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February 11, 2016

By Electronic Mail

Ms. Lisa Dernbach
Senior Engineering Geologist
California Regional Water Quality Control Board, Lahontan Region
2501 Lake Tahoe Boulevard
South Lake Tahoe, California 96150

Re: Response to Proposed Cleanup and Abatement Order for Former Lake Tahoe Laundry Works; 1024 Lake Tahoe Boulevard, South Lake Tahoe, California

Dear Ms. Dernbach:

On behalf of Fox Capital Management Corporation ("Fox"), we are pleased to submit to the California Regional Water Quality Control Board, Lahontan Region ("Regional Board") these comments to the Regional Board's proposed Cleanup and Abatement Order ("Proposed Order") No. R6T-2015-PROP, dated September 15, 2015 for the Former Lake Tahoe Laundry Works ("LTLW"); 1024 Lake Tahoe Boulevard, South Lake Tahoe, California ("South Y Site"). By letter dated January 14, 2016, the Regional Board extended the deadline for filing comments on the Proposed Order to February 11, 2016.

I. EXECUTIVE SUMMARY

In September 2015 the Regional Board issued a Proposed Order, which if finalized, would require Fox and the current owner of the South Y Site, Seven Springs Limited Partnership ("Seven Springs") to address chlorinated hydrocarbon contamination, including perchloroethylene ("PCE") at, and in the vicinity of the South Y Site, including contamination in an off-site area bounded by Eloise Avenue to the north, Dunlap Drive to the east, Glorene Avenue to the south and 7th Street to the west (hereinafter the "Off-Site Contamination"). The Off-Site Contamination encompasses PCE detected in:

- Monitoring wells at the Hurzel property located at 949 Emerald Bay Road,
- LTLW monitoring well OS-1, which is adjacent to the Hurzel property,
- Monitoring wells 4A/4B that were installed next to 933 Eloise Avenue in connection with investigation and remediation of a petroleum hydrocarbon release at 913 Emerald Bay Road, and
- Stanford Alumni Association Sierra Camp and Schneeweis domestic supply wells located at 883 Eloise Avenue and 903 Eloise Avenue, respectively.

There are multiple reasons why the Regional Board's allegations that Fox is responsible for the Off-Site Contamination are unfounded.

The Proposed Order alleges Century Properties Equity Fund 73 ("Century 73"), a limited partnership, and Fox, its general partner, owned the South Y Site during the 1970s when a coin-operated dry cleaning machine was present on-site and that Fox is a responsible party because it is the ultimate corporate successor to Century 73. The Proposed Order fails to provide the substantial evidence that is required in order to hold a former property owner liable under Section 13304 of the Water Code. In particular, the Regional Board has failed to establish that Century 73 or Fox (each a "Fox Party," and collectively, the "Fox Parties") could be liable under Section 13304 for having "caused or permitted" a discharge because it has failed to show, as California State Water Resources Control Board ("State Board") precedents require, that a discharge occurred during a Fox Party's ownership of the South Y Site, that a Fox Party knew or should have known of the discharge, or that a Fox Party could have prevented the discharge.

Even if the Regional Board could establish that Century 73 or Fox is considered a discharger under Section 13304, Fox still would not be liable for the off-site work under the Proposed Order because the Regional Board has not shown that the Off-Site Contamination migrated from the South Y Site. First, the distribution of PCE in groundwater does not support the Regional Board's conclusions that the South Y Site is a source of the Off-Site Contamination. Contamination at the South Y Site has been elevated in the shallow zone groundwater and much lower in the middle zone groundwater. Meanwhile, off-site contaminant concentrations consist of higher PCE concentrations in middle zone groundwater than shallow zone groundwater. Second, the on-site remediation system installed by Seven Springs and Fox has been effective in removing PCE and related chlorinated hydrocarbons from soil and groundwater before they migrate off-site. Third, groundwater flow data indicate that any releases from the South Y Site are not impacting the off-site Hurzel property or monitoring well OS-1 because groundwater from the South Y Site does not flow towards either location.

Although it contends that the South Y Site is a source of the Off-Site Contamination in part because it believes there are no other known sources of PCE in the vicinity, our review found that the Regional Board has not fully evaluated other possible sources of the Off-Site Contamination. These sources include the Napa/former Lakeside Auto facility, the former Big O Tire facility, and the former South Y Exxon service station (current Transit Terminal). PCE has been detected at these and other sites in the area, but the Regional Board has failed to adequately investigate whether these sources have contributed to the contamination in the area. In the absence of a complete investigation, the Regional Board cannot properly eliminate these facilities as potential sources of the contamination and attribute all of the Off-Site Contamination to releases from the LTLW.

Finally, the work required by the Proposed Order is not necessary because Seven Springs and Fox have been remediating the South Y Site since 2009, and that remediation has been effective in reducing the on-site PCE concentrations and containing the contamination within the boundaries of the South Y Site.

II. FACTUAL BACKGROUND

A. Site History

Century 73 purchased the South Y shopping center property in Lake Tahoe, California, including what is now known as the Lake Tahoe Laundry Works, in September 1974 from Connolly Development, Inc., ("Connolly") and owned the South Y Site until it sold it to Interland Communities, Inc. in December 1985. 1/ Upon acquiring the South Y Site, Century 73 immediately leased the South Y Site back to Connolly for one year, with an option by Connolly to extend the lease for two additional one year periods. 2/ It is not known whether Connolly ever exercised the option.

Multiple tenants or subtenants operated a laundromat at the South Y Site beginning in 1972, before, during and after Century 73's ownership of the South Y Site. 3/ These tenants included Robert and Bernice Prupas/Bobby Page's Inc. (1972-1982), Kjell and Kerstin Hakansson (1973-1976), Leeroy and Mary Lou Baisley (1976-1996), Kim and Debra Welch (1996-1998), and David and Louzel Rogers (1998-approximately 2011). 4/

The Regional Board began investigating properties in the vicinity of the South Y Site following the discovery of contamination in drinking water wells in the late 1980s. In November 1991, the Regional Board identified the South Y Site as a source of PCE contamination, allegedly stemming from the historic operation of the laundromat at the South Y Site. 5/ According to the Proposed Order, the suspected source of the contamination at the South Y Site is a coin-operated dry cleaning machine and the hose used to transfer solvent chemicals from delivery trucks in the parking lot. *See* Proposed Order at 2, ¶ 6. The Proposed Order alleges that the machine was present at the South Y Site during the 1970s and was removed in approximately 1979. *See id.* at 7 ¶ 24. A May 1972 lease between Connolly and Robert and Bernice Prupas identified authorized uses of the premises as "[d]ry cleaning and coin-operated laundry, and purposes related thereto." 6/ According to information from the deposition of Mary Louise Baisley, a subsequent LTLW tenant, the coin-operated machine was present at the South Y Site when Mrs. Baisley and her husband purchased the laundry business in July 1976 and was removed three and a half to four years later. 7/

In 2007, the current owner of the South Y Site, Seven Springs, sued Fox in federal court under the federal Comprehensive Environmental Response, Compensation and Liability Act ("CERCLA") and under an indemnity provision in the purchase agreement between Century 73 and Interland. 8/ Fox filed a Motion to Dismiss, which the court granted in part and denied in part. 9/ In the same action,

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1/ *See* Agreement for Purchase and Sale of South "Y" Shopping Center, between Century 73 and Interland Communities, Inc. (Dec. 19, 1985) (Exhibit A); Grant Deed from Connolly (Grantor) to Century 73 (Grantee) (Sept. 11, 1974) (Exhibit B).

2/ Memorandum of Lease Between Century 73 and Connolly (Sept.11, 1974) (Exhibit C).

3/ *See* Memorandum from A. Bassak, Esq. to H. Singer and L. Dernback (Regional Board), South Y Center Chain of Title and Laundry Lease History (Mar. 11, 2004) (Exhibit D).

4/ *See id.*; Notice to Creditors, Escrow No. 203-96154 (Feb. 5, 1998) (Exhibit E).

5/ *See* Regional Board, Status Report on the "Y" Investigation in South Lake Tahoe (Sept. 4-5, 1997) (Exhibit F); Letter from E. Garfinkle (Dreher, Garfinkle & Watson) to J. Short (Regional Board), Tahoe Y Shopping Center, South Lake Tahoe, El Dorado County, APNs: 023-421-011 and 021 (Jan. 10, 1992) (Exhibit G).

6/ Lease Between Landlord Connolly and Tenants the Prupases (May 24, 1972) ("May 1972 Lease") (Exhibit H) § 7.

7/ *See* Excerpts from the Transcript of Deposition of Mary Louise Baisley, *Seven Springs Ltd. P'ship v. Fox Capital Mgmt. Corp.* (E.D. CA, 2007) (No. 2:07-00412-LKK-GGH) ("Baisley Deposition") (Exhibit I) at 44-46.

8/ *See* Complaint, *Seven Springs Ltd. P'ship v. Fox Capital Mgmt. Corp.*, No. 2:07-00142-LKK-GGH (E.D. Cal. 2007) (Exhibit J).

9/ *See Seven Springs Ltd. P'ship v. Fox Capital Mgmt. Corp.*, No. 2:07-00142-LKK-GGH (E.D. Cal. 2007) (Exhibit K) (order granting in part and denying in part Fox's motion to dismiss and holding that Seven Springs did not qualify for the innocent landowner defense, was restricted to pursuing a

Fox filed claims against a number of third parties, including a number of former LTLW tenants, but never pursued these claims, as it eventually reached a confidential settlement agreement with its insurance company and Seven Springs. 10/

B. Remediation of the LTLW Site

Following the settlement with Seven Springs, the parties jointly retained a consultant, Environmental Engineering, Consulting and Remediation, Inc. ("E_2C"), to conduct the remediation that the Regional Board required. In June 2009, E_2C submitted to the Regional Board an Interim Remedial Action Workplan ("IRAP") that proposed to install a soil vapor extraction/groundwater air sparging system ("SVE/GASS") to address volatile organic compounds ("VOCs") in vadose zone soil and shallow zone groundwater at the South Y Site. 11/ E_2C amended the plan in August 2009 12/, and the Regional Board approved it on September 1, 2009. 13/ Operation of the SVE/GASS began in April 2010. The system consists of:

- Six (6) horizontal SVE wells
- Twenty (20) vertical SVE well pairs
- Twenty-seven (27) groundwater air sparge wells
- Ten (10) vapor probe points
- Four (4) on-site monitoring wells
- Two (2) off-site monitoring wells

The system was judged effective and E_2C recommended its continued operation. 14/ The Regional Board approved the SVE/GASS as the final remedy for the South Y Site in 2013. 15/ As of July 2015, almost 900 pounds of chlorinated hydrocarbons and other VOCs have been removed from the

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contribution claim under CERCLA § 113 and was not entitled to the benefits of the indemnity, which had, in any event, expired).

10/ *See* Fox Capital Mgmt. Corp. Third Party Complaint Against Real Estate Mgmt. Associates, LLC, et al., *Seven Springs Ltd. P'ship v. Fox Capital Mgmt. Corp.*, No. 2:07-00142-LKK-GGH (E.D. Cal. 2007) (Exhibit L).

11/ E_2C, Interim Remedial Action Workplan for SZA Groundwater Investigation, SZA Groundwater Monitoring, Interim Remedial Action Vadose Zone Soil and Shallow Groundwater Cleanup, Lake Tahoe Laundry Works, 1024 Lake Tahoe Boulevard, South Lake Tahoe (June 4, 2009) ("IRAP") (Exhibit M).

12/ E_2C, Amendment to Interim Remedial Action Workplan for SZA Groundwater Investigation, SZA Groundwater Monitoring, Interim Remedial Action Vadose Zone Soil and Shallow Groundwater Cleanup, Lake Tahoe Laundry Works, 1024 Lake Tahoe Boulevard, South Lake Tahoe (Aug. 26, 2009) ("IRAP Addendum") (Exhibit N).

13/ Letter from L. Dernbach (Regional Board) to S. Reisch (Fox's counsel) and B. Beard (Seven Springs' counsel) (Sept. 1, 2009) (Exhibit O).

14/ E_2C, Interim Remedial System Installation/Pilot Testing Report of Findings and Draft Remedial Action Plan for Vadose Zone Soil and Shallow Groundwater Cleanup, Lake Tahoe Laundry Works, 1024 Lake Tahoe Boulevard, South Lake Tahoe (Aug. 12, 2010) ("RAP") (Exhibit P) at 45.

15/ Regional Board, Acceptance of Work Plan for Remediation and Order to Submit Technical Reports, Former Lake Tahoe Laundry Works, 1024 Lake Tahoe Boulevard, South Lake Tahoe, El Dorado County, Investigative Order R6T-2013-064 (Aug. 2, 2013) (Exhibit Q) at 2.

South Y Site. 16/ Quarterly sampling events show PCE concentrations in groundwater have reduced by several orders of magnitude on-site. The most recent sampling conducted in December 2015 showed PCE concentrations of 35 micrograms per liter ("µg/L") in monitoring well LW-MW-1S, 1.1 µg/L in well LW-MW-2S, 34 µg/L in well LW-MW-5S, 2.8 µg/L in well LW-MW-10SR, and 3.8 µg/L in well LW-MW-11S. 17/ Although monitoring wells LW-MW-9S, LW-MW-12S, and LW-MW-13S could not be sampled because they were covered by snow and ice, PCE has either not been in those wells or it has been detected at concentrations less than the maximum contaminant level ("MCL") of 5 µg/L since the beginning of 2014. 18/

PCE in well LW-MW-5S rose from 6.3 µg/L in September 2015 to 34 µg/L in December 2015. This increase reflects contaminant rebound due to temporary shutdown of the SVE/GASS between July and October 2015. Rebound occurs during system shutdown because groundwater re-equilibrates with contaminants sorbed to sediment in the treatment zone. 19/ The rebound effect in well LW-MW-5S is small. The PCE concentration of 34 µg/L is substantially less than the maximum PCE concentration of 1,400 µg/L detected in June 2010 thereby demonstrating SVE/GASS has been effective in removing PCE mass from the subsurface and improving groundwater quality at the site.

C. Off-Site Activities

While the on-site remediation continued, in late 2014 and early 2015 the Regional Board tested a series of domestic wells, some of which were located nearly two thousand feet away from the South Y Site, and discovered PCE contamination in two of them. 20/ Pursuant to a stipulated agreement with the Regional Board, without admitting liability, Fox and Seven Springs agreed to provide alternative water supply to the affected landowners. 21/

On September 15, 2015, the Regional Board published the Proposed Order, which, if finalized, would require Fox and Seven Springs to undertake supplemental remedial measures to contain contamination on the South Y Site and to investigate, clean up and abate off-site contamination allegedly emanating from the South Y Site.

16/ E_2C, Third Quarter 2015 Groundwater Monitoring Report and Current Site Remediation Status Report, Lake Tahoe Laundry Works, 1024 Lake Tahoe Boulevard, South Lake Tahoe (Nov. 11, 2015) ("E_2C Third Quarter 2015 Monitoring Report") (Exhibit R) at 8.
17/ *See* E_2C, Summary of Fourth Quarter 2015 Groundwater Monitoring Data, Table 1 (Exhibit S).
18/ *See* E_2C Third Quarter 2015 Monitoring Report (Exhibit R), Table 1.
19/ U.S. Army Corps of Engineers ("USACOE"), In-Situ Air Sparging Engineer Manual, EM 200-1-19 (Dec. 31, 2013) ("In-Situ Air Sparging Manual") (Exhibit T) at 7-3.
20/ *In re Fox Capital Mgmt. Corp. and Seven Springs Ltd. P'Ship*, Cal. Reg. Water Quality Control Bd., Lahontan Region, Stipulated Agreement for Replacement Water Supply at 883 and 903 Eloise Avenue, South Lake Tahoe (Jun. 5, 2015) ("Stipulated Agreement") (Exhibit U) ¶¶ 4-8.
21/ *See id.* ¶ 10.

III. THERE IS NO BASIS FOR NAMING FOX OR CENTURY 73[22] AS A "DISCHARGER" UNDER THE WATER CODE

Section 13304(a) of the Water Code authorizes regional water quality control boards to issue cleanup and abatement orders to "[a]ny person . . . who has caused or permitted, causes or permits, or threatens to cause or permit any waste to be discharged or deposited where it is, or probably will be, discharged into the waters of the state and creates, or threatens to create, a condition of pollution or nuisance. . . ." Cal. Water Code § 13304(a). Here, the Regional Board has not alleged, nor is there any basis on which it could allege, that Century 73 or Fox "caused" a discharge at the South Y Site. While former owners and landlords who have not "caused" a discharge of waste may be found to have "permitted" a discharge under Water Code Section 13304(a), under State Board precedent that liability arises *only* if there is *substantial evidence* that the former owner/landlord:

- owned or possessed the relevant property at the time of the discharge;
- knew or should have known of the discharge; *and*
- had the legal ability to prevent the discharge.

See In re Stuart, Cal. State Water Res. Control Bd. Order No. WQ 86-15, 1986 WL 25522 at n.3 (Sept. 18, 1986); *In re Exxon Co.*, Cal. State Water Res. Control Bd. Order No. WQ 85-7, 1985 WL 20026 at *2-6 (Aug. 22, 1985). As explained below, the Regional Board has failed to produce substantial evidence in support of all three of these criteria.

A. The Regional Board has not Produced Substantial Evidence of a Discharge During a Fox Party's Ownership of the South Y Site.

To properly consider Century 73 or Fox as a discharger under Water Code Section 13304, the Regional Board has the burden of producing substantial evidence that a release occurred while they owned the South Y Site. *See In re Exxon,* 1986 WL 20026 at *5-6. Substantial evidence means "credible and reasonable evidence which indicates the named party has responsibility." *Id.* at *6.

Here, Fox never owned the Site and the Regional Board does not even directly allege that a release of PCE occurred during Century 73's ownership of the South Y Site between September 1974 and December 1985. Rather, the Regional Board merely asserts that the "suspected source for the solvent release was a self-service, coin-operated, dry cleaning machine in the Laundromat at the

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22/ The Proposed Order does not clearly articulate the Regional Board's theory of liability against Fox. The Proposed Order alleges that Fox was "the owner of the Facility at the time the self-service, coin-operated, dry cleaning machine existed at the laundromat" and that Fox is the "ultimate corporate successor" to Century 73. Proposed Order at 7, ¶¶ 24-25. However, Fox never owned the South Y Site. Furthermore, the Regional Board has not provided any evidence that Fox is the corporate successor to Century 73. Moreover, if Fox's liability is based upon Century 73's, that liability would have been extinguished if Century 73's liability was extinguished pursuant to Cal. Corp. Code § 15908.07 when Century 73 dissolved in 1990. *See* Century 73, Certificate of Cancellation – Limited Partnership (filed Jun. 29, 1990) (Exhibit V); *see also* Cal. Corp Code § 15908.07 (barring claims against a dissolved limited partnership four years after the publication of the notice to creditors of the dissolution in accordance with the terms of the statute). Fox is currently investigating whether Century 73 published the required notice of its dissolution under that section and hereby reserves the right to raise this defense in this and subsequent proceedings.

Facility and the hose used to transfer solvent chemicals from delivery trucks in the parking lot" and that "[w]hen the machine was removed from the Site in approximately 1979, PCE releases also ceased at that time." Proposed Order at 2, ¶ 6; 7, ¶ 24.

Moreover, rather than producing substantial evidence of the timing of the release, the Regional Board contends that PCE was discharged at the South Y Site during Century 73's ownership based solely on the fact that a coin-operated dry cleaning machine operated at the South Y Site during Century 73's ownership, and attributes the contamination at the South Y Site to a spill in the parking lot that occurred during the transfer of solvents from delivery trucks to the dry cleaning machine. *See id.*

There are at least two significant problems with the Regional Board's approach. First, the Regional Board assumes that merely alleging that PCE was *used* at the LTLW during Century 73's ownership automatically establishes that PCE was *discharged* into the environment during that period. This assumption is unsupported by any evidence in the record and flies in the face of the Regional Board's apparent conclusion that multiple facilities used PCE in the South Y area without experiencing a PCE release. Compare Proposed Order at 5, ¶ 17 (LTLW is the only source of PCE) with C. Hutto, URS Corporation Americas ("URS"), PCE Investigation, South Lake Tahoe, Summary of Findings (Feb. 5, 2016), slide 15 (conceding that multiple PCE users operated in the South Y area); *see also* Section IV.D., *infra,* for a discussion of other PCE sources in the area. Second, the May 1972 Lease between Connolly as the landlord, and Robert and Berniece Prupas, as the tenants, indicates that the Purpases leased the LTLW to operate a"[d]ry cleaning and coin-operated laundry, and purposes related thereto" for over two years *prior* to Century 73's ownership. *See* May 1972 Lease (Exhibit H), ¶ 7.1. Thus, a discharge in the parking lot during the transfer of solvents from delivery trucks could well have occurred between May 1972, when a laundromat first operated at the South Y Site, and September 1974, before Century 73 acquired the South Y Site, and there is no basis for concluding that a similar spill would have occurred after.

Moreover, the Regional Board has not attempted to identify or interview relevant witnesses, required all relevant parties to submit site histories, or prepared a conceptual site model or any other technical analysis of the contaminant plume that justifies the Regional Board's conclusion that a PCE release occurred while Century 73 owned the South Y Site. In the absence of such factual evidence and technical analysis, the Regional Board's determination that PCE was released during Century 73's ownership is based on mere conjecture. Such conjecture is not the "credible and reasonable evidence" that the State Board requires and therefore does not qualify as substantial evidence. *See In re Exxon*, 1985 WL 20026 at *6.

Importantly, there is no State Board precedent for reaching a conclusion as to the timing of a discharge without eyewitness testimony or technical evidence. After an extensive review, we have found no cleanup and abatement orders where the timing of a discharge was in dispute and the State Board made or upheld a finding on that issue based solely on the grounds that a detected chemical was in use at the site during the relevant time period. Instead, in the few cleanup and abatement orders where the timing of a discharge was directly in dispute, the State Board has relied on at least some direct evidence that the relevant contaminant was in fact spilled at the site in the relevant time period or on some technical evidence—such as a fate-and-transport analysis—to determine the timing and location of the discharge.

For example, in *In re Stinnes-Western Chem. Corp.*, Cal. State Water Res. Control Bd. Order No. WQ 86-16, 1986 WL 25523 at *3-8 (Sept. 18, 1986), the State Board affirmed a cleanup and abatement order issued by a regional board to the current owner of a contaminated site and the successor-in-interest of the former owner of the site based on eyewitness declarations about the timing of a PCE spill and a technical calculation of solvent-plume velocity to determine the timeframe in which a discharge occurred. In *In re Wenwest*, Cal. State Water Res. Control Bd. Order No. WQ 92-13, 1992 WL 12622783 at *2 (Oct. 22, 1992), the State Board upheld a regional board's finding that discharges occurred while the site was owned by a former owner based on technical reports that, "considering the soil in the area and the distance the gasoline has travelled to reach the neighbor's well, discharges took place at least 12 years before it was detected by the neighbor," placing the discharge well within the period in which the site was owned by the former owner. Similarly, in *In re Sanmina Corp.*, Cal. State Water Res. Control Bd. Order No. WQ 93-14, 1993 WL 456494 at *4 (Oct. 19, 1993), the State Board found evidence sufficient to find the petitioner—a former tenant at the site—caused or permitted a discharge where the petitioner operated a manufacturing business in which VOCs were typically used, documentary and testimonial evidence established that the petitioner stored or used VOCs, such compounds were detected beneath the petitioner's concrete "wet floor" at the facility, the petitioner had a history of repeated spills, and the contamination could not be attributed to an upgradient source. *See also In re Spencer Rental Serv.*, Cal. State Water Res. Control Bd. Order No. WQ 87-1, 1987 WL 1411947 (Jan. 22, 1987) (lessee of contaminated site properly named as discharger despite claims that the contamination pre-dated his tenancy where contamination was detected directly beneath gasoline tank used by lessee, evidence showed that no such contamination was present when the tank was installed, and monitoring data were consistent with a more recent spill).

Here, the only eyewitness testimony from the relevant time period, that of former tenant Mary Louise Baisley, directly contradicts the Regional Board's unsubstantiated assertions, and indicates that no spill occurred between July 1976 and 1979 when the Regional Board indicates that the coin-operated dry cleaning machine was removed from the South Y Site. During her April 2007 deposition, Mary Louise Baisley declared under oath that the coin-operated machine was used infrequently during her tenure, and thus the solvent did not need to be replaced frequently. According to the deposition, delivery trucks delivered solvent to the facility only four or so times during the entire period of the Baisleys' ownership of the laundry business. *See* Baisley Deposition (Exhibit I) at 135. Mrs. Baisley further declared that she was at the LTLW facility nearly every day and neither witnessed nor heard her husband describe any spill or leak during their period of ownership. *Id.* at 56-60, 101, 136-37. If a spill did not occur after July 1976, it may well have occurred before Century 73's ownership (e.g., between May 1972 and September 1974) as operations were beginning at the South Y Site.

Unlike the situations addressed by State Board precedents, in this case, the Regional Board has offered no evidence, direct or otherwise, that shows that a spill occurred during Century 73's ownership. In fact, the only direct evidence from the time period, Mrs. Baisley's sworn testimony, casts serious doubt on the Regional Board's allegations. Not only is the Regional Board's conclusion in this case at odds with existing State Board precedents, it creates a new (and ill-considered) precedent, as it suggests that every company that owned commercial or industrial property in the 1970s is liable under Section 13304 so long as it or its tenants used chemicals that are later found on the property and without any evidence of a spill during their ownership. Such a broad threat of liability contradicts the express terms of the statute, which requires some culpability – in the form of evidence that prior owners "caused or permitted" a discharge – before they can be held liable.

B. The Regional Board has not Produced Substantial Evidence That Century 73 or Fox Knew or Should Have Known of a Discharge

Even if the Regional Board concludes, despite the lack of supporting evidence, that a discharge at the South Y Site occurred during a Fox Party's ownership of the South Y Site, the Regional Board still must furnish substantial evidence that Century 73 or Fox *knew or should have known* of the discharge while a Fox Party owned the South Y Site. *See In re Stuart*, 1986 WL 25522 at n.3 (liability may attach under Section 13304 without proof of actual knowledge of contamination because the risk of leaking underground storage tanks was common knowledge in the oil industry in 1986); *In re Logsdon*, Cal. State Water Res. Control Bd. Order No. WQ 84-6, 1984 WL 19063 at *5 (July 19, 1984) (former landowners caused or permitted a tenant's discharge where they had "(1) actual knowledge of the dangerous condition and (2) an opportunity to obviate it"); *see also In re U.S. Dept. of Ag.*, Cal. State Water Res. Control Bd. Order No. WQ 87-5, 1987 WL 54537 at n.1 (Apr. 16, 1987) (landowners are liable without actual knowledge of a discharge "where the activity permitted on the property might be expected, by a reasonable and prudent landlord, to result in a discharge."). The theory behind the knowledge requirement recognized by these precedents is that the statutory predicate for imposing liability—i.e., that the landlord has "permitted" a nuisance—is met only if the landlord knows or should know that the nuisance exists or is threatened, has the authority to prevent it, and chooses not to. *See In re Stuart*, 1986 WL 25522 at *3. There is no evidence that Century 73 or Fox had any knowledge that a discharge occurred, and there was no way it should have known of the discharge – as a landlord and general partner of a landlord, respectively, Century 73 and Fox were not present on-site to observe any spills, and the fact that dry cleaners often released contaminants into the environment was not a commonly known fact at the time Century 73 owned the South Y Site.

In *In re Stuart*, the State Board held that Section 13304's knowledge requirement may be met by landlords who have "general knowledge of the operation and the normal dangers common to it." *Id.* at n.3. According to the State Board, the normal danger common to the tenant's gas-station operation was that underground storage tanks often leak. *Id.* On that point, the State Board emphasized that "[p]roblems of leaking underground tanks have become common knowledge, particularly in the oil business, in recent years and legislative responses (e.g. Health and Safety Code § 25280 *et seq.*) have called further attention to the issue." *Id.* Thus, the critical ruling by the State Board in *In re Stuart* was that a petroleum-company landlord can be found to have "permitted" its tenant gas-station operator's discharges where such discharges were common knowledge in the industry in which both companies operated. Importantly, the State Board did not impose liability on the petroleum company because it knew that its tenant operated a gas station at the site, that the tenant handled gasoline at the site, that gasoline required careful handling and containment, or because the petroleum company should have somehow inferred from the fact that gasoline is flammable or otherwise dangerous that it could be discharged into the environment. Rather, the petroleum company was found liable because it was in the oil business and it was common knowledge at the time the petroleum company leased the property that gasoline was often discharged from leaking underground storage tanks. 23/

23/ A year after *In re Stuart*, the State Board again explained in *In re United States Department of Agriculture* that "a landowner can be held accountable, even without actual knowledge, where the activity permitted on the property might be expected, by a reasonable and prudent landlord, to result in a discharge." 1987 WL 54537 at n.1. Reasonably expecting a tenant's activities to result in a discharge is not the same, of course, as simply knowing generally of the tenant's activities. Similarly, knowing that a tenant is using a chemical in its business is not the same as knowing that the tenant has spilled or discharged that chemical into groundwater.

None of the factors on which the State Board and California courts have relied in prior precedents to conclude that a landowner or landlord should have known of its tenant's discharges are present in this case. Unlike in *In re Stuart*, there is simply no evidence, let alone substantial evidence, that Century 73 or Fox, real estate companies that were not in the dry cleaning business, should have known based on common knowledge in the 1970s that PCE was likely to be released into the environment. On the contrary, numerous sources confirm that this hazard was not discovered until the late 1980s, after Century 73 sold the South Y Site. The first cleanup and abatement order published by the State Board that addresses groundwater contamination caused by a dry cleaner was issued in 1989, upholding a 1988 regional board order. *See In re Spitzer*, Cal. State Water Res. Control Bd. Order No. WQ 89-8, 1989 WL 97148 at *9-10 (May 16, 1989). A publication of the State Coalition for Remediation of Drycleaners also suggests that groundwater contamination from dry cleaning operations was first discovered in the late 1980s. 24/

For the foregoing reasons, there is no basis for concluding that Century 73 or Fox should have known of the discharges from the dry cleaner at the time it owned the South Y Site. There is no evidence that they were present on-site to observe everyday operations, let alone what could have been a one-time spill in the parking lot. Moreover, contamination was not a hazard commonly associated with dry cleaners until years after the coin-operated dry cleaning machine ceased operating at the South Y Site.

C. The Regional Board Has Not Produced Substantial Evidence that Century 73 or Fox Could Have Prevented a Discharge

In determining whether a landlord has the legal authority to prevent a tenant's discharge of waste, the State Board has focused on whether the terms of the relevant lease authorized the landlord to terminate the tenancy, enter the premises, or otherwise remediate the contamination. *See, e.g., In re Logsdon*, 1984 WL 19063 at *4-6 (lease authorized landlord to re-enter the premises if tenants violated lease provisions prohibiting tenants from creating a nuisance on the premises and requiring tenants to abide by all laws); *In re Spitzer*, 1989 WL 97148 at *4 (owners had right to regain possession of the site if the lessee failed to maintain the premises in good order and condition or failed to comply with all applicable laws). In this case, the Regional Board has not provided *any* evidence, let alone substantial evidence, that Century 73 or Fox had this ability.

In any event, Century 73 and Fox could only be expected to prevent contamination they knew or should have known about. In addition, unlike the landlord in *In re Spitzer*, neither Fox Party owned the South Y Site at the time the contamination was discovered. For all the reasons set out above, Century 73 and Fox neither knew nor should have known about PCE discharges, if any, at the LTLW by its tenants, and it is clear that neither entity had the ability to prevent any such discharges.

IV. THE CONTAMINATION AT ISSUE IN THE PROPOSED ORDER IS NOT ASSOCIATED WITH THE LTLW SITE

Even if a Fox Party could be considered a discharger, it still would not be liable for the off-site work set forth in the Proposed Order because the Regional Board has failed to provide substantial evidence that the Off-Site Contamination that is the subject of the Proposed Order – in particular, the PCE detected at 883 and 903 Eloise Avenue, in monitoring well OS-1, and south of the Hurzel property– is actually migrating from the LTLW at the South Y Site.

24/ *See* State Coalition for Remediation of Drycleaners, "A Chronology of Historical Developments in Drycleaning" (Nov. 2007) (Exhibit W) at 4.

The Regional Board asserts that "[c]ontinual detection of PCE in off-site monitoring well[s] . . . is assumed to be from historical solvent releases at the [LTLW]." Proposed Order at 3, ¶ 10. The Regional Board does not have authority to impose cleanup obligations based on assumptions; it must base its directives on substantial evidence. *See In re Exxon Co.*, 1985 WL 20026 at *2-6. Moreover, the mere presence of PCE in off-site groundwater does not establish that the LTLW is the source of the Off-Site Contamination. Before it can conclude that the Off-Site Contamination migrated from the LTLW, at a minimum, the Regional Board must identify substantial evidence that groundwater from the South Y Site actually flows in the direction of the observed off-site impacts, and that, consistent with scientific principles and known data, the concentrations and distribution of PCE off-site was caused by the concentrations and distribution of PCE at the South Y Site. Furthermore, as a matter of logic, the Regional Board cannot find that the Off-Site Contamination *must* have been caused by discharges of PCE from the South Y Site because there are *no* other known sources, unless it demonstrates, at a minimum, that all known and suspected sources of PCE have been thoroughly evaluated and exonerated.

The evidence in this case shows that the Regional Board cannot make these showings. Indeed, as explained below, the distribution of PCE concentrations in groundwater at and in the vicinity of the South Y Site and the groundwater flow data contradict the Proposed Order's assertion that PCE in groundwater at the South Y Site has caused the Off-Site Contamination.

A. The Distribution of PCE in Groundwater Does Not Support the Proposed Order's Conclusions

Extensive subsurface investigations at the South Y Site completed prior to the ongoing remedial action detected PCE in shallow zone groundwater (less than 40 ft bgs) at a maximum concentration of 5,150 µg/L in December 2009. Sampling of middle zone groundwater (roughly 40 to 50 ft bgs) at the South Y Site at various times between 2003 and 2008 found much lower PCE concentrations, with a maximum detected PCE concentration of 137 µg/L over this time period. By contrast, the Off-Site Contamination consists of much higher PCE concentrations in middle zone groundwater than shallow zone groundwater. As explained below, this difference between the PCE distribution in on-site and off-site groundwater contradicts the Regional Board staff's position that the South Y Site is the source of the Off-Site Contamination.

As reflected in the Proposed Order, the Regional Board has consistently maintained that PCE contamination at the South Y Site originated from a surficial spill of PCE in the LTLW parking lot. Proposed Order at 2, ¶ 6. This finding is supported by the fact that the highest PCE concentrations in soil and groundwater at the South Y Site have been detected at monitoring well LW-MW-1S, which is constructed in the parking lot near the suspected spill location and screened in the shallow zone from approximately 15 to 25 feet below ground surface ("ft bgs"). Maximum PCE concentrations were 532 milligrams per kilogram ("mg/kg") in a soil sample obtained at 7 ft bgs in 2008 25/ and 5,380 µg/L in a groundwater sample collected in May 2011. 26/

Soil PCE concentrations attenuate with depth in the suspected spill location, which demonstrates PCE did not enter the middle zone as dense non-aqueous liquid ("DNAPL"). PCE concentrations deeper than 7 ft bgs are low. PCE was detected at 0.26 mg/kg at 26 ft bgs, 0.33 mg/kg at 38 ft bgs, and was not measured above the laboratory reporting limit of 0.05 mg/kg at 52.5 ft bgs in soil

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25/ *See* IRAP (Exhibit M), Appendix G, Table 2.

26/ *See* E_2C Third Quarter 2015 Monitoring Report (Exhibit R), Table 3.

samples obtained from the boring for well LW-MW-1S. 27/ These data suggest the quantity of PCE spilled was insufficient to reach the saturated zone as DNAPL, and instead became trapped in shallow vadose zone soil.

Groundwater PCE concentrations in the middle zone also were low compared to those in the shallow zone. In the 12 years that groundwater sampling has been conducted at the South Y Site, the highest PCE concentration detected in middle zone groundwater was **137 µg/L** in well LW-MW-1D in 2008. Well LW-MW-1D is screened from 40 to 50 ft bgs, and is co-located (or nested) with shallow zone well LW-MW-1S. Figure 1 shows PCE concentrations in shallow and middle zone groundwater at the South Y Site, generally between 2003 and 2008, before operation of the SVE/GASS commenced. These data indicate the surficial spill of PCE did not significantly affect middle zone groundwater at the South Y Site. None of the PCE concentrations are suggestive of DNAPL in the middle zone. U.S. EPA states DNAPL may be present if sampled groundwater concentrations are in excess of 1 percent of their pure phase or effective solubility. 28/ One percent of the pure phase solubility of PCE is approximately 2,100 µg/L. 29/ No PCE has been detected in middle zone groundwater at the South Y Site at concentrations greater than this threshold value.

The Off-Site Contamination data reveal a completely different PCE distribution. As shown on Figure 2, PCE has been detected at the following concentrations in middle zone groundwater *between* the South Y Site and Eloise Avenue wells:

- 310 µg/L PCE at 60 ft bgs from borehole near James Avenue and Fifth Street in 1998.
- 430 µg/L PCE at 50 ft bgs from borehole on TCI site in 2001.
- 1,500 µg/L PCE at 45 ft bgs from borehole on Hurzel site in 2007.
- 3,000 µg/L PCE at 44 to 46 ft bgs from borehole on Napa site in 2002.
- 4,700 µg/L PCE at 47.5 to 50 ft bgs from borehole on Big O site in 2001.

These PCE concentrations are much higher than the maximum PCE concentration of 137 µg/L detected in middle zone groundwater at the South Y Site. PCE concentrations at the Napa and Big O sites indicate the potential existence of NAPL in middle zone groundwater at these properties. The significant difference between the PCE distributions in on-site and off-site wells indicates that LTLW is not the source of PCE in middle zone groundwater off-site, including in the Eloise Avenue wells themselves, which are screened in the middle zone (44 to 64 ft bgs) and the deeper groundwater zone (56 to 76 ft bgs). 30/

Regional Board staff have examined these same distributions and arrived at the same conclusion. In an email dated November 15, 2004, from Ms. Lisa Dernbach of the Regional Board to Mr. Harold Singer of the Regional Board, Ms. Dernbach stated the following:

27/ *See* IRAP (Exhibit M), Appendix G, Table 2.

28/ *See* U.S. EPA, Ground Water Issue: Assessment and Delineation of DNAPL Source Zones at Hazardous Waste Sites, EPA/600/R-09/119 (Sept. 2009) (Exhibit X) at 6.

29/ This is based upon PCE solubility limit in water of 210,000 µg/L, as reported by U.S. EPA in its Regional Screening Level ("RSL") Chemical-specific Parameters Supporting Table (Nov. 2015) (Exhibit Y).

30/ *See* Water Well Drillers Reports in Exhibit Z (providing Eloise Avenue well construction details).

- "... the source of the contamination in GW-6 [middle zone groundwater in Lake Tahoe Boulevard between the LTLW site and Napa site – *see* Figure 1] is not from the laundromat [LTLW site]."
- "... the laundromat [LTLW] plume is clearly in the upper portion of the saturated zone (20-30 ft) and is unlikely to be pulled to the 44 ft depth in the absence of an active force...."
- "More likely, contamination at GW-6 is from the Lakeside Napa Auto Store...." 31/

Similarly, in its Staff Report dated August 22, 2005, the Regional Board concluded that PCE in middle zone groundwater at the Big O site did not originate from the South Y Site, and that the Big O site is "primarily affected by a PCE source originating onsite." 32/ In a letter dated February 22, 2007, Regional Board staff stated that the Big O site potentially contributed to groundwater PCE contamination in the South Y area, and that as a result, the Regional Board could not issue a closure or no further action letter related to the Big O site. 33/

Since preparation of the Regional Board Staff Report in 2005, no additional middle zone groundwater data have been generated that would be expected to alter the Regional Board's conclusions and opinions regarding the source for the PCE in groundwater on the Big O site. PCE was detected at a maximum concentration of 5,380 µg/L in shallow zone groundwater at LTLW in 2011, but this contamination is associated with PCE trapped in shallow vadose zone soil; not PCE DNAPL that has migrated to middle zone groundwater. 34/ Furthermore, no additional information regarding the Big O site has been presented that would be expected to alter the Regional Board's conclusion in its 2007 letter.

B. SVE/GASS has Successfully Removed VOCs from the Subsurface and Contained the VOC Plume On-Site

Seven Springs and Fox installed the SVE/GASS to remediate PCE in vadose zone soil and shallow zone groundwater at the South Y Site in accordance with the RAP approved by the Regional Board. The cleanup area agreed upon by Seven Springs, Fox, and the Regional Board is depicted on Figure 4 in the RAP (Exhibit P). As explained below, the SVE/GASS has been operated as designed and has been effective at removing PCE and related compounds from soil and groundwater before they enter indoor air or migrate off the South Y Site.

Each SVE well pair consists of one well with a screen interval between approximately 5 and 10 ft bgs and the other with a screen interval between approximately 10 and 12 ft bgs. SVE well pairs are spaced 30 feet from each other. This spacing maintains overlapping radii of influence ("ROIs") between the well pairs and ensures that the entire vadose zone within the cleanup area is addressed by SVE. The number of SVE well pairs are more than adequate to achieve cleanup. In coarse-grained soil such as that encountered above the groundwater table at the LTLW, the ROI of SVE

31/ Email correspondence from L. Dernbach (Regional Board) to H. Singer (Regional Board) (Nov. 15, 2004) (Exhibit AA).

32/ Staff Report, Regional Board, Solvent Contamination at the Big O Tires Store, 1961 Lake Tahoe Boulevard, South Lake Tahoe (Aug. 22, 2005) ("2005 Staff Report") (Exhibit BB).

33/ Regional Board, Comments on Site Investigation Results, Big O Tires Store, 1961 Lake Tahoe Boulevard, South Lake Tahoe, El Dorado Count (Feb. 22, 2007) (Exhibit CC).

34/ *See* E_2C Third Quarter 2015 Monitoring Report (Exhibit R), Appendix G, Table 2.

wells can extend 100 feet. 35/ Consistent with this fact, E_2C found that "[v]acuum influence over the entire site, including under the building and into Lake Tahoe Boulevard, can be readily achieved using all shallow SVE wells." 36/

Analytical results of indoor air samples collected from the building at the LTLW in December 2015 demonstrate the SVE system's effectiveness. PES Environmental, Inc. ("PES") obtained indoor air samples from tenant spaces in the building where LTLW was located. The maximum PCE concentration of 0.514 micrograms per cubic meter ("$\mu g/m^3$") detected in indoor air was considerably less than the San Francisco Bay Regional Water Quality Control Board PCE Environmental Screening Level ("ESL") of 2.1 $\mu g/m^3$ established for protection of human health under commercial/industrial land-use scenarios. 37/ Accordingly, SVE is mitigating any vapor intrusion threat at the South Y Site. 38/

The air sparging component of the LTLW remediation system also has been effective. Air sparge wells are spaced 25 feet from each other. This spacing maintains overlapping zones of influence ("ZOIs") between the wells and contains the VOC plume on-site. This spacing is consistent with the typical ZOI range of 5 to 25 feet for in-situ air sparge systems cited by USACOE 39/ and within the well spacing range of 12 to 50 feet that the Wisconsin Department of Natural Resources states has generally been used for air sparge systems. 40/ Importantly, E_2C conducted performance tests in January 2016 that verify the air sparge wells at the South Y Site have a ZOI of at least 25 feet as predicted when the SVE/GASS was designed and constructed. 41/

Between January and November 2013, the SVE/GASS was stopped with Regional Board approval to allow pulsed ozone injection to treat VOCs in the subsurface. The Regional Board then directed that operation of the SVE/GASS be resumed because PCE in monitoring wells LW-MW-1S, LW-MW-2S, and LW-MW-5S rose to concentrations greater than 50 µg/L. 42/ The SVE/GASS system has operated nearly continuously since that time except for equipment malfunctions between April and August 2014, and July and October 2015.

The 2014 system shutdown was caused by plugging in granular activated carbon ("GAC") vessels used to treat air exhaust from the SVE/GASS. 43/ VOCs in the exhaust had declined to sufficiently low levels that treatment was no longer required. E_2C disconnected the GAC vessels with approval of the El Dorado County Air Quality Management District ("EDCAQMD") and restarted the system.

35/ U.S. EPA, Chapter II: Soil Vapor Extraction in How to Evaluate Alternative Cleanup Technologies for Underground Storage Tank Sites, A Guide for Corrective Action Plan Reviewers, EPA 510-R-04-002 (May 2004) (Exhibit DD) at II-15.

36/ RAP (Exhibit P) at 15.

37/ PES, Indoor Air Sampling Report, Former Lake Tahoe Laundry Works (Jan. 14, 2016) (Exhibit EE).

38/ Vapor intrusion is the general term given to migration of VOCs from soil and groundwater into the indoor air space of an overlying building through openings in the building foundation.

39/ USACOE, In-Situ Air Sparging Manual (Exhibit T) at 5-4.

40/ Wisconsin Department of Natural Resources, Guidance for Design, Installation and Operation of In Situ Air Sparging Systems, RR-186 (Feb. 2015) (Exhibit FF) at 19.

41/ E_2C, January 4, 2016 Air Sparge Confirmation Test Summary, Lake Tahoe Laundry Works, 1024 Lake Tahoe Boulevard, South Lake Tahoe, California (Jan.12, 2016) (Exhibit GG).

42/ E_2C, Third Quarter 2015 Monitoring Report (Exhibit R) at 2 and 3.

43/ E_2C, Second Quarter 2014 Groundwater Monitoring Report and Current Site Remediation Status Report, Lake Tahoe Laundry Works, 1024 Lake Tahoe Boulevard, South Lake Tahoe (Oct. 16, 2014) (Exhibit HH) at 6 and 7.

44/ The 2015 system shutdown was caused by a power surge in electrical service to the South Y Site that damaged the SVE/GASS transformer, circuit breaker, and blower motor. 45/ The damaged components were replaced and the system was restarted.

None of these shutdowns have caused or contributed to the Off-Site Contamination. Review of available data shows monitoring well LW-MW-1S, which is constructed near the suspected PCE source area, experienced PCE concentration rebound following SVE/GASS shutdown. Less significant PCE concentration rebounds have been observed in perimeter monitoring wells LW-MW-2S and LW-MW-5S. These perturbations have been short-lived; PCE concentrations lower than those before the rebound have been established shortly after the SVE/GASS operation resumes. 46/ These lower groundwater PCE concentrations demonstrate the SVE/GASS is limiting PCE migration by depleting PCE mass in soil and groundwater at the South Y Site. Moreover, the off-site groundwater investigation performed by URS in 2015 and summarized in its report prepared for the Regional Board 47/ confirms that the PCE plume has not migrated from the South Y Site. No PCE at concentrations above the MCL was found in the shallow zone at locations in the downgradient direction of groundwater flow from the Site. 48/

C. Both Groundwater Flow Data and Groundwater Quality Data Indicate that LTLW is not Impacting the Hurzel Property or Monitoring Well OS-1

Groundwater from the South Y Site does not flow toward the Hurzel property or off-site monitoring well OS-1. Quarterly groundwater monitoring reports for the LTLW site prepared by E_2C since 2010 show that the groundwater gradient or flow direction is predominantly to the north-northwest (see LTLW groundwater flow rose diagram on Figure 7) as opposed to the northeast toward the Hurzel property and monitoring well OS-1. 49/ This groundwater flow direction is corroborated by URS in its January 19, 2016 groundwater investigation report 50/ and by the site investigation report and groundwater monitoring reports prepared for the Hurzel property. Figure 1 of the URS Final Report shows groundwater flow direction arrows to the north at Tucker Avenue and Emerald Bay Road (near the South Y Site), and to the northwest at 5th Street and James Avenue (both located within

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44/ EDCAQMD, Air Pollution Permit Exemption, Soil and Groundwater Remediation Operation, Lake Tahoe Laundry Works, 1024 Lake Tahoe Blvd., South Lake Tahoe (Jul. 29, 2014) (Exhibit II).
45/ E_2C Third Quarter 2015 Monitoring Report (Exhibit R) at 3.
46/ For instance, after pulsed ozone injection commenced in January 2013, PCE in well LW-MW-5S rose from 3.72 µg/L to 150 µg/L in December 2013 shortly after the SVE/GASS was restarted in November 2013. PCE in the well subsequently dropped to 2.6 µg/L by March 2014 with continued operation of the SVE/GASS (Figure 5). The recent rebound of PCE in LW-MW-5S (to 6.3 µg/L in September 2015 and 34 µg/L in December 2015), *see* E_2C, Summary of Fourth Quarter 2015 Groundwater Monitoring Data, Table 1 (Exhibit S), is likely due to the shutdown caused by the power surge in July 2015, and is expected to follow a similar pattern. In the meantime, the increased PCE in this well is within the ZOI of air sparge well AS-13 and thus will be removed before it can migrate from the Site. Accordingly, any corrective action with respect to these detections is unnecessary, and, at the very least, premature.
47/ URS, Final PCE Investigation Report, South Lake Tahoe, California, (Jan. 19, 2016) ("URS Final Report") (Exhibit JJ).
48/ *See id.*, Figure 2.
49/ For example, *see* E_2C Third Quarter 2010 Monitoring Report (Exhibit KK), E_2C Fourth Quarter 2012 Monitoring Report (Exhibit LL), E_2C Second Quarter 2014 Monitoring Report (Exhibit MM), and E_2C First Quarter 2015 Monitoring Report (Exhibit NN).
50/ URS Final Report (Exhibit JJ) at 2.

the Off-Site Contamination area). Similarly, Stantec Consulting, Inc. states the following regarding the groundwater flow direction at the Hurzel property:

> The four quarters of monitoring and sampling at the site indicates that there is a significant shift in groundwater flow direction from fall and winter of the year to spring and summer of the year. During the fall and winter when the groundwater is deeper, the predominant groundwater flow direction is to the west northwest and during the spring and summer shifts to the north. The hydraulic gradient during the fall and winter is also steeper than the hydraulic gradient in the spring and summer. 51/

Figure 3 depicts the relationship of the South Y Site to the Hurzel property and monitoring well OS-1. The predominant north-northwest groundwater flow direction as reported by URS, Stantec, and E_2C is illustrated by arrows on this figure. Variations in the groundwater flow direction may increase dispersion (i.e., spreading and mixing) of PCE in groundwater, but they will not alter the bulk (i.e., center of mass) movement of the PCE plume from its north-northwest flow direction.

Groundwater quality data tell the same story. Contaminant concentrations are highest beneath their source at any site where a chemical release has taken place. 52/ As noted by the Regional Board in its 2005 Staff Report, "plumes composed of dissolved solvent compounds migrate with groundwater flow and decrease in concentration with distance from the source." 53/ Contaminant concentrations in groundwater decrease with distance from the source due to a number of phenomena. 54/ The phenomenon of dispersion is of particular importance at properties in the direction of groundwater flow from the South Y Site. Dispersion causes contaminant concentrations to drop with increasing distance of flow from the source. 55/ Thus, if a release of PCE at the South Y Site were a source of the Off-Site Contamination, one would expect the concentrations of PCE in *between* the South Y Site and the Hurzel property to be higher than the concentrations in the Hurzel monitoring wells. In fact, that is not the case. As shown on Figure 3, PCE was measured at 1.5 µg/L in shallow zone groundwater at 986 Emerald Bay Road (Runnels Automotive site), which is located between the South Y Site and Hurzel (presumably sampled during the Regional Board investigation in 1997-1998). This PCE concentration is much lower than groundwater PCE concentrations detected later at Hurzel. In 2008, PCE was measured at 1,300 µg/L and 400 µg/L in Hurzel monitoring wells MW-4 and MW-5, respectively (Figure 3).

Contemporaneous PCE concentrations in LTLW perimeter monitoring wells and shallow zone monitoring wells in Lake Tahoe Boulevard (between LTLW and Hurzel) also were lower than those detected in Hurzel wells. In 2008, PCE was measured in South Y Site perimeter wells LW-MW-2S and LW-MW-5S at 3 and 85.1 µg/L, respectively. Lake Tahoe Boulevard wells sampled in 2008 showed PCE concentrations generally less than 85 µg/L, considerably below PCE concentrations detected in Hurzel shallow zone monitoring wells sampled during the same time period (Figure 3). The lack of a groundwater PCE concentration gradient from LTLW to Hurzel indicates the higher PCE concentrations in shallow zone groundwater at the Hurzel property are due to a source other than the South Y Site.

51/ Stantec Consulting, Inc., Third Quarter 2008 Water Quality Report, Former Dry Cleaning Business, 949 Emerald Bay Drive, South Lake Tahoe (Dec. 10, 2008) ("Third Quarter 2008 Monitoring Report") (Exhibit OO).

52/ U.S. EPA, Handbook, Ground Water, Volume 1: Ground Water and Contamination, EPA/625/6-90/016a (Sept. 1990) ("USEPA Groundwater Handbook") (Exhibit PP) at 109 and 110.

53/ *See* 2005 Staff Report (Exhibit BB) at 6.

54/ *See* USEPA Groundwater Handbook (Exhibit PP) at 110.

55/ National Research Council, Groundwater Contamination (1984) (Exhibit QQ) at 37.

Further, as shown on Figure 3, between 2006 and 2010 groundwater samples were collected from a shallow zone monitoring well (MW-3) located on Dunlap Avenue at Eloise Avenue, associated with the Redwood Oil petroleum release site at 2060 Eloise Avenue. PCE concentrations in this well between 2006 and 2010 have ranged from 100 to 430 µg/L. These reported PCE concentrations in well MW-3 are higher than the PCE concentrations measured during the same time period in South Y Site perimeter wells and Lake Tahoe Boulevard wells. This suggests that the source for the PCE in well MW-3 is not from the South Y Site. Redwood Oil well MW-3 is not located downgradient of the South Y Site, which also suggests PCE in Redwood Oil well MW-3 is attributable to a source other than LTLW.

A review of the groundwater data for monitoring well OS-1 yields a similar conclusion. PCE migration in groundwater from the South Y Site cannot account for PCE in well OS-1 because PCE concentrations in well OS-1 are greater than those in LTLW perimeter monitoring wells, and have been greater in well OS-1 over the past several years, as shown on Figure 4. Moreover, no correlation exists between PCE concentrations in well OS-1 and LTLW perimeter monitoring wells.

Performance of the Mann Kendall statistical trend analysis demonstrates that PCE concentrations in well OS-1 remain on the order of 10 µg/L with no meaningful change. In contrast, the Mann Kendell analysis indicates statistically significant decreasing PCE concentration trends in South Y Site perimeter monitoring wells LW-MW-2S and LW-MW-5S. PCE concentrations in South Y Site perimeter well LW-MW-13S do not show any trend because PCE concentrations in this well have been less than the MCL since 2011 and remain so today (*see* Figure 5).

Off-site monitoring well OS-1 was never intended to evaluate the effectiveness of the SVE/GASS in containing on-site contamination. This was made clear by E_2C in the IRAP Addendum:

> Well OS-1 will be installed as an accommodation to the CRWQCB. We understand that groundwater monitoring analytical results collected from well OS-1 will be used to evaluate groundwater conditions in the proximity of that well and the data collected from that well will not affect the operation or cessation of operation of the remediation system on the South Y Site. 56/

The Regional Board approved the IRAP on September 1, 2009, without commenting on this statement. Accordingly, the Proposed Order cannot require implementation of additional remedial actions at the South Y Site based on data from monitoring well OS-1, as the parties agreed at the outset that well OS-1 would not be used to assess SVE/GASS performance.

D. The Regional Board Has Not Thoroughly Evaluated Other Possible Sources of the Off-Site Contamination.

The Proposed Order's assumption that the Off-Site Contamination is attributable to the South Y Site is based on its determination that there are no other sources of PCE contamination in the vicinity. Proposed Order at 4, ¶ 13. However, it appears that the Regional Board no longer holds this position as evidenced by its presentation at the public meeting on February 5, 2015. At the public meeting, Regional Board staff indicated that assessment of other sources of PCE is warranted based on the findings of the off-site investigation. Furthermore, Regional Board staff stated that they

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56/ IRAP Addendum (Exhibit N) at 2.

intend to assess other potential PCE sources as part of a Phase II Investigation tentatively scheduled to be performed in Fall 2016 or Spring 2017. 57/

As set forth below and as depicted in Figure 6, there are multiple possible sources of PCE contamination that could be the source of the Off-Site Contamination. Potential sources for PCE in the Off-Site Contamination area could be former dry cleaner or carpet cleaning sites, which may have used PCE in the past. In addition, as recognized by the Regional Board in its Media Release dated October 21, 2015, "PCE is normally associated with dry cleaning activities, but the solvent compound can also be used for metal degreasing and is an ingredient in paint strippers." 58/ Metal degreasing can be associated with automotive or equipment repair, or machine shops; and paint stripping can be associated with auto body shops and wood and metal working businesses. URS reached similar conclusions as a result of the off-site investigation. 59/ As discussed below, there are numerous current and former auto repair and auto body shops, as well as other industries that may have used PCE located in the South Y area that may have contributed PCE to the Off-Site Contamination.

Napa/Former Lakeside Auto (1935 Lake Tahoe Boulevard). As set forth in Fox's comments on the proposed no further action for this site, PCE was detected in shallow and middle zone groundwater but the Napa site was never fully investigated. 60/ For example:

- No shallow soil samples were collected directly beneath a concrete sump and potential PCE discharge point located within a former auto service bay in the Napa building;
- No soil or groundwater samples were collected from interior areas of the Napa site building, including interior areas of the auto service bays and machining areas where chemicals such as solvents may have been used or stored. Thus, the soil beneath the service bays remains uncharacterized and may be impacted by PCE;
- No floor drains or subsurface wastewater pipelines within the Napa site building were assessed;
- No shallow or middle zone groundwater monitoring wells were installed at the Napa site in both upgradient and downgradient locations to obtain representative and reproducible groundwater sample results, or to assess the nature and extent of the contamination.

Based on the foregoing, the Napa site remains a potential source of the Off-Site Contamination.

Former Big O Tire Store (1961 Lake Tahoe Boulevard). As set forth in Fox's comments on the proposed no further action for this site, PCE was detected in shallow and middle zone groundwater

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57/ *See* Regional Board, Fall 2015 URS PCE Investigation Meeting (Feb. 5, 2016) (Exhibit RR), slide 9.

58/ Regional Board Media Release, "Lahontan Water Board to Conduct Groundwater Testing for PCE in South Lake Tahoe" (Oct. 21, 2015) (Exhibit SS).

59/ *See* C. Hutto, URS, PCE Investigation, South Lake Tahoe, Summary of Findings (Feb. 5, 2016) (Exhibit TT), slides 14 and 15.

60/ Erler & Kalinowski, Inc. ("EKI"), Response to Water Board Notification of Consideration of No Further Action; Napa Auto Parts/Former Lakeside Auto, 1935 Lake Tahoe Boulevard South Lake Tahoe, California, (Dec. 3, 2015) (Exhibit UU).

but the Big O site was never fully investigated. 61/ An investigation work plan prepared by LFR, dated 27 April 2006, which apparently was reviewed and approved by the Regional Board, proposed the advancement of boreholes and the collection of soil samples in specific suspected PCE source areas on the Big O site; however, the boreholes were never advanced in these areas and samples were never collected. In the LFR findings report, dated August 9, 2006, there is no indication as to why these targeted areas were not sampled. For example:

- Borehole B-12 proposed to be located in the bottom of the lube pit adjacent to a drain was relocated approximately 20 feet to the northwest and outside of the pit.
- Borehole B-11 proposed to be located adjacent to a floor drain in the main service bay was relocated approximately 8 feet northwest of the drain.
- Borehole B-10 proposed to be located adjacent to the AST and filter drum area was relocated approximately 15 feet to the north.
- Borehole B-9 proposed to be located in an unpaved area off the edge of a concrete paved surface was moved approximately 15 feet to the northeast and onto the paved surface.

These areas were targeted by Big O's own consultant as suspected PCE source areas but were never sampled. Because these locations are upgradient from the Off-Site Contamination, these areas could be potential sources of the Off-Site Contamination.

Other examples that suggest the Big O site was not fully investigated and could be a potential source site for all or a portion of the Off-Site Contamination area are presented below:

- The area where a shallow soil sample contained detectable PCE (borehole B-9), located in an area of the Big O site that may have received surface water runoff from operations areas, was not further investigated or characterized to determine if PCE concentrations increased away from that sample location. Borehole B-9 was placed on a concrete paved surface and was not placed in the unpaved area that may have directly received surface water runoff. Additional boreholes and samples should have been collected from this area of the Big O site, including unpaved areas, to determine the lateral and vertical extents of the PCE contamination, and to determine whether higher concentrations of PCE existed away from borehole B-9.

- Soil in other unpaved areas of the Big O site that may have received surface water runoff from Big O operations areas, such as the unpaved areas along Tucker Avenue and unpaved areas on the Classic Cue portion of the site, were not sampled. These areas may have been impacted by PCE in surface water runoff from Big O operations and should have been sampled as part of the 2006 LFR investigation.

- The 2006 LFR investigation was conducted during a period of unusually high groundwater elevation (depth to groundwater was reported to be within 8 feet of the ground surface); thus, PCE concentrations in shallow zone groundwater may have been diluted due to fresh water influx possibly from the nearby storm water retention and percolation basin. In a letter dated February 22, 2007, prepared by the Regional Board (Exhibit CC), the Regional Board

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61/ EKI, Response to Water Board Notification of Consideration of No Further Action; Former Big O Tires Store Site, 1961 Lake Tahoe Boulevard, South Lake Tahoe, California (Dec. 3, 2015) (Exhibit VV).

indicated that high groundwater at the Big O site during sampling could potentially have diluted PCE concentrations in the shallow zone. The comments by the Regional Board in its February 22, 2007 letter suggested that several groundwater sampling events over several seasons with varying groundwater elevations would have more accurately depicted groundwater quality conditions at the Big O site.

- During the 2006 LFR investigation, shallow zone groundwater samples were collected on the upgradient side of sub-grade features, such as wastewater pipelines, which may have missed shallow zone groundwater impacts, if any, at those potential source locations. It is unclear why boreholes B-3, B-13 and B-14 were placed on the upgradient (west) side of the wastewater pipeline from the Big O building, and not on the downgradient (east) side. The wastewater pipeline from the Big O building, which presumably was connected to floor drains in the building, was inadequately characterized.

- No shallow or middle zone groundwater monitoring wells were installed at the Big O site in both upgradient and downgradient locations to obtain representative and reproducible groundwater sample results. In its February 22, 2007 letter (Exhibit CC), the Regional Board stated that increasing PCE concentrations in groundwater from the upgradient to downgradient areas of the site (in both shallow and middle zones) during the 2001 sampling event suggested a source of PCE at the Big O site. This possible source was never further investigated by Big O.

Further, the Amended Cleanup and Abatement Order (No. R6T-2003-031A1) (Mar. 7, 2006) ("2006 Big O Order") issued for the Big O site states that "further investigation is needed to attempt to locate the source area(s);" "[t]he investigation must be comprehensive, evaluating all on-site potential release areas and waste disposal areas;" and sampling is required at "all potential release sources to evaluate whether solvent compounds were discharged on site." 62/ These requirements from the 2006 Big O Order have not been met.

In addition, the 2006 Big O Order references an El Dorado County Department of Environmental Health report documenting an inspection of the Big O site on April 6, 2005, which identifies a receipt for contaminated soil taken to a transfer disposal facility. The 2006 Big O Order requires that Big O provide details of the release and the nature of the contaminated soil removed from the site as it "may be contributing to the groundwater pollution" at the Big O site. 63/ It does not appear that this requirement of the 2006 Big O Order has been met.

<u>Former South Y Exxon Service Station; Current Transit Terminal (1000 Emerald Bay Road)</u>. An auto service station was formerly located at the southwest corner of Emerald Bay Road and Lake Tahoe Boulevard. Based on a review of historical aerial photographs, this facility appears to have operated at this location from approximately 1960 through the 1980s. An environmental database search report prepared by Environmental Data Resources, Inc. ("EDR") 64/ indicates the presence of a 350-gallon waste oil tank on the Exxon site, which suggests auto repair and servicing activities were performed on-site. Past auto repair operations may have included the use of PCE as a degreasing solvent. During PES's initial subsurface investigations of the South Y Site in 2005, a groundwater sample from the shallow water bearing zone (16 to 20 ft bgs) was collected from a

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62/ 2006 Big O Order (Exhibit WW), ¶¶ 7 and 9.
63/ *See id.* ¶ 10.
64/ Environmental Data Resources, Inc. ("EDR"), The EDR Radius Map Report, South Y Center, South Lake Tahoe, California (July 13, 2007) (Exhibit XX).

borehole (GW-10) advanced at the northeast corner of the former Exxon site (*see* Figure 3). The groundwater sample contained PCE at a concentration of 20 µg/L. The former Exxon site is not located downgradient of the LTLW, based on reported groundwater flow directions. Thus, the PCE in groundwater on the Exxon site does not appear to be from the LTLW. Other than one groundwater sample collected in 2005, no sampling for PCE in the subsurface on the South Y Exxon site appears to have been performed.

<u>Runnels Automotive (986 Emerald Bay Road)</u>. Based on a review of historical aerial photographs, 65/ an auto repair and service station has been located at the northwest corner of Emerald Bay Road and Lake Tahoe Boulevard since around 1970. According to the EDR database report (Exhibit XX), a 400-gallon waste oil tank was reportedly located on-site. Past auto repair operations may have included the use of PCE as a degreasing solvent. In 1997, according to the EDR report, the Regional Board required Runnels to submit a work plan to conduct a groundwater investigation on the Runnels site. One sample of shallow zone groundwater was collected from the Runnels site in 1997 or 1998, which may have been in response to the Regional Board request (*see* Figure 3). Other than this one groundwater sample, to our knowledge, no other subsurface investigations have been performed on the Runnels site for the presence of PCE. Given the presence of elevated concentrations of PCE in shallow zone groundwater on the Hurzel property, which is located directly north and downgradient of the Runnels site (*see* Figures 3 and 6), the Runnels site may be a source of a portion of the Off-Site Contamination.

<u>976 Emerald Bay Road</u>. A small, light industrial or commercial cinderblock building with a roll-up door is currently located at this site. Based on a review of aerial photographs (Exhibit YY), this building has been located at this site since the early 1960s. To our knowledge, past uses of the site and the potential for PCE use at the site have not been investigated. Given the presence of elevated concentrations of PCE in shallow zone groundwater on the Hurzel property, which is located directly north and downgradient of the 976 Emerald Bay Road site (*see* Figures 3 and 6), this site may be a contributing source of the Off-Site Contamination.

<u>1963 Tucker Avenue</u>. This site is currently being used for commercial purposes (a window and door company), based on visual observations from Tucker Avenue. Past uses of the site included glass service and repair, and wood working, according to an EDR City Directory Report. 66/ Based on a review of aerial photographs (Exhibit YY), the current site building has existed at this site since the early 1960s. Solvents, such as PCE, may have been used on-site in the past. To our knowledge, the site has not been investigated. This site is located directly south, and upgradient of the TCI Cable/Former Honda Dealership site, where PCE has been detected in groundwater (*see* Figures 3 and 6, and discussion below). Thus, the 1963 Tucker Avenue site may be a source of PCE at the TCI Cable site and of a portion of the Off-Site Contamination.

<u>Hurzel Property; Current BevMo Store (945, 949, and 961 Emerald Bay Road)</u>. Past uses of the site included appliance repair (SOS Appliance) at 945 and 961 Emerald Bay Road, and drycleaning at 949 Emerald Bay Road (formerly Norma's Cleaners). SOS Appliance operated directly adjacent to and northeast of Norma's Cleaners, within the same building on the Hurzel property. 67/ The Hurzel property has been investigated for PCE by the Regional Board in the past, and several on-site

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65/ EDR, The EDR Aerial Photo Decade Package, South Y Center, South Lake Tahoe, California (July 13, 2007) (Exhibit YY).

66/ EDR, The EDR City Directory Image Report, South Y Area, South Lake Tahoe, California (June 5, 2015) ("EDR City Directory Report") (Exhibit ZZ).

67/ Harding ESE, Groundwater Investigation, Hurzel Properties, LLC, 949 Emerald Bay Road, South Lake Tahoe, California (Dec. 12, 2001) (Exhibit AAA).

groundwater monitoring wells are sampled on a periodic basis by the Regional Board. These investigations show that PCE is present in soil and groundwater on the Hurzel property. During a soil investigation conducted in 2003, PCE was detected at 98 and 16 µg/kg at 1 and 3.5 ft bgs, respectively, in a borehole advanced beneath a former coin-operated dry cleaning unit that reportedly operated between 1969 and 1977 within Norma's Cleaners. 68/ In 2007, PCE was detected at 45 µg/kg in a soil sample collected at a depth of approximately 2 ft bgs from a borehole (BH-16) advanced approximately 50 feet southeast of the former dry cleaning unit in the parking lot (Exhibit CCC). Finally, according to Secor's 2008 report (Exhibit CCC), waste residue from the Norma's Cleaners coin-operated dry cleaning machine (presumably PCE-containing waste) was periodically collected in a plastic bucket that was placed "into the trash dumpster for disposal with the normal trash products." Based on a review of historical aerial photographs, the trash dumpster appears to have been located in the northern portion of the Hurzel property, adjacent to James Avenue. None of these areas were assessed to delineate the extent of contamination. Accordingly, PCE released at the Hurzel property has not been investigated fully and may serve as a contributing source of the Off-Site Contamination.

Former Crystal Range Motel (941 Emerald Bay Road). Two carpet cleaning businesses are reported to have operated on this site in the 1980s and 1990s (Chem-Dry Carpet Cleaning of SLT and Custom Carpet Cleaning). 69/ This site is located adjacent to the Hurzel site and upgradient of the Eloise Avenue wells. Past carpet cleaning operations may have included the use, storage or disposal of PCE as a carpet cleaner. To our knowledge, this site has not been investigated for releases of PCE. As shown on Figure 2, in 1998, PCE was detected at a concentration of 310 µg/L in middle zone groundwater (60 ft bgs) from a borehole advanced on James Avenue, directly north and downgradient of the 941 Emerald Bay Road site. Thus, the site may be a source of a portion of the Off-Site Contamination.

Former Lampson One-Hour Cleaners/Sierra Dry Cleaners (2022 Lake Tahoe Boulevard). Former dry cleaners were located at the southeast corner of Emerald Bay Road and Lake Tahoe Boulevard from the 1970s through the 1990s. 70/ These businesses likely used PCE in their dry cleaning operations. Regional Board case files show a groundwater sample collected on the former Lampson/Sierra Dry Cleaners site at a depth of approximately 40 ft bgs contained PCE at 5 µg/L. 71/ LTLW is not the source for this PCE because the former Lampson/Sierra Dry Cleaners site is in the opposite direction of groundwater flow from LTLW. The source for the PCE in groundwater on the former Lampson/Sierra Dry Cleaners site has not been established, nor has the extent of that contamination been fully explored.

Former Five Star Texaco (2037 Lake Tahoe Boulevard). This site is located at the northeast corner of the intersection of Dunlap Drive and Lake Tahoe Boulevard (*see* Figure 6). Historical aerial photographs indicate an automobile service station operated at 2037 Lake Tahoe Boulevard from the 1960s through the 1980s. According to the EDR report (Exhibit XX), a release from an

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68/ MACTEC Engineering and Consulting, Inc. ("MACTEC"), Report of Findings, Potential PCE Source Investigation, 949 Emerald Bay Road, South Lake Tahoe, California (Nov. 3, 2003) (Exhibit BBB); Secor International Incorporated ("Secor"), Site Investigation Report, Former Dry Cleaning Business, 949 Emerald Bay Drive, South Lake Tahoe, CA, 96150 (May 30, 2008) (Exhibit CCC).

69/ Hill-Donnelly City Directory (1992) (Exhibit DDD); Pacific Bell Directory (1985) (Exhibit EEE).

70/ South Lake Tahoe phonebook (1979) (Exhibit FFF); Hill-Donnelly City Directory (1989) (Exhibit GGG).

71/ Images of the GHH Engineering, Inc. ("GHH") PCE Compilation Map (Exhibit HHH). Fox requests that the entire map (Drawings 1, 2, and 3), which is available at the Regional Board office, be added to the record.

underground storage tank occurred at this site; however, no additional information is reported. PCE may have been used as a degreasing solvent if automotive service or repair activities were performed in addition to dispensing gasoline. This site is located potentially upgradient of the Hurzel property and Redwood Oil monitoring well MW-3, which is reported to contain PCE at concentrations up to 430 µg/L (*see* Figures 3 and 6). Also, in 1997, PCE was detected at 5.7 µg/L in groundwater collected from a borehole located downgradient (i.e., north) of the former Five Star Texaco site. 72/ The source for PCE in groundwater at this location was not further investigated. Consequently, the former Five Star Texaco site remains a potential contributing source of the Off-Site Contamination.

<u>TCI Cable Site/Former Honda Dealership (924 Emerald Bay Road)</u>. This site is a former automobile dealership that performed auto service and repair during the 1970s and 1980s. The site also reportedly was a snowmobile dealership. PCE was detected in middle zone and deeper zone groundwater on the TCI site in 2001 at concentrations up to 430 µg/L and 190 µg/L, respectively. Soil sampling was performed in limited areas of the site, including adjacent to a former oil/water separator. No PCE was detected in soil samples; however, the 2001 findings report indicated that specific former chemical use and storage areas at the site associated with past maintenance and repair activities, including areas where solvents may have been stored, were not fully known. It is possible that past spills or releases of PCE on the TCI Cable site may have been missed during the 2001 investigation, and residual site contamination may be contributing to the Off-Site Contamination.

<u>Emerald Bay Chevron (1069 Emerald Bay Road)</u>. According to a Regional PCE Data Compilation Report prepared by GHH, dated October 2002 73/, PCE was detected in groundwater on the Chevron site at a concentration of 8.7 µg/L at a depth of approximately 40 ft bgs. The Chevron site is located approximately 1,100 feet south-southeast, and upgradient of monitoring well OS-1. To our knowledge, the source for the PCE at the Chevron site was never investigated, including sampling of the shallower water bearing zone or determination of the lateral or vertical extents of PCE in the subsurface at and around the Chevron site. The data suggest that this site is a potential source for PCE in groundwater upgradient of well OS-1 that could be impacting the well.

<u>Former Beacon/Swiss Mart Gasoline Service Station (913 Emerald Bay Road)</u>. This site was a former gasoline service station that operated roughly between the early 1960s through the 1990s. It is not known whether past uses included auto service and repair. Shallow zone groundwater on the Swiss Mart site is reported to contain PCE at a concentration of 29 µg/L (Exhibit ZZ). The source for the PCE in groundwater is not known but could be from past releases on the Swiss Mart site.

<u>South Tahoe Shell Gasoline Service Station (1020 Emerald Bay Road)</u>. This site was formerly and is currently used as a gasoline service station. According to the EDR report (Exhibit XX), a 550-gallon waste oil tank was located at this site which suggests past automobile service and repair operations, with possible use of PCE as an engine degreaser. Groundwater sampling at the Shell site found PCE in groundwater at 20 ft bgs at 18 µg/L and at 40 ft bgs at 9 µg/L (Exhibit III). To our knowledge, the source for the PCE in groundwater on the Shell site was never investigated. The Shell site is located approximately 500 feet east of the LTLW. The Shell site is *not* located downgradient of the LTLW, based on reported groundwater flow direction at the LTLW. Thus, the source for the PCE in groundwater on the Shell site cannot be the LTLW. Accordingly, the Shell site may be a source of a portion of the Off-Site Contamination. PCE sources also may exist upgradient (south-southeast) of the Shell site.

72/ *See id.*

73/ GHH, Regional PCE Data Compilation, South Tahoe Y Area, South Lake Tahoe, California (Oct. 2002) (Exhibit III).

Fifth Street Businesses. Review of historical city directories 74/ reveals light industrial and commercial businesses have operated along 2028 through 2042 Fifth Street, between James Avenue and Eloise Avenue. Businesses that may have used, stored or disposed of PCE are listed below.

- DC Turbo Parts
- Summit Carpets
- Performance Sleds-Polaris Parts
- Paradise Garage
- Performance Mobile Auto Repair
- American Motorcycle Service
- Pete's Auto Repair

To our knowledge, no testing for PCE has been performed at any of the Fifth Street businesses. The off-site groundwater investigation by URS in 2015, however, did test for PCE at boreholes SB-20 and SB-21, which are downgradient of the Fifth Street businesses. No PCE was detected in the shallow zone groundwater sample obtained from borehole SB-20. PCE was measured at 3 µg/L in the shallow zone groundwater sample collected from borehole SB-21. Groundwater monitoring wells MW-4A/4B are just north of the Fifth Street businesses, across Eloise Avenue. The Regional Board sampled these wells in October 2015. PCE was detected at 14 and 150 µg/L in groundwater samples from these wells. 75/ Thus, the Fifth Street businesses could be a source for the PCE detected in MW-4A/4B.

Eloise Avenue Businesses. Historical city directories (Exhibit ZZ) also indicate light industrial and commercial businesses have operated along the east and west sides of Eloise Avenue, upgradient of the 883 and 903 Eloise Avenue domestic water supply wells. As part of its off-site groundwater investigation, URS collected groundwater samples near some, but not all of the businesses along Eloise Avenue where PCE releases may have occurred.

URS obtained groundwater samples from borehole SB-20 completed at 912 Eloise Avenue, which is occupied by Sunshine/Yellow Taxi – Yellow Cab, and from borehole SB-21 completed at 934 Eloise Avenue, which is occupied by South Side Auto Body. As discussed above, no PCE was detected in shallow zone groundwater from SB-20 and 3 µg/L was found in shallow zone groundwater from SB-21. URS also obtained a groundwater sample from borehole SB-19 placed on Patricia Lane, which is in the north-northwest direction of groundwater flow from Hatch Electric, Bill's Automotive, and Sierra Pacific Power that are located at 921, 927, and 933 Eloise Avenue, respectively. PCE was detected at 0.6 µg/L in the shallow zone groundwater sample from borehole SB-19 76/

The URS Final Report recommends that further investigation be performed to identify the source of PCE detected in groundwater along Eloise Avenue. 77/ The following businesses along Eloise Avenue have yet to be investigated:

- Doug Gayner General Contractor
- Olsen Paving and Seal Coating

74/ EDR City Directory Report (Exhibit ZZ).
75/ URS Final Report (Exhibit JJ) at 6.
76/ *See id.* at 5.
77/ *See id.* at 8.

- Pedersen Underground Paving
- Two Guys Automotive
- Tahoe Valley Auto

The Proposed Order's conclusion that Off-Site Contamination must have migrated from LTLW is unsupportable when one considers: (a) the number and location of sites in the South Y vicinity that may have used PCE but which have not been fully investigated, (b) the detection of PCE in groundwater at and downgradient of some of these sites, and (c) the presence of PCE in groundwater at several sites located cross-gradient to and upgradient of LTLW.

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Based on the foregoing, there is not substantial evidence to support the conclusion that releases from the LTLW at the South Y Site have caused the Off-Site Contamination. Accordingly, the Regional Board's Proposed Order should be withdrawn on that basis.

V. THE WORK REQUIRED BY THE ORDER IS UNNECESSARY

A. Containment

Even if the Regional Board were to conclude, contrary to the evidence, that the Off-Site Contamination is attributable to the LTLW (e.g., because the contamination migrated off-site prior to the installation of the SVE/GASS), the Proposed Order's requirements for containment are completely unnecessary. As explained above:

- The remaining contamination at the South Y Site is limited to a small area in the vicinity of LW-MW-1S and LW-MW-5S and concentrations of PCE in all other wells at the South Y Site are below the MCL of 5 µg/L;

- The zone of influence of the SVE/GASS remediation system at the South Y Site effectively precludes any remaining contamination from migrating off-site; and

- The Regional Board's off-site investigation performed in 2015 did not find any contamination attributable to the South Y Site, which confirms no additional containment is needed because PCE is not migrating from the South Y Site.

B. The Water Supply Well Requirement

The Proposed Order provides that

> if at any time, water sample results from active water supply wells in the downgradient groundwater flow direction from the Facility and different from the Eloise Avenue supply wells, should show a chlorinated hydrocarbon constituent exceeding the primary drinking water maximum contaminant level, or secondary drinking water standard if a primary standard does not exist, the Discharger may be required, upon a separate Order, to provide replacement water service to users of those impacted water supply wells.

Proposed Order at 15, ¶ 3. This requirement is unfounded as nothing in the Proposed Oder indicates that there are any impacted supply wells downgradient of the South Y Site. Moreover, given the absence of substantial evidence that the Off-Site Contamination is emanating from the LTLW and compelling evidence that there are numerous possible sources of PCE in the South Y area, it is unreasonable to require the parties to provide alternative drinking water based solely on the presence of chlorinated hydrocarbons in drinking water dowgradient of the South Y Site. Finally, in the Stipulated Agreement, Seven Springs and Fox have already agreed that if contamination from the South Y Site is found to have impacted additional water supply wells, Seven Springs and Fox will confer with the Regional Board as to whether replacement water services to the users of those impacted wells need to be provided, and so the provision in the Proposed Order addressing the same issue is duplicative and unnecessary. *See* Stipulated Agreement (Exhibit U) ¶ 15.

C. Off-site Investigation and Corrective Action

As noted in Section IV, above, the evidence does not establish that the Off-Site Contamination is associated with releases from the LTLW at the South Y Site. At best, the source of that contamination is unknown and the Regional Board should thoroughly investigate other possible sources before putting that burden on Fox. The PCE spill at the South Y Site affected vadose zone soil and shallow zone groundwater. This contamination is being remediated and contained on-site by the SVE/GASS.

The results of the off-site investigation performed by URS in 2015 on behalf of the Regional Board confirm that PCE in groundwater has not migrated from the South Y Site. Figure 2 from the URS Final Report (Exhibit JJ) summarizes groundwater PCE results. Low PCE concentrations of 1.4 to 1.8 µg/L in the vicinity of 10th Street and James Avenue must originate from a source other than the LTLW because no PCE was found in the seven grab groundwater samples collected south and just upgradient at the intersection of Emerald Bay Road/10th Street/Roger Avenue, an area that is located in between the PCE detections at the 10th Street/James intersection and the LTLW. These groundwater data further support the fact that PCE detections in the Lukins Brothers Water Company municipal supply wells Nos. 2 and 5, which are located farther north of the intersection of 10th Street and James Avenue at 22 and 46 µg/L in 2014 are not from the LTLW. Similarly, PCE detected in shallow zone groundwater at 1.9 and 85 µg/L in Hurzel North and South monitoring wells, respectively, and at 14 and 150 µg/L in monitoring well MW-4A/B at the intersection of 5th Street and Eloise Avenue are attributable to sources other than the LTLW because these wells are not in the north-northwest direction of groundwater flow from the LTLW. As discussed in Section IV.D, numerous PCE sources exist near the wells that have not been fully investigated.

Under these circumstances, the Proposed Order's investigation and corrective action requirements are unwarranted. If, contrary to the evidence, the Regional Board insists on requiring an off-site investigation as part of the Proposed Order, it must clearly define the area to be investigated. As currently drafted, the Proposed Order is unduly vague and ambiguous and provides little to no information regarding the boundaries of the area that the Regional Board wants Respondents to investigate. *See In re Ocean Mist Farms and RC Farms et al.*, Cal. State Water Res. Control Bd. Order No. WQ 2012-12, 2012 WL 5494091 at *8 (Sept. 19, 2012) (staying an ambiguous provision of an order and indicating that "with no further clarification of its meaning or guidance . . . it poses a challenge to dischargers seeking to comply with its requirements"). Without fair notice of the Proposed Order's requirements, Fox is unable to fully evaluate or contest the scope of its potential liability. Moreover, if the Proposed Order were finalized in its current form, Fox would be subject to penalties for failing to comply with requirements that have not been clearly articulated. As the State Board has recognized, "an order must be sufficiently clear to give notice of prohibited conduct." *See In re Aerojet General Corporation and Cordova Chemical Company*, Cal. State Water Res. Control

Bd. Order No. WQ 80-4, 1980 WL 590838 at *16 (Mar. 20, 1980). The Proposed Order violates this requirement. While Fox recognizes that the area the Regional Board wants investigated could evolve over time, the Regional Board is obligated to define the area as best it can before finalizing the Proposed Order.

For the reasons stated above, the Proposed Order's corrective action requirements are similarly unwarranted. Moreover, even if the Regional Board were to adopt an order that requires some form of off-site investigation, imposing a corrective action requirement at this time is premature. As the URS Final Report acknowledges and these comments demonstrate, there are multiple additional potential sources of PCE in the vicinity of the LTLW, and it would be inappropriate, improper and unlawful for the Regional Board to require Fox to undertake corrective actions with respect to contamination caused by these other sources. *See generally* Cal. Water Code § 13320(c) ("Upon finding that the action of the regional board, or the failure of the regional board to act, was inappropriate or improper, the state board may direct that the appropriate action be taken by the regional board, refer the matter to another state agency having jurisdiction, take the appropriate action itself, or take any combination of those actions.") Moreover, as was discussed at the public meeting held on February 5, 2016, other parties are currently investigating both environmental conditions and possible treatment systems in the area north of the South Y Site. 78/ These efforts could significantly impact the Regional Board's understanding of the source of the Off-Site Contamination and the scope of any necessary corrective actions with respect to the Off-Site Contamination and must be better understood before the Regional Board imposes corrective action requirements upon Fox.

VI. THE PROPOSED ORDER CONTAINS MISSTATEMENTS THAT SHOULD BE REVISED

We identified a number of mis-statements in the Proposed Order. For your convenience, we have tracked our specific comments in the Proposed Order, and attached that document as Exhibit JJJ. The comments set forth in Exhibit JJJ are in addition to (and in no way limit) the comments set forth in the text of this document.

VII. CONCLUSION

For the reasons set forth above, the Proposed Order improperly identifies Fox as a liable party under Section 13304 of the Water Code and incorrectly attributes off-site contamination to releases at the South Y Site. Numerous investigations regarding groundwater flow, contaminant distribution, and the efficacy of the onsite remedial system demonstrate that the South Y Site contamination is being contained within the boundaries of the South Y Site and that sources other than the LTLW are the source of the contamination in the off-site area. Significantly, the Regional Board has failed to fully investigate those other potential sources. In any event, the work sought by the Regional Board in the Proposed Order is unnecessary because Seven Springs and Fox have been remediating the South Y Site since 2009, and that remediation has been successful in reducing the onsite PCE concentrations and containing the contamination within the boundaries of the South Y Site.

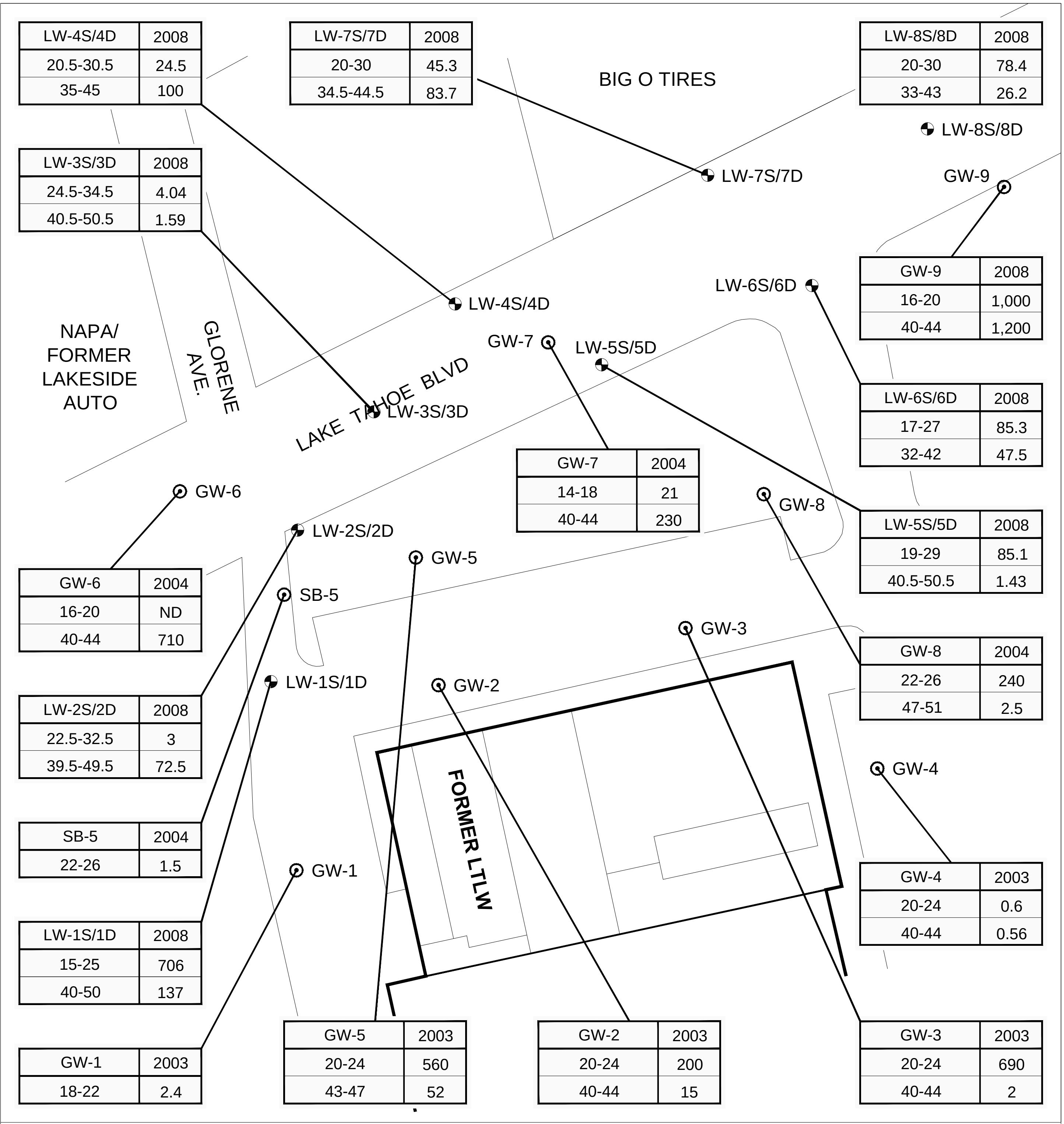
78/ *See* Regional Board, Fall 2015 URS PCE Investigation Meeting (Feb. 5, 2016) (Exhibit RR), slide 9.

Accordingly, Fox respectfully requests that the Regional Board reconsider issuing the Proposed Order. Fox remains willing to discuss alternative, collaborative approaches to addressing the Regional Board's concerns.

Respectfully submitted,

Scott H. Reisch
Partner

Enclosures



LW-4S/4D	2008
20.5-30.5	24.5
35-45	100

LW-7S/7D	2008
20-30	45.3
34.5-44.5	83.7

LW-8S/8D	2008
20-30	78.4
33-43	26.2

LW-3S/3D	2008
24.5-34.5	4.04
40.5-50.5	1.59

GW-9	2008
16-20	1,000
40-44	1,200

LW-6S/6D	2008
17-27	85.3
32-42	47.5

GW-7	2004
14-18	21
40-44	230

LW-5S/5D	2008
19-29	85.1
40.5-50.5	1.43

GW-6	2004
16-20	ND
40-44	710

GW-8	2004
22-26	240
47-51	2.5

LW-2S/2D	2008
22.5-32.5	3
39.5-49.5	72.5

SB-5	2004
22-26	1.5

GW-4	2003
20-24	0.6
40-44	0.56

LW-1S/1D	2008
15-25	706
40-50	137

GW-1	2003
18-22	2.4

GW-5	2003
20-24	560
43-47	52

GW-2	2003
20-24	200
40-44	15

GW-3	2003
20-24	690
40-44	2

Legend:

Sample ID → Sample Year

Sample Depths (ft bgs) → PCE Concentration (ug/L)

GW-2	2003
20-24	200
40-44	15

Abbreviations:

ft bgs = feet below ground surface
ug/L = micrograms per liter
PCE = tetrachloroethene

0 50 100
(Approximate Scale in Feet)

N

Notes:

1. All locations are approximate.
2. Basemap source: E2C Remediation

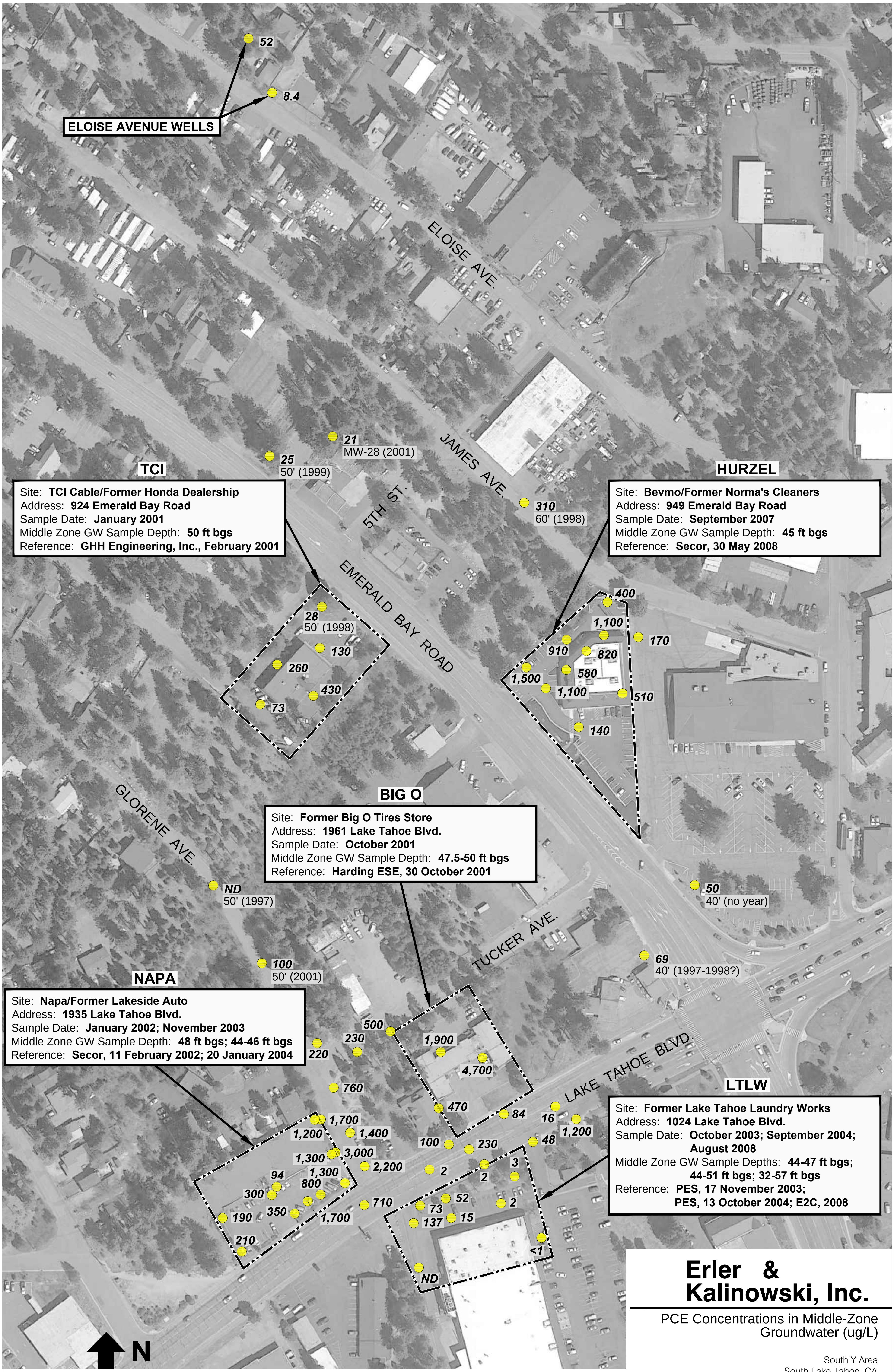
Erler & Kalinowski, Inc.

PCE Concentrations in Shallow and Middle Zone Groundwater (2003-2008)

Former Lake Tahoe Laundry Works
South Lake Tahoe, CA

February 2016
EKI A70020.01

Figure 1



TCI

Site: **TCI Cable/Former Honda Dealership**
Address: **924 Emerald Bay Road**
Sample Date: **January 2001**
Middle Zone GW Sample Depth: **50 ft bgs**
Reference: **GHH Engineering, Inc., February 2001**

HURZEL

Site: **Bevmo/Former Norma's Cleaners**
Address: **949 Emerald Bay Road**
Sample Date: **September 2007**
Middle Zone GW Sample Depth: **45 ft bgs**
Reference: **Secor, 30 May 2008**

BIG O

Site: **Former Big O Tires Store**
Address: **1961 Lake Tahoe Blvd.**
Sample Date: **October 2001**
Middle Zone GW Sample Depth: **47.5-50 ft bgs**
Reference: **Harding ESE, 30 October 2001**

NAPA

Site: **Napa/Former Lakeside Auto**
Address: **1935 Lake Tahoe Blvd.**
Sample Date: **January 2002; November 2003**
Middle Zone GW Sample Depth: **48 ft bgs; 44-46 ft bgs**
Reference: **Secor, 11 February 2002; 20 January 2004**

LTLW

Site: **Former Lake Tahoe Laundry Works**
Address: **1024 Lake Tahoe Blvd.**
Sample Date: **October 2003; September 2004; August 2008**
Middle Zone GW Sample Depths: **44-47 ft bgs; 44-51 ft bgs; 32-57 ft bgs**
Reference: **PES, 17 November 2003; PES, 13 October 2004; E2C, 2008**

0 150 300
(Approximate Scale in Feet)

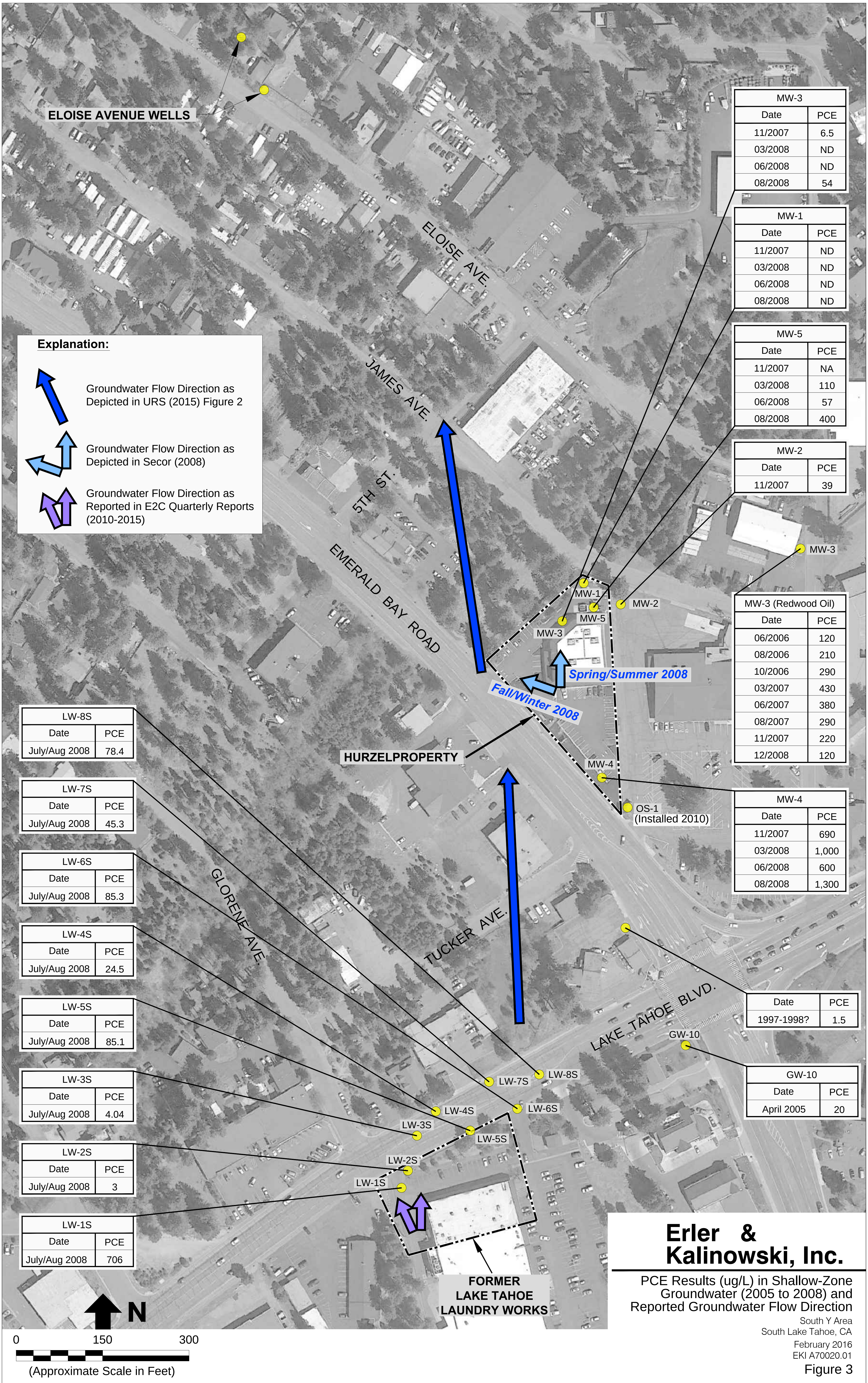
Other Reference:
Cumulative PCE Sampling Results as of March 2001, South Tahoe Y Area, South Lake Tahoe, large map prepared by GHH Engineering, Inc., 20 March 2001.

Erler & Kalinowski, Inc.

PCE Concentrations in Middle-Zone Groundwater (ug/L)

South Y Area
South Lake Tahoe, CA
February 2016
EKI A70020.01
Figure 2

C:\Users\ricasata\appdata\local\temp\AcPublish_6528\Figure 1 through 8.dwg 2-11-16



Explanation:

- Groundwater Flow Direction as Depicted in URS (2015) Figure 2
- Groundwater Flow Direction as Depicted in Secor (2008)
- Groundwater Flow Direction as Reported in E2C Quarterly Reports (2010-2015)

MW-3

Date	PCE
11/2007	6.5
03/2008	ND
06/2008	ND
08/2008	54

MW-1

Date	PCE
11/2007	ND
03/2008	ND
06/2008	ND
08/2008	ND

MW-5

Date	PCE
11/2007	NA
03/2008	110
06/2008	57
08/2008	400

MW-2

Date	PCE
11/2007	39

MW-3 (Redwood Oil)

Date	PCE
06/2006	120
08/2006	210
10/2006	290
03/2007	430
06/2007	380
08/2007	290
11/2007	220
12/2008	120

MW-4

Date	PCE
11/2007	690
03/2008	1,000
06/2008	600
08/2008	1,300

Date	PCE
1997-1998?	1.5

GW-10

Date	PCE
April 2005	20

LW-8S

Date	PCE
July/Aug 2008	78.4

LW-7S

Date	PCE
July/Aug 2008	45.3

LW-6S

Date	PCE
July/Aug 2008	85.3

LW-4S

Date	PCE
July/Aug 2008	24.5

LW-5S

Date	PCE
July/Aug 2008	85.1

LW-3S

Date	PCE
July/Aug 2008	4.04

LW-2S

Date	PCE
July/Aug 2008	3

LW-1S

Date	PCE
July/Aug 2008	706

Erler & Kalinowski, Inc.

PCE Results (ug/L) in Shallow-Zone Groundwater (2005 to 2008) and Reported Groundwater Flow Direction

South Y Area
South Lake Tahoe, CA

February 2016
EKI A70020.01

Figure 3

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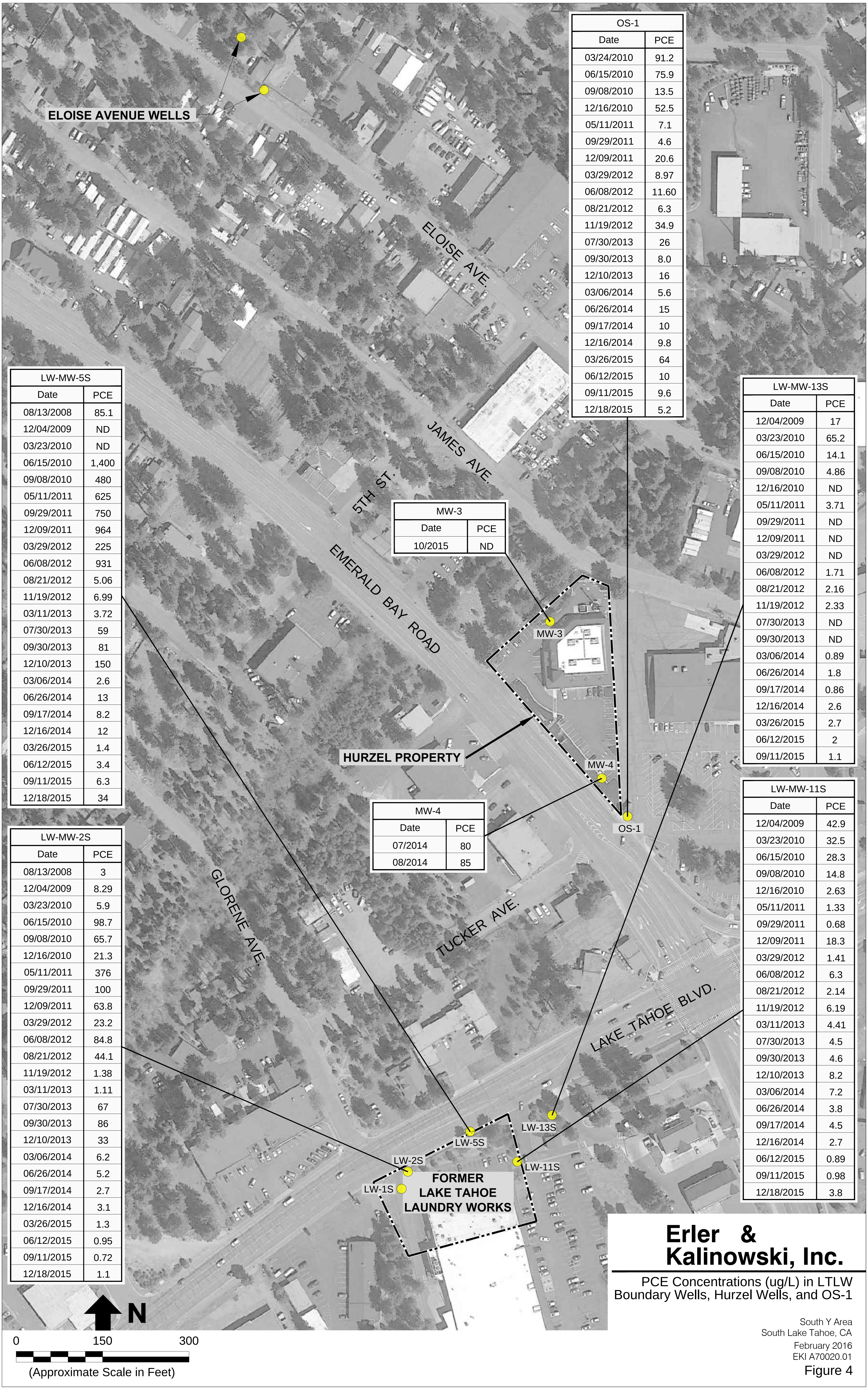

OS-1

Date	PCE
03/24/2010	91.2
06/15/2010	75.9
09/08/2010	13.5
12/16/2010	52.5
05/11/2011	7.1
09/29/2011	4.6
12/09/2011	20.6
03/29/2012	8.97
06/08/2012	11.60
08/21/2012	6.3
11/19/2012	34.9
07/30/2013	26
09/30/2013	8.0
12/10/2013	16
03/06/2014	5.6
06/26/2014	15
09/17/2014	10
12/16/2014	9.8
03/26/2015	64
06/12/2015	10
09/11/2015	9.6
12/18/2015	5.2

LW-MW-5S

Date	PCE
08/13/2008	85.1
12/04/2009	ND
03/23/2010	ND
06/15/2010	1,400
09/08/2010	480
05/11/2011	625
09/29/2011	750
12/09/2011	964
03/29/2012	225
06/08/2012	931
08/21/2012	5.06
11/19/2012	6.99
03/11/2013	3.72
07/30/2013	59
09/30/2013	81
12/10/2013	150
03/06/2014	2.6
06/26/2014	13
09/17/2014	8.2
12/16/2014	12
03/26/2015	1.4
06/12/2015	3.4
09/11/2015	6.3
12/18/2015	34

LW-MW-13S

Date	PCE
12/04/2009	17
03/23/2010	65.2
06/15/2010	14.1
09/08/2010	4.86
12/16/2010	ND
05/11/2011	3.71
09/29/2011	ND
12/09/2011	ND
03/29/2012	ND
06/08/2012	1.71
08/21/2012	2.16
11/19/2012	2.33
07/30/2013	ND
09/30/2013	ND
03/06/2014	0.89
06/26/2014	1.8
09/17/2014	0.86
12/16/2014	2.6
03/26/2015	2.7
06/12/2015	2
09/11/2015	1.1

MW-3

Date	PCE
10/2015	ND

MW-4

Date	PCE
07/2014	80
08/2014	85

LW-MW-11S

Date	PCE
12/04/2009	42.9
03/23/2010	32.5
06/15/2010	28.3
09/08/2010	14.8
12/16/2010	2.63
05/11/2011	1.33
09/29/2011	0.68
12/09/2011	18.3
03/29/2012	1.41
06/08/2012	6.3
08/21/2012	2.14
11/19/2012	6.19
03/11/2013	4.41
07/30/2013	4.5
09/30/2013	4.6
12/10/2013	8.2
03/06/2014	7.2
06/26/2014	3.8
09/17/2014	4.5
12/16/2014	2.7
06/12/2015	0.89
09/11/2015	0.98
12/18/2015	3.8

LW-MW-2S

Date	PCE
08/13/2008	3
12/04/2009	8.29
03/23/2010	5.9
06/15/2010	98.7
09/08/2010	65.7
12/16/2010	21.3
05/11/2011	376
09/29/2011	100
12/09/2011	63.8
03/29/2012	23.2
06/08/2012	84.8
08/21/2012	44.1
11/19/2012	1.38
03/11/2013	1.11
07/30/2013	67
09/30/2013	86
12/10/2013	33
03/06/2014	6.2
06/26/2014	5.2
09/17/2014	2.7
12/16/2014	3.1
03/26/2015	1.3
06/12/2015	0.95
09/11/2015	0.72
12/18/2015	1.1

Erler & Kalinowski, Inc.

PCE Concentrations (ug/L) in LTLW
Boundary Wells, Hurzel Wells, and OS-1

South Y Area
South Lake Tahoe, CA
February 2016
EKI A70020.01
Figure 4

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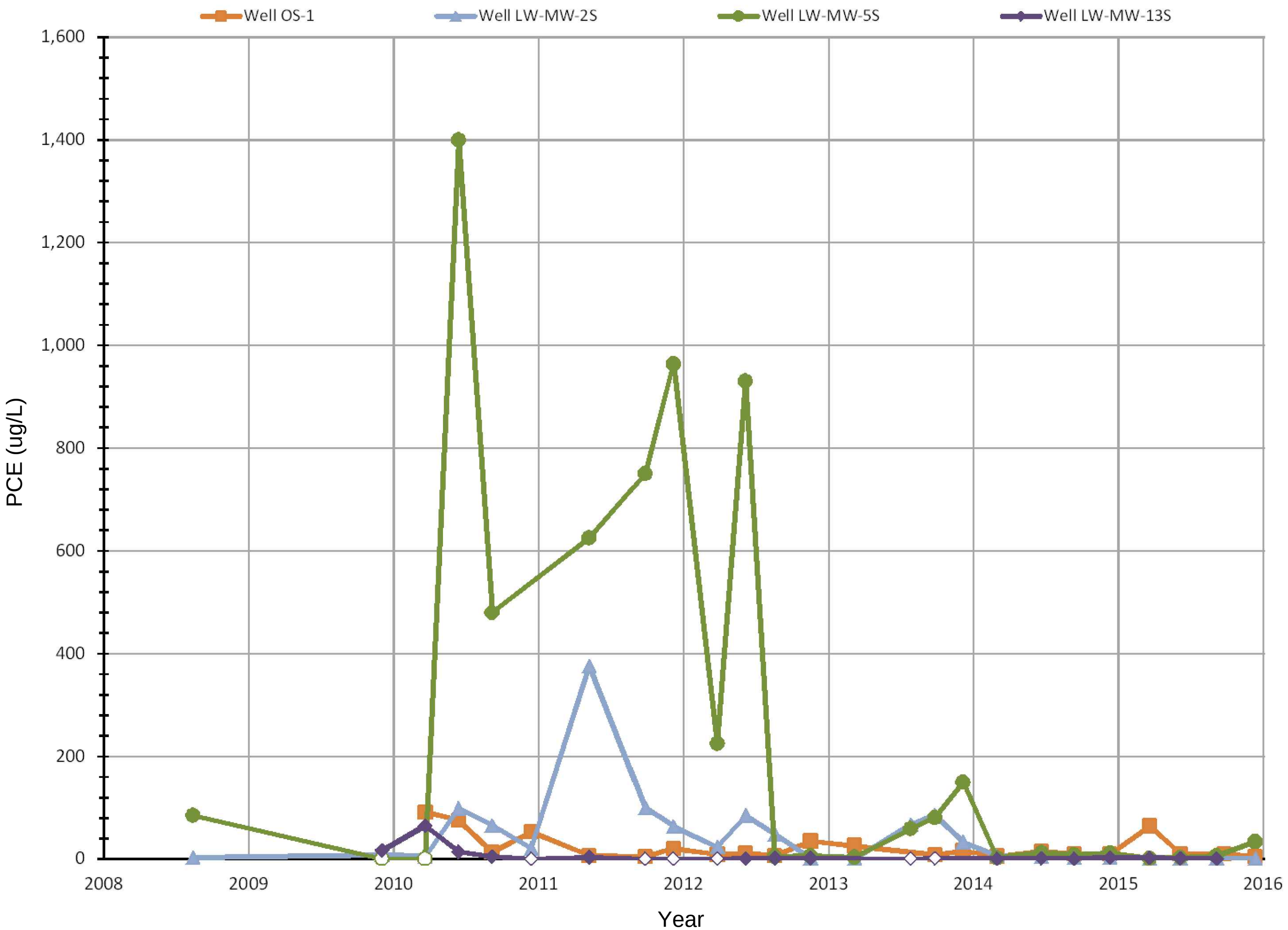

Erler & Kalinowski, Inc.

Comparison of Well OS-1 and LTLW Perimeter Well Data

Former Lake Tahoe Laundry Works
South Lake Tahoe, CA

February 2016
EKI A70020.01

Figure 5

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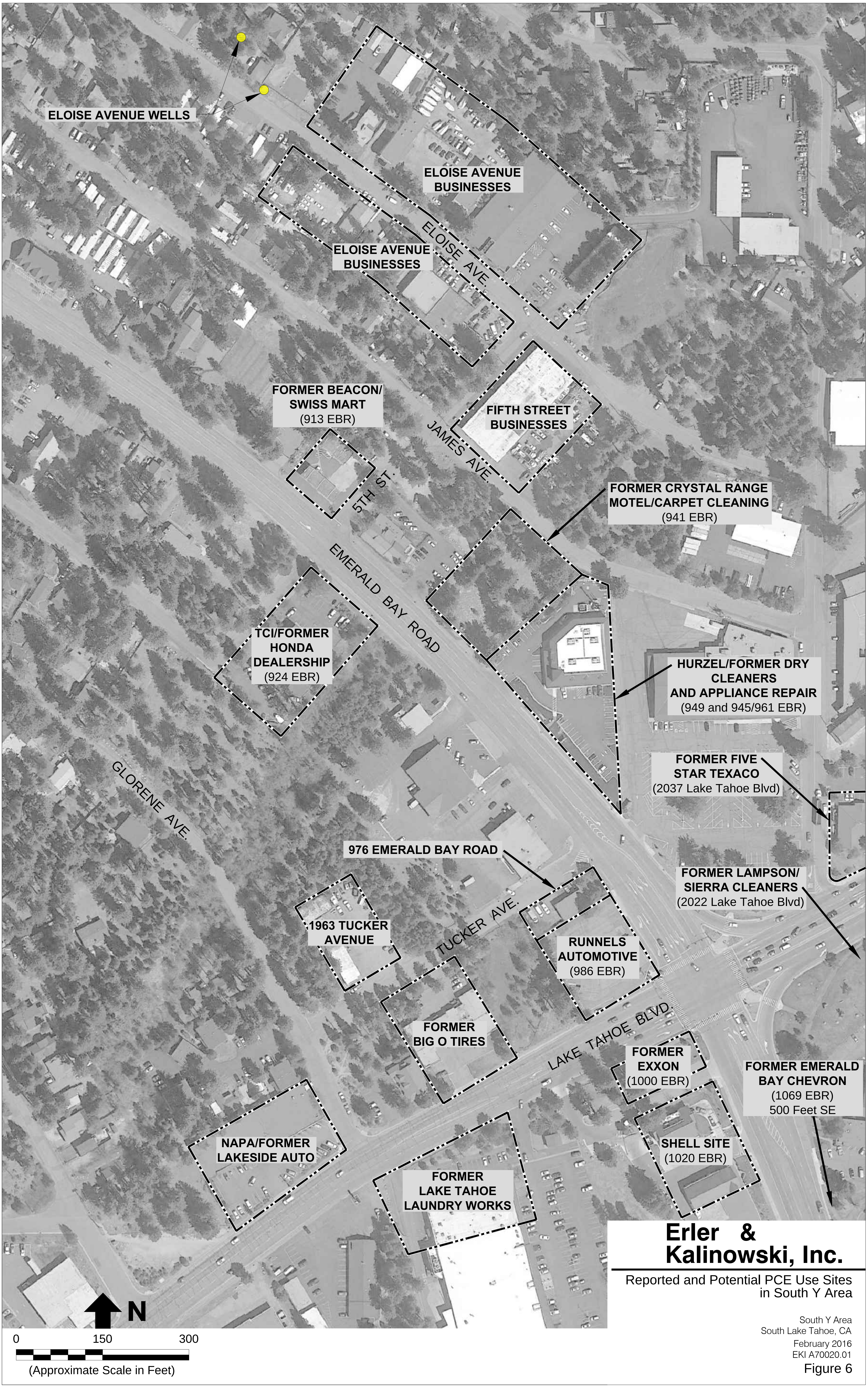
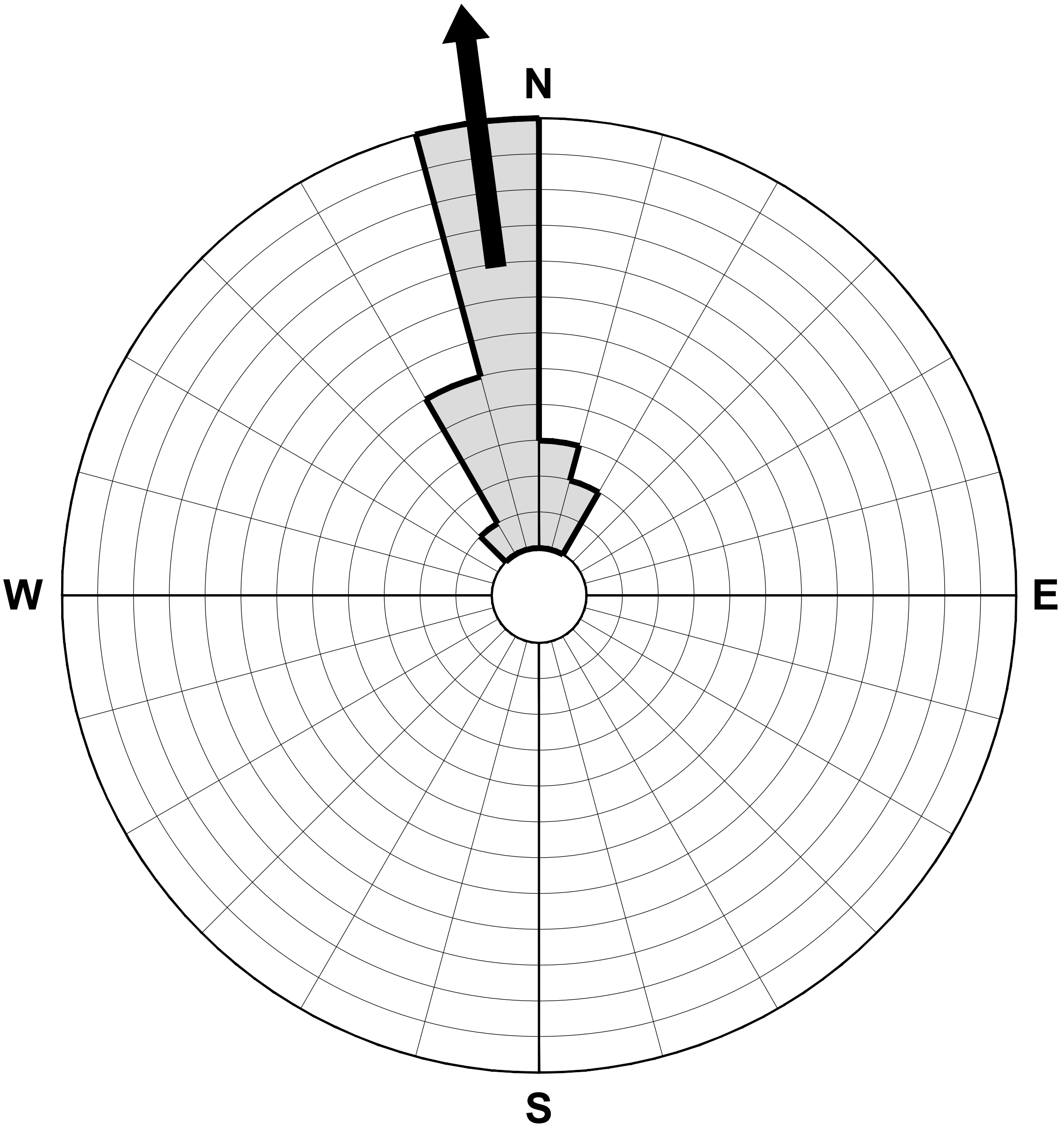


Erler & Kalinowski, Inc.

Reported and Potential PCE Use Sites
in South Y Area

South Y Area
South Lake Tahoe, CA
February 2016
EKI A70020.01
Figure 6

C:\Users\ricasata\appdata\local\temp\AcPublish_6528\Figure 1 through 8.dwg 2-11-16



Average Groundwater Flow Direction
(7.3 Degrees West of North)

Notes:

1. Based on 23 LTLW Quarterly Sampling Events from 2009 to 2015.

Erler & Kalinowski, Inc.

Rose Diagram
LTLW Groundwater Flow Direction

Former Lake Tahoe Laundry Works
South Lake Tahoe, CA

February 2016
EKI A70020.01

Figure 7

C:\Users\rcasata\appdata\local\temp\AcPublish_6528\Figure 7.dwg 2-11-16

Index of Exhibits to Fox's Comments on Proposed Order

Exhibit A	Agreement for Purchase and Sale of South "Y" Shopping Center, between Century 73 and Interland Communities, Inc. (Dec. 19, 1985)
Exhibit B	Grant Deed from Connolly (Grantor) to Century 73 (Grantee) (Sept. 11, 1974)
Exhibit C	Memorandum of Lease Between Century 73 and Connolly (Sept.11, 1974)
Exhibit D	Memorandum from A. Bassak, Esq. to H. Singer and L. Dernback (Regional Board), South Y Center Chain of Title and Laundry Lease History (Mar. 11, 2004)
Exhibit E	Notice to Creditors, Escrow No. 203-96154 (Feb. 5, 1998)
Exhibit F	Regional Board, Status Report on the "Y" Investigation in South Lake Tahoe (Sept. 4-5, 1997)
Exhibit G	Letter from E. Garfinkle (Dreher, Garfinkle & Watson) to J. Short (Regional Board), Tahoe Y Shopping Center, South Lake Tahoe, El Dorado County, APNs: 023-421-011 and 021 (Jan. 10, 1992)
Exhibit H	Lease Between Landlord Connolly and Tenants the Prupases (May 24, 1972)
Exhibit I	Excerpts from the Transcript of Deposition of Mary Louise Baisley, *Seven Springs Ltd. P'ship v. Fox Capital Mgmt. Corp.* (E.D. CA, 2007) (No. 2:07-00412-LKK-GGH)
Exhibit J	Complaint*, Seven Springs Ltd. P'ship v. Fox Capital Mgmt. Corp.*, No. 2:07-00142-LKK-GGH (E.D. Cal. 2007)
Exhibit K	*Seven Springs Ltd. P'ship v. Fox Capital Mgmt. Corp.*, No. 2:07-00142-LKK-GGH (E.D. Cal. 2007)
Exhibit L	Fox Capital Mgmt. Corp. Third Party Complaint Against Real Estate Mgmt. Associates, LLC, et al., *Seven Springs Ltd. P'ship v. Fox Capital Mgmt. Corp.*, No. 2:07-00142-LKK-GGH (E.D. Cal. 2007)
Exhibit M	E_2C, Interim Remedial Action Workplan for SZA Groundwater Investigation, SZA Groundwater Monitoring, Interim Remedial Action Vadose Zone Soil and Shallow Groundwater Cleanup, Lake Tahoe Laundry Works, 1024 Lake Tahoe Boulevard, South Lake Tahoe (June 4, 2009)
Exhibit N	E_2C, Amendment to Interim Remedial Action Workplan for SZA Groundwater Investigation, SZA Groundwater Monitoring, Interim Remedial Action Vadose Zone Soil and Shallow Groundwater Cleanup, Lake Tahoe Laundry Works, 1024 Lake Tahoe Boulevard, South Lake Tahoe (Aug. 26, 2009)
Exhibit O	Letter from L. Dernbach (Regional Board) to S. Reisch (Fox's counsel) and B. Beard (Seven Springs' counsel) (Sept. 1, 2009)
Exhibit P	E_2C, Interim Remedial System Installation/Pilot Testing Report of Findings and Draft Remedial Action Plan for Vadose Zone Soil and Shallow Groundwater Cleanup, Lake Tahoe Laundry Works, 1024 Lake Tahoe Boulevard, South Lake Tahoe (Aug. 12, 2010)
Exhibit Q	Regional Board, Acceptance of Work Plan for Remediation and Order to Submit Technical Reports, Former Lake Tahoe Laundry Works, 1024 Lake Tahoe Boulevard, South Lake Tahoe, El Dorado County, Investigative Order R6T-2013-064 (Aug. 2, 2013)
Exhibit R	E_2C, Third Quarter 2015 Groundwater Monitoring Report and Current Site Remediation Status Report, Lake Tahoe Laundry Works, 1024 Lake Tahoe Boulevard, South Lake Tahoe (Nov. 11, 2015)
Exhibit S	E_2C, Summary of Fourth Quarter 2015 Groundwater Monitoring Data, Table 1
Exhibit T	U.S. Army Corps of Engineers ("USACOE"), In-Situ Air Sparging Engineer Manual, EM 200-1-19 (Dec. 31, 2013)
Exhibit U	*In re Fox Capital Mgmt. Corp. and Seven Springs Ltd. P'Ship*, Cal. Reg. Water Quality Control Bd., Lahontan Region, Stipulated Agreement for Replacement Water Supply at 883 and 903 Eloise Avenue, South Lake Tahoe (Jun. 5, 2015)
Exhibit V	Century 73, Certificate of Cancellation – Limited Partnership (filed Jun. 29, 1990)
Exhibit W	State Coalition for Remediation of Drycleaners, "A Chronology of Historical Developments in Drycleaning" (Nov. 2007)

Exhibit X	EPA, Ground Water Issue: Assessment and Delineation of DNAPL Source Zones at Hazardous Waste Sites, EPA/600/R-09/119 (Sept. 2009)
Exhibit Y	U.S. EPA in its Regional Screening Level Chemical-specific Parameters Supporting Table (Nov. 2015)
Exhibit Z	Water Well Drillers Reports
Exhibit AA	Email correspondence from L. Dernbach (Regional Board) to H. Singer (Regional Board) (Nov. 15, 2004)
Exhibit BB	Staff Report, Regional Board, Solvent Contamination at the Big O Tires Store, 1961 Lake Tahoe Boulevard, South Lake Tahoe (Aug. 22, 2005)
Exhibit CC	Regional Board, Comments on Site Investigation Results, Big O Tires Store, 1961 Lake Tahoe Boulevard, South Lake Tahoe, El Dorado Count (Feb. 22, 2007)
Exhibit DD	EPA, Chapter II: Soil Vapor Extraction in How to Evaluate Alternative Cleanup Technologies for Underground Storage Tank Sites, A Guide for Corrective Action Plan Reviewers, EPA 510-R-04-002 (May 2004)
Exhibit EE	PES, Indoor Air Sampling Report, Former Lake Tahoe Laundry Works (Jan. 14, 2016)
Exhibit FF	Wisconsin Department of Natural Resources, Guidance for Design, Installation and Operation of In Situ Air Sparging Systems, RR-186 (Feb. 2015)
Exhibit GG	E_2C, January 4, 2016 Air Sparge Confirmation Test Summary, Lake Tahoe Laundry Works, 1024 Lake Tahoe Boulevard, South Lake Tahoe, California (Jan.12, 2016)
Exhibit HH	E_2C, Second Quarter 2014 Groundwater Monitoring Report and Current Site Remediation Status Report, Lake Tahoe Laundry Works, 1024 Lake Tahoe Boulevard, South Lake Tahoe (Oct. 16, 2014)
Exhibit II	EDCAQMD, Air Pollution Permit Exemption, Soil and Groundwater Remediation Operation, Lake Tahoe Laundry Works, 1024 Lake Tahoe Blvd., South Lake Tahoe (Jul. 29, 2014)
Exhibit JJ	URS, Final PCE Investigation Report, South Lake Tahoe, California, (Jan. 19, 2016)
Exhibit KK	E_2C Third Quarter 2010 Monitoring Report
Exhibit LL	E_2C Fourth Quarter 2012 Monitoring Report
Exhibit MM	E_2C Second Quarter 2014 Monitoring Report
Exhibit NN	E_2C First Quarter 2015 Monitoring Report
Exhibit OO	Stantec Consulting, Inc., Third Quarter 2008 Water Quality Report, Former Dry Cleaning Business, 949 Emerald Bay Drive, South Lake Tahoe (Dec. 10, 2008)
Exhibit PP	U.S. EPA, Handbook, Ground Water, Volume 1: Ground Water and Contamination, EPA/625/6-90/016a (Sept. 1990)
Exhibit QQ	National Research Council, Groundwater Contamination (1984)
Exhibit RR	Regional Board, Fall 2015 URS PCE Investigation Meeting (Feb. 5, 2016)
Exhibit SS	Regional Board Media Release, “Lahontan Water Board to Conduct Groundwater Testing for PCE in South Lake Tahoe” (Oct. 21, 2015)
Exhibit TT	C. Hutto, URS, PCE Investigation, South Lake Tahoe, Summary of Findings (Feb. 5, 2016)
Exhibit UU	EKI, Response to Water Board Notification of Consideration of No Further Action; Napa Auto Parts/Former Lakeside Auto, 1935 Lake Tahoe Boulevard South Lake Tahoe, California, (Dec. 3, 2015)
Exhibit VV	EKI, Response to Water Board Notification of Consideration of No Further Action; Former Big O Tires Store Site, 1961 Lake Tahoe Boulevard, South Lake Tahoe, California (Dec. 3, 2015)
Exhibit WW	2006 Big O Order
Exhibit XX	EDR, The EDR Radius Map Report, South Y Center, South Lake Tahoe, California (July 13, 2007)
Exhibit YY	EDR, The EDR Aerial Photo Decade Package, South Y Center, South Lake Tahoe, California (July 13, 2007)
Exhibit ZZ	EDR, The EDR City Directory Image Report, South Y Area, South Lake Tahoe, California (June 5, 2015)
Exhibit AAA	Harding ESE, Groundwater Investigation, Hurzel Properties, LLC, 949 Emerald Bay

	Road, South Lake Tahoe, California (Dec. 12, 2001)
Exhibit BBB	MACTEC Engineering and Consulting, Inc. ("MACTEC"), Report of Findings, Potential PCE Source Investigation, 949 Emerald Bay Road, South Lake Tahoe, California (Nov. 3, 2003)
Exhibit CCC	Secor International Incorporated ("Secor"), Site Investigation Report, Former Dry Cleaning Business, 949 Emerald Bay Drive, South Lake Tahoe, CA, 96150 (May 30, 2008)
Exhibit DDD	Hill-Donnelly City Directory (1992)
Exhibit EEE	Pacific Bell Directory (1985)
Exhibit FFF	South Lake Tahoe phonebook (1979)
Exhibit GGG	Hill-Donnelly City Directory (1989)
Exhibit HHH	Images of the GHH PCE Compilation Map
Exhibit III	GHH, Regional PCE Data Compilation, South Tahoe Y Area, South Lake Tahoe, California (Oct. 2002)
Exhibit JJJ	Specific Comments on Proposed Order

EXHIBIT A

AGREEMENT FOR PURCHASE AND SALE
OF
SOUTH TAHOE "Y" SHOPPING CENTER
South Lake Tahoe, California

THIS AGREEMENT FOR PURCHASE AND SALE is made and entered into as of December 19, 1985 by and between CENTURY PROPERTIES EQUITY FUND 73, a California limited partnership ("Seller"), and INTERLAND COMMUNITIES, INC., a California corporation ("Buyer").

RECITALS

Seller owns certain improved real property (the "Real Property") consisting of approximately 147,418 net rentable square feet of retail space on approximately 11.5 acres of land, commonly known as South Tahoe "Y" Shopping Center, which is located at the intersection of Highway 50 and Lake Tahoe Boulevard, South Lake Tahoe, California 95731, and certain personal property thereon (the "Personal Property"). The legal description of the Real Property is attached hereto as Exhibit A. A preliminary title report (the "Preliminary Title Report") with respect to the Real Property, dated as of November 6, 1985, issued by Western Title Insurance Company as its order No. 411720C, is attached hereto as Exhibit B. The Personal Property is generally described in the Bill of Sale attached hereto as Exhibit C. "Intangible Property" includes all property other than the Personal Property and the Real Property owned or held by Seller and used in connection with the Real Property or the business now or hereafter conducted by Seller on the Real Property including, without limitation, the name of the Property, "South Tahoe 'Y' Shopping Center," all contract rights, customer lists, advertising materials and telephone exchange numbers. The Real Property, Personal Property and Intangible Property are collectively referred to in this Agreement as the "Property." Seller's most current schedule of its tenants of the Real Property, the rents, security deposits, expiration dates of leases and other pertinent information with respect to such tenancies (the "Rent Roll") is attached hereto as Exhibit H.

Buyer desires to purchase from Seller, and Seller is prepared to sell to Buyer, the Property and, accordingly, Buyer and Seller agree as follows:

ARTICLE I

DEPOSIT

Section 1.1 Deposit by Buyer. In consideration of Seller's removal of the Property from the market, cessation of efforts to sell the Property to others and execution of this Agreement granting to Buyer the exclusive right and privilege to purchase the Property from Seller, subject to and upon all of the terms, covenants and conditions set forth in this Agreement, Buyer shall, upon execution and delivery of this Agreement by the parties, have delivered to Seller the Deposit (as hereinafter defined) in the amount and form hereinafter set forth. Disposition of the Deposit shall be in accordance with Section 1.3 of this Agreement.

Section 1.2 Amounts and Form of Deposit. The Deposit shall consist of a cashier's check drawn on a California bank or wire transfer of funds in favor of Seller in the sum of One Hundred Thousand Dollars ($100,000) (the "Deposit").

Section 1.3 Holding and Disposition of Deposit.

(a) In the event that (i) all of the conditions to this Agreement shall have been satisfied or waived and (ii) both parties shall have fully performed or tendered performance of their obligations hereunder, the entire amount of the Deposit and accrued interest thereon shall be credited against the Purchase Price as provided in Section 2.2 hereof. In the event that (i) all of the conditions except those recited in Section 3.1(a) or 3.1(b) to this Agreement shall have been satisfied or waived, (ii) Seller shall have fully performed or tendered performance of its obligations hereunder and (iii) Buyer shall be unable or fail to perform its obligations hereunder, then Seller shall retain the entire Deposit including accrued interest thereon. In all other events, the entire Deposit including accrued interest shall be returned immediately to Buyer.

(b) Upon Seller's receipt of the Deposit, Seller shall invest the same in a reasonably prudent manner. Buyer and

Seller acknowledge that investing the Deposit with Fidelity Money Markets in a Money Market Account is reasonably prudent.

Section 1.4 Liquidated Damages. BUYER AND SELLER HEREBY ACKNOWLEDGE AND AGREE THAT SELLER'S DAMAGES IN THE EVENT OF A BREACH OF THIS AGREEMENT BY BUYER BEFORE THE CLOSE OF ESCROW WOULD BE DIFFICULT OR IMPOSSIBLE TO DETERMINE AND THE AMOUNT OF THE DEPOSIT PLUS ACCRUED INTEREST THEREON IS THE PARTIES' BEST AND MOST ACCURATE ESTIMATE OF THE DAMAGES SELLER WOULD SUFFER IN THE EVENT THE TRANSACTION PROVIDED FOR IN THIS TRANSACTION FAILS TO CLOSE AND IS REASONABLE UNDER THE CIRCUMSTANCE EXISTING AT THE TIME HEREOF. BUYER AND SELLER AGREE THAT SELLER'S RIGHT TO RETAIN THE DEPOSIT SHALL BE THE SOLE REMEDY OF SELLER IN THE EVENT THIS TRANSACTION FAILS TO CLOSE BECAUSE OF A BREACH OF THIS AGREEMENT BY BUYER.

INTERLAND COMMUNITIES, INC.

Seller

BY:

Vic. Pres.

Buyer

ARTICLE II

PURCHASE AND SALE

Section 2.1 Purchase and Sale. Provided that the Deposit has been received by Seller and that all acts to be performed by Buyer pursuant to this Agreement before the close of escrow are timely performed by Buyer, Seller agrees to sell the Property to Buyer, and, provided that all acts to be performed by Seller pursuant to this Agreement before the close of escrow are timely performed by Seller, Buyer agrees to purchase the Property from

Seller, upon all of the terms, covenants and conditions hereinafter set forth.

Section 2.2 Purchase Price.

The purchase price ("Purchase Price") for the Property shall be Eight Million Nine Hundred Fifteen Thousand Dollars ($8,915,000). The Purchase Price shall be payable by Buyer to Seller on the Closing Date (as hereinafter defined) through the escrow hereinafter mentioned, as follows:

(a) Receipt of the Deposit by Seller pursuant to Section 1.1 in the amount of One Hundred Thousand Dollars ($100,000), together with all interest earned thereon;

(b) Two Million Five Hundred Sixty-Five Thousand Dollars ($2,565,000) plus or minus, as the case may be, the prorations computed in accordance with Section 5.2 hereof, shall be paid in cash;

(c) An amount of the Purchase Price equal to the unpaid principal balance on the Closing Date of that certain indebtedness of approximately Two Million Nine Hundred Twenty-Six Thousand Three Hundred Thirty-One Dollars ($2,926,331) evidenced by a note the original principal amount of which was Three Million Three Hundred Twenty-Five Thousand Dollars ($3,325,000) (the "Prior Lien Note"), which is secured by that certain deed of trust of which The Equitable Life Assurance Society of the United States, a corporation, is the beneficiary, identified as Exception No. 8 in the Preliminary Title Report (the "Prior Lien Deed of Trust"), shall be deemed paid by Buyer's taking title to the Real Property subject to the lien of the Prior Lien Note and Prior Lien Deed of Trust; and

(d) The balance of the Purchase Price (that is to say the difference between $8,915,000 and the sum of (i) $2,665,000, plus (ii) all the interest earned on the Deposit, plus (iii) the unpaid principal amount on the Closing Date of the Prior Lien Note) shall be evidenced by a promissory note from Buyer to Seller in the form attached hereto as Exhibit D (the "Purchase Money Note") dated as of the Closing Date, which shall be secured by a second deed of trust encumbering the Real Property in the form attached hereto as Exhibit E (the "Purchase Money Second Deed of Trust").

Section 2.3 Assignment of Leases. On the Closing Date, Seller shall assign to Buyer all of Seller's interest, as of the Closing Date, in its leases and rental agreements with respect to the Real Property pursuant to a document entitled Assignment of Lessor's Interest in Leases in the form attached hereto as Exhibit F. The Assignment of Lessor's Interest in Leases shall include a Rent Roll (in the form attached hereto as Exhibit H) current as of the Closing Date.

Section 2.4 Personal and Intangible Property. Seller shall deliver to Buyer title to the Personal Property and the Intangible Property on the Closing Date by a Bill of Sale in the form attached hereto as Exhibit C. The parties hereby acknowledge that Appendix I attached to Exhibit C represents a schedule of all such personal property located on the Real

Property as of November 14, 1985, and is subject to change in the normal course of the operation of the improvements on the Real Property which change shall not in the aggregate exceed $1,000 in value.

Section 2.5 Exceptions to Preliminary Title Report. Buyer has inspected and reviewed the Preliminary Title Report and all documents pertaining to all exceptions listed therein. Buyer hereby approves all said exceptions other than Exception Nos. 9, 10, 12, 14, 15 and 16.

Section 2.6 Buyer's Approval. Buyer acknowledges that Seller has given Buyer every opportunity to inspect and review to its satisfaction the following:

(a) The physical condition of the Property and the boundaries of the Real Property;

(b) The existing Rent Roll (Exhibit H) and copies of existing rental agreements and leases;

(c) An unaudited financial statement with respect to the Real Property for calendar years 1982, 1983, 1984 and whatever information is available for 1985 through the date hereof;

(d) All permits in Seller's possession required to operate the Real Property;

(e) The most recent tax bills affecting the Real Property;

(f) Copies of the Preliminary Title Report, Board Order, Parking Lot Repair Bid, Prior Lien Note and Prior Lien Deed of Trust;

(g) Copies of the existing service and supply contracts;

(h) List of Personal Property and identification of Intangible Property;

(i) List of tenant sales for Raley's and K-Mart for calendar years 1980-84, inclusive;

(j) A recent termite and pest control report with respect to Seller's improvements on the Real Property;

(k) Copy of Complaint filed by Barbara Feldman against Fox & Carskadon Management Corporation et. al. for personal injury, Superior Court, County of San Mateo, Case No. 275937 (the "Feldman Case"), and all other pleadings and papers filed in connection therewith.

(l) Any and all other documents or information in Seller's possession which Buyer deems material to the purchase of the Property, including, without limitation, plans and specifications, surveys and engineering reports for the Property.

ARTICLE III

CONDITIONS PRECEDENT

Section 3.1 Conditions. Anything in this Agreement to the contrary notwithstanding, Buyer's obligation to purchase and Seller's obligation to sell the Property shall be subject to and contingent upon the satisfaction of the following conditions precedent:

(a) Seller's receipt of the Deposit;

(b)(i) Execution and acknowledgment of a grant deed by Buyer as grantor to Dorothy S. Lyddon (the "Exchanger") as grantee in form and substance equivalent to Exhibit G attached hereto, acceptance of delivery of such deed by Exchanger and recordation of such deed by the Escrow Company immediately after recordation of the Deed (hereinafter defined) from Seller to Buyer and (ii) execution and acknowledgment by Exchanger of the Indemnity Agreement (Exhibit N) and by Exchanger of the Assumption and Release Agreement (Exhibit P);

(c) The willingness of Chicago Title Insurance Company or some other reputable title insurer acceptable to Buyer and Seller (the "Title Company") to issue, upon the sole condition of the payment of its regularly scheduled premium (i) an American Land Title Association Owners Policy-1970 (revised 10/17/70) of title insurance, insuring Buyer and Exchanger in the amount of $8,915,000 that title to the Real Property is vested of record in Buyer on the Closing Date, subject to and only to the printed conditions and exceptions of such policy, the lien of real property taxes and assessments not delinquent, the lien of the Purchase Money Second Deed of Trust and Exception Nos. 1 -8, 11, 13 and 17 inclusive, as set forth in the Preliminary Title Report (all of which are herein collectively referred to as the "Conditions of Title"), together with either omission of, or an endorsement insuring Buyer and Exchanger that the encroachments onto the Property will not interfere with Buyer's or Exchanger's use thereof, and insuring

Buyer and Exchanger against any losses ensuing by reason of the enforced removal of the encroachments of the improvements on the Property onto easements or other property on account of matters identified as Exception No. 14 in the Preliminary Title Report and (ii) an American Land Title Association Loan Policy-1970 (revised 10-17-70) of title insurance insuring Seller that the lien of the Purchase Money Second Deed of Trust constitutes a security interest in the Real Property subject to, and only to, the Conditions of Title; provided, however, that if some other exception to such policies shall arise after the date of the Preliminary Title Report and before the Closing Date, which exception (i) arose on account of Seller's execution of a document which is recorded against the Real Property, then Buyer shall have the option to take title subject to such other exception and to receive a credit against the cash portion of the Purchase Price equal to the amount of such other exception or (ii) is a mechanics lien claim, then Seller shall cause the same to be omitted from Buyer's title insurance policy by either (A) payment, bonding or indemnity to the Title Company or (B) depositing with the Title Company a sum sufficient to discharge the same, and in either case, Buyer shall purchase the Property, and provided that if Seller shall fail to cause the omission of such mechanics lien claim from the title insurance policy, then Buyer shall take title subject to such mechanics lien claim and receive a credit against the cash portion of the Purchase Price in an amount equal to the amount of such claim;

(d) The approval of this Agreement by the Investment Advisory Committee of Seller's general partner, which shall be deemed given upon Seller's execution of this Agreement;

(e) Seller's approval of the financial statement of Exchanger, which shall be deemed given upon Seller's execution of this Agreement;

(f) Buyer's receipt by the Closing Date of a statement executed by the holder of the Prior Lien Note and Prior Lien Deed of Trust substantially and materially in the form attached hereto as Exhibit I (the "Beneficiary Statement"), which shall disclose an outstanding principal balance of not less than $2,920,000;

(g) Execution on the Closing Date by Seller of a Tenant Credit Escrow Letter to Escrow Company, for tenant improvement and leasing commission credits, in the form attached hereto as Exhibit S, for suite 1044 unless a new lease has been executed therefor in accordance with Section 4.2(g);

(h) Buyer's approval of Seller's rent loss insurance coverage for the Real Property, which approval shall be deemed given upon Buyer's execution of this Agreement;

(i) Buyer's receipt on the Closing Date of a certification of Seller that the representations and warranties of Seller set forth in Section 4.1 of this Agreement are true and correct on the Closing Date; and

(j) Buyer's receipt before the Closing Date of Estoppel Certificates substantially in the form attached hereto escrow, Buyer's purchase of the Property shall waive all such unsatisfied conditions.

ARTICLE IV

COVENANTS, WARRANTIES AND REPRESENTATIONS

Section 4.1 Seller's Warranties and Representations. Seller hereby represents and warrants to Buyer that (a) Seller has, and as of the Closing Date shall have, full power and lawful authority to enter into and carry out the terms and provisions of this Agreement and to execute and deliver all documents which are contemplated by this Agreement and that all actions of Seller and of its general partners necessary to confer such power and authority upon the persons executing this Agreement and all documents which are contemplated by this Agreement on behalf of Seller have been taken, (b) the Rent Roll attached hereto as Exhibit H and the Rent Roll to be included in the Assignment of Lessor's Interest in Leases delivered at the closing shall be true, correct and complete, (c) Seller is not a party to any written employment contracts or collective bargaining agreements with respect to the Real Property for which Buyer will be liable, (d) there are no service contracts with respect to the Real Property by which Buyer would be bound that are not cancellable by the owner of the Real Property within 30 days after written notice from such owner, except as may otherwise be provided in the contracts listed on Appendix II to Exhibit J hereof, (e) until Buyer receives a Beneficiary Statement, the copy of Prior Lien Note attached hereto as

Exhibit R is a true and correct copy, and (f) K. C. Swartzel, Senior Vice President of Century Partners, the authorized agent of Seller, based solely upon his inquiry by means of the Inquiry Memorandum attached hereto as Exhibit M of the individuals listed thereon and without any independent investigation or further inquiry on his part, has no actual knowledge, as of the date hereof, that:

(i) Seller has received any written notice from any governmental authorities that eminent domain proceedings for the condemnation of the Real Property are pending;

(ii) Seller has received any written notice of any threatened or pending litigation which would materially and adversely affect the Real Property except as previously disclosed in writing to Buyer;

(iii) Seller has received any written notice from any governmental authorities that Seller's improvements located on the Real Property are presently in violation of any applicable building codes;

(iv) Except with respect to the items specified in the letter attached hereto as Exhibit O, Seller has received any written notice that Seller's use of the Real Property is presently in violation of any applicable zoning regulation or ordinance, or other law, order, ordinance, rule or regulation, or of any covenant, restriction, instrument or agreement affecting the Real Property;

(v) The income and expense data provided to Buyer are not true, correct and complete; and

(vi) There has been any failure to disclose material facts relating to the Real Property known to Seller.

The representations and warranties set forth in this Section are true as of the date of this Agreement and shall be true as of the Closing Date except as may be disclosed by Seller to Buyer in writing between the date of this Agreement and the Closing Date. Upon transfer of the Property to Exchanger, all the representations and warranties set forth in this Section 4.1 and all covenants set forth in Sections 4.2 and 5.5 hereof shall run directly to Exchanger, as if Exchanger were Buyer, and the provisions of Section 4.5 hereof shall apply to Exchanger as if Exchanger were Buyer.

Section 4.2 <u>Seller's Covenants</u>. Seller hereby covenants and agrees that, from the date hereof through the Closing Date:

(a) Seller will not enter into any service contracts binding upon Buyer which cannot be cancelled by the owner of the Property within 30 days after written notice from such owner;

(b) At the written request of Buyer received on or before the Closing Date, Seller will terminate or give notice of termination on the Closing Date of any service contract of Seller set forth in Appendix II to <u>Exhibit J</u> hereof, which, by its terms, is so terminable;

(c) Seller will make all installment payments due under the Prior Lien Note in accordance with its terms and shall not prepay any sums due thereunder;

(d) Seller shall maintain its existing insurance coverage, including rental loss insurance coverage;

(e) Seller will operate and maintain the Property in a manner consistent with Seller's past practices;

(f) Upon the close of escrow Seller will deliver to Buyer at the Real Property all of the following then in Seller's possession: plans and specifications with respect to the improvements located on the Real Property (the "Improvements"), keys to the Property, all permits in Seller's possession and original leases with respect to the Property;

(g) Seller will continue to utilize reasonable efforts to lease the space comprising suite 1044 of the Real Property and notify Buyer of the results of such effort. Seller shall not execute a lease for the foregoing suite without the prior written approval of Buyer, which Buyer will not unreasonably withhold or delay if (i) the monthly base rental rate provided throughout the term of the lease shall not be less than $.70 per square foot, (ii) the term of any such lease is not less than 3 years nor more than 10 years, (iii) the uses permitted thereunder are reasonably complementary to the then existing uses of the other tenants of the Real Property, and (iv) the tenant shall be reasonably creditworthy and have such reasonably sufficient financial resources and expertise to operate a successful retail operation. Seller shall not modify or terminate any lease of the Real Property without the prior approval of Buyer, which approval Buyer shall not unreasonably withhold or delay;

(h) Seller shall, upon Seller's receipt of information affecting the representations and warranties contained in Section 4.1, promptly notify Buyer of such information;

(i) Seller shall not, without the prior approval of Buyer, and except as provided in Section 4.2(g), execute any new lease of, or modify or terminate any existing lease of, the Real Property;

(j) From and after the Closing Date, Seller shall not continue, or take, any action against any tenant under any lease of the Real Property;

(k) Seller will make available to Buyer all documents relating to the Real Property in Seller's possession upon reasonable notice of request therefor; and

(l) Seller hereby indemnifies and agrees to hold harmless, Buyer from and against any and all cost, loss, expense (including reasonable attorneys fees) or liability paid or incurred by Buyer or Seller on account of the ownership, operation, management and servicing of the Property for any period prior to the Closing Date or, with respect to the obligations set forth in Section 5.5(b), prior to the Termination Date, including, but not limited to, the matters assumed by Buyer pursuant to Section 4.4(a); provided that with respect to any matters disclosed in the Board Order attached hereto as Exhibit O, Seller's indemnity herein stated shall be limited to any penalties or fines accrued through the Closing Date and attorneys fees incurred with respect to the same.

Section 4.3 Buyer's Warranties and Representations. Buyer hereby represents and warrants to Seller that (a) Buyer has full power and lawful authority to enter into and carry out the terms and conditions of this Agreement and to execute and deliver all documents which are contemplated by this Agreement, and (b) all actions of Buyer necessary to confer such power and authority upon the persons executing this Agreement and all documents which are contemplated by this Agreement on behalf of Buyer have been taken.

The representations and warranties set forth in this Section are true as of the date of this Agreement and shall be true as of the Closing Date.

Section 4.4 Buyer's Covenants.

(a) From and after the Closing Date, Buyer shall (i) assume all obligations of Seller with respect to the items specified in Exhibit O, except for any penalties or fines imposed in connection therewith for the period prior to the Closing Date and any attorneys' fees in connection therewith, and (ii) promptly execute a contract with a reputable general contractor for the performance of the parking lot repairs (collectively, the "Parking Lot Repairs") identified on the Parking Lot Repair Bid attached hereto as Exhibit Q and diligently proceed to complete the same on or before twelve (12) months after the Closing Date.

(b) Buyer hereby indemnifies, and agrees to hold harmless, Seller from and against any and all cost, loss, expense (including reasonable attorney's fees) or liability paid or incurred by Buyer or Seller on account of the matters assumed by Buyer pursuant to Section 4.4(a) and except as provided in Section 5.5, on account of the ownership, operation, management and servicing of the Property, relating to the period on and after the Closing Date.

4.5 Limitations. EXCEPT AS PROVIDED IN SECTION 4.1 ABOVE, AND EXCEPT WITH RESPECT TO ANY LESSOR'S ESTOPPEL CERTIFICATES PROVIDED TO BUYER, SELLER DISCLAIMS ALL WARRANTIES, EXPRESS OR IMPLIED, WITH RESPECT TO THE PROPERTY. SUBJECT TO THE PROVISIONS OF SECTION 6.1 OF THIS AGREEMENT, BUYER SHALL PURCHASE THE PROPERTY IN ITS "AS IS" CONDITION ON THE CLOSING DATE.

The parties agree (a) that the Seller's covenants, warranties and representations contained in this Agreement and in any document executed by Seller pursuant to the forms attached hereto as exhibits and (b) that any covenants, representations or warranties contained in any written certification given by Seller to Buyer, shall survive Buyer's purchase of the Property and the delivery of the Deed only for a period of twelve months (12) after the Closing Date (the "Limitation Period"), and that if any such covenants, warranties or representations are breached, Buyer agrees to provide actual written notice of such breach to Seller and to allow Seller 30 days within which to cure such breach, or, if such breach cannot reasonably be cured within 30 days, an additional reasonable time period, so long as such cure has been commenced within such 30 days and diligently pursued, and if Seller fails to cure such breach after actual written notice and within such cure period, Buyer's sole remedy shall be an action at law for damages as a consequence thereof which must be commenced, if at all, within the Limitation Period, provided, however, that if within the Limitation Period Buyer gives Seller written notice of such a breach and Seller commences to cure and thereafter terminates such cure effort, Buyer shall have an additional 60 days from the date of such termination within which to commence an action at law for damages as a consequence of Seller's failure to cure. The Limitation Period referred to herein shall apply to known as well as unknown breaches of such covenants, warranties and representations.

Notwithstanding the foregoing, the Limitation Period shall not apply to matters contained in any Lessor's Estoppel Certificates provided to Buyer for which Lessee's Estoppel Certificates have not been substituted or to Seller's covenants pursuant to Section 4.2(1) or 5.5(c) hereof; provided, however, that upon Buyer's receipt of a Lessee's Estoppel Certificate, which does not contain a Lessee's Allegation, in substitution for a Lessor's Estoppel Certificate, then the Limitation Period with respect to all matters contained therein shall commence and expire as provided above as if the date Buyer received such Lessee's Estoppel Certificate was the Closing Date.

ARTICLE V

ESCROW

Section 5.1 Escrow Arrangements. An escrow for the purchase and sale contemplated by this Agreement has been opened by Buyer at the Title Company, 311 California Street, Suite 700, San Francisco, California 94104 (the "Escrow Company"). Within two days before the Closing Date, Seller shall deliver to Buyer a copy of the Beneficiary Statement (Exhibit I). By the Closing Date, Seller and Buyer shall deliver separate escrow instructions to the Escrow Company and the parties shall deposit in escrow the following funds and documents:

(a) Seller shall deposit a duly executed and acknowledged grant deed to Buyer subject to all liens and encumbrances of record in the form attached hereto as Exhibit G (the "Deed"), the Beneficiary Statement (Exhibit I), a duly executed Assignment of Service Contracts, Warranties and Intangibles in the form attached hereto as Exhibit J, a duly executed and acknowledged counterpart of the Assignment of Lessor's Interest in Leases (Exhibit F), a duly executed FIRPTA Affidavit in the form attached hereto as Exhibit T, a duly executed Tenant Credit Escrow Letter in the form attached hereto as Exhibit S, the duly executed Bill of Sale (Exhibit C), a duly executed and acknowledged counterpart of the Indemnity Agreement (Exhibit N), a duly executed and acknowledged counterpart of the Assumption and Release Agreement (Exhibit P), a duly executed counterpart of the Roof Condition Agreement (Exhibit U) and cash in the amount of and escrow instructions with respect to the Repair Fund described in Section 5.5(a); and

(b) Buyer shall deposit the cash portion of the Purchase Price not already included in the Deposit received by Seller, the duly executed Purchase Money Note (Exhibit D), the duly executed and acknowledged Purchase Money Second Deed of Trust (Exhibit E), a duly executed counterpart of the Assignment of Lessor's Interest in Leases (Exhibit F), evidence of the fire and extended coverage and other insurance required under the Purchase Money Deed of Trust, a duly executed and acknowledged grant deed in form and substance substantially the same as Exhibit G from Buyer as grantor to Exchanger as grantee, a counterpart of the Indemnity Agreement (Exhibit N), duly executed and acknowledged by Seller and Exchanger, a counterpart of the Assumption and Release Agreement (Exhibit P) duly executed and acknowledged by Buyer and Exchanger and a counterpart of the Roof Condition Agreement (Exhibit U), duly executed by Exchanger.

Section 5.2 Prorations in Escrow. Real estate taxes and assessments, personal property taxes, if any, interest on the Prior Lien Note and rental income exclusive of percentage rents ("Base Rents") and other payments received by Seller under the rental agreements and leases with respect to the Property shall be prorated in escrow as of the Closing Date. Buyer shall be credited in escrow with any portion of rental agreement or lease deposits in Seller's possession with respect to the Property which are refundable to the tenants thereof and with the amount of any rent concessions extending beyond the Closing Date and rent prepaid beyond the Closing Date as set forth on the current Rent Roll to be delivered at the closing. Buyer shall not be entitled to any interest on rental agreement or lease deposits accrued prior to the Closing Date and shall not be obligated to return such interest to any tenant of the Real Property.

Section 5.3 Prorations Outside of Escrow.

(a) Operating expenses for the Property shall be prorated outside of escrow as of the Closing Date. Any sums therefor due one party from the other shall be paid by the other within sixty (60) days after the Closing Date upon receipt of appropriate supporting invoices.

(b) Buyer shall, consistent with reasonable business judgment, exert its best efforts to collect for Seller following the Closing Date all rental income which is delinquent on the Closing Date; provided, however, that Buyer shall not be required to bring legal action to collect such rents. The first monies collected on account of the Base Rents after the Closing Date shall be successively applied (after Buyer's deducting its reasonable costs and expenses incurred in collecting the same) to the payment of (i) Base Rents due and payable in the month in which the closing occurs, (ii) Base Rents due and payable in the months succeeding the month in which the closing occurs, up to and including the month in which payment is made, and (iii) Base Rents due and payable in the months preceding the month in which the closing occurs, if any.

(c) Within thirty (30) days of receipt by Buyer, Buyer shall pay to Seller, all percentage rents, billbacks and reimbursements for common area expenses, taxes, insurance and other monies due Seller under the rental agreements and leases with respect to the Real Property which were (i) accrued but not yet due and payable as of the Closing Date or (ii) due but not yet received by Seller as of the Closing Date. Proration of percentage rents, billbacks and reimbursements for common area expenses, taxes and insurance shall be based on the number of days in the calendar year preceding and succeeding the Closing Date where information is not otherwise available regarding the amounts earned, accrued or due on less than a calendar year basis.

Section 5.4 Other Closing Costs. Any impound accounts maintained under the Prior Lien Note or Prior Lien Deed of Trust shall be credited to Seller. Seller shall pay all closing costs incurred with respect to this transaction, including, without limitation, the (a) escrow fee charged by the Escrow Company, (b) transfer and other fees charged by the holder of the Prior Lien Note as a consequence of the transfer of the property from Seller to Buyer, (c) premiums for the title insurance policies issued by the Title Company (including any related survey costs), (d) real estate transfer and documentary tax due with respect to the transfer of the Property and (e) recording costs for this transaction.

Section 5.5 Feldman Case; Certain Indemnities; Creation of Repair Fund

(a) Buyer acknowledges that Buyer has been advised (i) of the existence of the Feldman Case and the disposition thereof; (ii) that plaintiff's claim for damages in the Feldman Case was based in part upon the contention that the roof of the improvements located on the Real Property was designed in a manner permitting excessive snow and ice to accumulate thereon, creating an alleged dangerous condition, and (iii) that there have been prior claims by other parties for damages caused by snow and ice falling from such roof. In order to assist Buyer in its efforts to prevent further injuries and damages from falling snow and ice on the Property, Seller shall make available to Buyer cash in the amount of $366,000, which sum shall be deposited on the Closing Date in an escrow established with the Title Company and shall be disbursed by the Title Company directly to such contractors, subcontractors and suppliers as Buyer shall direct in payment for such work as Buyer deems necessary or appropriate to correct any potentially dangerous conditions caused by accumulation of snow and/or ice on the roof and to prevent any such further injuries and damages. Any amounts not needed to correct the condition of the roof may be used for other capital improvements to the Property. Neither Seller nor any of Seller's affiliates, including without limitation Fox & Carskadon Financial Corporation (collectively "Seller's Affiliates"), shall bear any responsibility for or liability with respect to any such work or the condition of the Property following the Termination Date (as defined in subparagraph (b) below). Buyer shall commence such corrective work to the roof as it deems necessary or appropriate as soon after the Closing Date as weather reasonably permits and necessary governmental approvals have been obtained. Buyer agrees to use its best efforts to obtain all governmental approvals required to perform such work as Buyer reasonably deems necessary to correct the condition of the roof. Any funds remaining in the escrow account on December 31, 1986 shall be paid to Buyer, and Buyer shall be obligated to use such funds to complete such work as Buyer deems necessary to correct the condition of the roof. Any amounts not needed to accomplish the foregoing shall be used for repairs and other capital improvements to the Property. Buyer's obligations pursuant to this Section 5.5(a) shall be deemed satisfied upon transfer of the Property to Exchanger and delivery to Seller of the Roof Condition Agreement (Exhibit U) duly executed by Exchanger.

(b) Seller shall remain obligated from the Closing Date until the Termination Date, which shall be the earliest of (i) commencement of actual work to remove and replace the roof of the improvements, (ii) the date of the final snowmelt from the roof of the improvements following the winter of 1985-86 or (iii) April 30, 1986, to perform reasonable removal of snow and ice from the roof of the improvements and the sidewalks of the Property, provided that Buyer shall reimburse Seller in the amount of all reasonable costs expended by Seller after the Closing Date to perform such maintenance and to clear snow from the parking lot. All reimbursements shall be made within 30 days following submission by Seller to Buyer of a written invoice and supporting documentation evidencing the costs actually incurred by Seller to perform such work.

(c) Seller acknowledges and agrees that Seller's indemnification of Buyer set forth in Section 4.2(1) of this Agreement shall cover and include, without limitation, all costs, losses, expenses (including reasonable attorneys' fees) and liabilities paid or incurred by Buyer on account of the Feldman Case, or any other suits filed or claims made which arise out of or relate to injury or damage incurred by any party with respect to the Property prior to the Closing Date or arising out of the removal or build-up of snow on or snowfall from the roof of the improvements prior to the Termination Date. Buyer acknowledges and agrees that Buyer's indemnification of Seller set forth in Section 4.4(b) shall cover and include, without limitation, all costs, losses, expenses (including reasonable attorneys' fees) and liabilities paid or incurred by Seller or any of Seller's Affiliates with respect to any and all suits filed or claims made which arise out of or relate to injury or damage incurred by any party on or after the Closing Date with respect to the Property (other than any injury or damage arising out of the removal or build-up of snow on or snowfall from the roof of the improvements prior to the Termination Date), regardless of whether such suits or claims allege or establish that the cause of such injury or damage resulted from design defects or other conditions existing at the Property on or before the Closing Date. Accordingly, Seller and Seller's Affiliates shall have no responsibility for any such suits or claims, and Buyer shall, at the request of Seller, fully defend any such suits and claims at Buyer's sole expense.

Section 5.6 Insurance. Such portion of Seller's existing blanket fire and extended coverage insurance policy, as it affects the Property, as Seller may elect shall be cancelled as of the Closing Date, and Seller shall receive any premium refund due thereon.

Section 5.7 Closing. The Escrow Company shall close escrow on the Closing Date which shall be on or before December 31, 1985, unless a different date is agreed to in writing by Buyer and Seller; provided the conditions precedent set forth in Article III of this Agreement have been timely met or waived, and failure of either party to be in a position to close subject to the terms of this Agreement by the Closing Date shall constitute a default hereunder, and provided further that Seller shall have the right to extend the Closing Date by not more than thirty (30) days in order to obtain Estoppel Certificates from Raley's and K-Mart as provided in Section 3.1(j) hereof. Any pre-closing conference shall be held at the office of Seller's counsel.

ARTICLE VI

MISCELLANEOUS

Section 6.1 Condemnation, Damage or Destruction. If Seller has received the Deposit and there shall be any damage to, condemnation of, or destruction of, Seller's improvements on the Real Property between the date of this Agreement and the Closing Date (the "Contract Period") then the provisions of this Section shall be applicable.

(a) Seller shall promptly conclude the loss adjustment on such insurance claims and the award on such condemnation. Upon receipt of the insurance proceeds for repair of such damage or destruction from its insurance carriers, or receipt of such condemnation awards, and following approval from its mortgage holders, Seller shall promptly use such insurance proceeds to repair or replace such damage or destruction in the case of damage or destruction, or such condemnation awards to restore the Property to an architecturally complete unit in the case of condemnation, within a reasonable period of time. Any such Contract Period insurance proceeds or condemnation awards received by Seller prior to the Closing Date and not expended on restoration of the Property before the Closing Date shall be delivered by Seller to Buyer on the Closing Date. Any such Contract Period insurance proceeds or condemnation awards received by Seller after the Closing Date and not expended on restoration of the Property shall be promptly delivered by Seller to Buyer.

(b) Seller shall cooperate fully with all reasonable requests of Buyer in the processing of such insurance claims and condemnation awards. At the direction of Buyer, Seller agrees to request approval by its insurers of an assignment to Buyer of Seller's rights under any policy or policies covering losses to the Property occurring during the Contract Period, in which event Seller shall be released from any obligation to repair, replace or restore the Property.

(c) Notwithstanding the foregoing, if the cost of repairing or restoring any such damage, condemnation or destruction exceeds One Million Dollars ($1,000,000), either Seller or Buyer may terminate this Agreement by written notice delivered to the other within seven (7) days of the date upon which Buyer is notified of such damage, taking or destruction, whereupon Seller shall return to Buyer the Deposit Seller received from Buyer pursuant to Section 1.3 hereof.

(d) If any damage or destruction occurs for which the cost of repair or restoration is not fully covered by Seller's insurance, or if Seller chooses not to pay any applicable deductible under Seller's insurance policy or policies, Seller or Buyer may terminate this Agreement by written notice delivered to the other party on or before the Closing Date, whereupon the Deposit shall be returned to Buyer and all rights and obligations hereunder of each party shall be at an end. Notwithstanding the foregoing (i) Seller's election to terminate this Agreement as provided herein shall not be effective if

Buyer notifies Seller in writing on or before the Closing Date that (A) Buyer shall purchase the Property in its then "as is" condition notwithstanding any such damage or destruction and without the benefit of insurance proceeds for repair of such damage or destruction or (B) Buyer shall pay one-half of any applicable deductible under Seller's insurance policy or policies and delivers such amount to the Escrow Company with appropriate instructions and (ii) Buyer's election to terminate this Agreement as provided herein shall not be effective if Seller notifies Buyer in writing on or before the Closing Date that Seller shall grant Buyer a credit against the cash portion of the Purchase Price in an amount equal to the difference between the estimated cost of such repairs and restoration and the aggregate amount of insurance proceeds plus one-half of the amount of any applicable deductible, in which case Buyer shall purchase the Property in its then "as is" condition notwithstanding any such damage or destruction. If Buyer so notifies Seller that it will pay one-half of the amount of said deductible, then Seller shall pay the other one-half.

(e) Anything in this Agreement to the contrary notwithstanding, all insurance proceeds to be expended by Seller or assigned or delivered to Buyer pursuant to this Section shall exclude rental loss insurance proceeds, if any, for any periods up to and including the Closing Date, which rental loss insurance proceeds shall be retained by Seller; provided, however, that if such rental loss insurance proceeds are payable for periods after the Closing Date, Seller shall assign its interest in such rental loss insurance proceeds to Buyer at close of escrow. Such assignment shall be a condition precedent to Buyer's obligation to close hereunder in the event of condemnation, damage or destruction.

Section 6.2 Brokerage Commission and Finder's Fee.

(a) Each party to this Agreement warrants to the other (and Buyer also warrants to Seller's general partners) that except for the commissions mentioned below, no person or entity can properly claim a right to a commission, real estate finder's fee, real estate acquisition fee or other real estate brokerage compensation (collectively, "Real Estate Compensation") based upon the acts of that party with respect to the transaction contemplated by this Agreement, and each party hereby agrees to indemnify the other against and to hold the other harmless from (and Buyer also agrees to indemnify Seller's general partners against and to hold them harmless from) any loss, cost or expense (including but not limited to attorneys' fees and returned commissions) resulting from any claim for Real Estate Compensation by any person or entity based upon such acts or from payment of Real Estate Compensation to any person by Buyer or by any person or entity affiliated with Buyer.

(b) Buyer also hereby warrants to Seller and to its general partners that Buyer will not pay as part of this transaction any Real Estate Compensation to itself or any person or entity, including Buyer's general partner or any person or entity affiliated with Buyer, either directly or indirectly from escrow or otherwise. Neither Buyer nor any of its affiliates shall sell the Property as a part of this transaction to any of Buyer's affiliates for an amount which is greater than Buyer has paid to Seller hereunder for the purpose of avoiding the foregoing restrictions. For purposes of this Section 6.2(b): (i) "as part of this transaction" means the entering into of any agreement or understanding prior to a date which is ninety (90) days after the Closing Date and (ii) Real Estate Compensation shall not include a consulting agreement regarding asset management services, provided that the compensation and services provided for therein is payable, and commence, after the Closing Date.

(c) Notwithstanding the foregoing, Exchanger may pay an investment advisory fee to AMB Investments, Inc.; provided, that the amount thereof shall not exceed One Hundred Twenty-Five Thousand Seven Hundred and Fifty Dollars ($125,750).

(d) Buyer acknowledges that Seller may pay Seller's general partner(s) and/or affiliates, real estate brokerage commissions at Seller's expense.

Section 6.3 Successors and Assigns. (a) Buyer may not assign any of Buyer's rights, or delegate any of its duties, hereunder without the prior written consent of Seller.

(b) Buyer (i) shall be released from any obligations hereunder, on the Purchase Money Note (Exhibit D) and the Purchase Money Second Deed of Trust (Exhibit E) and (ii) shall not be deemed to have made any warranties to Seller pursuant to Section 6.2, except those warranties contained in Section 6.2(b), upon execution and acknowledgment by Seller, Buyer and Exchanger of the Assumption and Release Agreement (Exhibit P), execution and acknowledgment by Seller and Exchanger of the Indemnity Agreement (Exhibit N) and execution, delivery and recording of a grant deed to the Real Property to Exchanger from Buyer by which Exchanger takes the Real Property subject to the Purchase Money Note and the Purchase Money Second Deed of Trust.

Section 6.4 Notices. All written notices required to be given pursuant to the terms hereof shall be either personally delivered (which will be effective upon delivery) or deposited (which will be deemed effective forty-eight (48) hours after deposit) in the United States first class mail, registered or certified return receipt requested, postage prepaid, and addressed as follows:

To Seller:
(Pre-closing notices)

Century Properties Equity Fund 73
c/o Century Partners
Attention: Property Sales
2755 Campus Drive, Suite 235
San Mateo, California 94403

(Post-closing notices)

Century Properties Equity Fund 73
c/o Fox & Carskadon Financial Corporation
Attention: Portfolio Management
2755 Campus Drive, Suite 300
San Mateo, California 94403

with a copy to:

Robert A. Thompson, Esq.
Pettit & Martin
101 California Street, 35th Floor
San Francisco, California 94111

To Buyer:

Interland Communities, Inc.
Attention: Jim Joseph
441 Borel Avenue, Suite 600
San Mateo, California 94402

with copies to:

Peggy Springgay, Esq.
Berliner, Cohen & Biagini
99 Almaden Blvd., Suite 400
San Jose, California 95113

Dorothy S. Lyddon
c/o AMB Investments, Inc.
Four Embarcadero Center, 35th Floor
San Francisco, CA 94111

Janet C. Norris, Esq.
Steefel, Levitt & Weiss
One Embarcadero Center, 29th Floor
San Francisco, CA 94111

The foregoing addresses may be changed by written notice.

Section 6.5 Time. Time is of the essence of every provision herein contained.

Section 6.6 Possession. Possession of the Property shall be delivered to Buyer on the Closing Date, subject to existing tenancies.

Section 6.7 Incorporation by Reference. All of the exhibits attached hereto or referred to herein and all documents in the nature of such exhibits, when executed, are by this reference incorporated herein and made a part of this Agreement.

Section 6.8 No Deductions or Off-Sets. Buyer acknowledges that the Purchase Price to be paid for the Property pursuant to this Agreement is a net amount and shall not be subject to any off-sets or deductions other than the Repair Fund described in Section 5.5. Any rental rebates, rollbacks or the like mandated with respect to the period of the Seller's ownership of the Property shall be paid when due by Buyer.

Section 6.9 <u>Attorneys' Fees</u>. In the event Seller is made a party to any litigation commenced by or against Buyer, Buyer shall pay all costs, expenses, and attorneys' fees incurred by Seller in connection with such litigation except in the event that such litigation, or Seller's being made a party thereto, results from a claim against which Seller has agreed to indemnify Buyer pursuant to Section 5.5, from a breach of this Agreement by Seller or from any other act by Seller, including actions or omissions by Seller in the management of the Real Property prior to the Closing Date or in the performance of the obligations assumed by Seller pursuant to Section 5.5(b) prior to the Termination Date. Similarly, in the event Buyer is made a party to any litigation commenced by or against Seller, Seller shall pay all costs, expenses, and attorneys' fee incurred by Buyer in connection with such litigation except in the event that such litigation, or Buyer's being made a party thereto, results from a breach of this Agreement by Buyer or from any other act by Buyer, including actions or omissions by Buyer in the management of the Real Property after the Closing Date or, with respect to the snow and ice removal described in Section 5.5(b), after the Termination Date. In the event of any action or proceeding at law or in equity between Seller and Buyer as a consequence of any controversy, claim or dispute relating to this Agreement or the breach thereof or to enforce any of the provisions and/or rights hereunder, the unsuccessful party to such action or proceeding hereby covenants and agrees to pay to the successful party all costs and expenses, including attorneys' fees incurred therein by such successful party, and if such successful party shall recover judgment in any action or proceeding, such costs, expenses and fees shall be included in and as part of such judgment.

Section 6.10 Construction. The parties acknowledge that with respect to the transactions contemplated herein (a) each party and its counsel have reviewed and revised this Agreement and that the normal rule of construction to the effect that any ambiguities are to be resolved against the drafting party shall not be employed in the interpretation of this Agreement or any amendments or exhibits thereto; (b) neither party has received from the other any accounting, tax, legal or other advice, and (c) each party has relied solely upon the advice of its own accounting, tax, legal and other advisors.

Section 6.11 Sales and Use Taxes. If any sales or use taxes shall be determined to be payable in connection with any of the transactions contemplated by this Agreement, then such sales and use taxes shall be paid by Buyer upon demand of Seller.

Section 6.12 No Merger. The provisions of this Agreement shall not merge with the delivery of the Deed but shall, except as otherwise provided in this Agreement, survive the close of escrow.

Section 6.13 Governing Law. This Agreement shall be construed and interpreted in accordance with and shall be governed and enforced in all respects according to the laws of the State of California.

Section 6.14 Notice to Tenants. Promptly after the close of escrow, Buyer and Seller, or Exchanger and Seller, shall provide to each tenant of the Real Property by personal delivery or certified mail, written notice (a) of the sale of the Real Property by Seller to Buyer, (b) of the correct name, address and telephone number of Buyer, (c) that the sum designated in the notice as the tenant's deposits with respect to the Real Property less any lawful deductions, have been assigned and delivered by Seller to the Buyer, (d) of any claims then made against such deposits, and (e) of any other matters required by applicable local law as a consequence of the sale of the Real Property by Seller to Buyer. If the notice to a tenant is made by personal delivery, the tenant shall acknowledge receipt of a copy of the notice by signing his or her name on the landlord's copy of such notice.

Section 6.15 Disclosure of Information. Without the prior written consent of Seller, Buyer will not use the name of Seller in any press release or other media announcement until after closing has occurred. Buyer has no present intention of syndicating the Real Property. However, should Buyer do so, Buyer shall include the following language in the text of any offering circular distributed by Buyer in connection with the sale of ownership interests in the entity which will take title to the Real Property. This language shall appear together with the first reference to the name of Seller or Fox & Carskadon Financial Corporation:

> Neither Century Properties Equity Fund 73 nor Fox & Carskadon Financial Corporation are affiliated or otherwise associated with the sponsors of this offering for [name of entity] and neither Century Properties Equity Fund 73 nor Fox & Carskadon Financial Corporation has assumed any responsibility in connection with this offering.

Section 6.16 Exculpation. Buyer agrees that any liability of Seller under any claim brought pursuant to this Agreement or any document or instrument delivered simultaneously or in connection with, or pursuant to this Agreement, shall be limited to $6,000,000, and that in no event shall Buyer seek satisfaction for any such obligation from other assets, or from any of the general or limited partners, of Seller. Notwithstanding the foregoing, if Seller does not have assets of $6,000,000, or Seller has been dissolved, Buyer may seek satisfaction of up to $6,000,000 from Seller's general partners.

Section 6.17 Estoppel Certificates. Buyer hereby grants to Seller the right, after the Closing Date, to obtain Estoppel Certificates from any tenant of the Real Property which failed or refused to give such Estoppel Certificates on or before the Closing Date. Buyer shall return to Seller each Estoppel Certificate executed by Seller for which Seller is able to provide an equivalent Estoppel Certificate executed by a tenant of the Real Property. Upon Buyer's receipt of such an exhibits, when executed, contain the entire understanding of the parties and supersede any and all other written or oral understanding.

IN WITNESS WHEREOF, Seller and Buyer have executed this Agreement at San Francisco, California the day and year first above written.

SELLER:

CENTURY PROPERTIES EQUITY FUND 73,
a California limited partnership

By: Fox & Carskadon Financial
Corporation, a California
corporation, its general
partner

By: ______________________
K. C. Swartzel
Its Authorized Agent

BUYER:

INTERLAND COMMUNITIES, INC.

By: J Thomas Bale
Its Vice President

EXHIBIT B

OFFICIAL RECORDS
EL DORADO COUNTY CALIF
RECORD REQUESTED BY
SILVERADO TITLE CO.
SEP 11 4 58 PM 1974
JAMES W. SWEENEY
COUNTY RECORDER

When recorded mail to

THOMAS S. RENK, ESQ.
BROBECK, PHLEGER & HARRISON
111 Sutter Street
San Francisco, California 94104

GRANT DEED

I.

FOR VALUE RECEIVED, CONNOLLY DEVELOPMENT, INC., a California corporation (hereinafter called "Grantor"), grants to CENTURY PROPERTIES EQUITY FUND 73, a California limited partnership (hereinafter called "Grantee"), all that certain real property located in the City of South Lake Tahoe, County of El Dorado, State of California, more particularly described in Exhibit A, attached hereto and incorporated herein by reference thereto.

II.

This Deed is made and delivered subject to liens to secure payment of current taxes and assessments and easements, covenants, conditions and restrictions of record.

IN WITNESS WHEREOF, Grantor has executed this Grant Deed this 11th day of September, ~~1973~~ 1974.

"GRANTOR"

CONNOLLY DEVELOPMENT, INC.

By
Its President

By Keith W. Stafford
Its VP

249307

MAIL ALL TAX STATEMENTS TO GRANTEE AT:

c/o Fox & Carskadon Financial Corporation
3000 Sand Hill Road
Menlo Park, California 94025

1283 289

OFFICIAL RECORDS
EL DORADO COUNTY-CALIF
RECORD REQUESTED BY

SEP 11 4 57 PM 1974

JAMES W. SWEENEY
COUNTY RECORDER

STATE OF CALIFORNIA)
) ss.
COUNTY OF **ALAMEDA**)

On this **11th** day of **September**, 197 , before me, the undersigned, a Notary Public in and for said State personally appeared **Ted Connolly**, known to me to be the **President** and **Martha W. Stafford**, known to me to be the **Vice President** of CONNOLLY DEVELOPMENT, INC., the corporation that executed the within instrument, and known to me to be the persons who executed the within instrument on behalf of the corporation therein named, and acknowledged to me that such corporation executed the within instrument pursuant to its by-laws or a resolution of its board of directors.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my official seal the day and year in this certificate first above written.

ROSEMARY A. MUNOZ
MY COMMISSION EXPIRES DEC. 18, 1977

Rosemary A. Munoz
Notary Public
State of California

EXHIBIT C

OFFICIAL RECORDS
EL DORADO COUNTY-CALIF
RECORD REQUESTED BY
SILVERADO TITLE CO.
SEP 11 4 59 PM 1974
JAMES W. SWEENEY
COUNTY RECORDER

5

When recorded mail to

Thomas S. Renk, Esq.
Brobeck, Phleger & Harrison
111 Sutter Street
San Francisco, Ca. 94104

MEMORANDUM OF LEASE

CENTURY PROPERTIES EQUITY FUND 73, a California limited partnership (hereinafter called "Lessor"), and CONNOLLY DEVELOPMENT, INC., a California corporation (hereinafter called "Lessee"), have entered into a Lease and an Addendum thereto of even date herewith (hereinafter collectively called the "Lease"), of that parcel of real property and the improvements thereon located in the City of South Lake Tahoe, County of El Dorado, California, more particularly described in Exhibit A hereto, consisting of a one hundred forty-seven thousand six hundred sixty-five (147,665) square foot shopping center, known as the Tahoe South 'Y' Shopping Center. The real property and improvements are hereinafter referred to as the "Leased Premises".

Lessor does hereby lease, demise and let unto Lessee, and Lessee does hereby lease, hire and take from Lessor, the Leased Premises in accordance with the terms and conditions of the Lease.

The term of the Lease shall be for a period commencing on the date thereof and ending one (1) year from said date, provided that Lessee shall have the option to extend the term of the Lease for two (2) periods of one (1) year each.

This Memorandum of Lease is not a complete summary of the Lease. Provisions of this Memorandum of Lease shall not be used in interpreting provisions of the Lease. In the event of conflict between the Lease and this Memorandum of

24911

Lease, the terms of the Lease shall control.

IN WITNESS WHEREOF, Lessor and Lessee have MS executed this Memorandum of Lease this ~~11th~~ day of September, 1974.

LESSOR

CENTURY PROPERTIES EQUITY FUND 73

By: FOX & CARSKADON FINANCIAL CORPORATION
Its: General Partner

By:
Its: Vice President

LESSEE

CONNOLLY DEVELOPMENT, INC.

By:
Its: President

By:
Its: VP

STATE OF CALIFORNIA
COUNTY OF ALAMEDA } ss

ON September 11, 1974, before me, the undersigned, a Notary Public in and for said County and State, personally appeared TED CONNOLLY known to me to be the President, and MARTHA W. STAFFORD known to me to be the ~~Secretary~~ VICE PRESIDENT of the Corporation that executed the within instrument and the officers who executed the within instrument on behalf of the Corporation therein named, and acknowledged to me that such Corporation executed the within instrument pursuant to its By-laws or a Resolution of its Board of Directors.

OFFICIAL SEAL
ROSEMARY A. MUNOZ
NOTARY PUBLIC – CALIFORNIA
ALAMEDA COUNTY
MY COMMISSION EXPIRES DEC. 18, 1977

Notary's Signature Rosemary A. Munoz

CORPORATION ACKNOWLEDGMENT
Form No. 14

State of California }
County of ALAMEDA } ss.

On this 11th day of September, in the year 1974, before me, Rosemary A. Munoz, a Notary Public, personally appeared W. Patrick McDowell, known to me to be the Vice President, and ______, known to me to be the ______ Secretary of FOX & CARSKADON FINANCIAL CORPORATION, the corporation that executed the within instrument and known to me to be the persons who executed the within instrument on behalf of said corporation, said corporation being known to me to be one of the partners of CENTURY PROPERTIES EQUITY FUND 73, the partnership that executed the within instrument, and acknowledged to me that such corporation executed the same as such partner and that such partnership executed the same.

OFFICIAL SEAL
ROSEMARY A. MUNOZ
NOTARY PUBLIC – CALIFORNIA
ALAMEDA COUNTY
MY COMMISSION EXPIRES DEC. 18, 1977

Rosemary A. Munoz
Notary Public

END OF DOCUMENT

OFFICIAL RECORDS
EL DORADO COUNTY CALIF
RECORD REQUESTED BY
SILVERADO TITLE CO.
SEP 11 4 55 PM 1974
JAMES W. SWEENEY
COUNTY RECORDER

ADDENDUM TO LEASE

TAHOE SOUTH 'Y' SHOPPING CENTER

MS

THIS ADDENDUM, dated as of September 11th 1974, by and between CENTURY PROPERTIES EQUITY FUND 73, a California limited partnership ("Lessor"), and CONNOLLY DEVELOPMENT, INC., a California corporation ("Lessee"), is made and entered into to amend and supplement that certain Lease of even date herewith (the "Lease"), by and between Lessor and Lessee, whereby Lessor leased, demised and let unto Lessee the real property and improvements (the "Leased Premises") located in the City of South Lake Tahoe, County of El Dorado, State of California, and more particularly described in said Lease, which property and improvements are known as the "Tahoe South 'Y' Shopping Center".

RECITALS

A. The Agreement described in Recital A of the Lease has been amended by instrument dated April 16, 1974 (the "First Addendum") and by instrument dated September 11, 1974 ~~of even date herewith~~ (the "Second Addendum"). The First Addendum and the Second Addendum have altered the terms of the purchase of the Leased Premises by Lessor from Lessee.

MS

B. The terms of the Lease being dependent upon the terms of the Agreement, as amended, the purpose of this Addendum to Lease is to conform the provisions of the Lease to the provisions of the Agreement as amended by the First Addendum and the Second Addendum.

C. Lessor has financed the purchase of the Leased Premises from Lessee by a loan from the Equitable Life Assurance Society of the United States ("Equitable"). Equitable has required, as a condition to granting said financing, that the

24912

Lease and this Addendum be made subordinate to the Deed of Trust securing said loan (the "Deed of Trust"). As a further condition, Equitable has required the Lease and this Addendum be made subject to any and all leases to tenants of part of all of the Leased Premises.

NOW, THEREFORE, in consideration of their respective undertakings contained herein, Lessor and Lessee do hereby amend the Lease upon and subject to the terms and conditions hereinafter stated.

1. Recital A of the Lease is hereby amended to show that the Leased Premises consist of a 147,665 square foot Shopping Center.

2. The rent payable by Lessee upon the exercise of Lessee's option or options described in Section 1.1 of the Lease shall be Thirty-Five Thousand Seven Hundred Sixty-Seven Dollars and Sixty-Seven Hundredths ($35,767.67) per month during any extended term of the Lease.

3. The amount payable to Lessor pursuant to Section 9.1(a) of the Lease is hereby amended to be Five Hundred Sixty-One Thousand Two Hundred Thirty-Four Dollars ($561,234), plus simple interest thereon at the rate of eight per cent (8%) per annum from close of escrow under the Agreement to the date of taking.

4. Section 9.1(b) of the Lease is hereby amended in its entirety as follows:

> "The amount of all costs and expenses incurred by Lessor in securing the permanent loan described in the Agreement, said amount not to exceed Thirty-Six Thousand Two Hundred Fifty Dollars ($36,250)."

5. The amount of Three Hundred Twenty Thousand Dollars ($320,000) shown in Section 9.1(c) of the Lease is hereby amended to be Two Hundred Thirty-Four Thousand Ninety-Six Dollars ($234,096).

6. The amount payable to Lessor under Section 9.2 of the Lease of Eight Dollars and Ninety-One Hundredths ($8.91), multiplied by the total square footage of the space therein defined, is hereby amended to Seven Dollars and Ninety-One Hundredths ($7.91), multiplied by the total square footage of such space.

7. Section 15.5 of the Lease is hereby amended in its entirety as follows:

> "In the event of any litigation between the parties hereto growing out of this Lease, the prevailing party shall be reimbursed for all reasonable costs, including, but not limited to, reasonable attorney's fees."

8. The Lease and this Addendum now are and shall at all times continue to be subject and subordinate in each and every respect to the Deed of Trust and any and all increases, renewals, modifications, extensions, substitutions, replacements and/or consolidations of the Deed of Trust and to any future deed of trust or deeds of trust affecting the Leased Premises held by the holder of the Deed of Trust.

9. The Lease and this Addendum now are and shall at all times continue to be subject and subordinate in each and every respect to any and all leases to tenants of part or all of the Leased Premises and to any and all addenda, amendments, supplements and extensions to such leases.

Any defaults in the performance of any obligations under the Lease or this Addendum by Lessor or Lessee shall not affect the obligations of or performance under the said tenant leases.

10. The reference in the first sentence of Section 8.2(b) of the Lease to Sections 1.5(a)(ii) and (iii) of the Agreement is hereby amended to refer to Section 1.5(b)(i) of the Agreement.

IN WITNESS WHEREOF, the parties hereto have executed this Addendum to Lease as of the day and year first above written.

LESSOR

CENTURY PROPERTIES EQUITY FUND 73

By: FOX & CARSKADON FINANCIAL
CORPORATION

Its General Partner

By:
Its: Vice President

LESSEE

CONNOLLY DEVELOPMENT, INC.

By:
Its: President

By:
Its: VP

State of California }
County of San Francisco } ss.

On this 11th day of September, in the year 1974, before me, Angie Decker, a Notary Public, personally appeared W. PATRICK MC DOWELL, known to me to be the Vice President of FOX & CARSKADON FINANCIAL CORPORATION, the corporation that executed the within instrument and known to me to be the person who executed the within instrument on behalf of said corporation, said corporation being known to me to be one of the partners of CENTURY PROPERTIES EQUITY FUND 73, the partnership that executed the within instrument, and acknowledged to me that such corporation executed the same as such partner and that such partnership executed same.

ANGIE DECKER
My Commission Expires April 17, 1976

Angie Decker
Notary Public

STATE OF CALIFORNIA
COUNTY OF San Francisco } SS

ON September 11, 19 74, before me, the undersigned, a Notary Public in and for said County and State, personally appeared Ted Connolly known to me to be the President, and Martha W. Stafford known to me to be the ~~Secretary~~ Vice President of the Corporation that executed the within instrument and the officers who executed the within instrument on behalf of the Corporation therein named, and acknowledged to me that such Corporation executed the within instrument pursuant to its By-laws or a Resolution of its Board of Directors.

ANGIE DECKER

Notary's Signature Angie Decker

CORPORATION ACKNOWLEDGMENT
Form No. 14

END OF DOCUMENT

OFFICIAL RECORDS
EL DORADO COUNTY CALIF
RECORD REQUESTED BY
SILVERADO TITLE CO.
SEP 11 4 58 PM 1974
JAMES W. SWEENEY
COUNTY RECORDER

H

When recorded mail to

THOMAS S. RENK, ESQ.
BROBECK, PHLEGER & HARRISON
111 Sutter Street
San Francisco, California 94104

GRANT DEED

I.

FOR VALUE RECEIVED, CONNOLLY DEVELOPMENT, INC., a California corporation (hereinafter called "Grantor"), grants to CENTURY PROPERTIES EQUITY FUND 73, a California limited partnership (hereinafter called "Grantee"), all that certain real property located in the City of South Lake Tahoe, County of El Dorado, State of California, more particularly described in Exhibit A, attached hereto and incorporated herein by reference thereto.

II.

This Deed is made and delivered subject to liens to secure payment of current taxes and assessments and easements, covenants, conditions and restrictions of record.

IN WITNESS WHEREOF, Grantor has executed this Grant Deed this 11th day of September, ~~1973~~ 1974. NC RS

"GRANTOR"

CONNOLLY DEVELOPMENT, INC.

By
Its President

By Keith W. Stafford
Its

24907

MAIL ALL TAX STATEMENTS TO GRANTEE AT:

c/o Fox & Carskadon Financial Corporation
3000 Sand Hill Road
Menlo Park, California 94025

1283 289

OFFICIAL RECORDS
EL DORADO COUNTY-CALIF
RECORD REQUESTED BY

SEP 11 4 57 PM 1974

JAMES W. SWEENEY
COUNTY RECORDER

STATE OF CALIFORNIA)
) ss.
COUNTY OF **ALAMEDA**)

On this **11th** day of **September**, 197 , before me, the undersigned, a Notary Public in and for said State personally appeared **Ted Connolly**, known to me to be the **President** and **Martha W. Stafford**, known to me to be the **Vice President** of CONNOLLY DEVELOPMENT, INC., the corporation that executed the within instrument, and known to me to be the persons who executed the within instrument on behalf of the corporation therein named, and acknowledged to me that such corporation executed the within instrument pursuant to its by-laws or a resolution of its board of directors.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my official seal the day and year in this certificate first above written.

ROSEMARY A. MUNOZ
MY COMMISSION EXPIRES DEC. 18, 1977

Rosemary A. Munoz
Notary Public
State of California

EXHIBIT D

Steefel
STEEFEL, LEVITT & WEISS
A Professional Corporation

MEMORANDUM

TO: Harold J. Singer
Lisa Dernbach
California Regional Water Quality Control Board – Lahontan Region

FROM: Andrew A. Bassak, Esq.
Steefel Levitt & Weiss

DATE: March 11, 2004

RE: South Y Center Chain of Title And Laundry Lease History

At your request, this memorandum describes the title history for the South Y Center (the "Center"), and the lease history for the laundry located at the Center.

South Y Center Ownership History

December, 1972: Center property owned by Connolly Development ("Connolly"). Shopping center construction reaches completion. Raley's opens for business at the Center. We understand that this is the first business that opened. Other businesses opened shortly thereafter.

September, 1974: Connolly sells the Center to Century Properties Equity Fund 73, a limited partnership, with Fox and Carskadon Financial Corporation as general partner ("Fox"). We understand that the corporate successor to Fox is SSR Realty Advisors, One California Street, Suite 1400, San Francisco, California 94111, Attn: Herman Hugh Howerton.

December, 1985: Fox sells the Property to Dorothy S. Lyddon.

Laundry Lease History

May, 1972: Original lease signed for the laundry (initially constructed as both a laundry and a dry cleaners pick-up/drop-off location having greater square footage than the existing laundry premises) with Connolly, as Landlord, and Robert and Bernice Prupas, as Tenant.

July, 1972: Lease assigned by Prupases to Bobby Page's, a Nevada corporation (owned by the Prupases).

March - November, 1973: Laundry and dry cleaners drop-off opened between March and November, 1973.

November, 1973: The laundry portion of the leased premises is sublet to Kyell and Kerston Hakansson.

July, 1976: Laundry sublease is assigned to LeRoy and Mary Lou Baisley.

December, 1982: Master lease assigned from Bobby Page's Inc. and Robert and Bernice Prupas to Peter and Fern Quinzer. Subleases also are assigned to Quinzer as Sublessor.

May, 1988: Lease for entire laundry and dry cleaners pick-up/drop-off premises expires. Quinzer does not renew. New lease entered into by Lyddon and the Baisleys for the current Laundry premises only. Dry cleaners pick-up/drop-off closed.

EXHIBIT E

EL DORADO COUNTY

WHEN RECORDED MAIL TO:

PLACER TITLE CO.
1959 LAKE TAHOE BLVD.,
SOUTH LAKE TAHOE, CA 96150

El Dorado, County Recorder
William E. Schultz Co Recorder Office

DOC - 98-0011086-00
Acct 6-PLACER TITLE CO
Wednesday, MAR 04, 1998 08:00:00
Ttl Pd $10.00 Nbr-0000008091
BKS/C2/1-2

203-96154-DM

THIS DOCUMENT IS BEING EXECUTED IN DUPLICATE COUNTERPART

NOTICE TO CREDITORS

(Secs. 6104, 6105 U.C.C)

Escrow No. 203-96154

Notice is hereby given to creditors of the within named seller that a bulk sale is about to be made of the assets described below.

The names and business addresses of the seller are: Kim M. Welch and Debra E. Welch, 1024 Emerald Bay Road, South Lake Tahoe, Ca 96150.

The location in California of the chief executive office of the seller is: ~~(if~~ "same as above", ~~so state.)~~

As listed by the seller, all other business names and addresses used by the seller within three years before the date such list was sent or delivered to the buyer are: None.

The names and business addresses of the buyer are: David J. Rogers and Louzel J. Rogers, P. O. Box 3240, Stateline, Nevada 89449.
The assets to be sold are described in general as: Fixtures, equipment, goodwill, Leasehold Interest, Leasehold Improvements, Covenant Not To Compete and Trade Name and are located at: 1024 Emerald Bay Road, South Lake Tahoe, Ca 96150.

The business name used by the seller at that location is: Lake Tahoe Laundry Works.
The anticipated date of the bulk sale is March 20, 1998 at the office of Placer Title Co., 1959 LAKE TAHOE BLVD., SOUTH LAKE TAHOE, CA 96150.

This bulk sale is subject to California Uniform Commercial Code Section 6106.2.

If so subject, the name and address of the person with whom claims may be filed is: Placer Title Co., 1959 LAKE TAHOE BLVD., SOUTH LAKE TAHOE, CA 96150

and the last date for filing claims shall be March 19, 1998, which is the business day before the sale date specified above.

Dated: February 5, 1998

David J Rogers

Buyer David J. Rogers

Buyer Louzel J. Rogers

Seller Kim M. Welch

Seller Debra E. Welch

EL DORADO COUNTY

WHEN RECORDED MAIL TO:

PLACER TITLE CO.
1959 LAKE TAHOE BLVD.,
SOUTH LAKE TAHOE, CA 96150

203-96154-DM

THIS DOCUMENTS IS BEING EXECUTED IN DUPLICATE COUNTERPART

NOTICE TO CREDITORS

(Secs. 6104, 6105 U.C.C)

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As listed by the seller, all other business names and addresses used by the seller within three years before the date such list was sent or delivered to the buyer are: None.

The names and business addresses of the buyer are: David J. Rogers and Louzel J. Rogers, P. O. Box 3240, Stateline, Nevada 89449.
The assets to be sold are described in general as: Fixtures, equipment, goodwill, Leasehold Interest, Leasehold Improvements, Covenant Not To Compete and Trade Name and are located at: 1024 Emerald Bay Road, South Lake Tahoe, Ca 96150.

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If so subject, the name and address of the person with whom claims may be filed is: Placer Title Co., 1959 LAKE TAHOE BLVD., SOUTH LAKE TAHOE, CA 96150

and the last date for filing claims shall be March 19, 1998, which is the business day before the sale date specified above.

Dated: February 5, 1998

Buyer David J. Rogers

Kim M. Welch
Seller Kim M. Welch

Buyer Louzel J. Rogers

Debra E. Welch
Seller Debra E. Welch

98-0011086-00

EXHIBIT F

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
LAHONTAN REGION

MEETING OF SEPTEMBER 4 AND 5, 1997
South Lake Tahoe

ITEM: 13

SUBJECT: **STATUS REPORT ON THE "Y" INVESTIGATION IN SOUTH LAKE TAHOE**

CHRONOLOGY: This is a new item before the Board.

DISCUSSION: In 1989, Tetrachloroethylene (PCE) was first discovered in drinking water supply wells in the "Y" area of South Lake Tahoe, where Highway 89 and Interstate 50 merge. The contaminant, a carcinogen, was detected in two municipal wells owned by the Lukins Brothers Water Company, on the north side of the "Y". One of the wells showed concentrations above the state drinking water maximum contaminant level (MCL) of 5 ppb. The well was closed and replaced with a new supply well.

Soon thereafter, PCE was detected at low concentrations in the South Tahoe Public Utility District's Julie Lane well. Over the years, PCE concentrations rose and could be found in at least three of the District's wells. Eventually, the highest concentrations detected moved from the Julie Lane well to the Clement Street well.

Because of the PCE threat in drinking water to 800 homes and businesses in the "Y" area, the District in 1992 constructed an "air stripping tower" at the Clement Street well at a cost of $564,000. Water from affected municipal wells is piped to the tower which strips out the PCE. The air stripper has the capacity to remove about 500 ppb of PCE. Annual operating costs of the tower run approximately $40,000.

Under the Well Investigation Program (WIP), Regional Board staff initially conducted preliminary surveillance activities to attempt to identify the source(s). These activities ceased when funding ended for the WIP. In 1992, Board staff acquired $120,000 from the state's Cleanup and Abatement Account (CAA) to further investigate the source(s) of PCE contamination. Until mid-1996, this fund was used to: research the uses of PCE; identify current and historic businesses that may have used PCE in the "Y" area; conduct site visits and interviews with business operators; and implement two soil vapor surveys.

At the June 5 and 6, 1997 Regional Board meeting, District staff made a presentation to the Board that showed PCE concentrations significantly increasing in municipal wells since 1994. The highest concentration of 200 ppb was detected in October 1996. District staff expressed concern that should PCE concentrations continue to rise, the air stripping tower will not be effective in removing PCE to the state MCL. District staff requested that the Regional Board direct Board staff to resume the PCE investigation and attempt to narrow down the source(s) in the "Y" area.

Since the June 1997 Regional Board meeting, Board staff has acquired the remaining $56,100 of CAA funds for the "Y" investigation. Staff has also worked with District staff to coordinate a ground water investigation to be implemented during the week of September 8, 1997. The ground water investigation is being funded under a $50,000 grant received by the District from the El Dorado County Water Agency. This investigation will also attempt to identify the source or sources of MTBE contamination in the District's Tata Lane well.

For this status report, Board staff will summarize these activities and describe the upcoming ground water investigation. Additionally, staff will outline what will be done should the ground water data point to a PCE source or sources or if the data are deemed deficient, indicating that further investigations are necessary.

RECOMMENDATION: The Regional Board may provide direction to staff.

Enclosure: August 20, 1997 letter to the South Tahoe Public Utility District

LSD/sh

EXHIBIT G

EUGENE GARFINKLE
EDWARD J. WATSON

PATRICIA M. OLCOMENDY
KIRK RANDOLPH WILSON

DREHER, GARFINKLE & WATSON
ATTORNEYS AT LAW
300 MONTGOMERY STREET, SUITE 1060
SAN FRANCISCO, CALIFORNIA 94104
FACSIMILE (415) 362-2744

TELEPHONE (415) 362-3461

FRED L. DREHER
(1878-1968)
ROBERT J. DREHER
(1922-1987)

January 10, 1992

Mr. John L. Short
Associate Water Resource Control Engineer
California Regional Water Quality Control Board
Lahontan Region
2092 Lake Tahoe Boulevard
South Lake Tahoe, CA 96150

**Re: Tahoe Y Shopping Center, South Lake Tahoe,
El Dorado County, APNs: 023-421-011 and 021**

Dear Mr. Short:

Reference is made to your letter of November 14, 1991 concerning the above property. On behalf of the landowners, I have read your letter and have reviewed §13260 and 13267 of the Water Code. I do not see where under either section the word "waste" applies to natural storm water runoff. My understanding of the situation at Tahoe is that the center involved has not changed its contour and such storm water runoff as occurs follows the natural contours of the land and ultimately into the city streets. The City of South Lake Tahoe has for years captured this water and has disposed of it as it has determined to be appropriate. I can find no authority for the Regional Board's decision that continuing a practice which has existed for years and years is now a waste discharge which can be regulated by the Water Quality Control Board.

May I request a response to the following questions:

1. If there is a problem, why is it not the city's since it has taken over the disposal of such waste water?

2. What is the Board's authority to ask a property owner to make application for a permit and to declare that storm water runoff is a "waste" under the quoted code sections.

3. What is the Quality Control Board's current position with regard to regulating waste water originating on city, county and state streets and highways? Are these governmental agencies being asked to comply with the Board's directive? If not, why not?

The landowners wish to fully comply with the law. The landowners also have a great interest in maintaining the purity of the Lake Tahoe water. The answers to the above questions will aid in their dilemma as to how to respond to your letter of November 14, 1991.

Very truly yours,

DREHER, GARFINKLE & WATSON

Gene Garfinkle

Eugene Garfinkle

EG/ac

EXHIBIT H

SHOPPING CENTER: TAHOE SOUTH 'Y' SHOPPING CENTER
SOUTH LAKE TAHOE, CALIFORNIA

TENANT: ROBERT PRUPAS AND BERNIECE PRUPAS,
sublease - BOBBY PAGE'S, INC.

TERM OF LEASE: TEN YEARS, WITH ONE FIVE YEAR OPTION

DATE OF LEASE: MAY 24, 1972

Property Management By:

CONNOLLY DEVELOPMENT INC.

PENGAD 800-631-6989
DEPOSITION
EXHIBIT
3 Baisby
4-13-07

TABLE OF CONTENTS

SECTION 1. Date; Parties

This Lease, dated May 24, 19 72, is entered into between CONNOLLY DEVELOPMENT INC.,

(hereinafter called "Landlord"), and ROBERT PRUPAS and BERNIECE PRUPAS, husband and wife, jointly and severally*

(hereinafter called "Tenant"). *Landlord hereby consents to the subleasing of the Premise from said Tenant to any corporation of which Tenant owns and retains at least 51% of the outstanding stock.

SECTION 2. Premises

Landlord hereby leases to Tenant, and Tenant hereby hires from Landlord the real property (hereinafter called the "Premises"), located in the Tahoe South 'Y' Shopping Center, in South Lake Tahoe, California (hereinafter called the "Center"), outlined in red on the attached "Plot Plan, Exhibit A", and by this reference incorporated herein, and the building or portion thereof to be constructed thereon in accordance with "Scope of Work, Exhibit B", and by this reference incorporated herein, together with the parking, access, and other rights set forth herein. The Premises have a frontage of approximately 38 feet, a depth of approximately 75 feet, and an area of approximately 2850 square feet.

SECTION 3. Construction

The "Scope of Work, Exhibit B," sets forth the obligations of Landlord and Tenant to perform the work and to supply the materials necessary to prepare the Premises for occupancy. Landlord, at Landlord's expense, shall do all acts required by the "Scope of Work" of Landlord, and shall perform promptly and diligently all acts required of Landlord, in a first-class workmanlike manner. Tenant, at Tenant's expense, shall do all acts required by the "Scope of Work" of Tenant and shall perform promptly and diligently all acts required of Tenant, in a first-class workmanlike manner. Landlord shall have the sole right to initiate and supervise all work to be performed prior to the delivery of the Premises to Tenant. Upon delivery of the Premises to Tenant for the performance by Tenant of the work required by the "Scope of Work" of Tenant, Landlord shall have the right to designate the time period when said work is to be performed, subject to not unduly delaying the completion of said work. Any work performed or materials supplied for the Premises by Landlord that are not specified in the "Scope of Work" shall be at the expense of Tenant. Landlord shall deliver to Tenant a bill for the completed work and materials, at cost plus twenty percent (20%) added thereto for overhead and supervision, and Tenant shall pay said bill within fifteen (15) days after the receipt of said bill.

SECTION 4. Term; Commencement

4.1 **Term** — This Lease shall be for a term of ten (10) years.

4.2 **Commencement** — Said term shall commence at 12:01 A.M. on the date of whichever of the following events shall first occur:

(a) The date Tenant opens the Premises for business; or

(b) Thirty (30) days after the delivery of the Premises to Tenant by Landlord, said delivery to be established by the delivery of a written notification by Landlord to Tenant specifying the date upon which said Premises are delivered to Tenant; or

(c) At Landlord's option, thirty (30) days after delivery to Tenant of architect's plans for the Premises, for approval by Tenant, if Tenant has failed to approve, or to specify his objections to said plans, within said thirty (30) day period; or

(d) The last day of the period prescribed by Section 715.2 of the Civil Code of the State of California, using the life of the last survivor of the lawful natural issue of Ted Connolly, who are living on the date of this lease, as the life to govern the time of vesting under said Rule Against Perpetuities.

4.3 **Acknowledgment of Commencement** — When the date of commencement of said term has been determined, Landlord and Tenant shall execute a written acknowledgment specifying said date of commencement, and Landlord and Tenant shall attach said acknowledgment to this Lease, which shall be designated as "Exhibit C" and by this reference incorporated herein.

4.4 **Commencement of Construction** — If construction of said building on the Premises shall not have commenced on or before December 13, 19 72, then for a period of thirty (30) days thereafter each party shall have the option of canceling this Lease by notice to the other party.

4.5 **Landlord's Financing** — Landlord intends to finance the construction of buildings and improvements of the Shopping Center of which the Premises form a part. The terms and provisions of this Lease must be approved by any financial institution that may do the financing. If the financial institution should require, as a condition to the financing that Landlord may desire, any modification of the terms and provisions of this Lease and if Tenant should refuse to approve and execute any modifications so required, Landlord shall have the right by notice to Tenant to cancel this Lease.

4.6 **Option to Extend** — Tenant may, at Tenant's option, extend the original term of this Lease for One (1) additional period(s) of five (5) year(s) each, subject to all the provisions of this Lease, including but not limited to provisions for adjustments to and variations in rent. Failure to exercise the option for any period shall nullify the option for all subsequent periods. After the exercise of any option to extend, all references in this Lease to the term shall be considered to mean the term as extended, and all references to termination or to the end of the term shall be considered to mean the termination or end of the term as extended. Tenant's right to the option is subject to the following conditions precedent: (a) This Lease shall be in effect at the time notice of exercise is given and on the last day of the term; and (b) Tenant shall not be in default under any provision of this Lease at the time notice of exercise is given or on the last day of the term. Tenant's right to the option is also subject to Tenant's compliance with the following procedure for exercising the option: (a) At least six (6) months before the last day of the term, lessee shall give lessor notice irrevocably exercising the option, and (b) In lieu of executing a new Lease each party shall, at the request of the other, endorse on the original Lease or on a true copy of the original Lease that party's signature or signatures, the date the option was exercised, and the words "option exercised." Alternatively, each party shall, at the request of the other, execute a memorandum, in recordable form, acknowledging the fact that the option has been exercised and otherwise complying with the requirements of law for an effective memorandum or abstract of lease.

Landlord's Initials:

Tenant's Initials:

RP

5.1 Minimum Rent: Escalation

a. Tenant agrees to pay Landlord at the office of Landlord or at such other place designated by Landlord, without any deduction or set-off whatsoever, and as minimum ren

(1) From the commencement of the 10 years term, for the first two years in adva upon the first day of each calendar month, the sum of $855.00.

INITIAL HERE

(2) From the commencement of the next twenty four months (2 years), in advance upon the first day of each calendar month, the sum of $940.50.

(3) For the balance of the term, for the next six years, in advance upon the first day of each calendar month, the sum of $1,026.00.

(4) In the event that Tenant exercises the option to extend set forth in Section 4.6:

(1) From 10 years after the commencement of the term, for 5 additional year in advance upon the first day of each calendar month, a sum of $1,200.00 per month.

~~shall be determined for this purpose by reference to the "Consumer Price Index for All Items for Moderate-Income Families in Large Cities," as determined by the United States Department of Labor, Bureau of Labor Statistics.~~

~~(ii) From.., 19.........., to..19.........., in advance upon the first day of each calendar month, a sum calculated by a procedure similar to that described in (2) (i), above, using as the relevant months the month that is the start of the period set forth in (1), above, and the month that is the end of the period set forth in (2) (i), above.~~

(b) If the term shall commence upon a day other than the first day of a calendar month, then Tenant shall pay, upon the commencement date of the term, a pro-rata portion of the fixed monthly rent described in the foregoing clause prorated on a per diem basis with respect to the fractional calendar month preceding the commencement of the first lease year hereof.

(c) Landlord hereby acknowledges receipt of the sum of $ ...., from Tenant, representing payment of the first month's minimum rent in advance.

INITIAL HERE

5.2 **Percentage Rent** — In addition to the rent required by Section 5.1 Tenant shall pay to Landlord a sum equal to eight percent (8%) of the amount by which the Gross Sales of Tenant for any Lease Year exceeds the sum of $ 128,250 for the first 2 years; $141,075 for the next two years; $153,900 for the remai six years. In the event Tenant exercies the option to extend, percentage rent shall b eight (8%) percent of Gross Sales in excess of $191,400.

5.3 **Lease Year** — The term "Lease Year" as used herein shall mean:

(a) The period of time commencing with the date of commencement of the term of this Lease and continuing for one (1) full calendar year immediately following the first day of the first full month after the date of commencement, with said Lease Year terminating twelve (12) months after the first day of said first complete month.

(b) Each successive twelve (12) month period thereafter during the term of this Lease.

(c) The portion of the calendar year remaining in which this Lease terminates.

5.4 **Gross Sales** — The term "Gross Sales" as used herein shall mean:

The gross amount received by Tenant, its subtenants, and its concessionaires from the sale of merchandise or for services, including repairs and alterations, whether for cash or on credit, by or through the operation upon the Premises of any business, whether at wholesale or retail, whether credit sales are ever paid for and whether the orders are filled on the premises or elsewhere, excepting therefrom the account of all sales tax receipts which are required to be accounted for to any governmental organization, and the amount of any actual refunds or credits made for returned merchandise, the amount of which had previously been included by Tenant in Tenant's Gross Sales.

5.5 **Payment of Percentage Rent** — Tenant, within fifteen (15) days after the end of each quarter of the Lease Year, shall deliver to Landlord a written statement of the total Gross Sales during the preceding quarter. If the Gross Sales for said quarter exceed one-quarter (1/4) of the amount of Gross Sales designated in Section 5.2, then Tenant shall deliver to Landlord with said statement the amount of Percentage Rent due on said excess Gross Sales. Said quarterly payments shall be interim payments. Within thirty (30) days after the completion of a Lease Year, Tenant shall deliver to Landlord a written statement certified to be true and correct by a certified public accountant, of the Gross Sales of Tenant for said Lease Year, with said Gross Sales set out by calendar months. If the amount of said Gross Sales exceeds the amount of Gross Sales designated in Section 5.2, then the amount of Percentage Rent owing on said excess shall be computed, and shall be paid forthwith to Landlord by Tenant. If the amount owing is less than the total amount of the quarterly interim payments paid to Landlord, then the difference shall be refunded to Tenant by Landlord.

5.6 **Charge for Late Payment** — If any rental payment, or other payment, provided for in this Lease is not paid when due, Tenant shall pay to Landlord on demand an additional charge of one percent (1%) of any such overdue payment for each month in which such payment remains unpaid.

Landlord's Initials:

Tenant's Initials:

SECTION 6. Accounting

6.1 **Inspection of Records** — Tenant and each subtenant and concessionaire of Tenant shall at all times keep and maintain full, complete and proper accounts of all Gross Sales, cash and credit. All records of business done in and about the Premises by Tenant, its subtenants and concessionaires, including but in no way limited to all state and municipal sales tax returns and receipts, reports to the State Board of Equalization, income and franchise tax returns, bank books, vouchers, bills and all records, documents and papers pertaining to the business done in the Premises, shall be subject to the inspection of Landlord, its accountants and attorneys at all reasonable times and places.

6.2 **Audit of Records** — Tenant shall keep safe and intact all of the aforesaid records for a period of three (3) years after the date of the submission of the annual statement of Gross Sales to which said records pertain. Landlord and its accountants and attorneys, upon request, shall have the right to inspect any and all of the aforesaid records during said three (3) year period. Landlord shall have the right, but no more frequently than once in any twelve (12) month period, to have an audit made of the records of the business of Tenant and its subtenants and concessionaires, by a certified public accountant or a public accountant selected by Landlord, and in the event the statements of Gross Sales submitted by Tenant to Lessor shall be found to be incorrect by such audit by an understatement in excess of three percent (3%) of the Gross Sales for said Lease Year, then Tenant shall on demand pay the cost of such audit in addition to any additional rent found to be due to Landlord by virtue of said audit; otherwise the cost of said audit shall be paid for by Landlord. No statement of Gross Sales submitted to Landlord by Tenant shall be deemed to be correct until the expiration of the aforesaid three (3) year period.

SECTION 7. Use of Premises

7.1 **Authorized Use** — Tenant shall use and occupy the Premises during the term hereof for the purpose of:
Dry cleaning and coin-operated laundry, AND PURPOSES
RELATED THERETO
and Tenant shall not use or permit the use of said Premises for any other purpose without the prior written consent of Landlord.

7.2 **Requirement of Continued Use** — Tenant shall not leave the Premises unoccupied or vacant, and continuously during the entire term hereof shall conduct and carry on in the Premises the type of business for which the Premises are leased, keep in stock on said Premises a full and ample line of merchandise for the purpose of carrying on the business permitted under this Lease, maintain an adequate sales force to serve properly all customers and operate said business in an efficient and diligent manner. Tenant shall keep the Premises open continuously for business each regular business day during the regular business hours of the day, as is customary for business of like type and character in the surrounding area of the Center, but in no event less than the business days and the number of hours that shall be designated by any merchants' association of which Tenant is required to be a member, save and except when Tenant is prevented from doing so by strikes, lockouts or other causes or contingencies beyone the reasonable control of Tenant.

7.3 **Effect on Gross Sales** — For the purpose of computing the percentage rent under Section 5.2, the Gross Sales in any Lease Year in which Tenant does not continuously and uninterruptedly conduct its business as required by Section 7.2 shall be deemed to be the greater of the Gross Sales (1) during such Lease Year, and (2) during such earlier Lease Year in which Gross Sales were the highest.

~~7.4 Minimum Gross Sales — It shall, at Landlord's option, be a default by Tenant under this Lease if Tenant's Gross Sales in any Lease Year after the third Lease Year are less than the sum set forth in Section 5.2.~~

7.5 **Compliance with Laws** — Tenant shall not use the Premises for or carry on or permit upon said Premises, or any part thereof, any offensive, noisy, or dangerous trade, business, manufacture or occupation, or any nuisance, or anything against public policy, nor interfere with the business of any other tenants in the Center, nor permit any auction sale to be held or conducted in and about the Premises. Tenant shall not use the Premises or permit the Premises to be used in whole or in part during the term of this Lease for any purpose or use that is in violation of any of the laws, ordinances, regulations or rules of any public authority or organization at any time. The judgment of any court of competent jurisdiction or the admission by Tenant in any action or proceeding against Tenant that Tenant has violated any such laws, ordinances, regulations or rules in the use of the Premises shall be a conclusive determination of that fact between Landlord and Tenant.

SECTION 8. Signs and Advertising

8.1 **Signs and Displays** — Landlord reserves the right to use the exterior walls and roof of the Premises, except as otherwise provided herein. Tenant shall not inscribe, paint, place or affix or permit to be inscribed, painted, or affixed any sign, light, advertisement, notice, placard, marquee, or awning on the exterior of the Premises or the windows or doors or roof of the Premises, without the prior written consent of Landlord. No overhanging roof or projecting sign, placard, marquee or other advertisement and no paper or cardboard signs on or in the windows, doors or exterior of the Premises and no sidewalk racks or other display or vending machines shall be permitted. Tenant, upon request of Landlord, shall immediately remove any notice, sign, light, advertisement, placard, marquee, awning, sidewalk rack or other display or vending machine which Tenant has placed or permitted to be placed in, on, or about the Premises, which in the opinion of Landlord is objectionable, offensive, or not in good taste, and if Tenant shall fail to do so, Landlord may re-enter the Premises and remove the same at the expense of Tenant. Any written consent required hereunder by Landlord shall not be unreasonably withheld.

Tenant may install and maintain two (2), but no more than two (2), pint
or other coin-operated amusement device within the premises, outlined in re
on the attached "Plot Plan - Exhibit A." Tenant may not install or maintain
pinball or other coin-operated amusement device on the sidewalk or other pc
tions of the Center referred to as Common Area, defined in Section 12.1, Cc
Area: Definition.

9.1 **Personal Property** — Tenant shall be liable for and shall pay when due all taxes levied against personal property, trade fixtures and other property placed by Tenant in, on, or about the Premises, including, without limiting the foregoing, shelves, counters, vaults, doors, wall safes, partitions, fixtures, machinery, plant equipment, and other articles, and all taxes on Tenant's personal property, levied against Landlord or Landlord's property, and if Landlord pays the same, which Landlord shall have the right to do regardless of the validity of such levy, or if the assessed value of Landlord's property is increased by the inclusion of the value placed on such property or fixtures placed in the Premises by Tenant, and if Landlord pays the taxes based on such increased assessment, which Landlord shall have the right to do regardless of the validity thereof, Tenant shall pay to Landlord the taxes so levied against Landlord or the proportion of such taxes resulting from such increase in the assessment.

9.2 **Real Property** — Tenant shall pay a sum of money equal to Tenant's proportionate share of the amount of all taxes and assessments levied or assessed on the land, building, improvements, and common area comprising the Center. Tenant's proportionate share shall be determined by the ratio that the total number of leased square feet in the Center bears to the total number of square feet leased by Tenant under this Lease.

Landlord's Initials

____

Tenant's Initials:

____

9.3 Payment by Tenant — Any and all sums payable pursuant to Section 9.1 or Section 9.2 shall be paid by Tenant to Landlord within ten (10) days after receipt from Landlord of a statement setting forth the Tenant's share of such taxes or assessments. Tenant shall pay to Landlord on demand an additional charge of one per cent (1%) of any such amount for each month in which it remains unpaid.

SECTION 10. Utilities

10.1 Payment by Tenant — Tenant, from the date entry to the Premises is made for the purpose of installing fixtures, or from the date of commencement of the term of this Lease, whichever date shall first occur, and thereafter throughout the term of this Lease, shall pay before delinquency for all water, gas, heat, electricity, power, sewage, telephone, janitorial and all other services supplied to or consumed in or on the Premises. Landlord may, for convenience, elect not to install a water meter on the Premises, in which event Tenant shall pay to Landlord for the amount of water used on the Premises, as determined by Landlord, at the same rate that Tenant would pay if it purchased the water directly from the utility that furnishes the water, upon receipt of Landlord's monthly billing.

10.2 Pickup of Refuse — Tenant shall not allow refuse, garbage, or trash to accumulate outside the Premises, except on the date of scheduled pickup service, and then only in areas designated for such purpose by Landlord.

SECTION 11. Repairs and Alterations

11.1 Condition of Premises — By accepting possession of the Premises, Tenant acknowledges that the Premises are in good order, condition, and repair. Tenant, at its sole expense, shall keep and maintain the Premises, appurtenances and every part thereof (excluding the roof and exterior walls), including glazing, air-conditioning, and heating equipment, in clean, good order, condition and repair. To the maximum extent permitted by law, Tenant hereby waives the provisions of any statute or law permitting a tenant to make repairs at the expense of a Landlord or to terminate a lease by reason of the condition of the Premises. Tenant upon the termination of this Lease by the expiration of the term hereof or for any other reason, shall quit and surrender the Premises and appurtenances in good order, condition and repair, reasonable wear and tear excepted.

11.2 Repairs — Should Tenant, after notice from Landlord, fail to make with reasonable promptness any repairs which are the obligation of Tenant hereunder, Landlord may (but shall not be required to do so) enter the Premises and make the repairs necessary to restore the Premises to good order, condition and repair, and the reasonable cost of said repairs shall become due and payable by Tenant to Landlord upon demand. In the event any such expenditure is not paid within ten (10) days after demand, Tenant shall pay to Landlord on demand an additional charge of one per cent (1%) of any such amount for each month in which it remain unpaid.

11.3 Additions — Tenant shall not make or suffer to be made any additions or alterations of the Premises without the prior written consent of Landlord. Any additions or alterations, except trade fixtures of Tenant, upon installation shall become at once a part of the realty and be the property of Landlord. Any addition or alteration, whether voluntary or by operation of law, shall be done at the sole expense of Tenant. such consent shall not be ~~[illegible]~~ unreasonably withheld, [illegible]

11.4 Removal — Upon the termination of this Lease, whether by expiration of the term hereof or otherwise, Tenant, at its sole expense, shall remove any alterations or improvements, repair any damage caused by such removal and restore the Premises to the condition existing prior to any such alterations or improvements, forthwith after demand by Landlord.

~~11.5 Relocation —~~ Landlord shall have ~~the~~ right to relocate Tenant on six months' notice in substantially equivalent ~~Premises elsewhere in~~ the Center, provided that all of Tenant's expenses caused by such relocation shall be paid for by Landlord.

SECTION 12. Common Area

12.1 Definition — The Common Area shall consist of all portions of the Center, except for the areas where buildings are constructed for leasing to tenants.

12.2 Landlord's Duties — Landlord shall, at its sole expense, cause to be constructed and or relocated, and maintained such parking areas, sidewalks, access roads, delivery areas, landscaping and lighting as Landlord deems necessary for the proper operation of the Center. Landlord shall have the right to multi-deck any or all portions of the Center's parking areas. Landlord shall maintain said Common Area in good order, condition, and repair and shall provide adequate lighting whenever the Center is open for business. Landlord shall have the right to publish reasonable rules and regulations for the use of the Common Area, including designating areas where employees shall be required to park.

12.3 Tenant's Use — Tenant, its employees, customers and invitees shall have the right to use said Common Area in conjunction with all other tenants in the Center, and their employees, customers and invitees, subject to the rules and regulations published by Landlord.

12.4 Proration — Tenant shall reimburse Landlord for Tenant's proportionate share of the total maintenance cost of the Common Area. Tenant's proportionate share shall be the proportion that the square footage area leased by Tenant bears to the total square footage area of leased space in the Center. Maintenance cost shall include all sums expended for replacement and repair, improvements made after the Common Area is initially constructed, utilities services, police and watchman protection, public liability insurance, personal property taxes, cleaning, sweeping, striping, lighting, landscape maintenance and any other expense related to the operation and maintenance of the Common Area. The maintenance of the Common Area shall be in the sole discretion of Landlord and all costs incurred by Landlord in good faith shall be deemed binding conclusively on Tenant.

12.5 Management Fee — It is understood and agreed that Connolly Development Inc. may be engaged to manage the Center, including the Premises, and shall be paid a management fee for this service. The amount of this fee shall not exceed at any time the average fee being paid in the area for similar management services. Tenant's proportionate share of this fee shall be calculated on the same basis as its share of the maintenance costs.

12.6 Payment by Tenant — Tenant's proportionate share of the total maintenance cost and management fee, shall be paid within ten (10) days after receipt of a statement from Landlord setting forth the amount of Tenant's share. Said statement shall be prepared by Landlord monthly and shall be delivered to Tenant on or after the first day of each month, based upon the expenses and fee incurred by Landlord for the preceding month. Tenant shall pay to Landlord on demand an additional charge of one per cent (1%) of any such amount for each month in which it remains unpaid.

SECTION 13. Liens

13.1 Tenant's Duties — Tenant shall give fifteen (15) days prior written notice to Landlord before contracting for any work or repairs to the Premises that might subject the property to any lien, for the purpose of enabling Landlord to post notices of nonresponsibility. Tenant shall not permit to stand and shall pay and discharge any and all claims upon which any lien against the Premises could be based for any labor or material used or furnished to the Premises in connection with any operations of Tenant. Tenant shall hold harmless and indemnify Landlord free and clear from any such lien or claim of lien and shall defend, at Tenant's sole expense, any suit or proceeding pertaining thereto.

13.2 *Discharge of Liens* — Tenant shall have the right to contest the validity or amount of any such lien, but before doing so must notify Landlord within ten (10) days after the filing of such lien. Upon the final determination of the validity of any such lien, Tenant shall satisfy and discharge such lien within three (3) days thereafter. In no event shall the satisfaction and discharge of any such lien be delayed until execution is had upon any judgment rendered thereon. In the event of any such contest of the validity of any such lien, Tenant shall indemnify and hold Landlord harmless against all loss, costs, expenses, and damages resulting therefrom. In the event any sums are required to be paid by Landlord as a result of Tenant's failure to perform the obligations contained herein, Tenant shall pay the amount thereof, to Landlord within ten (10) days after demand. Tenant shall pay to Landlord on demand an additional charge of one per cent (1%) of any such amount for each month in which it remains unpaid.

SECTION 14. Merchant's Association

14.1 **Membership** — Tenant shall become and remain during the entire term of this Lease a member of the Center's Merchant's Association. Tenant shall be bound by all the rules and regulations adopted by said Merchant's Association pursuant to the By-Laws thereof.

14.2 **Dues** — Tenant shall pay when due all dues and assessments of said Merchant's Association owing by Tenant. The amount of dues and assessments to be paid by Tenant shall be based on a proration of the square footage area leased by Tenant to the total square footage area leased to tenants in the Center, but in no event shall the dues and assessments be less than ten cents (10¢) per square foot of area leased per annum, AND NOT TO EXCEED TWELVE CENTS (12¢) PER SQ. FT. PER YEAR.

SECTION 15. Right of Entry

Landlord and its agents shall have the right at any reasonable time to enter upon the Premises for the purpose of inspection, serving or posting notices, and making any necessary repairs, alterations or additions to any portion of the Premises, including the erection and maintenance of scaffolding, canopies, fences, and props, as shall be required for complying with any laws, ordinances, or regulations, protecting the Premises, or for any other lawful purpose, including showing the Premises to prospective purchasers or tenants and placing on the Premises usual "for rent" or "for lease" signs.

SECTION 16. Estoppel Certificate

Tenant shall execute, acknowledge and deliver to Landlord, within ten (10) days after request by Landlord, a statement in writing certifying, if such be the case, that this Lease is unmodified and in full force and effect (or if there have been modifications that the same is in full force and effect as modified) the date of commencement of this Lease, the dates for which the Minimum Rent and other charges have been paid, and such other information as Landlord shall reasonably request. It is acknowledged by Tenant that any such statements are intended to be delivered by Landlord and relied upon by prospective purchasers, mortgagees, beneficiaries under deeds of trust, or assignees thereof.

SECTION 17. Insurance

17.1 **Fire and Extended Coverage of Premises** — Tenant shall take out and maintain at Tenant's expense fire insurance with an extended coverage endorsement insuring his stock in trade, furniture, and fixtures, in an amount equal to one hundred per cent (100%) of the insurable value thereof.

17.2 **Fire and Extended Coverage of Center** — Landlord shall keep that part of the Center in which Tenant's Premises are located insured against loss or damage by fire, with an extended coverage endorsement, in an amount equal to at least eighty percent (80%) of the insurable value thereof, plus such other insurance (e.g. against vandalism, malicious mischief, sprinkler leakage, etc.) as Landlord may deem appropriate. Tenant shall pay its share of the fire, extended coverage, and other insurance covering that part of the Center in which Tenant's Premises are located to Landlord within ten (10) days after Tenant's receipt of Landlord's invoice therefor. Said share shall be determined and substantiated by Landlord's insurance carrier based on the portion of the total premium that is allocable to Tenant's Premises. Landlord shall apply all moneys collected by it from such insurance to the fulfillment of its obligations to repair, restore, or rebuild Tenant's Premises, as set forth in Section 19, insofar as necessary thereof.

17.3 **Public Liability** — Tenant shall take out and maintain, with respect to Tenant's Premises and any business operated thereon, at Tenant's expense, public liability insurance with coverage in the amounts of no less than Two Hundren Fifty Thousand ($250,000.00) Dollars for one person and Five Hundred Thousand ($500,000.00) Dollars for one occurrence for bodily injury, and Fifty Thousand ($50,000.00) Dollars for property damage.

17.4 **Plate Glass** — Tenant shall take out and maintain, at Tenant's Expense, plate glass insurance sufficient to pay for the replacement of all damaged plate glass on Tenant's portion of the Premises.

17.5 **Policy Provisions** — All of the policies required to be obtained by Tenant pursuant to the provisions of this Section shall be with companies and in policies whose form is satisfactory and acceptable to Landlord. Each policy shall designate Landlord as an additional named insured. Tenant shall provide Landlord with certificates of insurance issued by each of the insurance companies issuing any of the policies required pursuant to the provisions of this Section, and said certificates shall provide that the insurance issued thereunder shall not be altered or cancelled until after ten (10) days written notice to Landlord. In the event Tenant shall fail to take out or maintain any of the insurance required pursuant to this Section, Landlord shall have the right to obtain said policies in form and with companies acceptable to Landlord and to pay any premium due thereon. The amount of any such premiums paid by Landlord shall be paid by Tenant to Landlord within ten (10) days after demand.

17.6 **Waiver of Subrogation Rights** — In any case in which Tenant shall be obligated under any provision of this Lease to pay to Landlord any loss, cost, damage, liability or expense suffered or incurred by Landlord, Landlord shall allow to Tenant, as an offset against the amount thereof, the net proceeds of any insurance collected by Landlord for or on account of such loss, cost, damage, liability, or expense, provided that the allowance of such offset does not invalidate or prejudice the policy or policies under which such proceeds were payable.

In any case in which Landlord shall be obligated under any provision of this Lease to pay to Tenant any loss, cost, damage, liability, or expense suffered or incurred by Tenant, Tenant shall allow to Landlord, as an offset against the amount thereof, the net proceeds of any insurance collected by Tenant for or on account of such loss, cost damage, liability, or expense, provided that the allowance of such offset does not invalidate or prejudice the policy or policies under which such proceeds were payable.

The parties to this Lease shall each endeavor to procure an appropriate clause in, or an endorsement on, any policy of fire or extended coverage insurance covering the Premises and the personal property, fixtures, and equipment located in or on the Premises, pursuant to which the insurance companies waive subrogation or consent to a waiver of right of recovery, and having obtained such clauses or endorsements of waiver of subrogation or consent to a waiver of right of recovery, each party hereby agrees that it shall not make any claim against or seek to recover from the other for any loss or damage to its property, or the property of others, resulting from fire or other hazards covered by such fire or extended coverage insurance; provided, however, that the release, discharge, exoneration, and covenant not to sue herein contained shall be limited by the terms and provisions of the waiver of subrogation clauses or endorsements consenting to a waiver of right of recovery, and shall be coextensive therewith.

Landlord's Initials

17.7 Increase in Premiums — Tenant shall do all acts and pay all expense necessary to insure that the Premises are not used for purposes prohibited by any applicable fire insurance, and that the Premises comply with any and all reasonable requirements necessary to obtain and to maintain fire and public liability insurance on the Premises. In the event Tenant uses or permits the Premises to be used or acts occur on the Premises which increase the existing rate of insurance obtained by Landlord on the Premises, or which cause the cancellation of any insurance policy obtained by Landlord, Tenant shall pay the amount of any increase in premium caused thereby, and Landlord's cost of obtaining other replacement insurance policies, including any increase in premium, within ten (10) days after demand.

17.8 Late Charges — With respect to any payment required to be made to Landlord by Tenant in connection with any insurance coverage, Tenant shall pay to Landlord on demand an additional charge of one per cent (1%) of any such amount for each month in which it remains unpaid.

SECTION 18. Hold Harmless

18.1 Indemnity — This Lease is made upon the express condition that Tenant agrees to indemnify keep, save and hold Landlord free from all liability, penalties, losses, damages, costs, expenses, causes of action, claims and/or judgments arising by reason of any injury or damage to any person or persons, including without limitation, Tenant, its servants, agents and employees, or property of any kind whatsoever and to whomsoever belonging, from any cause or causes whatsoever, including leakage, while in, upon or in any way connected with the Premises, or its appurtenances, or the sidewalks adjacent thereto, during the term of this Lease or any occupancy hereunder, Tenant hereby covenanting and agreeing to indemnify, protect and save Landlord harmless from all liability, loss, costs and obligations on account of or arising out of any such injuries or losses, however occurring.

18.2 Waiver — Tenant hereby waives all claims against Landlord for damages to good, wares, and merchandise in, upon or about the Premises and for injuries to Tenant, its agents, or third persons in or about the Premises from any cause arising from acts or omissions of other tenants of the building of which the Premises are a part, or from the failure of any party to make repairs.

SECTION 19. Destruction of Premises

19.1 Repairs — If the part of the building in which the Premises are located is partially or totally destroyed by fire, earthquake, or other causes, and said destruction can be repaired from insurance proceeds in compliance with all the then applicable governmental rules and regulations and the Premises can be restored to the condition existing immediately prior to said destruction within sixty (60) days after the date of said destruction, taking into consideration the availability of labor and materials, then Landlord, at its sole expense, shall cause said repairs to be made. If said destruction cannot be repaired and the Premises restored within sixty (60) days, then Landlord shall have the option to elect either to perform said repairs at its sole expense or to terminate this Lease. If the repairs can be performed within sixty (60) days and Landlord fails to commence said repairs within said sixty (60) days, or if Landlord does not elect to perform said repairs requiring more than sixty (60) days to complete within said sixty (60) days, then Tenant shall have the right to terminate this Lease.

19.2 Cost of Repairs — If the part of the building in which the Premises are located is not partially or totally destroyed, but other parts of the building in which the Premises are located, or any other building comprising a part of the Center, are partially or totally destroyed to the extent that

(a) The then cost of the repairs for the damage to the building in which the Premises are located is greater than thirty-three and one-third percent (33-1/3%) of the then cost of replacing said whole building, or

(b) The then cost of the repairs for the damage to any other building comprising a part of the Center is greater than thirty-three and one-third percent (33-1/3%) of the then cost of replacing all the buildings comprising the Center, Landlord shall have the option for sixty (60) days after the date of such destruction to terminate this Lease.

19.3 Abatement of Rent — Landlord shall cause all work necessary to effect all repairs undertaken pursuant to Section 19.1 to be commenced promptly and prosecuted to completion diligently, excepting therefrom any delays caused by strikes, lockouts, and other causes beyond the control of Landlord. If the Premises are damaged, during the period from the date of damage until the completion of repairs, the Minimum Rent payable by Tenant during said period shall be reduced equitably in proportion to the degree the repair work interferes with the normal business conducted on the Premises.

19.4 Restoration of Fixtures — If repairs to the Premises are effected by Landlord, Tenant, at its sole expense, shall replace and repair promptly all trade fixtures, equipment and other property of Tenant located on the Premises that were damaged or destroyed, so as to restore all property of Tenant located on the Premises to a condition substantially equal to that which existed immediately prior to said damage or destruction.

SECTION 20. Condemnation

20.1 Total — If the whole or any part of the Premises or common areas are taken for public or quasi-public use by the exercise or the threat of the exercise of the right to eminent demain, with or without litigation or by judgment or agreement, then as to the portion of the Premises or Common Area taken, this Lease shall terminate as of the date that title vests in the condemning authority.

20.2 Partial — If the portion of the Premises remaining after such a taking is susceptible of occupation and use by Tenant for the purpose described in this Lease, then Landlord shall have the option for a period of thirty (30) days after said taking either to terminate this Lease, or to elect to continue this Lease in full force and effect, in which event Landlord, at its sole expense, promptly shall restore the Premises to an architectural unit as comparable as practicable to the condition existing immediately prior to such taking. During the period said repairs are being effected, the Minimum Rent payable by Tenant during said period shall be reduced equitably to the degree the repair work interferes with the normal business conducted on the Premises.

20.3 Termination — If the portion of the Premises remaining after such a taking is not susceptible of occupation and use by Tenant for the purpose described in this Lease, then this Lease shall terminate as of the date title vests in the condemning authority.

20.4 Award — Landlord shall receive all the proceeds of any award or settlement paid for any such taking.

SECTION 21. Assignment and Subletting

Tenant shall not assign this Lease voluntarily or by operation of law, or any right hereunder, nor sublet the Premises or any part thereof, nor permit any subtenant or concessionaire on the Premises without the prior written consent of Landlord, which consent shall not unreasonably be withheld. No consent to any assignment of this Lease, voluntarily or by operation of law, or any subletting of said Premises or permitting any concessionaire or subtenant on the Premises shall be deemed to be a consent to any subsequent assignment of this Lease, voluntarily or by operation of law, or to any subletting or permitting except as to the specific [illegible] covered thereby. Any such assignment of this Lease, voluntarily or by operation of law, or any such subletting or permitting without obtaining the prior written consent of Landlord shall, at the option of Landlord, constitute a default [illegible]

SECTION 22. Subordination

This Lease at all times shall be subordinate to the lien of any mortgage or deed of trust now existing or which shall at any time hereafter be placed upon the Premises or any part thereof, or the building of which the Premises are a part. Tenant shall execute and deliver without any charge therefor any form, document or instrument which shall be deemed necessary by Landlord to carry out the subordination of this Lease to the lien of any such mortgage or deed or trust.

SECTION 23. Holding Over

If Tenant holds possession of the Premises after the expiration of the term of this Lease, any such holding over shall be deemed to be a month-to-month tenancy, with all other terms and conditions specified herein applicable to the maximum extent practicable.

SECTION 24. Bankruptcy and Insolvency

24.1 Termination — This Lease, at the option of Landlord, shall terminate upon the happening of any of the following events:

(a) The filing of a petition for any proceeding under the Bankruptcy Act, or any amendment thereto, by Tenant or any person against Tenant.

(b) A finding or judgment of insolvency of Tenant.

(c) An assignment for the benefit of creditors by Tenant.

(d) The levying of a writ of execution on the business of Tenant or on the assets of Tenant located on the Premises which is not discharged within five (5) days after the date of said levy.

(e) The appointment of a receiver to take possession of any property of Tenant.

24.2 Effect — The occurrence of any of the events listed in Section 24.1 shall be deemed to be a material breach of this Lease, entitling Landlord to exercise the remedies set out in Section 25.

SECTION 25. Remedies Upon Default

25.1 Remedies Cumulative — In the event of any breach or default of this Lease by Tenant, then, in addition to all other rights and remedies available to Landlord at law or equity, Landlord shall have the right either (a) by written notice to terminate Tenant's right to possession of the leased Premises and thereby terminate this Lease, or (b) to have this Lease continue in full force and effect with Tenant at all times having the right to possession of the leased Premises.

25.2 Election to Terminate Lease — Should Landlord elect to terminate Tenant's right to possession of the leased Premises and terminate this Lease, then Landlord shall have the immediate right of entry and may remove all persons and property from the Premises. Property so removed may be stored in a public warehouse or elsewhere at the cost and for the account of Tenant. Upon such termination, in addition to all other rights and remedies available to Landlord (including rights and remedies under paragraphs (1), (2), and (4) of subdivision (a) of Section 1951.2 of the California Civil Code) Landlord shall (as allowed by Section 1951.2 (a) (3) of said Code) have the right to recover from Tenant the worth at the time of award of the amount by which the unpaid rent for the balance of the term after the time of award exceeds the amount of such rental loss that Tenant proves could be reasonably avoided.

Any proof by Tenant hereunder of the amount of rental loss that could be reasonably avoided, shall be made in the following manner: Landlord and Tenant shall each select a licensed real estate broker, and these two real estate brokers shall select a third licensed real estate broker. These three brokers shall determine the amount of the rental loss that could be reasonably avoided for the balance of the term of this Lease after the time of award. The decision of the majority of these three brokers as to that amount shall be final and binding upon the parties hereto.

25.3 Election to Keep Lease in Force — Should Landlord, following any breach or default of this Lease by Tenant, elect (by not giving written notice of termination) to keep this Lease in full force and effect, with Tenant retaining the right to possession of the Premises (notwithstanding the fact Tenant may have abandoned the leased Premises), then in addition to all other rights and remedies available to Landlord at law or equity, Landlord shall (as allowed by Section 1951.4(b) of said Code) have the right to enforce all of Landlord's rights and remedies under this Lease including but not limited to Landlord's right to recover the rent as it becomes due under this Lease. Notwithstanding any such election to have this Lease remain in full force and effect, Landlord may at any time thereafter by written notice elect to terminate Tenant's right to possession of said Premises and thereby terminate this Lease for any previous breach or default which remains uncured, or for any subsequent breach or default.

SECTION 26. Attorney's Fees

In any action brought to enforce the provisions of this Lease, the prevailing party shall be entitled to recover costs and reasonable attorney's fees.

SECTION 27. Surrender

The voluntary or other surrender of this Lease by Tenant, or a mutual termination thereof between Landlord and Tenant shall not result in a merger, but shall, at the option of Landlord, operate either as an assignment to Landlord of any and all existing subleases and subtenancies, or as termination of all or any existing subleases or subtenancies.

SECTION 28. Nonwaiver

No covenant, term or condition, or breach thereof, shall be deemed waived except if expressly waived in writing, and any waiver of such breach shall not be deemed to be a waiver of any preceding or succeeding breach. Acceptance of all or any portion of rent at any time shall not be deemed to be a waiver of any covenant, term or condition, except as to the rent payment accepted.

SECTION 29. Notice

All notices or demands under this Lease shall be in writing, and shall be deemed delivered when deposited in the United States mail, postage prepaid, addressed to:

Bobby Page's [illegible] INC.
P. O. Box 2464
Stateline. Nevada 89449

Tenant: ROBERT PRUPAS and BERNIECE PRUPAS
At the address of the Premises, whether or not Tenant has departed therefrom, or abandoned or vacated the Premises.

Landlord: CONNOLLY DEVELOPMENT. INC.
10 Eastmont Mall
Oakland, Calif. 94605

*of which $855.00 is the first montl
rental, and $855.00 shall be retai
by Landlord to be applied toward tl
rental for the last month of the L

Or to such other address as either party may from time by notice designate for this purpose.

SECTION 30. Security Deposit

30.1 **Payment** — Tenant has contemporaneously with the execution of this Lease deposited with Landlord the sum of SEVENTEEN HUNDRED AND TEN DOLLARS ($1,710.00*), ~~herein refered to as Security Deposit, receipt of which is~~ hereby acknowledged. This sum shall be held by Landlord as security for the faithful performance by Tenant of all the terms, covenants and conditions of this Lease to be kept and performed by Tenant. If, at any time during the term of this Lease, any rent, or any other sum payable by Tenant to Landlord shall be overdue, then Landlord may at its option, appropriate and apply any portion of said Security Deposit to the payment of any such overdue rent or other sum. In the event of the failure of Tenant to keep and perform all the terms, covenants and conditions of this Lease to be kept and performed by Tenant, then, at the option of Landlord, Landlord may, after terminating this Lease, appropriate and apply said Security Deposit, or so much thereof as may be necessary, to compensate Landlord for all loss or damage sustained or suffered by Landlord due to such breach on the part of Tenant. Should the entire Security Deposit, or any portion thereof, be appropriated and applied by Landlord for the payment of overdue rent or other sums due and payable to Landlord by Tenant hereunder, then Tenant shall, within ten (10) days after written demand by Landlord, pay to Landlord a sufficient sum in cash to restore said Security Deposit to the original sum of said Security Deposit. Tenant's failure to do shall constitute a breach of this Lease.

30.2 **Return** — Should Tenant comply with all of the terms, covenants and conditions and of this Lease, and pay when due all of the rental and all other sums payable by Tenant to Landlord hereunder, the Security Deposit shall be returned in full to Tenant at the end of the term of this Lease.

SECTION 31. Miscellaneous

31.1 **Captions** — Captions of Sections and Subsections of this Lease are for convenience only, and shall not be considered in resolving any questions of interpretation or construction of any Section or Subsection of this Lease.

31.2 **Binding Effect** — Each and all of the terms, covenants and conditions of this Lease shall be binding upon and inure to the benefit of the parties hereto and their heirs, executors, administrators, successors in interest and assigns. Such terms, conditions and covenants are intended to be for the benefit of the Premises. Nothing in this Subsection shall be deemed to permit any assignment, subletting, occupancy, or use of the Premises other than as provided for in Section 21.

31.3 **Disclaimer** — Nothing contained herein shall be deemed to create any relationship between the parties other than the relationship of Landlord and Tenant. It is expressly stipulated that the parties are not partners, or joint venturers, or agents of one another.

31.4 **Governing Law** — This Lease shall be governed and interpreted solely by the laws of the State of California.

31.5 **Gender** — Each number, singular or plural, as used in this Lease shall include all numbers and each gender shall be deemed to include all genders.

31.6 **Time** — Time is of the essence of this Lease and of each and every provision thereof.

31.7 **Joint and Several** — All the terms, covenants and conditions contained in this Lease to be performed by Tenant, if Tenant shall consist of more than one person or organization, shall be deemed to be joint and several, and all rights and remedies granted to Landlord or given to Landlord by law shall be cumulative and not exclusive of any other remedy.

31.8 **Force Majeure** — In the event that either party hereto shall be delayed or hindered in or prevented from the performance of any act required hereunder by reason of strikes, lock-outs, labor troubles, inability to procure materials, failure of power, restrictive governmental laws or regulations, riots, insurrection, war or other reason of a like nature not the fault of the party delayed in performing work or doing acts required under the terms of this lease, then performance of such act shall be excused for the period of the delay and the period for the performance of any such act shall be extended for a period equivalent to the period of such delay. The provisions of this Section shall not operate to excuse Tenant from prompt payment of rent, Percentage Rent, or any other sum required by the terms of this Lease.

31.9 **Entire Agreement** — This document contains all of the agreements, and supersedes all prior agreements, between the parties relating to the subject matter, and may be modified only by an agreement in writing signed by each of the parties.

IN WITNESS WHEREOF, said parties have set their hands as of the day and year set forth in Section 1 above.

LANDLORD:

CONNOLLY DEVELOPMENT INC.
(Name)
By Ted Connolly
(Signature)
Title President

TENANT:

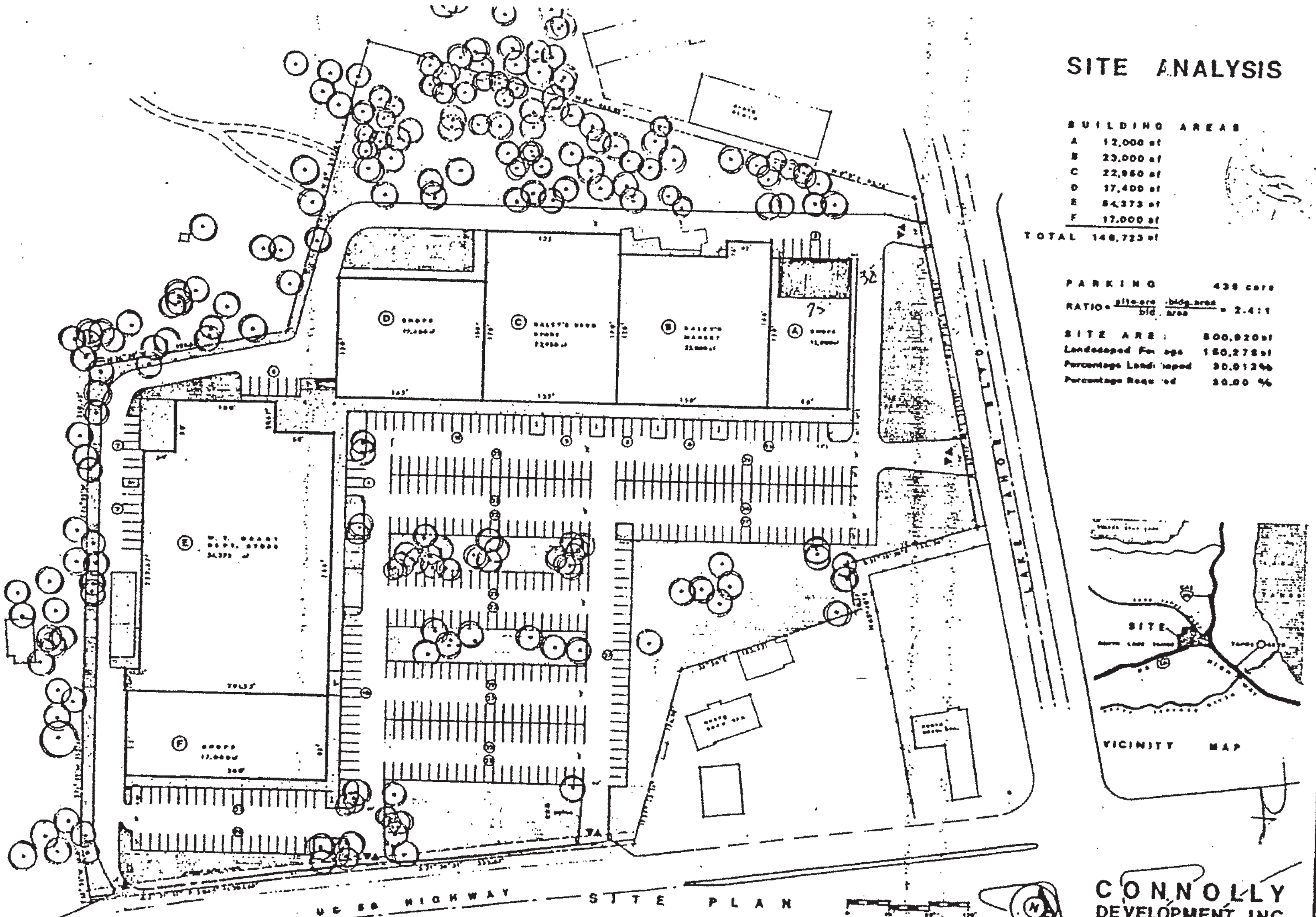
Robert Prupas
ROBERT PRUPAS ~~(Name)~~ (Signature)
By Berniece Prupas
BERNIECE PRUPAS (Signature)
Title

ATTACHMENTS:
EXHIBIT A — Plot Plan
EXHIBIT B — Scope of Work

Landlord's Initials:
TC

Tenant's Initials:
RP

EXHIBIT "A"



SITE ANALYSIS

BUILDING AREAS

A	12,000 sf
B	23,000 sf
C	22,950 sf
D	17,400 sf
E	54,373 sf
F	17,000 sf
TOTAL	146,723 sf

PARKING	438 cars
RATIO = $\frac{\text{site area - bldg area}}{\text{bldg. area}}$	= 2.4:1
SITE AREA	500,920 sf
Landscaped Footage	150,278 sf
Percentage Landscaped	30.012%
Percentage Required	30.00 %

TAHOE SOUTH 'Y' shopping center
SOUTH LAKE TAHOE, CALIFORNIA

WIENER · FISCHER and AINSWORTH · McCLELLAN Architects · Engineers · Planners
384 First Street Oakland, California 94607 Telephone 415/444-3320

CONNOLLY
DEVELOPMENT INC.
10 EASTMONT MALL
OAKLAND, CALIF
Telephone 415/562-9736

EXHIBIT "B"

A) Landlord Work

Landlord shall provide at no cost to the Tenant the building shell consisting of the following:

(1) Permanent exterior and interior bearing walls, including service doors, but not including store fronts and non-bearing partitions.

(2) Roof framing and permanent columns.

(3) Roof sheathing, roof insulation and roofing and roof drainage.

(4) Permanent roof parapet walls and canopies.

(5) 100 AMP electrical service, fire alarm, 3/4" telephone conduit, 1¼" cold water service, 1" gas, and 6" sewer services to the building in which Tenant's demised premises are to be located.

(6) Fire sprinkler system below the roof with provisions for installations of sprinkler system in Tenant's demised premises.

(7) Sidewalks and sidewalk illumination.

(8) Parking lot paving and curbs.

(9) Parking lot illumination and site drainage system.

(10) All site utilities.

(11) Parking lot landscaping and irrigation system for same.

(12) All off-site improvements.

B) Tenant Work

(1) All work necessary to complete the Tenant's demised premises for occupancy above and beyond the work described under Paragraph A. "Landlord work" shall be Tenant work.

(2) The Landlord agrees to an allowance of $ 7.00 per square foot of leased area as his share of the cost of the Tenant work. The Tenant agrees to pay the remainder of the cost of the Tenant work. Payments are to be made as outlined in Section 3 of the lease.

(1). Landlord's architect shall submit to Tentant accurately dimensioned drawings showing a floor plan of the Tenant's demised premises and all other information the Tenant may require. As soon as possible, but not later than 15 days after receipt of such drawings, Tenant shall furnish Landlord's architect with fixture layout drawings showing all information necessary to enable Landlord's architect to complete the working drawings and specifications for Tenant's demised premises. Immediately following date on which fixture layout drawings have been received by Landlord's architect, Landlord shall authorize Landlord's architect on his and Tenant's behalf to proceed with the preparation and completion of working drawings and specifications for Tenant's demised premises, based on said fixture layout drawings. The fee of said architect for such working drawings and specifications shall be paid jointly by Landlord and Tenant as follows:

(a) Tenant's share of said fee shall be a percentage of the total fee based on the floor area as outlined below:

Floor Area of Demised Premises	Applicable Percentage
Up to 2000 sq.ft.	65% of fee
2001 to 4000 sq.ft.	60% of fee
4001 to 5500 sq.ft.	55% of fee
5501 and over sq.ft.	45% of fee

(b) Landlord's share of said fee shall be the balance.

(c) Tenant shall pay the Landlord direct on all billings and Landlord will reimburse architect for his work.

(2) Upon completion of working drawings and specifications for demised premises, Landlord's architect will submit to the Tenant three (3) sets of drawings and specifications for Tenant's approval. Two (2) sets of drawings and specifications bearing Tenant's comments and approval shall be returned to Landlord's architect as soon as possible, but not later than fourteen (14) calendar days from date of receipt thereof.

(3) Landlord's architect shall submit working drawings and specifications for demised premises to Landlord's contractor for bids. After bids have been received, Landlord's contractor shall submit the bids properly itemized, jointly to the Landlord and the Tenant for comments and approval. After Tenant has given his approval of the contract amount, Landlord shall enter into a contract with Landlord's contractor to construct the work in accordance with the approved drawings and specifications.

(4) ~~If Tenant does not agree with Landlord's contractor's bid amount,~~ Tenant shall have the option of employing a contractor of Tenant's own choice. In this event, Tenant shall comply with the provisions set forth under Sections 13 and 18 of the lease and the following provisions:

It is understood and agreed that Tenant's contractor shall perform said work in a manner and at times which do not impede or delay Landlord's contractor in the completion of the premises as provided in the lease. Any delays in the completion of the premises or the commencement of the lease term and any damage to any work caused by Tenant's contractor shall be at the sole cost and expense of the Tenant.

In the event Tenant elects to employ a contractor of Tenant's choice, said contractor shall contain his storage of materials and his operations within Tenant's premises and such other space as may be assigned by Landlord's contractor. Should he be assigned space outside Tenant's premises, he shall move to such other space as Landlord's contractor shall direct from time to time to avoid interference or delays with other work. Tenant's contractor shall provide temporary facilities and utilities as required for his work within Tenant's premises, or shall make arrangements with Landlord's contractor for any temporary facilities or utilities to be provided by Landlord's contractor at Tenant's contractor's request.

In the event that Tenant retains both an Architect and Contractor other than Tenant's Architect or Contractor, Tenant's Architect shall furnish to Landlord's Architect approved copies of Contractors Request for Payment for certification by Landlord's Architect.

Tenant is responsible for the compliance with all applicable codes and regulations of duly constituted authorities having jurisdiction insofar as the performance of work and completed improvements are concerned for ~~all work performed by Tenant or Tenant's contractor.~~

D) Construction

(1) Exhibit B sets forth the obligations of Landlord and Tenant to perform the work and to supply the materials necessary to prepare the premises for occupancy. Landlord, at Landlord's expense, shall perform promptly and diligently all acts required of Landlord under Landlord work in a first-class workmanlike manner. Tenant, at Tenant's expense (less Landlord's allowance), shall perform promptly and diligently all acts required of Tenant under Tenant work in a first-class workmanlike manner. Landlord shall have the right to approve and supervise all work to be performed on the Tenant's demised premises. Before any construction work on Tenant's premises is to commence, Tenant shall have approved by initialing the plans and specifications and the construction contract for all work to be performed by Landlord's contractor, and shall be required to submit to the Landlord by a negotiable check one-half (1/2) of his share of the cost of the work to be done and the total amount of his share of the architectural fee. After completion of the work, Landlord shall deliver to Tenant a bill for the balance of the tenant's share of the original contract amount, including any adjustments due to approved change orders. Tenant shall pay said bill within fifteen (15) days after receipt of same.

Section 3. Construction

3.1 Exhibit B sets forth the obligations of Landlord and Tenant to perform the work and to supply the materials necessary to prepare the premises for occupancy. Landlord, at Landlord's expense, shall perform promptly and diligently all acts required of Landlord under Landlord work in a first-class workmanlike manner. Tenant, at Tenant's expense (less Landlord's allowance), shall perform promptly and diligently all acts required of Tenant under Tenant work in a first-class workmanlike manner. Landlord shall have the right to approve and supervise all work to be performed on the Tenant's demised premises. Before any construction work on Tenant's premises is to commence, Tenant shall have approved by initialing the plans and specifications and the construction contract for all work to be performed by Landlord's contractor, and shall be required to submit to the Landlord by a negotiable check one-half (1/2) of his share of the cost of the work to be done and the total amount of his share of the architectural fee. After completion of the work, Landlord shall deliver to Tenant a bill for the balance of the Tenant's share of the original contract amount, including any adjustments due to approved change orders. Tenant shall pay said bill within fifteen (15) days after receipt of same.

EXHIBIT I

UNITED STATES DISTRICT COURT
EASTERN DISTRICT OF CALIFORNIA

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SEVEN SPRINGS LIMITED PARTNERSHIP,)
)
Plaintiff,)
)
vs.) Case No. 07-00142-LKK-GGH
)
FOX CAPITAL MANAGEMENT CORPORATION,)
)
Defendant.)
)
)

CERTIFIED COPY

VIDEOTAPED DEPOSITION OF
MARY LOUISE BAISLEY

April 13, 2007

REPORTED BY: TERRI NESTORE, CSR 5614 (394004)

Videotaped deposition of MARY LOUISE BAISLEY taken by the Plaintiff at Lakeshore Lodge & Spa, 930 Bal Bijou Road, South Lake Tahoe, California, commencing at 9:35 a.m., on April 13, 2007, before TERRI NESTORE, CSR 5614, pursuant to Notice and Subpoena duces Tecum.

--oOo--

APPEARANCES

FOR THE PLAINTIFF SEVEN SPRINGS LIMITED PARTNERSHIP:

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FOR THE DEFENDANT FOX CAPITAL MANAGEMENT CORPORATION:

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ALSO PRESENT:

MERRILL LEGAL SOLUTIONS
GRETCHEN VOGEL, VIDEOGRAPHER
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Telephone: (415) 357-4300

09:07:47 SOUTH LAKE TAHOE, CALIFORNIA; FRIDAY, APRIL 13, 2007
09:07:47 9:35 A.M.
09:07:47 --oOo--
09:10:17 PROCEEDINGS
09:23:40 (Whereupon, Exhibits 1-9 were marked for
09:23:40 identification.)
09:39:21 THE VIDEOGRAPHER: Good morning.
09:39:23 Here begins Volume 1, Videotape No. 1, in the
09:39:25 deposition of Mary Lou Baisley, in the matter of
09:39:30 Seven Springs Limited Partnership vs. Fox Capital
09:39:38 Management Corporation, in the United States District
09:39:39 Court, Eastern District of California, Case No.
09:39:45 07-00142-LKK-GGH. Today's date is April 13th, 2007.
09:39:57 The time on the video monitor is 9:41 a.m.
09:40:02 The video operator today is Gretchen Vogel,
09:40:05 contracted by Merrill Legal Solutions, San Francisco,
09:40:09 California. This video deposition is taking place at
09:40:13 the Lakeshore Lodge & Spa, at 930 Bal Bijou, South Lake
09:40:28 Tahoe, California, and was noticed by Morrison &
09:40:31 Foerster for the plaintiff.
09:40:33 Counsel, would you please voice identify
09:40:35 yourselves and state whom you represent.
09:40:37 MR. BEARD: Brooks Beard for Seven Springs
09:40:41 Limited Partnership.
09:40:42 MR. VINDING: Michael Vinding of Diepenbrock

09:40:42 Harrison representing Fox.
09:40:49 THE VIDEOGRAPHER: The court reporter today is
09:40:51 Terri Nestore of Merrill Legal Solutions. Would the
09:40:56 reporter please swear in the witness.
09:41:07
09:42:43 MARY LOUISE BAISLEY
09:42:43 called as a witness by the plaintiff, who having been
09:42:43 first duly sworn, was examined and testified as follows.
09:42:43
09:42:46 EXAMINATION BY MR. BEARD
09:42:46
09:42:47 MR. BEARD: Q. Can you please tell us and
09:42:49 spell your full name.
09:42:50 A. Mary Louise Baisley, M-A-R-Y, capital
09:42:55 L-O-U-I-S-E, B-A-I-S-L-E-Y.
09:43:01 Q. And you go by "Mary Lou," is that correct?
09:43:04 A. I go by "Mary Lou," yes.
09:43:06 Q. And can you please tell us your current
09:43:08 address?
09:43:08 A. My physical address?
09:43:09 Q. The residence where you live, yes.
09:43:12 A. 2300 Colorado. I don't know whether it's an
09:43:16 avenue or a street -- they never told me -- South Lake
09:43:19 Tahoe. 96150 is the ZIP code.
09:43:25 Q. Have you ever had your deposition taken

10:46:40 put all the equipment in there.

10:46:41 MR. BEARD: Q. And how is it that you know
10:46:42 that? Obviously you weren't there until '76.

10:46:45 How do you know who put what into that
10:46:48 Laundromat?

10:46:49 A. I don't really know, but evidently it was put
10:46:53 in when he set up the whole thing.

10:46:56 Q. So what you do know is that when you purchased
10:46:58 the Laundromat in 1976, the coin operated dry cleaning
10:47:03 unit was there at that time, correct?

10:47:06 A. Oh, yes. Oh, yes.

10:47:07 Q. So is it accurate, then, that you're not
10:47:09 certain who or when -- who put the coin operated dry
10:47:13 cleaning unit there, or when, prior to your purchase, is
10:47:19 that correct?

10:47:21 A. That's correct.

10:47:21 Q. If you look back at Exhibit 2, and you
10:47:24 identify again on Exhibit 2 where the Laundromat was
10:47:27 located, where within the Laundromat was the dry
10:47:30 cleaning unit placed?

10:47:34 A. I would say about 15, maybe 20 feet from the
10:47:40 front door.

10:47:42 MR. VINDING: I'm going to offer a belated
10:47:44 objection, in that it misstates testimony.

10:47:46 She doesn't know where -- it was existing at

10:47:49 the time. She didn't place it anywhere.

10:47:54 MR. BEARD: Q. My question, again, is in
10:47:54 1976, when you bought the Laundromat, you've testified
10:47:57 that the coin operated dry cleaning unit was already
10:48:06 within the Laundromat, correct?

10:48:06 A. Yes, yes.

10:48:06 Q. At the time that you purchased the Laundromat,
10:48:06 where was the dry cleaning unit placed within that
10:48:07 building, within that tenancy?

10:48:09 A. Like I just got through saying, 15 to 20 feet
10:48:12 inside the front door, to your right.

10:48:14 Q. As you walk in the front door, 15 to 20 feet
10:48:17 to your right?

10:48:18 A. That's right.

10:48:19 Q. Was there more than one of those units?

10:48:21 A. No.

10:48:22 Q. Just one?

10:48:23 A. Just one.

10:48:24 Q. And do you recall the time period that you
10:48:29 removed that dry cleaning unit from the Laundromat?

10:48:34 A. I believe it was 1979, but I am not sure. I
10:48:39 know we didn't have it more than three-and-a-half, four
10:48:44 years, tops. That's all I... all I recall. I know it
10:48:49 was not making any money. We wanted the space, and it
10:48:55 took up space where we could put our vending machine

10:49:02 and -- like our soap vending and all that.
10:49:05 So I believe it was 1979 when we gave it away.
10:49:09 Q. You're not certain about the precise date, but
10:49:11 you are certain that you only had that unit for about
10:49:14 three or four years while you operated it?
10:49:18 A. Three-and-a-half, four years, yeah.
10:49:24 Q. I want to ask you some questions now -- this
10:49:26 one's going to be tough for testing your memory, but
10:49:30 what I want to do now is I want to identify a point in
10:49:33 time, and that point in time is approximately 1979, when
10:49:36 you removed the coin operated dry cleaning unit from the
10:49:39 facility. So what we're trying to do now is focus on
10:49:42 the period between '76, when you purchased the
10:49:45 Laundromat, and approximately 1979, when you removed the
10:49:49 coin operated dry cleaning unit. So that's the time
10:49:52 frame that we're shooting for here.
10:49:54 A. Okay.
10:49:54 Q. What I'd like to find out is about the
10:49:57 condition of the South "Y" facility generally, and by
10:50:02 "condition," I mean I'm going to talk about the
10:50:05 condition of the sidewalks and the parking area and the
10:50:13 driveways, that type of thing, and we'll see what you
10:50:15 remember, if anything.
10:50:16 And my first question to you is during the
10:50:18 time frame that that coin operated dry cleaning unit was

11:03:48 A. And there was never any big changes in the Laundromat, I mean as far as we did put 20 pound front loaders in the very first row. We put in -- yeah. And that's all we did. And then we changed washing machines from one brand to another, and that was it.

11:04:12 Q. I'd like to ask you some questions just about day-to-day operations, and I realize that this occurred over a 20-year period from 1976 to 1996.

11:04:24 What I'd like to do is ask some general questions about the operations, and what I'd like you to do is if your general operations changed at some point during that 20 years -- for example, as a hypothetical, let's say that in the early -- you know, the first five years you and your husband did all of the cleaning, but for the last 15 years you had a crew that came in, that's something that I'd like you to identify for us as something that changed over time.

11:04:51 Do you understand what I'm saying?

11:04:52 A. Yeah, but I don't know what you mean by "crew."

11:04:56 Q. For example, if you hired a cleaning service that -- instead of you and your husband doing the cleaning on a nightly or weekly basis, you would have a separate entity who had a cleaning crew that would come in. That's a hypothetical.

11:05:11 A. My late son did all the cleaning up of the
11:05:16 Laundromat. We hired no outside people to do that at
11:05:19 all. If my son couldn't do it, my husband would mop the
11:05:24 floor and all that. I mean, we didn't hire any outside
11:05:29 cleaning people at all.

11:05:34 Q. Let's start back a little bit broader, and I
11:05:37 want you to describe for us kind of what the day-to-day
11:05:40 operations were at the facility.

11:05:43 For example, the shop would be opened up at
11:05:44 this time, this is the routine that we did throughout
11:05:47 the day, this is when we closed. That type of thing.

11:05:51 A. Okay. We opened up about 8:00 o'clock and we
11:05:56 closed -- when we first bought it, we closed at 9:00
11:05:59 because this was the Hakanssons' hours, and then we got
11:06:02 to thinking, "Well, we're not going to live in this
11:06:05 Laundromat," so we pushed it back to 8:00 o'clock at
11:06:08 night. We went in, opened up, filled the money machine,
11:06:12 filled the vending machines. All the tubs had been
11:06:17 cleaned out. We prided ourselves in keeping a clean
11:06:21 Laundromat, as far as wiping the tubs out and just, in
11:06:29 general, this was our -- that's why I guess we got so
11:06:32 much repeat business, was because it was so clean. I
11:06:34 mean, you go into some Laundromats and they're bad.

11:06:39 Anyway, then we would go home for a while, and
11:06:46 periodically one of the two of us would go down and

11:06:48 check, see how things were going. We didn't spend all
11:06:54 day down there and all that. And then my son would come
11:06:57 in at night and clean. It was just a typical business.
11:07:04 Q. So during that 20-year period, did you ever
11:07:06 hire any other employees?
11:07:07 A.. Yes. I had -- excuse me. I had three old
11:07:13 ladies. They're all dead now. But we had three ladies
11:07:19 who were on a -- well, I paid them minimum wage.
11:07:23 This was when we did wash, dry, and fold.
11:07:27 Now this was not in the time frame where
11:07:31 you're saying, '76 to '79.
11:07:36 After we started wash, dry, and fold, this is
11:07:39 when I hired these -- I say old ladies -- well, I'm an
11:07:46 old lady -- and they would do wash, dry, and fold for
11:07:53 us. Some of them would work a couple hours, some of
11:07:56 them would work half a day. So -- and I know I had
11:07:59 three of them, and they're all gone. They're all dead.
11:08:02 Q. Other than those three ladies, do you remember
11:08:05 any other employees that you hired to help with the
11:08:06 operations?
11:08:08 A. Um-um. No. I'm sorry. Yes, go ahead.
11:08:24 No, we didn't hire anybody else.
11:08:27 Q. You've already said that there was a period of
11:08:28 time that your late son came in in the evenings and
11:08:31 would do the cleaning.

11:08:33 Do you remember, was that during the entire
11:08:34 20-year period, or during a portion of that time?

11:08:35 A. Just a portion. He had another job.

11:08:38 Q. Do you remember what time frame he helped with
11:08:39 the cleaning?

11:08:40 A. Sometimes he'd come in at 4:00, leave at 6:00.
11:08:45 Sometimes he'd wait until the Laundromat was ready to
11:08:49 close, and then he'd start. He'd chase the customers
11:08:54 out with a mop and, you know, it wasn't any set hours or
11:08:59 anything. He just did this to help us out and...

11:09:03 Q. How about the years? Do you remember, did he
11:09:05 do that from starting all the way back in 1976?

11:09:09 A. Oh, no, no. Not in '76, no.

11:09:13 This was -- my husband and I ran that for --
11:09:18 by ourselves till -- God. In late '80s, I guess.

11:09:27 Q. So it was approximately the late '80s that
11:09:30 your son began to help?

11:09:32 A. Yeah. Well, I'd say the middle '80s.

11:09:36 He needed help with his finances occasionally.

11:09:39 He had -- my late son had a problem, and it
11:09:44 cost him his life. So it's one of those things. But he
11:09:52 did help us out. He also helped us at the motel, but he
11:09:56 held down a job at the casinos also, so... He was a big
11:10:01 help, while he was alive. So it goes.

11:10:06 Q. I'd like to talk about the role that you and

11:10:08 your husband Leroy played. So can you describe for us
11:10:11 the different roles that each of you played with the
11:10:13 day-to-day operations.

11:10:16 A. I did the books, he stood around. He really
11:10:27 didn't do a heck of a lot. Occasionally he'd help me
11:10:31 with the money, to roll the coins and what have you.

11:10:37 Occasionally he would have to change a motor
11:10:39 in the washing machine, which was nothing but four bolts
11:10:44 and a couple of screws, and put in a new motor and get
11:10:50 rid of the other one. That's about all he did.

11:10:52 We never had too much problems with our
11:10:59 dryers. Occasionally a belt would break, and he knew
11:11:05 enough to change those, but that's all he did.

11:11:09 Q. So during -- prior to the mid to late '80s
11:11:13 when your son began helping with the cleaning in the
11:11:16 evenings, between you and your husband, who did the
11:11:19 regular day-to-day cleaning?

11:11:21 A. Both of us. We took our turns. If we had
11:11:26 a -- like in the middle of summer, if we had a full
11:11:30 house, quite a bit, and we were down there a lot -- a
11:11:35 lot more than we were in the winter, because the
11:11:38 machines -- we wanted to keep those machines clean.

11:11:41 So my husband and I would wipe out the
11:11:45 machines and -- this was in the summer, though.

11:11:50 In the wintertime, my son took care of most of

12:17:22 half an hour.

12:17:25 Q. One of the questions that he asked you was
12:17:27 whether you remembered any spills or leaks from the dry
12:17:30 cleaning unit.

12:17:32 A. Um-hum.

12:17:32 Q. Let me just ask you the same question.

12:17:34 A. No.

12:17:35 Q. Do you ever remember any spills or leaks?

12:17:37 A. No.

12:17:38 Q. Did your husband ever tell you about any
12:17:40 spills or leaks?

12:17:41 A. No.

12:17:42 Q. Did you ever otherwise hear about any spills
12:17:46 or leaks from the dry cleaning unit?

12:17:48 A. No.

12:17:49 Q. Do you recall, at the time that you were
12:17:50 talking with the Hakanssons about purchasing the
12:17:54 Laundromat, did they ever talk with you about the dry
12:17:56 cleaning unit?

12:17:59 A. No. All we did was say, "We'll buy it," and
12:18:03 we took a note to 'em and paid that off, and I really
12:18:09 did not know Kersten until I joined the auxiliary over
12:18:15 at the hospital. I didn't know she was the person that
12:18:19 I purchased the Laundromat from, until I saw her face
12:18:23 and recognized her when we signed papers and what have

14:05:14 Put another way, could you estimate how many checks you wrote in the course of a year, or during the course of the three-and-a-half to four years?

14:05:22 Could you say one check? Two checks? Three checks? Less than three checks?

14:05:26 MR. BEARD: Objection.

14:05:27 Lack of foundation, and asked and answered.

14:05:30 THE WITNESS: I couldn't tell you.

14:05:31 It could have been three times. I know we didn't... we didn't fill the tank very often. I know that for a fact, because we didn't -- the dry cleaner was not used that much.

14:05:50 MR. VINDING: Q. Do you recall ever writing a check for payment to whomever filled the tank?

14:05:56 A. Oh, yeah. I mean, they did bill us.

14:06:00 We had to pay for it. But I don't know who it was. I don't know the company or...

14:06:06 Q. How many times, during the three-and-a-half to four years that you had the coin operated dry cleaning unit, did you write checks?

14:06:16 I'm just looking for a ballpark.

14:06:18 A. Just to them?

14:06:19 Q. Yeah.

14:06:22 A. Maybe four times.

14:06:32 Q. If something eventful occurred at the

14:06:37 Laundromat, for example, say something went wrong, was
14:06:40 it your custom and practice to report it to your
14:06:42 husband?
14:06:43 MR. BEARD: Objection. Vague.
14:06:51 THE WITNESS: I don't think anything ever
14:06:52 happened that I'd have to report to him.
14:07:02 MR. VINDING: Q. On the occasions when
14:07:03 someone broke into the Laundromat, who discovered the
14:07:07 break-ins?
14:07:09 A. We had an alarm to the police department.
14:07:17 After the first -- excuse me.
14:07:18 After the first break-in when they went for
14:07:23 the pinball machines, we put in the silent alarm,
14:07:28 because it was -- we were getting tired of, you know,
14:07:35 just these kids going by, graffiti-ing the windows. We
14:07:42 just decided that that was the best thing to do, was put
14:07:45 in a silent alarm, and that's what we did.
14:07:48 Q. Would it be fair to say that you and your
14:07:50 husband talked on a daily basis about the dry clean --
14:07:54 strike that.
14:07:54 Would it be fair to say that you and your
14:07:56 husband talked about the Laundromat on a daily basis?
14:08:00 A. Well, we worked together.
14:08:04 Q. Is that a "yes"?
14:08:05 A. Yes, I'm sorry. I was married for 58 years.

14:08:08 I had to talk to him. Gee whiz.

14:08:11 Q. As you sit here today, were you ever made
14:08:12 aware of a spill of what you called the PERC?

14:08:17 A. Never.

14:08:38 Q. Did anyone ever interview you, in or around
14:08:42 1984 to about 1986, regarding your business?

14:08:51 A. What do you mean by interviewing me?
14:08:53 Like a insurance or...

14:08:56 Q. Anyone. Did anyone come to you and say, "What
14:09:00 kind of operation do you run here? What kind of
14:09:02 chemicals do you use?" Anything like that?

14:09:05 A. Oh, no, no, not me.
14:09:07 Not my husband, to my knowledge. No.

14:09:15 Q. Do you recall if anyone ever interviewed you
14:09:17 at any time regarding something called a site
14:09:21 assessment?

14:09:22 A. No.

14:09:42 Q. Did you ever complain about the condition of
14:09:43 the sidewalks to the landlord, at any time during which
14:09:46 you owned the Laundromat?

14:09:50 A. Yes.

14:09:52 Q. When?

14:09:55 A. Ballpark? I guess it might have been between
14:09:59 the time we bought it, which was -- well, I'd say the
14:10:05 year after we bought it, about the snow removal and the

CERTIFICATE OF REPORTER

I, TERRI NESTORE, a Certified Shorthand Reporter, hereby certify that the witness in the foregoing deposition was by me duly sworn to tell the truth, the whole truth, and nothing but the truth in the within-entitled cause;

That said deposition was taken down in shorthand by me, a disinterested person, at the time and place therein stated, and that the testimony of the said witness was thereafter reduced to typewriting, by computer, under my direction and supervision;

That before completion of the deposition, review of the transcript [ ] was [X] was not requested if requested, any changes made by the deponent (and provided to the reporter) during the period allowed are appended hereto.

I further certify that I am not of counsel or attorney for either or any of the parties to the said deposition, nor in any way interested in the event of this cause, and that I am not related to any of the parties thereto.

DATED: April 20, 2007

TERRI NESTORE, CSR No. 5614

EXHIBIT J

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SEVEN SPRINGS LIMITED PARTNERSHIP

UNITED STATES DISTRICT COURT

EASTERN DISTRICT OF CALIFORNIA

SEVEN SPRINGS LIMITED PARTNERSHIP, a Missouri limited partnership,

Plaintiff,

v.

FOX CAPITAL MANAGEMENT CORPORATION, a California corporation,

Defendant.

Case No.

COMPLAINT PURSUANT TO CERCLA AND FOR EXPRESS CONTRACTUAL INDEMNITY

In accordance with Rule 8 of the Federal Rules of Civil Procedure, Plaintiff Seven Springs Limited Partnership ("Seven Springs") brings these claims against Defendant Fox Capital Management Corporation. In support of its claims, Seven Springs states as follows:

NATURE OF ACTION

1. Seven Springs brings its first three claims under the Comprehensive Environmental Response, Compensation and Liability Act, as amended, 42 U.S.C. §§ 9601 *et seq*. ("CERCLA"), to recover costs it has incurred and may incur in the future responding to environmental contamination at and near the South Y Shopping Center, located near the intersection of Emerald Bay Road and Lake Tahoe Boulevard in South Lake Tahoe, El Dorado County, California (the "South Y Site").

2. Seven Springs brings its fourth claim seeking express contractual indemnity pursuant to an indemnity agreement to recover costs it has incurred and may incur in the future responding to environmental contamination at and near the South Y Site.

PARTIES

3. Seven Springs Limited Partnership is a Missouri limited partnership and is the current owner of the South Y Site.

4. On information and belief, Fox Capital Management Corporation ("Fox") is a California corporation with its principal place of business in Denver, Colorado.

JURISDICTION AND VENUE

5. This Court has original subject matter jurisdiction over Seven Springs' CERCLA claims in accordance with Rule 8 of the Federal Rules of Civil Procedure, as well as the federal question statute, 28 U.S.C. section 1331, CERCLA section 107(a), 42 U.S.C. section 9607(a), and CERCLA section 113(b), 42 U.S.C. section 9613(b).

6. This Court has authority to issue a declaratory judgment under CERCLA concerning Seven Springs' right to recover future response costs from Fox in accordance with 28 U.S.C. sections 2201 and 2202, as well as CERCLA section 113(g)(2), 42 U.S.C. section 9613(g)(2).

7. Seven Springs' contractual indemnity claim falls within this Court's supplemental jurisdiction under 28 U.S.C. section 1367(a), because that claim is "so related to claims in the action within [the Court's] original jurisdiction that they form part of the same case or controversy under Article III of the United States Constitution."

8. Venue is proper in this district in accordance with CERCLA section 113(b), 42 U.S.C. section 9613(b), because the South Y Site is located within this judicial district.

BACKGROUND

The South Y Site

9. The South Y Site is located near the intersection of Emerald Bay Road and Lake Tahoe Boulevard in South Lake Tahoe, El Dorado County, California.

10. The South Y Site is sometimes referred to as the Lake Tahoe Laundry Works Site by, for example, the California Regional Water Quality Control Board - Lahontan Region.

11. The South Y Site consists of a shopping center containing various shops, stores, and restaurants.

12. Since the South Y Site opened in approximately 1972, a laundromat has been one of the tenants.

Contaminating Activities

13. On information and belief, according to a prior tenant, between approximately 1972 and approximately 1979, the laundromat contained a coin-operated dry-cleaning unit near the front of the store.

14. On information and belief, according to a prior tenant, the coin-operated dry-cleaning unit used perchloroethylene (“PCE”) as its cleaning solvent.

15. On information and belief, according to a prior tenant, the company that provided the PCE would park its truck in front of the laundromat and drag a hose from the truck into the laundromat to refill a large storage drum located in a closet behind the coin-operated dry-cleaning unit.

16. On information and belief, during these deliveries, PCE spilled into the parking lot from the hose and/or the truck.

17. On information and belief, these spills entered soils and potentially groundwater at the South Y Site through cracks and holes in the sidewalk, parking lot, and/or driveway.

Fox’s Ownership Interest In The South Y Site

18. On information and belief, Century Properties Equity Fund 73, a California limited partnership (“Century 73”), owned the South Y Site from approximately September 1974 until December 1985.

19. On information and belief, during the entire period that Century 73 owned the South Y Site, Fox & Carskadon Financial Corporation (“Fox & Carskadon”) was its general partner.

20. On information and belief, in September 1986, Fox & Carskadon changed its name to Fox Capital Management Corporation.

21. Fox & Carskadon and Fox are the same legal entity, as evidenced by note 1 to Century 73's Consolidated Financial Statements in its 1989 Annual Report, which states that "[t]he general partner of [Century 73] is Fox Capital Management Corporation (formerly known as Fox & Carskadon Financial Corporation)."

22. On information and belief, Fox (under the name Fox & Carskadon) was Century 73's general partner during the period that PCE was spilled at the South Y Site and entered Site soils.

23. On information and belief, Century 73 was dissolved in the early 1990s.

Fox's Indemnity Obligation

24. On information and belief, when Century 73 sold the Site in 1985, it entered into an indemnity agreement with Ms. Dorothy Lyddon.

25. The applicable provision in that agreement provides as follows:

> [Century 73] hereby agrees to indemnify Lyddon against and to hold Lyddon harmless from any loss, damage, liability, cost or expense including attorney's fees incurred as a consequence of any act or occurrence which occurred or is alleged to have occurred with respect to [Century 73's] obligations as landlord under the Leases before the date hereof except as otherwise provided in the Agreement.

26. A copy of the indemnity agreement is attached to this Complaint as **Exhibit 1**.

27. On information and belief, during its period of ownership, Century 73 entered into lease or sublease agreements with its tenants, including the laundromat tenant and those tenants near the laundromat.

28. On information and belief, under these leases or subleases, Century 73 was obligated to maintain the common areas at the South Y Site, including the sidewalk, parking lot, and driveway in front of and near the laundromat that held the coin-operated dry-cleaning unit.

29. On information and belief, Century 73 failed to properly maintain the sidewalk, parking lot, and driveway in front of and near the laundromat.

30. On information and belief, as a result of Century 73's failure to properly maintain the sidewalk, parking lot, driveway in front of and near the laundromat, spills and leaks of PCE that occurred during PCE deliveries entered the soil and potentially the groundwater at the South Y Site through cracks and holes in the sidewalk, parking lot, and/or driveway.

31. On information and belief, Fox — as the general partner of the now-dissolved Century 73 — is obligated to indemnify Ms. Lyddon for all liabilities, including attorney's fees, relating to the contamination at the South Y Site.

32. On information and belief, in approximately 1995 Ms. Lyddon created the Seven Springs Limited Partnership and, in 1996, conveyed the South Y Site to the Seven Springs Limited Partnership.

33. On information and belief, the limited partners of Seven Springs held a 99% interest, and its General Partner — Real Estate Management Associates ("REMA"), created by Ms. Lyddon to act as Seven Springs' general partner — held a 1% interest.

34. On information and belief, at the time of the transfer, Ms. Lyddon held 100% of the 99% limited partner interest in Seven Springs.

35. On information and belief, Ms. Lyddon held 70.01% membership interest in REMA and, therefore, 70.01% of the 1% general partner interest in Seven Springs.

36. On information and belief, because of Ms. Lyddon's controlling interests in Seven Springs and REMA at the time of the transfer in 1996, Fox's indemnity obligations extend to Seven Springs.

37. Alternatively, on information and belief, Fox's indemnity obligations extend to Ms. Lyddon through Seven Springs in an amount equal to her interest in Seven Springs.

COUNT I

COST RECOVERY UNDER CERCLA SECTION 107

38. Seven Springs refers to, realleges, and incorporates herein by this reference the preceding paragraphs of this pleading.

39. CERCLA section 107(a)(2), 42 U.S.C. section 9607(a)(2), imposes liability for response costs on “any person who at the time of disposal of any hazardous substance owned or operated any facility at which such hazardous substances were disposed of[.]”

40. Century 73 was a “person” as that term is defined and has been interpreted under CERCLA section 101(21), 42 U.S.C. section 9601(21).

41. Fox is a “person” as that term is defined and has been interpreted under CERCLA section 101(21), 42 U.S.C. section 9601(21).

42. The South Y Site is a “facility” as that term is defined and has been interpreted under CERCLA section 101(9), 42 U.S.C. section 9601(9).

43. PCE is a “hazardous substances” as that term is defined and has been interpreted under CERCLA section 101(14), 42 U.S.C. section 9601(14).

44. There was a “disposal” of PCE at the South Y Site, as that term is defined and has been interpreted under CERCLA section 101(29), 42 U.S.C. section 9601(29).

45. The disposal of PCE at the South Y Site occurred during the period that Century 73 owned and/or operated the South Y Site and that Fox served as Century 73’s general partner, therefore making Century 73 and Fox liable under CERCLA section 107(b), 42 U.S.C. section 9607(b).

46. On information and belief, Seven Springs has incurred approximately $250,000 in necessary response costs consistent with the National Contingency Plan (“NCP”) relating to the PCE contamination at the South Y Site.

47. Seven Springs expects to incur in the future additional necessary response costs consistent with the NCP relating to the PCE contamination at the South Y Site.

48. On information and belief, Seven Springs satisfies all of the requirements of CERCLA’s innocent landowner defense under CERCLA section 107(b), 42 U.S.C. section 9607(b), and therefore may invoke that defense.

49. On information and belief, the release or threat of release of a hazardous substance and the damages resulting therefrom were caused solely by “an act or omission of a third party

other than … one whose act or omission occurs in connection with a contractual relationship ….” CERCLA § 107(b); 42 U.S.C. § 9607(b).

50. On information and belief, and to the extent required to invoke the innocent landowner defense, Seven Springs, through Ms. Lyddon, “exercised due care with respect to the hazardous substance concerned, taking into consideration the characteristics of such hazardous substance, in light of all relevant facts and circumstances ….” CERCLA § 107(b); 42 U.S.C. § 9607(b).

51. On information and belief, and to the extent required to invoke the innocent landowner defense, Seven Springs, through Ms. Lyddon, “took precautions against foreseeable acts or omissions of any such third party and the consequences that could foreseeably result from such acts or omissions ….” CERCLA § 107(b); 42 U.S.C. § 9607(b).

52. Under CERCLA, “contractual relationship” is defined to include property acquisitions. *See* CERCLA § 101(35)(A); 42 U.S.C. § 9601(35)(A).

53. On information and belief, and to the extent required to invoke the innocent landowner defense, Seven Springs, through Ms. Lyddon, “[a]t the time [Ms. Lyddon] acquired the facility [Ms. Lyddon] did not know and had no reason to know that any hazardous substance which is the subject of the release or threatened release was disposed of on, in, or at the facility.” CERCLA § 101(35)(A)(i); 42 U.S.C. § 9601(35)(A)(i).

54. On information and belief, and to the extent required to invoke the innocent landowner defense, Seven Springs, through Ms. Lyddon, “on or before the date on which [Ms. Lyddon] acquired the facility, [Ms. Lyddon] carried out all appropriate inquiries … into the previous ownership and uses of the facility in accordance with generally accepted good commercial and customary standards and practices ….” CERCLA § 101(35)(B)(i)(I); 42 U.S.C. § 9601(35)(B)(i)(I).

55. On information and belief, to the extent required to invoke the innocent landowner defense, and as an alternative to the above, Seven Springs independently satisfies all of the requirements set forth above to invoke the innocent landowner defense based on the facts and

circumstances surrounding the 1996 transfer of the South Y Site from Ms. Lyddon to Seven Springs.

56. On information and belief, because Seven Springs is an innocent landowner under CERCLA section 107(b), 42 U.S.C. section 9607(b), it is not liable under CERCLA and may therefore proceed at this time with a cost recovery action under CERCLA section 107(a), 42 U.S.C. section 9607(a).

57. Furthermore, because Fox is a liable party under CERCLA section 107(a)(2), 42 U.S.C. section 9607(a)(2), Fox is jointly and severally liable to Seven Springs for its past and future response costs.

COUNT II

CONTRIBUTION UNDER CERCLA SECTION 107
(Plead In The Alternative To Count II)

58. Seven Springs refers to, realleges, and incorporates herein by this reference the preceding paragraphs of this pleading.

59. CERCLA section 107(a)(2), 42 U.S.C. section 9607(a)(2), imposes liability for response costs on "any person who at the time of disposal of any hazardous substance owned or operated any facility at which such hazardous substances were disposed of[.]"

60. Century 73 was a "person" as that term is defined and has been interpreted under CERCLA section 101(21), 42 U.S.C. section 9601(21).

61. Fox is a "person" as that term is defined and has been interpreted under CERCLA section 101(21), 42 U.S.C. section 9601(21).

62. The South Y Site is a "facility" as that term is defined and has been interpreted under CERCLA section 101(9), 42 U.S.C. section 9601(9).

63. PCE is a "hazardous substances" as that term is defined and has been interpreted under CERCLA section 101(14), 42 U.S.C. section 9601(14).

64. There was a "disposal" of PCE at the South Y Site, as that term is defined and has been interpreted under CERCLA section 101(29), 42 U.S.C. section 9601(29).

65. The disposal of PCE at the South Y Site occurred during the period that Century 73 owned and/or operated the South Y Site and that Fox served as Century 73's general partner, therefore making Century 73 and Fox liable under CERCLA section 107(b), 42 U.S.C. section 9607(b).

66. On information and belief, Seven Springs has incurred approximately $250,000 in necessary response costs consistent with the NCP relating to the PCE contamination at the South Y Site.

67. Seven Springs expects to incur in the future additional necessary response costs consistent with the NCP relating to the PCE contamination at the South Y Site.

68. Assuming for purposes of this Count II only — pled in the alternative to Count I — that Seven Springs is deemed liable under CERCLA section 107(a), 42 U.S.C. section 9607(a), it may proceed with a contribution action under CERCLA section 107(a), 42 U.S.C. section 9607(a).

COUNT III

DECLARATORY JUDGMENT

69. Seven Springs refers to, realleges, and incorporates herein by this reference the preceding paragraphs of this pleading.

70. Seven Springs maintains that Fox is liable for all necessary response costs incurred and to be incurred by Seven Springs consistent with the NCP as a result of the PCE disposals at the South Y Site, which occurred during the time that Century 73 (with Fox as its general partner) owned and/or operated the South Y Site.

71. Seven Springs maintains that it qualifies as an innocent landowner under CERCLA, is not liable under CERCLA, and that Fox is jointly and severally liable to Seven Springs for its past and future response costs.

72. There exists an actual, substantial, and immediate controversy between Seven Springs and Fox warranting this Court's declaration of the parties' responsibilities for the response costs incurred and to be incurred as a result of the disposal of hazardous substances at the South Y Site under CERCLA section 113(g)(2), 42 U.S.C. section 9613(g)(2).

COUNT IV

EXPRESS CONTRACTUAL INDEMNITY

Seven Springs refers to, realleges, and incorporates herein by this reference the preceding paragraphs of this pleading.

73. The indemnity agreement between Century 73 and Ms. Lyddon expressly provides as follows:

> [Century 73] hereby agrees to indemnify Lyddon against and to hold Lyddon harmless from any loss, damage, liability, cost or expense including attorney's fees incurred as a consequence of any act or occurrence which occurred or is alleged to have occurred with respect to [Century 73's] obligations as landlord under the Leases before the date hereof except as otherwise provided in the Agreement.

74. Between approximately 1974 and 1979, Century 73 failed to satisfy its obligations under one or more leases or subleases between it and tenants in the vicinity of the laundromat by failing to properly maintain the sidewalk, parking lot, and driveway in front of and near the laundromat, which resulted in PCE entering South Y Site soils during that time period.

75. Although Century 73 is a dissolved limited partnership, Fox, as its general partner, remains liable under the indemnity agreement.

76. Although Ms. Lyddon transferred the South Y Site into Seven Springs, because of her continued ownership interest in Seven Springs at the time of transfer, the terms of the indemnity agreement extend to Seven Springs.

77. Seven Springs has incurred costs and expenses, including attorneys' fees, as a consequence of Century 73's failure to satisfy its obligations under one or more of the relevant leases.

78. Although notified of this claim under the indemnity agreement in December 2005, Fox has failed to indemnify Seven Springs or to pay its costs, including attorneys' fees, incurred as a consequence of Century 73's failure to satisfy its requirements under one or more of the relevant leases.

PRAYER FOR RELIEF

WHEREFORE, Seven Springs requests the following relief:

1. a determination that Seven Springs is an innocent landowner under CERCLA section 107(b), 42 U.S.C. section 9607(b);

2. a determination that Fox is jointly and severally liable to Seven Springs under CERCLA section 107(a)(2), 42 U.S.C. section 9607(a)(2);

3. alternatively to paragraph 2 of this Prayer For Relief, a determination that Fox is liable in contribution to Seven Springs under CERCLA section 107(a)(2), 42 U.S.C. section 9607(a)(2);

4. a judgment against Fox, based on a joint and several liability determination, for all response costs incurred by Seven Springs relating to the South Y Site;

5. alternatively to paragraph 4 of this Prayer For Relief, a judgment against Fox, based on contribution and appropriate equitable factors, for all response costs incurred by Seven Springs relating to the South Y Site;

6. a declaratory judgment that Fox is liable under CERCLA for all future response costs relating to the South Y Site;

7. a judgment that Fox must indemnify Seven Springs for all losses, damages, liabilities, costs, and expenses, including attorneys' fees, incurred as a consequence of Century 73's failure to satisfy its requirements under one or more leases relating to the South Y Site (through this Prayer For Relief, Seven Springs does not seek a double recovery of its response costs);

8. a judgment awarding Seven Springs its costs of litigation;

9. a judgment awarding Seven Springs prejudgment interest in accordance with law; and

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10. such other and further relief as this Court deems just and appropriate.

Dated: January 19, 2007

MORRISON & FOERSTER LLP
BROOKS M. BEARD

By: /s/ Brooks M. Beard
Brooks M. Beard

Attorneys for Plaintiff SEVEN SPRINGS
LIMITED PARTNERSHIP

EXHIBIT K

UNITED STATES DISTRICT COURT

FOR THE EASTERN DISTRICT OF CALIFORNIA

SEVEN SPRINGS LIMITED
PARTNERSHIP, a Missouri
limited partnership,

Plaintiff,

v.

FOX CAPITAL MANAGEMENT
CORPORATION, a California
corporation,

Defendant.
_________________________________/

NO. CIV. S-07-142 LKK/GGH

O R D E R

Plaintiff Seven Springs has brought an action for past and future response costs related to contamination at a shopping center in South Lake Tahoe, California. Plaintiff contends that defendant Fox, as the former partner of a prior owner to the site, is liable pursuant to the Comprehensive Environmental Response, Compensation, and Liability Act, 42 U.S.C. §§ 9601 et seq. ("CERCLA"), and pursuant to an indemnity agreement. Pending before the court is defendant's motion to dismiss. Defendant argues that (1) plaintiff has failed to plead sufficient facts to support its innocent land owner defense, (2) plaintiff cannot maintain a claim for contribution under CERCLA, and (3) plaintiff is not entitled to indemnity under the terms of the agreement. The court resolve the matter upon the parties' papers and after oral argument. For the reasons set forth below, the motion to dismiss is granted in part and denied in part.

I. Background

Plaintiff Seven Springs owns the South Y Shopping Center in South Lake Tahoe, California, which is site of alleged perchloroethylene (PCE) contamination. Plaintiff has brought four claims in the present action: (1) cost recovery under CERCLA Section 107, (2) contribution under CERCLA Section 107 (in the alternative), (3) declaratory judgment, and (4) express contractual indemnity.

Defendant Fox was the general partner of the now defunct Century Properties Equity Fund 73 ("Century 73"), which owned the site from 1974 to 1985. Compl. ¶ 18. During this period, plaintiff alleges that hazardous substances were disposed of at the site, causing the contamination at issue in this lawsuit. Specifically, plaintiff alleges that PCE was released to the soil and potentially the groundwater through cracks and holes in the sidewalk, parking lot, and/or driveway during delivery of PCE (a cleaning solvent) to a coin-operated dry-cleaning unit. Compl. ¶¶ 14, 17.

Plaintiff alleges that Century 73 sold the site in 1985 to Dorothy Lyddon. Compl. ¶ 24. At the time, Century 73 entered into an agreement with Lyddon to indemnify her for losses with respect to any breaches by Century 73 of its obligations as landlord, including an alleged duty to maintain the sidewalks of the premises. Compl. ¶ 30. In 1996, Lyddon transferred ownership of the site to plaintiff Seven Springs; at the time, she owned 100% of Seven Springs' limited partner interest and 70.01% of its 1% general partner interest. Compl. ¶ 32-35.

II. Standard

On a motion to dismiss, the allegations of the complaint must be accepted as true. See Cruz v. Beto, 405 U.S. 319, 322 (1972). The court is bound to give the plaintiff the benefit of every reasonable inference to be drawn from the "well-pleaded" allegations of the complaint. See Retail Clerks Intern. Ass'n, Local 1625, AFL-CIO v. Schermerhorn, 373 U.S. 746, 753 n.6 (1963). Thus, the plaintiff need not necessarily plead a particular fact if that fact is a reasonable inference from facts properly alleged. See id.; see also Wheeldin v. Wheeler, 373 U.S. 647, 648 (1963) (inferring fact from allegations of complaint).

In general, the complaint is construed favorably to the pleader. See Scheuer v. Rhodes, 416 U.S. 232, 236 (1974). So construed, the court may not dismiss the complaint for failure to state a claim unless it appears beyond doubt that the plaintiff can prove no set of facts in support of the claim which would entitle him or her to relief. See Hishon v. King & Spalding, 467 U.S. 69, 73 (1984) (citing Conley v. Gibson, 355 U.S. 41, 45-46 (1957)). In spite of the deference the court is bound to pay to the plaintiff's allegations, however, it is not proper for the court to assume that "the [plaintiff] can prove facts which [he or she] has not alleged, or that the defendants have violated the . . . laws in ways that have not been alleged." Associated General Contractors of California, Inc. v. California State Council of Carpenters, 459 U.S. 519, 526 (1983).

III. Analysis

A. Cost Recovery under CERCLA Section 107

First, defendant argues that plaintiff has failed to plead a defense to liability, which is a prerequisite to bringing a Section 107 cost recovery action against other potentially responsible parties ("PRPs") under CERCLA. The innocent land owner defense requires, among other things, that the defendant lack knowledge of the hazardous substance at the time of acquisition, carry out all appropriate inquiries regarding previous ownership, and exercise due care with respect to the hazardous substances. See 42 U.S.C. §§ 9607(b), 9601(35)(A)-(C) (requiring total of seven elements). Plaintiff alleges that it is entitled to the innocent landowner defense based on two theories: that Lyddon qualified for the defense when she acquired the site and that Seven Springs independently satisfies the requirements. The first theory is untenable as a matter of the law, and the second theory has not been sufficiently pled.

With regard to the first theory, even if Lyddon could establish that she was entitled to the defense, that would be of little assistance to Seven Springs. Simply put, Lyddon is not Seven Springs. Although Lyddon may own over 99% of the interest in Seven Springs, the two are still separate legal entities, with separate rights and responsibilities. See Cal. Corp. Code § 16201 ("[a] partnership is an entity distinct from its partners."); Chesapeake and Potomac Telephone Co. v. Peck Iron & Metal Co., Inc., 814 F. Supp. 1269, 1280-81 (E.D. Va. 1992) (analyzing availability of innocent landowner defense separately for partnership and general partners).

Moreover, to allow a subsequent owner to shelter under the defense of a former owner would defeat the purpose of the defense. For instance, Seven Springs would be able to claim the defense even if it performed no inquiry at all into existing environmental conditions at the time that it acquired the site. Accordingly, to the extent that plaintiff relies on the conduct of "Seven Springs, through Ms. Lyddon," Compl. ¶¶ 50-54, this fails to state a claim as a matter of law.

With regard to the second theory, Seven Springs has not sufficiently pled that it independently satisfies the elements of the innocent landowner's defense. The complaint contains allegations pertaining to only a subset of the required elements of the defense, such as whether defendant took reasonable steps to stop any continuing release. See Compl. ¶ 55; M&M Realty Co. v. Eberton Terminal Corp., 977 F. Supp. 683, 687 (M.D. Pa. 1997) (finding that plaintiff had not adequately pled all elements of the innocent landowner defense). Nevertheless, because the defects are easily cured, the court grants the motion to dismiss with respect to plaintiff's first claim, with leave to amend.[1]

B. Contribution under Section 107

Second, defendant argues that plaintiff cannot maintain a contribution action under Section 107 because it cannot meet the requirements set forth in Section 113, which defendant maintains is a prerequisite to any claim for contribution. Plaintiff concedes that, at present, it may not satisfy the requirements of Section 113, which permits a contribution action only where the plaintiff has first been sued under CERCLA, or has entered into a qualifying settlement.[2] Accordingly, the only issue is whether a plaintiff may proceed with a contribution action under Section 107, when it has not satisfied the requirements of Section 113.[3]

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[1] The draft amended complaint attached to plaintiff's opposition appears to have cured the defects in the original complaint. Despite defendant's assertions to the contrary, plaintiff need not plead more than this. Rule 8 only requires that the pleader provide a short and plain statement of the grounds for relief.

[2] Section 113 permits "any person [to] seek contribution from any other person who is liable or potentially liable . . . during or following any civil action under [Sections 106 or 107(a)]. 42 U.S.C. § 9613(f)(1). It also provides that "[a] person who has resolved its liability to the United States or a State for some or all of a response action . . . in an . .. approved settlement may seek contribution from any person who is not party to a settlement." 42 U.S.C. § 9613(f)(3)(B).

[3] Section 107 of CERCLA provides that a PRP "shall be liable to (A) all costs of removal or remedial action incurred by the United States Government or a State of an Indian tribe not inconsistent with the national contingency plan; (and) (B) any other necessary costs of response incurred by any other person consistent with the national contingency plan." 42 U.S.C. § 9607(a).

The state of the law on this issue is in flux, and is the subject of pending appeals before the Ninth Circuit, as well as the Supreme Court. See City of Rialto v. U.S. Dep't of Defense, No. 05-56749 (9th Cir. Nov. 5, 2005); Koutros v. Gross-Jewett Co., No. 05-80120 (9th Cir. Oct. 21, 2005); Atlantic Research Corp. v. United States, 459 F.3d 827 (8th Cir. 2006), cert. granted, 127 S. Ct. 1144 (Jan. 19, 2007) (No. 06-562). Nevertheless, three of the four circuit courts to have considered the issue -- the Second, Seventh, and Eighth Circuits -- have found that there is an independent action under Section 107. Compare Atlantic Research, 459. F.3d at 827, Metropolitan Water Reclamation Dist. of Greater Chicago v. North American Galvanizing & Coatings, Inc., 473 F.3d 824 (7th Cir. 2007), and Schaefer v. Town of Victor, 457 F.3d 188, 198-202 (2d Cir. 2006), with E.I. Dupont de Nemours & Co. v. United States, 460 F.3d 515 (3d Cir. 2006).

Similarly, the majority of district courts, including three courts within this district, have also found that plaintiffs may proceed under Section 107 without first satisfying the requirements of Section 113. See Adobe Lumber, Inc. v. Taecker, 2005 U.S. Dist. LEXIS 15374 (E.D. Cal. May 24, 2005); Kotrous v. Goss-Jewett Co. of N. Cal., 2005 U.S. Dist. LEXIS 18013 (E.D. Cal. June 16, 2005); Adobe Lumber v. Hellman, 415 F. Supp. 2d 1070 (E.D. Cal. 2006). But see City of Rialto v. United States Dep't of Defense, 2005 U.S. Dist. LEXIS 26941 (C.D. Cal. Aug. 16, 2005); AMCAL Multi-Housing, Inc. v. Pacific Clay Prods., 457

F. Supp. 2d 1016 (C.D. Cal. 2006).

In 1986, the Superfund Amendments and Authorization Act amended CERCLA to include an express right to contribution under Section 113(f). Previously, several courts had found that PRPs could recover their costs under Section 107. See, e.g., Key Tronic Corp. v. United States, 511 U.S. 809, 816 n.7 (1994) (collecting cases). In 2004, however, the Supreme Court held that PRPs who voluntarily cleaned up contaminated property could not use Section 113(f) to seek contribution from other PRPs without either having first been sued under CERCLA or having entered into a qualifying settlement. See Cooper Indus., Inc. v. Aviall Servs., Inc., 543 U.S. 157, 165-68 (2004). Nevertheless, Cooper Industries left open the issue of whether a PRP may sue another PRP under Section 107 (for joint and several liability or otherwise), or whether an implied right of contribution survived the 1986 amendments. Id. at 169-71.

The court finds that PRPs may independently pursue contribution under Section 107. First, and most importantly, Section 107's plain language commands such a result. It provides that a PRP "shall be liable for . . . any other necessary costs of response incurred by any other person." 42 U.S.C. § 9607(a). The statute does not read: "by any other person with the exception of a potentially responsible party." Rather, the term "person" is defined broadly under CERCLA. 42 U.S.C. § 9601(21).

Furthermore, in Key Tronic, the Supreme Court characterized the 1986 amendments as "appear[ing] to endorse the judicial decisions recognizing a cause of action under § 107 by presupposing that such a cause of action existed." 511 U.S. at 816. The Court went on to state that CERCLA "now expressly authorizes a cause of action for contribution in § 113 and impliedly authorizes a similar and somewhat overlapping remedy in § 107."[4] Id.

Defendant responds that reading Section 107 to permit contribution actions would nullify or render redundant Section 113. The savings clause in Section 113(f)(1), however, expressly preserves any preexisting state and federal causes of action for contribution. Because courts prior to the 1986 amendments had held that PRPs could pursue contribution from other PRPs under Section 107, those holdings were left intact by the savings clause.

The relevant Ninth Circuit cases are not to the contrary. First, defendant cites Pinal Creek for the proposition that "a claim asserted by a PRP under § 107 requires the application of § 113." Pinal Creek v. Newmont Mining Corp., 118 F.3d 1298, 1306 (9th Cir. 2004); see also W. Props. Serv. Corp. v. Shell Oil Co., 358 F.3d 678, 685 ("a claim for contribution requires the 'join operation' of both Sections"). Section 107 has similarly been described as creating the right of contribution,

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[4] In Cooper Industries, the Court clarified that the remedies "are similar at a general level in that they both allow private parties to recoup costs from other private parties. But the two remedies are clearly distinct." 543 U.S. at 582 n.3.

whereas Section 113 is the machinery that governs and regulates such actions. Pinal Creek, 118 F.3d at 1302. But this language is not inconsistent with plaintiff's interpretation: Section 113 still has force in contribution actions based wholly upon Section 107 because "the court may allocate response costs among liable parties using such equitable factors as the court determines are appropriate." 42 U.S.C. § 9613(f)(1). This is the core of the "machinery" to which Pinal Creek was referring. See Aggio v. Estate of Aggio, 2005 U.S. Dist. LEXIS 37428, at *15 (N.D. Cal. Sept. 19, 2005).

Finally, allowing PRPs to sue under Section 107 when a Section 113 action is unavailable advances CERCLA's polluter-pays objective. Under defendant's interpretation, where a PRP voluntarily incurs response costs, it would be barred from recovering those costs from other PRPs, even if the other PRPs were substantially responsible for the contamination. This result would clearly be inconsistent with CERCLA's objectives. Accordingly, the court denies the motion to dismiss plaintiff's second and third claims.

C. Indemnity Agreement

Last, defendant moves to dismiss the claim for indemnity on the grounds that the Indemnity Agreement has expired. As quoted in the complaint, the Indemnity Agreement between Century 73 and Lyddon provided that:

> [Century 73] hereby agrees to indemnify Lyddon against and to hold Lyddon harmless from any loss, damage, liability, cost or expense including attorney's fees

> incurred as a consequence of any act or occurrence which occurred or is alleged to have occurred with respect to [Century 73's] obligations as landlord under the Leases before the date hereof expect as otherwise provided in the Agreement.

Compl. ¶ 73. The parties agree that the "Agreement" referenced in the last sentence of this provision is the Agreement for Purchase and Sale dated December 19, 1985 ("Purchase Agreement").[5] Decl. of Scott Reisch, Ex. E.

First, to the extent that Fox owes a duty to indemnify, it owes that duty to Lyddon, not Seven Springs. As noted above, Lyddon and Seven Springs are separate legal entities. See also Wilshire-Dohency Associates, Ltd. v. Shapiro, 83 Cal. App. 4th 1380, 1396 (2000) ("The extent of the duty to indemnify is determined from the contract."). Second, the Indemnity Agreement was incorporated into the Purchase Agreement as an exhibit, which provided a twelve month expiration date that has since passed:

> [T]he Seller's covenants, warranties and representations contained in this Agreement and in any document executed by Seller pursuant to the forms attached hereto as exhibits . . . shall survive . . . only for a period of twelve months (12) after the Closing Date (the "Limitation Period").

Purchase Agreement, § 4.5.

Plaintiff responds in two ways, neither availing. First, plaintiff maintains that the Purchase Agreement is extrinsic evidence that cannot be evaluated on a motion to dismiss. This

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[5] Lyddon is bound by the Purchase Agreement. See Purchase Agreement §§ 4.1 (binding "exchanger" to limitations section), 3.1(b)(I) (defining "exchanger" to mean Lyddon).

general rule is subject to an exception, however, which applies when the plaintiff's claim necessarily relies on the extrinsic evidence. Parrino v. FHP, Inc., 146 F.3d 699, 705-06 (9th Cir. 1998). "A court may consider evidence on which the complaint 'necessarily relies' if: (1) the complaint refers to the document; (2) the document is central to the plaintiff's claim; and (3) no party questions the authenticity of the copy attached to the 12(b)(6) motion." Marder v. Lopez, 450 F.3d 445, 448 (9th Cir. 2006).

Here, the complaint references the Indemnity Agreement, which was attached to the complaint and in turn references the Purchase Agreement. Moreover, the latter document is central to the plaintiff's claim (as it sets forth when the indemnity agreement would expire), and its authenticity is not in question. Accordingly, it is appropriately before the court.

Second, defendant contends that the "except as otherwise provided in the [Purchase] Agreement" provision refers to only certain obligations and liabilities that were carved out of the Purchase Agreement (in Section 5.5), but not the expiration provision (in Section 4.5). There is no basis for this distinction. A plain reading of the Purchase Agreement indicates that any "covenants, warranties and representations" in the attached forms and documents would expire in twelve months. Because this provision carried over to the Indemnity Agreement, the indemnity has since expired. Accordingly, the court grants the motion to dismiss with respect to plaintiff's fourth claim.

IV. Conclusion

As set forth above, the motion to dismiss is granted in part and denied in part. Plaintiff is granted 20 days to file an amended complaint.

IT IS SO ORDERED.

DATED: April 26, 2007.

Lawrence K Karlton

LAWRENCE K. KARLTON
SENIOR JUDGE
UNITED STATES DISTRICT COURT

EXHIBIT L

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FOX CAPITAL MANAGEMENT
CORPORATION

UNITED STATES DISTRICT COURT

EASTERN DISTRICT OF CALIFORNIA

SEVEN SPRINGS LIMITED PARTNERSHIP, a Missouri limited partnership,

Plaintiff,

v.

FOX CAPITAL MANAGEMENT CORPORATION, a California corporation,

Defendant.

FOX CAPITAL MANAGEMENT CORPORATION, a California corporation,

Defendant and Third-Party Complainant,

v.

REAL ESTATE MANAGEMENT

CASE NO. 07-CV-00142-LKK-GGH

FOX CAPITAL MANAGEMENT'S THIRD PARTY COMPLAINT AGAINST REAL ESTATE MANAGEMENT ASSOCIATES, LLC, ET AL.

CERCLA CONTRIBUTION
(CERCLA Section 107 and 113)

DECLARATORY RELIEF
(CERCLA Section 113)

CONTRACTUAL INDEMNITY
(1985 Purchase Agreement and 1972 Lease)

BREACH OF CONTRACT
(1972 Lease)

STRICT PRODUCT LIABILITY

ASSOCIATES LLC, CONNOLLY DEVELOPMENT, INC., THE COMMERCE TRUST COMPANY, INTERLAND COMMUNITIES, INC., THE ESTATE OF DOROTHY S. LYDDON, JACK R. LYDDON TRUST II, MARTHA D. LYDDON, JOHN K. LYDDON, GRANT S. LYDDON, MARY LOU BAISLEY, ESTATE OF LEROY BAISLEY, THE ESTATE OF KJELL HAKANSSON, KERSTEN HAKANSSON, ESTATE OF ROBERT (BOBBY) PAGE, BOBBY PAGE'S, INC., LEID'S, INC., ROBERT PRUPAS, BERNIECE PRUPAS, NORMAN PRUPAS, PETER D. QUENZER, FERN QUENZER, KIM WELCH, DEBRA WELCH, DAVID ROGERS, LOUZEL ROGERS, JIM MEREDITH, FIRST COMMERCIAL PROPERTIES, SUPPLIER/TRANSPORTER DOES 1-20, ALLIANCE LAUNDRY SYSTEMS, LLC, PRODUCT MANUFACTURERS DOES 21-25, DOES 26-100

Third-Party Defendant(s).

NEGLIGENCE

JURY TRIAL DEMANDED

In accordance with Rule 14 of the Federal Rules of Civil Procedure, Defendant FOX CAPITAL MANAGEMENT CORPORATION ("Fox" or "Complainant") brings these claims against Third Party Defendants REAL ESTATE MANAGEMENT ASSOCIATES LLC, CONNOLLY DEVELOPMENT, INC., THE COMMERCE TRUST COMPANY, INTERLAND COMMUNITIES, INC., THE ESTATE OF DOROTHY S. LYDDON, JACK R. LYDDON TRUST II, MARTHA D. LYDDON, JOHN K. LYDDON, GRANT S. LYDDON, MARY LOU BAISLEY, ESTATE OF LEROY BAISLEY, ESTATE OF KJELL HAKANSSON, KERSTEN HAKANSSON, ESTATE OF ROBERT (BOBBY) PAGE, BOBBY PAGE'S, INC., LEID'S, INC., ROBERT PRUPAS, BERNIECE PRUPAS, NORMAN PRUPAS, PETER D. QUENZER, FERN QUENZER, KIM WELCH, DEBRA WELCH, DAVID ROGERS, LOUZEL ROGERS, JIM MEREDITH, FIRST COMMERCIAL PROPERTIES, SUPPLIER/TRANSPORTER DOES 1 to 20, ALLIANCE LAUNDRY SYSTEMS, LLC, PRODUCT MANUFACTURERS DOES 21-25 and Does 26 to 100 (collectively known as "Third Party Defendants").

NATURE OF THE ACTION

1. This Third Party Complaint arises from the claims under the Comprehensive Environmental Response, Compensation and Liability Act, as amended, 42 U.S.C. Sections 9601 et. seq. ("CERCLA") brought against Fox by Seven Springs Limited Partnership ("Seven Springs"), the current owner of the South Y Shopping Center, which is located near the intersection of Emerald Bay Road and Lake Tahoe Boulevard in South Lake Tahoe, El Dorado County, California ("South Y Site"). Seven Springs initiated this action by complaint filed with this Court on January 19, 2007 which was subsequently amended on May 16, 2007 ("Amended Complaint").

2. In its Amended Complaint, Seven Springs seeks to recover necessary response costs consistent with the National Contingency Plan ("NCP"), which it alleges it incurred, and may incur in the future, responding to environmental contamination at and near the South Y Site.

JURISDICTION AND VENUE

3. This Third Party Complaint arises primarily under Rule 14 of the Federal Rules of Civil Procedure and CERCLA. This Court has jurisdiction over these claims pursuant to CERCLA Sections 107 (a) and 113, 42 U.S.C. Sections 9607(a) and 9613, and pursuant to federal question jurisdiction, 28 U.S.C. Section 1331. Fox also maintains claims under the common law arising out of a common nucleus of operative facts. This Court has supplemental jurisdiction over these state law claims pursuant to 28 U.S.C. Section 1367.

4. Venue is proper in this Judicial District under 28 U.S.C. Section 1391(b) and 42 U.S.C. Section 9613(b), as this is the District where the claims allegedly arose and where the releases of hazardous substances are alleged to have occurred.

PARTIES

5. Fox is informed and believes and thereon alleges that Connolly Development, Inc. is a suspended California corporation and developer of the South Y Site with a business address of P.O. Box 348600, Sacramento, California 95834. Connolly Development, Inc.'s registered agent is listed as Mr. Steve Backlund located at 120 Main Avenue, Suite G, Sacramento, California 95838.

6. Fox is informed and believes and thereon alleges that Plaintiff Seven Springs is a Missouri limited partnership with its principal place of business being Real Estate Management Associates, LLC c/o Seven Springs Ranch, 11801 Dorothy Anne Way, Cupertino, California 95014.

7. Fox is informed and believes and thereon alleges that Real Estate Management Associates, LLC ("REMA") is a Missouri limited liability company organized pursuant to the Missouri Limited Liability Company Act and is the only general partner with a controlling interest in Seven Springs. REMA's registered agent is listed as Mr. Richard Hahn 1111 South McKnight Road, St. Louis, Missouri 63117.

8. Fox is informed and believes and thereon alleges that The Commerce Trust Company ("Commerce Trust"), a division of Commerce Bank, N.A., is the sole controlling trustee of The Jack Lyddon Trust II. Commerce Trust's principal place of business is located at 1000 Walnut, P.O. Box 419248, Kansas City, Missouri 64141-6248.

9. Fox is informed and believes and thereon alleges that The Jack Lyddon Trust II ("Jack Trust") is a Missouri testamentary trust, which fully controls all voting rights in REMA. The address for the trustee of the Jack Trust is c/o Commerce Trust, 1000 Walnut, P.O. Box 419248, Kansas City, Missouri 64141-6248.

10. Fox is informed and believes and thereon alleges that Interland Communities, Inc. ("Interland"), a prior owner of the South Y Site, is a California corporation with its principal place of business located at 1590 Drew Avenue, Suite 200, Davis, California 95616.

11. Fox is informed and believes and thereon alleges that Dorothy S. Lyddon, a prior owner of the South Y Site, is deceased and that the current mailing address for the Estate of Dorothy S. Lyddon is Steefel Levitt & Weiss, One Embarcadero Center, 30th Floor, San Francisco, California 94111.

12. Fox is informed and believes and thereon alleges that Martha D. Lyddon ("Martha") is a California resident whose current mailing address is P.O. Box 418 Sausalito, California 94966. On information and belief, Martha is an individual who controls 11.15% of

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REMA as well as a 12.33% limited partnership interest in Seven Springs, the current owner of the South Y Site.

13. Fox is informed and believes and thereon alleges that John K. Lyddon ("John") is a California resident residing at 1750 Starhill Road, Woodside, California 94062. On information and belief, John is an individual who controls 11.15 % of REMA as well as a 12.33% limited partnership interest in Seven Springs, the current owner of the South Y Site.

14. Fox is informed and believes and thereon alleges that Grant S. Lyddon ("Grant") is a California resident residing at 947 Berkeley Street, Santa Monica, California 90403. On information and belief, Grant is an individual who controls 11.15% of REMA as well as a 24.84% limited partnership interest in Seven Springs, the current owner of the South Y Site.

15. Fox is informed and believes and thereon alleges that Mary L. Baisley, a prior tenant at the South Y Site, is a California resident whose current mailing address is P.O. Box 7157, South Lake Tahoe, California 96158. On information and belief, Mrs. Baisley currently resides at 2300 Colorado Avenue, South Lake Tahoe, California 96150.

16. Fox is informed and believes and thereon alleges that Leroy Baisley, a prior tenant at the South Y Site, is deceased and that the current mailing address for the Estate of Leroy Baisley is P.O. Box 7157, South Lake Tahoe, California 96158.

17. Fox is informed and believes and thereon alleges that Kjell Hakansson, a prior tenant at the South Y Site, is deceased and that the current mailing address for the Estate of Kjell Hakansson is 908 Linda Avenue South Lake Tahoe, California 96150, and/or possibly P.O. Box 7784, South Lake Tahoe, California 96158.

18. Fox is informed and believes and thereon alleges that Kersten Hakansson, a prior tenant at the South Y Site, is a California resident, residing at 908 Linda Ave, South Lake Tahoe, California 96150, whose current mailing address is P.O. Box 7784, South Lake Tahoe, California 96158.

19. Fox is informed and believes and thereon alleges that Bobby Page's, Inc., a prior tenant at the South Y Site, is a Nevada corporation formerly doing business in California with its principal business address listed as P.O. Box 1550 Zephyr Cove, Nevada 89448.

20. Fox is informed and believes and thereon alleges that Robert (Bobby) Page, the prior president and owner of Bobby Page's, Inc., is deceased and that the current mailing address for the Estate of Robert (Bobby) Page is 1310 Stewart Street, Carson City, Nevada 89701.

21. Fox is informed and believes and thereon alleges that Leid's, Inc., a Nevada Corporation also doing business as Bobby Page's Dry Cleaners and Shirt Laundry, is the successor in interest to Bobby Page's, Inc. with its principal place of business listed as P.O. Box 1550, Zephyr Cove, Nevada 89448. Leid's Inc.'s registered agent is listed as Mr. Max Hoseit, Hwy 50 & Poplar Street, South Lake Tahoe, California 95708.

22. Fox is informed and believes and thereon alleges that Norman Prupas, a prior tenant at the South Y Site, is a California resident whose current mailing address is 15741 Morrison Street, Encino, California 91436.

23. Fox is informed and believes and thereon alleges that Robert Prupas, a prior tenant at the South Y Site, is a California resident whose current mailing address is 15741 Morrison Street, Encino, California 91436.

24. Fox is informed and believes and thereon alleges that Berniece Prupas, a prior tenant at the South Y Site, is a California resident whose current mailing address is 15741 Morrison Street, Encino, California 91436.

25. Fox is informed and believes and thereon alleges that Peter D. Quenzer, a prior tenant at the South Y Site, is a Nevada resident whose current mailing address is P.O. Box 215, Genoa, Nevada 89411 with a possible residence address of 170 5th Avenue, Genoa, Nevada 89411.

26. Fox is informed and believes and thereon alleges that Fern Quenzer, a prior tenant at the South Y Site, is a Nevada resident whose current mailing address is P.O. Box 215, Genoa, Nevada 89411with a possible residence address of 170 5th Avenue, Genoa, Nevada 89411.

27. Fox is informed and believes and thereon alleges that Kim Welch, a prior tenant at the South Y Site, is a resident of Nevada with a current mailing address of P.O. Box 4338, Incline Village, Nevada 89450.

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28. Fox is informed and believes and thereon alleges that Debra Welch, a prior tenant at the South Y Site, is a resident of Nevada with a current mailing address of P.O. Box 4338, Incline Village, Nevada 89450.

29. Fox is informed and believes and thereon alleges that David Rogers is a current tenant at the South Y Site with the business address of 1024 Emerald Bay Road, South Lake Tahoe, California 96150.

30. Fox is informed and believes and thereon alleges that Louzel Rogers is a current tenant at the South Y Site with the business address of 1024 Emerald Bay Road, South Lake Tahoe, California 96150.

31. Fox is informed and believes and thereon alleges that Jim Meredith is/and was the manager of the South Y Site by and through his sole proprietor business known as First Commercial Properties with the business address of 100 Howe Avenue, Suite 176, Sacramento, California 95825.

32. Fox is informed and believes and thereon alleges that First Commercial Properties by and through its owner Jim Meredith is/and was the manager of the South Y Site with the business address of 100 Howe Avenue, Suite 176, Sacramento, California 95825.

33. Fox is informed and believes and thereon alleges that Alliance Laundry Systems, LLC. ("Alliance") was the manufacturer of the Speed Queen coin-operated dry-cleaning unit allegedly located at the South Y Site, which used perchloroethylene ("PCE") as its dry-cleaning solvent. Furthermore, Fox is informed and believes that Alliance's business address is Shepard Street, Ripon, Wisconsin 54971.

34. Fox is presently unaware of the true names and capacities and liability of Defendants named herein as SUPPLIER/TRANSPORTER DOES 1 to 20, PRODUCT MANUFACTURER DOES 21-25, and Does 26 to 100, inclusive, and Fox will seek leave of court to amend this Third Party Complaint to allege their true names and capacities after the same have been ascertained.

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BACKGROUND

Contaminating Activities Alleged By Seven Springs

35. In its Amended Complaint, Seven Springs has alleged that since the shopping center at the South Y Site opened in approximately 1972, a laundromat has been one of the tenants.

36. In its Amended Complaint, Seven Springs has alleged that between approximately 1972 and approximately 1979 the laundromat at the South Y Site contained a coin-operated dry-cleaning unit.

37. In the Amended Complaint, Seven Springs has alleged that the coin-operated dry-cleaning unit allegedly located at the South Y Site, used PCE as its dry-cleaning solvent.

38. In its Amended Complaint, Seven Springs has alleged that PCE was stored at the South Y Site in a large drum located in a storage room in the laundromat behind the coin-operated dry-cleaning unit.

39. In its Amended Complaint, Seven Springs has alleged that PCE spilled, leaked, or was otherwise released or disposed of at the South Y Site while the PCE storage drum associated with the coin-operated dry-cleaning unit was being filled, while the coin-operated dry-cleaning unit was being maintained or operated, and/or when PCE from the coin-operated dry-cleaning unit leaked from pipes at, under, or otherwise associated with the laundromat at the South Y Site.

40. In its Amended Complaint, Seven Springs has alleged that spills of PCE entered the soil and, potentially, the groundwater at the South Y Site through the sidewalk, parking lot, driveway, and/or from pipes at the South Y Site.

41. In its Amended Complaint, Seven Springs has alleged that there was a "disposal" of PCE at the South Y Site, as the term is defined and has been interpreted under CERCLA Section 101 (29), 42 U.S.C. Section 9601 (29).

42. In its Amended Complaint, Seven Springs has alleged that the South Y Site is a "facility", as the term is defined and has been interpreted under CERCLA Section 101(29), 42 U.S.C. Section 9601 (29).

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Ownership History of the South Y Site

43. Fox is informed and believes and thereon alleges that, the South Y Site was developed as a strip mall shopping center in 1972.

44. Fox is informed and believes and thereon alleges that, Connolly Development, Inc. ("Connolly") owned the South Y Site until September 11, 1974. Connolly was the developer of the South Y Site in 1972.

45. Fox is informed and believes and thereon alleges that pursuant to a deed dated September 11, 1974, Century Properties Equity Fund 73 ("Century 73") purchased the South Y Site from Connolly.

46. Fox is informed and believes and thereon alleges that pursuant to an Agreement for Purchase and Sale of the South Y Site between Century 73 and Interland dated December 19, 1985 ("1985 Purchase Agreement") and a deed dated December 20, 1985, Interland acquired the South Y Site from Century 73 on December 20, 1985.

47. Fox is informed and believes and thereon alleges that, pursuant to the 1985 Purchase Agreement and a deed dated December 27, 1985, Dorothy S. Lyddon ("D.S. Lyddon") acquired the South Y Site from Interland on December 27, 1985.

48. Fox is informed and believes and thereon alleges that pursuant to the 1985 Purchase Agreement and the Assumption and Release Agreement among Century 73, Interland, and D.S. Lyddon dated December 20, 1985, D.S. Lyddon agreed to indemnify Century 73 for "all costs, losses, expenses (including reasonable attorney's fees) and liabilities paid or incurred by [Century 73] with respect to any and all suits filed or claims made which arise out of or relate to injury or damage incurred by any party on or after the Closing Date with respect to the [South Y Site]... regardless of whether such suits or claims allege or establish that the cause of such injury or damage resulted from design defects or other conditions existing at the [South Y Site] on or before [the sale of the property to Interland]."

49. Fox is informed and believes and thereon alleges that by deed dated October 30, 1995, D.S. Lyddon transferred ownership in the South Y Site to the yet to be formed entity Seven Springs.

50. Fox is informed and believes and thereon alleges that D.S. Lyddon formed Seven Springs on or about January 30, 1996.

51. Fox is informed and believes and thereon alleges that when Seven Springs was formed, D.S. Lyddon owned a 99 percent limited partnership interest in Seven Springs and the controlling general partner of Seven Springs was REMA (in which D.S. Lyddon owned a 70.01 percent interest).

52. Fox is informed and believes and thereon alleges that REMA was formed and filed its articles of incorporation with the State of Missouri on December 14, 1995. At its formation, REMA was a closely held limited liability corporation with the following members: D.S. Lyddon, Commerce Trust (as trustee for the Jack Trust), Martha, John, and Grant.

53. Fox is informed and believes and thereon alleges that on or about August 6, 1996 the Commerce Trust as sole trustee for the Jack Trust purchased a 48.5 percent limited partnership interest in Seven Springs from Lyddon for $3,122,000.

54. Fox is informed and believes and thereon alleges that prior to D.S. Lyddon's death in September 2000, she owned and controlled a 70.01 percent voting interest in REMA, while Martha, John, and Grant owned and controlled 9.99 percent, and Commerce Trust as sole trustee for the Jack Trust owned and controlled 20.00 percent.

The 1972 Lease between Connolly and Prupas

55. Robert and Berniece Prupas (the "Prupases"), pursuant to a lease dated May 24, 1972, and Bobby Page's, Inc., pursuant to an amendment to said lease dated May 24, 1972, leased a portion of the South Y Site ("Premises") for "dry-cleaning and coin-operated laundry, and purposes related thereto" from Connolly ("1972 Lease").

56. Fox is informed and believes and thereon alleges that following execution of the 1972 Lease, two businesses operated on the Premises: (1) a coin-operated laundry business and (2) a drop-off/pick-up dry cleaning business.

57. Pursuant to the 1972 Lease, the tenant agreed not to "use the Premises for or carry on or permit upon said Premises, or any part thereof, any offensive, noisy, or dangerous trade, business, manufacture or occupation, or any nuisance, or anything against public policy, nor

interfere with the business of any other tenants in [at the South Y Site], nor permit any auction sale to be held or conducted in and about the Premises." Further, under the 1972 Lease the tenant agreed not to use the Premises, or permit the Premises to be used "in whole or in part during the term of this [1972 Lease] for any purpose or use that is in violation of any of the laws, ordinances, regulations or rules of any public authority or organization at the time."

58. Pursuant to the terms of the 1972 Lease, the tenant agreed to "surrender the Premises and appurtenances in good order, condition and repair."

59. Pursuant to the terms of the 1972 Lease, the tenant agreed to 'indemnify, keep, save and hold [the landlord] free from all liability, penalties, losses, damages, costs, expenses, causes of action, claims and/or judgments arising by reason of any injury or damage to any person or persons, including without limitation, Tenant, its servants, agents and employees, or property of any kind whatsoever and to whomsoever belonging, from any cause or causes whatsoever, including leakage, while in, upon or in any way connected with the Premises, or its appurtenances, or the sidewalks adjacent thereto, during the term of this [1972 Lease] or any occupancy hereunder, Tenant hereby covenanting and agreeing to indemnify, protect and save [the landlord] harmless from all liability, loss, costs, obligations on account of or arising out of any such injuries or losses however occurring."

60. Pursuant to the 1972 Lease, "[i]n any action brought to enforce the provisions of [the 1972 Lease], the prevailing party shall be entitled to recover costs and reasonable attorney's fees."

61. Fox is informed and believes and thereon alleges that during their tenancy, the Prupases and Bobby Page's, Inc. managed, directed, or conducted operations at the Premises which used or involved hazardous substances or they made decisions regarding compliance with environmental requirements, regulations, laws and statutes.

62. Fox is informed and believes and thereon alleges that Connolly assigned its rights as landlord under the 1972 Lease to Century 73 on or about the time Century 73 purchased the South Y Site from Connolly.

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Assignments and Subleases of the 1972 Lease

63. Pursuant to an addendum to the 1972 Lease dated July 5, 1972, Connolly authorized Robert, Berniece, and Norman Prupas, dba Bobby Page Cleaners, as tenants, to assign the 1972 Lease to Bobby Page's, Inc. on the express condition that Robert, Berniece and Norman Prupas retain 51% ownership in Bobby Page's, Inc.

64. Following the July 5 addendum, the Prupases assigned the 1972 Lease to Bobby Page's, Inc.

65. Fox is informed and believes and thereon alleges that during the tenancy of the Prupases and Bobby Page's, Inc., Norman Prupas managed, directed, or conducted operations at the Premises related to hazardous substances or made decisions regarding compliance with environmental requirements, regulations, laws and statutes.

66. Fox is informed and believes and thereon alleges that during the tenancy of the Prupases and Bobby Page's, Inc., Bobby Page's, Inc. managed, directed, or conducted operations at the Premises related to hazardous substances or made decisions regarding compliance with environmental requirements, regulations, laws and statutes.

67. Fox is informed and believes and thereon alleges that Bobby Page was the president of Bobby Page's, Inc. during at least a portion of the term of the 1972 Lease. On information and belief, during the tenancy of the Prupases and Bobby Page's, Inc., Bobby Page managed, directed, or conducted operations at the Premises related to hazardous substances or made decisions regarding compliance with environmental requirements, regulations, laws and statutes.

68. Pursuant to a sublease executed on or about November 1973, the Prupases, dba Bobby Page's, Inc., subleased the coin-operated laundry portion of the Premises ("Laundromat") to Kjell and Kersten Hakansson ("Sublease"). On information and belief, during some portion of the term of the Sublease, the Laundromat included a coin-operated dry cleaning machine. Pursuant to the terms of the Sublease Kjell and Kersten Hakansson (the "Hankanssons") expressly agreed to assume the tenant's obligations under the 1972 Lease and to perform said obligations as

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if they were the tenant. Fox is informed and believes and thereon alleges that the Sublease was consented to by Connolly.

69. Fox is informed and believes and thereon alleges that during the tenancy under the Sublease, the Hankanssons managed, directed, or conducted operations at the Laundromat related to hazardous substances or made decisions regarding compliance with environmental requirements, regulations, laws and statutes.

70. Pursuant to an assignment of the Sublease, executed on or about July 1976, the Hakanssons assigned the Sublease to Leroy W. and Mary Lou Baisley (the "Baisleys"). Pursuant to this assignment, the Baisleys agreed to be bound by all the terms, covenants and conditions of the 1972 Lease. Fox is informed and believes and thereon alleges that Bobby Page's, Inc. consented to the assignment. Fox is informed and believes and thereon alleges that Century 73 also consented to the assignment and expressly did not release the Hankanssons from any liability under the 1972 Lease.

71. Fox is informed and believes and thereon alleges that during their tenancy under the Sublease, the Baisleys managed, directed, or conducted operations at the Laundromat related to hazardous substances or made decisions regarding compliance with environmental requirements, regulations, laws and statutes.

72. Pursuant to an assignment of the 1972 Lease executed on or about December 1982, Robert and Berniece Prupas and Bobby Page's, Inc. assigned their rights title and interest in the 1972 Lease to Peter D. Quenzer and Fern Joy Quenzer (the "Quenzers"). Pursuant to this assignment, the Quenzers agreed to perform as a direct obligation to the landlord all provisions of the 1972 Lease; however, Robert and Berniece Prupas and Bobby Page's, Inc. remained liable for performance of the provisions of the 1972 Lease. Fox is informed and believes and thereon alleges that the assignment was agreed to by Century 73.

73. Pursuant to an assignment of the Sublease executed on or about December 1982, Robert and Bernice Prupas and Bobby Page's, Inc. assigned their rights, title and interests in the Sublease to the Quenzers.

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74. Fox is informed and believes and thereon alleges that during their tenancy, the Quenzers managed, directed, or conducted operations at the Premises related to hazardous substances or made decisions regarding compliance with environmental requirements, regulations, laws and statutes.

Subsequent Leases of the Premises

75. Fox is informed and believes and thereon alleges that upon the expiration of the 1972 Lease on or about 1988, the Baisleys entered into a new lease for the Laundromat with D.S. Lyddon as landlord.

76. Fox is informed and believes and thereon alleges that during their tenancy under their lease with D.S. Lyddon, the Baisleys managed, directed, or conducted operations at the Premises related to hazardous substances or made decisions regarding compliance with environmental requirements, regulations, laws and statutes.

77. Fox is informed and believes and thereon alleges that on or about September 1996, Kim and Debra Welch (the "Welches") purchased the coin-operated laundry business from the Baisleys and leased the Laundromat from D.S. Lyddon.

78. Fox is informed and believes and thereon alleges that during their tenancy under the lease with D.S. Lyddon, the Welches managed, directed, or conducted operations at the Premises related to hazardous substances or made decisions regarding compliance with environmental requirements, regulations, laws and statutes.

79. Fox is informed and believes and thereon alleges that on or about April 1998, the Welches assigned their interest in their lease of the Laundromat to David and Louzel Rogers (the "Rogerses"). The Rogerses are the current tenants of the Laundromat.

80. Fox is informed and believes and thereon alleges that during their tenancy under the lease with D.S. Lyddon, the Rogerses managed, directed, or conducted operations at the Laundromat related to hazardous substances or made decisions regarding compliance with environmental requirements, regulations, laws and statutes.

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Other Operators

81. Fox is informed and believes and thereon alleges that REMA, as the controlling general partner of Seven Springs, has managed, directed, or conducted operations at the South Y Site related to hazardous substances and compliance with environmental requirements, regulations, laws, or statutes.

82. Fox is informed and believes and thereon alleges that the Commerce Trust as sole trustee for the Jack Trust is the managing member of REMA. On information and belief, the Jack Trust has managed, directed, and/or conducted operations at the South Y Site related to hazardous substances and the compliance with environmental requirements, regulations, laws, and statutes.

83. Fox is informed and believes and thereon alleges that Commerce Trust has managed, directed, and/or conducted operations at the South Y Site related to hazardous substances and the compliance with environmental requirements, regulations, laws and statutes.

84. Fox is informed and believes and thereon alleges that Martha is a partner in Seven Springs as well as shareholder in the closely held REMA. On information and belief, Martha has managed, directed, and/or conducted operations at the South Y Site related to hazardous substances and compliance with environmental requirements, regulations, laws, and statutes.

85. Fox is informed and believes and thereon alleges that John is a partner in Seven Springs as well as shareholder in the closely held REMA. On information and belief, John has managed, directed, and/or conducted operations at the South Y Site related to hazardous substances and the compliance with environmental requirements, regulations, laws, and statutes.

86. Fox is informed and believes and thereon alleges that Grant is a partner in Seven Springs as well as shareholder in the closely held REMA. On information and belief, Grant has managed, directed, and/or conducted operations at the South Y Site related to hazardous substances and compliance with environmental requirements, regulations, laws, and statutes.

87. Fox is informed and believes and thereon alleges that, as property manager of the South Y Site, Jim Meredith, individually and by and through First Commercial Properties, has managed, directed, and/or conducted operations at the South Y Site related to hazardous substances and compliance with environmental requirements, regulations, laws, and statutes.

88. Fox is informed and believes and thereon alleges that, as property manager of the South Y Site, First Commercial Properties has managed, directed, and/or conducted operations at the South Y Site related to hazardous substances and compliance with environmental requirements, regulations, laws, and statutes.

Suppliers/Transporters of PCE to the South Y Site

89. Fox is informed and believes, and without admitting the truth of the matter asserted, thereon alleges that SUPPLIER/TRANSPORTER DOES 1 to 20, maintained, operated, supplied and/or transported PCE to the storage drum associated with the coin-operated dry-cleaning unit and in so doing caused PCE to spill, leak, or otherwise be released or disposed of at the South Y Site. Fox is informed and believes, and without admitting the truth of the matter asserted, thereon further alleges that these SUPPLIER/TRANSPORTER DOES 1 to 20, supplied and/or transported PCE in an improper manner thus causing the release as alleged by Seven Springs in its Amended Complaint.

90. Fox is informed and believes, and without admitting the truth of the matter asserted, thereon alleges that SUPPLIER/TRANSPORTER DOES 1 to 20, accepted hazardous substances, including but not limited to PCE-containing laundry waste water from the dry cleaning unit located at the South Y Site, for transport to an off-site disposal or treatment site and in so doing caused PCE to spill, leak, or otherwise be released or disposed of at the South Y Site.

Product Manufacturers

91. In its Amended Complaint, Seven Springs has alleged that PCE spilled, leaked, or was otherwise released or disposed of at the South Y Site from the coin-operated dry-cleaning unit, including but not limited to leaks from pipes at, under, or otherwise associated with the coin-operated dry-cleaning unit located at the South Y Site.

92. Fox is informed and believes and thereon alleges that the coin operated dry-cleaning unit located at the South Y Site was a Speed Queen On Premises Washer Extractor or similar unit.

93. Fox is informed and believes and thereon alleges that at all times herein mentioned, Alliance was engaged in the business of manufacturing, designing, assembling, repairing,

maintaining, renting, leasing, testing, constructing, fabricating, analyzing, recommending, distributing, merchandising, advertising, modifying, warranting, promoting, selling, marketing, certain parts and products, and including in particular a product known as the Speed Queen On Premises Washer Extractor, which used PCE as a cleaning solvent

94. Fox is informed and believes and thereon alleges that PRODUCT MANUFACTURERS DOES 21-25 at all times herein mentioned, were engaged in the business of manufacturing, designing, assembling, repairing, maintaining, renting, leasing, testing, constructing, fabricating, analyzing, recommending, distributing, merchandising, advertising, modifying, warranting, promoting, selling, marketing, certain parts and products, and including in particular Speed Queen and/or other coin operated dry cleaning equipment, which used PCE as a cleaning solvent.

COUNT ONE

CONTRIBUTION UNDER CERCLA SECTION 107

95. Fox restates and incorporates by reference herein all the allegations contained in Paragraphs 1-94 above.

96. Fox is informed and believes and thereon alleges that there has been a "release", within the meaning of section 101(22) of CERCLA, 42 U.S.C. Section 9601(22), of hazardous substances at the South Y Site

97. Fox is informed and believes and thereon alleges that the South Y Site is or is part of a "facility" within the meaning of section 101(9) of CERCLA, 42 Section 9601(9).

98. Fox is informed and believes and thereon alleges that each Third Party Defendant is a "person" within the meaning of section 101(21) of CERCLA, 42 U.S.C. Section 9601(21).

99. Fox is informed and believes and thereon alleges that each of the following are prior owners of the South Y Site and that they owned the South Y Site at the time hazardous substances were allegedly disposed of at the South Y Site: Connolly, Interland, D.S. Lyddon, and DOES 26-100 ("Prior Owner Third Party Defendants"). Accordingly, if Fox is adjudged to be liable to Seven Springs under the Amended Complaint, then each such Prior Owner Third Party

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Defendant is a "covered person" pursuant to Section 107(a)(2) of CERCLA, 42 U.S.C. Section 9607(a)(2).

100. Fox is informed and believes and thereon alleges that each of the following Third Party Defendants is a prior operator of the South Y Site because each managed, directed, or conducted operations at the South Y Site, or a portion thereof, related to hazardous substances or made decisions regarding compliance with environmental requirements, regulations, laws and statutes at the time hazardous substances were allegedly disposed of at the South Y Site: Connolly, Interland, REMA, Commerce Trust, The Estate of Dorothy S. Lyddon, Jack Trust, Martha, John, Grant, Mary Lou Baisley, Estate of Leroy Baisley, Estate of Kjell Hakansson, Kersten Hakansson, Estate of Robert (Bobby) Page, Bobby Page's, Inc., Robert Prupas, Berniece Prupas, Norman Prupas, Peter D. Quenzer, Fern Quenzer, Kim Welch, Debra Welch, First Commercial Properties, Jim Meredith, and DOES 26-100 ("Prior Operator Third Party Defendants"). Accordingly, if Fox is adjudged to be liable to Seven Springsunder the Amended Complaint, then each Prior Operator Third Party Defendant is a "covered person" pursuant to Section 107(a)(2) of CERCLA, 42 U.S.C. Section 9607(a)(2).

101. Fox is informed and believes and thereon alleges that REMA, Commerce Trust, Jack Trust, Martha, John, Grant, First Commercial Properties, Jim Meredith, David and Louzel Rogers, and DOES 26-100 (collectively "Current Operator Third Party Defendants") are current operators of the South Y Site or a portion thereof because each has managed, directed, or conducted operations at the South Y Site, or a portion thereof, related to hazardous substances or has made decisions regarding compliance with environmental requirements, regulations, laws and statutes. Accordingly, if Fox is adjudged to be liable to Seven Springs under the Amended Complaint, then each Current Operator Third Party Defendant is a "covered person" pursuant to Section 107(a)(1) of CERCLA, 42 U.S.C. Section 9607(a)(1).

102. Fox is informed and believes and thereon alleges that each of the following had knowledge of and control over the disposal or ownership of the hazardous substance at the time of disposal, as well as managed, directed, or controlled how, when, or where the hazardous material was to be used and/or discarded: Mary Lou Baisley, Estate of Leroy Baisley, Estate of Kjell

Hakansson, Kersten Hakansson, Estate of Robert (Bobby) Page, Bobby Page's, Inc., Robert Prupas, Berniece Prupas, Norman Prupas, Peter D. Quenzer, Fern Quenzer, and DOES 26-100 ("Third Party Arranger Defendants"). Accordingly, if Fox is adjudged to be liable to Seven Springs under the Amended Complaint, then each Third Party Arranger Defendant is a "covered person" pursuant to Section 107(a)(3) of CERCLA, 42 U.S.C. Section 9607(a)(3).

103. Fox is informed and believes, and without admitting the truth of the matter asserted, thereon alleges that SUPPLIER/TRANSPORTER DOES 1 to 20 and DOES 26-100 ("Supplier/Transporter Third Party Defendants"), maintained, operated, supplied and/or transported PCE to the storage drum associated with the coin-operated dry-cleaning unit and in so doing caused PCE to spill, leak, or otherwise be released or disposed of at the South Y Site. Fox is further informed and believes, and without admitting the truth of the matter asserted, alleges that these Supplier/Transporter Third Party Defendants supplied and/or transported PCE in an improper manner thus causing the release alleged by Seven Springs Amended Complaint. Accordingly, if Fox is adjudged to be liable to Seven Springs under the Amended Complaint, then each Supplier/Transporter Third Party Defendant is a "covered person" pursuant to Section 107(a)(4) of CERCLA, 42 U.S.C. Section 9607(a)(4).

104. If Fox is adjudged to be liable under the Amended Complaint under any claim for relief stated therein, which potential liability Fox denies, then pursuant to Section 107(a)(4)(B) of CERCLA, 42 Section 9607 (a)(4)(B), the Third Party Defendants are liable to Fox for its necessary costs of responses consistent with the NCP with regard to the South Y Site.

COUNT TWO

CONTRIBUTION UNDER CERCLA SECTION 113

(Plead in the Alternative to Count One)

105. Fox restates and incorporates by reference herein the allegations contained in Paragraphs 1-104 above.

106. Fox brings this complaint during a civil action brought under Section 107(a) of CERCLA, 42 U.S.C. Section 9607(a).

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107. If Fox is adjudged to be liable under the Amended Complaint for any claim for relief stated therein, which potential liability Fox denies, all the Third Party Defendants are liable to Fox for their equitable share of any such relief pursuant to Section 113(f)(1) of CERCLA, 42 U.S.C. Section 9613(f)(1).

COUNT THREE

DECLARATORY JUDGMENT UNDER CERCLA SECTION 113

108. Fox restates and incorporates by reference herein the allegations contained in Paragraphs 1-107 above.

109. If Fox is adjudged to be liable under the Amended Complaint for any claim for relief stated therein, which potential liability Fox denies, then there will exist an actual, substantial, and immediate controversy among Fox and the Third Party Defendants warranting this Court's declaration, under Section 113(g)(2) of CERCLA, 42 U.S.C. Section 9613(g)(2), of the parties' responsibilities for the response costs incurred, and to be incurred, as a result of the alleged disposal of hazardous substances at the South Y Site.

COUNT FOUR

CONTRACTUAL INDEMNITY - PURCHASE AGREEMENT

110. Fox restates and incorporates by reference herein the allegations contained in Paragraphs 1-109 above.

111. Fox is informed and believes and thereon alleges that Seven Springs' claims against Fox arise out of or relate to injury or damage with respect to the South Y Site incurred by any party on or after the date on which Century 73 sold the South Y Site in 1985.

112. If Fox is adjudged to be liable under the Amended Complaint for any claim for relief stated therein, which potential liability Fox denies, then pursuant to the terms of the 1985 Purchase Agreement, the Estate of D.S. Lyddon is required to indemnify Fox for "all costs, losses, expenses (including reasonable attorney's fees) and liabilities" paid or incurred by Fox as a result of such judgment.

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COUNT FIVE

CONTRACTUAL INDEMNITY - 1972 LEASE

113. Fox restates and incorporates by reference herein the allegations contained in Paragraphs 1-112 above.

114. Pursuant to the terms of their respective lease agreements, each of the prior lessees of the Premises, the Prupases, Norman Prupas, Bobby Page's, Inc., Leid's, Inc. (as the successor in interest to Bobby Page's, Inc), the Hankannssons, the Baisleys, the Quenzers, and DOES 26-100 ("Lessee Third Party Defendants") contracted under the 1972 Lease to indemnify Century 73 for claims arising out of any injury or damage to the property in any way connected with the Premises, its appurtenances, or the sidewalks adjacent thereto, during the term of the 1972 Lease or any occupancy thereunder.

115. Fox is informed and believes and thereon alleges that Seven Springs' claims against Fox arise out of injury or damage to the South Y Site that allegedly occurred during the term of the 1972 Lease and/or the occupancy of the Lessee Third Party Defendants thereunder.

116. If Fox is adjudged to be liable under the Amended Complaint for any claim for relief stated therein, which potential liability Fox denies, then pursuant to the 1972 Lease, the Lessee Third Party Defendants are required to indemnify Fox for "all costs, losses, expenses (including reasonable attorney's fees) and liabilities" paid or incurred by Fox as a result of such judgment.

COUNT SIX

BREACH OF CONTRACT - 1972 LEASE

117. Fox restates and incorporates by reference herein the allegations contained in Paragraphs 1-116 above.

118. Fox is informed and believes and thereon alleges that the Lessee Third Party Defendants contracted under the 1972 Lease to comply with all laws, ordinances, regulations and rules of any public authority or organization in their use of the Premises and to surrender the Premises in good order, condition, and repair.

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119. Fox is informed and believes and thereon alleges that if the Court determines that hazardous substances were disposed of at the Premises during Century 73's ownership of the South Y Site, then Lessee Third Party Defendants did not comply with the law in their respective uses of the Premises and did not surrender the Premises in good order, condition, and repair.

120. Fox has fully performed all conditions, covenants, and promises required on its part to be performed in accordance with the terms and conditions of the 1972 Lease.

121. As a result of the Lessee Third Party Defendants' breach of the 1972 Lease with regard to the allegations made in the Amended Complaint, Fox has been damaged in an amount to be determined according to proof. Fox has retained the services of LEWIS, BRISBOIS, BISGAARD & SMITH LLP and HOGAN & HARTSON LLP to file the action herein, thereby incurring costs, consultants' fees, attorneys' fees and other litigation fees in prosecution of this Third Party Complaint. Fox will seek leave of this Court to amend this Third Party Complaint to show the amount of said costs and attorneys' fees when the same becomes known.

COUNT SEVEN

STRICT PRODUCTS LIABILITY

122. Fox restates and incorporates by reference herein the allegations contained in Paragraphs 1-121 above.

123. Fox is informed and believes and thereon alleges that Alliance and PRODUCT MANUFACTURE DOES 21-25 ("Product Third Party Defendants") were and are in the business of manufacturing, designing, assembling, repairing, maintaining, renting, leasing, testing, constructing, fabricating, analyzing, recommending, distributing, merchandising, advertising, modifying, warranting, promoting, selling, and marketing, and sold the Speed Queen On Premises Washer Extractor or a similar dry-cleaning unit ("Subject Product"), which used PCE as a cleaning solvent, and which was intended by said Product Third Party Defendants, and each of them, to be used as a coin-operated dry-cleaning machine at the Premises.

124. Fox is informed and believes that these Product Third Party Defendants, and each of them, knew or had reason to know that the Subject Product would be used by the Prior Operator

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Third Party Defendants, Current Operator Third Party Defendants, and/or the Lessee Third Party Defendants without inspection for defects.

125. Fox is informed and believes, and without admitting the truth of the matter asserted, alleges that the Subject Product was used at the Premises for the uses and purposes for which it was intended, and in a manner which was reasonably foreseeable by the Product Third Party Defendants. Fox is informed and believes, and without admitting the truth of the matter asserted, that said use involved a substantial danger not apparent to the Prior Operator Third Party Defendants, Current Operator Third Party Defendants, and/or the Lessee Third Party Defendants and caused the release of PCE. More specifically, Fox is informed and believes, and without admitting the truth of the matter asserted, alleges that said Product Third Party Defendants failed to adequately warn customers that the dry-cleaning machine's waste water and/or lint contained dissolved PCE and that disposal of such water and/or lint to the sewer would result in harm.

126. Fox is informed and believes, and without admitting the truth of the matter asserted, alleges that at the time the Subject Product was manufactured, designed, assembled, modified, leased, tested, constructed, fabricated, analyzed, recommended, distributed, merchandised, advertised, modified, promoted, marketed, and sold, it defective and unsafe for its intended purpose in that, among other things, PCE, the cleaning solvent used in the machine, leaked from the unit, its associated piping, and the filter elements which would accumulate PCE infused lint, disposal of which lead to the contamination of the Premises and injury to property or persons. Fox is informed and believes and thereon alleges that Product Third Party Defendants also concealed said defects and failed to warn the Prior Operator Third Party Defendants, Current Operator Third Party Defendants, and/or the Lessee Third Party Defendants with regard to the defects alleged.

127. Fox is informed and believes, and without admitting the truth of the matter asserted, alleges that while the Subject Product was being used in the manner intended, it leaked PCE. Fox is informed and believes, and without admitting the truth of the matter asserted, alleges that as a direct and proximate result of the aforesaid defects, PCE leaked into the ground water at or near the Premises. Such contamination at or near the Premises has caused and will cause Fox to

incur costs of investigation and clean-up with regard to the resulting PCE contamination, in an amount according to proof at the time of trial.

COUNT EIGHT

NEGLIGENCE

128. Fox restates and incorporates by reference herein the allegations contained in Paragraphs 1-127 above.

129. Fox is informed and believes and thereon alleges that Product Third Party Defendants, Supplier/Transporter Third Party Defendants, Prior Operator Third Party Defendants, and/or the Lessee Third Party Defendants, and each of them had a duty to exercise reasonable care in the manufacturing, designing, assembling, repairing, maintaining, renting, leasing, testing, constructing, fabricating, analyzing, recommending, distributing, merchandising, advertising, modifying, warranting, promoting, selling, marketing, managing, directing, and operating of the Premises at the South Y Site, including but not limited to the prevention of any release of PCE into the ground and/or groundwater at or near the Premises.

130. Fox is informed and believes and thereon alleges that the Product Third Party Defendants, Supplier/Transporter Third Party Defendants, Prior Operator Third Party Defendants, and/or the Lessee Third Party Defendants, and each of them knew, or in the exercise of reasonable care should have known, that the cleaning solvent used in the coin-operated dry-cleaning unit was a hazardous material and if not for the exercise of reasonable care in the manufacturing, designing, assembling, repairing, maintaining, renting, leasing, testing, constructing, fabricating, analyzing, recommending, distributing, merchandising, advertising, modifying, warranting, promoting, selling, marketing, managing, directing, and/or operating of the Premises at the South Y Site, such hazardous material could be released into the ground and/or groundwater at or near the Premises.

131. Fox is informed and believes, and without admitting the truth of the matter asserted, thereon alleges that the Product Third Party Defendants, Supplier/Transporter Third Party Defendants, Prior Operator Third Party Defendants, and/or the Lessee Third Party Defendants, and each of them, so negligently and carelessly manufactured, designed, assembled, repaired, maintained, rented, leased, tested, constructed, fabricated, analyzed, recommended,

distributed, merchandised, advertised, modified, warranted, promoted, sold, marketed, managed, directed, and/or operated their business on the Premises at the South Y Site, such that as a direct and proximate result of this negligence by these Third Party Defendants, hazardous material in the form of PCE was released onto the ground and/or into the groundwater at or near the Premises. Such contamination at or near the Premises has caused and will cause Fox to incur costs of investigation and clean-up with regard to the resulting PCE contamination, in an amount according to proof at the time of trial.

WHEREFORE, Fox prays judgment against the Third Party Defendants and each of them as follows:

1. For payment or reimbursement of all, or an equitable share of all, response and other costs incurred by Fox as a result of the Amended Complaint brought by Seven Springs;

2. For declaratory judgment establishing that the Third Party Defendants are responsible parties and are liable for any and all response or other costs incurred as a result of the presence, release, or threatened release of hazardous substances at the South Y Site;

3. For declaratory judgment establishing the liability of the Third Party Defendants in order that Fox may ascertain its rights as against Plaintiff and the Third Party Defendants;

4. A judicial determination that the Third Party Defendants are the legal cause of any injuries and damages as a result of the presence, release, or threatened release of hazardous substances at the South Y Site and that Third Party Defendants be adjudicated so liable and indemnify Complainant, entirely or partially, for any sums of money which may be awarded as against this Complainant;

5. Total and complete indemnity for any judgment rendered as against Fox;

6. Judgment in a proportionate share from all Third Party Defendants;

7. An order requiring any and all Third Party Defendants to conduct as required any response action, remedial action, removal action or other abatement with respect to releases and threatened releases at, on, under or from the South Y Site at their sole cost and expense;

8. For all expenses incurred herein, including allowable attorneys' fees;

9. For costs of suit incurred herein;

10. For interest on any money judgment; and

11. For such other and further relief as the Court deems just and proper.

DATED: December 19, 2008

LEWIS BRISBOIS BISGAARD & SMITH LLP

BY: ______________________
GLENN A. FRIEDMAN
PAUL A. DESROCHERS
PETER A. SCHMID
Attorneys for Third-Party Plaintiff
FOX CAPITAL MANAGEMENT CORPORATION

DATED: December 19, 2008

HOGAN & HARTSON LLP

BY: /s/Scott H. Reisch (as authorized on 12/19/08)
SCOTT H. REISCH
Attorneys for Third-Party Plaintiff
FOX CAPITAL MANAGEMENT CORPORATION

Cousineau, Kathryn A.

From: caed_cmecf_helpdesk@caed.uscourts.gov

Sent: Friday, December 19, 2008 9:04 PM

To: caed_cmecf_nef@caed.uscourts.gov

Subject: Activity in Case 2:07-cv-00142-LKK-GGH Seven Springs Limited Partnership v. Fox Capital Management Third Party Complaint

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Eastern District of California - Live System

Notice of Electronic Filing

The following transaction was entered by Desrochers, Paul on 12/19/2008 at 8:03 PM PST and filed on 12/19/2008

Case Name: Seven Springs Limited Partnership v. Fox Capital Management
Case Number: 2:07-cv-142
Filer: Fox Capital Management Corporation
Document Number: 79

Docket Text:
DEFENDANT(S) THIRD PARTY COMPLAINT against Real Estate Management Associates, LLC, Connolly Development, Inc., The Commerce Trust Company, Interland Communities, Inc., The Estate of Dorothy S. Lyddon, Jack R. Lyddon Trust II, Martha D. Lyddon, John K. Lyddon, Grant S. Lyddon, Mary Lou Baisley, Estate of Leroy Baisley, The Estate of Kjell Hakansson, Kersten Hakansson, Bobby Page's, Inc., Berniece Prupas, Norman Prupas, Robert Prupas, LEID'S, INC., Peter D. Quenzer, Fern Quenzer, Kim Welch, Debra Welch, David Rogers, Louzel Rogers, Jim Meredith, First Commercial Properties, Alliance Laundry Systems, LLC by Fox Capital Management Corporation.(Desrochers, Paul)

2:07-cv-142 Electronically filed documents will be served electronically to:

Brooks Michael Beard bbeard@mofo.com, mland@mofo.com

Rachael Clarke hdouglass@mofo.com, rclarke@mofo.com, stichregan@mofo.com

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Glenn Allen Friedman friedman@lbbslaw.com

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2:07-cv-142 Electronically filed documents must be served conventionally by the filer to:

The following document(s) are associated with this transaction:

Document description: Main Document
Original filename:n/a
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[STAMP dcecfStamp_ID=1064943537 [Date=12/19/2008] [FileNumber=2750214-0] [5c2f652e487ad3e20f08886ddde902b48d994d8ebfb5d48d7ceefa01a7bc6e072e c71517dc72f261cf56419d2b722700e7af585a1c2e1f8b23d3327768af1cef]]

EXHIBIT M

E2C Remediation
Environmental Engineering,
Consulting and Remediation, Inc.

June 4, 2009

Mr. Scott Reisch, Partner
Hogan & Hartson LLP
One Tabor Center, Suite 1500
1200 Seventeenth Street
Denver, CO 80202

SUBJECT: Remedial Action Workplan for SZA Groundwater Investigation, SZA Groundwater Monitoring, Interim Remedial Action Vadose Zone Soil and Shallow Groundwater Cleanup

Lake Tahoe Laundry Works
1024 Lake Tahoe Boulevard
South Lake Tahoe, California

Dear Mr. Reisch:

Pursuant to your request, please find attached the above-captioned Interim Remedial Action Workplan (IRAWP). The document was prepared to comply with the State of California Regional Water Quality Control Board – Lahontan Region, South Lake Tahoe Branch (CRWQCB) letter dated April 8, 2009 (the Letter). This IRAWP presents the methods and procedures that would be utilized to perform the shallow soil and shallow groundwater interim remediation at the above-captioned site. A copy of this document has been submitted to the CRWQCB for their review and approval prior to implementation of the work tasks described in the document.

If you have any questions, or comments, please call the undersigned at 661-831-6906.

Sincerely,
E_2C Remediation

Philip Goal

Philip Goalwin, P.G. #4779
Principal Geologist

PHILIP GOALWIN
Exp 11-30-10
No. 4779

5300 Woodmere Drive, Suite 105, Bakersfield, CA 93313
tel 661.831.6906 fax 661.831.6234 www.e2cr.net

E2C Remediation
Environmental Engineering,
Consulting and Remediation, Inc.

INTERIM REMEDIAL ACTION WORKPLAN FOR SZA GROUNDWATER INVESTIGATION, SZA GROUNDWATER MONITORING, INTERIM REMEDIAL ACTION VADOSE ZONE SOIL AND SHALLOW GROUNDWATER CLEANUP

Lake Tahoe Laundry Works
1024 Lake Tahoe Boulevard
South Lake Tahoe, California

June 4, 2009

Project Number: 1950BK27

Prepared For:

Seven Springs Limited Partnership
And
Fox Capital Management

Prepared By:

E$_2$C Remediation
Environmental/Engineering Consultants
5300 Woodmere Drive, Suite 105
Bakersfield, California 93313

TABLE OF CONTENTS

LIST OF FIGURES

LIST OF TABLES

LIST OF APPENDICES

I. INTRODUCTION

This Interim Remedial Action Workplan (IRAWP) presents the Tasks that are proposed for remediation of solvent-impacted shallow soils and shallow groundwater at the Lake Tahoe Laundry Works (LTLW) facility located at 1024 Lake Tahoe Boulevard in South Lake Tahoe, California (Site). The IRAWP was prepared to comply with the State of California Regional Water Quality Control Board – Lahontan Region, South Lake Tahoe Branch (CRWQCB) letter dated April 8, 2009 (CRWQCB, 2009).

I.A Site Description

The Site is located approximately 9,000 feet south of Lake Tahoe in the City of South Lake Tahoe, El Dorado County (see Figure 1). The Site is situated in the northwest corner of the South Y Shopping Center, along Lake Tahoe Boulevard between U.S. Highway 50 and Tata Lane and is cross-corner from the dead-end intersection of Glorene Avenue with Lake Tahoe Boulevard (see Figure 2).

I.B Previous Investigations

Based on a review of previous investigations, it appears that shallow soils (vadose zone) beneath the Site and shallow groundwater beneath and immediately adjacent to the Site had been impacted by low to moderate concentrations of volatile organic compounds (VOCs), principally tetrachloroethene (a.k.a. tetrachloroethylene or perchloroethene) (PCE) and trichloroethene (a.k.a. trichloroethylene) (TCE).

From October 2003 through November 2005, PES Environmental, Inc. (PES) conducted soil and shallow groundwater investigation work (PES, 2003, 2004, 2005 and PES 2006). The results of these investigations were summarized and are depicted in the plots included in Appendix C (PES Site Plots of Soil and Groundwater Analytical Results).

In August and September 2008, E_2C Remediation (E_2C) conducted a site investigation to further evaluate vadose zone and groundwater conditions beneath and adjacent to the Site. The findings of the 2008 investigation are discussed below.

I.B.1 Stratigraphic Relationships

Soil borings advanced in connection with the 2008 investigation generally encountered fill materials to depths ranging from 6-9 feet below ground surface (bgs), dependent upon location. Along Lake Tahoe Boulevard, fill generally was found to approximately eight (8) feet bgs with old road base materials encountered at approximately 5-6 feet bgs. Soils immediately underlying the fill materials generally consisted of unconsolidated sands with occasional gravel. The top of the uppermost water-bearing zone, designated as the Shallow Zone Aquifer (SZA) was generally encountered within the top few feet of these underlying sands. At five (5) of the locations (LW-MW-1, LW-MW-2, LW-MW-3, LW-MW-4, and LW-MW-5) the bottom of the SZA was defined by a thin layer (one to 2.5 feet in thickness), or thin layers of silt alternating with sands (dependent upon location). At three (3) of the investigative locations (LW-MW-6, LW-MW-7 and LW-MW-8) no SZA bottom-defining silt layer was encountered. This indicated that the silt layer that defines the bottom of the SZA is laterally continuous in varying thickness across the western portion of the Site; however, it is laterally discontinuous along the eastern portion of the Site.

Underlying the silt at the bottom of the SZA (where silt was encountered) were sands of varying coarseness and color to the maximum depths of the 2008 investigation. This zone was designated as the Middle Zone Aquifer (MZA). The bottom of this zone was defined by a thin layer of silt at only four (4) of the investigative locations LW-MW-4 (MZA bottom-defining silt was 1.5 feet thick), LW-MW-6 (MZA bottom-defining silt was 0.3-foot thick), LW-MW-7 (MZA bottom-defining silt was one-foot thick) and LW-MW-8 (MZA bottom-defining silt was one-foot thick). No MZA bottom-defining silt was encountered at locations LW-MW-1, LW-MW-2, LW-MW-3, and LW-MW-5. A silty sand lense approximately two (2) feet in thickness was encountered near the bottom of LW-MW-1; however, this unit was saturated and flowed into the sampling drive rod when the sampling device was driven and, therefore, cannot be classified as the bottom-defining silt layer for the MZA at the LW-MW-1D location.

I.B.2 Hydrogeologic Relationships

Initial groundwater was encountered at varying depths (see Figures 4, 5, 6 and 7 from E_2C, 2008 in Appendix F). After installation of the monitoring wells, the water table surface generally rose, which indicated that some confining conditions were present. On September 9, 2008, SZA depths to water ranged from 11.52 feet below top of casing (BTOC) (LW-MW-7S) to 14.99 feet BTOC (LW-MW-2S). It is important to note that the SZA groundwater flow directions interpreted honored the depth to water data collected in September 2008 and correlate well with the chemical gradient data; however, the flow directions (southeasterly) did not correlate well with the reportedly regional groundwater flow direction of northeast.

Shallow Zone Aquifer Groundwater Flow Conditions

On September 9, 2008, groundwater flow in the SZA was interpreted to be east-southeasterly at a gradient of approximately 0.024 foot of vertical drop per foot of horizontal distance (ft/ft). Flow in the area encompassed by LW-MW-1S and LW-MW-2 was generally easterly, flow in the area of LW-MW-3S was east-southeasterly, and flow in the area encompassed by LW-MW-4S, LW-MW-7S and LW-MW-8S was south-southeasterly. On August 13, 2008, and September 14, 2008, the flow patterns were similar (see plots in Appendix E). These flow patterns indicated that the area between LW-W-1S and LW-MW-4S was in a condition of discharge, thus a trough-like feature was evident. The data also indicate that recharge was occurring from the north in the area of LW-MW-7S. This was evidenced by a nose-like feature (seen in Figures 3, 3A, and 3AA in Appendix E) that extended from LW-MW-7S to LW-MW-6S and beyond to the south. Thus, the principal path of flow, or average groundwater flow direction for the Site, was from the northwest corner of the intersection of Glorene Avenue with Lake Tahoe Boulevard in a southeasterly direction.

I.B.3 Soil Chemical Conditions

PCE, TCE, vinyl chloride (VC), cis-1,2-Dichloroethene (cis-1,2-DCE), Trans-1,2-Dichloroethene (Trans-1,2-DCE), and 1,2-Dichloroethane (1,2-DCA) were reported in soil samples collected during this investigation (see the table in Appendix G for a tabular summary of data). Note: 1,2-DCA was reported in only one (1) soil sample (LW-MW-3-20) at a concentration of 0.19 μg/L and a review of the PES soil analytical summary data indicates that 1,2-DCA was not reported as detectable (see Appendix C, Plate 4).

Vadose Zone and SZA

The VOC concentrations reported were generally low, except at the LW-MW-1S boring where PCE was reported at a concentration of 410 milligrams per kilogram (mg/Kg) at the 7-foot depth, which indicated a zone of source material in that area. However, plots of concentrations in cross-section indicated that there were likely two (2) soil source areas for the impact found in the SZA: 1) in the area of boring LW-MW-1; and 2) northwest and north of the area encompassed by LW-MW-4, LW-MW-7 and LW-MW-8 (see plots in Appendix D) (E_2C, 2008).

I.B.4 SZA Groundwater Chemical Conditions

Groundwater sample analytical data indicated that dense non-aqueous phase liquid (DNAPL) was not present in the SZA at the monitoring locations at the time of sample collection. Concentrations of the contaminants of concern were low to moderate (maximum of 706 micrograms per liter (µg/L) of PCE in the SZA) and are not representative of the types of concentrations that would indicate that DNAPL is present. Using the '1% of solubility' rule of thumb DNAPL is suspected when the chemical concentration in groundwater is greater than 1% of its pure-phase solubility (USEPA, 1992). The pure-phase solubility of PCE is 200,000 µg/L (USEPA, 2004). Therefore, PCE DNAPL could be suspected if the concentration of PCE in groundwater exceeded 2,000 µg/L. All of the groundwater samples collected during the 2008 investigation from the SZA were reported at concentrations significantly less than this 2,000 µg/L reference concentration.

Shallow Zone Aquifer

PCE, TCE, 1,1-Dichloroethene (1,1-DCE), Trans-1,2-DCE and cis-1,2-DCE were reported in SZA groundwater samples summarized as follows (see Table 2 for summary of data):

- PCE was reported in all eight (8) SZA groundwater samples at concentrations ranging from a low of 3.00 µg/L (LW-MW-2S) to a high of 706 µg/L (LW-MW-1S);
- TCE was reported in seven (7) (all but LW-MW-3S) of the SZA wells at concentrations ranging from a low of 1.60 µg/L (LW-MW-4S) to a high of 74.0 µg/L (LW-MW-1S);
- cis-1,2-DCE was reported in the groundwater samples from all SZA monitoring wells, except LW-MW-3, at concentrations ranging from a low of 0.60 µg/L (LW-MW-4S) to a high of 41.3 µg/L (LW-MW-1S);
- 1,1-DCE was reported in one sample, LW-MW-1S, at a concentration of 1.25 µg/L;
- Trans-1,2-DCE was reported in one (1) sample, LW-MW-1S, at a concentration of 0.727 µg/L; and
- VC, chloroethane (CA), methylene chloride (MC), 1,1-Dichloroethane (1,1-DCA) and 1,1,1-Trichloroethane (1,1,1-TCA) were all reported as non-detect in all eight (8) SZA groundwater samples.

I.C Designation of LTLW Vadose Zone and SZA Cleanup Areas

In a meeting on September 24, 2008 at the CRWQCB South Lake Tahoe office, interim remedial actions for the SZA (the uppermost water-bearing zone beneath the Site) and VOC-affected vadose zone soils were discussed. Based on the results of soil and groundwater investigations conducted at the Site in conjunction with the measured direction of groundwater flow, the area to be addressed for remedial action consists of two (2) parts: 1) The vadose zone soils impacted by VOCs (see Figure 3 for approximate areal extent of vadose zone soil cleanup); and 2) An area of the SZA that was approximately 375 feet in length and 145 feet in width with a vertical extent (from bottom of vadose zone to approximately thirty (30) feet below ground surface (bgs) (see Figure 3 for approximate areal extent of proposed SZA cleanup). The proposed interim remedial action discussed below addresses vadose zone impact in the presumed source area above the SZA, and groundwater within the SZA in the area as shown on Figure 3. During the September 24, 2008 meeting, a remedial system comprised of soil vapor extraction (SVE) combined with groundwater air sparging (SVE/GASS) was proposed for the interim cleanup for the above-described areas. At that meeting, the CRWQCB verbally approved that plan. Note: The area of vadose zone soil cleanup is based on the historical reported VOC concentrations in soil as they relate to the proposed soil Cleanup Goals (see Section II below).

II. REMEDIAL ACTION GOALS

II.A Site Soil Quality Restoration Goals

Soil quality restoration goals are designed based on the following criteria:

- Protection of human health;
- Direct/indirect exposure to contaminated soil (ingestion, dermal absorption, inhalation of vapors and dust in outdoor air);
- Protection of groundwater quality (leaching of chemicals from soil);
- Protection of terrestrial (nonhuman receptors); and
- Protection against gross contamination concerns (nuisance, odors, etc,) and general resource degradation.

II.B Site Water Quality Restoration Goals

The existing and potential beneficial uses of groundwater at the Site include municipal and domestic water supply and industrial use. The beneficial use with the most stringent set of water quality goals is municipal and domestic supply. Applicable water quality restoration goals are summarized in the table below (note: The most restrictive MCL is listed).

Constituent	Water Quality Goal (μg/L)	Standard
PCE	5	Federal and State MCL
TCE	5	Federal and State MCL
cis-1,2-DCE	6	State MCL
Trans-1,2-DCE	10	State MCL
Vinyl Chloride	0.50	State MCL

MCL=maximum contaminant level.

II.C Site Public Health and Safety Goals

According to guidance presented in California Code of Regulations (CCR) Title 23, Chapter 16, Article 11 (CCR), any remediation approach considered must be designed to mitigate nuisance conditions and risk of fire or explosion posed by residual solvent impact. To assure that remedial objectives address the requirements of Article 11, consideration of site-specific public health and safety goals is necessary. The site-specific goal is to eliminate any threat to public health and safety associated with subsurface constituents of concern (COC) impact, including the potential threat posed by nuisance conditions and risk of fire or explosion. Additionally, use of, or exposure to, affected groundwater or soil will be restricted. Applicable health and safety goals include California Public Health Goals (PHGs).

II.C.1 Soil PHGs

PHGs for COCs in soils are calculated to represent a negligible risk for residents and commercial or industrial workers that may be exposed to contaminated vadose zone soils, or dust derived from these soils, or where groundwater is a current or potential source of drinking water.

Constituent	PHG
PCE	0.37 mg/Kg
TCE	0.46 mg/Kg
cis-1,2-DCE	0.19 mg/Kg
Trans-1,2-DCE	0.67 mg/Kg
Vinyl Chloride	0.022 mg/Kg
1,2-DCA*	0.0045 mg/Kg

The PHGs for PCE, TCE, cis-1,2-DCE, Trans-1,2-DCE and VC are higher than the method detection limit (0.005 mg/Kg for each compound). The PHG for 1,2-DCA is lower than the method detection limit (0.005 mg/Kg).

* - Based on a review of the PES and E_2C soil analytical data, there appears to have been only one (1) reported detection of 1,2-DCA (2008 investigation, see Section I.B.3 above.

II.C.2 Groundwater PHGs

PHGs for COCs in groundwater are calculated to represent a negligible risk of contracting cancer from the use of drinking water containing the COCs in the household environment over a lifetime (CRWQCB, 2003). The COCs detected in groundwater beneath the Site and their respective PHGs are summarized as follows:

Constituent	PHG
PCE	0.06 µg/L
TCE	0.8 µg/L
cis-1,2-DCE	100 µg/L
Trans-1,2-DCE	60 µg/L
Vinyl Chloride	0.05 µg/L

The PHGs for PCE and VC in groundwater are lower than the currently achievable method detection limit for those compounds (0.5 µg/L), whereas the PHGs for TCE, cis-1,2-DCE and Trans-1,2-DCE are higher than the method detection limit (0.5 µg/L) for TCE.

II.D Proposed Soil Cleanup Goals

Cleanup goals for protection of underlying groundwater and current and future site users (applicable for residential use) and construction or industrial workers from direct/indirect contact with impacted soils are proposed as follows (CRWQCB, 2008):

- PCE - 0.37 mg/Kg (the PHG for PCE), as it is greater than the method detection limit and is accurately quantifiable);
- TCE - 0.46 mg/Kg (the PHG for TCE), as it is greater than the method detection limit and is accurately quantifiable);
- Cis-1,2-DCE – 0.19 mg/Kg (the PHG for cis-1,2-DCE), as it is greater than the method detection limit and is accurately quantifiable);
- Trans-1,2-DCE - 0.67 mg/Kg (the PHG for Trans-1,2-DCE), as it is greater than the method detection limit and is accurately quantifiable);
- Vinyl Chloride - 0.05 mg/Kg (the method detection limit for VC), as the PHG is below the method detection limit and, therefore, is not accurately quantifiable; and
- 1,2-DCA – 0.05 mg/Kg (the method detection limit for 1,2-DCA), as the PHG is below the method detection limit and, therefore, is not accurately quantifiable.

II.E Proposed Groundwater Cleanup Goals

Pursuant to Resolution 92-49, the CRWQCB is required to ensure that the cleanup of groundwater attains "background" concentrations unless that is not reasonable. At a minimum the cleanup must attain the level that is economically and technically feasible and meets water quality objectives (SWRCB, 2003). As such, cleanup goals for the COCs reported in groundwater at the Site are proposed as follows:

- PCE - 5.0 µg/L (the Federal and State MCL for PCE), as the PHG is below the method detection limit and, therefore, is not accurately quantifiable;
- TCE – 5.0 µg/L (the Federal and State MCL for TCE), as it is greater than the method detection limit and is accurately quantifiable);
- Cis-1,2-DCE – 6.0 µg/L (the State MCL for cis-1,2-DCE), as it is greater than the method detection limit and is accurately quantifiable);
- Trans-1,2-DCE – 10 µg/L (the State MCL for Trans-1,2-DCE), as it is greater than the method detection limit and is accurately quantifiable); and
- Vinyl Chloride - 0.5 µg/L (the PHG and method detection limit for VC), as the PHG is at the method detection limit and is accurately quantifiable.

In summary, remediation of groundwater within the defined affected limits of the SZA underlying and immediately adjacent to the Site (see Figure 3) will be conducted until the respective State MCLs are attained. Groundwater monitoring will be conducted until the respective PHGs are attained for COCs with PHGs that are higher than the applicable method detection limit, or the method detection limit is attained for COCs with PHGs that are lower than the applicable method detection limit.

III. INTERIM REMEDIAL ACTION WORKPLAN

The Scope of Services for implementing the SVE/GASS remedial option is summarized as follows:

Task 1	Liaison/Project Management and Permitting
Task 2	Field Operations: Install Wells
Task 3	Field Operations: Install Interim Remediation Pilot Test System Elements
Task 4	Field Operations: Interim Remediation System Pilot Testing
Task 5	Interim Remediation System Installation/Pilot Testing Report of Findings and Draft Remedial Action Plan
Task 6	Public Notification Process & Final Remedial Action Plan
Task 7	Field Operations: Implement Final Remedial Action Plan
Task 8	Field Operations: Groundwater Monitoring/Sampling
Task 9	Status Reporting
Task 10	Site Decommissioning & Site Restoration

III.A Task 1 – Liaison/Project Management and Permitting

III.A.1 Subtask 1a – Liaison/Project Management and Permitting

E_2C will coordinate LTLW Site investigation and interim cleanup activities in meetings and/or communications with the CRWQCB, the County of El Dorado Environmental Management Department (CEDEMD), the El Dorado County Air Quality Management District (EDCAQMD) and the City of South Lake Tahoe Agencies (City). E_2C personnel will travel to the Site to speak with appropriate on-site City and Agency personnel to determine the logistics of proposed well placements, conveyance piping and equipment locations. Note: E_2C personnel will coordinate with the Site owner's representative on task work logistics at the Site.

The E_2C Project Manager, a State of California Professional Geologist, will coordinate and oversee all activities relating to the Scope of Work. All activities discussed below under the Scope of Services for this project will be under the supervision of E_2C's Principal Geologist, a State of California Professional Geologist.

III.A.2 Subtask 1b - Electronic Submittal of Data to GeoTracker Database

E_2C will request authorization from the responsible party to allow for uploading of documents and data to the State GeoTracker database pursuant to Title 23, Division 5, Chapter 30 of the California Code of Regulations (CCR). Once this authorization is received, the IRAWP will be uploaded. Note: Throughout the course of the remedial and monitoring activities at the Site during this project, groundwater analytical data, remediation data, monitoring data and reports will be uploaded to the GeoTracker data base (see pertinent subsections below).

III.A.3 Subtask 1c – Permitting

Upon CRWQCB approval of the IRAWP, E_2C will prepare and obtain any and all necessary permits for installing the groundwater monitoring and remediation wells, and excavation, building, and electrical installation permits from the CEDEMD, the City of South Lake Tahoe (City) and the Tahoe Regional Planning Agency (TRPA), as warranted and/or other Local Agencies, as required.

According to the Assistant Engineer for the City, a system trenching installation permit will not be required as all trenching will be on private property; however, a permit for construction of the equipment compound, compound-enclosing protective shed and an electrical permit will be required. Upon approval of the IRAWP, E_2C will prepare the necessary documentation and make application to the EDCAQMD to permit the installation and operation of the remediation equipment with associated conveyance systems.

III.B Task 2 – Field Operations: Install Wells

Field operations for installing monitoring and remediation wells will start after receipt of well installation permits from the CEDEMD, the clearance of drilling locations for utilities and approval of drilling locations by the Site owner.

Based on historical groundwater elevation data from nearby sites, the groundwater table beneath the Site can experience significant elevation fluctuations. The vapor extraction portion of the overall remedial system design has taken this into account. For the purpose of IRAWP implementation at the LTLW Site, E_2C proposes installing vertical wells, horizontal wells, vapor probe points and air sparge wells as follows:

- Five (5) SZA monitoring wells (LW-MW-9 through LW-MW-13) (See Figure 4 for locations);
- Twenty (20) nested (two-well) SVE wells (VE-1 through VE-20) (see Figure 5 for locations);
- Seven (7) horizontal SVE wells (HVE-1 through HVE-7) (see Figure 5 for locations);
- Ten (10) vapor probe (VP) points (VP-1 through VP-10) (see Figure 5 for locations); and
- Twenty-seven (27) groundwater air sparge (AS) wells (AS-1 through AS-27) (see Figure 6 for locations).

The SZA monitoring wells will be utilized to evaluate groundwater conditions (elevation and chemical) and remedial effectiveness before, during and after the remedial period. The vapor extraction wells (vertical and horizontal) will be utilized to extract pollutant vapor concentrations from vadose zone soils and dissolved-phase pollutants from the SZA. The AS wells will be utilized to strip volatiles (PCE and TCE) and add oxygen into groundwater to enhance aerobic degradation of the volatiles.

III.B.1 Subtask 2a – Site Visit to Mark Boring/Trenches & Locate Utilities

A site visit will be conducted to mark boring locations. The trench locations from Task 3 below will also be marked during this visit. At least 48 hours before commencing the boring program, USA Underground Alert will be notified for utility locating. Local Agency utility records will also be reviewed. Boring and trenching locations will also be coordinated with the Site owner. Note: Well locations depicted in Figures 4-6 may vary slightly dependent upon site logistics and/or utilities.

III.B.2 Subtask 2b – Soil Boring/Well Installation Methods and Procedures

Well Borings

Well borings will be advanced using a truck mounted hollow-stem auger drilling rig (CME 75, or equivalent) with ten-inch (10") diameter hollow-stem continuous flight auger in accordance with ASTM Method D 1452-80 for soil investigations and sampling by auger borings. The augers will be steam cleaned after advancing each boring. The lithology and other pertinent data will be recorded on boring logs in accordance with Method D 2488-84 for visual description and identification of soils. Borings will be advanced as follows:

- The monitoring well borings will be advanced with collection of soil samples at five-foot intervals commencing at five (5) feet below ground surface (bgs) to approximately thirty (30) feet (bgs);
- Each vertical SVE well boring will be straight drilled to a point approximately two (2) feet above the stable water table depth as measured in September 2008. This depth will vary dependant upon location (see below for discussion of SVE well construction details); and
- The AS well borings will be straight drilled to approximately thirty (30) feet bgs, or the SZA bottom-defining silt layer, whichever is encountered first. For example, at LW-MW-1S, the SZA bottom-defining silt layer was encountered at approximately twenty-five (25) feet bgs.

Note: Drilling operations, soil sampling and field monitoring for the presence of volatile organic compounds (VOCs) will be performed under the supervision of a California Professional Geologist. A flame ionization detector (FID) will be used during the drilling process to detect the presence of VOCs (note: these are only qualitative tests not to be construed to represent a certified laboratory analysis).

Soil samples will be collected using a California split-spoon sampler (2" ID) containing three (3) brass sleeves. Soil sample collection depths will be described on the boring logs. All sampling equipment will be cleaned in an Alconox-water solution and double-rinsed prior to each use. Two (2) soil samples from depths of five (5) feet and ten (10) feet bgs from each of the SZA monitoring well borings will be labeled, capped and placed in a cooler with ice at a temperature of 4° C for possible analysis. The samples will be transferred to a California State Certified laboratory under chain-of-custody control procedures.

Installation of SZA Groundwater Monitoring Wells

Five (5) SZA groundwater monitoring wells (LW-MW-9S through LW-MW-13S) will be installed under this IRAWP. These five (5) new wells will be used in conjunction with the existing three (3) SZA monitoring wells (LW-MW-1S, LW-MW-2S and LW-MW-5S) to monitor chemical concentrations, groundwater flow and gradient, and to evaluate remedial system effectiveness and progress (see Figure 4 for locations).

Shallow monitoring well borings will be advanced as described above to approximately thirty (30) feet bgs, or to the silty interface at the bottom of the SZA, whichever comes first, dependant upon location. Each shallow monitoring well will be installed similarly (see Figure 11 for typical monitoring well diagram) using 2-inch ID Schedule 40 PVC with twenty (20) feet of slot interval (0.020" from 30-10 feet bgs) followed by blank casing to the surface. Filter pack (Lonestar #3 sand, or equivalent) will be placed from bottom of the well to approximately two (2) feet above the slotted interval followed by three (3) feet of hydrated bentonite pellets. Neat-cement grout with <5% bentonite powder added will then be placed to approximately one (1) foot bgs. The wellhead will be placed in a steel traffic-rated box set in concrete. Note: Those monitoring wells that will be set in snow removal areas will be set at grade to allow for snow removal operations during winter months.

Installation of Vertical Vapor Extraction Wells

Based on the type of materials (sand) in the vadose zone, the vapor extraction radius of influence will likely exceed forty (40) feet (based on experience); however, based on a conservative radius of influence of thirty (30) feet to provide sufficient coverage for the defined plume area, twenty (20) nested two-well (well set) vertical SVE wells are proposed (see Figure 8). Note: vertical SVE wells will be constructed to take into account times of high water table. Each vertical SVE well boring will be advanced as described above to approximately eleven (11) feet bgs. Each SVE well set will be installed in a similar manner for each of two (2) areas:

A) The Source/Near-Source Area (area exhibiting vadose zone impact at concentrations requiring remediation (see Figure 3); and

B) The Non-Source (area not exhibiting vadose zone impact).

The Source/Near-Source Area - Upon reaching a point approximately two (2) feet above the average of the stable depth to water measurements recorded in September 2008 (refer to Table 1 for summary of measurements) vertical SVE wells in these areas will be constructed generally as follows:

- SVE wells placed in the area of LW-MW-1S (an area of intermediate depths to water) will be constructed in a nested two-well configuration with the lower well screened from approximately 10-12 feet bgs and the upper well screened from approximately 3-8 feet bgs (bottom of well boring at approximately 12 feet bgs) (see Figure 9A);
- SVE wells placed in the area of LW-MW-2S (an area of deeper depths to water) will be constructed with the lower well screened from approximately 11-13 feet bgs and the upper well screened from approximately 5-10 feet bgs (bottom of well boring at approximately 13 feet bgs) (see Figure 9B); and
- SVE wells placed in the area of LW-MW-5S (an area of intermediate depths to water), will be constructed similarly to those in the area of LW-MW-1S while SVE wells placed between LW-MW-5S and LW-MW-2S will have gradational screen intervals based on distance from the well location to these two (2) wells (see Figure 5). For example, a well placed one-half way between LW-MW-2S and LW-MW-5S (such as VE-3 and/or VE-13, see Figure 5) would have the lower well screened from approximately 10.5-12.5 feet bgs and the upper well would be screened from approximately 4.5-9.5 feet bgs (bottom of well boring at approximately 12.5 feet bgs).

For the Source Area/Near-Source Area SVE wells, filter pack sand (Lonestar #3 sand) will be placed one foot above the top of the lower screen interval followed by one (1) foot of hydrated bentonite chips. The upper SVE well will then be constructed with five (5) feet of screen at the bottom. Filter pack sand (Lonestar #3) will then be placed to one foot above the top of the screen followed by approximately 0.5 foot to 1.5 feet of hydrated bentonite chips. The top 1.5 feet will be left open to allow for plumbing of remediation piping. Construction details for these wells can be found in Figures 9A and 9B. Note: In driving-accessible areas, well boxes will be set at grade to allow for snow removal equipment to operate during winter months without damaging the wellheads.

Note: For the purpose of allowing for maximum vapor extraction during times of high water table in the Source/Near-Source Area, HVE wells will also be installed during the trenching and plumbing phase of the remediation system installation operations.

The methods and procedures for installation of these HVE wells are discussed under Subtask 3a below.

The Non-Source Area – Using the same criteria as described above for the Source Area/Near Source Area SVE wells, SVE wells in this area will be constructed generally as follows:

- SVE wells placed in the area of LW-MW-6S (an area of shallower depths to water) will be constructed in a nested two-well configuration with the lower well screened from approximately 7.5-9.5 feet bgs and the upper well screened from approximately 4.5-6.5 feet bgs (bottom of well boring at approximately 9.5 feet bgs) (see Figure 9C);
- SVE wells placed in the area of LW-MW-8S (an area of depths to water slightly deeper than those at LW-MW-6S) will be constructed with the lower well screened from approximately 8-10 feet bgs and the upper well screened from approximately 4.5-6.5 feet bgs (bottom of well boring at approximately 10 feet bgs) (see Figure 9D); and

For the non-Source Area SVE wells filter pack sand (Lonestar #3 sand) will be placed to the top of the lower screen interval followed by one (1) foot of hydrated bentonite chips. The upper SVE well will then be constructed with two (2) feet of screen at the bottom. Filter pack sand (Lonestar #3) will then be placed to the top of the screen followed by approximately one (1) foot of hydrated bentonite chips followed by neat cement grout. The top 1.5 feet will be left open to allow for plumbing of remediation piping. Construction details for these wells can be found in Figures 9C and 9D. Note: In driving-accessible areas, well boxes will be set at grade to allow for snow removal equipment to operate during winter months without damaging the wellheads.

Installation of Groundwater Air Sparge Wells

Based on the type of materials (sand) in the shallow water-bearing zone, the air sparging radius of influence will likely exceed thirty five (35) feet (based on experience); however, based on a conservative radius of influence of twenty-five (25) feet, a total of twenty-seven (27) AS wells are proposed and are expected to provide sufficient coverage to affect the defined area of the SZA (see Figure 8).

Each AS well will be constructed using 2-inch ID Schedule 40 PVC with a microporous sparge point set at the bottom (approximately 30.5-32 feet bgs, or the SZA bottom-defining silt layer, whichever occurs first (see Figure 10). Filter pack (Lonestar #3 sand) will be placed from bottom of the well to approximately 6 feet above the top of the sparge point followed by bentonite pellets to 6.5 feet bgs. Neat-cement grout with <5% bentonite powder added will then be tremied through the auger to approximately 1.5 feet bgs to complete the seal. The top 1.5 feet will be left open for plumbing of piping). Each wellhead will be encased within a steel traffic-rated box set in concrete. Construction details for these wells can be found in Figure 10. Note: well boxes that will be set in driving-accessible areas will be set at grade to allow for snow removal equipment to operate during winter months without damaging the wellheads.

Installation of Soil-Vapor Probes

Ten (10) shallow vapor probes (VPs) will be installed to monitor shallow vapor conditions, specifically along the building and around the impacted vadose zone area (see Figure 5 for locations). VP wells will be installed as prescribed in Appendix A. See Figure 15 for typical VP construction diagram.

E_2C field personnel will prepare detailed VP well installation boring logs, which will document the date and time of the installation activity, the depth of each VP well, the screen type and interval; material utilized, and surface completion details. VP well logs and as-built diagrams will be included in the Well Installation Report of Findings (see Task 5 below).

Drilling Decontamination Water

Decontamination water from steam cleaning of drill casings and equipment will be placed in drums and stored onsite. This water will be combined with groundwater sampling purge water (see below) and transported under the appropriate manifesting to a recycling facility within ninety (90) days after generation.

III.B.3 Subtask 2c – Groundwater Monitoring Well Development

Following at least three (3) days after installation of the five (5) new groundwater monitoring wells to allow for the well seals to set, these new monitoring wells will be developed to settle the filter packs and remove fines from the well casing. This will be accomplished via a Smeal rig using the 'surge blocking and bailing' method. Development water will be combined with the decontamination water and groundwater sampling purge water for transport to the recycling facility.

III.B.4 Subtask 2d – Soil Chemical Analyses

The two (2) selected soil samples from each of the SZA monitoring well borings will be chemically analyzed at ProVera Laboratories, Inc. of Bakersfield, California (California State-Certified analytical laboratory #2606) (ProVera) in accordance with State guidelines and EPA protocols for the following VOCs:

- PCE and TCE and associated degradation products of PCE and TCE using EPA Method 8260b, a gas chromatograph/mass spectrometer (GC/MS) method.

III.B.5 Subtask 2e - Electronic Submittal of Data to GeoTracker Database

Soil chemical analytical data will be electronically uploaded to the State GeoTracker database in accordance with the CCR.

III.B.6 Subtask 2f – Loading and Disposal/Recycling of Drill Cuttings

Soil cuttings generated during drilling operations will be placed on and covered by plastic sheeting. Sandbags and/or hay bales, as necessary, will be used to prevent runoff of soils from the stockpile area. A composite soil sample will be collected from the stockpiled soils for profile analysis. The soil sample will be chemically analyzed for the constituents listed above in Section III.B.4. Once profiled, the investigation-derived waste (includes decontamination fluids, etc.) will be transported under the appropriate manifesting to a recycling facility within ninety (90) days, or less, after generation.

III.B.7 Subtask 2g – SZA Monitoring Well Surveying

Existing monitoring wells (three wells) were surveyed previously for relative elevations. After the five (5) new monitoring wells are installed, all eight (8) wells will be surveyed for latitude and longitude coordinates and for wellhead elevation by a State of California-Licensed surveyor.

III.B.8 Subtask 2h – Baseline Groundwater Monitoring

At least 48 hours after development of the five (5) new SZA wells, pre-remediation baseline groundwater conditions will be monitored at all eight (8) LTLW Site SZA wells.

Depths to groundwater will be measured at the eight (8) wells (LW-MW-1S, LW-MW-2S, LW-MW-5S and LW-MW-9S through LW-MW-13S) with a Solinst water level meter to the nearest 0.01-foot indexed from a mark placed at the top of the well casing (generally the north side). Depths to water will be used to calculate the groundwater elevation at each well and a groundwater gradient plot can then be generated.

Low-Flow Sampling Method

During the groundwater sampling event, groundwater samples will be collected utilizing the low-flow sampling method. In this method, groundwater is extracted from the well at a very low rate, approximately 500 milliliters per minute (mL/min), and drawdown of the water table is stabilized. Water is recovered from the more hydrogeologically conductive areas of the aquifer around the well screen, and monitored with water quality sensors for stability to determine chemical change from well water to formation water. Once stabilization occurs, a sample can be taken with the greatest assurance of representative formation water and the least amount of geochemical disruption to the sample. This sampling system has several advantages:

- Improves sample quality;
- Reduces wastewater created by large volumes of sample purging; and
- Saves time in the field with preliminary set-up of sampling events.

During the low-flow purging, groundwater parameters will be monitored in the field with a QED Model MD-20 Flow Cell. The MD-20 Flow Cell measures temperature in degrees Centigrade (°C), dissolved oxygen (DO) in milligrams per liter (mg/L), electrical conductivity in milliseconds per centimeter (mS/cm), pH (in pH units), and ORP (oxygen reduction potential) in millivolts (mV).

After purging, a new disposable bailer will be lowered into a monitoring well to collect a sample. Each sample will be decanted into three (3) 40-milliliter VOA vials. Care will be taken to verify that headspace or bubbles do not exist in the VOAs and each container will be sealed using a Teflon®-lined lid. The samples will be labeled and placed in an iced cooler maintained at 4° Centigrade, accompanied with a chain-of-custody document for transport to the analytical laboratory. All downhole equipment will be cleaned prior to use by washing using a Liquinox solution and double-rinsing with clean potable water.

III.B.9 Subtask 2i – Chemical Analysis of Baseline Groundwater Samples

Baseline groundwater samples will be analyzed at ProVera for the following compounds by the appropriate EPA Method:

- PCE, TCE and associated PCE and TCE degradation products using EPA Method 8260b.

III.B.10 Subtask 2j - Electronic Submittal of Data to GeoTracker Database

Monitoring well survey data, a site plan, boring logs, soil analytical data and groundwater monitoring data will be electronically uploaded to the State GeoTracker database in accordance with the CCR (see Subtask 1b for authorization specifics).

III.C Task 3 - Field Operations: Install Remediation Pilot Test System Elements

Prior to excavating trenches for installation of remedial system plumbing elements, a site visit will be conducted to mark locations and locate utilities (will coincide with Subtask 2a above). USA Underground will be notified forty-eight hours prior to excavation operations.

III.C.1 Subtask 3a - Trenching, Plumbing, Backfilling

Upon completion of the well installations under Task 2 above, trenches for AS and SVE wells will be excavated and remedial plumbing will be installed (see Figure 12 for approximate trenching locations). For the purpose of allowing for maximum vapor extraction during times of high water table, HVE wells will also be installed during this phase of the operations.

AS Well Plumbing

AS well piping will consist of 1/2-inch diameter SCH 40 PVC in the subsurface and 1/2-inch diameter galvanized steel for the above ground portion of the AS piping runs. SVE piping (includes HVE wells) will consist of 2-inch ID SCH 40 PVC. SVE and AS wells will be individually plumbed. The vertical SVE, HVE and AS piping runs will be manifolded at the equipment area above ground (see Figure 12 for approximate equipment location - location may move based on site logistics. A control valve will be installed on the manifold for each SVE and AS well so each well can be adjusted for flow rates on an individual basis. The vapor extraction manifold will also contain a sampling port for each vertical SVE well and each HVE well for sampling of individual influent vapor streams.

HVE Well Construction

Trenches will be excavated to approximately five (5) feet in depth in the vadose zone impacted area. Six (6) inches of sand will be placed along the bottom of the trench and HVE wells be placed followed by approximately six inches of filter pack sand (Lonestar #3, or larger, such as medium aquarium or aquarium sand). A plastic membrane will then be placed onto the sand followed by approximately one (1) foot of bentonite slurry, or grout slurry. The slurry will be allowed to set, then horizontal plumbing connected to vertical SVE wells and AS wells will be laid followed by native soils to grade in non-paved areas. In unpaved areas, fill soils will be compacted to 85% relative density. In paved areas, native soils will be placed to approximately one (1) foot bgs, compacted to approximately 90% relative density, followed by six (6) inches of base rock compacted to approximately 95% relative density followed by a concrete cap to grade (see Figure 13 for typical sectional view and Figure 14 for typical plan view). Compaction tests will be conducted to verify that the compaction criteria are met.

Each HVE well will be constructed with a thirty (30) foot screen (0.020" slot) interval followed by blank piping to the manifold. A separation panel, composed of hydrated bentonite, will be placed between the end and beginning of each screen interval to minimize short-circuiting between horizontal vents (see Figure 14). Three (3) HVE lines will be placed in the northern trench and four (4) HVE lines will be placed in the southern trench, as depicted on Figure 12 (see Figure 7 for HVE radius of influence).

Note: Remediation plumbing trenches outside the vadose impacted area will be constructed similar to the ones inside the vadose impacted area; however, these trenches will only be excavated to approximately three (3) feet in depth with piping and backfill materials placed appropriate to the function such that the top one (1) foot will consist of compacted baserock followed by a 6-inch concrete cap.

Equipment Compound

The compound will require an area approximately twenty (20) feet by thirty (30) feet. Prior to constructing the compound, a concrete pad approximately twenty (20) feet wide by thirty (30) feet long by six (6) inches deep will be formed and poured. The slab and shed will be constructed in accordance with City Building Department guidelines.

Electrical Service Requirements

Electrical service will be provided at the power panel located at the rear of the Raley's store. Three-phase 200-amp 220-volt electrical service will be required. This will necessitate installation of a temporary power pole with an electrical 'drop feed'. The electrical feed for the equipment will be placed in a trench that will be excavated from the panel to the remediation plumbing trench. This will necessitate the installation of three (3) 'pull' boxes. The electrical line, which must consist of 3Ø, 4-wire, approximately 320 feet of wire, will then be encased within the appropriate conduit in the trench to the equipment compound. An electrical panel with meter will be installed inside the equipment containment structure. The panel will contain breakers to split the service to each piece of equipment, thus providing each piece of equipment with an individual breaker, sized to protect the equipment from minor power fluctuations. For equipment protection, the system will be configured for all equipment to shut down in the case of loss of power, or the failure of any piece of equipment. The electrical line installation will be performed in accordance with local building codes and a certified electrical contractor will perform the final hookup.

III.C.2 Subtask 3b – Temporary Landscaping

During the well installation and trenching processes, every effort will be made to not damage or destroy trees. Upon completion of the installation activities, temporary landscaping will be placed to restore the area. The landscaping will generally consist of placing a plastic sheeting layer throughout the planter areas followed by placement of a bark cover and decorative rocks. After the monitoring and remediation systems are decommissioned (see Task 8 below), the planter areas will be restored using native-type plants and other materials.

III.D Task 4 – Field Operations: Remediation System Pilot Testing

After completion of Task 3 above, issuance of the Permit To Operate (PTO) from the EDCAQMD and installation and energizing of electrical service, pilot testing of the SVE/GASS system will commence.

III.D.1 Subtask 4a – Mobilize and Install Remedial Equipment

Remedial system equipment will be mobilized to the Site and placed and secured in the equipment compound. The compound will then be 'winterized' for protection against the elements. Additionally, noise reduction elements will be installed, as warranted, to comply with local noise ordinances.

III.D.2 Subtask 4b – Remedial System Pilot Testing Methods and Procedures

E_2C professional staff, experienced in SVE/GASS technology, will perform Remedial System Pilot Testing (RSPT) of the system for two (2) months (60 days). The RSPT will be conducted to evaluate the system effectiveness along with radii of influence for the newly installed AS, SVE, and HVE wells. Prior to testing, initial groundwater data, including dissolved oxygen (DO) concentrations in groundwater and water levels, will be measured and recorded.

During the testing period, equipment operating parameters will be monitored by E_2C at on-site inspections conducted on a weekly basis. Maintenance and inspection schedules will ultimately comply with the PTO conditions set by the EDCAQMD. The operations and maintenance of the system will include all materials and supplies necessary to conduct normal operational activities such as field screening, systems checks and adjustments, and regular lubrication and maintenance. The SVE/GASS equipment proposed will be equipped with flow and vacuum measurement devices.

The RSPT will be conducted utilizing a 500 SCFM blower system due to the distances of the piping runs and the number of SVE wells. Groundwater air sparging will be accomplished using a 10-hp positive displacement (PD) blower set with control flow valves to regulate air flow into the AS wells on an individual basis.

VOC vapors collected with the vapor extraction system will be routed through a series of two (2) granular activated carbon (GAC) units (see Figure 16 for an idealized remediation system schematic).

During the RSPT, SVE and HVE wells will be systematically turned off at the manifolding to evaluate the vacuum induced on the well through the subsurface, from the active SVE and/or HVE wells. A vacuum pressure gauge will be connected to the inactive SVE and/or HVE wells to measure the vacuum backpressure/drawdown created by the active SVE and/or HVE wells. The vacuum pressure gauge will be capable of detecting pressure changes of 0.1-inch of water. Vacuum backpressure/drawdown will be recorded from each inactive SVE and/or HVE well and this data will be plotted against the distance from the active wells. The distance-backpressure/drawdown curves thus generated will yield the empirical data necessary to estimate whether the well configuration will provide sufficient lateral coverage to effectively remediate the impacted soil and groundwater. The radius of influence testing will also yield information regarding anisotropic flow in the vadose zone.

Measurements collected during the testing will include radius of influence, backpressure, extracted VOC concentrations, dissolved oxygen, and water table elevations. These measurements will be compared to non-sparging/vapor extraction and active sparging/vapor extraction measurements and used to evaluate the effectiveness of the system and the optimum rate at which air is to be injected into the subsurface and extracted by the vapor extraction system.

Influent/Effluent Sampling

During the RSPT, numerous field (using FID) influent and effluent samples (under non-sparging conditions and sparging conditions) will be collected to evaluate the mass removal rates. Effluent samples will also be collected for chemical analyses at an analytical laboratory to verify that the system is in compliance with EDCAQMD PTO conditions.

During the RSPT vapor samples will also be collected from the VP points to evaluate system effectiveness. Note: A discussion of soil-gas monitoring at VP wells is included in Appendix A.

III.D.3 Subtask 4c - Chemical Analyses of Vapor Influent/Effluent Samples

E_2C will collect influent/effluent vapor on a monthly basis to evaluate VOC removal rates and verify that the equipment is operating within EDCAQMD PTO conditions. Vapor samples will be collected using Tedlar® bags and/or Summa canisters. Vapor samples will be transported under chain-of-custody to and will be analyzed at ProVera for the following compounds using the appropriate method (note: samples will be analyzed within the prescribed method holding times):

- PCE, TCE and associated PCE and TCE degradation products using EPA Method 8260b.

III.D.4 Subtask 4d – Electronic Submittal of Data to GeoTracker Database

Pilot Testing remediation influent/effluent data will be electronically uploaded to the State GeoTracker database in accordance with the CCR.

III.D.5 Subtask 4e – Interim Operations

After completion of the RSPT, the equipment will continue to operate with the weekly inspection visits during the period of time it takes to complete Tasks 5 and 6 below.

III.E Task 5 – Remediation System Installation/Pilot Testing ROF/Draft RAP

III.E.1 Subtask 5a – RSIPT ROF/Draft RAP

Upon completion of the Pilot Test, a Remediation System Installation/Pilot Testing Report of Findings (RSIPT ROF) will be prepared that describes the methods and procedures that were used to install the wells and the elements of the Interim Remedial System and conduct the Pilot Testing. The ROF will be prepared under the supervision of, be reviewed by, and be certified by a State of California Professional Geologist and will include at a minimum the following:

- Description of all work elements under Tasks 1 through 4 above;
- Description of Well Installation (SVE, VP, AS and MW) Procedures and Findings;
- Remedial System Installation Methods and Procedures;
- Remedial System Pilot Testing Methods and Procedures;
- Soil and Water Field Screening Methods and Procedures;
- Sample Collection Procedures;
- Analytical Methods;
- Baseline and Quarterly Groundwater Monitoring and Sampling Methods and Procedures;
- Tabular and graphical summaries of data;
- A Draft RAP (RAP), which will include methods and procedures for implementing longer-term remedial action
- Sampling and Analysis Quality Assurance Plan;
- Status Reporting; and
- Scheduling.

III.E.2 Subtask 5b – Electronic Submittal of Reports to GeoTracker Database

The RSIPT ROF/Draft RAP will be electronically uploaded to the State GeoTracker database once approved by the CRWQCB. Additionally, although the boring logs will be included in the RSIPT ROF/Draft RAP, they will also be separately uploaded to the GeoTracker database in accordance with the CCR.

III.F Task 6 – Public Notification Process & Final RAP

Upon approval of the Draft RAP, the public notification process will commence.

III.F.1 Subtask 6a – Public Notification

Public Notification Subtasks to be performed under this process will consist of the following:

Task 6a(1)	Prepare and submit Public Notification Workplan (PNW) (PNW will contain a Draft Public Notification Letter for approval by the CRWQCB);
Task 6a(2)	Upon approval of the PNW, all properties within 500 feet of the groundwater plume and will be identified and tabulated;
Task 6a(3)	Tabulate parcel and property owner information for all parcels identified in Task 2;
Task 6a(4)	Send copies of the CRWQCB approved Public Notification Letter (from Task 1) to all parcels identified in Task 3;
Task 6a(5)	Place an ad in the local newspaper to establish a thirty (30) day comment period and place the Draft RAP in a Public Repository (generally the nearest Public Library) for public review;
Task 6a(6)	Collate and tabulate public questions and/or comments and prepare a Public Participation Plan to address public concern or comments regarding the ongoing investigation and cleanup of the affected properties;
Task 6a(7)	Attend Public Meetings as required by the CRWQCB; and
Task 6a(8)	Present a schedule for implementation of the above-described Tasks.

III.F.2 Subtask 6b – Final RAP

Upon completion of the Public Notification Process, the comments regarding the Draft RAP will be incorporated into a Final RAP (FRAP). The FRAP will then be sent to the CRWQCB for signature by the Executive Officer. When that signature is received, the elements of the FRAP can be implemented.

III.F.3 Subtask 6c - Electronic Submittal of Reports to GeoTracker Database

The PNW, PPP, the distributed PPP and FRAP will be electronically uploaded to the State GeoTracker database in accordance with the CCR.

III.G Task 7 – Implementation of the FRAP

III.G.1 Subtask 7a – Remediation System Operations and Maintenance

E_2C professional staff, experienced in SVE/GASS technology, will perform site inspections on a weekly basis to optimize and maintain the remedial system equipment. During each inspection visit, equipment operating parameters will be monitored and recorded. Maintenance and inspection schedules will ultimately comply with the PTO conditions set by the EDCAQMD. The operations and maintenance of the system is to include all materials and supplies necessary to conduct normal operational activities such as field screening, systems checks and adjustments, and regular lubrication and maintenance. The SVE/GASS equipment proposed will be equipped with flow and vacuum measurement devices.

VOC vapors will be extracted from the subsurface through the vertical and horizontal vents with routing of vapors through the vapor extraction system and through a series of two (2) GAC units.

III.G.2 Subtask 7b – Remediation System Equipment

Remedial operations will be conducted using a 500 SCFM blower system due to the distances of the piping runs and the number of SVE and HVE wells. Groundwater air sparging will be accomplished using a 10-hp PD blower set with control flow valves to regulate air flow into the AS wells on an individual basis.

III.G.3 Subtask 7c – Carbon Change-outs

It is anticipated that two (2) carbon change-outs will be required. An outside carbon purveyor will be contracted to remove used carbon from site and replenish canisters with fresh carbon. Each carbon change-out will be scheduled to coincide with a weekly O&M inspection visit.

III.G.4 Subtask 7d – Chemical Analyses of Vapor Influent/Effluent Samples

During the remedial operations, E_2C will collect influent/effluent vapor on a monthly basis to evaluate VOC removal rates and verify that equipment is operating within EDCAQMD PTO conditions. Samples will be analyzed at ProVera for:

- PCE, TCE and associated PCE and TCE degradation products using EPA Method 8260b.

III.G.5 Subtask 7e – EDCAQMD Annual Inspection Testing

An annual EDCAQMD Inspection Test will be conducted for each year of SVE/GASS operation after the date of the Startup Inspection Test. An EDCAQMD Inspector will visit the Site to verify that the machine meets Permit conditions. Influent and effluent samples will be collected. The influent and effluent vapor samples will be analyzed at a State of California-certified analytical laboratory for the constituents listed in Subtask II.7.d above.

III.G.6 Subtask 7f – Electronic Submittal of Reports to GeoTracker Database

Remediation influent/effluent data will be electronically uploaded to the State GeoTracker database in accordance with the CCR.

III.H Task 8 – Field Operations: Groundwater Monitoring/Sampling

Upon approval of the FRAP by CRWQCB following the public notification process, groundwater monitoring will be performed on a quarterly basis. Provisions for 4.5 years of monitoring are included (2.5 years during remedial operations and two (2) years of post-remediation monitoring).

III.H.1 Subtask 8a – Groundwater Monitoring and Sampling

Depths to groundwater will be measured at all site monitoring wells (LW-MW-1S, LW-MW-2S, LW-MW-5S, and LW-MW-9S through LW-MW-13S) with a Solinst water level meter to the nearest 0.01-foot indexed from a mark placed at the top of the well casing. Depths to water will be used to calculate the groundwater elevation at each well from which the groundwater flow direction and gradient can be calculated.

Groundwater samples will be collected utilizing the low-flow sampling method (see Subtask 2h above for description of method).

III.H.2 Subtask 8b – Soil-Gas Monitoring

Soil-gas will be monitored at the VP wells as discussed in Appendix A.

III.H.3 Subtask 8c – Groundwater Analytical Services

Groundwater samples will be chemically analyzed at ProVera for the following compounds by the appropriate EPA Method:

- PCE, TCE and associated PCE and TCE degradation products using EPA Method 8260b.

III.H.4 Subtask 8d – Soil-Gas Analytical Services

Soil-gas samples will be chemically analyzed at ProVera for the following compounds by the appropriate EPA Method:

- PCE, TCE and associated PCE and TCE degradation products using EPA Method 8260b.

III.H.5 Subtask 8e – Electronic Submittal of Reports to GeoTracker Database

Groundwater and soil-gas analytical data will be electronically uploaded to the State GeoTracker database in accordance with the CCR.

III.H.6 Subtask 8f – Purge and Entrained Water Disposal/Recycling

Purge water from groundwater monitoring will be temporarily stored in an on-site holding tank. Upon completion of monitoring/sampling activities for each quarterly monitoring event, the purge water will be transferred to a properly licensed and permitted disposal/recycling facility by a properly licensed and permitted transporter under the appropriate manifests. Based on concentrations in the shallow groundwater, it is anticipated that purge water will be transported and recycled as non-hazardous purge water.

III.I Task 9 – Status Reporting

A report of the remedial systems status will be prepared and submitted by the last day of the month following each quarter. The remedial status report will compile and review data generated during remedial system operations.

Approximately one (1) month after FRAP remedial system startup, the EDAQMD Startup Report will be prepared and submitted. Annual EDCAQMD status reports will then follow.

For each report, data will be compiled, interpreted, and presented in a technical report that is prepared under the supervision of, is reviewed by, and is certified by a State of California Professional Geologist. Remedial Systems Status Reports will be combined with Quarterly Groundwater Monitoring reports to reduce overall project costs.

III.I.1 Subtask 9a – Quarterly Status Reports

On a quarterly basis, a combined groundwater monitoring report and remediation status report (QMR/RSR) will be prepared and submitted by the last day of the next month following each quarter. Each quarterly report will comply with the Monitoring and Reporting Program (MRP) established by the CRWQCB for the project and will contain, at a minimum, the following:

- Tabulated results of all previous and to date investigations;
- Groundwater elevation and contamination contour maps;
- Site map clearly indicating the aerial extent of contamination plumes;
- A summary of analytical data to date, Combined Remedial System equipment records, daily/weekly inspection records, and a discussion of remedial progress; and
- In addition, each quarterly monitoring report will contain a conclusions and recommendations section clearly indicating what further actions, if any, are required.

III.I.2 Subtask 9b – EDCAQMD Status Reporting

EDCAQMD status reporting will not be required until full-scale operation of the SVE/GASS commences. This status reporting will then consist of a Startup Inspection Test report and Annual Inspection Test reports. This status reporting will ultimately comply with EDCAQMD PTO conditions.

III.I.3 Subtask 9c - Electronic Submittal of Reports to GeoTracker Database

The QMR/RSRs and EDCAQMD status reports will be electronically uploaded to the State GeoTracker database in accordance with the CCR.

III.J Task 10 – Site Decommissioning & Site Restoration

When the Site is approved for closure by the CRWQCB, site monitoring and remediation elements will be decommissioned and the site will be restored to pre-remediation conditions.

III.J.1 Subtask 10a – Site Decommissioning Workplan

A Workplan will be prepared and submitted for CRWQCB approval. The Workplan will describe methods and procedures for decommissioning the monitoring and remediation system elements.

III.J.2 Subtask 10b – Well Abandonment Permitting

Upon approval of the Workplan, the appropriate permits will be acquired and the decommissioning process will commence.

III.J.3 Subtask 10c – Well Abandonment

Vertical wells (8 groundwater monitoring, 20 nested two-well vertical SVE, 7 VP and 27 AS) will be high pressure grouted with drill-out of top 3 feet (vertical wells). The seven (7) HVE wells will be pumped with grout from the manifold.

III.J.4 Subtask 10d – Decommission Equipment and Remove from Site

Remedial system equipment will be disconnected and removed from the Site. The electrical connection at the power panel will be de-energized and the power pole and panel will be removed from the Site. The equipment compound will be dismantled and removed from the Site. The equipment pad (concrete pad) will be broken up and removed from the Site. The underground electrical line (from power pole to equipment pad) will be capped on each end and left in place.

III.J.5 Subtask 10e – Site Restoration

Upon completion of the decommissioning activities, a landscaping subcontractor will be hired to restore the planter areas.

III.J.6 Subtask 10f – Site Decommissioning Report of Findings

Upon completion of the Site Decommissioning activities a report of findings (SDROF) will be generated. This SDROF will describe methods and procedures used in the decommissioning process including well abandonment procedures and site restoration procedures and will request that the No Further Action (NFA) letter be issued.

Upon receipt of the SDROF, the CRWQCB would issue the NFA letter.

III.J.7 Subtask 10g - Electronic Submittal of SDROF to GeoTracker Database

The SDROF will be electronically uploaded to the State GeoTracker database. This would be the last required upload deliverable in accordance with the CCR.

IV. SCHEDULING

The projected duration of the cleanup activities is 2.5 years (30 months), with two (2) additional years (24 months) of quarterly groundwater monitoring and reporting to verify cleanup effectiveness. The overall anticipated project duration from start of interim remedial measures to closure is fifty-four (54) months. It is important to note that Tasks within the project are interdependent upon start and end times of other Tasks within the project. As such, if the scope of work for a Task is changed, or delayed, then starting and/or completion of other Tasks within the project may also be affected. If Task changes or delays are incurred, then the project schedule will be updated to reflect the current conditions.

Upon approval of this IRAWP, remedial work at the Site will commence with preparation of and submittal of the ATC to the EDCAQMD. Once the PTO is issued by the EDCAQMD and the other respective permitting agencies, the subcontractors will be scheduled. It is anticipated that it will take 30 days to acquire all permits.

Since installation of wells and the remedial system will occur during the peak time of year for tourism in the South Lake Tahoe area, it will require careful coordination with LTLW and adjacent property owners in scheduling of field work.

Once the drilling permits are acquired, it will take approximately three (3) weeks to install the additional groundwater monitoring wells and the remediation wells (vapor extraction and sparge), and the vapor sampling points.

After receipt of the PTO, E_2C will acquire any remedial system equipment not already in stock. It is anticipated that it will take approximately one (1) month of field work to trench and plumb the remedial wells to the equipment compound area, construct the equipment compound and have the needed utilities installed. Portions of this work may take place during portions of the well installation process, thus facilitating completion of these Tasks.

Once the remedial systems installation tasks are completed, the RSPT will be conducted over a period of sixty (60) days. Approximately forty-five (45) days after completion of the RSPT, the RSPT ROF/Draft RAP will be issued.

Upon receipt of regulatory approval of the Draft RAP, the Public Notification process will begin, which will require approximately forty-five (45) days to allow for mailing of documents. At the end of the Public Notification process, the FRAP will be prepared and submitted for regulatory review (CRWQCB review). Upon approval of the FRAP by the CRWQCB, it will be finalized and sent to the CRWQCB Executive Officer for signature. Once the FRAP is executed, full-scale site remediation will commence.

Note: For the period of time from the end of the SVE/GASS Pilot Test until the CRWQCB Executive Officer execution date of the FRAP, the site remedial system will operate in *'interim remedial action'* mode. All remedial system operation and maintenance tasks will be in force during this period of time. This will allow for remediation of the Site in a timely manner.

V. QUALITY ASSURANCE PLAN

This section describes field and analytical quality-assurance procedures to be followed during the investigation and remediation.

V.A Sample Collection and Handling Protocol

Proper sample collection and handling are essential to assure quality of data obtained from a sample. Therefore, each soil sample will be collected in a brass or stainless steel tube, each groundwater sample will be collected in VOAs and each soil-gas sample will be collected in a Summa canister. All samples (soil, groundwater and/or soil-gas) will be preserved correctly for the intended analysis and stored for no longer than permissible holding time prior to analysis.

V.B Sample Identification and Chain-of-Custody Protocol

Sample identification and Chain-of-Custody procedures are designed to assure sample quality and to document sample possession from the time it is collected to the time of its ultimate disposal. The container for each sample submitted for analysis will have a label affixed with the identifying number or the number will be inscribed directly on the container. The analytical laboratory will assign a separate sample number unique to that sample for internal sample coordination and identification. A description of the sample including the sample number and other pertinent information regarding its collection and/or geologic significance will be written in field notes and/or a geologic boring log being prepared by the site geologist. These field documents will be kept in a permanent project file. All samples will be analyzed by a state certified laboratory for the analyses requested.

A properly completed Chain-of-Custody Form will be submitted to the analytical laboratory along with sample. The laboratory's assigned number will be properly entered on the form.

A quality control officer at the lab will verify integrity of sample submitted, proper sample volume, correctness of containers used, and properly executed Chain-of-Custody Form. Pertinent information will be entered into a log book kept by the laboratory.

V.C Analytical Quality Assurance

In addition to routine calibration of analytical instruments with standards and blanks, the analyst is required to run duplicates and spikes on 10 percent of analyses to assure an added measure of reliability and precision. Accuracy is verified through the following:

1. U.S. EPA and State certification of results;
2. Participation in inter-laboratory round robin program;
3. "Blind" samples are submitted for analysis by the quality control officer on a weekly basis; these are prepared from National Bureau of Standards specifications of EPA reference standards;
4. Verification of results with an alternative method.

VI. LIMITATIONS AND CERTIFICATION

This IRAWP has been prepared under the professional supervision of the registered professionals whose seals and signatures appear herein. The proposed site monitoring and remediation tasks in this Workplan are based solely on the Scope of Services outlined and the sources of information referenced in this report. Any additional information that becomes available concerning the Site should be submitted to E_2C so that our conclusions may be reviewed and modified, if necessary. This IRAWP was prepared for the sole use of Seven Springs Limited Partnership, Fox Capital Management, and/or their agent(s), the CRWQCB and the EDCEMD.

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VII. REFERENCES

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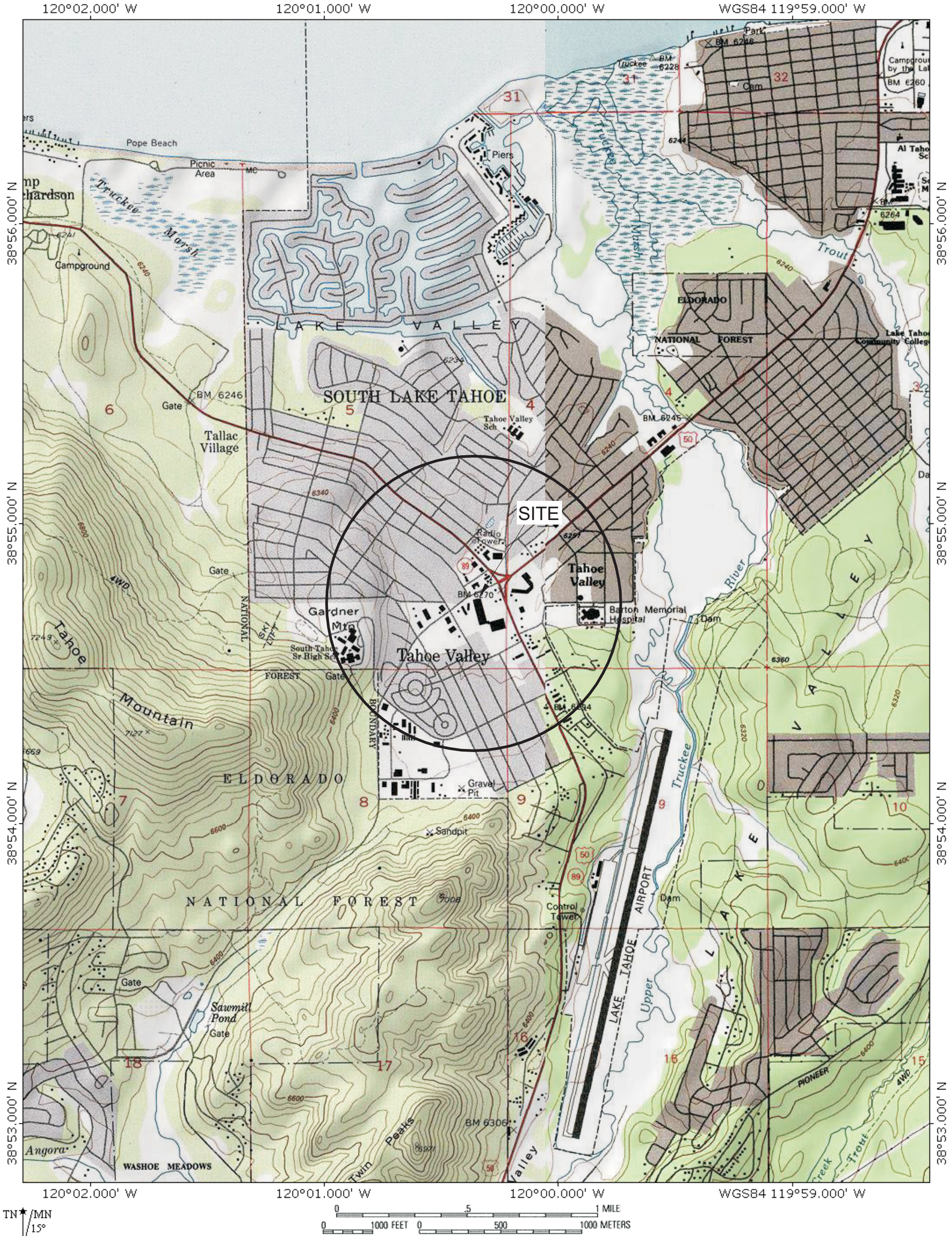
FIGURES

TOPO! map printed on 04/24/08 from "Untitled.tpo"



Map created with TOPO!® ©2003 National Geographic (www.nationalgeographic.com/topo)

E_2C Remediation

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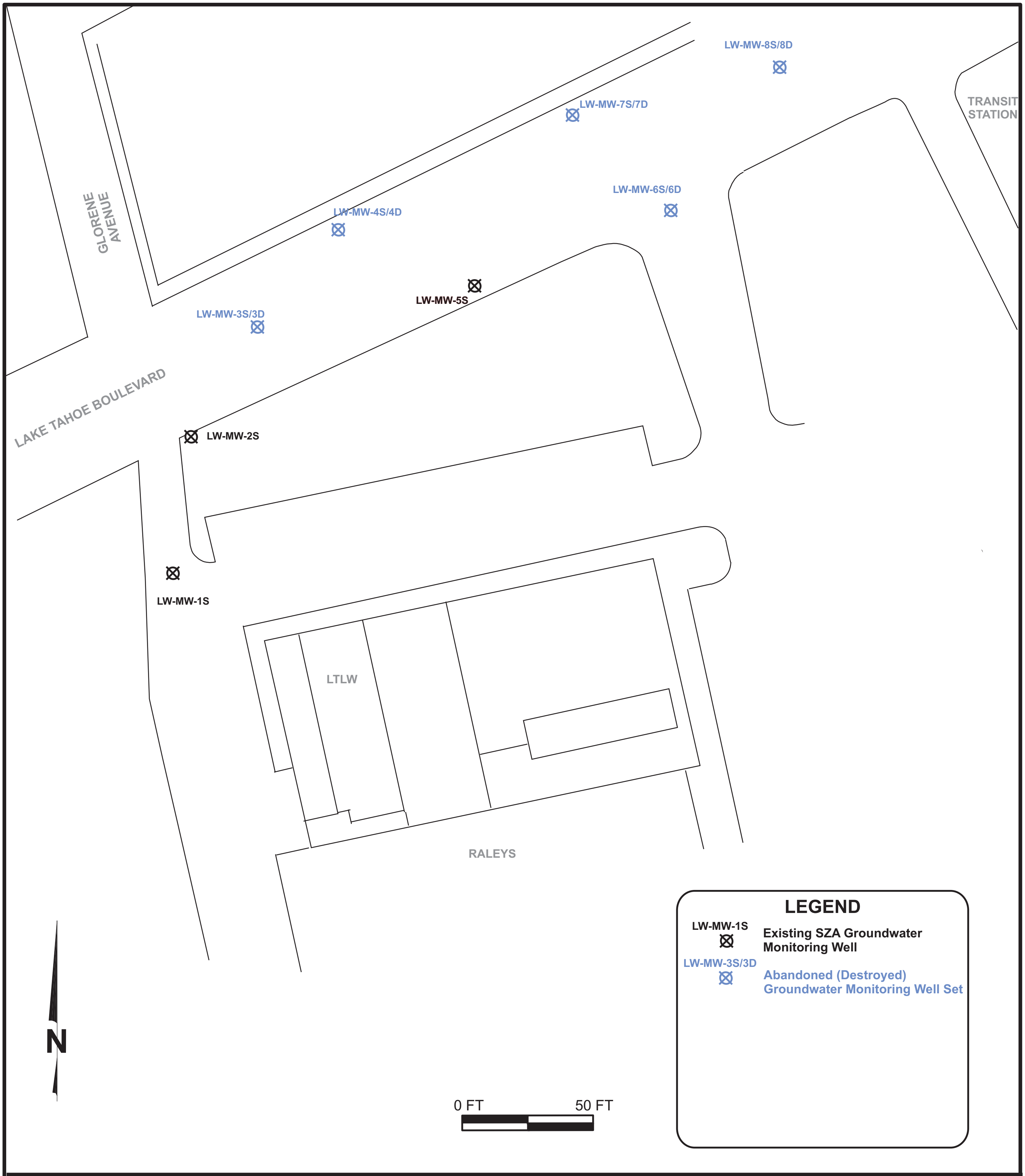
LAKE TAHOE LAUNDRY WORKS
1024 LAKE TAHOE BOULEVARD
SOUTH LAKE TAHOE, CALIFORNIA

SITE LOCATION MAP

FIGURE

1



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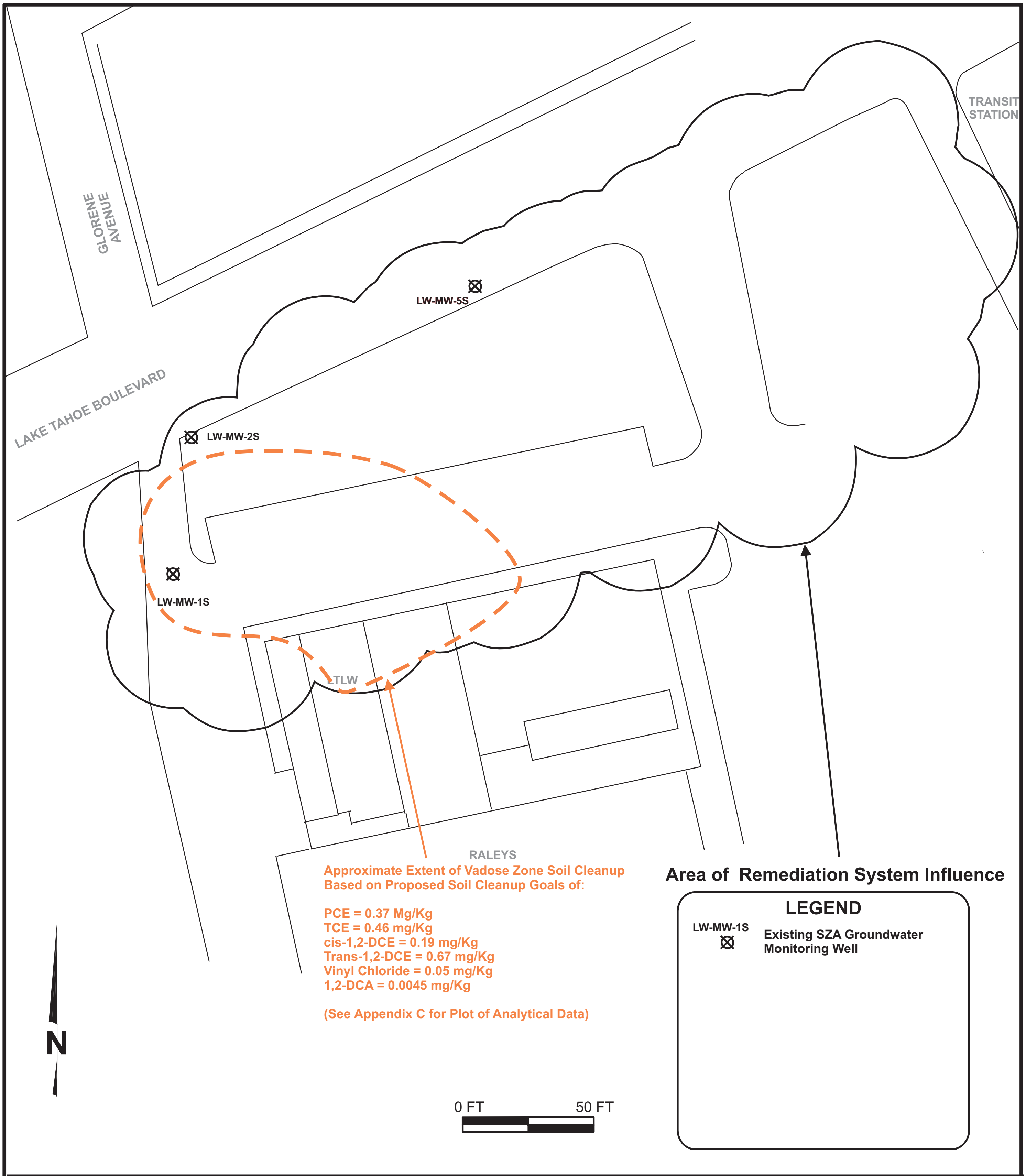
LAKE TAHOE LAUNDRY WORKS
1024 LAKE TAHOE BOULEVARD
SOUTH LAKE TAHOE, CALIFORNIA

SITE PLAN

FIGURE

2



Approximate Extent of Vadose Zone Soil Cleanup
Based on Proposed Soil Cleanup Goals of:

PCE = 0.37 Mg/Kg
TCE = 0.46 mg/Kg
cis-1,2-DCE = 0.19 mg/Kg
Trans-1,2-DCE = 0.67 mg/Kg
Vinyl Chloride = 0.05 mg/Kg
1,2-DCA = 0.0045 mg/Kg

(See Appendix C for Plot of Analytical Data)

Area of Remediation System Influence

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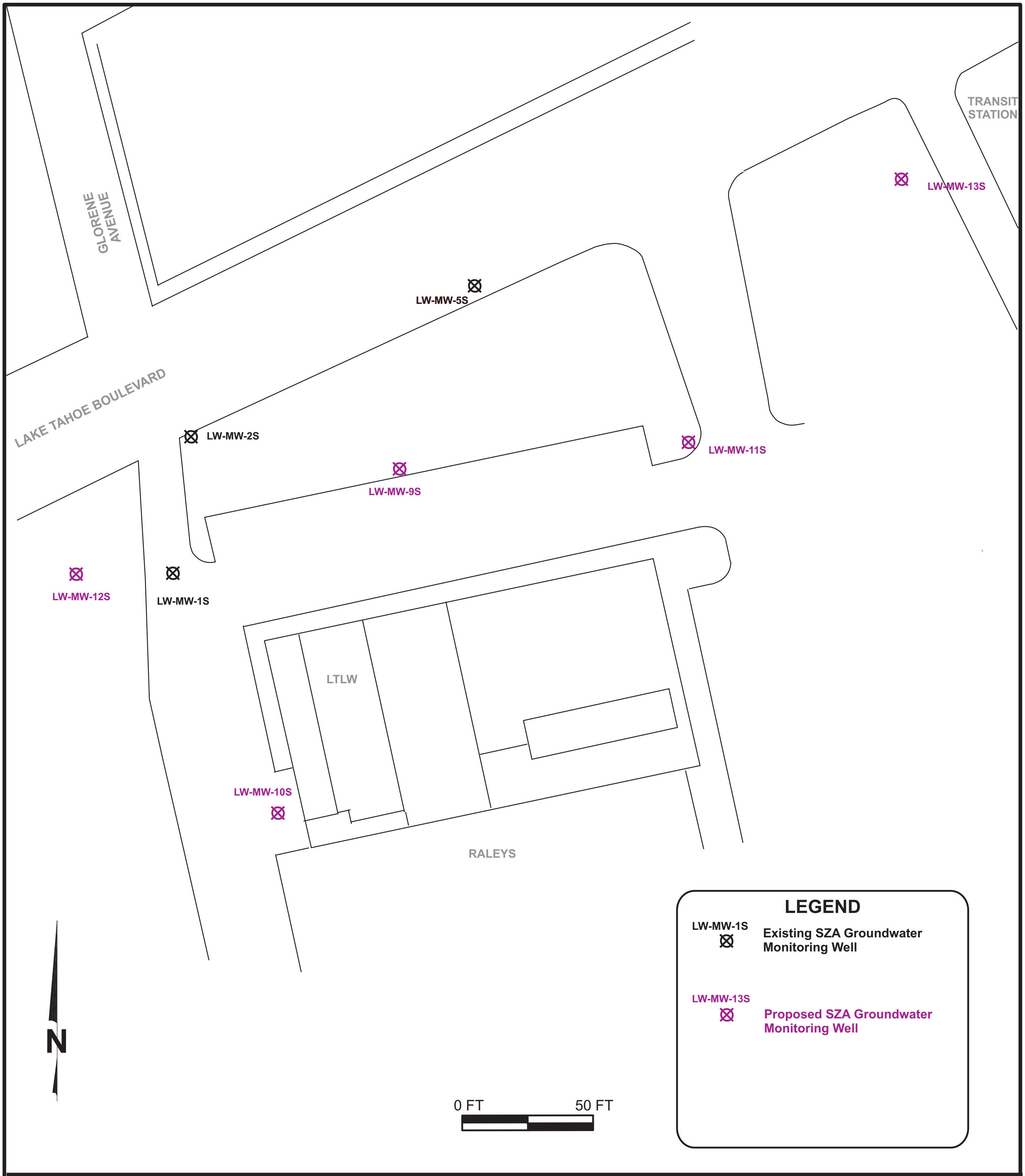
REMEDIATION AREA

FIGURE

3



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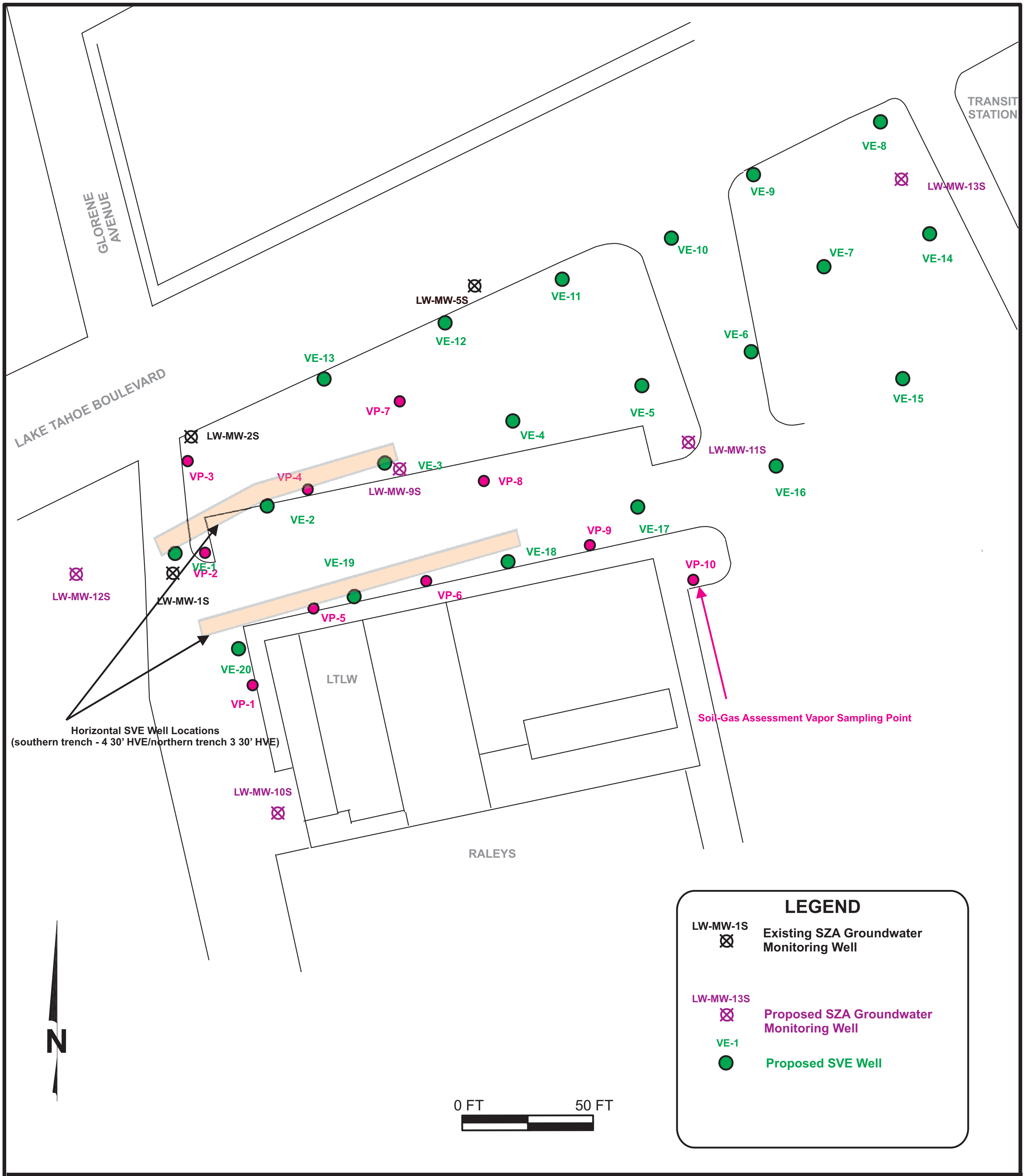
LAKE TAHOE LAUNDRY WORKS
1024 LAKE TAHOE BOULEVARD
SOUTH LAKE TAHOE, CALIFORNIA

PROPOSED SZA GROUNDWATER MONITORING WELL PLOT

FIGURE

4



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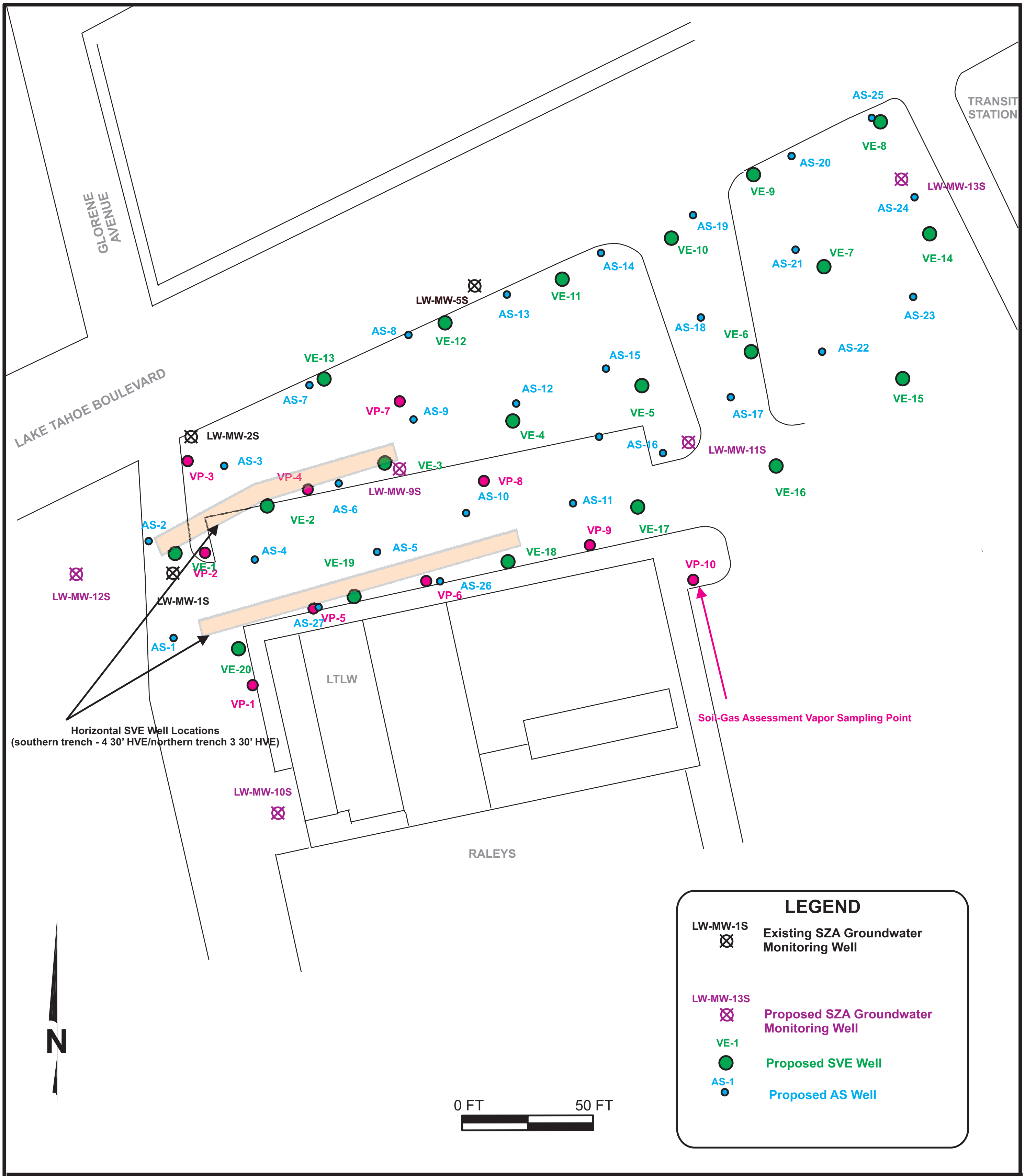
SVE WELL LOCATION PLOT

FIGURE

5



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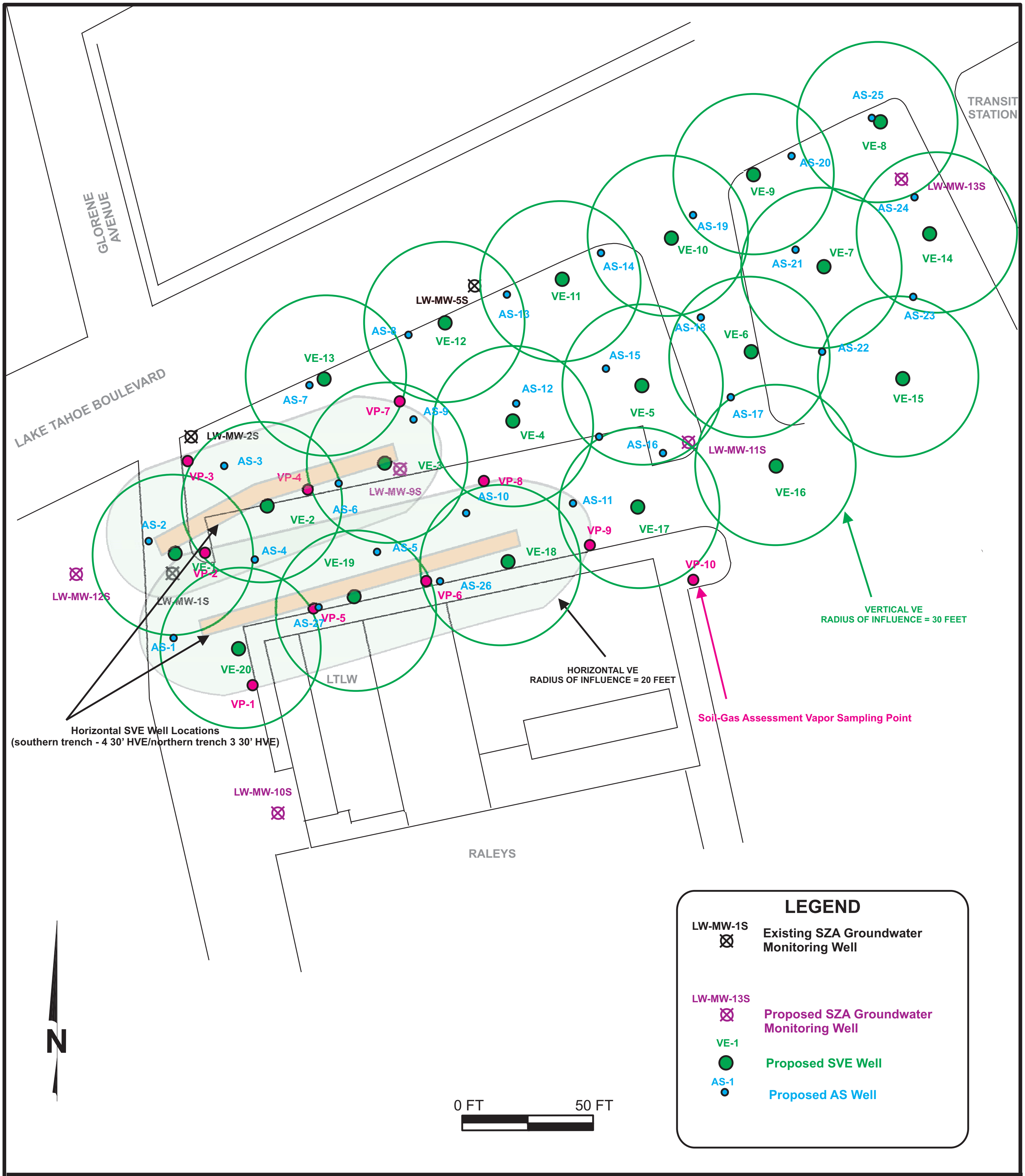
AS WELL LOCATION PLOT

FIGURE

6



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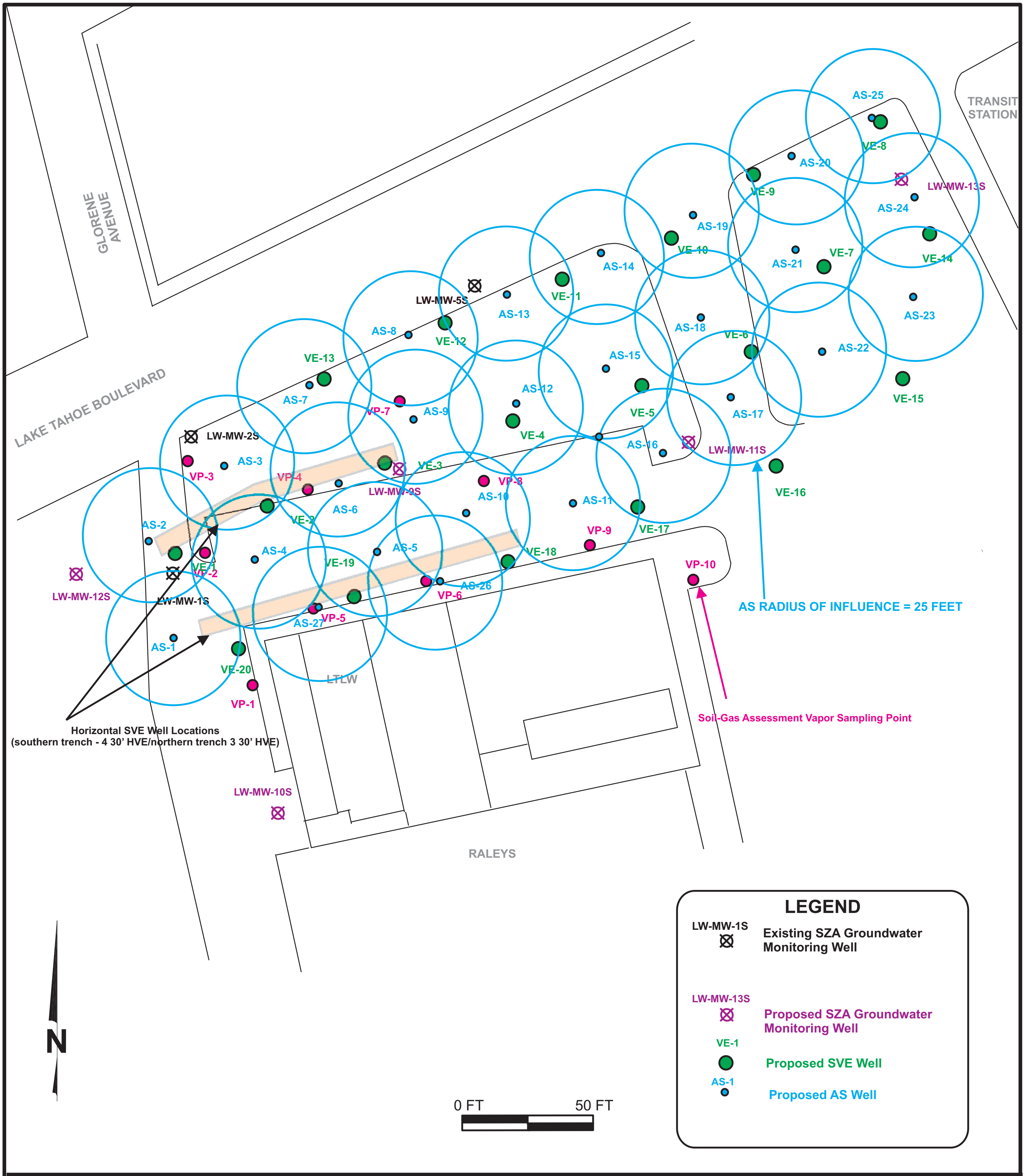
SOIL VAPOR EXTRACTION
RADIUS OF INFLUENCE PLOT

FIGURE

7



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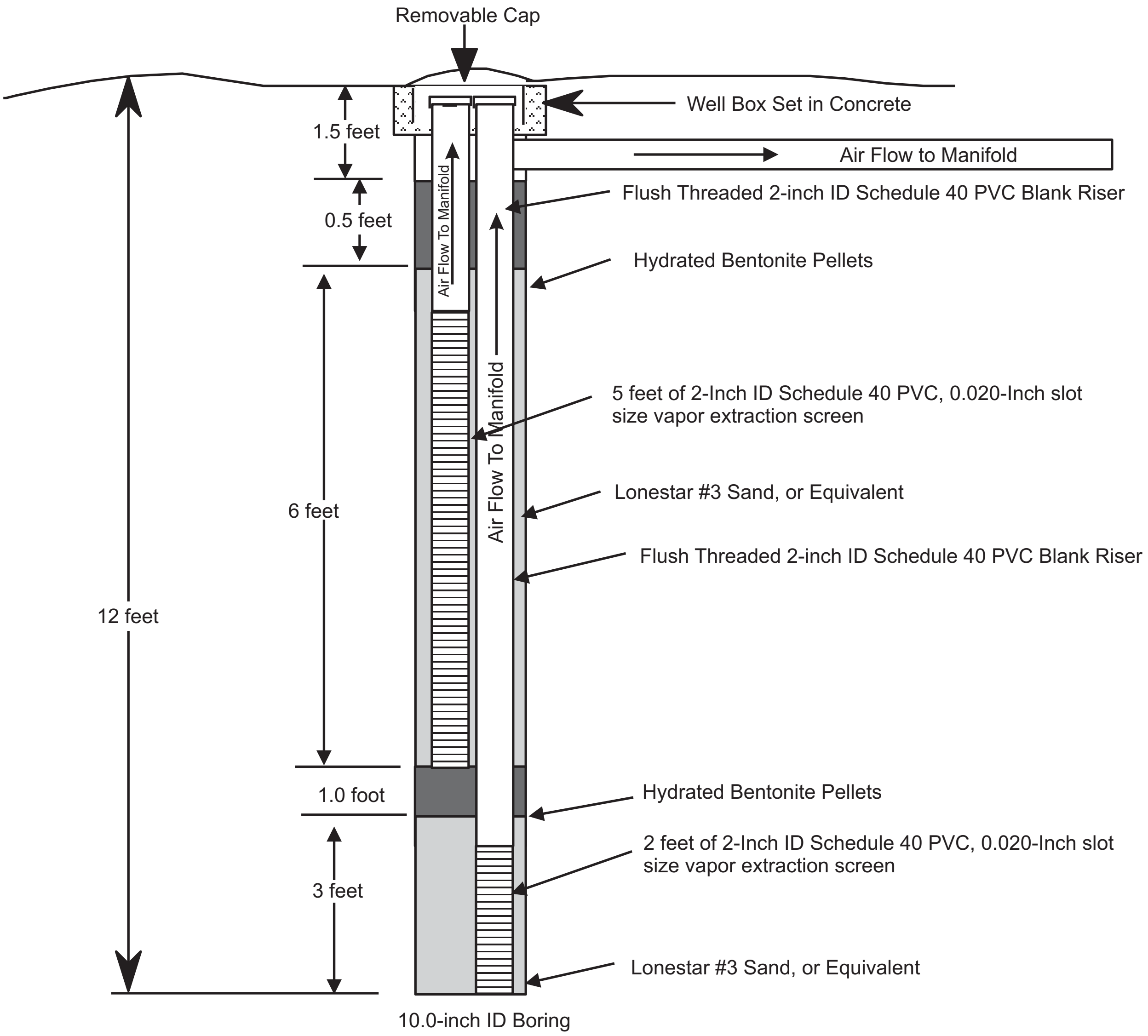
GROUNDWATER AIR SPARGING
RADIUS OF INFLUENCE PLOT

FIGURE

8

Note: Well head installed with a traffic-rated,
flush-mount cover in paved areas



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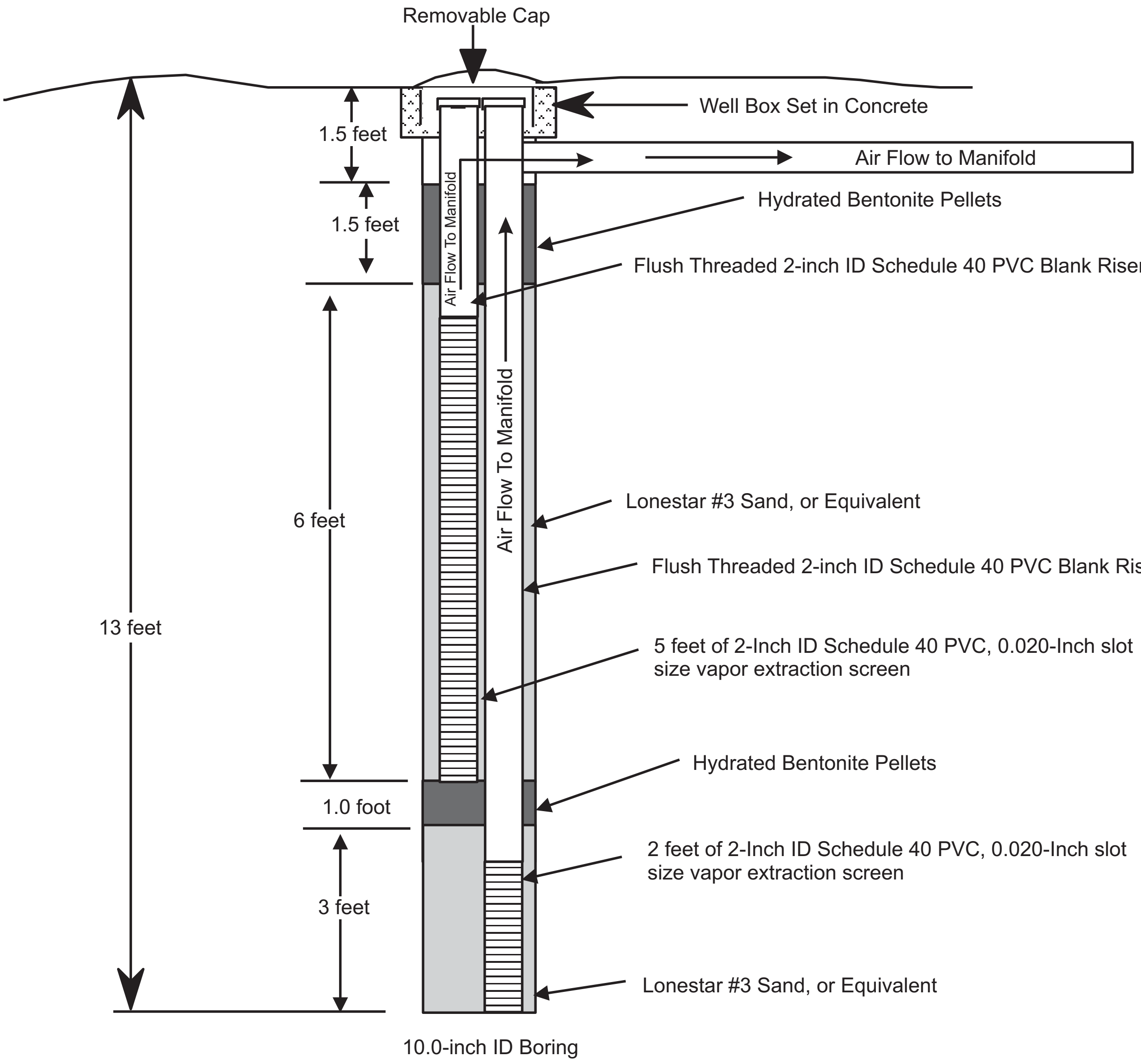
TYPICAL SOURCE AREA
NESTED TWO-SVE WELL DIAGRAM
INTERMEDIATE DEPTHS TO WATER

FIGURE

9A

Note: Well head installed with a traffic-rated,
flush-mount cover in paved areas



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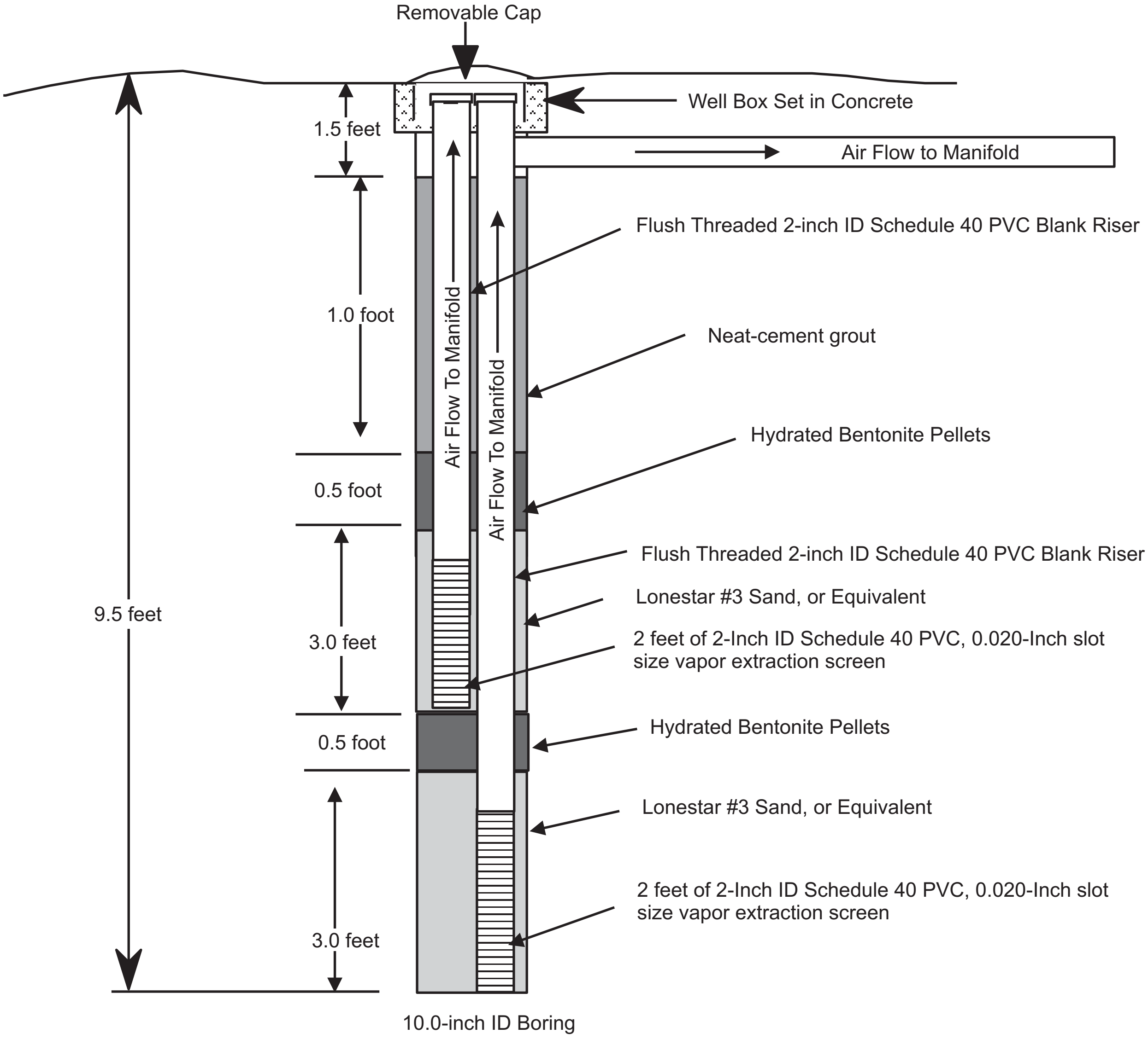
TYPICAL SOURCE AREA
NESTED TWO-SVE WELL DIAGRAM
DEEPER DEPTHS TO WATER

FIGURE

9B

Note: Well head installed with a traffic-rated,
flush-mount cover in paved areas



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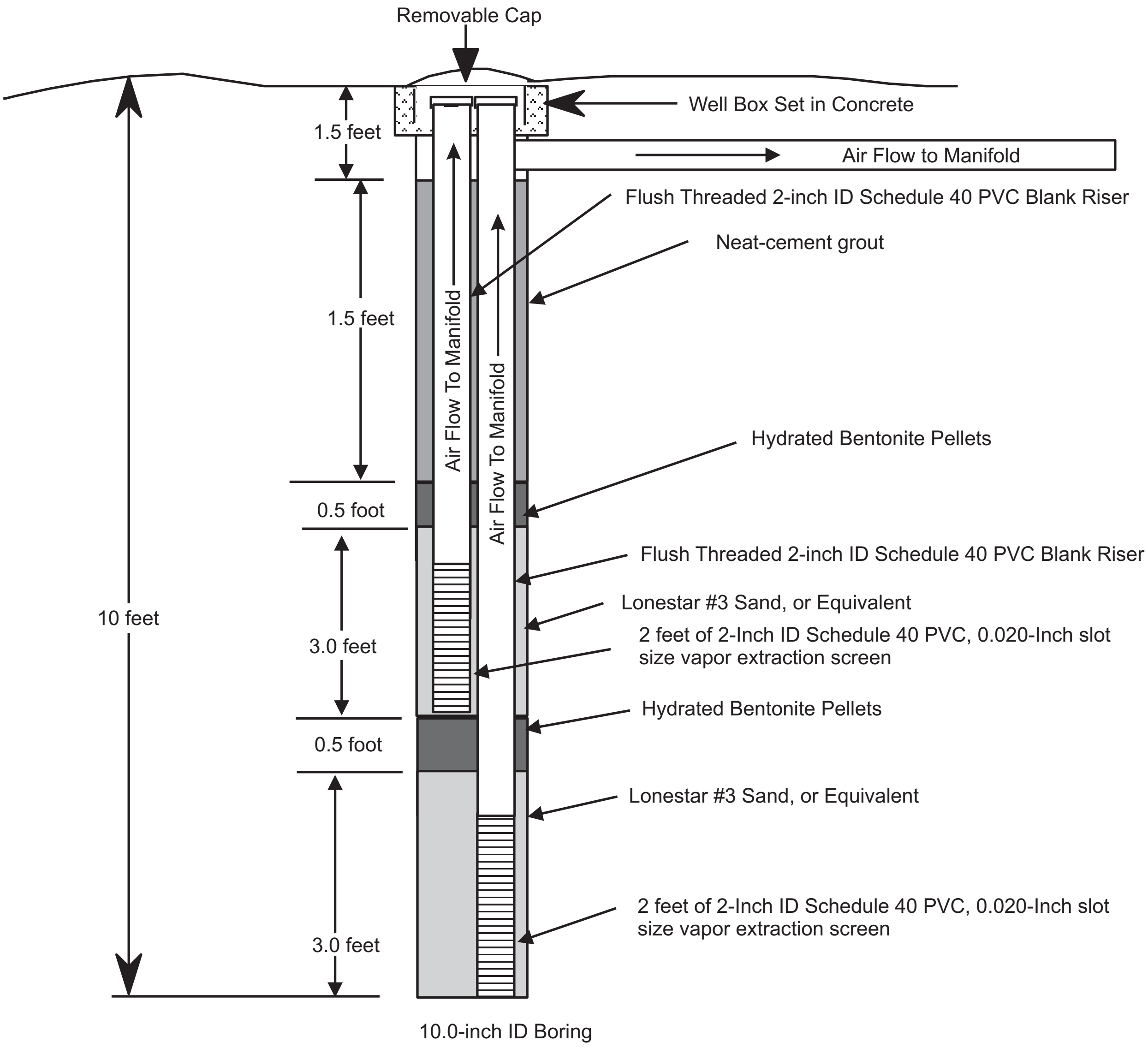
TYPICAL NON-SOURCE AREA
NESTED TWO-SVE WELL DIAGRAM
SHALLOW DEPTHS TO GROUNDWATER

FIGURE

9C

Note: Well head installed with a traffic-rated,
flush-mount cover in paved areas



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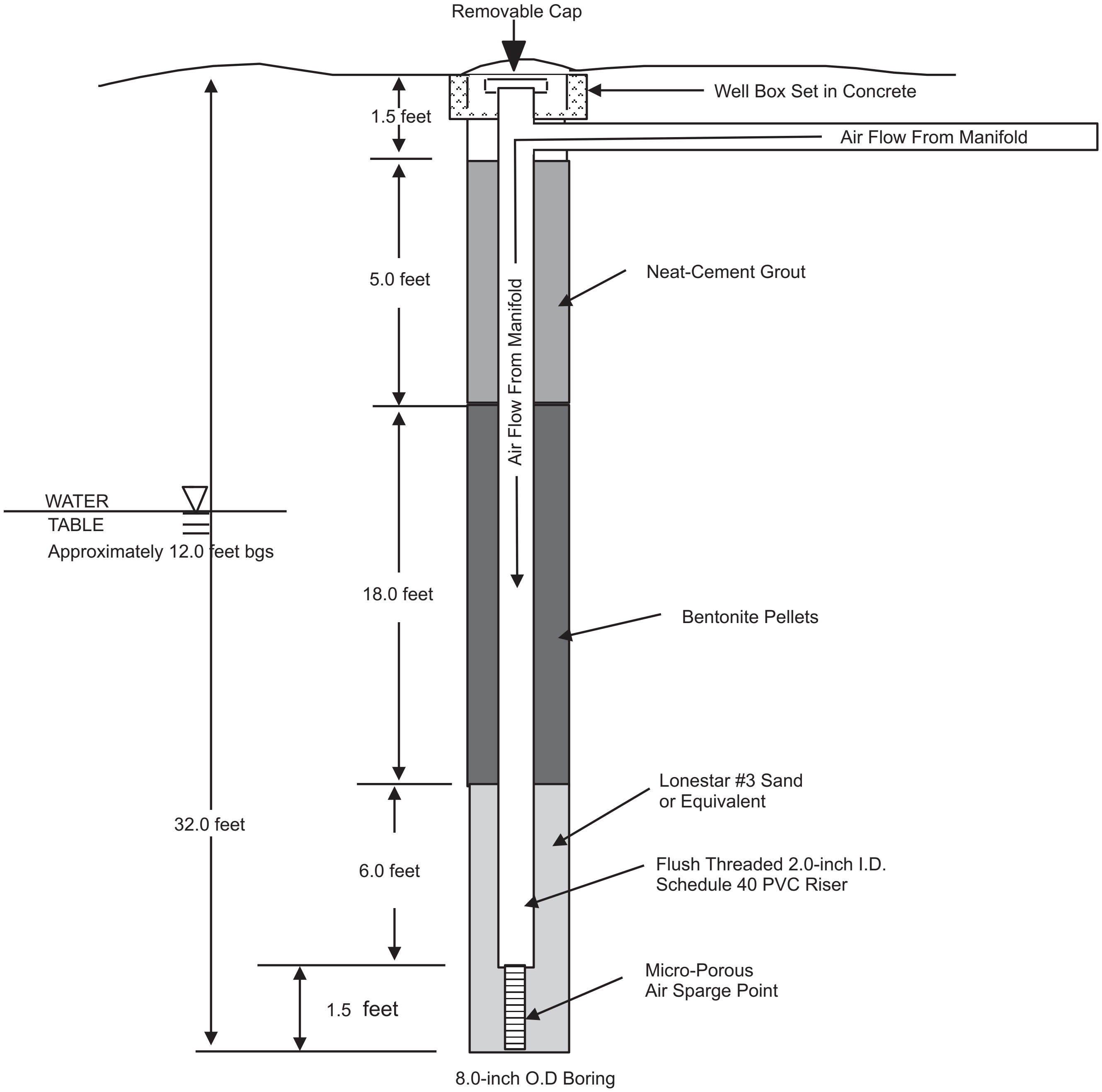
TYPICAL NON-SOURCE AREA
NESTED TWO-SVE WELL DIAGRAM
INTERMEDIATE DEPTHS TO GROUNDWATER

FIGURE

9D

Note: Well head installed with a traffic-rated,
flush-mount cover in paved areas



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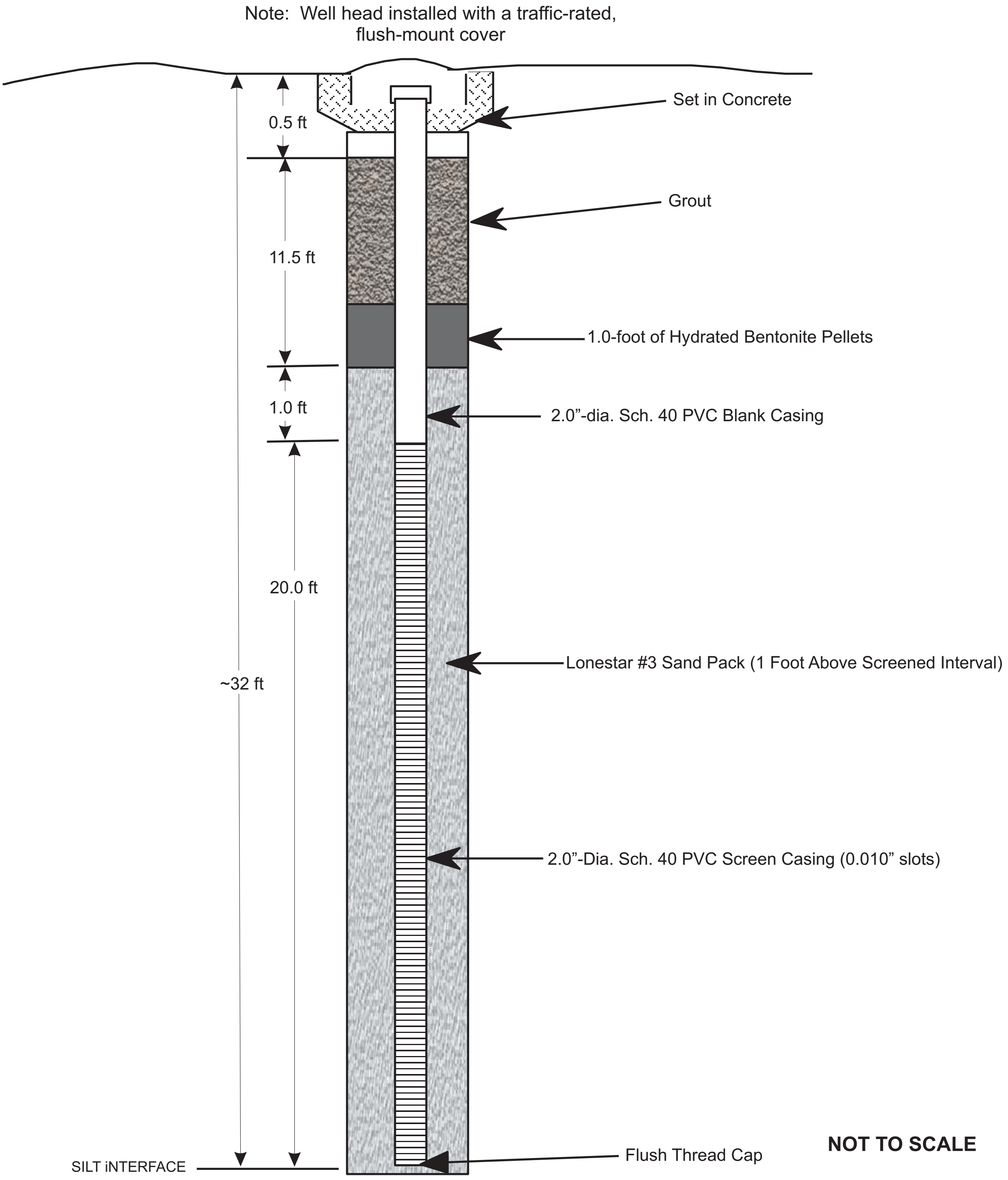
TYPICAL AIR SPARGE
WELL DIAGRAM

FIGURE

10



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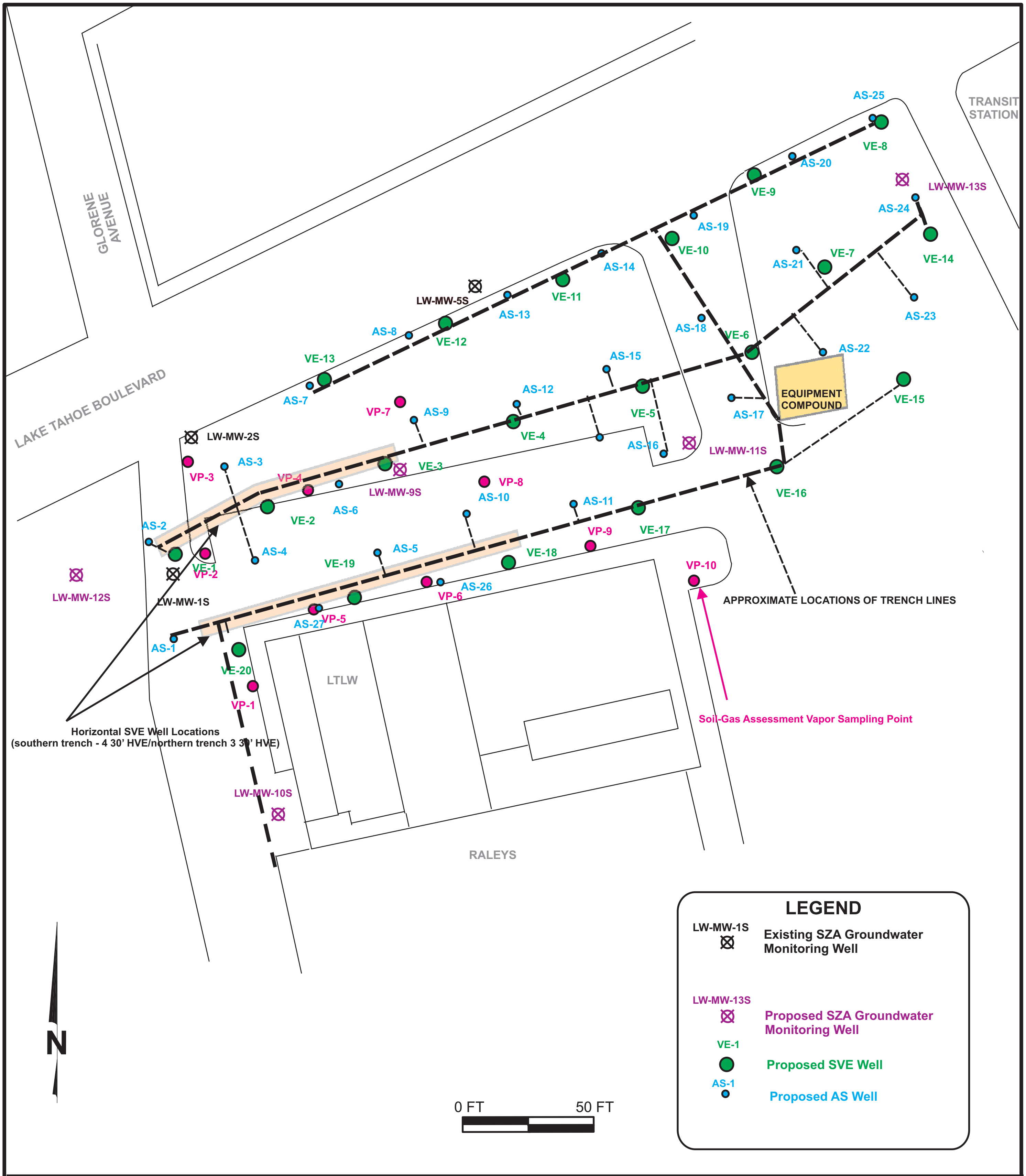
TYPICAL SZA
GROUNDWATER MONITORING
WELL DIAGRAM

FIGURE

11



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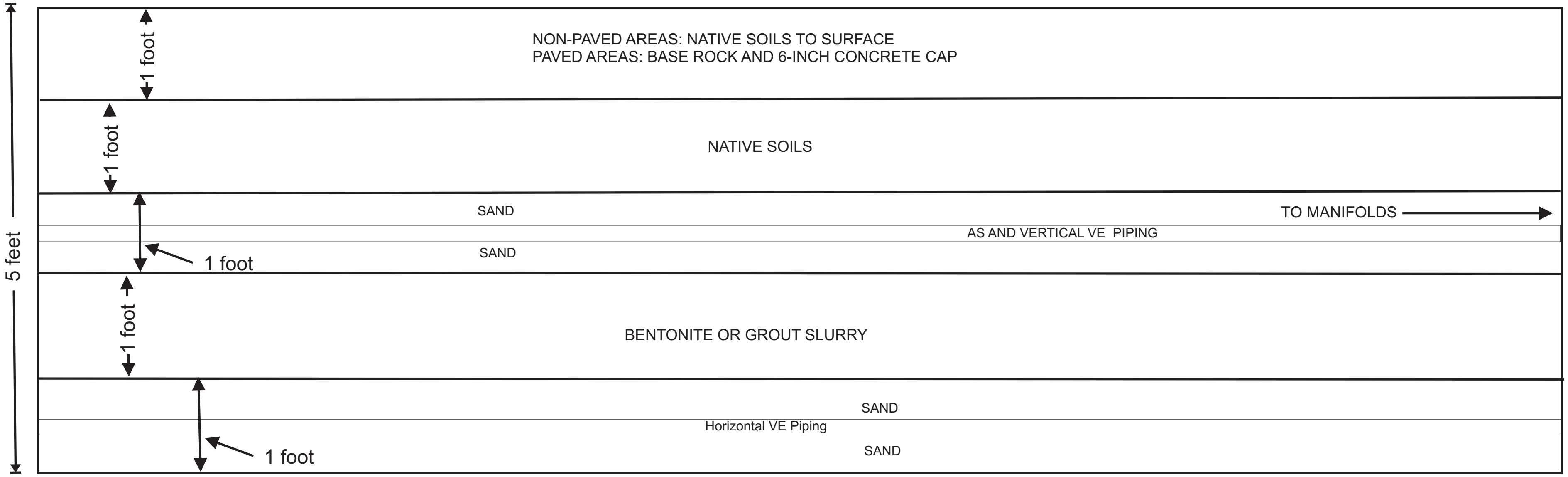
TRENCHING SCHEMATIC

FIGURE

12

NOT TO SCALE

SECTION VIEW



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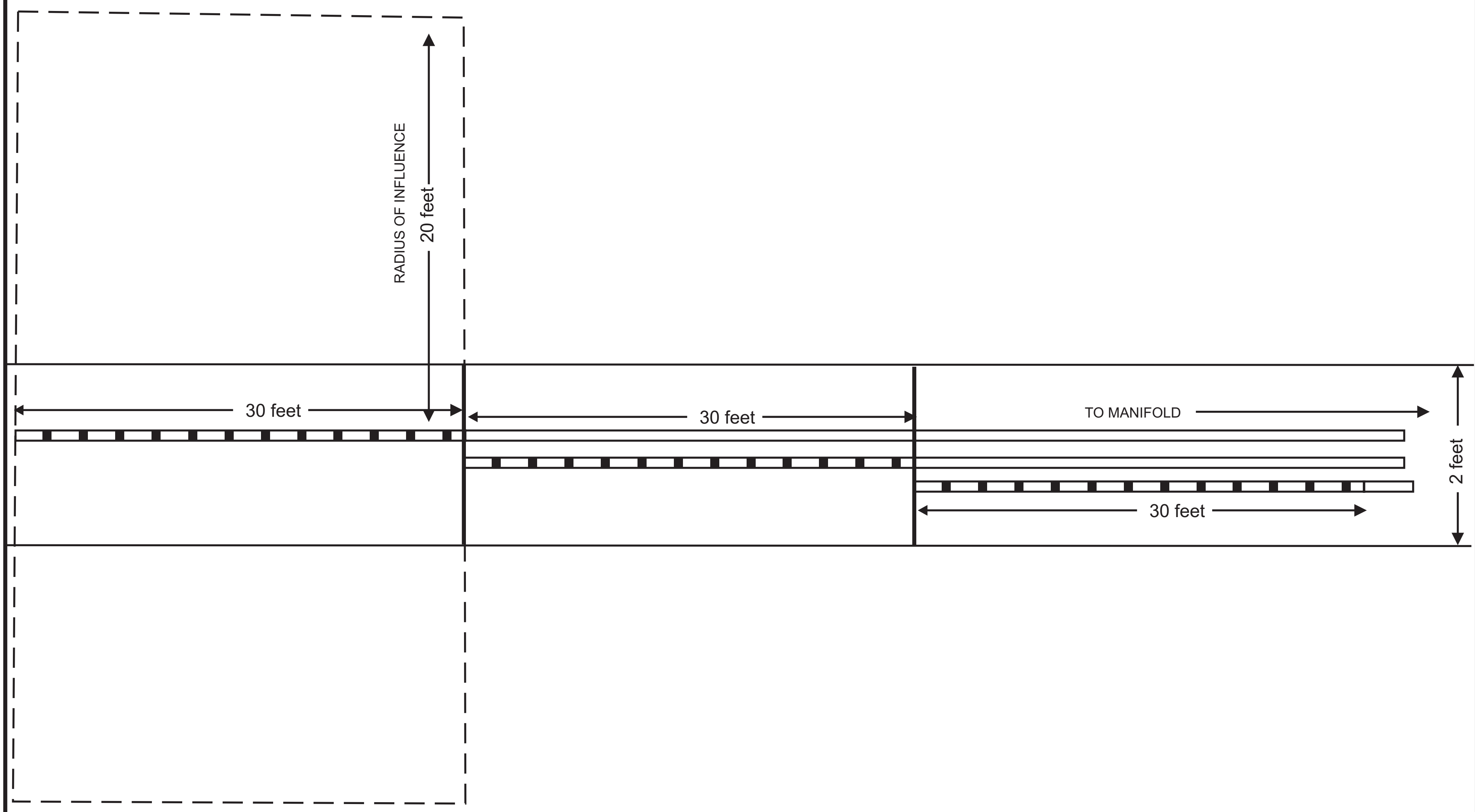
TYPICAL TRENCH DETAILS

FIGURE

13

NOT TO SCALE

PLAN VIEW



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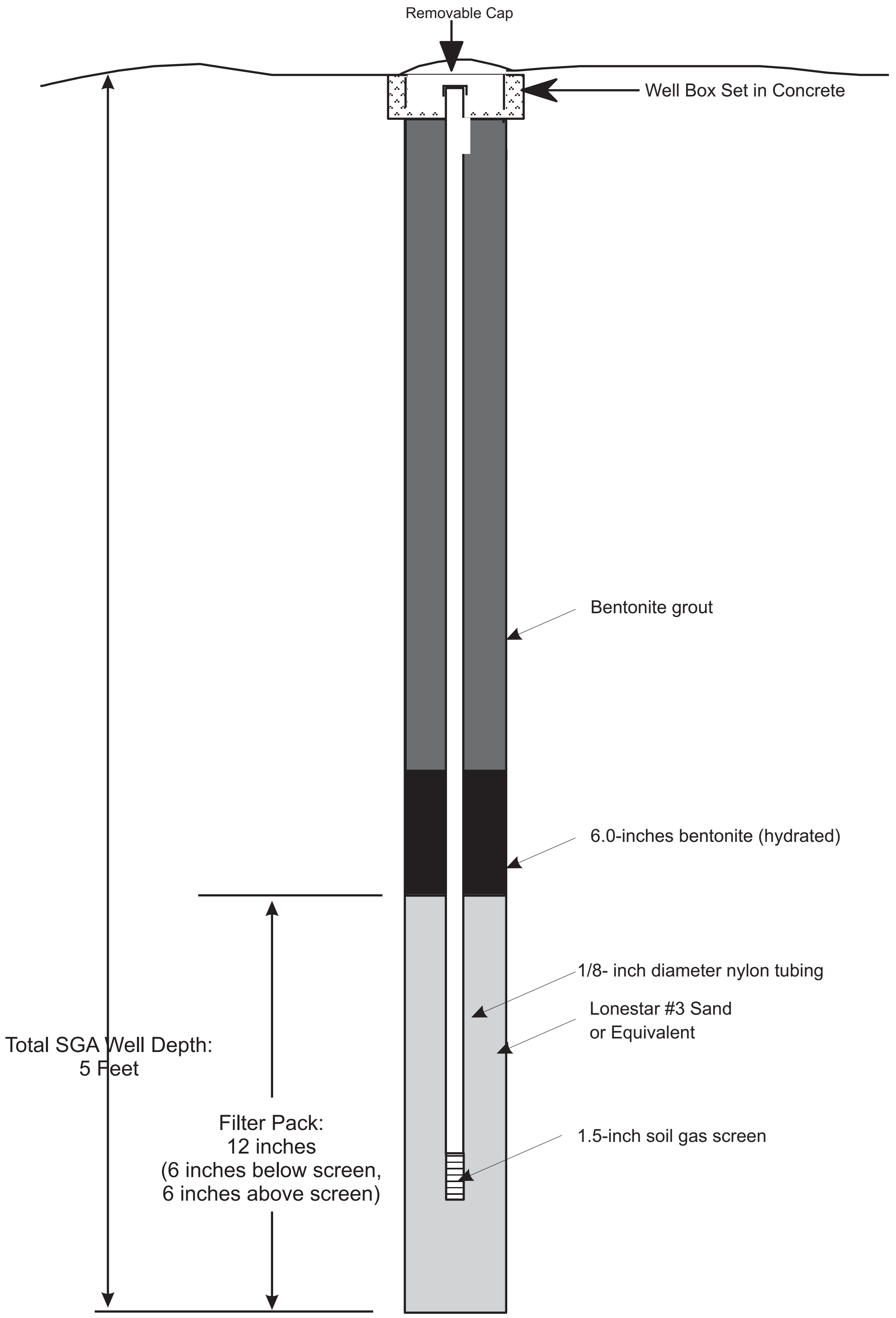
TYPICAL HVE LAYOUT

FIGURE

14



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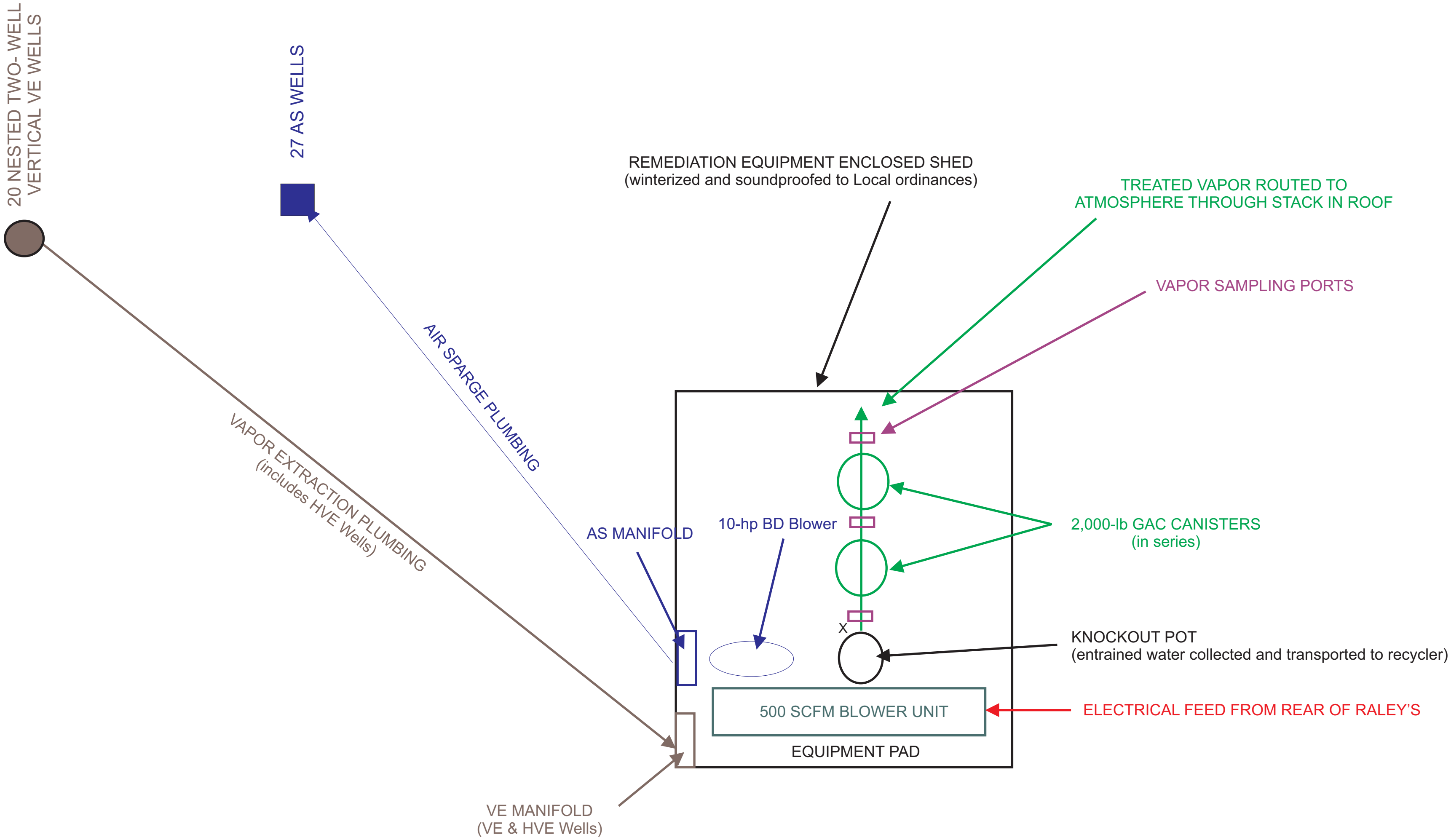
TYPICAL VP WELL CONSTRUCTION DIAGRAM

FIGURE

15



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REMEDIATION SYSTEM SCHEMATIC

FIGURE
16

TABLES

Table 1	Comparison of Groundwater Elevation Data
Table 2	Summary of 2008 SZA Groundwater Monitoring Data

TABLE 1
COMPARISON OF GROUNDWATER ELEVATION DATA
LAKE TAHOE LAUNDRY WORKS
1024 Lake Tahoe Boulevard
South Lake Tahoe, California

GW Elevation Data					
Well ID	**Date Monitored** (month/day/year)	**TOC Elevation** (feet rel)	**Depth to GW** (feet BTOC)	**GW Elevation** (feet rel)	**GW Elevation Change** (feet)
Shallow Zone Aquifer (SZA)					
LW-MW-1S	8/1/08	6,268.86	13.00	6,255.86	
	8/13/08		13.25	6,255.61	-0.25
	9/9/08		13.89	6,254.97	-0.64
	9/14/08		13.85	6,255.01	0.04
LW-MW-2S	7/25/08	6,268.71	12.20	6,256.51	
	8/13/08		15.28	6,253.43	-3.08
	9/9/08		14.99	6,253.72	0.29
	9/14/08		15.19	6,253.52	-0.20
LW-MW-3S	8/1/08	6,268.07	13.76	6,254.31	
	8/13/08		13.91	6,254.16	-0.15
	9/9/08		14.48	6,253.59	-0.57
	9/14/08		14.71	6,253.36	-0.23
LW-MW-4S	8/7/08	6,266.47	15.88	6,250.59	
	8/13/08		17.85	6,248.62	-1.97
	9/9/08		11.90	6,254.57	5.95
	9/14/08		12.08	6,254.39	-0.18
LW-MW-5S	8/1/08	6,266.78	10.25	6,256.53	
	8/13/08		12.53	6,254.25	-2.28
	9/9/08		14.04	6,252.74	-1.51
	9/14/08		14.08	6,252.70	-0.04
LW-MW-6S	8/13/08	6,266.49	11.94	6,254.55	
	9/9/08		11.55	6,254.94	0.39
	9/14/08		11.46	6,255.03	0.09
LW-MW-7S	8/7/08	6,266.65	11.43	6,255.22	
	8/13/08		11.23	6,255.42	0.20
	9/9/08		11.52	6,255.13	-0.29
	9/14/08		11.92	6,254.73	-0.40

TABLE 1
COMPARISON OF GROUNDWATER ELEVATION DATA
LAKE TAHOE LAUNDRY WORKS
1024 Lake Tahoe Boulevard
South Lake Tahoe, California

GW Elevation Data					
Well ID	**Date Monitored** (month/day/year)	**TOC Elevation** (feet rel)	**Depth to GW** (feet BTOC)	**GW Elevation** (feet rel)	**GW Elevation Change** (feet)
LW-MW-8S	7/30/08	6,266.43	12.50	6,253.93	
	8/13/08		18.27	6,248.16	-5.77
	9/9/08		12.02	6,254.41	6.25
	9/14/08		12.25	6,254.18	-0.23

Notes:

BTOC = Below Top of Casing

feet rel. = feet above Mean Sea Level relative to TOC elevation at MW-38M

gw = Groundwater

TOC Elevation = Top of casing elevation

TABLE 2
SUMMARY OF SHALLOW ZONE GROUNDWATER MONITORING ANALYTICAL DATA
LAKE TAHOE LAUNDRY WORKS
1024 Lake Tahoe Boulevard
South Lake Tahoe, California

	GW Analytical Data										
Well ID	**PCE**	**TCE**	**VC**	**CA**	**1,1-DCE**	**MC**	**Trans-1,2-DCE**	**1,1-DCA**	**Cis-1,2-DCE**	**1,2-DCA**	**1,1,1-TCA**
	(µg/L)										
LW-MW-1S	**706**	**74.0**	nd<0.50	nd<0.50	**1.25**	nd<0.50	**0.727**	nd<0.50	**41.3**	nd<0.50	nd<0.50
LW-MW-2S	**3.00**	**2.52**	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	**31.0**	nd<0.50	nd<0.50
LW-MW-3S	**4.04**	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50
LW-MW-4S	**24.5**	**1.60**	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	**0.60**	nd<0.50	nd<0.50
LW-MW-5S	**85.1**	**3.50**	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	**2.00**	nd<0.50	nd<0.50
LW-MW-6S	**85.3**	**7.50**	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	**7.00**	nd<0.50	nd<0.50
LW-MW-7S	**45.3**	**32.8**	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	**8.04**	nd<0.50	nd<0.50
LW-MW-8S	**78.4**	**11.0**	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	**24.0**	nd<0.50	nd<0.50

Notes:

µg/L = micrograms per liter (equivalent to parts per billion, or ppb)

1,1-DCE = 1,1-Di DCE = 1,2-Dichloroethylene
1,2-DCA = 1,2-Di feet rel = TOC Elevation in feet relative
1,1,1-TCA = 1,1, GW = Groundwater
BTOC = Below T MC = Methylene Chloride
CA = Chloroetha MDL = Method detection limit
cis-1,2-DCE = ci nd< = Not detected at or above the MDL (indicated by value)

PCE = Tetrachloroethylene (a.k.a. perchloroethylene)
TCE = Trichloroethylene
TOC = Top of Casing
Trans-1,2-DCE = Trans-1,2-Dichloroethene
VC = Vinyl Chloride

APPENDICES

APPENDIX A

Soil-Gas Monitoring Procedures

APPENDIX A

S-G Monitoring Table of Contents

A. SOIL GAS MONITORING PROCEDURES

The following sections detail the methods and procedures that will be followed to monitor soil gas during the site remediation period.

A.1 Field Activities

Prior to installation of soil-gas probe points, all necessary permits and utility clearance(s) will be obtained. All work will be performed or supervised by a California Professional Geologist, in accordance with the Business and Professions Code, Chapters 7 and 12.5, and the California Code of Regulations, Title 16, Chapters 5 and 29. E_2C will make raw data available to California Regional Water Quality Control Board – Lahontan Region, South Lake Tahoe Branch (CRWQCB) staff, as requested. E_2C will accommodate adjustments, or modifications to the sampling program, mandated by evaluation of the data set or unforeseen site conditions, if required by the Regional Water Quality Control Board (CRWQCB) staff. Investigative-derived wastes (IDWs) will be handled and disposed in accordance with federal, state and local requirements.

To expedite the completion of field activities and to avoid potential project delays, contingencies have been proposed in the Interim Remedial Action Workplan (IRAWP) (e.g., soil matrix samples will also be collected if clayey soils [as defined in the Unified Soil Classification System (USCS)] are encountered during the proposed soil-gas investigation). The CRWQCB field staff will be informed of any problems, unforeseen site conditions, or deviations from the approved IRAWP. When it becomes necessary to implement modifications to the approved IRAWP, the CRWQCB will be notified and a verbal approval will be obtained before implementing changes.

A.2 Soil-Gas Investigation Reports

Soil-gas monitoring data, including a discussion of field operations, deviations from the approved Workplan, data inconsistencies, and other significant operational details will be documented in the status reports. Each status report will contain soil-gas isoconcentration plots for constituents of concern (COCs) at a scale of 1 inch = 30 feet and summary tables for analytical data [in micrograms per liter (μg/L)], in accordance with the Active Soil Gas Investigation (ASGI) guidance (LARWQCB, 1997). E_2C will also provide legible copies of field and laboratory notes or logs, all analytical results and Quality Assurance/Quality Control (QA/QC) information, including tables and explanations of procedures, results, corrective actions and effect on the data.

A.3 Soil-Gas Vapor Monitoring Well Installation

A.3.a Additional Soil and Lithologic Investigations

Site soil and lithologic information will be obtained by collecting undisturbed soil samples from soil-gas sampling point VP-5. The soil samples will be collected with a slide-hammer in two (2) inch diameter brass liners from depths of two (2) and four (4) feet bgs. The samples will be submitted for physical parameter testing, which includes gradation, effective permeability, porosity, soil moisture, total organic carbon, and soil density. The results of the parameter testing will provide accurate soil input parameters to be used in an indoor air intrusion risk model. The results of the indoor air intrusion risk modeling will be presented in status reports under soil gas sections.

Low-flow or no-flow conditions (e.g., fine-grained soil, clay, soil with vacuum readings that exceed approximately ten (10) inches of mercury or 136 inches of water) are not expected to be encountered; however, if low-flow or no-flow conditions are encountered, soil matrix sampling using EPA Method 5035A will be conducted in those specific areas.

A.3.b Soil-Gas Vapor Monitoring Well Spacing

Refer to Figure 5 for a scaled site plan depicting proposed VP well locations. VP well spacing has been selected to provide soil vapor monitoring biased to optimize detecting and delineating volatile organic compounds (VOCs) in areas of occupied by humans (e.g., buildings) and monitor and assess the effectiveness of the soil vapor extraction (SVE) system on VOC-affected vadose zone soils. Based on these criteria E_2C will install five (5) VP wells (VP-1 through VP-5).

A.3.c VP Well Depth

All VP wells will be installed to a depth of approximately five (5) feet below ground surface (bgs).

A.3.d VP Well Installation Procedure

E_2C personnel will use a Bobcat with a four (4) inch diameter auger attachment to advance a boring to the design depth of approximately 5.0 feet below ground surface (bgs). If an asphalt or concrete surface is present, E_2C will utilize a coring machine to penetrate the surface material.

At the bottom of the boring, E_2C will emplace a one and one-half (1.5) inch vapor sampling screen in the center of a one-foot sand pack (#3 Lonestar sand or equivalent). 1/8 inch inside diameter Teflon® tubing will extend from the sampling screen to the surface. One (1) foot of dry granular bentonite will be emplaced on top of the sand pack to preclude the infiltration of hydrated bentonite grout. The borehole will then be grouted to approximately six (6) inches below the surface with hydrated bentonite. The surface completion will consist of a five (5) inch diameter, traffic-rated monitoring well box, set in concrete (See Figure 15).

E_2C field personnel will prepare detailed VP well installation boring logs, which will document the date and time of the installation activity, the depth of each VP well, the screen type and interval; material utilized, and surface completion details. VP well logs will be included in the subsequent status report.

A.4 Soil-Gas Monitoring Parameters

A.4.a Equilibration Time

Following the installation of the VP well, subsurface conditions will be disturbed. As delineated in the DTSC document, *Advisory – Active Soil Gas Investigations,* to allow subsurface conditions to equilibrate, the purge volume test, leak test, and soil-gas sampling will not be conducted for at least 48 hours following installation.

A.4.b Purge Volume

To ensure that stagnant or ambient air is removed from the sampling system and to assure samples collected are representative of subsurface conditions, E_2C will purge three (3) casing volumes from each VP well. Based on a well diameter of four (4) inches, a filter pack twelve (12) inches in height, and a porosity of 30%, E_2C estimates that one (1) casing volume will be approximately 200 milliliters. Therefore, three (3) casing volumes would equate to approximately 600 milliliters. At a purge rate of 200 ml/min, purging will be accomplished in approximately three (3) minutes. E_2C will use a purge pump, calibrated to pump 200 milliliters per minute. The purge pump will not be used for sampling purposes.

A.5 Leak Test

Leakage during soil gas sampling may dilute samples with ambient air and may produce results that underestimate actual site concentrations or contaminate the sample with external contaminants. Leak tests will be conducted to determine whether leakage is present (e.g., the leak check compound is detected and confirmed in the test sample after its application).

A.5.a Leak Test Frequency

Leak tests will be conducted at every SGA well location.

A.5.b Leak Check Compounds

The tracer compound tetrafluoroethane will be used as leak check compounds, if a detection limit (DL) of 10 µg/L or less can be achieved.

A.5.c Leak Test Protocol

The leak check compound (tetrafluoroethane) will be enclosed within a tent-type structure at each potential leak point to keep the potential leak areas at saturated concentrations throughout the test.

A.5.d Leak Test Analytical

The chemical analysis of the soil-gas sample will include an analysis for the leak check compound. If a leak check compound is detected in the sample, the cause of the leak will be evaluated, determined and corrected through confirmation sampling. If the leak check compound is suspected or detected as a site-specific contaminant, a new leak check compound will be used.

A.6 Purge/Sample Flow Rate

The sampling and purging flow rate of 100 ml/min to 200 ml/min was selected to minimize compound partitioning during soil-gas sampling. Samples will not be collected if field conditions, such as rainfall, irrigation, fine grained sediments, or drilling conditions affect the ability to collect soil-gas samples. If no-flow or low-flow conditions are caused by wet soils, the soil gas sampling will cease. In addition, the soil-gas sampling will not be conducted during or immediately after a significant rain event (e.g., 1/2 inch or greater), or onsite watering.

If low flow conditions are determined to be from a specific lithology, a new SGA well will be installed at a new lateral location selected after evaluation of the site lithologic logs and/or in consultation with the CRWQCB. If moisture or unknown material is observed, installation of the VP well will cease until the cause of the problem is identified and corrected. If refusal occurs during drilling, an alternate, nearby VP well location will be selected.

A.6.a No-Flow/Low-Flow Rates

The purging or sampling flow rate of 100 ml/min to 200 ml/min is expected to be

attainable in the lithology adjacent to the VP well. To evaluate lithologic conditions adjacent to the VP well where no-flow or low-flow conditions are encountered, a vacuum gauge or similar device will be used between the soil-gas sample tubing and the soil-gas extraction devices. A gas tight syringe may also be used to qualitatively determine if a high vacuum soil condition exists, which is based on whether suction is felt while the plunger is being withdrawn.

A.6.b Purging/Sampling Rates

E_2C will conduct purging/sampling at rates between 100 to 200 ml/min to limit stripping, prevent ambient air from diluting the soil-gas samples, and to reduce the variability of purging rates. The low flow purge rate increases the likelihood that representative samples may be collected. The purge/sample rate may be modified based on conditions encountered in individual VP wells. Modified rates will be documented in the report of findings.

A.7 Soil Gas Sampling Protocol

After the VP well is adequately purged, a soil-gas sample will be collected. A Summa canister equipped with a flow restrictor will be used at each location. A flow regulator will be placed between the probe and the Summa canister to ensure the canister is filled at the proper flow rate. Summa canisters will be stored in such a way as to avoid exposure to sunlight, and the samples will be analyzed within the prescribed hold time.

A.7.a Sample Container Cleanliness and Decontamination

Prior to its use at a site, each sample container will be assured clean by the analytical laboratory. New containers will be determined to be free of contaminants (e.g., lubricants) by either the supplier or the analytical laboratory; and the effectiveness of decontamination (and to detect any possible interference from ambient air) of reused/recycled containers will be verified with method blanks. After each use, reusable sample containers will be properly decontaminated. Glass syringes or bulbs will be disassembled and baked at 240° C for a minimum of 15 minutes or at 120° C for a minimum of 30 minutes, or be decontaminated by an equivalent method. Plastic syringes, if used, will be used only once and then properly discarded.

E_2C personnel will connect new Teflon® tubing to the top of the existing VP well tubing, and will utilize a 60 cubic centimeter (cc) syringe and a 3-way valve to purge the previously determined purge volume. The purge volume will be calculated based on one (1) cc/ft for 1/8" outside diameter (OD) tubing and five (5) cc/ft for ¼" OD tubing.

The leak compound will be placed in tent-type structures at the connections on the sampling train, using a paper towel moistened with the leak compound wrapped with plastic sheeting taped tightly at each end to seal the structure. The sampling procedure will then commence as detailed above.

A.7.b Documentation of VP Well Sampling Protocol

E_2C personnel will document the VP well sampling, and will include the sample identification, the probe location, date and time of sample collection, sampling depth, identity of on-Site personnel, weather conditions, sampling methods and devices, soil-gas purge volumes, volume of soil gas extracted, vacuum of canisters before and after samples are collected, chain of custody protocols.

A.7.c Chain of Custody Records

A chain of custody form will be completed to maintain the custodial integrity of samples. Probe installation times and sample collection times will be included on the chain of custody form, and in the report of findings.

A.8 Analysis of Soil-Gas Samples

A.8.a Quality Assurance/Quality Control (QA/QC)

The soil-gas analytical laboratory will comply with the project Quality Assurance Project Plan (QAPP) and will follow the QA/QC requirements of the most current ASGI and the employed EPA Method. If there is any inconsistency between the ASGI and the EPA Method, the most restrictive and specific requirements will prevail. The analytical data will be consistent with the Data Quality Objectives (DQOs) established for the project. Field QC samples will be collected, stored, transported and analyzed in a manner consistent with site samples.

QA/QC samples will be collected to support the sampling activity. Method blanks will be used to verify the effectiveness of decontamination procedures, as specified above, and to detect any possible interference from ambient air. For off-site shipments, a minimum of one (1) trip blank per day will be collected and analyzed for the target compounds. Trip blanks will contain laboratory grade ultra pure air. The trip blanks will be prepared to evaluate if the shipping and handling procedures are introducing contaminants into the samples, and to determine if cross contamination in the form of VOC migration has occurred between the collected VOC samples. Trip blank containers and media will be the same as site samples. At least one (1) duplicate sample per laboratory per day will be collected. Duplicate samples will be collected from areas of concern in separate sample containers, at the same location and depth. Duplicate samples will be collected immediately after the original sample. Laboratory control samples (LCS) and dilution procedure duplicates (DPD) will handled and analyzed in accordance with the most recent ASGI. E_2C will be prepared to collect split samples (for analysis by another laboratory) with the CRWQCB, if requested.

A.8.b Laboratory Certification and Analysis

E_2C will have the samples analyzed by EPA Method 8260b at a certified analytical laboratory.

A.8.c Detection Limits for Target Compounds

Analytical equipment calibration will be in accordance with the most current ASGI. Detection limits will be such that the Environmental Screening Levels (Soil Gas Screening Levels) (CCRWQCB, 2008) for evaluation of potential vapor intrusion into indoor air allow will be met, as follows:

CHEMICAL	**Vapor Screening ESL's**		
	Micrograms per cubic meter ($\mu g/m^{3)}$	Parts per billion - volume (ppbV)	Micrograms per liter ($\mu g/L$)
PCE	1.4E+03	206.54	1.400

TCE	4.1E+03	0.74481	0.0040
Cis-1,2-DCE	1.2E+05	3.0285+04	120.00
VC	1.0E+02	39.144	0.1000

The DL for leak check compounds will be 10 μg/L or less. For results with a high DL reported (e.g., due to matrix interference or dilution), the laboratory will provide a written explanation. Re-sampling and analyses will be conducted at the appropriate DL for a specific compound if requested by CRWQCB staff.

A.8.d Sample Handling

Exposure to light and changes in temperature and pressure will accelerate sample degradation. To protect sample integrity soil-gas samples will not be chilled, will not be subjected to changes in ambient pressure, and shipping of sample containers by air will be avoided, if possible. If condensation is observed in the sample container, the sample will be discarded and a new sample will be collected.

A.8.e Holding Time

All soil gas samples will be collected in Summa canisters and will be analyzed at ProVera Analytical Laboratories, Inc. (State Certification #2606) in Bakersfield, California within 48 hours after collection.

A.8.f Analytical Methods

All VOC samples will be analyzed using only a Gas Chromatograph/Mass Spectrometer (GC/MS) by EPA Method 8260b, or equivalent.

A.8.g Target Compounds

The ASGI (dated February 25, 1997) includes twenty-three (23) primary and four (4) other target VOCs. All quantifiable results will be reported. The estimated results of all Tentatively Identified Compounds (TICs), or non-AGSI-targeted compounds detected, will be included in the status reports. If TICs, or non-ASGI targeted compounds are identified, E_2C will consult with the CRWQCB to determine whether additional action is required (e.g., running additional standards to quantify TICs, or non-ASGI compounds) and whether the use of these estimated data for risk evaluation is appropriate. All quantifiable results of Leak Check Compounds will be reported as specified in above.

APPENDIX B

Health and Safety Plan

APPENDIX B

HASP Table of Contents

B1. HEALTH AND SAFETY PLAN

This Health and Safety Plan (HASP) has been designed to address safety provisions needed during the site characterization. Its purpose is to provide established procedures to protect all on-site personnel from direct skin contact, inhalation, or ingestion of potentially hazardous materials that may be encountered at the site. The HASP establishes personnel responsibilities, personal protective equipment standards, decontamination procedures, and emergency action plans. The HASP describes means for protecting all on-site personnel from deleterious contamination or personal injury while conducting on-site activities. The HASP has been written to comply with regulations established by OSHA in 29 CFR 1910.120 and in the Title 8 California Code of Regulations (CCR) 5192 Cal/OSHA requirements.

B1.a Background and Site Description

The subject property is located within the South Y Shopping Center in South Lake Tahoe, El Dorado County (see Figure 1). The Site is located approximately 9,000 feet south of Lake Tahoe. The LTLW is situated at the northwestern corner of the Shopping Center (see Figure 2). The Site abuts Lake Tahoe Boulevard between U.S. Highway 50 and Tata Lane and is cross-corner from the dead-end intersection of Glorene Avenue with Lake Tahoe Boulevard (see Figure 1). The property consists of a former dry cleaning facility, which reportedly contained one (1) coin-operated dry cleaning unit (DCU) that operated between March 1973 and 1979.

B1.b Planned Site Activities

E_2C Remediation seeks to enter property described above for the purpose of installing a site remediation system, operating the system and performing ongoing groundwater monitoring. Planned activities at the Site are as follows:

- Locate underground utilities using Client's as-built drawings (if available) as well as Underground Service Alert (U.S.A.);
- Advance a soil borings using hollow-stem auger drilling to sample soils and install groundwater monitoring and remediation wells at the locations shown in the attached figures;
- Field screen soil samples for volatile organic compounds (VOCs) using a hydrogen flame-ionizing detector (FID);
- Secure soil samples in sleeves sealed with Teflon®, end caps and tape. The sealed tubes will be placed in a cooler at 4° Centigrade (°C) and transported to a state Department of Health Services (DHS)-certified laboratory under Chain-of-Custody procedures. Selected samples will be chosen for chemical analysis;
- Develop groundwater monitoring wells;
- Survey wellhead casing elevations of existing and new monitoring wells;
- Measure depths to groundwater and collect groundwater samples from groundwater monitoring wells on a quarterly basis;
- Analyze soil samples for VOCs using EPA Method 8260b;
- Analyze groundwater samples for VOCs using EPA Method 8260b;
- Trench and plumb remediation wells to an equipment compound;
- Operate and maintain a site remediation system (combined soil vapor extraction with groundwater air sparging);
- Collect vapor samples at the remediation system;

- Collect soil-gas samples to monitor remediation progress and evaluate potential for indoor air intrusion of soil-gas vapor;
- Analyze vapor and soil;-gas samples for VOCs using EPA Method 8260b;
- Equipment and sampling decontamination wastewater will be placed in drums/roll-off containers, or other appropriate temporary storage pending transport to appropriate recycling facilities; and
- Drilling equipment will be brought to the site and operated by a subcontractor:

BC^2 Environmental Corporation
1150 West Trenton Avenue
Orange, CA 92867
C-57 License Number 686255

B2. KEY PERSONNEL AND RESPONSIBILITIES

B2.a Key Personnel

Project Director	Philip Goalwin, P.G.
Project Manager	William A. Lawson, P.G.
Alternate Project Manager	Daniel Hidalgo, CH.G.

B2.b Responsibilities

Project Director

Mr. Phil Goalwin, P.G., Principal Professional Geologist, of E_2C Remediation will serve as Project Director for this project. Mr. Goalwin has extensive knowledge of the project and has authored the Workplan for this investigation. He has completed the 40-hour Hazardous Waste Operations training, the 24-hour supervised on-the-job-training, and the 8-hour supervisory training course.

Project Manager

Mr. Bill Lawson, Senior Professional Geologist of E_2C Remediation will serve as Project Manager and the on-site Geologist and on-site Safety Officer (SSO). He has completed the 40-hour Hazardous Waste Operations training, the 24-hour supervised on-the-job-training, and the 8-hour supervisory training course. As SSO, Mr. Lawson will assure that on-site personnel have received a copy of HASP. Personnel will be required to document their full understanding of the HASP before admission to the site. Compliance with the HASP will be monitored at all times by the SSO. The SSO will conduct a training session to assure that all are aware of safe work practices. In the training session, personnel will be made aware of potential hazards at the site. Mr. Lawson will also be responsible for keeping field notes, collecting and securing samples, and assuring sample integrity by adherence to Chain-of-Custody protocol.

Alternate Project Manager/SSO

Mr. Daniel Hidalgo, CH.G of E_2C Remediation will serve as the alternate project manager. He will also serve as an alternate contact other than the Project Director for reporting deviations from the HASP and health and safety conditions that may be a risk to field personnel and as a contact for other project-related decisions. Finally, Mr. Hidalgo will serve as the alternate on-site Geologist and alternate SSO.

Provisions of this HASP are mandatory and personnel associated with on-site activities will adhere strictly hereto. On-site employees will take reasonable precautions to avoid unforeseen hazards. After documenting understanding of the HASP, each on-site employee will be responsible for strict adherence to all points contained herein. Any deviation observed will be reported to the SSO or alternate project manager and corrected.

B3. HAZARDS OF ANTICIPATED CHEMICALS OF CONCERN

Data collected during historical site investigations are described in the Site History Section of the main text. According to past investigations, the range in concentration of the anticipated chemicals of concern and the associated matrix are as follows.

Reported Compounds	Matrix	Reported Range in Concentration (soil = mg/kg, water = µg/L)	
		Minimum	Maximum
PCE	Soil	0.0085	12.0
TCE	Soil	0.0059	0.87
PCE	Groundwater	0.56	1,200
TCE	Groundwater	0.84	48

Notes:
mg/Kg = milligrams per kilogram
µg/L = micrograms per liter

Pathways of exposure for these contaminants include dermal contact with contaminated soil and groundwater, or inhalation of contaminated vapors. Use of personal protective equipment (PPE) planned for this project and following decontamination procedures listed in Section B7 of the HASP can mitigate dermal contact. Inhalation hazards can be reduced through the use of dust control measures, if warranted, and by observing action levels described in Section B8 of the HASP.

Monitoring for airborne contaminants will be performed during intrusive activities. An FID calibrated to methane in air per manufacturer's instructions, will be used for air monitoring. The FID response to PCE, the primary chemical of concern, is 70 percent (i.e., an instrument reading of 10 parts per million by volume (ppmV) represents an actual concentration of 7 ppmV PCE). Routine monitoring of the breathing zone as described in Section B8 of the HASP will be performed to evaluate fluctuations in VOC concentration during site activities. If VOC concentrations exceed action levels listed in Section B8, personnel will follow procedures described in Section B5 of the HASP.

B4. PHYSICAL HAZARDS

Potential health and safety physical hazards that may be encountered during the planned work activities include:

- Slips, trips, and falls;
- Heat stress;
- Noise;
- Underground and overhead utilities;
- Materials and equipment handling; and
- Heavy equipment use.

B4.a General Safe Work Practices

- Maintain at least one copy of this HASP at each work area;
- Field personnel will thoroughly clean their hands, faces, and other potentially contaminated areas before eating, smoking, or leaving the Site. Eating and smoking are prohibited in the exclusion zone;
- Personnel with beards or sideburns or other conditions that may prevent a proper seal will not wear respiratory protection;
- Anyone known to be under the influence of drugs, alcohol, or intoxicating substances that impair the employee's ability to safely perform the assigned duties shall not be allowed on the job site while in that condition;
- Horseplay, scuffling, and other acts that tend to have an adverse influence on the safety or well being of the field personnel shall be prohibited;
- Only appropriate tools maintained in good condition shall be used on the project;
- Accidents and/or injuries associated with site activities will be immediately reported to the SSO. If necessary, an incident report will be initiated by the SSO;
- Periodic safety meetings will be held to discuss site conditions, field tasks being performed, planned modifications, and worker's concerns;
- All visitors to the job site must comply with the HASP procedures and provide appropriate personal protective equipment as required in the HASP;
- Employees will evaluate whether conditions exist that may result in slips, trips, or falls, and if identified make provisions to rectify the problem or notify the SSO;
- Personnel and equipment in the exclusion zone shall be kept to a minimum to promote safe and effective site operations;
- Use the "buddy system" when appropriate (i.e., minimum two-man crew for hazard communication and help in case of injury);
- Wear ANSI-approved hardhat to prevent head injuries in areas of overhead obstacles and where falling objects are a hazard;
- Use good housekeeping procedures during site activities to maintain a safe working environment. The work site will be kept free of trash, debris, and waste materials; and
- Use ANSI-approved safety glasses during field activities to prevent eye injuries.

B4.b Heat Stress

Heat stress is an important consideration in planning and performing field activities. Health conditions related to excessive heat range from heat fatigue to heat stroke, the most serious condition. Many factors contribute to heat-related illnesses, including ambient temperature, protective clothing that decreases body ventilation, physical condition, and personal hydration. Heat-related conditions can cause physical discomfort and loss of concentration that may lead to an increased risk for accidents.

Workers should drink plenty of fluids to stay hydrated. Sports drinks that contain potassium and sodium are important for the replacement of electrolytes whose loss may cause muscle cramps. During hot weather, workers should adjust work schedules to allow for adequate rest periods. The SSO will maintain an adequate supply of cold potable water during the project. Workers should be aware of the typical weather conditions at the Site as well as signs and symptoms that indicate potential heat-related illnesses. A tabulation of heat-related physical conditions, signs, symptoms, and appropriate responses is provided following.

Condition	Signs	Symptoms	Response
Heat Rash	Red rash on skin.	Intense itching and inflammation.	Increase fluid intake and monitor worker's condition for more serious symptoms.
Heat Cramps	Heavy sweating, lack of muscle coordination.	Muscle spasms and pain in extremities (hands, feet) or abdomen.	Increase fluid intake and rest periods. Monitor worker for more serious symptoms.
Heat Exhaustion	Heavy sweating; pale, cool, moist skin; lack of coordination; fainting.	Weakness, headache, dizziness, nausea.	Remove worker to a cool shady area. Administer fluids and allow worker to rest until fully recovered. Increase rest periods and closely observe worker for additional signs of heat exhaustion. If symptoms of heat exhaustion occur, treat as above and release worker from day's activities after full recovery.

Heat Stroke	Red, hot, dry skin; disorientation; unconsciousness.	Lack of or reduced perspiration; nausea; dizziness and confusion; strong, rapid pulse.	Immediately contact emergency medical services by calling 911. Remove the worker to a cool shady area and observe for signs of shock. Attempt to comfort worker by administering small amounts of cool water (if conscious), loosening clothing, and placing cool compresses at locations where major arteries occur close to the body's surface (neck, underarms, and groin areas). Carefully follow instructions provided by emergency medical services until help arrives.

B4.c Heavy Equipment

Heavy equipment will consist of the drill rig, its support vehicles and the vacuum truck. Experienced personnel will operate these vehicles in accordance with the manufacturers' instructions and specifications. The operators are responsible for inspecting the rigs on a daily basis to ensure that they are operating properly and safely.

Potential physical hazards will arise from operation of the drilling rig and trenching equipment to perform the tasks described in Section II. General precautions that should be observed for safe operation include:

- Use of PPE, including steel-toed boots, safety glasses, and hard hats;
- Workers in the vicinity of the equipment should be aware of the equipment's location and that it is being operated. Verify that the operator is aware of your presence by establishing eye contact or communication by hand signals;
- Traffic vests should be worn in areas of vehicular traffic or near other mobile heavy equipment;
- Workers should inform operator if they will be walking on the side of or behind the rig to prevent moving parts from causing injury;
- Unauthorized personnel should be kept out of the immediate work area.

B4.d Noise

Use of heavy equipment on the Site may result in noise levels that exceed the Cal/OSHA permissible exposure limit of 90 dBA time-weighted average for an 8-hour workday. Site workers will wear hearing protection that will provide a noise rating reduction (NRR) of a minimum of 20 dB when operating or working around heavy equipment. Hearing protection will consist of earplugs or protective headphones.

B4.e Underground and Overhead Utilities

Prior to subsurface intrusive activities that may encounter buried utilities, Underground Service Alert (U.S.A.) will be contacted at least two (2) working days in advance to notify utility companies to field locate underground utilities. This typically includes water lines, electrical lines, television cables, and sewer piping.

When working near overhead utility lines a minimum 20-foot clearance will be maintained by equipment using upright booms that may come into contact with the utility lines.

B4.f Materials and Equipment Handling

Workers can be exposed to the physical risks of handling materials and equipment including muscle strains and minor injuries. Field employees will utilize proper safe lifting techniques, as reviewed in the annual 8-hour refresher HAZWOPER course. Use of proper PPE such as steel-toed boots and heavy work gloves will help prevent minor injuries. Heavy materials should be moved using mechanical devices (e.g., dollies, hydraulic lift gates) where available to reduce the risk of personal injury.

B5. PERSONAL PROTECTIVE EQUIPMENT

Personal protective equipment will be used to protect personnel from potential hazards arising from the field activities. The amount and type of PPE will be determined in the field by the SSO in accordance with the guidelines set forth in the HASP. The need for respiratory protection will be based on air monitoring data collected using an FID.

Skin protection will be employed through the use of coveralls and chemical-resistant nitrile gloves when handling media (soil or groundwater) that may be potentially contaminated. The SSO will keep field personnel informed of the Level of PPE recommended to safely perform the work activities.

B5.a Level D Protection

Most site activities will be performed utilizing Level D protection, unless determined otherwise by the SSO. Air monitoring will be conducted on a routine basis to determine if conditions are appropriate for upgrading to Level C protection. Level D PPE is allowable provided that air monitoring does not indicate a Level C upgrade is necessary (see Section B8). Dermal protection is required whenever personnel may come into contact with potentially contaminated media. The following are minimum requirements for Level D PPE:

- Work shirt and long pants;
- ANSI-approved steel-toed boots or safety shoes;
- ANSI-approved safety glasses;
- ANSI-approved hard hat;
- Other PPE that can be used to supplement the equipment above include:
- Outer nitrile gloves when handling potentially chemically-affected soil or groundwater;
- Inner latex gloves as an additional layer of skin protection;
- Chemical-resistant clothing such as Tyvek coveralls if contact of chemically-affected media with clothing is anticipated;
- Safety boots with protective overboots if contact with chemically-affected media is anticipated;
- Hearing protection; and
- Heavy work gloves to reduce the risk of hand injury when working with heavy equipment or materials.

B5.b Level C Protection

Upgrade of PPE from Level D to Level C will be contingent upon the results of real-time air monitoring using an FID. If air monitoring exceeds the action level described in Section 8, workers in the affected area will upgrade to Level C PPE. Level C PPE contain the elements of Level D PPE and additionally:

- NIOSH/MSHA-approved half-face air-purifying respirator equipped with organic filter cartridges as specified in Section B8 of this HASP;
- Chemical-resistant clothing (e.g., Tyvek, polycoated Tyvek, or Saranex coveralls) when contact with chemically-affected soil or groundwater is anticipated;

- Outer nitrile gloves when handling potentially chemically-affected soil or groundwater;
- Inner latex gloves as an additional layer of skin protection; and
- Safety boots with protective overboots if contact with chemically-affected media is anticipated

If air monitoring indicates that the next action level is reached following upgrade to Level C PPE, then personnel will stop work, evacuate the area, and immediately contact the Project Director or alternate Project Manager for further consultation.

B6. SAFETY PROCEDURES

Site control measures will be utilized to protect the community from potentially hazardous conditions. Measures will be taken to prevent the public from entering the work area by establishing a barricade perimeter connected by highlighted caution tape. Equipment that may pose a hazard if not utilized properly will be secured and safely stored.

Access to the work area will be limited to authorized personnel. Only E_2C employees, its subcontractors, and representatives of associated regulatory agencies will be admitted to the immediate work area. These personnel will be required to review the HASP and present proof of their 40-hour HAZWOPER certification or current 8-hour refresher. A visitor sign-in sheet will be maintained to document visitors not working at the Site. The SSO will be responsible for ensuring that personnel wear the appropriate Level of PPE for existing site conditions. Each visitor will be required to sign the HASP as proof of their understanding of the provisions of the HASP.

Documentation will be kept on personnel exposed to contaminant hazards on the job site according to OSHA regulations. These will include documentation that employees received training on the HASP, respiratory protection, and all emergency procedures. These will be reviewed during the pre-site training meeting conducted by the SSO.

Exposure records for the project will be kept for 30 years to meet requirements. Included will be names and social security number of employees, on-the-job logs from entry to exit, first aid administered, onsite visits by outside persons, and personal air monitoring records.

The SSO will conduct daily/pre-shift tailgate meetings to review safety and health issues for the day's activities and to provide a means for discussion of potential hazards identified by the field personnel. Attendance at these meetings is mandatory and issues discussed will be documented on Tailgate Safety Meeting forms that will include a list of all attendees and their signatures. A copy of the standard signature form is provided in Section C11 below.

B7. WORK ZONES AND DECONTAMINATION PROCEUDRES

The work areas for this project are located on one (1) private property and the City of South Lake Tahoe right-of-way (sidewalks and street). As the equipment setups will occur over a range of locations, the exclusion and contamination reduction zones at each location will require an assessment of the surrounding area to determine the appropriate extent for demarcating these zones. Decontamination will occur in the contamination reduction zone before proceeding to the support zone that will be established at the location of the LTLW site. The exclusion zone at each drilling location will be cordoned off by a set of barricades connected with yellow caution tape to discourage public access. The contamination reduction zone will be setup exterior of the exclusion zone using traffic cones or through the use of a second barricade perimeter in areas more heavily traveled by pedestrians. These two levels of cordoning off the work area should be sufficient to protect the public from exposure to physical and chemical hazards.

The decontamination area at each drilling location will be delineated by traffic cones or barricades connected by caution tape in areas of heavier pedestrian traffic. Personnel decontamination measures will generally consist of an Alconox solution wash followed by clean water rinse for appropriate items. The following decontamination procedure will be used when under Level C protection:

- Leave equipment and materials in exclusion zone;
- Outer glove wash and rinse;
- Outer glove removal;
- Suit wash and rinse, if non-disposable, or disposal in an appropriate container if disposable;
- Safety boot wash and rinse, as appropriate;
- Respirator removal;
- Inner glove removal and appropriate disposal; and
- Field wash of hands and face.

Workers will employ applicable steps according to the level of PPE worn. Disposable items will be properly disposed of in an appropriate container. Similar decontamination methods will be utilized for decontaminating field equipment though these may be supplemented by the use of a steam cleaner for grossly contaminated large equipment. Decontamination fluids will be temporarily stored on-site for future disposal at an appropriate facility.

B8. ACTION LEVELS

An FID that has a response of 70 percent to PCE will be utilized for air monitoring (i.e., at an actual concentration of 7 parts per million [ppm] PCE the instrument will read 10 ppm). Air monitoring will occur at a frequency of once every 15 minutes in the exclusion zone during intrusive work and the data will be recorded on an air monitoring form or in the daily field notes. The FID will be calibrated in compliance with the manufacturer's instructions for single sample methane calibration.

Air monitoring will occur at a frequency of once every 15 minutes in the exclusion zone during intrusive work and the data will be recorded on an air monitoring form or in the daily field notes. At an action level of 6 parts ppm above background, field personnel will upgrade from Level D to Level C personal protection. If vapor monitoring indicates that airborne contaminants reach a concentration of 35 ppm, work will be halted, the exclusion zone evacuated, and the SSO will contact the Project Director or alternate Project Manager for consultation. Agency personnel will alternatively be notified if the airborne concentration exceeds 35 ppm.

Due to the conservative action level of 35 ppm to halt work, E_2C believes that community exposure monitoring is unnecessary. If airborne concentrations reach this level in the work area, it is not possible for concentrations greater than this to reach the community. This is especially true given that work will be stopped upon reaching the action level so that the source area does not continue to emanate fugitive vapors.

The community will be protected from noise hazards by being excluded from the work area through the use of physical barriers such as barricades connected by highlighted caution tape. If dust is observed to be a problem, it will be controlled through wetting down the immediate work area.

Activity	**Action Level**	**Level of Respiratory Protection**
Direct-push boring, soil, groundwater and soil gas sampling.	0 to 6 ppm above background	Level D: No respiratory protection required
	6 to 35 ppm	Level C: Half-face air-purifying respirator with organic cartridges
	>35 ppm	Stop work and evacuate work area. Contact alternate Project Manager or Project Director immediately.

B9. CONTINGENCY PROCEDURES

For emergencies requiring site evacuation, field personnel will signal distress with three (3) horn blasts. A vehicle horn will be sufficient for this purpose. Communication signals (e.g., hand signals) will be used in the event that loud noise precludes use of a horn.

The SSO will be responsible for evaluating the degree of the emergency and notifying appropriate personnel. A list of emergency contacts and directions to the nearest hospital are provided in Section 10 of the HASP. The SSO will maintain a cellular telephone for use in case of an emergency.

B9.a Injury and Illness

Medical and emergency services of Barton Memorial Hospital, 2170 South Avenue, South Lake Tahoe, California will be used in the event of a medical emergency. The medical emergency unit will be contacted via the 911 emergency phone number: TOXLINE (Ph: 301/496-1131) or the Poison Control Center (Ph: 800/876-4766) may be used as alternate emergency contacts for emergency chemical exposure or accidental ingestion. The SSO will maintain a cellular phone at his side that will be used in case of an emergency. A full list of emergency contacts is included in Section 10 of the HASP. The SSO will maintain current CPR/First Aid certification.

Decontamination methods for injured workers will be similar to the methods described in Section C7.0 of the HASP; however, priority will be given to addressing the injury or medical condition over personal decontamination in the event that both are necessary. Emergency services at Barton Memorial Hospital are capable of handling emergency patients that may be potentially contaminated with hazardous materials.

B9.b Fire

Fire emergency personnel (local fire department) will be contacted using 911 in the event of a fire. Upon arrival of the fire department, the SSO will explain the nature of the fire, its location, and other circumstances that may affect the safety of the firefighters such as the potential for contact with chemically-affected media. Field personnel should not attempt to fight the fire unless they have been specifically trained and equipped to do so.

B9.c Underground Utilities

In the event that an underground utility line is ruptured during intrusive activities, the equipment will be shutdown and the nature of the utility will be determined. Upon making this determination, the SSO will contact the appropriate utility company so that repairs can be implemented. The SSO will also notify the Project Director or alternate Project Manager to advise of the situation.

B9.d Evacuation

Evacuation routes and personnel assembly locations will be designated by the SSO in the event that an emergency requiring evacuation arises. Evacuation routes will be selected by the SSO for each drilling location depending on the easiest means of egress for each location, therefore, a map showing evacuation routes has not been provided. Upon the need to evacuate the exclusion zone, workers will exit through the contamination reduction zone (CRZ), where possible, and will stay upwind of any vapors or smoke and upgradient of any spills. If evacuation is not possible through the CRZ, then personnel will evacuate to the nearest safe location and remove PPE at that location or near the exclusion zone if possible. Evacuated personnel will assemble at a location predetermined by the SSO who will verify that all workers have been evacuated safely.

B10. EMERGENCY CONTACTS

Ambulance: 911
Fire: 911
Police: 911
Hospital: 911
National Response Center: (800) 424-8802
Poison Control Center: (800) 876-4766
TOXLINE: (301) 496-1131
CHEMTREC: (800) 424-9300
E$_2$C Office: (661) 831-6906
E$_2$C Project Director (home): (661) 587-0585
E$_2$C Site Safety Officer (cellular): (831) 359-1879
E$_2$C Alternate Project Manager (cellular): (661) 599-1470
Regional Water Quality Control Board: Ms. Lisa Dernbach (530) 542-5424
Mr. Chuck Curtis (530)542-5460
Nearest Hospital: (530) 541-3420

Barton Memorial Hospital
2170 South Avenue
South Lake Tahoe, CA 96150

DIRECTIONS TO HOSPITAL:

From Site travel east on Lake Tahoe Blvd to Highway 50 0.01 mile; turn right and travel south on Highway 50 0.02 mile to B Street; turn left and travel 0.1 mi, turn left onto South Avenue travel 0.2 mile to hospital.

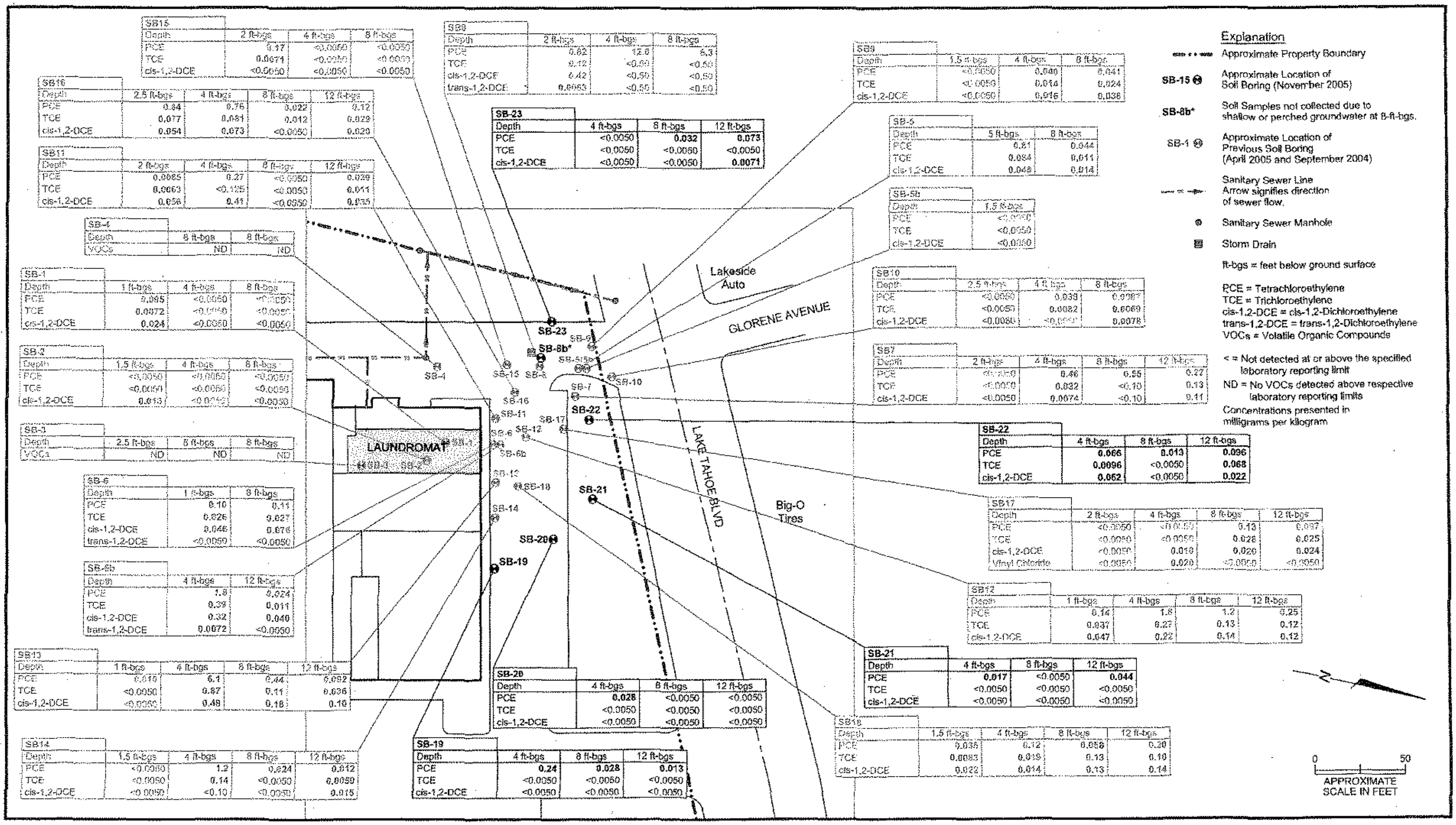
B11. SIGNATURE PAGE

The following signatures indicate that this Site Safety Plan has been read and accepted by E_2C Remediation personnel as well as their subcontractors and personnel.

NAME	COMPANY	SIGNATURE	DATE

APPENDIX C

PES Site Plots of Soil & SZA Analytical Results
(From: PES, 2006)



SB15			
Depth	2 ft-bgs	4 ft-bgs	8 ft-bgs
PCE	0.17	<0.0050	<0.0050
TCE	0.0071	<0.0050	<0.0050
cis-1,2-DCE	<0.0050	<0.0050	<0.0050

SB16				
Depth	2.5 ft-bgs	4 ft-bgs	8 ft-bgs	12 ft-bgs
PCE	0.34	0.76	0.022	0.12
TCE	0.077	0.061	0.012	0.029
cis-1,2-DCE	0.054	0.073	<0.0050	0.020

SB11				
Depth	2 ft-bgs	4 ft-bgs	8 ft-bgs	12 ft-bgs
PCE	0.0085	0.27	<0.0050	0.039
TCE	0.0063	<0.125	<0.0050	0.011
cis-1,2-DCE	0.056	0.41	<0.0050	0.035

SB-4		
Depth	6 ft-bgs	8 ft-bgs
VOCs	ND	ND

SB-1			
Depth	1 ft-bgs	4 ft-bgs	8 ft-bgs
PCE	0.095	<0.0050	<0.0050
TCE	0.0072	<0.0050	<0.0050
cis-1,2-DCE	0.024	<0.0050	<0.0050

SB-2			
Depth	1.5 ft-bgs	4 ft-bgs	8 ft-bgs
PCE	<0.0050	<0.0050	<0.0050
TCE	<0.0050	<0.0050	<0.0050
cis-1,2-DCE	0.013	<0.0050	<0.0050

SB-3			
Depth	2.5 ft-bgs	5 ft-bgs	8 ft-bgs
VOCs	ND	ND	ND

SB-6		
Depth	1 ft-bgs	8 ft-bgs
PCE	0.10	0.11
TCE	0.026	0.027
cis-1,2-DCE	0.046	0.076
trans-1,2-DCE	<0.0050	<0.0050

SB-6b		
Depth	4 ft-bgs	12 ft-bgs
PCE	1.8	0.024
TCE	0.39	0.011
cis-1,2-DCE	0.32	0.040
trans-1,2-DCE	0.0072	<0.0050

SB13				
Depth	1 ft-bgs	4 ft-bgs	8 ft-bgs	12 ft-bgs
PCE	0.010	6.1	0.44	0.092
TCE	<0.0050	0.87	0.11	0.036
cis-1,2-DCE	<0.0050	0.48	0.16	0.10

SB14				
Depth	1.5 ft-bgs	4 ft-bgs	8 ft-bgs	12 ft-bgs
PCE	<0.0050	1.2	0.024	0.012
TCE	<0.0050	0.14	<0.0050	0.0050
cis-1,2-DCE	<0.0050	<0.10	<0.0050	0.015

SB8			
Depth	2 ft-bgs	4 ft-bgs	8 ft-bgs
PCE	0.62	12.6	6.3
TCE	0.12	<0.50	<0.50
cis-1,2-DCE	0.42	<0.50	<0.50
trans-1,2-DCE	0.0053	<0.50	<0.50

SB-23			
Depth	4 ft-bgs	8 ft-bgs	12 ft-bgs
PCE	<0.0050	**0.032**	**0.073**
TCE	<0.0050	<0.0050	<0.0050
cis-1,2-DCE	<0.0050	<0.0050	**0.0071**

SB9			
Depth	1.5 ft-bgs	4 ft-bgs	8 ft-bgs
PCE	<0.0050	0.040	0.041
TCE	<0.0050	0.014	0.024
cis-1,2-DCE	<0.0050	0.016	0.038

SB-5		
Depth	5 ft-bgs	8 ft-bgs
PCE	0.81	0.044
TCE	0.094	0.011
cis-1,2-DCE	0.048	0.014

SB-5b	
Depth	1.5 ft-bgs
PCE	<0.0050
TCE	<0.0050
cis-1,2-DCE	<0.0050

SB10			
Depth	2.5 ft-bgs	4 ft-bgs	8 ft-bgs
PCE	<0.0050	0.039	0.0097
TCE	<0.0050	0.0082	0.0069
cis-1,2-DCE	<0.0050	<0.0050	0.0078

SB7				
Depth	2 ft-bgs	4 ft-bgs	8 ft-bgs	12 ft-bgs
PCE	<0.0050	0.46	0.55	0.27
TCE	<0.0050	0.032	<0.10	0.13
cis-1,2-DCE	<0.0050	0.0074	<0.10	0.11

SB-22			
Depth	4 ft-bgs	8 ft-bgs	12 ft-bgs
PCE	**0.066**	**0.013**	**0.096**
TCE	**0.0096**	<0.0050	**0.068**
cis-1,2-DCE	**0.062**	<0.0050	**0.022**

SB17				
Depth	2 ft-bgs	4 ft-bgs	8 ft-bgs	12 ft-bgs
PCE	<0.0050	<0.0050	0.13	0.097
TCE	<0.0050	<0.0050	0.028	0.025
cis-1,2-DCE	<0.0050	0.010	0.020	0.024
Vinyl Chloride	<0.0050	0.020	<0.0050	<0.0050

SB12				
Depth	1 ft-bgs	4 ft-bgs	8 ft-bgs	12 ft-bgs
PCE	0.14	1.8	1.2	0.25
TCE	0.037	0.27	0.13	0.12
cis-1,2-DCE	0.047	0.22	0.14	0.12

SB-21			
Depth	4 ft-bgs	8 ft-bgs	12 ft-bgs
PCE	**0.017**	<0.0050	**0.044**
TCE	<0.0050	<0.0050	<0.0050
cis-1,2-DCE	<0.0050	<0.0050	<0.0050

SB-20			
Depth	4 ft-bgs	8 ft-bgs	12 ft-bgs
PCE	**0.028**	<0.0050	<0.0050
TCE	<0.0050	<0.0050	<0.0050
cis-1,2-DCE	<0.0050	<0.0050	<0.0050

SB-19			
Depth	4 ft-bgs	8 ft-bgs	12 ft-bgs
PCE	**0.24**	**0.028**	**0.013**
TCE	<0.0050	<0.0050	<0.0050
cis-1,2-DCE	<0.0050	<0.0050	<0.0050

SB18				
Depth	1.5 ft-bgs	4 ft-bgs	8 ft-bgs	12 ft-bgs
PCE	0.036	0.12	0.058	0.30
TCE	0.0083	0.019	0.13	0.10
cis-1,2-DCE	0.022	0.014	0.13	0.14

Explanation

▬ • • ▬	Approximate Property Boundary
SB-15 ⊗	Approximate Location of Soil Boring (November 2005)
SB-8b*	Soil Samples not collected due to shallow or perched groundwater at 8-ft-bgs.
SB-1 ⊗	Approximate Location of Previous Soil Boring (April 2005 and September 2004)
— ss →	Sanitary Sewer Line Arrow signifies direction of sewer flow.
⊚	Sanitary Sewer Manhole
▤	Storm Drain

ft-bgs = feet below ground surface

PCE = Tetrachloroethylene
TCE = Trichloroethylene
cis-1,2-DCE = cis-1,2-Dichloroethylene
trans-1,2-DCE = trans-1,2-Dichloroethylene
VOCs = Volatile Organic Compounds

< = Not detected at or above the specified laboratory reporting limit

ND = No VOCs detected above respective laboratory reporting limits

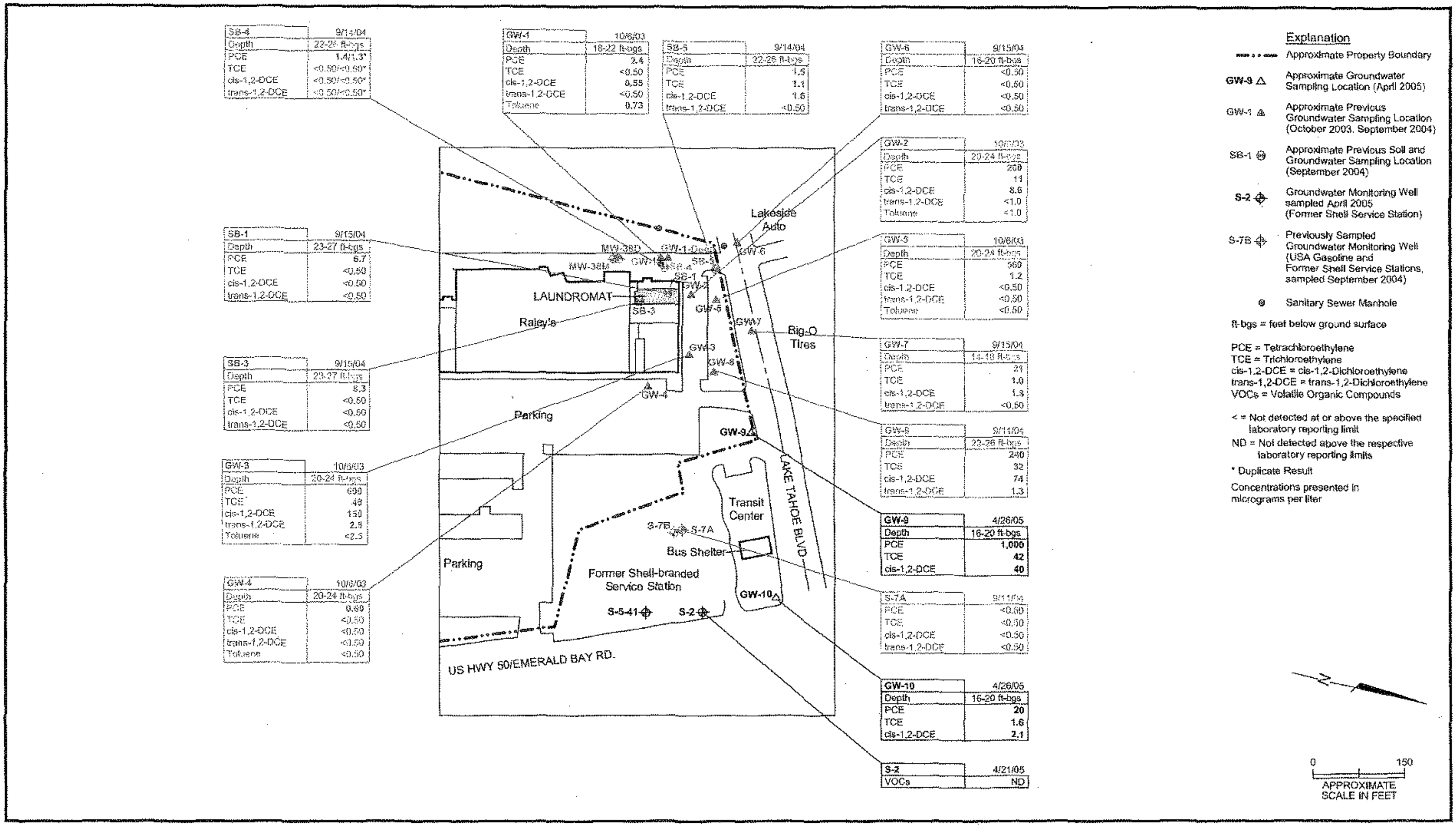
Concentrations presented in milligrams per kilogram

PES Environmental, Inc.
Engineering & Environmental Services

Soil Analytical Results
Lake Tahoe Laundry Works
1024 Lake Tahoe Boulevard
South Lake Tahoe, California

PLATE
4

1021.001.01.007	102100101007_1105	KSF	1/06
JOB NUMBER	DRAWING NUMBER	REVIEWED BY	DATE



SB-4	9/14/04
Depth	22-26 ft-bgs
PCE	1.4/1.3*
TCE	<0.50/<0.50*
cis-1,2-DCE	<0.50/<0.50*
trans-1,2-DCE	<0.50/<0.50*

GW-1	10/6/03
Depth	18-22 ft-bgs
PCE	2.4
TCE	<0.50
cis-1,2-DCE	0.55
trans-1,2-DCE	<0.50
Toluene	0.73

SB-5	9/14/04
Depth	22-26 ft-bgs
PCE	1.5
TCE	1.1
cis-1,2-DCE	1.6
trans-1,2-DCE	<0.50

GW-6	9/15/04
Depth	16-20 ft-bgs
PCE	<0.50
TCE	<0.50
cis-1,2-DCE	<0.50
trans-1,2-DCE	<0.50

SB-1	9/15/04
Depth	23-27 ft-bgs
PCE	6.7
TCE	<0.50
cis-1,2-DCE	<0.50
trans-1,2-DCE	<0.50

GW-2	10/6/03
Depth	20-24 ft-bgs
PCE	260
TCE	11
cis-1,2-DCE	8.6
trans-1,2-DCE	<1.0
Toluene	<1.0

GW-5	10/6/03
Depth	20-24 ft-bgs
PCE	560
TCE	1.2
cis-1,2-DCE	<0.50
trans-1,2-DCE	<0.50
Toluene	<0.50

SB-3	9/15/04
Depth	23-27 ft-bgs
PCE	8.3
TCE	<0.50
cis-1,2-DCE	<0.50
trans-1,2-DCE	<0.50

GW-7	9/15/04
Depth	14-18 ft-bgs
PCE	21
TCE	1.0
cis-1,2-DCE	1.3
trans-1,2-DCE	<0.50

GW-8	9/14/04
Depth	22-26 ft-bgs
PCE	240
TCE	32
cis-1,2-DCE	74
trans-1,2-DCE	1.3

GW-3	10/6/03
Depth	20-24 ft-bgs
PCE	690
TCE	48
cis-1,2-DCE	150
trans-1,2-DCE	2.9
Toluene	<2.5

GW-9	4/26/05
Depth	16-20 ft-bgs
PCE	**1,000**
TCE	**42**
cis-1,2-DCE	**40**

GW-4	10/6/03
Depth	20-24 ft-bgs
PCE	0.60
TCE	<0.50
cis-1,2-DCE	<0.50
trans-1,2-DCE	<0.50
Toluene	<0.50

S-7A	9/11/04
PCE	<0.50
TCE	<0.50
cis-1,2-DCE	<0.50
trans-1,2-DCE	<0.50

GW-10	4/26/05
Depth	16-20 ft-bgs
PCE	**20**
TCE	**1.6**
cis-1,2-DCE	**2.1**

S-2	4/21/05
VOCs	ND

Explanation

▬ • • ▬	Approximate Property Boundary
GW-9 △	Approximate Groundwater Sampling Location (April 2005)
GW-1 ▲	Approximate Previous Groundwater Sampling Location (October 2003, September 2004)
SB-1 ⊗	Approximate Previous Soil and Groundwater Sampling Location (September 2004)
S-2 ⊕	Groundwater Monitoring Well sampled April 2005 (Former Shell Service Station)
S-7B ⊕	Previously Sampled Groundwater Monitoring Well (USA Gasoline and Former Shell Service Stations, sampled September 2004)
⊗	Sanitary Sewer Manhole

ft-bgs = feet below ground surface

PCE = Tetrachloroethylene
TCE = Trichloroethylene
cis-1,2-DCE = cis-1,2-Dichloroethylene
trans-1,2-DCE = trans-1,2-Dichloroethylene
VOCs = Volatile Organic Compounds

< = Not detected at or above the specified laboratory reporting limit

ND = Not detected above the respective laboratory reporting limits

* Duplicate Result

Concentrations presented in micrograms per liter

PES Environmental, Inc.
Engineering & Environmental Services

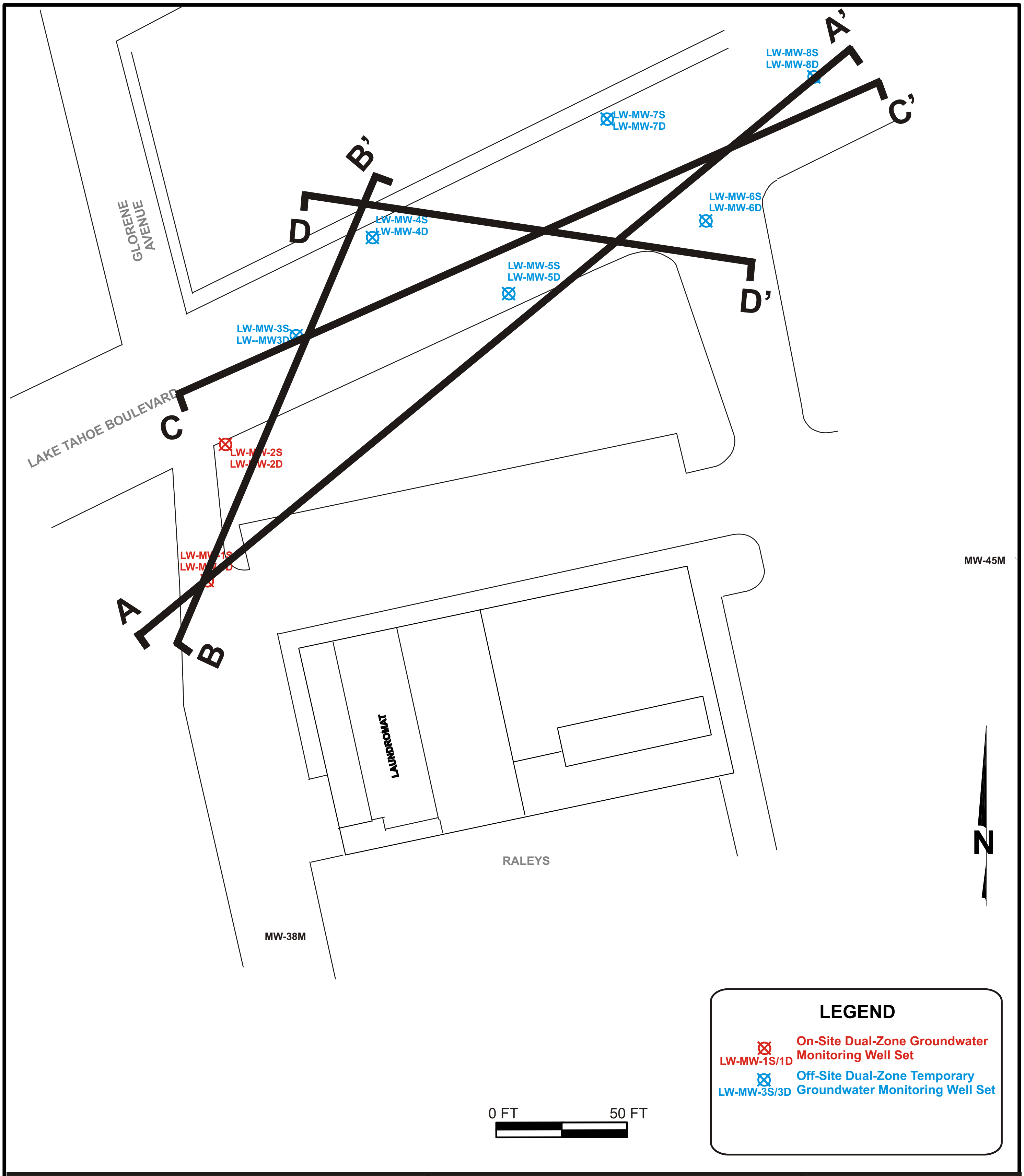
Analytical Results from
Shallow Water-Bearing Zone
Lake Tahoe Laundry Works
1024 Lake Tahoe Boulevard
South Lake Tahoe, California

PLATE
5

JOB NUMBER	DRAWING NUMBER	REVIEWED BY	DATE
1021.001.01.003	1021001_0505.dwg	FAB	5/05

APPENDIX D

E_2C, 2008 Chemical Cross-Section Plots



E_2C Remediation

5300 Woodmere Dr., Suite 105
Bakersfield, CA 93313

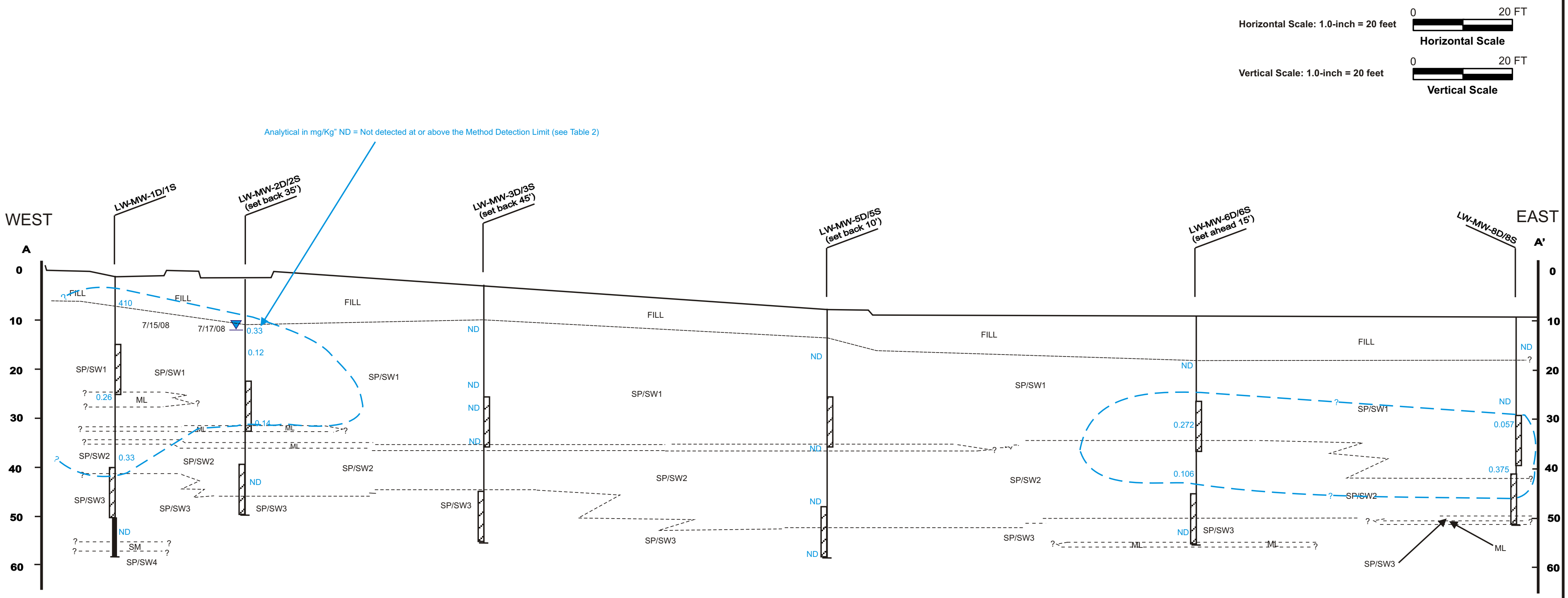
Phone: (661) 831-6906
Fax: (661) 831-6234

LAKE TAHOE LAUNDRY WORKS
1024 LAKE TAHOE BOULEVARD
SOUTH LAKE TAHOE, CALIFORNIA

SITE PLAN WITH
CROSS-SECTION TRANSECTS

FIGURE

2B



Legend

ML - Silt; light gray and orange brown with Fe-staining in places

SM - Silty Sand; reddish gray; generally very fine sands; non-plastic fines

SP - Poorly-Graded Sand

SW - Well-Graded Sand

SP/SW1 - Alternating lenses of poorly-graded and well-graded sands; generally salt & pepper in color with occasional moderate yellow brown lenses

SP/SW2 - Alternating lenses of poorly-graded and well-graded sands; generally salt & pepper lenses with interbedded moderate yellow brown and gray lenses

SP/SW3 - Alternating lenses of poorly-graded and well-graded sands; interbedded lenses of gray and orange-brown with occasional Fe-staining; occasional lenses of reddish brown, very fine sand

SP/SW4 - Alternating lenses of poorly-graded and well-graded sands; salt and pepper, moderate yellow brown and gray

▼ First Encountered Shallow Water

▽ Shallow Water Table w/date measured

E_2C Remediation
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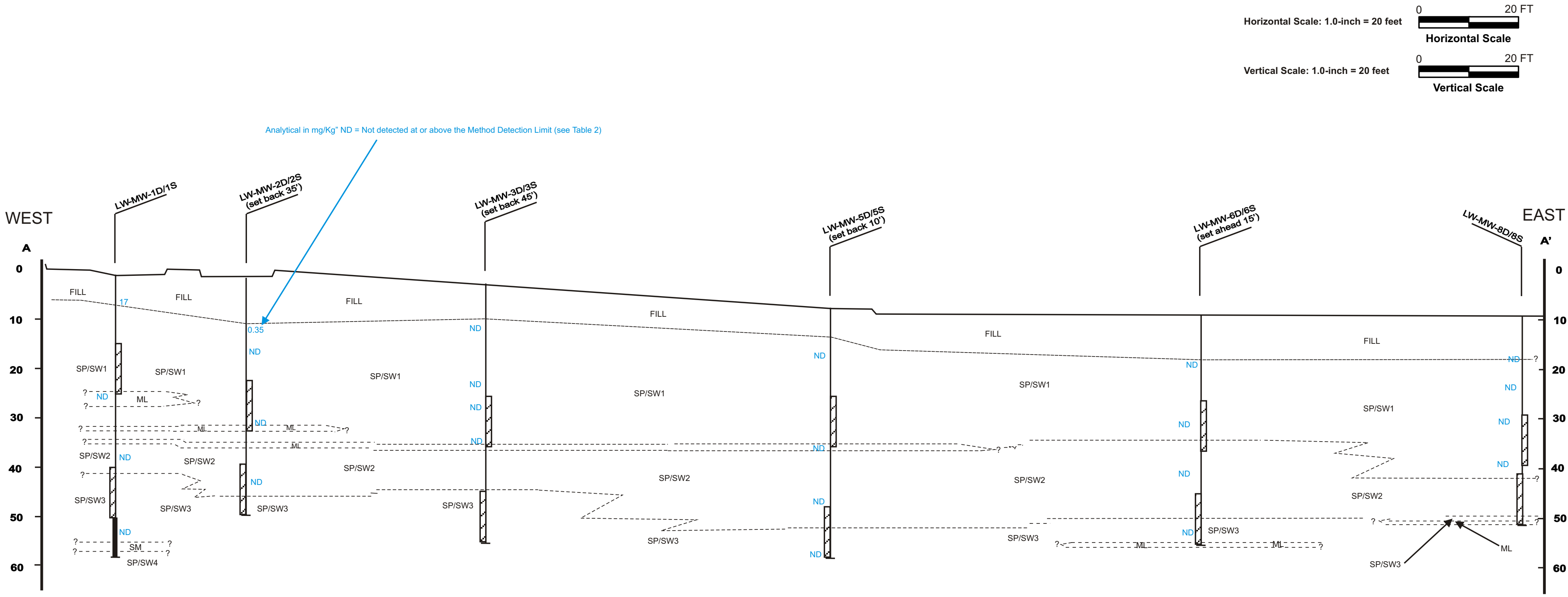
LAKE TAHOE LAUNDRY WORKS
1024 LAKE TAHOE BOULEVARD
SOUTH LAKE TAHOE, CALIFORNIA

CROSS SECTION A - A'
SOIL PCE

FIGURE

4A



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Legend

SP/SW3 - Alternating lenses of poorly-graded and well-graded sands; interbedded lenses of gray and orange-brown with occasional Fe-staining; occasional lenses of reddish brown, very fine sand

SP/SW4 - Alternating lenses of poorly-graded and well-graded sands; salt and pepper, moderate yellow brown and gray

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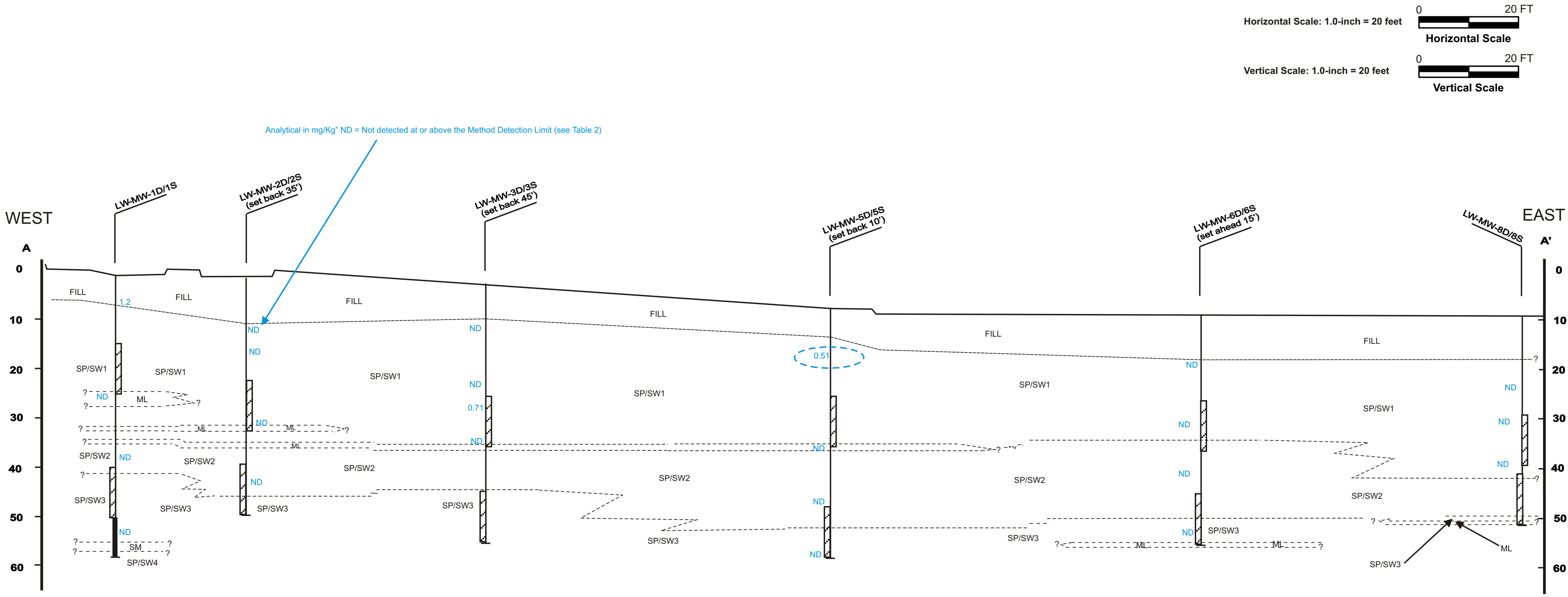
LAKE TAHOE LAUNDRY WORKS
1024 LAKE TAHOE BOULEVARD
SOUTH LAKE TAHOE, CALIFORNIA

CROSS SECTION A - A'
SOIL TCE

FIGURE

4B



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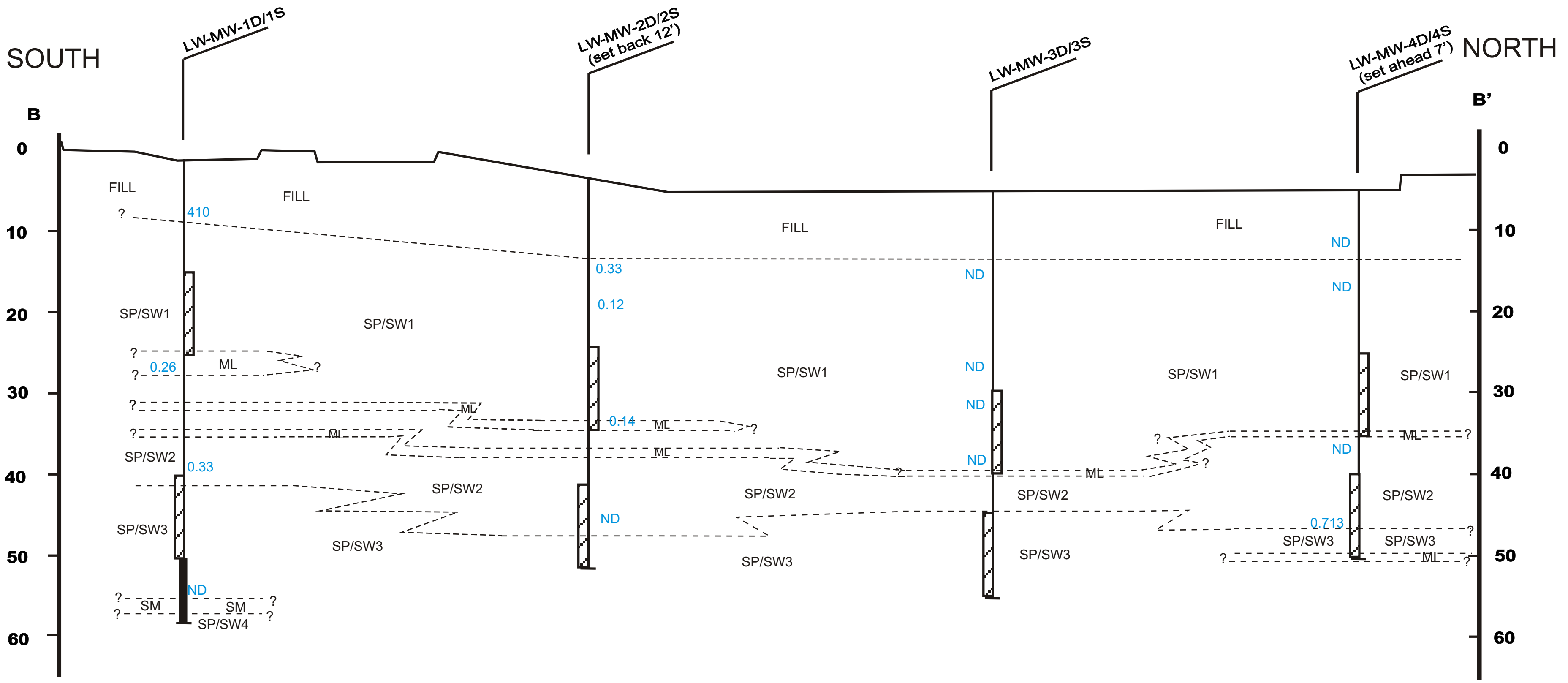
LAKE TAHOE LAUNDRY WORKS
1024 LAKE TAHOE BOULEVARD
SOUTH LAKE TAHOE, CALIFORNIA

CROSS SECTION A - A'
SOIL cis-1,2-DCE

FIGURE

4C



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▼ First Encountered Shallow Water

▽ Shallow Water Table w/date measured

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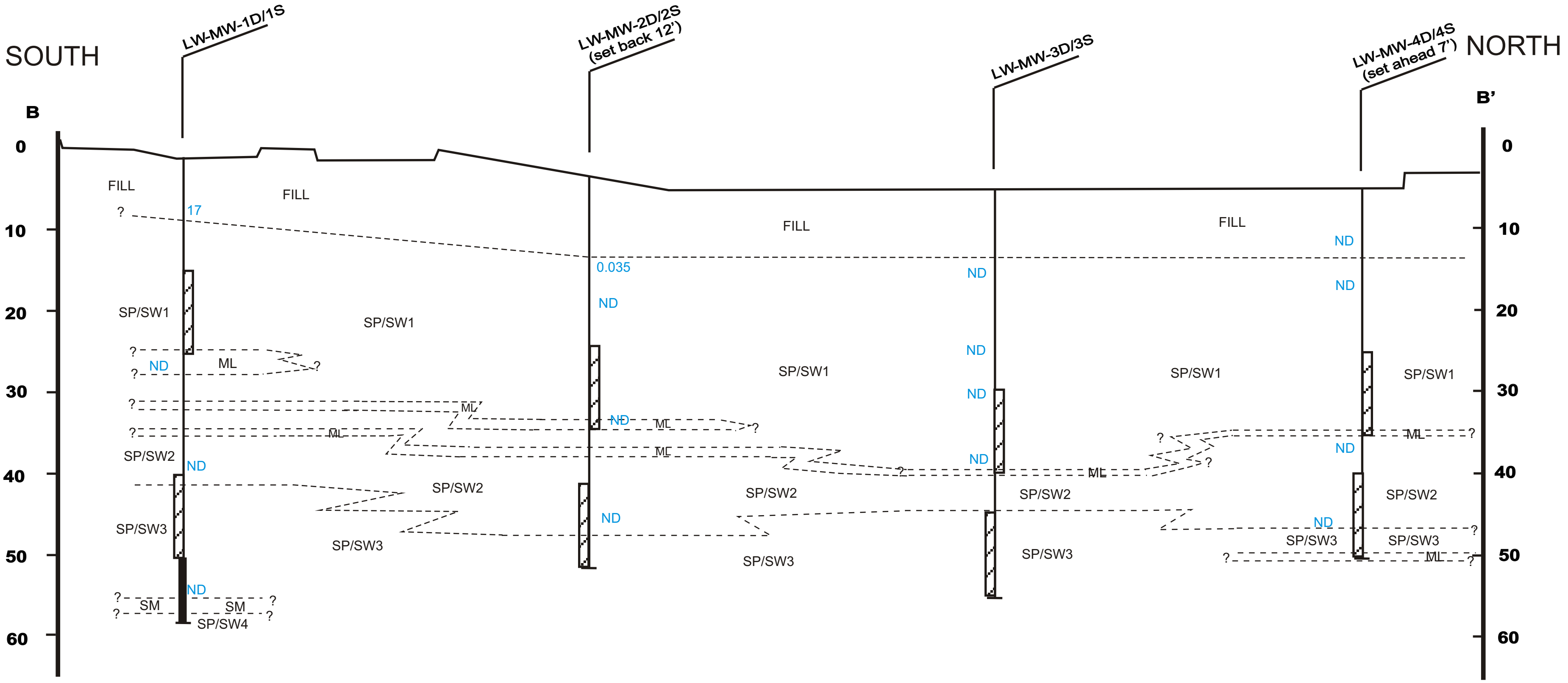
LAKE TAHOE LAUNDRY WORKS
1024 LAKE TAHOE BOULEVARD
SOUTH LAKE TAHOE, CALIFORNIA

CROSS SECTION B - B'
SOIL PCE

FIGURE

5A



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▼ First Encountered Shallow Water

▽ Shallow Water Table w/date measured

E$_2$C Remediation
5300 Woodmere Drive, Ste. 105
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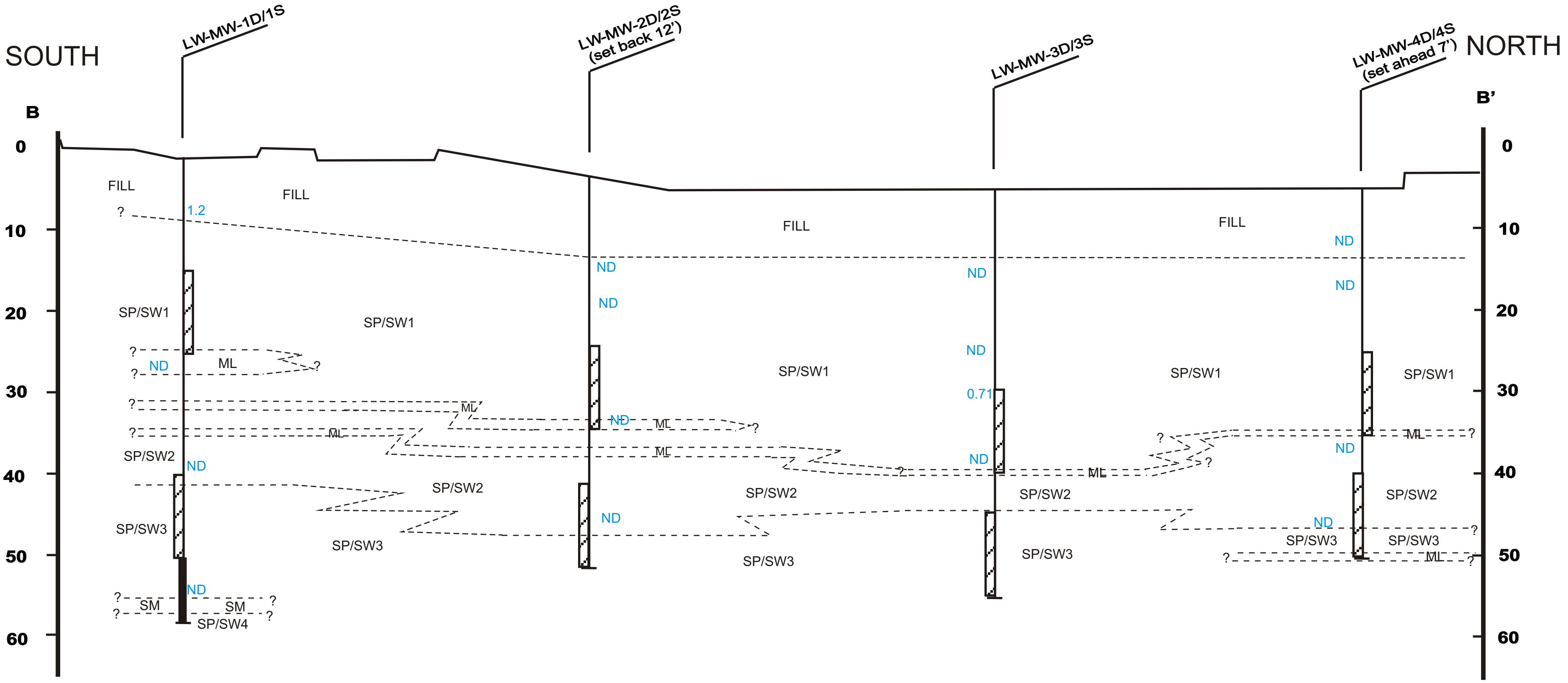
LAKE TAHOE LAUNDRY WORKS
1024 LAKE TAHOE BOULEVARD
SOUTH LAKE TAHOE, CALIFORNIA

CROSS SECTION B - B'
SOIL TCE

FIGURE

5B



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SP/SW4 - Alternating lenses of poorly-graded and well-graded sands; salt and pepper, moderate yellow brown and gray

▼ First Encountered Shallow Water

▽ Shallow Water Table w/date measured

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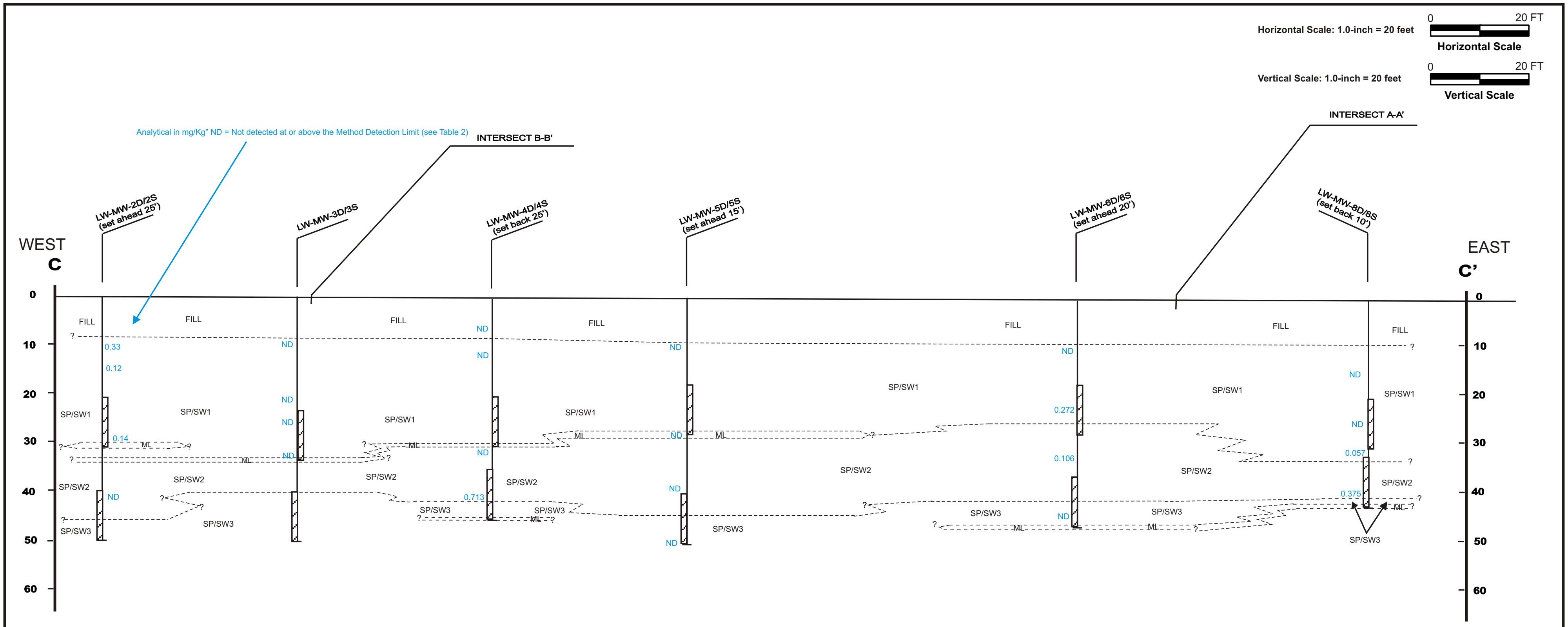
LAKE TAHOE LAUNDRY WORKS
1024 LAKE TAHOE BOULEVARD
SOUTH LAKE TAHOE, CALIFORNIA

CROSS SECTION B - B'
SOIL cis-1,2-DCE

FIGURE

5C



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SP/SW4 - Alternating lenses of poorly-graded and well-graded sands; salt and pepper, moderate yellow brown and gray

▼ First Encountered Shallow Water

▽ Shallow Water Table w/date measured

E$_2$C Remediation
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Bakersfield, CA 93313

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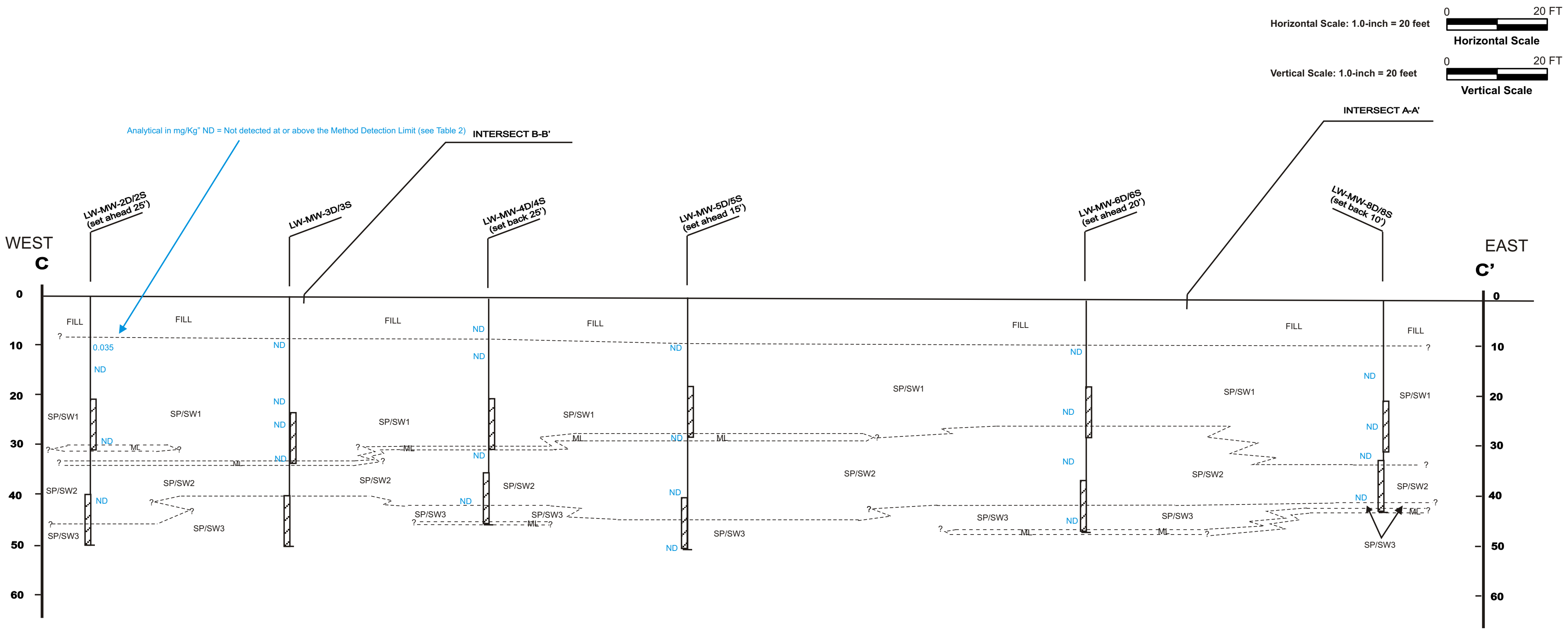
LAKE TAHOE LAUNDRY WORKS
1024 LAKE TAHOE BOULEVARD
SOUTH LAKE TAHOE, CALIFORNIA

CROSS SECTION C - C'
SOIL PCE

FIGURE

6A



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E_2C Remediation
5300 Woodmere Dr., Suite 105
Bakersfield, CA 93313

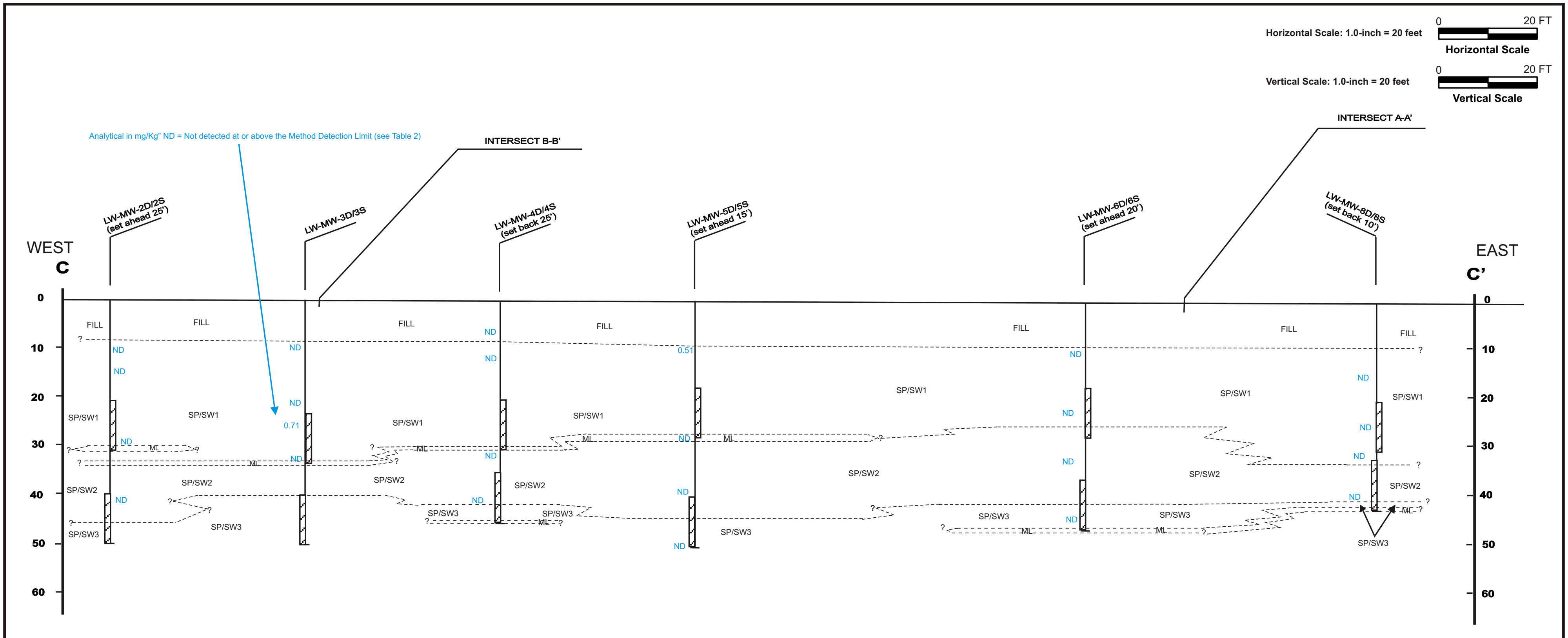
Phone: (661) 831-6906
Fax: (661) 831-6234

LAKE TAHOE LAUNDRY WORKS
1024 LAKE TAHOE BOULEVARD
SOUTH LAKE TAHOE, CALIFORNIA

CROSS SECTION C - C'
SOIL TCE

FIGURE

6B



Legend

ML - Silt; light gray and orange brown with Fe-staining in places

SM - Silty Sand; reddish gray; generally very fine sands; non-plastic fines

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SP/SW4 - Alternating lenses of poorly-graded and well-graded sands; salt and pepper, moderate yellow brown and gray

▼ First Encountered Shallow Water

▽ Shallow Water Table w/date measured

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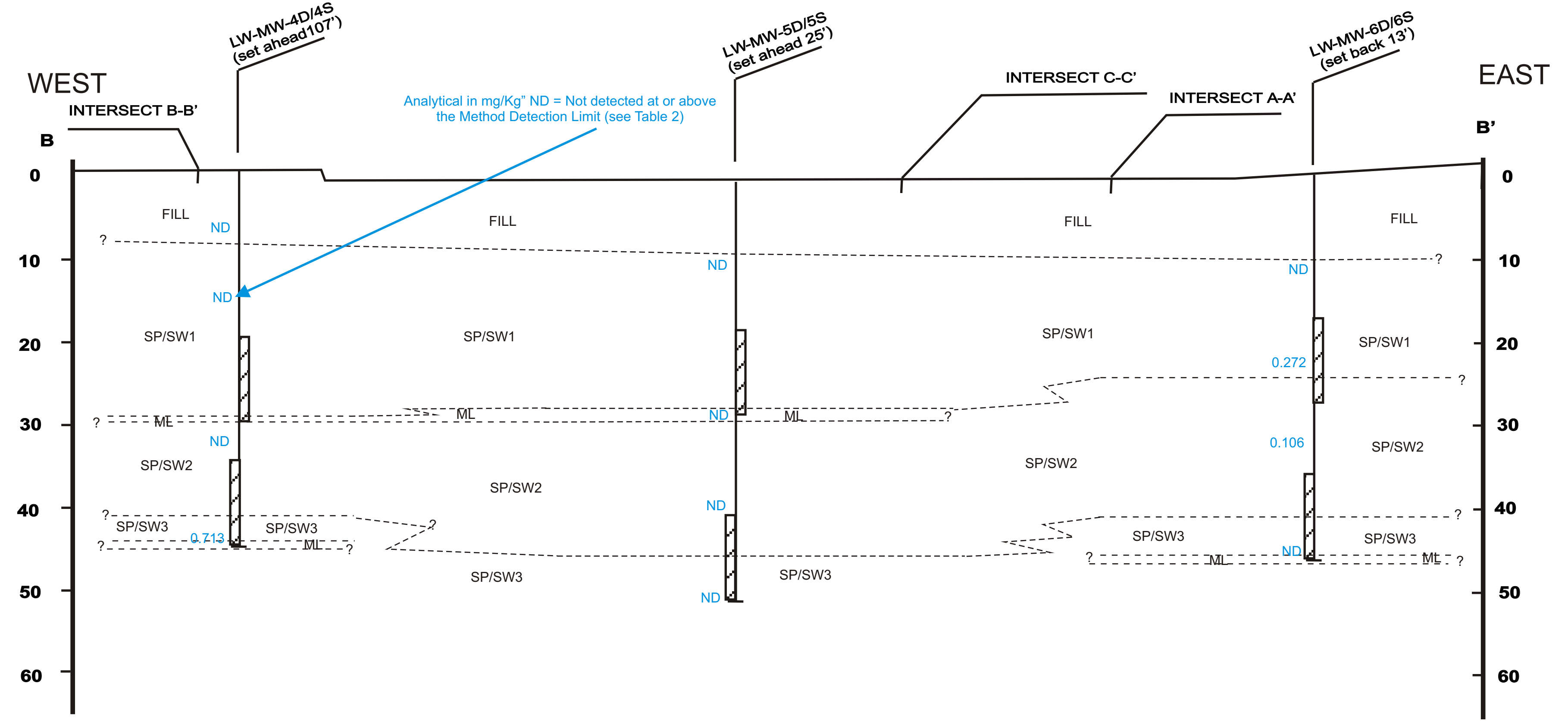
CROSS SECTION C - C'
SOIL cis-1,2-DCE

FIGURE

6C



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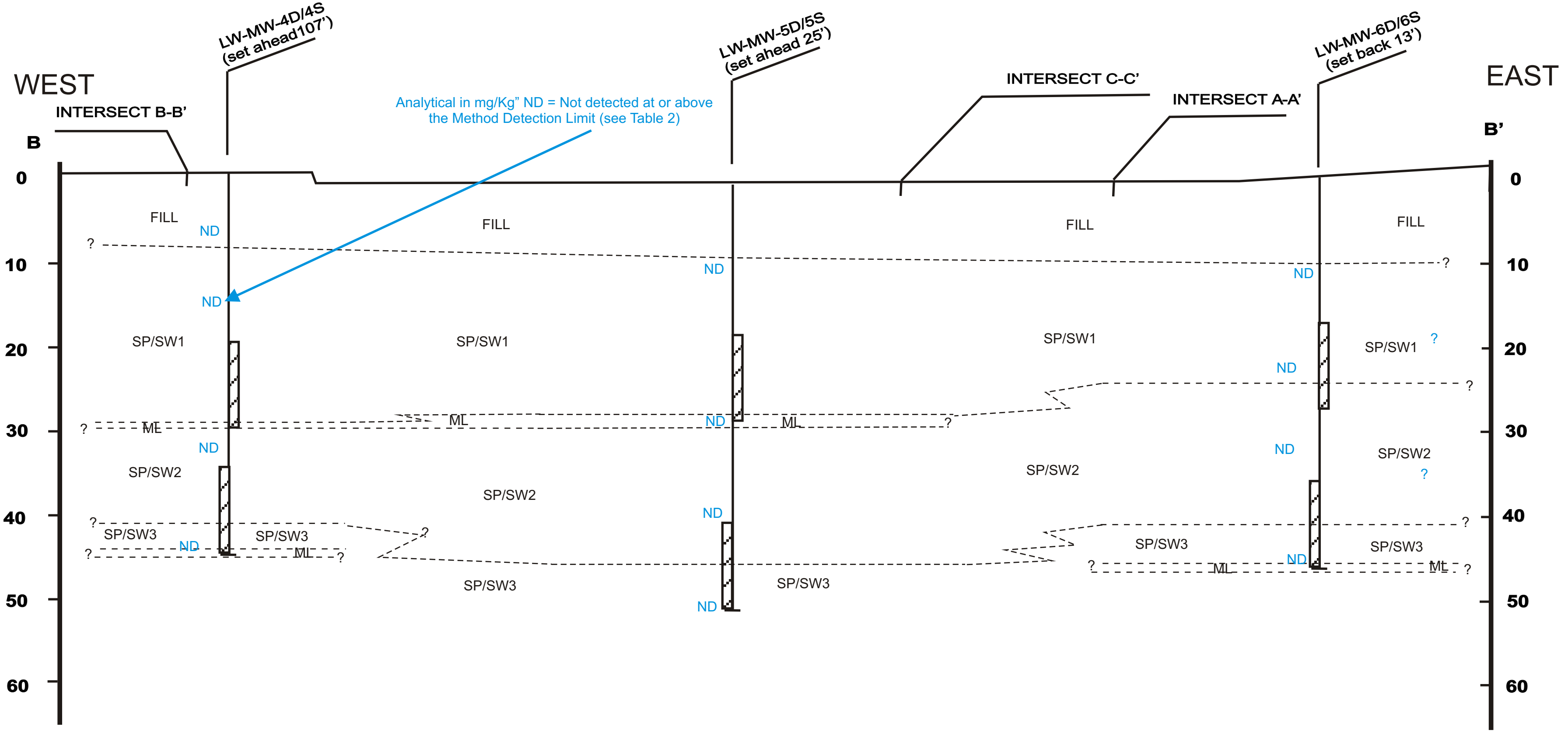
CROSS SECTION D - D'
SOIL PCE

FIGURE
7A



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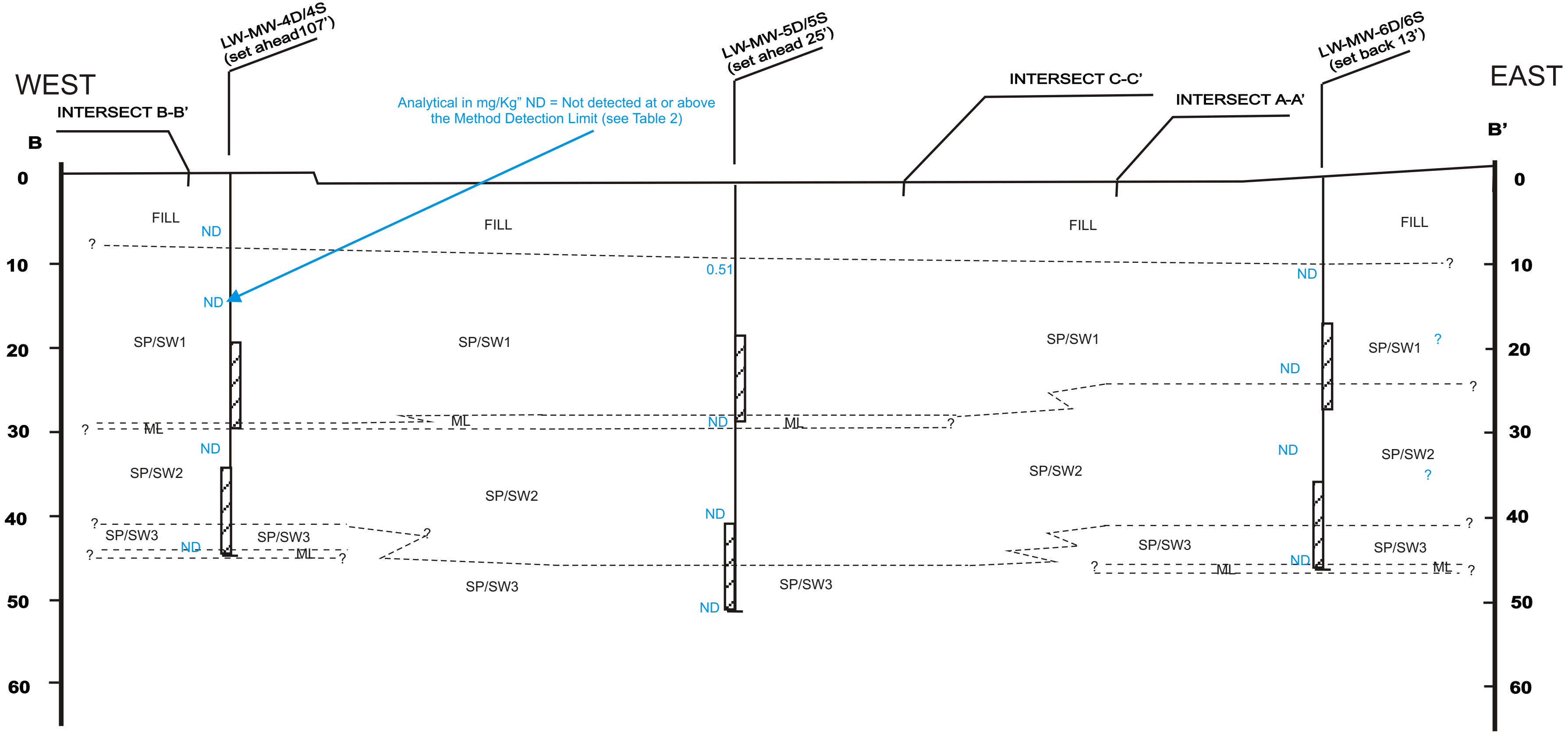
LAKE TAHOE LAUNDRY WORKS
1024 LAKE TAHOE BOULEVARD
SOUTH LAKE TAHOE, CALIFORNIA

CROSS SECTION D - D'
SOIL TCE

FIGURE

7B



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SOUTH LAKE TAHOE, CALIFORNIA

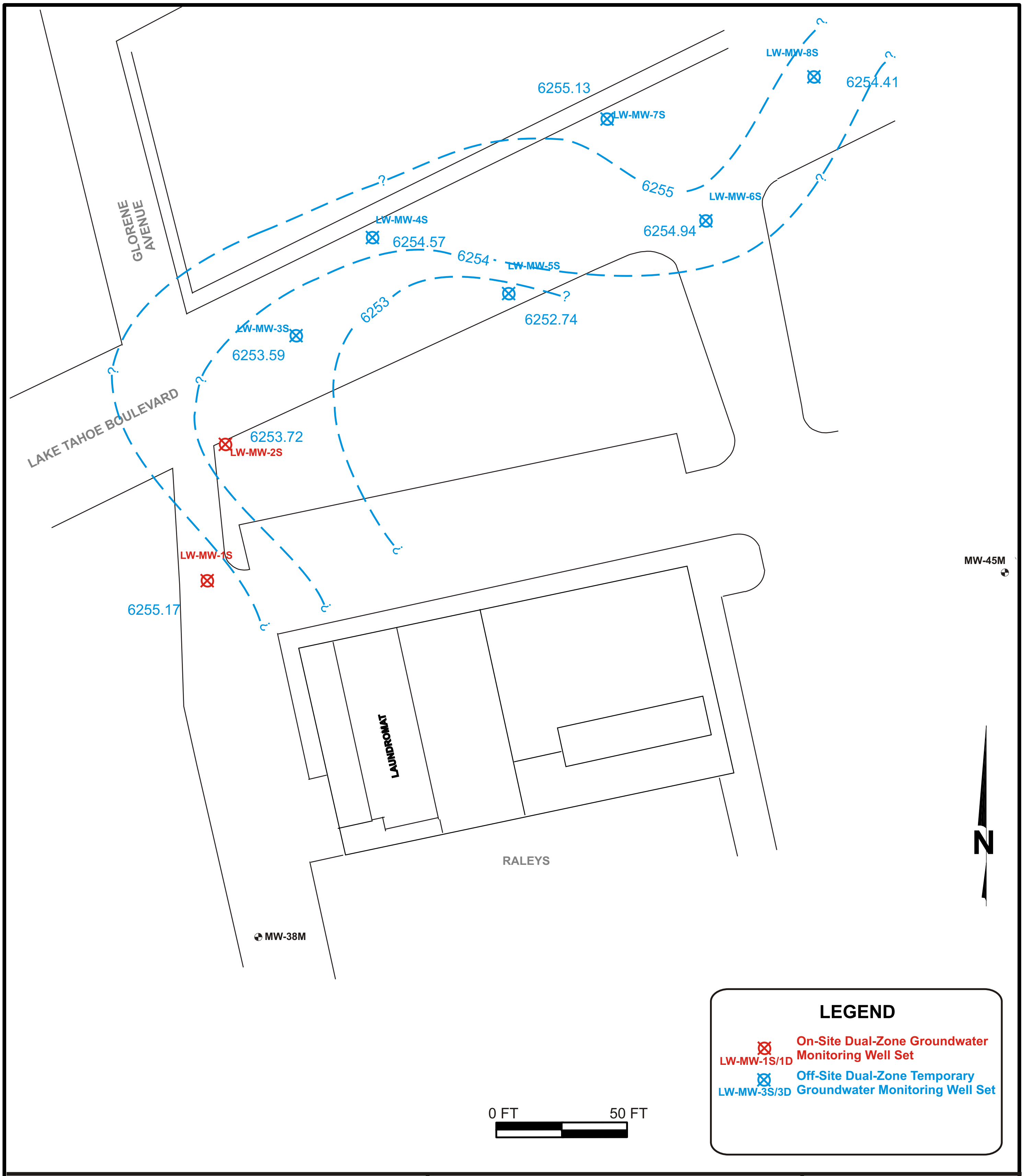
CROSS SECTION D - D'
SOIL cis-1,2-DCE

FIGURE

7C

APPENDIX E

E_2C, 2008 Groundwater Gradient Plots



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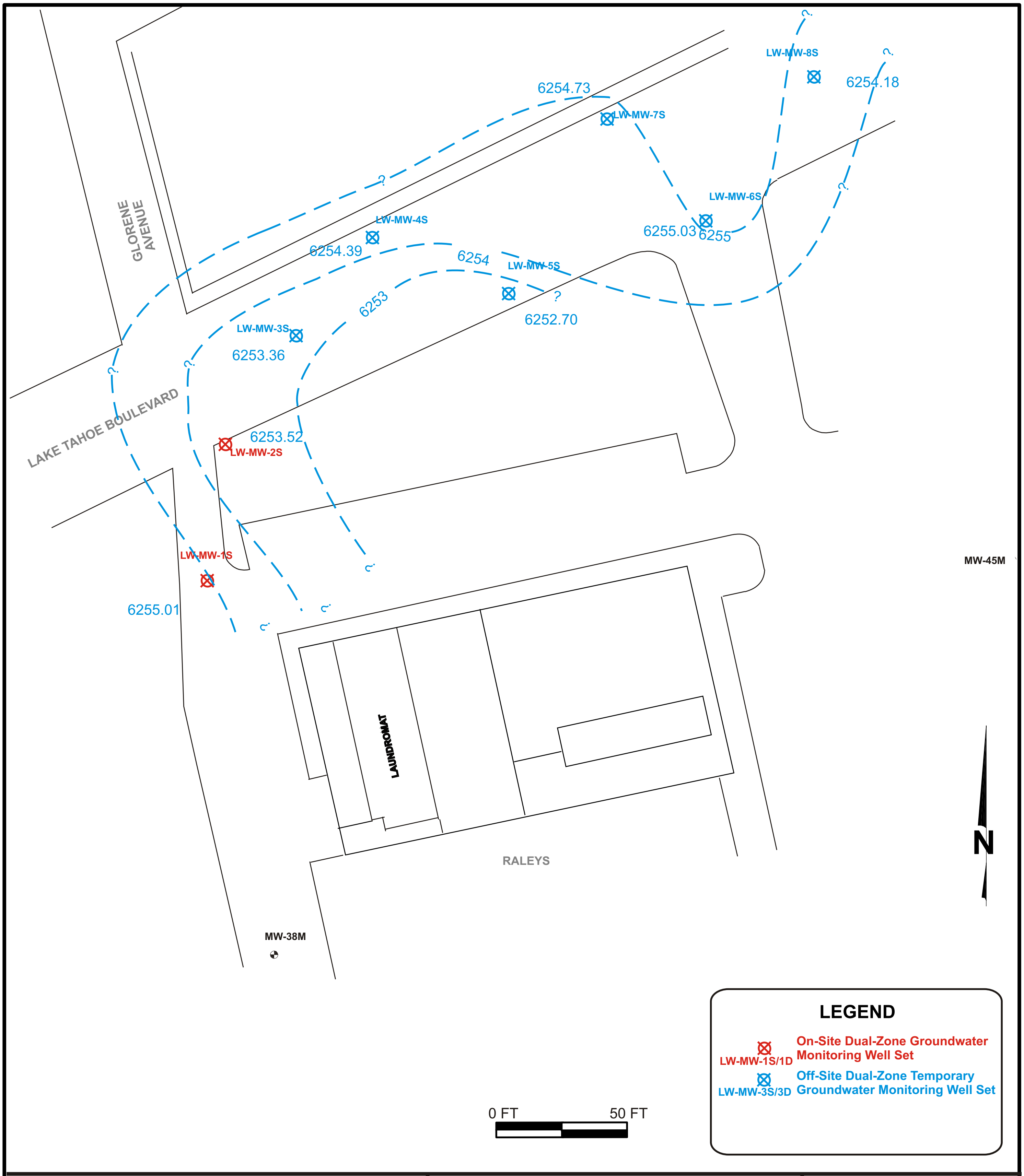
LAKE TAHOE LAUNDRY WORKS
1024 LAKE TAHOE BOULEVARD
SOUTH LAKE TAHOE, CALIFORNIA

GROUNDWATER GRADIENT PLOT
SHALLOW ZONE
9/9/08

FIGURE

3A



E_2C Remediation

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LAKE TAHOE LAUNDRY WORKS
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SOUTH LAKE TAHOE, CALIFORNIA

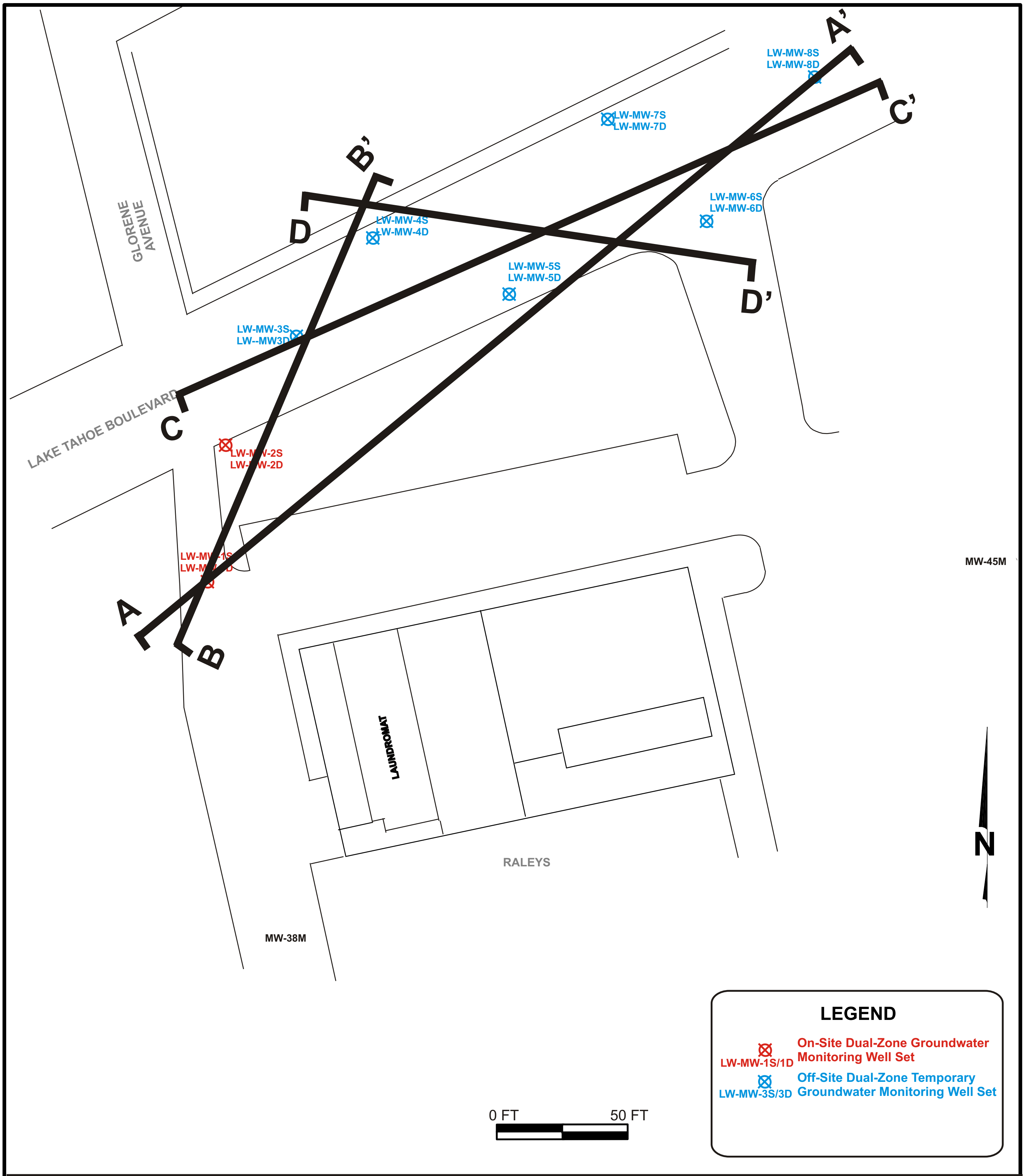
GROUNDWATER GRADIENT PLOT
SHALLOW ZONE
9/14/08

FIGURE

3AA

APPENDIX F

E_2C, 2008 Cross-Sections



E₂C Remediation

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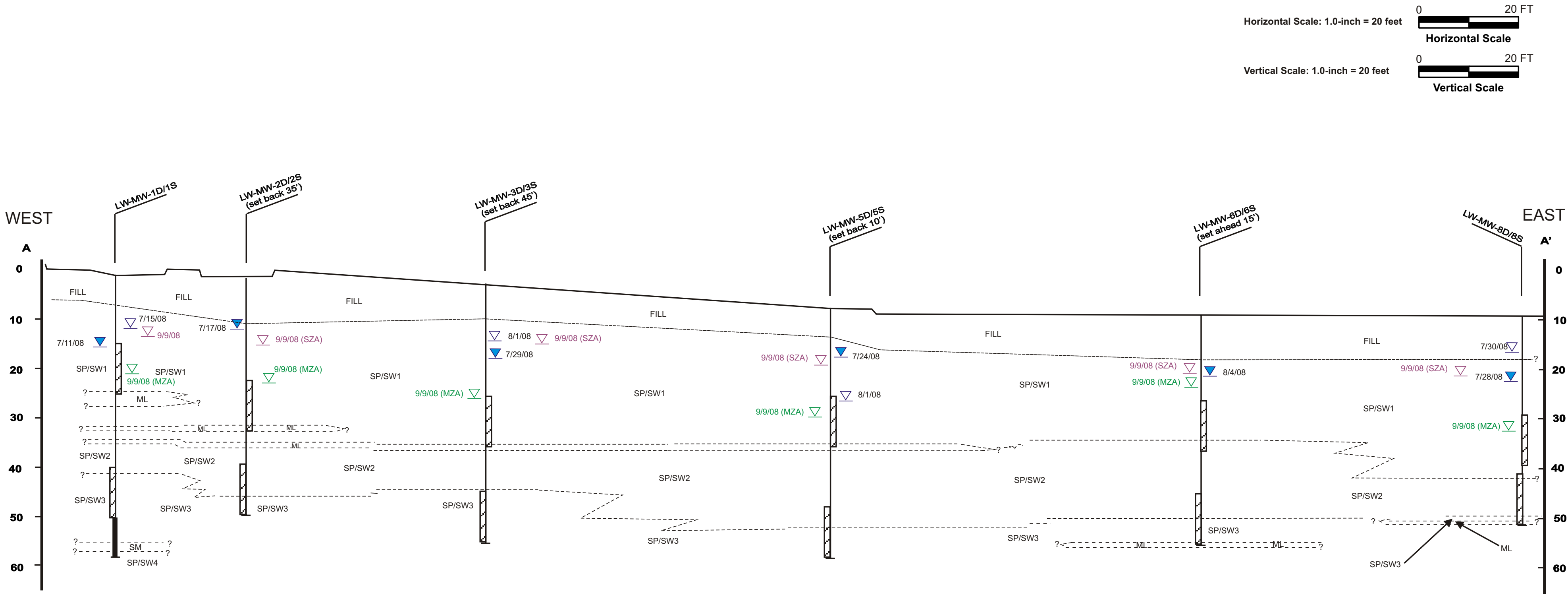
LAKE TAHOE LAUNDRY WORKS
1024 LAKE TAHOE BOULEVARD
SOUTH LAKE TAHOE, CALIFORNIA

SITE PLAN WITH
CROSS-SECTION TRANSECTS

FIGURE

2B



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▼	First Encountered Shallow Water
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LAKE TAHOE LAUNDRY WORKS
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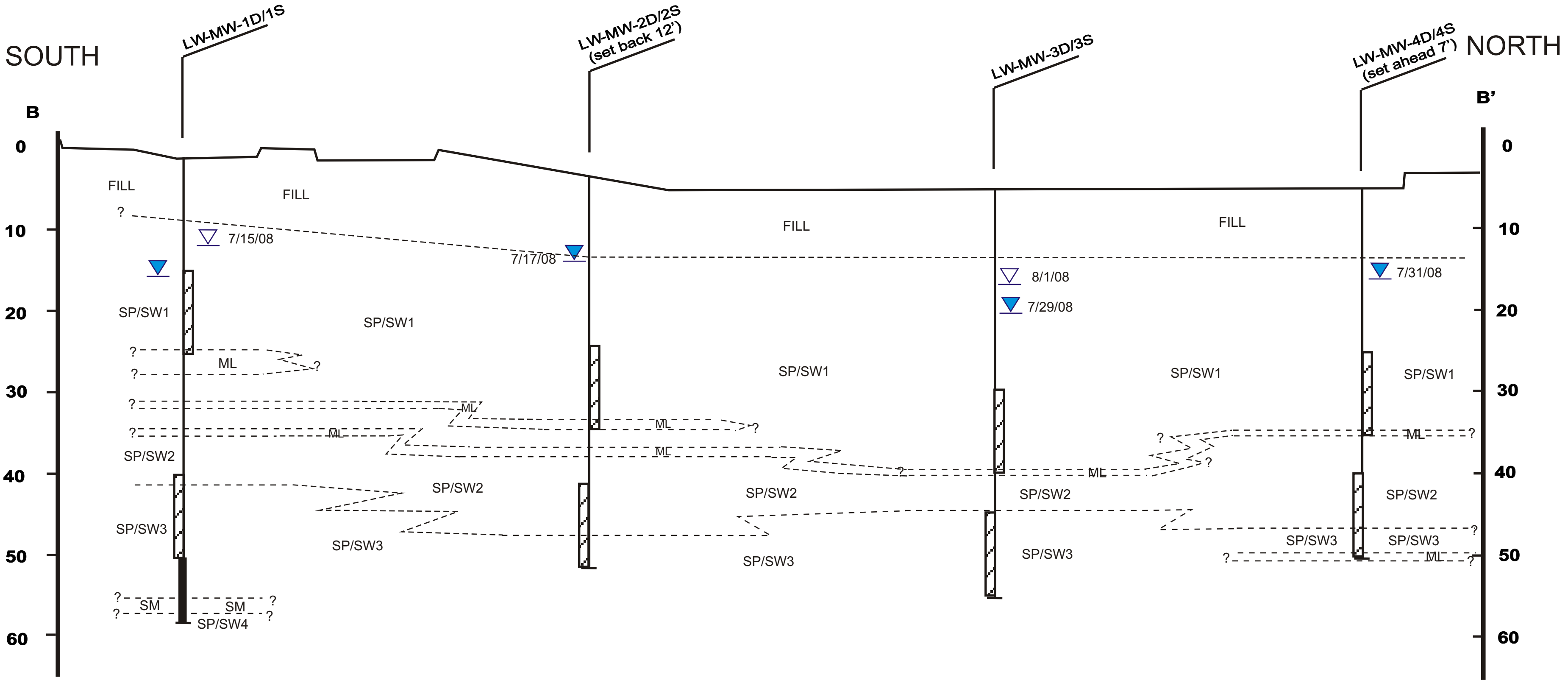
SOUTH LAKE TAHOE, CALIFORNIA

CROSS SECTION A - A'

FIGURE

4



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E₂C Remediation

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LAKE TAHOE LAUNDRY WORKS
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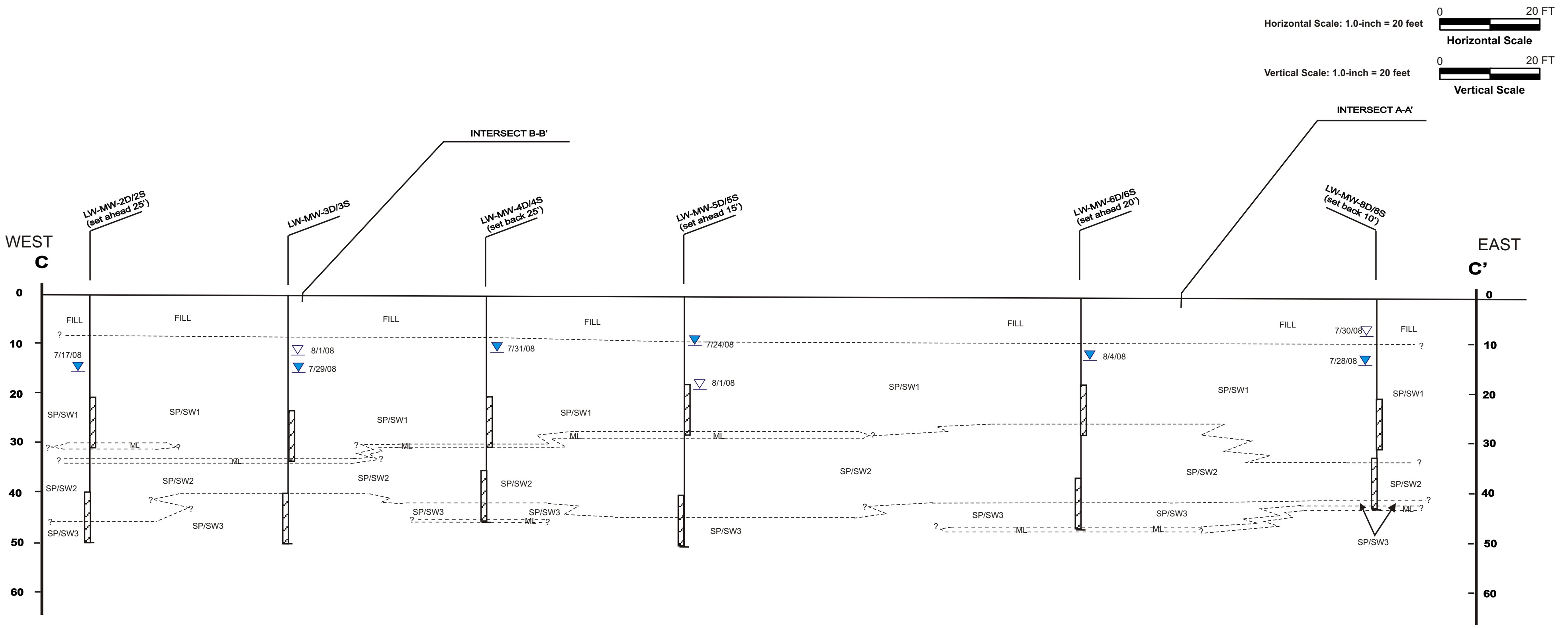
SOUTH LAKE TAHOE, CALIFORNIA

CROSS SECTION B - B'

FIGURE

5



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LAKE TAHOE LAUNDRY WORKS
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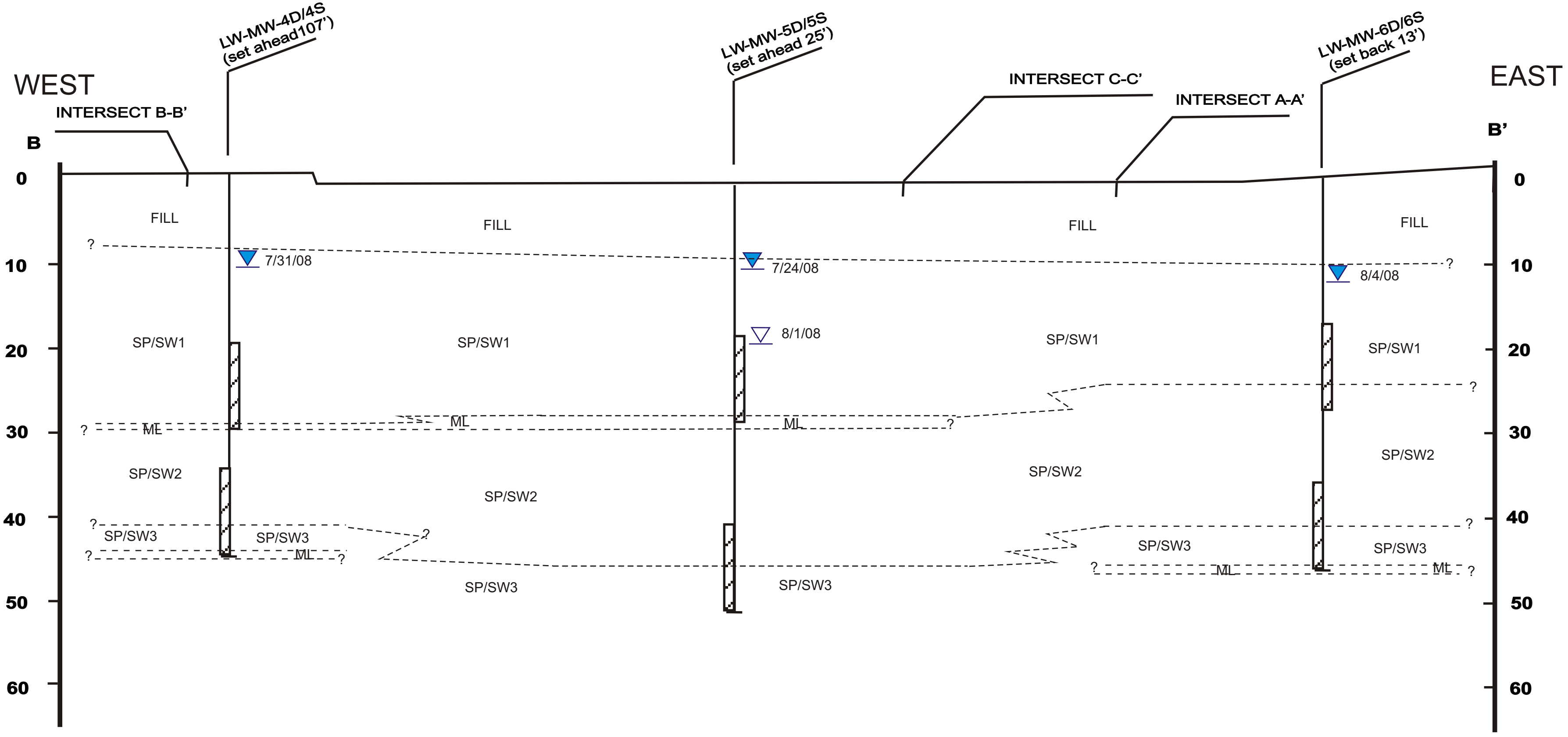
CROSS SECTION C - C'

FIGURE

6



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LAKE TAHOE LAUNDRY WORKS
1024 LAKE TAHOE BOULEVARD
SOUTH LAKE TAHOE, CALIFORNIA

CROSS SECTION D - D'

FIGURE
7

APPENDIX G

E_2C, 2008 Soil Analytical Summary Table

TABLE 2
SUMMARY OF SITE INVESTIGATION SOIL ANALYTICAL DATA
LAKE TAHOE LAUNDRY WORKS
1024 Lake Tahoe Boulevard
South Lake Tahoe, California

Sample Name	Sample Date	Sample Depth (bgs)	PCE	TCE	VC	CA	1,1-DCE	Trans-1,2-DCE	1,1-DCA	Cis-1,2-DCE	1,2-DCA	1,1,1-TCA
			(mg/Kg)									
Friedman & Bruya and ProVera Results												
LW-MW-1-7(FB)	7/11/08	7.0	**410**	**17**	<.05	<.5	<.05	<.05	<.05	**1.2**	<.05	<.05
LW-MW-1-7(PV)			**532**	**13.9**	<0..050	<0..050	<0..050	<0..050	<0..050	<0..050	<0..050	<0..050
LW-MW-1-26(FB)	7/11/08	26.0	**0.26**	<.03	<.05	<.5	<.05	<.05	<.05	<.05	<.05	<.05
LW-MW-1-26(PV)			**0.132**	<0.100	<0..050	<0..050	<0..050	<0..050	<0..050	<0..050	<0..050	<0..050
LW-MW-1-38(FB)	7/14/08	38.0	**0.33**	<.03	<.05	<.5	<.05	<.05	<.05	<.05	<.05	<.05
LW-MW-1-38(PV)			**0.27**	<0.100	<0..050	<0..050	<0..050	<0..050	<0..050	<0..050	<0..050	<0..050
LW-MW-1-52.5(PV)	7/14/08	52.5	<0.05	<0.1	<0.05	<0.05	<0.05	<0.05	<0.05	<0.5	<0.05	<0.05
LW-MW-2-10(FB)	7/17/08	10.0	**0.33**	**0.035**	<.05	<.5	<.05	<.05	<.05	<.05	<.05	<.05
LW-MW-2-10(PV)			**0.266**	<0.100	<0..050	<0..050	<0..050	<0..050	<0..050	<0..050	<0..050	<0..050
LW-MW-2-16(FB)	7/17/08	16.0	**0.12**	<.03	<.05	<.5	<.05	<.05	<.05	<.05	<.05	<.05
LW-MW-2-16(PV)			**0.086**	<0.100	<0..050	<0..050	<0..050	**0.126**	<0..050	<0..050	<0..050	<0..050
LW-MW-2-31(FB)	7/24/08	31.0	**0.14**	<.03	<.05	<.5	<.05	<.05	<.05	<.05	<.05	<.05
LW-MW-2-31(PV)			**0.112**	<0.100	<0..050	<0..050	<0..050	**0.125**	<0..050	<0..050	<0..050	<0..050
LW-MW-2-43(PV)	7/24/08	43.0	<0.05	<0.1	<0.05	<0.05	<0.05	0.125	<0.05	<0.5	<0.05	<0.05
ProVera Results												
LW-MW-3-11	7/29/08	11.0	<0.05	<0.1	<0.05	<0.05	<0.05	<0.05	<0.05	<0.5	<0.05	<0.05
LW-MW-3-20	7/29/08	20.0	<0.05	<0.1	<0.05	<0.05	<0.05	**0.123**	<0.05	<0.5	**0.19**	<0.05
LW-MW-3-25	7/29/08	25.0	<0.05	<0.1	0.053	<0.05	<0.05	<0.05	<0.05	**0.71**	<0.05	<0.05
LW-MW-3-34	7/30/08	34.0	<0.05	<0.1	<0.05	<0.05	<0.05	**0.12**	<0.05	<0.5	<0.05	<0.05
LW-MW-4-5.5	7/31/08	5.5	<0.05	<0.1	<0.05	<0.05	<0.05	<0.05	<0.05	<0.5	<0.05	<0.05
LW-MW-4-15	7/31/08	15.0	<0.05	<0.1	<0.05	<0.05	<0.05	<0.05	<0.05	<0.5	<0.05	<0.05
LW-MW-4-36.5	8/6/08	36.5	<0.05	<0.1	<0.05	<0.05	<0.05	<0.05	<0.05	<0.5	<0.05	<0.05
LW-MW-4-45.5	8/6/08	45.5	**0.713**	<0.1	<0.05	<0.05	<0.05	<0.05	<0.05	<0.5	<0.05	<0.05
LW-MW-5-10	7/24/08	10.0	<0.05	<0.1	<0.05	<0.05	<0.05	**0.108**	<0.05	**0.51**	<0.05	<0.05
LW-MW-5-30	7/24/08	30.0	<0.05		0.059	<0.05	<0.05	<0.05	<0.05	<0.5	<0.05	<0.05
LW-MW-5-41	7/24/08	41.0	<0.05	<0.1	<0.05	<0.05	<0.05	**0.107**	<0.05	<0.5	<0.05	<0.05
LW-MW-5-50	7/24/08	50.0	<0.05	<0.1	<0.05	<0.05	<0.05	**0.12**	<0.05	<0.5	<0.05	<0.05

TABLE 2
SUMMARY OF SITE INVESTIGATION SOIL ANALYTICAL DATA
LAKE TAHOE LAUNDRY WORKS
1024 Lake Tahoe Boulevard
South Lake Tahoe, California

Sample Name	Sample Date	Sample Depth (bgs)	PCE	TCE	VC	CA	1,1-DCE	Trans-1,2-DCE	1,1-DCA	Cis-1,2-DCE	1,2-DCA	1,1,1-TCA
			(mg/Kg)									
Friedman & Bruya and ProVera Results												
LW-MW-6-10	8/4/08	10.0	<0.05	<0.1	<0.05	<0.05	<0.05	<0.05	<0.05	<0.5	<0.05	<0.05
LW-MW-6-20	8/6/08	20.0	**0.272**	<0.1	<0.05	<0.05	<0.05	**0.109**	<0.05	<0.5	<0.05	<0.05
LW-MW-6-30	8/6/08	30.0	**0.106**	<0.1	<0.05	<0.05	<0.05	**0.122**	<0.05	<0.5	<0.05	<0.05
LW-MW-6-45	8/7/08	45.0	<0.05	<0.1	<0.05	<0.05	<0.05	<0.05	<0.05	<0.5	<0.05	<0.05
LW-MW-7-11	7/31/08	11.00	**0.069**	<0.1	**0.061**	<0.05	<0.05	<0.05	<0.05	<0.5	<0.05	<0.05
LW-MW-7-20	7/31/08	20.00	<0.05	<0.1	<0.05	<0.05	<0.05	**0.113**	<0.05	<0.5	<0.05	<0.05
LW-MW-7-25	7/31/08	25.00	<0.05	<0.1	<0.05	<0.05	<0.05	**0.118**	<0.05	<0.5	<0.05	<0.05
LW-MW-7-40.5	8/5/08	40.50	**0.82**	<0.1	**0.066**	<0.05	<0.05	**0.141**	<0.05	<0.5	<0.05	<0.05
LW-MW-8-15	7/28/08	15.00	<0.05	<0.1	<0.05	<0.05	<0.05	<0.05	<0.05	<0.5	<0.05	<0.05
LW-MW-8-25.5	7/28/08	25.50	<0.05	<0.1	<0.05	<0.05	<0.05	**0.105**	<0.05	<0.5	<0.05	<0.05
LW-MW-8-32	7/29/08	32.00	**0.057**	<0.1	<0.05	<0.05	<0.05	**0.11**	<0.05	<0.5	<0.05	<0.05
LW-MW-8-40	7/29/08	40.00	**0.375**	<0.1	<0.05	<0.05	<0.05	<0.05	<0.05	<0.5	<0.05	<0.05

Notes:
bgs = Below Ground Surface
FB = Friedman & Bruya, Inc.
nd<0.05 = not detected at or above the stated laboratory reporting limit.
PV = ProVera Analytical Laboratories, Inc.

EXHIBIT N

E2C Remediation
Environmental Engineering,
Consulting and Remediation, Inc.

August 26, 2009

Ms. Lisa Dernbach, CHG.
California Regional Water Quality Control Board – Lahontan Region
2501 Lake Tahoe Boulevard
South Lake Tahoe, CA 96150

SUBJECT: Addendum to Interim Remedial Action Workplan for SZA Groundwater Investigation, SZA Groundwater Monitoring, Interim Remedial Action Vadose Zone Soil and Groundwater Cleanup

Lake Tahoe Laundry Works
1024 Lake Tahoe Boulevard
South Lake Tahoe, California

Dear Ms. Dernbach:

Enclosed is an Addendum to the Interim Remedial Action Workplan (IRAWP), dated June 4, 2009. The Addendum addresses a verbal request from the State of California Regional Water Quality Control Board – Lahontan Region, South Lake Tahoe Branch (CRWQCB) with respect to two (2) items: 1) the screen interval for proposed groundwater monitoring wells; and 2) the addition of a shallow groundwater monitoring well in an off-site area.

By submitting the IRAWP and this Addendum, neither Fox nor Seven Springs admits any liability with respect to LTLW or any off site contamination.

If you have any questions, or comments, please call the undersigned at 661-831-6906.

Sincerely,
E$_2$C Remediation

PHILIP GOALWIN
Exp. 11-30-10
No. 4779

Philip Goalwin, P.G. #4779
Principal Geologist

cc: Mr. Scott Reisch, Partner
Hogan & Hartson LLP
One Tabor Center, Suite 1500
1200 Seventeenth Street
Denver, CO 8020

Mr. Brooks M. Beard, Esq.
Morrison & Foerster LLP
425 Market Street
San Francisco, CA 94105

5300 Woodmere Drive, Suite 105, Bakersfield, CA 93313
tel 661.831.6906 fax 661.831.6234 www.e2cr.net

E2C Remediation
Environmental Engineering,
Consulting and Remediation, Inc.

ADDENDUM TO INTERIM REMEDIAL ACTION WORKPLAN FOR SZA GROUNDWATER INVESTIGATION, SZA GROUNDWATER MONITORING, INTERIM REMEDIAL ACTION VADOSE ZONE SOIL AND SHALLOW GROUNDWATER CLEANUP

Lake Tahoe Laundry Works
1024 Lake Tahoe Boulevard
South Lake Tahoe, California

August 26, 2009

Project Number: 1950BK27

Prepared For:

Seven Springs Limited Partnership
And
Fox Capital Management

Prepared By:

E$_2$C Remediation
Environmental/Engineering Consultants
5300 Woodmere Drive, Suite 105
Bakersfield, California 93313

TABLE OF CONTENTS

LIST OF FIGURES

I. INTRODUCTION

This Addendum to the Interim Remedial Action Workplan (IRAWP), dated June 4, 2009, is submitted pursuant to a verbal request from the State of California Regional Water Quality Control Board – Lahontan Region, South Lake Tahoe Branch (CRWQCB) (oral communication, June 29, 2009). This Addendum addresses two (2) items: 1) the screen interval for proposed groundwater monitoring wells; and 2) the addition of a shallow groundwater monitoring well in an off-site area.

I.A Site Description

The Site is located approximately 9,000 feet south of Lake Tahoe in the City of South Lake Tahoe, El Dorado County (see Figure 1). The Site is situated in the northwest corner of the South Y Shopping Center, along Lake Tahoe Boulevard between U.S. Highway 50 and Tata Lane and is cross-corner from the dead-end intersection of Glorene Avenue with Lake Tahoe Boulevard (see attached Figure).

I.B Revised SZA Groundwater Monitoring Well Screen Intervals

Shallow groundwater (SZA) monitoring well borings were originally proposed to be completed with twenty (20) feet of screen interval. At the request of the CRWQCB, the five (5) proposed groundwater monitoring wells will now be constructed with fifteen (15) feet of screen interval.

Each of the five (5) SZA well borings will be advanced as described in the IRAWP will to approximately twenty-five (25) feet bgs. Each shallow monitoring well will be installed similarly (see Figure 2 for typical monitoring well diagram) using 2-inch ID Schedule 40 PVC with fifteen (15) feet of slot interval (0.020" from ~25-10 feet bgs) followed by blank casing to the surface. Filter pack (Lonestar #3 sand, or equivalent) will be placed from bottom of the well to approximately two (2) feet above the slotted interval followed by three (3) feet of hydrated bentonite pellets. Neat-cement grout with <5% bentonite powder added will then be placed to approximately one (1) foot bgs. The wellhead will be placed in a steel traffic-rated box set in concrete. Note: Those monitoring wells that will be set in snow removal areas will be set at grade to allow for snow removal operations during winter months.

I.C Additional SZA Groundwater Monitoring Well

In order to accommodate the request by the CRWQCB, and because the CRWQCB is requiring it as a condition of obtaining approval of the IRAWP, an additional SZA groundwater monitoring well (designated as OS-1) will be installed in an off-site area located across the South Y Interchange at the approximate location depicted on attached Figure 1. This well will be constructed in a similar manner as the five (5) wells under Section I.B discussed above. Monitoring well OS-1 will be installed, developed, surveyed, sampled and the samples analyzed in accordance with the methods described in Section III.B Task 2 of the IRAWP. Installation of this well will require obtaining an additional well installation permit and obtaining an access agreement from the well location property owner. Upon approval of the IRAWP and this Addendum, the off-site well property owner will be contacted to obtain access permission. Investigation derived waste (drill cuttings, decontamination fluids, and purge water) will be handled and disposed in accordance with Sections II.B.3 Subtask 2c and II.B.6 Subtask 2f of the IRAWP. Seven Springs and Fox understand that obtaining site closure will not be contingent on the sampling results obtained from this additional well.

I.C.2 Groundwater Monitoring at OS-1

Monitoring well OS-1 will be added to the monitoring program, as defined in Section III.H Task 8 of the IRAWP. Groundwater at monitoring well OS-1 will be sampled quarterly in conjunction with the monitoring events conducted on the monitoring wells installed on and in the immediate vicinity of the Site. The results of the sampling events will be reported quarterly in accordance with Section III.I Task 9 of the IRAWP. Groundwater data will be collected from OS-1 to serve for monitoring groundwater conditions in the offsite area in which the well will be located.

I.D Limitations

I.D.1 Designation of LTLW Vadose Zone and SZA Cleanup Areas

In a meeting on September 24, 2008 at the CRWQCB South Lake Tahoe office, interim remedial actions for the SZA (the uppermost water-bearing zone beneath the Site) and VOC-affected vadose zone soils were discussed. Based on the results of soil and groundwater investigations conducted at the Site in conjunction with the measured direction of groundwater flow, the area to be addressed for remedial action consists of two (2) parts: 1) The vadose zone soils impacted by VOCs (see Figure 3 of the IRAWP for approximate areal extent of vadose zone soil cleanup); and 2) An area of the SZA that was approximately 375 feet in length and 145 feet in width with a vertical extent (from bottom of vadose zone to approximately thirty (30) feet below ground surface (bgs) (see Figure 3 of the IRAWP for approximate areal extent of proposed SZA cleanup). The Tasks presented in the IRAWP addressed the remedial option to cleanup the vadose zone soils and applicable portion of the SZA, as defined above. The proposed interim remedial action consists of installing and operating a combined soil vapor extraction/groundwater air sparging system. At that meeting, the CRWQCB verbally approved that plan.

The area identified for remediation at the Site remains as discussed during the September 24, 2008 meeting and as detailed in the IRAWP. The remediation procedures detailed in the IRAWP were proposed specifically for cleanup of the two (2) areas defined above and in the IRAWP.

Well OS-1 will be installed as an accommodation to the CRWQCB. We understand that groundwater monitoring analytical results collected from well OS-1 will be used to evaluate groundwater conditions in the proximity of that well and the data collected from that well will not affect the operation or cessation of operation of the remediation system on the Site.

I.D.2 Proposed Soil and Groundwater Cleanup Goals

The soil and groundwater cleanup goals proposed in the IRAWP will remain in force for the defined and designated cleanup areas.

Closure will be granted upon remediation of soil and groundwater within the designated cleanup area to the target cleanup goals identified in the IRAWP. Closure criteria for the defined remediation areas will not be affected by data collected from well OS-1.

II. IRAWP ADDENDUM CERTIFICATION

This Addendum to the IRAWP has been prepared under the professional supervision of the registered professionals whose seals and signatures appear herein. The proposed site monitoring and remediation tasks in this Workplan are based solely on the Scope of Services outlined and the sources of information referenced in this report and the IRAWP. Any additional information that becomes available concerning the Site should be submitted to E$_2$C so that our conclusions may be reviewed and modified, if necessary. This IRAWP Addendum was prepared for the sole use of Seven Springs Limited Partnership, Fox Capital Management, and/or their agent(s), the CRWQCB and the EDCEMD.

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FIGURES

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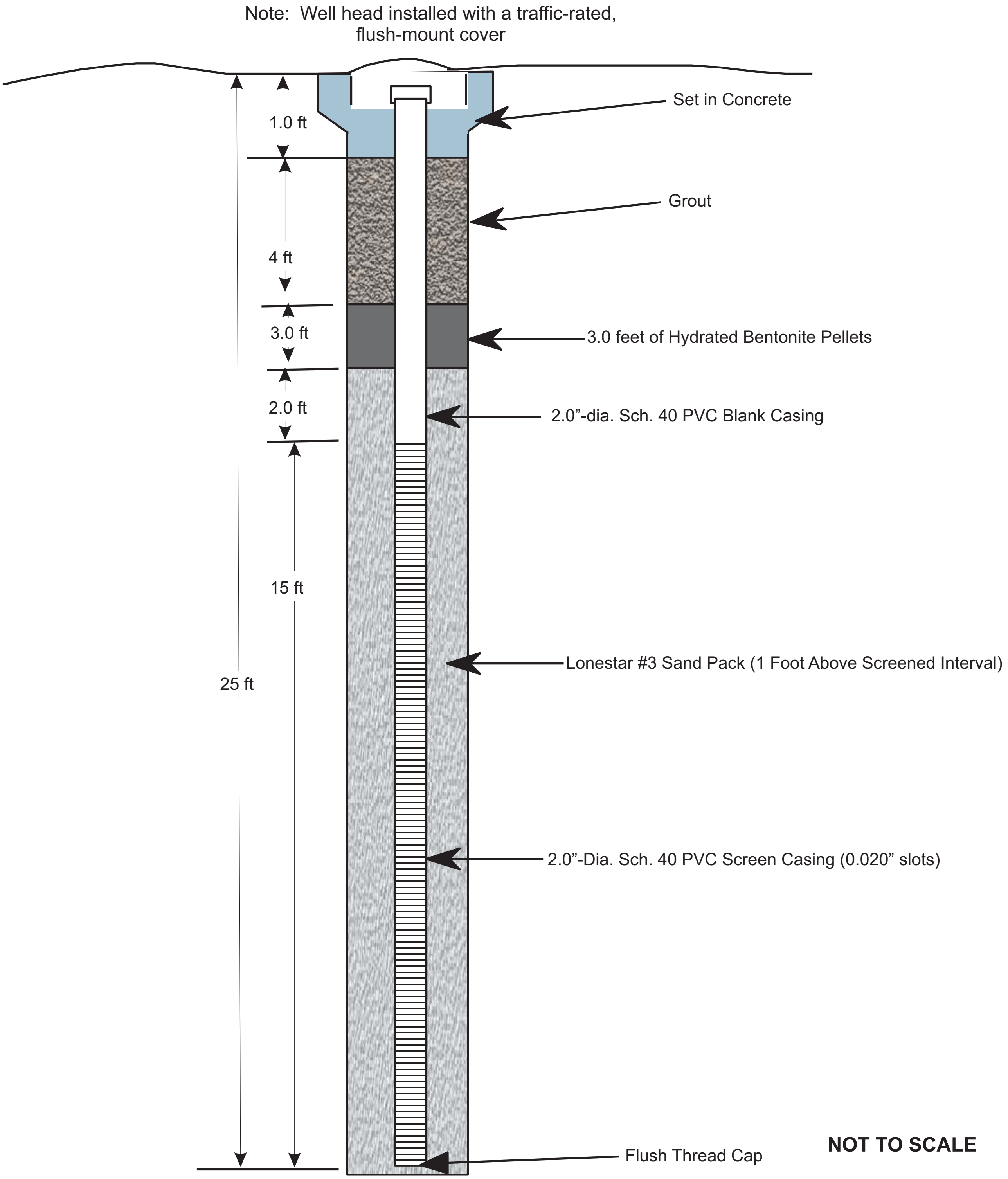
LAKE TAHOE LAUNDRY WORKS
1024 LAKE TAHOE BOULEVARD
SOUTH LAKE TAHOE, CALIFORNIA

OFF-SITE PROPOSED GROUNDWATER MONITORING WELL PLOT

FIGURE

1



NOT TO SCALE

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LAKE TAHOE LAUNDRY WORKS
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SOUTH LAKE TAHOE, CALIFORNIA

REVISED TYPICAL SZA
GROUNDWATER MONITORING
WELL DIAGRAM

FIGURE

2

EXHIBIT O

California Regional Water Quality Control Board
Lahontan Region

Linda S. Adams
Secretary for
Environmental Protection

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ACCEPTANCE OF INTERIM REMEDIAL ACTION WORKPLAN AND ADDENDUM, LAKE TAHOE LAUNDRY WORKS, 1024 LAKE TAHOE BOULEVARD, SOUTH LAKE TAHOE, EL DORADO COUNTY

The Regional Water Quality Control Board (Water Board) received the June 4, 2009 document *Interim Remedial Action Workplan* (Workplan) for the Lake Tahoe Laundry Works. We also received the August 26, 2009 addendum. The documents were submitted in compliance with the April 8, 2009 Water Board Order No. R6T-2009-0013.

The Workplan proposes tasks for implementing interim redial action of solvent-impacted shallow soils and groundwater at the site. A remedial system comprising of soil vapor extraction and groundwater air sparge (SVE/AS) will be constructed and pilot tested. The workplan describes installing the following: five monitoring wells, 20 nested vertical SVE wells, seven horizontal SVE wells, 27 air sparge points, and ten vapor probe points. All remedial wells will be plumbed to a shed to be located in the northeast corner of the shopping center. Upon completion, the SVE/AS system will be pilot tested for 60 days. Baseline groundwater samples will be collected prior to system operation and then quarterly from thereon. Based on discussions with Board staff, the addendum proposes shorter well screen lengths and a monitoring well to be located across the Y intersection.

Acceptance of Workplan and Schedule

Board staff accepts tasks in the Workplan and Addendum as proposed for interim remedial action at the site.

The schedule lists the following timeline for implementing tasks:

- 30 days to acquire permits,
- 21 days to install wells,
- 30 days to conduct trenching and install remedial equipment,
- 60 days to operate the interim system and conduct a pilot test, and
- 45 days for report preparation.

According to this schedule, a technical report with construction information and interim remediation results will be submitted to the Water Board approximately six months following our approval. The report will contain a recommendation for final cleanup action at the site for public comment. The proposed report and schedule are acceptable to Board staff.

Please let our office know when a date is established for installing wells and conducting the pilot test. If you have any questions, you may contact me at (530) 542-5424 or ldernbach@waterboards.ca.gov.

Lisa Dernbach

Lisa Dernbach, PG, CHg, CEG
Senior Engineering Geologist

cc: Lake Tahoe Laundry Works, Interested Party Mailing List

LSD/clhT: LTLW interim remed workplan 809.let
SLIC File: SCP-El Dorado County, T6S057

Lake Tahoe Laundry Works
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Rev. 809

EXHIBIT P

E$_2$C Remediation
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August 12, 2010

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Mr. Brooks M. Beard, Esq.
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SUBJECT: **INTERIM REMEDIAL SYSTEM INSTALLATION/PILOT TESTING REPORT OF FINDINGS AND DRAFT REMEDIAL ACTION PLAN FOR VADOSE ZONE SOIL AND SHALLOW GROUNDWATER CLEANUP**

Lake Tahoe Laundry Works
1024 Lake Tahoe Boulevard
South Lake Tahoe, California

Dear Mssrs. Reisch and Beard:

Pursuant to your requests, please find attached the above-captioned document. The document was prepared to comply with the Interim Remedial Action Workplan and its Addendum, which were approved by the State of California Regional Water Quality Control Board – Lahontan Region, South Lake Tahoe Branch (CRWQCB) letter dated September 9, 2009.

If you have any questions, or comments, please call the undersigned, or Phil Goalwin, at 661-831-6906.

Sincerely,
E$_2$C Remediation

William Lawson

William A. Lawson, P.G. #7171
Director of Technical Operations

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E2C Remediation
Environmental Engineering,
Consulting and Remediation, Inc.

INTERIM REMEDIAL SYSTEM INSTALLATION/ PILOT TESTING REPORT OF FINDINGS AND DRAFT REMEDIAL ACTION PLAN FOR VADOSE ZONE SOIL AND SHALLOW GROUNDWATER CLEANUP

Lake Tahoe Laundry Works
1024 Lake Tahoe Boulevard
South Lake Tahoe, California

August 12, 2010

Project Number: 1950BK49/27

Prepared For:

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TABLE OF CONTENTS

LIST OF FIGURES

LIST OF TABLES

LIST OF GRAPHS

LIST OF APPENDICES

I. INTRODUCTION

This document describes the methods and procedures that were used to implement provisions of the following documents for the Lake Tahoe Laundry Works (LTLW) facility located at 1024 Lake Tahoe Boulevard in South Lake Tahoe, California (Site):

- Interim Remedial Action Workplan for SZA Groundwater Investigation, SZA Groundwater Monitoring, Interim Remedial Action Vadose Zone Soil and Shallow Groundwater Cleanup (IRAWP), dated June 4, 2009 (E_2C, 2009a); and
- Addendum to Interim Remedial Action Workplan for SZA Groundwater Investigation, SZA Groundwater Monitoring, Interim Remedial Action Vadose Zone Soil and Shallow Groundwater Cleanup (IRAWP Addendum), dated August 26, 2009 (E_2C, 2009b)

These documents were approved by the State of California Regional Water Quality Control Board – Lahontan Region, South Lake Tahoe Branch (CRWQCB) in a letter dated September 1, 2009 (CRWQCB, 2009b).

Tasks outlined in the IRAWP and its Addendum consisted of the following:

Task 1	Liaison/Project Management and Permitting
Task 2	Field Operations: Install Wells
Task 3	Field Operations: Install Interim Remediation Pilot Test System Elements
Task 4	Field Operations: Interim Remediation System Pilot Testing
Task 5	Interim Remediation System Installation/Pilot Testing Report of Findings and Draft Remedial Action Plan
Task 6	Public Notification Process & Final Remedial Action Plan
Task 7	Field Operations: Implement Final Remedial Action Plan
Task 8	Field Operations: Groundwater Monitoring/Sampling
Task 9	Status Reporting
Task 10	Site Decommissioning & Site Restoration

Task 1 is ongoing; however, the permitting portion (relates to Tasks 2 and 3) has been completed. Tasks 2, 3 and 4 have been completed. Task 5 consists of the submittal of this document. Tasks 6 and 7 will be implemented after CRWQCB approval of the Draft RAP. Tasks 8 and 9 are ongoing. Task 10 will be implemented after No Further Action is approved by the CRWQCB.

Based on the findings of the interim remediation system installation and the pilot testing results, the installed interim remediation system was shown to be highly effective. As such, Site Cleanup using that system is recommended. Therefore, in accordance with the Tasks outlined above, the Draft Remedial Action Plan (Draft RAP) is included in this document.

II. WELL INSTALLATION REPORT OF FINDINGS

Field operations for installation of monitoring and remediation wells commenced after receipt of well installation permits from the County of El Dorado Environmental Management District (CEDEMD), the clearance of drilling locations for utilities, and approval of drilling locations by the Site owner.

II.A Permitting and Access Agreements

Upon CRWQCB approval of the IRAWP, E_2C prepared applications for installation of the applicable wells (monitoring and remediation) from the CEDEMD (See Appendix A for copies of permits). For offsite monitoring well LW-MW-12S, an offsite owner access agreement was obtained (see Appendix B for copy of agreement). For offsite monitoring well (OS-1), a CALTRANS Encroachment Permit was obtained (see Appendix C for copy of permit). The following wells were installed under this Task:

- Five (5) shallow-zone aquifer (SZA) monitoring wells (LW-MW-9 through LW-MW-13) (See Figure 3 for locations);
- Twenty (20) nested (two-well) soil vapor extraction (SVE) wells (VE-1 through VE-20) (see Figure 3 for locations);
- Six (6) horizontal SVE wells (HVE-1 through HVE-6) (see Figure 3 for locations);
- Ten (10) vapor probe (VP) points (VP-1 through VP-10) (see Figure 3 for locations);
- Twenty-seven (27) groundwater air sparge (AS) wells (AS-1 through AS-27) (see Figure 3 for locations); and
- One (1) offsite groundwater monitoring well (OS-1) (see Figure 2 for location).

On September 24, 2009, a Request for Grading Variance was submitted to the CRWQCB to extend the well installation and trenching time to the end of November 2009 (E_2C, 2009). The request was granted by the CRWQCB by letter, dated October 15, 2009 (CRWQCB, 2009c).

II.B Site Visit to Mark Boring/Trenches & Locate Utilities

A site visit was conducted to mark well-boring locations. The HVE well locations and trench locations (discussed below) were also marked during this visit. At least 48 hours before commencing the boring program, Underground Service Alert (USA) was notified for utility locating. Local Agency utility records were also reviewed as appropriate; boring and trenching locations were also coordinated with Site owner.

II.C Soil Boring/Well Installation Methods and Procedures

Well Borings

Well borings were advanced using a truck-mounted hollow-stem auger drilling rig (CME 75) with ten-inch (10") outside-diameter hollow-stem augers in accordance with ASTM Method D 1452-80 for soil investigations and sampling by auger borings. The augers were steam cleaned after advancing each boring. Soil descriptions and other pertinent data were recorded on boring logs in general accordance with Method D 2488-84 for visual description and identification of soils (see Appendix D for boring logs). Borings were generally advanced as follows:

- The monitoring well borings were advanced generally with collection of soil samples at five-foot intervals commencing at five (5) feet below ground surface (bgs) to approximately twenty-five (25) feet bgs;

- Each vertical SVE well boring was straight drilled to a point approximately two (2) feet above the stable water table depth as measured during this drilling period. The depth varied dependant upon location (see below for discussion of SVE well construction details); and
- The AS well borings were straight drilled to approximately thirty (30) feet bgs, or the SZA bottom-defining silt layer, whichever was encountered first.

Note: Drilling operations, soil sampling and field monitoring for the presence of volatile organic compounds (VOCs) were performed under the supervision of a California Professional Geologist. A photoionization detector (PID) was used during the drilling process to detect the presence of VOCs (note: these are only qualitative tests and should not be construed to represent a certified laboratory analysis).

Soil samples were collected using a California split-spoon sampler (2" ID) containing three (3) brass sleeves. Soil sample collection depths were described on the boring logs. All sampling equipment was cleaned in an Alconox-water solution and double-rinsed prior to each use. Soil samples were labeled, capped, recorded onto a chain-of-custody and placed in a cooler with ice at a temperature of 4° C for possible analysis. The samples were transferred to a California State Certified laboratory under chain-of-custody control procedures.

II.C.1 Installation of SZA Groundwater Monitoring Wells

Five (5) site SZA groundwater monitoring wells (LW-MW-9S through LW-MW-13S) were installed under the IRAWP. These five (5) new wells will be used in conjunction with the previously existing three (3) SZA monitoring wells (LW-MW-1S, LW-MW-2S and LW-MW-5S) to monitor chemical concentrations, groundwater flow and gradient, and to evaluate interim remedial system effectiveness and progress (see Figure 2 for site SZA well locations).

Shallow monitoring well borings were advanced as described above to approximately twenty-five (25) feet bgs. Each site SZA monitoring well was installed similarly using 2-inch ID Schedule 40 PVC with fifteen (15) feet of slot interval (0.020" from 25-10 feet bgs) followed by blank casing to the surface. Filter pack (Lonestar #2/12 sand) was placed from bottom of the well to approximately two (2) feet above the slotted interval (approximately 8 feet bgs) followed by three (3) feet of hydrated bentonite pellets. Neat-cement grout with <5% bentonite powder added was then placed to approximately one (1) foot bgs. Each wellhead was placed inside a steel traffic-rated box set in concrete. Note: Those monitoring wells that were set in snow removal areas were set at or near grade to allow for snow removal operations during winter months (see Figures in Appendix F for monitoring well as-built diagrams).

Offsite Monitoring Well OS-1

One (1) groundwater monitoring well (OS-1) was installed under the IRAWP Addendum (E_2C, 2009b) in CALTRANS right-of-way in an entrance to the former Miller's Outpost along Highway 89 (see Figure 2 for location). This well was installed in a similar manner to the SZA wells discussed above (see Appendix E for boring log and Appendix F for well construction diagram).

II.C.2 Installation of Vertical Vapor Extraction Wells

Twenty (20) nested two-well (well set) vertical SVE wells were installed (see Figure 3 for locations). Note: vertical SVE wells were constructed to take into account times of high water table dependant upon location. Each vertical SVE well boring was advanced as described above to depth (see boring logs in Appendix D).
Each SVE well set was installed in a similar manner at each location pursuant to the subsurface conditions encountered (see Figures in Appendix G for SVE as-built diagrams)

II.C.3 Installation of Groundwater Air Sparge Wells

A total of twenty-seven (27) AS wells were installed (see Figure 3 for locations). Each AS well was constructed using 2-inch ID Schedule 40 PVC with a microporous sparge point set at the bottom (see Figures in Appendix H for as-built diagrams). In general, the bottom of the sparge tip was set at thirty (30) feet bgs, or the SZA bottom-defining silt layer, whichever occurred first. Filter pack (Lonestar #2/12, or medium aquarium sand) was placed from bottom of the well to approximately 3.5 feet above the top of the sparge point followed by bentonite pellets to approximately fifteen (15) feet bgs. Neat-cement grout with <5% bentonite powder added was then tremied through the auger to approximately 1.5 feet bgs to complete the seal. The top 1.5 feet was left open for plumbing of piping). After the plumbing was connected, each AS wellhead was located relative to existing site features and then covered with native materials.

II.C.4 Installation of Soil-Vapor Probes

Ten (10) shallow vapor probes (VPs) were installed to monitor shallow vapor conditions, specifically along the building and around the impacted vadose zone area (see Figure 3 for locations). VP wells were installed as prescribed in Appendix S, Section S-1, Soil-Gas Monitoring Field Activities. See Appendix I for boring logs and Figure 7 for typical VP well as-built diagram.

II.C.5 Groundwater Monitoring Well Development

The newly installed groundwater monitoring wells were developed on December 2, 2009 (LW-MW-9S through LW-MW-13S) and March 22, 2010 (OS-1) (see Appendix K for copies of well development sheets).

Drilling Decontamination & Well Development Water

Decontamination water from steam cleaning of drill casings and equipment was placed in drums and stored onsite. This water was combined with groundwater well development water and groundwater sampling purge water and transported for temporary storage and recycling under the appropriate manifesting (see Appendix L for copy of transport manifest and recycling certification).

II.C.6 Soil Chemical Analyses

Selected soil samples from the SZA monitoring well borings were chemically analyzed at ProVera Laboratories, Inc. of Bakersfield, California (California State-Certified analytical laboratory #2606) (ProVera) in accordance with State guidelines and EPA protocols for the following VOCs (see Appendix Z for laboratory reports):

- PCE and TCE and associated degradation products of PCE and TCE using EPA Method 8260b, a gas chromatograph/mass spectrometer (GC/MS) method.

II.C.7 Electronic Submittal of Data to GeoTracker Database

Soil chemical analytical data will be electronically uploaded to the State GeoTracker database in accordance with California Code of Regulations, Title 23, Chapter 16, Article 11 (CCR).

II.C.8 Loading and Disposal/Recycling of Drill Cuttings

Soil cuttings generated during drilling operations were placed on and covered by plastic sheeting. Sandbags and/or hay bales, as necessary, were used to prevent runoff of soils from the stockpile area.

The analytical results from the soil samples were provided to the local landfill (see Table 5B for summary of data and Appendix Z for laboratory reports). After approval by the landfill (oral communication), the cuttings (along with system installation waste) were transported to the landfill for disposal (see Appendix L for transfer station documentation).

II.C.9 SZA Monitoring Well Surveying

Existing monitoring wells (three wells) were surveyed previously for relative elevations immediately after installation. Those elevations were used in preparation of the Fourth Quarter 2009 Groundwater Monitoring Report, dated March 1, 2010 (E_2C, 2010a).

In May 2010, SZA monitoring wells were surveyed for GeoTracker X, Y and Z coordinates by Morrow Surveying of West Sacramento, California (California Licensed Surveyor 5161) (see Appendix J for copy of surveying plot).

III. INSTALLATION OF INTERIM REMEDIATION SYSTEM ELEMENTS

Installation of Interim Remediation System/Pilot Testing Elements commenced approximately one (1) week after well installation activities started in early November 2009.

III.A Permitting

Permits for onsite trenching were not required from the City; however, permits were required for the electrical line and connection and the equipment shed (see Appendix A for copies of permits).

The Authority To Construct was issued by the El Dorado County Air Quality Management District (EDCAQMD) (see Appendix A for copy). The Permit To Operate (PTO) has been approved and issued; however, it has not been released yet, as the EDCAQMD is in the process of moving their office; when completed, the PTO will be released. In the meantime, interim remedial activity can continue (oral communication with the EDCAQMD oversight engineer, August 5, 2010).

III.A.1 Trenching, Plumbing, Backfilling

As well installation progressed, trenches for AS and VE wells were excavated and remedial plumbing was installed (see Figure 3 for approximate trenching locations). HVE wells were also installed during this phase of the operations.

AS well piping consisted of 1/2-inch diameter SCH 40 PVC and vertical VE (VVE) well and VE piping (included HVE wells) consisted of 2-inch ID SCH 40 PVC. HVE, VVE and AS wells were individually plumbed. The VVE, HVE and AS piping runs were manifolded at the equipment area above ground (see Figure 3 for approximate equipment location). A control valve was installed on the manifold for each HVE, VVE and AS well so each well can be adjusted for flow rates on an individual basis. The vapor extraction manifold also contains a sampling port for each VVE well and each HVE well for sampling of individual influent vapor streams, flow rates and applied/induced vacuum.

HVE Well Construction

Trenches were excavated to approximately five (5) feet in depth in the vadose zone impacted area. Six (6) inches of pea gravel were placed along the bottom of the trench and the HVE piping was laid. A mesh filter was placed on top of the slotted intervals of the HVE wells and that was covered by pea gravel. A plastic membrane was then laid over the slotted HVE intervals and that was covered with approximately two (2) feet of native soils (backfilled to height of horizontal VE and AS well plumbing) that had been excavated during the trenching operations followed by the AS and vertical VE well plumbing followed by native soils to subgrade (see Figure 3 for locations of HVE slotted intervals). In unpaved areas, HVE trench fill soils were compacted to approximately 85% relative density. In paved areas, native soils were placed to approximately one (1) foot bgs (subgrade), compacted to approximately 90% relative density, followed by six (6) inches of base rock compacted to approximately 95% relative density followed by an asphalt cap to grade.

Each HVE well was constructed with a thirty (30) foot screen (0.020" slot) interval followed by blank piping to the manifold. A separation panel, composed of hydrated bentonite, was placed between the end and beginning of each screen interval to minimize short-circuiting between horizontal vents. Three (3) HVE lines were placed in each of the northern and southern HVE trench lines (see Figure 3).

Note: Remediation plumbing trenches outside the vadose impacted area were constructed similar to the ones inside the vadose impacted area. The main trench was excavated to approximately five (5) feet in depth across the entire length of the area to the equipment compound.

Equipment Compound

The compound was constructed in an area approximately twenty (20) feet by twenty-five (25) feet at the northern end of the Raley's Parking lot in the landscape area (see Figure 3). The equipment shed and its concrete pad were constructed in that area in accordance with City permitting requirements (see Appendix A for permit containing construction details).

Electrical Service Requirements

Electrical service is being provided at the power panel located at the rear of the Raley's store. Three-phase 200-amp 220-volt electrical service was installed. This necessitated installation of a series of panels and connection to a ground mounted transformer. The electrical feed for the equipment was placed in the main southern trench that was excavated from the panels to the remediation plumbing trench (see Figure 3 for location). Pull boxes and electrical line conformed to City codes as outlined in the electrical permit.

An electrical panel with meter was installed inside the equipment containment structure. The panel contains breakers to split the service to each piece of equipment, thus providing each piece of equipment with an individual breaker, sized to protect the equipment from minor power fluctuations. For equipment protection, the system was configured for all equipment to shut down in the case of loss of power, or the failure of any piece of equipment. The electrical line installation was performed in accordance with local building codes and a certified electrical contractor was subcontracted to perform the final hookup.

III.A.2 Temporary Landscaping

During the well installation and trenching processes, every effort was made to not damage, or destroy, trees. On November 23, 2009, the CRWQCB requested an erosion and sediment control plan (SCP) (CRWQCB, 2009d). The SCP was prepared and submitted on December 1, 2009 (E_2C, 2009d) (see Appendix M for copy of plan). Provisions under the SCP provided elements of the temporary landscaping. Native trees were planted around the equipment containment structure and a drip irrigation system was installed for tree watering.

After the monitoring and remediation systems are decommissioned (see below), the planter areas will be restored to pre-remediation conditions using native-type plants and other materials.

IV. INTERIM REMEDIAL SYSTEM PILOT TEST REPORT OF FINDINGS

On April 6, 2010, E_2C commenced two (2) months of pilot testing of the interim site remedial system, soil vapor extraction combined with groundwater air sparging (SVE/GASS). E_2C subsequently completed a preliminary evaluation of the testing data collected. Pilot testing data indicate that the SVE/GASS has a significant influence over the CRWQCB-approved areal extent of SZA monitoring and cleanup zone (see Figure 4 for plot of specified area).

IV.A Pilot Testing Methods and Procedures

During the pilot test runs, the SVE unit was set to extract vapors from different combinations of SVE wells while E_2C field personnel recorded vacuum (or pressure) at observation wells. During pilot test runs 1 through 7, the air sparging system was off. During pilot test runs 8 and 9, all sparge wells were operational. The following pilot test configurations were used:

- Test #1: HVE-1, HVE-2, and HVE-3 active. No air sparging.
- Test #2: HVE-1, HVE-2, HVE-3, HVE-4, HVE-5, and HVE-6 active. No air sparging.
- Test #3: VE-1S, VE-1D, VE-2S, VE-2D, VE-3S, VE-3D, VE-4S, VE-4D, VE-12S, VE-12D, VE-13S, VE-13D, VE-18S, VE-18D, VE-19S, VE-19D, VE-20S, and VE-20D active. No air sparging.
- Test #4: VE-5S, VE-6S, VE-8S, VE-9S, VE-10S, VE-11S, VE-14S, VE-15S, VE-16S, and VE-17S active. No air sparging.
- Test #5: VE-4D, VE-5S, VE-5D, VE-6S, VE-6D, VE-7S, VE-7D, VE-8S, VE-8D, VE-9S, VE-9D, VE-10S, VE-10D, VE-11S, VE-11D, VE-14S, VE-14D, VE-15S, VE-15D, VE-16S, VE-16D, VE-17S, and VE-17D. No air sparging.
- Test #6: HVE-1, HVE-2, HVE-3, HVE-4, HVE-5, and HVE-6 active. No air sparging.
- Test #7: VE-1S, VE-2S, VE-3S, VE-4S, VE-5S, VE-6S, VE-7S, VE-8S, VE-9S, VE-10S, VE-11S, VE-12S, VE-13S, VE-14S, VE-15S, VE-16S, VE-17S, VE-18S, VE-19S, VE-20S, HVE-1, HVE-2, HVE-3, HVE-4, HVE-5, and HVE-6 active. No air sparging.
- Test #8: VE-1S, VE-2S, VE-3S, VE-4S, VE-5S, VE-6S, VE-7S, VE-8S, VE-9S, VE-10S, VE-11S, VE-12S, VE-13S, VE-14S, VE-15S, VE-16S, VE-17S, VE-18S, VE-19S, VE-20S, HVE-1, HVE-2, HVE-3, HVE-4, HVE-5, and HVE-6 active. All sparge wells (AS-1 through AS-27) active.
- Test #9: VE-1S, VE-2S, VE-20S, HVE-1, HVE-2, HVE-3, HVE-4, HVE-5, and HVE-6 active. All sparge wells (AS-1 through AS-27) active.

Copies of pilot testing field data sheets are included in Appendix T. Pilot test field data are tabulated in Appendix U (Tables U-1 through U-9). Vapor extraction wellfield data are summarized in Table 8.

Pilot test data, including applied vacuum at extraction wells and induced vacuum at observation wells were contoured using Surfer® software. Each pilot test data set was divided into "shallow" and "deep" wells. Shallow SVE and observation wells consisted of VE-1S, VE-2S, VE-3S, VE-4S, VE-5S, VE-6S, VE-7S, VE-8S, VE-9S, VE-10S, VE-11S, VE-12S, VE-13S, VE-14S, VE-15S, VE-16S, VE-17S, VE-18S, VE-19S, VE-20S, HVE-1, HVE-2, HVE-3, HVE-4, HVE-5, HVE-6, LW-MW-1S, LW-MW-2S, LW-MW-5S, LW-MW-9S, LW-MW-10S, LW-MW-11S, LW-MW-12S, LW-MW-13S, VP-1, VP-2, VP-3, VP-4, VP-5, VP-6, VP-7, VP-8, VP-9, and VP-10. Deep observation wells consisted of VE-1D, VE-2D, VE-3D, VE-4D, VE-5D, VE-6D, VE-7D, VE-8D, VE-9D, VE-10D, VE-11D, VE-12D, VE-13D, VE-14D, VE-15D, VE-16D, VE-17D, VE-18D, VE-19D, and VE-20D.

Pilot test vacuum isocontour data plots are included in Appendix V on Figures V-1A, V-1B, V-2A, V-2B, V-3A, V-3B, V-4A, V-4B, V-5A, V-5B, V-6A, V-6B, V-7A, V-7B, V-8A, and V-8B. The data were contoured using Surfer®'s Kriging function with default settings. The resulting contours were transferred to the figures with minor modifications. The -0.1 inches of water (in-H_2O) vacuum contour, considered by E_2C to be the practical limit of vacuum influence, is shown in red on the vacuum isocontour data plots.

IV.A.1 Pilot Testing Equipment

E_2C utilized the following equipment to conduct pilot testing of the interim remediation system:

- A Sutorbilt Model 7M, 50-hp, 500 cfm blower package for vapor extraction; and
- A Gardner Denver Model EBE99N, 25-hp air compressor with regulator for groundwater air sparging.

IV.A.2 Pilot Testing Monitoring

Field measurements collected during pilot testing included the following:

- Applied vacuum at the extraction equipment;
- Induced vacuum at the observation wells;
- Influent vapor flow rate at the SVE blower;
- Influent vapor concentration using a field instrument (PID);
- Vapor flow rates from SVE wells;
- Oxygen content of the vapor influent stream;
- Air flow to sparge wells;
- Pressure at sparge wells;
- Depths to groundwater at observation wells; and
- Dissolved oxygen content in groundwater.

IV.A.3 Influent Analytical Testing

System influent, midfluent, and/or effluent vapor samples were collected for laboratory analyses to evaluate system performance and to document compliance with the ATC/PTO. Influent, midfluent, and effluent vapor samples were collected using Tedlar® bags. The samples were transported under chain-of-custody procedures for analyses at ProVera Analytical Laboratories, Inc. (DHS certification #2606) of Bakersfield, California (ProVera) for PCE and TCE and/or associated breakdown products using Modified EPA Method TO-15.

These laboratory data were used to evaluate vapor influent concentrations, calibrate PID readings to actual vapor concentrations, estimate volatile organic compound removal rates (calculated as PCE), and document compliance with EDCAQMD permit requirements. See Appendix W for copies of vapor analytical laboratory reports.

IV.B Summary of Pilot Testing

Between April 6 and April 9, 2010, nine (9) pilot tests were completed using different combinations of SVE wells and/or groundwater sparge wells.

IV.B.1 Pilot Test #1 – 4/6/10

Pilot test #1 was conducted on April 6, 2010. The testing configuration consisted of vapor extraction from three (3) shallow horizontal SVE wells (HVE-1, HVE-2, HVE-3) for a period of 85 minutes with an applied vacuum of 9.5 inches of mercury (in-Hg) (approximately 129.2 in-H_2O) at an average flow rate of 530 standard cubic feet per minute (SCFM) (see Appendix U, Table U-1). Influent oxygen content was measured at 20.5%, an indicator of high-oxygen sub-surface conditions. The field influent concentration averaged approximately 58 parts per million by volume (ppmV) total volatiles using an Eagle combustible gas meter with oxygen sensor (Eagle). For reference check, a Photovac Mini-Ray photoionization detector (PPID) was also used to measure the influent. The measurements were generally the same and when not were within 10% of each other.

Vacuum isocontours from shallow observation well data (Appendix V, Figure V-1A) suggest a vacuum influence extending 15 to 50 feet north of the active HVE wells, as far as 140 feet east of the active HVE wells, and at least 40 feet west of the HVE wells. The vacuum influence appears to extend roughly 100 feet south of the active HVE wells, extending well under the Lake Tahoe Laundry Works building.

Vacuum isocontours from deep observation well data (Appendix V, Figure V-1B) suggest a good vacuum response at least 30 feet north and roughly 100 feet east of HVE-3. Vacuum isocontours shown on Figure V-1B are strongly influenced by vacuum readings at VE-18 and VE-19, and may not be representative of the actual southern extent of the vacuum influence produced during pilot test #1.

Based on the data from pilot test, #1 short-term operation of horizontal wells HVE-1, HVE-2, and HVE-3 created a vacuum influence over most of the western portion of the site, including a significant area under the building housing the Lake Tahoe Laundry Works.

IV.B.2 Pilot Test #2 – 4/6/10

Pilot test #2 was conducted on April 6, 2010. The testing configuration consisted of vapor extraction from all six (6) shallow horizontal SVE wells (HVE-1, HVE-2, HVE-3, HVE-4, HVE-5, HVE-6) for a period of 75 minutes with an applied vacuum of 8.2 in-Hg (111.5 in-H_2O) at an average flow rate of 575 SCFM (see Appendix U, Table U-2). Influent oxygen content was measured at 20.4%, an indicator of high-oxygen sub-surface conditions. The field influent concentration was 85 ppmV total volatiles as measured in the field using the Eagle and the PPID.

Vacuum isocontours from shallow observation well data (Appendix V, Figure V-2A) suggest a vacuum influence extending north into Lake Tahoe Boulevard. Vacuum influence extends at least 40 feet west to LW-MW-12S, 25 feet to 95 feet south to VP-1 and LW-MW-10S, respectively, and 90 feet to 135 feet east to wells VE-5 and VE-16, respectively. The strong vacuum response observed at observation wells VP-1 and LW-MW-10S suggests that a significant vacuum influence extends under the Lake Tahoe Laundry Works building.

Vacuum isocontours from deep observation well data (Appendix V, Figure V-2B) suggest a strong vacuum influence extending under the Lake Tahoe Laundry Works building. In addition, deep observation well data show significant vacuum influence as far east as VE-5, VE-16, and VE-17.

Based on the data from pilot test #2, short-term operation of horizontal wells HVE-1, HVE-2, HVE-3, HVE-4, HVE-5, and HVE-6 created a vacuum influence over most of the western portion of the site, including a significant area under the building housing the Lake Tahoe Laundry Works. Compared to pilot test #1, pilot test #2 vapor influent increased approximately 46 percent, from an average of 58 ppmV to 85 ppmV when measured with the PPID.

IV.B.3 Pilot Test #3 – 4/7/10

Pilot test #3 was conducted on April 7, 2010. The testing configuration consisted of vapor extraction from eighteen (18) SVE wells (VE-1S, VE-1D, VE-2S, VE-2D, VE-3S, VE-3D, VE-4S, VE-4D, VE-12S, VE-12D, VE-13S, VE-13D, VE-18S, VE-18D, VE-19S, VE-19D, VE-20S, and VE-20D) for a period of 85 minutes with an applied vacuum of 7.5 to 8.5 in-Hg (102.0 to 115.6 in-H_2O) at a flow rate of 560 SCFM (see Appendix U, Table U-3). Influent oxygen content averaged 20.2%, an indicator of high-oxygen sub-surface conditions. The field influent concentration averaged approximately 787 ppmV total volatiles as measured using the Eagle and the PPID.

Vacuum isocontours from shallow observation well data (Appendix V, Figure V-3A) indicate a very strong vacuum influence over the western portion of the site. This vacuum influence appears to extend north into Lake Tahoe Boulevard, west past LW-MW-12S, and south under the Lake Tahoe Laundry Works building as far as the Raley's building. The eastern limit of vacuum influence is defined by VE-5, VE-10, and VE-17.

Vacuum isocontours from deep observation well data (Appendix V, Figure V-3B) also indicate a strong vacuum influence over the western portion of the site. This vacuum influence appears to extend north into Lake Tahoe Boulevard, west past LW-MW-12S, and south under the Lake Tahoe Laundry Works building. The eastern limit of vacuum influence is defined by VE-5, VE-11, and VE-17.

Based on the data from pilot test #3, short-term operation of SVE wells VE-1S, VE-1D, VE-2S, VE-2D, VE-3S, VE-3D, VE-4S, VE-4D, VE-12S, VE-12D, VE-13S, VE-13D, VE-18S, VE-18D, VE-19S, VE-19D, VE-20S, and VE-20D created a strong vacuum influence over the western portion of the site, including an area under the building. Measured vapor influent concentrations were more than nine times higher than influent concentrations in pilot test #2.

IV.B.4 Pilot Test #4 – 4/7/10

Pilot test #4 was conducted on April 7, 2010. The testing configuration consisted of vapor extraction from ten (10) SVE wells (VE-5S, VE-6S, VE-8S, VE-9S, VE-10S, VE-11S, VE-14S, VE-15S, VE-16S, and VE-17S) for a period of 75 minutes with an applied vacuum of 5.6 in-Hg (76.1 in-H_2O) at a flow rate of 610 SCFM (see Appendix U, Table U-4). Influent oxygen content was 20.0%, an indicator of high-oxygen sub-surface conditions. The field influent concentration was 35 ppmV total volatiles as measured using the Eagle and the PPID.

Vacuum isocontours from shallow observation well data (Appendix V, Figure V-4A) indicate a strong vacuum influence over the eastern portion of the site. This vacuum influence appears to extend north into Lake Tahoe Boulevard, east past LW-MW-13S, and south past VE-16. Vacuum influence did not appear to extend under the Lake Tahoe Laundry Works building. The western limit of vacuum influence is defined by VE-12, VE-18, VP-6, VP-7, and LW-MW-9S.

Vacuum isocontours from deep observation well data (Appendix V, Figure V-4B) also indicate a strong vacuum influence over the eastern portion of the Site. This vacuum influence appears to extend north into Lake Tahoe Boulevard, east past VE-8 and VE-14, and south past VE-15 and VE-16. As contoured, vacuum influence appears to extend under the building east of the Lake Tahoe Laundry Works. The western limit of vacuum influence is defined VE-2, VE-13, and VE-18.

Based on the data from pilot test #4, short-term operation of SVE wells VE-5S, VE-6S, VE-8S, VE-9S, VE-10S, VE-11S, VE-14S, VE-15S, VE-16S, and VE-17S created a strong vacuum influence over the eastern portion of the site, including an area under the northeastern corner of the shopping center building. Measured vapor influent concentrations were relatively low at 35 ppmV.

IV.B.5 Pilot Test #5 – 4/7/10

Pilot test #5 was conducted on April 7, 2010. The testing configuration consisted of vapor extraction from twenty-three (23) SVE wells (VE-4D, VE-5S, VE-5D, VE-6S, VE-6D, VE-7S, VE-7D, VE-8S, VE-8D, VE-9S, VE-9D, VE-10S, VE-10D, VE-11S, VE-11D, VE-14S, VE-14D, VE-15S, VE-15D, VE-16S, VE-16D, VE-17S, and VE-17D) for a period of 50 minutes with an applied vacuum of 4.10 in-Hg (55.7 in-H_2O) at a flow rate of 630 SCFM (see Appendix U, Table U-5). Influent oxygen content was 20.2%, an indicator of high-oxygen sub-surface conditions. The field influent concentration was 20 ppmV total volatiles as measured using the Eagle and the PPID.

Vacuum isocontours from shallow observation well data (Appendix V, Figure V-5A) indicate a very strong vacuum influence over the eastern portion of the site. This vacuum influence extended north into Lake Tahoe Boulevard, east beyond VE-8 and VE-14, and south past VE-15 and VE-16. Vacuum influence did not appear to extend under the Lake Tahoe Laundry Works tenant space. The western limit of vacuum influence is defined by VE-2, VE-13, LW-MW-9S, and VP-5.

Vacuum isocontours from deep observation well data (Appendix V, Figure V-5B) also indicate a strong vacuum influence over the eastern portion of the site. This vacuum influence appears to extend north into Lake Tahoe Boulevard, east past VE-8 and VE-14, and south past VE-15 and VE-16. As contoured, vacuum influence appears to extend under the building, perhaps as far as of the Lake Tahoe Laundry Works tenant space. The western limit of vacuum influence is defined VE-2, VE-3, VE-13, and VE-18.

Based on the data from pilot test #5, short-term operation of SVE wells VE-4D, VE-5S, VE-5D, VE-6S, VE-6D, VE-7S, VE-7D, VE-8S, VE-8D, VE-9S, VE-9D, VE-10S, VE-10D, VE-11S, VE-11D, VE-14S, VE-14D, VE-15S, VE-15D, VE-16S, VE-16D, VE-17S, and VE-17D created a strong vacuum influence over the eastern portion of the site, including an area under the Lake Tahoe Laundry Works building. Vacuum influence extended roughly 150 feet west of the operating SVE wells. Measured vapor influent concentrations were relatively low at 20 ppmV.

IV.B.6 Pilot Test #6 – 4/7/10

Pilot test #6 was conducted on April 7, 2010. The testing configuration consisted of vapor extraction from all six (6) shallow horizontal SVE wells (HVE-1, HVE-2, HVE-3, HVE-4, HVE-5, HVE-6) with an applied vacuum of 9.4 in-Hg (127.8 in-H_2O) at a flow rate of 565 SCFM (see Appendix U, Table U-6). Influent oxygen content was 19.9%, an indicator of high-oxygen sub-surface conditions. The field influent concentration was 81 ppmV total volatiles as measured using the PPID. Pilot test #6 was terminated shortly after it began due to high water in the SVE/GASS holding tank; therefore, no vacuum measurements were collected from the observation wells and no vacuum contour plots were prepared from this test.

IV.B.7 Pilot Test #7 – 4/8/10

Pilot test #7 was conducted on April 8, 2010. The testing configuration consisted of vapor extraction from all twenty-six (26) shallow SVE wells (VE-1S, VE-2S, VE-3S, VE-4S, VE-5S, VE-6S, VE-7S, VE-8S, VE-9S, VE-10S, VE-11S, VE-12S, VE-13S, VE-14S, VE-15S, VE-16S, VE-17S, VE-18S, VE-19S, VE-20S, HVE-1, HVE-2, HVE-3, HVE-4, HVE-5 and HVE-6) for a period of approximately 265 minutes with an applied vacuum of 4.0 in-Hg (54.4 in-H_2O) at a flow rate of 625 SCFM (see Appendix U, Table U-7). Influent oxygen content averaged 20.4%, an indicator of high-oxygen sub-surface conditions. The field influent concentration averaged approximately 43 ppmV total volatiles as measured in the field using the Eagle and the PPID.

Vacuum isocontours from shallow observation well data (Appendix V, Figure V-6A) indicate a very strong vacuum influence over the entire site. This vacuum influence appears to extend north into Lake Tahoe Boulevard, west beyond LW-MW-12S, south under the Lake Tahoe Laundry Works tenant space potentially as far as the Raley's building, and east beyond wells VE-8, VE-14, and VE-15.

Vacuum isocontours from deep observation well data (Appendix V, Figure V-6B) also indicate a strong vacuum influence over the entire site. This vacuum influence appears to extend north into Lake Tahoe Boulevard, west at least as far as VE-2 and VE-20, south under the Lake Tahoe Laundry Works tenant space, and east beyond wells VE-8, VE-14, and VE-15.

Based on the data from pilot test #7, operation of all twenty-six (26) shallow SVE wells (VE-1S, VE-2S, VE-3S, VE-4S, VE-5S, VE-6S, VE-7S, VE-8S, VE-9S, VE-10S, VE-11S, VE-12S, VE-13S, VE-14S, VE-15S, VE-16S, VE-17S, VE-18S, VE-19S, VE-20S, HVE-1, HVE-2, HVE-3, HVE-4, HVE-5 and HVE-6) created a strong vacuum influence over the entire site, including an area under the Lake Tahoe Laundry Works tenant space. Measured vapor influent concentrations were relatively low, at an average of 43 ppmV.

IV.B.8 Pilot Test #8 – 4/8/10

Pilot test #8 was conducted on April 8, 2010. The testing configuration consisted of vapor extraction from all twenty-six (26) shallow SVE wells (VE-1S, VE-2S, VE-3S, VE-4S, VE-5S, VE-6S, VE-7S, VE-8S, VE-9S, VE-10S, VE-11S, VE-12S, VE-13S, VE-14S, VE-15S, VE-16S, VE-17S, VE-18S, VE-19S, VE-20S, HVE-1, HVE-2, HVE-3, HVE-4, HVE-5 and HVE-6), plus air sparging using all twenty-seven (27) sparge wells for a period of 85 minutes with an applied vacuum of 4.0 in-Hg (54.4 in-H_2O) at a flow rate of 630 SCFM (see Appendix U, Table U-8). Sparge pressure was 15 pounds per square inch (psi) at the compressor and 2.75 in-Hg (37.4 in-H_2O) at the sparge system manifold.

Influent oxygen content averaged 20.9%, an indicator of high-oxygen sub-surface conditions. The field influent concentration was 43 ppmV total volatiles as measured using the Eagle and the PPID.

Vacuum isocontours from shallow observation well data (Appendix V, Figure V-7A) indicate a very strong vacuum influence over the entire site, modified by positive pressure in groundwater due to air sparging. SVE vacuum influence appears to extend north into Lake Tahoe Boulevard, west beyond VE-1 and VE-20, south under the Lake Tahoe Laundry Works tenant space and east beyond wells VE-8, VE-14, and VE-15. Positive pressure was observed in all of the groundwater monitoring wells due to rising water levels induced by the air sparging system. The interaction of SVE system vacuum and GAS system positive pressure is apparent in the vacuum isocontours on Figure V-7A. These data show strong site-wide influence from the SVE/GASS.

Vacuum isocontours from deep observation well data (Appendix V, Figure V-7B) also indicate a strong vacuum influence over the eastern portion of the site. The vacuum isocontours over the western portion of the site are dominated by strong positive pressure in VE-2D. Again, these data show strong site-wide influence from both vapor extraction and groundwater air sparging systems.

Based on the data from pilot test #8, operation of all twenty-six (26) shallow SVE wells (VE-1S, VE-2S, VE-3S, VE-4S, VE-5S, VE-6S, VE-7S, VE-8S, VE-9S, VE-10S, VE-11S, VE-12S, VE-13S, VE-14S, VE-15S, VE-16S, VE-17S, VE-18S, VE-19S, VE-20S, HVE-1, HVE-2, HVE-3, HVE-4, HVE-5 and HVE-6), in conjunction with operation of all sparge wells, created a strong vacuum and a strong positive pressure influence over the entire site, including strong vacuum under the Lake Tahoe Laundry Works tenant space and beyond. Measured vapor influent concentrations were relatively low, at 43 ppmV.

IV.B.9 Pilot Test #9 – 4/9/10

Pilot test #9 was conducted on April 9, 2010. The testing configuration consisted of vapor extraction from nine (9) shallow SVE wells (VE-1S, VE-2S, VE-20S, HVE-1, HVE-2, HVE-3, HVE-4, HVE-5 and HVE-6), plus air sparging using all twenty-seven (27) sparge wells for a period of 120 minutes with an applied vacuum of 8.0 in-Hg (108.8 in-H_2O) at a flow rate of 575 SCFM (see Appendix U, Table U-9). Influent oxygen content was 20.5%, an indicator of high-oxygen sub-surface conditions. The field influent concentration was 83 ppmV total volatiles as measured in the field using the Eagle and the PPID.

Vacuum isocontours from shallow observation well data (Appendix V, Figure V-8A) indicate a strong vacuum influence under the western half of the site, and positive pressure under the eastern half of the site due to air sparging. SVE vacuum influence appears to extend north to Lake Tahoe Boulevard, west to VE-1 and VE-20, south beneath the Lake Tahoe Laundry Works tenant space, and east to wells VE-4, VE-13 and VE-17. Positive pressure was observed in all of the groundwater monitoring wells, except LW-MW-9S and LW-MW-10S, due to rising water levels induced by the air sparging system. The interaction of SVE system vacuum and GAS system positive pressure is apparent in the vacuum isocontours on Figure V-8A. These data show strong site-wide influence from the GAS system.

Vacuum isocontours from deep observation well data (Appendix V, Figure V-8B) show strong positive pressure from the air sparging system; however, vacuum was observed along the northern edge of the site building (VE-17, VE-18, VE-19, and VE-20). The vacuum isocontours over the western portion of the site are dominated by strong positive pressure in VE-2D.

Based on the data from pilot test #9, operation of nine (9) shallow SVE wells (VE-1S, VE-2S, VE-20S, HVE-1, HVE-2, HVE-3, HVE-4, HVE-5 and HVE-6), plus air sparging using all twenty-seven (27) sparge wells, created a strong vacuum under the western half of the site and a strong positive pressure influence over the entire Site. Measured vapor influent concentrations were relatively low, at 83 ppmV.

IV.C SVE Pilot Testing Radii of Influence Conclusions

At the Site, the SVE testing in April 2010 indicated that large radii of influence can be created in all or part of the site, depending on which combination of SVE wells are utilized. Vacuum influence over the entire site, including under the building and into Lake Tahoe Boulevard, can be readily achieved using all shallow SVE wells. Vacuum influence over selected portions of the Site can be readily achieved by selective use of groups of SVE wells. Pilot test data indicate that the Site is highly suitable for remediation using SVE/GASS.

IV.D Interim SVE/GASS Operation

Interim Site remediation, using the SVE/GASS commenced on April 9, 2010, after completion of pilot testing. Interim system operation typically consisted of operating all SVE wells (vertical and horizontal) and all sparge wells. Table 7 summarizes SVE/GASS operational data from April 9 through June 6, 2010. Interim system operation will continue until a final remediation plan is approved by the CRWQCB.

IV.E COC Mass Removal

Estimates of COC mass removed from April 9 through June 1, 2010, were calculated based on soil vapor flow rates, laboratory influent concentrations and run times. The resultant estimates of volatile organic compound removal (calculated as total PCE/TCE and associated degradation products mass) are summarized in Table 7.

Vapor influent samples collected on April 8 and 9, 2010, were analyzed at the laboratory (see Table 9 for summary of data and Appendix W for copies of laboratory reports). The laboratory data appeared disparate from the field data; however, laboratory analytical data are generally considered more accurate than field data, as the laboratory analysis is not influenced by external factors, such as the oxygen content in the influent stream.

IV.E.1 Estimates of COC Mass Removal Rates

In total, approximately 22.53 pounds (lbs) of COC mass were removed from the subsurface during the pilot testing period (see Table 7). The total runtime of interim SVE/GASS operation, through June 1, 2010 was approximately 1,260 hours, which equates to an average mass removal rate of approximately 0.017 lb/hr (see Table 7).

For mass removal calculations, monthly laboratory-derived data have been used when available. For times when only field-derived data were available, results have been adjusted, based on an average ratio between corresponding laboratory-derived data and field measurement data adjusted by the relative change in field-derived data from O&M event to O&M event.

Note: During the pilot test period, groundwater table elevations were high (see Graph 1). This resulted in submergence of a good portion of the vapor extraction wellfield. As a result, the vapor mass removal rates were low. During times of low groundwater table (fall to winter months), it is anticipated that vapor mass removal rates will increase.

IV.F Discussion of Pilot Testing Results

Based on the interim remediation system pilot testing results, the following conclusions can be made:

- The system produced significant vacuum influence over the entire Site, including under site buildings and under portions of Lake Tahoe Boulevard;
- The system produced significant sparge air (positive pressure) influence over the entire Site, including under site buildings and under portions of Lake Tahoe Boulevard;
- During the Pilot Test, influent COC concentrations were low due to the high water table, which placed major portions of the vapor extraction system elements under water;
- The highest COC removal rate was generated using both shallow and deep SVE wells in the western portion of the site; and
- The system is capable of significantly affecting the entire specified remedial area, as approved by the CRWQCB. Based on the data, additional vapor extraction and/or sparging wells and/or additional system equipment do not appear to be necessary.

V. DRAFT REMEDIAL ACTION PLAN

Based on the results of the installation and testing work discussed above, the selected *In-Situ* Cleanup Alternative of soil vapor extraction combined with groundwater air sparging has been shown to be highly effective. This Draft Remedial Action Plan (Draft RAP) presents the details regarding continued use of the installed Interim Remediation System for ongoing cleanup.

V.A Purpose of DRAP

The purpose of a Draft RAP is to describe the implementation of a remedial action or set of remedial actions, which will permanently prevent or minimize the release of hazardous substances or contaminants from the site such that they do not migrate or cause imminent and substantial endangerment to present or future public health and welfare, or the environment.

This Draft RAP describes activities that will take place for the project including remediation of soil and groundwater impacted by VOCs, primarily PCE, TCE and associated breakdown products to achieve the Site Cleanup goals that were proposed in the IRAWP (E_2C, 2009a).

V.A.1 Proposed Groundwater Cleanup Goals

PCE and TCE cleanup goals for groundwater were proposed in the IRAWP as follows:

- PCE - 5.0 µg/L (the Federal and State MCL for PCE); and
- TCE - 5.0 µg/L (the Federal and State MCL for TCE).

The CRWQCB approved the IRAWP by letter, dated September 1, 2009 (CRWQCB, 2009b)

V.B. Site Conceptual Model

A Site Conceptual Model (SCM) has been developed using historic site data and information obtained during site investigations.

V.B.1 Site Description

The Site is located approximately 9,000 feet south of Lake Tahoe in the City of South Lake Tahoe, El Dorado County (see Figure 1). The Site is situated in the northwest corner of the South Y Shopping Center, along Lake Tahoe Boulevard between U.S. Highway 50 and Tata Lane and is cross-corner from the dead-end intersection of Glorene Avenue with Lake Tahoe Boulevard (see Figure 2).

V.B.2 Regional Geology and Hydrogeology

The near-surface geology in the vicinity of the Site primarily consists of alluvial deposits, including sands, silty sands, and silts and clays to at least 140 feet bgs (IT Corp, 2000).

In January 2006, PES Environmental, Inc. (PES) reported the following (PES, 2006):

> "Remediation via pump and treat systems, soil vapor extraction, and well-head treatment for petroleum hydrocarbons has been conducted at numerous locations in the immediate vicinity of the property. Active groundwater remediation was conducted at the former Shell-branded Service Station at 1020 Emerald Bay Road and USA Gasoline Corporation Service Station No. 7 at 1140 Emerald Bay Road. According to the RWQCB, wellhead treatment using air stripping is being

> conducted at the Clement Well on groundwater pumped from the Julie Well and Tata #4 Well (RWQCB, 2003). The direction of local groundwater flow in shallow and deeper water-bearing zones has been modified as a result of groundwater extraction."

In 2006, PES reported that first-encountered groundwater was at approximately 8-15 feet bgs in the site vicinity with perched groundwater occurring as shallow as 5 feet bgs and that groundwater appeared to flow north-northeast at an approximate gradient of 0.05-0.08 foot of vertical drop per foot of foot of horizontal distance ft/ft (PES, 2006).

V.B.3 Local Geology and Hydrogeology

Soil borings advanced under the 2008 site investigation (E_2C, 2008) initially encountered fill materials to depths ranging from 6-9 feet bgs, dependent upon location. Along Lake Tahoe Boulevard, fill generally was found to approximately eight (8) feet bgs with old road base materials encountered at approximately 5-6 feet bgs.

Soils immediately underlying the fill materials generally consisted of unconsolidated sands with occasional gravel. The top of the shallow groundwater zone (SZA) was generally encountered within the top few feet of these underlying sands. At five (5) locations the bottom of the SZA was defined by a thin layer (one to 2.5 feet in thickness), or thin layers of silt alternating with sands (dependent upon location). At three (3) locations no SZA bottom-defining silt layer was encountered. This indicates that the silt layer that defines the bottom of the SZA is laterally continuous in varying thickness across the western portion of the Site (see Appendix O, Figures 4 and 5); however, it is laterally discontinuous along the eastern portion of the Site (see Appendix O, Figures 4, 5, 6 and 7). Underlying the silt at the bottom of the SZA (where silt was encountered) were sands of varying coarseness and color to the bottom depths of the 2008 investigation. This zone was classified as the MZA.

Initial groundwater in 2008 was encountered at varying depths (see Figures 4, 5, 6 and 7 from E_2C, 2008 in Appendix O). After installation of the monitoring wells, the water table surface generally rose, which indicated that some degree of confining conditions were present. On September 9, 2008, SZA depths to water ranged from 11.52 feet below top of casing (BTOC) (LW-MW-7S) to 14.99 feet BTOC (LW-MW-2S). It is important to note that the SZA groundwater flow directions interpreted honored the depth to water data collected in September 2008 and correlated well with the chemical gradient data; however, the flow directions (southeasterly) did not correlate well with the reportedly regional groundwater flow direction of northeast.

Shallow Zone Aquifer Groundwater Flow Conditions

On September 9, 2008, groundwater flow in the SZA was interpreted to be east-southeasterly at a gradient of approximately 0.024 ft/ft. Flow in the area encompassed by LW-MW-1S and LW-MW-2 was generally easterly, flow in the area of LW-MW-3S was east-southeasterly, and flow in the area encompassed by LW-MW-4S, LW-MW-7S and LW-MW-8S was south-southeasterly. On August 13, 2008, and September 14, 2008, the flow patterns were similar (see plots in Appendix P). These flow patterns indicated that the area between LW-W-1S and LW-MW-4S was in a condition of discharge, thus a trough-like feature was evident. The data also indicated that recharge was occurring from the north in the area of LW-MW-7S. This was evidenced by a nose-like feature (seen in Figures 3, 3A, and 3AA in Appendix P) that extended from LW-MW-7S to LW-MW-6S and beyond to the south. Thus, the principal path of flow, or average groundwater flow direction for the Site, was from the northwest corner of the intersection of Glorene Avenue with Lake Tahoe Boulevard in a southeasterly direction.

Groundwater table elevations fluctuate significantly, dependent upon time of year. For example, at LW-MW-1S, in December 2009, the groundwater elevation was 6,177.72 feet MSL, whereas the groundwater elevation at that well in June 2010 was 6,180.25 feet MSL, a difference of 3.93 feet (see Table 2). Based on the groundwater table elevation data collected to date at the Site (maximum of four monitoring events), the higher groundwater elevations occur in the summer, the lowest groundwater elevations occur in the winter and the intermediate groundwater elevations occur in the spring and fall (see Graph G-1, Hydrograph).

V.B.4 Site Characterization and Distribution of Contaminants

This section discusses historical soil and groundwater site assessment activities. The distribution of contaminants in soil and groundwater is also discussed. Based on the historical assessment activities, a vadose zone soil plume and a dissolved-phase groundwater plume that require cleanup have been identified (see Figure 4).

Site Assessments

From October 2003 through November 2005, PES Environmental, Inc. (PES) conducted soil and shallow groundwater investigation work (PES, 2003, 2004, 2005 and PES 2006). The results of these investigations were summarized and are depicted in the plots included in Appendix N (PES Site Plots of Soil and Groundwater Analytical Results).

In August and September 2008, E_2C Remediation (E_2C) conducted a site investigation to further evaluate vadose zone and groundwater conditions beneath and adjacent to the Site. Those findings were discussed in the *Site Investigation Report of Findings*, dated September 22, 2008 (E_2C, 2008).

In November 2009, E_2C conducted additional site assessment with installation of the interim remediation pilot test system (included installation of additional monitoring wells). Following the November installation work, groundwater samples were collected on two (2) occasions (Fourth Quarter 2009 and First Quarter 2010, which also served for the pre-pilot test groundwater baseline) prior to startup of the interim remediation system pilot test. The findings of the system installation the subsequent groundwater monitoring are discussed below.

Soil Chemical Conditions

PCE, TCE, vinyl chloride (VC), cis-1,2-DCE, Trans-1,2-Dichloroethene (Trans-1,2-DCE), and 1,2-Dichloroethane (1,2-DCA) were reported in soil samples collected during this investigation (see the table in Appendix Q for a tabular summary of data). Note: 1,2-DCA was reported in only one (1) soil sample (LW-MW-3-20) at a concentration of 0.19 μg/L and a review of the PES soil analytical summary data indicates that 1,2-DCA was not reported as detectable (see Appendix N, Plate 4).

Vadose Zone and SZA

The VOC concentrations reported were generally low, except at the LW-MW-1S boring where PCE was reported at a concentration of 410 milligrams per kilogram (mg/Kg) (analysis of a split-sample indicated a concentration of 532 mg/Kg) at the 7-foot depth, which indicated a zone of source material in that area. However, plots of concentrations in cross-section indicated that there were likely two (2) soil source areas for the impact found in the SZA: 1) in the area of on-site boring LW-MW-1; and 2) northwest and north of the area encompassed by off-site borings LW-MW-4, LW-MW-7 and LW-MW-8 (see plots in Appendix R) (E_2C, 2008).

SZA Groundwater Chemical Conditions

Dissolved-phase PCE was reported in the upgradient well (LW-MW-12S) at a concentration of 34.3 µg/L in March 2010, an increase from the 10.7 µg/L reported in the Fourth Quarter 2009. Upgradient well LW-MW-10S was reported to contain dissolved-phase PCE at a low concentration (1.04 µg/L), a decrease from the 15.8 µg/L reported in the Fourth Quarter 2009. This data appear to indicate that upgradient background concentrations in the vicinity of the Site fluctuate. Additional monitoring will be needed to evaluate longer-term trends.

The on-site Source Area appears to be located in the area of LW-MW-1S with the highest VOC concentrations occurring in the area between that well and LW-MW-9S. The PCE groundwater plume appears to be defined in the northerly direction, as evidenced by the reported low concentration of PCE at LW-MW-1S and the reported non-detect at LW-MW-5S. The PCE concentration reported at LW-MW-1S decreased significantly to 1,850 µg/L (2,000 µg/L in duplicate sample) as compared to the concentration of 5,150 µg/L reported in the Fourth Quarter 2009. Dissolved-phase TCE at LW-MW-1S was reported as non-detect in March 2010, a significant reduction from the concentrations reported in August 2008 and December 2009 (74.0 µg/L and 72.7 µg/L, respectively). Future monitoring data can be used to evaluate concentration trends.

Low concentrations of dissolved-phase volatile fuel hydrocarbon compounds, specifically benzene and MtBE were reported at four (4) of the site wells (LW-MW-2S, LW-MW-5S and LW-MW-13S) and at the off-site well (OS-1) (see Table 3 for summary of data).

Shallow Soil-Gas

Shallow soil-vapor samples were collected on April 9, 2010 from nine (9) of the ten (10) VP wells. Well VP-3 contained water and a sample could not be collected.

<u>Summary of Shallow Soil-Vapor Analytical Data</u>

Shallow soil-vapor analytical data are summarized in Table 4 and as follows (see Appendix X for copies of purge data sheets and Appendix Y for copy of laboratory report):

- PCE was reported in seven (7) of the nine (9) VP wells at concentrations ranging from a low of 0.012 parts per million by volume (ppmV) (VP-5) to a high of 1.98 ppmV (VP-10);
- TCE was reported at two (2) VP wells (VP-2 and VP-10) at concentrations of 0.029 ppmV and 0.047 ppmV, respectively;
- Cis-1,2-DCE was reported at three (3) VP wells (VP-2, VP-5 and VP-10) at concentrations of 0.38 ppmV, 0.015 ppmV and 0.050 ppmV, respectively; and
- All other VOCs analyzed for were reported as non-detect at the respective detection limit.

Soil and Groundwater Plume Limits

In a meeting on September 24, 2008 at the CRWQCB South Lake Tahoe office, interim remedial actions for the SZA (the uppermost water-bearing zone beneath the Site) and VOC-affected vadose zone soils were discussed. Based on the results of soil and groundwater investigations conducted at the Site in conjunction with the measured direction of groundwater flow, the area to be addressed for remedial action consists of two (2) parts: 1) The vadose zone soils impacted by VOCs (see Figure 4 for approximate areal extent of vadose zone soil cleanup); and 2) An area of the SZA that was approximately 375 feet in length and 145 feet in width with a vertical extent (from bottom of vadose zone to approximately twenty-five feet bgs (see Figure 4 for approximate areal extent of SZA cleanup).

During the September 24, 2008 meeting, a remedial system comprised of soil vapor extraction (SVE) combined with groundwater air sparging (SVE/GASS) was proposed for the interim cleanup for the above-described areas. At that meeting, the CRWQCB verbally approved that plan. The interim remedial system design was presented in the IRAWP (E_2C, 2009a). The CRWQCB approved the IRAWP by letter, dated September 1, 2009 (CRWQCB, 2009b).

Interim Operations

The interim remediation system pilot test was completed in early June 2010. The system equipment has been left in operational mode with weekly inspection visits to be conducted until approval of the Final RAP (FRAP) is provided by the CRWQCB.

V.B.5 Health Risk Evaluation

The evaluation of the potential health risk posed by soil and groundwater contamination at the Site is made through the identification of potential receptors and pathways linking the source and receptors. Potential receptors include water supply wells, visitors, construction workers, and relevant ecological receptors such as fish and wildlife. Pathways include transport through dermal contact or ingestion of soil, potable and surface water use, and inhalation of vapors. The purpose of this section is to provide an overview of the potential health risks based on site-specific conditions and is not intended to be a scientifically rigorous analysis of the potential health risks.

Potential Sources, Pathways, and Receptors

The potential sources of contamination at the Site include residual soil contaminant concentrations, soil-gas contaminants and shallow groundwater contaminants. Concentrations of PCE, TCE and associated degradation products were identified in soil beneath the Site during site investigation activities in 2008. Concentrations of these compounds were reported with PCE at a maximum of 532 mg/Kg and TCE at a maximum of 17 mg/Kg. The principal portion of the impacted vadose zone area, as depicted in Figure 4, is covered by asphalt in sidewalk, driveway, street and parking areas. The remaining portion of the vadose zone impacted area is covered by landscaping. Dermal contact with these soils and inhalation of vapors by visitors over the impacted area are not potential risks because that area is covered with asphalt and landscaping. The landscaping portion of the impacted area has been covered with bristle-coil woven mat covered by wood chips (see Appendix M). However, there is a potential for dermal contact and inhalation of vapors by construction and landscape workers should excavation of the surface materials be needed. For personnel working in the landscape area and for future construction in the paved area, care should be taken to avoid dermal contact with excavated soil by landscape/construction workers through the use of appropriate skin protection such as gloves or chemical resistant clothing.

Given that PCE and TCE volatilize rather easily into the atmosphere and the high concentrations reported in the Source Area, inhalation of these vapors from excavated soil is of moderate risk. Therefore, care should also be taken during construction/landscaping to keep fugitive dust emissions under control through the use of dust control measures such as periodic watering. Additionally, negative pressure exerted by the operating vapor extraction system will significantly reduce the potential for volatilization of the VOCs into ambient air.

Residual groundwater contaminants are a second potential source of contaminants. PCE and TCE were reported in groundwater at concentrations of 2,000 µg/L and 26.5 µg/L, respectively in March 2010. PCE and TCE appear to be degrading as indicated by cis-1,2-DCE and other associated degradation products. The nearest surface water is Lake Tahoe, located approximately 9,000 feet (1.7 miles) to the north of the Site. The lateral separation from the Site represents low-risk conditions for contaminants to migrate to, or enter the lake potentially endangering any aquatic life.

Potential vapor intrusion into indoor space is a third potential source of contaminants. Shallow soil-gas data is used as an indicator of potential vapor intrusion concern. Based on the April 9, 2010 shallow soil-gas analytical data from the VP wells (see Table 10), it appears there is no potential for vapor intrusion at the Site, with the possible exception of the northeast corner of the building in the area of VP-10 (see Figure 3 for location). The soil-gas sample from VP-10 was reported to contain PCE at a concentration (1,980 ppbV) higher than the ESL (206.54 ppbV) (see Section S.8.c in Appendix S for ESL values) and TCE at a concentration (47 ppbV) higher than the ESL (0.74481 ppbV). Note: Soil-gas analytical results were all less than the respective ESLs from the other VP wells located adjacent to the building (VP-1, VP-5, VP-6 and VP-9). The other VP wells (VP-2, VP-3, VP-4, VP-7 and VP-8) are all located in open areas.

In order to assess the vapor intrusion potential in the area of VP-10 to the building, a Tier-2 Human Health-Risk Assessment (HHRA) was conducted. The potential for an indoor air exposure pathway for on-site commercial receptors was found to be the critical path for human exposure in that area of the Site. The residual contaminants in the site soil and groundwater pose little human health risks via a potential vapor intrusion pathway and the risk level is below regulatory limits. In addition, the currently operating interim remedial action system will continue to capture vadose zone and groundwater contaminants. Therefore, vapor intrusion in the commercial space is not a potential risk.

Water Supply Wells

Three (3) water supply wells have been identified historically: 1) the Tata Lane Well; 2) the Julie Well; and 3) the Clement Well (see Figure 7 for approximate well locations) (referenced in CRWQCB, 2005b). All three (3) wells were reportedly shut down in 1999 due to MtBE contamination (CRWQCB, 2005b). In 2006, PES reported that the CRWQCB had indicated that wellhead treatment using air stripping was being conducted at the Clement Well on groundwater pumped from the Julie Well and Tata #4 Well (PES, 2006).

Interim Remediation System Pilot Testing

On April 6, 2010, E_2C commenced two (2) months of pilot testing of the interim site remedial system, SVE/GASS. E_2C subsequently completed a preliminary evaluation of the testing data collected (see discussion above for detailed description of testing and results). Pilot testing data indicate that the SVE/GASS has a significant influence over the CRWQCB-specified areal extent of SZA monitoring and cleanup zone (see Figure 4 for plot of specified area).

Summary of SCM

From October 2003 through November 2005, PES conducted soil and shallow groundwater investigation work (PES, 2003, 2004, 2005 and PES 2006). In August and September 2008 and November 2009, E_2C conducted site investigations to further evaluate vadose zone and groundwater conditions beneath and adjacent to the Site. Based on the investigations, an area of vadose zone soil impact and groundwater impact by PCE, TCE and associated degradation products has been identified in the area of the Lake Tahoe Laundry Works (see Figure 4). The initial site groundwater monitoring wells were installed in August 2008 followed by subsequent groundwater monitoring well installations in November 2010. Quarterly groundwater monitoring commenced in December 2009.

An evaluation of the health risk to human or ecological receptors by residual contamination indicates that there are no potential risks for dermal contact or inhalation as the vadose zone impacted area is covered by asphalt and landscaping that has been covered by bristle-coil mesh covered by wood chips. In addition, negative pressure exerted by the operating vapor extraction system will significantly reduce the potential for volatilization of the VOCs into ambient air. There may be moderate risk to construction and/or landscape workers should underground excavating be performed in the vadoze zone impacted area. Appropriate dust migration control procedures should be used during excavation activities.

Three (3) water supply wells were previously identified in the Site area. Reportedly, a wellhead treatment system was installed at the Clement Well to treat pumped water from the wells for MtBE.

Pilot testing of an interim remediation system installed during the period of November 2009 through April 2010 indicate that SVE/GASS is a highly effective cleanup alternative for the impacted subsurface areas.

V.C Feasibility Study/Remedial Options Evaluation

V.C.1 Purpose of Feasibility Study/Remedial Options Evaluation

The purpose of a Feasibility Study/Remedial Options Evaluation is to identify a remedial action or set of remedial actions, which will permanently prevent or minimize the release of hazardous substances or contaminants from the site such that they do not migrate or cause an imminent and substantial endangerment to present or future public health and welfare, or the environment. Based on the Feasibility Study, a Cleanup Plan has been prepared and is included in this combined document. The Site Background and Nature and Extent of Contamination were discussed above in the SCM. This Feasibility Study (FS) describes:

- Contaminant Fate and Transport (Section V.C.2);
- Biological and Chemical Degradation (Section V.C.3);

- Contaminant Transport Based on Soil and Aquifer Properties (Section V.C.4);
- Remedial Action Goals (Section V.D);
- Remedial Action Objectives (Section V.E);
- Description of Remedial Action Alternatives (Section V.F);
- Evaluation of Remedial Action Alternatives (Section V.G);
- Potential Impacts of Remedial Actions (Section V.H);
- Estimated Project Schedules for Each Alternative (Section V.I); and
- Preferred Alternative (Section V.J)

V.C.2 Contaminant Fate and Transport

Contaminant Properties

The contaminant properties presented below pertain to PCE and associated degradation products (includes TCE) the principal COCs at the Site. Based on the results of the investigation activities performed at the site, a summary of the maximum concentrations in each of the areas of concern is presented below:

Area of Concern	Depth Interval	Maximum PCE Concentration
Vadose Zone Soil	0 to approximately 10 feet bgs (i.e., water table)	7' – PCE = 532 mg/Kg at LW-MW-1S
Shallow Groundwater	Water table to approximately 32 feet bgs	5,150 μg/L in LW-MW-1S in December 2009

Mobility

PCE

Mobility of PCE is described as moderate, with solubility in water of 200 milligrams per liter (mg/L) at 20 degrees centigrade (°C), and organic carbon partition coefficient (K_{oc}) of 152 (Fetter 1988). Because its density of 1.662 grams per cubic centimeter (g/cm^3) is heavier than water (1.0 g/cm^3), free phase PCE can sink to the bottom of the aquifer in the DNAPL form.

TCE

Mobility of TCE in soil and groundwater is described as moderate, with solubility in water of 1,100 mg/L at 20 °C, and organic carbon partition coefficient (K_{oc}) of 152 (Fetter 1988). Because its density (1.460 g/cm^3) is heavier than water, free phase TCE can sink to the bottom of the aquifer in the DNAPL form. TCE can destroy the structure of clayey minerals, making them more permeable to dissolved contaminants (SWRCB, 2002b).

Toxicity

PCE

Acute: Acute exposure at levels above 200 mg/L may cause eye irritation and light-headedness: 400 mg/L, eye and nasal irritation, lack of coordination within 2 hours: 600 mg/L, dizziness within 10 minutes: 1,500 mg/L, extreme irritation to eyes and respiratory tract, dizziness within 2 minutes, unconsciousness within 30 minutes. These effects are related to PCE contaminated air (SWRCB, 2002a).

Chronic: Long-term exposure to PCE at levels above the MCL (5 µg/L) can cause adverse effects to liver, kidneys, and central nervous system. Prolonged dermal exposure can cause irritation, dryness, and dermatitis (SWRCB, 2002a).

Carcinogen: There is scientific evidence that PCE may cause cancer from prolonged exposure even at levels below the MCL. The US EPA classifies PCE as a probable human carcinogen. The California Public Health Goal (PHG) (0.06 µg/L) for PCE is calculated to represent a negligible risk of contracting cancer from the use of drinking water containing PCE in the household environment over a lifetime (SWRCB, 2002a).

TCE

Acute: Overexposure to TCE vapor can cause central nervous system effects (e.g. light-headedness, drowsiness, and headache), which may lead to unconsciousness or prove fatal in extreme circumstances. In addition, TCE may irritate the respiratory tract at high vapor concentrations. Repeated or prolonged contact with the chemical in liquid form can cause irritation of the skin and eyes (SWRCB, 2002b).

Chronic: (repeated) exposure, in excess of recommended occupational limits, has been associated with damage to the liver, kidneys, and nervous system. TCE is known to the State of California to cause cancer, for purposes of the Safe Drinking Water and Toxic Enforcement Act of 1986 ("Proposition 65") and was added to the list carcinogens in 1998. US EPA classifies TCE as a probable human carcinogen. The California PHG (0.8 µg/L) for TCE is calculated to represent a negligible risk of contracting cancer from the use of drinking water containing TCE in the household environment over a lifetime (SWRCB, 2002b).

The National Academy of Sciences reported July 27, 2006, that significant "evidence on the carcinogenic risk and other health hazards from exposure to TCE has strengthened since 2001." The report goes on to say there is "a large body of epidemiologic data available" on TCE showing the chemical is a possible cause of kidney cancer, reproductive and developmental damage, impaired neurological function and autoimmune disease (NAOS, 2006).

Half-Life

PCE

The half-life degradation rate in groundwater is estimated to be between 1 and 2 years, based on aqueous aerobic biodegradation (Howard et al, 1991) but may be considerably longer under certain conditions.

TCE

TCE is not readily degraded in most groundwater. Its half-life, based upon biodegradation in aerobic conditions, is between 0.5 to 1 year. Under anaerobic conditions, the half-life is from 3 months to 4.5 years (Howard et al, 1991); however, at most contaminated sites, TCE may last much longer than would be expected based on those half-life estimations.

V.C.3 Biological and Chemical Degradation

Biological Degradation

Biodegradation is a process in which naturally occurring organisms such as bacteria break down substances such as fuel hydrocarbons and chlorinated solvents into less toxic substances. Microorganisms have evolved to varying environmental conditions to metabolize chemical or use nutrients in their environment. For bacteria, the metabolic process requires the exchange of carbon and oxygen. Biodegradation may occur in the presence of oxygen (aerobic) or without oxygen (anaerobic) (CPEO, 1998).

There are three (3) primary biodegradation processes: 1) Where a contaminant is used as a primary food source; 2) Where the contaminant is used as an electron acceptor to aid respiration; and 3) Where biodegradation occurs in response to a chance reaction between a contaminant and an enzyme produced during an unrelated reaction (cometabolism). These processes are discussed further below.

1. **The contaminant is used as a primary food source**: Bacteria are able to use carbon found in contaminants as their primary food source in the presence of oxygen. This process has the greatest potential of degrading fuel hydrocarbons and chlorinated solvents with fewer chlorine atoms per molecule, such as vinyl chloride that has only one chlorine atom per molecule. A molecule like PCE with four (4) chlorine atoms is less susceptible to this type of biodegradation. Sometimes this process can occur under anaerobic conditions. This process depends on the type of contaminant, temperature, pH, and salinity. For chlorinated solvents, bacteria will use nitrate, iron, sulfate and carbon dioxide to metabolize the carbon in the contaminant molecule. Complete degradation of chlorinated solvents would leave carbon dioxide, water, and chlorine as byproducts (CPEO, 1998).
2. **The contaminant is used as an electron acceptor to aid respiration**: All living things use organic substances and other nutrients by breaking them down to simpler products. Under anaerobic conditions, microorganisms may use chlorinated solvents to aid in respiration, but not as a food source. This is done by an electron transfer process, whereby the contaminant is both the food source and electron donor. If the contaminant is not the food source, the contaminant may aid the transfer by accepting electrons that are shed during respiration. An electron transfer process called *reductive dechlorination* is the most common anaerobic process for degrading chlorinated solvents. In this process, hydrogen atoms are sequentially substituted for chlorine atoms in the contaminant. PCE becomes TCE, TCE becomes dichloroethene (DCE), DCE becomes vinyl chloride, and vinyl chloride becomes ethene. It should be noted that vinyl chloride is resistant to *reductive dechlorination*. If vinyl chloride is formed, it might be degraded by becoming the primary food source for different bacteria, such as in process 1 described above (CPEO, 1998).
3. **Cometabolism**: If a chlorinated solvent is biodegraded though cometabolism, it does not serve as a primary food or an electron acceptor. With cometabolism, biodegradation takes place as a result of a secondary reaction. An example is cometabolism caused by enzymes produced during the metabolism of methane. Cometabolism has generally been documented for aerobic conditions (CPEO, 1998).

The oxidized nature of PCE makes it hard to degrade by oxidative processes, and its chemical characteristics make it difficult to remove by groundwater extraction and treatment techniques. On the other hand, anaerobic microbes belonging to a diverse group, including, methanogens, acetogens, and sulfate-reducing bacteria, contain transition metal cofactors, which can reductively dechlorinate chlorinated solvents in a cometabolic process. A group of microorganisms known as halorespirators have been known to metabolize PCE in a process known as dehaloresipration, in which the PCE (or other chlorinated compounds) are used as electron acceptors in an anaerobic respiration process. In general, different microorganisms specialize in different steps of the degradation pathway. Metabolizing PCE may ultimately accumulate vinyl chloride, which is the most toxic of all chloroethenes (SRI, 2006).

Chemical Degradation

Chemical reactions whereby contaminants are broken down without the help of living organisms occur to a much lesser extent than those reactions by biological process. Contaminants may react directly with compounds in the soil or groundwater by a chemical degradation process known as *hydrolysis*. In *hydrolysis*, a chemical substitution reaction occurs in which hydrogen ions in water react with organic molecules, replacing the chlorine atoms. However, unlike *reductive dechlorination*, living organisms play no role in the reactions. The amount of clay in the soil and pH influence these reactions. Byproducts of *hydrolysis* include acids and alcohols, which degrade easily, making the effects of *hydrolysis* difficult to measure (CPEO, 1998).

V.C.4 Contaminant Transport Based on Soil and Aquifer Properties

Contaminant transport based on soil and aquifer properties is best understood if four principal mechanisms that cause measurable decreases in contaminant concentrations are described.

Dispersion: Dispersion is the spreading of a contaminant in groundwater laterally from its expected path of flow. Groundwater while moving through different soil types and geologic features travels at different velocities. The difference causes mechanical mixing, resulting in groundwater spreading contaminant material wider as it moves away from source areas. Rates of dispersion depend on differences in soil types as well as size and shape. This effect is a natural occurrence in most groundwater flow systems (CPEO, 1998).

Dilution: Dilution causes a decrease in contaminant concentration in groundwater by mixing with groundwater of lower contaminant concentration. Dilution is an effect of dispersion and occurs in most groundwater systems (CPEO, 1998).

Sorption: Sorption occurs when contaminants attach to soil particles. Sorption occurs in large part by contaminants dissolving into the organic matter within soil or because they are attracted by electrical charges. In groundwater, sorption may occur as dissolved chemicals are removed from solution. Sorption capacity is determined by factors such as temperature, pH, quantity of organic matter, and soil particle size. Contaminants can however, desorb from soil and enter groundwater or volatilize due to changing environmental conditions, including pH, temperature and changes in groundwater geochemistry (CPEO, 1998).

Volatilization: Volatilization occurs when contaminants dissolved in groundwater change from a liquid to a vapor. Factors affecting volatilization include contaminant characteristics, contaminant concentration and contaminant concentration with depth and temperature. Volatilization is generally a minor component of natural attenuation (CPEO, 1998).

The four mechanisms described above will occur with, or without, anthropogenic intervention. The degree to which these factors occur is hard to estimate.

Lithologic conditions at a site can have an impact on the distribution of contaminants, particularly subsurface PCE vapors. At the Site, there appears to be no upward migration barrier into the vadose zone, as evidenced by the reported concentrations of soil-gas in the VP wells (see Table 4). Design of the remediation system should account for this condition by focusing vapor capture in the depth interval where PCE vapors naturally tend to accumulate. Hence, the installation of the horizontal vapor extraction wells through the Source Area and vertical vapor extraction wells elsewhere for the interim remedial system pilot testing (see Sections II and III above).

The migration of PCE dissolved in the groundwater does not appear to be retarded, as concentrations have been reported at the furthest downgradient monitoring well. The highest concentrations of dissolved-phase contaminants occur in the area of LW-MW-1S. Therefore, the groundwater remediation strategy should focus on aggressive removal of high-concentration contaminants in the Source Area while accounting for low-concentration contaminants in the outer areas.

V.D REMEDIAL ACTION GOALS

V.D.1 Site Soil Quality Restoration Goals

Soil quality restoration goals are designed based on the following criteria:

- Protection of human health;
- Direct/indirect exposure to contaminated soil (ingestion, dermal absorption, inhalation of vapors and dust in outdoor air);
- Protection of groundwater quality (leaching of chemicals from soil);
- Protection of terrestrial (nonhuman receptors); and
- Protection against gross contamination concerns (nuisance, odors, etc,) and general resource degradation.

V.D.2 Site Water Quality Restoration Goals

The existing and potential beneficial uses of groundwater at the Site include municipal and domestic water supply and industrial use. The beneficial use with the most stringent set of water quality goals is municipal and domestic supply. Applicable water quality restoration goals are summarized in the table below (note: The most restrictive MCL is listed).

Constituent	Water Quality Goal (μg/L)	Standard
PCE	5	Federal and State MCL
TCE	5	Federal and State MCL
cis-1,2-DCE	6	State MCL
Trans-1,2-DCE	10	State MCL
Vinyl Chloride	0.50	State MCL

MCL=maximum contaminant level.

It should be noted that shallow groundwater that is contaminated by VOCs at the Site is not being ingested, as the identified water supply wells are all located upgradient of the Site and water pumped from those wells is reportedly being treated (see Section V.B.5 above).

V.D.3 Site Public Health and Safety Goals

According to guidance presented in the CCR, any remediation approach considered must be designed to mitigate nuisance conditions and risk of fire or explosion posed by residual solvent impact. To assure that remedial objectives address the requirements of Article 11, consideration of site-specific public health and safety goals is necessary. The site-specific goal is to eliminate any threat to public health and safety associated with subsurface constituents of concern (COC) impact, including the potential threat posed by nuisance conditions and risk of fire or explosion. Additionally, use of, or exposure to, affected groundwater or soil will be restricted. Applicable health and safety goals include California Public Health Goals (PHGs).

Soil PHGs

PHGs for COCs in soils are calculated to represent a negligible risk for residents and commercial or industrial workers that may be exposed to contaminated vadose zone soils, or dust derived from these soils, or where groundwater is a current or potential source of drinking water.

Constituent	PHG
PCE	0.37 mg/Kg
TCE	0.46 mg/Kg
cis-1,2-DCE	0.19 mg/Kg
Trans-1,2-DCE	0.67 mg/Kg
Vinyl Chloride	0.022 mg/Kg
1,2-DCA*	0.0045 mg/Kg

The PHGs for PCE, TCE, cis-1,2-DCE, Trans-1,2-DCE and VC are higher than the method detection limit (0.005 mg/Kg for each compound). The PHG for 1,2-DCA is lower than the method detection limit (0.005 mg/Kg).

* - Based on a review of the PES and E_2C soil analytical data, there appears to have been only one (1) reported detection of 1,2-DCA (2008 investigation, see Section I.B.3 above.

Groundwater PHGs

PHGs for COCs in groundwater are calculated to represent a negligible risk of contracting cancer from the use of drinking water containing the COCs in the household environment over a lifetime (CRWQCB, 2003). The COCs detected in groundwater beneath the Site and their respective PHGs are summarized as follows:

Constituent	PHG
PCE	0.06 µg/L
TCE	0.8 µg/L
cis-1,2-DCE	100 µg/L

Trans-1,2-DCE	60 µg/L
Vinyl Chloride	0.05 µg/L

The PHGs for PCE and VC in groundwater are lower than the currently achievable method detection limits for those compounds (0.5 µg/L), whereas the PHGs for TCE, cis-1,2-DCE and Trans-1,2-DCE are higher than their method detection limits (0.5 µg/L) for TCE.

V.D.4 Proposed Soil Cleanup Goals

Cleanup goals for protection of underlying groundwater and current and future site users (applicable for residential use) and construction or industrial workers from direct/indirect contact with impacted soils are proposed as follows (CRWQCB, 2008):

- PCE - 0.37 mg/Kg (the PHG for PCE), as it is greater than the method detection limit and is accurately quantifiable);
- TCE - 0.46 mg/Kg (the PHG for TCE), as it is greater than the method detection limit and is accurately quantifiable);
- Cis-1,2-DCE – 0.19 mg/Kg (the PHG for cis-1,2-DCE), as it is greater than the method detection limit and is accurately quantifiable);
- Trans-1,2-DCE - 0.67 mg/Kg (the PHG for Trans-1,2-DCE), as it is greater than the method detection limit and is accurately quantifiable);
- Vinyl Chloride - 0.05 mg/Kg (the method detection limit for VC), as the PHG is below the method detection limit and, therefore, is not accurately quantifiable; and
- 1,2-DCA – 0.05 mg/Kg (the method detection limit for 1,2-DCA), as the PHG is below the method detection limit and, therefore, is not accurately quantifiable.

V.D.5 Proposed Groundwater Cleanup Goals

Pursuant to Resolution 92-49, the CRWQCB is required to ensure that the cleanup of groundwater attains "background" concentrations unless that is not reasonable. At a minimum the cleanup must attain the level that is economically and technically feasible and meets water quality objectives (SWRCB, 2003). As such, cleanup goals for the COCs reported in groundwater at the Site are proposed as follows:

- PCE - 5.0 µg/L (the Federal and State MCL for PCE), as the PHG is below the method detection limit and, therefore, is not accurately quantifiable;
- TCE – 5.0 µg/L (the Federal and State MCL for TCE), as it is greater than the method detection limit and is accurately quantifiable);
- Cis-1,2-DCE – 6.0 µg/L (the State MCL for cis-1,2-DCE), as it is greater than the method detection limit and is accurately quantifiable);
- Trans-1,2-DCE – 10 µg/L (the State MCL for Trans-1,2-DCE), as it is greater than the method detection limit and is accurately quantifiable); and
- Vinyl Chloride - 0.5 µg/L (the PHG and method detection limit for VC), as the PHG is at the method detection limit and is accurately quantifiable.

In summary, remediation of groundwater within the defined affected limits of the SZA underlying and immediately adjacent to the Site (see Figure 4) will be conducted until the respective State MCLs are attained, or the measured background levels for a specific COC, whichever is higher, are reached.

V.E Remedial Action Objectives

Objectives are identified to provide direction in developing the remedial actions necessary to achieve remedial action goals. Objectives also serve as a baseline for measuring achievement. Soil- and groundwater-based objectives are identified below.

Soil: Within technical and economic constraints, prevent exposure to affected soils or vapors emanating from affected soils.

Groundwater: Within technical and economic constraints: prevent exposure to affected groundwater or vapors emanating from affected groundwater, until public health and safety goals are achieved; achieve groundwater quality restoration goals; and prevent exposure until groundwater quality restoration goals are met.

Achieving remedial action objectives is subject to technical and economic constraints; therefore, modifications to remediation goals (and associated remedial objectives) may be necessary at any time. Progress toward achieving the remedial action objectives is evaluated through analyses of data resulting from implementation of the recommended remedial alternative.

V.F Description of Remedial Action Alternatives

According to CCR Title 23, Chapter 16, Article 11, at least two (2) alternatives must be identified and evaluated for restoring or protecting beneficial water uses and protecting public health and safety. In addition, each alternative must be designed to mitigate nuisance conditions and risk of fire or explosion. For this Feasibility Study (FS), five (5) alternatives were developed for evaluation: (1) No action: (2) soil vapor extraction and groundwater air sparging; (3) groundwater extraction and treatment; (4) Hydrogen Release Compound; and (5) natural attenuation with long-term monitoring.

There are two (2) site-specific factors to consider in developing alternatives for remedial action at the Site: 1) a large portion of the contaminant mass in groundwater is located beneath paved areas, landscape areas and partially under a building; and 2) there is an existing interim remedial system pilot test compound ready for use. Because of the aforementioned factors, remedial alternatives must be able to affect contamination beneath paved areas and landscape areas without having direct access to the area under the building and to utilize the existing interim remedial pilot testing system. Elements common to all remedial action alternatives are:

Remediation Monitoring. Remediation monitoring is an aspect of any site remediation program, and is a key aspect of any remedial alternative. In addition to the current groundwater monitoring program, remediation monitoring will be performed to maintain compliance with any implementation permits, and to evaluate progress toward attaining the remedial objectives. Additionally, monitoring will be used as a tool to manage the affected groundwater plumes.

Institutional Control. Institutional controls are used to prevent exposure to affected soil and groundwater. Groundwater monitoring is an institutional control that will continue to be used to manage the affected groundwater plumes.

V.F.1 Alternative 1: No Action

This alternative consists of no action. Contaminant concentrations in the subsurface are left to naturally attenuate over time without any external remedial action or observation.

Alternative Advantages. The advantages of Alternative 1 are:

- No disruption of business;
- No *in-situ* or *ex-situ* groundwater extraction or treatment is required;
- No *in-situ* or *ex-situ* soil remediation is required; and
- No permits are required;

Alternative Disadvantages. Disadvantages of Alternative 1 include:

- Will likely not reduce contaminant mass in subsurface (soil or groundwater) in a reasonable period of time without use of outside stimulus.

V.F.2 Alternative 2: Soil Vapor Extraction/Groundwater Air Sparging

Vapor extraction in soils (SVE) is a proven technology for the removal of VOCs such as PCE from the vadose soil zone (EPA, 1996a). Wells are screened through the contaminated interval, but above the water table, and are connected at the surface to a blower. A negative pressure (vacuum) is created and soil gases carrying VOCs are drawn to the wells and into the remediation system piping. At the surface, the VOCs are adsorbed in canisters of granulated activated carbon (GAC) to prevent emissions to the atmosphere.

Soil vapor extraction (SVE) to remediate soil contaminated by VOCs and groundwater air sparging to cleanup VOC groundwater contamination are common strategies for sandy alluvial soils (EPA, 1996b). PCE has a relatively high vapor pressure meaning that it has a propensity to volatilize to the atmosphere in its pure phase. It also has a high Henry's Law constant so that when dissolved in water the equilibrium concentration in the adjacent vapor phase is relatively high compared to other VOCs. These properties of PCE make it well suited for removal through SVE and groundwater air sparging.

Alternative Advantages. The advantages of Alternative 2 are:

- Minimal disruption of business;
- No groundwater extraction with treatment of extracted groundwater is required;
- Vapor phase adsorption is more efficient than liquid phase adsorption;
- Removes contaminants and enhances aerobic biodegradation of daughter products;
- Only one discharge permit (EDCAQMD) is required;
- The remediation system is relatively easy to operate and maintain;
- In addition, Alternative 2 reduces the toxicity, volume and mobility of contaminants beneath the affected area and does not entail relocating contamination; and
- The SVE portion of the system would remove VOCs from soils, specifically in the short-term, thus reducing 'VOC source mass' that would be available for leaching downward to groundwater.

Alternative Disadvantages. Disadvantages of Alternative 2 include:

- Reduces, but does not eliminate contaminant mass in groundwater;
- Relies on natural groundwater flow and diffusion to flush contaminants into treatment zone, and
- May not completely clean the affected area.

Based on the results of Interim soil vapor extraction/groundwater air sparging system (SVE/GASS) pilot testing, elevated influent VOC concentrations were measured at the system influent stream, which indicate that the interim SVE/GASS remedial system is highly effective in removing PCE mass in the subsurface. Based on the interim SVE/GASS pilot testing, the equipment that was used in the pilot testing is more than adequate to cleanup the VOCs of concern in the subsurface at the Site. The SVE/GASS remediation well network provides coverage of the plume, as approved by the CRWQCB. Therefore, additional equipment, remediation wells and monitoring wells are not needed to implement remediation using SVE/GASS.

V.F.3 Alternative 3: Groundwater Extraction and Treatment (GWET)

This alternative involves the design and installation of a groundwater extraction well field for the purposes of mass removal and migration control. Existing wells could be used as extraction wells; however, aquifer testing would be required to determine the appropriate spacing of wells to be used for groundwater extraction. The installation of additional wells may be required to provide appropriate coverage of the PCE plume. Extracted groundwater would be treated using carbon adsorption. System components would require filters, surge tanks and transfer pumps, high-pressure vessels containing carbon, conveyance piping, and electrical distribution and control panels. Treated groundwater would be directed to the storm drain. The treatment equipment would be located at the existing remedial system compound. A permit from the CRWQCB would be necessary to discharge treated groundwater. It is assumed that a large number of pore volumes of water would need to pass through the contaminated zone beneath the site and adjacent properties before the full benefit of this alternative is exhausted.

Alternative Advantages. The advantages of Alternative 3 are:

- Minimal disruption of business;
- Provides dissolved contaminant migration control, does not solely rely on natural groundwater flow;
- Removes contaminants from groundwater;
- Only one discharge permit is required, and the remediation system is relatively easy to operate; and
- Alternative 3 also reduces the toxicity, volume and mobility of contaminants in groundwater beneath the affected area and does not entail relocating contamination.

Alternative Disadvantages. Disadvantages of Alternative 3 include:

- Does not remove VOCs from soils in the short-term, or the long-term, thus 'VOC source mass' would continue to be available for leaching downward to groundwater.
- Reduces, but does not eliminate contaminant mass in groundwater;

- Relies in part on natural groundwater flow and diffusion to flush contaminants into treatment zone;
- Liquid-phase carbon treatment is less efficient than vapor-phase carbon, and the system may be difficult to maintain due to low water quality;
- Alternative 3 is associated with resource-intensive discharge requirements and it would not completely clean the affected area; and
- Alternative 3 would require an extensive period of time to achieve Site Groundwater Cleanup Goals, potentially up to thirty (30) years.

V.F.4 Alternative 4: Hydrogen Release Compound (HRC™)

In-situ bioremediation of chlorinated VOCs in groundwater has been demonstrated at numerous sites by supplying lactic acid as an electron donor. The source of lactic acid for these demonstrations is Hydrogen Release Compound (HRC™), which is a polylactate ester that is especially formulated for the gradual release of lactic acid after hydration. In the subsurface, HRC™ continuously delivers lactic acid, which ultimately creates an anaerobic (reducing) environment in groundwater. In a highly reducing environment, anaerobic bacteria use the electron donor to dechlorinate the VOCs. HRC™ can be delivered into groundwater by hanging perforated containers in wells, adding it directly to borings, or injected using a direct-push technology such as GeoProbe® (Murray et al, 2001). A pilot test would be necessary to determine whether the use of HRC™ is appropriate for the site.

Alternative Advantages. Advantages to the HRC™ alternative are:

- No discharge stream and operation permits are required; and
- Effectively reduces concentrations of PCE and TCE in groundwater.

Alternative Disadvantages. Disadvantages to the HRC™ alternative are:

- Requires that the existing aerobic environment beneath the site be converted to an anaerobic environment;
- Relies on natural groundwater flow and diffusion to spread HRC™ throughout the treatment zone;
- Does not treat vadose zone soil, thus 'VOC source mass' would continue to leach downward to groundwater.,
- The costs to purchase HRC™ would be very expensive;
- Would require extensive bench-scale testing and pilot testing;
- Would require permitting from Agencies along with long-term monitoring for 'exotic' analytes;
- The existing well network is likely insufficient for applying the appropriate volumes of HRC™ needed to treat PCE and TCE. This is especially true in areas beneath buildings; and
- Highly toxic daughter products (DCE and vinyl chloride) of PCE and TCE reduction may persist in groundwater.

V.F.5 Alternative 5: Natural Attenuation with Long-Term Monitoring

Natural attenuation with long term monitoring program would be comprised of collecting and analyzing groundwater samples, while waiting for VOCs to be reduced naturally to below water quality restoration goals and health and safety goals.

Alternative Advantages. Advantages to the natural attenuation with long-term monitoring alternative are:

- No discharge stream and operation permits are required; and
- No capital costs.

Alternative Disadvantages. Disadvantages to the natural attenuation with long-term monitoring alternative are:

- May not reduce the toxicity, volume and mobility of contaminants beneath the Site;
- Over many years, PCE plume may migrate and impact downgradient sensitive receptors; and
- Long term monitoring may be costly and continue for many years.

V.G Evaluation of Remedial Action Alternatives

The FS evaluates the viability of the remedial strategy in terms of the nine EPA criteria (overall protection of human health and the environment; compliance with laws and regulations; long-term effectiveness and permanence; reduction of toxicity, mobility, and volume; short-term effectiveness; implementability; cost; state acceptance; and community acceptance).

V.G.1 Overall Protection of Human Health and the Environment

No Action: This alternative when used alone is not protective of human health or the environment in the short- or long-term. Site water quality protection standards are not met as background quality groundwater outside of the current PCE plume may be eventually contaminated. Site public health and safety goals are not met as this alternative has minimal effect on mitigating contaminants in the vadose zone soils.

SVE/GASS: This alternative is protective of human health and/or the environment in the short- or long-term. Site water quality protection standards are met as background groundwater quality outside of the current PCE plume is unlikely to eventually be contaminated as SVE/GASS provides significant VOC mass removal, as evidenced by the results of the recent SVE/GASS Pilot Test (see Section III above). Site public health and safety goals will be met as this alternative will significantly reduce VOC concentrations in shallow groundwater and will mitigate VOCs in vadose zone soils.

GWET: This alternative is possibly protective of human health and/or the environment in the long-term but not in the short-term. Site water quality protection standards are met as background quality groundwater outside of the current PCE plume is unlikely to eventually be contaminated as GWET provides groundwater migration control. Site public health and safety goals are not met as this alternative has no effect on mitigating 'VOC source mass' in soils.

HRC™: This alternative is possibly protective of human health and/or the environment in the long-term but not in the short-term. Site water quality protection standards are not met as background quality groundwater outside of the current PCE plume may eventually be contaminated as this alternative does not provide migration control and may not be able to fully affect the VOC plume. Site public health and safety goals are not met as this alternative has minimal effect on mitigating VOCs in vadose zone soils in the short- or long-terms.

Natural Attenuation with Long-Term Monitoring: This alternative when used alone is not protective of human health or the environment in the short- or long-term. Site water quality protection standards are not met as background quality groundwater outside of the current PCE plume may be eventually contaminated. Site public health and safety goals are not met as this alternative has little effect on mitigating VOCs in soil or groundwater.

V.G.2 Compliance with Laws and Regulations

No Action: No special permitting is needed for this alternative. Regulatory agencies generally have no problem with approving this alternative provided the COCs are at extremely very low concentrations that are at/or near water quality protection standards and the residual COCs do not pose threats to life and health of residents of the State. This method can take a very long time for the COCs at the Lake Tahoe Laundry Works Site to reduce to water quality standards, it is likely the State (in this case, the State of California Water Resources Control Board (SWRCB)) would require a faster remedial response for protection of the waters of the State of California.

SVE/GASS: The use of SVE/GASS is a well-accepted means for remediation of volatiles in the subsurface (soils and groundwater). A simple permit is required (Permit To Operate) (PTO) from the Local Air Pollution Control Agency to operate the vapor treatment unit.

Permits for discharge of extracted materials, such as groundwater is not required as groundwater is not extracted. Note: Any residual water entrained in the vapor stream is routed through a knock-out pot and stored temporarily on site. This minimal volume of water can be combined with groundwater sampling purge water and be transported off site for recycling.

GWET: The GWET permitting process is extensive. GWET involves the extraction of significant volumes of groundwater with subsequent treatment. Special permitting may be required from Local Agencies to facilitate storage of large volumes of water in an area, or areas, deemed feasible for such storage by Local Agencies. In addition, a PTO would be required for operation of the water treatment system. In fact, two PTO's would be required: 1) for extracted water treatment; and 2) for the additional system that would be required to treat soil vapors extracted from the vadose zone, as GWET does not address that zone. Once the water is treated, it would require recycling and/or discharge to ground. Recycling would require transport of large volumes of water to a regulatory-accepted (DHS certified and licensed) recycling facility. Discharge to ground would require an NPDES Permit, if allowable by Local and State Agencies, which would require renewal each year of operation. Obtaining an NPDES Permit is time consuming and expensive initial fees plus yearly renewal fees), although it is practical for discharge of large volumes of water when compared to transport and recycling of such large volumes.

HRC^{TM}: This alternative would require approval by the Lead Regulatory Agency (LRA) and may require other Local Agency approvals, and would be subject to waste discharge requirements. An *ex-situ* Bench-Scale test would be required to assess the potential for generation of unwanted degradation by-products and potential degradation rates of the COCs. Once the results of the bench-scale tests were approved by the LRA, an *in-situ* pilot test would likely be required to verify that this process is being effective and not harmful to the environment.

Natural Attenuation with Long-Term Monitoring: No special permitting is needed for this alternative. Regulatory agencies generally have no problem with approving this alternative provided the COCs are at very low concentrations after other methods have been utilized to reduce the concentrations and the residual COCs do not pose threats to life and health of residents of the State. This method can take a very long time for the COCs to reduce to Cleanup Goals, so the State (in this case, the SWRCB) would like to see a much faster remedial response for immediate protection of the waters of the State of California.

V.G.3 Long-term Effectiveness and Permanence

No Action: This alternative when used alone is not likely to be effective in the long-term. This is due to chlorinated VOCs being hard to degrade in an aerobic environment such as currently exists in the shallow groundwater beneath the Site. This alternative when used alone is unlikely to provide a permanent solution.

SVE/GASS: This alternative is effective in the long-term. Site water quality restoration goals are likely to be met as existing concentrations of PCE and TCE in shallow groundwater exceeding Federal and State MCLs are likely to decrease below MCLs by this alternative. As VOC concentrations become very low in shallow groundwater, this alternative will be aided by natural attenuation processes. This is the only alternative that directly affects both shallow groundwater dissolved-phase VOCs and vadose zone soil VOC vapors. This alternative provides a permanent solution because, once VOCs are removed from the subsurface, they are captured using a GAC system.

GWET: This alternative is likely effective in the long-term for groundwater treatment purposes. Site water quality restoration goals are likely to be met in the long-term as existing concentrations of PCE and TCE in shallow groundwater exceeding Federal and State MCLs are likely to decrease below MCLs by this alternative. However, the vadose zone is not treated leaving VOCs in the subsurface that would continue to leach downward to groundwater, thus prolonging the groundwater cleanup time. This alternative provides a permanent solution for groundwater as once the VOCs are removed from the groundwater they are captured using a treatment system, such as GAC.

HRC™: This alternative may be effective in the long-term if shallow groundwater can be fully converted to and maintained in an anaerobic state. It is unknown if site water quality restoration goals will be met in the long-term as existing concentrations of PCE and TCE in shallow groundwater exceeding Federal and State MCLs may not decrease below MCLs by this alternative as VOC mass beneath certain portions of buildings and paved areas possibly would not be influenced by the HRC™ process due to HRC™ very limited radius of influence. In addition, at the completion of the HRC™ process, concentrations of DCE and vinyl chloride may persist in shallow groundwater. This alternative may not provide a permanent solution as the subsurface may not become fully anaerobic. If so, a rebound in VOC concentrations would likely be observed.

Natural Attenuation with Long-Term Monitoring: This alternative when used alone is not likely to be effective in the long-term. This is due to chlorinated VOCs being hard to degrade in an aerobic environment such as currently exists in the shallow groundwater beneath the Site. This alternative when used alone is unlikely to provide a permanent solution.

V.G.4 Reduction of Toxicity, Mobility and Volume

No Action: This alternative does not effectively reduce toxicity, mobility or volume of contaminants present in the subsurface.

SVE/GASS: This alternative is effective at reducing toxicity, because concentrations of PCE and TCE in shallow groundwater and soil vapor may be reduced to concentrations lower than applicable public health goals. As PCE and TCE concentrations decrease, contaminant mass in the subsurface is simultaneously decreased. Use of this alternative would control the mobility of soil vapors by using the network of existing soil vapor extraction wells that was shown to be highly sufficient for capture of soil vapors in the recent SVE/GASS Pilot Test (see Section III above) This alternative is likely only moderately effective in affecting the mobility of VOCs in shallow groundwater.

GWET: This alternative may be effective at reducing toxicity, because concentrations of PCE and TCE in shallow groundwater may be reduced to concentrations lower than applicable public health goals. As PCE and TCE concentrations are decreased, contaminant mass in shallow groundwater is simultaneously decreased. This alternative would control the mobility of contaminated shallow groundwater by using a sufficient network of groundwater extraction wells. This alternative if used alone is ineffective in removing VOCs from vadose zone soils.

HRC™: This alternative, if implementable, may be effective at reducing toxicity, because concentrations of PCE and TCE in shallow groundwater may be reduced to concentrations lower than applicable public health goals. As PCE and TCE concentrations are decreased, contaminant mass in shallow groundwater is simultaneously decreased. Soil vapors may decrease in concentration with time as VOC concentrations in shallow groundwater decrease; however, this alternative will not directly control the mobility of VOCs in shallow groundwater, or as VOC vapor in vadose zone soils.

Natural Attenuation with Long-Term Monitoring: This alternative may be effective in reduction of toxicity, mobility or volume of contaminants present in the subsurface if anaerobic conditions were present in the subsurface. Additionally, the time required to meet water quality standards would likely not be unacceptable to regulatory agencies.

V.G.5 Short-Term Effectiveness

No Action: This alternative when used alone is not likely to be affective in the short-term. This is due to chlorinated VOCs being hard to degrade in an aerobic environment such as currently exists in the shallow groundwater beneath the Site. Additional mechanisms would be required to change the aerobic environment to an anaerobic environment.

SVE/GASS: This alternative is effective in the short-term as it can be implemented immediately using the existing interim remediation pilot testing system. This alternative directly affects both shallow groundwater dissolved-phase VOCs and vadose zone soil VOC vapors.

GWET: This alternative is likely ineffective in the short-term, as it may require up to thirty (30) years to achieve Site Groundwater Cleanup Goals. This alternative would require aquifer testing to determine if this alternative is feasible. If this alternative is feasible, it would likely require the installation of additional groundwater extraction wells. It would also require the installation of water conveyance piping and liquid phase activated carbon. Although this alternative would provide migration control in the shallow aquifer, this alternative would do little or nothing to mitigate VOCs in vadose zone soils.

HRC™: This alternative may be ineffective in the short-term. This alternative would require *ex-situ* bench-scale testing and *in-situ* pilot testing to determine if this alternative is feasible. If this alternative is feasible, it would likely require the installation of additional wells inside buildings and other areas to deliver the HRC™ to the largest possible portion of the entire VOC plume to convert the existing aerobic conditions to anaerobic conditions. Even if HRC™ is feasible, it may take years before fully anaerobic conditions can be achieved.

Natural Attenuation with Long-Term Monitoring: This alternative when used alone is not likely to be affective in the short-term. This is due to chlorinated VOCs being hard to degrade in an aerobic environment such as currently exists in the shallow groundwater beneath the Site. Additional mechanisms would be required to change the aerobic environment to an anaerobic environment.

V.G.6 Implementability

No Action: The implementability of this alternative is high, as no additional work would be required.

SVE/GASS: The implementability of this alternative is high. This alternative would only require start-up of the existing SVE/GASS that proved to be highly effective in reducing VOC concentrations during recent SVE/GASS pilot testing (see Section III above). No further infrastructure is required to implement this alternative. Operation, maintenance, and sampling of the SVE/GASS would also be required. Remediation status would be reported in conjunction with quarterly groundwater monitoring.

GWET: The implementability of this alternative is low to moderate. An aquifer test Workplan would be first required. After the appropriate regulatory approvals are granted, an aquifer test would be performed after installation of any needed groundwater extraction wells specifically designed for their purpose. Groundwater would likely be extracted from sets of extraction wells while observation wells are simultaneously monitored. Aquifer test data would be used to estimate groundwater extraction rates and radii of influence. If the aquifer testing is successful, it would take extensively more time before GWET could be fully implemented, as an FS report must be submitted and approved, followed by the preparation and approval of a Cleanup Plan. Infrastructure including additional extraction wells, water conveyance piping, and liquid phase activated carbon would be needed. In addition, a groundwater discharge permit would have to be obtained from the CRWQCB. The lifespan of active remediation under this alternative is estimated to be a minimum of five (5) years, although experience suggests the lifespan of groundwater extraction could be as long as thirty (30) years. In the end, the controlling factor would be the time required to sufficiently wash affected soil beneath the Site and bring affected groundwater into the capture zone of the groundwater extraction well field.

HRC™: The implementability of this alternative is low to moderate. An HRC™ pilot test Workplan would be first required. After the appropriate regulatory approvals of the Workplan, an *ex-situ* bench-scale test would be conducted and the results with recommendations would be reported. If the testing showed that implementation of this alternative could be effective without causing unwanted side effects and with approval of the LRA, an *in-situ* Pilot Test would be performed. HRC™ would be applied continuously at a selected area until anaerobic conditions are achieved. If anaerobic conditions are achieved for the selected area (it may take a year or more to determine if anaerobic degradation has occurred in the selected area), if the pilot test is successful and, if HRC™ is selected as the remedial method of choice, it would take several more years before anaerobic degradation by HRC™ could be fully attained, if fully attained at all. An FS report must be submitted and approved, followed by the preparation and approval of a Cleanup Plan. If full scale HRC™ is implemented, it may take at least a year or more to change existing aerobic site conditions to anaerobic conditions after which it may take a couple of years for biodegradation of the PCE and TCE present beneath the Site and adjacent areas to take effect. The also assumes that DCE and vinyl chloride are not left behind in shallow groundwater after the completion of the HRC™ program. Of important note, the radius of influence around the HRC™ target locations is very limited, approximately ten (10) feet. For an area the size of the Lake Tahoe Laundry Works site, a vast number of injection points/wells would be required.

Natural Attenuation with Long-Term Monitoring: The implementability of this alternative is high. All that would be required is quarterly groundwater monitoring and reporting, which is currently being performed.

V.G.7 Costs

No Action: Infrastructure costs are not required for this alternative. Costs for performing continuing monitoring are not required. All that would be required would be costs to decommission the existing monitoring and remediation systems (estimated at $73,000).

SVE/GASS: Additional Infrastructure costs are not required for this alternative. Costs for performing SVE/GASS operation and maintenance, quarterly monitoring, sample analysis, and report preparation for the pilot testing period, the interim remedial operation period, the full-scale remedial action period (after approval of the FRAP) (total of 2.5 years) and two (2) years of post-remediation monitoring is estimated to be $796,000.

GWET: Additional Infrastructure costs are required for this alternative. The existing well network might be usable for aquifer testing (only after initial testing can this be determined); however, the quantity of additional extraction wells needed (if any) can't be estimated until after the completion of successful aquifer testing. Costs for performing tasks needed for a GWET program including: extraction well installation, pump, piping, and treatment system installation, pilot testing, obtaining NPDES permits with yearly renewal fees, operation and maintenance, quarterly monitoring, sample analysis, data analysis, and report preparation for up to thirty (30) years is estimated to be $3,000,000. This does not include costs that would be needed to implement an additional cleanup alternative for mitigation of VOCs in vadose zone soils.

HRC™: Additional Infrastructure costs are required for this alternative. The existing well network is located mostly in parking areas and landscape areas. A numerous well network, or injection galleries, would be needed to apply HRC™ to groundwater due to the HRC™ small radius of influence. A large but unknown quantity of HRC™ would be required for full-scale implementation of this alternative. The quantity needed can't be estimated until after the completion of a successful HRC™ pilot test. Costs for performing tasks needed for an HRC™ program including: well installation, HRC™ purchase, pilot testing, operation and maintenance, quarterly monitoring, sample analysis, data analysis, and report preparation for approximately five (5) years is estimated to be $10-50 million.

Natural Attenuation with Long-Term Monitoring: Infrastructure costs are not required for this alternative. Costs for performing quarterly monitoring, sample analysis, and report preparation for approximately 30 years is estimated to be $600,000.

V.G.8 State Acceptance

No Action: It is doubtful that the State would accept this alternative as it would take too long to achieve water quality standards.

SVE/GASS: This alternative is currently in use at numerous sites throughout the State of California and has shown itself to be a very reliable remedial alternative in the State's 'eye', as evidenced by numerous site closures throughout the State in recent times.

GWET: This alternative was widely used in the 1980's and 1990's and was readily acceptable by the State; however, since that time, new technologies have become available, or refined such that better alternatives are available that take far less time to achieve Cleanup Goals. The GWET alternative would likely take a long period of time to achieve Site Cleanup Goals, up to 30 years. During that period of time, there would be significant potential for contaminants to migrate to areas outside of the Site. In addition, GWET does not account for cleanup of VOCs in vadose zone soils. As such, GWET would most likely not be approved by the State.

HRC™: The State has approved this alternative for numerous sites throughout the State of California; however, generally for small-scale projects, or 'hot spot' cleanup, due to the limited radius of influence of the HRC™ compound injection and the numerous times that injection may be required, which directly relates to an ineffective cost ratio per pound of VOC removal.

Natural Attenuation with Long-Term Monitoring: Due to the size of the groundwater plume and the amount of time that may be required (up to thirty years) to achieve Cleanup Goals, if aided by other means, it is doubtful that the State would approve of this method, as it is not the most protective method for cleanup of the waters of the State of California in a reasonable timeframe.

V.G.9 Community Acceptance

No Action: It is doubtful that the community would accept this alternative as it would take too long to achieve water quality standards.

SVE/GASS: This alternative is currently in use at numerous sites throughout municipalities in California under the direction of the SWRCB. Although the operation of the system can be a noise nuisance, proper sound-proofing measures can be put in place to meet municipal sound ordinances. With sound reduction methods in place and under proper system operation with elimination of VOCs to atmosphere, such as through the use of GAC at the Site, this alternative is highly likely to be accepted by the community.

GWET: This alternative has been generally accepted by the local communities; however, the installation and operation of the system equipment does make for quite an 'eyesore' for a significant period of time, up to thirty (30) years. In practice, the less noticeable the system, the more favorable the community reaction (i.e., if they cannot see it and cannot hear it, it is not a problem).

HRC™: It is doubtful the community would approve of this method due to the number of injection wells that would be required in and around businesses and residences.

Natural Attenuation with Long-Term Monitoring: It is doubtful that the community would accept this alternative as it would take too long to achieve the Cleanup Goals.

V.H Potential Impacts of Remedial Actions

An evaluation of each alternative relating to potential impacts is presented below.

No Action: No action presents no potential adverse effects unless the groundwater plume mitigates through natural attenuation and does not migrate into previously non-impacted areas, which, for this site, has a high potential as the process of natural attenuation may take a prolonged period of time for the COCs to reduce to water quality standards due to the aerobic groundwater conditions at the Site.

SVE/GASS: Air sparging can cause the water table to mound in the sparging area, thus enabling migration of contaminants to areas previously not impacted. By utilizing an additional remedial option, such as soil vapor extraction, the lateral migration of the dissolved-phase plume can be inhibited.

GWET: Extraction of groundwater would not generate any harmful effects unless proper containment systems were not in place to prevent spill of the extracted impacted water with subsequent migration to previously non-impacted areas. As such, large quantities of extracted water would require reliable containment and treatment with proper disposal and/or recycling. GWET does not provide cleanup of vadose zone soils, so 'VOC source mass' would continue to leach downward to groundwater, thus providing an ongoing contamination source.

HRC™: Use of this alternative may generate unwanted side products, commonly referred to as unwanted (harmful) daughter products. Bench-scale testing would be required to assess this potential and Pilot Testing would be required to verify the effectiveness in not creating harmful side products.

Natural Attenuation with Long-Term Monitoring: Natural attenuation causes no potential adverse effects unless the groundwater plume migrates into previously non-impacted areas, which has a high potential as the process of natural attenuation may take a prolonged period of time for the COCs to reduce to Cleanup Goal levels.

V.I Estimated Project Schedule for Each Alternative

Implementation of the remediation action alternatives may be performed by the following schedules after all public review periods are completed and after all regulatory approvals are granted. The tasks may be performed in the following order:

V.I.1 Alternative 1: No Action

Task	Work	Scheduled Start/Completion
Task 1	No Action Startup	Immediately
Task 2	Decommission Site Monitoring and Interim Remediation Systems	Approximately one (1) month

V.I.2 Alternative 2: SVE/GASS

Task	Work	Scheduled Start/Completion
Task 1	Full-Scale Remedial Action	Immediately after Draft RAP approved
Task 2	System Operation and Maintenance	Immediately after Draft RAP approved; already operating in interim mode; O&M visits performed weekly.
Task 3	Remediation Monitoring	Immediately, performed quarterly.
Task 4	Remediation Status Reporting	Quarterly after startup
Task 5	Completion of Remedial Action	Estimated at 2.5 years followed by 2 years of post-remediation monitoring

V.I.3 Alternative 3: Groundwater Extraction and Treatment

Task	Work	Scheduled Start/Completion
Task 1	Aquifer test Workplan	1 month
Task 2	Aquifer testing	1 – 2 months
Task 3	Aquifer testing report of findings with Workplan for GWET system installation	3 months
Task 4	Permitting and GWET system installation	6 months
Task 5	System Startup	Immediately after system installed and all permits received
Task 6	System Operation and Maintenance	Immediately, performed weekly.

Task 7	Remediation Monitoring	Immediately, performed monthly.
Task 8	Remediation Status Reporting	Quarterly after startup
Task 9	Completion of Remedial Action	Estimated at 5 to 30 years

V.I.4 Alternative 4: Hydrogen Release Compound

Task	Work	Scheduled Start/Completion
Task 1	HRC™ pilot test Workplan	1 month
Task 2	HRC™ pilot testing	1 – 2 years
Task 3	HRC™ pilot testing report of findings with Workplan for HRC system installation	3 months
Task 4	Permitting and HRC™ system installation	6 months
Task 5	Apply HRC™ to Groundwater	1 – 2 years
Task 6	System Operation and Maintenance	Immediately, performed weekly.
Task 7	Remediation Monitoring	Immediately, performed quarterly.
Task 8	Remediation Status Reporting	Quarterly after startup
Task 9	Completion of Remedial Action	Estimated at 5 years

V.I.5 Alternative 5: Natural Attenuation and Long term Monitoring

Task	Work	Scheduled Start/Completion
Task 1	Natural Attenuation Startup	Ongoing
Task 2	Groundwater Monitoring	Quarterly, ongoing
Task 3	Groundwater Monitoring Reporting	Quarterly, ongoing
Task 4	Completion of Natural Attenuation	Estimated at 30 years or more

V.J Preferred Alternative

Based on the evaluation of the alternatives above, a preferred remedial alternative for the Site can be selected, that is Alternative 2: Soil Vapor Extraction combined with groundwater air-sparging (SVE/GASS).

SVE/GASS best meets the criteria to protect the waters of the State of California as remediation using SVE/GASS will achieve Cleanup Goals in the most reasonable timeframe, approximately 4.5 years (2.5 years of interim and dull-scale remediation plus 2 years of post-remediation monitoring). The other alternatives may achieve Cleanup Goals in five (5) to thirty (30) years, if achieved at all.

SVE/GASS is the easiest alternative to implement as the existing network of vapor extraction wells, soil-gas monitoring wells, groundwater air sparge wells and groundwater monitoring wells can be utilized, thus minimizing additional infrastructure costs. For all other alternatives, except Alternative 5 (Natural Attenuation with Long-Term Monitoring) extensive infrastructure costs would be required. Some additional infrastructure costs might be required in the future for Alternative 5, if VOCs migrate beyond the currently monitored area, thus requiring additional groundwater monitoring wells.

SVE/GASS operational costs are the least prohibitive (other than No Action). The closest cost effective means is Alternative 5; however, this alternative requires an unreasonable timeframe, as well as additional mechanisms to change the environment from aerobic to anaerobic conditions. Operational costs for Alternative 3 (GWET) and Alternative 4 (HRC™) are extremely prohibitive.

As such, E$_2$C Remediation recommends full-scale implementation of Remedial Alternative 2: Soil Vapor Extraction combined with Groundwater Air Sparging.

V.L Public Notification Process & Final RAP

Upon approval of this Draft RAP, the public notification process will commence.

V.L.1 Public Notification

Public Notification Subtasks to be performed under this process will consist of the following:

Task 1 Prepare and submit Public Notification Workplan (PNW) (PNW will contain a Draft Public Notification Letter for approval by the CRWQCB);

Task 2 Upon approval of the PNW, all properties within 500 feet of the groundwater plume, as defined in Figure 4, will be identified and tabulated;

Task 3 Tabulate parcel and property owner information for all parcels identified in Task 2;

Task 4 Send copies of the CRWQCB approved Public Notification Letter (from Task 1) to all parcels identified in Task 3;

Task 5 Place an ad in the local newspaper to establish a thirty (30) day comment period and place the DRAP in a Public Repository (generally the nearest Public Library) for public review;

Task 6	Collate and tabulate public questions and/or comments and prepare a Public Participation Plan (PPP) to address public concern or comments regarding the ongoing investigation and cleanup of the affected properties;
Task 7	Attend Public Meetings as required by the CRWQCB; and
Task 8	Present a schedule for implementation of the above-described Tasks.

V.L.2 Final RAP

Upon completion of the Public Notification Process, the comments regarding the Draft RAP will be incorporated, as appropriate, into a Final RAP (FRAP). The FRAP will then be sent to the CRWQCB for signature by the Executive Officer. When that signature is received, the elements of the FRAP can be implemented.

V.L.3 Electronic Submittal of Reports to GeoTracker Database

The PNW, PPP, the distributed PPP and FRAP will be electronically uploaded to the State GeoTracker database.

V.M Implementation of the FRAP

V.M.1 Remediation System Operations and Maintenance

E_2C professional staff, experienced in SVE/GASS technology, will perform site inspections on a weekly basis to optimize and maintain the remedial system equipment. During each inspection visit, equipment operating parameters will be monitored and recorded. Maintenance and inspection schedules will ultimately comply with the PTO conditions set by the EDCAQMD. The operations and maintenance of the system is to include all materials and supplies necessary to conduct normal operational activities such as field screening, systems checks and adjustments, and regular lubrication and maintenance. The SVE/GASS equipment proposed will be equipped with flow and vacuum measurement devices.

VOC vapors will be extracted from the subsurface through the VVE and HVE wells with routing of vapors through the vapor extraction system and through a series of two (2) granular activated carbon (GAC) units.

V.M.2 Remediation System Equipment

Remedial operations will be conducted using the existing 500 SCFM GAC blower system due to the distances of the piping runs and the number of VVE and HVE wells. Groundwater air sparging will be accomplished using the existing 25-hp Ingersoll Rand air compressor set with control flow valves to regulate air flow into the AS wells on an individual basis.

V.M.3 Carbon Change-outs

It is anticipated that two (2) carbon change-outs will be required. An outside carbon purveyor will be contracted to remove used carbon from site and replenish canisters with fresh carbon. Each carbon change-out will be scheduled to coincide with a weekly O&M inspection visit.

V.M.4 Chemical Analyses of Vapor Influent/Effluent Samples

During the remedial operations, E_2C will collect influent/effluent vapor on a monthly basis to evaluate VOC removal rates and verify that equipment is operating within EDCAQMD PTO conditions. Samples will be analyzed at ProVera for:

- PCE, TCE, vinyl chloride, chloroethane, chlorobenzene, chloroform, methylene chloride, cis-1,2-DCE, 1,1-DCE, trans-1,2-DCE 1,1-DCA, 1,2-DCA, 1,1,1,2-DCA, 1,1,1-TCA and the tracer gas (see Appendix S) using Modified EPA Method TO-15.

V.M.5 EDCAQMD Annual Inspection Testing

An annual EDCAQMD Inspection Test will be conducted for each year of SVE/GASS operation after the date of the Startup Inspection Test. An EDCAQMD Inspector will visit the Site to verify that the machine meets Permit conditions. Influent and effluent samples will be collected. The influent and effluent vapor samples will be analyzed at a State of California-certified analytical laboratory for the constituents listed in Section V.M.4 above.

V.M.6 Electronic Submittal of Reports to GeoTracker Database

Remediation influent/effluent data will be electronically uploaded to the State GeoTracker database.

V.N Field Operations: Groundwater Monitoring/Sampling

Upon approval of the FRAP by CRWQCB following the public notification process, groundwater monitoring will be performed on a quarterly basis. Provisions for 4.5 years of monitoring are included (2.5 years during remedial operations and two (2) years of post-remediation monitoring).

V.N.1 Groundwater Monitoring and Sampling

Depths to groundwater will be measured at all site monitoring wells (LW-MW-1S, LW-MW-2S, LW-MW-5S, and LW-MW-9S through LW-MW-13S) and offsite monitoring well OS-1 with a Solinst water level meter to the nearest 0.01-foot indexed from a mark placed at the top of the well casing. Depths to water will be used to calculate the groundwater elevation at each well from which the groundwater flow direction and gradient can be calculated.

Low-Flow Sampling Method

Groundwater samples will be collected utilizing the low-flow sampling method. In this method, groundwater is extracted from the well at a very low rate (<500mL/min), and drawdown of the water level is stabilized. Water is pulled from the more hydrogeologically conductive areas of the aquifer around the well screen, and monitored with water quality sensors for stability to determine chemical change from well water to formation water. Once stabilization occurs, a sample can be taken with the greatest assurance of representative formation water and the least amount of geochemical disruption to the sample. This sampling system has several advantages:

- Improves sample quality;
- Reduces wastewater created by large volumes of sample purging; and
- Saves time in the field with preliminary set-up of sampling events.

During the low-flow purging, groundwater parameters will be monitored in the field with a QED Model MD-20 Flow Cell. The MD-20 Flow Cell measures temperature (in

°C), DO (in mg/L), electrical conductivity (in mS/cm), pH (in pH units), and ORP (oxygen reduction potential) (in mV; 1 mV = 1Eh).

After purging, a new disposable bailer will be lowered into a well to collect a sample. Each sample will be decanted into three (3) 40-milliliter VOA vials. Care will be taken to verify that headspace or bubbles do not exist in the VOAs and each container will be sealed using a Teflon®-lined lid. The samples will be labeled and placed in an iced cooler maintained at 4° Centigrade, accompanied with a chain-of-custody document for transport to the analytical laboratory. All downhole equipment will be cleaned prior to use by washing using a Liquinox solution and double-rinsing with clean potable water.

V.N.2 Groundwater Analytical Services

Groundwater samples will be chemically analyzed at ProVera for the following compounds by the appropriate EPA Method:

- PCE, TCE, vinyl chloride, chloroethane, chlorobenzene, chloroform, methylene chloride, cis-1,2-DCE, 1,1-DCE, trans-1,2-DCE 1,1-DCA, 1,2-DCA, 1,1,1,2-DCA, and 1,1,1-TCA using EPA Method 8260b.

V.N.3 Soil-Gas Monitoring

Soil-gas will be monitored at the VP wells as described in Appendix S.

V.N.4 Soil-Gas Analytical Services

Soil-gas samples will be chemically analyzed at ProVera for the following compounds by the appropriate EPA Method:

- PCE, TCE, vinyl chloride, chloroethane, chlorobenzene, chloroform, methylene chloride, cis-1,2-DCE, 1,1-DCE, trans-1,2-DCE 1,1-DCA, 1,2-DCA, 1,1,1,2-DCA, 1,1,1-TCA and the tracer gas (see Appendix S) using Modified EPA Method TO-15

V.N.5 Electronic Submittal of Reports to GeoTracker Database

Groundwater and soil-gas analytical data will be electronically uploaded to the State GeoTracker database.

V.N.6 Purge and Entrained Water Disposal/Recycling

Purge water from groundwater monitoring will be temporarily stored in an on-site holding tank. Upon completion of monitoring/sampling activities for each quarterly monitoring event, the purge water will be transferred to a properly licensed and permitted disposal/recycling facility by a properly licensed and permitted transporter under the appropriate manifests. Based on concentrations in the shallow groundwater, it is anticipated that purge water will be transported and recycled as non-hazardous purge water.

V.O Status Reporting

A report of the remedial systems status will be prepared and submitted by the last day of the month following each quarter. The remedial status report will compile and review data generated during remedial system operations.

Approximately one (1) month after FRAP remedial system startup, the EDCAQMD Startup Report will be prepared and submitted. Annual EDCAQMD status reports will then follow.

For each report, data will be compiled, interpreted, and presented in a technical report that is prepared under the supervision of, is reviewed by, and is certified by a State of California Professional Geologist. Remedial Systems Status Reports will be combined with Quarterly Groundwater Monitoring reports to reduce overall project costs.

V.O.1 Quarterly Status Reports

On a quarterly basis, a combined groundwater monitoring report and remediation status report (QMR/RSR) will be prepared and submitted by the last day of the next month following each quarter. Each quarterly report will comply with the Monitoring and Reporting Program (MRP) established by the CRWQCB for the project and will contain, at a minimum, the following:

- Tabulated results of all previous and to date investigations;
- Groundwater elevation and contamination contour maps;
- Site map clearly indicating the aerial extent of contamination plumes;
- A summary of analytical data to date, Combined Remedial System equipment records, daily/weekly inspection records, and a discussion of remedial progress; and
- In addition, each quarterly monitoring report will contain a conclusions and recommendations section clearly indicating what further actions, if any, are required.

V.O.2 EDCAQMD Status Reporting

EDCAQMD status reporting will not be required until full-scale operation of the VE/GASS commences. This status reporting will then consist of a Startup Inspection Test report and Annual Inspection Test reports. This status reporting will ultimately comply with EDCAQMD PTO conditions.

V.O.3 Electronic Submittal of Reports to GeoTracker Database

The QMR/RSRs and EDCAQMD status reports will be electronically uploaded to the State GeoTracker database.

V.P Site Decommissioning & Site Restoration

When the Site is approved for closure by the CRWQCB, site monitoring and remediation elements will be decommissioned and the site will be restored to pre-remediation conditions.

V.P.1 Site Decommissioning Workplan

A Workplan will be prepared and submitted for CRWQCB approval. The Workplan will describe methods and procedures for decommissioning the monitoring and remediation system elements.

V.P.2 Well Abandonment Permitting

Upon approval of the Workplan, the appropriate permits will be acquired and the decommissioning process will commence.

V.P.3 Well Abandonment

Vertical wells (9 monitoring, 20 vertical VE, 7 VP and 27 AS) will be high pressure grouted with drill-out of top 3 feet (vertical wells). The seven (7) HVE wells will be pumped with grout from the manifold.

V.P.4 Decommission Equipment and Remove from Site

Remedial system equipment will be disconnected and removed from the Site. At the discretion of the property owner, the utility connections and the equipment shed and pad may be removed, or left in place with approval under the City permitting agency.

V.P.5 Site Restoration

Upon completion of the decommissioning activities, a landscaping subcontractor will be hired to restore the planter areas.

V.P.6 Site Decommissioning Report of Findings

Upon completion of the Site Decommissioning activities a report of findings (SDROF) will be generated. This SDROF will describe methods and procedures used in the decommissioning process including well abandonment procedures and site restoration procedures and will request that the NFA letter be issued. Upon receipt of the SDROF, the CRWQCB would issue the NFA letter.

V.P.7 Electronic Submittal of SDROF to GeoTracker Database

The SDROF will be electronically uploaded to the State GeoTracker database. This would be the last required upload deliverable.

VI. SCHEDULING

The projected duration of the cleanup activities is 2.5 years (30 months) (includes the two months of pilot testing and the continued interim remedial operation during the Public Notification process and preparation and approval of the Final RAP), with two (2) additional years (24 months) of quarterly groundwater monitoring and reporting to verify cleanup effectiveness. The overall anticipated project duration from start of interim remedial measures to closure is fifty-four (54) months. It is important to note that Tasks within the project are interdependent upon start and end times of other Tasks within the project. As such, if the scope of work for a Task is changed, or delayed, then starting and/or completion of other Tasks within the project may also be affected. If Task changes, or delays, are incurred, then the project schedule will be updated to reflect the current conditions.

Interim remedial action will continue through the period of review and approval of the Draft RAP, the Public Notification period and the period for preparation, review and approval of the FRAP.

Upon receipt of regulatory approval of the Draft RAP, the Public Notification process will begin, which will require approximately forty-five (45) days to allow for mailing of documents. At the end of the Public Notification process, the FRAP will be prepared and submitted for regulatory review (CRWQCB review). Upon approval of the FRAP by the CRWQCB, it will be finalized and sent to the CRWQCB Executive Officer for signature. Once the FRAP is executed, the interim remediation period will end and full-scale site remediation will commence.

Note: For the period of time from the end of the SVE/GASS Pilot Test until the CRWQCB Executive Officer execution date of the FRAP, the site remedial system will operate in *'interim remedial action'* mode. All remedial system operation and maintenance tasks will be in force during this period of time. This will allow for remediation of the Site in a timely manner.

VII. QUALITY ASSURANCE PLAN

This section describes field and analytical quality-assurance procedures to be followed during the investigation and remediation.

VII.A Sample Collection and Handling Protocol

Proper sample collection and handling are essential to assure quality of data obtained from a sample. Each sample, therefore, will be collected in an appropriate container commensurate to the function of the sample, preserved correctly for the intended analysis and stored for no longer than permissible holding time prior to analysis.

Note: Vapor samples will be collected and preserved in accordance with the protcols described in the Soil-Gas Monitoring Procedures outlined in Appendix S.

VII.B Sample Identification and Chain-of-Custody Protocol

Sample identification and Chain-of-Custody procedures are designed to assure sample quality and to document sample possession from the time it is collected to the time of its ultimate disposal. The container for each sample submitted for analysis will have a label affixed with the identifying number or the number will be inscribed directly on the container. The analytical laboratory will assign a separate sample number unique to that sample for internal sample coordination and identification. A description of the sample including the sample number and other pertinent information regarding its collection and/or geologic significance will be written in field notes and/or a geologic boring log being prepared by the site geologist. These field documents will be kept in a permanent project file. All samples will be analyzed by a state certified laboratory for the analyses requested.

A properly completed Chain-of-Custody Form will be submitted to the analytical laboratory along with sample. The laboratory's assigned number will be properly entered on the form.

A quality control officer at the lab will verify integrity of sample submitted, proper sample volume, correctness of containers used, and properly executed Chain-of-Custody Form. Pertinent information will be entered into a log book kept by the laboratory.

VII.C Analytical Quality Assurance

In addition to routine calibration of analytical instruments with standards and blanks, the analyst is required to run duplicates and spikes on 10 percent of analyses to assure an added measure of reliability and precision. Accuracy is verified through the following:

1. U.S. EPA and State certification of results;
2. Participation in inter-laboratory round robin program;
3. "Blind" samples are submitted for analysis by the quality control officer on a weekly basis; these are prepared from National Bureau of Standards specifications of EPA reference standards; and
4. Verification of results with an alternative method.

VIII. LIMITATIONS AND CERTIFICATION

E2C has performed this investigation in accordance with generally accepted standards of care existing in California at this time. It should be recognized that definition and evaluation of geologic conditions is a difficult and inexact science. Judgments leading to conclusions and recommendations are generally made with limited knowledge of surface conditions present. No warranty expressed or implied is made.

This combined Report of Findings/Draft RAP has been prepared under the professional supervision of the registered professionals whose seals and signatures appear herein. The proposed site monitoring and remediation tasks in this Draft RAP are based solely on the Scope of Services outlined and the sources of information referenced in this report. Any additional information that becomes available concerning the Site should be submitted to E2C so that our conclusions may be reviewed and modified, if necessary. This document was prepared for the sole use of LTLW and/or their agent(s), the CRWQCB and the EDCEMD.

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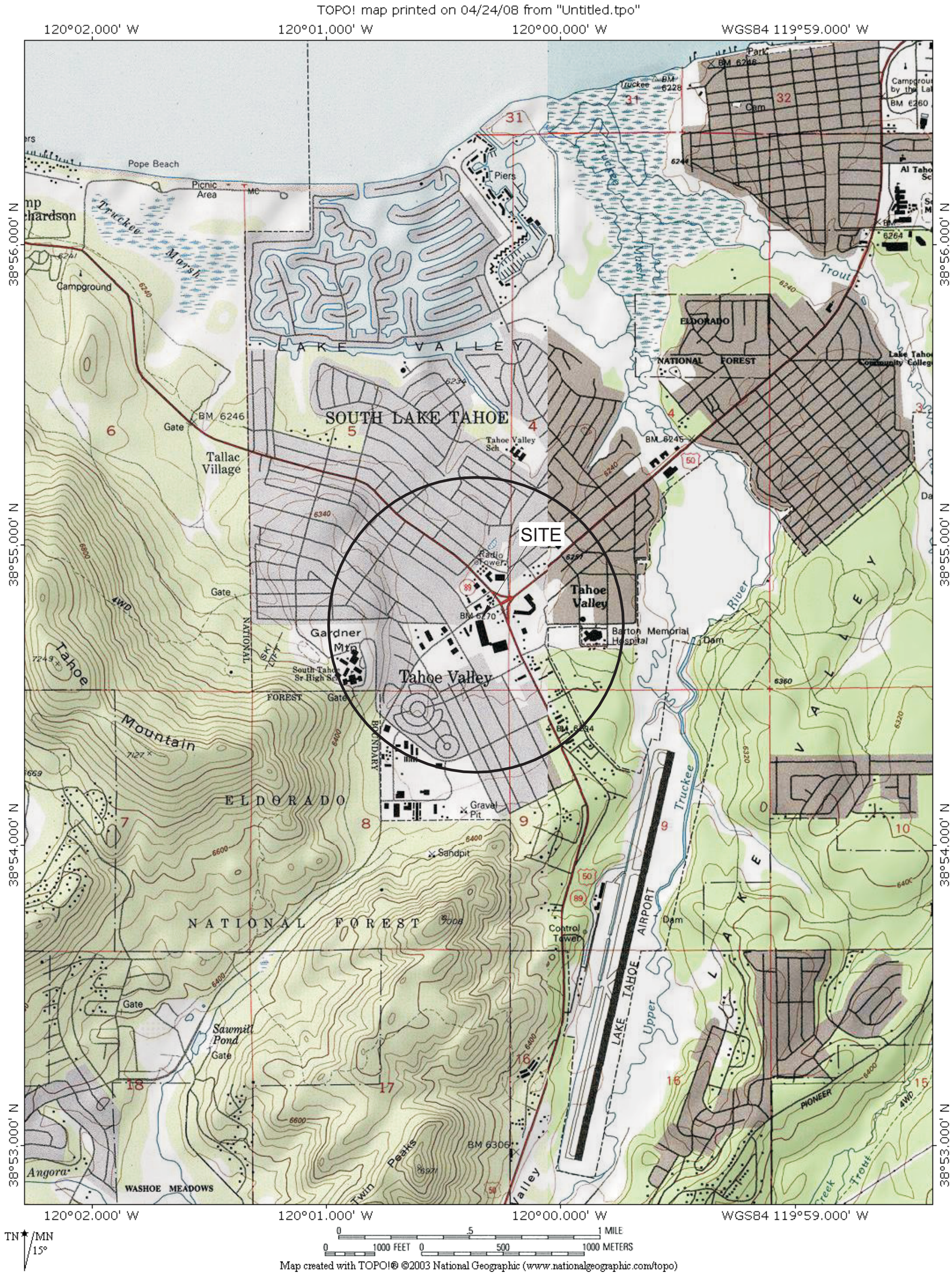
FIGURES



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E₂C Remediation

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LAKE TAHOE LAUNDRY WORKS
1024 LAKE TAHOE BOULEVARD
SOUTH LAKE TAHOE, CALIFORNIA

SITE LOCATION MAP

FIGURE

1

LEGEND

☒ Approximate Location of Groundwater Monitoring Well

LW-MW-1S

N

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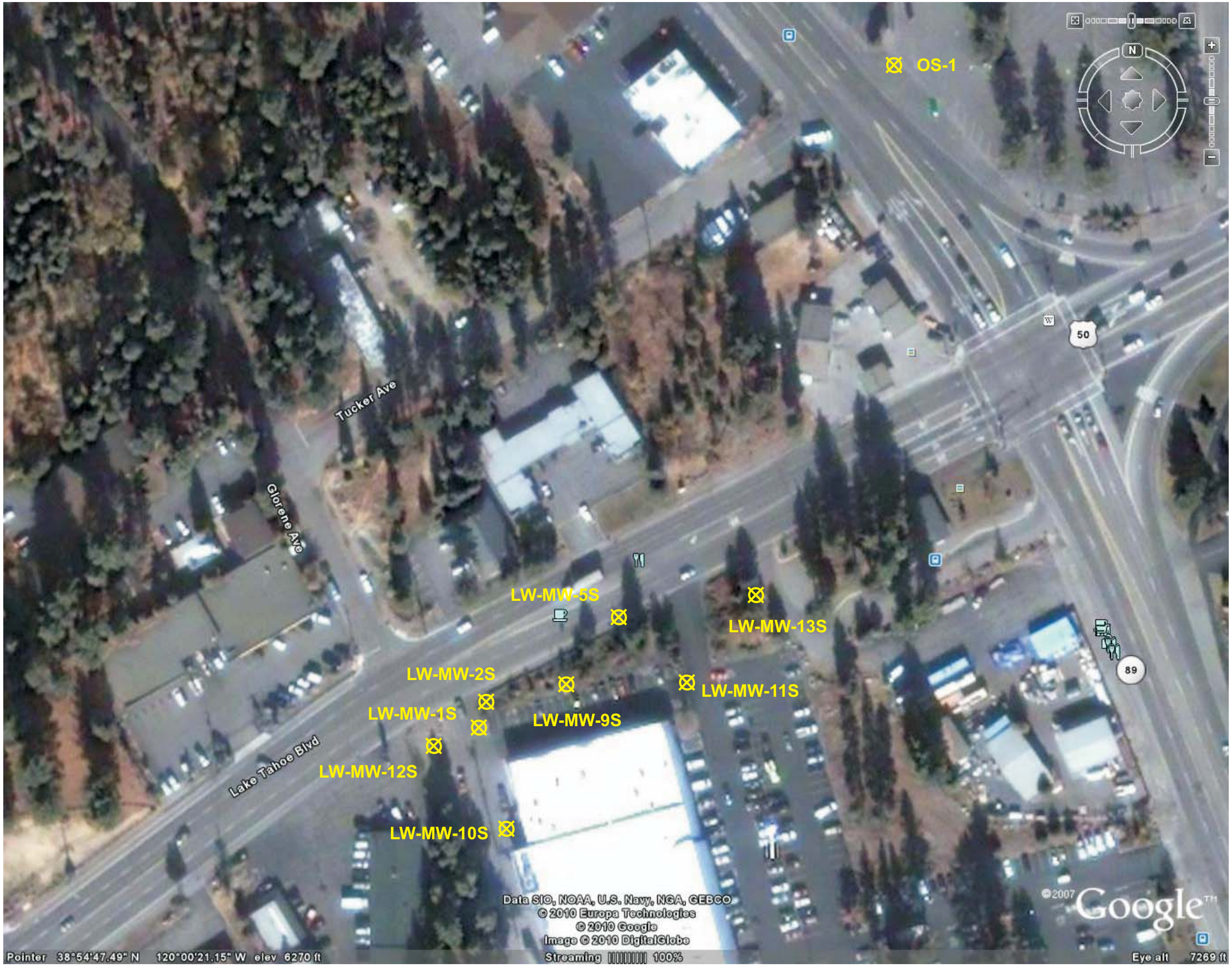

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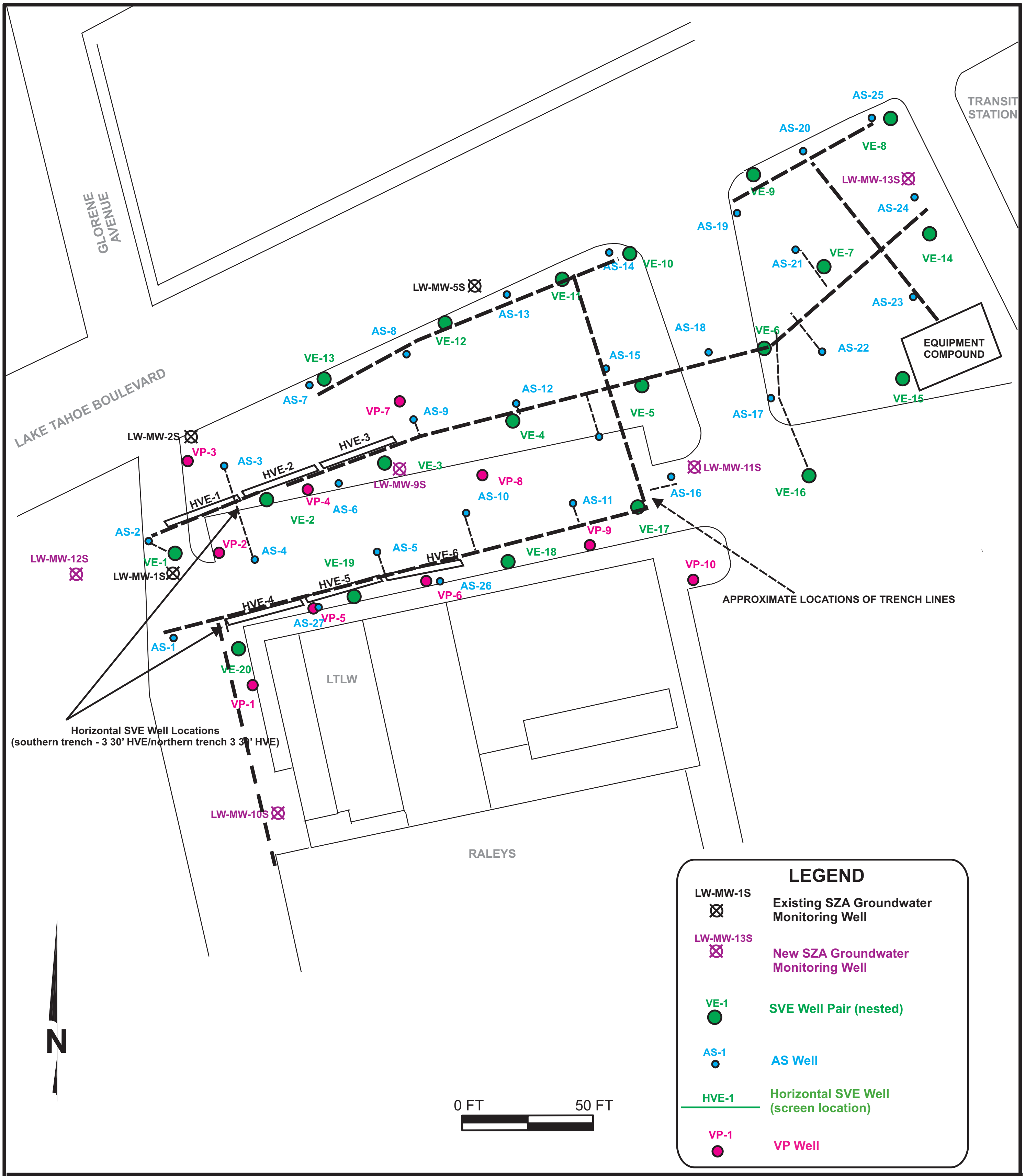
SITE PLAN

FIGURE

2



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LAKE TAHOE LAUNDRY WORKS
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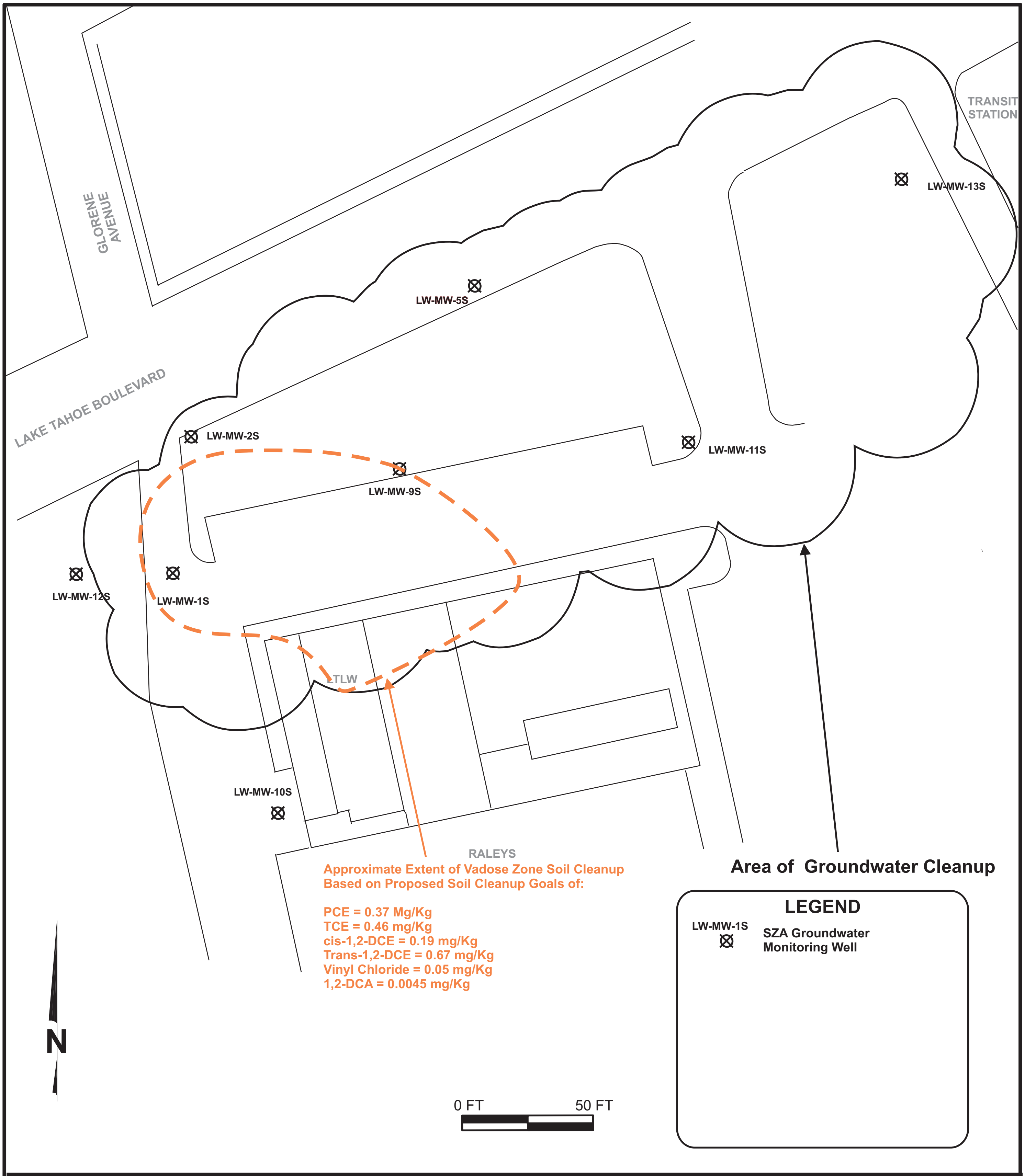
WELL AND TRENCHING LOCATIONS
PLOT PLAN

FIGURE

3



Approximate Extent of Vadose Zone Soil Cleanup
Based on Proposed Soil Cleanup Goals of:

PCE = 0.37 Mg/Kg
TCE = 0.46 mg/Kg
cis-1,2-DCE = 0.19 mg/Kg
Trans-1,2-DCE = 0.67 mg/Kg
Vinyl Chloride = 0.05 mg/Kg
1,2-DCA = 0.0045 mg/Kg

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LAKE TAHOE LAUNDRY WORKS
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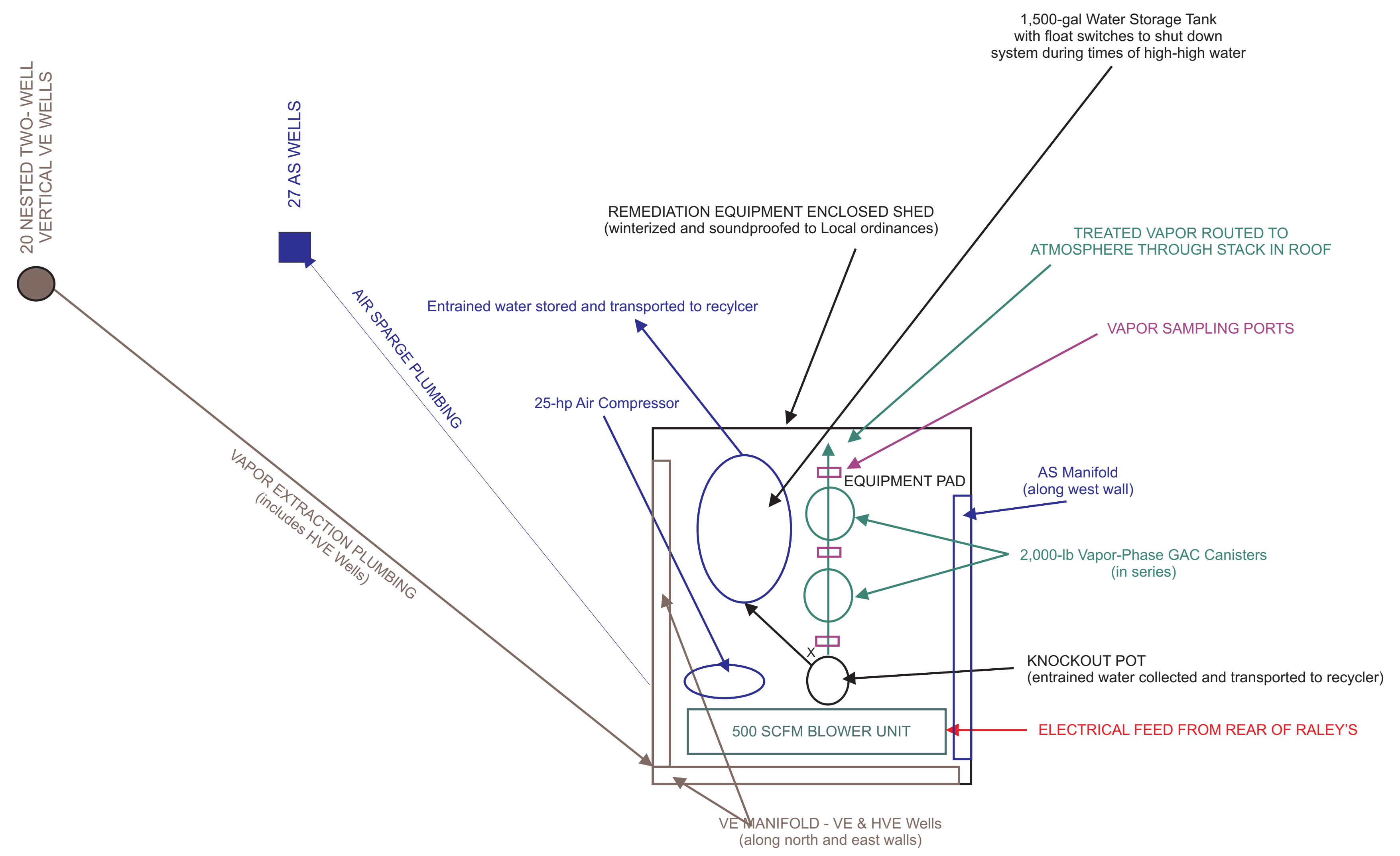
REMEDIATION AREA

FIGURE

4



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LAKE TAHOE LAUNDRY WORKS
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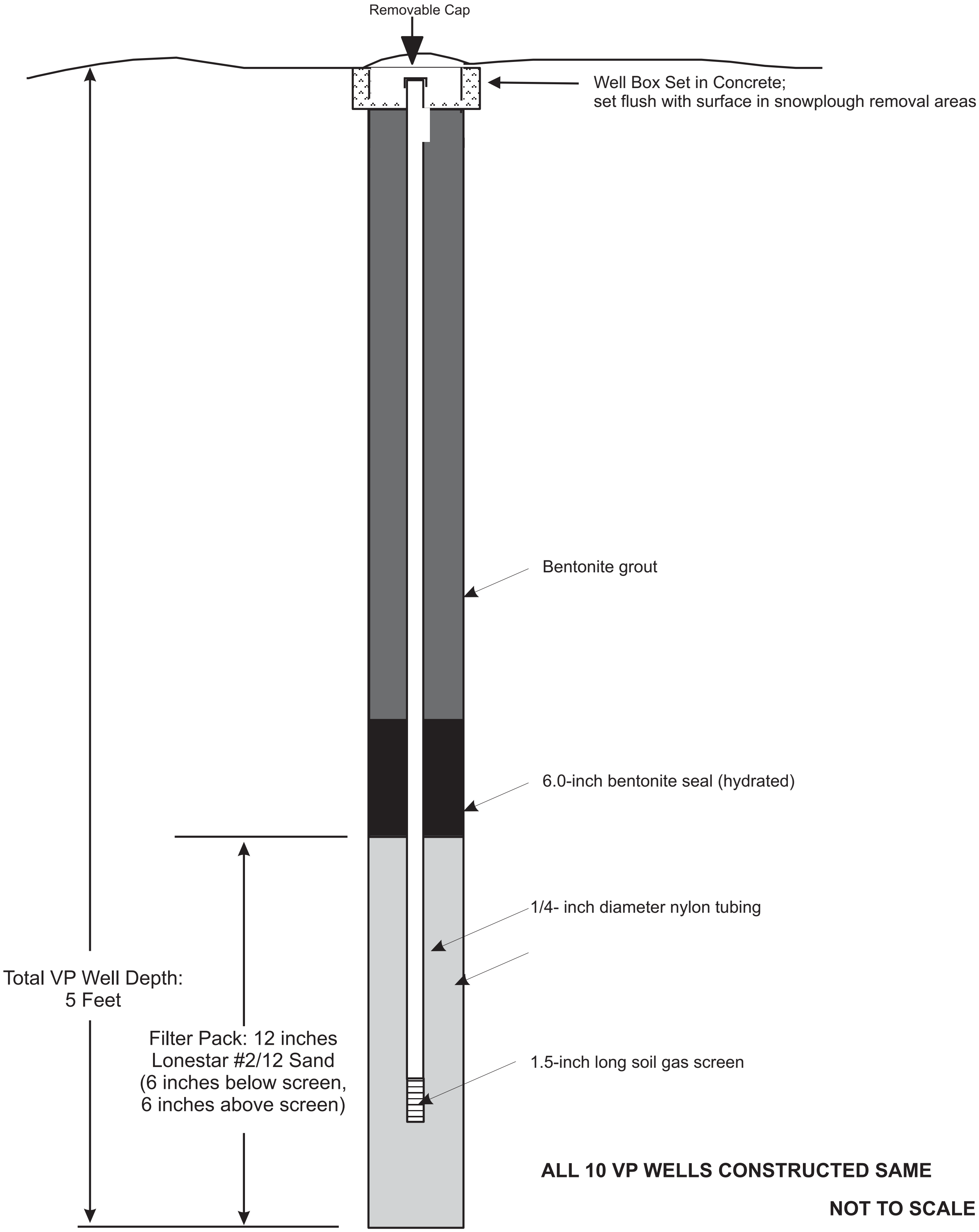
SOUTH LAKE TAHOE, CALIFORNIA

REMEDIATION SYSTEM AS-BUILT SCHEMATIC

FIGURE

5



ALL 10 VP WELLS CONSTRUCTED SAME

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LAKE TAHOE LAUNDRY WORKS
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TYPICAL VP WELL
CONSTRUCTION
AS-BUILT DIAGRAM

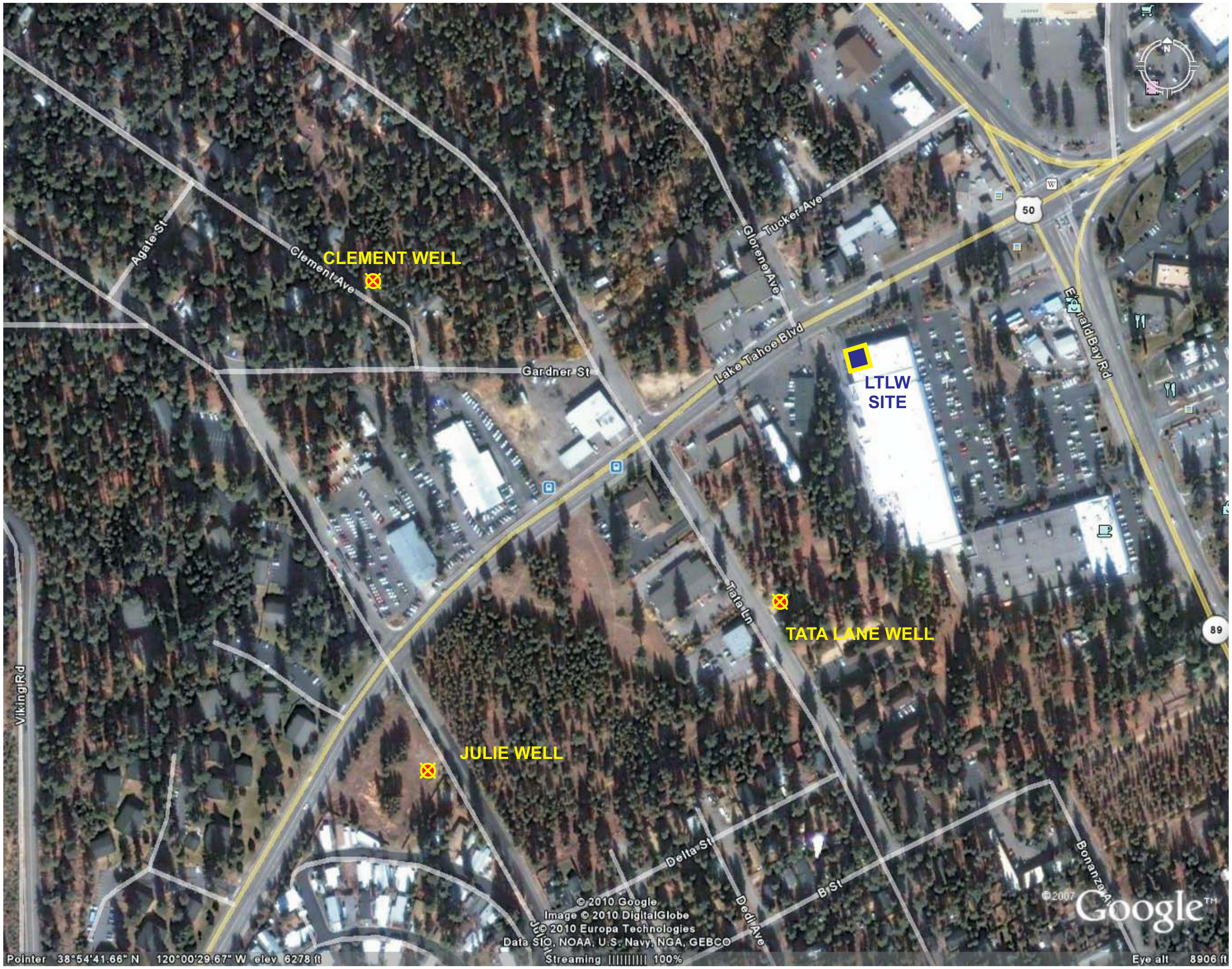
FIGURE

6

LEGEND

⊗ Approximate Location of Water Supply Well

TATA LANE WELL
JULIE WELL
CLEMENT WELL



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LAKE TAHOE LAUNDRY WORKS
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WATER SUPPLY WELL LOCATION PLOT

FIGURE

7

TABLES

TABLE 1
SUMMARY OF BASELINE (FIRST QUARTER 2010) GROUNDWATER MONITORING DATA
Lake Tahoe Laundry Works
1024 Lake Tahoe Boulevard
South Lake Tahoe, California
March 23, 2010

Well ID	TOC Elev. (feet rel MSL)	Depth to GW (feet BTOC)	GW Elevation (feet MSL)	PCE	TCE	VC	CA	CB	1,1-DCE	MC	Trans-1,2-DCE	1,1-DCA	cis-1,2-DCE	1,2-DCA	1,1,1,2-TCA	1,1,1-TCA
										(µg/L)						
LW-MW-1S	6,191.41	13.99	6,177.42	**1,850**	nd<0.500	nd<0.500	nd<0.500	**0.962**	**7.71**	nd<0.500	**1.41**	nd<0.500	**330**	nd<0.500	**0.795**	nd<0.500
duplicate				**2,000**	nd<0.500	nd<0.500	nd<0.500	**0.845**	**7.40**	nd<0.500	**1.23**	nd<0.500	**314**	nd<0.500	**0.710**	nd<0.500
LW-MW-2S	6,192.41	15.44	6,176.97	**5.9**	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500
LW-MW-5S	6,189.47	14.21	6,175.26	nd<0.500	**26.5**	**3.22**	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	**38.2**	nd<0.500	nd<0.500	nd<0.500
LW-MW-9S	6,192.98	14.82	6,178.16	**174**	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	**7.8**	nd<0.500	nd<0.500	nd<0.500
LW-MW-10S	6,192.15	13.27	6,178.88	**1.04**	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500
LW-MW-11S	6,191.67	14.72	6,176.95	**32.5**	**1.08**	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	**3.63**	nd<0.500	nd<0.500	nd<0.500
LW-MW-12S	6,190.71	13.36	6,177.35	**34.3**	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	**0.613**	nd<0.500	nd<0.500	nd<0.500
LW-MW-13S	6,190.82	13.20	6,177.62	**65.2**	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	**2.92**	nd<0.500	nd<0.500	nd<0.500
OS-1	6,188.12	13.25	6,174.87	**91.2**	**1.41**	nd<0.500	nd<0.500	nd<0.500	nd<0.500	**1.02**	nd<0.500	nd<0.500	**0.989**	nd<0.500	nd<0.500	nd<0.500

Notes:

Results in micrograms per liter (µg/L) (equivalent to parts per billion, ppb)

1,1-DCA = 1,1,-Dichloroethane
1,1-DCE = 1,2-Dichloroethene
1,1,1-TCA = 1,1,1-Trichlorethane
1,1,1,2-TCA = 1,1,1,2-Trichloroethane
CA = Chloeoethane
CB = Chlorobenzene
cis-1,2-DCE = cis-1,2-Dichloroethene
BTOC = Below Top of Casing
MC = Methylene Chloride
PCE = Tetrachloroethene (a.k.a. perchloroethene)
TCE = Trichloroethene
trans-1,2-DCE = trans-1,2-Dichloroethene
VC = Vinyl Chloride

Duplicate sample of LW-MW-1S marked as LW-MW-15 on Chain-of-Custody

TABLE 2
SUMMARY OF HISTORICAL GROUNDWATER ELEVATION DATA
Lake Tahoe Laundry Works
1024 Lake Tahoe Boulevard
South Lake Tahoe, California

Well ID	Date	Reference Elevation (feet MSL)	Total Well Depth (feet BTOC)	Depth to Groundwater (feet BTOC)	Groundwater Elevation (feet MSL)	GW Elevation Change (feet)
LW-MW-1S	08/13/08	6,191.41	---	13.69	6,177.72	---
	12/04/09		23.91	15.09	6,176.32	-1.40
	03/23/10		23.90	13.99	6,177.42	1.10
LW-MW-2S	08/13/08	6,192.41	---	14.99	6,177.42	---
	12/04/09		34.82	17.29	6,175.12	-2.30
	03/23/10		34.85	15.44	6,176.97	1.85
LW-MW-5S	08/13/08	6,189.47	---	14.04	6,175.43	---
	12/04/09		29.73	14.85	6,174.62	-0.81
	03/23/10		29.73	14.21	6,175.26	0.64
LW-MW-9S	12/04/09	6,192.98	24.40	16.01	6,176.97	---
	03/23/10		24.25	14.82	6,178.16	1.19
LW-MW-10S	12/04/09	6,192.15	24.76	14.30	6,177.85	---
	03/23/10		24.60	13.27	6,178.88	1.03
LW-MW-11S	12/04/09	6,191.67	24.30	14.91	6,176.76	---
	03/23/10		24.02	14.72	6,176.95	0.19
LW-MW-12S	12/04/09	6,190.71	24.20	15.00	6,175.71	---
	03/23/10		23.80	13.36	6,177.35	1.64
LW-MW-13S	12/04/09	6,190.82	24.95	14.39	6,176.43	---
	03/23/10		24.78	13.20	6,177.62	1.19
OS-1	03/24/10	6,188.12	23.45	13.25	6,174.87	---

Notes:
BTOC = Below Top of Casing
MSL = Mean Sea Level

<u>Ave Groundwater Elevation Change</u>

4th.09-1st.10	1.10

TABLE 3
SUMMARY OF HISTORICAL GROUNDWATER ANALYTICAL DATA
Lake Tahoe Laundry Works
1024 Lake Tahoe Boulevard
South Lake Tahoe, California

Well ID	Sample Date	PCE	TCE	VC	CA	CB	CF	1,1-DCE	MC	Trans-1,2-DCE	1,1-DCA	cis-1,2-DCE	1,2-DCA	1,1,1,2-TCA	1,1,1-TCA	Benzene	MtBE
										(ug/L)							
LW-MW-1S	08/13/08	**706**	**74.0**	nd<0.50	nd<0.50	nd<0.50	nd<0.50	**1.25**	nd<0.50	**0.727**	nd<0.50	**41.3**	nd<0.50	nd<0.50	nd<0.50	na	na
	12/04/09	**5,150**	**72.7**	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	na	na
	03/23/10	**1,850**	nd<0.500	nd<0.500	nd<0.500	**0.962**	nd<0.500	**7.71**	nd<0.500	**1.41**	nd<0.500	**339**	nd<0.500	**0.795**	nd<0.500	nd<0.500	nd<0.500
	duplicate	**2,000**	nd<0.500	nd<0.500	nd<0.500	**0.845**	nd<0.500	**7.40**	nd<0.500	**1.23**	nd<0.500	**314**	nd<0.500	**0.710**	nd<0.500	nd<0.500	nd<0.500
LW-MW-2S	08/13/08	**3.00**	**2.52**	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	**31.0**	nd<0.50	nd<0.50	nd<0.50	na	na
	12/04/09	**8.29**	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	na	na
	03/23/10	**5.9**	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	**0.731**	nd<0.500
LW-MW-5S	08/13/08	**85.1**	**3.50**	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	**2.00**	nd<0.50	nd<0.50	nd<0.50	na	na
	12/04/09	nd<0.500	**11.7**	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	na	na
	03/23/10	nd<0.500	**26.5**	**3.22**	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	**38.2**	nd<0.500	nd<0.500	nd<0.500	**0.778**	**0.529**
LW-MW-9S	12/04/09	**324**	**12.7**	nd<0.500	nd<0.500	nd<0.500	nd<0.50	nd<0.500	nd<0.500	nd<0.500	nd<0.500	**19.0**	nd<0.500	nd<0.500	nd<0.500	na	na
	03/23/10	**174**	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	**7.78**	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500
LW-MW-10S	12/04/09	**15.8**	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	na	na
	duplicate	**10.6**	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	na	na
	03/23/10	**1.04**	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500
LW-MW-11S	12/04/09	**42.9**	nd<0.50	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	na	na
	03/23/10	**32.5**	**1.08**	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	**3.63**	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500
LW-MW-12S	12/04/09	**10.7**	nd<0.50	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	na	na
	03/23/10	**34.3**	nd<0.50	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	**0.613**	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500
LW-MW-13S	12/04/09	**17**	nd<0.50	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	na	na
	03/23/10	**14.1**	**0.603**	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	**0.627**	nd<0.500	nd<0.500	nd<0.500	**0.645**	nd<0.500
OS-1	03/24/10	**91.2**	**1.41**	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	**1.02**	nd<0.500	nd<0.500	**0.989**	nd<0.500	nd<0.500	nd<0.500	**0.908**	**0.807**

Notes:
Results in micrograms per liter (µg/L) (equivalent to parts per billion, ppb)
1,1-DCA = 1,1,-Dichloroethane
1,1-DCE = 1,2-Dichloroethene
1,1,1-TCA = 1,1,1-Trichlorethane
BTOC = Below Top of Casing
CA = Chloeoethane
CB = Chlorobenzene
CF = Chloroform
cis-1,2-DCE = cis-1,2-Dichloroethene
MC = Methylene Chloride
MtBE = Methyl-tertiary butyl ether
PCE = Tetrachloroethene (a.k.a. perchloroethene)
TCE = Trichloroethene
trans-1,2-DCE = trans-1,2-Dichloroethene
VC = Vinyl Chloride

nd< = Not detected at or above the Method Detection Limit, which is indicated by the value

TABLE 4
SUMMARY OF HISTORICAL VP SHALLOW SOIL-GAS ANALYTICAL DATA
Lake Tahoe Laundry Works
1024 Lake Tahoe Boulevard
South Lake Tahoe, California

Sample ID	Sample Date	PCE	TCE	cis-1,2-DCE	Tracer Gas	Other VOCs
		ppmV				
VP-1	4/9/10	**0.016**	nd<0.01	nd<0.01	nd<0.01	nd
VP-2	4/9/10	**0.429**	**0.029**	**0.38**		nd
VP-3	4/9/10	unable to sample - water in well				
VP-4	4/9/10	nd<0.01	nd<0.01	nd<0.01	nd<0.01	nd
VP-5	4/9/10	**0.012**	nd<0.01	**0.015**	nd<0.01	nd
VP-6	4/9/10	**0.028**	nd<0.01	nd<0.01	nd<0.01	nd
VP-7	4/9/10	nd<0.01	nd<0.01	nd<0.01	nd<0.01	nd
VP-8	4/9/10	**0.034**	nd<0.01	nd<0.01	nd<0.01	nd
VP-9	4/9/10	**0.029**	nd<0.01	nd<0.01	nd<0.01	nd
VP-10	4/9/10	**1.98**	**0.047**	**0.050**	nd<0.01	nd

Notes:

cis-1,2-DCE = cis-1,2-Dichloroethene
nd = Not detected at or above detection limit for each respective compound (see Appendix D)
nd< = Not detected at or above the detection limit, which is indicated by value
PCE = Tetrachloroethene (a.k.a. perchloroethene)
ppmV = parts per million by volume
TCE = Trichloroethene
Tracer Gas = Freon 11 (see Appendix D)

TABLE 5A
SUMMARY OF WELL CONSTRUCTION DETAILS
Lake Tahoe Laundry Works
1024 Lake Tahoe Boulevard
South Lake Tahoe, California

WELL ID	Completion Date	Well Type	Well Depth (feet bgs)	Well Casing Material	TOC Elevation (feet rel)	Top of Screen (feet bgs)	Screen Length (feet)
AS-1	11/3/09	Air Sparge	25.0	2" PVC	--	23.5	1.5
AS-2	11/5/09	Air Sparge	25.0	2" PVC	--	23.5	1.5
AS-3	11/6/09	Air Sparge	28.0	2" PVC	--	26.5	1.5
AS-4	11/5/09	Air Sparge	26.0	2" PVC	--	24.5	1.5
AS-5	11/5/09	Air Sparge	26.0	2" PVC	--	24.5	1.5
AS-6	11/5/09	Air Sparge	30.0	2" PVC	--	28.5	1.5
AS-7	11/7/09	Air Sparge	28.5	2" PVC	--	27.0	1.5
AS-8	11/7/09	Air Sparge	27.0	2" PVC	--	25.5	1.5
AS-9	11/9/09	Air Sparge	28.5	2" PVC	--	27.0	1.5
AS-10	11/4/09	Air Sparge	27.0	2" PVC	--	25.5	1.5
AS-11	11/4/09	Air Sparge	30.0	2" PVC	--	28.5	1.5
AS-12	11/8/09	Air Sparge	27.5	2" PVC	--	26.0	1.5
AS-13	11/8/09	Air Sparge	29.0	2" PVC	--	27.5	1.5
AS-14	11/8/09	Air Sparge	30.0	2" PVC	--	28.5	1.5
AS-15	11/9/09	Air Sparge	30.0	2" PVC	--	28.5	1.5
AS-16	11/12/09	Air Sparge	30.0	2" PVC	--	28.5	1.5
AS-17	11/12/09	Air Sparge	30.0	2" PVC	--	28.5	1.5
AS-18	11/11/09	Air Sparge	30.0	2" PVC	--	28.5	1.5
AS-19	11/11/09	Air Sparge	30.0	2" PVC	--	28.5	1.5
AS-20	11/13/09	Air Sparge	30.0	2" PVC	--	28.5	1.5
AS-21	11/12/09	Air Sparge	30.0	2" PVC	--	28.5	1.5
AS-22	11/11/09	Air Sparge	30.0	2" PVC	--	28.5	1.5
AS-23	11/6/09	Air Sparge	30.0	2" PVC	--	28.5	1.5
AS-24	11/13/09	Air Sparge	30.0	2" PVC	--	28.5	1.5
AS-25	11/13/09	Air Sparge	30.0	2" PVC	--	28.5	1.5
AS-26	11/4/09	Air Sparge	27.0	2" PVC	--	25.5	1.5
AS-27	11/9/09	Air Sparge	26.0	2" PVC	--	24.5	1.5

TABLE 5A
SUMMARY OF WELL CONSTRUCTION DETAILS
Lake Tahoe Laundry Works
1024 Lake Tahoe Boulevard
South Lake Tahoe, California

WELL ID	Completion Date	Well Type	Well Depth (feet bgs)	Well Casing Material	TOC Elevation (feet rel)	Top of Screen (feet bgs)	Screen Length (feet)
LW-MW-1S	7/16/08	Monitoring	23.91	2" PVC	6,191.41	8.9	15
LW-MW-2S	7/23/08	Monitoring	34.82	2" PVC	6,192.41	19.8	15
LW-MW-5S	7/24/08	Monitoring	29.70	2" PVC	6,149.87	14.7	15
LW-MW-9S	11/10/09	Monitoring	24.40	2" PVC	6,192.98	9.4	15
LW-MW-10S	11/12/09	Monitoring	24.76	2" PVC	6,192.15	9.8	15
LW-MW-11S	11/12/09	Monitoring	24.30	2" PVC	6,191.67	9.3	15
LW-MW-12S	11/10/09	Monitoring	24.20	2" PVC	6,190.71	9.2	15
LW-MW-13S	11/10/09	Monitoring	24.95	2" PVC	6,190.82	10.0	15
OS-1	3/19/10	Monitoring	25.00	2" PVC	6,176.95	10.0	15
VED-1	11/5/09	Deep Vapor Extraction	13.0	2" PVC	--	11.0	2
VED-2	11/4/09	Deep Vapor Extraction	14.0	2" PVC	--	12.0	2
VED-3	11/7/09	Deep Vapor Extraction	14.0	2" PVC	--	12.0	2
VED-4	11/8/09	Deep Vapor Extraction	13.0	2" PVC	--	11.0	2
VED-5	11/9/09	Deep Vapor Extraction	13.4	2" PVC	--	11.4	2
VED-6	11/10/09	Deep Vapor Extraction	12.5	2" PVC	--	10.5	2
VED-7	11/12/09	Deep Vapor Extraction	12.0	2" PVC	--	10.0	2
VED-8	11/13/09	Deep Vapor Extraction	12.0	2" PVC	--	10.0	2
VED-9	11/11/09	Deep Vapor Extraction	12.0	2" PVC	--	10.0	2
VED-10	11/10/09	Deep Vapor Extraction	12.0	2" PVC	--	10.0	2
VED-11	11/8/09	Deep Vapor Extraction	12.0	2" PVC	--	10.0	2
VED-12	11/7/09	Deep Vapor Extraction	11.5	2" PVC	--	9.5	2
VED-13	11/7/09	Deep Vapor Extraction	13.5	2" PVC	--	11.5	2
VED-14	11/10/09	Deep Vapor Extraction	12.5	2" PVC	--	10.5	2
VED-15	11/6/09	Deep Vapor Extraction	12.0	2" PVC	--	10.0	2
VED-16	11/12/09	Deep Vapor Extraction	12.0	2" PVC	--	10.0	2
VED-17	11/4/09	Deep Vapor Extraction	15.0	2" PVC	--	13.0	2
VED-18	11/4/09	Deep Vapor Extraction	13.0	2" PVC	--	11.0	2

TABLE 5A
SUMMARY OF WELL CONSTRUCTION DETAILS
Lake Tahoe Laundry Works
1024 Lake Tahoe Boulevard
South Lake Tahoe, California

WELL ID	Completion Date	Well Type	Well Depth (feet bgs)	Well Casing Material	TOC Elevation (feet rel)	Top of Screen (feet bgs)	Screen Length (feet)
VED-19	11/3/09	Deep Vapor Extraction	12.0	2" PVC	--	10.0	2
VED-20	11/3/09	Deep Vapor Extraction	12.0	2" PVC	--	10.0	2
VES-1	11/5/09	Shallow Vapor Extraction	9.0	2" PVC	--	4.0	5
VES-2	11/4/09	Shallow Vapor Extraction	10.0	2" PVC	--	5.0	5
VES-3	11/7/09	Shallow Vapor Extraction	10.0	2" PVC	--	5.0	5
VES-4	11/8/09	Shallow Vapor Extraction	9.0	2" PVC	--	4.0	5
VES-5	11/9/09	Shallow Vapor Extraction	9.4	2" PVC	--	4.4	5
VES-6	11/10/09	Shallow Vapor Extraction	8.5	2" PVC	--	3.5	5
VES-7	11/12/09	Shallow Vapor Extraction	8.0	2" PVC	--	3.0	5
VES-8	11/13/09	Shallow Vapor Extraction	8.0	2" PVC	--	3.0	5
VES-9	11/11/09	Shallow Vapor Extraction	8.0	2" PVC	--	3.0	5
VES-10	11/11/09	Shallow Vapor Extraction	8.0	2" PVC	--	3.0	5
VES-11	11/8/09	Shallow Vapor Extraction	8.0	2" PVC	--	3.0	5
VES-12	11/7/09	Shallow Vapor Extraction	7.5	2" PVC	--	3.5	4
VES-13	11/7/09	Shallow Vapor Extraction	9.5	2" PVC	--	4.5	5
VES-14	11/10/09	Shallow Vapor Extraction	8.5	2" PVC	--	3.5	5
VES-15	11/6/09	Shallow Vapor Extraction	8.0	2" PVC	--	3.0	5
VES-16	11/12/09	Shallow Vapor Extraction	8.0	2" PVC	--	3.0	5
VES-17	11/4/09	Shallow Vapor Extraction	9.0	2" PVC	--	4.0	5
VES-18	11/4/09	Shallow Vapor Extraction	9.0	2" PVC	--	4.0	5
VES-19	11/3/09	Shallow Vapor Extraction	7.0	2" PVC	--	2.0	5
VES-20	11/3/09	Shallow Vapor Extraction	7.0	2" PVC	--	2.0	5
VP-1	11/5/09	Shallow Soil-Gas	5.0	1/8-inch Teflon Tubing		4.875	0.125
VP-2	11/5/09	Shallow Soil-Gas	5.0	1/8-inch Teflon Tubing		4.875	0.125
VP-3	11/9/10	Shallow Soil-Gas	5.0	1/8-inch Teflon Tubing		4.875	0.125
VP-4	11/7/09	Shallow Soil-Gas	5.0	1/8-inch Teflon Tubing		4.875	0.125
VP-5	11/3/09	Shallow Soil-Gas	5.0	1/8-inch Teflon Tubing		4.875	0.125

TABLE 5A
SUMMARY OF WELL CONSTRUCTION DETAILS
Lake Tahoe Laundry Works
1024 Lake Tahoe Boulevard
South Lake Tahoe, California

WELL ID	Completion Date	Well Type	Well Depth (feet bgs)	Well Casing Material	TOC Elevation (feet rel)	Top of Screen (feet bgs)	Screen Length (feet)
VP-6	11/3/09	Shallow Soil-Gas	5.0	1/8-inch Teflon Tubing		4.875	0.125
VP-7	11/9/10	Shallow Soil-Gas	5.0	1/8-inch Teflon Tubing		4.875	0.125
VP-8	11/9/10	Shallow Soil-Gas	5.0	1/8-inch Teflon Tubing		4.875	0.125
VP-9	11/8/09	Shallow Soil-Gas	5.0	1/8-inch Teflon Tubing		4.875	0.125
VP-10	11/8/09	Shallow Soil-Gas	5.0	1/8-inch Teflon Tubing		4.875	0.125

Notes

All wells are of Schedule 40 PVC construction

PVC = Poly vinyl chloride

feet bgs = feet below ground surface

TOC Elevation = Top of casing elevation based on feet above MSL relative at MW-1 taken from Topographic Map

TABLE 4B
SUMMARY OF NOVEMBER 2009 SOIL ANALYTICAL DATA
Lake Tahoe Laundry Works
1024 Lake Tahoe Boulevard
South Lake Tahoe, California

Sample ID	**Sample Date**	**Sample Depth (bgs)**	**PCE**	**TCE**	**cis-1,2-DCE**	**trans-1,2-DCE**	**Other VOCs**
			(mg/Kg)				
LW-MW-9S							
9S-6	11/10/09	6	**0.347**	nd<0.050	nd<0.050	nd<0.050	nd
9S-10.5		10.5	**not analyzed**				
9S-15.5		15.5	**0.078**	nd<0.050	nd<0.050	nd<0.050	nd
9S-20.5		20.5	**not analyzed**				
LW-MW-10S							
10S-6	11/10/09	6	**not analyzed**				
10S-10.5		10.5	**not analyzed**				
10S-15.5		15.5	**0.052**	nd<0.050	nd<0.050	nd<0.050	nd
10S-20.5		20.5	**not analyzed**				
10S-26		26	**0.051**	nd<0.050	nd<0.050	nd<0.050	nd
LW-MW-11S							
11S-5.5	11/10/09	5.5	**not analyzed**				
11S-10.5		10.5	nd<0.050	nd<0.050	nd<0.050	nd<0.050	nd
11S-15.5		15.5	**not analyzed**				
11S-20.5		21	**not analyzed**				
11S-25.5		25.5	**0.072**	nd<0.050	nd<0.050	nd<0.050	nd
LW-MW-12S							
12S-5.5	11/10/09	5.5	**not analyzed**				
12S-10.5		10.5	nd<0.050	nd<0.050	nd<0.050	nd<0.050	nd
12S-15.5		15.5	**not analyzed**				
12S-20		20	nd<0.050	nd<0.050	nd<0.050	nd<0.050	nd
12S-25		25	**not analyzed**				
LW-MW-13S							
13S-5.75	11/10/09	5.75	**not analyzed**				
13S-10.5		10.5	**not analyzed**				
13S-21		21	nd<0.050	nd<0.050	nd<0.050	nd<0.050	nd
13S-25.8		25.8	nd<0.050	nd<0.050	nd<0.050	nd<0.050	nd
OS-1							
OS-1@10	3/19/10	10.00	not analyzed; for logging purposes only				
OS-1@15		15.0	not analyzed; for logging purposes only				
OS-1@20		20	not analyzed; for logging purposes only				
OS-1@25		25.0	not analyzed; for logging purposes only				

Notes:

bgs = Below ground surface

cis-1,2-DCE = cis-1,2-dichloroethene

mg/Kg = Milligrams per kilogram (equivalent to parts per million)

nd = Not detected at or above the respective laboratory reporting limit

nd<0.05 = not detected at or above the stated laboratory reporting limit.

PCE = Tetrachloroethylene (a.k.a. perchloroethene)

TCE = Trichloroethylene

Trans-1,2-DCE = trans-1,2-dichloroethene

TABLE 6
SUMMARY OF DEPTHS TO GROUNDWATER DURING PILOT TESTING
Lake Tahoe Laundry Works
1024 Lake tahoe Boulevard
South Lake Tahoe, California

Well ID	Date (mo/dy/yr)	Time (hr:min)	Depth to GW (feet BTOC)	DO (mg/L)	Comments
Tests #1 and #2: Extraction at HVE-1, HVE-2, HVE-3, HVE-4, HVE-5, and HVE-6					
Observation Wells					
MW-1S	4/6/10	11:10	13.52	0.0	
		17:25	13.55	nr	
MW-1D	4/6/10	11:00	19.98	0.0	
		17:30	19.99	nr	
MW-2S	4/6/10	10:25	14.98	0.0	
		17:35	15.03	nr	
MW-2D	4/6/10	10:30	20.47	0.0	
		17:40	20.45	nr	
MW-5S	4/6/10	9:40	11.61	0.0	
MW-5D	4/6/10	10:00	20.36	0.0	
MW-9S	4/6/10	10:50	14.39	0.0	
		17:55	14.41	nr	
MW-10S	4/6/10	10:10	12.77	0.0	
		17:50	12.81	nr	
MW-11S	4/6/10	10:35	13.27	0.0	
MW-12S	4/6/10	10:20	12.13	0.0	
		17:45	12.10	nr	
MW-13S	4/6/10	11:20	12.78	0.0	
OS-1	4/6/10	9:25	12.71	0.0	
Test #3: Extraction at VE-1S, VE-1D, VE-2S, VE-2D, VE-3S, VE-3D, VE-4S, VE-4D, VE-12S, VE-12D, VE-13S, VE-13D, VE-18S, VE-18D, VE-19S, VE-19D, VE-20S, and VE-20D					
Observation Wells					
MW-1S	4/7/10	8:05	13.48	nr	
		8:55	nr	0.0	
		11:55	14.93	nr	
MW-1D	4/7/10	8:10	19.97	0.0	
		9:00	nr	0.0	
		12:00	20.30	nr	
MW-2S	4/7/10	7:55	14.94	0.0	
		8:45	nr	0.0	
		11:45	15.06	nr	
MW-2D	4/7/10	8:00	20.42	0.0	
		8:50	nr	0.0	
		11:50	20.57	nr	
MW-5S	4/7/10	8:20	11.71	0.0	
		9:05	nr	0.0	
		12:05	11.91	nr	
MW-5D	4/7/10	8:25	20.36	0.0	
		9:10	nr	0.0	
		12:10	20.40	nr	
MW-9S	4/7/10	8:15	14.34	0.0	
		8:20	nr	0.0	
		11:25	15.19	nr	
MW-10S	4/7/10	7:50	12.71	1.4	
		8:30	nr	1.4	
		11:35	13.11	nr	

TABLE 6
SUMMARY OF DEPTHS TO GROUNDWATER DURING PILOT TESTING
Lake Tahoe Laundry Works
1024 Lake tahoe Boulevard
South Lake Tahoe, California

Well ID	Date (mo/dy/yr)	Time (hr:min)	Depth to GW (feet BTOC)	DO (mg/L)	Comments
MW-11S	4/7/10	8:10	nr	0.0	
		8:30	13.22	0.0	
		11:20	13.29	nr	
MW-12S	4/7/10	7:45	12.07	0.0	
		8:35	nr	0.0	
		11:40	12.85	nr	
MW-13S	4/7/10	7:55	nr	0.0	
		8:35	12.71	0.0	
		12:15	12.75	nr	
OS-1	4/7/10	7:45	nr	0.0	
		8:40	12.71	0.0	
Test #4: Extraction at VE-5S, VE-6S, VE-8S, VE-9S, VE-10S, VE-11S, VE-14S, VE-15S, VE-16S, VE-17S					
Observation Wells					
MW-1S	4/7/10	15:20	13.36	nr	
MW-1D	4/7/10	15:15	19.92	nr	
MW-2S	4/7/10	15:05	15.09	nr	
		15:50	15.11	nr	
MW-2D	4/7/10	15:10	20.41	nr	
MW-5S	4/7/10	15:25	11.73	nr	
MW-5D	4/7/10	15:20	20.32	nr	
MW-9S	4/7/10	14:50	14.31	nr	
MW-10S	4/7/10	14:55	12.70	nr	
MW-11S	4/7/10	14:45	13.23	nr	
MW-12S	4/7/10	15:00	12.00	nr	
MW-13S	4/7/10	15:30	12.28	nr	
Test #5: Extraction at VE-4D, VE-5S, VE-5D, VE-6S, VE-6D, VE-7S, VE-7D, VE-8S, VE-8D, VE-9S, VE 9D, VE-10S, VE-10D, VE-11S, VE-11D, VE-14S, VE-14D, VE-15S, VE-15D, VE-16S, VE-16D, VE-17S, VE-17D					
Observation Wells					
MW-1S	4/7/10	15:20	13.36	nr	
		16:00	13.38	nr	
MW-1D	4/7/10	15:15	19.92	nr	
		16:05	19.92	nr	
		15:50	15.11	nr	
MW-2D	4/7/10	15:10	20.41	nr	
		15:55	20.40	nr	
MW-5S	4/7/10	15:25	11.73	nr	
		16:15	11.70	nr	
MW-5D	4/7/10	15:20	20.32	nr	
		16:20	23.30	nr	
MW-9S	4/7/10	16:10	14.31	nr	
MW-10S	4/7/10	15:45	12.71	nr	
MW-11S	4/7/10	16:25	13.13	nr	
MW-12S	4/7/10	15:40	12.03	nr	
MW-13S	4/7/10	15:30	12.28	nr	
		16:30	12.21	nr	

TABLE 6
SUMMARY OF DEPTHS TO GROUNDWATER DURING PILOT TESTING
Lake Tahoe Laundry Works
1024 Lake tahoe Boulevard
South Lake Tahoe, California

Well ID	Date (mo/dy/yr)	Time (hr:min)	Depth to GW (feet BTOC)	DO (mg/L)	Comments
Test #7: Extraction at VE-1S, VE-2S, VE-3S, VE-4S, VE-5S, VE-6S, VE-7S, VE-8S, VE-9S, VE-10S, VE-11S, VE-12S, VE-13S, VE-14S, VE-15S, VE-16S, VE-17S, VE-18S, VE-19S, VE-20S, HVE-1, HVE-2, HVE-3, HVE-4, HVE-5, HVE-6					
Observation Wells					
MW-1S	4/8/09	8:25	13.30	nr	
		8:50	nr	0.0	
		11:30	13.34	nr	
		15:15	10.96	nr	
MW-1D	4/8/10	8:30	19.82	nr	
		8:55	nr	0.0	
		11:35	19.78	nr	
		15:20	19.34	nr	
MW-2S	4/8/10	8:15	14.89	nr	
		8:40	nr	0.0	
		11:20	14.85	nr	
		15:25	14.64	nr	
MW-2D	4/8/10	8:20	20.28	nr	
		8:45	nr	0.0	
		11:25	20.22	nr	
		15:30	19.96	nr	
MW-5S	4/8/10	8:40	11.59	nr	
		9:00	nr	0.0	
		11:50	11.51	nr	
		15:40	10.80	nr	Water level rising
MW-5D	4/8/10	8:45	20.20	nr	
		9:05	nr	0.0	
		11:45	20.13	nr	
		15:45	20.03	nr	
MW-9S	4/8/10	8:25	nr	0.0	
		8:35	14.21	nr	
		11:40	14.15	nr	Water level falling
		15:35	9.18	nr	Water level rising
MW-10S	4/8/10	8:10	11.94	nr	
		8:30	nr	0.0	
		11:10	12.64	nr	
		15:05	11.19	nr	
MW-11S	4/8/10	8:20	nr	0.0	
		8:50	13.12	nr	
		11:55	13.10	nr	
		15:50	6.35	nr	
MW-12S	4/8/10	8:05	12.63	nr	
		8:35	nr	0.0	
		11:15	11.95	nr	
		15:10	11.05	nr	Water level rising
MW-13S	4/8/10	8:15	nr	0.0	
		8:55	12.63	nr	
		12:00	12.58	nr	
		15:55	5.00	nr	
OS-1	4/8/10	8:10	nr	0.0	
		9:00	12.61	nr	

TABLE 6
SUMMARY OF DEPTHS TO GROUNDWATER DURING PILOT TESTING
Lake Tahoe Laundry Works
1024 Lake tahoe Boulevard
South Lake Tahoe, California

Well ID	Date (mo/dy/yr)	Time (hr:min)	Depth to GW (feet BTOC)	DO (mg/L)	Comments
Test #9: Extraction at VE-1S, VE-2S, VE-20S, HVE-1, HVE-2, HVE-3, HVE-4, HVE-5, HVE-6					
Observation Wells					
MW-1S	4/9/10	7:55	13.34	nr	
		8:15	nr	0.0	
MW-1D	4/9/10	8:00	19.71	nr	
		8:20	nr	0.0	
MW-2S	4/9/10	7:45	14.98	nr	
		8:05	nr	0.0	
MW-2D	4/9/10	7:50	20.17	nr	
		8:10	nr	0.0	
MW-5S	4/9/10	8:05	11.57	nr	
		8:25	nr	0.0	
MW-5D	4/9/10	8:10	20.10	nr	
		8:30	nr	0.0	
MW-9S	4/9/10	7:50	nr	0.0	
		8:15	14.22	nr	
MW-10S	4/9/10	7:35	12.61	nr	
		7:55	nr	0.0	
MW-11S	4/9/10	7:45	nr	0.0	
		8:20	13.20	nr	
MW-12S	4/9/10	7:40	11.56	nr	
		8:00	nr	0.0	
MW-13S	4/9/10	7:40	nr	0.0	
		8:25	12.67	nr	

Notes:
BTOC = Below top of casing
DO = Dissolved Oxygen
GW = Groundwater
in-H2O = inches water
mg/L = Milligrams per liter
nr = No reading

TABLE 7
SUMMARY OF SVE/GASS REMEDIATION SYSTEM OPERATIONAL DATA
Lake Tahoe Laundry Works
1024 Lake Tahoe Boulevard
South Lake Tahoe, California

Date Monitored	Operational Status on Arrival	Cumulative Calendar Days	Hour Meter Reading	Cumulative Operating Hours	Inlet Flow (scfm)	System Vacuum (in-Hg)	Well Field Vacuum (in-Hg)	Field Oxygen (%)	Field Vapor Influent (ppmV)	Lab Vapor Influent (ppmV)	Field Vapor Effluent (ppmV)	VOCs Lbs./Hr. Extracted	Cumulative Lbs. Extracted
4/8/10	off	0	202.0	0	500	3.75	2.75	20.6	140	0.752	0	0.010	0.000
4/9/10	off	1	205.0	3.0	500	4.15	2.75	20.6	130	2.043	0	0.027	0.055
4/16/10	off	8	369.4	167.4	500	3.50	3.50	20.2	110		0	0.023	4.119
4/29/10	off	21	678.9	476.9	500	3.70	3.70	20.1	80		0	0.016	10.18
5/6/10	on	28	841.0	639.0	500	4.50	4.50	20.9	25		0	0.005	11.93
5/12/10	on	34	978.7	776.7	500	3.50	3.50	20.9	90		0	0.019	13.56
6/1/10	off	54	1,462	1,260	500	3.70	3.70	20.9	90		0	0.019	22.53

Average Extraction Rate (Lbs./Hr.) 0.017

Notes:

-- = Data not available / not recorded
in-Hg = Inches of Mercury
Lbs./Hr. = Pounds per hour
ppmv = Parts per million by volume
scfm = Standard cubic feet per minute
SVE/GASS = Soil Vapor Extraction / Groundwater Air Sparge S
VOCs = Volatile Organic Compounds (primarily tetrachloroethylene and trichloroethylene)

Volatile Organic Compounds Removal Rate (lbs/hr) = Influent (ppmv) x 10-6 x Influent Flow Rate (scfm) x 1 lb-mole/379.5 ft3 x 165.82 (lb/lb-mole) x 60 (min/hour)

TABLE 8
SUMMARY OF VE WELLFIELD DATA
Lake Tahoe Laundry Works
1024 Lake Tahoe Boulevard
South Lake Tahoe, California

Date Monitored	Well HVE-1 valve	Well HVE-2 valve	Well HVE-3 valve	Well HVE-4 valve	Well HVE-5 valve	Well HVE-6 valve	Well VES-1 valve	Well VED-1 valve	Well VES-2 valve	Well VED-2 valve	Well VES-3 valve	Well VED-3 valve	Well VES-4 valve	Well VED-4 valve	Well VES-5 valve	Well VED-5 valve	Well VES-6 valve	Well VED-6 valve	Well VES-7 valve	Well VED-7 valve	Well VES-8 valve	Well VED-8 valve	Well VES-9 valve	Well VED-9 valve	Well VES-10 valve	Well VED-10 valve	Well VES-11 valve	Well VED-11 valve	Well VES-12 valve	Well VED-12 valve	Well VES-13 valve	Well VED-13 valve	Well VES-14 valve	Well VED-14 valve	Well VES-15 valve	Well VED-15 valve	Well VES-16 valve	Well VED-16 valve	Well VES-17 valve	Well VED-17 valve	Well VES-18 valve	Well VED-18 valve	Well VES-19 valve	Well VED-19 valve	Well VES-20 valve	Well VED-20 valve
4/6/10	varying well configurations; see field sheets in Appendix T for Test-specific configurations																																													
4/7/10	varying well configurations; see field sheets in Appendix T for Test-specific configurations																																													
4/8/10	varying well configurations; see field sheets in Appendix T for Test-specific configurations																																													
4/9/10	varying well configurations; see field sheets in Appendix T for Test-specific configurations																																													
4/16/10	O	O	O	O	O	O	O	O	O	PO	O	PO	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O
4/29/10	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O
5/6/10	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O
5/12/10	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O
6/1/10	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O

Notes:

1/2 = One-half open
1/4 = 1/4 open
C = Closed
O = Fully open
PO = Partially Open

TABLE 9
SUMMARY OF HISTORICAL SVE VAPOR LABORATORY ANALYTICAL DATA
Lake Tahoe Laundry Works
1024 Lake Tahoe Boulevard
South Lake Tahoe, California

Sample Point	Sample Date	PCE	TCE	cis-1,2-DCE	Trans-1,2-DCE	Other VOCs
		ppmV				
Influent	4/8/10	**0.680**	**0.031**	**0.041**	nd<0.01	nd<0.01
	4/9/10 - Test 9	**0.268**	**0.02**	**0.027**	nd<0.01	nd<0.01
	4/9/10	**1.950**	**0.045**	**0.048**	nd<0.01	nd<0.01
Operational Average		0.97	**0.032**	0.04		
Mid-Fluent	4/9/10	nd<0.01	nd<0.01	nd<0.01	nd<0.01	nd<0.01
Operational Average		na	na	na	na	na
Effluent	4/9/10	nd<0.01	nd<0.01	nd<0.01	nd<0.01	nd<0.01
Operational Average		na	na	na	na	na

Notes:

cis-1,2-DCE = cis-1,2-Dichloroethene
na = Not applicable
nd< = Not detected at or above the detection limit, which is indicated by value
PCE = Tetrachloroethene (a.k.a. perchloroethene)
ppmV = parts per million by volume
TCE = Trichloroethene
Trans-1,2-DCE = Trans-1,2-dichloroethene

TABLE 10
COMPARISON OF APRIL 2010 SHALLOW SOIL-GAS WITH ESLs
Lake Tahoe Laundry Works
1024 Lake Tahoe Boulevard
South Lake Tahoe, California

Sample ID	Analyte	Concentration		ESLs
		ppmV	ppbV	(ppbV)
VP-1	PCE	0.016	16	206.54
	TCE	nd	nd	0.74481
	cis-1,2-DCE	nd	nd	3.03E+04
VP-5	PCE	0.012	12	206.54
	TCE	nd	nd	0.74481
	cis-1,2-DCE	0.015	15	3.03E+04
VP-6	PCE	0.028	28	206.54
	TCE	nd	nd	0.74481
	cis-1,2-DCE	nd	nd	3.03E+04
VP-9	PCE	0.029	29	206.54
	TCE	nd	nd	0.74481
	cis-1,2-DCE	nd	nd	3.03E+04
VP-10	PCE	**1.98**	**1,980**	206.54
	TCE	**0.047**	**47**	0.74481
	cis-1,2-DCE	0.050	50	3.03E+04

Notes:

VP wells that may indicate potential vapor instrusion into indoor space are VP-1, VP-5, VP-6, VP-9 and VP-10 (see Figure 3)

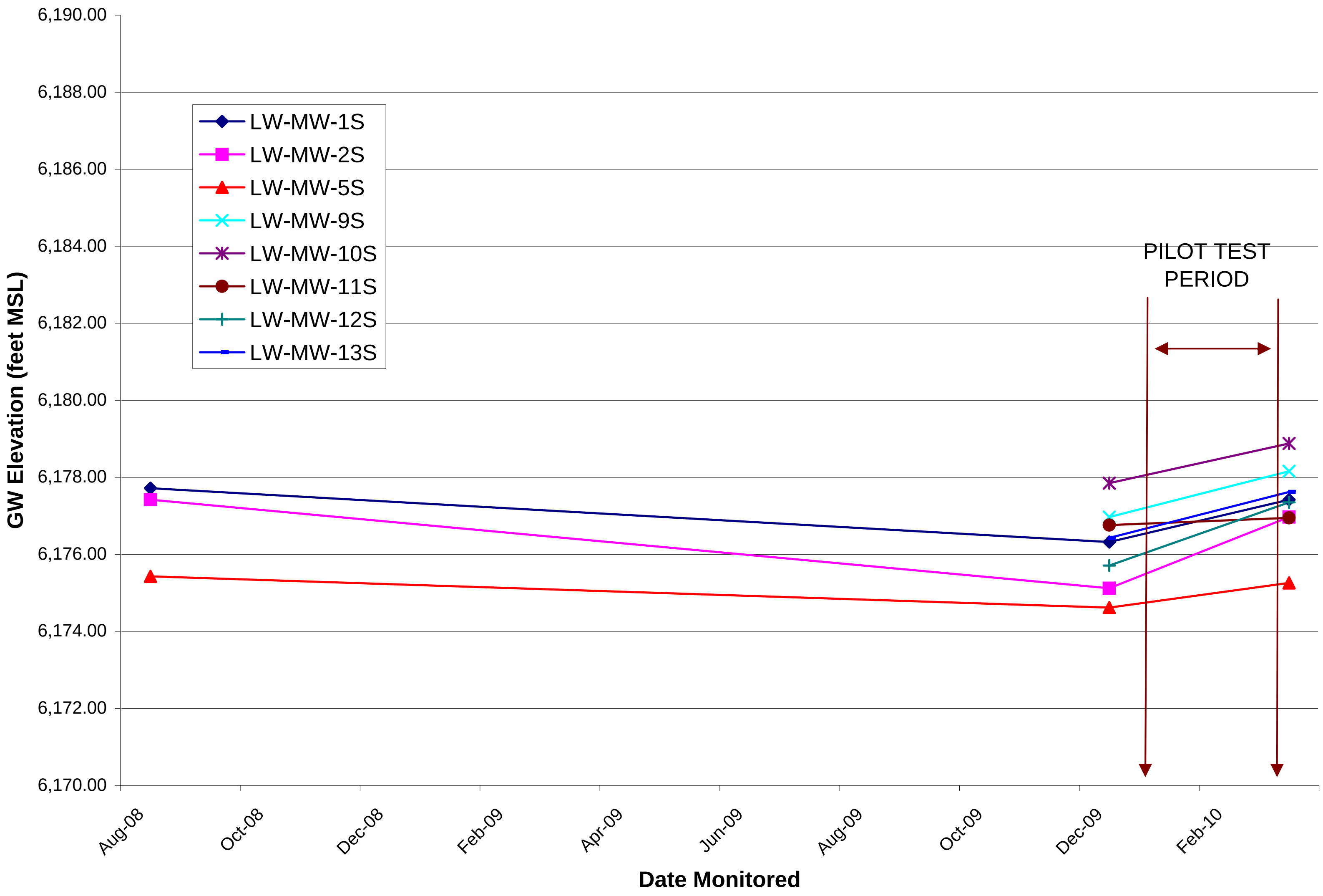
Data from Table 4 converted to parts per billion by volume (ppbV)

cis-1,2-DCE = cis-1,2-Dichloroethene
nd = Not detected at or above detection limit for each respective compound (see Appendix D)
nd< = Not detected at or above the detection limit, which is indicated by value
PCE = Tetrachloroethene (a.k.a. perchloroethene)
ppmV = parts per million by volume
TCE = Trichloroethene
Tracer Gas = Freon 11 (see Appendix D)

GRAPHS

G-1 HYDROGRAPH

LAKE TAHOE LAUNDRY WORKS
HYDROGRAPH



APPENDICES

APPENDIX A

CEDEMD, City & EDCAQMD Permits

MW09-007

EL DORADO COUNTY
ENVIRONMENTAL MANAGEMENT DEPARTMENT

SOLID WASTE & HAZARDOUS MATERIALS DIVISION

PLACERVILLE OFFICE:	SOUTH LAKE TAHOE OFFICE:
2850 FAIR LANE COURT, BUILDING C PLACERVILLE, CA 95667 (530) 621-5300	3368 LAKE TAHOE BLVD., SUITE 303 SOUTH LAKE TAHOE, CA 96150 (530) 573-3450

PERMIT GRANTED TO:

E2C REMEDIATION
5300 WOODMERE DRIVE, STE 105, BAKERSFIELD, CA 93313
(PCE INVESTIGATION)
(1950 LAKE TAHOE BLVD., SOUTH LAKE TAHOE, CA)

FOR

INSTALLATION OF MONITORING WELLS & SPARGE WELLS
Area of South Y Shopping Center
1950 Lake Tahoe Blvd., South Lake Tahoe, CA

PROPERTY OWNER:	CONTRACTOR:	C57# 686255
Seven Springs, L.P. 5530 Birdcage St., Ste. 220 Citrus Heights, CA 95610-4300	BC2 ~~E2C~~ Environmental 1150 W. Trenton Ave. Orange, CA 92867	

TOTAL FEES DUE:	$5340.00	TOTAL FEES PAID:	$5340.00
		RECEIPT #	AB0147370

**Any person, owner of real property or authorized agent shall immediately report, upon discovery or receipt of notification, any release or threatened release of a hazardous material to the El Dorado County Environmental Management Department.
A complete written report shall be submitted to this agency within five (5) working days of discovery or receiving knowledge of a release.
Contaminated soil may not be placed back into**

THIS PERMIT EXPIRES 11/02/10
PERMIT ISSUED 11/02/09

Virginia Huber, REHS
Virginia Huber, REHS
Tahoe Division Manager

** CONTACT THIS AGENCY FOR INSPECTION**
WITH A 48 HOUR ADVANCE NOTIFICATION

EL DORADO COUNTY ENVIRONMENTAL MANAGEMENT DEPARTMENT
AIR QUALITY MANAGEMENT DISTRICT
2850 Fairlane Court, Bldg. "C", Placerville, CA 95667
Ph: (530) 621-6662 FAX: (530) 295-2774
Web: http://www.co.el-dorado.ca.us/emd/apcd/index.html

Authority to Construct: 09-051
File Number: 17-1582
Valid from: 01-10-2010 to 01-09-2011

AUTHORITY TO CONSTRUCT

REVOCABLE AND NON TRANSFERABLE

This **Authority to Construct** is granted to:
E2C Remediation
5300 Woodmere Drive #105
Bakersfield, CA 93313

PROJECT LOCATION
1024 Lake Tahoe Boulevard
South Lake Tahoe

This Authority to Construct is for the equipment described below, as shown on the approved plans and specifications and subject to the conditions listed.

* * * AUTHORITY TO CONSTRUCT * * *

Remediation System

Equipment Description:

Type:	Vapor Extraction Blower	Granular Activated Carbon Vessels
Manufacturer:	Sutorbilt	
Model:	7M	2,000 lb
Flow Rate (cfm):	500	500
Quantity:	1	2
Control Efficiency:	Vented to Carbon	Est. 99%

(See Page Two for Conditions)

THIS PERMIT DOES NOT AUTHORIZE THE EMISSION OF AIR CONTAMINANTS IN EXCESS OF THOSE ALLOWED BY FEDERAL, STATE, OR DISTRICT RULES AND REGULATIONS. Air Quality Management District Rules are available at the District Office or www.arb.ca.gov/drdb/ed/cur.htm

BY Marcella McTaggart
Marcella McTaggart
AIR POLLUTION CONTROL OFFICER

01-22-2010
ISSUE DATE

AC1. The facility shall not discharge from any source whatsoever such quantities of air contaminants or other material which cause injury, detriment, nuisance or annoyance to any considerable number of persons, or to the public, or which endanger the comfort, repose, health or safety of any such persons, or the public, or which cause to have a natural tendency to cause injury or damage to business or property (Rule 205).

AC2. Fugitive emissions from any source shall not be visible at any point beyond the facility's property lines.

AC3. The District shall be notified of the anticipated date of initial startup no less than 30 days prior to the startup date (Rule 501.3.A.3).

AC4. The District shall be notified of the actual date of initial startup within 5 days after such date (Rule 501.3.A.4).

END OF AUTHORITY TO CONSTRUCT

Recommended Permit to Operate Conditions
(This is not a Permit to Operate)

All proposals of the applicant are conditions of approval unless mentioned herein.

GENERAL CONDITIONS

1. If any provision of this permit is found invalid, such finding **SHALL NOT** affect the remaining provisions of this permit.

2. Acceptance of this permit is deemed acceptance of all conditions as specified herein and acceptance of the Rules and Regulations of the El Dorado County AQMD (District).

3. Operation of the equipment **MUST** be conducted in compliance with all data and specifications submitted with the application under which this permit was issued (Rule 501.4 E.).

4. The District reserves the right to amend this permit, upon annual renewal, in order to insure compliance of this facility with District Rules and Regulations (Rule 501.3 F.).

5. Air Quality Management **MUST** be notified **PRIOR** to Change of Ownership, building, erecting, altering or replacing any article, machine, equipment or other contrivance, the use of which may cause, eliminate, reduce, or control the issuance of air contaminants (Rule 501.3).

6. Air Quality Management **MUST** be notified of upset or breakdown (Rule 516).

7. A person **SHALL NOT** discharge from any source whatsoever such

quantities of air contaminants or other material which cause injury, detriment, nuisance or annoyance to any considerable number of persons, or to the public, or which endanger the comfort, repose, health or safety of any such persons, or the public, or which cause to have a natural tendency to cause injury or damage to business or property (Rule 205).

8. For the purpose of enforcing or administering any State or local law, order, regulation, or rule relating to air pollution, the Air Pollution Control Officer and his duly authorized agents **SHALL** have the right of entry to any premises on which an air pollution emission source is located for the purpose of inspecting such source, including securing samples of emissions there from or any records required to be maintained therewith by the District. The Air Pollution Control Officer or his duly authorized agent **SHALL** have the right to inspect sampling and monitoring apparatus as deemed necessary (Rule 509).

9. The owner or operator **SHALL** maintain a legible copy of said permit on the premises of the subject equipment (Rule 501.4 A.).

OPERATING CONDITIONS

10. The SVE collection system **SHALL** have a total VOC hydrocarbon collection efficiency of at least 98%.

11. Influent and effluent vapor samples **SHALL** be collected and analyzed on a monthly basis for total hydrocarbons.

12. When the first canister reaches breakthrough, it **SHALL** be removed from service. The second canister **SHALL** become the new first canister and a new second canister **SHALL** be installed. Carbon replacement operations **SHALL** be conducted in a manner as to minimize fugitive emissions from spent carbon.

13. The owner/operator **SHALL** ensure that system sampling and maintenance are performed on a frequency that is adequate to detect when breakthrough is expected in the first carbon vessel. Breakthrough **SHALL** be defined as the condition when the daily total VOC emission rate from the first carbon vessel exceeds the rate specified below.

EMISSION LIMITATIONS

14. Emissions from the system **SHALL NOT** exceed the following:

Component	**Daily (lb/day)**
Total VOC	9.9

15. No source of emissions **SHALL** be as dark or darker in shade as that designated as No. 1 (20% Opacity) on the Ringlemann Chart for a

period or periods aggregating more than three (3) minutes in any one hour (Rule 202).

RECORD KEEPING AND REPORTING

16. A written emissions report **SHALL** be submitted on a calendar quarter basis. The report **SHALL** be received by the District on or before January 31, April 30, July 31 and October 31 for the previous calendar quarter. The report shall summarize the necessary information in as few pages as possible and shall contain:
    A. Total operating hours each month.
    B. Total volume of air processed each month.
    C. Concentration of volatile contaminates in ppmv or ppbv, as applicable, in each monthly sample.
    D. The emission rates, as applicable, in terms of pounds/hour averaged over the operating hours of each month.
    E. The report submitted on or before January 31 shall include a summary of emissions for the previous calendar year.

17. All record keeping logs **SHALL** be retained for no less than 5 years and **SHALL** be made available to District personnel upon request (Rule 501.5.C.1).

END OF CONDITIONS

City of South Lake Tahoe

1052 Tata Lane
South Lake Tahoe, CA 96150-6323
Office: (530) 542-6010
Fax: (530) 541-7524

INSPECTION RECORD

PERMIT NO: 09120001
APN NO: 02343032100
PERMIT TYPE: Commercial New
PERMIT ISSUED DATE: 12/02/2009

INSPECTION REQUESTS: (530) 542-6017

Building Address: 1024 EMERALD BAY RD

Owner Name: SEVEN SPRINGS LTD PTN
Mailing Address: 5530 BIRDCAGE ST #220 CITRUS HEIGHTS, CA 95610
Phone:
Cell:

Contractor Name: SEVEN SPRINGS LTD PTN
Address: 5530 BIRDCAGE ST #220 CITRUS HEIGHTS, CA 95610
Phone:
Cell:

State License #:
Classification:
City License #:

PROPOSED CONSTRUCTION:
RUN ELECTRICAL FROM TRANSFORMER TO EQUIPMENT COMPOUND, CONSTRUCT TEMPORARY SHED.

	Date	Inspector
TRPA Pre-grade		
TRPA Winterization		
Storm Water		
Temporary Electrical Power		
Jobsite Sanitary Facilities		
Setbacks		
Footings & Reinforcement	12/4/09	DW
Interior Isolated Piers		
Exterior Isolated Piers		
Masonry Pre-grout		
Slab		
Underground Electrical	11/16/2009	DW
Underground Gas Piping		
Underground Plumbing		
Under-floor Electrical		
Under-floor Framing		
Under-floor Gas Piping		
Under-floor HVAC		
Under-floor Plumbing		
Exterior shear walls		
Interior shear walls		
Roof Nailing	2-3-10	Gc
Truss Specifications		
Hold Downs, Uplift & Overturn Hardware		
Rough Electrical		
Rough Gas Piping		
Rough HVAC		
Rough Plumbing		
Rough Install Woodstove or Fireplace		
Exterior Decks & Stairs		
Framing	2-3-10	Gc
Insulation		
Drywall Nailing or Screws		
T-Bar		
Roof Final		
Tag Issued Electrical	3/12/2010	DW
Tag Issued Gas		
Final Electrical	3/12/2010	DW
Final Gas	↓	
Final Fireplace		
Final HVAC		
Final Plumbing		
Final T-24 Energy Regs		
Foundation/attic Ventilation		
Insulation Certificate	N/A	
Smoke Detectors		
Health Department Final	↑	
STPUD Final		
Fire Department Final		
Engineering Department Final		
Planning Department Final		
Building Final		
Foundation	12/4/09	DW

INSPECTIONS:
All inspection requests are required in advance of inspection. Telephone (530) 542-6017, prior to 7:00 a.m. on the date of inspection request. Be prepared to provide the following information: When you want the inspection (date), permit number, street address, type of inspection, your name and telephone number (where you may be reached if there is a problem with the request). If the requested inspection is not ready, call (530) 542-6010 to cancel or a reinspection fee may be charged.

CALLS FOR INSPECTORS – HOURS ARE:
Monday through Friday
7:00 a.m. to 8:00 a.m. and 3:00 p.m. to 3:30 p.m.

City of South Lake Tahoe Building Department
1052 Tata Lane • South Lake Tahoe, CA 96150-6251

CORRECTION NOTICE

Address 1024 EBR Permit Number 09120001

Inspector DW **(530) 542-6010** Date 3/12/2010

☐ THE WORK FOR WHICH AN INSPECTION WAS REQUESTED WAS NOT READY FOR INSPECTION. REINSPECTION FEE SHALL BE PAID AT THE CITY SERVICES CENTER PRIOR TO ANY FURTHER INSPECTIONS BEING SCHEDULED.

THE FOLLOWING ITEMS SHALL BE CORRECTED, REINSPECTED, AND APPROVED PRIOR TO COVERING.

1) Obtain Engineers ok on truss design

ok to final in office

CALL **(530) 542-6017** TO SCHEDULE REINSPECTION

P.O. Box 7358
South lake Tahoe, CA 96158
email: tahoeengineering@yahoo.com
Phone (530) 544-3016
Fax (530) 542-3603

TAHOE ENGINEERING, INC.

Client: E2C REMEDIATION

Project: TEMPORY EQUPT. SHED

Location: 1024 LAKE TAHOE BLVD

REGISTERED PROFESSIONAL ENGINEER
RANDY VOGELGESANG
No. S 3986
Exp. 03-31-11
STRUCTURAL
STATE OF CALIFORNIA
3-12-10

Structural Addendum - See original calculations.

Scope:

Truss Calculations,

This engineer has reviewed the truss calculations by CAPITAL CITY TRUSS, dated 1-13-10. I find them to be in substantial compliance with the design criteria of these structural calculations.

Job # 7091

Randy Vogelgesang S.E.
president

Tahoe Engineering Inc.

◆ *Structural Engineering* ◆

RANDY VOGELGESANG S.E.

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RANDY VOGELGESANG
No. S 3986
Exp. 03-31-11

NOV 1 C 2009

LAKE TAHOE LAUNDRY WORKS
1024 LAKE TAHOE BOULEVARD
SOUTH LAKE TAHOE, CALIFORNIA

TEMPORARY EQUIPMENT SHED

E₂C Remediation
5300 Woodmere Dr., Suite 105
Bakersfield, CA 93313

Phone: (661) 831-6906
Fax: (661) 831-6234

APPROVED
DEC - 2 2009
CITY OF SOUTH LAKE TAHOE
BUILDING DIVISION

GENERAL CONSTRUCTION NOTES:

1. General

a) All work shall conform to the 2006 IBC and applicable local codes. (2007CBC)

b) Where applicable, allowable stresses have been increased 15% (except Alpine and Placer counties) for snow.

c) The Engineer (Tahoe Engineering Inc.) is responsible for the structural items in the plans only. Should any changes be made from the design as detailed in these calculations without written approval from the Engineer then the Engineer assumes no responsibility for the entire structure or any portion there of. Should the results of the calculations not be fully or properly transferred to the plans, the engineer assumes no responsibility for the structure.

d) These calculations are based upon a completed structure. Should an unfinished structure be subjected to loads, Tahoe Engineering Inc. should be consulted for an interim design or if not, will assume no responsibility.

e) The structural details shown on the drawings are typical. Similar details apply to similar conditions.

f) All water proofing and flashing (roofs, foundations, garage floors, etc.) is the responsibility of the contractor or owner.

2. Site Work

a) Assumed soil bearing is determined in accordance with IBC table 1804.2.

b) Building sites are assumed to be drained and free of clay or expansive soil. Any other conditions encountered must be brought to the attention of the Engineer.

c) These calculations assume stable, undisturbed soils and level or stepped footings. Any other conditions should be reported to this Engineer.

d) Finished grade shall slope away from foundation.

e) All finished grade shall slope a minimum of 2% away from foundation for a minimum of 10'.

f) This engineer has not made a geotechnical review of the building site and is not responsible for general site stability or soil suitability.

3. Concrete

a) Concrete shall have a minimum 28 day compressive strength of 2500psi uno. Concrete exposed to freezing and thawing shall be protected as per IBC 1904.2.

b) Concrete shall be air entrained to not less than 5% and not more than 7%.

c) Slabs on grade shall have a minimum of thickness of 4" and shall be placed over 4" minimum of free draining aggregate base compacted to a minimum of 95% relative compaction.

d) Slabs shall be reinforced with 6X6X10WW mesh as per ASTM A185, or with Fibermesh as per manufacturer's specifications, uno. Water proofing of any garage slab over timber framing system is the responsibility of the owner or contractor.

e) Waterproofing of foundations and retaining walls is the responsibility of the owner or contractor.

f) Reinforcement shall be grade 40 as per ASTM A615 uno. Lap reinforcing bar splices 40 bar diameters, uno.

g) all reinforcing steel and anchor bolts shall be accurately located and adequately secured in position before and during placement of concrete.

4. Framing/Lumber

a) Roof Sheathing. Use CDX APA rated sheathing. The thickness is per APA load tables based upon roof live load and framing spacing. Apply face grain (long dimension) perpendicular to framing, stagger panels and nail with 8d @ 6" edge, 12" field. uno. (8d nail diameter = .131")

b) Sheathing shall conform to APA, PS 1. Shear sheathing shall be C-D, C-C, or 303 (T-1-11). Alternate sheathing may be substituted for floors, roofs, and shear walls provided they are structurally equivalent.

c) Headers uno. Headers that are not specifically addressed in the calculations shall be the typical header specified on the plans.

d) Sill plates shall be pressure treated Douglas fir or Hem Fir.

e) Studs shall be stud grade or better. In no instance shall a stud wall be used to retain soil or resist lateral pressure due to snow loading. In the case of snow build up against a stud wall the owner shall be responsible to eliminate snow to stud wall contact.

f) All framing lumber shall be Douglas Fir Larch. uno.

g) All nails shall be common or green sinkers as specified. Where exposed to weather, nails shall be galvanized. 8d nail diameter = .131", 16d sinkers = .148" diameter, 16d common = .162" diameter.

h) All framing members specified in these calculations are minimums, and larger members may be substituted.

i) When using "green" lumber care shall be taken to allow for the effects of shrinkage.

5. Hardware / Structural Steel

a) All hardware called shall be Simpson Strong-tie Co., installed as per manufacturer's specifications. All connectors are to be installed per max load values. All hangers and fasteners shall be coated for compatibility to treated lumber.

b) Bolts shall be ASTM A307 uno.

c) Provide 3x3x1/4" Plate washers on all foundation anchor bolts.

6. Trusses

a) All prefabricated trusses shall be fabricated by a code approved manufacturer. The manufacturer shall supply shop drawings for review by this engineer, and shall be responsible for the design and certification of the trusses.

b) It is the responsibility of the manufacturer to conform the truss design according to the loading conditions as called for in these calculations, such as (1) live and dead loads (including drag loads); (2) truss spacing; (3) spans and eave overhangs; (4) roof pitch; and (5) bearing points.

c) Trusses are to be handled, installed and braced in accordance with HIB-91 of the Truss Plate Institute. Bracing and/or bridging shall be provided for and detailed by truss manufacturer.

d) Truss Loading uno.
TOP CHORD DEAD LOAD = 10 psf
BOTTOM CHORD DEAD LOAD = 10 psf
DRAG LOADS = 2000# min (uno), when drag trusses are specified on plans.

7. Design Loads

a) All design loads are per IBC chapter 16, uno.

b) Snow Loading as per local ordinance and IBC 1608

c) Snow loads in excess of 30psf will be reduced per ASCE-7 12.7.2 when combined with dead loads.

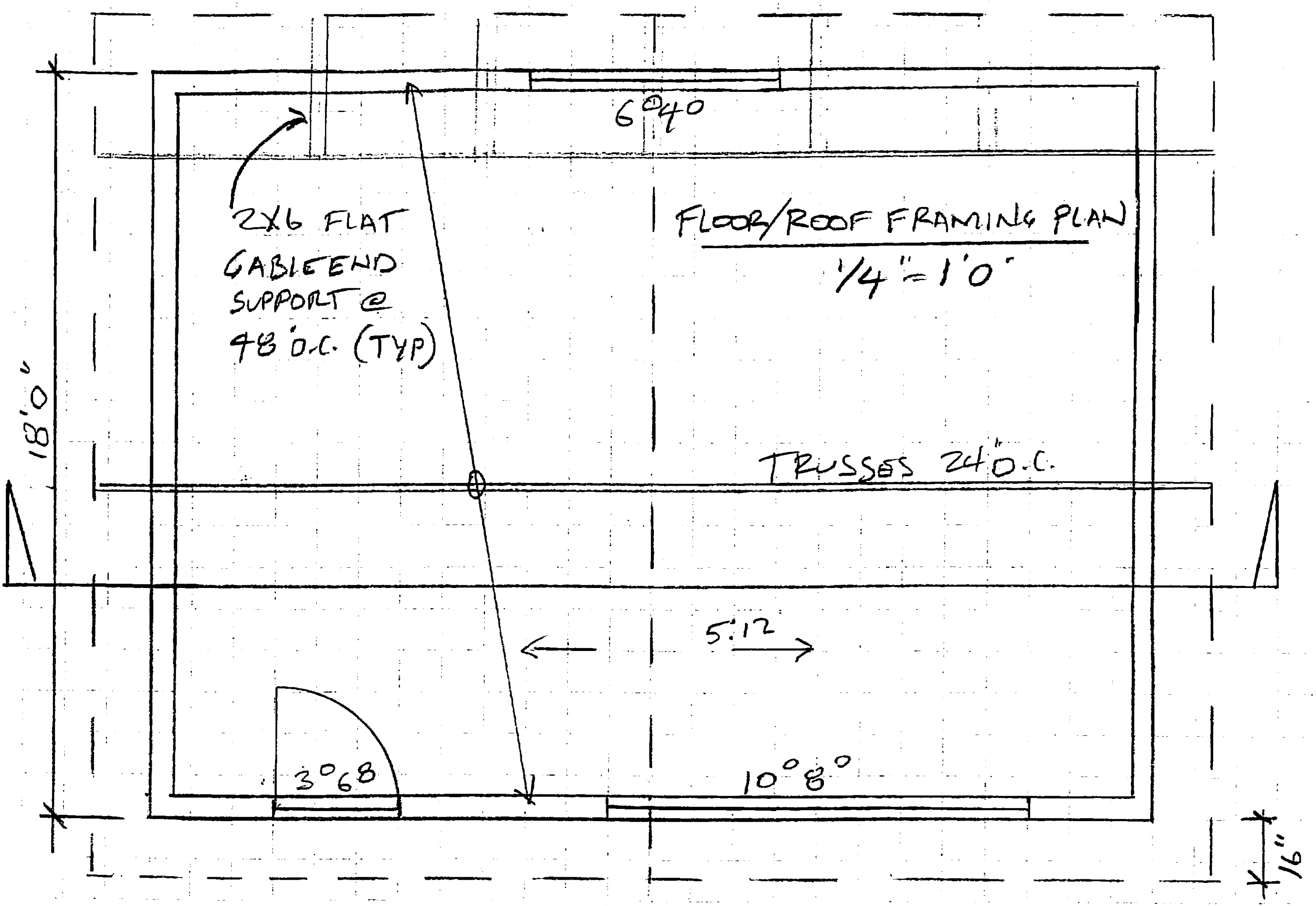
ROOF SHEATHING:

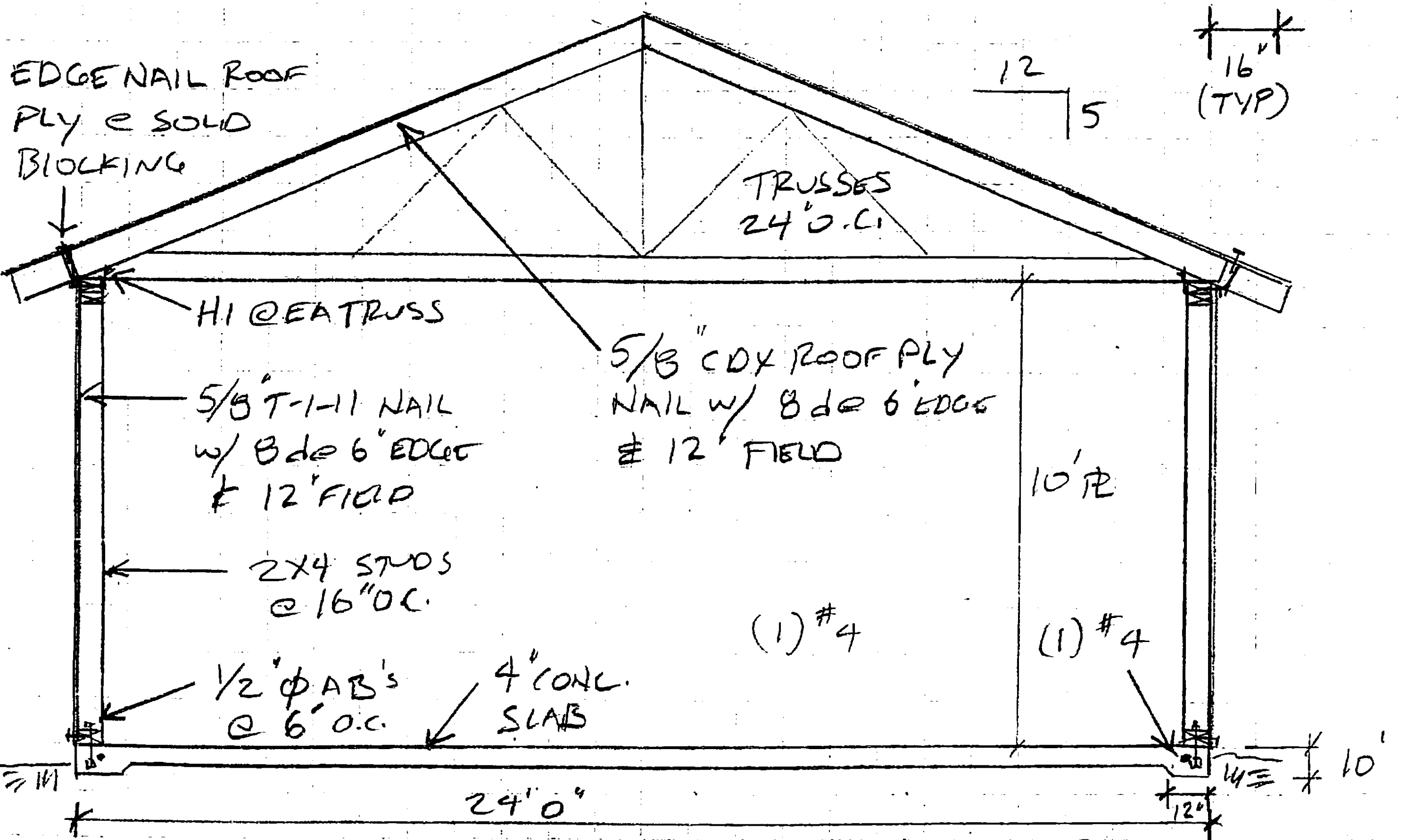
5 / 8 " APA rated sheathing (40 / 20). Apply face grain perpendicular to framing, stagger panels and nail with 8 d common @ 6" edge and 12" field. Edge nail at boundaries, drag trusses, gable end trusses, and blocking.

TYPICAL HEADERS (uno.):

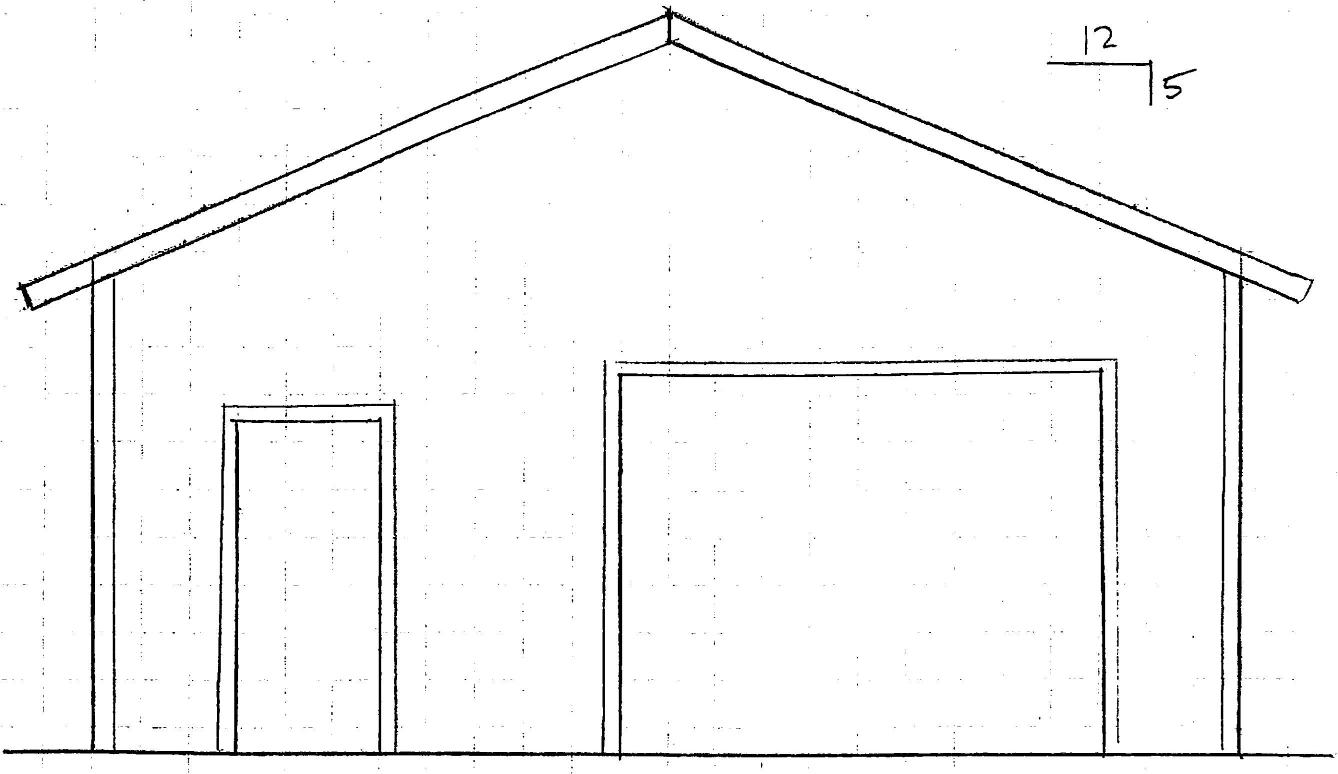
Use 4 x 6 DF# 2, Use (2) trimmers min. at all openings 10'0" and larger.

1/2

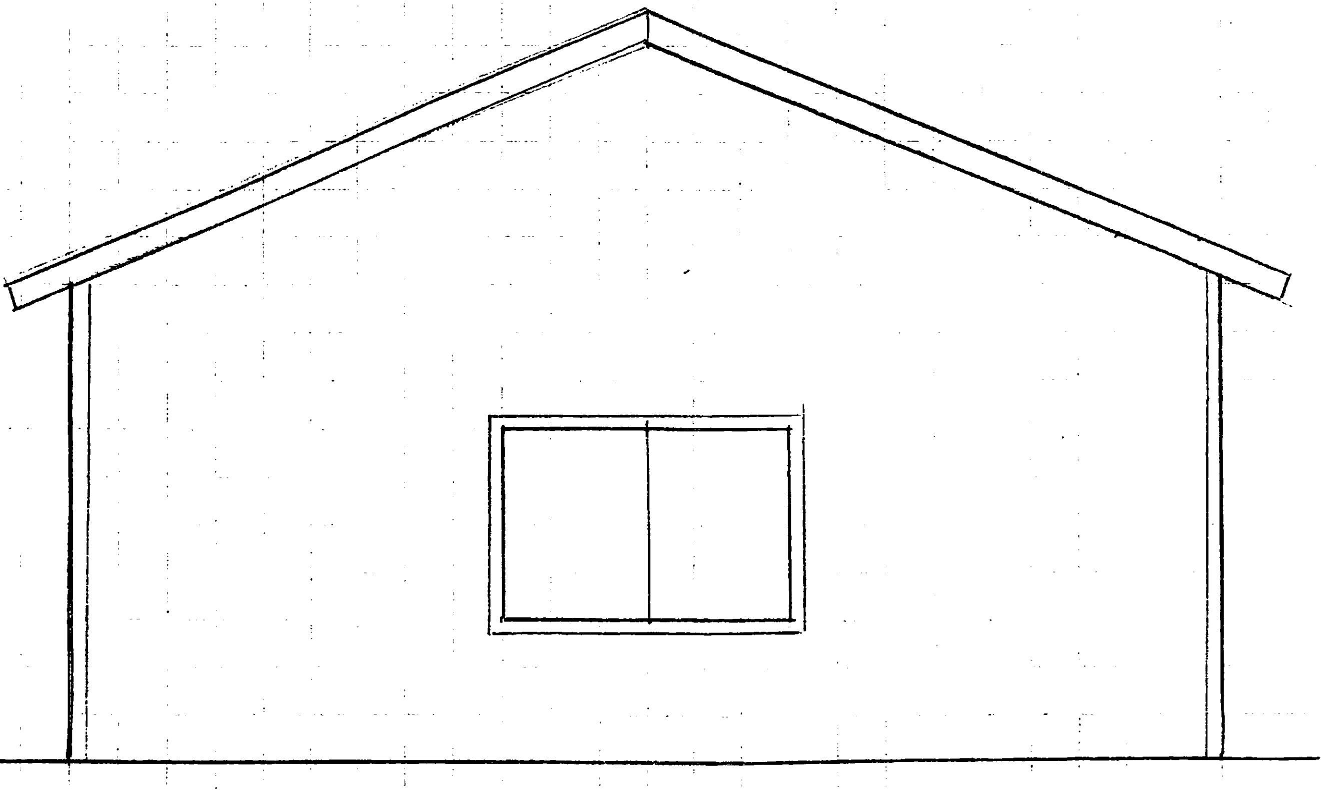




SECTION 1/4" = 1'0"

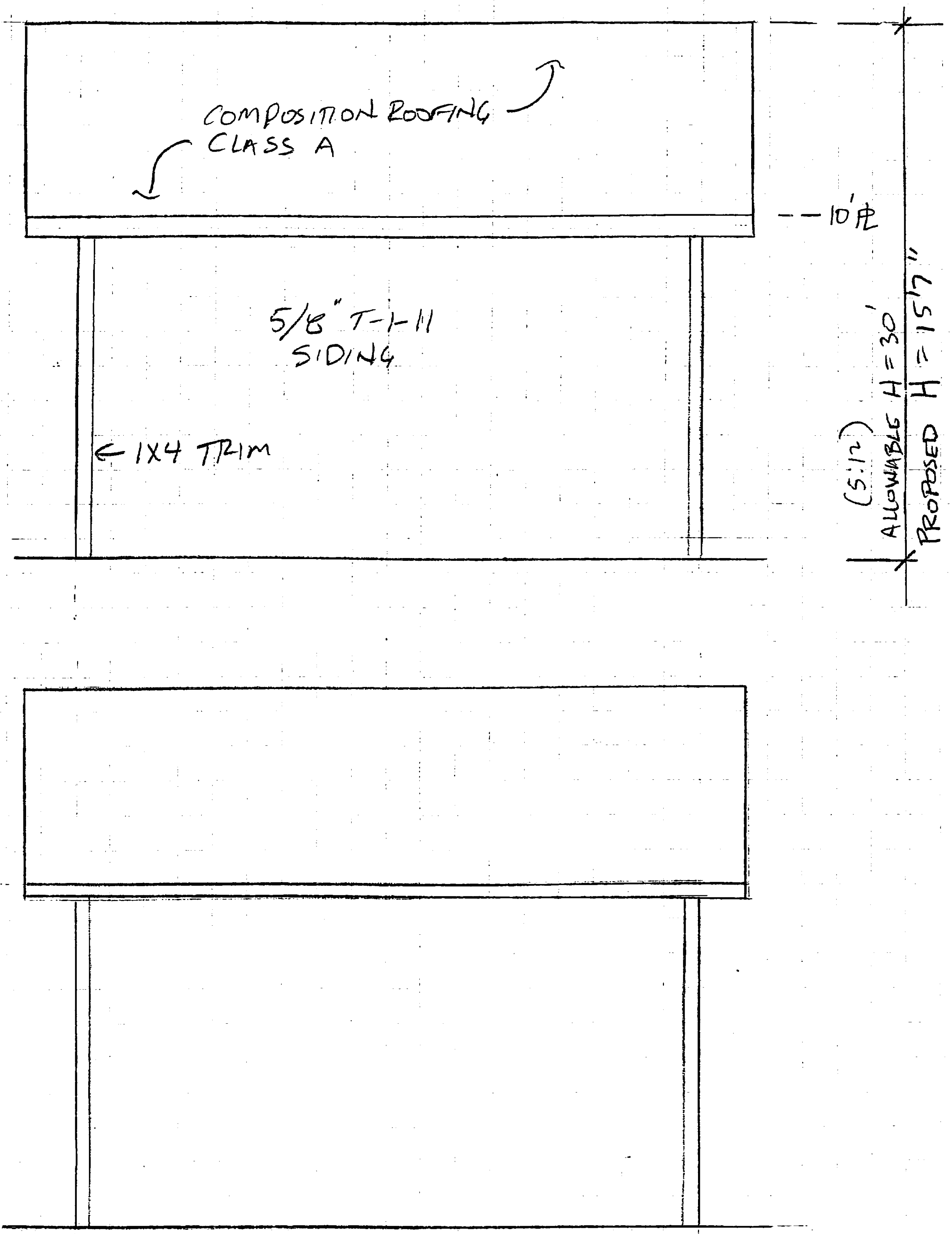


FRONT ELEVATION



BACK ELEVATION

1/4" = 1'0"



LEFT & RIGHT ELEVATIONS

1/4" = 1'0"

Capital City Truss

REGISTERED PROFESSIONAL ENGINEER
BRANDT KENNEDY
No. C 66452
Exp. 06-30-10
CIVIL
STATE OF CALIFORNIA

Job Name: Lake Tahoe Laundry
Address: 1024 Lake Tahoe Blvd.
Job Number: CC-0331.

TRUSS RESPONSIBILITY GUIDELINES

The architect/building designer, engineer of record and the erecting contractor (the framer) *must* read this page and *all* notes on the truss calculations.

These designs are for individual trusses, not the roof truss system. It has been based on the specifications provided to Capital City Truss by the owner, contractor, architect/building designer and the engineer of record, and in accordance with IBC-2006 and TPI design standards. These parties are responsible to provide Capital City Truss with a complete set of construction documents (plans) and updated information and plans after any changes are made which affect the roof system.

The building designer and the engineer of record *must* review and approve these calculations and the truss layout for compliance with local building codes and the approved construction documents. The engineer of record shall be responsible for permanent lateral bracing. This shall be accomplished by: (a) anchorage to solid end walls; permanent diagonal bracing in the plane of the web members; or (c) other means when demonstrated by the engineer of record to provide equivalent bracing.

The contractor must review these drawings for compliance with the construction documents and to determine the effect of the truss layout and each truss on other trades and the effect of the other trades on the trusses. The contractor must provide a set of these drawings to the individual or company responsible for the installation of the trusses. The contractor or framer *must* review these drawings and verify all dimensions, coordinating corrections with Capital City Truss *prior* to truss fabrication. Should this fail to occur and the trusses be fabricated incorrectly due to a lack of thorough review by the contractor/framer, Capital City Truss will not be responsible for costs incurred by truss repairs.

This design assumes that the top chord is laterally braced by the roof or floor sheathing and the bottom cord is laterally braced by a rigid sheathing material directly attached, unless otherwise noted. Bracing shown is for lateral support of truss members only to reduce buckling length*.

DO NOT CUT, MODIFY OR DAMAGE TRUSSES IN ANY WAY WITHOUT PRIOR ATHORIZATION FROM CAPITAL CITY TRUSS! Any party who cuts or damages a truss shall be responsible for obtaining the engineering required for the repair and for the cost of the repair.

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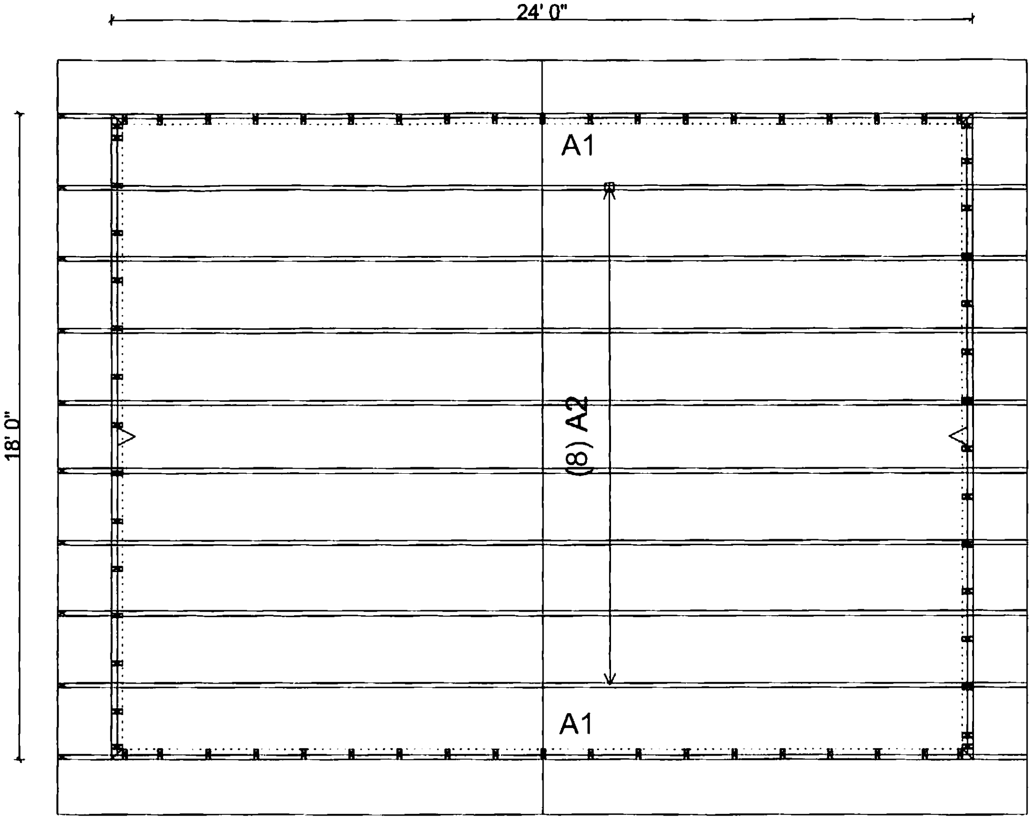
*Handle, install and brace the trusses in accordance with the following standards: 'ANSI-TPI 1', 'WTCA 1'-Wood Truss Council of America Standard Design Responsibilities, 'HANDLING INSTALLING AND BRACING METAL PLATE CONNECTED WOOD TRUSSES'-(HIB-91) and 'HIB-91 SUMMARY SHEET' by TPI. The Truss Plate Institute (TPI) is located at D'Onofrio Drive, Madison, Wisconsin 53719. The American Forest and Paper Association (AFPA) is located at 1111 19th Street, NW, Ste 800, Washington, DC 20036. WCTA is located at 6300 Enterprise Lane, Madison, Wisconsin



105 LBS. Snow Load.

Capital City Truss

Lake Tahoe Laundry

1024 Lake Tahoe Blvd.
S. Lake Tahoe, Ca.

SALES REP: MK
DUE DATE: 11/25/09
DSGNR/CHKR: BC / .

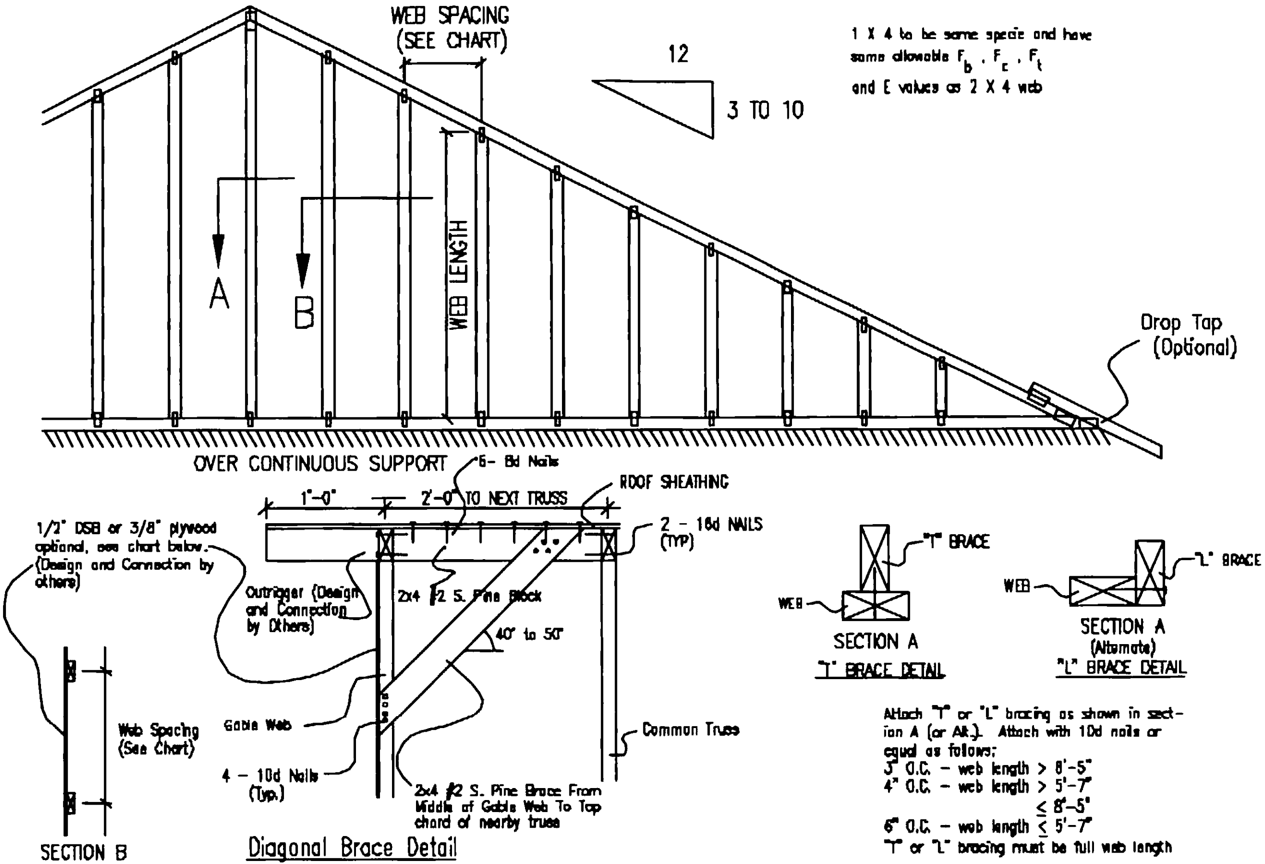
TC Live	105.00 psf
TC Dead	10.00 psf
BC Live	0.00 psf
BC Dead	10.00 psf
Total	125.00 psf

WO#: CC-0331
SCALE: 3/16" - 1'
Date: 1/12/2010 9:33

DurFac-Lbr : 1.15
DurFac-Plt : 1.15
O.C. Spacing: 2
Design Spec:
#Tr/#Cfg: 10 / 2

GABLE BRACING DETAIL

DWG # TX99320029-001



Attach "T" or "L" bracing as shown in section A (or Alt.). Attach with 10d nails or equal as follows:
3" O.C. - web length > 8'-5"
4" O.C. - web length > 5'-7"
$\leq$ 8'-5"
6" O.C. - web length $\leq$ 5'-7"
"T" or "L" bracing must be full web length

Notes:

Differential web spacing may be used on the same design to optimize bracing requirements.

Apply all nails in accordance to NDS-97 section 12.
All nails are common wire nails or equivalent.

Minimum Lumber Size and Grade:

Top Chord	See Structural Engineered Drawing
Bot. Chord	See Structural Engineered Drawing
Webs	Refer to chart below for grade

Bracing (designed by others) is required at the truss bottom to resist horizontal forces from the wall. The determination of all lateral forces is beyond the scope of the component fabricator and is the building designer's responsibility

Design meets SBC-97 code requirements and Deemed to Comply requirements. Maximum wind speed is 100 mph. Building is enclosed, exposure category C, classification 1. Designed for end zone and hurricane/ocean line conditions. Importance factor is 1.00 and wind load duration factor is 1.60. No diaphragm loads are considered. Maximum wind mean roof height is 25 feet. Wind uplift is 150 PLF.

WEB and "T" or "L" LUMBER SIZE AND GRADE		MAXIMUM WEB LENGTH WITHOUT BRACING		MAXIMUM WEB LENGTH WITH 2X4 DIAG BRACE		MAXIMUM WEB LENGTH WITH 1X4 "L" BRACE		MAXIMUM WEB LENGTH WITH 2X4 "T" or "L" BRACE	
		Sheathed/Unsheathed *		Sheathed/Unsheathed *		Sheathed/Unsheathed *		Sheathed/Unsheathed *	
	WEB SPACING	16" O.C.	24" O.C.	16" O.C.	24" O.C.	16" O.C.	24" O.C.	16" O.C.	24" O.C.
2X4 #3 S. PINE		5'-2"/5'-1"	4'-2"/4'-1"	10'-4"/10'-2"	8'-4/8'-2"	7'-0"/6'-7"	5'-10"/5'-4"	8'-9"/8'-9"	7'-2"/7'-2"
2X4 #2 ND S. PINE		6'-5"/6'-3"	5'-3"/5'-2"	11'-10"/11'-10"	10'-6"/10'-4"	8'-10"/8'-4"	7'-4"/6'-9"	11'-1"/11'-1"	9'-0"/9'-0"
2X4 #2 S. PINE		6'-7"/6'-3"	5'-5"/5'-4"	11'-10"/11'-10"	10'-10"/10'-8"	9'-3"/8'-9"	7'-9"/7'-2"	11'-8"/11'-8"	9'-8"/9'-6"
2X4 #2 Dense S. Pine		6'-11"/6'-3"	5'-8"/5'-8"	11'-10"/11'-10"	11'-4"/11'-4"	9'-11"/9'-4"	8'-3"/7'-8"	12'-5"/12'-5"	10'-2"/10'-2"

* sheathing plus vertical section / vertical section only

TRUSWAL
SYSTEMS
TRUSWAL SYSTEMS CORPORATION

WARNING Read all notes on this sheet and give a copy of it to the erecting contractor.
This design is for an individual building component. It has been based on specifications provided by the component manufacturer and done in accordance with the latest versions of TPI and AFPA design standards. No responsibility is assumed for dimensional accuracy. Dimensions are to be verified by the component manufacture and/ or building designer prior to fabrication. The building designer shall ascertain that the loads utilized on this design meet or exceed the loading imposed by the local building code. It is assumed that the top chord is laterally braced by the roof or floor sheathing and the bottom chord is laterally braced by a rigid ceiling material directly attached. Bracing shown is for lateral support of component members only to reduce buckling length. This component shall not be placed in any environment that will cause the moisture content of the wood to exceed 19% and / or cause connector plate corrosion. Fabricate, handle, install and brace this truss in accordance with the following standards: "TRUSCOM MANUAL", by Truswal, "QUALITY CONTROL STANDARD FOR METAL PLATE CONNECTED WOOD TRUSSES" - (QST-88). "HANDLING INSTALLING AND BRACING METAL PLATE CONNECTED WOOD TRUSSES" - (HIB-91) AND "HIB-91 SUMMARY SHEET" by TPI. The Truss Plate Institute (TPI) is located at 583 D' Onofrio Drive, Madison, Wisconsin 53719. The American Forest and Paper Association (AFPA) is located at 1250 Connecticut Ave, NW, Ste 200, Washington, DC 20036.

STANDARD

Duration factor: 1.25
Repetitive member bending: 1.00
O.C. Spacing: 2-0-0
Max loading (PSF): TL-30 TD-15 BD-10
Design specs: SBC 97, NDS 97, TPI 95
r08.05.99

Job Name: Lake Tahoe Laundry **ADDR: 1024 Lake Tahoe Blvd.** **Truss ID: A1** **Qty: 2**

BRG	X-LOC	REACT	SIZE	REQ'D
1	0- 3-12	1565	7.50"	1.50"
2	2- 6- 4	232	5.50"	1.50"
3	4- 5- 0	227	5.50"	1.50"
4	6- 3-12	226	5.50"	1.50"
5	8- 2- 8	1842	5.50"	1.50"
6	9- 8- 4	208	5.50"	1.50"
7	11- 2- 0	211	5.50"	1.50"
8	12-10- 0	211	5.50"	1.50"
9	14- 3-12	208	5.50"	1.50"
10	15- 9- 8	1842	5.50"	1.50"
11	17- 8- 4	226	5.50"	1.50"
12	19- 7- 0	227	5.50"	1.50"
13	21- 5-12	232	5.50"	1.50"
14	23- 8- 4	1565	7.50"	1.50"

BRG REQUIREMENTS shown are based ONLY on the truss material at each bearing

MAX DEFLECTION (span) :
L/999 MEM 3-4 (LIVE) LC 22
L= -0.12" D= -0.01" T= -0.13"

MAX DEFLECTION (cant) :
L/437 MEM 5-OR (LIVE) LC 53
L= -0.05" D= 0.00" T= -0.05"

CRITICAL MEMBER FORCES:

TC	COMP.(DUR.)/	TENS.(DUR.)	CSI
OL- 1	0(1.15)/	140(1.15)	0.20
1-2	-1326(1.15)/	246(1.15)	0.61
2-3	-478(1.15)/	313(1.15)	0.61
3-4	-478(1.15)/	313(1.15)	0.61
4-5	-1326(1.15)/	246(1.15)	0.61
5-OR	0(1.15)/	140(1.15)	0.20

BC	COMP.(DUR.)/	TENS.(DUR.)	CSI
6-7	-218(1.15)/	318(1.15)	0.22
7-8	/		0.07
8-9	/		0.06
9-10	/		0.07
10-11	/		0.22

WB	COMP.(DUR.)/	TENS.(DUR.)	CSI
2-7	-1716(1.15)/	505(1.60)	0.49
3-7	-745(1.15)/	182(1.60)	0.93
3-10	-770(1.15)/	187(1.60)	0.98
4-10	-1716(1.15)/	505(1.60)	0.49
8-12	-33(1.15)/	7(1.60)	0.01
9-13	-33(1.15)/	7(1.60)	0.01

TC	2x6	DFL	1800F-1.6E
BC	2x4	HF	#2
WEB	2x4	HF	STAND/STUD
GBL BLK	2x4	HF	STAND/STUD

Lumber shear allowables are per NDS.
Refer to Joint QC Detail Sheet for Maximum Rotational Tolerance used
THIS DESIGN IS THE COMPOSITE RESULT OF MULTIPLE LOAD CASES.
Loaded for 10 PSF concurrent BCLL.
Loaded for 200 lb non-concurrent moving BCLL.
Mark all interior bearing locations.
Install interior support(s) before erection.
Gable verticals are 2x 4 web material spaced at 16.0 " o.c. unless noted otherwise.
Top chord supports 24.0 " of uniform load at ** psf live load and 10 psf dead load. Additional design considerations may be required if sheathing is attached.
Brace gable studs in accordance with Truswal Systems standard gable bracing details and charts.
This truss requires adequate sheathing, as designed by others, applied to the truss face providing lateral support for webs in the truss plane and creating shear wall action to resist diaphragm loads.

\+ +

OVERHANG(S) MAY BE SHORTENED UP TO 3" MAX.!
Overhang Soffit loading = 0.0 psf

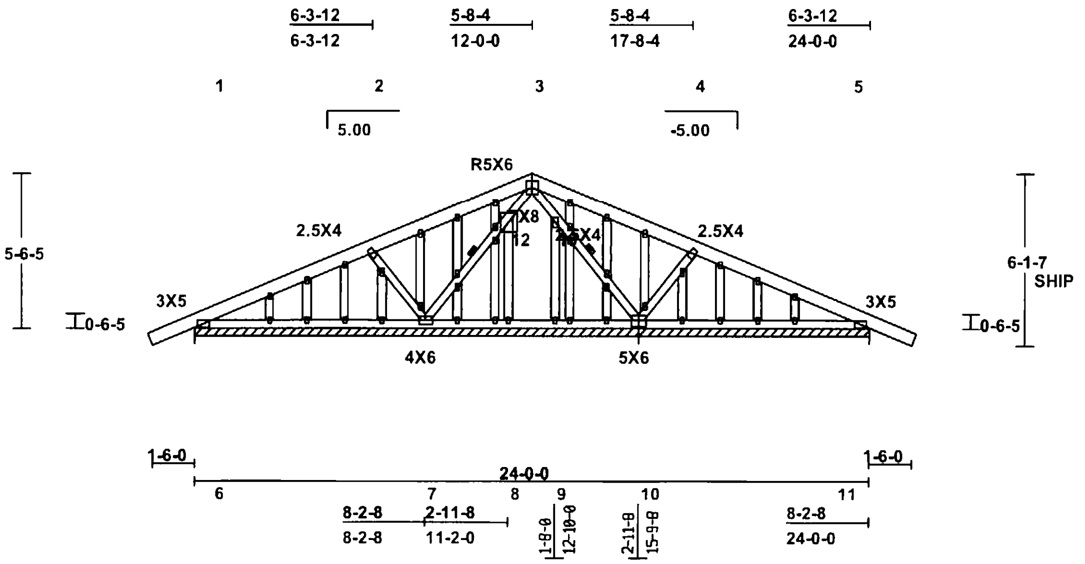
\+ +

☒ Web bracing required at each location shown. See standard details (TX01087001-001 rev1). Refer to BCSI for proper required lateral restraint.
Designed per ANSI/TPI 1-2002
This design does not account for long term time dependent loading (creep). Building Designer must account for this.
IRC/IBC truss plate values are based on testing and approval as required by IBC 1703 and ANSI/TPI and are reported in available documents as ER-1607 and ESR-1118.
ASCE7-05 SNOW LOAD DESIGN CRITERIA:
Pg = 105 psf, Ce = 1.1, I = 1.1, Ct = 1.18
Pfmin = 22 psf
20 psf bottom chord live load NOT required on this truss, per IBC/IRC requirements for attics with limited storage.
~FOR FUTURE USE - CUSTOMER USER NOTE #390

UPLIFT REACTION(S) :

Support	C&C Wind	Non-Wind
1	-466 lb	
2	-5 lb	-26 lb
5	-484 lb	
10	-484 lb	
13	-5 lb	-26 lb
14	-466 lb	

This truss is designed using the CBC-07 / ASCE7-05 Specification
Bldg Enclosed = Yes, Importance Factor = 1.00
Truss Location = End Zone
Hurricane/Ocean Line = No , Exp Category = C
Bldg Length = 99.00 ft, Bldg Width = 58.00 ft
Mean roof height = 22.76 ft, mph = 105
ASCE7 II Standard Occupancy, Dead Load = 10.2 psf
Designed as Main Wind Force Resisting System - Low-rise and Components and Cladding
Tributary Area = 48 sqft



TYPICAL PLATE : 1.5X3

OVER CONTINUOUS SUPPORT

All plates are 20 gauge Truswal Connectors unless preceded by "MX" for HS 20 gauge or "H" for 16 gauge, positioned per Joint Detail Reports available from Truswal software, unless noted.

Scale: 5/32" = 1'

Capitol City Truss
inc.
85 Industrial Parkway
Mound House, Nv. 89706

REGISTERED PROFESSIONAL ENGINEER
BRANDT KENNEDY
No. C 66452
Exp. 06-30-10
CIVIL
STATE OF CALIFORNIA

Cust:
WO: CC-0331 Date: 1/12/2010 09:30:59
Dsgnr: BC #LC = 55 WT: 207#

TC Live	105.00 psf	LiveDur L=1.15 P=1.15
TC Snow	105.00 psf	SnowDur L=1.15 P=1.15
TC Dead	10.00 psf	Rep Mbr Bnd / Comp / Tens
BC Live	0.00 psf	1.15 / 1.10 / 1.10
BC Dead	10.00 psf	O.C.Spacing 2- 0- 0

Bldg Code: CBC-07
DEFL RATIO: L/240 TC: L/240

01/13/2010

Job Name: Lake Tahoe Laundry **ADDR: 1024 Lake Tahoe Blvd.** **Truss ID: A2** **Qty: 8**

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BRG      X-LOC   REACT  SIZE    REQ'D
  1    0- 1-12   3605  3.50"    3.50"
  2   23-10- 4   3605  3.50"    3.50"
      BRG REINFORCEMENT:
BRG TYPE FACES NAILS LENGTH
  1 TBE4 See Simpson Catalog
  2 TBE4 See Simpson Catalog
BRG REQUIREMENTS shown are based ONLY
on the truss material at each bearing
MAX DEFLECTION (span) :
L/771 MEM  7-8  (LIVE) LC 24
L= -0.37"  D= -0.08"  T= -0.45"
MAX DEFLECTION (cant) :
L/361 MEM  5-OR (LIVE) LC 53
L= -0.06"  D=  0.01"  T= -0.04"
CRITICAL MEMBER FORCES:
  TC    COMP.(DUR.)/  TENS.(DUR.)  CSI
OL- 1       0(1.25)/    140(1.15) 0.20
 1-2    -5747(1.15)/   1255(1.60) 0.51
 2-3    -4935(1.15)/   1169(1.60) 0.64
 3-4    -4935(1.15)/   1169(1.60) 0.64
 4-5    -5747(1.15)/   1255(1.60) 0.51
 5-OR       0(1.15)/    140(1.15) 0.20

  BC    COMP.(DUR.)/  TENS.(DUR.)  CSI
 6-7    -1024(1.60)/   5069(1.15) 0.70
 7-8     -530(1.60)/   3424(1.15) 0.51
 8-9    -1024(1.60)/   5069(1.15) 0.70

  WB    COMP.(DUR.)/  TENS.(DUR.)  CSI
 2-7    -1560(1.15)/    452(1.60) 0.45
 3-7     -364(1.60)/   1737(1.15) 0.89
 3-8     -364(1.60)/   1737(1.15) 0.89
 4-8    -1560(1.15)/    452(1.60) 0.45
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TC                2x6  DFL  1800F-1.6E
BC                2x4  DFL  2100F-1.8E
WEB               2x4  HF   STAND/STUD
Lumber shear allowables are per NDS.
THIS DESIGN IS THE COMPOSITE RESULT OF
 MULTIPLE LOAD CASES.
Loaded for 10 PSF concurrent BCLL.
Loaded for 200 lb non-concurrent moving
 BCLL.
ASCE7-05 SNOW LOAD DESIGN CRITERIA:
 Pg = 105 psf, Ce = 1.1, I = 1.1, Ct = 1.18
  Pfmin =  22 psf
+ + + + + + + + + + + + + + + + + + + + + +
 OVERHANG(S) MAY BE SHORTENED UP TO 3" MAX.!
 Overhang Soffit loading =  0.0 psf
+ + + + + + + + + + + + + + + + + + + + + +
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Designed per ANSI/TPI 1-2002
This design does not account for long term
  time dependent loading (creep). Building
  Designer must account for this.
Refer to Joint QC Detail Sheet for
   Maximum Rotational Tolerance used
IRC/IBC truss plate values are based on
testing and approval as required by IBC 1703
and ANSI/TPI and are reported in available
documents as ER-1607 and ESR-1118.
+ + + + + + + + + + + + + + + + + + + + + + +
See Simpson catalog for Truss Bearing
 Enhancer installation notes. TBE shown is
 based ONLY on truss chord material.
+ + + + + + + + + + + + + + + + + + + + + + +
 20 psf bottom chord live load NOT required
on this truss, per IBC/IRC requirements for
attics with limited storage.
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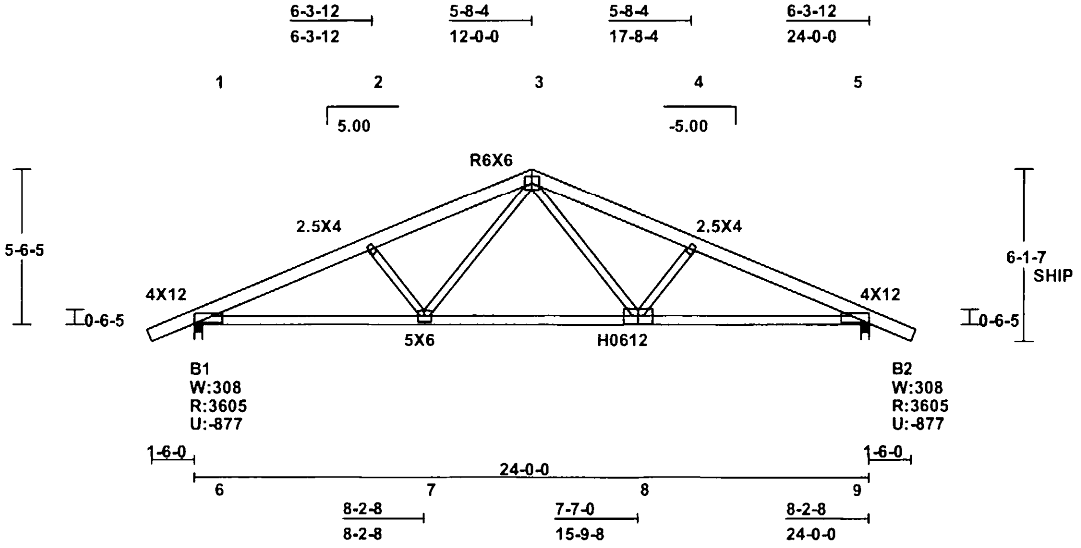
UPLIFT REACTION(S) :
Support   C&C Wind   Non-Wind
    1      -877 lb
    2      -877 lb
This truss is designed using the
CBC-07 / ASCE7-05 Specification
Bldg Enclosed = Yes, Importance Factor  = 1.00
Truss Location = End Zone
Hurricane/Ocean Line = No , Exp Category = C
Bldg Length =  99.00 ft, Bldg Width =  58.00 ft
Mean roof height =  22.76 ft, mph  =  105
ASCE7 II  Standard Occupancy, Dead Load =  10.2 psf
Designed as Main Wind Force Resisting System
 - Low-rise and Components and Cladding
Tributary Area = 48 sqft
```



All plates are 20 gauge Truswal Connectors unless preceded by "MX" for HS 20 gauge or "H" for 16 gauge, positioned per Joint Detail Reports available from Truswal software, unless noted. Scale: 5/32" = 1'

Capitol City Truss inc.
85 Industrial Parkway
Mound House, Nv. 89706

REGISTERED PROFESSIONAL ENGINEER
BRANDT KENNEDY
No. C 66452
Exp. 06-30-10
CIVIL
STATE OF CALIFORNIA

Cust:
WO: CC-0331 Date: 1/12/2010 09:31:00
Dsgnr: BC #LC = 55 WT: 153#

TC Live 105.00 psf	LiveDur L=1.15 P=1.15
TC Snow 105.00 psf	SnowDur L=1.15 P=1.15
TC Dead 10.00 psf	Rep Mbr Bnd / Comp / Tens
BC Live 0.00 psf	1.15 / 1.10 / 1.10
BC Dead 10.00 psf	O.C.Spacing 2- 0- 0
Bldg Code: CBC-07	DEFL RATIO: L/240 TC: L/240

01/13/2010

APPENDIX B

Offsite Well LW-MW-12S Access Agreement

DE DUFFNER ENGINEERING

Robert W. Cornell
Aeronautical Engineer

491 Batusrol Dr.
Aptos, CA 95003
(831) 688-5220 Office
(831) 688-5220 Fax
(831) 252-4911 Cell
rcornell@duffnerengineering.com
www.duffnerengineering.com

Lake Tahoe Laundry Works Soil & Groundwater Remediation Project
1024 Lake Tahoe Blvd., South Lake Tahoe, California
INDEMNIFICATION AND ACCESS AGREEMENT

This Indemnification and Access Agreement is entered into on the last date set forth below, by and between Bruell Properties Aptos CA, the owner of the property located at 1950 Lake Tahoe Blvd., South Lake Tahoe, California, "owner", and Environmental Engineering, Consulting, and Remediation, Inc., dba E_2C Remediation ("E_2C"), a California corporation and is based on the following facts and assumptions.

WHEREAS, "Owner" owns certain real property located at
1950 Lake Tahoe Blvd., South Lake Tahoe, California (the "Property"); and

WHEREAS, "Owner" occupies or leases said "Property"; and

WHEREAS, "E_2C" is conducting certain soil and groundwater investigation and remediation at 1034 Lake Tahoe Blvd. within the City of South Lake Tahoe; and

WHEREAS, as part of such investigation and remediation, "The responsible parties at 1024 Lake Tahoe Blvd. are required to install a groundwater monitoring well on the 1950 Lake Tahoe Blvd. property, develop and collect quarterly water samples from the well, survey the well for latitude, longitude and elevation, and property abandon (destroy the well) upon completion of monitoring and/or remediation activities at 1024 Lake Tahoe Blvd., South Lake Tahoe, California under the supervision and oversight of the State of California Regional Water Quality Control Board – Lahontan Region, South Lake Tahoe Office (RWQCB); and,

WHEREAS, E_2C Remediation will remove any investigation-derived waste (e.g., soil cuttings from well installation and/or purge water from groundwater sampling) immediately upon completion of any phase of the work; and,

WHEREAS, the duration of the anticipated water sampling events (after well installation) will be approximately 4.5 years; and,

WHEREAS, in order for "E_2C" to accomplish this work, it will be necessary to access said "Property" initially to install the well, develop the well and survey the well and once per quarter purge the well, then collect a groundwater sample from the well; and

WHEREAS, "E_2C" seeks authorization from the "Owner" to gain access to the "Property"" in exchange for the commitments on the part of "E_2C" described below; and

WHEREAS, "Owner" intends to convey to "E_2C" a right of access to the "Property" for the sole purpose of installing the well, developing the well, surveying the well and collection of the water sample on a quarterly basis.

NOW, THEREFORE, Owner, and E_2C hereby agree as follows:

Section 1. The above recitals are true and correct.

Section 2. "Owner" hereby grants to "E_2C" on its behalf and on behalf of E_2C's officers, employees, contractors, subcontractors, authorized agents, successors and assigns, a non-revocable license to gain access to the "Property" for the purpose of performing and completing the work identified above for the initial work and on a quarterly basis until the contemplated soil and groundwater remediation is complete.

Section 3. "E_2C" shall indemnify and hold "Owner", their officers, directors and stockholders harmless from any and all claims, demands, damages, lawsuits, actions, liabilities, causes of action, and judgments which they may be required to pay by reason of any damages, consequential damage, interfere, injury, or death to any person, property, or business suffered by any person, firm or other entity as a result of any negligent acts or omissions of "E_2C" or anyone acting on its behalf in carrying out the activities permitted herein.

Section 4. "E_2C" further agrees to remedy any damages to the "Property" which are caused by its entry on the "Property" or caused by operation activities.

Section 5. If any party commences an action or brings any proceeding against the other to enforce any of the terms hereof, or because of any breach by any party of any of the terms hereof, the losing or defaulting party shall pay to the prevailing party reasonable attorneys' fees, costs, and expenses incurred with connection with the prosecution or defense of such action.

Section 6. "E_2C" agrees to comply with all applicable state, federal and local requirements for the performance of the contemplated work.

Section 7. In order to terminate this agreement, "E_2C" must give "Property" owner at least 15 days written notice.

Section 8. This Agreement may be executed in counterparts, each of which shall be deemed an original.

Executed by the parties hereto as set forth below.

"Property" Owner
Dated: 23 OCTOBER 2009

By: CORNELL PROPERTIES By R. CORNELL Partner
"Property" Owner

E_2C Remediation
Dated:________________

By: ____________________________
Philip Goalwin, Professional Geologist No. 4779
President, E_2C Remediation

APPENDIX C

Offsite Well OS-1 CALTRANS Encroachment Permit

STATE OF CALIFORNIA • DEPARTMENT OF TRANSPORTATION

ENCROACHMENT PERMIT

TR-0120 (REV 6/200)

Permit No. 0310-6MC0136

Dist/Co/Rte/PM 03-ED-89-8.61/8.61

Date March 18, 2010

Fee Paid $ 492.00

Deposit $ 1000.00

Performance Bond Amount (1) $ N/A

Payment Bond Amount (2) $ N/A

Bond Company

Bond Number (1)

Bond Number (2)

In compliance with (Check one):

☒ Your application of March 1, 2010

☐ Utility Notice No. ______ of ______

☐ Agreement No. ______ of ______

☐ R/W Contract No. ______ of ______

TO:

Seven Springs, LLC
c/o E2C
5300 Woodmere Dr. Suite 105
Bakersfield, CA 93313
Attn: William A. Lawson
(661)831-6906

Ref No. Plan attached.

, PERMITTEE

and subject to the following, PERMISSION IS HEREBY GRANTED to:

Install 3/4-inch monitoring well approximately 300 feet north of State Highway 50 on the east side of State Highway 89 in the City of South Lake Tahoe. Monitoring well will be installed at back of sidewalk, top of handicap ramp.

1. Contact the Caltrans representative TWO (2) working days (minimum) prior to installation and prior to performing readings after installation. If traffic control is needed during any activity, contact Caltrans representative SEVEN (7) working days prior.
2. Proposed monitoring well should not impact existing State-owned structures or facilities.
3. When no longer needed, the well shall be removed and abandoned in accordance with Department of Water Resources' standards and in a manner acceptable to the Caltrans representative.

Continue on Page 2.

THIS PERMIT IS NOT A PROPERTY RIGHT AND DOES NOT TRANSFER WITH THE PROPERTY TO A NEW OWNER.

The following attachments are also included as part of this permit *(Check applicable)*:

☒ Yes	☐ No	General Provisions
☐ Yes	☒ No	Utility Maintenance Provisions
☒ Yes	☐ No	Special Provisions **TRAFFIC CONTROL, SWSP, MCP**
☐ Yes	☒ No	A Cal-OSHA permit, if required: Permit No. ______
☐ Yes	☒ No	As-Built Plans Submittal Route Slip for Locally Advertised Projects
☐ Yes	☒ No	Storm Water Pollution Protection Plan

In addition to fee, the permittee will be billed actual costs for:

☐ Yes	☒ No	Review
☐ Yes	☒ No	Inspection
☒ Yes	☐ No	Field work

(If any Caltrans effort expended)

☐ Yes ☒ No The information in the environmental documentation has been reviewed and considered prior to approval of this permit.

This permit is void unless the work is completed before April 1, 2012

This permit is to be strictly construed and no other work other than specifically mentioned is hereby authorized.
No project work shall be commenced until all other necessary permits and environmental clearances have been obtained

Tara McCann-Mook
3165 Gold Valley Drive
Rancho Cordova, CA 95742 - 6588
Cellular (530) 755-7371
cc: Rusty Grout Maint-Sunrise Region

APPROVED:

JODY JONES, District Director

BY: Berinder Dhaliwal

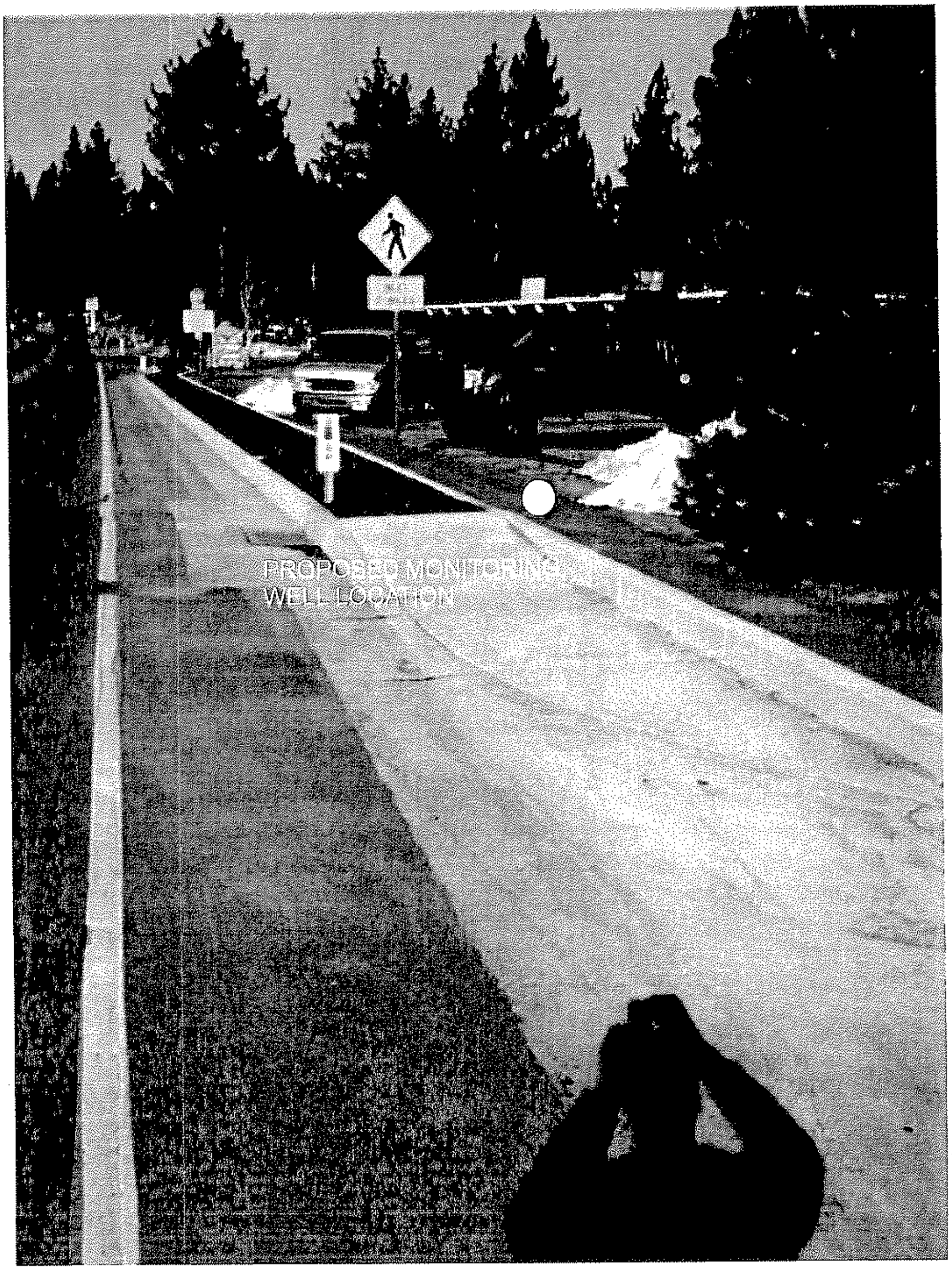
SHAUN A. RICE, Chief-Encroachment Permits Branch

ADA Notice For individuals with sensory disabilities, this document is available in alternate formats. For information call (916) 653-3657 or TDD (916) 654-3880 or write Records and Forms Management, 1120 N Street, MS-89, Sacramento, CA 95814.

PERMISSIONS Conditions Continued:

4. Permittee has paid a **$1,000.00** cash deposit in lieu of a performance bond. The cash deposit will be retained by the State until the well has been removed or abandoned in accordance with Department of Water Resources' standards and to the satisfaction of the Caltrans representative, at which time the cash deposit will be refunded.
5. Copies of all monitoring reports shall be sent to Caltrans District 3 Environmental Branch, Attention: Doug Coleman, P.O. Box 911, Marysville, CA 95901.
6. This Permit expires 04/01/2012. If the well has not been removed or abandoned prior to the expiration date, the Permittee shall apply for a time extension and pay the applicable Rider fee.

Permittee shall contact the Caltrans representative, Permit Inspector **Tara McCann-Mook**, Cell **(530) 755-7371**, SEVEN (7) working days prior to commencing initial work, to arrange a pre-job meeting. A 24-hour notification before restarting work shall be strictly adhered to. All work shall be conducted and completed in accordance with Department of Water Resources' standards and to the satisfaction of Caltrans representative.



E₂C Remediation

5300 Woodmere Dr., Suite 105
Bakersfield, CA 93313

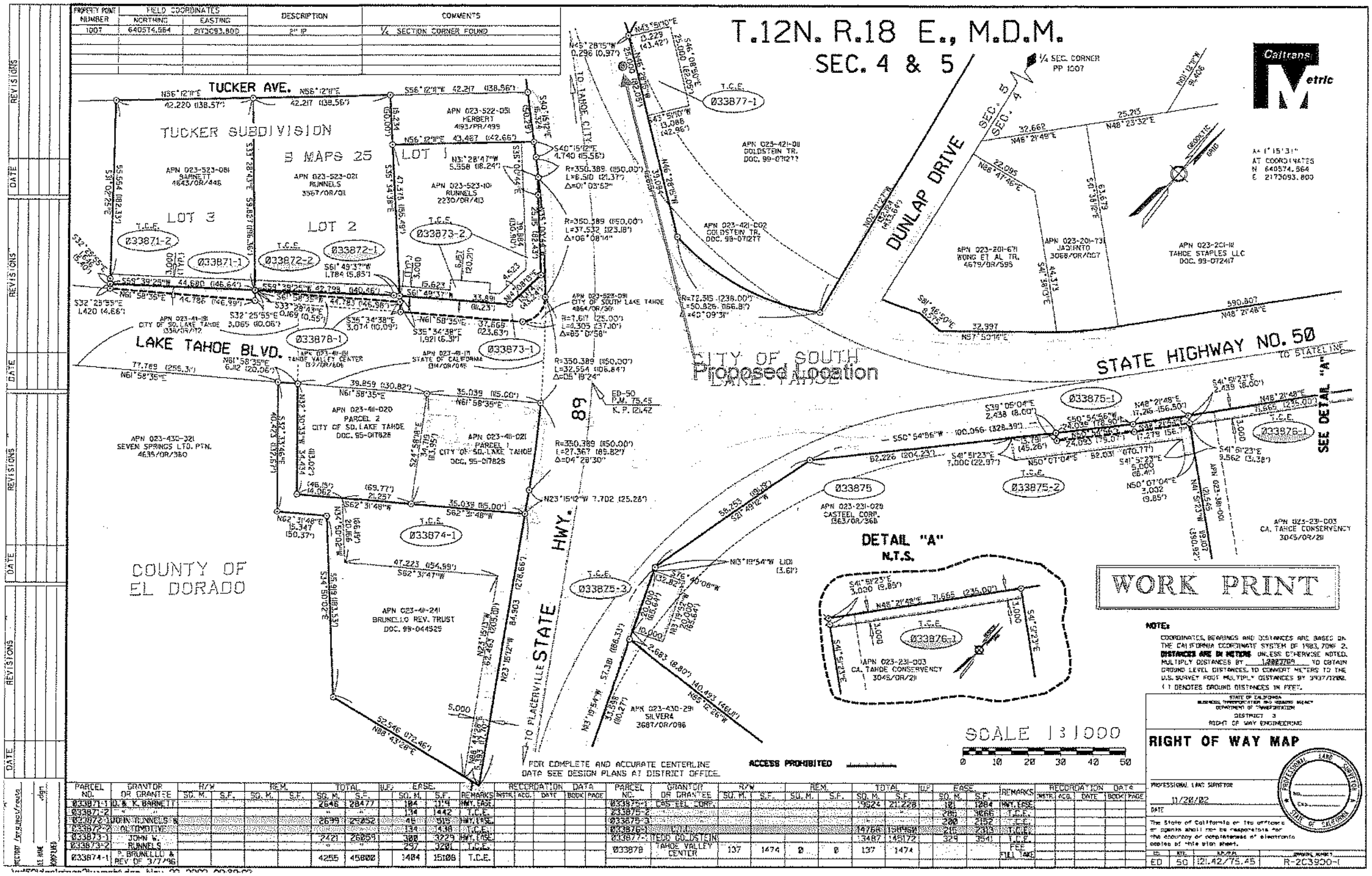
Phone: (661) 831-6906
Fax: (661) 831-6234

LAKE TAHOE LAUNDRY WORKS
1024 LAKE TAHOE BOULEVARD
SOUTH LAKE TAHOE, CALIFORNIA

GROUNDWATER MONITORING
WELL LOCATION PLOT

FIGURE

3



E2C Remediation
5300 Woodmere Dr., Suite 105
Bakersfield, CA 93313

Phone: (661) 831-6906
Fax: (661) 831-6234

LAKE TAHOE LAUNDRY WORKS
1024 LAKE TAHOE BOULEVARD
SOUTH LAKE TAHOE, CALIFORNIA

OFF-SITE PROPOSED GROUNDWATER MONITORING WELL PLOT

FIGURE 1

PEDESTRIAN SAFETY (MCP) SPECIAL PROVISIONS

In addition to the attached General Provisions (Form TR-0045), the following special provisions are also applicable:

1. When the work area encroaches upon a sidewalk, walkway, or crosswalk area, special consideration must be given to pedestrian safety. Protective barricades, fencing, handrails and bridges, together with warning and guidance devices and signs must be utilized so that the passageway for pedestrians, especially blind and other physically handicapped, is safe and well defined and shown on the approved permit plan.

2. Pedestrian walkways and canopies within State Right of Way shall comply with the requirements of the applicable local agency or of the latest edition of the Uniform Building Code whichever contains the higher standards

STATE OF CALIFORNIA • DEPARTMENT OF TRANSPORTATION

STORM WATER SPECIAL PROVISIONS for MINIMAL or NO IMPACT

TR-0400 (Rev 02/2008)

1. **GENERAL:** The Permittee shall comply with the following Special Provisions and the direction of the State Representative:

2. **NPDES REQUIREMENTS:** The Permittee shall be responsible for full compliance with the Caltrans Storm Water Program and the Caltrans NPDES Permit requirements. For additional information, visit the State Water Resources Control Boards Stormwater Website at http://www.swrcb.ca.gov/stormwtr/index.html

3. **RESPONSIBILITY FOR DEBRIS REMOVAL:** The Permittee shall be responsible for preventing all dirt, trash, debris, and other construction waste from entering storm drains, local creeks, or any other bodies of water.

4. **SPOILS AND RESIDUE:** The Permittee shall vacuum or sweep any saw-cut spoils, debris, residue, etc. No spoils, debris, residue, etc. shall be washed into a drainage system.

5. **SWEEPING:** Roadways and other paved areas shall be swept daily. Roadways or work areas shall not be washed down with water.

6. **VEHICLES AND EQUIPMENT:** Permittee shall prevent all vehicles, equipment, etc. from leakage or mud tracking onto roadways.

7. **MAINTENANCE AND FUELING OF VEHICLES AND EQUIPMENT:** Maintenance and fueling of equipment shall not result in any pollution at the job site. The Permittee shall immediately clean up spills, and properly dispose of contaminated soil and materials.

8. **CLEANING VEHICLES AND EQUIPMENT:** The Permittee shall clean all equipment within a bermed area or over a drip pan large enough to prevent run-off. No soaps, solvents, degreasers, etc shall be used in State right of way. Any water from this operation shall be collected and disposed of at an appropriate site.

9. **DIESEL FUELS:** The use of diesel fuel as a form-oil or solvent is not allowed.

10. **WEATHER CONDITIONS AT WORKSITE:** Any activity that would generate fine particles or dust that could be transported off site by stormwater shall be performed during dry weather.

11. **HOT MIX ASPHALT:** Runoff from washing hot mix asphalt shall not enter into any drainage conveyances.

12. **PROTECTION OF DRAINAGE FACILITIES:** The Permittee shall protect/cover gutters, ditches, drainage courses, and inlets with gravel bags, fiber rolls, etc., to the satisfaction of the State representative during grading, paving, saw-cutting, etc. No such protection measures shall cause an obstruction to the traveling public.

13. **PAINT:** Rinsing of painting equipment and materials is not permitted in state right-of-way. Oil based paint sludge and unusable thinner shall be disposed of at an approved hazardous waste site.

14. **CONSTRUCTION MATERIALS:** All construction materials, including concrete, grout, cement containing premixes, and mortar, shall be stored under cover and separated away from drainage areas. Stored materials shall not reach a storm drain.

15. **CONCRETE EQUIPMENT:** Concrete equipment shall be washed in a designated washing area that prevents effluent from discharging to drainage conveyances.

16. **EXISTING VEGETATION:** Established existing vegetation is the best form of erosion control. Disturbance to existing vegetation shall be minimized whenever possible. Damaged or removed vegetation shall be replaced as directed by the State Representative.

17. **SOIL DISTURBANCE:** Soil disturbing activities shall be avoided during the rainy season. If construction activities during wet weather are allowed in your permit, all necessary erosion control and soil stabilization measures shall be implemented.

18. **SLOPE STABILIZATION AND SEDIMENT CONTROL:** In cases where slopes are disturbed during construction, soil shall be secured with soil stabilization and sediment control measures. Fiber rolls or silt fences may be required downslope until permanent soil stabilization is established.

19. **STOCKPILES:** Sand, dirt, and similar materials shall be stored at least 50 feet from drainage features and shall be covered and protected with a temporary perimeter sediment barrier.

20. **DISCOVERY OF CONTAMINATION:** The State Representative shall be notified in case any unusual discoloration, odor, or texture of ground water, is found in excavated material or if abandoned, underground tanks, pipes, or buried debris are encountered.

21. **DEWATERING:** All dewatering operations shall comply with the latest Caltrans guidelines. Any effluent discharged into any storm water system requires approval from the Regional Water Quality Control Board. The Permittee shall provide the State Representative with a copy of the Waste Discharge Permit and a copy of a valid WDID number issued by the Regional Board.

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS

Greg W. Edwards
REGISTERED CIVIL ENGINEER

May 1, 2006
PLANS APPROVAL DATE

Greg W. Edwards
C36386
Exp. 6-30-06
CIVIL

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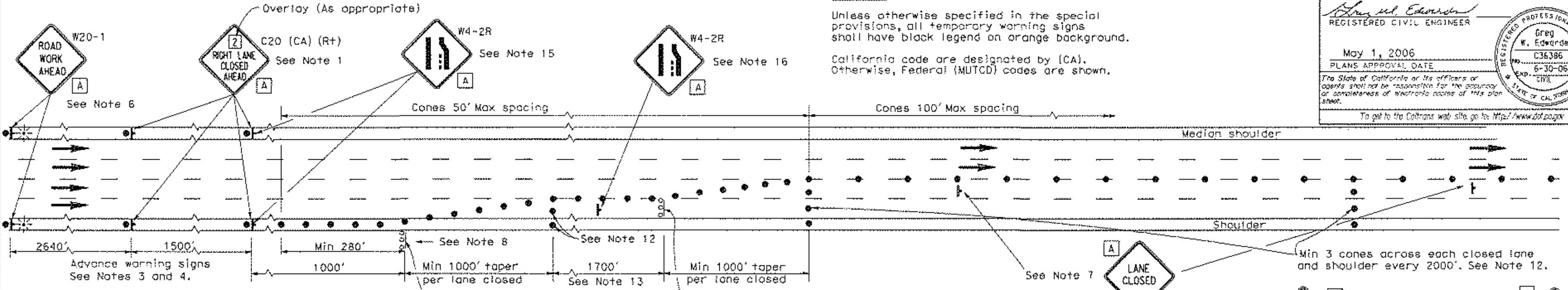
To get to the Caltrans web site, go to: http://www.dot.ca.gov

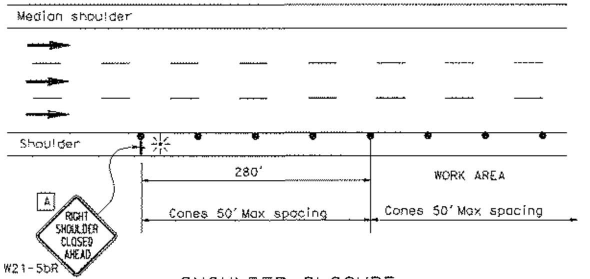
NOTES:

Unless otherwise specified in the special provisions, all temporary warning signs shall have black legend on orange background.

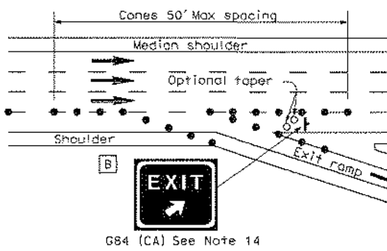
California code are designated by (CA). Otherwise, Federal (MUTCD) codes are shown.



LANE CLOSURE

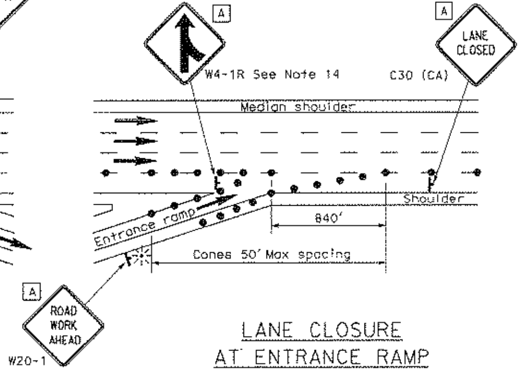


SHOULDER CLOSURE



G84 (CA) See Note 14

LANE CLOSURE
AT EXIT RAMP



LANE CLOSURE
AT ENTRANCE RAMP

NOTES:

1. Median lane closures shall conform to the details for outside lane closures except that C20 (CA) (Lt) signs shall be used.
2. At least one person shall be assigned to provide full time maintenance of traffic control devices for lane closures.
3. Duplicate sign installations are not required:
    a) On opposite shoulder if at least one-half of the available lanes remain open to traffic.
    b) In the median if the width of the median shoulder is less than 8' and the outside lanes are to be closed.
4. Each advance warning sign on each side of the roadway shall be equipped with at least two flags for daytime closure. Each flag shall be at least 16" x 16" in size and shall be orange or fluorescent red-orange in color. Flashing beacons shall be placed at the locations indicated for lane closure during hours of darkness.
5. A C14 (CA) "END ROAD WORK" sign, as appropriate, shall be placed at the end of the lane closure unless the end of work area is obvious or ends within a larger project's limits.
6. If the W20-1 sign would follow within 2000' of a stationary W20-1 or C11 (CA) "ROAD WORK NEXT _______ MILES", use a C20 (CA) sign for the first advance warning sign.
7. Place a C30 (CA) sign every 2000' throughout length of lane closure.
8. One flashing arrow sign for each lane closed. The first flashing arrow sign shall be Type I. All others may be either Type I or Type II.
9. A minimum 1500' of sight distance shall be provided where possible for vehicles approaching the first flashing arrow sign. Lane closures shall not begin at top of crest vertical curve or on a horizontal curve.
10. All cones used for lane closures during the hours of darkness shall be fitted with retroreflective bands (or sleeves) as specified in the specifications.
11. Portable delineators, placed at one-half the spacing indicated for traffic cones may be used instead of cones for daytime closures only.
12. Unless otherwise specified in the special provisions, a minimum of 3 cones shall be placed transversely across each closed lane and shoulder at each location where a taper across a traffic lane ends and every 2000' as shown on the "Lane Closure" detail. Two Type II barricades may be used instead of the 3 cones. The transverse alignment of the cones or barricades on the closed shoulder may be shifted from the transverse alignment to provide access to the work.
13. Unless otherwise specified in the special provisions, the 1700' tangent shown along lane lines shall be used between the 1000' tapers required for each closed traffic lane.
14. Unless otherwise specified in the special provisions, the G84 (CA) and W4-1 signs shall be used as shown.
15. When specified in the special provisions, a W4-2 "LANE ENDS" symbol sign is to be used in place of the C20 (CA) "RIGHT LANE CLOSED AHEAD" sign.
16. The W4-2 "LANE ENDS" symbol sign shown at this location is to be used where the W4-2 sign is used as advance warning as described in Note 15.

SIGN PANEL SIZE (Min)

A	48" x 48"
B	54" x 48"

LEGEND

●	Traffic Cone
○	Traffic Cone (optional taper)
┣	Temporary Sign
▨	Flashing Arrow Sign (FAS)
ooo	FAS Support or Trailer
→	Direction of Travel
✳	Portable Flashing Beacon

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

TRAFFIC CONTROL SYSTEM FOR LANE CLOSURE ON FREEWAYS AND EXPRESSWAYS

NO SCALE

T10

10-3-05

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS

Greg W. Edwards
REGISTERED CIVIL ENGINEER

May 1, 2006
PLANS APPROVAL DATE

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Greg W. Edwards
No. C36386
Exp. 5-30-06
CIVIL

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TYPICAL LANE CLOSURE

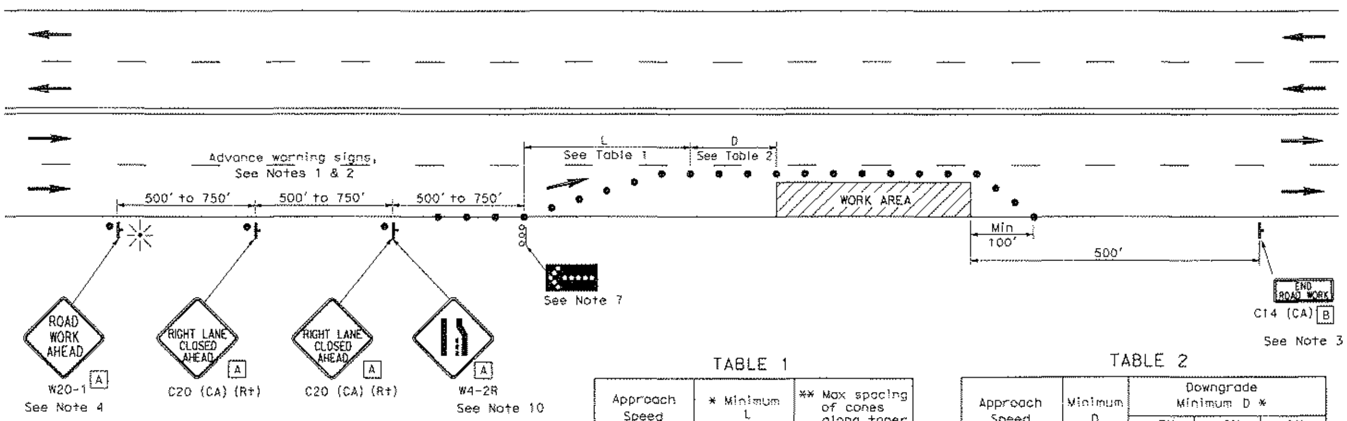

TABLE 1

Approach Speed	* Minimum L	** Max spacing of cones along taper
mph	ft	ft
20 and below	80	20
25	125	25
30	180	30
35	245	35
40	320	40
45	540	45
50	600	50
Over 50	See Note 9	

* Use L for lane widths less than or equal to 12'.
** See Note 8.

TABLE 2

Approach Speed	Minimum D	Downgrade Minimum D *		
		-3%	-6%	-9%
mph	ft	ft	ft	ft
25 and below	155	158	165	173
30	200	205	215	227
35	250	257	271	287
40	305	315	333	354
45	360	378	400	427
50	425	446	474	507
Over 50	See Note 9			

* Use on sustained downgrade steeper than -3 percent and longer than 1 mile.

NOTES:

Unless otherwise specified in the special provisions, all temporary warning signs shall have black legend on orange background.

California code are designated by (CA). Otherwise, Federal (MUTCD) codes are shown.

LEGEND

●	Traffic Cone
⊢	Temporary Sign
←	Direction of Travel
▬	Flashing Arrow Sign (FAS)
∞	FAS Support or Trailer
✳	Portable Flashing Beacon

SIGN PANEL SIZE (Min)

A 36" x 36"
B 36" x 18"

NOTES:

1. Where approach speeds are low, advance warning signs may be placed at 300' spacing and placed closer in urban areas.
2. Each advance warning sign shall be equipped with at least two flags for daytime closure. Each flag shall be at least 16" x 16" in size and shall be orange or fluorescent red-orange in color. Flashing beacons shall be placed at the locations indicated for lane closure during hours of darkness.
3. A C14 (CA) "END ROAD WORK" sign, as appropriate, shall be placed at the end of the lane closure unless the end of work area is obvious, or ends within a larger project's limits.
4. If the W20-1 sign would follow within 2000' of a stationary W20-1 or C11 (CA) "ROAD WORK NEXT ______ MILES", use a C20 (CA) sign for the first advance warning sign.
5. All cones used for lane closures during the hours of darkness shall be fitted with retroreflective bands (or sleeves) as specified in the specifications.
6. Portable delineators, placed at one-half the spacing indicated for traffic cones, may be used instead of cones for daytime closures only.
7. Flashing arrow sign shall be either Type I or Type II.
8. The maximum spacing between cones along a tangent shall be 50' and along a taper shall be approximately as shown in Table 1.
9. For approach speeds over 50 mph, use the "Traffic Control System for Lane Closure On Freeways And Expressways" plan for lane closure details and requirements.
10. When specified in the special provisions, a W4-2 "LANE ENDS" symbol sign is to be used in place of the C20 (CA) "RIGHT LANE CLOSED AHEAD" sign.

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

TRAFFIC CONTROL SYSTEM FOR LANE CLOSURE ON MULTILANE CONVENTIONAL HIGHWAYS

NO SCALE

T11

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS

Greg W. Edwards
REGISTERED CIVIL ENGINEER

May 1, 2006
PLANS APPROVAL DATE

Greg W. Edwards
No. C36386
Exp. 6-30-06
CIVIL

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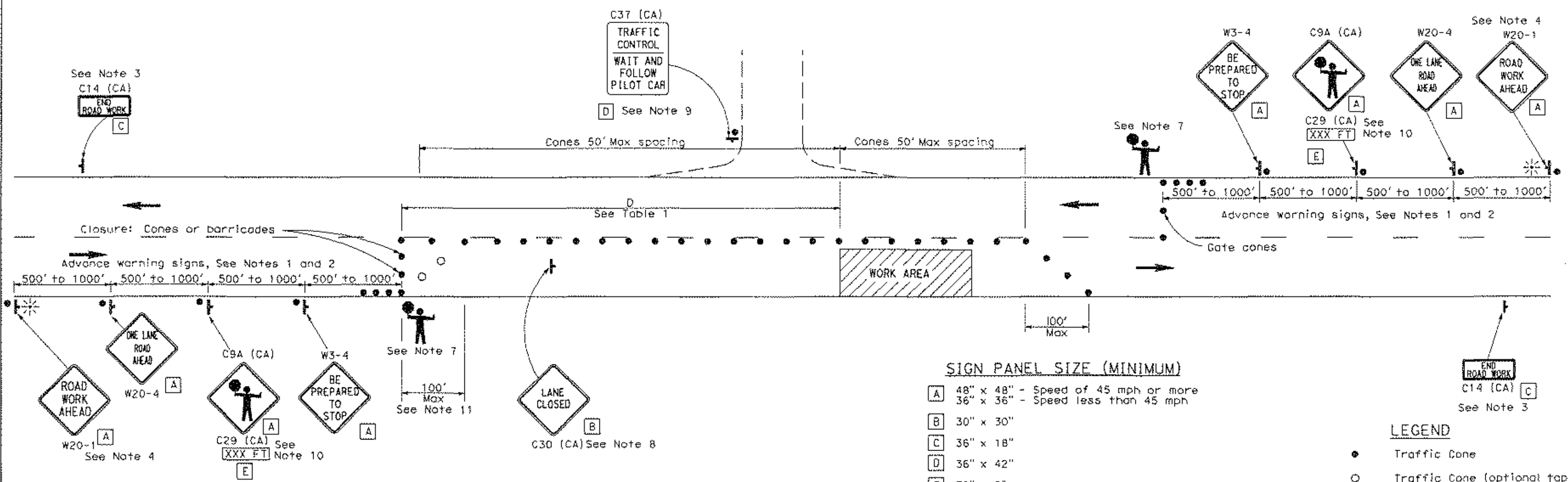
NOTES:

Unless otherwise specified in the special provisions, all temporary warning signs shall have black legend on orange background.

California code are designated by (CA). Otherwise, Federal (MUTCD) codes are shown.

TYPICAL LANE CLOSURE WITH REVERSIBLE CONTROL



SIGN PANEL SIZE (MINIMUM)

- A 48" x 48" - Speed of 45 mph or more
  36" x 36" - Speed less than 45 mph
- B 30" x 30"
- C 36" x 18"
- D 36" x 42"
- E 36" x 9"

LEGEND

- ● Traffic Cone
- ○ Traffic Cone (optional taper)
- ┣ Temporary Sign
- ← Direction of Travel
- ✳ Portable Flashing Beacon
- Flagger

NOTES:

1. Where approach speeds are low, advance warning signs may be placed at 300' spacing, and closer in urban areas.

2. Each advance warning sign in each direction of travel shall be equipped with at least two flags for daytime closure. Each flag shall be at least 16" x 16" in size and shall be orange or fluorescent red-orange in color. Flashing beacons shall be placed at the locations indicated for lane closure during hours of darkness.

3. A C14 (CA) "END ROAD WORK" sign, as appropriate, shall be placed at the end of the lane control unless the end of work area is obvious, or ends within a larger project's limits.

4. If the W20-1 sign would follow within 2000' of a stationary W20-1 or C11 (CA) "ROAD WORK NEXT ________ MILES", use a W20-4 sign for the first advance warning sign.

5. All cones used for lane closures during the hours of darkness shall be fitted with retroreflective bands (or sleeves) as specified in the specifications.

6. Portable delineators, placed at one-half the spacing indicated for traffic cones, may be used instead of cones for daytime closures only.

7. Additional advance flaggers may be required. Flagger should stand in a conspicuous place, be visible to approaching traffic as well as approaching vehicles after the first vehicle has stopped. During the hours of darkness, the flagging-station and flagger shall be illuminated and clearly visible to approaching traffic. The illumination footprint of the lighting on the ground shall be at least 20' in diameter. Place a minimum of four cones at 50' intervals in advance of flagger station as shown.

8. Place C30 (CA) "LANE CLOSED" sign at 500' to 1000' intervals throughout extended work areas. They are optional if the work area is visible from the flagger station.

9. When a pilot car is used, place a C37 (CA) "TRAFFIC CONTROL-WAIT AND FOLLOW PILOT CAR" sign at all intersections within traffic control area. Signs shall be clean and visible at all times.

10. An optional C29 (CA) sign may be placed below the C9A (CA) sign.

11. Traffic cones or barricades may be placed on the optional taper as shown, barricades shall be Type I, II, or III.

TABLE 1

Approach Speed	Minimum D	Downgrade Minimum D *		
		-3%	-6%	-9%
mph	ft	ft	ft	ft
25 and below	155	158	165	173
30	200	205	215	227
35	250	257	271	287
40	305	315	333	354
45	360	378	400	427
50	425	446	474	507
55	495	520	553	593
60	570	598	638	686
65	645	682	728	785

* Use on sustained downgrade steeper than -3 percent and longer than 1 mile.

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

TRAFFIC CONTROL SYSTEM FOR LANE CLOSURE ON TWO LANE CONVENTIONAL HIGHWAYS

NO SCALE

T13

9-28-05

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS

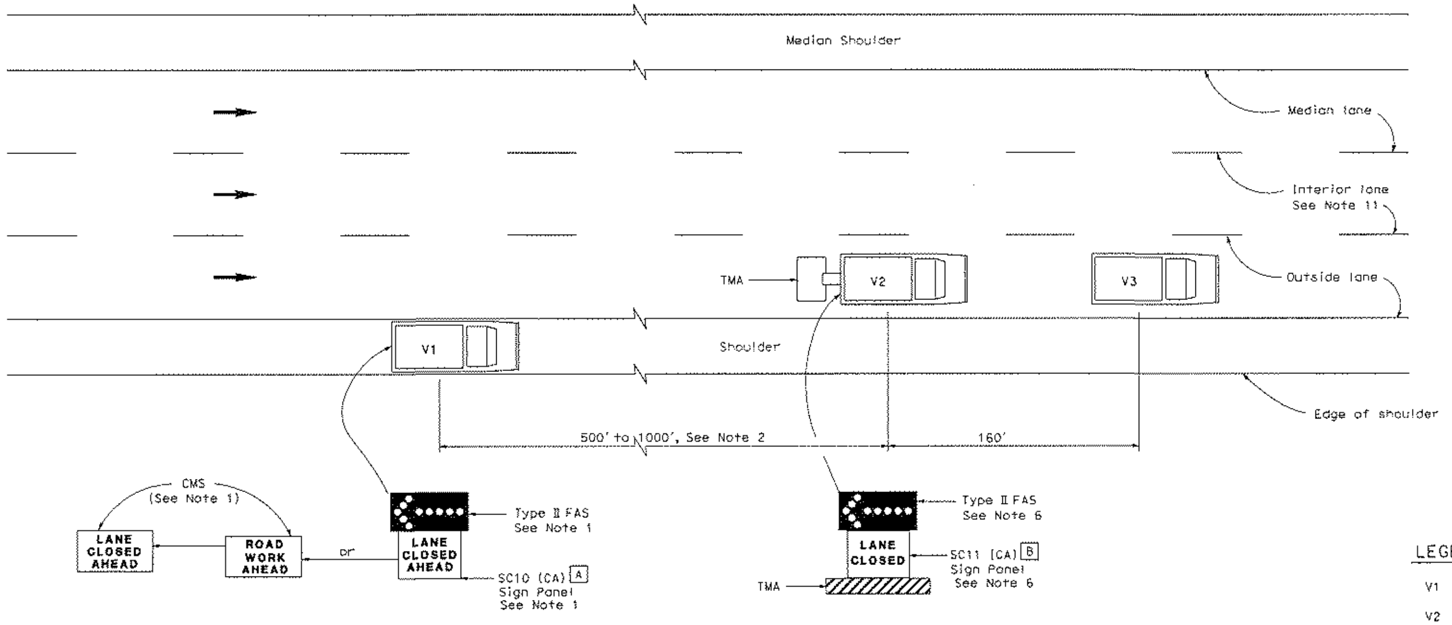
Greg W. Edwards
REGISTERED CIVIL ENGINEER

Greg W. Edwards
No. C36386
Exp. 6-30-06
CIVIL

May 1, 2006
PLANS APPROVAL DATE

The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.

To get to the Caltrans web site, go to: http://www.dot.ca.gov



MOVING LANE CLOSURE ON MEDIAN LANE OR OUTSIDE LANE OF MULTILANE HIGHWAYS

SIGN PANEL SIZE (Min)

A 66" x 36"
B 54" x 42"

LEGEND

V1	Sign Vehicle
V2	Shadow Vehicle
V3	Work/Application Vehicle
▦	Flashing Arrow Sign (FAS)
CMS	Changeable Message Sign
TMA	Truck-Mounted Attenuator
→	Direction of Travel

NOTES:

1. Either a changeable message sign or a SC10 (CA) sign panel and a Type II flashing arrow sign shall be mounted on the rear of sign vehicle V1. A Type II flashing arrow sign shall be mounted on the rear of sign vehicle V1 and used with the SC10 (CA) sign panel. A Type II flashing arrow sign will not be required with the changeable message sign provided the flashing arrow sign symbol is displayed on the changeable message sign board. The changeable message sign shall be sequenced to show the "ROAD WORK AHEAD" message first, followed by the "LANE CLOSED AHEAD" message and then the flashing arrow sign symbol. For median lane closure, the flashing arrow symbol shall be reversed with the arrowhead on the right.

2. If traffic queues develop, sign vehicle V1 should be positioned upstream from the end of queue. Sign vehicle V1 shall be positioned where highly visible when shoulders are not available.

3. A minimum sight distance of 1500' should be provided in advance of sign vehicle V1.

4. Sign vehicle V1 should remain at the beginning of horizontal or vertical curves until the other vehicles (V2 and V3) are far enough beyond the curve to resume the minimum sight distance of 1500'.

5. Vehicle-mounted sign panels shall be Type III, IV, VII, VIII or IX retroreflective sheeting, black on white, black on orange, or black on fluorescent orange, with 6" minimum series D letters per Caltrans sign specifications.

6. Gross Vehicle Weight of shadow vehicle V2 shall be a minimum of 20,000 pounds and shall be equipped with a truck-mounted attenuator. The sign panel shown and a Type II flashing arrow sign shall be mounted on the rear of shadow vehicle V2. For median lane closure the flashing arrow sign symbol shall be displayed with the arrowhead on the right.

7. All vehicles used for lane closures shall be equipped with two-way radios, and the vehicle operators shall maintain communication during the work or application operation.

8. All vehicles shall be equipped with flashing or rotating amber lights.

9. Where sufficient shoulder width is not available, sign vehicle V1 may encroach into the traffic lane staying as close to the edge of shoulder as practicable. Both V1 and V2 shall be equipped with a truck-mounted attenuator. The Gross Vehicle Weight of V1 and V2 shall be at least 20,000 pounds, respectively.

10. Where workers would be on foot in the work area, a stationary type lane closure (Standard Plan T10, T11, etc., as applicable) shall be used instead of this plan.

11. For moving lane closure on interior lane of multilane highways, use Standard Plan T16.

12. When multiple work vehicles are used in close proximity to each other, only one shadow vehicle is required, and spacing between work vehicles shall be minimized in order to deter traffic from entering the closdlane.

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

TRAFFIC CONTROL SYSTEM FOR MOVING LANE CLOSURE ON MULTILANE HIGHWAYS

NO SCALE

T15

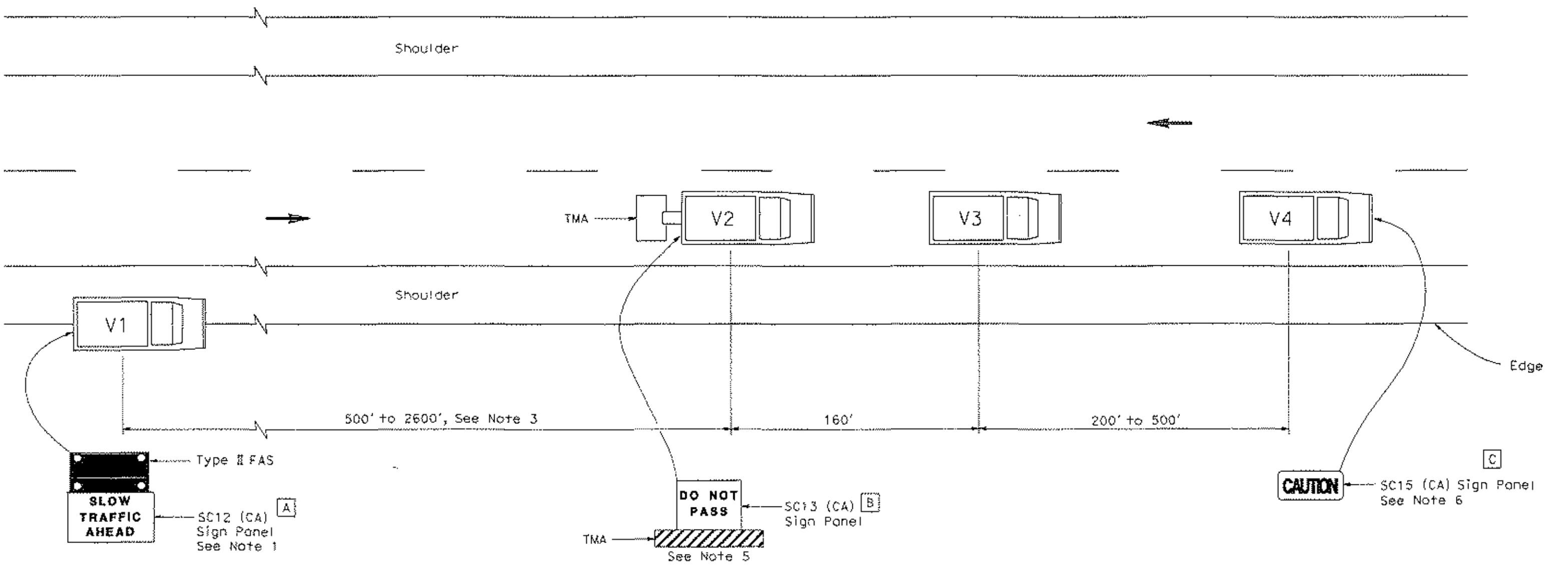
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS

Greg W. Edwards
REGISTERED CIVIL ENGINEER

May 1, 2006
PLANS APPROVAL DATE

Greg W. Edwards
No. C36386
Exp. 6-30-06
CIVIL

To get to the Caltrans web site, go to: http://www.dot.ca.gov



SIGN PANEL SIZE (Min)

A 72" x 42"
B 54" x 42"
C 54" x 24"

LEGEND

V1	Sign Vehicle
V2	Shadow Vehicle
V3	Work/Application Vehicle
V4	Sign Vehicle
TMA	Truck-Mounted Attenuator
→	Direction of Travel
▨	Flashing Arrow Sign (FAS) in flashing caution mode

NOTES:

1. Either a changeable message sign or a SC12 (CA) "SLOW TRAFFIC AHEAD" sign shall be mounted on the rear of sign vehicle V1. A Type II flashing arrow sign may be used with the SC12 (CA) sign panel.
2. Sign vehicle V1 should be positioned where highly visible when shoulders are not available.
3. If traffic queues develop, sign vehicle V1 should be positioned upstream from the end of queue.
4. Vehicle-mounted sign panels shall be Type III, IV VII, VIII or IX retroreflective sheeting, black on white, black on orange, or black on fluorescent orange, with 6" minimum series D letters per Caltrans sign specifications.
5. Gross Vehicle Weight of shadow vehicle shall be a minimum of 20,000 pounds and shall be equipped with a truck-mounted attenuator. The sign panel shown shall be mounted on the rear of shadow vehicle V2. The message "LANE CLOSED" may be used in place of the "DO NOT PASS" message.
6. The sign panel shown shall be mounted on the front of sign vehicle V4, facing opposing traffic.
7. All vehicles shall be equipped with flashing or rotating amber lights.
8. Sign vehicle V4 will not be required when the work and vehicles V2 and V3 are 2' or more from the centerline of the highway during the work or application operations.
9. All vehicles used for lane closures shall be equipped with two-way radios and the vehicle operators shall maintain communication during the work or application operation.
10. This plan shall not be used where workers would be on foot in the work area. Use a stationary type lane closure (Standard Plan T13) for this condition.
11. When multiple work vehicles are used in close proximity to each other, only one shadow vehicle is required and spacing between work vehicles shall be minimized in order to deter traffic from entering the closed lane.

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

TRAFFIC CONTROL SYSTEM FOR MOVING LANE CLOSURE ON TWO LANE HIGHWAYS

NO SCALE

T17

10-3-05

STATE OF CALIFORNIA, DEPARTMENT OF TRANSPORTATION
ENCROACHMENT PERMIT GENERAL PROVISIONS
TR-0045 (REV. 05/2007)

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1. **AUTHORITY:** The Department's authority to issue encroachment permits is provided under, Div. 1, Chpt. 3, Art. 1, Sect. 660 to 734 of the Streets and Highways Code.

2. **REVOCATION:** Encroachment permits are revocable on five days notice unless otherwise stated on the permit and except as provided by law for public corporations, franchise holders, and utilities. These General Provisions and the Encroachment Permit Utility Provisions are subject to modification or abrogation at any time. Permittees' joint use agreements, franchise rights, reserved rights or any other *agreements for operating purposes in State highway right of way* are exceptions to this revocation.

3. **DENIAL FOR NONPAYMENT OF FEES:** Failure to pay permit fees when due can result in rejection of future applications and denial of permits.

4. **ASSIGNMENT:** No party other than the permittee or permittee's authorized agent is allowed to work under this permit.

5. **ACCEPTANCE OF PROVISIONS:** Permittee understands and agrees to accept these General Provisions and all attachments to this permit, for any work to be performed under this permit.

6. **BEGINNING OF WORK:** When traffic is not impacted (see Number 35), the permittee shall notify the Department's representative, two (2) days before the intent to start permitted work. Permittee shall notify the Department's Representative if the work is to be interrupted for a period of five (5) days or more, unless otherwise agreed upon. All work shall be performed on weekdays during regular work hours, excluding holidays, unless otherwise specified in this permit.

7. **STANDARDS OF CONSTRUCTION:** All work performed within highway right of way shall conform to recognized construction standards and current Department Standard Specifications, Department Standard Plans High and Low Risk Facility Specifications, and Utility Special Provisions. Where reference is made to "Contractor and Engineer," these are amended to be read as "Permittee and Department representative."

8. **PLAN CHANGES:** Changes to plans, specifications, and permit provisions are not allowed without prior approval from the State representative.

9. **INSPECTION AND APPROVAL:** All work is subject to monitoring and inspection. Upon completion of work, permittee shall request a final inspection for acceptance and approval by the Department. The local agency permittee shall not give final construction approval to its contractor until final acceptance and approval by the Department is obtained.

10. **PERMIT AT WORKSITE:** Permittee shall keep the permit package or a copy thereof, at the work site and show it upon request to any Department representative or law enforcement officer. If the permit package is not kept and made available at the work site, the work shall be suspended.

11. **CONFLICTING ENCROACHMENTS:** Permittee shall yield start of work to ongoing, prior authorized, work adjacent to or within the limits of the project site. When existing encroachments conflict with new work, the permittee shall bear all cost for rearrangements, (e.g., relocation, alteration, removal, etc.).

12. **PERMITS FROM OTHER AGENCIES:** This permit is invalidated if the permittee has not obtained all permits necessary and required by law, from the Public Utilities Commission of the State of California (PUC), California Occupational Safety and Health Administration (Cal-OSHA), or any other public agency having jurisdiction.

13. **PEDESTRIAN AND BICYCLIST SAFETY:** A safe minimum passageway of 4' shall be maintained through the work area at existing pedestrian or bicycle facilities. At no time shall pedestrians be diverted onto a portion of the street used for vehicular traffic. At locations where safe alternate passageways cannot be provided, appropriate signs and barricades shall be installed at the limits of construction and in advance of the limits of construction at the nearest crosswalk or intersection to detour pedestrians to facilities across the street. Attention is directed to Section 7-1.09 Public Safety of the Department Standard Specifications.

14. **PUBLIC TRAFFIC CONTROL:** As required by law, the permittee shall provide traffic control protection warning signs, lights, safety devices, etc., and take all other measures necessary for traveling public's safety. While providing traffic control, the needs and control of all road users *[motorists, bicyclists and pedestrians, including* persons with disabilities in accordance with the Americans with Disabilities Act of 1990 (ADA)} shall be an essential part of the work activity.

    Day and night time lane closures shall comply with the California Manual on Uniform Traffic Control Devices (Part 6, Temporary Traffic Control), Standard Plans, and Standard Specifications for traffic control systems. These General Provisions are not intended to impose upon the permittee, by third parties, any duty or standard of care, greater than or different from, as required by law.

15. **MINIMUM INTERFERENCE WITH TRAFFIC:** Permittee shall plan and conduct work so as to create the least possible inconvenience to the traveling public; traffic shall not be unreasonably delayed. On conventional highways, permittee shall place properly attired flagger(s) to stop or warn the traveling public in compliance with the California Manual on Uniform Traffic Control Devices (Chapter 6E, Flagger Control).

16. **STORAGE OF EQUIPMENT AND MATERIALS:** The storage of equipment or materials is not allowed within State highway right-of-way, unless specified within the Special Provisions of this specific encroachment permit. If Encroachment Permit Special Provisions allow for the storage of equipment or materials within the State right of way, the equipment and material storage shall comply with Standard Specifications, Standard Plans, Special Provisions, and the Highway Design Manual. The clear recovery zone widths must be followed and are the minimum desirable for the type of facility indicated below: freeways and expressways - 30', conventional highways (no curbs) - 20', conventional highways (with curbs) - 1.5'. If a fixed object cannot be eliminated, moved outside the clear recovery zone, or modified to be made yielding, it should be shielded by a guardrail or a crash cushion.

17. **CARE OF DRAINAGE:** Permittee shall provide alternate drainage for any work interfering with an existing drainage facility in compliance with the Standard Specifications, Standard Plans and/or as directed by the Department's representative.

18. **RESTORATION AND REPAIRS IN RIGHT OF WAY:** Permittee is responsible for restoration and repair of State highway right of way resulting from permitted work (State Streets and Highways Code, Sections 670 et. seq.).

19. **RIGHT OF WAY CLEAN UP:** Upon completion of work, permittee shall remove and dispose of all scraps, brush, timber, materials, etc. off the right of way. The aesthetics of the highway shall be as it was before work started.

20. **COST OF WORK:** Unless stated in the permit, or a separate written agreement, the permittee shall bear all costs incurred for work within the State right of way and waives all claims for indemnification or contribution from the State.

21. **ACTUAL COST BILLING:** When specified in the permit, the Department will bill the permittee actual costs at the currently set hourly rate for encroachment permits.

22 **AS-BUILT PLANS:** When required, permittee shall submit one (1) set of folded as-built plans within thirty (30) days after completion and approval of work in compliance with requirements listed as follows:

    1. Upon completion of the work provided herein, the permittee shall send one vellum or paper set of As-Built plans, to the State representative. Mylar or paper sepia plans are not acceptable.
    2. All changes in the work will be shown on the plans, as issued with the permit, including changes approved by Encroachment Permit Rider.
    3. The plans are to be stamped or otherwise noted AS-BUILT by the permittee's representative who was responsible for overseeing the work. Any original plan that was approved with a State stamp, or Caltrans representative signature, shall be used for producing the As-Built plans.
    4. If As-Built plans include signing or striping, the dates of signing or striping removal, relocation, or installation shall be shown on the plans when required as a condition of the permit. When the construction plans show signing and striping for staged construction on separate sheets, the sheet for each stage shall show the removal, relocation or installation dates of the appropriate staged striping and signing.
    5. As-Built plans shall contain the Permit Number, County, Route, and Post Mile on each sheet.
    6. Disclaimer statement of any kind that differ from the obligations and protections provided by Sections 6735 through 6735.6 of the *California Business and Professions Code*, shall not be included on the As-Built plans. Such statements constitute non-compliance with Encroachment Permit requirements, and may result in the Department of Transportation retaining Performance Bonds or deposits until proper plans are submitted. Failure to comply may also result in denial of future permits, or a provision requiring a public agency to supply additional bonding.

23. **PERMITS FOR RECORD PURPOSES ONLY:** When work in the right of way is within an area under a Joint Use Agreement (JUA) or a Consent to Common Use Agreement (CCUA), a fee exempt permit is issued to the permittee for the purpose of providing a notice and record of work. The Permittee's prior rights shall be preserved without the intention of creating new or different rights or obligations. "Notice and Record Purposes Only" shall be stamped across the face of the permit.

24. **BONDING:** The permittee shall file bond(s), in advance, in the amount set by the Department. Failure to maintain bond(s) in full force and effect will result in the Department stopping of all work and revoking permit(s). Bonds are not required of public corporations or privately owned utilities, unless permittee failed to comply with the provision and conditions under a prior permit. The surety company is responsible for any latent defects as provided in California Code of Civil Procedures, Section 337.15. Local agency permittee shall comply with requirements established as follows: In recognition that project construction work done on State property will not be directly funded and paid by State, for the purpose of protecting stop notice claimants and the interests of State relative to successful project completion, the local agency permittee agrees to require the construction contractor furnish both a payment and performance bond in the local agency's name with both bonds complying with the requirements set forth in Section 3-1.02 of State's current Standard Specifications before performing any project construction work. The local agency permittee shall defend, indemnify, and hold harmless the State, its officers and employees from all project construction related claims by contractors and all stop notice or mechanic's lien claimants. The local agency also agrees to remedy, in a timely manner and to State's satisfaction, any latent defects occurring as a result of the project construction work.

25. **FUTURE MOVING OF INSTALLATIONS:** Permittee understands and agrees to relocate a permitted installation upon notice by the Department. Unless under prior property right or agreement, the permittee shall comply with said notice at his sole expense.

26. **ARCHAEOLOGICAL/HISTORICAL:** If any archaeological or historical resources are revealed in the work vicinity, the permittee shall immediately stop work, notify the Department's representative, retain a qualified archaeologist who shall evaluate the site, and make recommendations to the Department representative regarding the continuance of work.

27. **PREVAILING WAGES:** Work performed by or under a permit may require permittee's contractors and subcontractors to pay appropriate prevailing wages as set by the Department of Industrial Relations. Inquiries or requests for interpretations relative to enforcement of prevailing wage requirements are directed to State of California Department of Industrial Relations, 525 Golden Gate Avenue, San Francisco, California 94102.

28. **RESPONSIBILITY FOR DAMAGE:** The State of California and all officers and employees thereof, including but not limited to the Director of Transportation and the Deputy Director, shall not be answerable or accountable in any manner for injury to or death of any person, including but not limited to the permittee, persons employed by the permittee, persons acting in behalf of the permittee, or for damage to property from any cause. The permittee shall be responsible for any liability imposed by law and for injuries to or death of any person, including but not limited to the permittee, persons employed by the permittee, persons acting in behalf of the permittee, or for damage to property arising out of work, or other activity permitted and done by the permittee under a permit, or arising out of the failure on the permittee's part to perform his obligations under any permit in respect to maintenance or any other obligations, or resulting from defects or obstructions, or from any cause whatsoever during the progress of the work, or other activity or at any *subsequent time, work or other activity is being performed under the* obligations provided by and contemplated by the permit.

    The permittee shall indemnify and save harmless the State of California, all officers, employees, and State's contractors, thereof, including but not limited to the Director of Transportation and the Deputy Director, from all claims, suits or actions of every name, kind and description brought for or on account of injuries to or death of any person, including but not limited to the permittee, persons employed by the permittee, persons acting in behalf of the permittee and the public, or damage to property resulting from the performance of work or other activity under the permit, or arising out of the failure on the permittee's part to perform his obligations under any permit in respect to maintenance or any other obligations, or resulting from defects or obstructions, or from any cause whatsoever during the progress of the work, or other activity or at any subsequent time, work or other activity is being performed under the obligations provided by and contemplated by the permit, except as otherwise provided by statute.

    The duty of the permittee to indemnify and save harmless includes the duties to defend as set forth in Section 2778 of the Civil Code. The permittee waives any and all rights to any type of expressed or implied indemnity against the State, its officers, employees, and State contractors. It is the intent of the parties that the permittee will indemnify and hold harmless the State, its officers, employees, and State's contractors, from any and all claims, suits or actions as set forth above regardless of the existence or degree of fault or negligence, whether active or passive, primary or secondary, on the part of the State, the permittee, persons employed by the permittee, or acting on behalf of the permittee.

    For the purpose of this section, "State's contractors" shall include contractors and their subcontractors under contract to the State of California performing work within the limits of this permit.

29. **NO PRECEDENT ESTABLISHED:** This permit is issued with the understanding that it does not establish a precedent.

30. **FEDERAL CIVIL RIGHTS REQUIREMENTS FOR PUBLIC ACCOMMODATION:**
    A. The permittee, for himself, his personal representative, successors in interest, and assigns as part of the consideration hereof, does hereby covenant and agree that:
    1. No person on the grounds of race, color, or national origin shall be excluded from participation in, be denied the benefits of, or be otherwise subjected to discrimination in the use of said facilities.
    2. That in connection with the construction of any improvements on said lands and the furnishings of services thereon, no discrimination shall be practiced in the selection and retention of first-tier subcontractors in the selection of second-tier subcontractors.
    3. That such discrimination shall not be practiced against the public in *their access to and use of the facilities* and services provided for public accommodations (such as eating, sleeping, rest, recreation), and operation on, over, or under the space of the right of way.
    4. That the permittee shall use the premises in compliance with all other requirements imposed pursuant to Title 15, Code of Federal Regulations, Commerce and Foreign Trade, Subtitle A, Office of the Secretary of Commerce, Part 8 (15 C.F.R. Part 8) and as said Regulations may be amended.
    5. That in the event of breach of any of the above nondiscrimination covenants, the State shall have *the right to terminate the permit and to* re-enter and repossess said land and the land and the facilities thereon, and hold the same as if said permit had never been made or issued.

31. **MAINTENANCE OF HIGHWAYS:** The permittee agrees, by acceptance of a permit, to properly maintain any encroachment. This assurance requires the permittee to provide inspection and repair any damage, at permittee's expense, to State facilities resulting from the encroachment.

32. **SPECIAL EVENTS:** In accordance with subdivision (a) of Streets and Highways Code Section 682.5, the Department of Transportation shall not be responsible for the conduct or operation of the permitted activity, and the applicant agrees to defend, indemnify, and hold harmless the State and the city or county against any and all claims arising out of any activity for which the permit is issued.

    The permittee understands and agrees to comply with the obligations of Titles II and III of the Americans with Disabilities Act of 1990 in the conduct of the event, and further agrees to indemnify and save harmless the State of California, all officers and employees thereof, including but not limited to the Director of Transportation, from any claims or liability arising out of or by virtue of said Act.

33. **PRIVATE USE OF RIGHT OF WAY:** Highway right of way shall not be used for private purposes without compensation to the State. The gifting of public property use and therefore public funds is prohibited under the California Constitution, Article 16.

34. **FIELD WORK REIMBURSEMENT:** Permittee shall reimburse *State for field* work performed on permittee's behalf to correct or remedy hazards or damaged facilities, or clear debris not attended to by the permittee.

35. **NOTIFICATION OF DEPARTMENT AND TMC:** The permittee shall notify the Department's representative and the Transportation Management Center (TMC) at least 7 days before initiating a lane closure or conducting an activity that may cause a traffic impact. A confirmation notification should occur 3 days before closure or other potential *traffic impacts. In emergency situations* when the corrective work or the emergency itself may affect traffic, TMC and the Department's representative shall be notified as soon as possible.

36. **SUSPENSION OF TRAFFIC CONTROL OPERATION:** The permittee, upon notification by the Department's representative, shall immediately suspend all lane closure operations and any operation that impedes the flow of traffic. All costs associated with this suspension shall be borne by the permittee.

37. **UNDERGROUND SERVICE ALERT (USA) NOTIFICATION:** Any excavation requires compliance with the provisions of Government Code Section 4216 et. seq., including, but not limited to notice to a regional notification center, such as Underground Service Alert (USA). The permittee shall provide notification at least 48 hours before performing any excavation work within the right of way.

APPENDIX D

Site SZA Well Boring Logs

FIELD LOCATION OF BORING:

PAGE ___ OF ___

PROJECT NUMBER: 1950BK09 DATES DRILLED: 11/16/09

CLIENT: SS, LP & FCM DRILLER: BC2

SITE ADDRESS:
1024 Lake Tahoe Blvd LOGGED BY: W. Lawson #7171

DRILLING METHOD AND EQUIPMENT: H-A CME-75

WATER LEVEL			
START TIME		**END TIME**	
DATE			

Depth (Feet)	SAMPLE NAME	Blow Count	PID	WELL/ BORING SPECIFICATIONS and CONSTRUCTION DIAGRAM	USCS Symbol	SOIL DESCRIPTION
						HAND AUGER TOP 5'
	95-6	18/25/31	85			0-6 SAND (SP): dry; yellow brn; fine to med. sand
	95-10.5	17/24/32	110			10-11.5 SAND (SP) damp; decomp. granite
	95-15.5	29/60	170	16'-Refusal 15.5'	▽	15-16 SAND (SP): damp; decomp. granite
	95-20.5	29/50	05	21-Refusal		20-21 SANDY GRAVEL (GP): wet; salt & pepper; med. to coarse sand, 15-20%; fine to med. gravel
	~~95-25~~	50		Refusal @ 25.5		25 → 25.5
	not enough sample for retrieval					

WELL / BORING CONSTRUCTION DETAILS: 2 -inch I.D., Schedule 40 PVC: Bottom of Screen (25' 0.020") set at 25 feet BGS; 2/12 Sand placed to 8 feet BGS; Bentonite pellets placed to 5 feet BGS; Grout tremied to 1' BGS.

E₂C Remediation
1358 Blue Oaks Blvd., Suite 300
Roseville, California 95678

Phone: (916) 782-8700
Fax: (916) 782-8049

LAKE TAHOE LAUNDRY WORKS
1024 LAKE TAHOE BOULEVARD
SOUTH LAKE TAHOE, CALIFORNIA

LW-MW-95

FIELD LOCATION OF BORING:

PAGE 1 OF 1

PROJECT NUMBER: 1950BK09
DATES DRILLED:
CLIENT: SS, LP & FCM
DRILLER: BC2
SITE ADDRESS: 1024 Lake Tahoe Blvd
LOGGED BY: W. Lawson #7171

DRILLING METHOD AND EQUIPMENT: HA CME-75

WATER LEVEL			
START TIME		END TIME	
DATE			

Depth (Feet)	SAMPLE NAME	Blow Count	PID	WELL/ BORING SPECIFICATIONS and CONSTRUCTION DIAGRAM	USCS Symbol	SOIL DESCRIPTION
						HAND Auger top 5'
					FILL	0-5 SAND (SP): damp; mod
						yell brn; fine to med. sand
	105-6	10/16/24	530	R=1.5	SP	5-6.5 SAME AS 0-5 NO odor
	105-10.5	20/25/3	470	R=1	SP/GP	10-11. Decomposed granite;
						damp; S&P
	105-15.5	19/47/32	530	R=1		15-16 SAME AS 10-11
						wet
	105-20.5	9/17/21		R=1	GP	20-21 Reworked granite (GP) wet; S&P
	105-26	8/15/20		R=1	GP	25-26 SAME AS 20-21 wet

WELL / BORING CONSTRUCTION DETAILS: 2 -inch I.D., Schedule 40 PVC: Bottom of Screen (0.020") set at 25 feet BGS; 2/12 Sand placed to 3 feet BGS; Bentonite pellets placed to 6 feet BGS; Grout tremied to 1 BGS.

E$_2$C Remediation
1358 Blue Oaks Blvd., Suite 300
Roseville, California 95678

Phone: (916) 782-8700
Fax: (916) 782-8049

LAKE TAHOE LAUNDRY WORKS
1024 LAKE TAHOE BOULEVARD
SOUTH LAKE TAHOE, CALIFORNIA

LW-MW-105

FIELD LOCATION OF BORING:

PAGE 1 OF 1

PROJECT NUMBER: 1950BK09 DATES DRILLED: 11/12/09

CLIENT: SS, LP & FCM DRILLER: BC2

SITE ADDRESS: 1024 Lake Tahoe Blvd LOGGED BY: W. Lawson #7171

DRILLING METHOD AND EQUIPMENT: HA CME-75

WATER LEVEL			
START TIME		END TIME	
DATE			

Depth (Feet)	SAMPLE NAME	Blow Count	PID	WELL/ BORING SPECIFICATIONS and CONSTRUCTION DIAGRAM	USCS Symbol	SOIL DESCRIPTION
						HAND AUGER TOP 5'
	11s-5.5	25/50	140	R=1'		0-5' SAND (SP): MODERATE YELLOW BROWN AND: FINE-TO MED-SAND
	11s-10.5	35/50	80	R=1'		10-11' DEC. GRANITE/MIXED COLORS
	11s-15.5	17/25/50	25	R=1'		15-16' GRAVELLY SAND (SP): DAMP: OLIVE GREY
						MED TO CORSE SAND: 10% FINE GRAVEL
	11s-20.5	25/50	45	R=1'		20-21' SAND (SP): WET: OLIVE GREY
						FINE TO MED. SAND
	11s-25.5	6/9/12	95	R=1'		25-26' GRAVELLY SAND (SP): WET; OLIVE GREY
						S&P SAND MED. TO CORSE GRAVEL 15-20%

WELL / BORING CONSTRUCTION DETAILS: 2-inch I.D., Schedule 40 PVC: Bottom of Screen (0.020 IN.) set at 25 feet BGS; #2/12 Sand placed to 8 feet BGS; Bentonite pellets placed to 6 feet BGS; Grout tremied to 1 BGS.

E₂C Remediation
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Fax: (916) 782-8049

LAKE TAHOE LAUNDRY WORKS
1024 LAKE TAHOE BOULEVARD
SOUTH LAKE TAHOE, CALIFORNIA

LW-MW-11S

FIELD LOCATION OF BORING:

PAGE 1 OF 1

PROJECT NUMBER: 1950BK09 DATES DRILLED: 11/10/09

CLIENT: SS, LP & FCM DRILLER: BC2

SITE ADDRESS:
1024 Lake Tahoe Blvd LOGGED BY: W. Lawson #7171

DRILLING METHOD AND EQUIPMENT: HA CME-75

WATER LEVEL			
START TIME		END TIME	
DATE			

Depth (Feet)	SAMPLE NAME	Blow Count	PID	WELL/ BORING SPECIFICATIONS and CONSTRUCTION DIAGRAM	USCS Symbol	SOIL DESCRIPTION
						HAND AUGER TOP 5'
						FILL
	125-5.5	8/11/17	340	R=1'		5-6 GRAVELLY SAND (SP): damp
						olive gray fine to course sand
						6'-10 SAND (SP): damp; mod.
	125-10.5	13/18/25	570	R=1'		yell brn: fine-to med. sand
						10-10.5 - olive gray SAND
						10.5 - 11 Decomposed granite
	125-15.5	17/25/30	500	R=1'		15-16 Reworked granite; wet;
						S&P; sandy gravel
	125-20	14/24/39	400	R=0.5		20-20.5 SAME AS 15-16
	125-25	14/18/24	350	R= 0.5		25-25.5 SAME AS 20-20.5

WELL / BORING CONSTRUCTION DETAILS: **2 -inch I.D., Schedule 40 PVC: Bottom of Screen ( ) set at ______feet BGS; _____ Sand placed to _______feet BGS; Bentonite pellets placed to _______feet BGS; Grout tremied to BGS.**

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LAKE TAHOE LAUNDRY WORKS
1024 LAKE TAHOE BOULEVARD
SOUTH LAKE TAHOE, CALIFORNIA

LW-MW- 125

FIELD LOCATION OF BORING:

PAGE 1 OF 1

PROJECT NUMBER: 1950BK09
DATES DRILLED: 11/10/09
CLIENT: SS, LP & FCM
DRILLER: BC2
SITE ADDRESS: 1024 Lake Tahoe Blvd
LOGGED BY: W. Lawson #7171

DRILLING METHOD AND EQUIPMENT: HA CME-75

WATER LEVEL			
START TIME		**END TIME**	
DATE			

Depth (Feet)	SAMPLE NAME	Blow Count	PID	WELL/ BORING SPECIFICATIONS and CONSTRUCTION DIAGRAM	USCS Symbol	SOIL DESCRIPTION
	13 s-5.75	12/20/32	270			5-6.25 SAND (SP - .. Dry., MOD YELLOW BROWN.,
						FINE - TO MEDIUM - SAND
	13s - 10.5	16/23/29	260			10-11 GRAVELLY SAND/SANDY GRAVEL
				▽		
	R=3IN. NO sample					15-15.4 GRAVELLY SAND/DECOMPOSED GRANITE
	13s - 21'	10/20/31	310	R=1.5'		15-16.5 GRAVELLY SAND (SP) WET; S&P; MED
						TO COURSE SAND; FINE GRAVEL, 10%
	13s - 25.8'	11/16/20	510	R=1.3'		25-26.3 SAME AS 15-16.5; NO ODOR

WELL / BORING CONSTRUCTION DETAILS: 2 -inch I.D., Schedule 40 PVC: Bottom of Screen (0.020") set at 25 feet BGS; 2/12 Sand placed to 8 feet BGS; Bentonite pellets placed to 6 feet BGS; Grout tremied to 1 BGS.

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LAKE TAHOE LAUNDRY WORKS
1024 LAKE TAHOE BOULEVARD
SOUTH LAKE TAHOE, CALIFORNIA

LW-MW- 13 s

FIELD LOCATION OF BORING:

PAGE 1 OF 1

PROJECT NUMBER: 1950BK09 DATES DRILLED: 11/3/09

CLIENT: SS, LP & FCM DRILLER: BC2

SITE ADDRESS:
1024 Lake Tahoe Blvd LOGGED BY: W. Lawson #7171

DRILLING METHOD AND EQUIPMENT: HA · CME 75

WATER LEVEL			
START TIME		END TIME	
DATE			

Depth (Feet)	SAMPLE NAME	Blow Count	PID	WELL/ BORING SPECIFICATIONS and CONSTRUCTION DIAGRAM	USCS Symbol	SOIL DESCRIPTION
						4" AC HAND AUGER TOP 5'
						6" BR
						10"-15 SAND (SP); damp; yel.
						brn; no odor
				▽ 15'		15' color change to olive tan
						sand coarsening
						18' Gravel
						20' SAND
						25' SILT
						well construction
						0-22.5 Blank 2" PVC
						23.5-25 Spungetop
						SAND & SEAL
						0-1.5 cold patch compacted
						1.5-14 grout
						14-20 bentonite
						20-25 SAND #2/12

WELL / BORING CONSTRUCTION DETAILS: 2 -inch I.D., Schedule 40 PVC: Bottom of Screen ( ) set at ______feet BGS; _____ Sand placed to _______feet BGS; Bentonite pellets placed to _______feet BGS; Grout tremied to BGS.

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LAKE TAHOE LAUNDRY WORKS
1024 LAKE TAHOE BOULEVARD
SOUTH LAKE TAHOE, CALIFORNIA

AS- 1

FIELD LOCATION OF BORING:

PAGE 1 OF 1

PROJECT NUMBER: 1950BK09

DATES DRILLED: 12/5/09

CLIENT: SS, LP & FCM

DRILLER: BC2

SITE ADDRESS:
1024 Lake Tahoe Blvd

LOGGED BY: W. Lawson #7171

DRILLING METHOD AND EQUIPMENT: HA CME-75

WATER LEVEL			
START TIME		END TIME	
DATE			

Depth (Feet)	SAMPLE NAME	Blow Count	PID	WELL/ BORING SPECIFICATIONS and CONSTRUCTION DIAGRAM	USCS Symbol	SOIL DESCRIPTION
						HAND AUGER TOP 5'
						1-5 SAND (SP): moist; olive
						gray; fine to med. sand
						VOC odor
				15' ▽		SAME AS LW-MW-1S
						slight VOC odor all
						the Way down
						Well Construction
						0-23.5 2" ID Blank PVC
						23.5-25 Sparge tip
						SAND & SEAL
						0-1.5- Cold patch
						1.5-14 grout
						14-20 Bentonite
						20-25 SAND #2/12

WELL / BORING CONSTRUCTION DETAILS: 2 -inch I.D., Schedule 40 PVC: Bottom of Screen ( ) set at ______feet BGS; _____ Sand placed to _______feet BGS; Bentonite pellets placed to _______feet BGS; Grout tremied to BGS.

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LAKE TAHOE LAUNDRY WORKS
1024 LAKE TAHOE BOULEVARD
SOUTH LAKE TAHOE, CALIFORNIA

AS-2

FIELD LOCATION OF BORING:

PAGE 1 OF 1

PROJECT NUMBER: 1950BK09 **DATES DRILLED:** 11/6/09
CLIENT: SS, LP & FCM **DRILLER:** BC2
SITE ADDRESS: 1024 Lake Tahoe Blvd **LOGGED BY:** W. Lawson #7171

DRILLING METHOD AND EQUIPMENT: HA CME-75

WATER LEVEL			
START TIME		**END TIME**	
DATE			

Depth (Feet)	SAMPLE NAME	Blow Count	PID	WELL/ BORING SPECIFICATIONS and CONSTRUCTION DIAGRAM	USCS Symbol	SOIL DESCRIPTION
						HAND AUGER TOP 5'
						FILL
						0-4 mixed SAND
						4-5 gravels, debris, sand
						5-6 [illegible] sand - yellow
						bsn, clean
						11' gravelly SAND
						13' gravel lense
				15' ▽		18' gravelly sand (SP); wet; olive
						gray
						20-21 large gravel, cobbles
						28 soft - silt
						Well CONSTRUCTION
						0-26.5 2"ID Blank PVC
						26.5-28 Sponge top
						SAND & SEAL
						0-1.5 native soil
						1.5-15 grout
						15-23 bentonite
						23-28 Sand #2/12

WELL / BORING CONSTRUCTION DETAILS: 2 -inch I.D., Schedule 40 PVC: Bottom of Screen ( ) set at ______feet BGS; _____ Sand placed to _______feet BGS; Bentonite pellets placed to _______feet BGS; Grout tremied to BGS.

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LAKE TAHOE LAUNDRY WORKS
1024 LAKE TAHOE BOULEVARD
SOUTH LAKE TAHOE, CALIFORNIA

AS-3

FIELD LOCATION OF BORING:

PAGE 1 OF 1

PROJECT NUMBER: 1950BK09 **DATES DRILLED:** 11/5/09

CLIENT: SS, LP & FCM **DRILLER:** BC2

SITE ADDRESS: 1024 Lake Tahoe Blvd **LOGGED BY:** W. Lawson #7171

DRILLING METHOD AND EQUIPMENT: HA CME-75

WATER LEVEL			
START TIME		**END TIME**	
DATE			

Depth (Feet)	SAMPLE NAME	Blow Count	PID	WELL/ BORING SPECIFICATIONS and CONSTRUCTION DIAGRAM	USCS Symbol	SOIL DESCRIPTION
						4" AC HAND AUGER TOP 5'
						6" BR FILL
						10"-4' SAND (SP); damp; med.
						yell brn fine to med.
						4-6 SAND (SP): damp; dark
						brn; fine to med-sand
						6-10'
						8-9 some gravel
						10-12 lg. gravel cobbles
						12'- SAND; gravelly sand
						14'- large gravel
						16-21 GRAVELLY SAND (wet);
						olive gray; fine to lrg
	WELL CONSTRUCTION					sand
	0-24.5 2" ID Blank PVC					21-26.5 gravel
	24.5-26 Sparge tip					22-24 SAND lense
						26.0 SILT
	SAND & SEAL					
0-1.5- cold patch						
	1.5-14 grout					
	14-21 Bentonite					
	21-26 SAND #2/12					

WELL / BORING CONSTRUCTION DETAILS: 2 -inch I.D., Schedule 40 PVC: Bottom of Screen ( ) set at ______feet BGS; _____ Sand placed to _______feet BGS; Bentonite pellets placed to _______feet BGS; Grout tremied to BGS.

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LAKE TAHOE LAUNDRY WORKS
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SOUTH LAKE TAHOE, CALIFORNIA

AS- 4

FIELD LOCATION OF BORING:

PAGE 1 OF 1

PROJECT NUMBER: 1950BK09
DATES DRILLED: 4/3/09
CLIENT: SS, LP & FCM
DRILLER: BC2
SITE ADDRESS: 1024 Lake Tahoe Blvd
LOGGED BY: W. Lawson #7171

DRILLING METHOD AND EQUIPMENT: HA CME-75

WATER LEVEL			
START TIME		END TIME	
DATE			

Depth (Feet)	SAMPLE NAME	Blow Count	PID	WELL/ BORING SPECIFICATIONS and CONSTRUCTION DIAGRAM	USCS Symbol	SOIL DESCRIPTION
						4" AC HAND AUGER TOP 5'
						4" BR
						3-5 SAND dark brn
						5-8 SAND med yell
						brn
						8'-10 SAND (SP); damp; olive
						yell brn; med sand
						10'-11' gravel + cobbles
						11- SAND med yell brn
						16 gravel lense olive brn
						17 GRAVELLY SAND
						24 GRAVEL
						26 SILT
						well CONSTRUCTION
						0-24.5 2" ID Blank PVC
						24.5-26 sparge tip
						SAND & SEAL
						0-1.5 cold patch
						1.5-14 grout
						14-21 bentonite
						21-26 SAND #2/12

WELL / BORING CONSTRUCTION DETAILS: 2 -inch I.D., Schedule 40 PVC: Bottom of Screen ( ) set at ______feet BGS; _____ Sand placed to _______feet BGS; Bentonite pellets placed to _______feet BGS; Grout tremied to BGS.

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LAKE TAHOE LAUNDRY WORKS
1024 LAKE TAHOE BOULEVARD
SOUTH LAKE TAHOE, CALIFORNIA

AS-5

FIELD LOCATION OF BORING:

PAGE 1 OF 1

PROJECT NUMBER: 1950BK09 **DATES DRILLED:** 11/5/09

CLIENT: SS, LP & FCM **DRILLER:** BC2

SITE ADDRESS:
1024 Lake Tahoe Blvd **LOGGED BY:** W. Lawson #7171

DRILLING METHOD AND EQUIPMENT: HA CME-75

WATER LEVEL			
START TIME		**END TIME**	
DATE			

Depth (Feet)	SAMPLE NAME	Blow Count	PID	WELL/ BORING SPECIFICATIONS and CONSTRUCTION DIAGRAM	USCS Symbol	SOIL DESCRIPTION
						HAND AUGER TOP 5'
						FILL
						0-5 SAND w/chunks of rock
						& concrete, roots
						9-18 SAND (SP): damp; med.
						yell brn; fine to med
						12-14 10% gravel
						18-20 GRAVELLY SAND; wet; olive
						gray
						20-26 SAND
						26-30 gravelly SAND
						30-soft
						Well Construction
						0-28.5 2" ID Blank Sch 40 PVC
						28.5-30 Sparge Top
						SAND & SEAL
						0-1.5 native
						1.5-14 grout
						14-25 Bentonite
						25-30 Sand #2/12

WELL / BORING CONSTRUCTION DETAILS: 2 -inch I.D., Schedule 40 PVC: Bottom of Screen ( ) set at ______feet BGS; _____ Sand placed to _______feet BGS; Bentonite pellets placed to _______feet BGS; Grout tremied to BGS.

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LAKE TAHOE LAUNDRY WORKS
1024 LAKE TAHOE BOULEVARD
SOUTH LAKE TAHOE, CALIFORNIA

AS-6

FIELD LOCATION OF BORING:

PAGE 1 OF 1

PROJECT NUMBER: 1950BK09
DATES DRILLED: 11/9/09
CLIENT: SS, LP & FCM
DRILLER: BC2
SITE ADDRESS:
1024 Lake Tahoe Blvd
LOGGED BY: W. Lawson #7171

DRILLING METHOD AND EQUIPMENT: HA CME-75

WATER LEVEL			
START TIME		**END TIME**	
DATE			

Depth (Feet)	SAMPLE NAME	Blow Count	PID	WELL/ BORING SPECIFICATIONS and CONSTRUCTION DIAGRAM	USCS Symbol	SOIL DESCRIPTION
						HAND AUGER TOP 5'
						Fill
						0-6 SAND, GRAVEL, debris
						6-10' SAND (SP): damp; mod.
						yell brn; fine-to med. sand
						10- GRAVELLY SAND
						18- GRAVEL
						19-28.5 GRAVELLY SAND
						28.5 soft - silt?
						Well Construction
						0-27 Blank 2" ID PVC
						27-28.5 Sparge tip
						SAND & SEAL
						0-1½ Native soil
						1½-15 grout
						15-23.5 Bentonite
						23.5-28.5 Sand #2/12

WELL / BORING CONSTRUCTION DETAILS: 2 -inch I.D., Schedule 40 PVC: Bottom of Screen ( ) set at ______feet BGS; _____ Sand placed to _______feet BGS; Bentonite pellets placed to _______feet BGS; Grout tremied to BGS.

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LAKE TAHOE LAUNDRY WORKS
1024 LAKE TAHOE BOULEVARD
SOUTH LAKE TAHOE, CALIFORNIA

AS-7

FIELD LOCATION OF BORING:

PAGE 1 OF 1

PROJECT NUMBER: 1950BK09
DATES DRILLED: 11/7/09
CLIENT: SS, LP & FCM
DRILLER: BC2
SITE ADDRESS: 1024 Lake Tahoe Blvd
LOGGED BY: W. Lawson #7171

DRILLING METHOD AND EQUIPMENT: HA CME-75

WATER LEVEL			
START TIME		**END TIME**	
DATE			

Depth (Feet)	SAMPLE NAME	Blow Count	PID	WELL/ BORING SPECIFICATIONS and CONSTRUCTION DIAGRAM	USCS Symbol	SOIL DESCRIPTION
						0-8'? FILL
						10' cobbles
						11-12 GRAVELLY SAND
						12-18 SAND
						18' cobbles
						19-22 SAND
						22-25.5 SANDY GRAVEL
						25.5- Soft
						Well Construction
						0-25.5 2" ID Blank PVC
						25.5-27 Sparge top
						SAND & SEAL
						0-1½ Native Soils
						1.5-15 ~~Bent~~ Grout
						15-22 Bentonite
						22-27 SAND #2/12

WELL / BORING CONSTRUCTION DETAILS: 2 -inch I.D., Schedule 40 PVC: Bottom of Screen ( ) set at ______feet BGS; _____ Sand placed to _______feet BGS; Bentonite pellets placed to _______feet BGS; Grout tremied to BGS.

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LAKE TAHOE LAUNDRY WORKS
1024 LAKE TAHOE BOULEVARD
SOUTH LAKE TAHOE, CALIFORNIA

AS-8

FIELD LOCATION OF BORING:

PAGE 1 OF 1

PROJECT NUMBER: 1950BK09
DATES DRILLED: 11/9/09
CLIENT: SS, LP & FCM
DRILLER: BC2
SITE ADDRESS: 1024 Lake Tahoe Blvd
LOGGED BY: W. Lawson #7171

DRILLING METHOD AND EQUIPMENT: HA CME-75

WATER LEVEL			
START TIME		END TIME	
DATE			

Depth (Feet)	SAMPLE NAME	Blow Count	PID	WELL/ BORING SPECIFICATIONS and CONSTRUCTION DIAGRAM	USCS Symbol	SOIL DESCRIPTION
						HAND AUGER TOP 5'
						0-10 Fill
						10-18 SAND
						12-14 gravel
						18-20 GRAVELLY SAND
						20-25 SAND
						25-28.5 GRAVELLY SAND
						28.5 Soft
						Well Construction
						~~0-26~~ 0-27.0 2" ID Blank PVC
						27-28.5 Spongestop
						SAND & SEAL
						0-1.5 Native Soils
						1.5-15 Grout
						15-23.5 Bentonite
						23.5-28.5 SAND MED AREA

WELL / BORING CONSTRUCTION DETAILS: 2 -inch I.D., Schedule 40 PVC: Bottom of Screen ( ) set at ______feet BGS; _____ Sand placed to _______feet BGS; Bentonite pellets placed to _______feet BGS; Grout tremied to BGS.

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LAKE TAHOE LAUNDRY WORKS
1024 LAKE TAHOE BOULEVARD
SOUTH LAKE TAHOE, CALIFORNIA

AS- 9

FIELD LOCATION OF BORING:

PAGE 1 OF 1

PROJECT NUMBER: 1950BK09
DATES DRILLED: 11/4/09
CLIENT: SS, LP & FCM
DRILLER: BC2
SITE ADDRESS:
1024 Lake Tahoe Blvd
LOGGED BY: W. Lawson #7171

DRILLING METHOD AND EQUIPMENT: HA CME-75

WATER LEVEL			
START TIME		END TIME	
DATE			

Depth (Feet)	SAMPLE NAME	Blow Count	PID	WELL/ BORING SPECIFICATIONS and CONSTRUCTION DIAGRAM	USCS Symbol	SOIL DESCRIPTION
						4" AC HAND Auger top 5'
						6" BB
						10"-2' SAND med. yell brn
						2-4 SAND dark brown
						4-8 SAND med yell brn
						8' gravel
						9-12 gravelly SAND (SP): damp
						med. yellow brn
						12-14 SAND med yell brn
						14-18 gravelly Sand (SP): wet
						olive gray solvent odor
						18-27 sandy gravel solvent
						27' SILT odor
						WELL CONSTRUCTION
						0-25.5 2" Blank pvc
						25.5-27 Sparge tip
						SAND & SEAL
						0-1.5 cold patch
						1.5-14 grout
						14-22 bentonite
						22-27 SAND #2/12

WELL / BORING CONSTRUCTION DETAILS: 2 -inch I.D., Schedule 40 PVC: Bottom of Screen ( ) set at ______feet BGS; _____ Sand placed to _______feet BGS; Bentonite pellets placed to _______feet BGS; Grout tremied to BGS.

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LAKE TAHOE LAUNDRY WORKS
1024 LAKE TAHOE BOULEVARD
SOUTH LAKE TAHOE, CALIFORNIA

AS- 10

FIELD LOCATION OF BORING:

PAGE 1 OF 1

PROJECT NUMBER: 1950BK09

DATES DRILLED: 11/14/09

CLIENT: SS, LP & FCM

DRILLER: BC2

SITE ADDRESS:
1024 Lake Tahoe Blvd

LOGGED BY: W. Lawson #7171

DRILLING METHOD AND EQUIPMENT: HA CME-75

WATER LEVEL			
START TIME		END TIME	
DATE			

Depth (Feet)	SAMPLE NAME	Blow Count	PID	WELL/ BORING SPECIFICATIONS and CONSTRUCTION DIAGRAM	USCS Symbol	SOIL DESCRIPTION
						4" AC HAND Auger top 5'
						6" BR
						10"–4' SAND FILL
						4-6' SAND (SP): damp
						drk brn
						6-11' SAND (SP): damp;
						mod. yell brn; fine to med.
						11'-12' cobbles
						12'-25 SAND
						25-27 SANDY GRAVEL
						27-30 SAND
						30' SILT
						Well Construction
						0-28.5 2" blank PVC
						28.5-30 Sparge tip
						SAND & SEAL
						0-1.5 Cold Patch
						1.5-14 grout
						14-25 bentonite
						25-30 SAND #2/12

WELL / BORING CONSTRUCTION DETAILS: 2 -inch I.D., Schedule 40 PVC: Bottom of Screen ( ) set at ______feet BGS; _____ Sand placed to _______feet BGS; Bentonite pellets placed to _______feet BGS; Grout tremied to BGS.

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LAKE TAHOE LAUNDRY WORKS
1024 LAKE TAHOE BOULEVARD
SOUTH LAKE TAHOE, CALIFORNIA

AS-11

FIELD LOCATION OF BORING:

PAGE 1 OF 1

PROJECT NUMBER: 1950BK09 DATES DRILLED: 11/8/09

CLIENT: SS, LP & FCM DRILLER: BC2

SITE ADDRESS:
1024 Lake Tahoe Blvd LOGGED BY: W. Lawson #7171

DRILLING METHOD AND EQUIPMENT: HA CME-75

WATER LEVEL			
START TIME		END TIME	
DATE			

Depth (Feet)	SAMPLE NAME	Blow Count	PID	WELL/ BORING SPECIFICATIONS and CONSTRUCTION DIAGRAM	USCS Symbol	SOIL DESCRIPTION
						HAND AUGER TOP 5'
						FILL
						0-10? SAND
						8' cobbles
						GRAVELLY SAND
						20' cobbles
						22' SAND
						24-27.5 SANDY GRAVEL
						27.5 Soft
						Well Construction
						0-26 2" ID Blank PVC
						26-27.5 Sponge top
						SAND & SEAL
						0-1½ Native soil
						1.5-15 grout
						15-22. Bentonite
						22.5-27.5 SAND #2/12

WELL / BORING CONSTRUCTION DETAILS: 2 -inch I.D., Schedule 40 PVC: Bottom of Screen ( ) set at ______feet BGS; _____ Sand placed to _______feet BGS; Bentonite pellets placed to _______feet BGS; Grout tremied to BGS.

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LAKE TAHOE LAUNDRY WORKS
1024 LAKE TAHOE BOULEVARD
SOUTH LAKE TAHOE, CALIFORNIA

AS-12

FIELD LOCATION OF BORING:

PAGE 1 OF 1

PROJECT NUMBER: 1950BK09
DATES DRILLED: 11/8/09
CLIENT: SS, LP & FCM
DRILLER: BC2
SITE ADDRESS: 1024 Lake Tahoe Blvd
LOGGED BY: W. Lawson #7171

DRILLING METHOD AND EQUIPMENT: HA CME-75

WATER LEVEL			
START TIME		END TIME	
DATE			

Depth (Feet)	SAMPLE NAME	Blow Count	PID	WELL/ BORING SPECIFICATIONS and CONSTRUCTION DIAGRAM	USCS Symbol	SOIL DESCRIPTION
						HAND AUGER TOP 5'
						0-8 Fill - SAND, Gravel
						debris
						8-10 SAND
						10-11 cobbles
						11-16 SAND
						16-20 GRAVELLY SAND
						20-22 cobbles
						22-295 GRAVELLY SAND
						29- Soft - silt?
						WELL CONSTRUCTION
						0-27.5 2"ID Blank PVC
						27.5-29 Sparge tip
						SAND & SEAL
						0-1.5 Native Soils
						1.5-15 Grout
						15-24 Bentonite
						24-29 SAND #2/12

WELL / BORING CONSTRUCTION DETAILS: 2 -inch I.D., Schedule 40 PVC: Bottom of Screen ( ) set at ______feet BGS; _____ Sand placed to _______feet BGS; Bentonite pellets placed to _______feet BGS; Grout tremied to BGS.

E₂C Remediation
1358 Blue Oaks Blvd., Suite 300
Roseville, California 95678

Phone: (916) 782-8700
Fax: (916) 782-8049

LAKE TAHOE LAUNDRY WORKS
1024 LAKE TAHOE BOULEVARD
SOUTH LAKE TAHOE, CALIFORNIA

AS-13

FIELD LOCATION OF BORING:

PAGE 1 OF 1

PROJECT NUMBER: 1950BK09
DATES DRILLED: 11/8/09
CLIENT: SS, LP & FCM
DRILLER: BC2
SITE ADDRESS: 1024 Lake Tahoe Blvd
LOGGED BY: W. Lawson #7171

DRILLING METHOD AND EQUIPMENT: HA CME-75

WATER LEVEL			
START TIME		**END TIME**	
DATE			

Depth (Feet)	SAMPLE NAME	Blow Count	PID	WELL/ BORING SPECIFICATIONS and CONSTRUCTION DIAGRAM	USCS Symbol	SOIL DESCRIPTION
						HAND AUGER TOP 5'
						0-8 Fill
						8-10 SAND
						10-11 Cobbles
						11-16 SAND, GRAVELLY SAND
						16-20 SANDY GRAVEL
						20-25 SAND
						25-30 GRAVELLY SAND
						30 Soft
						WELL CONSTRUCTION
						0-28.5 Blank 2" ID PVC
						28.5-30 ~~0.020~~ Sparge tip
						SAND & SEAL
						0-1.5 Native Soils
						1.5-15 Grout
						15-25 Bentonite
						25-30 Sand #2/12

WELL / BORING CONSTRUCTION DETAILS: 2 -inch I.D., Schedule 40 PVC: Bottom of Screen ( ) set at ______feet BGS; _____ Sand placed to _______feet BGS; Bentonite pellets placed to _______feet BGS; Grout tremied to BGS.

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LAKE TAHOE LAUNDRY WORKS
1024 LAKE TAHOE BOULEVARD
SOUTH LAKE TAHOE, CALIFORNIA

AS-14

FIELD LOCATION OF BORING:

PAGE C OF 1

PROJECT NUMBER: 1950BK09 DATES DRILLED: 11/9/09

CLIENT: SS, LP & FCM DRILLER: BC2

SITE ADDRESS:
1024 Lake Tahoe Blvd LOGGED BY: W. Lawson #7171

DRILLING METHOD AND EQUIPMENT: HA CME-75

WATER LEVEL			
START TIME		END TIME	
DATE			

Depth (Feet)	SAMPLE NAME	Blow Count	PID	WELL/ BORING SPECIFICATIONS and CONSTRUCTION DIAGRAM	USCS Symbol	SOIL DESCRIPTION
						HAND AUGER TOP 5'
						FILL
						0-10 SAND, cobbles,
						debris
						10-19 SAND or GRAVELLY
						SAND
						19-20 cobbles
						20-30 GRAVELLY SAND
						26- cobbles
						30- Soft
						well Construction
						0-28.5 Blank 2" ID PVC
						28.5-30 Sponge top
						SAND & SEAL
						0-1 1/2 Native soils
						1.5-15 Grout
						15-25 Bentonite hydrated
						25-30 SAND Med. Aqua
						–

WELL / BORING CONSTRUCTION DETAILS: 2 -inch I.D., Schedule 40 PVC: Bottom of Screen ( ) set at ______feet BGS; _____ Sand placed to _______feet BGS; Bentonite pellets placed to _______feet BGS; Grout tremied to BGS.

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LAKE TAHOE LAUNDRY WORKS
1024 LAKE TAHOE BOULEVARD
SOUTH LAKE TAHOE, CALIFORNIA

AS-15

FIELD LOCATION OF BORING:

PAGE 1 OF 1

PROJECT NUMBER: 1950BK09
DATES DRILLED: 11/12/09
CLIENT: SS, LP & FCM
DRILLER: BC2
SITE ADDRESS: 1024 Lake Tahoe Blvd
LOGGED BY: W. Lawson #7171

DRILLING METHOD AND EQUIPMENT: HA CME-75

WATER LEVEL			
START TIME		END TIME	
DATE			

Depth (Feet)	SAMPLE NAME	Blow Count	PID	WELL/ BORING SPECIFICATIONS and CONSTRUCTION DIAGRAM	USCS Symbol	SOIL DESCRIPTION
						HAND AUGER TOP 5'
						4" AC
						6" BR
						10"-6' FILL
						6'-11' SAND (SP): damp;
						Mod. yell brn; fine-to med-
						sand
						11-12' Cobbles
						12-25 SAND
						25-27 GRAVELLY SAND
						27-29 GRAVEL & COBBLES
						29-30 GRAVELLY SAND
						Well Construction
						0-28.5 2" ID PVC Blank
						28.5-30 Sponge top
						SAND & SEAL
						0-1½' Native Soils w/coldpatch cap
						1.5-15' grout
						15-25 Bentonite
						25-30 SAND; Med. aqua

WELL / BORING CONSTRUCTION DETAILS: 2 -inch I.D., Schedule 40 PVC: Bottom of Screen ( ) set at ______feet BGS; _____ Sand placed to _______feet BGS; Bentonite pellets placed to _______feet BGS; Grout tremied to BGS.

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LAKE TAHOE LAUNDRY WORKS
1024 LAKE TAHOE BOULEVARD
SOUTH LAKE TAHOE, CALIFORNIA

AS-16

FIELD LOCATION OF BORING:

PAGE 1 OF 1

PROJECT NUMBER: 1950BK09
DATES DRILLED: 11/12/09
CLIENT: SS, LP & FCM
DRILLER: BC2
SITE ADDRESS: 1024 Lake Tahoe Blvd
LOGGED BY: W. Lawson #7171

DRILLING METHOD AND EQUIPMENT: CME-75 HA

WATER LEVEL			
START TIME		**END TIME**	
DATE			

Depth (Feet)	SAMPLE NAME	Blow Count	PID	WELL/ BORING SPECIFICATIONS and CONSTRUCTION DIAGRAM	USCS Symbol	SOIL DESCRIPTION
						HAND AUGER TOP 5'
						0-5' FILL
						5-11 SAND: mod. yell brN
						11-12 GRAVELLY SAND: olive gray
						12' Cobbles
						13-23 SAND
						23-27 GRAVELLY SAND
						27-29 Cobbles
						29-30 SAND
						Well Construction
						0-28.5 2"ID Blank PVC
						28.5-30 Sponge Top
						SAND & SEAL
						0-1.5' Native Soils
						1.5-15' Grout
						15'-25 Bentonite
						25-30 SAND, Med. Aqua

WELL / BORING CONSTRUCTION DETAILS: 2 -inch I.D., Schedule 40 PVC: Bottom of Screen ( ) set at ______feet BGS; _____ Sand placed to _______feet BGS; Bentonite pellets placed to _______feet BGS; Grout tremied to BGS.

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LAKE TAHOE LAUNDRY WORKS
1024 LAKE TAHOE BOULEVARD
SOUTH LAKE TAHOE, CALIFORNIA

AS- 17

FIELD LOCATION OF BORING:

PAGE 1 OF 1

PROJECT NUMBER: 1950BK09
DATES DRILLED:
CLIENT: SS, LP & FCM
DRILLER: BC2
SITE ADDRESS:
1024 Lake Tahoe Blvd
LOGGED BY: W. Lawson #7171

DRILLING METHOD AND EQUIPMENT: HA CME-75

WATER LEVEL				
START TIME			**END TIME**	
DATE				

Depth (Feet)	SAMPLE NAME	Blow Count	PID	WELL/ BORING SPECIFICATIONS and CONSTRUCTION DIAGRAM	USCS Symbol	SOIL DESCRIPTION
						HAND AUGER TOP 5'
						0-5 Fill
						5-11 SAND mod. yel brn
						11-12 GRAVELLY SAND ol. gray
						12' cobbles
						13-23 SAND
						23-24 GRAVELLY SAND
						24-27 SAND
						27-28 cobbles
						28-30 SAND
						Well Construction
						0-28.5 2"ID Blank PVC
						28.5-30 Sparge tip
						SAND & SEAL

WELL / BORING CONSTRUCTION DETAILS: **2 -inch I.D., Schedule 40 PVC: Bottom of Screen ( ) set at ______feet BGS; _____ Sand placed to _______feet BGS; Bentonite pellets placed to _______feet BGS; Grout tremied to BGS.**

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LAKE TAHOE LAUNDRY WORKS
1024 LAKE TAHOE BOULEVARD
SOUTH LAKE TAHOE, CALIFORNIA

AS- 18

FIELD LOCATION OF BORING:

PAGE 1 OF 1

PROJECT NUMBER: 1950BK09
DATES DRILLED: 11/11/09
CLIENT: SS, LP & FCM
DRILLER: BC2
SITE ADDRESS: 1024 Lake Tahoe Blvd
LOGGED BY: W. Lawson #7171

DRILLING METHOD AND EQUIPMENT: HA CME-75

WATER LEVEL			
START TIME		**END TIME**	
DATE			

Depth (Feet)	**SAMPLE NAME**	**Blow Count**	**PID**	**WELL/ BORING SPECIFICATIONS and CONSTRUCTION DIAGRAM**	**USCS Symbol**	**SOIL DESCRIPTION**
						HAND AUGER TOP 5'
						0-5 FILL
						5-10 SAND, GRAVELLY SAND
						10-11 Cobbles + GRAVEL
						11-16 SAND/GRAVELLY SAND
						16-20 SANDY GRAVEL 18' cobbles
						20-25 SAND
						25-30 GRAVELLY SAND 27 Large cobbles
						WELL CONSTRUCTION
						0-28.5 2" ID PVC Blank
						28.5-30 Sparge tip
						SAND + SEAL
						0-1.5 Native Soils
						1.5-15 Grout
						15-25 Bentonite
						25-30 SAND #2/12

WELL / BORING CONSTRUCTION DETAILS: 2 -inch I.D., Schedule 40 PVC: Bottom of Screen ( ) set at ______feet BGS; _____ Sand placed to _______feet BGS; Bentonite pellets placed to _______feet BGS; Grout tremied to BGS.

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LAKE TAHOE LAUNDRY WORKS
1024 LAKE TAHOE BOULEVARD
SOUTH LAKE TAHOE, CALIFORNIA

AS- 19

FIELD LOCATION OF BORING:

PAGE 1 OF 1

PROJECT NUMBER: 1950BK09 DATES DRILLED: 11/13/09

CLIENT: SS, LP & FCM DRILLER: BC2

SITE ADDRESS: 1024 Lake Tahoe Blvd LOGGED BY: W. Lawson #7171

DRILLING METHOD AND EQUIPMENT: HA CME-75

WATER LEVEL			
START TIME		END TIME	
DATE			

Depth (Feet)	SAMPLE NAME	Blow Count	PID	WELL/ BORING SPECIFICATIONS and CONSTRUCTION DIAGRAM	USCS Symbol	SOIL DESCRIPTION
						HAND AUGER TOP 5'
						0-5' FILL
						5-10 SAND & GRAVELLY SAND
						mod. yell brn
						10-11 cobbles & gravel
						11-16 SAND & gravelly SAND
						16-20 SANDY GRAVEL
						20-25 SAND
						25-30 GRAVELLY SAND
						27' lense of cobbles
						Well CONSTRUCTION
						0-28.5' 2" ID PVC blank
						28.5-30 Sparge top
						SAND & SEAL
						0-1.5 Native soils
						1.5-15 grout
						15-25 bentonite
						25-30 SAND, med. Aqua

WELL / BORING CONSTRUCTION DETAILS: 2 -inch I.D., Schedule 40 PVC: Bottom of Screen ( ) set at ______feet BGS; _____ Sand placed to _______feet BGS; Bentonite pellets placed to _______feet BGS; Grout tremied to BGS.

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LAKE TAHOE LAUNDRY WORKS
1024 LAKE TAHOE BOULEVARD
SOUTH LAKE TAHOE, CALIFORNIA

AS- 20

FIELD LOCATION OF BORING:

PAGE 1 OF 1

PROJECT NUMBER: 1950BK09 DATES DRILLED: 11/12/09

CLIENT: SS, LP & FCM DRILLER: BC2

SITE ADDRESS:
1024 Lake Tahoe Blvd LOGGED BY: W. Lawson #7171

DRILLING METHOD AND EQUIPMENT: HA CME-75

WATER LEVEL			
START TIME		END TIME	
DATE			

Depth (Feet)	SAMPLE NAME	Blow Count	PID	WELL/ BORING SPECIFICATIONS and CONSTRUCTION DIAGRAM	USCS Symbol	SOIL DESCRIPTION
						HAND AUGER TOP 5'
						0-5' FILL
						5-10' SAND/GRAVELLY SAND
						10-11 GRAVEL & Cobbles
						11-16 SAND
						16-20 GRAVELLY SAND
						20-25 SAND
						25-30 GRAVELLY SAND
						28-29 Cobbles
						Well Construction
						0-28.5 Blank 2" ID PVC
						28.5-30 Sparge tip
						SAND & SEAL
						0-1.5 Native soils
						1.5-15 Grout
						15-25 bentonite
						25-30 SAND, med. aqua

WELL / BORING CONSTRUCTION DETAILS: 2 -inch I.D., Schedule 40 PVC: Bottom of Screen ( ) set at ______feet BGS; _____ Sand placed to _______feet BGS; Bentonite pellets placed to _______feet BGS; Grout tremied to BGS.

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LAKE TAHOE LAUNDRY WORKS
1024 LAKE TAHOE BOULEVARD
SOUTH LAKE TAHOE, CALIFORNIA

AS-21

FIELD LOCATION OF BORING:

PAGE 1 OF 1

PROJECT NUMBER: 1950BK09
DATES DRILLED: 11/11/09
CLIENT: SS, LP & FCM
DRILLER: BC2
SITE ADDRESS: 1024 Lake Tahoe Blvd
LOGGED BY: W. Lawson #7171

DRILLING METHOD AND EQUIPMENT: HA CME-75

WATER LEVEL			
START TIME		**END TIME**	
DATE			

Depth (Feet)	SAMPLE NAME	Blow Count	PID	WELL/ BORING SPECIFICATIONS and CONSTRUCTION DIAGRAM	USCS Symbol	SOIL DESCRIPTION
						0-5' Fill
						5-10 SAND mod. yell brn
						10-12 cobbles
						12-16 SAND
						16-20 GRAVELLY SAND
						20-28 SAND & GRAVELLY SAND
						28-29 Cobbles
						29-30 GRAVELLY SAND
						30 Soft
						Well Construction
						0-1.5 Native Soils
						1.5-15 grout
						15-25 bentonite
						25-30 SAND, med. aqua
						0-28.5 Blank 2" ID PVC
						28.5-30 Sparge tip

WELL / BORING CONSTRUCTION DETAILS: 2 -inch I.D., Schedule 40 PVC: Bottom of Screen ( ) set at ______feet BGS; _____ Sand placed to _______feet BGS; Bentonite pellets placed to _______feet BGS; Grout tremied to BGS.

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LAKE TAHOE LAUNDRY WORKS
1024 LAKE TAHOE BOULEVARD
SOUTH LAKE TAHOE, CALIFORNIA

AS-22

FIELD LOCATION OF BORING:

PAGE 1 OF 1

PROJECT NUMBER: 1950BK09
DATES DRILLED: 12/6/09
CLIENT: SS, LP & FCM
DRILLER: BC2
SITE ADDRESS: 1024 Lake Tahoe Blvd
LOGGED BY: W. Lawson #7171

DRILLING METHOD AND EQUIPMENT: HA CME-75

WATER LEVEL				
START TIME		**END TIME**		
DATE				

Depth (Feet)	SAMPLE NAME	Blow Count	PID	WELL/ BORING SPECIFICATIONS and CONSTRUCTION DIAGRAM	USCS Symbol	SOIL DESCRIPTION
						HAND Auger top 5'
						Fill
						0-9 SAND, GRAVEL, debris
						Concrete pieces
						9-10 SAND (SP); damp; med.
						yell brn; fine to med.
						10'-11 - Gravel/cobbles
						11-18 SAND
						18-19 Gravel
						19-20 SAND
						20-21 Gravel
						21-22 SAND
						22-30 Gravel
						Well Construction
						0-28.5 Blank 2" ID PVC
						28.5-30 Sparge tip
						SAND 2 SEAL
						0-1.5 Native soil
						1.5-15 grout
						15-25 Bentonite
						25-30 SAND #2/12

WELL / BORING CONSTRUCTION DETAILS: 2 -inch I.D., Schedule 40 PVC: Bottom of Screen ( ) set at ______feet BGS; _____ Sand placed to _______feet BGS; Bentonite pellets placed to _______feet BGS; Grout tremied to BGS.

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LAKE TAHOE LAUNDRY WORKS
1024 LAKE TAHOE BOULEVARD
SOUTH LAKE TAHOE, CALIFORNIA

AS-23

FIELD LOCATION OF BORING:

PAGE 1 OF 1

PROJECT NUMBER: 1950BK09

DATES DRILLED: 11/13/09

CLIENT: SS, LP & FCM

DRILLER: BC2

SITE ADDRESS:
1024 Lake Tahoe Blvd

LOGGED BY: W. Lawson #7171

DRILLING METHOD AND EQUIPMENT: HA CME-75

WATER LEVEL			
START TIME		END TIME	
DATE			

Depth (Feet)	SAMPLE NAME	Blow Count	PID	WELL/ BORING SPECIFICATIONS and CONSTRUCTION DIAGRAM	USCS Symbol	SOIL DESCRIPTION
						HAND AUGER TOP 5'
						0-5' FILL
						5-10 SAND mod. yell brn
						10-12 Gravel & cobbles
						12-14 SAND
						14-16 GRAVELly SAND
						16-25 SAND w/ lenses of
						gravelly sand
						25-30 GRAVELLY SAND
						28' lense of cobbles
						30' - Soft
						Well Construction
						0-28.5 2" ID Blank PVC
						28.5-30 Sprage top
						SAND & SEAL
						0-1.5' Native soils
						1.5-15 grout
						15-25 bentonite
						25-30 SAND, med. grade

WELL / BORING CONSTRUCTION DETAILS: 2 -inch I.D., Schedule 40 PVC: Bottom of Screen ( ) set at ______feet BGS; _____ Sand placed to _______feet BGS; Bentonite pellets placed to _______feet BGS; Grout tremied to BGS.

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LAKE TAHOE LAUNDRY WORKS
1024 LAKE TAHOE BOULEVARD
SOUTH LAKE TAHOE, CALIFORNIA

AS- 24

FIELD LOCATION OF BORING:

PAGE 1 OF 1

PROJECT NUMBER: 1950BK09 DATES DRILLED: 11/13/09

CLIENT: SS, LP & FCM DRILLER: BC2

SITE ADDRESS: 1024 Lake Tahoe Blvd LOGGED BY: W. Lawson #7171

DRILLING METHOD AND EQUIPMENT: HA CME-75

WATER LEVEL			
START TIME		END TIME	
DATE			

Depth (Feet)	SAMPLE NAME	Blow Count	PID	WELL/ BORING SPECIFICATIONS and CONSTRUCTION DIAGRAM	USCS Symbol	SOIL DESCRIPTION
						HAND AUGER TOP 5'
						0-5' Fill
						5-11 SAND w/occas.
						Thin lenses of gravel
						11-12 cobbles
						12-20 SAND / GRAVELLY SAND
						20-25 SAND
						25-28 SANDY GRAVEL
						28-29 Cobbles
						29-30 SAND
						30 - Soft
						Well Construction
						0-28.5 2" ID PVC Blank
						28.5-30 Sparge tip
						SAND & SEAL
						0-1.5 Native Soils
						1.5-15 grout
						15-25 bentonite
						25-30 SAND, med. agua

WELL / BORING CONSTRUCTION DETAILS: 2 -inch I.D., Schedule 40 PVC: Bottom of Screen ( ) set at ______feet BGS; _____ Sand placed to _______feet BGS; Bentonite pellets placed to _______feet BGS; Grout tremied to BGS.

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LAKE TAHOE LAUNDRY WORKS
1024 LAKE TAHOE BOULEVARD
SOUTH LAKE TAHOE, CALIFORNIA

AS- 25

FIELD LOCATION OF BORING:

PAGE 1 OF 1

PROJECT NUMBER: 1950BK09 DATES DRILLED: 11/4/09

CLIENT: SS, LP & FCM DRILLER: BC2

SITE ADDRESS:
1024 Lake Tahoe Blvd LOGGED BY: W. Lawson #7171

DRILLING METHOD AND EQUIPMENT: HA CME-75

WATER LEVEL			
START TIME		END TIME	
DATE			

Depth (Feet)	SAMPLE NAME	Blow Count	PID	WELL/ BORING SPECIFICATIONS and CONSTRUCTION DIAGRAM	USCS Symbol	SOIL DESCRIPTION
						4" AC HAND AUGER TO 5'
						6" BR
						24' - gravel
						27' - SILT
						Well Construction
						0-25.5 2" blank PVC
						25.5-27 Sparge tip
						SAND & SEAL
						0-1.5 Cold Patch
						1.5-15 grout
						15-22 bentonite
						22-27 SAND #2/12

WELL / BORING CONSTRUCTION DETAILS: 2 -inch I.D., Schedule 40 PVC: Bottom of Screen ( ) set at ______feet BGS; _____ Sand placed to _______feet BGS; Bentonite pellets placed to _______feet BGS; Grout tremied to BGS.

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LAKE TAHOE LAUNDRY WORKS
1024 LAKE TAHOE BOULEVARD
SOUTH LAKE TAHOE, CALIFORNIA

AS- 26

FIELD LOCATION OF BORING:

PAGE 1 OF 1

PROJECT NUMBER: 1950BK09

DATES DRILLED: 11/19/09

CLIENT: SS, LP & FCM

DRILLER: BC2

SITE ADDRESS:
1024 Lake Tahoe Blvd

LOGGED BY: W. Lawson #7171

DRILLING METHOD AND EQUIPMENT: HA CME-75

WATER LEVEL			
START TIME		**END TIME**	
DATE			

Depth (Feet)	SAMPLE NAME	Blow Count	PID	WELL/ BORING SPECIFICATIONS and CONSTRUCTION DIAGRAM	USCS Symbol	SOIL DESCRIPTION
						0-5' HAND AUGER TOP 5'
						4" AC
						6" BR gray sand, damp
						1-5 SAND (SP): damp; mod. yellow
						brn; fine to med. no odor
						5- color change to dark brown
						6' color change to gold brn
						10' hard drilling cobbles
						11-26' SAND
						26' SILT
						Well Construction
						0-24.5 blank 2" ID PVC
						24.5-26 sponge tip
						SAND & SEAL
						1-15 grout
						15-21 bentonite
						21-26 SAND (#2/12)

WELL / BORING CONSTRUCTION DETAILS: 2 -inch I.D., Schedule 40 PVC: Bottom of Screen ( ) set at ______feet BGS; _____ Sand placed to _______feet BGS; Bentonite pellets placed to _______feet BGS; Grout tremied to BGS.

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LAKE TAHOE LAUNDRY WORKS
1024 LAKE TAHOE BOULEVARD
SOUTH LAKE TAHOE, CALIFORNIA

AS-27

FIELD LOCATION OF BORING:

PAGE 1 OF 1

PROJECT NUMBER: 1950BK09 DATES DRILLED: 11/5/09

CLIENT: SS, LP & FCM DRILLER: BC2

SITE ADDRESS:
1024 Lake Tahoe Blvd LOGGED BY: W. Lawson #7171

DRILLING METHOD AND EQUIPMENT: HA CME-75

WATER LEVEL			
START TIME		END TIME	
DATE			

Depth (Feet)	SAMPLE NAME	Blow Count	PID	WELL/ BORING SPECIFICATIONS and CONSTRUCTION DIAGRAM	USCS Symbol	SOIL DESCRIPTION
						4" AC Hand Auger top 5'
						6" BR
						10"-5' SAND (SP): moist; olive
						gray; fine to med sand; slight VOC
						odor
						5-13' SAME AS LW-MW-1S
						Well Construction
						ID 1S
						0-11 2" Blank PVC 0-4 Blank PVC
						11-13 0.020" slot 4-9 0.020" slot
						SAND & SEAL
						0-1.5 Native & cold patch
						1.5-3 Bentonite, hydrated
						3-9 SAND #2/12
						9-10 Bentonite, hydrated
						10-13 SAND #2/12

WELL / BORING CONSTRUCTION DETAILS: 2 -inch I.D., Schedule 40 PVC: Bottom of Screen ( ) set at ______feet BGS; _____ Sand placed to _______feet BGS; Bentonite pellets placed to _______feet BGS; Grout tremied to BGS.

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Fax: (916) 782-8049

LAKE TAHOE LAUNDRY WORKS
1024 LAKE TAHOE BOULEVARD
SOUTH LAKE TAHOE, CALIFORNIA

VES- 1
VED- 1

FIELD LOCATION OF BORING:

PAGE 1 OF 1

PROJECT NUMBER: 1950BK09
DATES DRILLED: 11/4/09
CLIENT: SS, LP & FCM
DRILLER: BC2
SITE ADDRESS:
1024 Lake Tahoe Blvd
LOGGED BY: W. Lawson #7171

DRILLING METHOD AND EQUIPMENT: HA CME-75

WATER LEVEL			
START TIME		END TIME	
DATE			

Depth (Feet)	SAMPLE NAME	Blow Count	PID	WELL/ BORING SPECIFICATIONS and CONSTRUCTION DIAGRAM	USCS Symbol	SOIL DESCRIPTION
						HAND Auger top 5'
						0-5 Fill - SAND w/some
						debris; mixed dark brn,
						olive brn & mod. yell. brn
						8' - SAND (SP); damp; med.
						yellow brn No odor
						9' - moist color change to yell brn
						Alluvium
						10-14 GRAVELLY SAND (SP; damp
						olive brn
						Well Construction
						2D 2S
						0-12 2" blank 0-6 blank
						12-14 0.020" slot 6-10 0.020"
						SAND & SEAL
						0-1.5 native soil
						1.5-4 bentonite hydrated
						4-10 SAND #2/12
						10-11 bentonite hydrated
						11-14 SAND #2/12

WELL / BORING CONSTRUCTION DETAILS: 2 -inch I.D., Schedule 40 PVC: Bottom of Screen ( ) set at ______feet BGS; _____ Sand placed to _______feet BGS; Bentonite pellets placed to _______feet BGS; Grout tremied to BGS.

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LAKE TAHOE LAUNDRY WORKS
1024 LAKE TAHOE BOULEVARD
SOUTH LAKE TAHOE, CALIFORNIA

VES- 2
VED- 2

FIELD LOCATION OF BORING:

PAGE 1 OF 1

PROJECT NUMBER: 1950BK09
DATES DRILLED: 11/7/09
CLIENT: SS, LP & FCM
DRILLER: BC2
SITE ADDRESS:
1024 Lake Tahoe Blvd
LOGGED BY: W. Lawson #7171

DRILLING METHOD AND EQUIPMENT: HA cme-75

WATER LEVEL			
START TIME		END TIME	
DATE			

Depth (Feet)	SAMPLE NAME	Blow Count	PID	WELL/ BORING SPECIFICATIONS and CONSTRUCTION DIAGRAM	USCS Symbol	SOIL DESCRIPTION
						HAND AUGER TOP 5'
						0-9 SAME AS VE-2
						9-12 SAND mod. yell brn
						12-14 gravel & cobbles
						14 SAND
						WELL CONSTRUCTION
						3D 3S
						0-12' BLANK 2" PVC 0-5 Blank PVC
						12-14' 0.020" Slot 5-10 0.020" Slot
						SAND & SEAL
						0-1.5 Native Soil
						1.5-4 bentonite hydrated
						4-10 SAND #2/12
						10-11 Bentonite hydrated
						11-14 SAND #2/12

WELL / BORING CONSTRUCTION DETAILS: 2 -inch I.D., Schedule 40 PVC: Bottom of Screen ( ) set at ______feet BGS; _____ Sand placed to _______feet BGS; Bentonite pellets placed to _______feet BGS; Grout tremied to BGS.

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LAKE TAHOE LAUNDRY WORKS
1024 LAKE TAHOE BOULEVARD
SOUTH LAKE TAHOE, CALIFORNIA

VES- 3
VED- 3

FIELD LOCATION OF BORING:

PAGE 1 OF 1

PROJECT NUMBER: 1950BK09 DATES DRILLED: 11/8/09

CLIENT: SS, LP & FCM DRILLER: BC2

SITE ADDRESS: 1024 Lake Tahoe Blvd LOGGED BY: W. Lawson #7171

DRILLING METHOD AND EQUIPMENT: HA CME-75

WATER LEVEL			
START TIME		**END TIME**	
DATE			

Depth (Feet)	SAMPLE NAME	Blow Count	PID	WELL/ BORING SPECIFICATIONS and CONSTRUCTION DIAGRAM	USCS Symbol	SOIL DESCRIPTION
						HAND Auger top 5'
						FILL
						0-10 SAND, debris, gravel
						10' cobbles
						11-13 GRAVELLY SAND
						WELL CONSTRUCTION
						4D 4S
						0-11 2" ID Blank PVC 0-4 Blank PVC
						11-13 0.020" SLOT 4-9 0.020" SLOT
						SAND & SEAL
						0-1.5 Native Soil
						1.5-3 Bentonite, hydrated
						3-9 SAND #2/12
						9-10 Bentonite, hydrated
						10-13 Sand #2/12

WELL / BORING CONSTRUCTION DETAILS: 2 -inch I.D., Schedule 40 PVC: Bottom of Screen ( ) set at ______feet BGS; _____ Sand placed to _______feet BGS; Bentonite pellets placed to _______feet BGS; Grout tremied to BGS.

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LAKE TAHOE LAUNDRY WORKS
1024 LAKE TAHOE BOULEVARD
SOUTH LAKE TAHOE, CALIFORNIA

VES- 4
VED- 4

FIELD LOCATION OF BORING:

PAGE 1 OF 1

PROJECT NUMBER: 1950BK09
DATES DRILLED: 11/9/07
CLIENT: SS, LP & FCM
DRILLER: BC2
SITE ADDRESS: 1024 Lake Tahoe Blvd
LOGGED BY: W. Lawson #7171

DRILLING METHOD AND EQUIPMENT: HA CME-75

WATER LEVEL			
START TIME		**END TIME**	
DATE			

Depth (Feet)	SAMPLE NAME	Blow Count	PID	WELL/ BORING SPECIFICATIONS and CONSTRUCTION DIAGRAM	USCS Symbol	SOIL DESCRIPTION
						HAND Auger top 5'
						0-8' FILL
						8-13.4' GRAVELLY SAND
						Well Construction
						5D 5S
						0-11.4 Blank 2" PVC 0-4.4 Blank PVC
						11.4-13.4 0.020" Slot 4.4-9.4 0.020" Slot
						SAND & SEAL
						0-1.5 Native Soils
						1.5-3.4 Bentonite, hydrated
						3.4-9.4 Sand Med. Aqua
						9.4-10.4 Bentonite, hydrated
						10.4-13.4 SAND Med. AQUA

WELL / BORING CONSTRUCTION DETAILS: 2 -inch I.D., Schedule 40 PVC: Bottom of Screen ( ) set at ______feet BGS; _____ Sand placed to _______feet BGS; Bentonite pellets placed to _______feet BGS; Grout tremied to BGS.

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LAKE TAHOE LAUNDRY WORKS
1024 LAKE TAHOE BOULEVARD
SOUTH LAKE TAHOE, CALIFORNIA

VES- 5
VED- 5

FIELD LOCATION OF BORING:

PAGE 1 OF 1

PROJECT NUMBER: 1950BK09
DATES DRILLED: 11/10/09
CLIENT: SS, LP & FCM
DRILLER: BC2
SITE ADDRESS: 1024 Lake Tahoe Blvd
LOGGED BY: W. Lawson #7171

DRILLING METHOD AND EQUIPMENT: HA CME-75

WATER LEVEL			
START TIME		END TIME	
DATE			

Depth (Feet)	SAMPLE NAME	Blow Count	PID	WELL/ BORING SPECIFICATIONS and CONSTRUCTION DIAGRAM	USCS Symbol	SOIL DESCRIPTION
						HAND AUGER TOP 5'
						0-5' Fill
						5-10' SAND (SP): damp: mod.
						yell. brn; fine-to med. sand
						10-11 GRAVELS + COBBLES
						11-12.5 GRAVELLY SAND
						WELL CONSTRUCTION
						6D 6S
						0-10.5 2" ID PVC Blank 0-3.5 Blank PVC
						10.5-12.5 0.020" Slot 3.5-8.5 0.020" slot
						SAND & SEALS
						0-1½ Native Soils
						1½-3 Bentonite, hydrated
						3-8.5 SAND #2/12
						8.5-9.5 Bentonite, hydrated
						9.5-12.5 SAND # 2/12

WELL / BORING CONSTRUCTION DETAILS: 2 -inch I.D., Schedule 40 PVC: Bottom of Screen ( ) set at ______feet BGS; _____ Sand placed to _______feet BGS; Bentonite pellets placed to _______feet BGS; Grout tremied to BGS.

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LAKE TAHOE LAUNDRY WORKS
1024 LAKE TAHOE BOULEVARD
SOUTH LAKE TAHOE, CALIFORNIA

VES- 6
VED- 6

FIELD LOCATION OF BORING:

PAGE 1 OF 1

PROJECT NUMBER: 1950BK09

DATES DRILLED: 11/12/09

CLIENT: SS, LP & FCM

DRILLER: BC2

SITE ADDRESS:
1024 Lake Tahoe Blvd

LOGGED BY: W. Lawson #7171

DRILLING METHOD AND EQUIPMENT: HA CME-75

WATER LEVEL			
START TIME		END TIME	
DATE			

Depth (Feet)	SAMPLE NAME	Blow Count	PID	WELL/ BORING SPECIFICATIONS and CONSTRUCTION DIAGRAM	USCS Symbol	SOIL DESCRIPTION
						HAND AUGER TOP 5'
						0-5' FILL
						5-10' SAND - med. yell brn
						10-12 GRAVELLY SAND
						olive gray
						Well CONSTRUCTION
						7D 7S
						0-10' 2" ID PVC Blank 1-3 blank
						10-12 0.020" slot 3-8 0.020" slot
						SAND & SEAL
						0-1.5 Native Soils
						1.5-2.5 bentonite, hydrated
						2.5-8 SAND, med. Aqua
						8-9 Bentonite, hydrated
						9-12 SAND, med. Aqua

WELL / BORING CONSTRUCTION DETAILS: 2 -inch I.D., Schedule 40 PVC: Bottom of Screen ( ) set at ______feet BGS; _____ Sand placed to _______feet BGS; Bentonite pellets placed to _______feet BGS; Grout tremied to BGS.

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LAKE TAHOE LAUNDRY WORKS
1024 LAKE TAHOE BOULEVARD
SOUTH LAKE TAHOE, CALIFORNIA

VES- 7
VED- 7

FIELD LOCATION OF BORING:

PAGE 1 OF 1

PROJECT NUMBER: 1950BK09
DATES DRILLED: 11/13/09
CLIENT: SS, LP & FCM
DRILLER: BC2
SITE ADDRESS: 1024 Lake Tahoe Blvd
LOGGED BY: W. Lawson #7171

DRILLING METHOD AND EQUIPMENT: HA CME-75

WATER LEVEL			
START TIME		END TIME	
DATE			

Depth (Feet)	SAMPLE NAME	Blow Count	PID	WELL/ BORING SPECIFICATIONS and CONSTRUCTION DIAGRAM	USCS Symbol	SOIL DESCRIPTION
						HAND AUGER TOP 5'
						0-5' Fill
						5-10' SAND (SP): damp; mod.
						yell brn; fine- to med. sand.
						10-12' GRAVELLY SAND (SP):
						damp; olive gray
						WELL CONSTRUCTION
						8D 8S
						0-10 2" ID pvc blank 1-3 blank PVC
						10-12 0.020" slot 3-8 0.020" slot
						SAND & SEAL
						0-1½ Native Soils
						1.5-2.5 Bentonite, hydrated
						2.5-8 SAND, med. Aqua
						8-9 Bentonite, hydrated
						9-12 SAND, med. Aqua

WELL / BORING CONSTRUCTION DETAILS: 2 -inch I.D., Schedule 40 PVC: Bottom of Screen ( ) set at ______feet BGS; _____ Sand placed to _______feet BGS; Bentonite pellets placed to _______feet BGS; Grout tremied to BGS.

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LAKE TAHOE LAUNDRY WORKS
1024 LAKE TAHOE BOULEVARD
SOUTH LAKE TAHOE, CALIFORNIA

VES- 8
VED- 8

FIELD LOCATION OF BORING:

PAGE 1 OF 1

PROJECT NUMBER: 1950BK09
DATES DRILLED: 11/11/09
CLIENT: SS, LP & FCM
DRILLER: BC2
SITE ADDRESS:
1024 Lake Tahoe Blvd
LOGGED BY: W. Lawson #7171

DRILLING METHOD AND EQUIPMENT: HA CME-75

WATER LEVEL			
START TIME		**END TIME**	
DATE			

Depth (Feet)	SAMPLE NAME	Blow Count	PID	WELL/ BORING SPECIFICATIONS and CONSTRUCTION DIAGRAM	USCS Symbol	SOIL DESCRIPTION
						HAND AUGER TOP 5'
						0-5 FILL
						5-7 GRAVELLY SAND
						7-11 SAND, GRAVELLY SAND
						11-12 SANDY GRAVEL
						WELL CONSTRUCTION
						0-10' 2" ID Blank PVC 1-3 Blank PVC
						10-12' 0.020" Slot 3-8 0.020" Slot
						SAND & SEAL
						0-1.5' Native Soils
						1.5-2.5 Bentonite, hydrated
						2.5-8 SAND #2/12
						8-9 Bentonite, hydrated
						9-12 SAND #2/12

WELL / BORING CONSTRUCTION DETAILS: **2 -inch I.D., Schedule 40 PVC: Bottom of Screen ( ) set at ______feet BGS; _____ Sand placed to _______feet BGS; Bentonite pellets placed to _______feet BGS; Grout tremied to BGS.**

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LAKE TAHOE LAUNDRY WORKS
1024 LAKE TAHOE BOULEVARD
SOUTH LAKE TAHOE, CALIFORNIA

VES- 9
VED- 9

FIELD LOCATION OF BORING:

PAGE 1 OF 1

PROJECT NUMBER: 1950BK09
DATES DRILLED: 11/11/09
CLIENT: SS, LP & FCM
DRILLER: BC2
SITE ADDRESS:
1024 Lake Tahoe Blvd
LOGGED BY: W. Lawson #7171

DRILLING METHOD AND EQUIPMENT: HA CME-75

WATER LEVEL			
START TIME		END TIME	
DATE			

Depth (Feet)	SAMPLE NAME	Blow Count	PID	WELL/ BORING SPECIFICATIONS and CONSTRUCTION DIAGRAM	USCS Symbol	SOIL DESCRIPTION
						HAND AUGER TOP 5'
						0-5 FILL
						5-7 GRAVELLY SAND
						7-11 SAND, GRAVELLY SAND
						11-12 SANDY GRAVEL
						WELL CONSTRUCTION
						10 D 10 S
						0-10 2" IP Blank PVC 1-3 Blank 2" DE
						10-12 0.020" Slot 3-8 0.020" Slot
						SAND & SEAL
						0-1.5 Native Soils
						1.5-2.5 Bentonite, hydrated
						2.5-8 SAND #2/12
						8-9 Bentonite, hydrated
						9-12 SAND #2/12

WELL / BORING CONSTRUCTION DETAILS: 2 -inch I.D., Schedule 40 PVC: Bottom of Screen ( ) set at ______feet BGS; _____ Sand placed to _______feet BGS; Bentonite pellets placed to _______feet BGS; Grout tremied to BGS.

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LAKE TAHOE LAUNDRY WORKS
1024 LAKE TAHOE BOULEVARD
SOUTH LAKE TAHOE, CALIFORNIA

VES- 10
VED- 10

FIELD LOCATION OF BORING:

PAGE 1 OF 1

PROJECT NUMBER: 1950BK09
DATES DRILLED: 11/8/09
CLIENT: SS, LP & FCM
DRILLER: BC2
SITE ADDRESS:
1024 Lake Tahoe Blvd
LOGGED BY: W. Lawson #7171

DRILLING METHOD AND EQUIPMENT: HA CME-75

WATER LEVEL			
START TIME		END TIME	
DATE			

Depth (Feet)	SAMPLE NAME	Blow Count	PID	WELL/ BORING SPECIFICATIONS and CONSTRUCTION DIAGRAM	USCS Symbol	SOIL DESCRIPTION
						HAND AUGER TOP 5'
						0-6' Fill
						6-7 Gravel
						7-11 SAND & GRAVELLY SAND
						11-12 SANDY GRAVEL
						Well Construction
						11D 11S
						0-10 2" IP Blank 1-3 Blank 2" PVC ~~0-8 0.020" slot~~
						10-12 0.020" slot 3-8 0.020" slot
						SAND & SEAL
						0-1.5 Native Soils
						1.5-2.5 Bentonite hydrated
						2.5-8 SAND #2/12
						8-9 Bentonite hydrated
						9-12 SAND #2/12

WELL / BORING CONSTRUCTION DETAILS: 2 -inch I.D., Schedule 40 PVC: Bottom of Screen ( ) set at ______feet BGS; _____ Sand placed to _______feet BGS; Bentonite pellets placed to _______feet BGS; Grout tremied to BGS.

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LAKE TAHOE LAUNDRY WORKS
1024 LAKE TAHOE BOULEVARD
SOUTH LAKE TAHOE, CALIFORNIA

VES- 11
VED- 11

FIELD LOCATION OF BORING:

PAGE 1 OF 1

PROJECT NUMBER: 1950BK09 DATES DRILLED: 11/7/09

CLIENT: SS, LP & FCM DRILLER: BC2

SITE ADDRESS:
1024 Lake Tahoe Blvd LOGGED BY: W. Lawson #7171

DRILLING METHOD AND EQUIPMENT: HA CME-75

WATER LEVEL			
START TIME		**END TIME**	
DATE			

Depth (Feet)	SAMPLE NAME	Blow Count	PID	WELL/ BORING SPECIFICATIONS and CONSTRUCTION DIAGRAM	USCS Symbol	SOIL DESCRIPTION
						HAND Auger top 6'
						FILL
						0-9 sand, gravel, debris,
						asphalt, cobbles
						9-10 large gravel, cobbles
						10-11.5 GRAVELLY SAND
						WELL CONSTRUCTION
						12D 12S
						0-9.5 Blank 2" ID 0-3.5 Blank
						9.5-11.5 0.020" Slot 3.5-7.5 0.020"
						SAND & SEAL
						0-1.5 Native soil
						1.5-3 Bentonite hydrated
						3-7.5 SAND
						7.5-8.5 Bentonite hydrated
						8.5-11.5 SAND #2/12
	MW-53 water 13.5'					

WELL / BORING CONSTRUCTION DETAILS: 2 -inch I.D., Schedule 40 PVC: Bottom of Screen ( ) set at ______feet BGS; _____ Sand placed to _______feet BGS; Bentonite pellets placed to _______feet BGS; Grout tremied to BGS.

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LAKE TAHOE LAUNDRY WORKS
1024 LAKE TAHOE BOULEVARD
SOUTH LAKE TAHOE, CALIFORNIA

VES- 12
VED- 12

FIELD LOCATION OF BORING:

PAGE 1 OF 1

PROJECT NUMBER: 1950BK09

DATES DRILLED: 5/7/09

CLIENT: SS, LP & FCM

DRILLER: BC2

SITE ADDRESS:
1024 Lake Tahoe Blvd

LOGGED BY: W. Lawson #7171

DRILLING METHOD AND EQUIPMENT: HA CME-75

WATER LEVEL			
START TIME		**END TIME**	
DATE			

Depth (Feet)	SAMPLE NAME	Blow Count	PID	WELL/ BORING SPECIFICATIONS and CONSTRUCTION DIAGRAM	USCS Symbol	SOIL DESCRIPTION
						HAND AUGER TOP 5'
						0-8 Fill
						8-9 GRAVELLY SAND
						9-10 cobbles
						10-13.5 GRAVELLY SAND/SANDY
						GRAVEL
						WELL CONSTRUCTION
						135 135 0-11.5 2" Blank
						11.5-13.5 0.020" Slot
						SAND & SEAL
						0-1.5 native Soils
						1.5-3.5 Bentonite, hydrated
						3.5-9.5 SAND #2/12
						9.5-10.5 Bentonite, hydrated
						10.5-13.5 SAND #2/12

WELL / BORING CONSTRUCTION DETAILS: 2 -inch I.D., Schedule 40 PVC: Bottom of Screen ( ) set at ______feet BGS; _____ Sand placed to _______feet BGS; Bentonite pellets placed to _______feet BGS; Grout tremied to BGS.

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LAKE TAHOE LAUNDRY WORKS
1024 LAKE TAHOE BOULEVARD
SOUTH LAKE TAHOE, CALIFORNIA

VES- 13
VED- 13

FIELD LOCATION OF BORING:

PAGE 1 OF 1

PROJECT NUMBER: 1950BK09 **DATES DRILLED:** 11/10/09

CLIENT: SS, LP & FCM **DRILLER:** BC2

SITE ADDRESS:
1024 Lake Tahoe Blvd **LOGGED BY:** W. Lawson #7171

DRILLING METHOD AND EQUIPMENT: HA CME-75

WATER LEVEL			
START TIME		**END TIME**	
DATE			

Depth (Feet)	SAMPLE NAME	Blow Count	PID	WELL/ BORING SPECIFICATIONS and CONSTRUCTION DIAGRAM	USCS Symbol	SOIL DESCRIPTION
						HAND AUGER TOP 5'
						0-5 Fill SAND, GRAVEL
						Debris
						5-10 SAND (SP): damp;
						mod yell brn; fine &
						med.
						10-11 Gravel & cobbles
						11-12.5 GRAVELLY SAND
						WELL CONSTRUCTION
						14D 14S
						0-10.5 2" ID BLANK PVC 0-3.5 Blank PVC
						10.5-12.5 0.020" Slot 3.5-8.5 0.020"
						Slot
						SAND & SEAL
						0-1½ Native soils
						1½-3 bentonite hydrated
						3-8.5 SAND #2/12
						8.5-9.5 bentonite hydrated
						9.5-12.5 SAND #2/12

WELL / BORING CONSTRUCTION DETAILS: **2 -inch I.D., Schedule 40 PVC: Bottom of Screen ( ) set at ______feet BGS; _____ Sand placed to _______feet BGS; Bentonite pellets placed to _______feet BGS; Grout tremied to BGS.**

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LAKE TAHOE LAUNDRY WORKS
1024 LAKE TAHOE BOULEVARD
SOUTH LAKE TAHOE, CALIFORNIA

VES- 14
VED- 14

FIELD LOCATION OF BORING:

PAGE 1 OF 1

PROJECT NUMBER: 1950BK09 **DATES DRILLED:** 1/6/09

CLIENT: SS, LP & FCM **DRILLER:** BC2

SITE ADDRESS: 1024 Lake Tahoe Blvd **LOGGED BY:** W. Lawson #7171

DRILLING METHOD AND EQUIPMENT: HA CME-75

WATER LEVEL			
START TIME		**END TIME**	
DATE			

Depth (Feet)	SAMPLE NAME	Blow Count	PID	WELL/ BORING SPECIFICATIONS and CONSTRUCTION DIAGRAM	USCS Symbol	SOIL DESCRIPTION
						4" AC HAND AUGER TOP 5'
						6" BR
						10" - SAND(SP): damp; med
						yell brn; fine to med.
						9' GRAVELLY SAND
						11.5-12 GRAVELLY SAND (SP);
						damp; olive gray; fine to
						med sand; fine to med grvl
						WELL CONSTRUCTION
						12 15
						0-10 2" ID PVC blank 0-3 Blank PVC
						10-12 0.020" SLOT 3-8 0.020" SLOT
						SAND & SEAL
						0-1.5 cold patch
						1.5-3 bentonite hydrated
						3-8 SAND # 2/12
						8-9 Bentonite hydrated
						9-12 SAND # 2/12

WELL / BORING CONSTRUCTION DETAILS: 2 -inch I.D., Schedule 40 PVC: Bottom of Screen ( ) set at ______feet BGS; _____ Sand placed to _______feet BGS; Bentonite pellets placed to _______feet BGS; Grout tremied to BGS.

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LAKE TAHOE LAUNDRY WORKS
1024 LAKE TAHOE BOULEVARD
SOUTH LAKE TAHOE, CALIFORNIA

VES- 15
VED- 15

FIELD LOCATION OF BORING:

PAGE 1 OF 1

PROJECT NUMBER: 1950BK09
DATES DRILLED: 11/12/09
CLIENT: SS, LP & FCM
DRILLER: BC2
SITE ADDRESS: 1024 Lake Tahoe Blvd
LOGGED BY: W. Lawson #7171

DRILLING METHOD AND EQUIPMENT: HA CME-75

WATER LEVEL			
START TIME		END TIME	
DATE			

Depth (Feet)	SAMPLE NAME	Blow Count	PID	WELL/ BORING SPECIFICATIONS and CONSTRUCTION DIAGRAM	USCS Symbol	SOIL DESCRIPTION
						4" AC
						6" BR
						HAND AUGER TOP 5'
						0-5' Fill
						5-11' SAND med. yell brn
						11-12 SAND/GRAVELLY SAND
						olive gray
						Well construction
						16 D 16 S
						0-10 2" ID blank pvc
						10-12 0.020" slot
						SAND & SEAL
						0-1.5 native soils w/cold patch cap
						1.5-2.5 bentonite, hydrated
						2.5-8 SAND, med. aqua
						8-9 bentonite, hydrated
						9-12 SAND, med. aqua

WELL / BORING CONSTRUCTION DETAILS: 2 -inch I.D., Schedule 40 PVC: Bottom of Screen ( ) set at ______feet BGS; _____ Sand placed to _______feet BGS; Bentonite pellets placed to _______feet BGS; Grout tremied to BGS.

E₂C Remediation
1358 Blue Oaks Blvd., Suite 300
Roseville, California 95678

Phone: (916) 782-8700
Fax: (916) 782-8049

LAKE TAHOE LAUNDRY WORKS
1024 LAKE TAHOE BOULEVARD
SOUTH LAKE TAHOE, CALIFORNIA

VES- 16
VED- 16

FIELD LOCATION OF BORING:

PAGE 1 OF 1

PROJECT NUMBER: 1950BK09
DATES DRILLED: 12/14/09
CLIENT: SS, LP & FCM
DRILLER: BC2
SITE ADDRESS: 1024 Lake Tahoe Blvd
LOGGED BY: W. Lawson #7171

DRILLING METHOD AND EQUIPMENT: HA CME-75

WATER LEVEL			
START TIME		**END TIME**	
DATE			

Depth (Feet)	SAMPLE NAME	Blow Count	PID	WELL/ BORING SPECIFICATIONS and CONSTRUCTION DIAGRAM	USCS Symbol	SOIL DESCRIPTION
						4" AC HAND AUGER TOP 5'
						6" BR
						10"-4' SAND med. yell brn
						4-6 SAND black brn
						6-8 SAND med. yell brn
						8'-9' gravel
						10-11 SAND med. yell brn
						11-12 gravel
						12-13 gravel/SAND
						well CONSTRUCTION
						17D 17S
						0-13 2" blank PVC 0-4 blank PVC
						13-5 0.020" slot 4-9 0.020" slot
						SAND & SEAL
						0-1.5 cold patch
						1.5-3 bentonite hydrated
						3-9 SAND #2/12
						9-10 bentonite hydrated
						10-13 Sand #2/12

WELL / BORING CONSTRUCTION DETAILS: 2 -inch I.D., Schedule 40 PVC: Bottom of Screen ( ) set at ______feet BGS; _____ Sand placed to _______feet BGS; Bentonite pellets placed to _______feet BGS; Grout tremied to BGS.

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LAKE TAHOE LAUNDRY WORKS
1024 LAKE TAHOE BOULEVARD
SOUTH LAKE TAHOE, CALIFORNIA

VES- 17
VED- 17

FIELD LOCATION OF BORING:

PAGE 1 OF 7

PROJECT NUMBER: 1950BK09

DATES DRILLED: 4/14/09

CLIENT: SS, LP & FCM

DRILLER: BC2

SITE ADDRESS:
1024 Lake Tahoe Blvd

LOGGED BY: W. Lawson #7171

DRILLING METHOD AND EQUIPMENT: HA CME 75

WATER LEVEL			
START TIME		**END TIME**	
DATE			

Depth (Feet)	SAMPLE NAME	Blow Count	PID	WELL/ BORING SPECIFICATIONS and CONSTRUCTION DIAGRAM	USCS Symbol	SOIL DESCRIPTION
						4" AC HAND Auger top 5'
						6" BR
						10"- 4' SAND(SP): damp; med.
						yell brn " 4
						4-6 SAND (SP): damp; dk brn
						6-12 SAND(SP): damp; med. yell.
						brn; fine to med.
						12-13 SAND (SW); damp; brn;
						med. sand.
						Well Construction
						16D 16S
						0-11 2" blank pvc 0-4 blank PVC
						11-13 2" 0.020" slot 4-9 0.020" slot
						SAND & SEAL
						0-1.5 cold patch
						1.5-3 bentonite hydrated
						3-9 SAND #2/12
						9-10 bentonite hydrated
						10-13 SAND #2/12

WELL / BORING CONSTRUCTION DETAILS: 2 -inch I.D., Schedule 40 PVC: Bottom of Screen ( ) set at ______feet BGS; _____ Sand placed to _______feet BGS; Bentonite pellets placed to _______feet BGS; Grout tremied to BGS.

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LAKE TAHOE LAUNDRY WORKS
1024 LAKE TAHOE BOULEVARD
SOUTH LAKE TAHOE, CALIFORNIA

VES- 16
VED- 16

FIELD LOCATION OF BORING:

PAGE 1 OF 1

PROJECT NUMBER: 1950BK09
DATES DRILLED: 11/3/09
CLIENT: SS, LP & FCM
DRILLER: BC2
SITE ADDRESS:
1024 Lake Tahoe Blvd
LOGGED BY: W. Lawson #7171

DRILLING METHOD AND EQUIPMENT: HA CME-75

WATER LEVEL			
START TIME		**END TIME**	
DATE			

Depth (Feet)	SAMPLE NAME	Blow Count	PID	WELL/ BORING SPECIFICATIONS and CONSTRUCTION DIAGRAM	USCS Symbol	SOIL DESCRIPTION
						4" AC HAND AUGER TOP 5'
						6" BR
						10"-4' SAND (SP): damp;
						med yell brn; fine to med
						4-6 SAND (SP): damp;
						dark brown
						6'-12' SAND (SM): damp; lt.
						brn; med. sand, no odor
						12' cobble
						well construction
						19D 19S
						0-10 2" blank 0-2 2" blank
						10-12 0.020" slot 2-7 0.020" slot
						SAND & SEAL
						0-18" open - dirt w/ cold patch
						1.5-2' hydrated bentonite
						2-8 #2/12 SAND
						8-9 hydrated bentonite
						9-12 #2/12 SAND

WELL / BORING CONSTRUCTION DETAILS: 2 -inch I.D., Schedule 40 PVC: Bottom of Screen ( ) set at ______feet BGS; _____ Sand placed to _______feet BGS; Bentonite pellets placed to _______feet BGS; Grout tremied to BGS.

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LAKE TAHOE LAUNDRY WORKS
1024 LAKE TAHOE BOULEVARD
SOUTH LAKE TAHOE, CALIFORNIA

VES- 19
VED- 19

FIELD LOCATION OF BORING:

PAGE 1 OF 1

PROJECT NUMBER: 1950BK09
DATES DRILLED: 6/3/09
CLIENT: SS, LP & FCM
DRILLER: BC2
SITE ADDRESS: 1024 Lake Tahoe Blvd
LOGGED BY: W. Lawson #7171

DRILLING METHOD AND EQUIPMENT: HA CME-75

WATER LEVEL			
START TIME		END TIME	
DATE			

Depth (Feet)	SAMPLE NAME	Blow Count	PID	WELL/ BORING SPECIFICATIONS and CONSTRUCTION DIAGRAM	USCS Symbol	SOIL DESCRIPTION
						4" AC HAND AUGER TOP 5'
						6" BR
						10" – 4' SAND (SP): damp;
						Mod. yell. brn; fine to med.; no odor
						4'-6' SAND (SP): damp; dk. brn
						6'-11 SAND (SP); damp; lt
						yell brn
						11-12 GRAVEL
						WELL CONSTRUCTION
						20 D 20 S
						0-10 2" blank PVC 0-2 2" blank PVC
						10-12 0.020" slot 2-7 0.020" slot
						SAND + SEAL
						0-1.5 cold patch
						1.5-2 hydrated bentonite
						2-8 SAND #2/12
						8 9 hydrated bentonite
						9-12 SAND #2/12

WELL / BORING CONSTRUCTION DETAILS: 2 -inch I.D., Schedule 40 PVC: Bottom of Screen ( ) set at ______feet BGS; _____ Sand placed to _______feet BGS; Bentonite pellets placed to _______feet BGS; Grout tremied to BGS.

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LAKE TAHOE LAUNDRY WORKS
1024 LAKE TAHOE BOULEVARD
SOUTH LAKE TAHOE, CALIFORNIA

VES- 20
VED- 20

APPENDIX E

Offsite Well OS-1 Boring Log

FIELD LOCATION OF BORING:

CALTRANS right-of-way in entrance to former Miller's Outpost parking lot

PAGE 1 OF 1

PROJECT NUMBER: 1950BK09

DATES DRILLED: ~~1950BK09~~ 2/19/09

CLIENT: Seven Springs, LLC
Fox Capital Management

DRILLER: Test America

SITE ADDRESS:
945-947 Hwy 89, So. Lake Tahoe

LOGGED BY: W. Lawson, P.G. 7171

DRILLING METHOD AND EQUIPMENT: Hollow-Stem Auger

WATER LEVEL			
START TIME		END TIME	
DATE			

Depth (Feet)	SAMPLE NAME	Blow Count	PID	WELL/ BORING SPECIFICATIONS and CONSTRUCTION DIAGRAM	USCS Symbol	SOIL DESCRIPTION
						HAND Auger to 8'
					SP	8-8.5 SAND (SP): damp: brown to light brown; very fine sand
	OS-1@10	19/23/20			SW	10-10.5 SAND (SW): damp to very moist: orange brown: coarse sand; no odor!
	OS-1@15	28/20/50 for 5"			SP/SP	15-15.5 GRAVELLY SAND/SAND (SP/SP): very moist; coarse sand; coarse gravel; lt. brown
				▽	SP/SM	18-18.5 SAND/SILTY SAND (SP/SM): wet; dark brown; coarse sand
	OS-1@20	39/50 for 3"			SP/SM	20-20.5 SAND/SILT (SP/SM): wet fine sand; dark brown
	OS-1@25	30/36/50 for 2"			SW	25-25.5 SAND (SW): wet; lt. brown to gray; fine to coarse sand

WELL / BORING CONSTRUCTION DETAILS: 2 -inch I.D., Schedule 40 PVC: Bottom of Screen (0.020") set at 10-25 feet BGS; #3 Sand placed to 8-25 feet BGS; Bentonite pellets placed to 5-8 feet BGS; Grout tremied to 1-5 BGS.

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LAKE TAHOE LAUNDRY WORKS
1024 LAKE TAHOE BOULEVARD
SOUTH LAKE TAHOE, CALIFORNIA

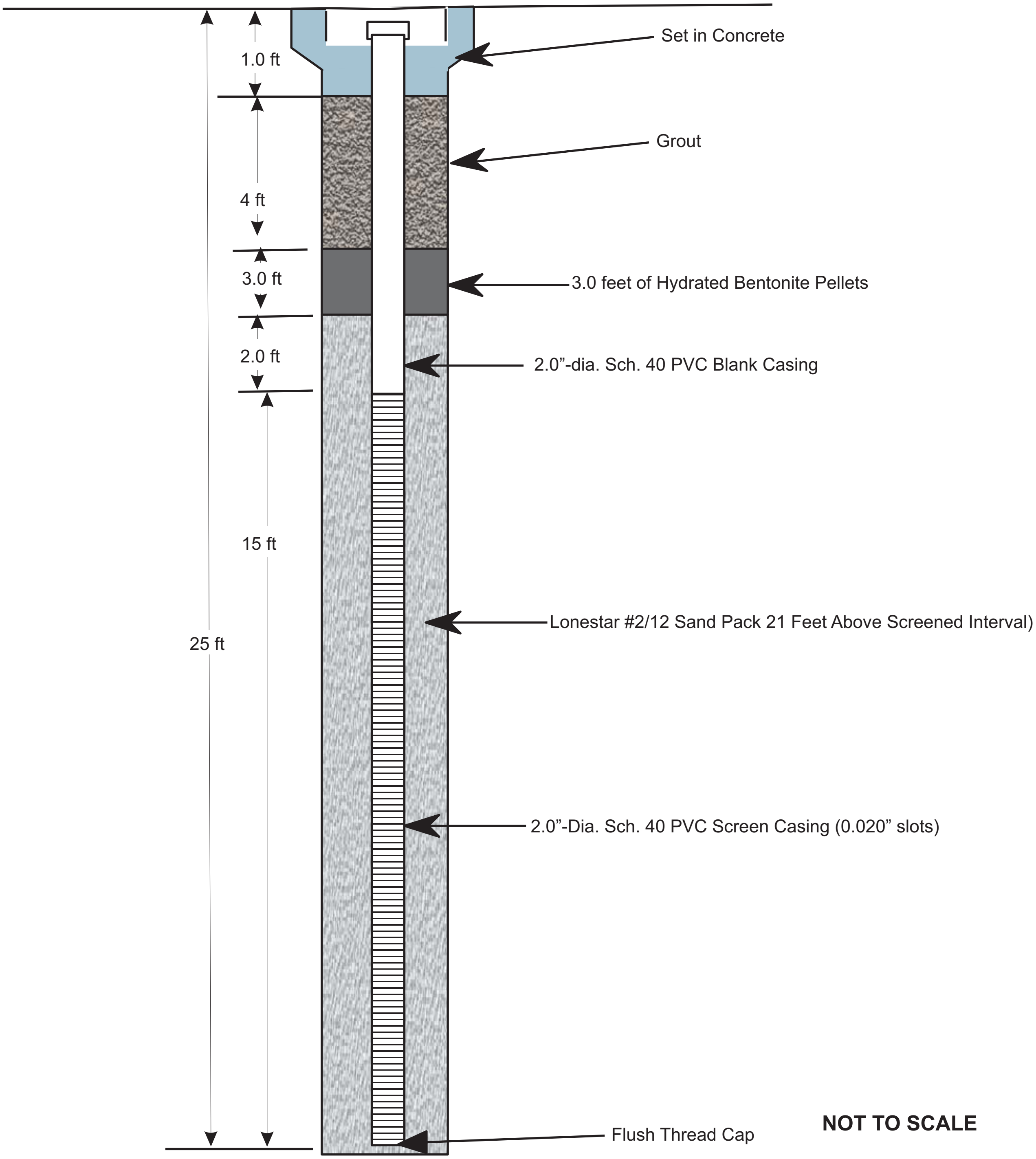
MONITORING WELL OS-1
BORING LOG

OS-1

APPENDIX F

Monitoring Well As-Built Diagrams

Note: Well head installed with a traffic-rated,
flush-mount cover



NOT TO SCALE

E_2C Remediation
5300 Woodmere Dr., Suite 105
Bakersfield, CA 93313

Phone: (661) 831-6906
Fax: (661) 831-6234

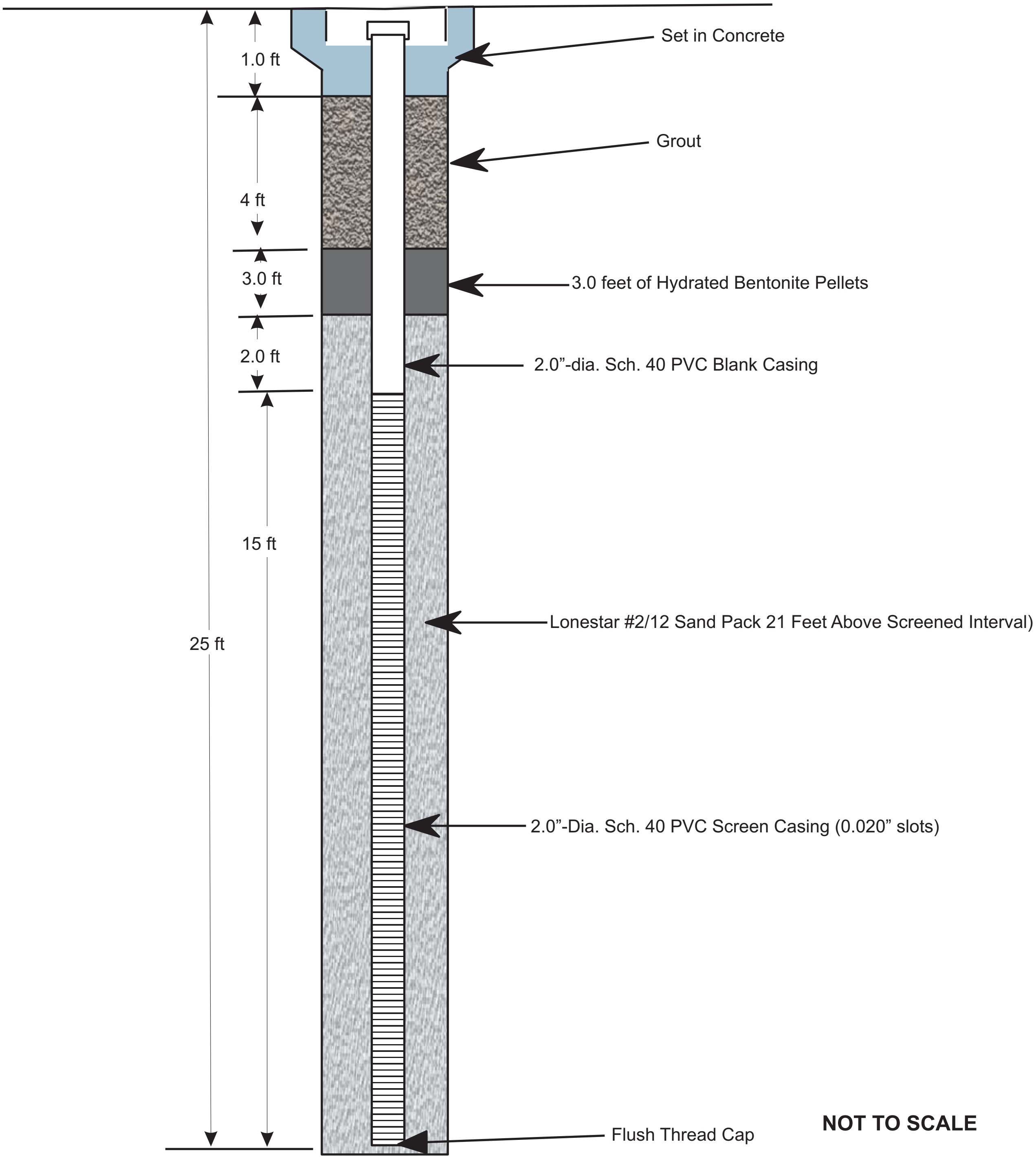
LAKE TAHOE LAUNDRY WORKS
1024 LAKE TAHOE BOULEVARD
SOUTH LAKE TAHOE, CALIFORNIA

GROUNDWATER MONITORING WELL
LW-MW-9S AS-BUILT DIAGRAM

FIGURE

F-1

Note: Well head installed with a traffic-rated,
flush-mount cover



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Fax: (661) 831-6234

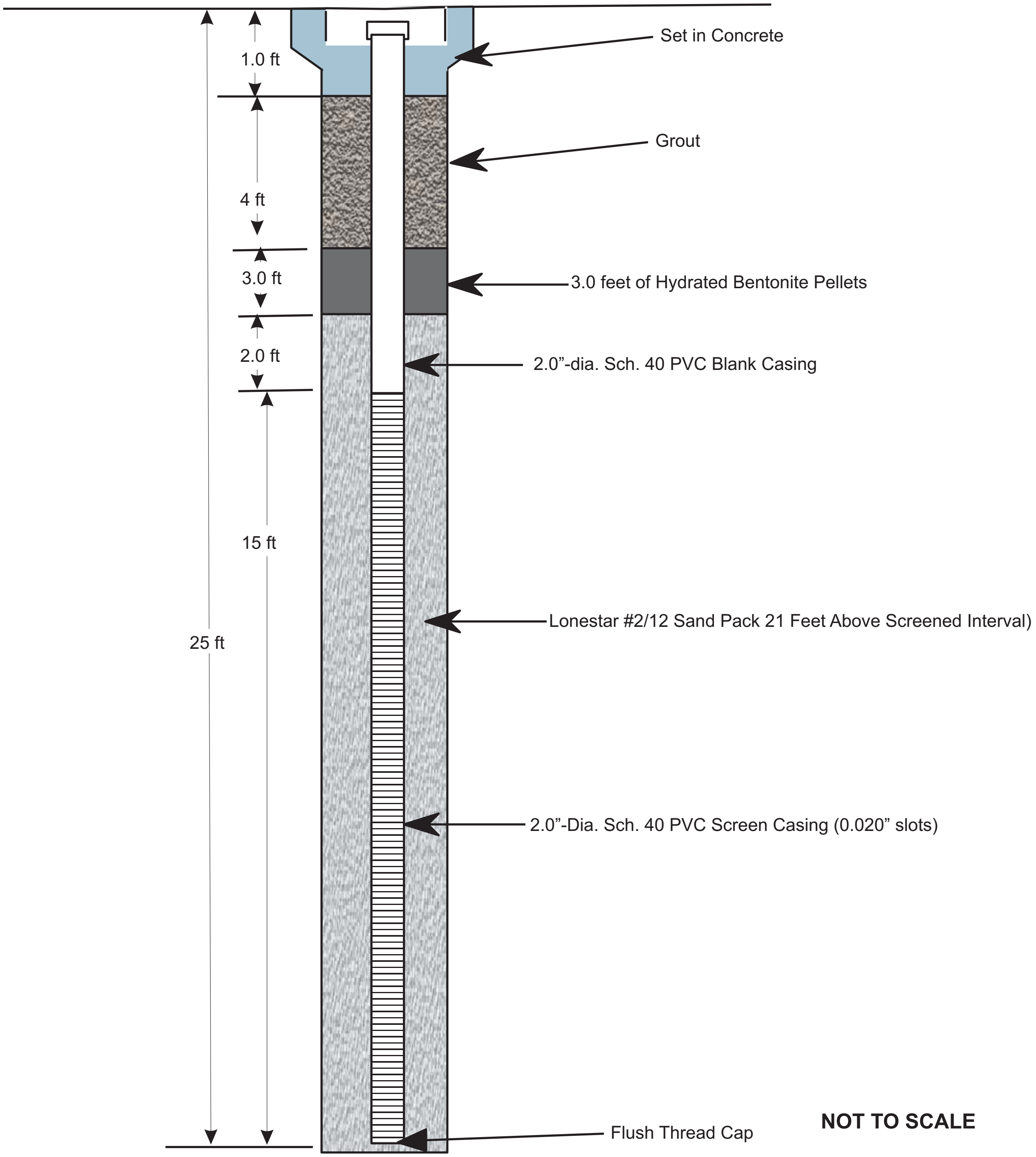
LAKE TAHOE LAUNDRY WORKS
1024 LAKE TAHOE BOULEVARD
SOUTH LAKE TAHOE, CALIFORNIA

GROUNDWATER MONITORING WELL
LW-MW-10S AS-BUILT DIAGRAM

FIGURE

F-2

Note: Well head installed with a traffic-rated,
flush-mount cover



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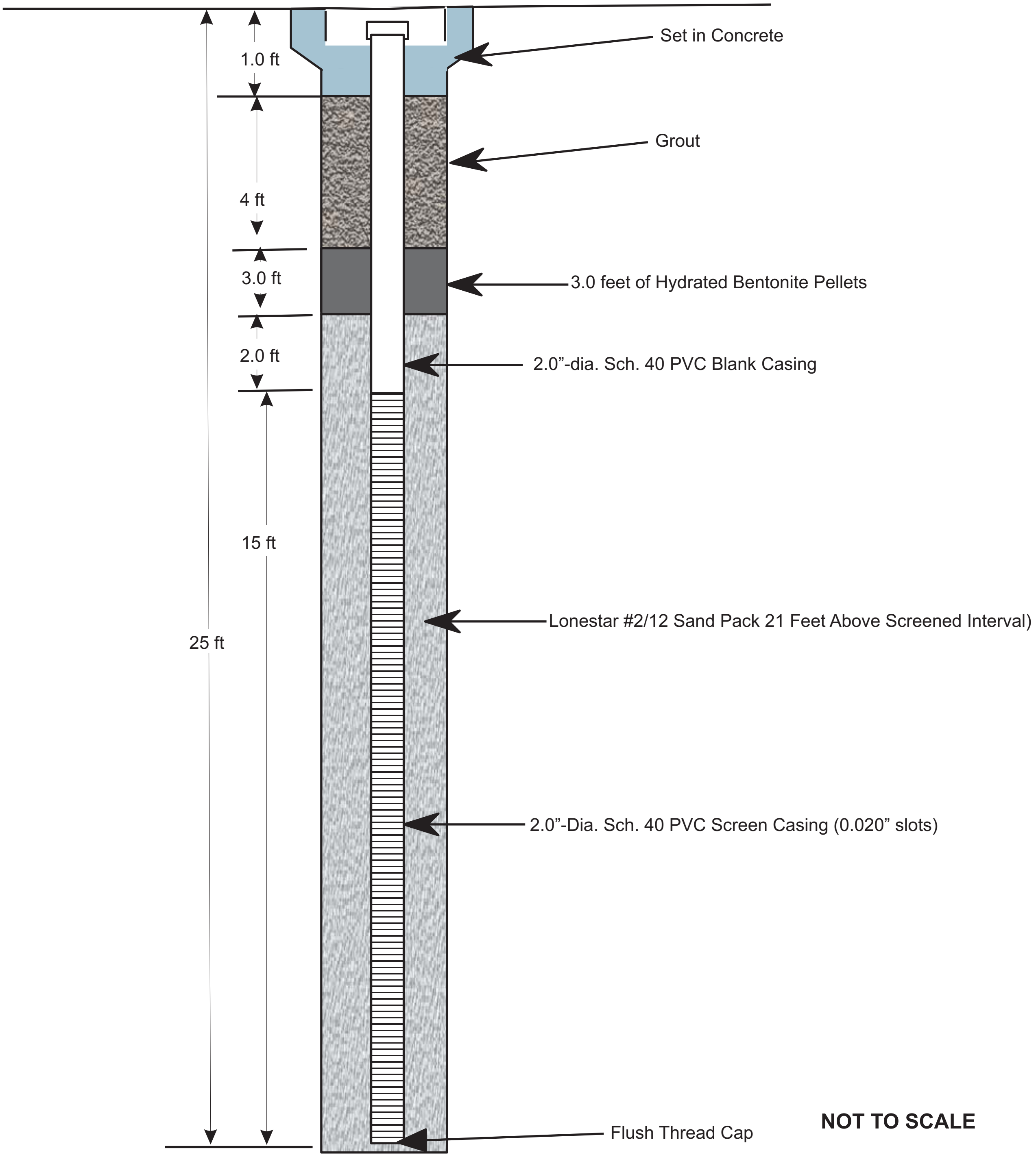
LAKE TAHOE LAUNDRY WORKS
1024 LAKE TAHOE BOULEVARD
SOUTH LAKE TAHOE, CALIFORNIA

GROUNDWATER MONITORING WELL
LW-MW-11S AS-BUILT DIAGRAM

FIGURE

F-3

Note: Well head installed with a traffic-rated,
flush-mount cover



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Fax: (661) 831-6234

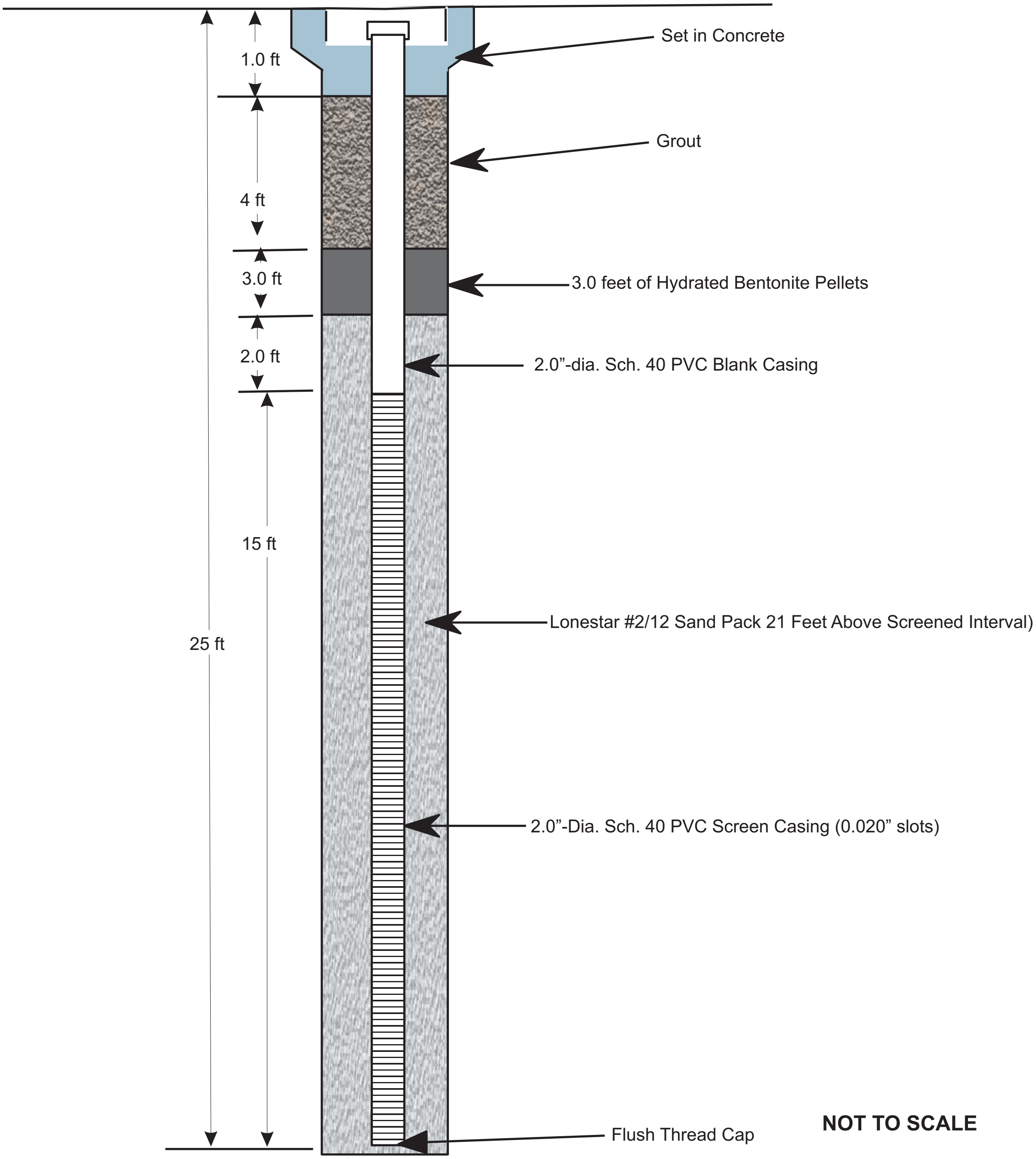
LAKE TAHOE LAUNDRY WORKS
1024 LAKE TAHOE BOULEVARD
SOUTH LAKE TAHOE, CALIFORNIA

GROUNDWATER MONITORING WELL
LW-MW-12S AS-BUILT DIAGRAM

FIGURE

F-4

Note: Well head installed with a traffic-rated,
flush-mount cover



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Fax: (661) 831-6234

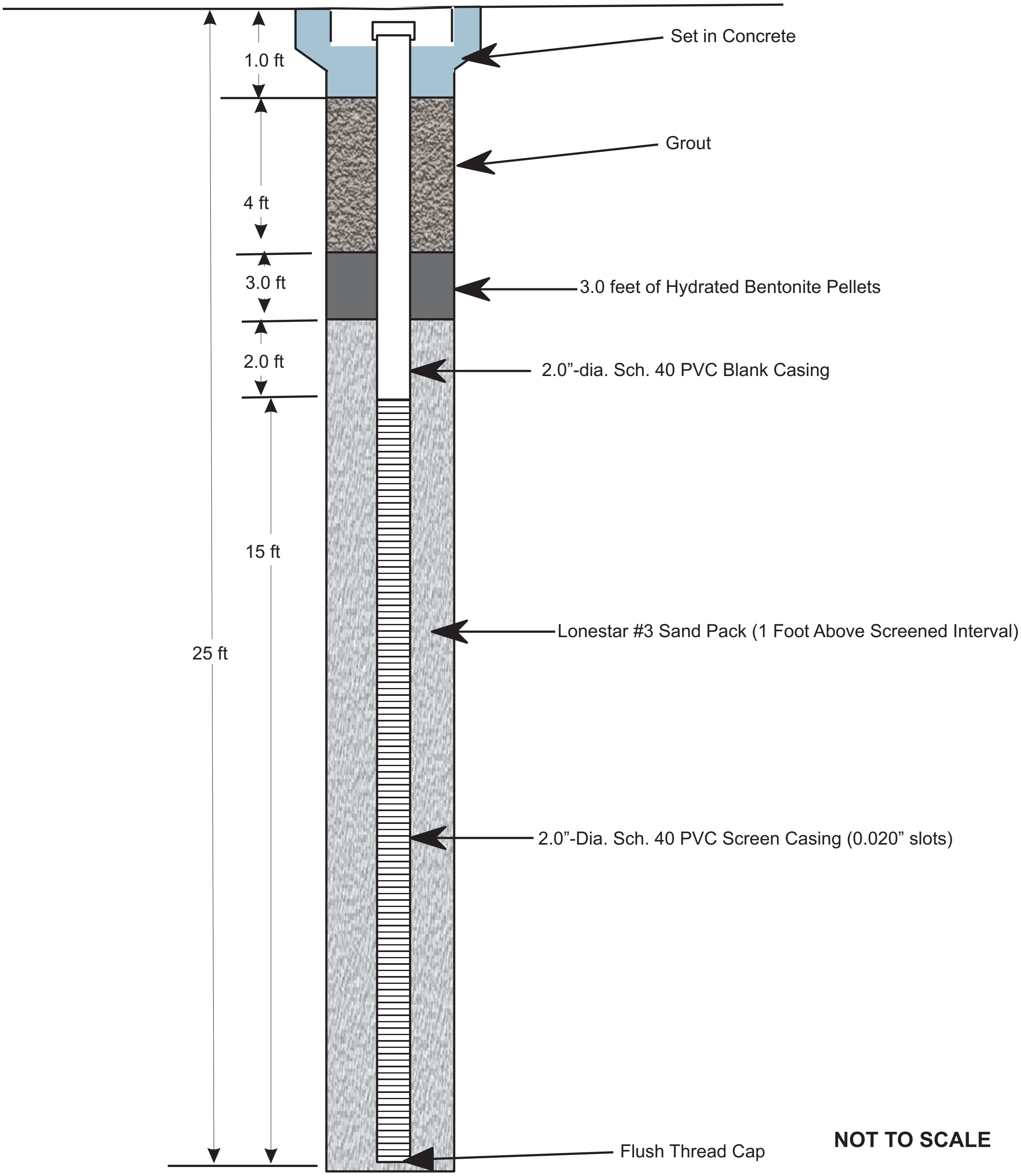
LAKE TAHOE LAUNDRY WORKS
1024 LAKE TAHOE BOULEVARD
SOUTH LAKE TAHOE, CALIFORNIA

GROUNDWATER MONITORING WELL
LW-MW-13S AS-BUILT DIAGRAM

FIGURE

F-5

Note: Well head installed with a traffic-rated, flush-mount cover



NOT TO SCALE

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Fax: (661) 831-6234

LAKE TAHOE LAUNDRY WORKS
1024 LAKE TAHOE BOULEVARD
SOUTH LAKE TAHOE, CALIFORNIA

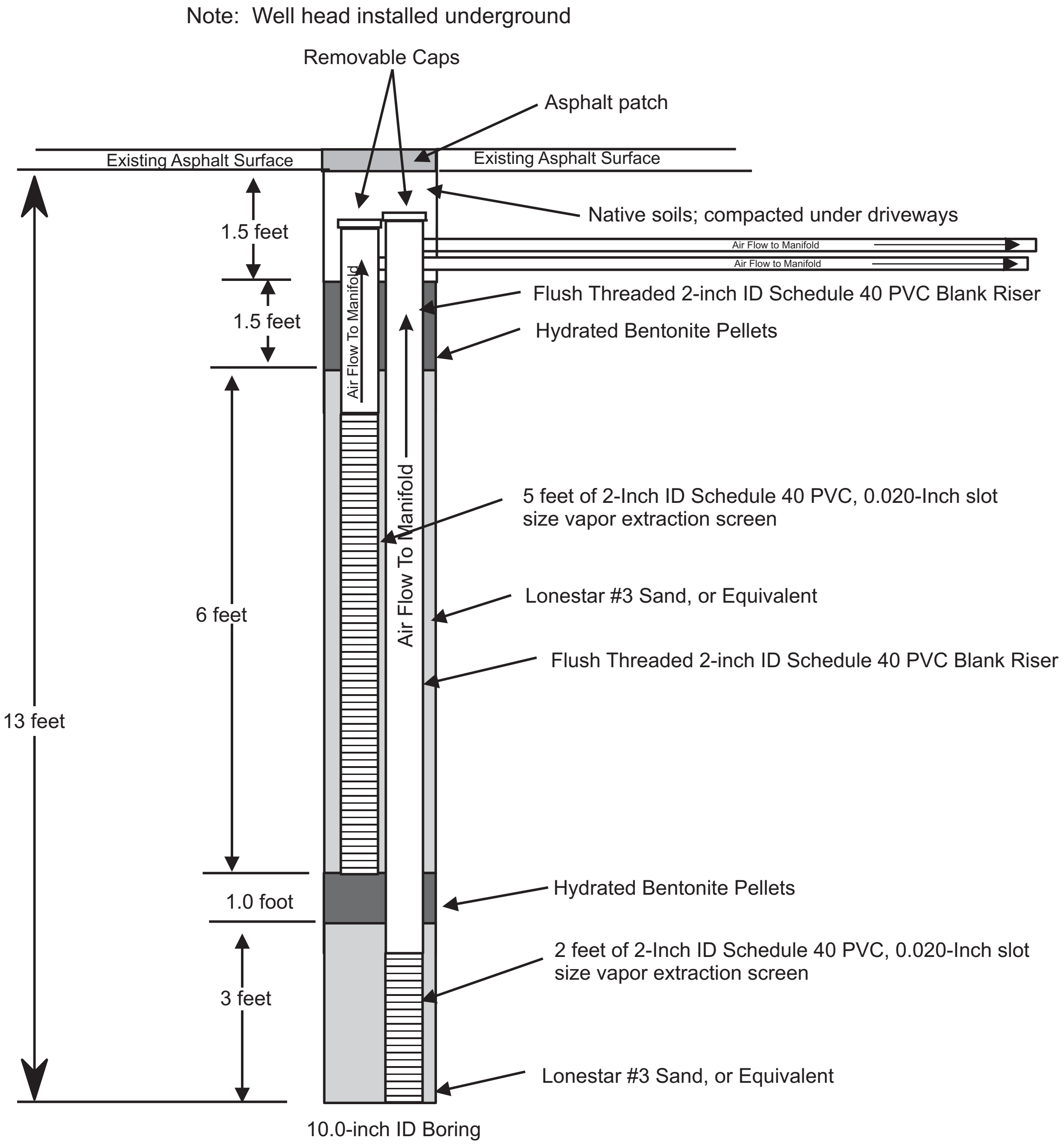
GROUNDWATER MONITORING WELL
OS-1 AS-BUILT DIAGRAM

FIGURE

F-6

APPENDIX G

SVE Well As-Built Diagrams



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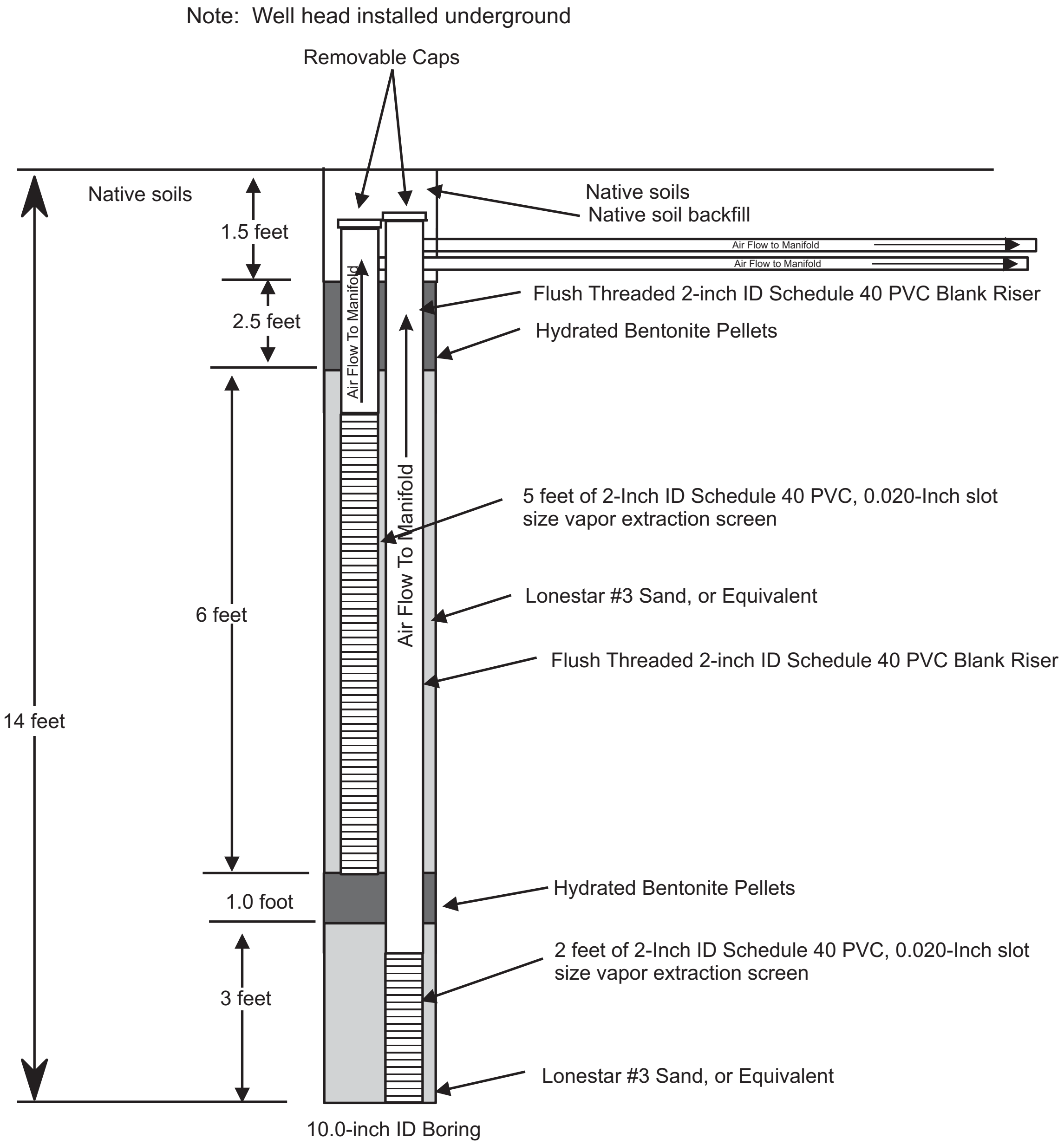
Fax: (661) 831-6234

LAKE TAHOE LAUNDRY WORKS
1024 LAKE TAHOE BOULEVARD
SOUTH LAKE TAHOE, CALIFORNIA

VES-1/VED-1
AS-BUILT DIAGRAM

FIGURE

G-1



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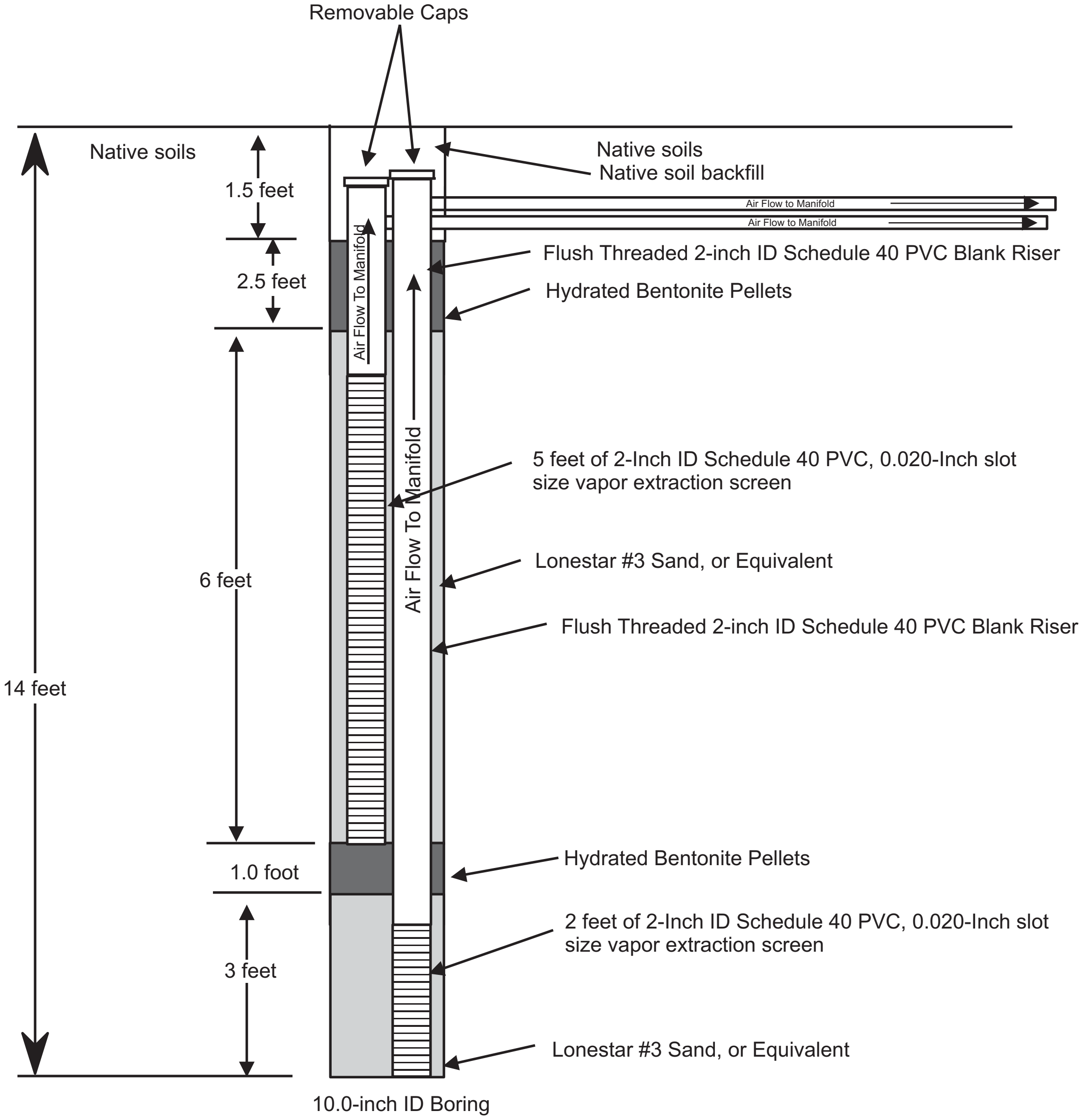
LAKE TAHOE LAUNDRY WORKS
1024 LAKE TAHOE BOULEVARD
SOUTH LAKE TAHOE, CALIFORNIA

VES-2/VED-2
AS-BUILT DIAGRAM

FIGURE

G-2

Note: Well head installed underground



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Bakersfield, CA 93313

Phone: (661) 831-6906
Fax: (661) 831-6234

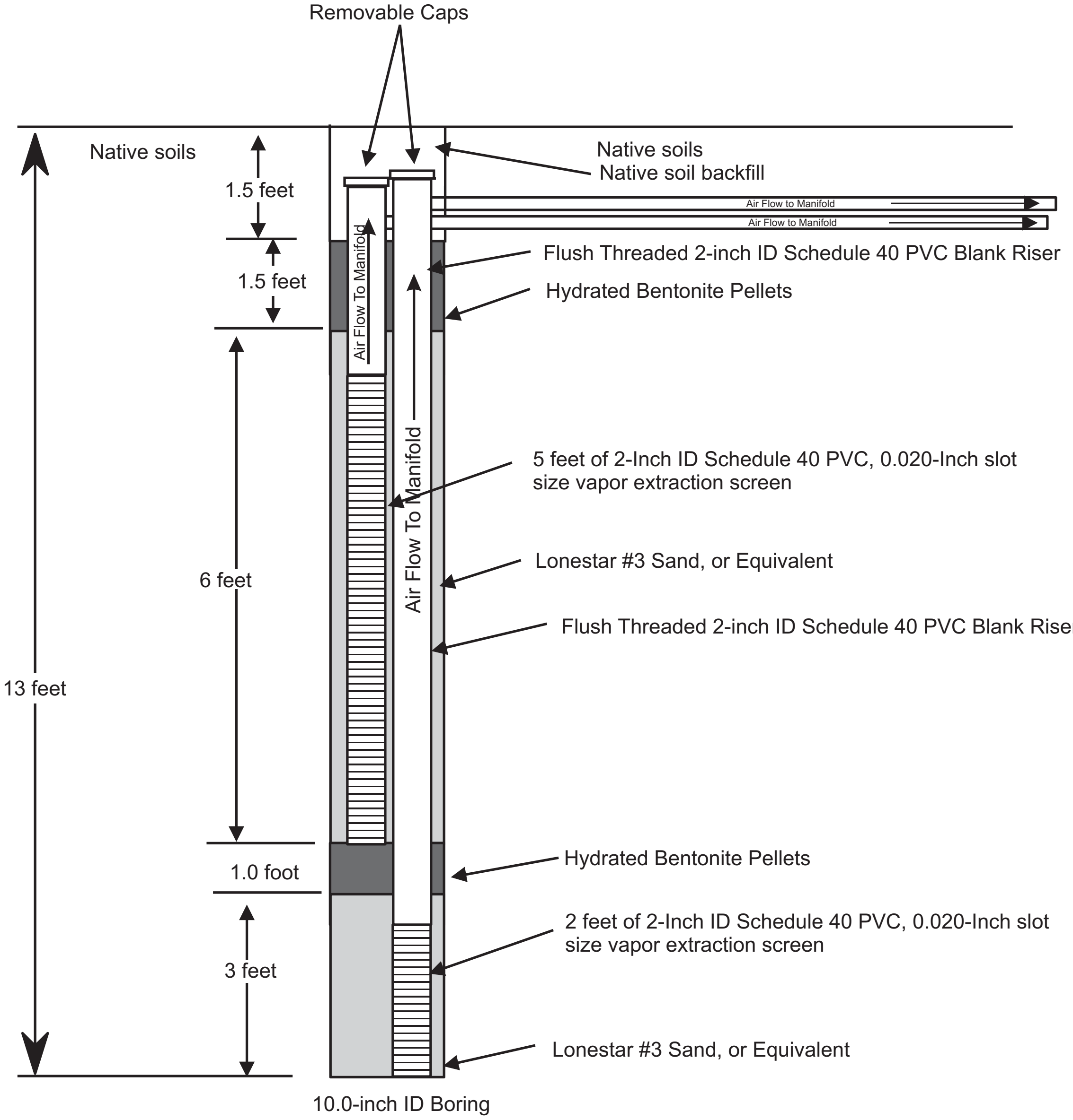
LAKE TAHOE LAUNDRY WORKS
1024 LAKE TAHOE BOULEVARD
SOUTH LAKE TAHOE, CALIFORNIA

VES-3/VED-3
AS-BUILT DIAGRAM

FIGURE

G-3

Note: Well head installed underground



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Fax: (661) 831-6234

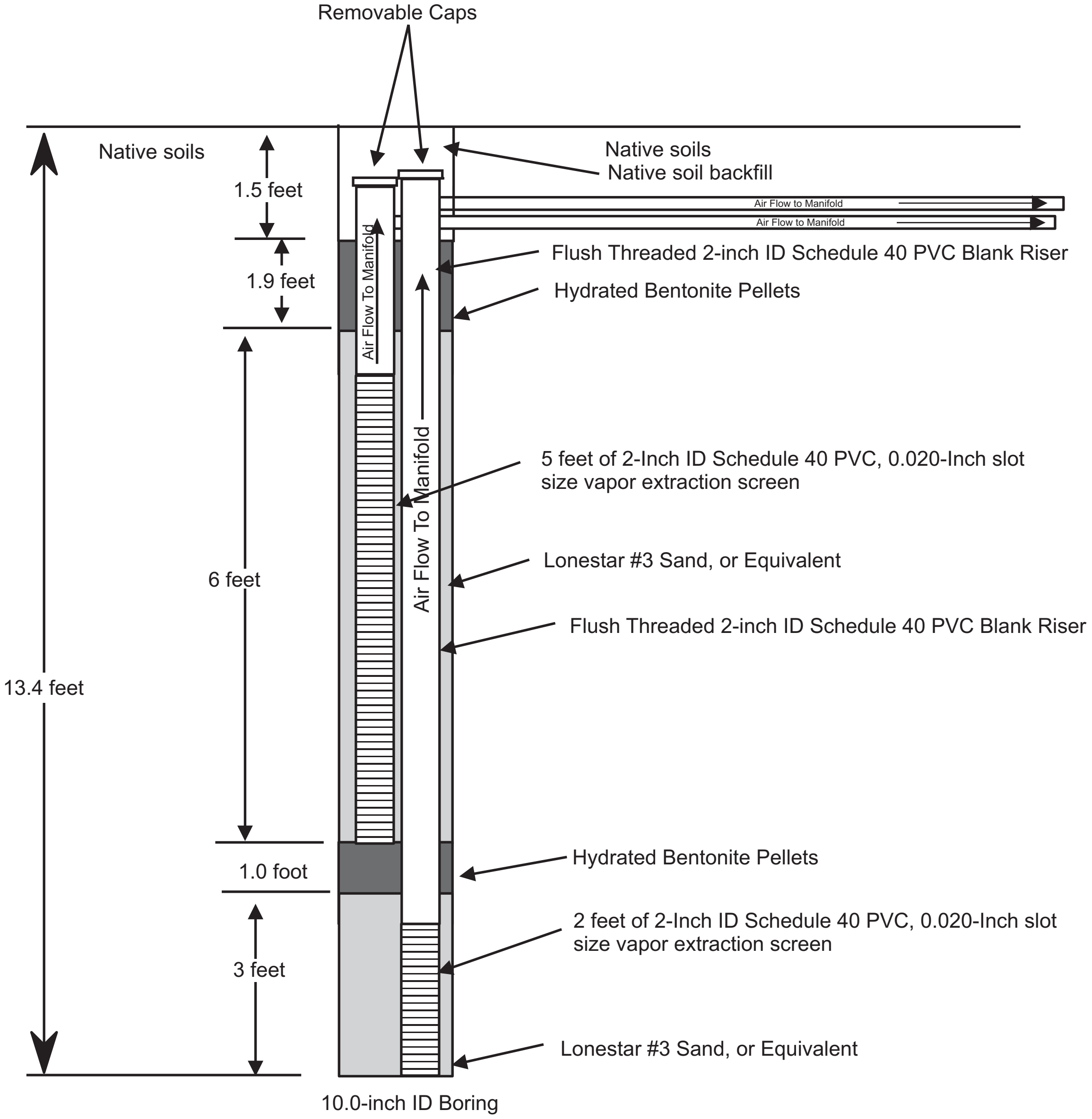
LAKE TAHOE LAUNDRY WORKS
1024 LAKE TAHOE BOULEVARD
SOUTH LAKE TAHOE, CALIFORNIA

VES-4/VED-4
AS-BUILT DIAGRAM

FIGURE

G-4

Note: Well head installed underground



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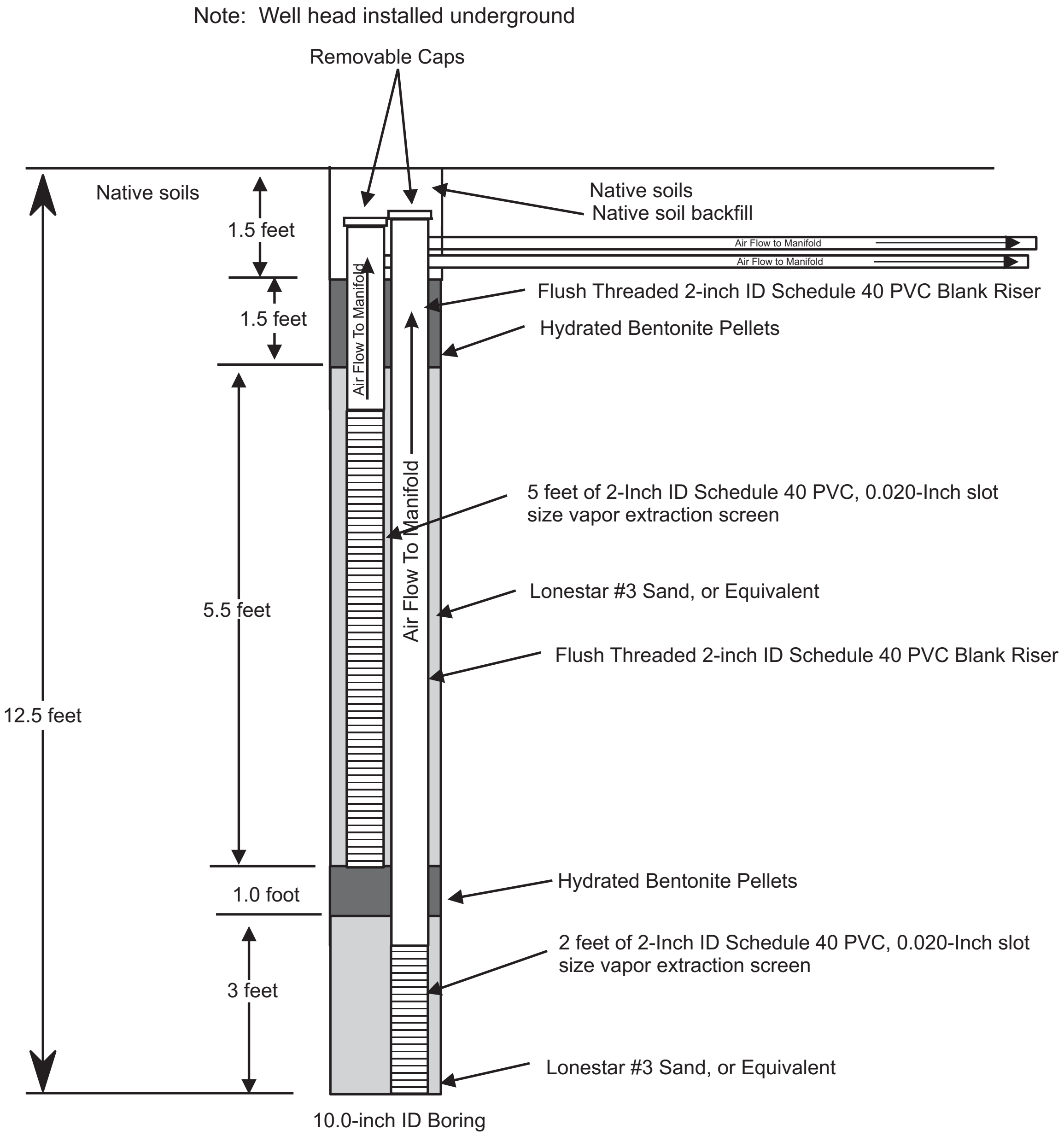
LAKE TAHOE LAUNDRY WORKS
1024 LAKE TAHOE BOULEVARD
SOUTH LAKE TAHOE, CALIFORNIA

VES-5/VED-5
AS-BUILT DIAGRAM

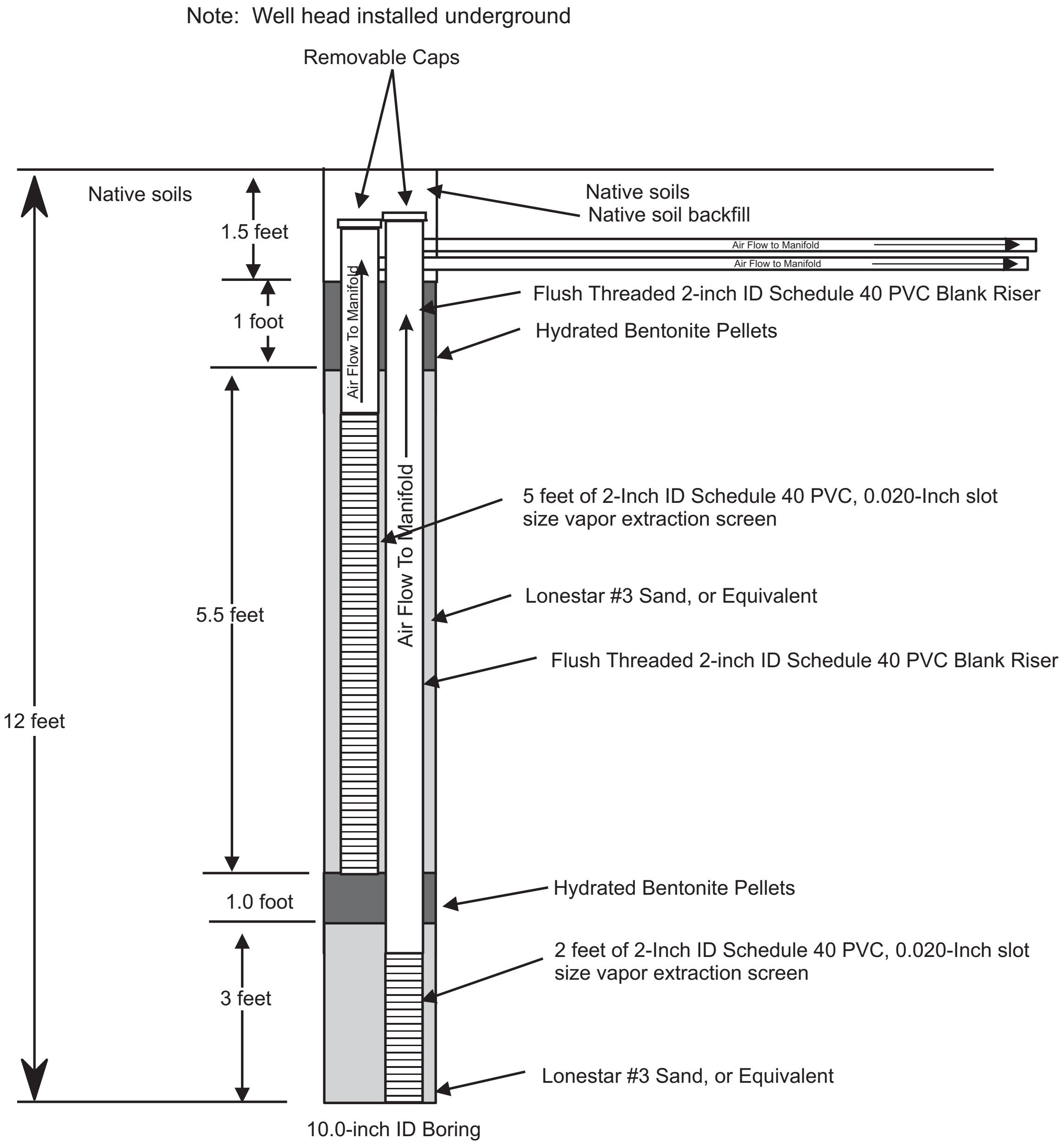
FIGURE

G-5



NOT TO SCALE

E_2C Remediation 5300 Woodmere Dr., Suite 105 Bakersfield, CA 93313 Phone: (661) 831-6906 Fax: (661) 831-6234	**LAKE TAHOE LAUNDRY WORKS 1024 LAKE TAHOE BOULEVARD SOUTH LAKE TAHOE, CALIFORNIA** **VES-6/VED-6 AS-BUILT DIAGRAM**	**FIGURE** **G-6**



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Bakersfield, CA 93313

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Fax: (661) 831-6234

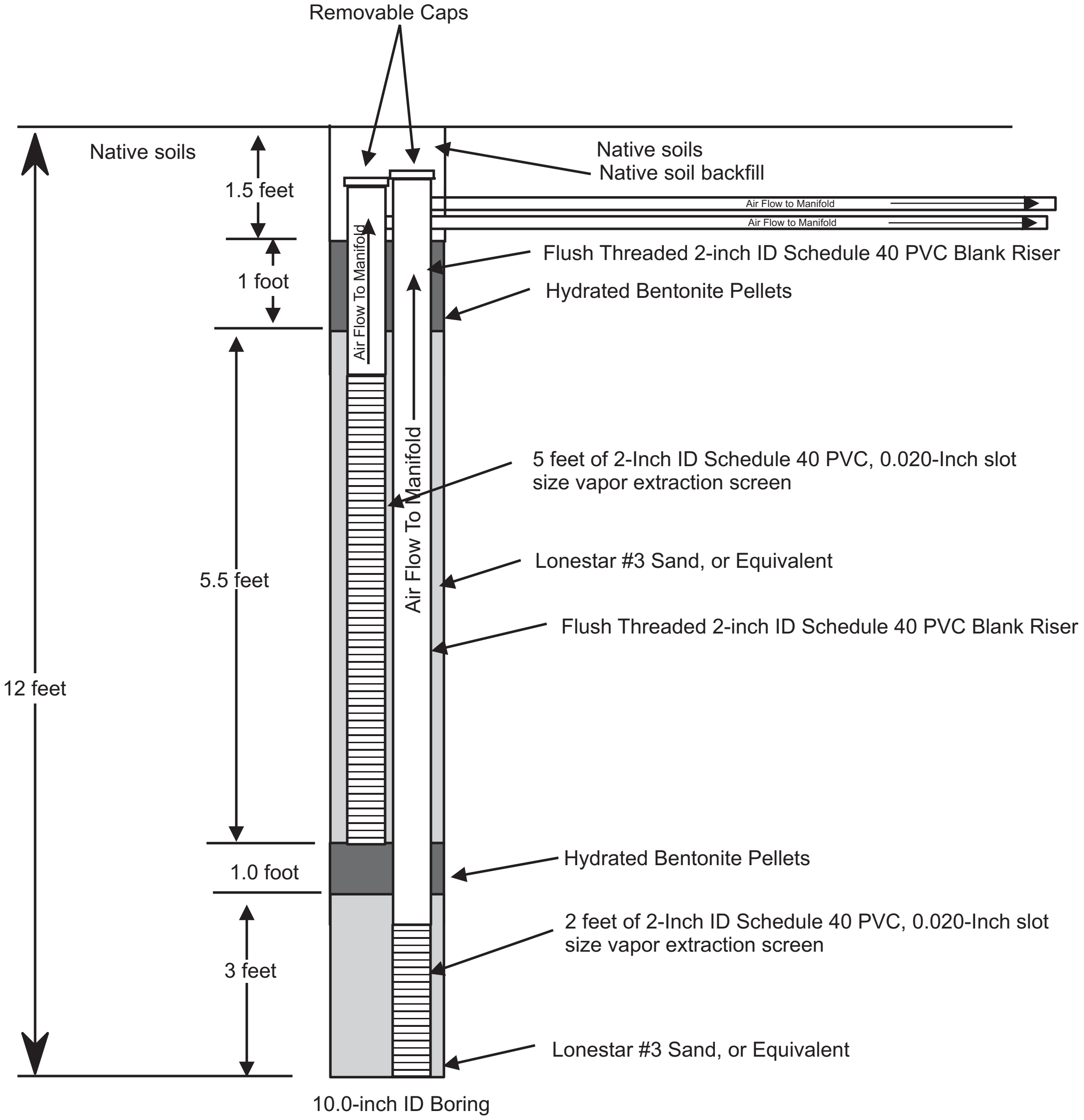
LAKE TAHOE LAUNDRY WORKS
1024 LAKE TAHOE BOULEVARD
SOUTH LAKE TAHOE, CALIFORNIA

VES-7/VED-7
AS-BUILT DIAGRAM

FIGURE

G-7

Note: Well head installed underground



NOT TO SCALE

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Bakersfield, CA 93313

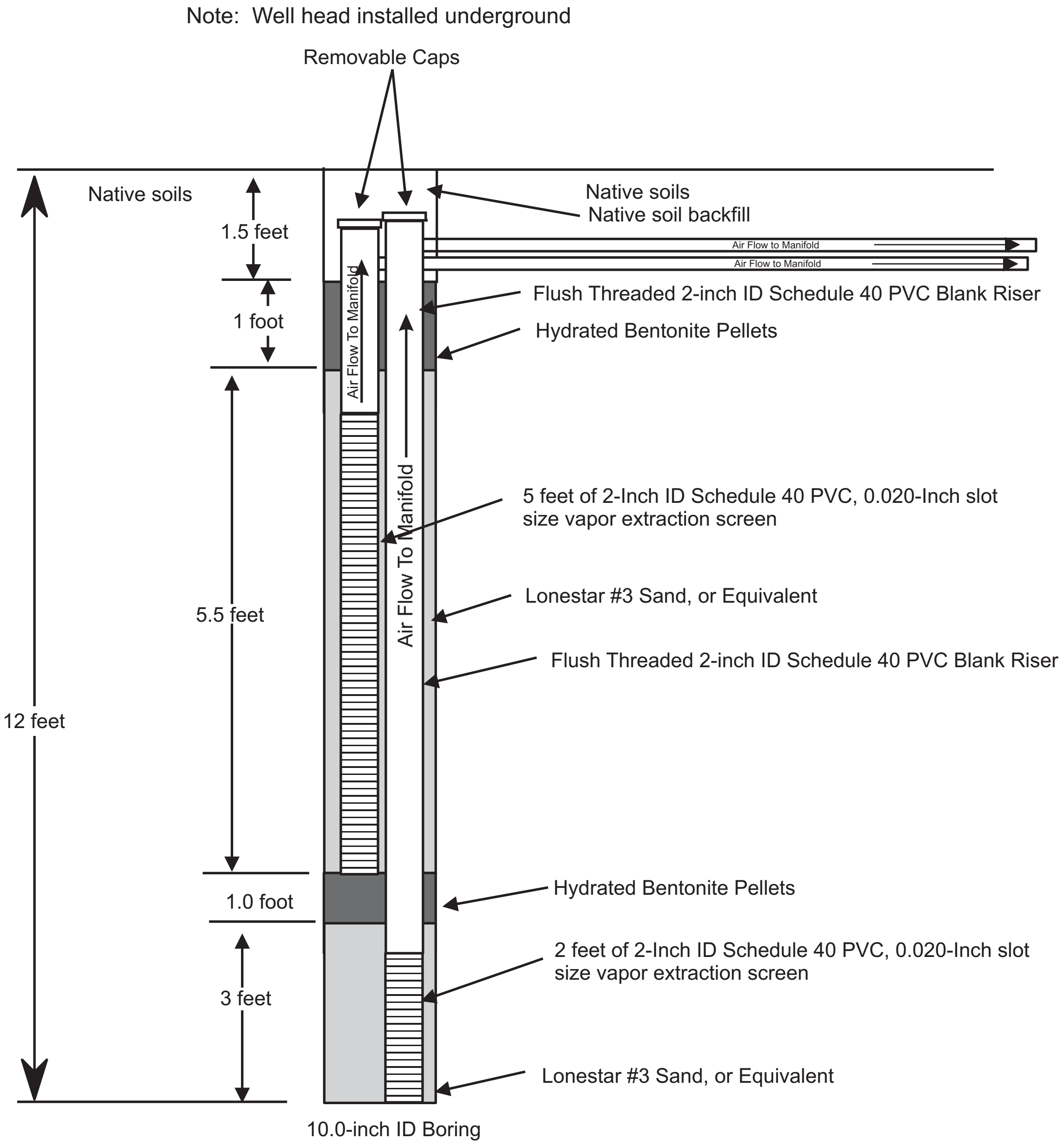
Phone: (661) 831-6906
Fax: (661) 831-6234

LAKE TAHOE LAUNDRY WORKS
1024 LAKE TAHOE BOULEVARD
SOUTH LAKE TAHOE, CALIFORNIA

VES-8/VED-8
AS-BUILT DIAGRAM

FIGURE

G-8



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Bakersfield, CA 93313

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Fax: (661) 831-6234

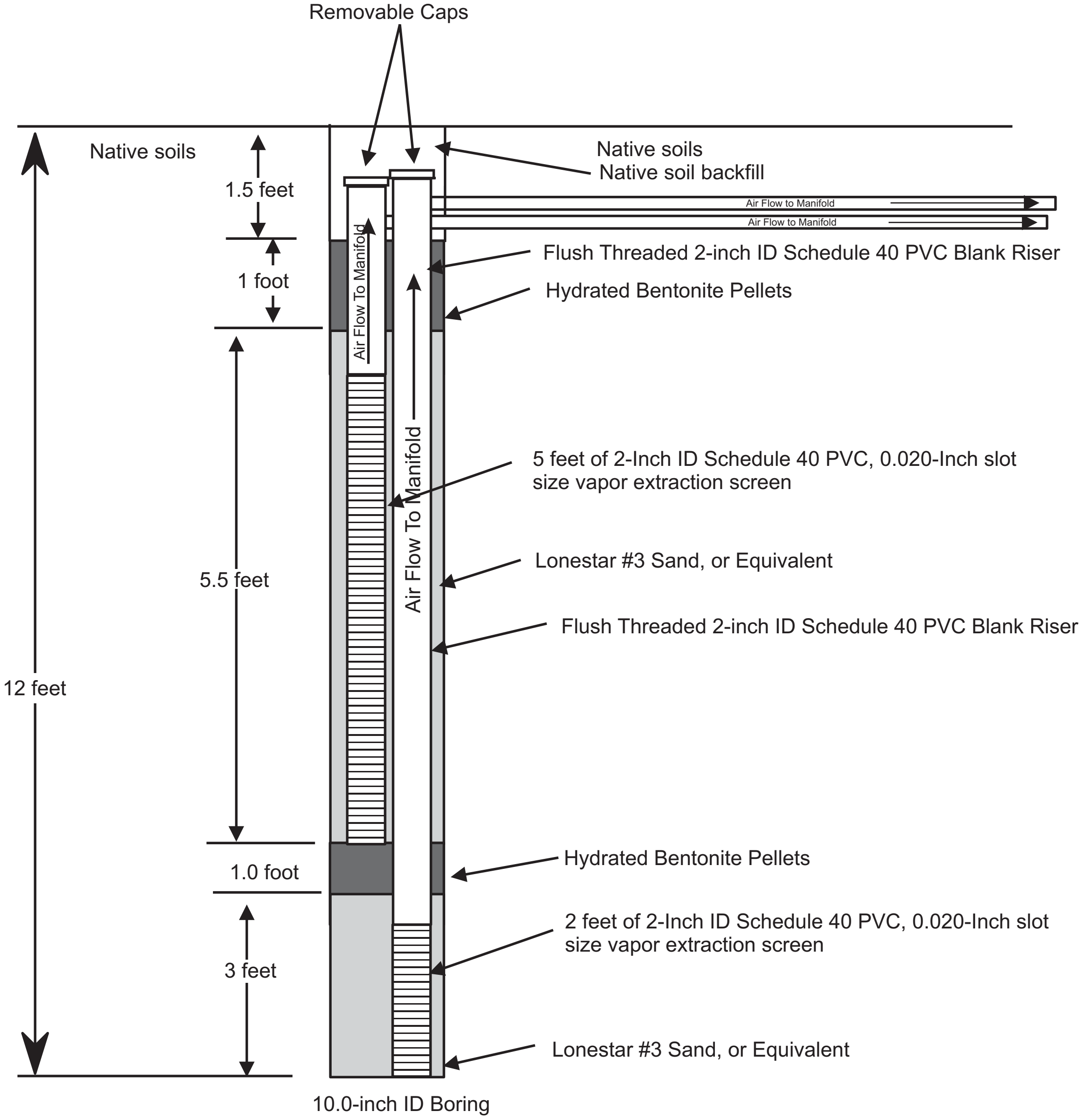
LAKE TAHOE LAUNDRY WORKS
1024 LAKE TAHOE BOULEVARD
SOUTH LAKE TAHOE, CALIFORNIA

VES-9/VED-9
AS-BUILT DIAGRAM

FIGURE

G-9

Note: Well head installed underground



NOT TO SCALE

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Bakersfield, CA 93313

Phone: (661) 831-6906
Fax: (661) 831-6234

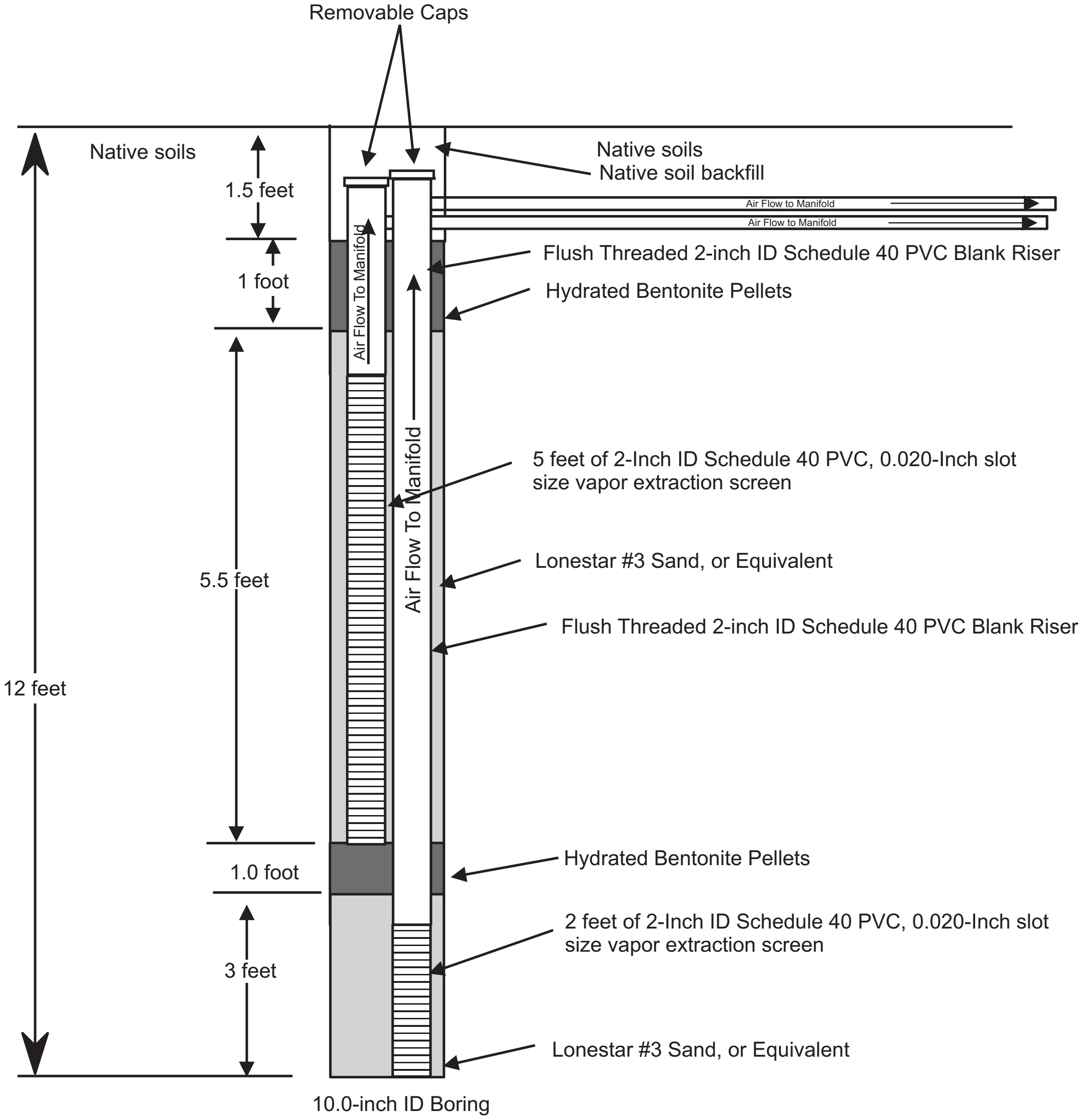
LAKE TAHOE LAUNDRY WORKS
1024 LAKE TAHOE BOULEVARD
SOUTH LAKE TAHOE, CALIFORNIA

VES-10/VED-10
AS-BUILT DIAGRAM

FIGURE

G-10

Note: Well head installed underground



NOT TO SCALE

E_2C Remediation
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Bakersfield, CA 93313

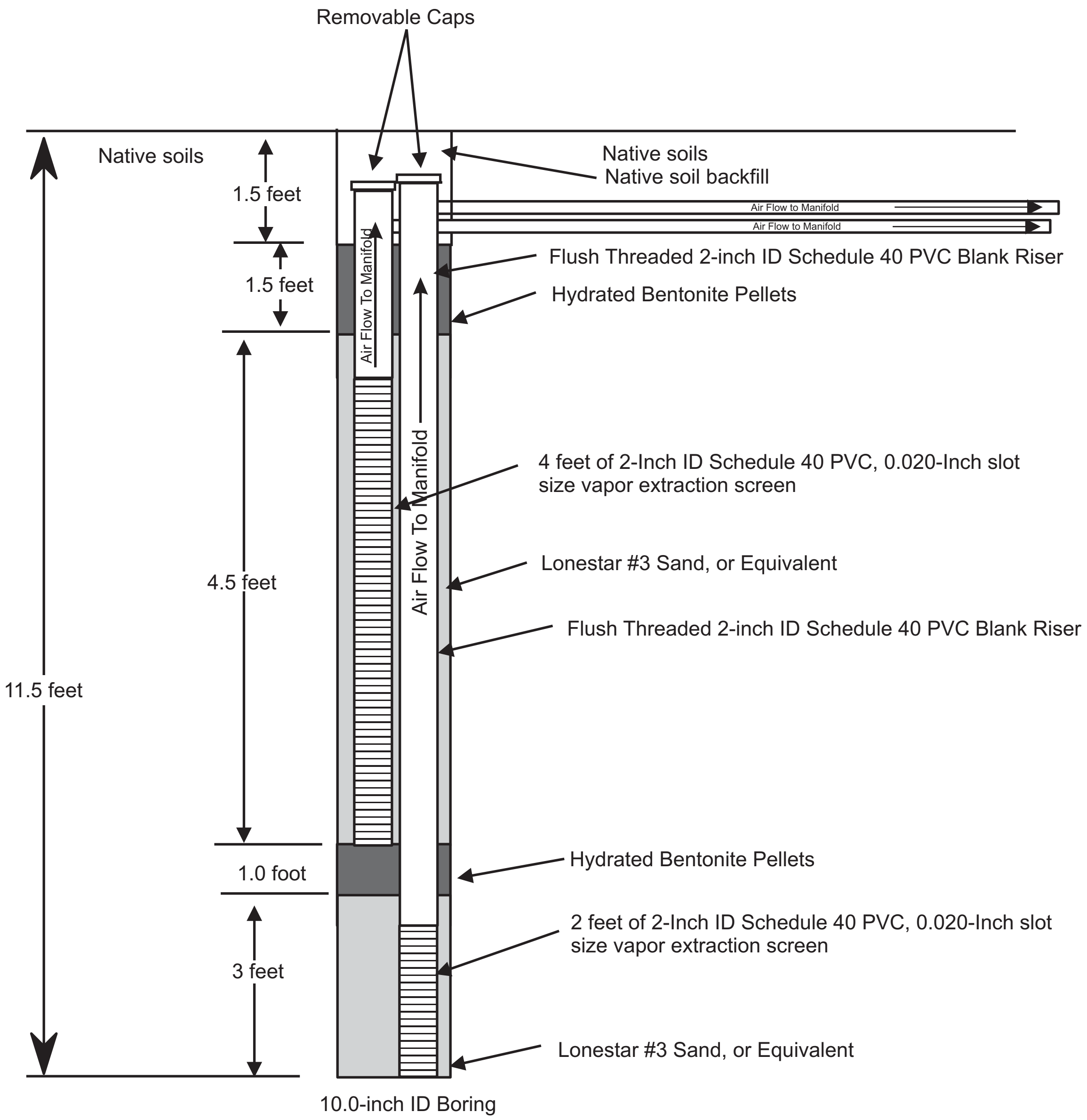
Phone: (661) 831-6906
Fax: (661) 831-6234

LAKE TAHOE LAUNDRY WORKS
1024 LAKE TAHOE BOULEVARD
SOUTH LAKE TAHOE, CALIFORNIA

VES-11/VED-11
AS-BUILT DIAGRAM

FIGURE

G-11



Note: Well head installed underground

NOT TO SCALE

E_2C Remediation

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Bakersfield, CA 93313

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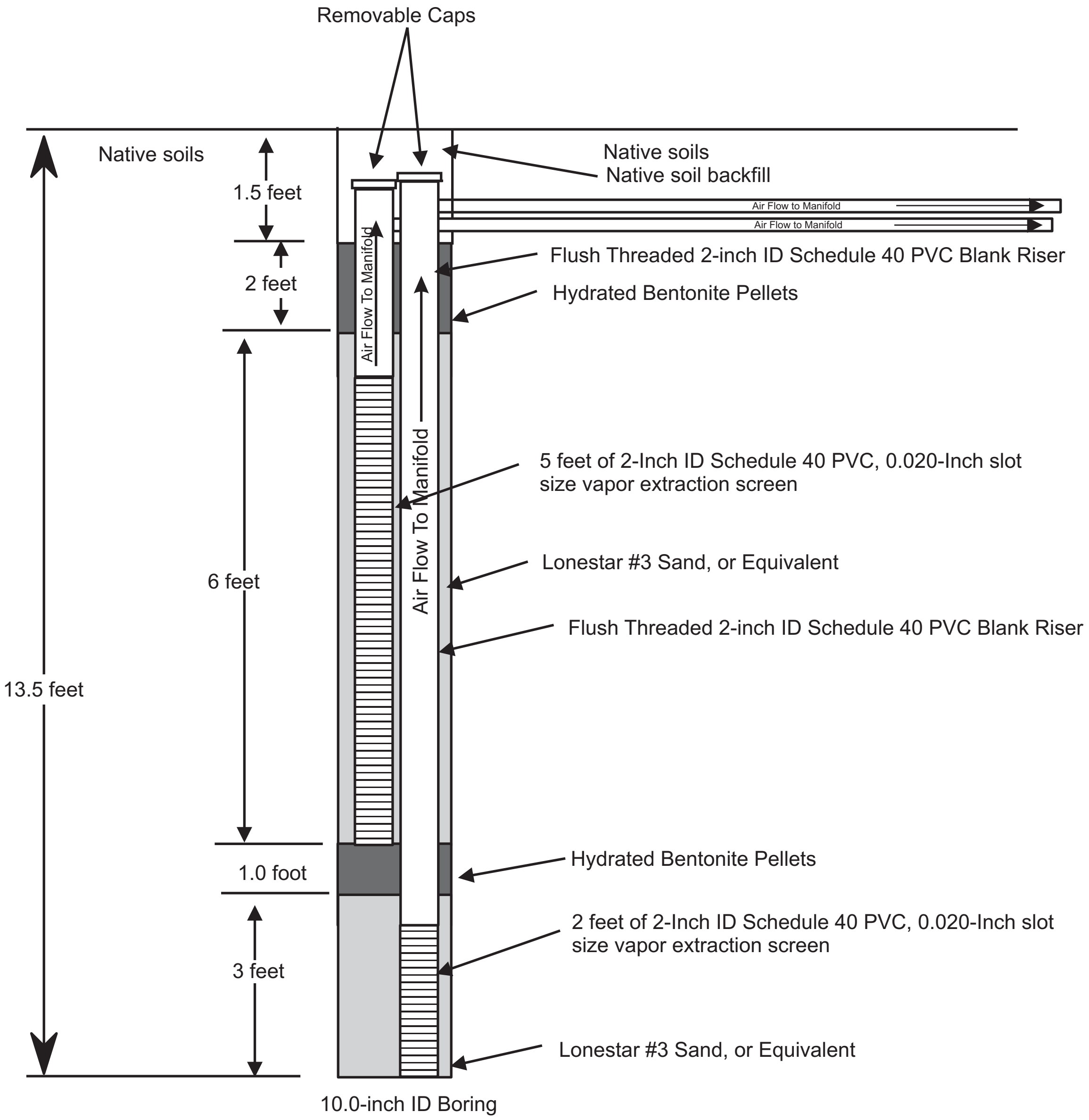
LAKE TAHOE LAUNDRY WORKS
1024 LAKE TAHOE BOULEVARD
SOUTH LAKE TAHOE, CALIFORNIA

VES-12/VED-12
AS-BUILT DIAGRAM

FIGURE

G-12

Note: Well head installed underground



NOT TO SCALE

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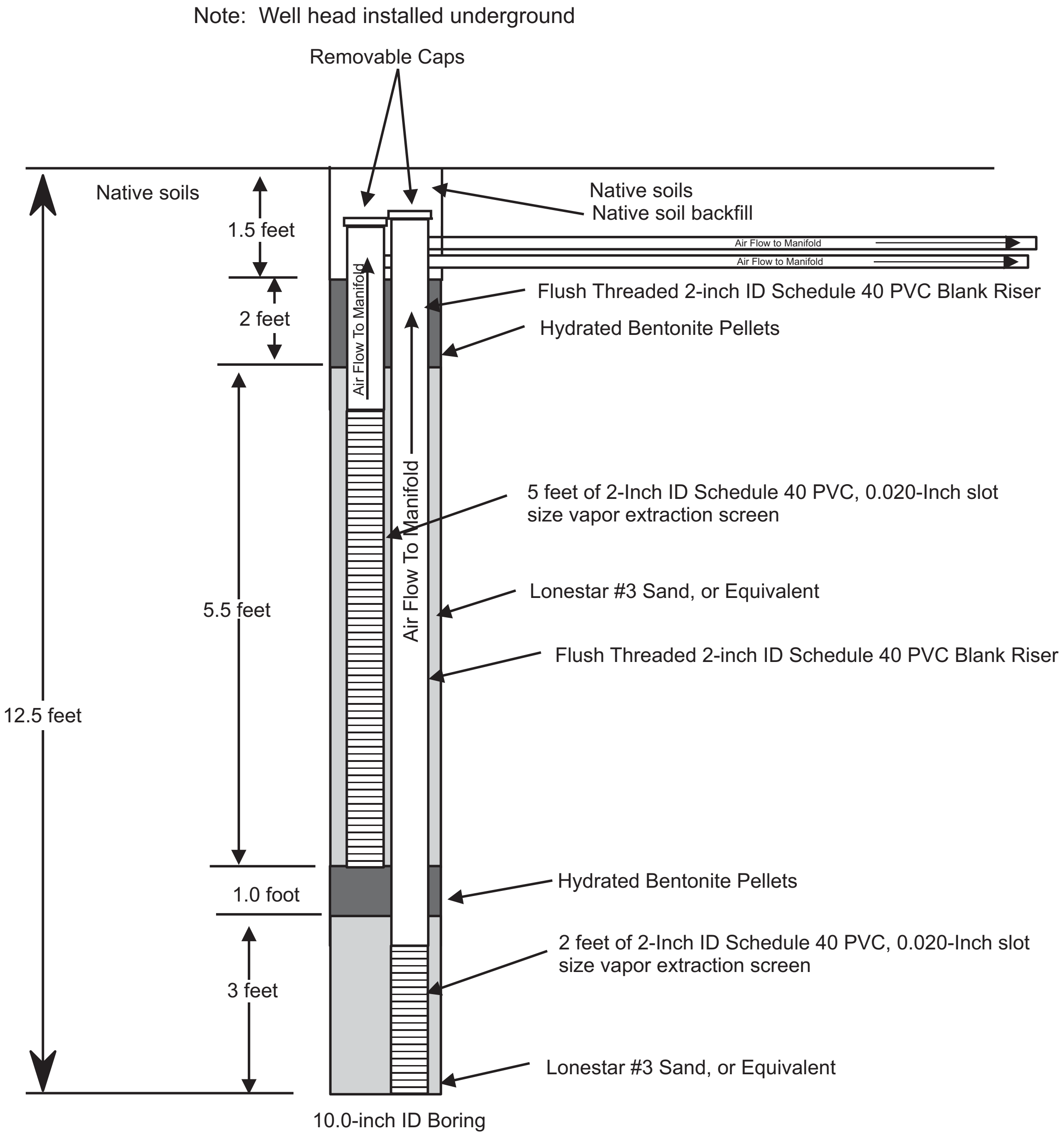
Phone: (661) 831-6906
Fax: (661) 831-6234

LAKE TAHOE LAUNDRY WORKS
1024 LAKE TAHOE BOULEVARD
SOUTH LAKE TAHOE, CALIFORNIA

VES-13/VED-13
AS-BUILT DIAGRAM

FIGURE

G-13



NOT TO SCALE

E_2C Remediation
5300 Woodmere Dr., Suite 105
Bakersfield, CA 93313

Phone: (661) 831-6906
Fax: (661) 831-6234

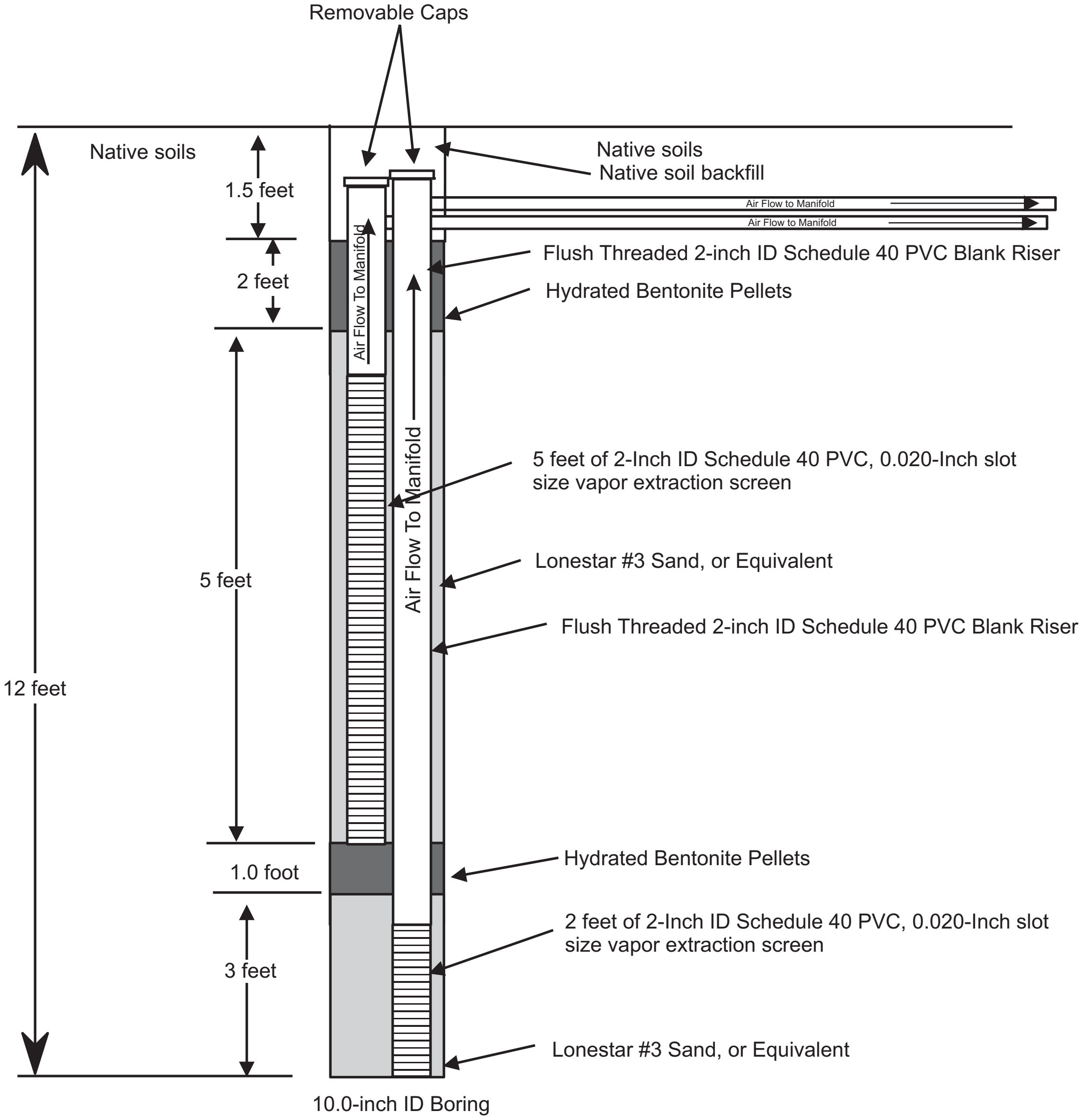
LAKE TAHOE LAUNDRY WORKS
1024 LAKE TAHOE BOULEVARD
SOUTH LAKE TAHOE, CALIFORNIA

VES-14/VED-14
AS-BUILT DIAGRAM

FIGURE

G-14

Note: Well head installed underground



NOT TO SCALE

E_2C Remediation
5300 Woodmere Dr., Suite 105
Bakersfield, CA 93313

Phone: (661) 831-6906
Fax: (661) 831-6234

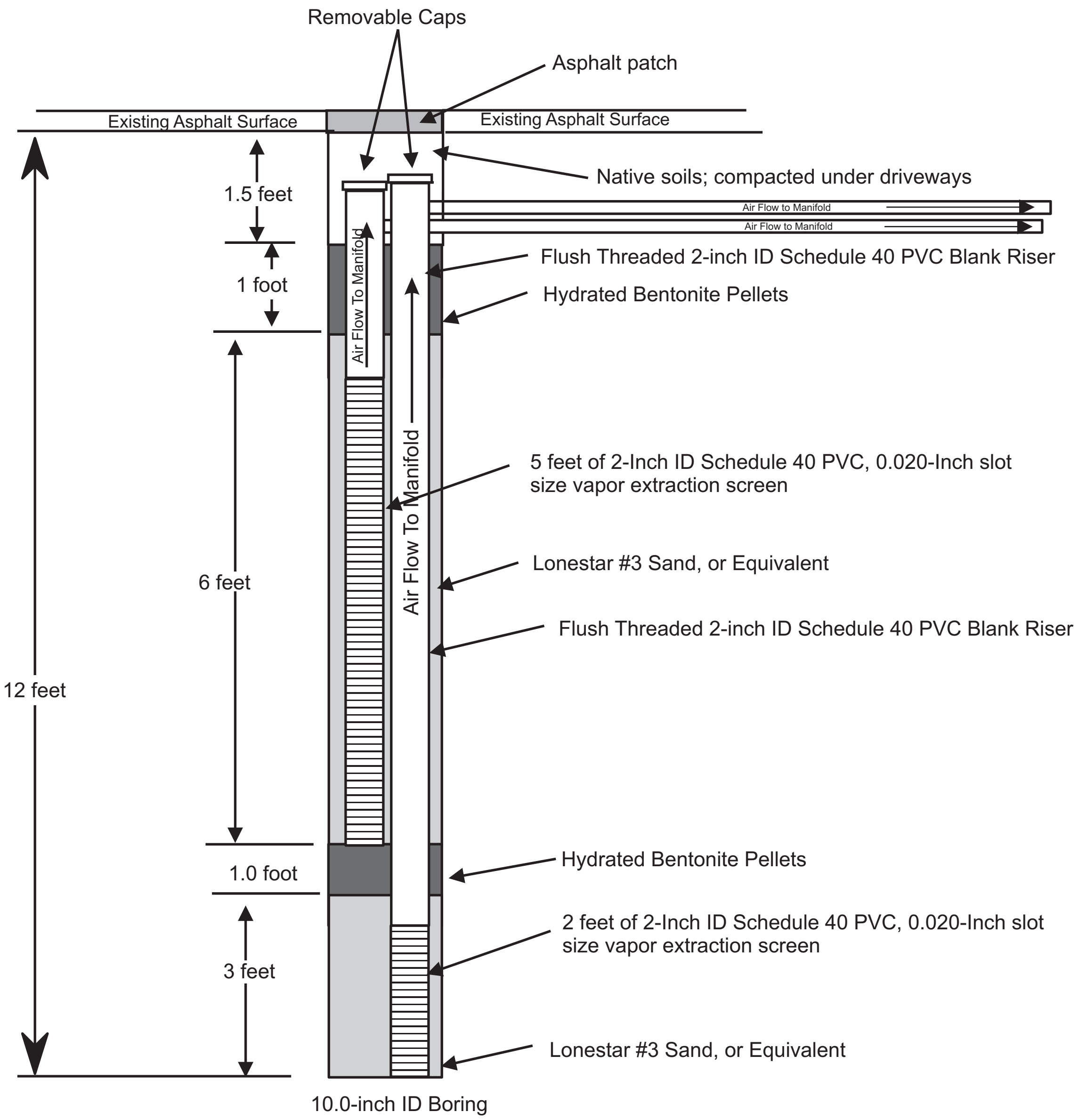
LAKE TAHOE LAUNDRY WORKS
1024 LAKE TAHOE BOULEVARD
SOUTH LAKE TAHOE, CALIFORNIA

VES-15/VED-15
AS-BUILT DIAGRAM

FIGURE

G-15

Note: Well head installed underground



NOT TO SCALE

E_2C Remediation
5300 Woodmere Dr., Suite 105
Bakersfield, CA 93313

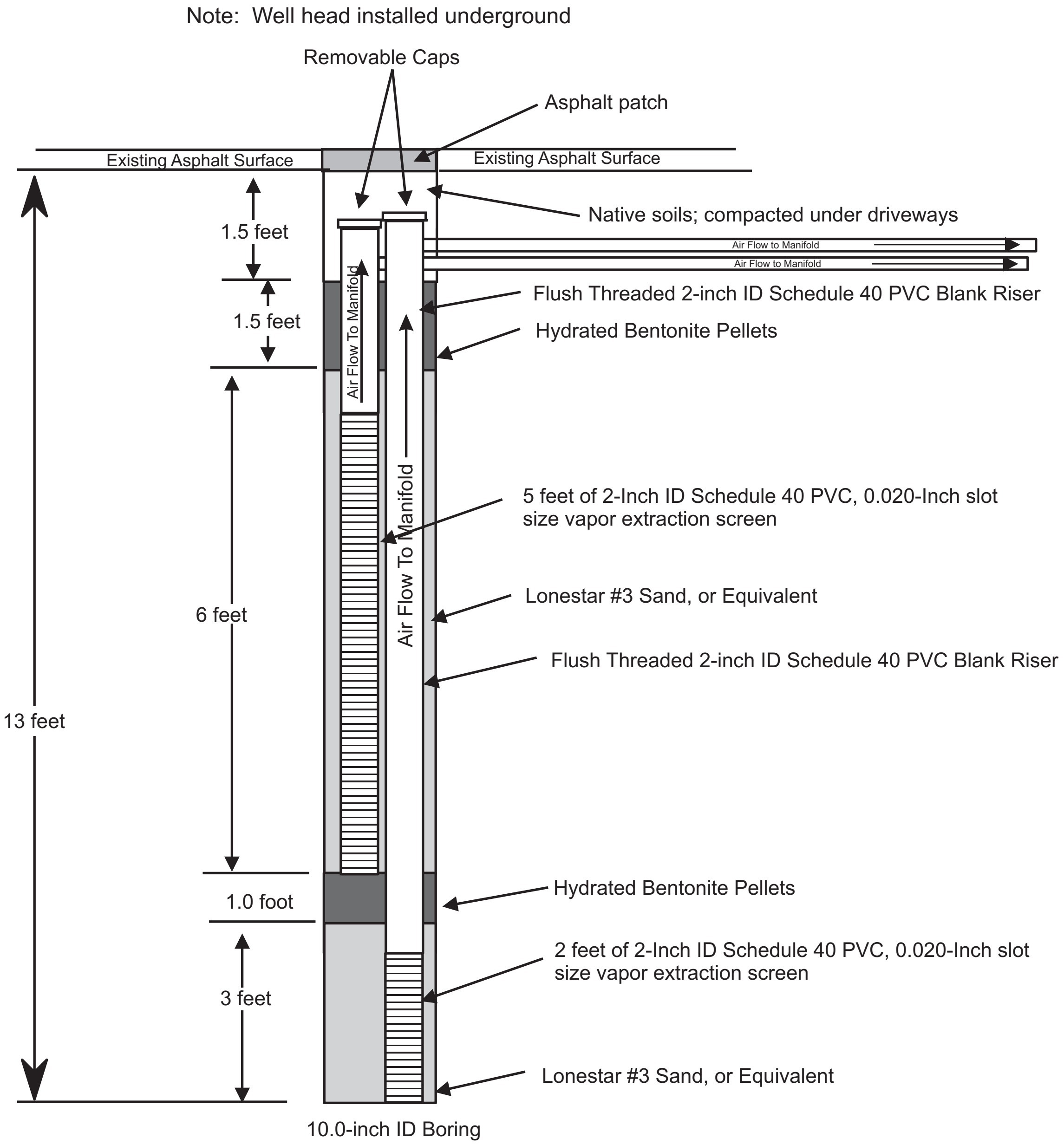
Phone: (661) 831-6906
Fax: (661) 831-6234

LAKE TAHOE LAUNDRY WORKS
1024 LAKE TAHOE BOULEVARD
SOUTH LAKE TAHOE, CALIFORNIA

VES-16/VED-16
AS-BUILT DIAGRAM

FIGURE

G-16



NOT TO SCALE

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5300 Woodmere Dr., Suite 105
Bakersfield, CA 93313

Phone: (661) 831-6906
Fax: (661) 831-6234

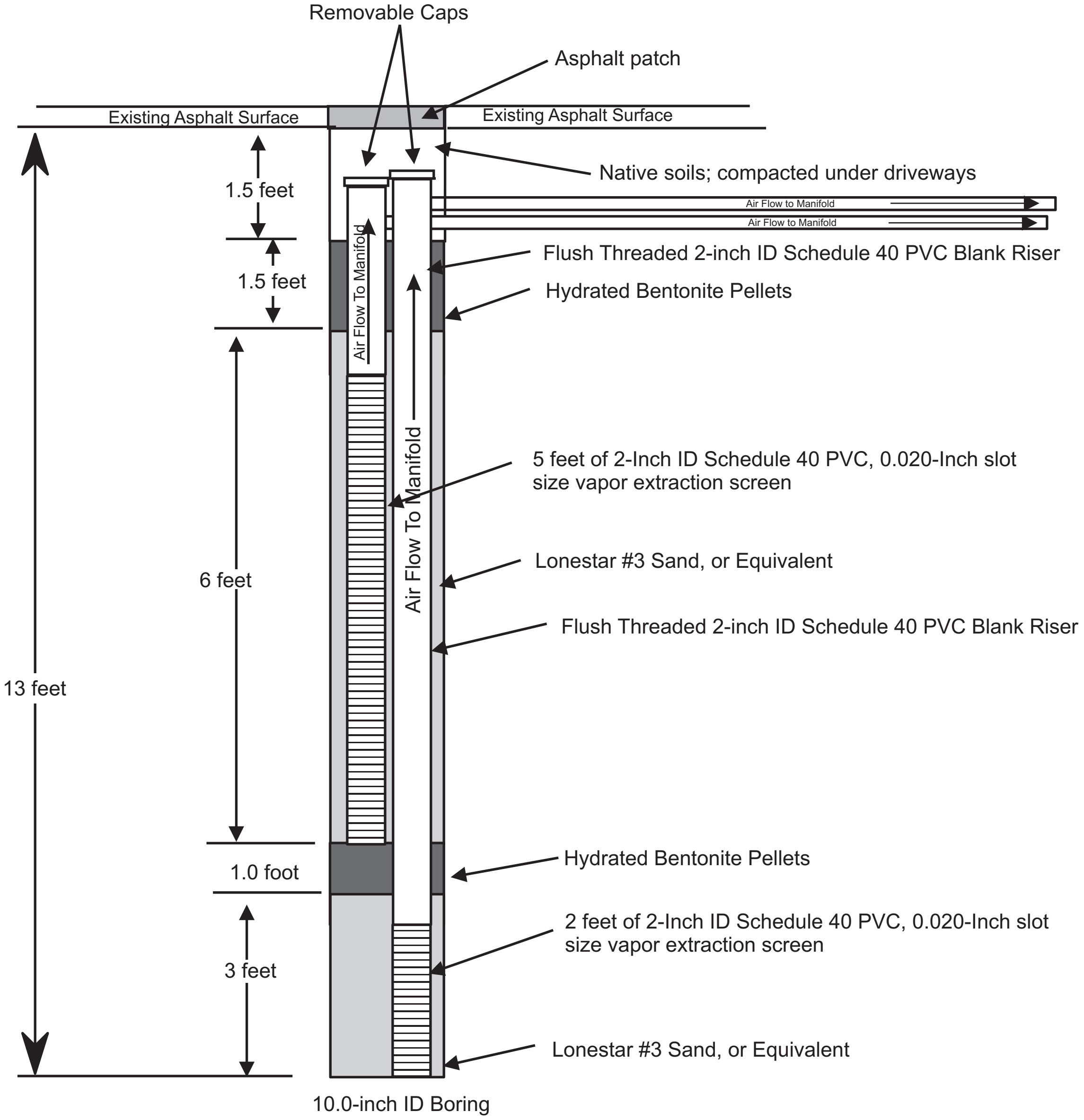
LAKE TAHOE LAUNDRY WORKS
1024 LAKE TAHOE BOULEVARD
SOUTH LAKE TAHOE, CALIFORNIA

VES-17/VED-17
AS-BUILT DIAGRAM

FIGURE

G-17

Note: Well head installed underground



NOT TO SCALE

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5300 Woodmere Dr., Suite 105
Bakersfield, CA 93313

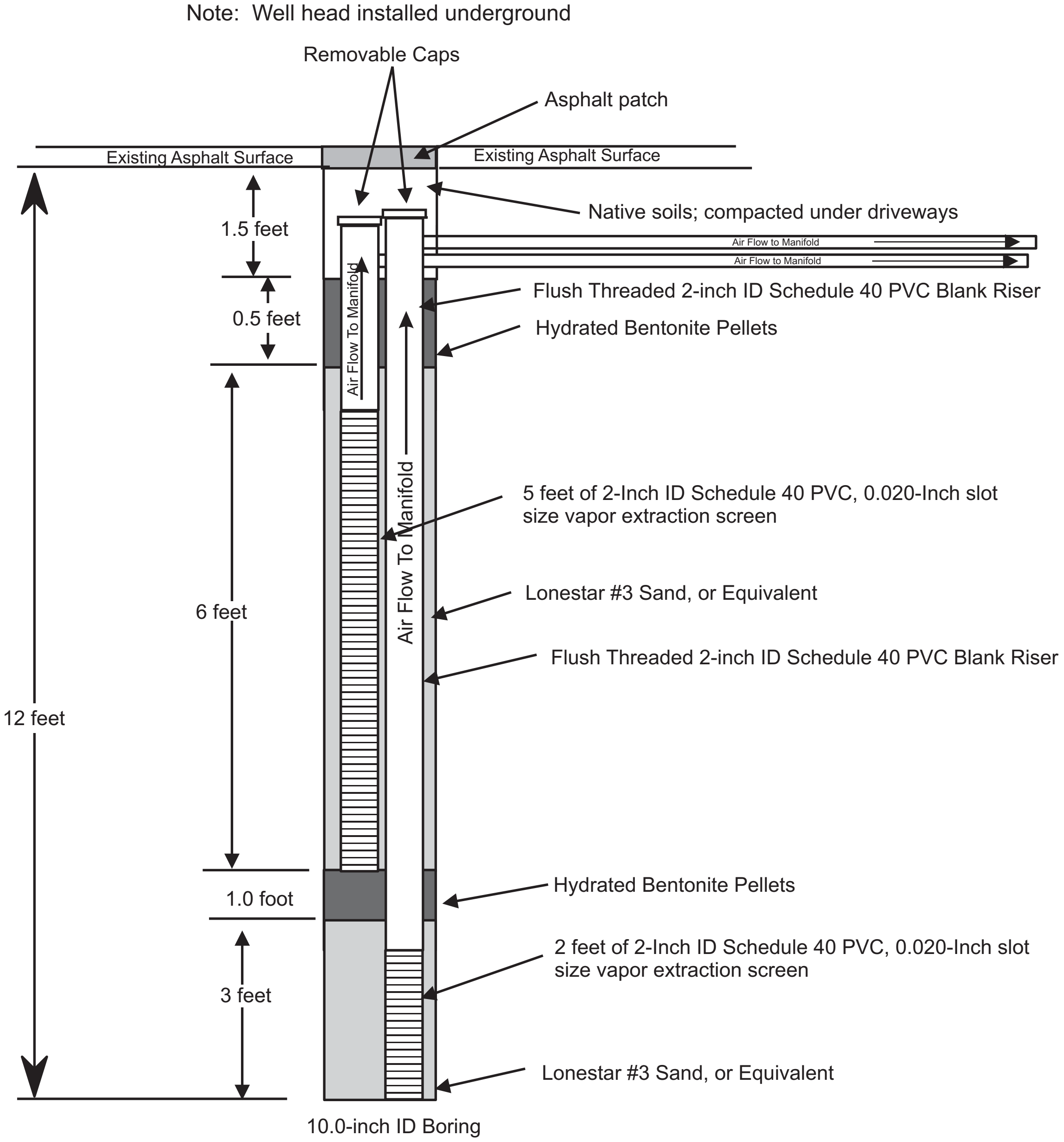
Phone: (661) 831-6906
Fax: (661) 831-6234

LAKE TAHOE LAUNDRY WORKS
1024 LAKE TAHOE BOULEVARD
SOUTH LAKE TAHOE, CALIFORNIA

VES-18/VED-18
AS-BUILT DIAGRAM

FIGURE

G-18



NOT TO SCALE

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5300 Woodmere Dr., Suite 105
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Phone: (661) 831-6906
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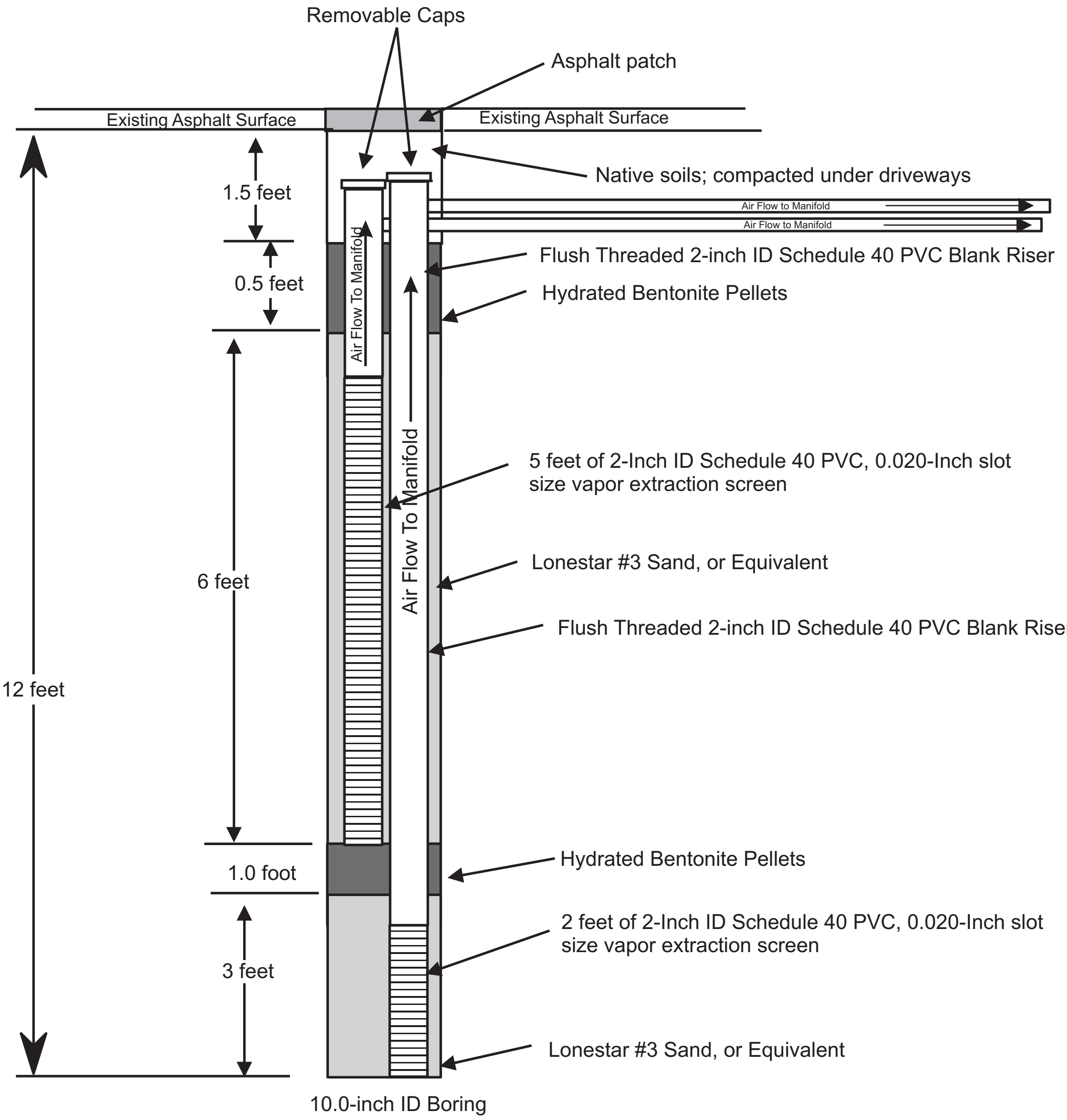
LAKE TAHOE LAUNDRY WORKS
1024 LAKE TAHOE BOULEVARD
SOUTH LAKE TAHOE, CALIFORNIA

VES-19/VED-19
AS-BUILT DIAGRAM

FIGURE

G-19

Note: Well head installed underground



NOT TO SCALE

E_2C Remediation
5300 Woodmere Dr., Suite 105
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Phone: (661) 831-6906
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LAKE TAHOE LAUNDRY WORKS
1024 LAKE TAHOE BOULEVARD
SOUTH LAKE TAHOE, CALIFORNIA

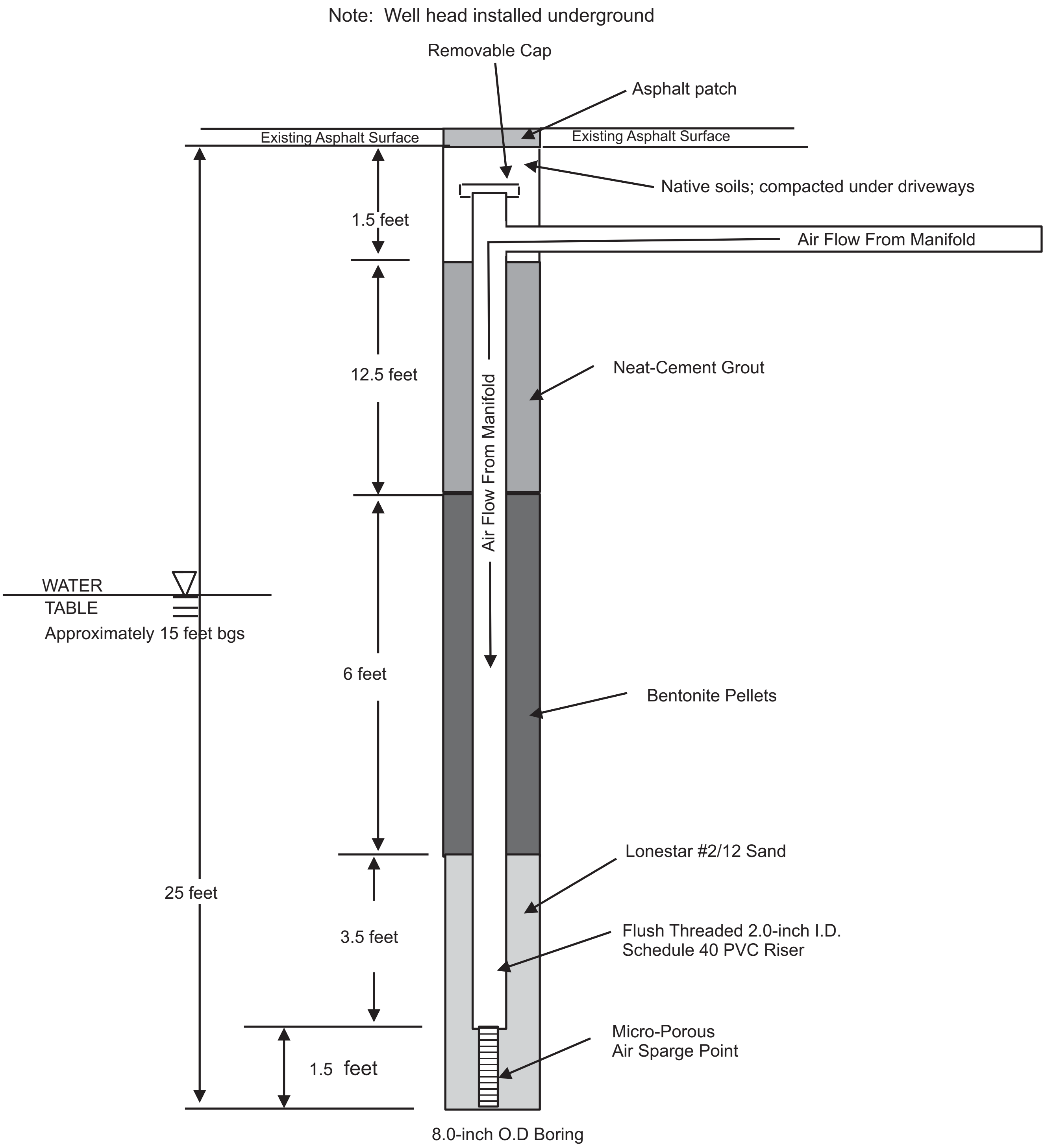
VES-20/VED-20
AS-BUILT DIAGRAM

FIGURE

G-20

APPENDIX H

AS Well As-Built Diagrams



NOT TO SCALE

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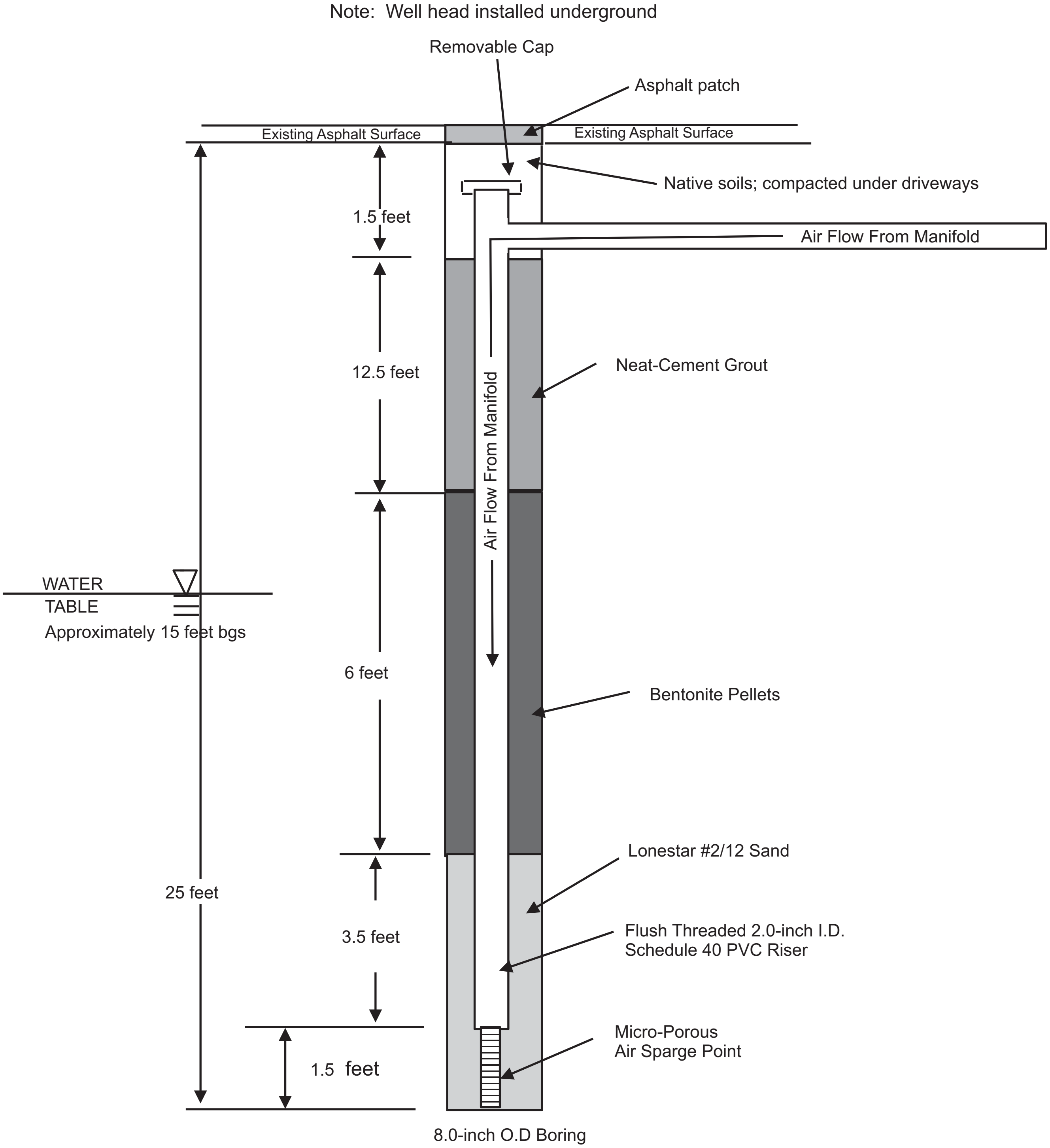
Phone: (661) 831-6906
Fax: (661) 831-6234

LAKE TAHOE LAUNDRY WORKS
1024 LAKE TAHOE BOULEVARD
SOUTH LAKE TAHOE, CALIFORNIA

AS-1
AS-BUILT DIAGRAM

FIGURE

H-1



NOT TO SCALE

E_2C Remediation
5300 Woodmere Dr., Suite 105
Bakersfield, CA 93313

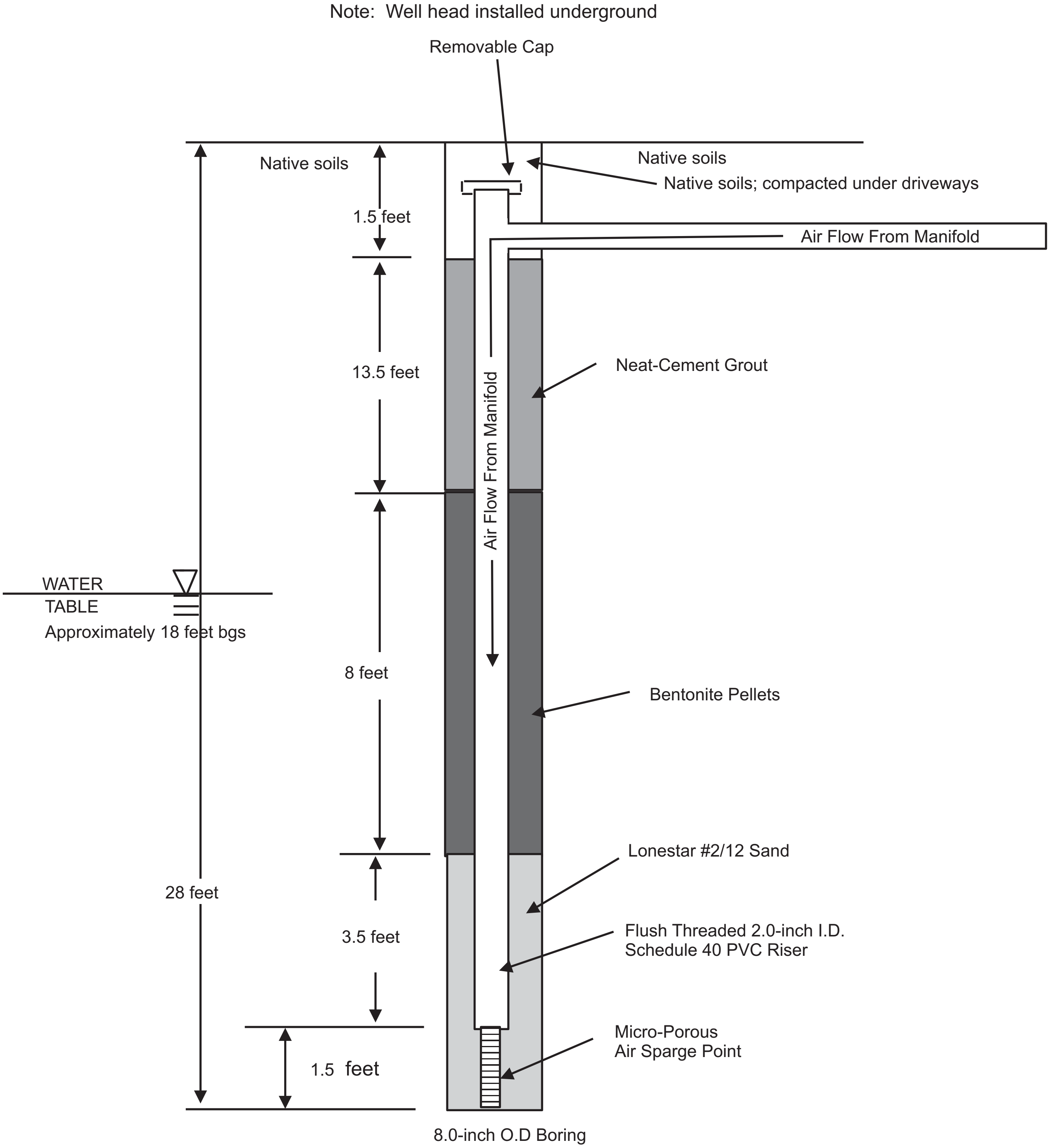
Phone: (661) 831-6906
Fax: (661) 831-6234

LAKE TAHOE LAUNDRY WORKS
1024 LAKE TAHOE BOULEVARD
SOUTH LAKE TAHOE, CALIFORNIA

AS-2
AS-BUILT DIAGRAM

FIGURE

H-2



NOT TO SCALE

E_2C Remediation
5300 Woodmere Dr., Suite 105
Bakersfield, CA 93313

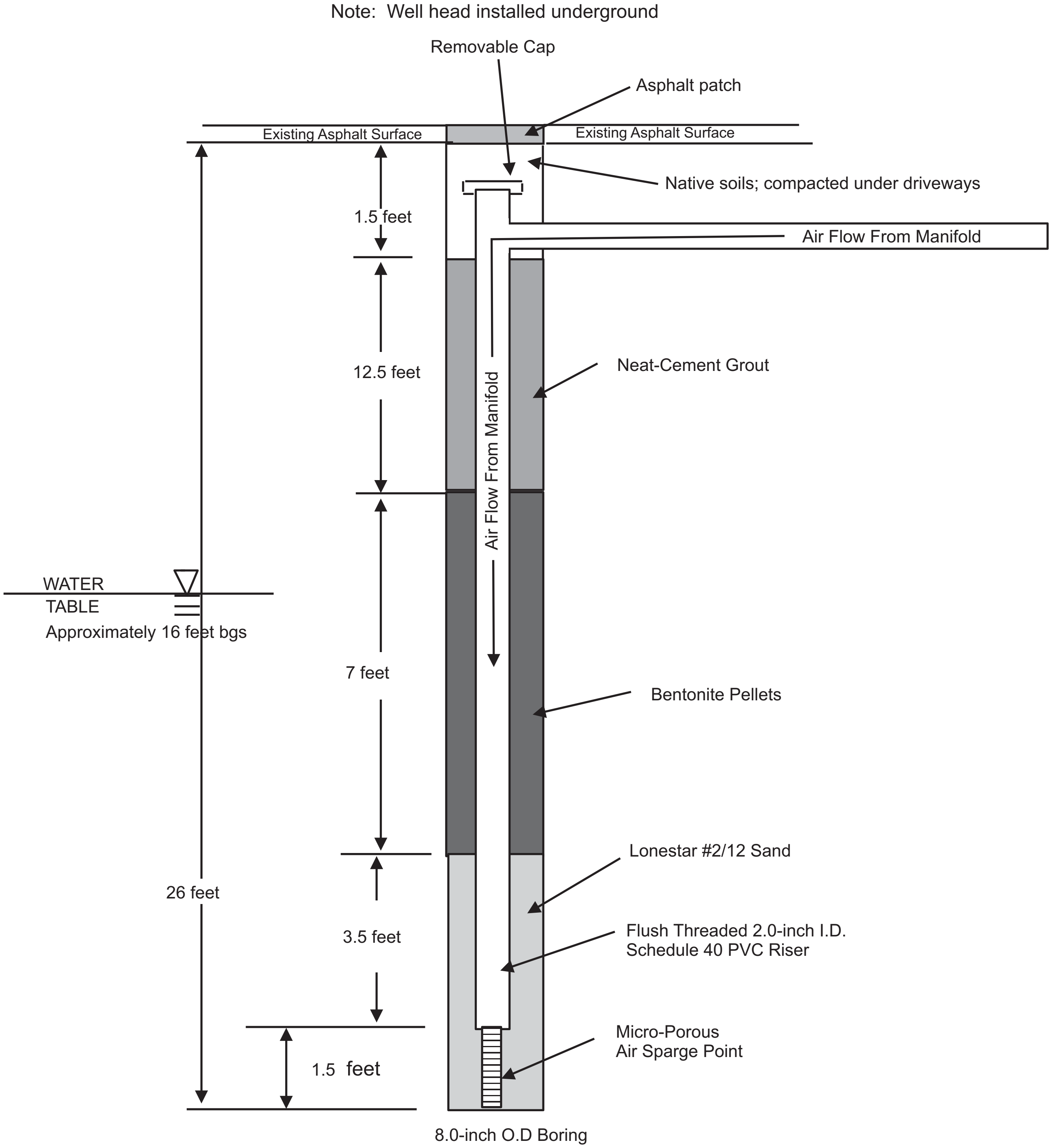
Phone: (661) 831-6906
Fax: (661) 831-6234

LAKE TAHOE LAUNDRY WORKS
1024 LAKE TAHOE BOULEVARD
SOUTH LAKE TAHOE, CALIFORNIA

AS-3
AS-BUILT DIAGRAM

FIGURE

H-3



NOT TO SCALE

E_2C Remediation
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Bakersfield, CA 93313

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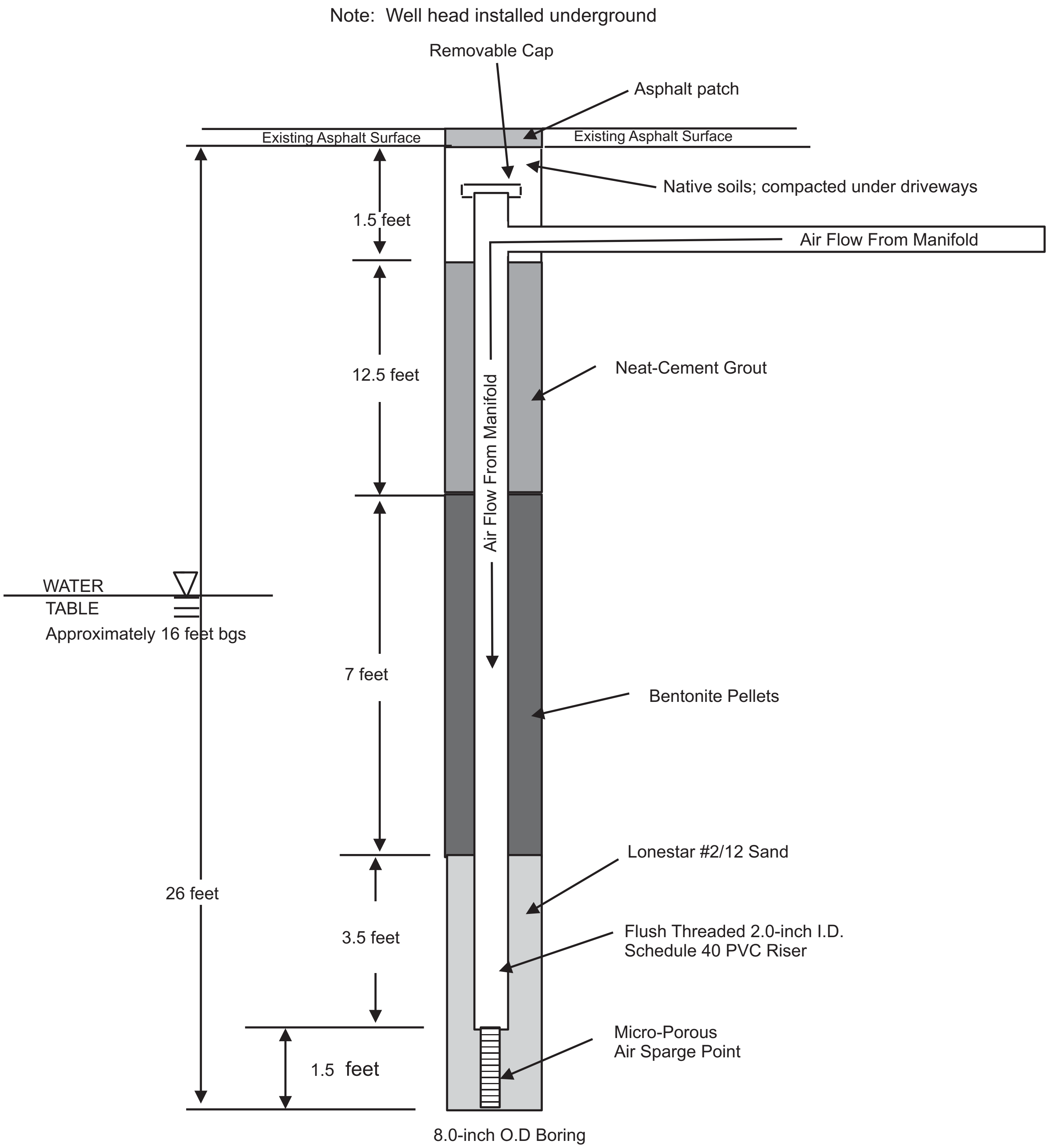
LAKE TAHOE LAUNDRY WORKS
1024 LAKE TAHOE BOULEVARD
SOUTH LAKE TAHOE, CALIFORNIA

AS-4
AS-BUILT DIAGRAM

FIGURE

H-4



NOT TO SCALE

E_2C Remediation
5300 Woodmere Dr., Suite 105
Bakersfield, CA 93313

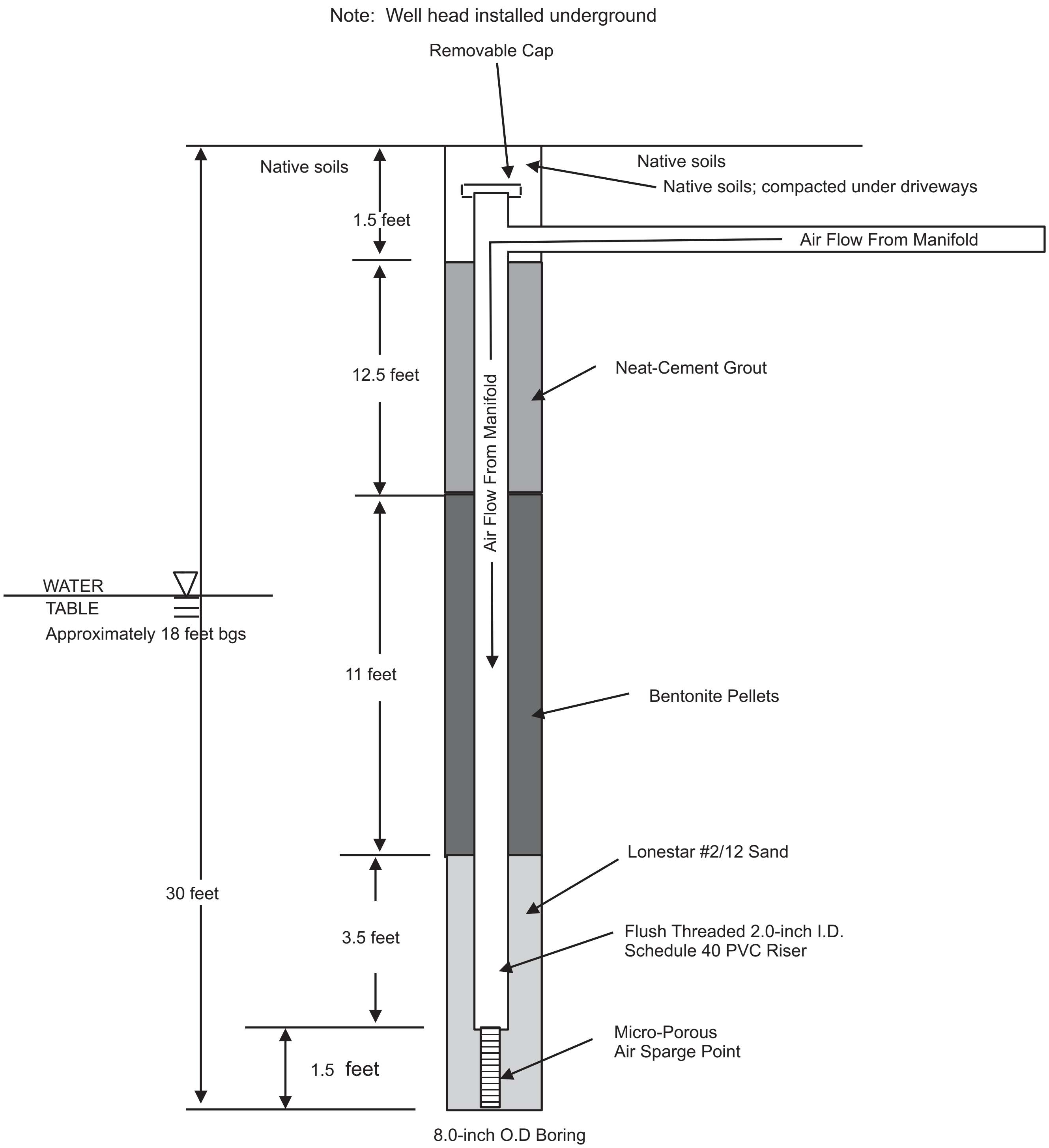
Phone: (661) 831-6906
Fax: (661) 831-6234

LAKE TAHOE LAUNDRY WORKS
1024 LAKE TAHOE BOULEVARD
SOUTH LAKE TAHOE, CALIFORNIA

AS-5
AS-BUILT DIAGRAM

FIGURE

H-5



NOT TO SCALE

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5300 Woodmere Dr., Suite 105
Bakersfield, CA 93313

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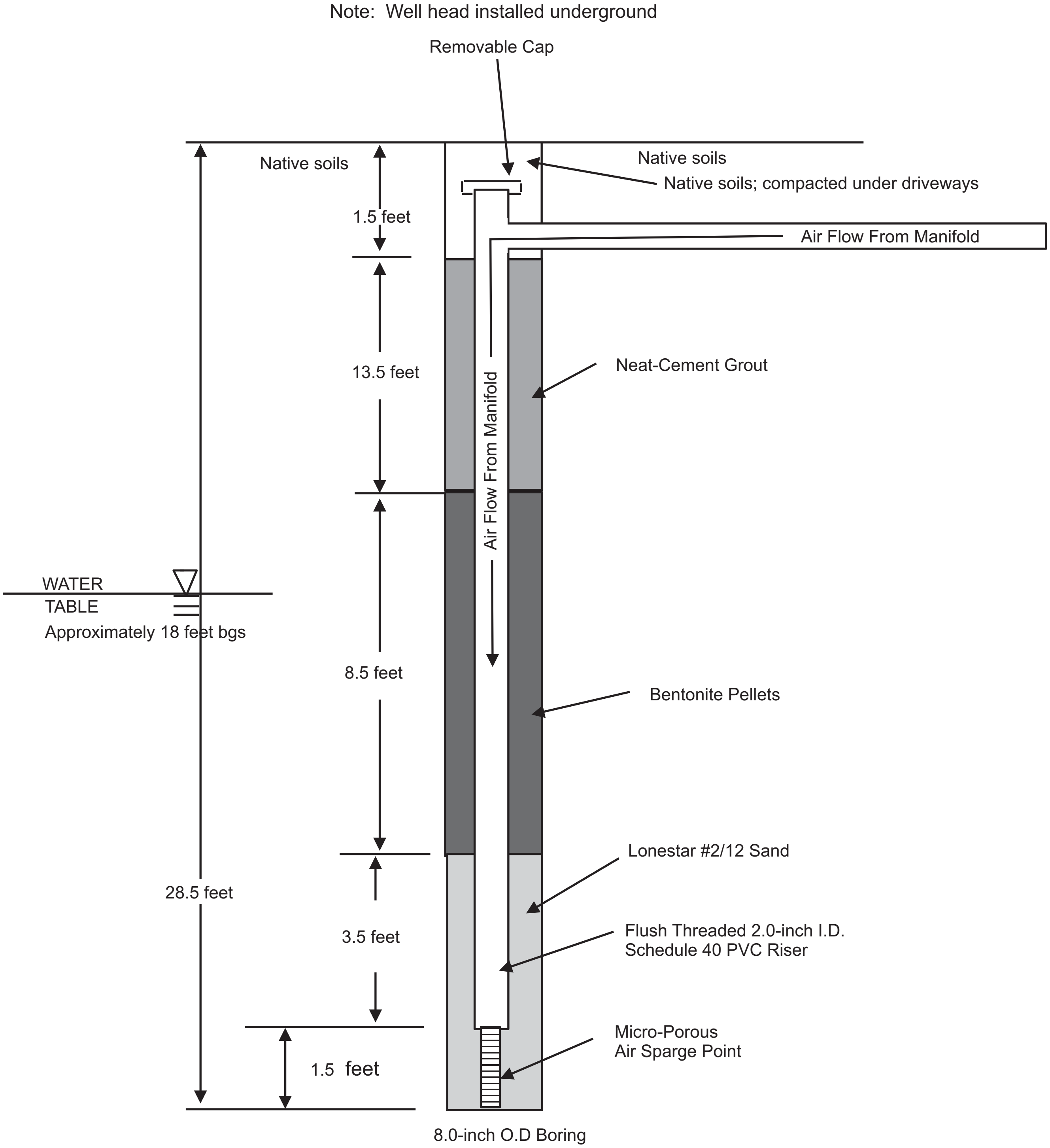
Fax: (661) 831-6234

LAKE TAHOE LAUNDRY WORKS
1024 LAKE TAHOE BOULEVARD
SOUTH LAKE TAHOE, CALIFORNIA

AS-6
AS-BUILT DIAGRAM

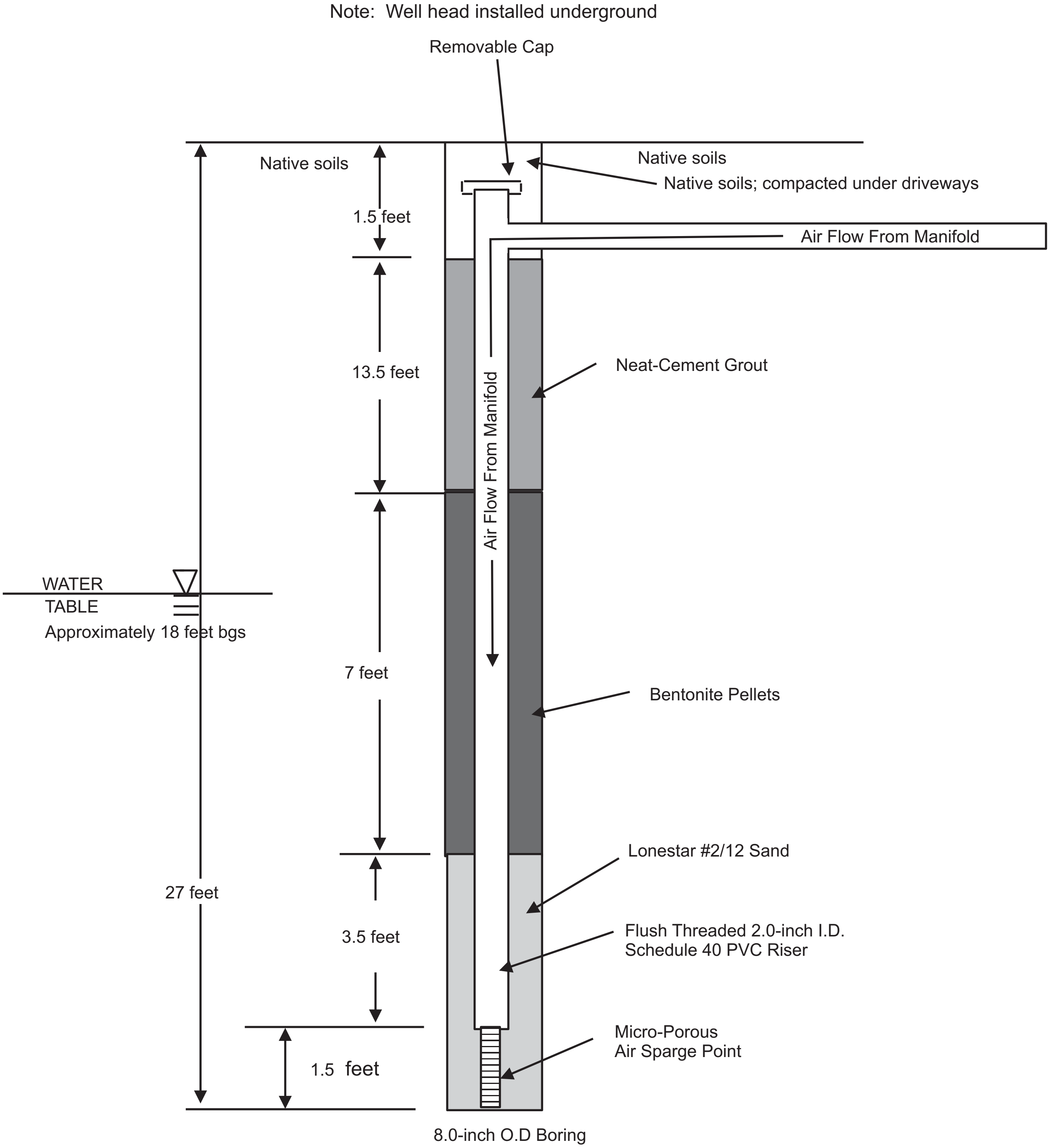
FIGURE

H-6



NOT TO SCALE

E_2C Remediation 5300 Woodmere Dr., Suite 105 Bakersfield, CA 93313 Phone: (661) 831-6906 Fax: (661) 831-6234	**LAKE TAHOE LAUNDRY WORKS 1024 LAKE TAHOE BOULEVARD SOUTH LAKE TAHOE, CALIFORNIA** **AS-7 AS-BUILT DIAGRAM**	**FIGURE** **H-7**



NOT TO SCALE

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5300 Woodmere Dr., Suite 105
Bakersfield, CA 93313

Phone: (661) 831-6906
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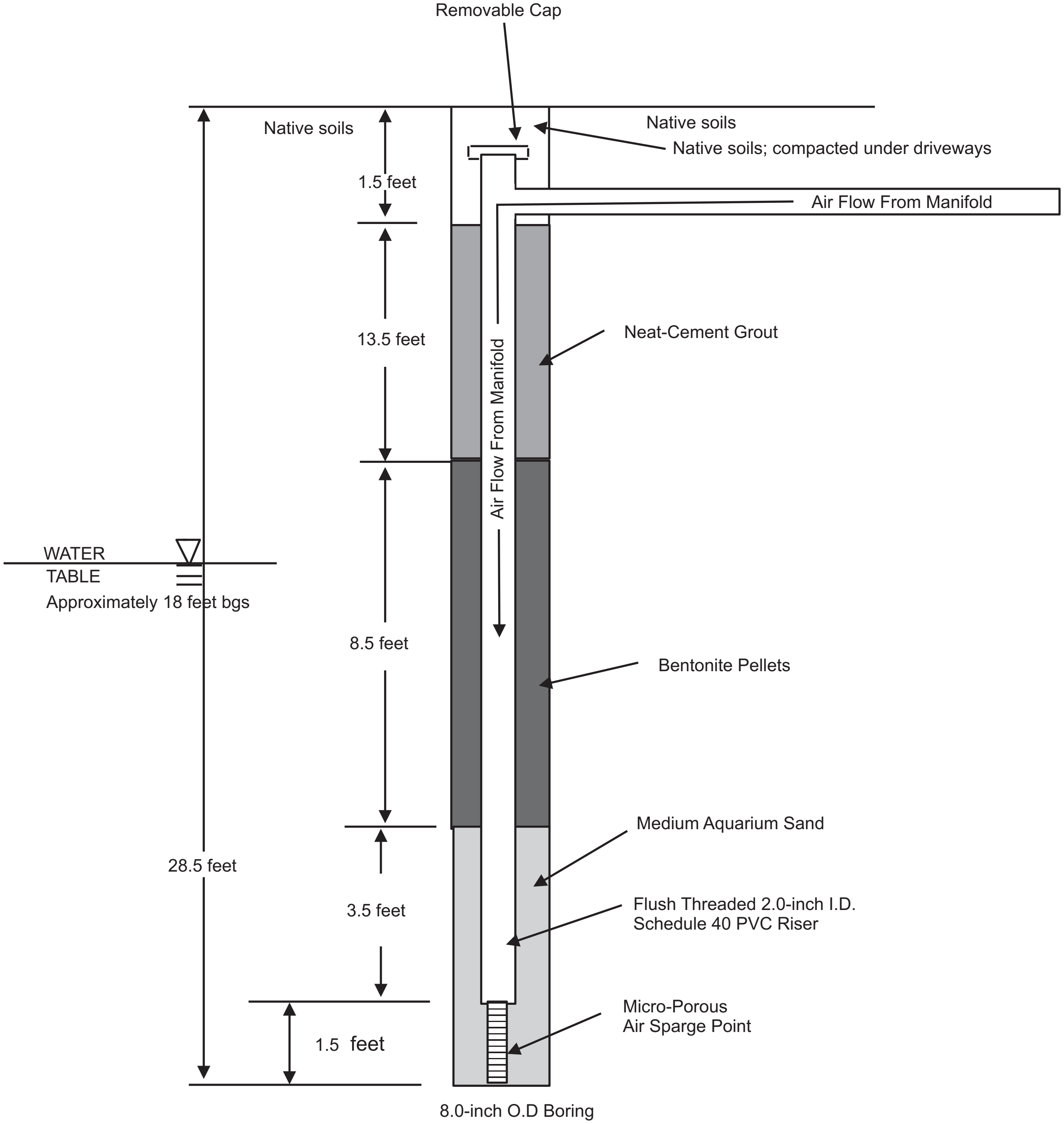
LAKE TAHOE LAUNDRY WORKS
1024 LAKE TAHOE BOULEVARD
SOUTH LAKE TAHOE, CALIFORNIA

AS-8
AS-BUILT DIAGRAM

FIGURE

H-8

Note: Well head installed underground



NOT TO SCALE

E₂C Remediation
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Bakersfield, CA 93313

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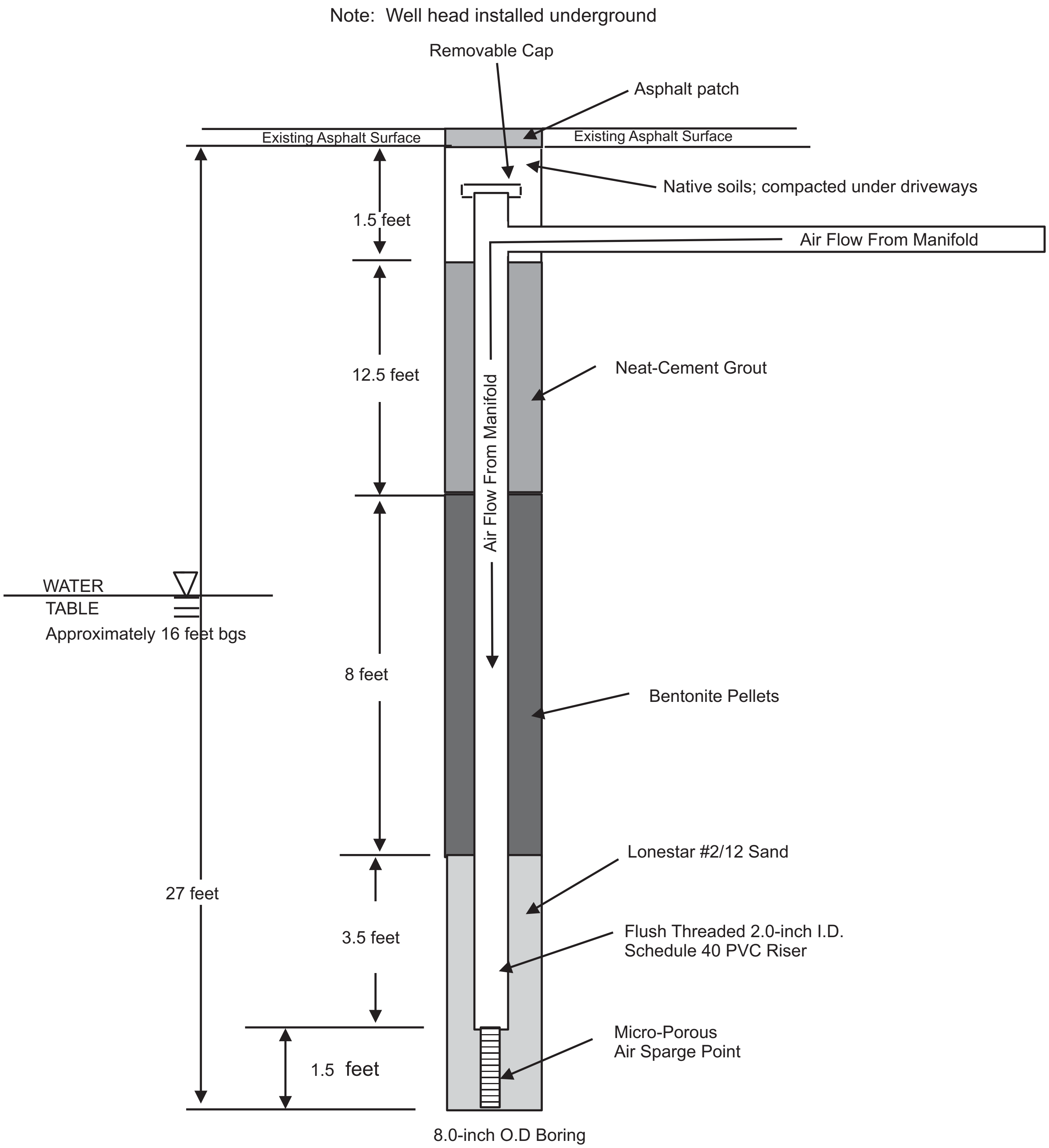
LAKE TAHOE LAUNDRY WORKS
1024 LAKE TAHOE BOULEVARD
SOUTH LAKE TAHOE, CALIFORNIA

AS-9
AS-BUILT DIAGRAM

FIGURE

H-9



NOT TO SCALE

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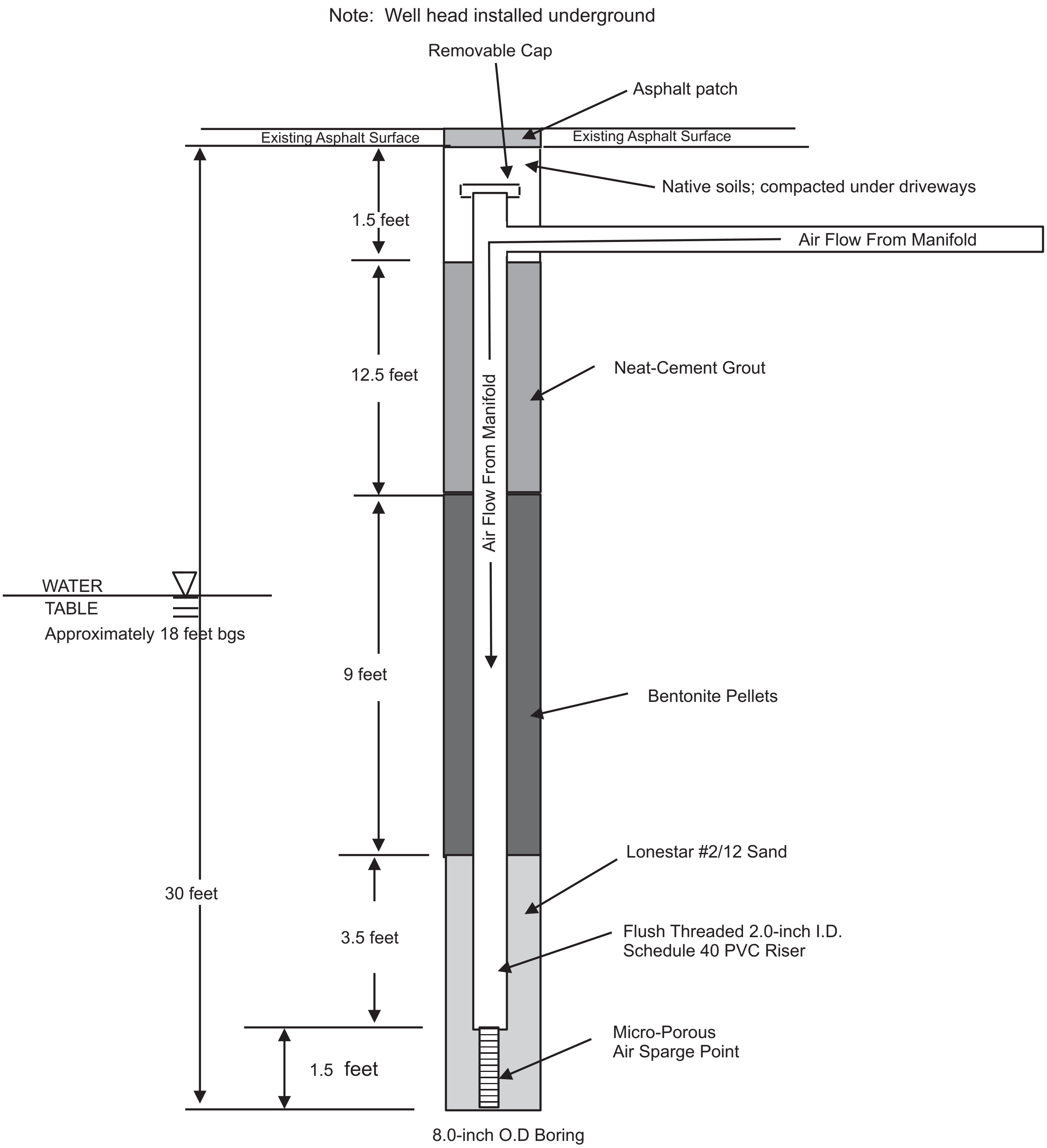
LAKE TAHOE LAUNDRY WORKS
1024 LAKE TAHOE BOULEVARD
SOUTH LAKE TAHOE, CALIFORNIA

AS-10
AS-BUILT DIAGRAM

FIGURE

H-10



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Bakersfield, CA 93313

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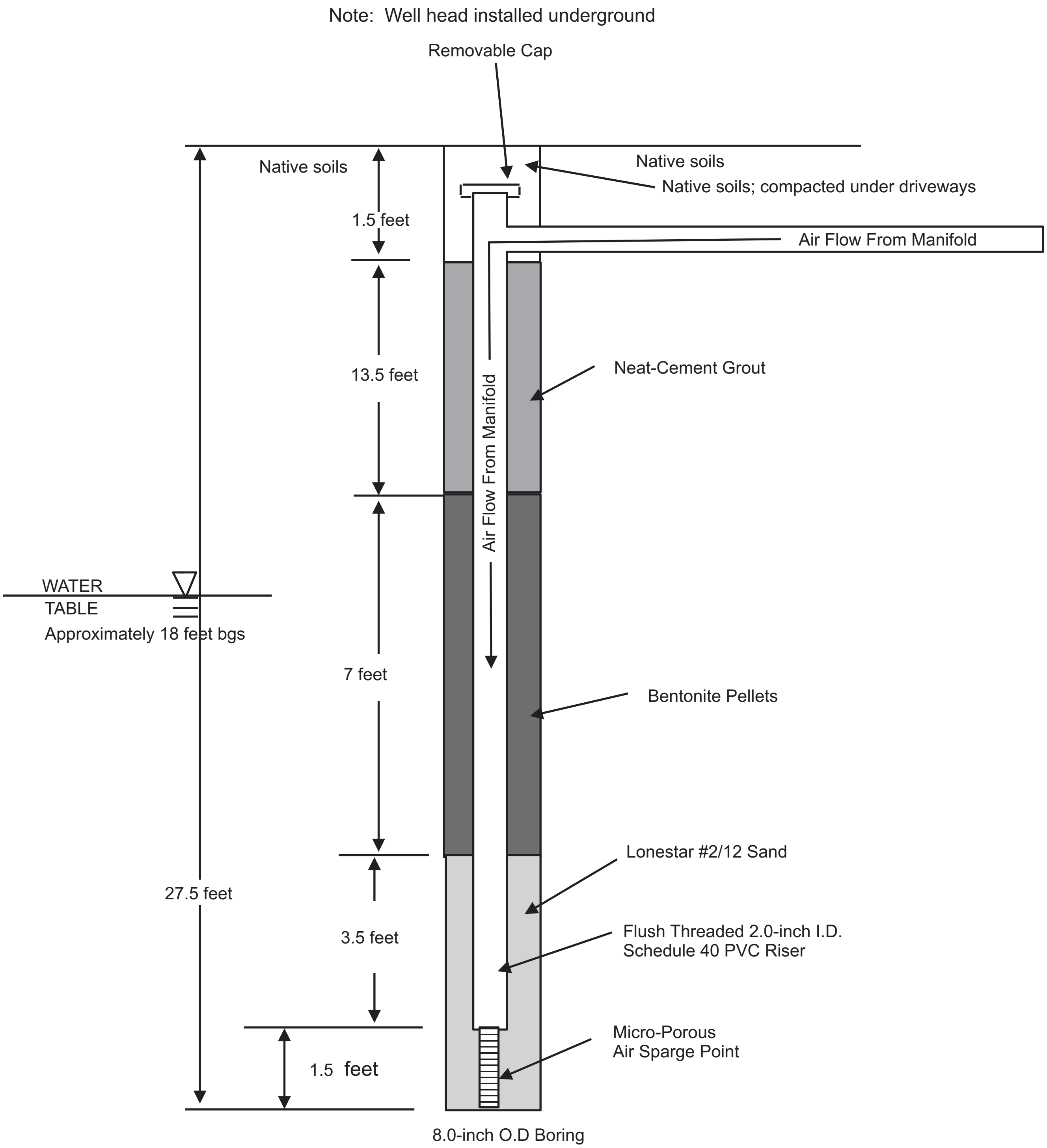
LAKE TAHOE LAUNDRY WORKS
1024 LAKE TAHOE BOULEVARD
SOUTH LAKE TAHOE, CALIFORNIA

AS-11
AS-BUILT DIAGRAM

FIGURE

H-11



NOT TO SCALE

E_2C Remediation
5300 Woodmere Dr., Suite 105
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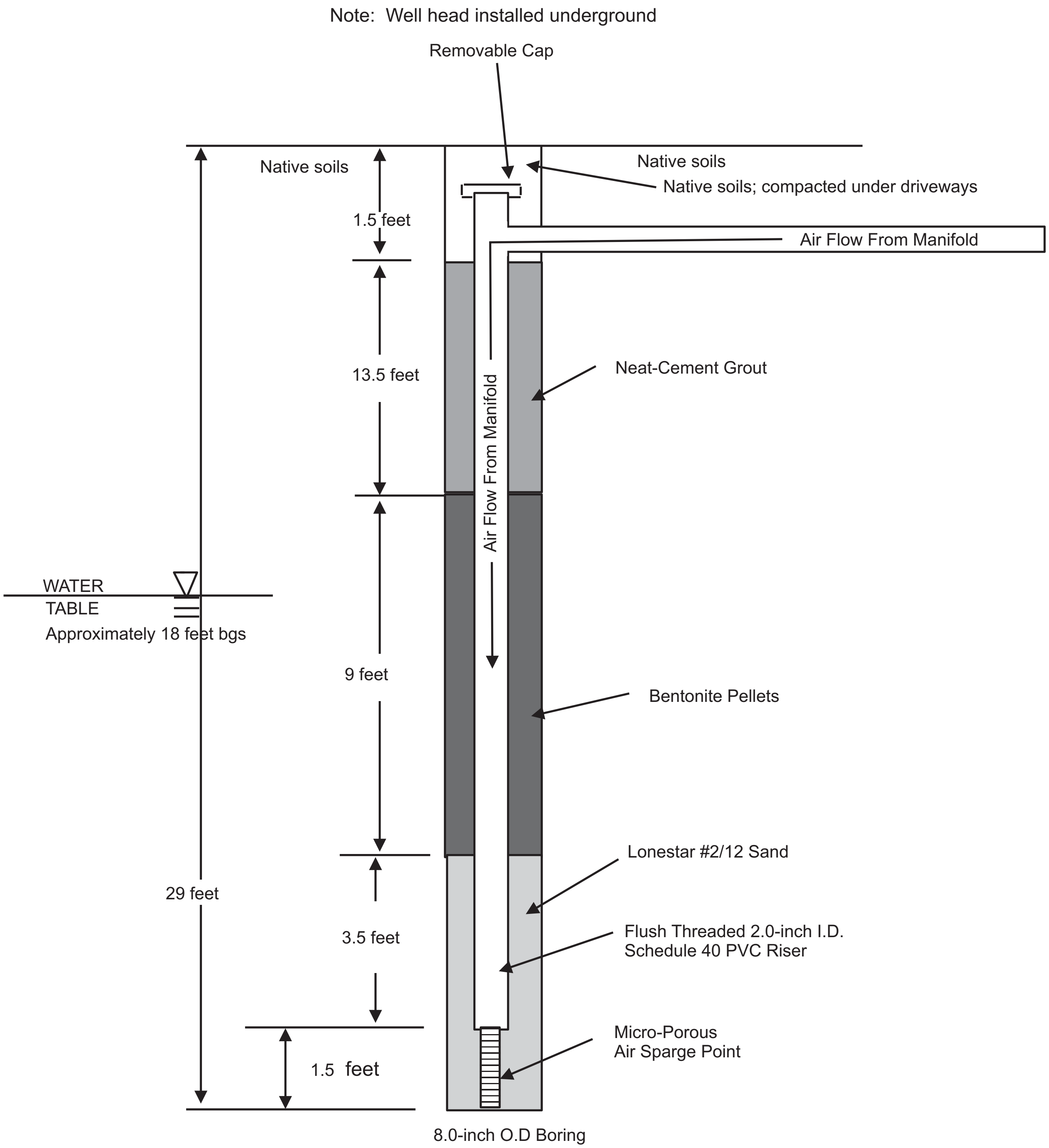
Phone: (661) 831-6906
Fax: (661) 831-6234

LAKE TAHOE LAUNDRY WORKS
1024 LAKE TAHOE BOULEVARD
SOUTH LAKE TAHOE, CALIFORNIA

AS-12
AS-BUILT DIAGRAM

FIGURE

H-12



NOT TO SCALE

E_2C Remediation
5300 Woodmere Dr., Suite 105
Bakersfield, CA 93313

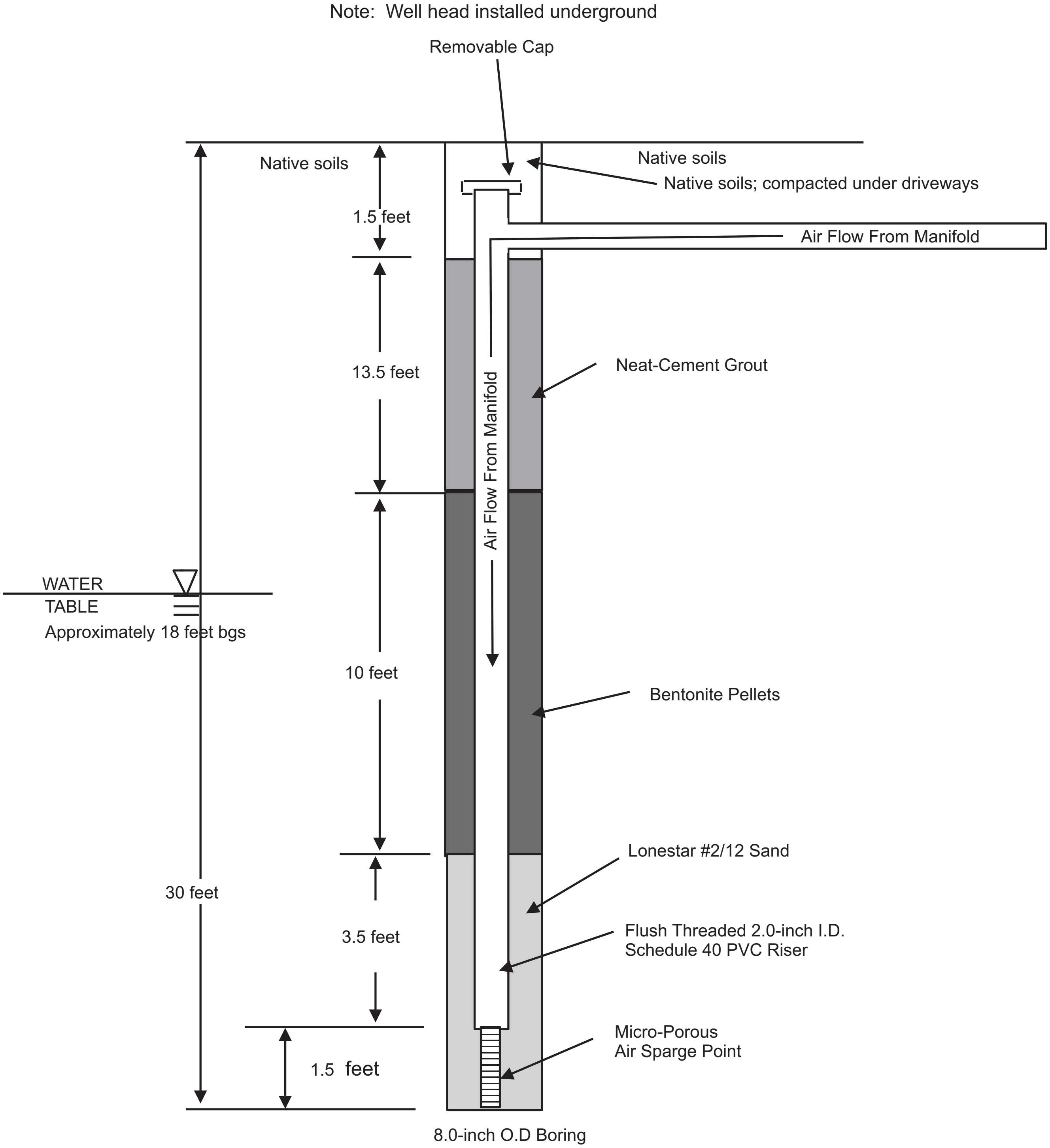
Phone: (661) 831-6906
Fax: (661) 831-6234

LAKE TAHOE LAUNDRY WORKS
1024 LAKE TAHOE BOULEVARD
SOUTH LAKE TAHOE, CALIFORNIA

AS-13
AS-BUILT DIAGRAM

FIGURE

H-13



NOT TO SCALE

E_2C Remediation
5300 Woodmere Dr., Suite 105
Bakersfield, CA 93313

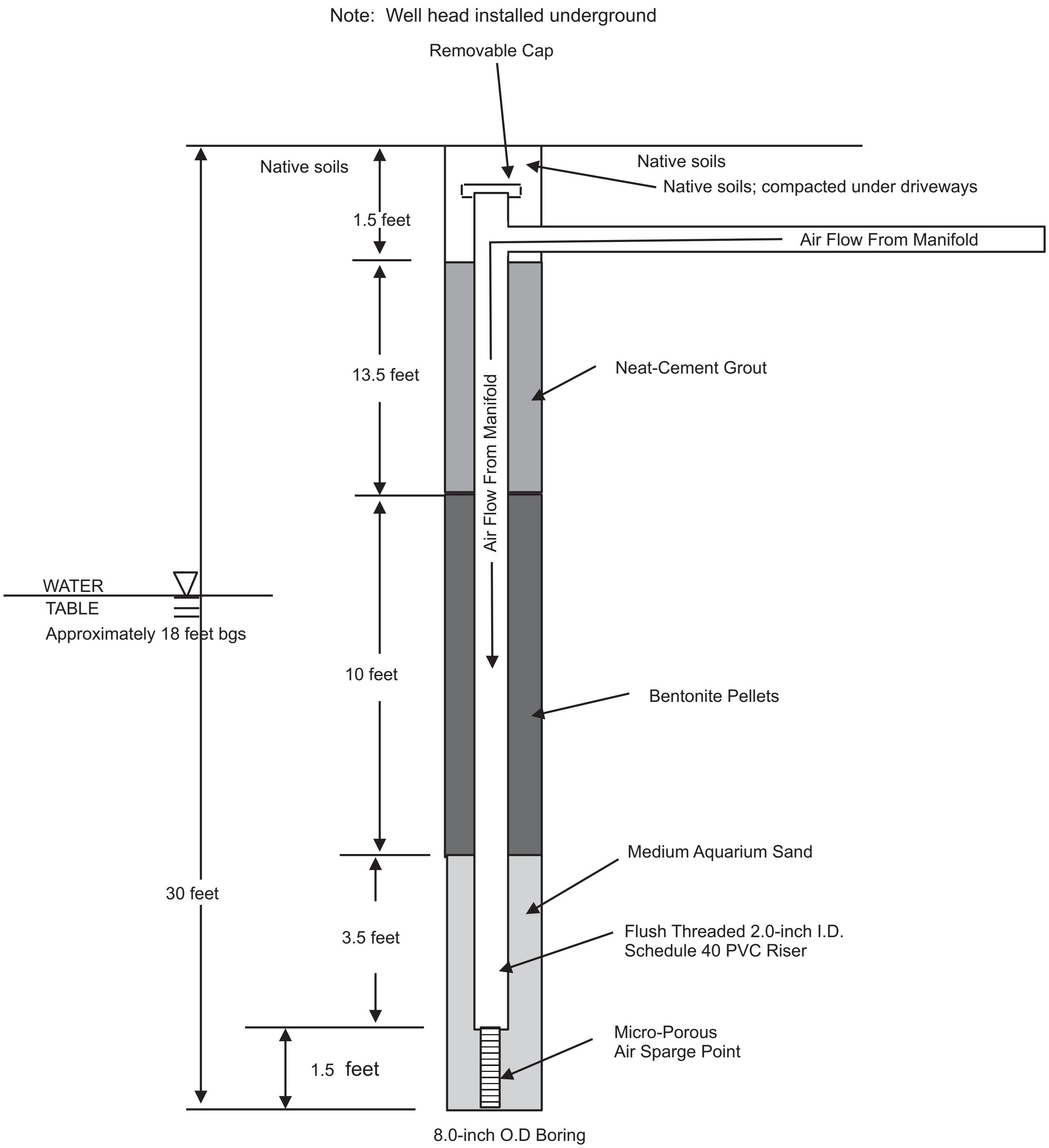
Phone: (661) 831-6906
Fax: (661) 831-6234

LAKE TAHOE LAUNDRY WORKS
1024 LAKE TAHOE BOULEVARD
SOUTH LAKE TAHOE, CALIFORNIA

AS-14
AS-BUILT DIAGRAM

FIGURE

H-14



NOT TO SCALE

E_2C Remediation
5300 Woodmere Dr., Suite 105
Bakersfield, CA 93313

Phone: (661) 831-6906
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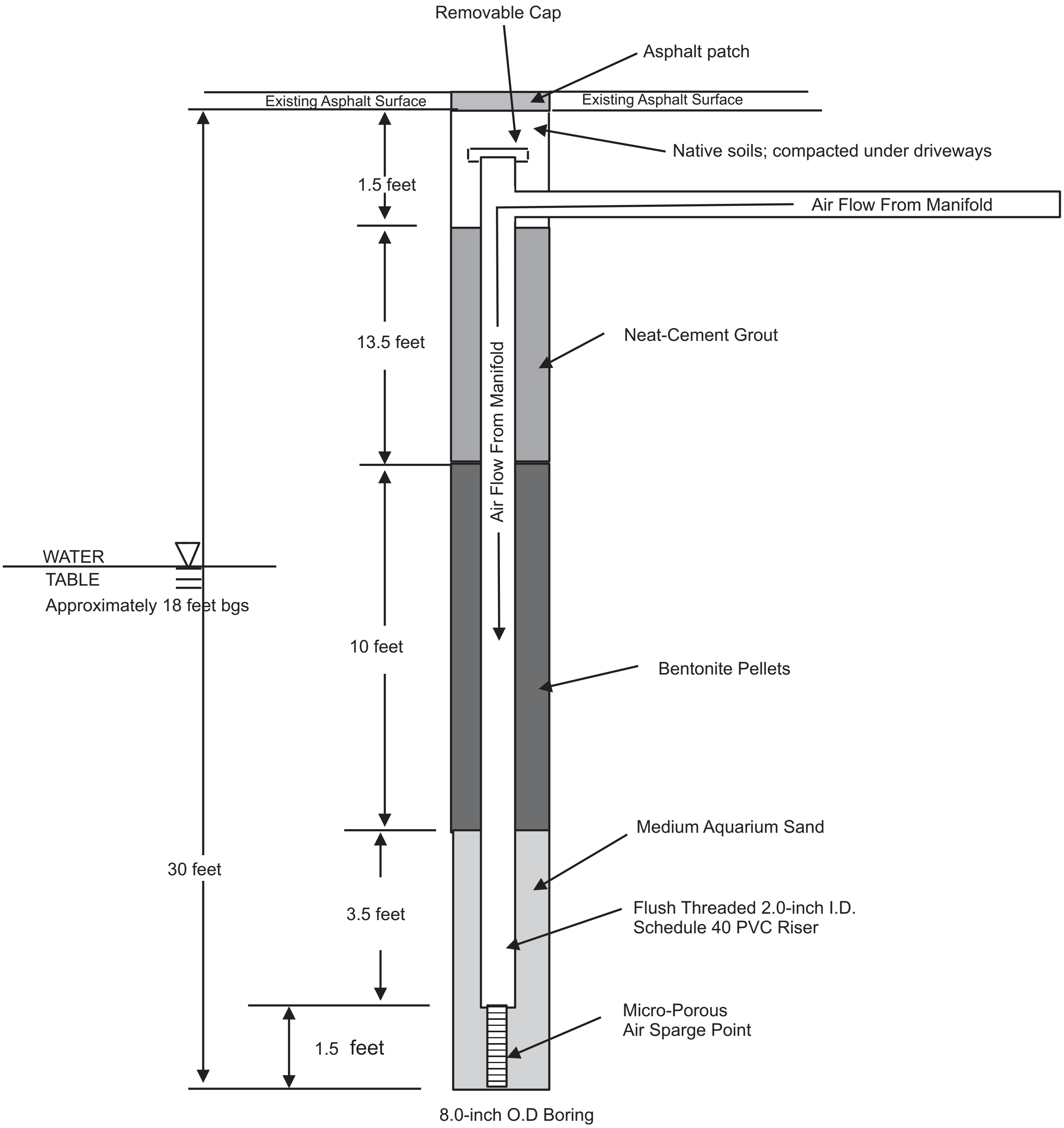
LAKE TAHOE LAUNDRY WORKS
1024 LAKE TAHOE BOULEVARD
SOUTH LAKE TAHOE, CALIFORNIA

AS-15
AS-BUILT DIAGRAM

FIGURE

H-15

Note: Well head installed underground



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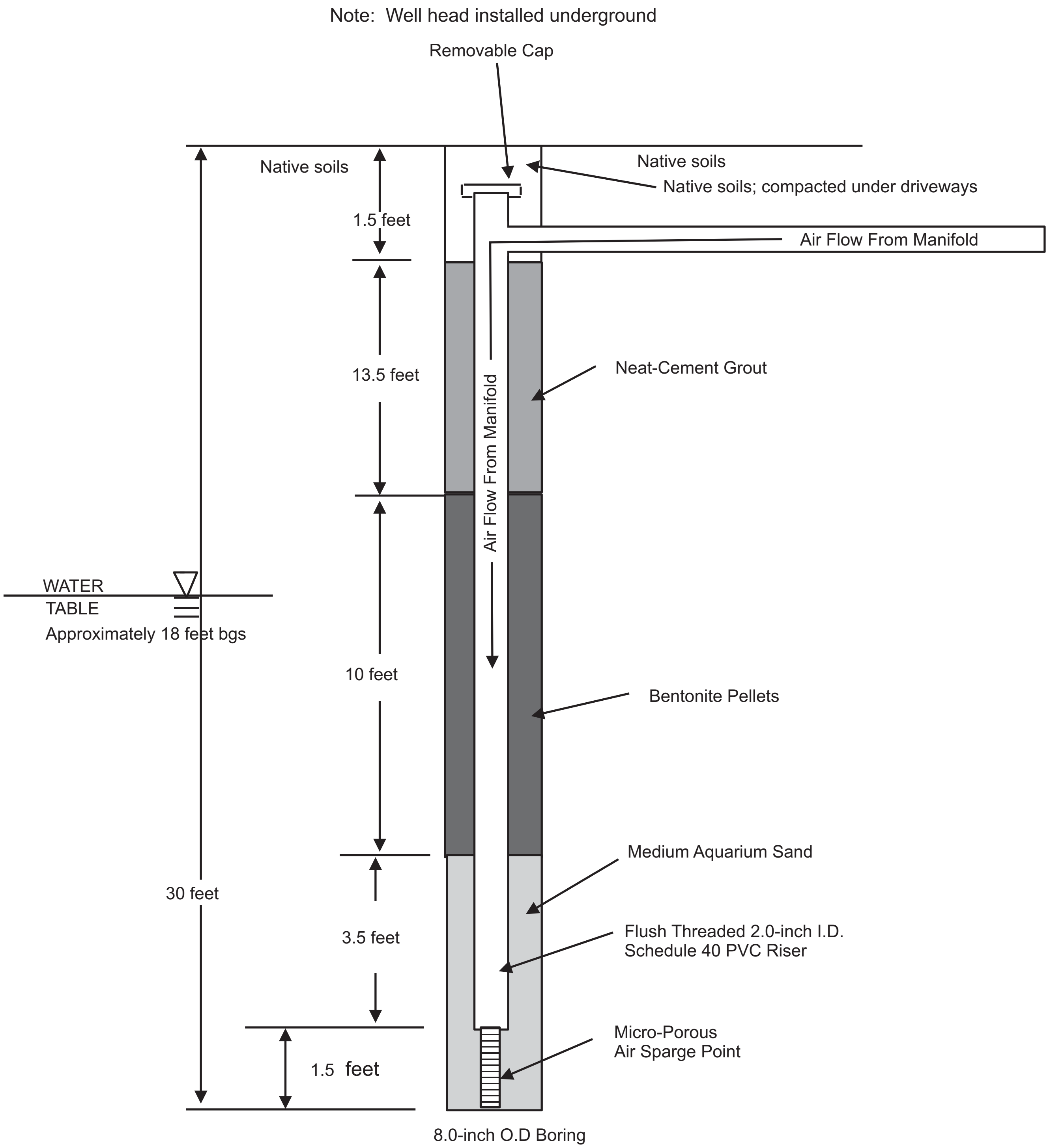
LAKE TAHOE LAUNDRY WORKS
1024 LAKE TAHOE BOULEVARD
SOUTH LAKE TAHOE, CALIFORNIA

AS-16
AS-BUILT DIAGRAM

FIGURE

H-16



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Bakersfield, CA 93313

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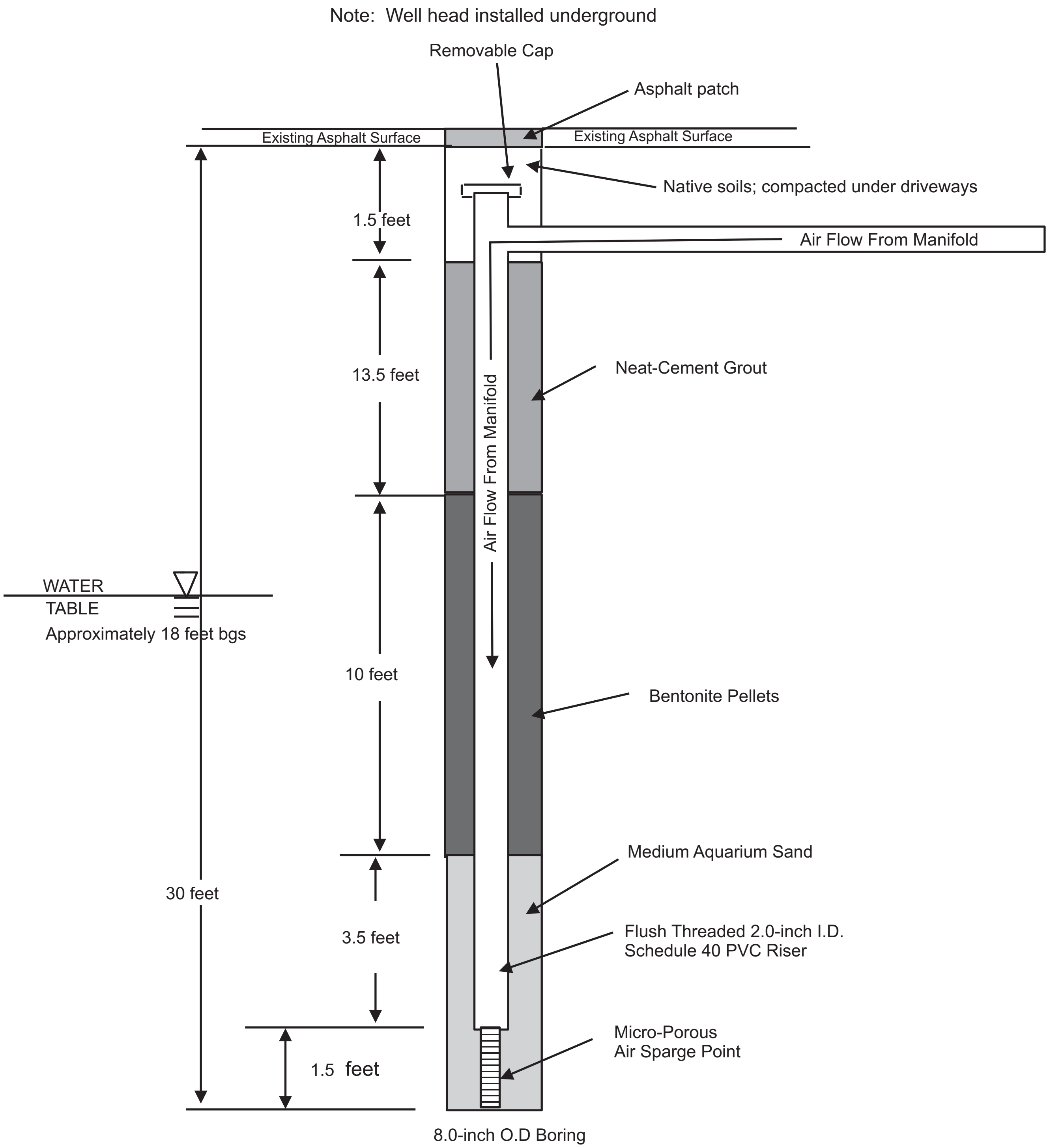
LAKE TAHOE LAUNDRY WORKS
1024 LAKE TAHOE BOULEVARD
SOUTH LAKE TAHOE, CALIFORNIA

AS-17
AS-BUILT DIAGRAM

FIGURE

H-17



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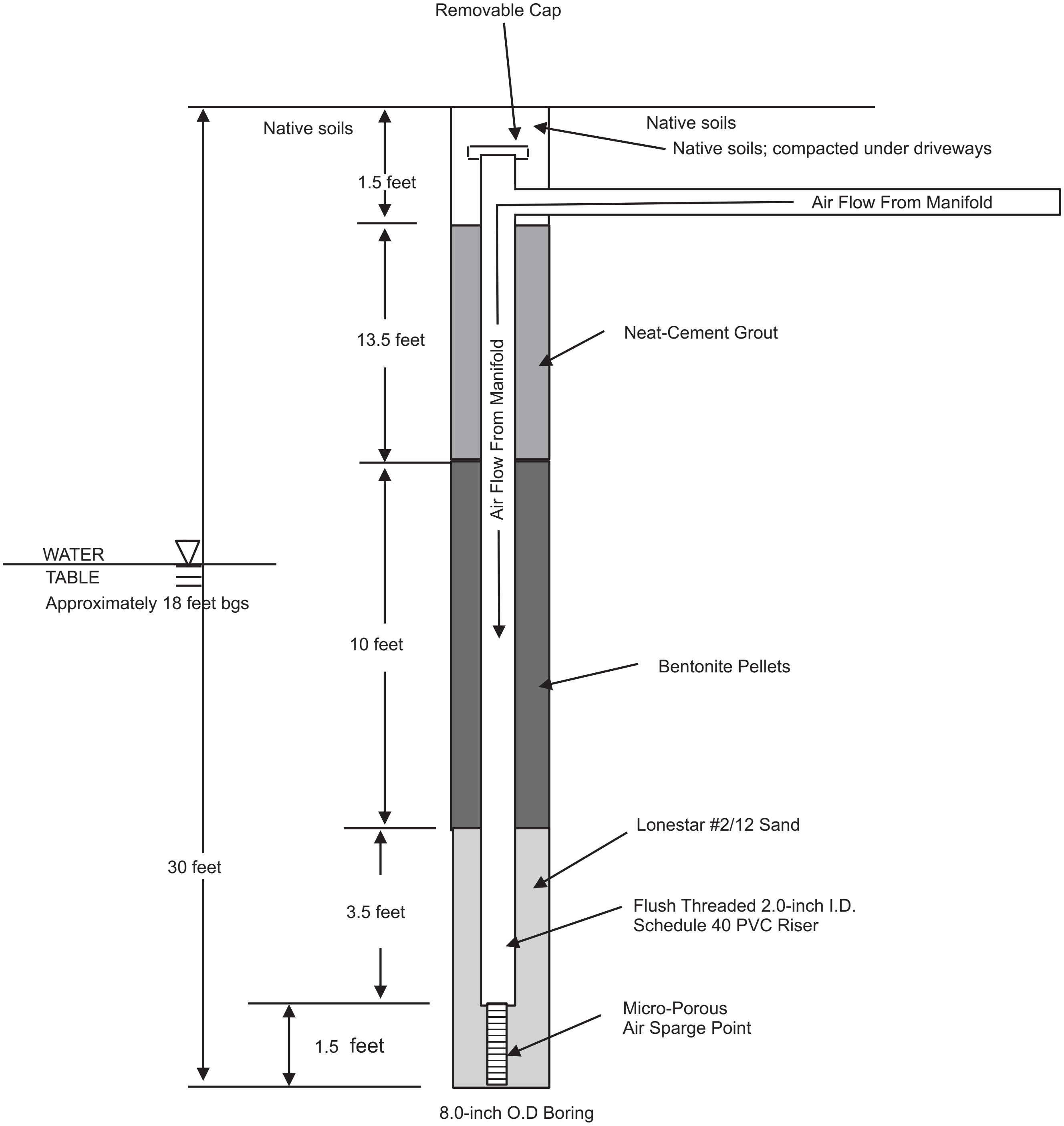
LAKE TAHOE LAUNDRY WORKS
1024 LAKE TAHOE BOULEVARD
SOUTH LAKE TAHOE, CALIFORNIA

AS-18
AS-BUILT DIAGRAM

FIGURE

H-18

Note: Well head installed underground



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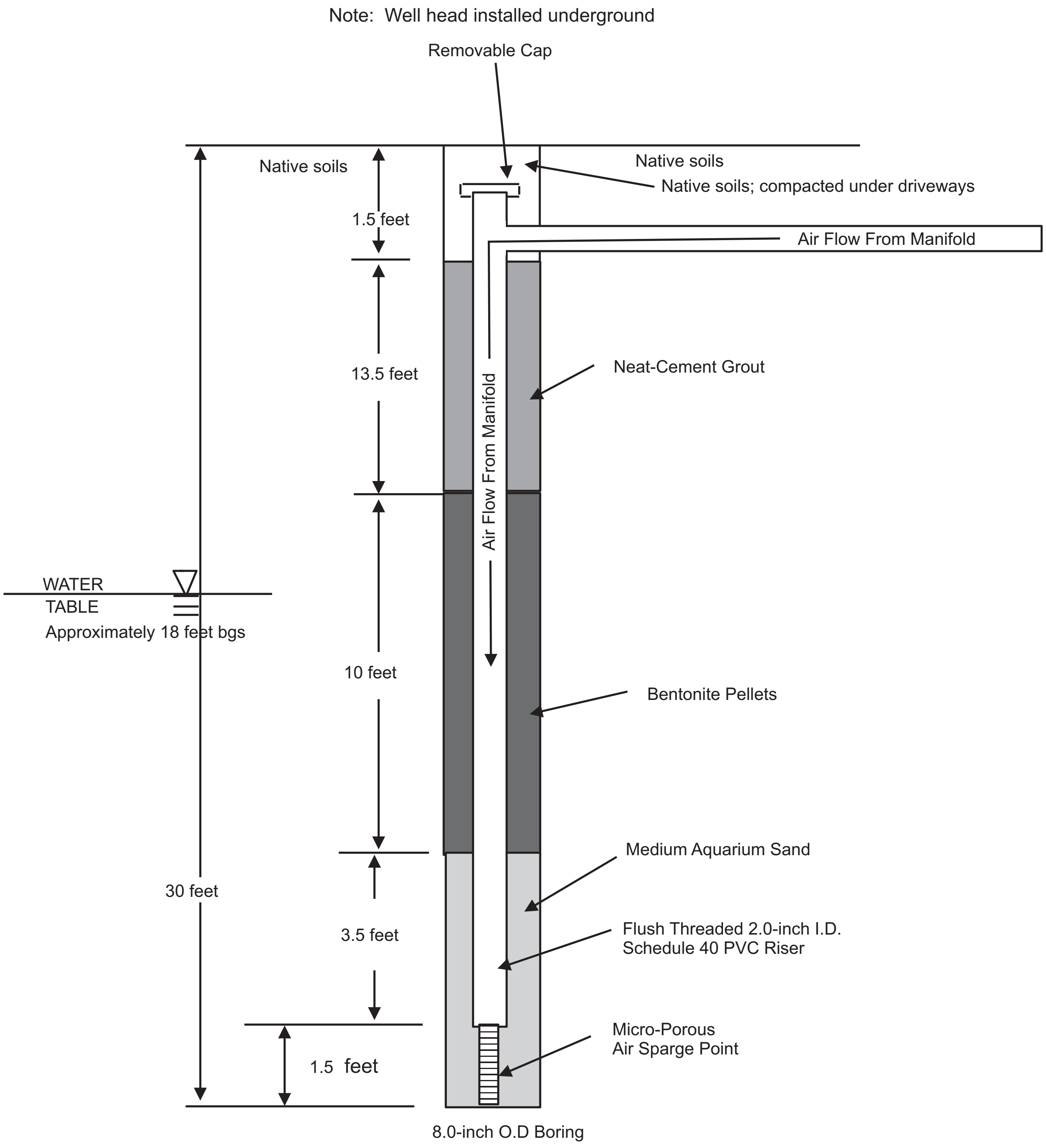
LAKE TAHOE LAUNDRY WORKS
1024 LAKE TAHOE BOULEVARD
SOUTH LAKE TAHOE, CALIFORNIA

AS-19
AS-BUILT DIAGRAM

FIGURE

H-19



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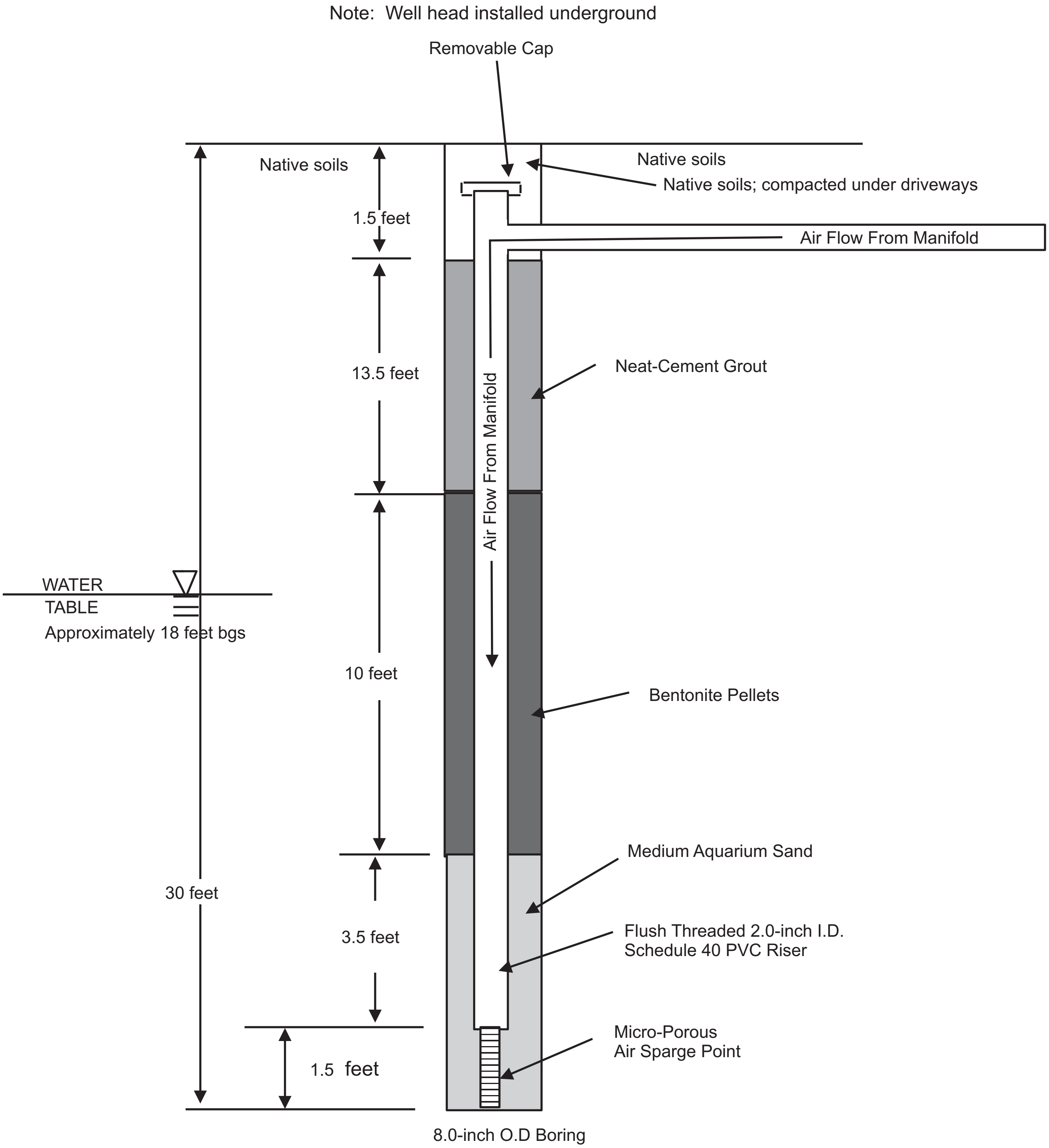
1024 LAKE TAHOE BOULEVARD
SOUTH LAKE TAHOE, CALIFORNIA

AS-20
AS-BUILT DIAGRAM

FIGURE

H-20



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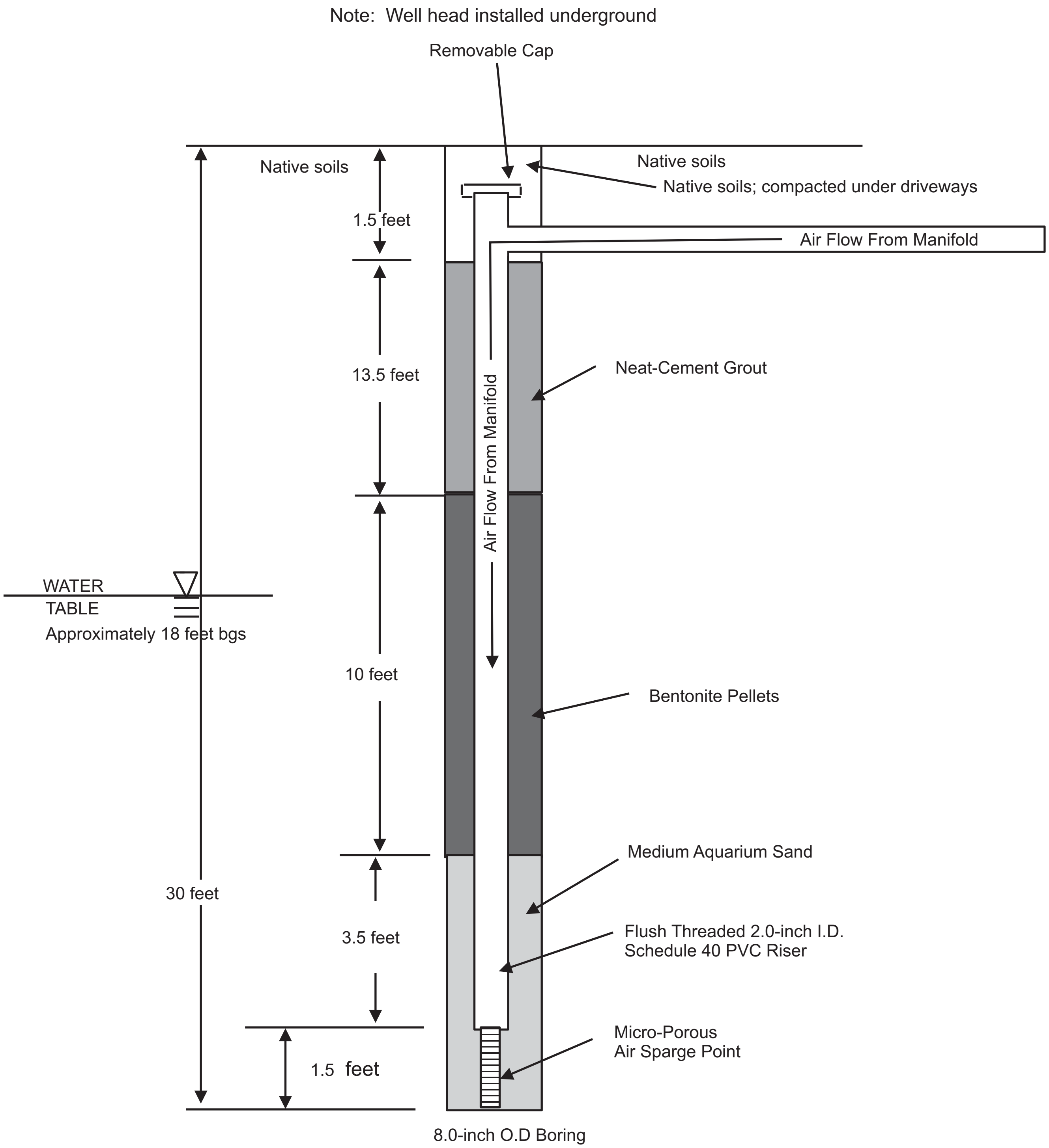
LAKE TAHOE LAUNDRY WORKS
1024 LAKE TAHOE BOULEVARD
SOUTH LAKE TAHOE, CALIFORNIA

AS-21
AS-BUILT DIAGRAM

FIGURE

H-21



NOT TO SCALE

E$_2$C Remediation
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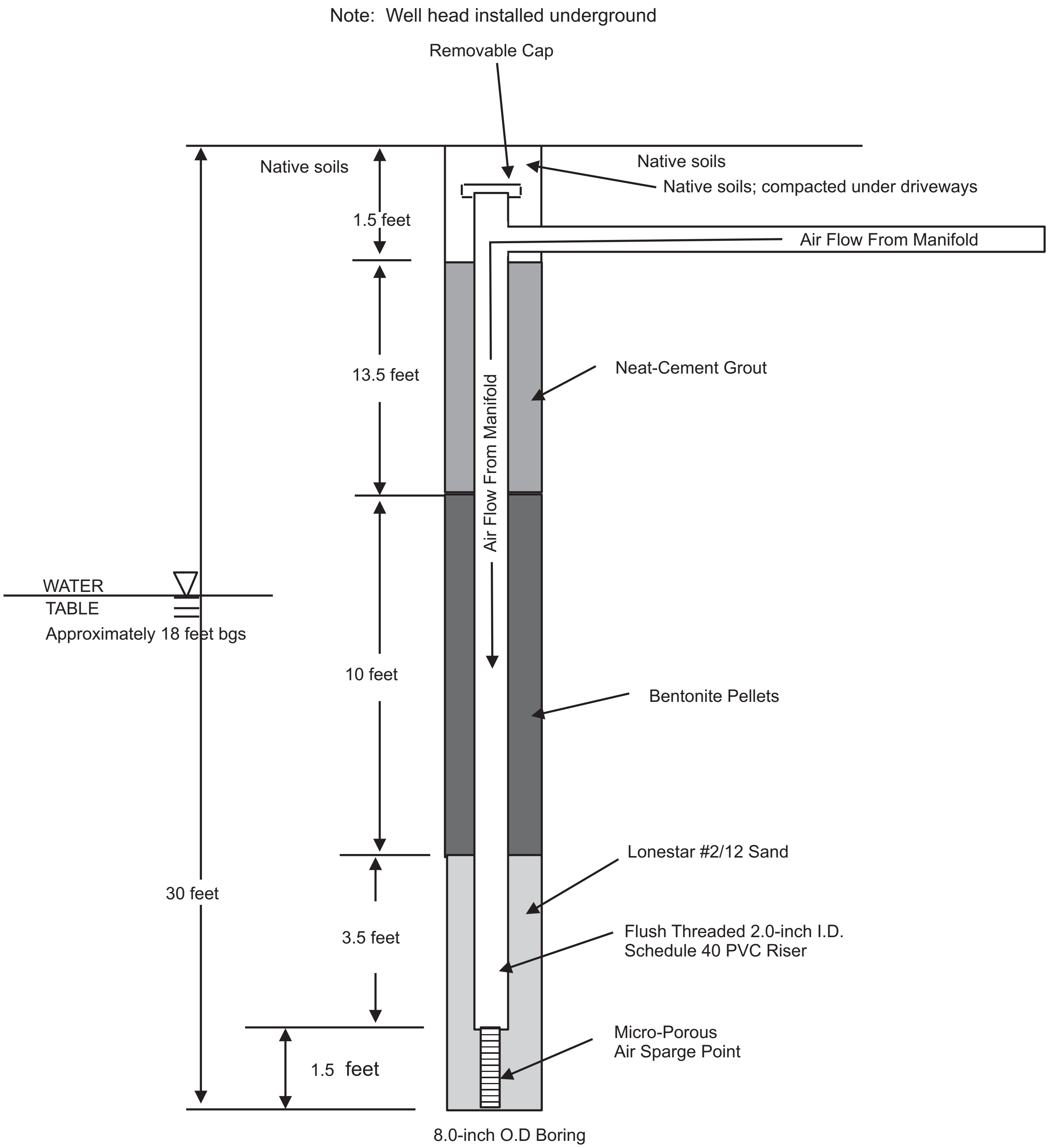
Phone: (661) 831-6906
Fax: (661) 831-6234

LAKE TAHOE LAUNDRY WORKS
1024 LAKE TAHOE BOULEVARD
SOUTH LAKE TAHOE, CALIFORNIA

AS-22
AS-BUILT DIAGRAM

FIGURE

H-22



NOT TO SCALE

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Bakersfield, CA 93313

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Fax: (661) 831-6234

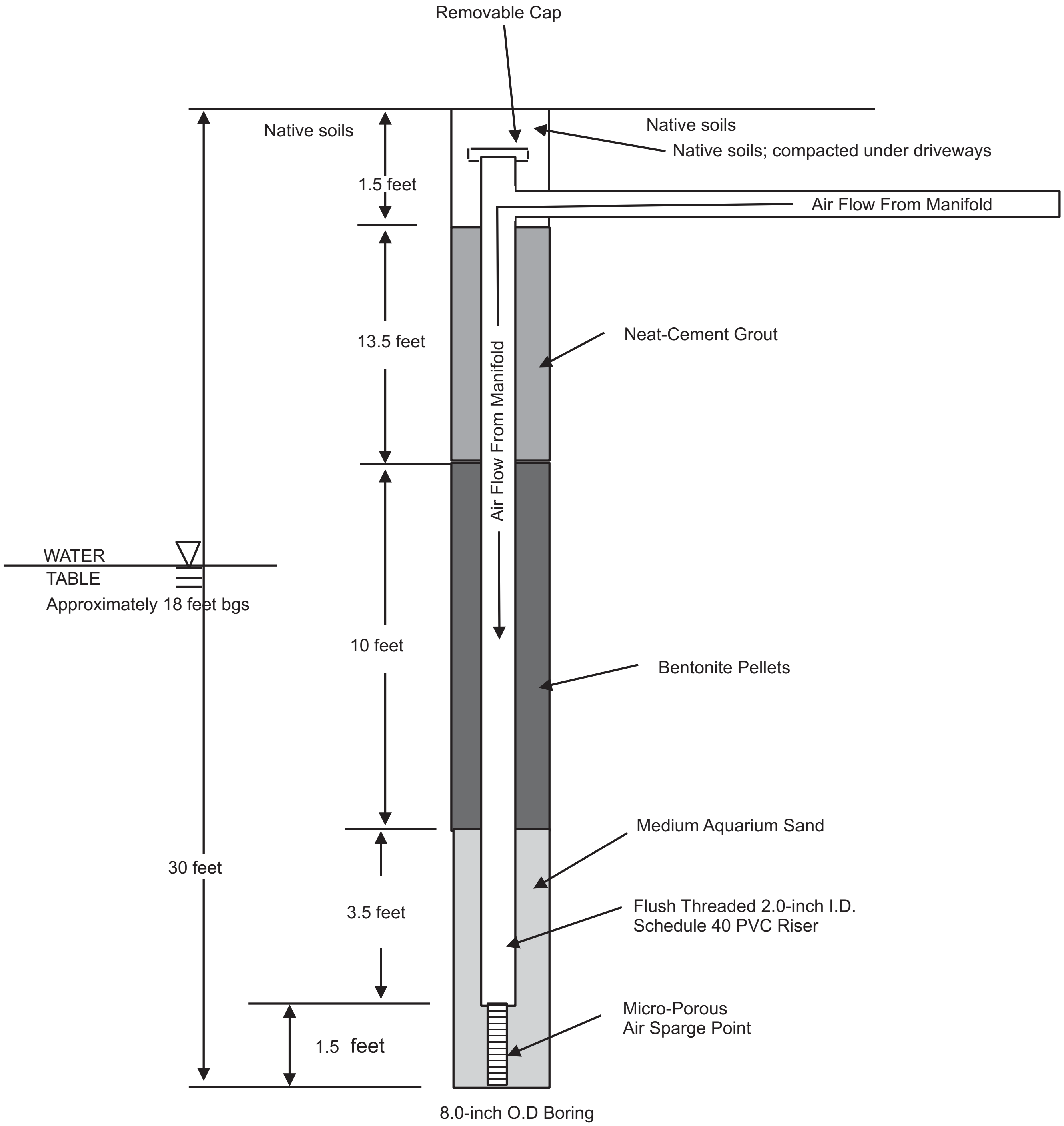
LAKE TAHOE LAUNDRY WORKS
1024 LAKE TAHOE BOULEVARD
SOUTH LAKE TAHOE, CALIFORNIA

AS-23
AS-BUILT DIAGRAM

FIGURE

H-23

Note: Well head installed underground



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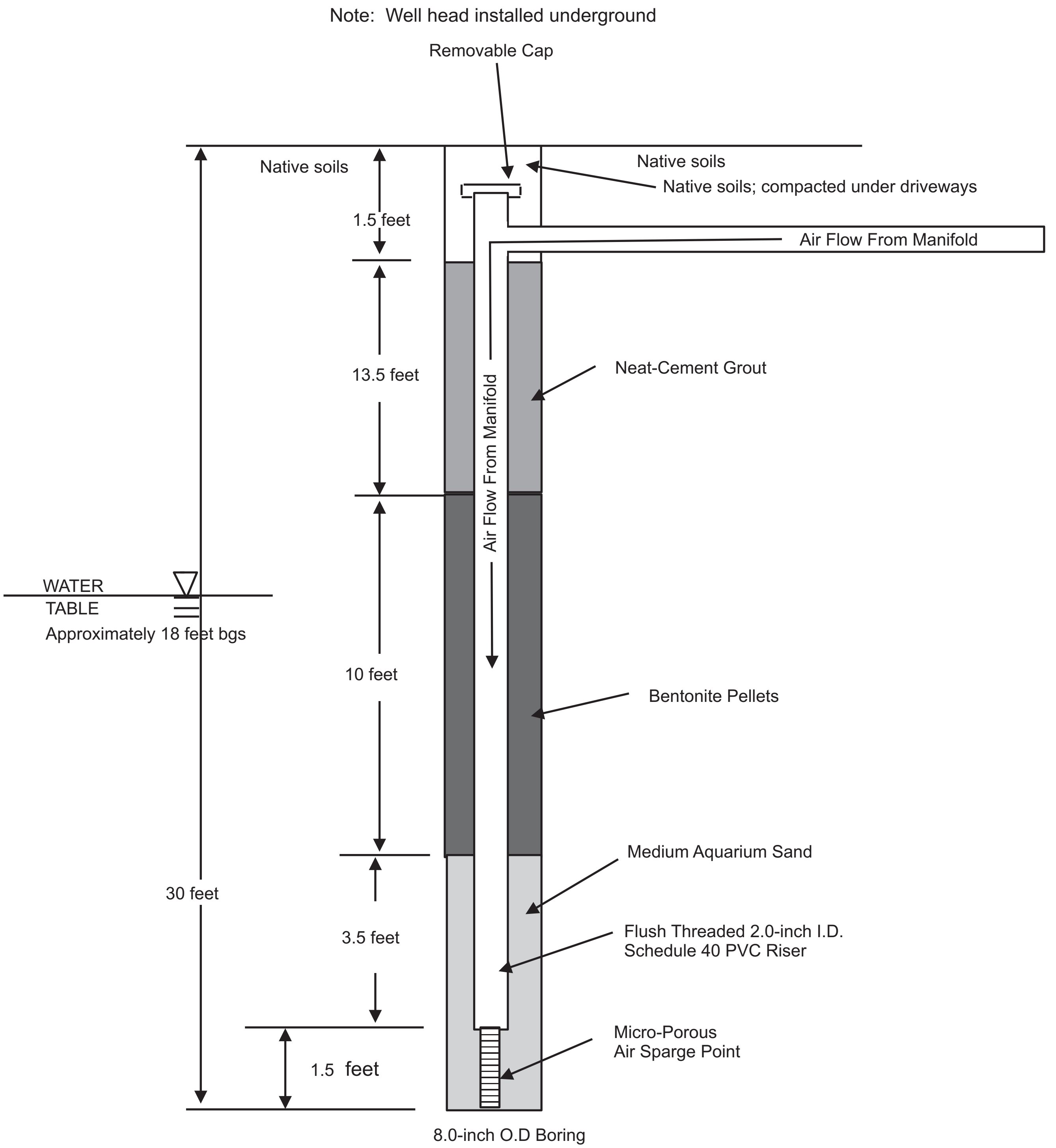
LAKE TAHOE LAUNDRY WORKS
1024 LAKE TAHOE BOULEVARD
SOUTH LAKE TAHOE, CALIFORNIA

AS-24
AS-BUILT DIAGRAM

FIGURE

H-24



NOT TO SCALE

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Bakersfield, CA 93313

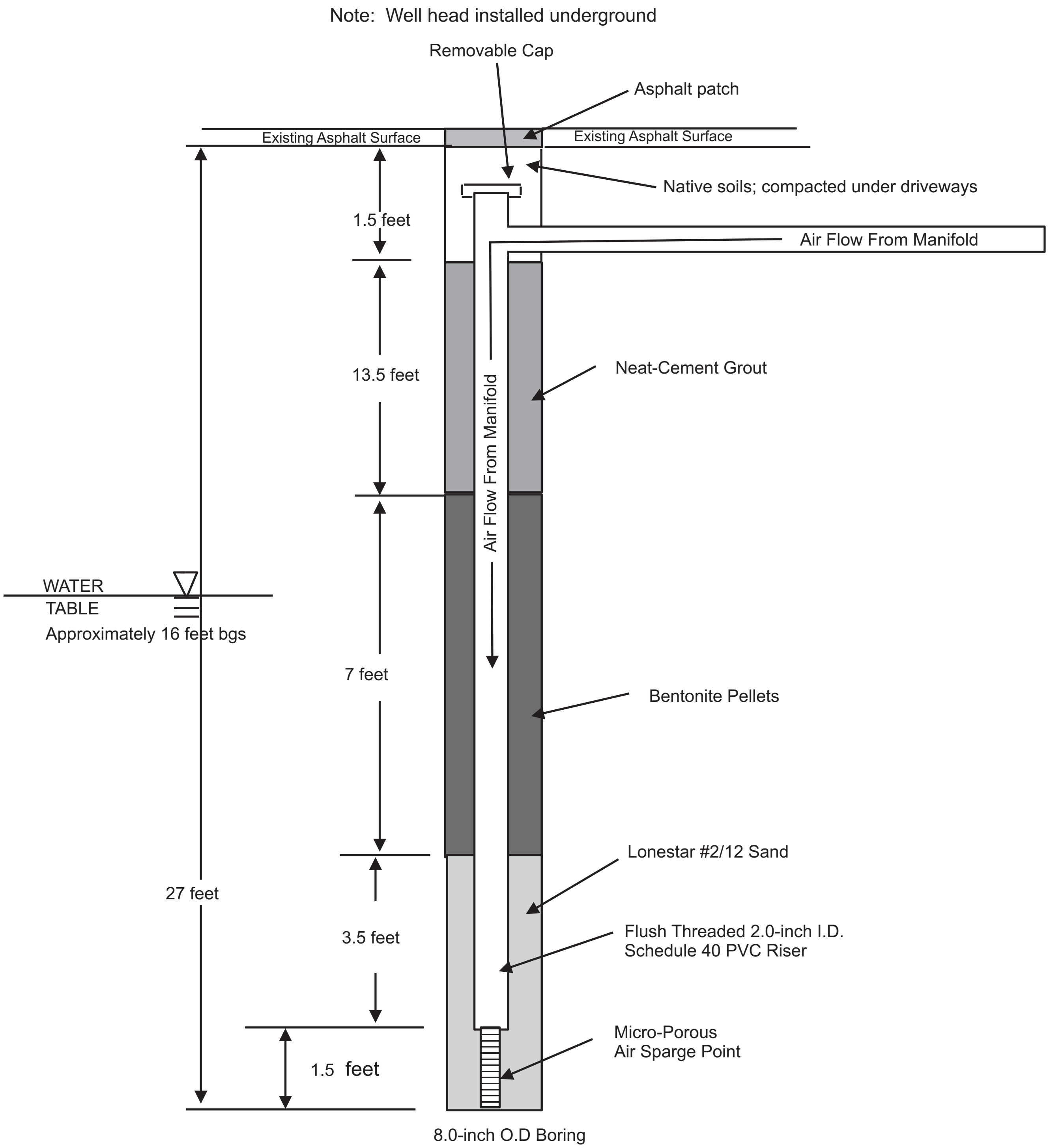
Phone: (661) 831-6906
Fax: (661) 831-6234

LAKE TAHOE LAUNDRY WORKS
1024 LAKE TAHOE BOULEVARD
SOUTH LAKE TAHOE, CALIFORNIA

AS-25
AS-BUILT DIAGRAM

FIGURE

H-25



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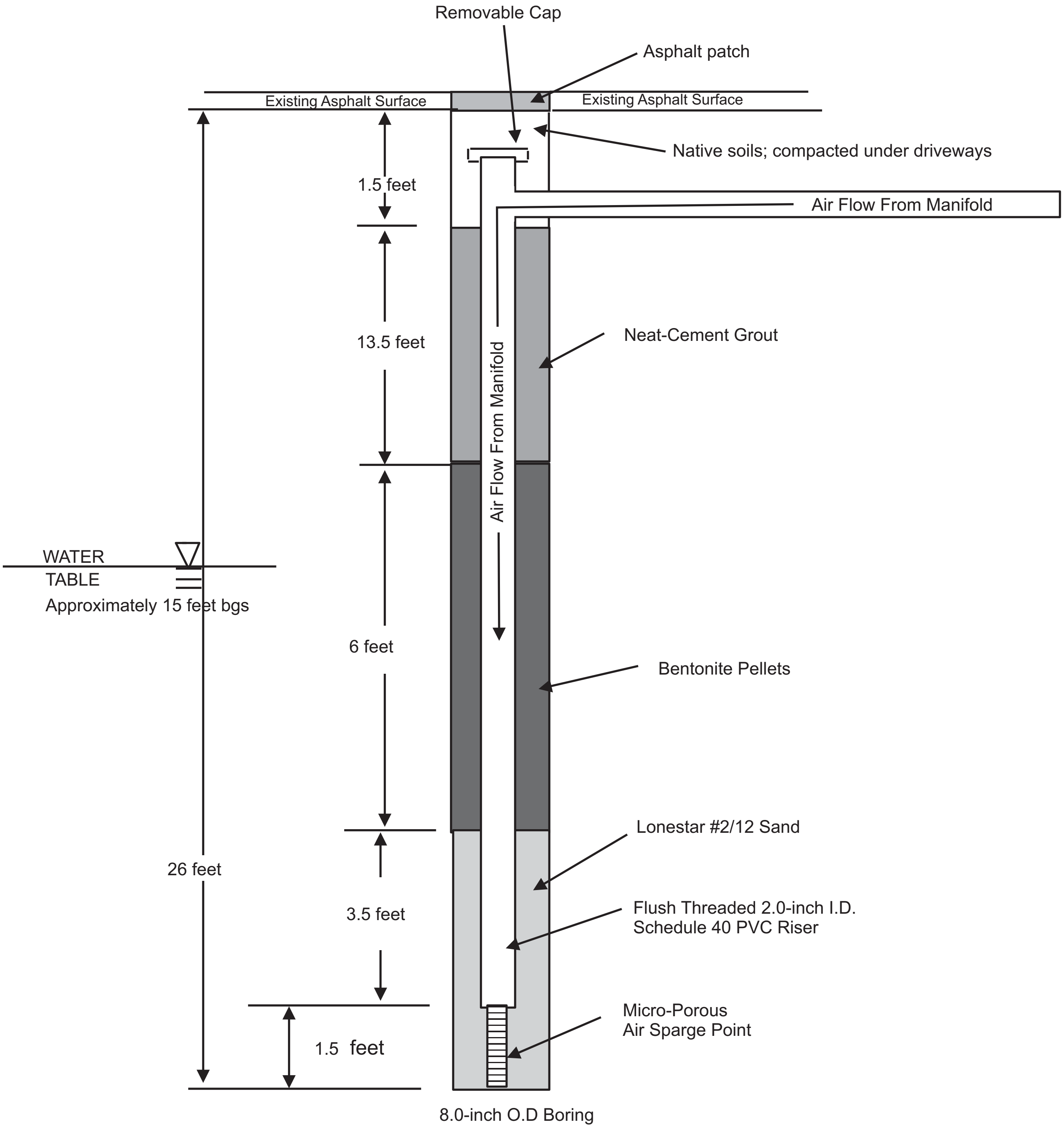
LAKE TAHOE LAUNDRY WORKS
1024 LAKE TAHOE BOULEVARD
SOUTH LAKE TAHOE, CALIFORNIA

AS-26
AS-BUILT DIAGRAM

FIGURE

H-26

Note: Well head installed underground



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LAKE TAHOE LAUNDRY WORKS
1024 LAKE TAHOE BOULEVARD
SOUTH LAKE TAHOE, CALIFORNIA

AS-27
AS-BUILT DIAGRAM

FIGURE

H-27

APPENDIX I

VP Well Logs

FIELD LOCATION OF BORING:

PAGE 1 OF 1

PROJECT NUMBER: 1956BR09 DATES DRILLED: 4/5/09

CLIENT: SSLP + FCM DRILLER: BC^2

SITE ADDRESS: 1024 LT BLVD LOGGED BY: WAC

DRILLING METHOD AND EQUIPMENT: HAND AUGER

WATER LEVEL				
START TIME		**END TIME**		
DATE				

Depth (Feet)	SAMPLE NAME	Blow Count	PID	WELL/ BORING SPECIFICATIONS and CONSTRUCTION DIAGRAM	USCS Symbol	SOIL DESCRIPTION
						4" AC
						6" BR
						set up
						0-4.5 1/4" Teflon tubing
						w/1.5' screen at bottom
						6" sand (#2/12) above & below
						screen
						1' bentonite hydrated
						grout to surface
						set 5" well box in concrete

WELL / BORING CONSTRUCTION DETAILS: -inch I.D., Schedule 40 PVC: Bottom of Screen ( ) set at ______feet BGS; _____ Sand placed to _______feet BGS; Bentonite pellets placed to _______feet BGS; Grout tremied to BGS.

E$_2$C Remediation
1358 Blue Oaks Blvd., Suite 300
Roseville, California 95678

Phone: (916) 782-8700
Fax: (916) 782-8049

VP-1

FIELD LOCATION OF BORING:

PAGE 1 OF 1

PROJECT NUMBER: 1950BR09 DATES DRILLED: 11/5/09

CLIENT: SSLP + Farm DRILLER: BC2

SITE ADDRESS: 1024 LT BLVD LOGGED BY: ______

DRILLING METHOD AND EQUIPMENT: HAND AUGER

WATER LEVEL			
START TIME		END TIME	
DATE			

Depth (Feet)	SAMPLE NAME	Blow Count	PID	WELL/ BORING SPECIFICATIONS and CONSTRUCTION DIAGRAM	USCS Symbol	SOIL DESCRIPTION
						set VP
						4.5' of 1/4 Teflon tubing
						w/ 1.5" screen at bottom
						6" sand above + below
						screen (#2/12)
						1' bentonite, hydrated
						grout to surface
						set in 5" well box in concrete

WELL / BORING CONSTRUCTION DETAILS: -inch I.D., Schedule 40 PVC: Bottom of Screen ( ) set at ______feet BGS; _____ Sand placed to _______feet BGS; Bentonite pellets placed to _______feet BGS; Grout tremied to BGS.

E2C Remediation
1358 Blue Oaks Blvd., Suite 300
Roseville, California 95678

Phone: (916) 782-8700
Fax: (916) 782-8049

VP-2

FIELD LOCATION OF BORING:

PAGE 1 OF 1

PROJECT NUMBER: 1950BK09 **DATES DRILLED:** 11/5/09 2

CLIENT: SSLP & FCM **DRILLER:** BC

SITE ADDRESS: 1024 LT Blvd **LOGGED BY:** WAL

DRILLING METHOD AND EQUIPMENT: HAND Auger

WATER LEVEL			
START TIME		**END TIME**	
DATE			

Depth (Feet)	SAMPLE NAME	Blow Count	PID	WELL/ BORING SPECIFICATIONS and CONSTRUCTION DIAGRAM	USCS Symbol	SOIL DESCRIPTION
						0-5' SAND
						0-4.5 1/4" Teflon tubing
						w/1.5" screen at bottom
						6" SAND (#2/12) above &
						below screen
						1' bentonite (hydrated) above
						SAND
						grout to surface
						set 5" well box in concrete

WELL / BORING CONSTRUCTION DETAILS: -inch I.D., Schedule 40 PVC: Bottom of Screen ( ) set at ______feet BGS; _____ Sand placed to _______feet BGS; Bentonite pellets placed to _______feet BGS; Grout tremied to BGS.

E_2C Remediation
1358 Blue Oaks Blvd., Suite 300
Roseville, California 95678

Phone: (916) 782-8700
Fax: (916) 782-8049

VP-3

FIELD LOCATION OF BORING:

PAGE 1 OF 1

PROJECT NUMBER: 1850BR09 DATES DRILLED: 11/7/09 2

CLIENT: SSLP & RCM DRILLER: BC

SITE ADDRESS: 1024 LT Blvd LOGGED BY: WAL

DRILLING METHOD AND EQUIPMENT: Hand Auger

WATER LEVEL			
START TIME		**END TIME**	
DATE			

Depth (Feet)	SAMPLE NAME	Blow Count	PID	WELL/ BORING SPECIFICATIONS and CONSTRUCTION DIAGRAM	USCS Symbol	SOIL DESCRIPTION
						0-5' SAND
						0-4.5' 1/4" Teflon tubing
						w/1.5" screen at bottom
						6" SAND (#2/12) above &
						below screen
						1' bentonite (hydrated) above SAND
						grout to surface
						set 5" well box in concrete

WELL / BORING CONSTRUCTION DETAILS: -inch I.D., Schedule 40 PVC: Bottom of Screen ( ) set at ______feet BGS; _____ Sand placed to _______feet BGS; Bentonite pellets placed to _______feet BGS; Grout tremied to BGS.

E₂C Remediation
1358 Blue Oaks Blvd., Suite 300
Roseville, California 95678

Phone: (916) 782-8700
Fax: (916) 782-8049

VP-4

FIELD LOCATION OF BORING:

PAGE 1 OF 1

PROJECT NUMBER: 1950BK09 DATES DRILLED: 11/3/09

CLIENT: DRILLER: BC²

SITE ADDRESS: 1024 LTB

LOGGED BY: WAL

DRILLING METHOD AND EQUIPMENT: HA CME-75

WATER LEVEL			
START TIME		END TIME	
DATE			

Depth (Feet)	SAMPLE NAME	Blow Count	PID	WELL/ BORING SPECIFICATIONS and CONSTRUCTION DIAGRAM	USCS Symbol	SOIL DESCRIPTION
						4" AC
						6" BR
						10"-5' SAND (SP): damp, yell
						brn & dark brn; no odor
						set VP
						0-4.5' 1/4" teflon tubing
						w/ 1.5" long soil-gas screen
						at bottom
						6" SAND above & below filter
						1' bent.
						grout to surface
						top set in 9" well box
						set in concrete

WELL / BORING CONSTRUCTION DETAILS: -inch I.D., Schedule 40 PVC: Bottom of Screen ( ) set at ______feet BGS; ______ Sand placed to ________feet BGS; Bentonite pellets placed to ________feet BGS; Grout tremied to BGS.

E₂C Remediation
1358 Blue Oaks Blvd., Suite 300
Roseville, California 95678

Phone: (916) 782-8700
Fax: (916) 782-8049

VP-5

FIELD LOCATION OF BORING:

PAGE 1 OF 1

PROJECT NUMBER: 1950BK09 DATES DRILLED: 11/3/09

CLIENT: SSLP + TCM DRILLER: BC²

SITE ADDRESS: 1024 LT BLVD LOGGED BY: WAL

DRILLING METHOD AND EQUIPMENT: HAND AUGER

WATER LEVEL			
START TIME		END TIME	
DATE			

Depth (Feet)	SAMPLE NAME	Blow Count	PID	WELL/ BORING SPECIFICATIONS and CONSTRUCTION DIAGRAM	USCS Symbol	SOIL DESCRIPTION
						4" AC HAND Auger
						6" BR
						Set VP
						0-4.5 1/4" teflon tubing
						w/ 1.5" screen at bottom
						6" sand above & below filter
						1' bentonite
						grout to surface
						set 5" well box in concrete

WELL / BORING CONSTRUCTION DETAILS: -inch I.D., Schedule 40 PVC: Bottom of Screen ( ) set at ______feet BGS; _____ Sand placed to _______feet BGS; Bentonite pellets placed to _______feet BGS; Grout tremied to BGS.

E₂C Remediation
1358 Blue Oaks Blvd., Suite 300
Roseville, California 95678

Phone: (916) 782-8700
Fax: (916) 782-8049

VP-6

FIELD LOCATION OF BORING:

PAGE 1 OF 1

PROJECT NUMBER: 1950BK09 **DATES DRILLED:** 11/7/09
CLIENT: SSP & FCM **DRILLER:** BC2
SITE ADDRESS: 1024 Lake Tahoe Bl **LOGGED BY:** WAL

DRILLING METHOD AND EQUIPMENT: HAND Auger

WATER LEVEL			
START TIME		**END TIME**	
DATE			

Depth (Feet)	SAMPLE NAME	Blow Count	PID	WELL/ BORING SPECIFICATIONS and CONSTRUCTION DIAGRAM	USCS Symbol	SOIL DESCRIPTION
						0-5' SAND
						0-4.5' 1/4" teflon tubing
						w/ 1.5" screen at bottom
						6" SAND (#2/12) above & below
						screen
						1' bentonite (hydrated) above
						SAND
						grout to surface
						set 5" well box in concrete

WELL / BORING CONSTRUCTION DETAILS: -inch I.D., Schedule 40 PVC: Bottom of Screen ( ) set at ______feet BGS; _____ Sand placed to _______feet BGS; Bentonite pellets placed to _______feet BGS; Grout tremied to BGS.

E_2C Remediation
1358 Blue Oaks Blvd., Suite 300
Roseville, California 95678

Phone: (916) 782-8700
Fax: (916) 782-8049

VP-7

FIELD LOCATION OF BORING:

PAGE 1 OF 1

PROJECT NUMBER: 1950BK09 DATES DRILLED: 11/2/09

CLIENT: SLP + Penn DRILLER: BC

SITE ADDRESS: 1024 Lake Tahoe Bl LOGGED BY: WRL

DRILLING METHOD AND EQUIPMENT: HAND AUGER

WATER LEVEL			
START TIME		END TIME	
DATE			

Depth (Feet)	SAMPLE NAME	Blow Count	PID	WELL/ BORING SPECIFICATIONS and CONSTRUCTION DIAGRAM	USCS Symbol	SOIL DESCRIPTION
						4" AC
						6" BR
						0.5-5 SAND
						0-4.5' 1/4" Teflon tubing
						w/ 1.5' SCREEN at bottom
						6" SAND (#2/12) above &
						below screen
						1' bentonite (hydrated) above
						SAND
						grout to surface
						set 5" well box in concrete

WELL / BORING CONSTRUCTION DETAILS: -inch I.D., Schedule 40 PVC: Bottom of Screen ( ) set at ______feet BGS; _____ Sand placed to _______feet BGS; Bentonite pellets placed to _______feet BGS; Grout tremied to BGS.

E₂C Remediation
1358 Blue Oaks Blvd., Suite 300
Roseville, California 95678

Phone: (916) 782-8700
Fax: (916) 782-8049

VP 8

FIELD LOCATION OF BORING:

PAGE 1 OF 1

PROJECT NUMBER: 19503K09 DATES DRILLED: 11/8/09

CLIENT: SS, LP & FCM DRILLER: BC²

SITE ADDRESS: 1024 LT BLVD LOGGED BY: WAL

DRILLING METHOD AND EQUIPMENT: HAND AUGER

WATER LEVEL			
START TIME		**END TIME**	
DATE			

Depth (Feet)	SAMPLE NAME	Blow Count	PID	WELL/ BORING SPECIFICATIONS and CONSTRUCTION DIAGRAM	USCS Symbol	SOIL DESCRIPTION
						4" AC HAND Auger
						6" BR
						Set VP
						0-4.5 1/4" Teflon tubing
						w/ 1.5" screen set at bottom
						6" sand above & below screen
						1' bentonite hydrated
						grout to surface
						set 5" well box in
						concrete

WELL / BORING CONSTRUCTION DETAILS: -inch I.D., Schedule 40 PVC: Bottom of Screen ( ) set at ______feet BGS; _____ Sand placed to _______feet BGS; Bentonite pellets placed to _______feet BGS; Grout tremied to BGS.

E₂C Remediation
1358 Blue Oaks Blvd., Suite 300
Roseville, California 95678

Phone: (916) 782-8700
Fax: (916) 782-8049

VP-9

FIELD LOCATION OF BORING:

PAGE 1 OF 1

PROJECT NUMBER: 1950BK09 DATES DRILLED: 11/8/09

CLIENT: SELP & FCM DRILLER: BCZ

SITE ADDRESS: 1024 LT BLVD LOGGED BY: WAL

DRILLING METHOD AND EQUIPMENT: HAND AUGER

WATER LEVEL			
START TIME		END TIME	
DATE			

Depth (Feet)	SAMPLE NAME	Blow Count	PID	WELL/ BORING SPECIFICATIONS and CONSTRUCTION DIAGRAM	USCS Symbol	SOIL DESCRIPTION
						0-5' SAND
						0-4.5' 1/4" Teflon tubing
						w/1.5" screen at bottom
						6" SAND (#2/12) above &
						below ~~sand~~ and screen
						1' bentonite (hydrated) above
						SAND
						grout to surface
						~~at~~ 5" well box in concrete

WELL / BORING CONSTRUCTION DETAILS: -inch I.D., Schedule 40 PVC: Bottom of Screen ( ) set at ______feet BGS; _____ Sand placed to _______feet BGS; Bentonite pellets placed to _______feet BGS; Grout tremied to BGS.

E₂C Remediation
1358 Blue Oaks Blvd., Suite 300
Roseville, California 95678

Phone: (916) 782-8700
Fax: (916) 782-8049

VP-10

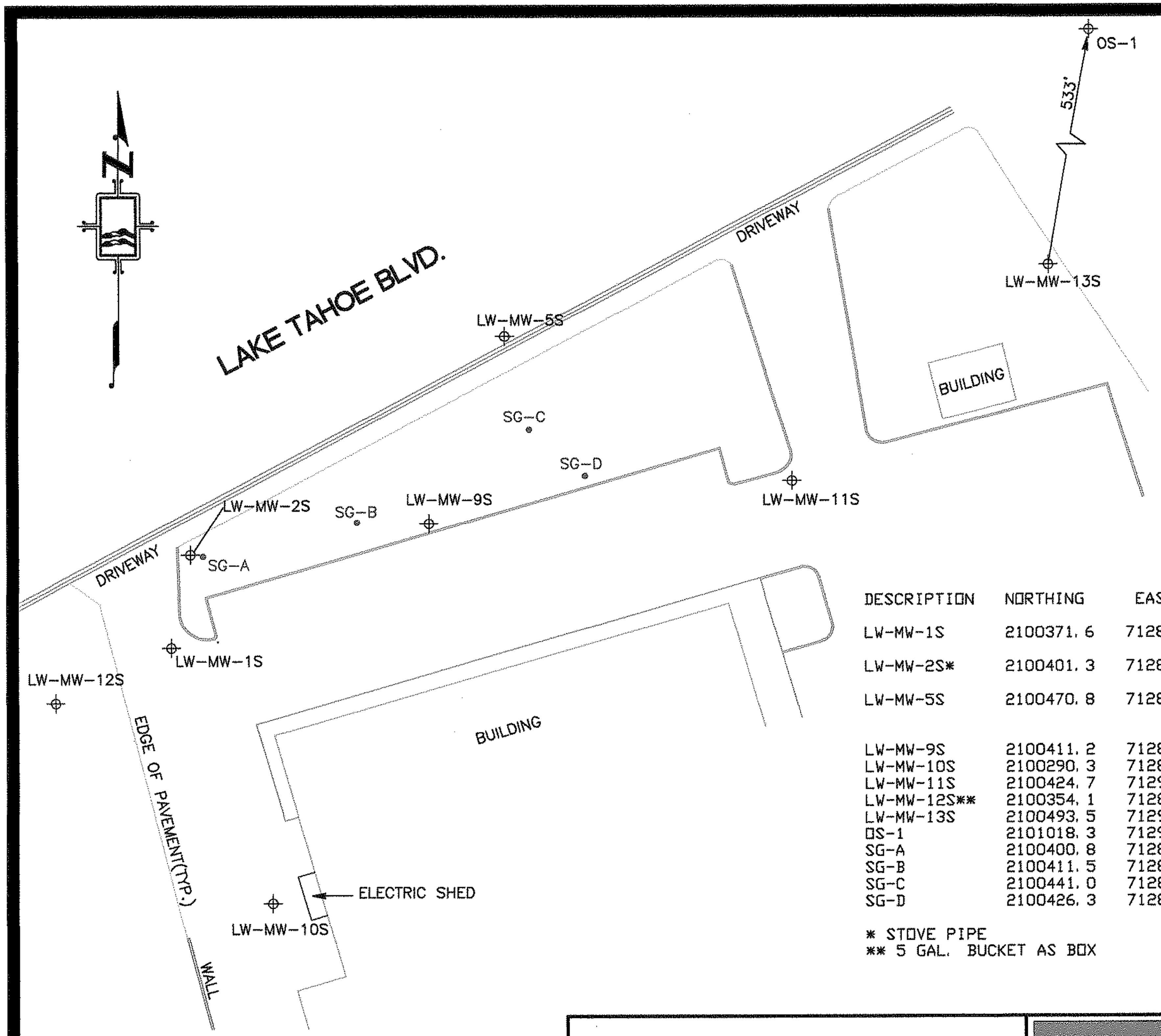
APPENDIX J

Morrow Surveying Plot

Monitoring Well Exhibit

Prepared For:

E2C Remediation



BASIS OF COORDINATES AND ELEVATIONS:

COORDINATES ARE CALIFORNIA STATE PLANE ZONE 2 COORDINATES BASED ON THE CALIFORNIA SPATIAL REFERENCE CENTER DATUM, REFERENCE EPOCH 2010.34457

COORDINATE DATUM IS NAD 83(CORS 96).

REFERENCE GEOID IS GEOID09.

CORS STATIONS USED: DOT1, RNO1, STEA, CMBB, UPSA, P271, CHO5, CHO6, PLSB.

VERTICAL DATUM IS NAVD 88 FROM GPS OBSERVATIONS.

DESCRIPTION	NORTHING	EASTING	LATITUDE	LONGITUDE	ELEV (PVC)	ELEV (BOX)	ELEV (GND)
LW-MW-1S	2100371.6	7128866.3	38.9125373	-120.0064021	6191.51(D) 6191.41(S)	6191.71	
LW-MW-2S*	2100401.3	7128872.3	38.9126185	-120.0063786	6192.38(D) 6192.41(S)	6192.64	6194.4
LW-MW-5S	2100470.8	7128972.0	38.9128032	-120.0060229	6189.33(D) 6189.47(S)	6189.86	
LW-MW-9S	2100411.2	7128947.7	38.9126411	-120.0061127	6192.98	6193.58	
LW-MW-10S	2100290.3	7128898.1	38.9123123	-120.0062966	6192.15	6192.45	
LW-MW-11S	2100424.7	7129062.9	38.9126713	-120.0057069	6191.67	6192.18	
LW-MW-12S**	2100354.1	7128829.5	38.9124914	-120.0065326	6190.71		6191.5
LW-MW-13S	2100493.5	7129144.6	38.9128551	-120.0054145	6190.82	6191.12	
OS-1	2101018.3	7129239.1	38.9142901	-120.0050421	6188.12	6188.42	
SG-A	2100400.8	7128876.3	38.9126167	-120.0063647			
SG-B	2100411.5	7128924.9	38.9126432	-120.0061929			
SG-C	2100441.0	7128979.9	38.9127209	-120.0059975			
SG-D	2100426.3	7128997.4	38.9126795	-120.0059369			

* STOVE PIPE
** 5 GAL. BUCKET AS BOX

Lake Tahoe Laundry Works
1024 Lake Tahoe Blvd.
South Lake Tahoe
El Dorado County
California

Morrow Surveying
LAND SURVEYORS

1255 Starboard Drive
West Sacramento
California 95691
(916) 372-8124
mark@morrowsurveying.com

Date: 5-7-10
Scale: 1"=40'
Sheet 1 of 1
Revised:
Field Book: MW-51
Dwg. No. 1601-002 MAM

APPENDIX K

Monitoring Well Development Purge Sheets

E$_2$C Remediation

Groundwater Scientists : Environmental Consultants
5300 Woodmere Drive, Suite 105; Bakersfield, California 93313
Telephone: (661) 831-6906 / Facsimile: (661) 831-6234

Water Quality Sampling Record and Well Development Data

SAMPLE ID / WELL #: LW-MW-9S

PROJECT #: 1950

PROJECT NAME: LTLW

DATE SAMPLED: 12/12/09

SAMPLED BY: S. REGO, J. IRWIN

DEPTH TO WATER: 15.98

TOTAL DEPTH OF WELL: 24.40

WELL DIAMETER: 2"

CASING VOLUME: 1.37

PURGE METHOD: AIR LIFT

TIME	PURGE CHARACTERISTICS				TEMP (F°)	pH (UNITS)	SEC (mmhos/cm)	REMARKS (COLOR, TURBIDITY, ETC.)
	INTAKE DEPTH	RATE (GPM)	CUM. VOL (GAL)	WELL VOL PUMPED				
1:57		3		0	46.5	8.1	.27	Cloudy No odor
2:04				10				
2:11				20	51.9	6.92	.22	Clear no odor

Well Capacity:	
2" -	0.1632 gallon / linear foot
4" -	0.6528 gallon / linear foot
6" -	1.4688 gallon / linear foot

SAMPLED AT: ________ FT. FINAL DEPTH TO WATER: 16.01 FT. 3 CASING VOLUMES = ________ GALS.

NOTES: WELL DEVELOPMENT

E_2C Remediation

Groundwater Scientists : Environmental Consultants
5300 Woodmere Drive, Suite 105; Bakersfield, California 93313
Telephone: (661) 831-6906 / Facsimile: (661) 831-6234

Water Quality Sampling Record and Well Development Data

SAMPLE ID / WELL #: LW-MW-105

PROJECT #: 1950

PROJECT NAME: LTLW

DATE SAMPLED: 12-2-09

SAMPLED BY: S. Rego, J. Irwin

DEPTH TO WATER: 14.22

TOTAL DEPTH OF WELL: 24.76

WELL DIAMETER: 2"

CASING VOLUME: 1.72

PURGE METHOD: Air lift

TIME	PURGE CHARACTERISTICS				TEMP (F°)	pH (UNITS)	SEC (mmhos/cm)	REMARKS (COLOR, TURBIDITY, ETC.)
	INTAKE DEPTH	RATE (GPM)	CUM. VOL (GAL)	WELL VOL PUMPED				
11:45		3		0	57.6	7.65	.19	
11:52				20				
11:59				40				
12:06				60				
12:13				80	49.1	8.04	.16	

Well Capacity:	2" - 0.1632 gallon / linear foot
	4" - 0.6528 gallon / linear foot
	6" - 1.4688 gallon / linear foot

SAMPLED AT: ______ FT. FINAL DEPTH TO WATER: 14.29 FT. 3 CASING VOLUMES = 5.16 GALS.

NOTES: WELL DEVELOPMENT

E_2C Remediation
Groundwater Scientists : Environmental Consultants
5300 Woodmere Drive, Suite 105; Bakersfield, California 93313
Telephone: (661) 831-6906 / Facsimile: (661) 831-6234

Water Quality Sampling Record and Well Development Data

SAMPLE ID / WELL #: LW-MW-115
PROJECT #: 1950
PROJECT NAME: LTLW
DATE SAMPLED: 12/2/09
SAMPLED BY: S. REGO

DEPTH TO WATER: 14.89
TOTAL DEPTH OF WELL: 24.30
WELL DIAMETER: 2"
CASING VOLUME: 1.54
PURGE METHOD: AIR LIFT

TIME	PURGE CHARACTERISTICS				TEMP (F°)	pH (UNITS)	SEC (mmhos/cm)	REMARKS (COLOR, TURBIDITY, ETC.)
	INTAKE DEPTH	RATE (GPM)	CUM. VOL (GAL)	WELL VOL PUMPED				
2:40		3		0	53.2	6.87	.29	Cloudy / NO ODOR
2:47				10				
2:54				20	53.1	6.96	.25	CLEAR NO ODOR

Well Capacity:
2" - 0.1632 gallon / linear foot
4" - 0.6528 gallon / linear foot
6" - 1.4688 gallon / linear foot

SAMPLED AT: ________ FT. FINAL DEPTH TO WATER: 14.92 FT. 3 CASING VOLUMES = ________ GALS.

NOTES: WELL DEVELOPMENT

E$_2$C Remediation

Groundwater Scientists : Environmental Consultants
5300 Woodmere Drive, Suite 105; Bakersfield, California 93313
Telephone: (661) 831-6906 / Facsimile: (661) 831-6234

Water Quality Sampling Record and Well Development Data

SAMPLE ID / WELL #: LW-MW-12S

PROJECT #: 1950

PROJECT NAME: CTLW

DATE SAMPLED: 12/2/09

SAMPLED BY: S. REGO, J. IRWEN

DEPTH TO WATER: 14.79

TOTAL DEPTH OF WELL: 24.20

WELL DIAMETER: 2"

CASING VOLUME: 1.53

PURGE METHOD: AIR LIFT

TIME	PURGE CHARACTERISTICS				TEMP (F°)	pH (UNITS)	SEC (mmhos/cm)	REMARKS (COLOR, TURBIDITY, ETC.)
	INTAKE DEPTH	RATE (GPM)	CUM. VOL (GAL)	WELL VOL PUMPED				
1:25		3		0	51.5	7.90	.22	CLOUDY NO ODOR
1:32				10				SLIGHTLY CLOUDY NO ODOR
1:39				20	524	7.25	.25	CLEAR NO ODOR

Well Capacity:
2" - 0.1632 gallon / linear foot
4" - 0.6528 gallon / linear foot
6" - 1.4688 gallon / linear foot

SAMPLED AT: ______ FT. FINAL DEPTH TO WATER: 14.82 FT. 3 CASING VOLUMES = ______ GALS.

NOTES: WELL DEVELOPMENT

E_2C Remediation

Groundwater Scientists : Environmental Consultants
5300 Woodmere Drive, Suite 105; Bakersfield, California 93313
Telephone: (661) 831-6906 / Facsimile: (661) 831-6234

Water Quality Sampling Record and Well Development Data

SAMPLE ID / WELL #: LW-MW-13S

PROJECT #: 1950

PROJECT NAME: LTLW

DATE SAMPLED: 12/2/09

SAMPLED BY: S. Rego

DEPTH TO WATER: 14.40

TOTAL DEPTH OF WELL: 24.95

WELL DIAMETER: 2"

CASING VOLUME: 1.72

PURGE METHOD: AIR LIFT

TIME	PURGE CHARACTERISTICS				TEMP (F°)	pH (UNITS)	SEC (mmhos/cm)	REMARKS (COLOR, TURBIDITY, ETC.)
	INTAKE DEPTH	RATE (GPM)	CUM. VOL (GAL)	WELL VOL PUMPED				
3:32		3		0	51	7.39	.52	CLOUDY NO ODOR
3:39				10				
3:46				20				
3:53				30	49.7	7.37	.22	CLEAR NO ODOR

Well Capacity:
2" - 0.1632 gallon / linear foot
4" - 0.6528 gallon / linear foot
6" - 1.4688 gallon / linear foot

SAMPLED AT: ______ FT. FINAL DEPTH TO WATER: 14.7 FT. 3 CASING VOLUMES = ______ GALS.

NOTES: WELL DEVELOPMENT

E$_2$C Remediation

Groundwater Scientists : Environmental Consultants
5300 Woodmere Drive, Suite 105; Bakersfield, California 93313
Telephone: (661) 831-6906 / Facsimile: (661) 831-6234

Water Quality Sampling Record and Well Development Data

SAMPLE ID / WELL #: OS-1 (WELL DEVELOPMENT)

DEPTH TO WATER: 13.34

PROJECT #: 1950-RV-

TOTAL DEPTH OF WELL: 23.45

PROJECT NAME: LTLW - TAHOE

WELL DIAMETER; 2"

DATE ~~SAMPLED~~ DEVELOPED: 3/22/10

CASING VOLUME: N/A

~~SAMPLED~~ DEVELOPED BY: NICK JENSEN / MARK EKWNO

PURGE METHOD: D.C. PUMP

TIME	PURGE CHARACTERISTICS				TEMP (F°)	pH (UNITS)	SEC (mmhos/cm)	REMARKS (COLOR, TURBIDITY, ETC.)
	INTAKE DEPTH	RATE (GPM)	CUM. VOL (GAL)	WELL VOL PUMPED				
3:45					60.5	8.86	.99	DIRTY, NO ODOR
4:00					58.0	9.28	1.09	DIRTY, NO ODOR
4:15					56.6	9.60	1.05	DIRTY, NO ODOR
4:30					57.5	9.74	1.00	DIRTY, NO ODOR
4:45					56.4	9.68	.86	DIRTY, NO ODOR
5:00					55.1	9.61	.89	MILKY, NO ODOR
5:15					54.5	9.59	.82	CLEARING, NO ODOR

Well Capacity:
2" - 0.1632 gallon / linear foot
4" - 0.6528 gallon / linear foot
6" - 1.4688 gallon / linear foot

SAMPLED AT: ________ FT. FINAL DEPTH TO WATER: ________ FT. 3 CASING VOLUMES = ________ GALS.

NOTES:

(PURGED ABOUT 50 GALLONS WITH D.C. PUMP)

APPENDIX L

Purge & Development Water Transport Manifest and Recycling Certification & Soil and Installation Waste Disposal Documentation

31.20

24

SOUTH TAHOE REFUSE TRANSFER STATION

2140 Ruth Avenue
South Lake Tahoe, CA 96150
(530)542-8311

Bill Acct: CASHSALE Haul Acct: N/A Ticket#:2062851
CASHSALE **Not Applicable**
Truck#: Trailer#:
TT = 105 - Self Haul Commercial - Cash Date: 12/04/09
PT = 5 - Credit Ca Time: 09:20
Cashier: Edwin C. Carlson PO #:

Material Types	**Vol/QY**	**Rate/UM**	**Total**
2100 - MSW	2.00	$15.60 CY	$31.20

Special Fees:
Total Cubic Yards = 2.00

Tip Amt	31.20
Spec Amt	0.00
Amt Tend	31.20
Change	0.00
Amount	$31.20

Print Name: ______________________

Customer Signature: ______________________
Note:

Ticket Layout #1

288.60

SOUTH TAHOE REFUSE
TRANSFER STATION

2140 Ruth Avenue
South Lake Tahoe, CA 96150
(530)542-8311

25

Bill Acct: CASHSALE Haul Acct: N/A Ticket#:2062871
CASHSALE Not Applicable
Truck#: Trailer#:
TT = 105 - Self Haul Commercial - Cash
PT = 5 - Credit Ca
Cashier: Edwin C. Carlson

Date: 12/04/09
Time: 10:21
PO #:

Material Types	Vol/QY	Rate/UM	Total
2440 - Dirt - Clean)	13.00	$22.20 CY	$288.60

Special Fees:
Total Cubic Yards = 13.00

Tip Amt	288.60
Spec Amt	0.00
Amt Tend	288.60
Change	0.00
Amount	$288.60

Print Name: ______________________________

Customer Signature: ______________________________
Note:

Ticket Layout #1

NON-HAZARDOUS WASTE MANIFEST

1. Generator ID Number

2. Page 1 of

3. Emergency Response Phone (661) 831-6906

4. Waste Tracking Number 7/3/7

5. Generator's Name and Mailing Address
LAKE TAHOE LAUNDRY WORKS
1024 LAKE TAHOE BLVD
SOUTH LAKE TAHOE

Generator's Phone:

Generator's Site Address (if different than mailing address) SAME

6. Transporter 1 Company Name E2C REMEDIATION
U.S. EPA ID Number CAL000239991

7. Transporter 2 Company Name
U.S. EPA ID Number

8. Designated Facility Name and Site Address
S A RECYCLING
3200 E. Frontera St.
Anaheim CA 92806
Facility's Phone:
U.S. EPA ID Number CAL000332635

9. Waste Shipping Name and Description	10. Containers		11. Total Quantity	12. Unit Wt./Vol.	
	No.	Type			
1. NON HAZ PURGE WATER	1	TT	[illegible]	G	R-01
2.					
3.					
4.					

13. Special Handling Instructions and Additional Information
WEAR PPE

7580:8 PH: 7.77

14. GENERATOR'S CERTIFICATION: I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.

Generator's/Offeror's Printed/Typed Name (AS AGENT)
Signature SHANE REGO
Month 12 Day 4 Year 09

15. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter Signature (for exports only): Date leaving U.S.:

16. Transporter Acknowledgment of Receipt of Materials
Transporter 1 Printed/Typed Name SHANE REGO
Signature
Month 12 Day 4 Year 0
Transporter 2 Printed/Typed Name
Signature
Month Day Year

17. Discrepancy
17a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection
Manifest Reference Number:

17b. Alternate Facility (or Generator)
U.S. EPA ID Number
Facility's Phone:

17c. Signature of Alternate Facility (or Generator)
Month Day Year

18. Designated Facility Owner or Operator: Certification of receipt of materials covered by the manifest except as noted in Item 17a
Printed/Typed Name FRANCISCO SALAZAR
Signature Francisco Salazar
Month 7 Day 3 Year 10

GENERATOR
INT'L
TRANSPORTER
DESIGNATED FACILITY

169-BLC-O 5 11977 (Rev. 8/06)

TRANSPORTER #1

WEIGHMASTER CERTIFICATE

Nº 12691

THIS IS TO CERTIFY that the following described commodity was weighed, measured, or counted by a weighmaster, whose signature is on this certificate, who is a recognized authority of accuracy, as prescribed by Chapter 7 (commencing with Section 12700) of Division 5 of the California Business and Professions Code, administered by the Division of Measurement Standards of the California Department of Food and Agriculture.

RES

REMEDY ENVIRONMENTAL SERVICES, LLC
3200 EAST FRONTERA STREET, ANAHEIM, CALIFORNIA 92806

SELLER: Sierra Energy

BUYER: Remedy

DRIVER: Don

CARRIER: C 2 C Remediation

DRIVER: GROSS AND TARE:

BIN NO.:

BL NO.

P.O. NO.

REMEDY ENVIRONMENTAL SERVICES, LLC
NAME OF PRINCIPAL WEIGHMASTER MUST BE PRINTED ABOVE LINE.

BY: E. Velazquez DEPUTY - DATE 7/13/10

BY: E. Velazquez DEPUTY - DATE 7/13/10

WEIGHED AT: 3200 EAST FRONTERA STREET
ANAHEIM, CALIFORNIA 92806

UNITS	COMMODITY	MARK	VEHICLE LIC. NOS.
		TRUCK 7DW339	
		TRAILER	

WEIGHT IN LBS.

06:25 am 07/13/10 44680 lb
07:56 am 07/13/10 25740 lb

Net 18940

APPENDIX M

Erosion and Sediment Control Plan

E2C Remediation
Environmental Engineering, Consulting and Remediation, Inc.

Via: E-Mail and U.S. Mail

December 1, 2009

Ms Lisa Dernbach, CHG.
Senior Engineering Geologist
CRWQCB – Lahontan Region
2501 Lake Tahoe Boulevard
South Lake Tahoe, CA 96150

SUBJECT: Erosion and Sediment Control Plan
Implementation of Interim Remedial Action Workplan & Interim Remedial Action Workplan Addendum

Lake Tahoe Laundry Works
1024 Lake Tahoe Boulevard
South Lake Tahoe, California

Dear Ms Dernbach:

This Erosion and Sediment Control Plan is submitted pursuant to your letter, dated November 23, 2009. This addendum describes the erosion and sediment control measures that have been placed in areas that had soils disturbed during installation of the site interim remediation system.

Note: The measures that have been taken were reviewed, approved and inspected by the City of South Lake Tahoe Public Works Department, Engineering Supervisor.

Erosion and Sediment Control Features - Landscape Areas

Structural BMPs have already been installed (see attached Figure for types of and installment locations). Excavated areas in landscape areas have been backfilled to surface with native soils followed by a covering of wood chips. Wattles have also been placed around the corners of the landscape areas.

The wood chipped areas will be covered by bristle-coil woven mat that will be held down by stakes.

Erosion and Sediment Control Features – Asphalt Areas

Trenches across asphalt areas were backfilled to subgrade with compaction. On November 24, 2009 approximately four (4) inches of asphalt was placed and compacted in these areas.

Erosion and Sediment Control – Stockpiles and Other Construction Materials

When construction was in progress and upon completion of the system installation activities stockpiled soils and construction materials were placed on and covered by plastic sheeting that was weighted down by sandbags to prevent wind or water erosion.

Remaining Tasks and Scheduling

By December 4, 2009, residual stockpiles or construction materials will be removed from the site and transported to the local landfill as construction debris. By December 4, 2009, all uprooted vegetation will be transported to the local landfill as construction debris. By December 4, 2009, the chipped areas will be covered by the bristle-coil woven mats with tie-down staking.

In accordance with the approved IRAWP, the areas disturbed during installation of the remediation system will be revegetated, as described in the IRAWP, upon completion of remediation activities and well abandonment operations.

In addition, some revegetation (trees, bushes, plants) will be placed around the equipment compound once construction of the compound is completed (currently underway).

If you have any questions, or comments, please call the undersigned, or Phil Goalwin, at 661-831-6906.

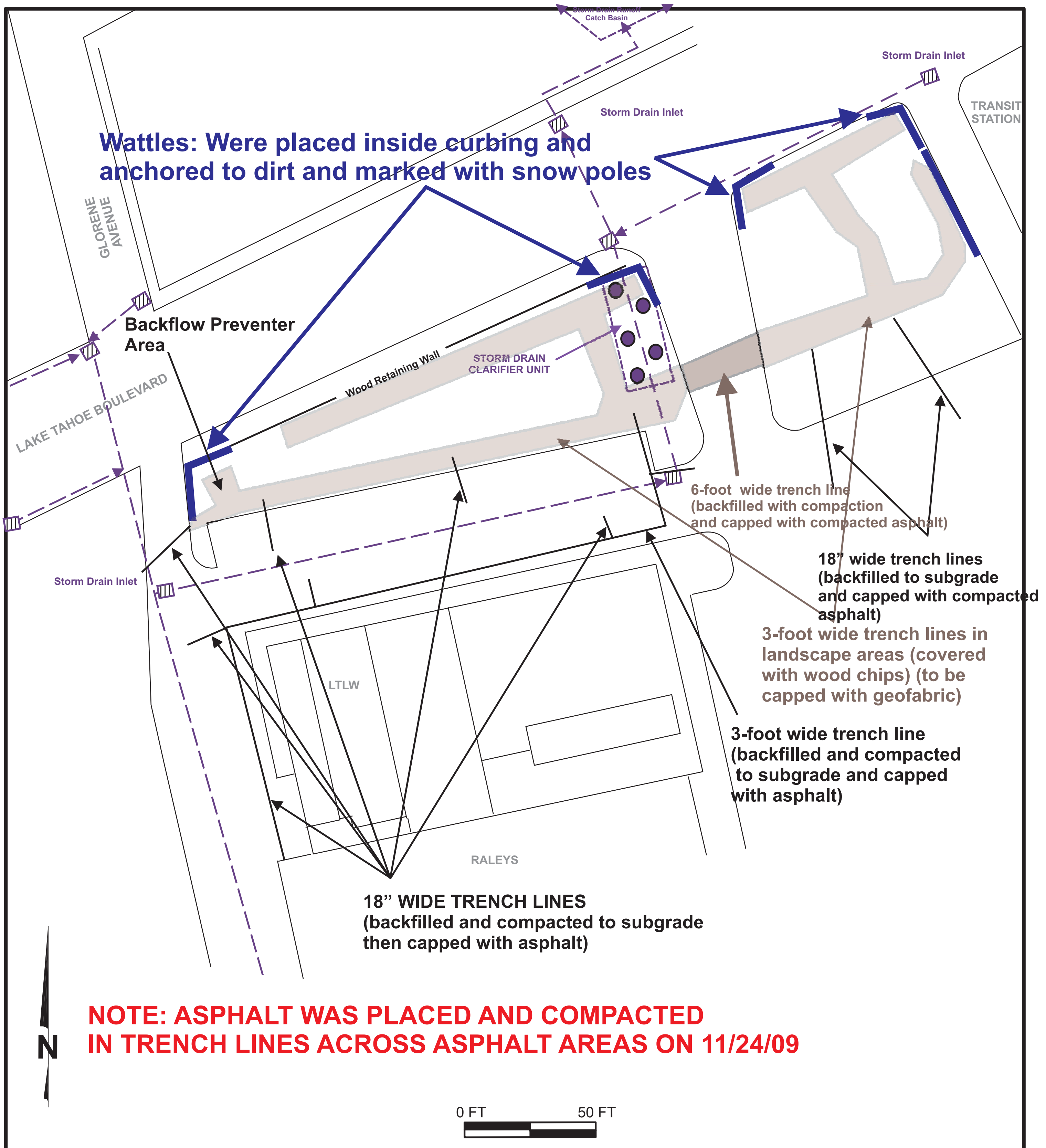
Sincerely,
E₂C Remediation

William Lawson
William A. Lawson, P.G. #7171
Senior Geologist

PROFESSIONAL GEOLOGIST
WILLIAM A. LAWSON
Exp. 8·31·10
No. 7171
STATE OF CALIFORNIA

cc: Mr. Robert Erlich
Engineering Superviser
City of South Lake Tahoe
Public Works Department
1052 Tata Lane
South Lake Tahoe, CA 96150

Attachment: Figure 1 – Erosion and Sediment Control Plot



Wattles: Were placed inside curbing and anchored to dirt and marked with snow poles

Backflow Preventer Area

6-foot wide trench line (backfilled with compaction and capped with compacted asphalt)

18" wide trench lines (backfilled to subgrade and capped with compacted asphalt)

3-foot wide trench lines in landscape areas (covered with wood chips) (to be capped with geofabric)

3-foot wide trench line (backfilled and compacted to subgrade and capped with asphalt)

18" WIDE TRENCH LINES (backfilled and compacted to subgrade then capped with asphalt)

NOTE: ASPHALT WAS PLACED AND COMPACTED IN TRENCH LINES ACROSS ASPHALT AREAS ON 11/24/09

E_2C Remediation
5300 Woodmere Dr., Suite 105
Bakersfield, CA 93313

Phone: (661) 831-6906
Fax: (661) 831-6234

LAKE TAHOE LAUNDRY WORKS
1024 LAKE TAHOE BOULEVARD
SOUTH LAKE TAHOE, CALIFORNIA

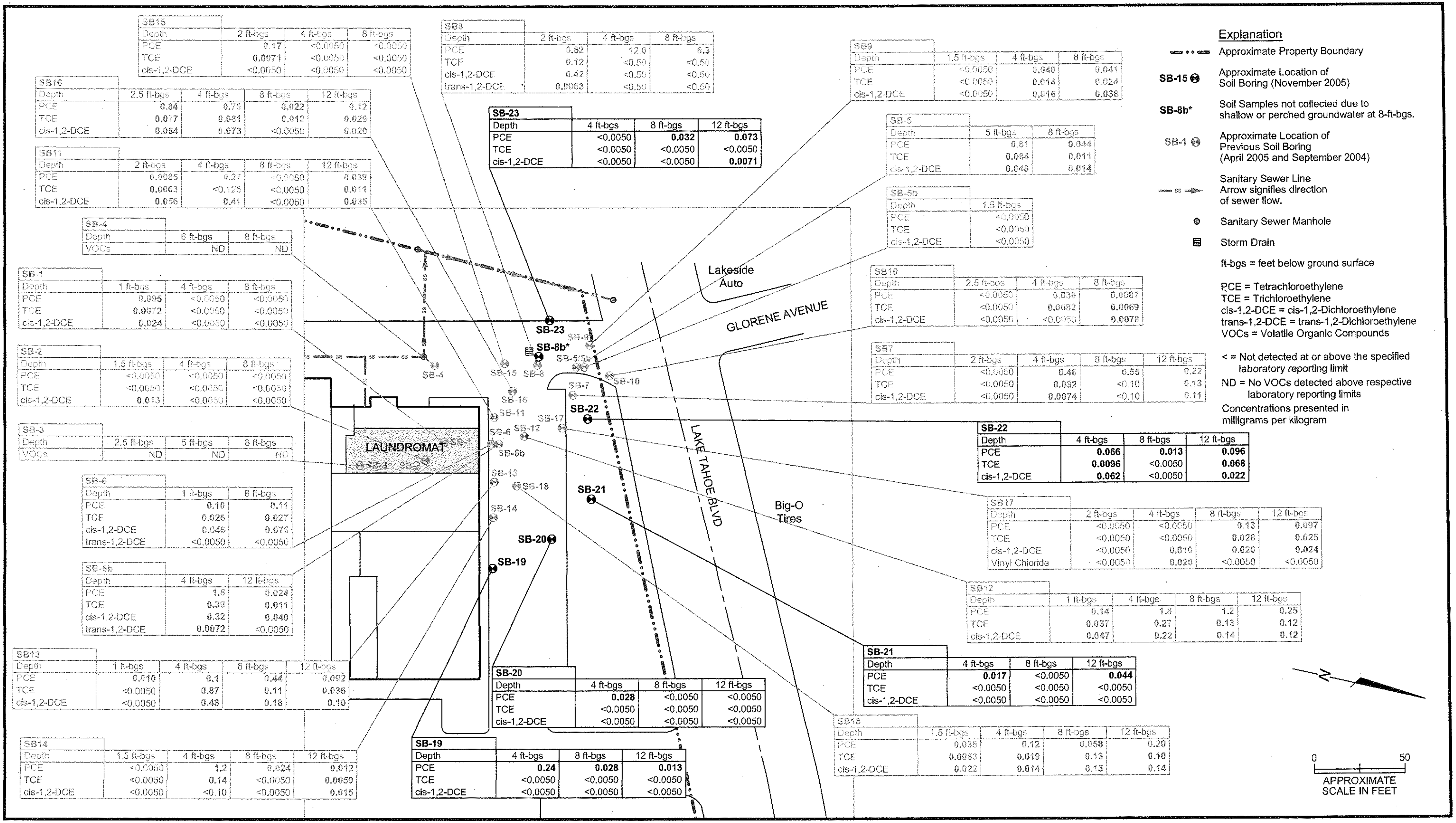
EROSION AND SEDIMENT CONTROL PLOT

FIGURE

1

APPENDIX N

PES Site Plots of Soil and Groundwater Analytical Results



SB15

Depth	2 ft-bgs	4 ft-bgs	8 ft-bgs
PCE	0.17	<0.0050	<0.0050
TCE	0.0071	<0.0050	<0.0050
cis-1,2-DCE	<0.0050	<0.0050	<0.0050

SB16

Depth	2.5 ft-bgs	4 ft-bgs	8 ft-bgs	12 ft-bgs
PCE	0.84	0.76	0.022	0.12
TCE	0.077	0.081	0.012	0.029
cis-1,2-DCE	0.054	0.073	<0.0050	0.020

SB11

Depth	2 ft-bgs	4 ft-bgs	8 ft-bgs	12 ft-bgs
PCE	0.0085	0.27	<0.0050	0.039
TCE	0.0063	<0.125	<0.0050	0.011
cis-1,2-DCE	0.056	0.41	<0.0050	0.035

SB-4

Depth	6 ft-bgs	8 ft-bgs
VOCs	ND	ND

SB-1

Depth	1 ft-bgs	4 ft-bgs	8 ft-bgs
PCE	0.095	<0.0050	<0.0050
TCE	0.0072	<0.0050	<0.0050
cis-1,2-DCE	0.024	<0.0050	<0.0050

SB-2

Depth	1.5 ft-bgs	4 ft-bgs	8 ft-bgs
PCE	<0.0050	<0.0050	<0.0050
TCE	<0.0050	<0.0050	<0.0050
cis-1,2-DCE	0.013	<0.0050	<0.0050

SB-3

Depth	2.5 ft-bgs	5 ft-bgs	8 ft-bgs
VOCs	ND	ND	ND

SB-6

Depth	1 ft-bgs	8 ft-bgs
PCE	0.10	0.11
TCE	0.026	0.027
cis-1,2-DCE	0.046	0.076
trans-1,2-DCE	<0.0050	<0.0050

SB-6b

Depth	4 ft-bgs	12 ft-bgs
PCE	1.8	0.024
TCE	0.39	0.011
cis-1,2-DCE	0.32	0.040
trans-1,2-DCE	0.0072	<0.0050

SB13

Depth	1 ft-bgs	4 ft-bgs	8 ft-bgs	12 ft-bgs
PCE	0.010	6.1	0.44	0.092
TCE	<0.0050	0.87	0.11	0.036
cis-1,2-DCE	<0.0050	0.48	0.18	0.10

SB14

Depth	1.5 ft-bgs	4 ft-bgs	8 ft-bgs	12 ft-bgs
PCE	<0.0050	1.2	0.024	0.012
TCE	<0.0050	0.14	<0.0050	0.0059
cis-1,2-DCE	<0.0050	<0.10	<0.0050	0.015

SB8

Depth	2 ft-bgs	4 ft-bgs	8 ft-bgs
PCE	0.82	12.0	6.3
TCE	0.12	<0.50	<0.50
cis-1,2-DCE	0.42	<0.50	<0.50
trans-1,2-DCE	0.0063	<0.50	<0.50

SB-23

Depth	4 ft-bgs	8 ft-bgs	12 ft-bgs
PCE	<0.0050	**0.032**	**0.073**
TCE	<0.0050	<0.0050	<0.0050
cis-1,2-DCE	<0.0050	<0.0050	**0.0071**

SB9

Depth	1.5 ft-bgs	4 ft-bgs	8 ft-bgs
PCE	<0.0050	0.040	0.041
TCE	<0.0050	0.014	0.024
cis-1,2-DCE	<0.0050	0.016	0.038

SB-5

Depth	5 ft-bgs	8 ft-bgs
PCE	0.81	0.044
TCE	0.084	0.011
cis-1,2-DCE	0.048	0.014

SB-5b

Depth	1.5 ft-bgs
PCE	<0.0050
TCE	<0.0050
cis-1,2-DCE	<0.0050

SB10

Depth	2.5 ft-bgs	4 ft-bgs	8 ft-bgs
PCE	<0.0050	0.038	0.0087
TCE	<0.0050	0.0082	0.0069
cis-1,2-DCE	<0.0050	<0.0050	0.0078

SB7

Depth	2 ft-bgs	4 ft-bgs	8 ft-bgs	12 ft-bgs
PCE	<0.0050	0.46	0.55	0.22
TCE	<0.0050	0.032	<0.10	0.13
cis-1,2-DCE	<0.0050	0.0074	<0.10	0.11

SB-22

Depth	4 ft-bgs	8 ft-bgs	12 ft-bgs
PCE	**0.066**	**0.013**	**0.096**
TCE	**0.0096**	<0.0050	**0.068**
cis-1,2-DCE	**0.062**	<0.0050	**0.022**

SB17

Depth	2 ft-bgs	4 ft-bgs	8 ft-bgs	12 ft-bgs
PCE	<0.0050	<0.0050	0.13	0.097
TCE	<0.0050	<0.0050	0.028	0.025
cis-1,2-DCE	<0.0050	0.010	0.020	0.024
Vinyl Chloride	<0.0050	0.020	<0.0050	<0.0050

SB12

Depth	1 ft-bgs	4 ft-bgs	8 ft-bgs	12 ft-bgs
PCE	0.14	1.8	1.2	0.25
TCE	0.037	0.27	0.13	0.12
cis-1,2-DCE	0.047	0.22	0.14	0.12

SB-21

Depth	4 ft-bgs	8 ft-bgs	12 ft-bgs
PCE	**0.017**	<0.0050	**0.044**
TCE	<0.0050	<0.0050	<0.0050
cis-1,2-DCE	<0.0050	<0.0050	<0.0050

SB18

Depth	1.5 ft-bgs	4 ft-bgs	8 ft-bgs	12 ft-bgs
PCE	0.035	0.12	0.058	0.20
TCE	0.0083	0.019	0.13	0.10
cis-1,2-DCE	0.022	0.014	0.13	0.14

SB-20

Depth	4 ft-bgs	8 ft-bgs	12 ft-bgs
PCE	**0.028**	<0.0050	<0.0050
TCE	<0.0050	<0.0050	<0.0050
cis-1,2-DCE	<0.0050	<0.0050	<0.0050

SB-19

Depth	4 ft-bgs	8 ft-bgs	12 ft-bgs
PCE	**0.24**	**0.028**	**0.013**
TCE	<0.0050	<0.0050	<0.0050
cis-1,2-DCE	<0.0050	<0.0050	<0.0050

Explanation

▬ • • ▬	Approximate Property Boundary
SB-15 ⊗	Approximate Location of Soil Boring (November 2005)
SB-8b*	Soil Samples not collected due to shallow or perched groundwater at 8-ft-bgs.
SB-1 ⊗	Approximate Location of Previous Soil Boring (April 2005 and September 2004)
▬ SS ➔	Sanitary Sewer Line Arrow signifies direction of sewer flow.
◎	Sanitary Sewer Manhole
▤	Storm Drain

ft-bgs = feet below ground surface

PCE = Tetrachloroethylene
TCE = Trichloroethylene
cis-1,2-DCE = cis-1,2-Dichloroethylene
trans-1,2-DCE = trans-1,2-Dichloroethylene
VOCs = Volatile Organic Compounds

< = Not detected at or above the specified laboratory reporting limit

ND = No VOCs detected above respective laboratory reporting limits

Concentrations presented in milligrams per kilogram

PES Environmental, Inc.
Engineering & Environmental Services

Soil Analytical Results
Lake Tahoe Laundry Works
1024 Lake Tahoe Boulevard
South Lake Tahoe, California

PLATE
4

1021.001.01.007	102100101007_1105	KSF	1/06
JOB NUMBER	DRAWING NUMBER	REVIEWED BY	DATE

SB-4	9/14/04
Depth	22-26 ft-bgs
PCE	1.4/1.3*
TCE	<0.50/<0.50*
cis-1,2-DCE	<0.50/<0.50*
trans-1,2-DCE	<0.50/<0.50*

GW-1	10/6/03
Depth	18-22 ft-bgs
PCE	2.4
TCE	<0.50
cis-1,2-DCE	0.55
trans-1,2-DCE	<0.50
Toluene	0.73

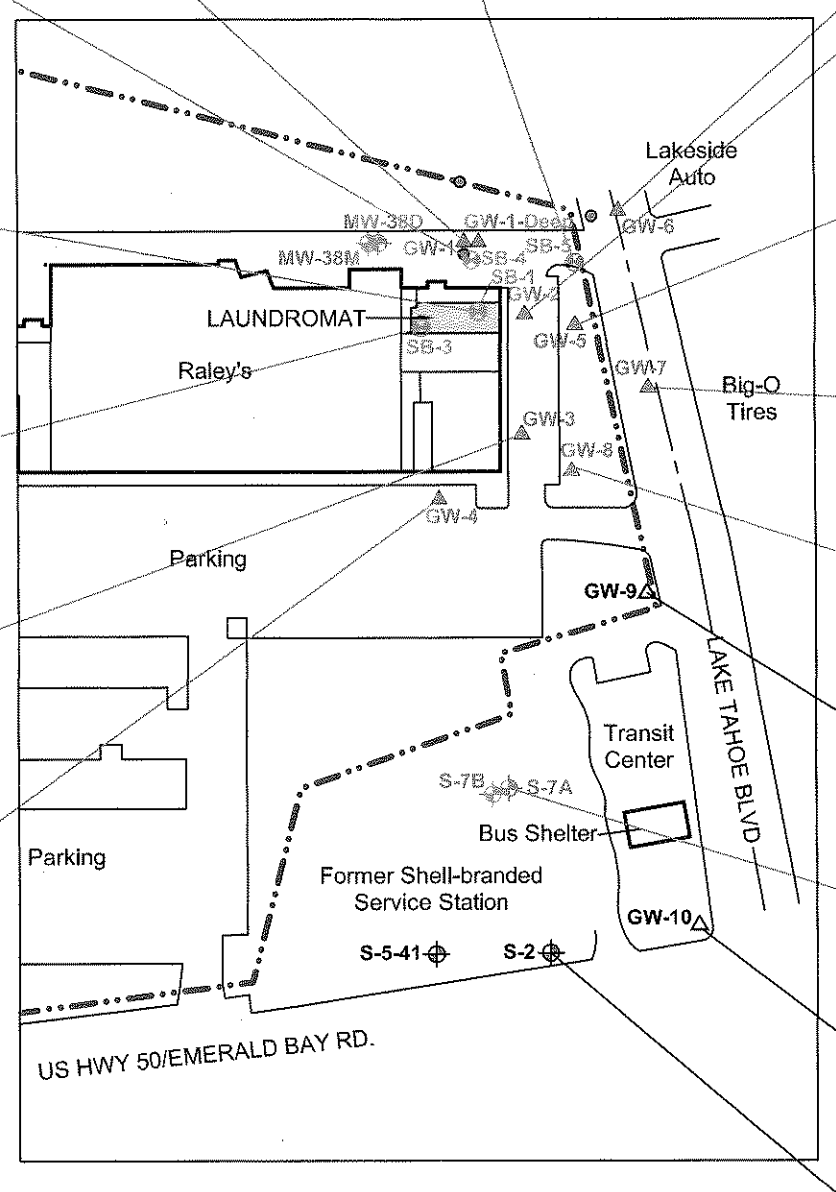
SB-5	9/14/04
Depth	22-26 ft-bgs
PCE	1.5
TCE	1.1
cis-1,2-DCE	1.6
trans-1,2-DCE	<0.50

SB-1	9/15/04
Depth	23-27 ft-bgs
PCE	6.7
TCE	<0.50
cis-1,2-DCE	<0.50
trans-1,2-DCE	<0.50

SB-3	9/15/04
Depth	23-27 ft-bgs
PCE	8.3
TCE	<0.50
cis-1,2-DCE	<0.50
trans-1,2-DCE	<0.50

GW-3	10/6/03
Depth	20-24 ft-bgs
PCE	690
TCE	48
cis-1,2-DCE	150
trans-1,2-DCE	2.8
Toluene	<2.5

GW-4	10/6/03
Depth	20-24 ft-bgs
PCE	0.60
TCE	<0.50
cis-1,2-DCE	<0.50
trans-1,2-DCE	<0.50
Toluene	<0.50



GW-6	9/15/04
Depth	16-20 ft-bgs
PCE	<0.50
TCE	<0.50
cis-1,2-DCE	<0.50
trans-1,2-DCE	<0.50

GW-2	10/6/03
Depth	20-24 ft-bgs
PCE	200
TCE	11
cis-1,2-DCE	8.6
trans-1,2-DCE	<1.0
Toluene	<1.0

GW-5	10/6/03
Depth	20-24 ft-bgs
PCE	560
TCE	1.2
cis-1,2-DCE	<0.50
trans-1,2-DCE	<0.50
Toluene	<0.50

GW-7	9/15/04
Depth	14-18 ft-bgs
PCE	21
TCE	1.0
cis-1,2-DCE	1.3
trans-1,2-DCE	<0.50

GW-8	9/14/04
Depth	22-26 ft-bgs
PCE	240
TCE	32
cis-1,2-DCE	74
trans-1,2-DCE	1.3

GW-9	4/26/05
Depth	16-20 ft-bgs
PCE	**1,000**
TCE	**42**
cis-1,2-DCE	**40**

S-7A	9/11/04
PCE	<0.50
TCE	<0.50
cis-1,2-DCE	<0.50
trans-1,2-DCE	<0.50

GW-10	4/26/05
Depth	16-20 ft-bgs
PCE	**20**
TCE	**1.6**
cis-1,2-DCE	**2.1**

S-2	4/21/05
VOCs	ND

Explanation

▬ • • ▬	Approximate Property Boundary
GW-9 △	Approximate Groundwater Sampling Location (April 2005)
GW-1 ▲	Approximate Previous Groundwater Sampling Location (October 2003, September 2004)
SB-1 ⊗	Approximate Previous Soil and Groundwater Sampling Location (September 2004)
S-2 ⊕	Groundwater Monitoring Well sampled April 2005 (Former Shell Service Station)
S-7B ⊕	Previously Sampled Groundwater Monitoring Well (USA Gasoline and Former Shell Service Stations, sampled September 2004)
●	Sanitary Sewer Manhole

ft-bgs = feet below ground surface

PCE = Tetrachloroethylene
TCE = Trichloroethylene
cis-1,2-DCE = cis-1,2-Dichloroethylene
trans-1,2-DCE = trans-1,2-Dichloroethylene
VOCs = Volatile Organic Compounds

< = Not detected at or above the specified laboratory reporting limit

ND = Not detected above the respective laboratory reporting limits

* Duplicate Result

Concentrations presented in micrograms per liter

N

0 150
APPROXIMATE SCALE IN FEET

PES Environmental, Inc.
Engineering & Environmental Services

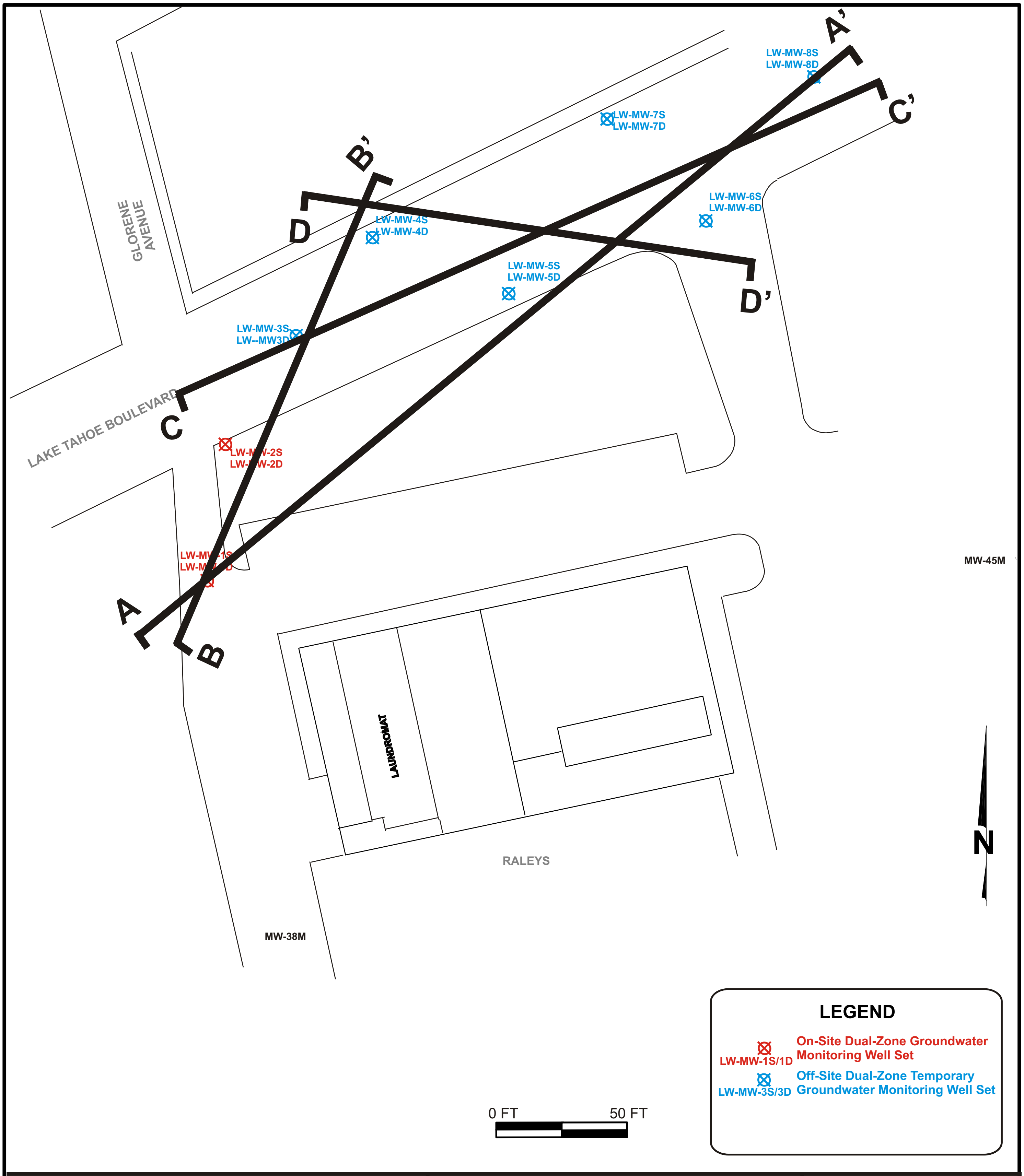
Analytical Results from
Shallow Water-Bearing Zone
Lake Tahoe Laundry Works
1024 Lake Tahoe Boulevard
South Lake Tahoe, California

PLATE
5

JOB NUMBER	DRAWING NUMBER	REVIEWED BY	DATE
1021.001.01.003	1021001_0505.dwg	FAB	5/05

APPENDIX O

2008 Cross-Sections



E₂C Remediation
5300 Woodmere Dr., Suite 105
Bakersfield, CA 93313

Phone: (661) 831-6906
Fax: (661) 831-6234

LAKE TAHOE LAUNDRY WORKS
1024 LAKE TAHOE BOULEVARD
SOUTH LAKE TAHOE, CALIFORNIA

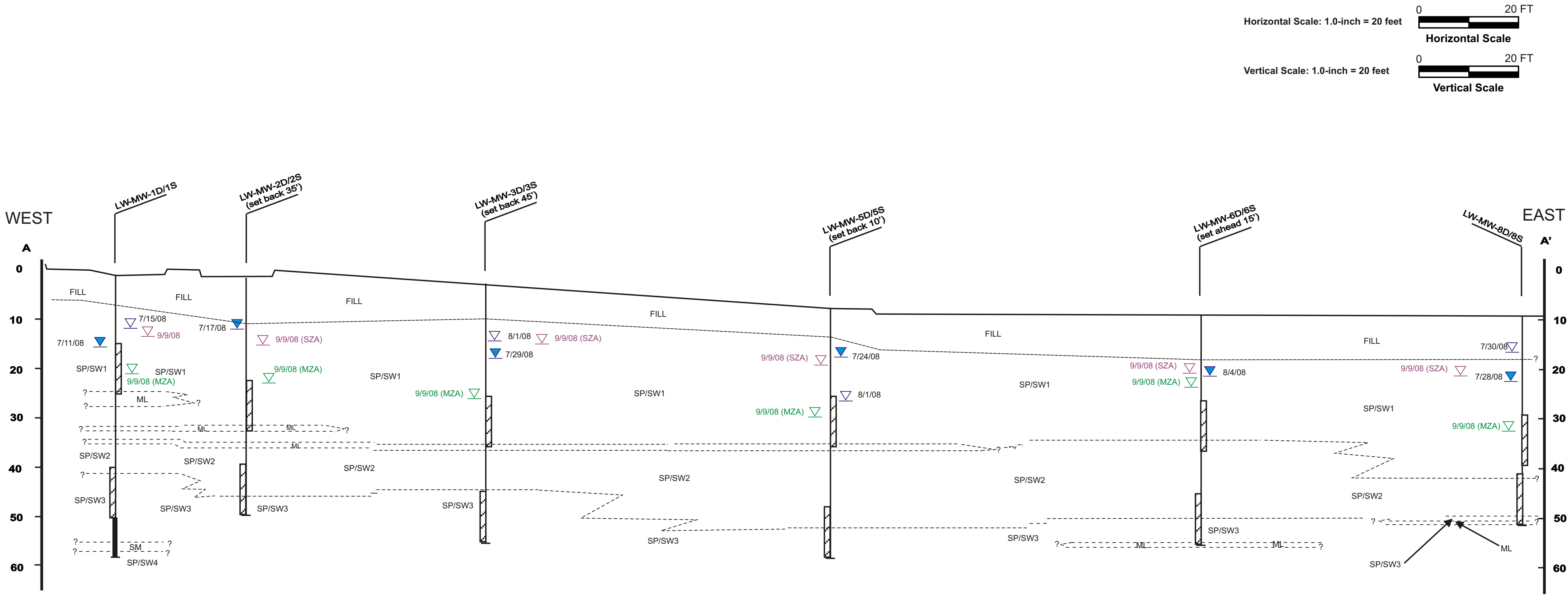
SITE PLAN WITH
CROSS-SECTION TRANSECTS

FIGURE

2B

Horizontal Scale: 1.0-inch = 20 feet

Vertical Scale: 1.0-inch = 20 feet



Legend

ML -	Silt; light gray and orange brown with Fe-staining in places
SM -	Silty Sand; reddish gray; generally very fine sands; non-plastic fines
SP -	Poorly-Graded Sand
SW -	Well-Graded Sand
SP/SW1 -	Alternating lenses of poorly-graded and well-graded sands; generally salt & pepper in color with occasional moderate yellow brown lenses
SP/SW2 -	Alternating lenses of poorly-graded and well-graded sands; generally salt & pepper lenses with interbedded moderate yellow brown and gray lenses
SP/SW3 -	Alternating lenses of poorly-graded and well-graded sands; interbedded lenses of gray and orange-brown with occasional Fe-staining; occasional lenses of reddish brown, very fine sand
SP/SW4 -	Alternating lenses of poorly-graded and well-graded sands; salt and pepper, moderate yellow brown and gray
▼	First Encountered Shallow Water
▽	Shallow Water Table w/date measured

E_2C Remediation
5300 Woodmere Dr., Suite 105
Bakersfield, CA 93313

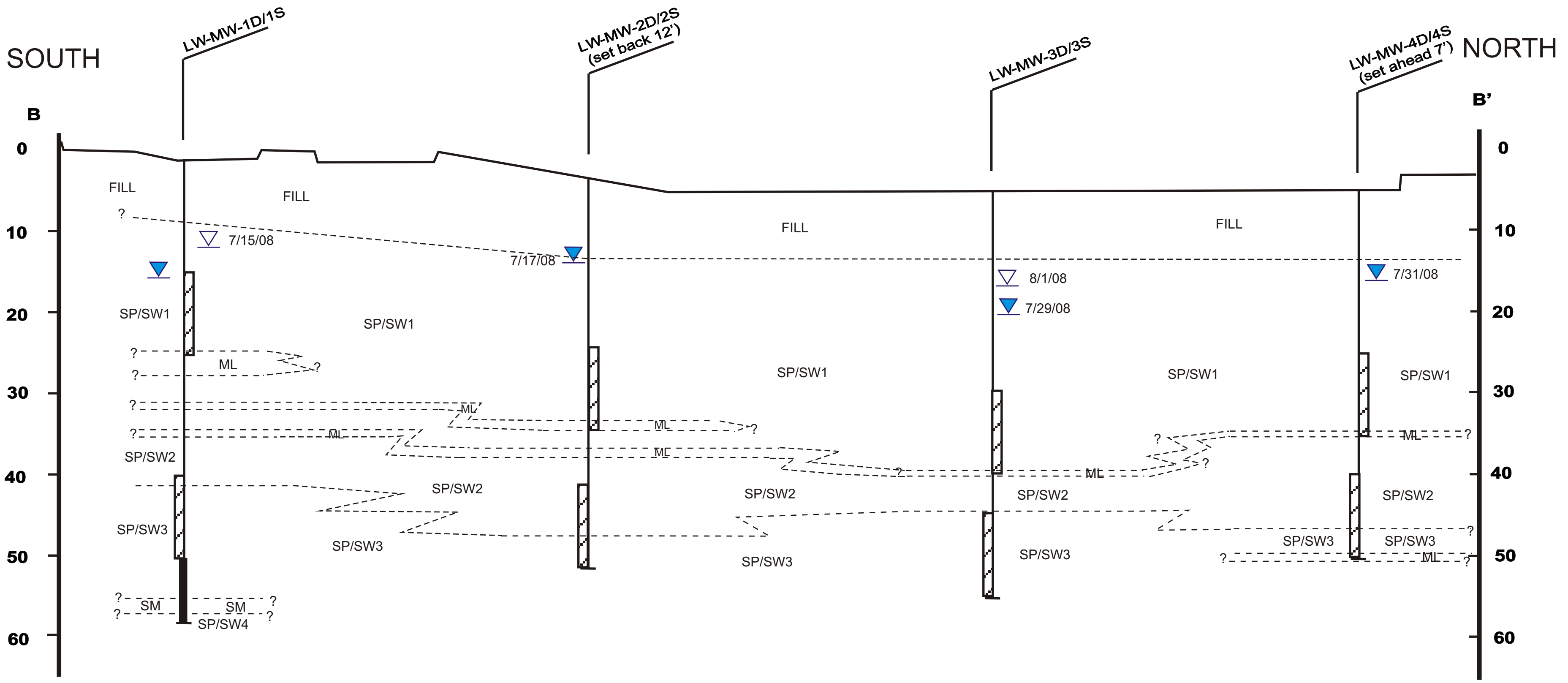
Phone: (661) 831-6906
Fax: (661) 831-6234

LAKE TAHOE LAUNDRY WORKS
1024 LAKE TAHOE BOULEVARD
SOUTH LAKE TAHOE, CALIFORNIA

CROSS SECTION A - A'

FIGURE

4



Legend

ML - Silt; light gray and orange brown with Fe-staining in places

SM - Silty Sand; reddish gray; generally very fine sands; non-plastic fines

SP - Poorly-Graded Sand

SW - Well-Graded Sand

SP/SW1 - Alternating lenses of poorly-graded and well-graded sands; generally salt & pepper in color with occasional moderate yellow brown lenses

SP/SW2 - Alternating lenses of poorly-graded and well-graded sands; generally salt & pepper lenses with interbedded moderate yellow brown and gray lenses

SP/SW3 - Alternating lenses of poorly-graded and well-graded sands; interbedded lenses of gray and orange-brown with occasional Fe-staining; occasional lenses of reddish brown, very fine sand

SP/SW4 - Alternating lenses of poorly-graded and well-graded sands; salt and pepper, moderate yellow brown and gray

▼ First Encountered Shallow Water

▽ Shallow Water Table w/date measured

E₂C Remediation
5300 Woodmere Drive, Ste. 105
Bakersfield, California 93313

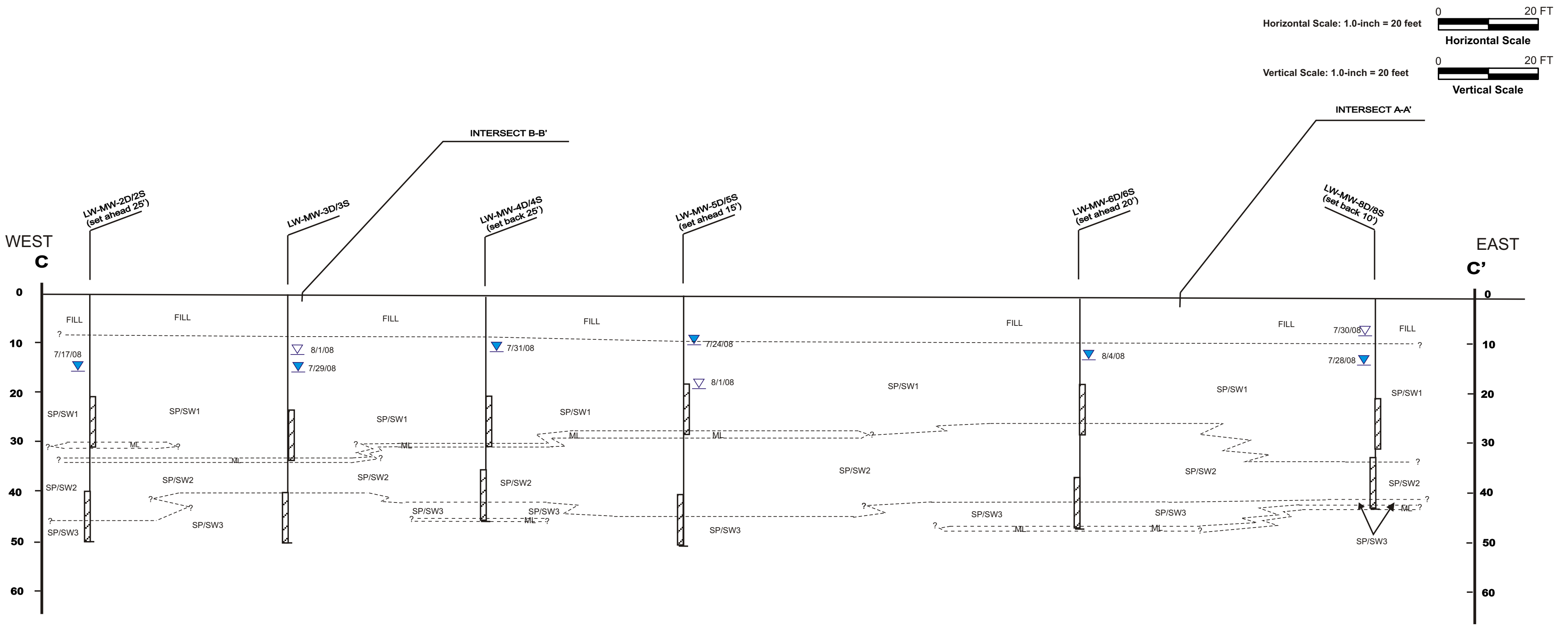
Phone: (661) 831-6906
Fax: (661) 831-6234

LAKE TAHOE LAUNDRY WORKS
1024 LAKE TAHOE BOULEVARD
SOUTH LAKE TAHOE, CALIFORNIA

CROSS SECTION B - B'

FIGURE

5



Legend

ML - Silt; light gray and orange brown with Fe-staining in places

SM - Silty Sand; reddish gray; generally very fine sands; non-plastic fines

SP - Poorly-Graded Sand

SW - Well-Graded Sand

SP/SW1 - Alternating lenses of poorly-graded and well-graded sands; generally salt & pepper in color with occasional moderate yellow brown lenses

SP/SW2 - Alternating lenses of poorly-graded and well-graded sands; generally salt & pepper lenses with interbedded moderate yellow brown and gray lenses

SP/SW3 - Alternating lenses of poorly-graded and well-graded sands; interbedded lenses of gray and orange-brown with occasional Fe-staining; occasional lenses of reddish brown, very fine sand

SP/SW4 - Alternating lenses of poorly-graded and well-graded sands; salt and pepper, moderate yellow brown and gray

▼ First Encountered Shallow Water

▽ Shallow Water Table w/date measured

E_2C Remediation
5300 Woodmere Dr., Suite 105
Bakersfield, CA 93313

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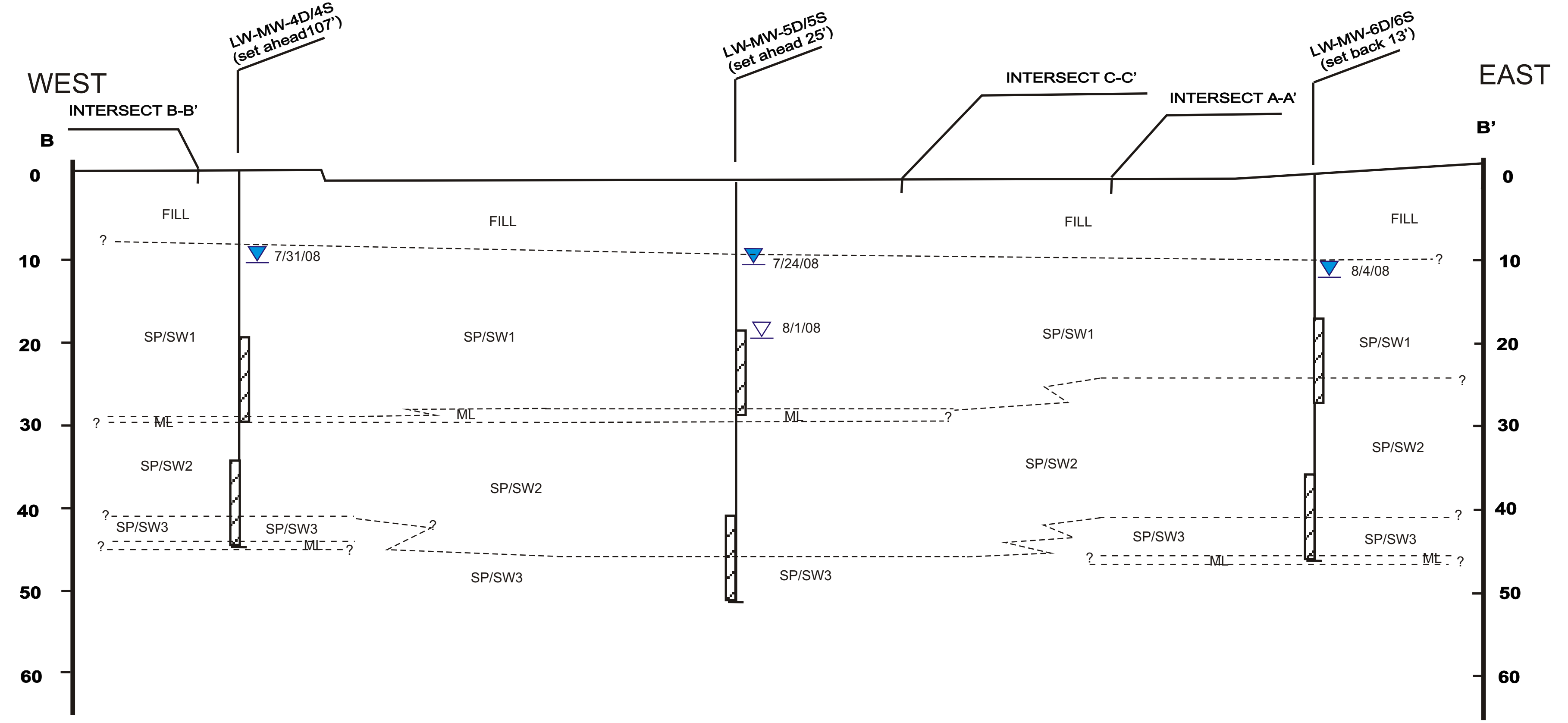
LAKE TAHOE LAUNDRY WORKS
1024 LAKE TAHOE BOULEVARD
SOUTH LAKE TAHOE, CALIFORNIA

CROSS SECTION C - C'

FIGURE

6



Legend

ML - Silt; light gray and orange brown with Fe-staining in places

SM - Silty Sand; reddish gray; generally very fine sands; non-plastic fines

SP - Poorly-Graded Sand

SW - Well-Graded Sand

SP/SW1 - Alternating lenses of poorly-graded and well-graded sands; generally salt & pepper in color with occasional moderate yellow brown lenses

SP/SW2 - Alternating lenses of poorly-graded and well-graded sands; generally salt & pepper lenses with interbedded moderate yellow brown and gray lenses

SP/SW3 - Alternating lenses of poorly-graded and well-graded sands; interbedded lenses of gray and orange-brown with occasional Fe-staining; occasional lenses of reddish brown, very fine sand

SP/SW4 - Alternating lenses of poorly-graded and well-graded sands; salt and pepper, moderate yellow brown and gray

▼ First Encountered Shallow Water

▽ Shallow Water Table w/date measured

E_2C Remediation
5300 Woodmere Drive, Ste. 105
Bakersfield, California 93313
Phone: (661) 831-6906
Fax: (661) 831-6234

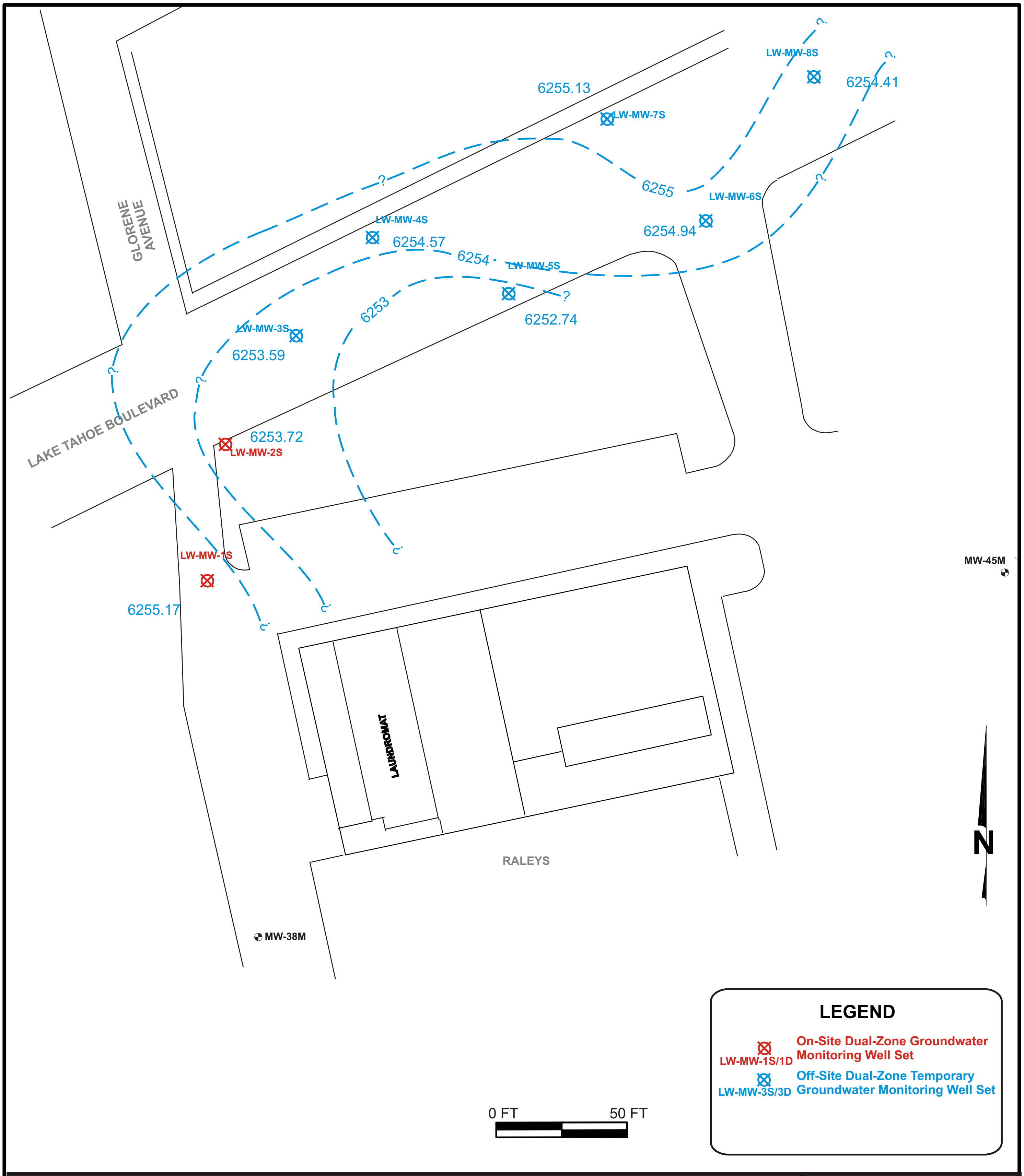
LAKE TAHOE LAUNDRY WORKS
1024 LAKE TAHOE BOULEVARD
SOUTH LAKE TAHOE, CALIFORNIA

CROSS SECTION D - D'

FIGURE
7

APPENDIX P

2008 Groundwater Gradient Plots



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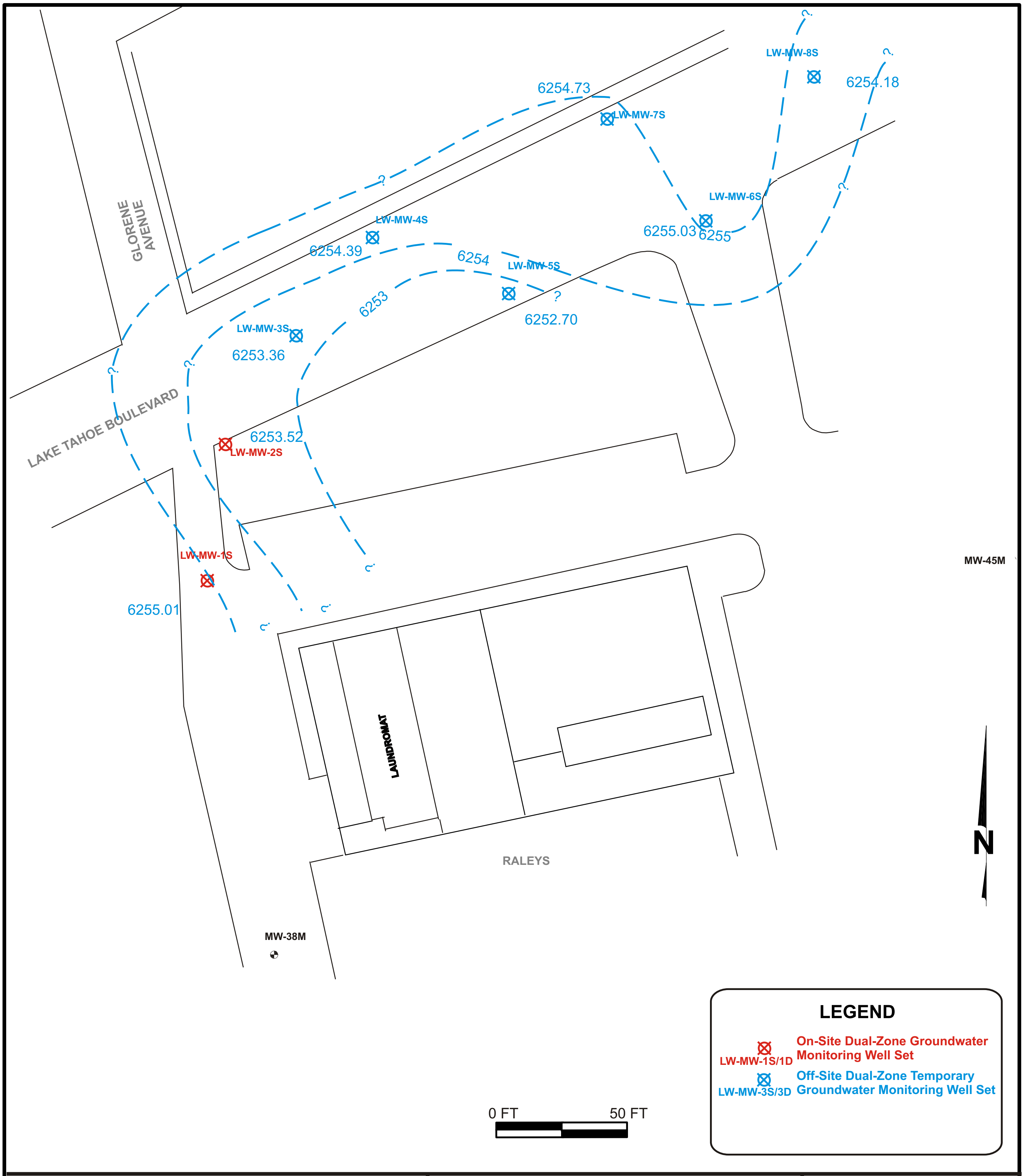
LAKE TAHOE LAUNDRY WORKS
1024 LAKE TAHOE BOULEVARD
SOUTH LAKE TAHOE, CALIFORNIA

GROUNDWATER GRADIENT PLOT
SHALLOW ZONE
9/9/08

FIGURE

3A



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LAKE TAHOE LAUNDRY WORKS
1024 LAKE TAHOE BOULEVARD
SOUTH LAKE TAHOE, CALIFORNIA

GROUNDWATER GRADIENT PLOT
SHALLOW ZONE
9/14/08

FIGURE

3AA

APPENDIX Q

Summary of 2008 Soil Analytical Data

TABLE 2
SUMMARY OF SITE INVESTIGATION SOIL ANALYTICAL DATA
LAKE TAHOE LAUNDRY WORKS
1024 Lake Tahoe Boulevard
South Lake Tahoe, California

Sample Name	Sample Date	Sample Depth (bgs)	PCE	TCE	VC	CA	1,1-DCE	Trans-1,2-DCE	1,1-DCA	Cis-1,2-DCE	1,2-DCA	1,1,1-TCA
			(mg/Kg)									
Friedman & Bruya and ProVera Results												
LW-MW-1-7(FB)	7/11/08	7.0	**410**	**17**	<.05	<.5	<.05	<.05	<.05	**1.2**	<.05	<.05
LW-MW-1-7(PV)			**532**	**13.9**	<0..050	<0..050	<0..050	<0..050	<0..050	<0..050	<0..050	<0..050
LW-MW-1-26(FB)	7/11/08	26.0	**0.26**	<.03	<.05	<.5	<.05	<.05	<.05	<.05	<.05	<.05
LW-MW-1-26(PV)			**0.132**	<0.100	<0..050	<0..050	<0..050	<0..050	<0..050	<0..050	<0..050	<0..050
LW-MW-1-38(FB)	7/14/08	38.0	**0.33**	<.03	<.05	<.5	<.05	<.05	<.05	<.05	<.05	<.05
LW-MW-1-38(PV)			**0.27**	<0.100	<0..050	<0..050	<0..050	<0..050	<0..050	<0..050	<0..050	<0..050
LW-MW-1-52.5(PV)	7/14/08	52.5	<0.05	<0.1	<0.05	<0.05	<0.05	<0.05	<0.05	<0.5	<0.05	<0.05
LW-MW-2-10(FB)	7/17/08	10.0	**0.33**	**0.035**	<.05	<.5	<.05	<.05	<.05	<.05	<.05	<.05
LW-MW-2-10(PV)			**0.266**	<0.100	<0..050	<0..050	<0..050	<0..050	<0..050	<0..050	<0..050	<0..050
LW-MW-2-16(FB)	7/17/08	16.0	**0.12**	<.03	<.05	<.5	<.05	<.05	<.05	<.05	<.05	<.05
LW-MW-2-16(PV)			**0.086**	<0.100	<0..050	<0..050	<0..050	**0.126**	<0..050	<0..050	<0..050	<0..050
LW-MW-2-31(FB)	7/24/08	31.0	**0.14**	<.03	<.05	<.5	<.05	<.05	<.05	<.05	<.05	<.05
LW-MW-2-31(PV)			**0.112**	<0.100	<0..050	<0..050	<0..050	**0.125**	<0..050	<0..050	<0..050	<0..050
LW-MW-2-43(PV)	7/24/08	43.0	<0.05	<0.1	<0.05	<0.05	<0.05	0.125	<0.05	<0.5	<0.05	<0.05
ProVera Results												
LW-MW-3-11	7/29/08	11.0	<0.05	<0.1	<0.05	<0.05	<0.05	<0.05	<0.05	<0.5	<0.05	<0.05
LW-MW-3-20	7/29/08	20.0	<0.05	<0.1	<0.05	<0.05	<0.05	**0.123**	<0.05	<0.5	**0.19**	<0.05
LW-MW-3-25	7/29/08	25.0	<0.05	<0.1	0.053	<0.05	<0.05	<0.05	<0.05	**0.71**	<0.05	<0.05
LW-MW-3-34	7/30/08	34.0	<0.05	<0.1	<0.05	<0.05	<0.05	**0.12**	<0.05	<0.5	<0.05	<0.05
LW-MW-4-5.5	7/31/08	5.5	<0.05	<0.1	<0.05	<0.05	<0.05	<0.05	<0.05	<0.5	<0.05	<0.05
LW-MW-4-15	7/31/08	15.0	<0.05	<0.1	<0.05	<0.05	<0.05	<0.05	<0.05	<0.5	<0.05	<0.05
LW-MW-4-36.5	8/6/08	36.5	<0.05	<0.1	<0.05	<0.05	<0.05	<0.05	<0.05	<0.5	<0.05	<0.05
LW-MW-4-45.5	8/6/08	45.5	**0.713**	<0.1	<0.05	<0.05	<0.05	<0.05	<0.05	<0.5	<0.05	<0.05
LW-MW-5-10	7/24/08	10.0	<0.05	<0.1	<0.05	<0.05	<0.05	**0.108**	<0.05	**0.51**	<0.05	<0.05
LW-MW-5-30	7/24/08	30.0	<0.05	`	0.059	<0.05	<0.05	<0.05	<0.05	<0.5	<0.05	<0.05
LW-MW-5-41	7/24/08	41.0	<0.05	<0.1	<0.05	<0.05	<0.05	**0.107**	<0.05	<0.5	<0.05	<0.05
LW-MW-5-50	7/24/08	50.0	<0.05	<0.1	<0.05	<0.05	<0.05	**0.12**	<0.05	<0.5	<0.05	<0.05

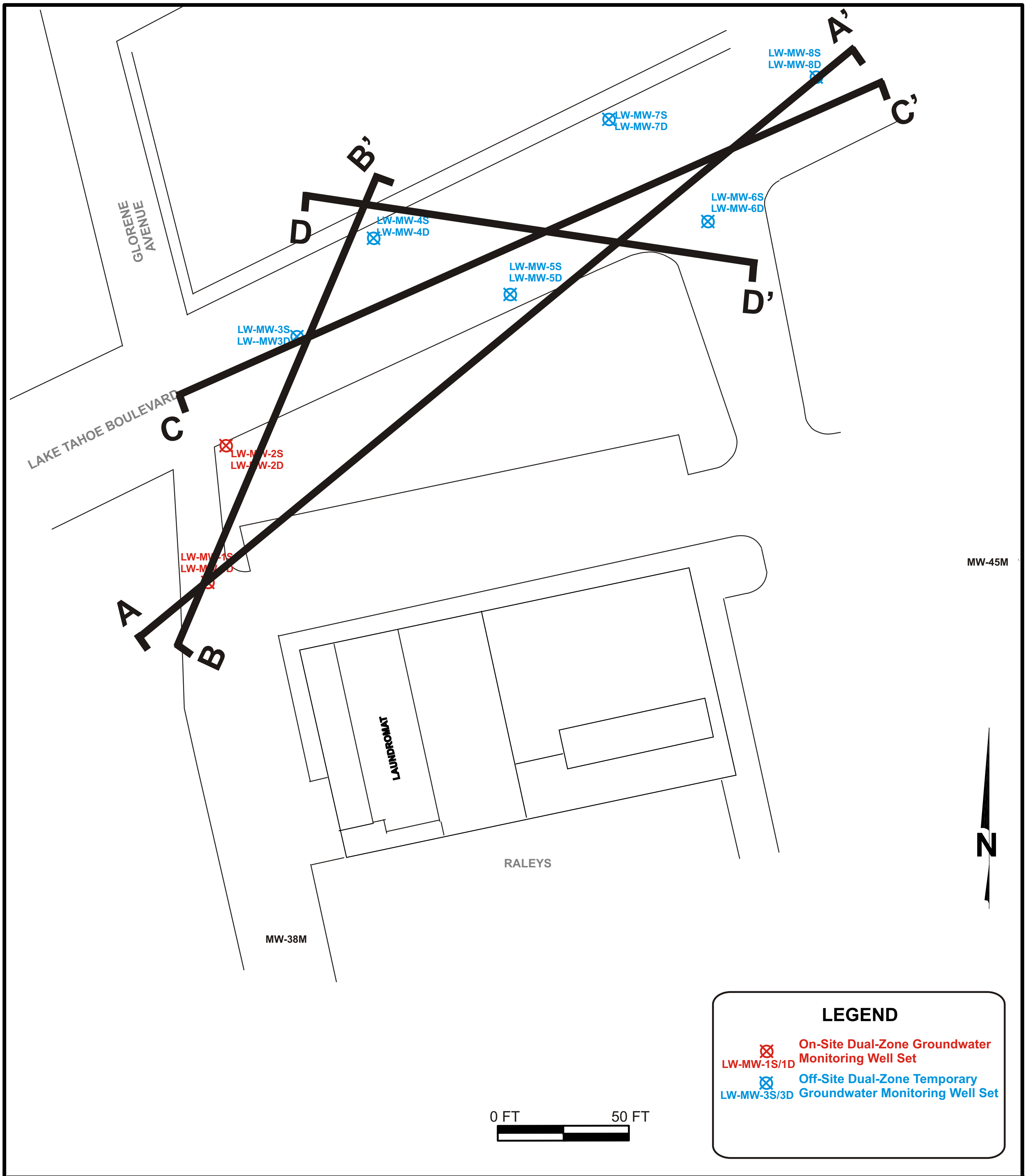
TABLE 2
SUMMARY OF SITE INVESTIGATION SOIL ANALYTICAL DATA
LAKE TAHOE LAUNDRY WORKS
1024 Lake Tahoe Boulevard
South Lake Tahoe, California

Sample Name	Sample Date	Sample Depth (bgs)	PCE	TCE	VC	CA	1,1-DCE	Trans-1,2-DCE	1,1-DCA	Cis-1,2-DCE	1,2-DCA	1,1,1-TCA
			(mg/Kg)									
Friedman & Bruya and ProVera Results												
LW-MW-6-10	8/4/08	10.0	<0.05	<0.1	<0.05	<0.05	<0.05	<0.05	<0.05	<0.5	<0.05	<0.05
LW-MW-6-20	8/6/08	20.0	**0.272**	<0.1	<0.05	<0.05	<0.05	**0.109**	<0.05	<0.5	<0.05	<0.05
LW-MW-6-30	8/6/08	30.0	**0.106**	<0.1	<0.05	<0.05	<0.05	**0.122**	<0.05	<0.5	<0.05	<0.05
LW-MW-6-45	8/7/08	45.0	<0.05	<0.1	<0.05	<0.05	<0.05	<0.05	<0.05	<0.5	<0.05	<0.05
LW-MW-7-11	7/31/08	11.00	**0.069**	<0.1	**0.061**	<0.05	<0.05	<0.05	<0.05	<0.5	<0.05	<0.05
LW-MW-7-20	7/31/08	20.00	<0.05	<0.1	<0.05	<0.05	<0.05	**0.113**	<0.05	<0.5	<0.05	<0.05
LW-MW-7-25	7/31/08	25.00	<0.05	<0.1	<0.05	<0.05	<0.05	**0.118**	<0.05	<0.5	<0.05	<0.05
LW-MW-7-40.5	8/5/08	40.50	**0.82**	<0.1	**0.066**	<0.05	<0.05	**0.141**	<0.05	<0.5	<0.05	<0.05
LW-MW-8-15	7/28/08	15.00	<0.05	<0.1	<0.05	<0.05	<0.05	<0.05	<0.05	<0.5	<0.05	<0.05
LW-MW-8-25.5	7/28/08	25.50	<0.05	<0.1	<0.05	<0.05	<0.05	**0.105**	<0.05	<0.5	<0.05	<0.05
LW-MW-8-32	7/29/08	32.00	**0.057**	<0.1	<0.05	<0.05	<0.05	**0.11**	<0.05	<0.5	<0.05	<0.05
LW-MW-8-40	7/29/08	40.00	**0.375**	<0.1	<0.05	<0.05	<0.05	<0.05	<0.05	<0.5	<0.05	<0.05

Notes:
bgs = Below Ground Surface
FB = Friedman & Bruya, Inc.
nd<0.05 = not detected at or above the stated laboratory reporting limit.
PV = ProVera Analytical Laboratories, Inc.

APPENDIX R

2008 Soil Chemical Cross-Sections



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LAKE TAHOE LAUNDRY WORKS
1024 LAKE TAHOE BOULEVARD
SOUTH LAKE TAHOE, CALIFORNIA

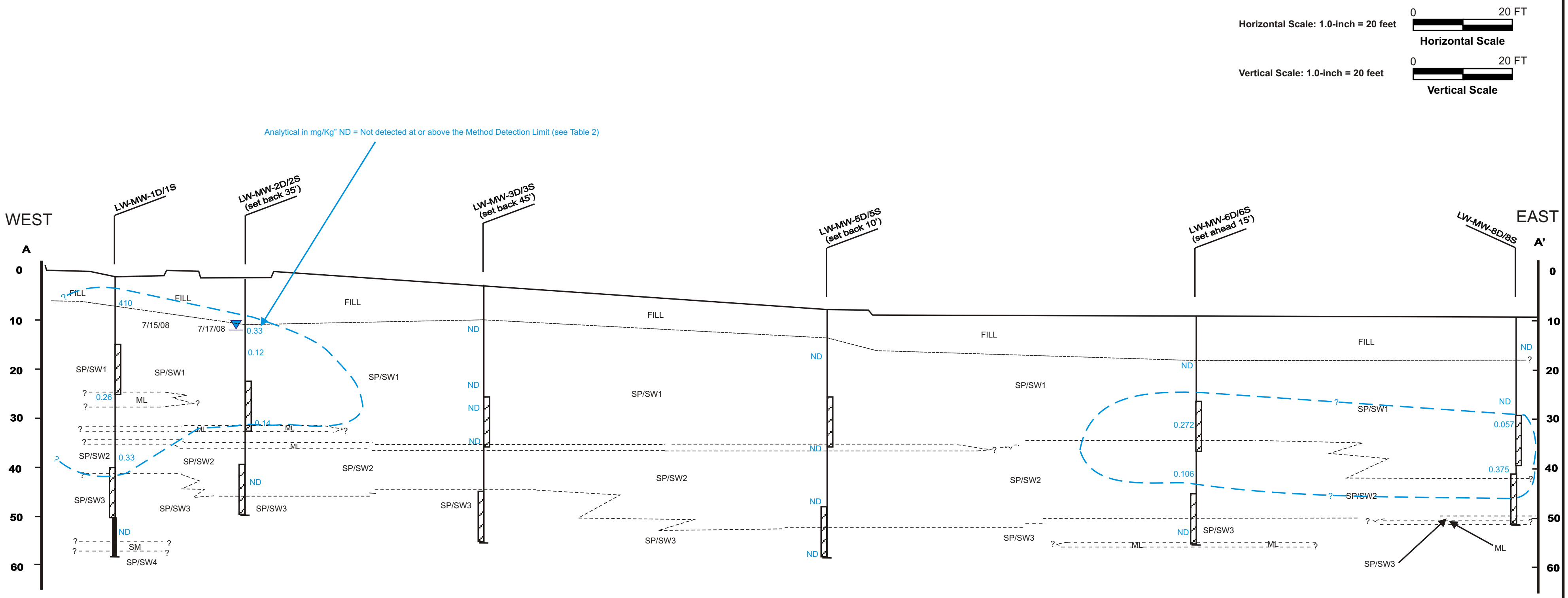
SITE PLAN WITH
CROSS-SECTION TRANSECTS

FIGURE

2B

Horizontal Scale: 1.0-inch = 20 feet

Vertical Scale: 1.0-inch = 20 feet



Legend

ML -	Silt; light gray and orange brown with Fe-staining in places
SM -	Silty Sand; reddish gray; generally very fine sands; non-plastic fines
SP -	Poorly-Graded Sand
SW -	Well-Graded Sand
SP/SW1 -	Alternating lenses of poorly-graded and well-graded sands; generally salt & pepper in color with occasional moderate yellow brown lenses
SP/SW2 -	Alternating lenses of poorly-graded and well-graded sands; generally salt & pepper lenses with interbedded moderate yellow brown and gray lenses
SP/SW3 -	Alternating lenses of poorly-graded and well-graded sands; interbedded lenses of gray and orange-brown with occasional Fe-staining; occasional lenses of reddish brown, very fine sand
SP/SW4 -	Alternating lenses of poorly-graded and well-graded sands; salt and pepper, moderate yellow brown and gray
▼	First Encountered Shallow Water
▽	Shallow Water Table w/date measured

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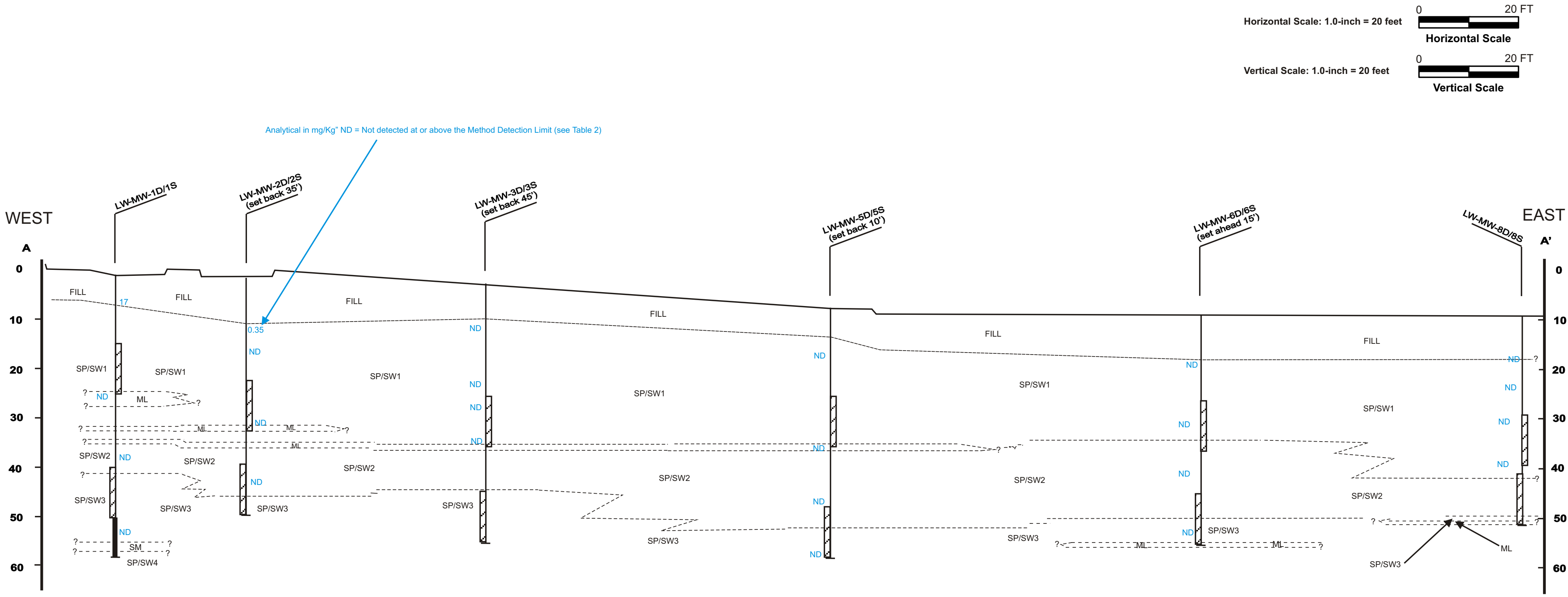
LAKE TAHOE LAUNDRY WORKS
1024 LAKE TAHOE BOULEVARD
SOUTH LAKE TAHOE, CALIFORNIA

CROSS SECTION A - A'
SOIL PCE

FIGURE

4A



Analytical in mg/Kg” ND = Not detected at or above the Method Detection Limit (see Table 2)

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SP/SW3 - Alternating lenses of poorly-graded and well-graded sands; interbedded lenses of gray and orange-brown with occasional Fe-staining; occasional lenses of reddish brown, very fine sand

SP/SW4 - Alternating lenses of poorly-graded and well-graded sands; salt and pepper, moderate yellow brown and gray

▼ First Encountered Shallow Water

▽ Shallow Water Table w/date measured

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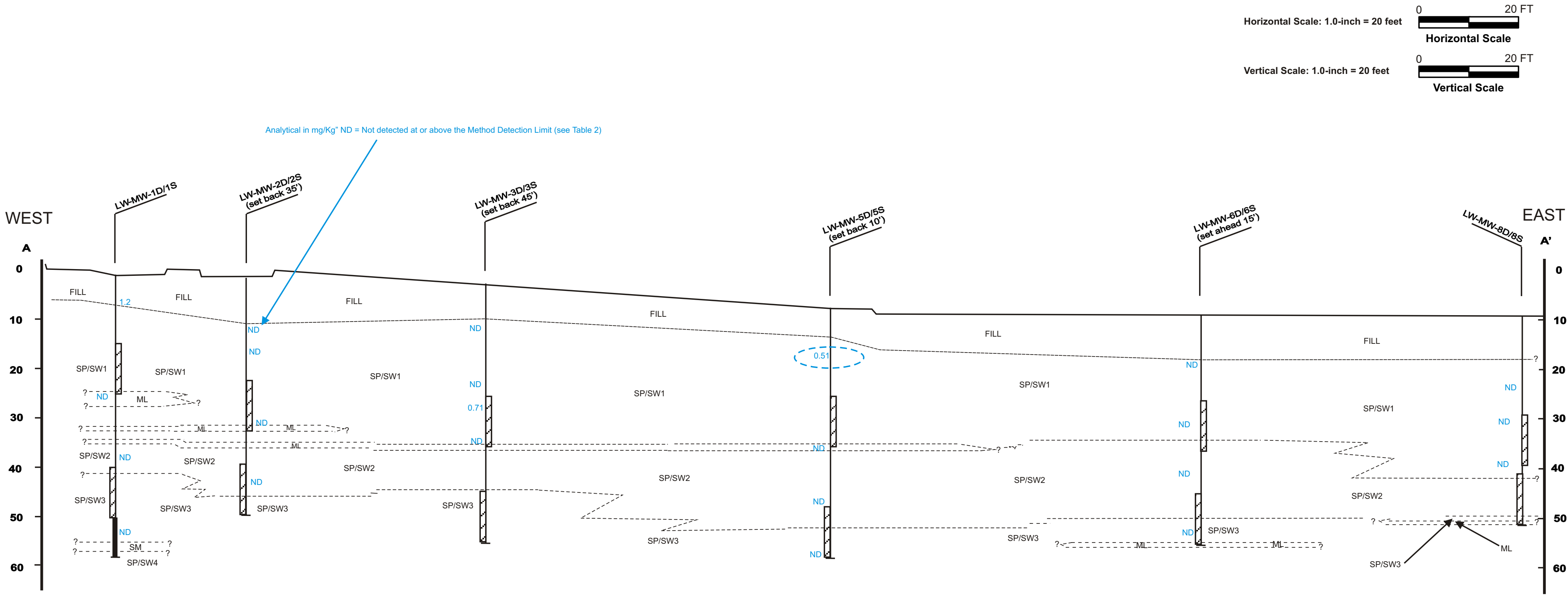
LAKE TAHOE LAUNDRY WORKS
1024 LAKE TAHOE BOULEVARD
SOUTH LAKE TAHOE, CALIFORNIA

CROSS SECTION A - A’
SOIL TCE

FIGURE

4B



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SP/SW4 -	Alternating lenses of poorly-graded and well-graded sands; salt and pepper, moderate yellow brown and gray
▼	First Encountered Shallow Water
▽	Shallow Water Table w/date measured

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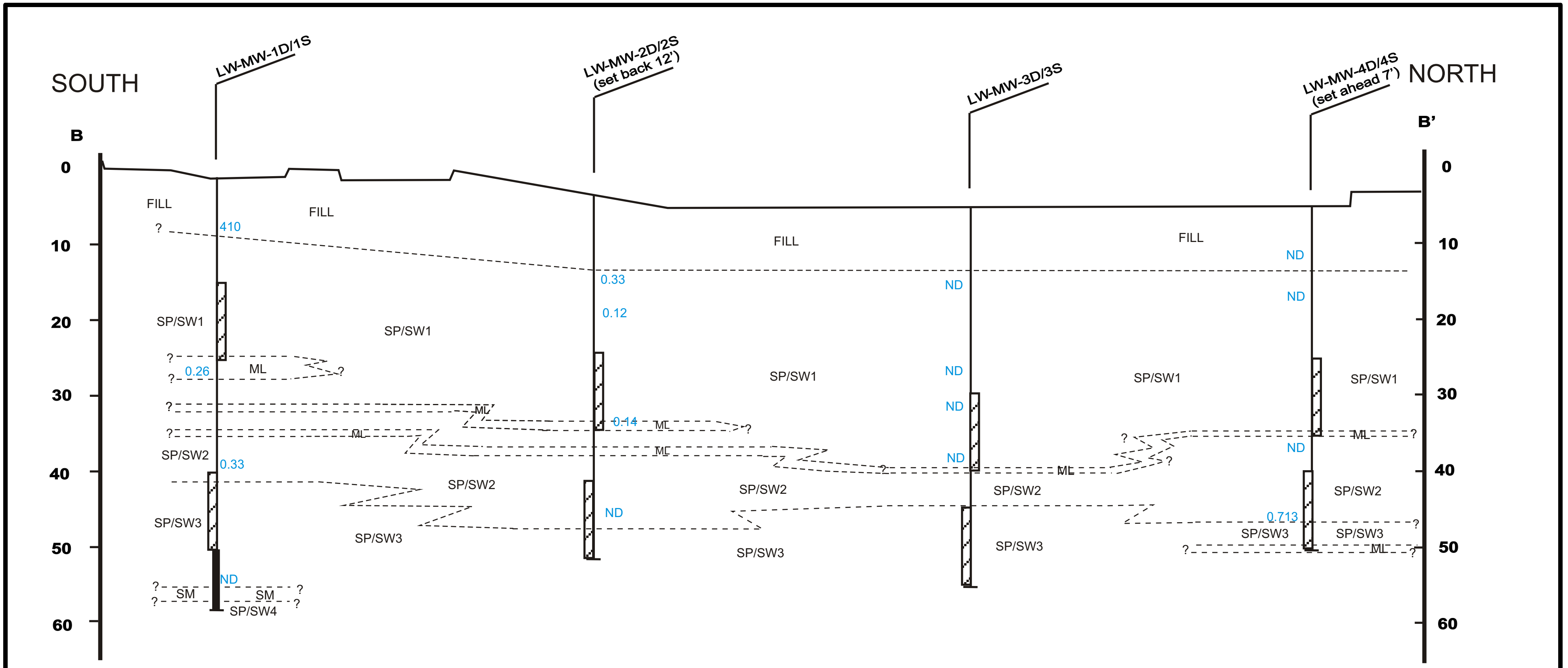
LAKE TAHOE LAUNDRY WORKS
1024 LAKE TAHOE BOULEVARD
SOUTH LAKE TAHOE, CALIFORNIA

CROSS SECTION A - A'
SOIL cis-1,2-DCE

FIGURE

4C



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SP/SW4 - Alternating lenses of poorly-graded and well-graded sands; salt and pepper, moderate yellow brown and gray

▼ First Encountered Shallow Water

▽ Shallow Water Table w/date measured

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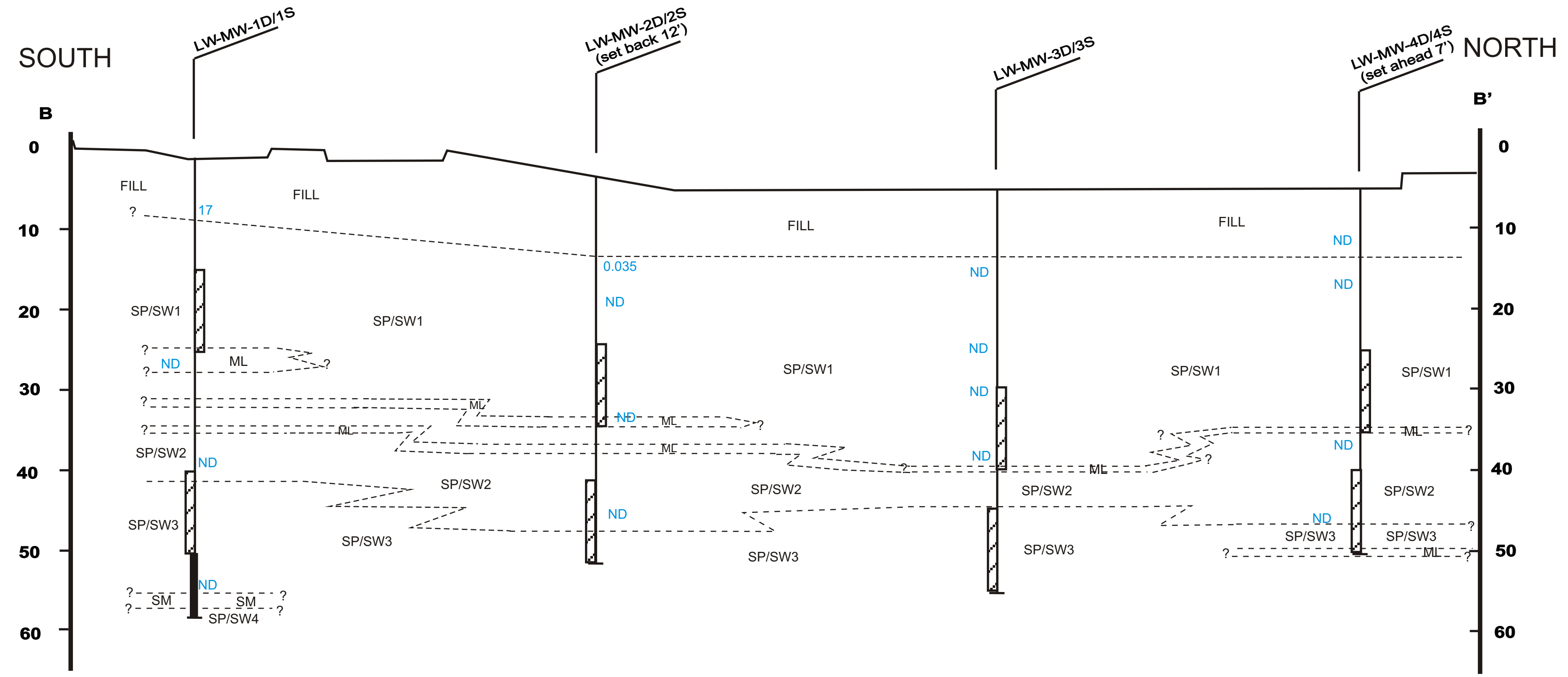
LAKE TAHOE LAUNDRY WORKS
1024 LAKE TAHOE BOULEVARD
SOUTH LAKE TAHOE, CALIFORNIA

CROSS SECTION B - B'
SOIL PCE

FIGURE

5A



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SP/SW4 - Alternating lenses of poorly-graded and well-graded sands; salt and pepper, moderate yellow brown and gray

▼ First Encountered Shallow Water

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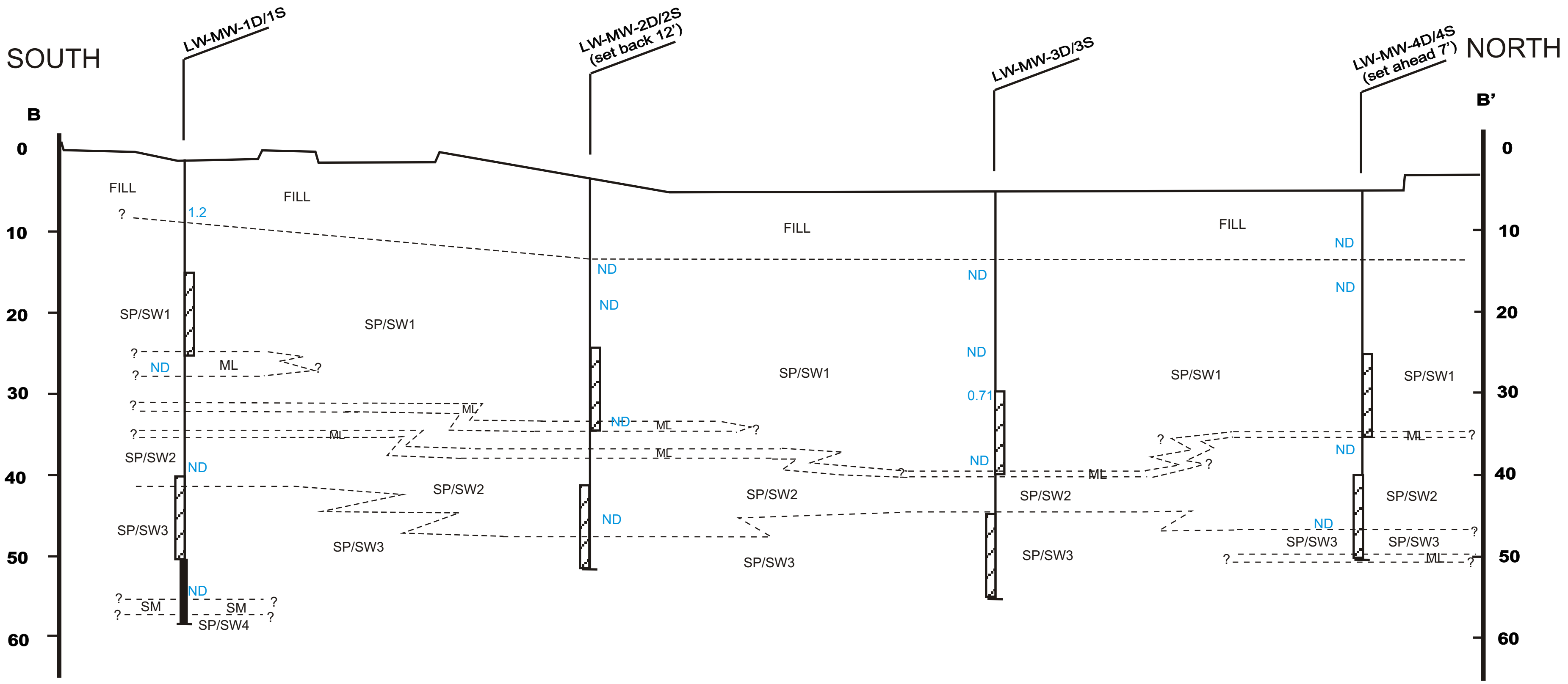
LAKE TAHOE LAUNDRY WORKS
1024 LAKE TAHOE BOULEVARD
SOUTH LAKE TAHOE, CALIFORNIA

CROSS SECTION B - B'
SOIL TCE

FIGURE

5B



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SP/SW4 - Alternating lenses of poorly-graded and well-graded sands; salt and pepper, moderate yellow brown and gray

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▽ Shallow Water Table w/date measured

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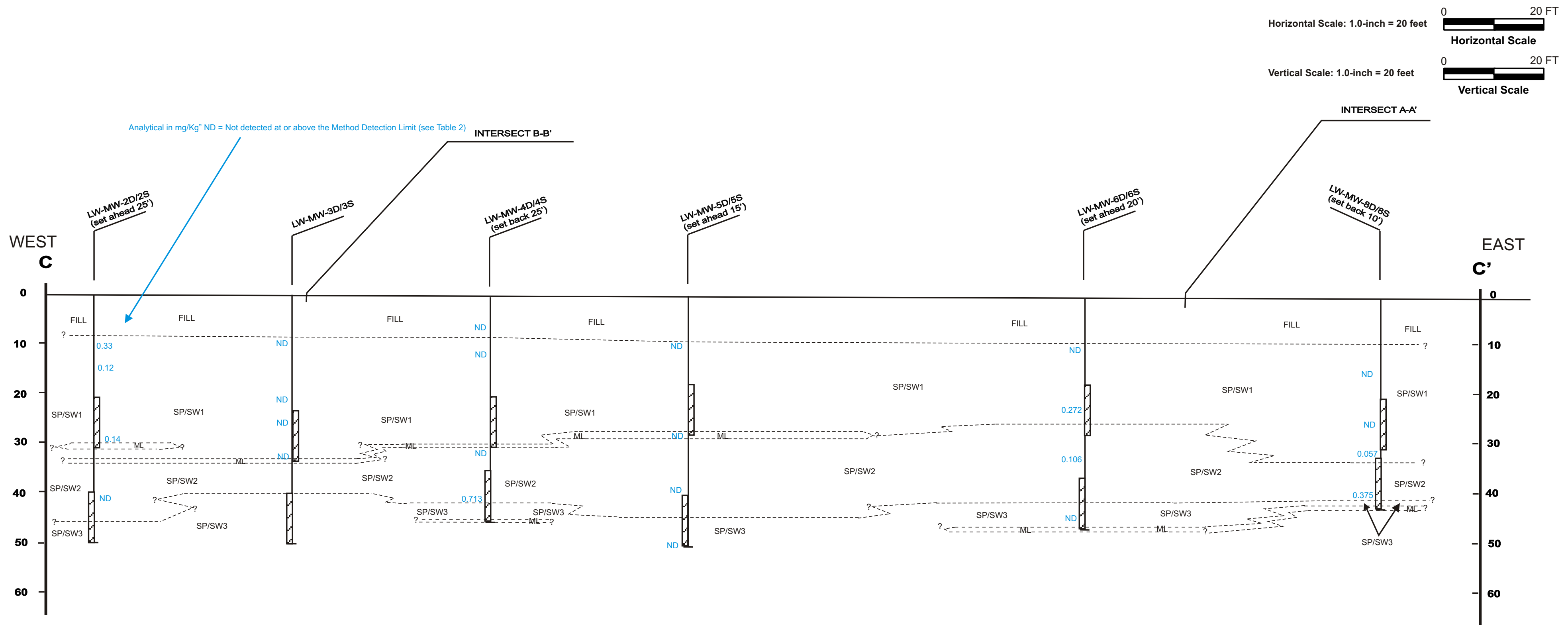
LAKE TAHOE LAUNDRY WORKS
1024 LAKE TAHOE BOULEVARD
SOUTH LAKE TAHOE, CALIFORNIA

CROSS SECTION B - B'
SOIL cis-1,2-DCE

FIGURE

5C



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SP/SW4 - Alternating lenses of poorly-graded and well-graded sands; salt and pepper, moderate yellow brown and gray

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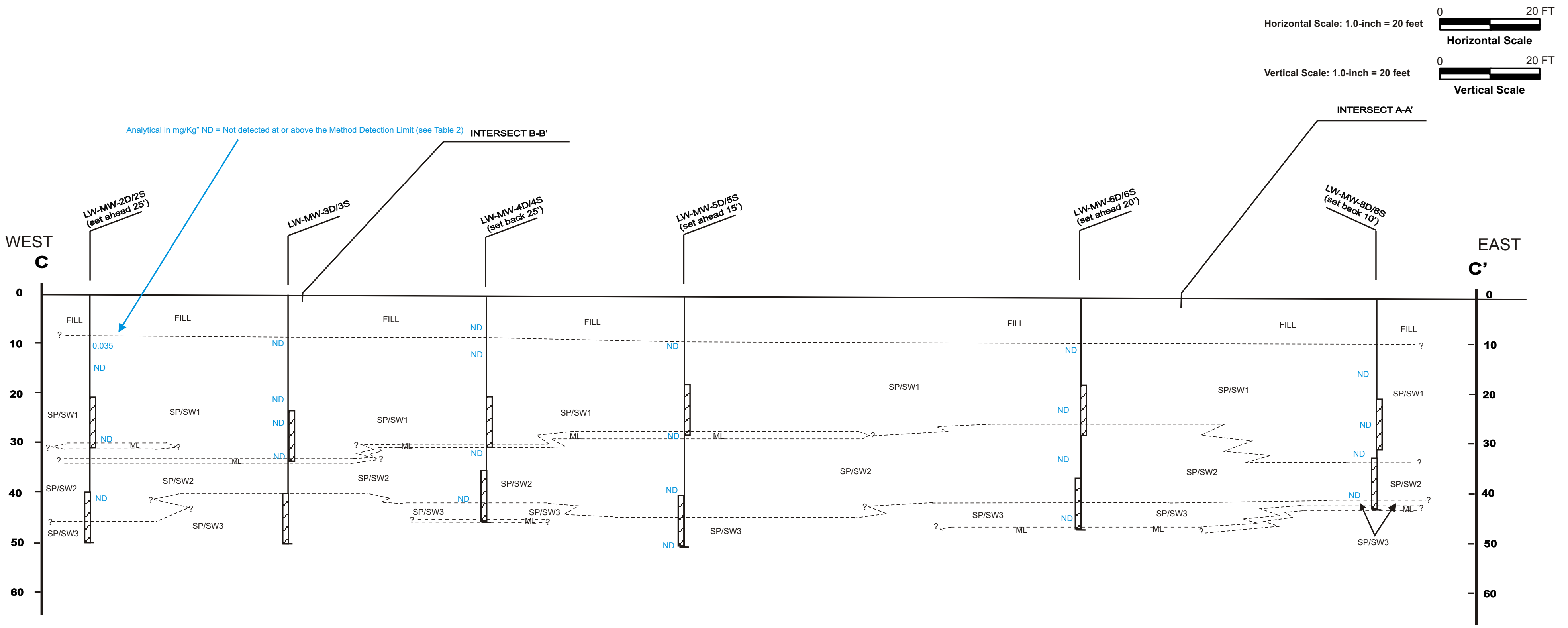
LAKE TAHOE LAUNDRY WORKS
1024 LAKE TAHOE BOULEVARD
SOUTH LAKE TAHOE, CALIFORNIA

CROSS SECTION C - C'
SOIL PCE

FIGURE

6A



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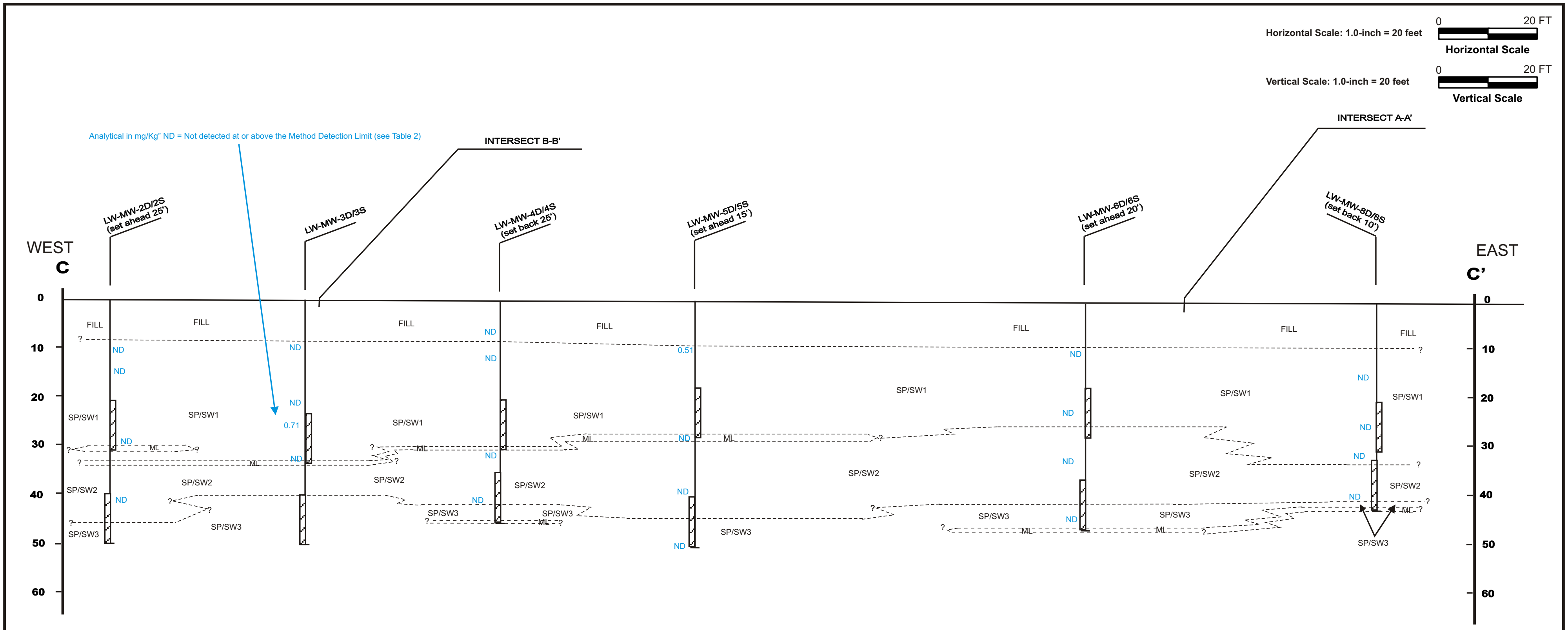
LAKE TAHOE LAUNDRY WORKS
1024 LAKE TAHOE BOULEVARD
SOUTH LAKE TAHOE, CALIFORNIA

CROSS SECTION C - C'
SOIL TCE

FIGURE

6B



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SW - Well-Graded Sand

SP/SW1 - Alternating lenses of poorly-graded and well-graded sands; generally salt & pepper in color with occasional moderate yellow brown lenses

SP/SW2 - Alternating lenses of poorly-graded and well-graded sands; generally salt & pepper lenses with interbedded moderate yellow brown and gray lenses

Legend

SP/SW3 - Alternating lenses of poorly-graded and well-graded sands; interbedded lenses of gray and orange-brown with occasional Fe-staining; occasional lenses of reddish brown, very fine sand

SP/SW4 - Alternating lenses of poorly-graded and well-graded sands; salt and pepper, moderate yellow brown and gray

▼ First Encountered Shallow Water

▽ Shallow Water Table w/date measured

E_2C Remediation
5300 Woodmere Dr., Suite 105
Bakersfield, CA 93313

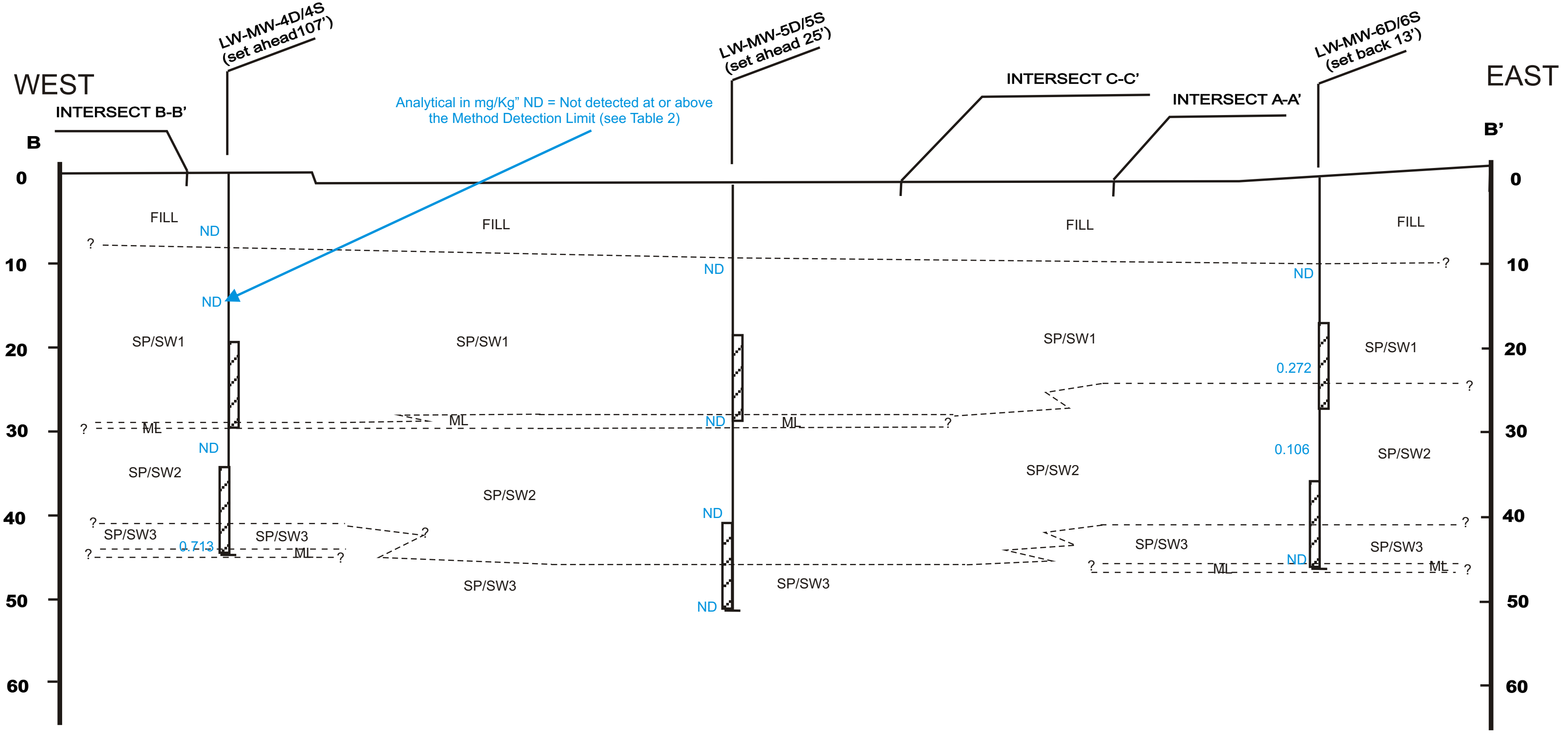
Phone: (661) 831-6906
Fax: (661) 831-6234

LAKE TAHOE LAUNDRY WORKS
1024 LAKE TAHOE BOULEVARD
SOUTH LAKE TAHOE, CALIFORNIA

CROSS SECTION C - C'
SOIL cis-1,2-DCE

FIGURE

6C



Analytical in mg/Kg" ND = Not detected at or above the Method Detection Limit (see Table 2)

Legend

ML - Silt; light gray and orange brown with Fe-staining in places

SM - Silty Sand; reddish gray; generally very fine sands; non-plastic fines

SP - Poorly-Graded Sand

SW - Well-Graded Sand

SP/SW1 - Alternating lenses of poorly-graded and well-graded sands; generally salt & pepper in color with occasional moderate yellow brown lenses

SP/SW2 - Alternating lenses of poorly-graded and well-graded sands; generally salt & pepper lenses with interbedded moderate yellow brown and gray lenses

SP/SW3 - Alternating lenses of poorly-graded and well-graded sands; interbedded lenses of gray and orange-brown with occasional Fe-staining; occasional lenses of reddish brown, very fine sand

SP/SW4 - Alternating lenses of poorly-graded and well-graded sands; salt and pepper, moderate yellow brown and gray

▼ First Encountered Shallow Water

▽ Shallow Water Table w/date measured

E_2C Remediation

5300 Woodmere Drive, Ste. 105
Bakersfield, California 93313

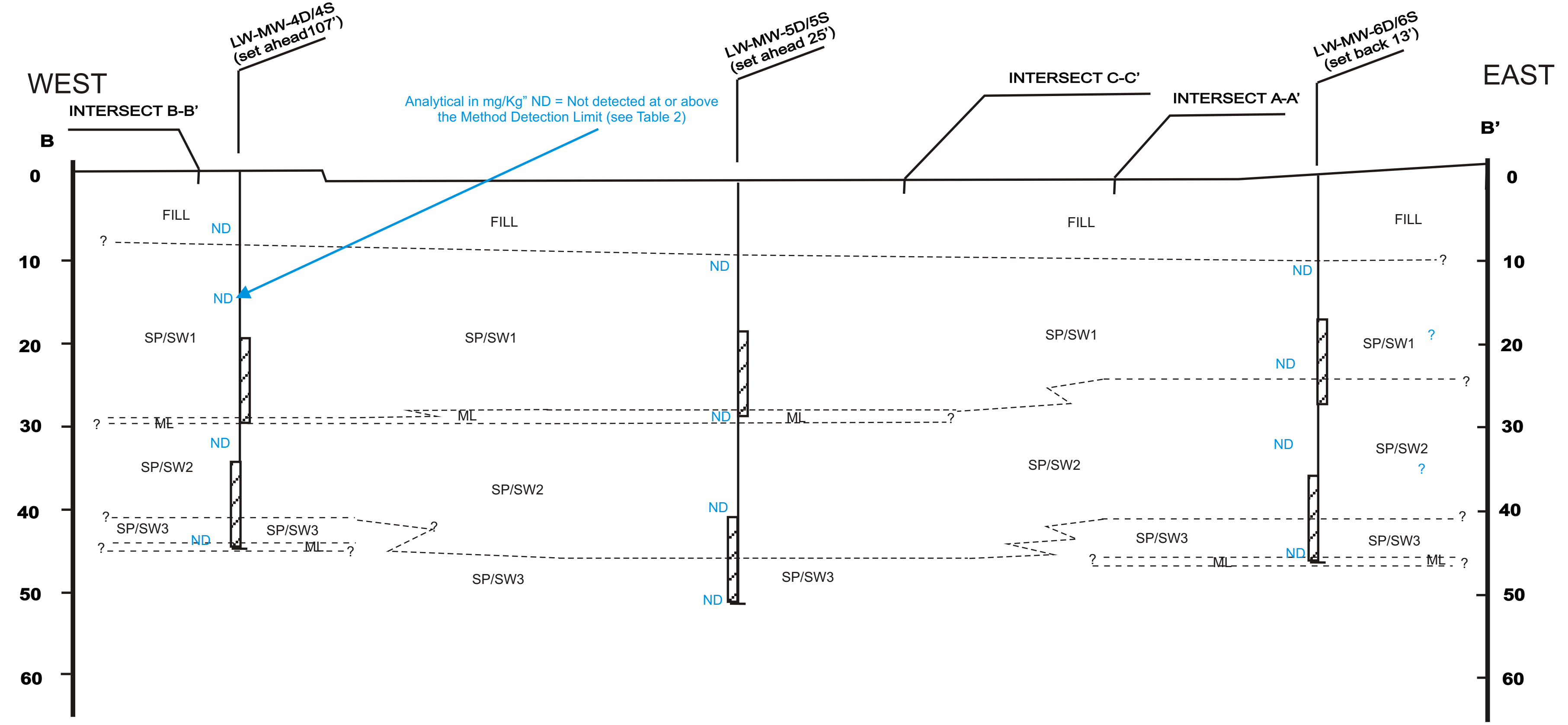
Phone: (661) 831-6906
Fax: (661) 831-6234

LAKE TAHOE LAUNDRY WORKS
1024 LAKE TAHOE BOULEVARD
SOUTH LAKE TAHOE, CALIFORNIA

CROSS SECTION D - D'
SOIL PCE

FIGURE

7A



Legend

ML - Silt; light gray and orange brown with Fe-staining in places

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SP/SW3 - Alternating lenses of poorly-graded and well-graded sands; interbedded lenses of gray and orange-brown with occasional Fe-staining; occasional lenses of reddish brown, very fine sand

SP/SW4 - Alternating lenses of poorly-graded and well-graded sands; salt and pepper, moderate yellow brown and gray

▼ First Encountered Shallow Water

▽ Shallow Water Table w/date measured

E₂C Remediation

5300 Woodmere Drive, Ste. 105
Bakersfield, California 93313

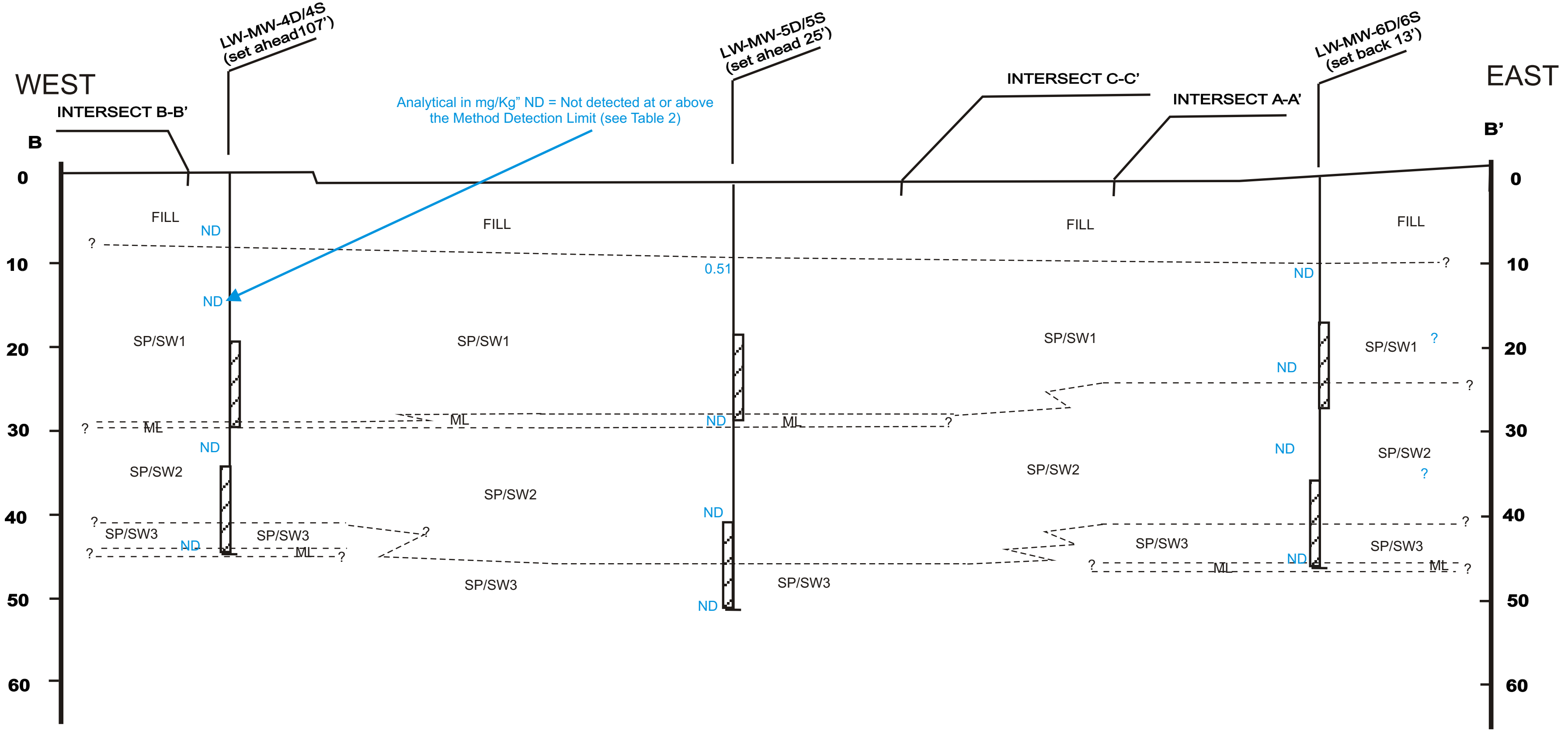
Phone: (661) 831-6906
Fax: (661) 831-6234

LAKE TAHOE LAUNDRY WORKS
1024 LAKE TAHOE BOULEVARD
SOUTH LAKE TAHOE, CALIFORNIA

CROSS SECTION D - D'
SOIL TCE

FIGURE

7B



Legend

ML - Silt; light gray and orange brown with Fe-staining in places

SM - Silty Sand; reddish gray; generally very fine sands; non-plastic fines

SP - Poorly-Graded Sand

SW - Well-Graded Sand

SP/SW1 - Alternating lenses of poorly-graded and well-graded sands; generally salt & pepper in color with occasional moderate yellow brown lenses

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SP/SW3 - Alternating lenses of poorly-graded and well-graded sands; interbedded lenses of gray and orange-brown with occasional Fe-staining; occasional lenses of reddish brown, very fine sand

SP/SW4 - Alternating lenses of poorly-graded and well-graded sands; salt and pepper, moderate yellow brown and gray

▼ First Encountered Shallow Water

▽ Shallow Water Table w/date measured

E_2C Remediation
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LAKE TAHOE LAUNDRY WORKS
1024 LAKE TAHOE BOULEVARD
SOUTH LAKE TAHOE, CALIFORNIA

CROSS SECTION D - D'
SOIL cis-1,2-DCE

FIGURE

7C

APPENDIX S

Soil-Gas Monitoring Methods and Procedures

APPENDIX S

S-G Monitoring Table of Contents

S. SOIL GAS MONITORING PROCEDURES

The following sections detail the methods and procedures that will be followed to monitor soil gas during the site remediation period.

S.1 Field Activities

Prior to installation of soil-gas probe points, all necessary permits and utility clearance(s) will be obtained. All work will be performed or supervised by a California Professional Geologist, in accordance with the Business and Professions Code, Chapters 7 and 12.5, and the California Code of Regulations, Title 16, Chapters 5 and 29. E_2C will make raw data available to California Regional Water Quality Control Board – Lahontan Region, South Lake Tahoe Branch (CRWQCB) staff, as requested. E_2C will accommodate adjustments, or modifications to the sampling program, mandated by evaluation of the data set or unforeseen site conditions, if required by the Regional Water Quality Control Board (CRWQCB) staff. Investigative-derived wastes (IDWs) will be handled and disposed in accordance with federal, state and local requirements.

To expedite the completion of field activities and to avoid potential project delays, contingencies have been proposed in the Interim Remedial Action Workplan (IRAWP) (e.g., soil matrix samples will also be collected if clayey soils [as defined in the Unified Soil Classification System (USCS)] are encountered during the proposed soil-gas investigation). The CRWQCB field staff will be informed of any problems, unforeseen site conditions, or deviations from the approved IRAWP. When it becomes necessary to implement modifications to the approved IRAWP, the CRWQCB will be notified and a verbal approval will be obtained before implementing changes.

S.2 Soil-Gas Investigation Reports

Soil-gas monitoring data, including a discussion of field operations, deviations from the approved Workplan, data inconsistencies, and other significant operational details will be documented in the status reports. Each status report will contain soil-gas isoconcentration plots for constituents of concern (COCs) at a scale of 1 inch = 30 feet and summary tables for analytical data [in micrograms per liter (μg/L)], in accordance with the Active Soil Gas Investigation (ASGI) guidance (LARWQCB, 1997). E_2C will also provide legible copies of field and laboratory notes or logs, all analytical results and Quality Assurance/Quality Control (QA/QC) information, including tables and explanations of procedures, results, corrective actions and effect on the data.

S.3 Soil-Gas Vapor Monitoring Well Installation

S.3.a Additional Soil and Lithologic Investigations

Site soil and lithologic information will be obtained by collecting undisturbed soil samples from soil-gas sampling point VP-5. The soil samples will be collected with a slide-hammer in two (2) inch diameter brass liners from depths of two (2) and four (4) feet bgs. The samples will be submitted for physical parameter testing, which includes gradation, effective permeability, porosity, soil moisture, total organic carbon, and soil density. The results of the parameter testing will provide accurate soil input parameters to be used in an indoor air intrusion risk model. The results of the indoor air intrusion risk modeling will be presented in status reports under soil gas sections.

Low-flow or no-flow conditions (e.g., fine-grained soil, clay, soil with vacuum readings that exceed approximately ten (10) inches of mercury or 136 inches of water) are not expected to be encountered; however, if low-flow or no-flow conditions are encountered, soil matrix sampling using EPA Method 5035A will be conducted in those specific areas.

S.3.b Soil-Gas Vapor Monitoring Well Spacing

Refer to Figure 5 for a scaled site plan depicting proposed VP well locations. VP well spacing has been selected to provide soil vapor monitoring biased to optimize detecting and delineating volatile organic compounds (VOCs) in areas of occupied by humans (e.g., buildings) and monitor and assess the effectiveness of the soil vapor extraction (SVE) system on VOC-affected vadose zone soils. Based on these criteria E_2C will install five (5) VP wells (VP-1 through VP-5).

S.3.c VP Well Depth

All VP wells will be installed to a depth of approximately five (5) feet below ground surface (bgs).

S.3.d VP Well Installation Procedure

E_2C personnel will use a Bobcat with a four (4) inch diameter auger attachment to advance a boring to the design depth of approximately 5.0 feet below ground surface (bgs). If an asphalt or concrete surface is present, E_2C will utilize a coring machine to penetrate the surface material.

At the bottom of the boring, E_2C will emplace a one and one-half (1.5) inch vapor sampling screen in the center of a one-foot sand pack (#3 Lonestar sand or equivalent). 1/8 inch inside diameter Teflon® tubing will extend from the sampling screen to the surface. One (1) foot of dry granular bentonite will be emplaced on top of the sand pack to preclude the infiltration of hydrated bentonite grout. The borehole will then be grouted to approximately six (6) inches below the surface with hydrated bentonite. The surface completion will consist of a five (5) inch diameter, traffic-rated monitoring well box, set in concrete (See Figure 15).

E_2C field personnel will prepare detailed VP well installation boring logs, which will document the date and time of the installation activity, the depth of each VP well, the screen type and interval; material utilized, and surface completion details. VP well logs will be included in the subsequent status report.

S.4 Soil-Gas Monitoring Parameters

S.4.a Equilibration Time

Following the installation of the VP well, subsurface conditions will be disturbed. As delineated in the DTSC document, *Advisory – Active Soil Gas Investigations,* to allow subsurface conditions to equilibrate, the purge volume test, leak test, and soil-gas sampling will not be conducted for at least 48 hours following installation.

S.4.b Purge Volume

To ensure that stagnant or ambient air is removed from the sampling system and to assure samples collected are representative of subsurface conditions, E_2C will purge three (3) casing volumes from each VP well. Based on a well diameter of four (4) inches, a filter pack twelve (12) inches in height, and a porosity of 30%, E_2C estimates that one (1) casing volume will be approximately 200 milliliters. Therefore, three (3) casing volumes would equate to approximately 600 milliliters. At a purge rate of 200 ml/min, purging will be accomplished in approximately three (3) minutes. E_2C will use a purge pump, calibrated to pump 200 milliliters per minute. The purge pump will not be used for sampling purposes.

S.5 Leak Test

Leakage during soil gas sampling may dilute samples with ambient air and may produce results that underestimate actual site concentrations or contaminate the sample with external contaminants. Leak tests will be conducted to determine whether leakage is present (e.g., the leak check compound is detected and confirmed in the test sample after its application).

S.5.a Leak Test Frequency

Leak tests will be conducted at every SGA well location.

S.5.b Leak Check Compounds

The tracer compound tetrafluoroethane will be used as leak check compounds, if a detection limit (DL) of 10 μg/L or less can be achieved.

S.5.c Leak Test Protocol

The leak check compound (tetrafluoroethane) will be enclosed within a tent-type structure at each potential leak point to keep the potential leak areas at saturated concentrations throughout the test.

S.5.d Leak Test Analytical

The chemical analysis of the soil-gas sample will include an analysis for the leak check compound. If a leak check compound is detected in the sample, the cause of the leak will be evaluated, determined and corrected through confirmation sampling. If the leak check compound is suspected or detected as a site-specific contaminant, a new leak check compound will be used.

S.6 Purge/Sample Flow Rate

The sampling and purging flow rate of 100 ml/min to 200 ml/min was selected to minimize compound partitioning during soil-gas sampling. Samples will not be collected if field conditions, such as rainfall, irrigation, fine grained sediments, or drilling conditions affect the ability to collect soil-gas samples. If no-flow or low-flow conditions are caused by wet soils, the soil gas sampling will cease. In addition, the soil-gas sampling will not be conducted during or immediately after a significant rain event (e.g., 1/2 inch or greater), or onsite watering.

If low flow conditions are determined to be from a specific lithology, a new SGA well will be installed at a new lateral location selected after evaluation of the site lithologic logs and/or in consultation with the CRWQCB. If moisture or unknown material is observed, installation of the VP well will cease until the cause of the problem is identified and corrected. If refusal occurs during drilling, an alternate, nearby VP well location will be selected.

S.6.a No-Flow/Low-Flow Rates

The purging or sampling flow rate of 100 ml/min to 200 ml/min is expected to be

attainable in the lithology adjacent to the VP well. To evaluate lithologic conditions adjacent to the VP well where no-flow or low-flow conditions are encountered, a vacuum gauge or similar device will be used between the soil-gas sample tubing and the soil-gas extraction devices. A gas tight syringe may also be used to qualitatively determine if a high vacuum soil condition exists, which is based on whether suction is felt while the plunger is being withdrawn.

S.6.b Purging/Sampling Rates

E_2C will conduct purging/sampling at rates between 100 to 200 ml/min to limit stripping, prevent ambient air from diluting the soil-gas samples, and to reduce the variability of purging rates. The low flow purge rate increases the likelihood that representative samples may be collected. The purge/sample rate may be modified based on conditions encountered in individual VP wells. Modified rates will be documented in the report of findings.

S.7 Soil Gas Sampling Protocol

After the VP well is adequately purged, a soil-gas sample will be collected. A Summa canister equipped with a flow restrictor will be used at each location. A flow regulator will be placed between the probe and the Summa canister to ensure the canister is filled at the proper flow rate. Summa canisters will be stored in such a way as to avoid exposure to sunlight, and the samples will be analyzed within the prescribed hold time.

S.7.a Sample Container Cleanliness and Decontamination

Prior to its use at a site, each sample container will be assured clean by the analytical laboratory. New containers will be determined to be free of contaminants (e.g., lubricants) by either the supplier or the analytical laboratory; and the effectiveness of decontamination (and to detect any possible interference from ambient air) of reused/recycled containers will be verified with method blanks. After each use, reusable sample containers will be properly decontaminated. Glass syringes or bulbs will be disassembled and baked at 240° C for a minimum of 15 minutes or at 120° C for a minimum of 30 minutes, or be decontaminated by an equivalent method. Plastic syringes, if used, will be used only once and then properly discarded.

E_2C personnel will connect new Teflon® tubing to the top of the existing VP well tubing, and will utilize a 60 cubic centimeter (cc) syringe and a 3-way valve to purge the previously determined purge volume. The purge volume will be calculated based on one (1) cc/ft for 1/8" outside diameter (OD) tubing and five (5) cc/ft for ¼" OD tubing.

The leak compound will be placed in tent-type structures at the connections on the sampling train, using a paper towel moistened with the leak compound wrapped with plastic sheeting taped tightly at each end to seal the structure. The sampling procedure will then commence as detailed above.

S.7.b Documentation of VP Well Sampling Protocol

E_2C personnel will document the VP well sampling, and will include the sample identification, the probe location, date and time of sample collection, sampling depth, identity of on-Site personnel, weather conditions, sampling methods and devices, soil-gas purge volumes, volume of soil gas extracted, vacuum of canisters before and after samples are collected, chain of custody protocols.

S.7.c Chain of Custody Records

A chain of custody form will be completed to maintain the custodial integrity of samples. Probe installation times and sample collection times will be included on the chain of custody form, and in the report of findings.

S.8 Analysis of Soil-Gas Samples

S.8.a Quality Assurance/Quality Control (QA/QC)

The soil-gas analytical laboratory will comply with the project Quality Assurance Project Plan (QAPP) and will follow the QA/QC requirements of the most current ASGI and the employed EPA Method. If there is any inconsistency between the ASGI and the EPA Method, the most restrictive and specific requirements will prevail. The analytical data will be consistent with the Data Quality Objectives (DQOs) established for the project. Field QC samples will be collected, stored, transported and analyzed in a manner consistent with site samples.

QA/QC samples will be collected to support the sampling activity. Method blanks will be used to verify the effectiveness of decontamination procedures, as specified above, and to detect any possible interference from ambient air. For off-site shipments, a minimum of one (1) trip blank per day will be collected and analyzed for the target compounds. Trip blanks will contain laboratory grade ultra pure air. The trip blanks will be prepared to evaluate if the shipping and handling procedures are introducing contaminants into the samples, and to determine if cross contamination in the form of VOC migration has occurred between the collected VOC samples. Trip blank containers and media will be the same as site samples. At least one (1) duplicate sample per laboratory per day will be collected. Duplicate samples will be collected from areas of concern in separate sample containers, at the same location and depth. Duplicate samples will be collected immediately after the original sample. Laboratory control samples (LCS) and dilution procedure duplicates (DPD) will handled and analyzed in accordance with the most recent ASGI. E_2C will be prepared to collect split samples (for analysis by another laboratory) with the CRWQCB, if requested.

S.8.b Laboratory Certification and Analysis

E_2C will have the samples analyzed by EPA Method 8260b at a certified analytical laboratory.

S.8.c Detection Limits for Target Compounds

Analytical equipment calibration will be in accordance with the most current ASGI. Detection limits will be such that the Environmental Screening Levels (Soil Gas Screening Levels) (CCRWQCB, 2008) for evaluation of potential vapor intrusion into indoor air allow will be met, as follows:

CHEMICAL	**Vapor Screening ESL's**		
	Micrograms per cubic meter (µg/m$^{3)}$	Parts per billion – volume (ppbV)	Micrograms per liter (µg/L)
PCE	1.4E+03	206.54	1.400
TCE	4.1E+03	0.74481	0.0040

Cis-1,2-DCE	2.0E+04	3.0285+04	120.00
VC	1.0E+02	39.144	0.1000

The DL for leak check compounds will be 10 μg/L or less. For results with a high DL reported (e.g., due to matrix interference or dilution), the laboratory will provide a written explanation. Re-sampling and analyses will be conducted at the appropriate DL for a specific compound if requested by CRWQCB staff.

S.8.d Sample Handling

Exposure to light and changes in temperature and pressure will accelerate sample degradation. To protect sample integrity soil-gas samples will not be chilled, will not be subjected to changes in ambient pressure, and shipping of sample containers by air will be avoided, if possible. If condensation is observed in the sample container, the sample will be discarded and a new sample will be collected.

S.8.e Holding Time

All soil gas samples will be collected in Summa canisters and will be analyzed at ProVera Analytical Laboratories, Inc. (State Certification #2606) in Bakersfield, California within 48 hours after collection.

S.8.f Analytical Methods

All VOC samples will be analyzed using only a Gas Chromatograph/Mass Spectrometer (GC/MS) by EPA Method 8260b, or equivalent.

S.8.g Target Compounds

The ASGI (dated February 25, 1997) includes twenty-three (23) primary and four (4) other target VOCs. All quantifiable results will be reported. The estimated results of all Tentatively Identified Compounds (TICs), or non-AGSI-targeted compounds detected, will be included in the status reports. If TICs, or non-ASGI targeted compounds are identified, E_2C will consult with the CRWQCB to determine whether additional action is required (e.g., running additional standards to quantify TICs, or non-ASGI compounds) and whether the use of these estimated data for risk evaluation is appropriate. All quantifiable results of Leak Check Compounds will be reported as specified in above.

APPENDIX T

Pilot Test Field Data

LAKE TAHOE LAUNDRY WORKS

TEST # 1

DATE 4/6/10 START TIME 2:45 pm STOP TIME 4:10 pm

WELL CONFIG		OPEN / CLOSED	
VE-1 S / D	C	VE-15 S / D	C
VE-2 S / D	C	VE-16 S / D	C
VE-3 S / D	C	VE-17 S / D	C
VE-4 S / D	C	VE-18 S / D	C
VE-5 S / D	C	VE-19 S / D	C
VE-6 S / D	C	VE-20 S / D	C
VE-7 S / D	C	HVE-1	O
VE-8 S / D	C	HVE-2	O
VE-9 S / D	C	HVE-3	O
VE-10 S / D	C	HVE-4	C
VE-11 S / D	C	HVE-5	C
VE-12 S / D	C	HVE-6	C
VE-13 S / D	C	~~HVE-7~~	N/A
VE-14 S / D	C		

AS	PSI	SCFM	AS	PSI	SCFM
AS-1			AS-15		
AS-2			AS-16		
AS-3			AS-17		
AS-4			AS-18		
AS-5			AS-19		
AS-6			AS-20		
AS-7			AS-21		
AS-8			AS-22		
AS-9			AS-23		
AS-10			AS-24		
AS-11			AS-25		
AS-12			AS-26		
AS-13			AS-27		
AS-14					

N A

% DILUTION = 0
TURNS OF RECIRC = 0
MACHINE VACUUM = 9.5 ~ "Hg
MACHINE FLOW = 530 ~ SCFM

WELL VACUUM
(from manifold gauge)

VE-1 S / D		VE-15 S / D	
VE-2 S / D		VE-16 S / D	
VE-3 S / D		VE-17 S / D	
VE-4 S / D		VE-18 S / D	
VE-5 S / D		VE-19 S / D	
VE-6 S / D		VE-20 S / D	
VE-7 S / D		HVE-1	
VE-8 S / D		HVE-2	
VE-9 S / D		HVE-3	
VE-10 S / D		HVE-4	
VE-11 S / D		HVE-5	
VE-12 S / D		HVE-6	
VE-13 S / D		~~HVE-7~~	N/A
VE-14 S / D			

WELL FLOW SCFM

VE-1S		VE-11S	
VE-2S		VE-12S	
VE-3S		VE-13S	
VE-4S		VE-14S	
VE-5S		VE-15S	
VE-6S		VE-16S	
VE-7S		VE-17S	
VE-8S		VE-18S	
VE-9S		VE-19S	
VE-10S		VE-20S	

VACUUM INFLUENCE = inches of H2O

VE-1 S / D	0/0.3	VE-15 S / D	0.01/0.015
VE-2 S / D	1.4/1.55	VE-16 S / D	0.03/0.03
VE-3 S / D	2.7/1.5	VE-17 S / D	0.50/0.55
VE-4 S / D	1.35/1.25	VE-18 S / D	4.9/5.0
VE-5 S / D	0.35/0.35	VE-19 S / D	+0.35/6.1
VE-6 S / D	0.15/0	VE-20 S / D	2.3/0.45
VE-7 S / D	0/0	HVE-1	—
VE-8 S / D	0/0	HVE-2	—
VE-9 S / D	0/0	HVE-3	—
VE-10 S / D	.01/.03	HVE-4	0.14
VE-11 S / D	0.10/0.085	HVE-5	1.25
VE-12 S / D	0.16/0.5	HVE-6	1.20
VE-13 S / D	0.6/.75	~~HVE-7~~	—
VE-14 S / D	0.01/0.01		

VACUUM INFLUENCE MW-1D 0.46

LW-MW-1S	0.33	VP-1	1.90
LW-MW-2S	+0.01	VP-2	2.9
LW-MW-5S	0/0	VP-3	0
LW-MW-9S	1.90	? VP-4	
LW-MW-10S	2.90	VP-5	22.5
LW-MW-11S	+0.04	VP-6	10.4
LW-MW-12S	0.75	VP-7	0.65
LW-MW-13S	0	VP-8	0
		VP-9	2.7
		VP-10	0

MW-2D + 0.06

NOTES:

* #'s w/ out (-) are vacuum

FID/PID READING

Influent	51 – climbed to 65 after 20 min	ppmv	Oxygen %	20.5
Midfluent	0	ppmv	Oxygen %	20.4
Effluent	0	ppmv	Oxygen %	20.4

BAG SAMPLE YES [✓ NO]

LAKE TAHOE LAUNDRY WORKS

TEST # 2

DATE 4/6/10 **START TIME** 4:15 pm **STOP TIME** 5:30 pm

WELL CONFIG		**OPEN / CLOSED**	
VE-1 S / D	C	VE-15 S / D	C
VE-2 S / D	C	VE-16 S / D	C
VE-3 S / D	C	VE-17 S / D	C
VE-4 S / D	C	VE-18 S / D	C
VE-5 S / D	C	VE-19 S / D	C
VE-6 S / D	C	VE-20 S / D	C
VE-7 S / D	C	HVE-1	O
VE-8 S / D	C	HVE-2	O
VE-9 S / D	C	HVE-3	O
VE-10 S / D	C	HVE-4	O
VE-11 S / D	C	HVE-5	O
VE-12 S / D	C	HVE-6	O
VE-13 S / D	C	HVE-7	N/A
VE-14 S / D	C		

AS	**PSI**	**SCFM**	**AS**	**PSI**	**SCFM**
AS-1			AS-15		
AS-2			AS-16		
AS-3			AS-17		
AS-4			AS-18		
AS-5			AS-19		
AS-6			AS-20		
AS-7			AS-21		
AS-8			AS-22		
AS-9			AS-23		
AS-10			AS-24		
AS-11			AS-25		
AS-12			AS-26		
AS-13			AS-27		
AS-14					

NA

% DILUTION = 0
TURNS OF RECIRC = 0
MACHINE VACUUM = 8.2 **"Hg**
MACHINE FLOW = 575 **SCFM**

WELL VACUUM
(from manifold gauge)

VE-1 S / D		VE-15 S / D	
VE-2 S / D		VE-16 S / D	
VE-3 S / D		VE-17 S / D	
VE-4 S / D		VE-18 S / D	
VE-5 S / D		VE-19 S / D	
VE-6 S / D		VE-20 S / D	
VE-7 S / D		HVE-1	
VE-8 S / D		HVE-2	
VE-9 S / D		HVE-3	
VE-10 S / D		HVE-4	
VE-11 S / D		HVE-5	
VE-12 S / D		HVE-6	
VE-13 S / D		HVE-7	
VE-14 S / D			

WELL FLOW **SCFM**

VE-1S		VE-11S	
VE-2S		VE-12S	
VE-3S		VE-13S	
VE-4S		VE-14S	
VE-5S		VE-15S	
VE-6S		VE-16S	
VE-7S		VE-17S	
VE-8S		VE-18S	
VE-9S		VE-19S	
VE-10S		VE-20S	

VACUUM INFLUENCE = inches of H2O

VE-1 S / D	41.0 / .95	VE-15 S / D	.005 / 0
VE-2 S / D	74.9 / 1.05	VE-16 S / D	.025 / .025
VE-3 S / D	.01 / 1.60	VE-17 S / D	.55 / .55
VE-4 S / D	1.25 / 1.1	VE-18 S / D	4.3 / 4.4
VE-5 S / D	.15 / .15	VE-19 S / D	+1.30 / 3.7
VE-6 S / D	.075 / 0	VE-20 S / D	2.8 / 1.55
VE-7 S / D	+.005 / .005	HVE-1	—
VE-8 S / D	+.005 / +.01	HVE-2	—
VE-9 S / D	.005 / +.045	HVE-3	—
VE-10 S / D	.005 / +0.07	HVE-4	—
VE-11 S / D	.075 / .07	HVE-5	—
VE-12 S / D	.145 / .45	HVE-6	—
VE-13 S / D	1.30 /	[redacted]	
VE-14 S / D	+.005 / +.005		

VACUUM INFLUENCE

LW-MW-10 +0.02

LW-MW-1S	+0.015	VP-1	1.80
LW-MW-2S	0	VP-2	34.4
LW-MW-5S	+0.20	VP-3	0
LW-MW-9S	2.2	VP-4	—
LW-MW-10S	2.4	VP-5	20.6
LW-MW-11S	0.08	VP-6	8.6
LW-MW-12S	0.85	VP-7	.55
LW-MW-13S	.035	VP-8	0
		VP-9	2.2
		VP-10	+ Blip

LW-MW-5D - +0.025
LW-MW-2D - +0.015

NOTES:

* #'s w/out (+) are vacuum

FID/PID READING

Influent	85	ppmv	Oxygen %	20.4%
Midfluent	0	ppmv	Oxygen %	20.4%
Effluent	0	ppmv	Oxygen %	20.4%

BAG SAMPLE YES [✓ NO]

LAKE TAHOE LAUNDRY WORKS

TEST # 3

DATE 4-7-10 **START TIME** 10:40 am **STOP TIME** 12:05

WELL CONFIG	**OPEN / CLOSED**		
VE-1 S / D	O	VE-15 S / D	C
VE-2 S / D	O	VE-16 S / D	C
VE-3 S / D	O	VE-17 S / D	C
VE-4 S / D	O	VE-18 S / D	O
VE-5 S / D	C	VE-19 S / D	O
VE-6 S / D	C	VE-20 S / D	O
VE-7 S / D	C	HVE-1	C
VE-8 S / D	C	HVE-2	C
VE-9 S / D	C	HVE-3	C
VE-10 S / D	C	HVE-4	C
VE-11 S / D	C	HVE-5	C
VE-12 S / D	O	HVE-6	C
VE-13 S / D	O	HVE-7	N/A
VE-14 S / D	C		

AS	**PSI**	**SCFM**
AS-1		
AS-2		
AS-3		
AS-4		
AS-5		
AS-6		
AS-7		
AS-8		
AS-9		
AS-10		
AS-11		
AS-12		
AS-13		
AS-14		

N

AS	**PSI**	**SCFM**
AS-15		
AS-16		
AS-17		
AS-18		
AS-19		
AS-20		
AS-21		
AS-22		
AS-23		
AS-24		
AS-25		
AS-26		
AS-27		

A

% DILUTION = 0
TURNS OF RECIRC = 0
MACHINE VACUUM = 7.5 → 8.5 HG "Hg
MACHINE FLOW = 560 CFM SCFM

WELL VACUUM = inches of H2O
(from manifold gauge)

VE-1 S / D	—	VE-15 S / D	.045/.04
VE-2 S / D	—	VE-16 S / D	.09/.10
VE-3 S / D	—	VE-17 S / D	2.0/1.7
VE-4 S / D	—	VE-18 S / D	—
VE-5 S / D	.70/+.005	VE-19 S / D	—
VE-6 S / D	.07/0	VE-20 S / D	—
VE-7 S / D	.005/.005	HVE-1	3.0
VE-8 S / D	0/0	HVE-2	5.2
VE-9 S / D	.01/+.06	HVE-3	5.5
VE-10 S / D	.09/+.065	HVE-4	30.0
VE-11 S / D	2.5/2.6	HVE-5	53.1
VE-12 S / D	—	HVE-6	51.0
VE-13 S / D	—	HVE-7	N/A
VE-14 S / D	.005/.005		

WELL FLOW **SCFM**

VE-1S		VE-11S	
VE-2S		VE-12S	
VE-3S		VE-13S	
VE-4S		VE-14S	
VE-5S		VE-15S	
VE-6S		VE-16S	
VE-7S		VE-17S	
VE-8S		VE-18S	
VE-9S		VE-19S	
VE-10S		VE-20S	

VACUUM INFLUENCE = inches of H2O

VE-1 S / D		VE-15 S / D	
VE-2 S / D		VE-16 S / D	
VE-3 S / D		VE-17 S / D	
VE-4 S / D		VE-18 S / D	
VE-5 S / D		VE-19 S / D	
VE-6 S / D		VE-20 S / D	
VE-7 S / D		HVE-1	
VE-8 S / D		HVE-2	
VE-9 S / D		HVE-3	
VE-10 S / D		HVE-4	
VE-11 S / D		HVE-5	
VE-12 S / D		HVE-6	
VE-13 S / D		HVE-7	
VE-14 S / D			

VACUUM INFLUENCE

LW-MW-1D	+0.06		
LW-MW-1S	0.0	VP-1	0.37
LW-MW-2S	+.005/2D +.02	VP-2	18.0
LW-MW-5S	0.20/5D 0.15	VP-3	+0.005
LW-MW-9S	28.3	VP-4	11.7
LW-MW-10S	5.0	VP-5	3.2
LW-MW-11S	0.45	VP-6	11.3
LW-MW-12S	22.7	VP-7	9.5
LW-MW-13S	+0.01	VP-8	16.9
		VP-9	9.0
		VP-10	.005

FID/PID READING

NOTES:

* #'s w/out (-) are vacuum

11:00	**Influent**	1450	ppmv	**Oxygen %**	20.4%
	Midfluent	0	ppmv	**Oxygen %**	20.4%
	Effluent	0	ppmv	**Oxygen %**	20.4%

BAG SAMPLE YES [✓ NO]

11:30a INF. - 825 ppm 20.3%

12:00p - 85 ppm 20.0%

LAKE TAHOE LAUNDRY WORKS

TEST # 4

DATE 4/7/10 START TIME 2:05 pm STOP TIME 3:20

WELL CONFIG	OPEN / CLOSED		OPEN / CLOSED
VE-1 S / D	C	VE-15 S / D	O / C
VE-2 S / D	C	VE-16 S / D	O / C
VE-3 S / D	C	VE-17 S / D	O / C
VE-4 S / D	C	VE-18 S / D	C
VE-5 S / D	O / c	VE-19 S / D	C
VE-6 S / D	O / C	VE-20 S / D	C
VE-7 S / D	C	HVE-1	C
VE-8 S / D	O / C	HVE-2	C
VE-9 S / D	O / C	HVE-3	C
VE-10 S / D	O / C	HVE-4	C
VE-11 S / D	O / C	HVE-5	C
VE-12 S / D	C	HVE-6	C
VE-13 S / D	C	HVE-7	C
VE-14 S / D	O / C		

AS	PSI	SCFM	AS	PSI	SCFM
AS-1			AS-15		
AS-2			AS-16		
AS-3			AS-17		
AS-4			AS-18		
AS-5			AS-19		
AS-6			AS-20		
AS-7			AS-21		
AS-8			AS-22		
AS-9			AS-23		
AS-10			AS-24		
AS-11			AS-25		
AS-12			AS-26		
AS-13			AS-27		
AS-14					

NA

% DILUTION = 0
TURNS OF RECIRC = 0
MACHINE VACUUM = 5.6 "Hg
MACHINE FLOW = 610 SCFM

WELL VACUUM
(from manifold gauge)

VE-1 S / D		VE-15 S / D	
VE-2 S / D		VE-16 S / D	
VE-3 S / D		VE-17 S / D	
VE-4 S / D		VE-18 S / D	
VE-5 S / D		VE-19 S / D	
VE-6 S / D		VE-20 S / D	
VE-7 S / D		HVE-1	
VE-8 S / D		HVE-2	
VE-9 S / D		HVE-3	
VE-10 S / D		HVE-4	
VE-11 S / D		HVE-5	
VE-12 S / D		HVE-6	
VE-13 S / D		HVE-7	
VE-14 S / D			

WELL FLOW	SCFM		
VE-1S		VE-11S	
VE-2S		VE-12S	
VE-3S		VE-13S	
VE-4S		VE-14S	
VE-5S		VE-15S	
VE-6S		VE-16S	
VE-7S		VE-17S	
VE-8S		VE-18S	
VE-9S		VE-19S	
VE-10S		VE-20S	

VACUUM INFLUENCE = inches of H2O

VE-1 S / D	0 / 0	VE-15 S / D	− / 9.9
VE-2 S / D	.09 / .60	VE-16 S / D	− / 9.4
VE-3 S / D	.075 / .35	VE-17 S / D	− / .80
VE-4 S / D	.44 / .48	VE-18 S / D	.13 / .13
VE-5 S / D	− / 16.0	VE-19 S / D	.04 / .005
VE-6 S / D	− / 15.5	VE-20 S / D	0 / .005
VE-7 S / D	− / 16.6	HVE-1	+ .025
VE-8 S / D	− / 11.0	HVE-2	.045
VE-9 S / D	− / 9.0	HVE-3	.05
VE-10 S / D	− / 8.2	HVE-4	.15
VE-11 S / D	− / 1.15	HVE-5	.10
VE-12 S / D	.40 / .14	HVE-6	.095
VE-13 S / D	.005 / .22	HVE-7	
VE-14 S / D	/ 15.9		

VACUUM INFLUENCE

LW-MW-4D	.065		
LW-MW-1S	.015	VP-1	+0.01
LW-MW-2S	0	VP-2	.005
LW-MW-5S	+0.50 / SD +.01	VP-3	+.005
LW-MW-9S	.17	VP-4	.005
LW-MW-10S	.01	VP-5	0.03
LW-MW-11S	3.7	VP-6	0.11
LW-MW-12S	.40	VP-7	0.20
LW-MW-13S	11.9	VP-8	0.44
LW-MW-20	0	VP-9	0.32
		VP-10	+.005

FID/PID READING

Influent	35	ppmv	Oxygen %	20.0%
Midfluent	0	ppmv	Oxygen %	20.0%
Effluent	0	ppmv	Oxygen %	20.0%

BAG SAMPLE YES [✓ NO]

NOTES:

* #'s w/out (-) are vacuum

LAKE TAHOE LAUNDRY WORKS

TEST # 5

DATE 4/7/10

START TIME 3:25 pm

STOP TIME 4:15 pm

WELL CONFIG	**OPEN / CLOSED**		
VE-1 S / D	C/C	VE-15 S / D	O/O
VE-2 S / D	C/C	VE-16 S / D	O/O
VE-3 S / D	C/C	VE-17 S / D	O/O
VE-4 S / D	C/O	VE-18 S / D	C/C
VE-5 S / D	O/O	VE-19 S / D	C/C
VE-6 S / D	O/O	VE-20 S / D	C/C
VE-7 S / D	O/O	HVE-1	C/C
VE-8 S / D	O/O	HVE-2	C/C
VE-9 S / D	O/O	HVE-3	C/C
VE-10 S / D	O/O	HVE-4	C/C
VE-11 S / D	O/O	HVE-5	C/C
VE-12 S / D	C/C	HVE-6	C/C
VE-13 S / D	C/C	~~HVE-7~~	
VE-14 S / D	O/O		

AS	PSI	SCFM	AS	PSI	SCFM
AS-1			AS-15		
AS-2			AS-16		
AS-3			AS-17		
AS-4			AS-18		
AS-5	N		AS-19	A	
AS-6			AS-20		
AS-7			AS-21		
AS-8			AS-22		
AS-9			AS-23		
AS-10			AS-24		
AS-11			AS-25		
AS-12			AS-26		
AS-13			AS-27		
AS-14					

% DILUTION = 0

TURNS OF RECIRC = 0

MACHINE VACUUM = 4.10 "Hg

MACHINE FLOW = 630 SCFM

WELL VACUUM
(from manifold gauge)

VE-1 S / D		VE-15 S / D	
VE-2 S / D		VE-16 S / D	
VE-3 S / D		VE-17 S / D	
VE-4 S / D		VE-18 S / D	
VE-5 S / D		VE-19 S / D	
VE-6 S / D		VE-20 S / D	
VE-7 S / D		HVE-1	
VE-8 S / D		HVE-2	
VE-9 S / D		HVE-3	
VE-10 S / D		HVE-4	
VE-11 S / D		HVE-5	
VE-12 S / D		HVE-6	
VE-13 S / D		HVE-7	
VE-14 S / D			

WELL FLOW SCFM

VE-1S		VE-11S	
VE-2S		VE-12S	
VE-3S		VE-13S	
VE-4S		VE-14S	
VE-5S		VE-15S	
VE-6S		VE-16S	
VE-7S		VE-17S	
VE-8S		VE-18S	
VE-9S		VE-19S	
VE-10S		VE-20S	

VACUUM INFLUENCE = inches of H20

VE-1 S / D	+.01/+.01	VE-15 S / D	
VE-2 S / D	.11/0.42	VE-16 S / D	
VE-3 S / D	.20/.45	VE-17 S / D	
VE-4 S / D	1.35/1.45	VE-18 S / D	0.27/0.27
VE-5 S / D		VE-19 S / D	.075/.005
VE-6 S / D		VE-20 S / D	+.005/.005
VE-7 S / D		HVE-1	+.06
VE-8 S / D		HVE-2	-.085
VE-9 S / D		HVE-3	-.09
VE-10 S / D		HVE-4	-0.195
VE-11 S / D		HVE-5	-0.12
VE-12 S / D	-1.9/.40	HVE-6	-0.12
VE-13 S / D	-.15/.22	~~HVE-7~~	
VE-14 S / D			

VACUUM INFLUENCE "H2O

LW-MW-1S	+0.03/+0.10	VP-1	+.001
LW-MW-2S	+0.03/+0.03	VP-2	+0.005
LW-MW-5S	+0.14/+0.08	VP-3	+0.005
LW-MW-9S	-0.49	VP-4	-0.11
LW-MW-10S	+0.01	VP-5	-.10
LW-MW-11S	-5.0	VP-6	-0.28
LW-MW-12S	-0.28	VP-7	-1.20
LW-MW-13S	-10.6	VP-8	-1.50
		VP-9	-0.65
		VP-10	-0.0

FIID/PID READING

Influent	20	ppmv	Oxygen %	20.2%
Midfluent	0	ppmv	Oxygen %	20.2%
Effluent		ppmv	Oxygen %	

BAG SAMPLE YES [✓ NO]

NOTES:

* #'s w/ out (-) are vacuum

LAKE TAHOE LAUNDRY WORKS

TEST # 6

DATE 4/7/10 START TIME 4:30 pm STOP TIME ______

WELL CONFIG		OPEN / CLOSED	
VE-1 S / D	c/c	VE-15 S / D	c/c
VE-2 S / D	c/c	VE-16 S / D	c/c
VE-3 S / D	c/c	VE-17 S / D	c/c
VE-4 S / D	c/c	VE-18 S / D	c/c
VE-5 S / D	c/c	VE-19 S / D	c/c
VE-6 S / D	c/c	VE-20 S / D	c/c
VE-7 S / D	c/c	HVE-1	O
VE-8 S / D	c/c	HVE-2	O
VE-9 S / D	c/c	HVE-3	O
VE-10 S / D	c/c	HVE-4	O
VE-11 S / D	c/c	HVE-5	O
VE-12 S / D	c/c	HVE-6	O
VE-13 S / D	c/c	~~HVE-7~~	N/A
VE-14 S / D	c/c		

AS	PSI	SCFM	AS	PSI	SCFM
AS-1			AS-15	OFF	
AS-2			AS-16	OFF	
AS-3			AS-17	OFF	
AS-4			AS-18	OFF	
AS-5			AS-19	OFF	
AS-6			AS-20	OFF	
AS-7			AS-21	OFF	
AS-8			AS-22	OFF	
AS-9			AS-23	OFF	
AS-10			AS-24	OFF	
AS-11	OFF		AS-25	OFF	
AS-12	OFF		AS-26		
AS-13	OFF		AS-27		
AS-14	OFF				

% DILUTION = 0
TURNS OF RECIRC = 0
MACHINE VACUUM = 9.4 "Hg
MACHINE FLOW = 565 SCFM

(SHUT DOWN DUE TO HIGH H^2O)

WELL VACUUM
(from manifold gauge)

VE-1 S / D		VE-15 S / D	
VE-2 S / D		VE-16 S / D	
VE-3 S / D		VE-17 S / D	
VE-4 S / D		VE-18 S / D	
VE-5 S / D		VE-19 S / D	
VE-6 S / D		VE-20 S / D	
VE-7 S / D		HVE-1	
VE-8 S / D		HVE-2	
VE-9 S / D		HVE-3	
VE-10 S / D		HVE-4	
VE-11 S / D		HVE-5	
VE-12 S / D		HVE-6	
VE-13 S / D		HVE-7	
VE-14 S / D			

WELL FLOW **SCFM**

VE-1S		VE-11S	
VE-2S		VE-12S	
VE-3S		VE-13S	
VE-4S		VE-14S	
VE-5S		VE-15S	
VE-6S		VE-16S	
VE-7S		VE-17S	
VE-8S		VE-18S	
VE-9S		VE-19S	
VE-10S		VE-20S	

VACUUM INFLUENCE

VE-1 S / D		VE-15 S / D	
VE-2 S / D		VE-16 S / D	
VE-3 S / D		VE-17 S / D	
VE-4 S / D		VE-18 S / D	
VE-5 S / D		VE-19 S / D	
VE-6 S / D		VE-20 S / D	
VE-7 S / D		HVE-1	
VE-8 S / D		HVE-2	
VE-9 S / D		HVE-3	
VE-10 S / D		HVE-4	
VE-11 S / D		HVE-5	
VE-12 S / D		HVE-6	
VE-13 S / D		HVE-7	
VE-14 S / D			

VACUUM INFLUENCE

LW-MW-1S		VP-1	
LW-MW-2S		VP-2	
LW-MW-5S		VP-3	
LW-MW-9S		VP-4	
LW-MW-10S		VP-5	
LW-MW-11S		VP-6	
LW-MW-12S		VP-7	
LW-MW-13S		VP-8	
		VP-9	
		VP-10	

FID/PID READING

Influent	81	ppmv	**Oxygen %**	19.9%
Midfluent		ppmv	**Oxygen %**	
Effluent		ppmv	**Oxygen %**	

BAG SAMPLE YES [✓ NO]

NOTES:

LAKE TAHOE LAUNDRY WORKS

TEST # 7

DATE 4/8/10 **START TIME** 9:45 AM **STOP TIME** ______

WELL CONFIG **OPEN / CLOSED**

VE-1 S / D O/C
VE-2 S / D O/C
VE-3 S / D O/C
VE-4 S / D O/C
VE-5 S / D O/C
VE-6 S / D O/C
VE-7 S / D O/C
VE-8 S / D O/C
VE-9 S / D O/C
VE-10 S / D O/C
VE-11 S / D O/C
VE-12 S / D O/C
VE-13 S / D O/C
VE-14 S / D O/C
VE-15 S / D O /C
VE-16 S / D O /C
VE-17 S / D O /C
VE-18 S / D O /C
VE-19 S / D O /C
VE-20 S / D O /C
HVE-1 O
HVE-2 O
HVE-3 O
HVE-4 O
HVE-5 O
HVE-6 O
HVE-7 N/A

AS	PSI	SCFM	AS	PSI	SCFM
AS-1			AS-15		
AS-2			AS-16		
AS-3			AS-17		
AS-4			AS-18		
AS-5			AS-19		
AS-6			AS-20		
AS-7			AS-21		
AS-8			AS-22		
AS-9			AS-23		
AS-10			AS-24		
AS-11			AS-25		
AS-12			AS-26		
AS-13			AS-27		
AS-14					

NA

% DILUTION = 0
TURNS OF RECIRC = 0
MACHINE VACUUM = 4.0 "Hg
MACHINE FLOW = 625 SCFM

INFLUENT	TIME
50/20.4%	9:50 AM
48/20.5%	10:00 AM
28/20.3%	10:30 AM
44/20.2%	2:10 PM *

WELL VACUUM = INCHES OF Hg
(from manifold gauge)

VE-1 S / D -2.42/X
VE-2 S / D -2.43/X
VE-3 S / D -2.43/X
VE-4 S / D -2.50/X
VE-5 S / D -2.53/X
VE-6 S / D -2.37/X
VE-7 S / D -2.40/X
VE-8 S / D -2.40/X
VE-9 S / D -2.40/X
VE-10 S / D -2.37/X
VE-11 S / D -2.40/X
VE-12 S / D -2.43/X
VE-13 S / D -2.40/X
VE-14 S / D -2.50/X
VE-15 S / D -2.50/X
VE-16 S / D -2.50/X
VE-17 S / D -2.50/X
VE-18 S / D -2.55/X
VE-19 S / D -2.56/X
VE-20 S / D -2.43/X
HVE-1 -2.55
HVE-2 -2.43
HVE-3 -2.43
HVE-4 -2.50
HVE-5 -2.50
HVE-6 -2.52
HVE-7 ______

X = WELLS THAT ARE CLOSED

WELL FLOW **SCFM**

VE-1S		VE-11S	
VE-2S		VE-12S	
VE-3S		VE-13S	
VE-4S		VE-14S	
VE-5S		VE-15S	
VE-6S		VE-16S	
VE-7S		VE-17S	
VE-8S		VE-18S	
VE-9S		VE-19S	
VE-10S		VE-20S	

VACUUM INFLUENCE = INCHES OF H²O

VE-1 S / D X /-.01
VE-2 S / D X /-1.75
VE-3 S / D X /-2.8
VE-4 S / D X /-6.8
VE-5 S / D X /-8.2
VE-6 S / D X /-.32
VE-7 S / D X /-9.3
VE-8 S / D X /-7.2
VE-9 S / D X /-6.1
VE-10 S / D X /-5.5
VE-11 S / D X /-1.9
VE-12 S / D X /-2.6
VE-13 S / D X /-2.2
VE-14 S / D X /-10.0
VE-15 S / D X /-5.7
VE-16 S / D X /-5.4
VE-17 S / D X /-1.7
VE-18 S / D X /-7.4
VE-19 S / D X /-3.3
VE-20 S / D X /-.22
HVE-1 X
HVE-2 X
HVE-3 X
HVE-4 X
HVE-5 X
HVE-6 X
HVE-7 X

X = WELLS THAT ARE OPEN

VACUUM INFLUENCE = INCHES OF H²O

LW-MW-1S +.03/+.05
LW-MW-2S +.025/+.01
LW-MW-5S +.025/+.02
LW-MW-9S -2.6
LW-MW-10S -1.50
LW-MW-11S -2.2
LW-MW-12S -1.15
LW-MW-13S -7.1
VP-1 0
VP-2 -13.6
VP-3 +.005
VP-4 -6.0
VP-5 -7.1
VP-6 -6.3
VP-7 -3.9
VP-8 -7.0
VP-9 -3.6
VP-10 +.005

NOTES:

FID/PID READING

Influent ______ ppmv Oxygen % ______
Midfluent ______ ppmv Oxygen % ______
Effluent ______ ppmv Oxygen % ______

BAG SAMPLE YES / NO

* - AFTER WELL FIELD ADJUSTMENT

LAKE TAHOE LAUNDRY WORKS

TEST # 8

DATE 4-8-10 START TIME 2:35 STOP TIME 4:00

WELL CONFIG	OPEN / CLOSED			AS	PSI	SCFM	AS	PSI	SCFM
VE-1 S / D	O/C	VE-15 S / D	O/C	AS-1	9.5	1.0	AS-15	9.5	3.5
VE-2 S / D	O/C	VE-16 S / D	O/C	AS-2	9.5	11.0	AS-16	8.0	1.0
VE-3 S / D	O/C	VE-17 S / D	O/C	AS-3	8	2.0	AS-17	7.0	1.0
VE-4 S / D	O/C	VE-18 S / D	O/C	AS-4	0	3.0	AS-18	9.0	1.0
VE-5 S / D	O/C	VE-19 S / D	O/C	AS-5	9.0	4.5	AS-19	10.0	1.0
VE-6 S / D	O/C	VE-20 S / D	O/C	AS-6	8.5	1.0	AS-20	10.0	2.0
VE-7 S / D	O/C	HVE-1	8	AS-7	11.0	1.0	AS-21	9.5	2.0
VE-8 S / D	O/C	HVE-2	8	AS-8	8.5	1.0	AS-22	14.0	13.0
VE-9 S / D	O/C	HVE-3	O	AS-9	9	1.0	AS-23	8.0	1.0
VE-10 S / D	O/C	HVE-4	8	AS-10	10.5	1.0	AS-24	10.0	2.0
VE-11 S / D	O/C	HVE-5	8	AS-11	9.5	1.5	AS-25	10.5	1.0
VE-12 S / D	O/C	HVE-6	8	AS-12	9.0	1.0	AS-26	8.0	5.0
VE-13 S / D	O/C	HVE-7		AS-13	9.0	1.0	AS-27	7.0	1.5
VE-14 S / D	O/C			AS-14	4.0	1.0			

COMPRESSOR PRESURE SET AT 15 PSI

% DILUTION = 0
TURNS OF RECIRC = 0
MACHINE VACUUM = 4.00 "Hg
MACHINE FLOW = 630 SCFM

2.75 in Hg @ manifold
4.0 in Hg @ machine

WELL VACUUM = INCHES OF H_2O
(from manifold gauge)

VE-1 S / D		VE-15 S / D	
VE-2 S / D		VE-16 S / D	
VE-3 S / D		VE-17 S / D	
VE-4 S / D		VE-18 S / D	
VE-5 S / D		VE-19 S / D	
VE-6 S / D		VE-20 S / D	
VE-7 S / D		HVE-1	
VE-8 S / D		HVE-2	
VE-9 S / D		HVE-3	
VE-10 S / D		HVE-4	
VE-11 S / D		HVE-5	
VE-12 S / D		HVE-6	
VE-13 S / D		HVE-7	
VE-14 S / D			

WELL FLOW SCFM

VE-1S	43.0	VE-11S	17.7
VE-2S	15.2	VE-12S	43.9
VE-3S	15.2	VE-13S	15.2
VE-4S	32.8	VE-14S	100.0
VE-5S	21.5	VE-15S	15.2
VE-6S	73.4	VE-16S	27.7
VE-7S	41.1	VE-17S	12.4
VE-8S	62.0	VE-18S	31.6
VE-9S	39.2	VE-19S	12.4
VE-10S	41.4	VE-20S	8.8

H-5 - 8.8
H-3 - 44.7
H-2 - 62.0
H-4 - 62.0
H-1 - 124.0
H-6 - 8.8

VACUUM INFLUENCE = INCHES OF H_2O

VE-1 S / D	X/2.5	VE-15 S / D	X/5.4
VE-2 S / D	X/+2.12	VE-16 S / D	X/5.1
VE-3 S / D	X/5.5	VE-17 S / D	X/1.45
VE-4 S / D	X/5.3	VE-18 S / D	X/6.1
VE-5 S / D	X/7.4	VE-19 S / D	X/1.65
VE-6 S / D	X/.015	VE-20 S / D	X/.75
VE-7 S / D	X/10.0	HVE-1	X
VE-8 S / D	X/8.5	HVE-2	X
VE-9 S / D	X/5.9	HVE-3	X
VE-10 S / D	X/5.1	HVE-4	X
VE-11 S / D	X/2.0	HVE-5	X
VE-12 S / D	X/2.1	HVE-6	X
VE-13 S / D	X/2.0	HVE-7	
VE-14 S / D	X/10.7		

VACUUM INFLUENCE

LW-MW-1S	+.03/+.035	VP-1	0
LW-MW-2S	+.02/+.03	VP-2	-8.5
LW-MW-5S	+1.75/+.08	VP-3	+.05
LW-MW-9S	+17.5	VP-4	-1.3
LW-MW-10S	+.05	VP-5	-5.4
LW-MW-11S	+25.3	VP-6	-4.4
LW-MW-12S	+22.8	VP-7	+.03
LW-MW-13S	+48.9	VP-8	-6.1
		VP-9	-2.7
		VP-10	0

NOTES:

X = online well

* - #'S w/ out (-) are vacuum

FID/PID READING

Influent	43	ppmv	Oxygen %	20.9
Midfluent	0	ppmv	Oxygen %	20.9
Effluent	0	ppmv	Oxygen %	20.9

BAG SAMPLE [✓ YES] / NO - INFLUENT

LAKE TAHOE LAUNDRY WORKS

TEST # system operation

DATE 4-9-10 START TIME 12:35 STOP TIME ______

WELL CONFIG	OPEN / CLOSED		
VE-1 S / D	O / C	VE-15 S / D	O / C
VE-2 S / D	O / C	VE-16 S / D	O / C
VE-3 S / D	O / C	VE-17 S / D	O / C
VE-4 S / D	O / C	VE-18 S / D	O / C
VE-5 S / D	O / C	VE-19 S / D	O / C
VE-6 S / D	O / C	VE-20 S / D	O / C
VE-7 S / D	O / C	HVE-1	O
VE-8 S / D	O / C	HVE-2	O
VE-9 S / D	O / C	HVE-3	O
VE-10 S / D	O / C	HVE-4	O
VE-11 S / D	O / C	HVE-5	O
VE-12 S / D	O / C	HVE-6	O
VE-13 S / D	O / C	HVE-7	
VE-14 S / D	O / C		

AS	PSI	SCFM	AS	PSI	SCFM
AS-1			AS-15		
AS-2			AS-16		
AS-3			AS-17		
AS-4			AS-18		
AS-5			AS-19		
AS-6			AS-20		
AS-7			AS-21		
AS-8			AS-22		
AS-9			AS-23		
AS-10			AS-24		
AS-11			AS-25		
AS-12			AS-26		
AS-13			AS-27		
AS-14					

% DILUTION = 0
TURNS OF RECIRC = 0
MACHINE VACUUM = 3.7 "Hg
MACHINE FLOW = 600 SCFM

WELL VACUUM
(from manifold gauge)

VE-1 S / D		VE-15 S / D	
VE-2 S / D		VE-16 S / D	
VE-3 S / D		VE-17 S / D	
VE-4 S / D		VE-18 S / D	
VE-5 S / D		VE-19 S / D	
VE-6 S / D		VE-20 S / D	
VE-7 S / D		HVE-1	
VE-8 S / D		HVE-2	
VE-9 S / D		HVE-3	
VE-10 S / D		HVE-4	
VE-11 S / D		HVE-5	
VE-12 S / D		HVE-6	
VE-13 S / D		HVE-7	
VE-14 S / D			

WELL FLOW SCFM

VE-1S		VE-11S	
VE-2S		VE-12S	
VE-3S		VE-13S	
VE-4S		VE-14S	
VE-5S		VE-15S	
VE-6S		VE-16S	
VE-7S		VE-17S	
VE-8S		VE-18S	
VE-9S		VE-19S	
VE-10S		VE-20S	

VACUUM INFLUENCE

VE-1 S / D		VE-15 S / D	
VE-2 S / D		VE-16 S / D	
VE-3 S / D		VE-17 S / D	
VE-4 S / D		VE-18 S / D	
VE-5 S / D		VE-19 S / D	
VE-6 S / D		VE-20 S / D	
VE-7 S / D		HVE-1	
VE-8 S / D		HVE-2	
VE-9 S / D		HVE-3	
VE-10 S / D		HVE-4	
VE-11 S / D		HVE-5	
VE-12 S / D		HVE-6	
VE-13 S / D		HVE-7	
VE-14 S / D			

VACUUM INFLUENCE

LW-MW-1S		VP-1	
LW-MW-2S		VP-2	
LW-MW-5S		VP-3	
LW-MW-9S		VP-4	
LW-MW-10S		VP-5	
LW-MW-11S		VP-6	
LW-MW-12S		VP-7	
LW-MW-13S		VP-8	
		VP-9	
		VP-10	

FID/PID READING

Influent		ppmv	Oxygen %	
Midfluent		ppmv	Oxygen %	
Effluent		ppmv	Oxygen %	

BAG SAMPLE YES / NO

NOTES:

LAKE TAHOE LAUNDRY WORKS

TEST # 9

DATE 4/9/10 START TIME 10:30 STOP TIME 12:30

WELL CONFIG		OPEN / CLOSED	
VE-1 S / D	O / C	VE-15 S / D	C / C
VE-2 S / D	O / C	VE-16 S / D	C / C
VE-3 S / D	C / C	VE-17 S / D	C / C
VE-4 S / D	C / C	VE-18 S / D	C / C
VE-5 S / D	C / C	VE-19 S / D	C / C
VE-6 S / D	C / C	VE-20 S / D	O /
VE-7 S / D	C / C	HVE-1	O
VE-8 S / D	C / C	HVE-2	O
VE-9 S / D	C / C	HVE-3	O
VE-10 S / D	C / C	HVE-4	O
VE-11 S / D	C / C	HVE-5	O
VE-12 S / D	C / C	HVE-6	O
VE-13 S / D	C / C	~~HVE-7~~	N/A
VE-14 S / D	C / C		

AS	PSI	SCFM	AS	PSI	SCFM
AS-1	12.0	3.0	AS-15	14.5	4.0
AS-2	14.5	9.5	AS-16	11.5	1.0
AS-3	11.0	5.0	AS-17	11.0	1.0
AS-4	2.0	6.5	AS-18	12.5	1.0
AS-5	12.5	4.5	AS-19	17.5	1.0
AS-6	12.5	1.0	AS-20	17.5	3.0
AS-7	15.0	1.0	AS-21	16.5	1.0
AS-8	11.5	1.0	AS-22	14.0	16.0
AS-9	12.5	2.0	AS-23	17.0	5.0
AS-10	14.0	2.5	AS-24	18.5	1.0
AS-11	15.5	1.0	AS-25	17.5	1.0
AS-12	13.5	2.5	AS-26	11.5	6.5
AS-13	12.0	1.0	AS-27	10.0	4.0
AS-14	6.5	1.0			

% DILUTION = 0
TURNS OF RECIRC = 0
MACHINE VACUUM = 8 "Hg
MACHINE FLOW = 575 SCFM

WELL VACUUM
(from manifold gauge)

VE-1 S / D		VE-15 S / D	
VE-2 S / D		VE-16 S / D	
VE-3 S / D		VE-17 S / D	
VE-4 S / D		VE-18 S / D	
VE-5 S / D		VE-19 S / D	
VE-6 S / D		VE-20 S / D	
VE-7 S / D		HVE-1	
VE-8 S / D		HVE-2	
VE-9 S / D		HVE-3	
VE-10 S / D	+.10/+2.4	HVE-4	
VE-11 S / D		HVE-5	
VE-12 S / D		HVE-6	
VE-13 S / D		HVE-7	
VE-14 S / D			

WELL FLOW SCFM

VE-1S	10.7	VE-11S	C
VE-2S	12.4	VE-12S	C
VE-3S	C	VE-13S	C
VE-4S	C	VE-14S	C
VE-5S	C	VE-15S	C
VE-6S	C	VE-16S	C
VE-7S	C	VE-17S	C
VE-8S	C	VE-18S	C
VE-9S	C	VE-19S	C
VE-10S	C	VE-20S	15.2

H-1 – 175.3
H-2 – 51.9
H-3 – 124.0
H-4 – 101.8
H-5 – 7.8
H-6 – 33.9

VACUUM INFLUENCE INCHES OF H^{2}O

VE-1 S / D	X/+.065	VE-15 S / D	+.65/+.60
VE-2 S / D	X/+20.2	VE-16 S / D	+.45/+.75
VE-3 S / D	1.5/48.8	VE-17 S / D	.28/.38
VE-4 S / D	.50/.17	VE-18 S / D	3.8/3.7
VE-5 S / D	+.02/+.025	VE-19 S / D	0/2.1
VE-6 S / D	+.90/+.075	VE-20 S / D	X/1.15
VE-7 S / D	+.45/+.45	HVE-1	X
VE-8 S / D	+.15/+.18	HVE-2	X
VE-9 S / D	+.13/+2.2	HVE-3	X
VE-10 S / D	+1.7/+2.6	HVE-4	X
VE-11 S / D	+.015/+.08	HVE-5	X
VE-12 S / D	+.01/+1.5	HVE-6	X
VE-13 S / D	.65/+2.7	~~HVE-7~~	N/A
VE-14 S / D	+.45/+.55		

VACUUM INFLUENCE

LW-MW-1S		VP-1	
LW-MW-2S		VP-2	
LW-MW-5S		VP-3	
LW-MW-9S		VP-4	
LW-MW-10S		VP-5	
LW-MW-11S		VP-6	
LW-MW-12S		VP-7	
LW-MW-13S		VP-8	
		VP-9	
		VP-10	

NOTES:

FID/PID READING

Influent	83	ppmv	Oxygen %	20.5%
Midfluent	0	ppmv	Oxygen %	20.5%
Effluent	0	ppmv	Oxygen %	20.5%

BAG SAMPLE [✓ YES] / NO INFLUENT @ 10:40 am

Page 1 of

4-8-10 Depth to Water LTLW Pre-post startup

Well #	DTW	Time	DTW	Time	DTW	Time
MW-12s	12.63	8:05 am	11.95	11:15 am	11.05 ↑	3:10 pm
MW-10s	11.94	8:10 am	12.64	11:10 am	11.19	3:05 pm
MW-2s	14.89	8:15 am	14.85	11:20	14.64	3:25 pm
MW-2D	20.28	8:20 am	20.22	11:25	19.96	3:30 pm
MW-1s	13.30	8:25 am	13.34	11:30	10.96	3:15
MW-1D	19.82	8:30 pm	19.78	11:35	19.34	3:20
MW-9s	14.21	8:35 am	14.15 + Dropping	11:40	9.18 ↑	3:35 pm
MW-5s	11.59	8:40 am	11.51	11:50	10.80 ↑	3:40 pm
MW-5D	20.20	8:45 am	20.13	11:45	20.03	3:45 pm
MW-11s	13.12	8:50 am	13.10	11:55	6.35	3:50 pm
MW-13s	12.63	8:55 am	12.58	12:00	5.00	3:55 pm
OS-1	12.61	9:00 am				

Page 1of

4-8-10 LTLW R.O.I Pre-Post start up

Well #	Vac "H2O	Time	Vac "H2O	Time	Vac "H2O	Time
mw-12s	+.02	8:05 am				
mw-10s	+.04	8:10 am				
mw-2s	+.005	8:15 am				
mw-2D	+.01	8:20 am				
mw-1s	+.02	8:25 am				
mw-1D	+.015	8:30 am				
mw-9s	+.015	8:35 am				
mw-5s	+.03	8:40 am				
mw-5D	+.04	8:45 am				
mw-11s	+.005	8:50 am				
mw-13s	+.01	8:55 am				
OS-1	0	9:00 am				
VP-1	+.005	9:05 am				
VP-2	+.01	9:10 am				
VP-3	+.005	9:15 am				
VP-4	0	9:20 am				
VP-5	+.005	9:25 am				
VP-6	+.005	9:30 am				
VP-7	+.01	9:35 am				
VP-8	-.16	9:40 am				
VP-9	0	9:45 am				
VP-10	+.005	9:50 am				

* #'s w/out (-) are vacuum

Page 1 of

Pre - Post start up

LTLW D.O. 4-8-10

Well #	Time	D.O.	Time	D.O.	
OS-1	8:10	0 (3.5)			
mw-13s	8:15	0 (7.3)			
mw-11s	8:20	0 (6.5)			
mw-9s	8:25	0 (5.9)			
mw-10s	8:30	0 (5.1)			
mw-12s	8:35	0 (3.3)			
mw-2s	8:40	0 (5.8)			
mw-2D	8:45	0 (6.2)			
mw-1s	8:50	0 (7.4)			
mw-1D	8:55	0 (6.1)			
mw-5s	9:00	0 (1.3)			
mw-5D	9:05	0 (6.3)			

FLOW AT WELL - LTLW - SOUTH LAKE TAHOE 4/8/10 (TEST 7)

Well #	Time	D.A.	FLOW CFM		
6s	12:10 pm	.35 ✓	51.9		DROPPED FLOW TO 20 CFM
10 s	12:13 pm	.25 ✓	43.8		DROPPED FLOW TO 20 CFM
11 s	12:15 pm	.035	16.4		
13 s	12:17 pm	.01 0.21	8.7 ✓		• 40.18 CFM - NEW FLOW
9s	12:19 pm	.20	39.2		DROPPED FLOW TO 20 CFM
8 s	12:21 pm	.60	67.9		DROPPED FLOW TO 20 CFM
7 s	12:23 pm	.02	12.4		
1 s	12:25 pm	.015 .005	10.7 ✓		• 6.2 CFM - NEW FLOW
2s	12:27 pm	.03	15.1		
12 s	12:29 pm	.30	48.03		
20 s	12:31 pm	.01 .07	8.7 ✓		• 23.2 CFM - NEW FLOW
3s	12:33 pm	.03	15.1		
H-3	12:35 pm	.045	18.6		
H-2	12:37 pm	.03	15.1		
14-S	12:39 pm	1.35	101.8		DROPPED FLOW TO 10 & 12 CFM
H-4	12:41 pm	.30	48.03		
19s	12:43 pm	.85	80.8		
H-1	1:30 pm	1.00	87.6		
18-S	1:32 pm	.19	38.2		
H-6	1:34pm	.02	12.4		
4-S	1:36	.17	36.1		
H-5	1:38	.05	19.6		
17-S	1:40	.035	16.4		
5s	1:42	.06	21.4		
16s	1:44	.10	27.7		
15 s	1:46	.03	15.1		

4/8/10 LTLW- SOUTH LAKE TAHOE -(TEST 8)

WELL #	TIME	O.P.	FLOW
6-S		.70	73.4
10-S		.22	41.1
11-S		.04	17,5
13-S		.03	15,2
9-S		.20	39.2
8-S		.50	62.0
7-S		.22	41.1
1-S		.24	43.0
2-S		.03	15.2
12-S		.25	43,9
20-S		.01	8,8
3-S		.03	15.2
H-3		.26	44.7
H-2		.50	62.0
14-S		1.30	100,0
H-4		.50	62.0
19s		.02	12.4
~~H-1~~		2.00	124,0
18s		.13	31.6
H6		.01	8.8
4s		.14	32.8
H5		.01	8.8
17s		.02	12.4
5s		.06	21,5
16s		.10	27,7
15s		.03	15,2

test # 7

ROI LTLW 4-8-10 Pre-post start up

Well #	Pre start up vac "H2O	time	vac "H2O
6D	+.045	9:26	
10D	+.10	9:28	
11D	+.015	9:30	
2D	.01	9:32	
13D	.06	9:34	
20D	.05	9:36	
9D	+.01	9:38	
8D	+.02	9:40	
7D	.005	9:42	
19D	+.01	9:44	
14D	.01	9:46	
3D	+.02	9:48	
1D	+.01	9:50	
2D	+.05	9:52	
18D	+.01	9:54	
5D	.01	9:56	
4D	.005	9:58	
17D	+.01	10:00	
16D	+.02	10:02	
15D	.01	10:04	

* #'s w/ out (-) are vacuum

DEPTH TO WATER - LTLW 4/7/10

WELL #	DTW	TIME	DTW	TIME	DTW	TIME	DTW	TIME
MW-12 s	12.07	7:45 am	12.85 -	11:40 am	12.00	3:00 pm	12.03	3:40
MW-10 s	12.71	7:50 am	13.11	11:35 am	12.70	2:55 pm	12.71	3:45
MW-2 s	14.94	7:55 am	15.06	11:45 am	15.09	3:05 pm	15.11	3:50
MW-2 D	20.42	8:00 am	20.57	11:50 am	20.41	3:10 pm	20.40	3:55
MW-1 s	13.48	8:05 am	14.93	11:55 am	13.36	3:20 pm	13.38	4:00
MW-1 D	19.97	8:10 am	20.30	12:00 pm	19.92	3:15 pm	19.92	4:05
MW-9 s	14.34	8:15 am	15.00/15.19	11:25 pm	14.31	2:50 pm	14.31	4:10
MW-5 s	11.71	8:20 am	11.91	12:05 pm	11.73	3:25 pm	11.70	4:15
MW-5 D	20.36	8:25 am	20.40	12:10 pm	20.32	3:20 pm	23.30	4:20
MW-11 s	13.22	8:30 am	13.29	11:20 am	13.19/13.23	2:45 pm	13.13	4:25
MW-13 s	12.71	8:35 am	12.75	12:15 pm	12.28 -	3:30 pm	12.21	4:30
OS-1	12.71	8:40 am						

Pre + Post start up

1950-RV LTLW - SOUTH LAKE TAHOE - 4/7/10

WELL #	TIME	D.O. (-11.8 FOR ALTITUDE)	D.O.	TIME
OS-1	7:45 AM	0 (6.4)		
MW-13 S	7:55 AM	0 (9.9)		
MW-11 S	8:10 AM	0 (10.1)		
MW-9 S	8:20 AM	0 (7.4)		
MW-10 S	8:30 AM	1.4 (13.2)		
MW-12 S	8:35 AM	0 (8.6)		
MW-2 S	8:45 AM	0 (1.3)		
MW-2 D	8:50 AM	0 (2.7)		
MW-1 S	8:55 AM	0 (6.2)		
MW-1 D	9:00 AM	0 (4.7)		
MW-5 S	9:05 AM	0 (10.8)		
MW-5 D	9:10 AM	0 (5.1)		

Page 1 of

Pre + Post start up

ROI LTLW - SOUTH LAKE TAHOE 4/7/10

WELL #	VAC" H_2O	TIME	VAC" H_2O	TIME	VAC" H_2O	TIME	Notes
MW-12s	0.03	7:45 AM					
MW-10s	0.05	7:50 AM					
MW-2s	+0.01	7:55 AM					
MW-2D	+0.005	8:00 AM					
MW-1s	+0.03	8:05 AM					
MW-1D	+0.06	8:10 AM					
MW-9s	0.01	8:15 AM					
MW-5s	+0.135	8:20 AM					
MW-5D	+0.14	8:25 AM					
MW-11s	+0.005	8:30 AM					
MW-13s	+0.01	8:35 AM					
OS-1	0	8:40 AM					
VP-1	0.005	8:45 AM					
VP-2	0	8:50 AM					
VP-3	+0.005	8:55 AM					
VP-4	0.005	9:00 AM					
VP-5	0.01	9:05 AM					
VP-6	0	9:10 AM					
VP-7	0	9:15 AM					
VP-8	0	9:20 AM					
VP-9	+0.01	9:25 AM					
VP-10	+0.01	9:30 AM					

South lake Tahoe
LTLW
R.O.I 4-6-10

Page 1of1

Time	Well #	DTW	D.O.	+ − Vac "H20	Notes
9:25	OS-1	12.71	0	+.03	Machine Not on ←11.8
9:40	MW-5S	11.61	0	+.22	MACHINE NOT RUNNING "
10:00	MW-5D	20.36	0	+.11	Machine not on "
10:10	MW-10S	12.77	0	−.10	machine not on "
10:20	MW-12S	12.13	0	−.09	machine not on "
10:25	MW-2S	14.98	0	.02	machine not on "
10:30	MW-2D	20.47	0	.03	machine not on "
10:35	MW-11S	13.27	0	0	Machine not on "
10:50	MW-9S	14.39	0	0	machine not on "
11:00	MW-1D	19.98	0	+.17	machine not on "
11:10	MW-~~5~~ 1S	13.52	0	+.03	machine not on "
11:20	MW-13S	12.78	0	0	machine not on "
5:25	MW-1S	13.55			
5:30	MW-1D	19.99			
5:35	MW-2S	15.03			
5:40	MW-2D	20.45			
5:45	MW-12S	12.10			
5:50	MW-10S	12.81			
	MW-9S	14.41			

LTLW SGA wells

4-6-10 ROI

Page 1 of 1

Time	Well #	+/- Vac. "H2O	Notes
11:35	UP-6	-.03	
11:45	VP-9	-.01	
11:50	VP-10	0	
11:55	VP-1	0	
12:00	VP-2	0	
12:05	VP-3	+.26	
12:25	VP-7	0	
2:30	VP-8	+.21	
2:00	UP-5	-.01	
—	VP-4	NOT FOUND	

LTLW

4-6-10

" H_2O

2:55 MW-1 s/o - -0.33/ - 0.46

3:00 MW-2 s/o - +0.01/ + 0.06

3:05 VP-2 - -2.9

3:10 VP-3 - 0

3:15 VP-7 - -.65

4-6-10

	VAC IN H_2O
19-S	0.0
3-D	+0.01
H-1	0.0
1-D	+0.02
18-S	+0.01
14-6	0.0
2-D	+0.02
18-D	+0.005
4-S	+0.01
14-5	0.0
5-D	PRESSURE - TO SMALL TO MEASURE
17-S	+0.005
5-S	0.0
4-D	+0.01
17-D	PRESSURE - TO SMALL TO MEASURE
16-S	+ 0.01
16-D	+ 0.005
15-S	+ 0.01
15-D	+ 0.01

BASE LINE/PRE TEST #

LTLW - SOUTH LAKE TAHOE 4/9/10

WELL #		TIME
6-D	0.00	10:00 am
10-D	+.40	10:03 am
11-D	+.005	10:05 am
12-D	+.01	10:07 am
13-D	+.005	10:09 am
20-D	+.001	10:11 am
9-D	+.20	10:13 am
8-D	+.01	10:15 am
7D	+.005	10:17 am
19-D	+.025	10:19 am
14-D	+.005	10:21 am
3-D	+.08	10:23 am
1-D	+.025	10:25 am
2-D	+.15	10:27 am
18-D	+.008	10:29 am
5-D	0.00	10:31 am
4-D	+.009	10:33 am
17-D	+.005	10:35 am
16-D	+.005	10:37 am
15-D	+.0075	10:39 am

RUSSEL - VECTRA

916 - 259 - 1005

4-9-10 LTLW ROI

	BEFORE START UP		AFTER START UP	
Well #	Vac "H_2O	Time	Vac "H_2O	Time
MW-12S	+.02	7:40 AM		
MW-10S	-.01	7:35 AM		
MW-2S	+.005	7:45 AM		
MW-2D	+.005	7:50 AM		
MW-1S	+.005	7:55 AM		
MW-1D	+.01	8:00 AM		
MW-9S	0	8:15 AM		
MW-5S	+.11	8:05 AM		
MW-5D	+.02	8:10 AM		
MW-11S	+.31	8:20 AM		
MW-13S	+.025	8:25 AM		
VP-1	0	9:15 am		
VP-2	0	9:25 am		
VP-3	+.005	9:20 am		
VP-4	0	9:10 am		
VP-5	-.005	9:15 am		
VP-6	-.005	9:05 am		
VP-7	0	9:00 am		
VP-8	+.005	8:55 am		
VP-9	+.005	8:50 AM		
VP-10	0	8:45 am		

LTLW DTW 4-9-10

	Before start up		After shutdown		
Well #	DTW	Time	DTW	Time	Notes
MW-12S	11.56	7:40 AM			
MW-10S	12.61	7:35 AM			
MW-2S	14.98	7:45 AM			
MW-2D	20.17	7:50 AM			
MW-1S	13.34	7:55 AM			
MW-1D	19.71	8:00 AM			
MW-9S	14.22	8:15 AM			
MW-5S	11.57	8:05 AM			
MW-5D	20.10	8:10 AM			
MW-11S	13.20	8:20 AM			
MW-13S	12.67	8:25 AM			

LTLW D.O. 4-9-10

	Before start up		AFTER START UP	
Well #	D.O.	Time	D.O.	Time
MW-13s	0(9.8)	7:40		
mw-11s	0(3.5)	7:45		
mw-9s	0(7.2)	7:50		
MW-10s	0(5.3)	7:55		
MW-12s	0(3.2)	8:00		
MW-2s	0(7.0)	8:05		
mw-2D	0(6.3)	8:10		
MW-1s	0(8.1)	8:15		
MW-1D	0(4.8)	8:20		
MW-5s	0(.2)	8:25		
MW-5D	0(.6)	8:30		

FLOW AT WELL LTLW 4-9-10

well#	Time	D.P.	FLOW CFM		
6s					
10s					
11s					
13s					
9s					
8s					
7s					
1s					
2s					
12s					
20s					
3s					
H-3					
H-2					
14s					
H-4					
19s					
H-1					
18s					
H-6					
4-s					
H-5					
17s					
5s					
16s					
15s					

Vac @ well 4-9-10 LTLW

	Before start up		After shut down	
Well#	Vac "H20	Time	Vac "H20	time
6D				
10D				
11D				
12D				
13D				
20D				
9D				
8D				
7D				
19D				
14D				
3D				
1D				
2D				
18D				
5D				
4D				
17D				
16D				
15D				

1950-RV - LTLW - SOUTH LAKE TAHOE - 4/7/10

WELL #	DEPTH TO H2O	TIME
MW-11 S	13.29	11:20 AM
MW-9 S	15.00 dropping to 15.19	11:25 AM
MW-10 S	13.11	11:35 AM
MW-12 S	12.85 - lowering	11:40 AM
MW-2 S	15.06	11:45 AM
MW-2D	20.57	11:50 AM
MW-1 S	14.93	11:55 AM
MW-1 D	20.30	12:00 pm
MW-5 S	11.91	12:05 pm
MW-5 D	20.40	12:10 pm

Page 1 of

ROI LTLW

4-7-10

Time	Well #	DTW	D.O.	+− Vac "H2O	Notes
7:45	MW-12S	12.07	0	0.03	machine OFF
7:50	MW-10S	12.71	1.4	0.05	
7:55	MW-2S	14.94	0	+0.01	
8:00	MW-2D	20.42	0	+0.005	
8:05	MW-1S	13.48	0	+0.03	
8:10	MW-1D	19.97	0	+0.06	
8:15	MW-9S	14.34	0	0.01	
8:20	MW-5S	11.71	0	+0.135	
8:25	MW-5D	20.36	0	+0.14	
8:30	MW-11S	13.22	0	+0.005	
8:35	MW-13S	12.71	0	+0.01	
8:40	OS-1	12.71	0	0	
8:45	VP-1	N/A	N/A	0.005	
8:50	VP-2			0	
8:55	VP-3			+0.005	
9:00	VP-5			0	
9:05	VP-6			0.01	
9:10	VP-7			0	
9:15	VP-8			0	
9:20	VP-9			0	
9:25	VP-10	N/A	N/A	+0.01	machine OFF
9:30	VP-4	N/A	N/A	0.005	

APPENDIX U

Summary Tables of Pilot Test Data

TABLE U-1A
SUMMARY OF SVE/GASS PILOT TEST DATA - 4/6/10 TEST #1
Lake Tahoe Laundry Works
1024 Lake Tahoe Boulevard
South Lake Tahoe, California

Well ID	Date (mo/dy/yr)	Time (hr:min)	Vacuum (in-H_2O)	Flow (SCFM)	Oxygen (%)	Field Influent (ppmV)	Comments
Extraction at HVE-1, HVE-2, and HVE-3							
			avg. applied				
HVE-1, HVE-2, HVE-3	4/6/09	14:45	9.5 in-Hg	500	20.5	51	
		15:05		500	nr	65	
		16:10	Test stopped				
		Average	9.5 in-Hg	500	20.5	58	
Observation Wells							
			induced				
VE-1S	4/6/09	nr	0.00				
VE-1D	4/6/09	nr	0.30				
VE-2S	4/6/09	nr	1.40				
VE-2D	4/6/09	nr	0.55				
VE-3S	4/6/09	nr	2.70				
VE-3D	4/6/09	nr	1.50				
VE-4S	4/6/09	nr	1.35				
VE-4D	4/6/09	nr	1.25				
VE-5S	4/6/09	nr	0.35				
VE-5D	4/6/09	nr	0.35				
VE-6S	4/6/09	nr	0.15				
VE-6D	4/6/09	nr	0.00				
VE-7S	4/6/09	nr	0.00				
VE-7D	4/6/09	nr	0.00				
VE-8S	4/6/09	nr	0.00				
VE-8D	4/6/09	nr	0.00				
VE-9S	4/6/09	nr	0.00				
VE-9D	4/6/09	nr	0.00				
VE-10S	4/6/09	nr	0.01				
VE-10D	4/6/09	nr	1.03				
VE-11S	4/6/09	nr	0.10				
VE-11D	4/6/09	nr	0.085				
VE-12S	4/6/09	nr	0.16				
VE-12D	4/6/09	nr	0.50				
VE-13S	4/6/09	nr	0.60				
VE-13D	4/6/09	nr	0.75				
VE-14S	4/6/09	nr	0.01				

TABLE U-1A
SUMMARY OF SVE/GASS PILOT TEST DATA - 4/6/10 TEST #1
Lake Tahoe Laundry Works
1024 Lake Tahoe Boulevard
South Lake Tahoe, California

Well ID	**Date** (mo/dy/yr)	**Time** (hr:min)	**Vacuum** (in-H_2O)	**Flow** (SCFM)	**Oxygen** (%)	**Field Influent** (ppmV)	**Comments**
VE-14D	4/6/09	nr	0.01				
VE-15S	4/6/09	nr	0.01				
VE1-5D	4/6/09	nr	0.015				
VE-16S	4/6/09	nr	0.03				
VE-16D	4/6/09	nr	0.03				
VE-17S	4/6/09	nr	0.50				
VE-17D	4/6/09	nr	0.55				
VE-18S	4/6/09	nr	4.90				
VE-18D	4/6/09	nr	5.00				
VE-19S	4/6/09	nr	+0.25				
VE-19D	4/6/09	nr	6.10				
VE-20S	4/6/09	nr	2.30				
VE-20D	4/6/09	nr	0.45				
HVE-1	4/6/09	nr	nr				
HVE-2	4/6/09	nr	nr				
HVE-3	4/6/09	nr	nr				
HVE-4	4/6/09	nr	0.14				
HVE-5	4/6/09	nr	1.25				
HVE-6	4/6/09	nr	1.20				
LW-MW-1S	4/6/09	nr	0.33				
	4/6/09	14:55	0.33				
LW-MW-1D	4/6/09	nr	0.46				
	4/6/09	14:55	0.46				
LW-MW-2S	4/6/09	nr	+0.01				
	4/6/09	15:00	+0.01				
LW-MW-2D	4/6/09	nr	+0.06				
	4/6/09	15:00	+0.06				
LW-MW-5S	4/6/09	nr	0.10				
LW-MW-9S	4/6/09	nr	1.90				
LW-MW-10S	4/6/09	nr	2.90				
LW-MW-11S	4/6/09	nr	0.04				
LW-MW-12S	4/6/09	nr	0.75				
LW-MW-13S	4/6/09	nr	0.00				
VP-1	4/6/09	11:55	0.00				
	4/6/09	nr	1.90				

TABLE U-1A
SUMMARY OF SVE/GASS PILOT TEST DATA - 4/6/10 TEST #1
Lake Tahoe Laundry Works
1024 Lake Tahoe Boulevard
South Lake Tahoe, California

Well ID	Date (mo/dy/yr)	Time (hr:min)	Vacuum (in-H_2O)	Flow (SCFM)	Oxygen (%)	Field Influent (ppmV)	Comments
VP-2	4/6/09	12:00	0.00				
	4/6/09	nr	2.90				
	4/6/09	15:05	2.90				
VP-3	4/6/09	12:05	+0.26				
	4/6/09	nr	0.00				
	4/6/09	15:10	0.00				
VP-4	4/6/09	nr	nr				
VP-5	4/6/09	14:00	0.01				
	4/6/09	nr	22.50				
VP-6	4/6/09	11:35	0.03				
	4/6/09	nr	10.40				
VP-7	4/6/09	12:25	0.00				
	4/6/09	nr	0.65				
	4/6/09	15:15	0.65				
VP-8	4/6/09	14:30	+0.21				
	4/6/09	nr	0.00				
VP-9	4/6/09	11:45	0.01				
	4/6/09	nr	2.70				
VP-10	4/6/09	11:50	0.00				
	4/6/09	nr	0.00				

Notes:

in-H2O = inches water
in-Hg = inches mercury
SCFM = standard cubic feet per minute
ppmV = parts per million by volume
mo/dy/yr = month, day year
hr:min = hour and minute of data measurement

TABLE U-2
SUMMARY OF SVE/GASS PILOT TEST DATA - 4/6/10 TEST #2
Lake Tahoe Laundry Works
1024 Lake Tahoe Boulevard
South Lake Tahoe, California

Well ID	Date (mo/dy/yr)	Time (hr:min)	Vacuum (in-H_2O)	Flow (SCFM)	Oxygen (%)	Field Influent (ppmV)	Comments
Extraction at HVE-1, HVE-2, HVE-3, HVE-4, HVE-5, and HVE-6							
			avg. applied				
HVE-1, HVE-2, HVE-3, HVE-4, HVE-5, HVE-6	4/6/09	16:15	8.2 in-Hg	500	20.4	85	
		17:30	Test stopped				
		Average	8.2 in-Hg	500	20.4	85	
Observation Wells							
			induced				
VE-1S	4/6/09	nr	41.00				
VE-1D	4/6/09	nr	0.95				
VE-2S	4/6/09	nr	74.90				
VE-2D	4/6/09	nr	1.05				
VE-3S	4/6/09	nr	0.01				
VE-3D	4/6/09	nr	1.60				
VE-4S	4/6/09	nr	1.25				
VE-4D	4/6/09	nr	1.10				
VE-5S	4/6/09	nr	0.15				
VE-5D	4/6/09	nr	0.15				
VE-6S	4/6/09	nr	0.025				
VE-6D	4/6/09	nr	0.00				
VE-7S	4/6/09	nr	+0.005				
VE-7D	4/6/09	nr	0.005				
VE-8S	4/6/09	nr	+0.005				
VE-8D	4/6/09	nr	+0.1				
VE-9S	4/6/09	nr	0.005				
VE-9D	4/6/09	nr	+0.045				
VE-10S	4/6/09	nr	0.005				
VE-10D	4/6/09	nr	+0.07				
VE-11S	4/6/09	nr	0.075				
VE-11D	4/6/09	nr	0.07				
VE-12S	4/6/09	nr	0.145				
VE-12D	4/6/09	nr	0.45				
VE-13S	4/6/09	nr	1.30				
VE-13D	4/6/09	nr	nr				
VE-14S	4/6/09	nr	+0.005				

TABLE U-2
SUMMARY OF SVE/GASS PILOT TEST DATA - 4/6/10 TEST #2
Lake Tahoe Laundry Works
1024 Lake Tahoe Boulevard
South Lake Tahoe, California

Well ID	Date (mo/dy/yr)	Time (hr:min)	Vacuum (in-H_2O)	Flow (SCFM)	Oxygen (%)	Field Influent (ppmV)	Comments
VE-14D	4/6/09	nr	+0.005				
VE-15S	4/6/09	nr	0.005				
VE1-5D	4/6/09	nr	0.00				
VE-16S	4/6/09	nr	0.25				
VE-16D	4/6/09	nr	0.25				
VE-17S	4/6/09	nr	0.55				
VE-17D	4/6/09	nr	0.55				
VE-18S	4/6/09	nr	4.30				
VE-18D	4/6/09	nr	4.40				
VE-19S	4/6/09	nr	+1.30				
VE-19D	4/6/09	nr	3.70				
VE-20S	4/6/09	nr	2.80				
VE-20D	4/6/09	nr	1.55				
HVE-1	4/6/09	nr	nr				
HVE-2	4/6/09	nr	nr				
HVE-3	4/6/09	nr	nr				
HVE-4	4/6/09	nr	nr				
HVE-5	4/6/09	nr	nr				
HVE-6	4/6/09	nr	nr				
LW-MW-1S	4/6/09	nr	+0.015				
LW-MW-1D	4/6/09	nr	nr				
LW-MW-2S	4/6/09	nr	0.00				
LW-MW-2D	4/6/09	nr	+0.015				
LW-MW-5S	4/6/09	nr	+0.20				
LW-MW-5D	4/6/09	nr	+0.015				
LW-MW-9S	4/6/09	nr	2.20				
LW-MW-10S	4/6/09	nr	2.40				
LW-MW-11S	4/6/09	nr	0.08				
LW-MW-12S	4/6/09	nr	0.85				
LW-MW-13S	4/6/09	nr	0.035				
VP-1	4/6/09	nr	1.80				
VP-2	4/6/09	nr	34.40				
VP-3	4/6/09	nr	0.00				
VP-4	4/6/09	nr	nr				
VP-5	4/6/09	nr	20.60				
VP-6	4/6/09	nr	8.60				
VP-7	4/6/09	nr	0.55				
VP-8	4/6/09	nr	0.00				

TABLE U-2
SUMMARY OF SVE/GASS PILOT TEST DATA - 4/6/10 TEST #2
Lake Tahoe Laundry Works
1024 Lake Tahoe Boulevard
South Lake Tahoe, California

Well ID	**Date** (mo/dy/yr)	**Time** (hr:min)	**Vacuum** ($in-H_2O$)	**Flow** (SCFM)	**Oxygen** (%)	**Field Influent** (ppmV)	**Comments**
VP-9	4/6/09	nr	2.20				
VP-10	4/6/09	nr	0.00				

Notes:
in-H2O = inches water
in-Hg = inches mercury
SCFM = standard cubic feet per minute
ppmV = parts per million by volume
mo/dy/yr = month, day year
hr:min = hour and minute of data measurement

TABLE U-3
SUMMARY OF SVE/GASS PILOT TEST DATA - 4/7/10 TEST #3
Lake Tahoe Laundry Works
1024 Lake Tahoe Boulevard
South Lake Tahoe, California

Well ID	Date (mo/dy/yr)	Time (hr:min)	Vacuum (in-H_2O)	Flow (SCFM)	Oxygen (%)	Field Influent (ppmV)	Comments
Extraction at VE-1S, VE-1D, VE-2S, VE-2D, VE-3S, VE-3D, VE-4S, VE-4D, VE-12S, VE-12D, VE-13S, VE-13D, VE-18S, VE-18D, VE-19S, VE-19D, VE-20S, and VE-20D							
			avg. applied				
VE-1S, VE-1D, VE-2S, VE-2D, VE-3S, VE-3D, VE-4S, VE-4D, VE-12S, VE-12D, VE-13S, VE-13D, VE-18S, VE-18D, VE-19S, VE-19D, VE-20S, VE-20D	4/7/09	10:40	7.5 to 8.5 in-Hg	500	nr	nr	
		11:00	nr	nr	20.4	1,450	
		11:30	nr	nr	20.3	825	
		12:00	nr	nr	20.0	85	
		12:05	Test stopped				
		Average	7.5 to 8.5 in-Hg	500	20.2	787	
Observation Wells							
			induced				
VE-1S	4/7/09	nr	nr				
VE-1D	4/7/09	nr	nr				
VE-2S	4/7/09	nr	nr				
VE-2D	4/7/09	nr	nr				
VE-3S	4/7/09	nr	nr				
VE-3D	4/7/09	nr	nr				
VE-4S	4/7/09	nr	nr				
VE-4D	4/7/09	nr	nr				
VE-5S	4/7/09	nr	0.70				
VE-5D	4/7/09	nr	+0.005				
VE-6S	4/7/09	nr	0.07				
VE-6D	4/7/09	nr	0.00				
VE-7S	4/7/09	nr	0.005				
VE-7D	4/7/09	nr	0.005				
VE-8S	4/7/09	nr	0.00				
VE-8D	4/7/09	nr	0.00				
VE-9S	4/7/09	nr	0.01				
VE-9D	4/7/09	nr	+0.06				
VE-10S	4/7/09	nr	0.09				

TABLE U-3
SUMMARY OF SVE/GASS PILOT TEST DATA - 4/7/10 TEST #3
Lake Tahoe Laundry Works
1024 Lake Tahoe Boulevard
South Lake Tahoe, California

Well ID	Date (mo/dy/yr)	Time (hr:min)	Vacuum (in-H_2O)	Flow (SCFM)	Oxygen (%)	Field Influent (ppmV)	Comments
VE-10D	4/7/09	nr	+0.065				
VE-11S	4/7/09	nr	2.50				
VE-11D	4/7/09	nr	2.60				
VE-12S	4/7/09	nr	nr				
VE-12D	4/7/09	nr	nr				
VE-13S	4/7/09	nr	nr				
VE-13D	4/7/09	nr	nr				
VE-14S	4/7/09	nr	0.005				
VE-14D	4/7/09	nr	0.005				
VE-15S	4/7/09	nr	0.045				
VE1-5D	4/7/09	nr	0.04				
VE-16S	4/7/09	nr	0.09				
VE-16D	4/7/09	nr	0.10				
VE-17S	4/7/09	nr	2.00				
VE-17D	4/7/09	nr	1.70				
VE-18S	4/7/09	nr	nr				
VE-18D	4/7/09	nr	nr				
VE-19S	4/7/09	nr	nr				
VE-19D	4/7/09	nr	nr				
VE-20S	4/7/09	nr	nr				
VE-20D	4/7/09	nr	nr				
HVE-1	4/7/09	nr	3.00				
HVE-2	4/7/09	nr	5.20				
HVE-3	4/7/09	nr	5.50				
HVE-4	4/7/09	nr	30.00				
HVE-5	4/7/09	nr	53.10				
HVE-6	4/7/09	nr	51.00				
LW-MW-1S	4/7/09	8:05	+0.03				
	4/7/09	nr	0.00				
LW-MW-1D	4/7/09	8:10	+0.06				
	4/7/09	nr	+0.06				
LW-MW-2S	4/7/09	7:55	+0.01				
	4/7/09	nr	+0.005				
LW-MW-2D	4/7/09	8:00	+0.005				
	4/7/09	nr	+0.02				

TABLE U-3
SUMMARY OF SVE/GASS PILOT TEST DATA - 4/7/10 TEST #3
Lake Tahoe Laundry Works
1024 Lake Tahoe Boulevard
South Lake Tahoe, California

Well ID	Date (mo/dy/yr)	Time (hr:min)	Vacuum (in-H_2O)	Flow (SCFM)	Oxygen (%)	Field Influent (ppmV)	Comments
LW-MW-5S	4/7/09	8:20	+0.135				
	4/7/09	nr	0.20				
LW-MW-5D	4/7/09	8:25	+0.14				
	4/7/09	nr	0.15				
LW-MW-9S	4/7/09	8:15	0.01				
	4/7/09	nr	28.30				
LW-MW-10S	4/7/09	7:50	0.05				
	4/7/09	nr	5.00				
LW-MW-11S	4/7/09	8:30	+0.005				
	4/7/09	nr	0.45				
LW-MW-12S	4/7/09	7:45	0.03				
	4/7/09	nr	22.70				
LW-MW-13S	4/7/09	8:35	+0.01				
	4/7/09	nr	+0.01				
OS-1	4/7/09	8:40	0.00				
VP-1	4/7/09	8:45	0.005				
	4/7/09	nr	0.37				
VP-2	4/7/09	8:50	0.00				
	4/7/09	nr	18.00				
VP-3	4/7/09	8:55	+0.005				
	4/7/09	nr	+0.005				
VP-4	4/7/09	9:30	0.005				
	4/7/09	nr	11.70				
VP-5	4/7/09	9:00	0.00				
	4/7/09	nr	3.20				
VP-6	4/7/09	9:05	0.01				
	4/7/09	nr	11.30				
VP-7	4/7/09	9:10	0.00				
	4/7/09	nr	9.50				
VP-8	4/7/09	9:15	0.00				
	4/7/09	nr	16.90				
VP-9	4/7/09	9:20	0.00				
	4/7/09	nr	9.00				
VP-10	4/7/09	9:25	+0.01				
	4/7/09	nr	0.005				

Notes:
in-H2O = inches water (positive sign indicates pressure reading)
in-Hg = inches mercury
SCFM = standard cubic feet per minute
ppmV = parts per million by volume
mo/dy/yr = month, day year
hr:min = hour and minute of data measurement

TABLE U-4
SUMMARY OF SVE/GASS PILOT TEST DATA - 4/7/10 TEST #4
Lake Tahoe Laundry Works
1024 Lake Tahoe Boulevard
South Lake Tahoe, California

Well ID	Date (mo/dy/yr)	Time (hr:min)	Vacuum (in-H_2O)	Flow (SCFM)	Oxygen (%)	Field Influent (ppmV)	Comments
Extraction at VE-5S, VE-6S, VE-8S, VE-9S, VE-10S, VE-11S, VE-14S, VE-15S, VE-16S, and VE-17S							
			avg. applied				
VE-5S, VE-6S, VE-8S, VE-9S, VE-10S, VE-11S, VE-14S, VE-15S, VE-16S, VE-17S	4/7/09	14:05	5.6 in-Hg	500	20.0	35	
		15:20	Test stopped				
		Average	5.6 in-Hg	500	20.0	35	
Observation Wells							
			induced				
VE-1S	4/7/09	nr	0.00				
VE-1D	4/7/09	nr	0.00				
VE-2S	4/7/09	nr	0.09				
VE-2D	4/7/09	nr	0.60				
VE-3S	4/7/09	nr	0.075				
VE-3D	4/7/09	nr	0.35				
VE-4S	4/7/09	nr	0.44				
VE-4D	4/7/09	nr	0.48				
VE-5S	4/7/09	nr	nr				
VE-5D	4/7/09	nr	16.00				
VE-6S	4/7/09	nr	nr				
VE-6D	4/7/09	nr	5.50				
VE-7S	4/7/09	nr	nr				
VE-7D	4/7/09	nr	16.60				
VE-8S	4/7/09	nr	nr				
VE-8D	4/7/09	nr	11.00				
VE-9S	4/7/09	nr	nr				
VE-9D	4/7/09	nr	9.00				
VE-10S	4/7/09	nr	nr				
VE-10D	4/7/09	nr	8.20				
VE-11S	4/7/09	nr	nr				
VE-11D	4/7/09	nr	1.15				
VE-12S	4/7/09	nr	0.40				
VE-12D	4/7/09	nr	0.14				

TABLE U-4
SUMMARY OF SVE/GASS PILOT TEST DATA - 4/7/10 TEST #4
Lake Tahoe Laundry Works
1024 Lake Tahoe Boulevard
South Lake Tahoe, California

Well ID	Date (mo/dy/yr)	Time (hr:min)	Vacuum (in-H_2O)	Flow (SCFM)	Oxygen (%)	Field Influent (ppmV)	Comments
VE-13S	4/7/09	nr	0.005				
VE-13D	4/7/09	nr	0.22				
VE-14S	4/7/09	nr	nr				
VE-14D	4/7/09	nr	15.80				
VE-15S	4/7/09	nr	nr				
VE1-5D	4/7/09	nr	9.90				
VE-16S	4/7/09	nr	nr				
VE-16D	4/7/09	nr	9.40				
VE-17S	4/7/09	nr	nr				
VE-17D	4/7/09	nr	0.80				
VE-18S	4/7/09	nr	0.13				
VE-18D	4/7/09	nr	0.13				
VE-19S	4/7/09	nr	0.04				
VE-19D	4/7/09	nr	0.005				
VE-20S	4/7/09	nr	0.00				
VE-20D	4/7/09	nr	0.005				
HVE-1	4/7/09	nr	+0.025				
HVE-2	4/7/09	nr	0.045				
HVE-3	4/7/09	nr	0.05				
HVE-4	4/7/09	nr	0.15				
HVE-5	4/7/09	nr	0.10				
HVE-6	4/7/09	nr	0.095				
LW-MW-1S	4/7/09	nr	0.015				
LW-MW-1D	4/7/09	nr	0.065				
LW-MW-2S	4/7/09	nr	0.00				
LW-MW-2D	4/7/09	nr	0.00				
LW-MW-5S	4/7/09	nr	+0.50				
LW-MW-5D	4/7/09	nr	+0.07				
LW-MW-9S	4/7/09	nr	0.17				
LW-MW-10S	4/7/09	nr	0.01				
LW-MW-11S	4/7/09	nr	3.70				
LW-MW-12S	4/7/09	nr	0.40				
LW-MW-13S	4/7/09	nr	11.90				
OS-1	4/7/09	nr	nr				
VP-1	4/7/09	nr	+0.01				
VP-2	4/7/09	nr	0.005				
VP-3	4/7/09	nr	+0.005				
VP-4	4/7/09	nr	0.005				

TABLE U-4
SUMMARY OF SVE/GASS PILOT TEST DATA - 4/7/10 TEST #4
Lake Tahoe Laundry Works
1024 Lake Tahoe Boulevard
South Lake Tahoe, California

Well ID	Date (mo/dy/yr)	Time (hr:min)	Vacuum (in-H_2O)	Flow (SCFM)	Oxygen (%)	Field Influent (ppmV)	Comments
VP-5	4/7/09	nr	0.03				
VP-6	4/7/09	nr	0.11				
VP-7	4/7/09	nr	0.20				
VP-8	4/7/09	nr	0.44				
VP-9	4/7/09	nr	0.32				
VP-10	4/7/09	nr	+0.005				

Notes:
in-H2O = inches water (positive sign indicates pressure reading)
in-Hg = inches mercury
SCFM = standard cubic feet per minute
ppmV = parts per million by volume
mo/dy/yr = month, day year
hr:min = hour and minute of data measurement

TABLE U-4
SUMMARY OF SVE/GASS PILOT TEST DATA - 4/7/10 TEST #4
Lake Tahoe Laundry Works
1024 Lake Tahoe Boulevard
South Lake Tahoe, California

Well ID	Date (mo/dy/yr)	Time (hr:min)	Vacuum (in-H_2O)	Flow (SCFM)	Oxygen (%)	Field Influent (ppmV)	Comments
Extraction at VE-5S, VE-6S, VE-8S, VE-9S, VE-10S, VE-11S, VE-14S, VE-15S, VE-16S, and VE-17S							
			avg. applied				
VE-5S, VE-6S, VE-8S, VE-9S, VE-10S, VE-11S, VE-14S, VE-15S, VE-16S, VE-17S	4/7/09	14:05	5.6 in-Hg	500	20.0	35	
		15:20	Test stopped				
		Average	5.6 in-Hg	500	20.0	35	
Observation Wells							
			induced				
VE-1S	4/7/09	nr	0.00				
VE-1D	4/7/09	nr	0.00				
VE-2S	4/7/09	nr	0.09				
VE-2D	4/7/09	nr	0.60				
VE-3S	4/7/09	nr	0.075				
VE-3D	4/7/09	nr	0.35				
VE-4S	4/7/09	nr	0.44				
VE-4D	4/7/09	nr	0.48				
VE-5S	4/7/09	nr	nr				
VE-5D	4/7/09	nr	16.00				
VE-6S	4/7/09	nr	nr				
VE-6D	4/7/09	nr	5.50				
VE-7S	4/7/09	nr	nr				
VE-7D	4/7/09	nr	16.60				
VE-8S	4/7/09	nr	nr				
VE-8D	4/7/09	nr	11.00				
VE-9S	4/7/09	nr	nr				
VE-9D	4/7/09	nr	9.00				
VE-10S	4/7/09	nr	nr				
VE-10D	4/7/09	nr	8.20				
VE-11S	4/7/09	nr	nr				
VE-11D	4/7/09	nr	1.15				
VE-12S	4/7/09	nr	0.40				
VE-12D	4/7/09	nr	0.14				

TABLE U-4
SUMMARY OF SVE/GASS PILOT TEST DATA - 4/7/10 TEST #4
Lake Tahoe Laundry Works
1024 Lake Tahoe Boulevard
South Lake Tahoe, California

Well ID	Date (mo/dy/yr)	Time (hr:min)	Vacuum (in-H_2O)	Flow (SCFM)	Oxygen (%)	Field Influent (ppmV)	Comments
VE-13S	4/7/09	nr	0.005				
VE-13D	4/7/09	nr	0.22				
VE-14S	4/7/09	nr	nr				
VE-14D	4/7/09	nr	15.80				
VE-15S	4/7/09	nr	nr				
VE1-5D	4/7/09	nr	9.90				
VE-16S	4/7/09	nr	nr				
VE-16D	4/7/09	nr	9.40				
VE-17S	4/7/09	nr	nr				
VE-17D	4/7/09	nr	0.80				
VE-18S	4/7/09	nr	0.13				
VE-18D	4/7/09	nr	0.13				
VE-19S	4/7/09	nr	0.04				
VE-19D	4/7/09	nr	0.005				
VE-20S	4/7/09	nr	0.00				
VE-20D	4/7/09	nr	0.005				
HVE-1	4/7/09	nr	+0.025				
HVE-2	4/7/09	nr	0.045				
HVE-3	4/7/09	nr	0.05				
HVE-4	4/7/09	nr	0.15				
HVE-5	4/7/09	nr	0.10				
HVE-6	4/7/09	nr	0.095				
LW-MW-1S	4/7/09	nr	0.015				
LW-MW-1D	4/7/09	nr	0.065				
LW-MW-2S	4/7/09	nr	0.00				
LW-MW-2D	4/7/09	nr	0.00				
LW-MW-5S	4/7/09	nr	+0.50				
LW-MW-5D	4/7/09	nr	+0.07				
LW-MW-9S	4/7/09	nr	0.17				
LW-MW-10S	4/7/09	nr	0.01				
LW-MW-11S	4/7/09	nr	3.70				
LW-MW-12S	4/7/09	nr	0.40				
LW-MW-13S	4/7/09	nr	11.90				
OS-1	4/7/09	nr	nr				
VP-1	4/7/09	nr	+0.01				
VP-2	4/7/09	nr	0.005				
VP-3	4/7/09	nr	+0.005				
VP-4	4/7/09	nr	0.005				

TABLE U-4
SUMMARY OF SVE/GASS PILOT TEST DATA - 4/7/10 TEST #4
Lake Tahoe Laundry Works
1024 Lake Tahoe Boulevard
South Lake Tahoe, California

Well ID	Date (mo/dy/yr)	Time (hr:min)	Vacuum (in-H_2O)	Flow (SCFM)	Oxygen (%)	Field Influent (ppmV)	Comments
VP-5	4/7/09	nr	0.03				
VP-6	4/7/09	nr	0.11				
VP-7	4/7/09	nr	0.20				
VP-8	4/7/09	nr	0.44				
VP-9	4/7/09	nr	0.32				
VP-10	4/7/09	nr	+0.005				

Notes:
in-H2O = inches water (positive sign indicates pressure reading)
in-Hg = inches mercury
SCFM = standard cubic feet per minute
ppmV = parts per million by volume
mo/dy/yr = month, day year
hr:min = hour and minute of data measurement

TABLE U-5
SUMMARY OF SVE/GASS PILOT TEST DATA - 4/7/10 TEST #5
Lake Tahoe Laundry Works
1024 Lake Tahoe Boulevard
South Lake Tahoe, California

Well ID	Date (mo/dy/yr)	Time (hr:min)	Vacuum (in-H_2O)	Flow (SCFM)	Oxygen (%)	Field Influent (ppmV)	Comments
Extraction at VE-4D, VE-5S, VE-5D, VE-6S, VE-6D, VE-7S, VE-7D, VE-8S, VE-8D, VE-9S, VE-9D, VE-10S, VE-10D, VE-11S, VE-11D, VE-14S, VE-14D, VE-15S, VE-15D, VE-16S, VE-16D, VE-17S, and VE-17D							
			avg. applied				
VE-4D, VE-5S, VE-5D, VE-6S, VE-6D, VE-7S, VE-7D, VE-8S, VE-8D, VE-9S, VE-9D, VE-10S, VE-10D, VE-11S, VE-11D, VE-14S, VE-14D, VE-15S, VE-15D, VE-16S, VE-16D, VE-17S, VE-17D	4/7/09	15:25	4.10 in-Hg	500	20.2	20	
		16:15	Test stopped				
		Average	4.10 in-Hg	500	20.2	20	
Observation Wells							
			induced				
VE-1S	4/7/09	nr	+0.01				
VE-1D	4/7/09	nr	+0.01				
VE-2S	4/7/09	nr	0.11				
VE-2D	4/7/09	nr	0.42				
VE-3S	4/7/09	nr	0.20				
VE-3D	4/7/09	nr	0.45				
VE-4S	4/7/09	nr	1.35				
VE-4D	4/7/09	nr	1.45				
VE-5S	4/7/09	nr	nr				
VE-5D	4/7/09	nr	nr				
VE-6S	4/7/09	nr	nr				
VE-6D	4/7/09	nr	nr				
VE-7S	4/7/09	nr	nr				
VE-7D	4/7/09	nr	nr				

TABLE U-5
SUMMARY OF SVE/GASS PILOT TEST DATA - 4/7/10 TEST #5
Lake Tahoe Laundry Works
1024 Lake Tahoe Boulevard
South Lake Tahoe, California

Well ID	**Date** (mo/dy/yr)	**Time** (hr:min)	**Vacuum** (in-H_2O)	**Flow** (SCFM)	**Oxygen** (%)	**Field Influent** (ppmV)	**Comments**
VE-8S	4/7/09	nr	nr				
VE-8D	4/7/09	nr	nr				
VE-9S	4/7/09	nr	nr				
VE-9D	4/7/09	nr	nr				
VE-10S	4/7/09	nr	nr				
VE-10D	4/7/09	nr	nr				
VE-11S	4/7/09	nr	nr				
VE-11D	4/7/09	nr	nr				
VE-12S	4/7/09	nr	1.90				
VE-12D	4/7/09	nr	0.40				
VE-13S	4/7/09	nr	0.150				
VE-13D	4/7/09	nr	0.22				
VE-14S	4/7/09	nr	nr				
VE-14D	4/7/09	nr	nr				
VE-15S	4/7/09	nr	nr				
VE1-5D	4/7/09	nr	nr				
VE-16S	4/7/09	nr	nr				
VE-16D	4/7/09	nr	nr				
VE-17S	4/7/09	nr	nr				
VE-17D	4/7/09	nr	nr				
VE-18S	4/7/09	nr	0.27				
VE-18D	4/7/09	nr	0.27				
VE-19S	4/7/09	nr	0.075				
VE-19D	4/7/09	nr	0.005				
VE-20S	4/7/09	nr	+0.005				
VE-20D	4/7/09	nr	0.005				
HVE-1	4/7/09	nr	+0.06				
HVE-2	4/7/09	nr	0.085				
HVE-3	4/7/09	nr	0.09				
HVE-4	4/7/09	nr	0.195				
HVE-5	4/7/09	nr	0.12				
HVE-6	4/7/09	nr	0.120				
LW-MW-1S	4/7/09	nr	+0.03				
LW-MW-1D	4/7/09	nr	+0.10				
LW-MW-2S	4/7/09	nr	+0.03				
LW-MW-2D	4/7/09	nr	+0.03				
LW-MW-5S	4/7/09	nr	+0.14				
LW-MW-5D	4/7/09	nr	+0.08				

TABLE U-5
SUMMARY OF SVE/GASS PILOT TEST DATA - 4/7/10 TEST #5
Lake Tahoe Laundry Works
1024 Lake Tahoe Boulevard
South Lake Tahoe, California

Well ID	Date (mo/dy/yr)	Time (hr:min)	Vacuum (in-H_2O)	Flow (SCFM)	Oxygen (%)	Field Influent (ppmV)	Comments
LW-MW-9S	4/7/09	nr	0.49				
LW-MW-10S	4/7/09	nr	+0.01				
LW-MW-11S	4/7/09	nr	5.00				
LW-MW-12S	4/7/09	nr	0.28				
LW-MW-13S	4/7/09	nr	10.60				
OS-1	4/7/09	nr	nr				
VP-1	4/7/09	nr	+0.001				
VP-2	4/7/09	nr	+0.005				
VP-3	4/7/09	nr	+0.005				
VP-4	4/7/09	nr	0.11				
VP-5	4/7/09	nr	0.10				
VP-6	4/7/09	nr	0.28				
VP-7	4/7/09	nr	1.20				
VP-8	4/7/09	nr	1.50				
VP-9	4/7/09	nr	0.65				
VP-10	4/7/09	nr	0.00				

Notes:

in-H2O = inches water (positive sign indicates pressure reading)

in-Hg = inches mercury

SCFM = standard cubic feet per minute

ppmV = parts per million by volume

mo/dy/yr = month, day year

hr:min = hour and minute of data measurement

TABLE U-6
SUMMARY OF SVE/GASS PILOT TEST DATA - 4/7/10 TEST #6
Lake Tahoe Laundry Works
1024 Lake Tahoe Boulevard
South Lake Tahoe, California

Well ID	Date (mo/dy/yr)	Time (hr:min)	Vacuum (in-H_2O)	Flow (SCFM)	Oxygen (%)	Field Influent (ppmV)	Comments
Extraction at HVE-1, HVE-2, HVE-3, HVE-4, HVE-5, and HVE-6							
			avg. applied				
HVE-1, HVE-2, HVE-3, HVE-4, HVE-5, HVE-6	4/7/09	16:30	9.4 in-Hg	500	19.9	81	
		nr	Test stopped due to high water in holding tank.				
		Average	9.4 in-Hg	500	19.9	81	
Observation Wells							
			induced				
VE-1S	4/7/09						
VE-1D	4/7/09						
VE-2S	4/7/09						
VE-2D	4/7/09						
VE-3S	4/7/09						
VE-3D	4/7/09						
VE-4S	4/7/09						
VE-4D	4/7/09						
VE-5S	4/7/09						
VE-5D	4/7/09						
VE-6S	4/7/09						
VE-6D	4/7/09						
VE-7S	4/7/09						
VE-7D	4/7/09						
VE-8S	4/7/09						
VE-8D	4/7/09						
VE-9S	4/7/09						
VE-9D	4/7/09						
VE-10S	4/7/09						
VE-10D	4/7/09						
VE-11S	4/7/09						

VE-11D	4/7/09						
VE-12S	4/7/09						
VE-12D	4/7/09						
VE-13S	4/7/09						
VE-13D	4/7/09						
VE-14S	4/7/09						
VE-14D	4/7/09						
VE-15S	4/7/09						
VE1-5D	4/7/09						
VE-16S	4/7/09						
VE-16D	4/7/09						
VE-17S	4/7/09						
VE-17D	4/7/09						
VE-18S	4/7/09						
VE-18D	4/7/09						
VE-19S	4/7/09						
VE-19D	4/7/09						
VE-20S	4/7/09						
VE-20D	4/7/09						
HVE-1	4/7/09						
HVE-2	4/7/09						
HVE-3	4/7/09						
HVE-4	4/7/09						
HVE-5	4/7/09						
HVE-6	4/7/09						
LW-MW-1S	4/7/09						
LW-MW-1D	4/7/09						
LW-MW-2S	4/7/09						
LW-MW-2D	4/7/09						
LW-MW-5S	4/7/09						
LW-MW-5D	4/7/09						
LW-MW-9S	4/7/09						
LW-MW-10S	4/7/09						
LW-MW-11S	4/7/09						
LW-MW-12S	4/7/09						
LW-MW-13S	4/7/09						
OS-1	4/7/09						
VP-1	4/7/09						
VP-2	4/7/09						
VP-3	4/7/09						
VP-4	4/7/09						
VP-5	4/7/09						
VP-6	4/7/09						

VP-7	4/7/09						
VP-8	4/7/09						
VP-9	4/7/09						
VP-10	4/7/09						

Notes:

in-H2O = inches water (positive sign indicates pressure reading)

in-Hg = inches mercury

SCFM = standard cubic feet per minute

ppmV = parts per million by volume

mo/dy/yr = month, day year

hr:min = hour and minute of data measurement

TABLE U-7
SUMMARY OF SVE/GASS PILOT TEST DATA - 4/8/10 TEST #7
Lake Tahoe Laundry Works
1024 Lake Tahoe Boulevard
South Lake Tahoe, California

Well ID	Date (mo/dy/yr)	Time (hr:min)	Vacuum (in-H_2O)	Flow (SCFM)	Oxygen (%)	Field Influent (ppmV)	Comments
Extraction at VE-1S, VE-2S, VE-3S, VE-4S, VE-5S, VE-6S, VE-7S, VE-8S, VE-9S, VE-10S, VE-11S, VE-12S, VE-13S, VE-14S, VE-15S, VE-16S, VE-17S, VE-18S, VE-19S, VE-20S, HVE-1, HVE-2, HVE-3, HVE-4, HVE-5, and HVE-6							
			avg. applied				
VE-1S, VE-2S, VE-3S, VE-4S, VE-5S, VE-6S, VE-7S, VE-8S, VE-9S, VE-10S, VE-11S, VE-12S, VE-13S, VE-14S, VE-15S, VE-16S, VE-17S, VE-18S, VE-19S, VE-20S, HVE-1, HVE-2, HVE-3, HVE-4, HVE-5, HVE-6	4/8/09	9:45	4.0 in-Hg	500	nr	nr	
		9:50	nr	nr	20.4	50	
		10:00	nr	nr	20.5	48	
		10:30	nr	nr	20.3	28	
		14:10	nr	nr	20.2	44	After well field adjustmet
		nr	Test stopped				
		Average	4.0 in-Hg	500	20.4	43	
Observation Wells							
			induced				
VE-1S	4/8/09	12:25					Flow 10.7, later measured at 6.2 cfm
VE-1D	4/8/09	9:50	+0.01				
		nr	0.01				
VE-2S	4/8/09	12:27					Flow 15.1 cfm
VE-2D	4/8/09	9:52	+0.05				
		nr	1.75				
VE-3S	4/8/09	12:33					Flow 15.1 cfm
VE-3D	4/8/09	9:48	+0.02				
		nr	2.80				
VE-4S	4/8/09	13:36					Flow 36.1 cfm
VE-4D	4/8/09	9:58	0.005				
		nr	6.50				

TABLE U-7
SUMMARY OF SVE/GASS PILOT TEST DATA - 4/8/10 TEST #7
Lake Tahoe Laundry Works
1024 Lake Tahoe Boulevard
South Lake Tahoe, California

Well ID	Date (mo/dy/yr)	Time (hr:min)	Vacuum (in-H_2O)	Flow (SCFM)	Oxygen (%)	Field Influent (ppmV)	Comments
VE-5S	4/8/09	13:42					Flow 21.4 cfm
VE-5D	4/8/09	9:56	0.01				
		nr	8.20				
VE-6S	4/8/09	12:10					Flow 51.9 cfm, adjust to 20 cfm
VE-6D	4/8/09	9:26	+0.045				
		nr	0.32				
VE-7S	4/8/09	12:23					Flow 12.4 cfm
VE-7D	4/8/09	9:42	0.005				
		nr	8.30				
VE-8S	4/8/09	12:21					Flow 67.9 cfm, adjust to 20 cfm
VE-8D	4/8/09	9:40	+0.02				
		nr	7.20				
VE-9S	4/8/09	12:19					Flow 39.2 cfm, adjust to 20 cfm
VE-9D	4/8/09	9:38	+0.01				
		nr	6.10				
VE-10S	4/8/09	12:13					Flow 43.8 cfm, adjust to 20 cfm
VE-10D	4/8/09	9:25	+0.10				
		nr	5.50				
VE-11S	4/8/09	12:15					Flow 16.4 cfm
VE-11D	4/8/09	9:30	+0.015				
		nr	1.80				
VE-12S	4/8/09	12:29					Flow 48.03 cfm
VE-12D	4/8/09	9:32	0.01				
		nr	2.60				
VE-13S	4/8/09	12:17					Flow 8.7 cfm, later measured at 40.18 cfm
VE-13D	4/8/09	9:34	0.06				
		nr	2.20				
VE-14S	4/8/09	12:39					Flow 101.8 cfm, adjust to 10 to 12 cfm
VE-14D	4/8/09	9:46	0.01				
		nr	10.00				
VE-15S	4/8/09	13:46					Flow 15.1 cfm
VE1-5D	4/8/09	10:04	0.01				
		nr	5.70				
VE-16S	4/8/09	13:44					Flow 27.7 cfm
VE-16D	4/8/09	10:02	+0.02				
		nr	5.40				

TABLE U-7
SUMMARY OF SVE/GASS PILOT TEST DATA - 4/8/10 TEST #7
Lake Tahoe Laundry Works
1024 Lake Tahoe Boulevard
South Lake Tahoe, California

Well ID	Date (mo/dy/yr)	Time (hr:min)	Vacuum (in-H_2O)	Flow (SCFM)	Oxygen (%)	Field Influent (ppmV)	Comments
VE-17S	4/8/09	13:40					Flow 16.4 cfm
VE-17D	4/8/09	10:00	+0.01				
		nr	1.70				
VE-18S	4/8/09	13:32					Flow 38.2 cfm
VE-18D	4/8/09	9:54	+0.01				
		nr	7.40				
VE-19S	4/8/09	12:43					Flow 80.8 cfm
VE-19D	4/8/09	9:44	+0.01				
		nr	3.30				
VE-20S	4/8/09	12:31					Flow 8.7 cfm, later measured at 23.2 cfm
VE-20D	4/8/09	9:36	0.05				
		nr	0.22				
HVE-1	4/8/09	13:30					Flow 87.6 cfm
HVE-2	4/8/09	12:37					Flow 15.1 cfm
HVE-3	4/8/09	12:35					Flow 18.6 cfm
HVE-4	4/8/09	12:41					Flow 48.03 cfm
HVE-5	4/8/09	13:38					Flow 19.6 cfm
HVE-6	4/8/09	13:34					Flow 12.4 cfm
LW-MW-1S	4/8/09	8:25	+0.02				
		nr	+0.03				
LW-MW-1D	4/8/09	8:30	+0.015				
		nr	+0.05				
LW-MW-2S	4/8/09	8:15	+0.005				
		nr	+0.25				
LW-MW-2D	4/8/09	8:20	+0.01				
		nr	+0.01				
LW-MW-5S	4/8/09	8:40	+0.03				
		nr	+0.025				
LW-MW-5D	4/8/09	8:45	+0.04				
		nr	+0.02				
LW-MW-9S	4/8/09	8:35	+0.015				
		nr	2.60				
LW-MW-10S	4/8/09	8:10	+0.04				
		nr	1.50				
LW-MW-11S	4/8/09	8:50	+0.005				
		nr	2.20				
LW-MW-12S	4/8/09	8:05	+0.02				

TABLE U-7
SUMMARY OF SVE/GASS PILOT TEST DATA - 4/8/10 TEST #7
Lake Tahoe Laundry Works
1024 Lake Tahoe Boulevard
South Lake Tahoe, California

Well ID	Date (mo/dy/yr)	Time (hr:min)	Vacuum (in-H_2O)	Flow (SCFM)	Oxygen (%)	Field Influent (ppmV)	Comments
		nr	1.15				
LW-MW-13S	4/8/09	8:55	+0.01				
		nr	7.10				
OS-1	4/8/09	9:00	0.00				
VP-1	4/8/09	9:05	+0.005				
		nr	0.00				
VP-2	4/8/09	9:10	+0.01				
		nr	13.60				
VP-3	4/8/09	9:15	+0.005				
		nr	+0.005				
VP-4	4/8/09	9:20	0.00				
		nr	6.00				
VP-5	4/8/09	9:25	+0.005				
		nr	7.10				
VP-6	4/8/09	9:30	+0.005				
		nr	6.30				
VP-7	4/8/09	9:35	+0.01				
		nr	3.90				
VP-8	4/8/09	9:40	0.16				
		nr	7.00				
VP-9	4/8/09	9:45	0.00				
		nr	3.60				
VP-10	4/8/09	9:50	+0.005				
		nr	+0.005				

Notes:

in-H2O = inches water (positive sign indicates pressure reading)

in-Hg = inches mercury

SCFM = standard cubic feet per minute

ppmV = parts per million by volume

mo/dy/yr = month, day year

hr:min = hour and minute of data measurement

TABLE U-8
SUMMARY OF SVE/GASS PILOT TEST DATA - 4/8/10 TEST #8
Lake Tahoe Laundry Works
1024 Lake Tahoe Boulevard
South Lake Tahoe, California

Well ID	Date (mo/dy/yr)	Time (hr:min)	Vacuum (in-H_2O)	Flow (SCFM)	Oxygen (%)	Field Influent (ppmV)	Comments
Extraction at VE-1S, VE-2S, VE-3S, VE-4S, VE-5S, VE-6S, VE-7S, VE-8S, VE-9S, VE-10S, VE-11S, VE-12S, VE-13S, VE-14S, VE-15S, VE-16S, VE-17S, VE-18S, VE-19S, VE-20S, HVE-1, HVE-2, HVE-3, HVE-4, HVE-5, and HVE-6							
All Sparge Wells Operating (AS-1, AS-2, AS-3, AS-4, AS-5, AS-6, AS-7, AS-8, AS-9, AS-10, AS-11, AS-12, AS-13, AS-14, AS-15, AS-16, AS-17, AS-18, AS-19, AS-20, AS-21, AS-22, AS-23, AS-24, AS-25, AS-26, and AS-27)							
			avg. applied				
VE-1S, VE-2S, VE-3S, VE-4S, VE-5S, VE-6S, VE-7S, VE-8S, VE-9S, VE-10S, VE-11S, VE-12S, VE-13S, VE-14S, VE-15S, VE-16S, VE-17S, VE-18S, VE-19S, VE-20S, HVE-1, HVE-2, HVE-3, HVE-4, HVE-5, HVE-6	4/8/09	14:35	4.0 in-Hg	500	20.9	43	2.75 in-Hg at manifold. Sparge compressor at 15 psi.
		16:00	Test stopped				
		Average	4.0 in-Hg	500	20.9	43	
Observation Wells							
			induced				
VE-1S	4/8/09	nr		43.0			
VE-1D	4/8/09	nr	2.50				
VE-2S	4/8/09	nr		15.2			
VE-2D	4/8/09	nr	+21.2				
VE-3S	4/8/09	nr		15.2			
VE-3D	4/8/09	nr	5.50				
VE-4S	4/8/09	nr		32.8			
VE-4D	4/8/09	nr	4.30				
VE-5S	4/8/09	nr		21.5			
VE-5D	4/8/09	nr	7.40				
VE-6S	4/8/09	nr		73.4			

TABLE U-8
SUMMARY OF SVE/GASS PILOT TEST DATA - 4/8/10 TEST #8
Lake Tahoe Laundry Works
1024 Lake Tahoe Boulevard
South Lake Tahoe, California

Well ID	**Date** (mo/dy/yr)	**Time** (hr:min)	**Vacuum** (in-H_2O)	**Flow** (SCFM)	**Oxygen** (%)	**Field Influent** (ppmV)	**Comments**
VE-6D	4/8/09	nr	0.015				
VE-7S	4/8/09	nr		41.1			
VE-7D	4/8/09	nr	10.00				
VE-8S	4/8/09	nr		62.0			
VE-8D	4/8/09	nr	8.50				
VE-9S	4/8/09	nr		39.2			
VE-9D	4/8/09	nr	5.90				
VE-10S	4/8/09	nr		41.4			
VE-10D	4/8/09	nr	5.10				
VE-11S	4/8/09	nr		17.7			
VE-11D	4/8/09	nr	2.00				
VE-12S	4/8/09	nr		43.9			
VE-12D	4/8/09	nr	2.10				
VE-13S	4/8/09	nr		15.2			
VE-13D	4/8/09	nr	2.00				
VE-14S	4/8/09	nr		100.0			
VE-14D	4/8/09	nr	10.70				
VE-15S	4/8/09	nr		15.2			
VE1-5D	4/8/09	nr	5.40				
VE-16S	4/8/09	nr		27.7			
VE-16D	4/8/09	nr	5.10				
VE-17S	4/8/09	nr		12.4			
VE-17D	4/8/09	nr	1.45				
VE-18S	4/8/09	nr		31.6			
VE-18D	4/8/09	nr	6.10				
VE-19S	4/8/09	nr		12.4			
VE-19D	4/8/09	nr	1.65				
VE-20S	4/8/09	nr		8.8			
VE-20D	4/8/09	nr	0.75				
HVE-1	4/8/09	nr		124.0			
HVE-2	4/8/09	nr		62.0			
HVE-3	4/8/09	nr		44.7			
HVE-4	4/8/09	nr		62.0			
HVE-5	4/8/09	nr		8.8			
HVE-6	4/8/09	nr		8.8			
AS-1	4/8/09	nr		1.0			8.5 psi
AS-2	4/8/09	nr		11.0			9.5 psi
AS-3	4/8/09	nr		2.0			8 psi

TABLE U-8
SUMMARY OF SVE/GASS PILOT TEST DATA - 4/8/10 TEST #8
Lake Tahoe Laundry Works
1024 Lake Tahoe Boulevard
South Lake Tahoe, California

Well ID	Date (mo/dy/yr)	Time (hr:min)	Vacuum (in-H_2O)	Flow (SCFM)	Oxygen (%)	Field Influent (ppmV)	Comments
AS-4	4/8/09	nr		3.0			0 psi
AS-5	4/8/09	nr		4.5			9.0 psi
AS-6	4/8/09	nr		1.0			8.5 psi
AS-7	4/8/09	nr		1.0			11.0 psi
AS-8	4/8/09	nr		1.0			8.5 psi
AS-9	4/8/09	nr		1.0			9 psi
AS-10	4/8/09	nr		1.0			10.5 psi
AS-11	4/8/09	nr		1.8			9.5 psi
AS-12	4/8/09	nr		1.0			9.0 psi
AS-13	4/8/09	nr		1.0			9.0 psi
AS-14	4/8/09	nr		1.0			4.0 psi
AS-15	4/8/09	nr		3.5			9.5 psi
AS-16	4/8/09	nr		1.0			8.0 psi
AS-17	4/8/09	nr		1.0			7.0 psi
AS-18	4/8/09	nr		1.0			9.0 psi
AS-19	4/8/09	nr		1.0			10.0 psi
AS-20	4/8/09	nr		2.0			10.0 psi
AS-21	4/8/09	nr		2.0			9.5 psi
AS-22	4/8/09	nr		13.0			14.0 psi
AS-23	4/8/09	nr		1.0			8.0 psi
AS-24	4/8/09	nr		2.0			10.0 psi
AS-25	4/8/09	nr		1.0			10.5 psi
AS-26	4/8/09	nr		5.0			8.0 psi
AS-27	4/8/09	nr		1.5			7.0 psi
LW-MW-1S	4/8/09	nr	+0.03				
LW-MW-1D	4/8/09	nr	+0.035				
LW-MW-2S	4/8/09	nr	+0.02				
LW-MW-2D	4/8/09	nr	+0.03				
LW-MW-5S	4/8/09	nr	+1.75				
LW-MW-5D	4/8/09	nr	+0.08				
LW-MW-9S	4/8/09	nr	+12.5				
LW-MW-10S	4/8/09	nr	+0.05				
LW-MW-11S	4/8/09	nr	+25.3				
LW-MW-12S	4/8/09	nr	+22.8				
LW-MW-13S	4/8/09	nr	+48.9				
VP-1	4/8/09	nr	0.00				
VP-2	4/8/09	nr	8.50				
VP-3	4/8/09	nr	+0.05				

TABLE U-8
SUMMARY OF SVE/GASS PILOT TEST DATA - 4/8/10 TEST #8
Lake Tahoe Laundry Works
1024 Lake Tahoe Boulevard
South Lake Tahoe, California

Well ID	Date (mo/dy/yr)	Time (hr:min)	Vacuum (in-H_2O)	Flow (SCFM)	Oxygen (%)	Field Influent (ppmV)	Comments
VP-4	4/8/09	nr	1.30				
VP-5	4/8/09	nr	5.40				
VP-6	4/8/09	nr	4.40				
VP-7	4/8/09	nr	+0.03				
VP-8	4/8/09	nr	6.10				
VP-9	4/8/09	nr	2.70				
VP-10	4/8/09	nr	0.00				

Notes:

in-H2O = inches water (positive sign indicates pressure reading)
in-Hg = inches mercury
SCFM = standard cubic feet per minute
ppmV = parts per million by volume
mo/dy/yr = month, day year
hr:min = hour and minute of data measurement

TABLE U-9
SUMMARY OF SVE/GASS PILOT TEST DATA - 4/9/10 TEST #9
Lake Tahoe Laundry Works
1024 Lake Tahoe Boulevard
South Lake Tahoe, California

Well ID	Date (mo/dy/yr)	Time (hr:min)	Vacuum (in-H_2O)	Flow (SCFM)	Oxygen (%)	Field Influent (ppmV)	Comments
Extraction at VE-1S, VE-2S, VE-20S, HVE-1, HVE-2, HVE-3, HVE-4, HVE-5, and HVE-6							
All Sparge Wells Operating (AS-1, AS-2, AS-3, AS-4, AS-5, AS-6, AS-7, AS-8, AS-9, AS-10, AS-11, AS-12, AS-13, AS-14, AS-15, AS-16, AS-17, AS-18, AS-19, AS-20, AS-21, AS-22, AS-23, AS-24, AS-25, AS-26, and AS-27)							
			avg. applied				
VE-1S, VE-2S, VE-20S, HVE-1, HVE-2, HVE-3, HVE-4, HVE-5, HVE-6	4/9/09	10:30	8 in-Hg	500	20.5	83	
		12:30	Test stopped				
		Average	8 in-Hg	500	20.5	83	
Observation Wells							
			induced				
VE-1S	4/9/09	nr		10.7			
VE-1D	4/9/09	10:25	+0.025				
		nr	+0.065				
VE-2S	4/9/09	7:45	+0.005				
		nr		12.4			
VE-2D	4/9/09	nr	+20.2				
VE-3S	4/9/09	nr					
VE-3D	4/9/09	10:23	+0.08				
		nr	+8.8				
VE-4S	4/9/09	nr	0.50				
VE-4D	4/9/09	10:33	+0.009				
		nr	0.17				
VE-5S	4/9/09	nr	+0.2				
VE-5D	4/9/09	10:31	0.00				
		nr	+0.025				
VE-6S	4/9/09	nr	+0.90				
VE-6D	4/9/09	10:00	0.000				
		nr	+0.75				
VE-7S	4/9/09	nr	+0.45				

TABLE U-9
SUMMARY OF SVE/GASS PILOT TEST DATA - 4/9/10 TEST #9
Lake Tahoe Laundry Works
1024 Lake Tahoe Boulevard
South Lake Tahoe, California

Well ID	Date (mo/dy/yr)	Time (hr:min)	Vacuum (in-H_2O)	Flow (SCFM)	Oxygen (%)	Field Influent (ppmV)	Comments
VE-7D	4/9/09	10:17	+0.005				
		nr	+0.45				
VE-8S	4/9/09	nr	+0.15				
VE-8D	4/9/09	10:15	+0.01				
		nr	+0.18				
VE-9S	4/9/09	nr	+0.13				
VE-9D	4/9/09	10:13	+0.20				
		nr	+2.2				
VE-10S	4/9/09	nr	+1.2				
VE-10D	4/9/09	10:03	+0.40				
		nr	+2.6				
VE-11S	4/9/09	nr	+0.015				
VE-11D	4/9/09	10:05	+0.005				
		nr	+0.08				
VE-12S	4/9/09	nr	+0.01				
VE-12D	4/9/09	10:07	+0.15				
		nr	+0.15				
VE-13S	4/9/09	nr	0.65				
VE-13D	4/9/09	10:09	+0.005				
		nr	+2.7				
VE-14S	4/9/09	nr	+0.45				
VE-14D	4/9/09	10:21	+0.005				
		nr	+0.55				
VE-15S	4/9/09	nr	+0.65				
VE-5D	4/9/09	10:39	+0.0075				
		nr	+0.60				
VE-16S	4/9/09	nr	+0.45				
VE-16D	4/9/09	10:37	+0.005				
		nr	+0.45				
VE-17S	4/9/09	nr	0.28				
VE-17D	4/9/09	10:35	+0.005				
		nr	0.38				
VE-18S	4/9/09	nr	3.80				
VE-18D	4/9/09	10:29	+0.008				
		nr	3.70				

TABLE U-9
SUMMARY OF SVE/GASS PILOT TEST DATA - 4/9/10 TEST #9
Lake Tahoe Laundry Works
1024 Lake Tahoe Boulevard
South Lake Tahoe, California

Well ID	Date (mo/dy/yr)	Time (hr:min)	Vacuum (in-H_2O)	Flow (SCFM)	Oxygen (%)	Field Influent (ppmV)	Comments
VE-19S	4/9/09	nr	0.00				
VE-19D	4/9/09	10:19	+0.025				
		nr	2.10				
VE-20S	4/9/09	nr		15.2			
VE-20D	4/9/09	10:11	+0.001				
		nr	1.15				
HVE-1	4/9/09	nr		175.3			
HVE-2	4/9/09	nr		51.9			
HVE-3	4/9/09	nr		124.0			
HVE-4	4/9/09	nr		101.8			
HVE-5	4/9/09	nr		7.8			
HVE-6	4/9/09	nr		33.9			
AS-1	4/9/09	nr		3.0			12.0 psi
AS-2	4/9/09	nr		9.5			14.5 psi
AS-3	4/9/09	nr		5.0			11 psi
AS-4	4/9/09	nr		6.5			2.0 psi
AS-5	4/9/09	nr		4.5			12.5 psi
AS-6	4/9/09	nr		1.0			12.5 psi
AS-7	4/9/09	nr		1.0			15.0 psi
AS-8	4/9/09	nr		1.0			11.5 psi
AS-9	4/9/09	nr		2.0			12.5 psi
AS-10	4/9/09	nr		2.5			14.0 psi
AS-11	4/9/09	nr		1.0			15.5 psi
AS-12	4/9/09	nr		2.5			13.5 psi
AS-13	4/9/09	nr		1.0			12.0 psi
AS-14	4/9/09	nr		1.0			6.5 psi
AS-15	4/9/09	nr		4.0			14.5 psi
AS-16	4/9/09	nr		11.5			11.5 psi
AS-17	4/9/09	nr		11.0			11.0 psi
AS-18	4/9/09	nr		12.5			12.5 psi
AS-19	4/9/09	nr		17.5			17.5 psi
AS-20	4/9/09	nr		17.5			17.5 psi
AS-21	4/9/09	nr		16.5			16.5 psi
AS-22	4/9/09	nr		14.0			14.0 psi
AS-23	4/9/09	nr		17.0			17.0 psi
AS-24	4/9/09	nr		18.5			18.5 psi
AS-25	4/9/09	nr		17.5			17.5 psi
AS-26	4/9/09	nr		11.5			11.5 psi

TABLE U-9
SUMMARY OF SVE/GASS PILOT TEST DATA - 4/9/10 TEST #9

Lake Tahoe Laundry Works
1024 Lake Tahoe Boulevard
South Lake Tahoe, California

Well ID	Date (mo/dy/yr)	Time (hr:min)	Vacuum (in-H_2O)	Flow (SCFM)	Oxygen (%)	Field Influent (ppmV)	Comments
AS-27	4/9/09	nr		10.0			10.0 psi
LW-MW-1S	4/9/09	7:55	+0.005				
LW-MW-1D	4/9/09	8:00	+0.01				
LW-MW-2S	4/9/09	7:45	+0.005				
LW-MW-2D	4/9/09	7:50	+0.005				
LW-MW-5S	4/9/09	8:05	+0.11				
LW-MW-5D	4/9/09	8:10	+0.02				
LW-MW-9S	4/9/09	8:15	0.00				
LW-MW-10S	4/9/09	7:35	0.01				
LW-MW-11S	4/9/09	8:20	+0.31				
LW-MW-12S	4/9/09	7:40	+0.02				
LW-MW-13S	4/9/09	8:25	+0.025				
VP-1	4/9/09	9:15	0.00				
VP-2	4/9/09	9:25	0.00				
VP-3	4/9/09	9:20	+0.005				
VP-4	4/9/09	9:10	0.00				
VP-5	4/9/09	9:15	0.005				
VP-6	4/9/09	9:05	0.005				
VP-7	4/9/09	9:00	0.00				
VP-8	4/9/09	8:55	+0.005				
VP-9	4/9/09	8:50	+0.005				
VP-10	4/9/09	8:45	0.00				

Notes:
in-H2O = inches water (positive sign indicates pressure reading)
in-Hg = inches mercury
SCFM = standard cubic feet per minute
ppmV = parts per million by volume
mo/dy/yr = month, day year
hr:min = hour and minute of data measurement

TABLE 1
SUMMARY OF BASELINE (FIRST QUARTER 2010) GROUNDWATER MONITORING DATA
Lake Tahoe Laundry Works
1024 Lake Tahoe Boulevard
South Lake Tahoe, California
March 23, 2010

Well ID	TOC Elev. (feet rel MSL)	Depth to GW (feet BTOC)	GW Elevation (feet MSL)	PCE	TCE	VC	CA	CB	1,1-DCE	MC	Trans-1,2-DCE	1,1-DCA	cis-1,2-DCE	1,2-DCA	1,1,1,2-TCA	1,1,1-TCA
										(µg/L)						
LW-MW-1S	6,191.41	13.99	6,177.42	**1,850**	nd<0.500	nd<0.500	nd<0.500	**0.962**	**7.71**	nd<0.500	**1.41**	nd<0.500	**330**	nd<0.500	**0.795**	nd<0.500
duplicate				**2,000**	nd<0.500	nd<0.500	nd<0.500	**0.845**	**7.40**	nd<0.500	**1.23**	nd<0.500	**314**	nd<0.500	**0.710**	nd<0.500
LW-MW-2S	6,192.41	15.44	6,176.97	**5.9**	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500
LW-MW-5S	6,189.47	14.21	6,175.26	nd<0.500	**26.5**	**3.22**	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	**38.2**	nd<0.500	nd<0.500	nd<0.500
LW-MW-9S	6,192.98	14.82	6,178.16	**174**	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	**7.8**	nd<0.500	nd<0.500	nd<0.500
LW-MW-10S	6,192.15	13.27	6,178.88	**1.04**	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500
LW-MW-11S	6,191.67	14.72	6,176.95	**32.5**	**1.08**	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	**3.63**	nd<0.500	nd<0.500	nd<0.500
LW-MW-12S	6,190.71	13.36	6,177.35	**34.3**	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	**0.613**	nd<0.500	nd<0.500	nd<0.500
LW-MW-13S	6,190.82	13.20	6,177.62	**65.2**	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	**2.92**	nd<0.500	nd<0.500	nd<0.500
OS-1	6,188.12	13.25	6,174.87	**91.2**	**1.41**	nd<0.500	nd<0.500	nd<0.500	nd<0.500	**1.02**	nd<0.500	nd<0.500	**0.989**	nd<0.500	nd<0.500	nd<0.500

Notes:

Results in micrograms per liter (µg/L) (equivalent to parts per billion, ppb)

1,1-DCA = 1,1,-Dichloroethane
1,1-DCE = 1,2-Dichloroethene
1,1,1-TCA = 1,1,1-Trichlorethane
1,1,1,2-TCA = 1,1,1,2-Trichloroethane
CA = Chloeoethane
CB = Chlorobenzene
cis-1,2-DCE = cis-1,2-Dichloroethene
BTOC = Below Top of Casing
MC = Methylene Chloride
PCE = Tetrachloroethene (a.k.a. perchloroethene)
TCE = Trichloroethene
trans-1,2-DCE = trans-1,2-Dichloroethene
VC = Vinyl Chloride

Duplicate sample of LW-MW-1S marked as LW-MW-15 on Chain-of-Custody

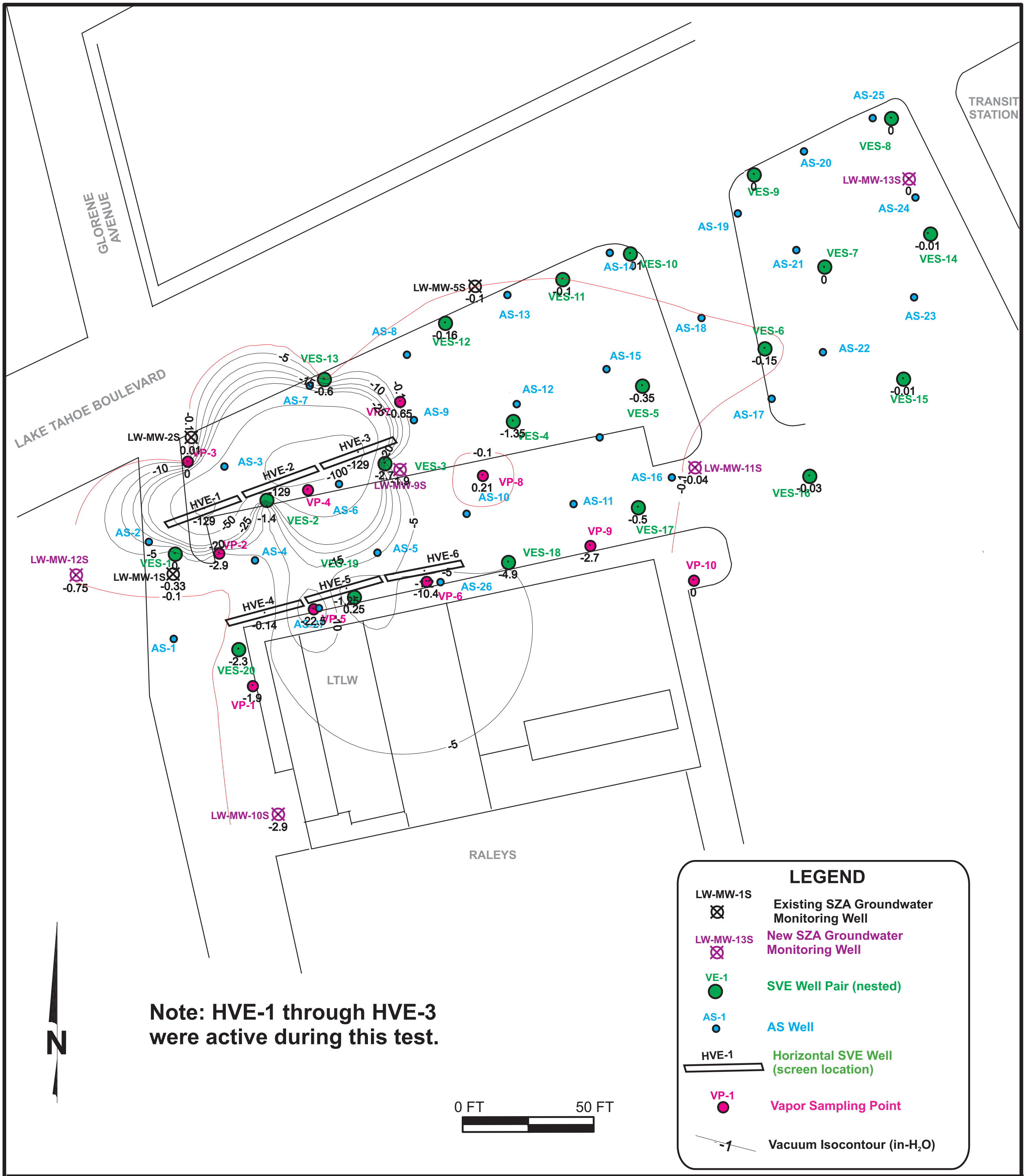
APPENDIX V

Pilot Test Vacuum Isocontour Plots

TABLE V-1
WELL DISTANCE MATRIX CHART
Lake Tahoe Laundry Works
1024 Lake Tahoe Boulevard
South Lake Tahoe, California

	VE-1	VE-2	VE-3	VE-4	VE-5	VE-6	VE-7	VE-8	VE-9	VE-10	VE-11	VE-12	VE-13	VE-14	VE-15	VE-16	VE-17	VE-18	VE-19	VE-20	MW-1S	MW-2S	MW-5S	MW-9S	MW-10S	MW-11S	MW-12S	MW-13S	VP-1	VP-2	VP-3	VP-4	VP-5	VP-6	VP-7	VP-8	VP-9	VP-10	HVE-1	HVE-2	HVE-3	HVE-4	HVE-5	HVE-6
VE-1	X	40	80	130	178	226	255	305	250	195	170	128	83	295	268	237	167	120	65	42	8	43	145	82	100	187	38	294	55	10	34	53	52	90	98	114	138	187	20	48	80	40	67	95
VE-2	X	X	45	95	142	183	218	267	212	160	134	92	50	257	235	205	135	90	45	52	40	38	115	50	117	154	74	257	65	28	33	15	40	65	60	78	116	155	25	8	37	42	50	70
VE-3	X	X	X	48	97	140	175	220	170	118	92	55	38	234	192	160	94	57	50	88	82	70	72	6	132	115	120	212	93	73	73	30	58	45	23	37	80	118	70	40	10	70	50	43
VE-4	X	X	X	X	48	97	125	172	125	73	55	42	70	165	142	117	55	50	85	128	135	117	50	45	165	65	167	170	135	120	118	77	97	65	40	25	52	85	120	90	60	118	90	63
VE-5	X	X	X	X	X	47	80	135	85	45	47	75	115	117	95	77	45	80	128	167	180	162	70	93	202	25	215	120	175	168	165	125	142	105	87	65	60	72	170	140	110	165	137	108
VE-6	X	X	X	X	X	X	35	95	63	59	80	118	162	70	50	52	75	122	174	218	230	230	115	140	245	45	262	78	215	205	207	167	182	143	128	105	90	85	220	190	160	214	184	152
VE-7	X	X	X	X	X	X	X	60	40	67	90	140	185	40	50	75	110	155	205	250	259	238	127	170	277	80	290	43	254	253	233	213	232	220	160	145	130	122	250	220	190	247	216	190
VE-8	X	X	X	X	X	X	X	X	57	108	135	180	220	45	95	135	170	215	262	305	304	280	165	220	335	140	238	24	303	303	296	262	286	197	215	225	220	213	298	268	238	301	274	246
VE-9	X	X	X	X	X	X	X	X	X	52	80	123	172	67	92	107	127	165	208	252	253	223	108	165	286	100	284	55	258	247	240	207	235	197	180	175	175	175	243	213	183	247	221	195
VE-10	X	X	X	X	X	X	X	X	X	X	27	72	120	107	105	105	90	118	158	199	200	172	60	114	240	70	232	100	200	185	185	153	180	145	135	130	137	147	187	157	127	195	167	143
VE-11	X	X	X	X	X	X	X	X	X	X	X	45	94	135	130	120	87	104	137	177	175	145	32	90	220	103	205	127	183	163	157	125	177	140	85	93	115	140	160	130	102	170	145	122
VE-12	X	X	X	X	X	X	X	X	X	X	X	X	47	177	167	155	97	90	103	140	132	100	18	55	185	130	162	178	147	120	105	78	113	93	32	60	95	124	114	85	60	128	108	94
VE-13	X	X	X	X	X	X	X	X	X	X	X	X	X	225	209	185	122	94	80	102	82	52	64	38	158	132	117	220	113	75	57	40	82	80	28	67	112	150	65	40	30	90	83	80
VE-14	X	X	X	X	X	X	X	X	X	X	X	X	X	X	52	95	145	192	244	290	295	275	165	210	214	115	332	22	290	295	293	255	275	232	240	218	200	178	293	263	233	290	260	230
VE-15	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	45	107	158	216	258	271	258	160	187	275	80	305	72	257	255	272	239	240	196	183	155	127	104	268	238	208	252	222	192
VE-16	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	70	120	177	221	240	232	145	155	232	53	273	115	250	253	235	190	230	158	165	125	87	60	229	198	171	212	182	152
VE-17	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	50	107	152	170	161	100	87	170	30	205	152	153	144	195	141	146	95	102	53	25	40	163	135	108	145	115	85
VE-18	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	57	100	120	122	100	50	122	77	156	198	102	110	120	75	73	30	70	30	30	67	115	90	70	93	63	33
VE-19	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	45	65	82	120	48	82	134	100	248	48	55	77	40	15	28	70	63	87	123	65	51	54	34	5	28
VE-20	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	472	80	150	87	60	205	65	292	13	35	75	62	30	72	132	107	132	165	50	65	87	17	46	77
MW-1S	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	50	150	87	95	222	35	298	48	15	40	56	52	90	102	115	150	187	20	50	80	37	65	96
MW-2S	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	115	77	140	180	65	272	92	40	8	45	75	100	77	105	150	187	27	39	64	72	83	102
MW-5S	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	72	202	96	178	158	164	135	120	95	130	107	39	70	103	132	132	103	77	145	125	109
MW-9S	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	131	105	124	210	95	70	75	33	58	42	25	30	75	112	75	44	17	74	50	40
MW-10S	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	200	117	320	47	95	130	118	75	100	155	140	147	170	118	126	140	75	89	108
MW-11S	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	226	122	180	155	180	140	147	105	105	75	40	50	185	155	125	170	140	110
MW-12S	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	329	75	50	57	90	87	125	130	150	185	224	55	85	115	73	102	133
MW-13S	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	314	296	293	255	278	237	230	197	185	173	294	264	234	293	264	235
VP-1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	45	85	72	45	73	115	110	130	163	68	78	95	28	50	80
VP-2	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	35	40	40	80	85	100	135	175	17	36	65	28	50	79
VP-3	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	45	70	95	80	105	143	192	20	36	64	65	76	100
VP-4	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	42	53	45	65	103	142	39	9	24	48	40	35
VP-5	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	40	80	75	100	135	55	50	60	18	15	45
VP-6	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	65	40	60	95	87	67	55	63	31	5
VP-7	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	40	85	124	83	47	25	95	75	65
VP-8	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	45	83	105	75	48	95	67	42
VP-9	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	40	145	117	95	125	95	65
VP-10	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	187	160	135	163	133	103
HVE-1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	30	60	45	60	85
HVE-2	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	30	50	47	63
HVE-3	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	70	51	50
HVE-4	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	30	60
HVE-5	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	30
HVE-6	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X

HVE DISTANCE FROM APPROXIMATE MID-POINT OF THE HVE WELL SCREEN
DOES NOT INCLUDE SPARGE WELLS



Note: HVE-1 through HVE-3 were active during this test.

E_2C Remediation

5300 Woodmere Dr., Suite 105
Bakersfield, CA 93313

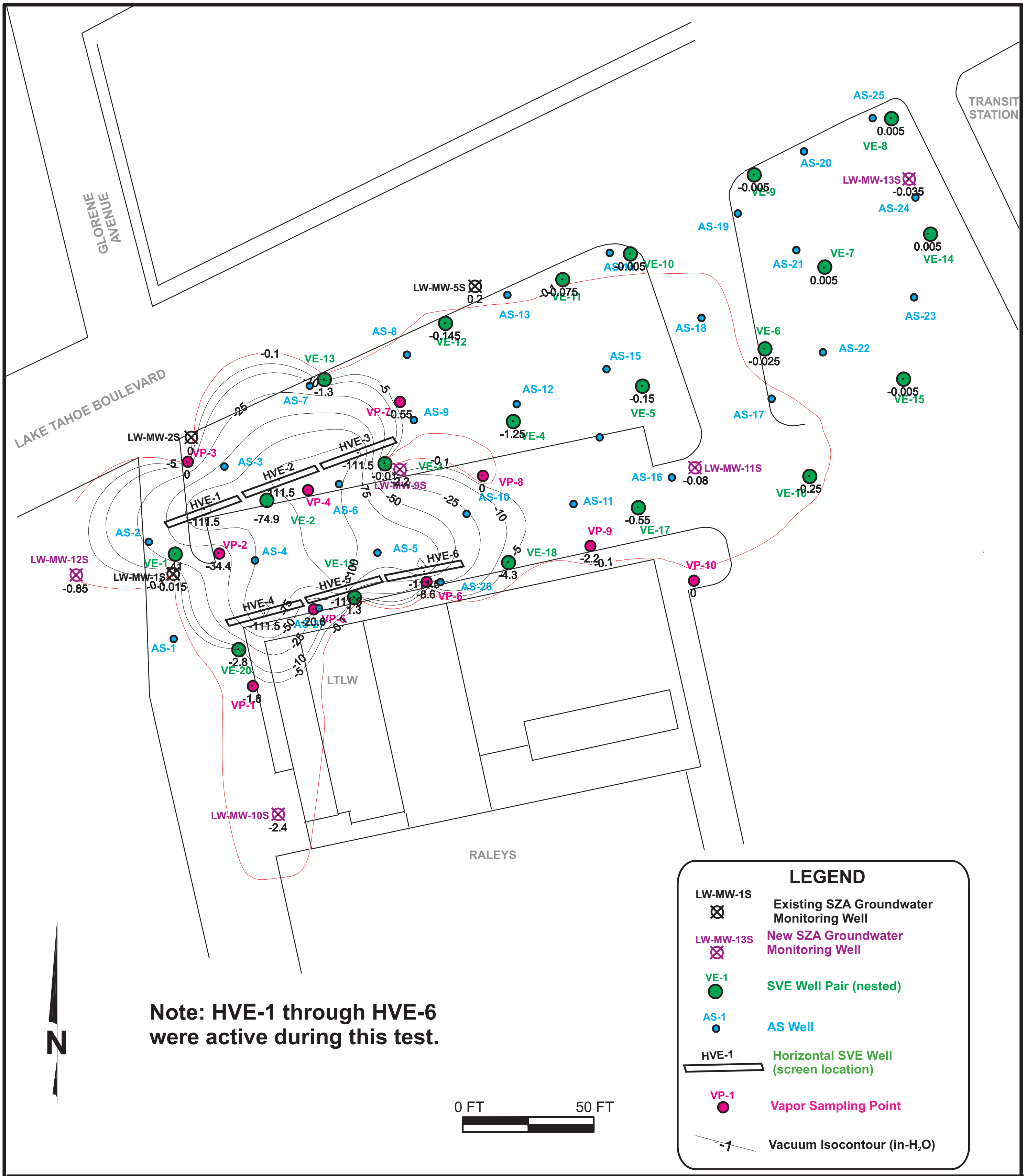
Phone: (661) 831-6906
Fax: (661) 831-6234

LAKE TAHOE LAUNDRY WORKS
1024 LAKE TAHOE BOULEVARD
SOUTH LAKE TAHOE, CALIFORNIA

PILOT TEST #1 (APRIL 6, 2010)
SHALLOW OBSERVATION WELL
VACUUM ISOCONTOUR PLOT

FIGURE

V-1A



Note: HVE-1 through HVE-6 were active during this test.

E_2C Remediation

5300 Woodmere Dr., Suite 105
Bakersfield, CA 93313

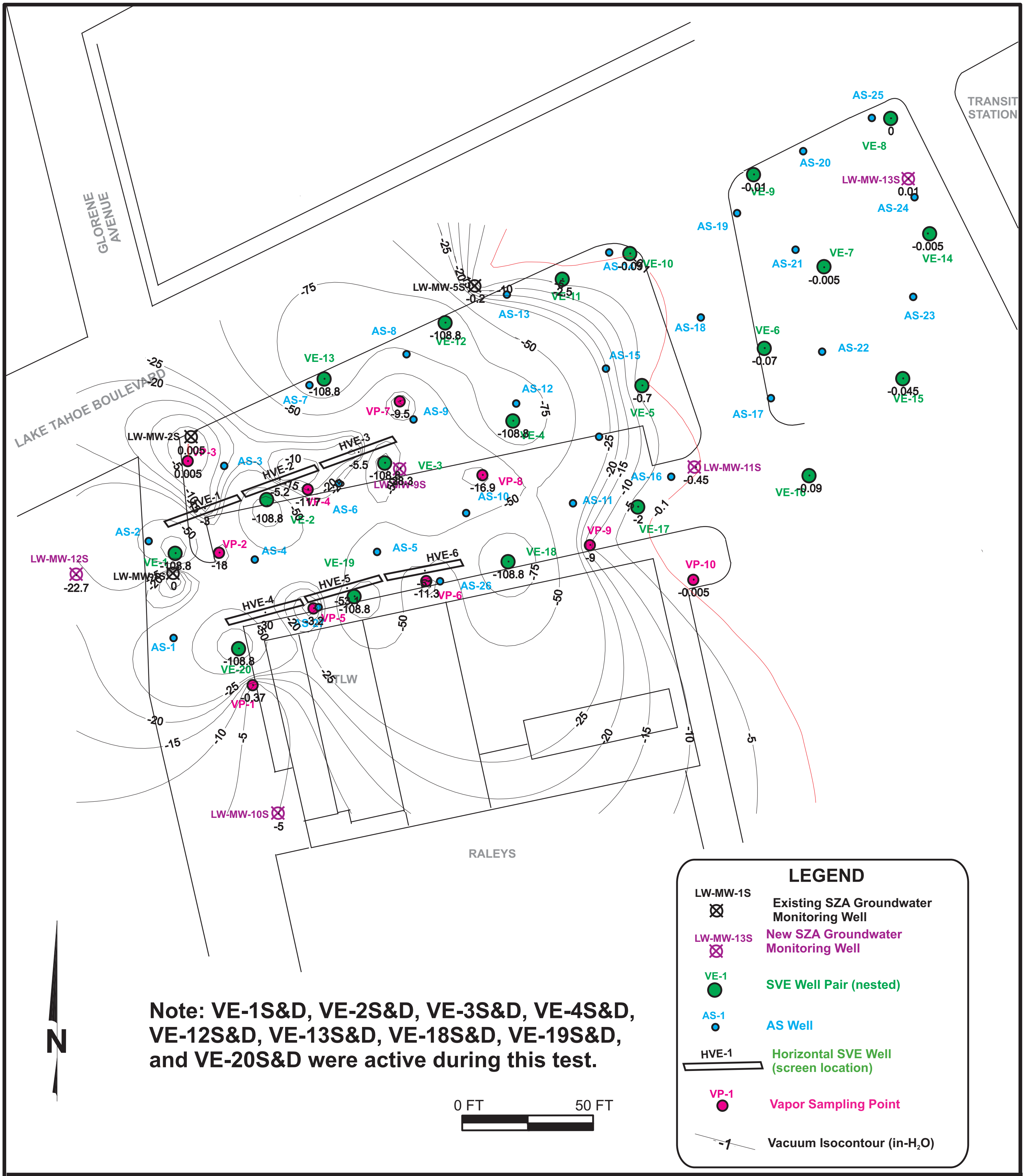
Phone: (661) 831-6906
Fax: (661) 831-6234

LAKE TAHOE LAUNDRY WORKS
1024 LAKE TAHOE BOULEVARD
SOUTH LAKE TAHOE, CALIFORNIA

PILOT TEST #2 (APRIL 6, 2010)
SHALLOW OBSERVATION WELL
VACUUM ISOCONTOUR PLOT

FIGURE

V-2A



Note: VE-1S&D, VE-2S&D, VE-3S&D, VE-4S&D, VE-12S&D, VE-13S&D, VE-18S&D, VE-19S&D, and VE-20S&D were active during this test.

E₂C Remediation
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Bakersfield, CA 93313

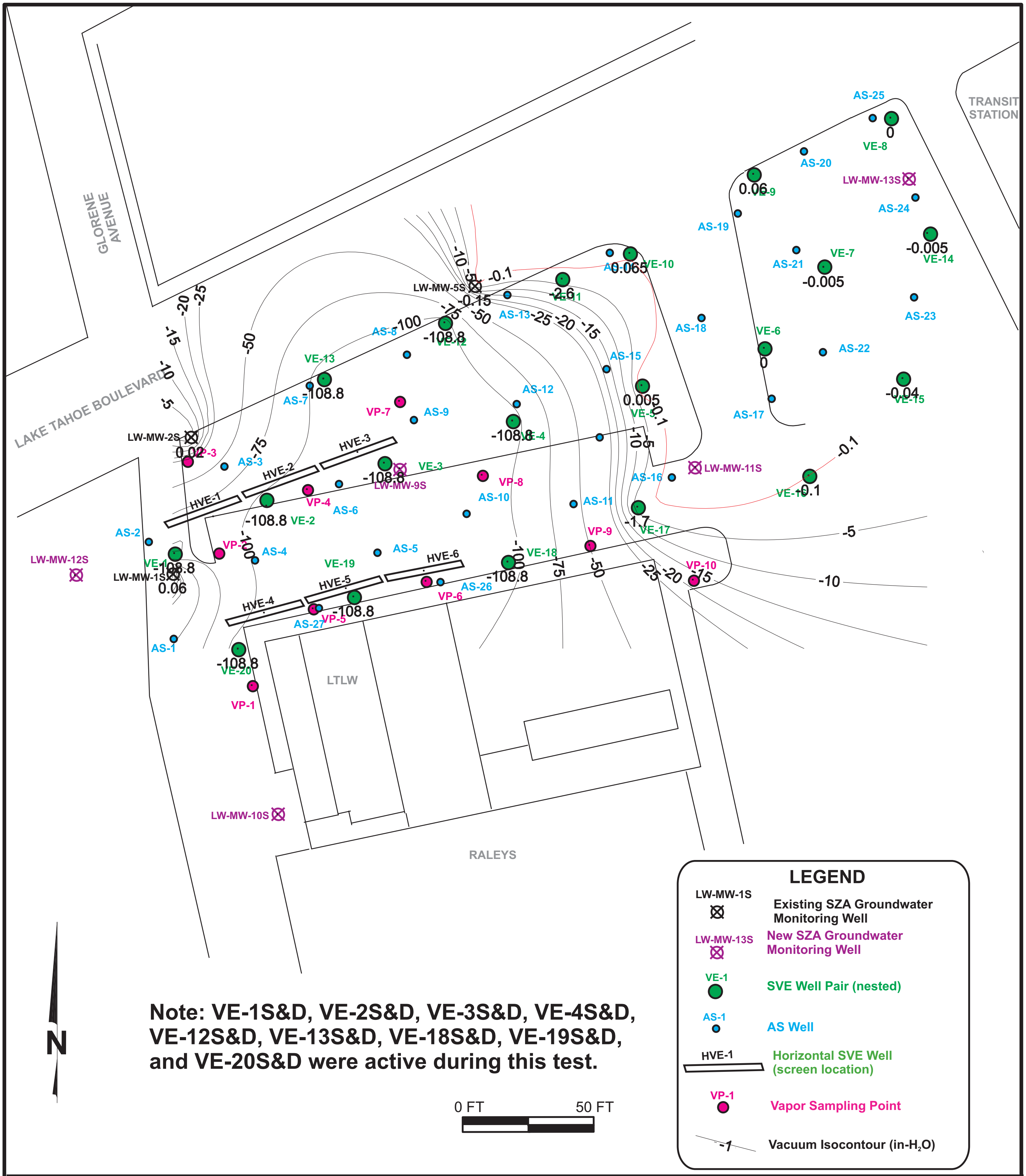
Phone: (661) 831-6906
Fax: (661) 831-6234

LAKE TAHOE LAUNDRY WORKS
1024 LAKE TAHOE BOULEVARD
SOUTH LAKE TAHOE, CALIFORNIA

PILOT TEST #3 (APRIL 7, 2010)
SHALLOW OBSERVATION WELL
VACUUM ISOCONTOUR PLOT

FIGURE

V-3A



Note: VE-1S&D, VE-2S&D, VE-3S&D, VE-4S&D, VE-12S&D, VE-13S&D, VE-18S&D, VE-19S&D, and VE-20S&D were active during this test.

LEGEND

LW-MW-1S ⊠	Existing SZA Groundwater Monitoring Well
LW-MW-13S ⊠	New SZA Groundwater Monitoring Well
VE-1 ●	SVE Well Pair (nested)
AS-1 ●	AS Well
HVE-1 ▭	Horizontal SVE Well (screen location)
VP-1 ●	Vapor Sampling Point
-1	Vacuum Isocontour (in-H_2O)

E_2C Remediation

5300 Woodmere Dr., Suite 105
Bakersfield, CA 93313

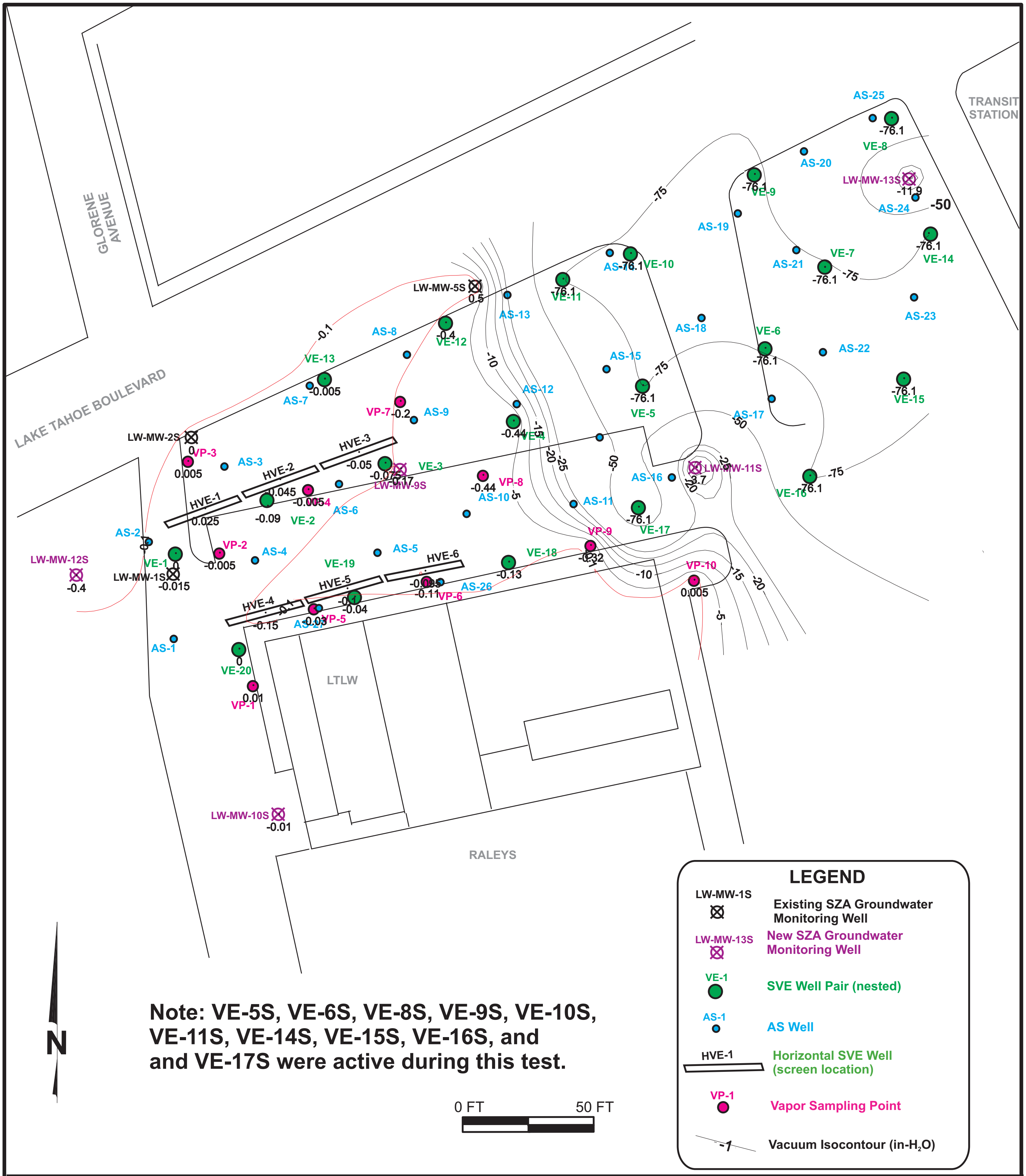
Phone: (661) 831-6906
Fax: (661) 831-6234

LAKE TAHOE LAUNDRY WORKS
1024 LAKE TAHOE BOULEVARD
SOUTH LAKE TAHOE, CALIFORNIA

PILOT TEST #3 (APRIL 7, 2010)
DEEP OBSERVATION WELL VACUUM
ISOCONTOUR PLOT

FIGURE

V-3B



Note: VE-5S, VE-6S, VE-8S, VE-9S, VE-10S, VE-11S, VE-14S, VE-15S, VE-16S, and and VE-17S were active during this test.

LEGEND

LW-MW-1S ☒	Existing SZA Groundwater Monitoring Well
LW-MW-13S ☒	New SZA Groundwater Monitoring Well
VE-1 ●	SVE Well Pair (nested)
AS-1 ●	AS Well
HVE-1 ▭	Horizontal SVE Well (screen location)
VP-1 ●	Vapor Sampling Point
-1	Vacuum Isocontour (in-H_2O)

E₂C Remediation

5300 Woodmere Dr., Suite 105
Bakersfield, CA 93313

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LAKE TAHOE LAUNDRY WORKS
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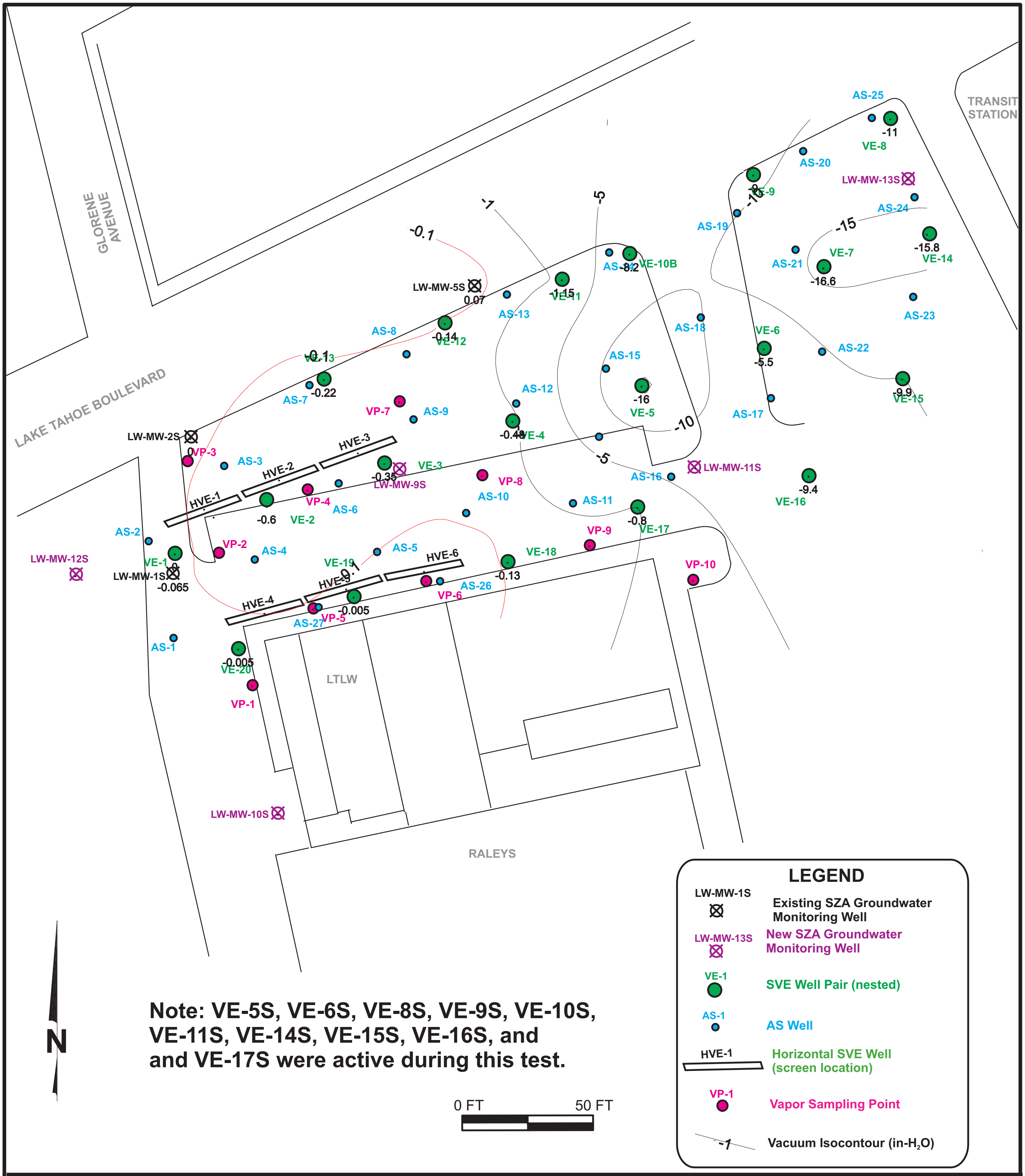
SOUTH LAKE TAHOE, CALIFORNIA

PILOT TEST #4 (APRIL 7, 2010)
SHALLOW OBSERVATION WELL
VACUUM ISOCONTOUR PLOT

FIGURE

V-4A



Note: VE-5S, VE-6S, VE-8S, VE-9S, VE-10S, VE-11S, VE-14S, VE-15S, VE-16S, and and VE-17S were active during this test.

E_2C Remediation

5300 Woodmere Dr., Suite 105
Bakersfield, CA 93313

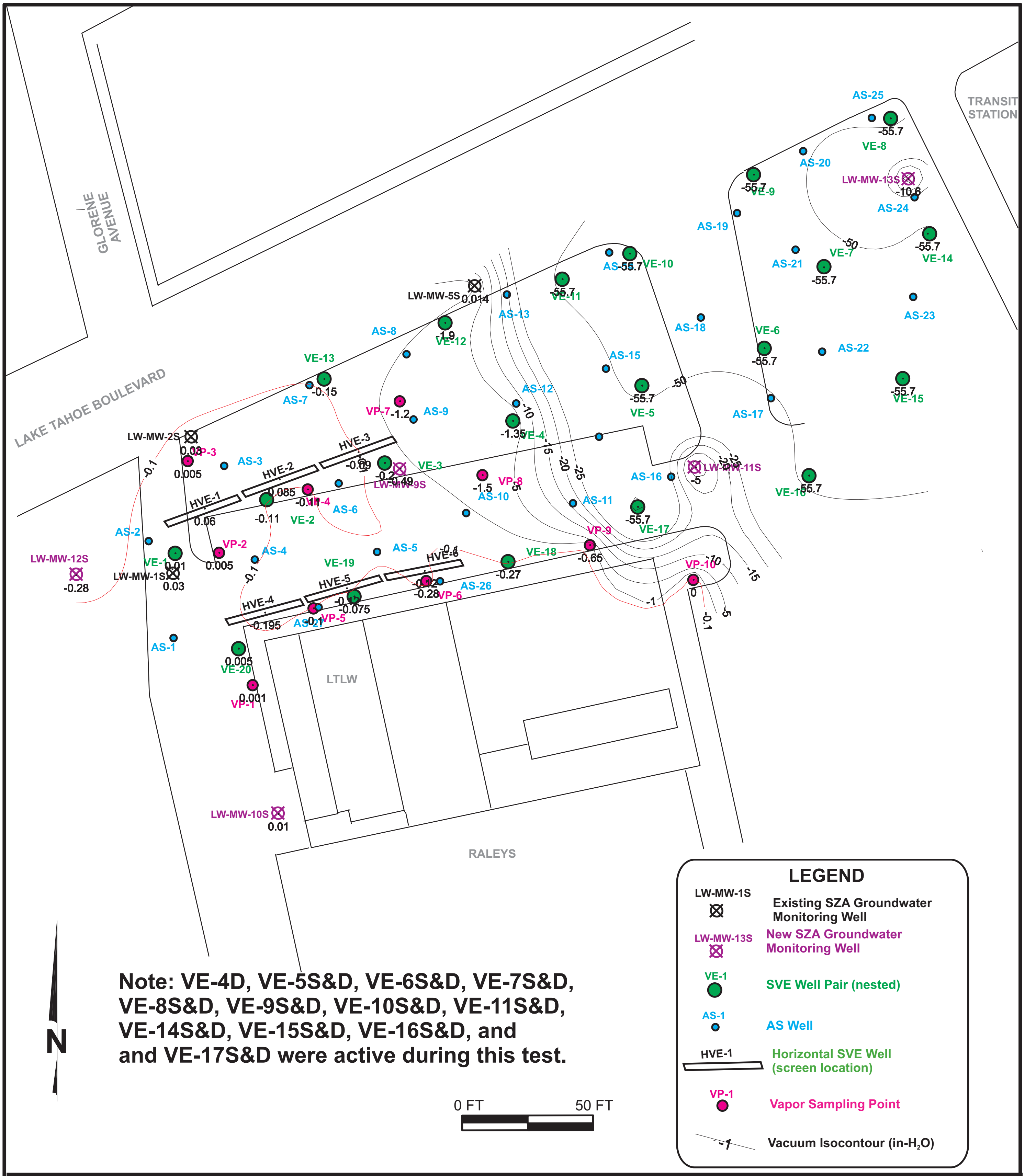
Phone: (661) 831-6906
Fax: (661) 831-6234

LAKE TAHOE LAUNDRY WORKS
1024 LAKE TAHOE BOULEVARD
SOUTH LAKE TAHOE, CALIFORNIA

PILOT TEST #4 (APRIL 7, 2010)
DEEP OBSERVATION WELL
VACUUM ISOCONTOUR PLOT

FIGURE

V-4B



Note: VE-4D, VE-5S&D, VE-6S&D, VE-7S&D, VE-8S&D, VE-9S&D, VE-10S&D, VE-11S&D, VE-14S&D, VE-15S&D, VE-16S&D, and and VE-17S&D were active during this test.

E_2C Remediation

5300 Woodmere Dr., Suite 105
Bakersfield, CA 93313

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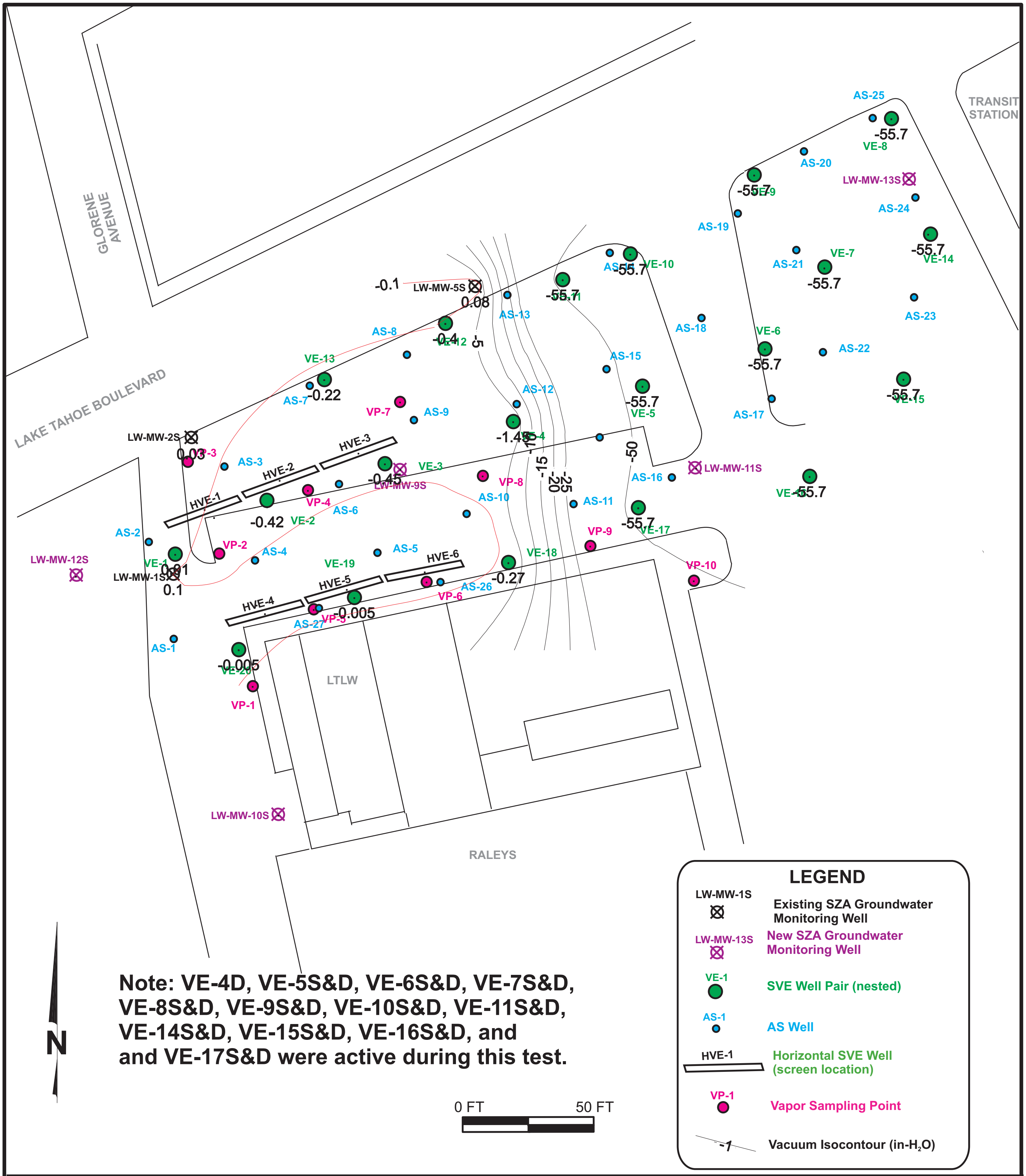
LAKE TAHOE LAUNDRY WORKS
1024 LAKE TAHOE BOULEVARD
SOUTH LAKE TAHOE, CALIFORNIA

PILOT TEST #5 (APRIL 7, 2010)
SHALLOW OBSERVATION WELL
VACUUM ISOCONTOUR PLOT

FIGURE

V-5A



Note: VE-4D, VE-5S&D, VE-6S&D, VE-7S&D, VE-8S&D, VE-9S&D, VE-10S&D, VE-11S&D, VE-14S&D, VE-15S&D, VE-16S&D, and and VE-17S&D were active during this test.

E_2C Remediation
5300 Woodmere Dr., Suite 105
Bakersfield, CA 93313

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Fax: (661) 831-6234

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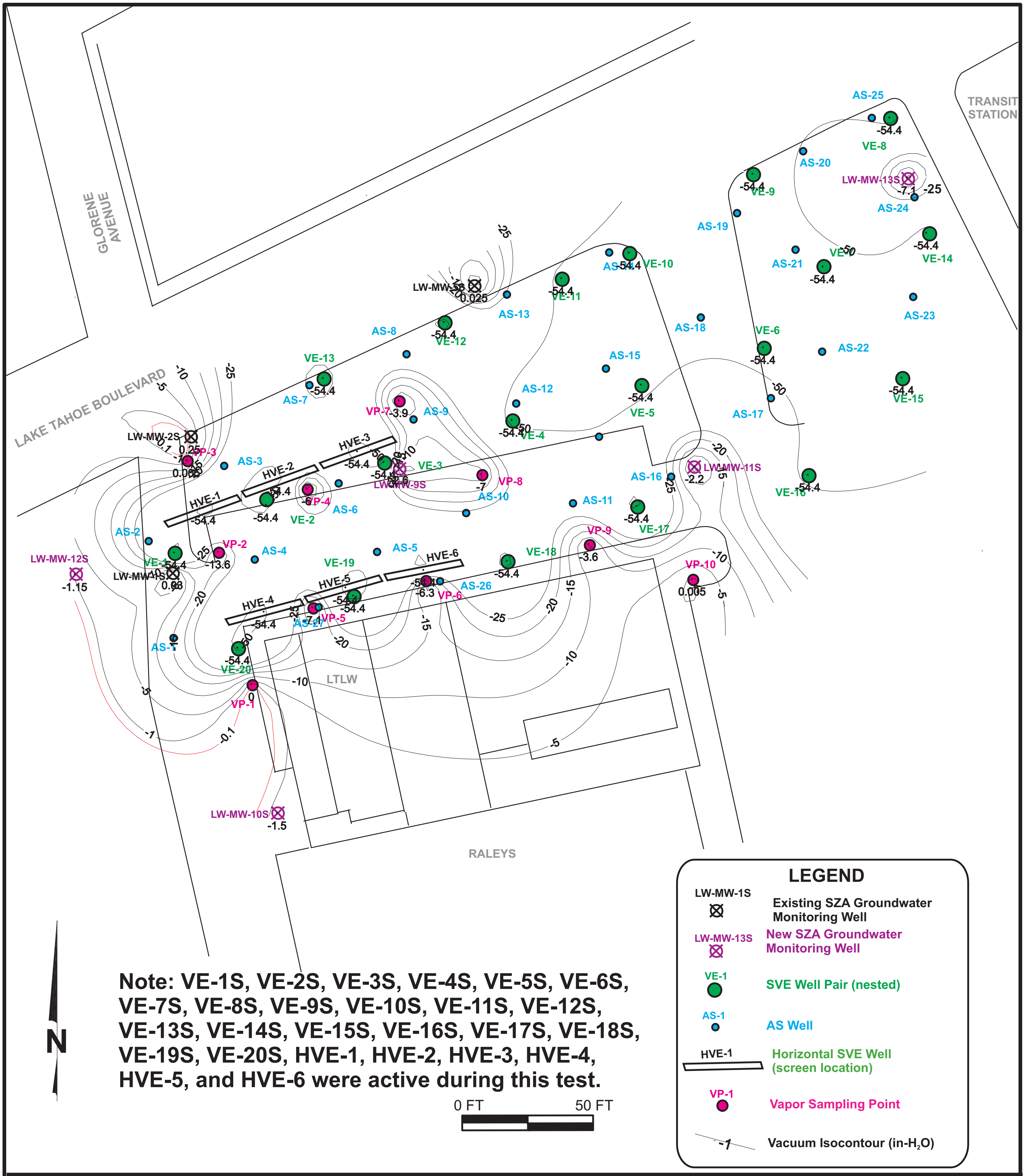
1024 LAKE TAHOE BOULEVARD
SOUTH LAKE TAHOE, CALIFORNIA

PILOT TEST #5 (APRIL 7, 2010)
DEEP OBSERVATION WELL
VACUUM ISOCONTOUR PLOT

FIGURE

V-5B



Note: VE-1S, VE-2S, VE-3S, VE-4S, VE-5S, VE-6S, VE-7S, VE-8S, VE-9S, VE-10S, VE-11S, VE-12S, VE-13S, VE-14S, VE-15S, VE-16S, VE-17S, VE-18S, VE-19S, VE-20S, HVE-1, HVE-2, HVE-3, HVE-4, HVE-5, and HVE-6 were active during this test.

E_2C Remediation
5300 Woodmere Dr., Suite 105
Bakersfield, CA 93313

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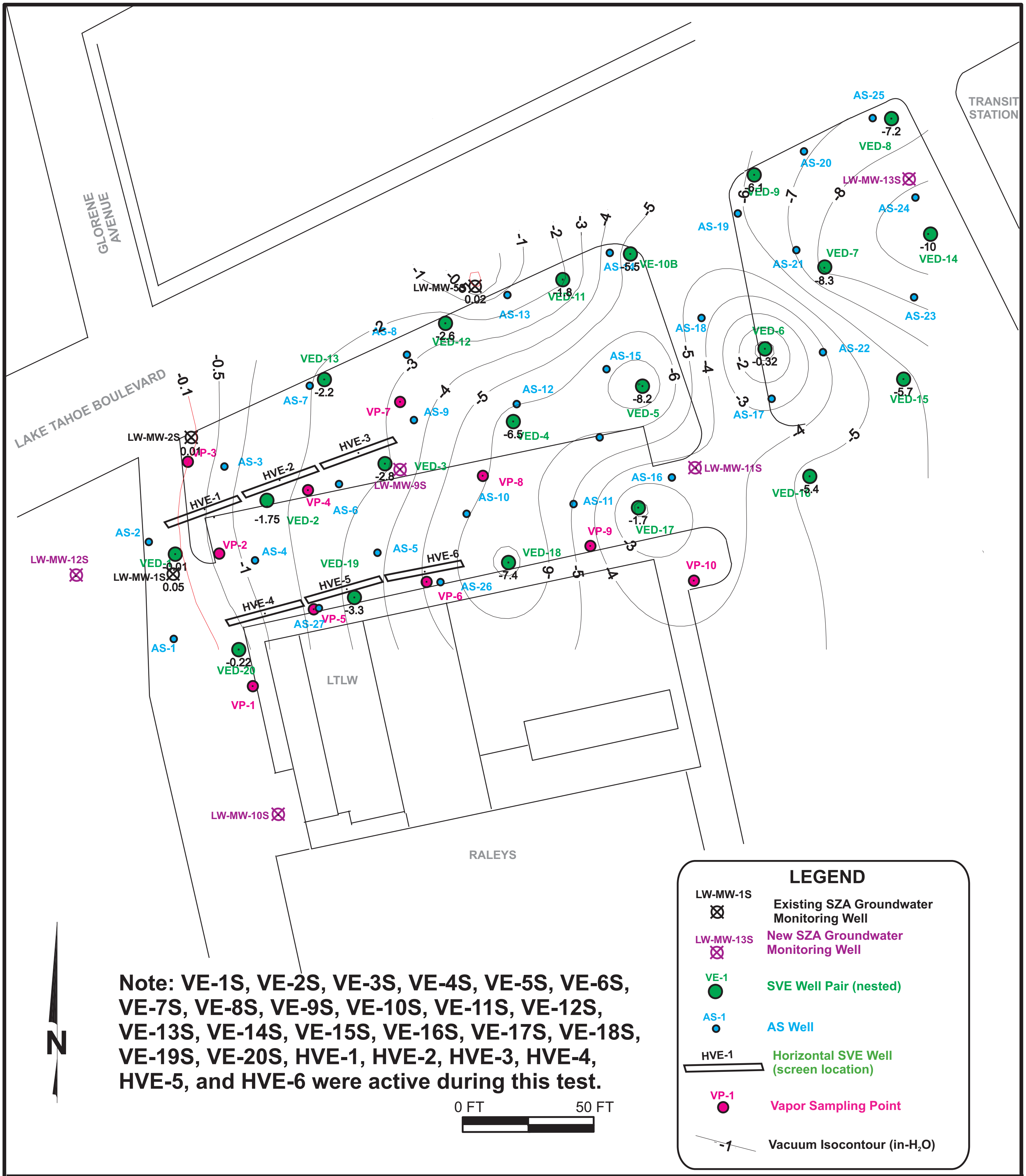
LAKE TAHOE LAUNDRY WORKS
1024 LAKE TAHOE BOULEVARD
SOUTH LAKE TAHOE, CALIFORNIA

PILOT TEST #7 (APRIL 8, 2010)
SHALLOW OBSERVATION WELL
VACUUM ISOCONTOUR PLOT

FIGURE

V-6A



Note: VE-1S, VE-2S, VE-3S, VE-4S, VE-5S, VE-6S, VE-7S, VE-8S, VE-9S, VE-10S, VE-11S, VE-12S, VE-13S, VE-14S, VE-15S, VE-16S, VE-17S, VE-18S, VE-19S, VE-20S, HVE-1, HVE-2, HVE-3, HVE-4, HVE-5, and HVE-6 were active during this test.

E_2C Remediation
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Bakersfield, CA 93313

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Fax: (661) 831-6234

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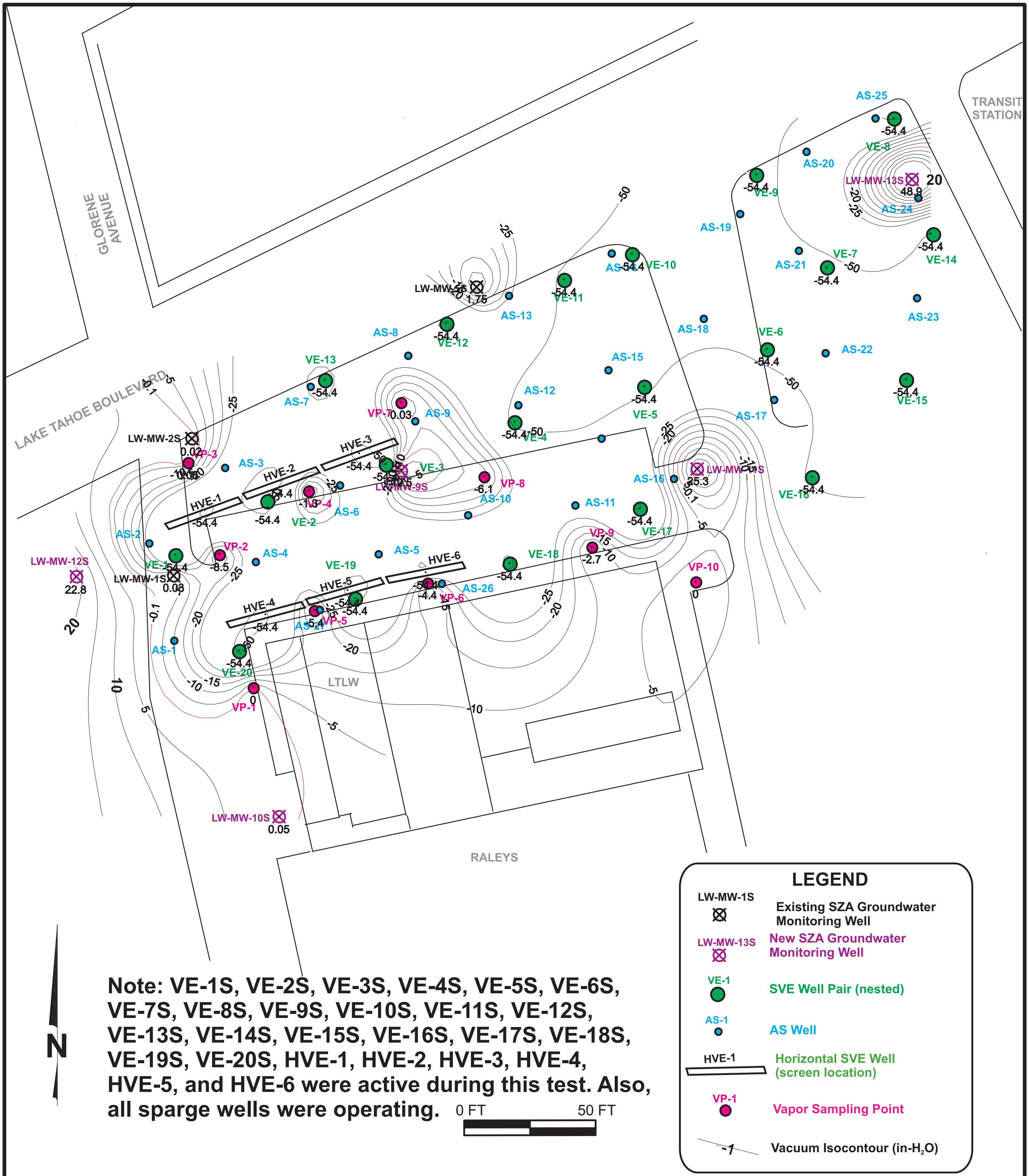
SOUTH LAKE TAHOE, CALIFORNIA

PILOT TEST #7 (APRIL 8, 2010)
DEEP OBSERVATION WELL
VACUUM ISOCONTOUR PLOT

FIGURE

V-6B



Note: VE-1S, VE-2S, VE-3S, VE-4S, VE-5S, VE-6S, VE-7S, VE-8S, VE-9S, VE-10S, VE-11S, VE-12S, VE-13S, VE-14S, VE-15S, VE-16S, VE-17S, VE-18S, VE-19S, VE-20S, HVE-1, HVE-2, HVE-3, HVE-4, HVE-5, and HVE-6 were active during this test. Also, all sparge wells were operating.

0 FT 50 FT

LEGEND

LW-MW-1S ☒	Existing SZA Groundwater Monitoring Well
LW-MW-13S ☒	New SZA Groundwater Monitoring Well
VE-1 ●	SVE Well Pair (nested)
AS-1 ●	AS Well
HVE-1 ▭	Horizontal SVE Well (screen location)
VP-1 ●	Vapor Sampling Point
-1	Vacuum Isocontour (in-H_2O)

E_2C Remediation
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Bakersfield, CA 93313

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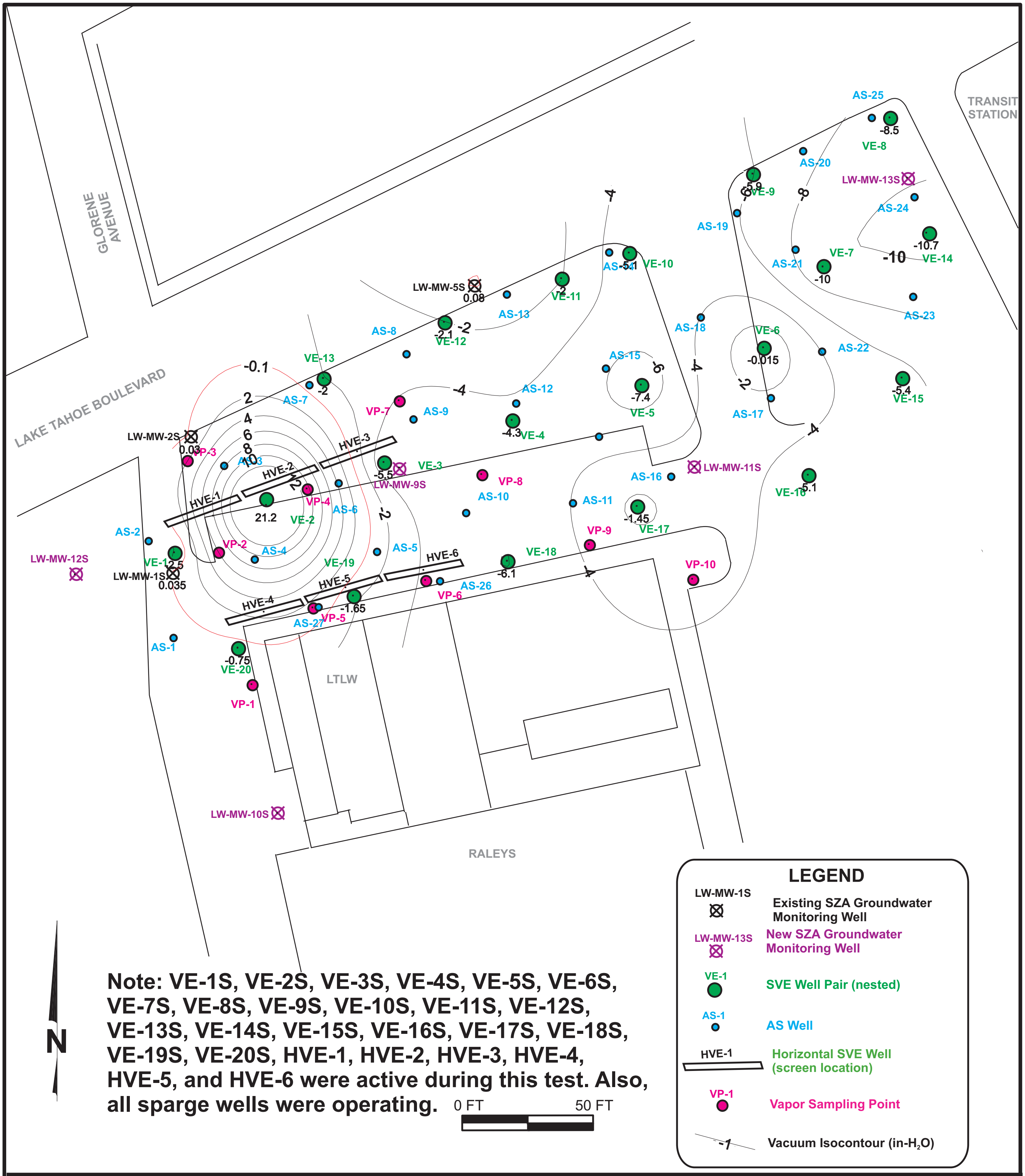
LAKE TAHOE LAUNDRY WORKS
1024 LAKE TAHOE BOULEVARD
SOUTH LAKE TAHOE, CALIFORNIA

PILOT TEST #8 (APRIL 8, 2010)
SHALLOW OBSERVATION WELL
VACUUM ISOCONTOUR PLOT

FIGURE

V-7A



Note: VE-1S, VE-2S, VE-3S, VE-4S, VE-5S, VE-6S, VE-7S, VE-8S, VE-9S, VE-10S, VE-11S, VE-12S, VE-13S, VE-14S, VE-15S, VE-16S, VE-17S, VE-18S, VE-19S, VE-20S, HVE-1, HVE-2, HVE-3, HVE-4, HVE-5, and HVE-6 were active during this test. Also, all sparge wells were operating.

E_2C Remediation

5300 Woodmere Dr., Suite 105
Bakersfield, CA 93313

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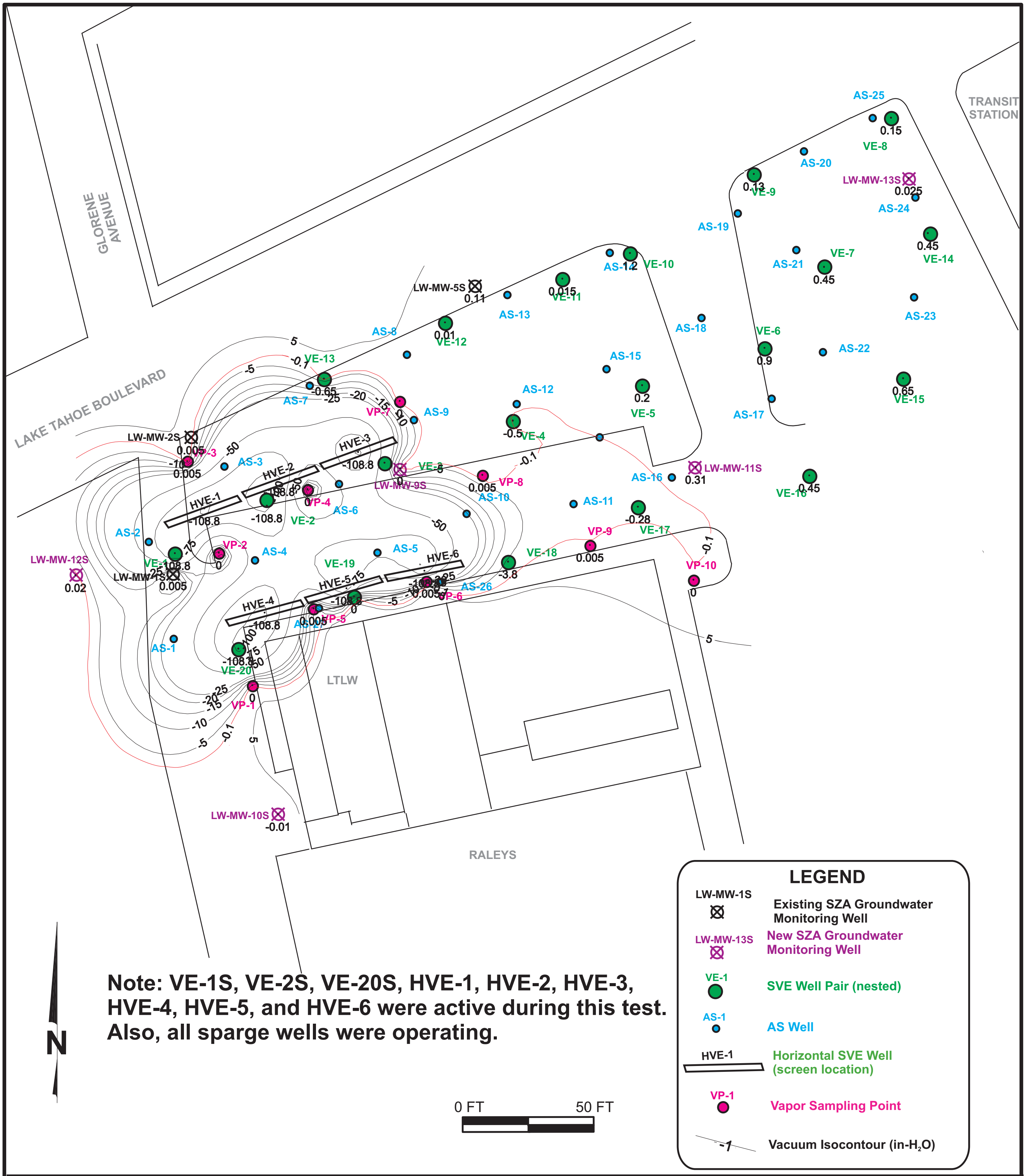
LAKE TAHOE LAUNDRY WORKS
1024 LAKE TAHOE BOULEVARD
SOUTH LAKE TAHOE, CALIFORNIA

PILOT TEST #8 (APRIL 8, 2010)
DEEP OBSERVATION WELL
VACUUM ISOCONTOUR PLOT

FIGURE

V-7B



Note: VE-1S, VE-2S, VE-20S, HVE-1, HVE-2, HVE-3, HVE-4, HVE-5, and HVE-6 were active during this test. Also, all sparge wells were operating.

E_2C Remediation
5300 Woodmere Dr., Suite 105
Bakersfield, CA 93313

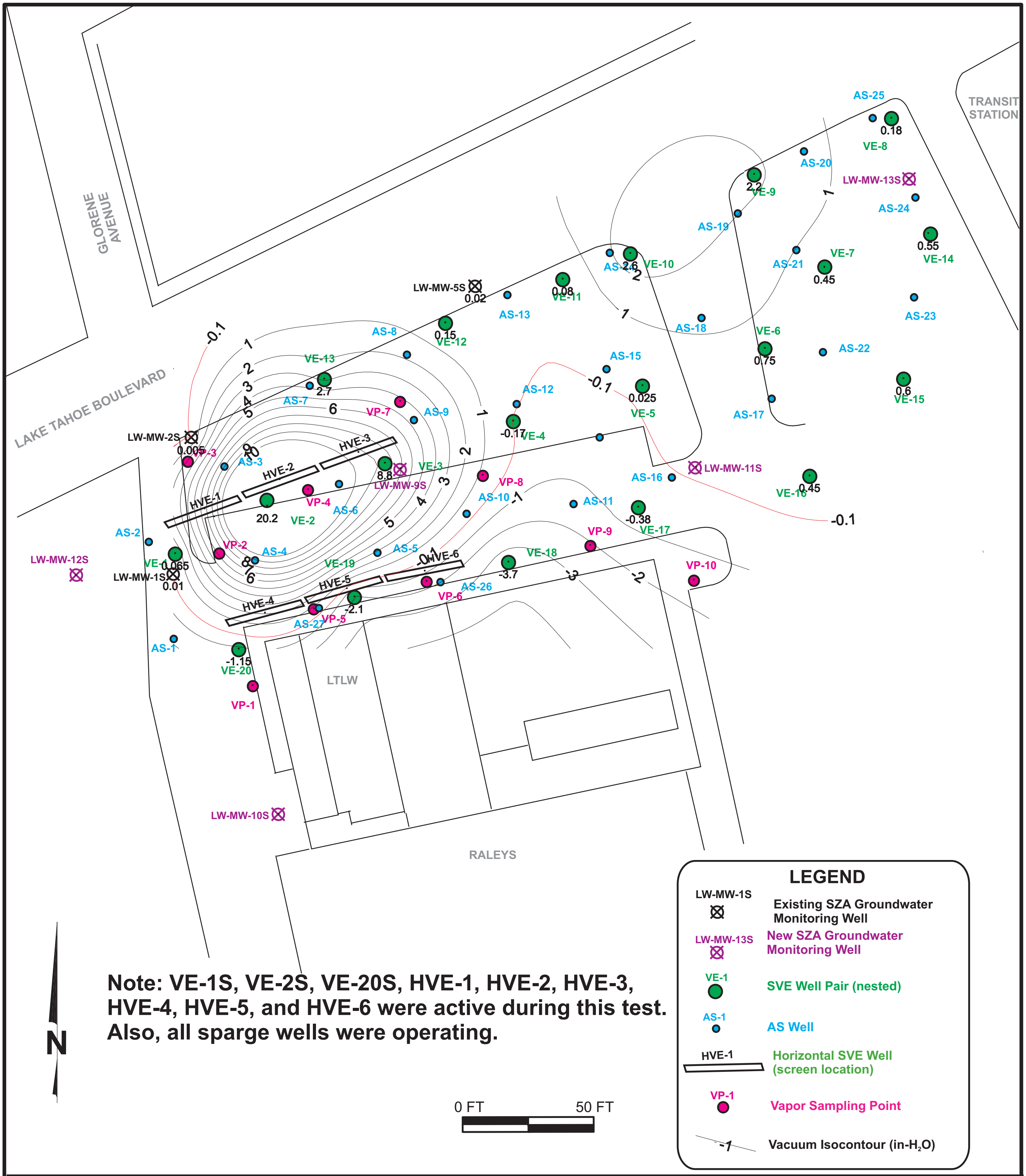
Phone: (661) 831-6906
Fax: (661) 831-6234

LAKE TAHOE LAUNDRY WORKS
1024 LAKE TAHOE BOULEVARD
SOUTH LAKE TAHOE, CALIFORNIA

PILOT TEST #9 (APRIL 9, 2010)
SHALLOW OBSERVATION WELL
VACUUM ISOCONTOUR PLOT

FIGURE

V-8A



Note: VE-1S, VE-2S, VE-20S, HVE-1, HVE-2, HVE-3, HVE-4, HVE-5, and HVE-6 were active during this test. Also, all sparge wells were operating.

E_2C Remediation
5300 Woodmere Dr., Suite 105
Bakersfield, CA 93313

Phone: (661) 831-6906
Fax: (661) 831-6234

LAKE TAHOE LAUNDRY WORKS
1024 LAKE TAHOE BOULEVARD
SOUTH LAKE TAHOE, CALIFORNIA

PILOT TEST #9 (APRIL 9, 2010)
DEEP OBSERVATION WELL
VACUUM ISOCONTOUR PLOT

FIGURE

V-8B

APPENDIX W

Remediation System Vapor Sample Analytical Reports

PROVERA ANALYTICAL LABORATORIES

Chain of Custody Form

Client Name: EZC Remediation

Project Name: LTLW

Client Address: 5300 Woodmere Dr St. 105

Project Manager: Phil Goalw

Sampler Name: J. Irwin

Sample Matrix

☒ Air

			Analysis Requested											
Sample Date	Sample Time	Sample Description and Container Type	BTEX (BY EPA TO-15)	MTBE (EPA TO-15)	TPH Gasoline (EPA TO-3)	METHANE (EPA TO-3)	FULL VOC (EPA TO-15)	PCE, TCE + Daughter Prods						Comments
4-8-10	3:45	Test 8 System INF 1 tedlarbag						X						P10642-ed

Turnaround Time Requested: 24 Hour ____ 48 Hour ____ 5-Day ____ Standard X

Relinquished By:	Date: 4-8-10	Relinquished By:	Date:
Received By:	Date: 4/9/10	Received By:	Date:

ProVera
Analytical Laboratories, Inc.

E2C Remediation	Project:	LTLW	Report Date:	4/12/2010
5300 Woodmere Dr. Suite 105			Analysis Type:	**EPA Method TO-15**
Bakersfield CA 93313	Project Mgr.	PHIL GOALWIN		

Sample ID: **10692-001**

Analyte	Result	Reporting Limit	Units
Chloromethane	ND	0.01	ppmV
Ethene, chloro-(Vinyl Cloride)	ND	0.01	ppmV
Methane, bromo-	ND	0.01	ppmV
Chloroethane	ND	0.01	ppmV
Trichloromonofluoromethane (Freon 11)	ND	0.01	ppmV
1,1 Dichloroethene	ND	0.01	ppmV
Methylene Chloride	ND	0.01	ppmV
trans 1,2 Dicloroethene	ND	0.01	ppmV
cis 1,2 dichloroethene	0.041	0.01	ppmV
Chloroform (Trichloromethane)	ND	0.01	ppmV
1,1,1 Tricloroethane	ND	0.01	ppmV
Carbon Tetrachloride	ND	0.01	ppmV
1,2 Dichloroethane	ND	0.01	ppmV
Trichloroethylene	0.031	0.01	ppmV
Propane, 1,2-dichloro-	ND	0.01	ppmV
Methane, bromodichloro-	ND	0.01	ppmV
Ethane, 1,1,2-trichloro-	ND	0.01	ppmV
Tetrachloroethylene	0.680	0.01	ppmV
Methane, dibromochloro-	ND	0.01	ppmV
Benzene, chloro-	ND	0.01	ppmV
Bromoform (Methane, tribromo-)	ND	0.01	ppmV
Ethane, 1,1,2,2-tetrachloro-	ND	0.01	ppmV
Benzene, 1,3-dichloro-	ND	0.01	ppmV
Benzene, 1,4-dichloro-	ND	0.01	ppmV
Benzene, 1,2-dichloro-	ND	0.01	ppmV
Benzene, 1,2,4-trichloro-	ND	0.01	ppmV
1,3-Butadiene, 1,1,2,3,4,4-hexachloro-	ND	0.01	ppmV

Principal Analyst: Jeff Scheidemantel

ProVera
Analytical Laboratories, Inc.

E2C Remediation	Project:	LAKE TAHOE L. W.	Report Date:	4/122010
5300 Woodmere Dr. Suite 105			Analysis Type:	**EPA Method TO-15**
Bakersfield CA 93313	Project Mgr.	Phil Goalwin		

Sample ID: **Laboratory Control Standard**

Analyte	Result	Units	Analyte Concentration	Units	% Recovery	% Recovery Limits
Propylene	134	ppmV	100	ppmV	134.0%	65-135
Dichlorodifluoromethane (Freon 12)	73.1	ppmV	100	ppmV	73.1%	65-135
Ethane, 1,2-diCl-1,1,2,2-tetraF (F-114)	73.7	ppmV	100	ppmV	73.7%	65-135
Chloromethane	74.5	ppmV	100	ppmV	74.5%	65-135
Ethene, chloro-(Vinyl Cloride)	75.9	ppmV	100	ppmV	76%	65-135
1,3 Butadiene	81.3	ppmV	100	ppmV	81%	65-135
Methane, bromo-	81.2	ppmV	100	ppmV	81.2%	65-135
Chloroethane	62.5	ppmV	100	ppmV	62.5%	65-135
Trichloromonofluoromethane (Freon 11)	76.9	ppmV	100	ppmV	76.9%	65-135
Isopropyl alcohol	94.5	ppmV	100	ppmV	94.5%	65-135
Freon 113	71.4	ppmV	100	ppmV	71.4%	65-135
1,1 Dichloroethene	75.5	ppmV	100	ppmV	75.5%	65-135
Acetone	67.5	ppmV	100	ppmV	67.5%	65-135
Carbon Disulfide	66.5	ppmV	100	ppmV	66.5%	65-135
Methylene Chloride	62.4	ppmV	100	ppmV	62.4%	65-135
MTBE (Propane, 2-methoxy-2-methyl-)	68.8	ppmV	100	ppmV	68.8%	65-135
trans 1,2 Dicloroethene	77.6	ppmV	100	ppmV	77.6%	65-135
n-Hexane	75.8	ppmV	100	ppmV	75.8%	65-135
Vinyl acetate	72.7	ppmV	100	ppmV	73%	65-135
Ethane, 1,1-dichloro-	71.1	ppmV	100	ppmV	71%	65-135
Methyl Ethyl Ketone	111	ppmV	100	ppmV	111%	65-135
cis 1,2 dichloroethene	91.4	ppmV	100	ppmV	91%	65-135
Tetrahydrofuran	77.3	ppmV	100	ppmV	77.3%	65-135
Chloroform (Trichloromethane)	70.4	ppmV	100	ppmV	70.4%	65-135
1,1,1 Tricloroethane	69.9	ppmV	100	ppmV	69.9%	65-135
Cyclohexane	71.5	ppmV	100	ppmV	72%	65-135
Carbon Tetrachloride		ppmV	100	ppmV	0%	65-135
Ethyl Acetate	111	ppmV	100	ppmV	111%	65-135
Benzene	70.6	ppmV	100	ppmV	71%	65-135
1,2 Dichloroethane	64.2	ppmV	100	ppmV	64%	65-135

ProVera
Analytical Laboratories, Inc.

E2C Remediation	Project:	Busy Bee	Report Date:	4/122010
5300 Woodmere Dr. Suite 105			Analysis Type:	**EPA Method TO-15**
Bakersfield CA 93313	Project Mgr.	Phil Goalwin		

Sample ID: **Laboratory Control Standard**

Analyte	Result	Units	Analyte Concentration	Units	% Recovery	% Recovery Limits
n-Heptane	64.2	ppmV	100	ppmV	64%	65-135
Trichloroethylene	73.5	ppmV	100	ppmV	74%	65-135
Propane, 1,2-dichloro-	73.8	ppmV	100	ppmV	74%	65-135
1,4 Dioxane	71.2	ppmV	100	ppmV	71.2%	65-135
Methane, bromodichloro-	67.4	ppmV	100	ppmV	67%	65-135
cis-1-Propene, 1,3-dichloro-	73.9	ppmV	100	ppmV	74%	65-135
MIBK (2,4-Pentanedione3-(1-methylethyl)-	79.2	ppmV	100	ppmV	79%	65-135
Toluene	75.9	ppmV	100	ppmV	76%	65-135
trans-1-Propene, 1,3-dichloro-	73.2	ppmV	100	ppmV	73%	65-135
Ethane, 1,1,2-trichloro-	78.3	ppmV	100	ppmV	78.3%	65-135
MBK	76.8	ppmV	100	ppmV	77%	65-135
Tetrachloroethylene	65.9	ppmV	100	ppmV	65.9%	65-135
Methane, dibromochloro-	68.9	ppmV	100	ppmV	68.9%	65-135
Ethane, 1,2-dibromo-	69.4	ppmV	100	ppmV	69.4%	65-135
Benzene, chloro-	99.6	ppmV	100	ppmV	100%	65-135
Ethylbenzene	98.4	ppmV	100	ppmV	98%	65-135
m+p-Xylene	78.1	ppmV	100	ppmV	78%	65-135
o-Xylene	45.1	ppmV	100	ppmV	45%	65-135
Styrene	59.9	ppmV	100	ppmV	60%	65-135
Bromoform (Methane, tribromo-)	78.9	ppmV	100	ppmV	79%	65-135
Ethane, 1,1,2,2-tetrachloro-	73.9	ppmV	100	ppmV	74%	65-135
4-Ethyltoluene	72.2	ppmV	100	ppmV	72%	65-135
Benzene, 1,3,5-trimethyl-	63.3	ppmV	100	ppmV	63%	65-135
Benzene, 1,2,4-trimethyl-	64.8	ppmV	100	ppmV	64.8%	65-135
Benzene, 1,3-dichloro-	78.4	ppmV	100	ppmV	78.4%	65-135
Benzene, 1,4-dichloro-	73.6	ppmV	100	ppmV	73.6%	65-135
Benzyl chloride	81.5	ppmV	100	ppmV	82%	65-135
Benzene, 1,2-dichloro-	84.2	ppmV	100	ppmV	84%	65-135
Benzene, 1,2,4-trichloro-	75.3	ppmV	100	ppmV	75%	65-135
1,3-Butadiene, 1,1,2,3,4,4-hexachloro-	71.3	ppmV	100	ppmV	71%	65-135

PROVERA ANALYTICAL LABORATORIES

Chain of Custody Form

Client Name: EZC Remediation
Project Name: LTCW
Client Address: 5300 Woodmere Dr St. 105
Project Manager: Phil Goalwin
Sampler Name: J. Irwin

Sample Matrix
☒ Air

Sample Date	Sample Time	Sample Description and Container Type	BTEX (BY EPA TO-15)	MTBE (EPA TO-15)	TPH Gasoline (EPA TO-3)	METHANE (EPA TO-3)	FULL VOC (EPA TO-15)	PCE, TCE & daughter prods						Comments
4-9-10	10:45	Test 9 INF 1 tedlar bag						X						P10693-01
(	1315	System INF 1 tedlar bag						X						-02
)	1320	System mid 1 tedlar bag						X						-03
4-9-10	1325	System EFF 1 tedlar bag						X						-04

Turnaround Time Requested: 24 Hour ____ 48 Hour ____ 5-Day ____ Standard ____

Relinquished By:	Date: 4-9-10	Relinquished By:	Date:
Received By:	Date: 4/9/10	Received By:	Date:

E2C Remediation	Project:	LTLW	Report Date:	4/12/2010
5300 Woodmere Dr. Suite 105			Analysis Type:	**EPA Method TO-15**
Bakersfield CA 93313	Project Mgr.	PHIL GOALWIN		

Sample ID: **10693-001**

Analyte	Result	Reporting Limit	Units	Analysis Date
Chloromethane	ND	0.01	ppmV	4/11/2010
Ethene, chloro-(Vinyl Cloride)	ND	0.01	ppmV	4/11/2010
Methane, bromo-	ND	0.01	ppmV	4/11/2010
Chloroethane	ND	0.01	ppmV	4/11/2010
Trichloromonofluoromethane (Freon 11)	ND	0.01	ppmV	4/11/2010
1,1 Dichloroethene	ND	0.01	ppmV	4/11/2010
Methylene Chloride	ND	0.01	ppmV	4/11/2010
trans 1,2 Dicloroethene	ND	0.01	ppmV	4/11/2010
cis 1,2 dichloroethene	0.027	0.01	ppmV	4/11/2010
Chloroform (Trichloromethane)	ND	0.01	ppmV	4/11/2010
1,1,1 Tricloroethane	ND	0.01	ppmV	4/11/2010
Carbon Tetrachloride	ND	0.01	ppmV	4/11/2010
1,2 Dichloroethane	ND	0.01	ppmV	4/11/2010
Trichloroethylene	0.02	0.01	ppmV	4/11/2010
Propane, 1,2-dichloro-	ND	0.01	ppmV	4/11/2010
Methane, bromodichloro-	ND	0.01	ppmV	4/11/2010
Ethane, 1,1,2-trichloro-	ND	0.01	ppmV	4/11/2010
Tetrachloroethylene	0.268	0.01	ppmV	4/11/2010
Methane, dibromochloro-	ND	0.01	ppmV	4/11/2010
Benzene, chloro-	ND	0.01	ppmV	4/11/2010
Bromoform (Methane, tribromo-)	ND	0.01	ppmV	4/11/2010
Ethane, 1,1,2,2-tetrachloro-	ND	0.01	ppmV	4/11/2010
Benzene, 1,3-dichloro-	ND	0.01	ppmV	4/11/2010
Benzene, 1,4-dichloro-	ND	0.01	ppmV	4/11/2010
Benzene, 1,2-dichloro-	ND	0.01	ppmV	4/11/2010
Benzene, 1,2,4-trichloro-	ND	0.01	ppmV	4/11/2010
1,3-Butadiene, 1,1,2,3,4,4-hexachloro-	ND	0.01	ppmV	4/11/2010

Principal Analyst: Jeff Scheidemantel

ProVera
Analytical Laboratories, Inc.

E2C Remediation	Project:	LTLW	Report Date:	4/12/2010
5300 Woodmere Dr. Suite 105			Analysis Type:	**EPA Method TO-15**
Bakersfield CA 93313	Project Mgr.	PHIL GOALWIN		

Sample ID: **10693-002**

Analyte	Result	Reporting Limit	Units	Analysis Date
Chloromethane	ND	0.01	ppmV	4/11/2010
Ethene, chloro-(Vinyl Cloride)	ND	0.01	ppmV	4/11/2010
Methane, bromo-	ND	0.01	ppmV	4/11/2010
Chloroethane	ND	0.01	ppmV	4/11/2010
Trichloromonofluoromethane (Freon 11)	ND	0.01	ppmV	4/11/2010
1,1 Dichloroethene	ND	0.01	ppmV	4/11/2010
Methylene Chloride	ND	0.01	ppmV	4/11/2010
trans 1,2 Dicloroethene	ND	0.01	ppmV	4/11/2010
cis 1,2 dichloroethene	0.048	0.01	ppmV	4/11/2010
Chloroform (Trichloromethane)	ND	0.01	ppmV	4/11/2010
1,1,1 Tricloroethane	ND	0.01	ppmV	4/11/2010
Carbon Tetrachloride	ND	0.01	ppmV	4/11/2010
1,2 Dichloroethane	ND	0.01	ppmV	4/11/2010
Trichloroethylene	0.045	0.01	ppmV	4/11/2010
Propane, 1,2-dichloro-	ND	0.01	ppmV	4/11/2010
Methane, bromodichloro-	ND	0.01	ppmV	4/11/2010
Ethane, 1,1,2-trichloro-	ND	0.01	ppmV	4/11/2010
Tetrachloroethylene	1.950	0.01	ppmV	4/11/2010
Methane, dibromochloro-	ND	0.01	ppmV	4/11/2010
Benzene, chloro-	ND	0.01	ppmV	4/11/2010
Bromoform (Methane, tribromo-)	ND	0.01	ppmV	4/11/2010
Ethane, 1,1,2,2-tetrachloro-	ND	0.01	ppmV	4/11/2010
Benzene, 1,3-dichloro-	ND	0.01	ppmV	4/11/2010
Benzene, 1,4-dichloro-	ND	0.01	ppmV	4/11/2010
Benzene, 1,2-dichloro-	ND	0.01	ppmV	4/11/2010
Benzene, 1,2,4-trichloro-	ND	0.01	ppmV	4/11/2010
1,3-Butadiene, 1,1,2,3,4,4-hexachloro-	ND	0.01	ppmV	4/11/2010

Principal Analyst: Jeff Scheidemantel

ProVera

Analytical Laboratories, Inc.

E2C Remediation	Project:	LTLW	Report Date:	4/12/2010
5300 Woodmere Dr. Suite 105			Analysis Type:	**EPA Method TO-15**
Bakersfield CA 93313	Project Mgr.	PHIL GOALWIN		

Sample ID: **10693-003**

Analyte	Result	Reporting Limit	Units	Analysis Date
Chloromethane	ND	0.01	ppmV	4/11/2010
Ethene, chloro-(Vinyl Cloride)	ND	0.01	ppmV	4/11/2010
Methane, bromo-	ND	0.01	ppmV	4/11/2010
Chloroethane	ND	0.01	ppmV	4/11/2010
Trichloromonofluoromethane (Freon 11)	ND	0.01	ppmV	4/11/2010
1,1 Dichloroethene	ND	0.01	ppmV	4/11/2010
Methylene Chloride	ND	0.01	ppmV	4/11/2010
trans 1,2 Dicloroethene	ND	0.01	ppmV	4/11/2010
cis 1,2 dichloroethene	ND	0.01	ppmV	4/11/2010
Chloroform (Trichloromethane)	ND	0.01	ppmV	4/11/2010
1,1,1 Tricloroethane	ND	0.01	ppmV	4/11/2010
Carbon Tetrachloride	ND	0.01	ppmV	4/11/2010
1,2 Dichloroethane	ND	0.01	ppmV	4/11/2010
Trichloroethylene	ND	0.01	ppmV	4/11/2010
Propane, 1,2-dichloro-	ND	0.01	ppmV	4/11/2010
Methane, bromodichloro-	ND	0.01	ppmV	4/11/2010
Ethane, 1,1,2-trichloro-	ND	0.01	ppmV	4/11/2010
Tetrachloroethylene	ND	0.01	ppmV	4/11/2010
Methane, dibromochloro-	ND	0.01	ppmV	4/11/2010
Benzene, chloro-	ND	0.01	ppmV	4/11/2010
Bromoform (Methane, tribromo-)	ND	0.01	ppmV	4/11/2010
Ethane, 1,1,2,2-tetrachloro-	ND	0.01	ppmV	4/11/2010
Benzene, 1,3-dichloro-	ND	0.01	ppmV	4/11/2010
Benzene, 1,4-dichloro-	ND	0.01	ppmV	4/11/2010
Benzene, 1,2-dichloro-	ND	0.01	ppmV	4/11/2010
Benzene, 1,2,4-trichloro-	ND	0.01	ppmV	4/11/2010
1,3-Butadiene, 1,1,2,3,4,4-hexachloro-	ND	0.01	ppmV	4/11/2010

Principal Analyst: Jeff Scheidemantel

ProVera
Analytical Laboratories, Inc.

E2C Remediation	Project:	LTLW	Report Date:	4/12/2010
5300 Woodmere Dr. Suite 105			Analysis Type:	**EPA Method TO-15**
Bakersfield CA 93313	Project Mgr.	PHIL GOALWIN		

Sample ID: **10693-004**

Analyte	Result	Reporting Limit	Units	Analysis Date
Chloromethane	ND	0.01	ppmV	4/11/2010
Ethene, chloro-(Vinyl Cloride)	ND	0.01	ppmV	4/11/2010
Methane, bromo-	ND	0.01	ppmV	4/11/2010
Chloroethane	ND	0.01	ppmV	4/11/2010
Trichloromonofluoromethane (Freon 11)	ND	0.01	ppmV	4/11/2010
1,1 Dichloroethene	ND	0.01	ppmV	4/11/2010
Methylene Chloride	ND	0.01	ppmV	4/11/2010
trans 1,2 Dicloroethene	ND	0.01	ppmV	4/11/2010
cis 1,2 dichloroethene	ND	0.01	ppmV	4/11/2010
Chloroform (Trichloromethane)	ND	0.01	ppmV	4/11/2010
1,1,1 Tricloroethane	ND	0.01	ppmV	4/11/2010
Carbon Tetrachloride	ND	0.01	ppmV	4/11/2010
1,2 Dichloroethane	ND	0.01	ppmV	4/11/2010
Trichloroethylene	ND	0.01	ppmV	4/11/2010
Propane, 1,2-dichloro-	ND	0.01	ppmV	4/11/2010
Methane, bromodichloro-	ND	0.01	ppmV	4/11/2010
Ethane, 1,1,2-trichloro-	ND	0.01	ppmV	4/11/2010
Tetrachloroethylene	ND	0.01	ppmV	4/11/2010
Methane, dibromochloro-	ND	0.01	ppmV	4/11/2010
Benzene, chloro-	ND	0.01	ppmV	4/11/2010
Bromoform (Methane, tribromo-)	ND	0.01	ppmV	4/11/2010
Ethane, 1,1,2,2-tetrachloro-	ND	0.01	ppmV	4/11/2010
Benzene, 1,3-dichloro-	ND	0.01	ppmV	4/11/2010
Benzene, 1,4-dichloro-	ND	0.01	ppmV	4/11/2010
Benzene, 1,2-dichloro-	ND	0.01	ppmV	4/11/2010
Benzene, 1,2,4-trichloro-	ND	0.01	ppmV	4/11/2010
1,3-Butadiene, 1,1,2,3,4,4-hexachloro-	ND	0.01	ppmV	4/11/2010

Principal Analyst: Jeff Scheidemantel

ProVera
Analytical Laboratories, Inc.

E2C Remediation	Project:	LTLW	Report Date:	4/21/2010
5300 Woodmere Dr. Suite 105			Analysis Type:	**EPA Method TO-15**
Bakersfield CA 93313	Project Mgr.	Phil Goalwin		

Sample ID: **Laboratory Control Standard**

Analyte	Result	Units	Analyte Concentration	Units	% Recovery	% Recovery Limits
Propylene	134	ppmV	100	ppmV	134.0%	65-135
Dichlorodifluoromethane (Freon 12)	73.1	ppmV	100	ppmV	73.1%	65-135
Ethane, 1,2-diCl-1,1,2,2-tetraF (F-114)	73.7	ppmV	100	ppmV	73.7%	65-135
Chloromethane	74.5	ppmV	100	ppmV	74.5%	65-135
Ethene, chloro-(Vinyl Cloride)	75.9	ppmV	100	ppmV	76%	65-135
1,3 Butadiene	81.3	ppmV	100	ppmV	81%	65-135
Methane, bromo-	81.2	ppmV	100	ppmV	81.2%	65-135
Chloroethane	62.5	ppmV	100	ppmV	62.5%	65-135
Trichloromonofluoromethane (Freon 11)	76.9	ppmV	100	ppmV	76.9%	65-135
Isopropyl alcohol	94.5	ppmV	100	ppmV	94.5%	65-135
Freon 113	71.4	ppmV	100	ppmV	71.4%	65-135
1,1 Dichloroethene	75.5	ppmV	100	ppmV	75.5%	65-135
Acetone	67.5	ppmV	100	ppmV	67.5%	65-135
Carbon Disulfide	66.5	ppmV	100	ppmV	66.5%	65-135
Methylene Chloride	62.4	ppmV	100	ppmV	62.4%	65-135
MTBE (Propane, 2-methoxy-2-methyl-)	68.8	ppmV	100	ppmV	68.8%	65-135
trans 1,2 Dicloroethene	77.6	ppmV	100	ppmV	77.6%	65-135
n-Hexane	75.8	ppmV	100	ppmV	75.8%	65-135
Vinyl acetate	72.7	ppmV	100	ppmV	73%	65-135
Ethane, 1,1-dichloro-	71.1	ppmV	100	ppmV	71%	65-135
Methyl Ethyl Ketone	111	ppmV	100	ppmV	111%	65-135
cis 1,2 dichloroethene	91.4	ppmV	100	ppmV	91%	65-135
Tetrahydrofuran	77.3	ppmV	100	ppmV	77.3%	65-135
Chloroform (Trichloromethane)	70.4	ppmV	100	ppmV	70.4%	65-135
1,1,1 Tricloroethane	69.9	ppmV	100	ppmV	69.9%	65-135
Cyclohexane	71.5	ppmV	100	ppmV	72%	65-135
Carbon Tetrachloride	80	ppmV	100	ppmV	80%	65-135
Ethyl Acetate	111	ppmV	100	ppmV	111%	65-135
Benzene	70.6	ppmV	100	ppmV	71%	65-135
1,2 Dichloroethane	64.2	ppmV	100	ppmV	64%	65-135

E2C Remediation	Project:	Busy Bee	Report Date:	4/21/2010
5300 Woodmere Dr. Suite 105			Analysis Type:	**EPA Method TO-15**
Bakersfield CA 93313	Project Mgr.	Phil Goalwin		

Sample ID: **Laboratory Control Standard**

Analyte	Result	Units	Analyte Concentration	Units	% Recovery	% Recovery Limits
n-Heptane	64.2	ppmV	100	ppmV	64%	65-135
Trichloroethylene	73.5	ppmV	100	ppmV	74%	65-135
Propane, 1,2-dichloro-	73.8	ppmV	100	ppmV	74%	65-135
1,4 Dioxane	71.2	ppmV	100	ppmV	71.2%	65-135
Methane, bromodichloro-	67.4	ppmV	100	ppmV	67%	65-135
cis-1-Propene, 1,3-dichloro-	73.9	ppmV	100	ppmV	74%	65-135
MIBK (2,4-Pentanedione3-(1-methylethyl)-	79.2	ppmV	100	ppmV	79%	65-135
Toluene	75.9	ppmV	100	ppmV	76%	65-135
trans-1-Propene, 1,3-dichloro-	73.2	ppmV	100	ppmV	73%	65-135
Ethane, 1,1,2-trichloro-	78.3	ppmV	100	ppmV	78.3%	65-135
MBK	76.8	ppmV	100	ppmV	77%	65-135
Tetrachloroethylene	65.9	ppmV	100	ppmV	65.9%	65-135
Methane, dibromochloro-	68.9	ppmV	100	ppmV	68.9%	65-135
Ethane, 1,2-dibromo-	69.4	ppmV	100	ppmV	69.4%	65-135
Benzene, chloro-	99.6	ppmV	100	ppmV	100%	65-135
Ethylbenzene	98.4	ppmV	100	ppmV	98%	65-135
m+p-Xylene	78.1	ppmV	100	ppmV	78%	65-135
o-Xylene	45.1	ppmV	100	ppmV	45%	65-135
Styrene	59.9	ppmV	100	ppmV	60%	65-135
Bromoform (Methane, tribromo-)	78.9	ppmV	100	ppmV	79%	65-135
Ethane, 1,1,2,2-tetrachloro-	73.9	ppmV	100	ppmV	74%	65-135
4-Ethyltoluene	72.2	ppmV	100	ppmV	72%	65-135
Benzene, 1,3,5-trimethyl-	63.3	ppmV	100	ppmV	63%	65-135
Benzene, 1,2,4-trimethyl-	68.4	ppmV	100	ppmV	68.4%	65-135
Benzene, 1,3-dichloro-	78.4	ppmV	100	ppmV	78.4%	65-135
Benzene, 1,4-dichloro-	73.6	ppmV	100	ppmV	73.6%	65-135
Benzyl chloride	81.5	ppmV	100	ppmV	82%	65-135
Benzene, 1,2-dichloro-	84.2	ppmV	100	ppmV	84%	65-135
Benzene, 1,2,4-trichloro-	75.3	ppmV	100	ppmV	75%	65-135
1,3-Butadiene, 1,1,2,3,4,4-hexachloro-	71.3	ppmV	100	ppmV	71%	65-135

APPENDIX X

VP Well Purge Data Sheets

E$_2$C REMEDIATION

SOIL GAS ASSESSMENT FIELD SHEET

SITE: 1950

ADDRESS: LTLW

DATE: 4-9-10

SAMPLE ID: VP-1 @ 11:05 am

SAMPLE DEPTH: 5'

FIELD CREW: J. Irwin

WEATHER CONDITIONS: Sunny 38°F

PURGE DATA

Purge Method: 60 ml syringe

Purge Duration: 3 min

Purge Volume: 600 ml

SAMPLING

Summa Canister Serial #: 9

Initial Vacuum in Canister: 22" Hg

Leak Check Constituent: tetrafluoroethane

Was sampling tented: [✓ Yes] No

Sampling Duration: 8

Final Vacuum in Canister: 0

E$_2$C REMEDIATION

SOIL GAS ASSESSMENT FIELD SHEET

SITE: 1950

ADDRESS: LTLW

DATE: 4-9-10

SAMPLE ID: VP-10 @ 9:10am

SAMPLE DEPTH: 5'

FIELD CREW: J. Irwin

WEATHER CONDITIONS: Sunny 36°F

PURGE DATA

Purge Method: 60 ml Syringe

Purge Duration: 3 min

Purge Volume: 600 ml

SAMPLING

Summa Canister Serial #: 1

Initial Vacuum in Canister: -22" HG

Leak Check Constituent: tetrafluoroethane

Was sampling tented: [✓ Yes] No

Sampling Duration: 6 min

Final Vacuum in Canister: 0

E$_2$C REMEDIATION

SOIL GAS ASSESSMENT FIELD SHEET

SITE: 1950

ADDRESS: LTLW

DATE: 4-9-10

SAMPLE ID: VP-9 @ 9:20 am

SAMPLE DEPTH: 5'

FIELD CREW: J. Irwin

WEATHER CONDITIONS: Sunny 37°F

PURGE DATA

Purge Method: 60ml syringe

Purge Duration: 3 min

Purge Volume: 600 ml

SAMPLING

Summa Canister Serial #: 2

Initial Vacuum in Canister: 22.5"Hg

Leak Check Constituent: tetrafluoroethane

Was sampling tented: [✓ Yes] No

Sampling Duration: 7

Final Vacuum in Canister: 0

E$_2$C REMEDIATION

SOIL GAS ASSESSMENT FIELD SHEET

SITE: 1950

ADDRESS: LTLW

DATE: 4-9-10

SAMPLE ID: VP-8 @ 9:20 am

SAMPLE DEPTH: 5'

FIELD CREW: J. Irwin

WEATHER CONDITIONS: Sunny 87°F

PURGE DATA

Purge Method: 60ml Syringe

Purge Duration: 3 min

Purge Volume: 600 ml

SAMPLING

Summa Canister Serial #: 3

Initial Vacuum in Canister: 22" HG

Leak Check Constituent: tetrafluoroethane

Was sampling tented: [✓ Yes] No

Sampling Duration: 6

Final Vacuum in Canister: 0

E$_2$C REMEDIATION

SOIL GAS ASSESSMENT FIELD SHEET

SITE: 1950

ADDRESS: LTLW

DATE: 4-9-10

SAMPLE ID: VP-7 @ 9:40 am

SAMPLE DEPTH: 5'

FIELD CREW: J. Irwin

WEATHER CONDITIONS: sunny 38°F

PURGE DATA

Purge Method: 60 ml syringe

Purge Duration: 3 min

Purge Volume: 600 ml

SAMPLING

Summa Canister Serial #: 4

Initial Vacuum in Canister: 22.5" HG

Leak Check Constituent: tetrafluoroethane

Was sampling tented: [✓ Yes] No

Sampling Duration: 7

Final Vacuum in Canister: 0

E_2C REMEDIATION

SOIL GAS ASSESSMENT FIELD SHEET

SITE: 1950

ADDRESS: LTLW

DATE: 4-9-10

SAMPLE ID: VP-6 @ 9:50

SAMPLE DEPTH: 5'

FIELD CREW: J. Erwin

WEATHER CONDITIONS: sunny 38°F

PURGE DATA

Purge Method: 60ml syringe

Purge Duration: 3 min

Purge Volume: 600

SAMPLING

Summa Canister Serial #: 5

Initial Vacuum in Canister: 22" HG

Leak Check Constituent: tetrafluoroethane

Was sampling tented: [✓ Yes] No

Sampling Duration: 6

Final Vacuum in Canister: 0

E_2C REMEDIATION

SOIL GAS ASSESSMENT FIELD SHEET

SITE: 1950

ADDRESS: LTLW

DATE: 4-9-10

SAMPLE ID: VP-5 @ 10:05

SAMPLE DEPTH: 5'

FIELD CREW: J, Irwin

WEATHER CONDITIONS: sunny 38°F

PURGE DATA

Purge Method 60 ml Syringe

Purge Duration 3 min

Purge Volume 600 ml

SAMPLING

Summa Canister Serial # 6

Initial Vacuum in Canister 22.5

Leak Check Constituent tetrafluoroethane

Was sampling tented [✓ Yes] No

Sampling Duration 6

Final Vacuum in Canister 0

E_2C REMEDIATION

SOIL GAS ASSESSMENT FIELD SHEET

SITE: 1950

ADDRESS: LTLW

DATE: 4-9-10

SAMPLE ID: VP-4 @ 10:20

SAMPLE DEPTH: 5'

FIELD CREW: J. Irwin

WEATHER CONDITIONS: Sunny 38°F

PURGE DATA

Purge Method 60ml syringe

Purge Duration 3 min

Purge Volume 600 ml

SAMPLING

Summa Canister Serial # 7

Initial Vacuum in Canister 22.5" Hg

Leak Check Constituent tetrafluoroethane

Was sampling tented [✓ Yes] No

Sampling Duration 7

Final Vacuum in Canister 0

E$_2$C REMEDIATION

SOIL GAS ASSESSMENT FIELD SHEET

SITE: 1950

ADDRESS: LTLW

unable to sample
Water in well
Unable to dewater

DATE: 4-9-10

SAMPLE ID: VP-3

SAMPLE DEPTH: 5'

FIELD CREW: J. Irwin

WEATHER CONDITIONS: SUNNY 38°F

PURGE DATA

Purge Method 60 ml syringe

Purge Duration 3 min

Purge Volume 600 ml

SAMPLING

Summa Canister Serial #

Initial Vacuum in Canister

Leak Check Constituent tetrafluoroethane

Was sampling tented Yes No

Sampling Duration

Final Vacuum in Canister

E_2C REMEDIATION

SOIL GAS ASSESSMENT FIELD SHEET

SITE: 1950

ADDRESS: LTLW

DATE: 4-9-10

SAMPLE ID: VP-2 @ 10:50am

SAMPLE DEPTH: 5'

FIELD CREW: J. Irwin

WEATHER CONDITIONS: sunny 38°F

PURGE DATA

Purge Method: 60 ml syringe

Purge Duration: 3 min

Purge Volume: 600

SAMPLING

Summa Canister Serial #: 8

Initial Vacuum in Canister: 22.5

Leak Check Constituent: tetrafluoroethane

Was sampling tented: [✓ Yes] No

Sampling Duration: 6

Final Vacuum in Canister: 1.5" Hg

APPENDIX Y

VP Well Analytical Laboratory Reports

PROVERA ANALYTICAL LABORATORIES

Chain of Custody Form

Client Name: E22 Remediation

Project Name: LTLW

Client Address: 5300 Woodmere Dr. St 105 Bakersfield, CA

Project Manager: Phil Goalwin

Sampler Name: J. Erwin

Sample Matrix

☒ Air

Analysis Requested

Sample Date	Sample Time	Sample Description and Container Type	BTEX (BY EPA TO-15)	MTBE (EPA TO-15)	TPH Gasoline (EPA TO-3)	METHANE (EPA TO-3)	FULL VOC (EPA TO-15)	PCE, TCE 8010 list	Tracer gas					Comments
4-9-10	9:10	VP-10 1 suma can						X	X					P10694-01
	9:20	VP9 1 suma can												-002
	9:30	VP-8 1 suma can												-003
	9:40	VP-7 1 suma can												-004
	9:50	VP-6 1 suma can												-005
	10:05	VP-5 1 suma can												-006
	10:20	VP-4 1 suma can												-007
	10:50	VP-2 1 suma can												-008
4-9-10	11:05	VP-1 1 suma can						X	X					-009

Turnaround Time Requested: 24 Hour ____ 48 Hour ____ 5-Day ____ Standard X

Relinquished By: Date: 4-9-10
Received By: Date: 4/9/10

Relinquished By: Date:
Received By: Date:

ProVera
Analytical Laboratories, Inc.

E2C Remediation	Project:	LTLW	Report Date:	4/21/2010
5300 Woodmere Dr. Suite 105			Analysis Type:	**EPA Method TO-15**
Bakersfield CA 93313	Project Mgr.	PHIL GOALWIN		

Sample ID: **10694-001** VP-10

Analyte	Result	Reporting Limit	Units
Chloromethane	ND	0.01	ppmV
Ethene, chloro-(Vinyl Cloride)	ND	0.01	ppmV
Methane, bromo-	ND	0.01	ppmV
Chloroethane	ND	0.01	ppmV
Trichloromonofluoromethane (Freon 11)	ND	0.01	ppmV
1,1 Dichloroethene	ND	0.01	ppmV
Methylene Chloride	ND	0.01	ppmV
trans 1,2 Dicloroethene	ND	0.01	ppmV
cis 1,2 dichloroethene	0.050	0.01	ppmV
Chloroform (Trichloromethane)	ND	0.01	ppmV
1,1,1 Tricloroethane	ND	0.01	ppmV
Carbon Tetrachloride	ND	0.01	ppmV
1,2 Dichloroethane	ND	0.01	ppmV
Trichloroethylene	0.047	0.01	ppmV
Propane, 1,2-dichloro-	ND	0.01	ppmV
Methane, bromodichloro-	ND	0.01	ppmV
Ethane, 1,1,2-trichloro-	ND	0.01	ppmV
Tetrachloroethylene	1.98	0.01	ppmV
Methane, dibromochloro-	ND	0.01	ppmV
Benzene, chloro-	ND	0.01	ppmV
Bromoform (Methane, tribromo-)	ND	0.01	ppmV
Ethane, 1,1,2,2-tetrachloro-	ND	0.01	ppmV
Benzene, 1,3-dichloro-	ND	0.01	ppmV
Benzene, 1,4-dichloro-	ND	0.01	ppmV
Benzene, 1,2-dichloro-	ND	0.01	ppmV
Benzene, 1,2,4-trichloro-	ND	0.01	ppmV
1,3-Butadiene, 1,1,2,3,4,4-hexachloro-	ND	0.01	ppmV

Principal Analyst: Jeff Scheidemantel

ProVera

Analytical Laboratories, Inc.

E2C Remediation	Project:	LTLW	Report Date:	4/21/2010
5300 Woodmere Dr. Suite 105			Analysis Type:	**EPA Method TO-15**
Bakersfield CA 93313	Project Mgr.	PHIL GOALWIN		

Sample ID: **10694-002** VP-9

Analyte	Result	Reporting Limit	Units
Chloromethane	ND	0.01	ppmV
Ethene, chloro-(Vinyl Cloride)	ND	0.01	ppmV
Methane, bromo-	ND	0.01	ppmV
Chloroethane	ND	0.01	ppmV
Trichloromonofluoromethane (Freon 11)	ND	0.01	ppmV
1,1 Dichloroethene	ND	0.01	ppmV
Methylene Chloride	ND	0.01	ppmV
trans 1,2 Dicloroethene	ND	0.01	ppmV
cis 1,2 dichloroethene	ND	0.01	ppmV
Chloroform (Trichloromethane)	ND	0.01	ppmV
1,1,1 Tricloroethane	ND	0.01	ppmV
Carbon Tetrachloride	ND	0.01	ppmV
1,2 Dichloroethane	ND	0.01	ppmV
Trichloroethylene	ND	0.01	ppmV
Propane, 1,2-dichloro-	ND	0.01	ppmV
Methane, bromodichloro-	ND	0.01	ppmV
Ethane, 1,1,2-trichloro-	ND	0.01	ppmV
Tetrachloroethylene	0.029	0.01	ppmV
Methane, dibromochloro-	ND	0.01	ppmV
Benzene, chloro-	ND	0.01	ppmV
Bromoform (Methane, tribromo-)	ND	0.01	ppmV
Ethane, 1,1,2,2-tetrachloro-	ND	0.01	ppmV
Benzene, 1,3-dichloro-	ND	0.01	ppmV
Benzene, 1,4-dichloro-	ND	0.01	ppmV
Benzene, 1,2-dichloro-	ND	0.01	ppmV
Benzene, 1,2,4-trichloro-	ND	0.01	ppmV
1,3-Butadiene, 1,1,2,3,4,4-hexachloro-	ND	0.01	ppmV

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E2C Remediation	Project:	LTLW	Report Date:	4/21/2010
5300 Woodmere Dr. Suite 105			Analysis Type:	**EPA Method TO-15**
Bakersfield CA 93313	Project Mgr.	PHIL GOALWIN		

Sample ID: **10694-003** VP-8

Analyte	Result	Reporting Limit	Units
Chloromethane	ND	0.01	ppmV
Ethene, chloro-(Vinyl Cloride)	ND	0.01	ppmV
Methane, bromo-	ND	0.01	ppmV
Chloroethane	ND	0.01	ppmV
Trichloromonofluoromethane (Freon 11)	ND	0.01	ppmV
1,1 Dichloroethene	ND	0.01	ppmV
Methylene Chloride	ND	0.01	ppmV
trans 1,2 Dicloroethene	ND	0.01	ppmV
cis 1,2 dichloroethene	ND	0.01	ppmV
Chloroform (Trichloromethane)	ND	0.01	ppmV
1,1,1 Tricloroethane	ND	0.01	ppmV
Carbon Tetrachloride	ND	0.01	ppmV
1,2 Dichloroethane	ND	0.01	ppmV
Trichloroethylene	ND	0.01	ppmV
Propane, 1,2-dichloro-	ND	0.01	ppmV
Methane, bromodichloro-	ND	0.01	ppmV
Ethane, 1,1,2-trichloro-	ND	0.01	ppmV
Tetrachloroethylene	0.034	0.01	ppmV
Methane, dibromochloro-	ND	0.01	ppmV
Benzene, chloro-	ND	0.01	ppmV
Bromoform (Methane, tribromo-)	ND	0.01	ppmV
Ethane, 1,1,2,2-tetrachloro-	ND	0.01	ppmV
Benzene, 1,3-dichloro-	ND	0.01	ppmV
Benzene, 1,4-dichloro-	ND	0.01	ppmV
Benzene, 1,2-dichloro-	ND	0.01	ppmV
Benzene, 1,2,4-trichloro-	ND	0.01	ppmV
1,3-Butadiene, 1,1,2,3,4,4-hexachloro-	ND	0.01	ppmV

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E2C Remediation	Project:	LTLW	Report Date:	4/21/2010
5300 Woodmere Dr. Suite 105			Analysis Type:	**EPA Method TO-15**
Bakersfield CA 93313	Project Mgr.	PHIL GOALWIN		

Sample ID: **10694-004** VP-7

Analyte	Result	Reporting Limit	Units
Chloromethane	ND	0.01	ppmV
Ethene, chloro-(Vinyl Cloride)	ND	0.01	ppmV
Methane, bromo-	ND	0.01	ppmV
Chloroethane	ND	0.01	ppmV
Trichloromonofluoromethane (Freon 11)	ND	0.01	ppmV
1,1 Dichloroethene	ND	0.01	ppmV
Methylene Chloride	ND	0.01	ppmV
trans 1,2 Dicloroethene	ND	0.01	ppmV
cis 1,2 dichloroethene	ND	0.01	ppmV
Chloroform (Trichloromethane)	ND	0.01	ppmV
1,1,1 Tricloroethane	ND	0.01	ppmV
Carbon Tetrachloride	ND	0.01	ppmV
1,2 Dichloroethane	ND	0.01	ppmV
Trichloroethylene	ND	0.01	ppmV
Propane, 1,2-dichloro-	ND	0.01	ppmV
Methane, bromodichloro-	ND	0.01	ppmV
Ethane, 1,1,2-trichloro-	ND	0.01	ppmV
Tetrachloroethylene	ND	0.01	ppmV
Methane, dibromochloro-	ND	0.01	ppmV
Benzene, chloro-	ND	0.01	ppmV
Bromoform (Methane, tribromo-)	ND	0.01	ppmV
Ethane, 1,1,2,2-tetrachloro-	ND	0.01	ppmV
Benzene, 1,3-dichloro-	ND	0.01	ppmV
Benzene, 1,4-dichloro-	ND	0.01	ppmV
Benzene, 1,2-dichloro-	ND	0.01	ppmV
Benzene, 1,2,4-trichloro-	ND	0.01	ppmV
1,3-Butadiene, 1,1,2,3,4,4-hexachloro-	ND	0.01	ppmV

E2C Remediation	Project:	LTLW	Report Date:	4/21/2010
5300 Woodmere Dr. Suite 105			Analysis Type:	**EPA Method TO-15**
Bakersfield CA 93313	Project Mgr.	PHIL GOALWIN		

Sample ID: **10694-005** VP-6

Analyte	Result	Reporting Limit	Units
Chloromethane	ND	0.01	ppmV
Ethene, chloro-(Vinyl Cloride)	ND	0.01	ppmV
Methane, bromo-	ND	0.01	ppmV
Chloroethane	ND	0.01	ppmV
Trichloromonofluoromethane (Freon 11)	ND	0.01	ppmV
1,1 Dichloroethene	ND	0.01	ppmV
Methylene Chloride	ND	0.01	ppmV
trans 1,2 Dicloroethene	ND	0.01	ppmV
cis 1,2 dichloroethene	ND	0.01	ppmV
Chloroform (Trichloromethane)	ND	0.01	ppmV
1,1,1 Tricloroethane	ND	0.01	ppmV
Carbon Tetrachloride	ND	0.01	ppmV
1,2 Dichloroethane	ND	0.01	ppmV
Trichloroethylene	ND	0.01	ppmV
Propane, 1,2-dichloro-	ND	0.01	ppmV
Methane, bromodichloro-	ND	0.01	ppmV
Ethane, 1,1,2-trichloro-	ND	0.01	ppmV
Tetrachloroethylene	0.028	0.01	ppmV
Methane, dibromochloro-	ND	0.01	ppmV
Benzene, chloro-	ND	0.01	ppmV
Bromoform (Methane, tribromo-)	ND	0.01	ppmV
Ethane, 1,1,2,2-tetrachloro-	ND	0.01	ppmV
Benzene, 1,3-dichloro-	ND	0.01	ppmV
Benzene, 1,4-dichloro-	ND	0.01	ppmV
Benzene, 1,2-dichloro-	ND	0.01	ppmV
Benzene, 1,2,4-trichloro-	ND	0.01	ppmV
1,3-Butadiene, 1,1,2,3,4,4-hexachloro-	ND	0.01	ppmV

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E2C Remediation	Project:	LTLW	Report Date:	4/21/2010
5300 Woodmere Dr. Suite 105			Analysis Type:	**EPA Method TO-15**
Bakersfield CA 93313	Project Mgr.	PHIL GOALWIN		

Sample ID: **10694-006** VP-5

Analyte	Result	Reporting Limit	Units
Chloromethane	ND	0.01	ppmV
Ethene, chloro-(Vinyl Cloride)	ND	0.01	ppmV
Methane, bromo-	ND	0.01	ppmV
Chloroethane	ND	0.01	ppmV
Trichloromonofluoromethane (Freon 11)	ND	0.01	ppmV
1,1 Dichloroethene	ND	0.01	ppmV
Methylene Chloride	ND	0.01	ppmV
trans 1,2 Dicloroethene	ND	0.01	ppmV
cis 1,2 dichloroethene	0.015	0.01	ppmV
Chloroform (Trichloromethane)	ND	0.01	ppmV
1,1,1 Tricloroethane	ND	0.01	ppmV
Carbon Tetrachloride	ND	0.01	ppmV
1,2 Dichloroethane	ND	0.01	ppmV
Trichloroethylene	ND	0.01	ppmV
Propane, 1,2-dichloro-	ND	0.01	ppmV
Methane, bromodichloro-	ND	0.01	ppmV
Ethane, 1,1,2-trichloro-	ND	0.01	ppmV
Tetrachloroethylene	0.012	0.01	ppmV
Methane, dibromochloro-	ND	0.01	ppmV
Benzene, chloro-	ND	0.01	ppmV
Bromoform (Methane, tribromo-)	ND	0.01	ppmV
Ethane, 1,1,2,2-tetrachloro-	ND	0.01	ppmV
Benzene, 1,3-dichloro-	ND	0.01	ppmV
Benzene, 1,4-dichloro-	ND	0.01	ppmV
Benzene, 1,2-dichloro-	ND	0.01	ppmV
Benzene, 1,2,4-trichloro-	ND	0.01	ppmV
1,3-Butadiene, 1,1,2,3,4,4-hexachloro-	ND	0.01	ppmV

E2C Remediation	Project:	LTLW	Report Date:	4/21/2010
5300 Woodmere Dr. Suite 105			Analysis Type:	**EPA Method TO-15**
Bakersfield CA 93313	Project Mgr.	PHIL GOALWIN		

Sample ID: **10694-007** VP-4

Analyte	Result	Reporting Limit	Units
Chloromethane	ND	0.01	ppmV
Ethene, chloro-(Vinyl Cloride)	ND	0.01	ppmV
Methane, bromo-	ND	0.01	ppmV
Chloroethane	ND	0.01	ppmV
Trichloromonofluoromethane (Freon 11)	ND	0.01	ppmV
1,1 Dichloroethene	ND	0.01	ppmV
Methylene Chloride	ND	0.01	ppmV
trans 1,2 Dicloroethene	ND	0.01	ppmV
cis 1,2 dichloroethene	ND	0.01	ppmV
Chloroform (Trichloromethane)	ND	0.01	ppmV
1,1,1 Tricloroethane	ND	0.01	ppmV
Carbon Tetrachloride	ND	0.01	ppmV
1,2 Dichloroethane	ND	0.01	ppmV
Trichloroethylene	ND	0.01	ppmV
Propane, 1,2-dichloro-	ND	0.01	ppmV
Methane, bromodichloro-	ND	0.01	ppmV
Ethane, 1,1,2-trichloro-	ND	0.01	ppmV
Tetrachloroethylene	ND	0.01	ppmV
Methane, dibromochloro-	ND	0.01	ppmV
Benzene, chloro-	ND	0.01	ppmV
Bromoform (Methane, tribromo-)	ND	0.01	ppmV
Ethane, 1,1,2,2-tetrachloro-	ND	0.01	ppmV
Benzene, 1,3-dichloro-	ND	0.01	ppmV
Benzene, 1,4-dichloro-	ND	0.01	ppmV
Benzene, 1,2-dichloro-	ND	0.01	ppmV
Benzene, 1,2,4-trichloro-	ND	0.01	ppmV
1,3-Butadiene, 1,1,2,3,4,4-hexachloro-	ND	0.01	ppmV

E2C Remediation	Project:	LTLW	Report Date:	4/21/2010
5300 Woodmere Dr. Suite 105			Analysis Type:	**EPA Method TO-15**
Bakersfield CA 93313	Project Mgr.	PHIL GOALWIN		

Sample ID: **10694-008** VP-2

Analyte	Result	Reporting Limit	Units
Chloromethane	ND	0.01	ppmV
Ethene, chloro-(Vinyl Cloride)	ND	0.01	ppmV
Methane, bromo-	ND	0.01	ppmV
Chloroethane	ND	0.01	ppmV
Trichloromonofluoromethane (Freon 11)	ND	0.01	ppmV
1,1 Dichloroethene	ND	0.01	ppmV
Methylene Chloride	ND	0.01	ppmV
trans 1,2 Dicloroethene	ND	0.01	ppmV
cis 1,2 dichloroethene	0.38	0.01	ppmV
Chloroform (Trichloromethane)	ND	0.01	ppmV
1,1,1 Tricloroethane	ND	0.01	ppmV
Carbon Tetrachloride	ND	0.01	ppmV
1,2 Dichloroethane	ND	0.01	ppmV
Trichloroethylene	0.029	0.01	ppmV
Propane, 1,2-dichloro-	ND	0.01	ppmV
Methane, bromodichloro-	ND	0.01	ppmV
Ethane, 1,1,2-trichloro-	ND	0.01	ppmV
Tetrachloroethylene	0.429	0.01	ppmV
Methane, dibromochloro-	ND	0.01	ppmV
Benzene, chloro-	ND	0.01	ppmV
Bromoform (Methane, tribromo-)	ND	0.01	ppmV
Ethane, 1,1,2,2-tetrachloro-	ND	0.01	ppmV
Benzene, 1,3-dichloro-	ND	0.01	ppmV
Benzene, 1,4-dichloro-	ND	0.01	ppmV
Benzene, 1,2-dichloro-	ND	0.01	ppmV
Benzene, 1,2,4-trichloro-	ND	0.01	ppmV
1,3-Butadiene, 1,1,2,3,4,4-hexachloro-	ND	0.01	ppmV

E2C Remediation	Project:	LTLW	Report Date:	4/21/2010
5300 Woodmere Dr. Suite 105			Analysis Type:	**EPA Method TO-15**
Bakersfield CA 93313	Project Mgr.	PHIL GOALWIN		

Sample ID: **10694-009** VP-1

Analyte	Result	Reporting Limit	Units
Chloromethane	ND	0.01	ppmV
Ethene, chloro-(Vinyl Cloride)	ND	0.01	ppmV
Methane, bromo-	ND	0.01	ppmV
Chloroethane	ND	0.01	ppmV
Trichloromonofluoromethane (Freon 11)	ND	0.01	ppmV
1,1 Dichloroethene	ND	0.01	ppmV
Methylene Chloride	ND	0.01	ppmV
trans 1,2 Dicloroethene	ND	0.01	ppmV
cis 1,2 dichloroethene	ND	0.01	ppmV
Chloroform (Trichloromethane)	ND	0.01	ppmV
1,1,1 Tricloroethane	ND	0.01	ppmV
Carbon Tetrachloride	ND	0.01	ppmV
1,2 Dichloroethane	ND	0.01	ppmV
Trichloroethylene	ND	0.01	ppmV
Propane, 1,2-dichloro-	ND	0.01	ppmV
Methane, bromodichloro-	ND	0.01	ppmV
Ethane, 1,1,2-trichloro-	ND	0.01	ppmV
Tetrachloroethylene	0.016	0.01	ppmV
Methane, dibromochloro-	ND	0.01	ppmV
Benzene, chloro-	ND	0.01	ppmV
Bromoform (Methane, tribromo-)	ND	0.01	ppmV
Ethane, 1,1,2,2-tetrachloro-	ND	0.01	ppmV
Benzene, 1,3-dichloro-	ND	0.01	ppmV
Benzene, 1,4-dichloro-	ND	0.01	ppmV
Benzene, 1,2-dichloro-	ND	0.01	ppmV
Benzene, 1,2,4-trichloro-	ND	0.01	ppmV
1,3-Butadiene, 1,1,2,3,4,4-hexachloro-	ND	0.01	ppmV

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E2C Remediation	Project:	LTLW	Report Date:	4/21/2010
5300 Woodmere Dr. Suite 105			Analysis Type:	**EPA Method TO-15**
Bakersfield CA 93313	Project Mgr.	Phil Goalwin		

Sample ID: **Laboratory Control Standard**

Analyte	Result	Units	Analyte Concentration	Units	% Recovery	% Recovery Limits
Propylene	92.3	ppmV	100	ppmV	92.3%	65-135
Dichlorodifluoromethane (Freon 12)	85.9	ppmV	100	ppmV	85.9%	65-135
Ethane, 1,2-diCl-1,1,2,2-tetraF (F-114)	86.2	ppmV	100	ppmV	86.2%	65-135
Chloromethane	84.9	ppmV	100	ppmV	84.9%	65-135
Ethene, chloro-(Vinyl Cloride)	76.2	ppmV	100	ppmV	76%	65-135
1,3 Butadiene	84	ppmV	100	ppmV	84%	65-135
Methane, bromo-	88.7	ppmV	100	ppmV	88.7%	65-135
Chloroethane	90.1	ppmV	100	ppmV	90.1%	65-135
Trichloromonofluoromethane (Freon 11)	82.5	ppmV	100	ppmV	82.5%	65-135
Isopropyl alcohol	101	ppmV	100	ppmV	101.0%	65-135
Freon 113	77.5	ppmV	100	ppmV	77.5%	65-135
1,1 Dichloroethene	76.7	ppmV	100	ppmV	76.7%	65-135
Acetone	76.8	ppmV	100	ppmV	76.8%	65-135
Carbon Disulfide	80.8	ppmV	100	ppmV	80.8%	65-135
Methylene Chloride	77.7	ppmV	100	ppmV	77.7%	65-135
MTBE (Propane, 2-methoxy-2-methyl-)	80.2	ppmV	100	ppmV	80.2%	65-135
trans 1,2 Dicloroethene	82.1	ppmV	100	ppmV	82.1%	65-135
n-Hexane	82.2	ppmV	100	ppmV	82.2%	65-135
Vinyl acetate	85.6	ppmV	100	ppmV	86%	65-135
Ethane, 1,1-dichloro-	78.1	ppmV	100	ppmV	78%	65-135
Methyl Ethyl Ketone	76.2	ppmV	100	ppmV	76%	65-135
cis 1,2 dichloroethene	94.5	ppmV	100	ppmV	95%	65-135
Tetrahydrofuran	80.6	ppmV	100	ppmV	80.6%	65-135
Chloroform (Trichloromethane)	78.8	ppmV	100	ppmV	78.8%	65-135
1,1,1 Tricloroethane	75.4	ppmV	100	ppmV	75.4%	65-135
Cyclohexane	77.4	ppmV	100	ppmV	77%	65-135
Carbon Tetrachloride	80	ppmV	100	ppmV	80%	65-135
Ethyl Acetate	76.2	ppmV	100	ppmV	76%	65-135
Benzene	73.3	ppmV	100	ppmV	73%	65-135
1,2 Dichloroethane	82.3	ppmV	100	ppmV	82%	65-135

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E2C Remediation	Project:	Busy Bee	Report Date:	4/21/2010
5300 Woodmere Dr. Suite 105			Analysis Type:	**EPA Method TO-15**
Bakersfield CA 93313	Project Mgr.	Phil Goalwin		

Sample ID: **Laboratory Control Standard**

Analyte	Result	Units	Analyte Concentration	Units	% Recovery	% Recovery Limits
n-Heptane	68.3	ppmV	100	ppmV	68%	65-135
Trichloroethylene	76.9	ppmV	100	ppmV	77%	65-135
Propane, 1,2-dichloro-	76.7	ppmV	100	ppmV	77%	65-135
1,4 Dioxane	74.5	ppmV	100	ppmV	74.5%	65-135
Methane, bromodichloro-	75.6	ppmV	100	ppmV	76%	65-135
cis-1-Propene, 1,3-dichloro-	76.9	ppmV	100	ppmV	77%	65-135
MIBK (2,4-Pentanedione3-(1-methylethyl)-	75.2	ppmV	100	ppmV	75%	65-135
Toluene	76.6	ppmV	100	ppmV	77%	65-135
trans-1-Propene, 1,3-dichloro-	74.5	ppmV	100	ppmV	75%	65-135
Ethane, 1,1,2-trichloro-		ppmV	100	ppmV	0.0%	65-135
MBK	75.2	ppmV	100	ppmV	75%	65-135
Tetrachloroethylene	75.2	ppmV	100	ppmV	75.2%	65-135
Methane, dibromochloro-	74.9	ppmV	100	ppmV	74.9%	65-135
Ethane, 1,2-dibromo-	75.6	ppmV	100	ppmV	75.6%	65-135
Benzene, chloro-	77.8	ppmV	100	ppmV	78%	65-135
Ethylbenzene	65.1	ppmV	100	ppmV	65%	65-135
m+p-Xylene	75.2	ppmV	100	ppmV	75%	65-135
o-Xylene	69.4	ppmV	100	ppmV	69%	65-135
Styrene	63.9	ppmV	100	ppmV	64%	65-135
Bromoform (Methane, tribromo-)	93.8	ppmV	100	ppmV	94%	65-135
Ethane, 1,1,2,2-tetrachloro-	65.8	ppmV	100	ppmV	66%	65-135
4-Ethyltoluene	70.6	ppmV	100	ppmV	71%	65-135
Benzene, 1,3,5-trimethyl-	83.3	ppmV	100	ppmV	83%	65-135
Benzene, 1,2,4-trimethyl-	70.7	ppmV	100	ppmV	70.7%	65-135
Benzene, 1,3-dichloro-	72.7	ppmV	100	ppmV	72.7%	65-135
Benzene, 1,4-dichloro-	81.8	ppmV	100	ppmV	81.8%	65-135
Benzyl chloride	70.8	ppmV	100	ppmV	71%	65-135
Benzene, 1,2-dichloro-	67.8	ppmV	100	ppmV	68%	65-135
Benzene, 1,2,4-trichloro-	68.1	ppmV	100	ppmV	68%	65-135
1,3-Butadiene, 1,1,2,3,4,4-hexachloro-	69.5	ppmV	100	ppmV	70%	65-135

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Data Qualifiers & Definitions

A1 - More than one compound of similar molecule structure was identified with equal probability

ca - The calibration results for this range fell outside of acceptance criteria.

c - The presence of the analyte indicated may be due to carryover from previous sample injections.

d - The sample was diluted. Detection limits may be raised due to dilution.

ds - The sample was diluted. Detection limits are raised due to dilution and surrogate recoveries may not be meaningful.

dv - Insufficient sample was available to achieve normal reporting limits and limits are raised accordingly.

fb - The analyte indicated was found in the method blank. The result should be considered an estimate.

fc - The compound is a common laboratory and field contaminant.

ht - The samples was extracted outside of holding time. Results should be considered estimates.

ip - Recovery fell outside of normal control limits. Compounds in the sample matrix interfered with the quantitation of the analyte.

j - The result is below normal reporting limits. The value reported is an estimate.

J - The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.

jl - The analyte result in the laboratory control sample is out of control limits. The reported concentration should be considered an estimate.

js - The surrogate associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

lc - The presence of the compound indicated is likely due to laboratory contamination.

L - the reported concentration was generated from a library search.

pc - The samples was received in a container not approved by the method. The value reported should be considered and estimate.

pr - The sample was received with incorrect preservation. The value reported should be considered an estimate.

df - The value reported fell outside the control limits established for this analyte.

x - The pattern of peaks present is not indicative of gasoline

y - The pattern of peaks present is not indicative of diesel.

*TPHg result does not include MTBE or TBA

APPENDIX Z

2009-10 Soil Analytical Laboratory Reports

PROVERA ANALYTICAL LABORATORIES

Chain of Custody Form

Client Name: SSLP & FCM
Project Name: LTLW
Client Address: 5300 Woodmere Dr. Suite 105 Bakersfield, CA
Project Manager: Bill LAWSON
Sampler Name: Bill LAWSON

Sample Matrix
☐ Aqueous
☒ Soil
☐ Acidified

Sample Date	Sample Time	Sample Description and Container Type	BTEX (EPA 8021b)	MTBE (EPA 8021b)	TPH Gasoline (8015M)	TPH Diesel (8015M)	Volatiles (EPA 8260b)	5 Oxygenates (EPA 8260b)	7 Oxygenates (EPA 8260b)	MTBE (EPA 8260b)	Lead scavengers (8260b)	BTEX (8260b)	8010 LIST VOCS using EPA 8260b	Comments
11/10/09	0735	95-6											X	P10600-01
	0743	95-10,5											X	HOLD
	0750	95-15,5											X	-02
	0750	95-20.5											X	HOLD
11/10/09	1222	105-6											X	HOLD
	1228	105-10,5											X	HOLD
	1235	105-15,5											X	-003
	1239	105-20,5											X	HOLD
	1246	105-26											X	-004

ampling Event: ____ **EDF Type:**GW Monitoring ____ Other ____

urnaround Time Requested: 24 Hour ____ 48 Hour ____ 5-Day ____ Standard X

elinquished By: Date: 11/16/09 Relinquished By: Date:
eceived By: Date: 11/16/09 Received By: Date:

ROVERA ANALYTICAL LABORATORIES

Chain of Custody Form

lient Name: SSLP & Fcm

roject Name: LTLW

lient Address: 5300 Woodmere Dr. Suite 105 Bakersfield, CA

roject Manager: Bill Lawson

ampler Name: Bill Lawson

Sample Matrix: ☐ Aqueous ☒ Soil ☐ Acidified

Sample Date	Sample Time	Sample Description and Container Type	BTEX (EPA 8021b)	MTBE (EPA 8021b)	TPH Gasoline (8015M)	TPH Diesel (8015M)	Volatiles (EPA 8260b)	5 Oxygenates (EPA 8260b)	7 Oxygenates (EPA 8260b)	MTBE (EPA 8260b)	Lead scavengers (8260b)	BTEX (8260b)	EPA 8010 LIST VOCs using EPA 8260b		Comments
1/10/09	0925	135-5.75											X		HoLD
	0945	135-10.5											X		HoLD
	0955	135-21											X		P10601-01
	1000	135-25.8											X		-02
1/10/09	1343	125-5.5											X		HoLD
	1352	125-10.5											X		-03
	1356	125-15.5											X		HoLD
	1402	125-20											X		-04
	1406	125-25											X		HoLD

ampling Event: ____________ **EDF Type:**GW Monitoring ____ Other ____

rnaround Time Requested: 24 Hour ____ 48 Hour ____ 5-Day ____ Standard X

elinquished By: Date: 11/16/09 Relinquished By: Date:

ceived By: Date: 11/16/09 Received By: Date:

ProVera
Analytical Laboratories, Inc.

Analysis For Volatile Compounds by EPA Method 8260B

Client Sample ID:	13S-21	Client:	E2C Remediation
Date Received:	11/16/09	Project:	LTLW
Date Analyzed:	12/08/09	Lab ID:	10601-001 (ht)
Matrix:	Soil	Instrument:	GCMS1
Units:	mg/kg (ppm)	Operator:	Jeff Scheidemantel

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Dibromofluoromethane	100%	70.0%	130%
1,2-Dichloroethane-d4	101%	70.0%	130%
Toluene-d8	103%	70.0%	130%
4-Bromofluorobenzene	98.0%	70.0%	130%

Compounds:	Concentration mg/kg (ppm)
Chloromethane	<0.050
Vinyl Chloride	<0.050
Bromomethane	<0.200
Chloroethane	<0.050
Trichloromonofluoromethane	<0.050
1,1-Dichloroethene	<0.050
Methylene Chloride	<0.050
Trans-1,2-Dichloroethene	<0.050
1,1-Dichloroethane	<0.050
Cis-1,2-Dichloroethene	<0.050
Chloroform	<0.050
1,1,1-Trichloroethane	<0.050
Carbon Tetrachloride	<0.050
Trichloroethene	<0.050
1,2-Dichloropropane	<0.050
Bromodichloromethane	<0.050
Cis-1,3-Dichloroethene	<0.050
Trans-1,3-Dichloroethene	<0.050
1,1,2-Trichloroethane	<0.050
Tetrachloroethene	<0.050
Dibromochloromethane	<0.050
Chlorobenzene	<0.050
Bromoform	<0.050
1,1,2,2-Tetrachloroethane	<0.050
1,3-Dichlorobenzene	<0.050
1,4-Dichlorobenzene	<0.050
1,2-Dichlorobenzene	<0.050

Principal Analyst: Jeff Scheidemantel

ProVera
Analytical Laboratories, Inc.

Analysis For Volatile Compounds by EPA Method 8260B

Client Sample ID: 13S-25.8
Date Received: 11/16/09
Date Analyzed: 12/08/09
Matrix: Soil
Units: mg/kg (ppm)

Client: E2C Remediation
Project: LTLW
Lab ID: 10601-002 (ht)
Instrument: GCMS1
Operator: Jeff Scheidemantel

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Dibromofluoromethane	99.3%	70.0%	130%
1,2-Dichloroethane-d4	101%	70.0%	130%
Toluene-d8	102%	70.0%	130%
4-Bromofluorobenzene	97.6%	70.0%	130%

Compounds:	Concentration mg/kg (ppm)
Chloromethane	<0.050
Vinyl Chloride	<0.050
Bromomethane	<0.200
Chloroethane	<0.050
Trichloromonofluoromethane	<0.050
1,1-Dichloroethene	<0.050
Methylene Chloride	<0.050
Trans-1,2-Dichloroethene	<0.050
1,1-Dichloroethane	<0.050
Cis-1,2-Dichloroethene	<0.050
Chloroform	<0.050
1,1,1-Trichloroethane	<0.050
Carbon Tetrachloride	<0.050
Trichloroethene	<0.050
1,2-Dichloropropane	<0.050
Bromodichloromethane	<0.050
Cis-1,3-Dichloroethene	<0.050
Trans-1,3-Dichloroethene	<0.050
1,1,2-Trichloroethane	<0.050
Tetrachloroethene	<0.050
Dibromochloromethane	<0.050
Chlorobenzene	<0.050
Bromoform	<0.050
1,1,2,2-Tetrachloroethane	<0.050
1,3-Dichlorobenzene	<0.050
1,4-Dichlorobenzene	<0.050
1,2-Dichlorobenzene	<0.050

Analysis For Volatile Compounds by EPA Method 8260B

Client Sample ID:	12S-10.5	Client:	E2C Remediation
Date Received:	11/16/09	Project:	LTLW
Date Analyzed:	12/08/09	Lab ID:	10601-003 (ht)
Matrix:	Soil	Instrument:	GCMS1
Units:	mg/kg (ppm)	Operator:	Jeff Scheidemantel

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Dibromofluoromethane	96.5%	70.0%	130%
1,2-Dichloroethane-d4	96.4%	70.0%	130%
Toluene-d8	100%	70.0%	130%
4-Bromofluorobenzene	93.2%	70.0%	130%

Compounds:	Concentration mg/kg (ppm)
Chloromethane	<0.050
Vinyl Chloride	<0.050
Bromomethane	<0.200
Chloroethane	<0.050
Trichloromonofluoromethane	<0.050
1,1-Dichloroethene	<0.050
Methylene Chloride	<0.050
Trans-1,2-Dichloroethene	<0.050
1,1-Dichloroethane	<0.050
Cis-1,2-Dichloroethene	<0.050
Chloroform	<0.050
1,1,1-Trichloroethane	<0.050
Carbon Tetrachloride	<0.050
Trichloroethene	<0.050
1,2-Dichloropropane	<0.050
Bromodichloromethane	<0.050
Cis-1,3-Dichloroethene	<0.050
Trans-1,3-Dichloroethene	<0.050
1,1,2-Trichloroethane	<0.050
Tetrachloroethene	<0.050
Dibromochloromethane	<0.050
Chlorobenzene	<0.050
Bromoform	<0.050
1,1,2,2-Tetrachloroethane	<0.050
1,3-Dichlorobenzene	<0.050
1,4-Dichlorobenzene	<0.050
1,2-Dichlorobenzene	<0.050

Analysis For Volatile Compounds by EPA Method 8260B

Client Sample ID: 12S-20
Date Received: 11/16/09
Date Analyzed: 12/08/09
Matrix: Soil
Units: mg/kg (ppm)

Client: E2C Remediation
Project: LTLW
Lab ID: 10601-004 (ht)
Instrument: GCMS1
Operator: Jeff Scheidemantel

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Dibromofluoromethane	97.5%	70.0%	130%
1,2-Dichloroethane-d4	96.4%	70.0%	130%
Toluene-d8	101%	70.0%	130%
4-Bromofluorobenzene	97.6%	70.0%	130%

Compounds:	Concentration mg/kg (ppm)
Chloromethane	<0.050
Vinyl Chloride	<0.050
Bromomethane	<0.200
Chloroethane	<0.050
Trichloromonofluoromethane	<0.050
1,1-Dichloroethene	<0.050
Methylene Chloride	<0.050
Trans-1,2-Dichloroethene	<0.050
1,1-Dichloroethane	<0.050
Cis-1,2-Dichloroethene	<0.050
Chloroform	<0.050
1,1,1-Trichloroethane	<0.050
Carbon Tetrachloride	<0.050
Trichloroethene	<0.050
1,2-Dichloropropane	<0.050
Bromodichloromethane	<0.050
Cis-1,3-Dichloroethene	<0.050
Trans-1,3-Dichloroethene	<0.050
1,1,2-Trichloroethane	<0.050
Tetrachloroethene	<0.050
Dibromochloromethane	<0.050
Chlorobenzene	<0.050
Bromoform	<0.050
1,1,2,2-Tetrachloroethane	<0.050
1,3-Dichlorobenzene	<0.050
1,4-Dichlorobenzene	<0.050
1,2-Dichlorobenzene	<0.050

ProVera
Analytical Laboratories, Inc.

EPA 8260B QA-QC Report
EPA 8015M QA-QC Report
Certification # 2606

CLIENT: **E2C Remediation**
5300 Woodmere Drive, Suite 105
Bakersfield, CA 93313

Projects Covered by this QA-QC:	**LAKE TAHOE LAUNDRY WORKS**
Analysis Date:	**12/8/2009**
Matrix:	**AQ**

BFB:

Internal Standards	**Results**	**% Recovery**
Benzene, fluoro	50.0	100%
Benzene-d5, chloro-	50.0	100%
1,4-Dichlorobenzene-d4	50.0	100%
Surrogate Standards		
Methane, dibromofluoro-	49.8	100%
1,2-Dichloroethane-d4	51.9	104%
Toluene-d8	68.0	136%
p-Bromofluorobenzene (BFB)	47.9	96%

IB:

Internal Standards	**Results**	**% Recovery**
Benzene, fluoro	50.0	100%
Benzene-d5, chloro-	50.0	100%
1,4-Dichlorobenzene-d4	50.0	100%
Surrogate Standards		
Methane, dibromofluoro-	49.5	99%
1,2-Dichloroethane-d4	52.1	104%
Toluene-d8	65.7	131%
p-Bromofluorobenzene (BFB)	47.9	96%

MS: (&)	**Results**	**% Recovery**
1,1-Dichloroethene	23.4	94%
Trichloroethene	15.5	62%
Chlorobenzene	28.1	112%
Toluene	25.5	102%
Benzene	36.1	144%
p-Bromofluorobenzene (BFB)	45.0	90%

MSD: (&)	**Results**	**% Recovery**
1,1-Dichloroethene	23.0	92%
Trichloroethene	15.5	62%
Chlorobenzene	28.8	115%
Toluene	26.4	106%
Benzene	37.0	148%
p-Bromofluorobenzene (BFB)	46.1	92%

ProVera
Analytical Laboratories, Inc.

Data Qualifiers & Definitions

A1 - More than one compound of similar molecule structure was identified with equal probability

ca - The calibration results for this range fell outside of acceptance criteria.

c - The presence of the analyte indicated may be due to carryover from previous sample injections.

d - The sample was diluted. Detection limits may be raised due to dilution.

ds - The sample was diluted. Detection limits are raised due to dilution and surrogate recoveries may not be meaningful.

dv - Insufficient sample was available to achieve normal reporting limits and limits are raised accordingly.

fb - The analyte indicated was found in the method blank. The result should be considered an estimate.

fc - The compound is a common laboratory and field contaminant.

ht - The samples was extracted outside of holding time. Results should be considered estimates.

ip - Recovery fell outside of normal control limits. Compounds in the sample matrix interfered with the quantitation of the analyte.

j - The result is below normal reporting limits. The value reported is an estimate.

J - The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.

jl - The analyte result in the laboratory control sample is out of control limits. The reported concentration should be considered an estimate.

js - The surrogate associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

lc - The presence of the compound indicated is likely due to laboratory contamination.

L - the reported concentration was generated from a library search.

pc - The samples was received in a container not approved by the method. The value reported should be considered and estimate.

pr - The sample was received with incorrect preservation. The value reported should be considered an estimate.

df - The value reported fell outside the control limits established for this analyte.

x - The pattern of peaks present is not indicative of gasoline

y - The pattern of peaks present is not indicative of diesel.

*TPHg result does not include MTBE or TBA

ProVera
Analytical Laboratories, Inc.

Analysis For Volatile Compounds by EPA Method 8260B

Client Sample ID:	9S-6	Client:	E2C Remediation
Date Received:	11/16/09	Project:	LTLW
Date Analyzed:	12/08/09	Lab ID:	10600-001 (ht)
Matrix:	Soil	Instrument:	GCMS1
Units:	mg/kg (ppm)	Operator:	Jeff Scheidemantel

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Dibromofluoromethane	98.8%	70.0%	130%
1,2-Dichloroethane-d4	99.7%	70.0%	130%
Toluene-d8	100%	70.0%	130%
4-Bromofluorobenzene	94.5%	70.0%	130%

Compounds:	Concentration mg/kg (ppm)
Chloromethane	<0.050
Vinyl Chloride	<0.050
Bromomethane	<0.200
Chloroethane	<0.050
Trichloromonofluoromethane	<0.050
1,1-Dichloroethene	<0.050
Methylene Chloride	<0.050
Trans-1,2-Dichloroethene	<0.050
1,1-Dichloroethane	<0.050
Cis-1,2-Dichloroethene	<0.050
Chloroform	<0.050
1,1,1-Trichloroethane	<0.050
Carbon Tetrachloride	<0.050
Trichloroethene	<0.050
1,2-Dichloropropane	<0.050
Bromodichloromethane	<0.050
Cis-1,3-Dichloroethene	<0.050
Trans-1,3-Dichloroethene	<0.050
1,1,2-Trichloroethane	<0.050
Tetrachloroethene	0.347
Dibromochloromethane	<0.050
Chlorobenzene	<0.050
Bromoform	<0.050
1,1,2,2-Tetrachloroethane	<0.050
1,3-Dichlorobenzene	<0.050
1,4-Dichlorobenzene	<0.050
1,2-Dichlorobenzene	<0.050

Jeff Sche

Principal Analyst: Jeff Scheidemantel

ProVera
Analytical Laboratories, Inc.

Analysis For Volatile Compounds by EPA Method 8260B

Client Sample ID: 9S-15.5
Date Received: 11/16/09
Date Analyzed: 12/08/09
Matrix: Soil
Units: mg/kg (ppm)

Client: E2C Remediation
Project: LTLW
Lab ID: 10600-002 (ht)
Instrument: GCMS1
Operator: Jeff Scheidemantel

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Dibromofluoromethane	96.6%	70.0%	130%
1,2-Dichloroethane-d4	95.9%	70.0%	130%
Toluene-d8	100%	70.0%	130%
4-Bromofluorobenzene	93.1%	70.0%	130%

Compounds:	Concentration mg/kg (ppm)
Chloromethane	<0.050
Vinyl Chloride	<0.050
Bromomethane	<0.200
Chloroethane	<0.050
Trichloromonofluoromethane	<0.050
1,1-Dichloroethene	<0.050
Methylene Chloride	<0.050
Trans-1,2-Dichloroethene	<0.050
1,1-Dichloroethane	<0.050
Cis-1,2-Dichloroethene	<0.050
Chloroform	<0.050
1,1,1-Trichloroethane	<0.050
Carbon Tetrachloride	<0.050
Trichloroethene	<0.050
1,2-Dichloropropane	<0.050
Bromodichloromethane	<0.050
Cis-1,3-Dichloroethene	<0.050
Trans-1,3-Dichloroethene	<0.050
1,1,2-Trichloroethane	<0.050
Tetrachloroethene	0.078
Dibromochloromethane	<0.050
Chlorobenzene	<0.050
Bromoform	<0.050
1,1,2,2-Tetrachloroethane	<0.050
1,3-Dichlorobenzene	<0.050
1,4-Dichlorobenzene	<0.050
1,2-Dichlorobenzene	<0.050

ProVera
Analytical Laboratories, Inc.

Analysis For Volatile Compounds by EPA Method 8260B

Client Sample ID: 10S-15.5
Date Received: 11/16/09
Date Analyzed: 12/08/09
Matrix: Soil
Units: mg/kg (ppm)

Client: E2C Remediation
Project: LTLW
Lab ID: 10600-003 (ht)
Instrument: GCMS1
Operator: Jeff Scheidemantel

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Dibromofluoromethane	99.1%	70.0%	130%
1,2-Dichloroethane-d4	97.5%	70.0%	130%
Toluene-d8	99.2%	70.0%	130%
4-Bromofluorobenzene	89.4%	70.0%	130%

Compounds:	Concentration mg/kg (ppm)
Chloromethane	<0.050
Vinyl Chloride	<0.050
Bromomethane	<0.200
Chloroethane	<0.050
Trichloromonofluoromethane	<0.050
1,1-Dichloroethene	<0.050
Methylene Chloride	<0.050
Trans-1,2-Dichloroethene	<0.050
1,1-Dichloroethane	<0.050
Cis-1,2-Dichloroethene	<0.050
Chloroform	<0.050
1,1,1-Trichloroethane	<0.050
Carbon Tetrachloride	<0.050
Trichloroethene	<0.050
1,2-Dichloropropane	<0.050
Bromodichloromethane	<0.050
Cis-1,3-Dichloroethene	<0.050
Trans-1,3-Dichloroethene	<0.050
1,1,2-Trichloroethane	<0.050
Tetrachloroethene	0.052
Dibromochloromethane	<0.050
Chlorobenzene	<0.050
Bromoform	<0.050
1,1,2,2-Tetrachloroethane	<0.050
1,3-Dichlorobenzene	<0.050
1,4-Dichlorobenzene	<0.050
1,2-Dichlorobenzene	<0.050

ProVera
Analytical Laboratories, Inc.

Analysis For Volatile Compounds by EPA Method 8260B

Client Sample ID:	10S-26	Client:	E2C Remediation
Date Received:	11/16/09	Project:	LTLW
Date Analyzed:	12/08/09	Lab ID:	10600-004 (ht)
Matrix:	Soil	Instrument:	GCMS1
Units:	mg/kg (ppm)	Operator:	Jeff Scheidemantel

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Dibromofluoromethane	101%	70.0%	130%
1,2-Dichloroethane-d4	98.4%	70.0%	130%
Toluene-d8	98.9%	70.0%	130%
4-Bromofluorobenzene	92.6%	70.0%	130%

Compounds:	Concentration mg/kg (ppm)
Chloromethane	<0.050
Vinyl Chloride	<0.050
Bromomethane	<0.200
Chloroethane	<0.050
Trichloromonofluoromethane	<0.050
1,1-Dichloroethene	<0.050
Methylene Chloride	<0.050
Trans-1,2-Dichloroethene	<0.050
1,1-Dichloroethane	<0.050
Cis-1,2-Dichloroethene	<0.050
Chloroform	<0.050
1,1,1-Trichloroethane	<0.050
Carbon Tetrachloride	<0.050
Trichloroethene	<0.050
1,2-Dichloropropane	<0.050
Bromodichloromethane	<0.050
Cis-1,3-Dichloroethene	<0.050
Trans-1,3-Dichloroethene	<0.050
1,1,2-Trichloroethane	<0.050
Tetrachloroethene	0.051
Dibromochloromethane	<0.050
Chlorobenzene	<0.050
Bromoform	<0.050
1,1,2,2-Tetrachloroethane	<0.050
1,3-Dichlorobenzene	<0.050
1,4-Dichlorobenzene	<0.050
1,2-Dichlorobenzene	<0.050

ProVera
Analytical Laboratories, Inc.

EPA 8260B QA-QC Report
EPA 8015M QA-QC Report
Certification # 2606

CLIENT: **E2C Remediation**
5300 Woodmere Drive, Suite 105
Bakersfield, CA 93313

Projects Covered by this QA-QC:	**LAKE TAHOE LAUNDRY WORKS**
Analysis Date:	**12/8/2009**
Matrix:	**AQ**

BFB:

Internal Standards	**Results**	**% Recovery**
Benzene, fluoro	50.0	100%
Benzene-d5, chloro-	50.0	100%
1,4-Dichlorobenzene-d4	50.0	100%
Surrogate Standards		
Methane, dibromofluoro-	49.8	100%
1,2-Dichloroethane-d4	51.9	104%
Toluene-d8	68.0	136%
p-Bromofluorobenzene (BFB)	47.9	96%

IB:

Internal Standards	**Results**	**% Recovery**
Benzene, fluoro	50.0	100%
Benzene-d5, chloro-	50.0	100%
1,4-Dichlorobenzene-d4	50.0	100%
Surrogate Standards		
Methane, dibromofluoro-	49.5	99%
1,2-Dichloroethane-d4	52.1	104%
Toluene-d8	65.7	131%
p-Bromofluorobenzene (BFB)	47.9	96%

MS: (&)	**Results**	**% Recovery**
1,1-Dichloroethene	23.4	94%
Trichloroethene	15.5	62%
Chlorobenzene	28.1	112%
Toluene	25.5	102%
Benzene	36.1	144%
p-Bromofluorobenzene (BFB)	45.0	90%

MSD: (&)	**Results**	**% Recovery**
1,1-Dichloroethene	23.0	92%
Trichloroethene	15.5	62%
Chlorobenzene	28.8	115%
Toluene	26.4	106%
Benzene	37.0	148%
p-Bromofluorobenzene (BFB)	46.1	92%

ProVera
Analytical Laboratories, Inc.

Data Qualifiers & Definitions

A1 - More than one compound of similar molecule structure was identified with equal probability

ca - The calibration results for this range fell outside of acceptance criteria.

c - The presence of the analyte indicated may be due to carryover from previous sample injections.

d - The sample was diluted. Detection limits may be raised due to dilution.

ds - The sample was diluted. Detection limits are raised due to dilution and surrogate recoveries may not be meaningful.

dv - Insufficient sample was available to achieve normal reporting limits and limits are raised accordingly.

fb - The analyte indicated was found in the method blank. The result should be considered an estimate.

fc - The compound is a common laboratory and field contaminant.

ht - The samples was extracted outside of holding time. Results should be considered estimates.

ip - Recovery fell outside of normal control limits. Compounds in the sample matrix interfered with the quantitation of the analyte.

j - The result is below normal reporting limits. The value reported is an estimate.

J - The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.

jl - The analyte result in the laboratory control sample is out of control limits. The reported concentration should be considered an estimate.

js - The surrogate associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

lc - The presence of the compound indicated is likely due to laboratory contamination.

L - the reported concentration was generated from a library search.

pc - The samples was received in a container not approved by the method. The value reported should be considered and estimate.

pr - The sample was received with incorrect preservation. The value reported should be considered an estimate.

df - The value reported fell outside the control limits established for this analyte.

x - The pattern of peaks present is not indicative of gasoline

y - The pattern of peaks present is not indicative of diesel.

*TPHg result does not include MTBE or TBA

ROVERA ANALYTICAL LABORATORIES

Chain of Custody Form

lient Name: SSLP & FCM
roject Name: LTLW
lient Address: 5300 Woodmere Dr. Suite 105 Bakersfield, CA
roject Manager: BILL LAWSON
ampler Name: BILL LAWSON

Sample Matrix: ☐ Aqueous ☒ Soil ☐ Acidified

Sample Date	Sample Time	Sample Description and Container Type	BTEX (EPA 8021b)	MTBE (EPA 8021b)	TPH Gasoline (8015M)	TPH Diesel (8015M)	Volatiles (EPA 8260b)	5 Oxygenates (EPA 8260b)	7 Oxygenates (EPA 8260b)	MTBE (EPA 8260b)	Lead scavengers (8260b)	BTEX (8260b)	EPA 8010 VOC's using EPA 8260b		Comments
1/12/09	08:05	115 - 5.5'											X		HOLD
	08:12	115 - 10.5'													P10602-01
	08:17	115 - 15.5'													HOLD
	08:20	115 - 20.5'													HOLD
	08:24	115 - 25.5'													-03

ampling Event: ______ EDF Type: GW Monitoring ____ Other ____

rnaround Time Requested: 24 Hour ____ 48 Hour ____ 5-Day ____ Standard X

elinquished By: Date: 11/16/09 Relinquished By: Date:

eceived By: Date: 11/16/09 Received By: Date:

ProVera
Analytical Laboratories, Inc.

Analysis For Volatile Compounds by EPA Method 8260B

Client Sample ID: 11S-10.5'
Date Received: 11/16/09
Date Analyzed: 12/08/09
Matrix: Soil
Units: mg/kg (ppm)

Client: E2C Remediation
Project: LTLW
Lab ID: 10602-001 (ht)
Instrument: GCMS1
Operator: Jeff Scheidemantel

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Dibromofluoromethane	108%	70.0%	130%
1,2-Dichloroethane-d4	112%	70.0%	130%
Toluene-d8	97.0%	70.0%	130%
4-Bromofluorobenzene	96.6%	70.0%	130%

Compounds:	Concentration mg/kg (ppm)
Chloromethane	<0.050
Vinyl Chloride	<0.050
Bromomethane	<0.200
Chloroethane	<0.050
Trichloromonofluoromethane	<0.050
1,1-Dichloroethene	<0.050
Methylene Chloride	<0.050
Trans-1,2-Dichloroethene	<0.050
1,1-Dichloroethane	<0.050
Cis-1,2-Dichloroethene	<0.050
Chloroform	<0.050
1,1,1-Trichloroethane	<0.050
Carbon Tetrachloride	<0.050
Trichloroethene	<0.050
1,2-Dichloropropane	<0.050
Bromodichloromethane	<0.050
Cis-1,3-Dichloroethene	<0.050
Trans-1,3-Dichloroethene	<0.050
1,1,2-Trichloroethane	<0.050
Tetrachloroethene	<0.050
Dibromochloromethane	<0.050
Chlorobenzene	<0.050
Bromoform	<0.050
1,1,2,2-Tetrachloroethane	<0.050
1,3-Dichlorobenzene	<0.050
1,4-Dichlorobenzene	<0.050
1,2-Dichlorobenzene	<0.050

Principal Analyst: Jeff Scheidemantel

ProVera
Analytical Laboratories, Inc.

Analysis For Volatile Compounds by EPA Method 8260B

Client Sample ID:	11S-25.5	Client:	E2C Remediation
Date Received:	11/16/09	Project:	LTLW
Date Analyzed:	12/08/09	Lab ID:	10602-002 (ht)
Matrix:	Soil	Instrument:	GCMS1
Units:	mg/kg (ppm)	Operator:	Jeff Scheidemantel

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Dibromofluoromethane	105%	70.0%	130%
1,2-Dichloroethane-d4	105%	70.0%	130%
Toluene-d8	98.4%	70.0%	130%
4-Bromofluorobenzene	97.1%	70.0%	130%

Compounds:	Concentration mg/kg (ppm)
Chloromethane	<0.050
Vinyl Chloride	<0.050
Bromomethane	<0.200
Chloroethane	<0.050
Trichloromonofluoromethane	<0.050
1,1-Dichloroethene	<0.050
Methylene Chloride	<0.050
Trans-1,2-Dichloroethene	<0.050
1,1-Dichloroethane	<0.050
Cis-1,2-Dichloroethene	<0.050
Chloroform	<0.050
1,1,1-Trichloroethane	<0.050
Carbon Tetrachloride	<0.050
Trichloroethene	<0.050
1,2-Dichloropropane	<0.050
Bromodichloromethane	<0.050
Cis-1,3-Dichloroethene	<0.050
Trans-1,3-Dichloroethene	<0.050
1,1,2-Trichloroethane	<0.050
Tetrachloroethene	0.072
Dibromochloromethane	<0.050
Chlorobenzene	<0.050
Bromoform	<0.050
1,1,2,2-Tetrachloroethane	<0.050
1,3-Dichlorobenzene	<0.050
1,4-Dichlorobenzene	<0.050
1,2-Dichlorobenzene	<0.050

ProVera
Analytical Laboratories, Inc.

EPA 8260B QA-QC Report
EPA 8015M QA-QC Report
Certification # 2606

CLIENT: **E2C Remediation**
5300 Woodmere Drive, Suite 105
Bakersfield, CA 93313

Projects Covered by this QA-QC: **LAKE TAHOE LAUNDRY WORKS**
Analysis Date: **12/8/2009**
Matrix: **AQ**

BFB:

Internal Standards	**Results**	**% Recovery**
Benzene, fluoro	50.0	100%
Benzene-d5, chloro-	50.0	100%
1,4-Dichlorobenzene-d4	50.0	100%
Surrogate Standards		
Methane, dibromofluoro-	49.8	100%
1,2-Dichloroethane-d4	51.9	104%
Toluene-d8	68.0	136%
p-Bromofluorobenzene (BFB)	47.9	96%

IB:

Internal Standards	**Results**	**% Recovery**
Benzene, fluoro	50.0	100%
Benzene-d5, chloro-	50.0	100%
1,4-Dichlorobenzene-d4	50.0	100%
Surrogate Standards		
Methane, dibromofluoro-	49.5	99%
1,2-Dichloroethane-d4	52.1	104%
Toluene-d8	65.7	131%
p-Bromofluorobenzene (BFB)	47.9	96%

MS: (&)	**Results**	**% Recovery**
1,1-Dichloroethene	23.4	94%
Trichloroethene	15.5	62%
Chlorobenzene	28.1	112%
Toluene	25.5	102%
Benzene	36.1	144%
p-Bromofluorobenzene (BFB)	45.0	90%

MSD: (&)	**Results**	**% Recovery**
1,1-Dichloroethene	23.0	92%
Trichloroethene	15.5	62%
Chlorobenzene	28.8	115%
Toluene	26.4	106%
Benzene	37.0	148%
p-Bromofluorobenzene (BFB)	46.1	92%

Data Qualifiers & Definitions

A1 - More than one compound of similar molecule structure was identified with equal probability

ca - The calibration results for this range fell outside of acceptance criteria.

c - The presence of the analyte indicated may be due to carryover from previous sample injections.

d - The sample was diluted. Detection limits may be raised due to dilution.

ds - The sample was diluted. Detection limits are raised due to dilution and surrogate recoveries may not be meaningful.

dv - Insufficient sample was available to achieve normal reporting limits and limits are raised accordingly.

fb - The analyte indicated was found in the method blank. The result should be considered an estimate.

fc - The compound is a common laboratory and field contaminant.

ht - The samples was extracted outside of holding time. Results should be considered estimates.

ip - Recovery fell outside of normal control limits. Compounds in the sample matrix interfered with the quantitation of the analyte.

j - The result is below normal reporting limits. The value reported is an estimate.

J - The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.

jl - The analyte result in the laboratory control sample is out of control limits. The reported concentration should be considered an estimate.

js - The surrogate associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

lc - The presence of the compound indicated is likely due to laboratory contamination.

L - the reported concentration was generated from a library search.

pc - The samples was received in a container not approved by the method. The value reported should be considered and estimate.

pr - The sample was received with incorrect preservation. The value reported should be considered an estimate.

df - The value reported fell outside the control limits established for this analyte.

x - The pattern of peaks present is not indicative of gasoline

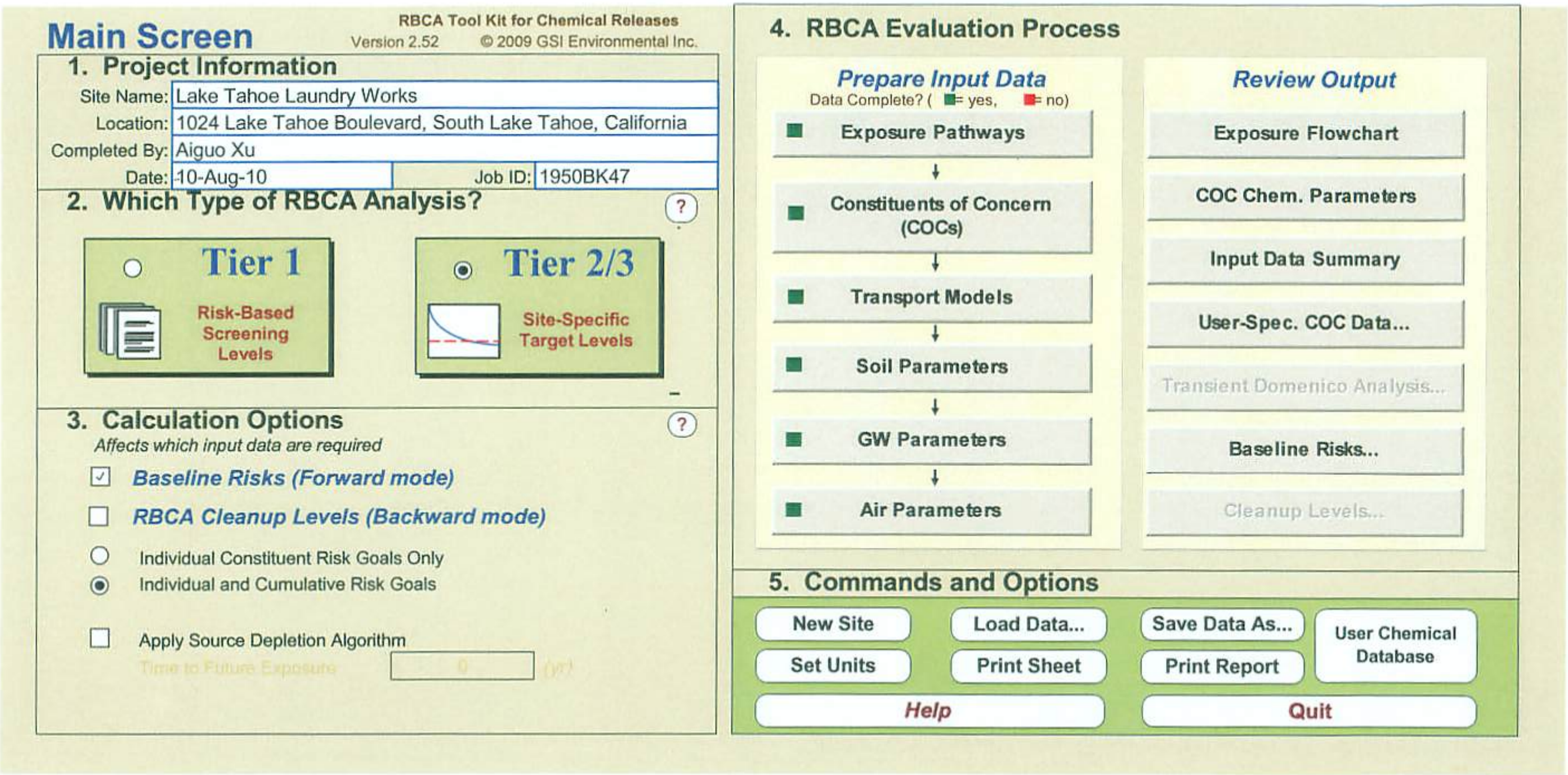
y - The pattern of peaks present is not indicative of diesel.

*TPHg result does not include MTBE or TBA

APPENDIX AA

Vapor Intrusion Tier-2 Human Health-Risk Assessment

RBCA Tool Kit for Chemical Releases, Version 2.51



Main Screen

RBCA Tool Kit for Chemical Releases
Version 2.52 © 2009 GSI Environmental Inc.

1. Project Information

Site Name: Lake Tahoe Laundry Works
Location: 1024 Lake Tahoe Boulevard, South Lake Tahoe, California
Completed By: Aiguo Xu
Date: 10-Aug-10 Job ID: 1950BK47

2. Which Type of RBCA Analysis?

○ Tier 1 Risk-Based Screening Levels
● Tier 2/3 Site-Specific Target Levels

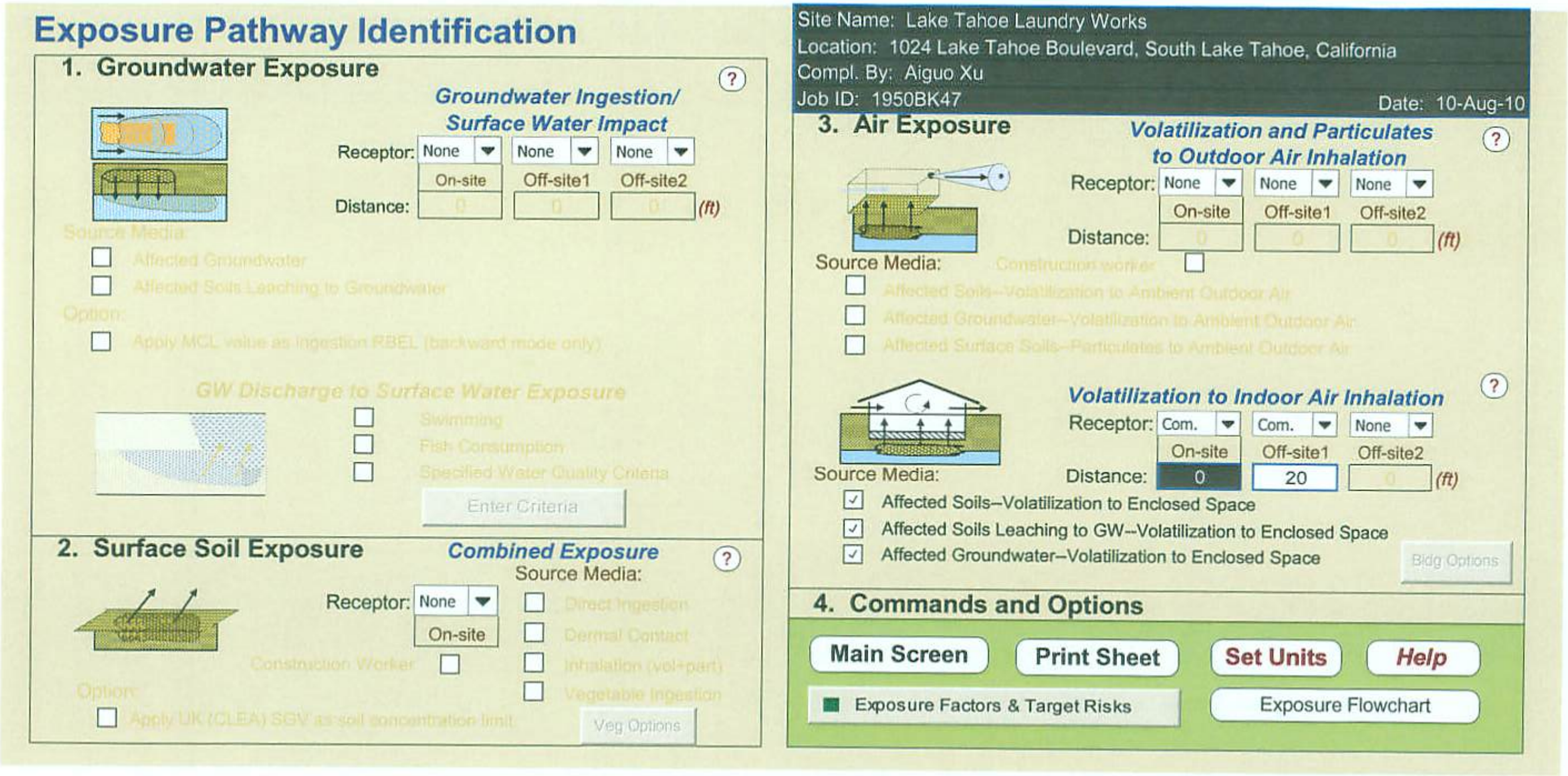
3. Calculation Options

Affects which input data are required

☑ Baseline Risks (Forward mode)
☐ RBCA Cleanup Levels (Backward mode)
○ Individual Constituent Risk Goals Only
● Individual and Cumulative Risk Goals
☐ Apply Source Depletion Algorithm
Time to Future Exposure 0 (yr)

4. RBCA Evaluation Process

Prepare Input Data
Data Complete? (🟩= yes, 🟥= no)
🟩 Exposure Pathways
🟩 Constituents of Concern (COCs)
🟩 Transport Models
🟩 Soil Parameters
🟩 GW Parameters
🟩 Air Parameters



Exposure Pathway Identification

Site Name: Lake Tahoe Laundry Works
Location: 1024 Lake Tahoe Boulevard, South Lake Tahoe, California
Compl. By: Aiguo Xu
Job ID: 1950BK47
Date: 10-Aug-10

1. Groundwater Exposure

Groundwater Ingestion/ Surface Water Impact

	On-site	Off-site1	Off-site2	
Receptor:	None	None	None	
Distance:	0	0	0	(ft)

Source Media:
☐ Affected Groundwater
☐ Affected Soils Leaching to Groundwater

Option:
☐ Apply MCL value as ingestion RBEL (backward mode only)

GW Discharge to Surface Water Exposure
☐ Swimming
☐ Fish Consumption
☐ Specified Water Quality Criteria

2. Surface Soil Exposure

Combined Exposure

Receptor: None (On-site)
Construction Worker ☐

Source Media:
☐ Direct Ingestion
☐ Dermal Contact
☐ Inhalation (vol+part)
☐ Vegetable Ingestion

Option:
☐ Apply UK (CLEA) SGV as soil concentration limit

3. Air Exposure

Volatilization and Particulates to Outdoor Air Inhalation

	On-site	Off-site1	Off-site2	
Receptor:	None	None	None	
Distance:	0	0	0	(ft)

Source Media: Construction worker ☐
☐ Affected Soils–Volatilization to Ambient Outdoor Air
☐ Affected Groundwater–Volatilization to Ambient Outdoor Air
☐ Affected Surface Soils–Particulates to Ambient Outdoor Air

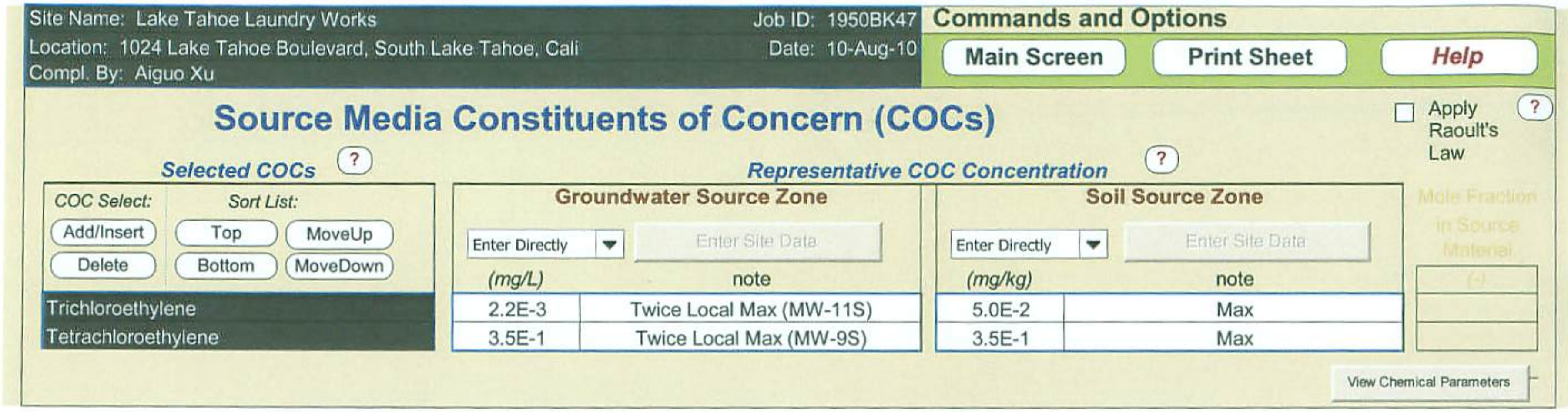
Volatilization to Indoor Air Inhalation

	On-site	Off-site1	Off-site2	
Receptor:	Com.	Com.	None	
Distance:	0	20	0	(ft)

Source Media:
☑ Affected Soils–Volatilization to Enclosed Space
☑ Affected Soils Leaching to GW–Volatilization to Enclosed Space
☑ Affected Groundwater–Volatilization to Enclosed Space

4. Commands and Options

RBCA Tool Kit for Chemical Releases, Version 2.51



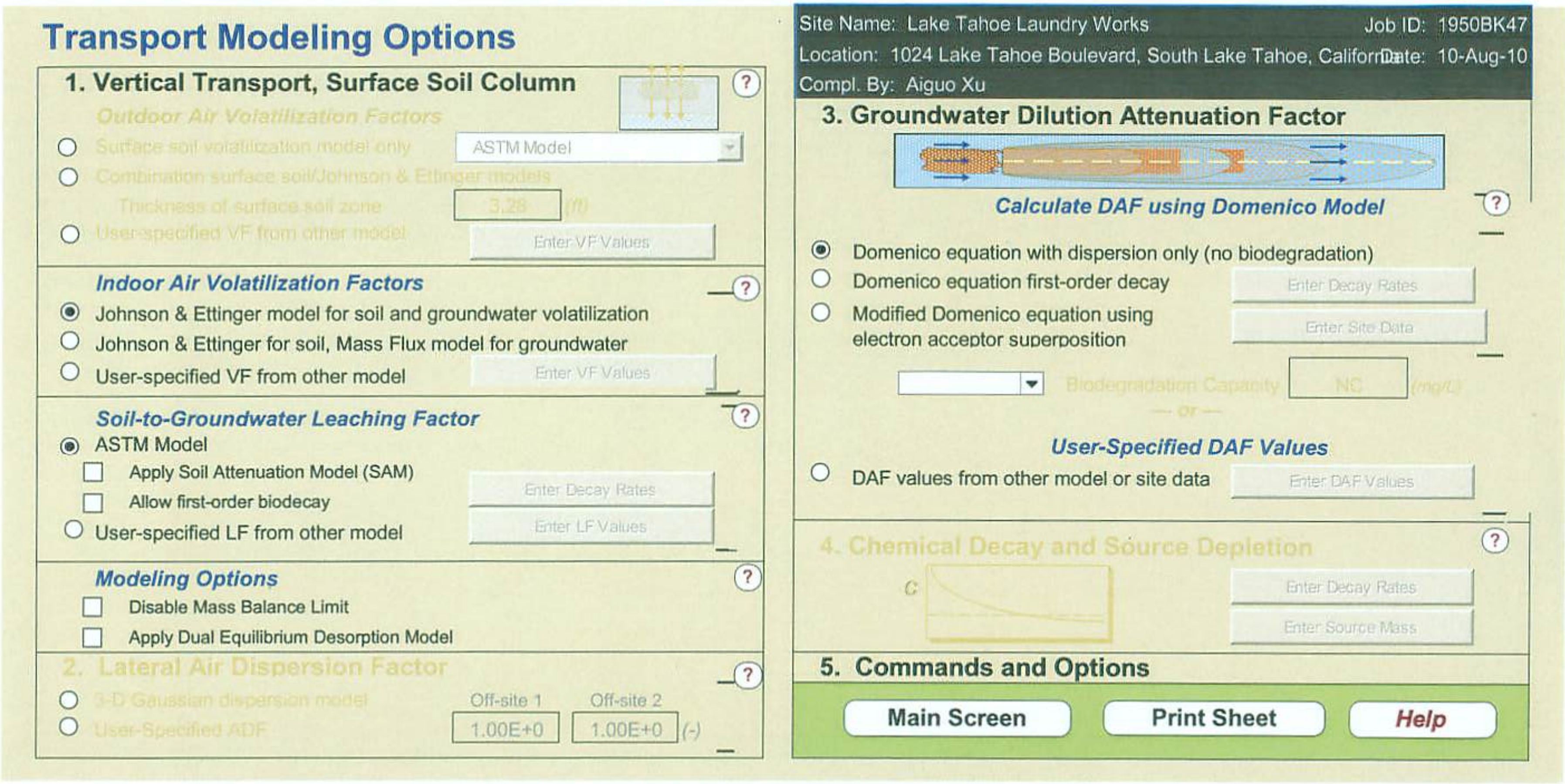
Site Name: Lake Tahoe Laundry Works
Job ID: 1950BK47
Location: 1024 Lake Tahoe Boulevard, South Lake Tahoe, Cali
Date: 10-Aug-10
Compl. By: Aiguo Xu

Source Media Constituents of Concern (COCs)

☐ Apply Raoult's Law

Selected COCs / **Representative COC Concentration**

Selected COCs	Groundwater Source Zone		Soil Source Zone		Mole Fraction in Source Material
	(mg/L)	note	(mg/kg)	note	(-)
Trichloroethylene	2.2E-3	Twice Local Max (MW-11S)	5.0E-2	Max	
Tetrachloroethylene	3.5E-1	Twice Local Max (MW-9S)	3.5E-1	Max	



Transport Modeling Options

Site Name: Lake Tahoe Laundry Works
Job ID: 1950BK47
Location: 1024 Lake Tahoe Boulevard, South Lake Tahoe, Californ
Date: 10-Aug-10
Compl. By: Aiguo Xu

1. Vertical Transport, Surface Soil Column

Outdoor Air Volatilization Factors

○ Surface soil volatilization model only — ASTM Model
○ Combination surface soil/Johnson & Ettinger models
Thickness of surface soil zone: 3.28 (ft)
○ User-specified VF from other model

Indoor Air Volatilization Factors

● Johnson & Ettinger model for soil and groundwater volatilization
○ Johnson & Ettinger for soil, Mass Flux model for groundwater
○ User-specified VF from other model

Soil-to-Groundwater Leaching Factor

● ASTM Model
☐ Apply Soil Attenuation Model (SAM)
☐ Allow first-order biodecay
○ User-specified LF from other model

Modeling Options

☐ Disable Mass Balance Limit
☐ Apply Dual Equilibrium Desorption Model

2. Lateral Air Dispersion Factor

○ 3-D Gaussian dispersion model
○ User-Specified ADF

	Off-site 1	Off-site 2
	1.00E+0	1.00E+0 (-)

3. Groundwater Dilution Attenuation Factor

Calculate DAF using Domenico Model

● Domenico equation with dispersion only (no biodegradation)
○ Domenico equation first-order decay
○ Modified Domenico equation using electron acceptor superposition
Biodegradation Capacity: NC (mg/L)

— or —

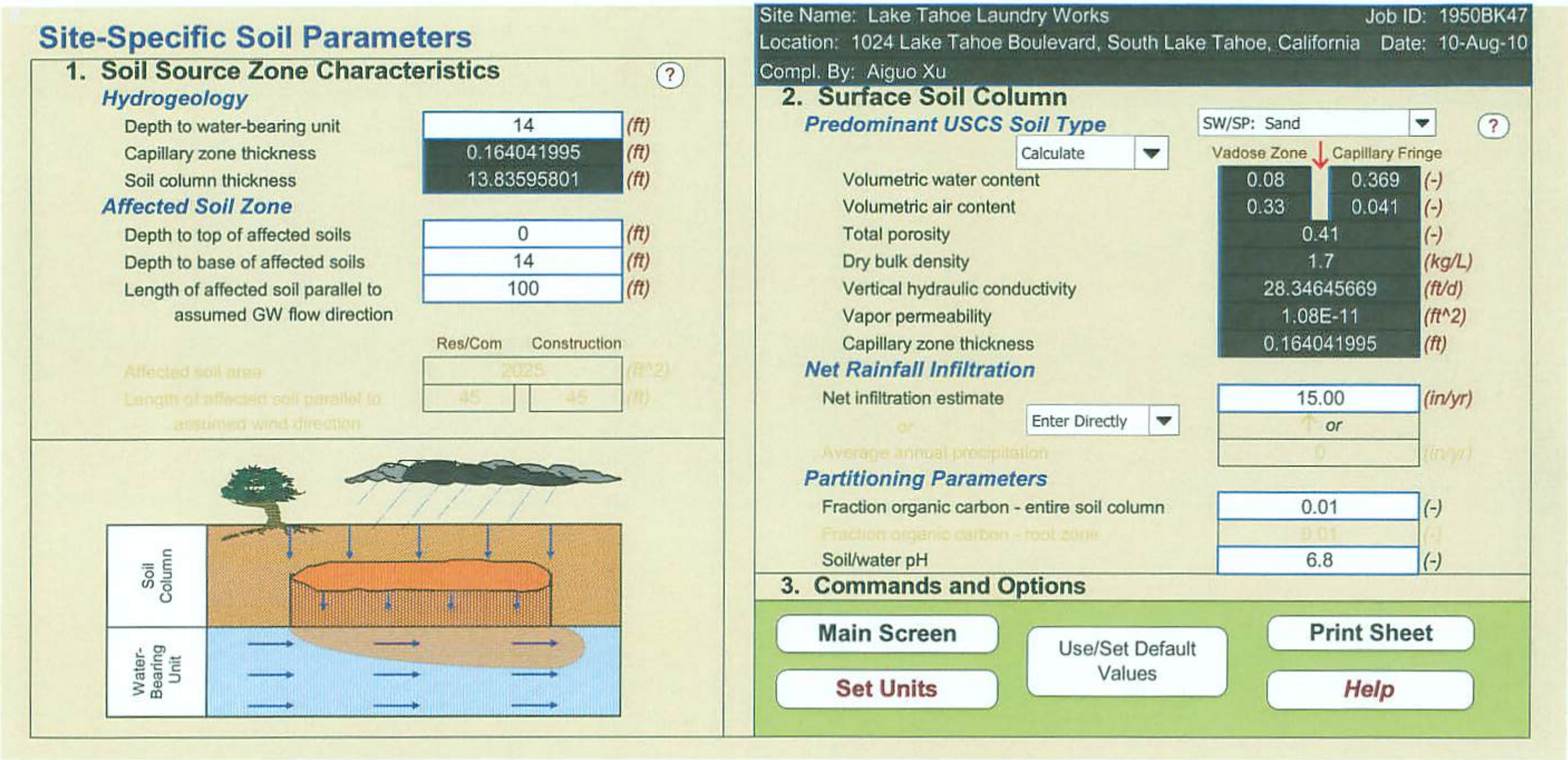
User-Specified DAF Values

○ DAF values from other model or site data

4. Chemical Decay and Source Depletion

5. Commands and Options

RBCA Tool Kit for Chemical Releases, Version 2.51



Site Name: Lake Tahoe Laundry Works Job ID: 1950BK47
Location: 1024 Lake Tahoe Boulevard, South Lake Tahoe, California Date: 10-Aug-10
Compl. By: Aiguo Xu

Site-Specific Soil Parameters

1. Soil Source Zone Characteristics

Hydrogeology

Depth to water-bearing unit	14	(ft)
Capillary zone thickness	0.164041995	(ft)
Soil column thickness	13.83595801	(ft)

Affected Soil Zone

Depth to top of affected soils	0		(ft)
Depth to base of affected soils	14		(ft)
Length of affected soil parallel to assumed GW flow direction	100		(ft)
	Res/Com	Construction	
Affected soil area	2025		(ft^2)
Length of affected soil parallel to assumed wind direction	45	45	(ft)

2. Surface Soil Column

Predominant USCS Soil Type SW/SP: Sand

Calculate

	Vadose Zone	Capillary Fringe	
Volumetric water content	0.08	0.369	(-)
Volumetric air content	0.33	0.041	(-)
Total porosity	0.41		(-)
Dry bulk density	1.7		(kg/L)
Vertical hydraulic conductivity	28.34645669		(ft/d)
Vapor permeability	1.08E-11		(ft^2)
Capillary zone thickness	0.164041995		(ft)

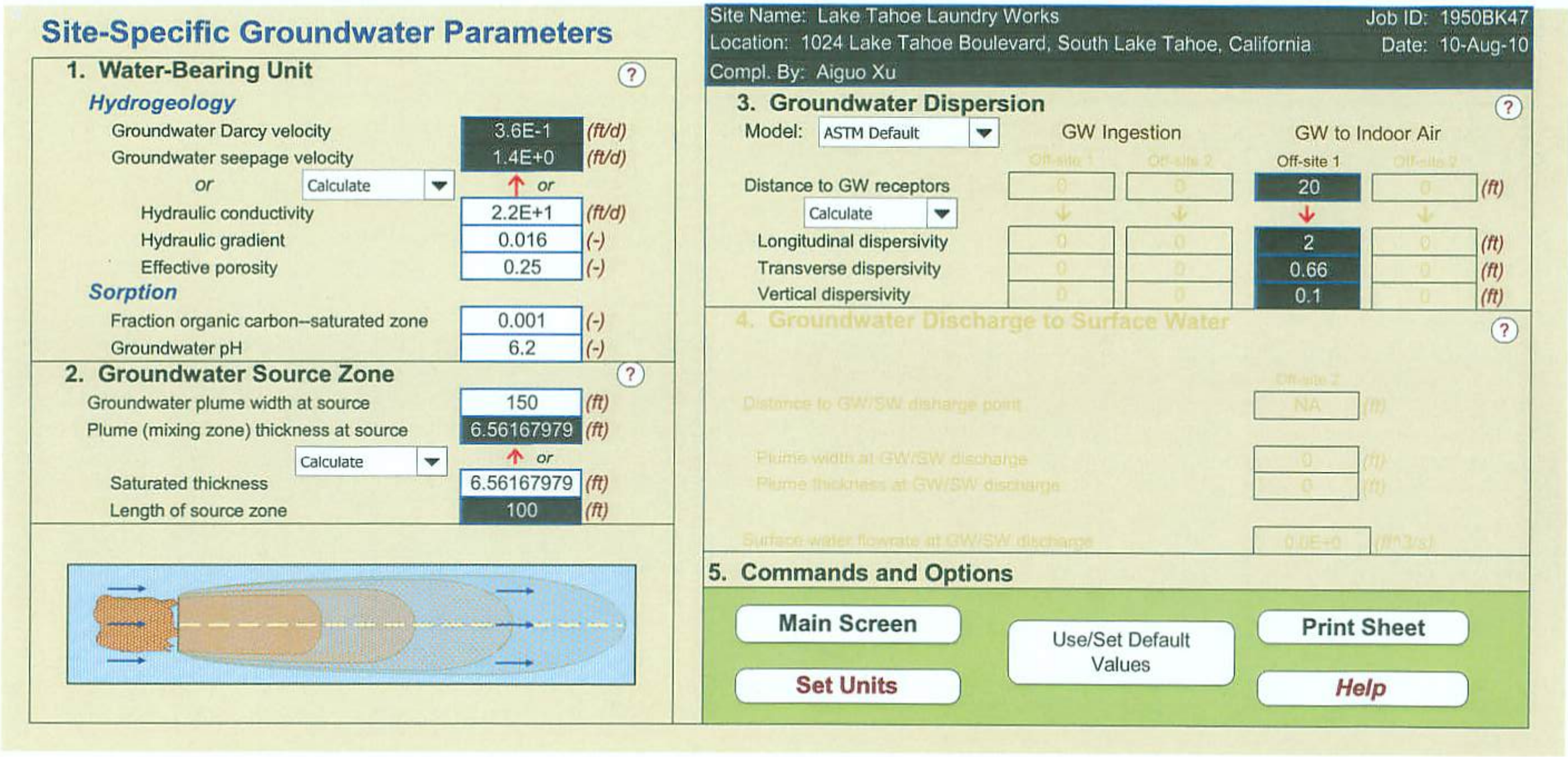
Net Rainfall Infiltration

Net infiltration estimate	15.00	(in/yr)
Enter Directly	or	
Average annual precipitation	0	(in/yr)

Partitioning Parameters

Fraction organic carbon - entire soil column	0.01	(-)
Fraction organic carbon - root zone	0.01	(-)
Soil/water pH	6.8	(-)

3. Commands and Options



Site Name: Lake Tahoe Laundry Works Job ID: 1950BK47
Location: 1024 Lake Tahoe Boulevard, South Lake Tahoe, California Date: 10-Aug-10
Compl. By: Aiguo Xu

Site-Specific Groundwater Parameters

1. Water-Bearing Unit

Hydrogeology

Groundwater Darcy velocity	3.6E-1	(ft/d)
Groundwater seepage velocity	1.4E+0	(ft/d)
or Calculate	↑ or	
Hydraulic conductivity	2.2E+1	(ft/d)
Hydraulic gradient	0.016	(-)
Effective porosity	0.25	(-)

Sorption

Fraction organic carbon--saturated zone	0.001	(-)
Groundwater pH	6.2	(-)

2. Groundwater Source Zone

Groundwater plume width at source	150	(ft)
Plume (mixing zone) thickness at source	6.56167979	(ft)
Calculate	↑ or	
Saturated thickness	6.56167979	(ft)
Length of source zone	100	(ft)

3. Groundwater Dispersion

Model: ASTM Default

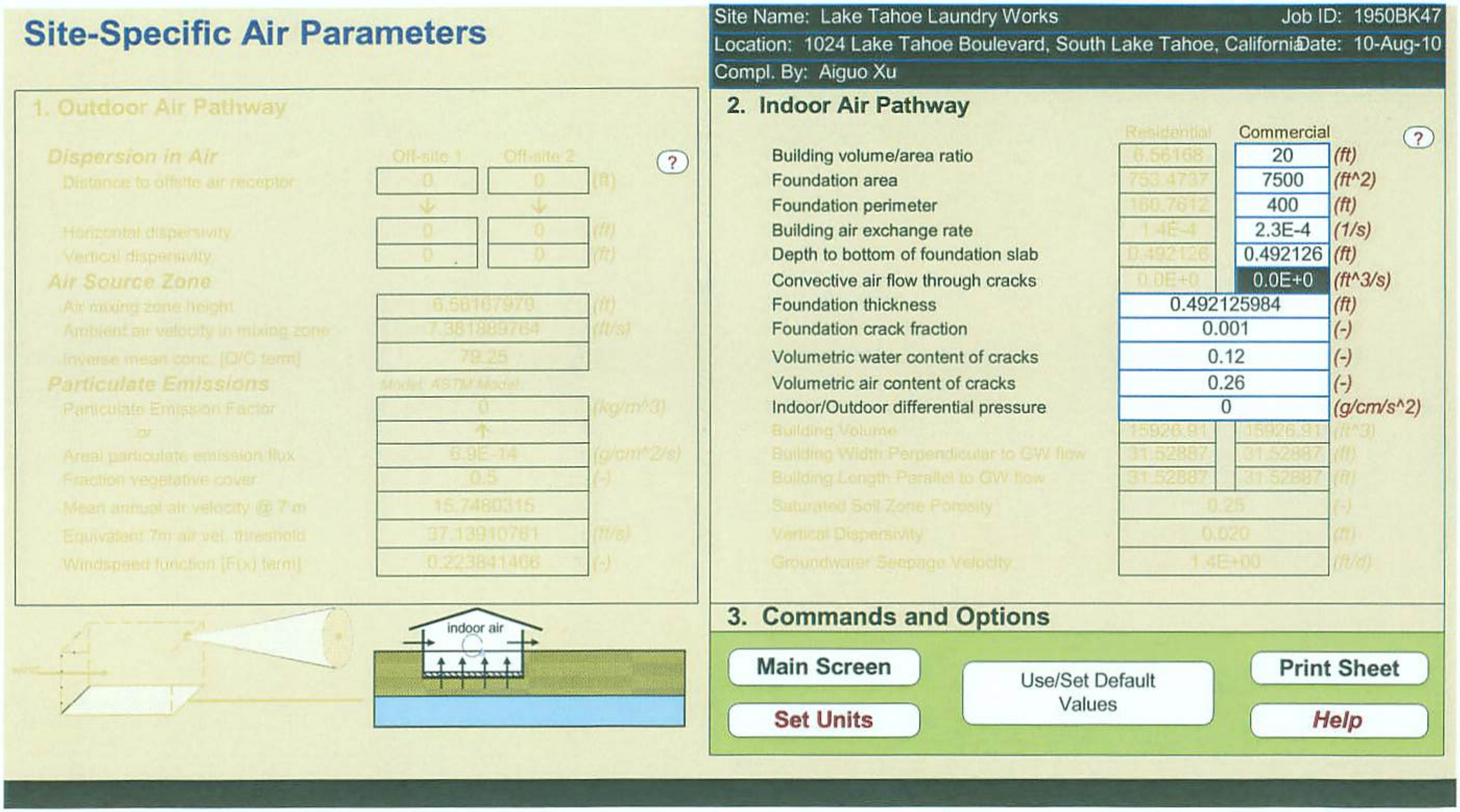
	GW Ingestion		GW to Indoor Air		
	Off-site 1	Off-site 2	Off-site 1	Off-site 2	
Distance to GW receptors	0	0	20	0	(ft)
Calculate	↓	↓	↓	↓	
Longitudinal dispersivity	0	0	2	0	(ft)
Transverse dispersivity	0	0	0.66	0	(ft)
Vertical dispersivity	0	0	0.1	0	(ft)

4. Groundwater Discharge to Surface Water

	Off-site 2	
Distance to GW/SW discharge point	NA	(ft)
Plume width at GW/SW discharge	0	(ft)
Plume thickness at GW/SW discharge	0	(ft)
Surface water flowrate at GW/SW discharge	0.0E+0	(ft^3/s)

5. Commands and Options

RBCA Tool Kit for Chemical Releases, Version 2.51



Site-Specific Air Parameters

Site Name: Lake Tahoe Laundry Works
Job ID: 1950BK47
Location: 1024 Lake Tahoe Boulevard, South Lake Tahoe, California
Date: 10-Aug-10
Compl. By: Aiguo Xu

1. Outdoor Air Pathway

Dispersion in Air

	Off-site 1	Off-site 2	
Distance to offsite air receptor	0	0	(ft)
Horizontal dispersivity	0	0	(ft)
Vertical dispersivity	0	0	(ft)

Air Source Zone

Air mixing zone height	6.56167979	(ft)
Ambient air velocity in mixing zone	7.381889764	(ft/s)
Inverse mean conc. [Q/C term]	79.25	

Particulate Emissions

Model: ASTM Model

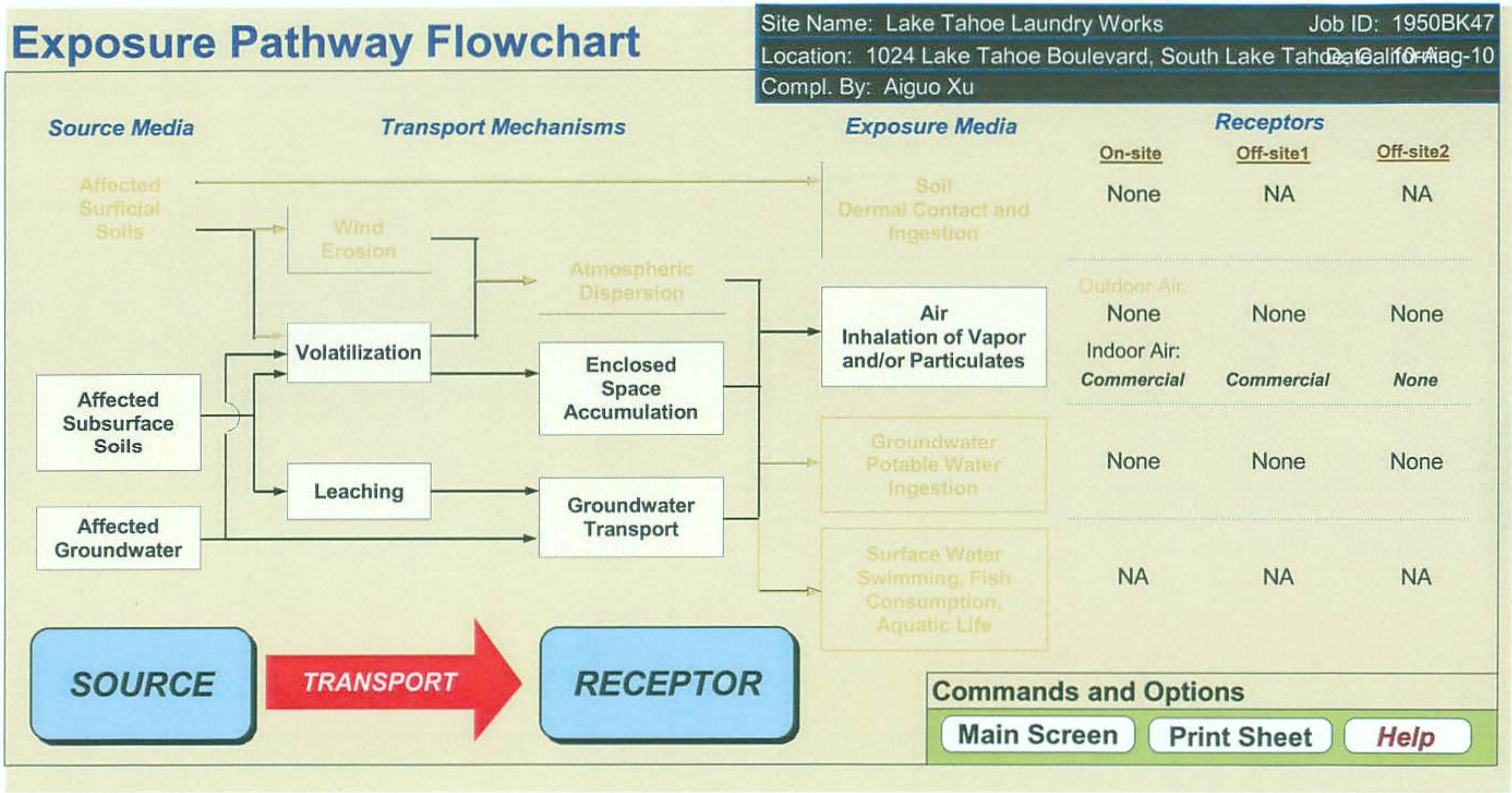
Particulate Emission Factor	0	(kg/m^3)
or		
Areal particulate emission flux	6.9E-14	(g/cm^2/s)
Fraction vegetative cover	0.5	(-)
Mean annual air velocity @ 7 m	15.7480315	
Equivalent 7m air vel. threshold	37.13910761	(ft/s)
Windspeed function [F(x) term]	0.223841466	(-)

2. Indoor Air Pathway

	Residential	Commercial	
Building volume/area ratio	6.56168	20	(ft)
Foundation area	753.4737	7500	(ft^2)
Foundation perimeter	160.7612	400	(ft)
Building air exchange rate	1.4E-4	2.3E-4	(1/s)
Depth to bottom of foundation slab	0.492126	0.492126	(ft)
Convective air flow through cracks	0.0E+0	0.0E+0	(ft^3/s)
Foundation thickness	0.492125984		(ft)
Foundation crack fraction	0.001		(-)
Volumetric water content of cracks	0.12		(-)
Volumetric air content of cracks	0.26		(-)
Indoor/Outdoor differential pressure	0		(g/cm/s^2)
Building Volume	15926.91	15926.91	(ft^3)
Building Width Perpendicular to GW flow	31.52887	31.52887	(ft)
Building Length Parallel to GW flow	31.52887	31.52887	(ft)
Saturated Soil Zone Porosity	0.25		(-)
Vertical Dispersivity	0.020		(ft)
Groundwater Seepage Velocity	1.4E+00		(ft/d)

3. Commands and Options

RBCA Tool Kit for Chemical Releases, Version 2.51



Exposure Pathway Flowchart

Site Name: Lake Tahoe Laundry Works
Job ID: 1950BK47
Location: 1024 Lake Tahoe Boulevard, South Lake Tahoe, California
Date: 10-Aug-10
Compl. By: Aiguo Xu

Exposure Media	On-site	Off-site1	Off-site2
Soil Dermal Contact and Ingestion	None	NA	NA
Air Inhalation of Vapor and/or Particulates — Outdoor Air:	None	None	None
Indoor Air:	*Commercial*	*Commercial*	*None*
Groundwater Potable Water Ingestion	None	None	None
Surface Water Swimming, Fish Consumption, Aquatic Life	NA	NA	NA

CHEMICAL DATA FOR SELECTED COCs

Physical Property Data

Orange = One or more parameter differs from User Chemical Database Constituent	CAS Number	Type	Molecular Weight (g/mole)		Aqueous Solubility (@ 20 - 25 C) (mg/L)		Soil Saturation Limit Calculated (mg/kg)	Vapor Pressure (@ 20 - 25 C) (mm Hg)		Henry's Constant (@ 20 - 25 C) (unitless)		log (Koc) or log (Kd) (@ 20 - 25 C) log(L/kg)		
Trichloroethylene	79-01-6	O	131.38894	TX08	1100	TX08	1.17E+03	7.20E+01	TX08	4.28E-01	TX08	1.97E+00	Koc	TX08
Tetrachloroethylene	127-18-4	O	165.834	TX08	200	TX08	3.49E+02	1.84E+01	TX08	7.65E-01	TX08	2.19E+00	Koc	TX08

Site Name: Lake Tahoe Laundry Works
Site Location: 1024 Lake Tahoe Boulevard, South Lake Tahoe, California
Job ID: 1950BK47
Date Completed: 10-Aug-10
Completed By: Aiguo Xu

CHEMICAL DATA FOR SELECTED COCs

Physical Property Data

	pH specific Kd for non-organics												
Orange = One or more parameter differs from User Chemical Database	Surface Soil Column			Water Bearing Unit				log(Kow) (@ 20 - 25 C) log(L/kg)		Diffusion Coefficients			
Constituent	Slope	y-Intercept	logKd_pH (L/kg)	Slope	y-Intercept	logKd_pH (L/kg)				Air (cm^2/s)		Water (cm^2/s)	
Trichloroethylene	-	-	-	-	-	-	-	2.47E+00	TX08	7.90E-02	TX08	9.10E-06	TX08
Tetrachloroethylene	-	-	-	-	-	-	-	2.97E+00	TX08	7.20E-02	TX08	8.20E-06	TX08

Site Name: Lake Tahoe Laundry Works
Site Location: 1024 Lake Tahoe Boulevard, South Lake Ta
Job ID: 1950BK47
Date Completed: 10-Aug-10
Completed By: Aiguo Xu

CHEMICAL DATA FOR SELECTED COCs

Miscellaneous Parameters

	Analytical Detection Limits				Half Life (First-Order Decay)			Soil-to-Plant Biotransfer Factors			Relative Bioavailability Factor		Leaf Concen. Factor	Root Concen. Factor	Bioconcentration Factor	
Orange = One or more parameter differs from User Chemical Database	Groundwater (mg/L)		Soil (mg/kg)		Saturated (days)	Unsaturated (days)		Above-grd (unitless)	Below-grd (unitless)				Calculated (mg/kg)/(mg/L)	Calculated (mg/kg)/(mg/L)		
Constituent																
Trichloroethylene	1.00E-03	S	5.00E-03	S	1.65E+03	1.65E+03	H	-	-	-	1.00E+00	TX08	1.81E+00	3.24E+00	39	LY
Tetrachloroethylene	5.00E-04	S	-	-	7.20E+02	7.20E+02	H	-	-	-	1.00E+00	TX08	2.94E+00	6.62E+00	49	LY

Site Name: Lake Tahoe Laundry Works
Site Location: 1024 Lake Tahoe Boulevard, South Lake Ta
Job ID: 1950BK47
Date Completed: 10-Aug-10
Completed By: Aiguo Xu

CHEMICAL DATA FOR SELECTED COCs

Dermal Exposure

	Water Dermal Permeability Data					
Orange = One or more parameter differs from User Chemical Database Constituent	Dermal Permeability Coeff. (cm/hr)	Lag time for Dermal Exposure (hr)	Critical Exposure Time (hr)	Relative Contr of Derm Perm Coeff	Water/Skin Derm Ads. Fact Calculated	
Trichloroethylene	0.016	0.55	1.3	0.026	0.065275634	D
Tetrachloroethylene	0.048	0.9	4.3	0.25	0.21799865	D

Site Name: Lake Tahoe Laundry Works
Site Location: 1024 Lake Tahoe Boulevard, South Lake Ta
Job ID: 1950BK47
Date Completed: 10-Aug-10
Completed By: Aiguo Xu

CHEMICAL DATA FOR SELECTED COCs

Orange = One or more parameter differs from User Chemical Database	Dermal Relative Abs.	Absorbtion Fraction		
Constituent	Factor Calculated	Dermal (unitless)	Gastrointestinal (unitless)	
Trichloroethylene	0	0	1	TX08
Tetrachloroethylene	0	0	1	TX08

Site Name: Lake Tahoe Laundry Works
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CHEMICAL DATA FOR SELECTED COCs

Regulatory Standards

Orange = One or more parameter differs from User Chemical Database Constituent	Maximum Contaminant Level (mg/L)		Time-Weighted Average Workplace Criteria (mg/m³)		UK Soil Guideline Values				
					Residential/Plant mg/kg	Residential/No Plant mg/kg	Allotments mg/kg	Commercial/Ind. mg/kg	
Trichloroethylene	0.005	MC	537	OS	-	-	-	-	-
Tetrachloroethylene	0.005	MC	685	OS	-	-	-	-	-

Site Name: Lake Tahoe Laundry Works
Site Location: 1024 Lake Tahoe Boulevard, South Lake Ta
Job ID: 1950BK47
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Completed By: Aiguo Xu

CHEMICAL DATA FOR SELECTED COCs

	Regulatory Standards									
	Surface Water Quality Criteria									
Orange = One or more parameter differs from User Chemical Database	Aquatic Life Protection				Human Health Protection					
	Freshwater		Marine		Drink & Freshwater Fish		Freshwater Fish		Saltwater Fish	
Constituent	(mg/L)		(mg/L)		(mg/L)		(mg/L)		(mg/L)	
Trichloroethylene	-	-	-	-	0.005	T3	0.612	T3	0.408	T3
Tetrachloroethylene	-	-	-	-	0.005	T3	0.323	T3	0.215	T3

Site Name: Lake Tahoe Laundry Works
Site Location: 1024 Lake Tahoe Boulevard, South Lake Ta
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CHEMICAL DATA FOR SELECTED COCs

	Toxicity Parameters											
Orange = One or more parameter differs from User Chemical Database **Constituent**	**Oral RfD or TDSI (mg/kg/day)**		**Dermal RfD or TDSI (mg/kg/day)**		**Inhalation Equivalent RfC or TCA (mg/m^3)**		**Oral Equivalent Slope Factor 1/(mg/kg/day)**		**Dermal Equivalent Slope Factor 1/(mg/kg/day)**		**Inhalation Equivalent Unit Risk Factor 1/($\mu g/m^3$)**	
Trichloroethylene	0.006	EPA-N	0.006	D2	-	-	***0.0059***	***CA***	0.011	D2	***0.000002***	***CA***
Tetrachloroethylene	0.01	EPA-I	0.01	D2	0.270749388	EPA-I	***0.54***	***CA***	0.052	D2	***0.0000059***	***CA***

Site Name: Lake Tahoe Laundry Works
Site Location: 1024 Lake Tahoe Boulevard, South Lake Ta
Job ID: 1950BK47
Date Completed: 10-Aug-10
Completed By: Aiguo Xu

RBCA SITE ASSESSMENT

Input Parameter Summary

Site Name: Lake Tahoe Laundry Works
Site Location: 1024 Lake Tahoe Boulevard, South Lake Tahoe, California

Completed By: Aiguo Xu
Date Completed: 10-Aug-10

Exposure Parameters		**Residential**				**Commercial/Industrial**		**User Defined**
		Child*	Adolescent	Adult	Age Adjusted**	Adult	Construct.	
ATc	Averaging time for carcinogens (yr)	70	70	70	NA	70	70	-
ATn	Averaging time for non-carcinogens (yr)	6	12	30	NA	25	1	-
BW	Body weight (kg)	15	35	70	NA	70	70	-
ED	Exposure duration (yr)	6	12	30	NA	25	1	-
τ	Averaging time for vapor flux (yr)	30	30	30	NA	30	30	-
EF	Exposure frequency (days/yr)	350	350	350	NA	250	180	-
EFD	Exposure frequency for dermal exposure	350	350	350	NA	250	180	-
IRw	Ingestion rate of water (L/day)	1	1	2	2.5	1	NA	-
IRs	Ingestion rate of soil (mg/day)	200	200	100	387	50	100	-
SA	Skin surface area (dermal) (cm^2)	2023	2023	3160	4771	3160	3160	-
M	Soil to skin adherence factor	0.5	0.5	0.5	NA	0.5	0.5	-
ETswim	Swimming exposure time (hr/event)	1	3	3	NA	NA	NA	NA
EVswim	Swimming event frequency (events/yr)	12	12	12	NA	NA	NA	NA
IRswim	Water ingestion while swimming (L/hr)	0.5	0.5	0.05	0.3	NA	NA	NA
SAswim	Skin surface area for swimming (cm^2)	3500	8100	23000	15680	NA	NA	NA
IRfish	Ingestion rate of fish (kg/yr)	0.025	0.025	0.025	0.053	NA	NA	NA
Flfish	Contaminated fish fraction (unitless)	1	1	1	NA	NA	NA	NA
IRbg	Below-ground vegetable ingestion	0.002	0.002	0.006	2.053	NA	NA	NA
IRabg	Above-ground vegetable ingestion	0.001	0.001	0.002	0.887	NA	NA	NA
VGbg	Above-ground Veg. Ingest. Correction Factor	0.01	0.01	0.01	NA	NA	NA	NA
VGabg	Below-ground Veg. Ingest. Correction Factor	0.01	0.01	0.01	NA	NA	NA	NA

* = Child Receptor used for Non-Carcinogens

** = Age-adjusted rate is effective value corresponding to adult exposure factors.

Complete Exposure Pathways and Receptors	**On-site**	**Off-site 1**	**Off-site 2**
Groundwater:			
Groundwater Ingestion	None	None	None
Soil Leaching to Groundwater Ingestion	None	None	None
Apply MCL Values	No	No	No
Applicable Surface Water Exposure Routes:			
Swimming	NA	NA	None
Fish Consumption	NA	NA	None
Aquatic Life Protection	NA	NA	None
Soil:			
Direct Contact: direct combined pathways	None	NA	NA
Apply CLEA- UK SGV levels		No	
Outdoor Air:			
Particulates from Surface Soils	None	None	None
Volatilization from Soils	None	None	None
Volatilization from Groundwater	None	None	None
Indoor Air:			
Volatilization from Soils	Commercial	NA	NA
Volatilization from Groundwater	Commercial	Commercial	None
Soil Leaching to Groundwater Volatilization	Commercial	Commercial	None

Receptor Distance from Source Media	**On-site**	**Off-site 1**	**Off-site 2**	**(Units)**
Groundwater receptor	NA	NA	NA	(ft)
Outdoor air inhalation receptor	NA	NA	NA	(ft)
Indoor air inhalation receptor	0	20	NA	(ft)

Target Health Risk Values		**Individual**	**Cumulative**
TR	Target Risk (carcinogens)	1.0E-6	1.0E-6
THQ	Target Hazard Quotient (non-carcinogenic risk)	1.0E+0	1.0E+0

Modeling Options	
RBCA tier	Tier 2
Outdoor air volatilization model	NA
Indoor air volatilization model	Johnson & Ettinger model
Soil leaching model	ASTM leaching model
Use soil attenuation model (SAM) for leachate?	No
Use dual equilibrium desorption model?	No
Apply Mass Balance Limit for Soil Volatilization?	No
Apply UK (CLEA) SGV as soil concentration limit	No
Vegetable calculation options	NA
Air dilution factor	NA
Groundwater dilution-attenuation factor	NA

NOTE: NA = Not applicable

RBCA SITE ASSESSMENT

Input Parameter Summary

Site Name: Lake Tahoe Laundry Works
Site Location: 1024 Lake Tahoe Boulevard, South Lake Tahoe, California

Completed By: Aiguo Xu
Date Completed: 10-Aug-10

	Surface Soil Column Parameters	Value			(Units)
h_{cap}	Capillary zone thickness	0.164041995			(ft)
h_v	Vadose zone thickness	***13.83595801***			(ft)
ρ_s	Soil bulk density	1.7			(g/cm^3)
f_{oc}	Fraction organic carbon	0.01			(-)
θ_T	Soil total porosity	***0.41***			(-)
		capillary	vadose	foundation	
θ_w	Volumetric water content	***0.369***	***0.08***	0.12	(-)
θ_a	Volumetric air content	***0.041***	***0.33***	0.26	(-)
K_{vs}	Vertical hydraulic conductivity	28.34645669			(ft/d)
k_v	Vapor permeability	1.07639E-11			(ft^2)
L_{gw}	Depth to groundwater	***14***			(ft)
pH	Soil/groundwater pH	6.8			(-)
W	Length of source-zone area parallel to wind	NA			(ft)
W_{gw}	Length of source-zone area parallel to GW flow	***100***			(ft)
L_{ss}	Thickness of affected surface soils	NA			(ft)
A	Source zone area	NA			(ft^2)
L_s	Depth to top of affected soils	0			(ft)
L_{base}	Depth to base of affected soils	***14***			(ft)
L_{subs}	Thickness of affected soils	***14***			(ft)

	Outdoor Air Parameters	Value	(Units)
U_{air}	Ambient air velocity in mixing zone	NA	(ft/s)
δ_{air}	Air mixing zone height	NA	(ft)
Q/C	Inverse mean concentration at the center of source	NA	
P_e	Areal particulate emission rate	NA	(g/cm^2/s)
V	Fraction of vegetative cover	NA	
U_m	Mean annual airvelocity at 7m	NA	
U_t	Equivalent 7m air velocity threshold value	NA	
F(x)	Windspeed function dependant on Um/Ut	NA	
PEF	Partculate Emission Factor	NA	

	Building Parameters	Residential	Commercial	(Units)
L_b	Building volume/area ratio	NA	***20***	(ft)
A_b	Foundation area	NA	***7500***	(ft^2)
X_{crk}	Foundation perimeter	NA	***400***	(ft)
ER	Building air exchange rate	NA	0.00023	(1/s)
L_{crk}	Foundation thickness	NA	0.492125984	(ft)
Z_{crk}	Depth to bottom of foundation slab	NA	0.492125984	(ft)
η	Foundation crack fraction	NA	0.001	(-)
dP	Indoor/outdoor differential pressure	NA	0	(g/cm/s^2)
Q_s	Convective air flow through slab	NA	0	(ft^3/s)
θ_{wcrack}	Volumetric water content of cracks	NA	0.12	(-)
θ_{acrack}	Volumetric air content of cracks	NA	0.26	(-)
BV	Building Volume	NA	NA	(ft^3)
w	Building Width Perpendicular to GW flow	NA	NA	(ft)
L	Building Length Parallel to GW flow	NA	NA	(ft)
ν	Saturated Soil Zone Porosity	NA	NA	(-)

	Groundwater Parameters	Value	(Units)
δ_{gw}	Groundwater mixing zone depth	6.56167979	(ft)
I_f	Net groundwater infiltration rate	***15***	(in/yr)
U_{gw}	Groundwater Darcy velocity	***0.359580052***	(ft/d)
V_{gw}	Groundwater seepage velocity	***1.43832021***	(ft/d)
K_s	Saturated hydraulic conductivity	22.47375328	(ft/d)
i	Groundwater gradient	***0.016***	(-)
S_w	Width of groundwater source zone	***150***	(ft)
S_d	Depth of groundwater source zone	6.56167979	(ft)
θ_{eff}	Effective porosity in water-bearing unit	***0.25***	(-)
f_{oc-sat}	Fraction organic carbon in water-bearing unit	0.001	(-)
pH_{sat}	Groundwater pH	6.2	(-)
	Biodegradation considered?	No	

	Transport Parameters	Off-site 1	Off-site 2	Off-site 1	Off-site 2	(Units)
	Lateral Groundwater Transport	Groundwater Ingestion		Groundwater to Indoor Air		
α_x	Longitudinal dispersivity	NA	NA	2.0E+0	NA	(ft)
α_y	Transverse dispersivity	NA	NA	6.6E-1	NA	(ft)
α_z	Vertical dispersivity	NA	NA	1.0E-1	NA	(ft)
	Lateral Outdoor Air Transport	Soil to Outdoor Air Inhal.		GW to Outdoor Air Inhal.		
σ_y	Transverse dispersion coefficient	NA	NA	NA	NA	(ft)
σ_z	Vertical dispersion coefficient	NA	NA	NA	NA	(ft)
ADF	Air dispersion factor	NA	NA	NA	NA	(-)

	Surface Water Parameters	Off-site 2	(Units)
Q_{sw}	Surface water flowrate	NA	(ft^3/s)
W_{pl}	Width of GW plume at SW discharge	NA	(ft)
δ_{pl}	Thickness of GW plume at SW discharge	NA	(ft)
DF_{sw}	Groundwater-to-surface water dilution factor	NA	(-)

NOTE: NA = Not applicable

Orange = Site-specific value (different from current default value)

REPRESENTATIVE COC CONCENTRATIONS IN SOURCE MEDIA

CONSTITUENT	Representative COC Concentration			
	Groundwater		Soils (0 - 14 ft)	
	value (mg/L)	note	value (mg/kg)	note
Trichloroethylene *	2.2E-3	Twice Local Max (MW-11S)	5.0E-2	Max
Tetrachloroethylene *	3.5E-1	Twice Local Max (MW-9S)	3.5E-1	Max

RBCA SITE ASSESSMENT

TIER 2 EXPOSURE CONCENTRATION AND INTAKE CALCULATION

INDOOR AIR EXPOSURE PATHWAYS ■ **(Checked if Pathway is Complete)**

SOILS (0 - 14 ft): VAPOR
INTRUSION INTO BUILDINGS

	1) Source Medium	2) NAF Value (L/kg) Receptor	3) Exposure Medium Indoor Air: POE Conc. (mg/m^3) (1) / (2)	4) Exposure Multiplier (EFxED)/(ATx365) (unitless)	5) Average Inhalation Exposure Concentration (mg/m^3) (3) X (4)
		On-site (0 ft)	On-site (0 ft)	On-site (0 ft)	On-site (0 ft)
Constituents of Concern	Soil Conc. (mg/kg)	Commercial	Commercial	Commercial	Commercial
Trichloroethylene *	5.0E-2	8.5E+2	5.9E-5	2.4E-1	1.4E-5
Tetrachloroethylene *	3.5E-1	8.6E+2	4.1E-4	2.4E-1	9.9E-5

* = Chemical with user-specified data

NOTE: AT = Averaging time (days) EF = Exposure frequency (days/yr) ED = Exposure duration (yr) NAF = Natural attenuation factor POE = Point of exposure

Site Name: Lake Tahoe Laundry Works
Site Location: 1024 Lake Tahoe Boulevard, South Lake Tahoe, California
Completed By: Aiguo Xu

Date Completed: 10-Aug-10
Job ID: 1950BK47

RBCA SITE ASSESSMENT

TIER 2 EXPOSURE CONCENTRATION AND INTAKE CALCULATION

INDOOR AIR EXPOSURE PATHWAYS ■ **(Checked if Pathway is Complete)**

GROUNDWATER: VAPOR INTRUSION INTO BUILDINGS

Exposure Concentration

	1) Source Medium	2) NAF Value (m^3/L) Receptor			3) Exposure Medium Indoor Air: POE Conc. (mg/m^3) (1) / (2)		
		On-site (0 ft)	Off-site 1 (20 ft)	Off-site 2 (0 ft)	On-site (0 ft)	Off-site 1 (20 ft)	Off-site 2 (0 ft)
Constituents of Concern	Groundwater Conc. (mg/L)	Commercial	Commercial	None	Commercial	Commercial	None
Trichloroethylene *	2.2E-3	9.1E+2	9.1E+2		2.4E-6	2.4E-6	
Tetrachloroethylene *	3.5E-1	5.7E+2	5.7E+2		6.1E-4	6.1E-4	

NOTE: AT = Averaging time (days) EF = Exposure frequency (days/yr) ED = Exposure duration (yr) NAF = Natural attenuation factor POE = Point of exposure

RBCA SITE ASSESSMENT

TIER 2 EXPOSURE CONCENTRATION AND INTAKE CALCULATION

INDOOR AIR EXPOSURE PATHWAYS

GROUNDWATER: VAPOR INTRUSION INTO BUILDINGS

Constituents of Concern	4) Exposure Multiplier (EFxED)/(ATx365) (unitless)			5) Average Inhalation Exposure Concentration (mg/m^3) (3) X (4)		
	On-site (0 ft) Commercial	Off-site 1 (20 ft) Commercial	Off-site 2 (0 ft) None	On-site (0 ft) Commercial	Off-site 1 (20 ft) Commercial	Off-site 2 (0 ft) None
Trichloroethylene *	2.4E-1	2.4E-1		5.8E-7	5.8E-7	
Tetrachloroethylene *	2.4E-1	2.4E-1		1.5E-4	1.5E-4	

* = Chemical with user-specified data

NOTE: AT = Averaging time (days) EF = Exposure frequency (days/yr) ED = Exposure duration (yr) NAF = Natural attenuation factor POE = Point of exposure

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RBCA SITE ASSESSMENT

TIER 2 EXPOSURE CONCENTRATION AND INTAKE CALCULATION

INDOOR AIR EXPOSURE PATHWAYS ■ **(Checked if Pathway is Complete)**

SOIL LEACHING TO GW- VAPOR INTRUSION INTO BUILDINGS

Exposure Concentration

	1) Source Medium	2) NAF Value (m^3/L) Receptor			3) Exposure Medium Indoor Air: POE Conc. (mg/m^3) (1) / (2)		
Constituents of Concern	Soil Conc. (mg/kg)	On-site (0 ft) Commercial	Off-site 1 (20 ft) Commercial	Off-site 2 (0 ft) None	On-site (0 ft) Commercial	Off-site 1 (20 ft) Commercial	Off-site 2 (0 ft) None
Trichloroethylene *	5.0E-2	7.7E+3	7.7E+3		6.5E-6	6.5E-6	
Tetrachloroethylene *	3.5E-1	7.8E+3	7.9E+3		4.4E-5	4.4E-5	

NOTE: AT = Averaging time (days) EF = Exposure frequency (days/yr) ED = Exposure duration (yr) NAF = Natural attenuation factor POE = Point of exposure

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RBCA SITE ASSESSMENT

TIER 2 EXPOSURE CONCENTRATION AND INTAKE CALCULATION

INDOOR AIR EXPOSURE PATHWAYS

SOIL LEACHING TO GW- VAPOR INTRUSION INTO BUILDINGS

	4) Exposure Multiplier (EFxED)/(ATx365) (unitless)			5) Average Inhalation Exposure Concentration (mg/m^3) (3) X (4)		
	On-site (0 ft)	Off-site 1 (20 ft)	Off-site 2 (0 ft)	On-site (0 ft)	Off-site 1 (20 ft)	Off-site 2 (0 ft)
Constituents of Concern	Commercial	Commercial	None	Commercial	Commercial	None
Trichloroethylene *	2.4E-1	2.4E-1		1.6E-6	1.6E-6	
Tetrachloroethylene *	2.4E-1	2.4E-1		1.1E-5	1.1E-5	

* = Chemical with user-specified data

NOTE: AT = Averaging time (days) EF = Exposure frequency (days/yr) ED = Exposure duration (yr) NAF = Natural attenuation factor POE = Point of exposure

Site Name: Lake Tahoe Laundry Works
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RBCA SITE ASSESSMENT

TIER 2 EXPOSURE CONCENTRATION AND INTAKE CALCULATION

INDOOR AIR EXPOSURE PATHWAYS

MAXIMUM PATHWAY EXPOSURE (mg/m^3)

(Maximum average exposure concentration from soil and groundwater routes.)

Constituents of Concern	On-site (0 ft) Commercial	Off-site 1 (20 ft) Commercial	Off-site 2 (0 ft) None
Trichloroethylene *	1.4E-5	1.6E-6	
Tetrachloroethylene *	1.5E-4	1.5E-4	

Site Name: Lake Tahoe Laundry Works
Date Completed: 10-Aug-10
Site Location: 1024 Lake Tahoe Boulevard, South Lake Tahoe, Ca
Job ID: 1950BK47
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RBCA SITE ASSESSMENT

TIER 2 PATHWAY RISK CALCULATION

INDOOR AIR EXPOSURE PATHWAYS ■ **(Checked if Pathway is Complete)**

CARCINOGENIC RISK

	(1) Carcinogenic Classification	(2) Maximum Carcinogenic Exposure (mg/m^3)			(3) Inhalation Unit Risk Factor	(4) Individual COC Risk (2) x (3) x 1000		
		On-site (0 ft)	Off-site 1 (20 ft)	Off-site 2 (0 ft)		On-site (0 ft)	Off-site 1 (20 ft)	Off-site 2 (0 ft)
Constituents of Concern		Commercial	Commercial	None	(µg/m^3)^-1	Commercial	Commercial	None
Trichloroethylene *	TRUE	1.4E-5	1.6E-6	-	2.0E-6	2.9E-8	3.2E-9	
Tetrachloroethylene *	TRUE	1.5E-4	1.5E-4	-	5.9E-6	8.8E-7	8.8E-7	
					Total Pathway Carcinogenic Risk =	**9.1E-7**	**8.8E-7**	

Site Name: Lake Tahoe Laundry Works
Site Location: 1024 Lake Tahoe Boulevard, South Lake Tahoe, California
Completed By: Aiguo Xu

Date Completed: 10-Aug-10
Job ID: 1950BK47

RBCA SITE ASSESSMENT

TIER 2 PATHWAY RISK CALCULATION

INDOOR AIR EXPOSURE PATHWAYS ■ **(Checked if Pathway is Complete)**

TOXIC EFFECTS

	(5) Maximum Toxicant Exposure (mg/m^3)			(6) Inhalation Reference Concentration	(7) Individual COC Hazard Quotient (5) / (6)		
Constituents of Concern	On-site (0 ft) Commercial	Off-site 1 (20 ft) Commercial	Off-site 2 (0 ft) None	(mg/m^3)	On-site (0 ft) Commercial	Off-site 1 (20 ft) Commercial	Off-site 2 (0 ft) None
Trichloroethylene *	4.0E-5	4.5E-6	NC	-			
Tetrachloroethylene *	4.2E-4	4.2E-4	NC	2.7E-1	1.5E-3	1.5E-3	
				Total Pathway Hazard Index =	**1.5E-3**	**1.5E-3**	

Site Name: Lake Tahoe Laundry Works
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RBCA SITE ASSESSMENT

Baseline Risk Summary-All Pathways

Site Name: Lake Tahoe Laundry Works
Completed By: Aiguo Xu
Site Location: 1024 Lake Tahoe Boulevard, South Lake Tahoe, Ca
Date Completed: 10-Aug-10

BASELINE RISK SUMMARY TABLE

	BASELINE CARCINOGENIC RISK					BASELINE TOXIC EFFECTS				
	Individual COC Risk		Cumulative COC Risk		Risk	Hazard Quotient		Hazard Index		Toxicity
EXPOSURE PATHWAY	Maximum Value	Target Risk	Total Value	Target Risk	Limit(s) Exceeded?	Maximum Value	Applicable Limit	Total Value	Applicable Limit	Limit(s) Exceeded?
OUTDOOR AIR EXPOSURE PATHWAYS										
☐	NA	NA	NA	NA	☐	NA	NA	NA	NA	☐
INDOOR AIR EXPOSURE PATHWAYS										
■	8.8E-7	1.0E-6	9.1E-7	1.0E-6	☐	1.5E-3	1.0E+0	1.5E-3	1.0E+0	☐
SOIL EXPOSURE PATHWAYS										
☐	NA	NA	NA	NA	☐	NA	NA	NA	NA	☐
GROUNDWATER EXPOSURE PATHWAYS										
☐	NA	NA	NA	NA	☐	NA	NA	NA	NA	☐
SURFACE WATER EXPOSURE PATHWAYS										
☐	NA	NA	NA	NA	☐	NA	NA	NA	NA	☐

CRITICAL EXPOSURE PATHWAY (Maximum Values From Complete Pathways)										
	8.8E-7	***1.0E-6***	***9.1E-7***	***1.0E-6***	☐	***1.5E-3***	***1.0E+0***	***1.5E-3***	***1.0E+0***	☐
	Indoor Air		***Indoor Air***			***Indoor Air***		***Indoor Air***		

EXHIBIT Q

CALIFORNIA
Water Boards

Edmund G. Brown Jr.
Governor

Matthew Rodriquez
Secretary for
Environmental Protection

Lahontan Regional Water Quality Control Board

August 2, 2013

Seven Springs Limited Partnership
c/o Christopher Blair
The Commerce Trust Company
P.O. Box 419249
Kansas City, MO 64141-6248

Fox Capital Management Corporation
c/o Scott Reisch
4582 S. Ulster Street Parkway, Suite 100
Denver, CO 80237

ACCEPTANCE OF WORK PLAN FOR REMEDIATION AND ORDER TO SUBMIT TECHNICAL REPORTS, FORMER LAKE TAHOE LAUNDRY WORKS, 1024 LAKE TAHOE BOULEVARD, SOUTH LAKE TAHOE, EL DORADO COUNTY

INVESTIGATIVE ORDER R6T-2013-0064

This letter conditionally accepts the cleanup action proposed for the Lake Tahoe Laundry Works property to remediate contamination in soil and groundwater. As responsible parties, Seven Springs Limited Partnership (as current owner) and Fox Capital Management Corporation (as past owner) are directed to continue to implement corrective actions and to submit technical reports to this agency.

BACKGROUND

The August 12, 2010 document, *Draft Remedial Action Plan (Draft RAP)*, recommends operating a soil vapor extraction (SVE) and air sparge (AS) system to remediate chlorinated hydrocarbons, mostly in the form of tetrachloroethene or PCE, in soil, soil gas, and groundwater at the site. Air sparging involves the injection of air below the water table to strip volatile organic compounds out of groundwater. Mobilized contaminants migrating to soil in the unsaturated zone are extracted by vacuum applied in a SVE well. This SVE/AS system was installed and pilot tested in 2010-12 and has been operational since. As the SVE/AS system becomes less effective with time, ozone sparging will be conducted to remove remaining contaminants at the site.

The remediation system operates under permit by the County Air Pollution Control District. This remedial operation was selected because it appears it would be effective for remediation, its costs are reasonable, and it would have the least disruption to the existing businesses on site. The schedule in the Draft RAP indicates that site cleanup could be achieved within one-and-a-half more years of operation and verification monitoring.

Peter C. Pumphrey, chair | Patty Z. Kouyoumdjian, executive officer

2501 Lake Tahoe Blvd., So. Lake Tahoe, CA 96150 | www.waterboards.ca.gov/lahontan

The proposed cleanup action was distributed to the public during a 30-day comment period. The comment period ended on July 15, 2013. No comments were received during this time.

DIRECTIVE

I am accepting the Draft RAP to remediate contaminants in soil, soil gas, and groundwater. Following the completion of remedial actions, verification monitoring will be necessary for at least one year before site closure will be considered to ensure restoration of beneficial uses to the drinking water aquifer.

Pursuant to Water Code sections 13267, Seven Springs Limited Partnership and Fox Capital Management Corporation are required to submit technical reports:

Beginning August 15, 2013, and every three months thereafter, submit quarterly remediation status reports that include the following information:

a. Description of analytical results for vapors samples collected from SVE wells and comparison to past sampling results.
b. Description of analytical results for water samples collected from monitoring wells and comparison to past sampling results. Hexavalent chromium must be analyzed in water samples whenever ozone sparge is conducted. The detection limit for hexavalent chromium shall be 0.5 parts per billion (ppb).
c. Site map showing property lines, building footprint, well locations, piping layout, and remediation system location.
d. Maps showing all monitoring wells associated with the site and contaminant boundaries in groundwater drawn to the following levels: 5 ppb PCE, 5 ppb TCE, and 6 ppb DCE.
e. Map showing all vapor wells associated with the site and PCE contaminant boundaries in soil drawn to 1 $\mu g/m^3$.
f. Describe the average vacuum extraction rate during the quarter.
g. A table of cumulative vacuum extraction at each well location volume back to 2010 when remediation was initiated.
h. Calculated PCE mass in soil and the aquifer based upon known conditions.
i. A table of cumulative system down time, reasons for down time, and how the problem was corrected and description in the text section.
j. Discussion of contaminant concentration trends from past sampling events and remediation system effectiveness.
k. Description of future activities.
l. Upload to Geotracker database.

ENFORCEMENT

Technical reports required by this Order are necessary during ongoing cleanup of chlorinated hydrocarbons. The need for these reports outweighs the burden on the responsible parties to produce the information verifying cleanup actions and restoration of the drinking water aquifer.

Pursuant to section 13268 of the Water Code, a violation of Water Code Section 13267 requirement may subject you to civil liability of up to $1,000 per day for each day in which the violation occurs.

I appreciate your attention in this matter and your efforts to cleanup discharges affecting the Lake Tahoe Basin. You may contact Lisa Dernbach of this office at (530) 542-5424 if you have any questions.

Lauri Kemper

LAURI KEMPER, P.E.
ACTING EXECUTIVE OFFICER

Enclosure: Section 13267 Fact Sheet

cc: PCE Interested Party Mail List

LSD/adw/T: LTLW RAP acceptance 7-30-13 lsd
Send to file: SLIC, El Dorado Co., T6S043

Fact Sheet – Requirements for Submitting Technical Reports Under Section 13267 of the California Water Code

October 8, 2008

What does it mean when the regional water board requires a technical report?

Section 13267[1] of the California Water Code provides that "…the regional board may require that any person who has discharged, discharges, or who is suspected of having discharged…waste that could affect the quality of waters...shall furnish, under penalty of perjury, technical or monitoring program reports which the regional board requires".

This requirement for a technical report seems to mean that I am guilty of something, or at least responsible for cleaning something up. What if that is not so?

Providing the required information in a technical report is not an admission of guilt or responsibility. However, the information provided can be used by the regional water board to clarify whether a given party has responsibility.

Are there limits to what the regional water board can ask for?

Yes. The information required must relate to an actual or suspected discharge of waste, and the burden of compliance must bear a reasonable relationship to the need for the report and the benefits obtained. The regional water board is required to explain the reasons for its request.

What if I can provide the information, but not by the date specified?

A time extension can be given for good cause. Your request should be submitted in writing, giving reasons. A request for a time extension should be made as soon as it is apparent that additional time will be needed and preferably before the due date for the information.

Are there penalties if I don't comply?

Depending on the situation, the regional water board can impose a fine of up to $1,000 per day, and a court can impose fines of up to $25,000 per day as well as criminal penalties. A person who submits false information is guilty of a misdemeanor and may be fined as well.

What if I disagree with the 13267 requirement and the regional water board staff will not change the requirement and/or date to comply?

Any person aggrieved by this action of the Regional Water Board may petition the State Water Board to review the action in accordance with Water Code section 13320 and California Code of Regulations, title 23, sections 2050 and following. The State Water Board must *receive* the petition by 5:00 p.m., 30 days after the date of the Order, except that if the thirtieth day following the date of this Order falls on a Saturday, Sunday, or state holiday, the petition must be received by the State Water Board by 5:00 p.m. on the next business day. Copies of the law and regulations applicable to filing petitions may be found on the Internet at: http://www.waterboards.ca.gov/public_notices/petitions/water_quality or will be provided upon request.

Claim of Copyright or other Protection

Any and all reports and other documents submitted to the Regional Board pursuant to this request will need to be copied for some or all of the following reasons: 1) normal internal use of the document, including staff copies, record copies, copies for Board members and agenda packets, 2) any further proceedings of the Regional Board and the State Water Resources Control Board, 3) any court proceeding that may involve the document, and 4) any copies requested by members of the public pursuant to the Public Records Act or other legal proceeding.

If the discharger or its contractor claims any copyright or other protection, the submittal must include a notice, and the notice will accompany all documents copied for the reasons stated above. If copyright protection for a submitted document is claimed, failure to expressly grant permission for the copying stated above will render the document unusable for the Regional Board's purposes, and will result in the document being returned to the discharger as if the task had not been completed.

If I have more questions, who do I ask?

Requirements for technical reports normally indicate the name, telephone number, and email address of the regional water board staff person involved at the end of the letter.

---

[1] All code sections referenced herein can be found by going to www.leginfo.ca.gov . Copies of the regulations cited are available from the Regional Board upon request.

EXHIBIT R

E_2C REMEDIATION
Environmental Engineering, Consulting & Remediation, Inc.

November 11, 2015

Mr. Scott Reisch, Partner
Hogan Lovells US LLP
One Tabor Center, Suite 1500
1200 Seventeenth Street
Denver, CO 80202

Mr. William F. Tarantino, Partner
Morrison & Foerster LLP
425 Market Street
San Francisco, CA 94105

SUBJECT: Third Quarter 2015 Groundwater Monitoring Report and Current Site Remediation Status Report

Lake Tahoe Laundry Works
1024 Lake Tahoe Boulevard
South Lake Tahoe, California

Dear Mssrs. Reisch and Tarantino:

Pursuant to your request, please find attached the above-captioned Groundwater Monitoring Report (QMR) and Remediation Status Report (RSR). The document was prepared to comply with the Final Remedial Action Plan, which was approved by the State of California Regional Water Quality Control Board – Lahontan Region, South Lake Tahoe Branch (CRWQCB) letter dated August 2, 2013.

If you have any questions, or comments, please call the undersigned, or Phil Goalwin, at 916-782-8700.

Sincerely,
E_2C Remediation

Aiguo Xu

REGISTERED PROFESSIONAL ENGINEER
AIGUO XU
No. 72685
Exp. 6/30/2016
CIVIL
STATE OF CALIFORNIA

Aiguo Xu, Ph.D.
Principal Engineer
C.E. # 72685

cc: Ms. Lisa Dernbach, C.H.G.
Senior Engineering Geologist
CRWQCB – Lahontan Region, South Lake Tahoe Office
2501 Lake Tahoe Boulevard
South Lake Tahoe, CA 96150

Mr. Levi Ford
CEDAQMD
330 Fair Lane
Placerville, CA 95667

1020 Winding Creek Road, Suite 110, Roseville, CA 95678
tel 916.782.8700 fax 916.782.8750

THIRD QUARTER 2015 GROUNDWATER MONITORING REPORT
AND
CURRENT SITE REMEDIATION STATUS REPORT

Lake Tahoe Laundry Works
1024 Lake Tahoe Boulevard
South Lake Tahoe, California

November 11, 2015
Project Number: 1950BK26

Prepared For:

Fox Capital Management Corporation
4582 S. Ulster Street Parkway, Suite 1100
Denver, CO 80237

Seven Springs Limited Partnership
c/o Christopher Blair
Vice President
The Commerce Trust Company
118 West 47th Street
Kansas City, MO 64112

Prepared By:

E$_2$C Remediation
Environmental Engineering, Consulting & Remediation, Inc.
1020 Winding Creek Road, Suite 110
Roseville, California 95678

TABLE OF CONTENTS

LIST OF FIGURES

LIST OF TABLES

LIST OF GRAPHS

LIST OF APPENDICES

EXECUTIVE SUMMARY

This report documents groundwater and shallow soil vapor monitoring activities conducted at the Lake Tahoe Laundry Works (LTLW) facility located at 1024 Lake Tahoe Boulevard in South Lake Tahoe, California (Site) for the Third Quarter 2015, and provides a discussion of remedial actions conducted through July 2015.

SVE/GASS Temporary Loss of Operation

The site SVW/GASS system was out of operation between July 21 and October 12, 2015 The Lahontan Regional Water Quality Control Board (LRWQCB) was immediately notified via email communication. Power outages caused severe damage to the main motor and the vacuum pump (Note: a claim was filed with the utility company for damage to the motor and pump. Although the utility company admitted a fault in its supply of electricity to the site was the cause of the resulting damage to the motor and pump, the claim was denied on the grounds that failures were not the result of any negligence by the utility provider). After attempts to repair the motor and the pump were unsuccessful, both the vacuum pump and the motor were replaced, and the system resumed operation on October 12, 2015.

It is important to note that on July 21, 2015, at the time the system went out of operation, the system influent concentration was extremely low and the contaminant mass removal rate was approximately 0.003 pounds (lbs) per day. At that time, the most recent monitoring data in both groundwater and soil vapor indicated a lack of contaminant mass and low concentrations. The then available data further appeared to indicate there was no need to resume operation immediately. As soon as the preliminary data for the Third Quarter 2015 groundwater monitoring event became available, indicating a rebound in soil vapor and groundwater concentrations, the damaged equipment was replaced immediately and operation resumed.

Groundwater Elevation Monitoring

Based on the September 2015 groundwater elevation data, groundwater elevations in on-site groundwater monitoring wells decreased in average elevation by approximately 2.41 feet from the Second Quarter 2015 to the Third Quarter 2015. The direction of groundwater flow was generally north-northwesterly to northerly, which was consistent with previous monitoring results.

Groundwater Chemical Conditions Monitoring

In September 2015, only two (2) onsite wells (LW-MW-1S and LW-MW-5S) contained tetrachloroethene (PCE) at a concentration greater than 5.0 micrograms per liter (µg/L). Trichloroethene (TCE) was detected in one (1) onsite well (LW-MW-1S) at 3.1 µg/L. Cis-1,2-dichloroethene (cis-1,2-DCE) was reported as not detectable at, or above the laboratory Method Reporting Limit (MRL) in all eight (8) on-site groundwater monitoring wells.

Off-site monitoring well OS-1 was reported to contain 9.6 µg/L of dissolved-phase PCE.

Shallow Soil Vapor Monitoring

In September 2015, Volatile Organic Compounds (VOCs) concentrations in soil vapor increased significantly in select wells at the Site, possibly due to the temporary shutdown of the SVE/GASS system on-site.

Residual PCE Mass in Soil-Vapor

An estimate of residual PCE soil-vapor mass within the vadose zone, at the time of the September 2015 monitoring event, was calculated at 0.010 pounds (lbs.)

Residual PCE Mass in Groundwater

Using the most recent September 2015 data, there were only two (2) onsite wells containing PCE at a concentration of 5 µg/L, or greater. Residual dissolved-phase PCE mass (calculated using the area of impacted mass greater than 5 µg/l) was 0.025 lbs.

Discussion of Remediation Data

Based on laboratory-derived vapor influent concentrations and incremental running time, approximately 894.89 pounds (lbs.) of VOC mass have been removed via remediation system operations using the soil vapor extraction/groundwater air sparging system (SVE/GASS) through July 21, 2015. For the period of March 2, 2015 through July 21, 2015, mass removal rates continued to show a decreasing trend (0.069 lbs./day on January 16, 2015 to 0.003 lbs./day on July 21, 2015). Remediation operations stopped in mid-July 2015, as a result of damage to electrical components due to power supply fluctuations, and resumed on October 12, 2015 after the damaged system components were replaced.

Conclusions

Based on the monitoring data collected to date and site historical investigation data, the following conclusions can be made:

- Site groundwater level decreased by an average of 2.41 feet from the Second Quarter to the Third Quarter 2015;
- At the Third Quarter 2015 event, site groundwater flows in a north to northwesterly direction at average hydraulic gradients of 0.011 to 0.017 ft/ft;
- The Third Quarter 2015 groundwater monitoring data indicated a PCE concentration increase in well LW-MW-1 (16 µg/L to 150 µg/L);
- Residual dissolved-phase PCE mass in September 2015 is estimated at 0.025 lb.;
- During the mid-July to mid-October hiatus in remediation operations, concentrations of PCE and related compounds increased, such that in September 2015 there was approximately 0.010 lb. of residual soil vapor PCE mass;
- On July 21, 2015, the remediation system was found to be off due to a power outage. The remediation system was restarted on October 12, 2015 after damaged system components were replaced;

- The increase in VOC concentrations in groundwater and soil vapor are likely the result of the temporary loss of operation of the SVE/GASS; and
- The SVE/GASS remedial operation has been effective at reduction of lateral plume extent.

Recommendations

Based on the above conclusions, E_2C recommends the following:

- Continue SVE/GASS operations pending ongoing review field and laboratory influent data; and
- Perform the next quarterly monitoring of groundwater and soil vapor in December 2015.

Discussion of Future Activities

Activities in the Fourth Quarter 2015 will consist of groundwater and shallow soil-vapor monitoring in December 2015. Based on the data from Fourth Quarter 2015 monitoring, the data will be evaluated and further recommendations will be made, as warranted.

1.0 INTRODUCTION

On behalf of Seven Springs Limited Partnership and Fox Capital Management, E_2C Remediation (E_2C) is submitting this report documenting groundwater and soil vapor monitoring activities conducted through the Third Quarter 2015 and remedial activities conducted through July 21, 2015 at the Lake Tahoe Laundry Works (LTLW) facility located at 1024 Lake Tahoe Boulevard in South Lake Tahoe, California (Site). All work documented in this report was conducted in accordance with the Remedial Action Plan (RAP) and the Lahontan Regional Water Quality Control Board (LRWQCB) letters, dated November 1, 2013 and April 9, 2014, respectively.

1.1 Site Description

The Site is located approximately 9,000 feet south of Lake Tahoe in the City of South Lake Tahoe, El Dorado County (see Figure 1). The Site is situated in the northwest corner of the South Y Shopping Center, along Lake Tahoe Boulevard between U.S. Highway 50 and Tata Lane and is cross-corner from the dead-end intersection of Glorene Avenue with Lake Tahoe Boulevard (see Figure 2).

1.2 Previous Investigations

Based on a review of previous investigations, it appeared that shallow soils (vadose zone) beneath the Site and shallow groundwater beneath and immediately adjacent to the Site had been impacted by low to moderate concentrations of volatile organic compounds (VOCs), principally tetrachloroethene (PCE) and trichloroethene (TCE) (a.k.a. trichloroethylene). From October 2003 through November 2005, PES Environmental, Inc. (PES) conducted soil and shallow groundwater investigation work (PES, 2003, 2004, 2005 and PES 2006). In August and September 2008, E_2C conducted a site investigation to further evaluate vadose zone and groundwater conditions beneath and adjacent to the Site. The findings of the 2008 investigation were presented in the *Site Investigation Report of Findings* (E_2C, 2008).

In accordance with the CRWQCB-approved Interim Remedial Action Work Plan, an Interim Remedial Action system using Soil Vapor Extraction combined with Groundwater Air Sparging (SVE/GASS) was installed at the Site. On April 6, 2010 the SVE/GASS commenced operation with the start of the 60-day system pilot test. Operation of the SVE/GASS Pilot Test was documented in the report, *Interim Remedial System Installation/Pilot Testing Report of Findings and Draft Remedial Action Plan for Vadose Zone Soil and Shallow Groundwater Cleanup, Lake Tahoe Laundry Works, 1024 Lake Tahoe Boulevard, South Lake Tahoe, California*' (IRSI/PTROF/DRAP) (E_2C, 2010).

Pursuant to the approved *Interim Remedial Action Workplan for SZA Groundwater Investigation, SZA Groundwater Monitoring, Interim Remedial Action Vadose Zone Soil and Shallow Groundwater Cleanup* (IRAWP) (E_2C, 2009a) and Addendum to the IRAWP, the system was left operational pending review, approval, and implementation of the IRSI/PTROF/DRAP. On October 31, 2012, E_2C recommended that the SVE/GASS be shut-down and that 'pulsed' ozone sparging commence. That recommendation was approved by the CRWQCB by letter, dated December 3, 2012. On August 2, 2013, the CRWQCB approved the DRAP, formally placing the Site into the Remediation Phase.

In a directive from the CRWQCB, dated November 1, 2013, Investigative Order No. R6T-2013-0090 required that the SVE/GASS be re-started at the Site as PCE concentrations in groundwater increased to greater than 50 micrograms per liter (µg/L) from the First Quarter 2013 to the Second Quarter 2013. According to the DRAP approved by the CRWQCB on August 2, 2013, the operation of 'pulsed' ozone sparging was intended for polishing of low concentrations (less than 50 µg/L) of chlorinated hydrocarbons in groundwater. As PCE concentrations at the Site in the Second Quarter 2013 exceeded 50 µg/L, the SVE/GASS was re-started on November 5, 2013.

1.3 Interim Remedial System Operations

The SVE/GASS operated almost continuously since the end of the Pilot Test period to shut-down on November 30, 2012 (see Table 6 for system operational data). The Site was visited generally on a weekly basis to record system operating parameters and to measure volatile organic compound (VOC) concentrations in vapor influent, mid-fluent and effluent. Vapor samples were collected periodically for laboratory analyses. Extraction rates from the SVE wells were adjusted during each visit to improve removal of subsurface contaminants (see Table 7 for SVE well field configurations). Specific well-head configurations up to November 2012 were documented in the status report, dated March 11, 2013. The results of the vapor extraction wellhead focusing were effective, as indicated by continued reduction of dissolved-phase VOCs into the First Quarter 2013, well after shut-down of the remediation system on November 30, 2012 (see Graphs 2-13).

The SVE/GASS was shut-down due to system influent concentrations of ‘zero’ on November 30, 2012. In December 2012, after approval by the CRWQCB, E_2C mobilized an ozone sparging unit to the Site and began plumbing the unit to select AS wells. On December 20, 2012, E_2C collected water samples from LW-MW-1S and LW-MW-2S to evaluate baseline hexavalent chromium concentrations, which were reported as not detectable at, or above, the laboratory method reporting limit (MRL). On January 10, 2013, plumbing of the ozone system was completed and the system was started; however, based on initial operating observations, the system was found to need repairs (replacement of compressor seals) prior to commencing longer-term operations. On January 31, 2013, the repairs were made and the system was re-started.

Pulsed ozone sparging was conducted from January 31, 2013 through February 5, 2013. On May 9, 2013, an attempt was made to conduct the second phase of ‘pulsed’ ozone sparging; however, it was found that parts within the ozone unit had malfunctioned and required repairs. The unit was removed from the site and transported to a repair facility in San Luis Obispo. On August 6, 2013, the unit was re-mobilized to the site and re-started. On November 5, 2013, the ozone sparging system was shut down and removed from the Site as SVE/GASS operations were re-started.

In accordance with the approved ozone sparging Workplan, groundwater samples collected from wells LW-MW-1S, LW-MW-2S and LW-MW-5S were analyzed for hexavalent chromium during the quarterly monitoring events during which ozone sparging occurred. Groundwater samples were not analyzed for hexavalent chromium in the First Quarter 2014 as ozone sparging operations were discontinued on November 5, 2013.

1.4 SVE/GASS Restart

As directed by the CRWQCB, the SVE/GASS was re-started on November 5, 2013. The Permit to Operate (PTO) for the remedial system was renewed through the El Dorado County Air Quality Management District (EDCAQMD) on November 5, 2013, prior to system startup. In accordance with the November 1, 2013 directive from the CRWQCB, E_2C submitted a letter to the CRWQCB on November 12, 2013 confirming SVE/GASS startup at the Site. Investigative Order R6T-2013-0090 also requires that the CRWQCB be notified if operation of the SVE/GASS at the Site ceases for seven (7) days or more. Additionally, per the November 1, 2013 directive, another SVE/GASS will be mobilized to the Site and put into operation if the current system is unable to operate within a period of two (2) weeks. See Section 3.2 below for current system operation status.

Note: On July 21, 2015, a site visit for O&M was performed. The SVE/GASS was found off on arrival, apparently due to a power outage. The Technician unsuccessfully attempted to re-start the system. The CRWQCB was immediately notified via email communication. The CRWQCB responded stating that they were aware that power surges are common in the site area and they would wait to hear on when it could be expected for system re-start (email communication July 21, 2015).

After discussions with an electrician/technician sent to the site by Liberty Utilities, the recent remediation system shut-down was caused because the area had “dropped a leg” of power, which in turn damaged the system. In short, our site is supplied with power by a ‘leg’ of the area power supply. According to the power company, the ‘leg’ that supplied our site went down. After repairs, the power company re-energized the ‘leg’. When our technician attempted to restart our system, the power surge that had been generated during the re-energizing of the power company’s ‘leg’ severely damaged the step-down transformer, the main breaker along with the fuses, the blower motor and the blower motor starter (the “dropped leg” cause of the damaged motor was confirmed by the repair company in Auburn to whom we took the motor).

This is the third time that there has been severe damage to the remediation equipment following re-energizing by the power company. Each previous repair consisted of extensive re-wiring and re-fusing along with installation of a new blower motor (the existing motor was too damaged to repair). This recent event will also require installation of a new step-down transformer.

The remediation system was restarted on October 12, 2015 after the damaged system components (vacuum pump and motor) were replaced.

2.0 THIRD QUARTER 2015 GROUNDWATER MONITORING

Soil vapor and groundwater monitoring for the Third Quarter 2015 monitoring event consisted of collection of shallow soil vapor samples from VP wells, measuring depths to groundwater in accessible groundwater monitoring wells, and collecting groundwater samples for chemical analysis from the accessible monitoring wells.

2.1 Groundwater Elevation Monitoring

On September 11, 2015, depths to groundwater were measured at all on-site monitoring wells, as well as the off-site monitoring well OS-1. During this monitoring event, depths to water were measured from a mark located at the top of each well casing (generally the north side) using a Solinst water level meter and were recorded to the nearest 0.01 foot (see Appendix A for field data sheets). Depths to groundwater from the site wells were used to calculate the groundwater elevation at each well (see Table 1). Groundwater elevation data were used to prepare a Third Quarter 2015 groundwater gradient plot.

2.1.1 On-Site Groundwater Gradient

On September 11, 2015, depths to water ranged from 13.91 feet below top of casing (BTOC) (LW-MW-5S) to 17.91 feet BTOC (LW-MW-2S) (see Table 1 for a summary of depth to groundwater data and Table 2 for summary of historical depth to groundwater data). Groundwater elevations decreased by an average of 2.41 feet in the on-site wells from June to September 2015 (see Table 2 and Graph 1). Depth to groundwater data were used to calculate the shallow groundwater zone (SZA) elevations across the Site (see Figure 3). Based on the groundwater elevations from the eight (8) on-site wells (LW-MW-1S, LW-MW-2S, LW-MW-5S, LW-MW-9S, LW-MW-10SR, LW-MW-11S, LW-MW-12S and LW-MW-13S), the direction of flow was generally north, north-northwesterly to north-northeasterly at average gradients of 0.011 to 0.017 feet of elevation drop per foot of horizontal distance (ft./ft.).

2.2 Groundwater Sampling

Groundwater purging and sampling were conducted using a low-flow purging and sampling method, except at OS-1, which was purged and sampled using the hand-bailing method. In the low-flow method, groundwater was extracted from the well at a very low rate, approximately 200 to 250 milliliters per minute (mL/min), and drawdown of the water table was stabilized. Water was recovered from the more hydro-geologically conductive areas of the water-bearing zone around the well screen, and monitored with water quality sensors for stability to determine chemical change from well water to formation water. Once stabilization occurred, a sample was collected with the assurance of representative formation water and the least amount of geochemical disruption to the sample.

During purging, groundwater parameters of temperature, pH, and conductivity were measured as water was purged from a well. Once the parameters stabilized, groundwater in the monitoring well casing was considered representative of formation groundwater and a sample was collected (see Appendix A for copies of field data sheets).

After purging, the low-flow method was also used to fill sample containers, except at OS-1 where a clean disposable bailer was used. Samples were collected into laboratory supplied glassware consisting of three (3) 40-milliliter volatile organic analysis (VOA) vials. Each VOA was sealed using a septum screw cap. Care was taken so that no headspace or bubbles were present in the VOA vials. All samples were labeled and documented on a Chain-of-Custody record immediately after sealing and placed into a cooler with ice for transport to the analytical laboratory.

2.2.1 Chemical Analysis of Groundwater Samples

Groundwater samples were analyzed at ProVera Analytical Laboratories, Inc. of Roseville, California (State DHS ELAP-Certification #2606) (ProVera) for the following constituents of concern (COCs) by the appropriate EPA Method (see Appendix B for a copy of the analytical laboratory report):

- Volatile Organic Compounds (VOCs), including PCE, TCE and associated PCE and TCE degradation products, using EPA Method 8260b; and
- The Method Reporting Limit (MRL) for all VOCs in all samples was 0.50 µg/L, except for tertiary-butyl alcohol with an MRL of 5 µg/L.

2.2.2 Summary of Groundwater Analytical Results

The reported results are summarized as follows (see Table 1 for summary of current data and Table 3 for summary of historical data):

Site Wells

- PCE was reported at all but one (1) well (LW-MW-10SR) at concentrations ranging from 0.54 µg/L (LW-MW-9S) to 150 µg/L (LW-MW-1S) (see Figure 4);
- TCE was reported in one (1) well (LW-MW-1S) at 3.1 µg/L (see Figure 5);
- Cis-1,2-DCE was reported as non-detect at all wells (see Figure 6);
- Chloroform was reported at two (2) wells at concentrations of 2.0 µg/L (LW-MW-11S) and 0.68 µg/L (LW-MW-13S);
- Methylene chloride was reported at all but two (2) wells (LW-MW-5S and LW-MW-9S) at concentrations ranging from 0.76 µg/L (LW-MW-10S, LW-MW-11S, and LW-MW-13S) to 0.90 µg/L (LW-MW-1S); and
- Other VOCs were reported as non-detect at all wells.

Off-Site Well OS-1

- PCE was reported at a concentration of 9.6 µg/L in the groundwater sample collected from well OS-1; and
- All other VOCs were reported as non-detect.

2.2.3 Quality Control Samples

The duplicate sample from LW-MW-12S was reported to contain concentrations of VOCs that were identical (e.g., not detected) or similar to the primary sample from that well. The laboratory control samples all had recoveries within acceptable ranges. These results indicate that the analytical data are usable and are of adequate quality and reproducibility to satisfy data validity requirements.

2.2.4 Electronic Submittal of Data to GeoTracker Database

Groundwater monitoring data (elevation and laboratory) will be uploaded to the State GeoTracker database. A copy of this report will also be uploaded (see Appendix C for copies of recent upload confirmation reports). Any GeoTracker upload not documented in this status report will be documented in the next status report.

2.3 Shallow Soil-Vapor Sampling

Shallow soil-vapor samples were collected in accordance with soil-gas monitoring procedures outlined in Appendix E of the IRAWP (copy included as Appendix E). All VP wells were accessible for vapor sampling during this sampling event.

2.3.1 Summary of Shallow Soil-Vapor Data

Analytical data for shallow soil vapor samples are summarized below and are presented with historical data in Tables 4A and 4B (see Appendix F for a copy of the soil vapor laboratory report):

- PCE was reported at ten (10) of the ten (10) VP wells at concentrations ranging from 1.5 parts per billion by volume (ppbV) (10.2 micrograms per cubic meter [$\mu g/m^3$]) at VP-7 to 2,000 ppbV (13,560 $\mu g/m^3$) at VP-2 (see Figure 7A and 7B);
- TCE was reported at seven (7) of the ten (10) VP wells concentrations ranging from 0.37 ppbV (2.0 $\mu g/m^3$) at VP-9 to 93 ppbV (499 $\mu g/m^3$) at VP-2) (see Table 4A);
- Cis-1,2-DCE was reported at two (2) VP wells (VP-2 and VP-5) at concentrations of 20 ppbV (79 $\mu g/m^3$) and 120 ppbV (475 $\mu g/m^3$), respectively (see Table 4A); and
- VP-5 contained 22 ppbV trans-1,2 Dichloroethene and VP-8 contained 11 ppbV acetone (see Table 6B). No other VOCs were detected at any monitoring location (see Tables 4A and 4B).

Note: PCE is analyzed by GC/ MS running in the selected ion monitoring (SIM) mode when PCE concentrations are very low. Using this method reliably achieves a conservative method reporting limit (MRL) for tetrachloroethene (PCE) of 0.10 parts per billion/volume (ppb/V) = 0.678 micrograms per cubic meter ($\mu g/m^3$) or lower depending on the need.

2.4 Discussion of Monitoring Data

Groundwater Elevation Monitoring

Based on the September 11, 2015, groundwater elevation data in the on-site monitoring wells, groundwater levels decreased on average by approximately 2.41-feet from June 2015 to September 2015 (see Graph 1). The direction of flow was generally north, north-northwesterly to north-northeasterly. The interpreted general flow directions and approximate gradients were similar to those interpreted in previous quarters.

Groundwater Chemical Conditions Monitoring

The highest reported PCE concentration in site groundwater (dissolved-phase) this quarter was at LW-MW-1S at a concentration of 150 µg/L. A PCE concentration of 6.3 µg/L was reported at well LW-MW-5S. PCE concentrations at all other on-site wells were either non-detect or below 5 µg/L.

A dissolved-phase PCE concentration of 9.6 µg/L was reported at OS-1. The PCE concentration fluctuations at OS-1 appear to be independent of fluctuations observed in groundwater at the on-site monitoring wells.

Shallow Soil Vapor Monitoring

VOC concentrations at the shallow soil vapor wells increased from June 2015 to September 2015. VOC concentration increase is likely the result of the mid-July to mid-October 2015 hiatus in Site remediation operations, in conjunction with very low groundwater levels and corresponding increase in vadose zone soil thickness.

3.0 CURRENT SITE REMEDIATION STATUS

Prior to November 1, 2013, site cleanup was conducted under the Interim Remedial Action Plan (IRAP). On November 1, 2013, the Remedial Action Plan (RAP) was approved by the CRWQCB. Since that date, site cleanup has been conducted in accordance with the approved RAP.

3.1 SVE/GASS Cyclic Operations

As PCE concentrations were less than 10 µg/L in all groundwater samples in the First Quarter 2014, E_2C proposed to the CRWQCB on March 17, 2014 that cyclical SVE/GASS operating periods commence. Ms. Lisa Dernbach of the CRWQCB approved the proposal via electronic message on April 7, 2014. The SVE/GASS was shut off on April 10, 2014 to begin the approved cycling plan (2 weeks off/2 weeks on). On April 25, 2014, the SVE/GASS was re-started and cycling commenced. In August 2014, cycling was suspended and full-time, operation commenced.

3.1.1 SVE/GASS Cycling Influent Concentrations

During the cycling period, system influent vapor concentrations, as measured in the field with a PID, ranged from 0.0 parts per million by volume (ppmV) to 5.0 ppmV. Laboratory-derived PCE concentrations in influent vapor samples collected in April, May and June 2014 were low, 1.0 ppmV, or less and in August 2014 was 3.5 ppmV (see Table 8).

3.2 Current SVE/GASS Operations

With the exception of downtime for maintenance and repairs, and several power outages at the Site which caused the system to remain off until re-start during the next weekly O&M visit, the SVE/GASS operated continuously from November 5, 2013 through April 10, 2014. For the period after April 10, 2014, the system continued to experience shut-down problems after numerous restarts and repairs to the piping system. Finally, it was determined that back-pressure from the carbon units on the extraction unit was causing overheating of the piping, resulting in failure of pipe integrity. This resulted in automatic shut-down of the system to prevent damage to the unit. The back-pressure was the result of a build-up of carbon fines due to break-down of the carbon granules. These fines restricted flow through the carbon vessels. This restriction caused pressure to build and heat to be generated. As a result, E_2C commenced an evaluation to assess corrective measures, including replacement of equipment and/or piping. The evaluation found that influent concentrations to the carbon were too low for effective carbon use. Additionally, the evaluation determined that the influent had never exceeded concentrations that would cause exception to the

EDCAQMD PTO Item 14 condition of not exceeding “9.9 lbs./day” of VOC emissions to the atmosphere. Additionally, data indicated that influent concentrations since June 14, 2011 would have yielded less than 1 lb./day of total VOC emissions into the atmosphere had the carbon units been taken off line. Therefore, the EDCAQMD was contacted and a Request for Permitting Exemption, dated July 24, 2014, was prepared to bypass the carbon units and allow emission directly to the atmosphere. On July 30, 2014, the EDCAQMD approved the Request. On August 4, 2014, the system was restarted in full-time operation mode.

As the PCE concentration at LW-MW-1S increased more than an order of magnitude from the First to Second Quarters 2014, E_2C personnel visited the site to re-start the remedial system for full-time operation. On August 4, 2014, the carbon units were removed and the system was restarted with emission of extracted vapors directly to the atmosphere. With re-plumbing of the system to discharge directly to the atmosphere, there is now only one vapor sampling port, the influent port. The vapor sample collected from the system for laboratory analysis indicated the maximum discharge to atmosphere was approximately 0.722 lbs./day (PCE = 3.5 parts per million by volume (ppmV), TCE = 0.095 ppmV, cis-1, 2-DCE = 0.028 ppmV and other VOCs = 0.017 ppmV) (the field measurement was zero). This result was well below the 2.0 lbs./day limit requiring a Permit to Operate (PTO). Field measurements since August 2014 continue to indicate an emission rate below the 2.0 lbs. /day limit. Laboratory analyses of vapor influent samples collected in the Third Quarter 2015 also indicated emission rates well below the 2 lbs. /day limit. The average removal rate, which equals emissions to atmosphere, from the beginning of March 2015 through the middle of July 2015 was 0.023 lb./day.

On July 21, 2015, the system was found to be off due to a power outage. The CRWQCB was immediately notified via email communication. The remediation system was restarted on October 12, 2015 after damaged system components were replaced.

Please note that the carbon vessels remain at the Site. Should emissions exceed 2.0 lbs. /day the EDCAQMD will be contacted, the system will be shut down and a new PTO will be issued for operations through carbon.

3.3 VOC Mass Removal

Laboratory analytical data were used to estimate the VOC mass removed during SVE/GASS operations (see Table 6). Mass removal calculations were performed for PCE, TCE and cis-1, 2-DCE individually. Low concentrations of fuel hydrocarbon compounds and other VOCs have also been reported sporadically in influent vapor samples. These compounds have been included in the ‘Total VOC’ category for mass removal calculation purposes.

Based on laboratory-derived vapor influent concentrations and incremental running time, approximately 894.89 lbs. of VOC mass were removed during SVE/GASS operations from system startup (April 8, 2010) through July 21, 2015 (see Table 6).

On July 21, 2015, the system was found to be off due to a power outage. The remediation system was restarted on October 12, 2015 after damaged system components were replaced. For the period of July 6, 2015 through July 21, 2015, the VOC removal rate was approximately 0.005 lb./day.

4.0 ESTIMATE OF RESIDUAL PCE MASS IN SOILS AND GROUNDWATER

In its August 2, 2013 letter, CRWQCB directed that PCE mass remaining in soil and the aquifer be calculated based on known conditions in each status report, which are to be submitted quarterly. The following section discusses difficulties associated with an estimation of residual PCE mass in vadose zone soil.

4.1 Estimate of Residual PCE Mass in Vadose Zone

In order to estimate residual PCE mass in vadose zone soils, analytical data from soil samples collected from confirmation borings would be needed. Although this is possible, it is not cost-effective to advance borings every quarter to collect soil samples for laboratory analyses.

It is possible to estimate residual PCE soil vapor mass in the vadose zone using shallow-soil vapor analytical data, which is collected quarterly, except during times when VP wells are not accessible due to snow and ice in wells or obstructions (see Table 4A). Although the soil vapor data can be used to estimate residual PCE in soil, some assumptions need to be applied to provide a conservative estimate as follows:

1) The soil vapor data represents residual PCE concentrations contained within the pore space of the shallow subsurface soils, the porosity of which is conservatively estimated to be 30%; and
2) Although the VP wells are set at 5 feet in depth, the resultant data is assumed to represent the thickness of the vadose zone; in this case, approximately 10 feet on average.

Based on these assumptions, and using the most recent soil vapor data collected on September 11, 2015 (see Table 4A), the estimated residual PCE mass in vadose zone vapor is 0.010 lb. (see Table 9A).

4.2 Estimate of Residual PCE Mass in Groundwater

The following assumptions have been made to estimate residual PCE mass in groundwater:

1) For the Third Quarter 2015, there were only two (2) monitoring wells with a detection of PCE significantly above 5 μg/L (LW-MW-1S at 150 μg/L and LW-MW-5S at 6.3 μg/L). This equates to a plume area of approximately 1,743 sf around LW-MW-1S and an area of approximately 62.5 sf around LW-MW-5S (see Figure 4A); see Table 10B for calculations and Table 10A for trend of PCE groundwater plume size);
2) The saturated zone soil porosity is approximately 30%; and
3) The impacted thickness within the saturated zone is approximately 10 feet on average.

Based on these assumptions, an estimate of residual PCE groundwater mass can be made. Using the most recent September 2015 data, the estimated PCE mass in groundwater at concentrations equal to, or greater than 5 μg/L is 0.025 lb. (see Table 10A and 10B).

5.0 CONCLUSIONS

Based on the monitoring data collected to date and site historical investigation data, the following conclusions can be made:

- Site groundwater level decreased by an average of 2.41 feet from the Second Quarter to the Third Quarter 2015;
- At the Third Quarter 2015 event, site groundwater flows in a north to northwesterly direction at average hydraulic gradients of 0.011 to 0.017 ft/ft;
- The Third Quarter 2015 groundwater monitoring data indicated a PCE concentration increase in well LW-MW-1 (16 µg/L to 150 µg/L);
- Residual dissolved-phase PCE mass in September 2015 is estimated at 0.025 lb.;
- During the mid-July to mid-October hiatus in remediation operations, concentrations of PCE and related compounds increased, such that in September 2015 there was approximately 0.010 lb. of residual soil vapor PCE mass;
- On July 21, 2015, the remediation system was found to be off due to a power outage. The remediation system was restarted on October 12, 2015 after damaged system components were replaced;
- The increase in VOC concentrations in groundwater and soil vapor are likely the result of the temporary loss of operation of the SVE/GASS; and
- The SVE/GASS remedial operation has been effective at reduction of lateral plume extent.

6.0 RECOMMENDATIONS

Based on the above conclusions, E_2C recommends the following:

- Continue SVE/GASS operations pending ongoing review field and laboratory influent data; and
- Perform the next quarterly monitoring of groundwater and soil vapor in December 2015.

7.0 FUTURE ACTIVITIES

Activities in the Fourth Quarter 2015 will consist of groundwater and shallow soil-vapor monitoring in December 2015. Based on the data from Fourth Quarter 2015 monitoring, the data will be evaluated and further recommendations will be made, as warranted.

8.0 LIMITATIONS AND CERTIFICATION

E$_2$C has performed this investigation in accordance with generally accepted standards of care existing in California at this time. It should be recognized that definition and evaluation of geologic conditions is a difficult and inexact science. Judgments leading to conclusions and recommendations are generally made with limited knowledge of subsurface conditions present. No warranty expressed or implied is made.

This Report has been prepared under the professional supervision of the registered professionals whose seals and signatures appear herein. The proposed site monitoring and remediation tasks in this Report are based solely on the Scope of Services outlined and the sources of information referenced in this report. Any additional information that becomes available concerning the Site should be submitted to E$_2$C so that our conclusions may be reviewed and modified, if necessary. This Report was prepared for the sole use of Seven Springs Limited Partnership, Fox Capital Management, and/or their agent(s), the LRWQCB and the CEDEMD.

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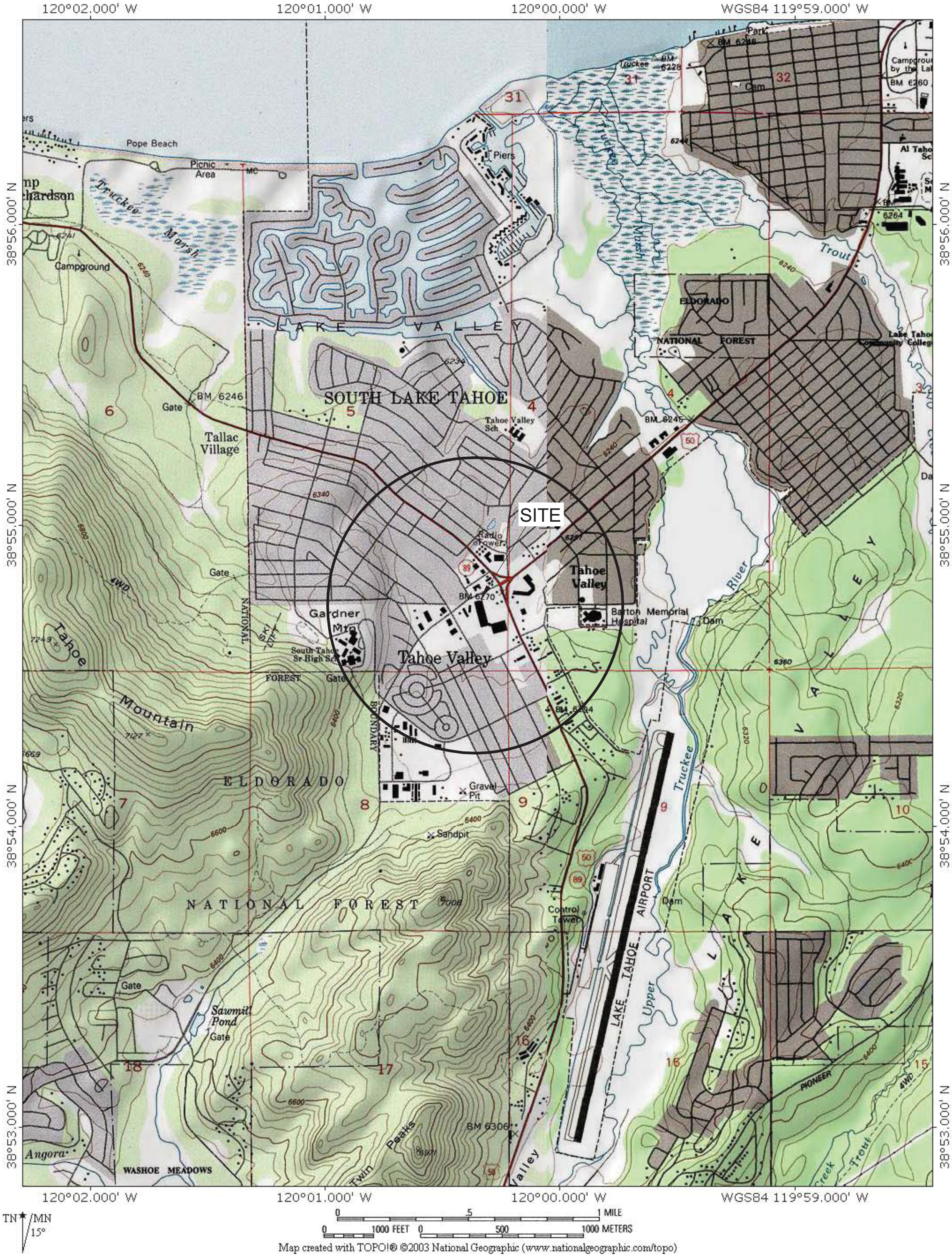
FIGURES

TOPO! map printed on 04/24/08 from "Untitled.tpo"



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LAKE TAHOE LAUNDRY WORKS
1024 LAKE TAHOE BOULEVARD
SOUTH LAKE TAHOE, CALIFORNIA

SITE LOCATION MAP

FIGURE

1

LEGEND

⊠ Approximate Location of Groundwater Monitoring Well

LW-MW-1S

N

NOT TO SCALE

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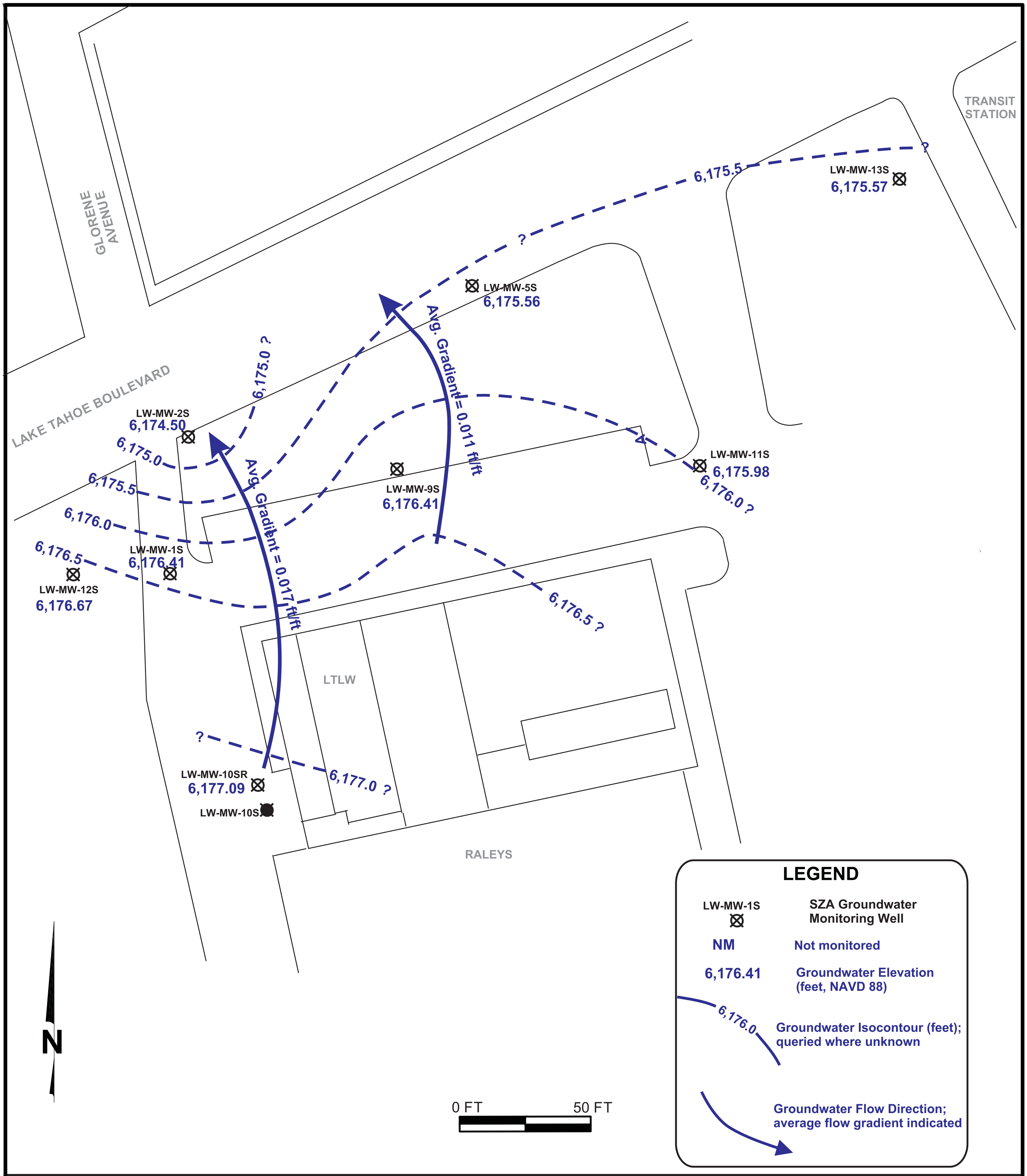
SITE PLAN

FIGURE

2



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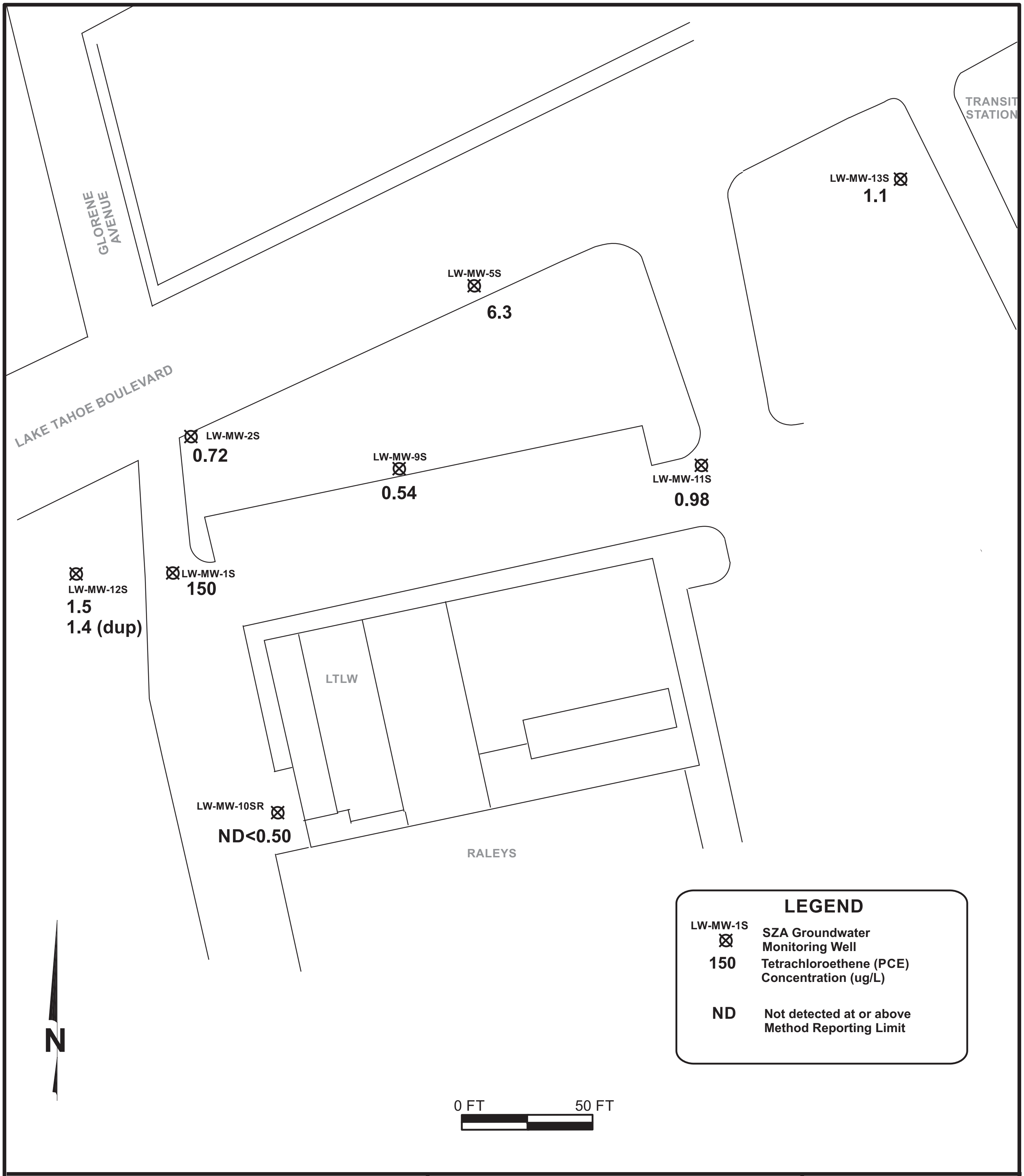
THIRD QUARTER 2015
GROUNDWATER GRADIENT PLOT

FIGURE

3



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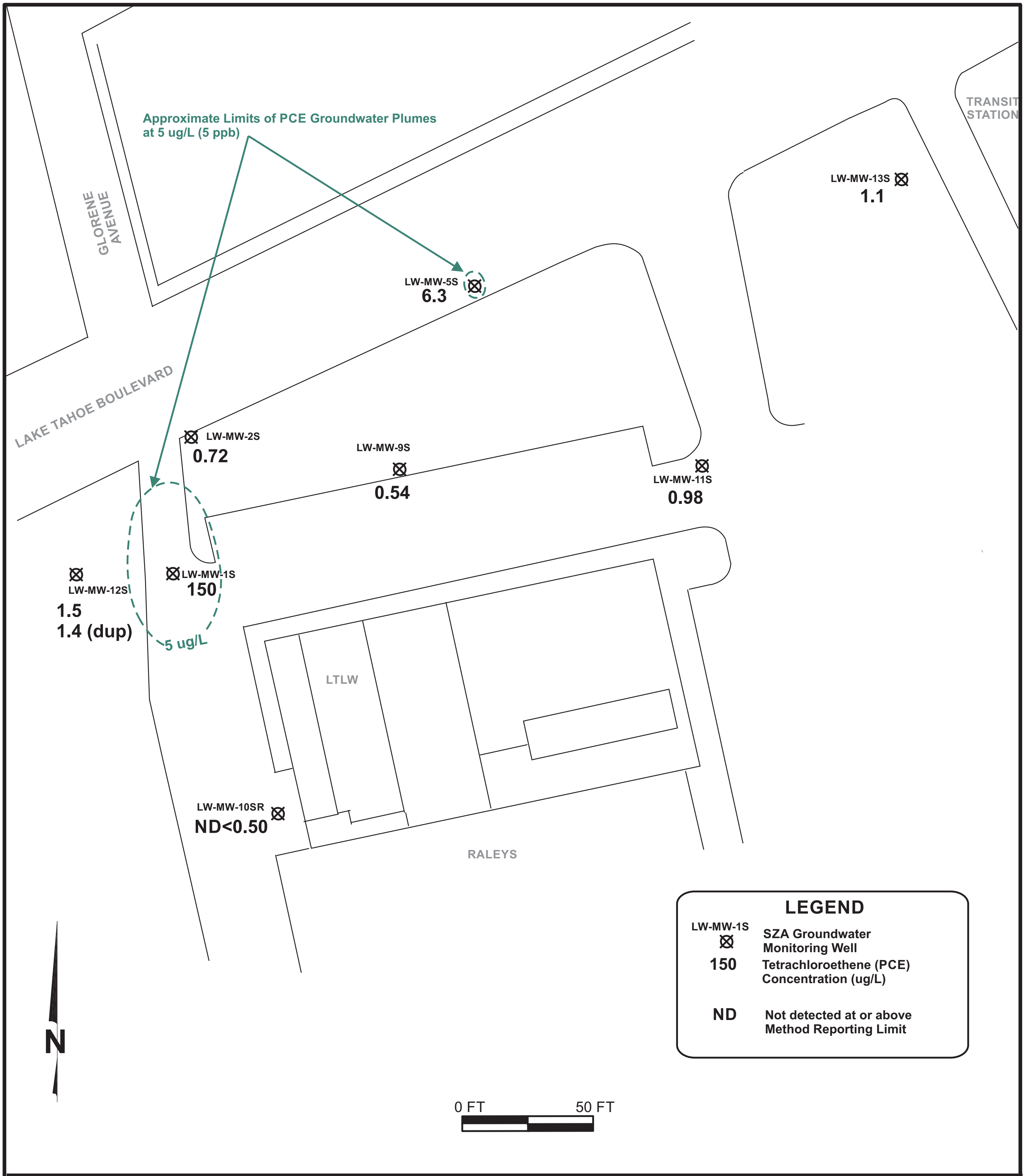
THIRD QUARTER 2015
DISSOLVED-PHASE
PCE DISTRIBUTION PLOT

FIGURE

4



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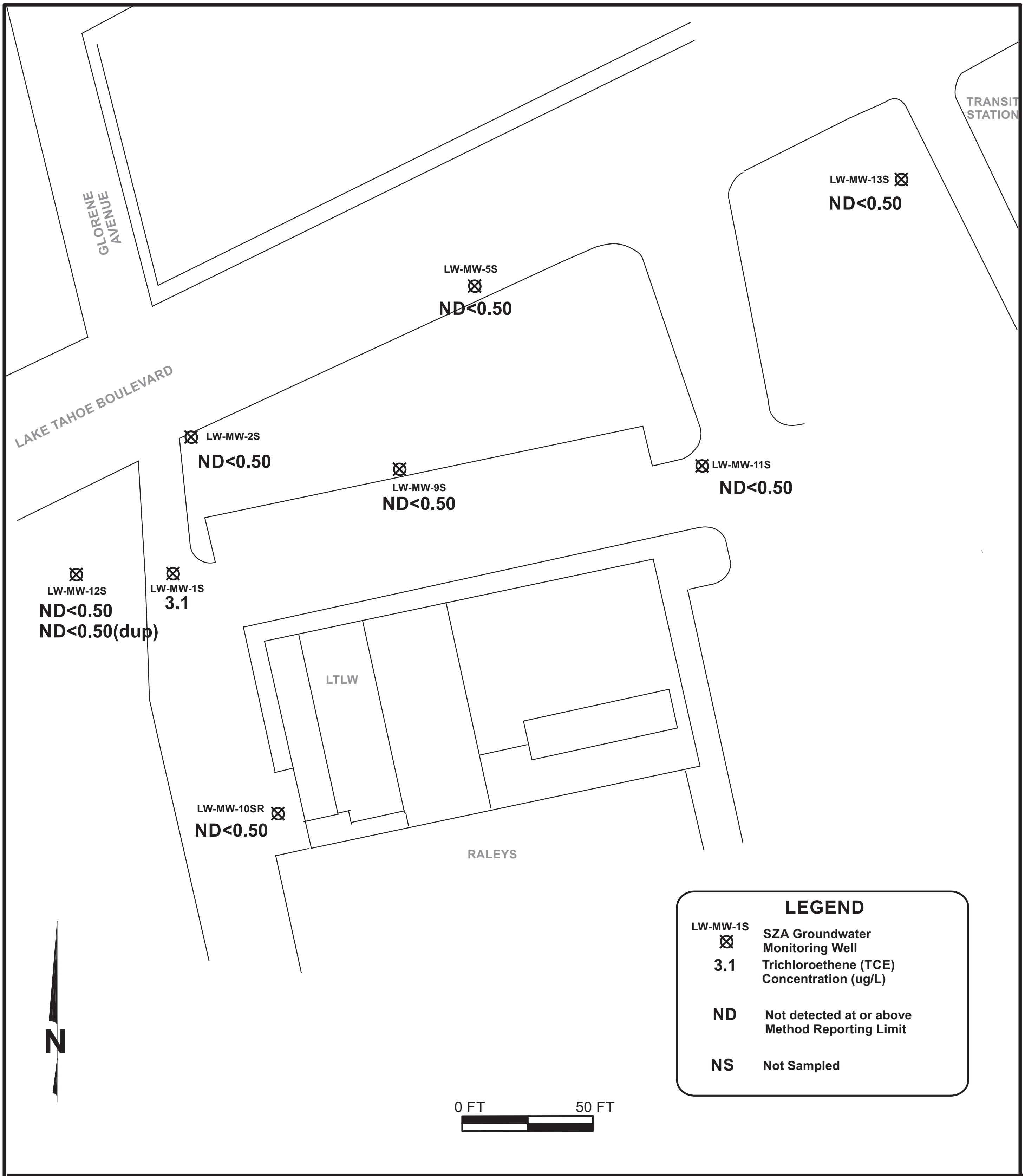
THIRD QUARTER 2015
DISSOLVED-PHASE
PCE 5 ug/L BOUNDARY PLOT

FIGURE

4A



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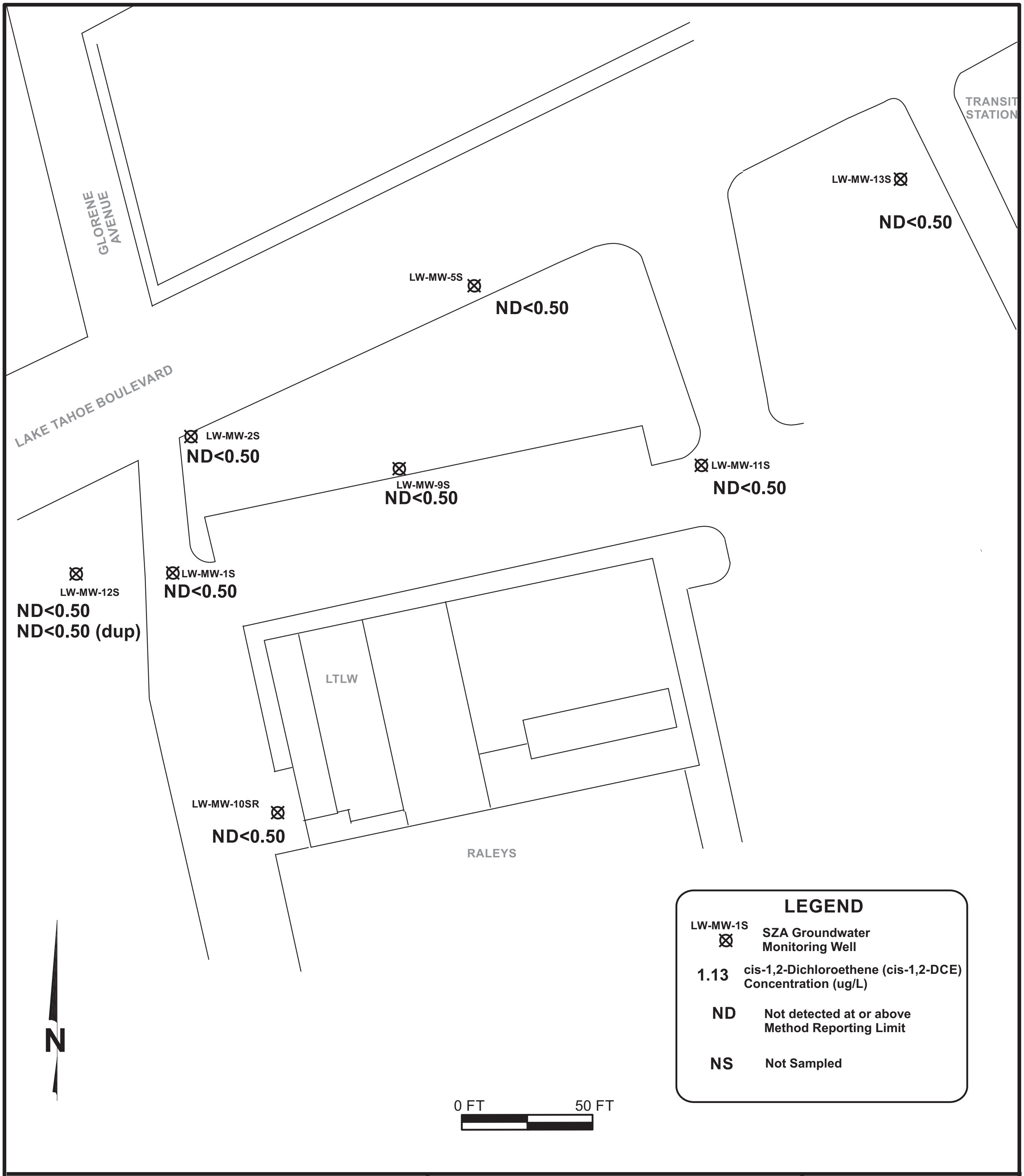
THIRD QUARTER 2015
DISSOLVED-PHASE
TCE DISTRIBUTION PLOT

FIGURE

5



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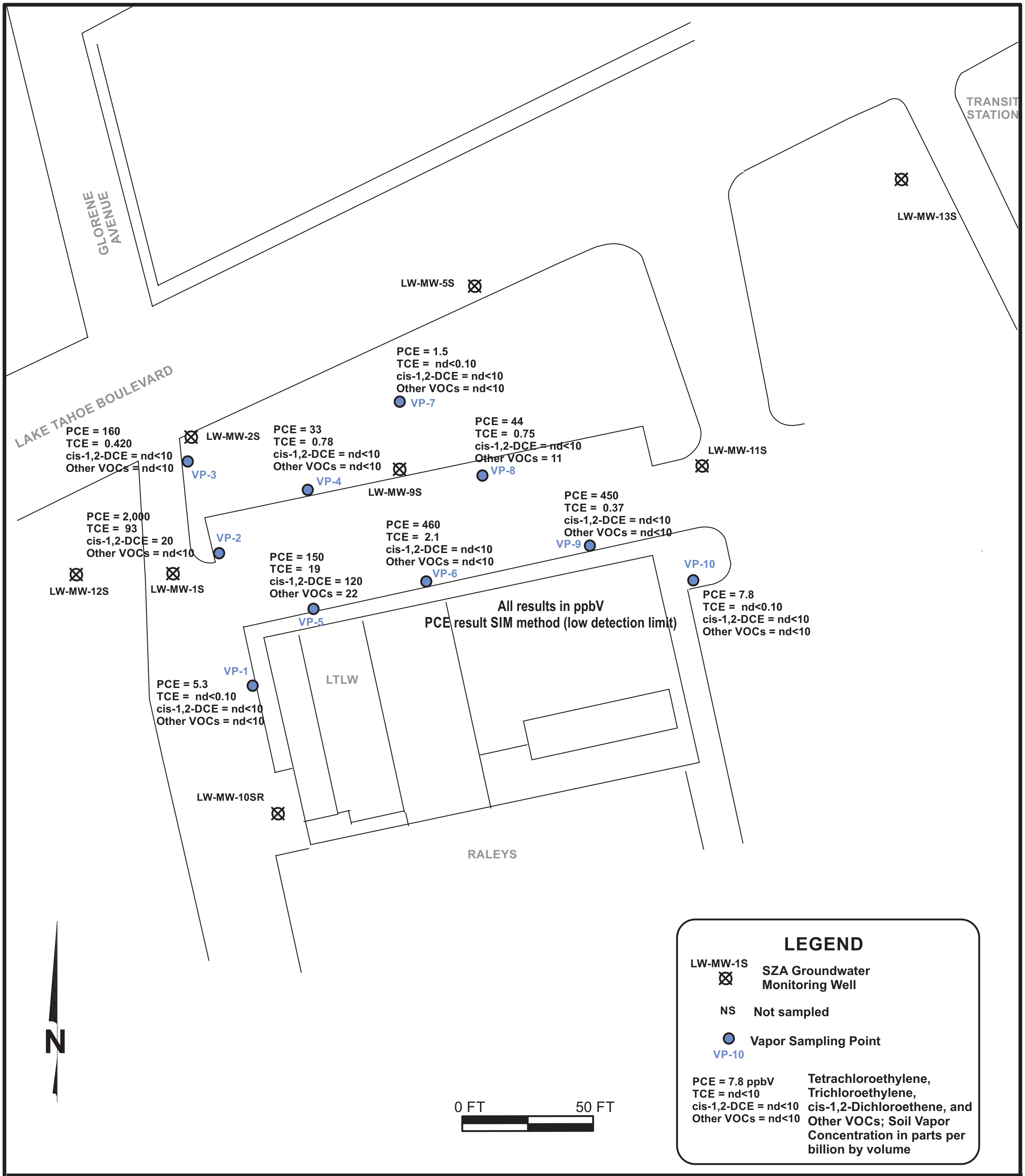
THIRD QUARTER 2015
DISSOLVED-PHASE
cis-1,2-DCE DISTRIBUTION PLOT

FIGURE

6



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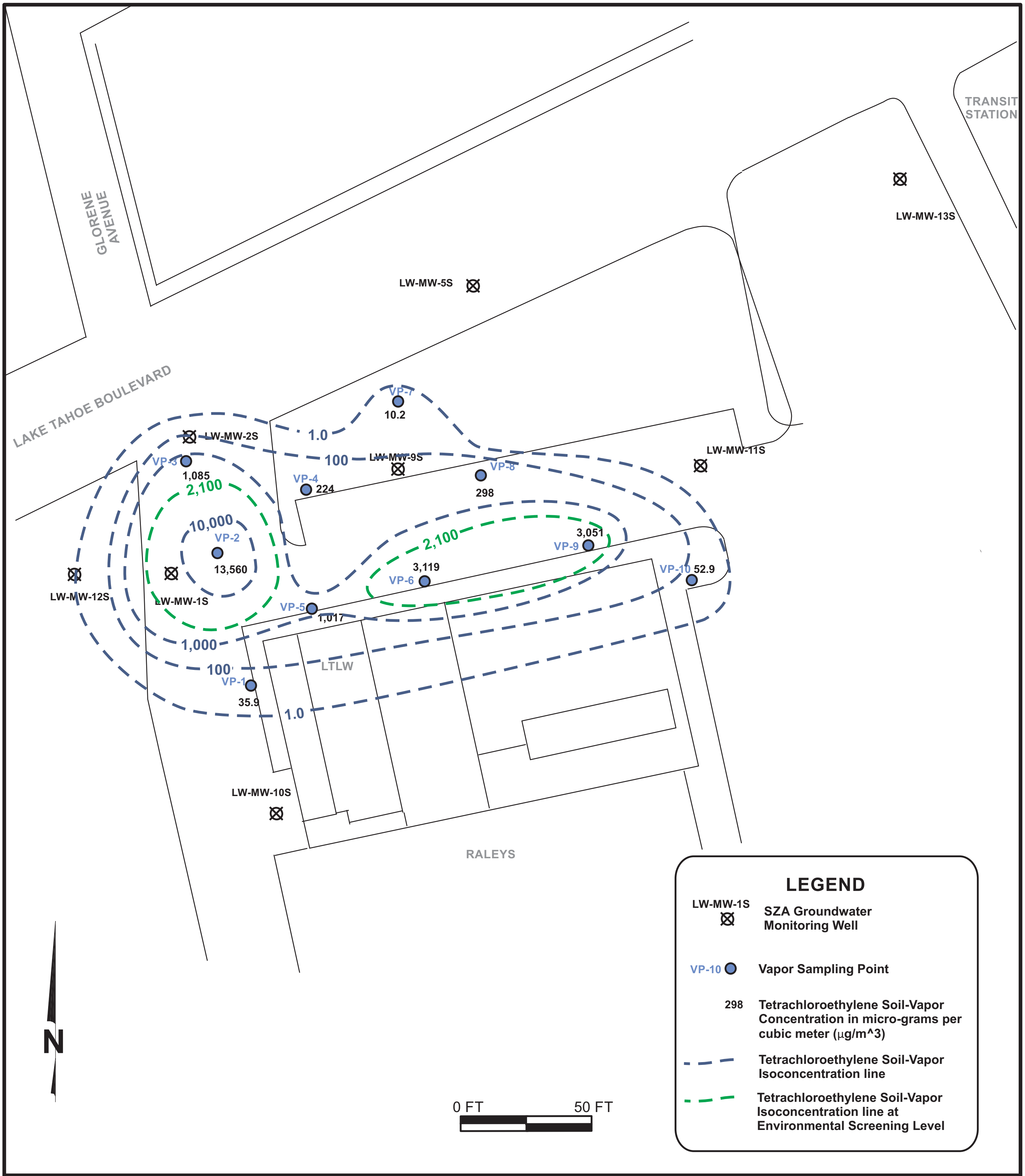
THIRD QUARTER 2015
SHALLOW SOIL VAPOR
DISTRIBUTION PLOT

FIGURE
7A



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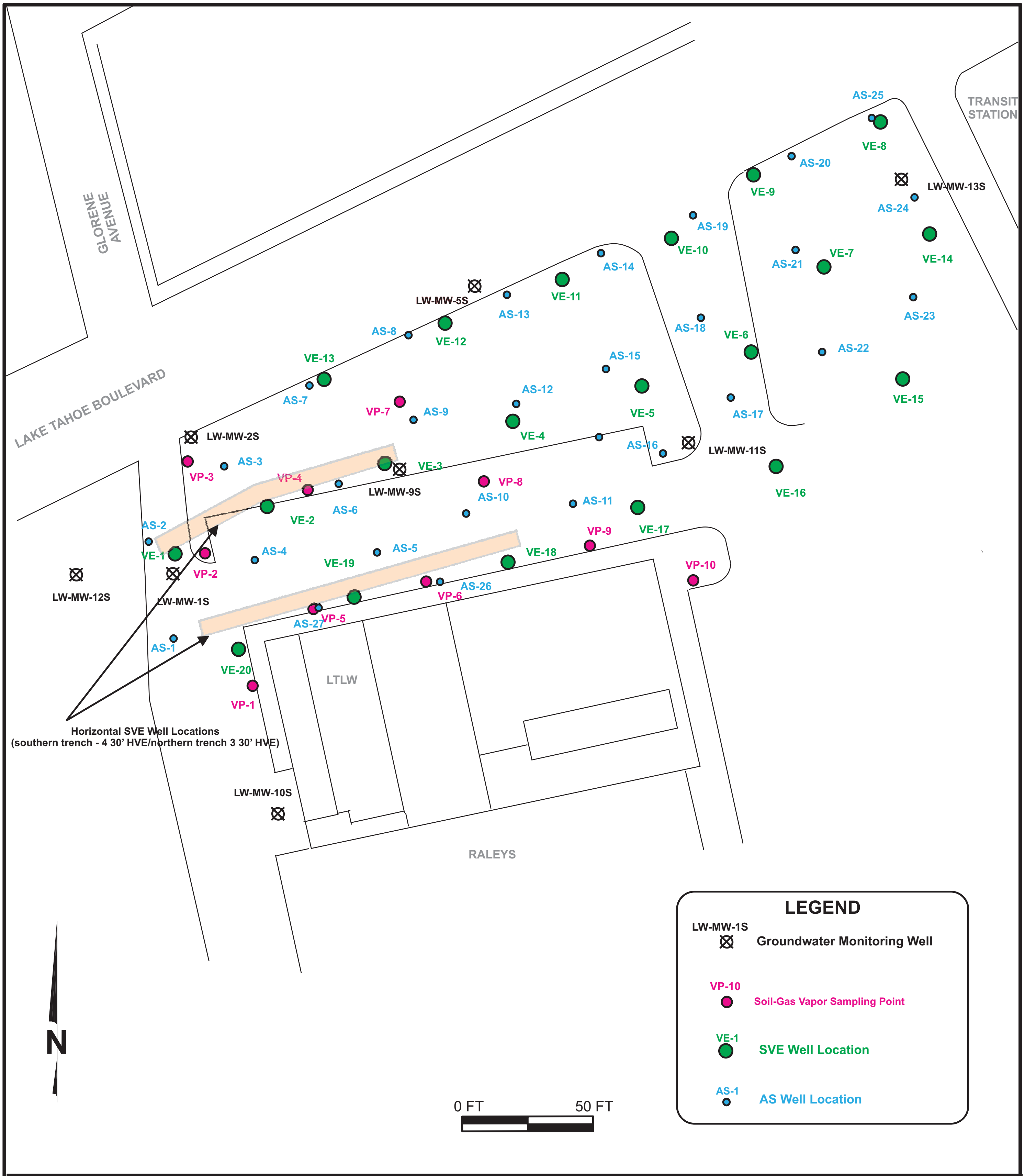
THIRD QUARTER 2015
SHALLOW SOIL VAPOR PCE
DISTRIBUTION PLOT

FIGURE

7B



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REMEDIATION WELL LOCATION PLOT

FIGURE 8

TABLES

TABLE 1
SUMMARY OF THIRD QUARTER 2015 GROUNDWATER MONITORING DATA
Lake Tahoe Laundry Works
1024 Lake Tahoe Boulevard
South Lake Tahoe, California
September 11, 2015

Well ID	TOC Elev. (feet rel MSL)	Depth to GW (feet BTOC)	GW Elevation (feet MSL)	PCE	TCE	VC	CA	CB	1,1-DCE	MC	Trans-1,2-DCE	1,1-DCA	cis-1,2-DCE	1,2-DCA	1,1,1,2-Tetra	1,1,1-TCA	CF	BDCM	B	EB	MtBE
				(µg/L)																	
LW-MW-1S	6,191.41	15.00	6,176.41	**150**	**3.1**	nd<0.50	nd<0.50	nd<0.50	nd<0.50	**0.90**	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50
LW-MW-2S	6,192.41	17.91	6,174.50	**0.72**	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	**0.79**	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50
LW-MW-5S	6,189.47	13.91	6,175.56	**6.3**	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50
LW-MW-9S	6,192.98	16.57	6,176.41	**0.54**	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50
LW-MW-10SR	6,191.91	14.82	6,177.09	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	**0.76**	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50
LW-MW-11S	6,191.67	15.69	6,175.98	**0.98**	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	**0.76**	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	**2.0**	nd<0.50	nd<0.50	nd<0.50	nd<0.50
LW-MW-12S	6,190.71	14.04	6,176.67	**1.5**	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50
duplicate				**1.4**	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	**0.82**	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50
LW-MW-13S	6,190.82	15.25	6,175.57	**1.1**	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	**0.76**	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	**0.68**	nd<0.50	nd<0.50	nd<0.50	nd<0.50
OS-1	6,188.12	15.30	6,172.82	**9.6**	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50

Notes:

Results in micrograms per liter (µg/L) (equivalent to parts per billion, ppb)

1,1-DCA = 1,1,-Dichloroethane
1,1-DCE = 1,2-Dichloroethene
1,1,1-TCA = 1,1,1-Trichlorethane
1,1,1,2-Tetra = 1,1,1,2-Tetrachloroethane
B = Benzene
BDCM - Bromodichloromethane
BTOC = Below Top of Casing
CA = Chloroethane
CB = Chlorobenzene
CF = Chloroform
cis-1,2-DCE = cis-1,2-Dichloroethene
EB = Ethlybenzene
MC = Methylene Chloride
MtBE = Methyl tertiary-butyl ether
nd< = Not detected at or above the Method Detection Limit, which is indicated by the value
nm = Not monitored
PCE = Tetrachloroethene (a.k.a. perchloroethene)
TCE = Trichloroethene
trans-1,2-DCE = trans-1,2-Dichloroethene
VC = Vinyl Chloride

LW-MW-14 is the duplicate of LW-MW-12S on Chain-of-Custody

TABLE 2
SUMMARY OF HISTORICAL GROUNDWATER ELEVATION DATA
Lake Tahoe Laundry Works
1024 Lake Tahoe Boulevard
South Lake Tahoe, California

Well ID	Date	Reference Elevation (feet MSL)	Total Well Depth (feet BTOC)	Depth to Groundwater (feet BTOC)	Groundwater Elevation (feet MSL)	GW Elevation Change (feet)
LW-MW-1S	08/13/08	6,191.41	---	13.69	6,177.72	---
	12/04/09		23.91	15.09	6,176.32	-1.40
	03/23/10		23.90	13.99	6,177.42	1.10
	06/15/10		23.90	11.16	6,180.25	2.83
	09/08/10		23.90	12.73	6,178.68	-1.57
	12/16/10		23.90	12.49	6,178.92	0.24
	05/11/11		23.90	5.08	6,186.33	7.41
	09/29/11		23.90	10.71	6,180.70	-5.63
	12/09/11		23.90	10.16	6,181.25	0.55
	03/29/12		23.90	9.03	6,182.38	1.13
	06/08/12		23.90	10.75	6,180.66	-1.72
	08/21/12		23.90	12.19	6,179.22	-1.44
	11/19/12		23.90	13.66	6,177.75	-1.47
	03/11/13		23.90	10.18	6,181.23	3.48
	07/30/13		23.90	11.27	6,180.14	-1.09
	09/30/13		23.90	12.31	6,179.10	-1.04
	12/10/13		23.90	13.91	6,177.50	-1.60
	03/06/14		23.90	14.14	6,177.27	-0.23
	06/26/14		23.90	12.30	6,179.11	1.84
	09/17/14		23.90	14.36	6,177.05	-2.06
	12/16/14		23.90	13.58	6,177.83	0.78
	03/26/15		23.90	13.84	6,177.57	-0.26
	06/12/15		23.90	13.05	6,178.36	0.79
	09/11/15		23.90	15.00	6,176.41	-1.95
LW-MW-2S	08/13/08	6,192.41	---	14.99	6,177.42	---
	12/04/09		34.82	17.29	6,175.12	-2.30
	03/23/10		34.85	15.44	6,176.97	1.85
	06/15/10		34.85	13.21	6,179.20	2.23
	09/08/10		34.85	14.85	6,177.56	-1.64
	12/16/10		34.85	14.11	6,178.30	0.74
	05/11/11		34.85	7.41	6,185.00	6.70
	09/29/11		34.85	11.76	6,180.65	-4.35
	12/09/11		34.85	12.63	6,179.78	-0.87
	03/29/12		34.85	11.85	6,180.56	0.78
	06/08/12		34.85	12.73	6,179.68	-0.88
	08/21/12		34.85	13.64	6,178.77	-0.91
	11/19/12		34.85	14.97	6,177.44	-1.33
	03/11/13		34.85	12.84	6,179.57	2.13
	07/30/13		34.85	14.32	6,178.09	-1.48
	09/30/13		34.85	15.11	6,177.30	-0.79
	12/10/13		34.85	16.52	6,175.89	-1.41
	03/06/14		34.85	15.94	6,176.47	0.58
	06/26/14		34.85	15.4	6,177.01	0.54
	09/17/14		34.85	16.88	6,175.53	-1.48
	12/16/14		34.85	16.89	6,175.52	-0.01
	03/26/15		34.85	17.05	6,175.36	-0.16
	06/12/15		34.85	16.87	6,175.54	0.18
	09/11/15		34.85	17.91	6,174.50	-1.04

TABLE 2
SUMMARY OF HISTORICAL GROUNDWATER ELEVATION DATA
Lake Tahoe Laundry Works
1024 Lake Tahoe Boulevard
South Lake Tahoe, California

Well ID	Date	Reference Elevation (feet MSL)	Total Well Depth (feet BTOC)	Depth to Groundwater (feet BTOC)	Groundwater Elevation (feet MSL)	GW Elevation Change (feet)
LW-MW-5S	08/13/08	6,189.47	---	14.04	6,175.43	---
	12/04/09		29.73	14.85	6,174.62	-0.81
	03/23/10		29.73	14.21	6,175.26	0.64
	06/15/10		29.73	9.75	6,179.72	4.46
	09/08/10		29.73	12.06	6,177.41	-2.31
	12/16/10		29.73	nm		
	05/11/11		29.73	4.75	6,184.72	
	09/29/11		29.73	9.21	6,180.26	-4.46
	12/09/11		29.73	8.94	6,180.53	0.27
	03/29/12		29.73	7.94	6,181.53	1.00
	06/08/12		29.73	8.84	6,180.63	-0.90
	08/21/12		29.73	11.84	6,177.63	-3.00
	11/19/12		29.73	15.25	6,174.22	-3.41
	03/11/13		29.73	9.25	6,180.22	6.00
	07/30/13		29.73	10.22	6,179.25	-0.97
	09/30/13		29.73	11.36	6,178.11	-1.14
	12/10/13		29.73	14.32	6,175.15	-2.96
	03/06/14		29.73	12.93	6,176.54	1.39
	06/26/14		29.73	11.27	6,178.20	1.66
	09/17/14		29.73	12.73	6,176.74	-1.46
	12/16/14		29.73	12.89	6,176.58	-0.16
	03/26/15		29.73	12.63	6,176.84	0.26
	06/12/15		29.73	11.78	6,177.69	0.85
	09/11/15		29.73	13.91	6,175.56	-2.13
LW-MW-9S	12/04/09	6,192.98	24.40	16.01	6,176.97	---
	03/23/10		24.25	14.82	6,178.16	1.19
	06/15/10		24.25	12.29	6,180.69	2.53
	09/08/10		24.25	13.91	6,179.07	-1.62
	12/16/10		24.25	14.75	6,178.23	-0.84
	05/11/11		24.25	6.37	6,186.61	8.38
	09/29/11		24.25	12.51	6,180.47	-6.14
	12/09/11		24.25	11.57	6,181.41	0.94
	03/29/12		24.25	10.68	6,182.30	0.89
	06/08/12		24.25	12.76	6,180.22	-2.08
	08/21/12		24.25	13.92	6,179.06	-1.16
	11/19/12		24.25	15.26	6,177.72	-1.34
	03/11/13		24.25	11.66	6,181.32	3.60
	07/30/13		24.25	12.69	6,180.29	-1.03
	09/30/13		24.25	13.75	6,179.23	-1.06
	12/10/13		24.25	17.23	6,175.75	-3.48
	03/06/14		24.25	16.80	6,176.18	0.43
	06/26/14		24.25	13.73	6,179.25	3.07
	09/17/14		24.25	12.40	6,180.58	1.33
	12/16/14		24.25	15.46	6,177.52	-3.06
	03/26/15		24.25	13.22	6,179.76	2.24
	06/12/15		24.25	7.29	6,185.69	5.93
	09/11/15		24.25	16.57	6,176.41	-9.28

TABLE 2
SUMMARY OF HISTORICAL GROUNDWATER ELEVATION DATA
Lake Tahoe Laundry Works
1024 Lake Tahoe Boulevard
South Lake Tahoe, California

Well ID	Date	Reference Elevation (feet MSL)	Total Well Depth (feet BTOC)	Depth to Groundwater (feet BTOC)	Groundwater Elevation (feet MSL)	GW Elevation Change (feet)
LW-MW-10S	12/04/09	6,192.15	24.76	14.30	6,177.85	---
	03/23/10		24.60	13.27	6,178.88	1.03
	06/15/10		24.60	10.55	6,181.60	2.72
	09/08/10		24.60	12.13	6,180.02	-1.58
	12/16/10		24.60	11.07	6,181.08	1.06
	05/11/11		24.60	4.41	6,187.74	6.66
	09/29/11		24.60	9.20	6,182.95	-4.79
	12/09/11		24.60	9.80	6,182.35	-0.60
	03/29/12		24.60	9.02	6,183.13	0.78
	06/08/12		24.60	9.43	6,182.72	-0.41
	08/21/12		24.60	10.45	6,181.70	-1.02
	11/19/12		Well Grouted Up on Arrival/Unaccessible			
LW-MW-10SR	07/30/13	6,191.91	24.65	11.73	6,180.18	---
	09/30/13		24.65	11.95	6,179.96	-0.22
	12/10/13		24.65	13.40	6,178.51	-1.45
	03/06/14		24.65	13.21	6,178.70	0.19
	06/26/14		24.65	11.99	6,179.92	1.22
	09/17/14		24.65	13.61	6,178.30	-1.62
	12/16/14		24.65	14.78	6,177.13	-1.17
	03/26/15		24.65	13.75	6,178.16	1.03
	06/12/15		24.65	12.99	6,178.92	0.76
	09/11/15		24.65	14.82	6,177.09	-1.83

TABLE 2
SUMMARY OF HISTORICAL GROUNDWATER ELEVATION DATA
Lake Tahoe Laundry Works
1024 Lake Tahoe Boulevard
South Lake Tahoe, California

Well ID	Date	Reference Elevation (feet MSL)	Total Well Depth (feet BTOC)	Depth to Groundwater (feet BTOC)	Groundwater Elevation (feet MSL)	GW Elevation Change (feet)
LW-MW-11S	12/04/09	6,191.67	24.30	14.91	6,176.76	---
	03/23/10		24.02	14.72	6,176.95	0.19
	06/15/10		24.02	11.38	6,180.29	3.34
	09/08/10		24.02	12.87	6,178.80	-1.49
	12/16/10		24.02	14.95	6,176.72	-2.08
	05/11/11		24.02	5.40	6,186.27	9.55
	09/29/11		24.02	10.25	6,181.42	-4.85
	12/09/11		24.02	10.61	6,181.06	-0.36
	03/29/12		24.02	9.79	6,181.88	0.82
	06/08/12		24.02	10.52	6,181.15	-0.73
	08/21/12		24.02	11.06	6,180.61	-0.54
	11/19/12		24.02	13.03	6,178.64	-1.97
	03/11/13		24.02	11.84	6,179.83	1.19
	07/30/13		24.02	11.74	6,179.93	0.10
	09/30/13		24.02	12.85	6,178.82	-1.11
	12/10/13		24.02	14.59	6,177.08	-1.74
	03/06/14		24.02	14.01	6,177.66	0.58
	06/26/14		24.02	12.80	6,178.87	1.21
	09/17/14		24.02	14.31	6,177.36	-1.51
	12/16/14		24.02	14.62	6,177.05	-0.31
	03/26/15		nm - unable to monitor			
	06/12/15		24.02	13.97	6,177.70	
	09/11/15		24.02	15.69	6,175.98	-1.72
LW-MW-12S	12/04/09	6,190.71	24.20	15.00	6,175.71	---
	03/23/10		23.80	13.36	6,177.35	1.64
	06/15/10		23.80	9.99	6,180.72	3.37
	09/08/10		23.80	11.57	6,179.14	-1.58
	12/16/10		23.80	nm		
	05/11/11		23.80	4.07	6,186.64	
	09/29/11		23.80	10.75	6,179.96	-6.68
	12/09/11		23.80	9.15	6,181.56	1.60
	03/29/12		nm	nm		
	06/08/12		23.80	9.51	6,181.20	
	08/21/12		23.80	9.37	6,181.34	0.14
	11/19/12		23.80	11.31	6,179.40	-1.94
	03/11/13		nm	nm		
	07/30/13		23.80	10.31	6,180.40	
	09/30/13		23.80	11.32	6,179.39	-1.01
	12/10/13		Not Measured - Snow Cover			
	03/06/14		23.80	12.57	6,178.14	---
	06/26/14		23.80	11.32	6,179.39	1.25
	09/17/14		23.80	13.05	6,177.66	-1.73
	12/16/14		23.80	12.96	6,177.75	0.09
	03/26/15		23.80	13.00	6,177.71	-0.04
	06/12/15		23.80	12.50	6,178.21	0.50
	09/11/15		23.80	14.04	6,176.67	-1.54

TABLE 2
SUMMARY OF HISTORICAL GROUNDWATER ELEVATION DATA
Lake Tahoe Laundry Works
1024 Lake Tahoe Boulevard
South Lake Tahoe, California

Well ID	Date	Reference Elevation (feet MSL)	Total Well Depth (feet BTOC)	Depth to Groundwater (feet BTOC)	Groundwater Elevation (feet MSL)	GW Elevation Change (feet)
LW-MW-13S	12/04/09	6,190.82	24.95	14.39	6,176.43	---
	03/23/10		24.78	13.20	6,177.62	1.19
	06/15/10		24.78	11.02	6,179.80	2.18
	09/08/10		24.78	12.42	6,178.40	-1.40
	12/16/10		24.78	14.09	6,176.73	-1.67
	05/11/11		24.78	5.07	6,185.75	9.02
	09/29/11		24.78	10.61	6,180.21	-5.54
	12/09/11		24.78	10.19	6,180.63	0.42
	03/29/12		24.78	9.37	6,181.45	0.82
	06/08/12		24.78	8.85	6,181.97	0.52
	08/21/12		24.78	10.22	6,180.60	-1.37
	11/19/12		24.78	11.98	6,178.84	-1.76
	03/11/13		nm	nm		
	07/30/13		24.78	11.36	6,179.46	
	09/30/13		24.78	12.78	6,178.04	-1.42
	12/10/13		Not Measured - Snow Cover			
	03/06/14		24.78	12.90	6,177.92	---
	06/26/14		24.78	12.46	6,178.36	0.44
	09/17/14		24.78	13.42	6,177.40	-0.96
	12/16/14		24.78	14.29	6,176.53	-0.87
	03/26/15		24.78	14.32	6,176.50	-0.03
	06/12/15		24.78	14.17	6,176.65	0.15
	09/11/15		24.78	15.25	6,175.57	-1.08

TABLE 2
SUMMARY OF HISTORICAL GROUNDWATER ELEVATION DATA
Lake Tahoe Laundry Works
1024 Lake Tahoe Boulevard
South Lake Tahoe, California

Well ID	Date	Reference Elevation (feet MSL)	Total Well Depth (feet BTOC)	Depth to Groundwater (feet BTOC)	Groundwater Elevation (feet MSL)	GW Elevation Change (feet)
OS-1	03/24/10	6,188.12	23.45	13.25	6,174.87	---
	06/15/10		24.00	11.17	6,176.95	2.08
	09/08/10		24.00	12.68	6,175.44	-1.51
	12/16/10		24.00	12.13	6,175.99	0.55
	05/11/11		24.00	5.91	6,182.21	6.22
	09/29/11		24.00	9.25	6,178.87	-3.34
	12/09/11		24.00	10.47	6,177.65	-1.22
	03/29/12		24.00	9.93	6,178.19	0.54
	06/08/12		24.00	9.52	6,178.60	0.41
	08/21/12		24.00	11.06	6,177.06	-1.54
	11/19/12		24.00	11.41	6,176.71	-0.35
	03/11/13		nm	nm		
	07/30/13		24.00	10.69	6,177.43	
	09/30/13		24.00	13.10	6,175.02	-2.41
	12/10/13		24.00	14.02	6,174.10	-0.92
	03/06/14		24.00	13.41	6,174.71	0.61
	06/26/14		24.00	12.71	6,175.41	0.70
	09/17/14		24.00	13.86	6,174.26	-1.15
	12/16/14		24.00	14.47	6,173.65	-0.61
	03/26/15		24.00	12.85	6,175.27	1.62
	06/12/15		24.00	14.14	6,173.98	-1.29
	09/11/15		24.00	15.30	6,172.82	-1.16

Notes:
BTOC = Below Top of Casing
MSL = Mean Sea Level

Avg Groundwater Elevation Change

4th.09-1st.10	1.10
1st.10-2nd.10	2.86
2nd.10-3rd.10	-1.63
3rd. 10-4th.10	-0.29
4th.10-2nd.11	7.71
2nd.11-3rd.11	-4.95
3rd.11-4th.11	-0.16
4th.11-1st.12	0.82
1st.12-2nd.12	-0.70
2nd.12-3rd.12	-1.14
3rd.12-4th.12	-1.57
4th.12-1st.13	3.28
1st.13-2nd.13	-0.89
2nd.13-3rd.13	-1.03
3rd.13-4th.13	-2.24
4th.13-1st.14	0.51
1st.14-2nd.14	1.33
2nd.14-3rd.14	-1.18
3rd.14-4th.14	-0.59
4th.14-1st.15	0.58
1st.15-2nd.15	0.98
2nd.15-3rd.15	-2.41

TABLE 3
SUMMARY OF HISTORICAL GROUNDWATER ANALYTICAL DATA
Lake Tahoe Laundry Works
1024 Lake Tahoe Boulevard
South Lake Tahoe, California

Well ID	Sample Date	PCE	TCE	VC	CA	CB	1,1-DCE	MC	Trans-1,2-DCE	1,1-DCA	cis-1,2-DCE	1,2-DCA	1,1,1,2-Tetra	1,1,1-TCA	Chloroform	BDCM	Benzene	EB	MtBE
											(µg/L)								
LW-MW-1S	08/13/08	**706**	**74.0**	nd<0.50	nd<0.50	nd<0.50	**1.25**	nd<0.50	**0.727**	nd<0.50	**41.3**	nd<0.50	nd<0.50	nd<0.50	na	na	na	na	na
	12/04/09	**5,150**	**72.7**	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	**0.575**	nd<0.500	na	na	na
	03/23/10	**1,850**	nd<0.500	nd<0.500	nd<0.500	**0.962**	**7.71**	nd<0.500	**1.41**	nd<0.500	**339**	nd<0.500	**0.795**	nd<0.500	nd<0.500	nd<0.500	nd<0.500	na	nd<0.500
	duplicate	**2,000**	nd<0.500	nd<0.500	nd<0.500	**0.845**	**7.40**	nd<0.500	**1.23**	nd<0.500	**314**	nd<0.500	**0.710**	nd<0.500	nd<0.500	nd<0.500	nd<0.500	na	nd<0.500
	06/15/10	**4,920**	**8.90**	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	**6.48**	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	na	nd<0.500
	09/08/10	**547**	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	**3.71**	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	na	nd<0.500
	12/16/10	**109**	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	na	nd<0.500
	05/11/11	**5,380**	**21.4**	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	**12.7**	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	na	nd<0.500
	09/29/11	**93**	**4.0**	nd<0.50	nd<0.50	nd<0.50	nd<0.50	**61**	nd<0.50	nd<0.50	**2.8**	nd<0.50	nd<0.50	nd<0.50	**4.4**	nd<0.50	**0.14**	nd<0.50	**0.26**
	12/09/11	**841**	**5.45**	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	**2.35**	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500
	03/29/12	**1,540**	**4.83**	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	**2.85**	nd<0.500	**5.56**	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500
	duplicate	**1,300**	**3.77**	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	2.15	nd<0.500	**6.26**	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500
	06/08/12	**95.5**	**2.06**	nd<0.500	nd<0.500	nd<0.500	**2.23**	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500
	08/21/12	**13.2**	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500
	CLS-Split	**11.0**	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500
	CRWQCB	**5.4**	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500
	11/19/12	**7.98**	**0.907**	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500
	03/11/13	**5.94**	**1.68**	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500
	07/30/13	**450**	**7.5**	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	**3.8**	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500
	duplicate	**550**	**7.7**	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	**4.0**	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500
	09/30/13	**770**	**8.4**	nd<1.0	nd<1.0	nd<1.0	nd<1.0	nd<1.0	nd<1.0	nd<1.0	nd<1.0	nd<1.0	nd<1.0	nd<1.0	nd<1.0	nd<1.0	nd<0.50	nd<2.0	nd<0.50
	12/10/13	**4.8**	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50
	03/06/14	**2.8**	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50
	06/26/14	**130**	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50
	09/17/14	**2.2**	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50
	12/16/14	**22**	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50
	03/26/15	**1.5**	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50
	06/12/15	**16**	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50
	09/11/15	**150**	**3.1**	nd<0.50	nd<0.50	nd<0.50	nd<0.50	**0.90**	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50

TABLE 3
SUMMARY OF HISTORICAL GROUNDWATER ANALYTICAL DATA
Lake Tahoe Laundry Works
1024 Lake Tahoe Boulevard
South Lake Tahoe, California

Well ID	Sample Date	PCE	TCE	VC	CA	CB	1,1-DCE	MC	Trans-1,2-DCE	1,1-DCA	cis-1,2-DCE	1,2-DCA	1,1,1,2-Tetra	1,1,1-TCA	Chloroform	BDCM	Benzene	EB	MtBE
											(µg/L)								
LW-MW-2S	08/13/08	**3.00**	**2.52**	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	**31.0**	nd<0.50	nd<0.50	nd<0.50	na	na	na	na	na
	12/04/09	**8.29**	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	na	na	na
	03/23/10	**5.9**	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	**0.731**	na	nd<0.500
	06/15/10	**98.7**	**4.39**	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	**4.07**	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	na	nd<0.500
	09/08/10	**65.7**	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	**3.14**	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	na	nd<0.500
	12/16/10	**21.3**	**1.09**	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	na	nd<0.500
	05/11/11	**376**	**11.7**	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	**5.04**	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	na	nd<0.500
	09/29/11	**100**	**14**	nd<0.50	nd<0.50	nd<0.50	nd<0.50	**51**	nd<0.50	nd<0.50	**4.6**	nd<0.50	nd<0.50	nd<0.50	**1.6**	nd<0.50	nd<0.50	nd<0.50	nd<0.50
	12/09/11	**63.8**	**7.67**	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	**1.89**	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500
	duplicate	**74.4**	**8.61**	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	**2.41**	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500
	03/29/12	**23.2**	**3.18**	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	**1.09**	nd<0.500	**2.14**	nd<0.500	**1.47**	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500
	06/08/12	**84.8**	**6.94**	nd<0.500	nd<0.500	nd<0.500	**2.69**	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500
	08/21/12	**44.1**	**3.22**	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	**1.67**	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500
	CLS-Split	**48**	**2.70**	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	**1.20**	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500
	CRWQCB	**20.8**	**2.30**	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	**1.10**	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500
	11/19/12	**1.38**	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	**0.877**	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500
	03/11/13	**1.11**	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500
	07/30/13	**67**	**2.5**	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	**1.1**	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500
	09/30/13	**86**	**2.2**	nd<1.0	nd<1.0	nd<1.0	nd<1.0	nd<1.0	nd<1.0	nd<1.0	nd<1.0	nd<1.0	nd<1.0	nd<1.0	nd<1.0	nd<1.0	nd<0.50	nd<2.0	nd<0.50
	12/10/13	**33**	**0.57**	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50
	duplicate	**33**	**0.85**	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50
	03/06/14	**6.2**	**0.90**	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50
	06/26/14	**5..2**	**0.57**	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50
	09/17/14	**2.7**	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50
	12/16/14	**3.1**	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50
	03/26/15	**1.3**	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50
	06/12/15	**0.95**	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50
	09/11/15	**0.72**	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	**0.79**	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50

TABLE 3
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Lake Tahoe Laundry Works
1024 Lake Tahoe Boulevard
South Lake Tahoe, California

Well ID	Sample Date	PCE	TCE	VC	CA	CB	1,1-DCE	MC	Trans-1,2-DCE	1,1-DCA	cis-1,2-DCE	1,2-DCA	1,1,1,2-Tetra	1,1,1-TCA	Chloroform	BDCM	Benzene	EB	MtBE
											(µg/L)								
LW-MW-5S	08/13/08	**85.1**	**3.50**	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	**2.00**	nd<0.50	nd<0.50	nd<0.50	na	na	na	na	na
	12/04/09	nd<0.500	**11.7**	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	na	na	na
	03/23/10	nd<0.500	**26.5**	**3.22**	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	**38.2**	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	**0.778**	na	**0.529**
	06/15/10	**1,400**	**28.1**	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	**29.0**	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	na	nd<0.500
	09/08/10	**480**	**11.0**	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	**11.5**	nd<0.500	nd<0.500	nd<0.500	**1.07**	nd<0.500	nd<0.500	na	nd<0.500
	duplicate	**448**	**10.6**	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	**11.3**	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	na	nd<0.500
	12/16/10	not sampled; covered with 5 feet of snow																	
	05/11/11	**625**	**2.74**	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	**1.13**	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	na	nd<0.500
	09/29/11	**750**	**14**	nd<0.50	nd<0.50	nd<0.50	nd<0.50	**44**	**0.19**	nd<0.50	**8.4**	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50
	duplicate	**600**	**13**	nd<0.50	nd<0.50	nd<0.50	nd<0.50	**37**	nd<0.50	nd<0.50	**6.7**	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50
	12/09/11	**964**	**23.6**	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500
	03/29/12	**225**	**4.81**	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	**2.23**	nd<0.500	**4.04**	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500
	06/08/12	**931**	**37.6**	nd<0.500	nd<0.500	nd<0.500	**37.8**	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500
	08/21/12	**5.06**	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500
	CLS-Split	**6.2**	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500
	CRWQCB	**3.1**	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500
	11/19/12	**6.99**	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500
	03/11/13	**3.72**	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500
	duplicate	**2.57**	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500
	07/30/13	**59**	**1.7**	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	**0.93**	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500
	09/30/13	**81**	**2.1**	nd<1.0	nd<1.0	nd<1.0	nd<1.0	nd<1.0	nd<1.0	nd<1.0	nd<1.0	nd<1.0	nd<1.0	nd<1.0	nd<1.0	nd<1.0	nd<0.50	nd<2.0	nd<0.50
	12/10/13	**150**	**2.1**	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	**0.82**	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50
	03/06/14	**2.6**	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50
	06/26/14	**13**	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50
	duplicate	**13**	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50
	09/17/14	**8.2**	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50
	12/16/14	**12**	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50
	03/26/15	**1.4**	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50
	duplicate	**1.5**	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50
	06/12/15	**3.4**	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50
	09/11/15	**6.3**	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50

TABLE 3
SUMMARY OF HISTORICAL GROUNDWATER ANALYTICAL DATA
Lake Tahoe Laundry Works
1024 Lake Tahoe Boulevard
South Lake Tahoe, California

Well ID	Sample Date	PCE	TCE	VC	CA	CB	1,1-DCE	MC	Trans-1,2-DCE	1,1-DCA	cis-1,2-DCE	1,2-DCA	1,1,1,2-Tetra	1,1,1-TCA	Chloroform	BDCM	Benzene	EB	MtBE
		(µg/L)																	
LW-MW-9S	12/04/09	**324**	**12.7**	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	**19.0**	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	na	na	na
	03/23/10	**174**	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	**7.78**	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	na	nd<0.500
	06/15/10	**162**	**7.57**	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	**22.5**	nd<0.500	nd<0.500	nd<0.500	**1.32**	nd<0.500	nd<0.500	na	nd<0.500
	duplicate	**172**	**8.04**	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	**24.5**	nd<0.500	nd<0.500	nd<0.500	**1.29**	nd<0.500	nd<0.500	na	nd<0.500
	09/08/10	**2.18**	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	na	nd<0.500
	12/16/10	**89.8**	**4.64**	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	**17.4**	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	na	nd<0.500
	duplicate	**89.6**	**4.51**	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	**18.4**	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	na	nd<0.500
	05/11/11	**30.6**	**0.509**	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	na	nd<0.500
	09/29/11	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	**64**	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50
	12/09/11	**7.64**	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500
	03/29/12	**1.15**	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500
	06/08/12	**0.66**	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	**0.596**	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500
	08/21/12	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500
	11/19/12	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500
	03/11/13	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500
	07/30/13	**5.3**	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500
	09/30/13	**4.9**	nd<1.0	nd<1.0	nd<1.0	nd<1.0	nd<1.0	nd<1.0	nd<1.0	nd<1.0	nd<1.0	nd<1.0	nd<1.0	nd<1.0	nd<1.0	nd<1.0	nd<0.50	nd<2.0	nd<0.50
	12/10/13	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50
	03/06/14	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50
	06/26/14	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50
	09/17/14	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50
	12/16/14	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50
	03/26/15	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50
	06/12/15	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50
	09/11/15	**0.54**	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50

TABLE 3
SUMMARY OF HISTORICAL GROUNDWATER ANALYTICAL DATA
Lake Tahoe Laundry Works
1024 Lake Tahoe Boulevard
South Lake Tahoe, California

Well ID	Sample Date	PCE	TCE	VC	CA	CB	1,1-DCE	MC	Trans-1,2-DCE	1,1-DCA	cis-1,2-DCE	1,2-DCA	1,1,1,2-Tetra	1,1,1-TCA	Chloroform	BDCM	Benzene	EB	MtBE
		(µg/L)																	
LW-MW-10S	12/04/09	**15.8**	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	na	na	na
	duplicate	**10.6**	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	na	na	na
	03/23/10	**1.04**	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	na	nd<0.500
	06/15/10	**63.8**	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	na	nd<0.500
	09/08/10	**23.7**	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	na	nd<0.500
	12/16/10	**7.57**	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	**2.09**	nd<0.500	nd<0.500	na	nd<0.500
	05/11/11	**8.59**	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	**4.93**	nd<0.500	nd<0.500	na	nd<0.500
	09/29/11	**13**	**0.18**	nd<0.50	nd<0.50	nd<0.50	nd<0.50	**56**	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	**0.32**	nd<0.50	nd<0.50	nd<0.50	nd<0.50
	12/09/11	**6.82**	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500
	03/29/12	**1.42**	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500
	06/08/12	**3.56**	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	**3.08**	nd<0.500	nd<0.500	nd<0.500	nd<0.500
	08/21/12	**2.02**	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	**4.45**	nd<0.500	nd<0.500	nd<0.500	nd<0.500
	11/19/12	**WELL FOUND TO BE DESTROYED ON ATTEMPT TO MONITOR**																	
LW-MW-10SR	07/30/13	**0.89**	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	**3.7**	nd<0.500	nd<0.500	nd<0.500	nd<0.500
	09/30/13	nd<1.0	nd<1.0	nd<1.0	nd<1.0	nd<1.0	nd<1.0	nd<1.0	nd<1.0	nd<1.0	nd<1.0	nd<1.0	nd<1.0	nd<1.0	**4.1**	nd<1.0	nd<0.50	nd<2.0	nd<0.50
	duplicate	nd<1.0	nd<1.0	nd<1.0	nd<1.0	nd<1.0	nd<1.0	nd<1.0	nd<1.0	nd<1.0	nd<1.0	nd<1.0	nd<1.0	nd<1.0	**4.3**	nd<1.0	nd<0.50	nd<2.0	nd<0.50
	12/10/13	**0.65**	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	**3.4**	nd<0.50	nd<0.50	nd<0.50	nd<0.50
	03/06/14	**1.4**	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	**0.62**	nd<0.50	nd<0.50	nd<0.50	nd<0.50
	duplicate	**1.5**	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	**0.63**	nd<0.50	nd<0.50	nd<0.50	nd<0.50
	06/26/14	**0.84**	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	**1.9**	nd<0.50	nd<0.50	nd<0.50	nd<0.50
	09/17/14	**0.84**	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	**4.1**	**0.88**	nd<0.50	nd<0.50	nd<0.50
	12/16/14	**0.51**	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	**1.2**	nd<0.50	nd<0.50	nd<0.50	nd<0.50
	03/26/15	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50
	06/12/15	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50
	09/11/15	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	**0.76**	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50

TABLE 3
SUMMARY OF HISTORICAL GROUNDWATER ANALYTICAL DATA
Lake Tahoe Laundry Works
1024 Lake Tahoe Boulevard
South Lake Tahoe, California

Well ID	Sample Date	PCE	TCE	VC	CA	CB	1,1-DCE	MC	Trans-1,2-DCE	1,1-DCA	cis-1,2-DCE	1,2-DCA	1,1,1,2-Tetra	1,1,1-TCA	Chloroform	BDCM	Benzene	EB	MtBE
											(µg/L)								
LW-MW-11S	12/04/09	**42.9**	nd<0.50	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	na	na	na
	03/23/10	**32.5**	**1.08**	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	**3.63**	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	na	nd<0.500
	06/15/10	**28.3**	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	**0.909**	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	na	nd<0.500
	09/08/10	**14.8**	nd<0.50	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	**0.830**	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	na	nd<0.500
	12/16/10	**2.63**	nd<0.50	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	na	nd<0.500
	05/11/11	**1.33**	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	na	nd<0.500
	09/29/11	**0.68**	**0.27**	nd<0.50	nd<0.50	nd<0.50	nd<0.50	**36**	nd<0.50	nd<0.50	**1.1**	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50
	12/09/11	**18.3**	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500
	03/29/12	**1.41**	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500
	06/08/12	**2.13**	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	**0.547**	nd<0.500	nd<0.500	nd<0.500	nd<0.500
	08/21/12	**2.14**	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	**3.97**	nd<0.500	nd<0.500	nd<0.500	nd<0.500
	11/19/12	**6.19**	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500
	03/11/13	**4.41**	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500
	07/30/13	**4.5**	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	**2.4**	nd<0.500	nd<0.500	nd<0.500	nd<0.500
	09/30/13	**4.6**	nd<1.0	nd<1.0	nd<1.0	nd<1.0	nd<1.0	nd<1.0	nd<1.0	nd<1.0	nd<1.0	nd<1.0	nd<1.0	nd<1.0	**2.0**	nd<1.0	nd<0.50	nd<2.0	nd<0.50
	12/10/13	**8.2**	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	**2.0**	nd<0.50	nd<0.50	nd<0.50	nd<0.50
	03/06/14	**7.2**	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	**0.70**	nd<0.50	nd<0.50	nd<0.50	nd<0.50
	06/26/14	**3.8**	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	**1.1**	nd<0.50	nd<0.50	nd<0.50	nd<0.50
	09/17/14	**4.5**	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	**0.71**	nd<0.50	nd<0.50	nd<0.50	nd<0.50
	12/16/14	**2.7**	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50
	duplicate	**2.7**	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50
	03/26/15	**Not Sampled - Wellhead Damaged**																	
	06/12/15	**0.89**	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	**1.4**	nd<0.50	nd<0.50	nd<0.50	nd<0.50
	duplicate	**0.86**	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	**1.3**	nd<0.50	nd<0.50	nd<0.50	nd<0.50
	09/11/15	**0.98**	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	**0.76**	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	**2.0**	nd<0.50	nd<0.50	nd<0.50	nd<0.50

TABLE 3
SUMMARY OF HISTORICAL GROUNDWATER ANALYTICAL DATA
Lake Tahoe Laundry Works
1024 Lake Tahoe Boulevard
South Lake Tahoe, California

Well ID	Sample Date	PCE	TCE	VC	CA	CB	1,1-DCE	MC	Trans-1,2-DCE	1,1-DCA	cis-1,2-DCE	1,2-DCA	1,1,1,2-Tetra	1,1,1-TCA	Chloroform	BDCM	Benzene	EB	MtBE
		(µg/L)																	
LW-MW-12S	12/04/09	**10.7**	nd<0.50	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	na	na	na
	03/23/10	**34.3**	nd<0.50	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	**0.613**	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	na	nd<0.500
	06/15/10	**314**	**1.40**	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	**1.46**	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	na	nd<0.500
	09/08/10	**824**	nd<0.50	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	**4.31**	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	na	nd<0.500
	12/16/10	**not sampled; covered with 12 feet of snow**																	
	05/11/11	**105**	**0.651**	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	na	nd<0.500
	duplicate	**95.4**	**0.586**	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	na	nd<0.500
	09/29/11	**23**	**0.35**	nd<0.50	nd<0.50	nd<0.50	nd<0.50	**54**	nd<0.50	nd<0.50	**0.12**	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50
	12/09/11	**25.1**	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500
	03/29/12	**not sampled; covered with 12-foot high pile of snow**																	
	06/08/12	**7.89**	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500
	08/21/12	**2.45**	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500
	11/19/12	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500
	03/11/13	**not sampled; covered with high pile of snow**																	
	07/30/13	**35**	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500
	09/30/13	**34**	nd<1.0	nd<1.0	nd<1.0	nd<1.0	nd<1.0	nd<1.0	nd<1.0	nd<1.0	nd<1.0	nd<1.0	nd<1.0	nd<1.0	nd<1.0	nd<1.0	nd<0.50	nd<2.0	nd<0.50
	12/10/13	**Not Sampled - well covered with snow**																	
	03/06/14	**2.4**	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50
	06/26/14	**6.1**	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50
	09/17/14	**3.7**	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50
	12/16/14	**5.2**	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50
	03/26/15	**0.7**	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50
	06/12/15	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50
	09/11/15	**1.5**	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50
	duplicate	**1.4**	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	**0.82**	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50

TABLE 3
SUMMARY OF HISTORICAL GROUNDWATER ANALYTICAL DATA
Lake Tahoe Laundry Works
1024 Lake Tahoe Boulevard
South Lake Tahoe, California

Well ID	Sample Date	PCE	TCE	VC	CA	CB	1,1-DCE	MC	Trans-1,2-DCE	1,1-DCA	cis-1,2-DCE	1,2-DCA	1,1,1,2-Tetra	1,1,1-TCA	Chloroform	BDCM	Benzene	EB	MtBE
		(µg/L)																	
LW-MW-13S	12/04/09	**17**	nd<0.50	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	na	na	na
	03/23/10	**65.2**	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	**0.784**	nd<0.500	nd<0.500	**2.92**	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	**0.645**	na	nd<0.500
	06/15/10	**14.1**	**0.603**	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	**0.627**	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	na	nd<0.500
	09/08/10	**4.86**	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	na	nd<0.500
	12/16/10	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	na	nd<0.500
	05/11/11	**3.71**	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	na	nd<0.500
	09/29/11	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	**39**	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50
	12/09/11	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500
	03/29/12	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500
	06/08/12	**1.71**	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500
	08/21/12	**2.16**	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500
	11/19/12	**2.33**	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500
	duplicate	**2.18**	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500
	03/11/13	**not sampled; covered with high pile of snow**																	
	07/30/13	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	**2.7**	nd<0.500	nd<0.500	nd<0.500	nd<0.500
	09/30/13	nd<1.0	nd<1.0	nd<1.0	nd<1.0	nd<1.0	nd<1.0	nd<1.0	nd<1.0	nd<1.0	nd<1.0	nd<1.0	nd<1.0	nd<1.0	nd<1.0	nd<1.0	nd<0.50	nd<2.0	nd<0.50
	12/10/13	**Not Sampled - well covered with snow**																	
	03/06/14	**0.89**	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50
	06/26/14	**1.8**	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	**0.63**	nd<0.50	nd<0.50	nd<0.50	nd<0.50
	09/17/14	**0.86**	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	**1.0**	nd<0.50	nd<0.50	nd<0.50	nd<0.50
	duplicate	**0.85**	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	**0.90**	nd<0.50	nd<0.50	nd<0.50	nd<0.50
	12/16/14	**2.6**	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	**3.1**	**0.62**	nd<0.50	nd<0.50	nd<0.50
	03/26/15	**2.7**	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50
	06/12/15	**2**	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	**0.99**	nd<0.50	nd<0.50	nd<0.50	nd<0.50
	09/11/15	**1.1**	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	**0.76**	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	**0.68**	nd<0.50	nd<0.50	nd<0.50	nd<0.50

TABLE 3
SUMMARY OF HISTORICAL GROUNDWATER ANALYTICAL DATA
Lake Tahoe Laundry Works
1024 Lake Tahoe Boulevard
South Lake Tahoe, California

Well ID	Sample Date	PCE	TCE	VC	CA	CB	1,1-DCE	MC	Trans-1,2-DCE	1,1-DCA	cis-1,2-DCE	1,2-DCA	1,1,1,2-Tetra	1,1,1-TCA	Chloroform	BDCM	Benzene	EB	MtBE
		(µg/L)																	
OS-1	03/24/10	**91.2**	**1.41**	nd<0.500	nd<0.500	nd<0.500	nd<0.500	**1.02**	nd<0.500	nd<0.500	**0.989**	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	**0.908**	na	**0.807**
	06/15/10	**75.9**	**2.91**	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	**1.41**	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	na	nd<0.500
	09/08/10	**13.5**	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	na	nd<0.500
	12/16/10	**52.5**	**2.43**	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	**4.43**	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	na	nd<0.500
	05/11/11	**7.1**	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	na	nd<0.500
	09/29/11	**4.6**	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	**25**	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	**0.12**	nd<0.50
	12/09/11	**20.6**	**0.617**	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500
	03/29/12	**8.97**	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500
	06/08/12	**11.60**	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500
	duplicate	**11.20**	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500
	08/21/12	**6.3**	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500
	11/19/12	**34.9**	**1.84**	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500
	03/11/13	**not sampled; covered with high pile of snow**																	
	07/30/13	**26**	**1.7**	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500	nd<0.500
	09/30/13	**8.0**	nd<1.0	nd<1.0	nd<1.0	nd<1.0	nd<1.0	nd<1.0	nd<1.0	nd<1.0	nd<1.0	nd<1.0	nd<1.0	nd<1.0	nd<1.0	nd<1.0	nd<0.50	nd<2.0	nd<0.50
	12/10/13	**16**	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50
	03/06/14	**5.6**	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50
	06/26/14	**15**	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50
	09/17/14	**10**	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50
	12/16/14	**9.8**	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50
	03/26/15	**64**	**1.4**	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50
	06/12/15	**10**	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50
	09/11/15	**9.6**	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50	nd<0.50

Notes:

Results in micrograms per liter (µg/L) (equivalent to parts per billion, ppb)

1,1-DCA = 1,1,-Dichloroethane
1,1-DCE = 1,2-Dichloroethene
1,1,1-TCA = 1,1,1-Trichlorethane
1,1,1,2-Tetra = 1,1,1,2-Tetrachloroethane
B = Benzene
BDCM - Bromodichloromethane
CA = Chloroethane
CB = Chlorobenzene
CF = Chloroform
cis-1,2-DCE = cis-1,2-Dichloroethene
EB = Ethlybenzene
MC = Methylene Chloride
MtBE = Methyl tertiary-butyl ether
nd< = Not detected at or above the Method Detection Limit, which is indicated by the value
nm = Not monitored
ns- not sampled
PCE = Tetrachloroethene (a.k.a. perchloroethene)
TCE = Trichloroethene
trans-1,2-DCE = trans-1,2-Dichloroethene
VC = Vinyl Chloride

TABLE 4A
SUMMARY OF HISTORICAL VP SHALLOW SOIL-GAS ANALYTICAL DATA
Lake Tahoe Laundry Works
1024 Lake Tahoe Boulevard
South Lake Tahoe, California

Sample ID	Sample Date	PCE		TCE		cis-1,2-DCE		Tracer Gas		Other VOCs	
		(ppbV)	(μg/m³)	(ppbV)	(μg/m³)	(ppbV)	(μg/m³)	(ppbV)	(μg/m³)	(ppbV)	(μg/m3)
VP-1	04/09/10	**16**	**108.5**	nd	nd	nd	nd	nd	nd	nd	nc
	09/08/10	**72**	**488.2**	nd	nd	nd	nd	nd	nd	**0.031**	nc
	12/16/10	**133**	**901.7**	nd	nd	nd	nd	nd	nd	nd	nc
	05/11/11	unable to sample - water in well									
	09/29/11	nd<1.0	nd<6.78	nd<1.0	nd<5.37	nd<1.0	nd<3.96	nd<1.0	nd<5.61	nd	nc
	12/09/11	nd<1.0	nd<6.78	nd<1.0	nd<5.37	nd<1.0	nd<3.96	nd<1.0	nd<5.61	nd	nc
	03/29/12	nd<1.0	nd<6.78	nd<1.0	nd<5.37	nd<1.0	nd<3.96	nd<1.0	nd<5.61	nd	nc
	06/08/12	**16.8**	**113.9**	nd<1.0	nd<5.37	nd<1.0	nd<3.96	nd<1.0	nd<5.61	**4.59**	nc
	09/13/12	**40**	**271.2**	nd<1.0	nd<5.37	nd<1.0	nd<3.96	nd<1.0	nd<5.61	nd	nc
	12/17/12	**Unable to collect sample; well tubing filled with ice**									
	02/14/13	**6.48**	**43.9**	nd<1.0	nd<5.37	nd<1.0	nd<3.96	nd<1.0	nd<5.61	nd	nc
	06/25/13	**Sample Collected - Sample Holding Time Expired, not analyzed**									
	09/30/13	**250**	**1,700**	**5.5**	**30**	nd<1.2	nd<4.8	nd<1.2	nd<6.74	**35.7**	nc
	12/10/13	**30**	**200**	nd<10	nd<53.7	nd<10	nd<39.6	nd<10	nd<56.1	**18**	nc
	03/06/14	**38**	**258**	nd<10	nd<53.7	nd<10	nd<39.6	nd<10	nd<56.1	**11**	nc
	06/26/14	**610**	**4,136**	nd<10	nd<53.7	nd<10	nd<39.6	nd<10	nd<56.1	**12**	**62.9**
	09/17/14	**38**	**258**	nd<10	nd<53.7	nd<10	nd<39.6	nd<10	nd<56.1	nd	nc
	12/16/14	**7.5**	**51**	nd<0.03	nd<0.016	nd<10	nd<39.6	nd<10	nd<56.1	nd	nc
	03/31/15	**13**	**88**	**0.99**	**5.3**	nd<10	nd<39.6	nd<10	nd<56.1	nd	nc
	06/12/15	nd<0.01	nd<0.0678	nd<10	nd<53.7	nd<10	nd<39.6	nd<10	nd<56.1	nd	nc
	09/11/15	**5.3**	**36**	nd<0.10	nd<0.537	nd<10	nd<39.6	nd<10	nd<56.1	nd	nc
VP-2	04/09/10	**429**	**2,909**	**29**	**155.7**	**380**	**1,506**	nd	nd	nd	nc
	09/08/10	**82**	**556.0**	nd	nd	nd	nd	nd	nd	nd	nc
	12/16/10	**2,510**	**17,018**	**174**	**9,344**	**150**	**594**	nd	nd	**186**	nc
	05/11/11	unable to sample - water in well									
	09/29/11	**189**	**1,281**	nd<1.0	nd<5.37	nd<1.0	nd<3.96	nd<1.0	nd<5.61	nd	nc
	12/09/11	**2,020**	**13,696**	**86.1**	**4,624**	**42.6**	**169**	nd<1.0	nd<5.61	**87.8**	nc
	03/29/12	**4,700**	**31,866**	**459**	**2,465**	nd<1.0	nd<3.96	nd<1.0	nd<5.61	**862**	nc
	06/08/12	**5,050**	**34,239**	**107**	**575**	**55.2**	**219**	nd<1.0	nd<5.61	**108**	nc
	09/13/12	**7,150**	**48,477**	**20**	**107.41**	nd<1.0	nd<3.96	nd<1.0	nd<5.61	**55**	nc
	12/17/12	**Unable to collect sample; well covered with snow**									
	02/14/13	**Unable to collect sample; well covered with snow**									
	06/25/13	**Sample Collected - Sample Holding Time Expired, not analyzed**									
	09/30/13	**140,000**	**949,200**	**4,400**	**23,628**	**26,000**	**102,960**	nd<660	nd<3,700	**2,700**	nc
	12/10/13	**Not Sampled - not accessible**									
	03/06/14	**Not Sampled - not accessible**									
	06/26/14	**8,500**	**57,630**	**240**	**1,289**	**250**	**990**	nd<1.0	nd<5.61	**11**	nc
	09/17/14	**800**	**5,424**	nd<10	nd<53.7	nd<10	nd<39.6	nd<1.0	nd<5.61	nd	nc
	12/16/14	**520**	**3,527**	**2.7**	**14.5**	**12**	**48**	nd<1.0	nd<5.61	nd	nc
	03/31/15	**160**	**1,085**	**3.6**	**19.3**	**15**	**59**	nd<1.0	nd<5.61	nd	nc
	06/12/15	**0.095**	**0.64**	nd<10	nd<53.7	nd<10	nd<39.6	nd<10	nd<56.1	nd	nc
	09/11/15	**2,000**	**13,560**	**93**	**499**	**20**	**79**	nd<10	nd<56.1	nd	nc

TABLE 4A
SUMMARY OF HISTORICAL VP SHALLOW SOIL-GAS ANALYTICAL DATA
Lake Tahoe Laundry Works
1024 Lake Tahoe Boulevard
South Lake Tahoe, California

Sample ID	Sample Date	PCE		TCE		cis-1,2-DCE		Tracer Gas		Other VOCs	
		(ppbV)	($\mu g/m^3$)	(ppbV)	($\mu g/m^3$)	(ppbV)	($\mu g/m^3$)	(ppbV)	($\mu g/m^3$)	(ppbV)	(µg/m3)
VP-3	04/09/10	unable to sample - water in well									
	09/08/10	nd	nd	nd	nd	nd	nd	nd	nd	nd	nc
	12/16/10	unable to sample - water in well									
	05/11/11	unable to sample - water in well									
	09/29/11	**527**	**3,573**	nd<1.0	nd<5.37	nd<1.0	nd<3.96	nd<1.0	nd<5.61	nd	nc
	12/09/11	**469**	**3,180**	**1.96**	**10.53**	nd<1.0	nd<3.96	nd<1.0	nd<5.61	**1.98**	nc
	03/29/12	**900**	**6,102**	**3.24**	**18.4**	nd<1.0	nd<3.96	nd<1.0	nd<5.61	nd	nc
	06/08/12	**522**	**3,539**	nd<1.0	nd<5.37	nd<1.0	nd<3.96	nd<1.0	nd<5.61	nd	nc
	09/13/12	nd<1.0	nd<6.78	nd<1.0	nd<5.37	nd<1.0	nd<3.96	nd<1.0	nd<5.61	nd	nc
	12/17/12	**Unable to collect sample; well covered with snow**									
	02/14/13	**Unable to collect sample; well covered with snow**									
	06/25/13	**Sample Collected - Sample Holding Time Expired, not analyzed**									
	09/30/13	**3,900**	**26,442**	**47**	**252**	**170**	**673**	nd<26	nd<140	nd	nc
	12/10/13	nd<10	nd<67.8	nd<10	nd<53.7	nd<10	nd<39.6	nd<10	nd<56.1	nd	nc
	03/06/14	nd<10	nd<67.8	nd<10	nd<53.7	nd<10	nd<39.6	nd<10	nd<56.1	nd	nc
	06/26/14	**330**	**2,237**	nd<10	nd<53.7	nd<10	nd<39.6	nd<10	nd<56.1	nd	nc
	09/17/14	**18**	**122**	nd<10	nd<53.7	nd<10	nd<39.6	nd<10	nd<56.1	nd	nc
	12/16/14	**4.2**	**28**	**0.032**	**0.17**	nd<10	nd<39.6	nd<10	nd<56.1	nd	nc
	03/31/15	**2.1**	**14**	nd<0.030	nd<0.016	nd<10	nd<39.6	nd<10	nd<56.1	nd	nc
	06/12/15	nd<0.01	nd<0.0678	nd<10	nd<53.7	nd<10	nd<39.6	nd<10	nd<56.1	nd	nc
	09/11/15	**160**	**1,085**	**0.42**	**2.26**	nd<10	nd<39.6	nd<10	nd<56.1	nd	nc
VP-4	04/09/10	nd	nd	nd	nd	nd	nd	nd	nd	nd	nc
	09/08/10	nd	nd	nd	nd	nd	nd	nd	nd	nd	nc
	12/16/10	unable to sample - water in well									
	05/11/11	unable to sample - water in well									
	09/29/11	**47**	**318.7**	nd<1.0	nd<5.37	nd<1.0	nd<3.96	nd<1.0	nd<5.61	nd	nc
	12/09/11	**22.1**	**149.8**	nd<1.0	nd<5.37	nd<1.0	nd<3.96	nd<1.0	nd<5.61	nd	nc
	03/29/12	nd<1.0	nd<6.78	nd<1.0	nd<5.37	nd<1.0	nd<3.96	nd<1.0	nd<5.61	nd	nc
	06/08/12	**54.3**	**368.2**	nd<1.0	nd<5.37	nd<1.0	nd<3.96	nd<1.0	nd<5.61	nd	nc
	09/13/12	nd<1.0	nd<6.78	nd<1.0	nd<5.37	nd<1.0	nd<3.96	nd<1.0	nd<5.61	nd	nc
	12/17/12	**Unable to collect sample; well covered with snow**									
	02/14/13	**1.38**	**9.36**	nd<1.0	nd<5.37	nd<1.0	nd<3.96	nd<1.0	nd<5.61	nd	nc
	06/25/13	**Sample Collected - Sample Holding Time Expired, not analyzed**									
	09/30/13	**4,300**	**29,154**	**64**	**344**	**26**	**103**	nd<1.2	nd<6.74	**21**	nc
	12/10/13	**16**	**108**	nd<10	nd<53.7	nd<10	nd<39.6	nd<10	nd<56.1	nd	nc
	03/06/14	nd<10	nd<67.8	nd<10	nd<53.7	nd<10	nd<39.6	nd<10	nd<56.1	nd	nc
	06/26/14	**340**	**2,305**	nd<10	nd<53.7	nd<10	nd<39.6	nd<10	nd<56.1	**12**	nc
	09/17/14	nd<10	nd<67.8	nd<10	nd<53.7	nd<10	nd<39.6	nd<10	nd<56.1	nd	nc
	12/16/14	**2.5**	**17**	**0.10**	**0.54**	nd<10	nd<39.6	nd<10	nd<56.1	nd	nc
	03/31/15	**1.1**	**7.5**	nd<0.030	nd<0.016	nd<10	nd<39.6	nd<10	nd<56.1	nd	nc
	06/12/15	nd<0.01	nd<0.0678	nd<10	nd<53.7	nd<10	nd<39.6	nd<10	nd<56.1	nd	nc
	09/11/15	**33**	**224**	**0.78**	**4.19**	nd<10	nd<39.6	nd<10	nd<56.1	nd	nc

TABLE 4A
SUMMARY OF HISTORICAL VP SHALLOW SOIL-GAS ANALYTICAL DATA
Lake Tahoe Laundry Works
1024 Lake Tahoe Boulevard
South Lake Tahoe, California

Sample ID	Sample Date	PCE		TCE		cis-1,2-DCE		Tracer Gas		Other VOCs	
		(ppbV)	(µg/m^3)	(ppbV)	(µg/m^3)	(ppbV)	(µg/m^3)	(ppbV)	(µg/m^3)	(ppbV)	(µg/m3)
VP-5	04/09/10	**12**	**81.4**	nd	nd	**15**	**59.44**	nd	nd	nd	nc
	09/08/10	nd	nd	nd	nd	nd	nd	nd	nd	nd	nc
	12/16/10	**63**	**427.1**	nd	nd	**62**	**246**	nd	nd	nd	nc
	05/11/11	unable to sample - water in well									
	09/29/11	**2,130**	**14,441**	**15**	**81**	nd<1.0	nd<3.96	nd<1.0	nd<5.61	**15.8**	nc
	12/09/11	**41.5**	**281.4**	**1.57**	**84**	**8.54**	**34**	nd<1.0	nd<5.61	nd	nc
	03/29/12	**93.1**	**631.2**	nd<1.0	nd<5.37	nd<1.0	nd<3.96	nd<1.0	nd<5.61	**332.3**	nc
	06/08/12	**393**	**2,665**	nd<1.0	nd<5.37	**230**	**911**	nd<1.0	nd<5.61	**23.0**	nc
	09/13/12	**390**	**2,644**	**40**	**215**	**420**	**1,663**	nd<1.0	nd<5.61	**40**	nc
	12/17/12	**Unable to collect sample; well box filled with ice**									
	02/14/13	**Unable to collect sample; well box filled with ice**									
	06/25/13	**Sample Collected - Sample Holding Time Expired, not analyzed**									
	09/30/13	**3,700**	**25,000**	**480**	**2,578**	**2,500**	**9,900**	nd<13	nd<74	**505**	nc
	12/10/13	**Not Sampled - not accessible**									
	03/06/14	**62**	**420**	nd<10	nd<53.7	**39**	**154**	nd<10	nd<56.1	nd	nc
	06/26/14	**540**	**3,661**	**52**	**279**	**0.27**	**1.07**	nd<10	nd<56.1	nd	nc
	09/17/14	**Unable to Collect Sample - Wellhead Damaged**									
	12/16/14	**Unable to Collect Sample - Wellhead Damaged**									
	03/31/15	**38**	**258**	**6.6**	**35**	**50**	**198**	nd<10	nd<56.1	**13**	nc
	06/12/15	**0.24**	**1.63**	**32**	**172**	**250**	**990**	nd<10	nd<56.1	nd	nc
	09/11/15	**150**	**1,017**	**19**	**102**	**120**	**475**	nd<10	nd<56.1	**22**	nc
VP-6	04/09/10	**28**	**189.8**	nd	nd	nd	nd	nd	nd	nd	nc
	09/08/10	nd	nd	nd	nd	nd	nd	nd	nd	nd	nc
	12/16/10	nd	nd	nd	nd	nd	nd	nd	nd	**98**	nc
	05/11/11	nd	nd	nd	nd	nd	nd	nd	nd	nd	nc
	09/29/11	nd<1.0	nd<6.78	nd<1.0	nd<5.37	nd<1.0	nd<3.96	nd<1.0	nd<5.61	nd	nc
	12/09/11	**1.44**	**9.8**	nd<1.0	nd<5.37	nd<1.0	nd<3.96	nd<1.0	nd<5.61	nd	nc
	03/29/12	**1.77**	**12.0**	nd<1.0	nd<5.37	nd<1.0	nd<3.96	nd<1.0	nd<5.61	nd	nc
	06/08/12	**39.3**	**266.5**	nd<1.0	nd<5.37	**4.95**	**20**	nd<1.0	nd<5.61	**5.85**	nc
	09/13/12	**50**	**339.0**	nd<1.0	nd<5.37	nd<1.0	nd<3.96	nd<1.0	nd<5.61	nd	nc
	12/17/12	**Unable to collect sample; well covered with snow**									
	02/14/13	**Unable to collect sample; well box filled with ice**									
	06/25/13	**Sample Collected - Sample Holding Time Expired, not analyzed**									
	09/30/13	**93**	**631**	**6.3**	**34**	**21**	**83**	nd<1.3	nd<7.5	**61.5**	nc
	12/10/13	nd<10	nd<67.8	nd<10	nd<53.7	nd<10	nd<39.6	nd<10	nd<56.1	**11**	nc
	03/06/14	**Unable to collect sample; well box filled with ice**									
	06/26/14	**Unable to collect sample; too much vacuum on well**									
	09/17/14	**Unable to Collect Sample - Obstruction in Well**									
	12/16/14	**Unable to Collect Sample - Obstruction in Well**									
	03/31/15	**12**	**81**	**0.059**	**0.317**	nd<10	nd<39.6	nd<10	nd<56.1	**18**	nc
	06/12/15	**0.60**	**4.1**	nd<10	nd<53.7	nd<10	nd<39.6	nd<10	nd<56.1	nd	nc
	09/11/15	**460**	**3,119**	**2.1**	**11**	nd<10	nd<39.6	nd<10	nd<56.1	nd	nc

TABLE 4A
SUMMARY OF HISTORICAL VP SHALLOW SOIL-GAS ANALYTICAL DATA
Lake Tahoe Laundry Works
1024 Lake Tahoe Boulevard
South Lake Tahoe, California

Sample ID	Sample Date	PCE		TCE		cis-1,2-DCE		Tracer Gas		Other VOCs	
		(ppbV)	(μg/m^3)	(ppbV)	(μg/m^3)	(ppbV)	(μg/m^3)	(ppbV)	(μg/m^3)	(ppbV)	(μg/m3)
VP-7	04/09/10	nd	nd	nd	nd	nd	nd	nd	nd	nd	nc
	09/08/10	**64**	**433.9**	nd	nd	nd	nd	nd	nd	nd	nc
	12/16/10	**32**	**217.0**	nd	nd	nd	nd	nd	nd	**247**	nc
	05/11/11	**73**	**494.9**	nd	nd	nd	nd	nd	nd	nd	nc
	09/29/11	**2.0**	**13.6**	nd<1.0	nd<5.37	nd<1.0	nd<3.96	nd<1.0	nd<5.61	nd	nc
	12/09/11	nd<1.0	nd<6.78	nd<1.0	nd<5.37	nd<1.0	nd<3.96	nd<1.0	nd<5.61	**16.1**	nc
	03/29/12	nd<1.0	nd<6.78	nd<1.0	nd<5.37	nd<1.0	nd<3.96	nd<1.0	nd<5.61	nd	nc
	06/08/12	**125**	**847.5**	nd<1.0	nd<5.37	nd<1.0	nd<3.96	nd<1.0	nd<5.61	nd	nc
	09/13/12	**60**	**406.8**	nd<1.0	nd<5.37	nd<1.0	nd<3.96	nd<1.0	nd<5.61	nd	nc
	12/17/12	**Unable to collect sample; well box filled with ice**									
	02/14/13	**5.03**	**34.1**	nd<1.0	nd<5.37	nd<1.0	nd<3.96	nd<1.0	nd<5.61	nd	nc
	06/25/13	**Sample Collected - Sample Holding Time Expired, not analyzed**									
	09/30/13	**110**	**746**	nd<1.3	nd<6.8	**2.5**	**10**	nd<1.3	nd<7.1	**27.2**	nc
	12/10/13	nd<10	nd<67.8	nd<10	nd<53.7	nd<10	nd<39.6	nd<10	nd<56.1	nd	nc
	03/06/14	nd<10	nd<67.8	nd<10	nd<53.7	nd<10	nd<39.6	nd<10	nd<56.1	nd	nc
	06/26/14	nd<10	nd<67.8	nd<10	nd<53.7	nd<10	nd<39.6	nd<10	nd<56.1	nd	nc
	09/17/14	nd<10	nd<67.8	nd<10	nd<53.7	nd<10	nd<39.6	nd<10	nd<56.1	nd	nc
	12/16/14	**0.65**	**4.4**	nd<0.03	nd<0.016	nd<10	nd<39.6	nd<10	nd<56.1	nd	nc
	03/31/15	**4.6**	**31.2**	**0.054**	**0.290**	nd<10	nd<39.6	nd<10	nd<56.1	nd	nc
	06/12/15	**0.012**	**0.081**	nd<10	nd<53.7	nd<1.0	nd<3.96	nd<10	nd<56.1	nd	nc
	09/11/15	**1.5**	**10.2**	nd<0.10	nd<0.537	nd<10	nd<39.6	nd<10	nd<56.1	nd	nc
VP-8	04/09/10	**34**	**230.5**	nd	nd	nd	nd	nd	nd	nd	nc
	09/08/10	**133**	**901.7**	nd	nd	nd	nd	nd	nd	nd	nc
	12/16/10	**318**	**2,156**	nd	nd	nd	nd	nd	nd	nd	nc
	05/11/11	**281**	**1,905**	nd	nd	nd	nd	**173**	**971.3**	nd	nc
	09/29/11	nd<1.0	nd<6.78	nd<1.0	nd<5.37	nd<1.0	nd<3.96	nd<1.0	nd<5.61	nd	nc
	12/09/11	**2.01**	**13.6**	nd<1.0	nd<5.37	nd<1.0	nd<3.96	nd<1.0	nd<5.61	nd	nc
	03/29/12	**39.9**	**270.5**	nd<1.0	nd<5.37	nd<1.0	nd<3.96	nd<1.0	nd<5.61	**3.33**	nc
	06/08/12	**537**	**3,641**	nd<1.0	nd<5.37	nd<1.0	nd<3.96	nd<1.0	nd<5.61	nd	nc
	09/13/12	**30**	**203.4**	nd<1.0	nd<5.37	nd<1.0	nd<3.96	nd<1.0	nd<5.61	nd	nc
	11/19/12	**Unable to collect sample; well covered with snow**									
	02/14/13	**17.8**	**121**	nd<1.0	nd<5.37	nd<1.0	nd<3.96	nd<1.0	nd<5.61	nd	nc
	06/25/13	**Sample Collected - Sample Holding Time Expired, not analyzed**									
	09/30/13	**580**	**3,932**	**5.9**	**32**	nd<2.2	nd<8.6	nd<1.2	nd<6.74	**127.7**	nc
	12/10/13	nd<10	nd<67.8	nd<10	nd<53.7	nd<10	nd<39.6	nd<10	nd<56.1	**25**	nc
	03/06/14	nd<10	nd<67.8	nd<10	nd<53.7	nd<10	nd<39.6	nd<10	nd<56.1	**27**	nc
	06/26/14	**100**	**678**	nd<10	nd<53.7	nd<10	nd<39.6	nd<10	nd<56.1	nd	nc
	09/17/14	**38**	**258**	nd<10	nd<53.7	nd<10	nd<39.6	nd<10	nd<56.1	nd	nc
	12/16/14	**12**	**81**	**0.65**	**3.49**	nd<10	nd<39.6	nd<10	nd<56.1	nd	nc
	03/31/15	**3.2**	**22**	**0.72**	**3.87**	nd<10	nd<39.6	nd<10	nd<56.1	**25**	nc
	06/12/15	nd<0.01	nd<0.0678	nd<10	nd<53.7	nd<10	nd<39.6	nd<10	nd<56.1	**95**	nc
	09/11/15	**44**	**298**	**0.75**	**4.03**	nd<10	nd<39.6	nd<10	nd<56.1	**11**	nc

TABLE 4A
SUMMARY OF HISTORICAL VP SHALLOW SOIL-GAS ANALYTICAL DATA
Lake Tahoe Laundry Works
1024 Lake Tahoe Boulevard
South Lake Tahoe, California

Sample ID	Sample Date	PCE		TCE		cis-1,2-DCE		Tracer Gas		Other VOCs	
		(ppbV)	(µg/m^3)	(ppbV)	(µg/m^3)	(ppbV)	(µg/m^3)	(ppbV)	(µg/m^3)	(ppbV)	(µg/m3)
VP-9	04/09/10	**29**	**196.6**	nd	nd	nd	nd	nd	nd	nd	nc
	09/08/10	**7,530**	**51,053**	nd	nd	nd	nd	nd	nd	nd	nc
	12/16/10	**1,610**	**10,916**	nd	nd	nd	nd	nd	nd	**111**	nc
	05/11/11	**4,480**	**30,374**	nd	nd	nd	nd	nd	nd	nd	nc
	09/29/11	nd<1.0	nd<6.78	nd<1.0	nd<5.37	nd<1.0	nd<3.96	nd<1.0	nd<5.61	**60**	nc
	12/09/11	**48.2**	**326.8**	nd<1.0	nd<5.37	nd<1.0	nd<3.96	nd<1.0	nd<5.61	nd	nc
	03/29/12	**1,270**	**8,611**	**3.57**	**19**	nd<1.0	nd<3.96	nd<1.0	nd<5.61	nd	nc
	06/08/12	**680**	**4,610**	nd<1.0	nd<5.37	nd<1.0	nd<3.96	nd<1.0	nd<5.61	nd	nc
	09/13/12	**190**	**1,288**	nd<1.0	nd<5.37	nd<1.0	nd<3.96	nd<1.0	nd<5.61	nd	nc
	12/17/12	**Unable to collect sample; well box filled with ice**									
	02/14/13	**Unable to collect sample; well box filled with ice**									
	06/25/13	**Sample Collected - Sample Holding Time Expired, not analyzed**									
	09/30/13	**3,800**	**25,764**	nd<12	nd<67	nd<12	nd<49	nd<12	nd<70	nd	nc
	12/10/13	**1,300**	**8,814**	nd<10	nd<53.7	nd<10	nd<39.6	nd<10	nd<56.1	**23**	nc
	03/06/14	**560**	**3,797**	nd<10	nd<53.7	nd<10	nd<39.6	nd<10	nd<56.1	**10**	nc
	06/26/14	**1,300**	**8,814**	nd<10	nd<53.7	nd<10	nd<39.6	nd<10	nd<56.1	**10**	nc
	09/17/14	**2,400**	**16,272**	nd<10	nd<53.7	nd<10	nd<39.6	nd<10	nd<56.1	nd	nc
	12/16/14	**13**	**88**	nd<0.03	nd<0.016	nd<10	nd<39.6	nd<10	nd<56.1	nd	nc
	03/31/15	**520**	**3,526**	**2.4**	**13**	nd<10	nd<39.6	nd<10	nd<56.1	**13**	nc
	06/12/15	**0.94**	**6.4**	nd<10	nd<53.7	nd<10	nd<39.6	nd<10	nd<56.1	**33**	nc
	09/11/15	**450**	**3,051**	**0.37**	**2.0**	nd<10	nd<39.6	nd<10	nd<56.1	nd	nc
VP-10	04/09/10	**1,980**	**13,424**	**47**	**252.4**	**50**	**198.1**	nd	nd	nd	nc
	09/08/10	**132**	**895.0**	nd	nd	nd	nd	nd	nd	nd	nc
	12/16/10	**43**	**291.5**	nd	nd	nd	nd	nd	nd	**183**	nc
	05/11/11	**132**	**895.0**	nd	nd	nd	nd	nd	nd	nd	nc
	09/29/11	**114**	**772.9**	nd<1.0	nd<5.37	nd<1.0	nd<3.96	nd<1.0	nd<5.61	nd	nc
	12/09/11	**9.34**	**63.3**	nd<1.0	nd<5.37	nd<1.0	nd<3.96	nd<1.0	nd<5.61	nd	nc
	03/29/12	nd<1.0	nd<6.78	**3.57**	**19**	nd<1.0	nd<3.96	nd<1.0	nd<5.61	nd	nc
	06/08/12	**416**	**2,820**	nd<1.0	nd<5.37	nd<1.0	nd<3.96	nd<1.0	nd<5.61	nd	nc
	09/13/12	**290**	**1,966**	nd<1.0	nd<5.37	nd<1.0	nd<3.96	nd<1.0	nd<5.61	nd	nc
	12/17/12	**Unable to collect sample; well box filled with ice**									
	02/14/13	**13.6**	**92.2**	nd<1.0	nd<5.37	nd<1.0	nd<3.96	nd<1.0	nd<5.61	nd	nc
	06/25/13	**Sample Collected - Sample Holding Time Expired, not analyzed**									
	09/30/13	**670**	**4,543**	nd<2.5	nd<14	nd<2.5	nd<10	nd<2.5	nd<14	**12.7**	nc
	12/10/13	**70**	**475**	nd<10	nd<53.7	nd<10	nd<39.6	nd<10	nd<56.1	**13**	nc
	03/06/14	**38**	**258**	nd<10	nd<53.7	nd<10	nd<39.6	nd<10	nd<56.1	**18**	nc
	06/26/14	**210**	**1,424**	nd<10	nd<53.7	nd<10	nd<39.6	nd<10	nd<56.1	nd	nc
	09/17/14	**160**	**1,085**	nd<10	nd<53.7	nd<10	nd<39.6	nd<10	nd<56.1	nd	nc
	12/16/14	**24**	**163**	nd<0.03	nd<0.016	nd<10	nd<39.6	nd<10	nd<56.1	nd	nc
	03/31/15	**17**	**115.3**	**0.56**	**3.01**	nd<10	nd<39.6	nd<10	nd<56.1	**13**	nc
	06/12/15	**0.01**	**0.07**	nd<10	nd<53.7	nd<10	nd<39.6	nd<10	nd<56.1	**30**	nc
	09/11/15	**7.8**	**52.9**	nd<0.10	nd<0.537	nd<10	nd<39.6	nd<10	nd<56.1	nd	nc

TABLE 4A
SUMMARY OF HISTORICAL VP SHALLOW SOIL-GAS ANALYTICAL DATA
Lake Tahoe Laundry Works
1024 Lake Tahoe Boulevard
South Lake Tahoe, California

Sample ID	Sample Date	PCE		TCE		cis-1,2-DCE		Tracer Gas		Other VOCs	
		(ppbV)	(μg/m^3)	(ppbV)	(μg/m^3)	(ppbV)	(μg/m^3)	(ppbV)	(μg/m^3)	(ppbV)	(μg/m3)

Notes:

For Other VOCs and Individual concentrations - See Table 4B

cis-1,2-DCE = cis-1,2-Dichloroethene (atomic weight = 96.95 g/mol)
g/mol = grams per mole
nc = Not calculated, as detection limit is based on atomic weight of a compound
nd = Not detected at or above detection limit for each respective compound
nd< = Not detected at or above the practical quantitation limit (PQL), which is indicated by value
PCE = Tetrachloroethene (a.k.a. perchloroethene) (atomic weight = 165.82 g/mol)
ppbV = parts per billion by volume
TCE = Trichloroethene (atomic weight = 131.39 g/mol)
Tracer Gas = Freon 11
μg/m3 = micrograms per cubic meter

TABLE 4B
SUMMARY OF HISTORICAL VP SHALLOW SOIL-GAS ANALYTICAL DATA - OTHER VOCS
Lake Tahoe Laundry Works
1024 Lake Tahoe Boulevard
South Lake Tahoe, California

Sample ID	Sample Date	Vinyl Acetate		Vinyl Chloride		n-Hexane		Isopropyl Alcohol		1,1-DCE		1,1,1-TCA		Tetrahydrofuran		Chloroform		Ethyl Acetate		Ethanol		Acetone		MC		Benzene		Toluene		Ethylbenzene		Total Xylenes		4-Ethyltoluene		1,3,5-TMB		1,2,4-TMB		Naphthalene	
		(ppbV)	(μg/m3)	(ppbV)	(μg/m3)	(ppbV)	(μg/m3)	(ppbV)	(μg/m3)	(ppbV)	(μg/m3)	(ppbV)	(μg/m3)	(ppbV)	(μg/m3)	(ppbV)	(μg/m3)	(ppbV)	(μg/m3)	(ppbV)	(μg/m3)	(ppbV)	(μg/m3)	(ppbV)	(μg/m3)	(ppbV)	(μg/m3)	(ppbV)	(μg/m3)	(ppbV)	(μg/m3)	(ppbV)	(μg/m3)	(ppbV)	(μg/m3)	(ppbV)	(μg/m3)	(ppbV)	(μg/m3)	(ppbV)	(μg/m3)
VP-1	04/09/10	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	na	na
	09/08/10	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	na	na
	12/16/10	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	na	na
	05/11/11	unable to sample - water in well																																							
	09/29/11	nd<1.0	nd<3.52	nd<1.0	nd<2.56	nd<1.0	nd<3.52	nd<1.0	nd<2.46	nd<1.0	nd<3.96	nd<1.0	nd<5.45	nd<1.0	nd<2.95	nd<1.0	nd<4.88	nd<1.0	nd<3.6	nd<1.0	nd<1.88	nd<1.0	nd<2.375	nd<1.0	nd<3.47	nd<1.0	nd<3.95	nd<1.0	nd<3.77	nd<1.0	nd<4.34	nd<1.0	nd<4.34	nd<1.0	nd<4.92	nd<1.0	nd<4.91	nd<1.0	nd<4.91	na	na
	12/09/11	nd<1.0	nd<3.52	nd<1.0	nd<2.56	nd<1.0	nd<3.52	nd<1.0	nd<2.46	nd<1.0	nd<3.96	nd<1.0	nd<5.45	nd<1.0	nd<2.95	nd<1.0	nd<4.88	nd<1.0	nd<3.6	nd<1.0	nd<1.88	nd<1.0	nd<2.375	nd<1.0	nd<3.47	nd<1.0	nd<3.95	nd<1.0	nd<3.77	nd<1.0	nd<4.34	nd<1.0	nd<4.34	nd<1.0	nd<4.92	nd<1.0	nd<4.91	nd<1.0	nd<4.91	nd<1.0	nd<5.24
	03/29/12	nd<1.0	nd<3.52	nd<1.0	nd<2.56	nd<1.0	nd<3.52	nd<1.0	nd<2.46	nd<1.0	nd<3.96	nd<1.0	nd<5.45	nd<1.0	nd<2.95	nd<1.0	nd<4.88	nd<1.0	nd<3.6	nd<1.0	nd<1.88	nd<1.0	nd<2.375	nd<1.0	nd<3.47	nd<1.0	nd<3.95	nd<1.0	nd<3.77	nd<1.0	nd<4.34	nd<1.0	nd<4.34	nd<1.0	nd<4.92	nd<1.0	nd<4.91	nd<1.0	nd<4.91	nd<1.0	nd<5.24
	06/08/12	nd<1.0	nd<3.52	nd<1.0	nd<2.56	nd<1.0	nd<3.52	nd<1.0	nd<2.46	nd<1.0	nd<3.96	nd<1.0	nd<5.45	nd<1.0	nd<2.95	nd<1.0	nd<4.88	nd<1.0	nd<3.6	nd<1.0	nd<1.88	nd<1.0	nd<2.375	nd<1.0	nd<3.47	nd<1.0	nd<3.95	nd<1.0	nd<3.77	nd<1.0	nd<4.34	nd<1.0	nd<4.34	**4.59**	**22.56**	nd<1.0	nd<4.91	nd<1.0	nd<4.91	nd<1.0	nd<5.24
	08/21/12	nd<1.0	nd<3.52	nd<1.0	nd<2.56	nd<1.0	nd<3.52	nd<1.0	nd<2.46	nd<1.0	nd<3.96	nd<1.0	nd<5.45	nd<1.0	nd<2.95	nd<1.0	nd<4.88	nd<1.0	nd<3.6	nd<1.0	nd<1.88	nd<1.0	nd<2.375	nd<1.0	nd<3.47	nd<1.0	nd<3.95	nd<1.0	nd<3.77	nd<1.0	nd<4.34	nd<1.0	nd<4.34	nd<1.0	nd<4.92	nd<1.0	nd<4.91	nd<1.0	nd<4.91	nd<10	nd<52.4
	11/19/12	**Unable to collect sample; well tubing filled with ice**																																							
	02/14/13	nd<1.0	nd<3.52	nd<1.0	nd<2.56	nd<1.0	nd<3.52	nd<1.0	nd<2.46	nd<1.0	nd<3.96	nd<1.0	nd<5.45	nd<1.0	nd<2.95	nd<1.0	nd<4.88	nd<1.0	nd<3.6	nd<1.0	nd<1.88	nd<1.0	nd<2.375	nd<1.0	nd<3.47	nd<1.0	nd<3.95	nd<1.0	nd<3.77	nd<1.0	nd<4.34	nd<1.0	nd<4.34	nd<1.0	nd<4.92	nd<1.0	nd<4.91	nd<1.0	nd<4.91	nd<1.0	nd<5.24
	06/25/13	**Sample Collected - Sample Holding Time Expired, Not Analyzed**																																							
	09/30/13	na	na	nd<1.2	nd<3.1	nd<1.2	nd<4.23	na	na	nd<1.2	nd<4.8	nd<1.2	nd<6.6	**1.4**	**4.0**	nd<1.2	nd<5.9	nd<1.2	nd<4.32	**5.0**	**9.4**	**15**	**36**	**13**	**45**	nd<1.2	nd<3.8	nd<1.2	nd<4.5	nd<1.2	nd<5.2	**1.3**	**5.7**	nd<1.2	nd<5.9	nd<1.2	nd<5.9	nd<1.2	nd<5.9	na	na
	12/10/13	nd<10	nd<35.2	nd<10	nd<25.6	nd<10	nd<35.2	nd<10	nd	nd<10	nd<39.6	nd<10	nd<54.5	nd<10	nd<29.5	nd<10	nd<48.8	nd<10	nd<36	na	na	nd<10	nd<23.75	**18**	**63**	nd<10	nd<39.5	nd<10	nd<37.7	nd<10	nd<43.4	nd<10	nd<43.4	nd<10	nd<49.2	nd<10	nd<49.1	nd<10	nd<49.1	nd<10	nd<52.4
	03/06/14	nd<10	nd<35.2	nd<10	nd<25.6	nd<10	nd<35.2	**11**	**27**	nd<10	nd<39.6	nd<10	nd<54.5	nd<10	nd<29.5	nd<10	nd<48.8	nd<10	nd<36	na	na	nd<10	nd<23.75	nd<10	nd<34.7	nd<10	nd<39.5	nd<10	nd<37.7	nd<10	nd<43.4	nd<10	nd<43.4	nd<10	nd<49.2	nd<10	nd<49.1	nd<10	nd<49.1	nd<10	nd<52.4
	06/26/14	nd<10	nd<35.2	nd<10	nd<25.6	nd<10	nd<35.2	nd<10	nd<24.6	nd<10	nd<39.6	nd<10	nd<54.5	nd<10	nd<29.5	nd<10	nd<48.8	nd<10	nd<36	na	na	nd<10	nd<23.75	nd<10	nd<34.7	nd<10	nd<39.5	nd<10	nd<37.7	nd<10	nd<43.4	nd<10	nd<43.4	nd<10	nd<49.2	nd<10	nd<49.1	nd<10	nd<49.1	**12**	**62.9**
	09/17/14	nd<10	nd<35.2	nd<10	nd<25.6	nd<10	nd<35.2	nd<10	nd<24.6	nd<10	nd<39.6	nd<10	nd<54.5	nd<10	nd<29.5	nd<10	nd<48.8	nd<10	nd<36	na	na	nd<10	nd<23.75	nd<10	nd<34.7	nd<10	nd<39.5	nd<10	nd<37.7	nd<10	nd<43.4	nd<10	nd<43.4	nd<10	nd<49.2	nd<10	nd<49.1	nd<10	nd<49.1	nd<10	nd<52.4
	12/16/14	nd<10	nd<35.2	nd<10	nd<25.6	nd<10	nd<35.2	nd<10	nd<24.6	nd<10	nd<39.6	nd<10	nd<54.5	nd<10	nd<29.5	nd<10	nd<48.8	nd<10	nd<36	na	na	nd<10	nd<23.75	nd<10	nd<34.7	nd<10	nd<39.5	nd<10	nd<37.7	nd<10	nd<43.4	nd<10	nd<43.4	nd<10	nd<49.2	nd<10	nd<49.1	nd<10	nd<49.1	nd<10	nd<52.4
	03/31/15	nd<10	nd<35.2	nd<10	nd<25.6	nd<10	nd<35.2	nd<10	nd<24.6	nd<10	nd<39.6	nd<10	nd<54.5	nd<10	nd<29.5	nd<10	nd<48.8	nd<10	nd<36	na	na	nd<10	nd<23.75	nd<10	nd<34.7	nd<10	nd<39.5	nd<10	nd<37.7	nd<10	nd<43.4	nd<10	nd<43.4	nd<10	nd<49.2	nd<10	nd<49.1	nd<10	nd<49.1	nd<10	nd<52.4
	06/12/15	nd<10	nd<35.2	nd<10	nd<25.6	nd<10	nd<35.2	nd<10	nd<24.6	nd<10	nd<39.6	nd<10	nd<54.5	nd<10	nd<29.5	nd<10	nd<48.8	nd<10	nd<36	na	na	nd<10	nd<23.75	nd<10	nd<34.7	nd<10	nd<39.5	nd<10	nd<37.7	nd<10	nd<43.4	nd<10	nd<43.4	nd<10	nd<49.2	nd<10	nd<49.1	nd<10	nd<49.1	nd<10	nd<52.4
	09/11/15	nd<10	nd<35.2	nd<10	nd<25.6	nd<10	nd<35.2	nd<10	nd<24.6	nd<10	nd<39.6	nd<10	nd<54.5	nd<10	nd<29.5	nd<10	nd<48.8	nd<10	nd<36	na	na	nd<10	nd<23.75	nd<10	nd<34.7	nd<10	nd<39.5	nd<10	nd<37.7	nd<10	nd<43.4	nd<10	nd<43.4	nd<10	nd<49.2	nd<10	nd<49.1	nd<10	nd<49.1	nd<10	nd<52.4
VP-2	04/09/10	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	na	na
	09/08/10	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	na	na
	12/16/10	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	**186**	**1,015**	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	na	na
	05/11/11	unable to sample - water in well																																							
	09/29/11	nd<1.0	nd<3.52	nd<1.0	nd<2.56	nd<1.0	nd<3.52	nd<1.0	nd<2.46	nd<1.0	nd<3.96	nd<1.0	nd<5.45	nd<1.0	nd<2.95	nd<1.0	nd<4.88	nd<1.0	nd<3.6	nd<1.0	nd<1.88	nd<1.0	nd<2.375	nd<1.0	nd<3.47	nd<1.0	nd<3.95	nd<1.0	nd<3.77	nd<1.0	nd<4.34	nd<1.0	nd<4.34	nd<1.0	nd<4.92	nd<1.0	nd<4.91	nd<1.0	nd<4.91	na	na
	12/09/11	nd<1.0	nd<3.52	nd<1.0	nd<2.56	nd<1.0	nd<3.52	nd<1.0	nd<2.46	nd<1.0	nd<3.96	**87.8**	**478.7**	nd<1.0	nd<2.95	nd<1.0	nd<4.88	nd<1.0	nd<3.6	nd<1.0	nd<1.88	nd<1.0	nd<2.375	nd<1.0	nd<3.47	nd<1.0	nd<3.95	nd<1.0	nd<3.77	nd<1.0	nd<4.34	nd<1.0	nd<4.34	nd<1.0	nd<4.92	nd<1.0	nd<4.91	nd<1.0	nd<4.91	nd<1.0	nd<5.24
	03/29/12	nd<1.0	nd<3.52	**33.9**	**86.6**	nd<1.0	nd<3.52	nd<1.0	nd<2.46	**459**	**2,470**	**405**	**2,210**	nd<1.0	nd<2.95	nd<1.0	nd<4.88	nd<1.0	nd<3.6	nd<1.0	nd<1.88	nd<1.0	nd<2.375	nd<1.0	nd<3.47	nd<1.0	nd<3.95	nd<1.0	nd<3.77	**7.26**	**31.5**	**91.2**	**396**	**133**	**652**	**35.4**	**174**	**137**	**673**	nd<1.0	nd<5.24
	06/08/12	nd<1.0	nd<3.52	nd<1.0	nd<2.56	nd<1.0	nd<3.52	nd<1.0	nd<2.46	nd<1.0	nd<3.96	**108**	**589**	nd<1.0	nd<2.95	nd<1.0	nd<4.88	nd<1.0	nd<3.6	nd<1.0	nd<1.88	nd<1.0	nd<2.375	nd<1.0	nd<3.47	nd<1.0	nd<3.95	nd<1.0	nd<3.77	nd<1.0	nd<4.34	nd<1.0	nd<4.34	nd<1.0	nd<4.92	nd<1.0	nd<4.91	nd<1.0	nd<4.91	nd<1.0	nd<5.24
	08/21/12	nd<1.0	nd<3.52	nd<1.0	nd<2.56	nd<1.0	nd<3.52	nd<1.0	nd<2.46	nd<1.0	nd<3.96	nd<1.0	nd<5.45	nd<1.0	nd<2.95	nd<1.0	nd<4.88	nd<1.0	nd<3.6	nd<1.0	nd<1.88	nd<1.0	nd<2.375	nd<1.0	nd<3.47	nd<1.0	nd<3.95	nd<1.0	nd<3.77	nd<1.0	nd<4.34	**50**	**217**	**50**	**246**	nd<1.0	nd<4.91	nd<1.0	nd<4.91	nd<10	nd<52.4
	11/19/12	**Unable to collect sample; well covered with snow**																																							
	02/14/13	**Unable to collect sample; well covered with snow**																																							
	06/25/13	**Sample Collected - Sample Holding Time Expired, Not Analyzed**																																							
	09/30/13	na	na	**1,500**	**3,800**	nd<660	nd<2,300	na	na	nd<660	nd<2,600	nd<660	nd<3,600	nd<660	nd<1,900	nd<660	nd<3,200	nd<660	nd<2376	nd<2,600	nd<5,000	nd<6,600	nd<16,000	nd<6,660	nd<66,000	**nd<660**	**nd<2,100**	**1,200**	**2,500**	nd<660	nd<2,900	nd<660	nd<2,900	nd<660	nd<3,200	nd<660	nd<3,200	nd<660	nd<3,200	na	na
	12/10/13	**Not Sampled - not accessible**																																							
	03/06/14	**Not Sampled - not accessible**																																							
	06/26/14	nd<10	nd<35.2	nd<10	nd<25.6	nd<10	nd<35.2	nd<10	nd<24.6	nd<10	nd<39.6	nd<10	nd<54.5	nd<10	nd<29.5	nd<10	nd<48.8	nd<10	nd<36	na	na	nd<10	nd<23.75	nd<10	nd<34.7	nd<10	nd<39.5	nd<10	nd<37.7	nd<10	nd<43.4	nd<10	nd<43.4	nd<10	nd<49.2	nd<10	nd<49.1	nd<10	nd<49.1	nd<10	nd<52.4
	09/17/14	nd<10	nd<35.2	nd<10	nd<25.6	nd<10	nd<35.2	nd<10	nd<24.6	nd<10	nd<39.6	nd<10	nd<54.5	nd<10	nd<29.5	nd<10	nd<48.8	nd<10	nd<36	na	na	nd<10	nd<23.75	nd<10	nd<34.7	nd<10	nd<39.5	nd<10	nd<37.7	nd<10	nd<43.4	nd<10	nd<43.4	nd<10	nd<49.2	nd<10	nd<49.1	nd<10	nd<49.1	nd<10	nd<52.4
	12/16/14	nd<10	nd<35.2	nd<10	nd<25.6	nd<10	nd<35.2	nd<10	nd<24.6	nd<10	nd<39.6	nd<10	nd<54.5	nd<10	nd<29.5	nd<10	nd<48.8	nd<10	nd<36	na	na	nd<10	nd<23.75	nd<10	nd<34.7	nd<10	nd<39.5	nd<10	nd<37.7	nd<10	nd<43.4	nd<10	nd<43.4	nd<10	nd<49.2	nd<10	nd<49.1	nd<10	nd<49.1	nd<10	nd<52.4
	03/31/15	nd<10	nd<35.2	nd<10	nd<25.6	nd<10	nd<35.2	nd<10	nd<24.6	nd<10	nd<39.6	nd<10	nd<54.5	nd<10	nd<29.5	nd<10	nd<48.8	nd<10	nd<36	na	na	nd<10	nd<23.75	nd<10	nd<34.7	nd<10	nd<39.5	nd<10	nd<37.7	nd<10	nd<43.4	nd<10	nd<43.4	nd<10	nd<49.2	nd<10	nd<49.1	nd<10	nd<49.1	nd<10	nd<52.4
	06/12/15	nd<10	nd<35.2	nd<10	nd<25.6	nd<10	nd<35.2	nd<10	nd<24.6	nd<10	nd<39.6	nd<10	nd<54.5	nd<10	nd<29.5	nd<10	nd<48.8	nd<10	nd<36	na	na	nd<10	nd<23.75	nd<10	nd<34.7	nd<10	nd<39.5	nd<10	nd<37.7	nd<10	nd<43.4	nd<10	nd<43.4	nd<10	nd<49.2	nd<10	nd<49.1	nd<10	nd<49.1	nd<10	nd<52.4
	09/11/15	nd<10	nd<35.2	nd<10	nd<25.6	nd<10	nd<35.2	nd<10	nd<24.6	nd<10	nd<39.6	nd<10	nd<54.5	nd<10	nd<29.5	nd<10	nd<48.8	nd<10	nd<36	na	na	nd<10	nd<23.75	nd<10	nd<34.7	nd<10	nd<39.5	nd<10	nd<37.7	nd<10	nd<43.4	nd<10	nd<43.4	nd<10	nd<49.2	nd<10	nd<49.1	nd<10	nd<49.1	nd<30	nd<157
VP-3	04/09/10	unable to sample - water in well																																							
	09/08/10	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	na	na
	12/16/10	unable to sample - water in well																																							
	05/11/11	unable to sample - water in well																																							
	09/29/11	nd<1.0	nd<3.52	nd<1.0	nd<2.56	nd<1.0	nd<3.52	nd<1.0	nd<2.46	nd<1.0	nd<3.96	nd<1.0	nd<5.45	nd<1.0	nd<2.95	nd<1.0	nd<4.88	nd<1.0	nd<3.6	nd<1.0	nd<1.88	nd<1.0	nd<2.375	nd<1.0	nd<3.47	nd<1.0	nd<3.95	nd<1.0	nd<3.77	nd<1.0	nd<4.34	nd<1.0	nd<4.34	nd<1.0	nd<4.92	nd<1.0	nd<4.91	nd<1.0	nd<4.91	na	na
	12/09/11	nd<1.0	nd<3.52	nd<1.0	nd<2.56	nd<1.0	nd<3.52	nd<1.0	nd<2.46	nd<1.0	nd<3.96	**1.98**	**10.8**	nd<1.0	nd<2.95	nd<1.0	nd<4.88	nd<1.0	nd<3.6	nd<1.0	nd<1.88	nd<1.0	nd<2.375	nd<1.0	nd<3.47	nd<1.0	nd<3.95	nd<1.0	nd<3.77	nd<1.0	nd<4.34	nd<1.0	nd<4.34	nd<1.0	nd<4.92	nd<1.0	nd<4.91	nd<1.0	nd<4.91	nd<1.0	nd<5.24
	03/29/12	nd<1.0	nd<3.52	nd<1.0	nd<2.56	nd<1.0	nd<3.52	nd<1.0	nd<2.46	nd<1.0	nd<3.96	**3.18**	**17.3**	nd<1.0	nd<2.95	nd<1.0	nd<4.88	nd<1.0	nd<3.6	nd<1.0	nd<1.88	nd<1.0	nd<2.375	nd<1.0	nd<3.47	nd<1.0	nd<3.95	nd<1.0	nd<3.77	nd<1.0	nd<4.34	**10.9**	**47.3**	**17.0**	**83.6**	**3.84**	**18.9**	**17.3**	**85**	nd<1.0	nd<5.24
	06/08/12	nd<1.0	nd<3.52	nd<1.0	nd<2.56	nd<1.0	nd<3.52	nd<1.0	nd<2.46	nd<1.0	nd<3.96	nd<1.0	nd<5.45	nd<1.0	nd<2.95	nd<1.0	nd<4.88	nd<1.0	nd<3.6	nd<1.0	nd<1.88	nd<1.0	nd<2.375	nd<1.0	nd<3.47	nd<1.0	nd<3.95	nd<1.0	nd<3.77	nd<1.0	nd<4.34	nd<1.0	nd<4.34	nd<1.0	nd<4.92	nd<1.0	nd<4.91	nd<1.0	nd<4.91	nd<1.0	nd<5.24
	08/21/12	nd<1.0	nd<3.52	nd<1.0	nd<2.56	nd<1.0	nd<3.52	nd<1.0	nd<2.46	nd<1.0	nd<3.96	nd<1.0	nd<5.45	nd<1.0	nd<2.95	nd<1.0	nd<4.88	nd<1.0	nd<3.6	nd<1.0	nd<1.88	nd<1.0	nd<2.375	nd<1.0	nd<3.47	nd<1.0	nd<3.95	nd<1.0	nd<3.77	nd<1.0	nd<4.34	nd<1.0	nd<4.34	nd<1.0	nd<4.92	nd<1.0	nd<4.91	nd<1.0	nd<4.91	nd<10	nd<52.4
	11/19/12	**Unable to collect sample; well covered with snow**																																							
	02/14/13	**Unable to collect sample; well covered with snow**																																							
	06/25/13	**Sample Collected - Sample Holding Time Expired, Not Analyzed**																																							
	09/30/13	na	na	nd<26	nd<66	nd<26	nd<91	na	na	nd<26	nd<100	nd<26	nd<140	nd<26	nd<76	nd<26	nd<120	nd<26	nd<93.6	nd<100	nd<190	nd<260	nd<610	nd<260	nd<900	nd<26	nd<82	nd<26	nd<97	nd<26	nd<110	nd<26	nd<110	nd<26	nd<130	nd<26	nd<130	nd<26	nd<130	na	na
	12/10/13	nd<10	nd<35.2	nd<10	nd<25.6	nd<10	nd<35.2	nd<10	nd<24.6	nd<10	nd<39.6	nd<10	nd<54.5	nd<10	nd<29.5	nd<10	nd<48.8	nd<10	nd<36	na	na	nd<10	nd<23.75	nd<10	nd<34.7	nd<10	nd<39.5	nd<10	nd<37.7	nd<10	nd<43.4	nd<10	nd<43.4	nd<10	nd<49.2	nd<10	nd<49.1	nd<10	nd<49.1	nd<10	nd<52.4
	03/06/14	nd<10	nd<35.2	nd<10	nd<25.6	nd<10	nd<35.2	nd<10	nd<24.6	nd<10	nd<39.6	nd<10	nd<54.5	nd<10	nd<29.5	nd<10	nd<48.8	nd<10	nd<36	na	na	nd<10	nd<23.75	nd<10	nd<34.7	nd<10	nd<39.5	nd<10	nd<37.7	nd<10	nd<43.4	nd<10	nd<43.4	nd<10	nd<49.2	nd<10	nd<49.1	nd<10	nd<49.1	nd<10	nd<52.4
	06/26/14	nd<10	nd<35.2	nd<10	nd<25.6	nd<10	nd<35.2	nd<10	nd<24.6	nd<10	nd<39.6	nd<10	nd<54.5	nd<10	nd<29.5	nd<10	nd<48.8	nd<10	nd<36	na	na	nd<10	nd<23.75	nd<10	nd<34.7	nd<10	nd<39.5	nd<10	nd<37.7	nd<10	nd<43.4	nd<10	nd<43.4	nd<10	nd<49.2	nd<10	nd<49.1	nd<10	nd<49.1	nd<10	nd<52.4
	09/17/14	nd<10	nd<35.2	nd<10	nd<25.6	nd<10	nd<35.2	nd<10	nd<24.6	nd<10	nd<39.6	nd<10	nd<54.5	nd<10	nd<29.5	nd<10	nd<48.8	nd<10	nd<36	na	na	nd<10	nd<23.75	nd<10	nd<34.7	nd<10	nd<39.5	nd<10	nd<37.7	nd<10	nd<43.4	nd<10	nd<43.4	nd<10	nd<49.2	nd<10	nd<49.1	nd<10	nd<49.1	nd<10	nd<52.4
	12/16/14	nd<10	nd<35.2	nd<10	nd<25.6	nd<10	nd<35.2	nd<10	nd<24.6	nd<10	nd<39.6	nd<10	nd<54.5	nd<10	nd<29.5	nd<10	nd<48.8	nd<10	nd<36	na	na	nd<10	nd<23.75	nd<10	nd<34.7	nd<10	nd<39.5	nd<10	nd<37.7	nd<10	nd<43.4	nd<10	nd<43.4	nd<10	nd<49.2	nd<10	nd<49.1	nd<10	nd<49.1	nd<10	nd<52.4
	03/31/15	nd<10	nd<35.2	nd<10	nd<25.6	nd<10	nd<35.2	nd<10	nd<24.6	nd<10	nd<39.6	nd<10	nd<54.5	nd<10	nd<29.5	nd<10	nd<48.8	nd<10	nd<36	na	na	nd<10	nd<23.75	nd<10	nd<34.7	nd<10	nd<39.5	nd<10	nd<37.7	nd<10	nd<43.4	nd<10	nd<43.4	nd<10	nd<49.2	nd<10	nd<49.1	nd<10	nd<49.1	nd<10	nd<52.4
	06/12/15	nd<10	nd<35.2	nd<10	nd<25.6	nd<10	nd<35.2	nd<10	nd<24.6	nd<10	nd<39.6	nd<10	nd<54.5	nd<10	nd<29.5	nd<10	nd<48.8	nd<10	nd<36	na	na	nd<10	nd<23.75	nd<10	nd<34.7	nd<10	nd<39.5	nd<10	nd<37.7	nd<10	nd<43.4	nd<10	nd<43.4	nd<10	nd<49.2	nd<10	nd<49.1	nd<10	nd<49.1	nd<10	nd<52.4
	09/11/15	nd<10	nd<35.2	nd<10	nd<25.6	nd<10	nd<35.2	nd<10	nd<24.6	nd<10	nd<39.6	nd<10	nd<54.5	nd<10	nd<29.5	nd<10	nd<48.8	nd<10	nd<36	na	na	nd<10	nd<23.75	nd<10	nd<34.7	nd<10	nd<39.5	nd<10	nd<37.7	nd<10	nd<43.4	nd<10	nd<43.4	nd<10	nd<49.2	nd<10	nd<49.1	nd<10	nd<49.1	nd<10	nd<52.4
VP-4	04/09/10	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	na	na
	09/08/10	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	na	na
	12/16/10	unable to sample - water in well																																							
	05/11/11	unable to sample - water in well																																							
	09/29/11	nd<1.0	nd<3.52	nd<1.0	nd<2.56	nd<1.0	nd<3.52	nd<1.0	nd<2.46	nd<1.0	nd<3.96	nd<1.0	nd<5.45	nd<1.0	nd<2.95	nd<1.0	nd<4.88	nd<1.0	nd<3.6	nd<1.0	nd<1.88	nd<1.0	nd<2.375	nd<1.0	nd<3.47	nd<1.0	nd<3.95	nd<1.0	nd<3.77	nd<1.0	nd<4.34	nd<1.0	nd<4.34	nd<1.0	nd<4.92	nd<1.0	nd<4.91	nd<1.0	nd<4.91	na	na
	12/09/11	nd<1.0	nd<3.52	nd<1.0	nd<2.56	nd<1.0	nd<3.52	nd<1.0	nd<2.46	nd<1.0	nd<3.96	nd<1.0	nd<5.45	nd<1.0	nd<2.95	nd<1.0	nd<4.88	nd<1.0	nd<3.6	nd<1.0	nd<1.88	nd<1.0	nd<2.375	nd<1.0	nd<3.47	nd<1.0	nd<3.95	nd<1.0	nd<3.77	nd<1.0	nd<4.34	nd<1.0	nd<4.34	nd<1.0	nd<4.92	nd<1.0	nd<4.91	nd<1.0	nd<4.91	nd<1.0	nd<5.24
	03/29/12	nd<1.0	nd<3.52	nd<1.0	nd<2.56	nd<1.0	nd<3.52	nd<1.0	nd<2.46	nd<1.0	nd<3.96	nd<1.0	nd<5.45	nd<1.0	nd<2.95	nd<1.0	nd<4.88	nd<1.0	nd<3.6	nd<1.0	nd<1.88	nd<1.0	nd<2.375	nd<1.0	nd<3.47	nd<1.0	nd<3.95	nd<1.0	nd<3.77	nd<1.0	nd<4.34	nd<1.0	nd<4.34	nd<1.0	nd<4.92	nd<1.0	nd<4.91	nd<1.0	nd<4.91	nd<1.0	nd<5.24
	06/08/12	nd<1.0	nd<3.52	nd<1.0	nd<2.56	nd<1.0	nd<3.52	nd<1.0	nd<2.46	nd<1.0	nd<3.96	nd<1.0	nd<5.45	nd<1.0	nd<2.95	nd<1.0	nd<4.88	nd<1.0	nd<3.6	nd<1.0	nd<1.88	nd<1.0	nd<2.375	nd<1.0	nd<3.47	nd<1.0	nd<3.95	nd<1.0	nd<3.77	nd<1.0	nd<4.34	nd<1.0	nd<4.34	nd<1.0	nd<4.92	nd<1.0	nd<4.91	nd<1.0	nd<4.91	nd<1.0	nd<5.24
	08/21/12	nd<1.0	nd<3.52	nd<1.0	nd<2.56	nd<1.0	nd<3.52	nd<1.0	nd<2.46	nd<1.0	nd<3.96	nd<1.0	nd<5.45	nd<1.0	nd<2.95	nd<1.0	nd<4.88	nd<1.0	nd<3.6	nd<1.0	nd<1.88	nd<1.0	nd<2.375	nd<1.0	nd<3.47	nd<1.0	nd<3.95	nd<1.0	nd<3.77	nd<1.0	nd<4.34	nd<1.0	nd<4.34	nd<1.0	nd<4.92	nd<1.0	nd<4.91	nd<1.0	nd<4.91	nd<10	nd<52.4
	11/19/12	**Unable to collect sample; well covered with snow**																																							
	02/14/13	nd<1.0	nd<3.52	nd<1.0	nd<2.56	nd<1.0	nd<3.52	nd<1.0	nd<2.46	nd<1.0	nd<3.96	nd<1.0	nd<5.45	nd<1.0	nd<2.95	nd<1.0	nd<4.88	nd<1.0	nd<3.6	nd<1.0	nd<1.88	nd<1.0	nd<2.375	nd<1.0	nd<3.47	nd<1.0	nd<3.95	nd<1.0	nd<3.77	nd<1.0	nd<4.34	nd<1.0	nd<4.34	nd<1.0	nd<4.92	nd<1.0	nd<4.91	nd<1.0	nd<4.91	nd<1.0	nd<5.24
	06/25/13	**Sample Collected - Sample Holding Time Expired, Not Analyzed**																																							
	09/30/13	na	na	nd<17	nd<44	nd<17	nd<61	na	na	nd<17	nd<68	nd<17	nd<94	nd<17	nd<51	nd<17	nd<84	nd<17	nd<61.2	nd<69	nd<130	nd<170	nd<410	nd<170	nd<600	nd<17	nd<55	**21**	**78**	nd<17	nd<75	nd<17	nd<75	nd<17	nd<84	nd<17	nd<84	nd<17	nd<84	na	na
	12/10/13	nd<10	nd<35.2	nd<10	nd<25.6	nd<10	nd<35.2	nd<10	nd<24.6	nd<10	nd<39.6	nd<10	nd<54.5	nd<10	nd<29.5	nd<10	nd<48.8	nd<10	nd<36	na	na	nd<10	nd<23.75	nd<10	nd<34.7	nd<10	nd<39.5	nd<10	nd<37.7	nd<10	nd<43.4	nd<10	nd<43.4	nd<10	nd<49.2	nd<10	nd<49.1	nd<10	nd<49.1	nd<10	nd<52.4
	03/06/14	nd<10	nd<35.2	nd<10	nd<25.6	nd<10	nd<35.2	nd<10	nd<24.6	nd<10	nd<39.6	nd<10	nd<54.5	nd<10	nd<29.5	nd<10	nd<48.8	nd<10	nd<36	na	na	nd<10	nd<23.75	nd<10	nd<34.7	nd<10	nd<39.5	nd<10	nd<37.7	nd<10	nd<43.4	nd<10	nd<43.4	nd<10	nd<49.2	nd<10	nd<49.1	nd<10	nd<49.1	nd<10	nd<52.4
	06/26/14	nd<10	nd<35.2	nd<10	nd<25.6	nd<10	nd<35.2	nd<10	nd<24.6	nd<10	nd<39.6	nd<10	nd<54.5	nd<10	nd<29.5	nd<10	nd<48.8	nd<10	nd<36	na	na	nd<10	nd<23.75	**12**	**42**	nd<10	nd<39.5	nd<10	nd<37.7	nd<10	nd<43.4	nd<10	nd<43.4	nd<10	nd<49.2	nd<10	nd<49.1	nd<10	nd<49.1	nd<10	nd<52.4
	09/17/14	nd<10	nd<35.2	nd<10	nd<25.6	nd<10	nd<35.2	nd<10	nd<24.6	nd<10	nd<39.6	nd<10	nd<54.5	nd<10	nd<29.5	nd<10	nd<48.8	nd<10	nd<36	na	na	nd<10	nd<23.75	nd<10	nd<34.7	nd<10	nd<39.5	nd<10	nd<37.7	nd<10	nd<43.4	nd<10	nd<43.4	nd<10	nd<49.2	nd<10	nd<49.1	nd<10	nd<49.1	nd<10	nd<52.4
	12/16/14	nd<10	nd<35.2	nd<10	nd<25.6	nd<10	nd<35.2	nd<10	nd<24.6	nd<10	nd<39.6	nd<10	nd<54.5	nd<10	nd<29.5	nd<10	nd<48.8	nd<10	nd<36	na	na	nd<10	nd<23.75	nd<10	nd<34.7	nd<10	nd<39.5	nd<10	nd<37.7	nd<10	nd<43.4	nd<10	nd<43.4	nd<10	nd<49.2	nd<10	nd<49.1	nd<10	nd<49.1	nd<10	nd<52.4
	03/31/15	nd<10	nd<35.2	nd<10	nd<25.6	nd<10	nd<35.2	nd<10	nd<24.6	nd<10	nd<39.6	nd<10	nd<54.5	nd<10	nd<29.5	nd<10	nd<48.8	nd<10	nd<36	na	na	nd<10	nd<23.75	nd<10	nd<34.7	nd<10	nd<39.5	nd<10	nd<37.7	nd<10	nd<43.4	nd<10	nd<43.4	nd<10	nd<49.2	nd<10	nd<49.1	nd<10	nd<49.1	nd<10	nd<52.4
	06/12/15	nd<10	nd<35.2	nd<10	nd<25.6	nd<10	nd<35.2	nd<10	nd<24.6	nd<10	nd<39.6	nd<10	nd<54.5	nd<10	nd<29.5	nd<10	nd<48.8	nd<10	nd<36	na	na	nd<10	nd<23.75	nd<10	nd<34.7	nd<10	nd<39.5	nd<10	nd<37.7	nd<10	nd<43.4	nd<10	nd<43.4	nd<10	nd<49.2	nd<10	nd<49.1	nd<10	nd<49.1	nd<10	nd<52.4
	09/11/15	nd<10	nd<35.2	nd<10	nd<25.6	nd<10	nd<35.2	nd<10	nd<24.6	nd<10	nd<39.6	nd<10	nd<54.5	nd<10	nd<29.5	nd<10	nd<48.8	nd<10	nd<36	na	na	nd<10	nd<23.75	nd<10	nd<34.7	nd<10	nd<39.5	nd<10	nd<37.7	nd<10	nd<43.4	nd<10	nd<43.4	nd<10	nd<49.2	nd<10	nd<49.1	nd<10	nd<49.1	nd<30	nd<157

TABLE 4B
SUMMARY OF HISTORICAL VP SHALLOW SOIL-GAS ANALYTICAL DATA - OTHER VOCS
Lake Tahoe Laundry Works
1024 Lake Tahoe Boulevard
South Lake Tahoe, California

Sample ID	Sample Date	Vinyl Acetate		Vinyl Chloride		n-Hexane		Isopropyl Alcohol		1,1-DCE		1,1,1-TCA		Tetrahydrofuran		Chloroform		Ethyl Acetate		Ethanol		Acetone		MC		Benzene		Toluene		Ethylbenzene		Total Xylenes		4-Ethyltoluene		1,3,5-TMB		1,2,4-TMB		Naphthalene	
		(ppbV)	(μg/m3)	(ppbV)	(μg/m3)	(ppbV)	(μg/m3)	(ppbV)	(μg/m3)	(ppbV)	(μg/m3)	(ppbV)	(μg/m3)	(ppbV)	(μg/m3)	(ppbV)	(μg/m3)	(ppbV)	(μg/m3)	(ppbV)	(μg/m3)	(ppbV)	(μg/m3)	(ppbV)	(μg/m3)	(ppbV)	(μg/m3)	(ppbV)	(μg/m3)	(ppbV)	(μg/m3)	(ppbV)	(μg/m3)	(ppbV)	(μg/m3)	(ppbV)	(μg/m3)	(ppbV)	(μg/m3)	(ppbV)	(μg/m3)
VP-5	04/09/10	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	na	na
	09/08/10	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	na	na
	12/16/10	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	na	na
	05/11/11	unable to sample - water in well																																							
	09/29/11	nd<1.0	nd<3.52	nd<1.0	nd<2.56	nd<1.0	nd<3.52	nd<1.0	nd<2.46	nd<1.0	nd<3.96	**15.8**	**86.15**	nd<1.0	nd<2.95	nd<1.0	nd<4.88	nd<1.0	nd<3.6	nd<1.0	nd<1.88	nd<1.0	nd<2.375	nd<1.0	nd<3.47	nd<1.0	nd<3.95	nd<1.0	nd<3.77	nd<1.0	nd<4.34	nd<1.0	nd<4.34	nd<1.0	nd<4.92	nd<1.0	nd<4.91	nd<1.0	nd<4.91	na	na
	12/09/11	nd<1.0	nd<3.52	nd<1.0	nd<2.56	nd<1.0	nd<3.52	nd<1.0	nd<2.46	nd<1.0	nd<3.96	nd<1.0	nd<5.45	nd<1.0	nd<2.95	nd<1.0	nd<4.88	nd<1.0	nd<3.6	nd<1.0	nd<1.88	nd<1.0	nd<2.375	nd<1.0	nd<3.47	nd<1.0	nd<3.95	nd<1.0	nd<3.77	nd<1.0	nd<4.34	nd<1.0	nd<4.34	nd<1.0	nd<4.92	nd<1.0	nd<4.91	nd<1.0	nd<4.91	nd<1.0	nd<5.24
	03/29/12	nd<1.0	nd<3.52	nd<1.0	nd<2.56	nd<1.0	nd<3.52	nd<1.0	nd<2.46	nd<1.0	nd<3.96	nd<1.0	nd<5.45	nd<1.0	nd<2.95	nd<1.0	nd<4.88	nd<1.0	nd<3.6	nd<1.0	nd<1.88	nd<1.0	nd<2.375	nd<1.0	nd<3.47	nd<1.0	nd<3.95	**23.3**	**87.8**	**9.3**	**40.4**	**101**	**438**	**77.1**	**379**	**24.2**	**120**	**96.9**	**476**	nd<1.0	nd<5.24
	06/08/12	nd<1.0	nd<3.52	nd<1.0	nd<2.56	nd<1.0	nd<3.52	nd<1.0	nd<2.46	nd<1.0	nd<3.96	**23.0**	**125**	nd<1.0	nd<2.95	nd<1.0	nd<4.88	nd<1.0	nd<3.6	nd<1.0	nd<1.88	nd<1.0	nd<2.375	nd<1.0	nd<3.47	nd<1.0	nd<3.95	nd<1.0	nd<3.77	nd<1.0	nd<4.34	nd<1.0	nd<4.34	nd<1.0	nd<4.92	nd<1.0	nd<4.91	nd<1.0	nd<4.91	nd<1.0	nd<5.24
	08/21/12	nd<1.0	nd<3.52	nd<1.0	nd<2.56	nd<1.0	nd<3.52	nd<1.0	nd<2.46	nd<1.0	nd<3.96	**40.0**	**218**	nd<1.0	nd<2.95	nd<1.0	nd<4.88	nd<1.0	nd<3.6	nd<1.0	nd<1.88	nd<1.0	nd<2.375	nd<1.0	nd<3.47	nd<1.0	nd<3.95	nd<1.0	nd<3.77	nd<1.0	nd<4.34	nd<1.0	nd<4.34	nd<1.0	nd<4.92	nd<1.0	nd<4.91	nd<1.0	nd<4.91	nd<10	nd<52.4
	11/19/12	**Unable to collect sample; well box filled with ice**																																							
	02/14/13	**Unable to collect sample; well box filled with ice**																																							
	06/25/13	**Sample Collected - Sample Holding Time Expired, Not Analyzed**																																							
	09/30/13	na	na	nd<13	nd<34	nd<13	nd<46	na	na	nd<13	nd<52	nd<13	nd<72	nd<13	nd<39	nd<13	nd<64	nd<13	nd<46.8	nd<53	nd<99	nd<130	nd<310	nd<130	nd<460	nd<13	nd<42	nd<13	nd<50	nd<13	nd<57	nd<13	nd<57	nd<13	nd<65	nd<13	nd<65	nd<13	nd<65	na	na
	12/10/13	**Not Sampled - not accessible**																																							
	03/06/14	nd<10	nd<35.2	nd<10	nd<25.6	nd<10	nd<35.2	nd<10	nd<24.6	nd<10	nd<39.6	nd<10	nd<54.5	nd<10	nd<29.5	nd<10	nd<48.8	nd<10	nd<36	na	na	nd<10	nd<23.75	nd<10	nd<34.7	nd<10	nd<39.5	nd<10	nd<37.7	nd<10	nd<43.4	nd<10	nd<43.4	nd<10	nd<49.2	nd<10	nd<49.1	nd<10	nd<49.1	nd<10	nd<52.4
	06/26/14	nd<10	nd<35.2	nd<10	nd<25.6	nd<10	nd<35.2	nd<10	nd<24.6	nd<10	nd<39.6	nd<10	nd<54.5	nd<10	nd<29.5	nd<10	nd<48.8	nd<10	nd<36	na	na	nd<10	nd<23.75	nd<10	nd<34.7	nd<10	nd<39.5	nd<10	nd<37.7	nd<10	nd<43.4	nd<10	nd<43.4	nd<10	nd<49.2	nd<10	nd<49.1	nd<10	nd<49.1	nd<10	nd<52.4
	09/17/14	**Unable to collect sample; wellhead damaged**																																							
	12/16/14	**Unable to collect sample; wellhead damaged**																																							
	03/31/15	nd<10	nd<35.2	nd<10	nd<25.6	nd<10	nd<35.2	nd<10	nd<24.6	nd<10	nd<39.6	nd<10	nd<54.5	nd<10	nd<29.5	nd<10	nd<48.8	nd<10	nd<36	na	na	nd<10	nd<23.75	nd<10	nd<34.7	nd<10	nd<39.5	nd<10	nd<37.7	nd<10	nd<43.4	**13**	**56.4**	nd<10	nd<49.2	nd<10	nd<49.1	nd<10	nd<49.1	nd<10	nd<52.4
	06/12/15	nd<10	nd<35.2	nd<10	nd<25.6	nd<10	nd<35.2	nd<10	nd<24.6	nd<10	nd<39.6	nd<10	nd<54.5	nd<10	nd<29.5	nd<10	nd<48.8	nd<10	nd<36	na	na	nd<10	nd<23.75	nd<10	nd<34.7	nd<10	nd<39.5	nd<10	nd<37.7	nd<10	nd<43.4	nd<10	nd<43.4	nd<10	nd<49.2	nd<10	nd<49.1	nd<10	nd<49.1	nd<10	nd<52.4
	09/11/15	nd<10	nd<35.2	nd<10	nd<25.6	nd<10	nd<35.2	nd<10	nd<24.6	nd<10	nd<39.6	nd<10	nd<54.5	nd<10	nd<29.5	nd<10	nd<48.8	nd<10	nd<36	na	na	nd<10	nd<23.75	nd<10	nd<34.7	nd<10	nd<39.5	nd<10	nd<37.7	nd<10	nd<43.4	nd<10	nd<43.4	nd<10	nd<49.2	nd<10	nd<49.1	nd<10	nd<49.1	nd<30	nd<157
VP-6	04/09/10	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	na	na
	09/08/10	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	na	na
	12/16/10	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	na	na
	05/11/11	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	na	na
	09/29/11	nd<1.0	nd<3.52	nd<1.0	nd<2.56	nd<1.0	nd<3.52	nd<1.0	nd<2.46	nd<1.0	nd<3.96	nd<1.0	nd<5.45	nd<1.0	nd<2.95	nd<1.0	nd<4.88	nd<1.0	nd<3.6	nd<1.0	nd<1.88	nd<1.0	nd<2.375	nd<1.0	nd<3.47	nd<1.0	nd<3.95	nd<1.0	nd<3.77	nd<1.0	nd<4.34	nd<1.0	nd<4.34	nd<1.0	nd<4.92	nd<1.0	nd<4.91	nd<1.0	nd<4.91	na	na
	12/09/11	nd<1.0	nd<3.52	nd<1.0	nd<2.56	nd<1.0	nd<3.52	nd<1.0	nd<2.46	nd<1.0	nd<3.96	nd<1.0	nd<5.45	nd<1.0	nd<2.95	nd<1.0	nd<4.88	nd<1.0	nd<3.6	nd<1.0	nd<1.88	nd<1.0	nd<2.375	nd<1.0	nd<3.47	nd<1.0	nd<3.95	nd<1.0	nd<3.77	nd<1.0	nd<4.34	nd<1.0	nd<4.34	nd<1.0	nd<4.92	nd<1.0	nd<4.91	nd<1.0	nd<4.91	nd<1.0	nd<5.24
	03/29/12	nd<1.0	nd<3.52	nd<1.0	nd<2.56	nd<1.0	nd<3.52	nd<1.0	nd<2.46	nd<1.0	nd<3.96	nd<1.0	nd<5.45	nd<1.0	nd<2.95	nd<1.0	nd<4.88	nd<1.0	nd<3.6	nd<1.0	nd<1.88	nd<1.0	nd<2.375	nd<1.0	nd<3.47	nd<1.0	nd<3.95	nd<1.0	nd<3.77	nd<1.0	nd<4.34	nd<1.0	nd<4.34	nd<1.0	nd<4.92	nd<1.0	nd<4.91	nd<1.0	nd<4.91	nd<1.0	nd<5.24
	06/08/12	**5.85**	**20.55**	nd<1.0	nd<2.56	nd<1.0	nd<3.52	nd<1.0	nd<2.46	nd<1.0	nd<3.96	nd<1.0	nd<5.45	nd<1.0	nd<2.95	nd<1.0	nd<4.88	nd<1.0	nd<3.6	nd<1.0	nd<1.88	nd<1.0	nd<2.375	nd<1.0	nd<3.47	nd<1.0	nd<3.95	nd<1.0	nd<3.77	nd<1.0	nd<4.34	nd<1.0	nd<4.34	nd<1.0	nd<4.92	nd<1.0	nd<4.91	nd<1.0	nd<4.91	nd<1.0	nd<5.24
	08/21/12	nd<1.0	nd<3.52	nd<1.0	nd<2.56	nd<1.0	nd<3.52	nd<1.0	nd<2.46	nd<1.0	nd<3.96	nd<1.0	nd<5.45	nd<1.0	nd<2.95	nd<1.0	nd<4.88	nd<1.0	nd<3.6	nd<1.0	nd<1.88	nd<1.0	nd<2.375	nd<1.0	nd<3.47	nd<1.0	nd<3.95	nd<1.0	nd<3.77	nd<1.0	nd<4.34	nd<1.0	nd<4.34	nd<1.0	nd<4.92	nd<1.0	nd<4.91	nd<1.0	nd<4.91	nd<10	nd<52.4
	11/19/12	**Unable to collect sample; well covered with snow**																																							
	02/14/13	**Unable to collect sample; well covered with snow**																																							
	06/25/13	**Sample Collected - Sample Comprimised, Not Analyzed**																																							
	09/30/13	na	na	nd<1.3	nd<3.4	nd<1.3	nd<4.7	na	na	nd<1.3	nd<5.3	nd<1.3	nd<7.3	nd<1.3	nd<3.9	nd<1.3	nd<6.5	nd<1.3	nd<4.7	**15**	**28**	**29**	**69**	nd<130	nd<460	**1.6**	**5.2**	**1.5**	**5.8**	nd<1.3	nd<5.8	**1.9**	**8.3**	nd<1.3	nd<6.6	nd<1.3	nd<6.6	nd<1.3	nd<6.6	na	na
	12/10/13	nd<1.0	nd<3.52	nd<1.0	nd<2.56	nd<1.0	nd<3.52	**11**	**27**	nd<10	nd<39.6	nd<10	nd<54.5	nd<10	nd<29.5	nd<10	nd<48.8	nd<10	nd<36	na	na	nd<10	nd<23.75	nd<10	nd<34.7	nd<10	nd<39.5	nd<10	nd<37.7	nd<10	nd<43.4	nd<10	nd<43.4	nd<10	nd<49.2	nd<10	nd<49.1	nd<10	nd<49.1	nd<10	nd<52.4
	03/06/14	**Unable to collect sample; well box filled with ice**																																							
	06/26/14	**Unable to collect sample; too much vacuum on well**																																							
	09/17/14	**Unable to collect sample; obstruction in well**																																							
	12/16/14	**Unable to collect sample; obstruction in well**																																							
	03/31/15	nd<10	nd<35.2	nd<10	nd<25.6	nd<10	nd<35.2	nd<10	nd<24.6	nd<10	nd<39.6	nd<10	nd<54.5	nd<10	nd<29.5	nd<10	nd<48.8	nd<10	nd<36	na	na	nd<10	nd<23.75	nd<10	nd<34.7	nd<10	nd<39.5	**18**	**67.9**	nd<10	nd<43.4	nd<10	nd<43.4	nd<10	nd<49.2	nd<10	nd<49.1	nd<10	nd<49.1	nd<10	nd<52.4
	06/12/15	nd<10	nd<35.2	nd<10	nd<25.6	nd<10	nd<35.2	nd<10	nd<24.6	nd<10	nd<39.6	nd<10	nd<54.5	nd<10	nd<29.5	nd<10	nd<48.8	nd<10	nd<36	na	na	nd<10	nd<23.75	nd<10	nd<34.7	nd<10	nd<39.5	nd<10	nd<37.7	nd<10	nd<43.4	nd<10	nd<43.4	nd<10	nd<49.2	nd<10	nd<49.1	nd<10	nd<49.1	nd<10	nd<52.4
	09/11/15	nd<10	nd<35.2	nd<10	nd<25.6	nd<10	nd<35.2	nd<10	nd<24.6	nd<10	nd<39.6	nd<10	nd<54.5	nd<10	nd<29.5	nd<10	nd<48.8	nd<10	nd<36	na	na	nd<10	nd<23.75	nd<10	nd<34.7	nd<10	nd<39.5	nd<10	nd<37.7	nd<10	nd<43.4	nd<10	nd<43.4	nd<10	nd<49.2	nd<10	nd<49.1	nd<10	nd<49.1	nd<30	nd<157
VP-7	04/09/10	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	na	na
	09/08/10	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	na	na
	12/16/10	nd	nd	nd	nd	nd	nd	**247**	**607**	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	na	na
	05/11/11	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	na	na
	09/29/11	nd<1.0	nd<3.52	nd<1.0	nd<2.56	nd<1.0	nd<3.52	nd<1.0	nd<2.46	nd<1.0	nd<3.96	nd<1.0	nd<5.45	nd<1.0	nd<2.95	nd<1.0	nd<4.88	nd<1.0	nd<3.6	nd<1.0	nd<1.88	nd<1.0	nd<2.375	nd<1.0	nd<3.47	nd<1.0	nd<3.95	nd<1.0	nd<3.77	nd<1.0	nd<4.34	nd<1.0	nd<4.34	nd<1.0	nd<4.92	nd<1.0	nd<4.91	nd<1.0	nd<4.91	na	na
	12/09/11	nd<1.0	nd<3.52	nd<1.0	nd<2.56	nd<1.0	nd<3.52	nd<1.0	nd<2.46	nd<1.0	nd<3.96	nd<1.0	nd<5.45	nd<1.0	nd<2.95	nd<1.0	nd<4.88	nd<1.0	nd<3.6	nd<1.0	nd<1.88	nd<1.0	nd<2.375	nd<1.0	nd<3.47	nd<1.0	nd<3.95	nd<1.0	nd<3.77	nd<1.0	nd<4.34	nd<1.0	nd<4.34	nd<1.0	nd<4.92	nd<1.0	nd<4.91	nd<1.0	nd<4.91	nd<1.0	nd<5.24
	03/29/12	nd<1.0	nd<3.52	nd<1.0	nd<2.56	nd<1.0	nd<3.52	nd<1.0	nd<2.46	nd<1.0	nd<3.96	nd<1.0	nd<5.45	nd<1.0	nd<2.95	nd<1.0	nd<4.88	nd<1.0	nd<3.6	nd<1.0	nd<1.88	nd<1.0	nd<2.375	nd<1.0	nd<3.47	nd<1.0	nd<3.95	nd<1.0	nd<3.77	nd<1.0	nd<4.34	nd<1.0	nd<4.34	nd<1.0	nd<4.92	nd<1.0	nd<4.91	nd<1.0	nd<4.91	nd<1.0	nd<5.24
	06/08/12	nd<1.0	nd<3.52	nd<1.0	nd<2.56	nd<1.0	nd<3.52	nd<1.0	nd<2.46	nd<1.0	nd<3.96	nd<1.0	nd<5.45	nd<1.0	nd<2.95	nd<1.0	nd<4.88	nd<1.0	nd<3.6	nd<1.0	nd<1.88	nd<1.0	nd<2.375	nd<1.0	nd<3.47	nd<1.0	nd<3.95	nd<1.0	nd<3.77	nd<1.0	nd<4.34	nd<1.0	nd<4.34	nd<1.0	nd<4.92	nd<1.0	nd<4.91	nd<1.0	nd<4.91	nd<1.0	nd<5.24
	08/21/12	nd<1.0	nd<3.52	nd<1.0	nd<2.56	nd<1.0	nd<3.52	nd<1.0	nd<2.46	nd<1.0	nd<3.96	nd<1.0	nd<5.45	nd<1.0	nd<2.95	nd<1.0	nd<4.88	nd<1.0	nd<3.6	nd<1.0	nd<1.88	nd<1.0	nd<2.375	nd<1.0	nd<3.47	nd<1.0	nd<3.95	nd<1.0	nd<3.77	nd<1.0	nd<4.34	nd<1.0	nd<4.34	nd<1.0	nd<4.92	nd<1.0	nd<4.91	nd<1.0	nd<4.91	nd<10	nd<52.4
	11/19/12	**Unable to collect sample; well box filled with ice**																																							
	02/14/13	nd<1.0	nd<3.52	nd<1.0	nd<2.56	nd<1.0	nd<3.52	nd<1.0	nd<2.46	nd<1.0	nd<3.96	nd<1.0	nd<5.45	nd<1.0	nd<2.95	nd<1.0	nd<4.88	nd<1.0	nd<3.6	nd<1.0	nd<1.88	nd<1.0	nd<2.375	nd<1.0	nd<3.47	nd<1.0	nd<3.95	nd<1.0	nd<3.77	nd<1.0	nd<4.34	nd<1.0	nd<4.34	nd<1.0	nd<4.92	nd<1.0	nd<4.91	nd<1.0	nd<4.91	nd<1.0	nd<5.24
	06/25/13	**Sample Collected - Sample Holding Time Expired, Not Analyzed**																																							
	09/30/13	na	na	nd<1.3	nd<2.8	nd<1.3	nd<2.4	na	na	nd<1.3	nd<5.0	nd<1.3	nd<6.9	nd<1.3	nd<6.7	nd<1.3	nd<6.2	nd<1.3	nd<4.7	**9.2**	**17**	**18**	**44**	nd<1.3	nd<44	nd<1.3	nd<4.0	nd<1.3	nd<4.8	nd<1.3	nd<5.5	nd<1.3	nd<5.5	nd<1.3	nd<6.2	nd<1.3	nd<6.2	nd<1.3	nd<6.2	na	na
	12/10/13	nd<10	nd<35.2	nd<10	nd<25.6	nd<10	nd<35.2	nd<10	nd<24.6	nd<10	nd<39.6	nd<10	nd<54.5	nd<10	nd<29.5	nd<10	nd<48.8	nd<10	nd<36	na	na	nd<10	nd<23.75	nd<10	nd<34.7	nd<10	nd<39.5	nd<10	nd<37.7	nd<10	nd<43.4	nd<10	nd<43.4	nd<10	nd<49.2	nd<10	nd<49.1	nd<10	nd<49.1	nd<10	nd<52.4
	03/06/14	nd<10	nd<35.2	nd<10	nd<25.6	nd<10	nd<35.2	nd<10	nd<24.6	nd<10	nd<39.6	nd<10	nd<54.5	nd<10	nd<29.5	nd<10	nd<48.8	nd<10	nd<36	na	na	nd<10	nd<23.75	nd<10	nd<34.7	nd<10	nd<39.5	nd<10	nd<37.7	nd<10	nd<43.4	nd<10	nd<43.4	nd<10	nd<49.2	nd<10	nd<49.1	nd<10	nd<49.1	nd<10	nd<52.4
	06/26/14	nd<10	nd<35.2	nd<10	nd<25.6	nd<10	nd<35.2	nd<10	nd<24.6	nd<10	nd<39.6	nd<10	nd<54.5	nd<10	nd<29.5	nd<10	nd<48.8	nd<10	nd<36	na	na	nd<10	nd<23.75	nd<10	nd<34.7	nd<10	nd<39.5	nd<10	nd<37.7	nd<10	nd<43.4	nd<10	nd<43.4	nd<10	nd<49.2	nd<10	nd<49.1	nd<10	nd<49.1	nd<10	nd<52.4
	09/17/14	nd<10	nd<35.2	nd<10	nd<25.6	nd<10	nd<35.2	nd<10	nd<24.6	nd<10	nd<39.6	nd<10	nd<54.5	nd<10	nd<29.5	nd<10	nd<48.8	nd<10	nd<36	na	na	nd<10	nd<23.75	nd<10	nd<34.7	nd<10	nd<39.5	nd<10	nd<37.7	nd<10	nd<43.4	nd<10	nd<43.4	nd<10	nd<49.2	nd<10	nd<49.1	nd<10	nd<49.1	nd<10	nd<52.4
	12/16/14	nd<10	nd<35.2	nd<10	nd<25.6	nd<10	nd<35.2	nd<10	nd<24.6	nd<10	nd<39.6	nd<10	nd<54.5	nd<10	nd<29.5	nd<10	nd<48.8	nd<10	nd<36	na	na	nd<10	nd<23.75	nd<10	nd<34.7	nd<10	nd<39.5	nd<10	nd<37.7	nd<10	nd<43.4	nd<10	nd<43.4	nd<10	nd<49.2	nd<10	nd<49.1	nd<10	nd<49.1	nd<10	nd<52.4
	03/31/15	nd<10	nd<35.2	nd<10	nd<25.6	nd<10	nd<35.2	nd<10	nd<24.6	nd<10	nd<39.6	nd<10	nd<54.5	nd<10	nd<29.5	nd<10	nd<48.8	nd<10	nd<36	na	na	nd<10	nd<23.75	nd<10	nd<34.7	nd<10	nd<39.5	nd<10	nd<37.7	nd<10	nd<43.4	nd<10	nd<43.4	nd<10	nd<49.2	nd<10	nd<49.1	nd<10	nd<49.1	nd<10	nd<52.4
	06/12/15	nd<10	nd<35.2	nd<10	nd<25.6	nd<10	nd<35.2	nd<10	nd<24.6	nd<10	nd<39.6	nd<10	nd<54.5	nd<10	nd<29.5	nd<10	nd<48.8	nd<10	nd<36	na	na	nd<10	nd<23.75	nd<10	nd<34.7	nd<10	nd<39.5	nd<10	nd<37.7	nd<10	nd<43.4	nd<10	nd<43.4	nd<10	nd<49.2	nd<10	nd<49.1	nd<10	nd<49.1	nd<10	nd<52.4
	09/11/15	nd<10	nd<35.2	nd<10	nd<25.6	nd<10	nd<35.2	nd<10	nd<24.6	nd<10	nd<39.6	nd<10	nd<54.5	nd<10	nd<29.5	nd<10	nd<48.8	nd<10	nd<36	na	na	nd<10	nd<23.75	nd<10	nd<34.7	nd<10	nd<39.5	nd<10	nd<37.7	nd<10	nd<43.4	nd<10	nd<43.4	nd<10	nd<49.2	nd<10	nd<49.1	nd<10	nd<49.1	nd<30	nd<157
VP-8	04/09/10	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	na	na
	09/08/10	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	na	na
	12/16/10	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	na	na
	05/11/11	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	na	na
	09/29/11	nd<1.0	nd<3.52	nd<1.0	nd<2.56	nd<1.0	nd<3.52	nd<1.0	nd<2.46	nd<1.0	nd<3.96	nd<1.0	nd<5.45	nd<1.0	nd<2.95	nd<1.0	nd<4.88	nd<1.0	nd<3.6	nd<1.0	nd<1.88	nd<1.0	nd<2.375	nd<1.0	nd<3.47	nd<1.0	nd<3.95	nd<1.0	nd<3.77	nd<1.0	nd<4.34	nd<1.0	nd<4.34	nd<1.0	nd<4.92	nd<1.0	nd<4.91	nd<1.0	nd<4.91	na	na
	12/09/11	nd<1.0	nd<3.52	nd<1.0	nd<2.56	nd<1.0	nd<3.52	nd<1.0	nd<2.46	nd<1.0	nd<3.96	nd<1.0	nd<5.45	nd<1.0	nd<2.95	nd<1.0	nd<4.88	nd<1.0	nd<3.6	nd<1.0	nd<1.88	nd<1.0	nd<2.375	nd<1.0	nd<3.47	nd<1.0	nd<3.95	nd<1.0	nd<3.77	nd<1.0	nd<4.34	nd<1.0	nd<4.34	nd<1.0	nd<4.92	nd<1.0	nd<4.91	nd<1.0	nd<4.91	nd<1.0	nd<5.24
	03/29/12	**3.33**	**11.7**	nd<1.0	nd<2.56	nd<1.0	nd<3.52	nd<1.0	nd<2.46	nd<1.0	nd<3.96	nd<1.0	nd<5.45	nd<1.0	nd<2.95	nd<1.0	nd<4.88	nd<1.0	nd<3.6	nd<1.0	nd<1.88	nd<1.0	nd<2.375	nd<1.0	nd<3.47	nd<1.0	nd<3.95	nd<1.0	nd<3.77	nd<1.0	nd<4.34	nd<1.0	nd<4.34	nd<1.0	nd<4.92	nd<1.0	nd<4.91	nd<1.0	nd<4.91	nd<1.0	nd<5.24
	06/08/12	nd<1.0	nd<3.52	nd<1.0	nd<2.56	nd<1.0	nd<3.52	nd<1.0	nd<2.46	nd<1.0	nd<3.96	nd<1.0	nd<5.45	nd<1.0	nd<2.95	nd<1.0	nd<4.88	nd<1.0	nd<3.6	nd<1.0	nd<1.88	nd<1.0	nd<2.375	nd<1.0	nd<3.47	nd<1.0	nd<3.95	nd<1.0	nd<3.77	nd<1.0	nd<4.34	nd<1.0	nd<4.34	nd<1.0	nd<4.92	nd<1.0	nd<4.91	nd<1.0	nd<4.91	nd<1.0	nd<5.24
	08/21/12	nd<1.0	nd<3.52	nd<1.0	nd<2.56	nd<1.0	nd<3.52	nd<1.0	nd<2.46	nd<1.0	nd<3.96	nd<1.0	nd<5.45	nd<1.0	nd<2.95	nd<1.0	nd<4.88	nd<1.0	nd<3.6	nd<1.0	nd<1.88	nd<1.0	nd<2.375	nd<1.0	nd<3.47	nd<1.0	nd<3.95	nd<1.0	nd<3.77	nd<1.0	nd<4.34	nd<1.0	nd<4.34	nd<1.0	nd<4.92	nd<1.0	nd<4.91	nd<1.0	nd<4.91	nd<10	nd<52.4
	11/19/12	**Unable to collect sample; well box filled with ice**																																							
	02/14/13	nd<1.0	nd<3.52	nd<1.0	nd<2.56	nd<1.0	nd<3.52	nd<1.0	nd<2.46	nd<1.0	nd<3.96	nd<1.0	nd<5.45	nd<1.0	nd<2.95	nd<1.0	nd<4.88	nd<1.0	nd<3.6	nd<1.0	nd<1.88	nd<1.0	nd<2.375	nd<1.0	nd<3.47	nd<1.0	nd<3.95	nd<1.0	nd<3.77	nd<1.0	nd<4.34	nd<1.0	nd<4.34	nd<1.0	nd<4.92	nd<1.0	nd<4.91	nd<1.0	nd<4.91	nd<1.0	nd<5.24
	06/25/13	**Sample Collected - Sample Holding Time Expired, Not Analyzed**																																							
	09/30/13	na	na	nd<2.2	nd<5.5	nd<2.2	nd<7.6	na	na	nd<2.2	nd<8.6	nd<2.2	nd<12	nd<2.2	nd<6.4	**2.9**	**14**	nd<10	nd<36	**13**	**25**	**41**	**98**	nd<22	nd<75	**8.7**	**28**	**30**	**110**	**3.5**	**15**	**25.6**	**110**	**4.9**	**24**	nd<2.2	nd<11	**4.1**	20	na	na
	12/10/13	nd<10	nd<35.2	nd<10	nd<25.6	nd<10	nd<35.2	nd<10	nd<24.6	nd<10	nd<39.6	nd<10	nd<54.5	nd<10	nd<29.5	nd<10	nd<48.8	nd<10	nd<36	na	na	**12**	**29**	**13**	**45**	nd<10	nd<39.5	nd<10	nd<37.7	nd<10	nd<43.4	nd<10	nd<43.4	nd<10	nd<49.2	nd<10	nd<49.1	nd<10	nd<49.1	nd<10	nd<52.4
	03/06/14	nd<10	nd<35.2	nd<10	nd<25.6	nd<10	nd<35.2	**27**	**66**	nd<10	nd<39.6	nd<10	nd<54.5	nd<10	nd<29.5	nd<10	nd<48.8	nd<10	nd<36	na	na	nd<10	nd<23.75	nd<10	nd<34.7	nd<10	nd<39.5	nd<10	nd<37.7	nd<10	nd<43.4	nd<10	nd<43.4	nd<10	nd<49.2	nd<10	nd<49.1	nd<10	nd<49.1	nd<10	nd<52.4
	06/26/14	nd<10	nd<35.2	nd<10	nd<25.6	nd<10	nd<35.2	nd<10	nd<24.6	nd<10	nd<39.6	nd<10	nd<54.5	nd<10	nd<29.5	nd<10	nd<48.8	nd<10	nd<36	na	na	nd<10	nd<23.75	nd<10	nd<34.7	nd<10	nd<39.5	nd<10	nd<37.7	nd<10	nd<43.4	nd<10	nd<43.4	nd<10	nd<49.2	nd<10	nd<49.1	nd<10	nd<49.1	nd<10	nd<52.4
	09/17/14	nd<10	nd<35.2	nd<10	nd<25.6	nd<10	nd<35.2	nd<10	nd<24.6	nd<10	nd<39.6	nd<10	nd<54.5	nd<10	nd<29.5	nd<10	nd<48.8	nd<10	nd<36	na	na	nd<10	nd<23.75	nd<10	nd<34.7	nd<10	nd<39.5	nd<10	nd<37.7	nd<10	nd<43.4	nd<10	nd<43.4	nd<10	nd<49.2	nd<10	nd<49.1	nd<10	nd<49.1	nd<10	nd<52.4
	12/16/14	nd<10	nd<35.2	nd<10	nd<25.6	nd<10	nd<35.2	nd<10	nd<24.6	nd<10	nd<39.6	nd<10	nd<54.5	nd<10	nd<29.5	nd<10	nd<48.8	nd<10	nd<36	na	na	nd<10	nd<23.75	nd<10	nd<34.7	nd<10	nd<39.5	nd<10	nd<37.7	nd<10	nd<43.4	nd<10	nd<43.4	nd<10	nd<49.2	nd<10	nd<49.1	nd<10	nd<49.1	nd<10	nd<52.4
	03/31/15	nd<10	nd<35.2	nd<10	nd<25.6	nd<10	nd<35.2	nd<10	nd<24.6	nd<10	nd<39.6	nd<10	nd<54.5	nd<10	nd<29.5	nd<10	nd<48.8	nd<10	nd<36	na	na	nd<10	nd<23.75	nd<10	nd<34.7	nd<10	nd<39.5	nd<10	nd<37.7	nd<10	nd<43.4	**13**	**56.4**	nd<10	nd<49.2	nd<10	nd<49.1	nd<10	nd<49.1	**13**	**68.1**
	06/12/15	nd<10	nd<35.2	nd<10	nd<25.6	nd<10	nd<35.2	nd<10	nd<24.6	nd<10	nd<39.6	nd<10	nd<54.5	nd<10	nd<29.5	nd<10	nd<48.8	**69**	**249**	na	na	nd<10	nd<37.7	**26**	**90**	nd<10	nd<39.5	nd<10	nd<37.7	nd<10	nd<43.4	nd<10	nd<43.4	nd<10	nd<49.2	nd<10	nd<49.1	nd<10	nd<49.1	nd<10	nd<52.4
	09/11/15	nd<10	nd<35.2	nd<10	nd<25.6	nd<10	nd<35.2	nd<10	nd<24.6	nd<10	nd<39.6	nd<10	nd<54.5	nd<10	nd<29.5	nd<10	nd<48.8	nd<10	nd<36	na	na	**11**	**26**	nd<10	nd<34.7	nd<10	nd<39.5	nd<10	nd<37.7	nd<10	nd<43.4	nd<10	nd<43.4	nd<10	nd<49.2	nd<10	nd<49.1	nd<10	nd<49.1	nd<30	nd<157

TABLE 4B
SUMMARY OF HISTORICAL VP SHALLOW SOIL-GAS ANALYTICAL DATA - OTHER VOCS
Lake Tahoe Laundry Works
1024 Lake Tahoe Boulevard
South Lake Tahoe, California

Sample ID	Sample Date	Vinyl Acetate		Vinyl Chloride		n-Hexane		Isopropyl Alcohol		1,1-DCE		1,1,1-TCA		Tetrahydrofuran		Chloroform		Ethyl Acetate		Ethanol		Acetone		MC		Benzene		Toluene		Ethylbenzene		Total Xylenes		4-Ethyltoluene		1,3,5-TMB		1,2,4-TMB		Naphthalene	
		(ppbV)	(µg/m3)	(ppbV)	(µg/m3)	(ppbV)	(µg/m3)	(ppbV)	(µg/m3)	(ppbV)	(µg/m3)	(ppbV)	(µg/m3)	(ppbV)	(µg/m3)	(ppbV)	(µg/m3)	(ppbV)	(µg/m3)	(ppbV)	(µg/m3)	(ppbV)	(µg/m3)	(ppbV)	(µg/m3)	(ppbV)	(µg/m3)	(ppbV)	(µg/m3)	(ppbV)	(µg/m3)	(ppbV)	(µg/m3)	(ppbV)	(µg/m3)	(ppbV)	(µg/m3)	(ppbV)	(µg/m3)	(ppbV)	(µg/m3)
VP-9	04/09/10	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	na	na
	09/08/10	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	na	na
	12/16/10	nd	nd	nd	nd	nd	nd	**111**	**273**	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	na	na
	05/11/11	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	na	na
	09/29/11	nd<1.0	nd<3.52	nd<1.0	nd<2.56	**15**	**52.8**	nd<1.0	nd<2.46	nd<1.0	nd<3.96	nd<1.0	nd<5.45	nd<1.0	nd<2.95	nd<1.0	nd<4.88	nd<1.0	nd<3.6	nd<1.0	nd<1.88	nd<1.0	nd<2.375	nd<1.0	nd<3.47	nd<1.0	nd<3.95	nd<1.0	nd<3.77	nd<1.0	nd<4.34	nd<1.0	nd<4.34	nd<1.0	nd<4.92	nd<1.0	nd<4.91	nd<1.0	nd<4.91	na	na
	12/09/11	nd<1.0	nd<3.52	nd<1.0	nd<2.56	nd<1.0	nd<3.52	nd<1.0	nd<2.46	nd<1.0	nd<3.96	nd<1.0	nd<5.45	nd<1.0	nd<2.95	nd<1.0	nd<4.88	nd<1.0	nd<3.6	nd<1.0	nd<1.88	nd<1.0	nd<2.375	nd<1.0	nd<3.47	nd<1.0	nd<3.95	nd<1.0	nd<3.77	nd<1.0	nd<4.34	nd<1.0	nd<4.34	nd<1.0	nd<4.92	nd<1.0	nd<4.91	nd<1.0	nd<4.91	nd<1.0	nd<5.24
	03/29/12	nd<1.0	nd<3.52	nd<1.0	nd<2.56	nd<1.0	nd<3.52	nd<1.0	nd<2.46	nd<1.0	nd<3.96	nd<1.0	nd<5.45	nd<1.0	nd<2.95	nd<1.0	nd<4.88	nd<1.0	nd<3.6	nd<1.0	nd<1.88	nd<1.0	nd<2.375	nd<1.0	nd<3.47	nd<1.0	nd<3.95	nd<1.0	nd<3.77	nd<1.0	nd<4.34	nd<1.0	nd<4.34	nd<1.0	nd<4.92	nd<1.0	nd<4.91	nd<1.0	nd<4.91	nd<1.0	nd<5.24
	06/08/12	nd<1.0	nd<3.52	nd<1.0	nd<2.56	nd<1.0	nd<3.52	nd<1.0	nd<2.46	nd<1.0	nd<3.96	nd<1.0	nd<5.45	nd<1.0	nd<2.95	nd<1.0	nd<4.88	nd<1.0	nd<3.6	nd<1.0	nd<1.88	nd<1.0	nd<2.375	nd<1.0	nd<3.47	nd<1.0	nd<3.95	nd<1.0	nd<3.77	nd<1.0	nd<4.34	nd<1.0	nd<4.34	nd<1.0	nd<4.92	nd<1.0	nd<4.91	nd<1.0	nd<4.91	nd<1.0	nd<5.24
	08/21/12	nd<1.0	nd<3.52	nd<1.0	nd<2.56	nd<1.0	nd<3.52	nd<1.0	nd<2.46	nd<1.0	nd<3.96	nd<1.0	nd<5.45	nd<1.0	nd<2.95	nd<1.0	nd<4.88	nd<1.0	nd<3.6	nd<1.0	nd<1.88	nd<1.0	nd<2.375	nd<1.0	nd<3.47	nd<1.0	nd<3.95	nd<1.0	nd<3.77	nd<1.0	nd<4.34	nd<1.0	nd<4.34	nd<1.0	nd<4.92	nd<1.0	nd<4.91	nd<1.0	nd<4.91	nd<10	nd<52.4
	11/19/12	**Unable to collect sample; well box filled with ice**																																							
	02/14/13	**Unable to collect sample; well box filled with ice**																																							
	06/25/13	**Sample Collected - Sample Holding Time Expired, Not Analyzed**																																							
	09/30/13	na	na	nd<12	nd<32	nd<12	nd<44	na	na	nd<12	nd<49	nd<12	nd<68	nd<12	nd<36	nd<12	nd<60	nd<12	nd<43.2	nd<50	nd<93	nd<120	nd<290	nd<120	nd<430	nd<12	nd<40	nd<12	nd<47	nd<12	nd<54	nd<12	nd<54	nd<12	nd<61	nd<12	nd<61	nd<12	nd<61	na	na
	12/10/13	nd<10	nd<35.2	nd<10	nd<25.6	**11**	**39**	nd<10	nd<24.6	nd<10	nd<39.6	nd<10	nd<54.5	nd<10	nd<29.5	nd<10	nd<48.8	nd<10	nd<36	na	na	nd<10	nd<23.75	nd<10	nd<34.7	nd<10	nd<39.5	**12**	**45**	nd<10	nd<43.4	nd<10	nd<43.4	nd<10	nd<49.2	nd<10	nd<49.1	nd<10	nd<49.1	nd<10	nd<52.4
	03/06/14	nd<10	nd<35.2	nd<10	nd<25.6	nd<10	nd<35.2	nd<10	nd<24.6	nd<10	nd<39.6	nd<10	nd<54.5	nd<10	nd<29.5	nd<10	nd<48.8	nd<10	nd<36	na	na	nd<10	nd<23.75	nd<10	nd<34.7	nd<10	nd<39.5	nd<10	nd<37.7	nd<10	nd<43.4	nd<10	nd<43.4	nd<10	nd<49.2	nd<10	nd<49.1	nd<10	nd<49.1	**10**	**52.4**
	06/26/14	nd<10	nd<35.2	nd<10	nd<25.6	nd<10	nd<35.2	nd<10	nd<24.6	nd<10	nd<39.6	nd<10	nd<54.5	nd<10	nd<29.5	nd<10	nd<48.8	nd<10	nd<36	na	na	nd<10	nd<23.75	nd<10	nd<34.7	nd<10	nd<39.5	nd<10	nd<37.7	nd<10	nd<43.4	nd<10	nd<43.4	nd<10	nd<49.2	nd<10	nd<49.1	nd<10	nd<49.1	**10**	**52.4**
	09/17/14	nd<10	nd<35.2	nd<10	nd<25.6	nd<10	nd<35.2	nd<10	nd<24.6	nd<10	nd<39.6	nd<10	nd<54.5	nd<10	nd<29.5	nd<10	nd<48.8	nd<10	nd<36	na	na	nd<10	nd<23.75	nd<10	nd<34.7	nd<10	nd<39.5	nd<10	nd<37.7	nd<10	nd<43.4	nd<10	nd<43.4	nd<10	nd<49.2	nd<10	nd<49.1	nd<10	nd<49.1	nd<10	nd<52.4
	12/16/14	nd<10	nd<35.2	nd<10	nd<25.6	nd<10	nd<35.2	nd<10	nd<24.6	nd<10	nd<39.6	nd<10	nd<54.5	nd<10	nd<29.5	nd<10	nd<48.8	nd<10	nd<36	na	na	nd<10	nd<23.75	nd<10	nd<34.7	nd<10	nd<39.5	nd<10	nd<37.7	nd<10	nd<43.4	nd<10	nd<43.4	nd<10	nd<49.2	nd<10	nd<49.1	nd<10	nd<49.1	nd<10	nd<52.4
	03/31/15	nd<10	nd<35.2	nd<10	nd<25.6	nd<10	nd<35.2	nd<10	nd<24.6	nd<10	nd<39.6	nd<10	nd<54.5	nd<10	nd<29.5	nd<10	nd<48.8	nd<10	nd<36	na	na	nd<10	nd<23.75	nd<10	nd<34.7	nd<10	nd<39.5	nd<10	nd<37.7	nd<10	nd<43.4	**13**	**56.4**	nd<10	nd<49.2	nd<10	nd<49.1	nd<10	nd<49.1	nd<10	nd<52.4
	06/12/15	nd<10	nd<35.2	nd<10	nd<25.6	nd<10	nd<35.2	nd<10	nd<24.6	nd<10	nd<39.6	nd<10	nd<54.5	nd<10	nd<29.5	nd<10	nd<48.8	**33**	**119**	na	na	nd<10	nd<23.75	nd<10	nd<34.7	nd<10	nd<39.5	nd<10	nd<37.7	nd<10	nd<43.4	nd<10	nd<43.4	nd<10	nd<49.2	nd<10	nd<49.1	nd<10	nd<49.1	nd<10	nd<52.4
	09/11/15	nd<10	nd<35.2	nd<10	nd<25.6	nd<10	nd<35.2	nd<10	nd<24.6	nd<10	nd<39.6	nd<10	nd<54.5	nd<10	nd<29.5	nd<10	nd<48.8	nd<10	nd<36	na	na	nd<10	nd<23.75	nd<10	nd<34.7	nd<10	nd<39.5	nd<10	nd<37.7	nd<10	nd<43.4	nd<10	nd<43.4	nd<10	nd<49.2	nd<10	nd<49.1	nd<10	nd<49.1	nd<10	nd<52.4
VP-10	04/09/10	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	na	na
	09/08/10	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	na	na
	12/16/10	nd	nd	nd	nd	nd	nd	**183**	**450**	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	na	na
	05/11/11	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	na	na
	09/29/11	nd<1.0	nd<3.52	nd<1.0	nd<2.56	nd<1.0	nd<3.52	nd<1.0	nd<2.46	nd<1.0	nd<3.96	nd<1.0	nd<5.45	nd<1.0	nd<2.95	nd<1.0	nd<4.88	nd<1.0	nd<3.6	nd<1.0	nd<1.88	nd<1.0	nd<2.375	nd<1.0	nd<3.47	nd<1.0	nd<3.95	nd<1.0	nd<3.77	nd<1.0	nd<4.34	nd<1.0	nd<4.34	nd<1.0	nd<4.92	nd<1.0	nd<4.91	nd<1.0	nd<4.91	na	na
	12/09/11	nd<1.0	nd<3.52	nd<1.0	nd<2.56	nd<1.0	nd<3.52	nd<1.0	nd<2.46	nd<1.0	nd<3.96	nd<1.0	nd<5.45	nd<1.0	nd<2.95	nd<1.0	nd<4.88	nd<1.0	nd<3.6	nd<1.0	nd<1.88	nd<1.0	nd<2.375	nd<1.0	nd<3.47	nd<1.0	nd<3.95	nd<1.0	nd<3.77	nd<1.0	nd<4.34	nd<1.0	nd<4.34	nd<1.0	nd<4.92	nd<1.0	nd<4.91	nd<1.0	nd<4.91	nd<1.0	nd<5.24
	03/29/12	nd<1.0	nd<3.52	nd<1.0	nd<2.56	nd<1.0	nd<3.52	nd<1.0	nd<2.46	nd<1.0	nd<3.96	nd<1.0	nd<5.45	nd<1.0	nd<2.95	nd<1.0	nd<4.88	nd<1.0	nd<3.6	nd<1.0	nd<1.88	nd<1.0	nd<2.375	nd<1.0	nd<3.47	nd<1.0	nd<3.95	nd<1.0	nd<3.77	nd<1.0	nd<4.34	nd<1.0	nd<4.34	nd<1.0	nd<4.92	nd<1.0	nd<4.91	nd<1.0	nd<4.91	nd<1.0	nd<5.24
	06/08/12	nd<1.0	nd<3.52	nd<1.0	nd<2.56	nd<1.0	nd<3.52	nd<1.0	nd<2.46	nd<1.0	nd<3.96	nd<1.0	nd<5.45	nd<1.0	nd<2.95	nd<1.0	nd<4.88	nd<1.0	nd<3.6	nd<1.0	nd<1.88	nd<1.0	nd<2.375	nd<1.0	nd<3.47	nd<1.0	nd<3.95	nd<1.0	nd<3.77	nd<1.0	nd<4.34	nd<1.0	nd<4.34	nd<1.0	nd<4.92	nd<1.0	nd<4.91	nd<1.0	nd<4.91	nd<1.0	nd<5.24
	08/21/12	nd<1.0	nd<3.52	nd<1.0	nd<2.56	nd<1.0	nd<3.52	nd<1.0	nd<2.46	nd<1.0	nd<3.96	nd<1.0	nd<5.45	nd<1.0	nd<2.95	nd<1.0	nd<4.88	nd<1.0	nd<3.6	nd<1.0	nd<1.88	nd<1.0	nd<2.375	nd<1.0	nd<3.47	nd<1.0	nd<3.95	nd<1.0	nd<3.77	nd<1.0	nd<4.34	nd<1.0	nd<4.34	nd<1.0	nd<4.92	nd<1.0	nd<4.91	nd<1.0	nd<4.91	nd<10	nd<52.4
	11/19/12	**Unable to collect sample; well box filled with ice**																																							
	02/14/13	nd<1.0	nd<3.52	nd<1.0	nd<2.56	nd<1.0	nd<3.52	nd<1.0	nd<2.46	nd<1.0	nd<3.96	nd<1.0	nd<5.45	nd<1.0	nd<2.95	nd<1.0	nd<4.88	nd<1.0	nd<3.6	nd<1.0	nd<1.88	nd<1.0	nd<2.375	nd<1.0	nd<3.47	nd<1.0	nd<3.95	nd<1.0	nd<3.77	nd<1.0	nd<4.34	nd<1.0	nd<4.34	nd<1.0	nd<4.92	nd<1.0	nd<4.91	nd<1.0	nd<4.91	nd<1.0	nd<5.24
	06/25/13	**Sample Collected - Sample Holding Time Expired, Not Analyzed**																																							
	09/30/13	na	na	nd<2.5	nd<6.4	nd<2.5	nd<8.9	na	na	nd<2.5	nd<10	nd<2.5	nd<140	nd<2.5	nd<7.4	**3.0**	**15**	nd<2.5	nd<9.0	nd<10	nd<19	nd<25	nd<60	nd<25	nd<88	nd<2.5	nd<8.0	**4.8**	**18**	nd<2.5	nd<11	**5.4**	**24**	nd<2.5	nd<12	nd<2.5	nd<12	nd<2.5	nd<12	na	na
	12/10/13	nd<10	nd<35.2	nd<10	nd<25.6	nd<10	nd<35.2	nd<10	nd<24.6	nd<10	nd<39.6	nd<10	nd<54.5	nd<10	nd<29.5	nd<10	nd<48.8	nd<10	nd<36	na	na	nd<10	nd	**13**	**45**	nd<10	nd<39.5	nd<10	nd<37.7	nd<10	nd<43.4	nd<10	nd<43.4	nd<10	nd<49.2	nd<10	nd<49.1	nd<10	nd<49.1	nd<10	nd<52.4
	03/06/14	nd<10	nd<35.2	nd<10	nd<25.6	nd<10	nd<35.2	nd<10	nd<24.6	nd<10	nd<39.6	nd<10	nd<54.5	nd<10	nd<29.5	nd<10	nd<48.8	nd<10	nd<36	na	na	**18**	**43**	nd<10	nd<34.7	nd<10	nd<39.5	nd<10	nd<37.7	nd<10	nd<43.4	nd<10	nd<43.4	nd<10	nd<49.2	nd<10	nd<49.1	nd<10	nd<49.1	nd<10	nd<52.4
	06/26/14	nd<10	nd<35.2	nd<10	nd<25.6	nd<10	nd<35.2	nd<10	nd<24.6	nd<10	nd<39.6	nd<10	nd<54.5	nd<10	nd<29.5	nd<10	nd<48.8	nd<10	nd<36	na	na	nd<10	nd<23.75	nd<10	nd<34.7	nd<10	nd<39.5	nd<10	nd<37.7	nd<10	nd<43.4	nd<10	nd<43.4	nd<10	nd<49.2	nd<10	nd<49.1	nd<10	nd<49.1	nd<10	nd<52.4
	09/17/14	nd<10	nd<35.2	nd<10	nd<25.6	nd<10	nd<35.2	nd<10	nd<24.6	nd<10	nd<39.6	nd<10	nd<54.5	nd<10	nd<29.5	nd<10	nd<48.8	nd<10	nd<36	na	na	nd<10	nd<23.75	nd<10	nd<34.7	nd<10	nd<39.5	nd<10	nd<37.7	nd<10	nd<43.4	nd<10	nd<43.4	nd<10	nd<49.2	nd<10	nd<49.1	nd<10	nd<49.1	nd<10	nd<52.4
	12/16/14	nd<10	nd<35.2	nd<10	nd<25.6	nd<10	nd<35.2	nd<10	nd<24.6	nd<10	nd<39.6	nd<10	nd<54.5	nd<10	nd<29.5	nd<10	nd<48.8	nd<10	nd<36	na	na	nd<10	nd<23.75	nd<10	nd<34.7	nd<10	nd<39.5	nd<10	nd<37.7	nd<10	nd<43.4	nd<10	nd<43.4	nd<10	nd<49.2	nd<10	nd<49.1	nd<10	nd<49.1	nd<10	nd<52.4
	03/31/15	nd<10	nd<35.2	nd<10	nd<25.6	nd<10	nd<35.2	nd<10	nd<24.6	nd<10	nd<39.6	nd<10	nd<54.5	nd<10	nd<29.5	nd<10	nd<48.8	nd<10	nd<36	na	na	nd<10	nd<23.75	nd<10	nd<34.7	nd<10	nd<39.5	nd<10	nd<37.7	nd<10	nd<43.4	**13**	**56.4**	nd<10	nd<49.2	nd<10	nd<49.1	nd<10	nd<49.1	nd<10	nd<52.4
	06/12/15	nd<10	nd<35.2	nd<10	nd<25.6	nd<10	nd<35.2	**10**	**25**	nd<10	nd<39.6	nd<10	nd<54.5	nd<10	nd<29.5	nd<10	nd<48.8	nd<10	nd<36	na	na	nd<10	nd<23.75	**20**	**69**	nd<10	nd<39.5	nd<10	nd<37.7	nd<10	nd<43.4	nd<10	nd<43.4	nd<10	nd<49.2	nd<10	nd<49.1	nd<10	nd<49.1	nd<10	nd<52.4
	09/11/15	nd<10	nd<35.2	nd<10	nd<25.6	nd<10	nd<35.2	nd<10	nd<24.6	nd<10	nd<39.6	nd<10	nd<54.5	nd<10	nd<29.5	nd<10	nd<48.8	nd<10	nd<36	na	na	nd<10	nd<23.75	nd<10	nd<34.7	nd<10	nd<39.5	nd<10	nd<37.7	nd<10	nd<43.4	nd<10	nd<43.4	nd<10	nd<49.2	nd<10	nd<49.1	nd<10	nd<49.1	nd<10	nd<52.4

Notes:

1,1-DCE = 1,1-Dichloroethene

1,1,1-TCA = 1,1,1-Trichloroethane

MC` = Methylene Chloride

na = not analyzed for this compound

nc = Not calculated

nd = Not detected at or above detection limit for each respective compound

nd< = Not detected at or above the practical quantitation limit (PQL), which is indicated by value

PCE = Tetrachloroethene (a.k.a. perchloroethene)

ppbV = parts per million by volume

TCE = Trichloroethene

Tracer Gas = Freon 11

µg/m3 = micrograms per cubic meter

Notes: 6/8/12- Ethyl Acetate= 2.63 ppbV; 1,1-dichloroethane= 3.12 ppbV (VP-8)

TABLE 5
SUMMARY OF WELL CONSTRUCTION DETAILS
Lake Tahoe Laundry Works
1024 Lake Tahoe Boulevard
South Lake Tahoe, California

WELL ID	Completion Date	Well Type	Well Depth (feet bgs)	Well Casing Material	TOC Elevation (feet rel)	Top of Screen (feet bgs)	Screen Length (feet)
AS-1	11/3/09	Air Sparge	25.0	2" PVC	--	23.5	1.5
AS-2	11/5/09	Air Sparge	25.0	2" PVC	--	23.5	1.5
AS-3	11/6/09	Air Sparge	28.0	2" PVC	--	26.5	1.5
AS-4	11/5/09	Air Sparge	26.0	2" PVC	--	24.5	1.5
AS-5	11/5/09	Air Sparge	26.0	2" PVC	--	24.5	1.5
AS-6	11/5/09	Air Sparge	30.0	2" PVC	--	28.5	1.5
AS-7	11/7/09	Air Sparge	28.5	2" PVC	--	27.0	1.5
AS-8	11/7/09	Air Sparge	27.0	2" PVC	--	25.5	1.5
AS-9	11/9/09	Air Sparge	28.5	2" PVC	--	27.0	1.5
AS-10	11/4/09	Air Sparge	27.0	2" PVC	--	25.5	1.5
AS-11	11/4/09	Air Sparge	30.0	2" PVC	--	28.5	1.5
AS-12	11/8/09	Air Sparge	27.5	2" PVC	--	26.0	1.5
AS-13	11/8/09	Air Sparge	29.0	2" PVC	--	27.5	1.5
AS-14	11/8/09	Air Sparge	30.0	2" PVC	--	28.5	1.5
AS-15	11/9/09	Air Sparge	30.0	2" PVC	--	28.5	1.5
AS-16	11/12/09	Air Sparge	30.0	2" PVC	--	28.5	1.5
AS-17	11/12/09	Air Sparge	30.0	2" PVC	--	28.5	1.5
AS-18	11/11/09	Air Sparge	30.0	2" PVC	--	28.5	1.5
AS-19	11/11/09	Air Sparge	30.0	2" PVC	--	28.5	1.5
AS-20	11/13/09	Air Sparge	30.0	2" PVC	--	28.5	1.5
AS-21	11/12/09	Air Sparge	30.0	2" PVC	--	28.5	1.5
AS-22	11/11/09	Air Sparge	30.0	2" PVC	--	28.5	1.5
AS-23	11/6/09	Air Sparge	30.0	2" PVC	--	28.5	1.5
AS-24	11/13/09	Air Sparge	30.0	2" PVC	--	28.5	1.5
AS-25	11/13/09	Air Sparge	30.0	2" PVC	--	28.5	1.5
AS-26	11/4/09	Air Sparge	27.0	2" PVC	--	25.5	1.5
AS-27	11/9/09	Air Sparge	26.0	2" PVC	--	24.5	1.5

TABLE 5
SUMMARY OF WELL CONSTRUCTION DETAILS
Lake Tahoe Laundry Works
1024 Lake Tahoe Boulevard
South Lake Tahoe, California

WELL ID	Completion Date	Well Type	Well Depth (feet bgs)	Well Casing Material	TOC Elevation (feet rel)	Top of Screen (feet bgs)	Screen Length (feet)
LW-MW-1S	7/16/08	Monitoring	23.91	2" PVC	6,191.41	8.9	15
LW-MW-2S	7/23/08	Monitoring	34.82	2" PVC	6,192.41	19.8	15
LW-MW-5S	7/24/08	Monitoring	29.70	2" PVC	6,149.87	14.7	15
LW-MW-9S	11/10/09	Monitoring	24.40	2" PVC	6,192.98	9.4	15
LW-MW-10S	11/12/09	Monitoring	24.76	2" PVC	6,192.15	9.8	15
LW-MW-10SR	6/8/13	Monitoring	24.65	2" PVC	6,191.91	9.7	15
LW-MW-11S	11/12/09	Monitoring	24.30	2" PVC	6,191.67	9.3	15
LW-MW-12S	11/10/09	Monitoring	24.20	2" PVC	6,190.71	9.2	15
LW-MW-13S	11/10/09	Monitoring	24.95	2" PVC	6,190.82	10.0	15
OS-1	3/19/10	Monitoring	25.00	2" PVC	6,176.95	10.0	15
VED-1	11/5/09	Deep Vapor Extraction	13.0	2" PVC	--	11.0	2
VED-2	11/4/09	Deep Vapor Extraction	14.0	2" PVC	--	12.0	2
VED-3	11/7/09	Deep Vapor Extraction	14.0	2" PVC	--	12.0	2
VED-4	11/8/09	Deep Vapor Extraction	13.0	2" PVC	--	11.0	2
VED-5	11/9/09	Deep Vapor Extraction	13.4	2" PVC	--	11.4	2
VED-6	11/10/09	Deep Vapor Extraction	12.5	2" PVC	--	10.5	2
VED-7	11/12/09	Deep Vapor Extraction	12.0	2" PVC	--	10.0	2
VED-8	11/13/09	Deep Vapor Extraction	12.0	2" PVC	--	10.0	2
VED-9	11/11/09	Deep Vapor Extraction	12.0	2" PVC	--	10.0	2
VED-10	11/10/09	Deep Vapor Extraction	12.0	2" PVC	--	10.0	2
VED-11	11/8/09	Deep Vapor Extraction	12.0	2" PVC	--	10.0	2
VED-12	11/7/09	Deep Vapor Extraction	11.5	2" PVC	--	9.5	2
VED-13	11/7/09	Deep Vapor Extraction	13.5	2" PVC	--	11.5	2
VED-14	11/10/09	Deep Vapor Extraction	12.5	2" PVC	--	10.5	2
VED-15	11/6/09	Deep Vapor Extraction	12.0	2" PVC	--	10.0	2
VED-16	11/12/09	Deep Vapor Extraction	12.0	2" PVC	--	10.0	2
VED-17	11/4/09	Deep Vapor Extraction	15.0	2" PVC	--	13.0	2
VED-18	11/4/09	Deep Vapor Extraction	13.0	2" PVC	--	11.0	2
VED-19	11/3/09	Deep Vapor Extraction	12.0	2" PVC	--	10.0	2
VED-20	11/3/09	Deep Vapor Extraction	12.0	2" PVC	--	10.0	2

TABLE 5
SUMMARY OF WELL CONSTRUCTION DETAILS
Lake Tahoe Laundry Works
1024 Lake Tahoe Boulevard
South Lake Tahoe, California

WELL ID	Completion Date	Well Type	Well Depth (feet bgs)	Well Casing Material	TOC Elevation (feet rel)	Top of Screen (feet bgs)	Screen Length (feet)
VES-1	11/5/09	Shallow Vapor Extraction	9.0	2" PVC	--	4.0	5
VES-2	11/4/09	Shallow Vapor Extraction	10.0	2" PVC	--	5.0	5
VES-3	11/7/09	Shallow Vapor Extraction	10.0	2" PVC	--	5.0	5
VES-4	11/8/09	Shallow Vapor Extraction	9.0	2" PVC	--	4.0	5
VES-5	11/9/09	Shallow Vapor Extraction	9.4	2" PVC	--	4.4	5
VES-6	11/10/09	Shallow Vapor Extraction	8.5	2" PVC	--	3.5	5
VES-7	11/12/09	Shallow Vapor Extraction	8.0	2" PVC	--	3.0	5
VES-8	11/13/09	Shallow Vapor Extraction	8.0	2" PVC	--	3.0	5
VES-9	11/11/09	Shallow Vapor Extraction	8.0	2" PVC	--	3.0	5
VES-10	11/11/09	Shallow Vapor Extraction	8.0	2" PVC	--	3.0	5
VES-11	11/8/09	Shallow Vapor Extraction	8.0	2" PVC	--	3.0	5
VES-12	11/7/09	Shallow Vapor Extraction	7.5	2" PVC	--	3.5	4
VES-13	11/7/09	Shallow Vapor Extraction	9.5	2" PVC	--	4.5	5
VES-14	11/10/09	Shallow Vapor Extraction	8.5	2" PVC	--	3.5	5
VES-15	11/6/09	Shallow Vapor Extraction	8.0	2" PVC	--	3.0	5
VES-16	11/12/09	Shallow Vapor Extraction	8.0	2" PVC	--	3.0	5
VES-17	11/4/09	Shallow Vapor Extraction	9.0	2" PVC	--	4.0	5
VES-18	11/4/09	Shallow Vapor Extraction	9.0	2" PVC	--	4.0	5
VES-19	11/3/09	Shallow Vapor Extraction	7.0	2" PVC	--	2.0	5

TABLE 5
SUMMARY OF WELL CONSTRUCTION DETAILS
Lake Tahoe Laundry Works
1024 Lake Tahoe Boulevard
South Lake Tahoe, California

WELL ID	Completion Date	Well Type	Well Depth (feet bgs)	Well Casing Material	TOC Elevation (feet rel)	Top of Screen (feet bgs)	Screen Length (feet)
VES-20	11/3/09	Shallow Vapor Extraction	7.0	2" PVC	--	2.0	5
VP-1	11/5/09	Shallow Soil-Gas	5.0	1/8-inch Teflon Tubing		4.875	0.125
VP-2	11/5/09	Shallow Soil-Gas	5.0	1/8-inch Teflon Tubing		4.875	0.125
VP-3	11/9/10	Shallow Soil-Gas	5.0	1/8-inch Teflon Tubing		4.875	0.125
VP-4	11/7/09	Shallow Soil-Gas	5.0	1/8-inch Teflon Tubing		4.875	0.125
VP-5	11/3/09	Shallow Soil-Gas	5.0	1/8-inch Teflon Tubing		4.875	0.125
VP-6	11/3/09	Shallow Soil-Gas	5.0	1/8-inch Teflon Tubing		4.875	0.125
VP-7	11/9/10	Shallow Soil-Gas	5.0	1/8-inch Teflon Tubing		4.875	0.125
VP-8	11/9/10	Shallow Soil-Gas	5.0	1/8-inch Teflon Tubing		4.875	0.125
VP-9	11/8/09	Shallow Soil-Gas	5.0	1/8-inch Teflon Tubing		4.875	0.125
VP-10	11/8/09	Shallow Soil-Gas	5.0	1/8-inch Teflon Tubing		4.875	0.125

Notes

All wells are of Schedule 40 PVC construction

PVC = Poly vinyl chloride

feet bgs = feet below ground surface

TOC Elevation = Top of casing elevation based on feet above MSL relative at MW-1 taken from Topographic Map

TABLE 6

SUMMARY OF SVE/GAS REMEDIATION SYSTEM OPERATIONAL DATA

Lake Tahoe Laundry Works
1024 Lake Tahoe Boulevard
South Lake Tahoe, California

Date Monitored	Operational Status on Arrival	Cumulative Calendar Days	Hour Meter Reading	Cumulative Operating Hours	Inlet Flow (scfm)	Vacuum (in-Hg)		Influent Oxygen Content (%)	Field Vapor Total VOCs		Lab Vapor Influent (ppmV)				VOCs Extracted (lbs/hr)				Cumulative VOCs Extracted (lbs)
						System	Wellfield		Influent (ppmV)	Effluent (ppmV)	PCE	TCE**	cis-1,2-DCE	Other VOCs	PCE	TCE**	cis-1,2-DCE	Total	
4/8/10	off	0	202.0	0	500	3.75	2.75	20.6	140	0	0.681	0.031	0.041	ND	0.009	0.00032	0.00031	0.010	0.000
4/9/10	off	1	205.0	3.0	500	4.15	2.75	20.6	130	0	1.950	0.045	0.048	ND	0.026	0.00047	0.00037	0.026	0.054
4/16/10	off	8	369.4	167.4	500	3.50	3.50	20.2	110	0									3.419
4/29/10	off	21	678.9	476.9	500	3.70	3.70	20.1	80	0									7.917
5/6/10	on	28	841.0	639.0	500	4.50	4.50	20.9	25	0									10.27
5/12/10	on	34	978.7	776.7	500	3.50	3.50	20.9	90	0									12.27
6/1/10	off	54	1,462	1,260	500	3.70	3.70	20.9	90	0									19.30
6/15/10	on	68	1,834	1,632	500	3.30	3.30	20.8	65	0									24.71
6/24/10	on	77	2,006	1,804	500	3.45	3.45	20.9	45	0	0.204	ND	ND	ND	0.003	0.00	0.00	0.003	26.19
7/2/10	on	85	2,199	1,997	500	3.30	3.30	20.8	170	0									30.90
7/15/10	off	98	2514.0	2,312	500	2.50	2.50	20.8	130	0	6.61	0.281	ND	ND	0.087	0.00292	0.00	0.000	38.16
7/22/10	off	105	2680.0	2,478	500	3.00	3.00	20.7	120	0									43.00
7/28/10	off	111	2681.0	2,479	500	3.26	3.26	20.7	160	0									43.06
8/5/10	on	119	2850.0	2,648	500	3.15	3.15	nm	120	0									52.91
8/5/10	on	119	2853.0	2,651	500	3.14	3.14	nm	210	0									53.09
8/11/10	on	125	3020.0	2,818	500	3.15	3.15	20.9	170	0	2.04	0.031	ND	ND	0.027	0.00032	0.00	0.027	60.2
8/18/10	on	132	3187.0	2,985	500	3.46	3.46	20.9	170	0	9.14	0.096	0.047	ND	0.120	0.00100	0.00036	0.121	72.6
8/25/10	on	139	3355.0	3,153	500	2.46	2.46	nm	180	0	11.4	1.83	4.32	ND	0.149	0.01901	0.03311	0.202	99.7
9/3/10	on	148	3568.3	3,366	500	2.80	2.80	20.7	195	10									143.5
9/8/10	on	153	3694.4	3,492	500	2.80	2.80	20.7	85	0									169.9
9/15/10	on	160	3863.0	3,661	500	5.16	5.16	20.1	60	0									205.2
9/15/10	on	160	3866.0	3,664	500	5.16	5.16	20.1	120	0	16.4	0.154	0.046	0.266	0.215	0.00160	0.00035	0.217	205.8
9/23/10	off	168	4051.5	3,850	500	4.15	4.15	20.9	190	0									246.0
9/28/10	on	173	4169.9	3,968	500	3.99	4.00	20.1	130	0									271.7
10/6/10	off	181	4362.4	4,160	500	4.98	4.98	20.1	75	0	11.8	0.104	0.033	0.112	0.155	0.00108	0.00025	0.156	307.5
10/13/10	on	188	4532.7	4,331	500	5.71	5.71	20.8	135	0									329.0
10/22/10	on	197	4746.8	4,545	500	5.00	5.00	20.9	190	0									349.5
10/28/10	off	203	4889.2	4,687	500	4.95	4.95	20.1	180	0									363.1
11/4/10	on	210	5056.4	4,854	500	4.83	4.83	nm	110	0									379.1
11/11/10	on	217	5255.8	5,054	500	5.22	5.22	20.1	230	0	2.7	ND	ND	ND	0.035	0.00	0.00	0.035	392.2
11/23/10	off	229	5684.7	5,483	0	nm	nm	nm	0	0									399.8
12/1/10	off	237	5684.7	5,483	500	2.60	2.60	nm	200	0									399.8
12/7/10	on	243	5826.3	5,624	500	3.24	3.24	20.1	190	0									404.3
12/16/10	on	252	6043.2	5,841	500	nm	nm	nm	180	0	2.18	0.39	ND	ND	0.029	0.00405	0.00	0.033	411.3
1/4/11	off	271	6463.5	6,262	500	2.89	nm	20.1	80	0									436.7
1/14/11	off	281	6707.8	6,506	500	2.00	nm	20.9	55	0									447.5
1/21/11	on	288	6873.9	6,672	500	2.00	2.00	20.8	60	0	11.30	0.228	0.028	0.241	0.148	0.00237	0.00021	0.151	460.0
1/27/11	on	294	7018.5	6,817	500	2.50	nm	20.9	45	0									476.7
2/2/11	on	300	7158.7	6,957	500	3.03	3.03	20.9	45	0									488.0
2/11/11	on	309	7375.1	7,173	500	2.80	2.80	20.9	25	0									505.4
2/21/11	off	319	7616.5	7,415	500	2.80	2.80	20.4	30	0									524.8
3/4/11	off	330	7879.0	7,677	500	3.00	3.00	20.8	75	0									546.0
3/11/11	on	337	8048.6	7,847	500	4.45	4.45	20.9	220	0									559.6
3/26/11	off	352	8456.8	8,255	500	5.00	5.00	19.8	200	0									592.5
4/6/11	off	363	8674.5	8,473	500	5.90	nm	nm	0	0									610.0
4/12/11	off	369	8675.5	8,474	500	1.95	1.95	20.8	60	0									610.0
5/11/11	off	398	9322.6	9,121	500	nm	nm	nm	nm	nm									662.1
5/18/11	on	405	9488.9	9,287	500	1.75	1.75	20.8	60	0	0.795	ND	ND	0.049	0.010	0.00	0.00	0.010	669.7
5/24/11	on	411	9632.8	9,431	500	4.10	4.10	nm	20	0									672.8
6/1/11	on	419	9823.0	9,621	500	3.50	3.50	20.8	10	0									679.1
6/9/11	on	427	10012.3	9,810	500	4.00	4.00	20.8	20	0									685.3
6/14/11	on	432	10134.7	9,933	500	5.30	5.30	nm	5	0	4.23	ND	ND	1.181	0.055	0.00	0.00	0.055	690.7
6/21/11	on	439	10303.2	10,101	500	5.50	5.50	nm	2.8	0									697.9
6/27/11	on	445	10446.1	10,244	500	4.80	4.80	nm	0	0									702.2
7/5/11	no	453	10637.1	10,435	500	5.50	5.50	nm	5.0	0									707.9

TABLE 6

SUMMARY OF SVE/GAS REMEDIATION SYSTEM OPERATIONAL DATA

Lake Tahoe Laundry Works
1024 Lake Tahoe Boulevard
South Lake Tahoe, California

Date Monitored	Operational Status on Arrival	Cumulative Calendar Days	Hour Meter Reading	Cumulative Operating Hours	Inlet Flow (scfm)	Vacuum (in-Hg)		Influent Oxygen Content (%)	Field Vapor Total VOCs		Lab Vapor Influent (ppmV)				VOCs Extracted (lbs/hr)				Cumulative VOCs Extracted (lbs)
						System	Wellfield		Influent (ppmV)	Effluent (ppmV)	PCE	TCE**	cis-1,2-DCE	Other VOCs	PCE	TCE**	cis-1,2-DCE	Total	
7/12/11	no	460	10803.4	10,601	0	0.00	0.00		0	0									710.4
7/13/11	no	461	10803.9	10,602	500	3.00	3.00	20.1	260	10									710.4
7/18/11	no	466	10949.5	10,748	500	3.00	3.00	20.8	160	10	0.332	ND	ND	0.419	0.0044	0.00	0.00	0.004	712.9
7/27/11	yes	475	11164.6	10,963	500	3.00	3.00	20.9	205	5									716.3
8/11/11	yes	490	11526.4	11,324	500	4.75	4.75	20.6	120	0									726.4
8/18/11	no	497	11692.8	11,491	500	4.60	4.60	nm	3										731.1
8/26/11	yes	505	11883.2	11,681	500	2.30	2.30	20.6	103	0									736.4
8/31/11	no	510	12005.0	11,803	500	3.80	3.80	nm	11	4	0.028	ND	ND	0.013	0.00037	0.00	0.00	0.0004	738.1
9/7/11	no	517	12170.7	11,969	500	3.75	3.75	nm	5	1									739.7
9/15/11	no	525	12362.0	12,160	500	3.70	3.70	nm	4	0.5									743.5
9/22/11	yes	532	12531.8	12,330	500	4.50	4.50	nm	3	6									746.8
9/29/11	yes	539	12703.5	12,502	500	4.60	4.60	nm	285	0									750.1
10/5/11	no	545	12838.8	12,637	0	0.00	0.00	0.0	67	0									751.5
10/6/11	no	546	12839.3	12,637	500	nm	nm	nm	160	0									751.5
10/13/11	yes	553	13010.1	12,808	500	3.00	3.00	nm	18.6	0	2.95	0.19	ND	0.0197	0.039	0.00194	0.00	0.041	756.6
10/18/11	yes	558	13130.1	12,928	500	5.00	5.00	20.9	45	0									760.8
10/26/11	yes	566	13324.3	13,122	500	3.00	3.00	20.6	60	0									766.6
11/30/11	no	601	13324.3	13,122	500	4.00	4.00	20.3	50	0									766.6
12/9/11	no	610	13535.1	13,333	500	3.50	3.50	20.8	140	0	1.61	0.024	ND	29.60	0.021	0.00025	0.00	0.021	772.3
12/15/11	yes	616	13681.1	13,479	500	3.50	3.50	20.8	160	0									775.2
12/21/11	yes	622	13825.5	13,624	500	3.00	3.00	20.8	85	0									777.6
1/4/12	yes	636	14165.5	13,964	500	2.15	nm	20.9	75	5.5	0.997	ND	ND	ND	0.013	0.00	0.00	0.013	782.5
1/12/12	yes	644	14353.0	14,151	500	3.15	3.15	20.9	60	0									785.1
1/17/12	no	649	14471.7	14,270	500	3.60	3.60	20.8	85	0									786.4
1/25/12	no	657	14667.2	14,465	500	4.10	4.10	20.9	90	0									787.5
2/3/12	no	666	14881.7	14,680	500	4.23	4.23	20.8	70	0									788.9
2/9/12	no	672	15024.4	14,822	500	4.00	4.00	nm	50	0	1.24	0.012	ND	ND	0.016	0.00	0.00	0.016	790.8
2/17/12	no	680	15215.9	15,014	0	0.00	0.00	0.0	0	0									792.4
3/8/12	no	700	15215.9	15,014	0	0.00	0.00	0.0	0	0									792.4
3/29/12	no	721	15215.9	15,014	500	0.00	0.00	0.0	0	0									792.4
4/18/12	no	741	15216.0	15,014	500	3.50	3.50	nm	4	0									792.4
4/26/12	no	749	15407.3	15,205	0	0.00	0.00	0.0	0	0									793.9
5/1/12	yes	754	15525.6	15,324	500	3.50	2.50	nm	10	0									794.9
5/8/12	yes	761	15693.3	15,491	500	3.50	2.50	nm	10	0									797.6
5/14/12	yes	767	15839.8	15,638	500	3.45	2.50	nm	18	0	1.24	ND	ND	0.056	0.016	0.00	0.00	0.016	800.0
5/23/12	yes	776	16053.1	15,851	500	3.95	3.00	nm	20-23	0									804.4
5/30/12	yes	783	16220.0	16,018	500	3.00	3.00	nm	15.3	0									808.7
6/8/12	no	792	16438.7	16,237	500	3.95	3.00	nm	14.3	0									814.3
6/14/12	yes	798	16582.0	16,380	500	0.00	0.00	0.0	0	0									818.0
6/21/12	no	805	16584.2	16,382	500	3.50	2.75	nm	30	0									818.0
6/27/12	yes	811	16723.0	16,521	500	4.0	3.25	20.9	35	0	2.66	ND	ND	0.03	0.035	0.00	0.00	0.035	822.2
7/20/12	no	834	17275.9	17,074	500	4.5	4.00	20.8	35	0									839.0
7/26/12	no	840	17424.0	17,222	500	4.0	3.25	nm	22	0	1.31	0.013	ND	ND	0.017	0.00	0.00	0.017	842.2
8/1/12	yes	846	17564.2	17,362	500	4.0	3.40	nm	18.3	0									844.2
8/8/12	yes	853	17736.3	17,534	500	3.3	2.60	nm	20.6	0									846.2
8/16/12	no	861	17925.7	17,724	500	4.0	3.25	nm	21	0									848.4
8/21/12	yes	866	18043.6	17,842	500	3.7	3.00	nm	18.2	0	0.441	ND	ND	ND	0.006	0.00	0.00	0.006	849.4
8/28/12	yes	873	18212.9	18,011	500	4.5	5.20	20.8	40.0	0									850.1
9/7/12	no	883	18452.3	18,250	0	0.0	0.00	0.0	0.0	0									850.5
9/13/12	no	889	18452.3	18,250	500	5.5	4.15	nm	28.6	0	0.00	0.00	0.00	0.00	0.000	0.00	0.00	0.000	850.5
9/18/12	yes	894	18714.5	18,513	500	4.5	3.75	nm	14.1	0									850.6
9/28/12	yes	904	18949.8	18,748	500	4.1	3.40	nm	13.6	0									850.8

TABLE 6

SUMMARY OF SVE/GAS REMEDIATION SYSTEM OPERATIONAL DATA

Lake Tahoe Laundry Works
1024 Lake Tahoe Boulevard
South Lake Tahoe, California

Date Monitored	Operational Status on Arrival	Cumulative Calendar Days	Hour Meter Reading	Cumulative Operating Hours	Inlet Flow (scfm)	Vacuum (in-Hg)		Influent Oxygen Content (%)	Field Vapor Total VOCs		Lab Vapor Influent (ppmV)				VOCs Extracted (lbs/hr)				Cumulative VOCs Extracted (lbs)
						System	Wellfield		Influent (ppmV)	Effluent (ppmV)	PCE	TCE**	cis-1,2-DCE	Other VOCs	PCE	TCE**	cis-1,2-DCE	Total	
10/3/12	yes	909	19072.9	18,871	500	4.75	3.95	nm	18.6	0									851.0
10/12/12	no	918	19074.2	18,872	500	2.80	3.15	nm	13.1	0									851.0
10/17/12	yes	923	19191.5	18,990	500	2.32	1.86	20.3	20	0									851.1
10/23/12	yes	929	19335.9	19,134	500	3.75	2.50	20.8	65	0									851.2
10/31/12	yes	937	19527.3	19,325	500	2.45	2.00	nm	25	0	0.145	0.00	0.00	0.233	0.002	0.00	0.00	0.002	851.5
11/6/12	yes	943	19673.6	19,472	500	2.75	2.30	20.8	40	0									851.7
11/19/12	yes	956	19985.0	19,783	500	2.80	2.35	nm	14.4	0									852.0
11/30/12	no	967	20248.3	20,046	500	4.90	4.33	nm	5.0	0	0.000	0.00	0.00	0.00	0.000	0.00	0.00	0.000	852.1
11/5/13	off	967	36969.0	20,046	500	3.71	2.98	nm	149.5	1.6									852.1
11/15/13	on	977	37209.0	20,286	500	2.75	2.25	nm	13.6	0.3									852.7
11/22/13	on	984	170.7	20,457	500	2.80	2.25	nm	6.3	1.1	0.39	0.00	0.00	1.7	0.005	0.00	0.00	0.005	853.4
11/26/13	on	988	266.3	20,553	500	2.80	2.25	nm	6.1	0.4									853.9
12/4/13	on	996	459.9	20,746	500	2.95	2.50	nm	5.8	0									855.0
12/10/13	on	1,002	599.9	20,886	500	2.80	2.25	nm	4.6	0.1	0.49	0.00	0.00	0.09	0.006	0.00	0.00	0.006	855.9
12/19/13	on	1,011	812.3	21,099	500	2.95	2.50	nm	5.1	0									857.1
12/27/13	off	1,019	1006.4	21,293	500	2.96	2.50	nm	5.3	0									858.0
1/3/14	on	1,026	1173.1	21,459	500	2.90	2.30	nm	4.3	0									858.9
1/7/14	on	1,030	1267.9	21,554	500	2.90	2.30	nm	3.9	0	0.27	0.00	0.00	0.00	0.004	0.00	0.00	0.004	859.3
1/14/14	on	1,037	1434.8	21,721	500	2.90	2.30	nm	5.4	0									859.7
1/20/14	on	1,043	1577.8	21,864	500	3.20	2.60	nm	0.7	0									860.0
1/28/14	off	1,051	1767.7	22,054	500	2.90	2.30	nm	3.6	0									860.3
1/31/14	off	1,054	1834.9	22,121	500	1.49	1.88	nm	4.6	0									860.4
2/4/14	on	1,058	1924.8	22,211	500	2.21	1.76	nm	2.4	0									860.6
2/14/14	on	1,068	2164.8	22,451	500	3.41	3.71	nm	5.0	0									861.01
2/18/14	off	1,072	2166.9	22,453	500	1.07	1.54	20.9	5.0	0									861.02
2/26/14	on	1,080	2354.3	22,641	500	nm	nm	nm	0.0	0									861.35
2/28/14	off	1,082	2354.3	22,641	500	2.75	2.30	nm	0.0	0	0.00	0.00	0.00	0.025	0.000	0.00	0.00	0.000	861.35
3/6/14	on	1,088	2495.7	22,782	500	2.60	2.00	nm	2.4	0									861.35
3/20/14	off	1,102	2496.1	22,782	500	1.25	0.70	nm	0.0	0	0.00	0.00	0.00	0.048	0.000	0.00	0.00	0.000	861.35
3/24/14	off	1,106	2590.5	22,877	500	1.20	0.65	nm	1.2	0									861.36
4/4/14	off	1,117	2850.6	23,137	0	0.00	0.00	nm	0.0	0									861.37
4/4/14	on at depart	1,117	2852.2	23,139	500	1.40	0.78	nm	1.3	0									861.37
4/10/14	on	1,123	2996.5	23,283	500	1.44	0.80	nm	0.8	0	0.022	0.00	0.00	0.011	0.000	0.00	0.00	0.000	861.41
4/25/14	off	1,138	2997.6	23,284	500	1.50	0.85	nm	1.1	0									861.41
5/1/14	off	1,144	3137.9	23,424	500	1.32	0.75	20.4	5.0	0									861.92
5/6/14	off	1,149	3258.1	23,544	0	0.00	0.00	nm	0.0	0									862.15
5/6/14	on at depart	1,149	3259.3	23,546	500	1.25	0.70	nm	3.6	0									862.15
5/9/14	on	1,152	3330.4	23,617	500	2.30	1.75	nm	4.8	0.019	0.540	0.00	0.00	0.00	0.007	0.00	0.00	0.007	862.53
5/9/14	off at depart	1,152	3331.5	23,618	0	0.00	0.00	nm	0.0	0									862.53
5/22/14	off	1,165	3331.5	23,618	0	0.00	0.00	nm	0.0	0									862.53
5/22/14	on at depart	1,165	3333.1	23,619	500	2.15	1.50	nm	1.3	0									862.54
5/30/14	off	1,173	3524.7	23,811	0	0.00	0.00	nm	0.0	0									863.51
5/30/14	on at depart	1,173	3526.1	23,812	500	2.20	1.53	nm	0.6	0									863.52
6/6/14	off	1,180	3689.6	23,976	0	0.00	0.00	nm	0.0	0									864.34
6/6/14	on at depart	1,180	3691.1	23,977	500	2.25	1.55	nm	3.1	0									864.35
6/13/14	on	1,187	3857.7	24,144	500	2.10	1.50	nm	1.8	0									866.03
6/13/14	off at depart	1,187	3859.6	24,146	0	0.00	0.00	nm	0.0	0									866.04
6/26/14	off	1,200	3859.6	24,146	0	0.00	0.00	nm	0.0	0									866.04
6/26/14	on	1,200	3861.1	24,147	500	2.55	2.02	nm	1.9	0.019	1.0	0.013	0.00	0.014	0.013	0.00	0.00	0.013	866.05
6/26/14	off at depart	1,200	3861.1	24,147	0	0.00	0.00	nm	0.0	0									866.05
8/4/14	off	1,239	3861.1	24,147	0	0.00	0.00	0.0	0.0	0									866.05
8/4/14	on at depart	1,239	3863.1	24,149	500	2.48	1.88	17.7	0.0	0	3.5	0.095	0.028	0.017	0.046	0.013	0.00	0.059	866.11
8/13/14	off	1,248	4069.9	24,356	0	0.00	0.00	0.0	0.0	0									872.20
8/13/14	on at depart	1,248	4071.2	24,358	500	2.04	1.53	20.2	0.0	0	0.94	0.011	0.000	0.000	0.012	0.013	0.00	0.025	872.21
8/20/14	on	1,255	4240.5	24,527	500	1.71	1.29	nm	0.0	n/a									874.97
8/25/14	on	1,260	4361.7	24,648	500	1.55	1.18	nm	0.0	n/a									875.85

TABLE 6

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Date Monitored	Operational Status on Arrival	Cumulative Calendar Days	Hour Meter Reading	Cumulative Operating Hours	Inlet Flow (scfm)	Vacuum		Influent Oxygen Content (%)	Field Vapor Total VOCs		Lab Vapor Influent				VOCs Extracted				Cumulative VOCs Extracted (lbs)
						System	Wellfield		Influent	Effluent	PCE	TCE**	cis-1,2-DCE	Other VOCs	PCE	TCE**	cis-1,2-DCE	Total	
						(in-Hg)			(ppmV)	(ppmV)		(ppmV)				(lbs/hr)			
9/3/14	off	1,269	4578.3	24,865	0	0.00	0.00	n/a	0.0	n/a									876.64
9/3/14	on at depart	1,269	4578.3	24,865	500	1.35	0.96	nm	1.8	n/a									876.64
9/8/14	on	1,274	4698.1	24,984	500	1.40	1.03	nm	0.0	n/a									877.51
9/17/14	on	1,283	4912.9	25,199	500	1.31	0.88	20.9	0.0	n/a									879.08
9/22/14	on	1,288	5033.8	25,320	500	1.28	0.89	20.9	0.0	n/a									879.96
10/10/14	on	1,306	5464.9	25,751	500	1.45	1.15	nm	1.1	n/a									883.09
10/17/14	on	1,313	5636.0	25,922	500	1.45	1.15	nm	0.0	n/a									884.34
10/24/14	on	1,320	5796.8	26,083	500	1.45	1.15	nm	1.7	n/a	0.170	0.000	0.000	0.000	0.002	0.000	0.00	0.002	885.10
11/3/14	on	1,330	6040.0	26,326	500	1.45	1.15	nm	1.1	n/a									885.60
11/7/14	off	1,334	6041.0	26,327	500	2.83	2.10	nm	1.3	n/a									885.60
11/14/14	on	1,341	6205.2	26,492	500	2.17	1.60	nm	1.0	n/a									885.90
11/14/14	on	1,341	6266.8	26,553	500	2.71	1.94	nm	1.0	n/a									886.01
11/20/14	on	1,347	6347.2	26,634	500	2.31	1.75	nm	1.6	n/a									886.16
11/20/14	on	1,347	6347.9	26,634	500	2.34	1.77	nm	2.1	n/a									886.16
11/26/14	on	1,353	6485.9	26,772	500	2.35	1.73	nm	2.3	n/a									886.41
11/26/14	on	1,353	6487.3	26,774	500	2.32	1.70	nm	2.1	n/a	0.11	0.000	0.000	0.000	0.001	0.000	0.00	0.001	886.42
12/3/14	off	1,360	6657.3	26,944	0	0.00	0.00	nm	0.0	n/a									886.54
12/3/14	on	1,360	6658.4	26,945	500	2.50	1.75	nm	1.7	n/a	0.32	0.000	0.000	0.000	0.004	0.000	0.00	0.004	886.54
12/9/14	on	1,366	6797.1	27,083	500	2.20	1.75	nm	1.0	n/a									887.03
12/9/14	on	1,366	6802.4	27,089	500	2.20	1.75	nm	1.1	n/a									887.05
12/16/14	ofvf	1,373	6960.0	27,246	0	0.00	0.00	nm	0.0	n/a									887.27
12/16/14	on	1,373	6960.0	27,246	500	2.35	1.77	nm	2.3	n/a									887.27
12/29/14	on	1,386	7266.1	27,552	500	2.54	1.84	nm	2.2	n/a									888.16
12/29/14	on	1,386	7267.6	27,554	500	2.54	1.84	nm	2.3	n/a									888.16
1/8/15	on	1,396	7505.9	27,792	500	2.52	2.02	nm	2.2	n/a									888.85
1/16/15	on	1,404	7694.8	27,981	500	2.02	1.50	nm	1.1	n/a									889.39
1/22/15	on	1,410	7838.9	28,125	500	2.02	1.54	nm	1.1	n/a	0.12	0.00	0.00	0.000	0.002	0.000	0.00	0.002	889.71
1/30/15	on	1,418	8029.3	28,316	500	2.10	1.55	nm	2.1	n/a									889.99
2/3/15	on	1,422	8126.1	28,412	500	2.13	1.62	nm	1.9	n/a									890.11
2/9/15	on	1,428	8270.4	28,557	500	2.72	2.21	nm	2.1	n/a									890.30
2/17/15	on	1,436	8460.1	28,746	500	2.30	1.96	nm	2.0	n/a									890.55
2/24/15	on	1,443	8630.1	28,916	500	2.37	1.88	nm	1.1	n/a									890.77
3/2/15	on	1,449	8774.8	29,061	500	2.35	1.86	nm	2.0	n/a									890.96
3/10/15	on	1,457	8966.3	29,253	500	2.25	1.75	nm	1.0	n/a									891.21
3/17/15	on	1,464	9132.0	29,418	500	2.07	1.75	nm	1.1	n/a	0.079	0.00	0.00	0.000	0.001	0.000	0.00	0.001	891.40
3/27/15	on	1,474	9370.9	29,657	500	2.13	1.69	nm	1.8	n/a					0.002	0.000	0.00	0.002	891.72
3/31/15	on	1,478	9467.7	29,754	500	2.21	1.64	nm	1.7	n/a					0.002	0.000	0.00	0.002	891.88
4/8/15	on	1,486	9655.5	29,942	500	2.21	1.69	nm	2.7	n/a					0.002	0.000	0.00	0.002	892.18
4/8/15	on	1,486	9657.2	29,944	500	2.21	1.69	nm	2.5	n/a					0.002	0.000	0.00	0.002	892.18
4/17/15	on	1,495	9874.1	30,160	500	2.17	1.64	nm	3.0	n/a	0.087	0.00	0.00	0.028	0.0011	0.000	0.00	0.001	892.48
4/17/15	on	1,495	9875.7	30,162	500	2.17	1.64	nm	2.8	n/a	0.087	0.00	0.00	0.028	0.0011	0.000	0.00	0.001	892.48
4/23/15	on	1,501	10016.8	30,303	500	2.00	1.53	nm	1.0	n/a									892.68
4/23/15	on	1,501	10018.3	30,305	500	2.00	1.53	nm	1.0	n/a									892.69
4/29/15	on	1,507	10156.8	30,443	500	2.25	1.70	nm	1.0	n/a									892.93
4/29/15	on	1,507	10157.9	30,444	500	2.25	1.70	nm	1.1	n/a									892.93
5/4/15	on	1,512	10281.1	30,567	500	2.07	1.60	nm	1.0	n/a									893.14
5/4/15	on	1,512	10281.1	30,567	500	2.09	1.63	nm	1.0	n/a									893.14
5/11/15	on	1,519	10442.8	30,729	500	2.14	1.66	nm	1.0	n/a									893.43
5/11/15	on	1,519	10444.4	30,731	500	2.12	1.65	nm	1.0	n/a									893.43
5/19/15	on	1,527	10634.7	30,921	500	2.21	1.77	nm	1.9	n/a									893.76
5/19/15	on	1,527	10636.0	30,922	500	2.21	1.77	nm	1.6	n/a									893.76
5/27/15	on	1,535	10822.7	31,109	500	2.10	1.60	nm	1.7	n/a	0.092	0.00	0.00	0.000	0.001	0.000	0.00	0.001	894.04
5/27/15	on	1,535	10824.3	31,111	500	2.13	1.63	nm	1.4	n/a	0.092	0.00	0.00	0.000	0.001	0.000	0.00	0.001	894.04
6/4/15	on	1,543	11014.0	31,300	500	2.07	1.59	nm	1.3	n/a									894.28
6/4/15	on	1,543	11015.8	31,302	500	2.08	1.59	nm	1.1	n/a									894.28
6/9/15	on	1,548	11130.1	31,416	500	2.04	1.57	nm	0.7	n/a									894.44
6/9/15	on	1,548	11131.3	31,418	500	2.06	1.58	nm	0.5	n/a									894.44
6/15/15	on	1,554	11271.2	31,558	500	2.13	1.67	nm	0.4	n/a									894.62

TABLE 6

SUMMARY OF SVE/GAS REMEDIATION SYSTEM OPERATIONAL DATA
Lake Tahoe Laundry Works
1024 Lake Tahoe Boulevard
South Lake Tahoe, California

Date Monitored	Operational Status on Arrival	Cumulative Calendar Days	Hour Meter Reading	Cumulative Operating Hours	Inlet Flow (scfm)	Vacuum (in-Hg)		Influent Oxygen Content (%)	Field Vapor Total VOCs		Lab Vapor Influent (ppmV)				VOCs Extracted (lbs/hr)				Cumulative VOCs Extracted (lbs)
						System	Wellfield		Influent (ppmV)	Effluent (ppmV)	PCE	TCE**	cis-1,2-DCE	Other VOCs	PCE	TCE**	cis-1,2-DCE	Total	
6/15/15	on	1,554	11272.8	31,559	500	2.16	1.68	nm	0.5	n/a									894.63
6/22/15	on	1,561	11439.2	31,726	500	2.07	1.60	nm	0.4	n/a	0.02	0.00	0.00	0.000	0.0003	0.000	0.00	0.000	894.76
6/22/15	on	1,561	11440.9	31,727	500	2.10	1.64	nm	0.3	n/a	0.02	0.00	0.00	0.000	0.0003	0.000	0.00	0.000	894.76
6/29/15	on	1,568	11598.6	31,885	500	0.00	1.58	nm	0.0	n/a									894.80
6/29/15	on	1,568	11600.2	31,887	500	0.00	2.07	nm	0.9	n/a									894.80
7/6/15	on	1,575	11765.0	32,051	500	2.00	1.50	nm	0.7	n/a									894.85
7/6/15	on	1,575	11767.7	32,054	500	2.04	1.53	nm	0.5	n/a									894.85
7/13/15	off	1,582	11931.0	32,217	0	0.00	0.00	nm	0.0	n/a									894.87
7/13/15	on	1,582	11931.0	32,217	500	1.97	1.50	nm	0.5	n/a									894.87
7/21/15	off	1,590	12110.7	32,397	0	0.00	0.00	nm	0.0	n/a									894.89

Average Extraction Rate (Lbs/Hr) 0.022 0.00051 0.00038 0.023

Notes: **System shut down for ozone sparging on 11/30/12; system restarted on 11/5/13 per CRWQCB directive, dated 11/1/13**

System shut off on 4/10/14, with approval from CRWQCB, for 2 weeks on/2 weeks off cycling plan; system restarted on 4/25/14

-- = Data not available / not recorded
cis-1,2-DCE = cis-1,2-Dichloroethene
in-Hg = Inches of Mercury
Lbs./Hr. = Pounds per hour
nm = Not measured
ND = Not detected at or above the method detection limit
PCE = Tetrachloroethene
ppmV = Parts per million by volume
scfm = Standard cubic feet per minute
SVE/GASS = Soil Vapor Extraction / Groundwater Air Sparge System
TCE = Trichloroethene
VOCs = Volatile Organic Compounds (primarily tetrachloroethylene and trichloroethylene)
Volatile Organic Compounds Removal Rate (lbs/hr) = Influent (ppmV) x 10-6 x Influent Flow Rate (scfm) x 1 lb-mole/379.5 ft3 x 165.82 (lb/lb-mole) x 60 (min/hour)

** = TCE mass removed includes 1,1,1-Trichloroethane, as their atomic weights are similar
For mass removal calculations (lb/lb-mole) - PCE mass weight = 165.82, TCE = 131.39 and cis-1,2-DCE = 96.95

8/5/10 - Extensive wellfield optimization conducted
9/23/10 - System off on arrival due to power outages
11/23/10 - System off on arrival due to power outages
12/1/10 - System off on arrival due to high water
1/4/11 - System off on arrival; power outage; also repaired knockout pot
4/6/11 - System off on arrival due to high water and would not start; off on departure
4/12/11 - System restarted
5/11/11 - System off on arrival due to high water
7/12/11 - System off on arrival; high water
7/13/11 - Remove water and restart system
7/18/11 - System off on arrival due to power outage
8/31/11 - System off on arrival due to power outage
9/7/11 - System off on arrival due to power outage
9/15/11 - System off on arrival due to power outage
10/5/11 - System off on arrival due to full water tank
10/6/11 - Water tank emptied and system restarted
10/26/11 - System shut off due to carbon back pressure
11/30/11 - Carbon changeout, restart system
12/9/11 - System off on arrival due to power outage
1/17/12 - System off on arrival due to power outage
1/25/12 - System off on arrival due to power outage
2/3/12 - System off on arrival due to power outage
2/9/12 - System off on arrival due to power outage
2/17/12 - System off on arrival due to high water

TABLE 6

SUMMARY OF SVE/GAS REMEDIATION SYSTEM OPERATIONAL DATA

Lake Tahoe Laundry Works
1024 Lake Tahoe Boulevard
South Lake Tahoe, California

Date Monitored	Operational Status on Arrival	Cumulative Calendar Days	Hour Meter Reading	Cumulative Operating Hours	Inlet Flow (scfm)	Vacuum (in-Hg)		Influent Oxygen Content (%)	Field Vapor Total VOCs		Lab Vapor Influent (ppmV)				VOCs Extracted (lbs/hr)				Cumulative VOCs Extracted (lbs)
						System	Wellfield		Influent (ppmV)	Effluent (ppmV)	PCE	TCE**	cis-1,2-DCE	Other VOCs	PCE	TCE**	cis-1,2-DCE	Total	
3/5/12 - Snow conditions finally were conducive to remove water; also, attempted to fix an oil leak, which was a broken seal; seal was back-ordered																			
3/8/12 - Attempted to repair seal; however, wrong parts were delivered																			
3/29/12 - Attempted to replace the broken seal; however, the part failed; had to order a new one (back-ordered)																			
4/18/12- Fix seal on compressor; change compressor and blower oil																			
4/26/12- High water upon arrival (system off); system off on departure; tech to empty water and restart system																			
5/1/12- Added air sparge to water and opened dilution air to drop VAC and collect vapors																			
5/8/12- Changed AS manifold and closed off wells at east end of field near compound																			
5/14/12- Shut off AS-14,15,16 to focus near MW-1S																			
5/23/12- Reduced dilution air; raised VAC from 2.35 to 3 in-Hg																			
6/8/12 - System off on arrival due to high water																			
6/14/12- turned system off..all PVC going to carbon and inbetween carbons melted from high temp.																			
6/21/12- replaced plumbing for carbon; added pressure switch between blower and carbon; added vent and therm.																			
6/27/12- installed fan over compressor exhaust																			
7/20/12 - System off on arrival due to power outage																			
7/26/12 - System off on arrival due to power outage; installed fan and additional vents to reduce heat inside building																			
8/16/12 - System off on arrival due to power outage																			
9/7/12 - System off on arrival due to high water																			
9/10/12 - Water removed for recycling																			
9/13/12 - System restarted																			
10/3/12 - System on on arrival, performed maintenance and recorded operational parameters; left system off on departure as carbon vessels needed re-plumbing																			
10/12/12 - Arrived and re-plumed carbon vessels; started system, recorded parameters; system running on departure																			
11/30/12 - System off on arrival due to power outage; restarted, recorded operational parameters, then shut down during storm period to not extract large volume of water during storms																			
12/18/12 - Installed and plumbed ozone unit to wells AS-1, AS-2, AS-3, AS-9, AS-7, AS-8 and AS-13; attempted to start; fuse problems requiring parts; ozone unit off on departure																			
11/5/13-11/15/13 - Air compressor hour meter reading used as system hour meter reading not functioning; replaced system hour meter on 11/15/13																			
12/10/13 - System shut-off for sampling and repairs to 4" pvc pipe (hairline crack at couple); restarted system before departure from site																			
12/27/13 - System off on arrival, possibly from a power outage; operating normally upon system startup; hour meter reading shows that system was only down for several hours before arrival to site																			
1/28/14 - System off on arrival; operated normally upon system startup																			
1/31/14 - System off on arrival due to possible power outage																			
2/18/14 - System off on arrival due to possible power outage																			
2/26/14 - Shut down system to make repairs to carbon system																			
2/28/14 - Completed repairs to carbon system, restarted; operated normally																			
3/6/14 - Shut down system to make additional repairs to carbon system																			
3/20/14 - Completed repairs to carbon system, restarted; operated normally																			
3/24/14 - System off on arrival due to possible power outage																			
4/4/14- System off on arrival due to power outage; restarted, measured parameters, left system on on departure																			
4/10/14 - System on at arrival, record parameters, then shut down for off cycling (2 weeks on/2 weeks off)																			
4/25/2014 - System was in off-cycling mode, restart system, recorded parameters and left on at departure																			
5/1/14 - System off on arrival due to power outage; restart and record parameters; left on at departure																			
5/6/14 - System off on arrival, likely due to high temp; restarted system, recorded parameters and left on at departure																			
5/9/14 - System running on arrival; perform O&M, shut down for cycling																			
5/22/14 - Off for off-cycling on arrival; restart for on-cycle period, recorde parameters; left on at departure																			
5/30/14 - Off on arrival, likely due to overheating related to high back-pressure in GAC; restart, record parameters, left on at departure																			
6/6/14 - Off on arrival due to thermal overload related to high back-pressxure in GAC; restsarted, recorded parameters, left on at departure																			
6/13/14 - System on on arrival, however, pressure switch had shut down due to thermal overload related to high back-presxsure in GAC; restarted, recorded parameters; had to leave off, could not keep running																			
6/26/14 - System off on arrival, same back-presxsure problem; restart and record measurements; left off on departure																			
8/4/14 - Replumbed to discharge directly to atmosphere; restarted syhstem; cleaned compound																			
8/13/14 - Off on arrival for unknown reason; restarted; on on departure																			
9/3/2014 - Off on arrival due to power outage; restarted																			
11/3/2014 - Left off on departure; reversed pullys on blower to get more efficient flow; blower motor burned up																			
11/7/2014 - Swapped out blower motor abd restarted																			
12/3/14 - Off on arrival due to power outage; changed pullies; changed blower oil; greased motor and blower; restarted																			
12/16/14 - Off on arrival due to power outage; restarted																			
2/3/15 - Air compressor off due to broken hose; replaced hose and restarted																			
6/29/15 - Off on arrival; possible power outage; restarted and left on at departure																			
7/13/15 - Off on arrival due to power outage; system restarted, parameters measured and system left on at departure																			
7/21/15 - Off on arrival; see Section 1.4 of report for detailed explanation																			

TABLE 7
SUMMARY OF VE WELLFIELD DATA
Lake Tahoe Laundry Works
1024 Lake Tahoe Boulevard
South Lake Tahoe, California

Date Monitored	Well HVE-1 valve	Well HVE-2 valve	Well HVE-3 valve	Well HVE-4 valve	Well HVE-5 valve	Well HVE-6 valve	Well VES-1 valve	Well VED-1 valve	Well VES-2 valve	Well VED-2 valve	Well VES-3 valve	Well VED-3 valve	Well VES-4 valve	Well VED-4 valve	Well VES-5 valve	Well VED-5 valve	Well VES-6 valve	Well VED-6 valve	Well VES-7 valve	Well VED-7 valve	Well VES-8 valve	Well VED-8 valve	Well VES-9 valve	Well VED-9 valve	Well VES-10 valve	Well VED-10 valve	Well VES-11 valve	Well VED-11 valve	Well VES-12 valve	Well VED-12 valve	Well VES-13 valve	Well VED-13 valve	Well VES-14 valve	Well VED-14 valve	Well VES-15 valve	Well VED-15 valve	Well VES-16 valve	Well VED-16 valve	Well VES-17 valve	Well VED-17 valve	Well VES-18 valve	Well VED-18 valve	Well VES-19 valve	Well VED-19 valve	Well VES-20 valve	Well VED-20 valve
4/6/10	varying well configurations																																													
4/7/10	varying well configurations																																													
4/8/10	varying well configurations																																													
4/9/10	varying well configurations																																													
4/16/10	O	O	O	O	O	O	O	O	O	PO	O	PO	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O
4/29/10	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O
5/6/10	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O
5/12/10	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O
6/1/10	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O
6/15/10	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O
6/24/10	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O
7/2/10	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O
7/15/10	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O
7/22/10	O	1/2	1/2	O	1/2	O	C	O	C	O	O	O	1/2	O	C	C	C	C	C	1/2	C	C	C	C	O	O	O	C	O	C	C	1/2	O	1/2	1/2	C	1/2	C	C	O	0	O	O	O	O	O
7/28/10	O	1/2	1/2	O	1/2	O	C	O	C	O	O	O	1/2	O	C	C	C	C	C	1/2	C	C	C	C	O	O	O	C	O	C	C	1/2	O	1/2	1/2	C	1/2	C	C	O	0	O	O	O	O	O
8/5/10	1/2	1/2	1/2	1/2	1/2	O	O	O	O	O	1/2	1/2	1/2	O	C	C	1/2	C	C	C	C	C	C	C	O	O	O	C	O	O	O	C	O	C	1/2	C	1/2	C	O	O	0	O	1/2	1/2	O	O
8/11/10	1/2	1/2	1/2	1/2	1/2	O	O	O	O	O	1/2	1/2	1/2	O	C	C	1/2	C	C	C	C	C	C	C	O	O	O	C	O	O	O	C	O	C	1/2	C	1/2	C	O	O	0	O	1/2	1/2	O	O
8/18/10	20%	1/2	O	C	O	1/2	O	C	O	1/2	O	O	1/2	O	C	O	C	O	1/2	1/2	C	1/2	1/2	O	O	O	O	1/2	1/2	O	C	C	C	C	O	1/2	O	O	O	O	1/2	1/2	O	C	O	C
8/25/10	O	O	O	1/2	O	1/2	20%	O	O	1/2	O	O	1/2	O	O	O	C	O	C	C	20%	C	C	C	1/2	C	O	C	O	20%	20%	O	O	1/2	O	20%	O	20%	O	1/2	O	1/2	O	O	O	O
9/3/10	O	O	O	1/2	O	1/2	20%	O	O	1/2	O	O	1/2	O	O	O	C	O	C	C	20%	C	C	C	1/2	C	O	C	O	20%	20%	O	O	1/2	O	20%	O	20%	O	1/2	O	1/2	O	O	O	O
9/8/10	O	O	O	1/2	O	1/2	20%	O	O	1/2	O	O	1/2	O	O	O	C	O	C	C	20%	C	C	C	1/2	C	O	C	O	20%	20%	O	O	1/2	O	20%	O	20%	O	1/2	O	1/2	O	O	O	O
9/15/10	O	1/2	O	1/2	1/2	20%	C	1/2	C	C	O	O	20%	O	C	C	C	O	C	C	C	C	C	C	1/2	1/2	O	1/2	C	C	C	C	C	C	1/2	1/2	O	1/2	C	1/2	C	20%	O	O	O	O
9/23/10	O	1/2	O	1/2	1/2	1/2	1/2	1/2	O	1/2	O	O	C	O	C	C	C	O	C	C	C	C	C	C	1/2	1/2	O	1/2	C	C	C	C	C	C	C	C	O	C	C	1/2	C	C	O	O	O	O
9/28/10	O	1/2	O	1/2	O	1/2	1/2	O	O	O	O	O	C	O	C	C	C	O	C	20%	C	C	C	C	1/2	1/2	O	1/2	C	C	C	C	C	1/2	C	C	O	C	C	1/2	C	C	O	O	O	O
10/13/10	20%	1/2	20%	O	20%	1/2	C	20%	20%	O	20%	1/2	10%	O	C	C	C	C	C	C	C	C	C	C	20%	20%	20%	1/2	20%	20%	C	20%	O	O	20%	20%	20%	20%	20%	20%	C	10%	20%	C	O	20%
10/28/10	1/2	1/2	1/2	O	1/2	1/2	C	O	20%	O	1/2	O	20%	C	C	C	C	C	C	C	C	C	C	C	1/2	1/2	20%	20%	20%	1/2	C	20%	O	O	O	O	O	O	1/2	20%	C	C	1/2	C	1/2	20%
11/4/10	1/2	1/2	1/2	O	1/2	1/2	C	O	20%	O	1/2	O	20%	C	C	C	C	C	C	C	C	C	C	C	1/2	1/2	20%	20%	20%	1/2	C	20%	O	O	O	O	O	O	1/2	20%	C	C	1/2	C	1/2	20%
11/11/10	1/2	1/2	1/2	O	1/2	1/2	C	O	20%	O	1/2	O	20%	C	C	C	C	C	C	C	C	C	C	C	1/2	1/2	20%	20%	20%	1/2	C	20%	O	O	O	O	O	O	1/2	20%	C	C	1/2	C	1/2	20%
11/23/10	1/2	1/2	1/2	O	1/2	1/2	C	O	20%	O	1/2	O	20%	C	C	C	C	C	C	C	C	C	C	C	1/2	1/2	20%	20%	20%	1/2	C	20%	O	O	O	O	O	O	1/2	20%	C	C	1/2	C	1/2	20%
12/1/10	1/2	1/2	1/2	O	1/2	1/2	C	O	20%	O	1/2	O	20%	C	C	C	C	C	C	C	C	C	C	C	1/2	1/2	20%	20%	20%	1/2	C	20%	O	O	O	O	O	O	1/2	20%	C	C	1/2	C	1/2	20%
12/7/10	1/2	1/2	1/2	O	1/2	1/2	C	O	20%	O	1/2	O	20%	C	C	C	C	C	C	C	C	C	C	C	1/2	1/2	20%	20%	20%	1/2	C	20%	O	O	O	O	O	O	1/2	20%	C	C	1/2	C	1/2	20%
12/16/10	1/2	1/2	1/2	O	1/2	1/2	C	O	20%	O	1/2	O	20%	C	C	C	C	C	C	C	C	C	C	C	1/2	1/2	20%	20%	20%	1/2	C	20%	O	O	O	O	O	O	1/2	20%	C	C	1/2	C	1/2	20%
1/4/11	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	C	O
1/14/11	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	C	O
1/27/11	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	C	O
2/2/11	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	C	O
2/21/11	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	C	O
3/4/11	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	C	O
3/11/11	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	C	O
3/26/11	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	C	O
4/6/11	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	C	O
4/12/11	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O
5/11/11	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O
5/18/11	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O
6/1/11	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O
6/9/11	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O
6/14/11	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O
6/21/11	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O
6/27/11	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O
7/5/11	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O
7/12/11	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O
7/13/11	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O
7/27/11	O	O	O	O	O	O	O	C	O	C	O	C	O	C	O	C	O	C	O	C	O	C	O	C	O	C	O	C	O	C	O	C	O	C	O	C	O	C	O	C	O	C	O	C	O	C
8/11/11	O	O	O	O	O	O	O	C	O	C	O	C	O	C	O	C	O	C	O	C	O	C	O	C	O	C	O	C	O	C	O	C	O	C	O	C	O	C	O	C	O	C	O	C	O	C
8/18/11	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O
8/26/11	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O
8/31/11	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O
9/7/11	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O
9/15/11	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O
9/22/11	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O
9/29/11	C	C	C	C	C	C	O	C	O	C	C	C	O	C	O	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	O	C	C	C	C	C	C	C	O	C	O	C	O	C	O	C

TABLE 7
SUMMARY OF VE WELLFIELD DATA
Lake Tahoe Laundry Works
1024 Lake Tahoe Boulevard
South Lake Tahoe, California

Date Monitored	Well HVE-1 valve	Well HVE-2 valve	Well HVE-3 valve	Well HVE-4 valve	Well HVE-5 valve	Well HVE-6 valve	Well VES-1 valve	Well VED-1 valve	Well VES-2 valve	Well VED-2 valve	Well VES-3 valve	Well VED-3 valve	Well VES-4 valve	Well VED-4 valve	Well VES-5 valve	Well VED-5 valve	Well VES-6 valve	Well VED-6 valve	Well VES-7 valve	Well VED-7 valve	Well VES-8 valve	Well VED-8 valve	Well VES-9 valve	Well VED-9 valve	Well VES-10 valve	Well VED-10 valve	Well VES-11 valve	Well VED-11 valve	Well VES-12 valve	Well VED-12 valve	Well VES-13 valve	Well VED-13 valve	Well VES-14 valve	Well VED-14 valve	Well VES-15 valve	Well VED-15 valve	Well VES-16 valve	Well VED-16 valve	Well VES-17 valve	Well VED-17 valve	Well VES-18 valve	Well VED-18 valve	Well VES-19 valve	Well VED-19 valve	Well VES-20 valve	Well VED-20 valve
10/5/11	System off on arrival and left off due to high water																																													
10/13/11	C	C	C	C	C	C	O	C	O	C	O	C	O	C	O	C	O	C	O	C	O	C	O	C	O	C	O	C	O	C	O	C	O	C	O	C	O	C	O	C	O	C	O	C	O	C
10/18/11	C	C	C	C	C	C	O	C	O	C	O	C	O	C	O	C	O	C	O	C	O	C	O	C	O	C	O	C	O	C	O	C	O	C	O	C	O	C	O	C	O	C	O	C	O	C
11/30/11	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	50%	C	C	50%	50%	50%	50%	50%	O	O	C	O	O	O	O	O	50%	50%	C	C	C	C	O	O	O	O	O	C	O	C
12/9/11	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	50%	C	C	50%	50%	50%	50%	50%	O	O	C	O	O	O	O	O	50%	50%	C	C	C	C	O	O	O	O	O	C	O	C
12/15/11	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	50%	C	C	50%	50%	50%	50%	50%	O	O	C	O	O	O	O	O	50%	50%	C	C	C	C	O	O	O	O	O	C	O	C
12/21/11	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	50%	C	C	50%	50%	50%	50%	50%	O	O	C	O	O	O	O	O	50%	50%	C	C	C	C	O	O	O	O	O	C	O	C
1/4/12	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	50%	C	C	50%	50%	50%	50%	50%	O	O	C	O	O	O	O	O	50%	50%	C	C	C	C	O	O	O	O	O	C	O	C
1/12/12	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	50%	C	C	50%	50%	50%	50%	50%	O	O	C	O	O	O	O	O	50%	50%	C	C	C	C	O	O	O	O	O	C	O	C
1/17/12	25%	25%	25%	25%	10%	10%	O	O	O	25%	O	O	25%	O	25%	25%	50%	50%	O	O	50%	50%	50%	50%	O	O	50%	O	O	O	O	O	50%	50%	25%	25%	50%	50%	25%	O	O	25%	O	O	O	50%
1/25/12	25%	25%	25%	25%	10%	10%	O	O	O	25%	O	O	25%	O	25%	25%	50%	50%	O	O	50%	50%	50%	50%	O	O	50%	O	O	O	O	O	50%	50%	25%	25%	50%	50%	25%	O	O	25%	O	O	O	50%
2/3/12	25%	25%	25%	25%	10%	10%	O	O	O	25%	O	O	25%	O	25%	25%	50%	50%	O	O	50%	50%	50%	50%	O	O	50%	O	O	O	O	O	50%	50%	25%	25%	50%	50%	25%	O	O	25%	O	O	O	50%
2/9/12	25%	25%	25%	25%	10%	10%	O	O	O	25%	O	O	25%	O	25%	25%	50%	50%	O	O	50%	50%	50%	50%	O	O	50%	O	O	O	O	O	50%	50%	25%	25%	50%	50%	25%	O	O	25%	O	O	O	50%
2/17/12	25%	25%	25%	25%	10%	10%	O	O	O	25%	O	O	25%	O	25%	25%	50%	50%	O	O	50%	50%	50%	50%	O	O	50%	O	O	O	O	O	50%	50%	25%	25%	50%	50%	25%	O	O	25%	O	O	O	50%
3/8/12	25%	25%	25%	25%	10%	10%	O	O	O	25%	O	O	25%	O	25%	25%	50%	50%	O	O	50%	50%	50%	50%	O	O	50%	O	O	O	O	O	50%	50%	25%	25%	50%	50%	25%	O	O	25%	O	O	O	50%
3/29/12	25%	25%	25%	25%	10%	10%	O	O	O	25%	O	O	25%	O	25%	25%	50%	50%	O	O	50%	50%	50%	50%	O	O	50%	O	O	O	O	O	50%	50%	25%	25%	50%	50%	25%	O	O	25%	O	O	O	50%
4/18/12	O	O	O	O	O	O	PO	C	PO	C	PO	C	O	C	PO	C	PO	C	O	C	O	C	O	C	O	C	O	C	O	C	PO	C	O	C	O	C	O	C	PO	C	PO	C	O	C	O	C
4/26/12	O	O	O	O	O	O	PO	C	PO	C	PO	C	O	C	PO	C	PO	C	O	C	O	C	O	C	O	C	O	C	O	C	PO	C	O	C	O	C	O	C	PO	C	PO	C	O	C	O	C
5/1/12	O	O	O	O	O	O	PO	C	PO	C	PO	C	O	C	PO	C	PO	C	O	C	O	C	O	C	O	C	O	C	O	C	PO	C	O	C	O	C	O	C	PO	C	PO	C	O	C	O	C
5/8/12	O	O	O	O	O	O	PO	C	PO	C	PO	C	O	C	PO	C	C	C	C	C	C	C	C	C	C	C	O	C	O	C	PO	C	C	C	C	C	C	C	PO	C	PO	C	O	C	O	C
5/14/12	O	O	O	O	O	O	PO	C	PO	C	PO	C	O	C	PO	C	C	C	C	C	C	C	C	C	C	C	O	C	O	C	PO	C	C	C	C	C	C	C	PO	C	PO	C	O	C	O	C
5/23/12	O	O	O	O	O	O	PO	C	PO	C	PO	C	O	C	PO	C	C	C	C	C	C	C	C	C	C	C	O	C	O	C	PO	C	C	C	C	C	C	C	PO	C	PO	C	O	C	O	C
5/30/12	O	O	O	O	O	O	PO	C	PO	C	PO	C	O	C	C	C	C	C	O	C	O	C	O	C	O	C	O	C	O	C	PO	C	O	C	O	C	O	C	C	C	PO	C	O	C	O	C
6/8/12	O	O	O	O	O	O	PO	C	PO	C	PO	C	O	C	C	C	C	C	O	C	O	C	O	C	O	C	O	C	O	C	PO	C	C	C	C	C	C	C	C	C	PO	C	O	C	O	C
6/14/12	O	O	O	O	O	O	PO	C	PO	C	PO	C	O	C	C	C	C	C	O	C	O	C	O	C	O	C	O	C	O	C	PO	C	C	C	C	C	C	C	C	C	PO	C	O	C	O	C
6/21/12	O	O	O	O	O	O	PO	C	PO	C	PO	C	O	C	C	C	C	C	O	C	O	C	O	C	O	C	O	C	O	C	PO	C	C	C	C	C	C	C	C	C	PO	C	O	C	O	C
6/27/12	O	O	O	O	C	C	O	C	O	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	O	C	O	C	O	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C
7/20/12	O	O	O	O	C	C	O	C	O	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	O	C	O	C	O	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C
7/26/12	O	O	O	O	C	C	O	C	O	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	O	C	O	C	O	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C
8/1/12	O	O	O	O	C	C	O	PO	O	PO	C	C	C	C	C	C	C	C	C	C	PO	C	C	PO	C	C	O	PO	O	PO	O	PO	C	C	C	C	C	C	C	C	C	C	C	C	C	C
8/8/12	O	O	O	O	C	C	O	50%	O	50%	C	C	C	C	C	C	C	C	C	C	50%	C	C	50%	C	C	O	50%	O	50%	O	50%	C	C	C	C	C	C	C	C	C	C	C	C	C	C
8/16/12	O	O	O	O	C	C	O	50%	O	50%	C	C	C	C	C	C	C	C	C	C	50%	C	C	50%	C	C	O	50%	O	50%	O	50%	C	C	C	C	C	C	C	C	C	C	C	C	C	C
8/21/12	O	O	O	O	C	C	O	50%	O	50%	C	C	C	C	C	C	C	C	C	C	50%	C	C	50%	C	C	O	50%	O	50%	O	50%	C	C	C	C	C	C	C	C	C	C	C	C	C	C
8/28/12	O	O	O	O	C	C	O	50%	O	50%	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	O	50%	O	50%	O	50%	C	C	C	C	C	C	C	C	C	C	C	C	C	C
9/7/12	O	O	O	O	C	C	O	50%	O	50%	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	O	50%	O	50%	O	50%	C	C	C	C	C	C	C	C	C	C	C	C	C	C
9/13/12	O	O	O	O	C	C	O	50%	O	50%	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	O	50%	O	50%	O	50%	C	C	C	C	C	C	C	C	C	C	C	C	C	C
9/18/12	O	O	O	O	C	C	O	50%	O	50%	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	O	50%	O	50%	O	50%	C	C	C	C	C	C	C	C	C	C	C	C	C	C
9/28/12	O	O	O	O	C	C	O	50%	O	50%	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	O	50%	O	50%	O	50%	C	C	C	C	C	C	C	C	C	C	C	C	C	C
10/3/12	O	O	O	O	C	C	O	50%	O	50%	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	O	50%	O	50%	O	50%	C	C	C	C	C	C	C	C	C	C	C	C	C	C
10/12/12	O	O	O	O	C	C	O	50%	O	50%	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	O	50%	O	50%	O	50%	C	C	C	C	C	C	C	C	C	C	C	C	C	C
10/17/12	O	O	O	O	C	C	O	50%	O	50%	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	O	50%	O	50%	O	50%	C	C	C	C	C	C	C	C	C	C	C	C	C	C
10/23/12	O	O	O	O	C	C	O	50%	O	50%	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	O	50%	O	50%	O	50%	C	C	C	C	C	C	C	C	C	C	C	C	C	C
10/31/12	O	O	O	O	C	C	O	50%	O	50%	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	O	50%	O	50%	O	50%	C	C	C	C	C	C	C	C	C	C	C	C	C	C
11/6/12	O	O	O	O	C	C	O	50%	O	50%	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	O	50%	O	50%	O	50%	C	C	C	C	C	C	C	C	C	C	C	C	C	C
11/19/12	O	O	O	O	C	C	O	50%	O	50%	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	O	50%	O	50%	O	50%	C	C	C	C	C	C	C	C	C	C	C	C	C	C
11/30/12	System off to start ozone sparging through AS wells																																													
11/5/13	O	O	O	O	C	C	O	O	O	O	O	O	O	O	C	C	C	C	C	C	C	O	C	O	O	O	O	O	O	O	O	O	C	C	C	C	C	C	C	C	C	C	C	C	C	C
11/15/13	O	O	O	O	C	C	O	O	O	O	O	O	O	O	C	C	C	C	C	C	C	O	C	O	O	O	O	O	O	O	O	O	C	C	C	C	C	C	C	C	C	C	C	C	C	C
11/22/13	O	O	O	O	C	C	O	O	O	O	O	O	O	O	C	C	C	C	C	C	C	O	C	O	O	O	O	O	O	O	O	O	C	C	C	C	C	C	C	C	C	C	C	C	C	C
11/26/13	O	O	O	O	C	C	O	O	O	O	O	O	O	O	C	C	C	C	C	C	C	O	C	O	O	O	O	O	O	O	O	O	C	C	C	C	C	C	C	C	C	C	C	C	C	C
12/4/13	O	O	O	O	C	C	O	O	O	O	O	O	O	O	C	C	C	C	C	C	C	O	C	O	O	O	O	O	O	O	O	O	C	C	C	C	C	C	C	C	C	C	C	C	C	C
12/10/13	O	O	O	O	C	C	O	O	O	O	O	O	O	O	C	C	C	C	C	C	C	O	C	O	O	O	O	O	O	O	O	O	C	C	C	C	C	C	C	C	C	C	C	C	C	C
12/19/13	O	O	O	O	C	C	O	O	O	O	O	O	O	O	C	C	C	C	C	C	C	O	C	O	O	O	O	O	O	O	O	O	C	C	C	C	C	C	C	C	C	C	C	C	C	C
12/27/13	O	O	O	O	C	C	O	O	O	O	O	O	O	O	C	C	C	C	C	C	C	O	C	O	O	O	O	O	O	O	O	O	C	C	C	C	C	C	C	C	C	C	C	C	C	C
1/3/14	O	O	O	O	C	C	O	O	O	O	O	O	O	O	C	C	C	C	C	C	C	O	C	O	O	O	O	O	O	O	O	O	C	C	C	C	C	C	C	C	C	C	C	C	C	C
1/7/14	O	O	O	O	C	C	O	O	O	O	O	O	O	O	C	C	C	C	C	C	C	O	C	O	O	O	O	O	O	O	O	O	C	C	C	C	C	C	C	C	C	C	C	C	C	C
1/14/14	O	O	O	O	C	C	O	O	O	O	O	O	O	O	C	C	C	C	C	C	C	O	C	O	O	O	O	O	O	O	O	O	C	C	C	C	C	C	C	C	C	C	C	C	C	C
1/20/14	O	O	O	O	C	C	O	O	O	O	O	O	O	O	C	C	C	C	C	C	C	O	C	O	O	O	O	O	O	O	O	O	C	C	C	C	C	C	C	C	C	C	C	C	C	C
1/28/14	O	O	O	C	C	C	O	O	O	O	O	O	O	O	C	C	C	C	C	C	C	C	C	C	C	C	O	O	O	O	O	O	C	C	C	C	C	C	C	C	C	C	C	C	O	C
1/31/14	O	O	O	C	C	C	O	O	O	O	O	O	O	O	C	C	C	C	C	C	C	C	C	C	C	C	O	O	O	O	O	O	C	C	C	C	C	C	C	C	C	C	C	C	O	C
2/4/14	O	O	O	C	C	C	O	O	O	O	O	O	O	O	C	C	C	C	C	C	C	C	C	C	O	O	O	O	O	O	O	O	C	C	C	C	C	C	C	C	C	C	C	C	O	O

TABLE 7
SUMMARY OF VE WELLFIELD DATA
Lake Tahoe Laundry Works
1024 Lake Tahoe Boulevard
South Lake Tahoe, California

Date Monitored	Well HVE-1 valve	Well HVE-2 valve	Well HVE-3 valve	Well HVE-4 valve	Well HVE-5 valve	Well HVE-6 valve	Well VES-1 valve	Well VED-1 valve	Well VES-2 valve	Well VED-2 valve	Well VES-3 valve	Well VED-3 valve	Well VES-4 valve	Well VED-4 valve	Well VES-5 valve	Well VED-5 valve	Well VES-6 valve	Well VED-6 valve	Well VES-7 valve	Well VED-7 valve	Well VES-8 valve	Well VED-8 valve	Well VES-9 valve	Well VED-9 valve	Well VES-10 valve	Well VED-10 valve	Well VES-11 valve	Well VED-11 valve	Well VES-12 valve	Well VED-12 valve	Well VES-13 valve	Well VED-13 valve	Well VES-14 valve	Well VED-14 valve	Well VES-15 valve	Well VED-15 valve	Well VES-16 valve	Well VED-16 valve	Well VES-17 valve	Well VED-17 valve	Well VES-18 valve	Well VED-18 valve	Well VES-19 valve	Well VED-19 valve	Well VES-20 valve	Well VED-20 valve
2/14/14	O	O	O	C	C	C	O	O	O	O	O	O	O	O	C	C	C	C	C	C	C	C	C	C	O	O	O	O	O	O	O	O	C	C	C	C	C	C	C	C	C	C	C	C	O	O
2/18/14	O	O	O	C	C	C	O	O	O	O	O	O	O	O	C	C	C	C	C	C	C	C	C	C	O	O	O	O	O	O	O	O	C	C	C	C	C	C	C	C	C	C	C	C	O	O
2/26/14	O	O	O	C	C	C	O	O	O	O	O	O	O	O	C	C	C	C	C	C	C	C	C	C	O	O	O	O	O	O	O	O	C	C	C	C	C	C	C	C	C	C	C	C	O	O
2/28/14	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	C	C	C	C	C	C	C	C	O	O	O	O	O	O	O	O	C	C	C	C	C	C	C	C	C	C	C	C	C	C
3/6/14	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	C	C	C	C	C	C	C	C	O	O	O	O	O	O	O	O	C	C	C	C	C	C	C	C	C	C	C	C	C	C
3/20/14	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	C	C	C	C	C	C	C	C	O	O	O	O	O	O	O	O	C	C	C	C	C	C	C	C	C	C	C	C	C	C
3/24/14	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	C	C	C	C	C	C	C	C	O	O	O	O	O	O	O	O	C	C	C	C	C	C	C	C	C	C	C	C	C	C
4/4/14	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	C	C	C	C	C	C	C	C	O	O	O	O	O	O	O	O	C	C	C	C	C	C	C	C	C	C	C	C	C	C
4/10/14	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	C	C	C	C	C	C	C	C	O	O	O	O	O	O	O	O	C	C	C	C	C	C	C	C	C	C	C	C	C	C
4/25/14	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	C	C	C	C	C	C	C	C	O	O	O	O	O	O	O	O	C	C	C	C	C	C	C	C	C	C	C	C	C	C
5/1/14	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	C	C	C	C	C	C	C	C	O	O	O	O	O	O	O	O	C	C	C	C	C	C	C	C	C	C	C	C	C	C
5/6/14	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	C	C	C	C	C	C	C	C	O	O	O	O	O	O	O	O	C	C	C	C	C	C	C	C	C	C	C	C	C	C
5/9/14	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	C	C	C	C	C	C	C	C	O	O	O	O	O	O	O	O	C	C	C	C	C	C	C	C	C	C	C	C	C	C
5/22/14	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	C	C	C	C	C	C	C	C	O	O	O	O	O	O	O	O	C	C	C	C	C	C	C	C	C	C	C	C	C	C
5/30/14	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	C	C	C	C	C	C	C	C	O	O	O	O	O	O	O	O	C	C	C	C	C	C	C	C	C	C	C	C	C	C
6/6/14	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	C	C	C	C	C	C	C	C	O	O	O	O	O	O	O	O	C	C	C	C	C	C	C	C	C	C	C	C	C	C
6/13/14	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	C	C	C	C	C	C	C	C	O	O	O	O	O	O	O	O	C	C	C	C	C	C	C	C	C	C	C	C	C	C
6/26/14	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	C	C	C	C	C	C	C	C	O	O	O	O	O	O	O	O	C	C	C	C	C	C	C	C	C	C	C	C	C	C
8/13/14	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	C	C	C	C	C	C	C	C	O	O	O	O	O	O	O	O	C	C	C	C	C	C	C	C	C	C	C	C	C	C
8/20/14	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	C	C	C	C	C	C	C	C	O	O	O	O	O	O	O	O	C	C	C	C	C	C	C	C	C	C	C	C	C	C
8/25/14	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	C	C	C	C	C	C	C	C	O	O	O	O	O	O	O	O	C	C	C	C	C	C	C	C	C	C	C	C	C	C
9/3/14	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	C	C	C	C	C	C	C	C	O	O	O	O	O	O	O	O	C	C	C	C	C	C	C	C	C	C	C	C	C	C
9/8/14	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	C	C	C	C	C	C	C	C	O	O	O	O	O	O	O	O	C	C	C	C	C	C	C	C	C	C	C	C	C	C
9/17/14	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	C	C	C	C	C	C	C	C	O	O	O	O	O	O	O	O	C	C	C	C	C	C	C	C	C	C	C	C	C	C
9/22/14	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	C	C	C	C	C	C	C	C	O	O	O	O	O	O	O	O	C	C	C	C	C	C	C	C	C	C	C	C	C	C
10/10/14	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	C	C	C	C	C	C	C	C	O	O	O	O	O	O	O	O	C	C	C	C	C	C	C	C	C	C	C	C	C	C
10/17/14	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	C	C	C	C	C	C	C	C	O	O	O	O	O	O	O	O	C	C	C	C	C	C	C	C	C	C	C	C	C	C
10/24/14	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	C	C	C	C	C	C	C	C	O	O	O	O	O	O	O	O	C	C	C	C	C	C	C	C	C	C	C	C	C	C
11/3/14	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	C	C	C	C	C	C	C	C	O	O	O	O	O	O	O	O	C	C	C	C	C	C	C	C	C	C	C	C	C	C
11/7/14	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	C	C	C	C	C	C	C	C	O	O	O	O	O	O	O	O	C	C	C	C	C	C	C	C	C	C	C	C	C	C
11/14/14	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	C	C	C	C	C	C	C	C	O	O	O	O	O	O	O	O	C	C	C	C	C	C	C	C	C	C	C	C	C	C
11/20/14	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	C	C	C	C	C	C	C	C	O	O	O	O	O	O	O	O	C	C	C	C	C	C	C	C	C	C	C	C	C	C
11/26/14	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	C	C	C	C	C	C	C	C	O	O	O	O	O	O	O	O	C	C	C	C	C	C	C	C	C	C	C	C	C	C
12/3/14	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	C	C	C	C	C	C	C	C	O	O	O	O	O	O	O	O	C	C	C	C	C	C	C	C	C	C	C	C	C	C
12/9/14	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	C	C	C	C	C	C	C	C	O	O	O	O	O	O	O	O	C	C	C	C	C	C	C	C	C	C	C	C	C	C
12/16/14	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	C	C	C	C	C	C	C	C	O	O	O	O	O	O	O	O	C	C	C	C	C	C	C	C	C	C	C	C	C	C
12/29/14	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	C	C	C	C	C	C	C	C	O	O	O	O	O	O	O	O	C	C	C	C	C	C	C	C	C	C	C	C	C	C
1/8/15	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	C	C	C	C	C	C	C	C	O	O	O	O	O	O	O	O	C	C	C	C	C	C	C	C	C	C	C	C	C	C
1/16/15	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	C	C	C	C	C	C	C	C	O	O	O	O	O	O	O	O	C	C	C	C	C	C	C	C	C	C	C	C	C	C
1/22/15	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	C	C	C	C	C	C	C	C	O	O	O	O	O	O	O	O	C	C	C	C	C	C	C	C	C	C	C	C	C	C
1/30/15	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	C	C	C	C	C	C	C	C	O	O	O	O	O	O	O	O	C	C	C	C	C	C	C	C	C	C	C	C	C	C
2/3/15	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	C	C	C	C	C	C	C	C	O	O	O	O	O	O	O	O	C	C	C	C	C	C	C	C	C	C	C	C	C	C
2/9/15	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	C	C	C	C	C	C	C	C	O	O	O	O	O	O	O	O	C	C	C	C	C	C	C	C	C	C	C	C	C	C
2/17/15	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	C	C	C	C	C	C	C	C	O	O	O	O	O	O	O	O	C	C	C	C	C	C	C	C	C	C	C	C	C	C
2/24/15	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	C	C	C	C	C	C	C	C	O	O	O	O	O	O	O	O	C	C	C	C	C	C	C	C	C	C	C	C	C	C
3/2/15	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	C	C	C	C	C	C	C	C	O	O	O	O	O	O	O	O	C	C	C	C	C	C	C	C	C	C	C	C	C	C
3/10/15	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	C	C	C	C	C	C	C	C	O	O	O	O	O	O	O	O	C	C	C	C	C	C	C	C	C	C	C	C	C	C
3/17/15	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	C	C	C	C	C	C	C	C	O	O	O	O	O	O	O	O	C	C	C	C	C	C	C	C	C	C	C	C	C	C
3/27/15	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	C	C	C	C	C	C	C	C	O	O	O	O	O	O	O	O	C	C	C	C	C	C	C	C	C	C	C	C	C	C
3/31/15	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	C	C	C	C	C	C	C	C	O	O	O	O	O	O	O	O	C	C	C	C	C	C	C	C	C	C	C	C	C	C
4/8/15	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	C	C	C	C	C	C	C	C	O	O	O	O	O	O	O	O	C	C	C	C	C	C	C	C	C	C	C	C	C	C
4/17/15	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	C	C	C	C	C	C	C	C	O	O	O	O	O	O	O	O	C	C	C	C	C	C	C	C	C	C	C	C	C	C
4/23/15	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	C	C	C	C	C	C	C	C	O	O	O	O	O	O	O	O	C	C	C	C	C	C	C	C	C	C	C	C	C	C
4/29/15	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	C	C	C	C	C	C	C	C	O	O	O	O	O	O	O	O	C	C	C	C	C	C	C	C	C	C	C	C	C	C
5/4/15	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	C	C	C	C	C	C	C	C	O	O	O	O	O	O	O	O	C	C	C	C	C	C	C	C	C	C	C	C	C	C
5/11/15	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	C	C	C	C	C	C	C	C	O	O	O	O	O	O	O	O	C	C	C	C	C	C	C	C	C	C	C	C	C	C
5/19/15	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	C	C	C	C	C	C	C	C	O	O	O	O	O	O	O	O	C	C	C	C	C	C	C	C	C	C	C	C	C	C
5/27/15	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	C	C	C	C	C	C	C	C	O	O	O	O	O	O	O	O	C	C	C	C	C	C	C	C	C	C	C	C	C	C
6/4/15	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	C	C	C	C	C	C	C	C	O	O	O	O	O	O	O	O	C	C	C	C	C	C	C	C	C	C	C	C	C	C
6/9/15	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	C	C	C	C	C	C	C	C	O	O	O	O	O	O	O	O	C	C	C	C	C	C	C	C	C	C	C	C	C	C
6/15/15	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	C	C	C	C	C	C	C	C	O	O	O	O	O	O	O	O	C	C	C	C	C	C	C	C	C	C	C	C	C	C

TABLE 7
SUMMARY OF VE WELLFIELD DATA
Lake Tahoe Laundry Works
1024 Lake Tahoe Boulevard
South Lake Tahoe, California

Date Monitored	Well HVE-1 valve	Well HVE-2 valve	Well HVE-3 valve	Well HVE-4 valve	Well HVE-5 valve	Well HVE-6 valve	Well VES-1 valve	Well VED-1 valve	Well VES-2 valve	Well VED-2 valve	Well VES-3 valve	Well VED-3 valve	Well VES-4 valve	Well VED-4 valve	Well VES-5 valve	Well VED-5 valve	Well VES-6 valve	Well VED-6 valve	Well VES-7 valve	Well VED-7 valve	Well VES-8 valve	Well VED-8 valve	Well VES-9 valve	Well VED-9 valve	Well VES-10 valve	Well VED-10 valve	Well VES-11 valve	Well VED-11 valve	Well VES-12 valve	Well VED-12 valve	Well VES-13 valve	Well VED-13 valve	Well VES-14 valve	Well VED-14 valve	Well VES-15 valve	Well VED-15 valve	Well VES-16 valve	Well VED-16 valve	Well VES-17 valve	Well VED-17 valve	Well VES-18 valve	Well VED-18 valve	Well VES-19 valve	Well VED-19 valve	Well VES-20 valve	Well VED-20 valve
6/22/15	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	C	C	C	C	C	C	C	C	O	O	O	O	O	O	O	O	C	C	C	C	C	C	C	C	C	C	C	C	C	C
6/29/15	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	C	C	C	C	C	C	C	C	O	O	O	O	O	O	O	O	C	C	C	C	C	C	C	C	C	C	C	C	C	C
7/6/15	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	C	C	C	C	C	C	C	C	O	O	O	O	O	O	O	O	C	C	C	C	C	C	C	C	C	C	C	C	C	C
7/13/15	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	C	C	C	C	C	C	C	C	O	O	O	O	O	O	O	O	C	C	C	C	C	C	C	C	C	C	C	C	C	C
7/21/15	System off due to power failure.																																													
10/12/15	O	O	C	O	O	O	O	O	O	O	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	O	O	O	O	O	O

Notes:

11/5/13: System restarted per CRWQCB directive, dated 11/1/13

8/13/14 - Restart with emissions direct to atmosphere per EDCQMD letter, dated 7/30/14

20% = 2O percent open
1/2 = One-half open
1/4 = 1/4 open
C = Closed
O = Fully open
PO = Partially Open

TABLE 8

SUMMARY OF HISTORICAL INTERIM REMEDIAL SYSTEM VAPOR LABORATORY ANALYTICAL DATA

Lake Tahoe Laundry Works
1024 Lake Tahoe Boulevard
South Lake Tahoe, California

Sample Point	Sample Date	PCE	TCE	cis-1,2-DCE	Trans-1,2-DCE	Other VOCs
		ppmV				
Influent	4/8/10	**0.680**	**0.031**	**0.041**	nd<0.01	nd<0.01
	4/9/10 - Test 9	**0.268**	**0.02**	**0.027**	nd<0.01	nd<0.01
	4/9/10	**1.950**	**0.045**	**0.048**	nd<0.01	nd<0.01
	6/24/10	**0.204**	nd<0.01	nd<0.01	nd<0.01	nd<0.01
	7/15/10	**6.61**	**0.281**	nd<2.00	nd<2.00	nd<2.00
	8/11/10	**2.04**	**0.031**	nd<0.025	nd<0.025	nd<0.025
	8/18/10	**9.14**	**0.096**	**0.047**	nd<0.041	nd<0.041
	8/25/10	**11.4**	**1.83**	**4.32**	nd<0.041	nd<0.041
	9/15/10	**16.4**	**0.154**	**0.046**	nd<0.041	**0.266**
	10/6/10	**11.8**	**0.104**	**0.033**	nd<0.041	**0.112**
	11/11/10	**2.7**	nd<0.01	nd<0.01	nd<0.01	nd<0.01
	12/16/10	**2.18**	**0.39**	nd<0.01	nd<0.01	nd<0.01
	1/21/11	**11.30**	**0.228**	**0.028**	nd<0.025	**0.241**
	5/18/11	**0.795**	nd<0.01	nd<0.01	nd<0.01	**0.049**
	6/14/11	**4.23**	nd<0.027	nd<0.027	nd<0.027	**1.181**
	7/18/11	**0.332**	nd<0.01	nd<0.01	nd<0.01	**0.419**
	8/31/11	**0.028**	nd<0.01	nd<0.01	nd<0.01	**0.015**
	10/13/11	**2.95**	**0.187**	nd<0.01	nd<0.01	**0.0197**
	12/9/11	**1.61**	**0.024**	nd<0.01	nd<0.01	**29.6**
	1/4/12	**0.997**	nd<0.01	nd<0.01	nd<0.01	nd<0.01
	2/9/12	**1.24**	**0.0124**	nd<0.01	nd<0.01	nd<0.01
	5/14/12	**1.24**	nd<0.01	nd<0.01	nd<0.01	**0.056**
	6/27/12	**2.66**	nd<0.01	nd<0.01	nd<0.01	**0.03**
	7/26/12	**1.31**	**0.013**	nd<0.01	nd<0.01	nd<0.01
	8/21/12	**0.441**	nd<0.01	nd<0.01	nd<0.01	nd<0.01
	9/13/12	nd<0.01	nd<0.01	nd<0.01	nd<0.01	nd<0.01
	10/31/12	**0.145**	nd<0.01	nd<0.01	nd<0.01	**0.233**
	11/30/12	nd<0.01	nd<0.01	nd<0.01	nd<0.01	nd<0.01
	11/22/13	**0.39**	nd<0.010	nd<0.010	nd<0.010	**1.7**
	12/10/13	**0.49**	nd<0.010	nd<0.010	nd<0.010	**0.09**
	1/7/14	**0.27**	nd<0.010	nd<0.010	nd<0.010	nd<0.010
	2/28/14	nd<0.010	nd<0.010	nd<0.010	nd<0.010	**0.025**
	3/20/14	nd<0.010	nd<0.010	nd<0.010	nd<0.010	**0.048**
	4/10/14	**0.022**	nd<0.010	nd<0.010	nd<0.010	**0.011**
	5/9/14	**0.54**	nd<0.010	nd<0.010	nd<0.010	nd<0.010
	6/26/14	**1.0**	**0.013**	nd<0.010	nd<0.010	**0.014**
	8/4/14	**3.5**	**0.095**	**0.028**	nd<0.010	**0.17**
	8/13/14	**0.94**	**0.011**	nd<0.010	nd<0.010	nd<0.010
	11/26/14	**0.11**	nd<0.010	nd<0.010	nd<0.010	nd<0.010
	12/3/14	**0.32**	nd<0.010	nd<0.010	nd<0.010	nd<0.010
	1/22/15	**0.12**	nd<0.010	nd<0.010	nd<0.010	nd<0.010
	3/27/15	**0.079**	nd<0.010	nd<0.010	nd<0.010	nd<0.010
	4/17/15	**0.087**	nd<0.010	nd<0.010	nd<0.010	nd<0.010
	5/27/15	**0.092**	nd<0.010	nd<0.010	nd<0.010	nd<0.010
	6/22/15	**0.02**	nd<0.010	nd<0.010	nd<0.010	nd<0.010
Operational Average		**2.503**	**0.198**	**0.513**	**0.000**	**1.804**

TABLE 8
SUMMARY OF HISTORICAL INTERIM REMEDIAL SYSTEM VAPOR LABORATORY ANALYTICAL DATA
Lake Tahoe Laundry Works
1024 Lake Tahoe Boulevard
South Lake Tahoe, California

Sample Point	Sample Date	PCE	TCE	cis-1,2-DCE	Trans-1,2-DCE	Other VOCs
		ppmV				
Mid-Fluent	4/9/10	nd<0.01	nd<0.01	nd<0.01	nd<0.01	nd<0.01
	6/24/10	nd<0.01	nd<0.01	nd<0.01	nd<0.01	nd<0.01
	7/15/10	nd<2.00	nd<2.00	nd<2.00	nd<2.00	nd<2.00
	8/18/10	**2.23**	**0.027**	**0.19**	nd<0.02	**0.29**
	8/25/10	**3.98**	**0.272**	**0.161**	nd<0.02	**0.276**
	9/15/10	**3.29**	**0.133**	**0.097**	nd<0.02	**0.139**
	10/6/10	**1.5**	**0.034**	nd<2.00	nd<2.00	**0.032**
	11/11/10	**2.52**	nd<2.00	nd<2.00	nd<2.00	**0.024**
	1/21/11	**1.35**	nd<0.025	nd<0.025	nd<0.025	nd<0.025
	5/18/11	**1.00**	nd<0.01	nd<0.01	nd<0.01	**0.026**
	6/14/11	**2.00**	**0.109**	**0.128**	nd<0.029	**0.626**
	7/18/11	nd<0.01	nd<0.01	nd<0.01	nd<0.01	**0.195**
	8/31/11	nd<0.01	nd<0.01	nd<0.01	nd<0.01	nd<0.01
	10/13/11	**0.142**	nd<0.01	nd<0.01	nd<0.01	nd<0.01
	12/9/11	**1.61**	**0.024**	nd<0.01	nd<0.01	nd<0.01
	1/4/12	nd<0.01	nd<0.01	nd<0.01	nd<0.01	nd<0.01
	8/21/12	**0.297**	nd<0.01	nd<0.01	nd<0.01	nd<0.01
Operational Average		**1.811**	**0.100**	**0.144**	**0.000**	**0.201**

TABLE 8
SUMMARY OF HISTORICAL INTERIM REMEDIAL SYSTEM VAPOR LABORATORY ANALYTICAL DATA
Lake Tahoe Laundry Works
1024 Lake Tahoe Boulevard
South Lake Tahoe, California

Sample Point	Sample Date	PCE	TCE	cis-1,2-DCE	Trans-1,2-DCE	Other VOCs
		ppmV				
Effluent	4/9/10	nd<0.01	nd<0.01	nd<0.01	nd<0.01	nd<0.01
	6/24/10	nd<0.01	nd<0.01	nd<0.01	nd<0.01	nd<0.01
	7/15/10	nd<2.00	nd<2.00	nd<2.00	nd<2.00	nd<2.00
	8/11/10	nd<0.023	nd<0.023	nd<0.023	nd<0.023	nd<0.023
	8/18/10	nd<0.01	nd<0.01	**0.192**	nd<0.01	nd<0.01
	8/25/10	nd<0.01	nd<0.01	**0.175**	nd<0.01	nd<0.01
	9/15/10	nd<0.01	nd<0.01	**0.221**	nd<0.01	nd<0.01
	10/6/10	**0.206**	nd<0.01	**0.024**	nd<0.01	nd<0.01
	11/11/10	**2.93**	**0.263**	nd<2.00	nd<0.01	**0.286**
	12/16/10	**0.948**	**0.067**	nd<2.00	nd<0.01	nd<0.01
	1/21/11	**3.68**	**0.233**	**0.081**	nd<0.027	**0.249**
	5/18/11	**0.106**	nd<0.01	nd<0.01	nd<0.01	**0.152**
	6/14/11	nd<0.029	nd<0.029	nd<0.029	nd<0.029	nd<0.029
	7/18/11	**0.187**	nd<0.01	nd<0.01	nd<0.01	**0.176**
	8/31/11	nd<0.01	nd<0.01	nd<0.01	nd<0.01	nd<0.01
	10/13/11	nd<0.01	nd<0.01	nd<0.01	nd<0.01	nd<0.01
	12/9/11	nd<0.01	nd<0.01	nd<0.01	nd<0.01	nd<0.01
	1/4/12	nd<0.01	nd<0.01	nd<0.01	nd<0.01	nd<0.01
	2/9/12	nd<0.01	nd<0.01	nd<0.01	nd<0.01	nd<0.01
	5/14/12	**0.633**	nd<0.01	nd<0.01	nd<0.01	nd<0.01
	6/27/12	**0.04**	nd<0.01	nd<0.01	nd<0.01	nd<0.01
	7/26/12	nd<0.01	nd<0.01	nd<0.01	nd<0.01	nd<0.01
	8/21/12	**0.287**	nd<0.01	nd<0.01	nd<0.01	nd<0.01
	9/13/12	**0.346**	nd<0.01	nd<0.01	nd<0.01	nd<0.01
	10/31/12	**0.117**	nd<0.01	nd<0.01	nd<0.01	nd<0.01
	11/30/12	nd<0.01	nd<0.01	nd<0.01	nd<0.01	nd<0.01
	11/22/13	nd<0.010	nd<0.010	nd<0.010	nd<0.010	nd<0.010
	12/10/13	**0.13**	nd<0.010	nd<0.010	nd<0.010	nd<0.010
	1/7/14	nd<0.010	nd<0.010	nd<0.010	nd<0.010	nd<0.010
	2/28/14	nd<0.010	nd<0.010	nd<0.010	nd<0.010	**0.128**
	3/20/14	nd<0.010	nd<0.010	nd<0.010	nd<0.010	**1.5**
	4/10/14	nd<0.010	nd<0.010	nd<0.010	nd<0.010	**0.024**
	5/9/14	nd<0.010	nd<0.010	nd<0.010	nd<0.010	**0.019**
	6/26/14	**0.019**	nd<0.010	nd<0.010	nd<0.010	nd<0.010
Operational Average		**0.801**	**0.188**	**0.139**	**0.00**	**0.359**

TABLE 8
SUMMARY OF HISTORICAL INTERIM REMEDIAL SYSTEM VAPOR LABORATORY ANALYTICAL DATA

Lake Tahoe Laundry Works
1024 Lake Tahoe Boulevard
South Lake Tahoe, California

Sample Point	Sample Date	PCE	TCE	cis-1,2-DCE	Trans-1,2-DCE	Other VOCs
		ppmV				

Notes:

cis-1,2-DCE = cis-1,2-Dichloroethene
na = Not applicable
nd< = Not detected at or above the detection limit, which is indicated by value
PCE = Tetrachloroethene (a.k.a. perchloroethene)
ppmV = parts per million by volume
TCE = Trichloroethene
Trans-1,2-DCE = Trans-1,2-dichloroethene

1/27/11 - Vapor samples collected; however, during lab analyses instrument malfunctioned; no results
2/21/11 - Vapor samples collected; however, during lab analyses instrument malfunctioned; no results
10/26/11-11/30/11 - carbon changeout

TABLE 9A

SUMMARY OF RESIDUAL VAPOR-PHASE PCE MASS ESTIMATES

Lake Tahoe Laundry Works
1024 Lake Tahoe Boulevard
South Lake Tahoe, California

Date	PCE Plume Area (square feet)	Average PCE Concentration (μg/L)	Estimated Mass (pounds)	Change (+/-)
9/13/12	15,100	1,966	0.020	
2/14/13	15,100	0.060	0.0002	-0.02
9/30/13	15,100	1,614	0.005	0.005
12/10/13	8,500	2.4	0.004	-0.001
3/6/14	8,500	1.2	0.002	-0.002
6/26/14	14,500	20.1	0.025	0.023
9/17/14	13,000	2.9	0.007	-0.018
12/16/14	11,000	0.495	0.00102	-0.006
3/31/15	7,412	0.859	0.00119	0.00017
6/12/15	NA	0.000	0.000	-0.00119
9/11/15	19,148	2.491	0.010	0.010

Notes:
See Figure 7b

TABLE 9B
9/11/15 - RESIDUAL PCE MASS IN SOIL-VAPOR CALCULATIONS
Lake Tahoe Laundry Works
1024 Lake Tahoe Boulevard
South Lake Tahoe, California

Area Encompassed by all VP Wells within the PCE Plume Boundary Limit

Well ID	**Sample Date**	**Impacted Soil Column** (feet)	**PCE Concentration** (ppbV)	(µg/m^3)	(µg/L)
VP-1	9/11/15	10	5.3	35.9	0.036
VP-2		10	2,000	13,560	13.560
VP-3		10	160	1,085	1.085
VP-4		10	33	224	0.224
VP-5		10	150	1,017	1.0170
VP-6		10	460	3,119	3.1188
VP-7		10	1.5	10.2	0.0102
VP-8		10	44	298	0.2983
VP-9		10	450	3,051	3.051
VP-10		10	7.8	52.9	0.0529
		Averages	367.37	2,490.75	2.491

For conservative estimate assumes 10-foot thick soil column

As conservative estimate, assumes that VP analytical data represents residual in top 10 feet of soil column
Table 4 PCE µg/m3 concentration calculated based on PCE atomic weight of 165.82 g/mol

Area in square feet (sf) - Estimated from Figure 7B	**21,678**
Impacted Column (ft)	**10**
Impacted Volume in cubic feet (cf)	**216,785**
Volume of soil gas, using 30% porosity (cf)	**65,035**
Soil gas volume in cubic meters	**1,842**
PCE in Mass in Soil Gas (µg)	**4,586,952**
PCE in Mass in Soil Gas (g)	**4.587**
PCE in Mass in Soil Gas (lbs)	**0.010**

Notes:
Avg = Av erage
ppbV = parts per billion by volume
PCE = Tetrachloroethene (a.k.a. perchloroethene)
µg/L = micrograms per liter
µg/m3 = micrograms per cubic meter

TABLE 10A
SUMMARY OF RESIDUAL DISSOLVED-PHASE PCE MASS ESTIMATES
Lake Tahoe Laundry Works
1024 Lake Tahoe Boulevard
South Lake Tahoe, California

Date	PCE Plume Area (square feet)	Average PCE Concentration (µg/L)	Estimated Mass (pounds)	Change (+/-)
7/30/13	24,300	143.26	0.65	na
9/30/13	23,000	242.75	1.05	0.40
12/10/13	15,300	63.73	0.18	-0.87
3/6/14	10,000	6.7	0.013	-0.17
6/26/14	2,750	20.1	0.020	0.01
9/17/14	500	6.35	0.001	-0.02
12/16/14	1,300	13.07	0.0032	0.0026
3/26/15	0	1.17	na	-0.0032
6/12/15	938	10.50	0.0028	0.0028
9/11/15	1,806	77.50	0.025	0.0222

Notes:
PCE plume area based on PCE concentrations greater than 5 µg/L
See Figure 4A for plot of data

TABLE 10B
9/11/15 - RESIDUAL DISSOLVED-PHASE PCE MASS CALCULATIONS
Lake Tahoe Laundry Works
1024 Lake Tahoe Boulevard
South Lake Tahoe, California

Area Encompassed by all LW-MW wells within the 5 ppb Plume Limit

Well ID	**Sample Date**	**Impacted GW Column**	**PCE (Center)**	PCE (Edge)	Average
		(feet)	(µg/L)	(µg/L)	(µg/L)
LW-MW-1S	9/11/15	10	150.00	5.0	77.50
LW-MW-5S	9/11/15	10	6.30	5.0	5.65

For conservative estimate assumes 10-foot aquifer thickness

Residual PCE Mass

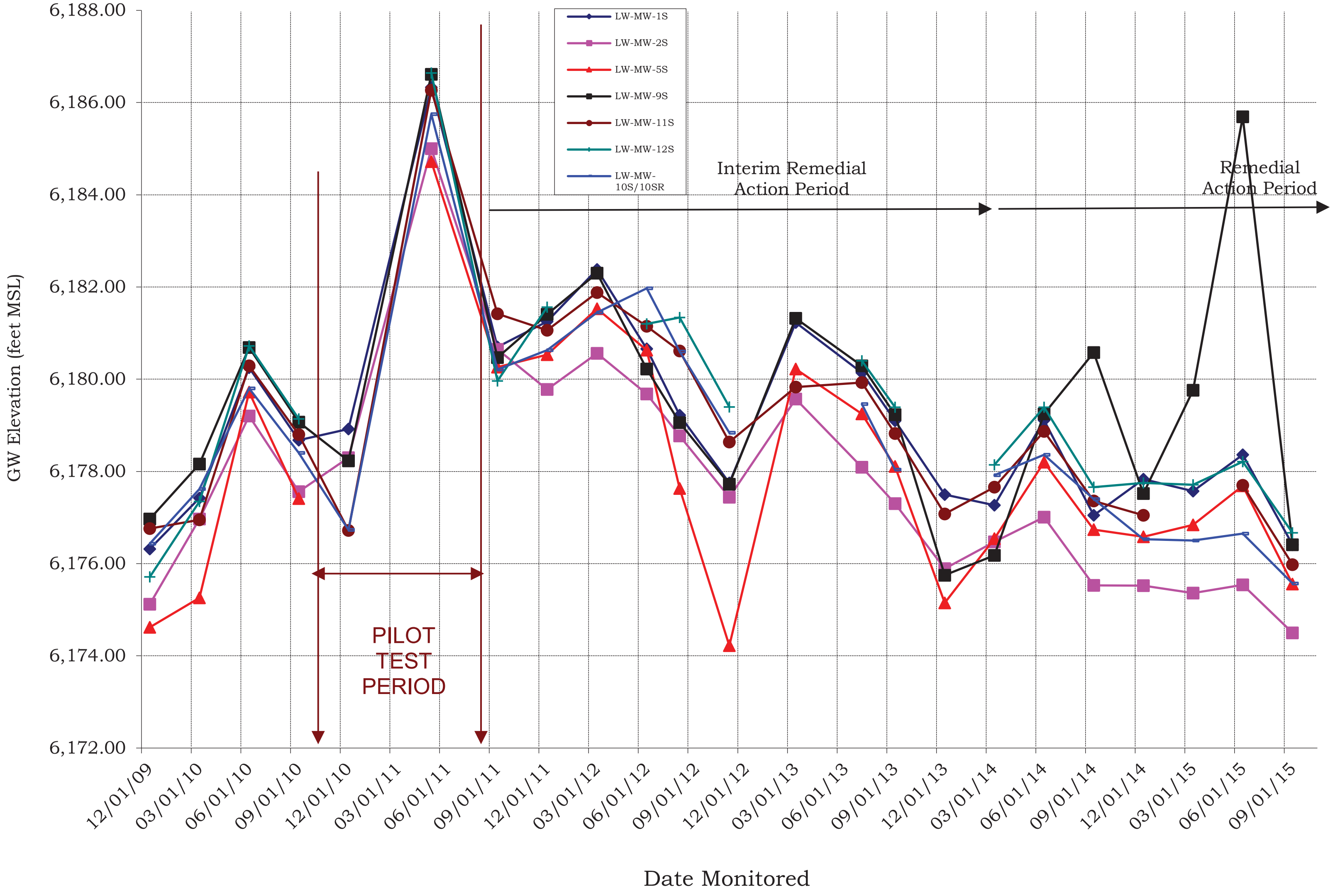
	LW-MW-1S	**LW-MW-5S**	
Area in square feet (sf) - From Figure 4A	**1,743**	**62.5**	
Impacted Column (ft)	**10**	**10.00**	
Impacted GW Volume in cubic feet (cf)	**17,429**	**625**	multiply area by column
Aqueous volume using 30% porosity (cf)	**5,229**	**188**	
Groundwater Volume (GWV) in Liters	**148,061**	**56**	
GW PCE Mass (µg)	**11,474,753**	**318**	
GW PCE Mass in grams (g)	**11.475**	**3.179E-04**	divide by (1,000,000 µg/g)
GW PCE Mass in pounds (lbs)	**2.5297E-02**	**7.0074E-07**	multiply by 0.00220462 lbs/g
	Total	**0.025**	lbs

Notes:

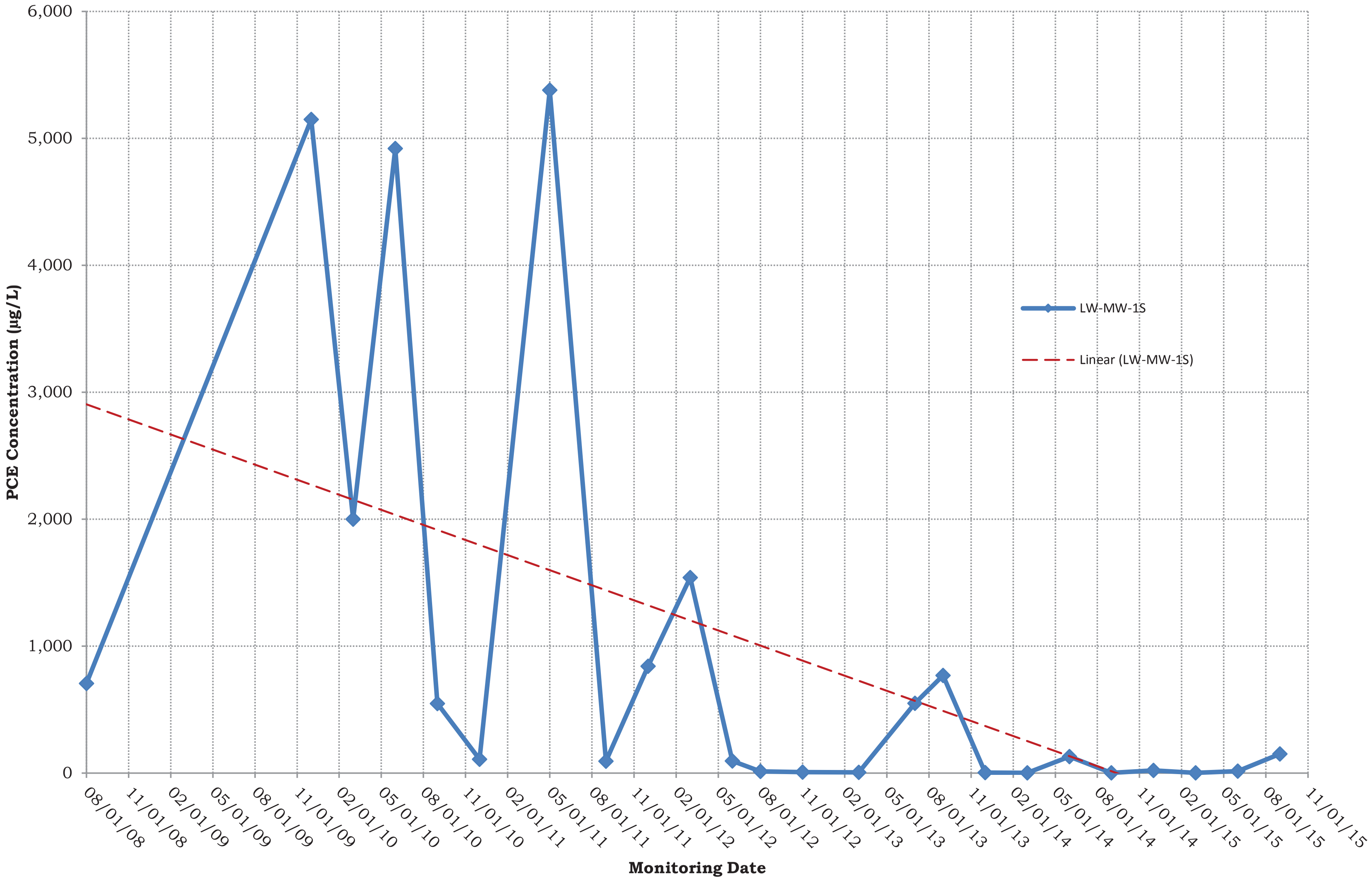
PCE = Tetrachloroethene (a.k.a. perchloroethene)
µg/L = micrograms per liter (equivalent to parts per billion, or ppb)

GRAPHS

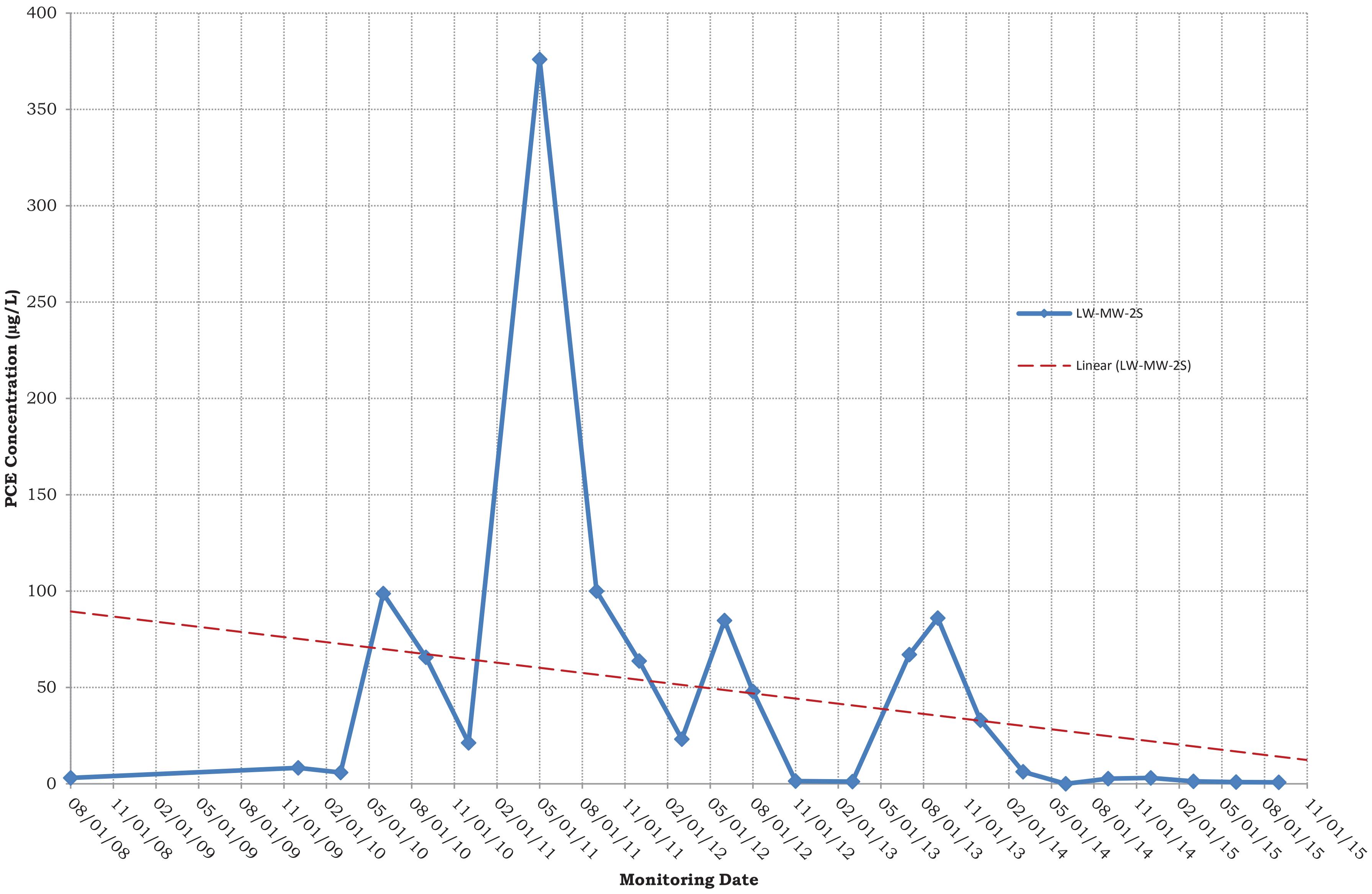
GRAPH 1
LAKE TAHOE LAUNDRY WORKS
HYDROGRAPH - 12/4/09 - Current



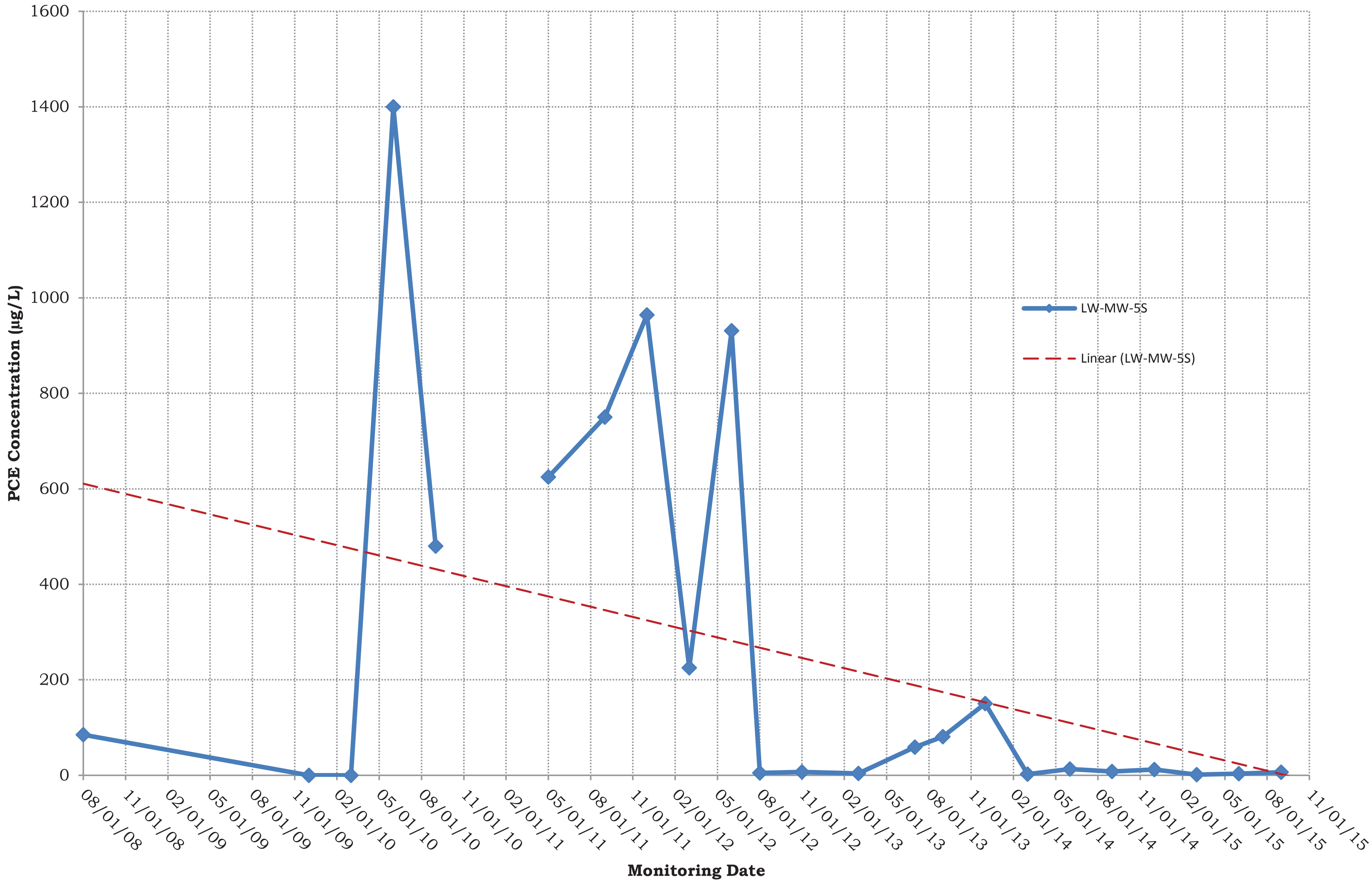
Graph 2
LW-MW-1S PCE CONCENTRATION TRENDS



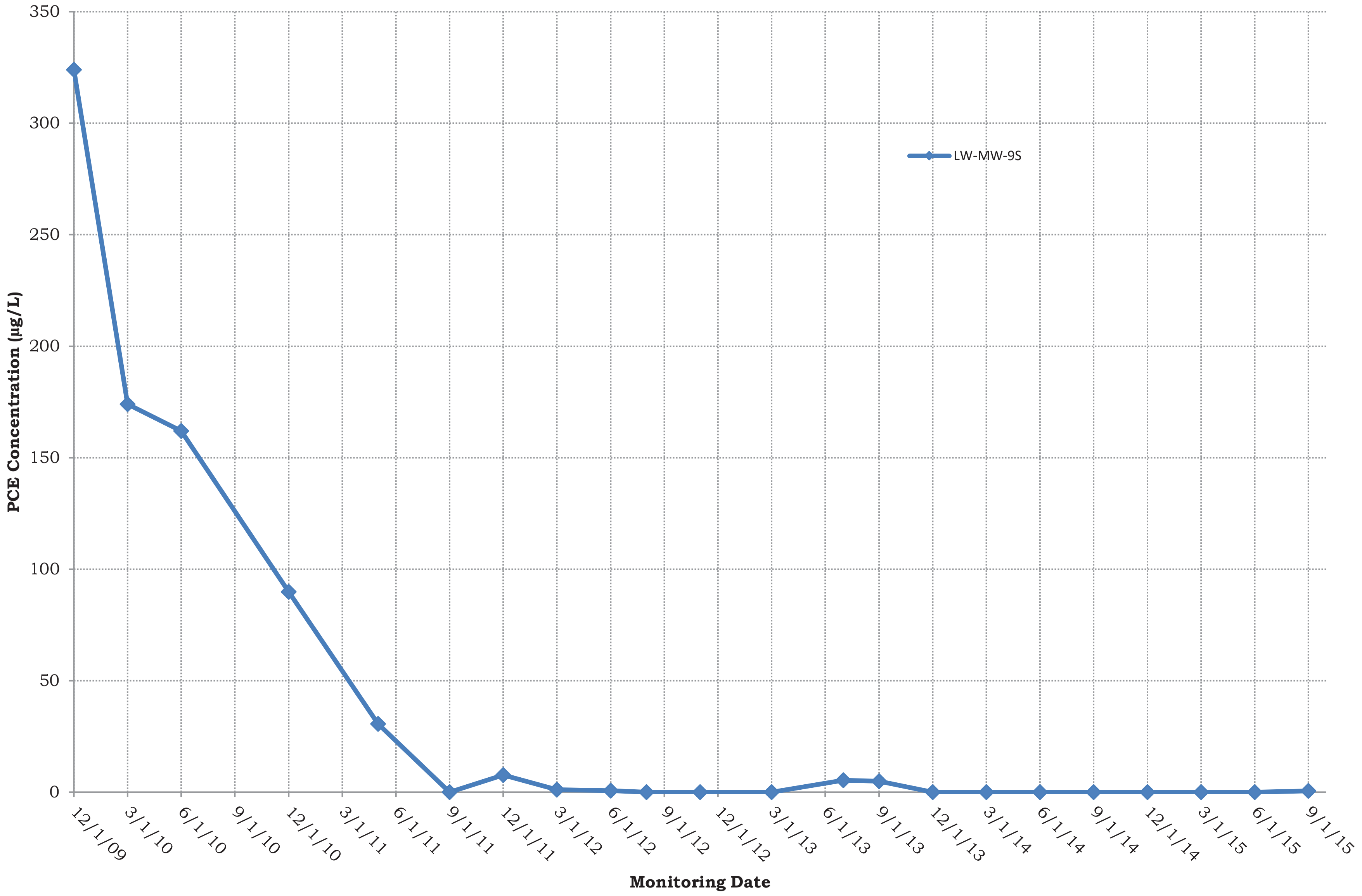
Graph 3
LW-MW-2S PCE CONCENTRATION TRENDS



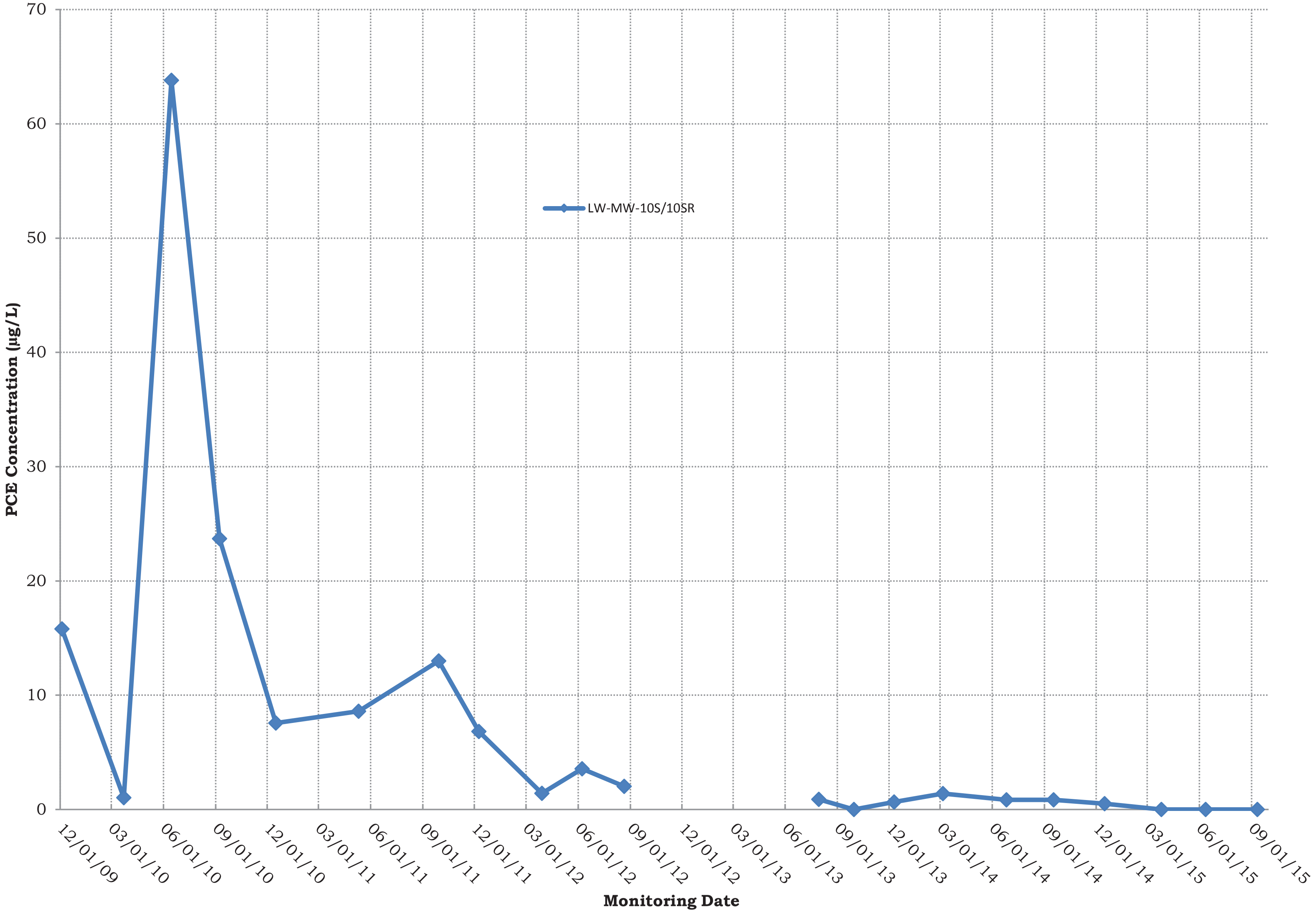
Graph 4
LW-MW-5S PCE CONCENTRATION TRENDS



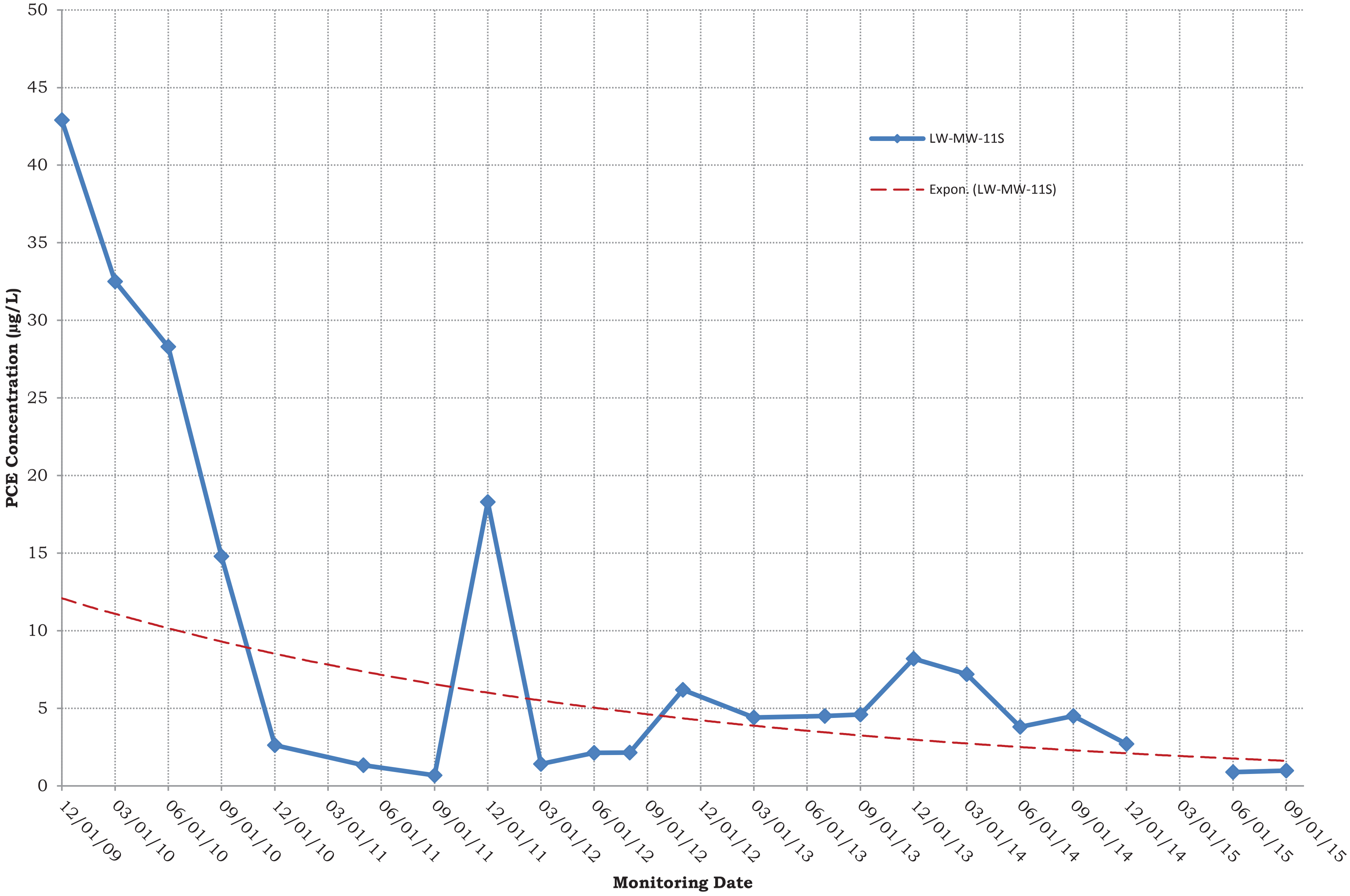
Graph 5
LW-MW-9S PCE CONCENTRATION TRENDS



Graph 6
LW-MW-10S/10SR PCE CONCENTRATION TRENDS

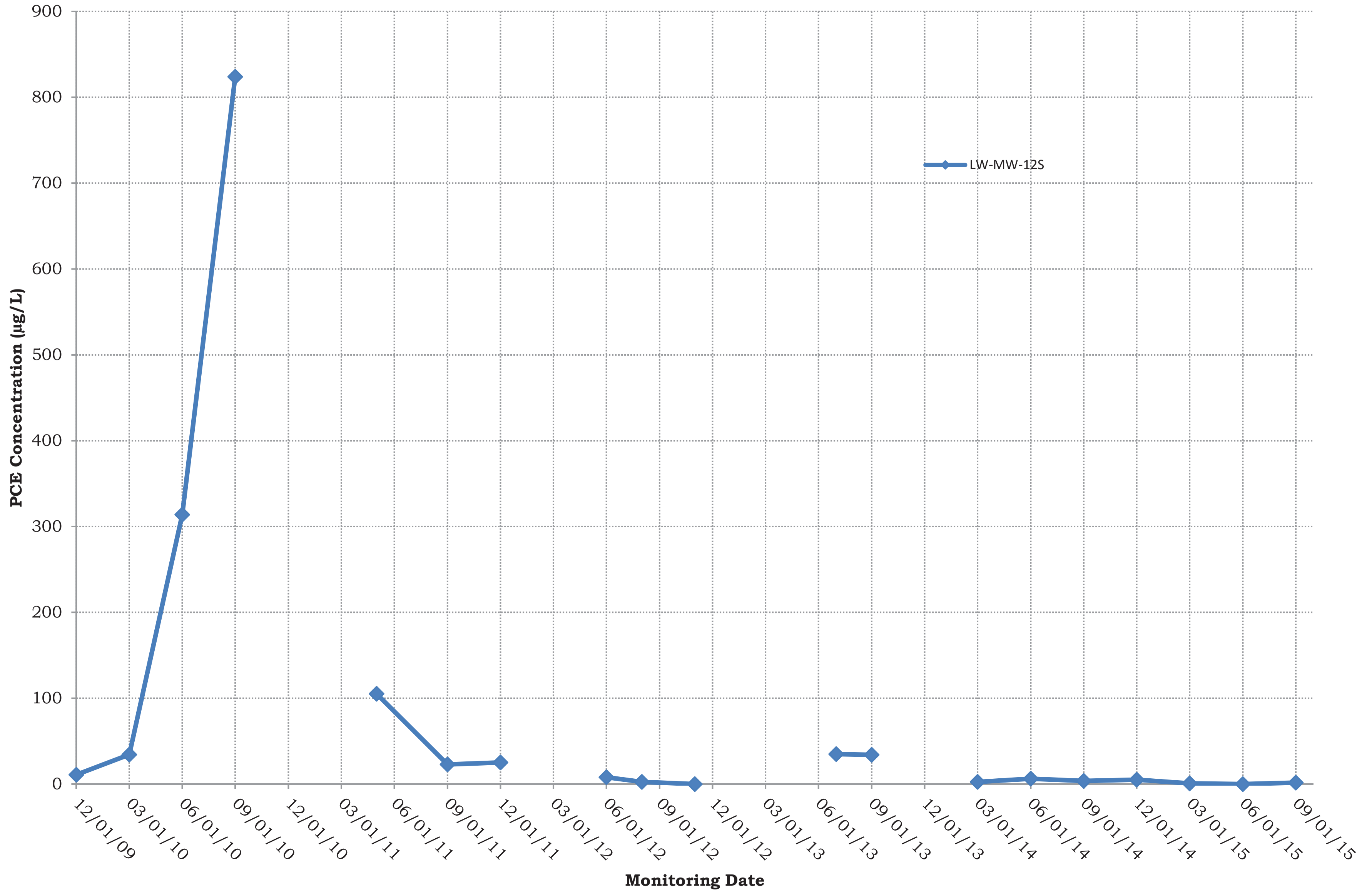


Graph 7
LW-MW-11S PCE CONCENTRATION TRENDS

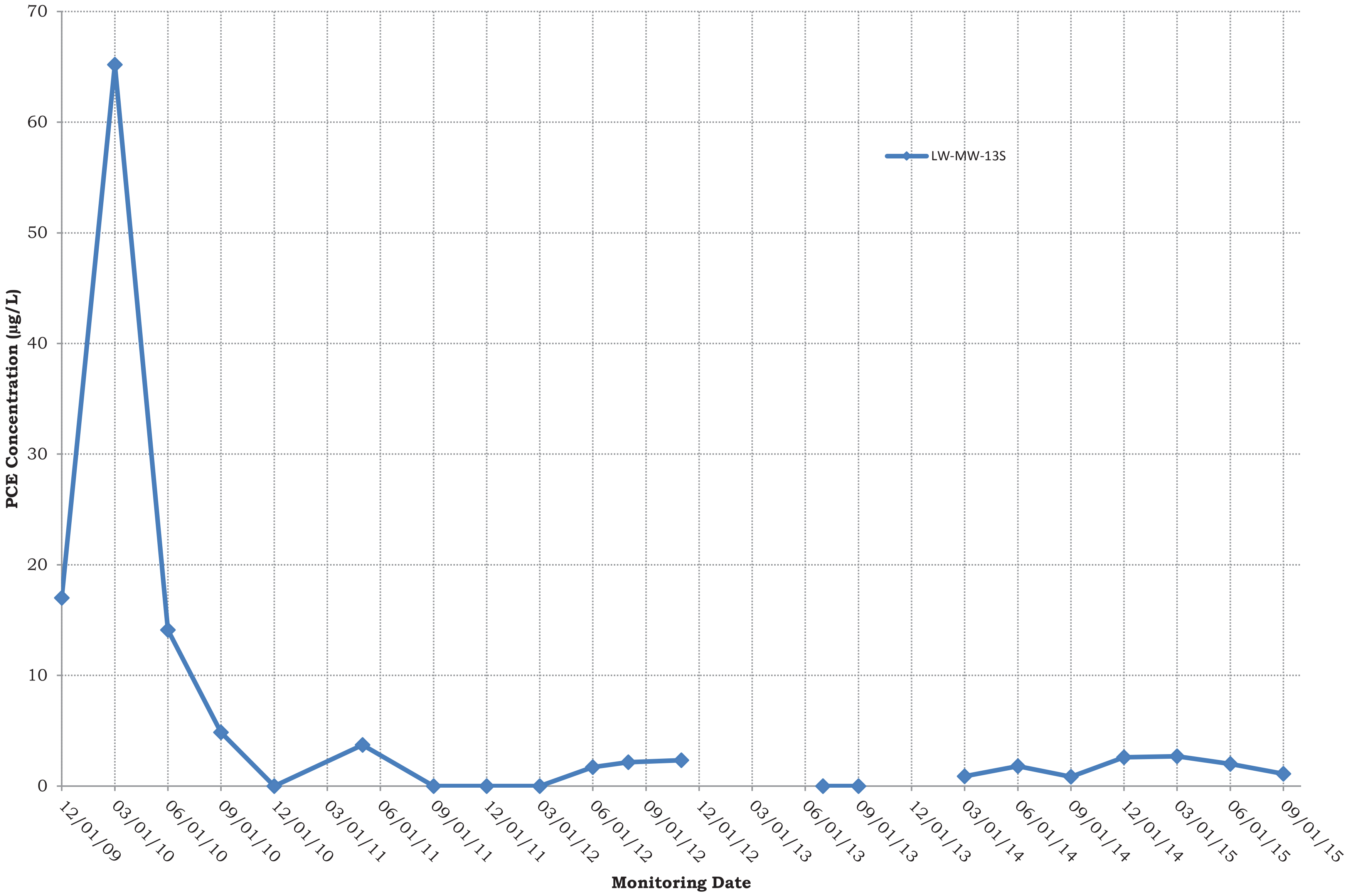


Graph 8

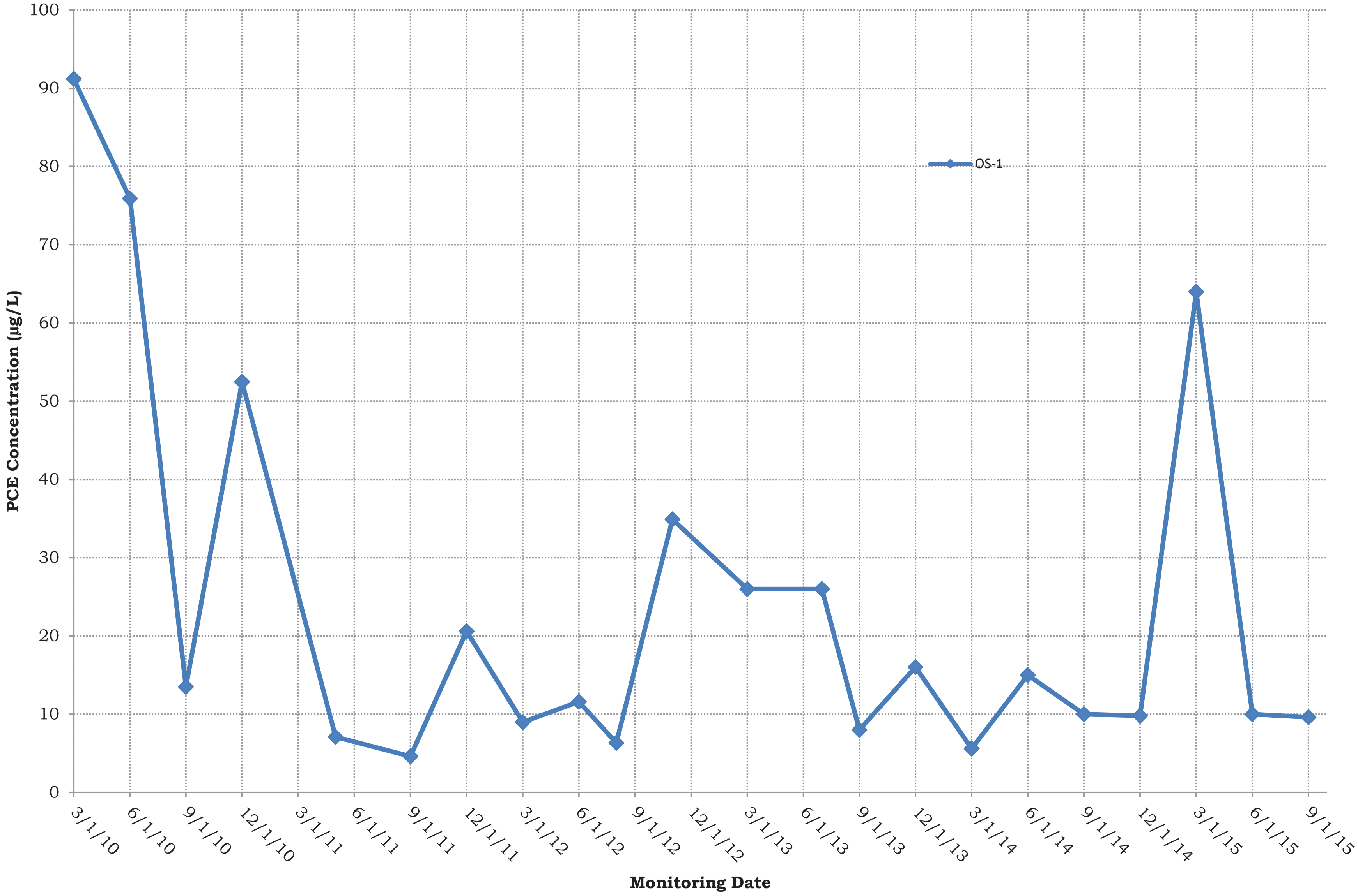
LW-MW-12S PCE CONCENTRATION TRENDS



Graph 9
LW-MW-13S PCE CONCENTRATION TRENDS



Graph 10
OS-1 PCE CONCENTRATION TRENDS



APPENDICES

APPENDIX A

Groundwater Monitoring Field Data Sheets

PROVERA ANALYTICAL LABORATORIES

Chain of Custody Form

Client Name: E2C Remadiation

Project Name: LTLW

Client Address: 5300 Woodmere Dr. Suite 105 Bakersfield, CA

Project Manager: Phil Goalwin

Sampler Name: J. Irwin

Sample Matrix

☒ Aqueous

☐ Soil

☐ Acidified

Sample Date	Sample Time	Sample Description and Container Type	BTEX (EPA 8021b)	MTBE (EPA 8021b)	TPH Gasoline (8015M)	TPH Diesel (8015M)	Volatiles (EPA 8260b)	5 Oxygenates (EPA 8260b)	7 Oxygenates (EPA 8260b)	MTBE (EPA 8260b)	Lead scavengers (8260b)	BTEX (8260b)		Comments
9-11-15	7:15	Travel blank 1voa					X							
	10:15	OS-1 3voas												
	10:35	LW-MW-9s												
	10:54	LW-MW-12s												
	10:59	LW-MW-14s												
	11:18	LWMW-10sR												
	11:39	LW-MW-13s												
	12:00	LW-MW-11s												
	12:21	LW-MW-2s												
	12:40	LW-MW-5s												
9-11-15	1:01	LW-MW-1s 3voas					X							

Sampling Event: 3rd QGWM EDF Type: GW Monitoring Other ____

Turnaround Time Requested: 24 Hour ____ 48 Hour ____ 5-Day ____ Standard X

Relinquished By:	Date: 9-11-15	Relinquished By:	Date:
Received By:	Date:	Received By:	Date:

E_2C Remediation

Groundwater Scientists : Environmental Consultants
1020 Winding Creek Road, Suite 110; Roseville, California 95678
Telephone: (916) 782-8700 / Facsimile: (916) 782-8750

Water Quality Sampling Record and Well Development Data

SAMPLE ID / WELL #: OS-1

E_2C REM. PROJECT #: 1950-RV-15

PROJECT NAME: Lake Tahoe Laundry Works

DATE SAMPLED: 9-11-15

SAMPLED BY: J. Irwin / N. Jensen

DEPTH TO WATER: 15.30

TOTAL DEPTH OF WELL: 24.00

WELL DIAMETER; 2"

CASING VOLUME: 1.41

PURGE METHOD: Bailor

TIME	PURGE CHARACTERISTICS				TEMP (F°)	pH (UNITS)	SEC (mmhos/cm)	DO (mg/L)	REMARKS (COLOR, TURBIDITY, ETC.)
	INTAKE DEPTH	RATE (GPM)	CUM. VOL (GAL)	WELL VOL PUMPED					
10:00		1/2		0	60.7	7.05	.73	1.4	clear, no odor
10:02				1	60.3	7.01	.72		clear no odor
10:04				2	60.0	6.98	.72		clear, no odor
10:06				3	59.9	6.87	.73		clear, no odor
10:08				4	59.7	6.85	.74		slightly cloudy, no odor
10:10				5	59.7	6.83	.74		cloudy, no odor
10:15	SAmple								

Well Capacity:
2" - 0.1632 gallon/linear foot
4" - 0.6528 gallon/linear foot
6" - 1.4688 gallon/linear foot

ORP = 341

SAMPLED AT 18' FT. FINAL DEPTH TO WATER: 15.34 FT. 3 CASING VOLUMES = 4.23 GALS.

NOTES: Sample labeled and placed in cooler maintained at 4 Degrees Centrigrade ORP measured after sample collected

E$_2$C Remediation

Groundwater Scientists : Environmental Consultants
1020 Winding Creek Road, Suite 110; Roseville, California 95678
Telephone: (916) 782-8700 / Facsimile: (916) 782-8750

Water Quality Sampling Record and Well Development Data

SAMPLE ID / WELL #: LW-MW-9S

E$_2$C REM. PROJECT #: 1950-RU-15

PROJECT NAME: Lake Tahoe Laundry Works

DATE SAMPLED: 9-11-15

SAMPLED BY: J. Irwin / N. Jensen

DEPTH TO WATER: 16.57

TOTAL DEPTH OF WELL: 21.30

WELL DIAMETER; 2"

CASING VOLUME: —

PURGE METHOD: LOW FLOW

TIME	PURGE CHARACTERISTICS				TEMP (F°)	pH (UNITS)	SEC (mmhos/cm)	DO (mg/L)	REMARKS (COLOR, TURBIDITY, ETC.)
	INTAKE DEPTH	RATE (GPM)	CUM. VOL (GAL)	WELL VOL PUMPED					
10:25		250/mL			63.8	7.11	.23	1.1	clear, no odor
10:27					63.5	7.02	.22		clear no odor
10:30					63.1	7.00	.22		clear no odr
10:35	SAMPLE								

Well Capacity:
2" - 0.1632 gallon/linear foot
4" - 0.6528 gallon/linear foot
6" - 1.4688 gallon/linear foot

ORP = 97

SAMPLED AT ______ FT. FINAL DEPTH TO WATER: ______ FT. 3 CASING VOLUMES = ______ GALS.

NOTES: Sample labeled and placed in cooler maintained at 4 Degrees Centrigrade ORP measured after sample collected

E$_2$C Remediation

Groundwater Scientists : Environmental Consultants
1020 Winding Creek Road, Suite 110; Roseville, California 95678
Telephone: (916) 782-8700 / Facsimile: (916) 782-8750

Water Quality Sampling Record and Well Development Data

SAMPLE ID / WELL #: LW-MW-12s
E$_2$C REM. PROJECT #: 1950-RV-15
PROJECT NAME: Lake Tahoe Laundry Works
DATE SAMPLED: 9-11-15
SAMPLED BY: J. Irwin / N. Jensen

DEPTH TO WATER: 14.04
TOTAL DEPTH OF WELL: 23.80
WELL DIAMETER; 2"
CASING VOLUME: —
PURGE METHOD: LOW FLOW

TIME	PURGE CHARACTERISTICS INTAKE DEPTH	RATE (GPM)	CUM. VOL (GAL)	WELL VOL PUMPED	TEMP (F°)	pH (UNITS)	SEC (mmhos/cm)	DO (mg/L)	REMARKS (COLOR, TURBIDITY, ETC.)
10:44		250/ml			68.0	6.33	.26	1.1	clear, no odor
10:47					67.5	6.25	.25		clear, no odor
10:49					67.3	6.21	.25		clear, no odor
10:54	SAMPLE								

Well Capacity:
2" - 0.1632 gallon/linear foot
4" - 0.6528 gallon/linear foot
6" - 1.4688 gallon/linear foot

ORP = 105

SAMPLED AT ______ FT. FINAL DEPTH TO WATER: ______ FT. 3 CASING VOLUMES = ______ GALS.

NOTES: Sample labeled and placed in cooler maintained at 4 Degrees Centrigrade ORP measured after sample collected

LW-MW-14s is the duplicate of LW-MW-12s

E$_2$C Remediation

Groundwater Scientists : Environmental Consultants
1020 Winding Creek Road, Suite 110; Roseville, California 95678
Telephone: (916) 782-8700 / Facsimile: (916) 782-8750

Water Quality Sampling Record and Well Development Data

SAMPLE ID / WELL #: LW-MW-10SR

E$_2$C REM. PROJECT #: 1950-RV-15

PROJECT NAME: Lake Tahoe Laundry Works

DATE SAMPLED: 9-11-15

SAMPLED BY: J. Irwin / N. Jensen

DEPTH TO WATER: 14.87

TOTAL DEPTH OF WELL: 24.65

WELL DIAMETER; 2"

CASING VOLUME: —

PURGE METHOD: Low flow

TIME	PURGE CHARACTERISTICS				TEMP (F°)	pH (UNITS)	SEC (mmhos/cm)	DO (mg/L)	REMARKS (COLOR, TURBIDITY, ETC.)
	INTAKE DEPTH	RATE (GPM)	CUM. VOL (GAL)	WELL VOL PUMPED					
11:08		250/ml			65.5	6.23	.30	.9	clear, no odor
11:10					65.2	6.19	.28		clear, no odor
11:13					65.0	6.15	.29		clear, no odor
11:18	sample								

Well Capacity:
2" - 0.1632 gallon/linear foot
4" - 0.6528 gallon/linear foot
6" - 1.4688 gallon/linear foot

ORP = 97

SAMPLED AT ______ FT. FINAL DEPTH TO WATER: ______ FT. 3 CASING VOLUMES = ______ GALS.

NOTES: Sample labeled and placed in cooler maintained at 4 Degrees Centigrade ORP measured after sample collected

E_2C Remediation
Groundwater Scientists : Environmental Consultants
1020 Winding Creek Road, Suite 110; Roseville, California 95678
Telephone: (916) 782-8700 / Facsimile: (916) 782-8750

Water Quality Sampling Record and Well Development Data

SAMPLE ID / WELL #: LW-MW-13s
E_2C REM. PROJECT #: 1950-RV-15
PROJECT NAME: Lake Tahoe Laundry Works
DATE SAMPLED: 9-11-15
SAMPLED BY: J. Irwin / N. Jensen

DEPTH TO WATER: 15.25
TOTAL DEPTH OF WELL: 24.78
WELL DIAMETER: 2"
CASING VOLUME:
PURGE METHOD: LOW FLOW

TIME	PURGE CHARACTERISTICS				TEMP (F°)	pH (UNITS)	SEC (mmhos/cm)	DO (mg/L)	REMARKS (COLOR, TURBIDITY, ETC.)
	INTAKE DEPTH	RATE (GPM)	CUM. VOL (GAL)	WELL VOL PUMPED					
11:29		250/ml			63.8	6.56	.22	.8	clear, no odor
11:32					63.3	6.53	.21		clear, no odor
11:34					63.6	6.49	.21		clear, no odor
11:39	SAMPLE								

Well Capacity:
2" - 0.1632 gallon/linear foot
4" - 0.6528 gallon/linear foot
6" - 1.4688 gallon/linear foot

ORP = 133

SAMPLED AT ______ FT. FINAL DEPTH TO WATER: ______ FT. 3 CASING VOLUMES = ______ GALS.

NOTES: Sample labeled and placed in cooler maintained at 4 Degrees Centrigrade ORP measured after sample collected

E$_2$C Remediation

Groundwater Scientists : Environmental Consultants
1020 Winding Creek Road, Suite 110; Roseville, California 95678
Telephone: (916) 782-8700 / Facsimile: (916) 782-8750

Water Quality Sampling Record and Well Development Data

SAMPLE ID / WELL #: LW-MW-11s

E$_2$C REM. PROJECT #: 1950-RV-15

PROJECT NAME: Lake Tahoe Laundry Works

DATE SAMPLED: 9-11-15

SAMPLED BY: J. Irwin / N. Jensen

DEPTH TO WATER: 15.69

TOTAL DEPTH OF WELL: 24.00

WELL DIAMETER; 2"

CASING VOLUME: —

PURGE METHOD: LOW FlOW

TIME	PURGE CHARACTERISTICS				TEMP (F°)	pH (UNITS)	SEC (mmhos/cm)	DO (mg/L)	REMARKS (COLOR, TURBIDITY, ETC.)
	INTAKE DEPTH	RATE (GPM)	CUM. VOL (GAL)	WELL VOL PUMPED					
11:50		250/min			64.4	6.26	.64	.6	clear, no odor
11:53					66.0	6.21	.63		clear, no odor
11:55					65.7	6.17	.62		clear, no odor
12:00	SAmple								

Well Capacity:
2" - 0.1632 gallon/linear foot
4" - 0.6528 gallon/linear foot
6" - 1.4688 gallon/linear foot

ORP = 53

SAMPLED AT ________ FT. FINAL DEPTH TO WATER: ________ FT.

3 CASING VOLUMES = ________ GALS.

NOTES: Sample labeled and placed in cooler maintained at 4 Degrees Centrigrade ORP measured after sample collected

E_2C Remediation

Groundwater Scientists : Environmental Consultants
1020 Winding Creek Road, Suite 110; Roseville, California 95678
Telephone: (916) 782-8700 / Facsimile: (916) 782-8750

Water Quality Sampling Record and Well Development Data

SAMPLE ID / WELL #: LW-MW-2s

E_2C REM. PROJECT #: 1950-RV-15

PROJECT NAME: Lake Tahoe Laundry Works

DATE SAMPLED: 9-11-15

SAMPLED BY: J. Irwin / N. Jensen

DEPTH TO WATER: 17.91

TOTAL DEPTH OF WELL: 34.85

WELL DIAMETER; 2"

CASING VOLUME:

PURGE METHOD: LOW FLOW

TIME	PURGE CHARACTERISTICS				TEMP (F^{o})	pH (UNITS)	SEC (mmhos/cm)	DO (mg/L)	REMARKS (COLOR, TURBIDITY, ETC.)
	INTAKE DEPTH	RATE (GPM)	CUM. VOL (GAL)	WELL VOL PUMPED					
12:11		250/ml			71.2	6.43	.22	.5	clear, no odor
12:14		S			70.3	6.34	.21	S	clear, no odor
12:16					69.9	6.31	.21		clear, no odor
12:21	Sample								

Well Capacity:
2" - 0.1632 gallon/linear foot
4" - 0.6528 gallon/linear foot
6" - 1.4688 gallon/linear foot

ORP = 107

SAMPLED AT ______ FT. FINAL DEPTH TO WATER: ______ FT. 3 CASING VOLUMES = ______ GALS.

NOTES: Sample labeled and placed in cooler maintained at 4 Degrees Centrigrade ORP measured after sample collected

E_2C Remediation

Groundwater Scientists : Environmental Consultants
1020 Winding Creek Road, Suite 110; Roseville, California 95678
Telephone: (916) 782-8700 / Facsimile: (916) 782-8750

Water Quality Sampling Record and Well Development Data

SAMPLE ID / WELL #: LW-MW-5s

E_2C REM. PROJECT #: 1950-RV-15

PROJECT NAME: Lake Tahoe Laundry Works

DATE SAMPLED: 9-11-15

SAMPLED BY: J. Irwin / N. Jensen

DEPTH TO WATER: 13.91

TOTAL DEPTH OF WELL: 29.70

WELL DIAMETER; 2"

CASING VOLUME: —

PURGE METHOD: LOW FLOW

TIME	PURGE CHARACTERISTICS				TEMP (F^{o})	pH (UNITS)	SEC (mmhos/cm)	DO (mg/L)	REMARKS (COLOR, TURBIDITY, ETC.)
	INTAKE DEPTH	RATE (GPM)	CUM. VOL (GAL)	WELL VOL PUMPED					
12:30		250/ml			64.7	6.63	.16	.3	clear, no odor
12:32		〃			64.1	6.57	.17	〃	clear, no odor
12:35		〃			63.8	6.55	.18	〃	clear, no odor
12:40	SAmple								

Well Capacity:
2" - 0.1632 gallon/linear foot
4" - 0.6528 gallon/linear foot
6" - 1.4688 gallon/linear foot

ORP = 61

SAMPLED AT ______ FT. FINAL DEPTH TO WATER: ______ FT. 3 CASING VOLUMES = ______ GALS.

NOTES: Sample labeled and placed in cooler maintained at 4 Degrees Centrigrade ORP measured after sample collected

E$_2$C Remediation

Groundwater Scientists : Environmental Consultants
1020 Winding Creek Road, Suite 110; Roseville, California 95678
Telephone: (916) 782-8700 / Facsimile: (916) 782-8750

Water Quality Sampling Record and Well Development Data

SAMPLE ID / WELL #: LW-MW-1s

E$_2$C REM. PROJECT #: 1950-RV-15

PROJECT NAME: Lake Tahoe Laundry Works

DATE SAMPLED: 9-11-15

SAMPLED BY: J. Irwin / N. Jensen

DEPTH TO WATER: 15.00

TOTAL DEPTH OF WELL: 23.15

WELL DIAMETER; 2"

CASING VOLUME: —

PURGE METHOD: LOW FLOW

	PURGE CHARACTERISTICS								
TIME	INTAKE DEPTH	RATE (GPM)	CUM. VOL (GAL)	WELL VOL PUMPED	TEMP (F°)	pH (UNITS)	SEC (mmhos/cm)	DO (mg/L)	REMARKS (COLOR, TURBIDITY, ETC.)
12:51		250 mL			70.6	6.72	.30	.2	clear, no odor
12:53					70.0	6.65	.29		clear, no odor
12:56					69.7	6.60	.31		clear, no odor
1:01	SAmple								

Well Capacity:
2" - 0.1632 gallon/linear foot
4" - 0.6528 gallon/linear foot
6" - 1.4688 gallon/linear foot

ORP = 121

SAMPLED AT ______ FT. FINAL DEPTH TO WATER: ______ FT. 3 CASING VOLUMES = ______ GALS.

NOTES: Sample labeled and placed in cooler maintained at 4 Degrees Centigrade ORP measured after sample collected

APPENDIX B

Laboratory Groundwater Analytical Report

PROVERA ANALYTICAL LABORATORIES

Chain of Custody Form

Client Name: E2C Remadiation

Project Name: LTLW

Client Address: 5300 Woodmere Dr. Suite 105 Bakersfield, CA

Project Manager: Phil Goalwin

Sampler Name: J. Irwin

Sample Matrix: ☒ Aqueous ☐ Soil ☐ Acidified

Analysis Requested

Sample Date	Sample Time	Sample Description and Container Type	BTEX (EPA 8021b)	MTBE (EPA 8021b)	TPH Gasoline (8015M)	TPH Diesel (8015M)	Volatiles (EPA 8260b)	5 Oxygenates (EPA 8260b)	7 Oxygenates (EPA 8260b)	MTBE (EPA 8260b)	Lead scavengers (8260b)	BTEX (8260b)		Comments
9-11-15	7:15	~~Travel blank~~ 1voa NO QCTB					X							1509401
	10:15	OS-1 3voas												-02
	10:35	LW-mw-9s												-03
	10:54	LW-MW-12s												-04
	10:59	LW-MW-14s												-05
	11:18	LWmw-10sR												-06
	11:39	LW-MW-13s												-07
	12:00	LW-mw-11s												-08
	12:21	LW-MW-2s												-09
	12:40	LW-MW-5s												-10
9-11-15	1:01	LW-mw-1s 3voas					X							-11

Sampling Event: 3rd QGWM EDF Type: GW Monitoring Other 3°C

Turnaround Time Requested: 24 Hour ____ 48 Hour ____ 5-Day ____ Standard X

Relinquished By:	Date: 9-11-15	Relinquished By:	Date:
Received By:	Date: 9-12-15	Received By:	Date:

Analysis For Volatile Compounds by EPA Method 8260B

Client Sample ID:	OS-1	Client:	E2C Remediation
Matrix:	Aqueous	Project:	Lake Tahoe-Laundry Works 3Q15 GWM
Date Sampled:	09/11/15	Lab ID:	15091401-02
		Instrument:	GCMS#1
Date Analyzed:	09/22/15	Operator:	Doug Selby

Compounds:	**Concentration ug/L (ppb)**	**Reporting Limit ug/L (ppb)**	**Dilution Factor**
Dichlorodifluoromethane	ND	0.50	1
Chloromethane	ND	0.50	1
Vinyl Chloride	ND	0.50	1
Bromomethane	ND	0.50	1
Chloroethane	ND	0.50	1
Trichlorofluoromethane	ND	0.50	1
Trans-1,2-Dichloroethene	ND	0.50	1
1,1-Dichloroethene	ND	0.50	1
Methyl Tert-Butyl Ether (MTBE)	ND	0.50	1
Methylene Chloride	ND	0.50	1
Diisopropyl Ether (DIPE)	ND	0.50	1
1,1-Dichloroethane	ND	0.50	1
Ethyl Tert-Butyl Ether (ETBE)	ND	0.50	1
Tert-Butyl Alcohol (TBA)	ND	5.0	1
1,1,1-Trichloroethane	ND	0.50	1
1,3-Dichloropropene	ND	0.50	1
1,1-Dichloropropene	ND	0.50	1
Carbon Tetrachloride	ND	0.50	1
Tert-Amyl Methyl Ether (TAME)	ND	0.50	1
Chloroform	ND	0.50	1
Benzene	ND	0.50	1
Bromochloromethane	ND	0.50	1
1,2-Dichloroethane	ND	0.50	1
Trichloroethene	ND	0.50	1
1,2-Dichlorpropane	ND	0.50	1
Dibromomethane	ND	0.50	1
Bromodichloromethane	ND	0.50	1
Toluene	ND	0.50	1
Trans-1,3-Dichloropropene	ND	0.50	1
Tetrachloroethene	9.6	0.50	1
1,3-Dichloropropane	ND	0.50	1
1,1,2-Trichloroethane	ND	0.50	1
Ethlybenzene	ND	0.50	1
1,2-Dibromoethane	ND	0.50	1
Total Xylenes	ND	0.50	1
Dibromochloromethane	ND	0.50	1
Chlorobenzene	ND	0.50	1
2,2 Dichloropropane	ND	0.50	1
Cis-1,3-Dichloropropane	ND	0.50	1

Analysis For Volatile Compounds by EPA Method 8260B

Client Sample ID:	OS-1	Client:	E2C Remediation
Matrix:	Aqueous	Project:	Lake Tahoe-Laundry Works 3Q15 GWM
Date Sampled:	09/11/15	Lab ID:	15091401-02
		Instrument:	GCMS#1
Date Analyzed:	09/22/15	Operator:	Doug Selby

Compounds:	**Concentration ug/L (ppb)**	**Reporting Limit ug/L (ppb)**	**Dilution Factor**
1,1,1,2-Tetrachloroethane	ND	0.50	1
Styrene	ND	0.50	1
Isopropylbenzene	ND	0.50	1
Propylbenzene	ND	0.50	1
1,3,5-Trimethylbenzene	ND	0.50	1
2-Chlorotoluene	ND	0.50	1
Bromobenzene	ND	0.50	1
Bromoform	ND	0.50	1
4-Chlorotoluene	ND	0.50	1
Tert-Butylbenzene	ND	0.50	1
1,2,4-Trimethylbenzene	ND	0.50	1
1,2,3-Trichloropropane	ND	0.50	1
Sec-Butylbenzene	ND	0.50	1
1,1,2,2-Tetrachloroethane	ND	0.50	1
4-Isopopyltoluene	ND	0.50	1
1,3-Dichlorobenzene	ND	0.50	1
Butylbenzene	ND	0.50	1
1,4-Dichlorobenzene	ND	0.50	1
1,2-Dichlorobenzene	ND	0.50	1
1,2-dibromo-3-chloropropane	ND	0.50	1
1,1,2,3,4,4-hexachloro-1,3-butadien	ND	0.50	1
1,2,4-Trichlorobenzene	ND	0.50	1
Napthalene	ND	0.50	1
1,2,3-Trichlorobenzene	ND	0.50	1
Cis-1,2-Dichloroethene	ND	0.50	1

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Dibromofluoromethane	*129%*	*70.0%*	*130%*
1,2-Dichloroethane-d4	*106%*	*70.0%*	*130%*
Toluene-d8	*108%*	*70.0%*	*130%*
4-Bromofluorobenzene	*94%*	*70.0%*	*130%*

Doug Selby

Report Date: 10/5/2015

Analysis For Volatile Compounds by EPA Method 8260B

Client Sample ID:	LW-MW-9S	Client:	E2C Remediation
Matrix:	Aqueous	Project:	Lake Tahoe-Laundry Works 3Q15 GWM
Date Sampled:	09/11/15	Lab ID:	15091401-03
		Instrument:	GCMS#1
Date Analyzed:	09/22/15	Operator:	Doug Selby

Compounds:	Concentration ug/L (ppb)	Reporting Limit ug/L (ppb)	Dilution Factor
Dichlorodifluoromethane	ND	0.50	1
Chloromethane	ND	0.50	1
Vinyl Chloride	ND	0.50	1
Bromomethane	ND	0.50	1
Chloroethane	ND	0.50	1
Trichlorofluoromethane	ND	0.50	1
Trans-1,2-Dichloroethene	ND	0.50	1
1,1-Dichloroethene	ND	0.50	1
Methyl Tert-Butyl Ether (MTBE)	ND	0.50	1
Methylene Chloride	ND	0.50	1
Diisopropyl Ether (DIPE)	ND	0.50	1
1,1-Dichloroethane	ND	0.50	1
Ethyl Tert-Butyl Ether (ETBE)	ND	0.50	1
Tert-Butyl Alcohol (TBA)	ND	5.0	1
1,1,1-Trichloroethane	ND	0.50	1
1,3-Dichloropropene	ND	0.50	1
1,1-Dichloropropene	ND	0.50	1
Carbon Tetrachloride	ND	0.50	1
Tert-Amyl Methyl Ether (TAME)	ND	0.50	1
Chloroform	ND	0.50	1
Benzene	ND	0.50	1
Bromochloromethane	ND	0.50	1
1,2-Dichloroethane	ND	0.50	1
Trichloroethene	ND	0.50	1
1,2-Dichlorpropane	ND	0.50	1
Dibromomethane	ND	0.50	1
Bromodichloromethane	ND	0.50	1
Toluene	ND	0.50	1
Trans-1,3-Dichloropropene	ND	0.50	1
Tetrachloroethene	0.54	0.50	1
1,3-Dichloropropane	ND	0.50	1
1,1,2-Trichloroethane	ND	0.50	1
Ethlybenzene	ND	0.50	1
1,2-Dibromoethane	ND	0.50	1
Total Xylenes	ND	0.50	1
Dibromochloromethane	ND	0.50	1
Chlorobenzene	ND	0.50	1
2,2 Dichloropropane	ND	0.50	1
Cis-1,3-Dichloropropane	ND	0.50	1

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Analysis For Volatile Compounds by EPA Method 8260B

Client Sample ID: LW-MW-9S
Matrix: Aqueous
Date Sampled: 09/11/15

Date Analyzed: 09/22/15

Client: E2C Remediation
Project: Lake Tahoe-Laundry Works 3Q15 GWM
Lab ID: 15091401-03
Instrument: GCMS#1
Operator: Doug Selby

Compounds:	**Concentration ug/L (ppb)**	**Reporting Limit ug/L (ppb)**	**Dilution Factor**
1,1,1,2-Tetrachloroethane	ND	0.50	1
Styrene	ND	0.50	1
Isopropylbenzene	ND	0.50	1
Propylbenzene	ND	0.50	1
1,3,5-Trimethylbenzene	ND	0.50	1
2-Chlorotoluene	ND	0.50	1
Bromobenzene	ND	0.50	1
Bromoform	ND	0.50	1
4-Chlorotoluene	ND	0.50	1
Tert-Butylbenzene	ND	0.50	1
1,2,4-Trimethylbenzene	ND	0.50	1
1,2,3-Trichloropropane	ND	0.50	1
Sec-Butylbenzene	ND	0.50	1
1,1,2,2-Tetrachloroethane	ND	0.50	1
4-Isopopyltoluene	ND	0.50	1
1,3-Dichlorobenzene	ND	0.50	1
Butylbenzene	ND	0.50	1
1,4-Dichlorobenzene	ND	0.50	1
1,2-Dichlorobenzene	ND	0.50	1
1,2-dibromo-3-chloropropane	ND	0.50	1
1,1,2,3,4,4-hexachloro-1,3-butadien	ND	0.50	1
1,2,4-Trichlorobenzene	ND	0.50	1
Napthalene	ND	0.50	1
1,2,3-Trichlorobenzene	ND	0.50	1
Cis-1,2-Dichloroethene	ND	0.50	1

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Dibromofluoromethane	*130%*	*70.0%*	*130%*
1,2-Dichloroethane-d4	*116%*	*70.0%*	*130%*
Toluene-d8	*113%*	*70.0%*	*130%*
4-Bromofluorobenzene	*103%*	*70.0%*	*130%*

Doug Selby

Report Date: 10/5/2015

Analysis For Volatile Compounds by EPA Method 8260B

Client Sample ID:	LW-MW-12S	Client:	E2C Remediation
Matrix:	Aqueous	Project:	Lake Tahoe-Laundry Works 3Q15 GWM
Date Sampled:	09/11/15	Lab ID:	15091401-04
		Instrument:	GCMS#1
Date Analyzed:	09/22/15	Operator:	Doug Selby

Compounds:	**Concentration ug/L (ppb)**	**Reporting Limit ug/L (ppb)**	**Dilution Factor**
Dichlorodifluoromethane	ND	0.50	1
Chloromethane	ND	0.50	1
Vinyl Chloride	ND	0.50	1
Bromomethane	ND	0.50	1
Chloroethane	ND	0.50	1
Trichlorofluoromethane	ND	0.50	1
Trans-1,2-Dichloroethene	ND	0.50	1
1,1-Dichloroethene	ND	0.50	1
Methyl Tert-Butyl Ether (MTBE)	ND	0.50	1
Methylene Chloride	ND	0.50	1
Diisopropyl Ether (DIPE)	ND	0.50	1
1,1-Dichloroethane	ND	0.50	1
Ethyl Tert-Butyl Ether (ETBE)	ND	0.50	1
Tert-Butyl Alcohol (TBA)	ND	5.0	1
1,1,1-Trichloroethane	ND	0.50	1
1,3-Dichloropropene	ND	0.50	1
1,1-Dichloropropene	ND	0.50	1
Carbon Tetrachloride	ND	0.50	1
Tert-Amyl Methyl Ether (TAME)	ND	0.50	1
Chloroform	ND	0.50	1
Benzene	ND	0.50	1
Bromochloromethane	ND	0.50	1
1,2-Dichloroethane	ND	0.50	1
Trichloroethene	ND	0.50	1
1,2-Dichlorpropane	ND	0.50	1
Dibromomethane	ND	0.50	1
Bromodichloromethane	ND	0.50	1
Toluene	ND	0.50	1
Trans-1,3-Dichloropropene	ND	0.50	1
Tetrachloroethene	1.5	0.50	1
1,3-Dichloropropane	ND	0.50	1
1,1,2-Trichloroethane	ND	0.50	1
Ethlybenzene	ND	0.50	1
1,2-Dibromoethane	ND	0.50	1
Total Xylenes	ND	0.50	1
Dibromochloromethane	ND	0.50	1
Chlorobenzene	ND	0.50	1
2,2 Dichloropropane	ND	0.50	1
Cis-1,3-Dichloropropane	ND	0.50	1

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Analysis For Volatile Compounds by EPA Method 8260B

Client Sample ID:	LW-MW-12S	Client:	E2C Remediation
Matrix:	Aqueous	Project:	Lake Tahoe-Laundry Works 3Q15 GWM
Date Sampled:	09/11/15	Lab ID:	15091401-04
		Instrument:	GCMS#1
Date Analyzed:	09/22/15	Operator:	Doug Selby

Compounds:	**Concentration ug/L (ppb)**	**Reporting Limit ug/L (ppb)**	**Dilution Factor**
1,1,1,2-Tetrachloroethane	ND	0.50	1
Styrene	ND	0.50	1
Isopropylbenzene	ND	0.50	1
Propylbenzene	ND	0.50	1
1,3,5-Trimethylbenzene	ND	0.50	1
2-Chlorotoluene	ND	0.50	1
Bromobenzene	ND	0.50	1
Bromoform	ND	0.50	1
4-Chlorotoluene	ND	0.50	1
Tert-Butylbenzene	ND	0.50	1
1,2,4-Trimethylbenzene	ND	0.50	1
1,2,3-Trichloropropane	ND	0.50	1
Sec-Butylbenzene	ND	0.50	1
1,1,2,2-Tetrachloroethane	ND	0.50	1
4-Isopopyltoluene	ND	0.50	1
1,3-Dichlorobenzene	ND	0.50	1
Butylbenzene	ND	0.50	1
1,4-Dichlorobenzene	ND	0.50	1
1,2-Dichlorobenzene	ND	0.50	1
1,2-dibromo-3-chloropropane	ND	0.50	1
1,1,2,3,4,4-hexachloro-1,3-butadiene	ND	0.50	1
1,2,4-Trichlorobenzene	ND	0.50	1
Napthalene	ND	0.50	1
1,2,3-Trichlorobenzene	ND	0.50	1
Cis-1,2-Dichloroethene	ND	0.50	1

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Dibromofluoromethane	*128%*	*70.0%*	*130%*
1,2-Dichloroethane-d4	*95%*	*70.0%*	*130%*
Toluene-d8	*110%*	*70.0%*	*130%*
4-Bromofluorobenzene	*104%*	*70.0%*	*130%*

Doug Selby

Report Date: 10/5/2015

Analysis For Volatile Compounds by EPA Method 8260B

Client Sample ID:	LW-MW-14S	Client:	E2C Remediation
Matrix:	Aqueous	Project:	Lake Tahoe-Laundry Works 3Q15 GWM
Date Sampled:	09/11/15	Lab ID:	15091401-05
		Instrument:	GCMS#1
Date Analyzed:	09/22/15	Operator:	Doug Selby

Compounds:	**Concentration ug/L (ppb)**	**Reporting Limit ug/L (ppb)**	**Dilution Factor**
Dichlorodifluoromethane	ND	0.50	1
Chloromethane	ND	0.50	1
Vinyl Chloride	ND	0.50	1
Bromomethane	ND	0.50	1
Chloroethane	ND	0.50	1
Trichlorofluoromethane	ND	0.50	1
Trans-1,2-Dichloroethene	ND	0.50	1
1,1-Dichloroethene	ND	0.50	1
Methyl Tert-Butyl Ether (MTBE)	ND	0.50	1
Methylene Chloride	0.82	0.50	1
Diisopropyl Ether (DIPE)	ND	0.50	1
1,1-Dichloroethane	ND	0.50	1
Ethyl Tert-Butyl Ether (ETBE)	ND	0.50	1
Tert-Butyl Alcohol (TBA)	ND	5.0	1
1,1,1-Trichloroethane	ND	0.50	1
1,3-Dichloropropene	ND	0.50	1
1,1-Dichloropropene	ND	0.50	1
Carbon Tetrachloride	ND	0.50	1
Tert-Amyl Methyl Ether (TAME)	ND	0.50	1
Chloroform	ND	0.50	1
Benzene	ND	0.50	1
Bromochloromethane	ND	0.50	1
1,2-Dichloroethane	ND	0.50	1
Trichloroethene	ND	0.50	1
1,2-Dichlorpropane	ND	0.50	1
Dibromomethane	ND	0.50	1
Bromodichloromethane	ND	0.50	1
Toluene	ND	0.50	1
Trans-1,3-Dichloropropene	ND	0.50	1
Tetrachloroethene	1.4	0.50	1
1,3-Dichloropropane	ND	0.50	1
1,1,2-Trichloroethane	ND	0.50	1
Ethlybenzene	ND	0.50	1
1,2-Dibromoethane	ND	0.50	1
Total Xylenes	ND	0.50	1
Dibromochloromethane	ND	0.50	1
Chlorobenzene	ND	0.50	1
2,2 Dichloropropane	ND	0.50	1
Cis-1,3-Dichloropropane	ND	0.50	1

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Analysis For Volatile Compounds by EPA Method 8260B

Client Sample ID:	LW-MW-14S	Client:	E2C Remediation
Matrix:	Aqueous	Project:	Lake Tahoe-Laundry Works 3Q15 GWM
Date Sampled:	09/11/15	Lab ID:	15091401-05
		Instrument:	GCMS#1
Date Analyzed:	09/22/15	Operator:	Doug Selby

Compounds:	**Concentration ug/L (ppb)**	**Reporting Limit ug/L (ppb)**	**Dilution Factor**
1,1,1,2-Tetrachloroethane	ND	0.50	1
Styrene	ND	0.50	1
Isopropylbenzene	ND	0.50	1
Propylbenzene	ND	0.50	1
1,3,5-Trimethylbenzene	ND	0.50	1
2-Chlorotoluene	ND	0.50	1
Bromobenzene	ND	0.50	1
Bromoform	ND	0.50	1
4-Chlorotoluene	ND	0.50	1
Tert-Butylbenzene	ND	0.50	1
1,2,4-Trimethylbenzene	ND	0.50	1
1,2,3-Trichloropropane	ND	0.50	1
Sec-Butylbenzene	ND	0.50	1
1,1,2,2-Tetrachloroethane	ND	0.50	1
4-Isopopyltoluene	ND	0.50	1
1,3-Dichlorobenzene	ND	0.50	1
Butylbenzene	ND	0.50	1
1,4-Dichlorobenzene	ND	0.50	1
1,2-Dichlorobenzene	ND	0.50	1
1,2-dibromo-3-chloropropane	ND	0.50	1
1,1,2,3,4,4-hexachloro-1,3-butadien	ND	0.50	1
1,2,4-Trichlorobenzene	ND	0.50	1
Napthalene	ND	0.50	1
1,2,3-Trichlorobenzene	ND	0.50	1
Cis-1,2-Dichloroethene	ND	0.50	1

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Dibromofluoromethane	*130%*	*70.0%*	*130%*
1,2-Dichloroethane-d4	*113%*	*70.0%*	*130%*
Toluene-d8	*113%*	*70.0%*	*130%*
4-Bromofluorobenzene	*100%*	*70.0%*	*130%*

Doug Selby

Report Date: 10/5/2015

Analysis For Volatile Compounds by EPA Method 8260B

Client Sample ID: LW-MW-10SR
Matrix: Aqueous
Date Sampled: 09/11/15
Date Analyzed: 09/22/15

Client: E2C Remediation
Project: Lake Tahoe-Laundry Works 3Q15 GWM
Lab ID: 15091401-06
Instrument: GCMS#1
Operator: Doug Selby

Compounds:	Concentration ug/L (ppb)	Reporting Limit ug/L (ppb)	Dilution Factor
Dichlorodifluoromethane	ND	0.50	1
Chloromethane	ND	0.50	1
Vinyl Chloride	ND	0.50	1
Bromomethane	ND	0.50	1
Chloroethane	ND	0.50	1
Trichlorofluoromethane	ND	0.50	1
Trans-1,2-Dichloroethene	ND	0.50	1
1,1-Dichloroethene	ND	0.50	1
Methyl Tert-Butyl Ether (MTBE)	ND	0.50	1
Methylene Chloride	0.76	0.50	1
Diisopropyl Ether (DIPE)	ND	0.50	1
1,1-Dichloroethane	ND	0.50	1
Ethyl Tert-Butyl Ether (ETBE)	ND	0.50	1
Tert-Butyl Alcohol (TBA)	ND	5.0	1
1,1,1-Trichloroethane	ND	0.50	1
1,3-Dichloropropene	ND	0.50	1
1,1-Dichloropropene	ND	0.50	1
Carbon Tetrachloride	ND	0.50	1
Tert-Amyl Methyl Ether (TAME)	ND	0.50	1
Chloroform	ND	0.50	1
Benzene	ND	0.50	1
Bromochloromethane	ND	0.50	1
1,2-Dichloroethane	ND	0.50	1
Trichloroethene	ND	0.50	1
1,2-Dichlorpropane	ND	0.50	1
Dibromomethane	ND	0.50	1
Bromodichloromethane	ND	0.50	1
Toluene	ND	0.50	1
Trans-1,3-Dichloropropene	ND	0.50	1
Tetrachloroethene	ND	0.50	1
1,3-Dichloropropane	ND	0.50	1
1,1,2-Trichloroethane	ND	0.50	1
Ethlybenzene	ND	0.50	1
1,2-Dibromoethane	ND	0.50	1
Total Xylenes	ND	0.50	1
Dibromochloromethane	ND	0.50	1
Chlorobenzene	ND	0.50	1
2,2 Dichloropropane	ND	0.50	1
Cis-1,3-Dichloropropane	ND	0.50	1

Analysis For Volatile Compounds by EPA Method 8260B

Client Sample ID: LW-MW-10SR
Matrix: Aqueous
Date Sampled: 09/11/15

Date Analyzed: 09/22/15

Client: E2C Remediation
Project: Lake Tahoe-Laundry Works 3Q15 GWM
Lab ID: 15091401-06
Instrument: GCMS#1
Operator: Doug Selby

Compounds:	**Concentration ug/L (ppb)**	**Reporting Limit ug/L (ppb)**	**Dilution Factor**
1,1,1,2-Tetrachloroethane	ND	0.50	1
Styrene	ND	0.50	1
Isopropylbenzene	ND	0.50	1
Propylbenzene	ND	0.50	1
1,3,5-Trimethylbenzene	ND	0.50	1
2-Chlorotoluene	ND	0.50	1
Bromobenzene	ND	0.50	1
Bromoform	ND	0.50	1
4-Chlorotoluene	ND	0.50	1
Tert-Butylbenzene	ND	0.50	1
1,2,4-Trimethylbenzene	ND	0.50	1
1,2,3-Trichloropropane	ND	0.50	1
Sec-Butylbenzene	ND	0.50	1
1,1,2,2-Tetrachloroethane	ND	0.50	1
4-Isopopyltoluene	ND	0.50	1
1,3-Dichlorobenzene	ND	0.50	1
Butylbenzene	ND	0.50	1
1,4-Dichlorobenzene	ND	0.50	1
1,2-Dichlorobenzene	ND	0.50	1
1,2-dibromo-3-chloropropane	ND	0.50	1
1,1,2,3,4,4-hexachloro-1,3-butadien	ND	0.50	1
1,2,4-Trichlorobenzene	ND	0.50	1
Napthalene	ND	0.50	1
1,2,3-Trichlorobenzene	ND	0.50	1
Cis-1,2-Dichloroethene	ND	0.50	1

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Dibromofluoromethane	*130%*	*70.0%*	*130%*
1,2-Dichloroethane-d4	*120%*	*70.0%*	*130%*
Toluene-d8	*110%*	*70.0%*	*130%*
4-Bromofluorobenzene	*99%*	*70.0%*	*130%*

Doug Selby

Report Date: 10/5/2015

Analysis For Volatile Compounds by EPA Method 8260B

Client Sample ID:	LW-MW-13S	Client:	E2C Remediation
Matrix:	Aqueous	Project:	Lake Tahoe-Laundry Works 3Q15 GWM
Date Sampled:	09/11/15	Lab ID:	15091401-07
		Instrument:	GCMS#1
Date Analyzed:	09/22/15	Operator:	Doug Selby

Compounds:	Concentration ug/L (ppb)	Reporting Limit ug/L (ppb)	Dilution Factor
Dichlorodifluoromethane	ND	0.50	1
Chloromethane	ND	0.50	1
Vinyl Chloride	ND	0.50	1
Bromomethane	ND	0.50	1
Chloroethane	ND	0.50	1
Trichlorofluoromethane	ND	0.50	1
Trans-1,2-Dichloroethene	ND	0.50	1
1,1-Dichloroethene	ND	0.50	1
Methyl Tert-Butyl Ether (MTBE)	ND	0.50	1
Methylene Chloride	0.76	0.50	1
Diisopropyl Ether (DIPE)	ND	0.50	1
1,1-Dichloroethane	ND	0.50	1
Ethyl Tert-Butyl Ether (ETBE)	ND	0.50	1
Tert-Butyl Alcohol (TBA)	ND	5.0	1
1,1,1-Trichloroethane	ND	0.50	1
1,3-Dichloropropene	ND	0.50	1
1,1-Dichloropropene	ND	0.50	1
Carbon Tetrachloride	ND	0.50	1
Tert-Amyl Methyl Ether (TAME)	ND	0.50	1
Chloroform	0.68	0.50	1
Benzene	ND	0.50	1
Bromochloromethane	ND	0.50	1
1,2-Dichloroethane	ND	0.50	1
Trichloroethene	ND	0.50	1
1,2-Dichlorpropane	ND	0.50	1
Dibromomethane	ND	0.50	1
Bromodichloromethane	ND	0.50	1
Toluene	ND	0.50	1
Trans-1,3-Dichloropropene	ND	0.50	1
Tetrachloroethene	1.1	0.50	1
1,3-Dichloropropane	ND	0.50	1
1,1,2-Trichloroethane	ND	0.50	1
Ethlybenzene	ND	0.50	1
1,2-Dibromoethane	ND	0.50	1
Total Xylenes	ND	0.50	1
Dibromochloromethane	ND	0.50	1
Chlorobenzene	ND	0.50	1
2,2 Dichloropropane	ND	0.50	1
Cis-1,3-Dichloropropane	ND	0.50	1

Analysis For Volatile Compounds by EPA Method 8260B

Client Sample ID:	LW-MW-13S	Client:	E2C Remediation
Matrix:	Aqueous	Project:	Lake Tahoe-Laundry Works 3Q15 GWM
Date Sampled:	09/11/15	Lab ID:	15091401-07
		Instrument:	GCMS#1
Date Analyzed:	09/22/15	Operator:	Doug Selby

Compounds:	Concentration ug/L (ppb)	Reporting Limit ug/L (ppb)	Dilution Factor
1,1,1,2-Tetrachloroethane	ND	0.50	1
Styrene	ND	0.50	1
Isopropylbenzene	ND	0.50	1
Propylbenzene	ND	0.50	1
1,3,5-Trimethylbenzene	ND	0.50	1
2-Chlorotoluene	ND	0.50	1
Bromobenzene	ND	0.50	1
Bromoform	ND	0.50	1
4-Chlorotoluene	ND	0.50	1
Tert-Butylbenzene	ND	0.50	1
1,2,4-Trimethylbenzene	ND	0.50	1
1,2,3-Trichloropropane	ND	0.50	1
Sec-Butylbenzene	ND	0.50	1
1,1,2,2-Tetrachloroethane	ND	0.50	1
4-Isopopyltoluene	ND	0.50	1
1,3-Dichlorobenzene	ND	0.50	1
Butylbenzene	ND	0.50	1
1,4-Dichlorobenzene	ND	0.50	1
1,2-Dichlorobenzene	ND	0.50	1
1,2-dibromo-3-chloropropane	ND	0.50	1
1,1,2,3,4,4-hexachloro-1,3-butadien	ND	0.50	1
1,2,4-Trichlorobenzene	ND	0.50	1
Napthalene	ND	0.50	1
1,2,3-Trichlorobenzene	ND	0.50	1
Cis-1,2-Dichloroethene	ND	0.50	1

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Dibromofluoromethane	*128%*	*70.0%*	*130%*
1,2-Dichloroethane-d4	*102%*	*70.0%*	*130%*
Toluene-d8	*110%*	*70.0%*	*130%*
4-Bromofluorobenzene	*100%*	*70.0%*	*130%*

Doug Selby

Report Date: 10/5/2015

Analysis For Volatile Compounds by EPA Method 8260B

Client Sample ID:	LW-MW-11S	Client:	E2C Remediation
Matrix:	Aqueous	Project:	Lake Tahoe-Laundry Works 3Q15 GWM
Date Sampled:	09/11/15	Lab ID:	15091401-08
		Instrument:	GCMS#1
Date Analyzed:	09/22/15	Operator:	Doug Selby

Compounds:	Concentration ug/L (ppb)	Reporting Limit ug/L (ppb)	Dilution Factor
Dichlorodifluoromethane	ND	0.50	1
Chloromethane	ND	0.50	1
Vinyl Chloride	ND	0.50	1
Bromomethane	ND	0.50	1
Chloroethane	ND	0.50	1
Trichlorofluoromethane	ND	0.50	1
Trans-1,2-Dichloroethene	ND	0.50	1
1,1-Dichloroethene	ND	0.50	1
Methyl Tert-Butyl Ether (MTBE)	ND	0.50	1
Methylene Chloride	0.76	0.50	1
Diisopropyl Ether (DIPE)	ND	0.50	1
1,1-Dichloroethane	ND	0.50	1
Ethyl Tert-Butyl Ether (ETBE)	ND	0.50	1
Tert-Butyl Alcohol (TBA)	ND	5.0	1
1,1,1-Trichloroethane	ND	0.50	1
1,3-Dichloropropene	ND	0.50	1
1,1-Dichloropropene	ND	0.50	1
Carbon Tetrachloride	ND	0.50	1
Tert-Amyl Methyl Ether (TAME)	ND	0.50	1
Chloroform	2.0	0.50	1
Benzene	ND	0.50	1
Bromochloromethane	ND	0.50	1
1,2-Dichloroethane	ND	0.50	1
Trichloroethene	ND	0.50	1
1,2-Dichlorpropane	ND	0.50	1
Dibromomethane	ND	0.50	1
Bromodichloromethane	ND	0.50	1
Toluene	ND	0.50	1
Trans-1,3-Dichloropropene	ND	0.50	1
Tetrachloroethene	0.98	0.50	1
1,3-Dichloropropane	ND	0.50	1
1,1,2-Trichloroethane	ND	0.50	1
Ethlybenzene	ND	0.50	1
1,2-Dibromoethane	ND	0.50	1
Total Xylenes	ND	0.50	1
Dibromochloromethane	ND	0.50	1
Chlorobenzene	ND	0.50	1
2,2 Dichloropropane	ND	0.50	1
Cis-1,3-Dichloropropane	ND	0.50	1

ProVera
Analytical Laboratories, Inc.

Analysis For Volatile Compounds by EPA Method 8260B

Client Sample ID:	LW-MW-11S	Client:	E2C Remediation
Matrix:	Aqueous	Project:	Lake Tahoe-Laundry Works 3Q15 GWM
Date Sampled:	09/11/15	Lab ID:	15091401-08
		Instrument:	GCMS#1
Date Analyzed:	09/22/15	Operator:	Doug Selby

Compounds:	**Concentration ug/L (ppb)**	**Reporting Limit ug/L (ppb)**	**Dilution Factor**
1,1,1,2-Tetrachloroethane	ND	0.50	1
Styrene	ND	0.50	1
Isopropylbenzene	ND	0.50	1
Propylbenzene	ND	0.50	1
1,3,5-Trimethylbenzene	ND	0.50	1
2-Chlorotoluene	ND	0.50	1
Bromobenzene	ND	0.50	1
Bromoform	ND	0.50	1
4-Chlorotoluene	ND	0.50	1
Tert-Butylbenzene	ND	0.50	1
1,2,4-Trimethylbenzene	ND	0.50	1
1,2,3-Trichloropropane	ND	0.50	1
Sec-Butylbenzene	ND	0.50	1
1,1,2,2-Tetrachloroethane	ND	0.50	1
4-Isopopyltoluene	ND	0.50	1
1,3-Dichlorobenzene	ND	0.50	1
Butylbenzene	ND	0.50	1
1,4-Dichlorobenzene	ND	0.50	1
1,2-Dichlorobenzene	ND	0.50	1
1,2-dibromo-3-chloropropane	ND	0.50	1
1,1,2,3,4,4-hexachloro-1,3-butadien	ND	0.50	1
1,2,4-Trichlorobenzene	ND	0.50	1
Napthalene	ND	0.50	1
1,2,3-Trichlorobenzene	ND	0.50	1
Cis-1,2-Dichloroethene	ND	0.50	1

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Dibromofluoromethane	*129%*	*70.0%*	*130%*
1,2-Dichloroethane-d4	*115%*	*70.0%*	*130%*
Toluene-d8	*110%*	*70.0%*	*130%*
4-Bromofluorobenzene	*99%*	*70.0%*	*130%*

Doug Selby

Report Date: 10/5/2015

Analysis For Volatile Compounds by EPA Method 8260B

Client Sample ID:	LW-MW-2S	Client:	E2C Remediation
Matrix:	Aqueous	Project:	Lake Tahoe-Laundry Works 3Q15 GWM
Date Sampled:	09/11/15	Lab ID:	15091401-09
		Instrument:	GCMS#1
Date Analyzed:	09/22/15	Operator:	Doug Selby

Compounds:	Concentration ug/L (ppb)	Reporting Limit ug/L (ppb)	Dilution Factor
Dichlorodifluoromethane	ND	0.50	1
Chloromethane	ND	0.50	1
Vinyl Chloride	ND	0.50	1
Bromomethane	ND	0.50	1
Chloroethane	ND	0.50	1
Trichlorofluoromethane	ND	0.50	1
Trans-1,2-Dichloroethene	ND	0.50	1
1,1-Dichloroethene	ND	0.50	1
Methyl Tert-Butyl Ether (MTBE)	ND	0.50	1
Methylene Chloride	0.79	0.50	1
Diisopropyl Ether (DIPE)	ND	0.50	1
1,1-Dichloroethane	ND	0.50	1
Ethyl Tert-Butyl Ether (ETBE)	ND	0.50	1
Tert-Butyl Alcohol (TBA)	ND	5.0	1
1,1,1-Trichloroethane	ND	0.50	1
1,3-Dichloropropene	ND	0.50	1
1,1-Dichloropropene	ND	0.50	1
Carbon Tetrachloride	ND	0.50	1
Tert-Amyl Methyl Ether (TAME)	ND	0.50	1
Chloroform	ND	0.50	1
Benzene	ND	0.50	1
Bromochloromethane	ND	0.50	1
1,2-Dichloroethane	ND	0.50	1
Trichloroethene	ND	0.50	1
1,2-Dichlorpropane	ND	0.50	1
Dibromomethane	ND	0.50	1
Bromodichloromethane	ND	0.50	1
Toluene	ND	0.50	1
Trans-1,3-Dichloropropene	ND	0.50	1
Tetrachloroethene	0.72	0.50	1
1,3-Dichloropropane	ND	0.50	1
1,1,2-Trichloroethane	ND	0.50	1
Ethlybenzene	ND	0.50	1
1,2-Dibromoethane	ND	0.50	1
Total Xylenes	ND	0.50	1
Dibromochloromethane	ND	0.50	1
Chlorobenzene	ND	0.50	1
2,2 Dichloropropane	ND	0.50	1
Cis-1,3-Dichloropropane	ND	0.50	1

ProVera
Analytical Laboratories, Inc.

Analysis For Volatile Compounds by EPA Method 8260B

Client Sample ID:	LW-MW-2S	Client:	E2C Remediation
Matrix:	Aqueous	Project:	Lake Tahoe-Laundry Works 3Q15 GWM
Date Sampled:	09/11/15	Lab ID:	15091401-09
		Instrument:	GCMS#1
Date Analyzed:	09/22/15	Operator:	Doug Selby

Compounds:	**Concentration ug/L (ppb)**	**Reporting Limit ug/L (ppb)**	**Dilution Factor**
1,1,1,2-Tetrachloroethane	ND	0.50	1
Styrene	ND	0.50	1
Isopropylbenzene	ND	0.50	1
Propylbenzene	ND	0.50	1
1,3,5-Trimethylbenzene	ND	0.50	1
2-Chlorotoluene	ND	0.50	1
Bromobenzene	ND	0.50	1
Bromoform	ND	0.50	1
4-Chlorotoluene	ND	0.50	1
Tert-Butylbenzene	ND	0.50	1
1,2,4-Trimethylbenzene	ND	0.50	1
1,2,3-Trichloropropane	ND	0.50	1
Sec-Butylbenzene	ND	0.50	1
1,1,2,2-Tetrachloroethane	ND	0.50	1
4-Isopopyltoluene	ND	0.50	1
1,3-Dichlorobenzene	ND	0.50	1
Butylbenzene	ND	0.50	1
1,4-Dichlorobenzene	ND	0.50	1
1,2-Dichlorobenzene	ND	0.50	1
1,2-dibromo-3-chloropropane	ND	0.50	1
1,1,2,3,4,4-hexachloro-1,3-butadien	ND	0.50	1
1,2,4-Trichlorobenzene	ND	0.50	1
Napthalene	ND	0.50	1
1,2,3-Trichlorobenzene	ND	0.50	1
Cis-1,2-Dichloroethene	ND	0.50	1

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Dibromofluoromethane	*130%*	*70.0%*	*130%*
1,2-Dichloroethane-d4	*105%*	*70.0%*	*130%*
Toluene-d8	*107%*	*70.0%*	*130%*
4-Bromofluorobenzene	*92%*	*70.0%*	*130%*

Doug Selby

Report Date: 10/5/2015

Analysis For Volatile Compounds by EPA Method 8260B

Client Sample ID:	LW-MW-5S	Client:	E2C Remediation
Matrix:	Aqueous	Project:	Lake Tahoe-Laundry Works 3Q15 GWM
Date Sampled:	09/11/15	Lab ID:	15091401-10
		Instrument:	GCMS#1
Date Analyzed:	09/22/15	Operator:	Doug Selby

Compounds:	**Concentration ug/L (ppb)**	**Reporting Limit ug/L (ppb)**	**Dilution Factor**
Dichlorodifluoromethane	ND	0.50	1
Chloromethane	ND	0.50	1
Vinyl Chloride	ND	0.50	1
Bromomethane	ND	0.50	1
Chloroethane	ND	0.50	1
Trichlorofluoromethane	ND	0.50	1
Trans-1,2-Dichloroethene	ND	0.50	1
1,1-Dichloroethene	ND	0.50	1
Methyl Tert-Butyl Ether (MTBE)	ND	0.50	1
Methylene Chloride	ND	0.50	1
Diisopropyl Ether (DIPE)	ND	0.50	1
1,1-Dichloroethane	ND	0.50	1
Ethyl Tert-Butyl Ether (ETBE)	ND	0.50	1
Tert-Butyl Alcohol (TBA)	ND	5.0	1
1,1,1-Trichloroethane	ND	0.50	1
1,3-Dichloropropene	ND	0.50	1
1,1-Dichloropropene	ND	0.50	1
Carbon Tetrachloride	ND	0.50	1
Tert-Amyl Methyl Ether (TAME)	ND	0.50	1
Chloroform	ND	0.50	1
Benzene	ND	0.50	1
Bromochloromethane	ND	0.50	1
1,2-Dichloroethane	ND	0.50	1
Trichloroethene	ND	0.50	1
1,2-Dichlorpropane	ND	0.50	1
Dibromomethane	ND	0.50	1
Bromodichloromethane	ND	0.50	1
Toluene	ND	0.50	1
Trans-1,3-Dichloropropene	ND	0.50	1
Tetrachloroethene	6.3	0.50	1
1,3-Dichloropropane	ND	0.50	1
1,1,2-Trichloroethane	ND	0.50	1
Ethlybenzene	ND	0.50	1
1,2-Dibromoethane	ND	0.50	1
Total Xylenes	ND	0.50	1
Dibromochloromethane	ND	0.50	1
Chlorobenzene	ND	0.50	1
2,2 Dichloropropane	ND	0.50	1
Cis-1,3-Dichloropropane	ND	0.50	1

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Analytical Laboratories, Inc.

Analysis For Volatile Compounds by EPA Method 8260B

Client Sample ID: LW-MW-5S
Matrix: Aqueous
Date Sampled: 09/11/15
Date Analyzed: 09/22/15

Client: E2C Remediation
Project: Lake Tahoe-Laundry Works 3Q15 GWM
Lab ID: 15091401-10
Instrument: GCMS#1
Operator: Doug Selby

Compounds:	Concentration ug/L (ppb)	Reporting Limit ug/L (ppb)	Dilution Factor
1,1,1,2-Tetrachloroethane	ND	0.50	1
Styrene	ND	0.50	1
Isopropylbenzene	ND	0.50	1
Propylbenzene	ND	0.50	1
1,3,5-Trimethylbenzene	ND	0.50	1
2-Chlorotoluene	ND	0.50	1
Bromobenzene	ND	0.50	1
Bromoform	ND	0.50	1
4-Chlorotoluene	ND	0.50	1
Tert-Butylbenzene	ND	0.50	1
1,2,4-Trimethylbenzene	ND	0.50	1
1,2,3-Trichloropropane	ND	0.50	1
Sec-Butylbenzene	ND	0.50	1
1,1,2,2-Tetrachloroethane	ND	0.50	1
4-Isopopyltoluene	ND	0.50	1
1,3-Dichlorobenzene	ND	0.50	1
Butylbenzene	ND	0.50	1
1,4-Dichlorobenzene	ND	0.50	1
1,2-Dichlorobenzene	ND	0.50	1
1,2-dibromo-3-chloropropane	ND	0.50	1
1,1,2,3,4,4-hexachloro-1,3-butadien	ND	0.50	1
1,2,4-Trichlorobenzene	ND	0.50	1
Napthalene	ND	0.50	1
1,2,3-Trichlorobenzene	ND	0.50	1
Cis-1,2-Dichloroethene	ND	0.50	1

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Dibromofluoromethane	*129%*	*70.0%*	*130%*
1,2-Dichloroethane-d4	*125%*	*70.0%*	*130%*
Toluene-d8	*107%*	*70.0%*	*130%*
4-Bromofluorobenzene	*94%*	*70.0%*	*130%*

Doug Selby

Report Date: 10/5/2015

Analysis For Volatile Compounds by EPA Method 8260B

Client Sample ID:	LW-MW-1S	Client:	E2C Remediation
Matrix:	Aqueous	Project:	Lake Tahoe-Laundry Works 3Q15 GWM
Date Sampled:	09/11/15	Lab ID:	15091401-11
		Instrument:	GCMS#1
Date Analyzed:	09/22/15	Operator:	Roy Diaz

Compounds:	Concentration ug/L (ppb)	Reporting Limit ug/L (ppb)	Dilution Factor
Dichlorodifluoromethane	ND	0.50	1
Chloromethane	ND	0.50	1
Vinyl Chloride	ND	0.50	1
Bromomethane	ND	0.50	1
Chloroethane	ND	0.50	1
Trichlorofluoromethane	ND	0.50	1
Trans-1,2-Dichloroethene	ND	0.50	1
1,1-Dichloroethene	ND	0.50	1
Methyl Tert-Butyl Ether (MTBE)	ND	0.50	1
Methylene Chloride	0.90	0.50	1
Diisopropyl Ether (DIPE)	ND	0.50	1
1,1-Dichloroethane	ND	0.50	1
Ethyl Tert-Butyl Ether (ETBE)	ND	0.50	1
Tert-Butyl Alcohol (TBA)	ND	5.0	1
1,1,1-Trichloroethane	ND	0.50	1
1,3-Dichloropropene	ND	0.50	1
1,1-Dichloropropene	ND	0.50	1
Carbon Tetrachloride	ND	0.50	1
Tert-Amyl Methyl Ether (TAME)	ND	0.50	1
Chloroform	ND	0.50	1
Benzene	ND	0.50	1
Bromochloromethane	ND	0.50	1
1,2-Dichloroethane	ND	0.50	1
Trichloroethene	3.1	0.50	1
1,2-Dichlorpropane	ND	0.50	1
Dibromomethane	ND	0.50	1
Bromodichloromethane	ND	0.50	1
Toluene	ND	0.50	1
Trans-1,3-Dichloropropene	ND	0.50	1
Tetrachloroethene	150	0.50	1
1,3-Dichloropropane	ND	0.50	1
1,1,2-Trichloroethane	ND	0.50	1
Ethlybenzene	ND	0.50	1
1,2-Dibromoethane	ND	0.50	1
Total Xylenes	ND	0.50	1
Dibromochloromethane	ND	0.50	1
Chlorobenzene	ND	0.50	1
2,2 Dichloropropane	ND	0.50	1
Cis-1,3-Dichloropropane	ND	0.50	1

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Analysis For Volatile Compounds by EPA Method 8260B

Client Sample ID: LW-MW-1S
Matrix: Aqueous
Date Sampled: 09/11/15
Date Analyzed: 09/22/15

Client: E2C Remediation
Project: Lake Tahoe-Laundry Works 3Q15 GWM
Lab ID: 15091401-11
Instrument: GCMS#1
Operator: Roy Diaz

Compounds:	**Concentration ug/L (ppb)**	**Reporting Limit ug/L (ppb)**	**Dilution Factor**
1,1,1,2-Tetrachloroethane	ND	0.50	1
Styrene	ND	0.50	1
Isopropylbenzene	ND	0.50	1
Propylbenzene	ND	0.50	1
1,3,5-Trimethylbenzene	ND	0.50	1
2-Chlorotoluene	ND	0.50	1
Bromobenzene	ND	0.50	1
Bromoform	ND	0.50	1
4-Chlorotoluene	ND	0.50	1
Tert-Butylbenzene	ND	0.50	1
1,2,4-Trimethylbenzene	ND	0.50	1
1,2,3-Trichloropropane	ND	0.50	1
Sec-Butylbenzene	ND	0.50	1
1,1,2,2-Tetrachloroethane	ND	0.50	1
4-Isopopyltoluene	ND	0.50	1
1,3-Dichlorobenzene	ND	0.50	1
Butylbenzene	ND	0.50	1
1,4-Dichlorobenzene	ND	0.50	1
1,2-Dichlorobenzene	ND	0.50	1
1,2-dibromo-3-chloropropane	ND	0.50	1
1,1,2,3,4,4-hexachloro-1,3-butadiene	ND	0.50	1
1,2,4-Trichlorobenzene	ND	0.50	1
Napthalene	ND	0.50	1
1,2,3-Trichlorobenzene	ND	0.50	1
Cis-1,2-Dichloroethene	ND	0.50	1

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Dibromofluoromethane	*125%*	*70.0%*	*130%*
1,2-Dichloroethane-d4	*123%*	*70.0%*	*130%*
Toluene-d8	*106%*	*70.0%*	*130%*
4-Bromofluorobenzene	*96%*	*70.0%*	*130%*

Doug Selly

Report Date: 10/5/2015

ProVera
Analytical Laboratories, Inc.

EPA 8260B QA-QC Report

ELAP Certification # 2606

CLIENT: **E2C Remediation**
1020 Winding Creek Rd., Suite 110
Roseville, CA 95678

Projects Covered by this QA-QC: Lake Tahoe Laundry Works 3Q15 GWM 9/11/15
Analysis Date: 9/22/2015
Matrix: AQ

BFB:

Internal Standards	**Results**	**% Recovery**
Benzene, fluoro	50.0	100%
Benzene-d5, chloro-	50.0	100%
1,4-Dichlorobenzene-d4	50.0	100%
Surrogate Standards		
Methane, dibromofluoro-	64.9	130%
1,2-Dichloroethane-d4	63.6	127%
Toluene-d8	56.8	114%
p-Bromofluorobenzene (BFB)	50.0	100%

Method Blank:

Internal Standards	**Results**	**% Recovery**
Benzene, fluoro	50.0	100%
Benzene-d5, chloro-	50.0	100%
1,4-Dichlorobenzene-d4	50.0	100%
Surrogate Standards		
Methane, dibromofluoro-	64.6	129%
1,2-Dichloroethane-d4	59.8	120%
Toluene-d8	54.3	109%
p-Bromofluorobenzene (BFB)	48.1	96%

Laboratory Control Sample:	**Results**	**% Recovery**
1,1-Dichloroethene	29.3	117%
Trichloroethene	29.6	118%
Chlorobenzene	23.5	94%
Toluene	25.3	101%
Benzene	32.6	130%
p-Bromofluorobenzene (BFB)	46.1	92%

LCS Duplicate:	**Results**	**% Recovery**
1,1-Dichloroethene	23.9	96%
Trichloroethene	24.3	97%
Chlorobenzene	19.8	79%
Toluene	20.9	84%
Benzene	27.0	108%
p-Bromofluorobenzene (BFB)	49.1	98%

APPENDIX C

GeoTracker Upload Confirmation Reports

UPLOADING A GEO_WELL FILE

SUCCESS

Processing is complete. No errors were found!
Your file has been successfully submitted!

Submittal Type: GEO_WELL
Report Title: GEO_WELL (6-12-15)
Facility Global ID: SL0601754315
Facility Name: LAKE TAHOE LAUNDRY WORKS
File Name: GEO_WELL.zip
Organization Name: E2C Remediation, LLC
Username: E2C REMEDIATION, LLC
IP Address: 66.60.184.162
Submittal Date/Time: 9/22/2015 11:25:02 AM
Confirmation Number: 9900282442

UPLOADING A GEO_REPORT FILE

SUCCESS

Your GEO_REPORT file has been successfully submitted!

Submittal Type:	GEO_REPORT
Report Title:	2Q 2015 Groundwater Monitoring Report and Current Site Remediation Status Report
Report Type:	Monitoring Report - Quarterly
Report Date:	9/17/2015
Facility Global ID:	SL0601754315
Facility Name:	LAKE TAHOE LAUNDRY WORKS
File Name:	LTLW 2Q15 QMR_RSR 9-17-15.pdf
Organization Name:	E2C Remediation, LLC
Username:	E2C REMEDIATION, LLC
IP Address:	66.60.184.162
Submittal Date/Time:	9/22/2015 11:18:47 AM
Confirmation Number:	5401388585

UPLOADING A EDF FILE

SUCCESS

Processing is complete. No errors were found!
Your file has been successfully submitted!

Submittal Type:	EDF
Report Title:	2Q 2015 Groundwater Monitoring Report and Current Site Remediation Status Report
Report Type:	Monitoring Report - Quarterly
Facility Global ID:	SL0601754315
Facility Name:	LAKE TAHOE LAUNDRY WORKS
File Name:	EDFCL.zip
Organization Name:	E2C Remediation, LLC
Username:	E2C REMEDIATION, LLC
IP Address:	66.60.184.162
Submittal Date/Time:	9/22/2015 11:20:00 AM
Confirmation Number:	8243232488

VIEW QC REPORT

VIEW DETECTIONS REPORT

APPENDIX D

Shallow Soil Vapor Sampling Field Data Sheets

PROVERA ANALYTICAL LABORATORIES

Chain of Custody Form

Client Name: E_2C Remediation

Project Name: Lake Tahoe Laundry Works 1950BK26

Client Address: 1024 Lake Tahoe Blvd., South Lake Tahoe

Project Manager: Bill Lawson

Sampler Name: J. Irwin

Sample Matrix: ☒ Air

				Analysis Requested											
Sample Date	Sample Time	Sample Description	Container Type	TO-15 Full Suite + Chlor											Comments
9-11-15	1:15	VP- 1	Summa	X											
	1:35	VP- 2	Summa	X											
	1:55	VP- 3	Summa	X											
	2:15	VP- 4	Summa	X											
	2:35	VP- 5	Summa	X											
	2:55	VP- 6	Summa	X											
	3:15	VP- 7	Summa	X											
	3:35	VP- 8	Summa	X											
	3:55	VP- 9	Summa	X											
9-11-15	4:15	VP- 10	Summa	X											

Sampling Event: VP Well Vapor Samples **Report in µg/L and µg/m³ using Selected Ion Monitoring (SIM)** ~~**procedure to obtain an MRL of 0.1475**~~ **ppbV,** ~~**or lower for PCE and TCE**~~**.**

Turnaround Time Requested: 24 Hour ____ 48 Hour ____ 5-Day ____ Standard X

Relinquished By:	Date: 9-11-15	Relinquished By:	Date:
Received By:	Date:	Received By:	Date:

E$_2$C REMEDIATION

SOIL GAS ASSESSMENT FIELD SHEET

SITE: LTLW

ADDRESS: 1024 Lake tahoe blvd.
South lake tahoe, CA

DATE: 9-11-15

SAMPLE ID: VP-1 (@ 1:15)

FIELD CREW: J. Irwin
N. Jensen

PURGE DATA

Purge Method: Syringe

Purge Duration: 3 min

Purge Volume: 600 mL

SAMPLING

Summa Canister Serial #: 83755A

Initial Vacuum in Canister: 20"Hg

Leak Check Constituent: tetrafluoroethane

Was sampling tented: [✓ Yes] No

Sampling Duration: 6 min

Final Vacuum in Canister: 0

E$_2$C REMEDIATION

SOIL GAS ASSESSMENT FIELD SHEET

SITE: LTLW

ADDRESS: 1024 Lake Tahoe blvd.
South lake tahoe, CA

DATE: 9-11-15

SAMPLE ID: VP-2 (1:35)

FIELD CREW: J. Irwin
N. Jensen

PURGE DATA

Purge Method: Syringe

Purge Duration: 3 min

Purge Volume: 600 mL

SAMPLING

Summa Canister Serial #: 83793

Initial Vacuum in Canister: 25"Hg

Leak Check Constituent: tetrafluoroethane

Was sampling tented: [✓ Yes] No

Sampling Duration: 8 min

Final Vacuum in Canister: 0"Hg

E$_2$C REMEDIATION

SOIL GAS ASSESSMENT FIELD SHEET

SITE: LTLW

ADDRESS: 1024 Lake tahoe blvd.
South lake tahoe, CA

DATE: 9-11-15

SAMPLE ID: VP-3 (1:55)

FIELD CREW: J. Irwin
N. Jensen

PURGE DATA

Purge Method: Syringe

Purge Duration: 3 min

Purge Volume: 600 mL

SAMPLING

Summa Canister Serial #: 83621

Initial Vacuum in Canister: 22" Hg

Leak Check Constituent: tetrafluoroethane

Was sampling tented: [✓ Yes] No

Sampling Duration: 6 min

Final Vacuum in Canister: 0" Hg

E_2C REMEDIATION

SOIL GAS ASSESSMENT FIELD SHEET

SITE: LTLW

ADDRESS: 1024 Lake tahoe blvd.
South lake tahoe, CA

DATE: 9-11-15

SAMPLE ID: VP-4 (2:15)

FIELD CREW: J. Irwin
N. Jensen

PURGE DATA

Purge Method: Syringe

Purge Duration: 3 min

Purge Volume: 600 mL

SAMPLING

Summa Canister Serial #: 8343

Initial Vacuum in Canister: 16" Hg

Leak Check Constituent: tetrafluoroethane

Was sampling tented: [✓ Yes] No

Sampling Duration: 7 min

Final Vacuum in Canister: 0" Hg

E$_2$C REMEDIATION

SOIL GAS ASSESSMENT FIELD SHEET

SITE: LTLW

ADDRESS: 1024 Lake tahoe blvd.
south lake tahoe, CA

DATE: 9-11-15 (2:35)

SAMPLE ID: VP-5

FIELD CREW: J. Irwin
N. Jensen

PURGE DATA

Purge Method: Syringe

Purge Duration: 3 min

Purge Volume: 600 mL

SAMPLING

Summa Canister Serial #: 83757

Initial Vacuum in Canister: 22.5" Hg

Leak Check Constituent: tetrafluoroethane

Was sampling tented: [✓ Yes] No

Sampling Duration: 5 min

Final Vacuum in Canister: 0" Hg

E_2C REMEDIATION

SOIL GAS ASSESSMENT FIELD SHEET

SITE: LTLW

ADDRESS: 1024 Lake tahoe blvd.
South lake tahoe, CA

DATE: 9-11-15

SAMPLE ID: VP-6 (2:55)

FIELD CREW: J. Irwin
N. Jensen

PURGE DATA

Purge Method: Syringe

Purge Duration: 3 min

Purge Volume: 600 mL

SAMPLING

Summa Canister Serial #: 86144

Initial Vacuum in Canister: 18" Hg

Leak Check Constituent: tetrafluoroethane

Was sampling tented: [✓ Yes] No

Sampling Duration: 8 min

Final Vacuum in Canister: 0" Hg

E$_2$C REMEDIATION

SOIL GAS ASSESSMENT FIELD SHEET

SITE: LTLW

ADDRESS: 1024 Lake tahoe blvd.
South lake tahoe, CA

DATE: 9-11-15

SAMPLE ID: VP-7 (3:15)

FIELD CREW: J. Irwin
N. Jensen

PURGE DATA

Purge Method: Syringe

Purge Duration: 3 min

Purge Volume: 600 mL

SAMPLING

Summa Canister Serial #: 251

Initial Vacuum in Canister: 20"Hg

Leak Check Constituent: tetrafluoroethane

Was sampling tented: [✓ Yes] No

Sampling Duration: 6 min

Final Vacuum in Canister: 0"Hg

E$_2$C REMEDIATION

SOIL GAS ASSESSMENT FIELD SHEET

SITE: LTLW

ADDRESS: 1024 Lake tahoe blvd.
South lake tahoe, CA

DATE: 9-11-15

SAMPLE ID: VP-8 (3:35)

FIELD CREW: J. Irwin
N. Jensen

PURGE DATA

Purge Method: Syringe

Purge Duration: 3 min

Purge Volume: 600 mL

SAMPLING

Summa Canister Serial #: 5150

Initial Vacuum in Canister: 22" Hg

Leak Check Constituent: tetrafluoroethane

Was sampling tented: [✓ Yes] No

Sampling Duration: 7 min

Final Vacuum in Canister: 0 "Hg

E_2C REMEDIATION

SOIL GAS ASSESSMENT FIELD SHEET

SITE: LTLW

ADDRESS: 1024 Lake tahoe blvd.
South lake tahoe, CA

DATE: 9-11-15

SAMPLE ID: VP-9 (3:55)

FIELD CREW: J. Irwin
N. Jensen

PURGE DATA

Purge Method Syringe

Purge Duration 3 min

Purge Volume 600 mL

SAMPLING

Summa Canister Serial # 83792

Initial Vacuum in Canister 18" Hg

Leak Check Constituent tetrafluoroethane

Was sampling tented [✓ Yes] No

Sampling Duration 5 min

Final Vacuum in Canister 0" Hg

E$_2$C REMEDIATION

SOIL GAS ASSESSMENT FIELD SHEET

SITE: LTLW

ADDRESS: 1024 Lake Tahoe blvd.
South lake tahoe, CA

DATE: 9-11-15

SAMPLE ID: VP-10 (4:15)

FIELD CREW: J. Irwin
N. Jensen

PURGE DATA

Purge Method: Syringe

Purge Duration: 3 min

Purge Volume: 600 mL

SAMPLING

Summa Canister Serial #: 9313

Initial Vacuum in Canister: 18"Hg

Leak Check Constituent: tetrafluoroethane

Was sampling tented: [✓ Yes] No

Sampling Duration: 5min

Final Vacuum in Canister: 0"Hg

APPENDIX E

Soil-Gas Monitoring Procedures (From IRAWP)

APPENDIX E

S-G Monitoring Table of Contents

E. SOIL GAS MONITORING PROCEDURES

The following sections detail the methods and procedures that will be followed to monitor soil gas during the site remediation period.

E.1 Field Activities

Prior to installation of soil-gas probe points, all necessary permits and utility clearance(s) will be obtained. All work will be performed or supervised by a California Professional Geologist, in accordance with the Business and Professions Code, Chapters 7 and 12.5, and the California Code of Regulations, Title 16, Chapters 5 and 29. E_2C will make raw data available to California Regional Water Quality Control Board – Lahontan Region, South Lake Tahoe Branch (CRWQCB) staff, as requested. E_2C will accommodate adjustments, or modifications to the sampling program, mandated by evaluation of the data set or unforeseen site conditions, if required by the Regional Water Quality Control Board (CRWQCB) staff. Investigative-derived wastes (IDWs) will be handled and disposed in accordance with federal, state and local requirements.

To expedite the completion of field activities and to avoid potential project delays, contingencies have been proposed in the Interim Remedial Action Workplan (IRAWP) (e.g., soil matrix samples will also be collected if clayey soils [as defined in the Unified Soil Classification System (USCS)] are encountered during the proposed soil-gas investigation). The CRWQCB field staff will be informed of any problems, unforeseen site conditions, or deviations from the approved IRAWP. When it becomes necessary to implement modifications to the approved IRAWP, the CRWQCB will be notified and a verbal approval will be obtained before implementing changes.

E.2 Soil-Gas Investigation Reports

Soil-gas monitoring data, including a discussion of field operations, deviations from the approved Workplan, data inconsistencies, and other significant operational details will be documented in the status reports. Each status report will contain soil-gas isoconcentration plots for constituents of concern (COCs) at a scale of 1 inch = 30 feet and summary tables for analytical data [in micrograms per liter (µg/L)], in accordance with the Active Soil Gas Investigation (ASGI) guidance (LARWQCB, 1997). E_2C will also provide legible copies of field and laboratory notes or logs, all analytical results and Quality Assurance/Quality Control (QA/QC) information, including tables and explanations of procedures, results, corrective actions and effect on the data.

E.3 Soil-Gas Vapor Monitoring Well Installation

E.3.a Additional Soil and Lithologic Investigations

Site soil and lithologic information will be obtained by collecting undisturbed soil samples from soil-gas sampling point VP-5. The soil samples will be collected with a slide-hammer in two (2) inch diameter brass liners from depths of two (2) and four (4) feet bgs. The samples will be submitted for physical parameter testing, which includes gradation, effective permeability, porosity, soil moisture, total organic carbon, and soil density. The results of the parameter testing will provide accurate soil input parameters to be used in an indoor air intrusion risk model. The results of the indoor air intrusion risk modeling will be presented in status reports under soil gas sections.

Low-flow or no-flow conditions (e.g., fine-grained soil, clay, soil with vacuum readings that exceed approximately ten (10) inches of mercury or 136 inches of water) are not expected to be encountered; however, if low-flow or no-flow conditions are encountered, soil matrix sampling using EPA Method 5035A will be conducted in those specific areas.

E.3.b Soil-Gas Vapor Monitoring Well Spacing

Refer to Figure 5 for a scaled site plan depicting proposed VP well locations. VP well spacing has been selected to provide soil vapor monitoring biased to optimize detecting and delineating volatile organic compounds (VOCs) in areas of occupied by humans (e.g., buildings) and monitor and assess the effectiveness of the soil vapor extraction (SVE) system on VOC-affected vadose zone soils. Based on these criteria E_2C will install five (5) VP wells (VP-1 through VP-5).

E.3.c VP Well Depth

All VP wells will be installed to a depth of approximately five (5) feet below ground surface (bgs).

E.3.d VP Well Installation Procedure

E_2C personnel will use a Bobcat with a four (4) inch diameter auger attachment to advance a boring to the design depth of approximately 5.0 feet below ground surface (bgs). If an asphalt or concrete surface is present, E_2C will utilize a coring machine to penetrate the surface material.

At the bottom of the boring, E_2C will emplace a one and one-half (1.5) inch vapor sampling screen in the center of a one-foot sand pack (#3 Lonestar sand or equivalent). 1/8 inch inside diameter Teflon® tubing will extend from the sampling screen to the surface. One (1) foot of dry granular bentonite will be emplaced on top of the sand pack to preclude the infiltration of hydrated bentonite grout. The borehole will then be grouted to approximately six (6) inches below the surface with hydrated bentonite. The surface completion will consist of a five (5) inch diameter, traffic-rated monitoring well box, set in concrete (See Figure 15).

E_2C field personnel will prepare detailed VP well installation boring logs, which will document the date and time of the installation activity, the depth of each VP well, the screen type and interval; material utilized, and surface completion details. VP well logs will be included in the subsequent status report.

E.4 Soil-Gas Monitoring Parameters

E.4.a Equilibration Time

Following the installation of the VP well, subsurface conditions will be disturbed. As delineated in the DTSC document, *Advisory – Active Soil Gas Investigations,* to allow subsurface conditions to equilibrate, the purge volume test, leak test, and soil-gas sampling will not be conducted for at least 48 hours following installation.

E.4.b Purge Volume

To ensure that stagnant or ambient air is removed from the sampling system and to assure samples collected are representative of subsurface conditions, E_2C will purge three (3) casing volumes from each VP well. Based on a well diameter of four (4) inches, a filter pack twelve (12) inches in height, and a porosity of 30%, E_2C estimates that one (1) casing volume will be approximately 200 milliliters. Therefore, three (3) casing volumes would equate to approximately 600 milliliters. At a purge rate of 200 ml/min, purging will be accomplished in approximately three (3) minutes. E_2C will use a purge pump, calibrated to pump 200 milliliters per minute. The purge pump will not be used for sampling purposes.

E.5 Leak Test

Leakage during soil gas sampling may dilute samples with ambient air and may produce results that underestimate actual site concentrations or contaminate the sample with external contaminants. Leak tests will be conducted to determine whether leakage is present (e.g., the leak check compound is detected and confirmed in the test sample after its application).

E.5.a Leak Test Frequency

Leak tests will be conducted at every SGA well location.

E.5.b Leak Check Compounds

The tracer compound tetrafluoroethane will be used as leak check compounds, if a detection limit (DL) of 10 μg/L or less can be achieved.

E.5.c Leak Test Protocol

The leak check compound (tetrafluoroethane) will be enclosed within a tent-type structure at each potential leak point to keep the potential leak areas at saturated concentrations throughout the test.

E.5.d Leak Test Analytical

The chemical analysis of the soil-gas sample will include an analysis for the leak check compound. If a leak check compound is detected in the sample, the cause of the leak will be evaluated, determined and corrected through confirmation sampling. If the leak check compound is suspected or detected as a site-specific contaminant, a new leak check compound will be used.

E.6 Purge/Sample Flow Rate

The sampling and purging flow rate of 100 ml/min to 200 ml/min was selected to minimize compound partitioning during soil-gas sampling. Samples will not be collected if field conditions, such as rainfall, irrigation, fine grained sediments, or drilling conditions affect the ability to collect soil-gas samples. If no-flow or low-flow conditions are caused by wet soils, the soil gas sampling will cease. In addition, the soil-gas sampling will not be conducted during or immediately after a significant rain event (e.g., 1/2 inch or greater), or onsite watering.

If low flow conditions are determined to be from a specific lithology, a new SGA well will be installed at a new lateral location selected after evaluation of the site lithologic logs and/or in consultation with the CRWQCB. If moisture or unknown material is observed, installation of the VP well will cease until the cause of the problem is identified and corrected. If refusal occurs during drilling, an alternate, nearby VP well location will be selected.

E.6.a No-Flow/Low-Flow Rates

The purging or sampling flow rate of 100 ml/min to 200 ml/min is expected to be

attainable in the lithology adjacent to the VP well. To evaluate lithologic conditions adjacent to the VP well where no-flow or low-flow conditions are encountered, a vacuum gauge or similar device will be used between the soil-gas sample tubing and the soil-gas extraction devices. A gas tight syringe may also be used to qualitatively determine if a high vacuum soil condition exists, which is based on whether suction is felt while the plunger is being withdrawn.

E.6.b Purging/Sampling Rates

E_2C will conduct purging/sampling at rates between 100 to 200 ml/min to limit stripping, prevent ambient air from diluting the soil-gas samples, and to reduce the variability of purging rates. The low flow purge rate increases the likelihood that representative samples may be collected. The purge/sample rate may be modified based on conditions encountered in individual VP wells. Modified rates will be documented in the report of findings.

E.7 Soil Gas Sampling Protocol

After the VP well is adequately purged, a soil-gas sample will be collected. A Summa canister equipped with a flow restrictor will be used at each location. A flow regulator will be placed between the probe and the Summa canister to ensure the canister is filled at the proper flow rate. Summa canisters will be stored in such a way as to avoid exposure to sunlight, and the samples will be analyzed within the prescribed hold time.

E.7.a Sample Container Cleanliness and Decontamination

Prior to its use at a site, each sample container will be assured clean by the analytical laboratory. New containers will be determined to be free of contaminants (e.g., lubricants) by either the supplier or the analytical laboratory; and the effectiveness of decontamination (and to detect any possible interference from ambient air) of reused/recycled containers will be verified with method blanks. After each use, reusable sample containers will be properly decontaminated. Glass syringes or bulbs will be disassembled and baked at 240° C for a minimum of 15 minutes or at 120° C for a minimum of 30 minutes, or be decontaminated by an equivalent method. Plastic syringes, if used, will be used only once and then properly discarded.

E_2C personnel will connect new Teflon® tubing to the top of the existing VP well tubing, and will utilize a 60 cubic centimeter (cc) syringe and a 3-way valve to purge the previously determined purge volume. The purge volume will be calculated based on one (1) cc/ft for 1/8" outside diameter (OD) tubing and five (5) cc/ft for ¼" OD tubing.

The leak compound will be placed in tent-type structures at the connections on the sampling train, using a paper towel moistened with the leak compound wrapped with plastic sheeting taped tightly at each end to seal the structure. The sampling procedure will then commence as detailed above.

E.7.b Documentation of VP Well Sampling Protocol

E_2C personnel will document the VP well sampling, and will include the sample identification, the probe location, date and time of sample collection, sampling depth, identity of on-Site personnel, weather conditions, sampling methods and devices, soil-gas purge volumes, volume of soil gas extracted, vacuum of canisters before and after samples are collected, chain of custody protocols.

E.7.c Chain of Custody Records

A chain of custody form will be completed to maintain the custodial integrity of samples. Probe installation times and sample collection times will be included on the chain of custody form, and in the report of findings.

E.8 Analysis of Soil-Gas Samples

E.8.a Quality Assurance/Quality Control (QA/QC)

The soil-gas analytical laboratory will comply with the project Quality Assurance Project Plan (QAPP) and will follow the QA/QC requirements of the most current ASGI and the employed EPA Method. If there is any inconsistency between the ASGI and the EPA Method, the most restrictive and specific requirements will prevail. The analytical data will be consistent with the Data Quality Objectives (DQOs) established for the project. Field QC samples will be collected, stored, transported and analyzed in a manner consistent with site samples.

QA/QC samples will be collected to support the sampling activity. Method blanks will be used to verify the effectiveness of decontamination procedures, as specified above, and to detect any possible interference from ambient air. For off-site shipments, a minimum of one (1) trip blank per day will be collected and analyzed for the target compounds. Trip blanks will contain laboratory grade ultra pure air. The trip blanks will be prepared to evaluate if the shipping and handling procedures are introducing contaminants into the samples, and to determine if cross contamination in the form of VOC migration has occurred between the collected VOC samples. Trip blank containers and media will be the same as site samples. At least one (1) duplicate sample per laboratory per day will be collected. Duplicate samples will be collected from areas of concern in separate sample containers, at the same location and depth. Duplicate samples will be collected immediately after the original sample. Laboratory control samples (LCS) and dilution procedure duplicates (DPD) will handled and analyzed in accordance with the most recent ASGI. E_2C will be prepared to collect split samples (for analysis by another laboratory) with the CRWQCB, if requested.

E.8.b Laboratory Certification and Analysis

E_2C will have the samples analyzed by EPA Method 8260b at a certified analytical laboratory.

E.8.c Detection Limits for Target Compounds

Analytical equipment calibration will be in accordance with the most current ASGI. Detection limits will be such that the Environmental Screening Levels (Soil Gas Screening Levels) (CCRWQCB, 2008) for evaluation of potential vapor intrusion into indoor air allow will be met, as follows:

CHEMICAL	**Vapor Screening ESL's**		
	Micrograms per cubic meter (µg/m$^{3)}$	Parts per billion – volume (ppbV)	Micrograms per liter (µg/L)
PCE	1.4E+03	206.54	1.400
TCE	4.1E+03	0.74481	0.0040
Cis-1,2-DCE	1.2E+05	3.0285+04	120.00
VC	1.0E+02	39.144	0.1000

The DL for leak check compounds will be 10 µg/L or less. For results with a high DL reported (e.g., due to matrix interference or dilution), the laboratory will provide a written explanation. Re-sampling and analyses will be conducted at the appropriate DL for a specific compound if requested by CRWQCB staff.

E.8.d Sample Handling

Exposure to light and changes in temperature and pressure will accelerate sample degradation. To protect sample integrity soil-gas samples will not be chilled, will not be subjected to changes in ambient pressure, and shipping of sample containers by air will be avoided, if possible. If condensation is observed in the sample container, the sample will be discarded and a new sample will be collected.

E.8.e Holding Time

All soil gas samples will be collected in Summa canisters and will be analyzed at ProVera Analytical Laboratories, Inc. (State Certification #2606) in Bakersfield, California within 48 hours after collection.

E.8.f Analytical Methods

All VOC samples will be analyzed using only a Gas Chromatograph/Mass Spectrometer (GC/MS) by EPA Method 8260b, or equivalent.

E.8.g Target Compounds

The ASGI (dated February 25, 1997) includes twenty-three (23) primary and four (4) other target VOCs. All quantifiable results will be reported. The estimated results of all Tentatively Identified Compounds (TICs), or non-AGSI-targeted compounds detected, will be included in the status reports. If TICs, or non-ASGI targeted compounds are identified, E_2C will consult with the CRWQCB to determine whether additional action is required (e.g., running additional standards to quantify TICs, or non-ASGI compounds) and whether the use of these estimated data for risk evaluation is appropriate. All quantifiable results of Leak Check Compounds will be reported as specified in above.

APPENDIX F

Laboratory VP Well Vapor Analytical Report

PROVERA ANALYTICAL LABORATORIES

Chain of Custody Form

Client Name: E2C Remediation
Project Name: Lake Tahoe Laundry Works 1950BK26
Client Address: 1024 Lake Tahoe Blvd., South Lake Tahoe
Project Manager: Bill Lawson
Sampler Name: J. Irwin

Analysis Requested

Sample Matrix: ☒ Air

Sample Date	Sample Time	Sample Description	Container Type	TO-15 Full Suite + Chlor											Comments
9-11-15	1:15	VP- 1	Summa	X											15091402-01
	1:35	VP- 2	Summa	X											-02
	1:55	VP- 3	Summa	X											-03
	2:15	VP- 4	Summa	X											-04
	2:35	VP- 5	Summa	X											-05
	2:55	VP- 6	Summa	X											-06
	3:15	VP- 7	Summa	X											-07
	3:35	VP- 8	Summa	X											-08
	3:55	VP- 9	Summa	X											-09
9-11-15	4:15	VP- 10	Summa	X											-10

Sampling Event: VP Well Vapor Samples **Report in µg/L and µg/m³ using Selected Ion Monitoring (SIM) ~~procedure to obtain an MRL of 0.1475 ppbV, or lower for PCE and TCE.~~**

Turnaround Time Requested: 24 Hour ____ 48 Hour ____ 5-Day ____ Standard X

Relinquished By:	Date: 9-11-15	Relinquished By:	Date:
Received By:	Date: 9-12-15	Received By:	Date:

E2C Remediation	Project:	Lake Tahoe-Laundry Works	Report Date:	10/7/2015
1020 Winding Creek Rd., Suite 110		VP Well Vapor Samples	Analysis Type:	**EPA Method TO-15**
Roseville, CA 95678	Project Mgr.	PHIL GOALWIN		

LAB ID: 15091402-01 Sample ID: **VP-1** Date Sampled: 9/11/2015

Analyte	Result	Reporting Limit	Units	Analysis Date	Notes
Propylene	ND	10	ppbV	10/1/2015	TO-15
Dichlorodifluoromethane (Freon 12)	ND	10	ppbV	10/1/2015	TO-15
1,2-Dichlorotetrafluoroethane(F-114)	ND	10	ppbV	10/1/2015	TO-15
Chloromethane	ND	10	ppbV	10/1/2015	TO-15
Vinyl Cloride	ND	10	ppbV	10/1/2015	TO-15
1,3 Butadiene	ND	10	ppbV	10/1/2015	TO-15
Bromomethane	ND	10	ppbV	10/1/2015	TO-15
Chloroethane	ND	10	ppbV	10/1/2015	TO-15
Trichlorofluoromethane (F 11)	ND	10	ppbV	10/1/2015	TO-15
Isopropyl alcohol	ND	10	ppbV	10/1/2015	TO-15
Freon 113	ND	10	ppbV	10/1/2015	TO-15
1,1 Dichloroethene	ND	10	ppbV	10/1/2015	TO-15
Acetone	ND	10	ppbV	10/1/2015	TO-15
Carbon Disulfide	ND	10	ppbV	10/1/2015	TO-15
Methylene Chloride	ND	10	ppbV	10/1/2015	TO-15
MTBE	ND	10	ppbV	10/1/2015	TO-15
trans-1,2 Dicloroethene	ND	10	ppbV	10/1/2015	TO-15
n-Hexane	ND	10	ppbV	10/1/2015	TO-15
Vinyl acetate	ND	10	ppbV	10/1/2015	TO-15
1,1-Dichloroethane	ND	10	ppbV	10/1/2015	TO-15
Methyl Ethyl Ketone	ND	10	ppbV	10/1/2015	TO-15
cis-1,2 Dichloroethene	ND	10	ppbV	10/1/2015	TO-15
Tetrahydrofuran	ND	10	ppbV	10/1/2015	TO-15
Chloroform	ND	10	ppbV	10/1/2015	TO-15
1,1,1-Tricloroethane	ND	10	ppbV	10/1/2015	TO-15
Cyclohexane	ND	10	ppbV	10/1/2015	TO-15
Carbon Tetrachloride	ND	10	ppbV	10/1/2015	TO-15
Ethyl Acetate	ND	10	ppbV	10/1/2015	TO-15
Benzene	ND	10	ppbV	10/1/2015	TO-15
1,2-Dichloroethane	ND	10	ppbV	10/1/2015	TO-15

ProVera
Analytical Laboratories, Inc.

E2C Remediation	Project:	Lake Tahoe-Laundry Works	Report Date:	10/7/2015
1020 Winding Creek Rd., Suite 110		VP Well Vapor Samples	Analysis Type:	**EPA Method TO-15**
Roseville, CA 95678	Project Mgr.	PHIL GOALWIN		

LAB ID: 15091402-01 Sample ID: **VP-1** Date Sampled: 9/11/2015

Analyte	Result	Reporting Limit	Units	Analysis Date	Notes
n-Heptane	ND	10	ppbV	10/1/2015	TO-15
Trichloroethylene	ND	0.10	ppbV	10/6/2015	TO-15
1,2-Dichloropropane	ND	10	ppbV	10/1/2015	TO-15
1,4 Dioxane	ND	10	ppbV	10/1/2015	TO-15
Bromodichloromethane	ND	10	ppbV	10/1/2015	TO-15
cis-1,3 Dichloropropene	ND	10	ppbV	10/1/2015	TO-15
MIBK (Methyl Isobutyl Ketone)	ND	10	ppbV	10/1/2015	TO-15
Toluene	ND	10	ppbV	10/1/2015	TO-15
trans-1,3 Dichloropropene	ND	10	ppbV	10/1/2015	TO-15
1,1,2-Trichloroethane	ND	10	ppbV	10/1/2015	TO-15
MBK	ND	10	ppbV	10/1/2015	TO-15
Tetrachloroethylene	5.3	0.10	ppbV	10/6/2015	TO-15
Dibromochloromethane	ND	10	ppbV	10/1/2015	TO-15
1,2-Dibromoethane (1,2 EDB)	ND	10	ppbV	10/1/2015	TO-15
Chlorobenzene	ND	10	ppbV	10/1/2015	TO-15
Ethylbenzene	ND	10	ppbV	10/1/2015	TO-15
m,p-Xylene	ND	10	ppbV	10/1/2015	TO-15
o-Xylene	ND	10	ppbV	10/1/2015	TO-15
Styrene	ND	10	ppbV	10/1/2015	TO-15
Bromoform	ND	10	ppbV	10/1/2015	TO-15
1,1,2,2-Tetrachloroethane	ND	10	ppbV	10/1/2015	TO-15
4-Ethyltoluene	ND	10	ppbV	10/1/2015	TO-15
1,3,5-Trimethylbenzene	ND	10	ppbV	10/1/2015	TO-15
1,2,4-Trimethylbenzene	ND	10	ppbV	10/1/2015	TO-15
1,3-Dichlorobenzene	ND	10	ppbV	10/1/2015	TO-15
1,4-Dichlorobenzene	ND	10	ppbV	10/1/2015	TO-15
Benzyl chloride	ND	10	ppbV	10/1/2015	TO-15
1,2-Dichlorobenzene	ND	10	ppbV	10/1/2015	TO-15
1,2,4-Trichlorobenzene	ND	10	ppbV	10/1/2015	TO-15
Hexachloro-1,3-butadiene	ND	10	ppbV	10/1/2015	TO-15
Naphthalene	ND	10	ppbV	10/1/2015	TO-15

Doug Selby

Senior Analytical Chemist: Doug Selby

ProVera
Analytical Laboratories, Inc.

E2C Remediation	Project:	Lake Tahoe-Laundry Works	Report Date:	10/7/2015
1020 Winding Creek Rd., Suite 110		VP Well Vapor Samples	Analysis Type:	**EPA Method TO-15**
Roseville, CA 95678	Project Mgr.	PHIL GOALWIN		

LAB ID: 15091402-02 Sample ID: **VP-2** Date Sampled: 9/11/2015

Analyte	Result	Reporting Limit	Units	Analysis Date	Notes
Propylene	ND	10	ppbV	10/2/2015	TO-15
Dichlorodifluoromethane (Freon 12)	ND	10	ppbV	10/2/2015	TO-15
1,2-Dichlorotetrafluoroethane(F-114)	ND	10	ppbV	10/2/2015	TO-15
Chloromethane	ND	10	ppbV	10/2/2015	TO-15
Vinyl Cloride	ND	10	ppbV	10/2/2015	TO-15
1,3 Butadiene	ND	10	ppbV	10/2/2015	TO-15
Bromomethane	ND	10	ppbV	10/2/2015	TO-15
Chloroethane	ND	10	ppbV	10/2/2015	TO-15
Trichlorofluoromethane (F 11)	ND	10	ppbV	10/2/2015	TO-15
Isopropyl alcohol	ND	10	ppbV	10/2/2015	TO-15
Freon 113	ND	10	ppbV	10/2/2015	TO-15
1,1 Dichloroethene	ND	10	ppbV	10/2/2015	TO-15
Acetone	ND	10	ppbV	10/2/2015	TO-15
Carbon Disulfide	ND	10	ppbV	10/2/2015	TO-15
Methylene Chloride	ND	10	ppbV	10/2/2015	TO-15
MTBE	ND	10	ppbV	10/2/2015	TO-15
trans-1,2 Dicloroethene	ND	10	ppbV	10/2/2015	TO-15
n-Hexane	ND	10	ppbV	10/2/2015	TO-15
Vinyl acetate	ND	10	ppbV	10/2/2015	TO-15
1,1-Dichloroethane	ND	10	ppbV	10/2/2015	TO-15
Methyl Ethyl Ketone	ND	10	ppbV	10/2/2015	TO-15
cis-1,2 Dichloroethene	20	10	ppbV	10/2/2015	TO-15
Tetrahydrofuran	ND	10	ppbV	10/2/2015	TO-15
Chloroform	ND	10	ppbV	10/2/2015	TO-15
1,1,1-Tricloroethane	ND	10	ppbV	10/2/2015	TO-15
Cyclohexane	ND	10	ppbV	10/2/2015	TO-15
Carbon Tetrachloride	ND	10	ppbV	10/2/2015	TO-15
Ethyl Acetate	ND	10	ppbV	10/2/2015	TO-15
Benzene	ND	10	ppbV	10/2/2015	TO-15
1,2-Dichloroethane	ND	10	ppbV	10/2/2015	TO-15

E2C Remediation	Project:	Lake Tahoe-Laundry Works	Report Date:	10/7/2015
1020 Winding Creek Rd., Suite 110		VP Well Vapor Samples	Analysis Type:	**EPA Method TO-15**
Roseville, CA 95678	Project Mgr.	PHIL GOALWIN		

LAB ID: 15091402-02 Sample ID: **VP-2** Date Sampled: 9/11/2015

Analyte	Result	Reporting Limit	Units	Analysis Date	Notes
n-Heptane	ND	10	ppbV	10/2/2015	TO-15
Trichloroethylene	93	10	ppbV	10/2/2015	TO-15
1,2-Dichloropropane	ND	10	ppbV	10/2/2015	TO-15
1,4 Dioxane	ND	10	ppbV	10/2/2015	TO-15
Bromodichloromethane	ND	10	ppbV	10/2/2015	TO-15
cis-1,3 Dichloropropene	ND	10	ppbV	10/2/2015	TO-15
MIBK (Methyl Isobutyl Ketone)	ND	10	ppbV	10/2/2015	TO-15
Toluene	ND	10	ppbV	10/2/2015	TO-15
trans-1,3 Dichloropropene	ND	10	ppbV	10/2/2015	TO-15
1,1,2-Trichloroethane	ND	10	ppbV	10/2/2015	TO-15
MBK	ND	10	ppbV	10/2/2015	TO-15
Tetrachloroethylene	2000	10	ppbV	10/2/2015	TO-15
Dibromochloromethane	ND	10	ppbV	10/2/2015	TO-15
1,2-Dibromoethane (1,2 EDB)	ND	10	ppbV	10/2/2015	TO-15
Chlorobenzene	ND	10	ppbV	10/2/2015	TO-15
Ethylbenzene	ND	10	ppbV	10/2/2015	TO-15
m,p-Xylene	ND	10	ppbV	10/2/2015	TO-15
o-Xylene	ND	10	ppbV	10/2/2015	TO-15
Styrene	ND	10	ppbV	10/2/2015	TO-15
Bromoform	ND	10	ppbV	10/2/2015	TO-15
1,1,2,2-Tetrachloroethane	ND	10	ppbV	10/2/2015	TO-15
4-Ethyltoluene	ND	10	ppbV	10/2/2015	TO-15
1,3,5-Trimethylbenzene	ND	10	ppbV	10/2/2015	TO-15
1,2,4-Trimethylbenzene	ND	10	ppbV	10/2/2015	TO-15
1,3-Dichlorobenzene	ND	10	ppbV	10/2/2015	TO-15
1,4-Dichlorobenzene	ND	10	ppbV	10/2/2015	TO-15
Benzyl chloride	ND	10	ppbV	10/2/2015	TO-15
1,2-Dichlorobenzene	ND	10	ppbV	10/2/2015	TO-15
1,2,4-Trichlorobenzene	ND	10	ppbV	10/2/2015	TO-15
Hexachloro-1,3-butadiene	ND	10	ppbV	10/2/2015	TO-15
Naphthalene	ND	30	ppbV	10/2/2015	TO-15

Doug Selby

Senior Analytical Chemist: Doug Selby

E2C Remediation 1020 Winding Creek Rd., Suite 110 Roseville, CA 95678	Project: Project Mgr.	Lake Tahoe-Laundry Works VP Well Vapor Samples PHIL GOALWIN	Report Date: 10/7/2015 Analysis Type: **EPA Method TO-15**

LAB ID: 15091402-03 Sample ID: **VP-3** Date Sampled: 9/11/2015

Analyte	Result	Reporting Limit	Units	Analysis Date	Notes
Propylene	ND	10	ppbV	10/1/2015	TO-15
Dichlorodifluoromethane (Freon 12)	ND	10	ppbV	10/1/2015	TO-15
1,2-Dichlorotetrafluoroethane(F-114)	ND	10	ppbV	10/1/2015	TO-15
Chloromethane	ND	10	ppbV	10/1/2015	TO-15
Vinyl Cloride	ND	10	ppbV	10/1/2015	TO-15
1,3 Butadiene	ND	10	ppbV	10/1/2015	TO-15
Bromomethane	ND	10	ppbV	10/1/2015	TO-15
Chloroethane	ND	10	ppbV	10/1/2015	TO-15
Trichlorofluoromethane (F 11)	ND	10	ppbV	10/1/2015	TO-15
Isopropyl alcohol	ND	10	ppbV	10/1/2015	TO-15
Freon 113	ND	10	ppbV	10/1/2015	TO-15
1,1 Dichloroethene	ND	10	ppbV	10/1/2015	TO-15
Acetone	ND	10	ppbV	10/1/2015	TO-15
Carbon Disulfide	ND	10	ppbV	10/1/2015	TO-15
Methylene Chloride	ND	10	ppbV	10/1/2015	TO-15
MTBE	ND	10	ppbV	10/1/2015	TO-15
trans-1,2 Dicloroethene	ND	10	ppbV	10/1/2015	TO-15
n-Hexane	ND	10	ppbV	10/1/2015	TO-15
Vinyl acetate	ND	10	ppbV	10/1/2015	TO-15
1,1-Dichloroethane	ND	10	ppbV	10/1/2015	TO-15
Methyl Ethyl Ketone	ND	10	ppbV	10/1/2015	TO-15
cis-1,2 Dichloroethene	ND	10	ppbV	10/1/2015	TO-15
Tetrahydrofuran	ND	10	ppbV	10/1/2015	TO-15
Chloroform	ND	10	ppbV	10/1/2015	TO-15
1,1,1-Tricloroethane	ND	10	ppbV	10/1/2015	TO-15
Cyclohexane	ND	10	ppbV	10/1/2015	TO-15
Carbon Tetrachloride	ND	10	ppbV	10/1/2015	TO-15
Ethyl Acetate	ND	10	ppbV	10/1/2015	TO-15
Benzene	ND	10	ppbV	10/1/2015	TO-15
1,2-Dichloroethane	ND	10	ppbV	10/1/2015	TO-15

ProVera
Analytical Laboratories, Inc.

E2C Remediation	Project:	Lake Tahoe-Laundry Works	Report Date:	10/7/2015
1020 Winding Creek Rd., Suite 110		VP Well Vapor Samples	Analysis Type:	**EPA Method TO-15**
Roseville, CA 95678	Project Mgr.	PHIL GOALWIN		

LAB ID: 15091402-03 Sample ID: **VP-3** Date Sampled: 9/11/2015

Analyte	Result	Reporting Limit	Units	Analysis Date	Notes
n-Heptane	ND	10	ppbV	10/1/2015	TO-15
Trichloroethylene	0.42	0.10	ppbV	10/6/2015	TO-15
1,2-Dichloropropane	ND	10	ppbV	10/1/2015	TO-15
1,4 Dioxane	ND	10	ppbV	10/1/2015	TO-15
Bromodichloromethane	ND	10	ppbV	10/1/2015	TO-15
cis-1,3 Dichloropropene	ND	10	ppbV	10/1/2015	TO-15
MIBK (Methyl Isobutyl Ketone)	ND	10	ppbV	10/1/2015	TO-15
Toluene	ND	10	ppbV	10/1/2015	TO-15
trans-1,3 Dichloropropene	ND	10	ppbV	10/1/2015	TO-15
1,1,2-Trichloroethane	ND	10	ppbV	10/1/2015	TO-15
MBK	ND	10	ppbV	10/1/2015	TO-15
Tetrachloroethylene	160	10	ppbV	10/1/2015	TO-15
Dibromochloromethane	ND	10	ppbV	10/1/2015	TO-15
1,2-Dibromoethane (1,2 EDB)	ND	10	ppbV	10/1/2015	TO-15
Chlorobenzene	ND	10	ppbV	10/1/2015	TO-15
Ethylbenzene	ND	10	ppbV	10/1/2015	TO-15
m,p-Xylene	ND	10	ppbV	10/1/2015	TO-15
o-Xylene	ND	10	ppbV	10/1/2015	TO-15
Styrene	ND	10	ppbV	10/1/2015	TO-15
Bromoform	ND	10	ppbV	10/1/2015	TO-15
1,1,2,2-Tetrachloroethane	ND	10	ppbV	10/1/2015	TO-15
4-Ethyltoluene	ND	10	ppbV	10/1/2015	TO-15
1,3,5-Trimethylbenzene	ND	10	ppbV	10/1/2015	TO-15
1,2,4-Trimethylbenzene	ND	10	ppbV	10/1/2015	TO-15
1,3-Dichlorobenzene	ND	10	ppbV	10/1/2015	TO-15
1,4-Dichlorobenzene	ND	10	ppbV	10/1/2015	TO-15
Benzyl chloride	ND	10	ppbV	10/1/2015	TO-15
1,2-Dichlorobenzene	ND	10	ppbV	10/1/2015	TO-15
1,2,4-Trichlorobenzene	ND	10	ppbV	10/1/2015	TO-15
Hexachloro-1,3-butadiene	ND	10	ppbV	10/1/2015	TO-15
Naphthalene	ND	10	ppbV	10/1/2015	TO-15

Doug Selby

Senior Analytical Chemist: Doug Selby