Prepared for

CG Roxane, LLC
1210 South Highway 395
Olancha, California 93549

REPORT OF WASTE DISCHARGE

Olancha Spring Water Bottling Facility
1210 South U.S. Highway 395
Olancha, California

Prepared by

Geosyntec consultants

engineers | scientists | innovators

924 Anacapa Street, Suite 4A
Santa Barbara, California 93105

21 October 2015

REPORT OF WASTE DISCHARGE

Olancha Spring Water Bottling Facility

1210 South U.S. Highway 395
Olancha, California

Prepared for

Crystal Geyser Roxane

21 October 2015

Ryan Smith, P.G., C.Hg.
Geosyntec Consultants
Project Geologist

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

APPENDICES

1.0 INTRODUCTION

Geosyntec Consultants, Inc. (Geosyntec), on behalf of Crystal Geyser Roxane (CGR), is pleased to present the following Report of Waste Discharge (ROWD) for the CGR Spring Water Bottling Facility (Site) located at 1210 South U.S. Highway 395, near Olancha, California.

The ROWD was prepared to address the requirements of the Lahontan Regional Water Quality Control Board (RWQCB) Notice of Violation (NOV) memo dated April 30, 2015. The NOV was issued for unauthorized discharge of industrial waste water at the Site. This ROWD meets the requirements in Water Code sections 13160 and 13260, which requires a complete ROWD for discharges of waste that could affect the quality of the waters of the state. This ROWD fully describes and characterizes the discharge as required in the April 30, 2015 letter and provides the following information and items to meet the requirements:

- Environmental documents, technical reports, plans, diagrams, maps, mitigation and monitoring proposals, and other documents that characterize the discharge and its impacts upon receiving waters (surface water and groundwater).

- State Water Resources Control Board (State Water Board) Form 200 - Application for Report of Waste Discharge.

- Complete characterization of all waste streams generated at the Facility, including discharge rates/volumes.

- A narrative description of each facility process that generates a waste stream. The narrative must also identify all products added during each facility process and the purpose of each product, as it relates to the facility process being described.

- System (flow) diagrams illustrating facility processes that generate waste streams. The system diagrams must identify products added during facility processes, and where in the process they are added.

- Scaled plans illustrating the Facility's waste stream collection, waste treatment (e.g., pH adjustment), storage, and conveyance systems including all waste treatment locations. The scaled plans identify system materials and include plan details/typicals (plan and cross-sectional views) of collection (e.g., drains, floor trenches), waste treatment, storage, and conveyance systems.

- Scaled plans (plan and cross-sectional views) illustrating all Facility waste disposal facilities.

- A description and analysis (constituents) of background groundwater quality (up-gradient of the Facility) with the supporting data and information. The analysis identifies the monitoring and/or supply wells from which data was obtained for the analysis, the well construction details for the wells used in the analysis, and groundwater elevation data. A scaled site map showing the locations of the wells used in the analysis is provided.

- A description and analysis of the Facility's impacts upon groundwater quality with the supporting data and information. The analysis identifies the monitoring and/or supply wells from which data was obtained for the analysis, the well construction details for the wells used in the analysis, and groundwater elevation data. In addition, a scaled site map showing the locations of the wells used in the analysis is provided.

Additionally, CGR is concurrently submitting an Industrial General Stormwater Permit to bring the Site into compliance with the RWQCB stormwater permitting regulations. CGR intends to co-mingle stormwater runoff with the industrial wastewater discharges covered in this ROWD. The proposed discharge location for stormwater from the impervious areas of the Site will be at the unlined infiltration pond that currently receives industrial waste water. Additional description of the proposed stormwater discharge and permitting program will be provided under separate stormwater permit application.

2.0 GENERAL SITE INFORMATION

The CGR Site is an irregularly-shaped property that consists of approximately 170 acres adjacent to Highway 395 and located approximately 3 miles north of Olancha, California (**Figure 1**). Regionally, the Site is located in the southern portion of the Owens Valley. Owens Lake (dry lake bed) is located approximately ½ mile east of the Site, and the base of the Sierra Nevada Mountains is located 1 mile west of the Site. Highway 395, which runs north-south, crosses the western portion of the Site (**Figure 1**). The Los Angeles Aqueduct is located approximately ½-mile west and upgradient of the Site.

The CGR Site is an active spring water bottling plant. The facility consists of two large bottling-production and warehouse buildings, CGR North and CGR South, that contains a total of six main bottling production lines. On-Site groundwater production wells are the source of spring water for bottling, and are used for domestic and industrial purposes in the plant.

Waste water associated with bottle filling and sanitation is generated during spring water bottling activities and has been discharged to land in two areas. CGR North waste water is discharged to East Pond (EP) and CGR South waste water is discharged to Fire Pond (FP). The EP is an unlined infiltration pond, while the FP is a concrete lined pond which discharges to land via an overflow outlet pipe. Additional discussion of the waste water processes and discharge is provided in Section 3.

A third pond, the Arsenic Pond (AP) was previously used for waste water generated from backwashing of in-line arsenic filters. However the AP has been removed and the waste water generated from this process has been modified by CGR so that it is completely contained in a closed loop. The waste water from this process is reportedly removed and disposed of off-Site (see Section 3 for additional details). Therefore waste water from this process is reportedly no longer discharged to any surface impoundment or to land surface.

3.0 WASTE STREAMS, WASTE WATER PROCESS, AND DISCHARGE DESCRIPTION

The following section describes the waste water streams, waste water processes and waste water discharge locations for each of these processes[1]. A detailed description of these waste water streams and processes that generate the waste water was also provided in the *Facility Waste Generation and Discharge Systems Report*, dated October 16, 2014 (CGR, 2014). This report was produced by CGR in general accordance with the RWQCB's investigation requirements for the Site. A summary of the daily waste water flow rate estimates were included in this report and are included as **Appendix A**. Additionally, process flow diagrams are provided in **Appendix B**.

The Facility is comprised of two distinct bottling-production and warehousing areas (i.e., "Olancha North" and "Olancha South") which run in north-south direction along Highway 395. Olancha North and Olancha South each contain three Production Water lines (i.e., #3, #5, #6 and #1, #2, #4, respectively). Olancha North and Olancha South also utilize separate water supply systems for its domestic supply and industrial supply that are both used apart from the Production Water.

Olancha North and Olancha South each generate discharges from both a domestic / industrial water circuit and a production water circuit. These separate circuits are described in more detail below. This section contains a narrative of the processes that generate wastewater, concentrations and volumes of waste streams, and destination of those waste streams.

CGR installed a sand filter process within the Facility to remove naturally occurring arsenic within the groundwater. As more particularly described below, the various sand filter units are periodically (approximately every three to four months) regenerated through an arsenic desorption process and the wastewater was previously discharged to a lined surface impoundment ("Arsenic Pond"). As a result the RWCQB and Department of Toxic Substances Control (DTSC) have initiated investigations into CGR's discharge practices. CGR has ceased further discharges to the Arsenic Pond. Instead, hazardous waste water from the regeneration process is hauled off-site to waste facilities under appropriate waste manifest documentation.

The Site handles and stores various solutions and chemicals which are used in its disinfection, sanitization and filter regeneration processes, including those deemed "hazardous materials" such as caustic soda, sulfuric acid, and phosphoric acid. The Site is authorized and permitted as a Certified Unified Program Agency / Hazardous Materials (CUPA) Facility by the Inyo County Environmental Health Services. As required by state

[1] Section 3 is based on the *Facility Waste Generation and Discharge Systems Report*, dated October 16, 2014, generated by CGR. All discussion of waste water discharge processes are reported based on information supplied by CGR.

law, the Facility routinely updates and submits a Hazardous Materials Business Plan and Hazardous Materials Inventory to remain CUPA compliant.

3.1 Domestic / Industrial Water Circuit

There are separate domestic water circuits for Olancha North and Olancha South; however, the treatment process is the same for both circuit locations. Both Olancha North and Olancha South use water from two groundwater wells "CGR-3", and "CGR-4", respectively. Notably, the naturally occurring arsenic concentrations in groundwater levels from CGR-3 and CGR-4 are 30 micrograms per liter (µg/l) and 15 µg/l, respectively, which exceed the maximum contaminant level (MCL) for arsenic.

For both Olancha North and Olancha South, all water is withdrawn from the wells using a stainless steel, submersible pump and delivered to the Facility through a high-density polyethylene (HDPE) pipe. All water is then filtered through 5 Micron Polyester Filter Bags (Bag Filter) before being utilized for either (1) onsite domestic water use (i.e., restrooms, break rooms, laboratory sink, hose bibs, or other similar uses) or (2) the industrial cooling towers. Bag Filters are used to remove larger particles (such as silt, sediment, and sand) from the spring water prior to use. The Bag Filter system is equipped with pressure gauges, purges, valves and a sample port to facilitate cleaning, purging and monitoring. Prior to use, the Bag Filters are rinsed using hoses with spring water from the domestic wells and the rinseate is collected through a floor drainage system and discharged to the EP by a pipeline outlet. The bag filters are periodically replaced. The replaced bag filter is removed and disposed of as solid waste in the trash.

3.2 Domestic Water Use

Domestic water use at the Facility consists of the following:

- Restroom facilities
- Drinking water fountains
- Lab Facilities
- Hose Bibs

After the Bag Filter process, the domestic water for both Olancha North and Olancha South is filtered for arsenic through the use of independent arsenic removal units[2]. This process has been approved by the Inyo County Health and Human Services, Public Health Division. These units utilize a special media that removes arsenic from the water. Notably, these units are entirely self-contained and do not generate a waste stream as the

[2] AdEdge Technologies – Model 33-3072-CO-2-315.

arsenic remains attached to the media and contained in the units until the media will be periodically disposed of off-Site. The specialized media has not required disposal to date at the facility. It is anticipated that at some date in the future the media may require disposal. At such time, the material will be appropriately handled pursuant to both state and federal law.

Following arsenic removal, the treated water for domestic use is then piped to a plastic tank where it is disinfected with chlorine solution. The domestic water is tested daily for chlorine at points-of-use (i.e., labs). The chlorine levels are maintained within a value range of 0.2 - 0.8 parts per million (ppm).

Domestic sewage wastewater is discharged to underground septic tanks through a system of pipes (3 septic units for Olancha South and 1 septic unit for Olancha North). The septic tanks are regularly pumped by a licensed third-party agent[3]. Notably, the septic units do not generate any waste outside of the system itself as they remain entirely self-contained (i.e. they are not connected to leachfields or other disposal outlets).

3.3 Industrial Cooling Towers.

The industrial cooling towers circulate water in order to remove process heat from various bottling production machinery. There are twelve total cooling tower units in the Facility (7 units for Olancha South and 5 units for Olancha North); each utilizing approximately 2,000 gallons per day (GPD) when operational. After the bag filter process, cooling water is “softened” by an ion exchange resin that replaces calcium ion with sodium ion within the spring water. The softeners are associated with each cooling unit. Depending on its location, the unit will discharge wastewater (i.e., softened spring water) through a continuous draining process to either a drainage system toward the EP or directly to the ground near the cooling towers.

The ion exchange resin is regularly and automatically regenerated with sodium chloride. The regeneration process utilizes a sea salt solution that is passed through the ion exchange resin to remove the retained calcium.

3.4 Production Water Circuits

The production water (used in bottling) for Olancha South is sourced from groundwater well “CGR-2”. Production water for Olancha North is sourced from a blending of two groundwater wells: “CGR-2” and “CGR-7”. Notably, the naturally occurring groundwater concentrations for arsenic in CGR-2 and CGR-7 are 10 µg/l and 23 µg/l, respectively.

[3] Preferred Septic and Disposal, Inc.

As with the domestic/industrial water circuits, production water is withdrawn from the same wells by stainless steel, submersible pumps and delivered to the respective Facility areas through either HDPE or stainless steel pipelines. At the Facility (North and South), the water is filtered through the same Bag Filter process previously described above. The water is then sent to stainless steel storage tanks for disinfection by ozonation. Olancha South utilizes two 8,000-gallons storage tanks in parallel. Olancha North utilizes one 8,000-gallon storage tank. Water in those tanks is treated with ozone gas. The ozone concentration is analyzed and regulated by an automated system, which is regularly checked by onsite quality control staff. There are no chemicals used for cleaning or sanitation of the water within the storage tanks. Therefore, when the storage tanks are routinely purged between production periods4 the discharge is only ozonated spring water, which contains the same compositions and concentrations as when withdrawn.. The wastewater generated through purging of the tanks is collected through a floor drain and associated underground pipeline system, and discharged to the EP by a pipeline outlet.

As discussed above, depending on the location in the Site, the ozonated spring water from the storage tanks will pass through one of three Manganese Sand Filters (Sand Filter)[5]. One Sand Filter (containing two vessels in parallel) is located in Olancha South serving production lines #1, #2, and #4. Two Sand Filters are located in Olancha North. One (containing two vessels in parallel) services lines #3 and #5, and the other (containing one vessel) services line #6. Each Sand Filter is used to remove certain threshold levels of natural occurring arsenic so that the production water meets Federal and State regulatory standards for drinking water. Each Sand Filter is used to remove certain threshold levels of natural occurring arsenic so that the production water meets Federal and State regulatory standards for drinking water.

Following arsenic removal, the production water is then delivered to a 0.1 Micron IMECA tangential microfiltration system made from ceramic composites (IMECA). There are two IMECA units in Olancha North and one IMECA unit in Olancha South. The purpose of these IMECA units is to serve as a fail-safe filter system in the unlikely event that some particulates are discharged through the Sand Filter. Approximately every 30 minutes during a production cycle, the IMECAs are purged using ozonated water in order to remove any particulate matter from the membrane. This wastewater is collected through a floor drainage system and discharged to the EP by a pipeline outlet.

A routine cleaning of each IMECA occurs approximately three times per year. Each unit has a dedicated Clean-In-Place (CIP) system, consisting of three separate tanks: (1) a tank containing approximately 185 gallons of 2% phosphoric acid solution (Acid Solution), (2) a tank containing approximately 185 gallons of 3% sodium hydroxide solution ("Alkaline Solution"), and (3) a water tank sourced from the storage tank. During a given cleaning

---

[4] Purging is done in order to avoid water stagnation within the storage tank.
[5] Natural manganese sand, NSF approved.

cycle, the first phase of cleaning involves circulation of the Alkaline Solution into the IMECA system and back to the CIP tank. This is a fully automated closed loop system. Next, a water rinse is delivered from the CIP water tank and used to flush and remove organic deposits (i.e., colloids), if any, from the unit (approximately 800 gallons of water is used to rinse). This rinse water is discharged to the EP through a floor drain and associated pipeline system with an outlet[6]. The second phase of cleaning involves application of the Acidic Solution into to the IMECA unit and back to the CIP tank. This is a fully automated closed loop system. Next, a water rinse is again delivered from the CIP water tank to the unit in order to remove mineral deposits, such as iron, from the unit (approximately 800 gallons of water is used to rinse). This rinse water is discharged to the EP through the same floor drainage system and pipeline outlet. A total of 1,600 gallons of ozonated spring water is used to rinse the IMECA during this stage.

The third phase (sanitation) involves three cycles of ozonated water rinse from the storage tank only. This rinse water is discharged to the East Pond though the same floor drainage system and pipeline outlet.

The fourth phase (conditioning) involves three cycles of water from the CIP water tank. This rinse water is discharged to the EP though the same process as above.

After the cleaning has been completed, the CIP tanks for each IMECA unit are neutralized and purged according to the following process. All Acid Solution within the tank is individually purged into parallel tanks used for neutralization (or neutralized in situ). In the case of the Acid Solution, the Alkaline Solution is added for neutralization. When the solution has reached a pH value of between 6 and 9, the solution is discharged to the EP through a floor drainage system and pipeline outlet. In the same fashion, the Alkaline Solution tank is individually purged into parallel tanks used for neutralization (or neutralized in situ). In the case of the Alkaline Solution, the Acid Solution is added for neutralization. When the solution has reached a pH value of between 6 and 9, the solution is discharged to the EP through a floor drainage system and pipeline outlet. The water tank is simply purged and allowed to discharge to the EP.

The production water that has passed through the IMECA units is then delivered to a second set of stainless steel storage tanks prior to bottling. These tanks consist of an 8,000-gallon tank in Olancha North and a 2,500-gallon tank for Olancha South that source the Facility’s six bottling fillers. The production water in these storage tanks is not treated in any way. Furthermore, the filler piping circuit (outside of the tanks) does not require internal cleaning or sanitizing.

Depending on the location of an individual production line within the Site building, the production water is then delivered by an internal network of pipelines to two distinct types of bottle fillers: gravimetric or volumetric. Lines #2, #3, #4 and #5 use volumetric fillers that contain a water storage tank within the machine unit. At the end of a production cycle, the production water (i.e., spring water only) within these storage tanks is purged and discharged to the EP (except for line #2) through a floor drainage system and the same pipeline outlet[7]. The production water (i.e., spring water only) in the filler machine for line #2 is collected in a floor drain system and discharged to the FP. Notably, this filler production water, including draining of the raw water storage tank, (together, spring water only) is discharged to the FP. The Filler from line #2 is the only source of wastewater to the FP. The FP contains a vertical screened pipe located within the pond itself to allow for overflow. When the water occasionally reaches a certain level within the pond (the level of water in the pond is naturally regulated by evaporation), the pipe captures and discharges water to a small portion of land owned by the Company located directly south of the FP[8].

A routine cleaning and sanitization of certain production equipment surfaces, such as the fillers (i.e., food contact surfaces), is required under the Food and Drug Administration's ("FDA"), Good Manufacturing Procedures ("GMP"). The following two food-grade sanitizing foams are used: Phosphoric Acid (CD 470) and Quaternary Ammonium (Quorum clear V). The sanitizing foams are applied onto requisite surfaces with a spray application and rinsed-off with various hose bibs using domestic water. The rinse water is discharged to the EP (except from filler 2 which goes to the FP) through a floor drainage system and pipeline outlet.

Furthermore, a potassium hydroxide solution (Kleensall) is infrequently used to sanitize Facility surfaces, such as floors. The solution is mainly applied using towels and rags, which are collected and disposed of in solid wastebaskets. Small food grade machinery parts, such as filler heads, are occasionally soaked in a Peracetic Acid Solution (Vortexx).

3.5 Miscellaneous Solutions.

In addition to the above-mentioned items, there are various chemicals used within the Facility for its ongoing operations, such as: oil for engines and machines which are collected and deposited into plastic storage containers and hauled off-site by a third-party company[9]; solutions to clean manufacturing parts in non-drained injection-blow molding production areas which are collected and hauled off-site[10]; hand-sanitizers[11] for personnel which are rinsed-off in the domestic circuit and discharged to the septic tank or dissipate through evaporation; hand-care solution for personnel which are rinsed-off in the domestic circuit and discharged to the septic tank; ink for printing manufacturing codes

[7] Purging is done in order to avoid water stagnation within the tank.
[8] The overflow from the FP was previously discharged to a cattle grazing field east of Olancha South, but has been redirected due to concerns raised by LRWQB.
[9] Crane's Waste Oil Disposal Company
[10] Safety Clean
[11] Eco-care

on bottles, trays and overwraps are collected and deposited into plastic storage containers and hauled off-site[12]; isopropyl alcohol used on rags to clean surfaces which are collected and disposed of in solid waste baskets; and DryEXX conveyer lubricant sprayed on conveyer belts.

None of the above mentioned chemicals are discharged to the ponds or ground at the site.

[12] Crane's Waste Oil Disposal Company

4.0 SITE GEOLOGY AND HYDROGEOLOGY

4.1 Regional Geology

The Site is located in the southern portion of the Owens Valley which has a length of 150 miles and width of generally less than 8 miles. The Owens Valley is the westernmost valley of the Basin Range Province and is formed by the Sierra Nevada Mountains to the west and the White/Inyo Mountains to the east. The Sierra Nevada Mountains are generally composed of Mesozoic age igneous rocks of granodiorite-granite composition whereas the White/Inyo Mountains, to the east, consist of Pre-Cambrian to Triassic sedimentary rock locally intruded with Mesozoic granitic rocks.

Structurally, the Owens Valley is a graben bounded by the Sierra Nevada Frontal fault and the Inyo Mountain Frontal fault. These faults are considered active and the offset on these faults is the cause of the dramatic relief in the Owens Valley area. The Site is located on the valley floor at an elevation of approximately 3,640 feet, while Olancha peak, to the west of the Site in the Sierra Nevada Mountains, stands at an elevation of over 12,000 feet. The Inyo Mountains east of the Site have an elevation greater than 8,000 feet.

4.2 Site Geohydrology

The California Department of Water Resources (DWR, 2003) shows the Site to be located in the southern portion of the Owens Valley Groundwater Basin. The groundwater basin has a surface area of 1,030 square miles and includes valleys in both Mono and Inyo County. The basin, as defined by the Department of Water Resources, is bounded to the south by the Coso Range, the Sierra Nevada to the west, the White/Inyo Mountains to the east, and the Benton Range to the north.

The most important water bearing formation in the vicinity of the Site is alluvium consisting of sands and gravels derived from erosion of the surrounding mountains. The upper zone of the alluvial aquifer, in which the westernmost Site production wells are installed, is unconfined. Deeper zones of water bearing alluvium beneath the Site are under semi-confined conditions. The sandy and gravelly alluvium is locally interbedded or interfingered with fine-grained lacustrine (lake) deposits. Fine-grained lacustrine deposits increase in occurrence and thickness to the east towards Owens Lake (GSI, 1983). The thickness of the alluvial and lacustrine sequence is thought to be several thousand feet thick and up to 6,000 feet or more in the middle of the Owens Lake (Pakiser et. al., 1964).

The primary source of groundwater recharge in the Owens Valley Groundwater basin is from percolation of stream flow from the Sierra Nevada range. In the case of the Site and the Cartago area, the main aquifer is thought to recharge primarily by flow in Olancha

Creek, Cartago Creek, and Walker Creek that have watersheds to the west of the Site in the Sierra Nevada Mountains. Stream flow in these creeks is derived from precipitation in the mountains and infiltrates through relatively permeable alluvium closer to the valley floor. There is also thought to be some recharge of the alluvium from underflow of groundwater in fractures in the mountain bedrock, although the volume of such recharge is not known. Recharge of direct precipitation into the alluvium may also contribute a relatively small component of recharge into the groundwater basin.

Groundwater in the shallow unconfined aquifer is the source for numerous springs and seeps that collectively form along a north-south trending fault (a part of the Sierra Nevada Frontal fault system). The north-south trending fault, known locally as the "Spring Line fault", intersects the property to the east of MW-02 and to the west of MW-03 (**Figure 3**). The fault is inferred to cause a "damming" effect and the subsequent rise of groundwater to the surface creates the large linear spring areas or spring seeps (Dames and Moore, 1991). Production wells that have been installed by CGR draw water from the shallow unconfined aquifer in hydraulic connection with the spring water. Wells used for spring water production are all located west of the spring line fault.

5.0 SUMMARY OF PREVIOUS GROUNDWATER INVESTIGATIONS

There are eight previous hydrogeological Site studies relating to the CGR spring water bottling operations as provided in chronological order below. Electronic copies of these reports (excepting the first listed report) were provided with the *Investigation Work Plan,* (Geosyntec, 2014) dated October 17, 2014.

- *Phase I – Water Resources Investigation, Crystal Geyser-Roxane, Bottling Facility*, Inyo County, California, February 19, 1990. Completed by Dames and Moore. Note: Report is referenced in subsequent reports, but a copy of the report is not available.

- *Phase II – Water Resources Investigation*, *Crystal Geyser-Roxane*, *Bottling Facility*, Inyo County, California, January 20, 1991. Completed by Dames and Moore.

- *Report – Water Supply Well CGR-2, Crystal Geyser Roxane,* Olancha, California, March 31, 1993. Completed by Dames and Moore.

- *Report – Water Supply Wells CGR-4, CGR-5 and CGR-6 Crystal Geyser-Roxane,* Olancha, California, April 21, 1995. Completed by Dames and Moore.

- *Test Well Installation and Hydrogeology Report*, Cabin Bar Ranch, Olancha, California. February 7, 2011. Completed by Geosyntec Consultants.

- *Phase 1 – Site Groundwater Investigation Report, Olancha Spring Water Bottling Facility*, Olancha, California, February 16, 2015. Completed by Geosyntec Consultants.

- *Phase 2 – Site Groundwater Investigation Report, Olancha Spring Water Bottling Facility*, Olancha, California, August 14, 2015. Completed by Geosyntec Consultants.

- *Third Quarter 2015 Groundwater Monitoring Report*, *Crystal Geyser Roxane Spring Water Bottling Facility*, Olancha, California, October 15, 2015. Completed by Geosyntec Consultants.

The majority of the hydrogeologic studies at the Site focused on the western portion of the property, where most of the production wells used for spring water bottling are located. As the subject of this ROWD is waste water discharge to the southern and eastern portions of the Site, information relevant to that area is provided below. A more detailed discussion of water quality is provided in Sections 6.0 and 7.0.

The 2015 Phase 1 investigation evaluated the groundwater and waste water quality in the areas around the current and former waste discharge ponds (EP, FP, and AP). During the investigation, a total of 10 groundwater grab samples were collected to gather screening level data in order to better evaluate groundwater quality conditions and identify appropriate locations for groundwater monitoring wells. In addition, production and sanitation waste water samples were collected during standard waste water discharge activities from both the northern and southern bottling plants, and from the waste discharge ponds to characterize the chemical composition of waste water generated.

Based on the screening level results of the Phase 1 investigation, the Phase 2 Site investigation was completed. This investigation included installation and sampling of nine groundwater monitoring wells in the shallow aquifer (**Figure 2**). Construction details and well gauging details for the wells are included in **Table 1**. The monitoring wells were installed within the upper shallow aquifer, with 15 foot well screens set between 5 and 25 feet below ground surface (ft bgs), with the exception of MW-01, which was installed with a screen interval between 18 and 33 ft bgs.

Groundwater samples have been collected from the Site monitoring wells in July and September 2015, and analyzed for a wide range of water quality constituents including:

- CAM 17 metals, (total and dissolved) using EPA Method 6010B and 7470A ;
- VOCs using EPA Method 8260B;
- Semi-Volatile Organic Compounds (SVOCs) using EPA Method 8270C;
- Methylene Blue Active Substances (MBAS) using SM Method 5540;
- General Minerals (sodium, calcium, magnesium, chloride, bicarbonate, and sulfate) using EPA Method 200.7, 300.0 and Standard Method (SM) 2320B;
- Total Dissolved Solids (TDS) using SM 2540C;
- Total phosphate and phosphorus using SM 4500;
- Total nitrogen, nitrate as nitrogen, ammonia, and Total Kjeldahl nitrogen using SM 4500;

Further discussion of the groundwater quality is described in Section 6.1, and a discussion of the waste water quality is discussed in Sections 6.2 and 6.3.

6.0 DESCRIPTION OF GROUNDWATER, WASTE WATER, AND POND WATER QUALITY

6.1 Upgradient Groundwater Quality

Groundwater wells MW-06 and MW-01 were installed during Phase 2 Site Investigations generally upgradient of the EP and FP waste discharge ponds respectively, therefore these wells can be used as a representation for background water quality upgradient of the proposed discharge locations. Well installation details are included in **Table 1** and a detailed summary of detected analytical results is included in **Tables 2 through 4** including the MCLs for drinking water. The results of laboratory analysis for MW-06 and MW-01 are summarized below.

The following is a summary of laboratory detections above the laboratory MRL in one or more of the groundwater samples from MW-06 in July and September 2015:

- Dissolved or total metals: arsenic, molybdenum, selenium, and zinc; and
- Inorganic and general mineral constituents: alkalinity, ammonia as nitrogen, calcium, chloride, magnesium, total nitrogen, total Kjeldahl nitrogen, phosphate, phosphorous, sodium, sulfate, and TDS.

Total and fecal coliform, VOCs, SVOCs, and MBAS were analyzed but not detected in the samples collected from MW-06.

Groundwater analytical results from samples collected from MW-06 generally indicate low detections of dissolved metals, total metals, TDS, and other inorganic and organic constituents that did not exceed established MCLs. The only constituent that has exceeded the MCL in MW-06 has been dissolved arsenic at concentrations ranging from 10.7 to 17.1 µg/l. The concentrations of dissolved arsenic are within the range of concentrations detected in the production wells.

The following is a summary of laboratory detections above the laboratory MRL in the groundwater samples from MW-01 in July and September 2015:

- Dissolved or total metals: arsenic, barium, molybdenum, and zinc;
- Inorganic and general mineral constituents: alkalinity, calcium, chloride, magnesium, nitrate and nitrite, total nitrogen, phosphate, phosphorous, sodium, sulfate, and TDS; and
- Total coliform.

Fecal coliform, VOCs, SVOCs, and MBAS were analyzed but not detected in the samples collected from MW-01.

Groundwater analytical results from samples collected from MW-01 generally indicate low detections of dissolved metals, total metals, TDS, and other inorganic and organic constituents that did not exceed established MCLs. The only constituent that has exceeded the MCL in MW-01 has been dissolved arsenic in July 2015 at a concentration of 13.6 µg/l. The concentrations of dissolved arsenic are within the range of concentrations detected in the production wells.

6.2 Groundwater Quality Downgradient of East Pond

Groundwater well MW-07 was installed downgradient of EP during Phase 2 Site Investigations. See **Table 1** for well installation details and **Tables 2 through 4** for a summary of analytical results.

The following is a summary of laboratory detections above the laboratory MRL in one or more of the groundwater samples from MW-07 in July and September 2015:

- Total and dissolved arsenic, total barium, total and dissolved copper, total and dissolved molybdenum, total nickel, total and dissolved vanadium, and total zinc;
- Inorganic and general mineral constituents: alkalinity, calcium, chloride, magnesium, total nitrogen, total Kjeldahl nitrogen, phosphate, phosphorous, sodium, sulfate, and TDS.
- Total coliform

VOCs, SVOCs, and MBAS were analyzed but not detected in the samples.

Groundwater analytical results from samples collected from MW-07 generally indicate low detections of dissolved metals, total metals, TDS, and other inorganic and organic constituents that did not exceed established MCLs. The only constituent that has exceeded the MCL in MW-07 has been dissolved arsenic in July 2015 at a concentration of 47.9 µg/l. The concentration of dissolved arsenic decreased to below the laboratory MRL in September 2015.

6.3 Groundwater Quality Downgradient of Fire Pond

Groundwater well MW-02 was installed cross and down-gradient of the FP discharge location. The following is a summary of laboratory detections above the laboratory MRL in one or more of the groundwater samples from MW-02 in July and September 2015:

- Dissolved and total arsenic, dissolved and total barium, and total zinc;

- Inorganic and general mineral constituents: alkalinity, ammonia nitrogen, calcium, chloride, magnesium, phosphate, phosphorous, sodium, sulfate, and TDS, and

- Total coliform

VOCs, SVOCs, and MBAS were analyzed but not detected in the samples.

Groundwater analytical results from samples collected from MW-02 generally indicate low detections of dissolved metals, total metals, TDS, and other inorganic and organic constituents that did not exceed established MCLs. The only constituent that has exceeded the MCL in MW-02 has been dissolved arsenic in July 2015 at a concentration of 23.3 µg/l. The concentration of dissolved and total arsenic decreased to below the laboratory MRL in September 2015.

6.4 North Bottling Plant Waste Water and East Pond Water Quality

The EP is an unlined pond used for discharge of the northern bottling plant waste water. During Phase 1 Site investigations samples were collected from the northern bottling plant waste water during production and sanitation, at the point of discharge into EP during production, and in EP standing water.

The waste water sample analytical results are summarized in **Tables 5 through 8**. These samples represent the expected quality of water discharged to the EP during waste water discharge.

The following is a summary of laboratory detections above the laboratory MRL in one or more of the waste water samples collected from the EP or FP:

- Total and dissolved antimony, total and dissolved arsenic, total and dissolved barium, total chromium, total and dissolved copper, total and dissolved molybdenum, dissolved vanadium, and total and dissolved zinc.

- Inorganic and general mineral constituents: Alkalinity (total), biochemical oxygen demand, calcium carbonate, calcium, chemical oxygen demand, chloride, magnesium, nitrate as nitrogen, total nitrogen, total Kjeldahl nitrogen, orthophosphate as phosphorous, total phosphorus, sodium, sulfate, surfactants, TDS, and total organic halides.

- VOCs and SVOCs: 2-butanone (MEK)

- Total coliform

Based on the analytical results from the EP waste water samples, the dissolved arsenic was the only constituent that exceeded the MCL of 10 µg/l. The dissolved arsenic concentrations in waste water produced during a sanitation cycle at the northern bottling plant and in the point of discharge to EP during production ranged from 12 to 18 µg/l. These arsenic results are within the range of arsenic detected in background groundwater concentrations, and therefore is not expected to degrade or impact groundwater quality in the proposed EP waste water discharge area.

6.5 South Bottling Plant Waste Water and Fire Pond Water Quality

The FP is a concrete lined pond used for discharge of the southern bottling plant waste water. An overflow drain pipe from the FP discharges to land surface and infiltrates approximately 100 feet to the south of the FP. During Phase 1 Site investigations, samples were collected from the southern bottling plant waste water during sanitation, in standing water in FP, and from the FP overflow. The waste water sample analytical results are summarized in **Tables 5 through 8** including MCLs for drinking water. These samples represent the expected quality of water discharged to the FP during waste water discharge.

The following is a summary of laboratory detections above the laboratory MRL in one or more of the waste water and FP samples:

- Total antimony, total and dissolved arsenic, barium, total chromium, total and dissolved copper, total vanadium, and total zinc.
- Inorganic and general mineral constituents: Alkalinity (total), calcium carbonate, calcium, chemical oxygen demand, chloride, magnesium, nitrate as nitrogen, total nitrogen, total Kjeldahl nitrogen, orthophosphate as phosphorous, total phosphorus, sodium, sulfate, surfactants, TDS, and total organic halides.
- 2-butanone (MEK)
- Total coliform

The waste water samples collected from the FP discharge stream and from discharge overflow did not exceed any MCLs. Therefore the waste water discharge is not expected to degrade or impact groundwater quality in the proposed EP waste water discharge area.

7.0 POTENTIAL IMPACTS TO GROUNDWATER QUALITY

In general, the results of waste water samples collected from the northern bottling plant during normal production, during a sanitation cycle, waste water samples collected at the point of discharge to EP, and in standing water at EP indicate that the waste water discharged to EP is generally similar in composition to the groundwater upgradient of the EP at MW-06. Consequently, waste water discharge to groundwater in this location is unlikely to impact the receiving groundwater quality, as documented in downgradient monitoring well MW-07.

Similarly, the results of waste water samples collected from the southern bottling plant during a sanitation cycle, in standing water at FP, and in the FP overflow indicate that the waste water discharged to FP is generally similar in composition to the groundwater quality upgradient of the FP at MW-01. Consequently, waste water discharge to groundwater in this location is unlikely to impact the receiving groundwater quality, as documented in downgradient monitoring well MW-02.

In summary, waste water discharge during sanitation and production from the north and south bottling plants to the EP and FP are of similar quality to the representative samples collected from surrounding up and downgradient groundwater monitoring wells, and discharge of waste water to groundwater has a very low potential to impact groundwater quality at the Site.

8.0 REFERENCES

CRWQCB, 2005. Water Quality Control Plan for the North Lahontan Basin, December 21, 2005.

CGR 2014, Facility Waste Generation and Discharge Systems Report, Prepared by CG Roxane, LLC, 1210 South U.S. Highway 395, Olancha, California, October 21, 2014.

Dames and Moore, 1990, Phase I – Water Resources Investigation, Crystal Geyser-Roxane, Bottling Facility, Inyo County, California, February 19, 1990.

Dames and Moore, 1991, Phase II – Water Resources Investigation, Crystal Geyser-Roxane, Bottling Facility, Inyo County, California, January 20, 1991.

Dames and Moore, 1993, Report – Water Supply Well CGR-2, Crystal Geyser Roxane, Olancha, California, March 31, 1993.

Dames and Moore, 1995, Report – Water Supply Wells CGR-4, CGR-5 and CGR-6 Crystal Geyser-Roxane, Olancha, California, April 21, 1995.

Department of Water Resources, 2003, California's Groundwater, Bulletin 118.

Geosyntec Consultants, Inc. 2011, Test Well Installation and Hydrogeology Report, Cabin Bar Ranch, Olancha, California. February 7, 2011.

Geosyntec 2015a, Phase 1 Site Groundwater Investigation Report, Olancha Spring Water Bottling Facility, 1210 South U.S. Highway 395, Olancha, California, February 16, 2015.

Geosyntec 2015b, Phase 2 Site Groundwater Investigation Report, Olancha Spring Water Bottling Facility, 1210 South U.S. Highway 395, Olancha, California, August 14, 2015.

Geothermal Surveys Inc., 1983, Ground Temperature Survey and Additional Geohydrologic Investigation, Cabin Bar Ranch, Inyo County. California.

Levy et al., 1999 D.B. Levy, J.A. Schramke, K.J. Esposito, T.A. Erickson and J.C. Moore, The shallow ground water chemistry of arsenic, fluorine, and major elements: Eastern Owens Lake, California, Appl. Geochem. 14 (1999),

Pakiser, L.C., Kane, M.F., and Jackson, W.H., 1964, Structural Geology and Volcanism of Owens Valley Region, California, a Geophysical Study. U.S.G.S. Professional Paper No. 438.

TABLES

Table 1
Groundwater Levels and Well Construction Data
Crystal Geyser Roxane
Olancha, CA

Well ID	Date	Depth to Water (ft btoc)	Top of Well Casing Elevation (ft amsl)	Groundwater Elevation (ft amsl)	Well Screen Interval (ft bgs)	Well Total Depth (ft bgs)	Location Coordinates	
							Northing	Easting
MW-01	9/14/2015	22.71	3643.80	3621.09	18 - 33	33	36.3011461	-118.0207444
MW-02	9/14/2015	18.43	3638.21	3619.78	10 - 25	25	36.3018132	-118.0199017
MW-03	9/15/2015	15.02	3618.26	3603.24	5 - 20	20	36.3057165	-118.0186995
MW-04	9/15/2015	11.94	3615.22	3603.28	5 - 20	20	36.3061799	-118.0177333
MW-05	9/15/2015	8.47	3608.33	3599.86	5 - 20	20	36.3066296	-118.0165260
MW-06	9/15/2015	13.04	3615.33	3602.29	8 - 23	23	36.3052343	-118.0149476
MW-07	9/15/2015	7.98	3610.16	3602.18	5 - 20	20	36.3055453	-118.0142003
MW-08	9/14/2015	13.95	3617.28	3603.33	5 - 20	20	36.3063264	-118.0185088
MW-09	9/15/2015	17.34	3620.04	3602.70	9 - 24	24	36.3056073	-118.0178481

Notes:
Wellhead elevation and location survey completed by Triad/Holmes Associates, Inc.
Coordinate data in NAD 83 State Plane IV.
Elevation data in NAV 88.
ft btoc: feet below top of casing
ft amsl: feet above mean sea level
ft bgs: feet below ground surface

Table 2
Groundwater Sample Results - Detected Metals
Crystal Geyser Roxane
Olancha, CA

Location	Date Sampled	Sample ID	Antimony (dissolved) µg/l	Antimony (total) µg/l	Arsenic (dissolved) µg/l	Arsenic (total) µg/l	Barium (dissolved) µg/l	Barium (total) µg/l	Copper (dissolved) µg/l	Copper (total) µg/l	Molybdenum (dissolved) µg/l	Molybdenum (total) µg/l	Nickel (total) µg/l	Selenium (dissolved) µg/l	Selenium (total) µg/l	Silver (dissolved) µg/l	Silver (total) µg/l	Vanadium (dissolved) µg/l	Vanadium (total) µg/l	Zinc (dissolved) µg/l	Zinc (total) µg/l
MW-01	Jul-15	MW-01-070715	**< 15.0**	**< 15.0**	13.6	17.6	22.8	26.8	< 10.0	< 10.0	11.0	11.9	< 10.0	< 15.0	< 15.0	< 5.00	< 5.00	< 10.0	< 10.0	< 10.0	< 10.0
	Sep-15	MW-01-091415	**< 15.0**	**< 15.0**	< 10.0	14.7	25.8	26.1	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 15.0	< 15.0	< 5.00	< 5.00	< 10.0	< 10.0	< 10.0	10.9
MW-02	Jul-15	MW-02-070715	**< 15.0**	**< 15.0**	23.3	21.0	19.6	20.2	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 15.0	< 15.0	< 5.00	< 5.00	< 10.0	< 10.0	< 10.0	< 10.0
	Sep-15	MW-02-091415	**< 15.0**	**< 15.0**	< 10.0	< 10.0	19.6	19.1	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 15.0	< 15.0	< 5.00	< 5.00	< 10.0	< 10.0	< 10.0	15.9
MW-03	Jul-15	MW-03-070715	**< 15.0**	**< 15.0**	20.5	20.1	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 15.0	< 15.0	< 5.00	< 5.00	< 10.0	< 10.0	< 10.0	< 10.0
	Sep-15	MW-03-091515	**< 15.0**	**< 15.0**	< 10.0	12.1	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 15.0	< 15.0	< 5.00	< 5.00	< 10.0	< 10.0	< 10.0	< 10.0
MW-04	Jul-15	MW-04-070615	24.7 J	16.0 J	742	821	10.3 J	24.4	48.2	43.3	430	476	< 10.0	< 15.0	< 15.0	6.80 J	< 5.00 J	217	249	< 10.0	24.9 J
	Jul-15	MW-04-070615-DUP	20.3 J	**< 15.0 J**	757	816	< 10.0 J	23.8	36.1	41.8	439	471	< 10.0	< 15.0	< 15.0	7.91 J	< 5.00 J	222	248	< 10.0	13.4 J
	Sep-15	MW-04-091515	19.3	16.1	685	691	< 10.0	10.5	15.8	16.4	389	364	< 10.0	< 15.0	< 15.0	< 5.00	< 5.00	189	193	< 10.0	37.3 J
	Sep-15	MW-04-091515-DUP	20.5	15.8	630	670	< 10.0	10.6	14.2	15.3	389	366	< 10.0	< 15.0	< 15.0	< 5.00	< 5.00	191	189	< 10.0	< 10.0 J
MW-05	Jul-15	MW-05-070715	**< 15.0**	**< 15.0**	707	730	14.3	17.2	50.5	47.3	437	448	< 10.0	< 15.0	< 15.0	5.59 J	< 5.00 J	197	208	10.3	37.5
	Sep-15	MW-05-091515	**< 15.0**	**< 15.0**	224	205	< 10.0	< 10.0	< 10.0	< 10.0	204	190	< 10.0	< 15.0	< 15.0	< 5.00	< 5.00	28.1	28.4	< 10.0	89.3
MW-06	Jul-15	MW-06-070615	**< 15.0**	**< 15.0**	17.1	18.3	< 10.0	< 10.0	< 10.0	< 10.0	10.4	10.4	< 10.0	< 15.0	< 15.0	< 5.00	< 5.00	< 10.0	< 10.0	< 10.0	< 10.0
	Sep-15	MW-06-091515	**< 15.0**	**< 15.0**	10.7	18.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	16.3	15.4	< 5.00	< 5.00	< 10.0	< 10.0	13.4	31.6
MW-07	Jul-15	MW-07-070615	**< 15.0**	**< 15.0**	47.9	48.3	< 10.0	14.2	37.2 J	16.2 J	29.3	30.1	10.5 J+	< 15.0	< 15.0	< 5.00	< 5.00	19.7	21.8 J+	< 10.0	22.6 J+
	Sep-15	MW-07-091515	**< 15.0**	**< 15.0**	< 10.0	14.9	< 10.0	22.7	< 10.0	< 10.0	< 10.0	13.4	< 10.0	< 15.0	< 15.0	< 5.00	< 5.00	< 10.0	< 10.0	< 10.0	25.3
MW-08	Jul-15	MW-08-070715	**< 15.0**	**< 15.0**	< 10.0	11.2	22.6	26.9	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 15.0	< 15.0	< 5.00	< 5.00	< 10.0	< 10.0	13.6 J	< 10.0 J
	Sep-15	MW-08-091415	**< 15.0**	**< 15.0**	14.0	15.8	28.6	29.6	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 15.0	< 15.0	< 5.00	< 5.00	< 10.0	< 10.0	< 10.0	< 10.0
MW-09	Jul-15	MW-09-070715	**< 15.0**	**< 15.0**	47.2	50.6	44.2	43.2	< 10.0	< 10.0	77.4	87.8	< 10.0	< 15.0	< 15.0	< 5.00	< 5.00	< 10.0	< 10.0	< 10.0	< 10.0
	Sep-15	MW-09-091515	**< 15.0**	**< 15.0**	49.0	50.9	50.5	49.4	< 10.0	< 10.0	97.1	91.3	< 10.0	< 15.0	< 15.0	< 5.00	< 5.00	< 10.0	< 10.0	16.8	18.1
		2015 Cal EPA MCL	6.0	6.0	10	10	1,000	1,000	1,300	1,300	nl	nl	100	50	50	nl	nl	nl	nl	nl	nl

Notes:

Groundwater samples were analyzed for CAM 17 Metals by Eurofins Calscience Enviromental Laboratories, in Garden Grove, California.

Samples were analyzed using EPA Methods 6010B and 7470A. Only detected metals shown in this table. Other metals were not detected above the laboratory Minimum Reporting Limit.

Shaded cells represent an exceedence of the listed maximum contaminant level.

<x.xx: Indicates sample result was less than laboratory minimum reporting limit.
ft bgs: Feet below ground surface
µg/l: micrograms per liter
RSL: United States Environmental Protection Agency Regional Screening Level.
nl: not listed
J: Estimated concentration.
J+: Estimated concentration based on data validation
\## Concentration is above the Maximum Contaminant Level (MCL)

Table 3
Groundwater Detected Results - Inorganic Constituents
Crystal Geyser Roxane
Olancha, CA

Location	Date Sampled	Sample ID	Alkalinity, Total mg/l	Ammonia Nitrogen mg/l	Calcium mg/l	Chloride mg/l	Magnesium mg/l	MBAS mg/l	Nitrate and Nitrite mg/l	Nitrogen, Total (Calculated) mg/l	Nitrogen, Total Kjeldahl mg/l	Phosphate mg/l	Phosphorus, Total as P mg/l	Sodium mg/l	Sulfate mg/l	Total Dissolved Solids mg/l
MW-01	Jul-15	MW-01-070715	114 J	< 0.10 J	37.7	3.1 J	3.63	< 0.10 J	0.55 J	0.54 J	< 0.500 J	< 0.31 J	< 0.10 J	21.8	26 J	230 J
	Sep-15	MW-01-091415	123	< 0.10	30.2	2.6	2.87	< 0.10	0.29	< 0.50	< 0.500	0.42	0.14	17.6	18	130
MW-02	Jul-15	MW-02-070715	72.0	< 0.10	23.1	2.0	2.54	< 0.10	< 0.10	< 0.50	< 0.500	< 0.31	< 0.10	9.42	12	160
	Sep-15	MW-02-091415	64.0	0.11	21.1	1.5	1.96	< 0.10	< 0.10	< 0.50	< 0.500	0.37	0.12	8.68	9.2	125
MW-03	Jul-15	MW-03-070715	120 J	0.56 J	20.9	9.7 J	5.19	< 0.10 J	< 0.10 J	1.1 J	1.10 J	0.94 J	0.31 J	41.3	12 J	245 J
	Sep-15	MW-03-091515	120	1.1	21.9	5.9	3.22	< 0.10	< 0.10	1.5 J+	1.50 J+	1.1	0.35	32.5	8.0	190
MW-04	Jul-15	MW-04-070615	916 J	0.11 J	7.40	20 J	1.10	< 0.10 J	0.23 J	1.6 J	1.40 J	4.8 J	1.6 J	934	880 J	2,340 J
	Jul-15	MW-04-070615-DUP	916 J	0.11 J	7.34	16 J	1.10	< 0.10 J	0.23 J	1.6 J	1.40 J	4.9 J	1.6 J	909	890 J	2,360 J
	Sep-15	MW-04-091515	841	< 0.10 J	2.33	8.5	0.295	< 0.10	0.38	1.1 J+	0.700 J+	7.2	2.4	823	840	1,780
	Sep-15	MW-04-091515-DUP	841	0.11 J	2.27	8.6	0.290	< 0.10	0.38	1.4 J+	0.980 J+	7.2	2.4	798	840	2,040
MW-05	Jul-15	MW-05-070715	556 J	0.39 J	16.3	19 J	2.37	0.11 J	< 0.10 J	1.8 J	1.80 J	4.9 J	1.6 J	716	830 J	1,960 J
	Sep-15	MW-05-091515	251	0.34	24.9	15	2.30	< 0.10	< 0.10	1.1 J+	1.10 J+	1.8	0.59	267	410	830
MW-06	Jul-15	MW-06-070615	180 J	0.17 J	48.5	190 J	8.91	< 0.10 J	< 0.10 J	0.86 J	0.840 J	1.5 J	0.49 J	192	48 J	635 J
	Sep-15	MW-06-091515	153	0.11	53.0	290	7.14	< 0.10	< 0.10	0.70 J+	0.700 J+	0.84	0.27	185	35	605
MW-07	Jul-15	MW-07-070615	248 J	< 0.10 J	6.56	72 J	1.69	< 0.10 J	< 0.10 J	1.3 J	1.30 J	1.8 J	0.58 J	145	58 J	1,040 J
	Sep-15	MW-07-091515	190	< 0.10	14.5	37	3.91	< 0.10	< 0.10	0.70 J+	0.700 J+	1.6	0.51	113	45	455
MW-08	Jul-15	MW-08-070715	120 J	0.39 J	22.3	4.3 J	1.49	< 0.10 J	< 0.10 J	0.84 J	0.840 J	0.43 J	0.14 J	30.8	4.2 J	205 J
	Sep-15	MW-08-091415	118	0.39	23.0	4.9	1.50	< 0.10	< 0.10	0.70	0.700	0.58	0.19	32.0	5.4	230
MW-09	Jul-15	MW-09-070715	174	< 0.10	154	6.8	7.11	< 0.10	0.28	0.79	0.560	0.44	0.14	75.3	360	730
	Sep-15	MW-09-091515	156	0.11	151	6.6	6.83	< 0.10	0.33	0.98 J+	0.700 J+	0.49	0.16	88.8	400	745
		2015 Cal EPA MCL	nl	nl	nl	nl	nl	nl	10	nl	nl	nl	nl	nl	nl	nl

Notes:

Groundwater samples were analyzed by Eurofins Calscience Enviromental Laboratories, in Garden Grove, California. Only detected compounds shown.

<x.xx: Indicates sample result was less than laboratory minimum reporting limit.
ft bgs: Feet below ground surface
mg/l: milligrams per liter
MBAS: Methylene Blue Activated Substances
nl: not listed
J: Estimated concentration
J+: Estimated concentration based on data validation

Table 4
Groundwater Detected Results - Total and Fecal Coliform
Crystal Geyser Roxane
Olancha, CA

Location	Date Sampled	Sample ID	Fecal Coliform MPN/100 ml	Total Coliform MPN/100 ml
MW-01	Jul-15	MW-01-070715	< 2.0 R	2.0 J
	Sep-15	MW-01-091415	< 2.0	< 2.0
MW-02	Jul-15	MW-02-070715	< 2.0 R	< 2.0 R
	Sep-15	MW-02-091415	< 2.0	30
MW-03	Jul-15	MW-03-070715	< 2.0 R	2.0 J
	Sep-15	MW-03-091515	< 2.0	23
MW-04	Jul-15	MW-04-070715	< 2.0 R	< 2.0 R
	Sep-15	MW-04-091515	< 2.0	< 2.0
	Sep-15	MW-04-091515-DUP	< 2.0	< 2.0
MW-05	Jul-15	MW-05-070715	< 2.0 R	2.0 J
	Sep-15	MW-05-091515	< 2.0	< 2.0
MW-06	Jul-15	MW-06-070715	< 2.0 R	< 2.0 R
	Sep-15	MW-06-091515	< 2.0	< 2.0
MW-07	Jul-15	MW-07-070615	2.0 J	2.0 J
	Sep-15	MW-07-091515	< 2.0	23
MW-08	Jul-15	MW-08-070715	< 2.0 R	2.0 J
	Sep-15	MW-08-091415	< 2.0	2.0
MW-09	Jul-15	MW-09-070715	< 2.0 R	< 2.0 R
	Sep-15	MW-09-091515	8.0	8.0

Notes:
Samples analyzed by BC Laboratories, Inc.
<x.xx: Indicates sample result was less than laboratory minimum reporting limit.
MPN/100ml: Most probable number per 100 milliliters.
J: Estimated concentration
R: Data rejected due to data quality issues.

Table 5

Waste Water Sample Results - Detected Metals

Crystal Geyser Roxane

Olancha, CA

Sample Location	Date Sampled	Sample ID	Antimony (dissolved) µg/l	Antimony (total) µg/l	Arsenic (dissolved) µg/l	Arsenic (total) µg/l	Barium (dissolved) µg/l	Barium (total) µg/l	Cadmium (dissolved) µg/l	Cadmium (total) µg/l	Chromium (dissolved) µg/l	Chromium (total) µg/l	Copper (dissolved) µg/l	Copper (total) µg/l	Lead (total) µg/l	Molybdenum (dissolved) µg/l	Molybdenum (total) µg/l	Nickel (total) µg/l	Vanadium (dissolved) µg/l	Vanadium (total) µg/l	Zinc (dissolved) µg/l	Zinc (total) µg/l
Olancha North Waste Water During Production	2014-08-18	OL3P	1.6	1.8	2.8	3.6	5.4	6.3	ND < 0.50	ND < 0.50	ND < 1.0	ND < 1.0	ND < 2.0	ND < 2.0	ND < 0.50	7.1	6.8	ND < 5.0	ND < 3.0	ND < 3.0	ND < 20	ND < 20
Olancha North Waste Water during Sanitation	2014-12-15	East Pond San	ND < 1.0	ND < 1.0	12	17	9.3	10	ND < 0.50	ND < 0.50	ND < 1.0	2.0	14	16	ND < 0.50	3.7 J	5.2	ND < 5.0	ND < 3.0	ND < 3.0	33	41
East Pond, Point of Discharge during Production	2014-08-27	PP INLET	1.0	1.1	18	17	7.4	7.3	ND < 0.50	ND < 0.50	ND < 1.0	ND < 1.0	16	20	ND < 0.50	6.3	7.5	ND < 5.0	3.0 J	ND < 3.0 J	ND < 20	22
East Pond, Standing Water	2014-12-11	East Pond	ND < 1.0	ND < 1.0	9.9	10	9.6	10	ND < 0.50	ND < 0.50	ND < 1.0	ND < 1.0	6.8	8.1	ND < 0.50	4.5 J	4.9	ND < 5.0	ND < 3.0	ND < 3.0	20	25
Olancha South Waste Water during Sanitation	2014-12-17	Fire Pond Sanit.	ND < 1.0	1.1	ND < 1.0	3.0	ND < 2.0	55	ND < 0.50	ND < 0.50	ND < 1.0	1.4	ND < 2.0	21	ND < 0.50	ND < 2.0	ND < 2.0	ND < 5.0	ND < 3.0	4.0	ND < 20	41
Fire Pond, Standing Water	2014-12-11	Fire Pond	ND < 1.0	ND < 1.0	2.6 J	1.4 J	17	15	ND < 0.50	ND < 0.50	ND < 1.0	ND < 1.0	ND < 2.0	ND < 2.0	ND < 0.50	ND < 2.0 R	ND < 2.0	ND < 5.0	ND < 3.0	ND < 3.0	ND < 20	ND < 20
Fire Pond, Overflow	2014-09-03	FP Outlet	ND < 1.0	ND < 1.0	ND < 1.0	ND < 1.0	8.0	8.2	ND < 0.50	ND < 0.50	ND < 1.0	ND < 1.0	ND < 2.0	ND < 2.0	ND < 0.50	ND < 2.0	ND < 2.0	ND < 5.0	ND < 3.0	ND < 3.0	ND < 20	ND < 20
		Screening Level - 2015 Cal EPA MCL	**6.0**	**6.0**	**10**	**10**	**1,000**	**1,000**	**5.0**	**5.0**	**50**	**50**	**1,300**	**1,300**	**15**	**NE**	**NE**	**100**	**NE**	**NE**	**NE**	**NE**

Notes:
Samples analyzed by Eurofins Eaton Analytical in Monrovia, CA.
Shaded cells indicate detection exceeds the primary California Environmental Protection Agency's Maximum Contaminant Level.
NE: A Maximum Contaminant Level has not been estabilished for this element.
µg/l: micrograms per liter
mg/l: milligrams per liter
J: Estimated concentration. The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
J+: Estimated concentration. The analyte was positively identified; however, the associated numerical value is likely to be higher than the concentration of the analyte in the sample due to positive bias of associated QC or calibration data or attributable to matrix interference.
ND < : Analyte not detected above the laboratory minimum reporting limit shown.

Table 6
Waste Water Sample Results - Detected Inorganic Constituents
Crystal Geyser Roxane
Olancha, CA

Location	Date Sampled	Sample ID	Alkalinity, Bicarbonate mg/l	Biochemical Oxygen Demand mg/l	Calcium Carbonate mg/l	Calcium mg/l	Chemical Oxygen Demand mg/l	Chloride mg/l	Chlorine, Free Residual mg/l	Chlorine, Total Residual mg/l	Dissolved Oxygen mg/l	Magnesium mg/l	Nitrate (as N) mg/l	Nitrogen, Total (Calculated) mg/l	Nitrogen, Total Kjeldahl mg/l
Olancha North Waste Water During Production	2014-08-18	OL3P	62	3.5	51	19	7.0	3.0	ND < 0.10 R	ND < 0.10 R	NA	2.0	0.83	NA	ND < 0.20
Olancha North Waste Water during Sanitation	2014-12-15	East Pond San	98	12 J	80	20	57	4.9	ND < 0.10 R	ND < 0.10 R	9.0 J	1.9	0.58	1.7	1.1
East Pond Point of Discharge during Production	2014-08-27	PP INLET	120	5.0 J	98	19	15	13	ND < 0.10 R	ND < 0.10 R	NA	1.7	ND < 0.10	NA	0.26
East Pond, Standing Water	2014-12-11	East Pond	98	7.8 J	80	22	12	4.5	ND < 0.10 R	ND < 0.10 R	6.9 J	2.2	0.16	0.50	0.34
Olancha South Waste Water during Sanitation	2014-12-17	Fire Pond Sanit.	34	ND < 3.0 J	28	19	18	2.9	ND < 0.10 R	ND < 0.10 R	8.3 J	1.4	4.0	4.0	ND < 0.20
Fire Pond, Standing Water	2014-12-11	Fire Pond	74	ND < 3.0	66	20	ND < 5.0	3.0	ND < 0.10 R	ND < 0.10 R	11 J	1.6	ND < 0.10	0.33	0.33
Fire Pond, Overflow	2014-09-03	FP Outlet	62	ND < 3.0	65	18	10	3.2	ND < 0.10 R	ND < 0.10 R	NA	1.3	ND < 0.10	NA	0.31

Table 6

Waste Water Sample Results - Detected Inorganic Constituents

Crystal Geyser Roxane

Olancha, CA

Location	Date Sampled	Sample ID	Orthophosphate as P mg/l	pH	Phosphorus, Total as P mg/l	Sodium mg/l	Specific Conductance µS/cm	Sulfate mg/l	Surfactants mg/l	Total Dissolved Solids mg/l	Total Organic Halides (Average) µg/l	Total Organic Halides (Rep 1) µg/l	Total Organic Halides (Rep 2) µg/l	Total Suspended Solids mg/l
Olancha North Waste Water During Production	2014-08-18	OL3P	1.7	7.5	2.0	20	210	29	NA	NA	ND < 10 J	ND < 10 J	ND < 10 J	ND < 10
Olancha North Waste Water during Sanitation	2014-12-15	East Pond San	1.2	7.4	1.9	30	250	34	ND < 0.050	180	12	12	11	ND < 10
East Pond Point of Discharge during Production	2014-08-27	PP INLET	0.15	7.6	0.34	45	330	36	NA	NA	ND < 10	ND < 10	ND < 10	ND < 10
East Pond, Standing Water	2014-12-11	East Pond	0.50	7.6	0.57	29	250	29	0.18	200	14	15	13	ND < 10
Olancha South Waste Water during Sanitation	2014-12-17	Fire Pond Sanit.	14	6.6	14	24	220	37	3.7 J	170	14	13	15	ND < 10
Fire Pond, Standing Water	2014-12-11	Fire Pond	0.94	9.2	1.1	23	210	28	0.092	140	ND < 10	ND < 10	10	ND < 10
Fire Pond, Overflow	2014-09-03	FP Outlet	0.23	9.9	0.27	25	220	28	NA	NA	ND < 10	ND < 10	ND < 10	ND < 10

Notes:
Samples analyzed by Eurofins Eaton Analytical in Monrovia, CA.
µg/l: micrograms per liter
mg/l: milligrams per liter
µS/cm: microsiemens per centimeter
NA: Not analyzed for this compound
ND < 0.10: Data not detected above minimum reporting limit shown.
"R" : The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte cannot be verified.
J: Estimated concentration. The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.

Table 7
Waste Water Results - Total Coliform Bacteria
Crystal Geyser Roxane
Olancha, CA

Location	Date Sampled	Sample ID	Total Coliform MPN/100 ml
Olancha North Waste Water During Production	2014-08-27	OL3P	NA
Olancha North Waste Water during Sanitation	2014-12-15	East Pond San	2,420 J
East Pond, Point of Discharge, Production	2014-08-27	PP INLET	NA
East Pond, Standing Water	2014-12-11	East Pond	2,420 J
Olancha South Waste Water during Sanitation	2014-12-17	Fire Pond Sanit.	2,400 J
Fire Pond, Standing Water	2014-12-11	Fire Pond	120 J
Fire Pond, Overflow	2014-09-03	FP Outlet	NA

Notes:
Samples analyzed by Eurofins Eaton Analytical in Monrovia, CA.
MPN/100 ml: Most probable number of colony forming units per 100 milliliters.
J: Estimated concentration. The analyte was positively identified; the associated numerical value is the approximate
"R" : The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte cannot be verified.
NA: Not analyzed for this compound

Table 8

Waste Water Sample Results - Detected Volatile Oganic Compounds

Crystal Geyser Roxane,

Olancha, CA

Sample Location	Date Sampled	Sample ID	2-butanone (MEK) µg/l	Acetic acid, dichloro- µg/l	Acetone µg/l	cis-1,3-Dichloropropene µg/l
Olancha North Waste Water During Production	2014-08-18	OL3P	NA	ND < 1.0	NA	NA
Olancha North Waste Water during Sanitation	2014-12-15	East Pond San	5.6	ND < 1.0	ND < 10	ND < 0.50
East Pond, Point of Discharge, Production	2014-08-27	PP INLET	NA	ND < 1.0	NA	NA
East Pond, Standing Water	2014-12-11	East Pond	ND < 5.0	ND < 1.0	ND < 10	ND < 0.50
Olancha South Waste Water during Sanitation	2014-12-17	Fire Pond Sanit.	5.3	ND < 1.0	ND < 10	ND < 0.50
Fire Pond, Standing Water	2014-12-11	Fire Pond	ND < 5.0	ND < 1.0	ND < 10	ND < 0.50
Fire Pond, Overflow	2014-09-03	FP Outlet	NA	ND < 1.0	NA	NA
Screening Level - 2015 Cal EPA MCL (µg/l)			**NE**	**NE**	**NE**	**NE**

Notes:

Samples analyzed by Eurofins Eaton Analytical in Monrovia, CA.

NE: A Maximum Contaminant Level has not been estabilished for this element.

NA: Not analyzed for this compound

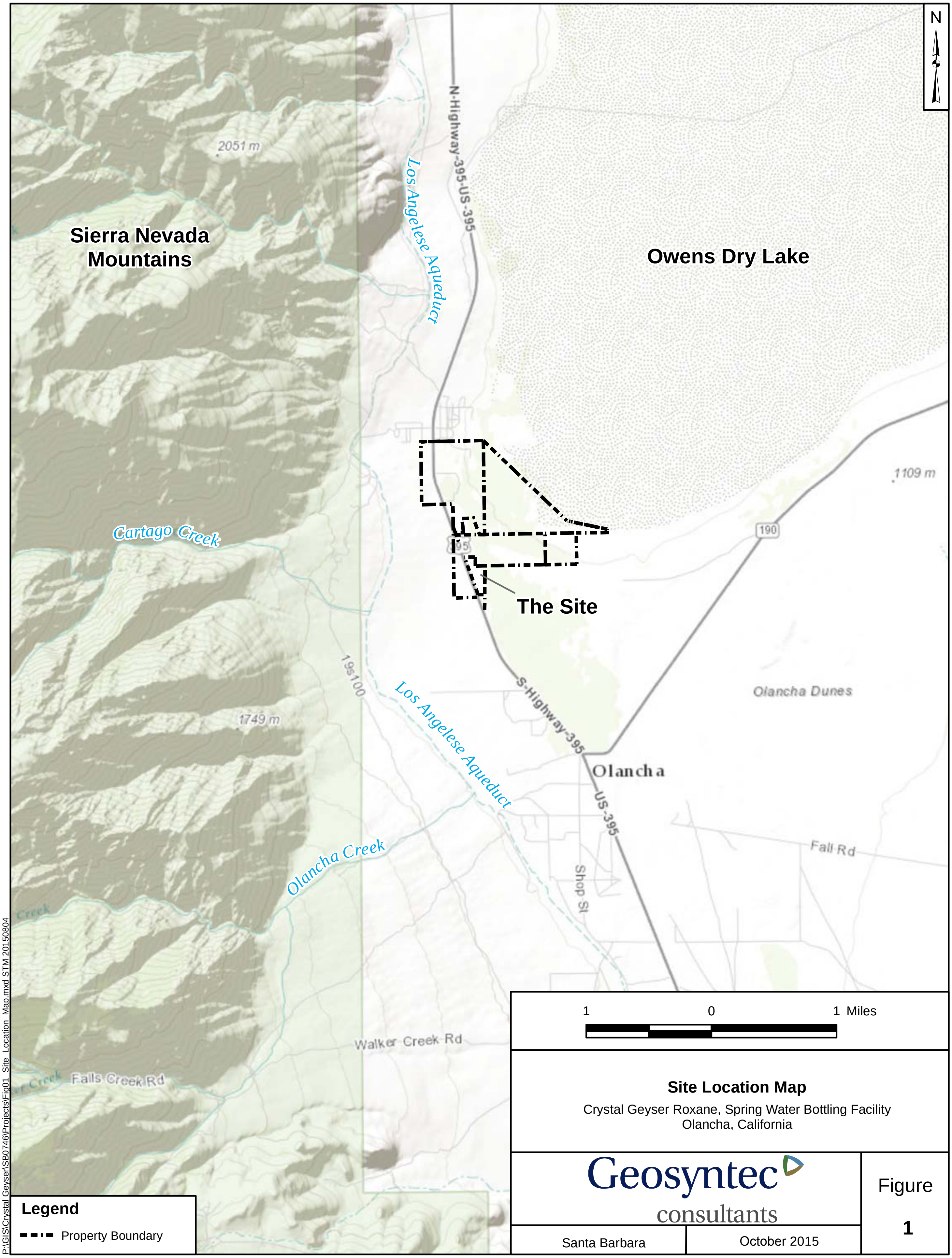
µg/l: micrograms per liter

J: Estimated concentration. The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.

J+: Estimated concentration. The analyte was positively identified; however, the associated numerical value is likely to be higher than the concentration of the analyte in the sample due to positive bias of associated QC or calibration data or attributable to matrix interference.

ND < : Analyte not detected above the laboratory minimum reporting limit shown.

FIGURES



1 0 1 Miles

Site Location Map

Crystal Geyser Roxane, Spring Water Bottling Facility
Olancha, California

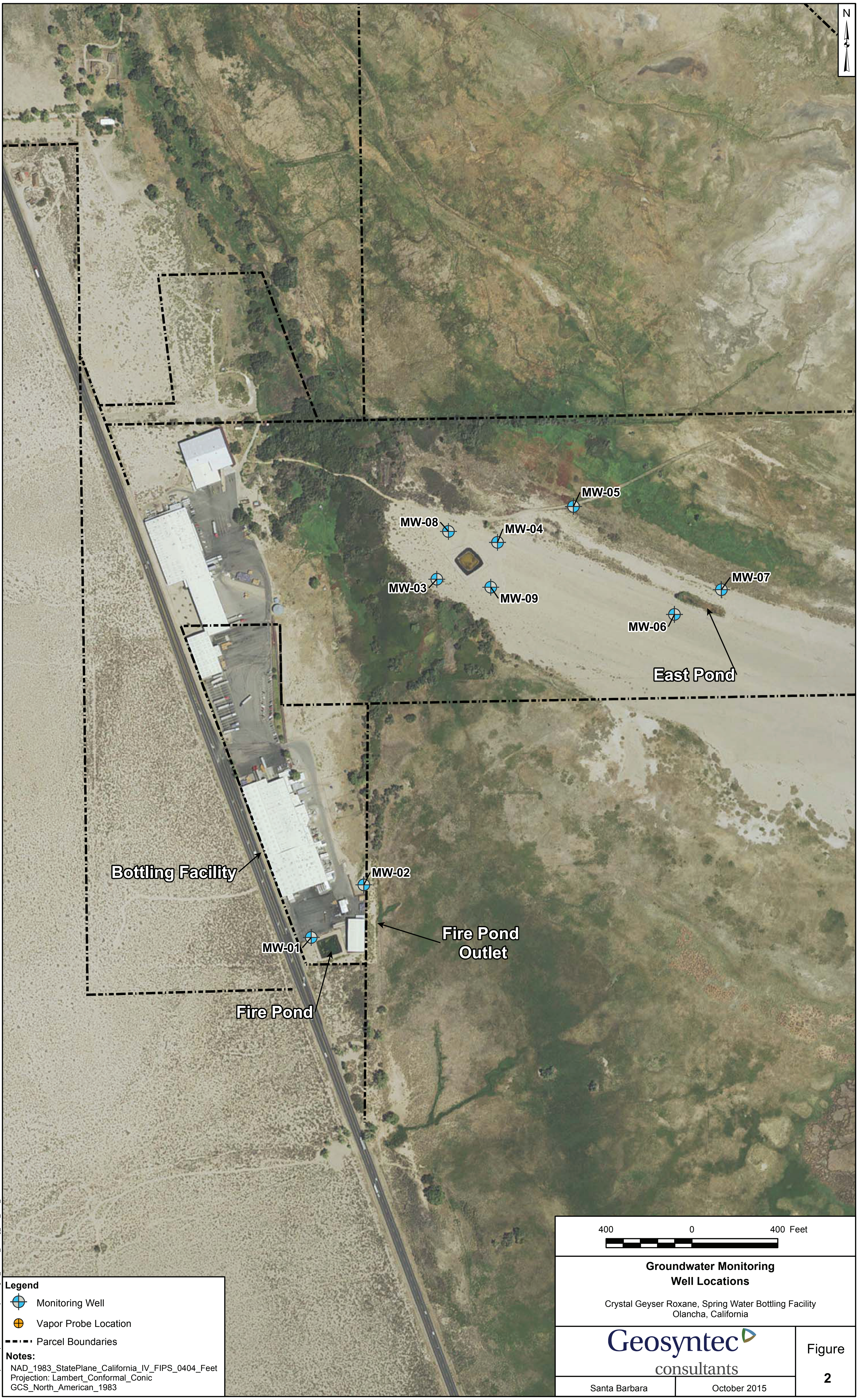
Geosyntec consultants

Figure 1

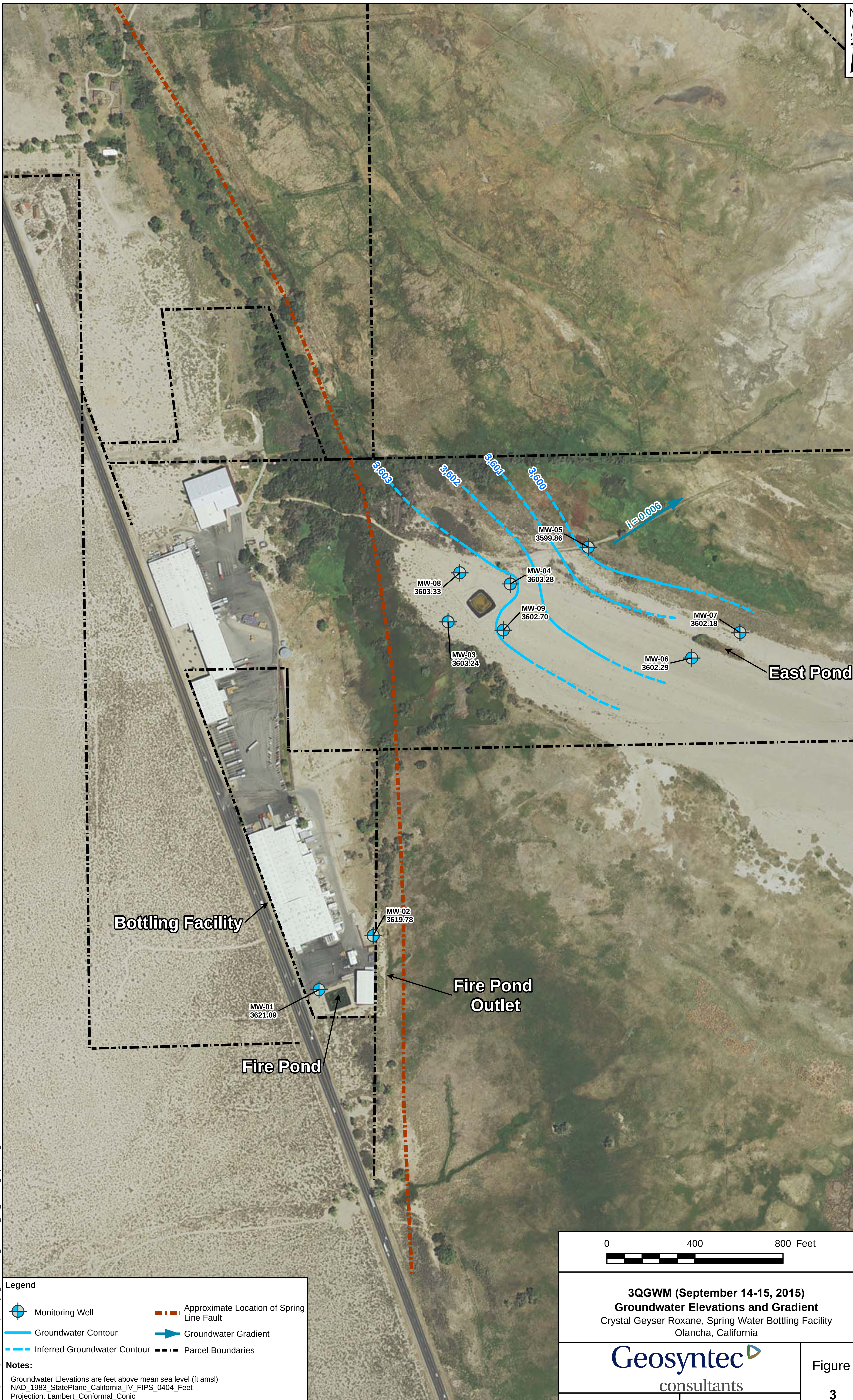
Santa Barbara

October 2015

P:\GIS\Crystal Geyser\SB0746\Projects\Fig01_Site_Location_Map.mxd STM 20150804



P:\GIS\Crystal Geyser\SB0746\Projects\Fig03_Phase2_Boring_GW_Well_Locations.mxd STM 20150814



3QGWM (September 14-15, 2015)
Groundwater Elevations and Gradient
Crystal Geyser Roxane, Spring Water Bottling Facility
Olancha, California

Geosyntec consultants

Santa Barbara | October 2015

Figure 3

P:\GIS\Crystal Geyser\SB0746\Projects\Fig03_Groundwater_Elevations_and_Gradient_September_2015.mxd TCB 20151015

APPENDIX A

TABLE OF WASTE WATER FLOW ESTIMATES

Table X - Summary of Facility Discharges

Location		Flow in gpd	Flow in gpy (260 days)	Nature of waste water	Concentration in the waste water flow	Frequency	Destination
Bag filters / x7		121	31500	Spring water	-	Every two months	East pond
Imeca filter	Purge / x3	18,000	4,680,000	Ozonated water	0.02 to 0.07 ppm	Every hour	East pond
	Cleaning/sanitation / x3	119	31,000	Ozonated water + (phosphoric acid 2% + caustic soda 3% neutralized)	Both products are mixed and neutralized	Up to 6 times per year	East pond
Storage tanks Olancha South		5,000 to 25,000	6,500,000	Ozonated water	0.02 to 0.07 ppm	Every week to every day	East pond
Storage tank Olancha North		3,500 to 17,500	4,550,000	Ozonated water	0.02 to 0.07 ppm	Every week to every day	East pond
Ozone generator (#2)		1,440	374,400	Spring water	-	Every day	East pond
Cooling towers (# 12)		23,000	6,000,000	Softened spring water	-	Every day	East pond
Filler # 1 (0.5)		3,000	780,000	Ozonated water	0.02 to 0.07 ppm	Every day	East pond
Filler # 3 (1.5 l)		18,000	4,680,000	Ozonated water	0.02 to 0.07 ppm	Every day	East pond
Filler # 4 (0.24 l)		12,000	3,120,000	Ozonated water	0.02 to 0.07 ppm	Every day	East pond
Filler # 5 (Gallon)		18,000	4,680,000	Ozonated water	0.02 to 0.07 ppm	Every day	East pond
Filler # 6 (0.5 l)		6,000	1,560,000	Ozonated water	0.02 to 0.07 ppm	Every day	East pond
Filler / x5	Cleaning	100/500	26,000/130,000	Chlorinated water + acidic solution	0.1 g/l of phosphoric acid	Every day	East pond
	Sanitation	100/500	26,000/130,000	Chlorinated water + quaternary ammonium solution	0.3 mg/l of quaternary ammonium	Every day	East pond
Restroom Olancha South		-	70,800	Chlorinated water	0.2 to 0.8 ppm	Every day	Septic tank 1
Restroom Olancha South		-	59,400	Chlorinated water	0.2 to 0.8 ppm	Every day	Septic tank 2

Restroom Olancha South		-	41,400	Chlorinated water	0.2 to 0.8 ppm	Every day	Septic tank 3
Restroom North		-	132,600	Chlorinated water	0.2 to 0.8 ppm	Every day	Septic tank 4
Storage tank Olancha 2		100 to 500	130,000	Ozonated water	0.02 to 0.07 ppm	Every week to every day	Fire pond
Filler # 2 (0.5)		18,000	4,680,000	Ozonated water	0.02 to 0.07 ppm	Every day	Fire pond
Filler #2	Cleaning	20/100	5,200/26,000	Chlorinated water + acidic solution	0.1 g/l of phosphoric acid	Every day	Fire pond
	Sanitation	20/100	5,200/26,000	Chlorinated water + quaternary ammonium solution	0.3 mg/l of quaternary ammonium	Every day	Fire pond
As removal system South		3,099	805,740	Ozonated and chlorinated water + caustic soda + arsenic	2.2 kg As/year	When necessary	“As” pond
As removal system North		9,523	2,476,000	Ozonated and chlorinated water + caustic soda + arsenic	2.8 kg As/year	When necessary	“As” pond
As removal system Ol 6		5,573	1,448,980	Ozonated and chlorinated water + caustic soda + arsenic	1.9 kg As/year	When necessary	“As” pond

Explanations for each waste water type:

-Bag filter: when replaced, the Bag Filters are rinsed in place with clear spring water for 5 minutes at 150 gpm (= 750 gallons)

-Imeca filter: the unit purges every hour = (~6,500 gallons per day).

-Imeca filter: during the CIP process, after circulation of the 185 gallons of 3 % caustic soda within the looped system, the Imeca Filter is rinsed three times with 265 gallons of ozonated water. Next, after circulation of the 185 gallons of 2% phosphoric acid, the Imeca filter is rinsed three times with 265 gallons of ozonated water. Finally, the unit is rinsed with 1,323 gallons of ozonated water. Total rinse water generated is approximately 3,400 gallons.

-Storage tanks: There are 9 production water storage tanks; each storage tank is drained either every day or once a week depending on the production schedule.

-Ozone generator: The generators use domestic water within their cooling system. This is discharge is domestic water.

-Cooling towers: There are a total of twelve cooling towers at the Facility. They are estimated to generate approximately .5 gallons - 1.3 gallons of discharge per minute of water when purging water.

-Filler: the overflow depends on individual characteristics associated with the filler: its type (gravimetric or volumetric), age, speed, and necessary maintenance. A rough estimation is provided in the table.

-Filler cleaning: During cleaning, 0.295 liter of CD-470 (phosphoric acid 170 g/l) is applied to the filler heads with foaming gun. Later, the filler heads are rinsed with chlorinated water for 10 minutes at 3 m3/h (=100 gallons per hour). During sanitization, 0.5 liter of Quorum Clear (quaternary ammonium 300 mg/l) are applied to the filler heads with foaming gun. The filler is subsequently rinsed with chlorinated water for 10 minutes at 3 m3/h (100 gallons per hour).

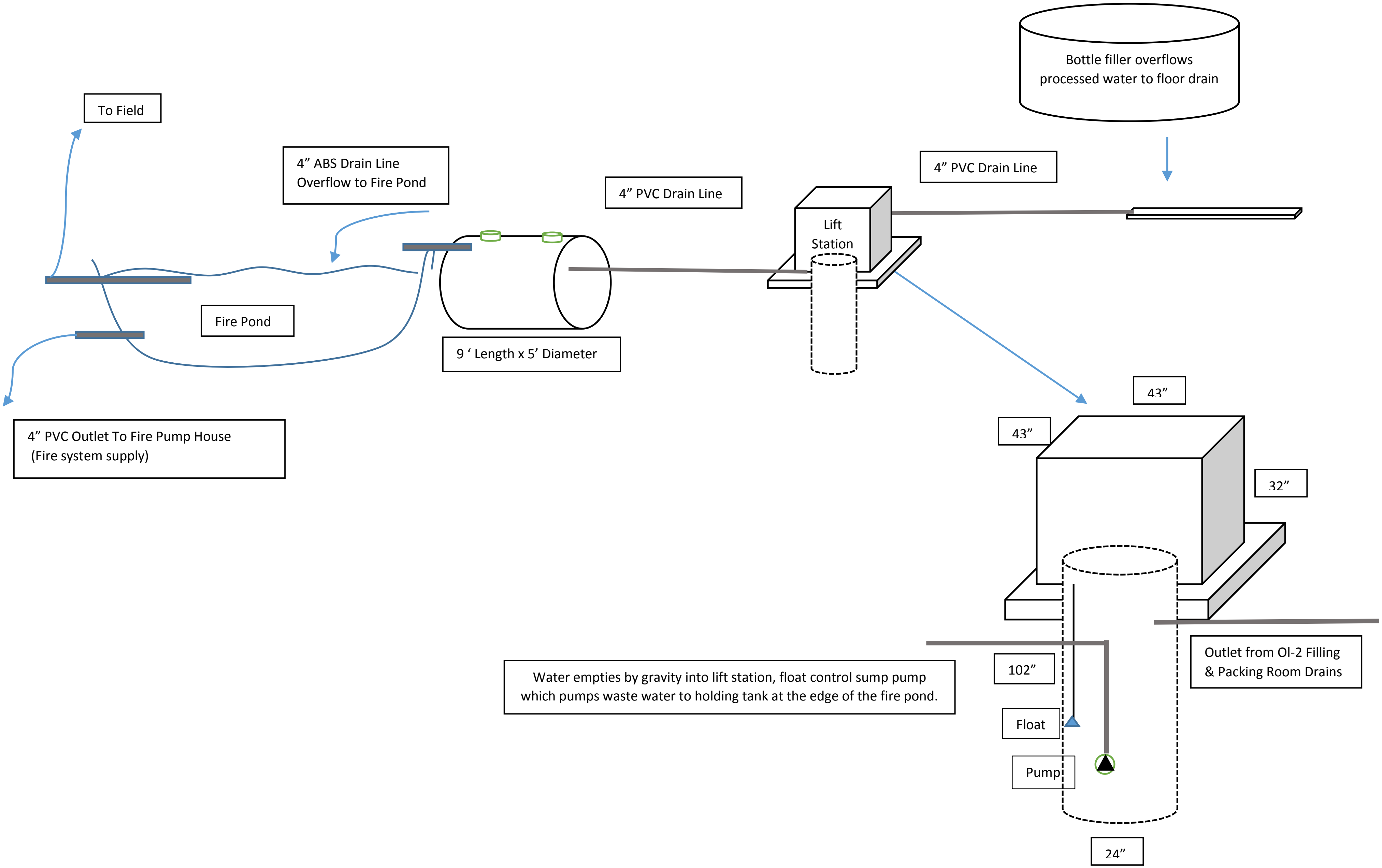
-Arsenic removal system: the counter (flowmeter) of the filters are monitored during the regeneration process. 30% caustic soda solution is used to remove the arsenic and 93% sulfuric acid to neutralize the pH of the wastewater "in line" prior to discharge to the lined Arsenic Pond (Annex 4: MSDS).

Rq: To calculate the concentration of chemical into the wastewater flow, the volume of rinse water necessary for the entire operation of cleaning/sanitation was estimated.

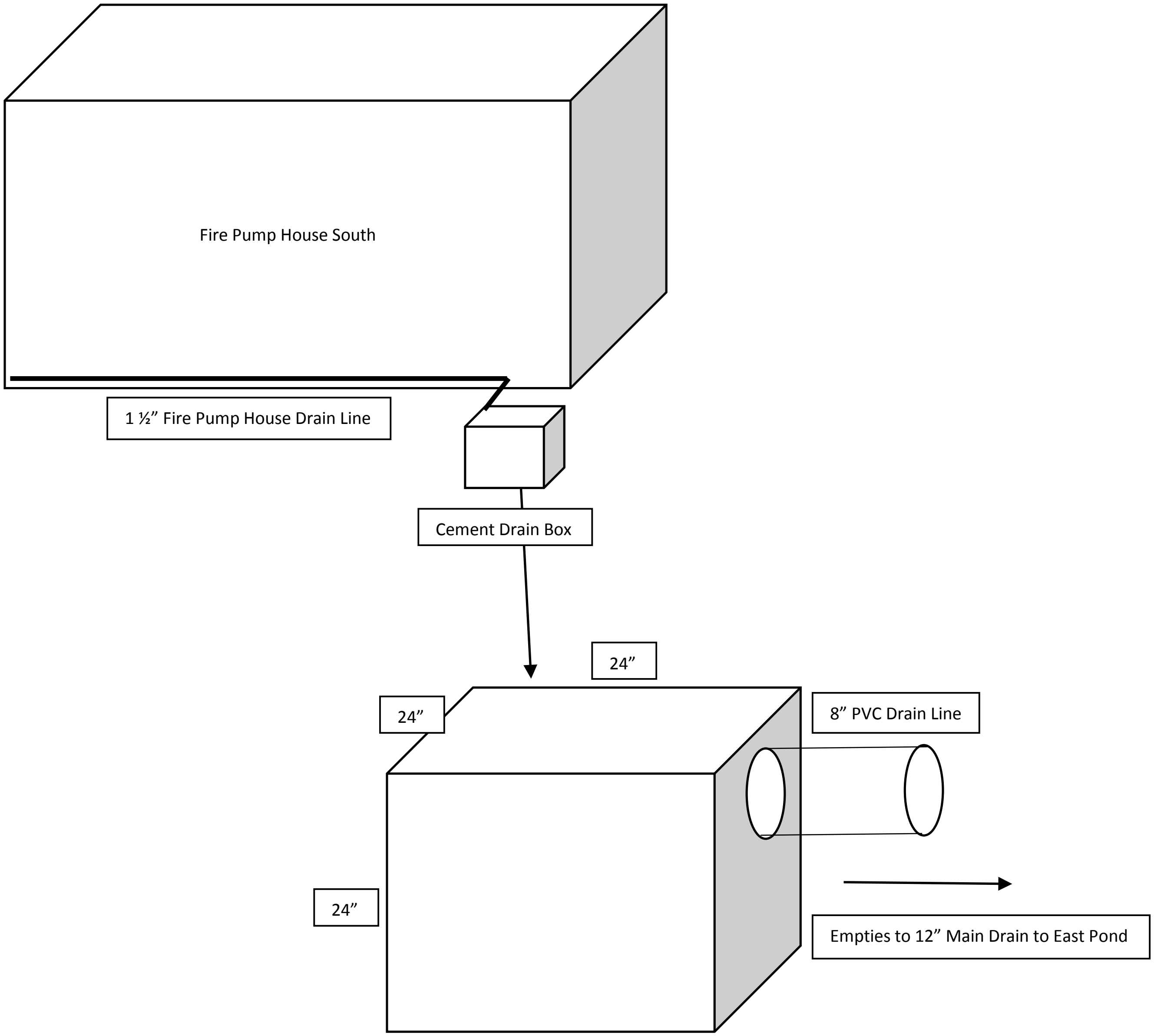
APPENDIX B

PROCESS FLOW DIAGRAMS

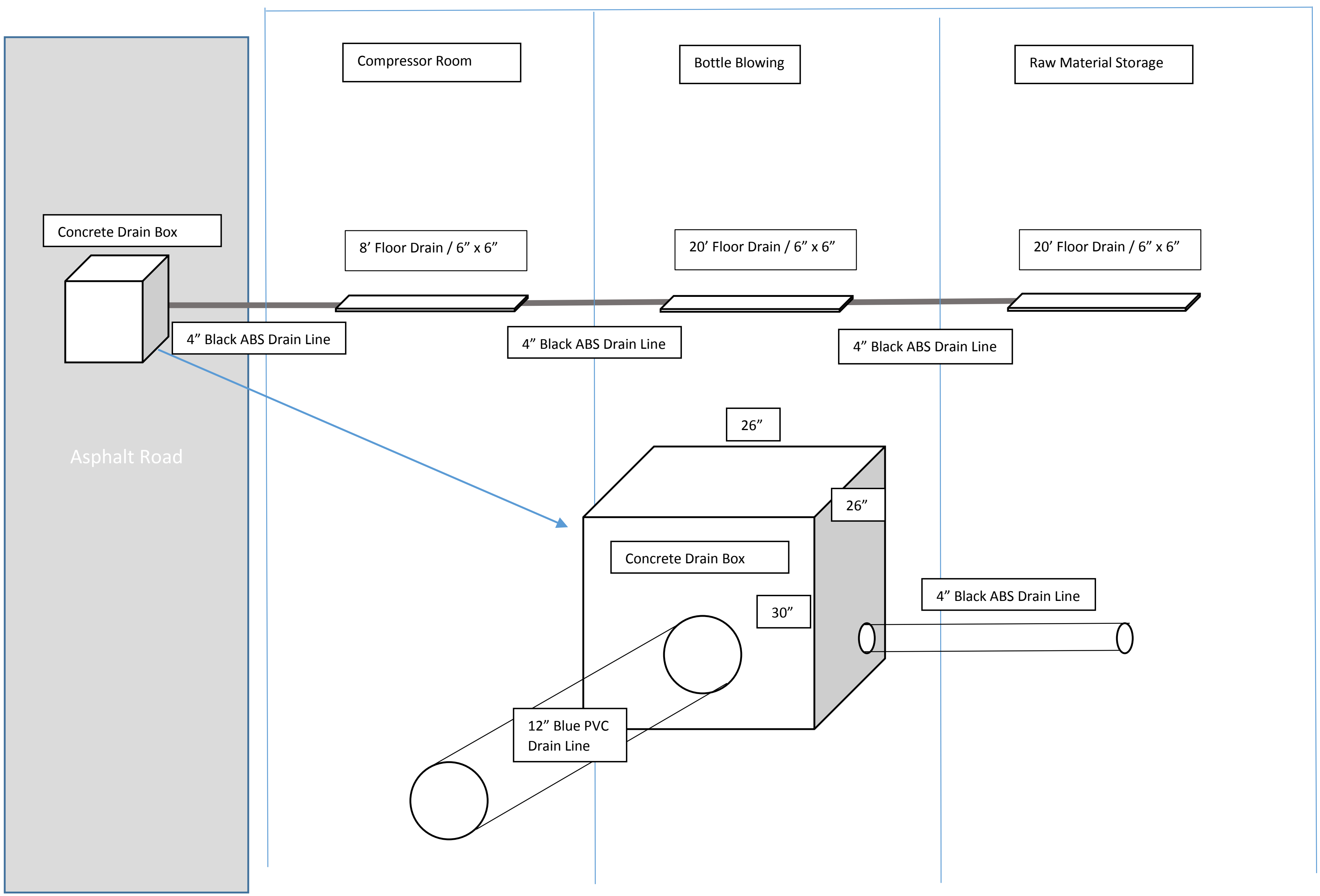
Olancha 2 Filling and Packing Room Drains



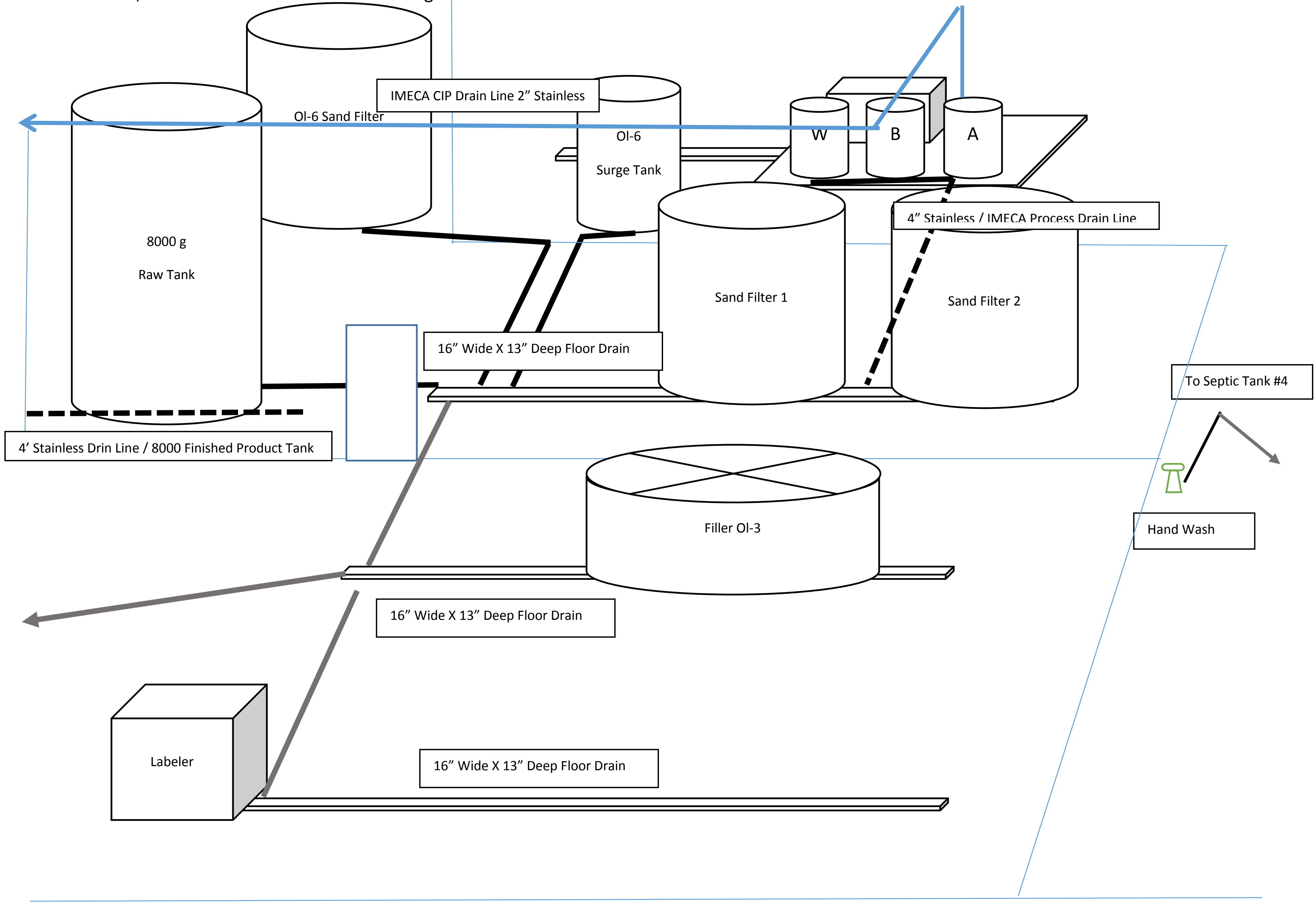
Fire Pump House Drain



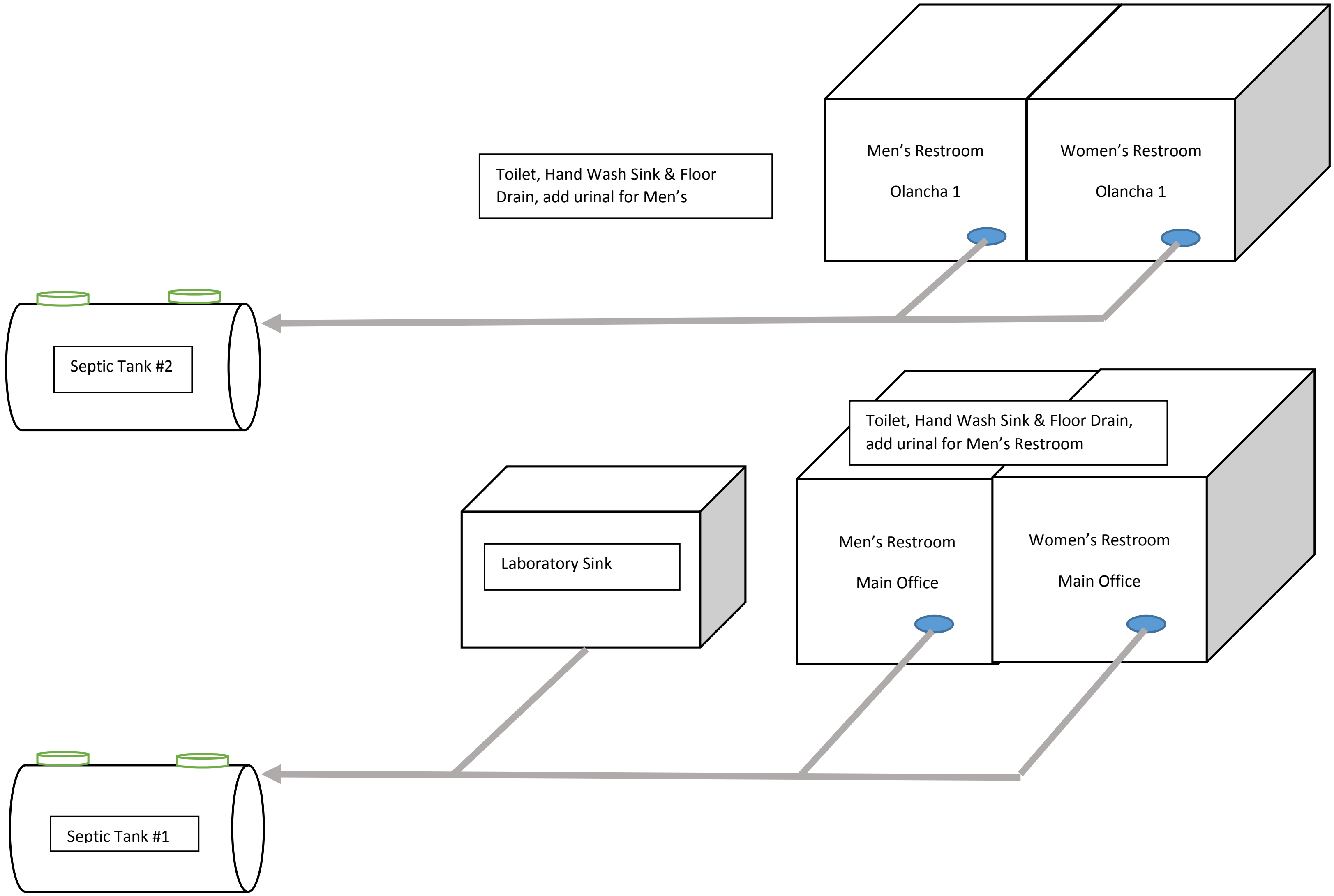
Olancha South Raw Material, Bottle Blowing Room and Compressor Room Drains



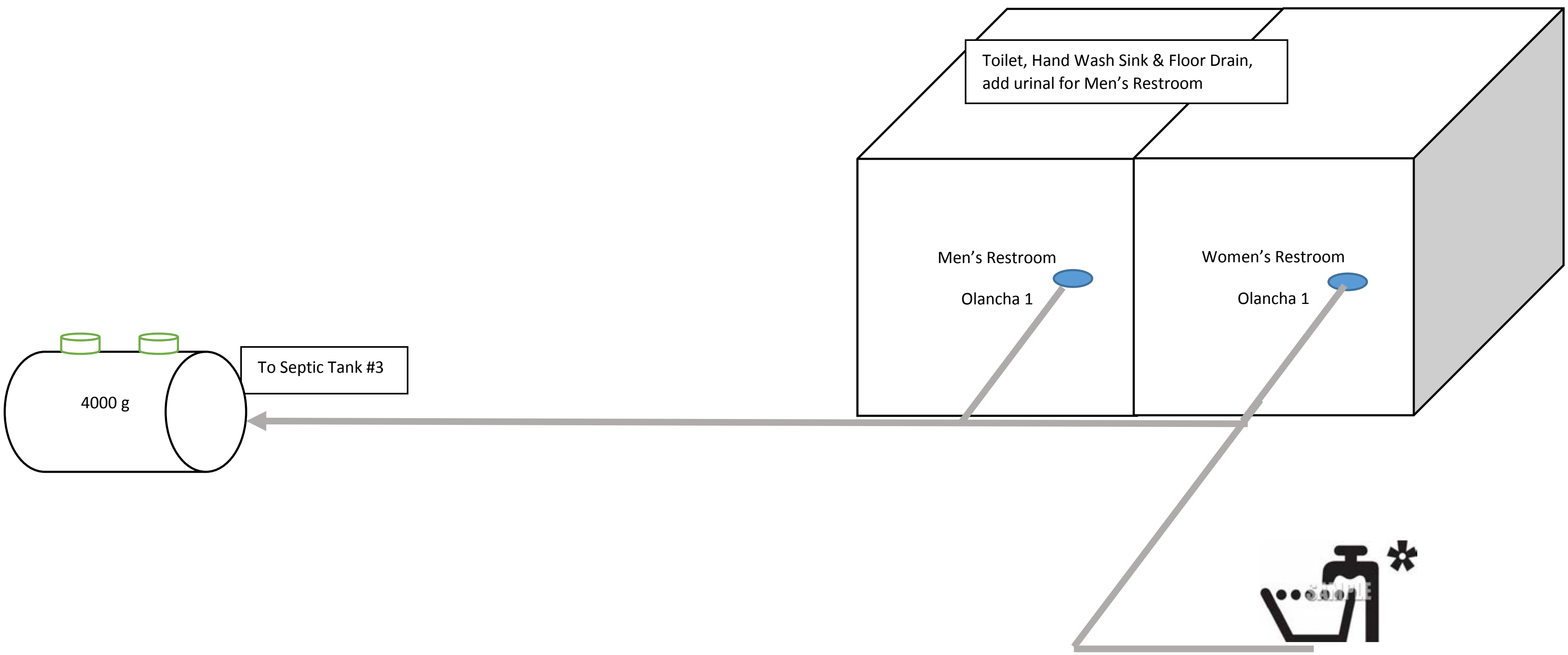
Olancha 3,5 & 6 Filtration and Olancha 3 Filling Room



Olancha 1 Production Area Restrooms and Office Restrooms including Laboratory Sink



Olancha 2 Production Area Restrooms & Stainless Steel Wash Tub



APPENDIX C

SCALED PLOT PLANS

Project: CG ROXANE, OLANCHA, CA			
Date: MAY 28, 2015	Drawn by: / Dessine par: LIONEL FERCHAUD	Sheet name:	Sheet N°
Scale/Echelle: NONE		SITE PLAN	1
CG ROXANE LLC 1400 MARY"S DR WEED, CA 96094 Phone: (530) 938-1831 E-Mail: L.Ferchaud@CGRoxane.com		Drawing N°: / Plan N°: Olancha rejects 04012015.dwg	


EAST POND
ARSENIC POND
MONITORING WELLS
PROPERTY LINE
ASPHALT PAVING
HWY. 395
N
0 100' 200' 300' 400' 500'
Project:
CG ROXANE, OLANCHA, CA
Date: MAY 28, 2015
Drawn by: Dessine par: LIONEL FERCHAUD
Scale/Echelle: NONE
Sheet name:
SITE PLAN
Sheet N°
2
CG ROXANE LLC
1400 MARY"S DR
WEED, CA 96094
Phone: (530) 938-1831
E-Mail: L.Ferchaud@CGRoxane.com
Drawing N°: Plan N°:
Olancha rejects 04012015.dwg

Project:

CG ROXANE, OLANCHA, CA

Date: MAY 28, 2015	Drawn by: / Dessine par: LIONEL FERCHAUD	Sheet name:	Sheet N°
Scale/Echelle: NONE		LAYOUT OF WASTE WATER DISCHARGE SYSTEMS	3
CG ROXANE LLC 1400 MARY"S DR WEED, CA 96094 Phone: (530) 938–1831 E–Mail: L.Ferchaud@CGRoxane.com		Drawing N°: / Plan N°: Olancha rejects 04012015.dwg	

PROPERTY LINE
TO RETENTION POND
OIL SEPARATOR
MONITORING WELL EW-4
MONITORING WELL EW-5
4" HDPP OVERFLOW LINE
6" HDPP OVERFLOW LINE
12" SDR 35 PLASTIC PIPE FROM OLANCHA #1 & 2 FACTORY FLOOR DRAIN & TOWERWATER
SEPTIC TANK #4
PICNIC AREA
FIRE PUMP HOUSE
235,000 GAL. STORAGE TANK
PUMP STATION
SEWER LINE
C.O.
EW-3 LANDSCAPE USE
WAREHOUSE BLDG.
ASPHALT PAVING
DIRT AREA
ASPHALT PAVING
8" PVC WATER PIPE UNDER GROUND
EMPLOYEE PARKING
N
0 10' 20' 30' 40' 50' 75' 100'
PET PELLET TANKER
POWER POLE
BOTTLE FORMING ROOM
WAREHOUSE BLDG.
PALLET REPAIR
WAREHOUSE BLDG.
PROPERTY LINE
HWY. 395
Project:
CG ROXANE, OLANCHA, CA
Date: MAY 28, 2015
Drawn by: LIONEL FERCHAUD
Sheet name:
Sheet N°
Scale: 1/32" = 1'-0"
LAYOUT OF WASTE WATER DISCHARGE SYSTEMS (NORTH)
4
CG ROXANE LLC
1400 MARY"S DR
WEED, CA 96094
Phone: (530) 938-1831
E-Mail: L.Ferchaud@CGRoxane.com
Drawing N°: Olancha rejects 04012015.dwg

Project:

CG ROXANE, OLANCHA, CA

Date: MAY 28, 2015	Drawn by: LIONEL FERCHAUD	Sheet name:	Sheet N°
Scale: 1/32" = 1'-0"		LAYOUT OF WASTE WATER DISCHARGE SYSTEMS (SOUTH)	5

CG ROXANE LLC
1400 MARY"S DR
WEED, CA 96094
Phone: (530) 938-1831
E-Mail: L.Ferchaud@CGRoxane.com

Drawing N°: Olancha rejects 04012015.dwg