State Water Resources Control Board



Division of Water Rights

901 P Street • Sacramento, California 95814 • (916) 657-1933 Mailing Address: P.O. Box 2000 · Sacramento, California · 95812-2000 FAX (916) 657-1485 · Web Site Address: http://www.swrcb.ca.gov Division of Water Rights: http://www.waterrights.ca.gov



Governor

AUG 2 9 2000

In Reply Refer To:341:WCS:26305, 26306, 26307

Emmerson Investment, Inc. c/o Jack G. Frost PO Box 496014 Redding, CA 96049-6014

Dear Mr. Frost:

PERMITS 19163, 19164, AND 19165 (APPLICATIONS 26305, 26306, AND 26307) SHASTA RIVER IN SISKIYOU COUNTY

On June 13, 2000, I conducted a field inspection of the water diversion projects covered by the above permits. I was accompanied by ranch foreman Pete Scala and Department of Water Resources watermaster Keith Dick. Subsequent to my visit, I gave you a call and we discussed my findings and recommendations, so this letter will be a fairly brief written summary of needed actions on your part.

These three permits cover diversions of water surplus to that distributed in accordance with the Shasta River Adjudication. These are generally early season flows resulting from leakage at the dam for Lake Shastina. The primary supplies of irrigation water for the places of use of these permits, Seldom Seen Ranch and Hole-In-The Ground Ranch, are waters covered by your adjudicated rights, which are "banked" for you in Lake Shastina.

The project under Permit 19163 utilized Diversion No. 156 of the adjudication to serve the Seldom Seen Ranch. This diversion has not been used for approximately 15 years and is in disrepair. A groundwater well has been used to irrigate this ranch (or at least portions of it) so that the "banked water" allotted this ground can be transferred to the Hole-In-The-Ground Ranch. This transfer is done informally with the watermasters' knowledge since no other water uses are adversely affected. Consequently, the project under Permit 19163 has been abandoned, the permit is unneeded, and I have recommended that it be revoked. Enclosed is a form for your signature and return which will authorize this revocation.

The projects under Permits 19164 and 19165 utilize Diversions 165 and 166 of the adjudication to serve portions of the Hole-In-The-Ground Ranch. Construction and use of water under these permits are complete but the projects are not ready for license because 1) measuring devices required by term 17 of each permit have not been installed. These devices are intended to

SURNAME DWR 540

W.C. Phili 8-18.00

show at a glance that the minimum 1 cubic foot per second (cfs) is being bypassed below each diversion point, and 2) no records have been kept of the amount of surplus water diverted under each permit. Such records of historical use are needed so that we may calculate the rate of diversion during the maximum month, the total acre-feet diverted during the maximum season, and to determine the season of diversion.

During my inspection, Mr. Dick indicated that he would work with Mr. Scala to devise a scheme for measurement of the 1 cfs fish bypass for each of the two diversions. He also said that he could use the existing 24" Parshall flume at the head of each ditch system to measure the amount of water being diverted and keep records of such measurements.

Licenses issued on Permits 19164 and 19165 will be based on measurements taken in future years. Since the time to complete use of water under each of these permits expired on December 31, 1995, extensions of time will be required. (Incidentally, the last extensions of time were granted in 1991 to former owner Gene Davis, also to keep diversion records for licensing.)

In view of the fact that your projects are not yet in compliance with the fish bypass measuring device requirement, I have recommended that extensions of time be denied until compliance is achieved.

You are hereby requested to submit, for my approval, a plan and an installation schedule for these measuring devices within 60 days of the date of this letter. Any future diversion of surplus water without an approved measuring device at either diversion would be in violation of term 17 of these permits and could result in administrative civil liability fines of \$500.00 per day. I'm sure you will want to take care of this matter before the next irrigation season commences so you can divert any surplus water that is available. Depending on the type of measuring device selected, some or all necessary construction may be most easily accomplished during low flows at the end of the current irrigation season.

I suggest that you formally request Mr. Dick's services for the next few years for making diversion measurements and keeping records for each diversion as follows: (1) the dates surplus water is diverted, (2) the corresponding head on the flumes, and, (3) if necessary, a calculation to determine how much of said water is surplus flow and how much is "banked" water released at your request from Lake Shastina. A copy for our files of your written request for watermaster assistance in making diversion measurements and keeping diversion records would be appreciated. Ideally such records would be submitted by you annually along with the Progress Report by Permittee which we will mail to you at the end of each year. It is likely that such a reporting requirement will be imposed as a condition of receiving extensions of time on Permits 19164 and 19165. I suggest that both you and Mr. Dick also keep a copy of such records in your own files.

Emmerson Investment, Inc.

Please give me a call at (916) 657-1933 if you have any questions. I will be looking for your plans for fish bypass measuring devices. I may need to visit the projects after installation of the devices to see how they are working. Once I have received and approved your plans, I will forward forms for your completion and submittal with the required fees to request extensions of time.

Sincerely,

ORIGINAL SIGNED BY

Wayne C. Smith Associate WRC Engineer

cc: Pete Scala Shasta Springs Ranch 21305 Slough Road Weed, CA 96097

> Keith Dick 9106 Airport Road Montague, CA 96064

erel.

STATE OF CALIFORNIA STATE WATER RESOURCES CONTROL BOARD

DIVISION OF WATER RIGHTS REPORT OF INSPECTION

FILING DATA

APPLICATION NO.: 26306	FILING DATE: 4-21-80		
NAME : Emmerson Investment, Inc. ADDRESS : c/o Jack G. Frost. P.O. Box 496014. Redding. CA 96 SOURCE : Shasta River tributary to Klamath River PT.OF DIV. : NE1/4 of NW1/4 of Section 22. T43N. R5W. MDB&M AMOUNT : 5 cfs: 400 AFA total PURPOSE : Irrigation and Stockwatering PLACE OF USE: 112 acres within Sections 16. 21. and 22. T43N. R5 SEASON : February 1 to November 1	COUNTY: Siskiyou		
PERMIT NO. : 19164 DATE ISSUED: 3-23-84	EXPIRES: 12:31-95		
PERMIT NO. : 19164 DATE ISSUED: 3-23-84 Date of Inspection: June 13. 2000 Inspected By (signature Accompanied By: Pete Scala (ranch foreman)	/submit date): \(\frac{\lambda \text{vu C. Ghit. } \frac{g-21-00}{\text{clephone:}} \) Telephone: \(\frac{(580) \ 938-3874 \text{ (residence)}}{(530) \ 598-4782 \text{ (cell phone)} \)		
Keith Dick (DWR watermaster) Person(s) Interviewed: Jack Frost (agent)	(530) 459-3876 Telephone: (530) 378-8119		
Accompanied By: Pete Scala (ranch foreman) Keith Dick (DWR watermaster) Person(s) Interviewed: Jack Frost (agent) RECOMMENDATION			
License Extension X to 2005 No Action conditional Corrections No Changes or Cor Owner Address Amount Season Purpose	Revoke Other rections X _ Point of Diversion Place of Use		
Remarks: (explain basis for recommendation) This permit, along with companions A26305 and A26307, was filed for water surplus to that distributed in accordance with the Shasta River Adjudication. Such surplus water generally consists of excess early season flows resulting from leakage from the dam for Lake Shastina. Each of the three separate PODs/POUs under these permits also has rights for their primary irrigation water under the Decree. At the time of construction of Dwinnell Reservoir (now Lake Shastina), a water right settlement allotted each POU a fixed amount of water, to be released each season upon demand and under watermaster supervision, from storage in the reservoir. These diversions and POUs were developed years ago and therefore construction and use of water have been complete for some time. However two issues remain: compliance with the measuring device for fish bypass requirement and keeping of diversion records for licensing purposes. These projects were deemed in compliance with the l cfs fish bypass in a 1986 inspection based on the watermaster's control of the diversions and his need to maintain flows greatly in excess of l cfs for downstream users. However, the permit clearly calls for a measuring device, presumably so that any interested part, could tell at a glance if the bypass was being met. In addition, there have apparently been times early in the irrigation season when diversions have been made under this permit and watermaster service had not yet begun. A Parshall flume with recorder is in place at the head of the ditch used under this permit and while it is used by the watermaster, no diversion records are kept, even though a term in this permit and while it is used by the watermaster supervision, even though Mr. Dick was present at both of our last two inspections. We discussed in detail his need to maintain written records for submittal to us to establish both a maximum month and maximum annual use of water. This will require a breakdown between water diverted under this perm			
SOURCE			
Tributary to: Klamath River Flow at time of inspection: 25 cfs How and where determined Mr. Dick, including 10 cfs being added to river via cross canal Is supply natural?: partially: at times includes releases from	storage in take shasting as mentioned above		
20 <u>00</u> <u>3rd</u> Inspection	8,22.00		

Application No. <u>26306</u>

<u>DIVERSION SYSTEM</u> Is point of diversion as specified?		
(1) California Coordinates. Zone N E		
Is change petition/correction required? (explain) no Would change cause any injury? no change Owner of land at point of diversion: permittee Assessor's Parcel No.: 20-04-43 Type of access: Is diversion system complete? yes		
Capacity of the limiting section: <u>8 cfs</u> How determined? <u>visible waterline at H=1.0' on staff gage for 24" Parshall flume in ditch just below POD; also backed up by statement of Mr. Dick. Diversion at inspection: H=0.81'=5.77 cfs from tables. Mr. Dick said that this amount includes about half surplus (permit) water and half adjudicated water.</u>		
PLACE OF USE		
Name of place of use. if commonly known as such: <u>Hole-in-the-Ground Ranch</u> Describe any changes/corrections from the place of use as described in the permit or order: <u>no changes: POU shown on E-map was both field checked and checked against aerial photos (in field file: from TerraServer web page). E-map appears surprisingly accurate.</u>		
Is change petition/correction required? (explain) no		
Is place of use developed to a point where full use of water may be made? (explain) yes		
Does it appear that development has been pursued with due diligence? (explain) yes		
Owner of land at place of use: <u>permittee</u> Assessor's Parcel No.: <u>portions of 20-04-43, 20-03-04 and 20-03-08</u> Acreage: <u>see assessor plats in field file</u>		
MAJOR USES OF WATER		
Briefly describe diversion works and method of applying water to major use: Scrap two-bys of various widths are used to partially block the entrances to two culverts (one 42"? and one 36"?) through an earth/rock diversion dam (approx 6' high x 40' long) across the Shasta River. The water level is thereby raised so that a portion will flow by gravity into an earth ditch. Flow into the ditch is controlled by the boards placed in front of the culverts and by a screw gate on another culvert about 50' down the ditch. Not far below the screw gate flow in the ditch is measured by a 24" Parshall flume (with recorder) operated by the DWR watermaster. Mr. Dick. Interestingly. Mr. Dick said the purpose of the recorder and flume was not to keep diversion records but to ensure that water is not "stolen" by monkeying with the water levels. The ditch is used to flood irrigate a portion of the Hole-in-the-Ground ranch on the east side of the river. Temporary tarp "dams" are typically used to turn water out of the ditch, but there are some permanent sliding gate turnouts in place. Does method appear wasteful, judging from local standards? (explain) No, this is the typical method for this		
area. List acreage/crop type or other units served during maximum season (show on attached sketch/map): 112 total acres, all meadow grass, is irrigated, of which the northerly 75 acres (approx) is hayed, then pastured. The upper (southerly) 37 or so acres is pastured only. About 75 head of cattle are grazed on this portion of the ranch, possibly along with ranch horses.		
OTHER USES		
Average number of persons served during maximum period: <u>none</u> Number of housing units: <u>none</u> Plumbing facilities available: <u>n/a</u> Area of garden, lawn, orchard, dust control, etc. (show measurements on attached sketch): <u>none known</u>		
Number and type of domestic livestock served: <u>none known</u> Other miscellaneous uses: (list and explain) <u>none</u>		

EXTENT OF USE OF WATER

Season of use and/or diversion to storage: will have to be determined from diversion records to be kept by Mr. Dick or his successor. Apparently irrigation under this permit does not occur until late March at the earliest and continues until all surplus water is gone and all water being diverted by permittee is being released for him from Lake Shastina. Early irrigations may consist entirely of surplus water in good water years when Lake Shastina has filled, as leakage occurs at a much greater rate when the lake level is high. Mr. Dick is aware from our discussion that he will need to keep and provide diversion records, based on the Parshall flume measurements, to substantiate both the amount and season for this appropriation. According to Mr. Scala, it takes them 2-1/2 to 3 weeks to complete one irrigation of the area flood irrigated by this ditch. Mr Dick estimates that in a good year the permittee may get 2-3 early irrigations using surplus water before he has to release stored (adjudicated) water for them.

Rate of use by direct diversion during maximum period: to be determined by future records (see above)

Maximum annual diversion: to be determined by future records (see above)

Maximum amount diverted to storage is involved: NO STORAGE

Maximum amount diverted to storage in one season:

Maximum withdrawal in one season (if applicable):

Year: 19 - 19

PERMIT TERMS

Address compliance with each Permit term (by term number): terms 14 and 15: the watermaster has long been aware of these permits and has been providing service to the permittees, but only to the extent necessary to ensure their diversions do not injure other users, not to the extent of keeping diversion records: terms 16 and 17: Mr. Dick maintains that the 1 cfs fish bypass is NEVER an issue for several reasons: he must manage these diversions while still satisfying the needs of downstream diverters: if insufficient water is available the flow is augmented by releases from Lake Shastina; and the existing diversion is physically unable to dewater the stream. He understands, however that term 17 requires a device for actual measurement to enable him. us or others to tell at a glance whether the bypass is being met. He is to work with the permittee to come up with existing system of partially blocking the culverts with loose two-bys with a metal framework to hold flashhboards fastened to the upstream end of the culverts. These flashboards may be used to form a weir with a specific pour-over head indicating a bypass is being met, or a sized orofice may be put in one or more lower boards to ensure a 1 cfs bypass. It is not certain at this time whether the device will be designed based on calculated flows or calibrated with actual flow measurements. I told Mr. Scala that I would be writing to them to request that they provide plans for the measuring devices for both diversions along with an installation schedule (before the next irrigation season) for my approval. I explained that we likely would not process their extension requests until such a plan and schedule are approved.

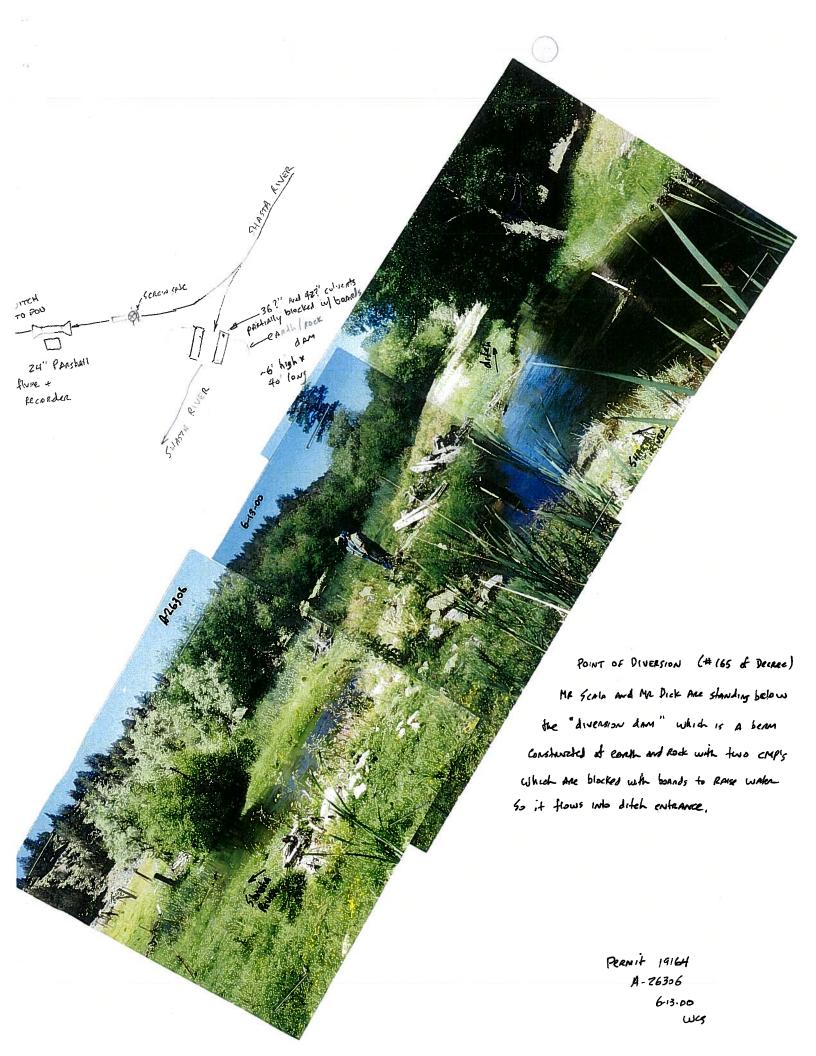
OTHER RIGHTS (show pertinent information)

Companion Permit 19163 (A26305) and Permit 19165 (A26307) were also inspected. Revocation is recommended for P19163, and an extension of time for diversion record-keeping is recommended for P19165. According to Mr. Dick. the Seldom Seen Ranch gets 924 ac-ft and the Hole-in-the-Ground Ranch 596 ac-ft under the Shasta River Adjudication (not verified - this is the water "banked" in Lake Shastina which the ranches can request each season on demand).

L11609 (A23767) covers two reservoirs on an adjacent ranch also owned by Emmerson.

L4151 (A8809) covers a spring on the bank of the Shasta River between the A26306 and A26307 PODs. This water is apparently rediverted at the A26307 POD, but I was not aware of L4151 at the time of this inspection, and therefore did not discuss it with Mr. Dick. This matter should be looked into to ensure that there is no duplication in Mr. Dick's diversion measurements. i.e. credit given towards P19165 for water already covered

by L4151





Screw gale on CMP
IN ditch ~ 50' below POD
Recorder Box (below)
CAN be seen to left REAR



24" Papshall flume in ditch ~75' downstream of POD MR. Dick is checking Recorder (in box)

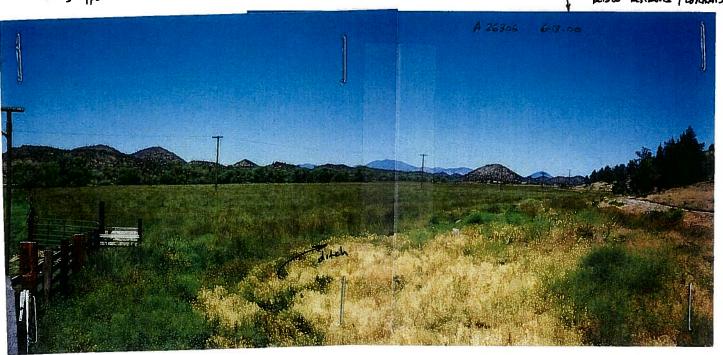
> Peamit 19164 A-26306 6-13-00 WES



MARROW Strip Mong upper ditch

PORTIONS OF FLOOD IRRIGATED PLACE OF USE

Upper and of Main pastisme
| below residence / Garrals



Pennit 19164 A-26306 6-13.00 cues

STATE OF CALIFORNIA STATE WATER RESOURCES CONTROL BOARD

DIVISION OF WATER RIGHTS

REPORT OF INSPECTION

FILING DATA

APPLICATION NO.: 26307		FILING DATE: 4-21-80
NAME : Emmerson Investment, Inc ADDRESS : c/o Jack G. Frost, P.O. SOURCE : Shasta River tributary to PT.OF DIV. : NW1/4 of NE1/4 of Section AMOUNT : 14 cfs; 800 AFA total PURPOSE : Irrigation and Stockwater PLACE OF USE: 375 acres within Sections SEASON : February 1 to November 1	ring 16, 17, 20, and 21. T43N, R5W. MDB&M (s	
PERMIT NO. : 19165	DATE ISSUED: 3-23-84	EXPIRES: 12-31-95
Date of Inspection: June 13, 2000 Accompanied By: Pete Scala (ranch fore)	_ Inspected By (signature/submit date): man) Telephone:	(530) 938-3874 (residence) (570) 598-4782 (cell phone)
<u>Keith Dick (DWR waterm</u> Person(s) Interviewed: <u>Jack Frost (age</u>	aster) nt) Telephone:	(530) 378-8119
RECOMMENDATION		
License Extension X to	<u>2005</u> No Action	Revoke Other
License Extension X to conditional Corrections Address Amount	No Changes or Corrections X Season Purpose Point of D	viversion Place of Use
flows resulting from leakage from the depermits also has rights for their prim Dwinnell Reservoir (now Lake Shastina), be released each season upon demand an These diversions and POUs were development of the for some time. However two requirement and keeping of diversion of these projects were deemed in complement and keeping of diversions users. However, the permit clearly caltell at a glance of the bypass was be irrigation season when diversions have The DWR watermaster, Keith Dick, has inwith this requirement. A Parshall flume with recorder is in post the watermaster, no diversion records under watermaster supervision, even of keeping diversion records. and ever discussed in detail his need to maintain and maximum annual use of water. The commendation for this permit is in the commendation for this permit is a series.	26305 and A26306, was filed for water ication. Such surplus water generally lam for Lake Shastina. Each of the three ary irrigation water under the Decree, a water right settlement allotted each d under watermaster supervision, from soped years ago and therefore construct issues remain: compliance with the me	At the time of construction of POU a fixed amount of water to torage in the reservoir. It is a suring device for fish bypass a 1986 inspection based on the in excess of 1 cfs for downstream that any interested party in the aster service had not yet beguntee to devise a scheme to comply this permit and while it is used bermit requires the diversion to so a prior owner) for the purpose of our last two inspections. We constant the start of the result of the start of the s
<u>SOURCE</u>		
Name: Shasta River Tributary to: Klamath River Flow at time of inspection: 25-30 cfs by Mr. Dick, including 10 cfs being ac Is supply natural?: partially; at time	Who measures flow? monitored by How and where determined? estimate ided to river via cross canal from Monta is includes releases from storage in Lake 2000 3rd Inspection	e of flow at POD of this permit.

Other miscellaneous uses: (list and explain) none

EXTENT OF USE OF WATER

Season of use and/or diversion to storage: will have to be determined from diversion records to be kept by Mr. Dick or his successor. Apparently irrigation under this permit does not occur until late March at the earliest and continues until all surplus water is gone and all water being diverted by permittee is being released for him from Lake Shastina. Early irrigations may consist entirely of surplus water in good water years when Lake Shastina has filled, as leakage occurs at a much greater rate when the lake level is high. Mr. Dick is aware from our discussion that he will need to keep and provide diversion records, based on the Parshall flume measurements, to substantiate both the amount and season for this appropriation. According to Mr. Scala, it takes them 3 to 4 weeks to complete one irrigation of the area flood irrigated by this ditch. Mr. Dick estimates that in a good year the permittee may get 2 early irrigations using surplus water before he has to release stored (adjudicated) water for them.

Rate of use by direct diversion during maximum period: to be determined by future records (see above)

Beginning and ending dates of maximum period: to be determined by future records (see above)

Maximum annual diversion: to be determined by future records (see above)

Maximum amount diverted to storage in one season:

Year: 19 - 19

Maximum withdrawal in one season (if applicable):

PERMIT TERMS

Address compliance with each Permit term (by term number): terms 14 and 15: the watermaster has long been aware of these permits and has been providing service to the permittees, but only to the extent necessary to ensure their diversions do not injure other users, not to the extent of keeping diversion records; terms 16 and 17: Mr. Dick maintains that the 1 cfs fish bypass is NEVER an issue for several reasons: he must manage these diversions while still satisfying the needs of downstream diverters; if insufficient water is available the flow is augmented by releases from Lake Shastina. He understands, however that term 17 requires a device for actual measurement to enable him, us or others to tell at a glance whether the bypass is being met. He is to work with the permittee to come up with such device for each of their diversion dams. For this diversion (No. 166), this might mean adding a notch in top flashboard sized for a 1 cfs bypass. I told Mr. Scala that I would be writing to request that they provide plans for the measuring devices for both diversions along with an installation schedule (before the next irrigation season; probably in the fall after the current irrigation season), for my approval. I explained that we likely would not process their extension requests until such a plan and schedule are approved.

OTHER RIGHTS (show pertinent information)

Companion Permit 19163 (A26305) and Permit 19164 (A26306) were also inspected. Revocation is recommended for P19163, and an extension of time for diversion record-keeping is recommended for P19164. According to Mr. Dick. the Seldom Seen Ranch gets 924 ac-ft and the Hole-in-the-Ground Ranch 596 ac-ft under the Shasta River Adjudication (not verified - this is the water "banked" in Lake Shastina which the ranches can request each season on demand).

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WR 19-2 (7/94)



1 LOSKING ACROSS DAM (PITCH TO LIFT PUMPS FLOWS BEHIND KEITH DICK AND PETE SCALA)

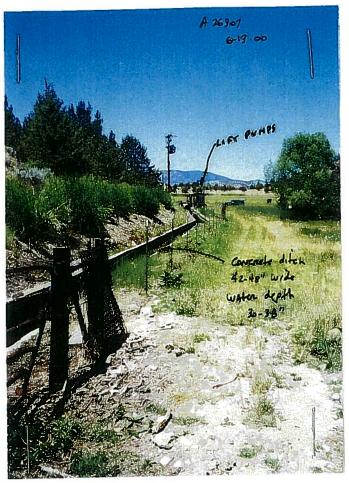


POINT OF DIVERSION (No. 166 of Decree)
FLASH BOARD DAM

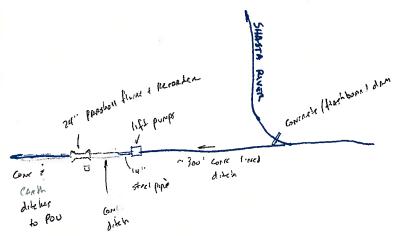
~ 12' WIDE X 6' HIGH

L-LOOKING UPSTREAM

PERMIT 19165 A 26307 6-13-00



CONCRETE LINED DITCH FROM DIVERSION DAM TO LIFT PUMPS





LIFT PUMPS (ELECTRIC CENTRIFUGAL)
30HP US Motors HIGH THRUST

154P US Notors
W (LAYNE & BOWLER PUMP

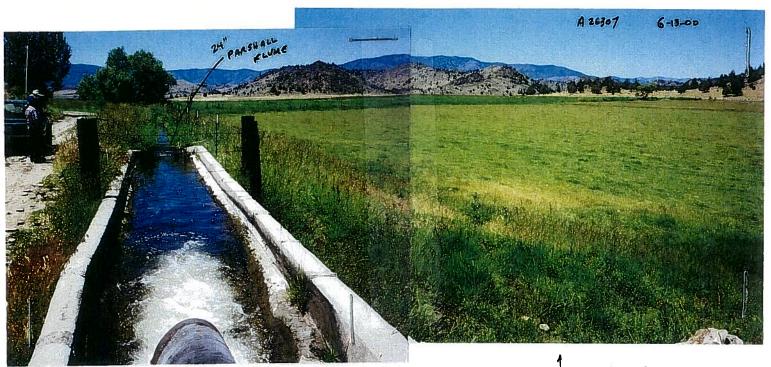
W VERTILINE PUMP

19" STEEL TO CONCRETE DITCH

PERMIT 14165 A 26307

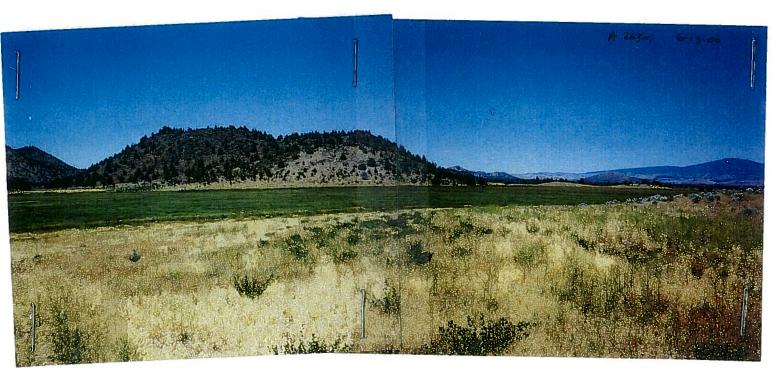
6-13.00

WCB



A LIFT PUMP DISCHARGE THENCE FLUME & DITCH SYSTEM

PORTION OF POU
FLOOD IRRIGATED HAY & PASTUR



1 PORTION OF POU (TOWARDS MIDDLE, LOOKING WEST)
FLOOD IRRIGATED PASTURE

PERMIT 19.165 A-26307 6-13-00 Weg