

TEMPORARY

NO. 62960

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APPLICATION FOR PERMISSION TO CHANGE POINT OF DIVERSION, MANNER OF USE AND PLACE OF USE OF THE PUBLIC WATERS OF THE STATE OF NEVADA HERETOFORE APPROPRIATED

Date of filing in State Engineer's Office MAR 26 1997

Returned to applicant for correction _____

Corrected application filed _____

Map filed OCT 09 1979 under 26934

The applicant United States of America (U.S. Navy) Attn: Larry Jones NAS Fallon Code 188, hereby make application for permission to change the Place of Use and Manner of Use of a portion of water heretofore appropriated under Permit 26934, Certificate 9856

1. The source of water is Underground
2. The amount of water to be changed 5.252 CFS not to exceed 555.72 acre feet annually
3. The water to be used for Industrial (Geothermal) Purposes
4. The water heretofore permitted for Irrigation Purposes
5. The water is to be diverted at the following point NW $\frac{1}{4}$ NW $\frac{1}{4}$ Section 8, T.24N., R.37E., MDM or at a point from which the northwest corner of said Section 8 bears N. 01°20"W. a distance of 1300 feet. Per PBU Map NE $\frac{1}{4}$ NE $\frac{1}{4}$ Section 7, T.24N., R.37E., MDM or at a point from which the northeast corner of said Section 7 bears N. 37°06'31" E. a distance of 1536.4 feet. Per 1983 BLM Survey.
6. The existing permitted point of diversion is located within
7. Proposed place of use NE $\frac{1}{4}$ Section 7, T.24N., R.37E., MDM
8. Existing place of use see attached
9. Use will be from January 1 to December 31 of each year.
10. Use was permitted from January 1 to December 31 of each year.
11. Description of proposed works Install pump in existing Goeringer well, install victaulic line to injection well SWL-1.
12. Estimated cost of works \$200,000
13. Estimated time required to construct works two years
14. Estimated time required to complete the application of water to beneficial use five years
15. Remarks: Water will be pumped from the existing Goeringer well into the existing injection sytem at SWL1 for the Oxbow Power Geothermal Power Plant. The purpose of this application is to determine if it is possible to use water from the shallower aquifer replace water lost through evaporation in the cooling tower (see attached memo form Dick Benoit). It is anticipated that the test will be performed for a 4 month period at approximately 1000 GPM, using a duty of approximately 530 acre feet.

By s/ Larry L. Jones
NAS Fallon Code 188
4755 Pasture Road
Fallon, NV 89406-5000

Compared cl/jr cl/cms

Protested _____

APPROVAL OF STATE ENGINEER

This is to certify that I have examined the foregoing application, and do hereby grant the same, subject to the following limitations and conditions:

This temporary permit to change the place of use and manner of use of a portion of the waters of an underground source as heretofore granted under Permit 26934 Certificate 9856 is issued subject to the terms and conditions imposed in said Permit 26934 Certificate 9856 and with the understanding that no other rights on the source will be affected by the change proposed herein. The well shall be equipped with a 2-inch opening and a totalizing meter must be installed and maintained in the discharge pipeline near the point of diversion and accurate measurements must be kept of water placed to beneficial use. The totalizing meter must be installed before any use of the water begins or before the proof of completion of work is filed. If the well is flowing, a valve must be installed and maintained to prevent waste. This source is located within an area designated by the State Engineer pursuant to NRS 534.030. The State retains the right to regulate the use of the water herein granted at any and all times.

This temporary permit does not extend the permittee the right of ingress and egress on public, private or corporate lands.

The issuance of this temporary permit does not waive the requirements that the permit holder obtain other permits from State, Federal and local agencies.

Monthly records shall be kept of the amount of water pumped from this well and the records submitted to the State Engineer on a quarterly basis within 15 days after the end of each calendar quarter.

This temporary permit is issued pursuant to the provisions of NRS 533.345 Section 2 and will expire on May 4, 1998 at which time all rights herein granted shall revert to the right being changed by this temporary permit.

The amount of water to be appropriated shall be limited to the amount which can be applied to beneficial use, and not to exceed 5.252 cubic feet per second, but not to exceed 555.72 acre-feet annually.

Work must be prosecuted with reasonable diligence and be completed on or before:

Proof of completion of work shall be filed before:

Application of water to beneficial use shall be filed on or before:

Proof of the application of water to beneficial use shall be filed on or before:

Map in support of proof of beneficial use shall be filed on or before:

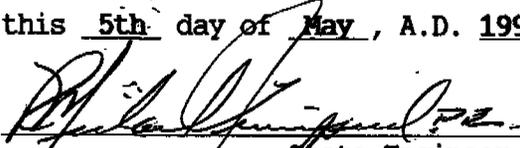
TEMPORARY

IN TESTIMONY WHEREOF, I, R. MICHAEL TURNIPSEED, P.E.,

State Engineer of Nevada, have hereunto set

my hand and the seal of my office,

this 5th day of May, A.D. 1997



State Engineer

EXPIRED
DATE JUN 23 1997

**ATTACHMENT
APPLICATION TO CHANGE PERMIT 26934**

8. The 1983 BLM Dependent Resurvey placed the northwest corner of Section 8 approximately 75 feet south and 990 feet east of the wood stake shown on the PBU Map for Permit 26934. Therefore the existing Place of Use shown on Certificate 9856 does not relate to the 1983 BLM survey

Existing Place of Use per PBU Map, Permit 26934

Section 8, T.24N., R.37E., MDM: SW 1/4 NW 1/4 - 6.31 ac.; SE 1/4 NW 1/4 - 17.18 ac.; NW 1/4 SW 1/4 - 38.35 ac.; NE 1/4 SW 1/4 - 25.34 ac.; SW 1/4 SW 1/4 - 40.0 ac.; SE 1/4 SW 1/4 - 11.75 ac. -- Total 138.93 ac.

Existing Place of Use per 1983 BLM Survey

Section 8, T.24N., R.37E., MDM: SE 1/4 NW 1/4 - 2.1 ac.; SW 1/4 NW 1/4 - 22.6 ac.; NW 1/4 SW 1/4 - 36.3 ac.; SW 1/4 SW 1/4 - 19.8 ac.; Section 7, T.24N., R.37E., MDM: SE 1/4 NE 1/4 - 4.33 ac.; NE 1/4 SE 1/4 - 28.5 ac.; SE 1/4 SE 1/4 - 25.3 ac.; -- Total 138.93 ac.

Note that 1 acre of the existing place of use (SE 1/4 NW 1/4, both surveys) is not to be changed by this application, but is to be changed by a concurrent application. Total acreage under Certificate 9856 is 139.93 acres.



OXBOW POWER SERVICES, INC.

5250 South Virginia Street, Suite 304
Reno, Nevada 89502

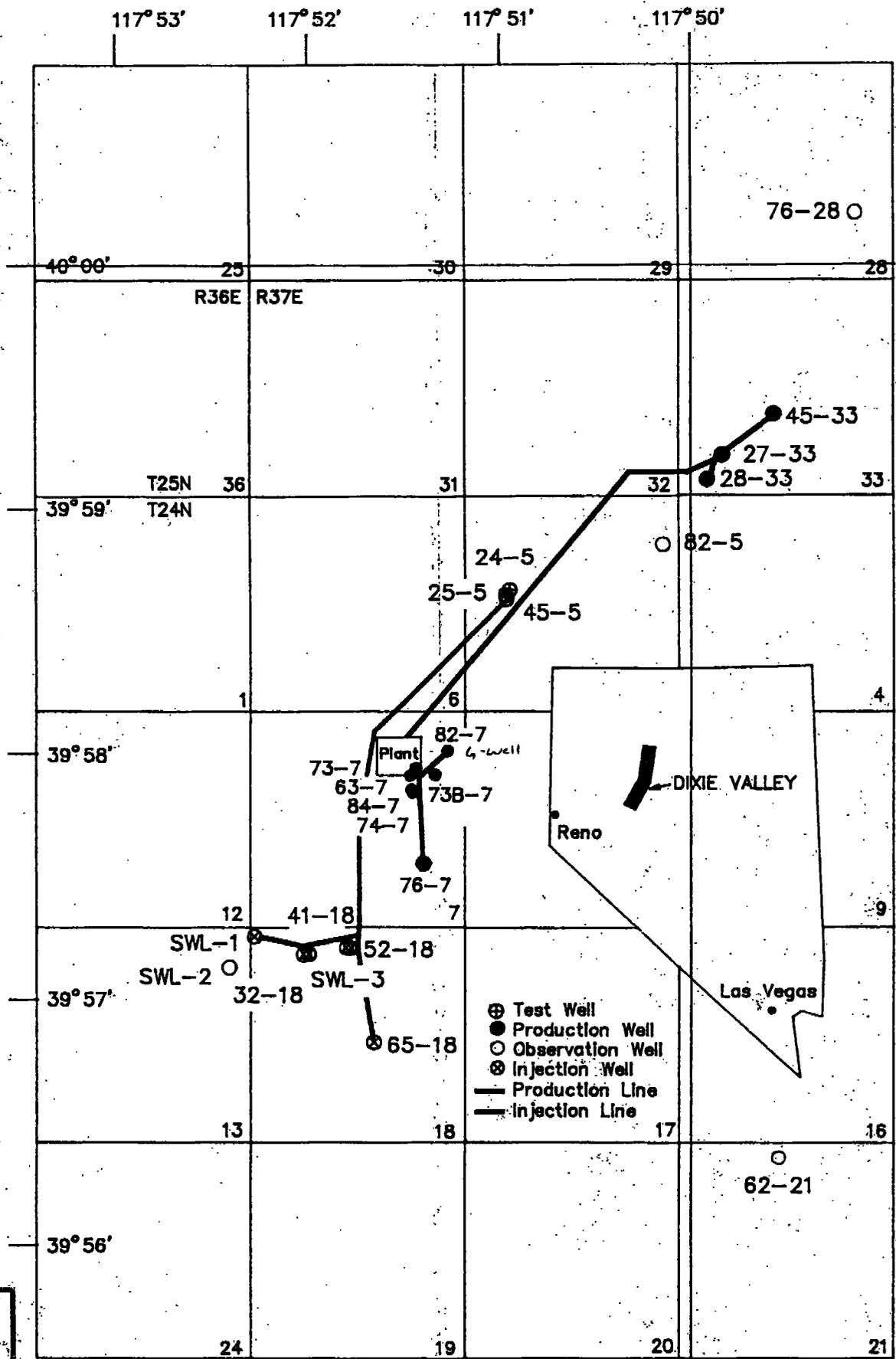
TO: Tom Foote
FROM: Dick Benoit
DATE: March 13, 1997
SUBJ: Places of Use for Goerenger Well Water and plans for cold water injection at Dixie Valley
cc: Dan, Jim Rutledge, Pete Rose

Our initial plan is to install a pump in the Goerenger well that is capable of 1000 gpm. We will build a victaulic line from the Goerenger well to injection well SWL-1 and pump whatever SWL-1 will accept at pressures that the 1000 gpm pump can generate. Currently SWL-1 is accepting about 600 gpm of hot injectate. It should be capable of accepting a slightly larger amount of cold water. As soon as we are to the point that we believe we can continuously operate the system we will inject a tracer, either fluorescein or amino-G, into SWL-1 to document how long it takes this water to reappear in the production wells. This tracer test already has all required agency approvals.

We also want to try cold shocking the other injectors in Section 18 for a period of a few days each to see if their injectivity can be improved by rapidly lowering the formation temperature near the wellbore. We probably will want to do this before the SWL-1 tracer test starts as the tracer test will likely take a year or so to complete and it is simplest to interpret if the flow is as continuous as possible. The candidate wells for shocking include 41-18, 52-18, 65-18, 32-18, and SWL-3. As the Goerenger-SWL-1 victaulic line will pass by the spur lines to each of these other wells it will be a simple exercise to shut off the normal injectate flow to one well at a time and inject whatever cold water each well will accept.

After we have convinced ourselves that the cold water injection is not significantly damaging SWL-1 or the immediate surrounding formation, I expect we will want to begin injecting the remaining cold fluid that the Goerenger well can produce to well 65-18. I really don't have a good time estimate for when this might start but presumably it would be late in 1997 at best.





FILED
 MAR 27 1997
 STATE ENGINEER'S OFFICE

62960-T

