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log #
79516

1401 N. ROOP ST. CARSON CITY, NV 89701 (775) 888-9926 FAX (775) 888-9928

Division of Water Resources
123 West Nye Lane, Suite 246
Carson City, NV. 89706-0818

Dear Sirs,

Following is a detailed description of the method of well abandonment conducted to the well located at the Riverside Hotel in downtown Reno. We mobilized to the site and removed 105' of 4" drop pipe and a submersible pump. The top of the well casing is approximately 8' below ground surface. We measured the static water level at 8.9' and the depth of the well at 338'. We decided that since we had to perforate the 14" well from 330' back to the surface, that we would brush the casing to remove the encrustations so that our Mills Knife could advance down into the casing without becoming lodged. We installed our 14" brush into the well but had difficulty advancing it. We removed several brushes before we finally succeeded in advancing it to the bottom of the well. We brushed the casing for 1 hour, removed the brush and measured the depth of the well at 322'. We then installed our 8" bailer and bailed the debris from the well until we could not advance any further. We measured the depth of the well at 354'.

While we were bailing the debris from the well, everytime we were retrieving the bailer from the well it would become lodged in the casing at a depth of 200'. After the bailer was removed, I measured the casing and found that the 14" casing had a 12" liner casing installed inside of it. I am sure that the 12" liner extended from surface to 200' where our sand bailer would hit an obstruction on return. Since we could not fit our 14" perforator through the 12" casing, it was decided that we try to pull the 12" liner from the well. We triple lined our pump rig to get the maximum amount of pull, but unfortunately we would just pull the front of the rig off the ground. My rig has a capacity of 35,000 lbs of line pull and we did not even move the 12" casing.

It was decided to try to perforate the casing with an oilfield perforating service. I contacted Halliburton Corp. and Slumber-J Oilfield Services. Halliburtons cost estimate was \$31,000.00 and they would not perforate within 200' of ground surface due to liability of damages to underground utilities or structures. Slumber-J cost estimate was \$26,000.00 but they would only perforate to within 80' of the surface. Since the casing had a 12" liner, the 14" casing had to be in poor condition. It was decided to use our 12" Mills Knife and perforate the 12" liner so that the neat cement would flow out into the formation through the damaged 14" casing. Wavier no. R-363, was granted to complete the abandonment. We installed our 12" Mills Knife and perforated 5 rows per foot from 200' to the surface. At a depth of 120' to 135' we perforated 7 rows per foot because this is where the upper perforations were in the 14" casing. After the perforating was completed, we installed 2" tremme pipe to a depth of 349'. The following day, we pumped from the bottom of the well to surface 16 yards of neat cement. After the cement was pumped in, we allowed the well to set for 1 hour and then measured the top of the cement at 3' below the top of the casing. We then mixed 5 bags of cement and topped the hole off. The neat cement that was delivered to the site contained 5 gallons of water per bag of cement.

Sincerely,

Dan
Dan Trampe



DEPARTMENT OF CONSERVATION AND NATURAL RESOURCES
DIVISION OF WATER RESOURCES

R-363

123 W. Nye Lane, Suite 246
Carson City, Nevada 89706-0818
(775) 687-4980 • Fax (775) 687-6972

March 8, 2000

Charla Honey
City of Reno
350 S. Center Street, Suite 400
Reno, NV 89501

RE: Request dated March 8, 2000, to waive the regulation requiring pulling or perforating the casing during an abandonment procedure. The well is located at 17 S. Virginia Street, Reno, Washoe County, Nevada.
Local No. 087 N19 E19 11 Cb

Dear Ms. Honey:

As provided in Section 534.450 of the Regulation for Water Well and Related Drilling as adopted under Chapter 534 of the Nevada Administrative Code, and for good cause shown, authorization is herewith granted to complete the subject well as described below:

This office waives only section 534.420 paragraph 5A and 5B of the regulation. The well driller's report must bear this waiver number R-363. The well must be plugged by perforating the well as discussed by phone on March 8, 2000, and circulating an appropriate plugging fluid from total depth to surface.

During the initial attempt to plug this well, the well driller discovered that the 14 inch well was equipped with a 12 inch liner from 0 to 200 feet. Every effort was made by the driller to pull the liner from the well, however, the liner could not be removed. After consultation with this office, it was decided that the perforating may be accomplished by blasting shot through the 12 inch liner and 14 inch casing. Haliburton and Slumber J companies were contacted by you to discuss the possibility of blasting the liner. Both companies expressed concern about the underground utilities less than ten feet from the well. As discussed, blasting the liner was determined to be impractical.

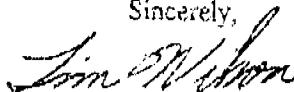
The 14 inch casing was determined to be in poor condition due to the presence of the liner and the age of the well (approx. 51 yrs.). By perforating the liner, the plugging

fluid will be able to circulate into the formation through holes and perforations in the 14 inch casing. This will provide a plug that will satisfy the intent of the plugging regulations.

Full compliance with the remainder of the statute and regulation is required. Please include as accurate a description as possible on the completion reports. It is expressly understood this authorization does not relieve the operator of the permitting requirements of other state, federal, and local agencies.

If any questions arise, please contact this office at (775) 687 - 3861.

Sincerely,



Tim Wilson
Staff Engineer II

TW

WELL LOG AND REPORT TO THE STATE ENGINEER OF NEVADA

Rec. _____ 194
 Well No. _____
 Permit No. _____
 Do not fill in

Owner: Riviera Hotel Driller: Lee Smith
 Address: Reno Address: Reno Lic. No. 29
 Location of well: $\frac{1}{4}$ Sec. 11, T. 19 N. R. 19 E, in Washoe County
 or _____
 Water will be used for Air Conditioning Total depth of well 360'
 Size of drilled hole 14" Weight of casing per linear foot _____
 Thickness of casing _____ Temp. of water 56
 Diameter and length of casing _____
 (Casing 12" in diameter and under give inside diameter; casing 12" in diameter give outside diameter.)
 If flowing well give flow in c.f.s. or g.p.m. and pressure _____
 If nonflowing well give depth of standing water from surface 18'
 If flowing well describe control works _____
 (Type and size of valve, etc.) _____
 Date of commencement of well May 9-1949 Date of completion of well July 1-1949
 Type of well rig Buckeye 24" Spudder

LOG OF FORMATIONS

From feet	To feet	Thickness feet	Type of material
0	7	7	Boulders & Clay
7	11	4	" " "
11	26	15	" " "
26	33	7	" " "
33	39	6	Boulders & Sand - W
39	42	3	" " "
42	50	8	Gravel & clay
50	62	12	Gravel & clay
62	80	18	Large gravel & clay
80	102	22	" " " "
102	107	5	" " " "
107	123	16	Brown Clay
123	124	1	" " "
124	131	7	Gravel sand & water
131	133	2	Brown Clay
133	159	26	" " "
159	165	6	Gravel sand & clay

Water-bearing Formation, Casing Perforations, Etc.

Chief aquifer (water-bearing formation)
 from 33.6 to 35.6 ft.

Other aquifers 217' - 230'
Gravel & Sand
124' - 131'
GRAVEL SAND WATER

First water at 39 feet

Casing perforated
 from 124 to 131 to 33.6 to 35.6

Size of perforations
3 x 1/4

