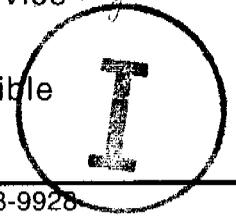






- Turbine and Submersible Sales & Service
- Complete Well Rehabilitations
- Aquifer Testing - Turbine or Submersible

log # 74795



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

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

Dear Sirs,

Following is a description of the work involved for the abandonment of a 16" well for Carson City Utilities, located along Northgate Lane in Carson City, NV.

We mobilized to the site on January 19, 1999. We excavated the area around the 26" conductor casing and found that the 16" casing had a 12" liner casing installed inside of it. The annulus between the 12" and 16" was gravel packed. According to the original well drillers report, the well was installed with 16" casing to a depth of 308'. The casing was perforated from 50' to 308'. There was no record of the liner, so I called the state engineers office and spoke to Tom Gallagher. He came out to the site and suggested that since the 12" casing was inside of the 16" casing, we would not achieve much by perforating the casing. He instructed us to try to remove 10' of gravel pack between the 12" and 16" casing and also 8 to 10' of gravel between the 26" and 16" casing and fill the annulus with cement. We got an air compressor and blew out about 12' of gravel between the 12" and 16" casing and removed about 8' between the 26" and 16" casing.

After the gravel was removed, we cut off the 12" casing cover and measured the depth of the well at 301'. The static water level was at 17' bgs. We installed our sand bailer and cleaned the debris from the bottom of the well to a depth of 307.13'. We then installed 306' of 2" tremmie pipe to the bottom of the well for pumping the cement through. The following day cement arrived on site at 10:00 am. I estimated the hole volume would require approximately 9.33 cubic yards of cement. The neat cement that was delivered to the site averaged 4 to 4.5 gallons of water per bag of cement. We pumped in a total of 13 cubic yards of neat cement. According to the load tickets from the concrete company, we used 32,994 pounds of Portland Type II cement and 13,161 pounds of water. After the hole was filled with cement, we cut the casing off to 1.5' below grade. During the pumping of the neat cement, both Tom Gallagher and Matt Dillion, with the State Engineers office were on site to observe the installation of the cement.

# WELL LOG AND REPORT TO THE STATE ENGINEER OF NEVADA

Log No. Log 2  
 Rec. 18th 12 19 61  
 Well No. \_\_\_\_\_  
 Permit No. 19564  
 Do not fill in

PLEASE COMPLETE THIS FORM IN ITS ENTIRETY

Owner Carson Water Company Driller Meyer Drilling Co.  
 Address Carson City, Nevada Address Hot Springs Rd. Carson City, Nev. No. 209  
 Location of well: SW 1/4 SW 1/4 Sec 8 15 T. 15N/3, R 20 E, in Ormsby County  
 or Meyer Drilling Co. Yard, Hot Springs Rd. Carson City  
 Water will be used for Municipal Total depth of well 431 ft.  
 Size of drilled hole 30" to 50", 26" to 308" 8" to Weight of casing per linear foot 44 lbs.  
 Thickness of casing 1/4" Temp. of water Cool (61 degrees)  
 Diameter and length of casing 16" ID 308 ft.  
(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 Not Flowing  
 If nonflowing well give depth of standing water from surface 2 ft.  
 If flowing well describe control works Not Flowing  
(Type and size of valve, etc.)  
 Date of commencement of well Dec. 20, 1960 Date of completion of well Jan. 10, 1961  
 Type of well rig KF-50 Rotary

### LOG OF FORMATIONS

From feet	To feet	Thickness feet	Type of material
0	3	3	Top soil
3	6	3	Hard pan
6	13	7	Sand & clay
13	15	2	Clay
15	35	20	Sand & clay
35	50	15	Clay
50	120	70	Sand
120	165	45	Course Sand
165	182	17	Shale
182	198	16	Sand & Gravel
198	210	12	Shale
210	228	18	Sand & Gravel
228	270	42	Sand
270	307	37	Clay
307	308	1	Hard Rock
308	320	12	Sand
320	332	12	Sand
332	355	23	Shale
355	359	4	Hard Rock
359	371	12	Clay
371	390	21	Hard Shale
390	427	33	Very Hard Shale
427	431	6	Hard Granite

Water-bearing Formation, Casing Perforations, Etc.

Chief aquifer (water-bearing formation)  
 from 50 to 270 ft.

Other aquifers  
320 ft. to 333 ft.

First water at 15 feet.

Casing perforated  
 from 50 to 308 ft.

Size of perforations  
Rosco Moss Company  
1/8" Shutter Screen  
 (Louver)

**MEYER DRILLING CO., INC.  
CARSON CITY, NEVADA**

