STATE OF NEVADA
DIVISION OF WATER RESOURCES
WELL DRILLER'S REPORT

OFFICE USE ONLY
Log No. 115885
Permit No.
Basin 221

PRINT OR TYPE ONLY
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Please complete this form in its entirety in accordance with NRS 534.170 and NAC 534.340

PW-2

NOTICE OF INTENT NO. 29523

1. OWNER VIDLER WATER
MAILING ADDRESS 3480 GS RICHARDS BLVD
CARSON CITY NEVADA 89703

ADDRESS AT WELL LOCATION TULE DESERT
Subdivision Name N/A County LINCOLN

2. LOCATION NW/4 SE 1/4 Sec 6 T 10 N OR 69 E
PERMIT/WAIVER No. R-1348 (Issued by Water Resources) N/A Parcel No.

Latitude N 37° 5.528
Longitude W 114° 19.177
UTM E
N
☒ NAD 27
☐ NAD 83/WGS 84

See note below PBB

3. WORKED PERFORMED
☒ New Well ☐ Replace ☐ Recondition
☐ Deepen ☐ Other

4. * EXPLORATORY PROPOSED USE
☐ Domestic ☐ Irrigation ☐ Test
☐ Municipal/Industrial ☐ Monitor ☐ Stock

5. WELL TYPE
☐ Cable ☐ Rotary ☒ RVC
☐ Air ☐ Other

6. LITHOLOGIC LOG

Material	Water Strata	From	To	Thickness
*SEE ATTACHED GEOLOGIC LOG				

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Date started 2-10, 20 07
Date completed 8-11, 20 07

7. Water Level
Static water level: 657.6 feet below land surface
Artesian Flow: N/A G.P.M. P.S.I.
Water Temperature: °F
Quality:

8. WELL TEST DATA
TEST METHOD: ☐ Bailer ☒ Pump ☐ Air Lift

	G.P.M.	Draw Down (Feet Below Static)	Time (Hours)
TEST PUMPING	1,000	632.9	168 HOURS

9. WELL CONSTRUCTION
Depth Drilled 2,732' Feet Depth Cased 2700' Feet

HOLE DIAMETER (BIT SIZE)

		From		To	
48	Inches	0	Feet	50	Feet
26"	Inches	50'	Feet	2732'	Feet
	Inches		Feet		Feet

CASING SCHEDULE

Size O.D. (Inches)	Weight/Ft. (Pounds)	Wall Thickness (Inches)	From (Feet)	To (Feet)
30"	128.65	.375	0	50'
16"	52.25	.312	0	1500'

Perforations:
Type of perforation LOUVERED STEEL
Size of perforation .125
From 1500 feet to 2700' feet
From feet to feet
From feet to feet
From feet to feet
From feet to feet

Annular Seal ☒ Yes ☐ No
☒ Neat Cement 480 to 1279' ☒ Pumped ☐ Poured
☒ Cement Grout 0 to 99' ☒ Pumped ☐ Poured
☒ ~~Concrete Grout~~ GRAVEL 99 to 480' ☒ Pumped ☐ Poured
☐ ≥30% Bentonite Grout to ☐ Pumped ☐ Poured

Gravel Pack: ☒ Yes ☐ No 1300 to 2732 ☒ Pumped ☐ Poured
Type: 5/8" ROUNDED GRAVEL
Bentonite Chips: ☒ Yes ☐ No 1279 to 1300 ☒ Pumped ☐ Poured
Type: BAROID BENTONITE CHIPS

10. DRILLER'S CERTIFICATION
This well was drilled under my supervision and the report is true to the best of my knowledge.
Name LAYNE CHRISTENSEN COMPANY (Contractor)
Address 1717 W. PARK AVE (Contractor)
REDLANDS CA. 92373
Nevada contractor's license number issued by the State Contractor's Board 0043608
Nevada driller's license number issued by the Division of Water Resources, the contractor for 1660
Signed M. Hal (By driller performing actual drilling on-site or contractor)
Date 12-11-12

USE ADDITIONAL SHEETS IF NECESSARY

37.092133
-114.319617
Based on gps provided by driller
well drilled SE SW

(NS/PO 3-08) (O) 627

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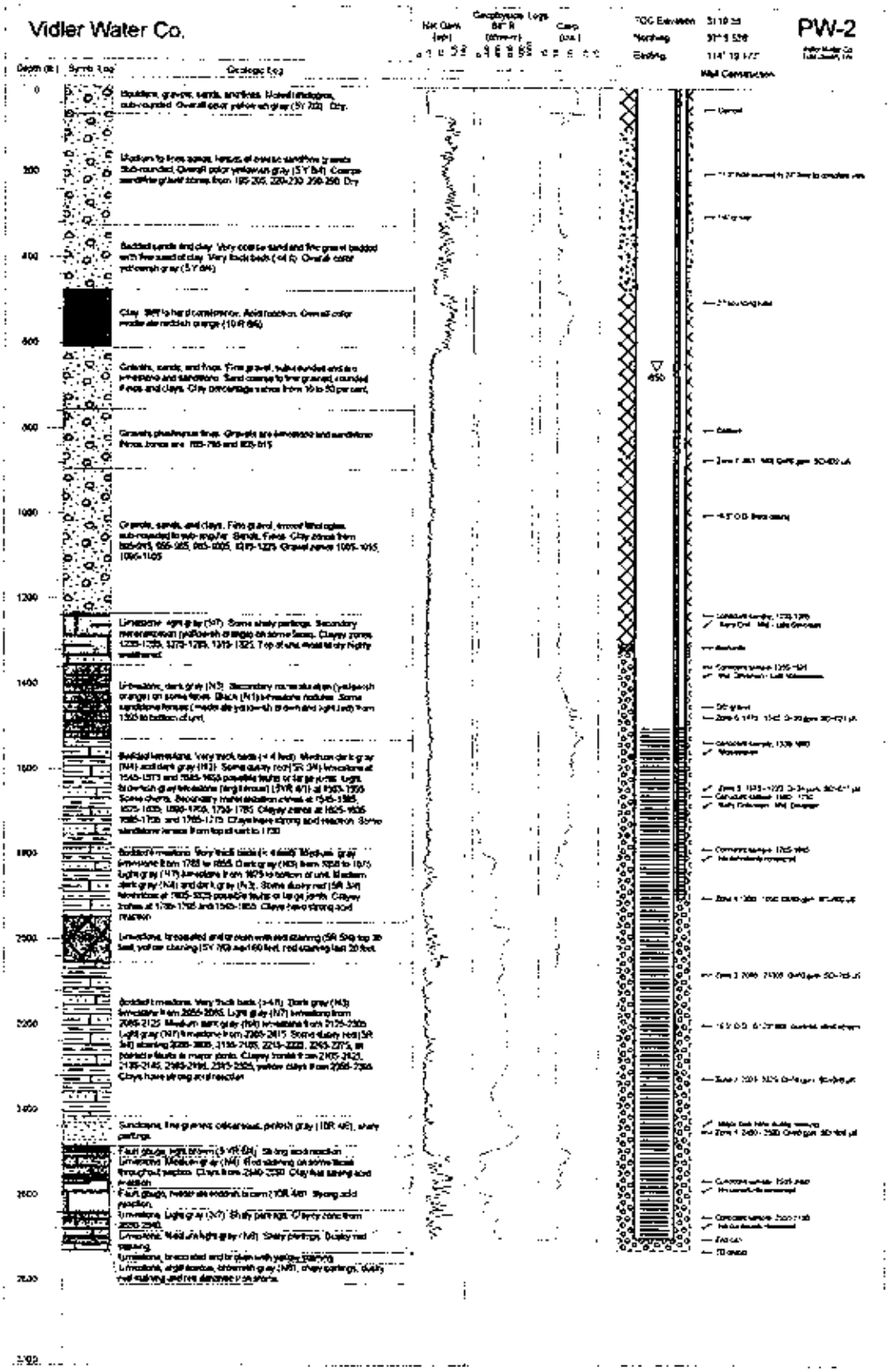
Summarized Geologic Log
Well PW-2 (TW-C)
Tule Desert, Lincoln, Co. NV

From	To	Keyword	Description
0	65	Alluvium	Boulders, gravels, sands, and fines. Mixed lithologies, sub-rounded. Overall color yellowish gray (5Y 7/2). Dry.
65	325	Alluvium	Medium to fines sands, lenses of coarse sand/fine gravels. Sub-rounded. Overall color yellowish gray (5 Y 8/4). Coarse sand/fine gravel zones from 195-205, 220-230, 250-260. Dry.
325	475	Alluvium	Bedded sands and clay. Very coarse sand and fine gravel bedded with fine sand of clay. Very thick beds (<4 ft). Overall color yellowish gray (5 Y 8/4).
475	610	Clay	Clay. Stiff to hard consistency. Acid reaction. Overall color moderate reddish orange (10 R 6/6).
610	755	Alluvium	Gravels, sands, and fines. Fine gravel, sub-rounded and are limestone and sandstone. Sand coarse to fine grained, rounded. Fines and clays. Clay percentage varies from 10 to 50 percent.
755	895	Alluvium	Gravels plus/minus fines. Gravels are limestone and sandstone. Fines zones are: 785-795 and 805-815.
895	1235	Alluvium	Gravels, sands, and clays. Fine gravel, mixed lithologies, sub-rounded to sub-angular. Sands. Fines. Clay zones from 895-915, 955-965, 985-1005, 1215-1225. Gravel zones 1005-1015, 1095-1105.
1235	1355	Shaley limestone	Limestone, light gray (N7). Some shaly partings. Secondary mineralization (yellowish orange) on some faces. Clayey zones 1235-1255, 1275-1295, 1315-1325. Top of unit most likely highly weathered.
1355	1530	Limestone	Limestone, dark gray (N3). Secondary mineralization (yellowish orange) on some faces. Black (N1) limestone nodules. Some sandstone lenses (moderate yellowish brown and light red) from 1395 to bottom of unit.
1530	1785	Bedded limestone	Bedded limestone. Very thick beds (< 4 feet). Medium dark gray (N4) and dark gray (N3). Some dusky red (5R 3/4) limestone at 1545-1575 and 1645-1655 possible faults or large joints. Light brownish gray limestone (argillerous) (5YR 4/1) at 1555-1565. Some cherts. Secondary mineralization zones at 1545-1595, 1625-1635, 1695-1705, 1755-1765. Clayey zones at 1625-1635, 1695-1705, and 1765-1775. Clays have strong acid reaction. Some sandstone lenses from top of unit to 1730.
1785	1945	Bedded limestone	Bedded limestone. Very thick beds (< 4 feet). Medium gray limestone from 1785 to 1855. Dark gray (N3) from 1855 to 1875. Light gray (N7) limestone from 1875 to bottom of unit. Medium dark gray (N4) and dark gray (N3). Some dusky red (5R 3/4) limestone at 1805-1825 possible faults or large joints. Clayey zones at 1785-1795 and 1845-1855. Clays have strong acid reaction.
1945	2055	Brecciated limestone	Limestone, brecciated and broken with red staining (5R 5/4) top 30 feet, yellow staining (5Y 7/6) next 60 feet, red staining last 20 feet.
2055	2415	Bedded limestone	Bedded limestone. Very thick beds (>4 ft). Dark gray (N3) limestone from 2055-2085. Light gray (N7) limestone from 2085-2125. Medium dark gray (N4) limestone from 2125-2305. Light gray (N7) limestone from 2305-2415. Some dusky red (5R 3/4) staining 2085-2095, 2155-2185, 2215-2225, 2265-2275, all possible faults or major joints. Clayey zones from 2105-2125, 2135-2145, 2185-2195, 2315-2325, yellow clays from 2355-2395. Clays have strong acid reaction.
2415	2485	Sandstone	Sandstone, fine grained, calcareous, pinkish gray (10R 4/6), shaly partings.
2485	2500	Fault gouge	Fault gouge, light brown (5 YR 6/4). Strong acid reaction.
2500	2555	Limestone	Limestone. Medium gray (N4). Red staining on some faces throughout section. Clays from 2540-2550. Clay has strong acid reaction.
2555	2565	Fault gouge	Fault gouge, moderate reddish brown (10R 4/6). Strong acid reaction.
2565	2645	Shaley limestone	Limestone. Light gray (N7). Shaly partings. Clayey zone from 2630-2640.
2645	2703	Limestone	Limestone. Medium light gray (N6). Shaly partings. Dusky red staining.
2703	2715	Brecciated limestone	Limestone, brecciated and broken with yellow staining.
2715	2732	Argillaceous limestone	Limestone, argillaceous, brownish gray (N6), shaly partings, dusky red staining and red dendritic iron stains.



Well PW-2 Construction

Drilled: Feb. 10 - June 14, 2007
Developed: June 15 - July 1, 2007
Contractor: Layne Christensen Co., Fontana, CA
Drilling Method: Flooded Reverse
Geophysical Logging: SW Exploration Services, Gilbert, AZ
Geologists: C. Fitzel and C. Parker, Fitzel Geosciences, Rosie, CO

Fitzel Geosciences, LLC

Well PW-2 Testing

Date: Aug. 4 - 11, 2007
7 day pumping test
Q = 1030 gpm, DD = 622 ft
Sampled Aug. 11, 2007
Field Parameters
Temp: 28.1 C, SC = 489 uS
pH = 7.9, ORP = 240

Figure 2
Well PW-2
Geologic Log and
Well Construction Details
Vidler Water Co.,
Tule Desert, Lincoln County, NV

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