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

OFFICE USE ONLY
Log No. 116782
Permit No.
Basin 087

PRINT OR TYPE ONLY
DO NOT WRITE ON BACK

Please complete this form in its entirety in accordance with NRS 534.170 and NAC 534.340

NOTICE OF INTENT NO. 69320

1. OWNER WASHOE COUNTY
MAILING ADDRESS 4930 ENERGY WAY
SW RENO, NV 89502

ADDRESS AT WELL LOCATION 3031 LONGLEY LN
RENO, NV 89502
Subdivision Name: County:

2. LOCATION ~~SE ¼~~ SW ¼ Sec. 20 T 19 N/S R 20 E
PERMIT/WAIVER No. 50 021-456-18
Issued by Water Resources Parcel No.

Latitude 39° 29' 35.63" N
Longitude 119° 45' 39.14" W
UTM E N
☐ NAD 27 ☒ NAD 83/WGS 84

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

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

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

6. LITHOLOGIC LOG

| Material | Water Strata | From | To | Thickness |
|---|---|---|---|---|
| HOLE # CTM 125 | | | | |
| SEE ATTACHED LOG | | | | |
| NAD 27 | | | | |
| 39.493569° N | | | | |
| 119.759875° W | | | | |
| Changed by DWR Staff | | | | |

Date started: 6-4-13, 20 13
Date completed: 6-4-13, 20 13

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7. Water Level
Static water level: 12 feet below land surface
Artesian Flow: 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) |
|---|---|---|
| | | |

9. WELL CONSTRUCTION
Depth Drilled 50 Feet Depth Cased 50 Feet

HOLE DIAMETER (BIT SIZE)

| | | From | | To | |
|---|---|---|---|---|---|
| 6 | Inches | 0 | Feet | 50 | Feet |
| | Inches | | Feet | | Feet |
| | Inches | | Feet | | Feet |

CASING SCHEDULE

| Size O.D. (Inches) | Weight/Ft. (Pounds) | Wall Thickness (Inches) | From (Feet) | To (Feet) |
|---|---|---|---|---|
| 2 | | SCH 80 PVC | 0 | 26.5 |
| | | | | |
| | | | | |

Perforations:
Type of perforation FACTORY SLOT
Size of perforation .020
From 26.5 feet to 21.5 feet
From feet to feet
From feet to feet
From feet to feet
From feet to feet

Annular Seal: ☐ Yes ☐ No

| | | | | |
|---|---|---|---|---|
| ☐ Neat Cement | | to | ☐ Pumped | ☐ Poured |
| ☒ Cement Grout | 0 | to 17.5' | ☒ Pumped | ☐ Poured |
| ☐ Concrete Grout | | to | ☐ Pumped | ☐ Poured |
| ☐ ≥30% Bentonite Grout | | to | ☐ Pumped | ☐ Poured |

Gravel Pack: ☒ Yes ☐ No 27.5 to 19.5 ☐ Pumped ☒ Poured
Type: 10x20 SILICA, #60 FINE
Bentonite Chips: ☒ Yes ☐ No 50 to 27.5 ☐ Pumped ☒ Poured
Type: MEDIUM, ALSO FROM 19.5' TO 17.5'

10. DRILLER'S CERTIFICATION
This well was drilled under my supervision and the report is true to the best of my knowledge.
Name BOART LONGYEAR
Contractor
Address 7103 W. AUGUSTA AVE
Contractor
GLENDALE, AZ 85303
Nevada contractor's license number issued by the State Contractor's Board 0021976
Nevada driller's license number issued by the Division of Water Resources, the on-site driller 2434-M
Signed
By driller performing actual drilling on-site or contractor
Date

(Rev. 05-06)

USE ADDITIONAL SHEETS IF NECESSARY

(NSPO 3-08) (O) 627

well log # 116783

# CTMRD PROGRAM MONITORING WELL STRATIGRAPHIC LOG

**Drilling Specifications:**

Drilling Contractor: BOART LONGYEAR
Drilling Method: SONIC
Rig: 1860
Driller:
Boring Diam.: 6 in TD: 50 ft
Development Method:
Date Start: End:

**Well Specifications:**

Location Description: FLAT GRAVELLED SURFACE
Coordinates: ft N ft E
Elevation: ft Survey Method:
Reference Pt. Description:
Well TD: ft bgs Well Diameter: in
Screen Interval: ft bgs
First Water: ft bgs Static Water at completion: ft bgs

WELL ID: CTM 126
Project:
Page 1 of
LOGGED BY:

| Depth | Engineering Properties: Density/ Consistency | Moisture | Plasticity | Cohesiveness | Transmissivity | 1ª Description: Color | Boulder % | Cobble % | Gravel % | Sand % | Silt % | Clay % | USCS Classification | 2ª Effects: Weathering/ Oxidization | Depositional Properties: Grading | Angularity | Matrix/Clast-Supported | Clast Lithology | Sedimentary Structure | Depositional Environment | Stratigraphic Contact | Graphics: PID/Samples | Lithology | Description |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | | | | | | | | | | | | | | | | | | | | | | | | Note: Description section to be used to complement and provide additional information to supplement column descriptors to the left, identify any samples collected, and describe any particulars associated with drilling behavior. |
| 5 | | | | | | | | | | | | | | | | | | | | | | | | |
| 10 | | | | | | | | | | | | | | | | | | | | | | | | |
| 15 | | | | | | | | | | | | | | | | | | | | | | | | |
| 20 | | | | | | | | | | | | | | | | | | | | | | | | |
| 25 | | | | | | | | | | | | | | | | | | | | | | | | |
| 30 | | | | | | | | | | | | | | | | | | | | | | | | |

SEE PG. 2

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# CTMRD PROGRAM MONITORING WELL STRATIGRAPHIC LOG

WELL LOCATION: CTM 126 10' N OF CTM 125

LOGGED BY: M. OWENS

Well ID: CTM126

Project:

Page ____ of ____

| Depth | Engineering Properties: Density/Consistency | Moisture | Plasticity | Cohesiveness | Transmissivity | 1° Description: Color | Boulder % | Cobble % | Gravel % | Sand % | Silt % | Clay % | USCS Classification | 2° Effects: Weathering/Oxidization | Depositional Properties: Grading | Angularity | Matrix/Clast-Supported | Clast Lithology | Sedimentary Structure | Depositional Environment | Stratigraphic Contact | Graphics: PID/Samples | Lithology | Description |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | L | M | N | N | M | 10yr 8/2 | | | 15 | 50 | 35 | | SM | | PG | SA | M | A-50 B-50 | MU | | S | | | Gravelled surface 3/4" AB<br>0-1 very pale Br silty sand w/ Gravel, F-C Gravel to 1" F-C sand, sharp contact w sandy silt (compacted AB) |
| 1 | F-H | M | N-L | N | T | 10yr 4/2 | | | 10 | 15 | 75 | | ML | | PG | SA | M | | | Fill | Gradual | | | 1-1.5 dark gr. Br. silt w/ sand/gravel, M-C sand, F-C gravel asphalt from 1.5-2 (black) |
| 2 | | | | | | 10yr 4/1 | | | | | | | | | | | | | | | | | | |
| 3 | | | | | | 10yr 4/2 | | | | | | | | | | | | | | | | | | 2'-5' - (as above) silt w/ sand/gravel, M-C sand, F-C gravel (proposed fill) |
| 4 | | | | | | | | | | | | | | | | | | | | | | | | |
| 5 | F-H | M | L | C | T | 10yr 3/1 | | | | | 95+ | | ML | | PG | — | M | — | M | F | G | | | 5-11.5 very dark gray to dark grayish brown silt w/ trace fine sand, fine sand. Color gradually changes from 10yr 3/1 to 10yr 4/2 from ~8' BGS to 10' BGS, very fine laminar structures can be observed throughout soil core but mostly uniform massive beds. |
| 6 | | | | | | | | | | | | | | | | | | | | | | | | |
| 7 | | | | | | | | | | | | | | | | | | | | | | | | |
| 8 | | | | | | | | | | | | | | | | | | | | | | | | |
| 9 | | | | | | | | | | | | | | | | | | | | | | | | |
| 10 | | | | | | 10yr 4/2 | | | | | | | | | | | | | | | | | | |
| 11 | | | | | | | | | | | | | | | | | | | | | | | | |
| 12 | F-H | M | N L | C | T-L | 10yr 5/1 | | 2 | 5 | 40 | 53 | | ML | | PG | SR | M | B-90 Q-10 | MU | F | G | | 5.80 | 11.5-14 gray sandy silt w/ gravel & cobble, F-C sand, F-C gravel upto 2", cobbles upto 4" cobbles and gravel from 12.5-14' BGS. No definite structure, high energy environment |
| 13 | | | | | | | | | | | | | | | | | | | | | | | | |
| 14 | MD | M | N | N | L-M | 10yr 3/1 | | | | 85 | 15 | | SM | | PG | | M | | MU | F | S | | | 14-18 very dark gray to yellowish Br silty sand F-C sand from 14'-16.5 makes very sharp, distinct contact w/ F-sand from 16.5'-18'. Massive uniform bedding w/ no definite structure other than color change and grain size contact @ 16.5' BGS |
| 15 | | | | | | | | | | | | | | | | | | | | | | | | |
| 16 | | | | | | | | | | | | | | | | | | | | | | | | |
| 17 | | | | | | 10yr 5/6 | | | | 70 | 30 | | | | | | | | | | S | | | 1, 4" cobble @ 16', basalt cobble. |
| 18 | L-MD | M | N | N | H | 10yr 3/4 | | | 5 5 | 95+ | | | SP | | PG | SA | M | | MU | F | | | | 18-26.5 dark yellowish Br poorly graded sand, F-C sand w/ F-gravel upto 1". |
| 19 | | | | | | | | | | | | | | | | | | | | | | | | |
| 20 | | | | | | | | | | | | | | | | | | | | | | | | |

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# CTMRD PROGRAM MONITORING WELL STRATIGRAPHIC LOG

WELL LOCATION: _____

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Well ID: _____

Project: _____

Page _____ of _____

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 20 | | | | | | | | | | | | | | | | | | | | | | | | |
| 21 | | | | | | | | | | | | | | | | | | | | | | | | |
| 22 | | | | | | | | | | | | | | | | | | | | | | | | |
| 23 | ← SAME AS PREVIOUS PAGE | | | | | | | | | | | | | | | | | | | | | → | | 1, 2" EGG SHAPED rounded gravel |
| 24 | | | | | | | | | | | | | | | | | | | | | | | | |
| 25 | | | | | | | | | | | | | | | | | | | | | | | | |
| 26 | | | | | | | | | | | | | | | | | | | | | | | | SHARP, IMMEDIATE CONTACT W/ |
| 27 | F-H | M | L-N | C | T | 10yr 4/4 | | | | 10 | 90 | | ML | MO 10yr 6/6 | PG | | M | | L | F | | | | 26.5-31.5' DARK YELLOWISH Br. w/ YELLOWISH Br SILT W/ SAND, F-C SAND, FAINT MOTTLED OXIDATION FROM 26.5-27.5' F- LAMINAR STRUCTURES THROUGHOUT CORE, OTHERWISE MASSIVE UNIFORM STRUCTURE. |
| 28 | | | | | | | | | | | | | | | | | | | | | | | | |
| 29 | | | | | | | | | | | | | | | | | | | | | | | | |
| 30 | | | | | | | | | | | | | | | | | | | | | | | | FINES UP FROM 33.5' TO 31.5' BECOMING SILTY SAND @ 34.5, AND SILT W/ SAND ABOVE 32.5 |
| 31 | | | | | | | | | | | | | | | | | | | | | | | | |
| 32 | | | | | | | | | | 30 | 70 | | ML | | FU | | | | | | | | | 31.5-33 DARK YELLOWISH Br SANDY SILT, F-M SAND |
| 33 | | | | | | | | | | TRANSITION ZONE | | | | | | | | | | | | | | TRANSITION ZONE |
| 34 | MD | M | N | N | L-M | 10yr 4/4 | | | 5 | 70 | 25 | | SM | | PG | SA | M | | MU | F | S | | | 33-34.5 DARK YELLOWISH Br SILTY SAND, F-C SAND, F-gravel UPTO 1/8". SHARP CONTACT W SANDY SILT BELOW |
| 35 | F-H | M | L-N | C | T | 10yr 4/4 | | | | | 95 | | ML | | PG | | M | | L M | F | G | | | 34.5-36 DARK YELLOWISH Br. SILT W/ TRACE F-SAND, F-LAMINAR STRUCTURE, OTHERWISE MASSIVE AND UNIFORM |
| 36 | | | | | | | | | | | | | | | | | | | | | | | | |
| 37 | F-H | M | N | N | T-L | 10yr 4/4 | | | | 25 | 75 | | ML | | PG | | M | | L M U | F | S | | | 36-39.5 DARK YELLOWISH Br SANDY SILT, F-laminar STRUCTURE, OTHERWISE MASSIVE AND UNIFORM |
| 38 | | | | | | | | | | | | | | | | | | | | | | | | |
| 39 | | | | | | | | | | | | | | | | | | | | | | | | |
| 40 | MD | M | N | N | M-L | 10yr 3/1 | | | ≤2 | 80 | 10 | | SP | | PG | | M | | M | F | S | | | 39.5-40 VERY DARK GRAY PGS w/ SILT, SAND W/ F gravel upto 1/4" |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 40–41 | H | M | N-L | N | T | 10yr 4/4 | | | | 20-25 | 80-75 | | ML | | PG | | M | | M U | F | S | | | 40'-42' Dark yell. Br. SANDY Silt. F-SAND F-Laminar struct. otherwise massive and uniform. |
| 42 | L | M | N | N | M | 10yr 4/2 | | | | 95 | 5 | | SP | | PG | | M | | MU | F | S | | | 42-42.5 Drk gr. Br. PGS w/silt |
| 43–44 | H | M | N-L | C | T | 10yr 4/4 | | | | 10 | 90 | | ML | | PG | | M | | MU | F | | | | 42.5-45 Drk yell. Br. Silt w/ Fine SAND |
| 45 | | | | | | | | | | | | | | | | | | | | | G | | | |
| 46–47 | MD D | M | N | N | M | 10yr 4/4 | | | | 70 | 30 | | SM | | PG | | M | | M U | F | G | | | 45-48 Drk. yell. Br. SANDY Silt, F-M SAND Grades into Silt w/trace Fine SAND, @~48' SOFT contact |
| 48–49 | H | M | L-M | C | T | 10yr 6/4 | | | | 4/5 | 1/5 | | ML | | PG | | M | | M U | F | | | | 48-50 light yell. Br Silt w/ trace F-Sand massive and uniform |
| 50 | | | | | | | | | | | | | | | | | | | | | | | | |

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