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

OFFICE USE ONLY
Log No. 108455
Permit No.
Basin 187

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. 64745

1. OWNER FRONTEER DEVELOPMENT
MAILING ADDRESS 230 S. ROCK BLVD., SUITE 30
RENO, NV 89502

ADDRESS AT WELL LOCATION SHAFTER
Subdivision Name: NONE County: ELKO

2. LOCATION NE ¼ NE ¼ Sec 11 T 35N N/S R 67 E
PERMIT/WAIVER No. 78151 W-640
Issued by Water Resources
Parcel No.

Latitude
Longitude
UTM E 722,146 ☐ NAD 27
N 4,534,627 ☒ 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

6. LITHOLOGIC LOG

| Material | Water Strata | From | To | Thickness |
|---|---|---|---|---|
| SLIGHTLY CEMENTED GRAVEL | | 0 | 140 | 140 |
| FINE SILT AND SAND | | 140 | 220 | 80 |
| GRAVEL AND SILTY SAND | X | 220 | 380 | 160 |
| GRAVEL AND SAND | X | 380 | 600 | 220 |
| GRAVEL WITH INTERMITENT | X | 600 | 820 | 220 |
| TUFF BEDS | | | | |
| MOSTLY CLAY WITH GRAVEL | | 820 | 920 | 100 |
| LAYERS | | | | |
| GRAVEL AND TUFF | | 920 | 960 | 40 |
| MOSTLY CLAY | | 960 | 1000 | 40 |

40.932666°N
114.360561°W
NAD 27 TR

RECEIVED 2009 AUG 31 AM 11:57 STATE ENGINEERS OFFICE

Date started: 10-Jul, 20 09
Date completed: 23-Jul, 20 09

9. WELL CONSTRUCTION
Depth Drilled 960 Feet Depth Cased 958 Feet

HOLE DIAMETER (BIT SIZE)

| | | From | | To | |
|---|---|---|---|---|---|
| 38 | Inches | 0 | Feet | 95 | Feet |
| 24 | Inches | 95 | Feet | 960 | Feet |
| | Inches | | Feet | | Feet |

CASING SCHEDULE

| Size O.D. (Inches) | Weight/Ft. (Pounds) | Wall Thickness (Inches) | From (Feet) | To (Feet) |
|---|---|---|---|---|
| 30 | 119 | 0.375 | 0 | 95 |
| 16 | 63 | 0.375 | +1.0 | 959 |
| | | | | |

Perforations:
Type of perforation 16" X 18" Johnson Mani-Pack
Size of perforation .020

| | | | | |
|---|---|---|---|---|
| From 389.63 | feet to | 610.37 | feet | |
| From 729.85 | feet to | 800.15 | feet | |
| From 925 | feet to | 945 | feet | |
| From | feet to | | feet | |
| From | feet to | | feet | |

Annular Seal: ☒ Yes ☐ No
☒ Neat Cement 0 to 100 ☒ Pumped ☐ Poured
☐ Cement Grout to ☐ Pumped ☐ Poured
☐ Concrete Grout to ☐ Pumped ☐ Poured
☐ ≥30% Bentonite Grout to ☐ Pumped ☐ Poured
Gravel Pack: ☒ Yes ☐ No 105 to 960 ☐ Pumped ☒ Poured
Type: 1/4 X 1/8
Bentonite Chips: ☒ Yes ☐ No 100 to 105 ☒ Pumped ☐ Poured
Type: 3/8 CHIPS

7. Water Level
*Static water level:* 212 feet below land surface
Artesian Flow: G.P.M. P.S.I.
Water Temperature: °F
Quality: GOOD

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

| | G.P.M. | Draw Down (Feet Below Static) | Time (Hours) |
|---|---|---|---|
| PUMP | 500 | -285' | 48 |

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 DRILLING SERVICES
Contractor
Address 2745 WEST CALIFORNIA AVENUE
Contractor
SALT LAKE CITY, UTAH 84104
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* 2386
Signed Scott Krug
By driller performing actual drilling on site for contractor
Date 8/26/09

(Rev. 06-08)

USE ADDITIONAL SHEETS IF NECESSARY