MARI 68150

WESTERBERG DRILLING INC.
PO BOX 1228
MOLALLA, OR 97038

# STATE OF OREGON
# WATER SUPPLY WELL REPORT
**(as required by ORS 537.765 & OAR 690-205-0210)**

WELL I.D. LABEL# L 131102
START CARD # 214999
ORIGINAL LOG #

## (1) LAND OWNER
Owner Well I.D. #2
First Name Richard Last Name Kraft
Company
Address 8644 Warner Dr SE
City Salem State OR Zip 97317

## (2) TYPE OF WORK
[X] New Well [ ] Deepening [ ] Conversion [ ] Alteration (complete 2a & 10) [ ] Abandonment(complete 5a)

## (2a) PRE-ALTERATION
| | Dia | + | From | To | Gauge | Stl | Plstc | Wld | Thrd |
|---|---|---|---|---|---|---|---|---|---|
| Casing: | | | | | | | | | |

| | Material | From | To | Amt | sacks/lbs |
|---|---|---|---|---|---|
| Seal: | | | | | |

## (3) DRILL METHOD
[X] Rotary Air [ ] Rotary Mud [ ] Cable [ ] Auger [ ] Cable Mud
[ ] Reverse Rotary [ ] Other

## (4) PROPOSED USE
[X] Domestic [ ] Irrigation [ ] Community
[ ] Industrial/ Commericial [ ] Livestock [ ] Dewatering
[ ] Thermal [ ] Injection [ ] Other

## (5) BORE HOLE CONSTRUCTION
Special Standard [ ] (Attach copy)
Depth of Completed Well 485 ft.

BORE HOLE

| Dia | From | To |
|---|---|---|
| 12 | 0 | 20 |
| 10 | 20 | 176 |
| 8 | 176 | 505 |

SEAL

| Material | From | To | Amt | sacks/lbs |
|---|---|---|---|---|
| Bentonite | 0 | 20 | 19 | S |
| | | Calculated | 19 | |
| Cement | 20 | 175 | 48 | S |
| | | Calculated | 43 | |

How was seal placed: Method [ ] A [ ] B [X] C [ ] D [ ] E
[X] Other Bentonite Poured & Probed
Backfill placed from 485 ft. to 505 ft. Material Rock Cuttings
Filter pack from ft. to ft. Material Size
Explosives used: [ ] Yes Type Amount

## (5a) ABANDONMENT USING UNHYDRATED BENTONITE
Proposed Amount Pounds Actual Amount Pounds

## (6) CASING/LINER

| Casing | Liner | Dia | + | From | To | Gauge | Stl | Plstc | Wld | Thrd |
|---|---|---|---|---|---|---|---|---|---|---|
| ● | | 6 | X | 1.5 | 179.5 | .250 | ● | | X | |

Shoe [ ] Inside [X] Outside [ ] Other Location of shoe(s) 179.5
Temp casing [X] Yes Dia 12 From + [X] 1 To 7

## (7) PERFORATIONS/SCREENS
Perforations Method
Screens Type Material

| Perf/Screen | Casing/ Liner | Screen Dia | From | To | Scrn/slot width | Slot length | # of slots | Tele/ pipe size |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | | |

## (8) WELL TESTS: Minimum testing time is 1 hour
[ ] Pump [ ] Bailer [●] Air [ ] Flowing Artesian

| Yield gal/min | Drawdown | Drill stem/Pump depth | Duration (hr) |
|---|---|---|---|
| 120 | | 485 | 1 |

Temperature 55 °F Lab analysis [ ] Yes By
Water quality concerns? [ ] Yes (describe below) TDS amount 61 ppm

| From | To | Description | Amount | Units |
|---|---|---|---|---|
| | | | | |

## (9) LOCATION OF WELL (legal description)
MARI 68150
County MARION Twp 7 S N/S Range 2 W E/W WM
Sec 35 NW 1/4 of the SE 1/4 Tax Lot 100
Tax Map Number Lot
Lat ° ' " or DMS or DD
Long ° ' " or DMS or DD
[ ] Street address of well [●] Nearest address
3/4 mile south of State Street. West of Howell Prairie 1/2 mile

## (10) STATIC WATER LEVEL

| | Date | SWL(psi) | + | SWL(ft) |
|---|---|---|---|---|
| Existing Well / Pre-Alteration | | | | |
| Completed Well | 07-27-2018 | | | 143 |

Flowing Artesian? [ ] Dry Hole? [ ]

WATER BEARING ZONES Depth water was first found 76

| SWL Date | From | To | Est Flow | SWL(psi) | + | SWL(ft) |
|---|---|---|---|---|---|---|
| | 76 | 95 | 2 - 3 | | | DNM |
| 07-02-2018 | 136 | 138 | 35 | | | 74.08 |
| 07-27-2018 | 202 | 250 | 120 | | | 143 |
| 07-27-2018 | 476 | 480 | 30 | | | 143 |
| | | | | | | |

## (11) WELL LOG
Ground Elevation

| Material | From | To |
|---|---|---|
| Soil & Rock | 0 | 2 |
| Clay Brown & Rock | 2 | 3 |
| Clay Brown | 3 | 10 |
| Weathered Rock Soft | 10 | 18 |
| Basalt Grey Fractured | 18 | 40 |
| Basalt Grey Medium with Fractures | 40 | 65 |
| Basalt Grey hard | 65 | 72 |
| Basalt Grey with Red Cinders | 72 | 76 |
| Basalt Grey Pourous Medium & Fractured | 76 | 95 |
| Basalt Grey Hard | 95 | 136 |
| Basalt Hard Grey with Fractures | 136 | 138 |
| Basalt Grey Hard | 138 | 202 |
| Basalt Grey Fractured | 202 | 210 |
| Basalt Grey Hard | 210 | 220 |
| Basalt Grey Broken | 220 | 226 |
| Basalt Grey Fractured | 226 | 240 |
| Basalt Light Grey Hard | 240 | 290 |
| Basalt Dark Grey Hard | 290 | 455 |
| Basalt Light Grey Hard | 455 | 476 |

Date Started 06-29-2018 Completed 07-27-2018

**(unbonded) Water Well Constructor Certification**
I certify that the work I performed on the construction, deepening, alteration, or abandonment of this well is in compliance with Oregon water supply well construction standards. Materials used and information reported above are true to the best of my knowledge and belief.
License Number 1358 Date 07-27-2018
Signed

RECEIVED
DEC 03 2018
OWRD

**(bonded) Water Well Constructor Certification**
I accept responsibility for the construction, deepening, alteration, or abandonment work performed on this well during the construction dates reported above. All work performed during this time is in compliance with Oregon water supply well construction standards. This report is true to the best of my knowledge and belief.
License Number 688 Date 09-04-2018
Signed Steven N. Stadeli
Contact Info (optional)

OWRD
SEP 20 2018
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ORIGINAL - WATER RESOURCES DEPARTMENT
THIS REPORT MUST BE SUBMITTED TO THE WATER RESOURCES DEPARTMENT WITHIN 30 DAYS OF COMPLETION OF WORK Form Version: 0.95

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**WATER SUPPLY WELL REPORT - continuation page**

**WELL I.D. LABEL# L** 131102
**START CARD #** 214999
**ORIGINAL LOG #**

## (2a) PRE-ALTERATION

| Dia | + | From | To | Gauge | Stl | Plstc | Wld | Thrd |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | | |

| Material | From | To | Amt | sacks/lbs |
|---|---|---|---|---|
| | | | | |

## Water Quality Concerns

| From | To | Description | Amount | Units |
|---|---|---|---|---|
| | | | | |

## (5) BORE HOLE CONSTRUCTION

| BORE HOLE Dia | From | To | SEAL Material | From | To | Amt | sacks/lbs |
|---|---|---|---|---|---|---|---|
| | | | | | Calculated | | |
| | | | | | Calculated | | |
| | | | | | Calculated | | |
| | | | | | Calculated | | |

FILTER PACK

| From | To | Material | Size |
|---|---|---|---|
| | | | |

## (10) STATIC WATER LEVEL

| SWL Date | From | To | Est Flow | SWL(psi) | + | SWL(ft) |
|---|---|---|---|---|---|---|
| | | | | | | |

## (11) WELL LOG

| Material | From | To |
|---|---|---|
| Basalt Grey/Pourous Medium | 476 | 480 |
| Basalt Grey | 480 | 483 |
| Clay Grey | 483 | 488 |
| Clay Pink | 488 | 495 |
| Clay Blue & Pink | 495 | 498 |
| Clay Green & Brown | 498 | 501 |
| Siltstone Dark Green | 501 | 505 |

## (6) CASING/LINER

| Casing Liner | Dia | + | From | To | Gauge | Stl | Plstc | Wld | Thrd |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | |

## (7) PERFORATIONS/SCREENS

| Perf/Screen | Casing/Liner | Screen Dia | From | To | Scrn/slot width | Slot length | # of slots | Tele/pipe size |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | | |

## (8) WELL TESTS: Minimum testing time is 1 hour

| Yield gal/min | Drawdown | Drill stem/Pump depth | Duration (hr) |
|---|---|---|---|
| | | | |

## Comments/Remarks

6" cable tool shoe @ 180' with 6" x 10" shale trap @ 176' with rock cuttings packer 175' - 176'.

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SEP 20 2018

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