

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

MULT 132797

WELL I.D. LABEL# L

START CARD #

1042794

9/20/2019

ORIGINAL LOG #

MULTNOMAH 802

(1) LAND OWNER
Owner Well I.D. MULT 802
First Name Last Name
Company NW NATURAL
Address (MULT 802), 7540 NW ST HELENS RD, P
City PORTLAND State OR Zip 97209

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

(2a) PRE-ALTERATION
Casing: Dia + From To Gauge Stl Plstc Wld Thrd
Seal: Concrete 0 1 4 Sacks

(3) DRILL METHOD
Rotary Air Rotary Mud Cable Auger Cable Mud
Reverse Rotary Other PERF & GROUT / SONIC

(4) PROPOSED USE
Domestic Irrigation Community
Industrial/ Commercial Livestock Dewatering
Thermal Injection Other

(5) BORE HOLE CONSTRUCTION
Depth of Completed Well 382.00 ft.
BORE HOLE
Dia From To Material From To Amt lbs

How was seal placed: Method A B C D E
Other TREMIE PIPE
Backfill placed from 10 ft. to 382 ft. Material ORGANO CLAY / B
Filter pack from ft. to ft. Material Size
Explosives used: Yes Type Amount

(5a) ABANDONMENT USING UNHYDRATED BENTONITE
Proposed Amount 9.00 Sacks Actual Amount 9.00 Sacks

(6) CASING/LINER
Casing Liner Dia + From To Gauge Stl Plstc Wld Thrd
Shoe Inside Outside Other Location of shoe(s)
Temp casing Yes Dia From + To

(7) PERFORATIONS/SCREENS
Perforations Method Mills Knife
Screens Type 8" Perforated Material Steel
Perf/ Casing/ Screen Dia From To Scrn/slot Slot # of Tele/
Screen Liner Dia From To width length slots 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)
Temperature 54 °F Lab analysis Yes By
Water quality concerns? Yes (describe below) TDS amount 125 ppm
From To Description Amount Units

(9) LOCATION OF WELL (legal description)
County MULTNOMAH Twp 1.00 N N/S Range 1.00 W E/W WM
Sec 12 SW 1/4 of the SW 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
7540 NW ST HELENS RD, PORTLAND, OR 97210

(10) STATIC WATER LEVEL
Date SWL(psi) + SWL(ft)
Existing Well / Pre-Alteration 8/13/2019 10
Completed Well
Flowing Artesian? Dry Hole?
WATER BEARING ZONES Depth water was first found
SWL Date From To Est Flow SWL(psi) + SWL(ft)

(11) WELL LOG
Ground Elevation
Material From To
Concrete 0 1
Perf & Bent Chip - Mills Knife 1 10
Perf & Organo Clay Grout - Mills Knife 10 63
Organo Clay Grout 63 382

Date Started 5/13/2019 Completed 8/22/2019
(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 2022 Date 9/5/2019
Signed STEVE VIBBARD (E-filed)

(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 1786 Date 9/20/2019
Signed JOSEPH STALOCH (E-filed)
Contact Info (optional) Cascade Drilling 110-19-1048

WATER SUPPLY WELL REPORT - continuation page

MULT 132797

WELL I.D. LABEL# L

START CARD # 1042794

9/20/2019

ORIGINAL LOG # MULTNOMAH | 802

(2a) PRE-ALTERATION

Dia	+	From	To	Gauge	Stl	Plstc	Wld	Thrd
Material					From	To	Amt sacks/lbs	
Bentonite Chips					1	10	9	Sacks
Other					10	382	89	Sacks

(5) BORE HOLE CONSTRUCTION

BORE HOLE			SEAL		Amt	sacks/lbs	
Dia	From	To	Material	From			To
			Other	10	382	89	S
					Calculated	62	
					Calculated		
					Calculated		
					Calculated		

FILTER PACK

From	To	Material	Size

(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)

Water Quality Concerns

From	To	Description	Amount	Units

(10) STATIC WATER LEVEL

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

(11) WELL LOG

Material	From	To

Comments/Remarks

Perf and grout 382 ft Industrial Water Well as per Final Order. Upper Steel casing 0 - 63 ft perforated. Screen removed from bottom of well 243 to 382 feet. Organo-Clay grout was used as per OWRD Final Order from 10 - 382 feet. 8 sacks of organo clay were used with 81 sacks of bentonite grout to make the Organo-Clay seal.

WATER SUPPLY WELL REPORT - Map with location identified must be attached and shall include an approximate scale and north arrow

MULT 132797

9/20/2019

Map of Hole



Notes:
 Base Map from Google Earth
 Imagery Date: 5/22/2017
 OU = Operable Unit

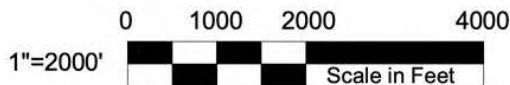


FIGURE 1
Location Map

7540 NW St Helens Rd, Portland, OR 97210
 Water Supply Well Decommissioning
 NW Natural Gasco Site
 Portland, Oregon