



Engineering +
Environmental

TECHNICAL MEMORANDUM

DATE: October 7, 2016

TO: Roger Lange
Mason County Transportation Cooperation

FROM: Megan Nogeire

PBS PROJECT NO: 41271.004

RE: Groundwater Well Decommissioning

Mr. Lange:

PBS was on site September 14, 2016 to decommission the four groundwater monitoring wells (MW-3, MW-4, MW-5 and MW-6) located at 3740 N. Shelton Springs Road in Shelton, Washington. Well locations are presented in Figure 1 (attached). The wells were decommissioned in accord with the findings of the Washington Department of Ecology letter dated June 20, 2016.

The purpose of the groundwater well decommissioning was to remove potential conduits to groundwater at the property. All decommissioning work was completed by a licensed drilling company (Holocene Drilling) who is experienced in resource protection well decommissioning per Chapter 18.27 of the Revised Code of Washington (RCW). PBS was onsite to observe and document the well decommission work.

The wells were decommissioned by removing the monument lid and filling the wells with bentonite slurry and filling the surface monument with cement. The concrete was finished to the existing surface elevation. A copy of the well decommissioning logs is included in Attachment 1.

Please note, the two observation wells (OB-1 and OB-2) located on the perimeter of the existing underground storage tank area were not decommissioned. These wells were originally installed in association with the underground storage tank system and are considered leak detection observation wells. The observation well locations are presented on Figure 1.

Please let me know if you need any additional information or clarification.

Thank you.

PBS Engineering and Environmental

Attached

Figure 1 – Site Plan

Attachment 1 - Well Decommissioning Logs

2517 Eastlake Avenue East, Suite 100, Seattle, WA 98102
206.233.9639 Main
866.727.0140 Fax
www.pbsenv.com

Bend | Boise | Coquille | Eugene | Portland | Seattle | Tri-Cities | Vancouver



SOURCE: © 2011 GOOGLE EARTH PRO, © 2012 GOOGLE

LEGEND

- ⊕ OW-1 EXISTING TANK OBSERVATION WELLS
- ⊕ MW-3 DECOMMISSIONED MONITORING WELLS (SEPTEMBER 2016)
- *—*— FENCE



SCALE: 1" = 30'

PREPARED FOR: MASON COUNTY TRANSPORTATION COOPERATIVE



PROJECT #
41271.004

DATE
OCT 2016

SITE PLAN
3740 SHELTON SPRING ROAD
SHELTON, WASHINGTON

FIGURE

1

MONITORING WELL REPORT

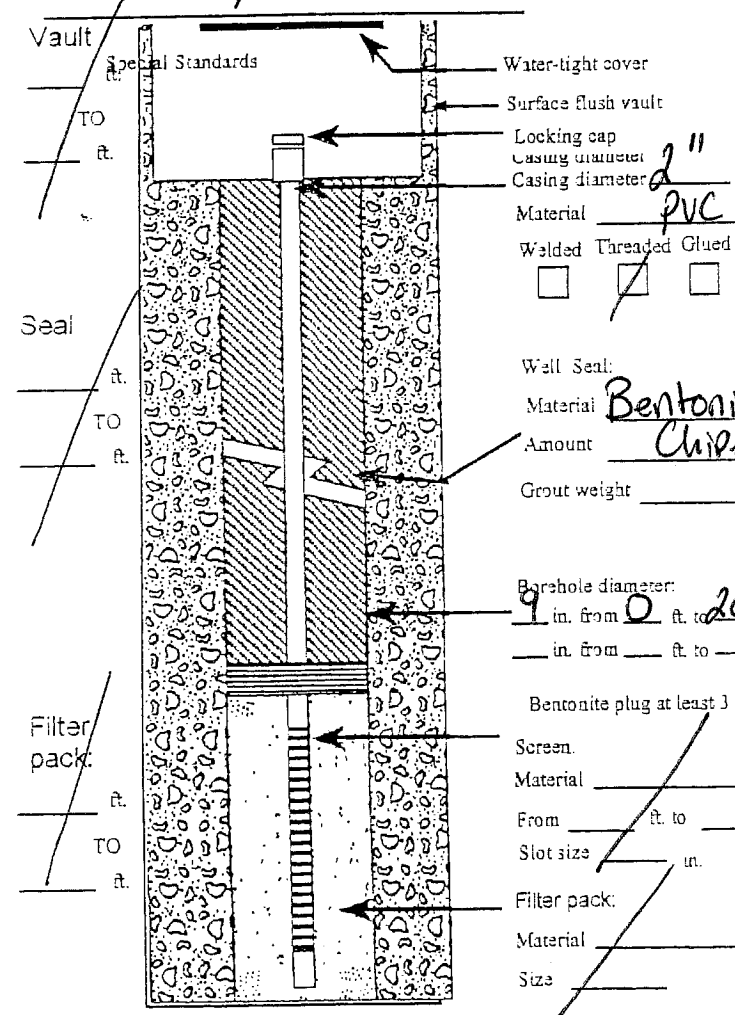
Well ID# APF-864
Start Card # AE 39327

(1) OWNER/PROJECT WELL NO
Name: Mason County Transportation Coop.
Address: 3740 Shelton Springs Rd.
City: Shelton State: WA Zip: 98584

(2) TYPE OF WORK
☐ New construction ☐ Alteration (Repair/Recondition)
☐ Conversion ☐ Deepening ☒ Abandonment

(3) DRILLING METHOD
☐ Rotary Air ☐ Rotary Mud ☐ Cable
☐ Hollow Stem Auger ☐ Other

(4) BORE HOLE CONSTRUCTION:
Special Standards ☐ Yes ☒ No Depth of Completed Well 20 ft.



(5) WELL TESTS:
☐ Pump ☐ Bailor ☐ Air ☐ Flowing Artesian
Permeability _____ Yield _____ GPM
Conductivity _____ pH _____
Temperature of water _____ OF/C Depth artesian flow found _____ ft.
Was water analysis done? ☐ Yes ☒ No
By whom? _____
Depth of strata to be analyzed From _____ ft. to _____ ft.
Remarks: _____
Name Of Supervising Geologist/Engineer PBS

(6) LOCATION OF WELL By legal description:
County Mason Latitude _____ Longitude _____
Township 20N (N or S) Range 4W (E or W) Section 12
SE 1/4 of NE 1/4 of above section
Street address of well location 3740 Shelton Springs Rd
Shelton
Tax lot number of well location _____

(7) STATIC WATER LEVEL:
_____ Ft. below land surface. Date _____
Artesian Pressure _____ lb/sq. in. Date _____

(8) WATER BEARING ZONES:

Depth at which water was first found _____

From	To	Est. Flow Rate	SW L

(9) WELL LOG:
Ground Elevation _____
Material From To SWL
_____ backfilled from
_____ bottom to top
w/ bentonite chips 0 20
Date started 9/14/16 Completed 9/14/16

WELL CONSTRUCTION CERTIFICATION:
I constructed and/or accept responsibility for construction of this well and its compliance with all Washington well construction standards. Materials used and the information reported above are true to my best knowledge and belief.
Type or Print Name Jeered Thompson License No. 2823
Trainee Name _____ License No. _____
Drilling Company Holocene Drilling, Inc.
(Signed) [Signature] License No. 2823
Address 11412 62nd Ave. E. Puyallup, Wa. 98373
Registration No. HLDCDI044KH Date 10/5/16

MONITORING WELL REPORT

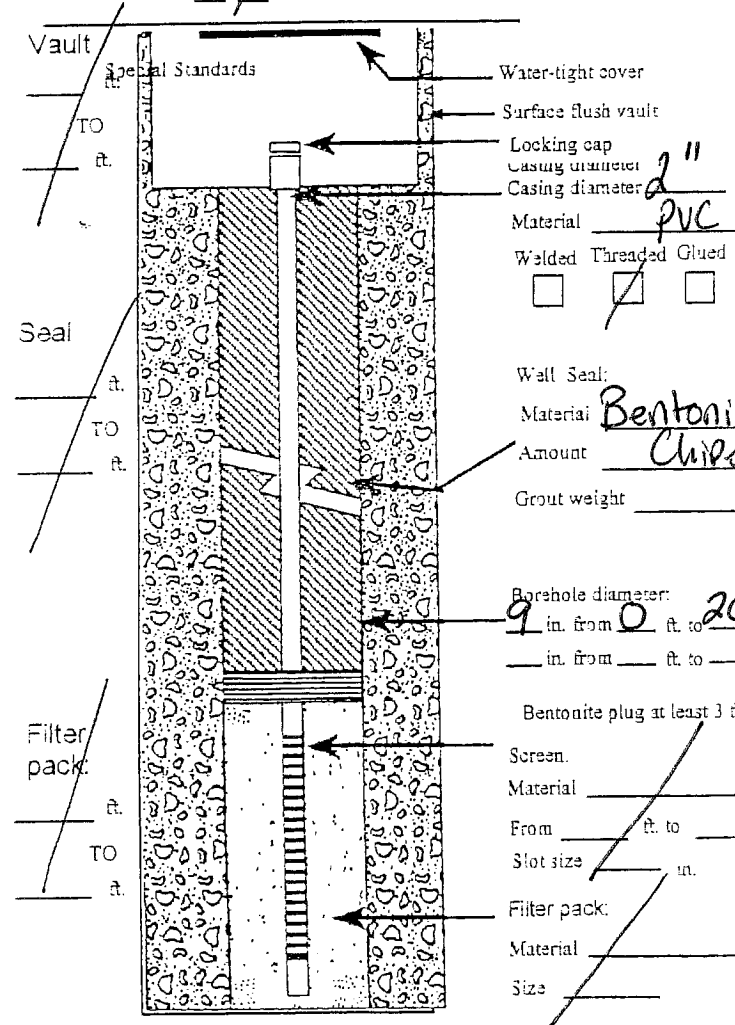
Well ID# BIP-468
Start Card # AE 39327

(1) OWNER/PROJECT WELL NO.
Name: Mason County Transportation Coop.
Address: 3740 Shelton Springs Rd.
City: Shelton State: WA Zip: 98584

(2) TYPE OF WORK
☐ New construction ☐ Alteration (Repair/Recondition)
☐ Conversion ☐ Deepening ☒ Abandonment

(3) DRILLING METHOD
☐ Rotary Air ☐ Rotary Mud ☐ Cable
☐ Hollow Stem Auger ☐ Other

(4) BORE HOLE CONSTRUCTION:
Special Standards ☐ Yes ☒ No Depth of Completed Well 20 ft.



(5) WELL TESTS:
☐ Pump ☐ Boiler ☐ Air ☐ Flowing Artesian
Permeability: Yield: GPM
Conductivity: PH
Temperature of water: OF/C Depth artesian flow found: ft.
Was water analysis done? ☐ Yes ☐ No
By whom?
Depth of strata to be analyzed: From ft. to ft.
Remarks:
Name of Supervising Geologist/Engineer: PBS

(6) LOCATION OF WELL By legal description:
County: Mason Latitude: Longitude:
Township: 20N (N or S) Range: 4W (E or W) Section: 12
8E 1/4 of NE 1/4 of above section.
Street address of well location: 3740 Shelton Springs Rd
Shelton
Tax lot number of well location:

(7) STATIC WATER LEVEL:
_____ Ft. below land surface. Date:
Artesian Pressure _____ lb./sq. in. Date:

(8) WATER BEARING ZONES:

Depth at which water was first found _____

From	To	Est. Flow Rate	SWL

(9) WELL LOG:
Ground Elevation _____
Material: From To SWL
backfilled from
bottom to top
w/ bentonite chips 0 20
Date started 9/14/16 Completed 9/14/16

WELL CONSTRUCTION CERTIFICATION:
I constructed and/or accept responsibility for construction of this well, and its compliance with all Washington well construction standards. Materials used and the information reported above are true to my best knowledge and belief.
Type or Print Name: Jerred Thompson License No: 2823
Trade Name: License No:
Drilling Company: Holocene Drilling, Inc.
(Signed): [Signature] License No: 2823
Address: 11412 62nd Ave. E. Puyallup, WA 98373
Registration No: HUDDCDI044KH Date: 10/5/16

Well ID# BIP 469
Start Card # AE 39327

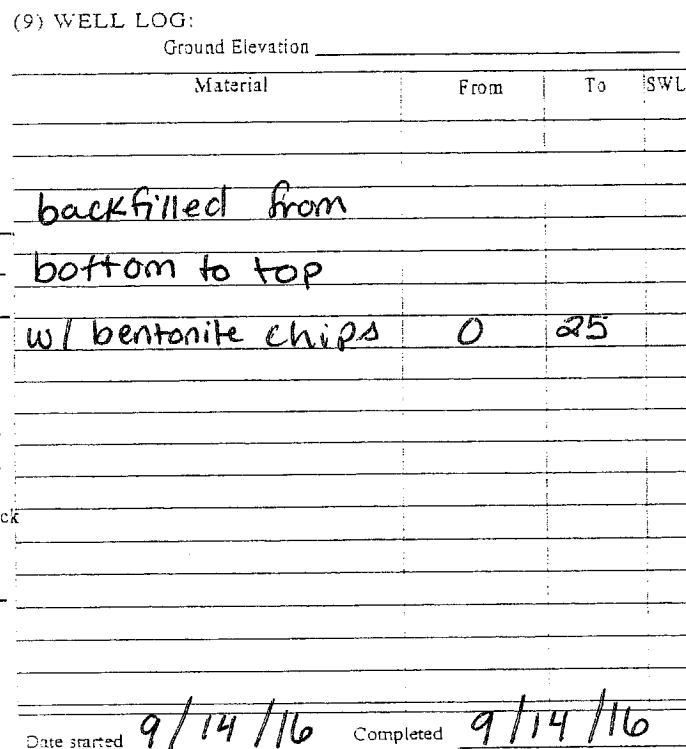
(6) LOCATION OF WELL By legal description:
County MASON Latitude _____ Longitude _____
Township 20N (N or S) Range 4W (E or W) Section 12
SE 1/4 of NE 1/4 of above section
Street address of well location 3740 Shelton Springs Rd
Shelton
Tax lot number of well location _____

(7) STATIC WATER LEVEL: _____ Ft. below land surface. Date _____
Artesian Pressure _____ lb/sq. in. Date _____

(3) WATER BEARING ZONES:

Depth at which water was first found _____

From	To	Est. Flow Rate	SWL



WELL CONSTRUCTION CERTIFICATION:

I constructed and/or accept responsibility for construction of this well, and its compliance with all Washington well construction standards. Materials used and the information reported above are true to my best knowledge and belief.

Type or Print Name Jerred Thompson License No. 2823

Trainee Name _____ License No. _____

Drilling Company Holocene Drilling, Inc.

(Signed) [Signature] License No. 2823

Address 1412 62nd Ave. E. Puyallup, Wa. 98373

Registration No. HOLDCDI044KH Date 10/5/16