POST INSPECTION MEMORANDUM

Inspector: *Huy Nguyen/Kuang Chu*

Date: December 7, 2010

Operator Inspected: **OPID:** 30781 **Region:** Western
Olympic Pipe Line Company
2319 Lind Avenue S.W.
Renton, WA 98057

Unit Address:
2319 Lind Avenue S.W.
Renton, WA 98057

Unit Inspected: OPL North and OPL South **Unit ID:** 925 and 32965
Unit Type: Interstate Hazardous Liquid
Inspection Type: II – Integrated Inspection and I08 - OQ Field Verification
Record Location: Renton Station, Renton, WA
Inspection Dates: November 15 - 19, 2010
AFOD: 10.0 (I09 – 9.5 and I08 – 0.5)
SMART Activity Number: 131859 and 131860

Operator Contact: David Knoelke, Compliance Coordinator
Phone: (360) 443-6511 **Fax:** N/A **Emergency:** (800) 271-8880

Unit Description for OPL North: 5 miles of 16" line transports refined petroleum products from BP Cherry Point pump station to the Ferndale Station. At the Ferndale Station, the pipeline receives additional products from ConocoPhillips refinery. A 16" line runs southward for 37.5 miles from Ferndale Station to Bayview Products Terminal and continues 1.2 miles to Allen Station. In addition, 9 miles of 16" line transports refined products (Tesoro refinery and Shell refinery) from Anacortes to Bayview Products Terminal and continues to Allen Station. A 16", 0.312" w.t., X-52 pipe was constructed in 1965 with a maximum operating pressure of 1440 psig.

There are two parallel lines of 20" and 16" lines from Allen Station to Renton Station. A 20" line runs from Allen Station to Renton Station for a distance of 75.5 miles. A 16" line runs 49.2 miles from Allen Station to Woodinville Station and continues south for 26.3 miles to Renton Station. There are one (1) breakout tank at Anacortes, six (6) breakout tanks at Bayview Products Terminal, and one (1) breakout tank at Allen Station. A 20", 0.250" w.t., X-52 pipe was constructed in 1965 with a maximum operating pressure of 960 psig. Both of the lines are coal tar coating over asbestos wrap.

Unit Description for OPL South: This inspection unit starts at the Renton Station (MP 112) to Washington/Oregon state line (MP 253). The mainline pipeline consists of 14-inch, 0.281-inch

wall thickness, API 5L grade X52, ERW, U.S. Steel, and it was constructed in 1965. The river crossing consists of 14-inch, 0.500-inch wall thickness, API 5L grade X42, ERW, and California U.S. Steel. The coating is coal tar over asbestos wrap. The system consists of four pump stations that are located at Renton, Tacoma, Olympia, and Castle Rock. There are two (2) lateral intrastate junction facilities (Tacoma Junction and Vancouver Junction), and five (5) intrastate product delivery facilities (Seattle, Sea-Tac Terminal, Tacoma, Olympia, and Vancouver). The pipeline crosses the Green River at milepost (MP) 119.5; Puyallup River at MP 133; Nisqually River at MP 155; Cowlitz River near MP 199; and the Columbia River near MP 254. There is one (1) breakout tank at the Renton Station (T-116). Other breakout tanks are located at the end of the intrastate laterals (not part of the interstate unit).

Facilities Inspected of Olympic North: This inspection reviewed the records since the last D.O.T. audit, OQ field verification on one (1) covered tasks, and the following field items:

1) Visited Cherry Point Booster Station (see pictures # 1, #2, and #3). Cathodic protection readings were taken at an incoming pipeline from the refinery (-1.428v), station pipe (-0.992v), and pipe (-2.482v) with casing (-0.950v) outside of the Cherry Point Pump Station.
2) Cathodic protection readings were taken at the MP7 Mainline Valve for a 16" pipe (-1.500v) with the casing (-0.511v) (see picture #4).
3) Visited Anacortes Pump Station (see pictures #5 and #6). Cathodic protection readings were taken at an outgoing pipeline (-1.300v) and Breakout Tank # T-107 (-1.645v). According to the Area Team Leader, Dennis Johnston, the tank is scheduled for repainting in two (2) years.
4) Visited Bayview Terminal (see pictures #7 and #8). Performed a visual inspection of six (6) Breakout Tanks at the terminal (Tanks # T-202, T-203, T-204, T-205, T-206, and T-209) and it appears that minor paint patch work is needed. Rectifier readings were taken at Rectifier B (14.6v/7.76amp).
5) Visited Allen Pump Station. Allen Pump Station is currently under station modification, such as: installing spill containment and removing abandoned buried pipe.
6) Visited mainline valves (16" and 20") at MP57 (see picture #9). Observed one (1) OQ covered task of Mr. Dennis Johnston for manually operating a 20" mainline valve.
7) Visited Woodinville Pump Station. Cathodic protection readings were taken at an incoming line (-1.276v), station pipe (-1.140v), and rectifier #30 (93.3v/4.2amp).

Facilities Inspected of Olympic South: This inspection reviewed the records since the last D.O.T. audit, OQ field verification on three (3) covered tasks, and the following field items:

1) Visited Renton Pump Station (see pictures # 10, #11, and #12). Cathodic protection readings were taken on 20" incoming pipeline (-1.248v for on potential/-0.864v for off potential), 16" incoming line (-1.590v for on potential/-1.400v for off potential), 14" outgoing line (-1.884v for on potential/-1.428v for off potential). Rectifier readings were taken at the station (11/55v/10amp) and mainline (24.47v/14amp). A tag attached with a fire extinguisher #17 did not show an inspection for October 2010; however, a record was provided to indicate that all the fire extinguishers at the Renton Station were inspected for the month of October 2010. Tank # T-116 appears to have a bulge on one the shell (northeast side of a tank) (see picture #6). Tank # T-116 outlet flange appears to be seeping (see picture #13). Olympic personnel did mitigate the condition by tightening the

bolts for additional ½ to 1 turn. It appears the condition has been mitigated and the bucket is placed under the flange for precautionary measure. Observed two (2) covered task of Mr. Nick Kitzmiller for taking pipe-to-soil potentials and rectifier readings.

2) Visited Tacoma Pump Station (see picture #14). Cathodic protection readings were taken at an incoming mainline valve (-1.608v). Rectifier readings were taken at rectifier # 290 for pipeline (28.12v/7.8amp) and rectifier for station (60.23v/0.3amp).
3) Visited Olympia Station (see picture #15 and #16). Rectifier readings were taken at rectifier #300 (55.3v/2.1amp).
4) Visited Castle Rock Pump Station (see pictures #17 and #18). Cathodic protection readings were taken at the incoming mainline block valve (-1.408v), MOV at MP196 (-1.800v). Rectifier readings were taken at rectifier #340 for the mainline (8.83v/3.12amp) and rectifier #342 for the station (46.8v/1.7amp). Observed one OQ covered task of Mr. Dave Wild to demonstrate the calibration of the pressure transmitter.
5) Verified a new actuator was installed in 2008 for mainline valve at MP186 (see pictures #19 and #20). Verified a new MOV was installed in September 2009 at MP 196 and it appears that drainage needs to be improved at the valve site (see pictures #21 and 22).

Persons Interviewed:

Dave Knoelke	Compliance Coordinator	(360) 443-6511
Dennis Johnston	Olympic North District Manager	
Jeff Berry	Olympic South District Manager	

Summary of Inspections:

-The signs and markers at pump stations, valve stations, and road crossings along the pipeline right-of-way (ROW) appear to be adequate. The facilities are well maintained and the operators are well trained.

- There were few isolated paint spots appeared to be peeling off on the tank shell for some breakout tanks at the Bayview Products Terminal. A remediation should be conducted during the next available opportunity.

- The 16" and 20" lines are running parallel within the ROW between Allen Station and Renton Station. It is recommended that identification of each valve be posted at the mainline valve stations and CP test stations, i.e. MP 57 and Woodinville Pump Station.

- During the field inspection of the Renton Station, it was noted that the tank shell of breakout tank # T-116 has a bulge on the northeast side of the tank. The latest API 653 out-of-service inspection was conducted in 2008 and the inspection report did include this item in their findings. However, no repairs or alterations to the distortion were recommended in the inspection report. It's recommended that the operator monitors the condition during their monthly tank inspections.

Recommendations:

Follow-up all the items listed from the summary of inspections.
Conduct an in-depth inspection of a new operator in 2012.

Comments:

On the next inspection, inspector may need to focus attention on records review of their breakout tanks, valve maintain, and components with their facilities. Do not try to schedule the field inspection during first quarter or four quarter of the year as the weather condition could make the field inspections difficult. Need to conduct an in-depth inspection after a new operator is taking over the operation in 2012.

Attachments:
- Operator Qualification Field Inspection Protocol Form

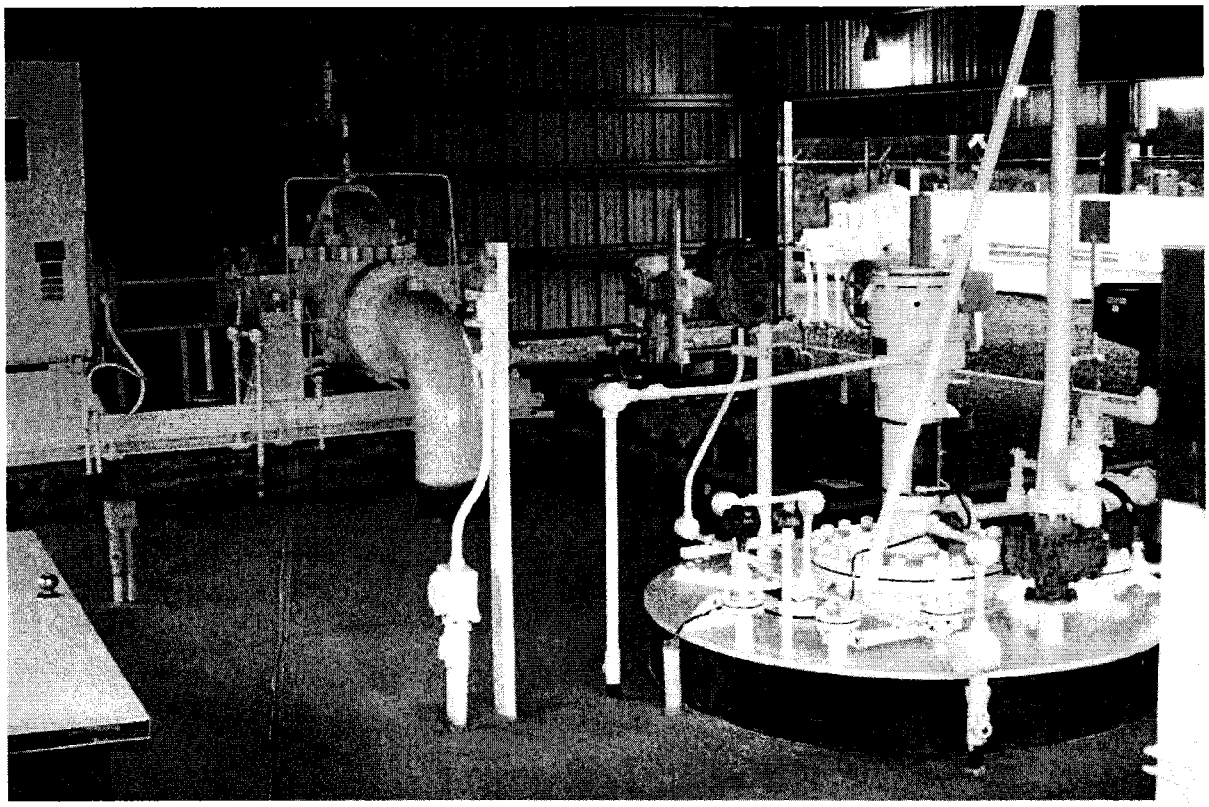

Figure 1: Cherry Point Booster Station

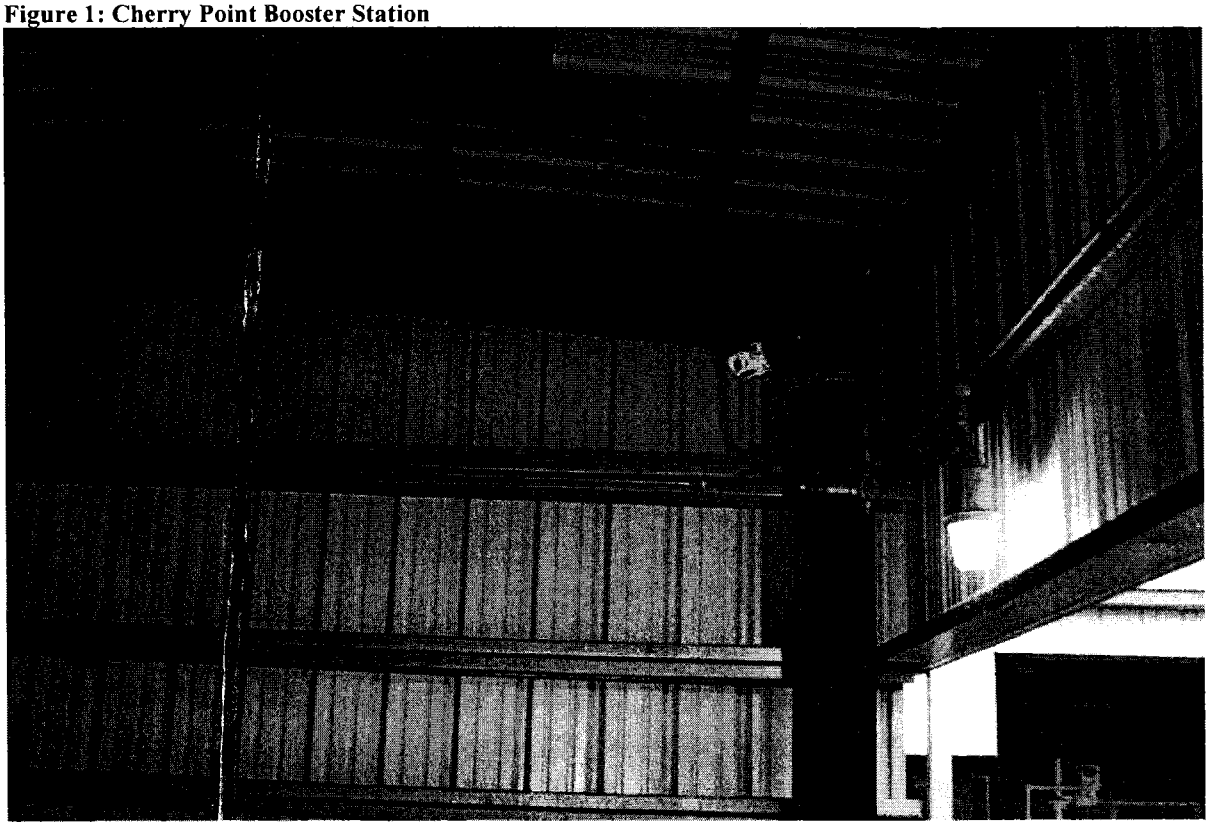

Figure 2: Fire eye at the Cherry Point Booster Station

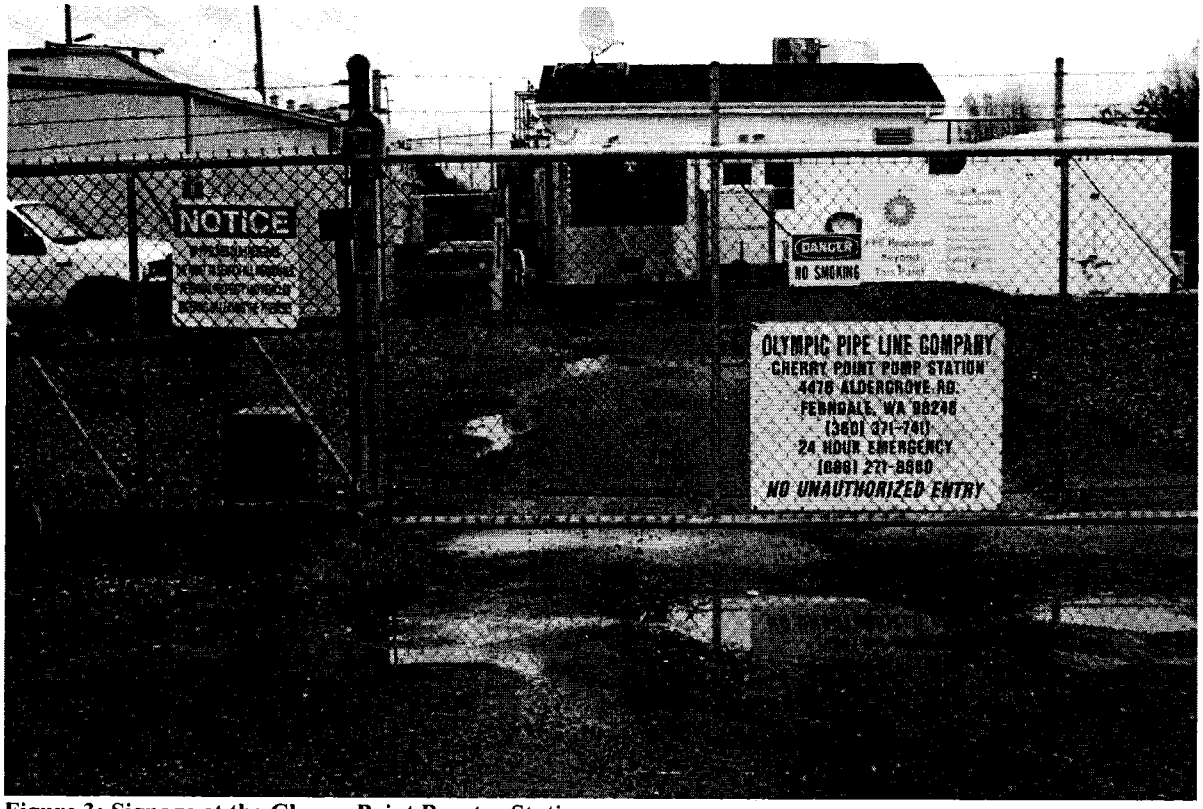

Figure 3: Signage at the Cherry Point Booster Station

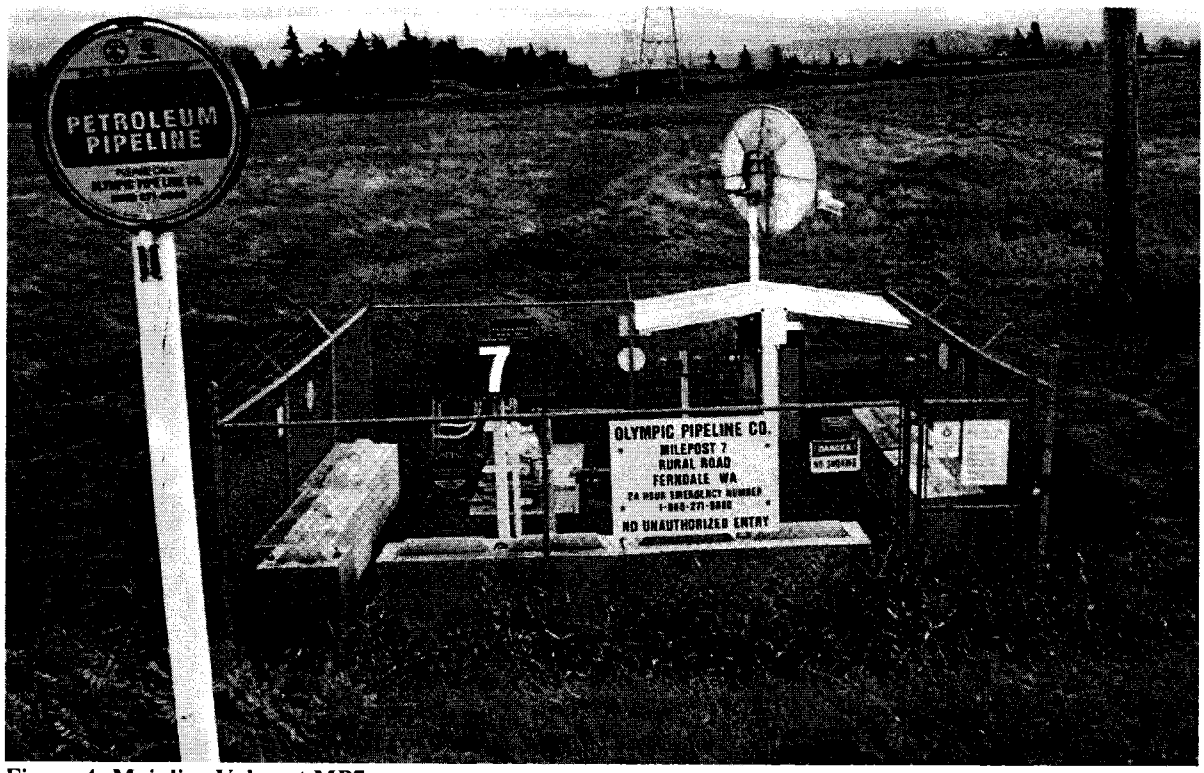

Figure 4: Mainline Valve at MP7

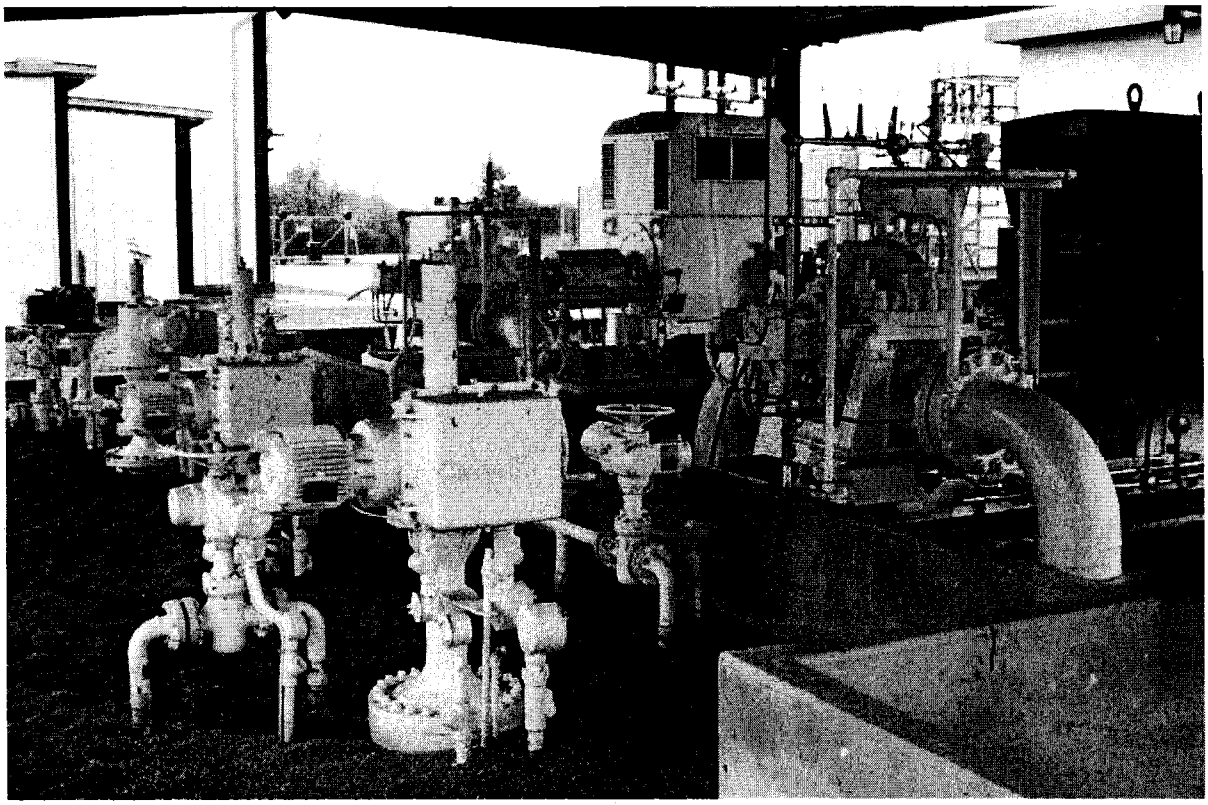

Figure 5: Anacortes Pump Station

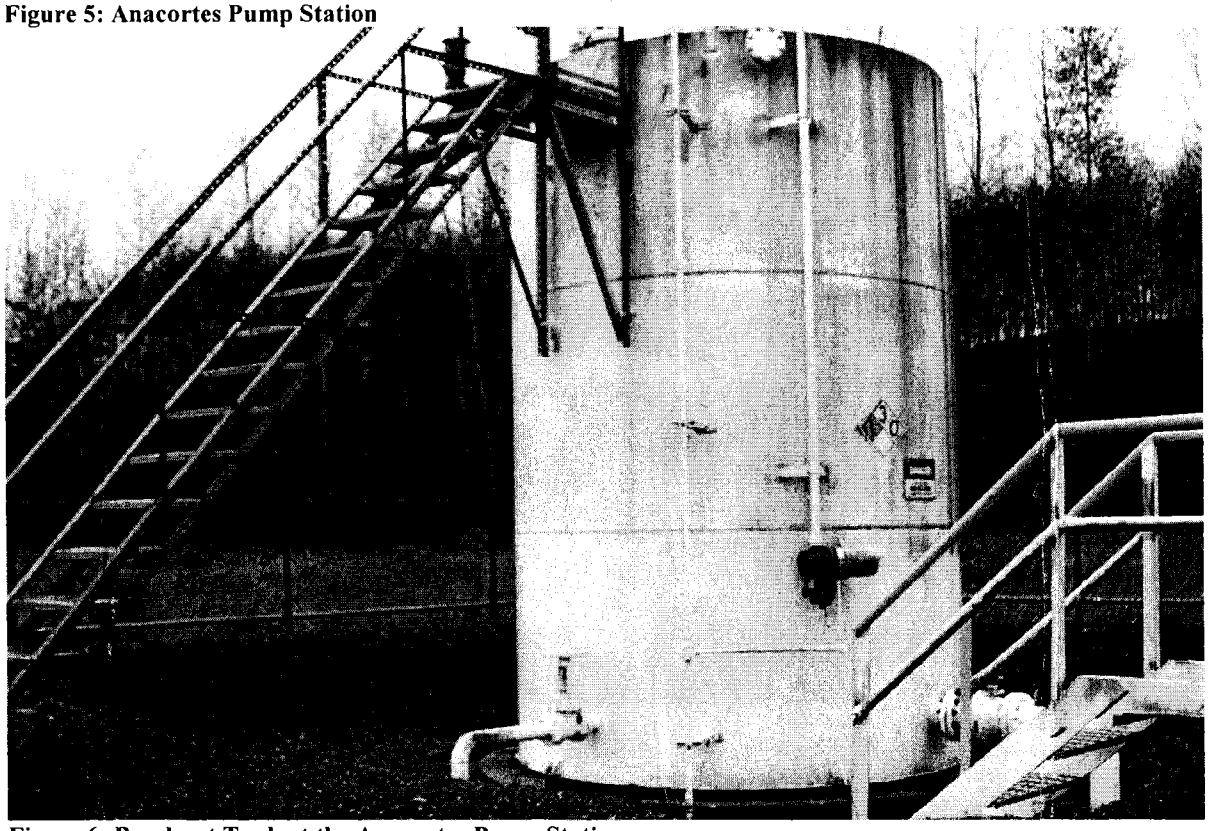

Figure 6: Breakout Tank at the Anacortes Pump Station

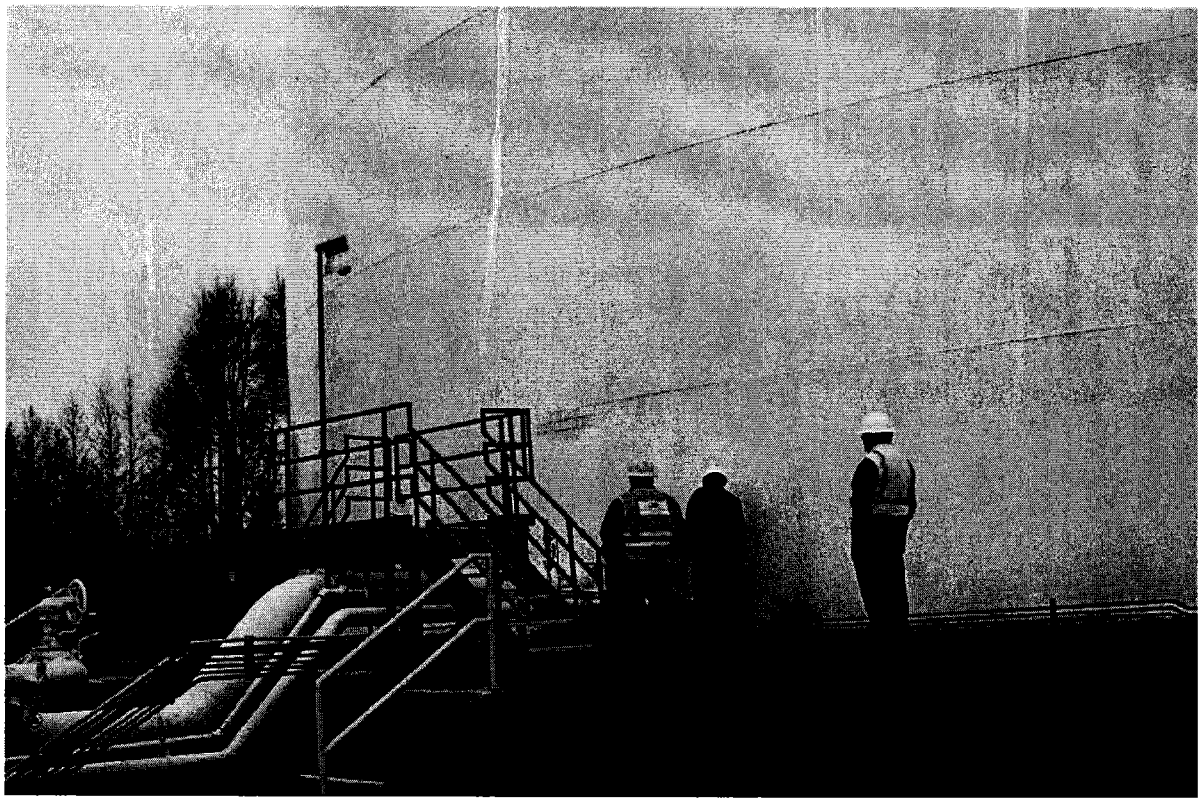

Figure 7: Breakout Tank at the Bayview Terminal

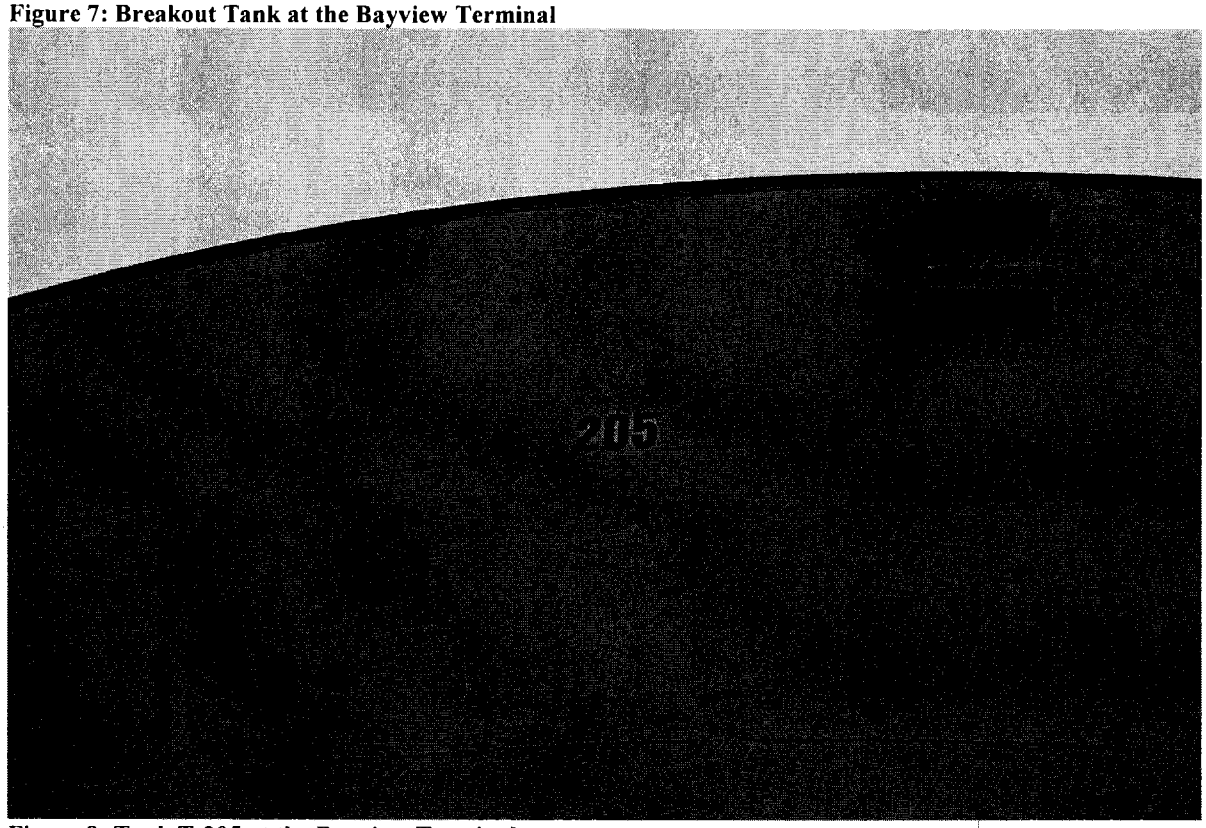

Figure 8: Tank T-205 at the Bayview Terminal

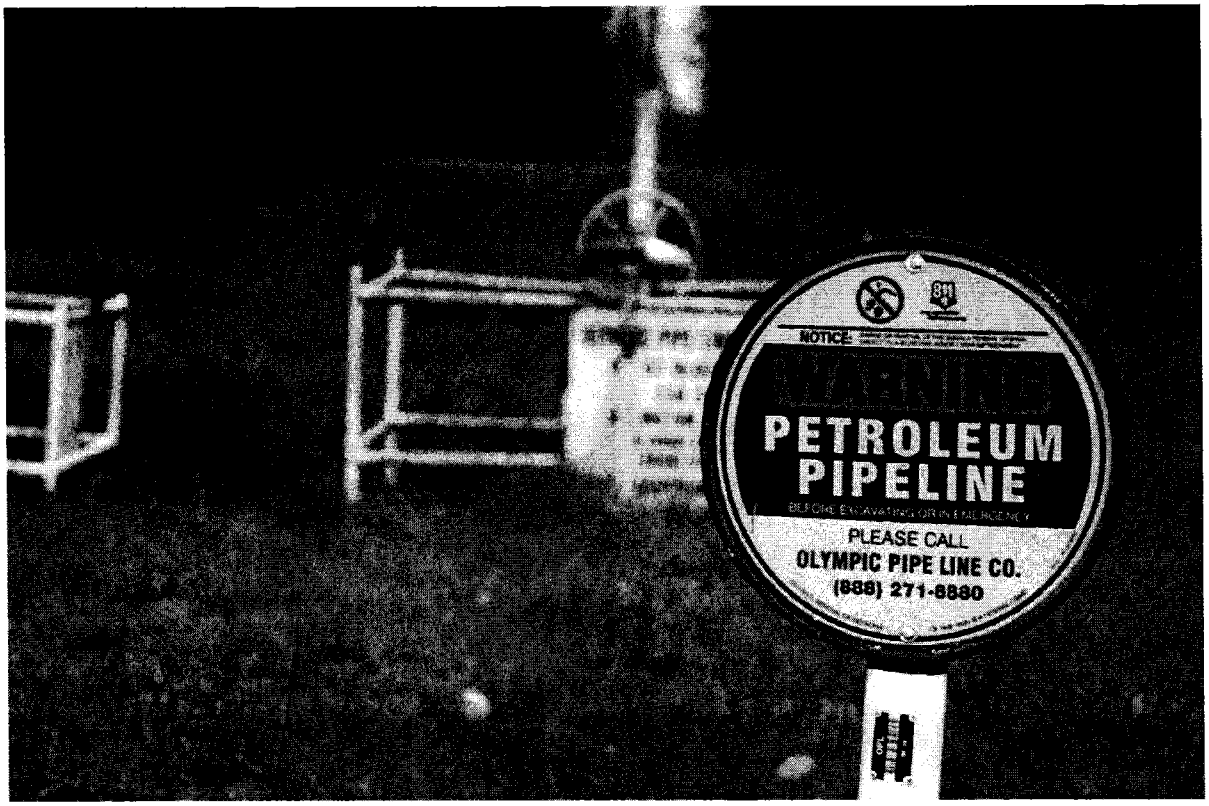

Figure 9: 16" and 20" Mainline Valves at MP57

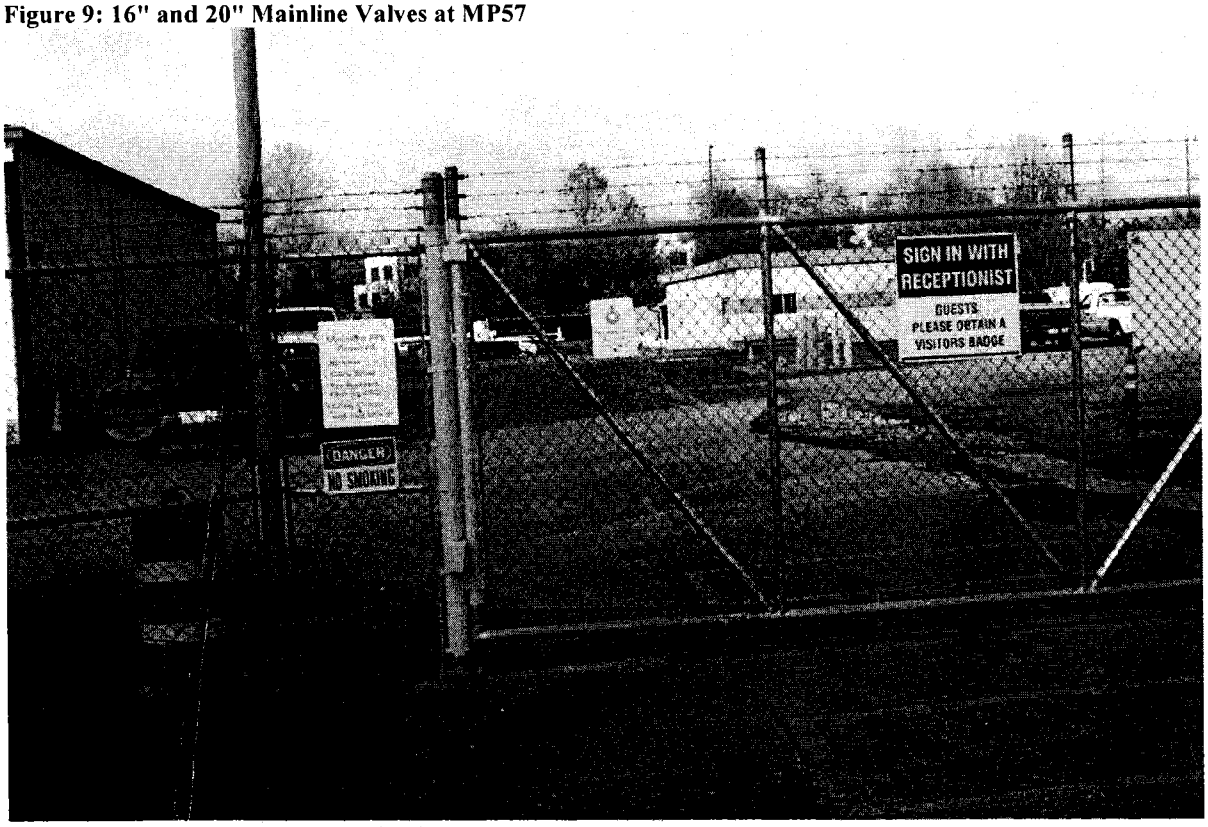

Figure 10: Signage at the Renton Station

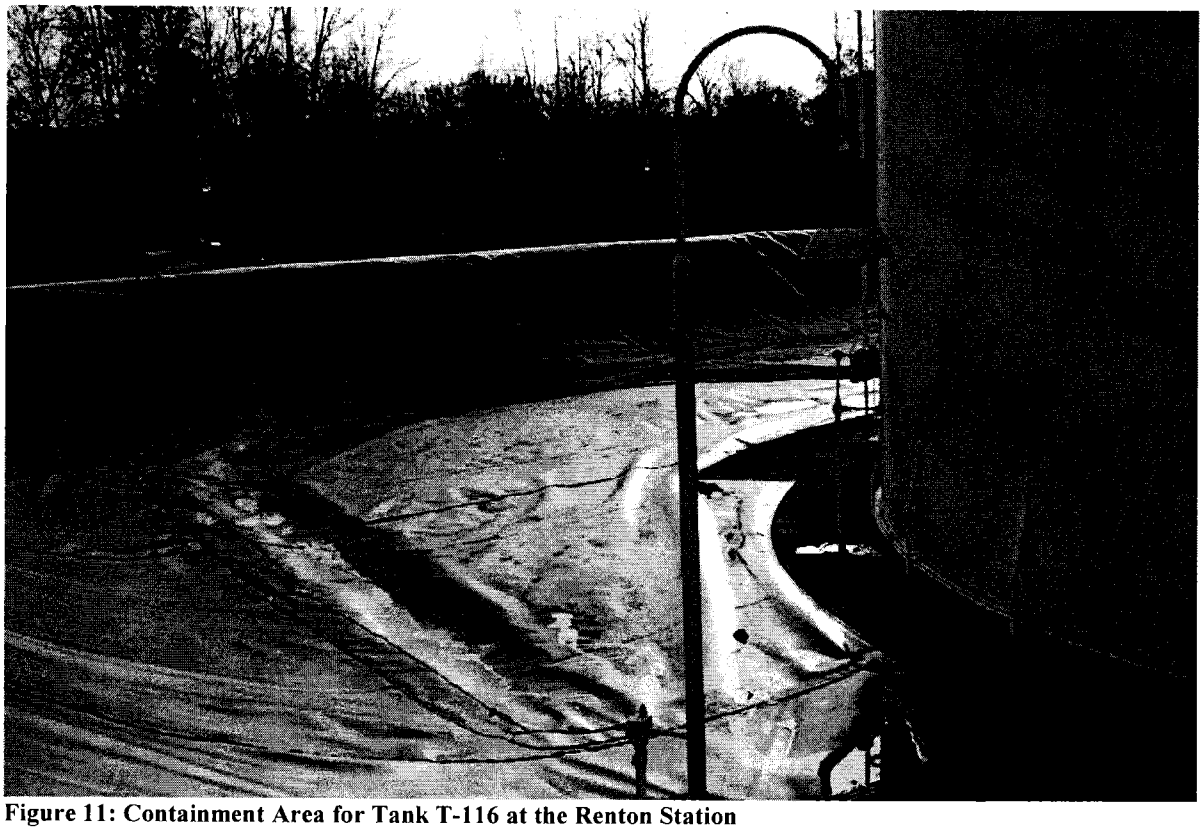

Figure 11: Containment Area for Tank T-116 at the Renton Station

Figure 12: Tank T-116 at the Renton Station

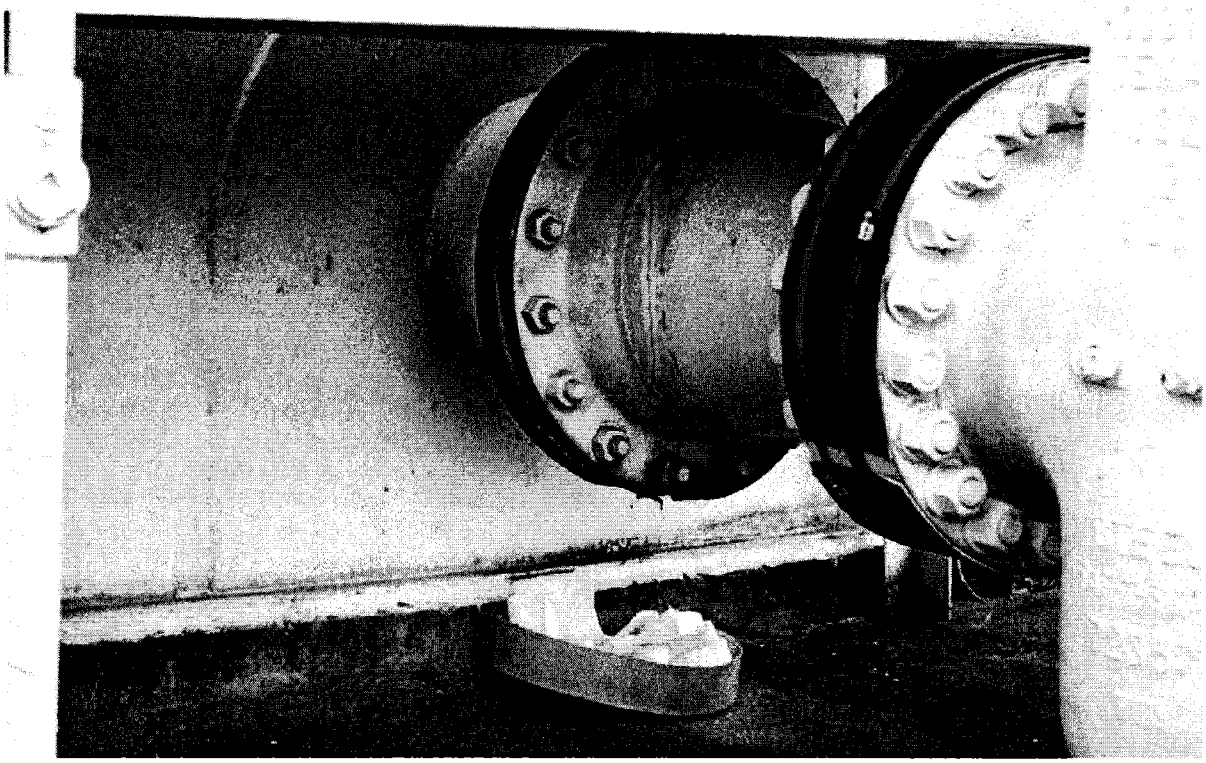

Figure 13: Flange of Tank T-116 at the Renton Station

Figure 14: Signage at the Tacoma Pump Station

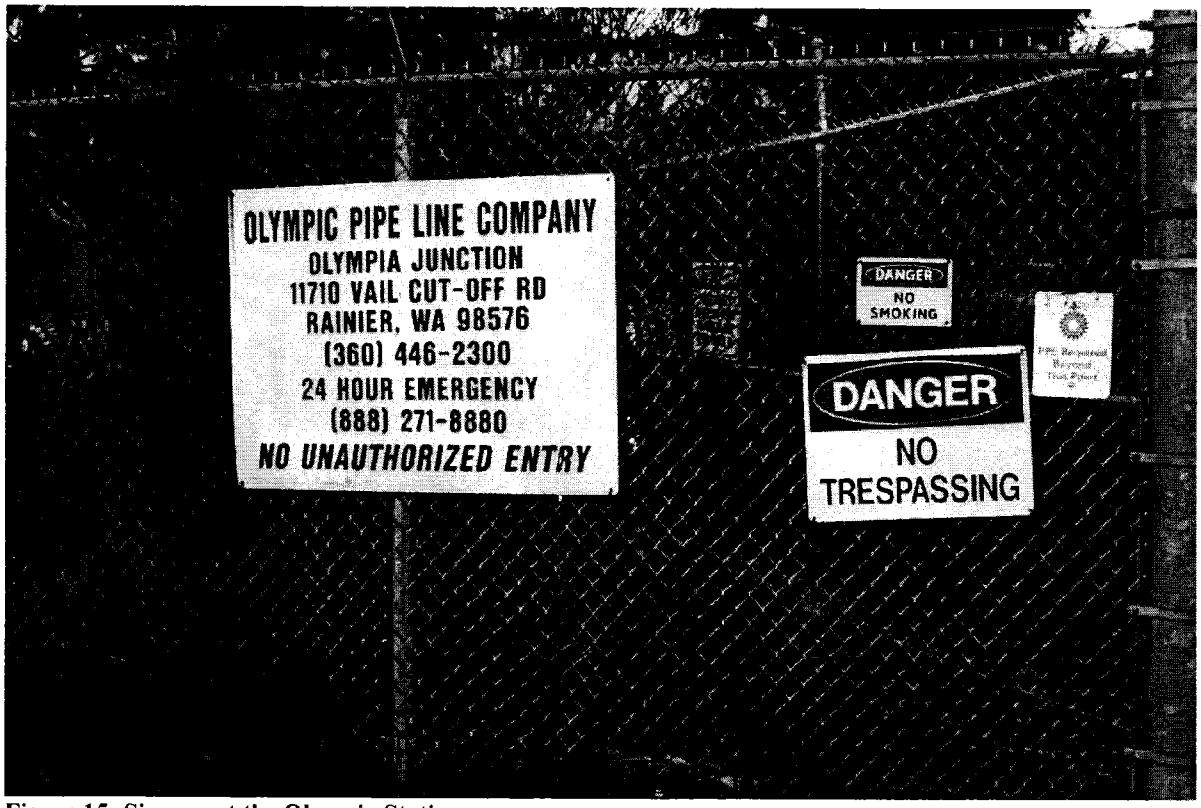

Figure 15: Signage at the Olympia Station

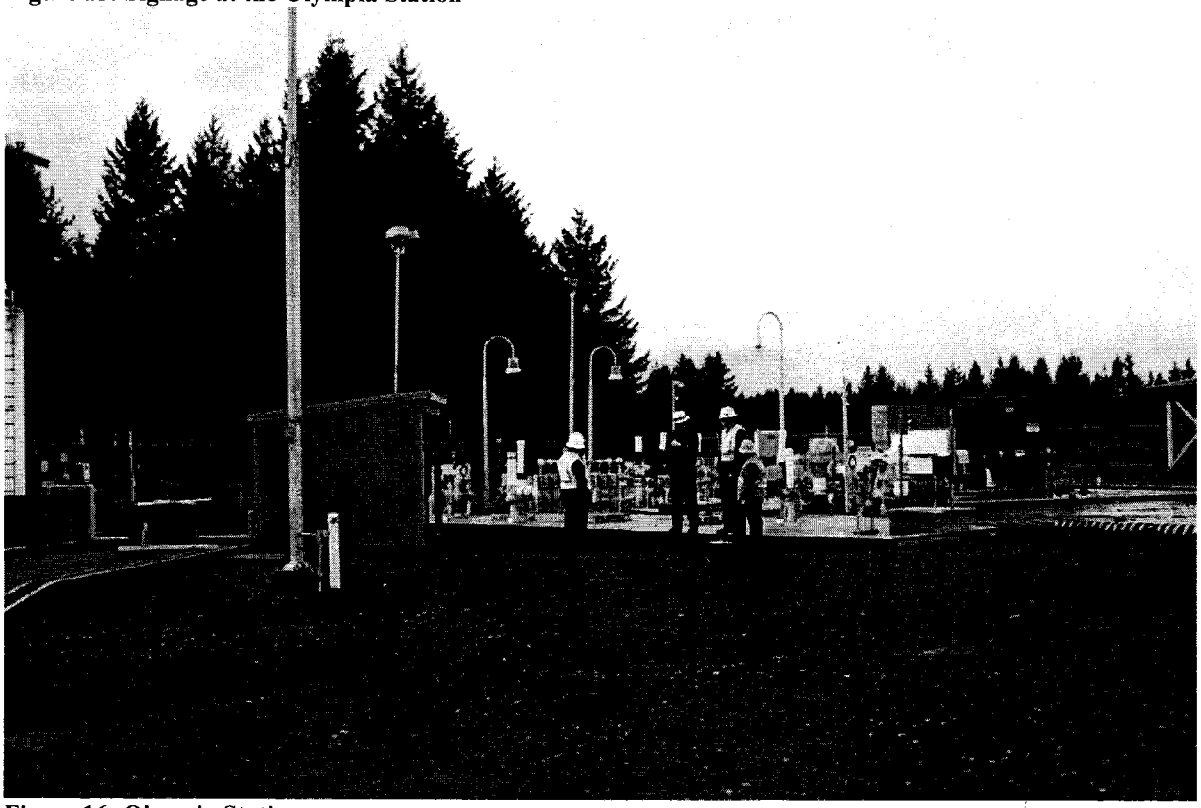
Figure 16: Olympia Station

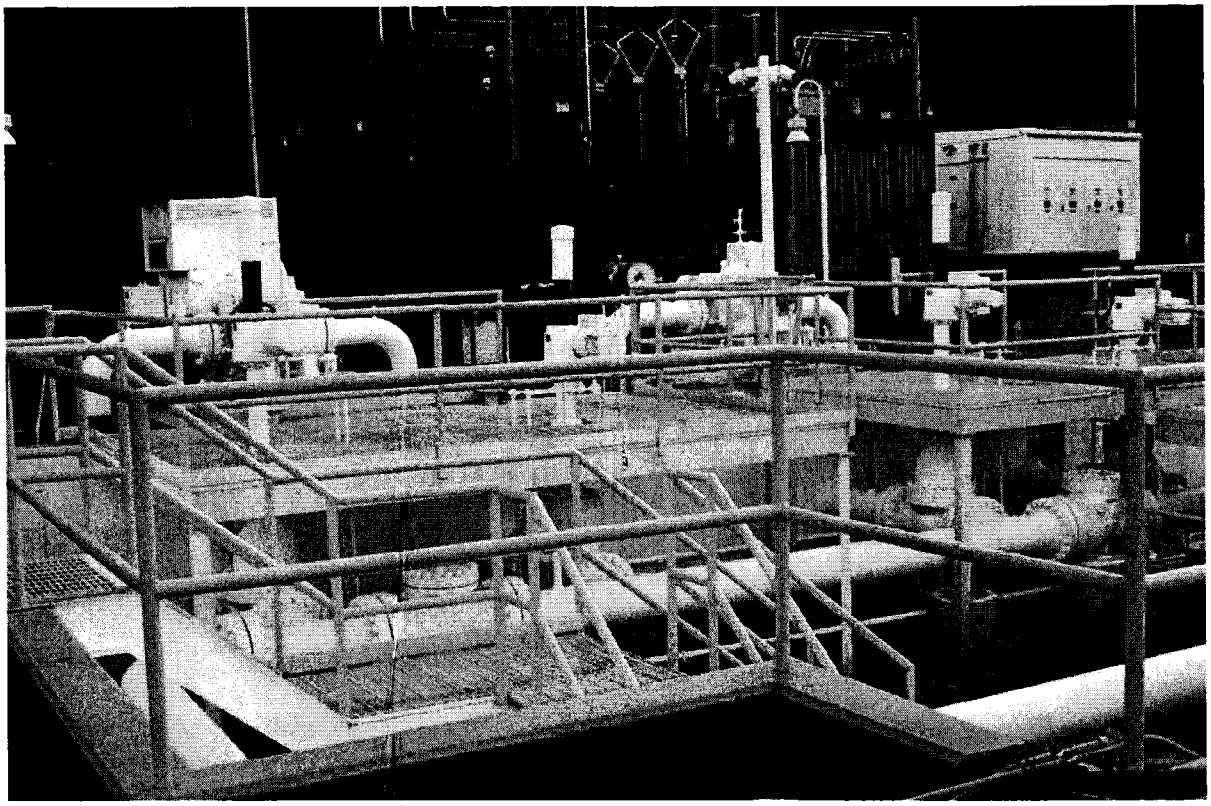

Figure 17: Castle Rock Pump Station

Figure 18: Pipeline right-of-way near the Castle Rock Station

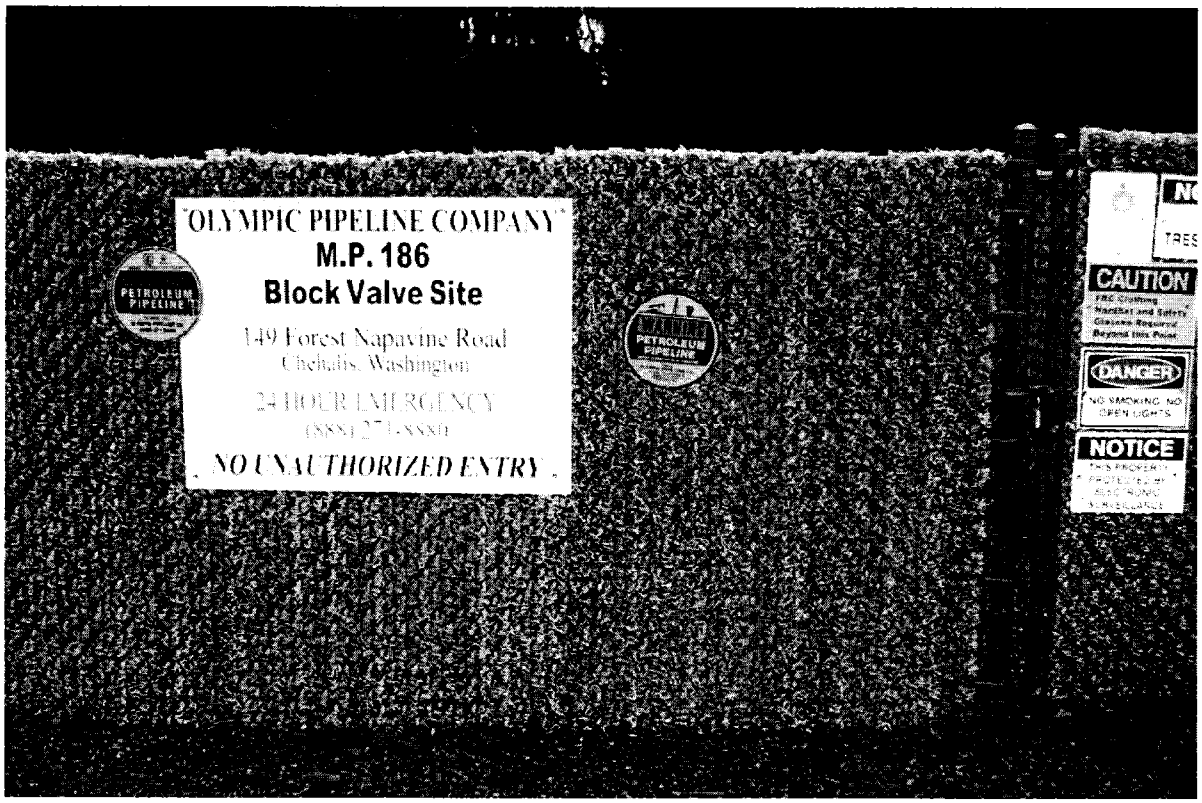

Figure 19: Signage for Mainline Valve at MP 186

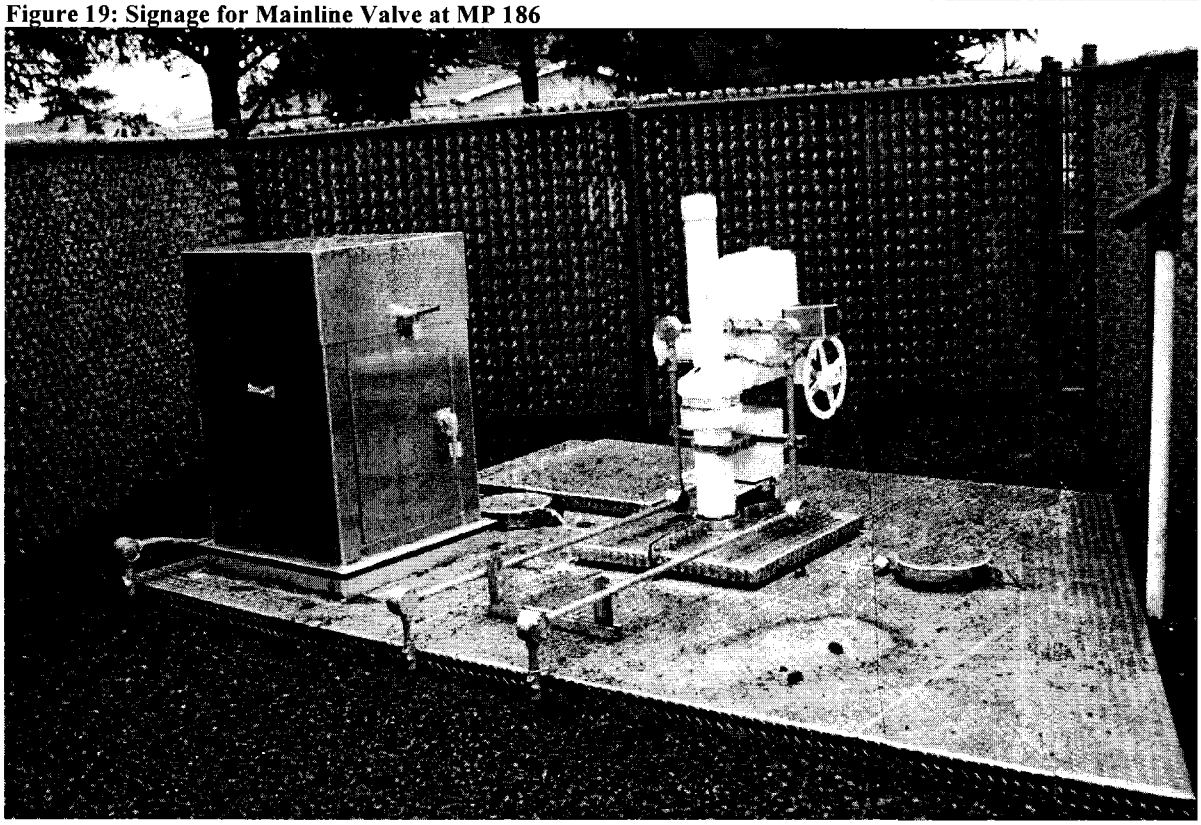

Figure 20: Mainline Valve at MP 186

Figure 21: Mainline Valve at MP 196

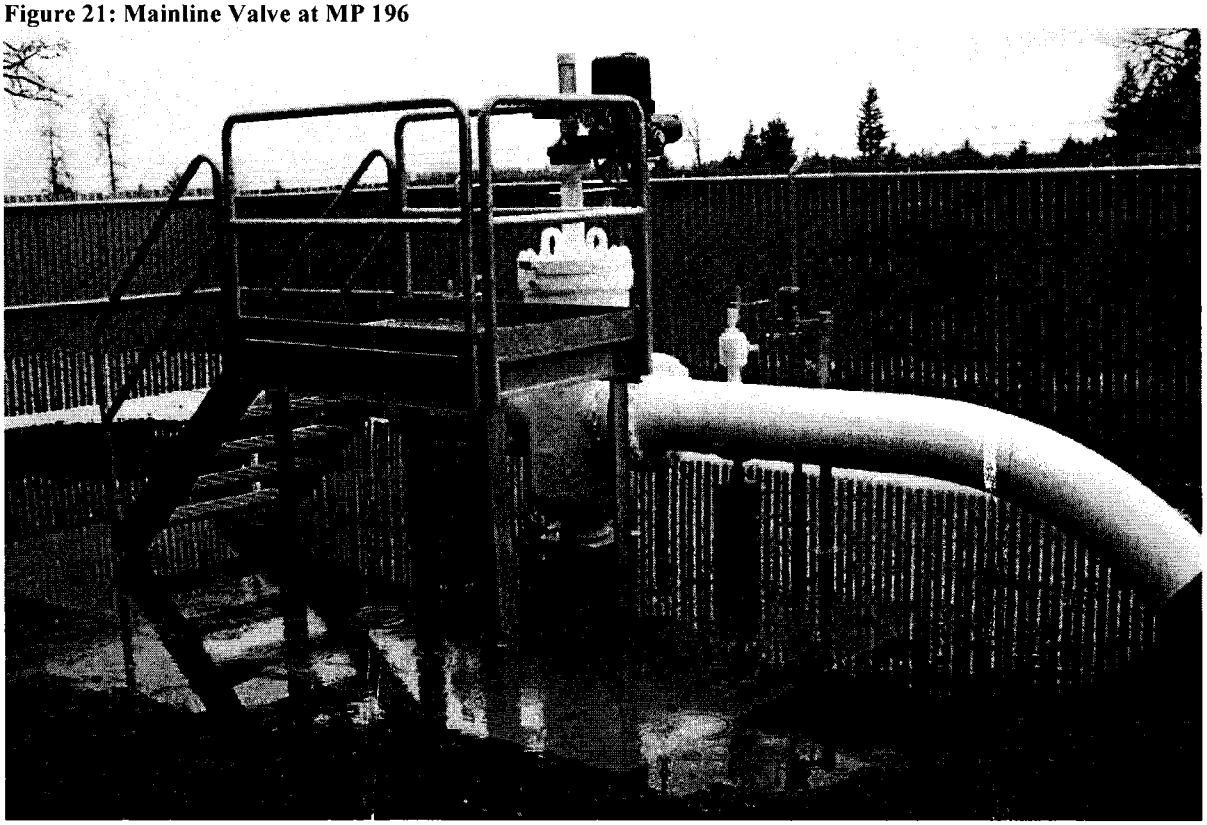

Figure 22: Mainline Valve at MP 196