Field Data Collection

(6/20-21/2012 Standard Inspection)

Company: Olympic Pipe Line Company

Unit: Intrastate Laterals

Pipe-to-Soil Potential Readings and Rectifiers

Date	Location	Pipe (Volts) Power On	Casing (Volts)	Comments
6/20/2012	**Renton Station**			
	12" pig launcher for Seattle Lateral	-3.949	N/A	
	12" Sea-Tac launcher	-2.376	N/A	
	Rectifier #190			Rectifier DC output: 9.30 V; 14.64 A
	Rectifier #195			Rectifier DC output: 20.14 V; 11.5 A
	Rectifier # 196 (for breakout tank T-116)			Rectifier DC output: 6.4 V; 2.7 A
6/20/2012	Seattle Lateral first block valve station north of the Renton Station at MP 1.5	-1.911	N/A	This mainline block valve is a manual valve. It was partially operated by Ken Carlton (Central Area Team Leader) with no difficulty.
6/20/2012	Seattle Lateral Henderson Street block valve station at MP 6	-2.220		This block valve is a MOV with remote control.
6/20/2012	Seattle Lateral Rectifier #200 at the intersection of S. Trenton Street & MLK Jr. Street S.	N/A	N/A	Rectifier DC output: 7.70 V; 3.05 A.
6/20/2012	Seattle Lateral block valve station at the intersection of 6th Street and	-1.738	N/A	The mainline block valve is a MOV with remote control. It was partially operated by Ken Carlton. The line was down (not delivering products)

	Charleston Street (MP 10). A CP test station is located at this site.			during the field inspection.
6/20/2012	**Seattle Lateral Delivery Facilities (DF) at Harbor Island (end of the line).** Pig receiver Rectifier #210 (for station) Rectifier #220 (for pipeline) Breakout Tank T-102, south side of the bottom plate.	 -1.720 -1.616	 N/A N/A	 Rectifier DC output: 17.00 V; 9.3 A. Rectifier DC output: 3.53 V; 1.50 A. The spill containment and impoundment project around the tank was completed in July, 2010.
6/20/2012	**Sea-Tac Lateral** Sea-Tac Lateral at MP-1 main line valve north of the Green River	 -2.418	 N/A	 This MLV is a manual valve and it is in a vault. It requires a confined space entry permit to operate the valve.
6/20/2012	Sea-Tac Lateral CP test station for carrier pipe and casing under I-5 Freeway	-2.900	-0.380	The test lead was relocated after the 2010 inspection as it was broken and not easily accessible.
6/20/2012	Sea-Tac Lateral at the airport (end of the line) near the 12" pig receiver. Rectifier #250	-2.658	N/A	 Rectifier DC output: 28.95 V; 0.9 A
6/20/2012	**Tacoma Junction** Tacoma Lateral at the Tacoma Junction 8" pig launcher Rectifier #255 for the junction	 -2.175	 N/A	 Rectifier DC output: 10.98 V; 0.46 A

	Rectifier #260 for the 8" lateral			Rectifier DC output: 23.56 V; 4.0 A
6/20/2012	Tacoma Lateral CP test station at MP-2 Railroad crossing The Puyallup River crossing at Lincoln Ave with 10" casing for the 8" pipe.	-1.626 -1.510 -1.275	N/A -0.637 -0.577	
6/20/2012	**<u>Tacoma Lateral Delivery Facilities (DF)</u>** Railroad crossing outside the DF 8" incoming line to the DF Rectifier #270 Rectifier #275 Breakout tank T-103	 -1.090 -1.170	 0.362	 Rectifier DC output: 14.31 V; 2.28 A Rectifier DC output: 5.85 V; 14.3 A An API 653 In-Service inspection was conducted in July 2011 and the inspector recommended that the operator should consider repairing the narrow cracks on concrete apron. The operator completed the repair within a week after this inspection.
6/21/2012	**<u>Vancouver Junction</u>** CP test station at the junction Rectifier #355 for the junction Rectifier #357 for the pipeline	 -2.670	 N/A	 Rectifier DC output: 5.9 V; 0.32 A Rectifier DC output: 2.9 V; 0.15 A
6/21/2012	12" Vancouver lateral at the Lower	-1.982	-0.484	The casing was not shorted.

	River Road Road crossing under the Lower River Road outside of the Port Road crossing under port access road Railroad crossing inside the port	 -1.889 -1.830 -2.307	 -0.384 -0.288 -0.093	
6/21/2012	**Vancouver Lateral Delivery Facilities (DF)** Incoming 12" line to the DF Breakout tank T-107 Rectifier #350 at the DF	 -2.165 -1.503 (south side of the tank)	 N/A	 The potential readings were taken at the edge of the chime (tank bottom plate). An API 653 In-Service inspection was conducted in July 2011 and a recommendation was made by the inspector to repair the seal between the chime and the concrete foundation. The operator has scheduled the repair by the end of 2013. Rectifier DC output: 61.6 V; 7.25 A
6/21/2012	**Rainier Pump Station** Olympia Lateral 6" pig launcher Rectifier #300 (for station) Rectifier #310 (for pipeline)	 -1.522	 N/A	 Rectifier DC output: 52.84 V; 1.8 A Rectifier DC output: 4.31 V; 0.82 A
6/21/2012	6" Olympia Lateral crossing under	-1.954	-0.236	

	Waddell Road SE in Tenino			
6/21/2012	6" Olympia Lateral crossing under State Highway 507 in Tenino	-1.470	-0.014	
6/21/2012	Old light rail (trail) crossing in Tenino	-1.332	0.076	
6/21/2012	Railroad crossing in Tenino	-1.740	-0.058	
6/21/2012	Olympia Lateral crossing under 138th Street in Tenino	-1.450	-0.128	
6/21/2012	Olympia Lateral crossing under Military Road	-1.685	-0.055	
6/21/2012	Olympia Lateral idled & disconnected last 3.5 miles segment Near the end of the segment At the end of the segment under 83rd Ave SW	 -1.721 -1.381	 -0.062	This segment is with galvanic system and not impressed current system.