

POST INSPECTION MEMORANDUM

Inspector: Al Jones/WUTC
Reviewed: D. Lykken/WUTC
Peer Reviewed: RR 01/10/2013 ✓
Follow-Up Enforcement: No Violations ✓
~~PCP* PCO* NOA WL LOC~~
Director Approval* CJH
1/11/13

Date: June 14, 2012

Operator Inspected:
Northwest Pipeline Corp (WGP)

OPID: 13845

Region: Western

Unit Address:
Sumas District
4738 Jones Road
Sumas, WA 98295

RECEIVED
JAN 22 2013
State of Washington
UTC
Pipeline Safety Program

Unit Inspected: Sumas District

Unit ID: 8355

Unit Type: Interstate Gas Transmission

Inspection Type: I01 - Unit Inspection, ~~I07 - IMP Field Verification & Follow-up, and I08 -~~
~~OQ Field Verification~~ *RR*

Record Location: Sumas, WA

Inspection Dates: June 4-7, 2012

AFOD: 4.0

SMART Activity Number: I01 2.5 days I07 1.0 day I08 0.5 day
141573 142176 142177

Operator Contact:

Phone: Justin Adams

Fax: 360-988-2261

Emergency: (800) 972-7733

Unit Description:

The Sumas District receives natural gas from West Coast Energy at the Canadian border. The gas pressure is increased at the Sumas compressor station then transported south by two parallel 30" and 36" pipelines. The Sumas District extends south to State Route 92 south of Marysville at MP 1411. The District includes approximately, 73.3 and 60.4 ROW miles of 30-inch and 36-inch transmission mainline, respectively. Most of the lines are in class 1 or 2 locations except for class 3 locations at Arlington, Deming and Stanwood. There are two compressor stations, one at Sumas and the other at Mt. Vernon. The MAOP of the pipeline system is 960 psig.

In addition to the main lines, the following laterals are within the District:

Stanwood Lateral - 8.3 mile of 6" line

Bellingham Lateral - 11.5 miles of 6" and 12" lines

Facilities Inspected:

The portion of unit inspected included compressor stations at Sumas and Mt. Vernon, a number of mainline valve stations including partially operating the valves, meter/regulator stations including overpressure protection check, rectifier stations, and the above ground span over the Skagit River. The pipe-to-soil potentials were taken at cathodic protection test stations along the right-of-way and within the compressor stations.

Geological hazards field inspected include:

1. Swift Creek
2. Nooksack River Crossing
3. Everson Landslide
4. Arlington Landslide
5. Deming
6. Skagit River Crossing (**Exhibit D**)

Class 3 Locations field inspected include:

1. Bellingham Lateral Loop – HCA daycare for children,
2. Everson – HCA for workers at a mushroom farm,
3. Deming – HCA for Mt. Baker High School and casino,
4. Sedro Woolley – HCA for golf course,
5. Stanwood – HCA for residential neighborhood (**Exhibit C**),
6. Arlington – HCA for LDS church and adult care home, and
7. Spokane – HCA business district (**Exhibit B**).

Inspected the completed integrity upgrades including:

- A. August 2009 – recoated 70 feet of 30-inch pipe at Mt. Vernon Compressor Station, between the discharge point and the pulsation bottle. The work was undertaken to repair substandard coating and to enhance cathodic polarization.
- B. November 2009 – NDT was completed on the 30-inch incoming line supports and straps to the Sumas Compressor Station yard. The pipe was evaluated for possible corrosion cells between the metal plate on the concrete support and the pipeline. There is no dielectric material placed between the pipeline and the supports. Short Range Guided Waves was used to evaluate 0.500" pipe wall at ten locations. The south support was of interest because it included a girth weld south of pipe strap #9 in the guided wave data. See **Exhibit "A"** (below) from Coast Wave ISONIC Investigation report for support and girth weld image. All locations were found acceptable with minimal corrosion. No additional evaluation or remediation is scheduled for this section of pipe.
- C. August 2010 – recoated 85 feet of 30-inch header manifold and twelve 12" x 8" vertical meter tubes at the West Coast Meter Station in the Sumas Compressor Station yard. During the project 400 linear feet of distributed anode was placed around the West Coast Meter Station and the south and east side of B-Plant Compressor Station. The project repaired substandard coating and enhanced cathodic potentials at the B-Plant.

- D. October 2010 – installed 5,168 feet of anode-flex adjacent to the 30-inch (#1401 mainline) at Jackson Creek between MP 1,454.92 and MP 1,455.90. The project increased the mainline polarization in rocky ground and high resistivity soil.
- E. June 2010 – installed a string of canister anodes around valves 17L-4 and 17L2-4 at Bryant Valve Station, MP 1,427.46. The ground bed addition was completed to enhance cathodic polarization of the mainline valves.

Persons Interviewed:

Persons Interviewed	Title	Phone No.
Justin Adams	Sumas District Manager	(360) 988-2261
Randy Tarter	Assistant District Manager	(360) 988-0500
Chris Mason	Senior Engineer	(801) 584-6689
Kevin Henson	Team Lead Sumas District	(509) 290-1918
Justin Reynolds	Integrity Lead - North	(509) 290-1918
Jeff Pollack	Senior Integrity	(206) 890-6259
Kim Nelson	Operation Technician IV	(360) 988-2261
Mike Fitchner	Operation Technician V	(360) 988-2261
Sam Chestnut	Pipeline Technician	(360) 988-2261

Probable Violations/Concerns:

No probable violations were noted.

Follow up on the history of prior offenses that are still open:

Prior Offenses (for the past 5 years)		
CPF #	What type of open enforcement action(s)?	Status of the regulations(s) violated (Reoccurrence Offenses, Implement a NOA Revision, Completion of PCO or CO, and etc...)

Recommendations:

This unit should continue to be inspected every other year.

Comments:

A Team O&M Inspection is scheduled in 2012.

Attachments:

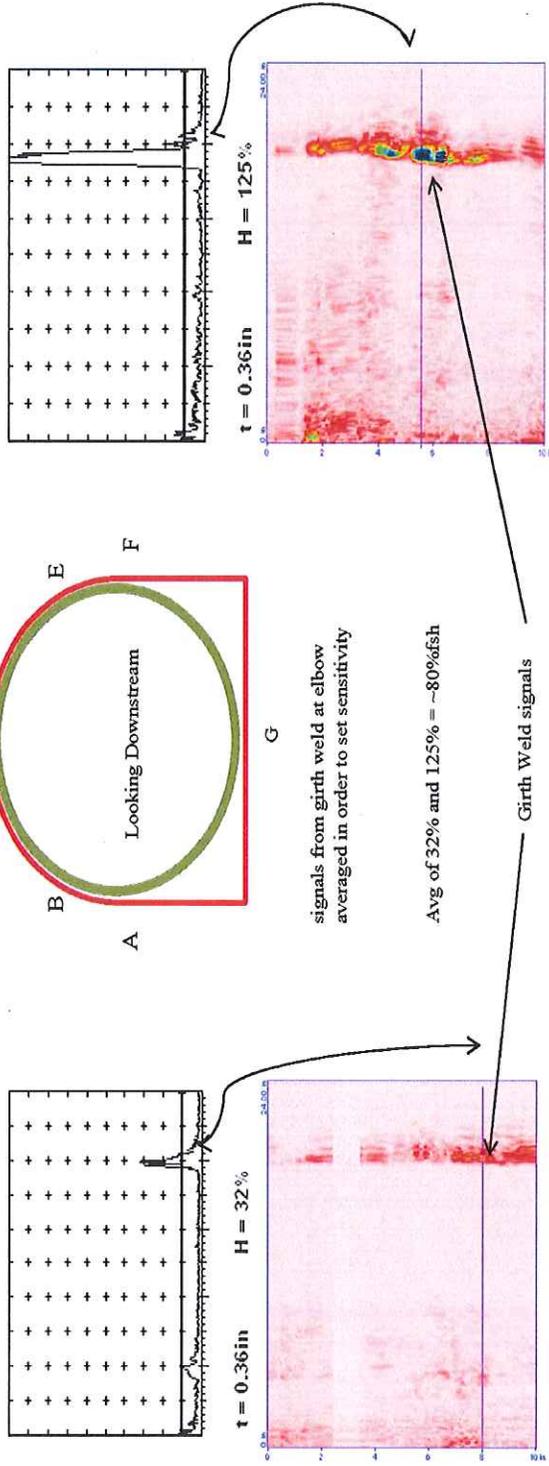
- Field Data Collection Form
- Exhibit A, B, C & D

• Utilized IA - IOR Attached
Version Date: 5/5/08

Exhibit "A"

Layout and Setup INFORMATION

total scan length: 60"/10" length per scan
 Probe loc. 6" from strap. Strap width 5 1/2"(note BOX in scan "A")



1 -- 7

8 -- 9

Coast Wave ISONIC Investigation, NDT was completed on the 30-inch incoming line supports and straps to the Sumas Compressor Station yard. The south support was of interest because it included a girth weld south of pipe strap #9 in the guided wave data. No additional evaluation or remediation is scheduled for this section of pipe. (Wave date on right is zone "G" and left is zone "E")

6/6/2012	<p>Skagit River arterial crossing North and South sides of river. 26" & 30"</p> <p>MP 1456 Geo Hazard "Big Ditch" Located on Wichersham Hill.</p>		<p>Rectifier #1071 27.8 v output 12.4 Amps Settings: C1, F5</p> <p>Rectifier #1676 17.3 v output 2.1 Amps</p> <p>Inspected remediation of soil erosion with the placement of rock in the shape of a swale to channel water flow across the ROW.</p>
6/7/2012	Mt. Vernon Compressor Station	<p>-1.06 v on -1.35 v on -1.19 v on -1.08 v on -1.15 v on</p>	<p>Compressor Plants A, B, and C was inspected. Gas sensors were checked with 2.5% methane test gas at each Plant. Lights and fans were activated at 20% LEL and at 40% LEL the station ESD. All sensors worked properly.</p> <p>Test Site #81 26" kicker gas pipe at receiver 30" receiver 30" kicker gas pipe at launcher 36" launcher</p> <p>The 30" mainline valve 17L-4N was operated.</p> <p>Rectifier #1687 13.0 v output 9.5 Amps Settings: C1, F4</p> <p>Rectifier #847 (ground bed) 37.3 v output 0.9 amp Settings: C3, F3</p>

6/7/2012	<p>Stanwood Lateral HCA, Class 3 Location (Lateral MP 7.6)</p> <p>MP 1424 HCA, Class 3 Location</p> <p>MP 1421.4 Arlington Slide</p> <p>MP 1414.1 Granit Falls Meter Station</p>	<p>-1.41 v on</p> <p>-1.35 v on</p> <p>-1.21 v on -1.27 v on</p>	<p>6" lateral, MAOP of 960 psig, odorized by Cascade Natural Gas.</p> <p>East Stanwood Gate Station</p> <p>8415 Arlington Heights Rd, Arlington, WA 30" pipeline</p> <p>30 & 36 Pipelines Six strain gauges stations with three gauges per stations. 30" Pipeline 36" Pipeline</p> <p>Gas is delivered to Cascade Natural Gas at 240 psig with overpressure protection at 253 psig. The station is configured with dual runs with worker and monitor regulation. Rectifier #1816 8.6 v output 1.2 Amps Setting: C1, F3</p>
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Exhibit B - Spokane, WA
Class 3 Location – 16-inch line replacement
Photo: Al Jones 6/6/2012



Exhibit C – Stanwood, WA
Class 3 Location
Photo: Al Jones 6/7/2012



Exhibit D – Mt. Vernon, WA
Skagit River Crossing
Flood plain and security mitigation installed
Photo: Al Jones 6/7/2012

Inspection Output Report (IOR)

Report Filters: *Results: Unsat,Concern*Report Generated: *12/31/2012 for Ross Reineke*

Inspection Information

Inspection Name	Williams Sumas	Operator(s)	NORTHWEST PIPELINE CORP (WGP) (13845)	Submit Date	
Status	ACTIVE	Lead	Al Jones	Review Started Date	
Start Year	2012	Team Members	Scott A Rukke	Reviewer	
System Type	GT	Observer(s)	David D Lykken	Review Complete Date	
Inspection Type	OTHER	Supervisor	Ross Reineke, Joe Subsits	Approver	
Protocol Set ID	GT.2012.01	Director	Chris Hoidal	Approval Date	

Scope (Assets)

#	Short Label	Long Label	Asset Type	Asset ID	Planned	Required	Total Inspected	Required % Complete
1.	UNIT 8355	WA-UTC/SUMAS DISTRICT	unit	8355	126	126	126	100.0%

a. Percent completion excludes unanswered questions planned as "always observe".

Plans

#	Plan Assets	Focus Directives	Topical Modules/Sub-Modules	Qst Type(s)	Extent	Notes
1.	UNIT 8355	Baseline Field Observations, Baseline Records, OQ Protocol 9, Gas IMP Field Verification	AR, CR, DC, EP, FS, IM, MO, PD, RPT, SRN, TD, TQ	O, P, R, S	Detail	

Plan Implementations

#	Activity Name	SMART Act#	Modules/Submodules	Assets	Qst Type(s)	Planned	Required	Total Inspected	Required % Complete
1.	Sumas	141573	AR, CR, DC, EP, FS, IM, MO, PD, RPT, SRN, TD, TQ	UNIT 8355	O, P, R, S	126	126	126	100.0%

a. Since questions may be implemented in multiple activities, but answered only once, questions may be represented more than once in this table.

b. Percent completion excludes unanswered questions planned as "always observe".

Results (Unsat,Concern values, 0 results)

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