A completed Standard Inspection Checklist, OQ Field Validation Protocol form and Cover Letter/Field Report are to be submitted to the Senior Engineer within 30 days from completion of the inspection.

	Inspection Report					
Docket Number	080034		· .			
Inspector Name & Submit Date	Lex Vinsel / Scott Rukke					
Sr. Eng Name & Review/Date	David Lykken 2/6/09					
	Operator Information					
Name of Operator:	NW Natural		<b>OP ID #:</b> 13840			
Name of Unit(s):	The Columbia Gorge					
Records Location:	Records Location: Portland OR					
Date(s) of Last (unit) Inspection:	September 20-24, 2006	Inspection Date(s):	September 29 – October 10 2008			

Inspection Summary:		
	•	
•		
	 <u> </u>	
HQ Address:	 System/Unit Name & Address:	•

The Dalles

220 NW 2<sup>nd</sup> Ave

Portland OR	1125 Bargeway Rd. The Dalles, OR 97058	
Co. Official: Grant Yoshiha	ra Phone No.:	(541)296-2229
<b>Phone No.:</b> (503)226-4211		(503)721-2500
Fax No.:	Emergency Phone No.:	(800)826-7725
<b>Emergency Phone No.:</b> (800)882-3377		
Persons Interviewed	Title	Phone No.
Bruce Paskett	Principal Compliance Supervisor	503/226-4211 ext. 4300
Darlene Maurer	Compliance Specialist	503/226-4211 ext. 4391
Keith Kilcoin	Compliance Specialist	ext. 4389
Katie Gough	Engineering Supervisor	ext. 2045
Mindi Thayer	Distribution Supervisor	8632
James Greger	Welding Inspector	Ext. 4341
Cari Colton	Manager, Operations Technical Services	Ext 5759
Brian Konrad		
Andy Fortier	Engineer	
Mark Clemens	Supervisor	
Dennis Silva	Crew Leader	
Richard Riffle	Regulator Tech/ Crew Leader	
John Walker		
Neal Rubbelki		
Mike Warthen	Sr. Field Corrosion Tech	
Larry Bradley		

## Utilities and Transportation Commission Standard Inspection Report for Intrastate Gas Distribution Systems

Records Review and Field Inspection (Form C)

*Doug Martin	*Leaka	ige Supervisor	
*Ron Martin	*Corros	sion Supervisor	
*Margret Locke	*Corro	osion Support	*On Follow-up Phone Call Only, not interviewed during inspection
		•	

WI	WUTC staff conducted an abbreviated procedures inspection on 192 O&M and WAC items that changed since the last inspection. This checklist focuses on Records and Field items per a routine standard inspection.  (check one below and enter appropriate date)						
X	Team inspection was performed (Within the past five years.) or,	Date:	March 2007				
	Other WUTC Inspector reviewed the O & M Manual (Since the last yearly review of the manual by the operator.)	Date:					

		GAS SYST	TEM OPERATIONS	
Gas Supp	olier Williams NW			
Services: Residential *NW Nat	163,392* <i>Commercial Industria</i> ural reports for all of Washington State	•	y district.	
Number o	f reportable safety related conditions last	year None	Number of deferred leaks in system	2*
Number o	f non-reportable safety related conditions	last year None	Number of third party hits last year	123*
Miles of to	ransmission pipeline within unit (total mil 4 areas) None	es and miles in	Miles of main within inspection unit areas) 1652*	t(total miles and miles in class 3 & 4
	Operating Pressure(s):		MAOP (Within last year)	Actual Operating Pressure (At time of Inspection)
Feeder:	North Bonneville		150 psig	
Feeder:	Bingen Gate (located in White Salmon	)	160 psig	
Feeder:	Klickitat		400 psig	
Feeder:	John Day Gate		250 psig	
Feeder:	Dallesport		250 psig	
Town:				
Other:				
Does the	operator have any transmission pipelines?	No transmission	on in this district.	
			rs in this district.	

Pipe Specifications:			
Year Installed (Range)	1963 to present	Pipe Diameters (Range)	5/8" up to 8 inches.
Material Type	Steel & PE	Line Pipe Specification Used	
Mileage	1652*	SMYS %	None in district >40% of SMYS

#### **Operator Qualification Field Validation**

Important: Per OPS, the OQ Field Inspection Protocol Form (Rev 3, Feb 08) shall be used by the inspector as part of this standard inspection. When completed, the inspector will upload this information into the PHMSA OQ Database (OQDB) located at <a href="http://primis.phmsa.dot.gov/oqdb/home.oq">http://primis.phmsa.dot.gov/oqdb/home.oq</a> Date Completed 01/09/09

		REPORTING RECORDS	S	U	N/A	N/C
1.	191.5	Any incidents requiring telephonic reporting to the NRC (800-424-8802) None	Х			
2.	191.23	Filing the Safety Related Condition Report within 5 days of determination, but not later than 10 days after discovery None	X			
3.	192.727(g)	Abandoned facilities offshore, onshore crossing commercially navigable waterways reports	X			
4.	480-93-200(1)	Telephonic Reports to UTC Pipeline Safety Incident Notification 1-888-321-9146 (Within 2 hours) for events which results in;	Х			
5.	480-93-200(1)(a)	A fatality or personal injury requiring hospitalization; None in Washington	X			
6.	480-93-200(1)(b)	Damage to property of the operator and others of a combined total exceeding fifty thousand dollars; None	Х			
7.	480-93-200(1)(c)	The evacuation of a building, or high occupancy structures or areas; OK	Х			
8.	480-93-200(1)(d)	The unintentional ignition of gas; OK	Х			
9.	480-93-200(1)(e)	The unscheduled interruption of service furnished by any operator to twenty five or more distribution customers;	х			

 $S-Satisfactory \quad U-Unsatisfactory \quad N/A-Not\ Applicable \quad N/C-Not\ Checked$  If an item is marked U, N/A, or N/C, an explanation must be included in this report.

		REPORTING RECORDS	S	U	N/A	N/C
10.	480-93-200(1)(f)	A pipeline pressure exceeding the MAOP plus ten percent or the maximum pressure allowed by proximity considerations outlined in WAC 480-93-020; None	Х			
,11.	480-93-200(1)(g)	Is significant, in the judgment of the operator, even though it does not meet the criteria of (a) through (f) of this subsection;	X			
12.	480-93-200(2)	Telephonic Reports to UTC Pipeline Safety Incident Notification 1-888-321-9146 (Within 24 hours) for;	х			
13.	480-93-200(2)(a)	The uncontrolled release of gas for more than two hours;	· X			
14.	480-93-200(2)(b)	The taking of a high pressure supply or transmission pipeline or a major distribution supply gas pipeline out of service;	X			
15.	480-93-200(2)(c)	A gas pipeline operating at low pressure dropping below the safe operating conditions of attached appliances and gas equipment; or	х			
16.	480-93-200(2)(d)	A gas pipeline pressure exceeding the MAOP	X.			
17.	480-93-200(4)	Did written incident reports (within 30 days of telephonic notice) include the following	Х			Z
18.	480-93-200(4)(a)	Name(s) and address(es) of any person or persons injured or killed, or whose property was damaged; None	х			·
19.	480-93-200(4)(b)	The extent of injuries and damage; None	X			
20.	480-93-200(4)(c)	A description of the incident or hazardous condition including the date, time, and place, and reason why the incident occurred. If more than one reportable condition arises from a single incident, each must be included in the report;	х			
21.	480-93-200(4)(d)	A description of the gas pipeline involved in the incident or hazardous condition, the system operating pressure at that time, and the MAOP of the facilities involved;	х	·		
22.	480-93-200(4)(e)	The date and time the gas pipeline company was first notified of the incident;	Х			
23.	480-93-200(4)(f)	The date and time the ((operators')) gas pipeline company's first responders arrived on-site;	Х			
24.	480-93-200(4)(g)	The date and time the gas ((facility)) pipeline was made safe;	Х			
25.	480-93-200(4)(h)	The date, time, and type of any temporary or permanent repair that was made;	·x			
26.	480-93-200(4)(i)	The cost of the incident to the ((operator)) gas pipeline company;	х			
27.	480-93-200(4)(j)	Line type;	Х			
28.	480-93-200(4)(k)	City and county of incident; and	Х			
29.	480-93-200(4)(1)	Any other information deemed necessary by the commission.	Х			
30.	480-93-200(5)	Submit a supplemental report if required information becomes available	Х			
31.	480-93-200(6)	Written report within 5 days of receiving the failure analysis of any incident or hazardous condition due to construction defects or material failure	х			
32.	480-93-200(7)	Annual Reports filed with the commission no later than March 15 for the proceeding calendar year	Х			
33.	480-93-200(7)(a)	A copy of PHMSA F-7100.1-1 and F-7100.2-1 annual report required by U.S. Department of Transportation, PHMSA/Office of Pipeline Safety	х			
34.	480-93-200(7)(b)	Damage Prevention Statistics Report including the following;	X			į.
35.	480-93-200(7)(b)(i)	Number of gas-related one-call locate requests completed in the field;	X			
36.	480-93-200(7)(b)(ii)	Number of third-party damages incurred; and	Х			
37.	480-93-200(7)(b)(iii)	Cause of damage, where cause of damage is classified as one of the following:  (A) Inaccurate locate;  (B) Failure to use reasonable care;  (C) Excavated prior to a locate being conducted; or	х			
38.	480-93-200(7)(c)	(D) Excavator failed to call for a locate.  Reports detailing all construction defects and material failures resulting in leakage.  Categorizing the different types of construction defects and material failures. The report must include the following:  (i) Types and numbers of construction defects; and  (ii) Types and numbers of material failures.	х			-

S – Satisfactory U – Unsatisfactory N/A – Not Applicable N/C – Not Checked If an item is marked U, N/A, or N/C, an explanation must be included in this report.

	REPORTING RECORDS					N/C
39.	480-93-200(8)	Providing updated emergency contact information to the commission and appropriate officials of all municipalities where gas pipeline companies have facilities	Х			
40.	480-93-200(9)	Providing by email, reports of daily construction and repair activities no later than 10:00 a.m.	х			
41.	480-93-200(10)	Submitting copy of DOT Drug and Alcohol Testing MIS Data Collection Form when required	х			-

Documentation Review	ed:			
Document Title	Document Number	Revision Date	Date Range Reviewed	Pct of Data Reviewed

_				
Co	m	m	en	TS:

MAOP for all IP lines is 60 psig, reviewed chart recorder pressure records.

	CUSTOMER	and EXCESS FLOW VALVE INSTALLATION NOTIFICATION	S	U	N/A	N/C
42.	192.16	New customers notified, within 90 days, of their responsibility for those service lines not maintained by the operator	Х			
43.	192.381	Does the excess flow valve meet the performance standards prescribed under §192.381?	X			
44.	192.383	Does the operator have a voluntary installation program for excess flow valves and does the program meet the requirements outlined in §192.383? Are records adequate? No voluntary program.			X	
45.	192.383	If no voluntary program for EFV installations, are customers notified in accordance with §192.383? Are records adequate?	Х			

		CONSTRUCTION RECORDS	S	U.	N/A	N/C
46.	480-93-013	OQ records for personnel performing New Construction covered tasks Did not observe any New Construction during this inspection.				х
47.	192.225	Test Results to Qualify Welding Procedures - Welding Procedure Records reviewed.	Х			
48.	192.227	Welder Qualification Checked 3 random welder qualifications.	Х			
49.	480-93-080(1)(a)(iv)	Appendix C Welders re-qualified 2/Yr (7.5Months) Appendix C qualification twice per year	X		·	
50.	480-93-080(2)	Plastic pipe joiners re-qualified 1/Yr (15 Months)	Х			
51.	480-93-080(2)(b)	Plastic pipe joiners re-qualified if no production joints made during any 12 month period	Х			
52.	480-93-080(2)(c)	Tracking Production Joints or Re-qualify joiners 1/Yr (12Months) Re-qualify every six months.	Х			
53.	480-93-115(2)	Test leads on casings (without vents) installed after 9/05/1992 None	Х			
54.	480-93-115(3)	Sealing ends of casings or conduits on transmission lines and mains	Х			
55.	480-93-115(4)	Sealing ends (nearest building wall) of casings or conduits on services	х			
56.	192.241(a)	Visual Weld Inspector Training/Experience AWS training for James L Greger Cert number 04061561 expires 6/1/10	Х			

Records Review and Field Inspection

S-Satisfactory U-Unsatisfactory N/A-Not Applicable N/C-Not Checked

If an item is marked U, N/A, or N/C, an explanation must be included in this report.

***************************************		CONSTRUCTION RECORDS	- S	U	N/A	N/C
57.	192.243(b)(2)	Nondestructive Technician Qualification SPW 223 Section 3.6. Level 2 Qualified	Х			
58.	192.243(c)	NDT procedures No transmission or replacement.			X.	
59.	192.243(f)	Total Number of Girth Welds No transmission or replacement.			х	
60.	192.243(f)	Number of Welds Inspected by NDT No transmission or replacement.			. X	·
61.	192.243(f)	Number of Welds Rejected No transmission or replacement.			Х	
62.	192.243(f)	Disposition of each Weld Rejected No transmission or replacement.			X	
63.	192.303	Construction Specifications No transmission or replacement.			Х	
64.	192.325	Underground Clearance No transmission or replacement.			. X	
65.	192.327	Amount, location, cover of each size of pipe installed No transmission or replacement.			Х	
66.	480-93-160(1)	Report filed 45 days prior to construction or replacement of transmission pipelines ≥ 100 feet in length No transmission or replacement.			Х	
67.	480-93-160(2)	Did report describe the proposed route and the specifications for the pipeline and must include, but is not limited to the following items: No transmission or replacement.			х	
68.	480-93-160(2)(a)	Description and purpose of the proposed pipeline; No transmission or replacement.			Х	
69.	480-93-160(2)(b)	Route map showing the type of construction to be used throughout the length of the line, and delineation of class location as defined in 49 CFR Part 192.5, and incorporated boundaries along the route. No transmission or replacement.			x	
70.	480-93-160(2)(c)	Location and specification of principal valves, regulators, and other auxiliary equipment to be installed as a part of the pipeline system to be constructed. No transmission or replacement.			х	
71.	480-93-160(2)(d)	MAOP for the gas pipeline being constructed; No transmission or replacement.			Х	
72.	480-93-160(2)(e)	Location and construction details of all river crossings or other unusual construction requirements encountered en route. No transmission or replacement.			X.	
73.	480-93-160(2)(f)	Proposed corrosion control program to be followed inc specs for coating and wrapping, and method to ensure the integrity of the coating using holiday detection equipment; No transmission or replacement.	·		х	
74.	480-93-160(2)(g)	Welding specifications; and No transmission or replacement.			Х	
75.	480-93-160(2)(h)	Bending procedures to be followed if needed. No transmission or replacement.			Х	;
76.	480-93-170(1)	Commission notified 2 day's prior to pressure testing pipelines with an MAOP producing a hoop stress ≥ 20% SMYS? None for this district			Х	
77.	480-93-170(7)	Pressure tests records at a minimum include required information listed under 480-93-170(a-h)	х			
78.	480-93-170(9)	Individual pressure test records maintained for single installations where multiple pressure tests were performed?	Х			
79.	480-93-170(10)	Pressure Testing Equipment checked for accuracy/intervals (Manufacturers Rec or Operators schedule)	Х			
80.	480-93-175(2)	Study prepared and approved prior to moving and lowering of metallic pipelines > 60 psig None lowered				X
81.	480-93-175(4)	Leak survey within 30 days of moving or lowering pipelines ≤ 60 psig None lowered			Х	

Document Title	Document Number	Revision Date	Date Range Reviewed
		,	
		7	

S-Satisfactory U-Unsatisfactory N/A-Not Applicable N/C-Not Checked If an item is marked U, N/A, or N/C, an explanation must be included in this report.

Comments:		
•		•

		OPERATIONS and MAINTENANCE	RECORDS	S	U	N/A	N/C
82.	192.517(a)	Pressure Testing (operates at or above 100)	psig) – useful life of pipeline	Х			
83.	192.605(a)	Procedural Manual Review – Operations ar see document section below for manuals		х			
84.	192.605(b)(3)	Availability of construction records, maps,	operating history to operating personnel	Х			
85.	480-93-018(3)	Records, including maps and drawings updeconstruction activity?	Records, including maps and drawings updated within 6 months of completion of construction activity?				
86.	192.605(b)(8)	Periodic review of personnel work – effectiveness of normal O&M procedures					
87.	192.609	Class Location Study (If pipeline operatin	g at >40% of SMYS) None			Х	
88.	192.614	Damage Prevention (Miscellaneous)		Х			
89.	192.615(b)(1) AOC-034-01	office.	ation specific emergency plan at The Dalles	Х			
90.	192.615(b)(2)	Emergency Procedure training, verify effect show the emergency training was perform	tiveness of training. Training records that med for IC 100.	Х			
91.	192.615(b)(3)	Employee Emergency activity review, determine if procedures were followed. SPW 615 Sec.3.7 Incident Command Team Evaluation and Training. NWN has not had any major incident that would trigger a post incident evaluation.					
92.	192.615(c)	Liaison Program with Public Officials		X			
93.	192.616	Public Awareness Program Reviewed Pul	blic Awareness Program – OK	Х			
94.	192.616(e&f)	and content, delivery method and frequency evaluations, etc. (i.e. contact or mailing ros	older Audience identification, message type y, supplemental enhancements, program ters, postage receipts, return receipts, nergency responder, public officials, school	x			
95.			ust have completed their written programs no	х			
96.		API RP 1162 Baseline* Recommended M	Message Deliveries These dates were found a Awareness Program. (No table)	х			
97.		Stakeholder Audience (LDC's)	Baseline Message Frequency (starting from effective date of Plan)				
		Residence Along Local Distribution System	Annual				
		LDC Customers	Twice annually	x			
		Emergency Officials	Annual				-
		Public Officials	3 years				
		Excavator and Contractors	Annual .				
98.		* Refer to API RP 1162 for additional requ	irements, including general program nts, recordkeeping, program evaluation, etc.	х			

Records Review and Field Inspection

S-Satisfactory U-Unsatisfactory N/A-Not Applicable N/C-Not Checked

If an item is marked U, N/A, or N/C, an explanation must be included in this report.

		OPERATIONS and MAINTENANO	CE RECORDS	S	U	N/A	N/C
99.	192.616(g)	The program conducted in English and a significant number of the population in the	ny other languages commonly understood by a ne operator's area.	х			
100.	192.617		ng laboratory analysis where appropriate to	х			
101.	192.619	Maximum Allowable Operating Pressure	(MAOP)	Х			·
102.	480-93-015(1)	Odorization of Gas - Concentrations ad	equate	- X			
103.	480-93-015(2)	Monthly Odorant Sniff Testing OK		Х			
104.	480-93-015(3)	minimum requirements No readings out		х			
105.	480-93-015(4)	Odorant Testing Equipment Calibration/I Recommendation) <b>OK</b>	ntervals (Annually or Manufacturers	х			
106.	480-93-124(4) PV-034-01	Pipeline markers attached to bridges or of Checking for pipeline markers at bridgmarkers on a separate map?)	ther spans inspected? 1/yr(15 months) ge over green leaf creek. (Maps, are pipeline		х		·
107.	480-93-124(5)	Markers reported missing or damaged rep		Х			
108.	480-93-140(2)	records are good.	levices tested during initial turn-on Sample of	х			
109.	480-93-155(1)	days prior? None	Procedures and specifications submitted 45	х			
110.	480-93-185(1)	Records retained? OK	? Graded in accordance with 480-93-186?	х			
111.	480-93-185(3)(a)	Leaks originating from a foreign source. property regarding the pipeline company	Take appropriate action to protect life and sown facilities, and; OK	х			
112.	480-93-185(3)(b)	Leaks originating from a foreign source r retained? OK	eported promptly/notification by mail. Records	х			
113.	480-93-186(3)	Leak evaluations: Are follow-up inspecti	ons performed within 30 days of a leak repair?	х			
114.	480-93-186(4)	physical repair?	any), downgraded once to a grade 3 without	Х			
115.	480-93-187	Gas leak records: at a minimum include r 13)	equired information listed under 480-93-187(1-	х			
116.	480-93-188(1)	Gas leak surveys		X			•
117.	480-93-188(2)	not to exceed 45 days) Calibration requi	racy/intervals (Mfct recommended or monthly ired every month or per manufactures libration check every week. See Comment	X			·
118.	480-93-188(3)	Leak survey frequency (Refer to Table Five year survey maps #1-001-142 & #1 High Occupancy – Special Building Su	1-001-143	х			
	Busin	ess Districts (implement by 6/02/07)	1/yr (15 months)	•			,
		High Occupancy Structures	1/yr (15 months)				
• .		Pipelines Operating ≥ 250 psig	1/yr (15 months)	,			
	Other M	fains: CI, WI, copper, unprotected steel	2/yr (7.5 months)				
119.	480-93-188(4)(a)	Special leak surveys - Prior to paving or r repairs None since last inspection.				Х	
120.	480-93-188(4)(b)	Special leak surveys - areas where substruunderground gas facilities, and damage co	ucture construction occurs adjacent to ould have occurred None since last inspection.			X	
121.	480-93-188(4)(c)		where active gas lines could be affected None			Х	
122.	480-93-188(4)(d)		of unusual activity, such as earthquake, floods,			Х	

### Washington Utilities and Transportation Commission Standard Inspection Report for Intrastate Gas Distribution Systems Records Review and Field Inspection U-Unsatisfactory N/A-Not Applicable N/6

S-Satisfactory U-Unsatisfactory N/A-Not Applicable N/C-Not Checked If an item is marked U, N/A, or N/C, an explanation must be included in this report.

		OPERATIONS and	MAINTENANCE RECORDS		S	U	N/A	N/C
123.	480-93-188(4)	(e) Special leak surveys - A	After third-party excavation damage to services, ey from the point of damage to the service tie-in-	operators must	Х			
124.	480-93-188(5 PV-034-02	`	lickatat survey did NOT record an instrument n			X		
125.	480-93-188(6	Leak program - Self A	ıdits		Х	****		
126.	192.709		on Lines) (Refer to Table Below) .705 No tra	nsmission in this			X.	
		Class Location	At Highway and Railroad Crossings	At All Other I	Places			
		1 and 2	2/yr (7½ months)	1/yr (15 mon	ths)			·
		3	4/yr (4½ months)	2/yr (7½ moi	iths)			
		4	4/yr (4½ months)	4/yr (4½ moi	iths)			
127.	192.709	Leak Surveys (Transm	nission Lines) ( <b>Refer to Table Below</b> ) .706 N this unit.	o transmission in			х	
	. [		Required	Not Excee		¬ · ·		
		Class Location	1/yr	15 month		-		
		1 and 2 3	2/yr	7½ month		-		
	.	4	4/yr	4½ month		-		
128.	192.603(b)	Salmon and Bingen. we questioned. It doe Business district is 10	strict (4 per yr/4½ months) Checked maps s NW Natural provided evauation report for E s NOT meet NW Natural's definition of a Bu 00 continuous feet on either side of road.	allsport section siness District.	х			
129.	192.603(b)	Patrolling Outside Bus	iness District (2 per yr/7½ months) 192.721(b	)(2) No patrols			Х	
130.	192.603(b)	Leakage Survey - Outs	side Business District ( <b>5 years</b> ) 192 .723(b)(1) atts with mains and services inspected. OK (The reved)	Maps and method by highlight maps	Х			
131.	192.603(b)	Tests for Reinstating S	ervice Lines 192.725 Reviewed leak tickets		Х			
132.	192.603(b)/.727	7(g) Abandoned Pipelines;	Underwater Facility Reports 192.727 None				Х	
133.	192.709	Pressure Limiting and	Regulating Stations (1 per yr/15 months) .739	OK .	Х			
134.	192.709		Regulator Stations - Capacity (1 per yr/15 mor		Х			
135.	192.709	Valve Maintenance – ' in unit.	Transmission (1 per yr/15 months) .745 No t	ransmission line			х	
136.	192.709		Distribution (1 per yr/15 months) .747		Х			
137.	480-93-100(3)	Service valve mainten	ance (1 per yr/15 months) And Key valves		Х			
138.	192.709	Vault maintenance (≥2	200 cubic feet)(1 per yr/15 months) .749 Nor	ne in district.			Х	
139.	192. 603(b)	Welding - Procedure	192.225(b) Qualification looked OK		· X			
140.	192. 603(b)	Welding – Welder Qu	alification 192.227/.229 Welder qualification	s OK	Х			
141.	192. 603(b)	requiring NDT.	Qualification .243(b)(2) Not applicable, no				х	
142.	192.709	NDT Records (pipelin	e life) .243(f) Not applicable, no large jobs	requiring NDT.			х	<u> </u>
143.	192.709	Repair: pipe (pipeline	life); Other than pipe (5 years) No transmissi	on in district.			Х	

Documentation Reviewed:			
Document Title	Document Number	Revision Date	Date Range Reviewed
Meter Record	F-8735	7/01	/sample from 2007

### Washington Utilities and Transportation Commission Standard Inspection Report for Intrastate Gas Distribution Systems

Records Review and Field Inspection

S - Satisfactory U - Unsatisfactory N/A – Not Applicable N/C - Not Checked If an item is marked U, N/A, or N/C, an explanation must be included in this report.

Natural Gas Odor Investigation	F-8222-NS (7/03) NW Natural	7/03	2005-2008
#95 - Public Safety Awareness Plan Summary	None	2007	2007
#95 - TOPOFF 4 Exercise	Executive summary and Exercise Overview.	None	October 16, 2007
#95 - PFIT II Training	Memo Oct 1, 2008		
#83 – NWN Washington's Standard Practices Manual			2005-2008
#83 - Construction Field Manual			2006-2008
#83 – Welding Procedures Manual		09/17/08	
#130 -Leakage Survey Maps	Platt 1-001-141 & 1-002-142		Example

#### Comments:

Note: Some of the records might have been on the CD disk with the other documents. In some cases the lists were quite handy, especially when looking at the historical record of a valve, regulator, rectifier, and others. But, if you were trying to find out how many low reads were found during CP inspection, then you would have to go through 161 or so pages of records.

Reviewed IC 100 rosters of NWN employees, training performed by third party.

#95 – Training for emergency responders, reviewed agenda and class list OK.

#117 - The calibration check (Bump Test) provides a value that should then be recorded in the Instrument Log. The bump test introduces a gas mixture of known LEL and then a reading is taken and should be recorded. If a value is read on the instrument then that reading (or value) should be recorded. WAC 480-93-018(4) requires any reading must be recorded for each test.

(4) Each gas pipeline company must record and maintain records of the actual value of any required reads, tests, surveys or inspections performed. The records must include the name of the person who performed the work and the date the work was performed. The records must also contain information sufficient to determine the location and facilities involved. Examples of the values to be recorded include, but are not limited to, pipe to soil potential reads, rectifier reads, pressure test levels, and combustible gas indicator reads. A gas pipeline company may not record a range of values unless the measuring device being used provides only a range of values.

NW Naturals argument is that calibration is not specifically called out as something you write the values down for.

UTC argument that the reading is taken every week and should be recorded instead of a checkmark on the form that signifies that the calibration check was OK.

#135 - American Axial Flow - Size 4 MAOP 250 Maximum MAOP 400 - Relief Calculations

4.		CORROSION CONTROL RECORDS	S	U	N/A	N/C
144.	192.453	CP procedures (design, installation, operation, and maintenance) carried out by qualified personnel NACE Qualified CP1	х			
145.	192.455(a)(1)	Pipeline coatings meet requirements of 192.461 (for buried pipelines installed after 7/31/71)	Х			
146.	192.455(a)(2)	CP system installed on and operating within 1 yr of completion of pipeline construction (after 7/31/71)	X			
147.	192.465(a)	Annual Pipe-to-soil Monitoring (1 per yr/15 months) for short sections (10% per year; all in 10 years) Plats are checked by the last digit in the plat map and the year. 2008 would have all plats ending in 8 checked that year.	х		ē	
148.	192.491	Maps or Records .491(a)	Х			
149.	192.491	Examination of Buried Pipe when exposed .459 CP performed by NWN crews only.	х		-	

### Washington Utilities and Transportation Commission Standard Inspection Report for Intrastate Gas Distribution Systems Records Review and Field Inspection U – Unsatisfactory N/A – Not Applicable N/6

N/C - Not Checked S – Satisfactory U – Unsatisfactory If an item is marked U, N/A, or N/C, an explanation must be included in this report.

		CORROSION CONTROL RECORDS	S	U	N/A	N/C
150.	480-93-110(8)	CP test reading on all exposed facilities where coating has been removed OK	Х			
151.	192.491	Annual Pipe-to-soil monitoring (1 per yr/15 months) .465(a)	Х			
152.	192.491 [DR K2]	Rectifier Monitoring (6 per yr/2½ months) .465(b) 9/16/08 Received list of rectifiers with location for Columbia Gorge unit. 10/01/08 – Reviewed the rectifier maintenance records for 6/04 to present. Checked 6X per year not to exceed 2.5 months. OK	X			
153.	192.491	Interference Bond Monitoring – Critical (6 per yr/2½ months) .465(c) No bonds in district.			х	
154.	192.491	Interference Bond Monitoring – Non-critical (1 per yr/15 months) .465(c) No bonds in district.			х	
155.	480-93-110(2)	Remedial action taken within 90 days (Up to 30 additional days if other circumstances. Must document) .465(d) "Reviewed 2 cases of low DP in this district and the WO's to mitigate with in 90 days, OK.	х			
156.	480-93-110(3)	CP equipment/ instrumentation maintained, tested for accuracy, calibrated, and operated in accordance with manufactures recommendations, or at appropriate schedule determined by gas company if no recommendation. Checked during field /crew inspections	х			
157.	192.491	Unprotected Pipeline Surveys, CP active corrosion areas (1 per 3 cal yr/39 months) .465(e)			Х	
158.	192.491	Electrical Isolation (Including Casings) .467 OK per SPW 467 Sec. 3.2.1	Х			
159.	480-93-110(5)	Casings inspected/tested annually not to exceed fifteen months 9/16/08 – (a) Unit casing list received and given to mapping. 10/01/08 - (b) The casing inspection records back to 06/08. OK	x			
160.	480-93-110(5)(a) [DR-K5]	Casings w/no test leads installed prior to 9/05/1992. Demonstrate other acceptable test methods (a) - 9/16/08 – Test method received. (b) - No casings without test leads in Columbia Gorge unit. OK.			х	
161.	480-93-110(5)(b)	Possible shorted conditions – Perform confirmatory follow-up inspection within 90 days Hwy 14 E Hood River Bridge -1.11 Casing to soil on 01-31-08 OK	Х			
162.	480-93-110(5)(c)	Casing shorts cleared when practical No casing shorts in this district.	Х			
163.	480-93-110(5)(d)	Shorted conditions leak surveyed within 90 days of discovery. Twice annually/7.5 months None in this district.	Х			
164.	192.491	Interference Currents .473 None			X	
165.	192.491	Internal Corrosion; Corrosive Gas Investigation .475(a) None			Х	
166.	192.491	Internal Corrosion; Internal Surface Inspection; Pipe Replacement .475(b) No large jobs in this district.			х	
167.	192.491	Internal Corrosion Control Coupon Monitoring (2 per yr/7½ months) .477 None	<u></u>		X	
168.	192.491	Atmospheric Corrosion Control Monitoring (1 per 3 cal yr/39 months onshore; 1 per yr/15 months offshore) .481 (Plat Maps 1-001-142 & 01-001-143) OK	x			
169.	192.491	Remedial: Replaced or Repaired Pipe; coated and protected; corrosion evaluation and actions .483/.485 Reviewed 2 cases of low CP in this district and the WO's to mitigate within 90 days, OK.	х			
170.	480-93-110(3)	CP Test Equipment and Instruments checked for accuracy/intervals (Mfct Rec or Opr Sched) OK	х			

Document Title	Document Number	Revision Date	Date Range Reviewed				
Equipment Calibration History	Contractors		2007 -2008				
Calibration Certificate	Multimeter #81150004	April 08, 2009					
Calibration Certificate	Multimeter #81150003	June 17, 2008					
Pressure Test Gauge Calibration Report	Service center – Columbia Gorge	09/25/08	7/1/2004 to 8/31/08				

S – Satisfactory U – Unsatisfactory N/A – Not Applicable N/C – Not Checked If an item is marked U, N/A, or N/C, an explanation must be included in this report.

Using a remote Methane Leakage Detector (RMLD)	OP-501-01 Addendum	Revision 1.2 - 02.07.08	
Corrosion Problem Report(CPR)	#100095	WO# 03090044	
Corrosion Problem Report(CPR)	#101190	WO# 03128652	08/08/06

#### Comments:

#163 Casings #121702, Isolation test performed 10/9/08. Pipe to Soil =-1.14 Volt, Casing to Soil = -0.78 Volt. Pipe is Isolated from Casing.

#170 Need maps and records to evaluate atmospheric corrosion survey

#170 Was this Idle riser at #70 NE Estes Ave. was this surveyed? Need to look at site maps to insure this idle riser would by surveyed, OK. Has not been surveyed on this 5 year survey yet.

		PIPELINE INSPECTION (Field)	S	U	N/A	N/C
171.	192.161	Supports and anchors	Х			
172.	480-93-080(1)(d)	Welding procedures located on site where welding is performed? No welding performed by district personnel. All welding performed by Clark County crews.			Х	
173.	480-93-080(1)(b)	Use of testing equipment to record and document essential variables No welding performed by district personnel. All welding performed by Clark County crews.			х	
174.	480-93-080(2)(a)	Plastic procedures located on site where fusing is performed?	X			
175.	480-93-080(3)	Identification and qualification cards/certificates w/name of welder/joiner, their qualifications, date of qualification and operator whose qualification procedures were followed.	х			
176.	480-93-013	Personnel performing "New Construction" covered tasks OQ qualified? No new construction observed.			х	
177.	480-93-015(1)	Odorization	Х			
178.	480-93-018(3)	Updated records, inc maps and drawings made available to appropriate operations personnel?	х		٠,	
179.	192.179	Valve Protection from Tampering or Damage	Х			
180.	192.455	Pipeline coatings meet requirements of 192.461 (for buried pipelines installed after 7/31/71)	х			
181.	192.463	Levels of cathodic protection	X			
182.	192.465	Rectifiers	Х			
183.	192.467	CP - Electrical Isolation	х			
184.	192.479	Pipeline Components exposed to the atmosphere	х			
185.	192.481	Atmospheric Corrosion: monitoring	Х			
186.	192.491	Test Stations – Sufficient Number .469	X			
187.	480-93-115(2)	Casings – Test Leads (casings w/o vents installed after 9/05/1992)	X			
188.	480-93-115(2)	Mains or transmission lines installed in casings/conduit. Are casing ends sealed?	х	·		
189.	480-93-115(4)	Service lines installed in casings/conduit. Are casing ends nearest to building walls sealed?	х			
190.	192.605(a)	Appropriate parts of manuals kept at locations where O&M activities are conducted	х			

S-Satisfactory U-Unsatisfactory N/A-Not Applicable N/C-Not Checked If an item is marked U, N/A, or N/C, an explanation must be included in this report.

		PIPELINE INSPECTION (Field)	S	U	N/A	N/C
191.	192.605	Knowledge of Operating Personnel	х			
192.	480-93-124	Pipeline markers installed	Х			
193.	480-93-124(4)	Markers reported missing or damaged replaced within 45 days?	Х			
194.	192.707	Warning Signs	Х	,		·
195.	192.719	Pre-pressure Tested Pipe (Markings and Inventory)	X			
196.	192.195	Overpressure protection designed and installed where required?	Х			
197.	192.739	Pressure Limiting and Regulating Devices (Mechanical)	Х			
198.	192.743	Pressure Limiting and Regulating Devices (Capacities)	Х			
199.	192.355	Customer meters and regulators. Protection from damage	Х			
200.	192.355(c)	Pits and vaults: Able to support vehicular traffic where anticipated.	Х			
201.	480-93-140	Service regulators installed, operated and maintained per state/fed regs and manufacturers recommended practices?	х			
202.	480-93-178(2)	Plastic Pipe Storage facilities – Maximum Exposure to Ultraviolet Light (2yrs)	х			
203.	480-93-178(4)	Minimum Clearances from other utilities. For parallel lines a minimum of twelve inches. Where a minimum twelve inches of separation is not possible, must take adequate precautions, such as inserting the plastic pipeline in conduit, to minimize any potential hazards.	x			
204.	480-93-178(5)	Minimum Clearances from other utilities. For perpendicular lines a minimum of six inches of separation from the other utilities. Where a minimum six inches of separation is not possible, must take adequate precautions, such as inserting the plastic pipeline in conduit, to minimize any potential hazards	х			
205.	480-93-178(6)	Are there Temporary above ground PE pipe installations currently? None			Х	
206.	480-93-178(6)(a)	If yes, is facility monitored and protected from potential damage? No such facilities.			Х	
207.	480-93-178(6)(b)	If installation exceeded 30 days, was commission staff notified prior to exceeding the deadline? No such facilities.			X	
208.	192.745	Valve Maintenance (Transmission) No Transmission in district.			Х	
209.	192.747	Valve Maintenance (Distribution)	Х			

S – Satisfactory U – Unsatisfactory N/A – Not Applicable N/C – Not Checked If an item is marked U, N/A, or N/C, an explanation must be included in this report.

Facility Sites Visited:									
Facility Type	Facility ID Number	Location							
,	· ·								

#### Comments:

#163 - Comments - #121702 Isolation Test 10/9/08, OK

Casing – Hwy 14 E Hood River Bridge - 3095' E of bride & 2415' E of bridge On 1-31-08 had CP of -1.11 V. Recheck for isolation during field audit. Isolation test performed during field inspection.

A rectifier instant off for CP done in Klickatat, WA. Checked various sites in Klickatat, OK

Testing Exercising regulators and relief stack performed by pressure control. OK

S-Satisfactory U-Unsatisfactory N/A-Not Applicable N/C-Not Checked If an item is marked U, N/A, or N/C, an explanation must be included in this report.

#### **Pipeline Safety Advisory Bulletins:**

OPS, PHMSA ADB-08-02 dated 3/04/2008 Notice to Owners and Operators of Gas Pipelines to Consider the Potential Failure Modes for Mechanical Couplings Used for Joining and Pressure Sealing Pipe Joints Due to variables related to age of couplings, specific procedures and installation practices, and conditions specific to certain regions of the country, it is difficult to cite common criteria affecting all failures that operators should address. To ensure compliance with 49 CFR Part 192, PHMSA advises operators of gas distribution pipelines using mechanical couplings to take the 7 measures outlined in this notice.

OPS, PHMSA DB-06-03 dated 11/17/2006 Notice to Operators of Natural Gas and Hazardous Liquid Pipelines to Accurately Locate and Mark Underground Pipelines Before Excavation Activities Commence Near the Pipelines

Excavation damage continues to be one of the three leading causes of pipeline damage. PHMSA continues to find pipeline operators damaging regulated pipelines, production and gathering pipelines, and other utilities adjacent to where construction and maintenance is being performed. This damage jeopardizes the safety of excavators, pipeline employees, construction personnel, and others in the vicinity of the excavation. To guard the integrity of buried pipelines and prevent injury, death, and property and environmental damage, PHMSA advises pipeline operators to take the 15 damage prevention measures outlined in this notice.

### OPS, PHMSA ADB-06-01 dated 1/17/06 Integrate Operator Qualification Regulations into Excavation Activities

Although excavation is not explicitly addressed in 49 CFR parts 192 and 195, excavation is considered a covered task under the pipeline operator qualifications regulations. These regulations require that pipeline operators and contractors be qualified to perform pipeline excavation activities. This advisory reminds operators to ensure all procedures and processes to perform excavation and backfilling are followed. Only qualified personnel must oversee all marking, trenching, and backfilling operations.

#### **Attachment 1**

Distribution Operator Compressor Station Inspection
Unless otherwise noted, all code references are to 49CFR Part 192. S – Satisfactory U – Unsatisfactory N/A – Not Applicable
If an item is marked U, N/A, or N/C, an explanation must be included in this report.

N/C - Not Checked

210.	.605(b)	COMPRESSOR STATION PROCEDURES  NW Natural has no compressors in this district.	S	.U	N/A	N/C
211.		.605(b)(6) Maintenance procedures, including provisions for isolating units or sections of pipe and for purging  before returning to service	- ·		Х	
212.		.605(b)(7) Starting, operating, and shutdown procedures for gas compressor units			Х	
213.		.731 Inspection and testing procedures for remote control shutdowns and pressure relieving devices  (1 per yr/15 months), prompt repair or replacement			х	
214.	i	.735 (a) Storage of excess flammable or combustible materials at a safe distance from the compressor buildings			х	
215.		(b) Tank must be protected according to NFPA #30			х	<u> </u>
216.		.736 Compressor buildings in a compressor station must have fixed gas detection and alarm systems  (must be performance tested), unless:			х	
217.		• 50% of the upright side areas are permanently open, or	٠-		Х	
218.		It is an unattended field compressor station of 1000 hp or less			X	

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	0. Compressor Station Emergency Shutdown (1 per yr/15 months)	S	U N/A	N/C		
219.	.709	.731(a)	Compressor Station Relief Devices (1 per yr/15 months)		Х	
220.		.731(c)	Compressor Station Emergency Shutdown (1 per yr/15 months)		X	
221.		.736(c)	Compressor Stations - Detection and Alarms (Performance Test)		Х	

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Document Title	Document Number	Revision Date	Date Range Reviewed							

#### Attachment 1

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N/C - Not Checked

Comments:	<u> </u>				

			COMPRESSOR STATIONS INSPECTION (Field)				
			NW Natural has no compressors in this district.	S	U	N/A	N/C
			(Note: Facilities may be "Grandfathered")				
222.	.163	(c)	Main operating floor must have (at least) two (2) separate and unobstructed exits			Х	
223.			Door latch must open from inside without a key			Х	
224.			Doors must swing outward			Х	
225.		(d)	Each fence around a compressor station must have (at least) 2 gates or other facilities for emergency exit			х	
226.			Each gate located within 200 ft of any compressor plant building must open outward			X	
227.			When occupied, the door must be opened from the inside without a key	·		Х	
228.		(e)	Does the equipment and wiring within compressor stations conform to the National Electric Code, ANSI/NFPA 70?			х	
229.	.165	(a)	If applicable, are there liquid separator(s) on the intake to the compressors?			X	
230.	*	(b)	Do the liquid separators have a manual means of removing liquids?			. X	
231.			If slugs of liquid could be carried into the compressors, are there automatic dumps on the separators, Automatic compressor shutdown devices, or high liquid level alarms?			X	
232.	.167	(a)	ESD system must:				
233.			- Discharge blowdown gas to a safe location			Х	
234.			- Block and blow down the gas in the station			Х	
235.			- Shut down gas compressing equipment, gas fires, electrical facilities in compressor building and near gas headers			X	
236.			Maintain necessary electrical circuits for emergency lighting and circuits needed to protect equipment from damage			х	
237.			ESD system must be operable from at least two locations, each of which is:				
238.			- Outside the gas area of the station	1		Х	
239.			- Not more than 500 feet from the limits of the station			Х	
240.			- ESD switches near emergency exits?			Х	
241.		(b)	For stations supplying gas directly to distribution systems, is the ESD system configured so that the LDC will not be shut down if the ESD is activated?			x	
242.		(c)	Are ESDs on platforms designed to actuate automatically by				
243.			- For unattended compressor stations, when:				
244.			The gas pressure equals MAOP plus 15%?			Х	
245.			An uncontrolled fire occurs on the platform?			Х	
246.			- For compressor station in a building, when				
247.			An uncontrolled fire occurs in the building?			Х	
248.			Gas in air reaches 50% or more of LEL in a building with a source of ignition (facility conforming to <b>NEC Class 1, Group D</b> is not a source of ignition)?			X	

#### Attachment 1

Distribution Operator Compressor Station Inspection
Unless otherwise noted, all code references are to 49CFR Part 192. S – Satisfactory U – Unsatisfactory N/A – Not Applicable
If an item is marked U, N/A, or N/C, an explanation must be included in this report.

N/C - Not Checked

		COMPRESSOR STATIONS INSPECTION (Field)				
		NW Natural has no compressors in this district.	S	U	N/A	N/C
		(Note: Facilities may be "Grandfathered")				
249.	.171 (a)	Does the compressor station have adequate fire protection facilities? If fire pumps are used, they must not be affected by the ESD system.			х	
250.	(b)	Do the compressor station prime movers (other than electrical movers) have over-speed shutdown?			, X	
251.	(c)	Do the compressor units alarm or shutdown in the event of inadequate cooling or lubrication of the unit(s)?			х	
252.	(d)	Are the gas compressor units equipped to automatically stop fuel flow and vent the engine if the engine is stopped for any reason?		`	х	
253.	(e)	Are the mufflers equipped with vents to vent any trapped gas?			Х	
254.	.173	Is each compressor station building adequately ventilated?			Х	
255.	.457 .	Is all buried piping cathodically protected?			Х	
256.	.481	Atmospheric corrosion of aboveground facilities			Х	-
257.	.603	Does the operator have procedures for the start-up and shut-down of the station and/or compressor units?			х	
258.		Are facility maps current/up-to-date?			· X	
259.	.615	Emergency Plan for the station on site?			Х	
260.	.619	Review pressure recording charts and/or SCADA			X	
261.	.707	Markers	h		Х	
262.	. <del>7</del> 31	Overpressure protection – relief's or shutdowns			Х	
263.	.735	Are combustible materials in quantities exceeding normal daily usage, stored a safe distance from the compressor building?			X	
264.		Is aboveground oil or gasoline storage tanks protected in accordance with NFPA standard No. 30?			х	
265.	.736	Gas detection – location			х	

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Comments:			