

**Field Data Collection**  
(2011 Standard Inspection)

**Company:** Williams Gas Pipeline - West

**Unit:** Battle Ground District

**Pipe-to-Soil Potential Readings (for 30" line), Rectifiers and Others**

<b>Date</b>	<b>Location</b>	<b>Pipe (Volts) Power On</b>	<b>Casing (Volts)</b>	<b>Comments</b>
5/4/2011	Hood River Meter Station (east of Willard Compressor Station)  2" Incoming line	-1.549		This meter station is to supply gas to Northwest Natural (NWN). The pressure relief valve was tested and it opened at 161 psig with a set point at 163 psig.
5/4/2011	Willard Compressor Station (MP 1175.14)  4" fuel gas line  8" low pressure vent line  Site 3 4" fuel gas line  Incoming 24" line from Goldendale  Road crossing with casing outside of the compressor station	-0.926  -1.136  -1.079  -1.714  -1.892	-0.091	The compressor station was inspected. A-Plant east fire eye was tested and was fine. A-Plant east gas detector was tested and was fine (alarm at 20% LEL, and ESD at 40% LEL).  Rectifier #1563 DC outputs: 26.90 V; 3.3 A.  Rectifier #864 DC outputs: 38.55V; 1.6A.  Casing was not shorted.
5/4/2011	Carson Meter Station (MP 1184.95)			This meter station delivers gas to Northwest Natural (NWN) and

	2" inlet line to the meter station	-1.538		was inspected. The mainline block valve (MLV) 14-A was partially operated and was fine.
5/4/2011	Stevenson #2 Meter Station (MP 1189.51)			This meter station supplies gas to Avista and was inspected. Rectifier # 443 DC outputs: 25.01 V; 5.3 A.
	2" insulating flange to Avista	-2.110 (Williams) -1.375 (Avista)		The insulating flange with Avista was not shorted.
	CP Test station at Kanaka Creek Road	-2.071	-0.305	The casing was not shorted.
5/4/2011	North Bonneville Meter Station at MP 1194.53			This meter station supplies gas to Northwest Natural (NWN) and was inspected.
	2" insulating flange to Northwest Natural	-1.984 (Williams) -1.620 (Northwest Natural)		The insulating flange was not shorted.
	Mainline valve 14-8B	-1.701		Mainline valve 14-8B was partially operated and was fine.
5/4/2011	Washougal Compressor Station			The compressor station was inspected. The fire eye at the NE corner of A-Plant was tested and was fine. The gas detector at the north of A-Plant was tested and was fine.
	CP test site #31, 20" Camas to Eugene line	-1.047		Rectifier #1130-4 DC outputs: 6.5 V; 0.2 A.
	CP test site #32, 24" station discharge line	-0.762		It was compared with the CP annual survey conducted on 2/16/2011 and it met the 100 mv shift criterion.
	CP test site #35, 20"	-0.779		It was compared with the CP

	Camas to Eugene line			annual survey conducted on 2/16/2011 and it met the 100 mv shift criterion.
	CP test site #36, 24" station discharge line	-0.795		It was compared with the CP annual survey conducted on 2/16/2011 It met the 100 mv shift criterion.
	CP test site #91, B-Plant 8" NE vent line	-0.705		It was compared with the CP annual survey conducted on 2/16/2011 It met the 100 mv shift criterion.
	CP test site #58, 2" fuel gas line to boilers	-0.512		It was compared with the CP annual survey conducted on 2/16/2011 It met the 100 mv shift criterion.
5/5/2011	Deer Island Meter Station (to NWN)/Kalama #2 Meter Station (to Cascade Natural Gas)			The pressure relief valve was tested. The set pressure was 312 psig. It opened at 310 psig.
	4" Incoming line to the station	-1.855		
	Insulating flange with Cascade Natural Gas (CNG)	-1.865 (Williams) -1.600 (CNG)		The insulating flange was not shorted.
	Insulating flange with NWN	-1.865 (Williams) -1.945 (NWN)		The insulating flange was not shorted.
5/5/2011	Kalama River span at MP 1251.	-2.077		The painting for the exposed pipe over the river appeared to be good.  Rectifier #1121 DC outputs: 8.23 V; 0.7 A
5/5/2011	Kelso Meter Station at MP 1262.95			This meter station was remodeled in June 2010 and appeared to be in good condition.

	30" line at the station  Insulating flange with Cascade Natural Gas (CNG)	-1.300  -1.313 (Williams) -1.051 (CNG)		The insulating flange was not shorted.
5/5/2011	Weyerhaeuser/Ostrander Meter Station at MP 1265.54			This meter station was inspected and it appeared to be in good condition.
5/5/2011	Toledo Meter Station at MP 1283.98			This meter station was inspected and it appeared to be in good condition.
5/5/2011	Chehalis Compressor Station at MP 1289.38			The compressor station was inspected.  A-Plant gas detector HG-0004 was tested and was acceptable (alarm at 20% LEL, and ESD at 40% LEL). A-Plant fire eye FD-0007 was tested and was acceptable.
	CP test site #020 (8" unit relief riser)	-0.817		It was compared with the CP annual survey conducted on 2/24/2011. It met the 100mv shift requirement.
	CP test site #091 (2" seal gas riser)	-0.665		It was compared with the CP annual survey conducted on 2/24/2011. It met the 100 mv shift criterion.
	CP test site #92 (2" instrument air line)	-0.826		It was compared with the CP annual survey conducted on 2/24/2011. It met the 100 mv shift criterion.
	CP test site #093 (2" fuel gas riser)	-0.823		It was compared with the CP annual survey conducted on 2/24/2011. It met the 100 mv shift criterion.