



Pipeline Specification Summary

WWP - Windfall North Leg GGS

General Description:

The Windfall North Leg Pipeline is a 6" & 8" Pipeline which transports Low Pressure Wet Sour Gas 5 Kilometers from 04-32-60-15W5 to the West Whitecourt Gas Plant at 2-17-60-15W5. Valve Stations and Tie-in points are installed along the length at several locations.

Pipeline Static Data:			
Medium:	Low Pressure Wet Sour Gas		
License Approval :	30266	License H2S :	17.5 %
Diameter :	6"/8"	Length :	5.0 Kms.
M.O.P :	11170Kpa.	Normal Operating Pres.	3500 – 4500 Kpa.
ANSI Rating :	900 RJ		

Tie-In / ESD Locations:		
STN 01	04-32-60-15	Block Valve, ESDV, Producer T/I
STN 02	03-32-60-15	Block Valve
STN 03	04-29-60-15	Block Valve
STN 04	08-19-60-15	Block Valve
STN 05	01-19-60-15	Block Valve, Producer T/I
STN 06	02-17-60-15	Block Valve – Inlet Control Valve

Tie In Specifications

Section A: WELLSITE Requirements

Gas Quality – Piping Configuration, Equipment & Reporting	
Dehydration	Production Must be routed to downstream dehydration.
H2S Composition (Max.)	17.5%
Separation Equipment	2 Phase – 3 Phase
Condensate	Combined with Gas Stream or Tanked - Trucked
Water	Combined with Gas Stream or Tanked - Trucked
Metering	EFM (Electronic Flow Measurement)
Fuel Gas – (Site Supplied)	Metered
Fuel Gas – (External Source)	Metered
SCADA	Required for all direct T/I's
Gas & Liquids Sampling	Required as per Manual requirements
Daily Reporting Method	SemCAMS SCADA, Customer SCADA, Fax, e-mail

Section B: DOWNSTREAM FACILITY Requirements**Gas Quality**

H2S Composition (Max.)	17.5%		
Temperature (Max)	50 ^o Celcius		
Water Dewpoint (combined stream)	Not Required		
Condensate	Re-injection		
BS&W	Not Required		
Water	Yes, volumes must be approved by SemCAMS		
Methanol	YES - Inhibited MeOH		
Corrosion Inhibitor Injection	YES	Type:	Champion RU 196
Sulphur Dispersants - Solvents	NONE		
Operational Liquids	NONE (Cleaning Solvents/Hydro/PL Initial Batch...)		
Operational Gasses	NONE (Purge Gasses N2 / CO2 / Air / ...)		

Piping - Configuration & Equipment

Dehydration Type	Not Required		
Dewpoint Auto Shut-in / Recycle	NONE	Set Point:	-10 ^o Celcius
Dewpoint Analyzer	NONE		
BS&W Analyzer	NONE		
BS&W Auto Shut-in / Diversion	NONE		
Metering – Gas Production	EFM		
Metering – Condensate Production	EFM		
Metering - Water	EFM, if water is recombined		
Metering – Fuel Gas (site supplied)	EFM Metered or Estimate		
Metering – Fuel Gas (external)	Not Required		
Compressor Recycle	Required – Pressure Control		
Flare & Recycle Connections	Upstream of Sales Meter		

SemCAMS SCADA:

Flow Measurement (Sales)	Required		
Remote ESD	Required (Supplied at tie-in location)		
Compressor Run Status	Required		
Dewpoint Analyzer Status	NONE		

Section C: SemCAMS Pipeline T/I Point Requirements**Piping Configuration and Equipment**

Pipe Specification (above ground)	SemCAMS SP-60		
Pigging Facilities	Required		
ESD Valve	Required		
Check Valve	Required		
Drains & Vents	Required		
Cathodic Protection – Insulating Kit	Required	Type:	Pikotek
Future Connection	Required		
Corrosion Monitoring Coupon	Required		

SemCAMS SCADA:

Pressure	Required		
ESD Valve Position	Required (Open – Moving – Closed)		
Remote ESD	Required (SemCAMS Control)		
ESD – Local PSHH	Required	Set Pressure:	
ESD – Local PSLL	Required	Set Pressure:	
TEG Status	Required		