



Pipeline Specification Summary

WWP - Windfall South GGS

General Description:

The Windfall South Pipeline is a 6" & 8" Pipeline which transports Low Pressure Wet Sour Gas 10 Kilometers from 15-21-59-15W5 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 :	3220	License H2S :	17.5 %
Diameter :	6"/8"	Length :	15.0 Kms.
M.O.P :	11170Kpa.	Normal Operating Pres.	3500 – 4500 Kpa.
ANSI Rating :	900 RJ		

Tie-In / ESD Locations:		
STN 01	15-21-59-15	Block Valve, Producer T/I
STN 02	01-28-59-15	Block Valve, Producer T/I
STN 03	11-27-59-15	Block Valve, Lineheater, Producer T/I
STN 04	10-34-59-15	Block Valve, Producer T/I
STN 05	07-03-60-15	Block Valve, Producer T/I, Lineheater
STN 05A-01	12-36-59-15	Block Valve, Producer T/I
STN 05A-02	02-02-60-15	Producer T/I
STN 05A-03	05-02-60-15	Producer T/I
STN 05A-03-01	06-02-60-15	Block Valve, Producer T/I
STN 05B-01	08-05-60-14	Block Valve, Producer T/I
STN 05B-02	06-01-60-15	Block Valve, Lineheater, 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		