

SWEETENING SKID
UNIT: SS05
PERFORMANCE (subject to process review)

Inlet H ₂ S Concentration	200 – 10,000 ppm
Outlet H ₂ S Concentration	< 0.5 ppm
Nominal Pipeline Pressure	30 – 1,300 psi (207 – 8,960 kPa)
Gas Flow Rate	0.48 – 9.1 mmscfd (13.6 – 258 e ³ m ³ /d)
Gas Temperature	59°F - 86°F (15°C – 30°C)
Pressure Relief Valves Max Flow Rate	9.1 mmscfd (258 e ³ m ³ /d)

Pressure psig	Pressure (kPag)	Max Flow mmscfd	Max Flow (e ³ m ³ /d)	Max H ₂ S ppm	Note
30	(207)	0.48	(13.6)	31,800	
50	(345)	0.69	(19.5)	21,900	
100	(689)	1.23	(34.8)	12,400	
200	(1380)	2.30	(65.1)	6,610	
300	(2070)	3.37	(95.4)	4,510	
400	(2760)	4.44	(126)	3,420	
500	(3450)	5.51	(156)	2,760	
600	(4140)	6.58	(186)	2,310	
700	(4820)	7.65	(216)	1,990	
800	(5510)	8.72	(247)	1,740	
900	(6200)	9.10	(258)	1,670	Limited by PSV
1000	(6890)	9.10	(258)	1,670	Limited by PSV
1100	(7580)	9.10	(258)	1,670	Limited by PSV
1200	(8270)	9.10	(258)	1,670	Limited by PSV
1300	(8960)	9.10	(258)	1,670	Limited by PSV

DESIGN CRITERIA

Maximum Operating Pressure	1440 psi (9,928kPa)
Minimum/Maximum Rated Operating Temperature	-20°F/130°F (-29°C/54.4°C)

CONTACTOR VESSEL

Radiography	Full RT-1
PWHT	Yes
Corrosion Allowance	1/8" (3.2 mm)
Sour Service	Yes
Vessel Diameter	24" (610 mm)
Vessel Length S/S	12' (3,658 mm)
Nozzle Rating	CL 600 RF
Inlet / Outlet Nozzle Size	3" (88.9 mm)



SEPARATOR VESSEL

Radiography	Spot RT-2
PWHT	No
Corrosion Allowance	1/16" (1.6 mm)
Sour Service	No
# Phases	2
Vessel Diameter	16" (406 mm)
Vessel Length S/S	5' (1,524 mm)
Nozzle Rating	CL 600 RF
Inlet Nozzle Size	3" (88.9 mm)
Gas Outlet Nozzle Size	3" (88.9 mm)
Drain Nozzle Size	2" (60.3 mm)


SECONDARY SEPERATOR VESSELS (2)

Radiography	Spot RT-2
PWHT	No
Corrosion Allowance	1/16" (1.6 mm)
Sour Service	No
# Phases	2
Vessel Diameter	20" (406 mm)
Vessel Length S/S	5' (1,524 mm)
Nozzle Rating	CL 150 RF
Inlet Nozzle Size	2" (60.3 mm)
Gas Outlet Nozzle Size	2" (60.3 mm)
Drain Nozzle Size	1" (33.4 mm)

CHEMICAL TANKS

Fresh Chemical Capacity	50 BBL (7.96 m ³)
Spent Chemical Capacity	50 BBL (7.96 m ³)
Double Walled	Yes
Flange Rating	CL 150 RF
Truck Inlet / Outlet Size	3" (88.9 mm)

INCLUDED EQUIPMENT

Fuel Gas Scrubber	6" Diameter 30" S/S 150 psi
Chemical Pumps	CVS 5100 3/8" plunger size
H ₂ S Analyzer	Envent 330, single stream
Meter Run & Orifice Meter	2" Daniels Senior
Pressure Control Valve	Kimray 2" CL 600, FC
Vent Gas Scrubber	24" Dia x 48" S/S
Catalytic Heaters	(1) 24,000 BTU/hr, 12v, Nat Gas
	(1) 12,000 BTU/hr, 12v, Nat Gas

SHIPPING DIMENSIONS

Width	10'-2" (3.10 m)
Length	26'-3" (8.00 m)
Height	12'-2" (3.71 m)
Weight Estimate	TBD

CERTIFICATION

Vessels	ASME Sec. VIII Div. 1
Piping	ASME B31.3
Province(s) of Registration	AB, BC, SK

