



- GENERAL NOTES**
- ALL DIMENSIONS ARE IN MILLIMETERS
 - CUSTOMER TIE-IN POINTS DESIGNATED AS SUCH (TP#)
 - PIPING DESIGN TEMPERATURES: -29°C INSIDE BUILDING
-45°C OUTSIDE BUILDING
 - BUILDING STRUCTURE TO BE ERECTED IN SHOP
 - ELEVATIONS SHOWN ARE FROM TOP OF CHECKER PLATE. (U.N.O.)
 - TUBING:
 - PROCESS LINES: 1/2" OD 0.049" WALL SEAMLESS
ASTM A269 TP316 SS w/
A183 - 316SS, SHORT COMPRESSION TYPE FITTINGS
 - INSTRUMENT LINES: 3/8" OD 0.035" WALL SEAMLESS
ASTM A269 TP316 SS w/
A183 - 316SS, SHORT COMPRESSION TYPE FITTINGS
 - IMPACT TIGHTENING OF BOLTS SHALL NOT BE USED.
PROPER BOLT TIGHTENING PROCEDURES MUST BE FOLLOWED.
 - TOTAL ESTIMATED PACKAGE WEIGHT AT TIME OF SHIPPING: 27,789.00 Kgs
 - STILL COLUMN AND STACK REMOVED FOR SHIPPING
 - TOWER C-322, OUTLET SPOOL/E-323 & ASSOCIATED GLYCOL PIPING REMOVED FOR SHIPPING
 - RUFFNECK GLYCOL EXCHANGER E-332 AND ASSOCIATED PIPING/ SUPPORTS REMOVED FOR SHIPPING
 - GAS EXCHANGER E-325 AND ASSOCIATED PIPING/ SUPPORTS REMOVED FOR SHIPPING
 - OVERALL SHIPPING DIMENSIONS:
 - HEIGHT = 4594mm (15'-1") (FROM BOTTOM OF SKID)
 - WIDTH = 4633mm (15'-2")
 - LENGTH = 10255mm (33'-8")
 - FOR BUILDING DETAILS SEE WARWICK SUPPLIED DRAWINGS.
 - FOR SKID / LIFTING LUG DETAILS SEE DWG. S-14-05110-41-001
 - FOR PIPE SUPPORT DETAILS SEE DWG. S-14-05110-41-002
 - FOR ACCESS PLATFORM DETAILS SEE DWG. S-14-05110-42-001

TIE-IN POINTS								
TP#	SIZE	CLASS	FACE	LINE NUMBER	EL. (mm)	SERVICE	SKID PROJ.	ANCHOR
1	6"	600#	RF	PG-CH-168-1005	1771	GAS INLET	203	YES
2	6"	600#	RF	PG-CH-168-1025	234	GAS OUTLET	203	YES
3	2"	150#	RF	HCD-AH-60-3000	310	DRAIN HEADER	203	YES
4	1"	3000#	NPT	IA-AH-33-6000	2387	INSTRUMENT AIR	152	YES
5	4"	150#	RF	FH-AH-114-5000	2427	FLARE HEADER	203	YES
6	2"	150#	RF	PG-AH-60-1060	2400	FUEL GAS OUTLET	203	YES
7	1"	3000#	NPT	FG-AH-33-4005	2387	FUEL GAS INLET	152	YES
8	3"	150#	RF		5152	VENT	N/A	-
9	2"	3000#	NPT		187	FLOOR DRAIN (DOWN)	186	-
10	1"	3000#	NPT	G-AGH-33-2095	2387	GLYCOL INLET	152	YES
11	1"	3000#	NPT	G-AGH-33-2085	2387	SKIM OUTLET	152	YES
12	1"	3000#	NPT	HCD-ALH-33-3025	135	LOW TEMP SEPARATOR DRAIN	152	YES
13	1/2"	3000#	NPT	PG-AH-33-1075	2387	PROCESS VENT HEADER	152	YES
14	1/2"	3000#	NPT	FG-AH-33-4030	2387	FUEL GAS VENT HEADER	152	YES

- PIPING CLASS SPECIFICATION (AH) (SWEET SERVICE) NON CORROSIVE SERVICE; STANDARD TEMP. PIPING**
- MATERIAL & RATING:** CARBON STEEL, 150# ANSI
TEMPERATURE RANGE: -29°C TO 149°C
MAXIMUM PRESSURE: 1960 kPag @ 38°C
CORROSION ALLOWANCE: 1.6mm
RADIOGRAPHY: PER PS-MW-01 & PS-PF-04
MAG. PARTICLE INSPECTION: 10% OF ALL SW
STRESS RELIEVE: PER PS-MW-01 & PS-PF-04
VISUAL INSPECTION (VT): 100%
- PIPE:** ASTM A106 GRADE B SMLS
 1/2" TO 2" SCH. 80 PE/SCRD
 2" TO 24" SCH. STD BE
- NIPPLES/SWAGES:** NIPPLES SCH 160 ASTM A106 GRADE B SMLS, 100mm LONG
 SWAGES, ASTM A234 GRADE WPB SCH. TO MATCH PIPE BORE
- FLANGES:** 150# RF ASTM A105N
 1/2" TO 1 1/2" SW/THR'D
 2" AND LARGER WELDNECK, BORED TO SUIT PIPE
- GASKETS:** 1/2" & LARGER: 150# SPWD 304SS FLEXIBLE GRAPHITE FILLER
- BOLTING:** STUDS ASTM A193-B7 w/A194-2H NUTS
- FITTINGS:** 1/2" TO 1 1/2" 3000#, FORGED STEEL, ASTM A105N, SW/SCRD
 2" AND LARGER FORGED STEEL, ASTM A234 GRADE WPB, BW SCH. TO MATCH PIPE BORE
- SPECTACLE BLINDS:** 1/2" TO 12" 150# FF, ASTM A516 GRADE 70N B16.48
- SPACERS / SPACERS:** 14" TO 24" 150# FF, ASTM A516 GRADE 70N B16.48

- PIPING CLASS SPECIFICATION (AGH) (SWEET SERVICE) GLYCOL SERVICE; STANDARD TEMP. PIPING**
- MATERIAL & RATING:** CARBON STEEL, 150# ANSI
TEMPERATURE RANGE: -29°C TO 149°C
MAXIMUM PRESSURE: 1960 kPag @ 38°C
CORROSION ALLOWANCE: 1.6mm
RADIOGRAPHY: PER PS-MW-01 & PS-PF-04
MAG. PARTICLE INSPECTION: 10% OF ALL SW
STRESS RELIEVE: PER PS-MW-01 & PS-PF-04
VISUAL INSPECTION (VT): 100%
- PIPE:** ASTM A106 GRADE B SEAMLESS
 1/2" TO 2" SCH. 80 PE/TE
 2" TO 6" SCH. STD BE
- NIPPLES/SWAGES:** NIPPLES SCH 160 ASTM A106 GRADE B SMLS, 100mm LONG
 SWAGES, ASTM A234 GRADE WPB SCH. TO MATCH PIPE BORE
- FLANGES:** 150# RF ASTM A105N
 1/2" TO 1 1/2" SW/THR'D
 2"-6" WELDNECK, BORED TO SUIT PIPE
- GASKETS:** 1/2"-6": 150# SPWD 304SS FLEXIBLE GRAPHITE FILLER
- BOLTING:** STUDS ASTM A193-B7 w/A194-2H NUTS
- FITTINGS:** 1/2" TO 1 1/2" 3000#, FORGED STEEL, ASTM A105N, SW/SCRD
 2"-6" FORGED STEEL, ASTM SA-234-WPB, BW SCH. TO MATCH PIPE BORE
- SPECTACLE BLINDS:** 1/2" TO 6" ANSI 150# FF, ASTM A516 GRADE 70N B16.48

- PIPING CLASS SPECIFICATION (CH) (SWEET SERVICE) NON CORROSIVE SERVICE; STANDARD TEMP. PIPING**
- MATERIAL & RATING:** CARBON STEEL, 600# ANSI
TEMPERATURE RANGE: -29°C TO 149°C
MAXIMUM PRESSURE: 10210 kPag @ 38°C
CORROSION ALLOWANCE: 1.6mm
RADIOGRAPHY: PER PS-MW-01 & PS-PF-04
MAG. PARTICLE INSPECTION: 10% OF ALL SW
STRESS RELIEVE: PER PS-MW-01 & PS-PF-04
VISUAL INSPECTION (VT): 100%
- PIPE:** 1/2" TO 1 1/2" SCH. 80 PE/TE ASTM A106 GRADE B SMLS
 2" SCH. 80 BE ASTM A106 GRADE B SMLS
 3" SCH. 40 BE ASTM A106 GRADE B SMLS
 4"-8" SCH. 80 BE ASTM A106 GRADE B SMLS
 10"-16" SCH. 80 BE ASTM A333 GRADE 6 SMLS
- NIPPLES/SWAGES:** NIPPLES SCH 160 SCRD/PE ASTM A106 GRADE B SMLS, 100mm LONG
 SWAGES, ASTM A234 GRADE WPB SCH. TO MATCH PIPE BORE
- FLANGES:** 1/2" TO 1 1/2" SW/SCRD 600# RF ASTM A105
 2"-8" WELDNECK, 600# RF ASTM A105
 10"-16" WELDNECK, 600# RF ASTM A350 GRADE LF2 CL.1
- GASKETS:** 1/2" & LARGER: GASKET 600# SPWD 304SS FLEXIBLE GRAPHITE FILLER
- BOLTING:** STUD BOLT ASTM A193-B7 w/A194-2H NUTS
- FITTINGS:** 1/2" TO 1 1/2" 3000#, FORGED STEEL, ASTM A105N, SW/SCRD
 2"-6" FORGED STEEL, ASTM SA-234-WPB, BW SCH. TO MATCH PIPE BORE
- SPECTACLE BLINDS:** 1/2" TO 12" BLIND SPEC 600# FF, ASTM A516 GRADE 70N B16.48
- SPACERS:** 14" TO 16" ANSI 600# FF, ASTM A516 GRADE 70N B16.48

- PIPING CLASS SPECIFICATION (CGH) (SWEET SERVICE) GLYCOL SERVICE; STANDARD TEMP. PIPING**
- MATERIAL & RATING:** CARBON STEEL, 600# ANSI
TEMPERATURE RANGE: -29°C TO 149°C
MAXIMUM PRESSURE: 10210 kPag @ 38°C
CORROSION ALLOWANCE: 1.6mm
RADIOGRAPHY: PER PS-MW-01 & PS-PF-04
MAG. PARTICLE INSPECTION: 10% OF ALL SW
STRESS RELIEVE: PER PS-MW-01 & PS-PF-04
VISUAL INSPECTION (VT): 100%
- PIPE:** 1/2" TO 1 1/2" SCH. 80 PE
 ASTM A106 GRADE B SMLS
 2" SCH. 80 BE ASTM A106 GRADE B SMLS
 3" SCH. 40 BE ASTM A106 GRADE B SMLS
 4" TO 6" SCH. 80 BE ASTM A106 GRADE B SMLS
- NIPPLES/SWAGES:** 1/2" TO 1 1/2" NIPPLE SCH 160 SCRD
 ASTM A106 GRADE B SMLS, 100mm LONG
 1/2" TO 1 1/2" NIPPLE SCH 160 PE
 ASTM A106 GRADE B SMLS, 100mm LONG
- FLANGES:** 600# RF ASTM SA-105N
 1/2" TO 1 1/2" SW
 2" TO 6" WELDNECK, BORED TO SUIT PIPE
- GASKETS:** 1/2"-6": 600# SPWD 304SS FLEXIBLE GRAPHITE FILLER
- BOLTING:** STUDS ASTM A193-B7 w/A194-2H NUTS
- FITTINGS:** 1/2" TO 1 1/2" 3000#, FORGED STEEL, ASTM SA-105N, SW/SCRD
 2"-6" FORGED STEEL, ASTM SA-234-WPB, BW SCH. TO MATCH PIPE BORE
- SPECTACLE BLINDS:** 1/2" TO 6" ANSI 600# FF, ASTM A516 GRADE 70N B16.48

- PIPING CLASS SPECIFICATION (DGH) (SWEET SERVICE) GLYCOL SERVICE; STANDARD TEMP. PIPING**
- MATERIAL & RATING:** CARBON STEEL, 900# ANSI
TEMPERATURE RANGE: -29°C TO 149°C
MAXIMUM PRESSURE: 15320 kPag @ 38°C
CORROSION ALLOWANCE: 1.6mm
RADIOGRAPHY: PER PS-MW-01 & PS-PF-04
MAG. PARTICLE INSPECTION: 10% OF ALL SW
STRESS RELIEVE: PER PS-MW-01 & PS-PF-04
VISUAL INSPECTION (VT): 100%
- PIPE:** 3/4" TO 1 1/2" SCH. 160 PE
 ASTM A106 GRADE B SMLS
 2" TO 3" SCH. 80 BE ASTM A106 GRADE B SMLS
 4" SCH. 120 BE ASTM A106 GRADE B SMLS
 6" SCH. 120 BE ASTM A333 GRADE 6 SMLS
- NIPPLES/SWAGES:** 3/4" TO 1 1/2" NIPPLE SCH 160 SCRD
 ASTM A106 GRADE B SMLS, 100mm LONG
 3/4" TO 1 1/2" NIPPLE SCH 160 PE
 ASTM A106 GRADE B SMLS, 100mm LONG
- FLANGES:** 900# RF ASTM SA-105N
 3/4" TO 1 1/2" SW
 2" TO 6" WELDNECK, BORED TO SUIT PIPE
- GASKETS:** 3/4"-6": 900# SPWD 304SS FLEXIBLE GRAPHITE FILLER
- BOLTING:** STUDS ASTM A193-B7 w/A194-2H NUTS
- FITTINGS:** 3/4" TO 1 1/2" 6000#, FORGED STEEL, ASTM SA-105N, SW/SCRD
 2"-6" FORGED STEEL, ASTM SA-234-WPB, BW SCH. TO MATCH PIPE BORE
- SPECTACLE BLINDS:** 1/2" TO 6" ANSI 900# FF, ASTM A516 GRADE 70N B16.48

No.	DATE	REVISIONS	BY	CHK	REW	APP
A	SEPT. 24 2014	ISSUED FOR APPROVAL	PT			
0	OCT. 01 2014	ISSUED FOR CONSTRUCTION	PT	TD	DC	LA
1	NOV. 15 2014	REMOVED "HOLD" ON JT AREA / ADDED TP#8,9	PT	TD	SS	LA
2	JAN. 16, 2015	REVISED SHIPPING WEIGHT & DIMS AS-BUILT	JC			

No.	DATE	REVISIONS	BY	CHK	REW	APP
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ENGINEERS RECORD	DATE
DRAWN BY PHUONG TRAN	23/09/2014
CHECKED BY TANYA DIXON	02/10/2014
REVIEWED BY DAVE CLARK	02/10/2014
PM APPD. BY LANE ARIAS	02/10/2014



CLIENT	HUSKY ENERGY
c/o EXCELSIOR ENGINEERING	
PROJECT	DEHYDRATION AND JT PACKAGE
	LSD: 02-20-050-18 WSM COMPRESSOR STATION
	RAVEN CREEK
TITLE	PIPING AND EQUIPMENT GENERAL ARRANGEMENT-PLAN VIEW
Scale	1:20
JOB No.	SPS-14-05110
DWG. No.	L-14-05110-21-001
REV.	2

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