E-601
GAS/GAS EXCHANGER
VENDOR: SPECTRUM
MAKE/MODEL: CASCADE EQUIPMENT/BEM 267mm x 3448mm
D.P.: 4447kPag @ -29/176°C
D.P. TUBESIDE: 9790 kPag @ -29/65°C
D.P. SHELLSIDE: 1793 kPag @ -29/65°C
S/N: 14-094.3
CRN: W5329.2
Ⓐ 640187

V-602
LOW TEMP. SEPARATOR
VENDOR: SPECTRUM
SIZE: 406mm O.D. x 1626mm S/S
M.A.W.P.: 1793 kPag @ -29/66°C
D.P. TUBESIDE: 9790 kPag @ -29/65°C
C.A.: 1.6mm
S/N: 13-05066-31
CRN: R5557.2
Ⓐ 638562

QUH-603A/B
BUILDING HEATER
VENDOR: SPECTRUM
MAKE/MODEL: CATADYNE/24x36xWX
DUTY: 30,000 BTU/AR
START: 115V AC/1PH/60HZ
CLASS 1, DIV. 2

QK-604A/B
BUILDING EXHAUST FAN
VENDOR: SPECTRUM
MAKE/MODEL: JAMES ELECTRIC
C/W __HP/115V AC/1PH/60HZ
CLASS 1, ZONE 1
12 ACPH

PG-CH-60.3-120-25H-ET
GAS FROM PI-0006-01 DEHY. PKG. (X-300)
FG-AH-60.3-101-25H-ET
IA-AIAH-60.3-107
I/A FROM PI-0011-01 HEADER
HAND/AUTO
HS 604
MS 604A/B
XS 604
ESD
TC 604
QK-604A/B
(NOTE 5)
21-VN 6004-W10
PCV 601
PI 601
PCV 600A
PCV 600B
PCV 600C
PI 600A
PI 600B
PI 600C
I/A
SIZE: 33x60
SET @ 9790 kPag
ORIFICE: D
BASIS: FIRE
PSV 601
F-AH-60.3-160
SLOPE 1:100
PG-CH-33.4-144
TI 601B
TIT 601B
TE 602
TE 601
TW 601
5 VALVE MANIFOLD
VENT O/S
FQI 601
MVS 601
MVS 602
FQI 602
RTU
(NOTE 8)
FE 601
PCV
PI
60-150# SPEC BLIND
60-VB-101-W8
27-VB 2002-W8
(NOTE 9)
N5
N2
33 NPT
33-VB 2002-W8
60x33 RED HUB
89x60
EYV 601
4C
ZIO 601
ZIC 601
ZSO 601
ZSC 601
ESDV 601
FC
TI 601A
TIT 601A
E-601
25C
NOTE 10
TY
TV
PI 602
MALF HH H
PSV 602
168.3x 114.3
168.3-150# SPEC BLIND
FP
168-VB-111-W10 CSO-44
F-AH-168.3-161
F-AH-168.3-162-25H-ET
NONE 25H ET
SLOPE 1:100
HP FLARE TO PI-0009-01 HEADER
33-VB 2002-W10 NOTE 13
PG-CH-60.3-141
PG-CH-60.3-142
PG-CH-88.9-143
PI 603
TY 603
TV 603
NOTE 10
NOTE 11
PIC 601
PIT 601
PI 601A
PI 601B
PV 601
TI 601C
TIT 601C
TI 602
TIT 602
LSHH 602
LAHH 602
LL MALF
LC 602
LYV 602
(NOTE 6)
LG 602
LV 602
76C
V-602
1/2" TUBING
AE 600A
AIT 600A
AI 600A
AE 600B
AIT 600B
AI 600B
GAS
HH 40% LEL H 20% LEL MALF
ESD
HS 600A
HS 600B
F-AH-60.3-129-25H-ET
FG-AH-60.3-105-25H-ET
FUEL GAS TO PI-0017-01 HEADER
(NOTE 9)
N6
N4
60-150# SPEC BLIND
D-AH-60.3-106-25H-ET
DRAIN TO PI-0009-01 HEADER
D-AH-60.3-124-25H-ET
SIZE: 33x33
SET @ 1792 kPag
BASIS: CHECK VALVE LEAKAGE
PSV 604
PI 604
27-VN-6004-W10
60-VC 301-W8
"AH"
"BH"
FG JT LIQUID TO PI-0009-01 SEP. PKG. (X-100)
D-BH-60.3-125-25H-ET
PCV 603A/B
TCV 603A/B
TSV 603A/B
QUH-603A/B
FG JT PACKAGE (X-600) LIMITS

NOTES

1. ALL PROCESS & INSTRUMENT VENTS SHALL BE AT LEAST 500mm FROM ANY ELECTRICAL CONNECTION OR OUTLET.
2. INSULATE ALL A/G PIPE AND FLANGES WHERE SPECIFIED WITH FIBERGLASS INSULATION AND ALUMINIUM CLADDING.
3. ▲ DENOTES VENDOR SUPPLIED ITEMS WHERE O/S OF PACKAGED UNITS.
4. FIELD TO SUPPLY VENTS AND DRAINS AS REQUIRED.
5. FAN START AT 10% LEL.
6. FOR LSHH ON V-801.
7. VENDOR PACKAGE P&ID WILL BE STAMPED BY VENDOR. FOR PURPOSE OF THIS DRAWING, ENGINEERING STAMP VERIFIES THAT THE VENDOR PACKAGE DRAWING (AS SHOWN) IS IN COMPLIANCE WITH THE HUSKY ENERGY HAZOP MEETING REQUIREMENTS AND RECOMMENDATIONS.
8. MVS-302 TIE-IN TO FLOW COMPUTER (FOR MEASUREMENT).
9. REUSE EXISTING 27 LPD.
10. PROCESS RECOMMENDS CHANGING TRIM SIZE TO 1" OR 1.25".
11. CHANGE TRIM SIZE TO 1/2".
12. CHANGE TO 48x89, "H" ORIFICE PSV.
13. AN OPERATING PROCEDURE NEEDS TO BE IN PLACE TO ENSURE THAT NO ACCUMULATED LIQUID IS PRESENT IN DRIP LEG AND THE LINE IS TO BE DRAINED WHEN REQUIRED.

ENGINEERING COMPANY PERMIT STAMP

REGISTERED PROFESSIONAL ENGINEER STAMP

REF	DRAWING NUMBER	DRAWING TITLE
6		
5		
4		
3		
2		
1		

REFERENCE DRAWINGS

REV	DATE	DESCRIPTION	BY	CHK	ENG	APR
6	2015/08/27	AS-BUILT FOR EWR 19227 EXCELSIOR 4411HUS	HH	AM	AM	AM
5	2015/04/30	AS BUILT FOR EWR 19227 EXCELSIOR 4178HUS	KM	TMD	AM	SA
4	2014/12/01	IFC FOR EWR 19227 EXCELSIOR 4178HUS	KM	KAB	AM	SA
3	2014/08/26	AS-BUILT FOR EWR 18319 EXCELSIOR 3829HUS	TMD	JD	JC	AM
8	2018/01/18	AS BUILT FOR MOC EI 10875835 (CAR SEAL REVIEW)	KZ	CM	CM	CM
7	2017/03/10	IFC FOR EWR 22510 STANTEC 110902423	JJ			

REVISION HISTORY

~~Husky Oil Operations Limited~~

RAVEN CREEK 02-20-050-18W5 COMP STN

TITLE: J.T. PACKAGE (X-600)
PIPING & INSTRUMENTATION DIAGRAM

SURFACE LOCATION	02-20-050-18 W5M	
ALTERNATE DWG NUMBER	PI-10-A-0008-1	REV NO
HUSKY DWG NUMBER	02-20-050-18W5-PI-0008-01	8
VENDOR DWG NUMBER		SCALE
AMU/FLOC NUMBER	W5-01-001-00007	NTS
DCN NO	PROJECT NO MOC EI 10875835	