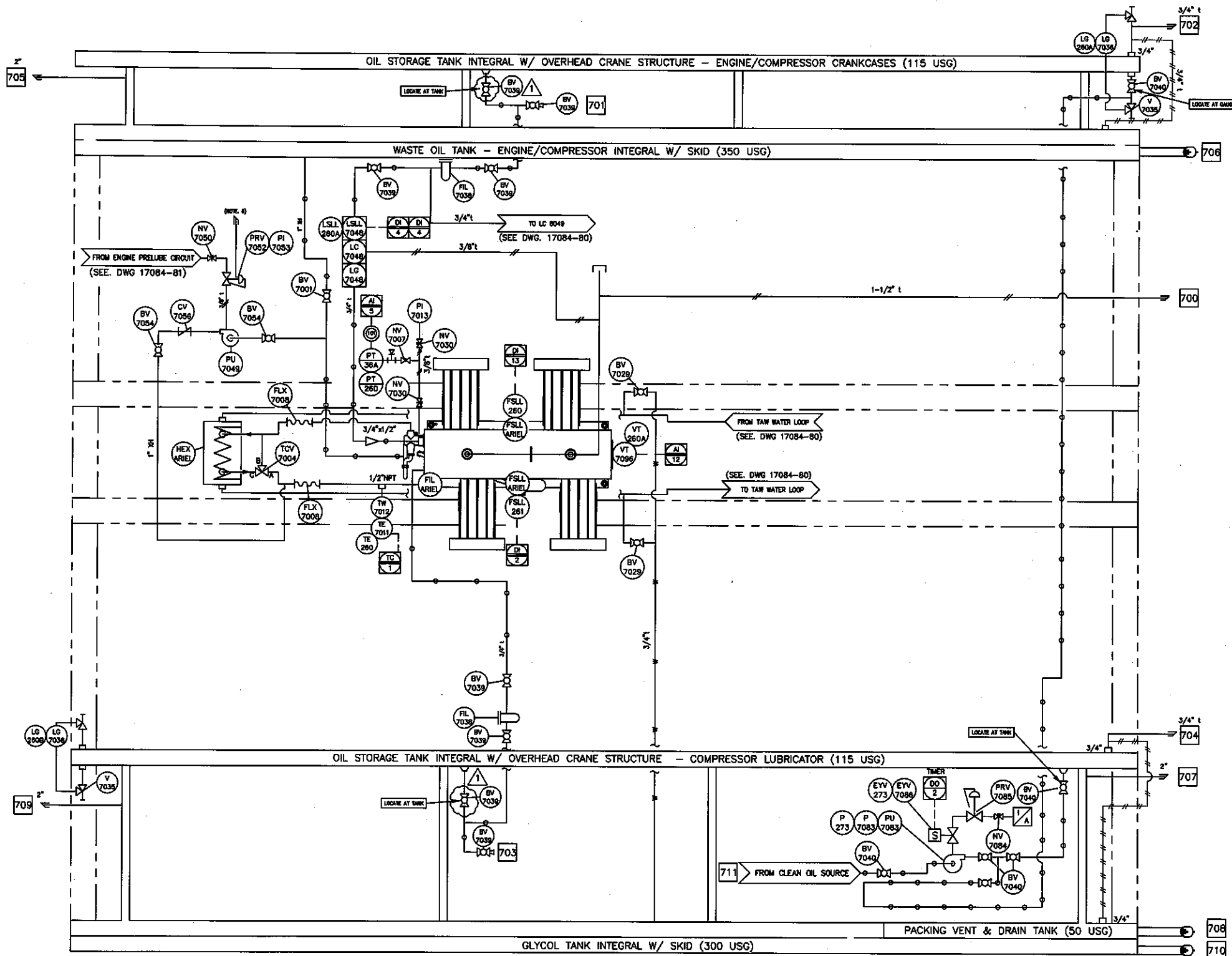




BILL OF MATERIAL

NOTE: ITEM No. = FIRST DIGIT (DWG REF.), LAST TWO DIGITS (item No.)

ITEM	PART NO.	QTY.	DESCRIPTION
7001	700198	1	VALVE, BALL, 1" NPT, RP, 2000# WOG, 316SS BODY, NACE LOCKING HANDLE, NAVCO (C1R10S20A)
7004	803332	1	THERMOSTATIC VALVE, 3-WAY, 1" NPT, CAST IRON, 170F, 150PSI, FPE (A1010-170)
7007	804795	1	VALVE, NEEDLE, 3/8" T X 3/8" T, SS, SWAGelok (SS-1VS6)
7008	700354	2	PIPE JOINT, 1-1/2" PIPE, FLEXMASTER (NH1600C150B0350)
7011	804272	1	THERMOCOUPLE, TYPE K, 6" PROBE, 30' SS ARMOUR LEAD, PIC (PN 2008-6-K-360) C/W CONNECTORS M & F (1015-K, 1065-K)
7012	805810	1	THERMOWELL, 0.5" X 0.5", U=1.25", 0.260" BORE, 304SS
7013	803090	1	GAUGE, PRESSURE, 0-100PSIG, 2-1/2" DIAL, 1/4" NPT BTM MOUNT, SS CASE / INTERNALS, LF, WIKA MODEL 233.53 (9200015)
7029	700195	2	VALVE, BALL, 3/4" NPT, RP, 2000# WOG, 316SS BODY, NACE LOCKING HANDLE, NAVCO (C1R07S20A)
7030	802997	2	VALVE, NEEDLE, 1/4" X 1/4" Mx F NPT, 6000PSIG, STD. BODY, STD. TRIM, CENTURY (CM2-3-M22T-B-V)
7035	803092	2	LEVEL GAUGE, VALVE SET, 3/4" NPTM, 5/8" TUBULAR GLASS, PENBERTHY N7A-IRON (64251-030)
7036	805508	2	TUBULAR SIGHT GLASS FOR LEVEL GAUGE, 3/4" DIA X 4' STOCK LENGTH, REDLINE
7038	803093	2	FILTER, OIL, ASSEMBLY, BALDWIN (BF-914)
7039	700195	6	VALVE, BALL, 3/4" NPT, RP, 2000# WOG, 316SS BODY, NACE LOCKING HANDLE, NAVCO (C1R07S20A)
7040	700195	4	VALVE, BALL, 3/4" NPT, RP, 2000# WOG, 316SS BODY, NACE LOCKING HANDLE, NAVCO (C1R07S20A)
7048	804790	1	LUBE LEVEL MAINTAINER / SWITCH, CSA / UL APPROVED, KENCO (KLCE-24)
7049	806415	1	PUMP, PNEUMATIC, DIAPHRAGM, 1" X 1" FNPT, WILDEN (XPX200/AAAA/XBS/TF/ABN/0391)
7050	802997	1	VALVE, NEEDLE, 1/4" X 1/4" Mx F NPT, 6000PSIG, STD. BODY, STD. TRIM, CENTURY (CM2-3-M22T-B-V)
7052	803008	1	REGULATOR, INST SUPPLY, 0-60PSI RANGE, VENTED BONNET, FISHER 67CFR-600-SC
7053	803096	1	GAUGE, PRESSURE, 0-100PSIG, 2-1/2" DIAL, 1/4" NPT BACK MNT, SS CASE / INTERNALS, LF, WIKA MODEL 233.53 (9206455)
7054	700198	2	VALVE, BALL, 1" NPT, RP, 2000# WOG, 316SS BODY, NACE LOCKING HANDLE, NAVCO (C1R10S20A)
7056	803099	1	VALVE, CHECK, PISTON, 1" NPT, 800CL, STD. BODY, STD NEWCO, MODEL: NEWCO 48T-FS2
7083	806415	1	PUMP, PNEUMATIC, DIAPHRAGM, 1" X 1" FNPT, WILDEN (XPX200/AAAA/XBS/TF/ABN/0391)
7084	802997	1	VALVE, NEEDLE, 1/4" X 1/4" Mx F NPT, 6000PSIG, STD. BODY, STD. TRIM, CENTURY (CM2-3-M22T-B-V)
7085	803008	1	REGULATOR, INST SUPPLY, 0-60PSI RANGE, VENTED BONNET, FISHER 67CFR-600-SC
7086	803149	1	SOLENOID VALVE, 3-WAY, NORMALLY CLOSED, 1/4" NPT, 24VDC, EXPLOSION PROOF, ASCO (EF8320G202-24)
7096	805581	1	VIBRATION TRANSMITTER, 1 IPS PK, 1/4" NPT, C1D2 GRP BCD, 4-20, 3-1000HZ FILTER, IMI (EX640B71)

CUSTOMER CONNECTIONS

TAG	DESCRIPTION	SIZE/(VOLTAGE)
700	COMPRESSOR CRANKCASE VENT	1-1/2" t
701	LUBE OIL STORAGE TANK FILL (ENG/COMP CRANKCASE)	3/4" NPT
702	LUBE OIL STORAGE TANK VENT (ENG/COMP CRANKCASE)	3/4" t
703	LUBE OIL STORAGE TANK FILL (COMP LUBRICATOR)	3/4" NPT
704	LUBE OIL STORAGE TANK VENT (COMP LUBRICATOR)	3/4" t
705	WASTE OIL TANK VENT	2" XH
706	WASTE OIL TANK DRAIN PUMP OUT	3" w/ PIPE CAP
707	COMP. PACKING VENT & DRAIN TANK VENT	2" XH
708	COMP. PACKING VENT & DRAIN TANK DRAIN PUMP OUT	3" w/ PIPE CAP
709	GLYCOL TANK VENT	2" XH
710	GLYCOL TANK DRAIN PUMP OUT	3" w/ PIPE CAP
711	PNEUMATIC OIL STORAGE TANK FILL (ENG/COMP.)	3/4" NPT

GENERAL NOTES

- ALL PRESSURE VESSELS ARE DESIGNED, FABRICATED AND TESTED IN ACCORDANCE WITH ASME SECTION VIII, DIV.1.
C.A. = 1/16"
RADIOGRAPHY = 100% ALL CATEGORY WELDS.
PWHT = INC.
- ALL PROCESS & THREADED PIPING DESIGNED, FABRICATED AND TESTED IN ACCORDANCE WITH ASME B31.3.
C.A. = 1/16"
RADIOGRAPHY = 100%
PWHT = N/A
SEE WELDED PROCESS PIPING DRAWINGS FOR MATERIAL SPECIFICATIONS.
ALL THREADED PROCESS PIPING TO UTILIZE SA106-B PIPE & SA105N FITTINGS
- PROCESS INSTRUMENT LINES: 316SS 1/2" x 0.049" WALL TUBING c/w SWAGelok 316SS FITTINGS w/ 316SS BACK FERRULE & 316SS FRONT FERRULE UNLESS OTHERWISE NOTED
UTILITY INSTRUMENT LINES: 316SS 3/8" (MIN) 0.035" WALL TUBING c/w SWAGelok 316SS FITTINGS w/ 316SS BACK FERRULE & 316SS FRONT FERRULE UNLESS OTHERWISE NOTED
- INSTRUMENT MEDIUM: CLEAN, DRY AIR
- PROCESS HARDWARE: STUDS: B7
NUTS: 2H
GASKETS: FLEXITALLIC (316SS GREY STRIPE)
- WENT TO HUNT AREA "PLANT AREA" SHALL BE AS SHOWN ON THE DRAWING. NO OTHER MATERIALS SHALL BE USED.
- SURFACE PREPARATION: SSPC-SP2
PAINT: (ONE) COAT F34 WARM GREY ENAMEL

STAMP AREA

AS BUILT

BY: *[Signature]*

DATE: 12/19/14

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2	KMB	KOM	AS BUILT	12/03/14
1	KMB	AH	ADDED VALVES AND SOLENOID	11/18/14
0	KMB	AH	ISSUED FOR FABRICATION	09/15/14
A	KMB	AH	ISSUED FOR APPROVAL	07/07/14
REV.	BY	CHK'D	REVISION DESCRIPTION	DATE



TITLE: MAIN COMPRESSOR UTILITIES SCHEMATIC

ARIEL JGK/4; WAUKESHA L5774LT; AXG 144EF-102-24

4 THROW, 3 STAGE, SWEET NATURAL GAS COMPRESSOR PKG.

END USER/CONSULTANT: HUSKY OIL OPERATIONS LTD.

LOCATION: ANSELL, ALBERTA

LSD: 02-20-050-18-WSM

DATE: 06/27/14

UNIT No. 17084-NC

UNIT No. 17084

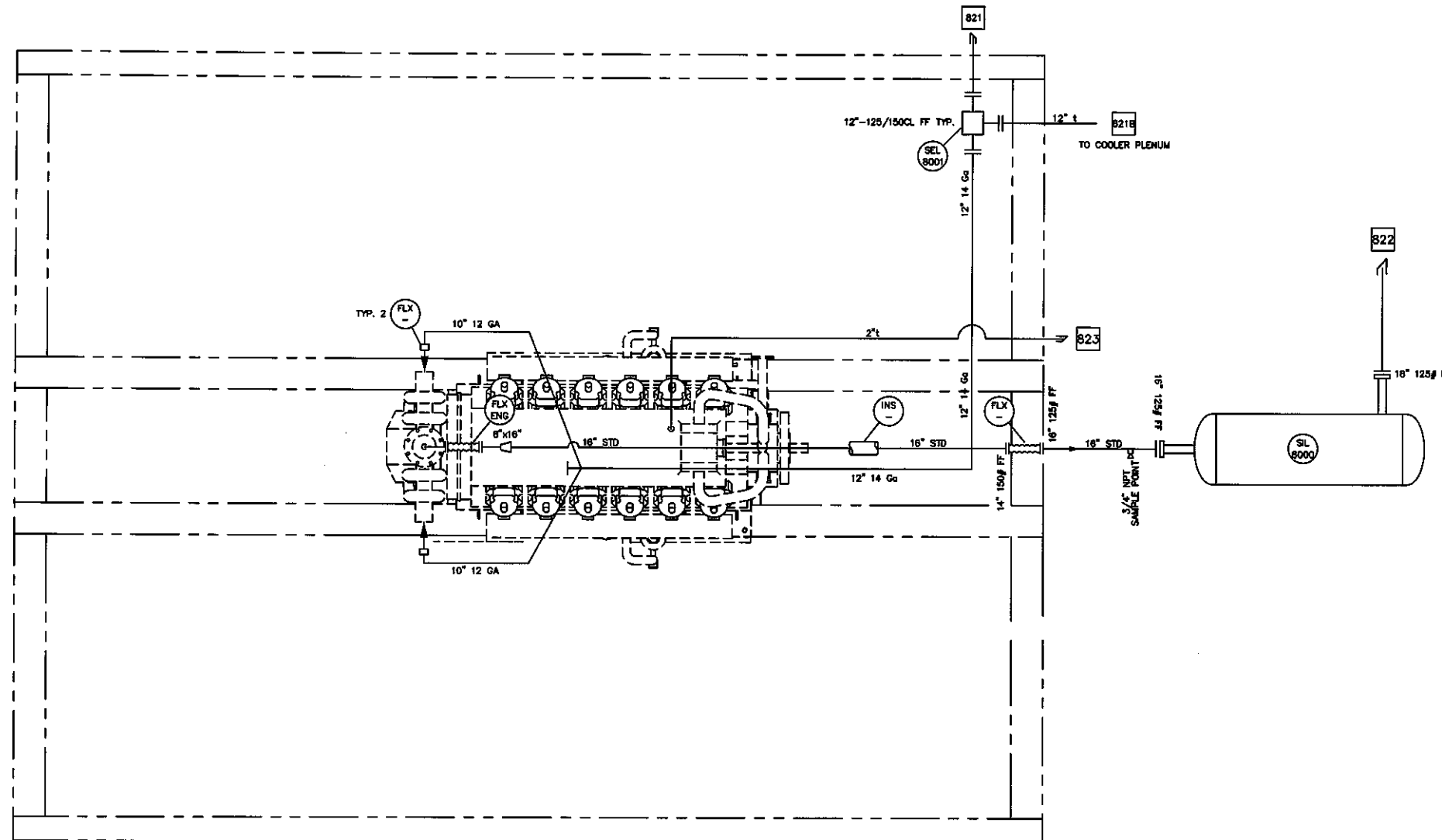
No. REQ'D 1

SCALE NTS

REVISION 2

DWG. No. 17084-70

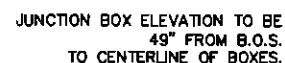
NOTE: ITEM No. = FIRST DIGIT (DWG REF.), LAST TWO DIGITS (item No.)			
ITEM	PART NO.	QTY.	DESCRIPTION
8000	807774	1	SILENCER, IAC ACOUSTICS, JDD5-18-S012-GI-GO-L-C-B-S, HOSPITAL GRADE SILENCER, 16" x 18" FLANGE, END IN, SIDE OUT
8001	807108	1	INTAKE DIVERTER BOX, 12" IN / 12" OUT, A1011 CS



CUSTOMER CONNECTIONS		
TAG	DESCRIPTION	SIZE/(VOLTAGE)
821A/B	AIR INLET	12" 14GA MITRE
822	EXHAUST	16" MITRE
	</	

NOTE: ITEM No. = FIRST DIGIT (DWG REF.), LAST TWO DIGITS (Item No.)

QK-270A/B
EXHAUST FAN
MODEL# V12X1 L1/4
1/4HP, 120VAC/1P/60 HZ
CLASS 1, ZONE 1/12ACPH

[illegible]

1. ALL PRESSURE VESSELS ARE DESIGNED, FABRICATED AND TESTED IN ACCORDANCE WITH ASME SECTION VIII, DIV.1. C.A. = 1/16" RADIOGRAPHY = 100% ALL CATEGORY WELDS. PWHT = INC. 2. ALL PROCESS & THREADED PIPING DESIGNED, FABRICATED AND TESTED IN ACCORDANCE WITH ASME B31.3. C.A. = 1/16" RADIOGRAPHY = 100% PWHT = N/A SEE WELDED PROCESS PIPING DRAWINGS FOR MATERIAL SPECIFICATIONS. ALL THREADED PROCESS PIPING TO UTILIZE SA106-B PIPE & SA105N FITTINGS 3. PROCESS INSTRUMENT LINES: 316SS 1/2"Ø 0.049" WALL TUBING c/w SWAGelok 316SS FITTINGS w/ 316SS BACK FERRULE & 316SS FRONT FERRULE UNLESS OTHERWISE NOTED 4. UTILITY INSTRUMENT LINES: 316SS 3/8"Ø (MIN) 0.035" WALL TUBING c/w SWAGelok 316SS FITTINGS w/ 316SS BACK FERRULE & 316SS FRONT FERRULE UNLESS OTHERWISE NOTED	5. INSTRUMENT MEDIUM: CLEAN, DRY AIR 6. PROCESS HARDWARE: STUDS: B7 NUTS: 2H GASKETS: FLEXITALIC (316SS GREY STRIPE) 7. HEAT TO RAZE WITH "HEAT TREATING" SHALL BE AS SHOWN ON THE ATTACHED ENCLATURE. THESE SHALL BE USED TO AVOID CORROSION OF THE SURFACE OF THE INSTRUMENTATION INTO THE PROCESS MEDIA. 8. SURFACE PREPARATION: SSPC-SP2 PAINT: (ONE) COAT F34 WARM GREY ENAMEL
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TITLE: BUILDING/INST/ELEC SYSTEM SCHEMATIC
ARIEL JGK/4; WAUKESHA L5774LT; AXC 144EF-102-24
4 THROW. 3 STAGE. SWEET NATURAL GAS COMPRESSOR PKG.

END USER/CONSULTANT: HUSKY OIL OPERATIONS LTD.		CUST. P.O. No.:	
LOCATION: ANSELL, ALBERTA LSD: 02-20-050-18-W5M		REASON: 2	DWG. REFERENCE:
DRAWN BY: K. BUCK	W.O. No. 17084-NC	—	
DATE 06/27/14	UNIT No. 17084	DWG. No.	
CHK'D BY: KDM	No. RECD 1	17084-91	
ATTACHED			