


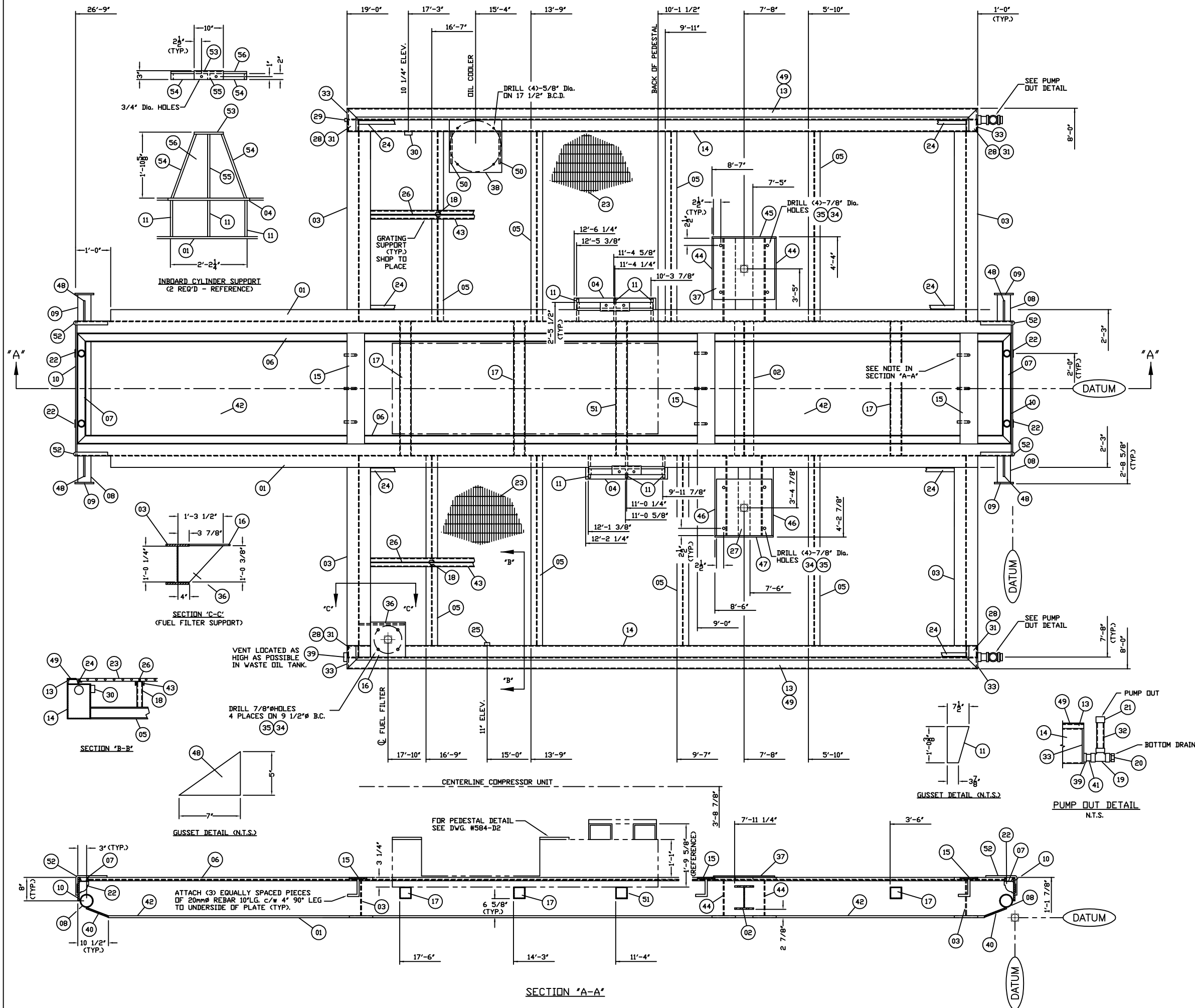
ALL PIPE DIM'S
ARE BOP

- NOTES:
1. ALL TUBING TO BE 304ss C/W SWAGelok CADMIUM PLATED FITTINGS WITH STAINLESS STEEL FERRULES.
 2. UNIT PAINT COLOR TO BE VALSPAR 20-F-34 "VARN GREY"
 3. BYPASS/BLOWDOWN AND HIGH PRESSURE RELIEF LINES ARE TO BE BUTT WELDED.
 4. STACKING SHEAVE REQUIRED ON ENGINE.
 5. CORROSION ALLOWANCE ON ALL VESSELS, BOTTLES, AND PIPE SPOOLS TO BE 1/16" (.0625").
 6. UNIT TO HAVE 10% X-RAY AS PER ANSI B31.3.
 7. ESTIMATED PACKAGE WEIGHT 73,000 LBS.

CUSTOMER CONNECTIONS			
1	INITIAL SUCTION	4"-300# RF	9 ---
2	FINAL DISCHARGE	2"-600# RF	10 ---
3	HIGH PRESSURE VENT HEADER	1 1/2"-150# RF	--- ---
4	WASTE OIL TANK DRAIN	2"-3000# (NPT)	--- ---
5	FUEL AND START GAS INLET	1"-3000# (NPT)	--- ---
6	SCRUBBER DUMP	1"-3000# (NPT)	--- ---
7	LOW PRESSURE STARTER VENT	2"-PIPE	--- ---
8	LOW PRESSURE INSTRUMENT VENT	1"-PIPE	--- ---

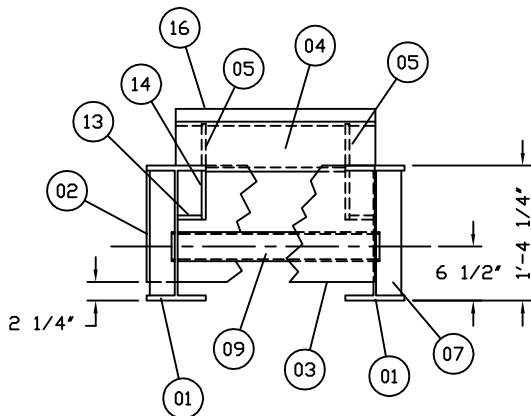
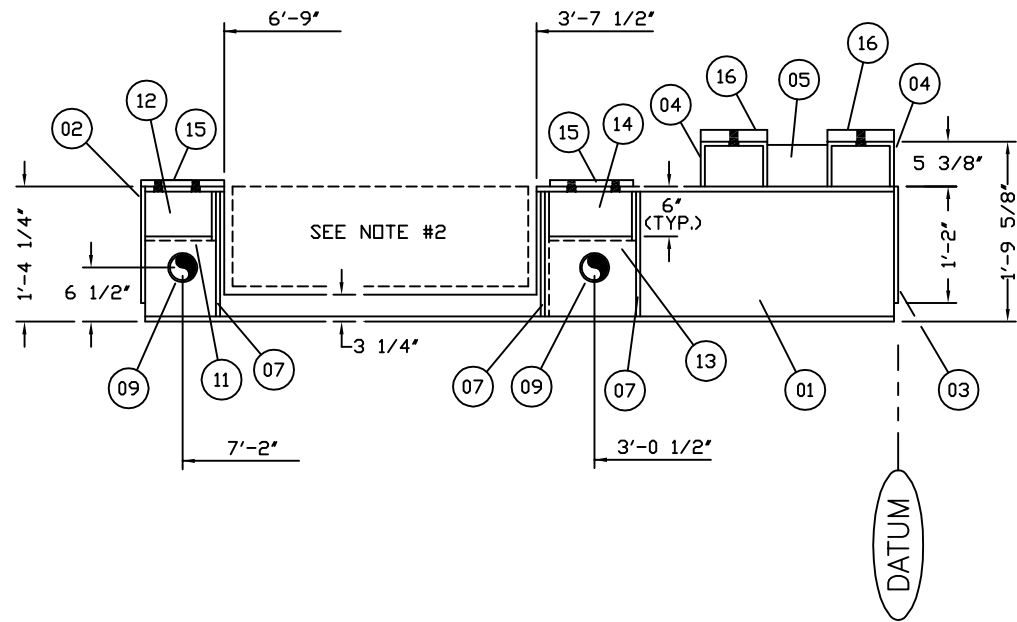
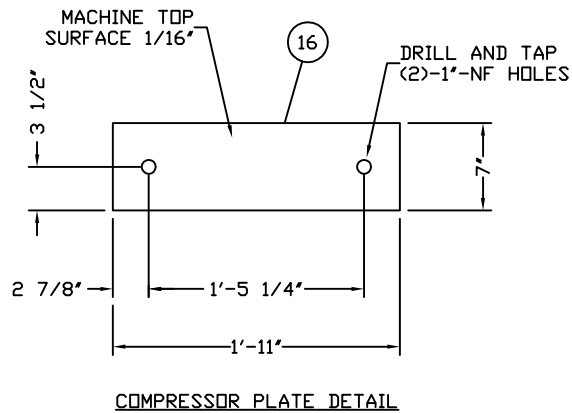
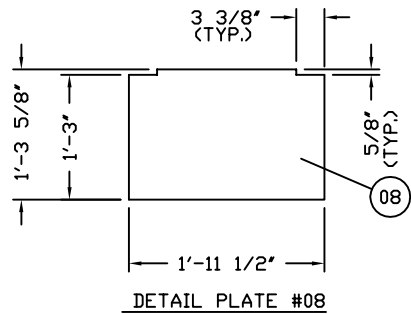
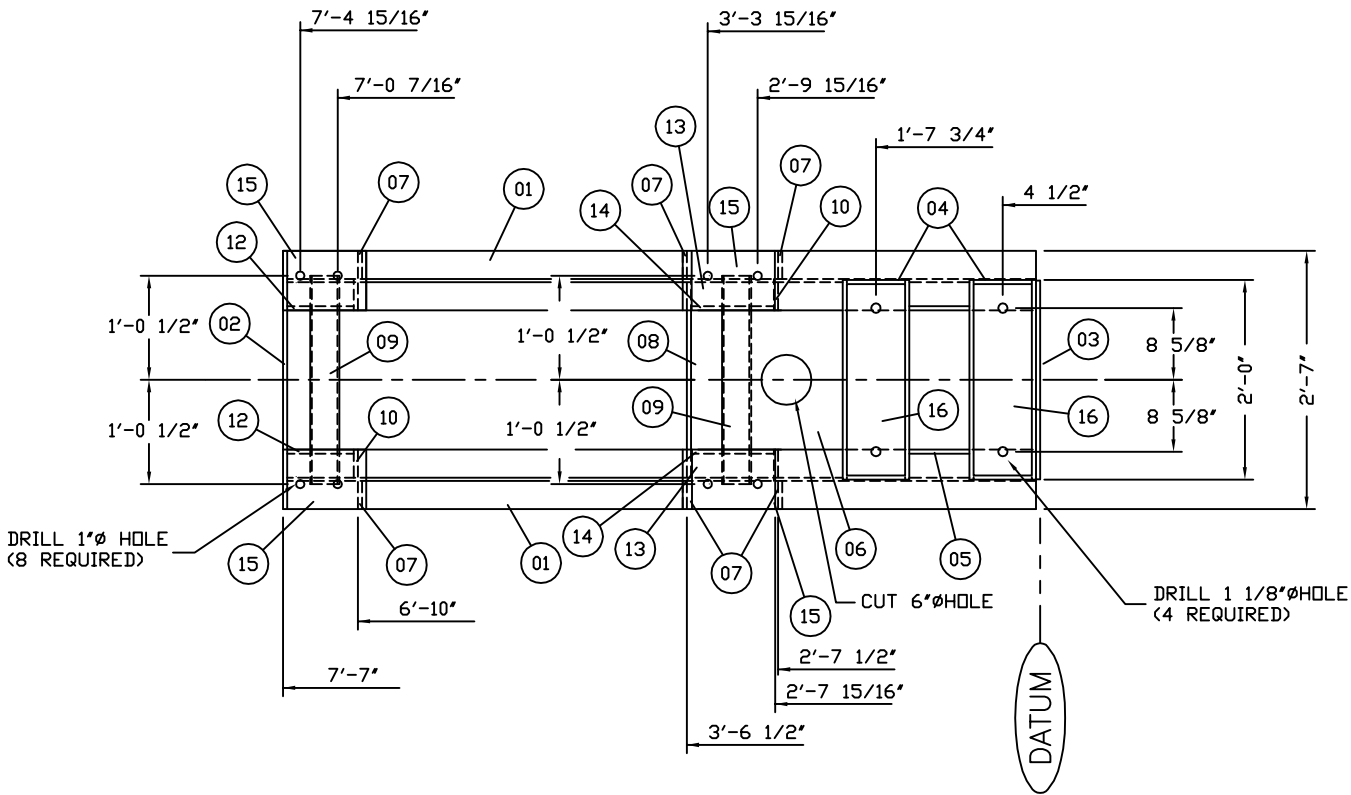
2	REVISED CYLINDER SIZES	12/13/94	G.W.P.
1	AS BUILT	10/05/94	G.W.P.
0	ISSUED FOR CONSTRUCTION	08/29/94	G.W.P.
No.	REVISION	DATE	BY
<div>ENERGY INDUSTRIES LTD.</div> <div>4303 - 117TH STREET N.E. CALGARY ALBERTA CANADA</div>			
TITLE: COMPRESSOR ELEVATION G3406TAW w/ FE-332D-22 COOLER ENERGY INDUSTRIES J84-1063		CUSTOMER: E.I. RENTAL UNIT - -	
SCALE: 3/4"=1'-0"	DATE: 08/29/94	BY: G.W.P.	DATE RELEASED: RELEASED BY:
PHASE #467-60 UNIT #467		DRAWING NO: 467-C	REV.2

1	AS-BUILT / CHANGED CYL'S 8.5/5.0 TO 5.5/4.0"	07/22/96	G.P.
0	ISSUED FOR CONSTRUCTION / CUSTOMER REFERENCE	11/27/95	D.W.
No.	REVISION	DATE	BY
<div style="text-align: center;">  <p>A Division of EnSery Corporation</p> </div> <div style="text-align: right; margin-top: -10px;"> 4303 - 11TH STREET N.E. CALGARY ALBERTA CANADA </div>			
TITLE:		CUSTOMER:	
COMPRESSOR PLANT G3406TAW w/ FE-332D-22 GEA RAINEY J84-1063		<u>GULF CANADA RESOURCES LTD.</u> NORDEG RIVER GAS PLANT LSD: 07-25-44-13 W5M	
SCALE: 3/4"=1'-0"	DATE: 11/22/95 BY: D.W.	DATE RELEASED:	RELEASED BY:
UNIT #584		DRAWING NO.: 584-B	REV. 1



BILL OF MATERIALS				
MARK	PART No.	DESCRIPTION		QUANTITY
01	88A130	WIDE FLANGE 14" x 53#/FT	26'-8" LG.	2
02	NPN	WIDE FLANGE 8" x 28#/FT	3'-9 5/8" LG.	1
03	88A130	WIDE FLANGE 14" x 53#/FT	5'-8 7/8" LG.	4
04	NPN	FLATBAR 4" x 3/4"	2'-4" LG.	2
05	17S312	WIDE FLANGE 4" x 13#/FT	5'-4 7/8" LG.	8
06	17S300	CHANNEL 3" x 4.1#/FT	26'-8" LG.	2
07	17S300	CHANNEL 3" x 4.1#/FT	3'-2" LG.	2
08	11K019	PIPE 4"-SCH.160	5'-4 1/4" LG.	2
09	17S328	PLATE 1/2"t x 6 1/2" O.D.	-	4
10	88A623	FLATBAR 8" x 1/2"t	3'-10 1/4" LG.	2
11	17S330	PLATE 3/4"t x 7 1/2" WIDE	1'-0 1/2" LG.	6
12	NPN	CONCRETE MIX 89, SLUMP 80, AIR 5	-	4.0 M ³
13	17S301	CHANNEL 4" x 5.4#/FT	18'-0" LG.	2
14	88A810	H.S.S. 12" x 8" x 1/4"	17'-11" LG.	2
15	17S339	FLATBAR 6" x 1/2"t	3'-2" LG.	3
16	17S328	PLATE 1/2"t x 1'-0" SQUARE (FUEL FILTER)	-	1
17	88A757	H.S.S. 4" x 4" x 1/4"t	3'-10 1/4" LG.	3
18	11K007	PIPE 1 1/2"-SCH.80	8 3/8" LG.	8
19	88A822	TEE 2"-3000# F.S. FULL SCR'D CPLG	-	2
20	27D006	PLUG 2"-6000# SCR'D	-	2
21	12C210	PIPE CAP 2"-3000#	-	2
22	19D056	ELBOW 1 1/2"-3000# 90° SCR'D	-	4
23	17S352	BAR GRATING 1"t x 3/16"	-	190 SQ.FT.
24	17S364	ANGLE 1 1/4" x 1 1/4" x 3/16"t	-	100'
25	12D023	HALF COUPLING 1'-3000# F.S.	-	1
26	17S333	FLATBAR 1" x 1/4"t	16'-8" LG.	2
27	17S330	PLATE 3/4"t x 1'-7" SQUARE (SCRUBBER BASE PLATE)	-	1
28	17S301	CHANNEL 4" x 5.4#/FT	8' LG.	4
29	12D025	HALF COUPLING 1/2"-3000# F.S.	-	2
30	12D022	HALF COUPLING 1 1/2"-3000# FS	-	1
31	88A835	FLATBAR 3" x 1/4"t	8' LG.	4
32	11K008	PIPE 2" SCH. 80	1'-0" LG.	2
33	17S328	PLATE 1/2"t x 8" WIDE	1'-0" LG.	4
34	1D4612	CAPSCREW 3/4" N.C.	4' LG.	12
35	1B4331	NUT 3/4" N.C.	-	12
36	17S328	PLATE 1/2"t x 1'-0 3/8" WIDE	1'-3 1/2" LG.	1
37	17S330	PLATE 3/4"t x 1'-9" SQUARE (SCRUBBER BASE PLATE)	-	1
38	17S328	PLATE 1/2"t x 1'-6" SQUARE	-	1
39	12D021	HALF COUPLING 2"-3000#F.S.	-	3
40	88A623	FLAT BAR 8" x 1/2"t	3'-10 1/4" LG.	2
41	19F167	NIPPLE 2" SCH.80	4' LG.	2
42	88E005	PLATE 14 GAUGE (3'-6" WIDE SHEET)	-	27'
43	17S300	CHANNEL 3" x 4.1#/FT	16'-8" LG.	2
44	88A130	WIDE FLANGE 14" x 53#/FT	2'-4 3/8" LG.	2
45	17S328	PLATE 1/2"t x 1'-1 7/8" WIDE	1'-10" LG.	1
46	88A130	WIDE FLANGE 14" x 53#/FT	2'-3 1/4" LG.	2
47	17S328	PLATE 1/2"t x 1'-1 7/8" WIDE	1'-8" LG.	1
48	17S328	PLATE 1/2"t x 5" WIDE (ONE CUTS TWD)	7' LG.	2
49	88A835	FLATBAR 3" x 1/4"t	18'-0" LG.	2
50	17S328	PLATE 1/2"t x 11" SQUARE (ONE CUTS TWD)	-	1
51	88A757	H.S.S. 4" x 4" x 1/4"t	3'-9 3/4" LG.	1
52	11K004	PIPE 1"-SCH. 80 (ONE CUTS TWD)	1'-3" LG.	2
53	10X056	FLATBAR 3" x 3/4"t	10' LG.	2
54	NPN	FLATBAR 2" x 3/4"t	1'-11 1/4" LG.	4
55	NPN	FLATBAR 2" x 3/4"t	1'-9 7/8" LG.	2
56	17S330	PLATE 3/4"t x 1'-9 7/8" WIDE (CUT TO FIT)	2'-2" LG.	2

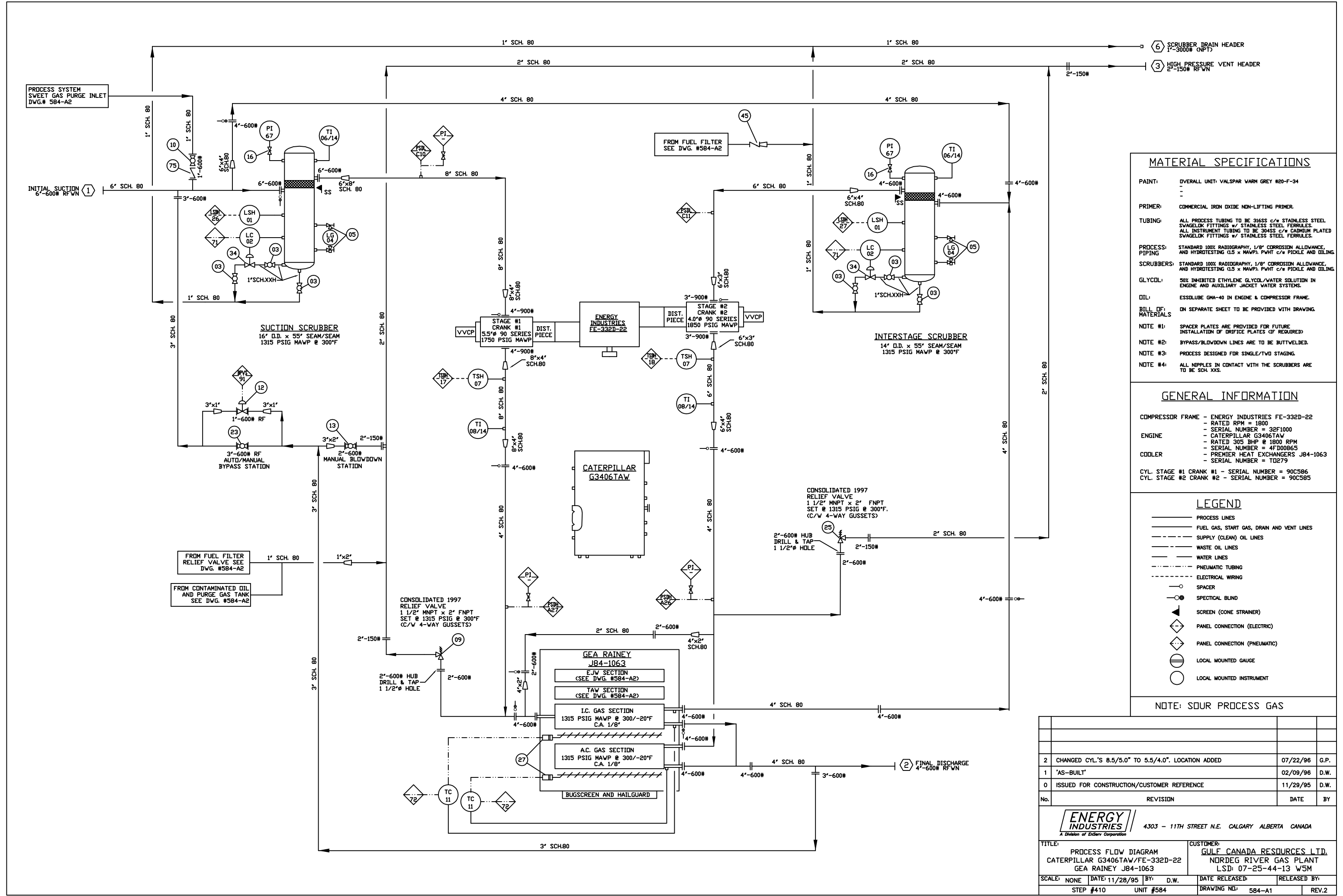
0	ISSUED FOR CONSTRUCTION			11/27/95	D.W.
No.	REVISION			DATE	BY
<div><div><div>ENERGY</div><div>INDUSTRIES</div><div><small>A Division of Enbridge Corporation</small></div></div><div>4303 - 11TH STREET N.E. CALGARY ALBERTA CANADA</div></div>					
TITLE: COMPRESSOR BASE G3406TAW w/ FE-332D-22 GEA RAINY J84-1063			CUSTOMER: GULF CANADA RESOURCES LTD. NORDEG RIVER GAS PLANT LSD: 07-25-44-13 WSM		
SCALE: 3/4"=1'-0"		DATE: 11/23/95	BY: D.W.	DATE RELEASED:	
STEP #311		UNIT #584		DRAWING NO: 584-D1	REV.0



BILL OF MATERIALS				
MARK	PART No.	DESCRIPTION		QTY.
01	17S322	WIDE FLANGE 16" @ 50#/FT.	7'-6"LG.	2
02	17S328	PLATE 1/2"t x 1'-2" WIDE	2'-7"LG.	1
03	17S328	PLATE 1/2"t x 1'-2" WIDE	2'-0 1/4"LG.	1
04	88A913	H.S.S. 8" x 6" x 1/2"t	2'-0"LG.	2
05	88A666	FLAT BAR 5" x 1/2"t	7 1/4"LG.	2
06	17S328	PLATE 1/2"t x 1'-0 3/4" WIDE	1'-4 3/4"LG.	1
07	88A633	FLAT BAR 3" x 1/2"t	1'-3"LG.	6
08	17S328	PLATE 1/2"t x 1'-3 5/8" WIDE	1'-11 1/2"LG.	1
09	11K012	PIPE 3" SCH.40 (216)	2'-1"LG.	2
10	88A633	FLAT BAR 3" x 1/2"t	5 7/8"LG.	4
11	17S328	PLATE 1/2"t x 2 1/2" WIDE	8"LG.	2
12	17S328	PLATE 1/2" x 5 7/8" WIDE	8"LG.	2
13	17S328	PLATE 1/2"t x 2 1/2" WIDE	10"LG.	2
14	17S328	PLATE 1/2"t x 5 7/8" WIDE	10"LG.	2
15	17S330	PLATE 3/4"t x 8" WIDE	10"LG.	4
16	NPN	PLATE 1 1/2"t x 7" WIDE (MACHINE 1/16")	1'-11"LG.	2

- NOTES:
1. ALL DIMENSIONS ARE IN FEET AND INCHES.
 2. DO NOT REMOVE THIS SECTION UNTIL ALL WELDING IS COMPLETE AND CONCRETE IS POURED.

0	ISSUED FOR CONSTRUCTION	11/29/95	D.W.
No.	REVISION	DATE	BY
<div><div>ENERGY INDUSTRIES</div><div>A Division of EnServ Corporation</div></div> <div>4303 - 11TH STREET N.E. CALGARY ALBERTA CANADA</div>			
TITLE: <div>COMPRESSOR PEDESTAL G3406TAW w/ FE-332D-22 GEA RAINEY J84-1063</div>		CUSTOMER: <div>GULF CANADA RESOURCES LTD.</div> <div>LSD: ____-____-____ W_M</div>	
SCALE: 3/4"=1'-0"	DATE: 11/28/95	BY: D.W.	DATE RELEASED: RELEASED BY:
STEP #312		UNIT# 584	DRAWING NO: 584-D2 REV.0



MATERIAL SPECIFICATIONS

PAINT: OVERALL UNIT: VALSPAR VARM GREY #20-F-34

PRIMER: COMMERCIAL IRON OXIDE NON-LIFTING PRIMER.

TUBING: ALL PROCESS TUBING TO BE 316SS C/W STAINLESS STEEL SWAGelok FITTINGS w/ STAINLESS STEEL FERRULES.
ALL INSTRUMENT TUBING TO BE 304SS C/W CADMIUM PLATED SWAGelok FITTINGS w/ STAINLESS STEEL FERRULES.

PROCESS PIPING: STANDARD 100% RADIOGRAPHY, 1/8" CORROSION ALLOWANCE, AND HYDROTESTING (1.5 x MAWP). PWHT C/W PICKLE AND OILING.

SCRUBBERS: STANDARD 100% RADIOGRAPHY, 1/8" CORROSION ALLOWANCE, AND HYDROTESTING (1.5 x MAWP). PWHT C/W PICKLE AND OILING.

GLYCOL: 50% INHIBITED ETHYLENE GLYCOL/WATER SOLUTION IN ENGINE AND AUXILIARY JACKET WATER SYSTEMS.

OIL: ESSOLUBE GMA-40 IN ENGINE & COMPRESSOR FRAME.

BILL OF MATERIALS: ON SEPARATE SHEET TO BE PROVIDED WITH DRAWING.

NOTE #1: SPACER PLATES ARE PROVIDED FOR FUTURE INSTALLATION OF ORIFICE PLATES (IF REQUIRED).

NOTE #2: BYPASS/BLOWDOWN LINES ARE TO BE BUTTWELDED.

NOTE #3: PROCESS DESIGNED FOR SINGLE/TWO STAGING.

NOTE #4: ALL NIPPLES IN CONTACT WITH THE SCRUBBERS ARE TO BE SCH. XXS.

GENERAL INFORMATION

COMPRESSOR FRAME - ENERGY INDUSTRIES FE-332D-22
- RATED RPM = 1800
- SERIAL NUMBER = 32F1000

ENGINE - CATERPILLAR G3406TAW
- RATED 305 BHP @ 1800 RPM
- SERIAL NUMBER = 4F000865

COOLER - PREMIER HEAT EXCHANGERS J84-1063
- SERIAL NUMBER = TQ279

CYL. STAGE #1 CRANK #1 - SERIAL NUMBER = 90C586
CYL. STAGE #2 CRANK #2 - SERIAL NUMBER = 90C585


LEGEND

PROCESS LINES
FUEL GAS, START GAS, DRAIN AND VENT LINES
SUPPLY (CLEAN) OIL LINES
WASTE OIL LINES
WATER LINES
PNEUMATIC TUBING
ELECTRICAL WIRING

SPACER
SPECTICAL BLIND
SCREEN (CONE STRAINER)
PANEL CONNECTION (ELECTRIC)
PANEL CONNECTION (PNEUMATIC)
LOCAL MOUNTED GAUGE
LOCAL MOUNTED INSTRUMENT

NOTE: SOUR PROCESS GAS

No.	REVISION	DATE	BY
2	CHANGED CYL.'S 8.5/5.0" TO 5.5/4.0". LOCATION ADDED	07/22/96	G.P.
1	'AS-BUILT'	02/09/96	D.W.
0	ISSUED FOR CONSTRUCTION/CUSTOMER REFERENCE	11/29/95	D.W.

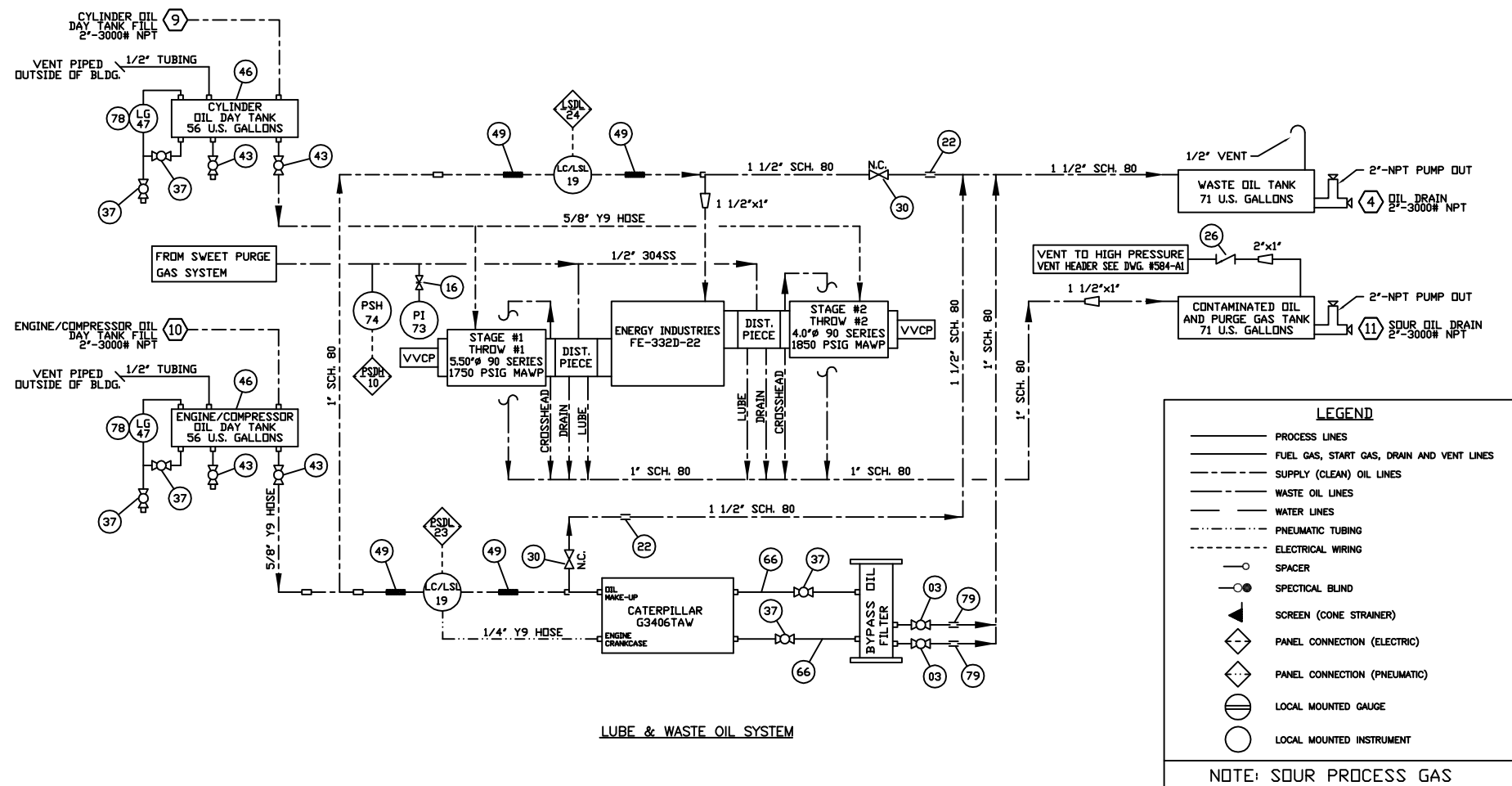
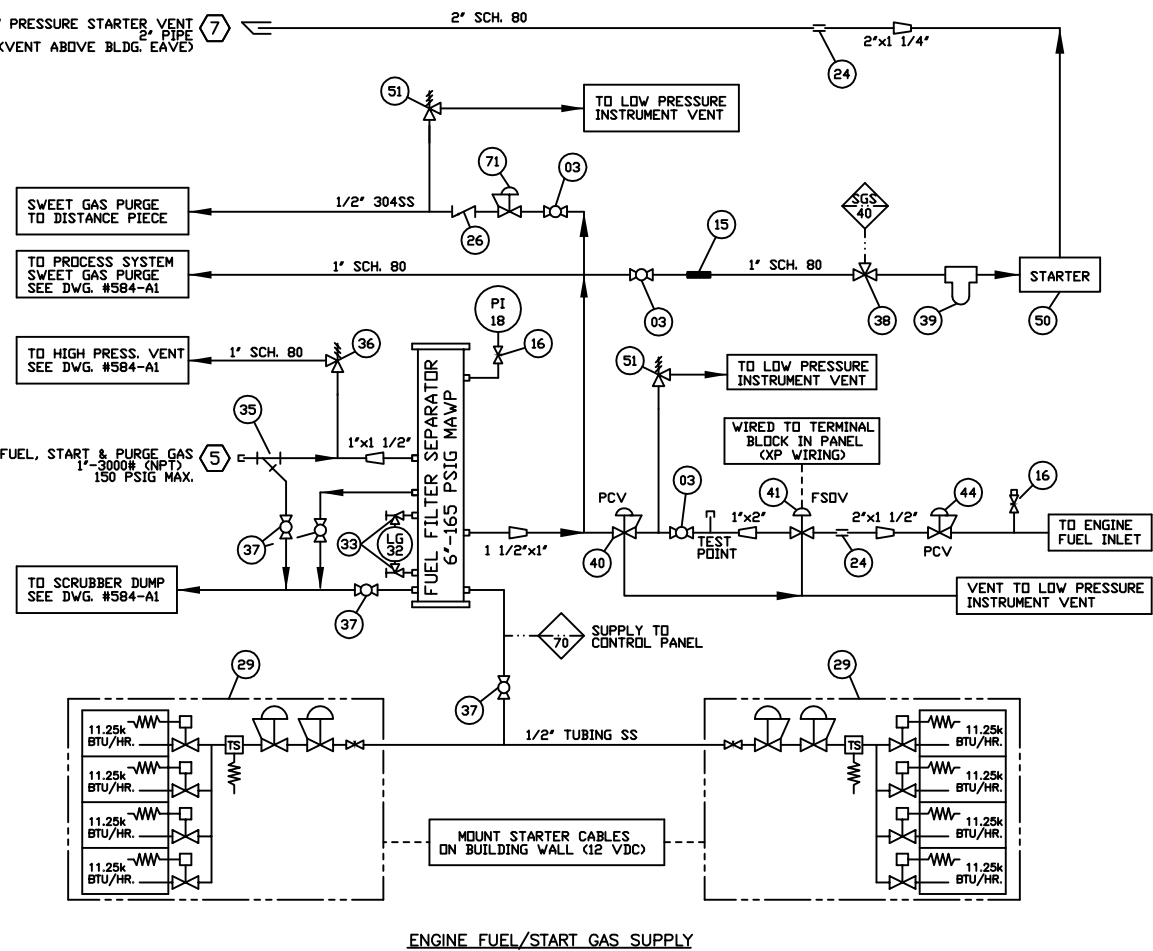


4303 - 11TH STREET N.E. CALGARY ALBERTA CANADA


TITLE: PROCESS FLOW DIAGRAM
CATERPILLAR G3406TAW/FE-332D-22
GEA RAINY J84-1063

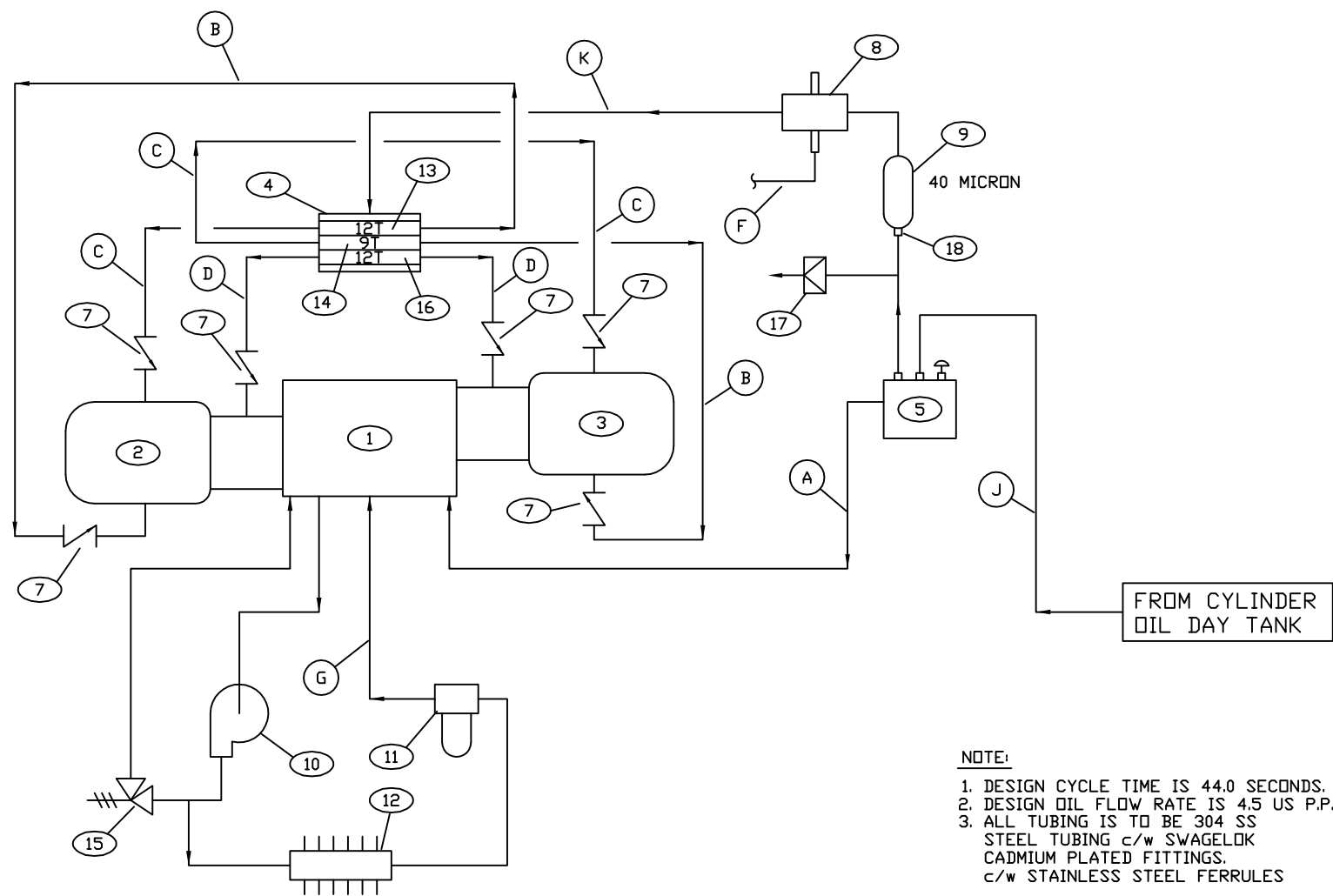
CUSTOMER: GULF CANADA RESOURCES LTD.
NORDEG RIVER GAS PLANT
LSD: 07-25-44-13 WSM

SCALE: NONE	DATE: 11/28/95	BY: D.W.	DATE RELEASED:	RELEASED BY:
STEP #410		UNIT #584	DRAWING NO: 584-A1	REV.2



2	CHANGED CYL.'S 8.5/5.0" TO 5.5/4.0", LOCATION ADDED	07/15/96	G.P.
1	'AS-BUILT'	02/09/96	D.W.
0	ISSUED FOR CONSTRUCTION/CUSTOMER REFERENCE	11/29/95	D.W.
No.	REVISION	DATE	BY

		4303 - 11TH STREET N.E. CALGARY ALBERTA CANADA	
TITLE: UTILITY FLOW DIAGRAM CATERPILLAR G3406TAW/FE-332D-22 GE A RAINEY J84-1063		CUSTOMER: <u>GULF CANADA RESOURCES LTD.</u> NORDEG RIVER GAS PLANT LSD: 07-25-44-13 W5M	
SCALE: NONE	DATE: 11/28/95	BY: D.W.	DATE RELEASED:
SHEET #510	UNIT #584	DRAWING NO: 584-A2	REV.2



BILL OF MATERIALS			
No.	PART No.	DESCRIPTION	QTY
1	-	COMPRESSOR FE-332D-22	1
2	-	CYLINDER #1 5.50"Ø	1
3	-	CYLINDER #2 4.00"Ø	1
4	12A977A	DIVIDER BLOCK BASE MCL-3	1
5	880087	LINCOLN LUBE PUMP 1/4" MODEL 55	1
6	-	-	-
7	88A957	CHECK VALVE <BALL>	6
8	-	ELECTRIC LUBE SENTRY VALVE <SEE UTILITY FLOW DIAGRAM>	1
9	11A066	IN-LINE SINTERED FILTER <40 MICRON>	1
10	2-PS5896	LUBE PUMP <GEAR DRIVEN> (c/w COMPRESSOR)	1
11	2P4004	OIL FILTER ELEMENT (c/w COMPRESSOR)	1
12	NPN	OIL COOLER ASSEMBLY <SDUR SPEC.>	1
13	12A983	DIVIDER VALVE 12T	1
14	12A982	DIVIDER VALVE 9T	1
15	3WPS1284	INTERNAL RELIEF VALVE SET @ 40 PSI (c/w COMPRESSOR)	1
16	12A228	DIVIDER VALVE 12T c/w INDICATOR	1
17	11A068	RUPTURE DISK (c/w COMPRESSOR)	1
18	88A824	1/4" NPT HEX-NIPPLE	1
19	-	-	-

LINE LIST

- (A) OVERFLOW LINE BACK TO CRANKCASE
- (B) LOWER PISTON LUBE
- (C) UPPER PISTON LUBE
- (D) ROD PACKING LUBE
- (E)
- (F) SIGNAL TO PANEL <ELECTRIC>
- (G) FRONT & BACK, MAIN & JOURNAL BEARING LUBE
- (J) OIL SUPPLY TO LUBRICATOR PUMP FROM DAYTANK
- (K) HIGH PRESSURE OIL LINE TO DIVIDER BLOCK

1	LOCATION ADDED / CHANGED CYL.'S 8.5/5.0" TO 5.5/4.0"	07/22/96	G.P.
0	ISSUED FOR CONSTRUCTION	11/29/95	D.W.
No.	REVISION	DATE	BY
<div><div><div>ENERGY INDUSTRIES</div><div>A Division of EnServ Corporation</div></div><div>4303 - 11TH STREET N.E. CALGARY ALBERTA CANADA</div></div>			
TITLE: LUBE OIL FLOW DIAGRAM FE-332D-22 COMPRESSOR		CUSTOMER: GULF CANADA RESOURCES LTD. NORDEG RIVER GAS PLANT LSD: 07-25-44-13 W5M	
SCALE: NONE	DATE: 11/28/95	BY: D.W.	DATE RELEASED: RELEASED BY:
STEP #511		UNIT #584	DRAWING NO.: 584-A3 REV.1