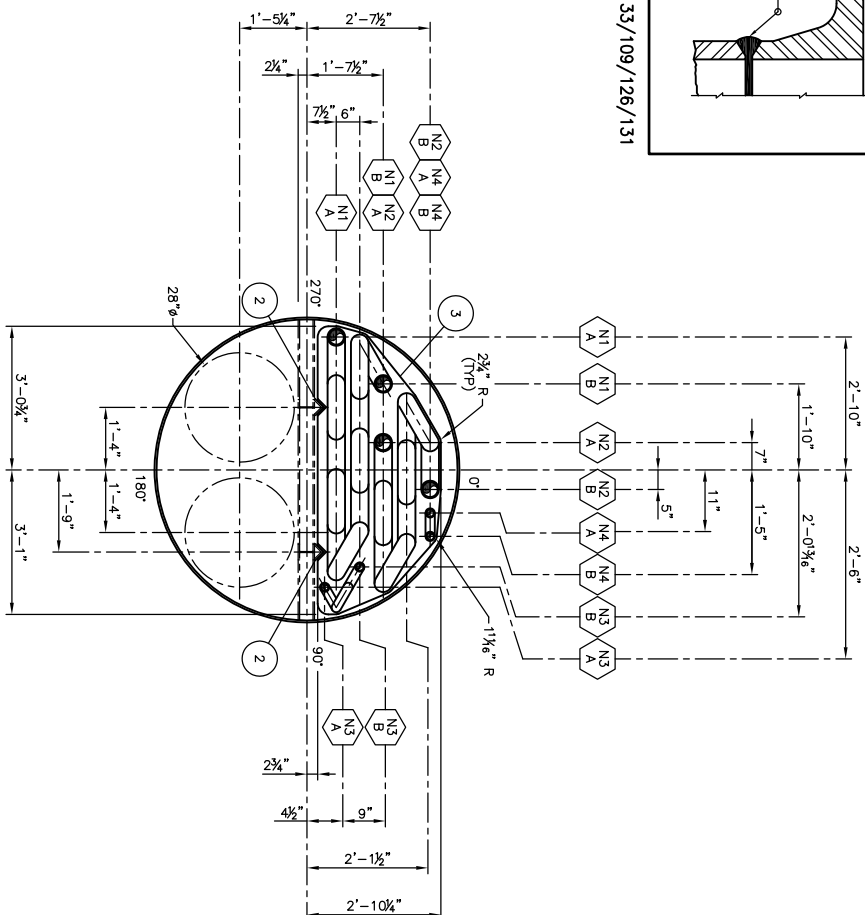
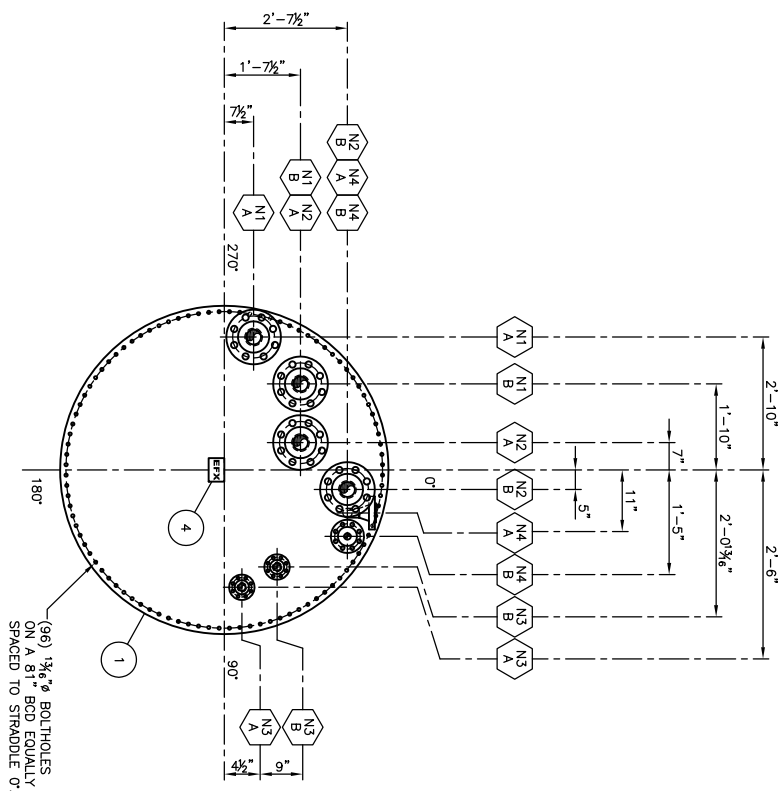


PM-105/108/133/109/126/131

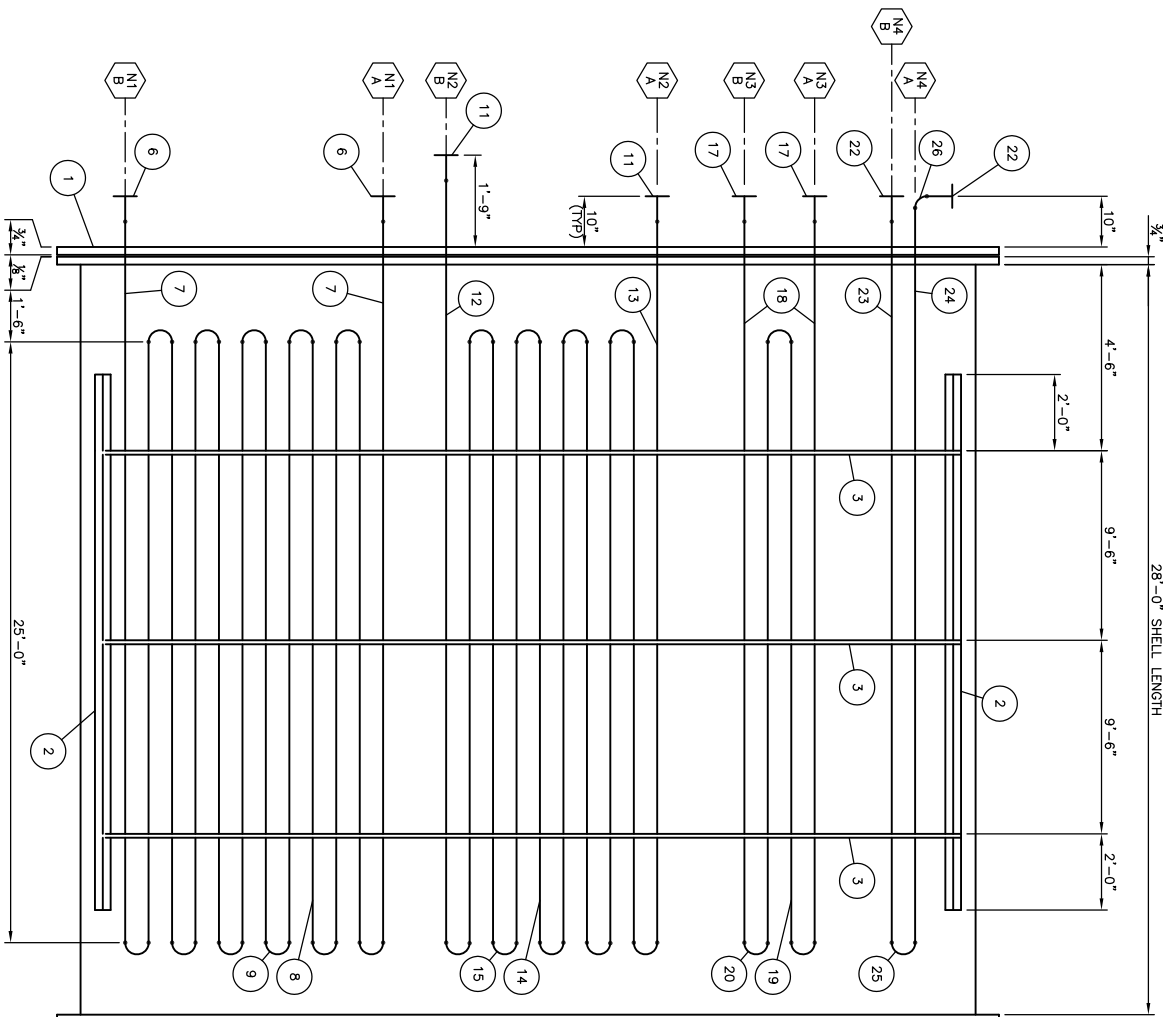


COIL LAYOUT



END PLATE DETAIL

NO.	REVISION	BY	CHKD.	DATE
2	REVISED ITEMS #8, #9, #14, #15	GDL		06/12/08
1	REVISED ITEM #3 (WAS 2--10 1/4")	AEB		06/11/03
0	ISSUED FOR CONSTRUCTION	TBB		06/11/02
A	ISSUED FOR APPROVAL	AEB		06/09/27
NO.	REVISION	BY	CHKD.	DATE



COIL SCHEMATIC

N.T.S.

NOTES:

- 1) ALL PRESSURE WELDS TO BE PER L1-1 WELD DETAIL.
- 2) ALL PRESSURE RETAINING TO BE CHEM. SELECT AS FOLLOWS:
 $CE = \frac{Wm}{Wc} \leq 0.5$
 $WC + \frac{2Wm}{Wc} \leq 2.5$
- 3) ALL PRESSURE RETAINING MATERIAL NOT TO EXCEED HARDNESS OF BHN ≤ 200 .
- 4) MAGNETIC PARTICLE TEST REQUIRED ON COIL TO END PLATE WELDS.
 CVNT EXEMPT PER PAR. 323.2.2

MARK	PART	DESCRIPTION	QTY.	MATERIAL
1	END PLATE	84" OD x 3/4" PL	1	SA-304/2144W
2	COIL SLIDES	3" x 3" x 3/8" ANGLE x 23'-0" LG	2	SA-40/2144W
3	SUPPORT PLATE	2'-7 1/2" x 3/8" PL x 6'-1 3/4" LG	3	SA-40/2144W
4	NAME PLATE	STANDARD NAME PLATE c/w "T" BRACKET	1	SA-40/2150W
6	N1 (PRE-HEAT)	4" CL 2500 SCH XXH RETURN FLG	1	SA-350L/F2CL1
7		4" SCH XXH SMSL PIPE x 26'-8 1/8 15/16" LG	2	SA-3350R6
8		4" SCH XXH SMSL PIPE x 25'-0" LG	10	SA-3350R6
9		4" SCH XXH 180° LR BW RETURN BEND	11	SA-420WPL6
				
11	N2 (RE-HEAT)	4" CL 2500 SCH XXH RETURN FLG	2	SA-350L/F2CL1
12		4" SCH XXH SMSL PIPE x 27'-7 1/8 15/16" LG	1	SA-3350R6
13		4" SCH XXH SMSL PIPE x 26'-8 1/8 15/16" LG	8	SA-3350R6
14		4" SCH XXH SMSL PIPE x 25'-0" LG	1	SA-3350R6
15		4" SCH XXH 180° LR BW RETURN BEND	9	SA-420WPL6
				
17	N3 (HEAT STRING)	2" CL 300 SCH 80 RETURN FLG	2	SA-105N
18		2" SCH 80 SMSL PIPE x 27'-2 1/8" LG	1	SA-106B
19		2" SCH 80 SMSL PIPE x 25'-0" LG	2	SA-106B
20		2" SCH 80 180° LR BW RETURN BEND	3	SA-234-WPB
22	N4 (FUEL GAS)	2" CL 900 SCH 80 RETURN FLG	2	SA-105N
23		2" SCH 80 SMSL PIPE x 27'-0 9/16" LG	1	SA-106B
24		2" SCH 80 SMSL PIPE x 27'-1 7/8" LG	1	SA-106B
25		2" SCH 80 180° LR BW RETURN BEND	1	SA-106B
26		2" SCH 80 90° LR BW ELL	1	SA-234-WPB

COIL DESIGN DATA									
DESIGN and FABRICATE ACCORDING TO ASME B31.3 2004 EDITION, and B16.5 1996 EDITION. REGISTER WITH A.B.S.A.									
COIL:	N1 (PRE-HEAT)	N2 (RE-HEAT)	N3 (HEAT STRING)	N4 (FUEL GAS)					
SIZE and SCH.:	4" SCH. XXH	4" SCH. XXH	2" SCH. 80	2" SCH. 80					
FLANGE RATING:	CL. 2500 RTJWN	CL. 2500 RTJWN	CL. 300 RTJWN	CL. 900 RTJWN					
DESIGN PRESSURE: (PSIG)	4500 PSIG	4500 PSIG	675 PSIG	2025 PSIG					
DESIGN TEMPERATURE: (°F)	200°F	200°F	200°F	200°F					
CORROSION ALLOWANCE:	0.125"	0.125"	0.0625"	0.0625"					
RADIOGRAPHY:	100%	100%	10%	10%					
STRESS RELIEVE:	60 min. @ 1100°F (±25°F)								
HYDROTEST: (PSIG)	6750	6750	1013	3038					
C.R.N.:	E9867.213	E9867.213	E9865.213	E9865.213					
M.D.M.I.:	-20°F	-20°F	-20°F	-20°F					
HEATING SURFACE: (sq. ft.)	523.8	99.7	66.2	35.1					
VOLUME: (cu. ft.)	24.0	4.6	2.2	1.2					
REF. REG. DWG. NO.:	DS-043-0 REV. 0			DS-043-0 REV. 0					
WELDING PROCEDURES:	PM-105/108/133/109/126/131								
SERIAL NO.:	B7330-50								
ESTIMATED WEIGHT: 19100 lbs									
CUSTOMER:	BP CANADA ENERGY COMPANY c/o EQUINOX			JOB NO. B7330-50					
PROJECT:	TWO LAKES 3-3 SOUR LINE HEATER PACKAGE								
TITLE 4.0 MM BTJH INDIRECT FIRED HEATER COIL DETAIL									
DRAWN AEB	CHECKED	APPROVED	SCALE 1/2"=1'-0"	DATE 06/08/30	DRAWING NUMBER	B7330-510 SHT. 1 OF 1			
									