NOTES:

1. TACK WELDS USED = WPS# BIL. 2
2. ALL REPADS TO HAVE 1/4" NPT WEEP HOLE
3. UT SHELLS AND HEADS ON 3" GRID AS PER SA 578, LEVEL 1.
4. ONE COAT OF INTERNATIONAL PRIMER AND TWO COATS OF STRAT GREY ALKYD ENAMEL
5. INTERNALLY CLEANED, PICKLED, NEUTRALIZED, WASHED AND OILED
6. U.T. CATEGORY "D" WELDS
7. ALL MATERIALS TO MEET "TUXTLA" RESTRICTED SOUR GAS CHEMISTRY
8. HARDNESS TEST: ONE TEST PER L.S., ONE TEST PER C.S. AND ONE TEST PER CAT. "B" WELD.

E9. ALL ATTACHMENTS TO VESSEL TO BE 1/4" CONTINUOUS FILLET WELD UNLESS OTHERWISE NOTED (BIL.14)

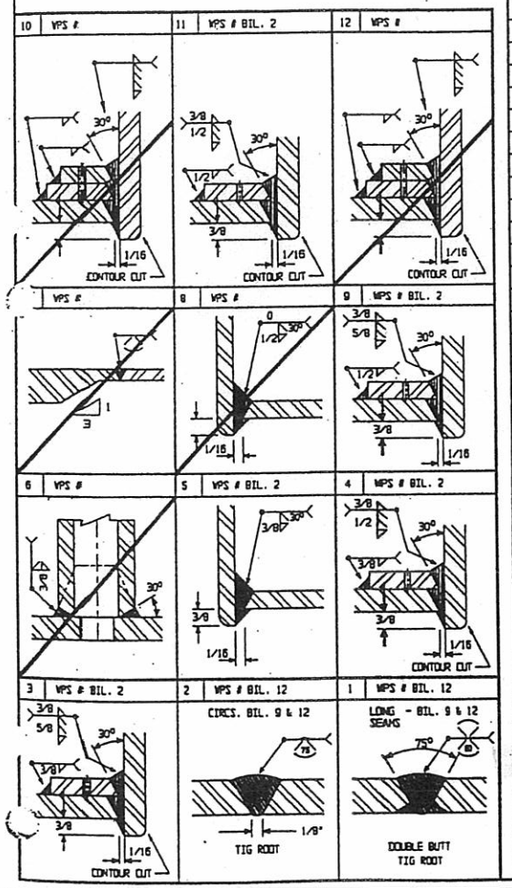
TUXTLA RESTRICTED CHEMISTRY:

PLATE: PHOSPHORUS = 0.025 % MAX.
SULPHUR = 0.005 % MAX.
PIPE & FITTINGS: CARBON = 0.30 % MAX
MANGANESE = 1.06 % MAX.
PHOSPHORUS = 0.025 % MAX.
SULPHUR = 0.015 % MAX.
FORGINGS: AS ABOVE EXCEPT MANGANESE CAN BE 1.30 % MAX.
CARBON EQUIVALENT: 0.45 % MAX & BHN = 200 MAX.

APPROVED
FOR FABRICATION

CUSTOMER PER	R. FOLEY	DATE
ENGINEERING PER	S. SEITZ	DATE
SHOP PROD. PER	S. SEITZ	DATE

95-5114-95089-48



BILL OF MATERIAL

Item	No. Req'd	Size	Description	Mat'l Spec.
1	2	84"	I.D.x 7/8"t. ROLLED CAN x 10'- 0" LG	SA-516-70N
2	2	84"	I.D.x 7/8"Nom.t. 2:1 SE HEAD c/w 2" SF	SA-516-70N
3	ONE	20"	150# RFWN FLANGE XH BORE	SA-105 N
4	ONE	20"	150# RF BLIND FLANGE	SA-105 N
5	2	12"	150# RFWN FLANGE SCH 80 BORE	SA-105 N
6	ONE	4"	150# RFWN FLANGE XXH BORE	SA-105 N
7	2	3"	150# RFWN FLANGE XXH BORE	SA-105 N
8	ONE	2"	150# RFWN FLANGE XXH BORE	SA-105 N
9	ONE	3"	150# RFWN BLIND FLANGE	SA-105 N
10	15	1.5"	150# RFWN FLANGE XXH BORE	SA-105 N
11	4	1"	150# RFWN FLANGE XXH BORE	SA-105 N
12	ONE	20"	XH WALL SMLS PIPE x 4 1/8" BOE,POE	SA-106-B
13	ONE	12"	SCH 80 WALL SMLS PIPE x 9 5/8" BOE,POE	SA-106-B
14	ONE	12"	SCH 80 WALL SMLS PIPE x 5 3/8" BOE,POE	SA-106-B
15	ONE	4"	XXH WALL SMLS PIPE x 6" BOE,POE	SA-106-B
16	ONE	3"	XXH WALL SMLS PIPE x 6 1/4" BOE,POE	SA-106-B
17	ONE	3"	XXH WALL SMLS PIPE x 36 1/8" BOE,POE	SA-106-B
18	ONE	2"	XXH WALL SMLS PIPE x 6 1/2" BOE,POE	SA-106-B
19	ONE	5/8"	t. x 20 1/8" ID x 36" OD REPAD	SA-516-70N
20	ONE	5/8"	t. x 12 7/8" ID x 22" OD REPAD	SA-516-70N
21	ONE	3/8"	t. x 4 5/8" ID x 8 1/2" OD REPAD	SA-516-70N
22	ONE	3/8"	t. x 3 5/8" ID x 7 1/2" OD REPAD	SA-516-70N
23	2	3/8"	t. PLATE x 12" WIDE x 11'- 2 5/8" LG.	SA-516-70N
24	2	1"	t. PLATE x 12" WIDE x 7'- 8" LG.	SA-36
25	2	1/2"	t.x 10"x 89 3/4"x 76° LG.FORMED CHANNEL	SA-36
26	2	3/8"	t. PLATE x 6" WIDE x 45 1/2" LG.	SA-36
27	2	3/8"	t. PLATE x 6" WIDE x 36 1/2" LG.	SA-36
28	ONE	3/8"	t. PLATE x 6" WIDE x 33 3/4" LG.	SA-36
29	ONE		20" HEAVY DAVIT ASSEMBLY	AS REQ'D.
30	ONE		ASME NAME PLATE c/w MNTG. BRKT.	SA-516-70N
31	ONE	20"	150# FLEXITALLIC GASKET	316 SS
32	ONE	3"	150# FLEXITALLIC GASKET	316 SS
33	24	1 1/8"	x 6 1/2" LG STUD c/w 2 HVY HEX NUTS	B7M/2HM
34	4	5/8"	x 3 1/2" LG STUD c/w 2 HVY HEX NUTS	B7M/2HM
35	2	1"	PLATE x 8" WIDE x 8" LG. (SEE DETAIL)	SA-36
36	2	1/2"	PLATE x 2" WIDE x 9" LG.	SA-516-70N
37	ONE	6"	t. #9 DENSITY MESH PAD x 40" x 44" LG.	316 SS
38	20	1"	x 3/8"t. FLAT BAR MESH SUPPORT	SA-516-70N
39	A/R	3/8"	PLATE MESH PAD BOX AS REQ'D.	SA-516-70N
40	ONE	12"	CHANNEL @ 20#/FT x LG. AS REQ'D.	SA-36
41	2	6"	x 6" x 1/4"t. ANGLE x LG. AS REQ'D.	SA-36
42	ONE	6"	x 6" x 1/4"t. ANGLE x LG. AS REQ'D.	SA-36

CONNECTION SCHEDULE

Ref.	Size	Rating	Type	Service	Weld Detail
M1	20"	150#	RFWN	MANWAY / INSP. OPENING	2,11
N1	12"	150#	RFWN	GAS INLET	2,9
N2	12"	150#	RFWN	GAS OUTLET	2,9
N3	3"	150#	RFWN	WATER OUTLET	2,3
N4	2"	150#	RFWN	MANUAL DRAIN	2,5
N5	4"	150#	RFWN	RELIEF VALVE CONNECTION	2,4
N6	3"	150#	RFWN	FUTURE HYDROCARBON OUTLET	2,3
N7	1"	150#	RFWN	PRESSURE INDICATOR	2,5
N8	1"	150#	RFWN	PRESSURE TRANSMITTER	2,5
N9	1"	150#	RFWN	PRESSURE SHUTDOWN	2,5
N10	1.5"	150#	RFWN	TEMPERATURE INDICATOR	2,5
N11	1.5"	150#	RFWN	WATER LEVEL CONTROLLER	2,5
N12	1.5"	150#	RFWN	WATER GAUGE GLASS	2,5
N13	1.5"	150#	RFWN	HYDROCARBON LEVEL CONTROLLER	2,5
N14	1.5"	150#	RFWN	HYDROCARBON GAUGE GLASS	2,5
N15	1.5"	150#	RFWN	HIGH LIQUID LEVEL SHUTDOWN	2,5
N16	1.5"	150#	RFWN	SPARE	2,5
N17	1.5"	150#	RFWN	SPARE	2,5
N18	1"	150#	RFWN	SPARE	2,5

E	59	3	3/4"	DIA. ROUND BAR	SA36
E	58	6	3/8"	t. x 2" x 2" SQ	SA516-70N
	57	ONE	3/8"	3"x 6"x 6" VORTEX BREAKER	SA-516-70N
	56	2	1/2"	t.x 42" WIDE x 84" LG.	SA-516-70N
	55	2	1.5"	XXH WALL LR 45 Deg. BW ELBOW	SA-234-WPB
	54				
	53	4	3/8"	t.x 1 1/2" WIDE GUSSETS	SA-516-70N
	52	ONE	3/8"	t.x 18" DIA. BAFFLE	SA-516-70N
	51	4	1/2"	DIA.x 2 1/2"LG. STUD c/w 2 HVY HEX NUTS	B7M/2HM
	50	16	1/2"	DIA.x 3" LG. STUD c/w 2 HVY HEX NUTS	B7M/2HM
	49	1	1"	150# FLEXITALLIC GASKET	316 SS
	48	4	1.5"	150# FLEXITALLIC GASKET	316 SS
	47	1	1"	150# RF BLIND FLANGE	SA-105 N
	46	4	1.5"	150# RF BLIND FLANGE	SA-105 N
	45	4	1"	XXH WALL SMLS PIPE x LG. AS REQ'D.	SA-106-B
	44	15	1.5"	XXH WALL SMLS PIPE x LG. AS REQ'D.	SA-106-B
	43	ONE	3/4"	t. x 12 7/8" ID x 26" OD REPAD	SA-516-70N

Vessel to be constructed in strict accordance with the 1992 edition of the ASME Code 1994 ADDENDA for Unfired Pressure Vessels Section VIII Div. 1

DESIGN	DESIGN			HYDROTEST
Internal Press.	285 PSIG			428 PSIG
External Press.	ATMOS.			ATMOS.
Temperature	100 Deg.F			AMBIENT

Min. Design Metal Temp. -20 Deg.F AT 285 PSIG
Corr. Allowance 1/8" in 3.2 mm
Radiography: PER UW 11a INCL. CAT."B"
Mat'l Tests EXEMPT PER UG 20(f)(1-5)
P.W.H.T. 1150 Deg.F/1 hour +25 -0
Volume ft³ m³
Wt. full of water lb kg
Shipping Wt. lb kg

MATERIAL	MATERIAL	Thickness Calc.	Thickness Min.	Thickness Nom.	TYPE
MAIN BARREL					
Shell	SA-516-70N	0.817	0.875	0.875	ROLLED PL.
Head.....End/Top	SA-516-70N	0.812	0.875	0.875	2:1 ELLIP.
Head.....End/Bottom	SA-516-70N	0.812	0.875	0.875	2:1 ELLIP.

Flange	Nozzle Neck	Coupling	Weld Fitting
SA-105N/350-LF2	SA-106-B	SA-105N	SA-234-WPB

Bolts/Studs	Nuts	Gaskets
SA-193-B7M	SA-194-2HM	FLEXITALLIC 316 SS

Special Procedures: SEE NOTES #3, #6 AND #8
Service: SOUR GAR SERVICE
Registered Welding Procedures: WPS 1259.2 ADP 1190
C R N :
Serial No. 4523 Customer P.O.#
Surface Prep. EXTERNALLY SANDBLASTED TO SSPC SP-6
Finish ONE COAT OF SHOP PRIMER
Insulation NONE

No.	Changes Made	By	Date	App.
E	ADD ITEM 58 & 59, ADD STRUCT WELD.	SS	DEC8	AM
D	AS PER TUXTLA MARK-UP	KP	NOV10	AM
C	AS PER TUXTLA MARK-UP	KP	NOV14	AM
B	AS PER BIMAC MARK-UP	KP	NOV 7	AM
A	AS PER BIMAC MARK-UP	KP	OCT31	AM

REVISIONS / ISSUES

FABRICATED BY
BIMAC INDUSTRIES LTD.
CALGARY, ALBERTA

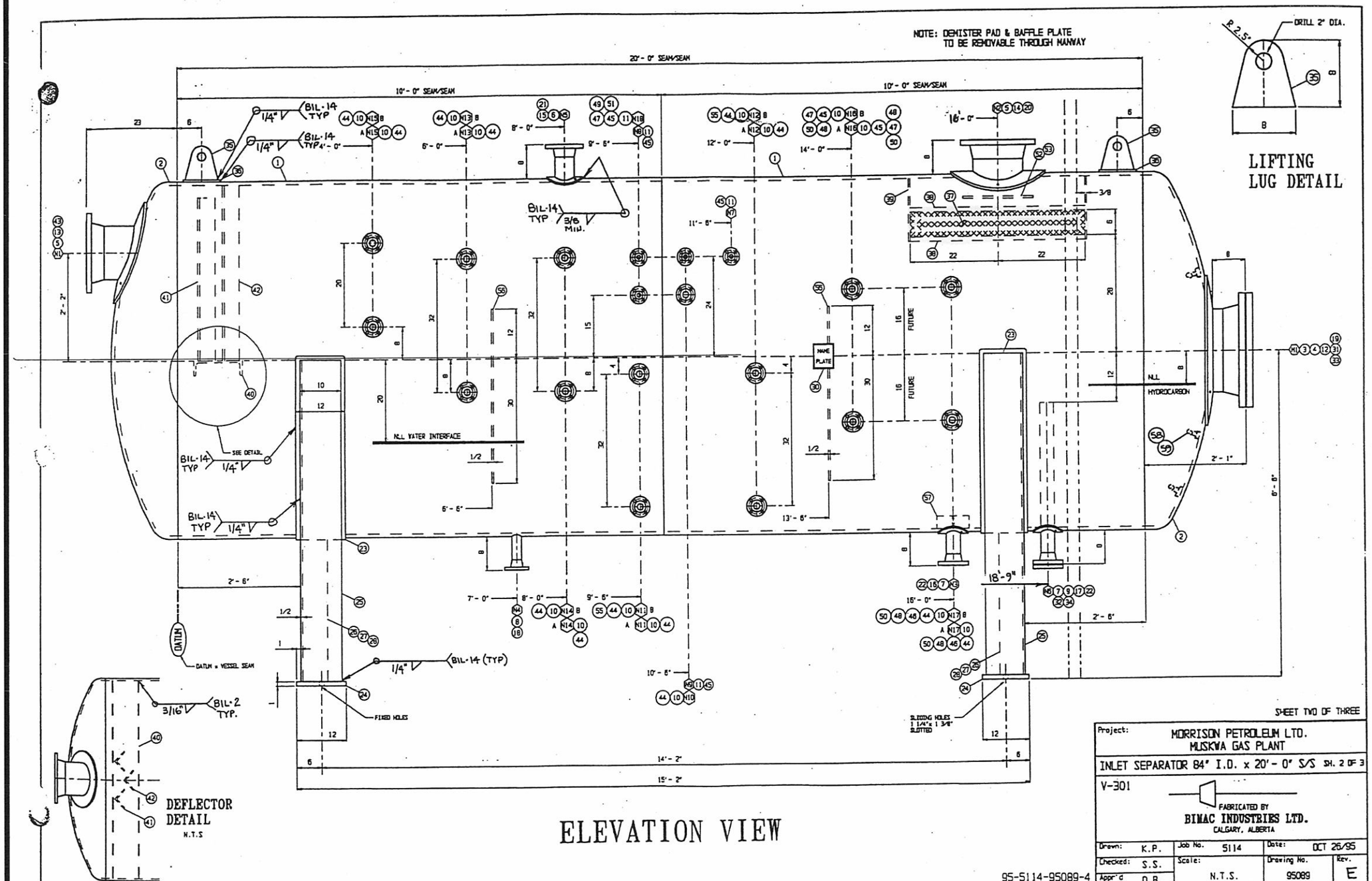
ASME Eng. Per: SHAWN SEITZ, C.E.T. Date: OCT 26/95

Project:
MORRISON PETROLEUM LTD.
MUSKWA GAS PLANT

INLET SEPARATOR 84" I.D. x 20'- 0" S/S
V-301
SHEET ONE OF THREE

Drawn: K.P.	Job No. 5114	Date: OCT 26/95	
Checked: S.S.	Scale: N.T.S.	BIMAC Drawing No. 95089	Rev. E
Appr'd D.B.			

#459



ELEVATION VIEW

LIFTING LUG DETAIL

SHEET TWO OF THREE

Project:	MORRISON PETROLEUM LTD. MUSKWA GAS PLANT
	INLET SEPARATOR 84" I.D. x 20'-0" S/S SH. 2 OF 3
V-301	FABRICATED BY BIMAC INDUSTRIES LTD. CALGARY, ALBERTA

Drawn:	K.P.	Job No.	5114	Date:	OCT 26/95
Checked:	S.S.	Scale:	N.T.S.	Drawing No.	95089
Appr'd	D.B.			Rev.	E

95-5114-95089-4

#459