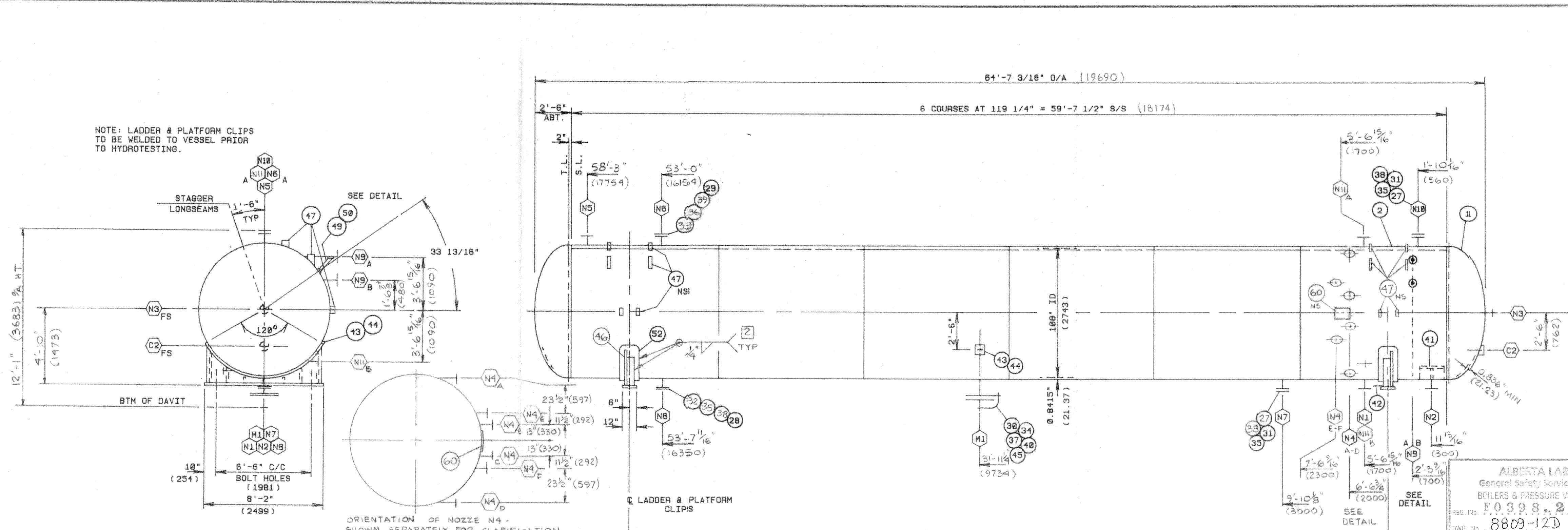


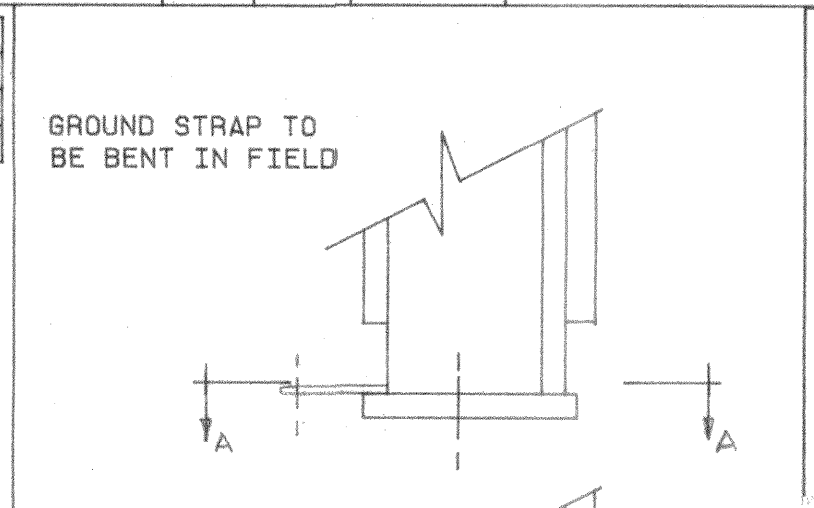
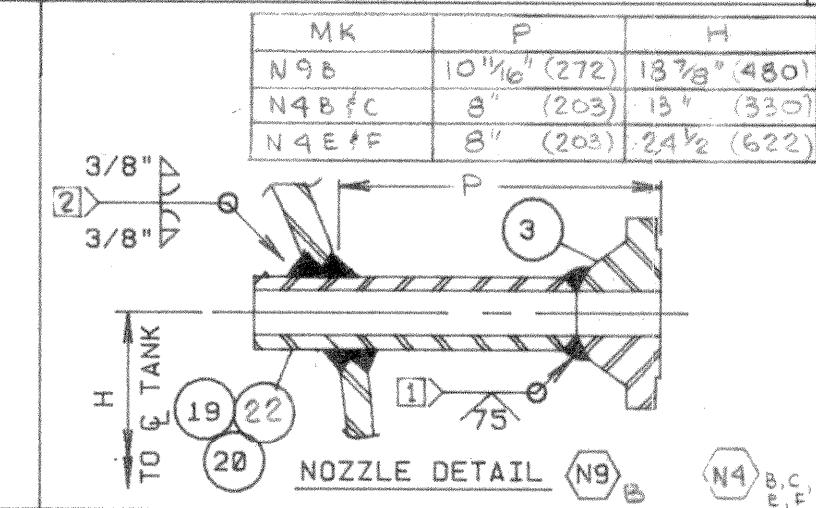


NOTE: LADDER & PLATFORM CLIPS TO BE WELDED TO VESSEL PRIOR TO HYDROTESTING.

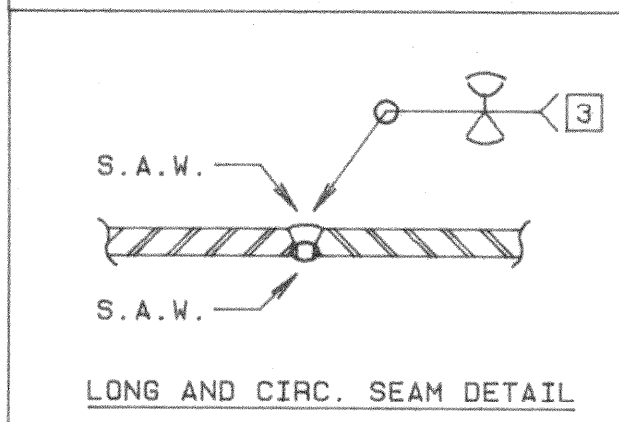
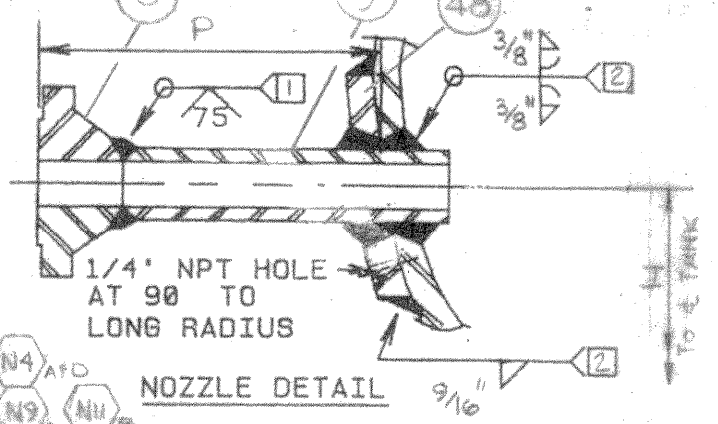
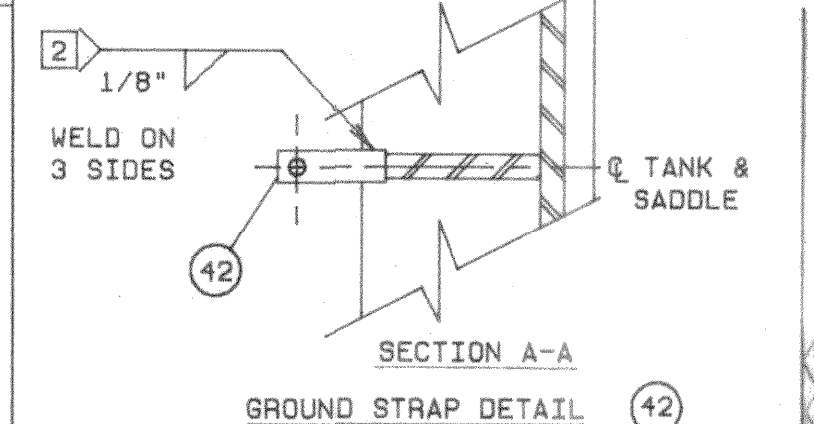
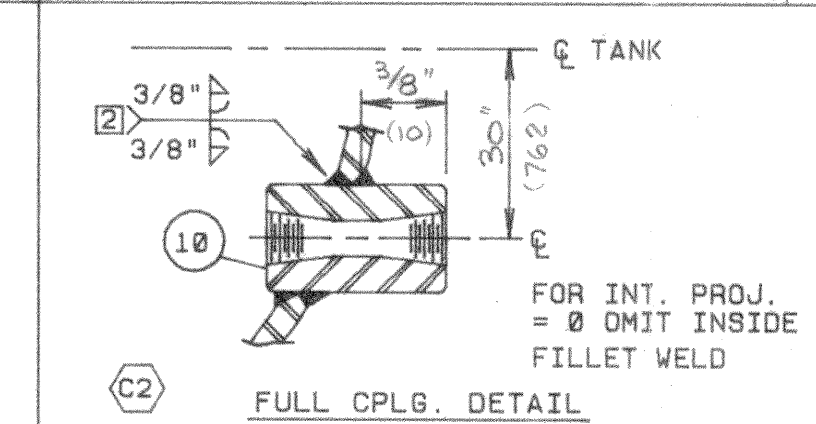
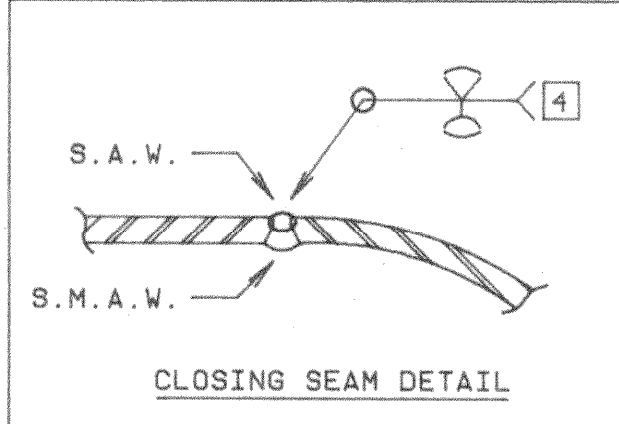
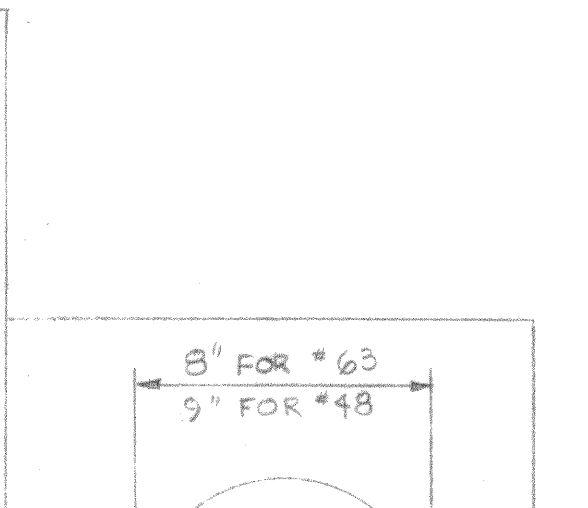
54	1	55600	PL 0.6124" SA516-70 3 1/8" ID x 6 7/8" OD
CONT PAD	52	2	51378 PL 3/8" x 1'-1 1/2" WD x 10'-4" LG SA516-70
N1	51	1	51568 PIPE 6" XS SMLS SA106B x 6 5/16" LG
SUP'T (N9A)	50	1	51448 ANGLE 2" x 2" x 1/4" 44W x 14 3/4" LG
SUP'T (N9A)	49	2	51377 PL 1/4" x 4" x 5" LG SA516-70
N4A#D	48	2	51387 R. 8415" SA516-70 x 9" O.D. (SEE DETAIL FOR I.D.)
CLIPS	47	2	54057 LADDER & PLATFORM CLIPS 108" ID DWG 8511-1008
SADDLES	46	1	58455 SADDLE 108" ID (NO CONTOUR PAD) DWG 8810-13C
M1	45	1	58185 DAVIT 24" CL150 BTM MT DWG 8612-33C
DATA PL	44	1	58077 PL DATA DUAL UNITS METRIC/IMPERIAL DWG 8805-15A
DATA PL	43	1	55884 BRKT DATA PLATE EXT. DWG 8807-82A
G STRAP	42	1	54136 STRAP GROUND FOR PRESSURE VESSEL DWG 8803-1A

54	1	55600	PL 0.6124" SA516-70 3 1/8" ID x 6 7/8" OD
CONT PAD	52	2	51378 PL 3/8" x 1'-1 1/2" WD x 10'-4" LG SA516-70
N1	51	1	51568 PIPE 6" XS SMLS SA106B x 6 5/16" LG
SUP'T (N9A)	50	1	51448 ANGLE 2" x 2" x 1/4" 44W x 14 3/4" LG
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G STRAP	42	1	54136 STRAP GROUND FOR PRESSURE VESSEL DWG 8803-1A

PART	NO	QTY	PART #	DESCRIPTION
1	WP 609.2-S-94			(S.M.A.W.)
2	WP 431.2-S-93			(S.M.A.W.)
3	WP 609.2-S-34			(S.A.W.)
4	WP 609.2-S-92			(S.M.A.W.)

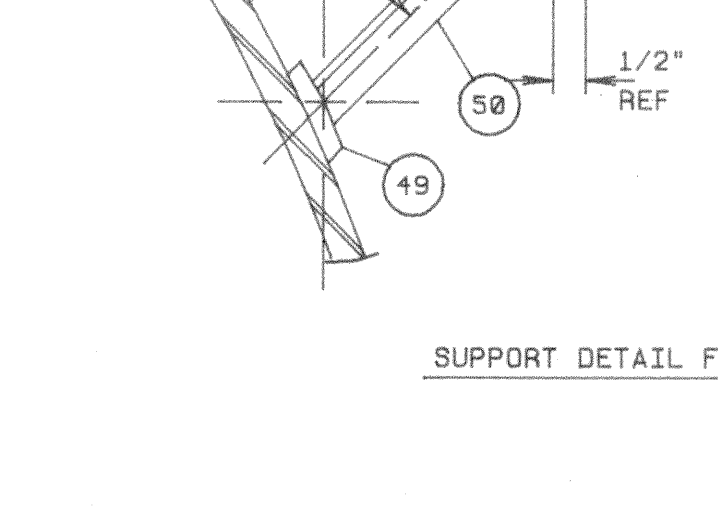
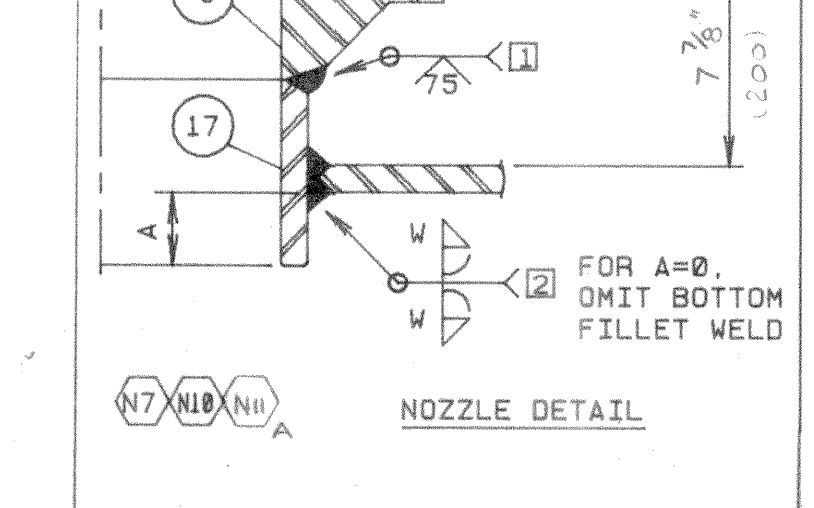
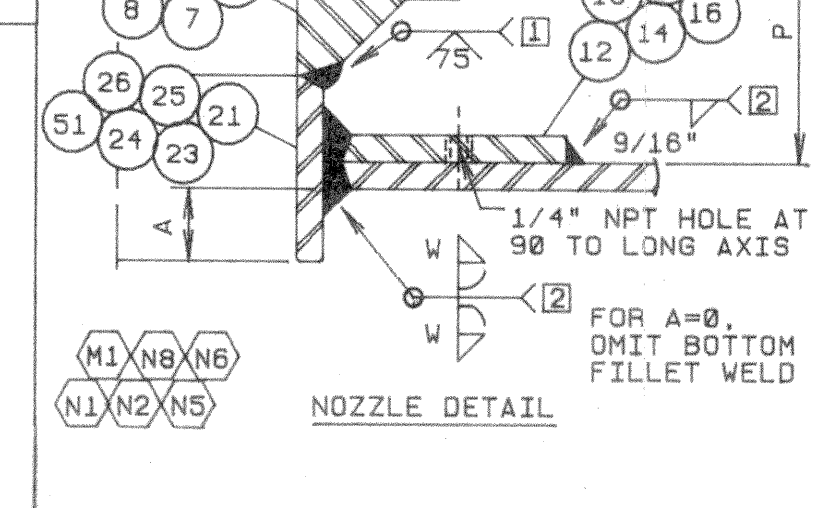
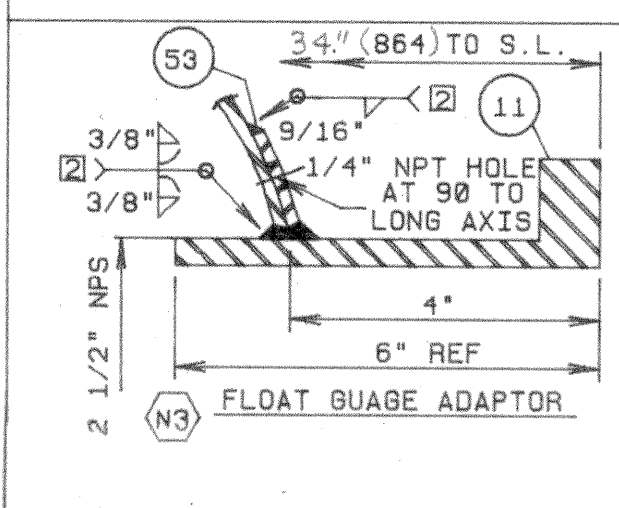
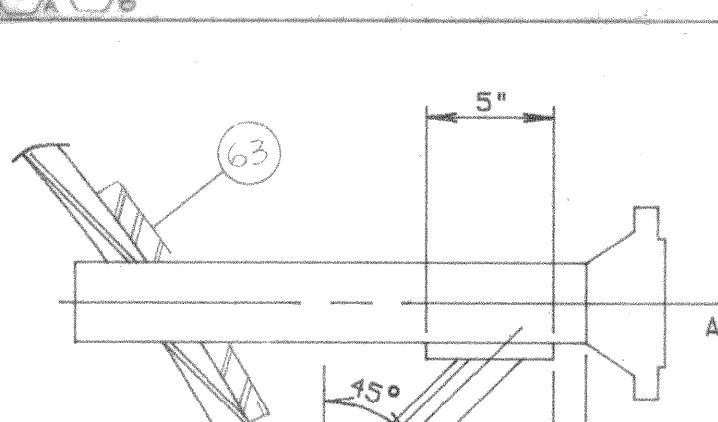


MK	P	H
N4A#D	8" (203)	48" (1219)
N9A	27 3/8" (696)	42 7/8" (1090)
N11B	5" (203)	42 7/8" (1090)



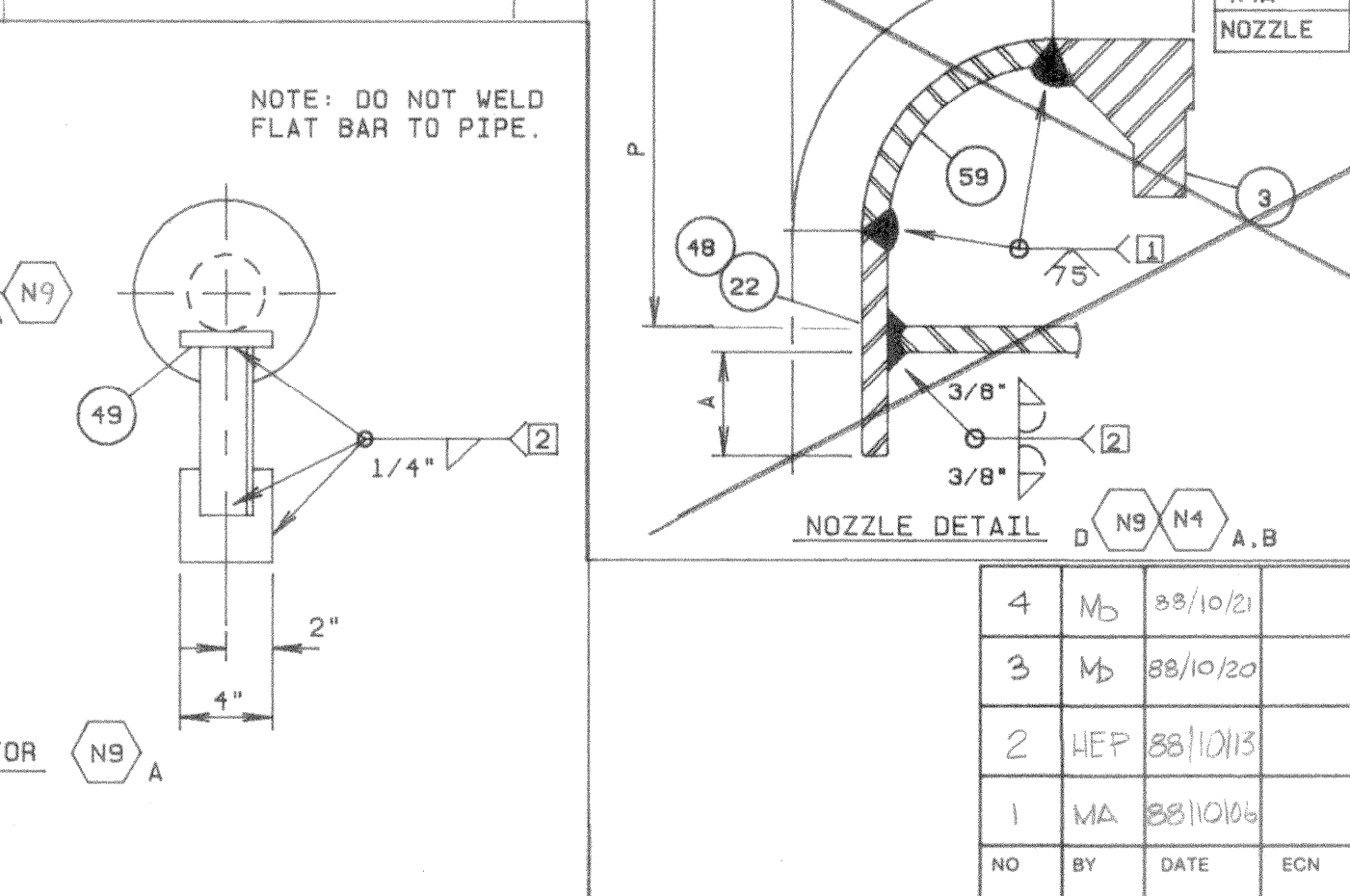
M1 (24")	1 3/4"	3/8"	7 13/16"	(250)	9 3/8"
N8 (3")	0"	5/16"	6"	(200)	7 7/8"
N6 (6")	0"	5/16"	5 5/16"	(200)	7 7/8"
N5 (4")	1"	5/16"	6 3/4"	(200)	7 7/8"
N2 (8")	6"	3/8"	10 7/8"	(200)	7 7/8"
N1 (6")	1"	3/8"	6 5/16"	(200)	7 7/8"
NOZZLE	A	W	PIPE LENGTH	P	

1 7/8"			
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99 1/8"			
100 1/8"			



PART	NO	QTY	PART #	DESCRIPTION
N9, N9, N11	65	10	50395	PROTECTOR FLG 2" CL150 PLASTIC
N5	66	1	50400	PROTECTOR FLG 4" CL300 PLASTIC
N1	67	1	53850	PROTECTOR FLG 6" CL150 PLASTIC
N2	68	1	53851	PROTECTOR FLG 8" CL150 PLASTIC
C2	70	1	18630060	PLUG HEX HEAD 1" SA105
N3	71	1	54079	PROTECTOR PLYWOOD, FLOAT GA ADAPTOR

SHOP NOTES:
1. BOLT HOLES TO STRADDLE NATURAL C. EXCEPT AS NOTED.
2. FLANGE SURFACE TO BE PROTECTED FROM WELD SPATTER.
3. PADS TO BE RADIUS ON ALL CORNERS. ALL INSIDE CONNECTIONS TO BE ROUNDED TO 1/8" R MIN.
4. FOR VESSEL PADS, 1/4" DIA. WEEP HOLE REQ'D 3/4" FROM EDGE ON C. TYPICAL.
5. SERVICE BOLTS & GASKETS NOT TO BE USED FOR HYDROTESTING.
6. AFTER FINAL HYDROTEST, VESSEL TO BE COMPLETELY DRAINED & DRIED PRIOR TO COVERING & PROTECTING ALL OPENINGS.
7. VESSEL TO BE SHIPPED WITH SERVICE BLIND, GASKET, & BOLLING IN PLACE.
8. NO EXPOSED OPENINGS ALLOWED WHILE IN SERVICE OR TRANSIT. ALL FLANGE FACES TO BE PROTECTED. FIT STEEL PLUG IN THREADED CONNECTION AS REQ'D.
9.
10. ALL DRAINS, SPARES, PURGES & VENTS TO BE PLUGGED WITH STEEL PLUGS OR BLIND FLANGES.
11. TAIL DIMENSIONS & OUTSIDE PROJECTIONS FOR OPENINGS ARE IN IMPERIAL, WITH S.I. UNITS IN BRACKETS.
12. CONTOUR PADS TO HAVE 1" RADIUS ON CORNERS.
13. CONTOUR PADS TO BE WELDED TO THE TANK PRIOR TO WELDING TO SADDLE. (FOR EASE OF MANUFACTURING.)
14. FLOAT GAUGE TO BE SHIPPED LOOSE, AND CUSTOMER TO INSTALL IN FIELD.



PART	NO	QTY	PART #	DESCRIPTION
HEAD	1	2	55813	HD 2:1 SE 108" ID x .836 MIN THK 2 S.F. SA516-70
SHELL	2	6	51331	PL .8415" x 119 1/4" WD x 341 5/16" LG SA516-70
N4, N7, N9, N10, N11	3	12	56172	FLG 2" CL150 RFWN XXS BORE SA105
N8	4	1	18650007	FLG 3" CL150 RFWN XS BORE SA105
N5	5	1	53809	FLG 4" CL300 RFWN XS BORE SA105
N1, N6	6	2	55404	FLG 6" CL150 RFWN XS BORE SA105
N2	7	1	56159	FLG 8" CL150 RFWN XS BORE SA105
M1	8	1	56162	FLG 24" CL150 RFWN XS BORE SA105
N4A#D	9	2	51553	PIPE 2" XXS SMLS SA106B x 12 3/16" LG
C2	10	1	54322	CPLG FULL 1" NPT 6000# SA105 (MOD) DWG 8901-7A
N3	11	1	53483	ADAPTOR FLG FLOAT GAUGE 8 HOLES DWG 8411-11A
N8	12	1	51387	PL .8415" SA516-70 3 3/4" ID x 7 1/2" OD
N5	13	1		PL .8415" SA516-70 4 3/4" ID x 8 1/2" OD
N1, N6	14	2		PL .8415" SA516-70 6 7/8" ID x 11 1/2" OD
N2	15	1		PL .8415" SA516-70 8 7/8" ID x 14 1/2" OD
M1	16	1		PL .8415" SA516-70 24 1/4" ID x 46" OD
N7, N10, N11A	17	3	51553	PIPE 2" XXS SMLS SA106B x 7 1/4" LG
N9A	18	1		PIPE 2" XXS SMLS SA106B x 29 13/16" LG
N9B	19	1		PIPE 2" XXS SMLS SA106B x 10 1/2" LG
N4B#C	20	2		PIPE 2" XXS SMLS SA106B x 7 3/4" LG
N8	21	1	51560	PIPE 3" XS SMLS SA106B x 6" LG
N4B#C	22	2	51553	PIPE 2" XXS SMLS SA106B x 8 7/16" LG
N5	23	1	51564	PIPE 4" XS SMLS SA106B x 6 3/4" LG
N6	24	1	51568	PIPE 6" XS SMLS SA106B x 5 5/16" LG
N2	25	1	51571	PIPE 8" XS SMLS SA106B x 10 7/8" LG
M1	26	1	56163	PIPE 24" XS SMLS SA106B x 7 13/16" LG
N7, N10	27	2	50634	GASKET FLEXITALLIC 2" CL150
N8	28	1	55860	GASKET FLEXITALLIC 3" CL150
N6	29	1	56185	GASKET FLEXITALLIC 6" CL150
M1	30	1	55517	GASKET FLEXITALLIC 24" CL150
N7, N10	31	2	51641	FLG BLIND 2" CL150 RF SA105
N8	32	1	51643	FLG BLIND 3" CL150 RF SA105
N6	33	1	55408	FLG BLIND 6" CL150 RF SA105
M1	34	1	56009	FLG BLIND 24" CL150 RF SA105
N8	35	4	51720	STUD 5/8" NC X 3 3/4" LG SA193-B7
N6	36	8	17110009	STUD 3/4" NC X 4" LG SA193-B7
M1	37	20	51727	STUD 1 1/4" NC X 7" LG SA193-B7
N7, N8, N10	38	24	51710	NUT HEX 5/8" NC SA194-2H
N6	39	16	17110008	NUT HEX 3/4" NC SA194-2H
M1	40	40	51712	NUT HEX 1 1/4" NC SA194-2H
N2	41	1	56164	VORTEX BREAKER 8" SA36 DWG 8212-8B

ITEM NO.	MK	NO	REQD	SIZE	RATING	TYPE	BORE	FLANGE MATERIAL	NECK MATERIAL	SERVICE
6.14.51.67	N1	1		6"	CL150	RFWN	XS	SA105	SA106B	INLET
7.15.25.41.68	N2	1		8"	CL150	RFWN	XS	SA105	SA106B	OUTLET C/V VORTEX BREAKER
11.53.4.8.71	N3	1		2 1/2"	8 HOLE	ADAPTOR		CRN 83620.2	DWG 8411-11A	FLOAT GAUGE
8.9.20.22.48.65	N4	6		2"	CL150	RFWN	XXS	SA105	SA106B	L.G.
5.13.23.66	N5	1		4"	CL300	RFWN	XS	SA105	SA106B	RELIEF
6.14.24.29.30.36.38	N6	1		6"	CL150	RFWN	XS	SA105	SA106B	VENT C/W BLIND
3.17.27.31.61.63	N7	1		2"	CL150	RFWN	XXS	SA105	SA106B	SPARE C/W BLIND
4.12.21.28.32.35.38	N8	1		3"	CL150	RFWN	XS	SA105	SA106B	DRAIN C/W BLIND
3.18.19.63.65	N9	2		2"	CL150	RFWN	XXS	SA105	SA106B	HLSD
9.17.27.31.61.63	N10	1		2"	CL150	RFWN	XXS	SA105	SA106B	VENT C/W BLIND
6.16.26.38.41.51.58.65	M1	1		24"	CL150	RFWN	XS	SA105	SA106B	HANWAY C/W BLIND & DAVIT
3.17.27.31.61.63	N11	2		2"	CL150	RFWN	XXS	SA105	SA106B	L.T.
10.70	C2	1		1"	6000#	F CPLG		SA105		T.I.

DESIGN DATA

CODE ASME SEC	VIII DIV I EDN 86	87 ADDENDA	SYMBOL UWI2	(1)(a)	
MWP	250 PSIG (1724 KPa)	PSIG	Diam	108" ID x 84'-7 1/2" LG (2743 ID x 19696 LG)	
Design Temp	115 (46 C)	F	Capacity	4004 FT ³ (113.41 M ³)	
Corr Allow: Head	.0625" (1.6 mm)	Shell	.0625" (1.6 mm)	Head Type	2:1 SE
Radiographed: Head	SMLS	Shell	LONG: FULL CIRC. UWI15.5b	Head Material	SA516-70
Joint Eff Head	100	% Shell	100	% Head Thickness	0.836" MIN. (21.23)
Stress Relieved	NO			Shell Material	SA516-70
Hydro Test New & Cold	375 PSIG (2586 KPa)			Shell Thickness	0.8415" (21.37)
Hydro Test Limited By	SHELL & HEAD			Studs	SA193-B7 Nuts SA194-2H
SURFACE AREA	1904 SQ FT (176 SQ M)			MW Gaskets	FLEXITALLIC
Sandblast	SSPC-SP6			Flanges & Pipes See Sched & Dwg	
Paint	1.5-2.0 MILS ZINC CHROMATE PRIMER 3.0-5.0 MILS WHITE ENAMEL FINISH			Support Mtl - See Dwg	8410-7C
Est Shipping Weight	67,600 LBS (30679 KG)			Reinforcing Mtl	SA516-70
CR No	F398.2			DMT = 20 F AT 250 PSI	

WESTERN ENGINEERING DEPT. OCT 26 1988 ISSUED

30,000 USWG 108" ID STORAGE VESSEL - ESSO RES. SUNDANCE GAS PLANT

OWN	HEP	CHK	MA	DATE	88-09-12	DRAWING NO	8809-12D	REV	4
PROJ	21-3427			SCALE	7/32" = 1'-0"	DETAILS	NTS		
NO	BY	DATE	ECN	REVISIONS					
4	Mb	88/10/21		NOZZLE N4 WAS ON FAR SIDE, TAIL DIM'S WERE IN METRIC					
3	Mb	88/10/20		AS PER CUSTOMER MARK-UP					
2	HEP	88/10/13		AS PER CUSTOMER SPECS					
1	MA	88/10/06		AS PER CUSTOMER SPECS					

PIN 16430043