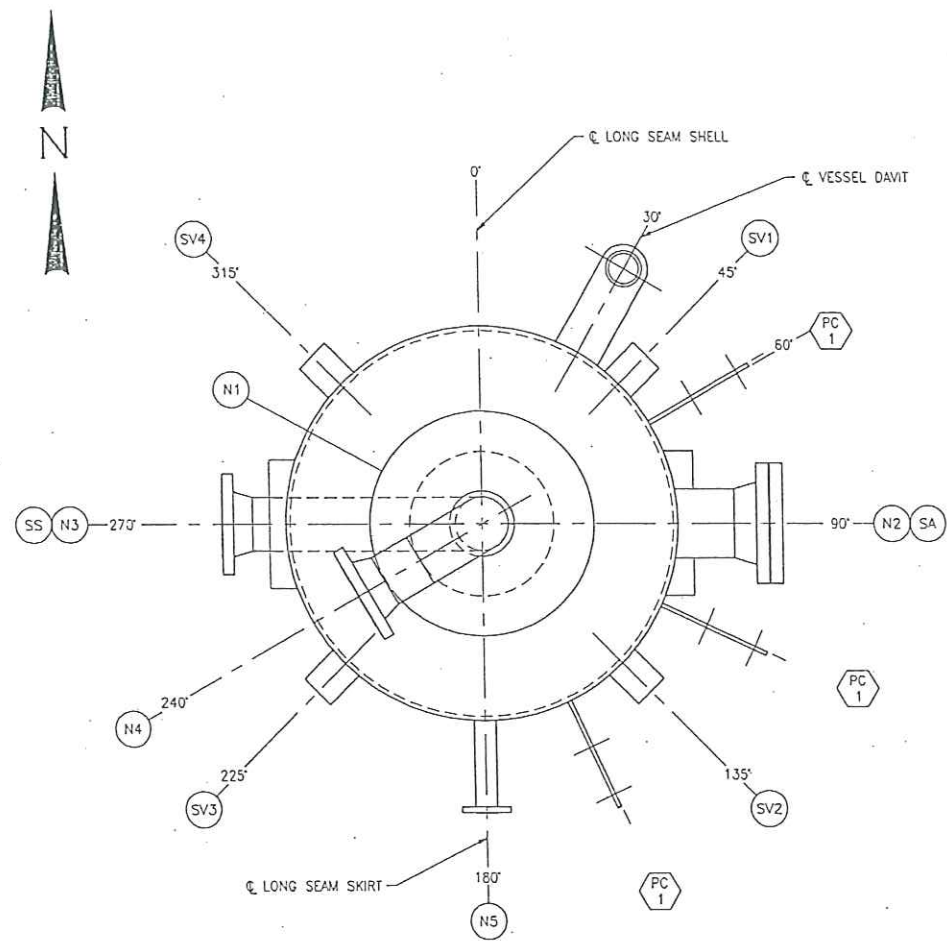
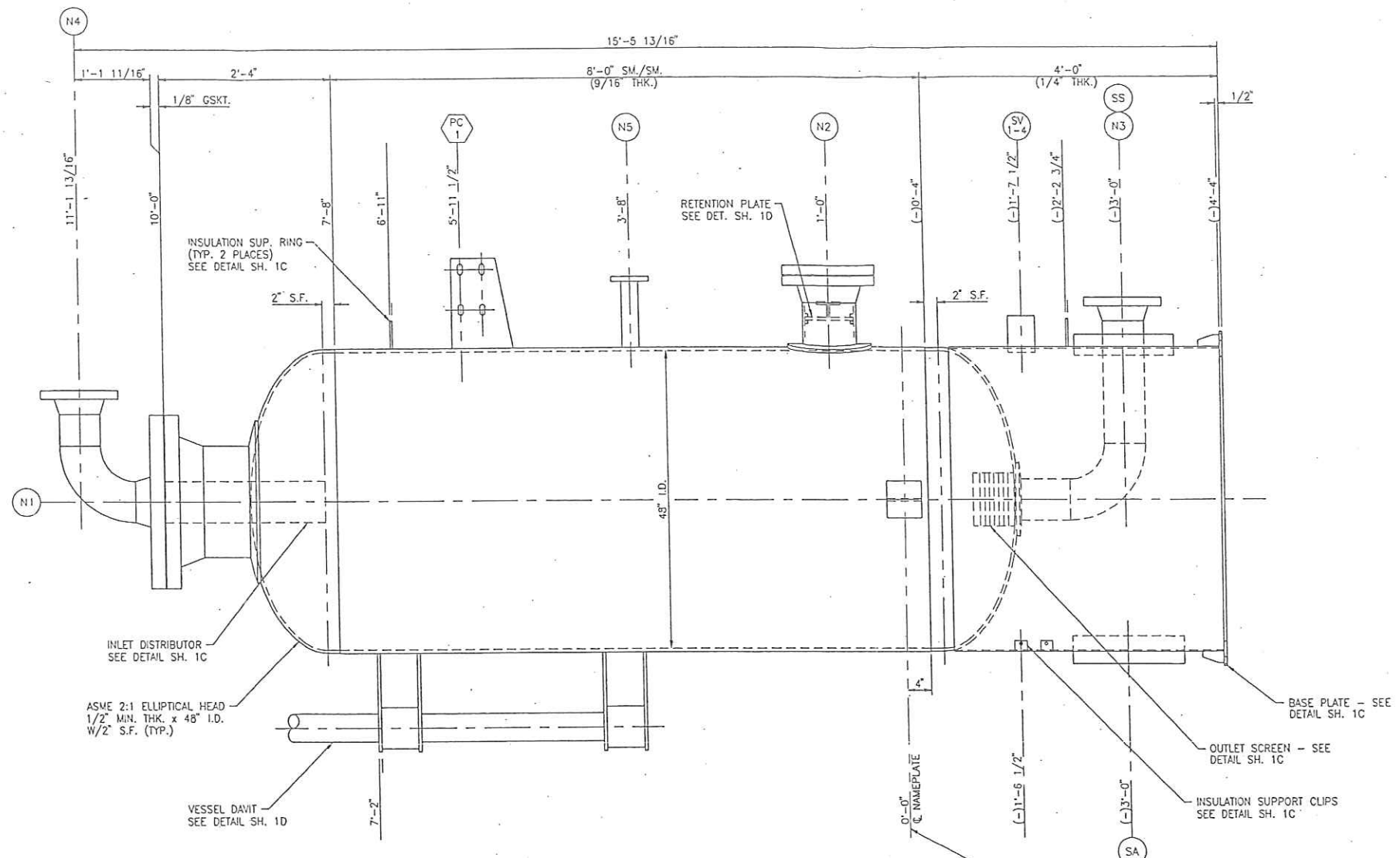


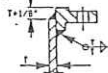
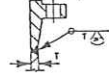
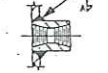
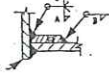
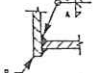
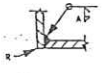
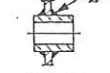
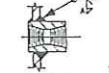
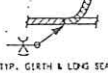
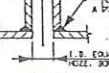


ORIENTATION



ELEVATION
(DIAGRAMATIC ONLY)

WORKLINE:
ALL ELEVATION DIMENSIONS
ARE FROM THIS LINE

SV1-4	4	SKIRT VENT	4.00	--	PIPE	4.02	.237	24	SA106-B	--	--	5	.625	7	--	.25	--	.25	--																																																																																																																																																																																																																												
SS	1	SKIRT SLEEVE	16.00	--	PIPE	15.25	.375	3.375	SA106-B	--	--	2	1.125	7	--	.25	--	.25	--																																																																																																																																																																																																																												
SA	1	SKIRT ACCESS	18.00	--	PIPE	17.25	.375	4.5	SA106-B	--	--	2	2.25	7	--	.25	--	.25	--																																																																																																																																																																																																																												
N5	1	SAMPLE	1.50	0300	RFLN	1.50	0.625	14	SA105	--	--	11.5	.50	5	--	.375	--	.25	--	CONSTR. NOTE 17																																																																																																																																																																																																																											
		INLET	6.00	0300	RFLN	5.76	.432	9	SA106-B	--	--	SEE DETAIL	--	2	--	--	--	--	--	CONSTR. NOTE 17																																																																																																																																																																																																																											
		OUTLET	6.00	0300	RFLN	5.76	.432	33	SA106-B	0.562x11.63	SA516-70	SEE DETAIL	GRND FLUSH	2	8	.375	.375	--	--	CONSTR. NOTE 17																																																																																																																																																																																																																											
		CATALYST DUMP	8.00	0300	RFLN	7.81	.406	9	SA106-B	0.562x13.63	SA516-70	11.5	FLUSH	2	8	.375	.438	--	--	CONSTR. NOTE 16 & 17																																																																																																																																																																																																																											
		CATALYST-FILL/MANWAY	18.00	0300	RFLN	16.87	.562	10	SA106-B	0.562x26.00	SA516-70	SEE ELEV.	SET FLUSH	2	8	.375	.438	--	--	CONSTR. NOTE 15 & 17																																																																																																																																																																																																																											
NO.	SERVICE		SIZE	RATING	TYPE	BORE	WALL	LG.	MAT'L.	OD & THK.	MAT'L.	O.S.	I.S.	WELD DETAIL		WELD SIZE			REMARKS																																																																																																																																																																																																																												
										REINFORCING PAD		PROJECTION		WELD DETAIL		WELD SIZE																																																																																																																																																																																																																															
																																																																																																																																																																																																																																															
																				FIGURE NO. 1																				FIGURE NO. 2																				FIGURE NO. 3																				FIGURE NO. 4																				FIGURE NO. 5																				FIGURE NO. 6																				FIGURE NO. 7																				FIGURE NO. 8																				FIGURE NO. 9																				FIGURE NO. 10																				FIGURE NO. 11																			

REVISIONS			
NO.	DESCRIPTION	BY	CHK
0	ISSUED FOR FABRICATION	LT	CK
1	ADDED PLATFORM CLIPS	LT	CK
2	ADDED NB & SERIAL NO.	LT	CK

REFERENCE DRAWINGS	
NUMBER	DESCRIPTION
D54V001A	GENERAL NOTES
D54V001C	MISCELLANEOUS DETAILS
D54V001D	VESSEL DAVIT & RETENTION PLATE

DESIGN DATA	
DESIGN PER ASME SEC. VIII DIV. 1 1992	STAMP APPLIED YES
SERIAL NO. 2827	NATIONAL BD. NO. 1390
DESIGN PRESS. 185 PSIG @ 800 °F EXT. - PSIG @ - °F	
OPER. PRESS. 157 PSIG @ 750 °F EXT. - PSIG @ - °F	
MAX PRESS. COR. 204 PSIG @ 800 °F LTD. BY SHELL	
MAX PRESS. NEW - PSIG @ - °F LTD. BY -	
MIN. DESIGN METAL TEMPERATURE OF F. PER UG-203	
CORROSION ALLOWANCE: HDS 1/16" SHELL 1/16" NOZZ. 1/16"	
MAX. ALLOW. STRESS @ 800 °F HDS. 12000 SHELL 12000	
HYDRO PRESSURE INTERNAL 427 STRESS MULTIPLIER 1.359	
RADIOGRAPHY: HEADS SPOT SHELL SPOT	
JOINT EFF.: HEAD LONG SEAM SMLS SHELL LONG SEAM 85%	
HEAD CIR. SEAM N.A. SHELL CIR. SEAM 85%	
FLANGE RATING 300 COUPLING RATING 3000	
SHELL MATL. SPEC. SA516-70 HEAD MATL. SPEC. SA516-70	
FLANGE MATL. SPEC. SA105 CPLG. MATL. SPEC. SA105	
PIPE MATL. SPEC. SA105-B BW FIT. MATL. SPEC. SA234-WPB	
REPAD MATL. SPEC. SA516-70 STRUC. MATL. SPEC. SA336	
RF GSK. MATL. SPEC. 304 SS FLG. STUD SPEC. SA193-B7	
RJ GSK. MATL. SPEC. FLG. NUT SPEC. SA194-2H	
RF GSK. DESC. 1/8" FLEXITALLIC W/304SS FLEXITE SUPER OR EQ. FILLER	
RJ GSK. DESC.	
POST WELD HEAT TREAT NO	
WIND CODE ANSI/ASCE 7-88 SEISMIC CODE ANSI/ASCE 7-88 (ZONE 3)	

CUSTOMER COMMENTS STAMP

107489

Howe-Baker Engineers, Inc.
TYLER, TEXAS

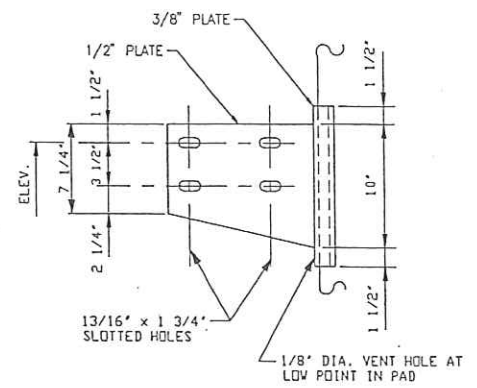
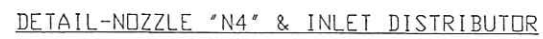
THIS DRAWING AND ALL DESIGN DETAILS AND DATA HEREON IS THE SOLE PROPERTY OF HOWE-BAKER ENGINEERS, INC. OF TYLER, TEXAS, AND SHALL NOT BE REPRODUCED IN ANY MANNER, OR USED FOR ANY PURPOSE WHATSOEVER, EXCEPT BY WRITTEN PERMISSION OF HOWE-BAKER ENGINEERS, INC.

DESCRIPTION
DESULFURIZER V-101
48" I.D. x 8'-0" SM./SM.

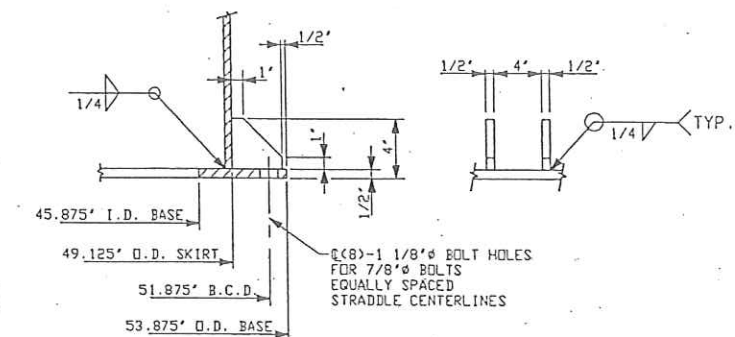
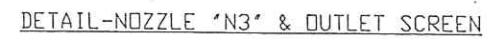
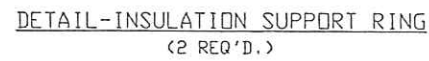
CUSTOMER
NUCOR CORP.
LISAS BAY TRINIDAD

SCALE: 1" = 1'-0" W.O. NO.
DRAWN LT 4-8-93 MRP NO.
CHECK CK 5-6-93 DWG. NO.
APVD TAS 5-6-93 D54V001B 2

[illegible]



DETAIL-PLATFORM CLIPS
(CLIPS MARKED 'PC-1')
(3 REQ'D.)



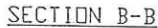
DETAIL-BASE PLATE



REVISONS					
NO.	DESCRIPTION	BY	CHK	APV	DATE
0	ISSUED FOR FABRICATION	LT	CK	TAS	5-6-93
1	ADDED PLATFORM CLIP DETAIL & REF. MATERIAL DESCRIPTION	LT	CK	TAS	8-13-99

REFERENCE DRAWINGS	
NUMBER	DESCRIPTION
D54V001A	GENERAL NOTES
D54V001B	ELEVATION AND ORIENTATION
D54V001D	VESSEL DWT & RETENTION PLATE

DESIGN INFORMATION	
DESCRIPTION	DETAILS
DESULFURIZER V-101 48" I.D. x 8'-0" SM./SM.	
CUSTOMER	
NUCOR CORP. LASAS BAY TRINIDAD	
SCALE: NONE	
DRAWN LT 4-26-93	W.O. NO. NONE
CHECK CK 5-6-93	MRP NO. NONE
APVD TAS 5-6-93	DWG. NO. D54V001C
	REV. 1



REVISIONS					
DESCRIPTION		BY	CHK	APV	DATE
0	ISSUED FOR FABRICATION	LT	CK	TAS	5-6-93
1	REVISED TITLE BLOCK	LT	CK	TAS	8-13-93

REFERENCE DRAWINGS	
NUMBER	DESCRIPTION
D54V001A	GENERAL NOTES
D54V001B	ELEVATION AND ORIENTATION
D54V001C	MISCELLANEOUS DETAILS

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 TYLER, TEXAS

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DESCRIPTION
 DESULFURIZER V-101
 48" I.D. x 8'-0" SM./SM.

CUSTOMER
 NUCOR CORP.
 LISAS BAY TRINIDAD

SCALE : NONE	W.O. NO. NONE
DRAWN LT 4-26-93	MRP NO. NONE
CHECK CK 5-6-93	DWG. NO.
APVD TAS 5-6-93	D54V001D

REV. 1