

**EST. WEIGHTS & CAPACITY**

EMPTY WEIGHT	17,100	LBS.
LIFT WEIGHT	17,100	LBS.
HYDRO WEIGHT	127,000	LBS.
CAPACITY	13,120	GALS.
INSULATION	3,524	LBS.

**WORKLINE**  
ALL DIMENSIONS ARE MEASURED FROM THIS LINE UNLESS NOTED OTHERWISE.

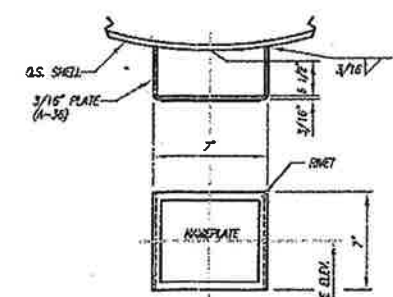
**PLAN**  
(STIFFENER RINGS NOT SHOWN FOR CLARITY)

**ELEVATION**  
SEE PLAN FOR TRUE ORIENTATION

- GENERAL NOTES:**
- 1) FLANGE BOLT HOLES TO STRADDLE VESSEL CENTERLINES UNLESS NOTED OTHERWISE.
  - 2) DRILL & UP 1/4" TOLERABLE HOLE IN REINFORCING PAD.
  - 3) OUTSIDE PROJECTION SHOWN IN THE HOZZLE SCHEDULE IS MINIMUM ONLY. INSIDE PROJECTION SHOWN IN THE HOZZLE SCHEDULE IS MAXIMUM ONLY. ALL HOZZLES SHALL BE ADEQUATELY PROTECTED AND COVERED FOR SHIPMENT. A MINIMUM OF (2) 3/8" DIA. BOLTS FOR 1/2" AND SMALLER AND (3) 3/4" DIA. BOLTS FOR LARGER FLANGES.
  - 4) VESSEL TO BE DEWATERED, DRYED AND CLEANED BEFORE SHIPMENT.
  - 5) ALL FLANGE FACE FINISHES ARE TO BE 125-250 RA.
  - 6) PART OF STENCIL P.L. NUMBER & ITEM NO. WITH 8" HIGH LETTERS ON ON SIDE OF VESSEL.
  - 7) BLANDED CONNECTORS FINISHED WITH BLAD FLANGE, STUBS, NUTS AND (2) GASKETS.
  - 8) VESSEL LIFT WEIGHT DOES NOT INCLUDE INSULATION.
  - 9) P.T. LIFTING LOSS.
  - 10) ALL PRESSURE CONTAINING WELDS SHALL BE GROUDED SECTION BY SECTION DISCONTINUITIES SUCH AS UNDERLAPPING AND OVERLAPPING OF THE WELD GEOMETRY.
  - 11) WRP LIMITED BY SHELL.

**ITEMS VS-4301**

PCN	61310-4500140663
SHELL THICKNESS	3/8"
HEAD THICKNESS	.5825" MIN.
WT EMPTY	17,100 LBS
MAX HYDRO PRESS	72



**83**

CERTIFIED BY  
SPECIALTY PROCESS FABRICATORS, INC.

SHELL MAWP	55	PSIG AT	500	°F
SHELL MAEP	15	PSIG AT	500	°F
SHELL WMT	-5	°F AT	55	PSIG

SERIAL **XX 102** YEAR BUILT **2007**

**Specialty Process Fabricators, Inc.**  
VICKSBURG MS 39183

**SPECIFICATIONS**

CONSTRUCTION CODE	ASME CODE SECTION VIII DIV. 1 2004 EDITION, 2005 ADDENDA
YEAR BUILT	2007
SERIAL NO.	XX
DESIGN PRESSURE INTERNAL	50
DESIGN PRESSURE EXTERNAL	15
HYDRO PRESSURE INTERNAL	72 PSIG
CORROSION ALLOWANCE	0.100"
RADIOGRAPHY	NONE
SHELL MATL. SPEC.	SA-516-70
FLANGE MATL. SPEC.	SA-105
PIPE MATL. SPEC.	SA-105-B
REPAID MATL. SPEC.	SA-516-70
WMT.	-5 F
NATIONAL B.D. NO.	LATER
PSIG @ TEMP.	-5/500 °F MIN/MAX
PSIG @ TEMP.	-5/500 °F MIN/MAX
J.E. SHELL	702
J.E. HEADS	702
STRESS RELIEVE	NONE
HEAD MATL. SPEC.	SA-516-70
CLPG. MATL. SPEC.	SA-105
BN P.T. MATL. SPEC.	SA-234-MF8
STRUC. MATL. SPEC.	A-36
FLD. STUB SPEC.	SA-105-B7
FLD. NUT SPEC.	SA-194-2H

GASKET DESG. ORGALDIX 3000L PTFE OR EQUAL OR EPDM

INSULATION DESG. 4" THK

INSPECTION BY NSB CO. & CUSTOMER

SANDBLAST PER SSPC-SPE (COMMERCIAL BLAST)

PAINT PRIME COAT WITH AMERON DIAMETOCOTE 9 (2-5 MILS)

MARK NO.	SERVICE	SIZE	RATING	TYPE	FLANGE	WALL	LO.	NECK	MATL.	TRK. X HD.	MATL.	O.S.	I.S.	WELD DETAIL	WELD SIZE	NOTES
6	PSY	5"	1500	RFSD	SA-105	5/160			SA-105-B	1/2" x 2"	SA-516-70	SEE ELEV.	FLUSH	M	W	7/16" 1/4" 1/4"
FL/6	TE7I	3/4"	30000	HALF CPLG. THD	SA-105							FLUSH	X			1/4"
E	PI	1/2"	60000	HALF CPLG. THD	SA-105							FLUSH	X			3/16"
D1/2	PLPT	2"	1500	RFSD	SA-105	5/160			SA-105-B		6"	FLUSH	B	W	5/16" 3/16"	
C	VAPOR OUTLET	16"	1500	RFSD	SA-105	2/AS			SA-105-B	2/8" x 3"	SA-516-70	SEE ELEV.	FLUSH	M	W	1/2" 3/8" 3/8"
B	VAPOR INLET	24"	1500	RFSD	SA-105	2/AS			SA-105-B	3/8" x 4"	SA-516-70	SEE ELEV.	FLUSH	B	W	1/2" 3/8" 3/8"
A	MANWAY	24"	1500	RFSD	SA-105	2/AS			SA-105-B	3/8" x 3"	SA-516-70	10"	FLUSH	B	W	1/2" 3/8" 3/8" W/ BLD, GASKET, BOLTING & DWGT *

REVISION	DESCRIPTION	BY	CHK	DATE
B	ISSUED FOR APPROVAL	GS	DM	7/12/07
O	ISSUED FOR CONSTRUCTION	BD	BD	8/17/07

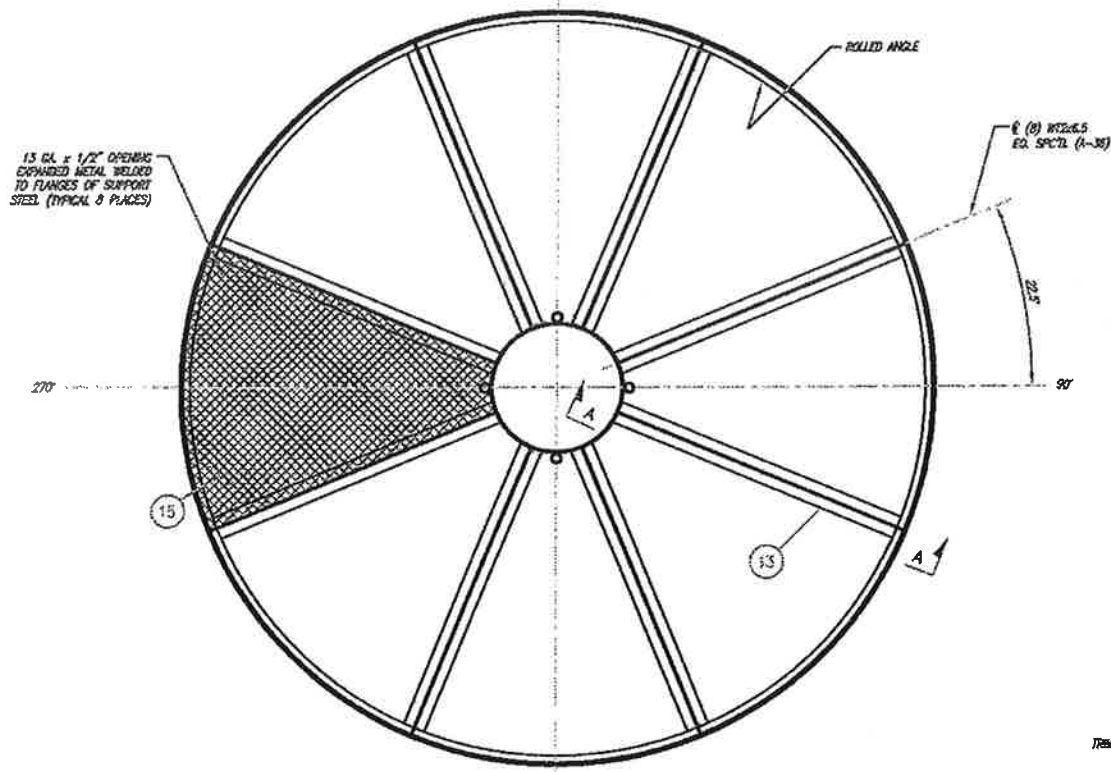
**NOTICE**

THIS DRAWING IS THE PROPERTY OF SPECIALTY PROCESS FABRICATORS, INC. AND IS TO BE USED ONLY FOR THE PROJECT AND VESSEL IDENTIFIED HEREON. ANY REUSE OR REPRODUCTION OF THIS DRAWING WITHOUT THE WRITTEN PERMISSION OF SPECIALTY PROCESS FABRICATORS, INC. IS STRICTLY PROHIBITED. ALL DIMENSIONS ARE TO BE UNLESS OTHERWISE NOTED.

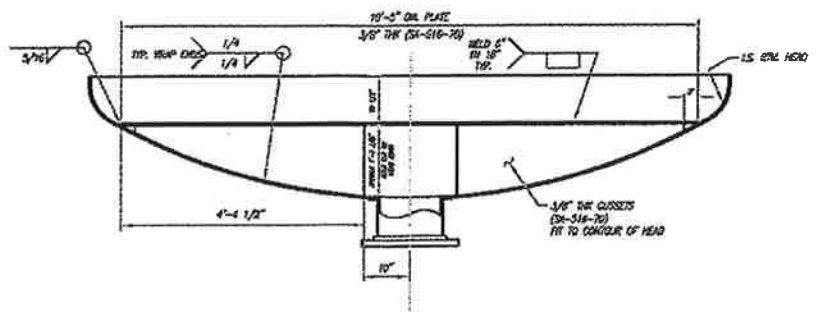
DESCRIPTION: **138" I.D. x 14'-1" SEAM / SEAM MOLECULAR SIEVE BED #1**  
ITEM NO.: VS-4301  
SPECFAB JOB # 2007119

CUSTOMER: **BUNGE - ERGON VICKSBURG, MS.**

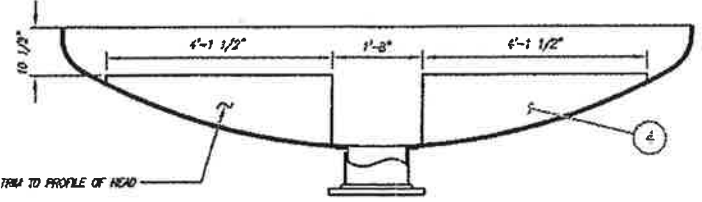
SCALE: N.T.S. DATE: P.O. No.: 61310-4500140663  
DRAWN: FILE No.: 2007119  
CHECK: DWG. NO. SHEET NO. REV. 1 OF 6  
APVD: V-074-110 0



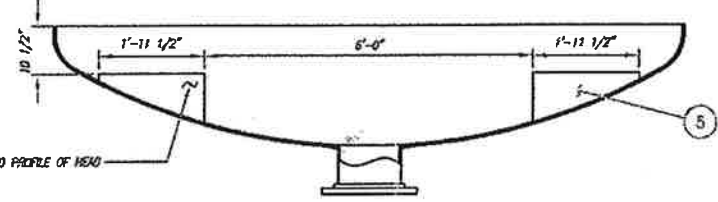
SIEVE UPPER DECK PLAN "B-B"



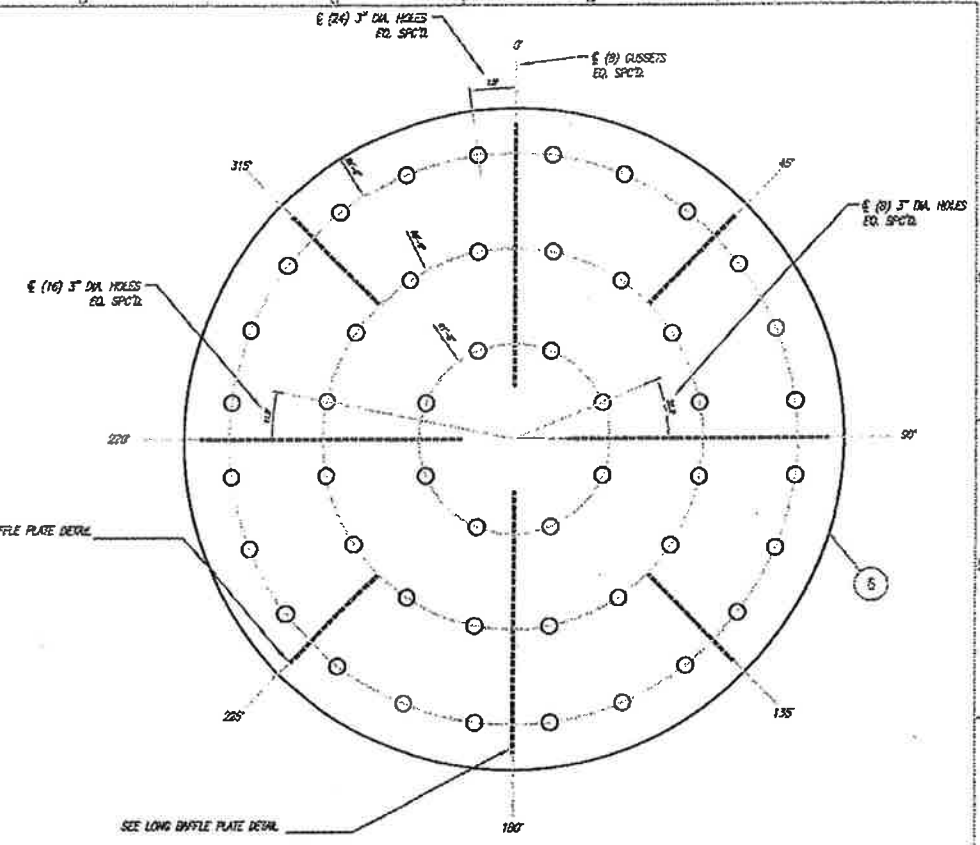
DISTRIBUTION PLATE DETAIL



LONG BAFFLE DETAIL



SHORT BAFFLE DETAIL



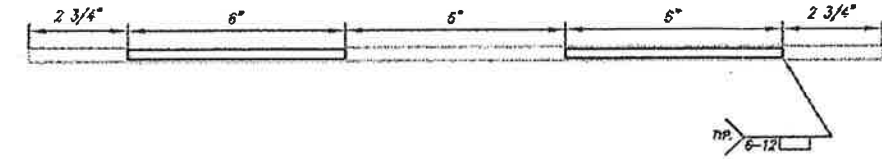
DISTRIBUTION PLATE PLAN



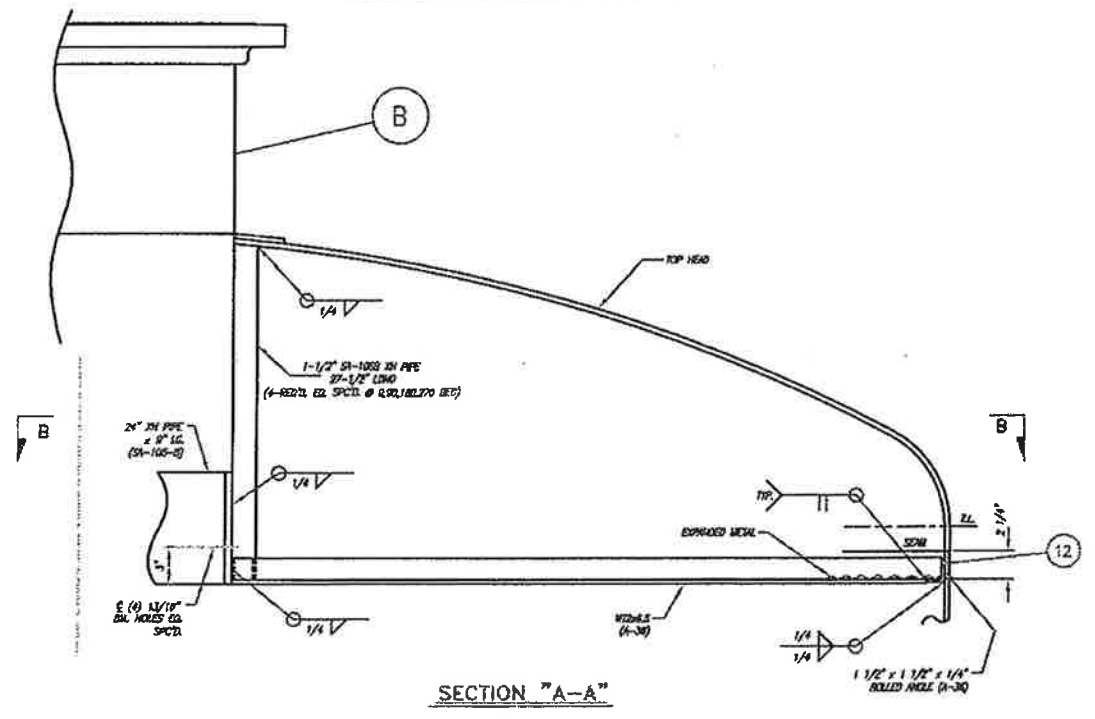
LONG BAFFLE PLUG WELD DETAIL



TYP SLOT DETAIL



SHORT BAFFLE PLUG WELD DETAIL

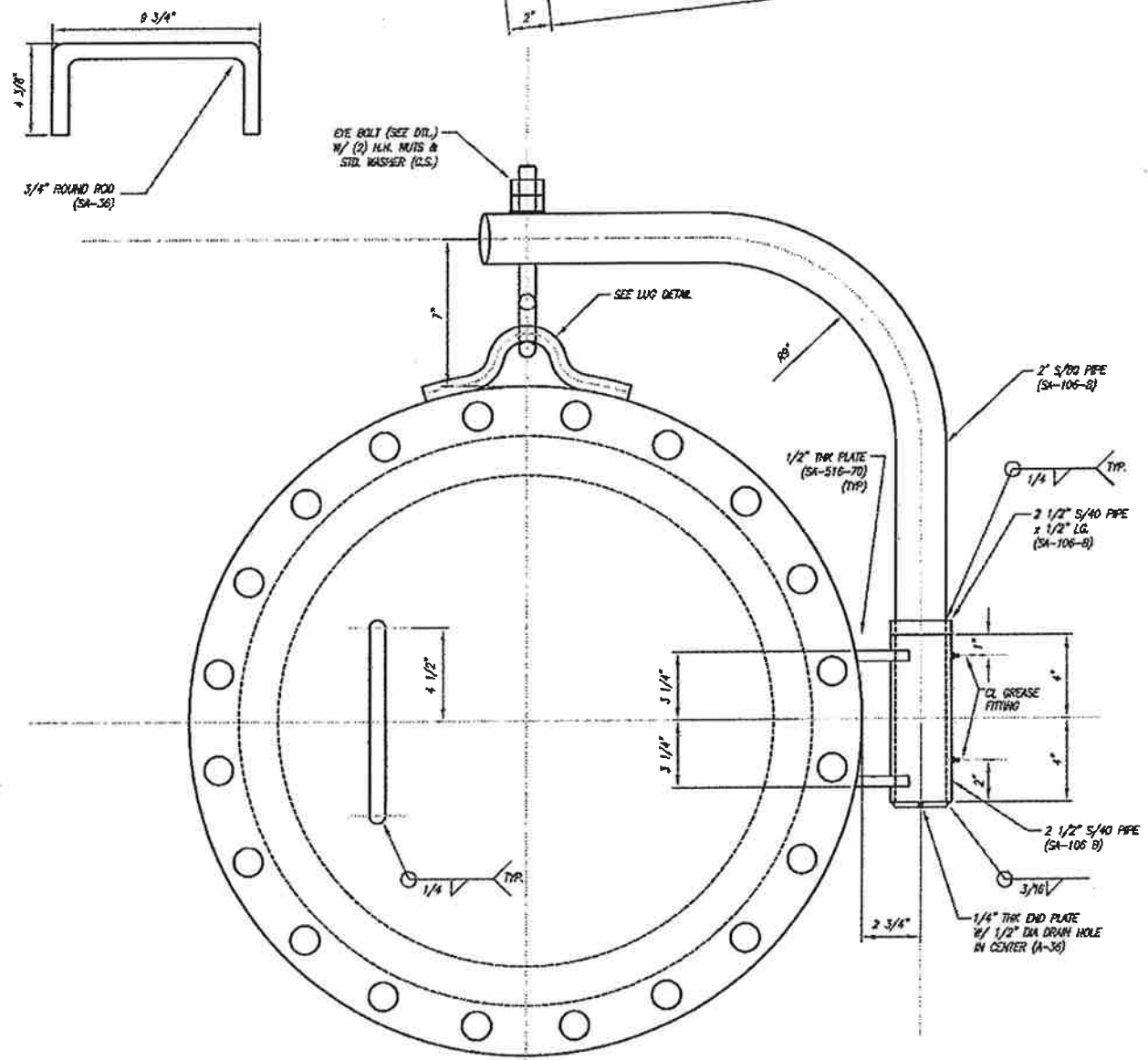
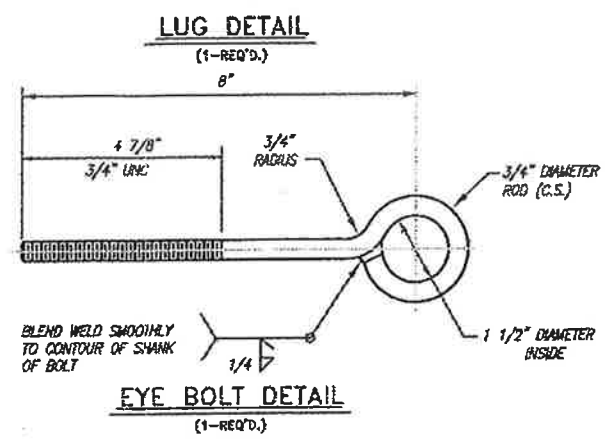
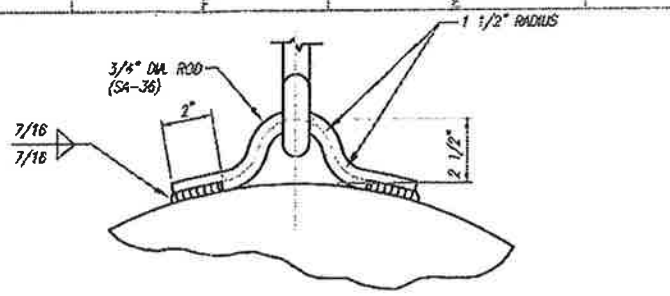
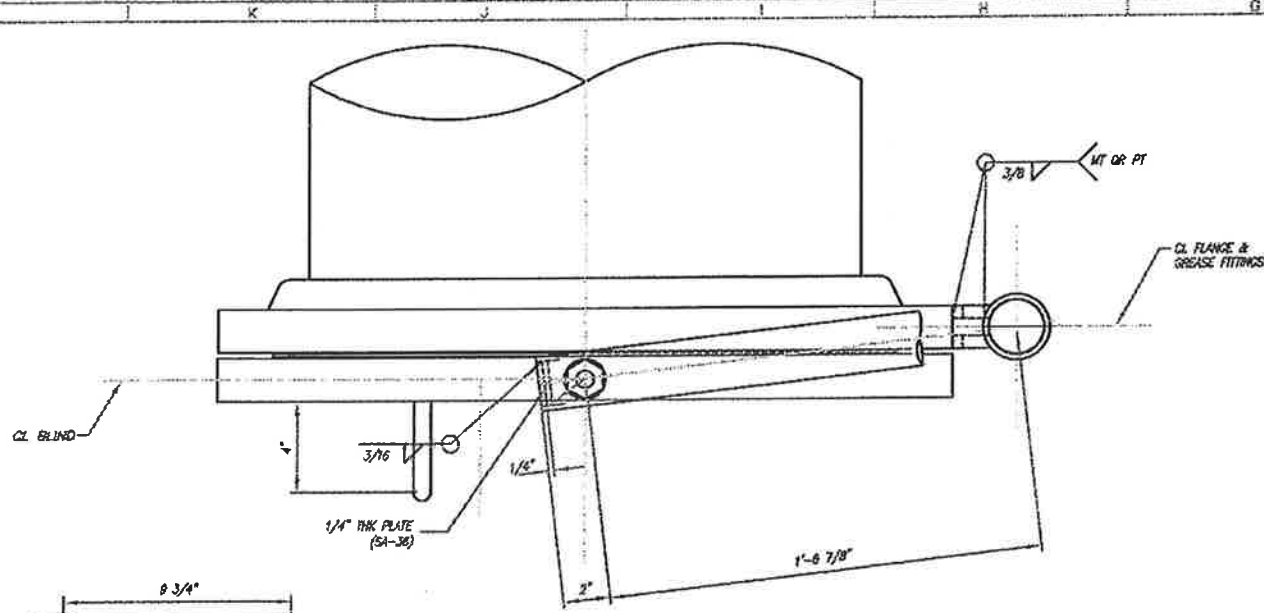


SECTION "A-A"

REFERENCE DRAWINGS		REVISIONS			
NO.	DESCRIPTION	REV.	DATE	BY	CHK.
0	ISSUED FOR APPROVAL	CS	DM	7/12/02	
0	ISSUED FOR CONSTRUCTION	BD	BD	8/17/02	

**NOTICE**  
 THIS DRAWING IS THE PROPERTY OF BUNGE, INC. AND IS NOT TO BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, INCLUDING PHOTOCOPYING, RECORDING, OR BY ANY INFORMATION STORAGE AND RETRIEVAL SYSTEM, WITHOUT THE WRITTEN PERMISSION OF BUNGE, INC.

S/D: 2007119	ITEM: VS-4301	ONE	REQ'D.
		Specialty Process Solutions 2100 Leaning Rock Vicksburg, MS 39180 661-636-8487 www.spartansteel.com	
<b>DESCRIPTION:</b> 138" I.D. x 14'-0" SEAM / SEAM MOLECULAR SIEVE BED #1 ITEM: VS-4301 SPECIFAB JOB # 2007119			
<b>CUSTOMER:</b> BUNGE - ERGON VICKSBURG, MS.			
SCALE: NONE	DATE: 8/17/02	P.O. No.: 61310-4500140663	
DRAWN: [initials]	FILE No.: 2007119		
CHECK: [initials]	OWG. NO. V-074-110	SHEET NO. 2	REV. 0
APVD: [initials]			

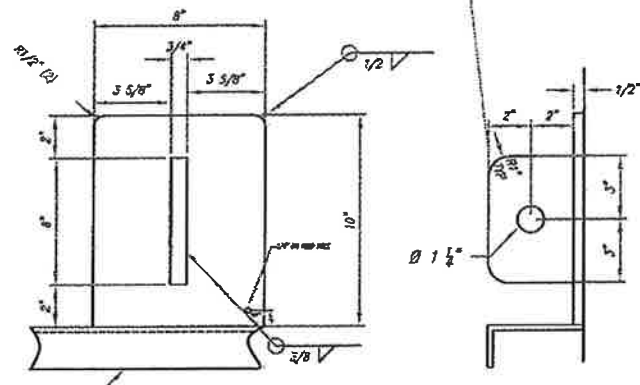


REFERENCE DRAWINGS		REVISIONS			
NO.	DESCRIPTION	BY	CHK	DATE	REV.
B	ISSUED FOR APPROVAL	GS	DM	7/2/07	
D	ISSUED FOR CONSTRUCTION	BD	BD	8/17/07	

**NOTICE**

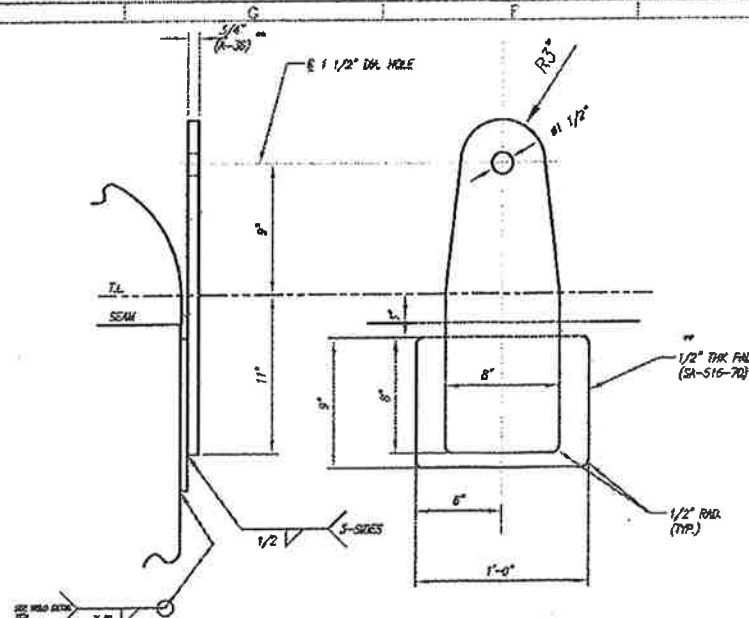
THIS DRAWING IS THE PROPERTY OF SPECFAB. NO PART OF THIS DRAWING OR THE INFORMATION CONTAINED HEREIN IS TO BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, INCLUDING PHOTOCOPYING, RECORDING, OR BY ANY INFORMATION STORAGE AND RETRIEVAL SYSTEM, WITHOUT THE WRITTEN PERMISSION OF SPECFAB. THE USER OF THIS DRAWING SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE APPROPRIATE AUTHORITIES.

S/C: 2007119	ITEM: VS-4301	ONE	REV'D.
		Specialty Process Fabrication, Inc. 2505 West 11th Street Vicksburg, MS 39180 664-444-4444 www.specfab.com	
DESCRIPTION: 138" I.D. x 14'-0" SEAM / SEAM MOLECULAR SIEVE BED #1 ITEM: VS-4301 SPECFAB JOB # 2007119			
CUSTOMER: BUNGE - ERGON VICKSBURG, MS.			
SCALE: NONE	DATE: 8/17/07	P.O. No.: 61310-4500140663	
DRAWN: GS	FILE No.: 2007119	DWG. NO. V-074-110	SHEET NO. 3 OF 6
CHECK: DM	APVD: DM		REV. 0

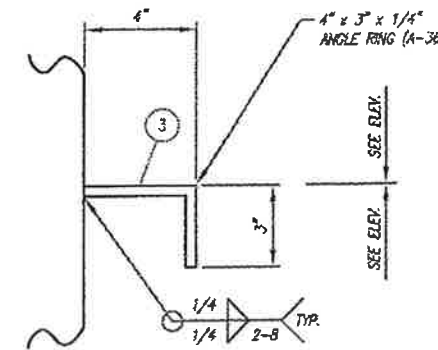
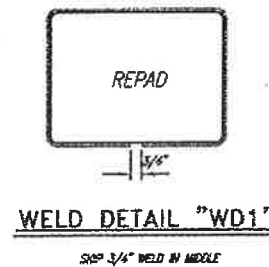


**TAIL LUG**  
(1-REQ'D.)  
SEE PLAN FOR LOCATION

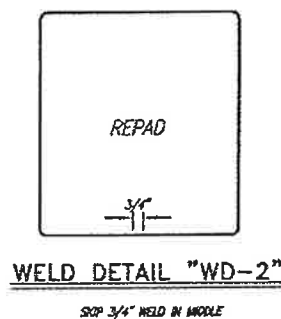
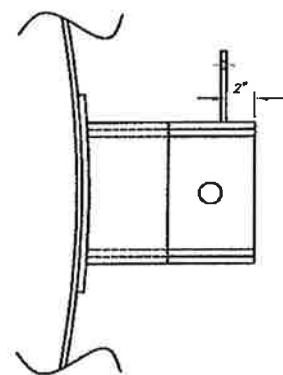
TAIL LUG - 3/4" THK A56  
REPAD - 1/2" THK SA-516-70



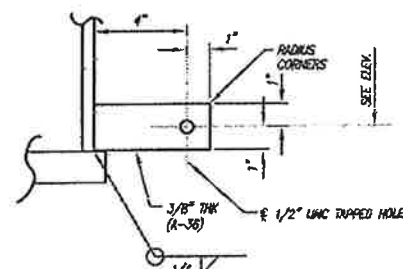
**DETAIL LIFTING LUG**  
(2-REQ'D.)



**DETAIL VSR #1 THRU 6**  
(6-REQ'D.)

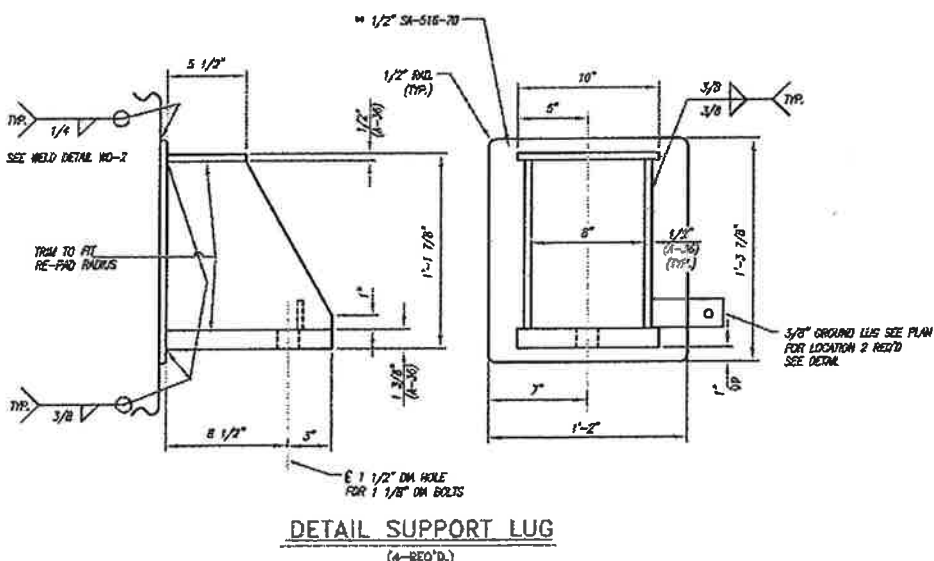


**WELD DETAIL "WD-2"**  
3/4" WELD IN MIDDLE



**GROUNDING LUG DETAIL**  
(2-REQ'D.)

**\*\* NOTE: ROLL TO FIT SHELL OD**



**DETAIL SUPPORT LUG**  
(4-REQ'D.)

REFERENCE DRAWINGS		REVISIONS			
NO.	DESCRIPTION	BY	CHK	DATE	REV.
B	ISSUED FOR APPROVAL	DS	DM	7/12/07	
O	ISSUED FOR CONSTRUCTION	BD	BD	8/17/07	

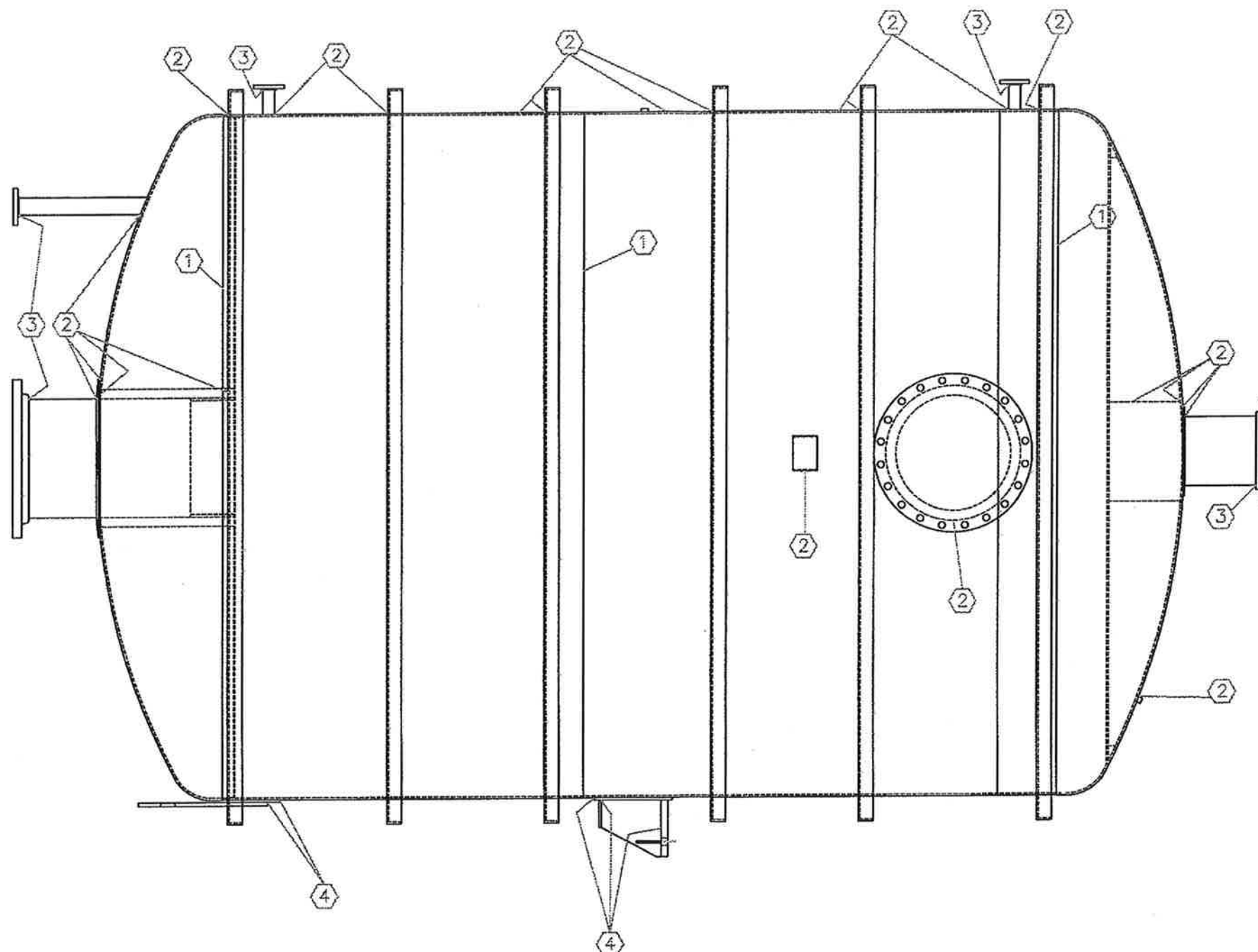
**NOTICE**

THIS DRAWING IS THE PROPERTY OF SUEDELL. IT IS TO BE USED ONLY FOR THE PROJECT AND SPECIFICATIONS DESCRIBED HEREIN. IT IS TO BE RETURNED TO SUEDELL UPON COMPLETION OF THE PROJECT. NO PART OF THIS DRAWING IS TO BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, INCLUDING PHOTOCOPYING, RECORDING, OR BY ANY INFORMATION STORAGE AND RETRIEVAL SYSTEM, WITHOUT THE WRITTEN PERMISSION OF SUEDELL.

S/O: 2007119	ITEM: VS-4301	ONE	REQ'D.
DESCRIPTION: 138" I.D. x 14'-0" SEAM / SEAM MOLECULAR SIEVE BED #1 ITEM: VS-4301 SPECFAB JOB # 2007119			
CUSTOMER: BUNGE - ERGON VICKSBURG, MS.			
SCALE: NONE	DATE: 7/12/07	P.O. No.: 61310-4500140663	
DRAWN: DS	FILE No.: 2007119		
CHECK: SP	DRG. NO. V-074-110		
APVD:		SHEET NO. 4 OF 8	REV. 0

WELD PROCEDURES

① E-141, E-142	③ E-109, E-139, E142	⑤ _____	⑦ _____	⑨ _____	⑪ _____	⑬ _____
② E-142, E-139	④ E-142	⑥ _____	⑧ _____	⑩ _____	⑫ _____	⑭ _____



SPECFAB JOB # 2007119

ORIGINATION: BRIAN DYKES  
 DATE: \_\_\_\_\_ REV: 0  
 S/O NUMBER: \_\_\_\_\_

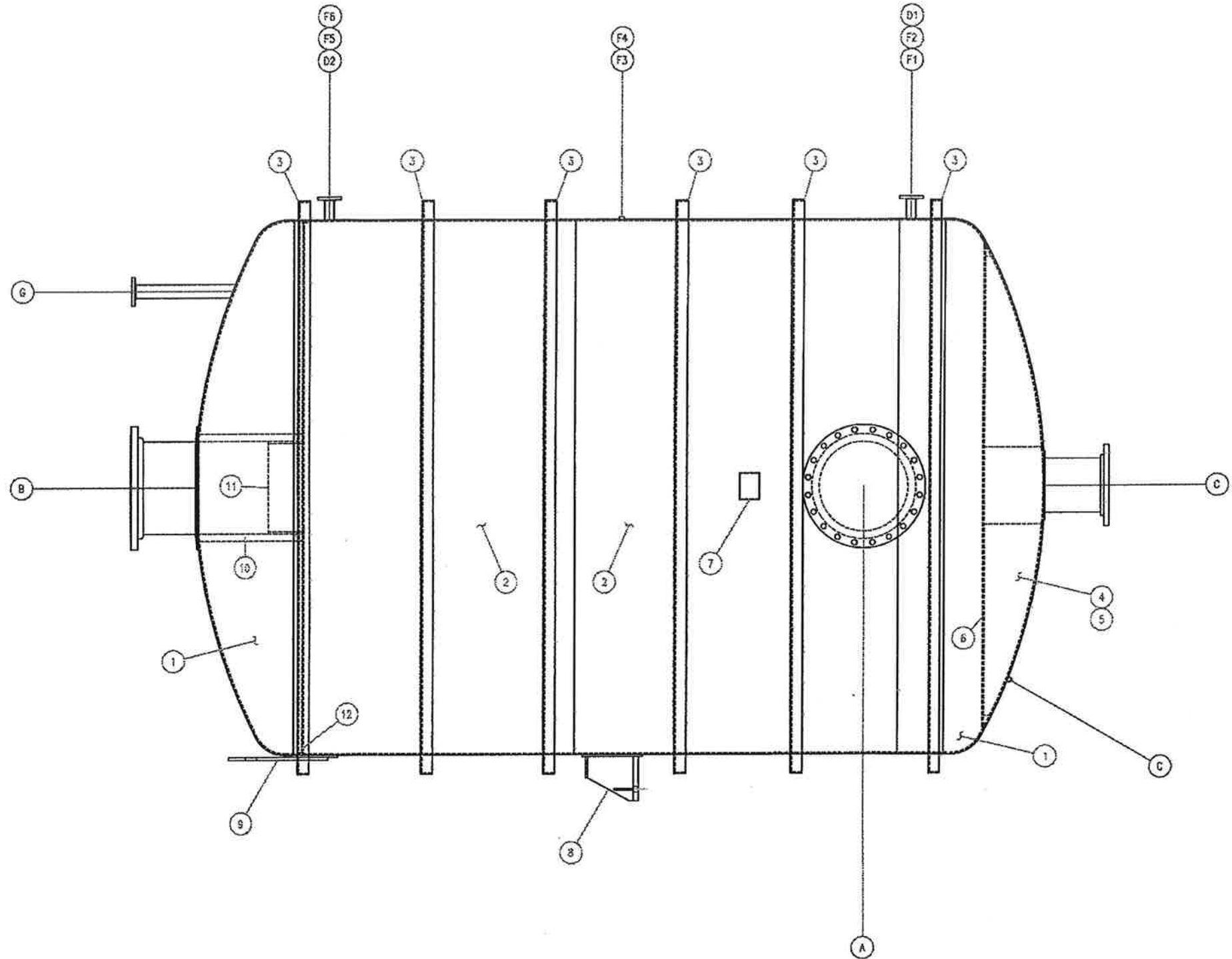
CUSTOMER: \_\_\_\_\_  
 PO NUMBER: 31310-4500140683  
 ITEM NUMBER: VS4301

REFERENCE DRAWINGS		REVISIONS			
NO.	DESCRIPTION	BY	CHKD	DATE	
0	ISSUED FOR CONSTRUCTION	BD	BD	8/17/07	

**NOTICE**  
 THE DRAWING IS THE PROPERTY OF SPECFAB, INC. AND IS TO BE USED ONLY FOR THE PROJECT AND QUANTITY SPECIFIED. IT IS TO BE RETURNED TO SPECFAB, INC. IMMEDIATELY UPON COMPLETION OF THE PROJECT. NO PART OF THIS DRAWING IS TO BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, INCLUDING PHOTOCOPYING, RECORDING, OR BY ANY INFORMATION STORAGE AND RETRIEVAL SYSTEM.

S/O: 2007119	ITEM: VS4301	ONE	REQD.
		SpecFab Products Corporation, Inc. 2000 Industrial Blvd. Vicksburg, MS 39180 601-438-8300 www.specfab.com	
DESCRIPTION: 138" I.D. X 168" TAN/TAN MOLECULAR SIEVE BED #1 ITEM: VS4301 WELD MAP			
CUSTOMER: BUNGE-ERGON VICKSBURG VICKSBURG, MS.			
SCALE: N.T.S.	DATE: 8-17-07	P.O. No.: 61310-4500140683	
DRAWN: SD		FILE No.: 2007119	
CHECK: _____		DWG. NO. V-074-110	SHEET NO. 5 OF 6
APVD: _____			REV. 0

BUBBLE	DESCRIPTION	QTY.	U/M
1	HEAD, F&D, 138" ID X 0.5625" MIN TH, 5/8" NOM, SA516-70	2	EA
2	SHELL PLATE, 3/8" SA-516-70, 138-3/4" OD ROLLUP	2	EA
3	ANGLE, ROLLED, 4" X 3" X 1/4" A36 (138-3/4" ID)	6	EA
4	GUSSET PLATE, 3/8" SA516-70, APPROX 16" x 53"	4	EA
5	GUSSET PLATE, 3/8" SA516-70, APPROX 16" x 27"	4	EA
6	DISTRIBUTION PLATE, 3/8" SA-516-70, 10'-5" DIA, WITH QTY 48 3" DIA HOLES	1	EA
7	NAME PLATE BRACKET, A36, APPROX 7" x 7"	1	EA
8	MOUNTING LUG	4	EA
	BOTTOM PLATE, 1-1/2" A-36, APPROX 10" x 12"	4	EA
	TOP PLATE, 1/2" A36, APPROX 6" x 10"	4	EA
	GUSSET PLATE, 1/2" A-36, APPROX 12" x 12"	8	EA
	GROUNDING LUG, 3/8" A-36, APPROX 2" x 5" WITH 1/2" UNC TAPPED HOLE	2	EA
	REPAD, 1/2" SA-516-70, APPROX 14" x 16"	4	EA
9	LIFT LUG, 3/4" A36, APPROX 8" x 23"	2	EA
	REPAD, 1/2" SA-516-70, APPROX 9" x 12"	2	EA
10	PIPE, SA106B, 1-1/2" XH, SIEVE DECK SUPPORTS, APPROX 28" LONG	4	EA
11	PIPE, SA106B, 24" SCH XH, APPROX 9" LONG (WITH 4 HOLES)	1	EA
12	ANGLE, ROLLED, 1-1/2" X 1-1/2" X 1/4" A36 (138" ID) (SIEVE DECK SUPPORT)	1	EA
13	T-BEAM, WT 2 X 6.5 A36, APPROX 60"	8	EA
14	TAIL LUG, 3/4" A36 PLATE, 4" x 6" W/1-1/4" HOLE	1	EA
	REPAD, 1/2" SA516-70 PLATE, 8" x 10"	1	EA
15	EXPANDED METAL, 13 GA X 1/2" OPENING, CARBON STEEL, APPROX 53" X 58"	8	EA
<b>A, B 24" NOZZLE (A - MANWAY W/DAVIT)</b>			
	FLANGE, 24" 150# RFSO SA105	2	EA
	FLANGE, 24" 150# RF BLIND SA105	1	EA
	PIPE 24" SCH XH SA106-B	2.5	FT
	REPAD, 3/8" X 3" SA516-70	1	EA
	REPAD, 3/8" X 4" SA516-70	1	EA
	GASKET, 24" GARLOCK 3000 1/8" THICK	3	EA
	STUD, 1-1/4" DIA X 7-1/2" LG. SA193 B7	20	EA
	NUT, 1-1/4", SA194 2H	40	EA
	DAVIT ARM, 2" S80 A106-B	1	EA
	PIPE, 2-1/2" S A106-B S40	1	FT
	EYEBOLT, 3/4" DIA, CS, 1-1/2" DIA EYE	1	EA
	NUT, HEAVY HEX, 3/4" UNC CS	2	EA
	WASHER, FLAT, 3/4" CS	1	EA
	ROD, 3/4" A36	3	FT
<b>C 14" NOZZLE</b>			
	FLANGE, 14" 150# RFSO, SA105	1	EA
	PIPE 14" SCH XH SA106-B	1.5	FT
	REPAD, 3/8" X 3" SA516-70	1	EA
	GASKET, 14" GARLOCK 3000 1/8" THICK	1	EA
<b>D1, D2 2" NOZZLE</b>			
	FLANGE, 2" 150# RFSO, SA105	2	EA
	PIPE 2" S 160 SA106-B	1.5	FT
	GASKET, 2" GARLOCK 3000 1/8" THICK	2	EA
<b>E 1/2" 6000# HALF COUPLING, SA105</b>			
<b>F1, F2 3/4" 3000# HALF COUPLING, SA105</b>			
<b>G 3" NOZZLE</b>			
	FLANGE, 3" 150# RFSO, SA105	1	EA
	PIPE, 3", S 160, SA106-B	1	FT
	GASKET, 3" GARLOCK 3000 1/8" THICK	1	EA



SPECFAB JOB # 2007119

REFERENCE DRAWINGS		REVISIONS			
NO.	DESCRIPTION	BY	DATE	REV.	DATE
0	ISSUED FOR CONSTRUCTION	BD	BD	6-17-07	

**NOTICE**

THIS DRAWING IS THE PROPERTY OF SPEC-FAB, INC. AND IS NOT TO BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, INCLUDING PHOTOCOPYING, RECORDING, OR BY ANY INFORMATION STORAGE AND RETRIEVAL SYSTEM. WITHOUT THE WRITTEN PERMISSION OF SPEC-FAB, INC. ANY UNAUTHORIZED REPRODUCTION OR TRANSMISSION OF THIS DRAWING IS STRICTLY PROHIBITED. SPEC-FAB, INC. SHALL NOT BE RESPONSIBLE FOR ANY DAMAGE TO PERSONS OR PROPERTY CAUSED BY THE USE OF THIS DRAWING.

S/O: 2007119	ITEM: VS4301	ONE	REV:
		Specialty Process Fabricators, Inc. 1509 Haining Road Vicksburg, MS 39180 601-436-6692 www.specfab.com	
DESCRIPTION: 138" I.D. X 168" TAN/TAN MOLECULAR SIEVE #1 ITEM: VS4301 BOM			
CUSTOMER: BUNGE-ERGON VICKSBURG VICKSBURG, MS.			
SCALE: N.T.S.	DATE:	P.O. No.: 61310-4500140663	
DRAWN: SS	DATE:	FILE No.: 2007119	
CHECK:	DWS. NO.:	V-074-110	SHEET NO. REV. 6 OF 6 0
APVD:			