

#106429

FORM U-1A MANUFACTURER'S DATA REPORT FOR PRESSURE VESSELS
(Alternative Form for Single Chamber, Completely Shop or Field Fabricated Vessels Only)
As Required by the Provisions of the ASME Code Rules, Section VIII, Division 1

Manufactured and certified by RAMA FABRICATION, INC., 2310 PROSPECT ODESSA, TEXAS 79762
(Name and address of manufacturer)

Manufactured for GIANT INDUSTRIES
(Name and address of purchaser)

3. Location of installation YORKTOWN, VA
(Name and address)

4. Type: HORIZONTAL 02848 - D-5860-V008 1126 2006
(Horiz. or vert. tank) (Mfg's serial No.) (CRN) (Drawing no.) (Nat'l Bd. No.) (Year built)

5. The chemical and physical properties of all parts meet the requirements of material specifications of the ASME BOILER AND PRESSURE VESSEL CODE. The design, construction, and workmanship conform to ASME Rules, Section VIII, Division 1 2004
Year

to 2005
Addenda (Date)

6. Shell: SA-516 Gr 70 .375" .1875" 8'-0" 11'-8" S/S
Matl. (Spec. No., Grade) Nom. Thk. (in.) Corr. Allow. (in.) Diam. I.D. (ft. & in.) Length (overall) (ft. & in.)

7. Seams: SINGLE FULL 100 - SINGLE FULL 2
Long. (Welded, Dbl., Sngl., Lap, Butt) R.T. (Spot or Full) Eff. (%) H.T. Temp (°F) Time (hr) Girth (Welded, Dbl., Sngl., Lap, Butt) R.T. (Spot, Eff. (%) or Full) No. of Courses

8. Heads: (a) Matl. SA-516 Gr 70 (b) Matl. -
(Spec No., Grade) (Spec No., Grade)

	Location (Top, Bottom, Ends)	Minimum Thickness	Corrosion Allowance	Crown Radius	Knuckle Radius	Elliptical Ratio	Conical Apex Angle	Hemispherical Radius	Flat Diameter	Side to Pressure (Convex or Concave)
(a)	ENDS	.3042"	.1875"	-	-	F & D	-	-	-	CONCAVE
(b)										

If removable, bolts used (describe other fastenings) Manway Bolting: 20 ea. 1.250" X 7" with 2 nuts each SA193-B7 & SA194-2H
(Matl., Spec. No., Gr., Size, No.)

9. MAWP 25 NA psi at max. temp. 700 NA °F
(internal) (external) (internal) (external)

Min. design metal temp. -20 °F at 25 psi. Hydro. 33 psi. test pressure 33 psi.

10. Nozzles, inspection and safety valve openings:

Purpose (Inlet, Outlet, Drain)	No.	Diam. or Size	Type	Matl.	Nom. Thk.	Reinforcement Matl.	How Attached	Location
MANWAY	1	24" 150#	RFWN	SA-106 GR B	.500"	Inherent	WELDED	SHELL
LET/OUTLET	2	16" 150#	RFWN	SA-106 GR B	.500"	Inherent	WELDED	SHELL
T.E.	5	1 1/2" 150#	RFLN	SA-105	.562"	Inherent	WELDED	SHELL

11. Supports: Skirt NO Lugs 2 Legs 2 Other - Attached WELDED TO SHELL
(Yes or no) (No.) (No.) (Describe) (Where and how)

12. Remarks: Manufacturer's Partial Data Reports properly identified and signed by Commissioned Inspectors have been furnished for the following items of the report: -

(Name of part, item number, Mfg's name and identifying stamp)

Vessel Exempt Per UG-20(f) Relief Per UG-125 Non-Lethal Service

All Flanges are SA-105.

CERTIFICATE OF SHOP / FIELD COMPLIANCE

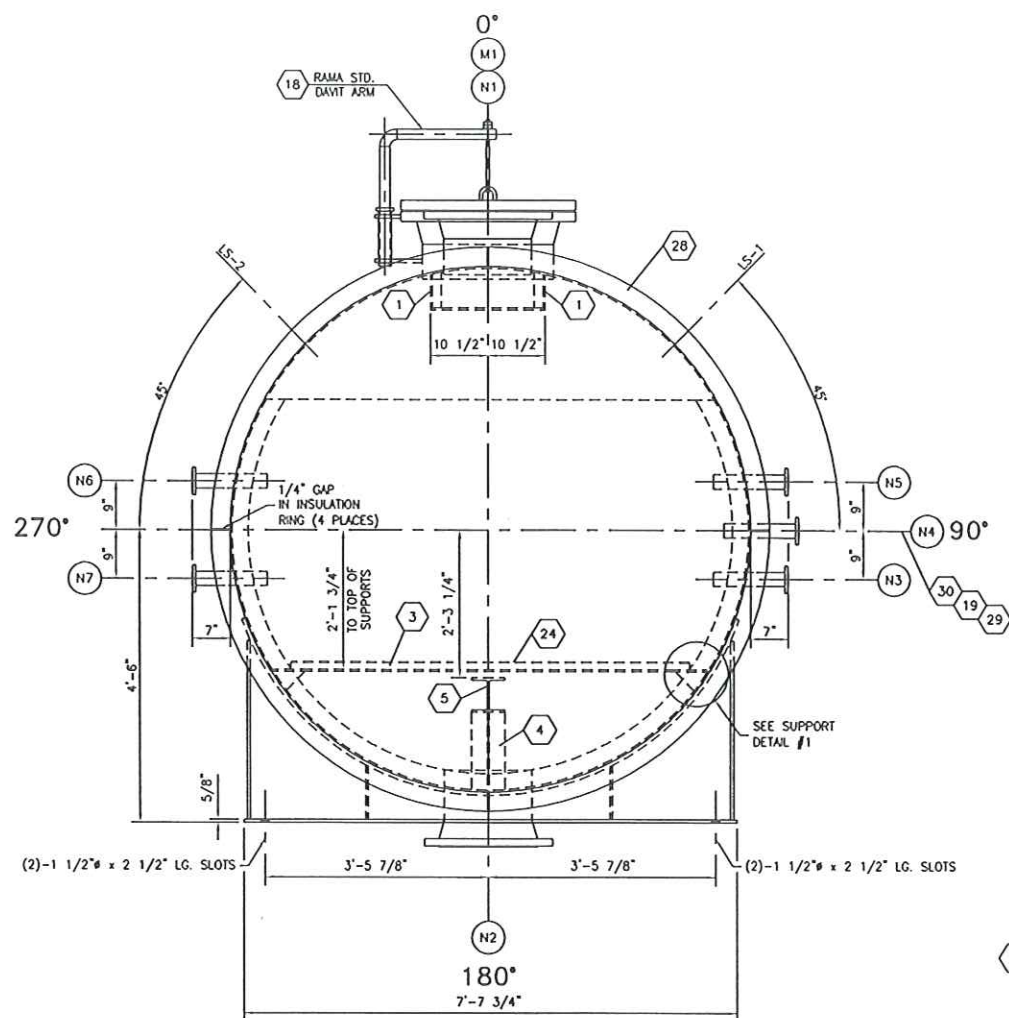
We certify that the statements made in this report are correct and that all details of design, material, construction, and workmanship of this vessel conform to the ASME Code for Pressure Vessels, Section VIII, Division 1. "U" Certificate of Authorization No. 17,022
expires 6/07/2008
Date 3/28/2006 Co. Name RAMA FABRICATION, INC. Signed Donald Westfall
(Manufacturer) (Representative)

CERTIFICATE OF SHOP / FIELD INSPECTION

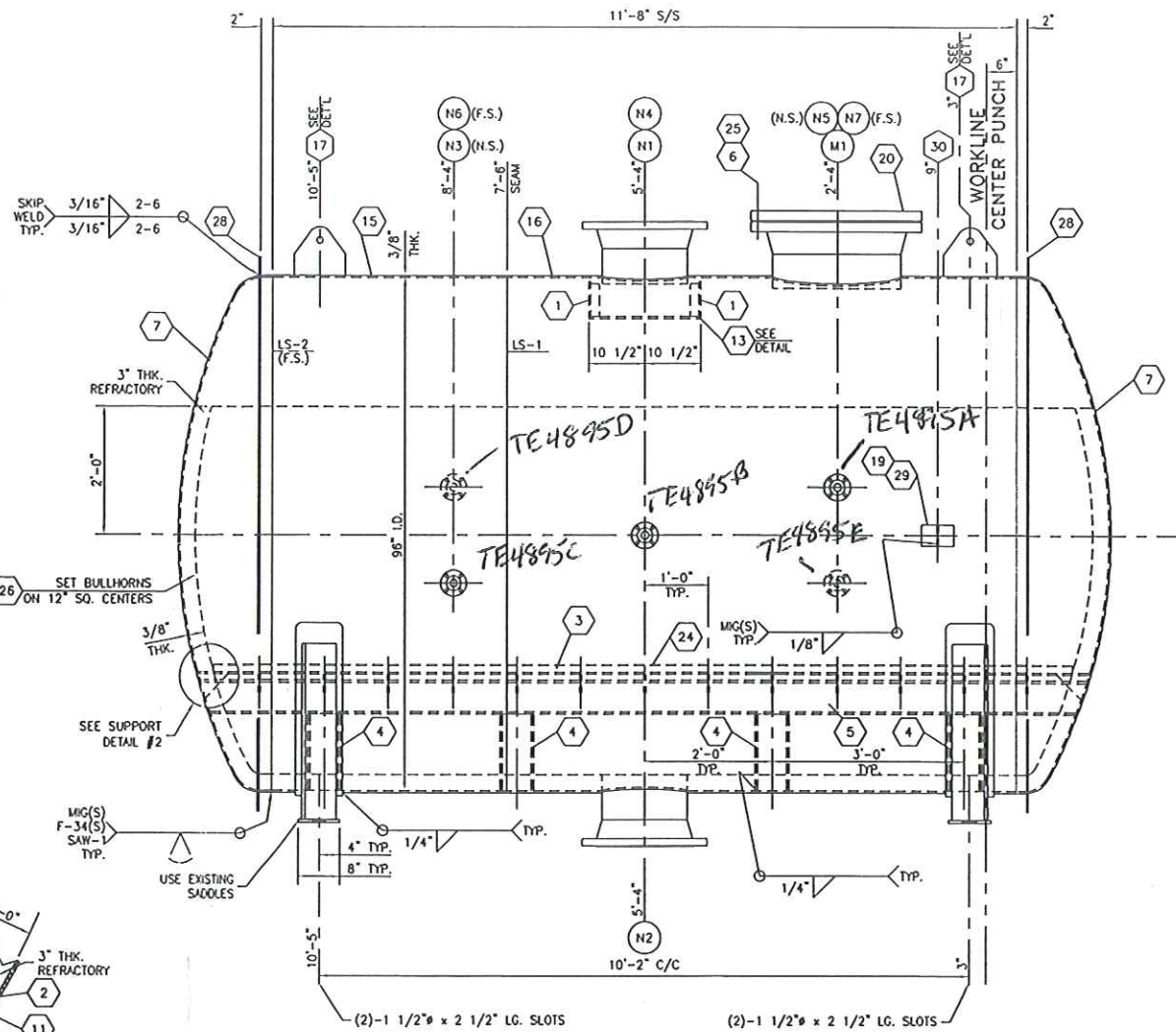
Vessel constructed by RAMA FABRICATION, INC. at 2310 PROSPECT ODESSA, TEXAS 79762
I, the undersigned, holding a valid commission issued by The National Board of Boiler and Pressure Vessel Inspectors and the State or Province of TX and employed by HSBCT
have inspected the component described in this Manufacturer's Data Report on 3/28/2006, and state that, to the best of my knowledge and belief, the Manufacturer has constructed this pressure vessel in accordance with ASME Code, Section VIII, Division 1. By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the pressure vessel described in this Manufacturer's Data Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.
Date 3/28/2006 Signed David A. Nor Commissions N.B. 12,612 A.B Texas 1723
(Authorized Inspector) (Nat'l Board. (incl. endorsements) State, Prov. and No.)

CODE STAMPS		1126		CERTIFIED BY		FABRICATION INC.	
		P.O. BOX 7346 ODESSA, TEXAS 79760 (915) 362-9291					
M.A.W.P.	5	PSI	AT	100	°F		
M.D.M.T.	10	°F	AT	5	PSI		
MFG. SER. NO.	02808	YEAR	2006				
HYDRO:	33	PSI	NOM. THICK	TYPE	MATERIAL		
C.A.:	1875"	SHELL	375"	SA516--70			
		HEADS	375"	SA516--70			
VESSEL DESCRIPTION		36" ID X 11'-8" S/S V508					
CUSTOMER		ICLANT					

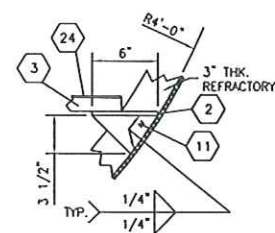
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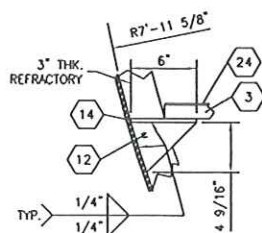
END VIEW



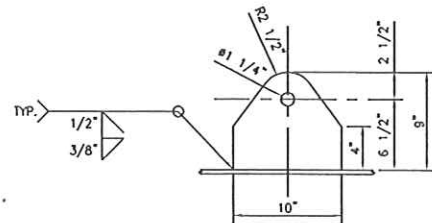
SIDE VIEW



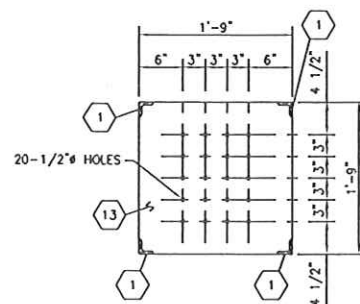
SUPPORT DETAIL #1
SCALE: 1 1/2" = 1'-0"



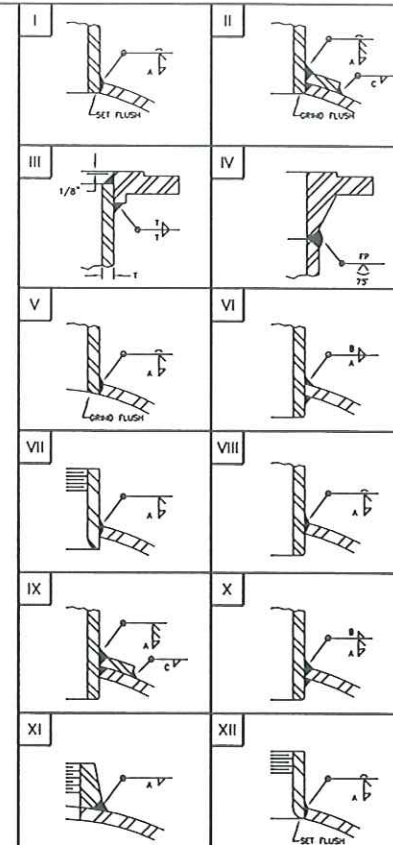
SUPPORT DETAIL #2
SCALE: 1 1/2" = 1'-0"



LIFT LUG DETAIL
SCALE: 1 1/2" = 1'-0"



DEFLECTOR DETAIL
SCALE: 1" = 1'-0"



- NOTES:
1. Flange bolt holes to straddle vessel centerlines unless otherwise noted.
 2. Drill & tap 1/4" test hole in reinforcing pad.
 3. Outside projection shown in the nozzle schedule is from the vessel O.D. unless otherwise noted.
 4. Inside projection shown in the nozzle schedule is minimum only.
 5. All dimensions are from the reference line.
 6. All nozzles shall be adequately protected and covered for shipment.

ISSUED FOR CONSTRUCTION
DATE: 01/04/06
BY: JDW

Headings must conform to UCS-79 and UCS-81, Section VII, Div. 1 and Section II for materials. MTR's are required.

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SPECIFICATIONS			
YEAR BUILT	2005	TAG/MODEL NUMBER	V-508
SERIAL NO.	02848	NATIONAL B.O. NO.	1126
DESIGN PRESSURE INTERNAL	25	PSIG @ TEMP.	200
DESIGN PRESSURE EXTERNAL	25	PSIG @ TEMP.	200
HYDRO PRESSURE INTERNAL	20	J.E. LONG SEAMS	100%
CORROSION ALLOWANCE	.250	J.E. ROUNDED SEAMS	100%
RADIOGRAPHY	RT-1	STRESS RELIEF	NO
FLANGE RATING	150	Coupling Rating	6000
SHELL MATL. SPEC.	SA516-70	HEAD MATL. SPEC.	SA516-70
FLANGE MATL. SPEC.	SA105	CPG. MATL. SPEC.	SA105
PIPE MATL. SPEC.	SA106-B	BN FIT. MATL. SPEC.	SA234-20
REPAIR MATL. SPEC.	SA516-70	STRUC. MATL. SPEC.	SA36
RF. BL. MATL. SPEC.	SA516-70	FLG. STUD SPEC.	SA193-B7
RF. GSK. MATL. SPEC.	SA516-70	FLG. NUT SPEC.	SA194-2H
EMPTY WEIGHT	21,345 LBS.	FULL LIQUID WEIGHT	64,210 LBS.
RF. GSK. DESC.	1/8" SPIRAL WOUND METAL/COMP.		
WELD PROCEDURE	WPS-1		
INSULATION DESC.	4" HOT		
INSPECTION BY	HSB-CT & RAMA		
CONSTRUCTION CODE	ASME SEC. VII DIV. 1, 2005 ADDN.		
EXT. SURFACE TREATMENT	PER CUSTOMER SPEC'S		
INT. SURFACE TREATMENT			



HYDROGENATION REACTOR (V508)			
96" I.D. X 11'-8" S/S			
CUSTOMER: GIANT YORKTOWN REFINERY			
SCALE: 3/4" = 1'-0"	W.O. #	6031	
CUST. PO#	DATE	12/13/05	REV. 0
DRAWN BY	DATE	01/04/06	
CHECK BY	DATE		

COOK BURNER			
MATERIAL NO. 1126			
CERTIFIED BY			
RAMA FABRICATION, INC.			
P.O. BOX 7346, ODESSA, TEXAS 79708			
(937) 362-7771			
ITEM NO.	QTY	UNIT	PRICE
1	1	EA	25.00
2	1	EA	25.00
3	1	EA	25.00
4	1	EA	25.00
5	1	EA	25.00
6	1	EA	25.00
7	1	EA	25.00
8	1	EA	25.00
9	1	EA	25.00
10	1	EA	25.00
11	1	EA	25.00
12	1	EA	25.00
13	1	EA	25.00
14	1	EA	25.00
15	1	EA	25.00
16	1	EA	25.00
17	1	EA	25.00
18	1	EA	25.00
19	1	EA	25.00
20	1	EA	25.00
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37	1	EA	25.00
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39	1	EA	25.00
40	1	EA	25.00
41	1	EA	25.00
42	1	EA	25.00
43	1	EA	25.00
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91	1	EA	25.00
92	1	EA	25.00
93	1	EA	25.00
94	1	EA	25.00
95	1	EA	25.00
96	1	EA	25.00
97	1	EA	25.00
98	1	EA	25.00
99	1	EA	25.00
100	1	EA	25.00

MARK	NO.	SERVICE	SIZE	RATING	TYPE	BORE	WALL	NECK	MAT'L.	OD & THK	MAT'L.	PROJECTION	WELD DETAIL	WELD SIZE	MRP NO.
N7	1	T.E.	1.50	0150	RFLN	1.50	0.562	14.0000	SA105	-	-	-	-	3/8"	21
N6	1	T.E.	1.50	0150	RFLN	1.50	0.562	14.0000	SA105	-	-	-	-	3/8"	21
N5	1	T.E.	1.50	0150	RFLN	1.50	0.562	14.0000	SA105	-	-	-	-	3/8"	21
N4	1	T.E.	1.50	0150	RFLN	1.50	0.562	14.0000	SA105	-	-	-	-	3/8"	21
N3	1	T.E.	1.50	0150	RFLN	1.50	0.562	14.0000	SA105	-	-	-	-	3/8"	21
N2	1	OUTLET	16.00	0150	RFLN	15.00	0.500	9.5625	SA106-B	-	-	-	-	3/8"	9
N1	1	INLET	16.00	0150	RFLN	15.00	0.500	9.5625	SA106-B	-	-	-	-	3/8"	9
M1	1	MANNWAY	24.00	0150	RFLN	23.00	0.500	6.8750	SA106-B	-	-	-	-	3/8"	10

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