

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

#99556

1. Manufactured and certified by SMITHCO Engineering, Inc., 6211 S. 39th W. Ave., Tulsa, OK 74132
(Name and address of manufacturer)

Manufactured for Meridian Oil, Inc. Farmington, NM 87499
(Name and address of purchaser)

3. Location of installation MERIDIAN OIL VAL VERDE TRAIN 1/2
(Name and address)

4. Type Horiz(Non-Cir) 93B-2661-A 93B-2661 5139 1994
(Horiz. or vert. tank) (Mfg's serial No.) (CRN) (Drawing No.) (Natl Bd. No.) (Year built)

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 1992
Year

to A92
Addenda (Date)

6. Shell: Tube & Plug Sheets: SA-516 GR-70 Fr .750/Bk .750 .0625 Fr 0' 3.7500"/Bk 0' 3.7500" 10' 11.6250"
Mat. (Spec. No., Grade) (Nom. Thk. (in)) (Corr. Allow. (in)) (Diam. I.D. (ft. & in.)) (Length (overall) (ft. & in.))

7. Seams: Corner Joint 100 1100 30min. 1
Long. (Welded, Dbl. Spot, Lap, But) R.T. (Spot or Full) E.R. H.T. Temp. (°F) Time (hr) Girth (Welded, Dbl. Spot, Lap, But) R.T. (Spot, Partial or Full) No. of Courses

8. Heads: (a) Mail (a) Covers: SA-516 GR-70 (b) Mail (b) Ends: SA-516 GR-70
(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)	Fr/Bk	.375/.375	.0625						3.4375/3.4375 x 131.6250	Flat
(b)	Fr/Bk	.375/.375	.0625						3.4375/3.4375 x 9.3750/9.3750	Flat

If removable, bolts used (describe other fastenings) _____
(Matl., Spec. No., Gr., Size, No.)

9. MAWP 150 psi at max. temp 300 °F

Min. design metal temp. -20 °F at 150 psi. Hydro., pneu., or comb. test pressure 225 psi

10. Nozzles, inspection and safety valve openings: UG-125 NOTE 39

Purpose (Outlet, Drain)	No.	Diameter or Size	Type	Material	Nominal Thickness	Reinforcement Material	How Attached	Location
Inlet/Outlet	1/1	4"150/XS	RFWN	SA-105/	.337	Weld Metal	Welded	Front Head
Vent/Drain	2	.75/.75	6000CPLG	SA-105		Weld Metal	Welded	Fr/Bk Head

11. Supports: Skirts No Lugs (No.) Legs 4 Other (Describe) Attached Welded to covers
(Yes or No) (No.) (No.) (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)

Impact testing exempt per: UG-20(f) Item: E-3307B Service: AMINE SOLUTION CLR

Stay Plate: Front(2)SA-516 GR-70 .3750 x .0625 x 130.6875 x 3.5000 Stay Plate: Back(2)SA-516 GR-70 .3750 x .0625 x 130.6875

Tubes: SA-214 WLD- 283 x 1.00" x .060" x 32.0000'-Straight

CERTIFICATE OF SHOP 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. 4175 expires February 28th, 19 94

Date 01-14-94 Co. name SMITHCO Engineering, Inc. Signed [Signature]
(Manufacturer) (Representative)

CERTIFICATE OF SHOP INSPECTION

Vessel constructed by SMITHCO Engineering, Inc. at Tulsa, Oklahoma

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and/or the State of Province of Oklahoma and employed by Delta Lloyds Insurance Company - Houston, Texas

inspected the component described in this Manufacturer's Data Report on 1-14 19 94, 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 loss of any kind arising from or connected with this inspection.

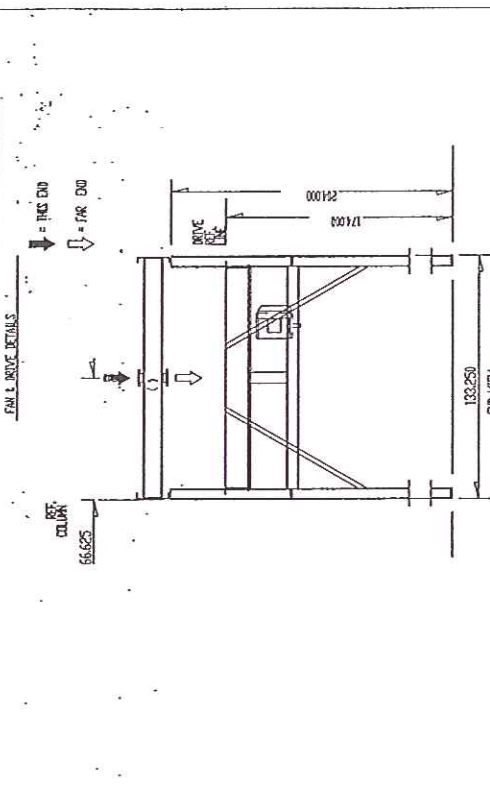
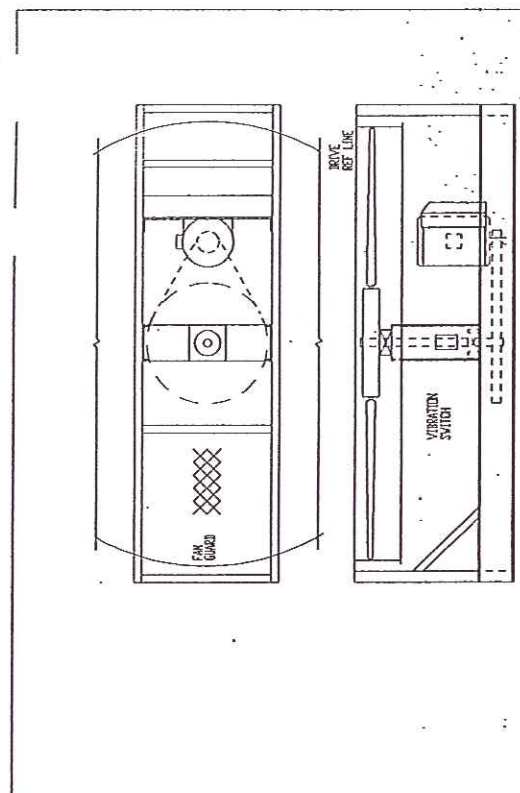
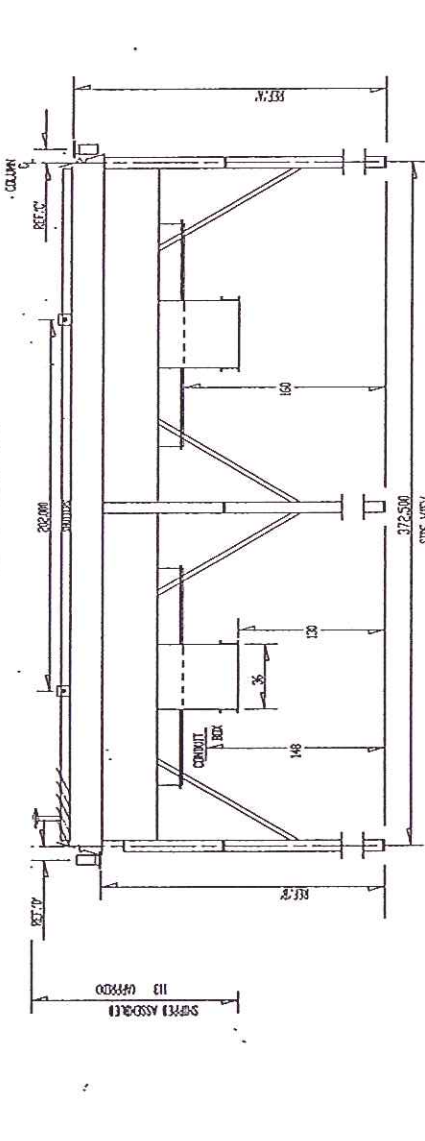
Date 1-14-94 Signed [Signature] Commissions NB7003, A, OK355
(Authorized Inspector) (Natl Board (incl. endorsements), State, Prov. and No.)

REF	QTY	DESCRIPTION	UNIT	AMOUNT
REV 1	1	CONDUIT	FT	133.250
REV 2	1	CONDUIT	FT	186.250
REV 3	1	CONDUIT	FT	372.500

PLATFORM 0	187/24-T LVC	NET WT	NET VOL	NET WT	NET VOL	NET WT	NET VOL
REV 1	1	3.5	0.00	3.5	0.00	3.5	0.00
REV 2	1	3.5	0.00	3.5	0.00	3.5	0.00
REV 3	1	3.5	0.00	3.5	0.00	3.5	0.00

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REV 1	1	CONDUIT	FT	186.250
REV 2	1	CONDUIT	FT	372.500



ITEM	QTY	DESCRIPTION	UNIT	AMOUNT
1	1	SMITHCO AIR COOLED DIVISION	EA	1
2	2	SMITHCO AIR COOLED DIVISION	EA	2

REV	DATE	BY	CHKD	APP'D
1	12-7-92	SM	DLK	
2	12-8-93	SM	DLK	

SMITHCO AIR COOLED DIVISION
TULSA, OKLAHOMA

TELEPHONES: 401-433-1111
FAX: 401-433-1112
WWW.SMITHCO.COM

SMITHCO AIR COOLED DIVISION
TULSA, OKLAHOMA

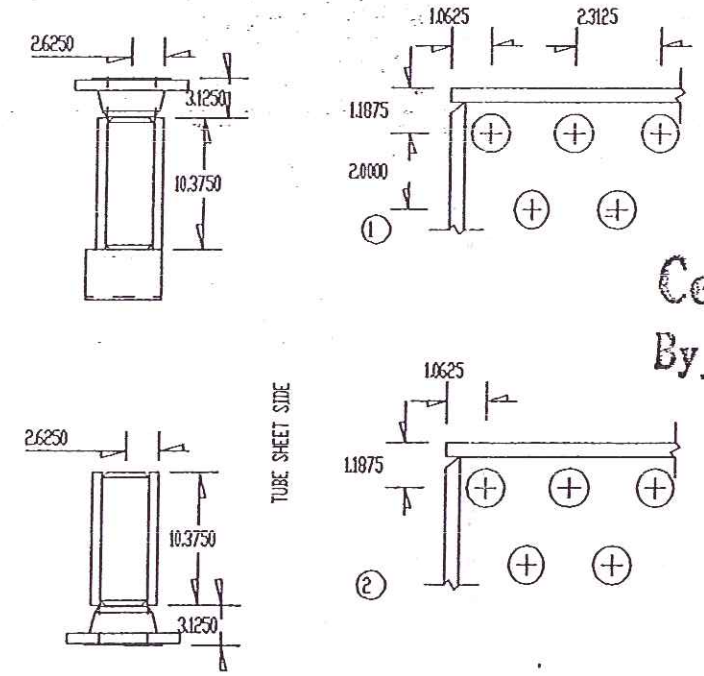
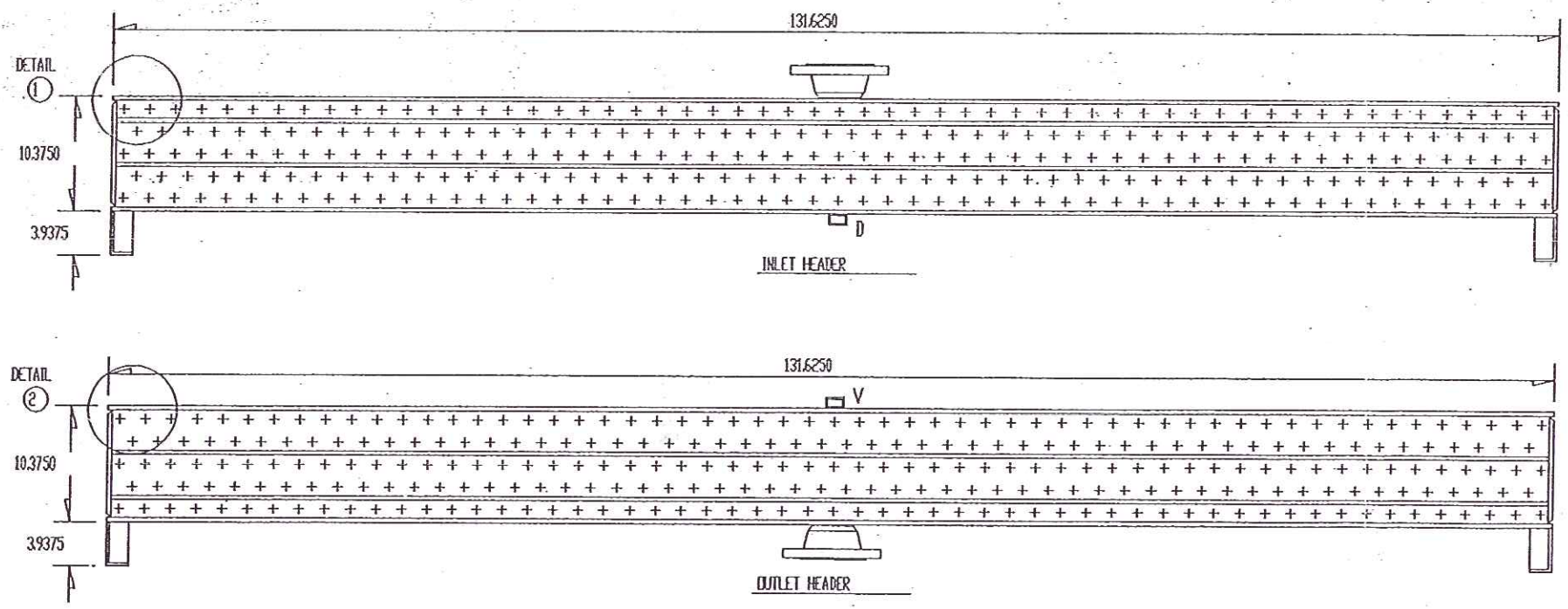
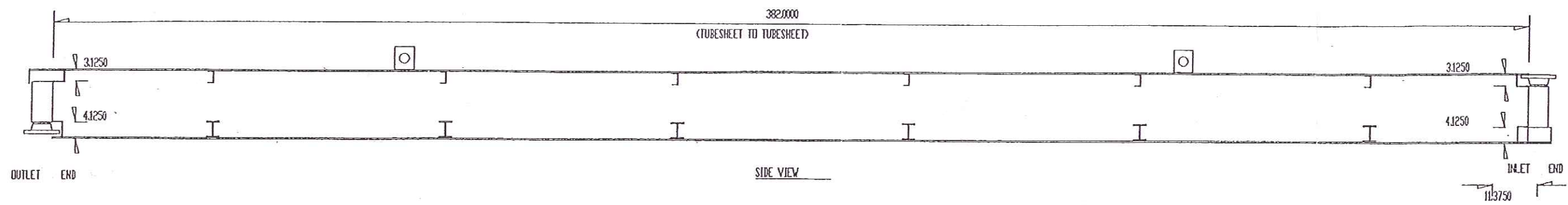
SMITHCO AIR COOLED DIVISION
TULSA, OKLAHOMA

#99556

#99556

NATIONAL BOARD NO		5139	
CERTIFIED BY			
SMITH ENGINEERING INC.			
S. C. L. I. C.			
W	150	300	
HT	-20	150	
93B2661-A		1994	
11225		E-3307B	
ACTIVE SOLUTION CLR			
P.O. NO. 202293			

#99556



Certified
By *[Signature]* 12-7-93

1 CHNG FINISH PER CUSTOMER AND CERTIFIED DJM 12-7-93

MACHINING	DRILL	REAM	SPECIAL
TUBE HOLE	0.9375	1.010	±0.002 SG
PLUG HOLE	1.0312	SF 1.375	TAP 0.7500
NOZZLE IN (1)	4.00	150	# RF SCH XS
OUT (1)	4.00	150	# RF SCH XS
VENT 3/4-6000	DRAIN	3/4-6000	
HEAT TREAT	1100	DEG. F	30 MIN.
WEIGHT	1700		

INLET TUBE PLUG	0.7500	131.6250	10.3750	NONE
INLET COVER	0.3750	131.6250	3.4375	LONG SIDES
INLET END	0.3750	3.4375	9.3750	ALL SIDES
INLET STAY	0.3750	130.6875	3.5000	ALL SIDES
RETURN TUBE PLUG	0.7500	131.6250	10.3750	NONE
RETURN COVER	0.3750	131.6250	3.4375	LONG SIDES
RETURN END	0.3750	3.4375	9.3750	ALL SIDES
RETURN STAY	0.3750	130.6875	3.5000	ALL SIDES

MATERIAL SPECIFICATIONS	
PLATE	SA-516 GR-70
FLG	SA-105
PIPE	SA-106B STOCK
CPLG	SA-105 STOCK
WELD PROCEDURES	
PIPE-FLANGE	SH-2HT/SH-2HT
FLANGE-HEAD	SH-1HT/SH-1HT
HAND WELD	SH-2HT/SH-2HT
AUTO WELD	SH-3HT/SH-3HT
PLATE TOLERANCES	±1/16"

TUBES	283	TF	57	ROWS	5	PASS	5	LGTH	384	IN.
TUBE OD	1.000	X	0.0650	MATL	SA-214	VLD				
FIN TYPE	L-TENSION			10.0	-	0.625	-	alum		
PLUG QTY	566	TYPE	CS	-	1818					
GASKET	CS	-	1813							
EXPANDER	0.8800	LENGTH	6.0000							
FRAME -THICK	0.1793									
LENGTH	394	IN. DEPTH	17.7500	X	3					
SUPPORT-	6	BINDER-	6	CLOSER-	4	131.250				
SUPPORT TYPE										
F.FOOT:	6' X	3.9375		R.FOOT:	6' X	3.9375				

J13218	TEST PRESSURE:	225	TIME:	60	MIN.	V/ CHART
J13189	HEADS:	COMMERCIAL BLAST CLEAN				
	FRAME:	COMMERCIAL BLAST CLEAN				
	COIL VOLUME:	46	FT ³			
	TOLERANCES	LENGTH & WIDTH	±0.125"	PER 10'	±0"	
	TUBE PROJECTION	0.25	±0.125"			

AIR COOLED DIVISION						
BUNDLE DETAILS						
APPRV	REV 1 12-7-93					
SERVICE ITEM	AMINE SOLUTION CLR E-3307B					
MFG	VELD	FIN	ASMBL	STRUC	INSP	CUST
1	2		2	1	1	0
QTY 1	WEIGHT 14100	93 B 266 1				