

NOZZLE SCHEDULE

MARK	NO.	SIZE	RATING	FLANGE & RATING	MAX SCHEDULE	RE-PAD SIZE	SERVICE
A	1	2"	3000#	HALF C.F.O.	-	N/A	SENSOR
B	1	1 1/2"	1500#	R.F.S.O. F.L.G.	SCH 40S	N/A	INLET
C	3	2"	1500#	R.F.S.O. F.L.G.	SCH 40S	N/A	STATION W/OP TUBE
D	1	1 1/2"	3000#	ELUPTICAL	3/2"	N/A	MANWAY
E	1	10"	1800#	HALF C.F.O.	-	N/A	RELIEF VALVE
F	1	1 1/2"	3000#	HALF C.F.O.	-	N/A	TEST DRUM W/PLUG
G	2	1 1/2"	3000#	HALF C.F.O.	-	N/A	TEST DRUM W/PLUG
H	1	2"	3000#	HALF C.F.O.	-	N/A	TEST DRUM W/PLUG

INTERIOR: SANDBLAST PER SSPC-SP-10 (NEAR WHITE BLAST CLEAN) AND PAINT WITH (2) COATS OF CARBOLINE BITUMASTIC 50 COAL TAR EPOXY @ 18-24 TOTAL MILS D.F.T.

- NOTES:
1. BOX HOLES STRUCKLE NATURAL VESSEL CENTERLINES U.M.D.
  2. WHEN LIFTING, A SPREADER BAR IS REQ'D. MAXIMUM SLING ANGLE IS 15°.
  3. FURNISH (6) HOLD-DOWN STRAPS W/TURNBUCKLES, SHIPPED LOOSE.
  4. FURNISH (2) 1/2" THRD. PLUMS FOR MARKS G1 & G2 (INSTALLED PRIOR TO LINING PROCESS).
  5. 48" MAXIMUM ELL ODER TANK - NO TRAFFIC LOAD ALLOWED.
  6. FOR FLANGE ATTACHMENT DETAIL, SEE DWG. A-87-SFADTL.

DESIGN DATA

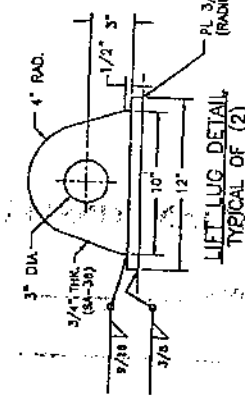
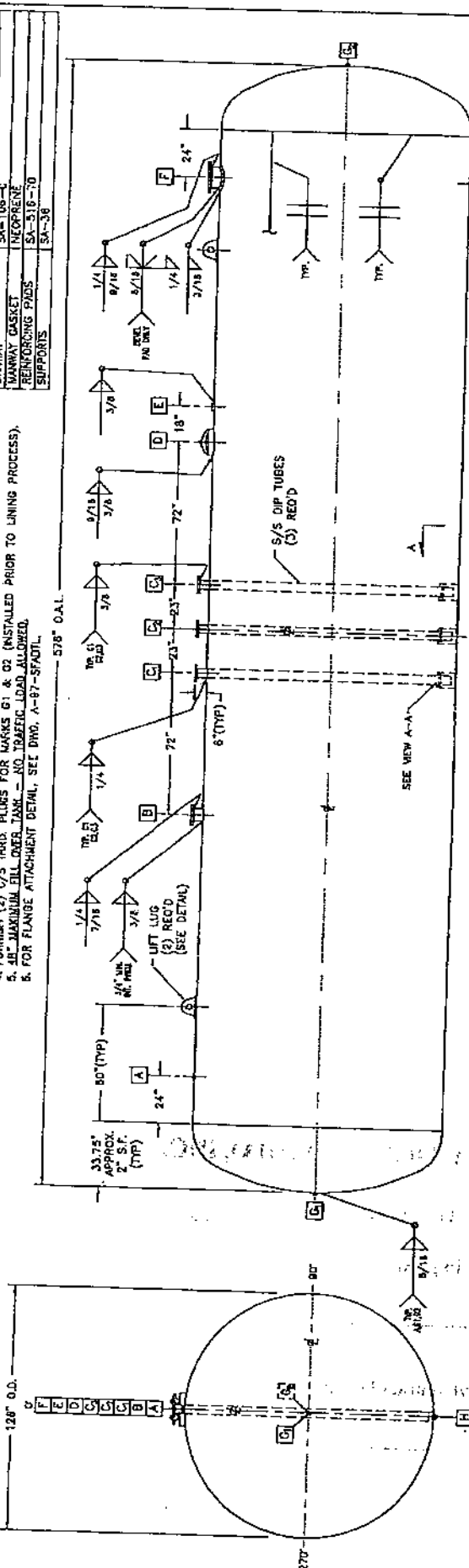
DESIGN FAB & STAMP	ASME SECT. VIII, DIV. 1, 2007 ED., 995.000
DESIGN PRESSURE	100 P.S.I.G.
DESIGN TEMPERATURE	250°F
CORROSION ALLOWANCE	NONE
RADIATION EXAM.	SPOT
JOINT EFFICIENCY	100% HEADS & 70% SHELL
TEST PRESSURE	130 P.S.I.G.
PHOT	NOT REQUIRED
TOLERANCE	-20%
STORAGE CAPACITY	35,000 GALLONS (APPROX.)
WEIGHT (EMPTY)	38,000 LBS. (APPROX.)

MATERIAL SPECIFICATIONS

HEADS (2:1 ELUPTICAL)	316L MIN THK SA-516-70
SHELL	1 1/2" THK SA-516-70
NOZZLE NECKS	SA-312-304/304L
NOZZLE FLANGES	SA-105
COUPLINGS	SA-105
MANWAY	SA-105-10
MANWAY GASKET	NEOPRENE
REINFORCING PADS	SA-516-70
SUPPORTS	SA-306

WELD PROCEDURES

PI/ASA	P1/PCAW-05
PI/TC	P1/PCAW-05
PI/TS	P1/PCAW-05
PI/TS-11C	P1/PCAW-05



ELEVATION

ORIENTATION



RECO HORIZONTAL STORAGE TANK  
MODEL 5TH100-126578E  
(126" O.D. x 48'-0" O.A.L.)

CUSTOMER: NSI SUPPLY, INC.  
PROJECT: CAPE CORAL VA OUTPATIENT CLINIC  
LOCATION: CAPE CORAL, FL  
TAG INFO: N/A

PL 3/4" x 3" x 12" REPAD (SA-306)  
(RADIUS CORNERS TO A 1/2" RADIUS)

NO.	DATE	BY	CHK'D	APP'D	REV.
1	U-14769	7-18-10	8-10-1476900	1	

**FORM U-1 MANUFACTURER'S DATA REPORT FOR PRESSURE VESSELS**  
As Required by the Provisions of the ASME Boiler and Pressure Vessel Code Rules, Section VIII, Division 1

1. Manufactured and certified by RECO USA 1839 DUNBAR ROAD CAYCE SOUTH CAROLINA 29033 USA  
(Name and address of Manufacturer)

2. Manufactured for MSI SUPPLY INC. 4411 BEE RIDGE RD. #330 SARASOTA, FL 34233  
(Name and address of Purchaser)

3. Location of installation CAPE CORVAL VA OUTPATIENT CLINIC, CAPE CORAL, FL  
(Name and address)

4. Type Horizontal STORAGE TANK U-14769  
(Horizontal, vertical, or sphere) (Tank, separator, jkt. vessel, heat exch., etc.) (Manufacturer's serial number)  
NA B-10-14769 R1 31256  
(CRN) (Drawing number) (National Board number) (Year built)  
5. ASME Code, Section VIII, Div. 1 2007 Edition, 2009 NA NA  
(Edition and Addenda (date)) (Code Case number) (Special service per UG-120(d))

Items 6 - 11 incl. to be completed for single wall vessels, jackets of jacketed vessels, shell of heat exchangers, or chamber of multichamber vessels.

6. Shell: (a) Number of course(s) 5 (b) Overall length 42' - 1"

Course(s)			Material		Thickness		Long. Joint (Cat. A)			Circum. Joint (Cat. A, B, & C)			Heat Treatment	
No.	Diameter	Length	Spec./Grade or Type		Nom.	Corr.	Type	Full, Spot, None	Eff.	Type	Full, Spot, None	Eff.	Temp.	Time
1&2	126"	8' - 5" EA.	SA516-70		1/2"	0	1	None	70	1	None	70	NA	NA
3&4	126"	8' - 5" EA.	SA516-70		1/2"	0	1	None	70	1	None	70	NA	NA
5	126"	8' - 5"	SA516-70		1/2"	0	1	None	70	1	None	70	NA	N

7. Heads: (a) SA516-70 (b) SA516-70  
(Material spec. number, grade or type) (H.T. - time & temp.) (Material spec. number, grade or type) (H.T. - time & temp.)

	Location (Top, Bottom, Ends)	Thickness		Radius		Elliptical Ratio	Conical Apex Angle	Hemispherical Radius	Flat Diameter	Side to Pressure		Category A		
		Min.	Corr.	Crown	Knuckle					Convex	Concave	Type	Full, Spot, None	Eff.
(a)	LT. END	.328"	0	-	-	2:1	-	-	-	-	X	-	-	-
(b)	RT. END	.328"	0	-	-	2:1	-	-	-	-	X	-	-	-

If removable, bolts used (describe other fastening) NA

8. Type of jacket NA (Material spec. number, grade, size, number) NA  
Jacket closure NA (Describe as ogree and weld, bar, etc.)  
If bar, give dimensions NA If bolted, describe or sketch.

9. MAWP 100 - at max. temp. 250 - Min. design metal temp. -20 at 100  
(Internal) (External) (Internal) (External)

10. Impact test NO PERUG-20(I) at test temperature of -  
(Indicate yes or no and the component(s) impact tested)

11. Hydro. ~~static~~ test pressure 130 Proof test NA

Items 12 and 13 to be completed for tube sections.

12. Tubesheet  
(Stationary (material spec. no.)) (Diameter (subject to press.)) (Nominal thickness) (Corr. allow.) (Attachment (welded or bolted))  
(Floating (material spec. no.)) (Diameter) (Nominal thickness) (Corr. allow.) (Attachment)

13. Tubes  
(Material spec. no., grade or type) (O.D.) (Nominal thickness) (Number) (Type (straight or U))

Items 14 - 18 incl. to be completed for inner chambers of jacketed vessels or channels of heat exchangers.

14. Shell: (a) Number of course(s) - (b) Overall length -

Course(s)			Material		Thickness		Long. Joint (Cat. A)			Circum. Joint (Cat. A, B, & C)			Heat Treatment	
No.	Diameter	Length	Spec./Grade or Type		Nom.	Corr.	Type	Full, Spot, None	Eff.	Type	Full, Spot, None	Eff.	Temp.	Time
1	-	-	-		-	-	-	-	-	-	-	-	-	-
2	-	-	-		-	-	-	-	-	-	-	-	-	-
3	-	-	-		-	-	-	-	-	-	-	-	-	-

15. Heads: (a) - (b) -  
(Material spec. number, grade or type) (H.T. - time and temp.) (Material spec. number, grade or type) (H.T. - time and temp.)

	Location (Top, Bottom, Ends)	Thickness		Radius		Elliptical Ratio	Conical Apex Angle	Hemispherical Radius	Flat Diameter	Side to Pressure		Category A		
		Min.	Corr.	Crown	Knuckle					Convex	Concave	Type	Full, Spot, None	Eff.
(a)	-	-	-	-	-	-	-	-	-	-	-	-	-	-
(b)	-	-	-	-	-	-	-	-	-	-	-	-	-	-

If removable, bolts used (describe other fastening) -

(Material spec. number, grade, size, number)

## Form U-1 (Back)

16. MAWP NA NA at max. temp. NA NA Min. design metal temp. NA at NA  
 (Internal) (External) (Internal) (External)  
 17. Impact test NA at test temperature of NA  
 (Internal) (External)  
 18. Hydro., pneum., or vacuum test pressure NA [Indicate yes or no and the component(s) impact tested]  
 NA Proof test NA

19. Nozzles, inspection, and safety valve openings:

Purpose (Inlet, Outlet, Drain, etc.)	No.	Diameter or Size	Flange Type	Material		Nozzle Thickness		Reinforcement Material	How Attached		Location (Insp. Oper.)
				Nozzle	Flange	Nom.	Corr.		Nozzle	Flange	
Manway	1	12" X 16"	ELLIP	SA106C	-	3/4"	0	NONE	UW16.1(f)	-	SHELL
Vent	1	10"	CL150	SA312-304	SA105	SC140	0	SA516-70	UW16.1(s)	S.O.	-
Inlet	1	6"	CL150	SA312-304	SA105	SC140	0	NONE	UW16.1(f)	S.O.	-
SUCTION	3	4"	CL150	SA312-304	SA105	SC140	0	NONE	UW16.1(f)	S.O.	-
Relief	1	3"	CPLG	SA182-304	-	3000#	0	NONE	UW16.1(f)	-	-
SENSOR	1	2"	CPLG	SA182-304	-	3000#	0	NONE	UW16.1(f)	-	-
SPARE	2	1 1/4"	CPLG	SA182-304	-	3000#	0	NONE	UW16.1(f)	-	-

20. Supports: Skirt NO Lugs - Legs - Others - Attached -  
 (Yes or no) (Number) (Number) (Describe) (Where and how)

21. Manufacturer's Partial Data Reports properly identified and signed by Commissioned Inspectors have been furnished for the following items of the report (list the name of part, item number, Manufacturer's name, and identifying number):  
 -  
 -  
 -

22. Remarks

## CERTIFICATE OF SHOP COMPLIANCE

We certify that the statements in this report are correct and that all details of design, material, construction, and workmanship of this vessel conform to the ASME BOILER AND PRESSURE VESSEL CODE, Section VIII, Division 1.

U Certificate of Authorization Number 4510 Expires 10/1/2011  
 Date 10/26/2010 Name RECO USA Signed [Signature]  
 (Manufacturer) (Representative)

## CERTIFICATE OF SHOP INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and/or the State or Province of SC and employed by One Beacon America Ins. Co. of Lynn, MA

have inspected the pressure vessel described in this Manufacturer's Data Report on 10/27/10, and state that, to the best of my knowledge and belief, the Manufacturer has constructed this pressure vessel in accordance with ASME BOILER AND PRESSURE VESSEL CODE, Section VIII, Division 1. By signing this certificate neither the Inspector nor his/her employer makes any warranty, expressed or implied, concerning the pressure vessel described in this Manufacturer's Data Report. Furthermore, neither the Inspector nor his/her 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 10/27/10 Signed [Signature] Commissions NB14016 A SC247  
 (Authorized Inspector) (National Board (incl. endorsements), State, Province, and Number)

## CERTIFICATE OF FIELD ASSEMBLY COMPLIANCE

We certify that the statements on this report are correct and that the field assembly construction of all parts of this vessel conforms with the requirements of ASME BOILER AND PRESSURE VESSEL CODE, Section VIII, Division 1. U Certificate of Authorization Number 4510 Expires 10/1/2011

Date 10/27/10 Name RECO USA Signed [Signature]  
 (Assembler) (Representative)

## CERTIFICATE OF FIELD ASSEMBLY INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and/or the State or Province of - and employed by -

of -, have compared the statements in this Manufacturer's Data Report with the described pressure vessel and state that parts referred to as data items -, not included in the certificate of shop inspection, have been inspected by me and to the best of my knowledge and belief, the Manufacturer has constructed and assembled this pressure vessel in accordance with the ASME BOILER AND PRESSURE VESSEL CODE, Section VIII, Division 1. The described vessel was inspected and subjected to a hydrostatic test of -.

By signing this certificate neither the Inspector nor his/her employer makes any warranty, expressed or implied, concerning the pressure vessel described in this Manufacturer's Data Report. Furthermore, neither the Inspector nor his/her 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 10/27/10 Signed [Signature] Commissions -  
 (Authorized Inspector) (National Board (incl. endorsements), State, Province, and Number)