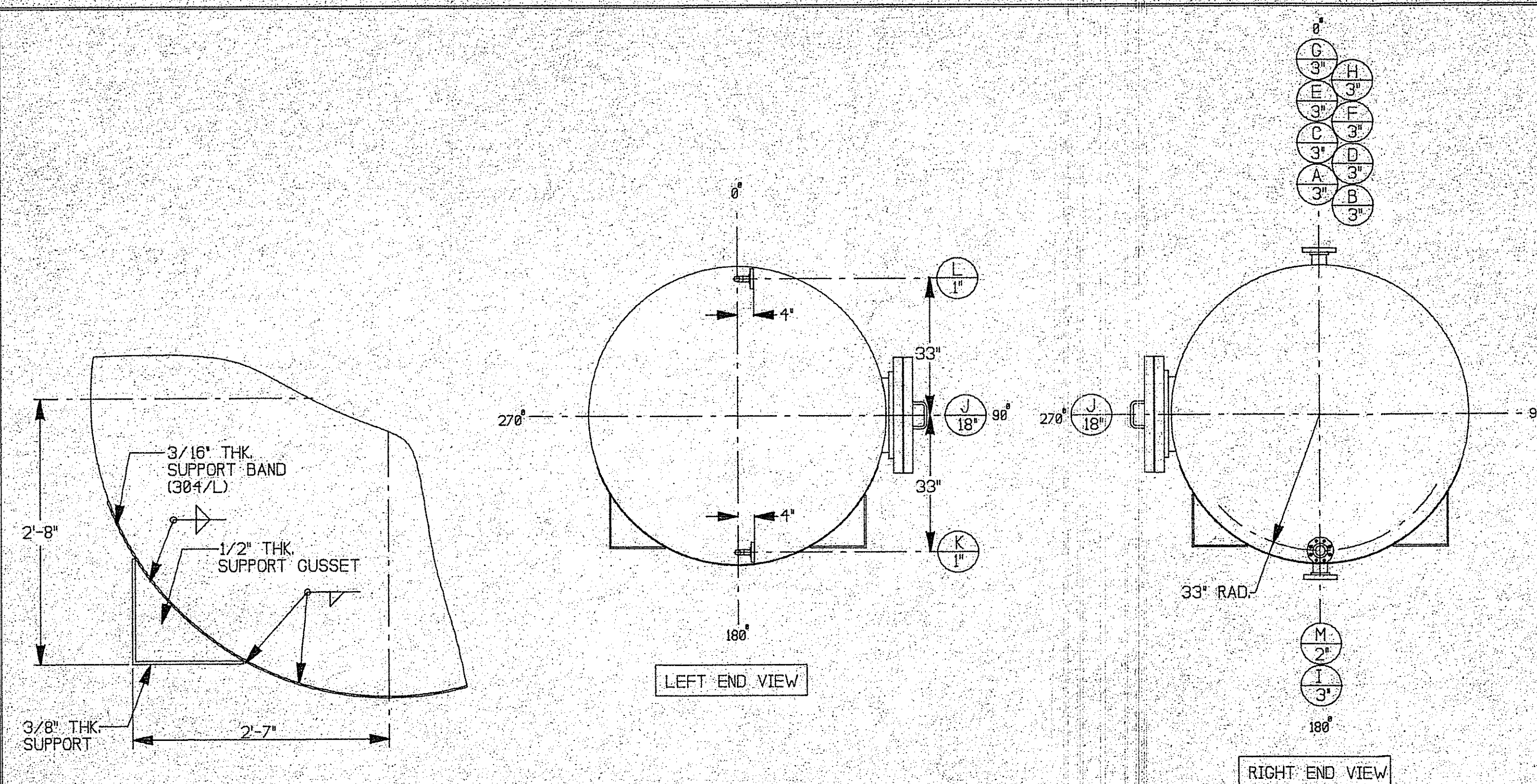


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DESIGN DATA	SHELL	JACKET	COIL
DESIGN PRESSURE (PSIG)	5V. & 150		
DESIGN TEMPERATURE (DEG.F)	650		
MINIMUM DESIGN METAL TEMP	-20		
MAXIMUM ALLOWABLE PRESSURE			
LIMITED BY			
OPERATING PRESSURE			
OPERATING TEMPERATURE (DEG.F)			
CORROSION ALLOWANCE	0.000"		
CODE ASME SECT. VIII, DIV. I, 1995, A95	YES		
"U" STAMP & NAT. BD. REGIST.	YES		
JOINT EFFICIENCY	HEAD	1.0	
	SHELL	0.85	
HYDROTEST (PSIG)	273		
RADIOGRAPHY - HEAD SPOT PER UW11-(A)(5)(B)/SHELL SPOT			
STRESS RELIEF - NONE			
TYPE HEADS AT SHELL - ASME TOR F&D 72" O.D. DR=66, KR=6", & SF=15			
TYPE OF CLOSURE AT JACKET -			
TYPE OF SUPPORT - SADDLES			
SHIPPING WEIGHT - 6075 LBS.			
OPERATING WGT. (AT SPEC. GRAV. = 10) 25718 LBS.			
CAPACITY (U.S. GALLONS) - 2358 GALLONS FULL			

MATERIAL SPECIFICATIONS	
SHELL- VESSEL-	SA-240-316/316L
JACKET-	
HEADS- VESSEL-	SA-240-316/316L
JACKET-	
COIL-	
FLANGE SPEC-	SA-182F-316/316L
EXTERNAL PIPE SPEC-	SA-312-WLD-316/316L,SA-240-316/316L
INTERNAL PIPE SPEC-	
OVERLAY SPEC-	
BOLTING (EXTERNAL)-	SA-193-B7;SA-194-2H
BOLTING (INTERNAL)-	
GASKET-	COMPRESSED NON ASBESTOS
INTERNALS-	
VESSEL SUPPORT MATL-	SA-240-304/L,SA-36
DOUBLER MATL-	
INSULATION-	

PAINTING-	SHOP PRIME C.S. ONE COAT OF SHOP PRIMER
NOTES:	
1.	COVER ALL FLANGES, OPENINGS, ETC. PRIOR TO SHIPMENT, U.O.N.
2.	NOZZLE BOLT HOLES TO STRADDLE Ø-180 C OR ITS PARALLEL

WHITING METALS
CAMDEN, SOUTH CAROLINA
PHONE (803) 438-3461
FAX (803) 438-3652

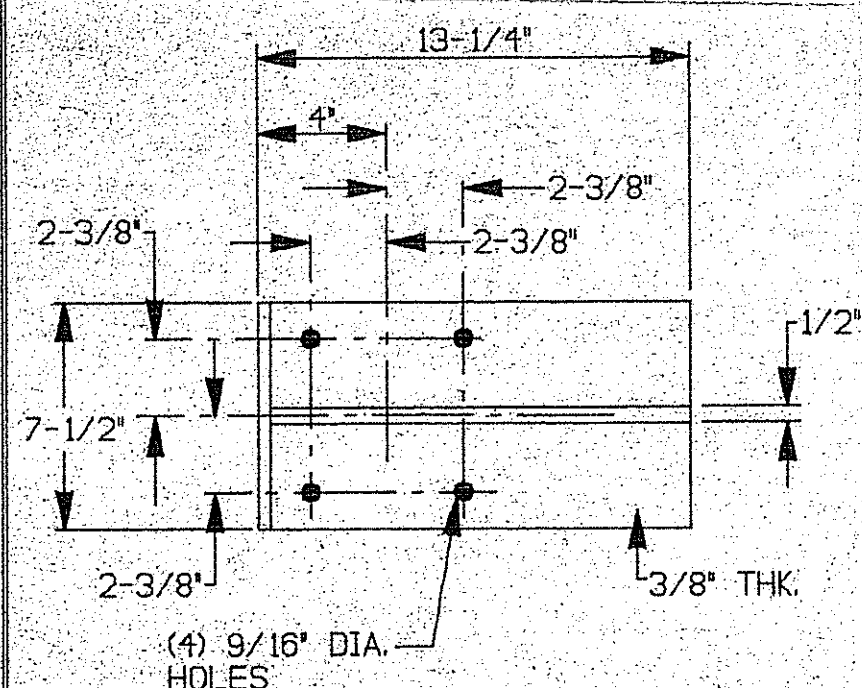
			EK-7	EK-4	RECEIVER
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				HENKEL	11403
E	Q	1-15-87	SMS		

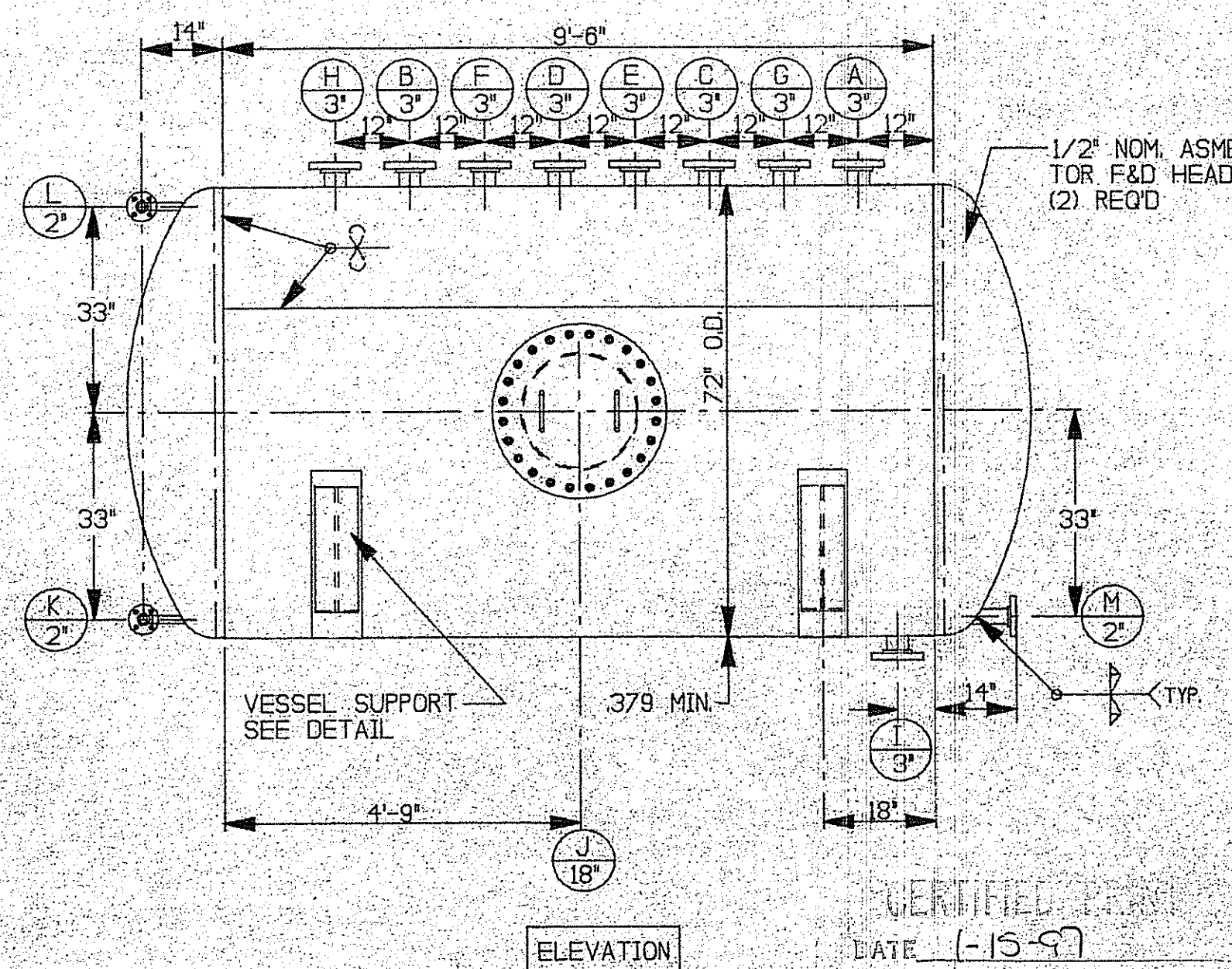
AL	A	1-2-97	SMS	DRAWN BY	SMS	SCALE	1/2"=1'	DRAWING NUMBER
NUMBER		DATE	BY	DATE	1-2-97			73101

REVISIONS	CHKD	APPD
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15



VESEL SUPPORT DETAIL
(4) REQ'D



100-443887-100

DATE 1-15-97

SIGNED *SS*

P.O. NUMBER - 166453

WELD PROCEDURE NO'S

#2, #4, #7, #8

WHITING METALS

CAMDEN, SOUTH CAROLINA
PHONE (803) 438-3461
FAX (803) 438-3652

EK-7 ~~EK-4~~ RECEIVER

HENKEL 114030

RELEASE	0
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REVISIONS

CHKD	
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APP'D

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F7181

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

114030

1. Manufactured and certified by Whiting Metals, Inc., subs. of Synalloy Corp., 1900 Whiting Way, Lugoff, SC 29078
(Name and address of manufacturer)

2. Manufactured for Henkel Corp., P.O. Box 7044, Charlotte, NC 28241
(Name and address of purchaser)

3. Location of installation Henkel Corp., 3300 Westinghouse Blvd., Charlotte, NC 28273
(Name and address)

4. Type Horizontal P-7181 - F-7181 1617 1997
(Name, or word, mark) (Mfg's serial No.) (CRN) (Drawing No.) (Part. Id. 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. 1995
Year

to A25
(Addenda (Date))

6. Shell: SA240-316/316L .375" 0.0" 5'-11 1/4" 9'-6"
(Mat. Spec. No., Grade) (Nom. Thk. (in.)) (Corr. Allow. (in.)) (Diam. I.D. (ft. & in.)) (Length (overall) (ft. & in.))

7. Seams: W,D,B Spot 85% - W,D,B Spot 1
(Long. (Welded, Dbl., Spig. Lap, Butt)) (R.T. (Spot or Full)) (S.R. (in.)) (H.T. Temp. (°F)) (Time (hr)) (Grth. (Welded, Dbl., Spig. Lap, Butt)) (R.T. (Spot, Partial, or Full)) (No. of Courses)

8. Heads: (a) Matl. SA240-316/316L (b) Matl. SA240-316/316L
(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	Flange Diameter	Side to Pressure (Convex or Concave)
(a)	Top/Btm	.500	0.0"	66"	6"	-	-	-	-	Concave
(b)										

If removable, bolts used (describe other fastenings) -

9. MAWP FV & 150 650 psi at max. temp. -20 °F at FV & 150 psi Hydro. 253 test pressure 253 psi.
Min. design metal temp. (°F)

10. Nozzles, inspection and safety valve openings:

Purpose (Inlet, Outlet, Drain)	No.	Diam. or Size	Type	Matl.	Nom. Thk.	Reinforcement Matl.	How Attached	Location
	(2)	1"	300#30	SA312W316/316L	Sch40	-	Welded	
	(1)	2"	"	"	Sch80	-	"	
	(1)	3"	"	"	Sch40	SA240-316/316L	"	
	(1)	18"	"	SA240-316/316L	3/8"	"	"	

11. Supports: Skirt No Lugs L Legs - Other - Attached Welded to shell
(Yes or no) (Mat.) (Mat.) (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:

EXEMPT FROM IMPACTS PER UHA-51
PURCHASE ORDER NO.: 166453
DESCRIPTION & ITEM NO.: PK-4 Receiver

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. 10330 expires March 29, 1997.
Date 3/25/97 Co. name Whiting Metals, Inc., subs. of Synalloy Corp. Signed [Signature] (Representative)

CERTIFICATE OF SHOP INSPECTION

Vessel constructed by Whiting Metals, Inc., subs. of Synalloy Corp., 1900 Whiting Way, Lugoff, SC 29078
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 GA and employed by H.S.B.I. & I. Co. of Hartford, CT
have inspected the component described in this Manufacturer's Data Report on 3-25, 1997, 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 3-25-97 Sign: Ramon P. Dulladanes Commission: NB 7465A GA167
(Authorized Inspector) (National Board (incl. order number), State, Prov. and No.)