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 Boiler and Pressure Vessel Code Rules, Section VIII, Division 1

1. Manufactured and certified by NORTHERN DESIGN SERVICES, INC.-SHOP 424 E. DRESDEN ST. KALKASKA,MI 49646 (Name and address of Manufacturer)
2. Manufactured for NATURAL GAS COMPRESSION SERVICES, INC 2480 AEROPARK DR. TRAVERSE CITY, MI 49686 (Name and address of Purchaser)
3. Location of installation UNKNOWN (Name and address)
4. Type VERT. FILTER (Horizontal or vertical, tank) | 11464 (Manufacturer's serial number) | - (CRN) | 24FS1QC380 (Drawing number) | 5796 (National Board number) | 2011 (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 2010 (Year)
   to NO ([Addenda, if applicable (date)]) | - ([Code Case numbers]) | - ([Special service per UG-120(d)])
6. Shell SA-106B (Material spec. number, grade) | .375" (Nominal thickness) | - (Corr. allow.) | 23.25" (Inner diameter) | 70" ([Length (overall)])
7. Seams SMLS ([Long. (welded, dbl., sngl., lap, butt)]) | - ([R.T. (spot or full)]) | 85 (Eff., %) | - (H.T. temp.) | - (Time, hr) | WELDED, SINGLE BUTT ([Girth (welded, dbl., sngl., lap, butt)]) | - ([R.T. (spot or full)]) | 70 (Eff., %) | 1 (No. of courses)
8. Heads: (a) Material SA-516 GR70 (Spec. no., grade) (b) Material SEE ATTACHED PARTIAL DATA REPORT (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)	BOTTOM	.3125"	-	-	-	2:1	-	-	-	CONCAVE
(b)	-	-	-	-	-	-	-	-	-	

If removable, bolts used (describe other fastenings) SEE ATTACHED PARTIAL DATA REPORT (Material spec. number, grade, size, number)

9. MAWP 272 (Internal) | N/A (External) at max. temp. 150 (Internal) | N/A (External)
   Min. design metal temp. -20 at 272 . Hydro., ~~pneumatic~~ test pressure 354 PSI PROOF TEST: N/A
10. Nozzles, inspection, and safety valve openings:

Purpose (Inlet, Outlet, Drain etc.)	No.	Diameter or Size	Type	Material		Nozzle Thickness		Reinforcement Material	Attachment Details		Location (Insp. Open.)
				Nozzle	Flange	Nom.	Corr.		Nozzle	Flange	
INLET/OUTLET	2	10"-150#	RFWN	SA-106B	SA-105	.500"	-	SA-53B	UW-16.1(c)	TYPE 1	SHELL
SIGHT GLASS	2	3/4"FNPT	TOL	SA-105	-	3000#	-	INHERENT	UW-16.1(a)	-	SHELL/B.HEAD
DUMP/RECYCLE	2	1"FNPT	TOL	SA-105	-	3000#	-	INHERENT	UW-16.1(a)	-	B.HEAD/SHELL
MAN. DUMP	1	1"FNPT	CPL	SA-105	-	3000#	-	INHERENT	UW-16.1(c)	-	B.HEAD
LEVEL/BYPASS/FUEL	4	2"FNPT	HLF.CP	SA-105	-	6000#	-	INHERENT	UW-16.1(c)	-	SHELL
DPI/PI/AUX.	5	1/4"FNPT	TOL	SA-105	-	6000#	-	INHERENT	UW-16.1(a)		SHELL/T.HEAD

11. Supports: Skirt YES (Yes or no) Lugs 1 (Number) Legs - (Number) Other - (Describe) Attached TOP/BOTTOM HEAD/WELDED (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: TOP HEAD IS A 24" 300# QUICK CLOSURE S/N -26709, MFG. BY LOS ANGELES BOILER WORKS INC. (Name of part, item number, Manufacturer's name and identifying stamp)
FOR NON-LETHAL/NON-CORROSIVE SERVICE. EXEMPT FROM IMPACT TESTING PER UG-20(f) AND UCS-66(c)

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 BOILER AND PRESSURE VESSEL CODE, Section VIII, Division 1. "U" Certificate of Authorization Number 33.792 expires 02/05/12 .

Date 10/7/11 Co. name NORTHERN DESIGN SERVICES,INC. (Manufacturer) Signed P.KALTENBACH Q.C (Representative)

CERTIFICATE OF SHOP/FIELD INSPECTION

Vessel constructed by NORTHERN DESIGN SERVICES,INC. at 424 E. DRESDEN ST. KALKASKA,MI 49646 .

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 MICHIGAN and employed by HSB CT have inspected the component described in this Manufacturer's Data Report on 10/3/11 , 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 10/7/11 Signed John S Kelly (Authorized Inspector) Commissions NB14299A MI 300611 [National Board (incl. endorsements), State, Province, and number]

(07/10)

FORM U-2A MANUFACTURER'S PARTIAL DATA REPORT (ALTERNATIVE FORM)

A Part of a Pressure Vessel Fabricated by One Manufacturer for Another Manufacturer 11-1390

As Required by the Provisions of the ASME Code Rules, Section VIII, Division 1

1. Manufactured and certified by: Los Angeles Boiler Works Inc 707 N. 20th Street Blackwell, OK. 74631
(Name and address of Manufacturer)
2. Manufactured for: Northern Design Services, Inc. 424 E. Dresden Kalkaska, MI 49646
(Name and address of Purchaser)
3. Location of installation: Unknown
(Name and address)
4. Type: 24" 300 psi Hinged Closure [Description of vessel part (shell, two piece head, tube bundle)] | 26707 thru 26713 (Mfg's serial No.) | N/A (CRN)
N/A (Nat'l Bd. No.) | CN-1963-3J (Drawing No.) | Los Angeles Boiler Works Inc (Drawing prepared by) | 2011 (Year built)
5. ASME Code Section VIII Div 1 | 2010 Edition [Edition and Addenda (date)] | N/A (Code Case No.) | N/A [Special Service per UG-120(d)]
6. Shell (a) No. of course (s): 1 (b) Overall Length (ft & in.): 0' 6"

Courses			Material	Thickness		Long. Joint (Cat A)			Circum. Joint (Cat. A, B, & C)			Heat Treatment	
No.	Diameter	Length (ft & in.)	Spec./Grade or Type	Nom.	Corr.	Type	Full, Spot, None	Eff.	Type	Full, Spot, None	Eff	Temp.	Time
1	24	0' 6"	SA-106B	.500	.125	sml	None	-	- -	- - -	-	- - -	- - -

7. Heads: (a) SA-516-70 Norm. (Matl. Spec. No., Grade or Type) (H.T. – Time & Temp) (b) N/A (Matl. Spec. No., 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)	Top	.43	.13	- -	- -	2:1	- -	- - -	- -	- -	XX	-	- -	- -
(b)														

If removable, bolts used (describe other fastenings) ten (10) - 1" SA-193 B7 Stud with SA-194 2H Nut (Mat'l Spec. No., Grade, Size, No.)

8. MAWP 300 (internal) 15 (external) psi at max temp. 650 (internal) 650 (external) °F Min. design metal temp. -20 °F at 300 psi
9. Impact Test No, exempt per UG 20 (f). Bolting exempt per UCS 66 (b). at test temperature of N/A °F
Indicate yes or no and the component(s) impact tested
10. Hydro., Pneu., or comb. test press. None Proof Test None
11. 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. Open.)
				Nozzle	Flange	Nom.	Corr.		Nozzle	Flange	

12. Identification of Parts:

Name of Part	Quantity	Line No.	Mfr's Identification No.	Mfr's Drawing no.	CRN	National Board No.	Year Built

13. Supports: Skirt NO (Yes or No) Lugs N/A (No.) Legs N/A (No.) Others N/A (Describe) Attached N/A (Where and How)
14. Remarks No hydro test performed. Design functions and calculations by Los Angeles Boiler Works Inc. Heat Nos. Heads-ArcelorMittal 101P32450 E056242 (GEI), 101P32480 E056245 (GER) SA-516-70 Norm.; Necks-USS U81957 (GCS) SA-106-B.

CERTIFICATE OF SHOP/FIELD COMPLIANCE

We certify that the statements made in this report are correct and that all details of material, construction and workmanship of this pressure vessel part conform to the ASME Code for Pressure Vessels, Section VIII, Division 1.

U Certificate of Authorization No. 721 Expires 30 March 2013

Date 3/31/11 Name Los Angeles Boiler Works Inc (Manufacturer) Signed (Representative)

CERTIFICATE OF SHOP/FIELD 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 of Oklahoma and employed by Seneca Insurance Company of Houston, Texas have inspected the pressure vessel part described in this Manufacturer's Data Report on 4-1-11 and state that, to the best of my knowledge and belief, the Manufacturer has constructed this pressure vessel part 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 part 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 4-1-11 Signed (Authorized Inspector) Commissions NB 12164A OK 856 (Nat'l Board incl endorsements State, Province and No)