

FORM U-1A MANUFACTURER'S DATA REPORT FOR PRESSURE VESSELS
(Alternative Form For Single Chamber, Completely Shop Fabricated Vessels Only) (A) 2904319
As Required By The Provisions Of the ASME Code Rules, Section VIII, Division 1

Manufactured and Certified By Natco Canada Ltd., 9423 Shepard Rd. S.E. Calgary AB.
(Name and address of manufacturer)

factured For NORCEN ENERGY RESOURCES LTD., 715 - 5 AVE. S.W. CALGARY, AB T2P 2X7
(Name and address of purchaser)

Location of Installation LSO: 9-20-88-11 WSM
(Name and address)

Type HORIZONTAL L-6438 F7404.2 CA-4627-03 --- 1993
(Horiz. Vert. Tank) (Mfr's serial no.) (CRN) (DRWG. 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
to 1992 --- --- (year)

Addenda (Date) Code Case Nos. Special Services per UG-120(d)

Shell: SA 516-70 .3125 .0625 5' 4 1/2" 20' S/S
Matl. (Spec. No., Grade) Nom. Thk. (in.) Corr. Allow. (in.) Diam. I.D. (ft. & in.) Length (Overall) (ft. & in.)

Seams: DBL-V-BUTT SPOT 85% N/A N/A DBL-V-BUTT SPOT 2
Long (Welded, Dbl. R.T. (Spot or Full) Eff. (%) H.T. Temp. (°F) Time (hr.) Sirth (Welded, Dbl. R.T. (Spot, Partial Sngl., Lap, Butt) or Full) No. of Courses

Heads (a) Matl. SA 516-70 (b) Matl. SA 516-70
Matl. (Spec. No., Grade) Matl. (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) END	.470	.0625	66"	6"					CONCAVE
b) END	.375	.0625	66"	5"					CONCAVE

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

MAWP 75 psi at max. temp 200 °F
Min. design metal temp. -20 °F at 75 psi Hydro., press., or comb. test pressure 113 psi

3. Nozzles, inspection and safety valve openings:

Purpose (Inlet, Outlet, Drain)	No.	Diam. or Size	Type	Matl.	Nom. Thk.	Reinforcement Matl.	How Attached	Location
SEE ATTACHED U-4 FORM								

1. Supports: Skirt NO Lugs NO Legs NO Other SADDLES Attached BOTTOM-WELDED
(Yes or No) (No.) (No.) (Describe) (Where and how)

2. 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, Mfr's name and identifying stamp)

HORIZONTAL DUAL POLARITY TREATER VOLUME 600 CU/FT
IMPACT TESTING NOT REQUIRED, EXEMPT PER UG-20f AND UCS-66a(3)
FAB DWG #: 6053-03

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. 11313 expires Sept. 9, 1995.
Date Nov 16/93 Co. Name NATCO CANADA LTD. SIGNED Perry Ross
(Manufacturer) (Representative)

CERTIFICATE OF SHOP INSPECTION

Vessel constructed by NATCO CANADA LTD. at CALGARY, ALBERTA
I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of ALBERTA and employed by GOVERNMENT OF ALBERTA
inspected the component described in this Manufacturer's Data Report on NOV 16, 19 93, 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 the 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 NOV. 16, 93 Signed [Signature] Commissions ACTA #11
(Authorized Inspector) (Natl Board (Incl. endorsement), State, Prov. and No.)

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

1. Manufactured and Certified By Natco Canada Ltd. 9423 Shepard Rd. S.E. Calgary AB. T2C-1E2
(Name and address of manufacturer)

Manufactured For NORCEN ENERGY RESOURCES LTD.
(Name and address of purchaser)

3. Location of Installation LSD: 9-20-88-11 WSH
(Name and address)

4. Type HORIZONTAL TREATER L-6438
(Horiz. Vert. or Sphere) (Tank, Separator, Heat exch., etc.) (Mfg's. serial No.)
F7404.2 CA-4627-03 --- 1993
(CRN) (Dup.#) (Mat'l Bd no.) (Year built)

Data Report
Item Number

Remarks

Attached

Purpose	No.	Size	Type	Mat'l	Thick.	Reinf. Mat	How	Where
W/T FRAME	F1-F2	18	FAB	SA51670	.625	-	WELD	HEAD
MANWAY	M1	24	FAB	SA 106-B	.500	-	WELD	HEAD
MANWAY	M2	24	FAB	SA 106-B	.500	-	WELD	SHELL
INLET	N1	3	RFWN	SA 106-B	.300	-	WELD	SHELL
OUTLET	N2	3	RFWN	SA 106-B	.300	-	WELD	SHELL
W OUTLET	N3A	3	RFWN	SA 106-B	.300	-	WELD	SHELL
W OUTLET	N3B	2	RFWN	SA 106-B	.343	-	WELD	SHELL
WAS OUTLET	N4	3	RFWN	SA 106-B	.300	-	WELD	SHELL
SV CONN.	N5	3	RFWN	SA 106-B	.300	-	WELD	SHELL
VESSEL DR.	N6AB	3	RFWN	SA 106-B	.300	-	WELD	SHELL
WILC	N7	4	RFWN	SA 106-B	.337	-	WELD	SHELL
WILC	N8	4	RFWN	SA 106-B	.337	-	WELD	SHELL
WILC	N9	4	RFWN	SA 106-B	.337	-	WELD	SHELL
WILC	N10	4	RFWN	SA 106-B	.337	-	WELD	SHELL
WILC	N11	4	RFWN	SA 106-B	.337	-	WELD	SHELL
SLUDGE DR.	N12	3	RFWN	SA 106-B	.300	-	WELD	SHELL
INTR. BUSHING	N13AB	4	RFWN	SA 106-B	.337	-	WELD	SHELL
WILC	N14	2	RFWN	SA 106-B	.343	-	WELD	SHELL
WILC	N15	2	RFWN	SA 106-B	.343	-	WELD	SHELL
WILC	N16	2	RFWN	SA 106-B	.343	-	WELD	SHELL
WILC	N17	2	RFWN	SA 106-B	.343	-	WELD	SHELL
WILC	N18AB	2	RFWN	SA 106-B	.343	-	WELD	SHELL
WILC	N19AB	2	RFWN	SA 106-B	.343	-	WELD	SHELL
WILC	N20AB	2	RFWN	SA 106-B	.343	-	WELD	SHELL
WILC	N21AB	2	RFWN	SA 106-B	.343	-	WELD	SHELL

Certificate of Authorization: Type "U" No. 11,313 Expires Sept. 9, 1995.

Date Nov 16/93 Name Natco Canada Ltd. Signed Perry Ross
(Manufacturer) (Representative)
Date Nov 16/93 Name [Signature] Commission PCA # 11
(Authorized Inspector) (Nat'l. Board (incl. endorsements), State, Province and No.)

Shop Order: 6053-03