

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

A400768

1. Manufactured and Certified by: ALCO GAS & OIL PRODUCTION EQUIPT LTD 5203-75 ST. EDMONTON ALBERTA
(Name and Address of Manufacturer)
2. Manufactured for: RIO ALTO C/O TUNDRA ENGINEERING 205- 5TH AVE SW, CALGARY ALBERTA
(Name and Address of Purchaser)

STOCK

3. Location of installation: VERTICAL
(Name and Address)

4. Type: VERTICAL
(Name and Address)
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

6. Shell: SA-516-70N
(Spec. No., Grade)
7. Seams: TYPE1
(Drawing No.)

8. Heads: (a) Mat'l SA-516-70N
(Spec. No., Grade)

9. MAWP 1480 psi at max. temp. 1480 °F
(Mat'l, Spec., No., Gr., Size., No.)
10. Nozzles, inspection, and safety valve openings: Hydro pneu., or comb. test pressure 2220 psi.

Location (Top, Bottom, Ends)	Minimum Thickness	Corrosion Allowance	Crown Radius	Knuckle Radius	Elliptical Radius	Conical Apex Angle	Hemispherical Radius	Flat Diameter	Side to Pressure (Convex or Concave)
(a) TOP	1.320"	.031"	N/A	N/A	2:1	N/A	N/A	N/A	CONCAVE
(b) BOTTOM	1.320"	.031"	N/A	N/A	2:1	N/A	N/A	N/A	CONCAVE

If removable, bolts used (describe other fastenings)

(Mat'l, Spec., No., Gr., Size., No.)

11. Supports: Skirts YES Lugs NO Legs NO Other NO Attached: wid to bott head
(Yes or No) (No.) (No.) (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

Purpose (Inlet, Outlet, Drain)	No.	Diam. Or Size	Type	Mat'l	Norm. Thk.	Reinforcement Mat'l	How Attached	Location
INLET	1	6" RFWN	600#	SA-106B/105N	SCH 160	SA-516-70N	UW16.1c	SHELL
OUTLET	1	6" RFWN	600#	SA-106B/105N	SCH-160	SA-516-70N	UW16.1c	TOP HEAD
RELIEF	1	2" RFWN	600#	SA-106B/105N/234WPB	SCH 160	N/A	UW 16.1c	SHELL
PRESS IND.	1	.5"	TOL	SA-105N	6000#	N/A	UW 16.1a	SHELL

11. Supports: Skirts YES Lugs NO Legs NO Other NO Attached: wid to bott head
(Yes or No) (No.) (No.) (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

PRODUCTION IMPACT TEST PER UG 84 TO -20 DEG F FOR ITEMS HEADS, SHELLS, ITEM12. OTHER MAT IMPACT TEST - <EMPT PER UG 20(f)>
GLYCOL CONTACTOR CAPACITY 4.0 CU M. SEE ATTACHED U4 DATA REPORT /AS BUILT ON DRAWING A-23950 R0

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. 14259 expires OCT 7 2001
Date 00-01-12 Co. name ALCO GAS & OIL PROD EQUIPT LTD Signed: [Signature] (Representative)

CERTIFICATE OF SHOP INSPECTION

Vessel constructed by ALCO GAS & OIL PROD. EQUIPT LTD at EDMONTON
I, the undersigned, hold a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and/or the State or Province of ALBERTA and employed by ABSA
have inspected the component described in this Manufacturer's Data Report on Jan 12 2000, 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 Jan 12, 2000 Signed [Signature] Commissions ALBERTA #87
(Authorized Inspector) (National Board Incl. Endorsement, State, Prov. And No.)

FORM U-4 MANUFACTURER'S DATA REPORT SUPPLEMENTARY SHEET
As Required by the provisions of the ASME Code Rules, Section VIII, Division 1

A400768

Manufactured and certified by: ALCO GAS & OIL PRODUCTION EQUIPT LTD 5203-75th STREET EDMONTON

(Name and address of Manufacturer)

Manufactured for: RIO-ALTO EXPLORATION C/O TUNDRA ENGINEERING 205 -5TH AVE SW CALGARY ALBERTA

(Name and address of Purchaser)

Location of Installation: STOCK

(Name and address)

Type: VERTICAL 3 PHASE GLYCOL CONTACTOR 99C-6220-01

(Horiz., vert., or sphere) (Tank, separator, heat exch., etc.) (Mfg.'s. serial number)

L-7843.21 A-23908 R3 N/A 1999

(CRN) (Drawing No.)

(Nat'l Bd. No.)

Reinforcement

SCH

Material

Type

Size

Facing

No.

Item Number

2

.750"

TOL

SA-105N

6000#

N/A

UW16.1a

SHELL

TEMP IND

1

.750"

TOL

SA-105N

6000#

N/A

UW16.1a

SHELL

WATER OUT

1

1"

CPLG

SA-105N

6000#

N/A

UW16.1c

SHELL

HTG COIL

2

1"

CPLG

SA-105N

6000#

N/A

UW16.1c

SHELL

GLYCOL OUT

1

1"

TOL

SA-105N

6000#

N/A

UW16.1a

SHELL

GLYCOL INLET

1

1"

TOL

SA-105N

6000#

N/A

UW16.1a

SHELL

LC/INSP

1

2"

CPLG

SA-105N

6000#

N/A

UW16.1c

SHELL

LEVEL GAUGE

4

.750"

TOL

SA-105N

6000#

N/A

UW16.1a

SHELL

LEVEL CONTROL

1

2"

CPLG

SA-105N

6000#

N/A

UW16.1c

SHELL

COND OUTLET

1

1"

TOL

SA-105N

6000#

N/A

UW16.1a

SHELL

CHIM TRAY DRAIN

1

1"

TOL

SA-105N

6000#

N/A

UW16.1a

SHELL

TRAY DRAINS

8

1"

TOL

SA-105N

6000#

N/A

UW16.1a

SHELL

INSPECTION

1

2"

CPLG

SA-105N

6000#

N/A

UW16.1c

MHB

Certificate of Authorization:

Type: U

No.: 14259

Expires: OCTOBER 7 2001

Date: 00-01-12

Name: ALCO GAS & OIL PROD. EQUIPT LTD.

Signed: [Signature]

Date: Jan 12, 2000

Name: [Signature]

(Manufacturer)

Commission: [Signature]

(Representative)

ALBERTA

(Nat'l Board Incl. Enforcement, State, Province and No.)