

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

A539284

1 Manufactured and certified by Alco Gas & Oil Production Equipment LTD, 5203-75th STREET EDMONTON, ALBERTA
(Name and address of Manufacturer)
2 Manufactured for ANDADARKO CANADA COOP ENGINEERING (180-36th AVENUE) SW CALGARY, ALBERTA
(Name and address of Purchaser)

3. Location of installation BUCKINGHORSE B.C. (LSD) d44-A94/G110

4. Type: Vertical (Name and address) 2 PHASE GLYCOL CONTACTOR
(Horiz., vert., or sphere) (Tank, separator, jkt. vessel, heat exch., etc.)
T-3297.21 (Drawing No.) D-2005-7453-06-001-002.R0
(CRN) (Year built) 2005

5. ASME Code, Section VIII, Div. 1 2004 (Edition and Addenda (date)) N/A (Code Case No.)
Items 6 - 11 incl. to be completed for single wall vessels, jackets of jacketed vessels, shell of heat exchangers, or chamber of multi-chamber vessels.

6. Shell (a) No. of course(s): 4 (b) Overall length (ft & in.): 40' 0" SM/SM

No.	Diameter, in.	Course(s)	Length (ft & in.)	Material	Thickness		Long. Joint (Cat. A)			Circum. Joint (Cat. A, B, & C)			Heat Treatment	
					Spec./Grade or Type	Nom.	Corr.	Type	Full, Spot, None	Eff.	Type	Full, Spot, None	Eff.	Temp.
1	11"	5'-0"	SA-106B	844	1/8"	S	N/A	100%	1	Full 100%	100%	1150	1HR	
1	11"	2'-0 5/8"	SA-106B	844	1/8"	S	N/A	100%	1	Full 100%	100%	1150	1HR	
2	11"	17'-4 1/2"	SA-106B	844	1/8"	S	N/A	100%	1	Full 100%	100%	1150	1HR	

7 Heads: (a) SA-516Gr.70MT (Mat'l Spec No., Grade or Type) (HT, Time & Temp)
(b) SA-516Gr.70MT (Mat'l Spec No., Grade or Type) (HT, Time & Temp)

Location (Top, Bottom, Ends)	Thickness	Corr.	Radius		Conical	Hemispherical	Flat		Side to Pressure		Category A				
			Min.	Corr.			Crown	Knuckle	Ratio	Concave		Convex	Concave	Convex	Type
(a) Top	.680"	1/8"	N/A	N/A	2:1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
(b) Bottom	.680"	1/8"	N/A	N/A	2:1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

If removable, bolts used (describe other fastening) N/A

8. Type of jacket N/A Jacket closure N/A (Mat'l Spec. No., Grade, size, No.)

If bar, give dimensions N/A (Describe as cage & weld, bar, etc.)
9. MAWP 1415 (internal) N/A (external) N/A psi at max. temp. 149 (internal) N/A (external) °F Min. design metal temp. -20 °F at 1415 psi.

10. Impact test EXEMPT PER UG 20 (U.C.S. 66(c)) (Indicate yes or no and the component(s) impact tested) at test temperature of °F.

11. Hydro., pneu., or comb. test press. Hydrostatic 1840 PSIG Proof test N/A

12. Tubsheet. N/A (Stationary (Mat'l Spec No.)) N/A (Dia. in (subject to press)) N/A (Nom thk. in.) N/A (Corr Allow. in.)
N/A (Floating (Mat'l Spec No.)) N/A (Dia. in.) N/A (Nom thk. in.) N/A (Corr Allow. in.)

13. Tubes: N/A (Mat'l Spec No., Grade or Type) (O.D., in.) (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) No. of course(s): 1 (b) Overall length (ft & in.): 2'-5"

No.	Diameter, in.	Length (ft & in.)	Material	Thickness		Long. Joint (Cat. A)			Circum. Joint (Cat. A, B, & C)			Heat Treatment	
				Spec./Grade or Type	Nom.	Corr.	Type	Full, Spot, None	Eff.	Type	Full, Spot, None	Eff.	Temp.
2	1 1/2"	5' 1/16"	SA-106B	.400"	1/8"	S	N/A	100	1	Full 100%	100	1150	1HR
2	1 1/2"	2' 7/8"	SA-106B	.281"	1/8"	S	N/A	100	1	Full 100%	100	1150	1HR
3	1 1/2"	2' 1/16"	SA-234-WPB	.281"	1/8"	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

15. Heads: (a) SA-105N.R0WN (Mat'l Spec No., Grade or Type) (HT, Time & Temp)
(b) SA-105N.R0WN (Mat'l Spec No., Grade or Type) (HT, Time & Temp)

Location (Top, Bottom, Ends)	Thickness	Corr.	Radius		Conical	Hemispherical	Flat		Side to Pressure		Category A				
			Min.	Corr.			Crown	Knuckle	Ratio	Apex Angle		Concave	Convex	Concave	Convex
(a) N5A	.281"	1/8"	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
(b) N5B	.281"	1/8"	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

If removable, bolts used (describe other fastening) N/A

FORM U-1 (Back)

16 MAWP 1415 (internal) 1415 (external) psi at max temp 150 (internal) 150 (external) °F at 1415 psi.
 17 Impact test N/A at test temperature of °F.

(Indicate yes or no and the component(s) impact tested)

18. Hydro. presu. or comb test press 1840 PSIG Proof test N/A

19. Nozzles, inspection, and safety valve openings

Purpose (inlet, Outlet, Drain, etc.)	Diameter	Fringe	Material	Nozzle	Flange	Nozzle Thickness	Reinforcement	How Attached	Location
	or Size	Type				Nom. Corr.	Material	Nozzle Flange	(Insp/Open)
GAS INLET	2"	Pipe CL600 RFWN	SA105N	SA-106B	SA105N	1.8"	N/A	UW16.1(c) TYPE1	SHELL
GAS OUT	2"	Pipe CL600 RFWN	SA105N	SA-106B	SA105N	1.8"	N/A	UW16.1(c) TYPE1	TOP
WATER OUT	1 1/2"	Pipe CL600 RFWN	SA105N	SA-106B	SA105N	1.8"	N/A	UW16.1(c) TYPE1	SHELL
PSV	1 1/2"	Pipe CL600 RFWN	SA105N	SA-106B	SA105N	1.8"	N/A	UW16.1(c) TYPE1	SHELL
GLYCOL	1 1/2"	Pipe CL600 RFWN	SA105N	SA-106B	SA105N	1.8"	N/A	UW16.1(c) TYPE1	SHELL
GLYCOL OUT	1 1/2"	Pipe CL600 RFWN	SA105N	SA-106B	SA105N	1.8"	N/A	UW16.1(c) TYPE1	SHELL
INSPECTION	3"	Pipe CL600 RFWN	SA105N	SA-106B	SA105N	1.8"	N/A	UW16.1(c) TYPE1	SHELL

20 Supports: Skirt Yes (Yes or No) Lugs No (No.) Legs No (No.) Others (Describe)

Attached WELDED TO BRITAM HEAD (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, mfg's name and identifying number)

N/A

22. Remarks

SEE ATTACHED U4 DATA REPORT / AS BUILT DRAWING D-2005-7453-06-001A01R4
 VOLUME 487M3

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 2007

Date Sept. 28 2005 Name Aleo Gas & Oil Production Equipment LTD. 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 ALBERTA and employed by ABSA of ALBERTA have inspected the pressure vessel described in this Manufacturer's Data Report on SEPT 27, 2005 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 SEP 28 2005 Signed [Signature] Commissions ALBERTA 95A
 (Authorized Inspector) (Nat'l Board incl. endorsement, State, Province and No.)

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 Code, Section VIII, Division 1.
 U Certificate of Authorization No. Expires

Date Name Signed
 (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 ASME Code, Section VIII, Division 1. The described vessel was inspected and subjected to a hydrostatic test of _____ psi. 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 Signed (Authorized Inspector) Commissions (Authorized Inspector)
 Date Signed (Assembler) (Representative) Commissions (Nat'l Board incl. endorsement, State, Province 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

A539784

1. Manufactured and certified by Alco Gas & Oil Production Equipment LTD 5203-75th STREET EDMONTON, ALBERTA
 (Name and address of Manufacturer)

2. Manufactured for ANIDADARCO CANADA CO/DIPPLE ENGINEERING 1480-36th AVENUE SW CALGARY, ALBERTA
 (Name and address of Purchaser)

3. Location of installation BUCKINGHORSE B.C. (LSD 44-A94/G10)
 (Name and address)

4. Type Vertical 2 PHASE GLYCOL CONTACTOR
 (Tank, separator, heat exch., etc.)
 2005-7453-06
 (Mfg's serial No.)
 T-3297.21 D-2005-7453-06-001-002 R0 N/A (Matl. Bd. No.)
 2005 (Year built)

(CRN)

Nozzles, inspection, and safety valve openings:

Purpose (Inlet, Outlet, Drain, etc.)	No.	Diameter or Size	Flange Type	Material		Nozzle Nom.	Nozzle Thickness Corr.	Reinforcement Material	How Attached		Location (Insp. Open)
				Nozzle	Flange				Nozzle	Flange	
HILL/HLL	2	4"	Pipe/CL600WN	SA105N	SA105N	.674"	1/8"	N/A	UW16.1(G)	TYPE 1	SHELL
LILL/INSP	1	4"	Pipe/CL600WN	SA105N	SA105N	.674"	1/8"	N/A	UW16.1(G)	TYPE 1	SHELL
LEVEL/GA	2	1 1/2"	Pipe/CL600WN	SA105N	SA105N	.400"	1/8"	N/A	UW16.1(G)	TYPE 1	SHELL
TEMP IND	1	1 1/2"	Pipe/CL600WN	SA105N	SA105N	.400"	1/8"	N/A	UW16.1(G)	TYPE 1	SHELL
PRESS IND	1	1 1/2"	Pipe/CL600WN	SA105N	SA105N	.400"	1/8"	N/A	UW16.1(G)	TYPE 1	SHELL
CHIMNEY	1	1 1/2"	Pipe/CL600WN	SA105N	SA105N	.400"	1/8"	N/A	UW16.1(G)	TYPE 1	SHELL
TRAY											
DRAIN											
TRAY	1	1 1/2"	Pipe/CL600WN	SA105N	SA105N	.400"	1/8"	N/A	UW16.1(G)	TYPE 1	SHELL
DRAINS											
DRAIN	1	1 1/2"	PIPE/ ELBOW CL600RFWN	SA105N	SA105N	.400"	1/8"	N/A	UW16.1(G)	TYPE 1	Bot HD

Data Report Item Number

Remarks

Certificate of Authorization:

Type U No. 14259 Expires OCT 7 2007

Date Sept 28/05

Name Alco Gas & Oil Production Equipment LTD
 (manufacturer)

Signed

 (representative)

Date

Name

(Authorized Inspector)

Commission

ALBERTA 95A

(Netl. Board incl. endorsement, state, province and no.)