

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

Crimtech Services Ltd. #45, 27429 Township Road 374 Red Deer County, Alberta T4S 2H4 Canada (Name and address of Manufacturer) Manufactured and certified by Laricina Energy Ltd. c/o IMV Projects Inc. Suite 1400, 500 - 5th Avenue SW Calgary, Alberta T2P 3L5 Canada 2. Manufactured for Laricina Energy - Saleski SC SAGD Pilot Project - LSD 26-85-19 W4M, Alberta Canada 3. Location of installation 1019033-VS-01, Rev 1 4. Type Horizontal 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 2007 N/A (Code Case numbers) 20'-0" SA-516 70N 6. Shell: N/A Type 7. Seams: Spot (spot or full)] SA-516 70N (b) Matl. -516 70N 8. Heads: (a) Matl. Conical Apex Hemispherical Side to Pressure (Convex Location (Top,Bottom, Ends) Minimum Corrosion Flat Diameter Elliptical Batic Crown Badius Knuckle Radius Angle Radius Thickness 0.5625" 0.125 N/A N/A 2:1 N/A N/A Concave (a) Left End N/A N/A Concave (b) Right End 0.5625 0.125 N/A N/A N/A If removable, bolts used (describe other fastenings) N/A per, grade, size, number) 9. MAWP at max. temp. 50 ps <u>15 psi</u> Min. design metal temp. at 50 psi . Hydro., pneu., or comb. test pressure 84 psi 10. Nozzies, inspection, and safety valve openings: Nominal Reinforcement How Purpose (Inlet, Outlet, Drain) Diam. or Size Location Material Number Type Attached Material SA-106 B Shell 24 NPS Cl. 150 WN 0.5 SA-516-70 UW-16.1(c) Manway - M1 SA-516 70 UW-16.1(c) Outlet - N3 10 NPS Cl. 150 WN SA-106 B 0.5 Shell SA-106 B UW-16.1(c) SA-516 70 Shell 0.5 Water Boot - N2 10 NPS N/A Cl. 150 WN 0.344 PG - N7
Additional Nozzles - See attached U-4... 2 NPS 11. Supports: Skirt Lugs Other Saddles Attached Shell - Welded Leas (Yes or no) (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: Construction Drawing: 1019033-VS-01, Rev. 1 Volume: 872.3 Cu Ft_Service: Sweet Customer Tag Number: V-9050 Impact Test Exempt per UG-20(f)(1) thru (5 M1: 24 NPS Class 150 Blind, SA105N c/w 20 1.25"x7.5" Lg. Stud (NC Thrd) SA193-B7 & 48 1.25" Nut SA194-2H 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 expires November 15, 2012 Date Name Crimtech Services Ltd. Signed CERTIFICATE OF SHOP/FIELD INSPECTION Red Deer County Vessel constructed by Crimtech Services Ltd. I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and/or the State or have inspected the component Province of Alberta and employed by ABSA, the pressure equipment safety authority , 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.

Commissions

d (incl. endorsements), State, Province, and number]

Date

Signed

(Authorized Inspector)

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

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Manufactured and certified by:			Crimtech Services Ltd. #45, 27429 Township Road 374 Red Deer County, Alberta T4S 2H4 Canada (Name and address of Manufacturer)					
2. Manufactured for:		Laricina Energy Ltd. c/o IMV Projects Inc. Suite 1400, 500 - 5th Avenue SW Calgary, Alberta T2P 3L5 Canada (Name and address of Purchaser)						
3. Location of installa	tion:	Lar	<u>icina Energy -</u>	Saleski SC S	AGD Pilot Proje (Name and ad		9 W4M , Alberta (Canada
4. Type:		Horizontal (Horiz., vert, or sphere)		High Pressure Flare Knockout Drum (Tank, separator, jkt, vessel, heat exh, ect.))			20335 (Mir.'s serial No.)	
V0332.2 (CRN)		1019033-VS-01, F (Drawing No.)		Rev 1	N/A (Nat'l Board No.)		2010 (Year built)	
Additional Nozzles: Purpose (Inlet, Outlet, Drain, etc)	No.	Diameter or Size	Туре	Material	Nominal Thickness	Reinforcement Material	How Attached	Location
LIT - Btm - N5b, N6b, Pump Out - N11	3	3 NPS	CI. 150 WN	SA-106 B	0.3"	N/A	UW-16.1(c)	Nozzle N2
LIT - Top - N5a, N6a, Radar - N14	3	3 NPS	Cl. 150 WN	SA-106 B	0.3"	SA-516 70	UW-16.1(c)	Shell
TG - N8	1	2 NPS	Cl. 150 WN	SA-106 B	0.436"	N/A	UW-16.1(c)	Shell
Drain - N13	1	2 NPS	Cl. 150 WN	SA-106 B	0.344"	N/A	UW-16.1(c)	Nozzle N2
Inlet - N1	1 1	6 NPS	CI. 150 WN	SA106 B	0.432"	N/A	UW-16.1(c)	Left Head

Certificate of Authorization: Type:

U No. 32.207 Expires November 15, 2012

Date 0//2//o Name Crimtech Services Ltd. Signed (Representative)

Date 1/4 3/ 36/0 Name (Authorized Inspector) Commission