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

4. Manufactured and a	adifical by	DDOM	DV MECUA	NICAL CED	VACEC INC. A	dividala	n of Argo	Calon I td C	25 22 C+ CW A	todicino Hat A	lborto T1 A OD1		
1. Manufactured and certified by BROMLEY MECHANICAL SERVICES INC., A division of Argo Sales Ltd., 925 23 St. SW, Medicine Hat, Alberta T1A 8R1  (Name and address of Manufacturer)													
2. Manufactured for Open Range Energy Ltd., c/o Onstream Engineering Ltd., 1260, 630 - 6th Avenue SW, Calgary, Alberta T2P 0S8													
3. Location of installation LSD: 09-34-53-20 W5M (Name and address of Purchaser)  (Name and address of Purchaser)													
• • • • • • • • • • • • • • • • • • • •					V 0346.		lame and add	33465-REG		n/a	2009		
(Horizontal or vertical, tank) (Manufacturer's serial number) (CRN) (Drawing number) (National Board number) (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  2007 Edition													
to	2008 Add	lenda		n/a					Year n/a				
	[Addenda (d	late)]			(Code Cas	e numbe			[Special service per UG-120(d)]				
6. Sheli	SA516-7	·	1.250" 0.0625"  (Nominal thickness) (Corr. allow.)					60" OD (Inner diameter)		20'-0" S/S [Length (overall)]			
•	(Material spec. number, grade) ams Single (Type 1) Full			(Nominal thickness) n/a			n/a		Single (Type 1)		.00 2		
[Long. (welded, dbl., sngl., lap, butt)] [R. T. (spot or full)] (Eff., %) (H. T. temp.) (Time, hr) [Girth (welded, dbl., sngl., lap, butt)] [R. T. (spot (Eff., %) (No.								(No. of courses)					
8. Heads: (a) Material SA516-70N (b) Material SA516-70N (Spec. no., grade) (Spec. no., grade)													
Location (Top,	Minimu	m Corro		Crown	Knuckle	EI	iptical	Conical	Hemispherical	Flat	Side To Pressure		
Bottom, Ends)	Thickne		Allowance Radiu		Radius		Ratio	Apex Angle	Radius	Diameter	(Convex or Concave)		
(a END	1.125	" 0.06	0.0625" -		-		2:1	-	-	-	Concave		
(b END	1.125	" 0.06	25".	-	-		2:1	-	-		Concave		
If removable, bolts used (describe other fastenings)  24-B7 STUD, 1 1/4" X 8" SA193, 48-2H HEX NUT, 1 1/4" SA194													
9. MAWP	720 p	.ci		N	I/A	at	(Material max. temp	spec. number, grad	le, size, number) 100°F		N/A .		
	/20 p				emai)	—"			(Internal)		(External)		
Min. design metal te	Min. design metal temp20°F at 720 psi Hydro., prantox, bx games test pressure 936 psi												
Proof test							<del></del>			-			
10. Nozzles, inspection	, and safety	valve opening	ıs:										
Purpose		Diameter					Nomina	1 .	inforcement	How Attached			
(Inlet, Outlet, Drain)	Number	or Size	Туре	Material			Thicknes		Material		Location		
Manway	1	20"	CL300RF	SA105N			2.500'		CAE1C ZON		Head		
Boot	1	16"	PIPE	SA106B			1.031		SA516-70N		Shell Shell		
Inlet, Outlet PSV , HC LSL	2	12" 4"	CL300RF	SA105N			1.380' 0.875'		<u> </u>		Shell Shell		
HC LSH & LSL	2	4"	CL300RF	SA105N SA105N			0.875		-		Shell		
Spare(2) HC Dump	2	3"	CL300RF	SA105N, SA106B			0.438		SA516-70N		1 Shell		
HC Crash Dump	1	3"	CL300RF		L05N, SA106B		0.438		SA516-70N		Shell		
									A44				
11. Supports: Skirt	No	Lugs	2	Leg	· —		Other	n/a	Attac		Shelf Weld		
12. Remarks: Manufacti	Yesorno) urer's Partia	o) al Data Reports	Numbe) properly id	r) entified and :	(Number) signed by Commi	issione	d Inspector	(Describe) rs have been fur		owing (vv	here and how)		
items of the report:					CA: 0.0625				•		Others Per UG125		
			(N	ame of part, iten	n number, Manufactur	er's nam	e and identify	ing stamp)					
Volume: 425 cu ft or	12.04 cu r	n, No-	Impact Te	sting Exem	pt Per UG20f(1-	-5) & l	JCS66(a)(	g), Cor	struction Drawi	ng Cad. No. 33	465-VESSEL Rev.0		
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 30634													
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Date	15/10	Co. name	`Argo Sale		L SERVICES IN	C., A C		olgned ————————————————————————————————————	Marian = Cet	esentative)	<del></del> · .		
						D / EIC	I D INCO	CTION	(глерл	escritative)			
CERTIFICATE OF SHOP / FIELD INSPECTION  Vessel constructed by BROMLEY MECHANICAL SERVICES INC., A at 925 23 St. SW, Medicine Hat., Alberta T1A 8R1													
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													
have inspected the component described in this Manufacturer's Data Report on JAN - 15, ZO10, 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													
implied, concerr	ing the pre	ssure vessel d	escribed in t	his Manufact	turer's Data Repo	rt. Furt	hermore, n	either the Inspe	ctor nor his/her en	nployer ction			
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 TAN 15/10 Signed . H Mother Commissions AB-12													
(Authorized Inspector) (National Board (IncCEnteResident Revision) 16-FP 2010.1.0													

FORM U-4 MANUFACTURER'S DATA REPORT SUPPLEMENTARY SHEET

As Required by the Provisions of the ASME Boiler and Pressure Vessel Code Rules, Section VIII, Division 1

1. Manufactured and certified by BROMLEY MECHANICAL SERVICES INC., A division of Argo Sales Ltd., 925 23 St. SW, Medicine Hat, Alberta T1A 8R1													
(Name and address of Manufacturer) 2. Manufactured for Open Range Energy Ltd., c/o Onstream Engineering Ltd., 1260., 630 - 6th Avenue SW, Calgary, Alberta T2P 0S8													
(Name and address of Purchaser)  3. Location of installation LSD: 09-34-53-20 W5M													
(Name and address)													
4. Type:	Horiz	Horizo	ontal cal, or sphere	) (	Separator 929159 (Tank, separator, heat exch., etc.) (Manufacturer's serial number)								
V 0346.2					33465-REG Rev	n/a 2009							
Nozzles, inspection,	(CRN) inspection, and safety valve openings:				(Drawing number)	(National Board number) (Year built)							
Purpose (inlet,	No.	Diameter or Size	Flange	Mat Nozzle	erial Flange	Nozzie 7 Nom.	hickness Corr.	Reinforcement Material	How A	tached Flange	Location (Insp. Open.)		
Outlet, Drain, etc.)  Boot Drain	1	3"	Type CL300RF	PIPE	SA105N		0.0625"	Waterial		UW16(c)(1	Boot Head		
Spare,HCBridle(2)	<u> </u>	2"	CL300RF	SA106B	SA105N		0.0625"	-	UW16.1a	UW16(c)(1	Shell		
Water Bridle	2	2"	CL300RF	SA106B	SA105N	<del></del>	0.0625"	-	UW16.1a	UW16(c)(1	Shell		
П рт реш	2	3/4" 1/2"	TOL TOL	SA105N SA105N	<u>-</u> ·	CL3000		-	UW-16.1a UW-16.1a	-	Shell Shell		
PI, PSHL	-	-	TOL -	SATUSIN	<u> </u>	-		•		· -	-		
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Certificate of Authoriz	ation	: Type		No.	30634		Expires	11/	10/26/2	2010			
	1	_	DDOM: C	MECHANICAL CERV	TOEC THO A disdeten	of A===		AA	7/				
Date Name BROMLEY MECHANICAL SERVICES INC., A division of Argo Signed (Representative)													
Date 4 Jan 18	1/10	Nam€		2 - HMar	hroco	Commi			-AB- 12	<u> </u>			
-	-			(Authorized Insp	ector)		[Na	itional Board (incl. end	orsements),	State, Provinc	ce, and number]		