A695576

ALBERTA MUNICIPAL AFFAIRS
ABSA, the pressure equipment safety authority
9410 – 20th Avenue
Edmonton, AB T6N 0A4
Partial/*Partiel* ☐

MANUFACTURER'S DATA REPORT FOR PRESSURE VESSEL
DÉCLARATION DE CONFORMITÉ DU CONSTRUCTEUR D'APPAREILS SOUS PRESSION

Upon shipment of a pressure vessel, this form fully and correctly filled in must be mailed to the office of the Chief Inspector in the province of installation in accordance with the regulations under the Act, governing the construction and installation of pressure vessels.

Au moment de l'expédition d'un appareil sous pression, ce formulaire complété correctement, doit être envoye au bureau de l'inspecteur en chef de la province d'installation tel que prévu dans les règlements de la loi sur les appareils sous pression.

Manufactured by *Construit par*	Name and address of Manufacturer/*Nom et adresse du constructeur* Aspire Energy Resources Ltd 53 Burnt Lake Cres. Red Deer, Alberta T4S 0K6
Manufactured for *Construit pour*	Name and address of Purchaser or Consignee/*Nom et adresse du client ou de son représentant* Aspire Energy Resources Ltd 53 Burnt Lake Cres. Red Deer, Alberta T4S 0K6
Ultimate owner *Utilisateur*	Name and address/*Nom et adresse* Aspire Energy Resources Ltd 53 Burnt Lake Cres. Red Deer, Alberta T4S 0K6
Location of installation *Lieu d'installation*	Address/*Adresse* Unknown

Pressure vessel/*Appareil*

Type/*Genre*	Overall Length/*Longeur totale*	Serial No./*N° de série*	Year Built/*Année de fabrication*
Horizontal Separator	10'0" s/s	500.802	2019
Provincial Registration No. – C.R.N./*N° d'enregistrement provincial - N.E.C.*		**National Board No./*N° National Board***	**Drawing No./*N° de dessin***
Y3065.2		-	5076 SHTS 1,2 Rev 2

The chemical and physical properties of all parts meet the requirements of material specifications of the A.S.M.E. Code.
Les propriétés chimiques et physiques de toutes les composantes respectent les exigences des spécifications de matériaux de code ASME.

The design, construction and workmanship conform to CSA B51. *La conception, la construction et la façon sont conformes à ACNOR B51.*	ASME	Division	Edition/*édition*	Code case No. *N° de cas*
	Section VIII	I	2017	-

Manufacturer's partial data reports properly identified and signed by authorized inspectors have been furnished for the following items of the report, and attached to this report:
Les rapports partiels du constructeur adqéuatement identifiés et signés par les inspecteurs authorisés ont été produits pour les items suivants du rapport, et attachés à ce rapport:

Names of parts/*Nom de la composante*	Manufacturer's Name/*Nom du constructeur*	Identifying Stamp/*Estampe d'identification*
Vessel	Score Projects Inc	500.802

Shell/*Virole*

Material *Matériau*	Thickness *Épaisseur*	Corr. Allow. *Surépais. de corr.*	Diameter *Diamètre*	Longitudinal Joints *Joints longitudinaux*			P.W.H.T. *Traitement therm*		Girth Joints *Joints de circonférence*			Number of courses *Nombre de sections*
				Type	R.T. *Radiog.*	Efficiency *Efficacité*	Temp.	Time *Durée*	Type	R.T. *Radiog*	Efficiency *Efficacité*	

Body Flanges on Shells/*Brides de corps sur les coquilles*

No.	Type	ID	OD	Flange Thk *l'épaisseur de la bride*	Min Hub Thk *l'épaisseur minimum de moyeu*	Material *Matériau*	How Attached *l'attachement de*	Location *Emplacement*	Bolting/boulonnage Spec. & Gr.	
									Num & Size *Nombre et la taille*	Bolting Material *Matériel de boulonnage*

Heads/*Tetes*

	Location Top, Bottom, Ends *Emplacement Haut, Bas, Extrémités*	Material *Matériau*	Min. Thickn. *Épais minim.*	Corr. Allow *Surép de. Corr.*	Crown. Radius *Rayon couron.*	Knuckle Radius *Petit rayon*	Ellipse Ratio *Rapp. ellipse*	Conical Apex Angle *Angle conique*	Hemisph. Radius *Ray. Hémisph*	Flat Diameter *Diam.plat*	Side to pressure *Côte sous pression*
a											
b											

MFG Representative/*MFG représentant*:	Date: March 21/19
Authorized Inspector/*Inspecteur autorisé*:	Date: MAR 2 1 2019

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Serial No: 500.802

Body Flanges on Heads/*Brides de corps sur les chefs*

	Location *Emplacement*	Type	ID	OD	Flange Thk *l'épaisseur de la bride*	Min Hub Thk *l'épaisseur minimum de moyeu*	Material *Matériau*	How Attached *l'attachement de*	Bolting/*boulonnage* Spec. & Gr. Num & Size *Nombre et la taille*	Bolting Material *Matériel de boulonnage*
a										
b										

Pressure - Temperature/*Pression - température*

Constructed for max. allowable working pressure *Construit pour une pression maximale de marche premise*	At max. temp. *A une temp. max.*	Minimum design metal temp. *Temp. min.*	Test pressure (hydro-pneumatic or combination) *Pression d'épreuvre (hydro-pneumatique ou combinaison)*	Proof Test *test de résistance*
Internal:1440 PSI External:	Internal: 130°F External:	-50°F	1872 PSI	N/A

Impact Tests/Tests d'impact

Material/*Matériau*	Welds/*Soudures*
_____ @ _____ Components/*composants* Test Temp/*essai Température*	_____ @ _____ Production Test/*test de production* Test Temp/*Test de Température*
_____ Exempt PER _____ Components/*composants* Paragraph(s)/paragraphe (s)	Exempt PER _____ Paragraph(s)/paragraphe (s)

Indicate Components Impact Tested or Exempted/*Indiquer Composants impact Testé ou exclus*

Tube Section/*Faisceau tubulaire*

Tubesheet/*Plaque tubulaire*	Material/*Matériau*	Diameter/*Diametre*	Nominal Thickness *Epaisseur nominale*	Corr. Allow. *Surépais. corrosion*	Attachment *Mode d'attachement*
Tube material/*Materiau des tubes*	Diameter/*Diamètre*	Nominal Thickness (gauge) *Épaisseur nominale (calibre)*	Number/*Nbre*	Type (Straight or U) *Type (Droit ou U)*	Heating Surface *Surface de chauffe*

Jacket/*Chemise*

Type of jacket/*Genre de chemise*	Jacket closure *Fermeture de chemise*	Proof Test *Pression d'épreuve*	Heating Surface *Surface de chauffe*	Sketch/*Schéma*

Safety Valve Outlets/*Soupapes de sûreté*

Number/*Nombre*	Dimension	Location/*Endroit*

Nozzles and Openings/*Tubulures et ouvertures*

Purpose/*But (Inlet, Outlet, Drain Etc.)*	Number *Nombre*	Diameter or Size	Type	Material *Matériau*		Nozzle Thickness *Épaisseur nominale*		Reinforcement Material *Matériau de renfort*	How Attached *Genre d'attaches*		Location *Endroit*
				Nozzle/*bec*	Flange/*bride*	Nom.	Corr.		Nozzle/*bec*	Flange/*bride*	

Supports/*Supports*

Skirt/*Jupe* Yes/*Oui* No/*Non*	Lugs/Oreilles *No./Nbre*	Legs/Pieds *No./Nbre*	Other/*Autres* (Description)	Attached/*Attaches* (Where and How/*Méthode et endroit*)
☐ ☐				

MFG Representative/*MFG représentant*:	Date: March 21/19
Authorized Inspector/*inspecteur autorisé*:	Date: MAR 21 2019

A693546

Serial No: 500.202

Remarks/*Observations* (Cubical capacity/Volume/*Capacité cubique/volume de*)

Construction Drawing: 5165-05 Rev. 3
Volume: 78 CuFt (2.21 CuM)
Empty Weight: 18,700lbs (8482 Kg)

Certificate of Compliance/*Certificat de conformité*

We certify that the statements made in this data report are correct and that the said vessel has been constructed in accordance with the Provincial Registered design below and the requirements of standard CSA B51./*Nous certifions que les données de la déclaration de conformité sont correctes et que l'appareil a été construit en accord avec l'enregistrement provincial ci-dessous et les exigences de la norme ACNOR B51.*

Provincial Registered Design/*Enregistrement provincial* Y3065.2

Manufacturer/*Constructeur* Cindy Toews Signature _____ Date March 21/19

Certificate of Shop Inspection/*Certificat d'inspecton en usine*

I, the undersigned, a duly authorized boiler and pressure vessel inspector/Je, soussigné, inspecteur autorisé de chaudières et appareil sous pression employed by (employé par) Alberta Boilers Safety Association (ABSA) of (de) Alberta have inspected the above vessel and state that to the best of my knowledge and belief the manufacturer has constructed the vessel in accordance with Canadian Registration No. Y3065.2 and the requirements of CSA Standard B51. By signing this certificate, neither the inspector nor his or her employer makes any warranty, expressed or implied, concerning the vessel described in this manufacturer's data report. Furthermore, neither the inspector nor his or 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.

ai inspecté l'appareil précité et, autant que je sache, le constructeur a construit l'appareil en accord avec le numéro d'enregistrement canadien _____ et les exigences de la norme CSA B51. En sigant ce certificate, ni l'inspecteur ni son employeur ne donnent de garantie explicite ou implicite relativement à l'appareil décrit dans la présente déclaration. De plus, ni l'inspecteur ni son employeur ne doivent être tenus responsables de quelque manière que ce soit des dommages, matériels ou corporels, ou des pertes de quelque nature que ce soit pouvant résulter de cette inspection.

Inspector's Name NB13790 D00005479
Nom de l'inspecteur Scott Forbes Signature _____ Date MAR 2 1 2019

Certificate of Compliance - Field Work/*Certificat de conformité - Installation au chantier*

We certify that the field installation of all parts of the vessel conforms with the requirements of Provincial Regulations.
Nous certifions que l'installation au chantier de toutes les composantes de l'appareil est conforme aux règlements provinciaux.

Installer's Name
Nom de l'installateur _____ Signature _____ Date _____

Certificate of Field Inspection/*Certificat d'inspection - Installation au chantier*

I, the undersigned, a duly authorized boiler and pressure vessel inspector/Je, soussigné, inspecteur autorisé de chaudières et appareil sous pression employed by/*employé par* _____ have inspected the items not covered by the Certificate of Shop inspection and the installation of the items and state that to the best of my knowledge and belief the construction and assembly of the items are in accordance with the provincial regulations. By signing this certificate, neither the inspector nor his or her employer makes any warranty, expressed or implied, concerning the vessel described in this manufacturer's data report. Furthermore, neither the inspector nor his or 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.

ai inspecté les composantes non couvertes par le certificat d'inspection en usine et l'installation de l'appareil et, autant que je sache, la construction et l'assemblage de l'appareil sont en accord avec les règlements provinciaux. En signant ce certificat, ni l'inspecteur ni son employeur ne donnent de garantie explicite ou implicite relativement à l'appareil décrit dans la présente déclaration. De plus, ni l'inspecteur ni son employeur ne doivent être tenus responsables de quelque manière que ce soit des dommages, matériels ou corporels, ou des pertes de quelque nature que ce soit pouvant résulter de cette inspection.

Inspector's Name
Nom de l'inspecteur _____ Signature _____ Date _____

(A)693576 PART

FORM U-2 MANUFACTURER'S PARTIAL DATA REPORT

A Part of a Pressure Vessel Fabricated by One Manufacturer for Another Manufacturer
As Required by the Provisions of the ASME Boiler and Pressure Vessel Code Rules, Section VIII, Division 1

1. Manufactured and certified by Score Projects Inc. 3814 - 47 Avenue, Stettler Alberta Canada T0C 2L0
(Name and address of Manufacturer)

2. Manufactured for Aspire Energy Resources LTD 53 Burnt Lake Crescent, Red Deer, Alberta, Canada T4S 0K6
(Name and address of Purchaser)

3. Location of installation Stock — Canadian Natural Resources LTD 2100 855- 2 Street SW Calgary Alberta Canada T2P 4J8
(Name and address)

4. Type Horizontal Separator (Description of vessel part (shell, two-piece head, tube bundle)) | 500.802 (Manufacturer's serial number) | (CRN)

N/A (National Board number) | (Drawing number) | Aspire Energy Resources (Drawing prepared by) | 2019 (Year built)

5. ASME Code, Section VIII, Div. 1 2017 (Edition and Addenda, if applicable (date)) | N/A (Code Case number) | N/A (Special service per UG-120(d))

Items 6–11 incl. to be completed for single wall vessels, jackets of jacketed vessels, shell of heat exchangers, or chamber of multichamber vessels.

6. Shell: (a) Number of course(s) 1 (b) Overall length 10' S/S

Course(s)			Material	Thickness		Long. Joint (Cat. A)			Circum. Joint (Cat. A, B & C)			Heat Treatment	
No.	Diameter	Length	Spec., Grade or Type	Nom.	Corr.	Type	Full, Spot, None	Eff.	Type	Full, Spot, None	Eff.	Temp.	Time
1	36"ID	10'	SA516-70N	1.500"	0.125"	1	Full	100	1	Full	100	1125 F	2 hrs

Body Flanges on Shells												
									Bolting			
	Type	ID	OD	Flange Thk	Min Hub Thk	Material	How Attached	Location	Num & Size	Bolting Material	Washer (OD, ID, thk)	Washer Material

7. Heads: (a) SA516-70N 1125 F for 2 Hours (Material spec. number, grade or type) (H.T. — time and temp.) (b) SA516-70N 1125 F for 2 Hours (Material spec. number, grade or type) (H.T. — time and temp.)

	Location (Top, Bottom, Ends)	Thickness		Radius		Elliptical Ratio	Conical Apex Angle	Hemis. Radius	Flat Diameter	Side to Pressure		Category A		
		Min.	Corr.	Crown	Knuckle					Convex	Concave	Type	Full, Spot, None	Eff.
(a)	Head 1	1.4375"	0.125"	N/A	N/A	2:1	N/A	N/A	N/A	N/A	Concave	1	Full	100
(b)	Head 2	1.4375"	0.125"	N/A	N/A	2:1	N/A	N/A	N/A	N/A	Concave	1	Full	100

Body Flanges on Heads												
									Bolting			
	Location	Type	ID	OD	Flange Thk	Min Hub Thk	Material	How Attached	Num & Size	Bolting Material	Washer (OD, ID, thk)	Washer Material
(a)												
(b)												

8. Type of jacket _____ Jacket closure _____ (Describe as ogee and weld, bar, etc.)
If bar, give dimensions. If bolted, describe or sketch. _____

9. MAWP 1440 PSI (Internal) N/A (External) at max. temp. 130 F (Internal) N/A (External) Min. design metal temp. 1440 Psi at -50 F

10. Impact test See U-4 (Indicate yes or no and the component(s) impact tested) at test temperature of -50 F

11. Hydro., pneu., or comb. test pressure By Others Proof test _____

Items 12 and 13 to be completed for tube sections.

Tubesheet _____ [Stationary (material spec. no.)] | [Diameter (subject to press.)] | (Nominal thickness) | (Corr. allow.) | [Attachment (welded or bolted)]

[Floating (material spec. no.)] | (Diameter) | (Nominal thickness) | (Corr. allow.) | (Attachment)

13. Tubes _____ (Material spec. no., grade or type) | (O.D.) | (Nominal thickness) | (Number) | [Type (straight or U)]

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FORM U-2

Manufactured by Score Projects Inc. 3814 - 47 Avenue, Stettler Alberta Canada T0C 2L0

Manufacturer's Serial No. 500.802 CRN _____ National Board No. N/A

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) _____ (b) Overall length _____

Course(s)			Material	Thickness		Long. Joint (Cat. A)			Circum. Joint (Cat. A, B & C)			Heat Treatment	
No.	Diameter	Length	Spec./Grade or Type	Nom.	Corr.	Type	Full, Spot, None	Eff.	Type	Full, Spot, None	Eff.	Temp.	Time

Body Flanges on Shells												
									Bolting			
No.	Type	ID	OD	Flange Thk	Min Hub Thk	Material	How Attached	Location	Num & Size	Bolting Material	Washer (OD, ID, thk)	Washer Material

15. Heads: (a) _____ (b) _____

(Material spec. number, grade, or type) (H.T. — time and temp.) (Material spec. number, grade, or type) (H.T. — time and temp.)

	Location (Top, Bottom, Ends)	Thickness		Radius		Elliptical Ratio	Conical Apex Angle	Hemis. Radius	Flat Diameter	Side to Pressure		Category A		
		Min.	Corr.	Crown	Knuckle					Convex	Concave	Type	Full, Spot, None	Eff.
(a)														
(b)														

Body Flanges on Heads												
									Bolting			
	Location	Type	ID	OD	Flange Thk	Min Hub Thk	Material	How Attached	Num & Size	Bolting Material	Washer (OD, ID, thk)	Washer Material
(a)												
(b)												

16. MAWP _____ (Internal) _____ (External) at max. temp. _____ (Internal) _____ (External) Min. design metal temp. _____ at _____.

17. Impact test _____ at test temperature of _____.

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

18. Hydro., pneu., or comb. test pressure _____ Proof test _____

19. Nozzles, inspection, and safety valve openings:

Purpose (Inlet, Outlet, Drain, etc.)	No.	Diameter or Size	Type	Material		Nozzle Thickness		Reinforcement Material	Attachment Details		Location (Insp. Open.)
				Nozzle	Flange	Nom.	Corr.		Nozzle	Flange	
N1 Inlet	1	6" RFLWN	CL600	SA350-LF2-CL1	SA350-LF2-CL1	1.38"	0.125"	N/A	UW16.1c	N/A	Shell
N2 Gas Outlet	1	6" RFLWN	CL600	SA350-LF2-CL1	SA350-LF2-CL1	1.38"	0.125"	N/A	UW16.1c	N/A	Shell
N3 Drain	1	2" RFHB	CL600	SA350-LF2-CL1	SA350-LF2-CL1	1.00"	0.125"	N/A	UW16.1c	N/A	Shell
N4 Liquid Out	1	2" RFHB	CL600	SA350-LF2-CL1	SA350-LF2-CL1	1.00"	0.125"	N/A	UW16.1c	N/A	Shell
N5 A/B H20 Bridle	2	2" RFHB	CL600	SA350-LF2-CL1	SA350-LF2-CL1	1.00"	0.125"	N/A	UW16.1c	N/A	Shell
N6 A/B HC Bridle	2	2" RFHB	CL600	SA350-LF2-CL1	SA350-LF2-CL1	1.00"	0.125"	N/A	UW16.1c	N/A	Shell
N7 LSHH	1	3" RFHB	CL600	SA350-LF2-CL1	SA350-LF2-CL1	1.24"	0.125"	N/A	UW16.1c	N/A	Shell

20. Identification of part(s)

Name of Part	Quantity	Line No.	Mfr's. Identification No.	Mfr's. Drawing No.	CRN	National Board No.	Year Built

Supports: Skirt N/A (Yes or no) Lugs N/A (Number) Legs N/A (Number) Others Saddle (Describe) Attached Welded to Shell (Where and how)

22. Remarks

(A)693576

PART

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: Score Projects Inc.
   3814 - 47 Avenue Stettler Alberta Canada T0C 2L0
   (Name and address of Manufacturer)
2. Manufactured for: Aspire Energy Resources LTD 53 Burnt Lake Crescent Red Deer Alberta Canada T4S 0K6
   (Name and address of Purchaser)
3. Location of installation: Stock — Canadian Natural Resources LTD 2100 855- 2 Street SW Calgary Alberta Canada T2P 4J8
   (Name and address)
4. Type: Horizontal (Horizontal, vertical, or sphere) — Separator (Tank, separator, heat exch., etc.) — 500.802 (Manufacturer's serial number)

(CRN)	(Drawing number)	N/A (National Board number)	2019 (Year built)

Data Report Item Number	Remarks
N8 PI	1 2" RFHB CL600 SA-350-LF2-CL1 Nozzle SA350-LF2-CL1 1.00" CA 0.125" UW16.1c Shell
N9 TI	1 2" RFHB CL600 SA-350-LF2-CL1 Nozzle SA350-LF2-CL1 1.00" CA 0.125" UW16.1c Shell
N10 PSV	1 2" RFHB CL600 SA-350-LF2-CL1 Nozzle SA350-LF2-CL1 1.00" CA 0.125" UW16.1c Shell
M1- Manway/ Inspection	1 18" ID RFHB CL600 SA350-LF2-CL1 SA350-LF2-CL1 2.60" CA 0.125" UW16.1c Shell
	10. Impact test Heads and Shell per UG-84d at -50 F. The Average impact energy shall be 15 FT-LBS (10 FT-LBS Min)
	Vessel Production impact tests of Cat A and B welds required per UG-84i at -50 F The average impact energy shall be 15 FT-LBS
	(10 FT-LBS Min) All other material exempt per UCS-66b1c, UCS-66g Studs per UCS-66, Note C
	22. Remarks: Construction Drawing 5165-05 Rev 3, Capacity 78 ft3.
	CRN has been resubmitted to ABSA, Edmonton Alberta Canada ABSA, will verify at Aspire Energy
	Resources 53 Burnt Lake Crescent Red Deer Alberta Canada T4S 0K6 for final sign off.

Certificate of Authorization: Type U No. 44,907 Expires March 6, 2022

Date Mar 8 2019 Name Score Projects Inc. (Manufacturer) Signed (Representative)

Date Mar 8 2019 Name (Authorized Inspector) Commissions NB13345 D00004401 (National Board (incl. endorsements))

(08/14)

A603576 PART

FORM U-2

Manufactured by Score Projects Inc. 3814 - 47 Avenue. Stettler Alberta Canada T0C 2L0

Manufacturer's Serial No. 500.802 CRN _____ National Board No. N/A

CERTIFICATE OF SHOP/FIELD COMPLIANCE

We certify that the statements in this report are correct and that all details of material, construction, and workmanship of this pressure vessel part conform to the ASME BOILER AND PRESSURE VESSEL CODE, Section VIII, Division 1.

U or PRT Certificate of Authorization number 44,907 Expires March 6, 2022

Date March 8 2019 Name Score Projects Inc. (Manufacturer) Signed _____ (Representative)

CERTIFICATE OF SHOP/FIELD INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and employed by ABSA of Edmonton Alberta Canada have inspected the pressure vessel part described in this Manufacturer's Data Report on March 8 2019, and state that, to the best of my knowledge and belief, the Manufacturer has constructed this pressure vessel part 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 part 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.

Date March 8 2019 Signed _____ (Authorized Inspector) Commissions NB13345 D00004401 (National Board Authorized Inspector Commission number)

(07/17)