



INSPECTION GROUP INC.

JOB # 3213

TABLE OF CONTENTS

JOB FILE ITEMS	YES	N/A	NO	REASON FOR NON-INCLUSION
Release Form	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Purchase Order	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Hold Points Form	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Pre Commissioning Form	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Pro Inspection Coating Report	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
PSV Data Sheet	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Deficiency List	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
P&ID & GA Drawings	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Bill of Materials	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
MTL Inspection & Test Plan (ITP)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Name Plate and Data Sheets (U1A's)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Vessel / Tank Data & Drawings	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Travel Sheets	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Spool Fabrication Drawings / AB83	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Structural Fabrication Drawings	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
MTL Shop Inspection Reports	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Meter Run	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Storage Tank	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Miscellaneous	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	



INSPECTION GROUPING

**PennWest**  
Exploration

2836 Ellwood Dr., Edmonton, AB, Canada, T6X 0A9, Phone: (780) 450-8883 Fax: (780) 450-8884, [projects@mtlinspection.com](mailto:projects@mtlinspection.com)

### INSPECTION RELEASE REPORT

MTL Job No.	3213	Release No.	001
PO#	PEI-A13370663-01	AFE No.	A13370663
Project	Cordova d-55-A/94-P-10 Facility	Location / LSD	Cordova / d-55-A/94-P-10
Client Project Engineer	Peter Orakwe Kourosh Kazemi	Phone	<a href="mailto:Peter.orakwe@pennwest.com">Peter.orakwe@pennwest.com</a> <a href="mailto:kkazemi@pioneerengineering.com">kkazemi@pioneerengineering.com</a>
Vendor	Cado Industries	Vendor Job No.	2013-070 <i>unit 122</i>
Vendor Primary Contact	Wilfred Cao	Phone	403-279-6662
Equipment	<i>(2) 30" Sour Quad Sep. units.</i>	Tag No.	<i>2013-070 unit 122</i>
Carrier	<i>Aveda Transportation</i>	Trailer No.	
Packing Slip No.	<i>2013-070 unit 122.</i>	Waybill No.	

Rev #	Inspection	Shipping	Details	Date	Inspector	Vendor
0	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<i>(2) 30" Sour Quadruple Separator Packages</i>	<i>April 30/14</i>	<i>[Signature]</i>	<i>[Signature]</i>
1	<input type="checkbox"/>	<input type="checkbox"/>				
2	<input type="checkbox"/>	<input type="checkbox"/>				
3	<input type="checkbox"/>	<input type="checkbox"/>				

Description of Material or Equipment			
<i>(2) Quadruple Separator Skids 2013-070 unit 122</i>			
	Yes	No	N/A
Shop Release	The Vendor Quality Control shall ensure that all Non-Conformance Reports are signed off if applicable.		
Shop Release	The Vendor Quality Control shall ensure that all the documentation is forwarded to the site with the completed equipment.		
Shop Release	The Client Representative shall witness equipment loading and tie down and will verify that any loose material to be installed at site is secured for transport.		
Shop Release	The Vendor shall ensure all packaging, markings and shipping preparations are in compliance with Client specifications, purchase order, notes and attachments.		

#### Deficiency Items if Applicable

Attached  N/A Comments: *Ship loose to be verified as per packing slip. Not ready yet.*

Gurmat Sidhu Inspector	<i>[Signature]</i> Signature	<i>April 30/14</i> Date	403-472-8292 Phone	<a href="mailto:gurmatSidhu@gmail.com">gurmatSidhu@gmail.com</a> E-Mail
Jeremy Koster Vendor Quality Representative	<i>[Signature]</i> Signature	<b>APR 30 2014</b> Date	403-279-6662 Phone	<a href="mailto:Jeremy.koster@cadoindustries.com">Jeremy.koster@cadoindustries.com</a> E-Mail

ADDITIONAL NOTES

2013-070

81  
Enail  
PIC

# PennWest Exploration

## PURCHASE ORDER (Off Site)

Issued On Behalf of Penn West Petroleum ("Buyer")

DATE: 18-Jul-2013

ATTN: Peter Orakwa  
ADDRESS: PennWest Exploration  
Suite 200, 207-8th Ave SW, Calgary, AB  
TEL: (403) 893 2812  
E-MAIL: Peter.Orakwa@pennwest.com  
PW Project Manager: Peter Orakwa

P.O. NO. PEI-A13370663-01  
SHIP TO: Cordova d-55-A Facility

FIELD CONTACT: Chris Kwiatkowski (780) 918-3252  
PROJECT NAME: Cordova d-55-A/94-P-10 Facility  
PROJECT NUMBER: PEI-12040  
AFE #: A13370663  
GL CODE: 335-1655

VENDOR: CADO INDUSTRIES INC. ("Seller")  
ATTN: Wilfred Cao  
ADDRESS: 7491 110 Avenue SE  
Calgary AB T2C 3B8  
TEL: (403) 279-5682  
E-MAIL: wilfred.cao@cadoindustries.ca

ADDITIONAL INFORMATION:  
Please send Invoice to: Pennwest/Pioneer Engineering Inc.

Attn: Kourosch Kazemi  
Suite 220N, 3016 - 8th Avenue NE, Calgary, AB

\*\*\*PO Number must appear on all invoices, shipping papers, bills of lading and packages\*\*\*

SHIPPING METHOD		FOB		DELIVERY DATE		
Calgary AB		Calgary AB		Jan 24, 2014		
ITEM #	QTY	UOM	DESCRIPTION	CURR.	UNIT PRICE	LINE TOTAL
1	2.00	Each	Two 30" Sour Quadruple Separator Packages for PennWest d-55-A/94-P-10 Facility as per Quote #: Q2013-082RS dated June 21, 2013.	CAD		
2	2.00	Each	ELECTRICAL WIRING as per Quote #: Q2013-082RS, dated June 21, 2013	CAD		
<p>Note: The nozzel/vessels/plipping orientation of the second skid is a mirror of the first skid.</p> <p>Penn West will provide 3rd party inspection - Mech &amp; Elect.</p>						

The quantities listed are approximate only and are based on Penn West's anticipated annual usage. The actual quantities may vary considerably and Penn West will not guarantee the quantities listed will be purchased.

All fitting designs must be registered with ABSA, BCBA, Saskatchewan and Manitoba Sellers Branch (if applicable).

SUBTOTAL \$  
GST \$  
OTHER \$  
TOTAL \$

Date: \_\_\_\_\_  
Accepted by Vendor: \_\_\_\_\_  
Title: \_\_\_\_\_

### TECHNICAL SIGN OFF

Authorized by (Signature): \_\_\_\_\_  
Name: Kourosch Kazemi  
Date: 18-Jul-2013

Penn West Authorized By (Signature): \_\_\_\_\_  
Name: Peter Orakwa  
Title: Facilities Mgr  
Date: July 15, 2013

By signing and returning this order, the Seller agrees to perform in accordance with all provisions set forth on this Purchase Order and the document entitled Terms and Conditions for the provision of Goods or Services, which is attached and incorporated.

1. Payment Terms: Net 60 Days
2. Seller shall notify Buyer immediately if it is unable to ship as specified

Mark Fitzgerald  
Senior VP, Development

Robert Hay  
07/15/2013

July 15, 2013

# CADO INDUSTRIES INC.

7491 110 AVENUE SE, CALGARY, AB T2C 3B8, TEL: (403) 279-6662, FAX: (403) 279-6687

Date: June 21/2013

Pioneer Engineering Inc  
Suite 220N, 3015-5<sup>th</sup> Avenue NE  
Calgary, AB T2A 6T8

Tel: (403) 453-8820  
Fax: (403) 819-9999

Your Inquiry No.:  
CADO Quote File No.: Q2013-082R5  
Ref: Two 30" Sour Quadruple Separator Packages  
Penn West

Attn: Kourosh Kazemi / Joe Wu

Dear Sir/Madam:

In response to your request dated June 20/2013, CADO Industries Inc. is pleased to re-submit of two separator packages as follows:

**COMMERCIAL**

**PRICE:** each unit

**F.O.B. POINT:** CADO Industries Inc. Shop Calgary, Alberta, Canada

**DELIVERY:** 20 to 24 weeks after drawings be approved for construction  
To be confirmed at time of award

<b>DRAWINGS:</b>	Original PID and GA in CAD	Free issued by Pioneer (note: Cado will issue IFA and IFC drawings)
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<b>PRICE VALIDITY:</b>	firm for 30 days
<b>PAYMENT TERM:</b>	50% upon major materials procurement, 25 % upon hydro test, 25 % upon completion and document (note: 75 % must be paid before the shipping)

Progress Pmt  
50% Materials  
40% Completion  
10% QC

**WARRANTY (MAT'L & LABOR):** 12 months after operation the date of start-up or 18 months after completion whichever is earlier

**TAXES:** Federal and Provincial Sales taxes are extra where and when applicable

• CADO Industries Inc. G.S.T. registration # 859954232RT

<b>TECHNICAL:</b>
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**FOUR SEPARTORS**

- Four 30" O/D x 10' S/S vertical separators:  
Per DWG Separator PID-01/02 Rev B (dated June 20)  
1440 psi, -20/100F, 1/8"CA  
RT-1, hardness test, PWHT, sour service, ASME Sec VIII, Div I, CRN in AB, BC and SK  
Mat'l Sa-516-70N/Sa-105N/Sa-106B/Sa-234-WPB/Sa-193-B7/Sa-194-2H/316SSt gasket  
6000# TOL for 1 1/2" and smaller nozzles  
2" mineral wool with alum cladding for outside
- Building:  
Per DWG #D055A094P10-PIP-0001 Rev C (dated June 20)  
16'x56'x11' low eave, 3:12 gable, 22ga. pre-painted exterior, 24 ga white liner, R12 wall and  
R20 roof, 6 mil vapor barrier, ridge vent, two 12"x12" weighted louvers, two single doors (with  
IWC, HC, CC, PH, LH), one 36"x36" window, eavestrough with down spouts
- Skid:  
Per DWG #D055A094P10-STR-0001 Rev B and D055A094P10-STR-0002 Rev C (dated  
June 20)  
16'x56' with W14x30 main beams and 1/4" check plate, ten lifting lugs, one floor sump with 2"  
drain, piping supports, 3" thick spray-on floor insulation
- Six heaters:  
Cadyne WX24x36 nature gas with SDV, PRV, TS, vent hood, protection grill and 12VDC  
start-up cable
- Instruments and valves:  
Per DWG #D055A094P10-BOM-0001/0002 Rev B (dated June 20)
- Piping and tubing:  
Per DWG #Separator Skid PID-01/02 Rev B and #D055A094P10-PIP-0001 Rev C (dated  
June 20)  
B31.3, Ansi 150 and 600 sour piping spec, 100 % X-ray, hardness test and no PWHT for sour  
service  
Swagelok 316SST tube fitting and 0.035" WT 316SST SMLS tubes (1/2" processing, 3/8"  
instrument)
- Exterior: sandblast to SP-6, 1 s/c prime and 1 s/c enamel finish
- Data book and manual:  
One hard copy and one PDF

<b>OPTION AND CLARIFICATION</b>
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- 1) All ROC103, detectors and HS-2050/2051 are free issued to Cado
- 2) Fuel gas scrubber is not included. The quote does include the 2" fuel gas header.
- 3) Add \$4,350.00 for Cado to supply one fuel gas scrubber, two fisher regulator, one PSV, one PI and associated 1" valves/piping with take-off connection and piping on four vessel's gas outline

- 4) Add \$61,500.00 for following CLI Zone 1 electrical works(Note: the price need to be confirmed after electrical IFC drawing is available)

Supply and install three NEMA4 junction boxes  
Install and wire two ESD  
Supply and wire two 3 way switches  
Hook up four detectors with two beacons  
Supply and install four interior lights and two photocell exterior lights  
Hook up six heaters and two fans  
Hook up qty (24) devices

- 5) The shipping height will be about 14'-8" with 14" skid main beam

Should you have any further questions ,or comments please feel free to contact the undersigned at (403) 279-6662 or Fax (403) 279-6687. We trust that our proposal meets with your approval and look forward to being of service.

Sincerely,



Wilfred Cao, P.Eng  
CADO Industries Inc.



2836 Ellwood Drive S.W. Edmonton, AB T6X 0A9  
Office: (780) 450-8883 Fax: (780) 450-8884

Job # 3213

FABRICATION HOLD POINTS

FABRICATOR: Cado Industries  
FABRICATOR'S JOB #: 2013-070 DELIVERY DATE: January 24, 2014  
CLIENT: PennWest  
CLIENT ENGINEER: Peter Orakwe  
PROJECT: Cardova J-55 - A/94 - P-10 Facility  
EQUIPMENT DESCRIPTION: (2) 30" Sour Quadruple Separator Packages.

MTL's Inspector will verify components, materials and equipment assembly, audit NDE and PWHT procedures and reports, witness client specification, jurisdictional and code compliance testing, and approve surface preparation and coating application.

Hold points for MTL's Inspector will be:

- Internals prior to closing of any vessel , Final Ext. Prior to PWHT
- All hydro tests
- Coatings application
- Leak tests of NPT piping and all tubing
- Instrument function tests
- Packaging and preparation for shipping
- Review, approve and obtain pertinent QC documentation
- Witness of loading
- Review Final documentation review before shipping & Issue inspection release
- 

MTL Inspection shall have a notification from the Vendor's representative of a reasonable amount of lead time (preferably 24 hours), prior to any of the above hold points.

Fabricator's Representative

MTL Inspector

Jeremy Koster Oct, 17, 2013  
Print Name / Date

Gurmat Sidhu Oct 17, 2013  
Print Name / Date

**PennWest Exploration Pre-Commissioning Form: Pre-Package Skid Equipment**

MTL Job # 3213

Project Number:	<u>2013-070</u>	AFE:		Purchase Order:	
Packager:	<u>Cado Industries</u>	Package Unique Identifier:	<u>Unit 1</u>		

Shop Inspection – Mechanical Inspector Data	Field Inspection – Construction Supervisor Data	Field Asset Integrity Advisor Data
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<p>Notes:</p> <ol style="list-style-type: none"> <li>Original of form, once completed by shop mechanical inspector, to be sealed into red plastic folder and attached to inside of window of package</li> <li>Copy of form, once completed by shop mechanical inspector, to be included in red QC file.</li> </ol>	<p>Notes:</p> <ol style="list-style-type: none"> <li>Original of form, once completed by Construction supervisor, to be forwarded to Maureen Rogers, Asset Integrity Administrator, in Calgary.</li> </ol>	<p>Notes:</p> <ol style="list-style-type: none"> <li>Completed form to be included in QAP equipment files.</li> <li>FAIA to update ESR with Pre-commissioning data once form is completed.</li> </ol>
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Pressure Equipment Information:														Vessel Internals installed and operable	External Check for Mechanical Damage	Hard File Established	Static Data Entered into Electronic Data Base	Initial inspection Interval
Tag #	Description	Provincial Registration Number	Canadian Registration Number	Manufacture	Manufacture's Serial Number	Corresponding Relief Device Tag #	Manufacture's Data Report		Name Plate Etching		Vessel Internals Shipped Loose							
							Attached	To Follow	Attached	To Follow	Yes	No	Initial / N/A	Initial	Initial	Initial	months	
1	V2100	Separator	(A) 636929	W3539-213	Cado	1667	PSV-2100	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>					
2	V2200	"	(A) 636927	"	"	1668	PSV-2200	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>					
3	V2300	"	(A) 636926	"	"	1669	PSV-2300	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>					
4	V2400	"	(A) 636928	"	"	1670	PSV-2400	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>					
5								<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>					
6								<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>					
7								<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>					
8								<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>					
9								<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>					
10								<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>					
11								<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>					
12								<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>					
13								<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>					
14								<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>					
15								<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>					
16								<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>					

Pressure Relief Device Information:														PSV Installed	PSV Shipping plugs and/or peripherals removed	Hard File Established	Static Data Entered into Electronic Data Base	Initial Service Interval
Tag#	Physical Location Installed	Canadian Registration Number	Manufacture	Manufacture's Serial Number	Data Sheet		Relief Valve Shipped Loose		Car Seal Block Valves Associated with Relief Valve									
					Attached	To Follow	Yes	No	Upst		Dnst		Initial	Initial	Initial	Initial	Months	
									Y	N	Y	N						
1	PSV-2100	Separator	OG8442-SRCLL	FARRIS	607569-23-A10	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>					
2	PSV-2200	"	"	"	601682-3-A10	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>					
3	PSV-2300	"	"	"	620417-3-A10	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>					
4	PSV-2400	"	"	"	630417-2-A10	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>					
5						<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>					
6						<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>					

Location of Installation (Field & LSD):		
<u>April 30, 2014</u>		
Completion of Packaging (Date):		Completion of Installation (Date):
<u>Gurmat Sidhu</u>		
Shop Mechanical Inspector: Name (Print):		Construction Supervisor: Name (Print):
<u>403-472-8292</u>		
Contact Number (s):		Contact Number (s):
Signature:		Signature:

**PennWest Exploration Pre-Commissioning Form: Pre-Package Skid Equipment**

MTL Job # 3213

Project Number:	<u>2013-070</u>	AFE:		Purchase Order:	
Packager:	<u>Cado Industries</u>	Package Unique Identifier:	<u>Unit 2</u>		

<b>Shop Inspection – Mechanical Inspector Data</b>										<b>Field Inspection – Construction Supervisor Data</b>				<b>Field Asset Integrity Advisor Data</b>		
Notes: 1 Original of form, once completed by shop mechanical inspector, to be sealed into red plastic folder and attached to inside of window of package 2 Copy of form, once completed by shop mechanical inspector, to be included in red QC file										Notes: 1 Original of form, once completed by Construction supervisor, to be forwarded to Maureen Rogers, Asset Integrity Administrator, in Calgary.				Notes: 1. Completed form to be included in QAP equipment files. 2 FAIA to update ESR with Pre-commissioning data once form is completed.		

Pressure Equipment Information:																	
Tag #	Description	Provincial Registration Number	Canadian Registration Number	Manufacture	Manufacture's Serial Number	Corresponding Relief Device Tag #	Manufacture's Data Report		Name Plate Etching		Vessel Internals Shipped Loose		Vessel Internals installed and operable	External Check for Mechanical Damage	Hard File Established	Static Data Entered into Electronic Data Base	Initial inspection Interval
							Attached	To Follow	Attached	To Follow	Yes	No					
1	V3100 Separator	A 632245	W3539-213	Cado	1671	PSV-3100	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>					
2	V3200 "	A 632246	"	"	1672	PSV-3200	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>					
3	V3300 "	A 632247	"	"	1673	PSV-3300	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>					
4	V3400 "	A 632248	"	"	1674	PSV-3400	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>					
5							<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>					
6							<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>					
7							<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>					
8							<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>					
9							<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>					
10							<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>					
11							<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>					
12							<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>					
13							<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>					
14							<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>					
15							<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>					
16							<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>					

Pressure Relief Device Information:																	
Tag#	Physical Location Installed	Canadian Registration Number	Manufacture	Manufacture's Serial Number	Data Sheet		Relief Valve Shipped Loose		Car Seal Block Valves Associated with Relief Valve				PSV Installed	PSV Shipping plugs and/or peripherals removed	Hard File Established	Static Data Entered into Electronic Data Base	Initial Service Interval
					Attached	To Follow	Yes	No	Upst		Dnst						
1	PSV-3100 Separator	OG8442-SRCL	FARRIS	630417-1-A10	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				
2	PSV-3200 "	"	"	630417-4-A10	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>					
3	PSV-3300 "	"	"	630417-5-A10	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>					
4	PSV-3400 "	"	"	630417-6-A10	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>					
5					<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>					
6					<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>					

Location of Installation (Field & LSD):															
April 30, 2014 Completion of Packaging (Date):										Completion of Installation (Date):					
Gurmat Sidhu Shop Mechanical Inspector: Name (Print):										Construction Supervisor: Name (Print):			Field Asset Integrity Advisor Name (Print):		
403-472-8292 Contact Number (s):										Contact Number (s):			Contact Number (s):		
[Signature] Signature:										Signature:			Signature:		

Unit 1

# FARRIS PRESSURE MANAGEMENT

## EDMONTON FACILITY INSPECTION TEST REPORT

Farris Pressure Management  
a Division of Spartan Controls

<b>CUSTOMER</b>	<b>ORDER#</b>	<b>Farris WO#</b>	<b>Metal Tag:</b>
Cado Industries Inc	2077522	2077522-002	
<b>PO:</b>	2013-070-8697		
<b>Req#</b>	8697- 070		<b>Sup. Tag:</b>

<b>MODEL:</b>	<b>TYPE:</b>	<b>VALVE SIZE:</b>	<b>ORIFICE</b>	<b>FactorySerial#</b>	<b>CRN#</b>
26EA13-120/00	2600	1"600RFx2"150RF	E	607569-23-A10	0G8442.5R2CL

**SERVICE:**

SERVICE: Gas StampSymbol: UVNB

CAPACITY: 5657 SCFM Metric Only: No

<u>Set Pressure</u>	<u>Back Pressure</u>	<u>Diff</u>	<u>Cold Diff</u>	<u>Temp. Corr.</u>	<u>Temperature</u>
1440 PSIG	0 PSIG	1440 PSIG	1440 PSIG	0 PSIG	60 F (16 C)

**MATERIAL/HEAT NUMBER ASSIGNMENT:**

Body Y7165 Nozzle B3K6 Valve Inspected for Hydro Tested Parts *DF*

Bonnet Y6222 Disc A3E5

**PERFORMANCE TEST DATA:**

TEST FLUID  Air  Water  Air Over Water

Final Test Pressure 1440 PSIG  KPAG

Upper B.D.R. Setting: \_\_\_\_\_ Notches

Lower B.D.R. Setting: -20 Notches

Shop Test Gauges Used: 1. SI11M 2. SI11J

**BACK PRESSURE TEST:**

Not Applicable, (Open Bonnet / Cap Design)

120 PSIG Air

**SEAT TIGHTNESS TEST: API-527**

TEST FLUID Air Req'd At 90% Leak Test Pressure 1296 PSIG \_\_\_\_\_ KPAG

Air  90% No Visible Leaks

Water  95% Of Set Pressure Leak Rate 8 B.P.M. Final Inspection / Tech Tested [Signature]

Air Over Water Date Tested 28 Nov / 13

**FOR WITNESS TESTING ONLY**

Tested By: \_\_\_\_\_ Date: \_\_\_\_\_

Customer Witness: \_\_\_\_\_ Farris Witness: \_\_\_\_\_

Unit 1

# FARRIS PRESSURE MANAGEMENT

## EDMONTON FACILITY

### INSPECTION TEST REPORT

Farris Pressure Management  
a Division of Spartan Controls

<b>CUSTOMER</b>	<b>ORDER#</b>	<b>Farris WO#</b>	<b>Metal Tag:</b>
Cado Industries Inc	2077522	2077522-001	
<b>PO:</b>	2013-070-8697		
<b>Req#</b>	8697-070		<b>Sup. Tag:</b>

<b>MODEL:</b>	<b>TYPE:</b>	<b>VALVE SIZE:</b>	<b>ORIFICE</b>	<b>FactorySerial#</b>	<b>CRN#</b>
26EA13-120/00	2600	1"600RFx2"150RF	E	601682-3-A10	0G8442.5R2CL

**SERVICE:**

SERVICE: Gas StampSymbol: UV NB

CAPACITY: 5657 SCFM Metric Only: No

<u>Set Pressure</u>	<u>Back Pressure</u>	<u>Diff</u>	<u>Cold Diff</u>	<u>Temp. Corr.</u>	<u>Temperature</u>
1440 PSIG	0 PSIG	1440 PSIG	1440 PSIG	0 PSIG	60 F (16 C)

**MATERIAL/HEAT NUMBER ASSIGNMENT:**

Body Y4162 Nozzle 9W027-LP0 Valve Inspected for Hydro Tested Parts 113

Bonnet Y6269 Disc S79141

**PERFORMANCE TEST DATA:**

TEST FLUID  Air  Water  Air Over Water

Final Test Pressure 1440 PSIG          KPAG

Upper B.D.R. Setting:          Notches

Lower B.D.R. Setting: -20 Notches

Shop Test Gauges Used: 1. S11M 2. S11J

**BACK PRESSURE TEST:**

Not Applicable, (Open Bonnet / Cap Design)

120 PSIG Air

**SEAT TIGHTNESS TEST: API-527**

TEST FLUID  Air  Water  Air Over Water

Req'd At  90%  95% Of Set Pressure

Leak Test Pressure 1296 PSIG          KPAG

No Visible Leaks

Leak Rate 10 B.P.M.

Final Inspection / Tech Tested [Signature]

Date Tested 28 Nov 13

**FOR WITNESS TESTING ONLY**

Tested By: \_\_\_\_\_ Date: \_\_\_\_\_

Customer Witness: \_\_\_\_\_ Farris Witness: \_\_\_\_\_

Unit 1

# FARRIS PRESSURE MANAGEMENT

## EDMONTON FACILITY INSPECTION TEST REPORT

Farris Pressure Management  
a Division of Spartan Controls

<b>CUSTOMER</b>	<b>ORDER#</b>	<b>Farris WO#</b>	<b>Metal Tag:</b>
Cado Industries Inc	2077522	2077522-008	
<b>PO:</b>	2013-070-8697		
<b>Req#</b>	8697-070		<b>Sup. Tag:</b>

<b>MODEL:</b>	<b>TYPE:</b>	<b>VALVE SIZE:</b>	<b>ORIFICE</b>	<b>FactorySerial#</b>	<b>CRN#</b>
26EA13-120/00	2600	1"600RFx2"150RF	E	630417-3-A10	0G8442.5R2CL

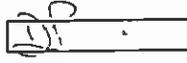
**SERVICE:**

SERVICE: Gas StampSymbol: UV NB

CAPACITY: 5657 SCFM Metric Only: No

<u>Set Pressure</u>	<u>Back Pressure</u>	<u>Diff</u>	<u>Cold Diff</u>	<u>Temp. Corr.</u>	<u>Temperature</u>
1440 PSIG	0 PSIG	1440 PSIG	1440 PSIG	0 PSIG	60 F (16 C)

**MATERIAL/HEAT NUMBER ASSIGNMENT:**

Body Y9599 Nozzle E5H8 Valve Inspected for Hydro Tested Parts 

Bonnet Y9567 Disc C7L0

**PERFORMANCE TEST DATA:**

TEST FLUID  Air  Water  Air Over Water

Final Test Pressure 1440 PSIG KPAG

Upper B.D.R. Setting: \_\_\_\_\_ Notches

Lower B.D.R. Setting: -20 Notches

Shop Test Gauges Used: 1. S11M 2. S11J

**BACK PRESSURE TEST:**

Not Applicable, (Open Bonnet / Cap Design)

120 PSIG Air

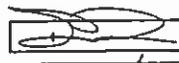
**SEAT TIGHTNESS TEST: API-527**

TEST FLUID  Air  Water  Air Over Water

Req'd At 90% 95% Of Set Pressure

Leak Test Pressure 1296 PSIG

No Visible Leaks  Leak Rate  B.P.M.

Final Inspection / Tech Tested 

Date Tested 28 Nov / 13

**FOR WITNESS TESTING ONLY**

Tested By: \_\_\_\_\_ Date: \_\_\_\_\_

Customer Witness: \_\_\_\_\_ Farris Witness: \_\_\_\_\_

Unit 1

# FARRIS PRESSURE MANAGEMENT

## EDMONTON FACILITY INSPECTION TEST REPORT

Farris Pressure Management,  
a Division of Spartan Controls

<b>CUSTOMER</b>	<b>ORDER#</b>	<b>Farris WO#</b>	<b>Metal Tag:</b>
Cado Industries Inc	2077522	2077522-006	
<b>PO:</b> 2013-070-8697			
<b>Req#</b> 8697-070			<b>Sup. Tag:</b>

<b>MODEL:</b>	<b>TYPE:</b>	<b>VALVE SIZE:</b>	<b>ORIFICE</b>	<b>FactorySerial#</b>	<b>CRN#</b>
26EA13-120/00	2600	1"600RFx2"150RF	E	630417-2-A10	OG8442.5R2CL

**SERVICE:**

SERVICE: Gas StampSymbol: UV NB

CAPACITY: 5657 SCFM Metric Only: No

Set Pressure	Back Pressure	Diff	Cold Diff	Temp. Corr.	Temperature
1440 PSIG	0 PSIG	1440 PSIG	1440 PSIG	0 PSIG	60 F (16 C)

**MATERIAL/HEAT NUMBER ASSIGNMENT:**

Body: Y9198 Nozzle: E5H8 Valve Inspected for Hydro Tested Parts:   

Bonnet: Y9568 Disc: C7L0

**PERFORMANCE TEST DATA:**

TEST FLUID:  Air  Water  Air Over Water

Final Test Pressure: 1440 PSIG  KPAG

Upper B.D.R. Setting:    Notches

Lower B.D.R. Setting: -20 Notches

Shop Test Gauges Used: 1. S11M 2. S11J

**BACK PRESSURE TEST:**

Not Applicable, (Open Bonnet / Cap Design)

120 PSIG Air

**SEAT TIGHTNESS TEST: API-527**

TEST FLUID:  Air  Water  Air Over Water

Req'd At:  90%  95% Of Set Pressure

Leak Test Pressure: 1296 PSIG  KPAG

No Visible Leaks:

Leak Rate: 2 B.P.M.

Final Inspection / Tech Tested:   

Date Tested: 28 Nov/13

**FOR WITNESS TESTING ONLY**

Tested By: \_\_\_\_\_ Date: \_\_\_\_\_

Customer Witness: \_\_\_\_\_ Farris Witness: \_\_\_\_\_

SN-167A

# FARRIS PRESSURE MANAGEMENT

## EDMONTON FACILITY INSPECTION TEST REPORT

Farris Pressure Management  
a Division of Spartan Controls

2013-070 unit 2

<b>CUSTOMER</b>	<b>ORDER#</b>	<b>Farris WO#</b>	<b>Metal Tag:</b>
Cado Industries Inc	2077522	2077522-003	
<b>PO:</b>	2013-070-8697		
<b>Req#</b>	8697-070		<b>Sup. Tag:</b>

<b>MODEL:</b>	<b>TYPE:</b>	<b>VALVE SIZE:</b>	<b>ORIFICE</b>	<b>FactorySerial#</b>	<b>CRN#</b>
26EA13-120/00	2600	1"600RFx2"150RF	E	630417-1-A10	0G8442.5R2CL

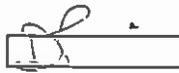
**SERVICE:**

SERVICE: Gas StampSymbol: UV NB

CAPACITY: 5657 SCFM Metric Only: No

<u>Set Pressure</u>	<u>Back Pressure</u>	<u>Diff</u>	<u>Cold Diff</u>	<u>Temp. Corr.</u>	<u>Temperature</u>
1440 PSIG	0 PSIG	1440 PSIG	1440 PSIG	0 PSIG	60 F (16 C)

**MATERIAL/HEAT NUMBER ASSIGNMENT:**

Body: Y9595 Nozzle: E5H8 Valve Inspected for Hydro Tested Parts: 

Bonnet: Y9527 Disc: C7L0

**PERFORMANCE TEST DATA:**

TEST FLUID:  Air Final Test Pressure: 1440 PSIG Upper B.D.R. Setting: Notches Lower B.D.R. Setting: -20 Notches

Water  Air Over Water Shop Test Gauges Used: 1. S11M 2. S11J

**BACK PRESSURE TEST:**

Not Applicable, (Open Bonnet / Cap Design)

120 PSIG Air

**SEAT TIGHTNESS TEST: API-527**

TEST FLUID:  Air Req'd At:  90% Leak Test Pressure: 1246 PSIG No Visible Leaks:  Leak Rate: 0 B.P.M. Final Inspection / Tech Tested:  Date Tested: 28 Nov / 13

Water  95% Of Set Pressure  Air Over Water

**FOR WITNESS TESTING ONLY**

Tested By: \_\_\_\_\_ Date: \_\_\_\_\_

Customer Witness: \_\_\_\_\_ Farris Witness: \_\_\_\_\_

V-2100  
SN-1672

# FARRIS PRESSURE MANAGEMENT

## EDMONTON FACILITY INSPECTION TEST REPORT

Farris Pressure Management  
a Division of Spartan Controls

2013-070 unit 2

<b>CUSTOMER</b>	<b>ORDER#</b>	<b>Farris WO#</b>	<b>Metal Tag:</b>
Cado Industries Inc	2077522	2077522-007	
<b>PO:</b>			
2013-070-8697			
<b>Req#</b>			
8697-070			
	<b>Sup. Tag:</b>		

<b>MODEL:</b>	<b>TYPE:</b>	<b>VALVE SIZE:</b>	<b>ORIFICE</b>	<b>FactorySerial#</b>	<b>CRN#</b>
26EA13-120/00	2600	1"600RFx2"150RF	E	630417-4-A10	0G8442.5R2CL

**SERVICE:**

SERVICE: Gas StampSymbol: UV NB

CAPACITY: 5657 SCFM Metric Only: No

<u>Set Pressure</u>	<u>Back Pressure</u>	<u>Diff</u>	<u>Cold Diff</u>	<u>Temp. Corr.</u>	<u>Temperature</u>
1440 PSIG	0 PSIG	1440 PSIG	1440 PSIG	0 PSIG	60 F (16 C)

**MATERIAL/HEAT NUMBER ASSIGNMENT:**

Body Y9193 Nozzle E5H8 Valve Inspected for Hydro Tested Parts *[Signature]*

Bonnet Y9557 Disc C7LO

**PERFORMANCE TEST DATA:**

TEST FLUID  Air  Water  Air Over Water

Final Test Pressure 1440 PSIG

Upper B.D.R. Setting: \_\_\_\_\_ Notches

Lower B.D.R. Setting: -20 Notches

Shop Test Gauges Used: 1. S11M 2. S11J

**BACK PRESSURE TEST:**

Not Applicable, (Open Bonnet / Cap Design)

120 PSIG Air

**SEAT TIGHTNESS TEST: API-527**

TEST FLUID  Air  Water  Air Over Water

Req'd At  90%  95% Of Set Pressure

Leak Test Pressure 1296 PSIG

No Visible Leaks

Leak Rate 12 B.P.M.

Final Inspection / Tech Tested *[Signature]*

Date Tested 28 Nov/13

**FOR WITNESS TESTING ONLY**

Tested By: \_\_\_\_\_ Date: \_\_\_\_\_

Customer Witness: \_\_\_\_\_ Farris Witness: \_\_\_\_\_

SN-1673

# FARRIS PRESSURE MANAGEMENT

## EDMONTON FACILITY INSPECTION TEST REPORT

Farris Pressure Management  
a Division of Spartan Controls

2013-070-01012

<b>CUSTOMER</b>	<b>ORDER#</b>	<b>Farris WO#</b>	<b>Metal Tag:</b>
Cado Industries Inc	2077522	2077522-005	
<b>PO:</b>	2013-070-8697		
<b>Req#</b>	8697-070		<b>Sup. Tag:</b>

<b>MODEL:</b>	<b>TYPE:</b>	<b>VALVE SIZE:</b>	<b>ORIFICE</b>	<b>FactorySerial#</b>	<b>CRN#</b>
26EA13-120/00	2600	1"600RFx2"150RF	E	630417-5-A10	0G8442.5R2CL

**SERVICE:**

SERVICE: Gas StampSymbol: UV NB

CAPACITY: 5657 SCFM Metric Only: No

<u>Set Pressure</u>	<u>Back Pressure</u>	<u>Diff</u>	<u>Cold Diff</u>	<u>Temp. Corr.</u>	<u>Temperature</u>
1440 PSIG	0 PSIG	1440 PSIG	1440 PSIG	0 PSIG	60 F (16 C)

**MATERIAL/HEAT NUMBER ASSIGNMENT:**

Body Y9196 Nozzle E5H8 Valve Inspected for Hydro Tested Parts 

Bonnet Y9574 Disc C7L0

**PERFORMANCE TEST DATA:**

TEST FLUID  Air  Water  Air Over Water

Final Test Pressure 1440 PSIG KPAG

Upper B.D.R. Setting: \_\_\_\_\_ Notches

Lower B.D.R. Setting: -20 Notches

Shop Test Gauges Used: 1. S11M 2. S11J

**BACK PRESSURE TEST:**

Not Applicable, (Open Bonnet / Cap Design)

120 PSIG Air

**SEAT TIGHTNESS TEST: API-527**

TEST FLUID  Air  Water  Air Over Water

Req'd At  90%  95% Of Set Pressure

Leak Test Pressure 1296 PSIG KPAG

No Visible Leaks

Leak Rate .4 B.P.M.

Final Inspection / Tech Tested 

Date Tested 28 Nov 13

**FOR WITNESS TESTING ONLY**

Tested By: \_\_\_\_\_ Date: \_\_\_\_\_

Customer Witness: \_\_\_\_\_ Farris Witness: \_\_\_\_\_

# FARRIS PRESSURE MANAGEMENT

## EDMONTON FACILITY INSPECTION TEST REPORT

SN-1674

Farris Pressure Management  
a Division of Spartan Controls

2013-070 2013

<b>CUSTOMER:</b>	<b>ORDER#</b>	<b>Farris WO#</b>	<b>Metal Tag:</b>
Cado Industries Inc	2077522	2077522-004	
<b>PO:</b> 2013-070-8697			
<b>Req#</b> 8697-070			<b>Sup. Tag:</b>

<b>MODEL:</b>	<b>TYPE:</b>	<b>VALVE SIZE:</b>	<b>ORIFICE</b>	<b>FactorySerial#</b>	<b>CRN#</b>
26EA13-120/00	2600	1"600RFx2"150RF	E	630417-6-A10	0G8442.5R2CL

**SERVICE:**

---

**SERVICE:** Gas      StampSymbol: UV NB

**CAPACITY:** 5657 SCFM      Metric Only: No

<u>Set Pressure</u>	<u>Back Pressure</u>	<u>Diff</u>	<u>Cold Diff</u>	<u>Temp. Corr.</u>	<u>Temperature</u>
1440 PSIG	0 PSIG	1440 PSIG	1440 PSIG	0 PSIG	60 F (16 C)

**MATERIAL/HEAT NUMBER ASSIGNMENT:**

---

Body	Y8888	Nozzle	E5H8	Valve Inspected for Hydro Tested Parts
Bonnet	Y9568	Disc	C7L0	

**PERFORMANCE TEST DATA:**

---

TEST FLUID     Air       Water       Air Over Water

Final Test Pressure      Upper B.D.R. Setting:      Notches

1440 PSIG      Lower B.D.R. Setting: -20      Notches

K PAG      Shop Test Gauges Used: 1. S11M 2. S11J

**BACK PRESSURE TEST:**

---

Not Applicable, (Open Bonnet / Cap Design)

120 PSIG Air

**SEAT TIGHTNESS TEST: API-527**

---

TEST FLUID    Req'd At      Leak Test Pressure      PSIG      KPAG

Air       90%      No Visible Leaks     

Water       95% Of Set Pressure      Leak Rate      5 B.P.M.      Final Inspection / Tech Tested      [Signature]

Air Over Water      Date Tested      28 Nov 13

**FOR WITNESS TESTING ONLY**

Tested By: \_\_\_\_\_ Date: \_\_\_\_\_

Customer Witness: \_\_\_\_\_ Farris Witness: \_\_\_\_\_

unit 1

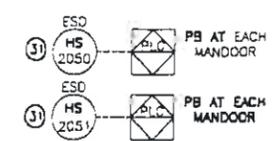
EF-2000,2001 EXHAUST FAN  
 SIZE: 12" MODEL: CANARM SD12-XPF  
 1/3HP, 115V/1/230V, XP, 1825RPM, 1540CFM

V-2100 INLET SEPARATOR  
 SIZE: 30" O.D. X 10'-0" S/S  
 DESIGN PRESSURE: 9376 kPa (1360 PSI) @ 90°C (194°F)  
 X-RAY: 100% PWHT: YES  
 J-3-PHASE VERTICAL DESIGN

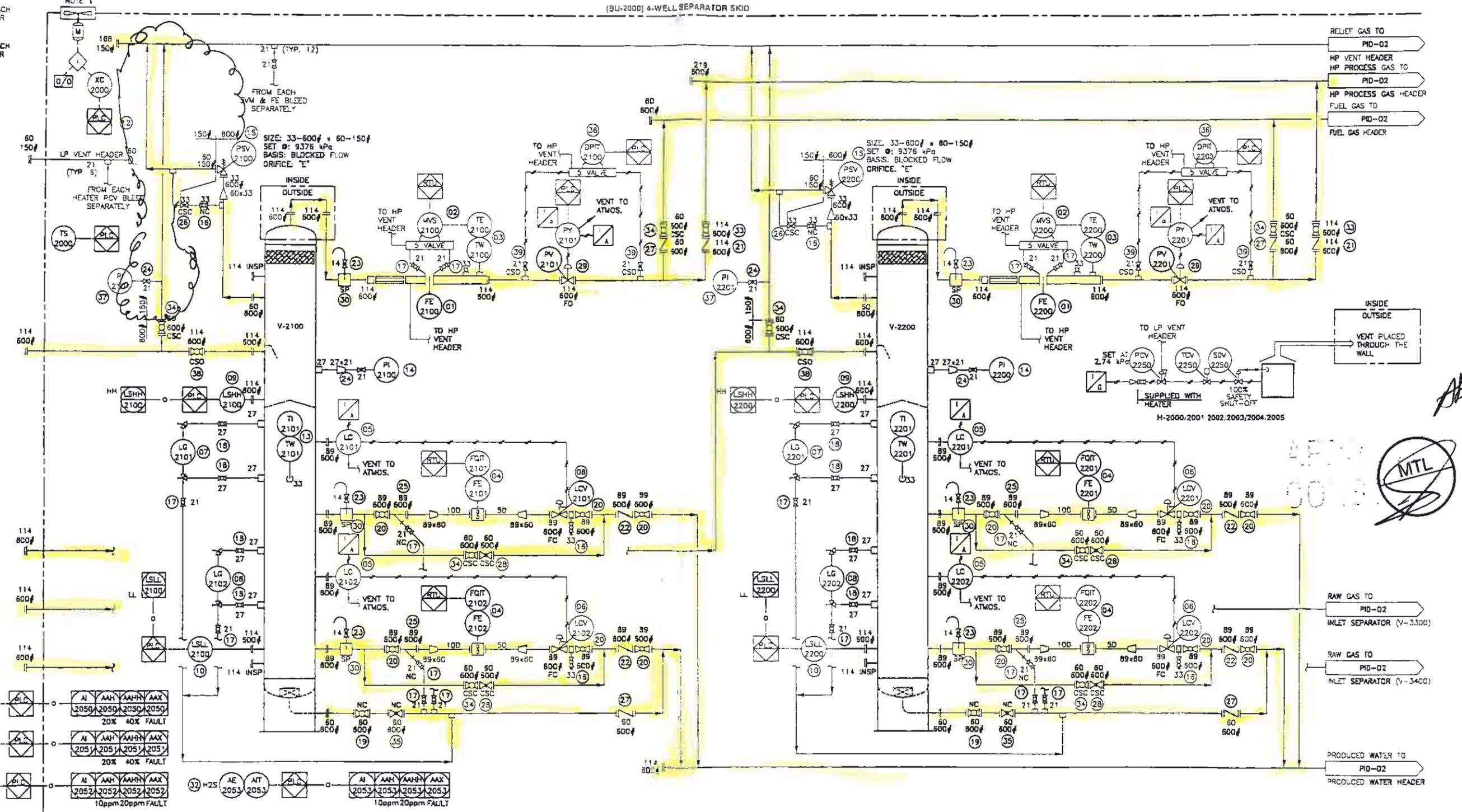
V-2200 INLET SEPARATOR  
 SIZE: 30" O.D. X 10'-0" S/S  
 DESIGN PRESSURE: 9376 kPa (1360 PSI) @ 90°C (194°F)  
 X-RAY: 100% PWHT: YES  
 J-3-PHASE VERTICAL DESIGN

H-2000,2001/2002,2003,2004 2005 BUILDING HEATER  
 MAKE: CATADYNE  
 MODEL: WK24J36  
 OUTPUT: 30,000BTU/HR EACH  
 GRILL, SAFETY SHUTOFF, REGULATOR, VENT HOOD, THERMOSTAT  
 CLASS 1, DIV 1, (NATURAL GAS) 120V

(BU-2000) 4-WELL SEPARATOR SKID



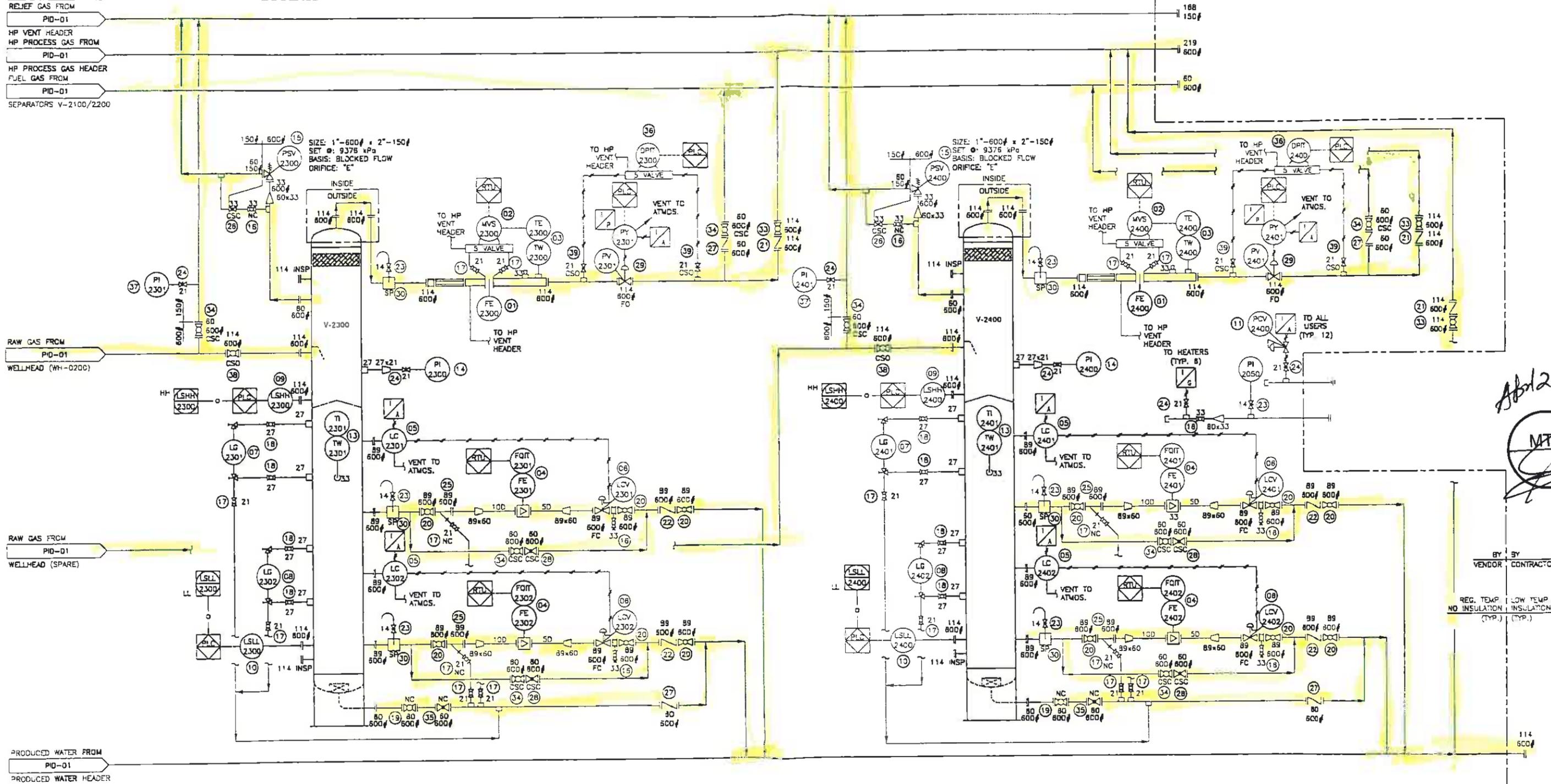
NOTE:  
 1. EXHAUST FAN MOUNTING POSITIONS: EF-2000 TO BE MOUNTED 2' ABOVE TOP OF SKID, EF-2001 TO BE MOUNTED 1' BELOW BUILDING EYE.



V-2300  
 INLET SEPARATOR  
 SIZE: 30" O.D. X 10'-0" S/S  
 DESIGN PRESSURE: 9376 kPa (1360 PSI) @ 90°C (194°F)  
 X-RAY: 100%  
 PWHT: YES  
 3-PHASE VERTICAL DESIGN

V-2400  
 INLET SEPARATOR  
 SIZE: 30" O.D. X 10'-0" S/S  
 DESIGN PRESSURE: 9376 kPa (1360 PSI) @ 90°C (194°F)  
 X-RAY: 100%  
 PWHT: YES  
 3-PHASE VERTICAL DESIGN

(BU-2000) 4-WELL SEPARATOR SKID



*Abt 25*

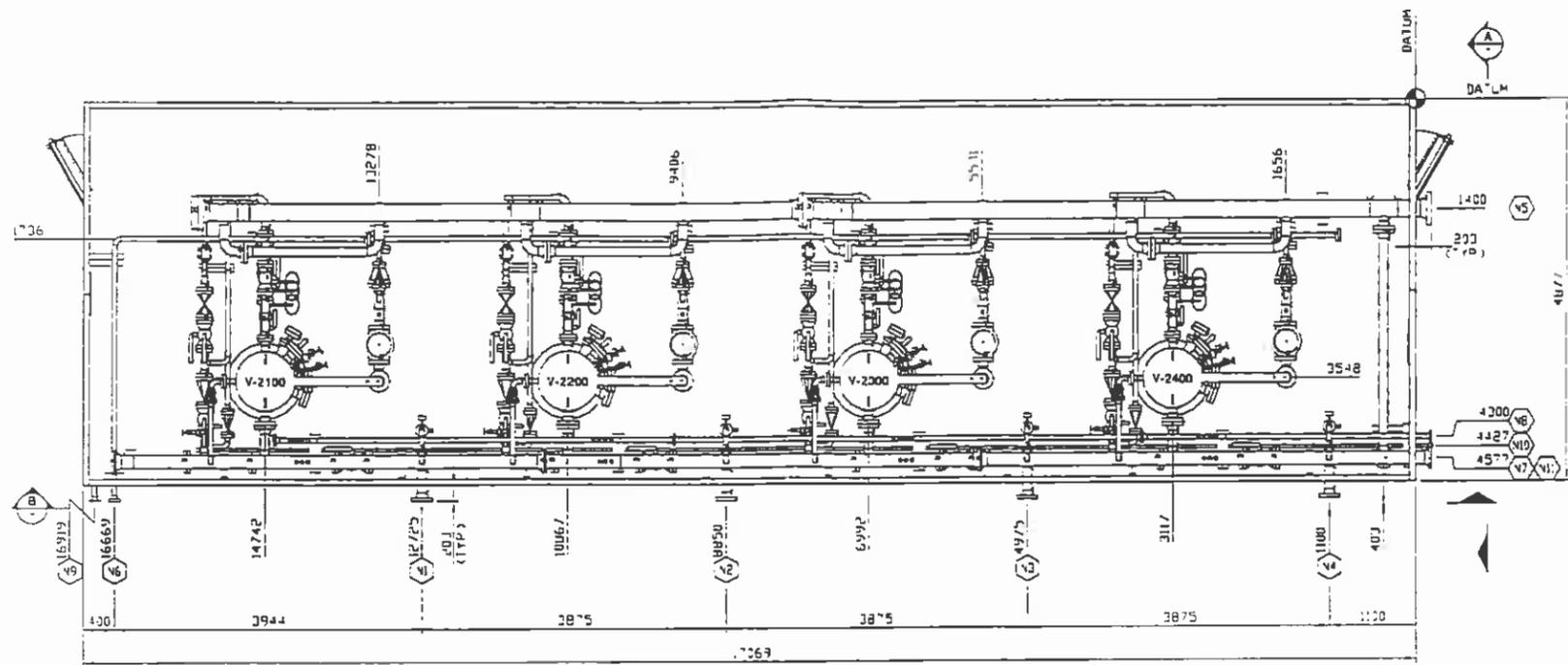
BY VENDOR BY CONTRACTOR

REG. TEMP. NO INSULATION (TYP.)  
 LOW TEMP. INSULATION (TYP.)

*Unit 1*

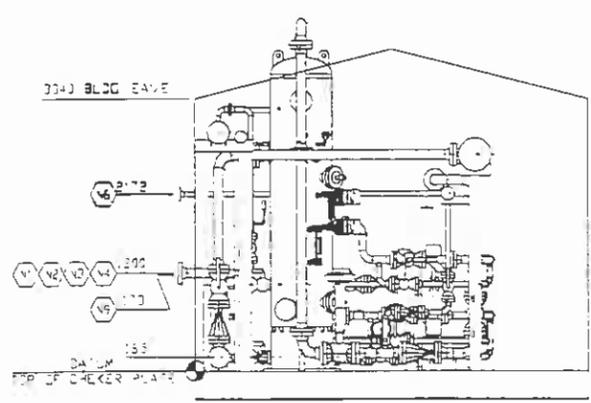
Rev.	Description	By	Chk	Eng	Date	Title	Job No	Drawing Number	Rev.
1	RE-ISSUED FOR CONSTRUCTION	AP	WC	WC	NOV 05/13	PIPING AND INSTRUMENTATION DIAGRAM 4-WELL SEPARATOR SKID (BU-2000)	2013-070	2013-070-102	1
0	ISSUED FOR CONSTRUCTION	AP	WC	WC	OCT 28/13				
A	ISSUED FOR APPROVAL	AP	WC	WC	OCT 09/13				
Drawn: A. PERNA Date: OCT. 08, 2013 Scale: NTS Customer: PENNWEST EXPLORATION c/o PIONEER ENGINEERING INC.						CADO INDUSTRIES INC. 7491 - 113 AVE SE, CALGARY, ALBERTA T2C 3B5 TEL: (403) 279-8862; FAX: (403) 279-8887			

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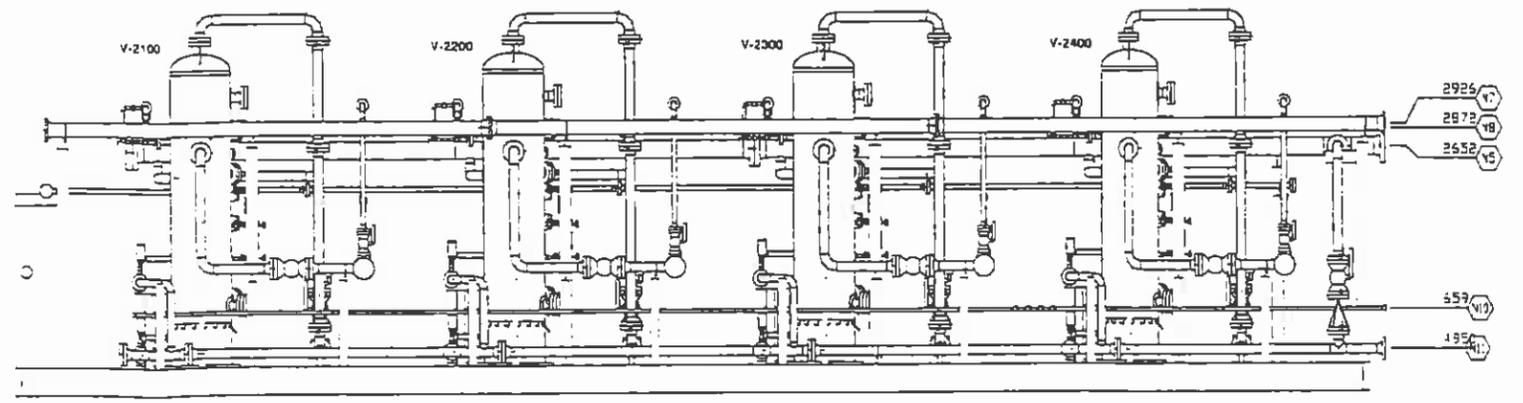


PLAN VIEW  
SCALE 1:30

- (11) 4"-600# GAS INLET
- (12) 4"-600# GAS INLET
- (13) 4"-600# GAS INLET
- (14) 4"-600# GAS INLET
- (15) 3"-600# GAS OUTLET
- (16) 2"-600# FUEL GAS OUTLET
- (17) 5"-50# RELIEF FLARE
- (18) 2"-50# LP FLARE
- (19) 2"-150# FUEL GAS INLET
- (20) 1"-300# INSTRUMENT AIR INLET
- (21) 4"-600# WATER OUTLET



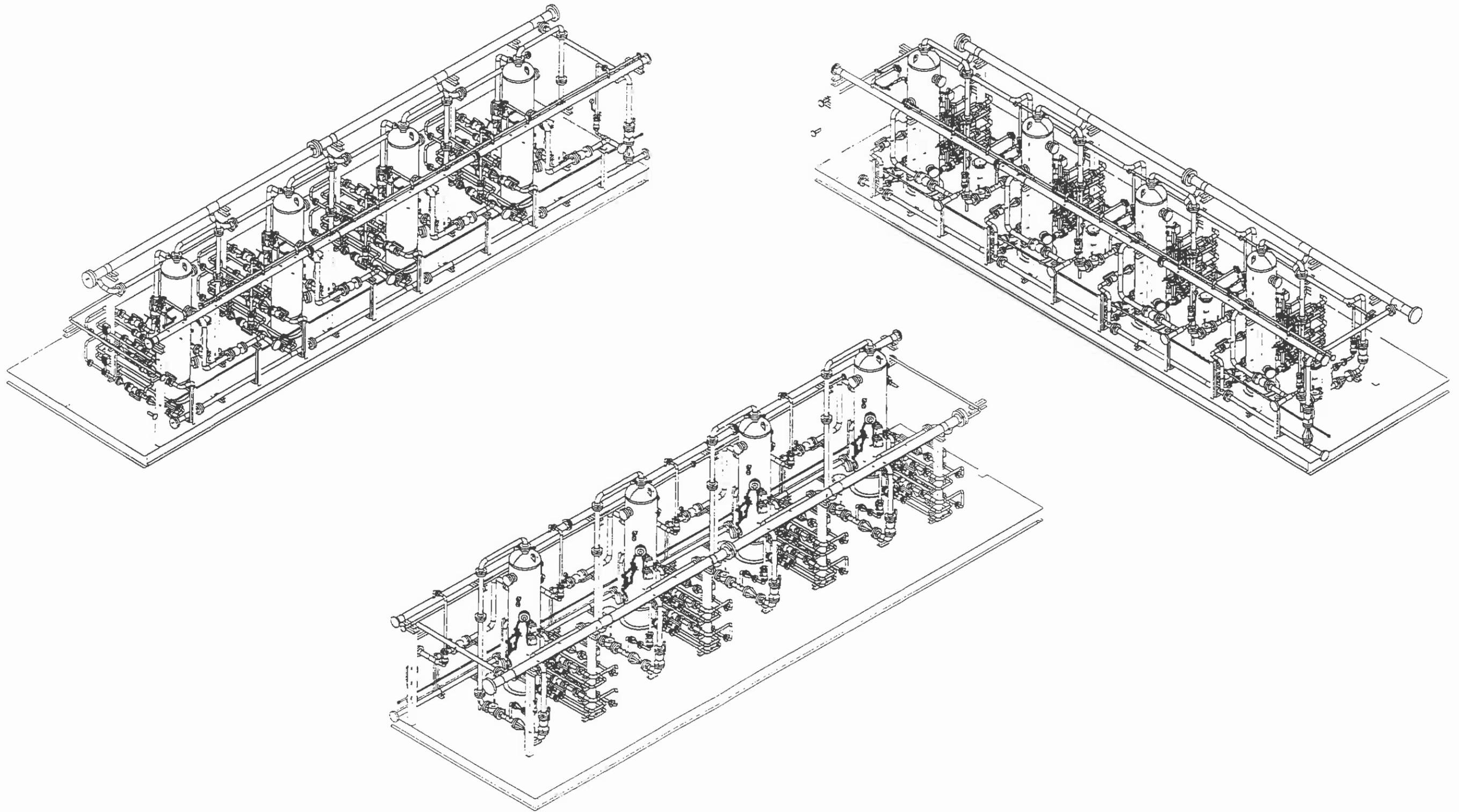
ELEVATION VIEW A-A  
SCALE 1:30



ELEVATION VIEW B-B  
SCALE 1:30

Drawn: A. PERNA Date: OCT 28, 2013				<b>CADO INDUSTRIES INC.</b> 7401 - 110 AVE SE, CALGARY, ALBERTA T2C 3B6 TEL: (403) 279-8883; FAX: (403) 279-8887			
Scale: NTS Customer: PENNYWEST EXPLORATION & PIONEER ENGINEERING INC.				Job No: 2013-070 Drawing Number: 2013-070-201		Rev: 1	
Description: 4-VES. SEPARATOR SKID BY-2000				Title: GENERAL ARRANGEMENT		Rev: 1	

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				Drawn	A PERVA	<b>CADO INDUSTRIES INC.</b> 7401 - 110 AVE SE, CALGARY, ALBERTA T2C 3B8 TEL (403) 279-8882; FAX (403) 279-8887			
				Date	OCT 08 2013				
2	REVISED FOR CONSTRUCTION	AP	WC	WC	NOV 26 2013	Scale NTS Customer PENNWEST EXPLORATION & PIONEER ENGINEERING INC	Job No 2013-070	Drawing Number 2013-070-201	Rev 1
1	REVISED FOR CONSTRUCTION	AP	WC	WC	NOV 26 2013				
3	REVISED FOR CONSTRUCTION	AP	WC	WC	NOV 26 2013				
4	REVISED FOR CONSTRUCTION	AP	WC	WC	NOV 26 2013				
Rev	Description	By	Chk	Eng	Date	Title GENERAL ARRANGEMENT 4-WELL SEPARATOR SKID BU-2700			

REVISIONS

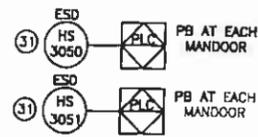
**EF-3000/3001**  
 EXHAUST FAN  
 SIZE: 12", MODEL#: CANARM SD12-XPF  
 1/3HP, 115/1/230V, XP, 1825RPM, 1640CFM

**V-3100**  
 INLET SEPARATOR  
 SIZE: 30" O.D. X 10'-0" S/S  
 SET @: 9376 kPa (1360 PSI) @ 90°C (194°F)  
 X-RAY: 100%  
 PWHT: YES  
 3-PHASE VERTICAL DESIGN

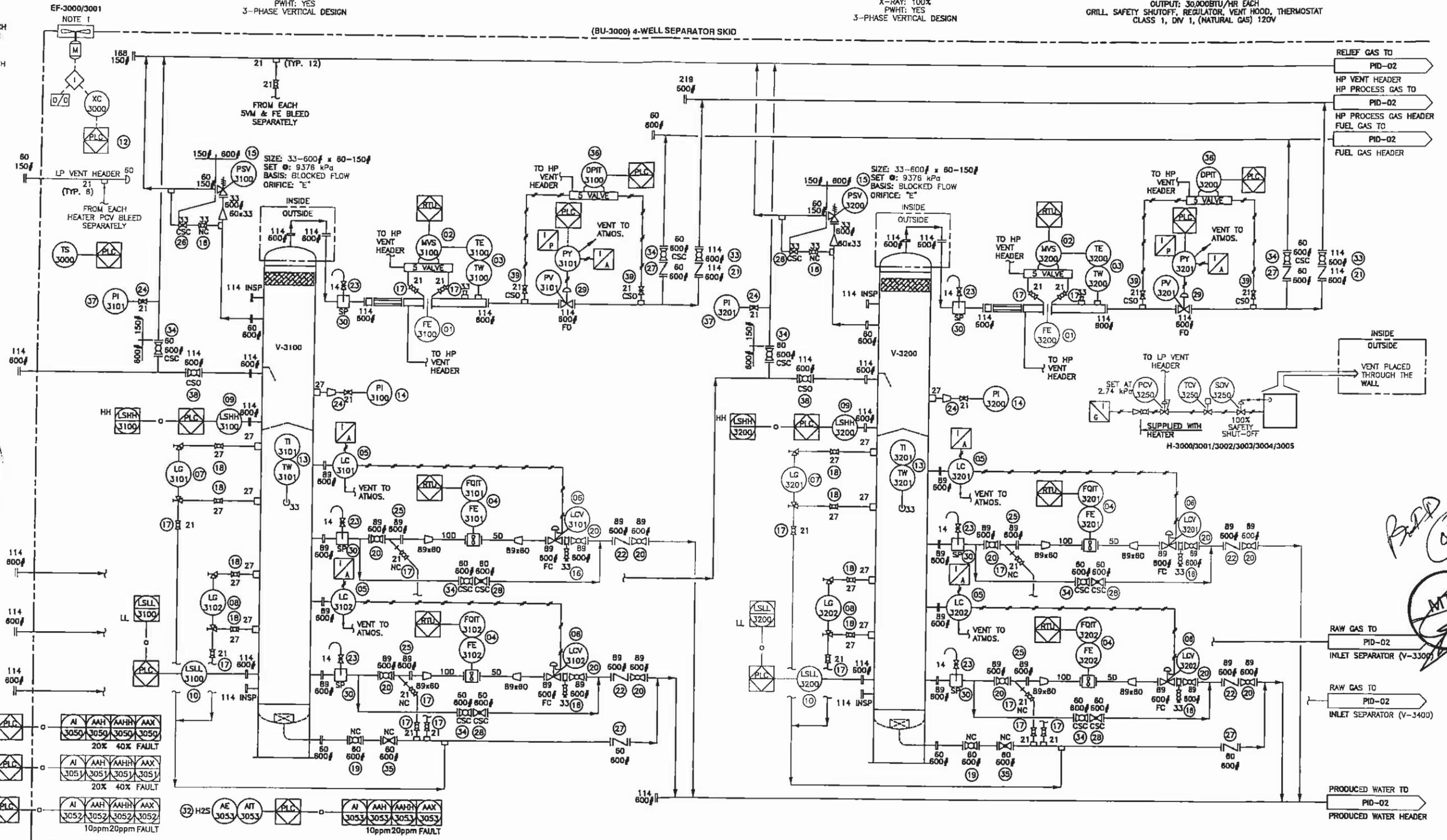
**V-3200**  
 INLET SEPARATOR  
 SIZE: 30" O.D. X 10'-0" S/S  
 SET @: 9376 kPa (1360 PSI) @ 90°C (194°F)  
 X-RAY: 100%  
 PWHT: YES  
 3-PHASE VERTICAL DESIGN

**H-3000/3001/3002/3003/3004/3005**  
 BUILDING HEATER  
 MAKE: CATADYNE  
 MODEL: WX24X38  
 OUTPUT: 30,000BTU/HR EACH  
 GRILL SAFETY SHUTOFF, REGULATOR, VENT HOOD, THERMOSTAT  
 CLASS 1, DIV 1, (NATURAL GAS) 120V

(BU-3000) 4-WELL SEPARATOR SKID



NOTE:  
 1. EXHAUST FAN MOUNTING POSITIONS: EF-2000 TO BE MOUNTED 2' ABOVE TOP OF SKID, EF-2001 TO BE MOUNTED 1' BELOW BUILDING EVE.



WILFRED CAO  
 18/02/14

MTL

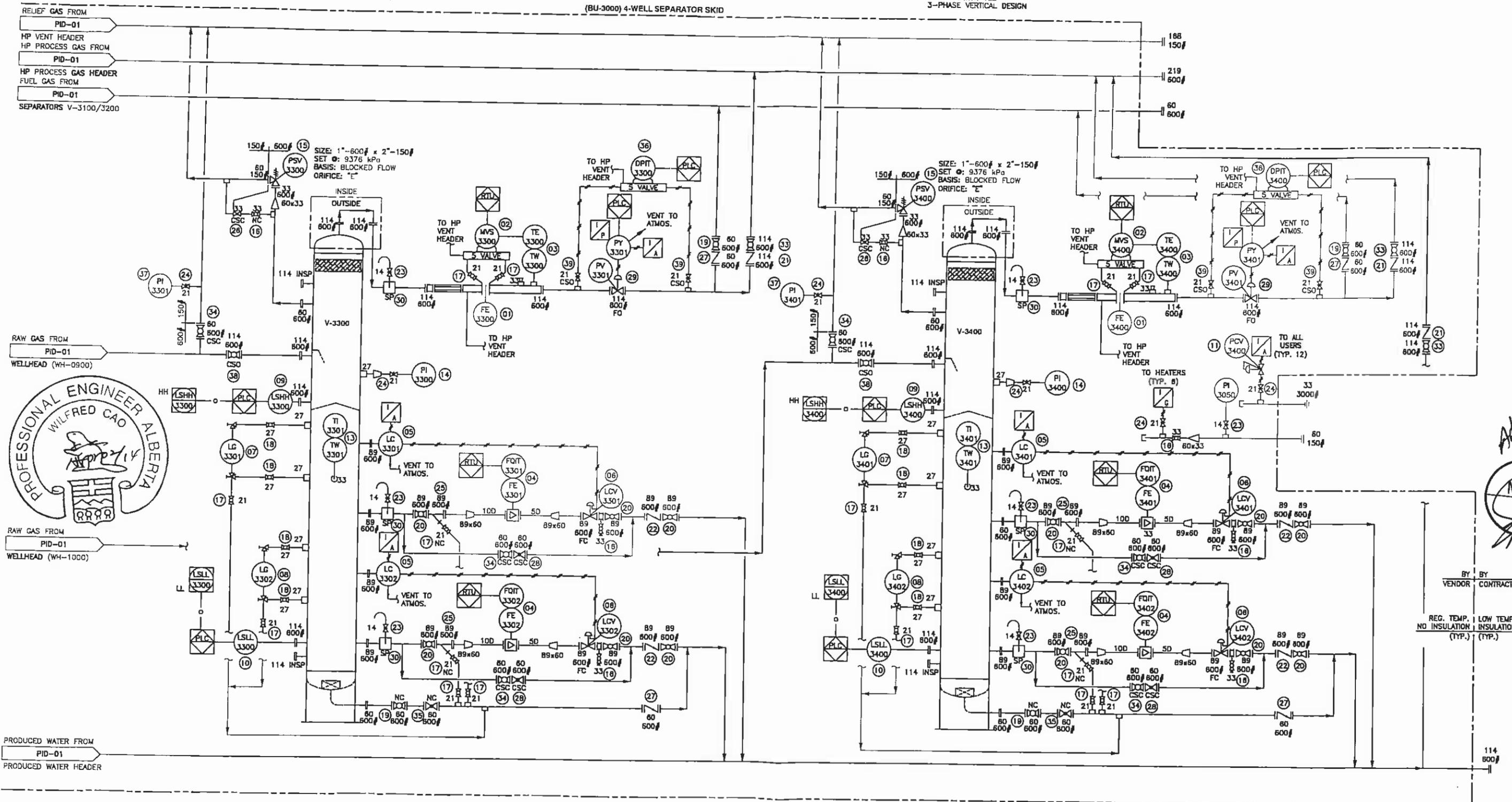
Unit 2

2	AS BUILT	AP	WC	WC	APR 02/14	Drawn	A. PERNA	<b>CADO INDUSTRIES INC.</b> 7491 - 110 AVE SW, CALGARY, ALBERTA T2C 3B8 TEL: (403) 279-8882; FAX: (403) 279-8887
1	RE-ISSUED FOR CONSTRUCTION	AP	WC	WC	NOV 05/13	Date	OCT. 08, 2013	
0	ISSUED FOR CONSTRUCTION	AP	WC	WC	OCT 28/13	Scale	NTS	
A	ISSUED FOR APPROVAL	AP	WC	WC	OCT 09/13	Customer:	PENWEST EXPLORATION c/o PIONEER ENGINEERING INC.	
Rev.	Description	Rv	Chk	Enr	Date	Piping and Instrumentation Diagram		

**V-3300**  
 INLET SEPARATOR  
 SIZE: 30" O.D. X 10'-0" S/S  
 DESIGN PRESSURE: 9376 kPa (1360 PSI) @ 80°C (194°F)  
 X-RAY: 100%  
 PWHT: YES  
 3-PHASE VERTICAL DESIGN

**V-3400**  
 INLET SEPARATOR  
 SIZE: 30" O.D. X 10'-0" S/S  
 DESIGN PRESSURE: 9376 kPa (1360 PSI) @ 80°C (194°F)  
 X-RAY: 100%  
 PWHT: YES  
 3-PHASE VERTICAL DESIGN

(BU-3000) 4-WELL SEPARATOR SKID



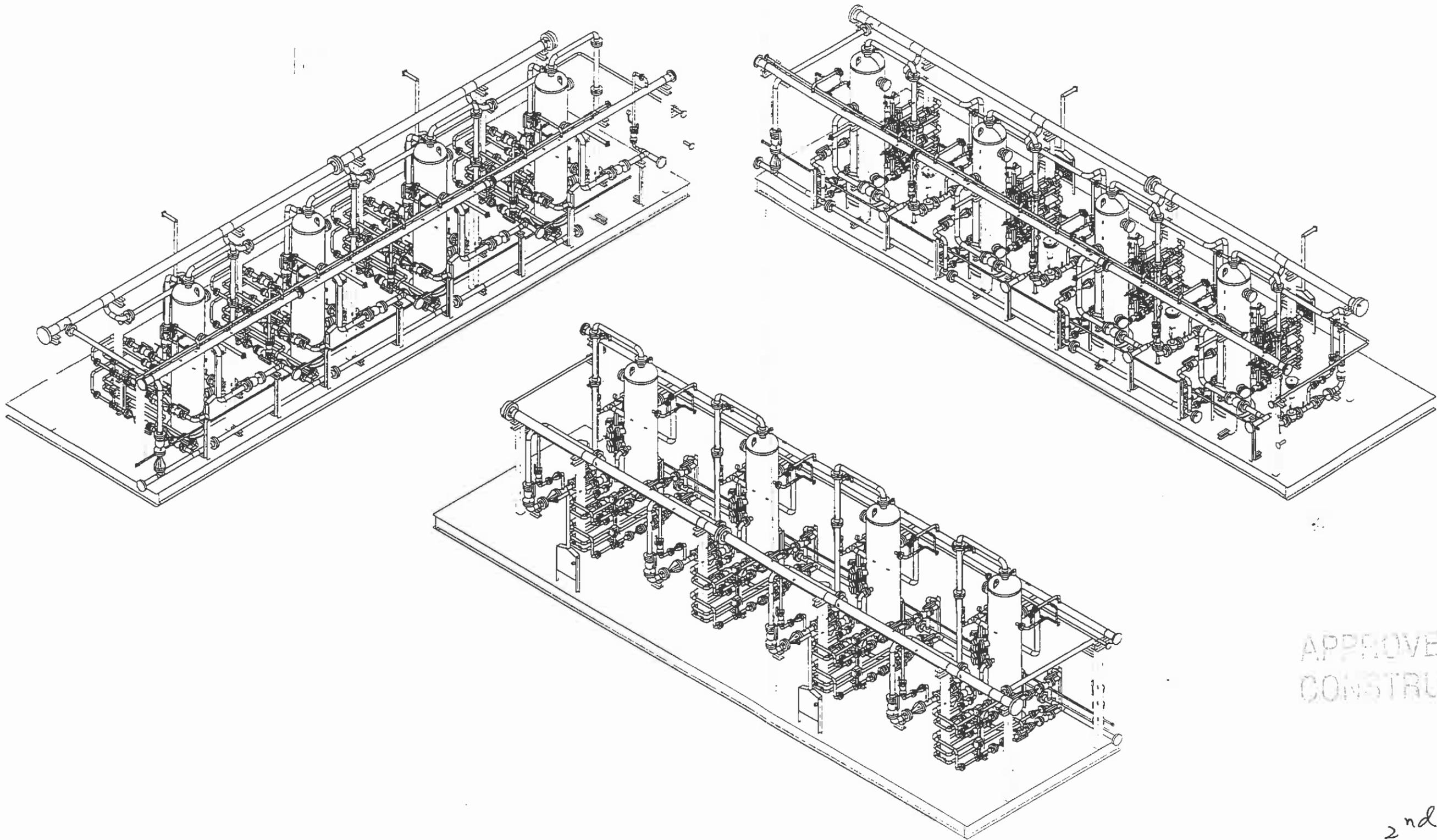
April 30  
 MTL

BY VENDOR BY CONTRACTOR  
 REG. TEMP. NO INSULATION (TYP.)  
 LOW TEMP. INSULATION (TYP.)

2	AS BUILT	AP	WC	WC	APR 02/14	Drawn	A. PERNA
1	RE-ISSUED FOR CONSTRUCTION	AP	WC	WC	NOV 05/13	Date	OCT. 08, 2013
0	ISSUED FOR CONSTRUCTION	AP	WC	WC	OCT 28/13	Scale	NTS
A	ISSUED FOR APPROVAL	AP	WC	WC	OCT 09/13	Customer:	PENNWEST EXPLORATION c/o PIONEER ENGINEERING INC.
Rev.	Description	By	Chk.	Date			

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APPROVED FOR  
CONSTRUCTION

2<sup>nd</sup> unit

				Drawn: J. PERNA	CADO INDUSTRIES INC. 7491 - 115 AVE SE, CALGARY, ALBERTA T2C 3B8 TEL: (403) 279-8680; FAX: (403) 279-8087		
				Date: 07.08.2010	Customer: PENNYWIT EXPLORATION LTD. HOMER ENGINEERING INC.		
				Scale: 1:1	Job No: 0010-001		
				Title: GENERAL IMPROVEMENT SHALE SEPARATOR S&C 81-43.01	Drawing Number: 0010-001-002		Rev: 1
Rev.	Description	By	Chk	Eng.	Date		
1	REVISED FOR APPROVAL	AP	AC	AC	NOV 09, 13		
2	REVISED FOR APPROVAL	AP	AC	AC	NOV 24, 13		
3	REVISED FOR APPROVAL	AP	AC	AC	SEP 13, 13		
4	REVISED FOR APPROVAL	AP	AC	AC	OCT 09, 13		



ITEM	INST. TAG	QUANTITY	DESCRIPTION
1	FE-2100/2200/2300/2400	4	4" SCH. 80 DANIEL SENIOR METER RUN, 4"-600# RF, c/w FLANGE FLOW CONDITIONER, CONFORMS TO AGA 2000, FLANGED BOTH ENDS, 100% X-RAY, HYDRO-TEST, PWHT, SOUR SERVICE
2	MVS-2100/2200/2300/2400	4	ROSEMOUNT MULTIVARIABLE TRANSMITTER, MODEL# MVS205E (FORMERLY PART NUMBER: RSE205), OUTPUT: EIA-485 (RS-485), MODBUS, DIFFERENTIAL PRESSURE RANGE: 0-250 IN H2O, STATIC PRESSURE RANGE: 0-3626 PSIG, PROCESS TEMPERATURE RANGE -40 TO 752 DEG. F, c/w 5TIS-4FLG 5 WAY MANIFOLD, c/w MOUNTING BRACKET (MODEL AK-002-10-HD)
3	TW/TE-2100/2200/2300/2400	4	ROSEMOUNT RTD ASSEMBLY, MODEL# RTD-3", 3 WIRE RTD c/w THERMOWELL (3" INSERTION LENGTH), 3/4" NPT PROCESS CONNECTION, -100 TO 250 DEG. C
4	FE-2101/2201/2301/2401/2102/2202/2302/2402	8	2"-600# RF NUPRO EZE IN TURBINE METER c/w MC-III TOTALIZER FLOW ANALYZER, EXPL. PROOF, PULSE OUTPUT, 4-20 mA OUTPUT AND MAGNETIC PICK-UP AND ACCESSORIES, M3/DAY REGISTER, SOUR SERVICE
5	LC-2101/2201/2301/2401/2102/2202/2302/2402	8	2" NPT FISHER LEVEL CONTROLLERS, STANDARD NACE SERVICE, SNAP ACTING, 5 TO 30 PSIG 1 7/8" x 12" PVC DISPLACER, DIRECT MOUNT, NOTE: SPECIFIC GRAVITY DIFFERENCE OF 0.3 REQUIRED FOR OIL/WATER INTERFERENCE
6	LCV-2101/2201/2301/2401/2102/2202/2302/2402	8	3" 600# RF CVS 667 ET CONTROL VALVE, 3 7/16" EQUAL PERCENT CAGE GUIDED TRIM c/w FISHER 667 SPRING AND DIAPHRAGM ACTUATOR, FAIL CLOSED, SIZED 45 ACTUATOR, 0-33 PSIG OPERATING RANGE.
7	LG-2101/2201/2301/2401	4	PENBERTHY 2RL7 REFLEX GAUGE, 1950 PSIG AT 100 DEG. F MAWP, SET OF 330J GAUGE VALVES, VISIBLE GLASS 22"
8	LG-2102/2202/2302/2402	4	PENBERTHY 2TH7 TRANSPARENT GAUGE, 2250 PSIG AT 100 DEG. F MAWP, SET OF 330J GAUGE VALVES, VISIBLE GLASS 22"
9	LSHH-2100/2200/2300/2400	4	1 1/2" NPT SOR ELECTRIC HIGH LEVEL SWITCH, MODEL# 1510-C-G5A-C-L1-ES-CS-CV-MC c/w MANUAL CHECK, DIRECT ACTING, DIRECT MOUNT c/w 4"-600# RF BLIND FLANGE (TAPPED 1 1/2" NPT) (MECHANICAL TEST FACING UP)
10	LSLL-2100/2200/2300/2400	4	1 1/2" NPT SOR ELECTRIC LOW LEVEL SWITCH, MODEL# 1510-C-G5A-C-L1-ES-CS-CV-MC c/w MANUAL CHECK, DIRECT ACTING, DIRECT MOUNT c/w 4"-600# RF BLIND FLANGE (TAPPED 1 1/2" NPT) (MECHANICAL TEST FACING DOWN)
11	PCV-2400	12	FISHER 1/4" NPT TYPE 67CFR PRESSURE REGULATORS (SOUR SERVICE), STANDARD BODY/TRIM c/w VENTED BONNET, 0 TO 35 PSIG RANGE
12	EF-2000/2001	2	12" EXHAUST FAN, CANARM 5012-XP, 1/3HP, 115/1/230V, XP, 1525RPM, 164CCFM
13	TW/TG-2101/2201/2301/2401	4	3" TREND MODEL 33 BIMETAL THERMOMETER, -40/120 DEG. F RANGE, 12" STEM LENGTH (1/2" BACK CONNECTION), c/w 1/2" x 3/4" x 12" LONG 316 SS THERMOWELL
14	PI-2100/2200/2300/2400	4	4" WKA 233.54 LIQUID PRESSURE GAUGE, DUAL SCALE, 0 TO 1500 PSIG RANGE 1/2" NPT BOTTOM CONNECTION, 316 SS BOURDON TUBE/SOCKET
15	PSV-2100/2200/2300/2400	4	FARRIS 26EA13-120 PRESSURE RELIEF VALVE, 1"-600# RF INLET x 2"-150# RF OUTLET, "E" SIZE CRIFICE, SET AT 9928 kPag (1440 PSIG), (BLOCKED FLOW GAS)
16		13	1" NPT 3000 PSIG WOG, FULL PORT KF, BALL VALVE, SOUR SERVICE
17		33	1/2" NPT 2000 PSIG WOG, REG PORT KF, BALL VALVE, SOUR SERVICE
18		16	3/4" NPT 2000 PSIG WOG, REG PORT KF, BALL VALVE, SOUR SERVICE
19		4	2"-600# RF REG PORT, KF BALL VALVE, SOUR SERVICE
20		24	3"-600# RF FULL PORT, KF BALL VALVE, SOUR SERVICE
21		5	4" CL 600 RF, KF SWING CHECK VALVE, SOUR SERVICE
22		8	3" CL 600 RF, KF SWING CHECK VALVE, SOUR SERVICE
23		13	1/4" NPT, 6000# AGCO H7VC-2 NEEDLE VALVE, SOUR SERVICE
24		26	1/2" NPT, 6000# AGCO H7VC-440 NEEDLE VALVE, SOUR SERVICE
25		8	3"-600# RF, ALTA STRAINER, Y-STRAINER, SOUR SERVICE
26		4	1" NPT NEWCO GLOBE VALVE, CARSEAL CLOSED, CLASS 800, SOUR SERVICE
27		8	2" CL 600 RF, KF SWING CHECK VALVE, SOUR SERVICE
28		8	2"-600# RF NEWCO GLOBE VALVE, CARSEAL CLOSED, SOUR SERVICE
29	PV/PY-2101/2201/2301/2401	4	4" 600# RF CVS 667-ET PRESSURE CONTROL VALVE c/w FISHER 667 SPRING AND DIAPHRAGM ACTUATOR, FISHER DVC6200 FIELDVIEW POSITIONED, SIZE 45 ACTUATOR, FAIL OPEN, NACE, SOUR SERVICE
30		12	WELKER SP-2 SAMPLE PROBE, 3/4" x 1/2" NPT x 4" LG (TO BE CUT 45 DEG AT MIDDLE OF PIPE)
31	HS-2050/2051	2	SUPPLIED AND INSTALLED BY CUSTOMER
32	AE/AIT-2050/2051/2052/2053	4	SUPPLIED AND INSTALLED BY CUSTOMER
33		5	4"-600# RF REG PORT BALL VALVE, KF, SOUR SERVICE

				Drawn	A. PERNA	<b>CADO INDUSTRIES INC.</b> 7431 - 110 AVE SE, CALGARY, ALBERTA T2C 3B8 TEL: (403) 279-8883; FAX: (403) 279-8887			
				Date	OCT. 08, 2013				
1	RE-ISSUED FOR CONSTRUCTION	AP	WC	WC	NOV 05/13	Scale	NTS	Customer	PENNWEST EXPLORATION c/o PIONEER ENGINEERING INC.
2	ISSUED FOR CONSTRUCTION	AP	WC	WC	OCT 23/13				
3	ISSUED FOR APPROVAL	AP	WC	WC	OCT 08/13				
Rev.	Description	By	Chk	Eng	Date	Title	BILL OF MATERIAL		Job No
							4-WELL SEPARATOR SKID (3U-2000)		2013-370
							Drawing Number	SHT 1 OF 1	Rev
								2013-370-501	

These technical data and the drawings contained herein are the property of CADO INDUSTRIES INC. and all information properly marked as confidential or otherwise restricted shall remain the property of CADO INDUSTRIES INC.

ITEM	INST. TAG	QUANTITY	DESCRIPTION
34		16	2"-600# RF FULL PORT BALL VALVE, KF, CARSEAL CLOSED, SOUR SERVICE
35		4	2"-600# RF, NEWCO GLOBE VALVE
36	DPIT-2100/2200/2300/2400	4	ROSEMOUNT 3051C PRESSURE TRANSMITTER MODEL 3051CD+A02A1AM5K655, 4-20mA WITH DIGITAL SIGNAL BASED ON HART PROTOCOL, CSA EXPL. PROOF c/w ROSEMOUNT 305 INTEGRAL 5-VALVE MANIFOLD MODEL: 0305RC52B115G
37	PI-2101/2201/2301/2401	4	2 1/2" DIAL WKA 233.53 LIQUID PRESSURE INDICATOR, DUAL UNIT, LIQUID FILLED, 1/2" NPT BOTTOM CONNECTION, 0-200 PSIG RANGE.
38		4	4"-600# RF REG PORT BALL VALVE, KF, CARSEAL OPEN, SOUR SERVICE
39		8	1/2" NPT, 6000# AGCO H7VC-440 NEEDLE VALVE, CARSEAL OPEN, SOUR SERVICE

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				Drawn	A. PERNA	<b>CADO INDUSTRIES INC.</b> 7431 - 110 AVE SE, CALGARY, ALBERTA T2C 3B6 TEL: (403) 270-6662; FAX: (403) 270-6667				
				Date	OCT 08, 2013					
1	ISSUED FOR CONSTRUCTION	AP	WC	WC	NOV 05/13	Scale	NTS	Customer: PENNWEST EXPLORATION c/o PIONEER ENGINEERING INC.		
0	ISSUED FOR CONSTRUCTION	AP	WC	WC	OCT 28/13					
1	ISSUED FOR APPROVAL	AP	WC	WC	OCT 09/13					
Rev	Description	By	Chk	Eng	Date	Title:	BILL OF MATERIAL	Job No	Drawing Number: SH1 OF 1	Rev
							4-WELL SEPARATOR SKID (BU-2000)	2013-370	2013-070-502	1

REVISED



INSPECTION GROUP INC.

**PennWest**  
Exploration

2836 Ellwood Drive S.W, Edmonton, AB, T6X 0A9, Phone: (780) 450-8883 Fax: (780) 450-8884, [projects@mtlinspection.com](mailto:projects@mtlinspection.com)

**INSPECTION TEST PLAN – PACKAGED PROCESS EQUIPMENT**

<b>Date:</b>	August 13, 2013	<b>Revision No.</b>	000	<b>MTL Job No.</b>	3213
<b>Client:</b>	PennWest Exploration c/o Pioneer Engineering Inc.		<b>Client P.O. No.</b>	PEI-A13370663-01	
<b>AFE No.</b>	A13370663	<b>Cost Code:</b>			
<b>Project:</b>	Cordova d-55-A/94-P-10 Facility	<b>Location / LSD</b>	Cordova / d-55-A/94-P-10		
<b>Client Project Engineer:</b>	Peter Orakwe Kourosh Kazemi	<b>Delivery Date:</b>	January 24, 2014		
<b>Vendor:</b>	Cado Industries	<b>Vendor Job No.</b>	2013-070 unit 1 & 2		
<b>Equipment &amp; Tag No.:</b>	(2) 30" Sour Quadruple Separator Packages	<b>Equipment S/N:</b>	Unit 1 & Unit 2.		
<b>Vendor Project Engineer:</b>	Wilfred Cao				

**Code of Construction:** ASME Section VIII, Div.1, ASME Section IX, ASME B31.3, CSA W47 & W59, CSA B51, CSA B149.3, CEC, Alberta Building Code, API 12F, Alberta Boiler & Pressure Vessel Regulations, Alberta Safety Codes Act, Alberta Welders Regulations and associated Clients specifications, CE.S.002, ME.S.011, ME.S.012, JE.S.001, ME.S.001.

No.	Inspection Point	Date	Criteria Met? Y/N	Initial	Applicable Notes
1	Initiate Vendor contact / Pre-Job Meeting – issue Hold Points	08/17	Hold	[Signature]	Attend project kick off meeting.
2	Ensure applicable Quality Program in place	✓	Verify	[Signature]	On Record
3	Review specs, drawings and material lists & confirm to Client specs. Vendor ITP sign on.	✓	Review	[Signature]	Monitor throughout the project.
4	Review vessel/equipment placement and anchoring.	✓	Verify	[Signature]	Monitor throughout the project.
5	Review CSA B149.3 when applicable (Dehys)	—	Verify	—	Monitor throughout the project.
6	Verification of all NDE & QC Data requirements	08/17	Review	[Signature]	Review applicable reports as required
7	Welding follows approved procedures, is traceable and acceptable	✓	Review	[Signature]	Review applicable reports as required
8	Welders / Apprentices Qualifications acceptable	✓	Verify	[Signature]	On Record
9	Suppliers/Subcontractors approved	—	Verify	—	On Record
10	Vessels, pipe and fittings conform to ratings, sizes & materials. Traceability maintained.	08/17	Verify	[Signature]	On Record
11	Visual inspection of all threaded connections and socket weld piping.	✓	Hold	[Signature]	Inspect as required.

Any omission or failure on part of the inspector to disapprove or reject any work or materials shall not be construed as acceptance of any defective work or materials.  
H – Hold Point, W – Witness Point, R – Review, V – Verify, SP – Surveillance Point



INSPECTION GROUPING

**PennWest**  
Exploration

2836 Ellwood Drive S.W, Edmonton, AB, T6X 0A9, Phone: (780) 450-8883 Fax: (780) 450-8884, [projects@minspection.com](mailto:projects@minspection.com)

No.	Inspection Point	Date	Criteria Met? Y/N	Initial	Applicable Notes
12	Flange finish and rating confirmed	Nov 27/14	Surveillance point	[Signature]	Monitor throughout the fabrication.
13	Random fit up check (spec/code/WPS tolerance)	✓	Surveillance point	[Signature]	Monitor throughout the fabrication.
14	Nozzle orientation and coordinates confirmed	✓	Verify	[Signature]	Confirm layout and orientation prior to cutting openings
15	Internal coil hydro test	—	Hold	[Signature]	Witness and complete inspection.
16	Internal before closure	Nov 27	Surveillance point	[Signature]	Confirm vessel is clean and dry.
17	Visual externals of all vessels, bottles and filters	Jan 22	Verify	[Signature]	Photos required for equipment file.
18	PWHT Acceptable	✓	Review	[Signature]	Review applicable charts and reports as required.
19	Vessel & piping hydro tests complete. Gauges calibrated. Documentation in order.	✓	Review	[Signature]	Witness and document all testing.
20	Cleaning, flushing, purging, drying witnessed.	✓	Verify	[Signature]	Photos required for equipment file.
21	Filters and elements installed.	—	Surveillance point	[Signature]	Confirm correct installation.
22	Skid materials, welds, dimensions and auxiliaries conform. Traceability maintained.	Jan 22	Inspect	[Signature]	Conduct full inspection and verify to approved drawings and specifications.
23	Valves conform and are installed correctly	March 21	Verify	[Signature]	Conduct full inspection and verify to approved drawings and specifications.
24	Meter run orientation and nameplate data acceptable.	✓	Verify	[Signature]	Conduct full inspection and verify to approved drawings and specifications.
25	Valves & equipment are accessible & removable for repair	✓	Verify	[Signature]	Conduct full inspection and verify to approved drawings and specifications. Clearance is sufficient.
26	Studs, nuts & gaskets conform to material and length.	✓	Verify	[Signature]	Conduct full inspection and verify to approved drawings and specifications. Clearance is sufficient.
27	Piping adequately supported and is plumb and level	✓	Verify	[Signature]	Quality of workmanship and specifications is required.
28	Confirm HP vent and LP drains are in correct locations.	✓	Verify	[Signature]	Quality of workmanship and specifications is required.
29	Piping, "off-skid" nozzle locations and elevations verified	✓	Verify	[Signature]	Quality of workmanship and specifications is required.
30	Pump/motor alignment, rotation & bracing complete	—	Verify	[Signature]	Quality of workmanship and specifications is required.
31	NPT fuel & instrument piping & tubing leak tests complete	March 21	Hold	[Signature]	All testing to be witnessed and documented.
32	PSV sizing, material and installation verified	April 30	Verify	[Signature]	Quality of workmanship and specifications is required.
33	All instrumentation components conform to material lists and are installed correctly	March 21	Verify	[Signature]	Quality of workmanship and specifications is required.

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H – Hold Point, W – Witness Point, R – Review, V – Verify, SP – Surveillance Point



MIL INSPECTION GROUP INC.

**PennWest**  
Exploration

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No.	Inspection Point	Date	Criteria Met? Y/N	Initial	Applicable Notes
34	Review control panel location.	—	Verify	[Signature]	Complete the inspection.
35	Instrument function tests complete	March 21	Hold	[Signature]	All testing to be witnessed and documented.
36	Electrical components comply to classifications, ratings and sizes	—	Verify	—	Compare and verify electrical components to documentation.
37	All building components and accessories checked	April 30	Verify	[Signature]	Confirm panels, colors, workmanship, windows, eaves, canopies, Etc. to specifications.
38	All necessary insulation is done and meets requirements	4	Verify	[Signature]	All interior / exterior pipe insulations to be confirmed.
39	Ancillary ladders, platforms, stands, etc. correct	—	Verify	—	Ensure specifications and quality conform (OH&S)
40	QC Data Audit – MTR's, Weld Mapping, As-Builts, NDE Mapping, etc. conform.	April 30	Review	[Signature]	All pertinent documentation n and collect for file
41	Paint colours and applications are acceptable	April 30	Verify	[Signature]	Complete the inspection, ensure compliance with project requirements.
42	Internal Coating Inspection: <ul style="list-style-type: none"> <li>▪ Surface prep after blast</li> <li>▪ Inspection after 1st coat</li> <li>▪ Final inspection for cure, ml's thickness and holiday free</li> </ul> Holiday test after internals installed	1	N/A N/A N/A N/A	1	Perform blast inspection. Monitor vendor's quality & QC records. Monitor vendor's quality & QC records. Witness/document final tests.
43	Vessel name plates installed and copies obtained.	April 30	Verify	[Signature]	Photo
44	PSV Data sheets and name plate copies attained	4	Surveillance point	[Signature]	Verify sizing, CRN and all documents conform to project specifications.
45	AB83 and U1A signed off. CRN's complete & transferred	4	Confirm	[Signature]	Documentation to be signed off prior to final release.
46	Ship loose items confirmed	4	Surveillance point	[Signature]	Confirm all components to bill of lading, photos required.
47	Install red file into package, generate and inspection release form.	May 1	Hold	[Signature]	Using tie straps, secure red file to a major piping in plain view to field contractors.
48	Unit is packaged and prepared for shipping <ul style="list-style-type: none"> <li>▪ Proper securing of ship-loose items</li> <li>▪ Windows, doors, louvers locked</li> <li>▪ Nozzles covered</li> <li>▪ Wrapping/tarping acceptable</li> <li>▪ Packing slips confirmed</li> </ul> Photographs taken	4	Hold	[Signature]	Conduct a walk through inspection on building. Conduct a walk around the package. Advise and correct all possible components that may be damaged or go missing during shipment.
49	Loading procedures witnessed and details recorded.	4	Hold	[Signature]	Witness loading, assess damages, obtain copy of way bill, record contractor and trailer numbers, photos required.

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 H – Hold Point, W – Witness Point, R – Review, V – Verify, SP – Surveillance Point



INSPECTION GROUP INC.

**PennWest**  
Exploration

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No.	Inspection Point	Date	Criteria Met? Y/N	Initial	Applicable Notes
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"Photos should accompany all reports once fabrication begins"

ADDITIONAL NOTES:	
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Any omission or failure on part of the inspector to disapprove or reject any work or materials shall not be construed as acceptance of any defective work or materials.

H – Hold Point, W – Witness Point, R – Review, V – Verify, SP – Surveillance Point

0433029

U  
W  
FT-1  
HT

INDUSTRIES INC.

M.A.W.P. 1360

PSI @ 194

M.A.E.W.P.

PSI @

M.D.M.T. - 20

°F @ 1360

SERIAL # 1667

YEAR BUILT 2014

CRN # W3539.213

**FORM U-1A MANUFACTURERS 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 Code Rules, Section VIII, Division 1

①636929

1. Manufactured and certified by Cado Industries Inc. 7491, 110 Avenue S.E. Calgary, Alberta, Canada, T2C 3B8  
(Name and Address of Manufacturer)

2. Manufactured for Penn West Exploration #200, 207 - 9th Avenue S.W. Calgary, Alberta T2P 1K3  
(Name and address of purchaser)

3. Location of installation Penn West Exploration Cordova d-55-A/94-P-10 Facility  
(Name and address)

4. Type Vertical 1667 W3539 213 2013-070-300 Rev. 2 N/A 2014  
(Horiz or vert. tank) (Mfg's serial No) (CRN) (Drawing No) (Mat'l Bd. No) (Year built)

5. ASME Code, Section VIII, Division 1 2010 ED, 2011 ADD N/A N/A  
(Edition & Addenda, if applicable (Date)) (Code Case No's.) (Special Service per UG-120(d))

6. Shell SA-516-70N 1.25" 0.125" 2'-4" 10'-0"  
Mat'l (Spec No. Grade) Nom. Thk (in) Corr Allow (in) Diam ID (ft & in) Length (overall) (ft. & in)

Body Flanges on Shells										Bolting			
No	Type	ID	OD	Flange Thickness	Min Hub Thickness	Material	How Attached	Location	Nut & Size	Bolting Material	Washer (OD ID Thk)	Washer Material	

7. Seams Type 1 Full 100% 1100° F 1.25 HR Type 1 Full 100% 1  
Long (Welded, Dbl Singl Lap Butt) R T (Spot or Full) Eff (%) H T Temp (° F) Time (hr) Girth (Welded, Dbl Singl Lap Butt) R T (Spot or Full) Eff (%) No of Courses

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

	Location (Top Bottom Ends)	Minimum Thickness	Corrosion Allowance	Crown Radius	Knuckle Radius	Elliptical Ratio	Conical Apex Angle	Hemispherical Radius	Flat Diameter	Side to Pressure (Convex or Concave)
(a)	End	1.14"	0.125"			2:1				Concave
(b)	End	1.14"	0.125"			2:1				Concave

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

9. MAWP 1360 PSI at max. temp. 194° F  
Internal External Internal External  
 Min. design metal temp -20° F at 1360 PSI Hydro., pneu., or comb. test pressure 1768 PSI  
 Proof Test N/A

10. 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	
				SEE	ATTACH	ED	FORM	U-4			

11. Supports: Skirt Yes Lugs Two Legs None Other N/A Attached Top & Bottom Head, Welded  
(Yes or no) (Number) (Number) (Describe) (Where and how)

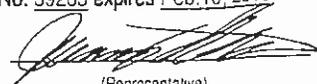
12. Remarks: Manufacturer's Partial Data Reports properly identified and signed by Commissioned Inspectors have been furnished for the following items of the report:

(Name of part, item number, Mfg's name and identifying stamp)

Vessel : 30" Separator; Construction Drawing : 2013-070-300 Rev. 2; Volume : 45.8 Cu. Ft. Impact test: Exempt as per FIG UCS-66, UCS 66(b)(1)(b) and UG-20(f). Three 4" Blind RF CL 600 SA-105-N c/w 36 1" Ø Studs 171 LG c/w 2 Nuts each SA-193-B7M/194-2HM UNC.

**CERTIFICATE OF SHOP/ FIELD COMPLIANCE**

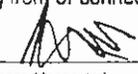
We certify that the statements made in this report are correct and that all details of design, material, construction, and workmanship of this vessel conform to the ASME BOILER AND PRESSURE VESSEL CODE, Section VIII, Division 1. "U"Certificate of Authorization No. 39285 expires Feb. 10, 2016

Date JAN 21 2014 Co. name Cado Industries Inc. Signed   
(Manufacturer) (Representative)

**CERTIFICATE OF SHOP / FIELD INSPECTION**

Vessel constructed by Cado Industries Inc at 7491, 110 Avenue S.E. Calgary, Alberta, Canada, T2C 3B8  
 I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and employed by ABSA

have inspected the component described in this Manufacturer's Data Report on JAN 22 2014, 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.

Date JAN 22 2014 Signed   
(Authorized Inspector) Commissions AB 11 NB 10270 A, B  
(National Board (incl. endorsements))

**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 Cado Industries Inc. 7491, 110 Avenue S.E. Calgary, Alberta, Canada, T2C 3B8  
 (Name and address of Manufacturer)

2 Manufactured for Penn West Exploration #200, 207 - 9<sup>th</sup> Avenue S.W. Calgary, Alberta T2P 1K3  
 (Name and address of Purchaser)

3 Location of installation Penn West Exploration Cordova d-55-A/94-P-10 Facility  
 (Name and address)

4 Type Vertical 30" Separator 1667  
 (Horizontal, vertical, or sphere) (Tank, separator, heat exch., etc) (Mfg's serial No)

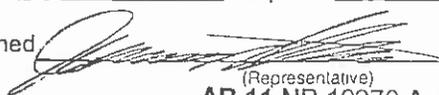
W3539 213 2013-070-300 Rev 2 N/A 2014  
 (CRN) (Drawing No.) (Nat'l Bd. No.) (Year Built)

Data Report  
 Item Number 10  
 Continued from Form U1a

Remarks

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	
Inlet	1	4" CL 600	RFWN	SA-106-B	SA-105-N	0.674"	0.125"	Inherent	UW16.1(c)	Type 1	Shell
Gas Outlet	1	4" CL 600	RFWN	SA-106-B	SA-105-N	0.674"	0.125"	Inherent	UW16.1(c)	Type 1	Head
H2O Outlet	1	3" CL 600	RFWN	SA-106-B	SA-105-N	0.600"	0.125"	Inherent	UW16.1(c)	Type 1	Shell
HC Outlet	1	3" CL 600	RFWN	SA-106-B	SA-105-N	0.600"	0.125"	Inherent	UW16.1(c)	Type 1	Shell
Drain	1	2" CL 600	RFWN	SA-106-B	SA-105-N	0.436"	0.125"	Inherent	UW16.1(c)	Type 1	Head
PSV	1	2" CL 600	RFWN	SA-106-B	SA-105-N	0.436"	0.125"	Inherent	UW16.1(c)	Type 1	Shell
LSHH	1	4" CL 600	RFWN	SA-106-B	SA-105-N	0.674"	0.125"	Inherent	UW16.1(c)	Type 1	Shell
LSSL	1	4" CL 600	RFWN	SA-106-B	SA-105-N	0.674"	0.125"	Inherent	UW16.1(c)	Type 1	Shell
LC (H2O)	1	3" CL 600	RFWN	SA-106-B	SA-105-N	0.600"	0.125"	Inherent	UW16.1(c)	Type 1	Shell
LC (HC)	1	3" CL 600	RFWN	SA-106-B	SA-105-N	0.600"	0.125"	Inherent	UW16.1(c)	Type 1	Shell
Inspection	2	4" CL 600	RFWN	SA-106-B	N/A	0.674"	0.125"	Inherent	UW16.1(c)	Type 1	Shell
LG (H2O)	2	3/4" CL 6000	CPLG	SA-105-N	N/A	CL 6000	0.125"	Inherent	UW16.1(c)	Type 1	Shell
LG (HC)	2	3/4" CL 6000	CPLG	SA-105-N	N/A	CL 6000	0.125"	Inherent	UW16.1(c)	Type 1	Shell
PG	1	3/4" CL 6000	CPLG	SA-105-N	N/A	CL 6000	0.125"	Inherent	UW16.1(c)	Type 1	Shell
TG	1	1" CL 6000	CPLG	SA-105-N	N/A	CL 6000	0.125"	Inherent	UW16.1(c)	Type 1	Shell

Certificate of Authorization: Type "U" No. 39285 Expires Feb. 10, 2016

Date JAN 21 2014 Name Cado Industries Inc Signed  AB 11 NB 10270 A, B  
 (Manufacturer) (Representative)

Date JAN 22 2014 Name  Commission AB 11 NB 10270 A, B  
 (Authorized Inspector) (Nat'l Board incl Endorsement, State, Province and No)



FORM U-1A MANUFACTURERS 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 Code Rules, Section VIII, Division 1

① 636957

1. Manufactured and certified by Cado Industries Inc. 7491, 110 Avenue S.E. Calgary, Alberta, Canada, T2C 3B8  
(Name and Address of Manufacturer)

2. Manufactured for Penn West Exploration #200, 207 - 9th Avenue S.W. Calgary, Alberta T2P 1K3  
(Name and address of purchaser)

3. Location of installation Penn West Exploration Cordova d-55-A/94-P-10 Facility  
(Name and address)

4. Type Vertical 1668 W3539 213 2013-070-300 Rev 2 N/A 2014  
(Horiz. or vert. tank) (Mfg's serial No.) (CRN) (Drawing No.) (Nat'l Bd No.) (Year built)

5. ASME Code, Section VIII, Division 1 2010 ED, 2011 ADD N/A N/A  
(Edition & Addenda, if applicable (Date)) (Code Case No.'s) (Special Service per UG-120(d))

6. Shell SA-516-70N 1.25" 0.125" 2'-4" 10'-0"  
Matl. (Spec No Grade) (Nom Thk (in)) (Corr Allow (in)) (Diam I.D (ft & in)) (Length overall) (ft & in)

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

7. Seams Type 1 Full 100% 1100° F 1.25 HR Type 1 Full 100% 1  
Long Welded Dbl Singl. Lap Butt) R T (Spot or Full) Eff (%) HT Temp (° F) Time (hr) Girth (Welded Dbl Singl. Lap Butt) R T (Spot or Full) Eff (%) No. of Courses

8 Heads. (a) Matl. SA-516-70N (Spec No Grade) b) Matl. SA-516-70N (Spec No Grade)

	Location (Top Bottom Ends)	Minimum Thickness	Corrosion Allowance	Crown Radius	Knuckle Radius	Elliptical Ratio	Conical Apex Angle	Hemispherical Radius	Flat Diameter	Side to Pressure (Convex or Concave)
(a)	End	1.14"	0.125"			2:1				Concave
(b)	End	1.14"	0.125"			2:1				Concave

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

9. MAWP 1360 PSI at max. temp. 194° F  
Internal External  
 Min. design metal temp -20° F at 1360 PSI Hydro., pneu., or comb. test pressure 1768 PSI  
Internal External  
 Proof Test N/A

10. 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	
				SEE	ATTACH	ED	FORM	U-4			

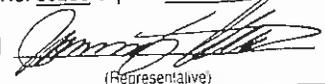
11. Supports: Skirt Yes Lugs Two Legs None Other N/A Attached Top & Bottom Head Welded  
(Yes or no) (Number) (Number) (Describe) (Where and how)

12. Remarks: Manufacturer's Partial Data Reports properly identified and signed by Commissioned Inspectors have been furnished for the following items of the report:

(Name of unit, item number, Mfg's name and identifying stamp)  
 Vessel : 30" Separator; Construction Drawing : 2013-070-300 Rev. 2; Volume : 45.8 Cu. Ft. Impact test: Exempt as per FIG UCS-66, UCS 66(b)(1)(b) and UG-20(f). Three 4" Blind RF CL 600 SA-105-N c/w 36 1" O Studs 171 LG c/w 2 Nuts each SA-193-B7M/194-2HM UNC.

**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 No. 39285 expires Feb. 10, 2016

Date JAN 21 2014 Co. name Cado Industries Inc Signed  (Manufacturer) (Representative)

**CERTIFICATE OF SHOP / FIELD INSPECTION**

Vessel constructed by Cado Industries Inc at 7491, 110 Avenue S.E. Calgary, Alberta, Canada, T2C 3B8  
I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and employed by ABSA

have inspected the component described in this Manufacturer's Data Report on JAN 22 2014 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.

Date JAN 22 2014 Signed  (Authorized Inspector) Commissions AB 11 NB 10270 A, B (National Board (incl. endorsements))

**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 Cado Industries Inc. 7491, 110 Avenue S.E. Calgary, Alberta, Canada, T2C 3B8  
 (Name and address of Manufacturer)

2. Manufactured for Penn West Exploration #200, 207 - 9<sup>th</sup> Avenue S.W. Calgary, Alberta T2P 1K3  
 (Name and address of Purchaser)

3. Location of installation Penn West Exploration Cordova d-55-A/94-P-10 Facility  
 (Name and address)

4. Type: Vertical 30" Separator 1668  
 (Horizontal, vertical or sphere) (Tank, separator, heat exh., etc) (Mfg's serial No.)

W3539.213 2013-070-300 Rev. 2 N/A 2014  
 (CRN) (Drawing No.) (Nat'l Bd. No.) (Year Built)

Data Report  
 Item Number 10  
 Continued from Form U1a

Remarks

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	
Inlet	1	4" CL 600	RFWN	SA-106-B	SA-105-N	0.674"	0.125"	Inherent	UW16.1(c)	Type 1	Shell
Gas Outlet	1	4" CL 600	RFWN	SA-106-B	SA-105-N	0.674"	0.125"	Inherent	UW16.1(c)	Type 1	Head
H2O Outlet	1	3" CL 600	RFWN	SA-106-B	SA-105-N	0.600"	0.125"	Inherent	UW16.1(c)	Type 1	Shell
HC Outlet	1	3" CL 600	RFWN	SA-106-B	SA-105-N	0.600"	0.125"	Inherent	UW16.1(c)	Type 1	Shell
Drain	1	2" CL 600	RFWN	SA-106-B	SA-105-N	0.436"	0.125"	Inherent	UW16.1(c)	Type 1	Head
PSV	1	2" CL 600	RFWN	SA-106-B	SA-105-N	0.436"	0.125"	Inherent	UW16.1(c)	Type 1	Shell
LSHH	1	4" CL 600	RFWN	SA-106-B	SA-105-N	0.674"	0.125"	Inherent	UW16.1(c)	Type 1	Shell
LSLL	1	4" CL 600	RFWN	SA-106-B	SA-105-N	0.674"	0.125"	Inherent	UW16.1(c)	Type 1	Shell
LC (H2O)	1	3" CL 600	RFWN	SA-106-B	SA-105-N	0.600"	0.125"	Inherent	UW16.1(c)	Type 1	Shell
LC (HC)	1	3" CL 600	RFWN	SA-106-B	SA-105-N	0.600"	0.125"	Inherent	UW16.1(c)	Type 1	Shell
Inspection	2	4" CL 600	RFWN	SA-106-B	N/A	0.674"	0.125"	Inherent	UW16.1(c)	Type 1	Shell
LG (H2O)	2	3/4" CL 6000	CPLG	SA-105-N	N/A	CL 6000	0.125"	Inherent	UW16.1(c)	Type 1	Shell
LG (HC)	2	3/4" CL 6000	CPLG	SA-105-N	N/A	CL 6000	0.125"	Inherent	UW16.1(c)	Type 1	Shell
PG	1	3/4" CL 6000	CPLG	SA-105-N	N/A	CL 6000	0.125"	Inherent	UW16.1(c)	Type 1	Shell
TG	1	1" CL 6000	CPLG	SA-105-N	N/A	CL 6000	0.125"	Inherent	UW16.1(c)	Type 1	Shell

Certificate of Authorization: Type "U" No. 39285 Expires Feb. 10, 2016

Date JAN 21 2014 Name Cado Industries Inc. Signed [Signature]  
 (Manufacturer) (Representative)

Date JAN 22 2014 Name [Signature] Commission AB 11 NB 10270 A, B  
 (Authorized Inspector) (Nat'l Board incl Endorsement, State, Province and No.)

Ⓐ 636926

ASME U  
W  
RT-1  
HT

Certified by  
  
INDUSTRIES, INC.

MAWP 1360

PSI @ 194

MAEWP

PSI @

MDMT -20

°F @ 1360

SERIAL # 1669

YEAR BUILT 2014

CRN # W3539.213

**FORM U-1A MANUFACTURERS 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 Code Rules, Section VIII, Division 1

① 636926

1. Manufactured and certified by Cado Industries Inc. 7491, 110 Avenue S.E. Calgary, Alberta, Canada, T2C 3B8  
(Name and Address of Manufacturer)

2. Manufactured for Penn West Exploration #200 207 - 9th Avenue S.W. Calgary, Alberta T2P 1K3  
(Name and address of purchaser)

3. Location of installation Penn West Exploration Cordova d-55-A/94-P-10 Facility  
(Name and address)

4. Type Vertical 1669 W3539.213 2013-070-300 Rev. 2 N/A 2014  
(Horiz or vert. tank) (Mfg's serial No) (CRN) (Drawing No) (Nat'l Bd No) (Year built)

5. ASME Code, Section VIII, Division 1 2010 ED, 2011 ADD N/A N/A  
(Edition & Addenda, if applicable (Date)) (Code Case No.'s) (Special Service per UG-120(d))

6. Shell SA-516-70N 1.25" 0.125" 2'-4" 10'-0"  
Matl. (Spec No., Grade) Nom. Thk (in) Corr Allow (in) Diam ID (ft. & in) Length (overall) (ft. & in)

**Body Flanges on Shells**

No	Type	ID	OD	Flange Thickness	Min Hub Thickness	Material	How Attached	Location	Bolting				
									Num & Size	Bolting Material	Washer (OD/ID Thk)	Washer Material	

7. Seams Type 1 Full 100% 1100° F 1.25 HR Type 1 Full 100% 1  
Long (Welded, Dbl Srgt., Lap, Butt) R T (Spot or Full) Eff (%) HT Temp (°F) Time (hr) Girth (Welded, Dbl Srgt., Lap, Butt) R T (Spot or Full) Eff (%) No of Courses

8. Heads (a) Matl. SA-516-70N (Spec No., Grade) b) Matl. SA-516-70N (Spec No., Grade)

	Location (Top Bottom Ends)	Minimum Thickness	Corrosion Allowance	Crown Radius	Knuckle Radius	Elliptical Ratio	Conical Apex Angle	Hemispherical Radius	Flat Diameter	Side to Pressure (Convex or Concave)
(a)	End	1.14"	0.125"			2:1				Concave
(b)	End	1.14"	0.125"			2:1				Concave

**Body Flanges on Heads**

	Location	Type	ID	OD	Flange Thickness	Min Hub Thk	Material	How Attached	Bolting			
									Num & Size	Bolting Material	Washer (OD/ID Thk)	Washer Material
(a)												
(b)												

9. MAWP 1360 PSI at max. temp. 194° F  
Internal External Internal External  
 Min. design metal temp -20° F at 1360 PSI Hydro., pneu., or comb. test pressure 1768 PSI  
 Proof Test N/A

10. 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	
				SEE	ATTACH	ED	FORM	U-4			

11. Supports: Skirt Yes Lugs Two Legs None Other N/A Attached Top & Bottom Head, Welded  
(Yes or no) (Number) (Number) (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:

(Name of sub. item number, Mfg's name and identifying stamp)

Vessel : 30" Separator; Construction Drawing : 2013-070-300 Rev. 2; Volume : 45.8 Cu. Ft. Impact test: Exempt as per FIG UCS-66, UCS 66(b)(1)(b) and UG-20(f). Three 4" Blind RF CL 600 SA-105-N c/w 36 1" Ø Studs 171 LG c/w 2 Nuts each SA-193-B7M/194-2HM UNC.

CERTIFICATE OF SHOP/ FIELD COMPLIANCE

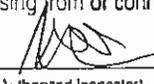
We certify that the statements made in this report are correct and that all details of design, material, construction, and workmanship of this vessel conform to the ASME BOILER AND PRESSURE VESSEL CODE, Section VIII, Division 1. "U" Certificate of Authorization No. 39285 expires Feb 10, 2016

Date JAN 21 2014 Co. name Cado Industries Inc Signed  (Manufacturer) (Representative)

CERTIFICATE OF SHOP / FIELD INSPECTION

Vessel constructed by Cado Industries Inc at 7491, 110 Avenue S.E. Calgary, Alberta, Canada, T2C 3B8  
I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and employed by ABSA

have inspected the component described in this Manufacturer's Data Report on JAN 22 2014, 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.

Date JAN 22 2014 Signed  (Authorized Inspector) Commissions AB 11 NB 10270 A, B (National Board (incl. endorsements))

**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 Cado Industries Inc. 7491, 110 Avenue S.E. Calgary, Alberta, Canada, T2C 3B8  
 (Name and address of Manufacturer)

2. Manufactured for Penn West Exploration #200, 207 - 9<sup>th</sup> Avenue S.W. Calgary, Alberta T2P 1K3  
 (Name and address of Purchaser)

3. Location of installation Penn West Exploration Cordova d-55-A/94-P-10 Facility  
 (Name and address)

4. Type: Vertical 30" Separator 1669  
 (Horizontal, vertical, or sphere) (Tank, separator, heat exch. etc.) (Mfg's serial No.)

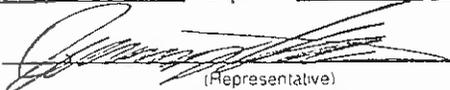
W3539.213 2013-070-300 Rev. 2 N/A 2014  
 (CRN) (Drawing No.) (Nat'l Bd. No.) (Year Built)

Data Report  
 Item Number 10  
 Continued from Form U1a

Remarks

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	
Inlet	1	4" CL 600	RFWN	SA-106-B	SA-105-N	0.674"	0.125"	Inherent	UW16.1(c)	Type 1	Shell
Gas Outlet	1	4" CL 600	RFWN	SA-106-B	SA-105-N	0.674"	0.125"	Inherent	UW16.1(c)	Type 1	Head
H2O Outlet	1	3" CL 600	RFWN	SA-106-B	SA-105-N	0.600"	0.125"	Inherent	UW16.1(c)	Type 1	Shell
HC Outlet	1	3" CL 600	RFWN	SA-106-B	SA-105-N	0.600"	0.125"	Inherent	UW16.1(c)	Type 1	Shell
Drain	1	2" CL 600	RFWN	SA-106-B	SA-105-N	0.436"	0.125"	Inherent	UW16.1(c)	Type 1	Head
PSV	1	2" CL 600	RFWN	SA-106-B	SA-105-N	0.436"	0.125"	Inherent	UW16.1(c)	Type 1	Shell
LSSH	1	4" CL 600	RFWN	SA-106-B	SA-105-N	0.674"	0.125"	Inherent	UW16.1(c)	Type 1	Shell
LSSL	1	4" CL 600	RFWN	SA-106-B	SA-105-N	0.674"	0.125"	Inherent	UW16.1(c)	Type 1	Shell
LC (H2O)	1	3" CL 600	RFWN	SA-106-B	SA-105-N	0.600"	0.125"	Inherent	UW16.1(c)	Type 1	Shell
LC (HC)	1	3" CL 600	RFWN	SA-106-B	SA-105-N	0.600"	0.125"	Inherent	UW16.1(c)	Type 1	Shell
Inspection	2	4" CL 600	RFWN	SA-106-B	N/A	0.674"	0.125"	Inherent	UW16.1(c)	Type 1	Shell
LG (H2O)	2	3/4" CL 6000	CPLG	SA-105-N	N/A	CL 6000	0.125"	Inherent	UW16.1(c)	Type 1	Shell
LG (HC)	2	3/4" CL 6000	CPLG	SA-105-N	N/A	CL 6000	0.125"	Inherent	UW16.1(c)	Type 1	Shell
PG	1	3/4" CL 6000	CPLG	SA-105-N	N/A	CL 6000	0.125"	Inherent	UW16.1(c)	Type 1	Shell
TG	1	1" CL 6000	CPLG	SA-105-N	N/A	CL 6000	0.125"	Inherent	UW16.1(c)	Type 1	Shell

Certificate of Authorization: Type "U" No. 39285 Expires Feb. 10, 2016

Date JAN 21 2014 Name Cado Industries Inc. Signed  (Manufacturer) (Representative)

Date JAN 22 2014 Name  (Authorized Inspector) Commission AB 11 NB 10270 A B  
 (Nat'l Board incl. Endorsement, State, Province and No.)

636928

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Certified by

CADO

INDUSTRIES

M.A.W.P. 1350

PSIO 194

M.A.E.W.P.

PSIO

M.D.M.T. - 20

F 1360

SERIAL # 1670

YEAR BUILT 2014

CRN # W3539.213

**FORM U-1A MANUFACTURERS 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 Code Rules, Section VIII, Division 1

① 636928

1. Manufactured and certified by Cado Industries Inc. 7491, 110 Avenue S.E. Calgary, Alberta, Canada, T2C 3B8  
(Name and Address of Manufacturer)

2. Manufactured for Penn West Exploration #200, 207 - 9th Avenue S.W. Calgary, Alberta T2P 1K3  
(Name and address of purchaser)

3. Location of installation Penn West Exploration Cordova d-55-A/94-P-10 Facility  
(Name and address)

4. Type Vertical 1670 W3539 213 2013-070-300 Rev 2 N/A 2014  
(Horz. or vert. tank) (Mfg's serial No) (CRN) (Drawing No) (Matl Bd No) (Year built)

5. ASME Code, Section VIII, Division 1 2010 ED, 2011 ADD N/A N/A  
(Edition & Addenda, if applicable (Date)) (Code Case No's.) (Special Service per UG-120(d))

6. Shell SA-516-70N 1.25" 0.125" 2'-4" 10'-0"  
Matl (Spec No Grade) Nom Thk (in) Corr Allow (in) Diam ID (ft & in) Length (overall) (ft & in)

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

7. Seams Type 1 Full 100% 1100° F 1.25 HR Type 1 Full 100% 1  
Long. Welded Jct (Sngl. Lap Butt) R.T. (Sect. or Full) Eff. (%) HT Temp (°F) Time (hr) Girth Welded Jct (Sngl. Lap Butt) R.T. (Sect. or Full) Eff. (%) No. of Courses

8. Heads: (a) Matl. SA-516-70N (Spec. No. Grade) b) Matl. SA-516-70N (Spec. No. Grade)

Location (Top Bottom Ends)	Minimum Thickness	Corrosion Allowance	Crown Radius	Knuckle Radius	Elliptical Ratio	Conical Apex Angle	Hemispherical Radius	Flat Diameter	Side to Pressure (Convex or Concave)
(a) <u>End</u>	<u>1.14"</u>	<u>0.125"</u>			<u>2:1</u>				<u>Concave</u>
(b) <u>End</u>	<u>1.14"</u>	<u>0.125"</u>			<u>2:1</u>				<u>Concave</u>

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

9. MAWP 1360 PSI at max. temp. 194° F  
Internal External Internal External  
 Min. design metal temp -20° F at 1360 PSI Hydro., pneu., or comb. test pressure 1768 PSI  
 Proof Test N/A

10. 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	
				<u>SEE</u>	<u>ATTACH</u>	<u>ED</u>	<u>FORM</u>	<u>U-1</u>			

11. Supports: Skirt Yes Lugs Two Legs None Other N/A Attached Top & Bottom Head, Welded  
(Yes or no) (Number) (Number) (Describe) (Where and how)

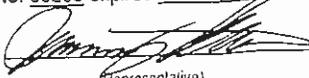
12. Remarks: Manufacturer's Partial Data Reports properly identified and signed by Commissioned Inspectors have been furnished for the following items of the report:

(Name of part, item number, Mfg's name and identifying stamp)

Vessel : 30" Separator; Construction Drawing : 2013-070-300 Rev. 2; Volume : 45.8 Cu. Ft. Impact test: Exempt as per FIG UCS-66, UCS 66(b)(1)(b) and UG-20(f). Three 4" Blind RF CL 600 SA-105-N c/w 36 1" O Studs 171 LG c/w 2 Nuts each SA-193-B7M/194-2HM UNC.

CERTIFICATE OF SHOP/ FIELD COMPLIANCE

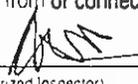
We certify that the statements made in this report are correct and that all details of design, material, construction, and workmanship of this vessel conform to the ASME BOILER AND PRESSURE VESSEL CODE, Section VIII, Division 1. "U" Certificate of Authorization No. 39285 expires Feb 10, 2016.

Date JAN 21 2014 Co. name Cado Industries Inc. Signed   
(Manufacturer) (Representative)

CERTIFICATE OF SHOP / FIELD INSPECTION

Vessel constructed by Cado Industries Inc at 7491, 110 Avenue S.E. Calgary, Alberta, Canada, T2C 3B8  
 I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and employed by ABSA

have inspected the component described in this Manufacturer's Data Report on JAN 22 2014, 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.

Date JAN 22 2014 Signed  AB 11 NB 10270 A, B  
(Authorized Inspector) (National Board [incl. endorsements])

**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 Cado Industries Inc. 7491, 110 Avenue S.E. Calgary, Alberta, Canada, T2C 3B8  
 (Name and address of Manufacturer)

2. Manufactured for Penn West Exploration #200, 207 - 9<sup>th</sup> Avenue S.W. Calgary, Alberta T2P 1K3  
 (Name and address of Purchaser)

3. Location of installation Penn West Exploration Cordova d-55-A/94-P-10 Facility  
 (Name and address)

4. Type. Vertical 30" Separator 1670  
 (Horizontal vertical or sphere) (Tank, separator, heat exh., etc.) (Mfg's serial No.)

W3539 213 2013-070-300 Rev. 2 N/A 2014  
 (CRN) (Drawing No.) (Nat'l Bd. No.) (Year Built)

Data Report  
 Item Number 10  
 Continued from Form U1a

Remarks

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	
Inlet	1	4" CL 600	RFWN	SA-106-B	SA-105-N	0.674"	0.125"	Inherent	UW16.1(c)	Type 1	Shell
Gas Outlet	1	4" CL 600	RFWN	SA-106-B	SA-105-N	0.674"	0.125"	Inherent	UW16.1(c)	Type 1	Head
H2O Outlet	1	3" CL 600	RFWN	SA-106-B	SA-105-N	0.600"	0.125"	Inherent	UW16.1(c)	Type 1	Shell
HC Outlet	1	3" CL 600	RFWN	SA-106-B	SA-105-N	0.600"	0.125"	Inherent	UW16.1(c)	Type 1	Shell
Drain	1	2" CL 600	RFWN	SA-106-B	SA-105-N	0.436"	0.125"	Inherent	UW16.1(c)	Type 1	Head
PSV	1	2" CL 600	RFWN	SA-106-B	SA-105-N	0.436"	0.125"	Inherent	UW16.1(c)	Type 1	Shell
LSSH	1	4" CL 600	RFWN	SA-106-B	SA-105-N	0.674"	0.125"	Inherent	UW16.1(c)	Type 1	Shell
LSSL	1	4" CL 600	RFWN	SA-106-B	SA-105-N	0.674"	0.125"	Inherent	UW16.1(c)	Type 1	Shell
LC (H2O)	1	3" CL 600	RFWN	SA-106-B	SA-105-N	0.600"	0.125"	Inherent	UW16.1(c)	Type 1	Shell
LC (HC)	1	3" CL 600	RFWN	SA-106-B	SA-105-N	0.600"	0.125"	Inherent	UW16.1(c)	Type 1	Shell
Inspection	2	4" CL 600	RFWN	SA-106-B	N/A	0.674"	0.125"	Inherent	UW16.1(c)	Type 1	Shell
LG (H2O)	2	3/4" CL 6000	CPLG	SA-105-N	N/A	CL 6000	0.125"	Inherent	UW16.1(c)	Type 1	Shell
LG (HC)	2	3/4" CL 6000	CPLG	SA-105-N	N/A	CL 6000	0.125"	Inherent	UW16.1(c)	Type 1	Shell
PG	1	3/4" CL 6000	CPLG	SA-105-N	N/A	CL 6000	0.125"	Inherent	UW16.1(c)	Type 1	Shell
TG	1	1" CL 6000	CPLG	SA-105-N	N/A	CL 6000	0.125"	Inherent	UW16.1(c)	Type 1	Shell

Certificate of Authorization: Type "U" No. 39285 Expires Feb. 10, 2016

Date JAN 21 2014 Name Cado Industries Inc. Signed [Signature]  
 (Manufacturer) (Representative)

Date JAN 22 2014 Name [Signature] Commission AB 11 NB 10270 A, B  
 (Authorized Inspector) (Nat'l Board incl. Endorsement, State, Province and No.)

Ⓐ 632245

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Certified by:  
**CAID**  
INDUSTRIES INC.

M.A.W.P. 1760

PSI @ 194 °F

M.A.E.W.P.

PSI @ °F

M.D.M.T. — 20

°F @ 1360 PSI

SERIAL # 1671

YEAR BUILT 2014

CRN # W3530.213

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**FORM U-1A MANUFACTURERS 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 Code Rules, Section VIII, Division 1

①632245

1. Manufactured and certified by Cado Industries Inc. 7491, 110 Avenue S.E. Calgary, Alberta, Canada, T2C 3B8  
(Name and Address of Manufacturer)

2. Manufactured for Penn West Exploration #200, 207 – 9<sup>th</sup> Avenue S.W. Calgary, Alberta T2P 1K3  
(Name and address of purchaser)

3. Location of installation Penn West Exploration Cordova d-55-A/94-P-10 Facility  
(Name and address)

4. Type Vertical 1671 W3539 213 2013-070-300 Rev. 2 N/A 2014  
(Horiz. or vert. tank) (Mfg's serial No.) (CRN) (Drawing No.) (Nat'l Bd. No.) (Year built)

5. ASME Code, Section VIII, Division 1 2010 ED, 2011 ADD N/A N/A  
(Edition & Addenda, if applicable (Date)) (Code Case No.'s.) [Special Service per UG-120(d)]

6. Shell SA-516-70N 1.25" 0.125" 2'-4" 10'-0"  
Mat'l. (Spec No., Grade) Nom. Thk. (in.) Corr Allow. (in.) Diam ID (ft. & in.) Length (overall) (ft. & in.)

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

7. Seams Type 1 Full 100% 1100° F 1.25 HR Type 1 Full 100% 1  
Long (Welded, Dbl Singl. Lap, Butt) R.T. (Spot or Full) Eff. (%) H.T. Temp. (°F) Time (hr) Girth (Welded, Dbl Singl. Lap Butt) R.T. (Spot or Full) Eff. (%) No. of Courses

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

	Location (Top Bottom Ends)	Minimum Thickness	Corrosion Allowance	Crown Radius	Knuckle Radius	Elliptical Ratio	Conical Apex Angle	Hemispherical Radius	Flat Diameter	Side to Pressure (Convex or Concave)
(a)	<u>End</u>	<u>1.14"</u>	<u>0.125"</u>			<u>2:1</u>				<u>Concave</u>
(b)	<u>End</u>	<u>1.14"</u>	<u>0.125"</u>			<u>2:1</u>				<u>Concave</u>

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

9. MAWP 1360 PSI at max. temp. 194° F  
Internal External Internal External  
 Min. design metal temp -20° F at 1360 PSI Hydro., pneu., or comb. test pressure 1768 PSI  
 Proof Test N/A

10. Nozzles, inspection and safety valve openings:

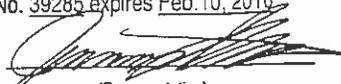
Purpose (Inlet, Outlet, Drain etc)	No.	Diameter or Size	Type	Material		Nozzle Thickness		Reinforcement Material	Attachment Details		Location (Insp. Open)
				Nozzle	Flange	Nom	Corr		Nozzle	Flange	
				<u>SEE</u>	<u>ATTACH</u>	<u>ED</u>	<u>FORM</u>	<u>U-4</u>			

11. Supports: Skirt Yes Lugs Two Legs None Other N/A Attached Top & Bottom Head, Welded  
(Yes or no) (Number) (Number) (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: (Name of part, item number, Mfg's name and identifying stamp)  
Vessel : 30" Separator; Construction Drawing : 2013-070-300 Rev. 2; Volume : 45.8 Cu. Ft. Impact test: Exempt as per FIG UCS-66, UCS 66(b)(1)(b) and UG-20(f). Three 4" Blind RF CL 600 SA-105-N c/w 36 1" O Studs 171 LG c/w 2 Nuts each SA-193-B7M/194-2HM UNC.

**CERTIFICATE OF SHOP/ FIELD COMPLIANCE**

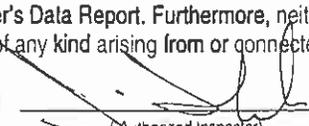
We certify that the statements made in this report are correct and that all details of design, material, construction, and workmanship of this vessel conform to the ASME BOILER AND PRESSURE VESSEL CODE, Section VIII, Division 1. "U" Certificate of Authorization No. 39285 expires Feb. 10, 2016

Date FEB 10 2014 Co. name Cado Industries Inc. Signed  (Manufacturer) (Representative)

**CERTIFICATE OF SHOP / FIELD INSPECTION**

Vessel constructed by Cado Industries Inc at 7491, 110 Avenue S.E. Calgary, Alberta, Canada, T2C 3B8  
I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and employed by ABSA

have inspected the component described in this Manufacturer's Data Report on FEB 13 2014, 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.

Date FEB 13 2014 Signed  (Authorized Inspector) Commissions AB 40 NB 9644 A, B (National Board (incl. endorsements))

①632245

**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 Cado Industries Inc. 7491, 110 Avenue S.E. Calgary, Alberta, Canada, T2C 3B8  
 (Name and address of Manufacturer)
2. Manufactured for Penn West Exploration #200, 207 – 9<sup>th</sup> Avenue S.W. Calgary, Alberta T2P 1K3  
 (Name and address of Purchaser)
3. Location of installation Penn West Exploration Cordova d-55-A/94-P-10 Facility  
 (Name and address)
4. Type: Vertical 30" Separator 1671  
 (Horizontal, vertical, or sphere) (Tank, separator, heat exch., etc.) (Mfg's serial No.)
- W3539.213 2013-070-300 Rev. 2 N/A 2014  
 (CRN) (Drawing No.) (Nat'l Bd. No.) (Year Built)

Data Report  
 Item Number 10  
 Continued from Form U1a

Remarks

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	
Inlet	1	4" CL 600	RFWN	SA-106-B	SA-105-N	0.674"	0.125"	Inherent	UW16.1(c)	Type 1	Shell
Gas Outlet	1	4" CL 600	RFWN	SA-106-B	SA-105-N	0.674"	0.125"	Inherent	UW16.1(c)	Type 1	Head
H2O Outlet	1	3" CL 600	RFWN	SA-106-B	SA-105-N	0.600"	0.125"	Inherent	UW16.1(c)	Type 1	Shell
HC Outlet	1	3" CL 600	RFWN	SA-106-B	SA-105-N	0.600"	0.125"	Inherent	UW16.1(c)	Type 1	Shell
Drain	1	2" CL 600	RFWN	SA-106-B	SA-105-N	0.436"	0.125"	Inherent	UW16.1(c)	Type 1	Head
PSV	1	2" CL 600	RFWN	SA-106-B	SA-105-N	0.436"	0.125"	Inherent	UW16.1(c)	Type 1	Shell
LSHH	1	4" CL 600	RFWN	SA-106-B	SA-105-N	0.674"	0.125"	Inherent	UW16.1(c)	Type 1	Shell
LSSL	1	4" CL 600	RFWN	SA-106-B	SA-105-N	0.674"	0.125"	Inherent	UW16.1(c)	Type 1	Shell
LC (H2O)	1	3" CL 600	RFWN	SA-106-B	SA-105-N	0.600"	0.125"	Inherent	UW16.1(c)	Type 1	Shell
LC (HC)	1	3" CL 600	RFWN	SA-106-B	SA-105-N	0.600"	0.125"	Inherent	UW16.1(c)	Type 1	Shell
Inspection	2	4" CL 600	RFWN	SA-106-B	N/A	0.674"	0.125"	Inherent	UW16.1(c)	Type 1	Shell
LG (H2O)	2	¾" CL 6000	CPLG	SA-105-N	N/A	CL 6000	0.125"	Inherent	UW16.1(c)	Type 1	Shell
LG (HC)	2	¾" CL 6000	CPLG	SA-105-N	N/A	CL 6000	0.125"	Inherent	UW16.1(c)	Type 1	Shell
PG	1	¾" CL 6000	CPLG	SA-105-N	N/A	CL 6000	0.125"	Inherent	UW16.1(c)	Type 1	Shell
TG	1	1" CL 6000	CPLG	SA-105-N	N/A	CL 6000	0.125"	Inherent	UW16.1(c)	Type 1	Shell

Certificate of Authorization: Type "U" No. 39285 Expires Feb. 10, 2016

Date FEB 10 2014 Name Cado Industries Inc. Signed [Signature]  
 (Manufacturer) (Representative)

Date FEB 13 2014 Name [Signature] Commission AB 40 NB 9644 A, B  
 (Authorized Inspector) (Nat'l Board incl. Endorsement, State, Province and No.)

Ⓐ 632246

W  
RT

Certified by:



INDUSTRIAL ENGINEERING INC.

M.A.W.P. 1360

PSI @ 194

°F

M.A.E.W.P.

PSI @

°F

M.D.M.T. -20

°F @

1360

PSI

SERIAL # 1672

YEAR  
BUILT

2014

CRN # W3539.213

**FORM U-1A MANUFACTURERS 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 Code Rules, Section VIII, Division 1

①632246

1. Manufactured and certified by Cado Industries Inc. 7491, 110 Avenue S.E. Calgary, Alberta, Canada, T2C 3B8  
(Name and Address of Manufacturer)

2. Manufactured for Penn West Exploration #200, 207 - 9<sup>th</sup> Avenue S.W. Calgary, Alberta T2P 1K3  
(Name and address of purchaser)

3. Location of installation Penn West Exploration Cordova d-55-A/94-P-10 Facility  
(Name and address)

4. Type Vertical 1672 W3539 213 2013-070-300 Rev. 2 N/A 2014  
(Vert or horz tank) (Mfg's serial No.) (CRN) (Drawing No.) (Nat'l Bd No.) (Year built)

5. ASME Code, Section VIII, Division 1 2010 ED, 2011 ADD N/A N/A  
(Edition & Addenda, if applicable (Date)) (Code Case No.'s) (Special Service per UG-120(d))

6. Shell SA-516-70N 1.25" 0.125" 2'-4" 10'-0"  
Matl. (Spec No., Grade) (Nom. Thk (in)) (Corr Allow (in)) (Diam. I.D. (ft & in)) (Length (overall) (ft & in))

**Body Flanges on Shells**

No	Type	ID	OD	Flange Thickness	Min. Hub Thickness	Material	How Attached	Location	Bolting				
									Num & Size	Bolting Material	Washer (OD ID Thk)	Washer Material	

7. Seams Type 1 Full 100% 1100° F 1.25 HR Type 1 Full 100% 1  
Long (Welded, Dbl. Singl. Lap Butt) R.T (Spot or Full) Eff. (%) HT Temp. (° F) Time (hr) Girth (Welded, Dbl. Singl. Lap Butt) R.T (Spot or Full) Eff. (%) No. of Courses

8. Heads: (a) Matl. SA-516-70N (Spec No. Grade) b) Matl. SA-516-70N (Spec No. Grade)

	Location (Top Bottom, Ends)	Minimum Thickness	Corrosion Allowance	Crown Radius	Knuckle Radius	Elliptical Ratio	Conical Apex Angle	Hemispherical Radius	Flat Diameter	Side to Pressure (Convex or Concave)
(a)	End	1.14"	0.125"			2:1				Concave
(b)	End	1.14"	0.125"			2:1				Concave

**Body Flanges on Heads**

	Location	Type	ID	OD	Flange Thickness	Min. Hub Thk	Material	How Attached	Bolting			
									Num & Size	Bolting Material	Washer (OD ID Thk)	Washer Material
(a)												
(b)												

9. MAWP 1360 PSI at max. temp. 194° F  
Internal External Internal External  
 Min. design metal temp -20° F at 1360 PSI Hydro., pneu., or comb. test pressure 1768 PSI  
 Proof Test N/A

10. 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	
				SEE	ATTACH	ED	FORM	U-4			

11. Supports: Skirt Yes Lugs Two Legs None Other N/A Attached Top & Bottom Head, Welded  
(Yes or no) (Number) (Number) (Describe) (Where and how)

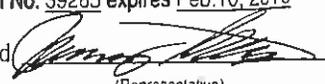
12. Remarks: Manufacturer's Partial Data Reports properly identified and signed by Commissioned Inspectors have been furnished for the following items of the report:

(Name of part, item number, Mfg's name and identifying stamp)

Vessel : 30" Separator; Construction Drawing : 2013-070-300 Rev. 2; Volume : 45.8 Cu. Ft. Impact test: Exempt as per FIG UCS-66, UCS 66(b)(1)(b) and UG-20(f). Three 4" Blind RF CL 600 SA-105-N c/w 36 1" Ø Studs 171 LG c/w 2 Nuts each SA-193-B7M/194-2HM UNC.

**CERTIFICATE OF SHOP/ FIELD COMPLIANCE**

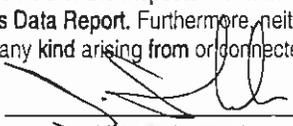
We certify that the statements made in this report are correct and that all details of design, material, construction, and workmanship of this vessel conform to the ASME BOILER AND PRESSURE VESSEL CODE, Section VIII, Division 1. "U"Certificate of Authorization No. 39285 expires Feb.10, 2016

Date FEB 10 2014 Co. name Cado Industries Inc. Signed  (Manufacturer) (Representative)

**CERTIFICATE OF SHOP / FIELD INSPECTION**

Vessel constructed by Cado Industries Inc at 7491, 110 Avenue S.E. Calgary, Alberta, Canada, T2C 3B8  
I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and employed by ABSA

have inspected the component described in this Manufacturer's Data Report on FEB 13 2014, 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.

Date FEB 13 2014 Signed  (Authorized Inspector) Commissions AB 40 NB 9644 A, B (National Board (incl. endorsements))

①632246

**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 I

1. Manufactured and certified by Cado Industries Inc. 7491, 110 Avenue S.E. Calgary, Alberta, Canada, T2C 3B8  
 (Name and address of Manufacturer)

2. Manufactured for Penn West Exploration #200, 207 - 9<sup>th</sup> Avenue S.W. Calgary, Alberta T2P 1K3  
 (Name and address of Purchaser)

3. Location of installation Penn West Exploration Cordova d-55-A/94-P-10 Facility  
 (Name and address)

4. Type: Vertical 30" Separator 1672  
 (Horizontal, vertical, or sphere) (Tank, separator, heat exch., etc.) (Mfg's. serial No.)

W3539 213 2013-070-300 Rev. 2 N/A 2014  
 (CRN) (Drawing No.) (Nat'l Bd. No.) (Year Built)

Data Report  
 Item Number 10  
 Continued from Form U1a

Remarks

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	
Inlet	1	4" CL 600	RFWN	SA-106-B	SA-105-N	0.674"	0.125"	Inherent	UW16.1(c)	Type 1	Shell
Gas Outlet	1	4" CL 600	RFWN	SA-106-B	SA-105-N	0.674"	0.125"	Inherent	UW16.1(c)	Type 1	Head
H2O Outlet	1	3" CL 600	RFWN	SA-106-B	SA-105-N	0.600"	0.125"	Inherent	UW16.1(c)	Type 1	Shell
HC Outlet	1	3" CL 600	RFWN	SA-106-B	SA-105-N	0.600"	0.125"	Inherent	UW16.1(c)	Type 1	Shell
Drain	1	2" CL 600	RFWN	SA-106-B	SA-105-N	0.436"	0.125"	Inherent	UW16.1(c)	Type 1	Head
PSV	1	2" CL 600	RFWN	SA-106-B	SA-105-N	0.436"	0.125"	Inherent	UW16.1(c)	Type 1	Shell
LSHH	1	4" CL 600	RFWN	SA-106-B	SA-105-N	0.674"	0.125"	Inherent	UW16.1(c)	Type 1	Shell
LSLL	1	4" CL 600	RFWN	SA-106-B	SA-105-N	0.674"	0.125"	Inherent	UW16.1(c)	Type 1	Shell
LC (H2O)	1	3" CL 600	RFWN	SA-106-B	SA-105-N	0.600"	0.125"	Inherent	UW16.1(c)	Type 1	Shell
LC (HC)	1	3" CL 600	RFWN	SA-106-B	SA-105-N	0.600"	0.125"	Inherent	UW16.1(c)	Type 1	Shell
Inspection	2	4" CL 600	RFWN	SA-106-B	N/A	0.674"	0.125"	Inherent	UW16.1(c)	Type 1	Shell
LG (H2O)	2	¾" CL 6000	CPLG	SA-105-N	N/A	CL 6000	0.125"	Inherent	UW16.1(c)	Type 1	Shell
LG (HC)	2	¾" CL 6000	CPLG	SA-105-N	N/A	CL 6000	0.125"	Inherent	UW16.1(c)	Type 1	Shell
PG	1	¾" CL 6000	CPLG	SA-105-N	N/A	CL 6000	0.125"	Inherent	UW16.1(c)	Type 1	Shell
TG	1	1" CL 6000	CPLG	SA-105-N	N/A	CL 6000	0.125"	Inherent	UW16.1(c)	Type 1	Shell

Certificate of Authorization: Type "U" No. 39285 Expires Feb. 10, 2016

Date FEB 10 2014 Name Cado Industries Inc. Signed [Signature]  
 (Manufacturer) (Representative)

Date FEB 13 2014 Name [Signature] Commission AB 40 NB 9644 A, B  
 (Authorized Inspector) (Nat'l Board incl. Endorsement, State, Province and No.)

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M.D.M.T. -20

°F @ 1360

PSI

SERIAL # 1873

YEAR BUILT 2014

CRN # W3539213

**FORM U-1A MANUFACTURERS 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 Code Rules, Section VIII, Division 1

①632247

1. Manufactured and certified by Cado Industries Inc. 7491, 110 Avenue S.E. Calgary, Alberta, Canada, T2C 3B8  
(Name and Address of Manufacturer)

2. Manufactured for Penn West Exploration #200, 207 - 9<sup>th</sup> Avenue S.W. Calgary, Alberta T2P 1K3  
(Name and address of purchaser)

3. Location of installation Penn West Exploration Cordova d-55-A/94-P-10 Facility  
(Name and address)

4. Type Vertical 1673 W3539 213 2013-070-300 Rev. 2 N/A 2014  
(Honz or Vert tank) (Mfrs serial No) (CRN) (Drawing No.) (Nat'l Bd. No.) (Year built)

5. ASME Code, Section VIII, Division 1 2010 ED, 2011 ADD N/A N/A  
(Edition & Addenda, if applicable (Date)) (Code Case No.'s) (Special Service per UG-120(d))

6. Shell SA-516-70N 1.25" 0.125" 2'-4" 10'-0"  
Matl (Spec No. Grade) Nom Thk. (in.) Corr. Allow (in.) Diam I.D. (ft. & in.) Length (overall) (ft. & in.)

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

7. Seams Type 1 Full 100% 1100° F 1.25 HR Type 1 Full 100% 1  
Long (Welded, Dbl Singl Lap Butt) R T (Spot or Full) Eff (%) H T Temp. (° F) Time (hr) Grth (Welded, Dbl Singl Lap Butt) R T (Spot or Full) Eff (%) No of Courses

8. Heads: (a) Matl. SA-516-70N (Spec. No. Grade) b) Matl. SA-516-70N (Spec. No. Grade)

(a)	Location (Top Bottom Ends)	Minimum Thickness	Corrosion Allowance	Crown Radius	Knuckle Radius	Elliptical Ratio	Conical Apex Angle	Hemispherical Radius	Flat Diameter	Side to Pressure (Convex or Concave)

Body Flanges on Heads												
No	Location	Type	ID	OD	Flange Thickness	Min Hub Thk	Material	How Attached	Bolting			
									Num & Size	Bolting Material	Washer (OD ID Thk)	Washer Material
(a)												
(b)												

9. MAWP 1360 PSI at max. temp. 194° F  
Internal External Internal External  
 Min. design metal temp -20° F at 1360 PSI Hydro. pneu., or comb. test pressure 1768 PSI  
 Proof Test N/A

10. Nozzles, inspection and safety valve openings:

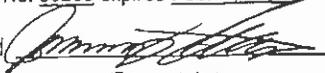
Purpose (Inlet, Outlet, Drain etc)	No.	Diameter or Size	Type	Material		Nozzle Thickness		Reinforcement Material	Attachment Details		Location (Insp. Open)
				Nozzle	Flange	Nom.	Corr.		Nozzle	Flange	
				SEE	ATTACH	ED	FORM	U-4			

11. Supports: Skirt Yes Lugs Two Legs None Other N/A Attached Top & Bottom Head, Welded  
(Yes or no) (Number) (Number) (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:  
(Name of part, item number, Mfr's name and identifying stamp)  
Vessel : 30" Separator; Construction Drawing : 2013-070-300 Rev. 2; Volume : 45.8 Cu. Ft. Impact test: Exempt as per FIG UCS-66, UCS 66(b)(1)(b) and UG-20(f). Three 4" Blind RF CL 600 SA-105-N c/w 36 1" O Studs 171 LG c/w 2 Nuts each SA-193-B7M/194-2HM UNC.

**CERTIFICATE OF SHOP/ FIELD COMPLIANCE**

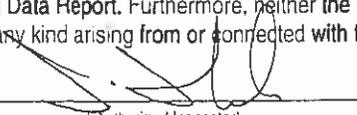
We certify that the statements made in this report are correct and that all details of design, material, construction, and workmanship of this vessel conform to the ASME BOILER AND PRESSURE VESSEL CODE, Section VIII, Division 1. "U"Certificate of Authorization No. 39285 expires Feb.10, 2016

Date FEB 10 2014 Co. name Cado Industries Inc. Signed   
(Manufacturer) (Representative)

**CERTIFICATE OF SHOP / FIELD INSPECTION**

Vessel constructed by Cado Industries Inc at 7491, 110 Avenue S.E. Calgary, Alberta, Canada, T2C 3B8  
 I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and employed by ABSA

have inspected the component described in this Manufacturer's Data Report on FEB 13 2014, 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.

Date FEB 13 2014 Signed   
(Authorized Inspector) Commissions AB 40 NB 9644 A, B  
[National Board (incl. endorsements)]

①632247

**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 Cado Industries Inc. 7491, 110 Avenue S.E. Calgary, Alberta, Canada, T2C 3B8  
(Name and address of Manufacturer)

2. Manufactured for Penn West Exploration #200, 207 - 9<sup>th</sup> Avenue S.W. Calgary, Alberta T2P 1K3  
(Name and address of Purchaser)

3. Location of installation Penn West Exploration Cordova d-55-A/94-P-10 Facility  
(Name and address)

4. Type: Vertical 30" Separator 1673  
(Horizontal, vertical, or sphere) (Tank, separator, heat exch., etc.) (Mfg's. serial No.)

W3539.213 2013-070-300 Rev. 2 N/A 2014  
(CRN) (Drawing No.) (Nat'l Bd. No.) (Year Built)

Data Report  
Item Number 10  
Continued from Form U1a

Remarks

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	
Inlet	1	4" CL 600	RFWN	SA-106-B	SA-105-N	0.674"	0.125"	Inherent	UW16.1(c)	Type 1	Shell
Gas Outlet	1	4" CL 600	RFWN	SA-106-B	SA-105-N	0.674"	0.125"	Inherent	UW16.1(c)	Type 1	Head
H2O Outlet	1	3" CL 600	RFWN	SA-106-B	SA-105-N	0.600"	0.125"	Inherent	UW16.1(c)	Type 1	Shell
HC Outlet	1	3" CL 600	RFWN	SA-106-B	SA-105-N	0.600"	0.125"	Inherent	UW16.1(c)	Type 1	Shell
Drain	1	2" CL 600	RFWN	SA-106-B	SA-105-N	0.436"	0.125"	Inherent	UW16.1(c)	Type 1	Head
PSV	1	2" CL 600	RFWN	SA-106-B	SA-105-N	0.436"	0.125"	Inherent	UW16.1(c)	Type 1	Shell
LSHH	1	4" CL 600	RFWN	SA-106-B	SA-105-N	0.674"	0.125"	Inherent	UW16.1(c)	Type 1	Shell
LSSL	1	4" CL 600	RFWN	SA-106-B	SA-105-N	0.674"	0.125"	Inherent	UW16.1(c)	Type 1	Shell
LC (H2O)	1	3" CL 600	RFWN	SA-106-B	SA-105-N	0.600"	0.125"	Inherent	UW16.1(c)	Type 1	Shell
LC (HC)	1	3" CL 600	RFWN	SA-106-B	SA-105-N	0.600"	0.125"	Inherent	UW16.1(c)	Type 1	Shell
Inspection	2	4" CL 600	RFWN	SA-106-B	N/A	0.674"	0.125"	Inherent	UW16.1(c)	Type 1	Shell
LG (H2O)	2	3/4" CL 6000	CPLG	SA-105-N	N/A	CL 6000	0.125"	Inherent	UW16.1(c)	Type 1	Shell
LG (HC)	2	3/4" CL 6000	CPLG	SA-105-N	N/A	CL 6000	0.125"	Inherent	UW16.1(c)	Type 1	Shell
PG	1	3/4" CL 6000	CPLG	SA-105-N	N/A	CL 6000	0.125"	Inherent	UW16.1(c)	Type 1	Shell
TG	1	1" CL 6000	CPLG	SA-105-N	N/A	CL 6000	0.125"	Inherent	UW16.1(c)	Type 1	Shell

Certificate of Authorization: Type "U" No. 39285 Expires Feb. 10, 2016

Date FEB 10 2014 Name Cado Industries Inc. Signed [Signature]  
(Manufacturer) (Representative)

Date FEB 13 2014 Name [Signature] Commission AB 40 NB 9644 A, B  
(Authorized Inspector) (Nat'l Board Incl. Endorsement, State, Province and No.)

14) 632248

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SERIAL #

1674

YEAR  
BUILT

2014

CRN #

W3539.213

**FORM U-1A MANUFACTURERS 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 Code Rules, Section VIII, Division 1

① 632248

1. Manufactured and certified by Cado Industries Inc. 7491, 110 Avenue S.E. Calgary, Alberta, Canada, T2C 3B8  
(Name and Address of Manufacturer)

2. Manufactured for Penn West Exploration #200, 207 - 9<sup>th</sup> Avenue S.W. Calgary, Alberta T2P 1K3  
(Name and address of purchaser)

3. Location of installation Penn West Exploration Cordova d-55-A/94-P-10 Facility  
(Name and address)

4. Type Vertical 1674 W3539.213 2013-070-300 Rev. 2 N/A 2014  
(Honz. or vert., tank) (Mfg's serial No.) (CRN) (Drawing No.) (Nat'l Bd. No.) (Year built)

5. ASME Code, Section VIII, Division 1 2010 ED, 2011 ADD N/A N/A  
(Edition & Addenda, if applicable (Date)) (Code Case No.'s.) (Special Service per UG-120(d))

6. Shell SA-516-70N 1.25" 0.125" 2'-4" 10'-0"  
(Matl (Spec No. Grade)) (Nom. Thk. (in)) (Corr Allow (in.)) (Diam ID (ft. & in)) (Length (overall) (ft. & in.))

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

7. Seams Type 1 Full 100% 1100° F 1.25 HR Type 1 Full 100% 1  
Long (Welded Dbl Singl Lap Butt) R T (Scot or Full) Eff (%) H T Temp (° F) Time (hr) Grth (Welded Dbl Singl. Lap Butt) R.T. (Scot or Full) Eff (%) No of Courses

8. Heads: (a) Matl. SA-516-70N (Spec. No. Grade) (b) Matl. SA-516-70N (Spec. No. Grade)

	Location (Top Bottom Ends)	Minimum Thickness	Corrosion Allowance	Crown Radius	Knuckle Radius	Elliptical Ratio	Conical Apex Angle	Hemispherical Radius	Flat Diameter	Side to Pressure (Convex or Concave)
(a)	End	1.14"	0.125"			2:1				Concave
(b)	End	1.14"	0.125"			2:1				Concave

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

9. MAWP 1360 PSI at max. temp. 194° F  
Internal External Internal External  
 Min. design metal temp -20° F at 1360 PSI Hydro., pneu., or comb. test pressure 1768 PSI  
 Proof Test N/A

10. 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	
				SEE	ATTACH	ED	FORM	U-4			

11. Supports: Skirt Yes Lugs Two Legs None Other N/A Attached Top & Bottom Head, Welded  
(Yes or no) (Number) (Number) (Describe) (Where and how)

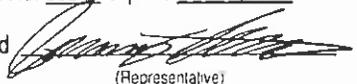
12. Remarks: Manufacturer's Partial Data Reports properly identified and signed by Commissioned Inspectors have been furnished for the following items of the report:

(Name of part, item number, Mfg's. name and identifying stamp)

Vessel : 30" Separator; Construction Drawing : 2013-070-300 Rev. 2; Volume : 45.8 Cu. Ft. Impact test: Exempt as per FIG UCS-66, UCS 66(b)(1)(b) and UG-20(i). Three 4" Blind RF CL 600 SA-105-N c/w 36 1" O Studs 171 LG c/w 2 Nuts each SA-193-B7M/194-2HM UNC.

**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 No. 39285 expires Feb.10, 2016

Date FEB 10 2014 Co. name Cado Industries Inc. Signed  (Manufacturer) (Representative)

**CERTIFICATE OF SHOP / FIELD INSPECTION**

Vessel constructed by Cado Industries Inc at 7491, 110 Avenue S.E. Calgary, Alberta, Canada, T2C 3B8  
I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and employed by ABSA

have inspected the component described in this Manufacturer's Data Report on FEB 13 2014, 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.

Date FEB 13 2014 Signed  (Authorized Inspector) Commissions AB 40 NB 9644 A, B (National Board (incl. endorsements))

① 632248

**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 Cado Industries Inc. 7491, 110 Avenue S.E. Calgary, Alberta, Canada, T2C 3B8  
 (Name and address of Manufacturer)

2. Manufactured for Penn West Exploration #200, 207 - 9<sup>th</sup> Avenue S.W. Calgary, Alberta T2P 1K3  
 (Name and address of Purchaser)

3. Location of installation Penn West Exploration Cordova d-55-A/94-P-10 Facility  
 (Name and address)

4. Type: Vertical 30" Separator 1674  
 (Horizontal, vertical, or sphere) (Tank, separator, heat exch., etc.) (Mfg's serial No.)

W3539.213 2013-070-300 Rev. 2 N/A 2014  
 (CRN) (Drawing No.) (Nat'l Bd. No.) (Year Built)

Data Report  
 Item Number 10  
 Continued from Form U1a

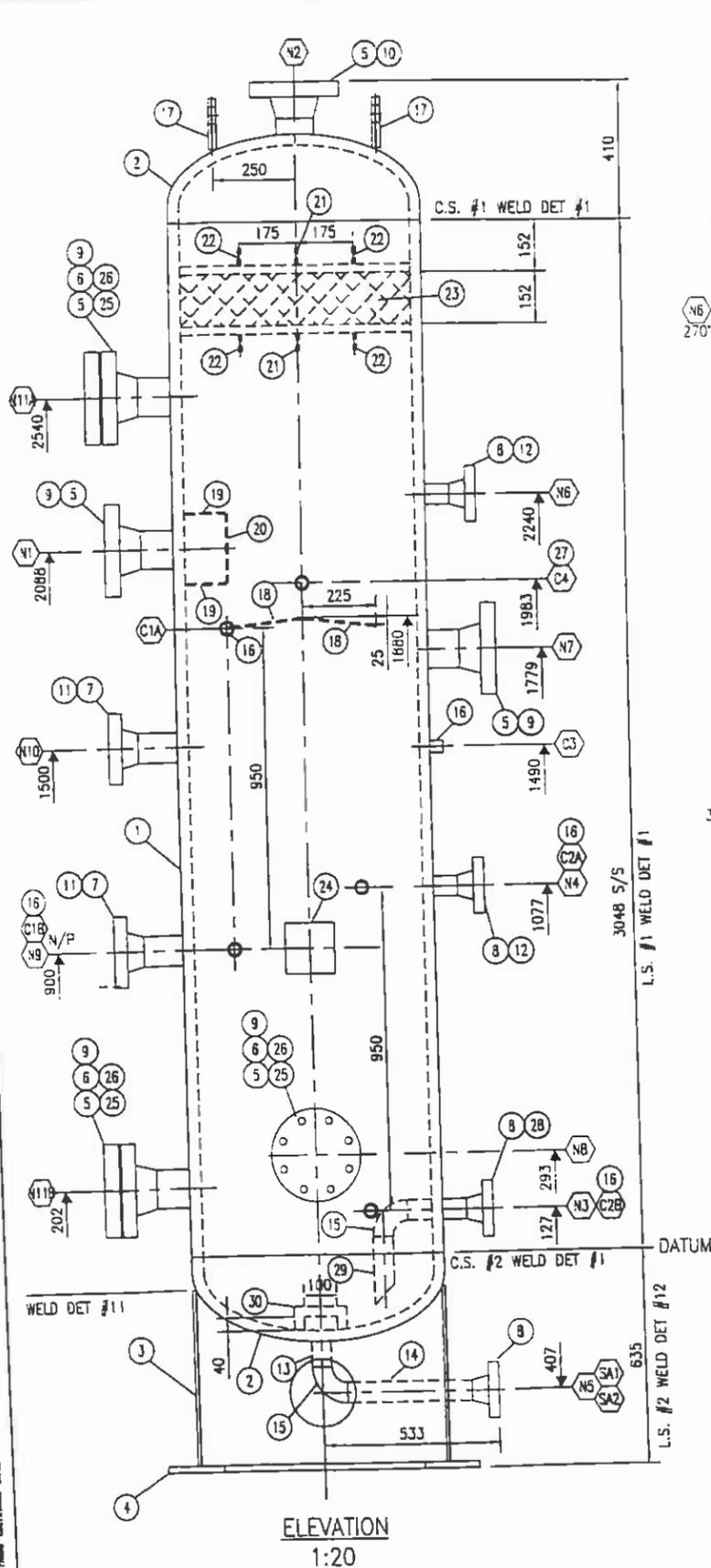
Remarks

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	
Inlet	1	4" CL 600	RFWN	SA-106-B	SA-105-N	0.674"	0.125"	Inherent	UW16.1(c)	Type 1	Shell
Gas Outlet	1	4" CL 600	RFWN	SA-106-B	SA-105-N	0.674"	0.125"	Inherent	UW16.1(c)	Type 1	Head
H2O Outlet	1	3" CL 600	RFWN	SA-106-B	SA-105-N	0.600"	0.125"	Inherent	UW16.1(c)	Type 1	Shell
HC Outlet	1	3" CL 600	RFWN	SA-106-B	SA-105-N	0.600"	0.125"	Inherent	UW16.1(c)	Type 1	Shell
Drain	1	2" CL 600	RFWN	SA-106-B	SA-105-N	0.436"	0.125"	Inherent	UW16.1(c)	Type 1	Head
PSV	1	2" CL 600	RFWN	SA-106-B	SA-105-N	0.436"	0.125"	Inherent	UW16.1(c)	Type 1	Shell
LSHH	1	4" CL 600	RFWN	SA-106-B	SA-105-N	0.674"	0.125"	Inherent	UW16.1(c)	Type 1	Shell
LSLL	1	4" CL 600	RFWN	SA-106-B	SA-105-N	0.674"	0.125"	Inherent	UW16.1(c)	Type 1	Shell
LC (H2O)	1	3" CL 600	RFWN	SA-106-B	SA-105-N	0.600"	0.125"	Inherent	UW16.1(c)	Type 1	Shell
LC (HC)	1	3" CL 600	RFWN	SA-106-B	SA-105-N	0.600"	0.125"	Inherent	UW16.1(c)	Type 1	Shell
Inspection	2	4" CL 600	RFWN	SA-106-B	N/A	0.674"	0.125"	Inherent	UW16.1(c)	Type 1	Shell
LG (H2O)	2	3/4" CL 6000	CPLG	SA-105-N	N/A	CL 6000	0.125"	Inherent	UW16.1(c)	Type 1	Shell
LG (HC)	2	3/4" CL 6000	CPLG	SA-105-N	N/A	CL 6000	0.125"	Inherent	UW16.1(c)	Type 1	Shell
PG	1	3/4" CL 6000	CPLG	SA-105-N	N/A	CL 6000	0.125"	Inherent	UW16.1(c)	Type 1	Shell
TG	1	1" CL 6000	CPLG	SA-105-N	N/A	CL 6000	0.125"	Inherent	UW16.1(c)	Type 1	Shell

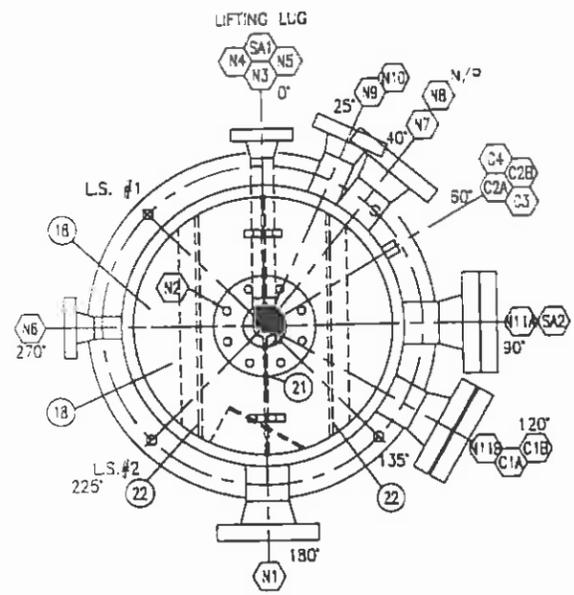
Certificate of Authorization: Type "U" No. 39285 Expires Feb. 10, 2016

Date FEB 10 2014 Name Cado Industries Inc. Signed [Signature]  
 (Manufacturer) (Representative)

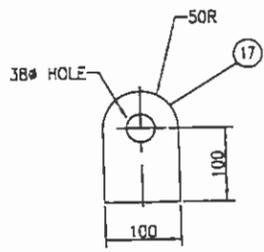
Date FEB 13 2014 Name [Signature] Commission AB 40 NB 9644 A, B  
 (Authorized Inspector) (Nat'l Board incl. Endorsement, State, Province and No.)



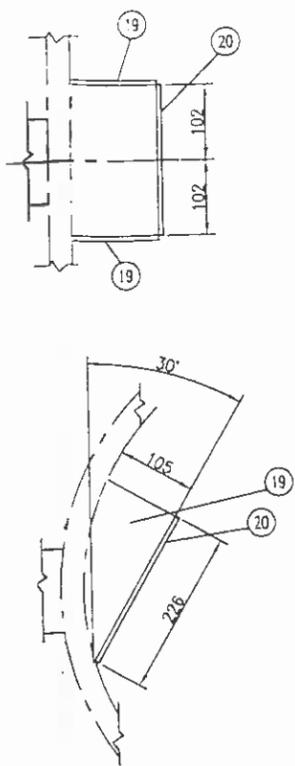
ELEVATION  
1:20



ORIENTATION  
1:20



LIFTING LUG DETAIL  
1:10



INLET DIVERTER DETAIL  
1:10

- NOTE:
- 1) 1/4" CONT. FOR ALL NON-SPECIFIED WELDS (STITCH WELD N.P. BRACKET TO VESSEL), 1/2" FOR LIFTING LUGS
  - 2) FABRICATE THE VESSEL PER CADO'S FABRICATION TOLERANCE AND WPR FOR WELDING TOLERANCE
  - 3) TWO HARDNESS TEST (MAX 200 BHN)

BILL OF MATERIALS FOR VESSEL

ITEM	QTY	DESCRIPTION	MATERIAL	HEAT NO.
1	1	SHELL PLATE 1 1/4" THK X 3048 LG ROLLED TO 782 OD	SA-516-70N	
2	2	ELLIPTICAL HEAD 1 1/4" THK (1.14" MIN) 2:1 W/ 5:1 SF	SA-516-70N	
3	1	SKIRT PLATE 3/8" THK X 535 LG ROLLED TO 782 OD (CTS)	SA-36	
4	1	BASEPLATE 3/4" THK X 940 X 610 ID C/W (4) #29 HOLES ON 864 BCD	SA-36	
5	6	FLANGE 4" 600# RFWN SCH XXH BORE	SA-105N	
6	3	BLIND FLANGE 4" 600# RF	SA-105N	
7	2	FLANGE 3" 600# RFWN SCH XXH BORE	SA-105N	
8	4	FLANGE 2" 600# RFWN SCH XXH BORE	SA-105N	
9	5	PIPE 114(4") SCH XXH X 183 LG SMLS	SA-106-B	
10	1	PIPE 114(4") OD SCH XXH X 113 LG SMLS	SA-106-B	
11	2	PIPE 89(3") OD SCH XXH X 172 LG SMLS	SA-106-B	
12	2	PIPE 60(2") OD SCH XXH X 105 LG SMLS	SA-106-B	
13	1	PIPE 60(2") OD SCH XXH X 108 LG SMLS	SA-106-B	
14	1	PIPE 60(2") OD SCH XXH X 371 LG SMLS	SA-106-B	
15	2	ELBOW LR 60(2") OD SCH XXH SMLS	SA-234-WPB	
16	5	CPLG 27(3/4") 6000# THD	SA-105N	
17	2	LIFTING LUG 19(3/4") THK X 150 LG X 100 WD	SA-36	
18	2	HOOD PLATE 10(3/8") THK X 695 LG X 225 WD (CUT & WELD TO SUIT)	SA-36	
19	2	INLET DIVERTER TOP & BTM PLATE 10(3/8") THK X 226 LG X 105 WD (CUT TO SUIT)	SA-36	
20	2	INLET DIVERTER SIDE PLATE 10(3/8") THK X 226 LG X 203 WD	SA-36	
21	2	DEMISTER SUP'T PLATE (MIDDLE) 13(1/2") THK X 695 LG X 50 WD	SA-36	
22	4	DEMISTER SUP'T PLATE (SIDE) 13(1/2") THK X 598 LG X 50 WD	SA-36	
23	1	DEMISTER 152 THK X 695 DIA X 144 KG/M3 C/W 25 CS TOP AND BOTTOM GRD	316 SS	
24	1	NAME PLATE C/W CS BRACKET	ALUM / SA-36	
25	36	25(1") STUD X 171 LG UNC C/W (2) 1" UNC NUTS EACH	SA-193-87M/194-2HM	
26	3	114(4") 600# RF GASKET SPIRAL WOUND WITH CENTRE RING	316 SS	
27	1	CPLG 33(1") 6000# THD	SA-105N	
28	1	PIPE 60(2") OD SCH XXH X 175 LG SMLS	SA-106-B	
29	1	PIPE 60(2") OD SCH XXH X 200 LG SMLS	SA-106-B	
30	1	VORTEX BREAKER PLATE 10(3/8") THK X 160 LG X 70 WD (CUT TO SUIT)	SA-36	
31				
32				

NOZZLE SCHEDULE

Mark	Qty	Size	Rating	Type	Nozz. Sch.	Service	Int. Proj.	Ext. Proj.	Weld Del. Number	Weld Size		
										a	b	c
N1	1	4"	600	RFWN	XXH	INLET	32	203	2, 9	29	29	-
N2	1	4"	600	RFWN	XXH	GAS OUTLET	32	SPEC	2, 9	29	22	-
N3	1	2"	600	RFWN	XXH	H2O OUTLET	-	152	2, 7	10	-	-
N4	1	2"	600	RFWN	XXH	HC OUTLET	-	152	2, 7	10	-	-
N5	1	2"	600	RFWN	XXH	DRAIN	FLUSH	SPEC	1, 2, 4	10	-	-
N6	1	2"	600	RFWN	XXH	PSV	-	152	2, 7	10	-	-
N7	1	4"	600	RFWN	XXH	LSHH	32	203	2, 9	29	29	-
N8	1	4"	600	RFWN	XXH	LSL	32	203	2, 9	29	29	-
N9	1	3"	600	RFWN	XXH	LC (H2O)	25	203	2, 9	29	19	-
N10	1	3"	600	RFWN	XXH	LC (HC)	25	203	2, 9	29	19	-
N11A/B	2	4"	600	RFWN	XXH	INSPECTION	32	203	2, 9	29	29	-
C1A/B	2	3/4"	6000	CPLG	-	LG (H2O)	-	-	7	3/8"	-	-
C2A/B	2	3/4"	6000	CPLG	-	LG (HC)	-	-	7	3/8"	-	-
C3	1	3/4"	6000	CPLG	-	PG	-	-	7	3/8"	-	-
C4	1	1"	6000	CPLG	-	TG	-	-	7	3/8"	-	-
SA1	1	#200	HOLE	-	-	SKIRT ACCESS FOR N5	-	-	-	-	-	-
SA2	1	#200	HOLE	-	-	SKIRT ACCESS	-	-	-	-	-	-

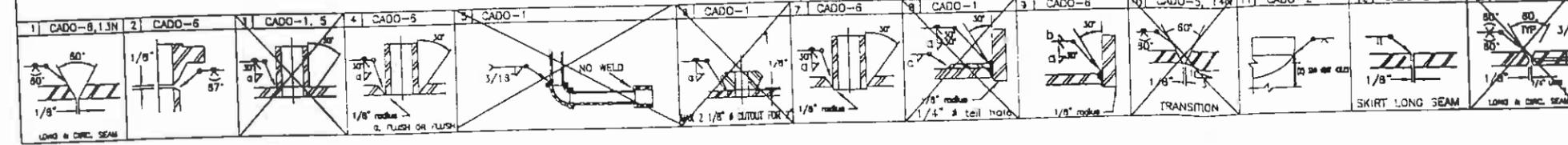
DESIGN DATA

MAWP.	9928 KPAG @ 38 °C (1440 PSIG @ 100 °F)	ASME Code	SEC. VIII, DIV. 1 '10 ED. & '11 ADD.
MDMT.	-29 °C @ 9928 KPAG (-20 °F @ 1440 PSIG)	Service	SWEET
Corrosion All.	3.2 MM (0.125")	Impact Testing	EXEMPT - PER FIG UCS66, UCS 66(b)(1)(b) AND UC-20(1)
Hydrostatic Test Press.	12907 KPAG (1872 PSIG)	Serial No.	1887 to 1874
X-Ray	RT-1	C.R.N. No.	TBA - AB, BC and SASK
Stress Relief	YES - 593 °C (1100 °F) FOR 75 min	Location	LSD TBA
Cyclic Loading	-	Paint Spec.	EXTERNAL: SAND BLAST TO SP-6 1 S/C PRIMER, 1 S/C ENAMEL (WARM GRAY F-34)
Empty Weight	2830 KG (6240 LB)	For Tack Weld and Attachment	CADO-2
Vessel Volume	1.30 CU M (45.8 CU FT)	Welding Procedure	RQP/APQ WP 2612.2/1426(S)
Weight in Full Water	4126 KG (9096 LB)		

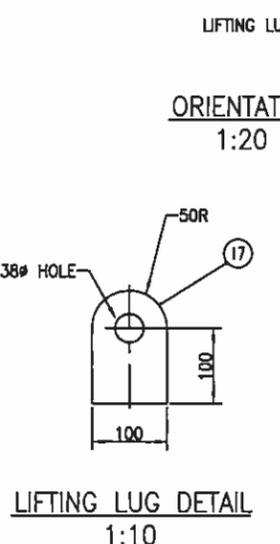
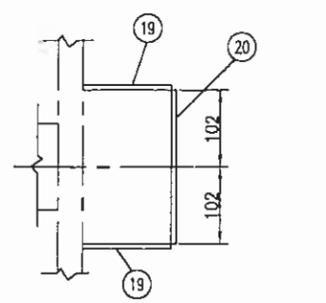
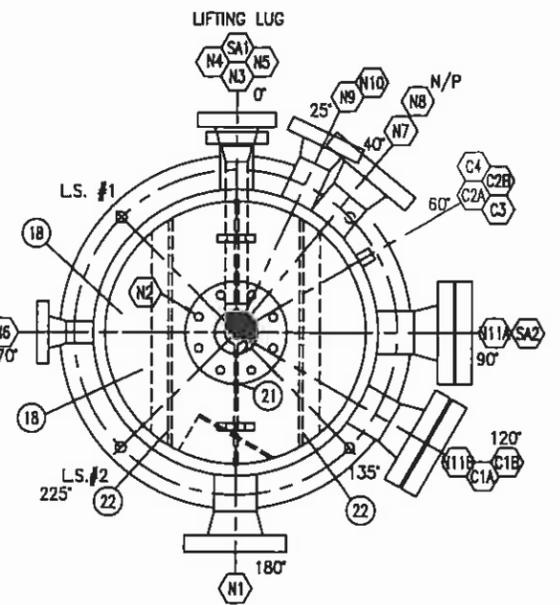
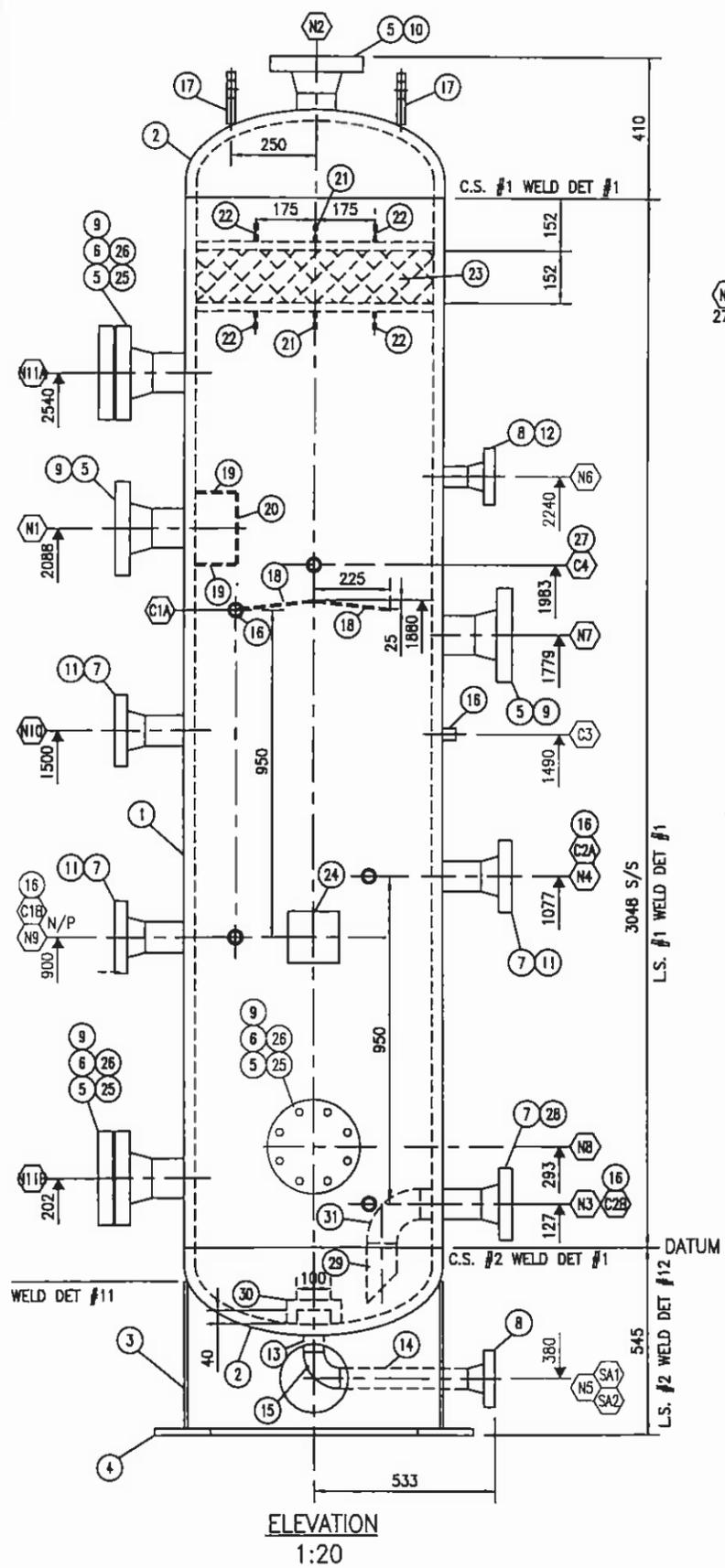
Rev.	Description	Calc	Rev	Lev	By	Chk	Apr	Date
0	ISSUED FOR CONSTRUCTION							OCT 03/13

REVISIONS

Drawn	WZ	<b>CADO INDUSTRIES INC.</b> 7481 - 110 AVE SE, CALGARY, ALBERTA T2C 3B8 TEL: (403) 270-6882; FAX: (403) 270-6887	
Date	JUNE 05/13		
Scale	AS SHOWN	Customer:	PENN WEST
Title:	752 O/D X 3048 S/S SEPARATOR	Job No	2013-070
		Drawing Number:	SHT 1 OF 1 2013-070-300
		Rev	0



These technical data and the designs disclosed herein are the property of CADDO INDUSTRIES INC. and are not to be used or disclosed to others without consent of CADDO INDUSTRIES INC.



**NOTE:** 1) 1/4" CONT. FOR ALL NON-SPECIFIED WELDS(STITCH WELD N.P. BRACKET TO VESSEL), 1/2" FOR LIFTING LUGS  
 2) FABRICATE THE VESSEL PER CADDO'S FABRICATION TOLERANCE AND WPR FOR WELDING TOLERANCE  
 3) TWO HARDNESS TEST(MAX 200 BHN)

APPROVED FOR CONSTRUCTION

NOV 08

**BILL OF MATERIAL IS FOR ONE, EIGHT ARE REQ'D**

ITEM	QTY.	DESCRIPTION	MATERIAL	HEAT NO.
1	1	SHELL PLATE 1 1/4" THK X 3048 LG ROLLED TO 762 OD	SA-516-70N	
2	2	ELLIPTICAL HEAD 1 1/4" THK (1.14" MIN) 2:1 W/ 51 SF	SA-516-70N	
3	1	SKIRT PLATE 3/8" THK X 445 LG ROLLED TO 762 OD (CTS)	SA-36	
4	1	BASEPLATE 3/4" THK X 940 X 610 ID C/W (4) #29 HOLES ON 864 BCD	SA-36	
5	6	FLANGE 4" 600# RFWN SCH XXH BORE	SA-105N	
6	3	BLIND FLANGE 4" 600# RF	SA-105N	
7	4	FLANGE 3" 600# RFWN SCH XXH BORE	SA-105N	
8	2	FLANGE 2" 600# RFWN SCH XXH BORE	SA-105N	
9	5	PIPE 114(4") SCH XXH X 163 LG SMLS	SA-106-B	
10	1	PIPE 114(4") OD SCH XXH X 113 LG SMLS	SA-106-B	
11	3	PIPE 89(3") OD SCH XXH X 172 LG SMLS	SA-106-B	
12	1	PIPE 60(2") OD SCH XXH X 105 LG SMLS	SA-106-B	
13	1	PIPE 60(2") OD SCH XXH X 81 LG SMLS	SA-106-B	
14	1	PIPE 60(2") OD SCH XXH X 371 LG SMLS	SA-106-B	
15	1	ELBOW LR 60(2") OD SCH XXH SMLS	SA-234-WPB	
16	5	CPLG 27(3/4") 6000# THD	SA-105N	
17	2	LIFTING LUG 19(3/4") THK X 150 LG X 100 WD	SA-36	
18	2	HOOD PLATE 10(3/8") THK X 695 LG X 225 WD(CUT & WELD TO SUIT)	SA-36	
19	2	INLET DIVERTER TOP/RTM PLATE 10(3/8") THK X 226 LG X 105 WD(CUT TO SUIT)	SA-36	
20	2	INLET DIVERTER SIDE PLATE 10(3/8") THK X 226 LG X 203 WD	SA-36	
21	2	DEMISTER SUP'T PLATE (MIDDLE) 13(1/2") THK X 695 LG X 50 WD	SA-36	
22	4	DEMISTER SUP'T PLATE (SIDE) 13(1/2") THK X 598 LG X 50 WD	SA-36	
23	1	DEMISTER 152 THK X 695 DIA X 144 KG/M3 C/W 25 CS TOP AND BOTTOM GRD	316 SS	
24	1	NAME PLATE C/W CS BRACKET	ALUM / SA-36	
25	36	25(1") STUD X 171 LG UNC C/W (2) 1" UNC NUTS EACH	SA-193-87M/194-2HM	
26	3	114(4") 600# RF GASKET SPIRAL WOUND WITH CENTRE RING	316 SS	
27	1	CPLG 33(1") 6000# THD	SA-105N	
28	1	PIPE 89(3") OD SCH XXH X 174 LG SMLS	SA-106-B	
29	1	PIPE 89(3") OD SCH 80 X 175 LG SMLS	SA-106-B	
30	1	VORTEX BREAKER PLATE 10(3/8") THK X 160 LG X 70 WD(CUT TO SUIT)	SA-36	
31	1	ELBOW LR 89(3") OD SCH 80 SMLS	SA-234-WPB	
32				

**NOZZLE SCHEDULE**

Mark	Qty	Size	Rating	Type	Nozz. Sch.	Service	Int. Proj.	Ext. Proj.	Weld Det. Number	Weld Size		
										a	b	c
N1	1	4"	600#	RFWN	XXH	INLET	32	203	2, 9	29	29	-
N2	1	4"	600#	RFWN	XXH	GAS OUTLET	32	SPEC	2, 9	29	22	-
N3	1	3"	600#	RFWN	XXH	H2O OUTLET	25 min	203	2, 9	29	19	-
N4	1	3"	600#	RFWN	XXH	HC OUTLET	25	203	2, 9	29	19	-
N5	1	2"	600#	RFWN	XXH	DRAIN	FLUSH	SPEC	1, 2, 4	10	-	-
N6	1	2"	600#	RFWN	XXH	PSY	-	152	2, 7	10	-	-
N7	1	4"	600#	RFWN	XXH	LSHH	32	203	2, 9	29	29	-
N8	1	4"	600#	RFWN	XXH	LSL	32	203	2, 9	29	29	-
N9	1	3"	600#	RFWN	XXH	LC (H2O)	25	203	2, 9	29	19	-
N10	1	3"	600#	RFWN	XXH	LC (HC)	25	203	2, 9	29	19	-
N11A/B	2	4"	600#	RFWN	XXH	INSPECTION	32	203	2, 9	29	29	-
C1A/B	2	3/4"	6000#	CPLG	-	LG (H2O)	-	-	7	3/8"	-	-
C2A/B	2	3/4"	6000#	CPLG	-	LG (HC)	-	-	7	3/8"	-	-
C3	1	3/4"	6000#	CPLG	-	PG	-	-	7	3/8"	-	-
C4	1	1"	6000#	CPLG	-	TG	-	-	7	3/8"	-	-
SA1	1	ø200	HOLE	-	-	SKIRT ACCESS FOR N5	-	-	-	-	-	-
SA2	1	ø200	HOLE	-	-	SKIRT ACCESS	-	-	-	-	-	-

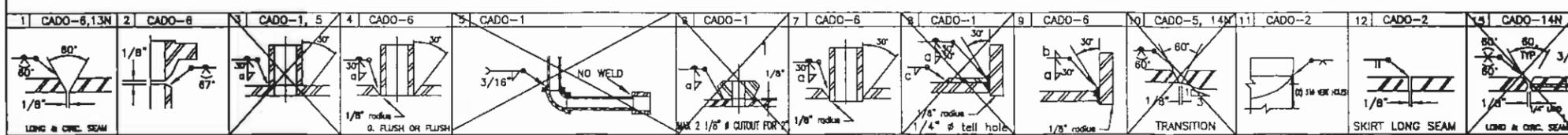
**DESIGN DATA**

MAWP.	9376 KPAC @ 90 °C (1360 PSIG @ 194 °F)	ASME Code	SEC. VIII, DIV. 1 '10 ED. & '11 ADD.
MDMT.	-29 °C @ 9376 KPAC (-20 °F @ 1360 PSIG)	Service	SWEET
Corrosion All.	3.2 MM (0.125")	Impact Testing	EXEMPT - PER FIG UCS-66(b)(1)(b) AND UG-200(f)
Hydrostatic Test Press.	12189 KPAC (1768 PSIG)	Serial No.	1667 to 1674
X-Ray	RT-1.	C.R.N. No.	TBA - AB, BC and SASK
Stress Relief	YES - 593 °C(1100 °F) FOR 75 min	Location	LSD TBA
Cyclic Loading	-	Paint Spec.	EXTERNAL: SAND BLAST TO SP-6 1 S/C PRIMER, 1 S/C ENAMEL(WARM GRAY F-34)
Empty Weight	2830 KG (6240 LB)	For Tack Weld and Attachment	CADO-2
Vessel Volume	1.30 CU M (45.8 CU FT)	Welding Procedure	RQP/APQ WP 2612.2/1426(S)
Weight in Full Water	4126 KG (9098 LB)		

Rev.	Description	Calc	Rev	Lev	By	Chk	Apr	Date
2	CHANGED DP AND DT	0	WZ	WC	WC			NOV 08/13
1	REVISED N2 and N3	0	WZ	WC	WC			NOV 06/13
0	ISSUED FOR CONSTRUCTION	0	WZ	WC	WC			OCT 03/13

**REVISIONS**

Drawn	WZ	<b>CADDO INDUSTRIES INC.</b>		
Date	JUNE 05/13	7491 - 110 AVE SE, CALGARY, ALBERTA T2C 3B8 TEL: (403) 279-6602; FAX: (403) 279-6687		
Scale	AS SHOWN	Customer:	PENN WEST	
Title:	762 O/D X 3048 S/S SEPARATOR	Job No	2013-070	Drawing Number: SHT 1 OF 1
	TAG:			Rev. 2



CADO INDUSTRIES INC  
Quality Control Manual

Revision Number: 4.0

Revision Date: November 30, 2012

Section: 9 Page: 10 of 11

SIPU1667

EXHIBIT 9.6 TRAVEL SHEET (BACK)

MATERIAL THICKNESS VERIFICATION AND IDENTIFICATION				WELD I.D. / WELDER SYMBOLS / FIT-UP						
Description	Thickness	Material Spec. & Grade	Heat & Plate Identifier or I.D. Number	Weld I.D.	Welder Symbol	Fit-Up Exam	Weld I.D.	Welder Symbol	Fit-Up Exam	Verify Type Joint
Shell #1	1.328"	SA-516-70N	3826492139002	L-1	R/D/M	72	C-1	A/D/M	72	72
Shell #2				L-2			C-2	A/S		
Shell #3				L-			C-			
Shell #4				L-			C-			
Shell #5				L-			C-			
Shell #6				L-			C-			
Head #1	1.343"	SA-516-70N	G1133476540102				C-			
Head #2	1.346"	SA-516-70N	G1133476840102				C-			
Head #3							C-			
Head #4							C-			
Boot #1 Shell				L-			C-			
Boot #1 Head							C-			
Boot #2 Shell				L-			C-			
Boot #2 Head							C-			
Re-Pad										

ATTACHMENT AND / OR NOZZLE MATERIAL THICKNESS VERIFICATION AND IDENTIFICATION						WPS # WELDER SYMBOLS/FIT-UP			
Mark	Mat. I.D.	Neck	Fitting	Flange	Repad or Attachment	Cat. B	Cat. C	Cat. D	Pad OD
N1	Spec.-Grd.	SA-106-B		SA-105-N					
	Thk./Rating	4" SCH XXH		4" CL 600 RFWN			S	R/S	
	Heat# or ID	C1561	✓	T10004515	✓				
N2	Spec.-Grd.	SA-106-B		SA-105-N					
	Thk./Rating	4" SCH XXH		4" CL 600 RFWN			S	S	
	Heat# or ID	C1561	✓	T10004515	✓				
N3	Spec.-Grd.	SA-106-B		SA-105-N					
	Thk./Rating	3" 2" SCH XXH		3" 2" CL 600 RFWN				R/S	
	Heat# or ID	C1281	✓	121350500	✓				
N4	Spec.-Grd.	SA-106-B		SA-105-N					
	Thk./Rating	3" 2" SCH XXH		3" 2" CL 600 RFWN			S	R/S	
	Heat# or ID	C1281	✓	121350500	✓				
N5	Spec.-Grd.	SA-106-B		SA-105-N					
	Thk./Rating	2" SCH XXH		2" CL 600 RFWN			S	R/S	
	Heat# or ID	C1692	✓	T10005612	✓				
N6	Spec.-Grd.	SA-106-B		SA-105-N					
	Thk./Rating	2" SCH XXH		2" CL 600 RFWN			C	R/S	
	Heat# or ID	C1700	✓	T10005612	✓				
N7	Spec.-Grd.	SA-106-B		SA-105-N					
	Thk./Rating	4" SCH XXH		4" CL 600 RFWN			S	R/S	
	Heat# or ID	C1561	✓	T10004515	✓				
N8	Spec.-Grd.	SA-106-B		SA-105-N					
	Thk./Rating	4" SCH XXH		4" CL 600 RFWN			S	R/S	
	Heat# or ID	C1561	✓	T10004515	✓				



CADO INDUSTRIES INC  
Quality Control Manual

Revision Number: 4.0

Revision Date: November 30, 2012

Section: 9 Page: 10 of 11

EXHIBIT 9.5 TRAVEL SHEET (FRONT)

DO NOT START CONSTRUCTION WITHOUT AI REVIEW						TRAVEL SHEET REVISION NO.:			
AI REVIEW: <i>✓</i>			REVIEW DATE: <i>OCT 04 2013</i>						
SERIAL NO.: 1667		JOB NO.: 2013-070		VESSEL TYPE: 762 Separator					
DRAWING NO.: 2013-070-300		DWG. REVISION NO.: Rev. 0		TRAVEL SHEET INITIATION BY: <i>cm</i>					
Seq.	Item	Comments	Q.C.I.	Date	A.I. Hold Points	A.I.	Date	Owner	Date
1.	Calculations in File		<i>[Signature]</i>	JAN 20 2014	x	<i>[Signature]</i>	JAN 22 2014	<i>[Signature]</i>	
2.	Release of App'd Dwg.		<i>[Signature]</i>	OCT 03 2013	✓	<i>[Signature]</i>	OCT 04 2013	<i>[Signature]</i>	Nov 26
3.	Materials Examined		<i>[Signature]</i>	DEC 11 2013				<i>[Signature]</i>	
4.	Heat Numbers Recorded		<i>[Signature]</i>	DEC 11 2013	x	<i>[Signature]</i>	JAN 22 2014	<i>[Signature]</i>	Jan 22
5.	MTRs Checked		<i>[Signature]</i>	JAN 20 2014	✓			<i>[Signature]</i>	Jan 23
6.	WPS(s) Checked		<i>[Signature]</i>	OCT 03 2013	x	<i>[Signature]</i>	OCT 04 2013	<i>[Signature]</i>	"
7.	Welder(s) Qualified		<i>[Signature]</i>	DEC 11 2013				<i>[Signature]</i>	"
8.	Thicknesses Verified & Recorded		<i>[Signature]</i>	DEC 11 2013				<i>[Signature]</i>	
9.	Shell(s) & Head(s) Fit-up Inspection		<i>[Signature]</i>	DEC 11 2013	✓	<i>[Signature]</i>		<i>[Signature]</i>	Jan 22
10.	Nozzles & Fittings Fit-up Inspection		<i>[Signature]</i>	DEC 11 2013			JAN 22 2014	<i>[Signature]</i>	Jan 26
11.	Nozzle Orientation		<i>[Signature]</i>	DEC 11 2013				<i>[Signature]</i>	"
12.	Nozzle & Flange Rating Checked		<i>[Signature]</i>	DEC 11 2013				<i>[Signature]</i>	"
13.	Impact Tests		<i>[Signature]</i>	EXEMPT	UCS 66			<i>[Signature]</i>	-
14.	Internals Checked		<i>[Signature]</i>	NOV 20 2013				<i>[Signature]</i>	"
15.	Final Internal Inspection	Shell Side Tube Side	<i>[Signature]</i>	NOV 25 2013	x	<i>[Signature]</i>	NOV 26 2013	<i>[Signature]</i>	Nov 26
16.	Weld Sizes Checked		<i>[Signature]</i>	DEC 11 2013				<i>[Signature]</i>	Jan 22
17.	Welder I.D. Checked		<i>[Signature]</i>	DEC 11 2013				<i>[Signature]</i>	"
18.	Final External Inspection		<i>[Signature]</i>	JAN 20 2014	✓	<i>[Signature]</i>	JAN 22 2014	<i>[Signature]</i>	"
19.	Radiography		<i>[Signature]</i>	DEC 11 2013	✓	<i>[Signature]</i>	JAN 22 2014	<i>[Signature]</i>	Jan 23
20.	Other N.D.E. <i>Hardness</i>		<i>[Signature]</i>	JAN 20 2014				<i>[Signature]</i>	Jan 23
21.	Final Ext. Prior to P.W.H.T.		<i>[Signature]</i>	DEC 11 2013				<i>[Signature]</i>	-
22.	PWHT Chart Checked		<i>[Signature]</i>	JAN 20 2014	x	<i>[Signature]</i>	JAN 22 2014	<i>[Signature]</i>	Jan 23
23.	Hydrostatic Test	Shell Side Gauge # <i>PG-08F/07</i> Tube Side Gauge #	<i>[Signature]</i>	JAN 22 2014	xx	<i>[Signature]</i>	JAN 22 2014	<i>[Signature]</i>	Jan 22
24.	CRN Drawing	CRN#	<i>[Signature]</i>	JAN 20 2014	xx	<i>[Signature]</i>	JAN 22 2014	<i>[Signature]</i>	Jan 23
25.	N.C.R. #		<i>[Signature]</i>					<i>[Signature]</i>	
26.	Nameplate Stamping		<i>[Signature]</i>	JAN 21 2014	xx	<i>[Signature]</i>	JAN 22 2014	<i>[Signature]</i>	Jan 23
27.	Manuf. Data Report Completed & Verified		<i>[Signature]</i>	JAN 21 2014	xx	<i>[Signature]</i>	"	<i>[Signature]</i>	Jan 23
28.	Nameplate Installation		<i>[Signature]</i>	"		<i>[Signature]</i>	"	<i>[Signature]</i>	

The Authorized Inspector shall be presented with the Travel Sheet prior to construction so that he can designate additional inspection points and/or Hold Points. Any revisions shall be marked with a delta symbol with revision number and described at the bottom of this page.

\* Denotes an A.I. Inspection Point \*\* Denotes an A.I. Hold Point

CADO INDUSTRIES INC  
Quality Control Manual

Revision Number: 4.0

Revision Date: November 30, 2012

Section: 9 Page: 10 of 11

EXHIBIT 9.5 TRAVEL SHEET (FRONT)

DO NOT START CONSTRUCTION WITHOUT AI REVIEW				TRAVEL SHEET REVISION NO.:					
AI REVIEW: <i>[Signature]</i>				REVIEW DATE: OCT 04 2013					
SERIAL NO.: 1668		JOB NO.: 2013-070		VESSEL TYPE: 762 Separator					
DRAWING NO.: 2013-070-300		DWG. REVISION NO.: Rev. 0		TRAVEL SHEET INITIATION BY: <i>CA</i>					
Seq	Item	Comments	Q.C.I.	Date	A.I. Hold Points	A.I.	Date	Owner	Date
1.	Calculations in File		<i>[Signature]</i>	JAN 21 2014	X	<i>[Signature]</i>	JAN 22 2014	<i>[Signature]</i>	
2.	Release of App'd Dwg.		<i>[Signature]</i>	OCT 03 2013	X	<i>[Signature]</i>	OCT 04 2013	<i>[Signature]</i>	Nov 27
3.	Materials Examined		<i>[Signature]</i>	DEC 11 2013					
4.	Heat Numbers Recorded		<i>[Signature]</i>	DEC 11 2013	X	<i>[Signature]</i>	JAN 22 2014		JAN 23 2014
5.	MTRs Checked		<i>[Signature]</i>	DEC 11 2013	X	<i>[Signature]</i>			JAN 23 2014
6.	WPS(s) Checked		<i>[Signature]</i>	OCT 03 2013	X	<i>[Signature]</i>	OCT 04 2013		JAN 23 2014
7.	Welder(s) Qualified		<i>[Signature]</i>	DEC 11 2013					JAN 23 2014
8.	Thicknesses Verified & Recorded		<i>[Signature]</i>	DEC 11 2013					
9.	Shell(s) & Head(s) Fit-up Inspection		<i>[Signature]</i>	DEC 11 2013		<i>[Signature]</i>	JAN 22 2014		JAN 23 2014
10.	Nozzles & Fittings Fit-up Inspection		<i>[Signature]</i>	DEC 11 2013				<i>[Signature]</i>	Nov 27
11.	Nozzle Orientation		<i>[Signature]</i>	DEC 11 2013					"
12.	Nozzle & Flange Rating Checked		<i>[Signature]</i>	DEC 11 2013				<i>[Signature]</i>	"
13.	Impact Tests		<i>[Signature]</i>	DEC 11 2013					-
14.	Internals Checked		<i>[Signature]</i>	NOV 25 2013					
15.	Final Internal Inspection	Shell Side Tube Side	<i>[Signature]</i>	NOV 25 2013	X	<i>[Signature]</i>	NOV 26 2013	<i>[Signature]</i>	Nov 27
16.	Weld Sizes Checked		<i>[Signature]</i>	DEC 11 2013					JAN 23 2014
17.	Welder I.D. Checked		<i>[Signature]</i>	DEC 11 2013					JAN 23 2014
18.	Final External Inspection		<i>[Signature]</i>	DEC 11 2013	X	<i>[Signature]</i>	JAN 22 2014		JAN 23 2014
19.	Radiography		<i>[Signature]</i>	DEC 11 2013	X	<i>[Signature]</i>	JAN 22 2014		JAN 23 2014
20.	Other N.D.E.	Hardness	<i>[Signature]</i>	JAN 21 2014					JAN 23 2014
21.	Final Ext. Prior to P.W.H.T.		<i>[Signature]</i>	DEC 11 2013					
22.	PWHT Chart Checked		<i>[Signature]</i>	JAN 21 2014	X				JAN 23 2014
23.	Hydrostatic Test	Shell Side Gauge # PG-17N/07A Tube Side Gauge #	<i>[Signature]</i>	JAN 22 2014	XX	<i>[Signature]</i>	JAN 22 2014	<i>[Signature]</i>	Jan 22
24.	CRN Drawing	CRN#	<i>[Signature]</i>	JAN 21 2014	XX	<i>[Signature]</i>	JAN 22 2014		
25.	N.C.R. #		<i>[Signature]</i>				JAN 22 2014		
26.	Nameplate Stamping		<i>[Signature]</i>	JAN 21 2014	XX	<i>[Signature]</i>			JAN 23 2014
27.	Manuf. Data Report Completed & Verified		<i>[Signature]</i>	JAN 21 2014	XX	<i>[Signature]</i>			JAN 23 2014
28.	Nameplate Installation		<i>[Signature]</i>	"			JAN 22 2014		

The Authorized Inspector shall be presented with the Travel Sheet prior to construction so that he can designate additional inspection points and/or Hold Points. Any revisions shall be marked with a delta symbol with revision number and described at the bottom of this page.

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CADO INDUSTRIES INC  
Quality Control Manual

Revision Number: 4.0

Revision Date: November 30, 2012

Section: 9 Page: 10 of 11

EXHIBIT 9.5 TRAVEL SHEET (FRONT)

DO NOT START CONSTRUCTION WITHOUT AI REVIEW						TRAVEL SHEET REVISION NO.:			
AI REVIEW:						REVIEW DATE: OCT 04 2013			
SERIAL NO.: 1669		JOB NO.: 2013-070		VESSEL TYPE: 762 Separator					
DRAWING NO.: 2013-070-300		DWG. REVISION NO.: Rev. 0		TRAVEL SHEET INITIATION BY: CA					
Seq	Item	Comments	Q.C.I.	Date	A.I Hold Points	A.I.	Date	Owner	Date
1	Calculations in File			JAN 21 2014	X				
2	Release of App'd Dwg.			OCT 03 2013	Y		OCT 04 2013		Nov 26
3	Materials Examined			DEC 11 2013					
4	Heat Numbers Recorded			DEC 11 2013	Y		JAN 22 2014		JAN 23 2014
5	MTRs Checked			DEC 11 2013	X				
6	WPS(s) Checked			OCT 03 2013	Y		OCT 04 2013		JAN 23 2014
7	Welder(s) Qualified			DEC 11 2013					
8	Thicknesses Verified & Recorded			DEC 11 2013					
9	Shell(s) & Head(s) Fit-up Inspection			DEC 11 2013	Y		JAN 22 2014		JAN 23 2014
10	Nozzles & Fittings Fit-up Inspection			DEC 11 2013					Nov 26
11	Nozzle Orientation			DEC 11 2013					u
12	Nozzle & Flange Rating Checked			DEC 11 2013					u
13	Impact Tests			N/A					-
14	Internals Checked			NOV 25 2013					
15	Final Internal Inspection	Shell Side Tube Side		NOV 25 2013	X		NOV 26 2013		Nov 26
16	Weld Sizes Checked			DEC 11 2013					Jan 22
17	Welder I.D. Checked			DEC 11 2013					"
18	Final External Inspection			JAN 21 2014	Y		JAN 22 2014		"
19	Radiography			DEC 11 2013	Y		JAN 22 2014		JAN 23 2014
20	Other N.D.E.	Hardacs		JAN 21 2014					JAN 23 2014
21	Final Ext. Prior to P.W.H.T.			DEC 11 2013					
22	PWHT Chart Checked			JAN 21 2014	X		JAN 22 2014		Jan 22
23	Hydrostatic Test	Shell Side Gauge # PG-08B/17 Tube Side Gauge #		JAN 22 2014	XX		JAN 22 2014		"
24	CRN Drawing	CRN#		JAN 21 2014	XX		JAN 22 2014		
25	N.C.R. #								
26	Nameplate Stamping			JAN 21 2014	XX		JAN 22 2014		JAN 23 2014
27	Manuf. Data Report Completed & Verified			JAN 21 2014	XX		JAN 22 2014		JAN 23 2014
28	Nameplate Installation			"					

The Authorized Inspector shall be presented with the Travel Sheet prior to construction so that he can designate additional inspection points and/or Hold Points. Any revisions shall be marked with a delta symbol with revision number and described at the bottom of this page.

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CADO INDUSTRIES INC  
Quality Control Manual

Revision Number: 4.0

Revision Date: November 30, 2012

Section: 9 Page: 10 of 11

EXHIBIT 9.5 TRAVEL SHEET (FRONT)

DO NOT START CONSTRUCTION WITHOUT AI REVIEW						TRAVEL SHEET REVISION NO.:			
AI REVIEW:			REVIEW DATE: OCT 04 2013						
SERIAL NO.: 1670		JOB NO.: 2013-070		VESSEL TYPE: 762 Separator					
DRAWING NO.: 2013-070-300		DWG. REVISION NO.: Rev. 0		TRAVEL SHEET INITIATION BY: CA					
Seq	Item	Comments	Q.C.I.	Date	A.I. Hold Points	A.I.	Date	Owner	Date
1.	Calculations in File			JAN 21 2014	X		JAN 22 2014		
2.	Release of App'd Dwg			OCT 03 2013	X		OCT 04 2013		Nov 27
3.	Materials Examined			DEC 11 2013					
4.	Heat Numbers Recorded			DEC 11 2013			JAN 22 2014		JAN 23 2014
5.	MTRs Checked			DEC 11 2013					JAN 23 2014
6.	WPS(s) Checked			OCT 03 2013	X		OCT 04 2013		JAN 23 2014
7.	Welder(s) Qualified			DEC 11 2013					JAN 23 2014
8.	Thicknesses Verified & Recorded			DEC 11 2013					
9.	Shell(s) & Head(s) Fit-up Inspection			DEC 11 2013	X		JAN 22 2014		JAN 23 2014
10.	Nozzles & Fittings Fit-up Inspection			DEC 11 2013					Nov 27
11.	Nozzle Orientation			DEC 11 2013					
12.	Nozzle & Flange Rating Checked			DEC 11 2013					
13.	Impact Tests								
14.	Internals Checked			NOV 25 2013					
15.	Final Internal Inspection	Shell Side Tube Side		NOV 25 2013	XX		NOV 26 2013		Nov 27
16.	Weld Sizes Checked			DEC 11 2013					Nov 22
17.	Welder I.D. Checked			DEC 11 2013					Jan 22
18.	Final External Inspection			JAN 21 2014	X		JAN 22 2014		
19.	Radiography			DEC 11 2013	X		JAN 22 2014		JAN 23 2014
20.	Other N.D.E.	Hardness		JAN 21 2014					JAN 23 2014
21.	Final Ext. Prior to P.W.H.T.			DEC 11 2013					
22.	PWHT Chart Checked			JAN 21 2014	X		JAN 22 2014		Jan 22
23.	Hydrostatic Test	Shell Side Tube Side		JAN 22 2014	XX		JAN 22 2014		Jan 22
24.	CRN Drawing	CRN#		JAN 21 2014	XX		JAN 22 2014		
25.	N.C.R. #								
26.	Nameplate Stamping			JAN 21 2014	XX		JAN 22 2014		JAN 23 2014
27.	Manuf. Data Report Completed & Verified			JAN 21 2014	XX				JAN 23 2014
28.	Nameplate Installation								

The Authorized Inspector shall be presented with the Travel Sheet prior to construction so that he can designate additional inspection points and/or Hold Points. Any revisions shall be marked with a delta symbol with revision number and described at the bottom of this page.

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CADO INDUSTRIES INC  
Quality Control Manual

Revision Number: 4.0

Revision Date: November 30, 2012

Section: 9 Page: 10 of 11

EXHIBIT 9.5 TRAVEL SHEET (FRONT)

DO NOT START CONSTRUCTION WITHOUT AI REVIEW				TRAVEL SHEET REVISION NO.:					
AI REVIEW: <i>[Signature]</i>				REVIEW DATE:		OCT 04 2013			
SERIAL NO.: 1671		JOB NO.: 2013-070		VESSEL TYPE: 762 Separator					
DRAWING NO.: 2013-070-300			DWG. REVISION NO.: Rev. 0		TRAVEL SHEET INITIATION BY: <i>CA</i>				
Seq	Item	Comments	Q.C.I.	Date	A.I. Hold Points	A.I.	Date	Owner	Date
1.	Calculations in File		<i>[Signature]</i>	FEB 10 2014	X	<i>[Signature]</i>	FEB 13 2014	<i>[Signature]</i>	
2.	Release of App'd Dwg.		<i>[Signature]</i>	OCT 03 2013	X	<i>[Signature]</i>	OCT 04 2013	<i>[Signature]</i>	Jan 3
3.	Materials Examined		<i>[Signature]</i>	JAN 09 2014				<i>[Signature]</i>	
4.	Heat Numbers Recorded		<i>[Signature]</i>	JAN 09 2014	X	<i>[Signature]</i>	FEB 10 2014	<i>[Signature]</i>	Feb 10
5.	MTRs Checked		<i>[Signature]</i>	JAN 09 2014	X	<i>[Signature]</i>	FEB 13 2014	<i>[Signature]</i>	Feb 21
6.	WPS(s) Checked		<i>[Signature]</i>	OCT 03 2013	X	<i>[Signature]</i>	OCT 04 2013	<i>[Signature]</i>	Jan 3
7.	Welder(s) Qualified		<i>[Signature]</i>	JAN 09 2014				<i>[Signature]</i>	Feb 10
8.	Thicknesses Verified & Recorded		<i>[Signature]</i>	JAN 09 2014				<i>[Signature]</i>	
9.	Shell(s) & Head(s) Fit-up Inspection		<i>[Signature]</i>	JAN 09 2014	X	<i>[Signature]</i>	FEB 10 2014	<i>[Signature]</i>	Feb 10
10.	Nozzles & Fittings Fit-up Inspection		<i>[Signature]</i>	JAN 09 2014				<i>[Signature]</i>	Jan 3
11.	Nozzle Orientation		<i>[Signature]</i>	JAN 09 2014				<i>[Signature]</i>	Jan 3
12.	Nozzle & Flange Rating Checked		<i>[Signature]</i>	JAN 09 2014				<i>[Signature]</i>	Jan 3
13.	Impact Tests			N/A					
14.	Internals Checked		<i>[Signature]</i>	JAN 03 2014				<i>[Signature]</i>	Jan 3
15.	Final Internal Inspection	Shell Side Tube Side	<i>[Signature]</i>	JAN 3 2014	X	<i>[Signature]</i>	JAN - 3 2014	<i>[Signature]</i>	Jan 3
16.	Weld Sizes Checked		<i>[Signature]</i>	JAN 21 2014				<i>[Signature]</i>	Feb 10
17.	Welder I.D. Checked		<i>[Signature]</i>	JAN 21 2014				<i>[Signature]</i>	Feb 10
18.	Final External Inspection		<i>[Signature]</i>	FEB 10 2014	X	<i>[Signature]</i>	FEB 10 2014	<i>[Signature]</i>	Feb 10
19.	Radiography		<i>[Signature]</i>	FEB 10 2014	X	<i>[Signature]</i>	FEB 13 2014	<i>[Signature]</i>	Feb 21
20.	Other N.D.E.		<i>[Signature]</i>	FEB 10 2014				<i>[Signature]</i>	Feb 21
21.	Final Ext. Prior to P.W.H.T.		<i>[Signature]</i>	FEB 10 2014				<i>[Signature]</i>	
22.	PWHT Chart Checked		<i>[Signature]</i>	FEB 10 2014	X	<i>[Signature]</i>	FEB 13 2014	<i>[Signature]</i>	Feb 10
23.	Hydrostatic Test	Shell Side Gauge #	<i>[Signature]</i>	FEB 10 2014	X X	<i>[Signature]</i>	FEB 10 2014	<i>[Signature]</i>	Feb 10
		Tube Side Gauge #	<i>[Signature]</i>	FEB 10 2014		<i>[Signature]</i>	FEB 10 2014	<i>[Signature]</i>	Feb 10
24.	CRN Drawing	CRN#	<i>[Signature]</i>	FEB 10 2014	X X	<i>[Signature]</i>	FEB 13 2014	<i>[Signature]</i>	Feb 21
25.	N.C.R. #		<i>[Signature]</i>					<i>[Signature]</i>	
26.	Nameplate Stamping		<i>[Signature]</i>	FEB 10 2014	X X	<i>[Signature]</i>	FEB 13 2014	<i>[Signature]</i>	Feb 21
27.	Manuf. Data Report Completed & Verified		<i>[Signature]</i>	FEB 10 2014	X X	<i>[Signature]</i>	FEB 13 2014	<i>[Signature]</i>	Feb 21
28.	Nameplate Installation		<i>[Signature]</i>	\\				<i>[Signature]</i>	

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CADO INDUSTRIES INC  
Quality Control Manual

Revision Number: 4.0

Revision Date: November 30, 2012

Section: 9 Page: 10 of 11

EXHIBIT 9.5 TRAVEL SHEET (FRONT)

DO NOT START CONSTRUCTION WITHOUT AI REVIEW				TRAVEL SHEET REVISION NO.:					
AI REVIEW: <i>[Signature]</i>				REVIEW DATE:		OCT 04 2013			
SERIAL NO.: 1672		JOB NO.: 2013-070		VESSEL TYPE: 762 Separator					
DRAWING NO.: 2013-070-300			DWG. REVISION NO.: Rev. 0		TRAVEL SHEET INITIATION BY: <i>CA</i>				
Seq	Item	Comments	Q.C.I.	Date	A.I. Hold Points	A.I.	Date	Owner	Date
1.	Calculations in File		<i>[Signature]</i>	FEB 10 2014	X	<i>[Signature]</i>	FEB 13 2014	<i>[Signature]</i>	
2.	Release of App'd Dwg.		<i>[Signature]</i>	OCT 03 2013	X		OCT 04 2013	<i>[Signature]</i>	Jan 13
3.	Materials Examined		<i>[Signature]</i>	JAN 09 2014				<i>[Signature]</i>	
4.	Heat Numbers Recorded		<i>[Signature]</i>	JAN 09 2014	X	<i>[Signature]</i>	FEB 10 2014	<i>[Signature]</i>	FEB 10
5.	MTRs Checked		<i>[Signature]</i>	JAN 09 2014	X	<i>[Signature]</i>	FEB 13 2014	<i>[Signature]</i>	
6.	WPS(s) Checked		<i>[Signature]</i>	OCT 03 2013	X		OCT 04 2013	<i>[Signature]</i>	Jan 13
7.	Welder(s) Qualified		<i>[Signature]</i>	JAN 09 2014				<i>[Signature]</i>	Feb 21
8.	Thicknesses Verified & Recorded		<i>[Signature]</i>	JAN 09 2014				<i>[Signature]</i>	
9.	Shell(s) & Head(s) Fit-up Inspection		<i>[Signature]</i>	JAN 09 2014	X	<i>[Signature]</i>	FEB 10 2014	<i>[Signature]</i>	Feb 10
10.	Nozzles & Fittings Fit-up Inspection		<i>[Signature]</i>	JAN 09 2014				<i>[Signature]</i>	Jan 13
11.	Nozzle Orientation		<i>[Signature]</i>	JAN 09 2014				<i>[Signature]</i>	Jan 13
12.	Nozzle & Flange Rating Checked		<i>[Signature]</i>	JAN 09 2014				<i>[Signature]</i>	Jan 13
13.	Impact Tests			N/A					
14.	Internals Checked		<i>[Signature]</i>	JAN 03 2014				<i>[Signature]</i>	Jan 13
15.	Final Internal Inspection	Shell Side Tube Side	<i>[Signature]</i>	JAN 13 2014	X	<i>[Signature]</i>	JAN - 3 2014	<i>[Signature]</i>	Jan 13
16.	Weld Sizes Checked		<i>[Signature]</i>	JAN 17 2014				<i>[Signature]</i>	Feb 10
17.	Welder I.D. Checked		<i>[Signature]</i>	JAN 17 2014				<i>[Signature]</i>	Feb 10
18.	Final External Inspection		<i>[Signature]</i>	JAN 17 2014	X	<i>[Signature]</i>	FEB 10 2014	<i>[Signature]</i>	Feb 10
19.	Radiography		<i>[Signature]</i>	JAN 21 2014	X	<i>[Signature]</i>	FEB 13 2014	<i>[Signature]</i>	Feb 21
20.	Other N.D.E.		<i>[Signature]</i>	FEB 10 2014				<i>[Signature]</i>	Feb 21
21.	Final Ext. Prior to P.W.H.T.		<i>[Signature]</i>	FEB 10 2014				<i>[Signature]</i>	
22.	PWHT Chart Checked		<i>[Signature]</i>	FEB 10 2014	X	<i>[Signature]</i>	FEB 13 2014	<i>[Signature]</i>	Feb 10
23.	Hydrostatic Test	Shell Side	Gauge #	<i>[Signature]</i>	X	<i>[Signature]</i>	FEB 10 2014	<i>[Signature]</i>	Feb 10
		Tube Side	Gauge #	<i>[Signature]</i>		<i>[Signature]</i>	FEB 10 2014	<i>[Signature]</i>	Feb 10
24.	CRN Drawing	CRN#	<i>[Signature]</i>	FEB 10 2014	X	<i>[Signature]</i>	FEB 13 2014	<i>[Signature]</i>	Feb 21
25.	N.C.R. #								
26.	Nameplate Stamping		<i>[Signature]</i>	FEB 10 2014	X	<i>[Signature]</i>	FEB 13 2014	<i>[Signature]</i>	Feb 21
27.	Manuf. Data Report Completed & Verified		<i>[Signature]</i>	FEB 10 2014	X	<i>[Signature]</i>	FEB 13 2014	<i>[Signature]</i>	Feb 21
28.	Nameplate Installation		<i>[Signature]</i>	11				<i>[Signature]</i>	

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**CADO INDUSTRIES INC**  
**Quality Control Manual**

Revision Number: 4.0

Revision Date: November 30, 2012

Section: 9 Page: 10 of 11

**EXHIBIT 9.5 TRAVEL SHEET (FRONT)**

DO NOT START CONSTRUCTION WITHOUT AI REVIEW				TRAVEL SHEET REVISION NO.:					
AI REVIEW: <i>8</i>				REVIEW DATE: <b>OCT 04 2013</b>					
SERIAL NO.: 1673		JOB NO.: 2013-070		VESSEL TYPE: 762 Separator					
DRAWING NO.: 2013-070-300		DWG. REVISION NO.: Rev. 0		TRAVEL SHEET INITIATION BY: <i>CA</i>					
Seq.	Item	Comments	Q.C.I.	Date	A.I. Hold Points	A.I.	Date	Owner	Date
1.	Calculations in File		<i>[Signature]</i>	FEB 10 2014	<i>x</i>	<i>8</i>	FEB 13 2014	<i>[Signature]</i>	
2.	Release of App'd Dwg.		<i>[Signature]</i>	OCT 03 2013	<i>x</i>	<i>8</i>	OCT 04 2013	<i>[Signature]</i>	Jan 13
3.	Materials Examined		<i>[Signature]</i>	JAN 13 2013				<i>[Signature]</i>	Feb 10
4.	Heat Numbers Recorded		<i>[Signature]</i>	JAN 16 2014	<i>x</i>	<i>8</i>	FEB 10 2014	<i>[Signature]</i>	Feb 10
5.	MTRs Checked		<i>[Signature]</i>	JAN 16 2014	<i>x</i>	<i>8</i>	FEB 13 2014	<i>[Signature]</i>	Feb 21
6.	WPS(s) Checked		<i>[Signature]</i>	OCT 03 2013	<i>x</i>	<i>8</i>	OCT 04 2013	<i>[Signature]</i>	Jan 13
7.	Welder(s) Qualified		<i>[Signature]</i>	JAN 13 2013				<i>[Signature]</i>	Feb 21
8.	Thicknesses Verified & Recorded		<i>[Signature]</i>	JAN 16 2014				<i>[Signature]</i>	Feb 21
9.	Shell(s) & Head(s) Fit-up Inspection		<i>[Signature]</i>	JAN 16 2014	<i>x</i>	<i>8</i>	FEB 10 2014	<i>[Signature]</i>	Feb 10
10.	Nozzles & Fittings Fit-up Inspection		<i>[Signature]</i>	JAN 16 2014				<i>[Signature]</i>	Jan 13
11.	Nozzle Orientation		<i>[Signature]</i>	JAN 07 2013				<i>[Signature]</i>	"
12.	Nozzle & Flange Rating Checked		<i>[Signature]</i>	JAN 07 2013				<i>[Signature]</i>	"
13.	Impact Tests		<i>[Signature]</i>	N/A				<i>[Signature]</i>	-
14.	Internals Checked		<i>[Signature]</i>	JAN 13 2013				<i>[Signature]</i>	Jan 13
15.	Final Internal Inspection	Shell Side Tube Side	<i>[Signature]</i>	JAN 13 2013	<i>x</i>	<i>8</i>	JAN 13 2014	<i>[Signature]</i>	Jan 13
16.	Weld Sizes Checked		<i>[Signature]</i>	JAN 17 2014				<i>[Signature]</i>	Feb 10
17.	Welder I.D. Checked		<i>[Signature]</i>	JAN 17 2014				<i>[Signature]</i>	Feb 10
18.	Final External Inspection		<i>[Signature]</i>	JAN 17 2014	<i>x</i>	<i>8</i>	FEB 10 2014	<i>[Signature]</i>	Feb 10
19.	Radiography		<i>[Signature]</i>	JAN 21 2014	<i>x</i>	<i>8</i>	FEB 13 2014	<i>[Signature]</i>	Feb 21
20.	Other N.D.E.		<i>[Signature]</i>	FEB 10 2014				<i>[Signature]</i>	"
21.	Final Ext. Prior to P.W.H.T.		<i>[Signature]</i>	FEB 10 2014				<i>[Signature]</i>	
22.	PWHT Chart Checked		<i>[Signature]</i>	FEB 10 2014	<i>x</i>	<i>8</i>	FEB 13 2014	<i>[Signature]</i>	Feb 10
23.	Hydrostatic Test	Shell Side Gauge #	<i>[Signature]</i>	FEB 10 2014	<i>x</i>	<i>8</i>	FEB 10 2014	<i>[Signature]</i>	Feb 10
		Tube Side Gauge #	<i>[Signature]</i>	FEB 10 2014	<i>x</i>	<i>8</i>	FEB 10 2014	<i>[Signature]</i>	Feb 10
24.	CRN Drawing	CRN#	<i>[Signature]</i>	FEB 10 2014	<i>x</i>	<i>8</i>	FEB 13 2014	<i>[Signature]</i>	Feb 21
25.	N.C.R. #		<i>[Signature]</i>					<i>[Signature]</i>	
26.	Nameplate Stamping		<i>[Signature]</i>	FEB 10 2014	<i>x</i>	<i>8</i>	FEB 13 2014	<i>[Signature]</i>	Feb 21
27.	Manuf. Data Report Completed & Verified		<i>[Signature]</i>	FEB 10 2014	<i>x</i>	<i>8</i>	FEB 13 2014	<i>[Signature]</i>	Feb 21
28.	Nameplate Installation		<i>[Signature]</i>	"				<i>[Signature]</i>	Feb 21

The Authorized Inspector shall be presented with the Travel Sheet prior to construction so that he can designate additional inspection points and/or Hold Points. Any revisions shall be marked with a delta symbol with revision number and described at the bottom of this page.

\* Denotes an A.I. Inspection Point    \*\* Denotes an A.I. Hold Point

CADO INDUSTRIES INC  
Quality Control Manual

Revision Number: 4.0

Revision Date: November 30, 2012

Section: 9 Page: 10 of 11

EXHIBIT 9.5 TRAVEL SHEET (FRONT)

DO NOT START CONSTRUCTION WITHOUT AI REVIEW				TRAVEL SHEET REVISION NO.:					
AI REVIEW: <i>SP</i>		REVIEW DATE: OCT 04 2013		SERIAL NO.: 1674		JOB NO.: 2013-070		VESSEL TYPE: 762 Separator	
DRAWING NO.: 2013-070-300		DWG. REVISION NO.: Rev. 0		TRAVEL SHEET INITIATION BY: <i>CA</i>					
Seq	Item	Comments	Q.C.I.	Date	A.I. Hold Points	A.I.	Date	Owner	Date
1.	Calculations in File		<i>[Signature]</i>	FEB 10 2014	X	<i>[Signature]</i>	FEB 13 2014	<i>[Signature]</i>	
2.	Release of App'd Dwg.		<i>[Signature]</i>	OCT 03 2013		<i>[Signature]</i>	OCT 04 2013	<i>[Signature]</i>	Jan 13
3.	Materials Examined		<i>[Signature]</i>	JAN 13 2013				<i>[Signature]</i>	
4.	Heat Numbers Recorded		<i>[Signature]</i>	JAN 21 2014	X	<i>[Signature]</i>	FEB 10 2014	<i>[Signature]</i>	Feb 10
5.	MTRs Checked		<i>[Signature]</i>	JAN 21 2014	X	<i>[Signature]</i>	FEB 13 2014	<i>[Signature]</i>	Feb 21
6.	WPS(s) Checked		<i>[Signature]</i>	OCT 03 2013	X	<i>[Signature]</i>	OCT 04 2013	<i>[Signature]</i>	Jan 13
7.	Welder(s) Qualified		<i>[Signature]</i>	JAN 13 2013				<i>[Signature]</i>	Feb 21
8.	Thicknesses Verified & Recorded		<i>[Signature]</i>	JAN 21 2014				<i>[Signature]</i>	
9.	Shell(s) & Head(s) Fit-up Inspection		<i>[Signature]</i>	JAN 21 2014	X	<i>[Signature]</i>	FEB 10 2014	<i>[Signature]</i>	Feb 10
10.	Nozzles & Fittings Fit-up Inspection		<i>[Signature]</i>	JAN 21 2014				<i>[Signature]</i>	Jan 13
11.	Nozzle Orientation		<i>[Signature]</i>	JAN 13 2013				<i>[Signature]</i>	21
12.	Nozzle & Flange Rating Checked		<i>[Signature]</i>	JAN 13 2013				<i>[Signature]</i>	21
13.	Impact Tests		<i>[Signature]</i>	N/A				<i>[Signature]</i>	-
14.	Internals Checked		<i>[Signature]</i>	JAN 13 2013				<i>[Signature]</i>	Jan 13
15.	Final Internal Inspection	Shell Side Tube Side	<i>[Signature]</i>	JAN 13 2013	X	<i>[Signature]</i>	JAN 13 2014	<i>[Signature]</i>	Jan 13
16.	Weld Sizes Checked		<i>[Signature]</i>	JAN 21 2014				<i>[Signature]</i>	Feb 10
17.	Welder I.D. Checked		<i>[Signature]</i>	JAN 21 2014				<i>[Signature]</i>	Feb 10
18.	Final External Inspection		<i>[Signature]</i>	FEB 10 2014	X	<i>[Signature]</i>	FEB 10 2014	<i>[Signature]</i>	Feb 10
19.	Radiography		<i>[Signature]</i>	FEB 10 2014	X	<i>[Signature]</i>	FEB 13 2014	<i>[Signature]</i>	Feb 21
20.	Other N.D.E.		<i>[Signature]</i>	FEB 10 2014				<i>[Signature]</i>	Feb 21
21.	Final Ext. Prior to P.W.H.T.		<i>[Signature]</i>	FEB 10 2014				<i>[Signature]</i>	
22.	PWHT Chart Checked		<i>[Signature]</i>	FEB 10 2014	X	<i>[Signature]</i>	FEB 13 2014	<i>[Signature]</i>	Feb 10
23.	Hydrostatic Test	Shell Side Gauge #	<i>[Signature]</i>	FEB 10 2014	XX	<i>[Signature]</i>	FEB 10 2014	<i>[Signature]</i>	Feb 10
		Tube Side Gauge #	<i>[Signature]</i>	FEB 10 2014		<i>[Signature]</i>		<i>[Signature]</i>	
24.	CRN Drawing	CRN#	<i>[Signature]</i>	FEB 10 2014	XX	<i>[Signature]</i>	FEB 13 2014	<i>[Signature]</i>	Feb 21
25.	N.C.R. #		<i>[Signature]</i>					<i>[Signature]</i>	
26.	Nameplate Stamping		<i>[Signature]</i>	FEB 10 2014	XX	<i>[Signature]</i>	FEB 13 2014	<i>[Signature]</i>	Feb 21
27.	Manuf. Data Report Completed & Verified		<i>[Signature]</i>	FEB 10 2014	XX	<i>[Signature]</i>	FEB 13 2014	<i>[Signature]</i>	Feb 21
28.	Nameplate Installation		<i>[Signature]</i>					<i>[Signature]</i>	

The Authorized Inspector shall be presented with the Travel Sheet prior to construction so that he can designate additional inspection points and/or Hold Points. Any revisions shall be marked with a delta symbol with revision number and described at the bottom of this page.

\* Denotes an A.I. Inspection Point    \*\* Denotes an A.I. Hold Point



the pressure equipment safety authority

# PRESSURE PIPING CONSTRUCTION AND TEST DATA REPORT

In accordance with the provisions of the PESR Section 31(1)

Shop Construction : Field Construction   
 Final Data Report : Partial Data Report  (from one ABSA- authorized Contractor to another ABSA- authorized Contractor).

Complete both sides of this Form

1. Constructed By: Cado Industries Inc. Owner's Job No: 2013-070 Unit 1  
(Name of ABSA authorized primary contractor or subcontractor)  
7491, 110 Avenue S.E. Calgary, Alberta, Canada, T2C 3B8  
(Address)

Certificate of Authorization Permit No. AQP-1426(S) Expiry Date: Feb. 10, 2016

2. Constructed For: Penn West Exploration  
(Name of primary contractor if different from above)  
#200, 207 - 9<sup>th</sup> Avenue S.W. Calgary, Alberta T2P 1K3  
(Address)

Certificate of Authorization Permit No. AQP-N/A Expiry Date: N/A  
(Required when the primary contractor undertakes some/all of the quality functions, e.g., NDE, PWHT, Tie-in, fabrication, hydro test, final assembly etc.)

3. Owner: Penn West Exploration #200, 207 - 9<sup>th</sup> Avenue S.W. Calgary, Alberta T2P 1K3  
(Name and address)  
Cordova d-55-A/94-P-10 Facility  
(Location of installation)

Certificate of Authorization Permit No. AQP- N/A Expiry Date: N/A  
(Required when the owner undertakes some/all of the quality functions, e.g., NDE, PWHT, Tie-in, fabrication, hydro test, final assembly etc.)

4. Piping Design Alberta Registration No.: PP-N/A  
(Required if aggregate piping volume is over 0.5m<sup>3</sup>)

5. Design Responsibility: Owner ; Contractor

6. WP No.: WP-2621.2; Company: CADO INDUSTRIES INC Owner's WP No. (If used): WP-N/A  
(Alberta Registration No.) (Alberta Registration No.)  
 WPS No(s). used: Cado 5, Cado 6; Owner's WPS No(s). (If used): N/A

7. Code: ASME B31.1 Non Boiler External Piping ; ASME B31.1 Boiler External Piping   
 B31.5 ; B31.9 ; CSA Z662 Steam Pipelines   
 ASME B31.3  - Service Category: Normal , D , M , High Pressure ; Severe Cyclic Condition

Drawing No. Rev. No. Line No.	Fluid (Air/Stm. Etc.)	Des. Press. kPa	Des. Temp. °C (Max. & Min )	Pressure Test kPa	Test Medium	Pipe Mat'l Spec. & Grade	C.A. mm	Pipe NPS & Schedule	Flange Material & Rating	PWHT/ Preheat Temp. °C	NDE
070-01A Rev. 0 Skid Inlet (V-2100)	W.O.G.	9376	90/-29	14064	Water	SA-106-B	1.6	4" Sch 80 2" Sch 80	SA-105-N CL 600	None/10°C	RT 100% VT 100%
070-01B Rev. 0 Skid Inlet (V-2100)	W.O.G.	9376	90/-29	14064	Water	SA-106-B	1.6	4" Sch 80	SA-105-N CL 600	None/10°C	RT 100% VT 100%
070-02A Rev. 0 Skid Inlet (V-2200)	W.O.G.	9376	90/-29	14064	Water	SA-106-B	1.6	4" Sch 80 2" Sch 80	SA-105-N CL 600	None/10°C	RT 100% VT 100%
070-02B Rev. 0 Skid Inlet (V-2200)	W.O.G.	9376	90/-29	14064	Water	SA-106-B	1.6	4" Sch 80	SA-105-N CL 600	None/10°C	RT 100% VT 100%
070-03A Rev. 0 Skid Inlet (V-2300)	W.O.G.	9376	90/-29	14064	Water	SA-106-B	1.6	4" Sch 80 2" Sch 80	SA-105-N CL 600	None/10°C	RT 100% VT 100%
070-03B Rev. 0 Skid Inlet (V-2300)	W.O.G.	9376	90/-29	14064	Water	SA-106-B	1.6	4" Sch 80	SA-105-N CL 600	None/10°C	RT 100% VT 100%

Drawing No. Rev. No. Line No.	Fluid (Air/Stm. Etc.)	Des. Press. kPa	Des. Temp. °C (Max. & Min.)	Pressure Test kPa	Test Medium	Pipe Mat'l Spec. & Grade	C.A mm	Pipe NPS & Schedule	Flange Material & Rating	PWHT/ Preheat Temp °C	NDE
070-04A Rev. 0 Skid Inlet (V-2400)	W.O.G.	9376	90/-29	14064	Water	SA-106-B	1.6	4" Sch 80 2" Sch 80	SA-105-N CL 600	None/10°C	RT 100% VT 100%
070-04B Rev. 0 Skid Inlet (V-2400)	W.O.G.	9376	90/-29	14064	Water	SA-106-B	1.6	4" Sch 80	SA-105-N CL 600	None/10°C	RT 100% VT 100%
070-05A Rev. 0 Process Outlet (V-2100)	W.O.G.	9376	90/-29	14064	Water	SA-106-B	1.6	4" Sch 80	SA-105-N CL 600	None/10°C	RT 100% VT 100%
070-05B Rev. 0 Process Outlet (V-2100)	W.O.G.	9376	90/-29	14064	Water	SA-106-B	1.6	4" Sch 80	SA-105-N CL 600	None/10°C	RT 100% VT 100%
070-05C Rev. 0 Process Outlet (V-2100)	W.O.G.	9376	90/-29	14064	Water	SA-106-B	1.6	2" Sch 80	SA-105-N CL 600	None/10°C	RT 100% VT 100%
070-05D Rev. 0 Process Gas Outlet (V-2100)	W.O.G.	9376	90/-29	14064	Water	SA-106-B	1.6	4" Sch 80 2" Sch 80	SA-105-N CL 600	None/10°C	RT 100% VT 100%
070-05E Rev. 0 Process Gas Outlet (V-2100)	W.O.G.	9376	90/-29	14064	Water	SA-106-B	1.6	4" Sch 80	SA-105-N CL 600	None/10°C	RT 100% VT 100%
070-05F Rev. 0 Process Gas Outlet (V-2100)	W.O.G.	9376	90/-29	14064	Water	SA-106-B	1.6	4" Sch 80	SA-105-N CL 600	None/10°C	RT 100% VT 100%
070-05G Rev. 0 Process Gas Outlet Header	W.O.G.	9376	90/-29	14064	Water	SA-106-B	1.6	4" Sch 80	SA-105-N CL 600	None/10°C	RT 100% VT 100%
070-05H Rev. 0 Process Gas Outlet Header	W.O.G.	9376	90/-29	14064	Water	SA-106-B	1.6	8" Sch 80 4" Sch 80	SA-105-N CL 600	None/10°C	RT 100% VT 100%
070-05J Rev. 0 Process Gas Outlet Header	W.O.G.	9376	90/-29	14064	Water	SA-106-B	1.6	8" Sch 80 4" Sch 80	SA-105-N CL 600	None/10°C	RT 100% VT 100%
070-05K Rev. 0 Process Gas Outlet Header	W.O.G.	9376	90/-29	14064	Water	SA-106-B	1.6	8" Sch 80 4" Sch 80	SA-105-N CL 600	None/10°C	RT 100% VT 100%
070-06A Rev. 0 Process Outlet (V-2200)	W.O.G.	9376	90/-29	14064	Water	SA-106-B	1.6	4" Sch 80	SA-105-N CL 600	None/10°C	RT 100% VT 100%
070-06B Rev. 0 Process Outlet (V-2200)	W.O.G.	9376	90/-29	14064	Water	SA-106-B	1.6	4" Sch 80	SA-105-N CL 600	None/10°C	RT 100% VT 100%
070-06C Rev. 0 Process Gas Outlet (V-2200)	W.O.G.	9376	90/-29	14064	Water	SA-106-B	1.6	2" Sch 80	SA-105-N CL 600	None/10°C	RT 100% VT 100%
070-06D Rev. 0 Process Gas Outlet (V-2200)	W.O.G.	9376	90/-29	14064	Water	SA-106-B	1.6	4" Sch 80 2" Sch 80	SA-105-N CL 600	None/10°C	RT 100% VT 100%
070-06E Rev. 0 Process Gas Outlet (V-2200)	W.O.G.	9376	90/-29	14064	Water	SA-106-B	1.6	4" Sch 80	SA-105-N CL 600	None/10°C	RT 100% VT 100%

Drawing No. Rev. No. Line No.	Fluid (Air/Stm. Etc.)	Des. Press. kPa	Des. Temp. °C (Max. & Min.)	Pressure Test kPa	Test Medium	Pipe Mat'l Spec. & Grade	C.A. mm	Pipe NPS & Schedule	Flange Material & Rating	PWHT/ Preheat Temp. °C	NDE
070-06F Rev. 0 Process Gas Outlet (V-2200)	W.O.G.	9376	90/29	14064	Water	SA-106-B	1.6	4" Sch 80	SA-105-N CL 600	None/10°C	RT 100% VT 100%
070-07A Rev. 0 Process Outlet (V-2300)	W.O.G.	9376	90/29	14064	Water	SA-106-B	1.6	4" Sch 80	SA-105-N CL 600	None/10°C	RT 100% VT 100%
070-07B Rev. 0 Process Outlet (V-2300)	W.O.G.	9376	90/29	14064	Water	SA-106-B	1.6	4" Sch 80	SA-105-N CL 600	None/10°C	RT 100% VT 100%
070-07C Rev. 0 Process Gas Outlet (V-2300)	W.O.G.	9376	90/29	14064	Water	SA-106-B	1.6	2" Sch 80	SA-105-N CL 600	None/10°C	RT 100% VT 100%
070-07D Rev. 0 Process Gas Outlet (V-2300)	W.O.G.	9376	90/29	14064	Water	SA-106-B	1.6	4" Sch 80 2" Sch 80	SA-105-N CL 600	None/10°C	RT 100% VT 100%
070-07E Rev. 0 Process Gas Outlet (V-2300)	W.O.G.	9376	90/29	14064	Water	SA-106-B	1.6	4" Sch 80	SA-105-N CL 600	None/10°C	RT 100% VT 100%
070-07F Rev. 0 Process Gas Outlet (V-2300)	W.O.G.	9376	90/29	14064	Water	SA-106-B	1.6	4" Sch 80	SA-105-N CL 600	None/10°C	RT 100% VT 100%
070-08A Rev. 0 Process Outlet (V-2400)	W.O.G.	9376	90/29	14064	Water	SA-106-B	1.6	4" Sch 80	SA-105-N CL 600	None/10°C	RT 100% VT 100%
070-08B Rev. 0 Process Outlet (V-2400)	W.O.G.	9376	90/29	14064	Water	SA-106-B	1.6	4" Sch 80	SA-105-N CL 600	None/10°C	RT 100% VT 100%
070-08C Rev. 0 Process Gas Outlet (V-2400)	W.O.G.	9376	90/29	14064	Water	SA-106-B	1.6	2" Sch 80	SA-105-N CL 600	None/10°C	RT 100% VT 100%
070-08D Rev. 0 Process Gas Outlet (V-2400)	W.O.G.	9376	90/29	14064	Water	SA-106-B	1.6	4" Sch 80 2" Sch 80	SA-105-N CL 600	None/10°C	RT 100% VT 100%
070-08E Rev. 0 Process Gas Outlet (V-2400)	W.O.G.	9376	90/29	14064	Water	SA-106-B	1.6	4" Sch 80	SA-105-N CL 600	None/10°C	RT 100% VT 100%
070-08F Rev. 0 Process Gas Outlet (V-2400)	W.O.G.	9376	90/29	14064	Water	SA-106-B	1.6	4" Sch 80	SA-105-N CL 600	None/10°C	RT 100% VT 100%
070-09A Rev. 0 Fuel Gas Outlet	W.O.G.	9376	90/29	14064	Water	SA-106-B	1.6	2" Sch 80	SA-105-N CL 600	None/10°C	RT 100% VT 100%
070-09B Rev. 0 Fuel Gas Outlet	W.O.G.	9376	90/29	14064	Water	SA-106-B	1.6	2" Sch 80	SA-105-N CL 600	None/10°C	RT 100% VT 100%
070-09C Rev. 0 Fuel Gas Outlet	W.O.G.	9376	90/29	14064	Water	SA-106-B	1.6	2" Sch 80	SA-105-N CL 600	None/10°C	RT 100% VT 100%
070-09D Rev. 0 Fuel Gas Outlet	W.O.G.	9376	90/29	14064	Water	SA-106-B	1.6	2" Sch 80	SA-105-N CL 600	None/10°C	RT 100% VT 100%

Drawing No. Rev. No. Line No.	Fluid (Air/Stm. Etc.)	Des. Press. kPa	Des. Temp. °C (Max. & Min.)	Pressure Test kPa	Test Medium	Pipe Mat'l Spec. & Grade	C.A mm	Pipe NPS & Schedule	Flange Material & Rating	PWHT/ Preheat Temp. °C	NDE
070-09E Rev. 0 Fuel Gas Outlet	W.O.G.	9376	90/-29	14064	Water	SA-106-B	1.6	2" Sch 80	SA-105-N CL 600	None/10°C	RT 100% VT 100%
070-09F Rev. 0 Fuel Gas Outlet	W.O.G.	9376	90/-29	14064	Water	SA-106-B	1.6	2" Sch 80	SA-105-N CL 600	None/10°C	RT 100% VT 100%
070-09G Rev. 0 Fuel Gas Outlet	W.O.G.	9376	90/-29	14064	Water	SA-106-B	1.6	2" Sch 80	SA-105-N CL 600	None/10°C	RT 100% VT 100%
070-09H Rev. 0 Fuel Gas Outlet	W.O.G.	9376	90/-29	14064	Water	SA-106-B	1.6	2" Sch 80	SA-105-N CL 600	None/10°C	RT 100% VT 100%
070-09J Rev. 0 Fuel Gas Outlet	W.O.G.	9376	90/-29	14064	Water	SA-106-B	1.6	2" Sch 80	SA-105-N CL 600	None/10°C	RT 100% VT 100%
070-10A Rev. 0 Condensate Outlet (V-2100)	W.O.G.	9376	90/-29	14064	Water	SA-106-B	1.6	3" Sch 80 2" Sch 80	SA-105-N CL 600	None/10°C	RT 100% VT 100%
070-10B Rev. 0 Condensate Outlet (V-2100)	W.O.G.	9376	90/-29	14064	Water	SA-106-B	1.6	3" Sch 80 2" Sch 80	SA-105-N CL 600	None/10°C	RT 100% VT 100%
070-10C Rev. 0 Condensate Outlet (V-2100)	W.O.G.	9376	90/-29	14064	Water	SA-106-B	1.6	2" Sch 80	SA-105-N CL 600	None/10°C	RT 100% VT 100%
070-10D Rev. 0 Condensate Outlet (V-2100)	W.O.G.	9376	90/-29	14064	Water	SA-106-B	1.6	2" Sch 80	SA-105-N CL 600	None/10°C	RT 100% VT 100%
070-10E Rev. 0 Condensate Outlet (V-2100)	W.O.G.	9376	90/-29	14064	Water	SA-106-B	1.6	2" Sch 80	SA-105-N CL 600	None/10°C	RT 100% VT 100%
070-11A Rev. 0 Condensate Outlet (V-2200)	W.O.G.	9376	90/-29	14064	Water	SA-106-B	1.6	3" Sch 80 2" Sch 80	SA-105-N CL 600	None/10°C	RT 100% VT 100%
070-11B Rev. 0 Condensate Outlet (V-2200)	W.O.G.	9376	90/-29	14064	Water	SA-106-B	1.6	3" Sch 80 2" Sch 80	SA-105-N CL 600	None/10°C	RT 100% VT 100%
070-11C Rev. 0 Condensate Outlet (V-2200)	W.O.G.	9376	90/-29	14064	Water	SA-106-B	1.6	2" Sch 80	SA-105-N CL 600	None/10°C	RT 100% VT 100%
070-11D Rev. 0 Condensate Outlet (V-2200)	W.O.G.	9376	90/-29	14064	Water	SA-106-B	1.6	2" Sch 80	SA-105-N CL 600	None/10°C	RT 100% VT 100%
070-11E Rev. 0 Condensate Outlet (V-2200)	W.O.G.	9376	90/-29	14064	Water	SA-106-B	1.6	2" Sch 80	SA-105-N CL 600	None/10°C	RT 100% VT 100%
070-12A Rev. 0 Condensate Outlet (V-2300)	W.O.G.	9376	90/-29	14064	Water	SA-106-B	1.6	3" Sch 80 2" Sch 80	SA-105-N CL 600	None/10°C	RT 100% VT 100%

Drawing No. Rev. No. Line No.	Fluid (Air/Stm. Etc.)	Des. Press. kPa	Des. Temp. °C (Max. & Min.)	Pressure Test kPa	Test Medium	Pipe Mat'l Spec. & Grade	C.A. mm	Pipe NPS & Schedule	Flange Material & Rating	PWHT/ Preheat Temp. °C	NDE
070-12B Rev. 0 Condensate Outlet (V-2300)	W.O.G.	9376	90/-29	14064	Water	SA-106-B	1.6	3" Sch 80 2" Sch 80	SA-105-N CL 600	None/10°C	RT 100% VT 100%
070-12C Rev. 0 Condensate Outlet (V-2300)	W.O.G.	9376	90/-29	14064	Water	SA-106-B	1.6	2" Sch 80	SA-105-N CL 600	None/10°C	RT 100% VT 100%
070-12D Rev. 0 Condensate Outlet (V-2300)	W.O.G.	9376	90/-29	14064	Water	SA-106-B	1.6	2" Sch 80	SA-105-N CL 600	None/10°C	RT 100% VT 100%
070-12E Rev. 0 Condensate Outlet (V-2300)	W.O.G.	9376	90/-29	14064	Water	SA-106-B	1.6	2" Sch 80	SA-105-N CL 600	None/10°C	RT 100% VT 100%
070-13A Rev. 0 Condensate Outlet (V-2400)	W.O.G.	9376	90/-29	14064	Water	SA-106-B	1.6	3" Sch 80 2" Sch 80	SA-105-N CL 600	None/10°C	RT 100% VT 100%
070-13B Rev. 0 Condensate Outlet (V-2400)	W.O.G.	9376	90/-29	14064	Water	SA-106-B	1.6	3" Sch 80 2" Sch 80	SA-105-N CL 600	None/10°C	RT 100% VT 100%
070-13C Rev. 0 Condensate Outlet (V-2400)	W.O.G.	9376	90/-29	14064	Water	SA-106-B	1.6	2" Sch 80	SA-105-N CL 600	None/10°C	RT 100% VT 100%
070-13D Rev. 0 Condensate Outlet (V-2400)	W.O.G.	9376	90/-29	14064	Water	SA-106-B	1.6	2" Sch 80	SA-105-N CL 600	None/10°C	RT 100% VT 100%
070-13E Rev. 0 Condensate Outlet (V-2400)	W.O.G.	9376	90/-29	14064	Water	SA-106-B	1.6	2" Sch 80	SA-105-N CL 600	None/10°C	RT 100% VT 100%
070-14A Rev. 0 Water Outlet (V-2100)	W.O.G.	9376	90/-29	14064	Water	SA-106-B	1.6	3" Sch 80 2" Sch 80	SA-105-N CL 600	None/10°C	RT 100% VT 100%
070-14B Rev. 0 Water Outlet (V-2100)	W.O.G.	9376	90/-29	14064	Water	SA-106-B	1.6	3" Sch 80 2" Sch 80	SA-105-N CL 600	None/10°C	RT 100% VT 100%
070-14C Rev. 0 Water Outlet (V-2100)	W.O.G.	9376	90/-29	14064	Water	SA-106-B	1.6	2" Sch 80	SA-105-N CL 600	None/10°C	RT 100% VT 100%
070-14D Rev. 0 Water Outlet (V-2100)	W.O.G.	9376	90/-29	14064	Water	SA-106-B	1.6	2" Sch 80	SA-105-N CL 600	None/10°C	RT 100% VT 100%
070-14E Rev. 0 Water Outlet (V-2100)	W.O.G.	9376	90/-29	14064	Water	SA-106-B	1.6	2" Sch 80	SA-105-N CL 600	None/10°C	RT 100% VT 100%
070-15A Rev. 0 Water Outlet (V-2200)	W.O.G.	9376	90/-29	14064	Water	SA-106-B	1.6	3" Sch 80 2" Sch 80	SA-105-N CL 600	None/10°C	RT 100% VT 100%
070-15B Rev. 0 Water Outlet (V-2200)	W.O.G.	9376	90/-29	14064	Water	SA-106-B	1.6	3" Sch 80 2" Sch 80	SA-105-N CL 600	None/10°C	RT 100% VT 100%
070-15C Rev. 0 Water Outlet (V-2200)	W.O.G.	9376	90/-29	14064	Water	SA-106-B	1.6	2" Sch 80	SA-105-N CL 600	None/10°C	RT 100% VT 100%

Drawing No. Rev. No. Line No.	Fluid (Air/Stm. Etc.)	Des. Press. kPa	Des. Temp. °C (Max. & Min.)	Pressure Test kPa	Test Medium	Pipe Mat'l Spec. & Grade	C.A. mm	Pipe NPS & Schedule	Flange Material & Rating	PWHT/ Preheat Temp. °C	NDE
070-15D Rev. 0 Water Outlet (V-2200)	W.O.G.	9376	90/29	14064	Water	SA-106-B	1.6	2" Sch 80	SA-105-N CL 600	None/10°C	RT 100% VT 100%
070-15E Rev. 0 Water Outlet (V-2200)	W.O.G.	9376	90/29	14064	Water	SA-106-B	1.6	2" Sch 80	SA-105-N CL 600	None/10°C	RT 100% VT 100%
070-16A Rev. 0 Water Outlet (V-2300)	W.O.G.	9376	90/29	14064	Water	SA-106-B	1.6	3" Sch 80 2" Sch 80	SA-105-N CL 600	None/10°C	RT 100% VT 100%
070-16B Rev. 0 Water Outlet (V-2300)	W.O.G.	9376	90/29	14064	Water	SA-106-B	1.6	3" Sch 80 2" Sch 80	SA-105-N CL 600	None/10°C	RT 100% VT 100%
070-16C Rev. 0 Water Outlet (V-2300)	W.O.G.	9376	90/29	14064	Water	SA-106-B	1.6	2" Sch 80	SA-105-N CL 600	None/10°C	RT 100% VT 100%
070-16D Rev. 0 Water Outlet (V-2300)	W.O.G.	9376	90/29	14064	Water	SA-106-B	1.6	2" Sch 80	SA-105-N CL 600	None/10°C	RT 100% VT 100%
070-16E Rev. 0 Water Outlet (V-2300)	W.O.G.	9376	90/29	14064	Water	SA-106-B	1.6	2" Sch 80	SA-105-N CL 600	None/10°C	RT 100% VT 100%
070-17A Rev. 0 Water Outlet (V-2400)	W.O.G.	9376	90/29	14064	Water	SA-106-B	1.6	3" Sch 80 2" Sch 80	SA-105-N CL 600	None/10°C	RT 100% VT 100%
070-17B Rev. 0 Water Outlet (V-2400)	W.O.G.	9376	90/29	14064	Water	SA-106-B	1.6	3" Sch 80 2" Sch 80	SA-105-N CL 600	None/10°C	RT 100% VT 100%
070-17C Rev. 0 Water Outlet (V-2400)	W.O.G.	9376	90/29	14064	Water	SA-106-B	1.6	2" Sch 80	SA-105-N CL 600	None/10°C	RT 100% VT 100%
070-17D Rev. 0 Water Outlet (V-2400)	W.O.G.	9376	90/29	14064	Water	SA-106-B	1.6	2" Sch 80	SA-105-N CL 600	None/10°C	RT 100% VT 100%
070-17E Rev. 0 Water Outlet (V-2400)	W.O.G.	9376	90/29	14064	Water	SA-106-B	1.6	2" Sch 80	SA-105-N CL 600	None/10°C	RT 100% VT 100%
070-18A Rev. 0 Drain (V-2100)	W.O.G.	9376	90/29	14064	Water	SA-106-B	1.6	2" Sch 80	SA-105-N CL 600	None/10°C	RT 100% VT 100%
070-18B Rev. 0 Drain (V-2100)	W.O.G.	9376	90/29	14064	Water	SA-106-B	1.6	2" Sch 80	SA-105-N CL 600	None/10°C	RT 100% VT 100%
070-19A Rev. 0 Drain (V-2200)	W.O.G.	9376	90/29	14064	Water	SA-106-B	1.6	2" Sch 80	SA-105-N CL 600	None/10°C	RT 100% VT 100%
070-19B Rev. 0 Drain (V-2200)	W.O.G.	9376	90/29	14064	Water	SA-106-B	1.6	2" Sch 80	SA-105-N CL 600	None/10°C	RT 100% VT 100%
070-20A Rev. 0 Drain (V-2300)	W.O.G.	9376	90/29	14064	Water	SA-106-B	1.6	2" Sch 80	SA-105-N CL 600	None/10°C	RT 100% VT 100%
070-20B Rev. 0 Drain (V-2300)	W.O.G.	9376	90/29	14064	Water	SA-106-B	1.6	2" Sch 80	SA-105-N CL 600	None/10°C	RT 100% VT 100%
070-21A Rev. 0 Drain (V-2400)	W.O.G.	9376	90/29	14064	Water	SA-106-B	1.6	2" Sch 80	SA-105-N CL 600	None/10°C	RT 100% VT 100%
070-21B Rev. 0 Drain (V-2400)	W.O.G.	9376	90/29	14064	Water	SA-106-B	1.6	2" Sch 80	SA-105-N CL 600	None/10°C	RT 100% VT 100%

Drawing No. Rev. No Line No.	Fluid (Air/Stm. Etc.)	Des. Press. kPa	Des. Temp.°C (Max. & Min.)	Pressure Test kPa	Test Medium	Pipe Mat'l Spec. & Grade	C.A. mm	Pipe NPS & Schedule	Flange Material & Rating	PWHT/ Preheat Temp. °C	NDE
070-22A Rev. 0 Water Outlet Header	W.O.G.	9376	90/-29	14064	Water	SA-106-B	1.6	4" Sch 80 2" Sch 80	SA-105-N CL 600	None/10°C	RT 100% VT 100%
070-22B Rev. 0 Water Outlet Header	W.O.G.	9376	90/-29	14064	Water	SA-106-B	1.6	3" Sch 80	SA-105-N CL 600	None/10°C	RT 100% VT 100%
070-22C Rev. 0 Water Outlet Header	W.O.G.	9376	90/-29	14064	Water	SA-106-B	1.6	4" Sch 80 2" Sch 80	SA-105-N CL 600	None/10°C	RT 100% VT 100%
070-22D Rev. 0 Water Outlet Header	W.O.G.	9376	90/-29	14064	Water	SA-106-B	1.6	3" Sch 80	SA-105-N CL 600	None/10°C	RT 100% VT 100%
070-22E Rev. 0 Water Outlet Header	W.O.G.	9376	90/-29	14064	Water	SA-106-B	1.6	4" Sch 80 2" Sch 80	SA-105-N CL 600	None/10°C	RT 100% VT 100%
070-22F Rev. 0 Water Outlet Header	W.O.G.	9376	90/-29	14064	Water	SA-106-B	1.6	4" Sch 80 2" Sch 80	SA-105-N CL 600	None/10°C	RT 100% VT 100%
070-22G Rev. 0 Water Outlet Header	W.O.G.	9376	90/-29	14064	Water	SA-106-B	1.6	3" Sch 80	SA-105-N CL 600	None/10°C	RT 100% VT 100%
070-22H Rev. 0 Water Outlet Header	W.O.G.	9376	90/-29	14064	Water	N/A	1.6	N/A	SA-105-N CL 600	None/10°C	RT 100% VT 100%
070-22J Rev. 0 Water Outlet Header	W.O.G.	9376	90/-29	14064	Water	SA-106-B	1.6	3" Sch 80	SA-105-N CL 600	None/10°C	RT 100% VT 100%
070-22K Rev. 0 Water Outlet Header	W.O.G.	9376	90/-29	14064	Water	SA-106-B	1.6	4" Sch 80	SA-105-N CL 600	None/10°C	RT 100% VT 100%
070-23C Rev. 0 H.P. Flare Header	W.O.G.	9376	90/-29	14064	Water	SA-106-B	1.6	1" Sch 80	SA-105-N CL 600	None/10°C	RT 100% VT 100%
070-23G Rev. 0 H.P. Flare Header	W.O.G.	9376	90/-29	14064	Water	SA-106-B	1.6	1" Sch 80	SA-105-N CL 600	None/10°C	RT 100% VT 100%
070-23M Rev. 0 H.P. Flare Header	W.O.G.	9376	90/-29	14064	Water	SA-106-B	1.6	1" Sch 80	SA-105-N CL 600	None/10°C	RT 100% VT 100%
070-23R Rev. 0 H.P. Flare Header	W.O.G.	9376	90/-29	14064	Water	SA-106-B	1.6	1" Sch 80	SA-105-N CL 600	None/10°C	RT 100% VT 100%
070-24A Rev. 0 L.P. Flare Header	W.O.G.	1965	90/-29	2162	Air	SA-106-B	1.6	2" Std	SA-105-N CL 150	None/10°C	RT 100% VT 100%
070-24B Rev. 0 L.P. Flare Header	W.O.G.	1965	90/-29	2162	Air	SA-106-B	1.6	2" Std	SA-105-N CL 150	None/10°C	RT 100% VT 100%
070-24C Rev. 0 L.P. Flare Header	W.O.G.	1965	90/-29	2162	Air	SA-106-B	1.6	2" Std	SA-105-N CL 150	None/10°C	RT 100% VT 100%
070-24D Rev. 0 L.P. Flare Header	W.O.G.	1965	90/-29	2162	Air	SA-106-B	1.6	2" Std	SA-105-N CL 150	None/10°C	RT 100% VT 100%
070-24E Rev. 0 L.P. Flare Header	W.O.G.	1965	90/-29	2162	Air	SA-106-B	1.6	2" Std	SA-105-N CL 150	None/10°C	RT 100% VT 100%
070-24F Rev. 0 L.P. Flare Header	W.O.G.	1965	90/-29	2162	Air	SA-106-B	1.6	2" Std	SA-105-N CL 150	None/10°C	RT 100% VT 100%





the pressure equipment safety authority

# PRESSURE PIPING CONSTRUCTION AND TEST DATA REPORT

In accordance with the provisions of the PESR Section 31(1)

Shop Construction  Field Construction   
 Final Data Report  Partial Data Report  (from one ABSA- authorized Contractor to another ABSA- authorized Contractor).

Complete both sides of this Form

1. Constructed By: Cado Industries Inc. Owner's Job No: 2013-070 Unit 2  
(Name of ABSA authorized primary contractor or subcontractor)  
7491, 110 Avenue S.E. Calgary, Alberta, Canada, T2C 3B8  
(Address)

Certificate of Authorization Permit No. AQP-1426(S) Expiry Date: Feb. 10, 2016

2. Constructed For: Penn West Exploration  
(Name of primary contractor if different from above)  
#200, 207 - 9<sup>th</sup> Avenue S.W. Calgary, Alberta T2P 1K3  
(Address)

Certificate of Authorization Permit No. AQP-N/A Expiry Date: N/A  
(Required when the primary contractor undertakes some/all of the quality functions, e.g., NDE, PWHT, Tie-in, fabrication, hydro test, final assembly etc.)

3. Owner: Penn West Exploration #200, 207 - 9<sup>th</sup> Avenue S.W. Calgary, Alberta T2P 1K3  
(Name and address)  
Cordova d-55-A/94-P-10 Facility  
(Location of installation)

Certificate of Authorization Permit No. AQP- N/A Expiry Date: N/A  
(Required when the owner undertakes some/all of the quality functions, e.g., NDE, PWHT, Tie-in, fabrication, hydro test, final assembly etc.)

4. Piping Design Alberta Registration No.: PP-N/A  
(Required if aggregate piping volume is over 0.5m<sup>3</sup>)

5. Design Responsibility: Owner  Contractor

6. WP No.: WP-2621.2 ; Company: CADO INDUSTRIES INC Owner's WP No. (If used): WP-N/A  
(Alberta Registration No.)  (Alberta Registration No.)  
 WPS No(s). used: Cado 5, Cado 6 ; Owner's WPS No(s). (If used): N/A

7. Code: ASME B31.1 Non Boiler External Piping  ASME B31.1 Boiler External Piping   
 B31.5  B31.9  CSA Z662 Steam Pipelines   
 ASME B31.3  - Service Category: Normal  D  M  High Pressure  Severe Cyclic Condition

Drawing No. Rev. No. Line No.	Fluid (Air/Stm. Etc.)	Des. Press. kPa	Des. Temp. °C (Max & Min.)	Pressure Test kPa	Test Medium	Pipe Mat'l Spec. & Grade	C.A. mm	Pipe NPS & Schedule	Flange Material & Rating	PWHT/ Preheat Temp. °C	NDE
070-01A Rev. 0 Skid Inlet (V-2100)	W.O.G.	9376	90/-29	14064	Water	SA-106-B	1.6	4" Sch 80 2" Sch 80	SA-105-N CL 600	None/10°C	RT 100% VT 100%
070-01B Rev. 0 Skid Inlet (V-2100)	W.O.G.	9376	90/-29	14064	Water	SA-106-B	1.6	4" Sch 80	SA-105-N CL 600	None/10°C	RT 100% VT 100%
070-02A Rev. 0 Skid Inlet (V-2200)	W.O.G.	9376	90/-29	14064	Water	SA-106-B	1.6	4" Sch 80 2" Sch 80	SA-105-N CL 600	None/10°C	RT 100% VT 100%
070-02B Rev. 0 Skid Inlet (V-2200)	W.O.G.	9376	90/-29	14064	Water	SA-106-B	1.6	4" Sch 80	SA-105-N CL 600	None/10°C	RT 100% VT 100%
070-03A Rev. 0 Skid Inlet (V-2300)	W.O.G.	9376	90/-29	14064	Water	SA-106-B	1.6	4" Sch 80 2" Sch 80	SA-105-N CL 600	None/10°C	RT 100% VT 100%
070-03B Rev. 0 Skid Inlet (V-2300)	W.O.G.	9376	90/-29	14064	Water	SA-106-B	1.6	4" Sch 80	SA-105-N CL 600	None/10°C	RT 100% VT 100%

Drawing No Rev. No. Line No.	Fluid (Air/Steam Etc.)	Des. Pres. kPa	Des. Temp. °C (Max. & Min.)	Pressure Test kPa	Test Medium	Pipe Mat'l Spec. & Grade	C.A. mm	Pipe NPS & Schedule	Flange Material & Rating	PWHT/ Preheat Temp. °C	NDE
070-04A Rev. 0 Skid Inlet (V-2400)	W.O.G.	9376	90/-29	14064	Water	SA-106-B	1.6	4" Sch 80 2" Sch 80	SA-105-N CL 600	None/10°C	RT 100% VT 100%
070-04B Rev. 0 Skid Inlet (V-2400)	W.O.G.	9376	90/-29	14064	Water	SA-106-B	1.6	4" Sch 80	SA-105-N CL 600	None/10°C	RT 100% VT 100%
070-05A Rev. 0 Process Outlet (V-2100)	W.O.G.	9376	90/-29	14064	Water	SA-106-B	1.6	4" Sch 80	SA-105-N CL 600	None/10°C	RT 100% VT 100%
070-05B Rev. 0 Process Outlet (V-2100)	W.O.G.	9376	90/-29	14064	Water	SA-106-B	1.6	4" Sch 80	SA-105-N CL 600	None/10°C	RT 100% VT 100%
070-05C Rev. 0 Process Outlet (V-2100)	W.O.G.	9376	90/-29	14064	Water	SA-106-B	1.6	2" Sch 80	SA-105-N CL 600	None/10°C	RT 100% VT 100%
070-05D Rev. 0 Process Gas Outlet (V-2100)	W.O.G.	9376	90/-29	14064	Water	SA-106-B	1.6	4" Sch 80 2" Sch 80	SA-105-N CL 600	None/10°C	RT 100% VT 100%
070-05E Rev. 0 Process Gas Outlet (V-2100)	W.O.G.	9376	90/-29	14064	Water	SA-106-B	1.6	4" Sch 80	SA-105-N CL 600	None/10°C	RT 100% VT 100%
070-05F Rev. 0 Process Gas Outlet (V-2100)	W.O.G.	9376	90/-29	14064	Water	SA-106-B	1.6	4" Sch 80	SA-105-N CL 600	None/10°C	RT 100% VT 100%
070-05G Rev. 0 Process Gas Outlet Header	W.O.G.	9376	90/-29	14064	Water	SA-106-B	1.6	8" Sch 80	SA-105-N CL 600	None/10°C	RT 100% VT 100%
070-05H Rev. 0 Process Gas Outlet Header	W.O.G.	9376	90/-29	14064	Water	SA-106-B	1.6	4" Sch 80	SA-105-N CL 600	None/10°C	RT 100% VT 100%
070-05J Rev. 0 Process Gas Outlet Header	W.O.G.	9376	90/-29	14064	Water	SA-106-B	1.6	4" Sch 80	SA-105-N CL 600	None/10°C	RT 100% VT 100%
070-05K Rev. 0 Process Gas Outlet Header	W.O.G.	9376	90/-29	14064	Water	SA-106-B	1.6	8" Sch 80 4" Sch 80	SA-105-N CL 600	None/10°C	RT 100% VT 100%
070-05L Rev. 0 Process Gas Outlet Header	W.O.G.	9376	90/-29	14064	Water	SA-106-B	1.6	8" Sch 80 4" Sch 80	SA-105-N CL 600	None/10°C	RT 100% VT 100%
070-06A Rev. 0 Process Outlet (V-2200)	W.O.G.	9376	90/-29	14064	Water	SA-106-B	1.6	4" Sch 80	SA-105-N CL 600	None/10°C	RT 100% VT 100%
070-06B Rev. 0 Process Outlet (V-2200)	W.O.G.	9376	90/-29	14064	Water	SA-106-B	1.6	4" Sch 80	SA-105-N CL 600	None/10°C	RT 100% VT 100%
070-06C Rev. 0 Process Gas Outlet (V-2200)	W.O.G.	9376	90/-29	14064	Water	SA-106-B	1.6	2" Sch 80	SA-105-N CL 600	None/10°C	RT 100% VT 100%
070-06D Rev. 0 Process Gas Outlet (V-2200)	W.O.G.	9376	90/-29	14064	Water	SA-106-B	1.6	4" Sch 80 2" Sch 80	SA-105-N CL 600	None/10°C	RT 100% VT 100%

Drawing No. Rev. No. Line No.	Fluid (Air/Strm Etc.)	Des. Press. kPa	Des. Temp °C (Max. & Min.)	Pressure Test kPa	Test Medium	Pipe Mat'l Spec. & Grade	C.A. mm	Pipe NPS & Schedule	Flange Material & Rating	PWHT/ Preheat Temp. °C	NDE
070-06E Rev. 0 Process Gas Outlet (V-2200)	W.O.G.	9376	90/-29	14064	Water	SA-106-B	1.6	4" Sch 80	SA-105-N CL 600	None/10°C	RT 100% VT 100%
070-06F Rev. 0 Process Gas Outlet (V-2200)	W.O.G.	9376	90/-29	14064	Water	SA-106-B	1.6	4" Sch 80	SA-105-N CL 600	None/10°C	RT 100% VT 100%
070-07A Rev. 0 Process Outlet (V-2300)	W.O.G.	9376	90/-29	14064	Water	SA-106-B	1.6	4" Sch 80	SA-105-N CL 600	None/10°C	RT 100% VT 100%
070-07B Rev. 0 Process Outlet (V-2300)	W.O.G.	9376	90/-29	14064	Water	SA-106-B	1.6	4" Sch 80	SA-105-N CL 600	None/10°C	RT 100% VT 100%
070-07C Rev. 0 Process Gas Outlet (V-2300)	W.O.G.	9376	90/-29	14064	Water	SA-106-B	1.6	2" Sch 80	SA-105-N CL 600	None/10°C	RT 100% VT 100%
070-07D Rev. 0 Process Gas Outlet (V-2300)	W.O.G.	9376	90/-29	14064	Water	SA-106-B	1.6	4" Sch 80 2" Sch 80	SA-105-N CL 600	None/10°C	RT 100% VT 100%
070-07E Rev. 0 Process Gas Outlet (V-2300)	W.O.G.	9376	90/-29	14064	Water	SA-106-B	1.6	4" Sch 80	SA-105-N CL 600	None/10°C	RT 100% VT 100%
070-07F Rev. 0 Process Gas Outlet (V-2300)	W.O.G.	9376	90/-29	14064	Water	SA-106-B	1.6	4" Sch 80	SA-105-N CL 600	None/10°C	RT 100% VT 100%
070-08A Rev. 0 Process Outlet (V-2400)	W.O.G.	9376	90/-29	14064	Water	SA-106-B	1.6	4" Sch 80	SA-105-N CL 600	None/10°C	RT 100% VT 100%
070-08B Rev. 0 Process Outlet (V-2400)	W.O.G.	9376	90/-29	14064	Water	SA-106-B	1.6	4" Sch 80	SA-105-N CL 600	None/10°C	RT 100% VT 100%
070-08C Rev. 0 Process Gas Outlet (V-2400)	W.O.G.	9376	90/-29	14064	Water	SA-106-B	1.6	2" Sch 80	SA-105-N CL 600	None/10°C	RT 100% VT 100%
070-08D Rev. 0 Process Gas Outlet (V-2400)	W.O.G.	9376	90/-29	14064	Water	SA-106-B	1.6	4" Sch 80 2" Sch 80	SA-105-N CL 600	None/10°C	RT 100% VT 100%
070-08E Rev. 0 Process Gas Outlet (V-2400)	W.O.G.	9376	90/-29	14064	Water	SA-106-B	1.6	4" Sch 80	SA-105-N CL 600	None/10°C	RT 100% VT 100%
070-08F Rev. 0 Process Gas Outlet (V-2400)	W.O.G.	9376	90/-29	14064	Water	SA-106-B	1.6	4" Sch 80	SA-105-N CL 600	None/10°C	RT 100% VT 100%
070-09A Rev. 0 Fuel Gas Outlet	W.O.G.	9376	90/-29	14064	Water	SA-106-B	1.6	2" Sch 80	SA-105-N CL 600	None/10°C	RT 100% VT 100%
070-09B Rev. 0 Fuel Gas Outlet	W.O.G.	9376	90/-29	14064	Water	SA-106-B	1.6	2" Sch 80	SA-105-N CL 600	None/10°C	RT 100% VT 100%

Drawing No Rev. No. Line No.	Fluid (Air/Stm. Etc.)	Des. Press kPa	Dev. Temp. °C (Max. & Min.)	Pressure Test kPa	Test Medium	Pipe Mat'l Spec. & Grade	C.A. mm	Pipe NPS & Schedule	Flange Material & Rating	PWHT/ Preheat Temp. °C	NDE
070-09C Rev. 0 Fuel Gas Outlet	W O G	9376	90/-29	14064	Water	SA-106-B	1.6	2" Sch 80	SA-105-N CL 600	None/10°C	RT 100% VT 100%
070-09D Rev. 0 Fuel Gas Outlet	W O G	9376	90/-29	14064	Water	SA-106-B	1.6	2" Sch 80	SA-105-N CL 600	None/10°C	RT 100% VT 100%
070-09E Rev. 0 Fuel Gas Outlet	W.O.G.	9376	90/-29	14064	Water	SA-106-B	1.6	2" Sch 80	SA-105-N CL 600	None/10°C	RT 100% VT 100%
070-09F Rev. 0 Fuel Gas Outlet	W.O.G.	9376	90/-29	14064	Water	SA-106-B	1.6	2" Sch 80	SA-105-N CL 600	None/10°C	RT 100% VT 100%
070-09G Rev. 0 Fuel Gas Outlet	W.O.G.	9376	90/-29	14064	Water	SA-106-B	1.6	2" Sch 80	SA-105-N CL 600	None/10°C	RT 100% VT 100%
070-10A Rev. 0 Condensate Outlet (V-2100)	W O G.	9376	90/-29	14064	Water	SA-106-B	1.6	3" Sch 80 2" Sch 80	SA-105-N CL 600	None/10°C	RT 100% VT 100%
070-10B Rev. 0 Condensate Outlet (V-2100)	W O G.	9376	90/-29	14064	Water	SA-106-B	1.6	3" Sch 80 2" Sch 80	SA-105-N CL 600	None/10°C	RT 100% VT 100%
070-10C Rev. 0 Condensate Outlet (V-2100)	W O G	9376	90/-29	14064	Water	SA-106-B	1.6	2" Sch 80	SA-105-N CL 600	None/10°C	RT 100% VT 100%
070-10D Rev. 0 Condensate Outlet (V-2100)	W.O.G	9376	90/-29	14064	Water	SA-106-B	1.6	2" Sch 80	SA-105-N CL 600	None/10°C	RT 100% VT 100%
070-10E Rev. 0 Condensate Outlet (V-2100)	W.O.G.	9376	90/-29	14064	Water	SA-106-B	1.6	2" Sch 80	SA-105-N CL 600	None/10°C	RT 100% VT 100%
070-11A Rev. 0 Condensate Outlet (V-2200)	W.O.G	9376	90/-29	14064	Water	SA-106-B	1.6	3" Sch 80 2" Sch 80	SA-105-N CL 600	None/10°C	RT 100% VT 100%
070-11B Rev. 0 Condensate Outlet (V-2200)	W.O.G.	9376	90/-29	14064	Water	SA-106-B	1.6	3" Sch 80 2" Sch 80	SA-105-N CL 600	None/10°C	RT 100% VT 100%
070-11C Rev. 0 Condensate Outlet (V-2200)	W O G	9376	90/-29	14064	Water	SA-106-B	1.6	2" Sch 80	SA-105-N CL 600	None/10°C	RT 100% VT 100%
070-11D Rev. 0 Condensate Outlet (V-2200)	W O G	9376	90/-29	14064	Water	SA-106-B	1.6	2" Sch 80	SA-105-N CL 600	None/10°C	RT 100% VT 100%
070-11E Rev. 0 Condensate Outlet (V-2200)	W.O.G.	9376	90/-29	14064	Water	SA-106-B	1.6	2" Sch 80	SA-105-N CL 600	None/10°C	RT 100% VT 100%
070-12A Rev. 0 Condensate Outlet (V-2300)	W.O.G	9376	90/-29	14064	Water	SA-106-B	1.6	3" Sch 80 2" Sch 80	SA-105-N CL 600	None/10°C	RT 100% VT 100%

Drawing No Rev. No. Line No.	Fluid (Air/Steam Etc.)	Des. Press. kPa	Des. Temp. °C (Max. & Min.)	Pressure Test kPa	Test Medium	Pipe Mat'l Spec. & Grade	C.A. mm	Pipe NPS & Schedule	Flange Material & Rating	PWHT/ Preheat Temp °C	NDE
070-12B Rev. 0 Condensate Outlet (V-2300)	W.O.G.	9376	90/-29	14064	Water	SA-106-B	1.6	3" Sch 80 2" Sch 80	SA-105-N CL 600	None/10°C	RT 100% VT 100%
070-12C Rev. 0 Condensate Outlet (V-2300)	W.O.G.	9376	90/-29	14064	Water	SA-106-B	1.6	2" Sch 80	SA-105-N CL 600	None/10°C	RT 100% VT 100%
070-12D Rev. 0 Condensate Outlet (V-2300)	W.O.G.	9376	90/-29	14064	Water	SA-106-B	1.6	2" Sch 80	SA-105-N CL 600	None/10°C	RT 100% VT 100%
070-12E Rev. 0 Condensate Outlet (V-2300)	W.O.G.	9376	90/-29	14064	Water	SA-106-B	1.6	2" Sch 80	SA-105-N CL 600	None/10°C	RT 100% VT 100%
070-13A Rev. 0 Condensate Outlet (V-2400)	W.O.G.	9376	90/-29	14064	Water	SA-106-B	1.6	3" Sch 80 2" Sch 80	SA-105-N CL 600	None/10°C	RT 100% VT 100%
070-13B Rev. 0 Condensate Outlet (V-2400)	W.O.G.	9376	90/-29	14064	Water	SA-106-B	1.6	3" Sch 80 2" Sch 80	SA-105-N CL 600	None/10°C	RT 100% VT 100%
070-13C Rev. 0 Condensate Outlet (V-2400)	W.O.G.	9376	90/-29	14064	Water	SA-106-B	1.6	2" Sch 80	SA-105-N CL 600	None/10°C	RT 100% VT 100%
070-13D Rev. 0 Condensate Outlet (V-2400)	W.O.G.	9376	90/-29	14064	Water	SA-106-B	1.6	2" Sch 80	SA-105-N CL 600	None/10°C	RT 100% VT 100%
070-13E Rev. 0 Condensate Outlet (V-2400)	W.O.G.	9376	90/-29	14064	Water	SA-106-B	1.6	2" Sch 80	SA-105-N CL 600	None/10°C	RT 100% VT 100%
070-14A Rev. 0 Water Outlet (V-2100)	W.O.G.	9376	90/-29	14064	Water	SA-106-B	1.6	3" Sch 80 2" Sch 80	SA-105-N CL 600	None/10°C	RT 100% VT 100%
070-14B Rev. 0 Water Outlet (V-2100)	W.O.G.	9376	90/-29	14064	Water	SA-106-B	1.6	3" Sch 80 2" Sch 80	SA-105-N CL 600	None/10°C	RT 100% VT 100%
070-14C Rev. 0 Water Outlet (V-2100)	W.O.G.	9376	90/-29	14064	Water	SA-106-B	1.6	2" Sch 80	SA-105-N CL 600	None/10°C	RT 100% VT 100%
070-14D Rev. 0 Water Outlet (V-2100)	W.O.G.	9376	90/-29	14064	Water	SA-106-B	1.6	2" Sch 80	SA-105-N CL 600	None/10°C	RT 100% VT 100%
070-14E Rev. 0 Water Outlet (V-2100)	W.O.G.	9376	90/-29	14064	Water	SA-106-B	1.6	2" Sch 80	SA-105-N CL 600	None/10°C	RT 100% VT 100%
070-15A Rev. 0 Water Outlet (V-2200)	W.O.G.	9376	90/-29	14064	Water	SA-106-B	1.6	3" Sch 80 2" Sch 80	SA-105-N CL 600	None/10°C	RT 100% VT 100%
070-15B Rev. 0 Water Outlet (V-2200)	W.O.G.	9376	90/-29	14064	Water	SA-106-B	1.6	3" Sch 80 2" Sch 80	SA-105-N CL 600	None/10°C	RT 100% VT 100%
070-15C Rev. 0 Water Outlet (V-2200)	W.O.G.	9376	90/-29	14064	Water	SA-106-B	1.6	2" Sch 80	SA-105-N CL 600	None/10°C	RT 100% VT 100%

Drawing No Rev. No. Line No	Fluid (Air/Strm. Etc.)	Des Press kPa	Des. Temp. °C (Max. & Min.)	Pressure Test kPa	Test Medium	Pipe Mat'l Spec. & Grade	C.A mm	Pipe NPS & Schedule	Flange Material & Rating	PWHT/ Preheat Temp °C	NDE
070-15D Rev. 0 Water Outlet (V-2200)	W O G.	9376	90/-29	14064	Water	SA-106-B	1.6	2" Sch 80	SA-105-N CL 600	None/10°C	RT 100% VT 100%
070-15E Rev. 0 Water Outlet (V-2200)	W O G.	9376	90/-29	14064	Water	SA-106-B	1.6	2" Sch 80	SA-105-N CL 600	None/10°C	RT 100% VT 100%
070-16A Rev. 0 Water Outlet (V-2300)	W O G.	9376	90/-29	14064	Water	SA-106-B	1.6	3" Sch 80 2" Sch 80	SA-105-N CL 600	None/10°C	RT 100% VT 100%
070-16B Rev. 0 Water Outlet (V-2300)	W.O.G	9376	90/-29	14064	Water	SA-106-B	1.6	3" Sch 80 2" Sch 80	SA-105-N CL 600	None/10°C	RT 100% VT 100%
070-16C Rev. 0 Water Outlet (V-2300)	W O G.	9376	90/-29	14064	Water	SA-106-B	1.6	2" Sch 80	SA-105-N CL 600	None/10°C	RT 100% VT 100%
070-16D Rev. 0 Water Outlet (V-2300)	W O G.	9376	90/-29	14064	Water	SA-106-B	1.6	2" Sch 80	SA-105-N CL 600	None/10°C	RT 100% VT 100%
070-16E Rev. 0 Water Outlet (V-2300)	W.O.G	9376	90/-29	14064	Water	SA-106-B	1.6	2" Sch 80	SA-105-N CL 600	None/10°C	RT 100% VT 100%
070-17A Rev. 0 Water Outlet (V-2400)	W.O.G	9376	90/-29	14064	Water	SA-106-B	1.6	3" Sch 80 2" Sch 80	SA-105-N CL 600	None/10°C	RT 100% VT 100%
070-17B Rev. 0 Water Outlet (V-2400)	W.O.G	9376	90/-29	14064	Water	SA-106-B	1.6	3" Sch 80 2" Sch 80	SA-105-N CL 600	None/10°C	RT 100% VT 100%
070-17C Rev. 0 Water Outlet (V-2400)	W O G	9376	90/-29	14064	Water	SA-106-B	1.6	2" Sch 80	SA-105-N CL 600	None/10°C	RT 100% VT 100%
070-17D Rev. 0 Water Outlet (V-2400)	W.O.G.	9376	90/-29	14064	Water	SA-106-B	1.6	2" Sch 80	SA-105-N CL 600	None/10°C	RT 100% VT 100%
070-17E Rev. 0 Water Outlet (V-2400)	W.O.G.	9376	90/-29	14064	Water	SA-106-B	1.6	2" Sch 80	SA-105-N CL 600	None/10°C	RT 100% VT 100%
070-18A Rev. 0 Drain (V-2100)	W O G	9376	90/-29	14064	Water	SA-106-B	1.6	2" Sch 80	SA-105-N CL 600	None/10°C	RT 100% VT 100%
070-18B Rev. 0 Drain (V-2100)	W O G	9376	90/-29	14064	Water	SA-106-B	1.6	2" Sch 80	SA-105-N CL 600	None/10°C	RT 100% VT 100%
070-19A Rev. 0 Drain (V-2200)	W.O.G	9376	90/-29	14064	Water	SA-106-B	1.6	2" Sch 80	SA-105-N CL 600	None/10°C	RT 100% VT 100%
070-19B Rev. 0 Drain (V-2200)	W.O.G	9376	90/-29	14064	Water	SA-106-B	1.6	2" Sch 80	SA-105-N CL 600	None/10°C	RT 100% VT 100%
070-20A Rev. 0 Drain (V-2300)	W O G.	9376	90/-29	14064	Water	SA-106-B	1.6	2" Sch 80	SA-105-N CL 600	None/10°C	RT 100% VT 100%
070-20B Rev. 0 Drain (V-2300)	W.O.G	9376	90/-29	14064	Water	SA-106-B	1.6	2" Sch 80	SA-105-N CL 600	None/10°C	RT 100% VT 100%
070-21A Rev. 0 Drain (V-2400)	W.O.G	9376	90/-29	14064	Water	SA-106-B	1.6	2" Sch 80	SA-105-N CL 600	None/10°C	RT 100% VT 100%
070-21B Rev. 0 Drain (V-2400)	W.O.G.	9376	90/-29	14064	Water	SA-106-B	1.6	2" Sch 80	SA-105-N CL 600	None/10°C	RT 100% VT 100%



Partial Data Reports certified by sub-contractors are listed below and attached to this Data Report

No.	Line No.	Spool No.	Dwg. No. (with Rev. No.)	Sub-contractor (Name)	AQP No. (if from Alberta)	Expiry (if from Alberta)

Remarks: For partial data report provide information about the code work that was not completed by the subcontractor (e.g., hydrostatic test, PWHT etc.). For final data report provide information about the code work that was not completed by subcontractors and subsequently completed by the primary contractor (e.g., hydrostatic test of entire assembly, PWHT etc.)

Endorse certificate 'A' or 'B'	
<p style="text-align: center;"><b>A. CERTIFICATE OF COMPLIANCE</b> Signed by the subcontractor when supplying this certificate as a Partial Data Report</p> <p>We certify that the statements in this Data Report are correct and that materials, construction and workmanship of the piping fabrication conform to the registered quality system and the applicable Piping code(s).</p> <p>Date: _____</p> <p style="text-align: right;">_____ Contractor</p> <hr/> <p style="display: flex; justify-content: space-between;"><span>Print Authorized Representative's Name</span> <span>Signature</span></p> <p><b>This certificate is not valid unless it forms part of a Final Data Report signed by Primary Contractor</b></p>	<p style="text-align: center;"><b>B. CERTIFICATE OF COMPLIANCE</b> Signed by the primary contractor when supplying this certificate as a Final Data Report</p> <p>We certify that the statements in this Data Report are correct and that piping job no. <u>2013-070(#2)</u> described in this Data Report was constructed in accordance with the Province of Alberta Safety Codes Act and Regulations, and applicable ASME Piping Code(s).</p> <p>Date: _____ <u>CADO INDUSTRIES INC</u></p> <p style="text-align: right;">_____ Contractor</p> <hr/> <p style="display: flex; justify-content: space-between;"><span>Jeremy Koster</span> <span>Signature</span></p> <p>Print Authorized Representative's Name</p>

### CERTIFICATE OF INSPECTION

I, the undersigned, employed by MTL Inspection Group have verified that all required examination and testing has been completed, and inspected the piping described in this construction data report to the extent necessary to be satisfied that it conforms to all applicable examination requirements of the Code and of the engineering design, and state that, to the best of my knowledge and belief, the contractor has constructed this piping in accordance with the Alberta Safety Codes Act and Regulations. By signing this certificate neither the inspector nor his or her employer makes any warranty, expressed or implied, concerning the piping described in this construction 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.

Date: April 30, 2014 \_\_\_\_\_ Date: \_\_\_\_\_

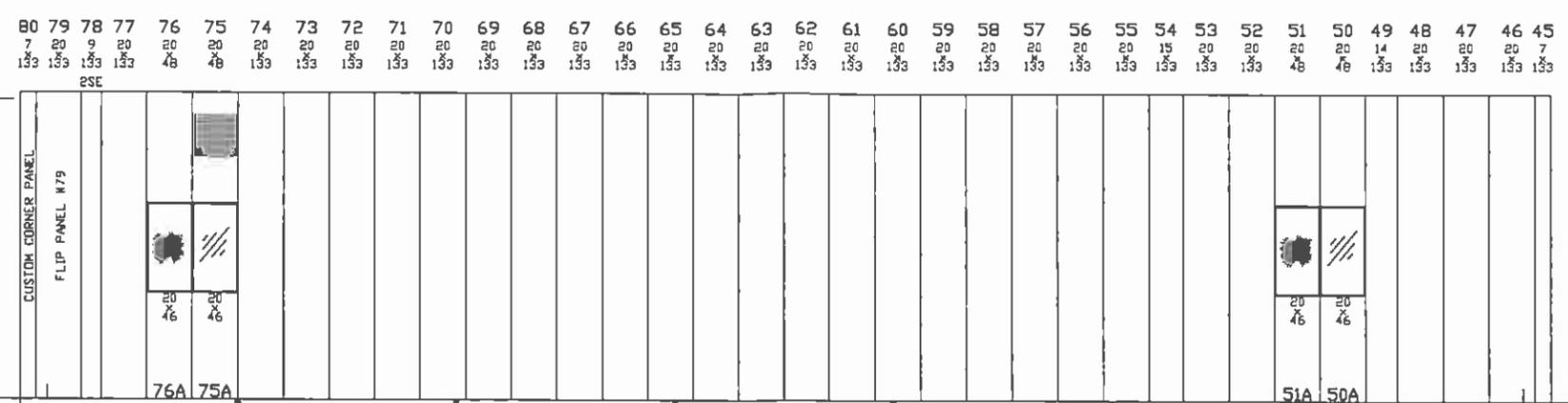
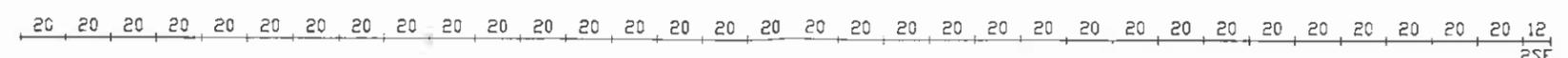
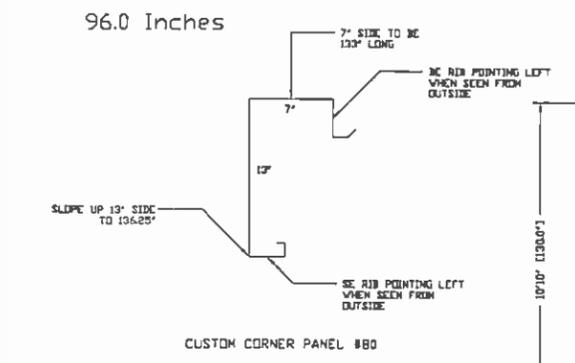
Suomet Sidhu  
Owner's Inspector Name (please print)

Sidhu  
Owner's Inspector Signature:

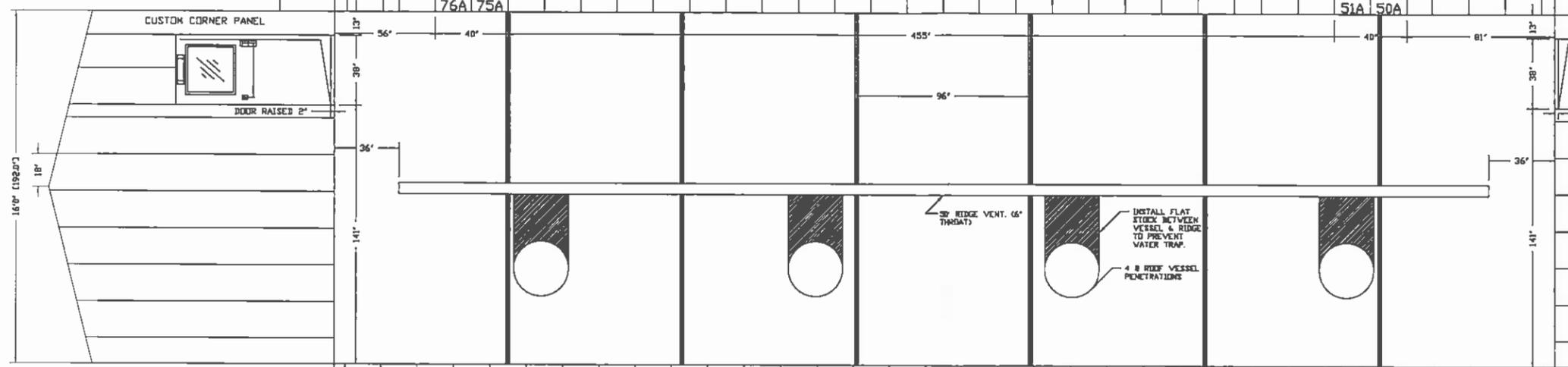
\_\_\_\_\_  
ABSA Safety Codes Officer (please print)  
(BOILER EXTERNAL PIPING ONLY)

\_\_\_\_\_  
ABSA Safety Codes Officer's Signature

Current version of this form may be obtained from [www.safety.alberta.ca](http://www.safety.alberta.ca)



- 80 13x136.32SE
- 81 18x53.82BE
- 82 20x58.8
- 83 7x147.5
- 84 20x152.5
- 85 20x157.0
- 86 20x156.5
- 87 20x151.5
- 88 20x146.5
- 89 20x141.5
- 1 14x136.5



- 13x136.3 45
- 20x54.3 44
- 18x58.8 2BE 43
- 7x147.5 2SE 42
- 20x152.5 41
- 20x157.0 40
- 20x156.5 39
- 20x151.5 38
- 20x146.5 37
- 20x141.5 36
- 14x136.5 35

**Straight-Up Metal Buildings Ltd.**  
 22GA Tan Exterior Walls R-12  
 22GA Tan Exterior Roof R-20  
 24GA Fluted Alum. White Interior  
 Metro Brown Trim

**FIELD ERECTION NOTES**

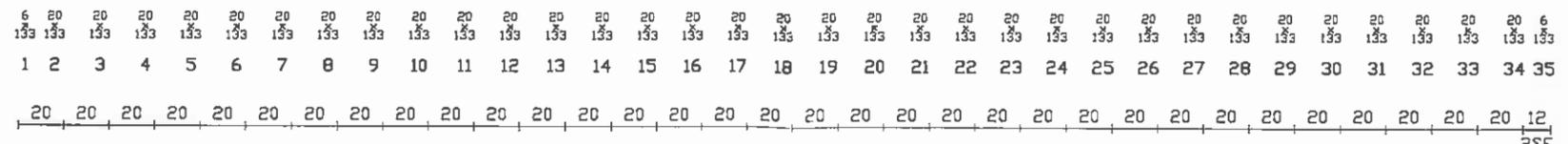
- CONNECT BOTTOM CHANNEL TO SKID USING #14 SCREWS @ 12' O.C.
- CONNECT WALL PANELS TO EACH OTHER USING #8 SCREWS @ 18' O.C. IN SIDE WALLS & @ 6' O.C. IN END WALLS.
- CONNECT EACH ROOF PANEL TO BUILDING USING 16 @ #10 SCREWS, 8 @ EAVES DRIP & 8 @ RIDGE.
- CONNECT ROOF PANELS TO EACH OTHER USING #10 SCREWS @ 14' O.C.
- CONNECT STARTER ROOF PANEL TO END WALL TOP CHANNEL USING #10 SCREWS @ 14' O.C.
- CONNECT INTERIOR LINER TO WALL PANEL RIBS USING WHITE #8 SCREWS IN EVERY 2nd LOW LINER PROFILE.
- CONNECT THRESHOLD TO SKID USING ZAMAC PINS.

SEE PAGE 2 FOR CUTLIST.



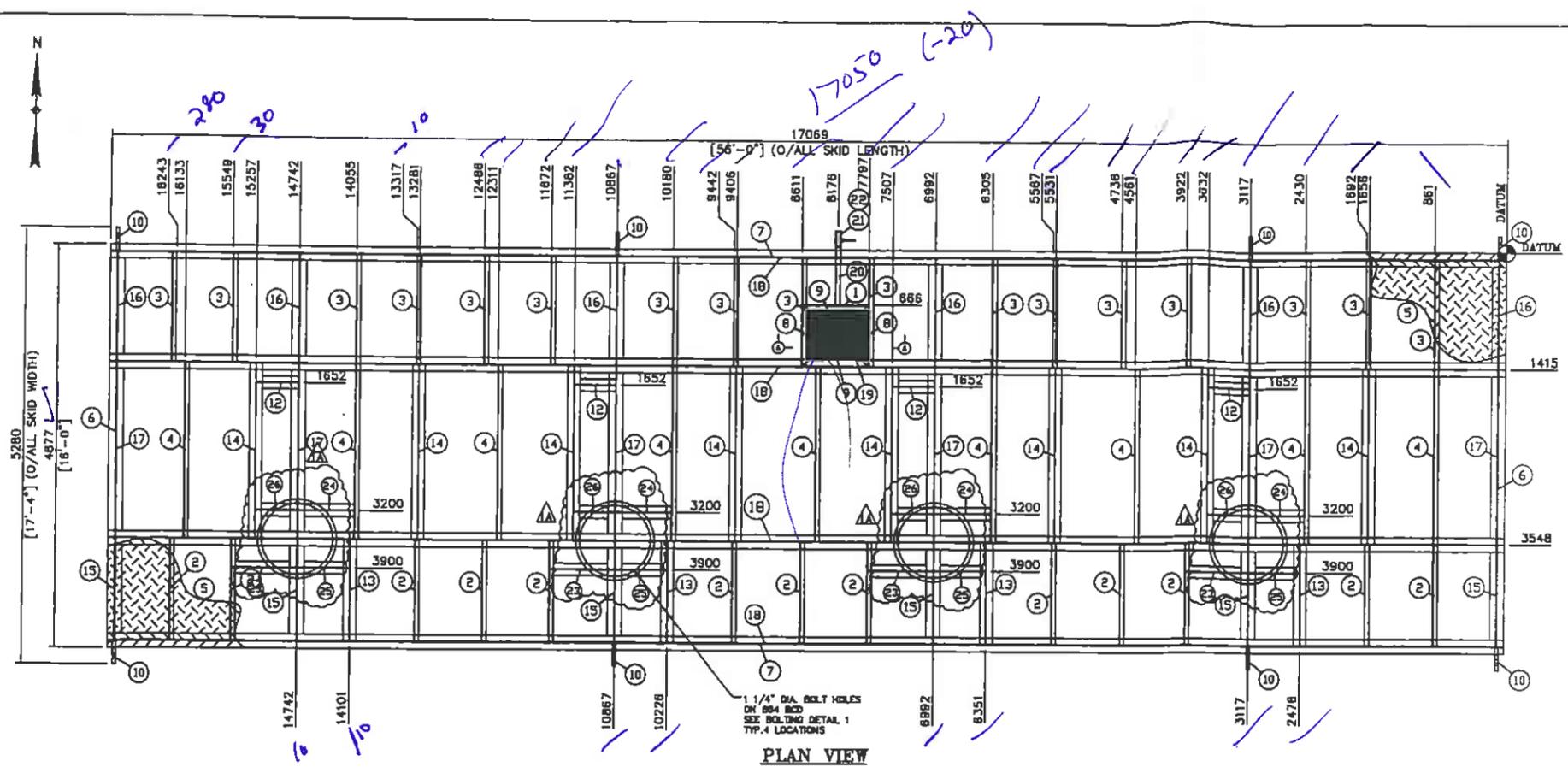
DESIGN DATA		DESIGN NOTES	
LOCATION	-	STEEL USED IN WALL PANELS, ROOF PANELS, FLASHINGS, TRIM & EAVES TROUGH TO CONFORM TO A633, GRADE 37, 2875 COATING WITH A792, GRADE 37, 2165 COATING AS A PERMISSIBLE ALTERNATIVE.	
LSD	-	STEEL USED FOR SWAY BRACES IS TO CONFORM TO CSA G40.21-04 50W CLASS C.	
WIND	0.50 kPa	REFER TO SPECIAL NOTES & BUILDING ASSEMBLY MANUAL FOR COMPLETE ERECTION INSTRUCTIONS.	
S <sub>s</sub>	2.5 kPa	NORMAL IMPORTANCE AND SEISMIC SITE CATEGORY E ASSUMED.	
S <sub>t</sub>	0.1 kPa		
SW(0.2)	0.12		
SW(0.8)	0.06		
SW(1.0)	0.02		
SW(2.0)	0.01		
PE4	0.09		

ROOF PANELS  
 66 @ 20x98.0  
 2 @ 12.0x98.0 2SE

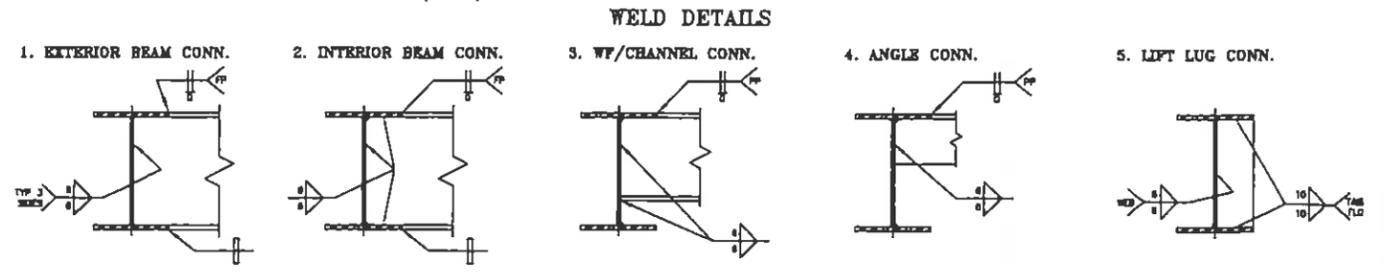
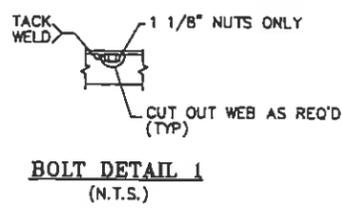
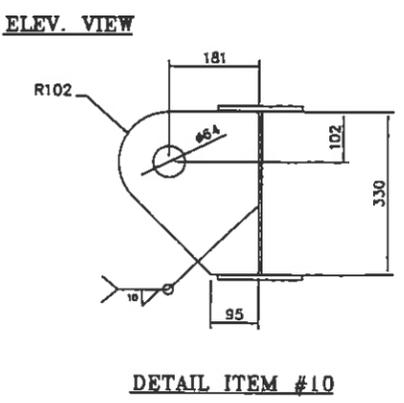
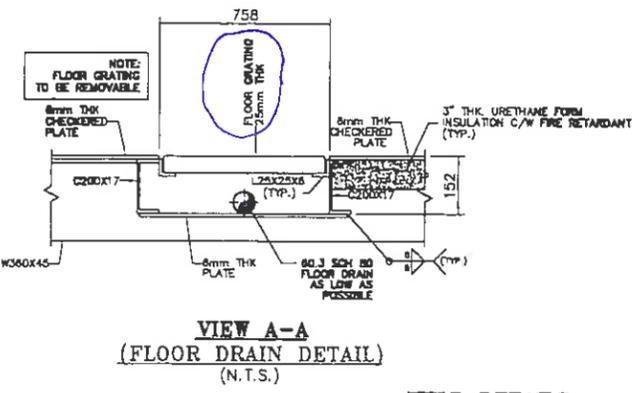


REVISION	STATUS	DRAWN BY	DATE	Job:	Drawing:	Rev:
1	ISSUED FOR CONSTRUCTION	C.THANKEY	JAN 06/14	13-4212	13-4212	1
0	ISSUED FOR APPROVAL	C.THANKEY	JAN 03/14			

CLIENT:	CADO INDUSTRIES INC.
PROJECT:	-
TITLE:	PLAN/PANEL LAYOUT
SIZE:	W 16'0" L 56'0" H 10'10" 3.012
Sq. FT.	W 1596' G 32' R 924' T 2552'
Perimeter	144'0" Weight
Quota:	P13-120658 Unit: -
Drawn by:	C.THANKEY Date: JAN 06/14
Checked by:	Date:
Page:	1/2



BILL OF MATERIAL					
MARK	QTY	LONG ANNOTATION	LENGTH	MATERIAL	WEIGHT
1	1	C200x17	809	G40.21-44W	13.84
2	13	C200x17	1236	G40.21-44W	266.90
3	17	C200x17	1322	G40.21-44W	374.04
4	9	C200x17	2125	G40.21-44W	321.25
5	1	CHECKER PL-6 X 17069 X 4877	17069	SA-36	3921.61
6	2	F850x6	4685	SA-36	23.71
7	2	F850x6	16889	SA-36	85.46
8	2	L25x25x4.8	600	G40.21-44V	2.08
9	2	L25x25x4.8	758	G40.21-44V	2.62
10	8	PL-3B X 330 X 282	330	SA-36	175.03
11	1	PL-6 X 809 X 746	809	SA-36	28.44
12	4	W150x22	509	G40.21-50W	38.26
13	4	W150x22	1236	G40.21-50V	105.61
14	8	W150x22	2125	G40.21-50V	369.47
15	6	V360x45	1236	G40.21-50V	305.16
16	6	V360x45	1322	G40.21-50V	328.20
17	6	V360x45	2125	G40.21-50V	543.30
18	4	V360x45	17069	G40.21-50V	3047.80
19	1	GRATING - 25 X 4.8 BEARING BAR	748x600	SA-36	38.44
20	1	PIPE, 2", SCH. XH SMLS, SA-106-B, CUT TO FIT	1000	-	8.05
21	1	BALL VALVE, CL800 THRD	-	-	-
22	1	HEX HEAD PLUG, 2", 3000#, SA-105N	-	-	-
23	4	W150x22	798	G40.21-50V	66.62
24	4	W150x22	683	G40.21-50V	58.54
25	4	W150x22	635	G40.21-50V	49.78
26	4	W150x22	509	G40.21-50V	38.55
TOTAL WEIGHT:			10107.41 KG		



**GENERAL STRUCTURAL STEEL NOTES:**

- ALL DIMENSION ARE IN MILLIMETERS UNLESS NOTED. ALL ELEVATIONS ARE REFERRED FROM TOP OF CHECKER PLATE.
- ALL WORK SHALL GENERALLY CONFORM TO THE LATEST EDITIONS OF THE FOLLOWING CODES AND STANDARDS:  
CSA W47.1-92  
CISC HANDBOOK OF STEEL CONSTRUCTION
- ALL STEEL SHALL BE OF NEW STOCK AND SHALL BE IN ACCORDANCE WITH CSA C40.21-M. STRUCTURAL STEEL SHALL GRADE 50W FOR WF AND 44W FOR ANGLE AND CHANNELS. PLATE MATERIAL SHALL BE 44W, EXCEPT CHECKERED PLATE TO BE A-36.
- WELDING SHALL BE IN GENERAL CONFORMANCE WITH CSA W59-1989. FILLER METAL SHALL CONFORM TO CSA STD. W48.5-M-E4802C-6-CH. WELDS TO BE 6mm CONTINUOUS FILLET WELD UNLESS NOTED. USE PROLONG WELDING PROCEDURE AS SHOWN IN WELDING DETAILS.
- CHECKERED PLATED SEAMS TO BE WELDED CONTINUOUSLY ON ONE SIDE & AROUND PERIMETER OF BUILDING. STITCH WELD TO SKID USING 6mm FILLETS 50mm AT 300mm INTERVALS.
- CLEAN ALL STEEL SURFACES PRIOR TO PAINTING TO SSPC-SP6 COMMERCIALY SANDBLASTED.  
PRIMER TO BE ONE (1) COAT OF ANTI-CORROSIVE INDUSTRIAL PRIMER  
PAINTING TO BE TWO (2) COATS OF WARM GREY INDUSTRIAL ENAMEL
- UNDERSIDE OF ENTIRE SKID SHALL BE INSULATED WITH 3" THK URETHANE.
- TOTAL SHIPPING WEIGHT OF STRUCTURAL STEEL SKID = 7,827 Kg (17,255 Lbs) (INCLUDING 100LBS UNDERSIDE SKID 3" THK URETHANE INSULATION)
- CWB CERTIFICATION IS REQUIRED FOR FABRICATORS AND WELDERS.
- MPI REQUIRED ON LIFTING LUGS.
- LIFTING NOTES:  
MAX. SLING LOAD = 117 KN  
SHACKLE: USE G209 CROSBY SCREW TYPE SWL = 17 TONS  
SLUNG: 28# MIN. BREAKING LOAD = 52 TONS

APPROVED FOR CONSTRUCTION

Rev.	Description	By	Chk	Eng	Date	Title:	Customer:	Job No	Drawing Number:	Rev.
2	ISSUED FOR CONSTRUCTION	AP	WC	WC	NOV 08/13	SKID STEEL DETAILS	PENNWEST EXPLORATION c/o PIONEER ENGINEERING INC.	2013-070	2013-070-403	2
1	RE-ISSUED FOR APPROVAL	AP	WC	WC	OCT 28/13	4-WELL SEPARATOR SKID (BU-3000)				
A	ISSUED FOR APPROVAL	AP	WC	WC	OCT 09/13					

CADO INDUSTRIES INC.  
7491 - 110 AVE SE, CALGARY, ALBERTA T2C 3B8  
TEL: (403) 279-8882; FAX: (403) 279-8887





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FABRICATION SHOP INSPECTION REPORT – MULTIPLE PACKAGED PROCESS EQUIPMENT

Table with inspection details including MTL Job No. 3213, Report No. 001, Mechanical Inspector Gurmat Sidhu, Electrical Inspector Ryan Mikkelsen, Client PennWest Exploration, and Vendor Cado Industries.

Summary table with columns: PO Delivery Date (January 24, 2014), Estimated Completion Date (On time), and Percentage Complete (2%).

Progress summary table: Vessels 10%, Spooling 0%, Structural 0%, Assembly 0%, Instrumentation 0%, Building 0%.

Table with 6 columns: Item Serial No., Description, Current Shipping Date, Actual Shipping Date, LSD, Status. Rows for 2013-070 unit 1 and 2.

Areas of Concern

- No area of concern was noted during this inspection week.

Deficiencies / Quality Issues

- No deficiencies or quality issues were noted during this inspection visit.

Project Information / Drawings

- ENGINEERING: Engineering is in progress.
DRAWINGS: Vessel drawings are issued for construction. Vessel DWG 2013-070-300 sheet 1 of 1 rev. 0.



**Project Information / Drawings**

- Skid, Piping and P&ID drawings to be issued yet.

**Inspection / Expediting Comments**

**EXPEDITING**

- Expediting is not required for this project.

**INSPECTION**

October 17, 2013

Unit 1

- Writer reviewed client PO. Green file was created including the client PO and ITP.
- Shop visit was made to Cado industries to receive project and inspect recent fabrication.
- PO was discussed with the project manager. Vendor job number is 2013-070.
- Only vessel drawings are issued for construction. Other drawings to be completed.
- Vessel material is received for first unit. Vessel long seams are completed.
- Visual inspection confirmed satisfactory results. Welding completed as per WPS listed on the drawings. Welders were qualified.
- Fabrication hold points were issued for the project.
- Piping and skid fabrication is expected to start by late next week for unit #1.
- Vendor was requested to properly hard stamp the vessel shells to maintain proper traceability as there will be 8 similar vessels.

**Additional Information / Comments**

**MATERIALS**

- Vessel shell and heads are received for unit #1. Total 4 vessels.
- Piping and skid material to be received.

**FABRICATION**

- 4 vessel long seams are done. October 17, 2013.
- Piping and skid fabrication hasn't started yet.
- Unit 2 fabrication dates TBD.

**DELIVERY STATUS**

1. PO states the delivery date of January 24, 2014.
2. Writer believes the vendor to meet the delivery date at this point.

**DOCUMENTATION REVIEW**

- Client PO, Vessel drawings, Vessel WPS have been reviewed during this visit.

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Inspector	Phone	E-Mail					



**PHOTOGRAPHS**



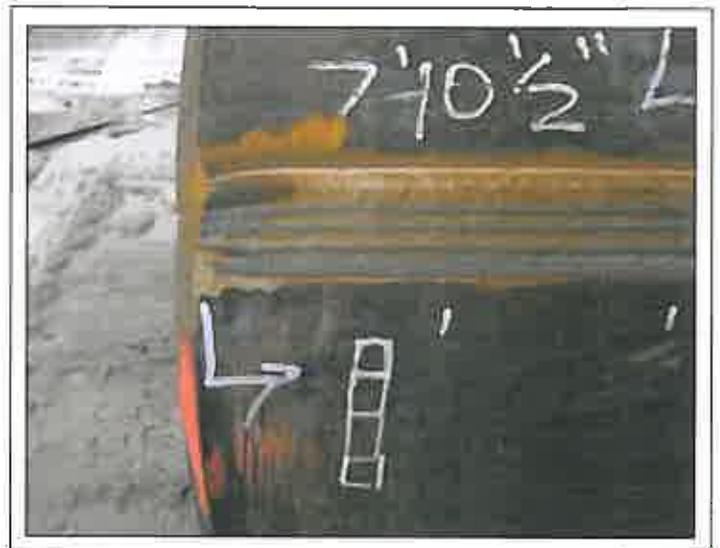
October 17, 2013  
Fabrication hold points.



October 17, 2013  
Vessel heads.



October 17, 2013  
Vessels for unit 1.



October 17, 2013  
Typical long seam weld profile.



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**FABRICATION SHOP INSPECTION REPORT – MULTIPLE PACKAGED PROCESS EQUIPMENT**

<b>MTL Job No.</b>	3213	<b>Report No.</b>	002
<b>Mechanical Inspector</b>	Gurmat Sidhu	<b>Phone:</b>	403-472-8292 <a href="mailto:gurmatSidhu@gmail.com">gurmatSidhu@gmail.com</a>
<b>Electrical Inspector</b>	Ryan Mikkelsen	<b>Phone:</b>	403-585-4359 <a href="mailto:ryan.mikkelsen@graeltd.ca">ryan.mikkelsen@graeltd.ca</a>
<b>AFE No.</b>	A13370663	<b>Date</b>	November 11, 2013
<b>Client</b>	PennWest Exploration c/o Pioneer Engineering Inc.	<b>Client P.O. No.</b>	PEI-A13370663-01
<b>Project</b>	Cordova d-55-A/94-P-10 Facility	<b>Location / LSD</b>	Cordova / d-55-A/94-P-10
<b>Equipment</b>	(2) 30" Sour Quadruple Separator Packages	<b>Tag No.</b>	2013-070
<b>Client Project Engineer</b>	Peter Orakwe Kourosh Kazemi	<b>Contact Info.</b>	403-693-2912, <a href="mailto:Peter.orakwe@pennwest.com">Peter.orakwe@pennwest.com</a> 403-453-8820, <a href="mailto:kkazemi@pioneerengineering.com">kkazemi@pioneerengineering.com</a>
<b>Vendor</b>	Cado Industries	<b>Vendor Job No.</b>	Unit 1 and 2.
<b>Vendor Project Engineer</b>	Wilfred Cao	<b>Phone:</b>	403-279-6662
<b>Vendor QC Manager</b>	Jeremy Koster	<b>Phone:</b>	403-279-6662

<b>PO Delivery Date</b>	January 24, 2014	<b>Estimated Completion Date</b>	Tight.	<b>Percentage Complete</b>	2%						
<b>Vessels</b>	10%	<b>Spooling</b>	0%	<b>Structural</b>	0%	<b>Assembly</b>	0%	<b>Instrumentation</b>	0%	<b>Building</b>	0%

Item Serial No :	Description:	Current Shipping Date:	Actual Shipping Date:	LSD:	Status:
2013-070 unit 1	30" Sour Quadruple Separator Package	January 24, 2014	TBD	d-55-A/94-P-10	Vessel shells long seams done.
2013-070 unit 2	30" Sour Quadruple Separator Package	January 24, 2014	TBD	d-55-A/94-P-10	No activity.

**Areas of Concern**

- Fabrication is moving slow due to other shop priorities. This may affect the promised PO delivery date.

**Deficiencies / Quality Issues**

- No deficiencies or quality issues were noted during this inspection visit.

**Project Information / Drawings**

- ENGINEERING**
- Engineering is in progress.
- DRAWINGS**
- Vessel drawings are issued for construction.
  - Vessel DWG 2013-070-300 sheet 1 of 1 rev. 0.



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**Project Information / Drawings**

- Skid, Piping and P&ID drawings to be issued yet.

**Inspection / Expediting Comments**

**EXPEDITING**

- Expediting is not required for this project.

**INSPECTION**

November 7, 2013

**Unit 1**

- Shop visit was made to Cado industries to receive project and inspect recent fabrication.
- No further activity was noted on the project this week.
- Vessel material is complete. Long seams are done. Remainder of the fabrication to be completed.
- Skid and piping fabrication hasn't started as of yet.

**Unit 2**

- No material has been received yet.
- No fabrication has started yet.

**Additional Information / Comments**

**MATERIALS**

**Unit 1**

- Vessel shell and heads are received for unit #1. Total 4 vessels.
- Piping and skid material to be received.

**Unit 2**

- No material has been received yet.

**FABRICATION**

**Unit 1**

- 4 vessel long seams are done. Nov 7, 2013.
- Piping and skid fabrication hasn't started yet.

**Unit 2**

- Fabrication hasn't started as of yet.

**DELIVERY STATUS**

1. PO states the delivery date of January 24, 2014.
2. Writer believes the unit completion date can be tight.

**DOCUMENTATION REVIEW**

- Client PO, Vessel drawings, Vessel WPS have been reviewed during this visit.

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Inspector	Phone	E-Mail					

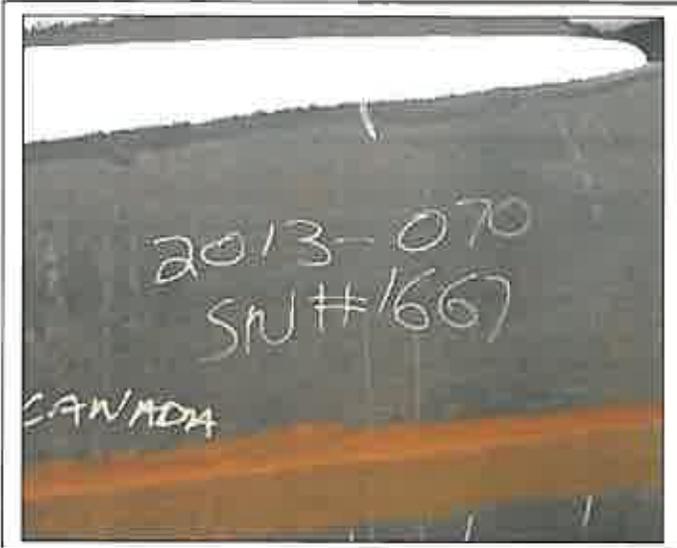


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### PHOTOGRAPHS



November 7, 2013  
Vendor job number 2013-070.



November 7, 2013  
Vessel long seams completed.



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**FABRICATION SHOP INSPECTION REPORT – MULTIPLE PACKAGED PROCESS EQUIPMENT**

<b>MTL Job No.</b>	3213	<b>Report No.</b>	003
<b>Mechanical Inspector</b>	Gumat Sidhu	<b>Phone:</b>	403-472-8292 <a href="mailto:gurmatidhu@gmail.com">gurmatidhu@gmail.com</a>
<b>Electrical Inspector</b>	Ryan Mikkelsen	<b>Phone:</b>	403-585-4359 <a href="mailto:ryan.mikkelsen@graeltd.ca">ryan.mikkelsen@graeltd.ca</a>
<b>AFE No.</b>	A13370663	<b>Date</b>	November 25, 2013
<b>Client</b>	PennWest Exploration c/o Pioneer Engineering Inc.	<b>Client P.O. No.</b>	PEI-A13370663-01
<b>Project</b>	Cordova d-55-A/94-P-10 Facility	<b>Location / LSD</b>	Cordova / d-55-A/94-P-10
<b>Equipment</b>	(2) 30" Sour Quadruple Separator Packages	<b>Tag No.</b>	2013-070
<b>Client Project Engineer</b>	Peter Orakwe Kourosh Kazemi	<b>Contact Info.</b>	403-693-2912, <a href="mailto:Peter.orakwe@pennwest.com">Peter.orakwe@pennwest.com</a> 403-453-8820, <a href="mailto:kkazemi@pioneerengineering.com">kkazemi@pioneerengineering.com</a>
<b>Vendor</b>	Cado Industries	<b>Vendor Job No.</b>	Unit 1 and 2.
<b>Vendor Project Engineer</b>	Wilfred Cao	<b>Phone:</b>	403-279-6662
<b>Vendor QC Manager</b>	Jeremy Koster	<b>Phone:</b>	403-279-6662

<b>PO Delivery Date</b>	January 24, 2014	<b>Estimated Completion Date</b>	Tight.	<b>Percentage Complete</b>	3%
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<b>Vessels</b>	15%	<b>Spooling</b>	0%	<b>Structural</b>	0%	<b>Assembly</b>	0%	<b>Instrumentation</b>	0%	<b>Building</b>	0%
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Item Serial No.:	Description:	Current Shipping Date:	Actual Shipping Date:	LSD:	Status:
2013-070 unit 1	30" Sour Quadruple Separator Package	January 24, 2014	TBD	d-55-A/94-P-10	Nozzles being installed to the vessels.
2013-070 unit 2	30" Sour Quadruple Separator Package	January 24, 2014	TBD	d-55-A/94-P-10	Long seams being welded.

**Areas of Concern**

- Fabrication is moving slow due to other shop priorities. This may affect the promised PO delivery date. (Vessel and skid fabrication is in progress for first skid, Piping to follow)

**Deficiencies / Quality Issues**

- No deficiencies or quality issues were noted during this inspection visit.

**Project Information / Drawings**

- ENGINEERING**
- Engineering is in progress.



### Project Information / Drawings

#### DRAWINGS

- Vessel and skid drawings are issued for construction.
- Vessel DWG 2013-070-300 sheet 1 of 1 rev. 0.
- Skid DWG 2013-070-403 sheet 1 of 1 Rev. 2.
- DWG 2013-070-404 sheet 1 of 1 Rev. 2.
- Piping, GA and P&ID drawings to be issued yet.

### Inspection / Expediting Comments

#### EXPEDITING

- Expediting is not required for this project.

#### INSPECTION

November 20, 2013

##### Unit 1

- Shop visit was made to Cado industries to receive project and inspect recent fabrication.
- Fabrication is in progress for all 4 vessels. Nozzles are being installed. Random sample inspection was conducted on completed fabrication. Satisfactory results were obtained.
- Two vessels are expected to be ready for internal inspection by late next week.
- Skid beams are being prepared for fit up.
- Piping fabrication hasn't started yet.

##### Unit 2

- Two vessel long seams are done. Other two to follow.
- No skid or piping fabrication has started yet.

### Additional Information / Comments

#### MATERIALS

##### Unit 1

- Vessel shell and heads are received for unit #1. Total 4 vessels.
- Skid material is complete.
- Piping material is ordered.

##### Unit 2

- Vessel material is complete.
- Skid and piping material is ordered.

#### FABRICATION

##### Unit 1

- 4 vessel long seams are done. November 7, 2013.
- Nozzles being installed - November 22, 2013.

##### Unit 2

- Two long seams are done - November 22, 2013.

#### DELIVERY STATUS

1. PO states the delivery date of January 24, 2014.
2. Writer believes the unit completion date can be tight.



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**Additional Information / Comments**

**DOCUMENTATION REVIEW**

- Client PO, Vessel drawings, Vessel WPS have been reviewed during this visit.

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<b>Inspector</b>	<b>Phone</b>	<b>E-Mail</b>					

**PHOTOGRAPHS**



November 22, 2013  
Fabrication overview.



November 22, 2013  
Skid material being prepared.



November 22, 2013  
Vessel nozzles fit up.



November 22, 2013  
Accepted nozzle fit up as per welding procedure.



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November 22, 2013  
Fabrication overview.



November 22, 2013  
Welds being back gouged to clean deposited metal.



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**FABRICATION SHOP INSPECTION REPORT – MULTIPLE PACKAGED PROCESS EQUIPMENT**

<b>MTL Job No.</b>	3213	<b>Report No.</b>	004
<b>Mechanical Inspector</b>	Gurmat Sidhu	<b>Phone:</b>	403-472-8292 <a href="mailto:gurmatSidhu@gmail.com">gurmatSidhu@gmail.com</a>
<b>Electrical Inspector</b>	Ryan Mikkelsen	<b>Phone:</b>	403-585-4359 <a href="mailto:ryan.mikkelsen@graelted.ca">ryan.mikkelsen@graelted.ca</a>
<b>AFE No.</b>	A13370663	<b>Date</b>	December 2, 2013
<b>Client</b>	PennWest Exploration c/o Pioneer Engineering Inc.	<b>Client P.O. No.</b>	PEI-A13370663-01
<b>Project</b>	Cordova d-55-A/94-P-10 Facility	<b>Location / LSD</b>	Cordova / d-55-A/94-P-10
<b>Equipment</b>	(2) 30" Sour Quadruple Separator Packages	<b>Tag No.</b>	2013-070
<b>Client Project Engineer</b>	Peter Orakwe Kourosh Kazemi	<b>Contact Info.</b>	403-693-2912, <a href="mailto:Peter.orakwe@pennwest.com">Peter.orakwe@pennwest.com</a> 403-453-8820, <a href="mailto:kkazemi@pioneerengineering.com">kkazemi@pioneerengineering.com</a>
<b>Vendor</b>	Cado Industries	<b>Vendor Job No.</b>	Unit 1 and 2.
<b>Vendor Project Engineer</b>	Wilfred Cao	<b>Phone:</b>	403-279-6662
<b>Vendor QC Manager</b>	Jeremy Koster	<b>Phone:</b>	403-279-6662

**PO Delivery Date** January 24, 2014      **Estimated Completion Date**      Deliveries look to be tight at this time.      **Percentage Complete** 6%

**Vessels** 20%    **Spooling** 0%    **Structural** 15%    **Assembly** 0%    **Instrumentation** 0%    **Building** 0%

Item Serial No :	Description:	Current Shipping Date:	Actual Shipping Date:	LSD:	Status:
2013-070 unit 1	30" Sour Quadruple Separator Package	January 24, 2014	TBD	d-55-A/94-P-10	Vessel internal insp. completed. Skid fit up in progress.
2013-070 unit 2	30" Sour Quadruple Separator Package	January 24, 2014	TBD	d-55-A/94-P-10	Two vessel long seams completed.

**Areas of Concern**

- Promised delivery date of January 24, 2014 does not seem to be achievable at this speed of fabrication.

**Deficiencies / Quality Issues**

- No deficiencies or quality issues were noted during this inspection visit.

**Project Information / Drawings**

**ENGINEERING**

- Engineering is in progress.



**Project Information / Drawings**

**DRAWINGS**

- Vessel drawings are issued for construction.
- Vessel DWG 2013-070-300 sheet 1 of 1 rev. 0.
- Skid, Piping and P&ID drawings to be issued yet.

**Inspection / Expediting Comments**

**EXPEDITING**

- Expediting is not required for this project.

**INSPECTION**

**November 26, 2013**

**Unit 1**

- Shop visit was made to Cado industries to conduct vessel internal inspection as per vendor request.
- Vessel internal inspection was conducted on vessel SN 1667 and 1669. Shell and heads prior to mesh pad installation.
- Vessel dimensions, thickness and material was verified as per drawings.
- Nozzle internal projections, fillet welds were measured to be acceptable as per drawings. Drain nozzle was ground flush with vortex breaker.
- Inlet diverter and float hood elevation and orientation were verified with satisfactory results. Mesh pad bars were welded, elevation was checked ok as per drawings.
- Vendor to install the mesh pad prior to closing the vessel.
- Vessel internal inspection was signed off on travel sheet for 1667 and 1669.
- Only shells were inspected for vessel SN 1668 and 1670. Head nozzles were still to be welded. Writer has been requested to come in next day.

**November 27, 2013**

**Unit 1**

- Shop visit was made to Cado industries to conduct vessel internal inspection as per vendor request.
- Head nozzles were inspected for vessel SN1668 and 1670. Outlet nozzle internal projection and fillet weld sizes were verified. Drain nozzles were ground flush from inside with vortex breaker welded in place. Welder traceability was maintained.
- Mesh pad was installed on Vessel SN1669. Visual inspection provided satisfactory results. Material and thickness was verified as per drawings.
- Vessel traveler was signed off for vessel internal inspection for vessel SN1668 and 1670.
- Spooling fabrication hasn't started as of yet. Skid fit up is in progress. Progress is extremely slow.

**Additional Information / Comments**

**MATERIALS**

**Unit 1**

- Vessel shell and heads are received for unit #1. Total 4 vessels.
- Piping and skid material is complete.

**Unit 2**

- Vessel material has been received.

**FABRICATION**

**Unit 1**

- 4 vessel long seams are done. Nov 7, 2013.
- Vessel SN1667 and 1669 internal inspection complete. Nov 26, 2013.
- Vessel SN1668 and 1670 internal inspection complete. Nov 27, 2013.



**Additional Information / Comments**

**Unit 2**

- Two vessel long seams are complete.

**DELIVERY STATUS**

1. PO states the delivery date of January 24, 2014.
2. Writer believes the unit completion date is very tight at this time.

**DOCUMENTATION REVIEW**

- Client PO, Vessel drawings, Vessel WPS have been reviewed during this visit.

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Inspector	Phone	E-Mail					

**PHOTOGRAPHS**



November 26, 2013

Vessel ready for internal inspection before closing.



November 26, 2013

Vessel SN stamped at name plate location, Typ.



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November 26, 2013

Vessel top view, Mesh pad to be installed by vendor prior to closing.



November 26, 2013

Vessel bottom view.



November 26, 2013

Internal attachments and fillet weld sizes verified.



November 26, 2013

Vessel 68 and 70 to be welded.



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November 27, 2013  
Vessel SN hard stamped, typical.



November 27, 2013  
Mesh pads installed before closing.



November 27, 2013  
Top and bottom heads inspected for 68 and 70.



November 27, 2013  
Skid fit up in progress.



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**FABRICATION SHOP INSPECTION REPORT – MULTIPLE PACKAGED PROCESS EQUIPMENT**

<b>MTL Job No.</b>	3213	<b>Report No.</b>	005
<b>Mechanical Inspector</b>	Gurmat Sidhu	<b>Phone:</b>	403-472-8292 <a href="mailto:gurmatsidhu@gmail.com">gurmatsidhu@gmail.com</a>
<b>Electrical Inspector</b>	Ryan Mikkelsen	<b>Phone:</b>	403-585-4359 <a href="mailto:ryan.mikkelsen@graeld.ca">ryan.mikkelsen@graeld.ca</a>
<b>AFE No.</b>	A13370663	<b>Date</b>	December 9, 2013
<b>Client</b>	PennWest Exploration c/o Pioneer Engineering Inc.	<b>Client P.O. No.</b>	PEI-A13370663-01
<b>Project</b>	Cordova d-55-A/94-P-10 Facility	<b>Location / LSD</b>	Cordova / d-55-A/94-P-10
<b>Equipment</b>	(2) 30" Sour Quadruple Separator Packages	<b>Tag No.</b>	2013-070
<b>Client Project Engineer</b>	Peter Orakwe Kourosh Kazemi	<b>Contact Info.</b>	403-693-2912, <a href="mailto:Peter.orakwe@pennwest.com">Peter.orakwe@pennwest.com</a> 403-453-8820, <a href="mailto:kkazemi@pioneerengineering.com">kkazemi@pioneerengineering.com</a>
<b>Vendor</b>	Cado Industries	<b>Vendor Job No.</b>	Unit 1 and 2.
<b>Vendor Project Engineer</b>	Wilfred Cao	<b>Phone:</b>	403-279-6662
<b>Vendor QC Manager</b>	Jeremy Koster	<b>Phone:</b>	403-279-6662

**PO Delivery Date** January 24, 2014      **Estimated Completion Date**      Deliveries look to be tight at this time.      **Percentage Complete** 13%

**Vessels** 25%    **Spooling** 0%    **Structural** 50%    **Assembly** 0%    **Instrumentation** 0%    **Building** 0%

Item Serial No :	Description:	Current Shipping Date:	Actual Shipping Date:	LSD:	Status:
2013-070 unit 1	30" Sour Quadruple Separator Package	January 24, 2014	TBD	d-55-A/94-P-10	Vessel internal insp. completed. Skid inspection completed.
2013-070 unit 2	30" Sour Quadruple Separator Package	January 24, 2014	TBD	d-55-A/94-P-10	Two vessel long seams completed.

**Areas of Concern**

- Promised delivery date of January 24, 2014 does not seem to be achievable at this speed of fabrication.

**Deficiencies / Quality Issues**

- Dimensional check on skid length has skid being 18mm short. Drawings state 17069mm, actual is 17051mm..

**Project Information / Drawings**

**ENGINEERING**

- Engineering is in progress.



**Project Information / Drawings**

**DRAWINGS**

- Vessel drawings are issued for construction.
- Vessel DWG 2013-070-300 sheet 1 of 1 rev. 0.
- Skid, Piping and P&ID drawings to be issued yet.

**Inspection / Expediting Comments**

**EXPEDITING**

- Expediting is not required for this project.

**INSPECTION**

**December 3, 2013**

**Unit 1**

- Writer visited vendor to conduct skid inspection and receive project update.
- Skid inspection was conducted prior to checker plate as per skid drawings.
- Skid dimensions, internal beam locations, lifting lug locations and skid squareness was checked with satisfactory results. Skid width and squareness accepted. Skid length found to be 18 mm short. Drawings show 17069, measured to 17051.
- 100% Visual inspection was conducted on all skid welds. Welds provided satisfactory results overall. A few beam butt welds were marked up for low cap. Vendor to build up the low area and grind it flush. One vertical weld was missing on skid I-Beam corner joint.
- Skid beam welds were measured to be ¼" seam weld and lifting lug welds measured to be 10mm as per drawings.
- Top ground welds were ground flush for proper checker plate fit up.
- Vessel base support plate assembly and sump vessel assembly provided satisfactory results.
- Lifting lug bars to be MPI tested by the vendor.
- Vessel fabrication is in progress.

**December 5, 2013**

**Unit 1**

- Shop visit was made to Cado industries to conduct final skid inspection.
- ¼" Checker plate was installed on the skid as per drawings. Checker plate was stitch welded to the skid I beams without any visual gap. Checker plate seam welds were seal welded with satisfactory results.
- 2" bar was used for drip lip weld as per drawings. Drip lip was seal welded from inside.
- Missing weld from previous visit was completed and accepted.
- Sump tank was leak tested at atmospheric test pressure. No visual leaks were found at the time of testing.

**Additional Information / Comments**

**MATERIALS**

**Unit 1**

- Vessel shell and heads are received for unit #1. Total 4 vessels.
- Piping and skid material is complete.

**Unit 2**

- Vessel material has been received.

**FABRICATION**

**Unit 1**

- Four vessel long seams are done. November 7, 2013.
- Vessel SN1667 and 1669 internal inspection complete. November 26, 2013.



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**Additional Information / Comments**

- Vessel SN1668 and 1670 internal inspection complete. November 27, 2013.
- Skid inspection complete – December 5, 2013.

**Unit 2**

- Two vessel long seams are complete.

**DELIVERY STATUS**

1. PO states the delivery date of January 24, 2014.
2. Writer believes the unit completion date is very tight at this time.

**DOCUMENTATION REVIEW**

- Client PO, Vessel drawings, Vessel WPS have been reviewed during this visit.

Gurmat Sidhu	403-472-8292	<a href="mailto:gurmatsidhu@gmail.com">gurmatsidhu@gmail.com</a>					
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**Inspector**

**Phone**

**E-Mail**

**PHOTOGRAPHS**



December 3, 2013  
Skid overview.



December 3, 2013  
Lifting lug weld profile, Typical.



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December 3, 2013  
Low cap welds measured.



December 3, 2013  
Low cap welds.



December 3, 2013  
Missing vertical weld.



December 3, 2013  
Vessel base assembly.



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December 5, 2013  
Checker plate and drip lip assembly.



December 5, 2013  
Sump leak hydro tested.



December 5, 2013  
No leaks on the sump tank.



December 5, 2013  
Missing weld completed.



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**FABRICATION SHOP INSPECTION REPORT – MULTIPLE PACKAGED PROCESS EQUIPMENT**

<b>MTL Job No.</b>	3213	<b>Report No.</b>	006
<b>Mechanical Inspector</b>	Gurmat Sidhu	<b>Phone:</b>	403-472-8292 <a href="mailto:gurmatsidhu@gmail.com">gurmatsidhu@gmail.com</a>
<b>Electrical Inspector</b>	Ryan Mikkelsen	<b>Phone:</b>	403-585-4359 <a href="mailto:ryan.mikkelsen@graeltd.ca">ryan.mikkelsen@graeltd.ca</a>
<b>AFE No.</b>	A13370663	<b>Date</b>	January 2, 2014
<b>Client</b>	PennWest Exploration c/o Pioneer Engineering Inc.	<b>Client P.O. No.</b>	PEI-A13370663-01
<b>Project</b>	Cordova d-55-A/94-P-10 Facility	<b>Location / LSD</b>	Cordova / d-55-A/94-P-10
<b>Equipment</b>	(2) 30" Sour Quadruple Separator Packages	<b>Tag No.</b>	2013-070
<b>Client Project Engineer</b>	Peter Orakwe Kourosh Kazemi	<b>Contact Info.</b>	403-693-2912, <a href="mailto:Peter.orakwe@pennwest.com">Peter.orakwe@pennwest.com</a> 403-453-8820, <a href="mailto:kkazemi@pioneerengineering.com">kkazemi@pioneerengineering.com</a>
<b>Vendor</b>	Cado Industries	<b>Vendor Job No.</b>	Unit 1 and 2.
<b>Vendor Project Engineer</b>	Wilfred Cao	<b>Phone:</b>	403-279-6662
<b>Vendor QC Manager</b>	Jeremy Koster	<b>Phone:</b>	403-279-6662

<b>PO Delivery Date</b>	January 24, 2014	<b>Estimated Completion Date</b>	Deliveries look to be tight at this time.	<b>Percentage Complete</b>	27%
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<b>Vessels</b>	50%	<b>Spooling</b>	10%	<b>Structural</b>	100%	<b>Assembly</b>	0%	<b>Instrumentation</b>	0%	<b>Building</b>	0%
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Item Serial No :	Description:	Current Shipping Date:	Actual Shipping Date:	LSD:	Status:
2013-070 unit 1	30" Sour Quadruple Separator Package	January 24, 2014	TBD	d-55-A/94-P-10	Assembly to start next week.
2013-070 unit 2	30" Sour Quadruple Separator Package	January 24, 2014	TBD	d-55-A/94-P-10	Skid fabrication complete.

**Areas of Concern**

- Promised delivery date of January 24, 2014 does not seem to be achievable at this speed of fabrication.

**Deficiencies / Quality Issues**

- No deficiencies or quality issues were noted during this inspection visit.

**Project Information / Drawings**

- ENGINEERING**
- Engineering is complete.
- DRAWINGS**
- Vessel drawings are issued for construction.
  - Vessel DWG 2013-070-300 sheet 1 of 1 rev. 0.



**Project Information / Drawings**

- SKID
- 2013-070-403 sheet 1 of 1 Rev. 2
- 2013-070-404 sheet 1 of 1 Rev. 2
- Piping and P&ID drawings to be issued yet.

**Inspection / Expediting Comments**

**EXPEDITING**

- Expediting is not required for this project.

**INSPECTION**

**December 16, 2013**

**Unit 2**

- Writer visited vendor to conduct skid inspection and receive project update.
- Skid # 2 was inspected prior to checker plate as per skid drawings.
- Skid dimensions, internal beam locations, lifting lug locations and skid squareness was checked with satisfactory results. Skid width and squareness accepted.
- 100% Visual inspection was conducted on all skid welds. Welds provided satisfactory results overall.
- Skid beam welds were measured to be ¼" seam weld and lifting lug welds measured to be 10mm as per drawings.
- Top ground welds were ground flush for proper checker plate fit up.
- Vessel base support plate assembly and sump assembly provided satisfactory results.
- Lifting lug bars to be MPI tested by the vendor.
- Vessels are back from PWHT. Vessels are stored outside in the yard. PWHT chart was reviewed and accepted for 4 vessels.
- Piping fabrication is in progress. Random visual inspection provided satisfactory results on piping fabrication.
- Skid assembly is expected to start next week.

**December 18, 2013**

**Unit 2**

- Shop visit was made to Cado industries to conduct final skid inspection on skid # 2.
- ¼" Checker plate was installed on the skid as per drawings. Checker plate was stitch welded to the skid I beams without any visual gap. Checker plate seam welds were seal welded with satisfactory results.
- 2" bar was used for drip lip welded as per drawings. Drip lip was seal welded from inside.
- Sump tank was leak tested at atmospheric test pressure. No visual leaks were found at the time of testing.
- Lifting lug welds were MPI tested with satisfactory results.

**Additional Information / Comments**

**MATERIALS**

**Unit 1**

- Vessel materials complete.
- Piping and skid material is complete.

**Unit 2**

- Vessel material complete.
- Piping and skid material is complete.

**FABRICATION**

**Unit 1**

- 4 vessel long seams are done. November 7, 2013.
- Vessel SN1667 and 1669 internal inspection complete. November 26, 2013.
- Vessel SN1668 and 1670 internal inspection complete. November 27, 2013.

Any omission or failure on part of the inspector to disapprove or reject any work or materials shall not be construed as acceptance of any defective work or materials.



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**Additional Information / Comments**

- Skid inspection complete – December 5, 2013.

**Unit 2**

- Four vessels complete w PWHT – Stored outdoors – December 18, 2013.
- Skid inspection complete – December 18, 2013.
- Spooling fabrication has commenced. – December 18, 2013.

**DELIVERY STATUS**

1. PO states the delivery date of January 24, 2014.
2. Writer believes the unit completion date is very tight at this time.

**DOCUMENTATION REVIEW**

- Client PO, Vessel drawings, Vessel WPS have been reviewed during this visit.

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Inspector

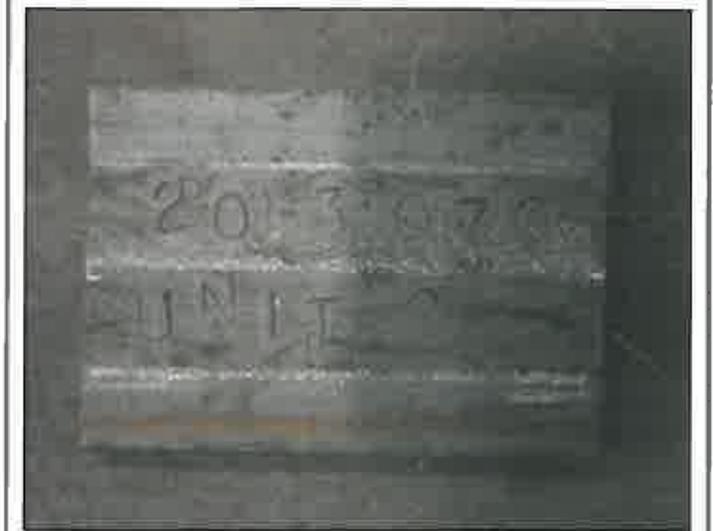
Phone

E-Mail

**PHOTOGRAPHS**



December 16, 2013  
Skid overview.



December 16, 2013  
Skid Tag.



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December 16, 2013  
Top welds ground flush.



December 16, 2013  
Top welds ground flush.



December 16, 2013  
Typical skid welds.



December 16, 2013  
Lifting lugs welds measured.



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December 18, 2013  
Leak testing sump.



December 18, 2013  
Leak testing sump.



December 18, 2013  
Lugs MPI tested.



December 18, 2013  
Checker plate stitch welded without any gap.



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December 18, 2013  
Checker plate stitch welds.



December 18, 2013  
Drip lip assembly.



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FABRICATION SHOP INSPECTION REPORT – MULTIPLE PACKAGED PROCESS EQUIPMENT

Table with inspection details including MTL Job No. 3213, Report No. 007, Mechanical Inspector Gurmat Sidhu, Electrical Inspector Ryan Mikkelsen, Client PennWest Exploration, and Vendor Cado Industries.

Summary table with columns: PO Delivery Date (January 24, 2014), Estimated Completion Date, Deliveries look to be tight at this time., Percentage Complete (40%), Vessels (70%), Spooling (40%), Structural (100%), Assembly (20%), Instrumentation (10%), Building (0%).

Table with 6 columns: Item Serial No., Description, Current Shipping Date, Actual Shipping Date, LSD, Status. Rows include 2013-070 unit 1 and 2.

Areas of Concern

- Promised delivery date of January 24, 2014 does not seem to be achievable at this speed of fabrication.

Deficiencies / Quality Issues

- No deficiencies or quality issues were noted during this inspection visit.

Project Information / Drawings

- ENGINEERING
• Engineering is complete.
DRAWINGS
• Vessel drawings are issued for construction.
• Vessel DWG 2013-070-300 sheet 1 of 1 rev. 0.



### Project Information / Drawings

- SKID
- 2013-070-403 sheet 1 of 1 Rev. 2
- 2013-070-404 sheet 1 of 1 Rev. 2
- P&ID
- 2013-070-101 sheet 1 of 1 Rev. 1
- 2013-070-102 sheet 1 of 1 Rev. 1
- GA
- 2013-070-201 sheet 1 of 1 Rev. 2.
- Building drawings to be issued.

### Inspection / Expediting Comments

#### EXPEDITING

- Expediting is not required for this project.

#### INSPECTION

January 3, 2013

##### Unit 2

- Shop visit was made to Cado Industries to conduct vessel internal inspection as per vendor request.
- Vessel internal inspection was conducted on vessel SN 1671 and 1672. Shell and heads were inspected prior to mesh pad installation.
- Vessel dimensions, thickness and material was verified as per drawings.
- Nozzle internal projections, fillet welds were measured to be acceptable as per drawings. Drain nozzle was ground flush with vortex breaker.
- Inlet diverter and float hood elevation and orientation were verified with satisfactory results. Mesh pad bars were welded, elevation was checked ok as per drawings.
- Vendor to install the mesh pad prior to closing the vessel.
- Vessel internal inspection was signed off on travel sheet for 1671 and 1672.
- Fabrication is in progress for last 2 vessels for this skid.

##### Unit 1

- Assembly is in progress for unit 1. Vessels are mounted. Piping fabrication is about 80% complete. Piping NDE is completed as the fabrication proceeds. Random assembly visual inspection provided satisfactory results. Skid P&ID and GA drawings were received during this inspection visit. Building drawings to be issued.

### Additional Information / Comments

#### MATERIALS

##### Unit 1

- Vessel materials complete.
- Piping and skid material is complete.

##### Unit 2

- Vessel material complete.
- Piping and skid material is complete.

#### FABRICATION

##### Unit 1

- 4 vessel long seams are done. November 7, 2013.
- Vessel SN1667 and 1669 internal inspection complete. November 26, 2013.
- Vessel SN1668 and 1670 internal inspection complete. November 27, 2013.

Any omission or failure on part of the inspector to disapprove or reject any work or materials shall not be construed as acceptance of any defective work or materials.



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**Additional Information / Comments**

- Skid inspection complete – December 5, 2013.
- Four vessels complete PWHT – Stored outdoors – December 18, 2013.
- Assembly is in progress.

**Unit 2**

- Skid inspection complete – December 18, 2013.
- Spooling fabrication has commenced. – December 18, 2013.
- Vessel SN 1671 and 1672 internal inspection complete - January 3, 2014.

**DELIVERY STATUS**

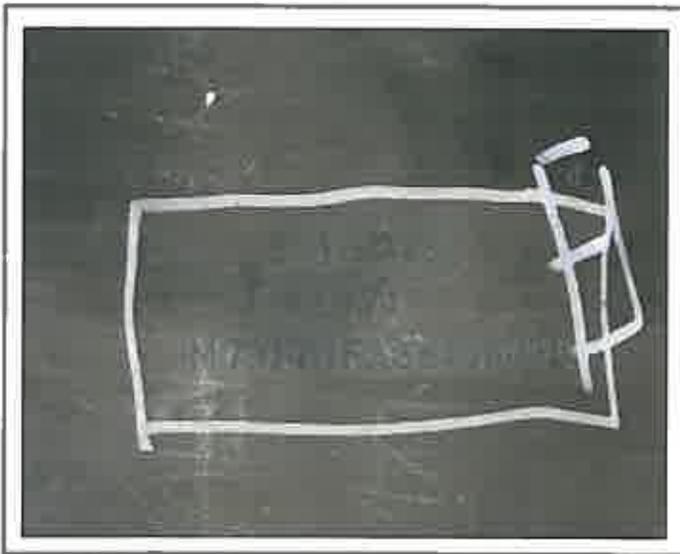
1. PO states the delivery date of January 24, 2014.
2. Writer believes the unit completion date is very tight at this time.

**DOCUMENTATION REVIEW**

- Client PO, Vessel drawings, Vessel WPS have been reviewed during this visit.

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<b>Inspector</b>	<b>Phone</b>	<b>E-Mail</b>					

**PHOTOGRAPHS**



January 3, 2014  
Vessel SN verified.



January 3, 2014  
Vessel internal top view, Mesh pad to be installed prior to closing.



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January 3, 2014  
Top and bottom heads inspected.



January 3, 2014  
Internal attachments and fillet weld sizes verified.



January 3, 2013  
Assembly overview for skid # 1.



January 3, 2013  
Assembly overview for skid # 1.



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**FABRICATION SHOP INSPECTION REPORT – MULTIPLE PACKAGED PROCESS EQUIPMENT**

<b>MTL Job No.</b>	3213	<b>Report No.</b>	008
<b>Mechanical Inspector</b>	Gurmat Sidhu	<b>Phone:</b>	403-472-8292 <a href="mailto:gurmatSidhu@gmail.com">gurmatSidhu@gmail.com</a>
<b>Electrical Inspector</b>	Ryan Mikkelsen	<b>Phone:</b>	403-585-4359 <a href="mailto:ryan.mikkelsen@graeltd.ca">ryan.mikkelsen@graeltd.ca</a>
<b>AFE No.</b>	A13370663	<b>Date</b>	January 20, 2014
<b>Client</b>	PennWest Exploration c/o Pioneer Engineering Inc.	<b>Client P.O. No.</b>	PEI-A13370663-01
<b>Project</b>	Cordova d-55-A/94-P-10 Facility	<b>Location / LSD</b>	Cordova / d-55-A/94-P-10
<b>Equipment</b>	(2) 30" Sour Quadruple Separator Packages	<b>Tag No.</b>	2013-070
<b>Client Project Engineer</b>	Peter Orakwe Kourosh Kazemi	<b>Contact Info.</b>	403-693-2912, <a href="mailto:Peter.orakwe@pennwest.com">Peter.orakwe@pennwest.com</a> 403-453-8820, <a href="mailto:kkazemi@pioneerengineering.com">kkazemi@pioneerengineering.com</a>
<b>Vendor</b>	Cado Industries	<b>Vendor Job No.</b>	Unit 1 and 2.
<b>Vendor Project Engineer</b>	Wilfred Cao	<b>Phone:</b>	403-279-6662
<b>Vendor QC Manager</b>	Jeremy Koster	<b>Phone:</b>	403-279-6662

<b>PO Delivery Date</b>	January 24, 2014	<b>Estimated Completion Date</b>	Mid-February, 2014	<b>Percentage Complete</b>	46%
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<b>Vessels</b>	80%	<b>Spooling</b>	45%	<b>Structural</b>	100%	<b>Assembly</b>	40%	<b>Instrumentation</b>	10%	<b>Building</b>	0%
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Item Serial No :	Description:	Current Shipping Date:	Actual Shipping Date:	LSD:	Status:
2013-070 unit 1	30" Sour Quadruple Separator Package	January 24, 2014	TBD	d-55-A/94-P-10	Assembly in progress.
2013-070 unit 2	30" Sour Quadruple Separator Package	January 24, 2014	TBD	d-55-A/94-P-10	Vessel / piping fab continues.

**Areas of Concern**

- New expected completion date for Unit 1 is February, 2014. Unit 2 to follow this.

**Deficiencies / Quality Issues**

- No deficiencies or quality issues were noted during this inspection visit.

**Project Information / Drawings**

- ENGINEERING**
- Engineering is complete.
- DRAWINGS**
- Vessel drawings are issued for construction.
  - Vessel DWG 2013-070-300 sheet 1 of 1 rev. 0.



**Project Information / Drawings**

- SKID.
- 2013-070-403 sheet 1 of 1 Rev. 2.
- 2013-070-404 sheet 1 of 1 Rev. 2.
- P&ID.
- 2013-070-101 sheet 1 of 1 Rev. 1.
- 2013-070-102 sheet 1 of 1 Rev. 1.
- GA.
- 2013-070-201 sheet 1 of 1 Rev. 2.
- Building drawings to be issued.

**Inspection / Expediting Comments**

**EXPEDITING**

- Expediting is not required for this project.

**INSPECTION**

January 13, 2013

**Unit 2**

- Shop visit was made to Cado Industries to conduct vessel internal inspection as per vendor request.
- Vessel internal inspection was conducted on vessel SN 1673 and 1674. Shell and heads were inspected prior to mesh pad installation.
- Vessel dimensions, thickness and material was verified as per drawings.
- Nozzle internal projections, fillet welds were measured to be acceptable as per drawings. Drain nozzle was ground flush with vortex breaker.
- Inlet diverter and float hood elevation and orientation were verified with satisfactory results. Mesh pad bars were welded, elevation was checked as acceptable as per drawings.
- Vendor to install the mesh pad prior to closing the vessel.
- Vessel internal inspection was signed off on travel sheet for 1673 and 1674.

**Unit 1**

- Assembly is in progress for unit 1. Vessels are mounted. Piping fabrication is about 90% complete. Piping NDE is completed as the fabrication proceeds. Random assembly visual inspection provided satisfactory results. Skid P&ID and GA drawings were received during this inspection visit. Building drawings to be issued.

**Additional Information / Comments**

**MATERIALS**

**Unit 1**

- Vessel materials complete.
- Piping and skid material is complete.

**Unit 2**

- Vessel material complete.
- Piping and skid material is complete.

**FABRICATION**

**Unit 1**

- 4 vessel long seams are done. November 7, 2013.
- Vessel SN1667 and 1669 internal inspection complete. November 26, 2013.
- Vessel SN1668 and 1670 internal inspection complete. November 27, 2013.
- Skid inspection complete – December 5, 2013.



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**Additional Information / Comments**

- Four vessels complete PWHT – Stored outdoors – December 18, 2013.
- Assembly is in progress.

**Unit 2**

- Skid inspection complete – December 18, 2013.
- Spooling fabrication has commenced. – December 18, 2013.
- Vessel SN 1671 and 1672 internal inspection complete - January 3, 2014.
- Vessel SN 1673 and 1674 internal inspection complete - January 13, 2014.

**DELIVERY STATUS**

1. PO states the delivery date of January 24, 2014.
2. Writer believes the first unit to be completed in mid-February 2014 and second unit to follow shortly behind.

**DOCUMENTATION REVIEW**

- Client PO, Vessel drawings, Vessel WPS have been reviewed during this visit.

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Inspector	Phone	E-Mail					

**PHOTOGRAPHS**



January 13, 2014  
Vessel SN verified.



January 13, 2014  
Vessel internal top view, Mesh pad to be installed prior to closing.



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January 13, 2014

Top and bottom heads inspected.



January 13, 2014

Internal attachments and fillet weld sizes verified.



January 13, 2013

Assembly overview for skid # 1.



January 13, 2013

Assembly overview for skid # 1.



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**FABRICATION SHOP INSPECTION REPORT – MULTIPLE PACKAGED PROCESS EQUIPMENT**

<b>MTL Job No.</b>	3213	<b>Report No.</b>	009
<b>Mechanical Inspector</b>	Gurmat Sidhu	<b>Phone:</b>	403-472-8292 <a href="mailto:gurmatsidhu@gmail.com">gurmatsidhu@gmail.com</a>
<b>Electrical Inspector</b>	Ryan Mikkelsen	<b>Phone:</b>	403-585-4359 <a href="mailto:ryan.mikkelsen@graeltd.ca">ryan.mikkelsen@graeltd.ca</a>
<b>AFE No.</b>	A13370663	<b>Date</b>	January 27, 2014
<b>Client</b>	PennWest Exploration c/o Pioneer Engineering Inc.	<b>Client P.O. No.</b>	PEI-A13370663-01
<b>Project</b>	Cordova d-55-A/94-P-10 Facility	<b>Location / LSD</b>	Cordova / d-55-A/94-P-10
<b>Equipment</b>	(2) 30" Sour Quadruple Separator Packages	<b>Tag No.</b>	2013-070
<b>Client Project Engineer</b>	Peter Orakwe Kourosh Kazemi	<b>Contact Info.</b>	403-693-2912, <a href="mailto:Peter.orakwe@pennwest.com">Peter.orakwe@pennwest.com</a> 403-453-8820, <a href="mailto:kkazemi@pioneerengineering.com">kkazemi@pioneerengineering.com</a>
<b>Vendor</b>	Cado Industries	<b>Vendor Job No.</b>	Unit 1 and 2.
<b>Vendor Project Engineer</b>	Wilfred Cao	<b>Phone:</b>	403-279-6662
<b>Vendor QC Manager</b>	Jeremy Koster	<b>Phone:</b>	403-279-6662

<b>PO Delivery Date</b>	January 24, 2014	<b>Estimated Completion Date</b>	Mid-February, 2014	<b>Percentage Complete</b>	60%
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<b>Vessels</b>	100%	<b>Spooling</b>	80%	<b>Structural</b>	100%	<b>Assembly</b>	60%	<b>Instrumentation</b>	20%	<b>Building</b>	0%
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Item Serial No :	Description:	Current Shipping Date:	Actual Shipping Date:	LSD:	Status:
2013-070 unit 1	30" Sour Quadruple Separator Package	January 24, 2014	TBD	d-55-A/94-P-10	Hydro tested.
2013-070 unit 2	30" Sour Quadruple Separator Package	January 24, 2014	TBD	d-55-A/94-P-10	Assembly and piping fabrication in progress.

**Areas of Concern**

- New expected completion date for unit 1 is Mid February, unit 2 end of February, 2014.

**Deficiencies / Quality Issues**

- No deficiencies or quality issues were noted during this inspection visit.

**Project Information / Drawings**

- ENGINEERING**
- Engineering is complete.
- DRAWINGS**
- Vessel drawings are issued for construction.



**Project Information / Drawings**

- Vessel DWG 2013-070-300 sheet 1 of 1 rev. 0.
- SKID.
- 2013-070-403 sheet 1 of 1 Rev. 2.
- 2013-070-404 sheet 1 of 1 Rev. 2.
- P&ID.
- 2013-070-101 sheet 1 of 1 Rev. 1.
- 2013-070-102 sheet 1 of 1 Rev. 1.
- GA.
- 2013-070-201 sheet 1 of 1 Rev. 2.
- Building drawings to be issued.

**Inspection / Expediting Comments**

**EXPEDITING**

- Expediting is not required for this project.

**INSPECTION**

January 22, 2013

**Unit 1**

- Writer visited Cado Industries to witness the hydro test.
- Hydro test was conducted on Unit # 1. Separator serial numbers and skid SN stamped were verified. Vessel SN 1667 to 1670 were installed on unit 1.
- Hydro test was conducted while vessel piping was assembled on the skid. Skid assembly was complete. Skid lugs were MPI tested with satisfactory results.
- Piping installation and valve directions were confirmed as per P&ID drawings. All the valves were in correct position at the time of testing.
- Entire skid was tested at one test pressure including all 4 vessels and the entire process piping.
- Test pressure was set up at 2040 psi.
- Vendor did not test the PSV flare lines. As per vendor shop standard PSV flare lines not tested unless requested by the client.
- Spool elevation was verified as per GA drawings. Satisfactory results were obtained.
- Test was conducted for one hour. No visual leaks were found at the time of testing.
- Two calibrated gauges were used to monitor the test pressure.
- Writer accepted the hydro test and signed off vendor's travel sheet.
- Writer is requested to come back tomorrow to review vessel data reports tomorrow.

January 23, 2013

**Unit 1**

- Writer visited Cado Industries to review vessel data reports and witness skid dry out procedure.
- As per vendor unit was drained overnight. Skid does not have any low point TOL drains so low drain point flanges were loosen to drain the water out.
- Inspector verified by taking plugs off the low points and flange spacing between connections. Very small amount of water was noticed on the drain lines which could not cause any cracking from freezing. Vendor also added some methanol to the vessel drain to avoid any freezing.
- Vendor decided not to take apart the meter run assembly but will add methanol to avoid any freezing in cold weather conditions.
- Skid to go for paint and insulation next.
- Vessels were signed off with ABSA. Final data package was reviewed.
- Vessel U-1As were reviewed and accepted for four vessels SN1667, 1668, 1669 and 1670. Satisfactory results were obtained as per drawings and applicable codes. Alberta registration numbers are issued to all four vessels.
- NDE such as RT, PWHT and HT was reviewed and accepted for all four vessels. NDE reports showed satisfactory results.
- All the NDE testing was conducted by qualified personnel to the appropriate code.
- Vessel MTRs were reviewed and accepted as per mapped drawings and BOM.



Inspection / Expediting Comments

- Name plate information was verified. Vessel SN and A# were verified as per data reports.

Unit 2

- Vessels are back from PWHT. Assembly is in progress. Piping fabrication is in progress and NDE is completed as the fabrication proceeds. Random assembly visual inspection provided satisfactory results.

Additional Information / Comments

MATERIALS

Unit 1

- Vessel materials complete.
- Piping and skid material is complete.

Unit 2

- Vessel material complete.
- Piping and skid material is complete.

FABRICATION

Unit 1

- 4 vessel long seams are done. November 7, 2013.
- Vessel SN1667 and 1669 internal inspection complete. November 26, 2013.
- Vessel SN1668 and 1670 internal inspection complete. November 27, 2013.
- Skid inspection complete – December 5, 2013.
- Four vessels complete PWHT – Stored outdoors – December 18, 2013.
- Unit hydro tested at 2040 psi - January 22, 2014.
- Four vessel data packages reviewed and accepted (Vessel SN1667, 68, 69 and 70) - January 23, 2014.

Unit 2

- Skid inspection complete – December 18, 2013.
- Spooling fabrication has commenced. – December 18, 2013.
- Vessel SN 1671 and 1672 internal inspection complete - January 3, 2014.
- Vessel SN 1673 and 1674 internal inspection complete - January 13, 2014.

DELIVERY STATUS

- PO states the delivery date of January 24, 2014.
- Writer believes the first unit to be completed in mid-February 2014 and second unit to follow shortly behind.

DOCUMENTATION REVIEW

- Client PO, Vessel drawings, Vessel WPS have been reviewed during this visit.
- Unit 1 vessel data reports have been reviewed. Vessel SN1667, 68, 69 and 70.
  - Vessel SN1667, A # 636929.
  - Vessel SN1668, A # 636927.
  - Vessel SN1669, A # 636926.
  - Vessel SN1670, A # 636928.

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Inspector	Phone	E-Mail					



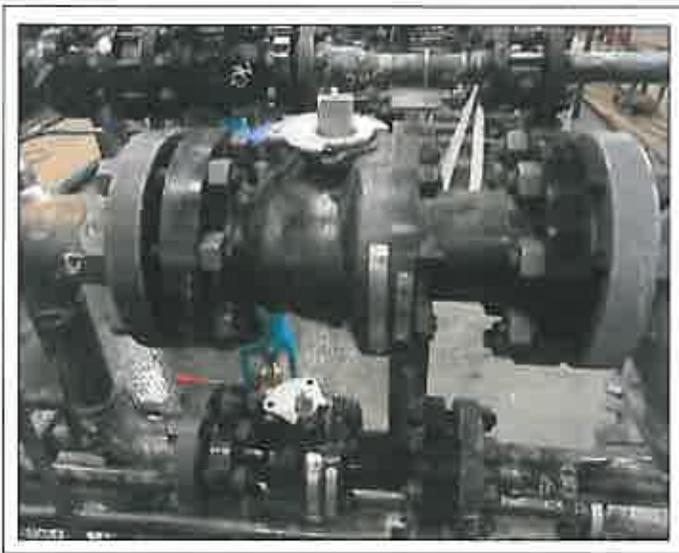
**PHOTOGRAPHS**



January 22, 2014  
Unit 1 hydro test overview.



January 22, 2014  
Two calibrated gauges used.



January 22, 2014  
Ball valve, gate valve and check valve direction and position verified for positive water flow.



January 22, 2014  
Flare header not tested as per vendor shop standard.



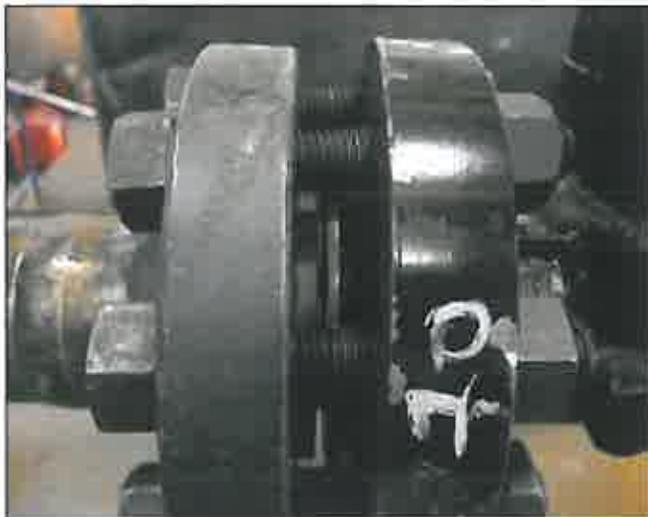
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January 23, 2013  
Draining after hydro test.



January 23, 2013  
Low point drains.



January 23, 2013  
Low points unbolted flanges.



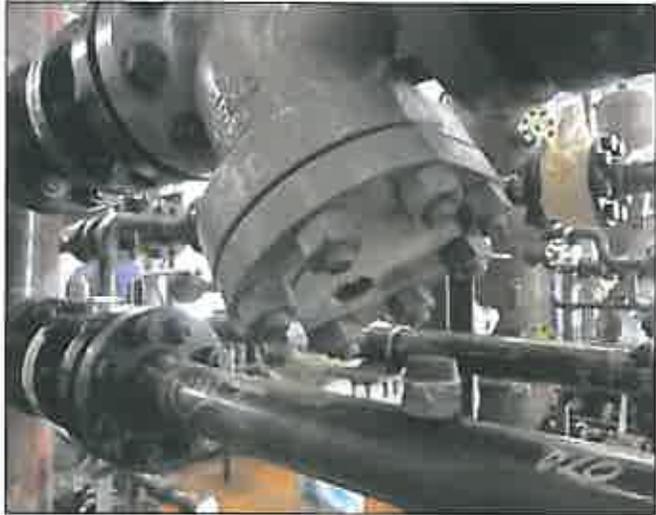
January 23, 2013  
Water level checked from TOL openings.



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January 23, 2013  
Plugs taken off to verify.



January 23, 2013  
Actuators wrapped prior to painting.



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**FABRICATION SHOP INSPECTION REPORT – MULTIPLE PACKAGED PROCESS EQUIPMENT**

<b>MTL Job No.</b>	3213	<b>Report No.</b>	010
<b>Mechanical Inspector</b>	Gurmat Sidhu	<b>Phone:</b>	403-472-8292 <a href="mailto:gurmatsidhu@gmail.com">gurmatsidhu@gmail.com</a>
<b>Electrical Inspector</b>	Ryan Mikkelsen	<b>Phone:</b>	403-585-4359 <a href="mailto:ryan.mikkelsen@graeld.ca">ryan.mikkelsen@graeld.ca</a>
<b>AFE No.</b>	A13370663	<b>Date</b>	February 3, 2014
<b>Client</b>	PennWest Exploration c/o Pioneer Engineering Inc.	<b>Client P.O. No.</b>	PEI-A13370663-01
<b>Project</b>	Cordova d-55-A/94-P-10 Facility	<b>Location / LSD</b>	Cordova / d-55-A/94-P-10
<b>Equipment</b>	(2) 30" Sour Quadruple Separator Packages	<b>Tag No.</b>	2013-070
<b>Client Project Engineer</b>	Peter Orakwe Kourosh Kazemi	<b>Contact Info.</b>	403-693-2912, <a href="mailto:Peter.orakwe@pennwest.com">Peter.orakwe@pennwest.com</a> 403-453-8820, <a href="mailto:kkazemi@pioneerengineering.com">kkazemi@pioneerengineering.com</a>
<b>Vendor</b>	Cado Industries	<b>Vendor Job No.</b>	Unit 1 and 2.
<b>Vendor Project Engineer</b>	Wilfred Cao	<b>Phone:</b>	403-279-6662
<b>Vendor QC Manager</b>	Jeremy Koster	<b>Phone:</b>	403-279-6662

<b>PO Delivery Date</b>	January 24, 2014	<b>Estimated Completion Date</b>	March & April 2014	<b>Percentage Complete</b>	62%
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<b>Vessels</b>	100%	<b>Spooling</b>	90%	<b>Structural</b>	100%	<b>Assembly</b>	65%	<b>Instrumentation</b>	20%	<b>Building</b>	0%
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Item Serial No :	Description:	Current Shipping Date:	Actual Shipping Date:	LSD:	Status:
2013-070 unit 1	30" Sour Quadruple Separator Package	March, 2014	TBD	d-55-A/94-P-10	Hydro tested. Painting is progress.
2013-070 unit 2	30" Sour Quadruple Separator Package	April , 2014	TBD	d-55-A/94-P-10	Assembly and piping fabrication in progress.

**Areas of Concern**

- New expected completion date for unit 1 is March, unit 2 end April, 2014.

**Deficiencies / Quality Issues**

- No deficiencies or quality issues were noted during this inspection visit.

**Project Information / Drawings**

**ENGINEERING**

- Engineering is complete.



### Project Information / Drawings

#### DRAWINGS

- Vessel drawings are issued for construction.
- Vessel DWG 2013-070-300 sheet 1 of 1 rev. 0.
- SKID.
- 2013-070-403 sheet 1 of 1 Rev. 2.
- 2013-070-404 sheet 1 of 1 Rev. 2.
- P&ID.
- 2013-070-101 sheet 1 of 1 Rev. 1.
- 2013-070-102 sheet 1 of 1 Rev. 1.
- GA.
- 2013-070-201 sheet 1 of 1 Rev. 2.
- Building drawings to be issued.

### Inspection / Expediting Comments

#### EXPEDITING

- Expediting is not required for this project.

#### INSPECTION

January 31, 2013

- Writer visited Cado Industries to receive project update and inspect recent fabrication.
- Unit 1 is not back from painting yet. Expected to be back by early next week. Instrumentation to start right away and could take up to 2 weeks for completion.
- Unit 2 assembly is in progress. Vessels are mounted on the skid. PWHT is complete on the vessels. PWHT charts were reviewed and accepted as per drawings.
- Spooling fabrication is almost 90% complete. Assembly is about 60% complete. Random visual inspection was conducted on completed assembly with satisfactory results.
- Piping fabrication inspection was conducted. Welder IDs were maintained. Root welds were inspected with satisfactory results.
- Unit 2 hydro test is expected possibly late next week.

### Additional Information / Comments

#### MATERIALS

##### Unit 1

- Vessel materials complete.
- Piping and skid material is complete.

##### Unit 2

- Vessel material complete.
- Piping and skid material is complete.

#### FABRICATION

##### Unit 1

- 4 Vessel long seams are done. November 7, 2013.
- Vessel SN1667 and 1669 internal inspection complete. November 26, 2013.



Additional Information / Comments

- Vessel SN1668 and 1670 internal inspection complete. November 27, 2013.
- Skid inspection complete – December 5, 2013.
- Four vessels complete PWHT – Stored outdoors – December 18, 2013.
- Unit hydro tested at 2040 psi - January 22, 2014.
- Unit currently out for blast /paint. Building erection to follow. – January 31, 2014.

Unit 2

- Skid inspection complete – December 18, 2013.
- Spooling fabrication has commenced. – December 18, 2013.
- Vessel SN 1671 and 1672 internal inspection complete - January 3, 2014.
- Vessel SN 1673 and 1674 internal inspection complete - January 13, 2014.
- Assembly is in progress, Hydro test expected late next week.

DELIVERY STATUS

1. PO states the delivery date of January 24, 2014.
2. Writer believes the first unit to be completed in March, 2014 and second unit to follow shortly behind or early April, 2014.

DOCUMENTATION REVIEW

- Client PO, Vessel drawings, Vessel WPS have been reviewed during this visit.
- Unit 1 vessel data reports have been reviewed. Vessel SN1667, 68, 69 and 70.
  - Vessel SN1667, A # 636929.
  - Vessel SN1668, A # 636927.
  - Vessel SN1669, A # 636926.
  - Vessel SN1670, A # 636928.
- Four vessel data packages reviewed and accepted (Vessel SN1667, 68, 69 and 70) - January 23, 2014.

Gurmat Sidhu	403-472-8292	<a href="mailto:gurmatsidhu@gmail.com">gurmatsidhu@gmail.com</a>				
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Inspector

Phone

E-Mail

PHOTOGRAPHS



January 31, 2014  
Unit 2 assembly overview.



January 31, 2014  
Unit 2 assembly overview.



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January 31, 2014

Random spool root inspection conducted prior to bolt up.



January 31, 2014

Typical TOL full penetration welds.



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**FABRICATION SHOP INSPECTION REPORT – MULTIPLE PACKAGED PROCESS EQUIPMENT**

<b>MTL Job No.</b>	3213	<b>Report No.</b>	011
<b>Mechanical Inspector</b>	Gurmat Sidhu	<b>Phone:</b>	403-472-8292 <a href="mailto:gurmatSidhu@gmail.com">gurmatSidhu@gmail.com</a>
<b>Electrical Inspector</b>	Ryan Mikkelsen	<b>Phone:</b>	403-585-4359 <a href="mailto:ryan.mikkelsen@graeld.ca">ryan.mikkelsen@graeld.ca</a>
<b>AFE No.</b>	A13370663	<b>Date</b>	February 18, 2014
<b>Client</b>	PennWest Exploration c/o Pioneer Engineering Inc.	<b>Client P.O. No.</b>	PEI-A13370663-01
<b>Project</b>	Cordova d-55-A/94-P-10 Facility	<b>Location / LSD</b>	Cordova / d-55-A/94-P-10
<b>Equipment</b>	(2) 30" Sour Quadruple Separator Packages	<b>Tag No.</b>	2013-070
<b>Client Project Engineer</b>	Peter Orakwe Kourosh Kazemi	<b>Contact Info.</b>	403-693-2912, <a href="mailto:Peter.orakwe@pennwest.com">Peter.orakwe@pennwest.com</a> 403-453-8820, <a href="mailto:kkazemi@pioneerengineering.com">kkazemi@pioneerengineering.com</a>
<b>Vendor</b>	Cado Industries	<b>Vendor Job No.</b>	Unit 1 and 2.
<b>Vendor Project Engineer</b>	Wilfred Cao	<b>Phone:</b>	403-279-6662
<b>Vendor QC Manager</b>	Jeremy Koster	<b>Phone:</b>	403-279-6662

<b>PO Delivery Date</b>	January 24, 2014	<b>Estimated Completion Date</b>	March & April 2014	<b>Percentage Complete</b>	82%
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<b>Vessels</b>	100%	<b>Spooling</b>	100%	<b>Structural</b>	100%	<b>Assembly</b>	80%	<b>Instrumentation</b>	30%	<b>Building</b>	0%
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Item Serial No :	Description:	Current Shipping Date:	Actual Shipping Date:	LSD:	Status:
2013-070 unit 1	30" Sour Quadruple Separator Package	March, 2014	TBD	d-55-A/94-P-10	Painting completed. Instrumentation in progress.
2013-070 unit 2	30" Sour Quadruple Separator Package	April , 2014	TBD	d-55-A/94-P-10	Hydro tested. Painting to follow.

**Areas of Concern**

- New expected completion date for unit 1 is March, unit 2 is April, 2014.

**Deficiencies / Quality Issues**

- PSV flare lines were not hydro tested. Vendor advises these will not be tested unless advised by Client. Client to advise.

**Project Information / Drawings**

**ENGINEERING**

- Engineering is complete.

**DRAWINGS**

- Vessel drawings are issued for construction.



### Project Information / Drawings

- Vessel DWG 2013-070-300 sheet 1 of 1 rev. 0.
- SKID.
- 2013-070-403 sheet 1 of 1 Rev. 2.
- 2013-070-404 sheet 1 of 1 Rev. 2.
- P&ID.
- 2013-070-101 sheet 1 of 1 Rev. 1.
- 2013-070-102 sheet 1 of 1 Rev. 1.
- GA.
- 2013-070-201 sheet 1 of 1 Rev. 2.
- Building drawings to be issued.

### Inspection / Expediting Comments

#### EXPEDITING

- Expediting is not required for this project.

#### INSPECTION

##### February 10, 2014

- Writer visited Cado Industries to witness the hydro test.
- Hydro test was conducted on Unit # 2. Separator serial numbers and skid SN stamped were verified. Vessel SN 1671 to 1674 were installed on unit 1.
- Hydro test was conducted while vessel piping was assembled on the skid. Skid assembly was complete. Skid lugs were MPI tested with satisfactory results.
- Piping installation and valve directions were confirmed as per P&ID drawings. All the valves were in correct position at the time of testing.
- Entire skid was tested at one test pressure including all four vessels and the entire process piping.
- Test pressure was set up at 2040 psi.
- Vendor did not test the PSV flare lines. As per vendor shop standard PSV flare lines not tested unless requested by the client. **Client to advise.**
- Spool elevation was verified as per GA drawings. Satisfactory results were obtained.
- Test was conducted for one hour. No visual leaks were found at the time of testing.
- Two calibrated gauges were used to monitor the test pressure.
- Writer accepted the hydro test and signed off vendor's travel sheet.
- Writer is scheduled to come back tomorrow to witness the dry out procedure and review vessel data packages.

##### February 11, 2014

- Writer visited Cado Industries to witness skid dry out procedure.
- As per vendor unit was drained overnight. Skid does not have any low point TOL drains so low drain point flanges were loosen to drain the water out.
- Inspector verified by taking plugs off the low points and flange spacing between connections. Very small amount of water was noticed on the drain lines which could not cause any cracking from freezing. Vendor also added some methanol to the vessel drain to avoid any freezing.
- Vendor decided not to take apart the meter run assembly but will add methanol to avoid any freezing in cold weather conditions.
- Unit to go for paint next. Skid insulation was in progress.
- Vessels data packages weren't ready as vessel still needed to be signed off by ABSA.
- Unit 1 was back from painting. Painting inspection provided satisfactory results.
- Skid insulation was completed. 3" thick spray foam was applied as per drawings.
- Building is in progress and Instrumentation is expected to start from next week.



Additional Information / Comments

**MATERIALS**

**Unit 1**

- Vessel materials complete.
- Piping and skid material is complete.

**Unit 2**

- Vessel material complete.
- Piping and skid material is complete.

**FABRICATION**

**Unit 1**

- 4 Vessel long seams are done. November 7, 2013.
- Vessel SN1667 and 1669 internal inspection complete. November 26, 2013.
- Vessel SN1668 and 1670 internal inspection complete. November 27, 2013.
- Skid inspection complete – December 5, 2013.
- Four vessels complete PWHT – Stored outdoors – December 18, 2013.
- Unit hydro tested at 2040 psi - January 22, 2014.
- Unit currently out for blast /paint. Building erection to follow. – January 31, 2014.
- Painting and skid insulation complete - February 11, 2014.

**Unit 2**

- Skid inspection complete – December 18, 2013.
- Spooling fabrication has commenced. – December 18, 2013.
- Vessel SN 1671 and 1672 internal inspection complete - January 3, 2014.
- Vessel SN 1673 and 1674 internal inspection complete - January 13, 2014.
- Hydro test complete - February 10, 2014.

**DELIVERY STATUS**

1. PO states the delivery date of January 24, 2014.
2. Writer believes the first unit will be completed in March, 2014 and second unit to follow shortly behind inr early April, 2014.

**DOCUMENTATION REVIEW**

- Client PO, Vessel drawings, Vessel WPS have been reviewed during this visit.
- Unit 1 vessel data reports have been reviewed. Vessel SN1667, 68, 69 and 70.
  - Vessel SN1667, A # 636929.
  - Vessel SN1668, A # 636927.
  - Vessel SN1669, A # 636926.
  - Vessel SN1670, A # 636928.
- Four vessel data packages reviewed and accepted (Vessel SN1667, 68, 69 and 70) - January 23, 2014.

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Inspector	Phone	E-Mail					



**PHOTOGRAPHS**



February 10, 2014  
Unit 2 hydro test overview.



February 10, 2014  
Two calibrated gauges used.



February 10, 2014  
Ball valve, gate valve and check valve direction and position  
verified for positive water flow.



February 10, 2014  
Flare header not tested as per vendor shop standard.



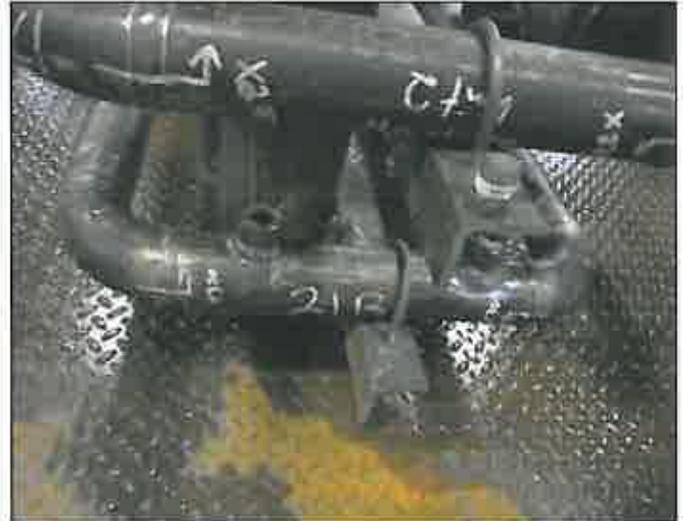
February 11, 2014  
Draining after hydro test.



February 11, 2014  
Level gauges drain separately.



February 11, 2014  
Low points unbolted flanges.



February 11, 2014  
Water level checked from TOL openings.



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Exploration

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February 11, 2014  
Plugs taken off to verify.



February 11, 2014  
Plugs taken off to verify.



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**FABRICATION SHOP INSPECTION REPORT – MULTIPLE PACKAGED PROCESS EQUIPMENT**

<b>MTL Job No.</b>	3213	<b>Report No.</b>	012
<b>Mechanical Inspector</b>	Gurmat Sidhu	<b>Phone:</b>	403-472-8292 <a href="mailto:gurmatsidhu@gmail.com">gurmatsidhu@gmail.com</a>
<b>Electrical Inspector</b>	Ryan Mikkelsen	<b>Phone:</b>	403-585-4359 <a href="mailto:ryan.mikkelsen@graetd.ca">ryan.mikkelsen@graetd.ca</a>
<b>AFE No.</b>	A13370663	<b>Date</b>	February 24, 2014
<b>Client</b>	PennWest Exploration c/o Pioneer Engineering Inc.	<b>Client P.O. No.</b>	PEI-A13370663-01
<b>Project</b>	Cordova d-55-A/94-P-10 Facility	<b>Location / LSD</b>	Cordova / d-55-A/94-P-10
<b>Equipment</b>	(2) 30" Sour Quadruple Separator Packages	<b>Tag No.</b>	2013-070
<b>Client Project Engineer</b>	Peter Orakwe Kourosh Kazemi	<b>Contact Info.</b>	403-693-2912, <a href="mailto:Peter.orakwe@pennwest.com">Peter.orakwe@pennwest.com</a> 403-453-8820, <a href="mailto:kkazemi@pioneerengineering.com">kkazemi@pioneerengineering.com</a>
<b>Vendor</b>	Cado Industries	<b>Vendor Job No.</b>	Unit 1 and 2.
<b>Vendor Project Engineer</b>	Wilfred Cao	<b>Phone:</b>	403-279-6662
<b>Vendor QC Manager</b>	Jeremy Koster	<b>Phone:</b>	403-279-6662

<b>PO Delivery Date</b>	January 24, 2014	<b>Estimated Completion Date</b>	Late March & April 2014	<b>Percentage Complete</b>	76%
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<b>Vessels</b>	100%	<b>Spooling</b>	100%	<b>Structural</b>	100%	<b>Assembly</b>	85%	<b>Instrumentation</b>	35%	<b>Building</b>	40%
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Item Serial No :	Description:	Current Shipping Date:	Actual Shipping Date:	LSD:	Status:
2013-070 unit 1	30" Sour Quadruple Separator Package	Late March, 2014	TBD	d-55-A/94-P-10	Instrumentation in progress.
2013-070 unit 2	30" Sour Quadruple Separator Package	April, 2014	TBD	d-55-A/94-P-10	Painting completed. Building to follow.

**Areas of Concern**

- New expected completion date for unit 1 is late March, unit 2 is April 2014.

**Deficiencies / Quality Issues**

- PSV flare lines were not hydro tested. Vendor advises these will not be tested unless advised by Client. **Client to advise.**

**Project Information / Drawings**

- ENGINEERING**
- Engineering is complete.
- DRAWINGS**
- Vessel drawings are issued for construction.
  - Vessel DWG 2013-070-300 sheet 1 of 1 rev. 0.



### Project Information / Drawings

- SKID.
- 2013-070-403 sheet 1 of 1 Rev. 2.
- 2013-070-404 sheet 1 of 1 Rev. 2.
- P&ID.
- 2013-070-101 sheet 1 of 1 Rev. 1.
- 2013-070-102 sheet 1 of 1 Rev. 1.
- GA.
- 2013-070-201 sheet 1 of 1 Rev. 2.
- Building drawings to be issued.

### Inspection / Expediting Comments

#### EXPEDITING

- Expediting is not required for this project.

#### INSPECTION

February 21, 2014

- Writer visited Cado Industries to receive project update and inspect recent fabrication.
- Unit 1 instrumentation is in progress.
- Vendor now decided to rotate the Y-Strainers due to not having enough room to tie-in the drain tubing as well as it will also make it easier to remove the fittings in field. This was discussed with the vendor at hydro testing stage.
- Vendor believes it will take another two weeks to complete the instrumentation on unit 1 due to extra time required to rotate the Y-strainers.
- Unit 2 is back from painting. Painting inspection provided satisfactory results as per drawings.
- Skid insulation is completed with spray foam. 3" spray foam insulation is applied as per drawings.
- Unit 2 building erection to follow in the coming week.
- Unit 2 vessels are signed off with ABSA. Writer reviewed the final vessel data packages.
- Vessel U-1As were reviewed and accepted for four vessels SN1671, 1672, 1673 and 1674. Satisfactory results were obtained as per drawings and applicable codes. Alberta registration numbers are issued to all four vessels.
- NDE such as RT, PWHT and HT was reviewed and accepted for all four vessels. NDE reports showed satisfactory results.
- All the NDE testing was conducted by qualified personnel to the appropriate code.
- Vessel MTRs were reviewed and accepted as per mapped drawings and BOM.
- Name plate information was verified. Vessel SN and A# were verified as per data reports.
- Vessel travel sheets are signed off as acceptable.

### Additional Information / Comments

#### MATERIALS

##### Unit 1

- Vessel materials complete.
- Piping and skid material is complete.
- Instrumentation materials complete.

##### Unit 2

- Vessel material complete.
- Piping and skid material is complete.
- Instrumentation materials complete.

#### FABRICATION

##### Unit 1



**Additional Information / Comments**

- 4 Vessel long seams are done. November 7, 2013.
- Vessel SN1667 and 1669 internal inspection complete. November 26, 2013.
- Vessel SN1668 and 1670 internal inspection complete. November 27, 2013.
- Skid inspection complete – December 5, 2013.
- Four vessels complete PWHT – Stored outdoors – December 18, 2013.
- Unit hydro tested at 2040 psi - January 22, 2014.
- Unit currently out for blast /paint. Building erection to follow. – January 31, 2014.
- Painting and skid insulation complete - February 11, 2014.
- Instrumentation is in progress. Y strainers are being rotated. - February 21, 2014.

**Unit 2**

- Skid inspection complete – December 18, 2013.
- Spooling fabrication has commenced. – December 18, 2013.
- Vessel SN 1671 and 1672 internal inspection complete - January 3, 2014.
- Vessel SN 1673 and 1674 internal inspection complete - January 13, 2014.
- Hydro test complete - February 10, 2014.
- Painting and skid insulation complete - February 21, 2014.
- Vessel data reports reviewed and accepted - February 21, 2014.

**DELIVERY STATUS**

1. PO states the delivery date of January 24, 2014.
2. Writer believes the first unit will be completed in Late March, 2014 and second unit to follow shortly behind in early April, 2014.

**DOCUMENTATION REVIEW**

- Client PO, Vessel drawings, Vessel WPS have been reviewed during this visit.
- Unit 1 vessel data reports have been reviewed. Vessel SN1667, 68, 69 and 70.
  - Vessel SN1667, A # 636929.
  - Vessel SN1668, A # 636927.
  - Vessel SN1669, A # 636926.
  - Vessel SN1670, A # 636928.
- Four vessel data packages reviewed and accepted (Vessel SN1667, 68, 69 and 70) - January 23, 2014.
- Unit 2 vessel data reports have been reviewed. Vessel SN1671, 72, 73 and 74.
  - Vessel SN1671, A # 632245
  - Vessel SN1672, A # 632246.
  - Vessel SN1673, A # 632247.
  - Vessel SN1674, A # 632248.

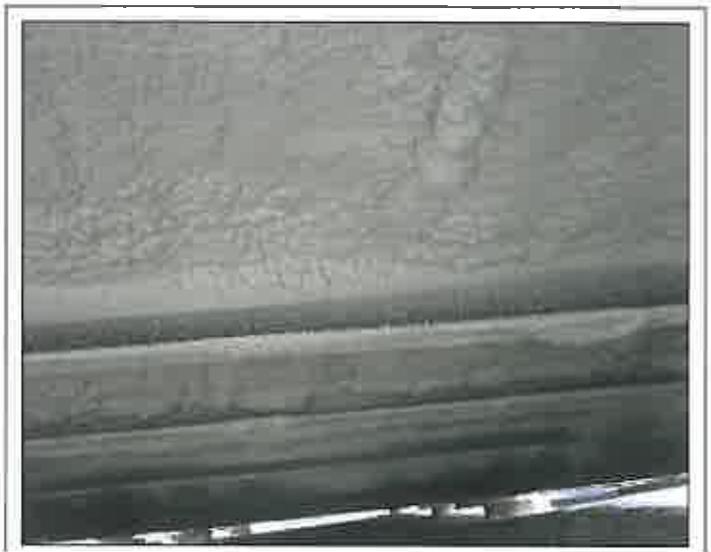
Gurmat Sidhu	403-472-8292	<a href="mailto:gurmalsidhu@gmail.com">gurmalsidhu@gmail.com</a>					
Inspector	Phone	E-Mail					



**PHOTOGRAPHS**



February 21, 2014  
Unit 2 assembly overview.



February 21, 2014  
Unit 2 Spray foam insulation completed.



February 21, 2014  
Unit 1 assembly overview.



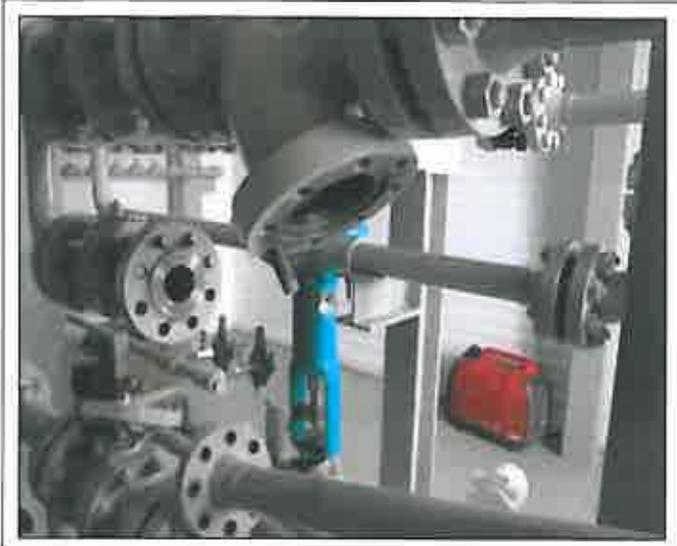
February 21, 2014  
Y strainer being rotated to 45 for easy drain tubing tie ins.



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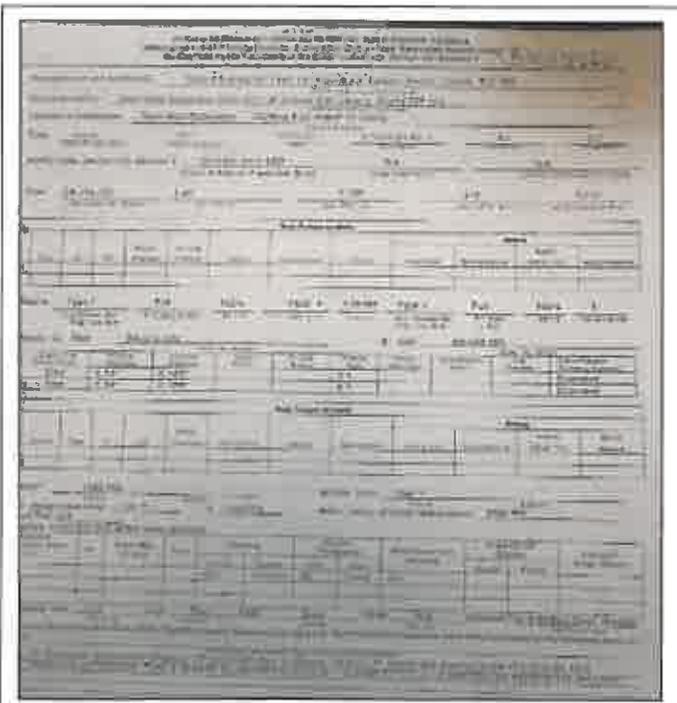
2836 Ellwood Drive S.W, Edmonton, AB, T6X 0A9, Phone: (780) 450-8883 Fax: (780) 450-8884, [projects@mtlinspection.com](mailto:projects@mtlinspection.com)



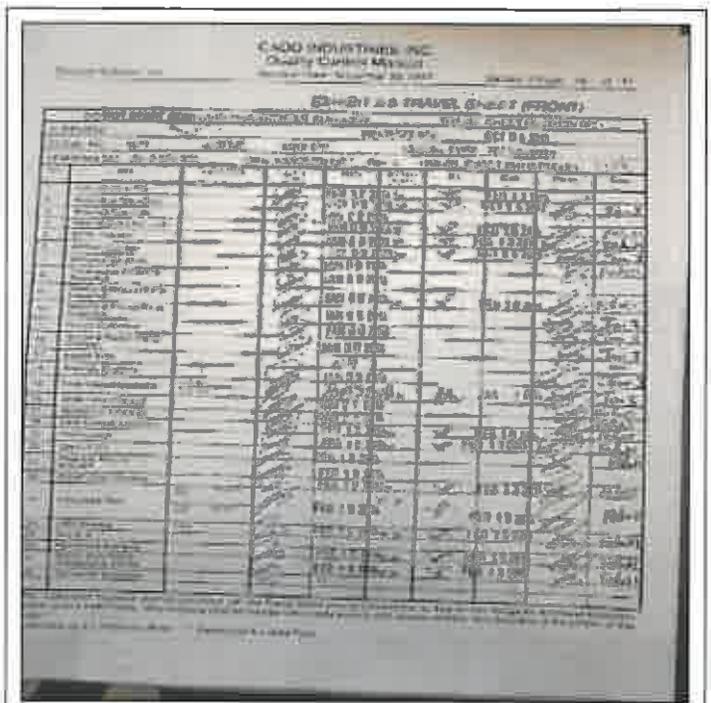
February 21, 2014  
Unit 1 Y strainer re-installation overview.



February 21, 2014  
Unit 1 Y strainer re-installation overview.



February 21, 2014  
Vessel U-1a.



February 21, 2014  
Signed off vessel travel sheet.



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**FABRICATION SHOP INSPECTION REPORT – MULTIPLE PACKAGED PROCESS EQUIPMENT**

<b>MTL Job No.</b>	3213	<b>Report No.</b>	013
<b>Mechanical Inspector</b>	Gurmat Sidhu	<b>Phone:</b>	403-472-8292 <a href="mailto:gurmatsidhu@gmail.com">gurmatsidhu@gmail.com</a>
<b>Electrical Inspector</b>	Ryan Mikkelsen	<b>Phone:</b>	403-585-4359 <a href="mailto:ryan.mikkelsen@graelted.ca">ryan.mikkelsen@graelted.ca</a>
<b>AFE No.</b>	A13370663	<b>Date</b>	March 3, 2014
<b>Client</b>	PennWest Exploration c/o Pioneer Engineering Inc.	<b>Client P.O. No.</b>	PEI-A13370663-01
<b>Project</b>	Cordova d-55-A/94-P-10 Facility	<b>Location / LSD</b>	Cordova / d-55-A/94-P-10
<b>Equipment</b>	(2) 30" Sour Quadruple Separator Packages	<b>Tag No.</b>	2013-070
<b>Client Project Engineer</b>	Peter Orakwe Kourosh Kazemi	<b>Contact Info.</b>	403-693-2912, <a href="mailto:Peter.orakwe@pennwest.com">Peter.orakwe@pennwest.com</a> 403-453-8820, <a href="mailto:kkazemi@pioneerengineering.com">kkazemi@pioneerengineering.com</a>
<b>Vendor</b>	Cado Industries	<b>Vendor Job No.</b>	Unit 1 and 2.
<b>Vendor Project Engineer</b>	Wilfred Cao	<b>Phone:</b>	403-279-6662
<b>Vendor QC Manager</b>	Jeremy Koster	<b>Phone:</b>	403-279-6662

<b>PO Delivery Date</b>	January 24, 2014	<b>Estimated Completion Date</b>	Late March & April 2014	<b>Percentage Complete</b>	82%
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<b>Vessels</b>	100%	<b>Spooling</b>	100%	<b>Structural</b>	100%	<b>Assembly</b>	90%	<b>Instrumentation</b>	40%	<b>Building</b>	60%
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Item Serial No :	Description:	Current Shipping Date:	Actual Shipping Date:	LSD:	Status:
2013-070 unit 1	30" Sour Quadruple Separator Package	Late March, 2014	TBD	d-55-A/94-P-10	Instrumentation in progress.
2013-070 unit 2	30" Sour Quadruple Separator Package	April , 2014	TBD	d-55-A/94-P-10	Painting completed. Building in progress.

**Areas of Concern**

- New expected completion date for unit 1 is late March, unit 2 is April 2014.

**Deficiencies / Quality Issues**

- PSV flare lines were not hydro tested. Vendor advises these will not be tested unless advised by Client. **Client to advise.**

**Project Information / Drawings**

- ENGINEERING**
- Engineering is complete.
- DRAWINGS**
- Vessel drawings are issued for construction.



### Project Information / Drawings

- Vessel DWG 2013-070-300 sheet 1 of 1 rev. 0.
- SKID.
- 2013-070-403 sheet 1 of 1 Rev. 2.
- 2013-070-404 sheet 1 of 1 Rev. 2.
- P&ID.
- 2013-070-101 sheet 1 of 1 Rev. 1.
- 2013-070-102 sheet 1 of 1 Rev. 1.
- GA.
- 2013-070-201 sheet 1 of 1 Rev. 2.
- Building drawings 13-4212 Rev. 1.

### Inspection / Expediting Comments

#### EXPEDITING

- Expediting is not required for this project.

#### INSPECTION

February 28, 2014

- Writer visited Cado Industries to receive project update and inspect recent fabrication.
- Unit 1 instrumentation is in progress.
- All the Y-strainers are rotated to 45 degree for better accessibility for drain tubing and repair procedure in field.
- Drain tubing was completed for two separate vessels. Tubing provided satisfactory results as per P&ID check and visual inspection.
- Instrumentation is in progress for rest of the unit. Tubing is expected to be completed by end of next week or early week after. Function test and process tubing hydro test to follow this.
- Building erection is 100% complete on unit 1. Building inspection was conducted as per DWG 13-4212 rev. 1.
- Building dimensions were verified. Window and door sizes and locations were verified as per drawings.
- All the building reinforcements and caulking was completed around nozzles passing locations.
- Building erection is in progress for unit 2.

### Additional Information / Comments

#### MATERIALS

##### Unit 1

- Vessel materials complete.
- Piping and skid material is complete.
- Instrumentation materials complete.
- Building materials are complete.

##### Unit 2

- Vessel material complete.
- Piping and skid material is complete.
- Instrumentation materials complete.
- Building materials are complete.

#### FABRICATION

##### Unit 1

- 4 Vessel long seams are done. November 7, 2013.
- Vessel SN1667 and 1669 internal inspection complete. November 26, 2013.
- Vessel SN1668 and 1670 internal inspection complete. November 27, 2013.



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**Additional Information / Comments**

- Skid inspection complete – December 5, 2013.
- Four vessels complete PWHT – Stored outdoors – December 18, 2013.
- Unit hydro tested at 2040 psi - January 22, 2014.
- Unit currently out for blast /paint. Building erection to follow. – January 31, 2014.
- Painting and skid insulation complete - February 11, 2014.
- Instrumentation is in progress. Y strainers are rotated. - February 21, 2014.
- Building inspection completed - February 28, 2014.

**Unit 2**

- Skid inspection complete – December 18, 2013.
- Spooling fabrication has commenced. – December 18, 2013.
- Vessel SN 1671 and 1672 internal inspection complete - January 3, 2014.
- Vessel SN 1673 and 1674 internal inspection complete - January 13, 2014.
- Hydro test complete - February 10, 2014.
- Painting and skid insulation complete - February 21, 2014.
- Vessel data reports reviewed and accepted - February 21, 2014.
- Building erection is in progress.

**DELIVERY STATUS**

1. PO states the delivery date of January 24, 2014.
2. Writer believes the first unit will be completed in Late March, 2014 and second unit to follow shortly behind in early April, 2014.

**DOCUMENTATION REVIEW**

- Client PO, Vessel drawings, Vessel WPS have been reviewed during this visit.
- Unit 1 vessel data reports have been reviewed. Vessel SN1667, 68. 69 and 70.
  - Vessel SN1667, A # 636929.
  - Vessel SN1668, A # 636927.
  - Vessel SN1669, A # 636926.
  - Vessel SN1670, A # 636928.
- Four vessel data packages reviewed and accepted (Vessel SN1667, 68, 69 and 70) - January 23, 2014.
- Unit 2 vessel data reports have been reviewed. Vessel SN1671, 72. 73 and 74.
  - Vessel SN1671, A # 632245
  - Vessel SN1672, A # 632246.
  - Vessel SN1673, A # 632247.
  - Vessel SN1674, A # 632248.

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Inspector	Phone	E-Mail					



**PHOTOGRAPHS**



February 28, 2014  
Unit 1 Building overview.



February 28, 2014  
Y strainers rotated to 45 degree.



February 28, 2014  
Assembly overview.



February 28, 2014  
Level gauges and Y-strainer drains tied in with two ball valves  
as per P&ID.



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February 28, 2014  
Building in progress for unit 2.



February 28, 2014  
Unit 2 building in progress.



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**FABRICATION SHOP INSPECTION REPORT – MULTIPLE PACKAGED PROCESS EQUIPMENT**

<b>MTL Job No.</b>	3213	<b>Report No.</b>	014
<b>Mechanical Inspector</b>	Gurmat Sidhu	<b>Phone:</b>	403-472-8292 <a href="mailto:gurmatsidhu@gmail.com">gurmatsidhu@gmail.com</a>
<b>Electrical Inspector</b>	Ryan Mikkelsen	<b>Phone:</b>	403-585-4359 <a href="mailto:ryan.mikkelsen@graeltd.ca">ryan.mikkelsen@graeltd.ca</a>
<b>AFE No.</b>	A13370663	<b>Date</b>	March 24, 2014
<b>Client</b>	PennWest Exploration c/o Pioneer Engineering Inc.	<b>Client P.O. No.</b>	PEI-A13370663-01
<b>Project</b>	Cordova d-55-A/94-P-10 Facility	<b>Location / LSD</b>	Cordova / d-55-A/94-P-10
<b>Equipment</b>	(2) 30" Sour Quadruple Separator Packages	<b>Tag No.</b>	2013-070
<b>Client Project Engineer</b>	Peter Orakwe Joe Wu	<b>Contact Info.</b>	403-693-2912, <a href="mailto:Peter.orakwe@pennwest.com">Peter.orakwe@pennwest.com</a> <a href="mailto:jwu@pioneerengineering.com">jwu@pioneerengineering.com</a>
<b>Vendor</b>	Cado Industries	<b>Vendor Job No.</b>	Unit 1 and 2.
<b>Vendor Project Engineer</b>	Wilfred Cao	<b>Phone:</b>	403-279-6662
<b>Vendor QC Manager</b>	Jeremy Koster	<b>Phone:</b>	403-279-6662

**PO Delivery Date** January 24, 2014      **Estimated Completion Date** Late March & April 2014      **Percentage Complete** 82%

**Vessels** 100%    **Spooling** 100%    **Structural** 100%    **Assembly** 90%    **Instrumentation** 40%    **Building** 60%

Item Serial No :	Description:	Current Shipping Date:	Actual Shipping Date:	LSD:	Status:
2013-070 unit 1	30" Sour Quadruple Separator Package	Late March, 2014	TBD	d-55-A/94-P-10	Function test complete.
2013-070 unit 2	30" Sour Quadruple Separator Package	April , 2014	TBD	d-55-A/94-P-10	Painting completed. Building in progress.

**Areas of Concern**

- New expected completion date for unit 1 is late March, unit 2 is April 2014.

**Deficiencies / Quality Issues**

- PSV flare lines were not hydro tested. Vendor advises these will not be tested unless advised by Client. **Air tested on March 21, 2014.**

**Project Information / Drawings**

**ENGINEERING**

- Engineering is complete.



### Project Information / Drawings

#### DRAWINGS

- Vessel drawings are issued for construction.
- Vessel DWG 2013-070-300 sheet 1 of 1 rev. 0.
- SKID.
- 2013-070-403 sheet 1 of 1 Rev. 2.
- 2013-070-404 sheet 1 of 1 Rev. 2.
- P&ID.
- 2013-070-101 sheet 1 of 1 Rev. 1.
- 2013-070-102 sheet 1 of 1 Rev. 1.
- GA.
- 2013-070-201 sheet 1 of 1 Rev. 2.
- Building drawings 13-4212 Rev. 1.

### Inspection / Expediting Comments

#### EXPEDITING

- Expediting is not required for this project.

#### INSPECTION

March 21, 2014

- Writer visited Cado Industries to witness the function test as per vendor request.
- Unit 1 was function tested. Unit 2 is still about two weeks away from function test.
- Process tubing were hydro tested at 2040 psi. Gauge # 8B and 8D. Both calibrations due on February 6, 2015. Test conducted for one hour, no visual leaks were found at the time of testing. Test medium was methanol water mixture.
- Drain tubing and instrumentation tubing were air tested at shop air pressure of 110 psi. Vendor used service gauge to monitor the test pressure.
- Flare lines were air tested at 315 psi. Gauge # 4 and 3B. Both calibrations due on May 24, 2014. Test conducted for half hour, no visual leaks were found at the time of testing. All joints were sprayed with soapy water.
- All the ESD valve fail open/close position was verified as per P&ID drawings.
- All the air and solenoid controlled valves were function tested with satisfactory results. Valves were fully opening and closing during the function test. These valves included PV-2101, LCV-2101, LCV-2102, PV-2201, LCV-2201, 2202, PV-2301, LCV-2301, 2302 and PV-2401, LCV-2401, 2402.
- Valve solenoid and regulators make and range was verified as per drawings. Solenoid voltage and regulators set pressures were verified.
- Instrumentation air line and heater lines were also sprayed with soap solution during testing. Two leaks were found at threaded joints which were corrected immediately.
- Writer accepted the function test and signed off vendor function test report.
- Vendor to install the process tubing and complete AB-83.
- Final P&ID check is expected late next week.
- Unit 2 building erection is in progress and all the Y-strainers need to be rotated to 45 degree to drain tubing to tie in. Unit 2 function test could be up to two weeks out.

### Additional Information / Comments

#### MATERIALS

Unit 1

- Vessel materials complete.
- Piping and skid material is complete.
- Instrumentation materials complete.
- Building materials are complete.



Additional Information / Comments

Unit 2

- Vessel material complete.
- Piping and skid material is complete.
- Instrumentation materials complete.
- Building materials are complete.

FABRICATION

Unit 1

- 4 Vessel long seams are done. November 7, 2013.
- Vessel SN1667 and 1669 internal inspection complete. November 26, 2013.
- Vessel SN1668 and 1670 internal inspection complete. November 27, 2013.
- Skid inspection complete – December 5, 2013.
- Four vessels complete PWHT – Stored outdoors – December 18, 2013.
- Unit hydro tested at 2040 psi – January 22, 2014.
- Unit currently out for blast /paint. Building erection to follow. – January 31, 2014.
- Painting and skid insulation complete – February 11, 2014.
- Instrumentation is in progress. Y strainers are rotated. – February 21, 2014.
- Building inspection completed – February 28, 2014.
- Function test complete – March 21, 2014.
- Process tubing hydro tested – March 21, 2014.
- Instrument lines and flare headers air tested – March 21, 2014.

Unit 2

- Skid inspection complete – December 18, 2013.
- Spooling fabrication has commenced. – December 18, 2013.
- Vessel SN 1671 and 1672 internal inspection complete – January 3, 2014.
- Vessel SN 1673 and 1674 internal inspection complete – January 13, 2014.
- Hydro test complete – February 10, 2014.
- Painting and skid insulation complete – February 21, 2014.
- Vessel data reports reviewed and accepted – February 21, 2014.
- Building erection is in progress. – March 21, 2014

DELIVERY STATUS

1. PO states the delivery date of January 24, 2014.
2. Writer believes the first unit will be completed in Late March, 2014 and second unit to follow shortly behind in early April, 2014.

DOCUMENTATION REVIEW

- Client PO, Vessel drawings, Vessel WPS have been reviewed during this visit.
- Unit 1 vessel data reports have been reviewed. Vessel SN1667, 68. 69 and 70.
  - Vessel SN1667, A # 636929.
  - Vessel SN1668, A # 636927.
  - Vessel SN1669, A # 636926.
  - Vessel SN1670, A # 636928.
- Four vessel data packages reviewed and accepted (Vessel SN1667, 68, 69 and 70) - January 23, 2014.
- Unit 2 vessel data reports have been reviewed. Vessel SN1671, 72. 73 and 74.
  - Vessel SN1671, A # 632245
  - Vessel SN1672, A # 632246.
  - Vessel SN1673, A # 632247.
  - Vessel SN1674, A # 632248.

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Inspector	Phone	E-Mail					



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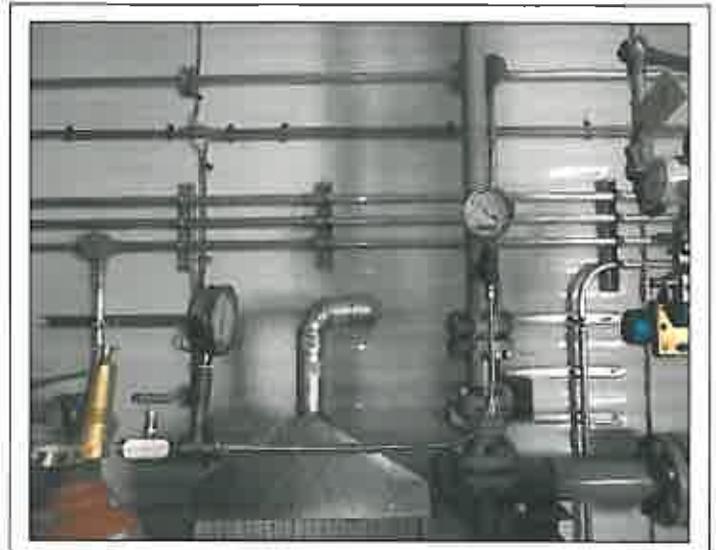
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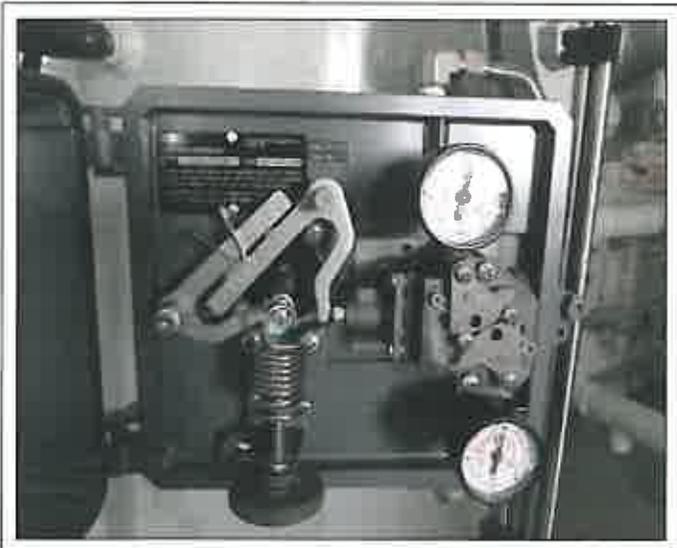
### PHOTOGRAPHS



March 21, 2011  
Unit 1 Building overview.



March 21, 2014  
Testing header lines.



March 21, 2014  
Function test overview.



March 21, 2014  
Function test overview.



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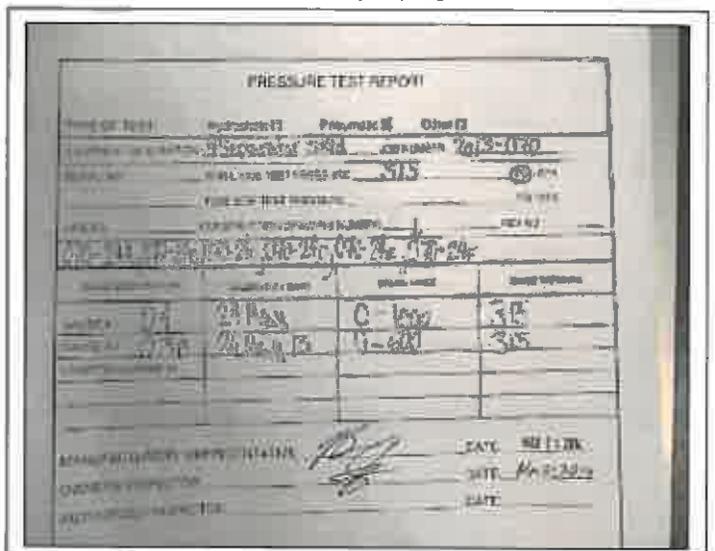
March 21, 2014  
Tubing hydro test overview.



March 21, 2014  
Unit 2 building in progress.



March 21, 2014  
Tubing hydro test report.



March 21, 2014  
Header lines air test report.



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FABRICATION SHOP INSPECTION REPORT – MULTIPLE PACKAGED PROCESS EQUIPMENT

Table with 2 columns: Field Name and Value. Fields include MTL Job No., Report No., Mechanical Inspector, Electrical Inspector, AFE No., Date, Client, Client P.O. No., Project, Location / LSD, Equipment, Tag No., Client Project Engineer, Contact Info., Vendor, Vendor Job No., Vendor Project Engineer, and Vendor QC Manager.

Summary row with fields: PO Delivery Date (January 24, 2014), Estimated Completion Date (Late April, 2014), and Percentage Complete (93%).

Progress bar row: Vessels 100%, Spooling 100%, Structural 100%, Assembly 95%, Instrumentation 60%, Building 100%.

Table with 6 columns: Item Serial No., Description, Current Shipping Date, Actual Shipping Date, LSD, Status. Contains data for two units of 30" Sour Quadruple Separator Packages.

Areas of Concern

- New expected completion date for unit 1 is mid April, unit 2 is late April 2014.

Deficiencies / Quality Issues

- Ball valve handle missing on 4" ball valve.
Skid drain valve to be installed.
8" gas header testing flange to be replaced with blind flange.
Skid sump to be cleaned, paint repairs and touch ups to be completed.

Project Information / Drawings

- ENGINEERING
Engineering is complete.



### Project Information / Drawings

#### DRAWINGS

- Vessel drawings are issued for construction.
- Vessel DWG 2013-070-300 sheet 1 of 1 rev. 0.
- SKID.
- 2013-070-403 sheet 1 of 1 Rev. 2.
- 2013-070-404 sheet 1 of 1 Rev. 2.
- P&ID.
- 2013-070-101 sheet 1 of 1 Rev. 1.
- 2013-070-102 sheet 1 of 1 Rev. 1.
- GA.
- 2013-070-201 sheet 1 of 1 Rev. 2.
- Building drawings 13-4212 Rev. 1.

### Inspection / Expediting Comments

#### EXPEDITING

- Expediting is not required for this project.

#### INSPECTION

April 4, 2014

- Writer visited Cado Industries to receive project update and inspect recent fabrication.
- Process tubing was installed back on unit 1. Final walk through inspection was conducted on unit 1.
- P&ID check was completed with satisfactory results. Flow directions and equipment installation was verified.
- One 4" ball valve was missing a handle. Gas header blind flange to be replaced. Skid drain ball valve to be either installed or shipped loose with the unit.
- Unit 2 building erection is complete. Building inspection provided satisfactory results. Building dimensions, doors and window elevations and orientation was verified.
- Tubing is in progress for unit 2. Y strainers are rotated to 45 degree. Unit 2 function test is expected late next week.
- Vendor is still working on piping data package for unit 1.

### Additional Information / Comments

#### MATERIALS

##### Unit 1

- Vessel materials complete.
- Piping and skid material is complete.
- Instrumentation materials complete.
- Building materials are complete.

##### Unit 2

- Vessel material complete.
- Piping and skid material is complete.
- Instrumentation materials complete.
- Building materials are complete.

#### FABRICATION

##### Unit 1

- 4 Vessel long seams are done. November 7, 2013.
- Vessel SN1667 and 1669 internal inspection complete. November 26, 2013.
- Vessel SN1668 and 1670 internal inspection complete. November 27, 2013.



**Additional Information / Comments**

- Skid inspection complete – December 5, 2013.
- Four vessels complete PWHT – Stored outdoors – December 18, 2013.
- Unit hydro tested at 2040 psi – January 22, 2014.
- Unit currently out for blast /paint. Building erection to follow. – January 31, 2014.
- Painting and skid insulation complete – February 11, 2014.
- Instrumentation is in progress. Y strainers are rotated. – February 21, 2014.
- Building inspection completed – February 28, 2014.
- Function test complete – March 21, 2014.
- Process tubing hydro tested – March 21, 2014.
- Instrument lines and flare headers air tested – March 21, 2014.
- P&ID check with deficiencies - April 4, 2014.

**Unit 2**

- Skid inspection complete – December 18, 2013.
- Spooling fabrication has commenced. – December 18, 2013.
- Vessel SN 1671 and 1672 internal inspection complete – January 3, 2014.
- Vessel SN 1673 and 1674 internal inspection complete – January 13, 2014.
- Hydro test complete – February 10, 2014.
- Painting and skid insulation complete – February 21, 2014.
- Vessel data reports reviewed and accepted – February 21, 2014.
- Building inspection complete. – March 21, 2014.
- Instrumentation in progress. Y Strainers rotated. – April 4, 2014.

**DELIVERY STATUS**

1. PO states the delivery date of January 24, 2014.
2. Writer believes the first unit will be completed in mid April, 2014 and second unit to follow shortly behind in late April, 2014.

**DOCUMENTATION REVIEW**

- Client PO, Vessel drawings, Vessel WPS have been reviewed during this visit.
- Unit 1 vessel data reports have been reviewed. Vessel SN1667, 68. 69 and 70.
  - Vessel SN1667, A # 636929.
  - Vessel SN1668, A # 636927.
  - Vessel SN1669, A # 636926.
  - Vessel SN1670, A # 636928.
- Four vessel data packages reviewed and accepted (Vessel SN1667, 68, 69 and 70) - January 23, 2014.
- Unit 2 vessel data reports have been reviewed. Vessel SN1671, 72. 73 and 74.
  - Vessel SN1671, A # 632245
  - Vessel SN1672, A # 632246.
  - Vessel SN1673, A # 632247.
  - Vessel SN1674, A # 632248.

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Inspector	Phone	E-Mail					



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### PHOTOGRAPHS



April 4, 2014  
Unit 1 Building overview.



April 4, 2014  
Final assembly, typical per vessel.



April 4, 2014  
Ball valve missing handle.



April 4, 2014  
Hydro test blind to be replaced.



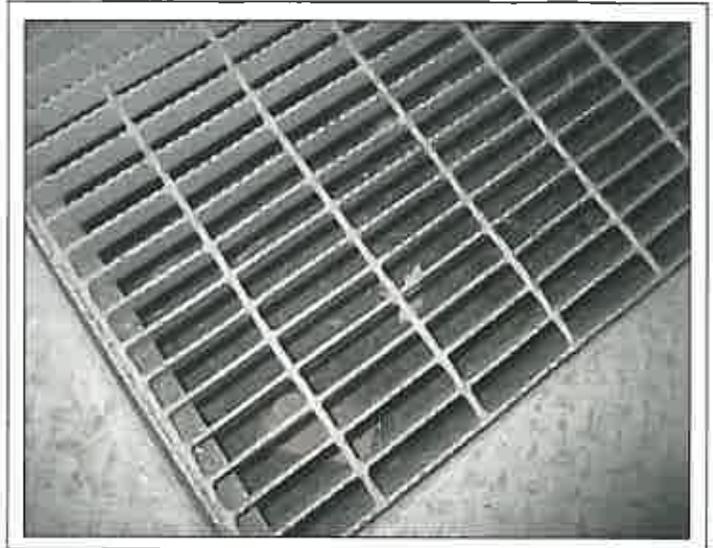
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April 4, 2014  
Ball valve missing on sump drain.



April 4, 2014  
Debris in sump tank.



April 4, 2014  
Unit 2 building overview.



April 4, 2014  
Tubing in progress.



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FABRICATION SHOP INSPECTION REPORT – MULTIPLE PACKAGED PROCESS EQUIPMENT

Table with inspection details including MTL Job No. 3213, Report No. 016, Mechanical Inspector Gurmat Sidhu, Electrical Inspector Ryan Mikkelsen, AFE No. A13370663, Client PennWest Exploration, Project Cordova d-55-A/94-P-10 Facility, Equipment (2) 30" Sour Quadruple Separator Packages, Vendor Cado Industries, and Vendor Project Engineer Wilfred Cao.

Summary table with PO Delivery Date January 24, 2014, Estimated Completion Date May 2, 2014, and Percentage Complete 99%.

Progress bar table showing completion percentages for Vessels (100%), Spooling (100%), Structural (100%), Assembly (95%), Instrumentation (99%), and Building (100%).

Table with 6 columns: Item Serial No., Description, Current Shipping Date, Actual Shipping Date, LSD, and Status. It lists two units of 30" Sour Quadruple Separator Packages with their respective shipping dates and status.

Areas of Concern

- New expected completion date for unit 1 is mid April, unit 2 is late April 2014.

Deficiencies / Quality Issues

- Ball valve handle missing on 4" ball valve.
Skid drain valve to be installed.
8" gas header testing flange to be replaced with blind flange.
Skid sump to be cleaned, paint repairs and touch ups to be completed.



### Project Information / Drawings

#### ENGINEERING

- Engineering is complete.

#### DRAWINGS

- Vessel drawings are issued for construction.
- Vessel DWG 2013-070-300 sheet 1 of 1 rev. 0.
- SKID.
- 2013-070-403 sheet 1 of 1 Rev. 2.
- 2013-070-404 sheet 1 of 1 Rev. 2.
- P&ID.
- 2013-070-101 sheet 1 of 1 Rev. 1.
- 2013-070-102 sheet 1 of 1 Rev. 1.
- GA.
- 2013-070-201 sheet 1 of 1 Rev. 2.
- Building drawings 13-4212 Rev. 1.

### Inspection / Expediting Comments

#### EXPEDITING

- Expediting is not required for this project.

#### INSPECTION

April 15, 2014

- Writer visited Cado Industries to witness the function test as per vendor request.
- Unit 2 was function tested. Unit 2 shipping preparations are in progress.
- Process tubing were hydro tested at 2040 psi. Two calibrated gauges used to monitor the test pressure. Test conducted for half hour, no visual leaks were found at the time of testing. Test medium was methanol water mixture.
- Drain tubing and instrumentation tubing were air tested at shop air pressure of 110 psi. Vendor used service gauge to monitor the test pressure.
- Flare lines were air tested at 315 psi. Calibrated gauges used to monitor the test pressure. Test conducted for half hour, no visual leaks were found at the time of testing. All joints were sprayed with soapy water.
- All the ESD valve fail open/close position was verified as per P&ID drawings.
- All the air and solenoid controlled valves were function tested with satisfactory results. Valves were fully opening and closing during the function test. These valves included PV-2101, LCV-2101, LCV-2102, PV-2201, LCV-2201, 2202, PV-2301, LCV-2301, 2302 and PV-2401, LCV-2401, 2402.
- Valve solenoid and regulators make and range was verified as per drawings. Solenoid voltage and regulators set pressures were verified.
- Instrumentation air line and heater lines were also sprayed with soap solution during testing. Two leaks were found at threaded joints which were corrected immediately.
- Writer accepted the function test and signed off vendor function test report.
- Vendor to install the process tubing and complete AB-83.
- Final P&ID check is expected late next week.
- Unit 2 shipping preparations are in progress. Final documentation to be completed. Vendor to notify for final inspection.

### Additional Information / Comments

#### MATERIALS

Unit 1

- Vessel materials complete.
- Piping and skid material is complete.



**Additional Information / Comments**

- Instrumentation materials complete.
- Building materials are complete.

**Unit 2**

- Vessel material complete.
- Piping and skid material is complete.
- Instrumentation materials complete.
- Building materials are complete.

**FABRICATION**

**Unit 1**

- 4 Vessel long seams are done. November 7, 2013.
- Vessel SN1667 and 1669 internal inspection complete. November 26, 2013.
- Vessel SN1668 and 1670 internal inspection complete. November 27, 2013.
- Skid inspection complete – December 5, 2013.
- Four vessels complete PWHT – Stored outdoors – December 18, 2013.
- Unit hydro tested at 2040 psi – January 22, 2014.
- Unit currently out for blast /paint. Building erection to follow. – January 31, 2014.
- Painting and skid insulation complete – February 11, 2014.
- Instrumentation is in progress. Y strainers are rotated. – February 21, 2014.
- Building inspection completed – February 28, 2014.
- Function test complete – March 21, 2014.
- Process tubing hydro tested – March 21, 2014.
- Instrument lines and flare headers air tested – March 21, 2014.
- P&ID check with deficiencies - April 4, 2014.

**Unit 2**

- Skid inspection complete – December 18, 2013.
- Spooling fabrication has commenced. – December 18, 2013.
- Vessel SN 1671 and 1672 internal inspection complete – January 3, 2014.
- Vessel SN 1673 and 1674 internal inspection complete – January 13, 2014.
- Hydro test complete – February 10, 2014.
- Painting and skid insulation complete – February 21, 2014.
- Vessel data reports reviewed and accepted – February 21, 2014.
- Building inspection complete. – March 21, 2014.
- Instrumentation is complete. Y Strainers rotated. – April 4, 2014.
- Unit function test complete - April 15, 2014.

**DELIVERY STATUS**

1. PO states the delivery date of January 24, 2014.
2. Writer believes the both units to be ready by May 2, 2014.

**DOCUMENTATION REVIEW**

- Client PO, Vessel drawings, Vessel WPS have been reviewed during this visit.
- Unit 1 vessel data reports have been reviewed. Vessel SN1667, 68, 69 and 70.
  - Vessel SN1667, A # 636929.
  - Vessel SN1668, A # 636927.
  - Vessel SN1669, A # 636926.
  - Vessel SN1670, A # 636928.
- Four vessel data packages reviewed and accepted (Vessel SN1667, 68, 69 and 70) - January 23, 2014.
- Unit 2 vessel data reports have been reviewed. Vessel SN1671, 72, 73 and 74.
  - Vessel SN1671, A # 632245.
  - Vessel SN1672, A # 632246.
  - Vessel SN1673, A # 632247.

Any omission or failure on part of the inspector to disapprove or reject any work or materials shall not be construed as acceptance of any defective work or materials.



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**Additional Information / Comments**

- Vessel SN1674, A # 632248.

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Inspector	Phone	E-Mail					

**PHOTOGRAPHS**



April 15, 2014  
Unit 2 Building overview.



April 15, 2014  
Function test overview.



April 15, 2014  
Function test overview.



April 15, 2014  
Function test overview.



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April 15, 2014  
Air testing header lines.



April 15, 2014  
Skid structural repairs.



April 15, 2014  
Tubing hydro test overview.



April 15, 2014  
Tubing tested at 2040 psi.



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**FABRICATION SHOP INSPECTION REPORT – MULTIPLE PACKAGED PROCESS EQUIPMENT**

<b>MTL Job No.</b>	3213	<b>Report No.</b>	017
<b>Mechanical Inspector</b>	Gurmat Sidhu	<b>Phone:</b>	403-472-8292 <a href="mailto:gurmatsidhu@gmail.com">gurmatsidhu@gmail.com</a>
<b>Electrical Inspector</b>	Ryan Mikkelsen	<b>Phone:</b>	403-585-4359 <a href="mailto:ryan.mikkelsen@graeltd.ca">ryan.mikkelsen@graeltd.ca</a>
<b>AFE No.</b>	A13370663	<b>Date</b>	April 28, 2014
<b>Client</b>	PennWest Exploration c/o Pioneer Engineering Inc.	<b>Client P.O. No.</b>	PEI-A13370663-01
<b>Project</b>	Cordova d-55-A/94-P-10 Facility	<b>Location / LSD</b>	Cordova / d-55-A/94-P-10
<b>Equipment</b>	(2) 30" Sour Quadruple Separator Packages	<b>Tag No.</b>	2013-070
<b>Client Project Engineer</b>	Peter Orakwe Joe Wu	<b>Contact Info.</b>	403-693-2912, <a href="mailto:Peter.orakwe@pennwest.com">Peter.orakwe@pennwest.com</a> <a href="mailto:jwu@pioneerengineering.com">jwu@pioneerengineering.com</a>
<b>Vendor</b>	Cado Industries	<b>Vendor Job No.</b>	Unit 1 and 2.
<b>Vendor Project Engineer</b>	Wilfred Cao	<b>Phone:</b>	403-279-6662
<b>Vendor QC Manager</b>	Jeremy Koster	<b>Phone:</b>	403-279-6662

<b>PO Delivery Date</b>	January 24, 2014	<b>Estimated Completion Date</b>	May 2, 2014	<b>Percentage Complete</b>	99%
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<b>Vessels</b>	100%	<b>Spooling</b>	100%	<b>Structural</b>	100%	<b>Assembly</b>	95%	<b>Instrumentation</b>	99%	<b>Building</b>	100%
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Item Serial No :	Description:	Current Shipping Date:	Actual Shipping Date:	LSD:	Status:
2013-070 unit 1	30" Sour Quadruple Separator Package	Late March, 2014	TBD	d-55-A/94-P-10	Ship loose to be completed.
2013-070 unit 2	30" Sour Quadruple Separator Package	April , 2014	TBD	d-55-A/94-P-10	Final documentation and shipping preparations in progress.

**Areas of Concern**

- Both units are scheduled to leave on Friday May 2, 2014.

**Deficiencies / Quality Issues**

- Ball valve handle missing on 4" ball valve. Complete.
- Skid drain valve to be installed.
- 8" gas header testing flange to be replaced with blind flange. Complete.
- Skid sump to be cleaned, paint repairs and touch ups to be completed. Complete.
- unit 2 X607 needs to be cleared as original film called for reshoot one spot.



### Project Information / Drawings

#### ENGINEERING

- Engineering is complete.

#### DRAWINGS

- Vessel drawings are issued for construction.
- Vessel DWG 2013-070-300 sheet 1 of 1 rev. 0.
- SKID.
- 2013-070-403 sheet 1 of 1 Rev. 2.
- 2013-070-404 sheet 1 of 1 Rev. 2.
- P&ID.
- 2013-070-101 sheet 1 of 1 Rev. 1.
- 2013-070-102 sheet 1 of 1 Rev. 1.
- GA.
- 2013-070-201 sheet 1 of 1 Rev. 2.
- Building drawings 13-4212 Rev. 1.

### Inspection / Expediting Comments

#### EXPEDITING

- Expediting is not required for this project.

#### INSPECTION

April 25, 2014

- Writer visited Cado Industries to receive project update and inspect recent fabrication.
- Unit 1 Final P&ID check completed with satisfactory results. Paint touch ups were completed. Ship loose items still need to be completed and installed in the building for shipping.
- Unit 2 shipping preparations are in progress. Final P&ID check found acceptable. Paint touch ups and ship loose to be completed.
- Unit 1 Piping data report (AB-83) was reviewed and accepted. NDE was reviewed and accepted. NDE was completed by qualified personnel to the appropriate code.
- Unit 2 NDE and AB-83 was reviewed. AB-83 showed acceptable results as per drawings and applicable codes. 100% RT was completed with satisfactory results. Few welds failed the RT first time but repairs were reworked and retested with acceptable results, except weld RT X607 was called for reshot on one spot, No film was available to show retest was done. Vendor to address this.
- Both units are scheduled to leave on May 2, 2014. Vendor to notify inspector when both skids are ready for final inspection release. Next shop visit is expected mid next week.

### Additional Information / Comments

#### MATERIALS

##### Unit 1

- Vessel materials complete.
- Piping and skid material is complete.
- Instrumentation materials complete.
- Building materials are complete.

##### Unit 2

- Vessel material complete.
- Piping and skid material is complete.
- Instrumentation materials complete.



**Additional Information / Comments**

- Building materials are complete.

**FABRICATION**

**Unit 1**

- 4 Vessel long seams are done. November 7, 2013.
- Vessel SN1667 and 1669 internal inspection complete. November 26, 2013.
- Vessel SN1668 and 1670 internal inspection complete. November 27, 2013.
- Skid inspection complete – December 5, 2013.
- Four vessels complete PWHT – Stored outdoors – December 18, 2013.
- Unit hydro tested at 2040 psi – January 22, 2014.
- Unit currently out for blast /paint. Building erection to follow. – January 31, 2014.
- Painting and skid insulation complete – February 11, 2014.
- Instrumentation is in progress. Y strainers are rotated. – February 21, 2014.
- Building inspection completed – February 28, 2014.
- Function test complete – March 21, 2014.
- Process tubing hydro tested – March 21, 2014.
- Instrument lines and flare headers air tested – March 21, 2014.
- P&ID check with deficiencies - April 4, 2014.
- P&ID check complete. April 25, 2014.
- Piping data report AB-83 complete. – April 25, 2014.

**Unit 2**

- Skid inspection complete – December 18, 2013.
- Spooling fabrication has commenced. – December 18, 2013.
- Vessel SN 1671 and 1672 internal inspection complete – January 3, 2014.
- Vessel SN 1673 and 1674 internal inspection complete – January 13, 2014.
- Hydro test complete – February 10, 2014.
- Painting and skid insulation complete – February 21, 2014.
- Vessel data reports reviewed and accepted – February 21, 2014.
- Building inspection complete. – March 21, 2014.
- Instrumentation is complete. Y Strainers rotated. – April 4, 2014.
- Unit function test complete - April 15, 2014.
- P&ID check complete. April 25, 2014.

**DELIVERY STATUS**

1. PO states the delivery date of January 24, 2014.
2. Writer believes the both units to be ready by May 2, 2014.

**DOCUMENTATION REVIEW**

- Client PO, Vessel drawings, Vessel WPS have been reviewed during this visit.
- Unit 1 vessel data reports have been reviewed. Vessel SN1667, 68. 69 and 70.
  - Vessel SN1667, A # 636929.
  - Vessel SN1668, A # 636927.
  - Vessel SN1669, A # 636926.
  - Vessel SN1670, A # 636928.
- Four vessel data packages reviewed and accepted (Vessel SN1667, 68, 69 and 70) - January 23, 2014.
- Unit 2 vessel data reports have been reviewed. Vessel SN1671, 72. 73 and 74.
  - Vessel SN1671, A # 632245.
  - Vessel SN1672, A # 632246.
  - Vessel SN1673, A # 632247.
  - Vessel SN1674, A # 632248.

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Inspector

Phone

E-Mail

### PHOTOGRAPHS



April 25, 2014  
Unit 1 Building overview.



April 25, 2014  
Paint touch ups completed.



April 25, 2014  
Missing valve handle installed.



April 25, 2014  
Sump cleaned.



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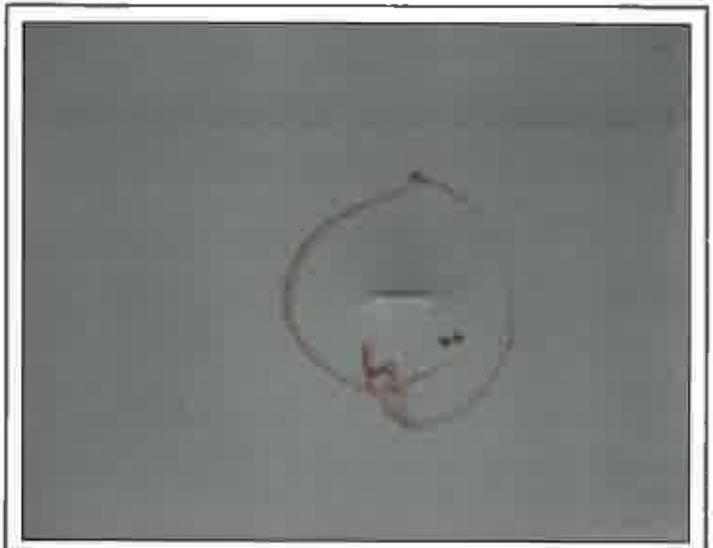
April 25, 2014  
Unit 2 skid overview.



April 25, 2014  
Paint touch ups to be completed.



April 25, 2014  
Skid I beam to be repaired.



April 25, 2014  
I beams repairs to be addressed.



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**FABRICATION SHOP INSPECTION REPORT – MULTIPLE PACKAGED PROCESS EQUIPMENT**

<b>MTL Job No.</b>	3213	<b>Report No.</b>	018
<b>Mechanical Inspector</b>	Gurmat Sidhu	<b>Phone:</b>	403-472-8292 <a href="mailto:gurmatsidhu@gmail.com">gurmatsidhu@gmail.com</a>
<b>Electrical Inspector</b>	Ryan Mikkelsen	<b>Phone:</b>	403-585-4359 <a href="mailto:ryan.mikkelsen@graelttd.ca">ryan.mikkelsen@graelttd.ca</a>
<b>AFE No.</b>	A13370663	<b>Date</b>	May 5, 2014
<b>Client</b>	PennWest Exploration c/o Pioneer Engineering Inc.	<b>Client P.O. No.</b>	PEI-A13370663-01
<b>Project</b>	Cordova d-55-A/94-P-10 Facility	<b>Location / LSD</b>	Cordova / d-55-A/94-P-10
<b>Equipment</b>	(2) 30" Sour Quadruple Separator Packages	<b>Tag No.</b>	2013-070
<b>Client Project Engineer</b>	Peter Orakwe Joe Wu	<b>Contact Info.</b>	403-693-2912, <a href="mailto:Peter.orakwe@pennwest.com">Peter.orakwe@pennwest.com</a> <a href="mailto:jwu@pioneerengineering.com">jwu@pioneerengineering.com</a>
<b>Vendor</b>	Cado Industries	<b>Vendor Job No.</b>	Unit 1 and 2.
<b>Vendor Project Engineer</b>	Wilfred Cao	<b>Phone:</b>	403-279-6662
<b>Vendor QC Manager</b>	Jeremy Koster	<b>Phone:</b>	403-279-6662

<b>PO Delivery Date</b>	January 24, 2014	<b>Estimated Completion Date</b>	Shipped on May 1, 2014	<b>Percentage Complete</b>	100%						
<b>Vessels</b>	100%	<b>Spooling</b>	100%	<b>Structural</b>	100%	<b>Assembly</b>	100%	<b>Instrumentation</b>	100%	<b>Building</b>	100%

Item Serial No :	Description:	Current Shipping Date:	Actual Shipping Date:	LSD:	Status:
2013-070 unit 1	30" Sour Quadruple Separator Package	Late March, 2014	May 1, 2014	d-55-A/94-P-10	Complete
2013-070 unit 2	30" Sour Quadruple Separator Package	April , 2014	May 1, 2014	d-55-A/94-P-10	Complete

**Areas of Concern**

- Both units shipped May 1, 2014.

**Deficiencies / Quality Issues**

- Skid drain valve to be installed. **Completed**
- 8" gas header testing flange to be replaced with blind flange. **Complete.**
- Skid sump to be cleaned, paint repairs and touch ups to be completed. **Complete.**
- Unit 2 X607 needs to be cleared as original film called for reshoot one spot. **Complete**
- PSV nameplates got covered during painting on unit 1. Vendor to clean. **Not completed. To be addressed at site.**

**Project Information / Drawings**

- ENGINEERING**
- Engineering is complete.



**Project Information / Drawings**

**DRAWINGS**

- Vessel drawings are issued for construction.
- Vessel DWG 2013-070-300 sheet 1 of 1 rev. 0.
- SKID.
- 2013-070-403 sheet 1 of 1 Rev. 2.
- 2013-070-404 sheet 1 of 1 Rev. 2.
- P&ID.
- 2013-070-101 sheet 1 of 1 Rev. 1.
- 2013-070-102 sheet 1 of 1 Rev. 1.
- GA.
- 2013-070-201 sheet 1 of 1 Rev. 2.
- Building drawings 13-4212 Rev. 1.

**Inspection / Expediting Comments**

**EXPEDITING**

- Expediting is not required for this project.

**INSPECTION**

**April 30, 2014**

- Writer visited Cado Industries to conduct final inspection on both units prior to shipping.
- Unit 1 final P&ID check completed acceptable. Paint touch ups completed. Ship loose verified. PSV name plates were painted over. Vendor requested to clean the name plates so serial numbers can be verified with PSV data sheets provided by the vendor.
- Unit 2 final P&ID check was completed. Skid repairs marked from previous visit were addressed. Paint touch ups were completed. Ship loose items were verified.
- Both units were missing sump drain ball valves. Vendor to address this prior to shipping.
- Final documentation was reviewed for both units. X607 was reshot with satisfactory results. RT report reviewed and accepted.
- Writer accepted the piping data report (AB-83) and signed off as an acceptance.
- Red files were generated for both units. Red file included a copy of signed of P&ID, vessel and piping data reports, vessel name plates, PSV data reports and pre commission form.
- Units are scheduled to leave tomorrow at 8 am.

**May 1, 2014**

- Writer visited Cado Industries to witness the load out.
- Ball valves were installed on sump drains for both units. Paint didn't get cleaned on PSV name plates for unit 1. Vendor confirmed that shop was unable to remove the paint off the nameplates. To be addressed at site.
- Both units were safely picked up by cranes and loaded on the trucks.
- No visual damage was noted at the time of loading. Ship loose pallet of external piping was also loaded along with the skids.
- Down spouts were taken off during the lift as it was an obstruction in the lifting cables. Down spouts were loaded inside the building and to be installed in the field.
- Inspection and shipping release was issued for each skid. This was included in the red file. Red file was put in the window of each skid for the field supervisor.
- Building doors were properly locked and keys were taped to the doors.
- Units were picked up by Aveda transportation.

Project is 100% complete. Thank you.

**Additional Information / Comments**

**MATERIALS**



### Additional Information / Comments

#### Unit 1

- Vessel materials complete.
- Piping and skid material is complete.
- Instrumentation materials complete.
- Building materials are complete.

#### Unit 2

- Vessel material complete.
- Piping and skid material is complete.
- Instrumentation materials complete.
- Building materials are complete.

#### FABRICATION

##### Unit 1

- Four Vessel long seams are done. November 7, 2013.
- Vessel SN1667 and 1669 internal inspection complete. November 26, 2013.
- Vessel SN1668 and 1670 internal inspection complete. November 27, 2013.
- Skid inspection complete – December 5, 2013.
- Four vessels complete PWHT – Stored outdoors – December 18, 2013.
- Unit hydro tested at 2040 psi – January 22, 2014.
- Unit currently out for blast /paint. Building erection to follow. – January 31, 2014.
- Painting and skid insulation complete – February 11, 2014.
- Instrumentation is in progress. Y strainers are rotated. – February 21, 2014.
- Building inspection completed – February 28, 2014.
- Function test complete – March 21, 2014.
- Process tubing hydro tested – March 21, 2014.
- Instrument lines and flare headers air tested – March 21, 2014.
- P&ID check with deficiencies - April 4, 2014.
- P&ID check complete. April 25, 2014.
- Piping data report AB-83 complete. – April 25, 2014.
- Unit shipped on May 1, 2014.

##### Unit 2

- Skid inspection complete – December 18, 2013.
- Spooling fabrication has commenced. – December 18, 2013.
- Vessel SN 1671 and 1672 internal inspection complete – January 3, 2014.
- Vessel SN 1673 and 1674 internal inspection complete – January 13, 2014.
- Hydro test complete – February 10, 2014.
- Painting and skid insulation complete – February 21, 2014.
- Vessel data reports reviewed and accepted – February 21, 2014.
- Building inspection complete. – March 21, 2014.
- Instrumentation is complete. Y Strainers rotated. – April 4, 2014.
- Unit function test complete - April 15, 2014.
- P&ID check complete. April 25, 2014.
- AB-83 completed - April 30, 2014.
- Unit shipped on May 1, 2014.

#### DELIVERY STATUS

1. PO states the delivery date of January 24, 2014.
2. Writer believes the both units to be ready by May 2, 2014.
3. Both units shipped on May 1, 2014.

#### DOCUMENTATION REVIEW



INSPECTION GROUP INC.

**PennWest**  
Exploration

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**Additional Information / Comments**

- Client PO, Vessel drawings, Vessel WPS have been reviewed during this visit.
- Unit 1 vessel data reports have been reviewed. Vessel SN1667, 68. 69 and 70.
  - Vessel SN1667, A # 636929.
  - Vessel SN1668, A # 636927.
  - Vessel SN1669, A # 636926.
  - Vessel SN1670, A # 636928.
- Four vessel data packages reviewed and accepted (Vessel SN1667, 68, 69 and 70) - January 23, 2014.
- Unit 2 vessel data reports have been reviewed. Vessel SN1671, 72. 73 and 74.
  - Vessel SN1671, A # 632245.
  - Vessel SN1672, A # 632246.
  - Vessel SN1673, A # 632247.
  - Vessel SN1674, A # 632248.

Gurmat Sidhu	403-472-8292	<a href="mailto:gurmatsidhu@gmail.com">gurmatsidhu@gmail.com</a>				
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Inspector

Phone

E-Mail

**PHOTOGRAPHS**



April 30, 2014  
Skid tagging verified for each unit.



April 30, 2014  
PSV SN and set pressure verified.



INSPECTION GROUP INC.

**PennWest**  
Exploration

2836 Ellwood Drive S.W, Edmonton, AB, T6X 0A9, Phone: (780) 450-8883 Fax: (780) 450-8884, [projects@mitlinspection.com](mailto:projects@mitlinspection.com)



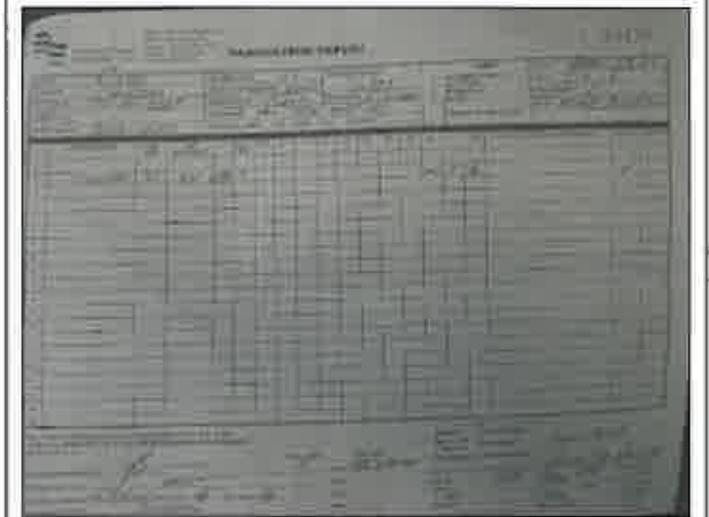
April 30, 2014  
Missing ball valve on sump drains.



April 30, 2014  
PSV name plates painted over for unit 1.



April 30, 2014  
Ship loose external piping.



April 30, 2014  
X607 retested for unit 2.



INSPECTION GROUP INC.

**PennWest**  
Exploration

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May 1, 2014  
Loading overview.



May 1, 2014  
Loading overview.



May 1, 2014  
Drain valve installed.



May 1, 2014  
Down spouts taken off and installed in the building.



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Exploration

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May 1, 2014  
Red files installed.



May 1, 2014  
Load overview.



May 1, 2014  
Doors locked and keys taped to the doors.



May 1, 2014  
Ship loose skids loaded on the trailer.



INSPECTION GROUP INC.

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May 1, 2014  
Load overview.



May 1, 2014  
Load overview.

# CADO Industries Inc.

7491 - 110 Avenue SE, Calgary, Alberta, T2C 3B8, Tel: (403) 279-6662, Fax (403) 279-6687

## BILL OF LADING

CADO PROJECT No: 2013-070 unit 2

PROJECT DESCRIPTION: 30" Quad Separator pkg

PURCHASE ORDER: PEI- A13370663-01

CLIENT: Penn West

SHIP TO OR LSD No: Cordova rd-55-A/94-P-10

Attn: Chris K

780-518-3252

30" Quadriples separator package (1)

unit 2 of 2

Aveda

CARRIER:

Regan

NAME IN PRINT:

[Signature]

SIGN:

May 4/14

DATE:

MAY 1/14

# CADO INDUSTRIES

7491 - 110 Avenue SE, CALGARY, AB T2C 3B8  
 TEL: 403-279-6662  
 FAX: 403-279-6687

# PACKING SLIP

DATE: \_\_\_\_\_  
 CADO JOB # 2013-070 unit 2 of 2  
 CUSTOMER PO PEI-A13370663-01  
 CUSTOMER AFE A13370663  
 SHIP TO Penn West Exploration  
 Cordova d-55-A/94-P-10 Facilit  
 Attn: Chris Kwiatkowski  
 780-518-3252

SOLD TO  
 Penn West Exploration  
 Suite 200, 207 - 9th Ave SW  
 Calgary, AB T2P 1K3

	SHIP VIA	F.O.B.		PREPAID	COLLECT
		Calgary			

ITEM #	DESCRIPTION	QTY	UNIT PRICE	TOTAL
1	30" Sour Quadruples Separator Package SN1671, SN1672, SN1673, SN1674 (Pioneer Engineering project # PEI-12040)	1		
2	PALLET OF SHIP LOOSE SPOOLS 4" #600x4 / 3" #150x1 / 2" #150x1	1 PALLET		
3	BOXES OF BOLTUP FOR SPOOLS	5 BOXES		
4	Hood Vents	4pc		
5	FLOATERS	1 Box		

Other Comments or Special Instructions

Print Name \_\_\_\_\_ Signature \_\_\_\_\_ Date \_\_\_\_\_

# CADO Industries Inc.

7491 - 110 Avenue SE, Calgary, Alberta, T2C 3B8, Tel: (403) 279-6662, Fax (403) 279-6687

## BILL OF LADING

CADO PROJECT No: 2013-070 unit 1

PROJECT DESCRIPTION: 30' Quad Separator Pkg

PURCHASE ORDER: PEI - A13370663-01

CLIENT: Penn West

SHIP TO OR LSD No: Cordova d-SS-A/94-P-10

Attn: Chris K.

780-518-3252

30" Quadruplex Separator Package (1)  
unit 1 of 2

CARRIER:	NAME IN PRINT:	SIGN:	DATE:
	DAVID P. HOFER	<i>David P. Hofer</i>	MAY 1/14

MAY - 1 2014

# CADO INDUSTRIES

7491 - 110 Avenue SE, CALGARY, AB T2C 3B8  
 TEL: 403-279-6662  
 FAX: 403-279-6687

# PACKING SLIP

DATE: \_\_\_\_\_  
 CADO JOB # 2013-070 unit 1 of 2  
 CUSTOMER PO PEI-A13370663-01  
 CUSTOMER AFE A13370663  
 SHIP TO Penn West Exploration  
 Cordova d-55-A/94-P-10 Facility  
 Attn: Chris Kwiatkowski  
 780-518-3252

SOLD TO  
 Penn West Exploration  
 Suite 200, 207 - 9th Ave SW  
 Calgary, AB T2P 1K3

	SHIP VIA	F.O.B.	PREPAID	COLLECT
		Calgary		

ITEM #	DESCRIPTION	QTY	UNIT PRICE	TOTAL
1	30" Sour Quadruples Separator Package SN1667, SN1668, SN1669, SN1670 (Pioneer Engineering project # PEI-12040)	1		
2	PALLET OF SHIP LOOSE SPOOLS 4" x 600 x 4 / 3" x 150 x 1 / 2" x 150 x 1	1 PALLET		
3	BOXES FOR BOLT UP SHIP LOOSE SPOOLS	5 BOXES		
4	HOOD VENTS	4 pc		
5	Box of FLOATERS	1 Box		

Other Comments or Special Instructions

---

Print Name \_\_\_\_\_ Signature \_\_\_\_\_ Date \_\_\_\_\_