

**GENERAL INTERNAL COMPONENT INFORMATION**

District: Central	Skid No.:
Facility: Fir	Location (LSD): 11-13-059-20W5
Name & Equip No: LINEHEATER - N/S	Orientation: Horizontal
Company: Devon Canada	Cost Code:
Status: Operating	Operating Province: Alberta

**NAMEPLATE DATA**

Registration Number: 0563164	Registration Number (Other):
Serial Number: 6053-13	Manufacturer: PRIORITY PROJECTS LTD
Year Built: 2006	Design Pressure: 3130.00 (psi) 21580.72 (Kpa)
Internal Component: COIL A & COIL B	Design Temperature: 200.00 (F) 0.00 (C)
Equipment Type: coil	Size Diameter: 3.50 (In) 88.90 (mm)
Material Type: Unknown	Size Length: (In) (mm)
S Value: 15000.00	CRN: F3325.231
Joint Efficiency: 1.00	

**ASSOCIATED EQUIPMENT**

Registration Number	Equipment Number	Equipment Name
	N/S	LINEHEATER

**GENERAL COMMENTS**

HEAT TREATMENT YES.  
COIL B - DIAMETER 2.375"

*Set @ 48 months*

*CE Busby*

*3-25-2010*

*0/5*

ENTERED MAR 23 2010

**GENERAL PRESSURE VESSEL INFORMATION**

District: Central	Skid No.:
Facility: Fir	Location (LSD): 11-13-059-20W5
Name & Equip No: LINEHEATER - N/S	Orientation: Horizontal
Company: Devon Canada	Cost Code:
Status: Operating	Operating Province: Alberta
Unit:	

**ABSA**

Plant:	Vessel:
Process:	Special:
Amount(\$):	

**PRESSURE VESSEL NAMEPLATE DATA**

Registration Number:	Registration Number (Other):
Serial Number:	CRN Number:
MAWP: (psi) 0.00 (Kpa)	AT temperature: 200.00 (F) 93.33 (C)
Size (diam. x length): x (In) 0.00 x 0.00 (mm)	Manufacturer: PRIORITY PROJECTS LTD
X-Ray: None	Lining Or Coated:
Year Built: 2006	Heat Treatment:
Code parameters:	Corrosion allowance: (In) 0.00 (mm)
	Manway: No

**PIPING NAMEPLATE DATA**

Primary Flange Rating: 900	ASME B16.5 - Table 2-1.1 @ 150F: 2220 (psi)
Pressure Use For TMin: Other	Piping Operating Press: 3130 (psi)
Stress Value: 20000 (psi)	E Value: 1
Comments:	

**SERVICE CONDITIONS-INDICATE ALL THAT APPLY**

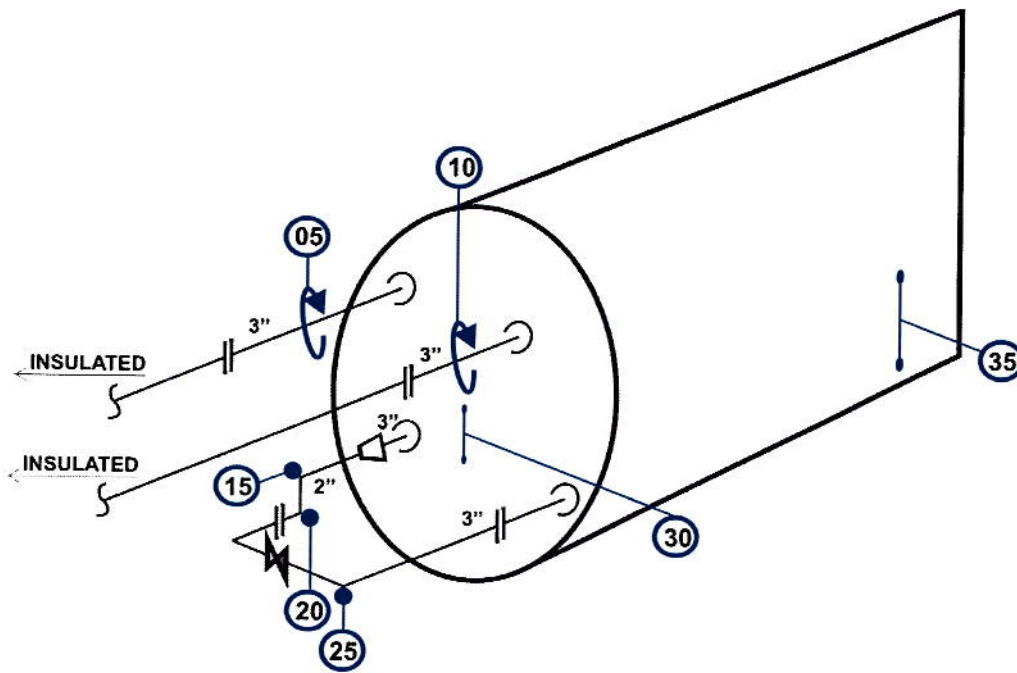
Sweet	Sour	Oil	Gas	Water
Amine	LPG	Condensate	Air	Glycol
Other (Describe):				

**COMPONENTS**

Name	Joint Efficiency	Outside Diameter(in.)	Head Type	Material Type	Stress Value (PSI)	Nominal Thickness(Inch)
SHELL	0.70			Unknown	12500	
HEAD	0.85		Flat	Unknown	12500	

**GENERAL COMMENTS**

PIC: 3352-3355.



**Ultrasonic Corrosion Survey**

OWNER	DEVON CANADA	NOTES
EQUIPMENT NAME	LINE HEATER	
REGISTRATION #	0563164	
EQUIP NUMBER	N/S	
SERIAL NUMBER	6053-13	

# ULTRASONIC CORROSION SURVEY REPORT

EQUIP NAME: LINEHEATER  
 PROV REG:  
 EQUIP #: N/S

SERIAL #:  
 CRN:

DISTRICT: Central  
 FACILITY: Fir  
 LSD: 11-13-059-20W5

## SUMMARY

TYPE	LAST INSPECTION	INSPECTION INTERVAL (YEARS)	CORROSION RATE (IN/YR)		REMAINING HALF LIFE (YEARS)	GOVERNING INSPECTION INTERVAL	NEXT INSPECTION DATE
			SHORT TERM	LONG TERM			
VESSEL	Jan 19, 2010	4.0	0.0000	0.0000	99.0	<b>REGULATORY</b>	<b>Jan 19, 2014</b>
PIPING	Jan 19, 2010	4.0	0.0000	0.0000	99.0		

## VESSEL SURVEY READINGS

POINT NUMBER	TYPE	POINT DATA (INCH)			DATE	SURVEY READINGS			T Req (inch)	CALCULATIONS		
		NOM.	C.A.	NOM-CA		LOW	AVG	short term corr rate		long term corr rate	remaining half life	
30	Head	0.0000	0.0000	0.0000	Jan 19/10	0.250	0.255	0.000	0.0000	0.0000	99.0	
35	Shell	0.0000	0.0000	0.0000	Jan 19/10	0.375	0.380	0.000	0.0000	0.0000	99.0	

## PIPING SURVEY READINGS

POINT NUMBER	TYPE	POINT DATA (INCH)			DATE	SURVEY READINGS			T Req (inch)	CALCULATIONS		
		NOM.	Mill Tol./CA	NOM-CA		LOW	AVG	short term corr rate		long term corr rate	remaining half life	
05	BAND 3 160	0.4380	0.0547	0.3833	Jan 19/10	0.433	0.445	0.274	0.0000	0.0000	99.0	
10	BAND 3 XS	0.3000	0.0375	0.2625	Jan 19/10	0.285	0.295	0.274	0.0000	0.0000	99.0	
15	90L 2 160	0.3440	0.0430	0.3010	Jan 19/10	0.312	0.325	0.186	0.0000	0.0000	99.0	
20	90L 2 160	0.3440	0.0430	0.3010	Jan 19/10	0.301	0.310	0.186	0.0000	0.0000	99.0	
25	90L 3 XS	0.3000	0.0375	0.2625	Jan 19/10	0.282	0.295	0.274	0.0000	0.0000	99.0	

**Field Inspection Report - Devon Canada**

**6,612**

<b>Registration #:</b>		<b>Equipment Name:</b> LINEHEATER	<b>Province:</b>
<b>District:</b> Central		<b>LSD:</b> 11-13-059-20W5	<b>Location:</b> Fir
<b>RN:</b>		<b>Skid Number:</b>	<b>Service:</b>
<b>Manway:</b> No		<b>Coating:</b>	<b>Equipment Number:</b> N/S
<b>MAWP (psi):</b> (psi)		<b>Temp:</b> 200.00 (F)	<b>Serial Number:</b>
<b>Outstanding NCR's:</b> No		<b>No.:</b> 0	
<b>General:</b>			

**Safety Valves**

Side:	MAWP (psi)	MAWP (kPa)	PSV No.	Set Press (psi)	Set Press (kPa)	Capacity Imperial	Imperial Units	Capacity Metric	Metric Units
		0.00			0.00		SCFM		
<b>Status:</b> Operating	<b>Examination Methods:</b>		<b>Access:</b> EXTERNAL		<b>Cleaning:</b>				

**External Inspection**

<b>Inspection Date:</b> Jan 19, 2010	<b>Inspection Interval:</b> 60	<b>Next Insp. Date:</b> Jan 19, 2015
<b>Item</b>	<b>Condition</b>	<b>Inspection Comments</b>
Insulation	Accept	IN GOOD CONDITION.
External Condition	Accept	IN GOOD CONDITION.
Leakage	Accept	NO LEAKS FOUND.
Skirt/Saddle	Accept	IN GOOD CONDITION.
Anchor Bolts	N/A	
Concrete Foundation	N/A	
Ladder/Platform	Accept	IN GOOD CONDITION.
Nozzle	Accept	IN GOOD CONDITION.
Gauges	Accept	EASILY VISIBLE.
External Piping	Accept	IN GOOD CONDITION.
Valving	Accept	TIGHT.
PSV	Accept	LAST SET 8/09.
NDE Methods	Accept	UT/VT 2010.
Other	N/A	
<b>Recommendations:</b> FIT FOR SERVICE.	<b>Inspected By:</b> Aaron Thompson <b>PESL#:</b>	

**INSPECTOR :** I have witnessed/done the above inspections and certify that they have been done in accordance with our approved manual and that the information is accurate. I certify that the status of the Pressure equipment detailed here is:

**Suitable to be returned to service:** \_\_\_\_\_ **Repairs complete(AB-40 attached):** \_\_\_\_\_

**Repairs are still required:** \_\_\_\_\_ **Suggested Inspection interval:** \_\_\_\_\_

**Inspector:** \_\_\_\_\_ **PESL #:** \_\_\_\_\_ **Signature:** \_\_\_\_\_ **Date:** \_\_\_\_\_

**CHIEF INSPECTOR :** I certify that the information on this report is true and all inspections as required by our Owner/User.:

**Quality Assurance Program #** \_\_\_\_\_ **which expires in** \_\_\_\_\_ **have been done.**

# Pressure Safety Valve Summary

## PSV Static Data

Client:	Devon Canada	Facility:	Fir
District:	Central	PSV Number:	1113-1J
Location:	11-13-059-20W5	Serial Number:	501975-2-KE
Description:		Manufacturer:	FARRIS
CRN:		Code Stamp:	
Model:	27DA33H-M20	Outlet Size:	1
Inlet Size:	1		
Side (Shell or Tube):	Tube		

## PSV Service/Inspection

Set Date:	6 Aug, 2009	Service Interval:	36
Set Pressure (psig):	2220	Capacity (scfm):	4942
Service Sealed Intact:	Yes		
Block Valve Inlet:	No	Block Valve Inlet Locked Open:	
Block Valve Outlet:	No	Block Valve Outlet Locked Open:	
Service Company:		Ref Number:	
Condition:		Prepopped Results:	
Service Type:		Installed Date:	
Next Service Date:	6 Aug, 2012		
Comments:			

## Equipment Protected

<u>Reg #</u>	<u>Equip #</u>	<u>Type</u>	<u>Name</u>	<u>Status</u>	<u>MAWP</u>
0563164	N/S	coil	LINEHEATER	Operating	3130.00

## PSV Summary

PSV passes all summary checks.
--------------------------------



the pressure equipment safety authority

# MANUFACTURER'S DATA REPORT FOR INDIRECT FIRED HEATER COILS

6053-13  
11-13-54-30W

AB-28 2005-12

PARTIAL

A# 563164

Manufactured By: Priority Projects Ltd. 1603-8th St. Nisku Alberta T9E-7S7

Manufactured For: Devon Canada Corp. 2000,400-3 Ave. S.W. Calgary Alberta T2P-4H2

Ultimate Owner: Devon Canada Corp. 2000,400-3 Ave. S.W. Calgary Alberta T2P-4H2

Location of Installation: 10-7-73-9 W6

Manufacturer's Serial No. 6053-13	Construction Drawing No. 6053-302 Rev. "0"	CODE: ASME B31.3			Year Built 2006
		Edition	2004	Addenda	

### CONSTRUCTION

Coil ID/Purpose	Design Pressure	Design Temp	Design Minimum Temp	Corrosion Allowance	Registered Drawing No.	CRN
a 2.624" / preheat	3130 psig.	200°F	minus 20°F	0.125"	Coil Chart	F-3325.231
b 2.900" / reheat	1629 psig.	200°F	minus 20°F	0.125"	Coil Chart	F-3319.231
c						
d						
e						

### COIL

Tubes			End Closures				Openings		
Mat'l Spec.	Diameter	Thickness	Return Bend		Flanges		Mat'l Spec.	Size/Type	Rating
			Mat'l Spec.	Thickness	Mat'l Spec.	Rating			
a SA106B,SA333-6	3.5" O.D.	0.438"	SA234WPB	0.438"	SA350LF2 CL 1	CL1500			
b SA106B,SA333-6	3.5" O.D.	0.300"	SA234WPB	0.300"	SA350LF2 CL 1	CL 900			
c									
d									
e									

### HEADERS/MANIFOLDS

Purpose	Size	Shell		Ends			Openings		
		Mat'l Spec.	Thickness	Mat'l Spec.	Thickness	No	Mat'l Spec.	Size/Type	Rating
f									
g									

### TEST PRESSURE, NDE, POSTWELD HEAT TREATMENT AND SIZE

Hydrostatic Test Pressure	Radiography (100% or % Random)	Other NDE (MT) (PT) (UT)	Postweld Heat Treatment		Overall Length	Heating Surface	Volume
			Temp.	Time			
a 4695 psig.	100	Visual	1150°F	One Hour	220"	88 sq. ft.	3.61 cu. Ft.
b 2444 psig.	100	Visual	1150°F	One Hour	201 1/2"	146 sq. ft.	7.22 cu. Ft.
c							
d							
e							
f							
g							

IMPACT TESTING: Impact exemption per. Para. 323.2.2b

REMARKS:

### CERTIFICATE OF COMPLIANCE

We certify that the statements in this report are correct and that all details of design, material, construction, and workmanship of this coil bundle are in accordance with the above Provincial Registered Design.

Date 18 SEP. 06 Signed Michael M. Young For Priority Projects Ltd.

(Representative)

(Manufacturer)

### CERTIFICATE OF SHOP INSPECTION

I, the undersigned, a duly authorized Safety Codes Officer employed by ABSA has inspected the above Heater Coils and state that, to the best of my knowledge and belief, the construction is in accordance with the Alberta Safety Codes Act and Regulations.

Date Sept 18 / 06 Signed

File Name: U:\AB-28 Excel Version-2.xls

D J Young

AB# 256 A

**INDIRECT HEATER COIL TRAVEL SHEET**  
**PRIORITY PROJECTS LTD.**

JOB NO. 6053-13

CRN F-3319.231  
F-3325.231

DATE 21 SEP. 05

**OPERATION**

DRAWING NUMBER:

6053-302 REV. 0

	Q.C. PERSONNEL	DATE	A.I.	DATE
DRAWINGS APPROVED BY GOVERNMENT	↑  <i>Michael Wong</i>  ↓	<u>26-3-85</u>	<u>R. Kelly</u>	<u>7 July 06</u>
MATERIAL CHECKED AGAINST DRAWING		<u>21-9-05</u>	<u>R. Kelly</u>	<u>7 July 06</u>
MILL TEST CHECKED				
PIPING LAYOUT				
PIPE ORIENTATION & FITTINGS RATINGS				
RADIOGRAPHY AND OTHER N.D.E.		<u>17-18-1-06</u> <u>1-5-06</u> <u>27-6-06</u>	<u>R. Kelly</u>	<u>SEP 18 2006</u>
HYDROSTATIC TEST		<u>18-9-06</u>	<u>R. Kelly</u>	<u>SEP 18 2006</u>
NAME PLATE		<u>18-9-06</u>	<u>R. Kelly</u>	<u>SEP 18 2006</u>
P.W.H.T.		<u>18-7-06</u>	<u>R. Kelly</u>	<u>SEP 18 2006</u>
WELDERS I.D. & WELD SIZE		<u>21-9-05</u>	<u>R. Kelly</u>	<u>7 July 06</u>
EXTERNAL AFTER COMPLETION OF ALL WELDING (Before P.W.H.T.)		<u>26-6-06</u>	<u>R. Kelly</u>	<u>7 July 06</u>
DATA REPORTS		<u>15-9-06</u>	<u>R. Kelly</u>	<u>SEP 18 2006</u>

06.5  
 13

	SPEC.	HEAT NUMBER	THICKNESS
FITTING MATERIAL A	<u>180 SA234WPB</u>	<u>04E00081, 04G0002, 04M00081</u>	<u>.438"</u>
FITTING MATERIAL B	<u>180 SA234WPB</u>	<u>04F00041, 04N00061, 04M00081</u>	<u>.300"</u>
FITTING MATERIAL C	<u>REQ. SA420WPL6</u>	<u>457085</u>	<u>SCH. 160</u>
FITTING MATERIAL D	<u>2" TEESA420WPL6</u>	<u>1-47322</u>	<u>SCH. 160</u>
FITTING MATERIAL E	<u>2" 90 SA420WPL6</u>	<u>1-47152</u>	<u>SCH. 160</u>
PIPE MATERIAL A	<u>80 SA106B</u>	<u>16368, 16372, 16357</u>	<u>.300"</u>
PIPE MATERIAL B	<u>80 SA333</u>	<u>33330</u>	<u>.300"</u>
PIPE MATERIAL C	<u>160 SA106B</u>	<u>37409, 71472</u>	<u>.438"</u>
PIPE MATERIAL D	<u>160 SA333</u>	<u>71473, 71477</u>	<u>.438"</u>
PIPE MATERIAL E	<u>2" 160 SA333</u>	<u>741540</u>	<u>.343"</u>
FLANGE MATERIAL A	<u>3" RTJ SA350LF2</u>	<u>286R4</u>	<u>.438"</u>
FLANGE MATERIAL B	<u>2" RTJ SA350LF2</u>	<u>17839, 38673</u>	<u>.343"</u>
FLANGE MATERIAL C	<u>3" RTJ SA350LF2</u>	<u>12680</u>	<u>.300"</u>
FLANGE MATERIAL D	<u>SHEET SA36</u>	<u>151010</u>	<u>.250"</u>
FLANGE MATERIAL E	<u>SHEET SA36</u>	<u>576858</u>	<u>.250"</u>



W HT

RT 100% 16 PASS 1MM

6&10

(A) 563164

F-3325.231  
F-3319.231

6053-302

6053-13

2006

21589 93  
11231

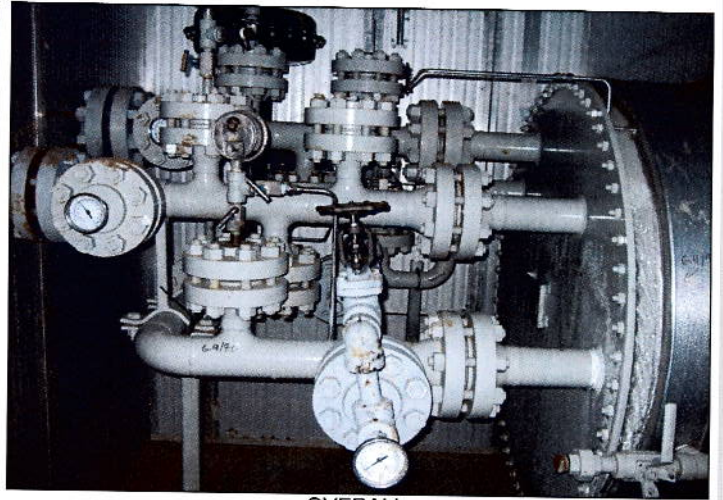
3130 200  
1629

438  
300

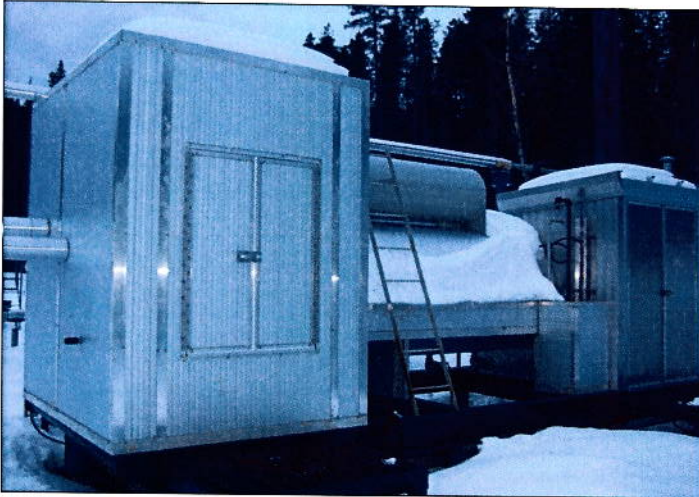
CL 1500  
CL 900



NAMEPLATE



OVERALL



OVERALL



PSV

Blank area for additional information or notes.

Blank area for additional information or notes.

<b>OWNER</b>	DEVON CANADA	<b>NOTES</b>
<b>EQUIPMENT NAME</b>	LINE HEATER / COIL	
<b>REGISTRATION #</b>	0563164	
<b>EQUIP NUMBER</b>	N/S	
<b>SERIAL NUMBER</b>	6053-13	