



TAQA NORTH DATA										
EQUIP NO.:	603FB002	RAMS ID TAG NO.:	NEW	PRN:	N/A	NAT'L BOARD #:	N/A	CATEGORY:		
PLANT/FIELD:	CHINCHAGA GAS PLANT		LSD:	C-032-H / 094-H-08		LOCATION:	GAS PLANT			
EQUIP. NAME :	VOLCANO BOILER			CLASS :	FB		TYPE:	BOILER		
SERVICE:	<input checked="" type="checkbox"/> Sweet	<input type="checkbox"/> Sour	H2S:	N/A	PPM	FLUID:	GLYCOL/NATURAL GAS		S/D REQT.:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Partial
OPERATING PRESSURE:	1103		<input checked="" type="checkbox"/> kPa	<input type="checkbox"/> PSI	OPERATING TEMPERATURE:	N/A		<input type="checkbox"/> °C	<input type="checkbox"/> °F	
OPERATING STATUS:	<input type="checkbox"/> IN SERVICE		<input checked="" type="checkbox"/> Not In Service		M/WAY(16"AND ABOVE):	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		SIZE:		

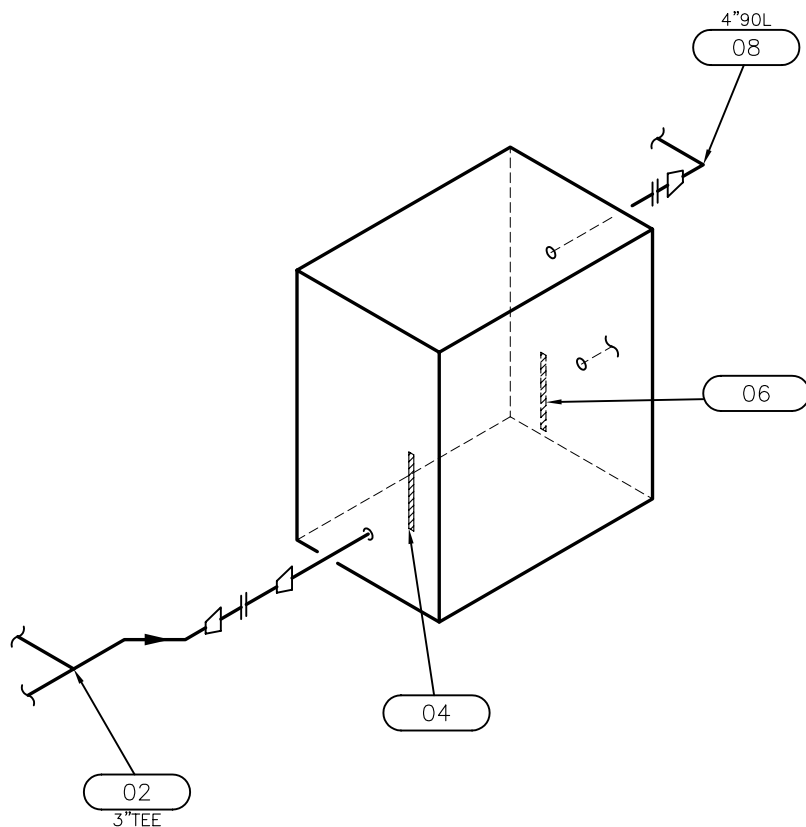
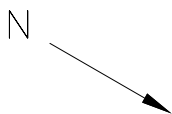
MANUFACTURING DATA												
MFG.:	VOLCANO		DWG. NO.:	N/A		SERIAL NO.:	1148-E		YR. BUILT:	1998	STAMP:	S
CRN:	L2867.51		CODE/DIV.:	ASME VIII DIV 1		PARA.:	N/A		SUPPORT:	<input type="checkbox"/> Skirt <input type="checkbox"/> Saddles <input checked="" type="checkbox"/> N/A		
MAWP:	2068	<input checked="" type="checkbox"/> kPa <input type="checkbox"/> PSI	@ TEMP:	216	<input checked="" type="checkbox"/> °C <input type="checkbox"/> °F	MDMT:	N/A	<input type="checkbox"/> °C <input type="checkbox"/> °F	VOLUME:	N/A	<input type="checkbox"/> M <sup>3</sup>	<input type="checkbox"/> FT <sup>3</sup>
FLANGE RATING:	300#		PWHT:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	RADIOGRAPHY:	<input type="checkbox"/> RT1 <input type="checkbox"/> RT2 <input type="checkbox"/> RT3 <input type="checkbox"/> RT4	<input type="checkbox"/> Spot <input type="checkbox"/> Full	<input checked="" type="checkbox"/> N/A				
SIZE :	1524	<input checked="" type="checkbox"/> mm. <input type="checkbox"/> inch.	<input type="checkbox"/> ID <input type="checkbox"/> OD	LENGTH:	2743	<input checked="" type="checkbox"/> mm. <input type="checkbox"/> inch.	HEIGHT:	2134	<input checked="" type="checkbox"/> mm	<input type="checkbox"/> inch.		
INSULATION TYPE:	<input type="checkbox"/> Fiberglass <input type="checkbox"/> Wool <input type="checkbox"/> Low Temp <input type="checkbox"/> Asbestos Other: N/A							INSULATION THK:	N/A	<input type="checkbox"/> mm <input type="checkbox"/> inch.		
SECTION	MATERIAL		NOMINAL mm		C.A. mm							
N/A	N/A		N/A		N/A			N/A				
COMMENTS:												

TUBING DATA												
MAWP:	N/A	<input type="checkbox"/> kPa <input type="checkbox"/> PSI	@ TEMP:	N/A	<input type="checkbox"/> °C <input type="checkbox"/> °F	TEMA CLASS:	N/A		TYPE:	N/A		
TUBE SIZE:	N/A	mm. <input type="checkbox"/> ID <input type="checkbox"/> OD	NUMBER (QTY OF TUBES):	N/A		GAUGE (BWG):	N/A		JOINT:	<input type="checkbox"/> Welded <input type="checkbox"/> Rolled		
SECTION	MATERIAL		NOMINAL mm		C.A. mm							
N/A	N/A		N/A		N/A			N/A				

TRAY/PACKING DATA								
TRAY TYPE:	N/A		NUMBER (# OF TRAYS):	N/A		PACKING TYPE:	N/A	
MATERIAL:	N/A		MANUFACTURER:	N/A				

COATING/LINING/CLADDING DATA			
AREA	TYPE	MATERIAL	YR. APPLIED
EXTERNAL:	EPOXY	N/A	N/A
INTERNAL:	N/A	N/A	N/A
LINING:	N/A	N/A	N/A
CLADDING:	N/A		

PRESSURE RELIEF DEVICES DATA		<input type="checkbox"/> PSV not located		<input type="checkbox"/> No PSV	
EQUIP. NO.	TAG NO.	SET	CAPACITY	CAP UNITS/OTHER	
603SVFB002A	N/A	1034 <input checked="" type="checkbox"/> kPa <input type="checkbox"/> PSI	4227	<input type="checkbox"/> SCFM <input checked="" type="checkbox"/> LB/hr.	<input type="checkbox"/> GAL/min.
603SVFB002B	N/A	1034 <input checked="" type="checkbox"/> kPa <input type="checkbox"/> PSI	4227	<input type="checkbox"/> SCFM <input checked="" type="checkbox"/> LB/hr.	<input type="checkbox"/> GAL/min.
N/A	N/A	N/A <input type="checkbox"/> kPa <input type="checkbox"/> PSI	N/A	<input type="checkbox"/> SCFM <input type="checkbox"/> LB/hr.	<input type="checkbox"/> GAL/min.



**Integrity Testing**  
SERVICES

P.E. No.: N/S Yr. Blt.: 1998  
OIP# 603FB002 Manway: YES  
Serial No.: 1148-E Size: 1524 X 2743mm  
P.R.N. Ⓐ N/S Service: SWEET  
C.R.N.: L2867.51 PWHT: NO  
Code/Div.: N/S RT: N/S  
Para: N/S Insulated: N/S  
C. Stamp: S N.B. No: N/S  
Manufacturer: VOLCANO

#### Design & Materials Data

HEAD	SHELL
Material: <u>N/S</u>	Material: <u>N/S</u>
Nom.: <u>N/S</u>	Nom.: <u>N/S</u>
C.A.: <u>N/S</u>	C.A.: <u>N/S</u>
BOOT HEAD	BOOT SHELL
Material: _____	Material: _____
Nom.: _____	Nom.: _____
C.A.: _____	C.A.: _____
CHANNEL HEAD	CHANNEL SHELL
Material: _____	Material: _____
Nom.: _____	Nom.: _____
C.A.: _____	C.A.: _____
MAWP Shell Side: <u>2068 KPA</u>	@ Temp.: <u>216°C</u>
MAWP Tube Side: _____	@ Temp.: _____

CLIENT

TAQA NORTH

FACILITY

CHINCHAGA GAS PLANT

C-032-H/094-H-08

ITEM

VOLCANO BOILER

Comments: \_\_\_\_\_

BY: M.J.

DATE: 2008/04

DWG.# 135

## TAQA North

Unit: N-603

FACILITY:	CHINCHAGA GAS PLANT	MANUFACTURER:	VOLCANO
LSD:	C-032-H/094-H-08	DESIGN PRESSURE:	2068 kPa / 300 psi
ITEM DESC.:	VOLCANO BOILER	DESIGN TEMP.:	216 C / 421 F
EQUIP / OIP#:	603FB002	RECOMMENDED NEXT INSP. DATE:	04/2013
PROV. REG. #:	N/S	RECOMMENDED RETIREMENT DATE:	06/2048
SERIAL #:	1148-E	REM. LIFE (from last survey 04/2008):	40.10 yrs.
CRN.:	L2867.51	TOTAL CAUTION / ACTION TML:	0

### Item # (135)

#### TML No.: 2 3"TEE I/L 150 #

DATE BUILT: 01/1998

AVERAGE THICKNESS MEASURED: 9.22 mm.

MATERIAL:

MINIMUM THICKNESS MEASURED: 9.10 mm.

Pts.	Nom. Thick.	Corr. Allow.	Min. Thick.	B/L Survey Date mm/yyyy	B/L Survey	Prev. Survey Date mm/yyyy	Prev. Survey	Last Survey Date mm/yyyy	Last Survey	Short Term Rate	Long Term Rate	TML Insp. Due	TML Retire. Date	Action/Caution Required Item
2.01	7.60	0.90	6.70	01/1998	7.60	N/A	N/A	04/2008	9.10	0.000	0.000	04/2013	04/2808	NO
2.02	7.60	0.90	6.70	01/1998	7.60	N/A	N/A	04/2008	9.30	0.000	0.000	04/2013	12/2874	NO
2.03	7.60	0.90	6.70	01/1998	7.60	N/A	N/A	04/2008	9.30	0.000	0.000	04/2013	12/2874	NO
2.04	7.60	0.90	6.70	01/1998	7.60	N/A	N/A	04/2008	9.20	0.000	0.000	04/2013	08/2841	NO
2.05	7.60	0.90	6.70	01/1998	7.60	N/A	N/A	04/2008	9.20	0.000	0.000	04/2013	08/2841	NO

#### TML No.: 4 EAST MID SH T-B

DATE BUILT: 01/1998

AVERAGE THICKNESS MEASURED: 2.93 mm.

MATERIAL:

MINIMUM THICKNESS MEASURED: 2.90 mm.

Pts.	Nom. Thick.	Corr. Allow.	Min. Thick.	B/L Survey Date mm/yyyy	B/L Survey	Prev. Survey Date mm/yyyy	Prev. Survey	Last Survey Date mm/yyyy	Last Survey	Short Term Rate	Long Term Rate	TML Insp. Due	TML Retire. Date	Action/Caution Required Item
4.01	0.00	0.00	0.00	N/A	N/A	N/A	N/A	04/2008	2.90	0.000	0.000	04/2013	12/2974	NO
4.02	0.00	0.00	0.00	N/A	N/A	N/A	N/A	04/2008	2.90	0.000	0.000	04/2013	12/2974	NO
4.03	0.00	0.00	0.00	N/A	N/A	N/A	N/A	04/2008	3.00	0.000	0.000	04/2013	04/3008	NO
4.04	0.00	0.00	0.00	N/A	N/A	N/A	N/A	04/2008	3.00	0.000	0.000	04/2013	04/3008	NO
4.05	0.00	0.00	0.00	N/A	N/A	N/A	N/A	04/2008	2.90	0.000	0.000	04/2013	12/2974	NO
4.06	0.00	0.00	0.00	N/A	N/A	N/A	N/A	04/2008	2.90	0.000	0.000	04/2013	12/2974	NO

(\*) and GREEN Represent 25% of the TMLs, which have the earliest retirement dates.

BLUE (Caution TML) Corrosion Rate greater than 0.250mm/yr. or TML Remaining Life is less than 1.00 year.

RED (Action TML) TML with negative life.

If Baseline Survey Thickness Measurement was not taken at the time of Manufacture, then Nominal Thickness is used as Baseline Thickness.

## TAQA North

Unit: N-603

FACILITY:	CHINCHAGA GAS PLANT	MANUFACTURER:	VOLCANO
LSD:	C-032-H/094-H-08	DESIGN PRESSURE:	2068 kPa / 300 psi
ITEM DESC.:	VOLCANO BOILER	DESIGN TEMP.:	216 C / 421 F
EQUIP / OIP#:	603FB002	RECOMMENDED NEXT INSP. DATE:	04/2013
PROV. REG. #:	N/S	RECOMMENDED RETIREMENT DATE:	06/2048
SERIAL #:	1148-E	REM. LIFE (from last survey 04/2008):	40.10 yrs.
CRN.:	L2867.51	TOTAL CAUTION / ACTION TML:	0

### Item # (135)

#### TML No.: 6 WEST BTM SH T-B

DATE BUILT: 01/1998

AVERAGE THICKNESS MEASURED: 2.98 mm.

MATERIAL:

MINIMUM THICKNESS MEASURED: 2.90 mm.

Pts.	Nom. Thick.	Corr. Allow.	Min. Thick.	B/L Survey Date mm/yyyy	B/L Survey Date mm/yyyy	Prev. Survey Date mm/yyyy	Prev. Survey Date mm/yyyy	Last Survey Date mm/yyyy	Last Survey Date mm/yyyy	Short Term Rate	Long Term Rate	TML Insp. Due	TML Retire. Date	Action/Caution Required Item
6.01	0.00	0.00	0.00	N/A	N/A	N/A	N/A	04/2008	3.00	0.000	0.000	04/2013	04/3008	NO
6.02	0.00	0.00	0.00	N/A	N/A	N/A	N/A	04/2008	3.00	0.000	0.000	04/2013	04/3008	NO
6.03	0.00	0.00	0.00	N/A	N/A	N/A	N/A	04/2008	3.00	0.000	0.000	04/2013	04/3008	NO
6.04	0.00	0.00	0.00	N/A	N/A	N/A	N/A	04/2008	3.00	0.000	0.000	04/2013	04/3008	NO
6.05	0.00	0.00	0.00	N/A	N/A	N/A	N/A	04/2008	3.00	0.000	0.000	04/2013	04/3008	NO
6.06	0.00	0.00	0.00	N/A	N/A	N/A	N/A	04/2008	2.90	0.000	0.000	04/2013	12/2974	NO

#### TML No.: 8 4"90L N-W 150 #

DATE BUILT: 01/1998

AVERAGE THICKNESS MEASURED: 5.83 mm.

MATERIAL:

MINIMUM THICKNESS MEASURED: 5.70 mm.

Pts.	Nom. Thick.	Corr. Allow.	Min. Thick.	B/L Survey Date mm/yyyy	B/L Survey Date mm/yyyy	Prev. Survey Date mm/yyyy	Prev. Survey Date mm/yyyy	Last Survey Date mm/yyyy	Last Survey Date mm/yyyy	Short Term Rate	Long Term Rate	TML Insp. Due	TML Retire. Date	Action/Caution Required Item
8.01	6.00	0.70	5.30	01/1998	6.00	N/A	N/A	04/2008	5.70	0.000	0.028	04/2013	08/2022	NO *
8.02	6.00	0.70	5.30	01/1998	6.00	N/A	N/A	04/2008	5.90	0.000	0.010	04/2013	05/2067	NO *
8.03	6.00	0.70	5.30	01/1998	6.00	N/A	N/A	04/2008	5.80	0.000	0.020	04/2013	11/2032	NO *
8.04	6.00	0.70	5.30	01/1998	6.00	N/A	N/A	04/2008	5.90	0.000	0.010	04/2013	05/2067	NO *
8.05	6.00	0.70	5.30	01/1998	6.00	N/A	N/A	04/2008	5.90	0.000	0.010	04/2013	05/2067	NO *
8.06	6.00	0.70	5.30	01/1998	6.00	N/A	N/A	04/2008	5.80	0.000	0.020	04/2013	11/2032	NO *

(\*) and GREEN Represent 25% of the TMLs, which have the earliest retirement dates.

BLUE (Caution TML) Corrosion Rate greater than 0.250mm/yr. or TML Remaining Life is less than 1.00 year.

RED (Action TML) TML with negative life.

If Baseline Survey Thickness Measurement was not taken at the time of Manufacture, then Nominal Thickness is used as Baseline Thickness.

## DETAIL VESSEL AND PIPING INSPECTION REPORT

(Imperial)

### GENERAL PRESSURE VESSEL INFORMATION

Company:	Pioneer Natural Resources Canada Inc.	LSD:	BC	C-32-H/94-H-8
Area/Facility:	Chinchaga Gas Plant	Inspection Date	06-Feb-02	Interval: 2 yrs
Vessel Name:	Heat Medium Boiler	A No:	BC	MTL No: BLR179
Internal Coating Type:		Next External:	2/6/2003	Next Internal: Feb, 2004
Vessel Orientation:		Internal Coating Lining:	0	
Vessel Type:	Heating Boiler	Fluid Type:		
Tag No:		Serial Number:	1143-E	
Separator Type:		Business Unit:		
Direct Fired Vessel:	N/A	Fired Tube:		Cost Centre:
Current Status:	In Service	Flame Arrester Date Required:		Date
Thermal Insulation:	No	Asbestos:	No	

### PRESSURE VESSEL NAMEPLATE INFORMATION

MTL Number:	BLR179	Volume:		CRN Number:		Registered:	No
Serial Number:	1143-E			Size:	in	x	0 ft 0 in
Drawing Number:				P & ID Number:			
Shell Material:				Shell Thickness:		In	
				Shell Thickness:		In	
Head Material:				Head Thickness:		In	
				Head Thickness:		In	
Tube Material:		Tube Size(OD):	In	Tube Thickness:		In	
Tubesheet Material:				Tubesheet Thickness:		In	
Channel Material:		Channel Type:		Channel Thickness:		In	
Design Pressure:	Shell:	300 psi		Operating Pressure:	Shell:	psi	
	Tube:	psi			Tube:	psi	
Design Temperature:	Shell:	421 F		Operating Temperature:	Shell:	F	
	Tube:	F			Tube:	F	
RT (XRay):				Heat Treatment:	No		
Code Parameters:				Joint Efficiency:			
Manufacturer:	Volcano Boilers			Year Built:	1998		
Corrosion Allowance:				Manway:	No		

**DETAIL VESSEL AND PIPING INSPECTION REPORT**

(Imperial)

**GENERAL PRESSURE VESSEL INFORMATION**

Company:	Pioneer Natural Resources Canada Inc.	LSD:	BC	C-32-H/94-H-8
Area/Facility:	Chinchaga Gas Plant	Inspection Date	06-Feb-02	Interval: 2 yrs
Vessel Name:	Heat Medium Boiler	A No:	BC	MTL No: BLR179

**VESSEL SHELL / HEADS / PIPING****External / Instrumentation Condition**

The cladding appears in good condition. There was numerous NPT leaks noted on burner end and at PSV location. The paint was also in good condition with no evidence of corrosion. The associated instrumentation appears to be in good working order.

**Internal Condition**

No internal access

**Nozzle Condition**

Not Applicable

**Flange Condition**

Not Applicable

**Internal Piping**

Not Applicable

**External Piping**

The paint is heat chalked. The pipe supports on B.W. and NPT piping appears to be in good condition. The flange bolting and gaskets also appeared in good condition with no signs of corrosion or mechanical damage.

**Pipe Support Condition**

All of the supports are in place, secure and functioning properly.

**Bolting Condition**

The associated bolting and gaskets were in place and appeared to be tight.

**Firetube Condition**

Not Applicable

**Demister Pad Condition**

Not Applicable

**Anode Condition**

Not Applicable

**Vessel Support**

The skid assembly is welded to the skid floor.

## DETAIL VESSEL AND PIPING INSPECTION REPORT

(Imperial)

### GENERAL PRESSURE VESSEL INFORMATION

Company:	Pioneer Natural Resources Canada Inc.	LSD:	BC	C-32-H/94-H-8
Area/Facility:	Chinchaga Gas Plant	Inspection Date	06-Feb-02	Interval: 2 yrs
Vessel Name:	Heat Medium Boiler	A No:	BC	MTL No: BLR179

### VESSEL COATING INSPECTION

Type of Coating

Coating Manufacturer and Type

Location

Coating Condition

### VESSEL NONDESTRUCTIVE TESTING

NDE Type

Location of Test

Contractors Name

Qualifications

Last UT Survey Date

Interval

2 yrs

Next UT Date:

Survey By

Test Results

### VESSEL STATUS

Suitable for Further Service?	Yes	Repairs Required?	No
Owners Representative		Repairs Completed?	
Owners Date		Repairs Completed By	
		Repair Date	

Recommendations

Repair leaks on NPT external piping.  
Repeat UT corrosion survey at next T/A.  
Next PSV servicing in 3 years.

Details of Repairs

## DETAIL VESSEL AND PIPING INSPECTION REPORT

(Imperial)

### GENERAL PRESSURE VESSEL INFORMATION

Company:	Pioneer Natural Resources Canada Inc.	LSD:	BC	C-32-H/94-H-8
Area/Facility:	Chinchaga Gas Plant	Inspection Date	06-Feb-02	Interval: 2 yrs
Vessel Name:	Heat Medium Boiler	A No:	BC	MTL No: BLR179

### PSV DATA

Side	Set Pressure psi	CRN Number	Manufacturer PSV Number	Model Serial Number	Capacity	Size Inches	Set Date
	150		Kunkle PNR191	927BGFM01-BG		1.25 x 2	Dec/1999

### CURRENT VESSEL PROCESS CONDITIONS

Sweet Glycol

Name (Printed)	Signature	Date
Visual Inspector Paul Gorman API510	<i>Signature for Paul Gorman</i>	February 06, 2002
QA Supervisor: (Chief Inspector)		
QA Administrator:		
ABSA Inspector:		



**EQUIPMENT NO: 603FB002**

Page of

FACILITY: Chinchaga Gas Plant

PROV. REG. NO:

EQUIPMENT NAME: Volcano Boiler

TAG NO:

SIZE: 1524mm x 2743mm L/H 2134mm MAWP: 2068 kPa @ 216 °C

LSD : C-032-H / 094-H-08

MANWAY ☒ YES ☐ NO

SERVICE:

FLUID: Natural Gas / Glycol

☐ SOUR ☒ SWEET ☐ CRYOGENIC

SCOPE OF INSPECTION

TYPE OF INSPECTION:

CLEANING:

ACCESS:

☐ PRECOMMISSIONING

☐ AE

☐ MT

☐ RT

☒ GOOD

☐ FULL

☒ INITIAL

☐ ET

☐ MFL

☒ UT

☐ FAIR

☐ PARTIAL

☐ REINSPECTION

☐ LT

☐ PT

☒ VT

☐ INADEQUATE

☒ EXTERNAL

☐ OTHER

**PLEASE ADD PAGES AND SKETCHES AS NEEDED (TURN OVER FOR SKETCH)**
OBSERVATIONS:
☒ EXTERNAL

1. LADDERS, STAIRWAYS, PLATFORMS AND WALKWAYS ☒

2. FOUNDATIONS AND SUPPORTS ☒

3. NOZZLES ☒

4. GROUNDING CONNECTIONS ☒

5. PROTECTIVE COATINGS AND INSULATION ☒ Epoxy

6. EXTERNAL METAL SURFACES ☒ Good

7. FANS AND OTHER ANCILLARY EQUIPMENT ☐ N/A

8. PRESSURE RELIEF DEVICES ☒

9. NAME PLATE ☒

10. ULTRASONIC INSPECTION SURVEY ☒

11. INSPECTION REPORT COMPLETED ☒

12. NON CONFORMANCE COMPLETED ☐ N/A

13. OIP LABEL APPLIED ☒

14. PICTURE ON FILE ☒

COMMENTS

CHECKED BOX INDICATES ACCEPTANCE

RECOMMENDATIONS:

SUITABLE FOR

REMEDIAL ACTION

FURTHER SERVICE: ☒ YES ☐ NO

PRIORITY: ☐ HIGH ☐ MEDIUM ☐ LOW

INSPECTION PERFORMED BY: Mark Tomko

DATE OF INSPECTION 22 04 2008  
(DD MONTH YYYY)

FOLLOW-UP INSPECTION REQ'D:

☐ YES ☒ NO

BY DATE:

(DD MONTH YYYY)



603FB002 (IDLE)

NO A #

505 - 6th Street, Suite 200  
New Westminster, BC V3L 0E1

Toll Free: 1-866-566-SAFE

Fax: (778) 396 - 2064

www.safetyauthority.ca

**BOILER, PRESSURE VESSEL  
AND REFRIGERATION OPERATING PERMIT**

Expiry Month/Year  
Jul 2011

**Granted To**

TAQA NORTH  
Attn: ACCOUNTS PAYABLE  
5100-150 6TH AVENUE SW  
CALGARY AB T2P 3Y7

**Address:**

PIONEER RESOURCES CHINCHAGA  
CHINCHAGA C-32-H/94-H-8 ✓  
FORT ST JOHN BC

**Unit ID:** HW82608  
**Class:** Hot Water Boiler  
**Type:** Watertube  
**Unit Name/Equipment ID:** TF 200HP C-32-H/94-H-8  
**Serial Number:** 1148-E

**POST IN BOILER ROOM OR MACHINERY ROOM**

**PURSUANT AND SUBJECT TO THE SAFETY STANDARDS ACT AND REGULATIONS:**

**A PERSON MUST NOT OPERATE A BOILER, PRESSURE VESSEL OR REFRIGERANT PLANT UNLESS THE OWNER  
HOLDS A VALID CERTIFICATE OF INSPECTION AND AN OPERATING PERMIT.**



505 - 6th Street, Suite 200  
New Westminster, BC V3L 0E1  
Local Phone: 778-396-2000  
Local Fax: 778-396-2174  
Toll Free: 1-866-566-SAFE (7233)  
Toll Free Fax: 1-888-660-3508  
www.safetyauthority.ca

**BOILER, PRESSURE VESSEL  
AND REFRIGERATION OPERATING PERMIT**

Expiry Month/Year  
Jul 2012

**Granted To**

TAQA NORTH LTD  
Attn: ACCOUNTS PAYABLE  
P O BOX 2350 STN M  
CALGARY AB T2P 2M6



**Address:**

PIONEER RESOURCES CHINCHAGA  
CHINCHAGA C-32-H/94-H-8  
FORT ST JOHN BC

IDLE

Unit ID: HW82608  
Class: Hot Water Boiler  
Type: Watertube  
Unit Name/Equipment ID: TF 200HP C-32-H/94-H-8  
Serial Number: 1148-E

603FB002 @ SAME LSD

**POST IN BOILER ROOM OR MACHINERY ROOM**

**PURSUANT AND SUBJECT TO THE SAFETY STANDARDS ACT AND REGULATIONS:**

**A PERSON MUST NOT OPERATE A BOILER, PRESSURE VESSEL OR REFRIGERANT PLANT UNLESS THE OWNER  
HOLDS A VALID CERTIFICATE OF INSPECTION AND AN OPERATING PERMIT.**



505 - 6th Street, Suite 200  
New Westminster, BC V3L 0E1  
Local Phone: 778-396-2000  
Local Fax: 778-396-2174  
Toll Free: 1-866-566-SAFE (7233)  
Toll Free Fax: 1-888-660-3508  
www.safetyauthority.ca

**BOILER, PRESSURE VESSEL  
AND REFRIGERATION OPERATING PERMIT**

Expiry Month/Year  
Jul 2013

**Granted To**

TAQA NORTH LTD  
Attn: ACCOUNTS PAYABLE  
P O BOX 2350 STN M  
CALGARY AB T2P 2M6

**Address:**

PIONEER RESOURCES CHINCHAGA  
CHINCHAGA C-32-H/94-H-8  
FORT ST JOHN BC

**Unit ID:** HW82608  
**Class:** Hot Water Boiler  
**Type:** Watertube  
**Unit Name/Equipment ID:** TF 200HP C-32-H/94-H-8  
**Serial Number:** 1148-E

**POST IN BOILER ROOM OR MACHINERY ROOM**

**PURSUANT AND SUBJECT TO THE SAFETY STANDARDS ACT AND REGULATIONS:**

**A PERSON MUST NOT OPERATE A BOILER, PRESSURE VESSEL OR REFRIGERANT PLANT UNLESS THE OWNER  
HOLDS A VALID CERTIFICATE OF INSPECTION AND AN OPERATING PERMIT.**

603F8002



TAQA NORTH DATA				
EQUIP NO.: 603FB002	RAMS ID TAG NO.: NEW	PRN: N/A	NAT'L BOARD #: N/A	CATEGORY:
PLANT/FIELD: CHINCHAGA GAS PLANT		LSD: C-032-H / 094-H-08	LOCATION: GAS PLANT	
EQUIP. NAME : VOLCANO BOILER		CLASS : FB	TYPE: BOILER	
SERVICE: <input checked="" type="checkbox"/> Sweet <input type="checkbox"/> Sour	H2S: N/A PPM	FLUID: GLYCOL/NATURAL GAS	S/D REQT.: <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Partial	
OPERATING PRESSURE: 1103 <input checked="" type="checkbox"/> kPa <input type="checkbox"/> PSI		OPERATING TEMPERATURE: N/A <input type="checkbox"/> °C <input type="checkbox"/> °F		
OPERATING STATUS: <input type="checkbox"/> IN SERVICE <input checked="" type="checkbox"/> Not In Service		M/WAY(16"AND ABOVE): <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No SIZE:		

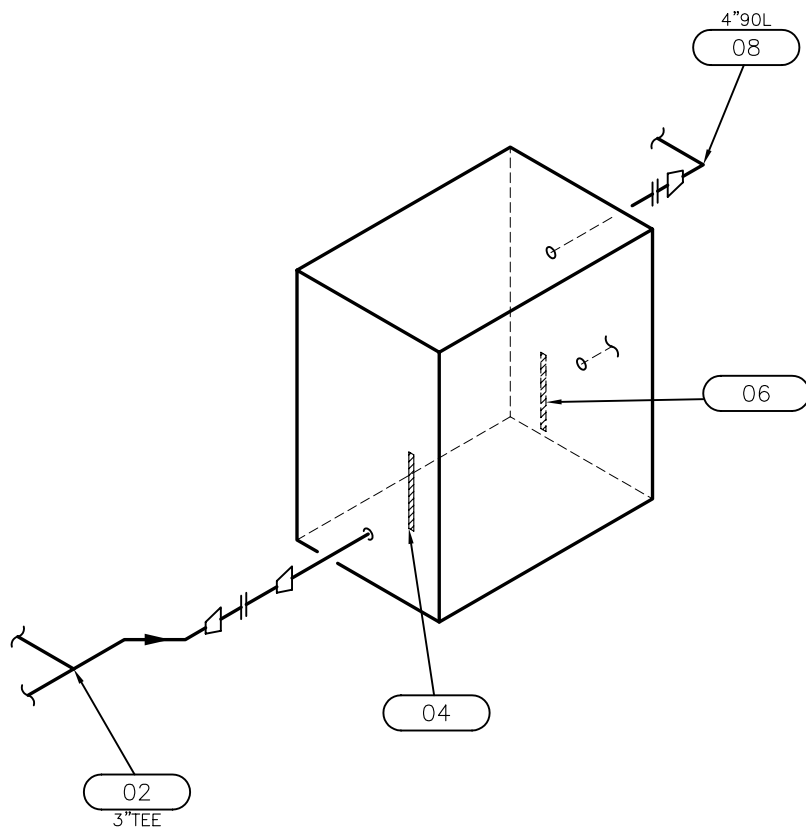
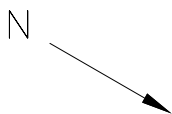
MANUFACTURING DATA				
MFG.: VOLCANO	DWG. NO.: N/A	SERIAL NO.: 1148-E	YR. BUILT: 1998	STAMP: S
CRN: L2867.51	CODE/DIV.: ASME VIII DIV 1	PARA.: N/A	SUPPORT: <input type="checkbox"/> Skirt <input type="checkbox"/> Saddles <input checked="" type="checkbox"/> N/A	
MAWP: 2068 <input checked="" type="checkbox"/> kPa <input type="checkbox"/> PSI	@ TEMP: 216 <input checked="" type="checkbox"/> °C <input type="checkbox"/> °F	MDMT: N/A <input type="checkbox"/> °C <input type="checkbox"/> °F	VOLUME: N/A <input type="checkbox"/> M³ <input type="checkbox"/> FT³	
FLANGE RATING: 300#	PWHT: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	RADIOGRAPHY: <input type="checkbox"/> RT1 <input type="checkbox"/> RT2 <input type="checkbox"/> RT3 <input type="checkbox"/> RT4	<input type="checkbox"/> Spot <input type="checkbox"/> Full <input checked="" type="checkbox"/> N/A	
SIZE : 1524 <input checked="" type="checkbox"/> mm. <input type="checkbox"/> inch. <input type="checkbox"/> ID <input type="checkbox"/> OD	LENGTH: 2743 <input checked="" type="checkbox"/> mm. <input type="checkbox"/> inch.	HEIGHT: 2134 <input checked="" type="checkbox"/> mm <input type="checkbox"/> inch.		
INSULATION TYPE: <input type="checkbox"/> Fiberglass <input type="checkbox"/> Wool <input type="checkbox"/> Low Temp <input type="checkbox"/> Asbestos Other: N/A			INSULATION THK: N/A <input type="checkbox"/> mm <input type="checkbox"/> inch.	
SECTION	MATERIAL	NOMINAL mm	C.A. mm	
N/A	N/A	N/A	N/A	
COMMENTS:				

TUBING DATA				
MAWP: N/A <input type="checkbox"/> kPa <input type="checkbox"/> PSI	@ TEMP: N/A <input type="checkbox"/> °C <input type="checkbox"/> °F	TEMA CLASS: N/A	TYPE: N/A	
TUBE SIZE: N/A mm. <input type="checkbox"/> ID <input type="checkbox"/> OD	NUMBER (QTY OF TUBES): N/A	GAUGE (BWG): N/A	JOINT: <input type="checkbox"/> Welded <input type="checkbox"/> Rolled	
SECTION	MATERIAL	NOMINAL mm	C.A. mm	
N/A	N/A	N/A	N/A	

TRAY/PACKING DATA		
TRAY TYPE: N/A	NUMBER (# OF TRAYS): N/A	PACKING TYPE: N/A
MATERIAL: N/A	MANUFACTURER: N/A	

COATING/LINING/CLADDING DATA			
AREA	TYPE	MATERIAL	YR. APPLIED
EXTERNAL:	EPOXY	N/A	N/A
INTERNAL:	N/A	N/A	N/A
LINING:	N/A	N/A	N/A
CLADDING:	N/A		

PRESSURE RELIEF DEVICES DATA		<input type="checkbox"/> PSV not located	<input type="checkbox"/> No PSV
EQUIP. NO.	TAG NO.	SET	CAPACITY
603SVFB002A	N/A	1034 <input checked="" type="checkbox"/> kPa <input type="checkbox"/> PSI	4227 <input type="checkbox"/> SCFM <input checked="" type="checkbox"/> LB/hr. <input type="checkbox"/> GAL/min.
603SVFB002B	N/A	1034 <input checked="" type="checkbox"/> kPa <input type="checkbox"/> PSI	4227 <input type="checkbox"/> SCFM <input checked="" type="checkbox"/> LB/hr. <input type="checkbox"/> GAL/min.
N/A	N/A	N/A <input type="checkbox"/> kPa <input type="checkbox"/> PSI	N/A <input type="checkbox"/> SCFM <input type="checkbox"/> LB/hr. <input type="checkbox"/> GAL/min.



**Integrity Testing**  
SERVICES

P.E. No.: <u>N/S</u>	Yr. Blt.: <u>1998</u>
OIP# <u>603FB002</u>	Manway: <u>YES</u>
Serial No.: <u>1148-E</u>	Size: <u>1524 X 2743mm</u>
P.R.N. Ⓐ <u>N/S</u>	Service: <u>SWEET</u>
C.R.N.: <u>L2867.51</u>	PWHT: <u>NO</u>
Code/Div.: <u>N/S</u>	RT: <u>N/S</u>
Para: <u>N/S</u>	Insulated: <u>N/S</u>
C. Stamp: <u>S</u>	N.B. No: <u>N/S</u>
Manufacturer: <u>VOLCANO</u>	

#### Design & Materials Data

<b>HEAD</b>	<b>SHELL</b>
Material: <u>N/S</u>	Material: <u>N/S</u>
Nom.: <u>N/S</u>	Nom.: <u>N/S</u>
C.A.: <u>N/S</u>	C.A.: <u>N/S</u>
<b>BOOT HEAD</b>	<b>BOOT SHELL</b>
Material: _____	Material: _____
Nom.: _____	Nom.: _____
C.A.: _____	C.A.: _____
<b>CHANNEL HEAD</b>	<b>CHANNEL SHELL</b>
Material: _____	Material: _____
Nom.: _____	Nom.: _____
C.A.: _____	C.A.: _____
MAWP Shell Side: <u>2068 KPA</u>	@ Temp.: <u>216°C</u>
MAWP Tube Side: _____	@ Temp.: _____

CLIENT

TAQA NORTH

FACILITY

CHINCHAGA GAS PLANT

C-032-H/094-H-08

ITEM

VOLCANO BOILER

Comments: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

BY: M.J.

DATE: 2008/04

DWG.# 135

## TAQA North

Unit: N-603

FACILITY:	CHINCHAGA GAS PLANT	MANUFACTURER:	VOLCANO
LSD:	C-032-H/094-H-08	DESIGN PRESSURE:	2068 kPa / 300 psi
ITEM DESC.:	VOLCANO BOILER	DESIGN TEMP.:	216 C / 421 F
EQUIP / OIP#:	603FB002	RECOMMENDED NEXT INSP. DATE:	04/2013
PROV. REG. #:	N/S	RECOMMENDED RETIREMENT DATE:	06/2048
SERIAL #:	1148-E	REM. LIFE (from last survey 04/2008):	40.10 yrs.
CRN.:	L2867.51	TOTAL CAUTION / ACTION TML:	0

### Item # (135)

#### TML No.: 2 3"TEE I/L 150 #

DATE BUILT: 01/1998

AVERAGE THICKNESS MEASURED: 9.22 mm.

MATERIAL:

MINIMUM THICKNESS MEASURED: 9.10 mm.

Pts.	Nom. Thick.	Corr. Allow.	Min. Thick.	B/L Survey Date mm/yyyy	B/L Survey	Prev. Survey Date mm/yyyy	Prev. Survey	Last Survey Date mm/yyyy	Last Survey	Short Term Rate	Long Term Rate	TML Insp. Due	TML Retire. Date	Action/Caution Required Item
2.01	7.60	0.90	6.70	01/1998	7.60	N/A	N/A	04/2008	9.10	0.000	0.000	04/2013	04/2808	NO
2.02	7.60	0.90	6.70	01/1998	7.60	N/A	N/A	04/2008	9.30	0.000	0.000	04/2013	12/2874	NO
2.03	7.60	0.90	6.70	01/1998	7.60	N/A	N/A	04/2008	9.30	0.000	0.000	04/2013	12/2874	NO
2.04	7.60	0.90	6.70	01/1998	7.60	N/A	N/A	04/2008	9.20	0.000	0.000	04/2013	08/2841	NO
2.05	7.60	0.90	6.70	01/1998	7.60	N/A	N/A	04/2008	9.20	0.000	0.000	04/2013	08/2841	NO

#### TML No.: 4 EAST MID SH T-B

DATE BUILT: 01/1998

AVERAGE THICKNESS MEASURED: 2.93 mm.

MATERIAL:

MINIMUM THICKNESS MEASURED: 2.90 mm.

Pts.	Nom. Thick.	Corr. Allow.	Min. Thick.	B/L Survey Date mm/yyyy	B/L Survey	Prev. Survey Date mm/yyyy	Prev. Survey	Last Survey Date mm/yyyy	Last Survey	Short Term Rate	Long Term Rate	TML Insp. Due	TML Retire. Date	Action/Caution Required Item
4.01	0.00	0.00	0.00	N/A	N/A	N/A	N/A	04/2008	2.90	0.000	0.000	04/2013	12/2974	NO
4.02	0.00	0.00	0.00	N/A	N/A	N/A	N/A	04/2008	2.90	0.000	0.000	04/2013	12/2974	NO
4.03	0.00	0.00	0.00	N/A	N/A	N/A	N/A	04/2008	3.00	0.000	0.000	04/2013	04/3008	NO
4.04	0.00	0.00	0.00	N/A	N/A	N/A	N/A	04/2008	3.00	0.000	0.000	04/2013	04/3008	NO
4.05	0.00	0.00	0.00	N/A	N/A	N/A	N/A	04/2008	2.90	0.000	0.000	04/2013	12/2974	NO
4.06	0.00	0.00	0.00	N/A	N/A	N/A	N/A	04/2008	2.90	0.000	0.000	04/2013	12/2974	NO

(\*) and GREEN Represent 25% of the TMLs, which have the earliest retirement dates.

BLUE (Caution TML) Corrosion Rate greater than 0.250mm/yr. or TML Remaining Life is less than 1.00 year.

RED (Action TML) TML with negative life.

If Baseline Survey Thickness Measurement was not taken at the time of Manufacture, then Nominal Thickness is used as Baseline Thickness.



## TAQA North

Unit: N-603

FACILITY:	CHINCHAGA GAS PLANT	MANUFACTURER:	VOLCANO
LSD:	C-032-H/094-H-08	DESIGN PRESSURE:	2068 kPa / 300 psi
ITEM DESC.:	VOLCANO BOILER	DESIGN TEMP.:	216 C / 421 F
EQUIP / OIP#:	603FB002	RECOMMENDED NEXT INSP. DATE:	04/2013
PROV. REG. #:	N/S	RECOMMENDED RETIREMENT DATE:	06/2048
SERIAL #:	1148-E	REM. LIFE (from last survey 04/2008):	40.10 yrs.
CRN.:	L2867.51	TOTAL CAUTION / ACTION TML:	0

### Item # (135)

#### TML No.: 6 WEST BTM SH T-B

DATE BUILT: 01/1998

AVERAGE THICKNESS MEASURED: 2.98 mm.

MATERIAL:

MINIMUM THICKNESS MEASURED: 2.90 mm.

Pts.	Nom. Thick.	Corr. Allow.	Min. Thick.	B/L Survey Date mm/yyyy	B/L Survey Date mm/yyyy	Prev. Survey Date mm/yyyy	Prev. Survey Date mm/yyyy	Last Survey Date mm/yyyy	Last Survey Date mm/yyyy	Short Term Rate	Long Term Rate	TML Insp. Due	TML Retire. Date	Action/Caution Required Item
6.01	0.00	0.00	0.00	N/A	N/A	N/A	N/A	04/2008	3.00	0.000	0.000	04/2013	04/3008	NO
6.02	0.00	0.00	0.00	N/A	N/A	N/A	N/A	04/2008	3.00	0.000	0.000	04/2013	04/3008	NO
6.03	0.00	0.00	0.00	N/A	N/A	N/A	N/A	04/2008	3.00	0.000	0.000	04/2013	04/3008	NO
6.04	0.00	0.00	0.00	N/A	N/A	N/A	N/A	04/2008	3.00	0.000	0.000	04/2013	04/3008	NO
6.05	0.00	0.00	0.00	N/A	N/A	N/A	N/A	04/2008	3.00	0.000	0.000	04/2013	04/3008	NO
6.06	0.00	0.00	0.00	N/A	N/A	N/A	N/A	04/2008	2.90	0.000	0.000	04/2013	12/2974	NO

#### TML No.: 8 4"90L N-W 150 #

DATE BUILT: 01/1998

AVERAGE THICKNESS MEASURED: 5.83 mm.

MATERIAL:

MINIMUM THICKNESS MEASURED: 5.70 mm.

Pts.	Nom. Thick.	Corr. Allow.	Min. Thick.	B/L Survey Date mm/yyyy	B/L Survey Date mm/yyyy	Prev. Survey Date mm/yyyy	Prev. Survey Date mm/yyyy	Last Survey Date mm/yyyy	Last Survey Date mm/yyyy	Short Term Rate	Long Term Rate	TML Insp. Due	TML Retire. Date	Action/Caution Required Item
8.01	6.00	0.70	5.30	01/1998	6.00	N/A	N/A	04/2008	5.70	0.000	0.028	04/2013	08/2022	NO *
8.02	6.00	0.70	5.30	01/1998	6.00	N/A	N/A	04/2008	5.90	0.000	0.010	04/2013	05/2067	NO *
8.03	6.00	0.70	5.30	01/1998	6.00	N/A	N/A	04/2008	5.80	0.000	0.020	04/2013	11/2032	NO *
8.04	6.00	0.70	5.30	01/1998	6.00	N/A	N/A	04/2008	5.90	0.000	0.010	04/2013	05/2067	NO *
8.05	6.00	0.70	5.30	01/1998	6.00	N/A	N/A	04/2008	5.90	0.000	0.010	04/2013	05/2067	NO *
8.06	6.00	0.70	5.30	01/1998	6.00	N/A	N/A	04/2008	5.80	0.000	0.020	04/2013	11/2032	NO *

(\*) and GREEN Represent 25% of the TMLs, which have the earliest retirement dates.

BLUE (Caution TML) Corrosion Rate greater than 0.250mm/yr. or TML Remaining Life is less than 1.00 year.

RED (Action TML) TML with negative life.

If Baseline Survey Thickness Measurement was not taken at the time of Manufacture, then Nominal Thickness is used as Baseline Thickness.



## DETAIL VESSEL AND PIPING INSPECTION REPORT

(Imperial)

### GENERAL PRESSURE VESSEL INFORMATION

Company:	Pioneer Natural Resources Canada Inc.	LSD:	BC	C-32-H/94-H-8
Area/Facility:	Chinchaga Gas Plant	Inspection Date	06-Feb-02	Interval: 2 yrs
Vessel Name:	Heat Medium Boiler	A No:	BC	MTL No: BLR179
Internal Coating Type:		Next External:	2/6/2003	Next Internal: Feb, 2004
Vessel Orientation:		Internal Coating Lining:	0	
Vessel Type:	Heating Boiler	Fluid Type:		
Tag No:		Serial Number:	1143-E	
Separator Type:		Business Unit:		
Direct Fired Vessel:	N/A	Fired Tube:		Cost Centre:
Current Status:	In Service	Flame Arrester Date Required:		Date
Thermal Insulation:	No	Asbestos:	No	

### PRESSURE VESSEL NAMEPLATE INFORMATION

MTL Number:	BLR179	Volume:		CRN Number:		Registered:	No
Serial Number:	1143-E			Size:	in	x	0 ft 0 in
Drawing Number:				P & ID Number:			
Shell Material:				Shell Thickness:		In	
				Shell Thickness:		In	
Head Material:				Head Thickness:		In	
				Head Thickness:		In	
Tube Material:		Tube Size(OD):	In	Tube Thickness:		In	
Tubesheet Material:				Tubesheet Thickness:		In	
Channel Material:		Channel Type:		Channel Thickness:		In	
Design Pressure:	Shell: 300 psi			Operating Pressure:	Shell: psi		
	Tube: psi				Tube: psi		
Design Temperature:	Shell: 421 F			Operating Temperature:	Shell: F		
	Tube: F				Tube: F		
RT (XRay):				Heat Treatment:	No		
Code Parameters:				Joint Efficiency:			
Manufacturer:	Volcano Boilers			Year Built:	1998		
Corrosion Allowance:				Manway:	No		

**DETAIL VESSEL AND PIPING INSPECTION REPORT**

(Imperial)

**GENERAL PRESSURE VESSEL INFORMATION**

Company:	Pioneer Natural Resources Canada Inc.	LSD:	BC	C-32-H/94-H-8
Area/Facility:	Chinchaga Gas Plant	Inspection Date	06-Feb-02	Interval: 2 yrs
Vessel Name:	Heat Medium Boiler	A No:	BC	MTL No: BLR179

**VESSEL SHELL / HEADS / PIPING****External / Instrumentation Condition**

The cladding appears in good condition. There was numerous NPT leaks noted on burner end and at PSV location. The paint was also in good condition with no evidence of corrosion. The associated instrumentation appears to be in good working order.

**Internal Condition**

No internal access

**Nozzle Condition**

Not Applicable

**Flange Condition**

Not Applicable

**Internal Piping**

Not Applicable

**External Piping**

The paint is heat chalked. The pipe supports on B.W. and NPT piping appears to be in good condition. The flange bolting and gaskets also appeared in good condition with no signs of corrosion or mechanical damage.

**Pipe Support Condition**

All of the supports are in place, secure and functioning properly.

**Bolting Condition**

The associated bolting and gaskets were in place and appeared to be tight.

**Firetube Condition**

Not Applicable

**Demister Pad Condition**

Not Applicable

**Anode Condition**

Not Applicable

**Vessel Support**

The skid assembly is welded to the skid floor.

## DETAIL VESSEL AND PIPING INSPECTION REPORT

(Imperial)

### GENERAL PRESSURE VESSEL INFORMATION

Company:	Pioneer Natural Resources Canada Inc.	LSD:	BC	C-32-H/94-H-8
Area/Facility:	Chinchaga Gas Plant	Inspection Date	06-Feb-02	Interval: 2 yrs
Vessel Name:	Heat Medium Boiler	A No:	BC	MTL No: BLR179

### VESSEL COATING INSPECTION

Type of Coating

Coating Manufacturer and Type

Location

Coating Condition

### VESSEL NONDESTRUCTIVE TESTING

NDE Type			
Location of Test			
Contractors Name		Qualifications	
Last UT Survey Date	Interval	2 yrs	Next UT Date:
Survey By			
Test Results			

### VESSEL STATUS

Suitable for Further Service?	Yes	Repairs Required?	No
Owners Representative		Repairs Completed?	
Owners Date		Repairs Completed By	
		Repair Date	

Recommendations	Repair leaks on NPT external piping. Repeat UT corrosion survey at next T/A. Next PSV servicing in 3 years.
-----------------	---

Details of Repairs	
--------------------	--

## DETAIL VESSEL AND PIPING INSPECTION REPORT

(Imperial)

### GENERAL PRESSURE VESSEL INFORMATION

Company:	Pioneer Natural Resources Canada Inc.	LSD:	BC	C-32-H/94-H-8
Area/Facility:	Chinchaga Gas Plant	Inspection Date	06-Feb-02	Interval: 2 yrs
Vessel Name:	Heat Medium Boiler	A No:	BC	MTL No: BLR179

### PSV DATA

Side	Set Pressure psi	CRN Number	Manufacturer PSV Number	Model Serial Number	Capacity	Size Inches	Set Date
	150		Kunkle PNR191	927BGFM01-BG		1.25 x 2	Dec/1999

### CURRENT VESSEL PROCESS CONDITIONS

Sweet Glycol

Name (Printed)	Signature	Date
Visual Inspector Paul Gorman API510	<i>Signature for Paul Gorman</i>	February 06, 2002
QA Supervisor: (Chief Inspector)		
QA Administrator:		
ABSA Inspector:		

**EQUIPMENT NO: 603FB002**

Page of

FACILITY: Chinchaga Gas Plant

PROV. REG. NO:

EQUIPMENT NAME: Volcano Boiler

TAG NO:

SIZE: 1524mm x 2743mm L/H 2134mm MAWP: 2068 kPa @ 216 °C

LSD : C-032-H / 094-H-08

MANWAY ☒ YES ☐ NO

SERVICE:

FLUID: Natural Gas / Glycol

☐ SOUR ☒ SWEET ☐ CRYOGENIC

SCOPE OF INSPECTION

TYPE OF INSPECTION:

CLEANING:

ACCESS:

☐ PRECOMMISSIONING

☐ AE

☐ MT

☐ RT

☒ GOOD

☐ FULL

☒ INITIAL

☐ ET

☐ MFL

☒ UT

☐ FAIR

☐ PARTIAL

☐ REINSPECTION

☐ LT

☐ PT

☒ VT

☐ INADEQUATE

☒ EXTERNAL

☐ OTHER

**PLEASE ADD PAGES AND SKETCHES AS NEEDED (TURN OVER FOR SKETCH)**
OBSERVATIONS:
☒ EXTERNAL

1. LADDERS, STAIRWAYS, PLATFORMS AND WALKWAYS ☒

2. FOUNDATIONS AND SUPPORTS ☒

3. NOZZLES ☒

4. GROUNDING CONNECTIONS ☒

5. PROTECTIVE COATINGS AND INSULATION ☒ Epoxy

6. EXTERNAL METAL SURFACES ☒ Good

7. FANS AND OTHER ANCILLARY EQUIPMENT ☐ N/A

8. PRESSURE RELIEF DEVICES ☒

9. NAME PLATE ☒

10. ULTRASONIC INSPECTION SURVEY ☒

11. INSPECTION REPORT COMPLETED ☒

12. NON CONFORMANCE COMPLETED ☐ N/A

13. OIP LABEL APPLIED ☒

14. PICTURE ON FILE ☒

COMMENTS

CHECKED BOX INDICATES ACCEPTANCE

RECOMMENDATIONS:

SUITABLE FOR

REMEDIAL ACTION

FURTHER SERVICE: ☒ YES ☐ NO

PRIORITY: ☐ HIGH ☐ MEDIUM ☐ LOW

INSPECTION PERFORMED BY: Mark Tomko

DATE OF INSPECTION 22 04 2008  
(DD MONTH YYYY)

FOLLOW-UP INSPECTION REQ'D:

☐ YES ☒ NO

BY DATE: (DD MONTH YYYY)



603FB002 (IDLE)

NO A #

505 - 6th Street, Suite 200  
New Westminster, BC V3L 0E1

Toll Free: 1-866-566-SAFE

Fax: (778) 396 - 2064

www.safetyauthority.ca

**BOILER, PRESSURE VESSEL  
AND REFRIGERATION OPERATING PERMIT**

Expiry Month/Year  
Jul 2011

**Granted To**

TAQA NORTH  
Attn: ACCOUNTS PAYABLE  
5100-150 6TH AVENUE SW  
CALGARY AB T2P 3Y7

**Address:**

PIONEER RESOURCES CHINCHAGA  
CHINCHAGA C-32-H/94-H-8 ✓  
FORT ST JOHN BC

**Unit ID:** HW82608  
**Class:** Hot Water Boiler  
**Type:** Watertube  
**Unit Name/Equipment ID:** TF 200HP C-32-H/94-H-8  
**Serial Number:** 1148-E

**POST IN BOILER ROOM OR MACHINERY ROOM**

**PURSUANT AND SUBJECT TO THE SAFETY STANDARDS ACT AND REGULATIONS:**

**A PERSON MUST NOT OPERATE A BOILER, PRESSURE VESSEL OR REFRIGERANT PLANT UNLESS THE OWNER  
HOLDS A VALID CERTIFICATE OF INSPECTION AND AN OPERATING PERMIT.**



505 - 6th Street, Suite 200  
New Westminster, BC V3L 0E1  
Local Phone: 778-396-2000  
Local Fax: 778-396-2174  
Toll Free: 1-866-566-SAFE (7233)  
Toll Free Fax: 1-888-660-3508  
www.safetyauthority.ca

**BOILER, PRESSURE VESSEL  
AND REFRIGERATION OPERATING PERMIT**

Expiry Month/Year  
Jul 2012

**Granted To**

TAQA NORTH LTD  
Attn: ACCOUNTS PAYABLE  
P O BOX 2350 STN M  
CALGARY AB T2P 2M6



**Address:**

PIONEER RESOURCES CHINCHAGA  
CHINCHAGA C-32-H/94-H-8  
FORT ST JOHN BC

IDLE

Unit ID: HW82608  
Class: Hot Water Boiler  
Type: Watertube  
Unit Name/Equipment ID: TF 200HP C-32-H/94-H-8  
Serial Number: 1148-E

603FB002 @ SAME LSD

**POST IN BOILER ROOM OR MACHINERY ROOM**

**PURSUANT AND SUBJECT TO THE SAFETY STANDARDS ACT AND REGULATIONS:**

**A PERSON MUST NOT OPERATE A BOILER, PRESSURE VESSEL OR REFRIGERANT PLANT UNLESS THE OWNER  
HOLDS A VALID CERTIFICATE OF INSPECTION AND AN OPERATING PERMIT.**





505 - 6th Street, Suite 200  
New Westminster, BC V3L 0E1  
Local Phone: 778-396-2000  
Local Fax: 778-396-2174  
Toll Free: 1-866-566-SAFE (7233)  
Toll Free Fax: 1-888-660-3508  
www.safetyauthority.ca

**BOILER, PRESSURE VESSEL  
AND REFRIGERATION OPERATING PERMIT**

Expiry Month/Year  
Jul 2013

**Granted To**

TAQA NORTH LTD  
Attn: ACCOUNTS PAYABLE  
P O BOX 2350 STN M  
CALGARY AB T2P 2M6

**Address:**

PIONEER RESOURCES CHINCHAGA  
CHINCHAGA C-32-H/94-H-8  
FORT ST JOHN BC

**Unit ID:** HW82608  
**Class:** Hot Water Boiler  
**Type:** Watertube  
**Unit Name/Equipment ID:** TF 200HP C-32-H/94-H-8  
**Serial Number:** 1148-E

**POST IN BOILER ROOM OR MACHINERY ROOM**

**PURSUANT AND SUBJECT TO THE SAFETY STANDARDS ACT AND REGULATIONS:**

**A PERSON MUST NOT OPERATE A BOILER, PRESSURE VESSEL OR REFRIGERANT PLANT UNLESS THE OWNER  
HOLDS A VALID CERTIFICATE OF INSPECTION AND AN OPERATING PERMIT.**

603F8002