

**Canadian Natural Resources Limited  
GENERAL PRESSURE VESSEL INFORMATION**

**Job # 105.00157**

District: <b>Grand Prairie</b>	Skid No. <b>Nil</b>
Facility: <b>Saddle Hills Gas Plant</b>	Location (LSD): <b>10-11-75-07 W6M</b>
Vessel Name Equipment Number: <b>Cansweet Tower</b>	
Orientation: <b>Vertical</b>	
Status: <b>In service</b>	<b>Regulatory Inspection</b>

**PRESSURE VESSEL NAMEPLATE DATA**

"A" or "G" or "S" (Sask.) or BC Registration Number. <b>C# 38593</b>		CRN Number: <b>K2684.1</b>	
Vessel serial number: 01168-501		Size: 56" x 32'	
Shell thickness: 57.15		Shell material: SA 516 70 N	
Head thickness: 53.98mm		Head material: SA 516 70 N	
Tube wall thickness:		Tube material:	
Tube diameter:		Tube length:	
Channel thickness:		Channel material:	
Design pressure	Shell: 11997 kPa	Operating pressure	Shell: kPa
	Tubes:		Tubes:
Design Temp.	Shell: 93.3°C	Operating temperature	Shell: °C
	Tubes:		Tubes:
X-ray: Nil		Heat treatment: HT	
Code parameters: ASME VIII, Div 1		Coated: Nil	
Manufacturer: Propak Systems Ltd.		Year built: 2002	
Corrosion allowance: Nil		Manway: 3 Manways	

**PRESSURE SAFETY VALVE NAMEPLATE DATA**

PSV Tag #	Manufacture	Model #	Serial #	Set Pressure (kPa)	Capacity (scfm)	Service Date
<b>22340G</b>	<b>Mercer</b>	<b>81-53H11P88C1</b>	<b>A85417</b>	<b>9653</b>	<b>*Unknown*</b>	<b>09/2005</b>
CRN #	Service By	Block Valve	Location	Size	Code Stamp	
<b>OG2606.5C</b>	<b>Unified Valve</b>	<b>No</b>	<b>Outlet Line</b>	<b>2"600 x 3"150</b>	<b>UV NB</b>	

**SERVICE CONDITIONS-INDICATE ALL THAT APPLY**

Sweet <input checked="" type="checkbox"/>	Sour	Oil	Gas <input checked="" type="checkbox"/>	Water
Amine	LPG	Condensate	Air	Glycol

Other (Describe): **CANSWEET 800 SX**

**Inspection Interval** \_\_\_\_\_ **PSV Service Interval** \_\_\_\_\_

(Determined by MIC in conjunction with Chief Inspector following guidelines of CNRL Owner-User Inspection Program)

Reports reviewed and accepted by:

**Mechanical Integrity Coordinator** \_\_\_\_\_ **Date** \_\_\_\_\_

Fill out all forms as completely as possible. **All information is important!** Use back of sheets to record additional information or sketch if required.

Copy of report to be filed by MIC at site, and copy sent to Chief Inspector

C38593

External Inspection Items	G	F	P	N/A	Comments
<b>Insulation</b> Verify sealed around manways, nozzles, no damage present, and there is no egress of moisture.				X	No insulation present.
<b>External Condition</b> Assess paint condition, areas peeling, record any corrosion, damage, etc (record location, size and depth of corrosion or damage)	X				Paint is in good condition. No exposed metal or corrosion present.
<b>Leakage</b> Record any leakage at flanges, threaded joints, weep holes on repads, etc.	X				No leaks present.
<b>Saddle/Skirt</b> Assess condition of paint, fire protection, concrete. Look for corrosion, buckling, dents, etc. Look at vessel surface area near supports. Verify no signs of leakage at attachment to vessel and attachment welds are acceptable. Ground wire attached?	X				Skirt is firmly bolted to supports. Paint is in good condition no significant corrosion present. No leakage present at attachment welds to vessel. Attachment welds are acceptable.  Supports are grounded.
<b>Anchor Bolts</b> Hammer tap to ensure secure. Look for cracking in treads or signs of deformation.	X				Skirt is bolted to I beam & pilling supports. No deformation or cracking present.
<b>Concrete foundation</b> Check for cracks, spalling, etc.				X	
<b>Ladder / Platform</b> Describe general condition, ensure support is secure to vessel, describe any hazards.	X				Platform and ladders are in good condition no loose or missing rungs.
<b>Nozzle</b> Assess paint, look for leakage, and ensure stud threads are fully engaged. Record any damage, deflection, etc. Are nozzles gusseted?	X				Nozzle paint is in good condition no leaks present. No stud threads present. No damage or deflection present. No gussets present.
<b>Gauges</b> Ensure gauges are visible, working, no leakage, and suitable for range of MAWP/ Temp.				X	No Gauges Present.
<b>External Piping</b> Ensure pipe is well supported. All clamps, supports, shoes, etc. in place. Look for evidence of structural overload, deflection, etc. Paint condition, external corrosion?	X				Piping is well supported and in place. No loose clamps or supports. No evidence of structural overload or deflection. Paint is in good condition no significant corrosion present.
<b>Valving</b> Ensure no leaks are visible. Valves are properly supported and chained if necessary.	X				Valves are properly supported, no leaks present.
PSV Ensure PSV is set at pressure at or below that of vessel. Discharge piping is same size as inlet to valve and is properly supported and routed. Ensure no block valves between PSV and vessel or if there are they are locked open.	X				PSV is set below MAWP of vessel. PSV Discharge piping is larger than inlet piping and is properly supported and routed. No block valves present. PSV Seal is intact Location: Outlet piping
<b>NDE methods</b> Was UT/ MPI done on vessel (MI coordinator to review results)	X				Ultrasonic corrosion survey carried out - no metal thickness detected below nominal minus corrosion allowance.
<p><b>Recommendations or corrective actions : Vessel is Fit for Service or describe corrective actions required)</b> (MIC to review corrective actions with Operations, discuss with Chief Inspector where necessary, and get remedial action implemented)</p> <p><b>Recommendations: No recommendations at this time.</b></p> <p><b>Summary:</b> Vessel is in overall good condition, visual external inspection and ultrasonic corrosion survey performed - no metal thickness detected below nominal minus corrosion allowance.</p> <p><b>Vessel is fit for service.</b></p>					

Inspected By: Dellas Weidman

Date: May 21<sup>th</sup> 2010

Photo Table for C38593



Data Plate



Overview



Overview



PSV Tag