

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

Job # 105.00157

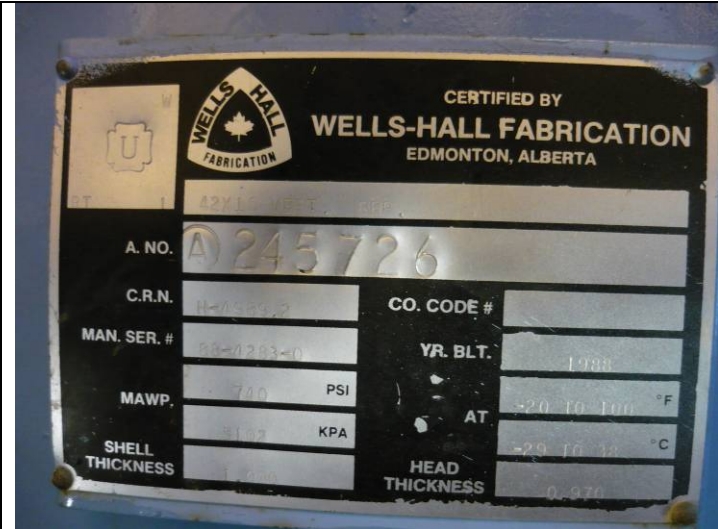
District: Grand Prairie		Skid No. Nil				
Facility: Saddle Hills Gas Plant		Location (LSD): 10-11-75-07 W6M				
Vessel Name Equipment Number: High Pressure Inlet Separator V-400						
Orientation: Vertical						
Status: In service		Regulatory Inspection				
PRESSURE VESSEL NAMEPLATE DATA						
“A” or “G” or “S” (Sask.) or BC Registration Number. A245726		CRN Number: H-4989.2				
Vessel serial number: 88-4283-0		Size: 42” x 120”				
Shell thickness: 25.4mm		Shell material: SA 516 70N				
Head thickness: 24.6mm		Head material: SA 516 70N				
Tube wall thickness:		Tube material:				
Tube diameter:		Tube length:				
Channel thickness:		Channel material:				
Design pressure	Shell: 5102 kPa	Operating pressure	Shell: 900 kPa			
	Tubes:		Tubes:			
Design Temp.	Shell: 38°C	Operating temperature	Shell: 10 °C			
	Tubes:		Tubes:			
X-ray: RT -1		Heat treatment: Nil				
Code parameters: ASME VIII, Div 1		Coated: Nil				
Manufacturer: Wells Hall Fabrication		Year built: 1988				
Corrosion allowance: Nil		Manway: No				
PRESSURE SAFETY VALVE NAMEPLATE DATA						
PSV Tag #	Manufacture	Model #	Serial #	Set Pressure (kPa)	Capacity (scfm)	Service Date
21956G	Consolidated	1910HC1-1-1-1	88C2065	5102	11814	07/2005
CRN #	Service By	Block Valve	Location	Size	Code Stamp	
01832.52	Unified Valve	No	Mid Shell	2”300 x 3”150	UV NB	
SERVICE CONDITIONS-INDICATE ALL THAT APPLY						
Sweet X	Sour	Oil		Gas X	Water X	
Amine	LPG	Condensate X		Air	Glycol	
Other (Describe):						

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

External Inspection Items	G	F	P	N/A	Comments
Insulation Verify sealed around manways, nozzles, no damage present, and there is no egress of moisture.				X	No insulation present.
External Condition 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 corrosion or damage present.
Leakage Record any leakage at flanges, threaded joints, weep holes on repads, etc.	X				No leaks present.
Saddle/Skirt 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 skid corrosion and paint failure present around base of skirt to 20% , no buckling or dents present. No leakage present at attachment welds to vessel. Attachment welds are acceptable. Skid is grounded.
Anchor Bolts Hammer tap to ensure secure. Look for cracking in treads or signs of deformation.	X				Skirt is bolted to skid floor, No deformation or cracking present.
Concrete foundation Check for cracks, spalling, etc.				X	
Ladder / Platform Describe general condition, ensure support is secure to vessel, describe any hazards.				X	
Nozzle 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. Stud threads present fully engaged, no damage or deflection present. No gussets present.
Gauges Ensure gauges are visible, working, no leakage, and suitable for range of MAWP/ Temp.	X				Pressure gauge (0-3440 kPa) Not suitable for MAWP of Vessel Temperature gauge (-40-50 °C) Suitable for allowable range. Gauges are clear and visible.
External Piping 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.
Valving 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 at 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: Upper shell
NDE methods 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.
Recommendations or corrective actions : Vessel is Fit for Service or describe corrective actions required) (MIC to review corrective actions with Operations, discuss with Chief Inspector where necessary, and get remedial action implemented) Recommendations: No recommendations at this time. Summary: Vessel is in overall good condition, visual external inspection and ultrasonic corrosion survey performed - no metal thickness detected below nominal minus corrosion allowance. Vessel is fit for service.					



Data Plate



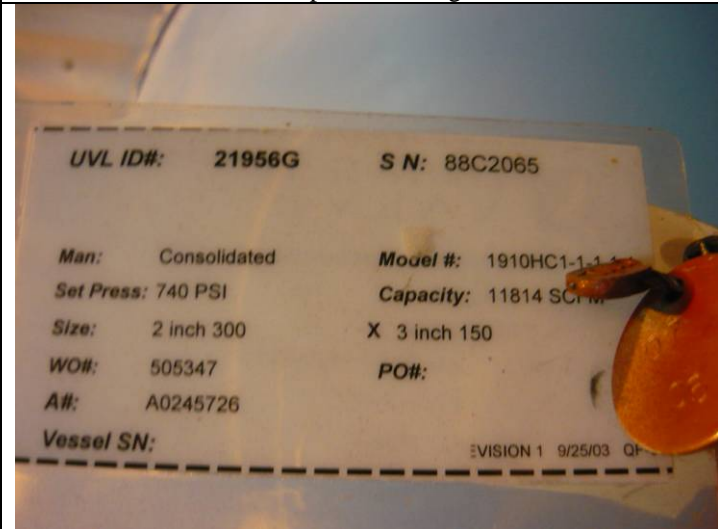
Pressure Gauge



Temperature Gauge



PSV Data Plate



PSV Tag



Skirt Overview



Vessel Overview



Vessel Overview



Above roof