

**MATRIX**
INSPECTION

An IRISNDT Company

**VESSEL INSPECTION
SUMMARY**Report #: **141136-PM-01**
Inspect Date: 01/26/2010
Page: 1 of 4
IRISNDT #: 141136

Client: CNRL District: St. Albert Field: Byemoor
 Facility: 08-32-034-17W4 Unit / Skid #: N/A LSD: 08-32-034-17W4
 Jurisdiction #: A0142244 Equip Tag #: N/A Serial #: 85C339009
 CRN #: F1579.2 Nat'l Bd #: N/A Year Built: 1985
 Manufacturer: Alco Gas & Oil LTD. Equipment Description: Propane Suction Scrubber
 Status: In - Date Removed From Service: _____ Service: Sweet
 MAWP Shell: 250 Psi @ 150 °F Height/Length: 2159 mm Code Stamp: ☒ Y ☐ N
 MAWP Tube: _____ @ _____ Size/Diameter.: 406 mm O.D. Insulated: ☒ Y ☐ N
 MDMT: -20 °F RT: RT-3 Volume: _____ PWHT: ☐ Y ☒ N
 Support Type: Skirt Manway: ☐ Y ☒ N
 C.A.: 1.6000 mm Coated ☐ Y ☐ N Clad: ☒ Y ☐ N J.E.: _____

Component	Material	Nominal Thk	Diameter	OD/ID	Tube Side	Shell Side
- Head	SA-516-70	7.900 mm	406.000 mm	OD	<input type="checkbox"/>	<input type="checkbox"/>
- Shell	SA-106-B	9.500 mm	406 mm	OD	<input type="checkbox"/>	<input type="checkbox"/>
-					<input type="checkbox"/>	<input type="checkbox"/>
-					<input type="checkbox"/>	<input type="checkbox"/>
-					<input type="checkbox"/>	<input type="checkbox"/>

Comments:**PSV Static Data**

PSV -1 Tag #: _____ Serial #: TG68934 CRN: _____
 Model #: 1992C1 Capacity: 349 SCFM Set Pressure: 250 psi
 Manufacturer: Consolidated Service Company: Unified Valve
 Inlet Size & Type: 1 in. - Threaded Last Service Date: July 06/2004
 Outlet Size & Type: 1 in. - Threaded Block Valve: - -
 Shell Side / Tube Side: Shell Side Location of PSV: Shell

PSV -2 Tag #: _____ Serial #: _____ CRN: _____
 Model #: _____ Capacity: _____ Set Pressure: _____
 Manufacturer: _____ Service Company: _____
 Inlet Size & Type: - Last Service Date: _____
 Outlet Size & Type: - Block Valve: - -
 Shell Side / Tube Side: _____ Location of PSV: _____

PSV Comments

Could not read CRN number off of nameplate.

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Houston, TX (281) 476-4444Mailing Address
5311 - 86 Street
Edmonton, Alberta
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Client: CNRL LSD: 08-32-034-17W4 Jurisdiction #: A0142244
External Inspection Results - VE

Item	Y	N	N/A	Condition	Comment	NCR	Action Item	Priority
Nameplate	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Accept		<input type="checkbox"/>	<input type="checkbox"/>	
Foundation and Supports	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Accept		<input type="checkbox"/>	<input type="checkbox"/>	
Anchor Bolts	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Accept		<input type="checkbox"/>	<input type="checkbox"/>	
Grounding	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Accept		<input type="checkbox"/>	<input type="checkbox"/>	
Insulation Condition	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Accept		<input type="checkbox"/>	<input type="checkbox"/>	
PSV	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Accept		<input type="checkbox"/>	<input type="checkbox"/>	
Shell & Heads	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Accept		<input type="checkbox"/>	<input type="checkbox"/>	
Metal Surfaces (Paint)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Accept		<input type="checkbox"/>	<input type="checkbox"/>	
Aux Equipment	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>	
Cathodic Protection	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>	
Alignment	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Accept		<input type="checkbox"/>	<input type="checkbox"/>	
Flange Connections	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Accept		<input type="checkbox"/>	<input type="checkbox"/>	
Pressure Gauge	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>	
Piping from Vessel	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Accept		<input type="checkbox"/>	<input type="checkbox"/>	
Temperature Gauge	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>	
Sight Glass	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Accept		<input type="checkbox"/>	<input type="checkbox"/>	
Leaks	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>	
Current UT Survey	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>			UT Company:		
Previous UT Survey	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			UT Company:		

LEGEND:

Priority 0 - General Recommendations

Priority 1 - Goal date is 30 days from the activity date

Priority 2 - Goal date is 90 days from the activity date.

Priority 3 - Goal date is 1 Year from the activity date.

Priority 4 - Goal date is 5 Years from the activity date.

External Visual Observations
Manual Review Required By Customer Representative -

An external visual inspection was performed on the propane suction scrubber and the findings are as follows:

- The vessel was operating at time of inspection. No process leaks or vibrations were noted. Due to the vessel being insulated a limited visual inspection was performed.
- The insulation on the shell and piping is intact and in good condition.
- Where exposed all piping, flanges and bolting were in good condition. Very isolated areas of paint flaking were observed with bare clean metal exposed.
- The vessel is supported by a skirt welded to the bottom head bolted to the floor and is secure and level.
- External UT was not performed as the vessel was fully insulated with no inspection ports available.
- The PSV is in good condition with the carseal intact.
- Refer to the attached photos and drawing for inspection findings.

**VESSEL INSPECTION
SUMMARY**

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Internal Inspection Results – VI N/A (Not Applicable)

Item	Y	N	N/A	Condition	Comment	NCR	Action Item	Priority
Shell	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>	
Heads	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>	
Manway	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>	
Gasket Surfaces	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>	
Welds	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>	
Refractory	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>	
Heating Coils	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>	
Demister Pad	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>	
Vane Pack	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>	
Baffles	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>	
Trays	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>	
Filter	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>	
Internal Coating	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>	
Tubesheet	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>	
Tube Bundle	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>	

LEGEND:

Priority " 0 " - General Recommendations.

Priority " 1 " - Goal date is 30 days from the activity date.

Priority " 2 " - Goal date is 90 days from the activity date.

Priority " 3 " - Goal date is 1 Year from the activity date.

Priority " 4 " - Goal date is 5 Years from the activity date.

Internal Visual Observations

Manual Review Required By Customer Representative -

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Attached to Vessel Inspection Report # _____

Additional Attachments # of pages _____ Specify _____

NDE UT ☐ MT ☐ PT ☐ ET ☐ RT ☐ OTHER ☐ _____

NDE Report #: _____

Items Raised: NCR _____ Operational Action Item _____ Repair Action Item _____ Deferred Action Item Yes _____

Action Items / Recommendations:

- Have proper inspection ports cut at the located TML's so that UT thickness readings may be performed at next available opportunity.
- Continue to inspect vessel at regular scheduled intervals.

Actions Corrected at Time of Inspection: (If actions were corrected at the time of Inspection – note the corrected actions here.)

Recommended Inspection Intervals:

Meets Code Criteria: -			Re-Inspection Required -			
VT External	Last Inspection:	-	Interval (yrs)		Next Inspection:	- 0000
VT Internal	Last Inspection:	-	Interval (yrs)		Next Inspection:	- 0000
UT Inspect.	Last Inspection:	-	Interval (yrs)		Next Inspection:	- 0000
PSV Service	Last Inspection:	-	Interval (yrs)		Next Inspection:	- 0000

Unit # 374 Kilometers: _____ In 00:00 Out 00:00 Hrs _____ In 00:00 Out 00:00 Hrs _____ Personnel: KK/MB P.O.# / W.O.#/AFE #: _____	Consumables: _____ _____ _____ _____ _____	Inspector: Pamela Maze _____ PESL: 351 (Print) _____ (Signature) I am in full agreement with report contents: Client Representative _____
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A0142244_Nameplate_26Jan2010



A0142244_Overview_26Jan2010