



## VESSEL INSPECTION SUMMARY

Report #: **141136-PM-09**  
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 #: A0225171 Equip Tag #: N/A Serial #: 85C339004  
CRN #: F1879.2 Nat'l Bd #: N/A Year Built: 1985  
Manufacturer: Alco Gas & Oil LTD. Equipment Description: De-Ethanizer Column  
Status: In - Date Removed From Service: \_\_\_\_\_ Service: Sweet  
MAWP Shell: 400 Psi @ 250 °F Height/Length: 14325 mm Code Stamp: ☒ Y ☐ N  
MAWP Tube: \_\_\_\_\_ @ \_\_\_\_\_ Size/Diameter.: 219 mm I.D. Insulated: ☒ Y ☐ N  
MDMT: \_\_\_\_\_ 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
Top - Head	SA234WPB	12.700 mm	219.000 mm	ID	<input type="checkbox"/>	<input type="checkbox"/>
Bottom - Head	SA105FLO				<input type="checkbox"/>	<input type="checkbox"/>
Bottom - Shell	SA 53B	12.700 mm	219.000 mm	ID	<input type="checkbox"/>	<input type="checkbox"/>
Mid - Shell	SA106B	8.100 mm	168.000 mm	ID	<input type="checkbox"/>	<input type="checkbox"/>
Top - Shell		7.100 mm	168.00 mm	ID	<input type="checkbox"/>	<input type="checkbox"/>

Comments:

### PSV Static Data

PSV -1 Tag #: \_\_\_\_\_ Serial #: TG68935 CRN: \_\_\_\_\_  
Model #: 1992C Capacity: 1349 SCFM Set Pressure: 400 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.

Client: CNRL LSD: 08-32-034-17W4 Jurisdiction #: A0225171
**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 type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>			<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 checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Accept		<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 checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Accept		<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"/>		No Access	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 vessel and the findings are as follows:

- The vessel was operating at time of inspection and located inside and outside of building. 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. All exposed piping had threaded fittings but in good condition.
- The vessel is supported by skirt bolted to floor. Vessel 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.
- The vessel appears to be in good operating condition for continued service based on the external visual observations.



**MATRIX**  
INSPECTION

An IRISNDT Company

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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 -

Edmonton (780) 437-4747  
Calgary (403) 279-6121  
Nisku (780) 955-7616  
Barrhead (780) 674-3018

Fort McMurray (780) 743-1536  
Grande Prairie (780) 532-2283  
High Level (780) 841-0470  
Lloydminster (780) 875-6455

Cold Lake (780) 594-1114  
Red Deer (403) 347-1742  
Tulsa, OK (918) 446-8773  
Houston, TX (281) 476-4444

Mailing Address  
5311 – 86 Street  
Edmonton, Alberta  
T6E 5T8



**MATRIX**  
INSPECTION

An IRISNDT Company

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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

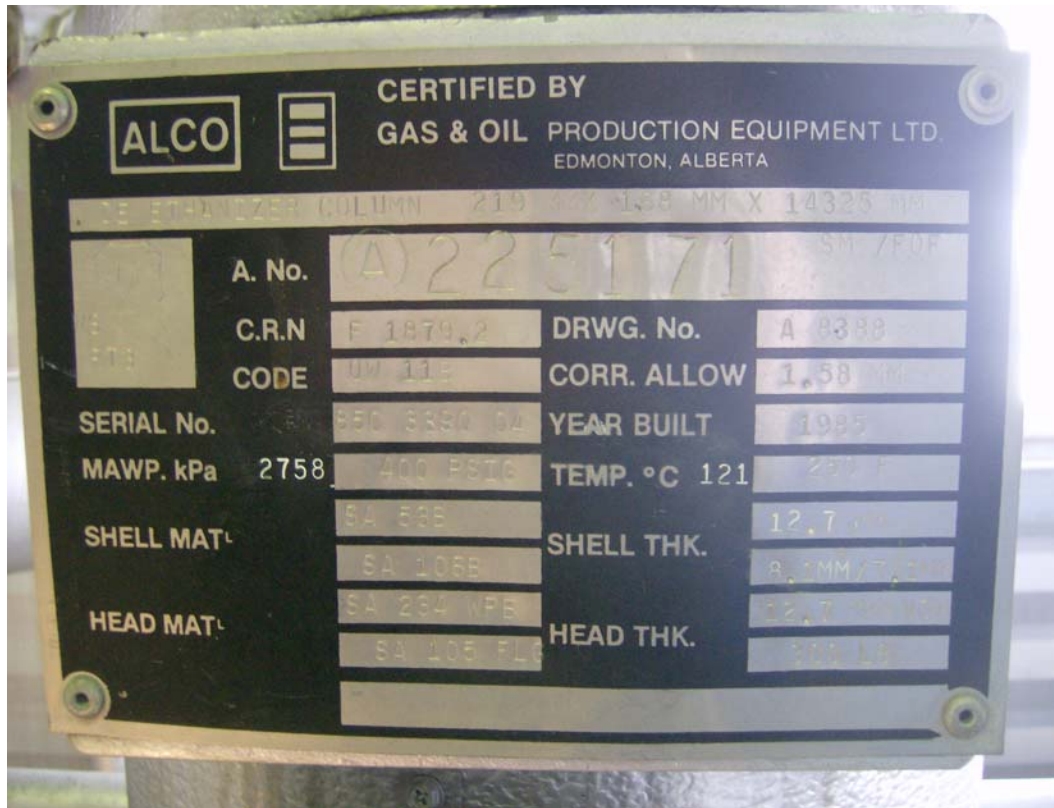
Unit # 374 Kilometers: _____	Consumables: _____	Inspector: _____
In 00:00 Out 00:00 Hrs _____		Pamela Maze (Print) PESL: 351
In 00:00 Out 00:00 Hrs _____		API: 28750/34396/2786
Personnel: KK/MB		(Signature)
P.O.# / W.O.#/AFE #: _____		I am in full agreement with report contents:
		Client Representative _____

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A0225171\_Nameplate\_26Jan2010





A0225171\_Overview inside building\_26Jan2010



A0225171\_Overview outside of building\_26Jan2010