



A0218208_Nameplate_28May09



VESSEL INSPECTION SUMMARY

Report #: **137854-WF-1**
Inspect Date: 05/28/2009
Page: 1 of 2
IRISNDT #: 137854

Client: CNRL District: Bonneville Heavy Oil Field: Frog Lake
Facility: 06-32-055-03W4 Unit: N/A LSD: 06-32-055-03W4
Jurisdiction #: A0218208 Equip Tag #: N/A Serial #: 26978A
CRN #: C4936.23 Nat'l Bd #: N/A Year Built: 1985
Manufacturer: Western Rockbit LTD Equipment Description: Propane Bullet
Status: Out Of Service Date Removed From Service: Service: Unknown
MAWP Shell 1724 kPa @ 66 °C Height/Length: 720 in. Code Stamp: ☒ Y ☐ N
MAWP Tube Select @ Pick Size/Diameter: 108 in. O.D. Insulated: ☐ Y ☒ N
Support Type: Saddle RT: 2 Volume: ft³ / m³ PWHT: ☐ Y ☒ N
C.A. 0 Coated ☐ Y ☒ N Clad: ☐ Y ☒ N Manway: ☒ Y ☐ N

Component	Material	Nominal	Minimum
Shell	SA-516-70	19.76mm	
Head	SA-516-70	19.62mm	

Component	Material	Nominal	Minimum

PSV Static Data

PSV -1 Tag #: Serial #: CRN:
Model #: Capacity: SCFM Set Pressure: Select
Manufacturer: Service Company:
Shell/Tube Side: Shell / Tube Service Date:
Size In: Size Out: Connection Type:
Carseal Intact: Yes / No Number of PSV's Location: PSV's not present

PSV - 2 Tag #: Serial #: CRN:
Model #: Capacity: SCFM Set Pressure: Select
Manufacturer: Service Company:
Shell/Tube Shell / Tube Service Date:
Size In: Size Out: Connection Type:
Carseal Intact: Yes / No Number of PSV's Location:

External Inspection Results - VE ☒

Last Report #:

Last Report Date:

Summary Report #:

Item	Y	N	N/A	Acc	Comment
Foundation	☒	☐	☐	☒	
Grounding	☐	☐	☒	☐	Out of service in boneyard
Insulation	☐	☐	☒	☐	
Piping	☐	☐	☒	☐	None attached
Supports	☒	☐	☐	☒	
Anchor Bolting	☐	☐	☒	☐	
TMLs	☒	☐	☐	☒	
	☐	☐	☐	☐	

Item	Y	N	N/A	Acc	Comment
Paint	☒	☐	☐	☒	
Cathodic Protection	☐	☐	☒	☐	
Fireproofing	☐	☐	☒	☐	
Ladders/Platforms	☐	☐	☒	☐	
Berms	☐	☐	☒	☐	
Davit Arm	☐	☐	☒	☐	
Pressure Gauge	☒	☐	☐	☒	
Temp. Gauge	☒	☐	☐	☒	

Internal Inspection Results - VI ☒

Item	Y	N	N/A	Acc	Comment
Shell	☒	☐	☐	☒	
Heads	☒	☐	☐	☒	
Manway	☒	☐	☐	☒	
Gasket Surfaces	☒	☐	☐	☒	
Welds	☒	☐	☐	☒	
Refractory	☐	☐	☒	☐	
Heating Coils	☐	☐	☒	☐	
Refractory	☐	☐	☒	☐	

Item	Y	N	N/A	Acc	Comment
Demister	☐	☐	☒	☐	
Vane Pack	☐	☐	☒	☐	
Baffles	☐	☐	☒	☐	
Trays	☐	☐	☒	☐	
Filter	☐	☐	☒	☐	
Internal Coating	☐	☐	☒	☐	
Tubesheet	☐	☐	☒	☐	
Tube Bundle	☐	☐	☒	☐	

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Edmonton, Alberta
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VESSEL INSPECTION SUMMARY

Report #: **137854-WF-1**
Report Date: 05/28/2009
Page: 2 of 2
IRISNDT #: 137854

Client: CNRL LSD: 06-32-055-03W4 Jurisdiction #: A0218208

Attached to Vessel Inspection Report # _____

Additional Attachments ☐ # of pages _____ Specify _____

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

NDE Report # _____

NCR Raised ☐ Operational Action Item Raised ☐ Repair Action Item Raised ☒ Deferred Action Item Raised ☐

Inspection Comments:

An internal/external visual inspection was performed on vessel and the findings are as follows:

External

- The vessel is out of service and is scheduled to be moved to a new location after inspection. No evidence of prior process leaks is noted.
- The paint on the shell and nozzles is intact with the exception of isolated areas on the nozzle flanges.
- The saddle and leg supports are secure and level.
- No PSV's are present on the vessel.
- No piping is attached to the vessel.
- The temperature, pressure and capacity gauges are clear and visible.
- External UT was carried out with no significant wall losses noted.

Internal

- The vessel was opened and cleaned for internal inspection.
- No corrosion, erosion or pitting is present on any internal components. Previous inspection and/or original fabrication markings are still visible on the shell walls.
- All nozzle and man way seating surfaces are in good condition.
- Wet fluorescent MT inspection was carried out on all internal welds. The support bracket for the internal inlet piping is fillet welded to the top shell. MT revealed a crack along the fusion zone of the fillet weld. All other areas inspected were acceptable to code. Refer to IRISNDT report MT-139176-01 & 137854-MT-KS-01 for details.
- The fillet weld for the inlet pipe bracket was removed by grinding. The bracket and the shell were cleaned to sound metal by grinding. The area on the shell to accept the new fillet weld was scanned with UT to ensure no laminar flaws are present in the parent material. The areas on the shell and bracket that were cleaned to sound metal were inspected with dry powder MT. No relevant indications were found with UT or MT; refer to IRISNDT reports 137854-MT-WF-01 & 137854-UT-WF-01 for details. The bracket was fitted back into the original position and the bracket and shell was preheated to 180F prior to welding. E-7018 3/32" electrodes were utilized for welding. The root weld was inspected with MT before continuing with the weld fill; refer to MT report #137854-MT-WF-01 for details. After welding was complete the area was allowed to slow cool and wet black MT was carried out on the full fillet weld. No rejectable indications were noted; refer to MT report #137854-MT-WF-02 for details.
- Refer to the attached photos, UT data and drawing for inspection findings.

Recommendations:

- Ensure pre-commissioning inspection is carried out after vessel is moved to new location.

Unit # _____ Kilometers: _____
In _____ Out _____ Hrs _____
In _____ Out _____ Hrs _____
Personnel: _____

Consumables:

Inspector:

Wes Farquhar _____ PESL: _____
(Print)

(Signature) API: 510 / 570

I am in full agreement with report contents:

Client Representative _____

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A0218208_Propane Bullet_28May09

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A0218208_Internal View of Shell-Good Condition_28May09



A0218208_Previouse inspection or original fabrication markings still visible_28May09



A0218208_Fillet Weld Crack on Internal Piping Support Bracket_28May09



A0218208_Fillet Weld Crack Along Fusion Zone--_28May09



A0218208_Fillet Weld Crack Along Fusion Zone-_28May09



A0218208_Completed Weld Repair on Inlet Piping Bracket-_28May09



A0218208_Completed Weld Repair on Inlet Piping Bracket_28May09