

Field Inspection Report - Long_Run 565212_11/20/2013_VT_Internal

Vessel Number	565212	Vessel Name	HORIZONTAL SEPARATOR	Province	Alberta
District	NORTHERN - AB	LSD	06-03-074-04W6	Location	TEEPEE CREEK
Method	VT	Access	Internal	Cleaning	Good
Inspection Date (mm/dd/yyyy)	11/20/2013	Inspection Interval (months)	60	Next Inspection (mm/dd/yyyy)	11/20/2018
CRN	T4475.2	Skid Number	PKG56601	Service	Sour
Internal Access	Yes	Internal Coating	No	Status	In Service
MAWP (PSI)	720	MAWP (kPa)	4964.26	Outstanding NCRs	0
MAWT (°C)	37.78	MAWT (°F)	100		

General

The vessel was blinded, opened and cleaned for internal inspection as part of this 2013 T/A. Vessel is 90% inside a building with the manway and north head protruding out the building. This inspection was completed at -36 C and had some ice build-up on the inside making some areas difficult to inspect.

PSV protecting the vessel was serviced in 2011 and is due in 2016.

In sour service.
RT-1.
PWHT - Yes.
CA = .125"
See attached pictures.

Safety Valves

PSV P91334 Shell side. Set pressure: 720 PSI / 4964.26 KPa. MAWP: 720 PSI / 4964.256 KPa. Capacity: 11076 SCFM / 313.64 m3/min.

External Condition

All visible shell surfaces and nozzles appear in good condition. Name plate is intact and legible. Vessel supports, foundation and electrical grounding appear good. The exterior painted surface appears in good condition, but has been painted over minor old surface corrosion. Associated piping, supports and components appear in good condition and alignment. There was some evidence of old leaks on both the inlet and outlet lines. Vessel is supported on 2 saddles with both being tight, limiting expansion. No evidence of short studding or nut rounding at time of inspection.

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PSV protection have been verified to ensure the PSV are properly installed with any block valves locked/sealed open. Verify vessel has Alberta CRN and A# stamping, PSV has correct code stamp, set pressure and MWS tagging, and was last serviced within the required interval guidelines.
Assign inspection interval.

Internal Condition

Vessel not internally coated.

Internals cleaned and washed, but there was some frost and ice on the north head/manway end that was outside of the heated building.

All internal vessel shell, head and nozzle surfaces were clean with some ice build-up for inspection and evidenced no corrosion, hydrogen blistering, deterioration or defects.

Circons, longs, attachment and Cat. D welds appear in good order.

30" tall weir with bolted removable center section, bolted on flow diverter, both vortex breakers and internal attachments are all intact and sound. 30" tall weir is 2/3 down the vessel towards the outlet. Fillet welds are good.

The nozzles are clear. Found the small bore nozzles had a bad root passes from construction.

The float is clear and free to move.

Round style 3 piece, demister is the removable type. Demister was removed with all supports appearing to be clean and aligned as seen from underneath. Support assembly, meshing, and tie wires are secure. Fillet welds are good.

The inlet deflector, demister, center section of weir and vortex breakers are a bolt in style, the bolts are all in place and tight.

Manway, cover, davit and gasket faces are in good condition and working order. The davit has a grease nipple.

Recommendations

- Maintain on stream Ultrasonic Corrosion survey monitoring of the vessel components and associated piping.
- After closure, remove manway davit arm, grease and re-install in preparation for next opening.
- Internally inspect again in 5 years.
- Move outage to warmer weather, so there is not ice build-up after cleaning on internal surfaces.

The above recommendations have been reviewed with operations prior to closure.

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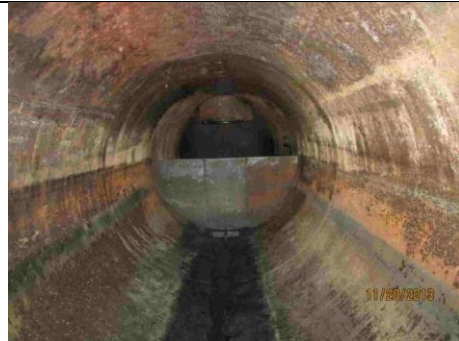
Suitable to be returned to Service	Yes	Suggested Inspection interval (Months)	60
Repairs are still required	No		
Daryl Cole Cert 000391 Inspector	Signature		11/25/2013 Date (mm/dd/yyyy)

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Pictures



LRE - 565212 SEPARATOR EXT. 11-20-13.JPG



LRE - 565212 SEPARATOR INT. 11-20-13 (1).JPG



LRE - 565212 SEPARATOR INT. 11-20-13
(8).JPG



LRE - 565212 SEPARATOR INT. 11-20-13 (11).JPG