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Report No: VP000052

<b>Client</b>	Newalta Corporation	<b>Inspection Date</b>	Feb 13, 2015		
<b>Prov. Reg. #</b>	AB 0647153	<b>Inspection Type</b>	INSTALL		
<b>Equipment Type</b>	Vertical Blow Off Tank	<b>LSD</b>	AB 08-09-067-05W6		
<b>Tag/Equip.</b>		<b>Location</b>	Gold Creek Waste Management Facility		
<b>Status</b>	In Service	<b>Area</b>	Gold Creek		
<b>Manufacturer</b>	AT&S Advanced Tanks & Systems	<b>Year Built</b>	2014		
<b>Serial Number</b>	10434.3	<b>Service</b>	Hot Water		
<b>CRN #</b>	C2282.6527804913	<b>Manway</b>	Yes		
<b>Comp/Unit Id</b>		<b>Coating</b>	Yes		
<b>Nat.Board #</b>		<b>Owned By</b>	Newalta Corporation		
<b>Interim Insp'n</b>		<b>Interim Insp Type</b>			
<b>Next Inspection</b>	2020	<b>Next Insp Type</b>	VE / VI / UT		
<b>Length</b>		<b>Height</b>			
<b>Volume</b>		<b>RT</b>		<b>HT</b>	
<b>Job No.</b>	1435.024	<b>Client Reference</b>			
<b>Foreman</b>	Bryan Wagner	<b>DownholdLSD</b>			
<b>ABSA</b>	<b>Plant:</b> O <b>Vessel:</b> B <b>Process:</b> I	<b>Special:</b> 0	<b>ASME</b>	Sec. VIII div. 1	
<b>History Log</b>	As per ABSA ESR A#0647153 has been assigned to vessel. RAE44214 replaced with A0647153 A0647153 (Vertical Blow Off Tank) Inspection Plan - 00.144.390				

<b>Component</b>	SHELL 1				
<b>MAWP</b>	150.00 PSI @ 550 °F		<b>MDMT</b>	-20 °F @ 21.8 PSI	
<b>Material</b>	SA-516-70	<b>Material Thickness</b>	0.375 in		
<b>Diameter</b>	35.25 in	<b>Length</b>	34.625 in		
<b>Corrosion Allowance</b>	0.125 in				



<b>Component</b>	Top Head		
<b>Material</b>	SA-516-70	<b>Material Thickness</b>	0.3938 in
<b>Corrosion Allowance</b>	0.125 in		

<b>Component</b>	Bottom Head		
<b>Material</b>	SA-516-70	<b>Material Thickness</b>	0.3938 in
<b>Corrosion Allowance</b>	0.125 in		

Comments

This is a blow down vessel open to atmosphere (not under any internal pressure).

Building Observations

The building houses the boiler, the blowdown vessel, the boiler feed water supply storage tank and the water treatment system.

There is enough room for emergency storage and daily operation.

The building has two doors and one double open door on burner target side.

Building is a sea can type with a checkered metal plate floor.

Note: There are drain provisions made on the floor. There is enough natural and artificial light to perform work ergonomically.

The heat is maintained through an electrical heat system in the air circulation.

Figure: 1



Building housing the boiler blowdown vessel

Piping Observations

The piping from blow down vessel comes to a truck out point.



Figure: 2



Piping from blow down vessel comes to a truck out point

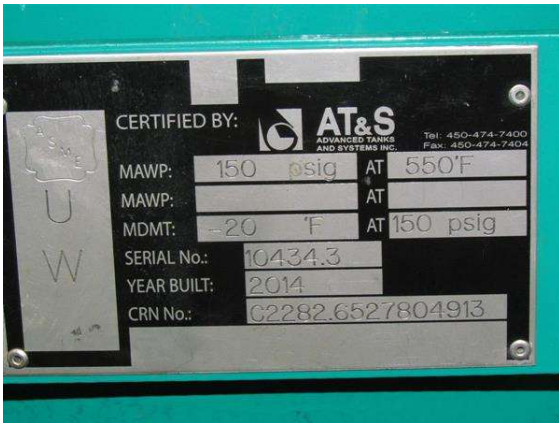
PSV Observations

PSV exempt (vessel is not under pressure)

External Observations

The boiler blow down tank is not insulated.  
It has a coating which is green in color.  
The vessel is supported on 3 angle iron legs welded to the vessel and skid floor.  
Manway with internal manway door designed as per cyclic condition.  
The vessel is situated in a corner at the largest side of boiler inside the building.  
There is no level indication for the blow down vessel.

Figure: 3



Vessel nameplate

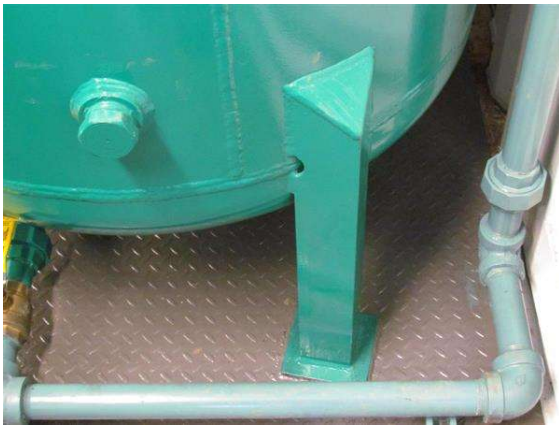
Figure: 4



Vessel general view



Figure: 5



Vessel supported on angle iron legs

Internal Observations

No internal inspection was done.

Recommendations

Attend to the following:

- 1) The low water cutoff valve installed has no testing switch
- 2) The front and rear doors on the boiler require double nuts to be installed (currently has single nuts)
- 3) The backwash line from the water treatment system needs provision for draining
- 4) The PSV discharge pipe is currently capped just outside the boiler building. The PSV discharge pipe should be at least 18 inches from the building and the ends are to be chamfered down to prevent rain water from entering the discharge piping.
- 5) The gas analyzing port in the stack needs to be plugged
- 6) The stop valve in the main steam line is not easily accessible and might require a permanent step ladder for easy operator access
- 7) There needs to be a rubber seal around the main steam line coming off the boiler building to prevent water from entering the building.

**Inspector:** Vishnu Pooviah

Cobus du Plessis  
Alberta IBPV #A-60923

**Reviewed By:** Cobus du Plessis