



4810-93 Street, Edmonton, Alberta T6E 5M4
 Phone: (780) 469-2401 Fax: (780) 468-2422

Report No: SF000651

Client	Apache Canada Ltd.	Inspection Date	Sep 11, 2014		
Prov. Reg. #	AB 0485078	Inspection Type	VI		
Equipment Type	Glycol Contactor	Location	Patry		
Tag/Equip.	T-500	LSD	BC c-11-J/94-O-5		
Status	In Service	Downhole LSD			
Manufacturer	Propak Systems Ltd.	Area	Liard		
Serial Number	00190-201	Year Built	2000		
CRN #	P2157.21	Service	Sour		
Comp/Unit Id	Dehy Bldg	Manway	Yes		
Nat.Board #		Coating	No		
Interim Insp'n		Interim Type			
Next Inspection	9999	Next Insp Type	TBD		
Length		Height			
Volume		Client Reference			
Owner	Apache Canada Ltd.	RT	1	HT	YES
Foreman	Tom Jensen	RAE Job No.	4748		
ABSA	Plant: H Vessel: P Process: W Special: B	ASME			
History Log	Third party inspection report by TEAM Industrial Services Dated October 1, 2012 - entered on February 7, 2013				

Component	Shell				
MAWP	2000.0 PSI @ 151 °F		MDMT	-20 °F @ 2000.0 PSI	
Material	SA-516-70N	Material Thickness	2.75 in		
Diameter		Length			
Corrosion Allowance					

Comments

This vessel was inspected to the Apache 4.4PRD-001VS Category 1 Unfired Separator procedure.



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Figure: 1



LSD Sign



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Internal Observations

Access for Inspection

Access for thorough internal inspection was partially limited via top and bottom manways for torso in only access. Areas in between were not accessible.

Components Inspected - Top

- Upper tray
- Bubble caps
- Shell
- Demister
- Glycol inlet and perforated screens
- Manway/cover and neck

Cleanliness

There was some minor product residue; however, the level of cleanliness was adequate for a thorough inspection.

Inspection Observations

The components inspected appeared to be in serviceable condition with no relevant indications of corrosion/erosion or mechanical defects and exhibited no areas of fabrication defects, distortion, or evidence of overheating. There was some minor surface corrosion however there was no pitting.

Components Inspected - Bottom

- Shell
- Bottom head
- Deflector plate for inlet
- Nozzles

Cleanliness

Sludge build-up on bottom head shell allowed for a limited inspection.

Inspection Observations

The components inspected appeared to be in serviceable condition with no relevant indications of corrosion/erosion or mechanical defects and exhibited no areas of fabrication defects, distortion, or evidence of overheating.

Figure: 2



Top manway cover

Figure: 3



Top manway opening

Figure: 4



Top bubble cap overview

Figure: 5



Top demister

Figure: 6



Bottom manway cover

Figure: 7



Bottom manway opening



Figure: 8



Bottom shell/demister overview

Figure: 9



Bottom shell/head/glycol coil overview

Figure: 10



Bottom head/outlet. Sludge water limited the inspection

Recommendations

Based on the scope of this inspection the vessel appears suitable for continued service.



Keith Courneyea
SEN. INSPECTOR
ALBERTA IBPV
FILE # A - 69528

Inspector : Keith Courneyea



Ken McNeil
SEN. INSPECTOR
ALBERTA IPV
FILE # A - 75085

Reviewed By: Ken McNeil



4.4-FRM-002VS Visual Internal Inspection Report

Sep-11

Date:	10-Sep-2014	WO #:		Sketch/Notes: <i>- Torso in access via Top & Bottom Manways. Areas in between were not accessible.</i>
Inspected By:	Keith Courneyea	Cert.#:	IBPV 246/API 510 - 31740	
Coordinator:	Tom Jensen			
Ops Foreman:				
Region:	Pastry	Area:	Fr Nelson	
Facility:	Pastry Dehy.			
Location, LSD:	C-11-J/94-0-5			
Description:	<input checked="" type="checkbox"/> Vessel <input type="checkbox"/> Exchanger <input type="checkbox"/> Tank <input type="checkbox"/> Heater			
Service Fluid:	<input type="checkbox"/> Sweet <input checked="" type="checkbox"/> Sour Fluid Name:			
Unit Name / #:	Dehy	Equip#:		
Equip. Name:	Glycol Contactor			
Jurisdiction #:	A 485078	CRN:	P2157.21	
Manufacturer:	Propat Systems			
Year Built:	2000	S/N:	00190-201	
Scope:	A visual internal (VI) inspection was performed on all accessible shell and head surfaces, nozzles, welds, etc.			
Manway:	gasket surfaces:	<input checked="" type="checkbox"/> Compliant with code	Comment:	
	manway nozzle:	<input checked="" type="checkbox"/> No pitting, erosion, etc.	Comment:	
Shell and Head Surfaces:	coated	<input type="checkbox"/> continuous and well-adhered	Comment:	
	uniform corrosion:	<input checked="" type="checkbox"/> insignificant amount	Comment:	
	pitting corrosion:	<input checked="" type="checkbox"/> none noted	Comment:	
	erosion:	<input checked="" type="checkbox"/> none noted	Comment:	
Welds:	mechanical damage:	<input checked="" type="checkbox"/> none noted	Comment:	
	uniform corrosion:	<input checked="" type="checkbox"/> insignificant amount	Comment: <i>none noted</i>	
Welds:	pitting corrosion:	<input checked="" type="checkbox"/> none noted	Comment:	
	welding defects:	<input checked="" type="checkbox"/> none noted	Comment:	
NDT:	<input type="checkbox"/> NDT was performed by: _____		Type: <input type="checkbox"/> MPI (<input type="checkbox"/> WFI <input type="checkbox"/> B&W <input type="checkbox"/> Dry) <input type="checkbox"/> LPI <input type="checkbox"/> OUT <input type="checkbox"/> RT <input type="checkbox"/> Other: _____	
	Extent: _____			
	Results: <i>None Required.</i>			
Nozzles:	obstructions:	<input checked="" type="checkbox"/> none noted	Comment:	
	corrosion:	<input checked="" type="checkbox"/> none noted	Comment:	
	erosion:	<input checked="" type="checkbox"/> none noted	Comment:	
Attachments:	<input checked="" type="checkbox"/> vortex breaker	<input checked="" type="checkbox"/> secure <input checked="" type="checkbox"/> good condition	Comment: <i>only partially visible.</i>	
	<input type="checkbox"/> impingement plate	<input type="checkbox"/> secure <input type="checkbox"/> good condition	Comment:	
	<input type="checkbox"/> internal piping	<input type="checkbox"/> secure <input type="checkbox"/> good condition	Comment:	
	<input checked="" type="checkbox"/> demister(s)	<input checked="" type="checkbox"/> secure <input checked="" type="checkbox"/> good condition	Comment: <i>Top & Bottom Manways.</i>	
	<input type="checkbox"/> heating coil	<input type="checkbox"/> secure <input type="checkbox"/> good condition	Comment:	
	<input type="checkbox"/> bubble caps	<input checked="" type="checkbox"/> secure <input checked="" type="checkbox"/> good condition	Comment:	
	<input type="checkbox"/> upper tray	<input checked="" type="checkbox"/> secure <input checked="" type="checkbox"/> good condition	Comment: <i>Hardware tight - none missing.</i>	
Notes:	<input type="checkbox"/>			
	<input type="checkbox"/>			
	<input type="checkbox"/>			
	<input type="checkbox"/>			
	<input type="checkbox"/>			
Recommended Actions:	1. <i>None.</i>			
	2. _____			
	3. _____			

Additional notes are attached: Item is suitable for service. is NOT

Inspector's Signature: *Keith Courneyea*
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