

PART I – ASSESSMENT

General Details					
Business Unit:	NBEC	Area:	Oak	ITA Reviewer:	Aaron Allison
Facility:	Wellsite	Location (LSD):	05-28-086-18W6	ITA Effective Date:	1/1/2014
Regulatory Number:	A0136622	Tag Number:	24341	Previous ITA Review Date:	Click here to enter a date
Serial Number:	27794A	CRN Number:	C4936.2	Design Press/Temp:	250psi @ 150F
EAM Asset Number:	21828	Specific Location:	NBEC Field Site		
Equipment Description:	Butane Storage Bullet				

Equipment Details					
Equipment Class: <input checked="" type="checkbox"/> Vessel <input type="checkbox"/> Exchanger <input type="checkbox"/> Boiler <input type="checkbox"/> Fired Heater <input type="checkbox"/> Piping System <input type="checkbox"/> Tank (Above Ground) <input type="checkbox"/> Tank (Below Ground)					
Process Fluid	Component	Service Classification	Process Fluid/Gas	Comments	
	Shell:	Sweet	Butane		
	Tube (A):	Choose an item			
	Tube (B):	Choose an item			
	Tube (C):	Choose an item			

Equipment Pictures		
Picture 1: Overview	Picture 2: Nameplate	Picture 3:

Equipment Overview			
Repairs and Alterations	Previous Repairs/Alterations:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Details:
	Anticipated/ Possible Repairs:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Details:
	Scheduled Repairs/Alteration/ Decommissioning Plan:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Details:
Equipment History	Number of Years in Service: 1985		
(History starting with most recent or current activities) (Detail equipment history for inspections, repairs, NDE, etc.)	<ul style="list-style-type: none"> 2014 01 (VE UT) - no external issues, all shell points above nominal 		
Corrosion Mitigation	<input type="checkbox"/> Corrosion Inhibitor <input type="checkbox"/> Operating Procedures <input type="checkbox"/> CP (External Sacrificial Anode) <input type="checkbox"/> CP (External Impressed Current)		
	<input type="checkbox"/> CP (Internal Sacrificial Anode) <input type="checkbox"/> CP (Internal Impressed Current) <input type="checkbox"/> Internal Coating		
(Describe activities or systems in place to prevent corrosion or failure)	Details:		

Degradation Mechanisms			
Potential Degradation Mechanisms	Degradation Mechanism	Consideration	Comments
(Based on service seen or anticipated through life of equipment)	General Internal Corrosion	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
	External Corrosion	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
	Corrosion Under Insulation	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
	Under-Deposit Corrosion	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
	Coating Failure	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
	HIC/Sulphide Stress Cracking	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
	Stress Corrosion Cracking (other)	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
	High Temperature Sulphidation	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
	Fatigue (Cyclic or Vibrating Service)	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
	Creep Damage (High temperatures, flame impingement)	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
	Dynamic Stresses (firetubes, equipment subject to slugging)	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
	Erosion (or velocity induced corrosion – corrosion / erosion)	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
	Biological Corrosion	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
	Mechanical Stresses (settling vessel or piping connected to nozzles)	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
	Other:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Other:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		

Integrity Thorough Assessment (ITA) Form



Inspection Plan Schedule				
Remaining Life Assessment: (Use Worst Case)	Location of part of the vessel being assessed (use worst case): Point 30			
	Material:	Max Allowable Stress Value (psi)	ASME Code Edition:	
	Minimum Actual Thickness: (measured or estimated) 0.130"	Required Thickness: 0.100"		
	Remaining Thickness: (actual – required) 0.030"	Corrosion Rate: (higher of STCR or LTCR) 2.5mpy		
	Remaining Life (RL): 12 years	½ Remaining Life (RL): 6 years		
	<i>Note: Thorough inspection should not exceed ½ RL, unless ½ RL is less than 2; then the inspection interval can be equal to the Remaining Life up to a maximum of 2 years</i>			
Comments:				
Thorough Inspection Interval (based on ABSA AB-506 – Inspection and Servicing Requirements for Pressure Equipment Guidelines)	AB-506 Type of Equipment (Appendix A): LPG plant storage vessels and	Grade Assigned: 3		
	API 510 Alternative Rule Type of Equipment (Ref. AB-506 Appendix B): N/A	Risk Classification (Ref. AB-506 Appendix B): N/A		
	Thorough Inspection Type: On-stream	Maximum Thorough Inspection Interval Assigned: 5		
Justification for Grade Assignment and Interval: Max on stream				
Equipment suitable for continued service?	<input checked="" type="checkbox"/> Fit for continued service	<input type="checkbox"/> Not fit for continued service (if not, explain)		

Integrity Thorough Assessment (ITA) Form



Inspection Plan Schedule						
Type of Inspection	Required	Last Date Completed	Last Assessed Report No.	Next Interval (months)	Next Due Date	Comments
Integrity Thorough Assessment (ITA)	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Click here to enter a date	A0136622 Master (ITA)	60	1/1/2019	
Internal Inspection	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Click here to enter a date			Click here to enter a date	
External Inspection	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	1/1/2014	A0136622 2014 01 (VE UT)	60	1/1/2019	
Partial/Limited Internal Inspection	<input type="checkbox"/> Yes <input type="checkbox"/> No	Click here to enter a date			Click here to enter a date	
UT Corrosion Survey	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	1/1/2014	A0136622 2014 01 (VE UT)	60	1/1/2019	
MT/WFMT	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Click here to enter a date			Click here to enter a date	
PT (LPI)	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Click here to enter a date			Click here to enter a date	
Shear Wave UT	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Click here to enter a date			Click here to enter a date	
Automated / Phased Array UT	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Click here to enter a date			Click here to enter a date	
Eddy Current	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Click here to enter a date			Click here to enter a date	
Boroscope	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Click here to enter a date			Click here to enter a date	
Hydrotest/Leak Test	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Click here to enter a date			Click here to enter a date	
Other:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Click here to enter a date			Click here to enter a date	
Other:	<input type="checkbox"/> Yes <input type="checkbox"/> No	Click here to enter a date			Click here to enter a date	

Note: The Integrity Thorough Assessment (ITA) due date **MUST** be set to match the next significant inspection activity.

PART II – PLANNING

General Details					
Business Unit:	NBEC	Area:	Oak	ITA Reviewer:	Aaron Allison
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Inspection Task Planning	
Equipment Preparation (detail cleaning, access and general inspection preparation requirements)	No special prep
Details and Special Requirements	VE, UT
Recommendations and Cautions	

Inspection and Test Plan (ITA) Sign-Off			
This section is to be signed off whenever the ITA is updated. The review and sign-off is to be completed by the Asset Integrity Coordinator or Chief Inspector.			
ITA Approved By:	_____ Aaron Allison Name	_____ 1/4/2017 Date	_____ Aaron Allison Signature