

INSPECTION REPORT

Pressure Vessel Survey			
Location:	Point Tupper	EM&I Report No.:	PT-D2008-090313-BR-R1
Client Name:		Client Ref No.:	PT-11573609-001-D2008
Client Rep.:		Inspector Name:	Barry Ritchie
WO No.:		Inspection Date:	March 13, 2009
SPO No.:		System:	Propane + Liquids
Workscope No.:	PT-2008-VESSEL-EXT-02	EM&I Job No:	EMJ0132.31
Tag No.:	D-2008	Equipment Description:	Off-spec Storage Vessel
Date of Last Inspection:	NA	Previous Records Seen:	NA
Drawing No.:	LA-B22-F-22-8006-01-Z4, 980047-1-4, 980047-4-2, 98-CA-399735-4B		

Inspection Summary					
Item	Condition				Comments
External Ladders, Access and Support Structure	Good	Fair	Poor	NA	
1. If applicable, check ladders, stairways, platforms and walkways that are connected to, or bearing on the vessel for signs of corrosion, missing components, or deterioration.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
2. If applicable, check vessel supports for signs of deterioration, settlement, deflection, and/or corrosion.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	See photos 1 to 4
3. If applicable, check coatings for signs of deterioration, rusts spots, cracks, blistering, and/or coating disbondment.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
4. a) For horizontally mounted vessels, check for signs of trapped moisture, resulting in corrosion between cradle support and vessel shell.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
b) For vertically mounted vessels on skirt support or support legs, check for condensation, resulting in corrosion on the bottom cap/ inside skirt support surface or area of attachment of the support legs to the bottom cap.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
5. Check the grounding connection is correctly installed, with cable connections tight and ground wires in good condition.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	See photo 5 & 8
6. Check all bolted connections for any signs of corrosion or mechanical damage.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
7. If applicable, check the vessel sliding foot free to move and hold-down bolts are free.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Vessel External Surfaces	Good	Fair	Poor	NA	
1. Check permanent identifying tags on vessel are legible and present the required information.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	See photo 9
2. If applicable, check that all bolts/studs extend fully through their nuts, having a protrusion beyond the nut of not less than one thread; flange bolts have bolt heads all on the side of the joint.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
3. If applicable, check bolted connections are in full contact with connected elements and connections for any signs of rust, corrosion or mechanical damage.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
4. If applicable, check insulation support bands and clips for signs of corrosion or breakage.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
5. Check all welded seams and connections for any signs of deterioration, corrosion, cracking, pitting or other sign of failure. Specify.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Only one area of concern, see photo 32
6) If applicable, check insulation type, condition for any insulation damage and ingress of water. Record insulation type.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
7. Carry out visual inspection of the exterior surface of the vessel, including coatings for any signs of leaks, cracks, deformation, distortion, pitting, corrosion or other forms of deterioration. If so, specify type, location and extent.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Overall coating in good condition with four small isolated patches of coating breakdown.
8. If applicable, check weep holes in reinforcement plates are not plugged.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
External Piping / Instrument Attachments	Good	Fair	Poor	NA	
1. If applicable, check vessel trim, such as gauges, sight glasses, valves and other appurtenances, show signs of deterioration, or missing components, etc.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
2. If applicable, check if the PSV on the vessel is in calibration. Record tag number of PSV and calibration date.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	See photo 24
3. Inspect fittings, nozzles and other connections, including the surrounding vessel shell / head for any signs of distortion or cracks, wall loss, leakage, deterioration of	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

INSPECTION REPORT



Inspection Summary

Item	Condition				Comments
coatings, etc. Specify extent and location.					
Vessel Internal Surfaces	Good	Fair	Poor	NA	
1. Check for signs of corrosion, erosion, cracks, blisters, pitting, distortion, or other forms of deterioration on the internal vessel surfaces. If any, specify type, location and extent.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
2. Check all welded joints for any signs of deterioration, corrosion, cracking, pitting or other sign of failure. Specify.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
3. Check all man-ways, nozzles and connections for distortion, cracks, corrosion, wall loss and other type of defects or failures. If any defects are noted, specify type, extent and location.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
4. If applicable, compare the results of performed wall thickness survey with previous reports for areas of wall thickness loss. Identify areas on inspection report.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
5. Where applicable, check vessel internal cladding for signs of bulging, buckling, cracks, holes, etc. If any, specify type, location and extent.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
6. Where applicable, check the vessel internal coating for signs of deterioration, such as: rust spots, blisters, coating disbandment, etc. If any, specify type, location and extent.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
7. If possible, check gasket seals on all flanges for signs of corrosion and/or mechanical damage.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Internal Equipment/Piping /Supports	Good	Fair	Poor	NA	
1. Where applicable, check supports for vessel's internal equipment and components for signs of corrosion, distortion and deterioration.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
2. If applicable, check vessel's internals for signs of corrosion, distortion and deterioration, missing components etc.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
3. If applicable, check if bolted connections are in full contact with connected elements and connections are free from rust or other deleterious material that may prohibit full contact.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	

Detail of Findings

Instructions: With the aid of Drawing(s), Sketch(es) and Photo(s) describe findings

ID Tag D-2008

Manufacturer - RNG Pro-Tech Inc

Manufacturer Date - 1999

Serial No - 98-11

MAWP - 250/-11 PSI @ 149°F // 1724/-76 KPA @ 65°C

MDMT - -17°F @ 250/-11 PSI // -27°C @ 1724/-76 KPA

PSV Tag D-2008

L&S Job - 07-13878-2

Date - Jan 8/08

Set Pressure - 250 PSI

Capacity - 18656 SCFM

Model - JPVM 15A

Detail of Findings

Instructions: With the aid of Drawing(s), Sketch(es) and Photo(s) describe findings



Photo 1 – Showing North face of North vessel support, light corrosion on edges of steel to concrete connection



Photo 2 – Showing South face of North vessel support showing the start of coating breakdown on weld connections. Photo taken facing North



Photo 3 – Showing north face of South vessel support, coating breakdown starting on vertical stiffener plate weld connections. Photo taken facing South



Photo 4 – Showing general condition of paint coating of South face of South vessel support

Detail of Findings

Instructions: With the aid of Drawing(s), Sketch(es) and Photo(s) describe findings

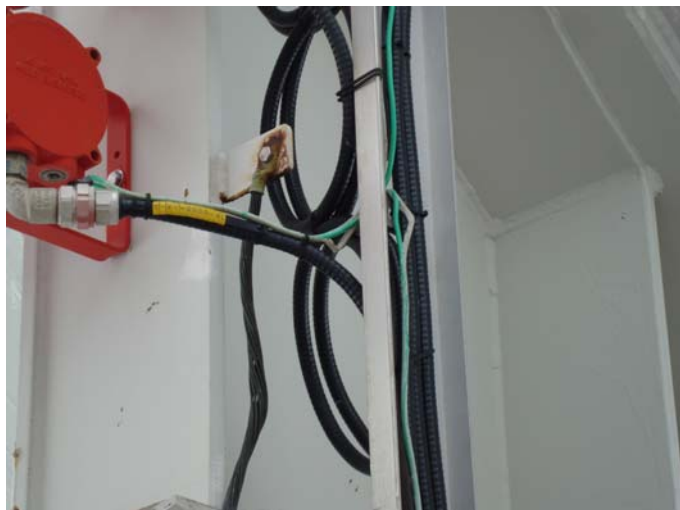


Photo 5 – Showing earthing strap connection on North support



Photo 6 – Showing earthing strap North support



Photo 7 – Showing earthing strap South support



Photo 8 – Showing close up of South side earth connection South vessel support

INSPECTION REPORT

Detail of Findings

Instructions: With the aid of Drawing(s), Sketch(es) and Photo(s) describe findings



Photo 9 – ID plate



Photo 10 – General condition of East side of vessel (south dome). Photo taken running North



Photo 11 – General condition of East side of vessel. Photo taken running North



Photo 12 – General condition of East side of vessel. Photo taken running North

Detail of Findings

Instructions: With the aid of Drawing(s), Sketch(es) and Photo(s) describe findings



Photo 13 – General condition of East side of vessel.
Photo taken running North



Photo 14 – General condition of East side of vessel.
Photo taken running North



Photo 15 – Showing coating breakdown on nozzle N2
and light corrosion on studs and nuts CAT 3



Photo 16 – Showing coating breakdown on nozzle N5,
light to moderate corrosion on studs and nuts CAT 2

INSPECTION REPORT

Detail of Findings

Instructions: With the aid of Drawing(s), Sketch(es) and Photo(s) describe findings



Photo 17 – Showing coating breakdown on nozzle N12, light scale around nozzle connection, studs and nuts uncoated but in good condition CAT 3



Photo 18 – West side of vessel. Photo taken facing South



Photo 19 – West side of vessel. Photo taken facing South



Photo 20 – West side of vessel. Photo taken facing South

Detail of Findings

Instructions: With the aid of Drawing(s), Sketch(es) and Photo(s) describe findings



Photo 21 – West side of vessel. Photo taken facing South



Photo 22 – Top section of vessel. Photo taken facing South



Photo 23 – Top section of vessel. Photo taken facing South



Photo 24 – PSV cal plate

Detail of Findings

Instructions: With the aid of Drawing(s), Sketch(es) and Photo(s) describe findings



Photo 25 – PSV



Photo 26 – General condition of nozzles N3A, N4A, N8, N10. All nuts and studs uncoated with light to moderate corrosion CAT 2



Photo 27 – Nozzle N1 studs and nuts light to moderate corrosion CAT 2



Photo 28 – General condition of deluge pipe supports located along the top section of vessel

INSPECTION REPORT

Detail of Findings

Instructions: With the aid of Drawing(s), Sketch(es) and Photo(s) describe findings



Photo 29 – Small isolated patch approx 70 mm x 70 mm, light corrosion located on South-East side lower shell



Photo 30 – Small isolated patch approx 90mm x 30mm located on the South bottom shell



Photo 31 – Showing small area of coating breakdown on weld haz area approx 140mm x 30mm located on middle bottom



Photo 32 – Showing area of coating breakdown on the lower East side shell central showing mid section stiffener

INSPECTION REPORT

Detail of Findings

Instructions: With the aid of Drawing(s), Sketch(es) and Photo(s) describe findings



Photo 33 – Showing lower section of South dome, under side of ID plate and nozzle N6 slight coating breakdown around nozzle weld connection



Photo 34 – General condition of nozzle N3B & N4B, light corrosion on studs and nuts CAT 3

List of Attachments

- Attachment 1: PT-D2008-090313-VR-UT (Page 1 to 7)
- Attachment 2: Sketch of UT Grid - Side View
- Attachment 3: Sketch of UT Grid - End View
- Attachment 4: PT-D2008-090525-MR-UT (Page 1 to 3)
- Attachment 5: 980047-1-4

End of Report

INSPECTION REPORT



Ultrasonic Inspection Survey for Vessel Inspection

Location:	Point Tupper	EM&I J Report No.:	PT-D2008-090313-VR-UT		
Client Name:	Exxon Mobil Sable	Client Ref No.:	PT-11573609-001-D2008		
Client Rep.:	Dale Groves	Inspector Name:	Victor Ritchie		
WO No.:	11573609	Inspection Date:	March 13, 2009		
SPO No.:	4501854963	Inspection Time:	Various		
Workscope No.:	PT-2008-VESSEL-EXT-02	System:	Propane + Liquids		
Previous Report No.	NA	EM&I J Job No:	EMJ0132.31		
Ref. Drawing No.:	LA-B22-F-22-8006-01-Z4, 980047-1-4, 980047-4-2, 98-CA-399735-4B				
Technician Certifications:	PCN UT 2	Certification Expiry Date:	January 29, 2014		
Inspection Code:	NA	Inspection Procedure:	EM&I		
Item Inspected:	D-2008	Material (Incl. Vol.):	CS		
Surface Condition:	As coated	Surface Temp:	Ambient		
Instrument	Type: Epoch LTC	Equipment S/N: 090100701	Cal Due Date: January 24, 2010		
Instrument Settings	Reference Level: 80fsh	Gain: 50db	Reject Settings: NA		
Search Unit Cables	Type:	Length: 5'	Transfer Value:		
Calibration Block:	Step wedge 2.5-12.5mm	Calibration Block S/N:	CB2		
Simulation Block:	NA	Couplant:	Ultragel		
Computerized Program:	NA				
Transducer Mfg:	Type:	Model No.:	Angle:	Frequency:	Size:
Panametrics	dual element	D790SM	0	5MHz	10mm

Inspection Summary

Restricted Access?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	Comments:
---------------------------	------------------------------	--	------------------

Comments:

UT measurements were taken on side wall using echo technique and readings were recorded.
 This does not constitute a UT survey.
 See below and Attachment 2 & 3 for locations and readings. All readings are in millimeters.

INSPECTION REPORT

Inspection Summary

Item Identification	Test Point	Diameter (inches)	Nominal Wall Thickness (mm)	Minimum Wall Thickness (mm)	Average Wall Thickness (mm)
North Dome End	A1	147.5	31.75	32.6	32.8
North Dome End	A2	147.5	31.75	32.5	32.9
North Dome End	A3	147.5	31.75	32.9	33.1
North Dome End	A4	147.5	31.75	32.2	32.7
North Dome End	B1	147.5	31.75	32.1	32.5
North Dome End	B2	147.5	31.75	32.1	32.5
North Dome End	B3	147.5	31.75	32.1	32.6
North Dome End	B4	147.5	31.75	32.4	32.8
North Dome End	C1	147.5	31.75	32.6	32.9
North Dome End	C2	147.5	31.75	32.6	32.8
North Dome End	C3	147.5	31.75	32.8	33.0
North Dome End	C4	147.5	31.75	32.8	33.1
North Dome End	D1	147.5	31.75	32.4	32.8
North Dome End	D2	147.5	31.75	32.3	32.6
North Dome End	D3	147.5	31.75	32.5	32.8
North Dome End	D4	147.5	31.75	32.3	32.7
North Dome End	E1	147.5	31.75	32.2	32.6
North Dome End	E2	147.5	31.75	32.2	32.7
North Dome End	E3	147.5	31.75	32.3	32.6
North Dome End	E4	147.5	31.75	32.0	32.5
North Dome End	F1	147.5	31.75	32.0	32.4
North Dome End	F2	147.5	31.75	32.4	32.7
North Dome End	F3	147.5	31.75	32.0	32.5
North Dome End	F4	147.5	31.75	32.4	32.9
South Dome End	A1	147.5	31.75	32.1	32.4
South Dome End	A2	147.5	31.75	31.9	32.3
South Dome End	A3	147.5	31.75	31.7	32.4
South Dome End	A4	147.5	31.75	32.0	32.6
South Dome End	B1	147.5	31.75	31.8	32.3
South Dome End	B2	147.5	31.75	31.5	32.0
South Dome End	B3	147.5	31.75	31.8	32.2
South Dome End	B4	147.5	31.75	31.5	32.0
South Dome End	C1	147.5	31.75	32.0	32.5
South Dome End	C2	147.5	31.75	31.9	32.0
South Dome End	C3	147.5	31.75	32.4	32.4
South Dome End	C4	147.5	31.75	32.0	32.5

INSPECTION REPORT



Inspection Summary

Item Identification	Test Point	Diameter (inches)	Nominal Wall Thickness (mm)	Minimum Wall Thickness (mm)	Average Wall Thickness (mm)
South Dome End	D1	147.5	31.75	32.0	33.0
South Dome End	D2	147.5	31.75	31.6	32.0
South Dome End	D3	147.5	31.75	32.1	32.3
South Dome End	D4	147.5	31.75	32.3	32.4
South Dome End	E1	147.5	31.75	32.9	33.1
South Dome End	E2	147.5	31.75	33.0	33.2
South Dome End	E3	147.5	31.75	33.0	33.4
South Dome End	E4	147.5	31.75	32.4	32.9
South Dome End	F1	147.5	31.75	32.6	33.1
South Dome End	F2	147.5	31.75	32.2	33.0
South Dome End	F3	147.5	31.75	33.0	33.4
South Dome End	F4	147.5	31.75	32.6	33.0
East Side Wall	TP1	147.5	28.5	30.4	N/A
East Side Wall	TP2	147.5	28.5	30.1	N/A
East Side Wall	TP3	147.5	28.5	30.6	N/A
East Side Wall	TP4	147.5	28.5	30.3	N/A
East Side Wall	TP5	147.5	28.5	30.1	N/A
East Side Wall	TP6	147.5	28.5	30.4	N/A
East Side Wall	TP7	147.5	28.5	30.4	N/A
East Side Wall	TP8	147.5	28.5	30.8	N/A
East Side Wall	TP9	147.5	28.5	30.6	N/A
East Side Wall	TP10	147.5	28.5	30.3	N/A
East Side Wall	TP11	147.5	28.5	30.8	N/A
East Side Wall	TP12	147.5	28.5	31.4	N/A
East Side Wall	TP13	147.5	28.5	31.0	N/A
East Side Wall	TP14	147.5	28.5	30.0	N/A
East Side Wall	TP15	147.5	28.5	30.6	N/A
East Side Wall	TP16	147.5	28.5	31.2	N/A
East Side Wall	TP17	147.5	28.5	30.3	N/A
East Side Wall	TP18	147.5	28.5	30.8	N/A
East Side Wall	TP19	147.5	28.5	30.4	N/A
East Side Wall	TP20	147.5	28.5	31.0	N/A
East Side Wall	TP21	147.5	28.5	31.4	N/A
East Side Wall	TP22	147.5	28.5	31.0	N/A
East Side Wall	TP23	147.5	28.5	30.3	N/A

INSPECTION REPORT

Inspection Summary

Item Identification	Test Point	Diameter (inches)	Nominal Wall Thickness (mm)	Minimum Wall Thickness (mm)	Average Wall Thickness (mm)
East Side Wall	TP24	147.5	28.5	30.8	N/A
East Side Wall	TP25	147.5	28.5	30.5	N/A
East Side Wall	TP26	147.5	28.5	31.0	N/A
East Side Wall	TP27	147.5	28.5	31.0	N/A
East Side Wall	TP28	147.5	28.5	30.3	N/A
East Side Wall	TP28	147.5	28.5	30.8	N/A
East Side Wall	TP29	147.5	28.5	31.0	N/A
East Side Wall	TP30	147.5	28.5	30.3	N/A
East Side Wall	TP32	147.5	28.5	30.5	N/A
East Side Wall	TP33	147.5	28.5	30.8	N/A
East Side Wall	TP34	147.5	28.5	31.3	N/A
East Side Wall	TP35	147.5	28.5	31.0	N/A
East Side Wall	TP36	147.5	28.5	30.5	N/A
West Side Wall	TP1	147.5	28.5	30.5	N/A
West Side Wall	TP2	147.5	28.5	30.7	N/A
West Side Wall	TP3	147.5	28.5	30.5	N/A
West Side Wall	TP4	147.5	28.5	30.8	N/A
West Side Wall	TP5	147.5	28.5	30.4	N/A
West Side Wall	TP6	147.5	28.5	30.7	N/A
West Side Wall	TP7	147.5	28.5	30.7	N/A
West Side Wall	TP8	147.5	28.5	30.9	N/A
West Side Wall	TP9	147.5	28.5	31.0	N/A
West Side Wall	TP10	147.5	28.5	31.0	N/A
West Side Wall	TP11	147.5	28.5	30.6	N/A
West Side Wall	TP12	147.5	28.5	30.7	N/A
West Side Wall	TP13	147.5	28.5	30.6	N/A
West Side Wall	TP14	147.5	28.5	30.7	N/A
West Side Wall	TP15	147.5	28.5	31.0	N/A
West Side Wall	TP16	147.5	28.5	30.8	N/A
West Side Wall	TP17	147.5	28.5	31.0	N/A
West Side Wall	TP18	147.5	28.5	31.0	N/A
West Side Wall	TP19	147.5	28.5	30.3	N/A
West Side Wall	TP20	147.5	28.5	30.7	N/A
West Side Wall	TP21	147.5	28.5	30.6	N/A
West Side Wall	TP22	147.5	28.5	30.4	N/A

INSPECTION REPORT

Inspection Summary

Item Identification	Test Point	Diameter (inches)	Nominal Wall Thickness (mm)	Minimum Wall Thickness (mm)	Average Wall Thickness (mm)
West Side Wall	TP23	147.5	28.5	30.3	N/A
West Side Wall	TP24	147.5	28.5	30.4	N/A
West Side Wall	TP25	147.5	28.5	30.3	N/A
West Side Wall	TP26	147.5	28.5	30.3	N/A
West Side Wall	TP27	147.5	28.5	30.4	N/A
West Side Wall	TP28	147.5	28.5	30.8	N/A
West Side Wall	TP28	147.5	28.5	31.0	N/A
West Side Wall	TP29	147.5	28.5	31.4	N/A
West Side Wall	TP30	147.5	28.5	31.3	N/A
West Side Wall	TP32	147.5	28.5	30.7	N/A
West Side Wall	TP33	147.5	28.5	31.0	N/A
West Side Wall	TP34	147.5	28.5	31.3	N/A
West Side Wall	TP35	147.5	28.5	31.0	N/A
West Side Wall	TP36	147.5	28.5	30.9	N/A
Top of Shell	TP1	147.5	28.5	31.0	N/A
Top of Shell	TP2	147.5	28.5	31.0	N/A
Top of Shell	TP3	147.5	28.5	31.3	N/A
Top of Shell	TP4	147.5	28.5	31.1	N/A
Top of Shell	TP5	147.5	28.5	31.5	N/A
Top of Shell	TP6	147.5	28.5	31.3	N/A
Top of Shell	TP7	147.5	28.5	31.6	N/A
Top of Shell	TP8	147.5	28.5	31.5	N/A
Top of Shell	TP9	147.5	28.5	30.9	N/A
Top of Shell	TP10	147.5	28.5	30.9	N/A
Top of Shell	TP11	147.5	28.5	30.7	N/A
Top of Shell	TP12	147.5	28.5	30.6	N/A
Top of Shell	TP13	147.5	28.5	30.8	N/A
Top of Shell	TP14	147.5	28.5	30.8	N/A
Top of Shell	TP15	147.5	28.5	30.6	N/A
Top of Shell	TP16	147.5	28.5	30.8	N/A
Top of Shell	TP17	147.5	28.5	29.9	N/A
Top of Shell	TP18	147.5	28.5	30.3	N/A
Top of Shell	TP19	147.5	28.5	30.1	N/A
Top of Shell	TP20	147.5	28.5	29.8	N/A
Top of Shell	TP21	147.5	28.5	29.4	N/A

INSPECTION REPORT



Inspection Summary

Item Identification	Test Point	Diameter (inches)	Nominal Wall Thickness (mm)	Minimum Wall Thickness (mm)	Average Wall Thickness (mm)
Top of Shell	TP22	147.5	28.5	29.6	N/A
Top of Shell	TP23	147.5	28.5	30.1	N/A
Top of Shell	TP24	147.5	28.5	29.7	N/A
Top of Shell	TP25	147.5	28.5	30.0	N/A
Top of Shell	TP26	147.5	28.5	30.5	N/A
Top of Shell	TP27	147.5	28.5	30.2	N/A
Top of Shell	TP28	147.5	28.5	30.8	N/A
Top of Shell	TP28	147.5	28.5	31.0	N/A
Top of Shell	TP29	147.5	28.5	30.7	N/A
Top of Shell	TP30	147.5	28.5	30.8	N/A
Top of Shell	TP32	147.5	28.5	30.7	N/A
Top of Shell	TP33	147.5	28.5	31.1	N/A
Top of Shell	TP34	147.5	28.5	30.7	N/A
Top of Shell	TP35	147.5	28.5	30.7	N/A
Top of Shell	TP36	147.5	28.5	30.7	N/A
Shell Bottom	TP1	147.5	28.5	30.6	N/A
Shell Bottom	TP2	147.5	28.5	30.5	N/A
Shell Bottom	TP3	147.5	28.5	30.9	N/A
Shell Bottom	TP4	147.5	28.5	30.2	N/A
Shell Bottom	TP5	147.5	28.5	30.1	N/A
Shell Bottom	TP6	147.5	28.5	30.1	N/A
Shell Bottom	TP7	147.5	28.5	30.1	N/A
Shell Bottom	TP8	147.5	28.5	31.0	N/A
Shell Bottom	TP9	147.5	28.5	30.9	N/A
Shell Bottom	TP10	147.5	28.5	30.9	N/A
Shell Bottom	TP11	147.5	28.5	30.7	N/A
Shell Bottom	TP12	147.5	28.5	30.8	N/A
Shell Bottom	TP13	147.5	28.5	31.9	N/A
Shell Bottom	TP14	147.5	28.5	30.9	N/A
Shell Bottom	TP15	147.5	28.5	30.5	N/A
Shell Bottom	TP16	147.5	28.5	30.5	N/A
Shell Bottom	TP17	147.5	28.5	30.2	N/A
Shell Bottom	TP18	147.5	28.5	30.2	N/A
Shell Bottom	TP19	147.5	28.5	30.3	N/A
Shell Bottom	TP20	147.5	28.5	30.0	N/A

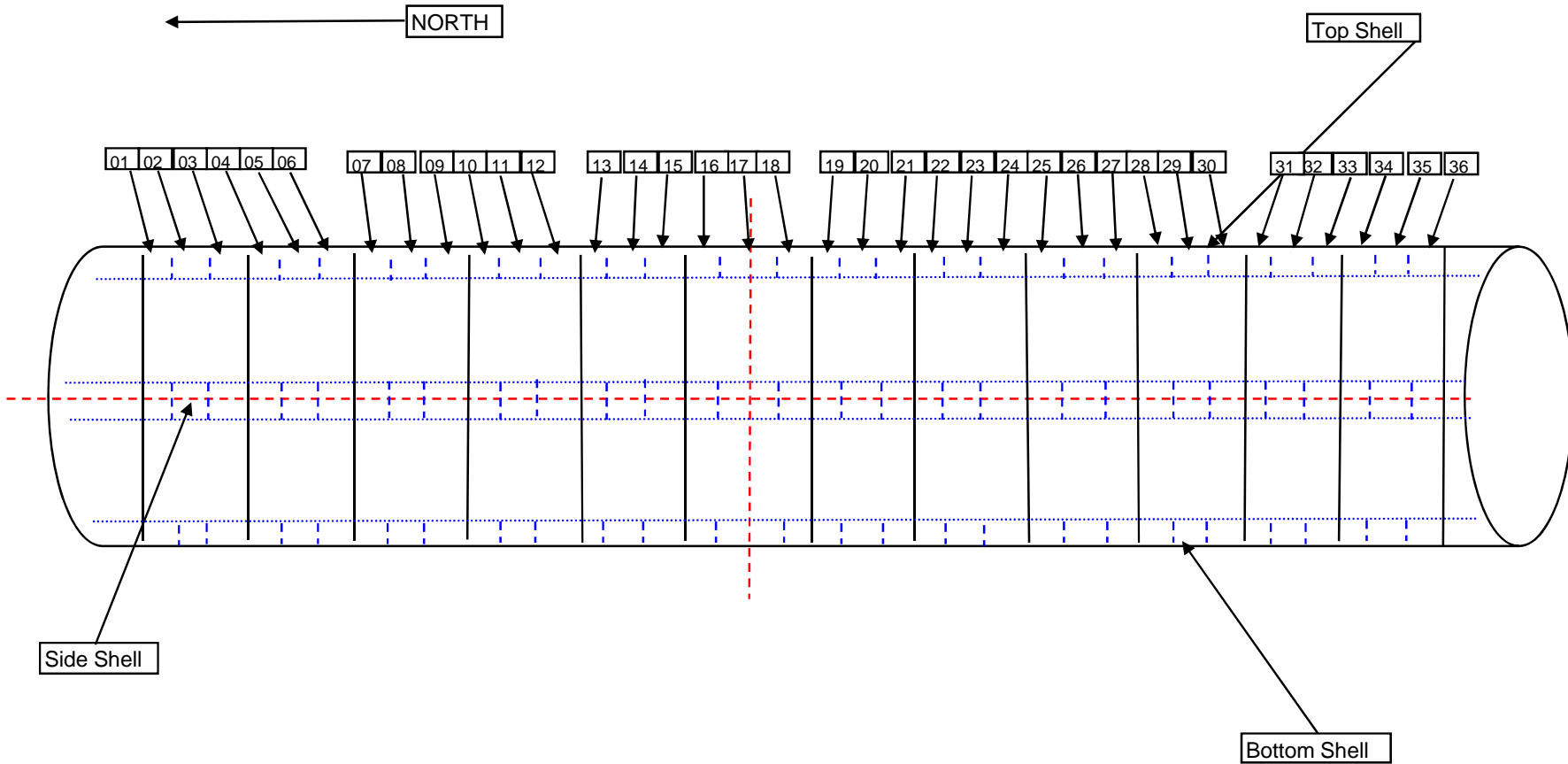
INSPECTION REPORT

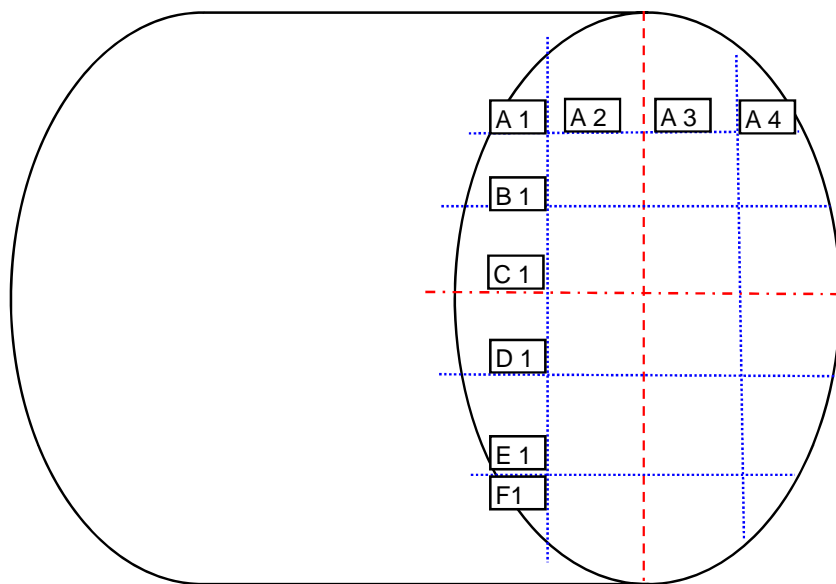


Inspection Summary

Item Identification	Test Point	Diameter (inches)	Nominal Wall Thickness (mm)	Minimum Wall Thickness (mm)	Average Wall Thickness (mm)
Shell Bottom	TP21	147.5	28.5	30.0	N/A
Shell Bottom	TP22	147.5	28.5	31.4	N/A
Shell Bottom	TP23	147.5	28.5	31.0	N/A
Shell Bottom	TP24	147.5	28.5	31.4	N/A
Shell Bottom	TP25	147.5	28.5	30.1	N/A
Shell Bottom	TP26	147.5	28.5	30.0	N/A
Shell Bottom	TP27	147.5	28.5	30.0	N/A
Shell Bottom	TP28	147.5	28.5	30.0	N/A
Shell Bottom	TP28	147.5	28.5	30.7	N/A
Shell Bottom	TP29	147.5	28.5	30.3	N/A
Shell Bottom	TP30	147.5	28.5	31.3	N/A
Shell Bottom	TP32	147.5	28.5	31.7	N/A
Shell Bottom	TP33	147.5	28.5	30.4	N/A
Shell Bottom	TP34	147.5	28.5	30.6	N/A
Shell Bottom	TP35	147.5	28.5	30.4	N/A
Shell Bottom	TP36	147.5	28.5	30.4	N/A

End of Report





INSPECTION REPORT



Ultrasonic Inspection Survey for Vessel Inspection

Location:	Point Tupper	EM&I J Report No.:	PT-D2008-090525-MR-UT		
Client Name:	Exxon Mobil Sable	Client Ref No.:	PT-11573609-001-D2008		
Client Rep.:	Dale Groves	Inspector Name:	Michael Rotondella		
WO No.:	11573609	Inspection Date:	May 25, 2009		
SPO No.:	4501854963	Inspection Time:	Various		
Workscope No.:	PT-2008-VESSEL-EXT-02	System:	Propane + Liquids		
Previous Report No.	NA	EM&I J Job No:	EMJ0132.31		
Ref. Drawing No.:	LA-B22-F-22-8006-01-Z4, 980047-1-4, 980047-4-2, 98-CA-399735-4B				
Technician Certifications:	PCN UT 2 3.1, 3.2, 3.8, 3.9	Certification Expiry Date:	October 24, 2010		
Inspection Code:	NA	Inspection Procedure:	EM&I		
Item Inspected:	D2008	Material (Incl. Vol.):	C/S		
Surface Condition:	As coated	Surface Temp:	Ambient		
Instrument	Type: Epoch LTC	Equipment S/N: 090108403	Cal Due Date: March 11, 2010		
Instrument Settings	Reference Level: 80fsh	Gain: 60db	Reject Settings: NA		
Search Unit Cables	Type:	Length: 5'	Transfer Value:		
Calibration Block:	Step wedge 2.5-12.5mm	Calibration Block S/N:	09-1652		
Simulation Block:	NA	Couplant:	Ultragel II		
Computerized Program:	NA				
Transducer Mfg:	Type:	Model No.:	Angle:	Frequency:	Size:
Panametrics	Dual Element	D790SM	0	5MHz	10mm

Inspection Summary

Restricted Access? ☒ Yes ☐ No **Comments:** Rope Access Required

Comments:

UT spot readings were taken and the readings were recorded.
See below and Attachment 5 for locations and readings. All readings are in millimeters.

INSPECTION REPORT

Inspection Summary

Item Identification	Test Point	Diameter (inches)	Nominal Wall Thickness (mm)	Minimum Wall Thickness (mm)	Average Wall Thickness (mm)
D2008 N1	North	4"	33.1	33.6	N/A
D2008 N1	East	4"	33.1	33.1	N/A
D2008 N1	South	4"	33.1	32.7	N/A
D2008 N1	West	4"	33.1	33.0	N/A
D2008 N2	North	10"	51.6	52.1	N/A
D2008 N2	East	10"	51.6	51.9	N/A
D2008 N2	South	10"	51.6	51.8	N/A
D2008 N2	West	10"	51.6	52.0	N/A
D2008 N3A	North	3"	31.5	31.2	N/A
D2008 N3A	East	3"	31.5	31.6	N/A
D2008 N3A	South	3"	31.5	31.8	N/A
D2008 N3A	West	3"	31.5	31.9	N/A
D2008 N3B	North	3"	31.5	31.2	N/A
D2008 N3B	East	3"	31.5	31.8	N/A
D2008 N3B	South	3"	31.5	31.9	N/A
D2008 N3B	West	3"	31.5	31.3	N/A
D2008 N4A	North	2"	16.6	16.9	N/A
D2008 N4A	East	2"	16.6	17.2	N/A
D2008 N4A	South	2"	16.6	17.3	N/A
D2008 N4A	West	2"	16.6	17.5	N/A
D2008 N4B	North	2"	16.6	16.9	N/A
D2008 N4B	East	2"	16.6	17.3	N/A
D2008 N4B	South	2"	16.6	17.4	N/A
D2008 N4B	West	2"	16.6	16.9	N/A
D2008 N5	North	4"	33.1	32.6	N/A
D2008 N5	East	4"	33.1	32.7	N/A
D2008 N5	South	4"	33.1	33.0	N/A
D2008 N5	West	4"	33.1	32.8	N/A
D2008 N6	North	2"	25.4	25.1	N/A
D2008 N6	East	2"	25.4	25.7	N/A
D2008 N6	South	2"	25.4	25.7	N/A
D2008 N6	West	2"	25.4	25.4	N/A
D2008 N7	North	4"	33.1	33.1	N/A
D2008 N7	East	4"	33.1	33.1	N/A
D2008 N7	South	4"	33.1	33.2	N/A
D2008 N7	West	4"	33.1	32.9	N/A

INSPECTION REPORT

Inspection Summary

Item Identification	Test Point	Diameter (inches)	Nominal Wall Thickness (mm)	Minimum Wall Thickness (mm)	Average Wall Thickness (mm)
D2008 N8	North	6"	63.5	66.8	N/A
D2008 N8	East	6"	63.5	66.8	N/A
D2008 N8	South	6"	63.5	67.4	N/A
D2008 N8	West	6"	63.5	66.9	N/A
D2008 N9	North	3"	31.5	31.5	N/A
D2008 N9	East	3"	31.5	31.7	N/A
D2008 N9	South	3"	31.5	31.6	N/A
D2008 N9	West	3"	31.5	31.8	N/A
D2008 N10	North	6"	63.5	66.8	N/A
D2008 N10	East	6"	63.5	66.5	N/A
D2008 N10	South	6"	63.5	67.2	N/A
D2008 N10	West	6"	63.5	66.5	N/A
D2008 N11	North	3"	31.5	31.0	N/A
D2008 N11	East	3"	31.5	32.0	N/A
D2008 N11	South	3"	31.5	32.2	N/A
D2008 N11	West	3"	31.5	31.0	N/A
D2008 M	North	24"	101.6	102.0	N/A
D2008 M	East	24"	101.6	103.0	N/A
D2008 M	South	24"	101.6	103.0	N/A
D2008 M	West	24"	101.6	103.0	N/A

End of Report

