

## Tank Calibration Survey – Report Details

### Client Inspection Agency

<b>Company -</b>	<b>Address -</b>
<b>File Number -</b>	<b>City -</b>
<b>Customer Email -</b>	<b>State/Prov -</b>
<b>Phone/Fax -</b>	<b>Zip/Postal Code -</b>

### Inspector Information

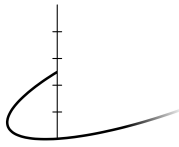
<b>Name/Contact -</b>	<b>Email -</b>
	<b>Phone -</b>

### Tank Details

<b>Tank Number -</b>	<b>Tank Serial -</b>
<b>Date Strapped -</b>	<b>Owner -</b>
<b>Year Built -</b>	<b>Facility Name &amp; Location -</b>

### Report Data:

<b>Main Table Volume -</b> <b>Second Table Volume (if requested) -</b>	<b>Volumes - Barrel (bbl), Mbbl, US Gallon Imperial Gallon, Cubic Inch, Litre, Cubic Metre Other : Please specify</b>
<b>Main Table Increment -</b> <b>Second Table Increment -</b> <b>Out of Round Increment -</b>	<b>Increments - 1 Inch, 1/2", 1/4", 1/8", 1/16" 1 Foot, 1/10', 1/100' 1 mm, 1 cm, 5 cm Other : Please specify</b>
<b>Table Layout - Portrait/Landscape Innage/Ullage/Both -</b>	<b>Table Sizes - 8<sup>1/2</sup> X 11" (Letter / A4), 8<sup>1/2</sup> X 14" (Legal), 11 X 17" (Ledger / A3) Other: Please specify</b>



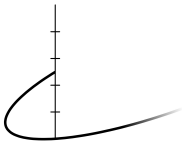
**Tank Calibration – Data Survey**

**Tank Dimensions from Nameplate/Terminal**

<b>Shell Material - Carbon Steel, Stainless Steel, Aluminum, Copper, Fibreglass, Other : Please Specify</b>			<b>value</b>	<b>unit</b>
<b>Is Tank (Insulated / Not Insulated)</b>		<b>Nominal Tank Diameter</b>		
	<b>value</b>	<b>unit</b>	<b>Nominal Tank Height</b>	
<b>(Overflow or Foam-line) distance to top</b>			<b>Safe Fill Height</b>	
<b>If Foam-line : (Stop Table/Calculate Full Height)</b>			<b>Calibration Product Height</b>	
<b>Product Calibration Description eg. Water -</b>			<b>Calibration Product Density</b>	
<b>Product Service Description eg. Gasoline -</b>			<b>Service Product Density</b>	
			<b>Product Temperature</b>	<b>°F/°C</b>
			<b>Ambient Air Temperature</b>	<b>°F/°C</b>
			<b>Reference Temperature (60°F/15°C)</b>	<b>°F/°C</b>
			<b>Operating Temperature</b>	<b>°F/°C</b>

**Tape Certificate & Measured Tank Dimensions**

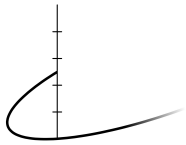
<b>MasterTape Serial # -</b>			<b>value</b>	<b>unit</b>
<b>Certified Tape Factor -</b>				
	<b>value</b>	<b>unit</b>	<b>Horizontal Distance To Gauge</b>	
<b>MasterTape Tension</b>			<b>Height of Gauge above roof</b>	
<b>MasterTape Span</b>			<b>Reference Gauge Height</b>	
<b>MasterTape Calibrated Length</b>			<b>Measured Tank Height</b>	
<b>Reference Circumference</b>			<b>Gauge Point Description -</b>	
<b>Circumference Method - (tape/optical)</b> see Optical Survey form				



### Tank Calibration – Dimension Survey

1 – Estimated height of measurement point (0% - bottom of ring; 100% - top of ring) 2 – Measured strap circumference (optical methods may only reference one course strap)  
 3 – Measured height of course ring 4 – Fitment & Joint : eg:Butt-weld, Lap-Rivet 5 – Width of shell protrusion under strap 6 – Height of protrusion outward from shell

Course Number	Measure 1 Height %	Circumference² Unit	Course Height³ Unit	Plate Thickness Unit	Method of Construction¹	Plates Per Course	Number of Strap Rises	Strap Rise Width⁵ Unit	Strap Rise Depth⁶ Unit

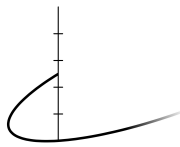


### Tank Calibration - Deadwood Survey

Quantity	Interior / Exterior	Category	Description	Diameter	Length	Width	Depth	Thickness	Open / Closed	Start Height	End Height

Categories : Round Sump, Pan Sump, Box Sump,  
Exterior Horizontal Pipe, Interior Horizontal Pipe, Interior Vertical Pipe,  
Interior Steel, Square Blinds, Square Closed Shape, Round Plate

For Unconventional deadwood, please submit drawing with dimensions



**Tank Calibration – Shell Optical Survey**

Measurements in :  Inches  Millimetres  Feet

Optical Readings :  Internal  External

Gradians  Degrees  Other \_\_\_\_\_

Direction : Clockwise / Counter-Clockwise

Course #																	Distance	
	Ref																To	value
1																		
2																		
3																		
4																		
5																		
6																		
7																		
8																		
9																		
10																		
11																		
12																		
13																		
14																		
15																		
16																		
17																		
18																		
19																		
20																		

For Station readings above 20 continue on page 7. For Tanks with more than 10 Course measurements, record on reverse.

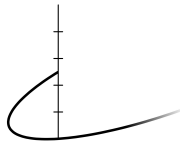
Tank Diameter (Feet)	Tank Diameter (Metres)	Minimum Stations
50	15	8
100	30	12
150	50	16
200	70	20
250	85	24
300	100	30
350	120	36

**Example: Recording Optical data for MPMS 2.2B, 2.2C-C, 2.2C-A, 2.2C-D**

If Feet : Circumference 30  
 If Metres : Circumference 9  
 Round up to an even number of Stations

Course #	1		1			1		Distance		Course #	1				Distance	
	ref	strap	ref	θ <sub>Lo</sub>	θ <sub>Hi</sub>	ref	α	β	to		value	ref	θ	α	β	to
1	0.706 m	0.709 m	1	24.2325	60.9253	1	24.2325	60.9253	α-β	1512 m	1	60.9253	24.2325	60.9253	2	12.5 m
2	0.911 m	0.913 m	2	44.4694	94.5188	2	44.4694	94.5188			2				3	13.2 m
3			3			3					3				4	10.9 m
4			4			4					4				5	12.7 m

External Strap + Optical Offset, External Strap + Optical Angle, Internal Optical Circumference, External Optical Angle  
 \* Values are for example only and are not accurate data representations



**Tank Calibration – Bottom Plate Survey**

Measurements in :  Inches  Millimetres  Feet  Other \_\_\_\_\_

Direction : Clockwise / Counter-Clockwise

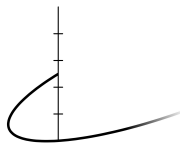
Other ->	Shell	1'	5'	10'	15'	20'	30'	40'	50'	60'	70'	80'	90'	100'	110'	120'	Center
1																	
2																	
3																	
4																	
5																	
6																	
7																	
8																	
9																	
10																	
11																	
12																	
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20																	
21																	
22																	
23																	
24																	
25																	
26																	

Bottom Description – Liquid Calibrated, Physical Survey, Cone Up, Cone Down, Sloping, Flat, Other : Please Specify

	value	units
Bottom Cone Height		
Liquid Calibration Volume		

Strike Point Description -

	value	units
Strike Point Height		
Shell Height closest to Strike point		
Datum Height		

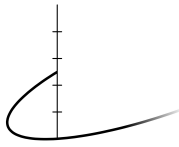


**Tank Calibration – Additional Shell Optical Survey**

Course																	Distance			
Horizontal Stations	Ref																		To	value
	21																			
	22																			
	23																			
	24																			
	25																			
	26																			
	27																			
	28																			
	29																			
	30																			
	31																			
	32																			
	33																			
	34																			
	35																			
	36																			
	37																			
38																				

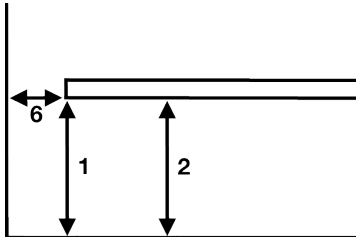
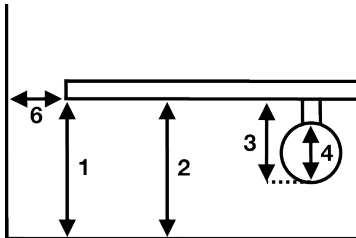
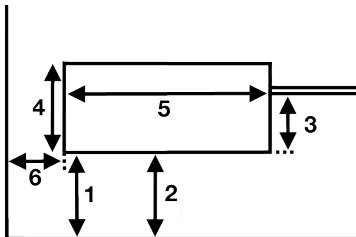
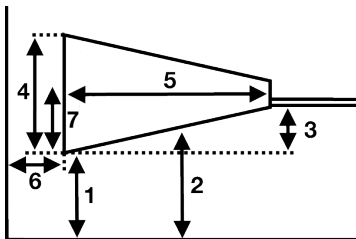
**Tank Calibration – Additional Bottom Plate Survey**

Other ->																		
	Shell	1'	5'	10'	15'	20'	30'	40'	50'	60'	70'	80'	90'	100'	110'	120'	Center	
27																		
28																		
29																		
30																		
31																		
32																		
33																		
34																		
35																		
36																		
37																		
38																		



### Tank Calibration – Floating Roof Survey

Roof Type: Cone, Dome, Flat, Floating (Internal/External), Other
Floating Roof Shape: Flat, Pontoon (Angled, Round, Square), Other
Floating Roof Data Source: Terminal / Measurement / Previous Table
Floating Roof Position during Measure: High / Low
Table Issue Position: High / Low
Table Deduction Method: Density / API / Not Deducted
No Deduction Option: Formula / Table



	value	unit
<b>Floating Roof Weight</b>		
1 - Height to bottom of deck or pontoon		
2 - Height from StrikePoint to Roof		
3 - Height from Roof to Pontoon		
4 - Pontoon Diameter or Height		
5 - Pontoon length along radius		
6 - Shell horizontal to Roof edge		
7 - Roof edge vertical to seal / product line		
Pin Distance setting for Hi/Lo		

For other non-conforming roof designs please complete a sketch below

Measurements in :  Inches  Millimetres  Feet  Other \_\_\_\_\_

Other Distance ->			5'	10'	15'	20'	30'	40'	50'	60'	70'	80'	90'	100'	110'	120'	Center
Lowest point	Rim	Strike															