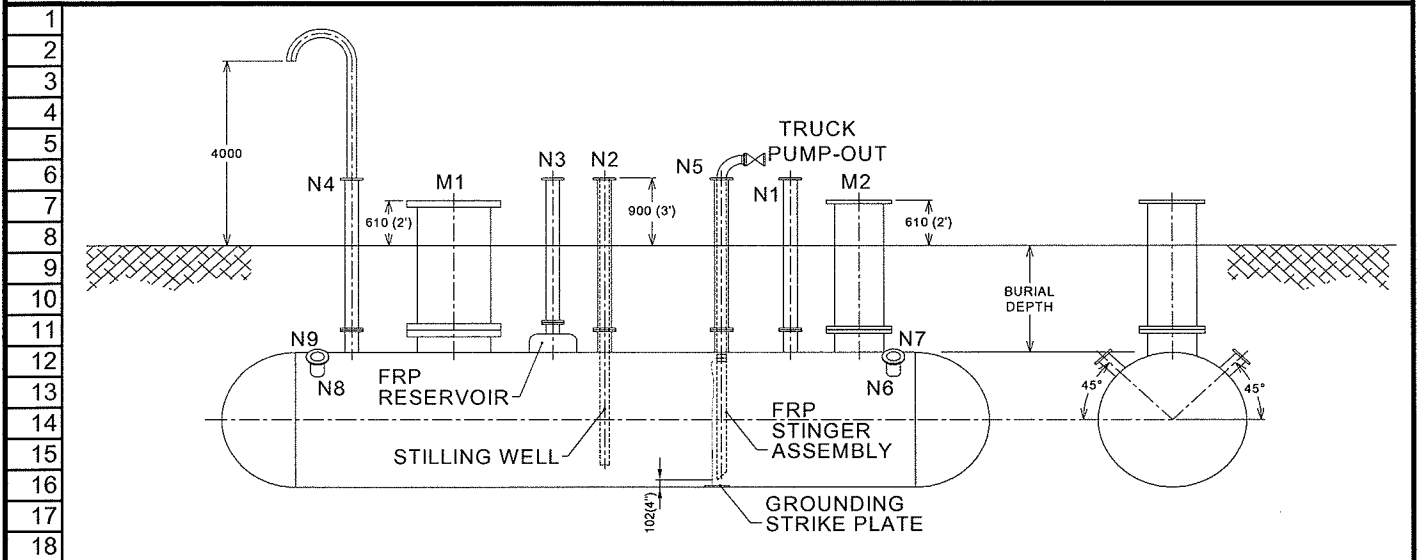




Project: Keystone XL Oil Pipeline Project	Project No.: 08E4490
Client: TransCanada Keystone Pipeline Limited Partnership	Datasheet No.: 25472-101-MTD-MTNF-W0001 Rev: 01
Tank Type: Fiberglass Reinforced Plastic Sump Tank	Tank Tags: See Sheet 2 of 2
Location: <input type="radio"/> U.S. <input checked="" type="radio"/> Canada	Quantity: 8
Sheet: 1 Of 2	

SCHEMATIC \triangle_{01}



Operating Conditions:		Testing:	
20 Design Capacity:	37854 (10,000 USG) L	Air Leak Test:	<input checked="" type="radio"/> Yes <input type="radio"/> No
21 Tank Size: Int. Diameter:	\triangle_{01} (Note 4) m	HydroTest:	<input type="radio"/> Yes <input checked="" type="radio"/> No
22 Length:	\triangle_{01} 9.37 (30.75') m		
23 Tank Weight: Empty:	\triangle_{01} 2300 kg		
24 Operating Pressure:	ATM kPag @ ambient	Externals:	
25 Internal Design Pressure:	7 kPag @ ambient	Insulation:	<input checked="" type="radio"/> No <input type="radio"/> Yes <input type="radio"/> By Tank Vendor
26 Design Temp: MAX: 70 °C MIN: -5 °C		Bolts/Nuts:	SA 193 Gr. B7/SA 194 Gr. 2H Cadmium Plated
27 Product Temperature: MAX: 70 °C MIN: 0 °C		Painting/Coating:	
28 Product Stored: Synthetic Crude Oil (SCO) / Diluted Bitumen (Dilbit)		Risers:	<input type="radio"/> No <input checked="" type="radio"/> Yes <input checked="" type="radio"/> By Tank Vendor
29		Int. Coating/Lining:	<input type="radio"/> Yes <input checked="" type="radio"/> No
30 Product Design Specific Gravity:	0.94 MAX	Site Conditions:	
31 Design & Construction:		Ambient Temperature:	Min: -40 °C Max: 40 °C
32 Design Code: <input checked="" type="radio"/> ULC-CAN4-S615		Electrical Rack Support: \triangle_{01}	<input type="radio"/> Yes <input checked="" type="radio"/> No
33 <input type="radio"/> UL-1316		Leak Detection Type:	<input checked="" type="radio"/> Wet <input type="radio"/> Dry
34 Type of Tank: <input type="radio"/> Single Wall <input checked="" type="radio"/> Double Wall			
35 Materials: Fiberglass Reinforced Plastic			
36 Anchor Design: <input type="radio"/> By Owner <input checked="" type="radio"/> By Tank Vendor			
37 Anchor Block: <input type="radio"/> By Owner <input checked="" type="radio"/> By Tank Vendor			
38 Ladder/Platforms: None			
39 Gaskets: Neoprene			
40 Lifting Lugs: <input checked="" type="radio"/> Yes <input type="radio"/> No			
41 Corrosion Allowance: N/A in			
42 Anti Static Device: <input checked="" type="radio"/> Yes <input type="radio"/> No			
43			
44 Maximum Burial Depth: 2.1 m \triangle_{01}			
45			
46			
47			

Rev	Description	Originator	Reviewer	WP Approval	Date
0A	Issued For Review	Brad Kooy	Troy Smereka		30-Jul-09
00	Issued For Quotation	Brad Kooy	Troy Smereka		12-Aug-09
01	Issued for Purchase	Brad Kooy	Troy Smereka		26-Oct-09



Project:	Keystone XL Oil Pipeline Project	Project No.:	08E4490
Client:	TransCanada Keystone Pipeline Limited Partnership	Datasheet No.:	25472-101-MTD-MTNF-W0001 Rev: 01
Tank Type:	Fiberglass Reinforced Plastic Sump Tank	Tank Tags:	See Below. Quantity: 8
Location:	<input type="radio"/> U.S. <input checked="" type="radio"/> Canada		Sheet: 2 Of 2

Nozzle Schedule:

1	Mark:	Size:	Quantity:	Rating:	Type:	Service:	Remarks:
2	N1	NPS 6	1	50 PSI (Note 5)	F.F.	Liquid Level Transmitter	On 4" ID Stilling Well 01
3	N2	NPS 6	1	50 PSI (Note 5)	F.F.	Liquid Level Transmitter	On 4" ID Stilling Well
4	N3	NPS 6	1	50 PSI (Note 5)	F.F.	Liquid Level Transmitter	Liquid Level Monitoring Type Leak Detection. On 4" ID Stilling Well. 01
5	N4	NPS 6	1	50 PSI (Note 5)	F.F.	Tank Vent	Gooseneck vent c/w bird screen 4 m above grade
6	N5	NPS 6	1	50 PSI (Note 5)	F.F.	Pump Out	c/w 3" stinger tube, 3" camlock, 3" ball valve, and anti-static device.
7	N6	NPS 6	1	50 PSI (Note 5)	F.F.	Side Tie-In	
8	N7	NPS 6	1	50 PSI (Note 5)	F.F.	Side Tie-In	
9	N8	NPS 6	1	50 PSI (Note 5)	F.F.	Side Tie-In	
10	N9	NPS 6	1	50 PSI (Note 5)	F.F.	Side Tie-In	
11	M1	NPS 36	1	50 PSI (Note 6)	F.F.	Manway c/w Dumping Hatch	For design and sizing, ASME B16.47 Series A bolt pattern shall be followed
12	M2	NPS 24	1	50 PSI (Note 6)	F.F.	Pump Mount	For design and sizing, ASME B16.5 bolt pattern shall be followed
13							
14							

Tank Tagging:

16	Functional Tags:	Burial Depth:	(Note 3)
17	121-HRDBP-B0-OST-01	2099 mm (6' - 10 5/8")	
18	122-LKSDE-B0-OST-01	2099 mm (6' - 10 5/8")	
19	123-MTRSP-B0-OST-01	2099 mm (6' - 10 5/8")	
20	124-OYENS-B0-OST-01	2099 mm (6' - 10 5/8")	
21	125-BDLSS-B0-OST-01	2099 mm (6' - 10 5/8")	
22	126-FXVLY-B0-OST-01	2099 mm (6' - 10 5/8")	
23	127-PIAPT-B0-OST-01	2099 mm (6' - 10 5/8")	
24	128-GRSSY-B0-OST-01	2099 mm (6' - 10 5/8")	
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Notes:

37	1) Ground plate to be installed for the length of the tank and grounded to tank grounding system.
38	2) All risers shall be tinted white as per the tank manufacturer's standard procedures.
39	3) Burial depth indicated is from the surface to the top of the tank wall, not the ribs.
40	4) Outer diameter of the Tank as measured from the outside of the stiffening ribs is 2591 mm (8' 6"). Outer diameter of the
41	tank walls is approximately 2489 mm (8'2"), while the inner diameter of the tank is approximately 2464 mm (8'1"). 01
42	5) All nozzle flanges shall be rated for 50 PSI and are in dimensional compliance with ASME B16.5 Class 150 flanges. 01
43	6) All manway connections shall conform to ASME B16.5 and B16.47 Series A dimensions with the exception of
44	smaller bolts and bolt holes. Deviations are as noted: Bolts - 5/8 " dia, Bolt Holes - 3/4" dia. 01
45	
46	