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Page 1 of 11  
Reference: PS060000

Company Name  
**EXAMPLE**

Tank ID  
Terminal Name

Date of Calibration                      02/03/06

Calibration performed and calculated in accordance  
with ISO Standard 7507



**NATA Accredited Laboratory**  
**Number: 9475**

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**CERTIFICATE OF CALIBRATION - NO. PS060000**

This table gives volumes in litres for millimetres of product measured over the dip plate.  
 The tank is a vertical "in/out" lapped tank with a fixed roof, an internal blanket and a coned up floor.

The first red highlighted area on page 4 of the table is below the high point of the floor.  
 In this zone the average values from the bottom of the page should not be used.  
 Intermediate volumes in the zone should be interpolated from the nearest values in the table.

Accurate volumes cannot be obtained from the tables within the zone of partial displacement  
 of the blanket, which is also highlighted in red on the table.  
 Refer to the Floating Blanket Correction Table (page 3) for the zone levels and treatment of  
 the blanket in the calculation of tank volumes.

Tank dimensions:	Diameter (external at base):	20.015 metres
	Shell height:	14.145 metres
	<b>Maximum Safe Fill height:</b>	<b>12,280 mm</b>
	Capacity at M.S.F. height:	3,858,099 litres

<b>Reference height:</b>	<b>15,545 mm</b>
The tank has been calibrated for a temperature of:	<b>15 deg C</b>
Manual gauging dip plate above shell bottom edge (average height):	139 mm

Heights of tank fittings relative to dip plate

Manholes (2 of)	bases exposed at:	380 mm
150NB Inlet	covered at:	380 mm
200NB Outlet	covered at:	470 mm
100NB Jet Mixer	covered at:	560 mm
200NB Foam Line	covered at:	520 mm

A 100NB Water Drain draws from a sump located adjacent to the tank shell.

Volume below datum plate calibrated by physical survey.

Tank volumes have been calculated using the following factors:-

Young's Modulus:	2,040,000 kg/cm <sup>2</sup>
Coefficient of linear expansion of the tank shell metal:	0.000011 /Deg C
Calibration Tape Certification Temperature:	20 Deg C
Coefficient of linear expansion of the strapping tape metal:	0.000011 /Deg C
Tank shell expansion under liquid head calculated at density:	0.7400 kg/litre

No adjustment has been incorporated into this table for product meniscus effect on dip tape readings.

All measurements are traceable to Australian national standards.

Shell plate thicknesses measured on site.

Calibration Performed:	02/03/06
Certificate issued:	14/09/06
Calibration to:	ISO Standard 7507

For and on behalf of  
 PETROSPECTION Pty Ltd

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## FLOATING BLANKET CORRECTION TABLE

This tank is equipped with a floating blanket, the weight of which has been given to us as: 2,236 kg  
 Between the following dips the blanket is only partially afloat and accurate volumes may not be calculated:

<b>ROOF LEGS IN OPERATING POSITION</b>	Lower limit:	<b>1350</b>	mm
	Upper limit:	<b>1520</b>	mm

For dips below the lower limit the blanket does not affect the tank volume and the volume may be read from the main tank table against the product dip.

For dips above the upper limit the following table should be consulted with the density of the tank contents at tank temperature. The correction obtained should be deducted from the volumes obtained for the product dip in the main table. Note that the density used is in air, at tank temperature, not at 15 degrees C.

<b>BLANKET DISPLACEMENT IN LITRES</b>										
Density (air) at tank temp	Third place figure for density									
	0.000	0.001	0.002	0.003	0.004	0.005	0.006	0.007	0.008	0.009
0.670	3,337	3,332	3,327	3,322	3,318	3,313	3,308	3,303	3,298	3,293
0.680	3,288	3,283	3,279	3,274	3,269	3,264	3,259	3,255	3,250	3,245
0.690	3,241	3,236	3,231	3,227	3,222	3,217	3,213	3,208	3,203	3,199
0.700	3,194	3,190	3,185	3,181	3,176	3,172	3,167	3,163	3,158	3,154
0.710	3,149	3,145	3,140	3,136	3,132	3,127	3,123	3,119	3,114	3,110
0.720	3,106	3,101	3,097	3,093	3,088	3,084	3,080	3,076	3,071	3,067
0.730	3,063	3,059	3,055	3,050	3,046	3,042	3,038	3,034	3,030	3,026
0.740	3,022	3,018	3,013	3,009	3,005	3,001	2,997	2,993	2,989	2,985
0.750	2,981	2,977	2,973	2,969	2,966	2,962	2,958	2,954	2,950	2,946
0.760	2,942	2,938	2,934	2,931	2,927	2,923	2,919	2,915	2,911	2,908
0.770	2,904	2,900	2,896	2,893	2,889	2,885	2,881	2,878	2,874	2,870
0.780	2,867	2,863	2,859	2,856	2,852	2,848	2,845	2,841	2,838	2,834
0.790	2,830	2,827	2,823	2,820	2,816	2,813	2,809	2,806	2,802	2,798
0.800	2,795	2,792	2,788	2,785	2,781	2,778	2,774	2,771	2,767	2,764
0.810	2,760	2,757	2,754	2,750	2,747	2,744	2,740	2,737	2,733	2,730
0.820	2,727	2,724	2,720	2,717	2,714	2,710	2,707	2,704	2,700	2,697

Calibration Performed: 02/03/06  
 Certificate issued: 14/09/2006  
 Calibration according to ISO Standard 7507

For and on behalf of  
**PETROSPECTION Pty Ltd**

Company Name **EXAMPLE**  
 Tank ID - Terminal Name

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Reference: PS060000

DIP mm	VOLUME litres	DIP mm	VOLUME litres	DIP mm	VOLUME litres	DIP mm	VOLUME litres
0	8,009	500	160,763	1,000	317,539	1,500	474,381
10	10,027	510	163,892	1,010	320,676	1,510	477,518
20	12,045	520	167,021	1,020	323,813	1,520	480,655
30	14,544	530	170,157	1,030	326,950	1,530	483,791
40	17,043	540	173,292	1,040	330,086	1,540	486,928
<b>Top of Floor = 57mm</b>							
50	19,923	550	176,427	1,050	333,223	1,550	490,065
60	22,879	560	179,563	1,060	336,360	1,560	493,202
70	26,015	570	182,698	1,070	339,497	1,570	496,339
80	29,152	580	185,833	1,080	342,634	1,580	499,476
90	32,288	590	188,968	1,090	345,771	1,590	502,612
100	35,424	600	192,104	1,100	348,907	1,600	505,749
110	38,561	610	195,239	1,110	352,044	1,610	508,886
120	41,697	620	198,374	1,120	355,181	1,620	512,023
130	44,833	630	201,510	1,130	358,318	1,630	515,160
140	47,970	640	204,645	1,140	361,455	1,640	518,297
150	51,106	650	207,780	1,150	364,592	1,650	521,433
160	54,242	660	210,916	1,160	367,728	1,660	524,570
170	57,379	670	214,051	1,170	370,865	1,670	527,707
180	60,515	680	217,186	1,180	374,002	1,680	530,845
190	63,651	690	220,322	1,190	377,139	1,690	533,982
200	66,788	700	223,457	1,200	380,276	1,700	537,128
210	69,924	710	226,592	1,210	383,413	1,710	540,270
220	73,060	720	229,727	1,220	386,549	1,720	543,411
230	76,197	730	232,863	1,230	389,686	1,730	546,553
240	79,334	740	235,998	1,240	392,823	1,740	549,694
250	82,471	750	239,133	1,250	395,960	1,750	552,836
260	85,608	760	242,269	1,260	399,097	1,760	555,977
270	88,745	770	245,404	1,270	402,234	1,770	559,119
280	91,882	780	248,539	1,280	405,370	1,780	562,260
290	95,019	790	251,675	1,290	408,507	1,790	565,402
300	98,156	800	254,810	1,300	411,644	1,800	568,543
310	101,287	810	257,945	1,310	414,781	1,810	571,685
320	104,419	820	261,081	1,320	417,918	1,820	574,826
330	107,550	830	264,216	1,330	421,055	1,830	577,968
340	110,682	840	267,351	1,340	424,192	1,840	581,109
350	113,813	850	270,486	1,350	427,328	1,850	584,251
360	116,945	860	273,623	1,360	430,465	1,860	587,392
370	120,076	870	276,760	1,370	433,602	1,870	590,534
380	123,208	880	279,897	1,380	436,739	1,880	593,675
390	126,337	890	283,034	1,390	439,876	1,890	596,816
<b>Floating Blanket</b>							
400	129,467	900	286,171	1,400	443,013	1,900	599,958
410	132,597	910	289,307	1,410	446,149	1,910	603,099
420	135,726	920	292,444	1,420	449,286	1,920	606,241
430	138,856	930	295,581	1,430	452,423	1,930	609,382
440	141,986	940	298,718	1,440	455,560	1,940	612,524
<b>Zone of Partial Displacement</b>							
450	145,115	950	301,855	1,450	458,697	1,950	615,665
460	148,245	960	304,992	1,460	461,834	1,960	618,807
470	151,375	970	308,128	1,470	464,970	1,970	621,948
480	154,504	980	311,265	1,480	468,107	1,980	625,090
490	157,633	990	314,402	1,490	471,244	1,990	628,231
<b>AVERAGE VALUES FOR LITRES PER MILLIMETRE</b>							
1 mm	314	4 mm	1,254	7 mm	2,195		
2 mm	627	5 mm	1,568	8 mm	2,509		
3 mm	941	6 mm	1,882	9 mm	2,823		

Company Name **EXAMPLE**  
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DIP mm	VOLUME litres	DIP mm	VOLUME litres	DIP mm	VOLUME litres	DIP mm	VOLUME litres
2,000	631,373	2,500	788,447	3,000	945,521	3,500	1,102,440
2,010	634,514	2,510	791,588	3,010	948,662	3,510	1,105,573
2,020	637,656	2,520	794,730	3,020	951,804	3,520	1,108,706
2,030	640,797	2,530	797,871	3,030	954,945	3,530	1,111,840
2,040	643,939	2,540	801,013	3,040	958,087	3,540	1,114,973
2,050	647,080	2,550	804,154	3,050	961,228	3,550	1,118,106
2,060	650,222	2,560	807,296	3,060	964,370	3,560	1,121,239
2,070	653,363	2,570	810,437	3,070	967,511	3,570	1,124,372
2,080	656,505	2,580	813,579	3,080	970,653	3,580	1,127,506
2,090	659,646	2,590	816,720	3,090	973,794	3,590	1,130,639
2,100	662,788	2,600	819,862	3,100	976,936	3,600	1,133,772
2,110	665,929	2,610	823,003	3,110	980,077	3,610	1,136,905
2,120	669,071	2,620	826,144	3,120	983,218	3,620	1,140,039
2,130	672,212	2,630	829,286	3,130	986,360	3,630	1,143,172
2,140	675,353	2,640	832,427	3,140	989,501	3,640	1,146,305
2,150	678,495	2,650	835,569	3,150	992,643	3,650	1,149,438
2,160	681,636	2,660	838,710	3,160	995,784	3,660	1,152,572
2,170	684,778	2,670	841,852	3,170	998,926	3,670	1,155,705
2,180	687,919	2,680	844,993	3,180	1,002,067	3,680	1,158,838
2,190	691,061	2,690	848,135	3,190	1,005,209	3,690	1,161,971
2,200	694,202	2,700	851,276	3,200	1,008,350	3,700	1,165,105
2,210	697,344	2,710	854,418	3,210	1,011,492	3,710	1,168,238
2,220	700,485	2,720	857,559	3,220	1,014,633	3,720	1,171,371
2,230	703,627	2,730	860,701	3,230	1,017,775	3,730	1,174,504
2,240	706,768	2,740	863,842	3,240	1,020,916	3,740	1,177,638
2,250	709,910	2,750	866,984	3,250	1,024,058	3,750	1,180,771
2,260	713,051	2,760	870,125	3,260	1,027,199	3,760	1,183,904
2,270	716,193	2,770	873,267	3,270	1,030,341	3,770	1,187,037
2,280	719,334	2,780	876,408	3,280	1,033,482	3,780	1,190,171
2,290	722,476	2,790	879,550	3,290	1,036,624	3,790	1,193,304
2,300	725,617	2,800	882,691	3,300	1,039,765	3,800	1,196,437
2,310	728,759	2,810	885,833	3,310	1,042,907	3,810	1,199,570
2,320	731,900	2,820	888,974	3,320	1,046,041	3,820	1,202,703
2,330	735,042	2,830	892,116	3,330	1,049,175	3,830	1,205,837
2,340	738,183	2,840	895,257	3,340	1,052,308	3,840	1,208,970
2,350	741,325	2,850	898,399	3,350	1,055,441	3,850	1,212,103
2,360	744,466	2,860	901,540	3,360	1,058,574	3,860	1,215,236
2,370	747,607	2,870	904,681	3,370	1,061,708	3,870	1,218,370
2,380	750,749	2,880	907,823	3,380	1,064,841	3,880	1,221,503
2,390	753,890	2,890	910,964	3,390	1,067,974	3,890	1,224,636
2,400	757,032	2,900	914,106	3,400	1,071,107	3,900	1,227,769
2,410	760,173	2,910	917,247	3,410	1,074,241	3,910	1,230,903
2,420	763,315	2,920	920,389	3,420	1,077,374	3,920	1,234,036
2,430	766,456	2,930	923,530	3,430	1,080,507	3,930	1,237,169
2,440	769,598	2,940	926,672	3,440	1,083,640	3,940	1,240,302
2,450	772,739	2,950	929,813	3,450	1,086,774	3,950	1,243,436
2,460	775,881	2,960	932,955	3,460	1,089,907	3,960	1,246,569
2,470	779,022	2,970	936,096	3,470	1,093,040	3,970	1,249,702
2,480	782,164	2,980	939,238	3,480	1,096,173	3,980	1,252,835
2,490	785,305	2,990	942,379	3,490	1,099,307	3,990	1,255,969
<b>AVERAGE VALUES FOR LITRES PER MILLIMETRE</b>							
1 mm	314	4 mm	1,256	7 mm	2,198		
2 mm	628	5 mm	1,570	8 mm	2,512		
3 mm	942	6 mm	1,884	9 mm	2,826		

Company Name **EXAMPLE**  
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DIP mm	VOLUME litres	DIP mm	VOLUME litres	DIP mm	VOLUME litres	DIP mm	VOLUME litres
4,000	1,259,102	4,500	1,415,764	5,000	1,572,426	5,500	1,729,443
4,010	1,262,235	4,510	1,418,897	5,010	1,575,559	5,510	1,732,586
4,020	1,265,368	4,520	1,422,030	5,020	1,578,692	5,520	1,735,730
4,030	1,268,502	4,530	1,425,164	5,030	1,581,826	5,530	1,738,874
4,040	1,271,635	4,540	1,428,297	5,040	1,584,959	5,540	1,742,018
4,050	1,274,768	4,550	1,431,430	5,050	1,588,092	5,550	1,745,161
4,060	1,277,901	4,560	1,434,563	5,060	1,591,225	5,560	1,748,305
4,070	1,281,034	4,570	1,437,696	5,070	1,594,359	5,570	1,751,449
4,080	1,284,168	4,580	1,440,830	5,080	1,597,492	5,580	1,754,592
4,090	1,287,301	4,590	1,443,963	5,090	1,600,625	5,590	1,757,736
4,100	1,290,434	4,600	1,447,096	5,100	1,603,758	5,600	1,760,880
4,110	1,293,567	4,610	1,450,229	5,110	1,606,891	5,610	1,764,024
4,120	1,296,701	4,620	1,453,363	5,120	1,610,025	5,620	1,767,167
4,130	1,299,834	4,630	1,456,496	5,130	1,613,158	5,630	1,770,311
4,140	1,302,967	4,640	1,459,629	5,140	1,616,291	5,640	1,773,455
4,150	1,306,100	4,650	1,462,762	5,150	1,619,424	5,650	1,776,599
4,160	1,309,234	4,660	1,465,896	5,160	1,622,558	5,660	1,779,742
4,170	1,312,367	4,670	1,469,029	5,170	1,625,699	5,670	1,782,886
4,180	1,315,500	4,680	1,472,162	5,180	1,628,843	5,680	1,786,030
4,190	1,318,633	4,690	1,475,295	5,190	1,631,987	5,690	1,789,174
4,200	1,321,767	4,700	1,478,429	5,200	1,635,131	5,700	1,792,317
4,210	1,324,900	4,710	1,481,562	5,210	1,638,274	5,710	1,795,461
4,220	1,328,033	4,720	1,484,695	5,220	1,641,418	5,720	1,798,605
4,230	1,331,166	4,730	1,487,828	5,230	1,644,562	5,730	1,801,748
4,240	1,334,300	4,740	1,490,962	5,240	1,647,705	5,740	1,804,892
4,250	1,337,433	4,750	1,494,095	5,250	1,650,849	5,750	1,808,036
4,260	1,340,566	4,760	1,497,228	5,260	1,653,993	5,760	1,811,180
4,270	1,343,699	4,770	1,500,361	5,270	1,657,137	5,770	1,814,323
4,280	1,346,833	4,780	1,503,495	5,280	1,660,280	5,780	1,817,467
4,290	1,349,966	4,790	1,506,628	5,290	1,663,424	5,790	1,820,611
4,300	1,353,099	4,800	1,509,761	5,300	1,666,568	5,800	1,823,755
4,310	1,356,232	4,810	1,512,894	5,310	1,669,712	5,810	1,826,898
4,320	1,359,365	4,820	1,516,027	5,320	1,672,855	5,820	1,830,042
4,330	1,362,499	4,830	1,519,161	5,330	1,675,999	5,830	1,833,186
4,340	1,365,632	4,840	1,522,294	5,340	1,679,143	5,840	1,836,330
4,350	1,368,765	4,850	1,525,427	5,350	1,682,287	5,850	1,839,473
4,360	1,371,898	4,860	1,528,560	5,360	1,685,430	5,860	1,842,617
4,370	1,375,032	4,870	1,531,694	5,370	1,688,574	5,870	1,845,761
4,380	1,378,165	4,880	1,534,827	5,380	1,691,718	5,880	1,848,905
4,390	1,381,298	4,890	1,537,960	5,390	1,694,861	5,890	1,852,048
4,400	1,384,431	4,900	1,541,093	5,400	1,698,005	5,900	1,855,192
4,410	1,387,565	4,910	1,544,227	5,410	1,701,149	5,910	1,858,336
4,420	1,390,698	4,920	1,547,360	5,420	1,704,293	5,920	1,861,479
4,430	1,393,831	4,930	1,550,493	5,430	1,707,436	5,930	1,864,623
4,440	1,396,964	4,940	1,553,626	5,440	1,710,580	5,940	1,867,767
4,450	1,400,098	4,950	1,556,760	5,450	1,713,724	5,950	1,870,911
4,460	1,403,231	4,960	1,559,893	5,460	1,716,868	5,960	1,874,054
4,470	1,406,364	4,970	1,563,026	5,470	1,720,011	5,970	1,877,198
4,480	1,409,497	4,980	1,566,159	5,480	1,723,155	5,980	1,880,342
4,490	1,412,631	4,990	1,569,293	5,490	1,726,299	5,990	1,883,486
<b>AVERAGE VALUES FOR LITRES PER MILLIMETRE</b>							
1 mm	314	4 mm	1,255	7 mm	2,196		
2 mm	627	5 mm	1,568	8 mm	2,509		
3 mm	941	6 mm	1,882	9 mm	2,823		

Company Name **EXAMPLE**  
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Reference: PS060000

DIP mm	VOLUME litres	DIP mm	VOLUME litres	DIP mm	VOLUME litres	DIP mm	VOLUME litres
6,000	1,886,629	6,500	2,043,816	7,000	2,200,897	7,500	2,357,811
6,010	1,889,773	6,510	2,046,960	7,010	2,204,036	7,510	2,360,949
6,020	1,892,917	6,520	2,050,104	7,020	2,207,174	7,520	2,364,087
6,030	1,896,061	6,530	2,053,247	7,030	2,210,312	7,530	2,367,225
6,040	1,899,204	6,540	2,056,391	7,040	2,213,450	7,540	2,370,364
6,050	1,902,348	6,550	2,059,535	7,050	2,216,589	7,550	2,373,502
6,060	1,905,492	6,560	2,062,679	7,060	2,219,727	7,560	2,376,640
6,070	1,908,635	6,570	2,065,822	7,070	2,222,865	7,570	2,379,778
6,080	1,911,779	6,580	2,068,966	7,080	2,226,003	7,580	2,382,917
6,090	1,914,923	6,590	2,072,110	7,090	2,229,142	7,590	2,386,055
6,100	1,918,067	6,600	2,075,253	7,100	2,232,280	7,600	2,389,193
6,110	1,921,210	6,610	2,078,397	7,110	2,235,418	7,610	2,392,332
6,120	1,924,354	6,620	2,081,541	7,120	2,238,556	7,620	2,395,470
6,130	1,927,498	6,630	2,084,685	7,130	2,241,695	7,630	2,398,608
6,140	1,930,642	6,640	2,087,828	7,140	2,244,833	7,640	2,401,746
6,150	1,933,785	6,650	2,090,972	7,150	2,247,971	7,650	2,404,885
6,160	1,936,929	6,660	2,094,116	7,160	2,251,110	7,660	2,408,023
6,170	1,940,073	6,670	2,097,260	7,170	2,254,248	7,670	2,411,161
6,180	1,943,217	6,680	2,100,403	7,180	2,257,386	7,680	2,414,299
6,190	1,946,360	6,690	2,103,547	7,190	2,260,524	7,690	2,417,438
6,200	1,949,504	6,700	2,106,691	7,200	2,263,663	7,700	2,420,576
6,210	1,952,648	6,710	2,109,835	7,210	2,266,801	7,710	2,423,714
6,220	1,955,792	6,720	2,112,978	7,220	2,269,939	7,720	2,426,852
6,230	1,958,935	6,730	2,116,122	7,230	2,273,077	7,730	2,429,991
6,240	1,962,079	6,740	2,119,266	7,240	2,276,216	7,740	2,433,129
6,250	1,965,223	6,750	2,122,409	7,250	2,279,354	7,750	2,436,267
6,260	1,968,366	6,760	2,125,553	7,260	2,282,492	7,760	2,439,405
6,270	1,971,510	6,770	2,128,697	7,270	2,285,630	7,770	2,442,544
6,280	1,974,654	6,780	2,131,841	7,280	2,288,769	7,780	2,445,682
6,290	1,977,798	6,790	2,134,984	7,290	2,291,907	7,790	2,448,820
6,300	1,980,941	6,800	2,138,128	7,300	2,295,045	7,800	2,451,959
6,310	1,984,085	6,810	2,141,270	7,310	2,298,184	7,810	2,455,097
6,320	1,987,229	6,820	2,144,409	7,320	2,301,322	7,820	2,458,235
6,330	1,990,373	6,830	2,147,547	7,330	2,304,460	7,830	2,461,373
6,340	1,993,516	6,840	2,150,685	7,340	2,307,598	7,840	2,464,512
6,350	1,996,660	6,850	2,153,823	7,350	2,310,737	7,850	2,467,650
6,360	1,999,804	6,860	2,156,962	7,360	2,313,875	7,860	2,470,788
6,370	2,002,948	6,870	2,160,100	7,370	2,317,013	7,870	2,473,926
6,380	2,006,091	6,880	2,163,238	7,380	2,320,151	7,880	2,477,065
6,390	2,009,235	6,890	2,166,376	7,390	2,323,290	7,890	2,480,203
6,400	2,012,379	6,900	2,169,515	7,400	2,326,428	7,900	2,483,341
6,410	2,015,522	6,910	2,172,653	7,410	2,329,566	7,910	2,486,479
6,420	2,018,666	6,920	2,175,791	7,420	2,332,704	7,920	2,489,618
6,430	2,021,810	6,930	2,178,929	7,430	2,335,843	7,930	2,492,756
6,440	2,024,954	6,940	2,182,068	7,440	2,338,981	7,940	2,495,894
6,450	2,028,097	6,950	2,185,206	7,450	2,342,119	7,950	2,499,033
6,460	2,031,241	6,960	2,188,344	7,460	2,345,258	7,960	2,502,171
6,470	2,034,385	6,970	2,191,482	7,470	2,348,396	7,970	2,505,309
6,480	2,037,529	6,980	2,194,621	7,480	2,351,534	7,980	2,508,447
6,490	2,040,672	6,990	2,197,759	7,490	2,354,672	7,990	2,511,586
<b>AVERAGE VALUES FOR LITRES PER MILLIMETRE</b>							
1 mm	314	4 mm	1,256	7 mm	2,198		
2 mm	628	5 mm	1,570	8 mm	2,512		
3 mm	942	6 mm	1,884	9 mm	2,826		

Company Name **EXAMPLE**  
 Tank ID - Terminal Name

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Reference: PS060000

DIP mm	VOLUME litres	DIP mm	VOLUME litres	DIP mm	VOLUME litres	DIP mm	VOLUME litres
8,000	2,514,724	8,500	2,671,637	9,000	2,828,661	9,500	2,985,740
8,010	2,517,862	8,510	2,674,775	9,010	2,831,802	9,510	2,988,881
8,020	2,521,000	8,520	2,677,914	9,020	2,834,944	9,520	2,992,023
8,030	2,524,139	8,530	2,681,052	9,030	2,838,086	9,530	2,995,165
8,040	2,527,277	8,540	2,684,190	9,040	2,841,227	9,540	2,998,306
8,050	2,530,415	8,550	2,687,328	9,050	2,844,369	9,550	3,001,448
8,060	2,533,553	8,560	2,690,467	9,060	2,847,510	9,560	3,004,589
8,070	2,536,692	8,570	2,693,605	9,070	2,850,652	9,570	3,007,731
8,080	2,539,830	8,580	2,696,743	9,080	2,853,793	9,580	3,010,872
8,090	2,542,968	8,590	2,699,882	9,090	2,856,935	9,590	3,014,014
8,100	2,546,107	8,600	2,703,020	9,100	2,860,077	9,600	3,017,156
8,110	2,549,245	8,610	2,706,158	9,110	2,863,218	9,610	3,020,297
8,120	2,552,383	8,620	2,709,296	9,120	2,866,360	9,620	3,023,439
8,130	2,555,521	8,630	2,712,435	9,130	2,869,501	9,630	3,026,580
8,140	2,558,660	8,640	2,715,573	9,140	2,872,643	9,640	3,029,722
8,150	2,561,798	8,650	2,718,711	9,150	2,875,785	9,650	3,032,864
8,160	2,564,936	8,660	2,721,849	9,160	2,878,926	9,660	3,036,005
8,170	2,568,074	8,670	2,724,989	9,170	2,882,068	9,670	3,039,147
8,180	2,571,213	8,680	2,728,130	9,180	2,885,209	9,680	3,042,288
8,190	2,574,351	8,690	2,731,272	9,190	2,888,351	9,690	3,045,430
8,200	2,577,489	8,700	2,734,413	9,200	2,891,492	9,700	3,048,571
8,210	2,580,627	8,710	2,737,555	9,210	2,894,634	9,710	3,051,713
8,220	2,583,766	8,720	2,740,697	9,220	2,897,776	9,720	3,054,855
8,230	2,586,904	8,730	2,743,838	9,230	2,900,917	9,730	3,057,996
8,240	2,590,042	8,740	2,746,980	9,240	2,904,059	9,740	3,061,138
8,250	2,593,181	8,750	2,750,121	9,250	2,907,200	9,750	3,064,279
8,260	2,596,319	8,760	2,753,263	9,260	2,910,342	9,760	3,067,421
8,270	2,599,457	8,770	2,756,404	9,270	2,913,483	9,770	3,070,562
8,280	2,602,595	8,780	2,759,546	9,280	2,916,625	9,780	3,073,704
8,290	2,605,734	8,790	2,762,688	9,290	2,919,767	9,790	3,076,846
8,300	2,608,872	8,800	2,765,829	9,300	2,922,908	9,800	3,079,987
8,310	2,612,010	8,810	2,768,971	9,310	2,926,050	9,810	3,083,129
8,320	2,615,148	8,820	2,772,112	9,320	2,929,191	9,820	3,086,270
8,330	2,618,287	8,830	2,775,254	9,330	2,932,333	9,830	3,089,412
8,340	2,621,425	8,840	2,778,396	9,340	2,935,475	9,840	3,092,554
8,350	2,624,563	8,850	2,781,537	9,350	2,938,616	9,850	3,095,695
8,360	2,627,701	8,860	2,784,679	9,360	2,941,758	9,860	3,098,837
8,370	2,630,840	8,870	2,787,820	9,370	2,944,899	9,870	3,101,978
8,380	2,633,978	8,880	2,790,962	9,380	2,948,041	9,880	3,105,120
8,390	2,637,116	8,890	2,794,103	9,390	2,951,182	9,890	3,108,261
8,400	2,640,254	8,900	2,797,245	9,400	2,954,324	9,900	3,111,403
8,410	2,643,393	8,910	2,800,387	9,410	2,957,466	9,910	3,114,545
8,420	2,646,531	8,920	2,803,528	9,420	2,960,607	9,920	3,117,686
8,430	2,649,669	8,930	2,806,670	9,430	2,963,749	9,930	3,120,828
8,440	2,652,808	8,940	2,809,811	9,440	2,966,890	9,940	3,123,969
8,450	2,655,946	8,950	2,812,953	9,450	2,970,032	9,950	3,127,111
8,460	2,659,084	8,960	2,816,094	9,460	2,973,173	9,960	3,130,252
8,470	2,662,222	8,970	2,819,236	9,470	2,976,315	9,970	3,133,394
8,480	2,665,361	8,980	2,822,378	9,480	2,979,457	9,980	3,136,536
8,490	2,668,499	8,990	2,825,519	9,490	2,982,598	9,990	3,139,677
<b>AVERAGE VALUES FOR LITRES PER MILLIMETRE</b>							
1 mm	314	4 mm	1,256	7 mm	2,199		
2 mm	628	5 mm	1,571	8 mm	2,513		
3 mm	942	6 mm	1,885	9 mm	2,827		

Company Name **EXAMPLE**  
 Tank ID - Terminal Name

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Reference: PS060000

DIP mm	VOLUME litres	DIP mm	VOLUME litres	DIP mm	VOLUME litres	DIP mm	VOLUME litres
10,000	3,142,819	10,500	3,299,834	11,000	3,456,641	11,500	3,613,449
10,010	3,145,960	10,510	3,302,970	11,010	3,459,778	11,510	3,616,585
10,020	3,149,102	10,520	3,306,106	11,020	3,462,914	11,520	3,619,721
10,030	3,152,244	10,530	3,309,242	11,030	3,466,050	11,530	3,622,857
10,040	3,155,385	10,540	3,312,378	11,040	3,469,186	11,540	3,625,994
10,050	3,158,527	10,550	3,315,515	11,050	3,472,322	11,550	3,629,130
10,060	3,161,668	10,560	3,318,651	11,060	3,475,458	11,560	3,632,266
10,070	3,164,810	10,570	3,321,787	11,070	3,478,594	11,570	3,635,402
10,080	3,167,951	10,580	3,324,923	11,080	3,481,731	11,580	3,638,538
10,090	3,171,093	10,590	3,328,059	11,090	3,484,867	11,590	3,641,674
10,100	3,174,235	10,600	3,331,195	11,100	3,488,003	11,600	3,644,811
10,110	3,177,376	10,610	3,334,331	11,110	3,491,139	11,610	3,647,947
10,120	3,180,518	10,620	3,337,468	11,120	3,494,275	11,620	3,651,083
10,130	3,183,659	10,630	3,340,604	11,130	3,497,411	11,630	3,654,219
10,140	3,186,801	10,640	3,343,740	11,140	3,500,548	11,640	3,657,355
10,150	3,189,943	10,650	3,346,876	11,150	3,503,684	11,650	3,660,491
10,160	3,193,084	10,660	3,350,012	11,160	3,506,820	11,660	3,663,627
10,170	3,196,226	10,670	3,353,148	11,170	3,509,956	11,670	3,666,764
10,180	3,199,367	10,680	3,356,285	11,180	3,513,092	11,680	3,669,900
10,190	3,202,509	10,690	3,359,421	11,190	3,516,228	11,690	3,673,036
10,200	3,205,650	10,700	3,362,557	11,200	3,519,364	11,700	3,676,172
10,210	3,208,792	10,710	3,365,693	11,210	3,522,501	11,710	3,679,308
10,220	3,211,934	10,720	3,368,829	11,220	3,525,637	11,720	3,682,444
10,230	3,215,075	10,730	3,371,965	11,230	3,528,773	11,730	3,685,581
10,240	3,218,217	10,740	3,375,101	11,240	3,531,909	11,740	3,688,717
10,250	3,221,358	10,750	3,378,238	11,250	3,535,045	11,750	3,691,853
10,260	3,224,500	10,760	3,381,374	11,260	3,538,181	11,760	3,694,989
10,270	3,227,641	10,770	3,384,510	11,270	3,541,317	11,770	3,698,125
10,280	3,230,783	10,780	3,387,646	11,280	3,544,454	11,780	3,701,261
10,290	3,233,925	10,790	3,390,782	11,290	3,547,590	11,790	3,704,397
10,300	3,237,066	10,800	3,393,918	11,300	3,550,726	11,800	3,707,534
10,310	3,240,208	10,810	3,397,054	11,310	3,553,862	11,810	3,710,670
10,320	3,243,349	10,820	3,400,191	11,320	3,556,998	11,820	3,713,806
10,330	3,246,491	10,830	3,403,327	11,330	3,560,134	11,830	3,716,942
10,340	3,249,633	10,840	3,406,463	11,340	3,563,271	11,840	3,720,078
10,350	3,252,774	10,850	3,409,599	11,350	3,566,407	11,850	3,723,214
10,360	3,255,916	10,860	3,412,735	11,360	3,569,543	11,860	3,726,350
10,370	3,259,057	10,870	3,415,871	11,370	3,572,679	11,870	3,729,487
10,380	3,262,199	10,880	3,419,008	11,380	3,575,815	11,880	3,732,623
10,390	3,265,336	10,890	3,422,144	11,390	3,578,951	11,890	3,735,759
10,400	3,268,472	10,900	3,425,280	11,400	3,582,087	11,900	3,738,895
10,410	3,271,608	10,910	3,428,416	11,410	3,585,224	11,910	3,742,031
10,420	3,274,745	10,920	3,431,552	11,420	3,588,360	11,920	3,745,167
10,430	3,277,881	10,930	3,434,688	11,430	3,591,496	11,930	3,748,304
10,440	3,281,017	10,940	3,437,824	11,440	3,594,632	11,940	3,751,440
10,450	3,284,153	10,950	3,440,961	11,450	3,597,768	11,950	3,754,576
10,460	3,287,289	10,960	3,444,097	11,460	3,600,904	11,960	3,757,712
10,470	3,290,425	10,970	3,447,233	11,470	3,604,041	11,970	3,760,848
10,480	3,293,561	10,980	3,450,369	11,480	3,607,177	11,980	3,763,984
10,490	3,296,698	10,990	3,453,505	11,490	3,610,313	11,990	3,767,120
<b>AVERAGE VALUES FOR LITRES PER MILLIMETRE</b>							
1 mm	314	4 mm	1,254	7 mm	2,195		
2 mm	627	5 mm	1,568	8 mm	2,509		
3 mm	941	6 mm	1,882	9 mm	2,823		

Company Name **EXAMPLE**  
 Tank ID - Terminal Name

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Reference: PS060000

DIP mm	VOLUME litres	DIP mm	VOLUME litres	DIP mm	VOLUME litres	DIP mm	VOLUME litres
12,000	3,770,257	12,500	3,927,220	13,000	4,084,315	13,500	4,241,410
12,010	3,773,393	12,510	3,930,362	13,010	4,087,457	13,510	4,244,551
12,020	3,776,529	12,520	3,933,504	13,020	4,090,599	13,520	4,247,693
12,030	3,779,665	12,530	3,936,646	13,030	4,093,741	13,530	4,250,835
12,040	3,782,801	12,540	3,939,788	13,040	4,096,883	13,540	4,253,977
12,050	3,785,937	12,550	3,942,930	13,050	4,100,024	13,550	4,257,119
12,060	3,789,074	12,560	3,946,072	13,060	4,103,166	13,560	4,260,261
12,070	3,792,210	12,570	3,949,214	13,070	4,106,308	13,570	4,263,403
12,080	3,795,346	12,580	3,952,355	13,080	4,109,450	13,580	4,266,545
12,090	3,798,482	12,590	3,955,497	13,090	4,112,592	13,590	4,269,687
12,100	3,801,618	12,600	3,958,639	13,100	4,115,734	13,600	4,272,828
12,110	3,804,754	12,610	3,961,781	13,110	4,118,876	13,610	4,275,970
12,120	3,807,890	12,620	3,964,923	13,120	4,122,018	13,620	4,279,112
12,130	3,811,027	12,630	3,968,065	13,130	4,125,160	13,630	4,282,254
12,140	3,814,163	12,640	3,971,207	13,140	4,128,301	13,640	4,285,396
12,150	3,817,299	12,650	3,974,349	13,150	4,131,443	13,650	4,288,538
12,160	3,820,435	12,660	3,977,491	13,160	4,134,585	13,660	4,291,680
12,170	3,823,571	12,670	3,980,633	13,170	4,137,727	13,670	4,294,822
12,180	3,826,707	12,680	3,983,774	13,180	4,140,869	13,680	4,297,964
12,190	3,829,844	12,690	3,986,916	13,190	4,144,011	13,690	4,301,106
12,200	3,832,980	12,700	3,990,058	13,200	4,147,153	13,700	4,304,247
12,210	3,836,116	12,710	3,993,200	13,210	4,150,295	13,710	4,307,389
12,220	3,839,252	12,720	3,996,342	13,220	4,153,437	13,720	4,310,531
12,230	3,842,389	12,730	3,999,484	13,230	4,156,578	13,730	4,313,673
12,240	3,845,531	12,740	4,002,626	13,240	4,159,720	13,740	4,316,815
<b>Max Safe Fill = 12.280mm</b>							
12,250	3,848,673	12,750	4,005,768	13,250	4,162,862	13,750	4,319,957
12,260	3,851,815	12,760	4,008,910	13,260	4,166,004	13,760	4,323,099
12,270	3,854,957	12,770	4,012,051	13,270	4,169,146	13,770	4,326,241
12,280	3,858,099	12,780	4,015,193	13,280	4,172,288	13,780	4,329,383
12,290	3,861,241	12,790	4,018,335	13,290	4,175,430	13,790	4,332,524
12,300	3,864,383	12,800	4,021,477	13,300	4,178,572	13,800	4,335,666
12,310	3,867,524	12,810	4,024,619	13,310	4,181,714	13,810	4,338,808
12,320	3,870,666	12,820	4,027,761	13,320	4,184,856	13,820	4,341,950
12,330	3,873,808	12,830	4,030,903	13,330	4,187,997	13,830	4,345,092
12,340	3,876,950	12,840	4,034,045	13,340	4,191,139	13,840	4,348,234
12,350	3,880,092	12,850	4,037,187	13,350	4,194,281	13,850	4,351,376
12,360	3,883,234	12,860	4,040,328	13,360	4,197,423	13,860	4,354,518
12,370	3,886,376	12,870	4,043,470	13,370	4,200,565	13,870	4,357,660
12,380	3,889,518	12,880	4,046,612	13,380	4,203,707	13,880	4,360,801
12,390	3,892,660	12,890	4,049,754	13,390	4,206,849	13,890	4,363,943
12,400	3,895,801	12,900	4,052,896	13,400	4,209,991	13,900	4,367,085
12,410	3,898,943	12,910	4,056,038	13,410	4,213,133	13,910	4,370,227
12,420	3,902,085	12,920	4,059,180	13,420	4,216,274	13,920	4,373,369
12,430	3,905,227	12,930	4,062,322	13,430	4,219,416	13,930	4,376,511
12,440	3,908,369	12,940	4,065,464	13,440	4,222,558	13,940	4,379,653
12,450	3,911,511	12,950	4,068,605	13,450	4,225,700	13,950	4,382,795
12,460	3,914,653	12,960	4,071,747	13,460	4,228,842	13,960	4,385,937
12,470	3,917,795	12,970	4,074,889	13,470	4,231,984	13,970	4,389,078
12,480	3,920,937	12,980	4,078,031	13,480	4,235,126	13,980	4,392,220
12,490	3,924,078	12,990	4,081,173	13,490	4,238,268	13,990	4,395,362

AVERAGE VALUES FOR LITRES PER MILLIMETRE					
1 mm	314	4 mm	1,257	7 mm	2,199
2 mm	628	5 mm	1,571	8 mm	2,514
3 mm	943	6 mm	1,885	9 mm	2,828

TANK CALIBRATION - ISO 7507

## CRITICAL LEVEL CERTIFICATE

TANK	Tank ID
LOCATION	Terminal Name
CLIENT	Company Name EXAMPLE
DATE OF CALIBRATION	02/03/06
CERTIFICATE	PS060000

### NOMINAL TANK DIMENSIONS

THEORETICAL EXTERNAL DIAMETER	20015 mm
SHELL HEIGHT	14145 mm
SHELL HT ABOVE DIP PLATE	13992 mm
VOLUME BELOW DIP PLATE	8009 ltrs
MAXIMUM SAFE FILL HEIGHT	12280 mm
REFERENCE HEIGHT AT DIP POINT	15545 mm

LEVEL No.	LEVEL	VOLUME		
	mm	ltrs	ltrs/mm	
1	0	8,009	201.83835	
2	20	12,045	249.90744	
3	40	17,043	287.92853	
4	57	21,938	313.63227	
5	220	73,060	313.66352	
6	240	79,334	313.70143	
7	300	98,156	313.15052	
8	380	123,208	312.96608	
9	470	151,375	312.93130	
10	520	167,021	313.53375	
11	560	179,563	313.53062	
12	850	270,486	313.68381	
13	1,350	427,328	313.68381	<b>blanket lower limit</b>
14	1,520	480,655	313.68381	<b>blanket upper limit</b>
15	1,677	529,903	314.14797	
16	3,312	1,043,535	313.32401	
17	5,162	1,623,184	314.37353	
18	6,807	2,140,329	313.82657	
19	8,667	2,724,046	314.15801	
20	10,382	3,262,827	313.61522	
21	12,228	3,841,761	314.18921	
22	13,992	4,395,991		

The above critical levels are the heights in the tank, relative to the dip plate, at which the volume per unit area changes.

This is the base data from which the tank calibration table is constructed. These levels and volumes have been corrected for thermal and liquid head expansion of the tank shell, but not for meniscus effect on the dip tape.

For and on behalf of:  
 PETROSPECTION Pty Ltd