

PTT AROMATICS AND REFINING PUBLIC CO., LTD.

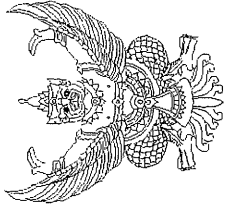
TANK CALIBRATION TABLE

TANK NO. V-5220

AT MAP TA PHUT, RAYONG

REPORT NO. PTL/0396/2011

MARCH 2011



ที่ กค 0622/ 82๕1

กรมสรรพสามิต

ถนนนครไชยศรี กรุงเทพฯ 10300

๙ เมษายน 2554

เรื่อง อนุมัติให้ใช้ตารางคำนวณปริมาณความจุถังพร้อมด้วยเครื่องวัดระดับและเครื่องวัดอุณหภูมิ  
ชนิดอัตโนมัติประจำถังหมายเลข V-5220

เรียน กรรมการผู้จัดการใหญ่บริษัท ปตท. อะโรเมติกส์และการกลั่น จำกัด (มหาชน)

อ้างถึง หนังสือบริษัท ปตท. อะโรเมติกส์และการกลั่น จำกัด (มหาชน) ที่ PTTAR-MO-OUT11-043  
ลงวันที่ 17 มีนาคม 2554

สิ่งที่ส่งมาด้วย สำเนาตารางคำนวณปริมาณความจุประจำถังหมายเลข V-5220 จำนวน 1 ชุด

ตามหนังสือที่อ้างถึง บริษัทฯ ได้จัดส่งตารางคำนวณปริมาณความจุประจำถังหมายเลข  
V-5220 เพื่อขออนุมัติใช้เป็นเกณฑ์ในการคำนวณภาษีสรรพสามิต ณ โรงกลั่นน้ำมันบริษัทฯ เลขที่ 8  
ถนนเอ-แปด ตำบลมาบตาพุด อำเภอเมือง จังหวัดระยอง ความละเอียดแจ้งแล้ว นั้น

กรมสรรพสามิตพิจารณาแล้ว อนุมัติให้บริษัทฯ ใช้ตารางคำนวณปริมาณความจุประจำถัง  
หมายเลข V-5220 เป็นเกณฑ์ในการคำนวณปริมาณความจุเพื่อการคำนวณภาษีผลิตภัณฑ์ LPG โดยใช้รวม  
กับเครื่องวัดระดับชนิดอัตโนมัติ SAAB Tank Radar Model RTG 3930 หมายเลขเครื่อง 44865 และเครื่องวัด  
อุณหภูมิชนิดอัตโนมัติ SAAB Model DAU 2100 หมายเลขเครื่อง 2804 ซึ่งติดตั้งกับถังดังกล่าวได้  
ทั้งนี้ มีกำหนดระยะเวลาไม่เกิน 5 ปี นับตั้งแต่วันที่ลงนามในหนังสือนี้

จึงเรียนมาเพื่อทราบ

ขอแสดงความนับถือ

(นางสาวณารัตน์ กัลยาณสูตร)

รองอธิบดี ปฏิบัติราชการแทน

อธิบดีกรมสรรพสามิต

กลุ่มพัฒนาและตรวจสอบทางเทคนิค

โทร. 0 2241 5600-19 ต่อ 55833

โทรสาร 0 2243 8912

/ สำเนาส่ง...

- ส่ง 1. สำนักงานสรรพสามิตภาคที่ 2
2. สำนักงานสรรพสามิตพื้นที่ระยอง 1
3. สำนักงานสรรพสามิตควบคุมโรงกลั่นน้ำมันบริษัท ปตท. อะโรเมติกส์และการกลั่น จำกัด (มหาชน)

## PTT Aromatics and Refining Public Co., Ltd.

สถานที่ตั้ง :

ณ โรงกลั่นน้ำมันบริษัท เลขที่ 8 ถ.โล-8 นิคมอุตสาหกรรมมาบตาพุด ต.มาบตาพุด อ.เมือง จ.ระยอง

Calibration Table Tank No. V-5220

1. Calculation is Based on ASTM Standard D 1408

2. Date of Measurement : March 18, 2011

3. Product : LPG

4. Density @ 15 Deg.C : 0.5000-0.6000

5. Service Temperature : 27.0 - 40.0 Deg.C

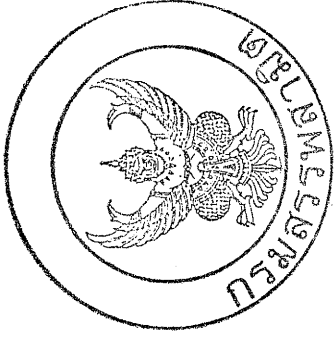
6. The Zero Point is 61.9 cms From The Bottom of Sphere.

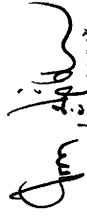
7. Capacity 100 % : 1,768,612 Litres

8. When The Temperature of Product in The Storage Tank is Lower  
or Higher Than 33.5 Deg.C. The Figure Which is Read

From The Tank Calibration Table Must be Multiplied By

" Tank Volume Correction Factor " Attached.



  
(นายธนา ปลั่งখন)  
วิศวกรชำนาญการพิเศษ

Computed By



Approved By

นางสาว วาสนา

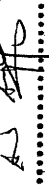
EXCISE OFFICER  
(นายมานะ ถิ่นทองประเสริฐ)  
วิศวกรชำนาญการ

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ผู้รับรอง ..... 

ผู้เชี่ยวชาญเฉพาะด้านวิศวกรรมทั่วไป

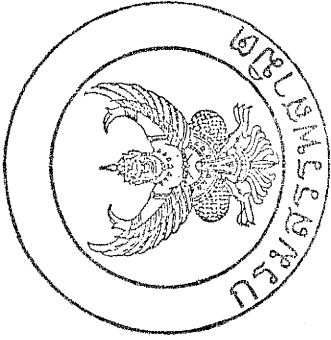
กลุ่มพัฒนาและตรวจสอบทางเทคนิค

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TANK VOLUME CORRECTION FACTOR

The figure which is read from the tank calibration table must be multiplied by the factor below. When the temperature of product is lower or higher than 33.5 Deg.c.

Temp(C)	Factor	Temp(C)	Factor
26.25	0.9997455	33.75	1.0000088
26.50	0.9997543	34.00	1.0000176
26.75	0.9997631	34.25	1.0000263
27.00	0.9997719	34.50	1.0000351
27.25	0.9997806	34.75	1.0000439
27.50	0.9997894	35.00	1.0000527
27.75	0.9997982	35.25	1.0000614
28.00	0.9998070	35.50	1.0000702
28.25	0.9998157	35.75	1.0000790
28.50	0.9998245	36.00	1.0000878
28.75	0.9998333	36.25	1.0000965
29.00	0.9998421	36.50	1.0001053
29.25	0.9998508	36.75	1.0001141
29.50	0.9998596	37.00	1.0001229
29.75	0.9998684	37.25	1.0001316
30.00	0.9998772	37.50	1.0001404
30.25	0.9998859	37.75	1.0001492
30.50	0.9998947	38.00	1.0001580
30.75	0.9999035	38.25	1.0001667
31.00	0.9999123	38.50	1.0001755
31.25	0.9999210	38.75	1.0001843
31.50	0.9999298	39.00	1.0001931
31.75	0.9999386	39.25	1.0002018
32.00	0.9999474	39.50	1.0002106
32.25	0.9999561	39.75	1.0002194
32.50	0.9999649	40.00	1.0002282
32.75	0.9999737	40.25	1.0002369
33.00	0.9999825	40.50	1.0002457
33.25	0.9999912	40.75	1.0002545
33.50	1.0000000	41.00	1.0002633

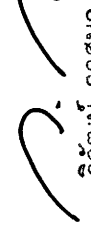


For other temperature , calculate by the formular :

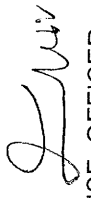
$$\text{Factor} = 1 + 0.0000351 \times [T - (33.5)]$$

T = Temperature of product (Deg.c)

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Intertek Testing Services (Thailand) Limited

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วิศวกรโรงแห่ยานาถการ

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Dip cms	Volume Litres	Diff Litres/cms	Volume Litres	Diff Litres/cms
0	10,576	281.799	25,153	449.571
1	10,858	286.116	25,603	453.636
2	11,144	290.426	26,056	457.695
3	11,435	294.731	26,514	461.748
4	11,729	299.029	26,976	465.795
5	12,028	303.320	27,442	469.835
6	12,332	307.606	27,911	473.869
7	12,639	311.885	28,385	477.897
8	12,951	316.158	28,863	481.919
9	13,267	320.424	29,345	485.934
10	13,588	324.684	29,831	489.943
11	13,912	328.938	30,321	493.945
12	14,241	333.186	30,815	497.942
13	14,574	337.428	31,313	501.932
14	14,912	341.663	31,815	505.916
15	15,254	345.892	32,321	509.893
16	15,599	350.114	32,831	513.864
17	15,950	354.330	33,345	517.829
18	16,304	358.540	33,862	521.788
19	16,662	362.744	34,384	525.740
20	17,025	366.942	34,910	529.686
21	17,392	371.133	35,440	533.626
22	17,763	375.318	35,973	537.560
23	18,139	379.496	36,511	541.487
24	18,518	383.668	37,052	545.408
25	18,902	387.834	37,598	549.323
26	19,290	391.994	38,147	553.231
27	19,682	396.148	38,700	557.133
28	20,078	400.295	39,257	561.029
29	20,478	404.436	39,818	564.918
30	20,882	408.570	40,383	568.802
31	21,291	412.699	40,952	572.679
32	21,704	416.821	41,525	576.549
33	22,121	420.936	42,101	580.414
34	22,541	425.046	42,682	584.272
35	22,967	429.149	43,266	588.124
36	23,396	433.246	43,854	591.969
37	23,829	437.337	44,446	595.809
38	24,266	441.421	45,042	599.642
39	24,708	445.499	45,642	603.468

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Intertek Testing Services (Thailand) Limited

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วิศวกรรมโยธาชำนาญการ

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PTT Aromatics and Refining , Map Ta Phut

Tank No. V-5220

Volume 100 %

Page

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Litres

Dip cms	Volume Litres	Diff Litres/cms	Bip cms	Volume Litres	Diff Litres/cms
80	46,245	607.289	120	73,449	754.953
81	46,852	611.103	121	74,204	758.516
82	47,463	614.911	122	74,963	762.072
83	48,078	618.712	123	75,725	765.622
84	48,697	622.508	124	76,491	769.166
85	49,320	626.297	125	77,260	772.704
86	49,946	630.079	126	78,033	776.235
87	50,576	633.856	127	78,809	779.761
88	51,210	637.626	128	79,589	783.279
89	51,847	641.390	129	80,372	786.792
90	52,489	645.147	130	81,159	790.298
91	53,134	648.899	131	81,949	793.798
92	53,783	652.644	132	82,743	797.292
93	54,435	656.382	133	83,540	800.779
94	55,092	660.115	134	84,341	804.260
95	55,752	663.841	135	85,145	807.735
96	56,416	667.561	136	85,953	811.204
97	57,083	671.274	137	86,764	814.666
98	57,755	674.982	138	87,579	818.122
99	58,430	678.683	139	88,397	821.571
100	59,108	682.378	140	89,218	825.015
101	59,791	686.066	141	90,043	828.452
102	60,477	689.748	142	90,872	831.883
103	61,166	693.424	143	91,704	835.307
104	61,860	697.094	144	92,539	838.726
105	62,557	700.757	145	93,378	842.138
106	63,258	704.414	146	94,220	845.543
107	63,962	708.065	147	95,065	848.943
108	64,670	711.709	148	95,914	852.336
109	65,382	715.347	149	96,767	855.723
110	66,097	718.979	150	97,622	859.103
111	66,816	722.605	151	98,481	862.478
112	67,539	726.224	152	99,344	865.846
113	68,265	729.837	153	100,210	869.207
114	68,995	733.444	154	101,079	872.563
115	69,728	737.045	155	101,952	875.912
116	70,465	740.639	156	102,827	879.255
117	71,206	744.227	157	103,707	882.591
118	71,950	747.808	158	104,589	885.922
119	72,698	751.384	159	105,475	889.246

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Intertek Testing Services (Thailand) Limited



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วิศวกรชำนาญการ

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PTT Aromatics and Refining Public Co., Ltd.

Dip cms	Volume Litres	Diff Litres/cms	Volume Litres	Diff Litres/cms
160	106,365	892,563	200	144,588
161	107,257	895,875	201	145,608
162	108,153	899,180	202	146,631
163	109,052	902,479	203	147,657
164	109,955	905,772	204	148,687
165	110,860	909,058	205	149,719
166	111,769	912,338	206	150,754
167	112,682	915,612	207	151,793
168	113,597	918,879	208	152,834
169	114,516	922,140	209	153,879
170	115,438	925,395	210	154,926
171	116,364	928,644	211	155,976
172	117,292	931,886	212	157,030
173	118,224	935,122	213	158,086
174	119,159	938,352	214	159,146
175	120,098	941,575	215	160,208
176	121,039	944,793	216	161,274
177	121,984	948,004	217	162,342
178	122,932	951,208	218	163,413
179	123,883	954,406	219	164,487
180	124,838	957,599	220	165,565
181	125,795	960,784	221	166,645
182	126,756	963,964	222	167,728
183	127,720	967,137	223	168,814
184	128,687	970,304	224	169,903
185	129,658	973,465	225	170,994
186	130,631	976,619	226	172,089
187	131,608	979,767	227	173,187
188	132,587	982,909	228	174,287
189	133,570	986,044	229	175,391
190	134,556	989,174	230	176,497
191	135,546	992,297	231	177,606
192	136,538	995,413	232	178,718
193	137,533	998,524	233	179,833
194	138,532	1,001,628	234	180,951
195	139,533	1,004,725	235	182,072
196	140,538	1,007,817	236	183,195
197	141,546	1,010,902	237	184,322
198	142,557	1,013,981	238	185,451
199	143,571	1,017,054	239	186,583
200	144,588	1,020,120	240	187,718
201	145,608	1,023,180	241	188,854
202	146,631	1,026,234	242	189,991
203	147,657	1,029,282	243	191,128
204	148,687	1,032,323	244	192,265
205	149,719	1,035,358	245	193,402
206	150,754	1,038,387	246	194,539
207	151,793	1,041,409	247	195,676
208	152,834	1,044,425	248	196,813
209	153,879	1,047,435	249	197,950
210	154,926	1,050,439	250	199,087
211	155,976	1,053,436	251	200,224
212	157,030	1,056,427	252	201,361
213	158,086	1,059,411	253	202,498
214	159,146	1,062,390	254	203,635
215	160,208	1,065,362	255	204,772
216	161,274	1,068,328	256	205,909
217	162,342	1,071,287	257	207,046
218	163,413	1,074,241	258	208,183
219	164,487	1,077,188	259	209,320
220	165,565	1,080,128	260	210,457
221	166,645	1,083,063	261	211,594
222	167,728	1,085,991	262	212,731
223	168,814	1,088,913	263	213,868
224	169,903	1,091,828	264	215,005
225	170,994	1,094,738	265	216,142
226	172,089	1,097,641	266	217,279
227	173,187	1,100,538	267	218,416
228	174,287	1,103,428	268	219,553
229	175,391	1,106,312	269	220,690
230	176,497	1,109,190	270	221,827
231	177,606	1,112,062	271	222,964
232	178,718	1,114,927	272	224,101
233	179,833	1,117,786	273	225,238
234	180,951	1,120,639	274	226,375
235	182,072	1,123,485	275	227,512
236	183,195	1,126,325	276	228,649
237	184,322	1,129,159	277	229,786
238	185,451	1,131,987	278	230,923
239	186,583	1,134,808	279	232,060
240	187,718	1,137,621	280	233,197
241	188,854	1,140,428	281	234,334
242	189,991	1,143,230	282	235,471
243	191,128	1,146,027	283	236,608
244	192,265	1,148,819	284	237,745
245	193,402	1,151,606	285	238,882
246	194,539	1,154,388	286	240,019
247	195,676	1,157,165	287	241,156
248	196,813	1,159,937	288	242,293
249	197,950	1,162,704	289	243,430
250	199,087	1,165,466	290	244,567
251	200,224	1,168,223	291	245,704
252	201,361	1,170,975	292	246,841
253	202,498	1,173,722	293	247,978
254	203,635	1,176,465	294	249,115
255	204,772	1,179,203	295	250,252
256	205,909	1,181,936	296	251,389
257	207,046	1,184,664	297	252,526
258	208,183	1,187,387	298	253,663
259	209,320	1,190,105	299	254,800
260	210,457	1,192,818	300	255,937
261	211,594	1,195,526	301	257,074
262	212,731	1,198,229	302	258,211
263	213,868	1,200,927	303	259,348
264	215,005	1,203,620	304	260,485
265	216,142	1,206,308	305	261,622
266	217,279	1,208,991	306	262,759
267	218,416	1,211,669	307	263,896
268	219,553	1,214,342	308	265,033
269	220,690	1,217,010	309	266,170
270	221,827	1,219,673	310	267,307
271	222,964	1,222,331	311	268,444
272	224,101	1,224,984	312	269,581
273	225,238	1,227,632	313	270,718
274	226,375	1,230,275	314	271,855
275	227,512	1,232,913	315	272,992
276	228,649	1,235,546	316	274,129
277	229,786	1,238,174	317	275,266
278	230,923	1,240,797	318	276,403
279	232,060	1,243,415	319	277,540
280	233,197	1,246,028	320	278,677
281	234,334	1,248,636	321	279,814
282	235,471	1,251,239	322	280,951
283	236,608	1,253,837	323	282,088
284	237,745	1,256,430	324	283,225
285	238,882	1,259,018	325	284,362
286	240,019	1,261,601	326	285,499
287	241,156	1,264,179	327	286,636
288	242,293	1,266,752	328	287,773
289	243,430	1,269,320	329	288,910
290	244,567	1,271,883	330	290,047
291	245,704	1,274,441	331	291,184
292	246,841	1,276,994	332	292,321
293	247,978	1,279,542	333	293,458
294	249,115	1,282,085	334	294,595
295	250,252	1,284,623	335	295,732
296	251,389	1,287,156	336	296,869
297	252,526	1,289,684	337	298,006
298	253,663	1,292,207	338	299,143
299	254,800	1,294,725	339	300,280
300	255,937	1,297,238	340	301,417
301	257,074	1,299,746	341	302,554
302	258,211	1,302,249	342	303,691
303	259,348	1,304,747	343	304,828
304	260,485	1,307,240	344	305,965
305	261,622	1,309,728	345	307,102
306	262,759	1,312,211	346	308,239
307	263,896	1,314,689	347	309,376
308	265,033	1,317,162	348	310,513
309	266,170	1,319,630	349	311,650
310	267,307	1,322,093	350	312,787
311	268,444	1,324,551	351	313,924
312	269,581	1,327,004	352	315,061
313	270,718	1,329,452	353	316,198
314	271,855	1,331,895	354	317,335
315	272,992	1,334,333	355	318,472
316	274,129	1,336,766	356	319,609
317	275,266	1,339,194	357	320,746
318	276,403	1,341,617	358	321,883
319	277,540	1,344,035	359	323,020
320	278,677	1,346,448	360	324,157
321	279,814	1,348,856	361	325,294
322	280,951	1,351,259	362	326,431
323	282,088	1,353,657	363	327,568
324	283,225	1,356,050	364	328,705
325	284,362	1,358,438	365	329,842
326	285,499	1,360,821	366	330,979
327	286,636	1,363,200	367	332,116
328	287,773	1,365,574	368	333,253
329	288,910	1,367,943	369	334,390
330	290,047	1,370,307	370	335,527
331	291,184	1,372,666	371	336,664
332	292,321	1,375,020	372	337,801
333	293,458	1,377,369	373	338,938
334	294,595	1,379,713	374	340,075
335	295,732	1,382,052	375	341,212
336	296,869	1,384,387	376	342,349
337	298,006	1,386,717	377	343,486
338	299,143	1,389,042	378	344,623
339	300,280	1,391,362	379	345,760
340	301,417	1,393,677	380	346,897
341	302,554	1,395,987	381	348,034
342	303,691	1,398,292	382	349,171
343	304,828	1,400,592	383	350,308
344	305,965	1,402,887	384	351,445
345	307,102	1,405,177	385	352,582
346	308,239	1,407,462	386	353,719
347	309,376	1,409,742	387	354,856
348	310,513	1,412,017	388	355,993
349	311,650	1,414,287	389	357,130
350	312,787	1,416,552	390	358,267
351	313,924	1,418,812	391	359,404
352	315,061	1,421,067	392	360,541
353	316,198	1,423,317	393	361,678
354	317,335	1,425,562	394	362,815
355	318,472	1,427,802	395	363,952
356	319,609	1,430,037	396	365,089
357	320,746	1,432,267	397	366,226
358	321,883	1,434,492	398	367,363
359	323,020	1,436,712	399	368,500
360	324,157	1,438,927	400	369,637
361	325,294	1,441,137	401	370,774
362	326,431	1,443,342	402	371,911
363	327,568	1,445,542	403	373,048
364	328,705	1,447,737	404	374,185
365	329,842	1,449,927	405	375,322
366	330,979	1,452,112	406	376,459
367				



PTT Aromatics and Refining , Map Ta Phut  
Tank No. V-5220

Page 6  
1,768,612 Litres

Dip cms	Volume Litres	Diff Litres/cms	Dip cms	Volume Litres	Diff Litres/cms
240	187,717	1,137.623	280	235,351	1,245.073
241	188,855	1,140.432	281	236,596	1,247.630
242	189,996	1,143.235	282	237,844	1,250.181
243	191,139	1,146.031	283	239,094	1,252.726
244	192,285	1,148.821	284	240,347	1,255.265
245	193,434	1,151.604	285	241,602	1,257.797
246	194,585	1,154.382	286	242,860	1,260.323
247	195,740	1,157.153	287	244,120	1,262.843
248	196,897	1,159.917	288	245,383	1,265.356
249	198,057	1,162.676	289	246,648	1,267.863
250	199,219	1,165.428	290	247,916	1,270.364
251	200,385	1,168.174	291	249,187	1,272.859
252	201,553	1,170.914	292	250,459	1,275.347
253	202,724	1,173.647	293	251,735	1,277.829
254	203,898	1,176.374	294	253,013	1,280.305
255	205,074	1,179.095	295	254,293	1,282.774
256	206,253	1,181.809	296	255,576	1,285.237
257	207,435	1,184.518	297	256,861	1,287.694
258	208,619	1,187.220	298	258,149	1,290.145
259	209,807	1,189.915	299	259,439	1,292.589
260	210,996	1,192.605	300	260,731	1,295.027
261	212,189	1,195.288	301	262,026	1,297.459
262	213,384	1,197.965	302	263,324	1,299.884
263	214,582	1,200.635	303	264,624	1,302.303
264	215,783	1,203.299	304	265,926	1,304.716
265	216,986	1,205.957	305	267,231	1,307.123
266	218,192	1,208.609	306	268,538	1,309.523
267	219,401	1,211.254	307	269,847	1,311.917
268	220,612	1,213.893	308	271,159	1,314.305
269	221,826	1,216.526	309	272,474	1,316.687
270	223,042	1,219.153	310	273,790	1,319.062
271	224,262	1,221.773	311	275,109	1,321.431
272	225,483	1,224.387	312	276,431	1,323.793
273	226,708	1,226.995	313	277,755	1,326.150
274	227,935	1,229.596	314	279,081	1,328.500
275	229,164	1,232.191	315	280,409	1,330.844
276	230,397	1,234.780	316	281,740	1,333.181
277	231,631	1,237.363	317	283,073	1,335.512
278	232,869	1,239.939	318	284,409	1,337.837
279	234,109	1,242.509	319	285,747	1,340.156

Computed By

Approved By

วิวัฒน์ วัฒนานันท์

Intertek Testing Services (Thailand) Limited

EXCISE OFFICER

(นายมานะ ถิ่นทองประเสริฐ)

วิศวกรโยธาชำนาญการ

Certified By

PTT Aromatics and Refining Public Co., Ltd.

PTT Aromatics and Refining , Map Ta Phut  
Tank No. V-5220

Page  
7

Litres  
1,768,612

Dip cms	Volume Litres	Diff Litres/cms	Dip cms	Volume Litres	Diff Litres/cms
320	287,087	1,342.468	360	342,522	1,429.810
321	288,429	1,344.774	361	343,952	1,431.865
322	289,774	1,347.074	362	345,384	1,433.913
323	291,121	1,349.368	363	346,818	1,435.955
324	292,470	1,351.655	364	348,254	1,437.991
325	293,822	1,353.936	365	349,692	1,440.021
326	295,176	1,356.210	366	351,132	1,442.044
327	296,532	1,358.479	367	352,574	1,444.061
328	297,891	1,360.741	368	354,018	1,446.072
329	299,251	1,362.997	369	355,464	1,448.076
330	300,614	1,365.246	370	356,912	1,450.075

331	301,980	1,367.489	371	358,362	1,452.066
332	303,347	1,369.726	372	359,814	1,454.052
333	304,717	1,371.957	373	361,268	1,456.031
334	306,089	1,374.181	374	362,724	1,458.004
335	307,463	1,376.400	375	364,182	1,459.971
336	308,839	1,378.611	376	365,642	1,461.932
337	310,218	1,380.817	377	367,104	1,463.886
338	311,599	1,383.016	378	368,568	1,465.834
339	312,982	1,385.209	379	370,034	1,467.775
340	314,367	1,387.396	380	371,502	1,469.711

341	315,755	1,389.576	381	372,971	1,471.640
342	317,144	1,391.750	382	374,443	1,473.563
343	318,536	1,393.918	383	375,917	1,475.479
344	319,930	1,396.080	384	377,392	1,477.389
345	321,326	1,398.235	385	378,869	1,479.293
346	322,724	1,400.384	386	380,349	1,481.191
347	324,124	1,402.527	387	381,830	1,483.082
348	325,527	1,404.663	388	383,313	1,484.967
349	326,932	1,406.793	389	384,798	1,486.846
350	328,338	1,408.917	390	386,285	1,488.719

351	329,747	1,411.035	391	387,773	1,490.585
352	331,158	1,413.146	392	389,264	1,492.445
353	332,572	1,415.251	393	390,757	1,494.298
354	333,987	1,417.350	394	392,251	1,496.146
355	335,404	1,419.442	395	393,747	1,497.987
356	336,824	1,421.528	396	395,245	1,499.822
357	338,245	1,423.608	397	396,745	1,501.650
358	339,669	1,425.682	398	398,246	1,503.472
359	341,094	1,427.749	399	399,750	1,505.288

Computed By

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Intertek Testing Services (Thailand) Limited

EXCISE OFFICER

(นายมานะ นินทองประเสริฐ)

วิศวกรโยธาชำนาญการ

Certified By

PTT Aromatics and Refining Public Co., Ltd.

PTT Aromatics and Refining , Map Ta Phut

Tank No. V-5220

Volume 100 %

Page

8

Litres

Dip cms	Volume Litres	Diff Litres/cms	Dip Litres	Diff Litres/cms
400	401,255	1,507.098	440	462,884
401	402,762	1,508.901	441	464,458
402	404,271	1,510.699	442	466,034
403	405,782	1,512.489	443	467,611
404	407,294	1,514.274	444	469,190
405	408,809	1,516.052	445	470,771
406	410,325	1,517.824	446	472,353
407	411,843	1,519.590	447	473,936
408	413,362	1,521.349	448	475,521
409	414,883	1,523.102	449	477,108
410	416,407	1,524.849	450	478,696

411	417,931	1,526.590	451	480,286
412	419,458	1,528.324	452	481,877
413	420,986	1,530.052	453	483,469
414	422,516	1,531.774	454	485,063
415	424,048	1,533.489	455	486,659
416	425,582	1,535.198	456	488,256
417	427,117	1,536.901	457	489,854
418	428,654	1,538.598	458	491,454
419	430,192	1,540.288	459	493,055
420	431,733	1,541.972	460	494,658

421	433,275	1,543.650	461	496,262
422	434,818	1,545.321	462	497,868
423	436,364	1,546.986	463	499,475
424	437,911	1,548.645	464	501,083
425	439,459	1,550.298	465	502,693
426	441,009	1,551.944	466	504,304
427	442,561	1,553.584	467	505,917
428	444,115	1,555.218	468	507,531
429	445,670	1,556.845	469	509,146
430	447,227	1,558.466	470	510,763

431	448,786	1,560.081	471	512,381
432	450,346	1,561.690	472	514,001
433	451,907	1,563.292	473	515,622
434	453,471	1,564.888	474	517,244
435	455,036	1,566.478	475	518,868
436	456,602	1,568.061	476	520,493
437	458,170	1,569.639	477	522,119
438	459,740	1,571.210	478	523,746
439	461,311	1,572.774	479	525,375

Computed By

วิวัฒน์ ภาศนา

Intertek Testing Services (Thailand) Limited



Approved By

วิวัฒน์ ภาศนา

EXCISE OFFICER

นายมานะ จันทองประเสริฐ

วิศวกร ไขมันยานุการ

Certified By

PTT Aromatics and Refining Public Co., Ltd.

Litres

วิวัฒน์ ภาคนา  
Intertek Testing Services (Thailand) Co., Ltd.

By

Intertek (Thailand) Limited  
Intertek Testing Services (Thailand) Limited  
วิวัฒน์ วัฒนา

EXCISE OFFICER

(นายมานะ ภูิ่นทองประเสริฐ)

วิศวกรรมโยธาชำนาญการ

*[Signature]*

PTT Aromatics and Refining Public Co., Ltd.

PTT Aromatics and Refining , Map Ta Phut

Tank No. V-5220

Volume 100 %

Page 10

Litres

\*\*\*\*\*

Dip cms	Volume Litres	Diff Litres/cms	Dip cms	Volume Litres	Diff Litres/cms
560	661,120	1,715.713	600	730,309	1,742.733
561	662,836	1,716.511	601	732,052	1,743.279
562	664,553	1,717.303	602	733,795	1,743.820
563	666,270	1,718.088	603	735,539	1,744.354
564	667,988	1,718.867	604	737,284	1,744.882
565	669,707	1,719.640	605	739,028	1,745.403
566	671,427	1,720.407	606	740,774	1,745.918
567	673,147	1,721.167	607	742,520	1,746.427
568	674,868	1,721.921	608	744,266	1,746.930
569	676,590	1,722.669	609	746,013	1,747.426
570	678,313	1,723.411	610	747,761	1,747.916

\*\*\*\*\*

571	680,036	1,724.146	611	749,508	1,748.400
572	681,760	1,724.875	612	751,257	1,748.878
573	683,485	1,725.597	613	753,006	1,749.349
574	685,211	1,726.314	614	754,755	1,749.814
575	686,937	1,727.024	615	756,505	1,750.273
576	688,664	1,727.727	616	758,255	1,750.725
577	690,392	1,728.425	617	760,006	1,751.171
578	692,120	1,729.116	618	761,757	1,751.611
579	693,849	1,729.801	619	763,509	1,752.045
580	695,579	1,730.480	620	765,261	1,752.472

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581	697,310	1,731.152	621	767,013	1,752.893
582	699,041	1,731.818	622	768,766	1,753.308
583	700,773	1,732.478	623	770,519	1,753.716
584	702,505	1,733.131	624	772,273	1,754.118
585	704,238	1,733.778	625	774,027	1,754.514
586	705,972	1,734.419	626	775,782	1,754.904
587	707,706	1,735.054	627	777,537	1,755.287
588	709,442	1,735.682	628	779,292	1,755.664
589	711,177	1,736.304	629	781,048	1,756.035
590	712,914	1,736.920	630	782,804	1,756.399

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591	714,650	1,737.530	631	784,560	1,756.757
592	716,388	1,738.133	632	786,317	1,757.109
593	718,126	1,738.730	633	788,074	1,757.455
594	719,865	1,739.321	634	789,831	1,757.794
595	721,604	1,739.905	635	791,589	1,758.127
596	723,344	1,740.483	636	793,347	1,758.454
597	725,085	1,741.055	637	795,106	1,758.775
598	726,826	1,741.620	638	796,865	1,759.089
599	728,567	1,742.180	639	798,624	1,759.397

\*\*\*\*\*

591	714,650	1,737.530	631	784,560	1,756.757
592	716,388	1,738.133	632	786,317	1,757.109
593	718,126	1,738.730	633	788,074	1,757.455
594	719,865	1,739.321	634	789,831	1,757.794
595	721,604	1,739.905	635	791,589	1,758.127
596	723,344	1,740.483	636	793,347	1,758.454
597	725,085	1,741.055	637	795,106	1,758.775
598	726,826	1,741.620	638	796,865	1,759.089
599	728,567	1,742.180	639	798,624	1,759.397

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592	716,388	1,738.133	632	786,317	1,757.109
593	718,126	1,738.730	633	788,074	1,757.455
594	719,865	1,739.321	634	789,831	1,757.794
595	721,604	1,739.905	635	791,589	1,758.127
596	723,344	1,740.483	636	793,347	1,758.454
597	725,085	1,741.055	637	795,106	1,758.775
598	726,826	1,741.620	638	796,865	1,759.089
599	728,567	1,742.180	639	798,624	1,759.397

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592	716,388	1,738.133	632	786,317	1,757.109
593	718,126	1,738.730	633	788,074	1,757.455
594	719,865	1,739.321	634	789,831	1,757.794
595	721,604	1,739.905	635	791,589	1,758.127
596	723,344	1,740.483	636	793,347	1,758.454
597	725,085	1,741.055	637	795,106	1,758.775
598	726,826	1,741.620	638	796,865	1,759.089
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591	714,650	1,737.530	631	784,560	1,756.757
592	716,388	1,738.133	632	786,317	1,757.109
593	718,126	1,738.730	633	788,074	1,757.455
594	719,865	1,739.321	634	789,831	1,757.794
595	721,604	1,739.905	635	791,589	1,758.127
596	723,344	1,740.483	636	793,347	1,758.454
597	725,085	1,741.055	637	795,106	1,758.775
598	726,826	1,741.620	638	796,865	1,759.089
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592	716,388	1,738.133	632	786,317	1,757.109
593	718,126	1,738.730	633	788,074	1,757.455
594	719,865	1,739.321	634	789,831	1,757.794
595	721,604	1,739.905	635	791,589	1,758.127
596	723,344	1,740.483	636	793,347	1,758.454
597	725,085	1,741.055	637	795,106	1,758.775
598	726,826	1,741.620	638	796,865	1,759.089
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592	716,388	1,738.133	632	786,317	1,757.109
593	718,126	1,738.730	633	788,074	1,757.455
594	719,865	1,739.321	634	789,831	1,757.794
595	721,604	1,739.905	635	791,589	1,758.127
596	723,344	1,740.483	636	793,347	1,758.454
597	725,085	1,741.055	637	795,106	1,758.775
598	726,826	1,741.620	638	796,865	1,759.089
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592	716,388	1,738.133	632	786,317	1,757.109
593	718,126	1,738.730	633	788,074	1,757.455
594	719,865	1,739.321	634	789,831	1,757.794
595	721,604	1,739.905	635	791,589	1,758.127
596	723,344	1,740.483	636	793,347	1,758.454
597	725,085	1,741.055	637	795,106	1,758.775
598	726,826	1,741.620	638	796,865	1,759.089
599	728,567	1,742.180	639	798,624	1,759.397

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592	716,388	1,738.133	632	786,317	1,757.109
593	718,126	1,738.730	633	788,074	1,757.455
594	719,865	1,739.321	634	789,831	1,757.794
595	721,604	1,739.905	635	791,589	1,758.127
596	723,344	1,740.483	636	793,347	1,758.454
597	725,085	1,741.055	637	795,106	1,758.775
598	726,826	1,741.620	638	796,865	1,759.089
599	728,567	1,742.180	639	798,624	1,759.397

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591	714,650	1,737.530	631	784,560	1,756.757
592	716,388	1,738.133	632	786,317	1,757.109
593	718,126	1,738.730	633	788,074	1,757.455
594	719,865	1,739.321	634	789,831	1,757.794
595	721,604	1,739.905	635	791,589	1,758.127
596	723,344	1,740.483	636	793,347	1,758.454
597	725,085	1,741.055	637	795,106	1,758.775
598	726,826	1,741.620	638	796,865	1,759.089
599	728,567	1,742.180	639	798,624	1,759.397

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591	714,650	1,737.530	631	784,560	1,756.757
592	716,388	1,738.133	632	786,317	1,757.109
593	718,126	1,738.730	633	788,074	1,757.455
594	719,865	1,739.321	634	789,831	1,757.794
595	721,604	1,739.905	635	791,589	1,758.127
596	723,344	1,740.483	636	793,347	1,758.454
597	725,085	1,741.055	637	795,106	1,758.775
598	726,826	1,741.620	638	796,865	1,759.089
599	728,567	1,742.180	639	798,624	1,759.397

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591	714,650	1,737.530	631	784,560	1,756.757
592	716,388	1,738.133	632	786,317	1,757.109
593	718,126	1,738.730	633	788,074	1,757.455
594	719,865	1,739.321	634	789,831	1,757.794
595	721,604	1,739.905	635	791,589	1,758.127
596	723,344	1,740.483	636	793,347	1,758.454
597	725,085	1,741.055	637	795,106	1,758.775
598	726,826	1,741.620	638	796,865	1,759.089
599	728,567	1,742.180	639	798,624	1,759.397

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591	714,650	1,737.530	631	784,560	1,756.757
592	716,388	1,738.133	632	786,317	1,757.109
593	718,126	1,738.730	633	788,074	1,757.455
594	719,865	1,739.321	634	789,831	1,757.794
595	721,604	1,739.905	635	791,589	1,758.127
596	723,344	1,740.483	636	793,347	1,758.454
597	725,085	1,741.055	637	795,106	1,758.775
598	726,826	1,741.620	638	796,865	1,759.089
599	728,567	1,742.180	639	798,624	1,759.397

PTT Aromatics and Refining , Map Ta Phut  
Tank No. V-5220

Volume 100 %  
Volume 1,768,612 Litres

Page 11

Dip cms	Volume Litres	Diff Litres/cms	Dip cms	Volume Litres	Diff Litres/cms
640	800,383	1,759.698	680	870,939	1,766.610
641	802,143	1,759.994	681	872,706	1,766.654
642	803,903	1,760.283	682	874,472	1,766.692
643	805,663	1,760.565	683	876,239	1,766.723
644	807,424	1,760.842	684	878,006	1,766.748
645	809,184	1,761.112	685	879,773	1,766.767
646	810,945	1,761.376	686	881,539	1,766.780
647	812,707	1,761.634	687	883,306	1,766.786
648	814,469	1,761.885	688	885,073	1,766.786
649	816,230	1,762.130	689	886,840	1,766.780
650	817,993	1,762.369	690	888,607	1,766.767
651	819,755	1,762.601	691	890,373	1,766.748
652	821,517	1,762.827	692	892,140	1,766.723
653	823,280	1,763.047	693	893,907	1,766.692
654	825,043	1,763.261	694	895,673	1,766.654
655	826,807	1,763.468	695	897,440	1,766.610
656	828,570	1,763.669	696	899,207	1,766.560
657	830,334	1,763.864	697	900,973	1,766.503
658	832,098	1,764.053	698	902,740	1,766.441
659	833,862	1,764.235	699	904,506	1,766.371
660	835,626	1,764.411	700	906,273	1,766.296
661	837,390	1,764.581	701	908,039	1,766.214
662	839,155	1,764.744	702	909,805	1,766.126
663	840,920	1,764.901	703	911,571	1,766.032
664	842,685	1,765.052	704	913,337	1,765.932
665	844,450	1,765.196	705	915,103	1,765.825
666	846,215	1,765.335	706	916,869	1,765.712
667	847,980	1,765.467	707	918,635	1,765.592
668	849,746	1,765.592	708	920,400	1,765.467
669	851,511	1,765.712	709	922,166	1,765.335
670	853,277	1,765.825	710	923,931	1,765.196
671	855,043	1,765.932	711	925,696	1,765.052
672	856,809	1,766.032	712	927,461	1,764.901
673	858,575	1,766.126	713	929,226	1,764.744
674	860,341	1,766.214	714	930,991	1,764.581
675	862,107	1,766.296	715	932,756	1,764.411
676	863,873	1,766.371	716	934,520	1,764.235
677	865,640	1,766.441	717	936,284	1,764.053
678	867,406	1,766.503	718	938,048	1,763.864
679	869,173	1,766.560	719	939,812	1,763.669

Computed By

วิวัฒน์ วาศนา  
Intertek Testing Services (Thailand) Limited



Approved By

Excise Officer  
(นายมานะ จินทองประเสริฐ)  
วิศวกรโยธาชำนาญการ

Certified By

PTT Aromatics and Refining Public Co., Ltd.

PTT Aromatics and Refining , Map Ta Phut  
Tank No. V-5220

Volume 100 %

Page

1768,612 Litres

12

Dip cms	Volume Litres	Diff Litres/cms	Dip cm	Volume Litres	Diff Litres/cms
720	941,576	1,763.468	760	1,011,891	1,750.273
721	943,339	1,763.261	761	1,013,641	1,749.814
722	945,103	1,763.047	762	1,015,391	1,749.349
723	946,866	1,762.827	763	1,017,140	1,748.878
724	948,628	1,762.601	764	1,018,889	1,748.400
725	950,391	1,762.369	765	1,020,637	1,747.916
726	952,153	1,762.130	766	1,022,385	1,747.426
727	953,916	1,761.885	767	1,024,133	1,746.930
728	955,677	1,761.634	768	1,025,880	1,746.427
729	957,439	1,761.376	769	1,027,626	1,745.918
730	959,200	1,761.112	770	1,029,372	1,745.403
731	960,962	1,760.842	771	1,031,117	1,744.882
732	962,722	1,760.565	772	1,032,862	1,744.354
733	964,483	1,760.283	773	1,034,607	1,743.820
734	966,243	1,759.994	774	1,036,351	1,743.279
735	968,003	1,759.698	775	1,038,094	1,742.733
736	969,763	1,759.397	776	1,039,837	1,742.180
737	971,522	1,759.089	777	1,041,579	1,741.620
738	973,281	1,758.775	778	1,043,320	1,741.055
739	975,040	1,758.454	779	1,045,061	1,740.483
740	976,799	1,758.127	780	1,046,802	1,739.905
741	978,557	1,757.794	781	1,048,542	1,739.321
742	980,315	1,757.455	782	1,050,281	1,738.730
743	982,072	1,757.109	783	1,052,020	1,738.133
744	983,829	1,756.757	784	1,053,758	1,737.530
745	985,586	1,756.399	785	1,055,496	1,736.920
746	987,342	1,756.035	786	1,057,232	1,736.304
747	989,098	1,755.664	787	1,058,969	1,735.682
748	990,854	1,755.287	788	1,060,704	1,735.054
749	992,609	1,754.904	789	1,062,439	1,734.419
750	994,364	1,754.514	790	1,064,174	1,733.778
751	996,119	1,754.118	791	1,065,908	1,733.131
752	997,873	1,753.716	792	1,067,641	1,732.478
753	999,627	1,753.308	793	1,069,373	1,731.818
754	1,001,380	1,752.893	794	1,071,105	1,731.152
755	1,003,133	1,752.472	795	1,072,836	1,730.480
756	1,004,885	1,752.045	796	1,074,567	1,729.801
757	1,006,637	1,751.611	797	1,076,297	1,729.116
758	1,008,389	1,751.171	798	1,078,026	1,728.425
759	1,010,140	1,750.725	799	1,079,754	1,727.727

Computed By

วิวัฒน์ วัฒนาศา  
Intertek Testing Services (Thailand) Limited



Approved By

Excise Officer  
(นายมานะ จินทองประเสริฐ)  
วิศวกรโยธาชำนาญการ

Certified By

วิวัฒน์ วัฒนาศา

PTT Aromatics and Refining Public Co., Ltd.

Page 38,612 Litres

100%

Volume  
Litres

Diff

800	1,081,482	1,727,024	840	1,149,947	1,693,721
801	1,083,209	1,726,314	841	1,151,641	1,692,759
802	1,084,935	1,725,597	842	1,153,333	1,691,792
803	1,086,661	1,724,875	843	1,155,025	1,690,818
804	1,088,386	1,724,146	844	1,156,716	1,689,837
805	1,090,110	1,723,411	845	1,158,406	1,688,851
806	1,091,833	1,722,669	846	1,160,095	1,687,858
807	1,093,556	1,721,921	847	1,161,782	1,686,859
808	1,095,278	1,721,167	848	1,163,469	1,685,854
809	1,096,999	1,720,407	849	1,165,155	1,684,842
810	1,098,719	1,719,640	850	1,166,840	1,683,824
811	1,100,439	1,718,867	851	1,168,524	1,682,800
812	1,102,158	1,718,088	852	1,170,207	1,681,769
813	1,103,876	1,717,303	853	1,171,888	1,680,732
814	1,105,593	1,716,511	854	1,173,569	1,679,689
815	1,107,310	1,715,713	855	1,175,249	1,678,640
816	1,109,025	1,714,909	856	1,176,927	1,677,584
817	1,110,740	1,714,098	857	1,178,605	1,676,522
818	1,112,454	1,713,281	858	1,180,282	1,675,454
819	1,114,168	1,712,458	859	1,181,957	1,674,380
820	1,115,880	1,711,629	860	1,183,631	1,673,299
821	1,117,592	1,710,793	861	1,185,305	1,672,212
822	1,119,303	1,709,951	862	1,186,977	1,671,119
823	1,121,013	1,709,103	863	1,188,648	1,670,019
824	1,122,722	1,708,248	864	1,190,318	1,668,913
825	1,124,430	1,707,387	865	1,191,987	1,667,801
826	1,126,137	1,706,520	866	1,193,655	1,666,682
827	1,127,844	1,705,647	867	1,195,321	1,665,558
828	1,129,549	1,704,767	868	1,196,987	1,664,426
829	1,131,254	1,703,881	869	1,198,651	1,663,289
830	1,132,958	1,702,989	870	1,200,315	1,662,146
831	1,134,661	1,702,090	871	1,201,977	1,660,996
832	1,136,363	1,701,185	872	1,203,638	1,659,839
833	1,138,064	1,700,274	873	1,205,298	1,658,677
834	1,139,765	1,699,357	874	1,206,956	1,657,508
835	1,141,464	1,698,433	875	1,208,614	1,656,333
836	1,143,162	1,697,503	876	1,210,270	1,655,152
837	1,144,860	1,696,567	877	1,211,925	1,653,964
838	1,146,557	1,695,624	878	1,213,579	1,652,770
839	1,148,252	1,694,676	879	1,215,232	1,651,570

Approved By



2

วิศจารย์แผนผังภูมิ

Certified By

PTT Aromatics and Refining Public Co., Ltd.



PTT Aromatics and Refining , Map Ta Phut  
Tank No. V-5220

Page 14  
1,768,612 Litres

Dip cms	Volume Litres	Diff Litres/cms	Dip cms	Volume Litres	Diff Litres/cms
880	1,216,884	1,650.364	920	1,281,890	1,596.953
881	1,218,534	1,649.151	921	1,283,487	1,595.489
882	1,220,183	1,647.932	922	1,285,083	1,594.019
883	1,221,831	1,646.707	923	1,286,677	1,592.542
884	1,223,478	1,645.475	924	1,288,269	1,591.059
885	1,225,123	1,644.237	925	1,289,860	1,589.570
886	1,226,768	1,642.993	926	1,291,450	1,588.075
887	1,228,411	1,641.743	927	1,293,038	1,586.573
888	1,230,052	1,640.486	928	1,294,624	1,585.065
889	1,231,693	1,639.223	929	1,296,210	1,583.550
890	1,233,332	1,637.954	930	1,297,793	1,582.030
891	1,234,970	1,636.678	931	1,299,375	1,580.503
892	1,236,607	1,635.396	932	1,300,956	1,578.970
893	1,238,242	1,634.108	933	1,302,535	1,577.430
894	1,239,876	1,632.814	934	1,304,112	1,575.884
895	1,241,509	1,631.513	935	1,305,688	1,574.332
896	1,243,140	1,630.206	936	1,307,262	1,572.774
897	1,244,771	1,628.893	937	1,308,835	1,571.210
898	1,246,400	1,627.573	938	1,310,406	1,569.639
899	1,248,027	1,626.247	939	1,311,976	1,568.061
900	1,249,653	1,624.915	940	1,313,544	1,566.478
901	1,251,278	1,623.577	941	1,315,110	1,564.888
902	1,252,902	1,622.232	942	1,316,675	1,563.292
903	1,254,524	1,620.881	943	1,318,239	1,561.690
904	1,256,145	1,619.524	944	1,319,800	1,560.081
905	1,257,765	1,618.160	945	1,321,360	1,558.466
906	1,259,383	1,616.791	946	1,322,919	1,556.845
907	1,260,999	1,615.415	947	1,324,476	1,555.218
908	1,262,615	1,614.032	948	1,326,031	1,553.584
909	1,264,229	1,612.643	949	1,327,584	1,551.944
910	1,265,842	1,611.249	950	1,329,136	1,550.298
911	1,267,453	1,609.847	951	1,330,687	1,548.645
912	1,269,063	1,608.440	952	1,332,235	1,546.986
913	1,270,671	1,607.026	953	1,333,782	1,545.321
914	1,272,278	1,605.606	954	1,335,328	1,543.650
915	1,273,884	1,604.179	955	1,336,871	1,541.972
916	1,275,488	1,602.747	956	1,338,413	1,540.288
917	1,277,091	1,601.308	957	1,339,954	1,538.598
918	1,278,692	1,599.863	958	1,341,492	1,536.901
919	1,280,292	1,598.411	959	1,343,029	1,535.198

Computed By

Intertek  
EXAMINATION SERVICES (THAILAND) LTD.  
วิบูลย์ วัฒนา  
Intertek Testing Services (Thailand) Limited

Approved By

Excise Officer  
นายมานะ คิณฑองประเสริฐ  
วิศวกรโยธาชำนาญการ

Certified By

PTT Aromatics and Refining Public Co., Ltd.

PTT Aromatics and Refining , Map Ta Phut  
Tank No. V-5220

15

Volume 100 % 1,768.612 Litres

Dip cms	Volume Litres	Diff Litres/cms	Dip cms	Volume Litres	Diff Litres/cms
960	1,344,564	1,533.489	1000	1,404,504	1,459.971
961	1,346,098	1,531.774	1001	1,405,964	1,458.004
962	1,347,630	1,530.052	1002	1,407,422	1,456.031
963	1,349,160	1,528.324	1003	1,408,878	1,454.052
964	1,350,688	1,526.590	1004	1,410,332	1,452.066
965	1,352,215	1,524.849	1005	1,411,784	1,450.075
966	1,353,739	1,523.102	1006	1,413,234	1,448.076
967	1,355,262	1,521.349	1007	1,414,682	1,446.072
968	1,356,784	1,519.590	1008	1,416,128	1,444.061
969	1,358,303	1,517.824	1009	1,417,572	1,442.044
970	1,359,821	1,516.052	1010	1,419,014	1,440.021
971	1,361,337	1,514.274	1011	1,420,454	1,437.991
972	1,362,852	1,512.489	1012	1,421,892	1,435.955
973	1,364,364	1,510.699	1013	1,423,328	1,433.913
974	1,365,875	1,508.901	1014	1,424,762	1,431.865
975	1,367,384	1,507.098	1015	1,426,194	1,429.810
976	1,368,891	1,505.288	1016	1,427,624	1,427.749
977	1,370,396	1,503.472	1017	1,429,052	1,425.682
978	1,371,900	1,501.650	1018	1,430,477	1,423.608
979	1,373,401	1,499.822	1019	1,431,901	1,421.528
980	1,374,901	1,497.987	1020	1,433,322	1,419.442
981	1,376,399	1,496.146	1021	1,434,742	1,417.350
982	1,377,895	1,494.298	1022	1,436,159	1,415.251
983	1,379,389	1,492.445	1023	1,437,574	1,413.146
984	1,380,882	1,490.585	1024	1,438,988	1,411.035
985	1,382,372	1,488.719	1025	1,440,399	1,408.917
986	1,383,861	1,486.846	1026	1,441,807	1,406.793
987	1,385,348	1,484.967	1027	1,443,214	1,404.663
988	1,386,833	1,483.082	1028	1,444,619	1,402.527
989	1,388,316	1,481.191	1029	1,446,021	1,400.384
990	1,389,797	1,479.293	1030	1,447,422	1,398.235
991	1,391,277	1,477.389	1031	1,448,820	1,396.080
992	1,392,754	1,475.479	1032	1,450,216	1,393.918
993	1,394,229	1,473.563	1033	1,451,610	1,391.750
994	1,395,703	1,471.640	1034	1,453,002	1,389.576
995	1,397,175	1,469.711	1035	1,454,391	1,387.396
996	1,398,644	1,467.775	1036	1,455,779	1,385.209
997	1,400,112	1,465.834	1037	1,457,164	1,383.016
998	1,401,578	1,463.886	1038	1,458,547	1,380.817
999	1,403,042	1,461.932	1039	1,459,928	1,378.611

Computed By

วิวัฒน์ วิชาณา

Intertek Testing Services (Thailand) Ltd.  
Intertek

Approved By

Excise Officer

(นายมานะ ถินทองประเสริฐ)

วิศวกรโยธาชำนาญการ

Certified By

PTT Aromatics and Refining Public Co., Ltd.

PTT Aromatics and Refining , Map Ta Phut  
Tank No. V-5220

Page 16  
1,768,612 Litres

Dip cms	Volume Litres	Diff Litres/cms	Dip cms	Volume Litres	Diff Litres/cms
1040	1,461,306	1,376.400	1080	1,514,570	1,282.774
1041	1,462,683	1,374.181	1081	1,515,853	1,280.305
1042	1,464,057	1,371.957	1082	1,517,133	1,277.829
1043	1,465,429	1,369.726	1083	1,518,411	1,275.347
1044	1,466,799	1,367.489	1084	1,519,686	1,272.859
1045	1,468,166	1,365.246	1085	1,520,959	1,270.364
1046	1,469,531	1,362.997	1086	1,522,230	1,267.863
1047	1,470,894	1,360.741	1087	1,523,498	1,265.356
1048	1,472,255	1,358.479	1088	1,524,763	1,262.843
1049	1,473,614	1,356.210	1089	1,526,026	1,260.323
1050	1,474,970	1,353.936	1090	1,527,286	1,257.797
1051	1,476,324	1,351.655	1091	1,528,544	1,255.265
1052	1,477,675	1,349.368	1092	1,529,799	1,252.726
1053	1,479,025	1,347.074	1093	1,531,052	1,250.181
1054	1,480,372	1,344.774	1094	1,532,302	1,247.630
1055	1,481,717	1,342.468	1095	1,533,550	1,245.073
1056	1,483,059	1,340.156	1096	1,534,795	1,242.509
1057	1,484,399	1,337.837	1097	1,536,037	1,239.939
1058	1,485,737	1,335.512	1098	1,537,277	1,237.363
1059	1,487,073	1,333.181	1099	1,538,515	1,234.780
1060	1,488,406	1,330.844	1100	1,539,749	1,232.191
1061	1,489,737	1,328.500	1101	1,540,982	1,229.596
1062	1,491,065	1,326.150	1102	1,542,211	1,226.995
1063	1,492,391	1,323.793	1103	1,543,438	1,224.387
1064	1,493,715	1,321.431	1104	1,544,663	1,221.773
1065	1,495,037	1,319.062	1105	1,545,884	1,219.153
1066	1,496,356	1,316.687	1106	1,547,103	1,216.526
1067	1,497,672	1,314.305	1107	1,548,320	1,213.893
1068	1,498,987	1,311.917	1108	1,549,534	1,211.254
1069	1,500,299	1,309.523	1109	1,550,745	1,208.609
1070	1,501,608	1,307.123	1110	1,551,954	1,205.957
1071	1,502,915	1,304.716	1111	1,553,160	1,203.299
1072	1,504,220	1,302.303	1112	1,554,363	1,200.635
1073	1,505,522	1,299.884	1113	1,555,564	1,197.965
1074	1,506,822	1,297.459	1114	1,556,762	1,195.288
1075	1,508,120	1,295.027	1115	1,557,957	1,192.605
1076	1,509,415	1,292.589	1116	1,559,149	1,189.915
1077	1,510,707	1,290.145	1117	1,560,339	1,187.220
1078	1,511,997	1,287.694	1118	1,561,527	1,184.518
1079	1,513,285	1,285.237	1119	1,562,711	1,181.809

Computed By

*[Signature]*  
วิวัฒน์ วาสนา



Intertek Testing Services (Thailand) Limited

Approved By

*[Signature]*  
EXCISE OFFICER

(นายมานะ นิมทองประเสริฐ)  
วิศวกรโยธาชำนาญการ

Certified By

*[Signature]*

PTT Aromatics and Refining Public Co., Ltd.

Dip cms	Volume Litres	Diff Litres/cms	Dip cms	Volume Litres	Diff Litres/cms
1120	1,563,893	1,179.095	1160	1,608,872	1,065.362
1121	1,565,072	1,176.374	1161	1,609,938	1,062.390
1122	1,566,248	1,173.647	1162	1,611,000	1,059.411
1123	1,567,422	1,170.914	1163	1,612,060	1,056.427
1124	1,568,593	1,168.174	1164	1,613,116	1,053.436
1125	1,569,761	1,165.428	1165	1,614,169	1,050.439
1126	1,570,927	1,162.676	1166	1,615,220	1,047.435
1127	1,572,089	1,159.917	1167	1,616,267	1,044.425
1128	1,573,249	1,157.153	1168	1,617,312	1,041.409
1129	1,574,406	1,154.382	1169	1,618,353	1,038.387
1130	1,575,561	1,151.604	1170	1,619,392	1,035.358
1131	1,576,712	1,148.821	1171	1,620,427	1,032.323
1132	1,577,861	1,146.031	1172	1,621,459	1,029.282
1133	1,579,007	1,143.235	1173	1,622,489	1,026.234
1134	1,580,150	1,140.432	1174	1,623,515	1,023.180
1135	1,581,291	1,137.623	1175	1,624,538	1,020.120
1136	1,582,428	1,134.808	1176	1,625,558	1,017.054
1137	1,583,563	1,131.987	1177	1,626,575	1,013.981
1138	1,584,695	1,129.159	1178	1,627,589	1,010.902
1139	1,585,824	1,126.325	1179	1,628,600	1,007.817
1140	1,586,951	1,123.485	1180	1,629,608	1,004.725
1141	1,588,074	1,120.639	1181	1,630,613	1,001.628
1142	1,589,195	1,117.786	1182	1,631,614	998.524
1143	1,590,313	1,114.927	1183	1,632,613	995.413
1144	1,591,428	1,112.062	1184	1,633,608	992.297
1145	1,592,540	1,109.190	1185	1,634,600	989.174
1146	1,593,649	1,106.312	1186	1,635,590	986.044
1147	1,594,755	1,103.428	1187	1,636,576	982.909
1148	1,595,859	1,100.538	1188	1,637,559	979.767
1149	1,596,959	1,097.641	1189	1,638,538	976.619
1150	1,598,057	1,094.738	1190	1,639,515	973.465
1151	1,599,151	1,091.828	1191	1,640,488	970.304
1152	1,600,243	1,088.913	1192	1,641,459	967.137
1153	1,601,332	1,085.991	1193	1,642,426	963.964
1154	1,602,418	1,083.063	1194	1,643,390	960.784
1155	1,603,501	1,080.128	1195	1,644,351	957.599
1156	1,604,581	1,077.188	1196	1,645,308	954.406
1157	1,605,659	1,074.241	1197	1,646,263	951.208
1158	1,606,733	1,071.287	1198	1,647,214	948.004
1159	1,607,804	1,068.328	1199	1,648,162	944.793

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K TESTING SERVICES (THAILAND) LTD. (INCORPORATED IN THAILAND)  
Intertek

EXCISE OFFICER

(นายมานะ นิมทองประเสริฐ)  
วิศวกรโยธาชำนาญการ

3

PTT Aromatics and Refining Public Co., Ltd.

PTT Aromatics and Refining , Map Ta Phut  
Tank No. V-5220

18

Volume 100 % 1,768,612 Litres

Dip cms	Volume Litres	Diff Litres/cms	Dip cms	Volume Litres	Diff Litres/cms
1200	1,649,107	941.575	1240	1,684,193	807.735
1201	1,650,048	938.352	1241	1,685,001	804.260
1202	1,650,986	935.122	1242	1,685,805	800.779
1203	1,651,922	931.886	1243	1,686,606	797.292
1204	1,652,853	928.644	1244	1,687,403	793.798
1205	1,653,782	925.395	1245	1,688,197	790.298
1206	1,654,708	922.140	1246	1,688,987	786.792
1207	1,655,630	918.879	1247	1,689,774	783.279
1208	1,656,549	915.612	1248	1,690,557	779.761
1209	1,657,464	912.338	1249	1,691,337	776.235
1210	1,658,376	909.058	1250	1,692,113	772.704
1211	1,659,286	905.772	1251	1,692,886	769.166
1212	1,660,191	902.479	1252	1,693,655	765.622
1213	1,661,094	899.180	1253	1,694,421	762.072
1214	1,661,993	895.875	1254	1,695,183	758.516
1215	1,662,889	892.563	1255	1,695,941	754.953
1216	1,663,781	889.246	1256	1,696,696	751.384
1217	1,664,671	885.922	1257	1,697,448	747.808
1218	1,665,557	882.591	1258	1,698,196	744.227
1219	1,666,439	879.255	1259	1,698,940	740.639
1220	1,667,318	875.912	1260	1,699,680	737.045
1221	1,668,194	872.563	1261	1,700,418	733.444
1222	1,669,067	869.207	1262	1,701,151	729.837
1223	1,669,936	865.846	1263	1,701,881	726.224
1224	1,670,802	862.478	1264	1,702,607	722.605
1225	1,671,664	859.103	1265	1,703,330	718.979
1226	1,672,524	855.723	1266	1,704,049	715.347
1227	1,673,379	852.336	1267	1,704,764	711.709
1228	1,674,232	848.943	1268	1,705,476	708.065
1229	1,675,081	845.543	1269	1,706,184	704.414
1230	1,675,926	842.138	1270	1,706,888	700.757
1231	1,676,768	838.726	1271	1,707,589	697.094
1232	1,677,607	835.307	1272	1,708,286	693.424
1233	1,678,442	831.883	1273	1,708,979	689.748
1234	1,679,274	828.452	1274	1,709,669	686.066
1235	1,680,103	825.015	1275	1,710,355	682.378
1236	1,680,928	821.571	1276	1,711,038	678.683
1237	1,681,749	818.122	1277	1,711,716	674.982
1238	1,682,567	814.666	1278	1,712,391	671.274
1239	1,683,382	811.204	1279	1,713,063	667.561

Computed By

วิวัฒน์ วิชาณา

Intertek Testing Services (Thailand) Limited

Approved By

EXCISE OFFICER

(นายมานะ จินทองประเสริฐ)

วิศวกรโยธาชำนาญการ

Certified By

PTT Aromatics and Refining Public Co., Ltd.

PTT Aromatics and Refining , Map Ta Phut  
Tank No. V-5220

Volume

100 %

Page

19

Litres

\*\*\*\*\*  
Dip  
cms  
Volume  
Litres  
Diff  
Litres/cms  
Diff  
Litres/cms  
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1280	1,713,730	663.841	1320	1,737,315	509.893
1281	1,714,394	660.115	1321	1,737,825	505.916
1282	1,715,054	656.382	1322	1,738,331	501.932
1283	1,715,710	652.644	1323	1,738,833	497.942
1284	1,716,363	648.899	1324	1,739,331	493.945
1285	1,717,012	645.147	1325	1,739,825	489.943
1286	1,717,657	641.390	1326	1,740,315	485.934
1287	1,718,299	637.626	1327	1,740,801	481.919
1288	1,718,936	633.856	1328	1,741,283	477.897
1289	1,719,570	630.079	1329	1,741,761	473.869
1290	1,720,200	626.297	1330	1,742,234	469.835

1291	1,720,826	622.508	1331	1,742,704	465.795
1292	1,721,449	618.712	1332	1,743,170	461.748
1293	1,722,068	614.911	1333	1,743,632	457.695
1294	1,722,683	611.103	1334	1,744,090	453.636
1295	1,723,294	607.289	1335	1,744,543	449.571
1296	1,723,901	603.468	1336	1,744,993	445.499
1297	1,724,504	599.642	1337	1,745,438	441.421
1298	1,725,104	595.809	1338	1,745,880	437.337
1299	1,725,700	591.969	1339	1,746,317	433.246
1300	1,726,292	588.124	1340	1,746,750	429.149

1301	1,726,880	584.272	1341	1,747,179	425.046
1302	1,727,464	580.414	1342	1,747,604	420.936
1303	1,728,045	576.549	1343	1,748,025	416.821
1304	1,728,621	572.679	1344	1,748,442	412.699
1305	1,729,194	568.802	1345	1,748,855	408.570
1306	1,729,763	564.918	1346	1,749,263	404.436
1307	1,730,328	561.029	1347	1,749,668	400.295
1308	1,730,889	557.133	1348	1,750,068	396.148
1309	1,731,446	553.231	1349	1,750,464	391.994
1310	1,731,999	549.323	1350	1,750,856	387.834

1311	1,732,548	545.408	1351	1,751,244	383.668
1312	1,733,094	541.487	1352	1,751,628	379.496
1313	1,733,635	537.560	1353	1,752,007	375.318
1314	1,734,173	533.626	1354	1,752,383	371.133
1315	1,734,706	529.686	1355	1,752,754	366.942
1316	1,735,236	525.740	1356	1,753,121	362.744
1317	1,735,762	521.788	1357	1,753,483	358.540
1318	1,736,284	517.829	1358	1,753,842	354.330
1319	1,736,801	513.864	1359	1,754,196	350.114

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Computed By

วิวัฒน์ วาสนา

Intertek Testing Services (Thailand) Limited

Approved By

EXCISE OFFICER

Intertek Testing Services (Thailand) Limited

(นายมานะ จินทองประเสริฐ)

วิศวกรโยธาชำนาญการ


Certified By


PTT Aromatics and Refining Public Co., Ltd.

PTT Aromatics and Refining , Map Ta Phut  
Tank No. V-5220

Volume 100 %  
1,768,612 Litres

Dip cms	Volume Litres	Diff Litres/cms	Dip cms	Volume Litres	Diff Litres/cms
1360	1,754,546	345.892	1400	1,765,022	171.836
1361	1,754,892	341.663	1401	1,765,193	167.356
1362	1,755,234	337.428	1402	1,765,361	162.870
1363	1,755,571	333.186	1403	1,765,524	158.377
1364	1,755,905	328.938	1404	1,765,682	153.878
1365	1,756,234	324.684	1405	1,765,836	149.372
1366	1,756,558	320.424	1406	1,765,985	144.861
1367	1,756,879	316.158	1407	1,766,130	140.343
1368	1,757,195	311.885	1408	1,766,270	135.819
1369	1,757,507	307.606	1409	1,766,406	131.288
1370	1,757,814	303.320	1410	1,766,538	126.751
1371	1,758,118	299.029	1411	1,766,664	122.208
1372	1,758,417	294.731	1412	1,766,786	117.659
1373	1,758,711	290.426	1413	1,766,904	113.104
1374	1,759,002	286.116	1414	1,767,017	108.542
1375	1,759,288	281.799	1415	1,767,126	103.973
1376	1,759,570	277.476	1416	1,767,230	99.399
1377	1,759,847	273.146	1417	1,767,329	94.818
1378	1,760,120	268.811	1418	1,767,424	90.231
1379	1,760,389	264.469	1419	1,767,514	85.638
1380	1,760,654	260.121	1420	1,767,600	81.038
1381	1,760,914	255.766	1421	1,767,681	76.433
1382	1,761,170	251.405	1422	1,767,757	71.820
1383	1,761,421	247.038	1423	1,767,829	67.202
1384	1,761,668	242.665	1424	1,767,896	62.577
1385	1,761,911	238.285	1425	1,767,959	57.946
1386	1,762,149	233.899	1426	1,768,017	53.309
1387	1,762,383	229.507	1427	1,768,070	48.665
1388	1,762,612	225.108	1428	1,768,119	44.016
1389	1,762,837	220.704	1429	1,768,163	39.359
1390	1,763,058	216.293	1430	1,768,202	34.697
1391	1,763,274	211.875	1431	1,768,237	30.028
1392	1,763,486	207.452	1432	1,768,267	25.353
1393	1,763,694	203.022	1433	1,768,292	20.672
1394	1,763,897	198.585	1434	1,768,313	15.984
1395	1,764,095	194.143	1435	1,768,329	11.291
1396	1,764,290	189.694	1436	1,768,340	6.590
1397	1,764,479	185.239	1437	1,768,347	1.884
1398	1,764,664	180.778	1437.9	1,768,349	
1399	1,764,845	176.310			

Computed By  Jitwanna Wattana  
Intertek Testing Services (Thailand) Limited

Approved By    
EXCISE OFFICER  
นายมานะ จินทองประเสริฐ  
วิศวกรโยธาชำนาญการ

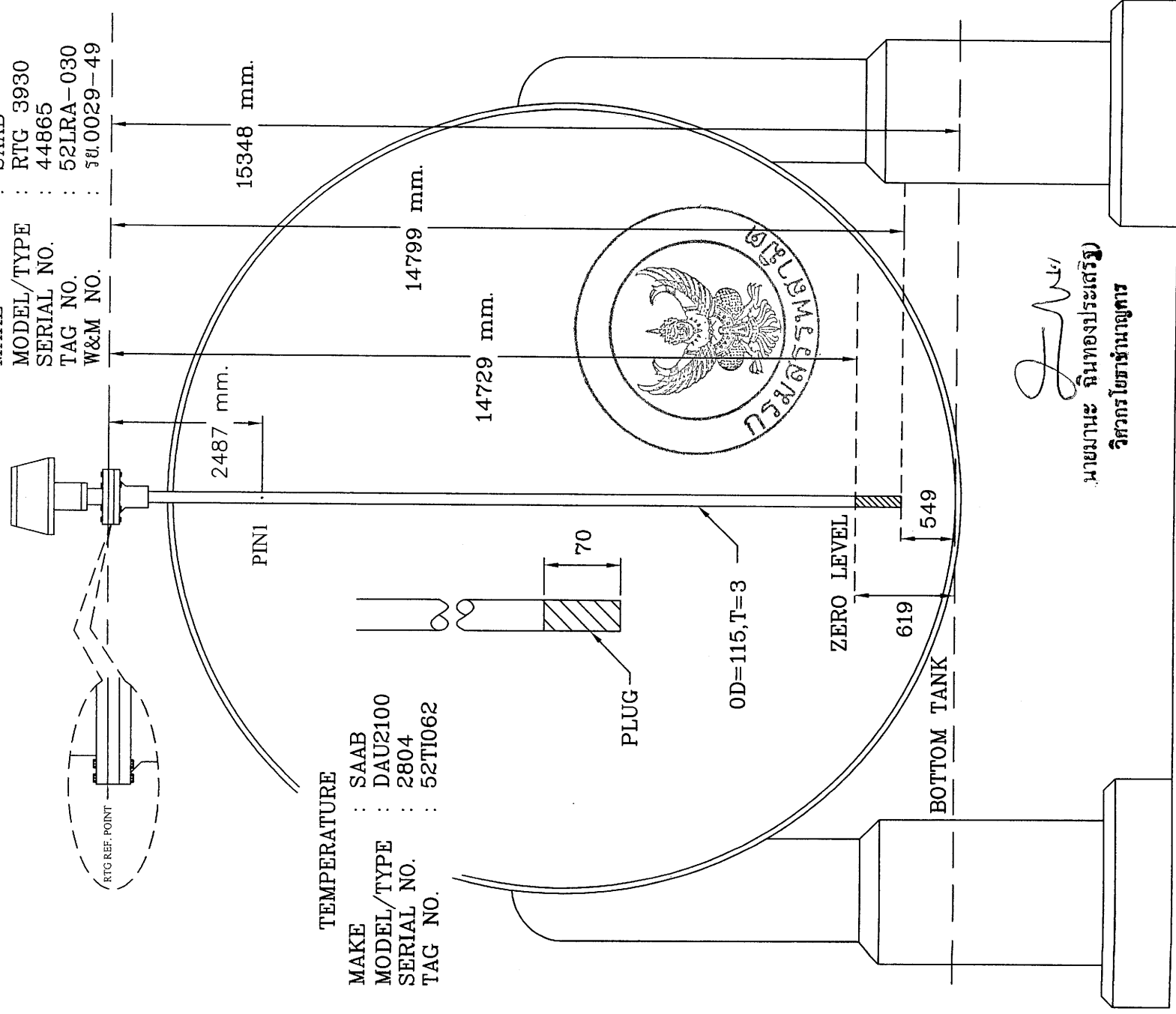
Certified By   
PTT Aromatics and Refining Public Co., Ltd.




# RADAR TANK GAUGE (ACTUAL)

MAKE : SAAB  
 MODEL/TYPE : RTG 3930  
 SERIAL NO. : 44865  
 TAG NO. : 52LRA-030  
 W&M NO. : 58.0029-49

## TEMPERATURE

MAKE : SAAB  
 MODEL/TYPE : DAU2100  
 SERIAL NO. : 2804  
 TAG NO. : 52TI062



01	01		 วิวัฒน์ วาตนา		TANK No. V-5220
LOCATION: PTTAR1 / MTP			DRAWN BY PEERASAK	REPORT No.PTL/0396/2011	
DATE OF CALIBRATION: 24,28/02/11,09-11/03/11			DATED 14/03/2011	CHECKED BY PIYAWAT R.	
				DATED 14/03/2011	



