

Crude Oil Assay – Text pg. 416

Fraction	mm Hg	Increment		Cumulative		Corrected °F	Corrected Cumulative	Mid-Cumulative Amount	°API
		°F	vol%	vol%	SpGr				
	756	82	IBP						
1	756	122	2.6	2.6	0.644				
2	756	167	2.3	4.9	0.683				
3	756	212	5.0	9.9	0.725				
4	756	257	7.9	17.8	0.751				
5	756	302	6.2	24.0	0.772				
6	756	347	4.9	28.9	0.791				
7	756	392	4.6	33.5	0.808				
8	756	437	5.2	38.7	0.825				
9	756	482	4.9	43.6	0.837				
10	756	527	6.2	49.8	0.852				
11	40	392	4.3	54.1	0.867				
12	40	437	5.2	59.3	0.872				
13	40	482	5.3	64.6	0.890				
14	40	527	3.2	67.8	0.897				
15	40	572	5.4	73.2	0.915				
Residuum			25.0	98.2	0.984				
Total									
Loss									
Reported					0.854				

Updated: July 5, 2017

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Crude Oil Assay – Text pg. 416

Fraction	mm Hg	°F	Incremental vol%	Cumulative vol%	SpGr	Corrected °F	Corrected Cumulative	Mid-Cumulative Amount	°API
	756	82	IBP						
1	756	122	2.6	2.6	0.644				
2	756	167	2.3	4.9	0.683				
3	756	212	5.0	9.9	0.725				
4	756	257	7.9	17.8	0.751				
5	756	302	6.2	24.0	0.772				
6	756	347	4.9	28.9	0.791				
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12	40	437	5.2	59.3	0.872				
13	40	482	5.3	64.6	0.890				
14	40	527	3.2	67.8	0.897				
15	40	572	5.4	73.2	0.915				
Residuum			25.0	98.2	0.984				
Total			98.2						
Loss									
Reported					0.854				

If both incremental & cumulative yields given, use one & calculate other (as check).

Crude Oil Assay – Text pg. 416

Fraction	mm Hg	°F	Increment vol%	Cumulative vol%	SpGr	Corrected °F	Corrected Cumulative	Mid-Cumulative Amount	°API
	756	82	IBP						
1	756	122	2.6	2.6	0.644				
2	756	167	2.3	4.9	0.683				
3	756	212	5.0	9.9	0.725				
4	756	257	7.9	17.8	0.751				
5	756	302	6.2	24.0	0.772				
6	756	347	4.9	28.9	0.791				
7	756	392	4.6	33.5	0.808				
8	756	437	5.2	38.7	0.825				
9	756	482	4.9	43.6	0.837				
10	756	527	6.2	49.8	0.852				
11	40	392	4.3	54.1	0.867				
12	40	437	5.2	59.3	0.872				
13	40	482	5.3	64.6	0.890				
14	40	527	3.2	67.8	0.897				
15	40	572	5.4	73.2	0.915				
Residuum			25.0	98.2	0.984				
Total			98.2						
Loss			1.8						
Reported					0.854				

Calculate difference from 100%.
Attribute losses to light ends.

Crude Oil Assay – Text pg. 416

Fraction	mm Hg	°F	Increment vol%	Cumulative vol%	SpGr	Corrected °F	Corrected Cumulative	Mid-Cumulative Amount	°API
	756	82	IBP						
1	756	122	2.6	2.6	0.644				
2	756	167	2.3	4.9	0.683				
3	756	212	5.0	9.9	0.725				
4	756	257	7.9	17.8	0.751				
5	756	302	6.2	24.0	0.772				
6	756	347	4.9	28.9	0.791				
7	756	392	4.6	33.5	0.808				
8	756	437	5.2	38.7	0.825				
9	756	482	4.9	43.6	0.837				
10	756	527	6.2	49.8	0.852				
11	40	392	4.3	54.1	0.867				
12	40	437	5.2	59.3	0.872				
13	40	482	5.3	64.6	0.890				
14	40	527	3.2	67.8	0.897				
15	40	572	5.4	73.2	0.915				
Residuum			25.0	98.2	0.984				
Total			98.2		0.858				
Loss			1.8						
Reported					0.854				

Calculate overall specific gravity
& compare to reported value.

Crude Oil Assay – Text pg. 416

Fraction	mm Hg	°F	Increment vol%	Cumulative vol%	SpGr	Corrected °F	Corrected Cumulative	Mid-Cumulative Amount	°API
	756	82	IBP						
1	756	122	2.6	2.6	0.644				88.2
2	756	167	2.3	4.9	0.683				75.7
3	756	212	5.0	9.9	0.725				63.7
4	756	257	7.9	17.8	0.751				56.9
5	756	302	6.2	24.0	0.772				51.8
6	756	347	4.9	28.9	0.791				47.4
7	756	392	4.6	33.5	0.808				43.6
8	756	437	5.2	38.7	0.825				40.0
9	756	482	4.9	43.6	0.837				37.6
10	756	527	6.2	49.8	0.852				34.6
11	40	392	4.3	54.1	0.867				31.7
12	40	437	5.2	59.3	0.872				30.8
13	40	482	5.3	64.6	0.890				27.5
14	40	527	3.2	67.8	0.897				26.2
15	40	572	5.4	73.2	0.915				23.1
Residuum			25.0	98.2	0.984				12.3
Total			98.2		0.858				
Loss			1.8						
Reported					0.854				

Calculate the °API from the given specific gravities.

Crude Oil Assay – Text pg. 416

Fraction	mm Hg	°F	Incremental vol%	Cumulative vol%	SpGr	Corrected °F	Corrected Cumulative	Mid-Cumulative Amount	°API
	756	82	IBP			82.3			
1	756	122	2.6	2.6	0.644	122.3			88.2
2	756	167	2.3	4.9	0.683	167.3			75.7
3	756	212	5.0	9.9	0.725	212.3			63.7
4	756	257	7.9	17.8	0.751	257.3			56.9
5	756	302	6.2	24.0	0.772	302.4			51.8
6	756	347	4.9	28.9	0.791	347.4			47.4
7	756	392	4.6	33.5	0.808	392.4			43.6
8	756	437	5.2	38.7	0.825	437.4			40.0
9	756	482	4.9	43.6	0.837	482.4			37.6
10	756	527	6.2	49.8	0.852	527.4			34.6
11	40	392	4.3	54.1	0.867				31.7
12	40	437	5.2	59.3	0.872				30.8
13	40	482	5.3	64.6	0.890				27.5
14	40	527	3.2	67.8	0.897				26.2
15	40	572	5.4	73.2	0.915				23.1
Residuum			25.0	98.2	0.984				12.3
Total			98.2		0.858				
Loss			1.8						
Reported					0.854				

Correct the reported atmospheric TBP temperatures to 760 mmHg.

Crude Oil Assay – Text pg. 416

Fraction	mm Hg	°F	Increment vol%	Cumulative vol%	SpGr	Corrected °F	Corrected Cumulative	Mid-Cumulative Amount	°API
	756	82	IBP			82.3			
1	756	122	2.6	2.6	0.644	122.3			88.2
2	756	167	2.3	4.9	0.683	167.3			75.7
3	756	212	5.0	9.9	0.725	212.3			63.7
4	756	257	7.9	17.8	0.751	257.3			56.9
5	756	302	6.2	24.0	0.772	302.4			51.8
6	756	347	4.9	28.9	0.791	347.4			47.4
7	756	392	4.6	33.5	0.808	392.4			43.6
8	756	437	5.2	38.7	0.825	437.4			40.0
9	756	482	4.9	43.6	0.837	482.4			37.6
10	756	527	6.2	49.8	0.852	527.4			34.6
11	40	392	4.3	54.1	0.867	584.0			31.7
12	40	437	5.2	59.3	0.872	635.0			30.8
13	40	482	5.3	64.6	0.890	685.5			27.5
14	40	527	3.2	67.8	0.897	735.7			26.2
15	40	572	5.4	73.2	0.915	785.4			23.1
Residuum			25.0	98.2	0.984				12.3
Total			98.2		0.858				
Loss			1.8						
Reported					0.854				

Correct the reported TBP temperatures from 40 mmHg to 760 mmHg.

Crude Oil Assay – Text pg. 416

Fraction	mm Hg	°F	Incremental vol%	Cumulative vol%	SpGr	Corrected °F	Corrected Cumulative	Mid-Cumulative Amount	°API
	756	82	IBP			82.3	1.8		
1	756	122	2.6	2.6	0.644	122.3			88.2
2	756	167	2.3	4.9	0.683	167.3			75.7
3	756	212	5.0	9.9	0.725	212.3			63.7
4	756	257	7.9	17.8	0.751	257.3			56.9
5	756	302	6.2	24.0	0.772	302.4			51.8
6	756	347	4.9	28.9	0.791	347.4			47.4
7	756	392	4.6	33.5	0.808	392.4			43.6
8	756	437	5.2	38.7	0.825	437.4			40.0
9	756	482	4.9	43.6	0.837	482.4			37.6
10	756	527	6.2	49.8	0.852	527.4			34.6
11	40	392	4.3	54.1	0.867	584.0			31.7
12	40	437	5.2	59.3	0.872	635.0			30.8
13	40	482	5.3	64.6	0.890	685.5			27.5
14	40	527	3.2	67.8	0.897	735.7			26.2
15	40	572	5.4	73.2	0.915	785.4			23.1
Residuum			25.0	98.2	0.984				12.3
Total			98.2		0.853				
Loss			1.8						
Reported					0.854				

Start the corrected cumulative amounts with the light ends loss.

Crude Oil Assay – Text pg. 416

Fraction	mm Hg	°F	Incremental vol%	Cumulative vol%	SpGr	Corrected °F	Corrected Cumulative	Mid-Cumulative Amount	°API
	756	82	IBP			82.3	1.8		
1	756	122	2.6	2.6	0.644	122.3	4.4		88.2
2	756	167	2.3	4.9	0.683	167.3	6.7		75.7
3	756	212	5.0	9.9	0.725	212.3	11.7		63.7
4	756	257	7.9	17.8	0.751	257.3	19.6		56.9
5	756	302	6.2	24.0	0.772	302.4	25.8		51.8
6	756	347	4.9	28.9	0.791	347.4	30.7		47.4
7	756	392	4.6	33.5	0.808	392.4	35.3		43.6
8	756	437	5.2	38.7	0.825	437.4	40.5		40.0
9	756	482	4.9	43.6	0.837	482.4	45.4		37.6
10	756	527	6.2	49.8	0.852	527.4	51.6		34.6
11	40	392	4.3	54.1	0.867	584.0	55.9		31.7
12	40	437	5.2	59.3	0.872	635.0	61.1		30.8
13	40	482	5.3	64.6	0.890	685.5	66.4		27.5
14	40	527	3.2	67.8	0.897	735.7	69.6		26.2
15	40	572	5.4	73.2	0.915	785.4	75.0		23.1
Residuum			25.0	98.2	0.984		100.0		12.3
Total			98.2		0.858				
Loss			1.8						
Reported					0.854				

Calculate the corrected cumulative amounts including the light ends loss.

Crude Oil Assay – Text pg. 416

Fraction	mm Hg	°F	Increment vol%	Cumulative vol%	SpGr	Corrected °F	Corrected Cumulative	Mid-Cumulative Amount	°API
	756	82	IBP			82.3	1.8	0.9	
1	756	122	2.6	2.6	0.644	122.3	4.4	3.1	88.2
2	756	167	2.3	4.9	0.683	167.3	6.7	5.5	75.7
3	756	212	5.0	9.9	0.725	212.3	11.7	9.2	63.7
4	756	257	7.9	17.8	0.751	257.3	19.6	15.7	56.9
5	756	302	6.2	24.0	0.772	302.4	25.8	22.7	51.8
6	756	347	4.9	28.9	0.791	347.4	30.7	28.3	47.4
7	756	392	4.6	33.5	0.808	392.4	35.3	33.0	43.6
8	756	437	5.2	38.7	0.825	437.4	40.5	37.9	40.0
9	756	482	4.9	43.6	0.837	482.4	45.4	43.0	37.6
10	756	527	6.2	49.8	0.852	527.4	51.6	48.5	34.6
11	40	392	4.3	54.1	0.867	584.0	55.9	53.8	31.7
12	40	437	5.2	59.3	0.872	635.0	61.1	58.5	30.8
13	40	482	5.3	64.6	0.890	685.5	66.4	63.8	27.5
14	40	527	3.2	67.8	0.897	735.7	69.6	68.0	26.2
15	40	572	5.4	73.2	0.915	785.4	75.0	72.3	23.1
Residuum			25.0	98.2	0.984		100.0	87.5	12.3
Total			98.2		0.858				
Loss			1.8						
Reported					0.854				

Calculate the cumulative amount at the mid-point of the increment.

Crude Oil Assay – Text pg. 416

Fraction	mm Hg	Increment		Cumulative		Corrected	Corrected	Mid-Cumulative	
		°F	vol%	vol%	SpGr			Amount	°API
	756	82	IBP			82.3	1.8	0.9	
1	756	122	2.6	2.6	0.644	122.3	4.4	3.1	88.2
2	756	167	2.3	4.9	0.683	167.3	6.7	5.5	75.7
3	756	212	5.0	9.9	0.725	212.3	11.7	9.2	63.7
4	756	257	7.9	17.8	0.751	257.3	19.6	15.7	56.9
5	756	302	6.2	24.0	0.772	302.4	25.8	22.7	51.8
6	756	347	4.9	28.9	0.791	347.4	30.7	28.3	47.4
7	756	392	4.6	33.5	0.808	392.4	35.3	33.0	43.6
8	756	437	5.2	38.7	0.825	437.4	40.5	37.9	40.0
9	756	482	4.9	43.6	0.837	482.4	45.4	43.0	37.6
10	756	527	6.2	49.8	0.852	527.4	51.6	48.5	34.6
11	40	392	4.3	54.1	0.867	584.0	55.9	53.8	31.7
12	40	437	5.2	59.3	0.872	635.0	61.1	58.5	30.8
13	40	482	5.3	64.6	0.890	685.5	66.4	63.8	27.5
14	40	527	3.2	67.8	0.897	735.7	69.6	68.0	26.2
15	40	572	5.4	73.2	0.915	785.4	75.0	72.3	23.1
Residuum			25.0	98.2	0.984		100.0	87.5	12.3
Total			98.2		0.858				
Loss			1.8						
Reported					0.854				

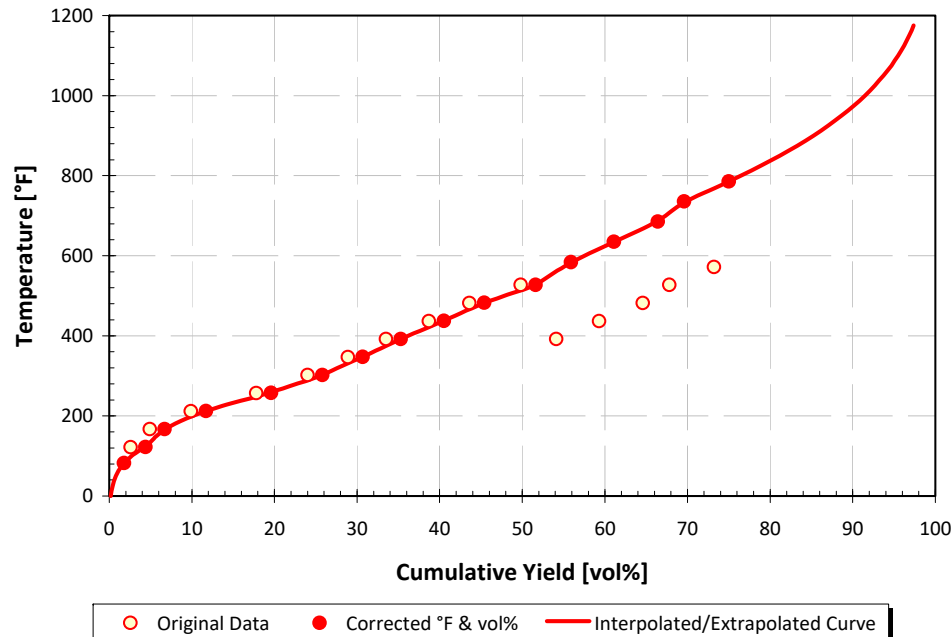
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Crude Oil Assay – Text pg. 416

Fraction	mm Hg	°F	Incremental vol%	Cumulative vol%	SpGr	Corrected °F	Corrected Cumulative	Mid-Cumulative Amount	°API
	756	82	IBP			82.3	1.8	0.9	
1	756	122	2.6	2.6	0.644	122.3	4.4	3.1	88.2
2	756	167	2.3	4.9	0.683	167.3	6.7	5.5	75.7
3	756	212	5.0	9.9	0.725	212.3	11.7	9.2	63.7
4	756	257	7.9	17.8	0.751	257.3	19.6	15.7	56.9
5	756	302	6.2	24.0	0.772	302.4	25.8	22.7	51.8
6	756	347	4.9	28.9	0.791	347.4	30.7	28.3	47.4
7	756	388	4.0	32.9	0.808	392.4	35.3	33.0	43.6
8	756	425	3.7	36.6	0.825	437.4	40.5	37.9	40.0
9	756	462	3.3	40.0	0.837	482.4	45.4	43.0	37.6
10	756	502	2.9	42.9	0.852	527.4	51.6	48.5	34.6
11	756	547	2.6	45.5	0.867	584.0	55.9	53.8	31.7
12	756	592	2.3	47.8	0.872	635.0	61.1	58.5	30.8
13	756	637	2.0	49.8	0.890	685.5	66.4	63.8	27.5
14	756	682	1.8	51.6	0.897	735.7	69.6	68.0	26.2
15	756	727	1.6	53.2	0.915	785.4	75.0	72.3	23.1
16	756	772	1.4	54.6	0.984		100.0	87.5	12.3
17	756	817	1.2	55.8					
18	756	862	1.0	56.8					
19	756	907	0.8	57.6					
20	756	952	0.7	58.3					
21	756	997	0.6	58.9					
22	756	1042	0.5	59.4					
23	756	1087	0.4	59.8					
24	756	1132	0.3	60.1					
25	756	1177	0.2	60.3					
26	756	1222	0.1	60.4					
27	756	1267	0.1	60.5					
28	756	1312	0.1	60.6					
29	756	1357	0.1	60.7					
30	756	1402	0.1	60.8					
31	756	1447	0.1	60.9					
32	756	1492	0.1	61.0					
33	756	1537	0.1	61.1					
34	756	1582	0.1	61.2					
35	756	1627	0.1	61.3					
36	756	1672	0.1	61.4					
37	756	1717	0.1	61.5					
38	756	1762	0.1	61.6					
39	756	1807	0.1	61.7					
40	756	1852	0.1	61.8					
41	756	1897	0.1	61.9					
42	756	1942	0.1	62.0					
43	756	1987	0.1	62.1					
44	756	2032	0.1	62.2					
45	756	2077	0.1	62.3					
46	756	2122	0.1	62.4					
47	756	2167	0.1	62.5					
48	756	2212	0.1	62.6					
49	756	2257	0.1	62.7					
50	756	2302	0.1	62.8					
51	756	2347	0.1	62.9					
52	756	2392	0.1	63.0					
53	756	2437	0.1	63.1					
54	756	2482	0.1	63.2					
55	756	2527	0.1	63.3					
56	756	2572	0.1	63.4					
57	756	2617	0.1	63.5					
58	756	2662	0.1	63.6					
59	756	2707	0.1	63.7					
60	756	2752	0.1	63.8					
61	756	2797	0.1	63.9					
62	756	2842	0.1	64.0					
63	756	2887	0.1	64.1					
64	756	2932	0.1	64.2					
65	756	2977	0.1	64.3					
66	756	3022	0.1	64.4					
67	756	3067	0.1	64.5					
68	756	3112	0.1	64.6					
69	756	3157	0.1	64.7					
70	756	3202	0.1	64.8					
71	756	3247	0.1	64.9					
72	756	3292	0.1	65.0					
73	756	3337	0.1	65.1					
74	756	3382	0.1	65.2					
75	756	3427	0.1	65.3					
76	756	3472	0.1	65.4					
77	756	3517	0.1	65.5					
78	756	3562	0.1	65.6					
79	756	3607	0.1	65.7					
80	756	3652	0.1	65.8					
81	756	3697	0.1	65.9					
82	756	3742	0.1	66.0					
83	756	3787	0.1	66.1					
84	756	3832	0.1	66.2					
85	756	3877	0.1	66.3					
86	756	3922	0.1	66.4					
87	756	3967	0.1	66.5					
88	756	4012	0.1	66.6					
89	756	4057	0.1	66.7					
90	756	4102	0.1	66.8					
91	756	4147	0.1	66.9					
92	756	4192	0.1	67.0					
93	756	4237	0.1	67.1					
94	756	4282	0.1	67.2					
95	756	4327	0.1	67.3					
96	756	4372	0.1	67.4					
97	756	4417	0.1	67.5					
98	756	4462	0.1	67.6					
99	756	4507	0.1	67.7					
100	756	4552	0.1	67.8					

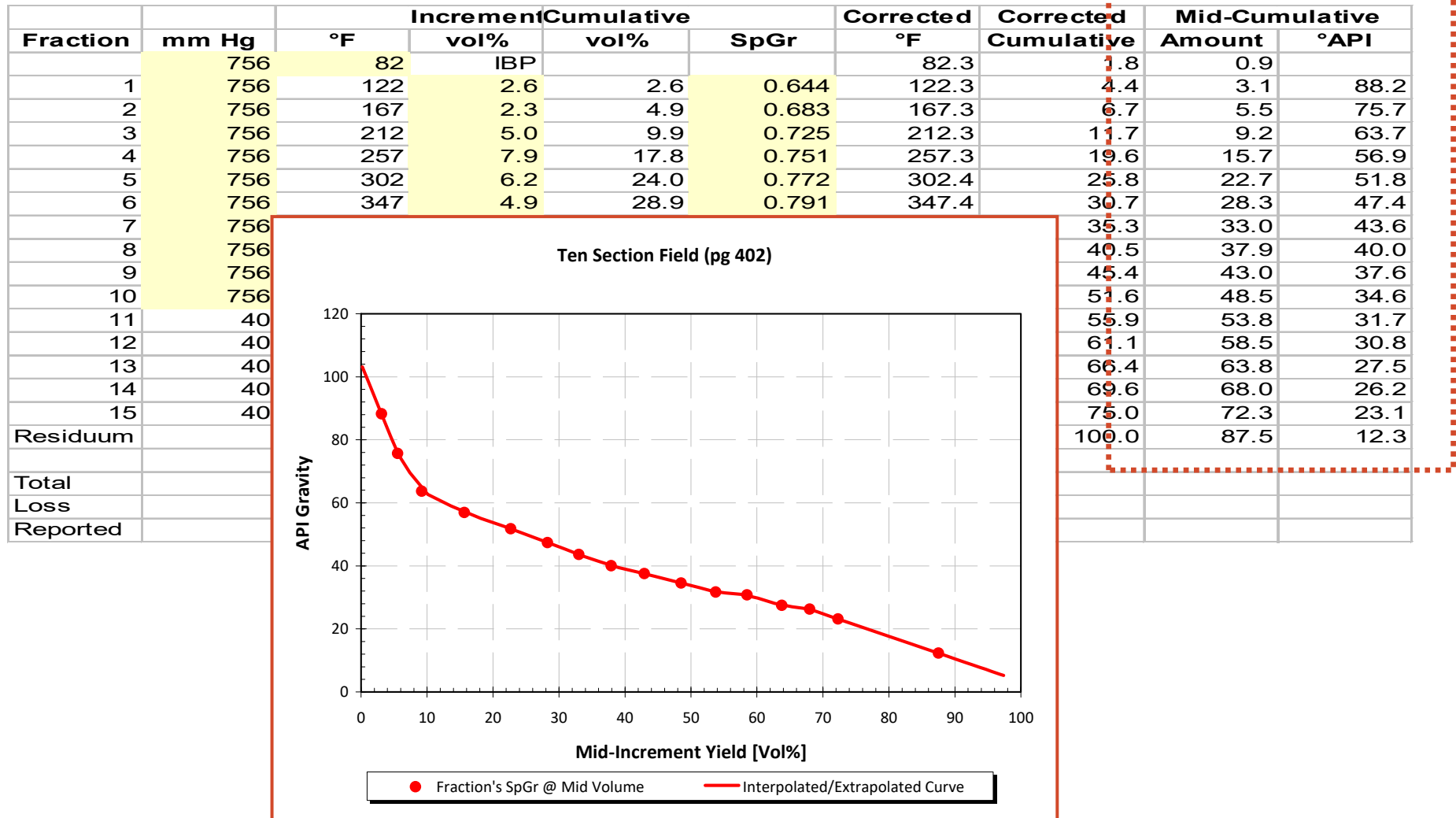
Ten Section Field (pg 402)



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Fraction	mm Hg	Increment		Cumulative		Corrected	Corrected	Mid-Cumulative	
		°F	vol%	vol%	SpGr			Amount	°API
	756	82	IBP			82.3	1.8	0.9	
1	756	122	2.6	2.6	0.644	122.3	4.4	3.1	88.2
2	756	167	2.3	4.9	0.683	167.3	6.7	5.5	75.7
3	756	212	5.0	9.9	0.725	212.3	11.7	9.2	63.7
4	756	257	7.9	17.8	0.751	257.3	19.6	15.7	56.9
5	756	302	6.2	24.0	0.772	302.4	25.8	22.7	51.8
6	756	347	4.9	28.9	0.791	347.4	30.7	28.3	47.4
7	756	392	4.6	33.5	0.808	392.4	35.3	33.0	43.6
8	756	437	5.2	38.7	0.825	437.4	40.5	37.9	40.0
9	756	482	4.9	43.6	0.837	482.4	45.4	43.0	37.6
10	756	527	6.2	49.8	0.852	527.4	51.6	48.5	34.6
11	40	392	4.3	54.1	0.867	584.0	55.9	53.8	31.7
12	40	437	5.2	59.3	0.872	635.0	61.1	58.5	30.8
13	40	482	5.3	64.6	0.890	685.5	66.4	63.8	27.5
14	40	527	3.2	67.8	0.897	735.7	69.6	68.0	26.2
15	40	572	5.4	73.2	0.915	785.4	75.0	72.3	23.1
Residuum			25.0	98.2	0.984		100.0	87.5	12.3
Total			98.2		0.858				
Loss			1.8						
Reported					0.854				

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