

Reference: CPCBL18A  
Crude: CPC Blend



## Crude Summary Report

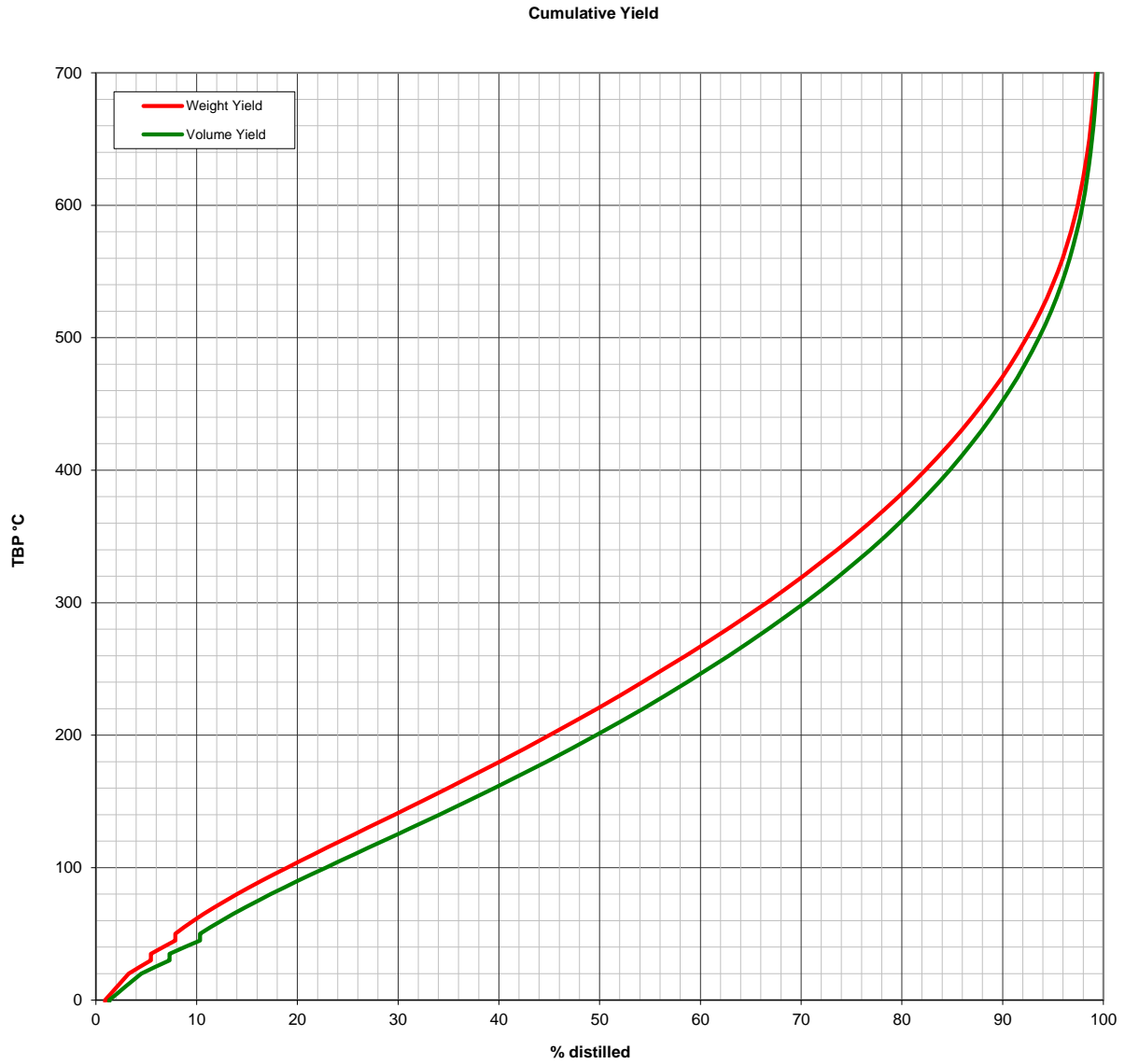
General Information		Molecules (%wt on crude)				Whole Crude Properties			
Reference:	CPCBL18A	methane + ethane	0.00	Density @ 15°C (g/cc)	0.7964				
Name:	CPC Blend	propane	0.22	<b>API Gravity</b>	<b>46.1</b>				
Origin:	Kazakhstan	isobutane	0.70	Total Sulfur (% wt)	0.58				
		n-butane	2.33	Pour Point (°C)	-15				
Assay Date:	12/17/2020	isopentane	2.21	Viscosity @ 20°C (cSt)	2.7				
		n-pentane	2.42	Viscosity @ 40°C (cSt)	1.7				
Comments:		cyclopentane	0.15	Nickel (ppm)	0.4				
		C6 paraffins	4.76	Vanadium (ppm)	0.6				
		C6 naphthenes	1.26	Total Nitrogen (ppm)	206				
		benzene	0.20	Total Acid Number (mgKOH/g)	0.05				
		C7 paraffins	3.86	Mercaptan Sulfur (ppm)	661				
		C7 naphthenes	2.58	Hydrogen Sulfide (ppm)	0.0				
		toluene	0.73	Reid Vapor Pressure (kPa)	59.2				

Cut Data	IBP	Atmospheric Cuts									Vacuum Cuts			
		C5	65	100	150	200	250	300	350	370	370	450	500	550
Start (°C)	FBP	65	100	150	200	250	300	350	370	FBP	450	500	550	FBP
Yield (% wt)		8.0	8.3	13.3	12.7	11.4	10.2	8.6	3.0	21.8	9.8	4.4	3.1	4.5
Yield (% vol)		9.9	9.2	14.0	12.8	11.1	9.6	8.0	2.7	18.9	8.7	3.8	2.7	3.7
Cumulative Yield (% wt)		2.7	10.7	19.0	32.3	45.0	56.4	66.6	75.2	78.2	78.2	88.0	92.4	95.5
Volume Average B.P. (°C)	229	39.8	83	125	174	224	274	324	360	480	407	474	523	627
Density @ 15°C (g/cc)	0.7964	0.6413	0.7135	0.7539	0.7858	0.8108	0.8406	0.8585	0.8810	0.9107	0.8874	0.9099	0.9218	0.9585
API Gravity	46.1	89.1	66.8	56.1	48.5	42.9	36.8	33.2	29.0	23.8	27.9	23.9	21.9	16.1
UOPK	12.14			11.87	11.84	11.88	11.83	11.93	11.85	12.15	12.05	12.12	12.23	12.25
Molecular Weight (g/mol)				110	138	171	209	255	289	453	348	450	568	939
Total Sulfur (% wt)	0.58	0.065	0.145	0.229	0.232	0.251	0.57	0.96	1.18	1.36	1.20	1.26	1.41	1.75
Mercaptan Sulfur (ppm)	661.0	354.2	535.3	767.6	1144.7	837.3	328.8							
Total Nitrogen (ppm)	206					1	6	68	216	887	462	696	850	2019
Basic Nitrogen (ppm)	42					0	2	10	22	185	57	141	191	500
Total Acid Number (mgKOH/g)	0.05	0.00	0.00	0.01	0.02	0.03	0.06	0.08	0.10	0.14	0.12	0.15	0.17	0.14
Viscosity @ 20°C (cSt)	2.69				1.28									
Viscosity @ 40°C (cSt)	1.67				0.99	1.55	2.76	5.51	9.86					
Viscosity @ 50°C (cSt)	1.38					1.35	2.31	4.36	7.40	65.6	16.7	59.7	158	
Viscosity @ 60°C (cSt)										41.6	12.1	38.1	92.0	
Viscosity @ 100°C (cSt)										10.9	4.55	10.3	19.0	147
Viscosity @ 130°C (cSt)														43.2
Viscosity @ 150°C (cSt)														23.2
RON (Clear)		77.1	39.2	56.1	31.5									
MON (Clear)		74.2	53.6	54.7	31.8									
Paraffins (% wt)	50.0	97.9	69.4	42.5	55.0									
Naphthenes (%wt)	28.5	2.1	28.3	41.2	27.7									
Aromatics (% wt)	21.5	0.0	2.3	16.3	17.3									
Pour Point (°C)	-15					-46	-22	1	13	34	29	47	56	36
Cloud Point (°C)						-45	-20	3						
Freeze Point (°C)						-57	-39	-16						
Smoke Point (mm)						24	20	16						
Cetane Index (D4737A)						40	49	53	61	61				
Naphthalenes (% vol)						0.0	1.4	5.6	7.8					
Aniline Point (°C)				48.2	54.1	63.8	72.0	79.2	84.2		91.7	100.8	106.0	
Hydrogen (% wt)	14.1	16.6	15.5	14.2	14.2	13.8	13.6	13.2	13.0		12.9	12.8	12.8	
Total Wax (% wt)	14.0									15.9	18.8	16.4	15.7	9.1
C7 Asphaltenes (% wt)	0.0									0.1	0.0	0.0	0.0	0.3
Micro Carbon Residue (% wt)	0.5									2.4	0.1	1.1	10.6	
Vanadium (ppm)	0.6									2.7	0.0	0.0	13.2	
Nickel (ppm)	0.4									1.9	0.0	0.0	9.2	
Iron (ppm)	1.1									4.9	0.0	0.0	23.6	
Sodium (ppm)	4.9													
Mercury (ppb)	2.6													
Arsenic (ppb)	9													

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## Yield Distribution



**Cumulative Volume % Distilled at 10 Degree C (TBP) Intervals**

	0	10	20	30	40	50	60	70	80	90
0				7.3	8.8	10.3	12.5	14.8	17.4	20.0
100	22.8	25.6	28.5	31.3	34.1	36.8	39.5	42.2	44.7	47.2
200	49.7	52.0	54.3	56.5	58.7	60.8	62.8	64.8	66.7	68.6
300	70.4	72.1	73.7	75.3	76.9	78.3	79.7	81.1	82.4	83.6
400	84.7	85.9	86.9	87.9	88.9	89.8	90.7	91.5	92.2	92.9
500	93.6	94.2	94.8	95.3	95.8	96.3	96.7	97.0	97.4	97.7