

Reference: EBOK20X
Crude: Ebok



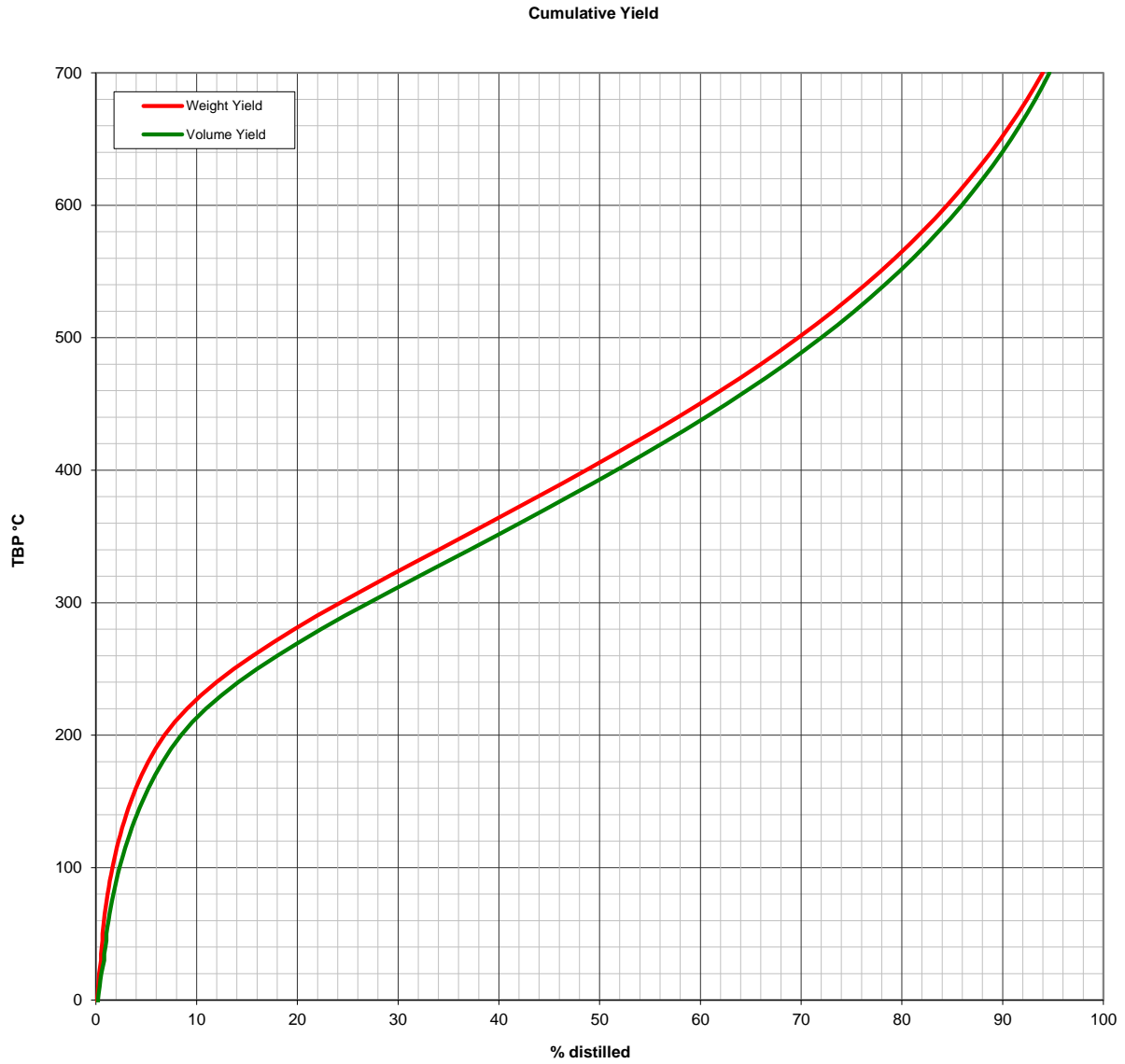
Crude Summary Report

General Information		Molecules (%wt on crude)									Whole Crude Properties			
Reference:	EBOK20X	methane + ethane								0.00	Density @ 15°C (g/cc)	0.9466		
Name:	Ebok	propane								0.01	API Gravity	17.9		
Origin:	Nigeria	isobutane								0.02	Total Sulfur (% wt)	0.44		
		n-butane								0.07	Pour Point (°C)	-36		
Assay Date:	7/31/2020	isopentane								0.11	Viscosity @ 20°C (cSt)	376.0		
		n-pentane								0.08	Viscosity @ 40°C (cSt)	93.8		
Comments:		cyclopentane								0.02	Nickel (ppm)	36.3		
		C6 paraffins								0.28	Vanadium (ppm)	6.1		
		C6 naphthenes								0.16	Total Nitrogen (ppm)	4323		
		benzene								0.04	Total Acid Number (mgKOH/g)	3.19		
		C7 paraffins								0.31	Mercaptan Sulfur (ppm)	9.0		
		C7 naphthenes								0.32	Hydrogen Sulfide (ppm)	0.0		
		toluene								0.01	Reid Vapor Pressure (kPa)	12.5		
													Salt (ptb)	20.4
Cut Data		Atmospheric Cuts									Vacuum Cuts			
Start (°C)	IBP	C5	65	100	150	200	250	300	350	370	370	450	500	550
End (°C)	FBP	65	100	150	200	250	300	350	370	FBP	450	500	550	FBP
Yield (% wt)		0.6	0.8	1.8	3.3	6.9	10.5	12.3	4.9	58.6	18.5	9.8	8.2	22.1
Yield (% vol)		0.9	1.0	2.3	3.8	7.5	11.1	12.5	4.9	55.5	18.1	9.4	7.7	20.3
Cumulative Yield (% wt)		0.3	0.9	1.6	3.5	6.8	13.7	24.2	36.5	41.4	41.4	59.9	69.7	77.9
Volume Average B.P. (°C)	408	39.1	84	127	177	228	276	325	360	525	409	474	524	651
Density @ 15°C (g/cc)	0.9466	0.6414	0.7209	0.7612	0.8226	0.8638	0.8977	0.9263	0.9467	0.9977	0.9660	0.9860	0.9955	1.0322
API Gravity	17.9	89.1	64.8	54.3	40.4	32.2	26.0	21.2	17.9	10.3	14.9	11.9	10.6	5.5
UOPK	11.30			11.77	11.33	11.18	11.09	11.06	11.03	11.30	11.08	11.19	11.32	11.47
Molecular Weight (g/mol)				111	136	165	198	236	266	477	314	402	508	939
Total Sulfur (% wt)	0.44	0.001	0.003	0.010	0.041	0.092	0.198	0.353	0.423	0.59	0.427	0.482	0.57	0.78
Mercaptan Sulfur (ppm)	9.0	5.1	4.8	3.4	3.0	2.6	1.8							
Total Nitrogen (ppm)	4323					14	76	394	1014	7198	2353	3762	4821	13637
Basic Nitrogen (ppm)	1450					12	74	303	594	2347	992	1542	2142	3910
Total Acid Number (mgKOH/g)	3.19	0.00	0.00	0.00	0.00	0.24	1.50	4.04	4.66	3.91	3.90	5.25	5.98	2.55
Viscosity @ 20°C (cSt)	376				1.54									
Viscosity @ 40°C (cSt)	93.8				1.13	1.96	4.21	13.1	41.4					
Viscosity @ 50°C (cSt)	54.3					1.65	3.30	9.10	25.0	23444	164	3195	35353	
Viscosity @ 60°C (cSt)										6940	84.8	1156	9786	
Viscosity @ 100°C (cSt)										238	13.7	71.1	283	71529
Viscosity @ 130°C (cSt)														3901
Viscosity @ 150°C (cSt)														940
RON (Clear)		80.4	59.5	63.8	51.8									
MON (Clear)		79.3	67.9	60.8	46.2									
Paraffins (% wt)	3.4	94.7	53.8	29.1	24.9									
Naphthenes (%wt)	38.1	5.3	40.8	58.6	56.7									
Aromatics (% wt)	58.4	0.0	5.4	12.4	18.4									
Pour Point (°C)	-36					-111	-102	-85	-64	36	-12	26	36	69
Cloud Point (°C)						-109	-100	-82						
Freeze Point (°C)						-113	-105	-96						
Smoke Point (mm)						21	16	12						
Cetane Index (D4737A)						26	29	31	34	35				
Naphthalenes (% vol)						0.0	1.0	5.6	9.1					
Aniline Point (°C)				53.0	51.6	51.8	49.5	46.6	48.9		56.7	62.4	63.3	
Hydrogen (% wt)	11.9	16.5	15.0	14.2	13.7	12.7	12.5	11.9	11.5		11.5	11.5	11.6	
Total Wax (% wt)	0.6									0.5	1.0	0.6	0.3	0.1
C7 Asphaltene (% wt)	0.0									0.0	0.0	0.0	0.0	0.1
Micro Carbon Residue (% wt)	4.5									7.6	0.3	2.3	19.2	
Vanadium (ppm)	6.1									10.4	0.0	0.0	27.5	
Nickel (ppm)	36.3									62.0	0.0	0.0	164.1	
Iron (ppm)	44.9									76.7	0.0	0.0	202.8	
Sodium (ppm)	15.9													
Mercury (ppb)	1.0													
Arsenic (ppb)	271													

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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				0.8	0.9	1.0	1.2	1.5	1.7	2.0
100	2.4	2.7	3.1	3.6	4.1	4.6	5.2	5.9	6.6	7.5
200	8.5	9.6	10.9	12.4	14.1	16.0	18.0	20.1	22.4	24.7
300	27.1	29.6	32.1	34.6	37.1	39.6	42.1	44.5	46.9	49.3
400	51.6	53.9	56.2	58.4	60.5	62.6	64.6	66.6	68.4	70.2
500	72.0	73.7	75.3	76.8	78.3	79.7	81.1	82.4	83.6	84.8