

Reference: KUTUB25Y
Crude: Kutubu Blend



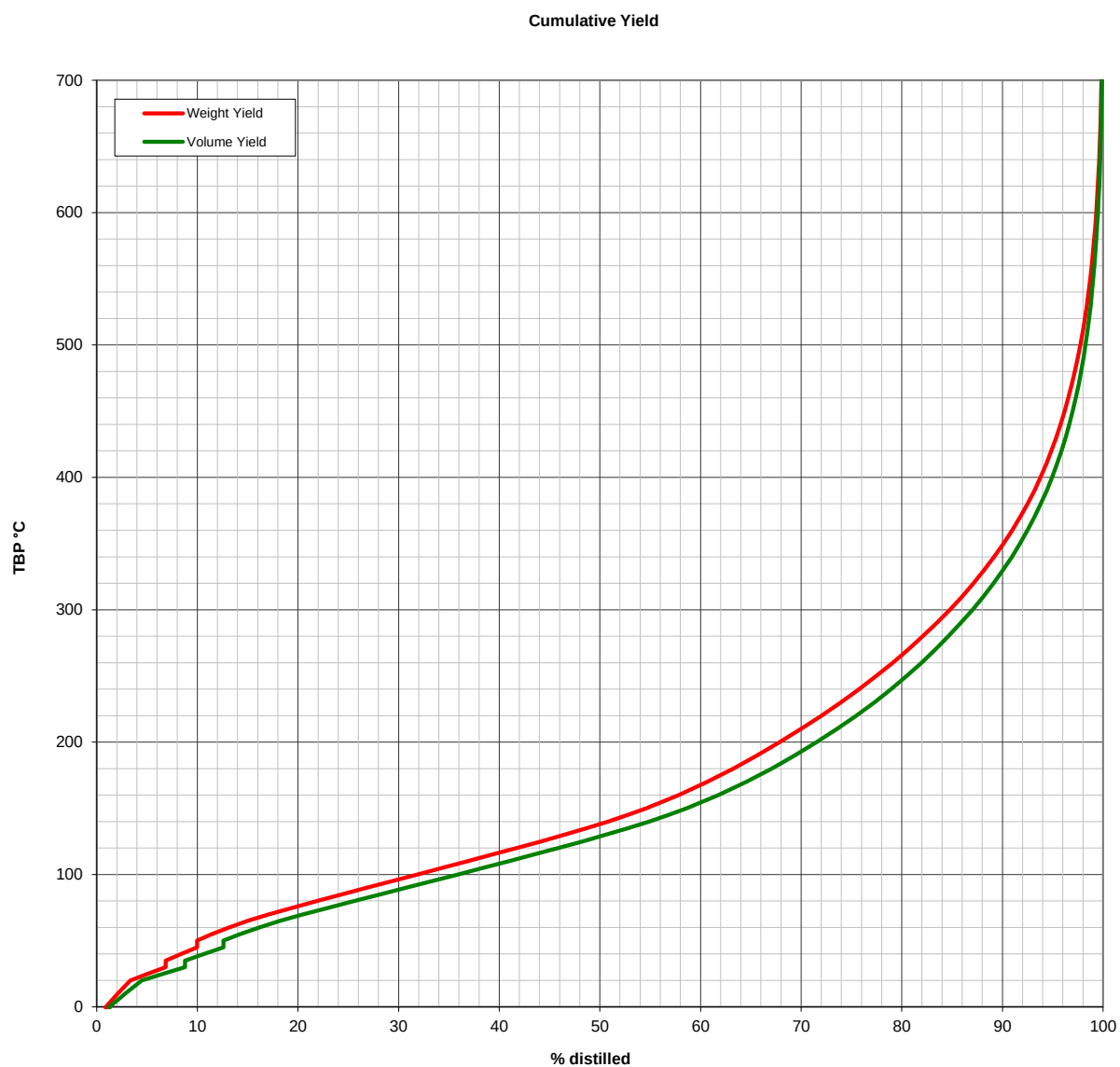
Crude Summary Report

General Information				Molecules (%wt on crude)							Whole Crude Properties					
Reference:	KUTUB25Y			methane + ethane			0.00		Density @ 15°C (g/cc)			0.7687				
Name:	Kutubu Blend			propane			0.11		API Gravity			52.5				
				isobutane			0.72		Total Sulfur (% wt)			0.02				
Origin:	Papua New Guinea			n-butane			1.96		Pour Point (°C)			-20				
				isopentane			2.68		Viscosity @ 20°C (cSt)			1.0				
Assay Date:	6/27/2025			n-pentane			2.38		Viscosity @ 40°C (cSt)			0.8				
				cyclopentane			0.32		Nickel (ppm)			0.2				
Comments:				C6 paraffins			5.86		Vanadium (ppm)			0.0				
				C6 naphthenes			3.70		Total Nitrogen (ppm)			125				
				benzene			0.79		Total Acid Number (mgKOH/g)			0.02				
				C7 paraffins			5.49		Mercaptan Sulfur (ppm)			0.5				
				C7 naphthenes			6.78		Hydrogen Sulfide (ppm)			0.0				
				toluene			2.82		Reid Vapor Pressure (kPa)			53.1				
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)		12.3	16.8	22.8	13.3	9.6	7.3	5.3	1.7	8.2		4.4	1.6	1.0	1.3	
Yield (% vol)		14.6	17.6	22.7	12.9	9.0	6.5	4.7	1.4	6.8		3.8	1.3	0.8	1.0	
Cumulative Yield (% wt)		2.7	15.0	31.9	54.6	67.9	77.5	84.8	90.1	91.8		91.8	96.2	97.7	98.7	
Volume Average B.P. (°C)	161	41.2	83	124	173	224	274	323	360	462		405	473	523	620	
Density @ 15°C (g/cc)	0.7687	0.6473	0.7316	0.7681	0.7879	0.8233	0.8573	0.8672	0.8880	0.9270		0.8910	0.9423	0.9813	1.0046	
API Gravity	52.5	87.1	61.9	52.7	48.0	40.3	33.5	31.6	27.8	21.1		27.2	18.6	12.6	9.3	
UOPK	11.98			11.63	11.79	11.70	11.60	11.80	11.76	11.84		11.99	11.70	11.48	11.65	
Molecular Weight (g/mol)				108	137	169	205	252	287	413		343	428	516	832	
Total Sulfur (% wt)		0.000	0.000	0.001	0.001	0.003	0.014	0.064	0.101	0.155		0.098	0.161	0.217	0.295	
Mercaptan Sulfur (ppm)	0.5	0.0	0.0	0.0	0.2	0.4	0.3									
Total Nitrogen (ppm)	125					1	6	88	264	1407		458	1210	2601	4014	
Basic Nitrogen (ppm)	47					0	4	32	95	522		210	399	602	1689	
Total Acid Number (mgKOH/g)	0.02	0.00	0.00	0.00	0.00	0.01	0.04	0.07	0.06	0.08		0.05	0.11	0.17	0.09	
Viscosity @ 20°C (cSt)	0.96					1.19										
Viscosity @ 40°C (cSt)	0.82					0.92	1.44	2.58	5.12	9.00						
Viscosity @ 50°C (cSt)	0.76						1.26	2.16	4.06	6.81	60.0					
Viscosity @ 60°C (cSt)											38.3	14.7	76.6	458		
Viscosity @ 100°C (cSt)											10.3	10.7	47.7	238		
Viscosity @ 130°C (cSt)												4.20	12.0	35.7	815	
Viscosity @ 150°C (cSt)															156	
															68.6	
RON (Clear)		79.1	43.8	69.6	37.9											
MON (Clear)		77.1	61.7	64.3	36.3											
Paraffins (% wt)	46.2	96.4	56.6	30.4	52.0											
Naphthenes (%wt)	30.5	3.6	37.7	43.0	25.6											
Aromatics (% wt)	23.3	0.0	5.7	26.6	22.4											
Pour Point (°C)	-20					-40	-18	8	23	16		37	49	55	22	
Cloud Point (°C)						-38	-16	10								
Freeze Point (°C)						-48	-33	-12								
Smoke Point (mm)						23	19	16								
Cetane Index (D4737A)						38	43	46	57	58						
Naphthalenes (% vol)						0.1	5.7	11.7	11.9							
Aniline Point (°C)		50.6				52.9	58.6	67.0	75.9	80.7		85.7	90.3	91.2		
Hydrogen (% wt)	13.9	16.5	15.0	13.4	14.0	13.4	13.1	13.0	12.7			12.7	12.1	11.6		
Total Wax (% wt)	14.1										28.5		41.4	18.8	9.5	10.5
C7 Asphaltenes (% wt)	0.0										0.1					
Micro Carbon Residue (% wt)	0.2										2.5					
Vanadium (ppm)	0.0										0.0					
Nickel (ppm)	0.2										2.0					
Iron (ppm)	0.2										2.0					
Sodium (ppm)	0.1															
Mercury (ppb)	1.0															
Arsenic (ppb)	5															

This assay information is provided to you courtesy of ExxonMobil Technology & Engineering Company (EMTEC) and is based on a range of data and information. While care has been taken in preparing these materials, no representations, warranties or guarantees are made as to their accuracy, reliability, quality, correctness or completeness. Each user must make its own determination and judgment on applying any information in this assay. Any and all use of this information shall be the sole responsibility of the user, and the user releases EMTEC, its parent and its affiliates from any and all claims arising from its use and shall defend and hold EMTEC, its parent and its affiliates harmless from any third party claims arising from the user's application or use of the assay information.

Reference: KUTUB25Y
Crude: Kutubu Blend

Yield Distribution



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

	0	10	20	30	40	50	60	70	80	90
0				8.8	10.7	12.6	16.2	20.6	25.6	30.8
100	35.9	40.9	45.9	50.6	54.9	58.6	61.8	64.6	67.1	69.4
200	71.5	73.6	75.5	77.3	78.9	80.5	82.0	83.3	84.6	85.9
300	87.0	88.1	89.1	90.1	90.9	91.8	92.5	93.2	93.8	94.4
400	94.9	95.4	95.9	96.3	96.6	97.0	97.3	97.6	97.8	98.0
500	98.3	98.4	98.6	98.8	98.9	99.0	99.1	99.2	99.3	99.4