

Reference: BANYU23Y
Crude: Banyu Urip



Crude Summary Report

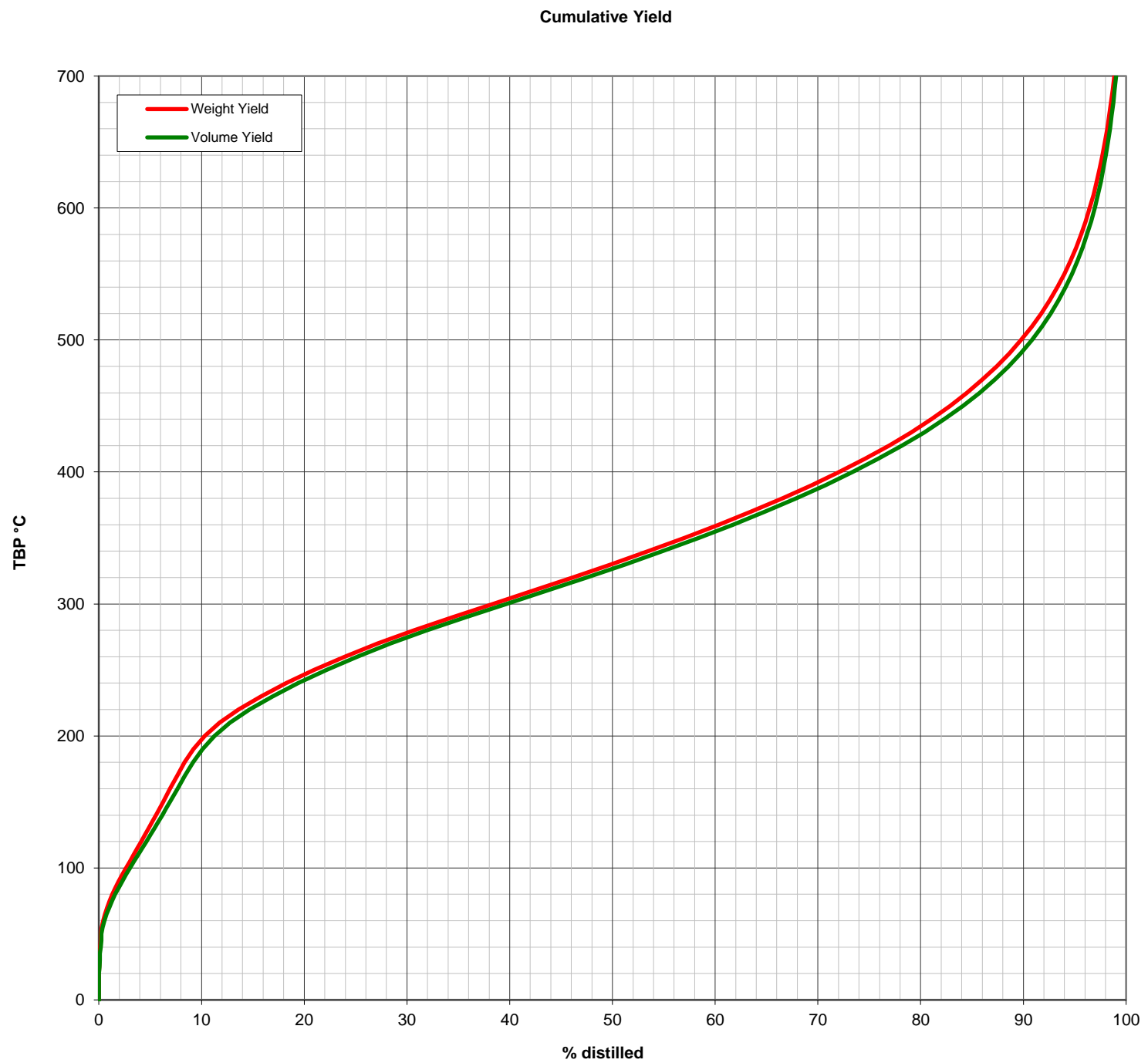
General Information		Molecules (%wt on crude)				Whole Crude Properties			
Reference:	BANYU23Y	methane + ethane	0.00	Density @ 15°C (g/cc)	0.8619				
Name:	Banyu Urip	propane	0.00	API Gravity	32.6				
Origin:	Indonesia	isobutane	0.00	Total Sulfur (% wt)	0.32				
Assay Date:	10/26/2023	n-butane	0.01	Pour Point (°C)	27				
Comments:		isopentane	0.04	Viscosity @ 20°C (cSt)	53.1				
		n-pentane	0.06	Viscosity @ 40°C (cSt)	9.0				
		cyclopentane	0.01	Nickel (ppm)	0.2				
		C6 paraffins	0.24	Vanadium (ppm)	0.2				
		C6 naphthenes	0.27	Total Nitrogen (ppm)	320				
		benzene	0.92	Total Acid Number (mgKOH/g)	0.05				
		C7 paraffins	0.35	Mercaptan Sulfur (ppm)	76.0				
		C7 naphthenes	0.56	Hydrogen Sulfide (ppm)	0.0				
		toluene	0.82	Reid Vapor Pressure (kPa)	3.1				

Cut Data	IBP	Atmospheric Cuts									Vacuum Cuts				
		C5	65	100	150	200	250	300	350	370	370	450	500	550	
Start (°C)															
End (°C)	FBP	65	100	150	200	250	300	350	370	FBP	450	500	550	FBP	
Yield (% wt)		0.6	2.1	3.6	4.1	10.6	17.4	18.6	6.5	36.5	19.3	6.9	4.2	6.0	
Yield (% vol)		0.8	2.3	3.9	4.3	10.9	17.5	18.8	6.5	35.1	19.2	6.7	3.9	5.3	
Cumulative Yield (% wt)		0.0	0.6	2.7	6.3	10.3	21.0	38.3	57.0	63.5	63.5	82.9	89.8	94.0	
Volume Average B.P. (°C)	336	50.7	84	125	177	228	276	324	360	466	406	473	523	633	
Density @ 15°C (g/cc)	0.8619	0.6786	0.7790	0.7995	0.8074	0.8395	0.8568	0.8566	0.8667	0.8949	0.8670	0.8862	0.9300	0.9816	
API Gravity	32.6	77.0	50.1	45.4	43.7	37.0	33.6	33.6	31.7	26.5	31.6	28.1	20.6	12.6	
UOPK	11.96			11.19	11.55	11.50	11.62	11.95	12.05	12.28	12.33	12.44	12.11	11.98	
Molecular Weight (g/mol)				107	138	170	207	256	295	438	356	465	560	923	
Total Sulfur (% wt)	0.32	0.014	0.023	0.038	0.049	0.070	0.210	0.492	0.51	0.417	0.245	0.349	0.62	0.91	
Mercaptan Sulfur (ppm)	76.0	91.9	94.3	100.4	173.4	102.2	42.3								
Total Nitrogen (ppm)	320					0	4	64	187	810	304	616	1183	2396	
Basic Nitrogen (ppm)	102					0	2	30	127	240	165	163	500	385	
Total Acid Number (mgKOH/g)	0.05	0.00	0.02	0.09	0.11	0.02	0.02	0.03	0.04	0.08	0.05	0.09	0.12	0.15	
Viscosity @ 20°C (cSt)	53.1				1.32										
Viscosity @ 40°C (cSt)	9.04				1.03	1.57	2.64	4.87	8.06						
Viscosity @ 50°C (cSt)	5.02					1.37	2.23	3.92	6.21						
Viscosity @ 60°C (cSt)										37.5	11.9	37.8	130		
Viscosity @ 100°C (cSt)										25.4	8.92	25.6	78.1		
Viscosity @ 130°C (cSt)										8.01	3.76	8.06	17.6	301	
Viscosity @ 150°C (cSt)														76.2	
RON (Clear)		77.5	55.6	83.3	45.1										
MON (Clear)		77.1	63.5	71.1	44.6										
Paraffins (% wt)	41.2	94.0	26.4	20.4	49.3										
Naphthenes (%wt)	25.1	6.0	21.4	27.9	20.7										
Aromatics (% wt)	33.7	0.0	52.2	51.7	30.0										
Pour Point (°C)	27						-40	-18	10	28	58	46	60	67	51
Cloud Point (°C)								-36	-14	13					
Freeze Point (°C)							-50	-33	-12						
Smoke Point (mm)							20	18	15						
Cetane Index (D4737A)							32	38	47	62	69				
Naphthalenes (% vol)							2.1	10.9	14.9	16.0					
Aniline Point (°C)				37.6	41.7	52.5	65.6	79.6	89.0		103.2	112.1	105.5		
Hydrogen (% wt)	13.0	16.4	11.4	12.0	13.6	12.7	13.1	13.2	13.3		13.3	13.4	12.7		
Total Wax (% wt)	44.5									50.0	60.9	47.7	38.4	25.6	
C7 Asphaltenes (% wt)	0.2									0.6		0.0	0.0	3.7	
Micro Carbon Residue (% wt)	1.5									4.1		0.2	3.1	22.2	
Vanadium (ppm)	0.2									0.5		0.0	0.0	2.8	
Nickel (ppm)	0.2									0.6		0.0	0.0	3.6	
Iron (ppm)	0.0									0.0		0.0	0.0	0.2	
Sodium (ppm)	0.7														
Mercury (ppb)	5.7														
Arsenic (ppb)	42														

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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				0.1	0.2	0.2	0.6	1.0	1.6	2.3
100	3.0	3.8	4.6	5.4	6.2	6.9	7.7	8.4	9.2	10.1
200	11.3	12.8	14.7	16.9	19.4	22.2	25.1	28.4	31.9	35.7
300	39.6	43.6	47.5	51.3	54.9	58.4	61.7	64.9	67.9	70.7
400	73.4	75.9	78.2	80.3	82.3	84.1	85.7	87.2	88.6	89.8
500	90.8	91.8	92.7	93.4	94.1	94.7	95.3	95.8	96.2	96.6