

Reference: LIZA23Z
Crude: Liza



Crude Summary Report

General Information		Molecules (%wt on crude)				Whole Crude Properties			
Reference:	LIZA23Z	methane + ethane	0.00	Density @ 15°C (g/cc)	0.8656				
Name:	Liza	propane	0.24	API Gravity	31.9				
Origin:	Guyana	isobutane	0.20	Total Sulfur (% wt)	0.59				
Assay Date:	5/22/2024	n-butane	0.87	Pour Point (°C)	-9				
Comments:		isopentane	0.76	Viscosity @ 20°C (cSt)	14.6				
		n-pentane	0.99	Viscosity @ 40°C (cSt)	7.6				
		cyclopentane	0.13	Nickel (ppm)	14.6				
		C6 paraffins	1.95	Vanadium (ppm)	24.5				
		C6 naphthenes	0.93	Total Nitrogen (ppm)	1988				
		benzene	0.09	Total Acid Number (mgKOH/g)	0.26				
		C7 paraffins	1.72	Mercaptan Sulfur (ppm)	10.0				
		C7 naphthenes	1.61	Hydrogen Sulfide (ppm)	0.0				
		toluene	0.30	Reid Vapor Pressure (kPa)	42.1				
				Salt (ptb)	20.0				

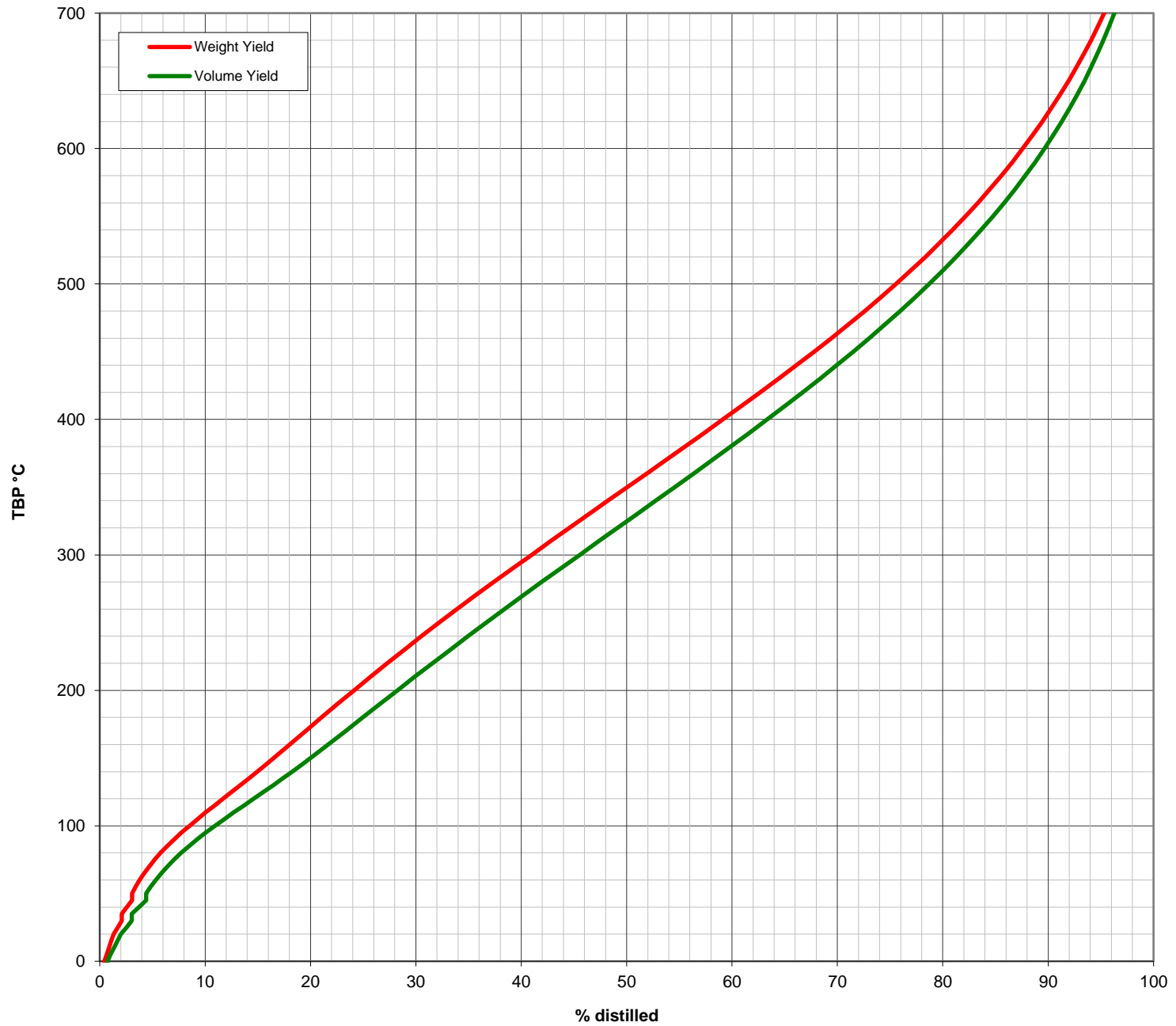
Cut Data	IBP	Atmospheric Cuts									Vacuum Cuts			
		C5	65	100	150	200	250	300	350	370	370	450	500	550
Start (°C)														
End (°C)	FBP	65	100	150	200	250	300	350	370	FBP	450	500	550	FBP
Yield (% wt)		3.1	4.3	8.0	7.6	8.1	8.8	9.1	3.7	46.3	14.0	7.8	6.6	17.8
Yield (% vol)		4.2	5.1	9.1	8.2	8.4	8.9	9.0	3.6	41.9	13.4	7.2	6.1	15.2
Cumulative Yield (% wt)		1.1	4.2	8.5	16.5	24.1	32.2	41.0	50.1	53.7	53.7	67.8	75.6	82.2
Volume Average B.P. (°C)	336	40.7	84	125	175	225	275	325	360	524	409	474	524	648
Density @ 15°C (g/cc)	0.8656	0.6440	0.7243	0.7584	0.7936	0.8240	0.8507	0.8652	0.8873	0.9496	0.9027	0.9276	0.9376	1.0058
API Gravity	31.9	88.2	63.8	55.0	46.7	40.2	34.7	32.0	27.9	17.4	25.2	21.0	19.3	9.1
UOPK	11.91			11.79	11.72	11.70	11.70	11.84	11.77	11.87	11.86	11.90	12.03	11.76
Molecular Weight (g/mol)				110	137	170	208	254	287	522	343	439	557	986
Total Sulfur (% wt)	0.6	0.000	0.000	0.004	0.030	0.102	0.258	0.434	0.54	1.08	0.64	0.76	0.95	1.61
Mercaptan Sulfur (ppm)	10.0													
Total Nitrogen (ppm)	1988					5	68	353	731	4157	1401	2487	3460	7313
Basic Nitrogen (ppm)	550					4	57	141	191	1135	414	631	428	2186
Total Acid Number (mgKOH/g)	0.26	0.00	0.01	0.03	0.07	0.13	0.23	0.41	0.57	0.35	0.72	0.55	0.23	0.01
Viscosity @ 20°C (cSt)	14.6				1.40									
Viscosity @ 40°C (cSt)	7.56				1.07	1.70	3.10	6.67	12.8					
Viscosity @ 50°C (cSt)	5.78					1.46	2.56	5.14	9.28	629				
Viscosity @ 60°C (cSt)										316	24.5	108	366	
Viscosity @ 100°C (cSt)										43.4	16.8	64.0	193	
Viscosity @ 130°C (cSt)											5.58	14.2	30.7	3020
Viscosity @ 150°C (cSt)														463
RON (Clear)		76.1	44.8	54.8	29.3									
MON (Clear)		74.2	58.3	54.2	27.2									
Paraffins (% wt)	28.2	95.4	59.6	36.6	45.8									
Naphthenes (%wt)	36.0	4.6	38.3	52.0	42.4									
Aromatics (% wt)	35.7	0.0	2.1	11.3	11.8									
Pour Point (°C)	-9					-49	-25	-1	11	40	27	44	54	54
Cloud Point (°C)						-48	-22	2						
Freeze Point (°C)						-59	-42	-19						
Smoke Point (mm)						25	21	16						
Cetane Index (D4737A)						37	43	49	58	58				
Naphthalenes (% vol)						0.1	2.9	6.8	8.4					
Aniline Point (°C)				47.0	49.9	57.1	66.9	75.6	79.1		84.9	93.3	98.3	
Hydrogen (% wt)	13.3	16.5	15.3	14.3	14.3	13.6	13.4	13.3	12.9		12.7	12.5	12.5	
Total Wax (% wt)	10.6									9.4	17.6	12.7	8.5	1.9
C7 Asphaltenes (% wt)	0.2									0.4	0.0	0.0	1.0	
Micro Carbon Residue (% wt)	3.2									6.8	0.1	1.0	17.3	
Vanadium (ppm)	24.5									52.9	0.0	0.0	137.3	
Nickel (ppm)	14.6									31.5	0.0	0.0	81.7	
Iron (ppm)	1.8									3.8	0.0	0.0	9.9	
Sodium (ppm)	3.6													
Mercury (ppb)	1.0													
Arsenic (ppb)	5													

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Yield Distribution

Cumulative Yield



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

	0	10	20	30	40	50	60	70	80	90
0				3.0	3.7	4.4	5.3	6.4	7.7	9.3
100	10.9	12.8	14.6	16.5	18.3	20.0	21.7	23.3	25.0	26.6
200	28.2	29.9	31.6	33.3	35.0	36.7	38.4	40.2	41.9	43.7
300	45.5	47.3	49.1	51.0	52.8	54.6	56.3	58.1	59.9	61.6
400	63.3	65.0	66.7	68.3	69.9	71.5	73.0	74.5	75.9	77.3
500	78.7	80.0	81.3	82.5	83.6	84.8	85.8	86.9	87.8	88.8