

Reference: PAZFL24Y  
Crude: Pazflor



## Crude Summary Report

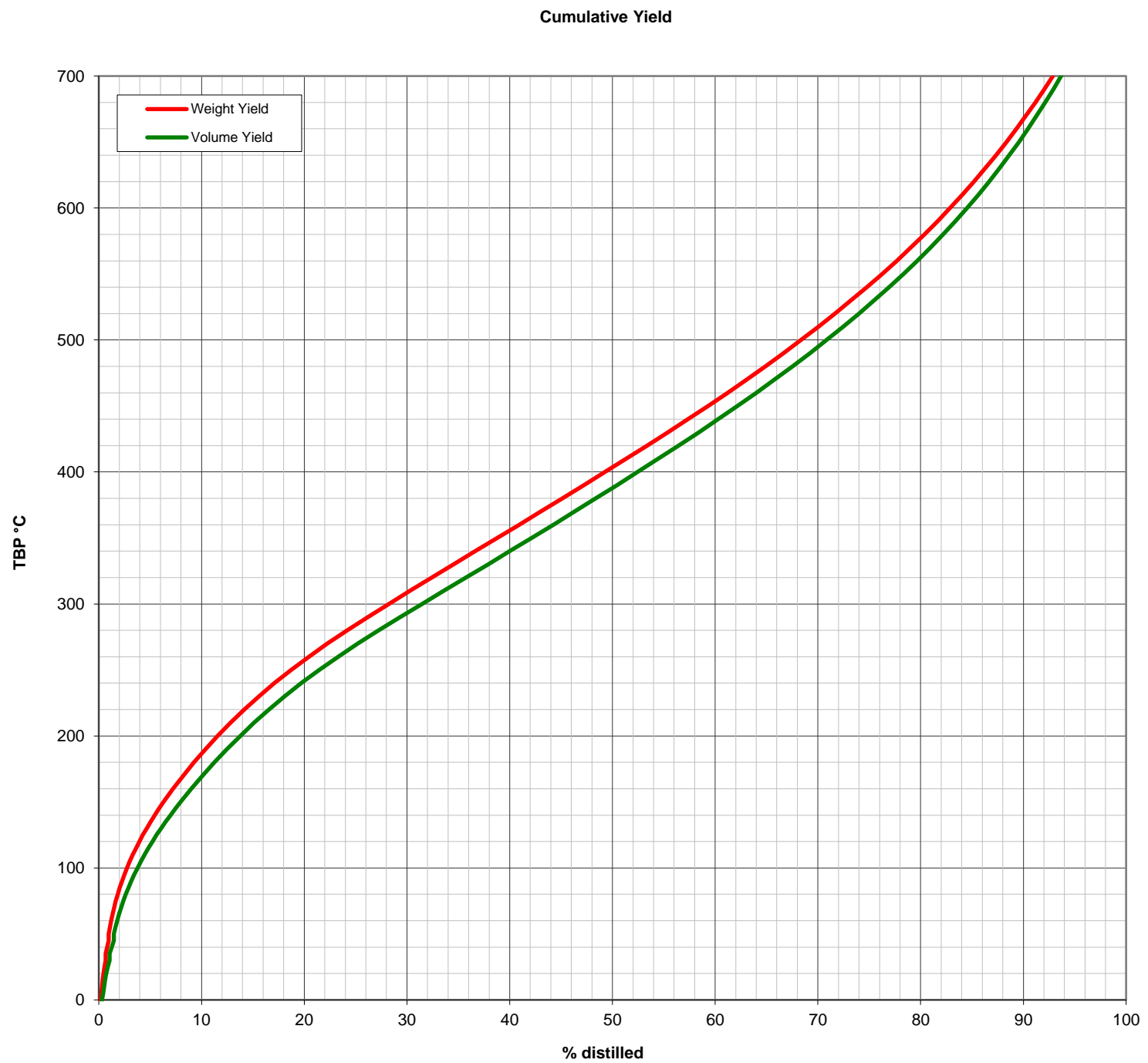
General Information		Molecules (%wt on crude)				Whole Crude Properties			
Reference:	PAZFL24Y	methane + ethane	0.00	Density @ 15°C (g/cc)	0.9060				
Name:	Pazflor	propane	0.15	<b>API Gravity</b>	<b>24.6</b>				
Origin:	Angola	isobutane	0.17	Total Sulfur (% wt)	0.40				
Assay Date:	1/19/2024	n-butane	0.43	Pour Point (°C)	-54				
Comments:		isopentane	0.34	Viscosity @ 20°C (cSt)	81.0				
		n-pentane	0.40	Viscosity @ 40°C (cSt)	30.9				
		cyclopentane	0.06	Nickel (ppm)	23.5				
		C6 paraffins	0.61	Vanadium (ppm)	8.8				
		C6 naphthenes	0.41	Total Nitrogen (ppm)	1984				
		benzene	0.03	Total Acid Number (mgKOH/g)	1.51				
		C7 paraffins	0.51	Mercaptan Sulfur (ppm)	22.0				
		C7 naphthenes	0.82	Hydrogen Sulfide (ppm)	0.0				
		toluene	0.10	Reid Vapor Pressure (kPa)	18.7				

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)		1.0	1.4	3.6	5.3	7.2	9.5	10.6	4.2	57.0	16.3	9.1	7.9	23.8
Yield (% vol)		1.4	1.8	4.2	5.8	7.7	10.0	10.7	4.2	53.7	15.8	8.7	7.5	21.7
Cumulative Yield (% wt)		0.4	1.3	2.7	6.3	11.6	18.7	28.2	38.8	43.0	43.0	59.3	68.4	76.2
Volume Average B.P. (°C)	400	41.3	84	127	176	226	276	325	360	536	409	474	524	656
Density @ 15°C (g/cc)	0.9060	0.6382	0.7113	0.7702	0.8201	0.8426	0.8602	0.8965	0.9183	0.9609	0.9295	0.9445	0.9541	0.9928
API Gravity	24.6	90.2	67.4	52.2	41.0	36.4	32.9	26.3	22.5	15.7	20.7	18.2	16.7	11.0
UOPK	11.76			11.63	11.36	11.45	11.57	11.43	11.37	11.79	11.52	11.68	11.82	11.95
Molecular Weight (g/mol)				110	135	168	206	245	276	528	331	428	543	1031
Total Sulfur (% wt)	0.40	0.010	0.020	0.024	0.029	0.050	0.103	0.235	0.336	0.60	0.404	0.455	0.53	0.82
Mercaptan Sulfur (ppm)	22.0	19.1	50.1	56.4	18.4	2.2	0.4							
Total Nitrogen (ppm)	1984					9	35	160	435	3413	1028	1923	2806	5817
Basic Nitrogen (ppm)	866					9	38	119	214	1475	397	715	1068	2637
Total Acid Number (mgKOH/g)	1.51	0.01	0.04	0.11	0.21	0.41	0.83	1.62	2.56	1.94	3.38	3.30	2.23	0.34
Viscosity @ 20°C (cSt)	81.0				1.54									
Viscosity @ 40°C (cSt)	30.9				1.16	1.85	3.46	7.78	15.7					
Viscosity @ 50°C (cSt)	21.0					1.59	2.82	5.91	11.1	1990	31.5	186	1127	
Viscosity @ 60°C (cSt)										888	21.1	104	530	
Viscosity @ 100°C (cSt)										86.8	6.55	19.8	60.6	9496
Viscosity @ 130°C (cSt)														1097
Viscosity @ 150°C (cSt)														371
RON (Clear)		77.2	57.9	62.2	50.8									
MON (Clear)		75.4	67.3	59.9	44.9									
Paraffins (% wt)	14.6	94.6	48.2	23.6	25.4									
Naphthenes (%wt)	39.1	5.4	50.0	66.2	60.4									
Aromatics (% wt)	46.3	0.0	1.8	10.1	14.2									
Pour Point (°C)	-54					-65	-49	-25	-8	31	12	28	34	60
Cloud Point (°C)						-63	-46	-22						
Freeze Point (°C)						-72	-58	-42						
Smoke Point (mm)						21	18	15						
Cetane Index (D4737A)						26	36	45	44	45				
Naphthalenes (% vol)						0.2	3.1	6.7	8.3					
Aniline Point (°C)				52.7	52.4	53.7	55.7	59.3	63.2		71.7	83.3	91.5	
Hydrogen (% wt)	12.7	16.5	15.1	14.2	14.0	13.1	13.3	12.5	12.1		12.1	12.2	12.3	
Total Wax (% wt)	4.1									4.6	7.7	7.9	5.2	0.9
C7 Asphaltenes (% wt)	1.5									2.7	0.0	0.0	6.5	
Micro Carbon Residue (% wt)	4.8									8.5	0.0	1.1	19.9	
Vanadium (ppm)	8.8									15.5	0.0	0.0	37.2	
Nickel (ppm)	23.5									41.2	0.0	0.0	98.8	
Iron (ppm)	7.6									13.3	0.0	0.0	31.8	
Sodium (ppm)	0.9													
Mercury (ppb)	0.0													
Arsenic (ppb)	123													

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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				1.1	1.3	1.5	1.8	2.2	2.6	3.2
100	3.8	4.5	5.2	6.1	7.0	8.0	9.0	10.1	11.3	12.5
200	13.8	15.1	16.6	18.1	19.7	21.5	23.3	25.2	27.2	29.3
300	31.4	33.6	35.7	37.9	40.0	42.1	44.2	46.3	48.4	50.4
400	52.5	54.5	56.4	58.4	60.3	62.2	64.0	65.8	67.5	69.2
500	70.9	72.4	74.0	75.5	76.9	78.3	79.7	81.0	82.2	83.4