

Reference: MOSTR22R
Crude: Mostarda



Crude Summary Report

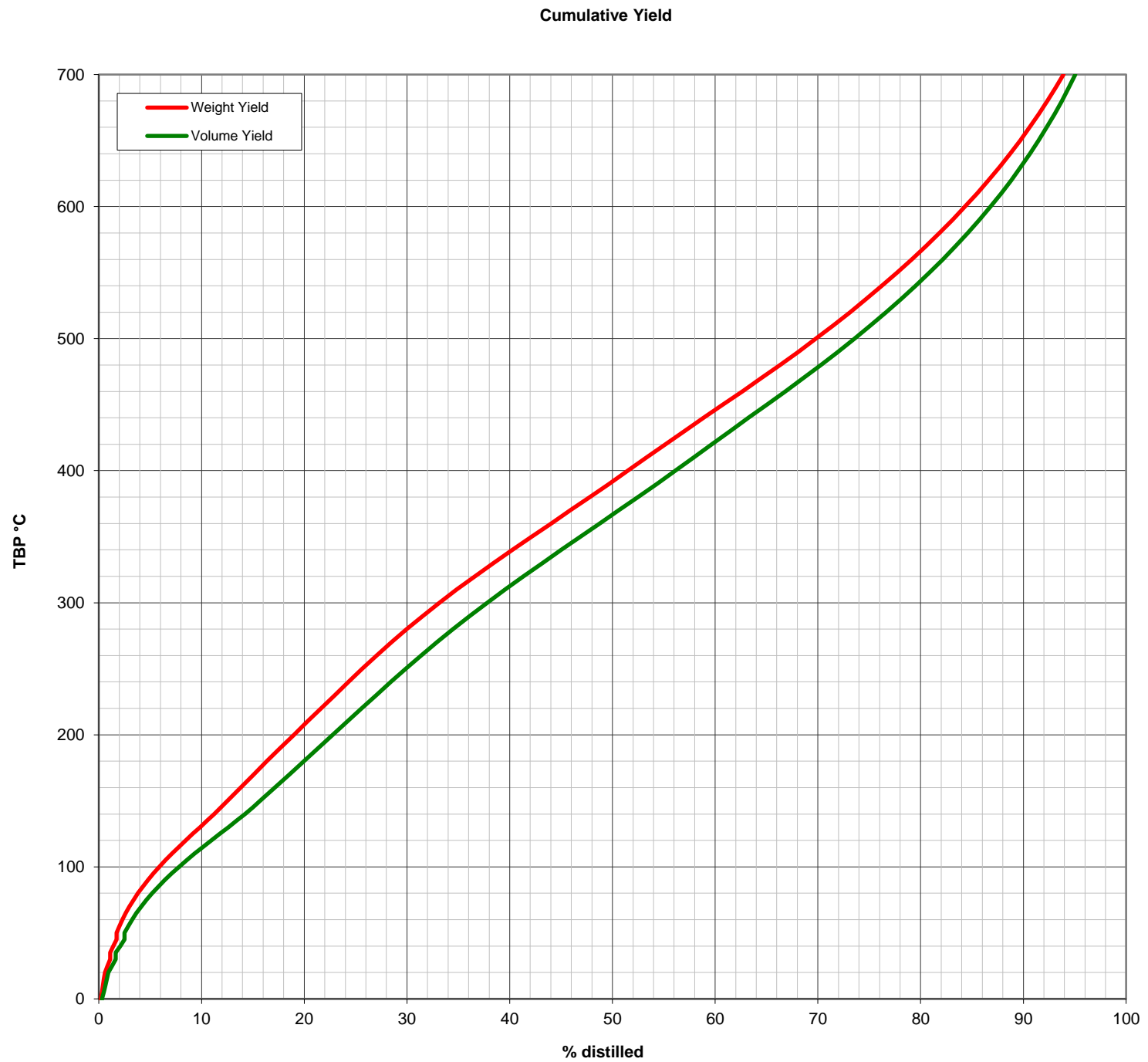
General Information		Molecules (%wt on crude)			Whole Crude Properties		
Reference:	MOSTR22R	methane + ethane	0.00	Density @ 15°C (g/cc)	0.8834		
Name:	Mostarda	propane	0.09	API Gravity	28.6		
Origin:	Angola	isobutane	0.10	Total Sulfur (% wt)	1.03		
Assay Date:	5/12/2023	n-butane	0.40	Pour Point (°C)	-9		
Comments:		isopentane	0.50	Viscosity @ 20°C (cSt)	27.7		
		n-pentane	0.63	Viscosity @ 40°C (cSt)	13.1		
		cyclopentane	0.13	Nickel (ppm)	26.5		
		C6 paraffins	1.53	Vanadium (ppm)	38.2		
		C6 naphthenes	0.88	Total Nitrogen (ppm)	1955		
		benzene	0.06	Total Acid Number (mgKOH/g)	0.33		
		C7 paraffins	1.47	Mercaptan Sulfur (ppm)	16.0		
		C7 naphthenes	1.63	Hydrogen Sulfide (ppm)	0.0		
		toluene	0.39	Reid Vapor Pressure (kPa)	24.8		

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)		2.1	3.3	6.6	6.5	6.7	7.5	9.0	3.8	54.1	14.8	9.1	7.9	22.3
Yield (% vol)		2.9	4.2	7.9	7.1	7.1	7.9	9.1	3.7	49.4	14.4	8.5	7.3	19.1
Cumulative Yield (% wt)		0.5	2.6	5.9	12.5	19.0	25.7	33.2	42.1	45.9	45.9	60.7	69.8	77.7
Volume Average B.P. (°C)	370	42.3	84	125	175	225	276	325	360	531	410	474	524	650
Density @ 15°C (g/cc)	0.8834	0.6479	0.6951	0.7409	0.8065	0.8263	0.8351	0.8717	0.8908	0.9656	0.9075	0.9366	0.9543	1.0267
API Gravity	28.6	86.9	72.0	59.4	43.9	39.7	37.9	30.7	27.3	15.0	24.4	19.5	16.7	6.2
UOPK	11.88			12.08	11.54	11.67	11.92	11.75	11.72	11.71	11.80	11.78	11.81	11.53
Molecular Weight (g/mol)				111	136	169	212	253	286	530	342	434	543	958
Total Sulfur (% wt)	1.0	0.010	0.025	0.039	0.069	0.159	0.376	0.75	0.99	1.63	1.18	1.39	1.57	2.05
Mercaptan Sulfur (ppm)	16.0	2.2	5.9	12.6	19.6	19.0	12.5							
Total Nitrogen (ppm)	1955					3	17	108	338	3570	1101	2052	2634	6163
Basic Nitrogen (ppm)	662					4	22	86	167	1194	306	531	778	2202
Total Acid Number (mgKOH/g)	0.33	0.01	0.03	0.08	0.16	0.23	0.31	0.38	0.43	0.42	0.48	0.50	0.49	0.33
Viscosity @ 20°C (cSt)	27.7				1.28									
Viscosity @ 40°C (cSt)	13.1				0.99	1.51	2.66	5.55	10.4					
Viscosity @ 50°C (cSt)	9.67					1.32	2.23	4.38	7.76	1333				
Viscosity @ 60°C (cSt)										628	20.8	117	776	
Viscosity @ 100°C (cSt)										71.1	14.7	69.8	385	
Viscosity @ 130°C (cSt)											5.25	15.7	50.5	13166
Viscosity @ 150°C (cSt)														1407
RON (Clear)		76.4	52.8	58.5	35.9									
MON (Clear)		75.1	62.6	57.4	36.2									
Paraffins (% wt)	26.1	94.0	53.3	34.9	50.7									
Naphthenes (%wt)	29.4	6.0	45.2	52.2	34.3									
Aromatics (% wt)	44.5	0.0	1.6	13.0	15.0									
Pour Point (°C)	-9					-43	-24	-4	6	33	20	35	43	53
Cloud Point (°C)						-41	-21	-2						
Freeze Point (°C)						-56	-37	-18						
Smoke Point (mm)						22	20	17						
Cetane Index (D4737A)						31	42	56	55	57				
Naphthalenes (% vol)						0.3	5.6	11.8	14.0					
Aniline Point (°C)				47.2	47.7	51.4	56.4	65.8	72.0		77.8	82.7	84.8	
Hydrogen (% wt)	13.0	16.5	15.2	14.2	14.3	13.5	13.7	13.1	12.8		12.5	12.3	12.2	
Total Wax (% wt)	18.1									23.2	18.7	32.3	42.0	15.8
C7 Asphaltenes (% wt)	1.4									2.7	0.0	0.0	6.5	
Micro Carbon Residue (% wt)	5.0									9.3	0.1	1.4	22.1	
Vanadium (ppm)	38.2									70.6	0.0	0.0	171.4	
Nickel (ppm)	26.5									49.0	0.0	0.0	118.8	
Iron (ppm)	9.3									17.0	0.0	0.0	41.3	
Sodium (ppm)	1.0													
Mercury (ppb)	1.0													
Arsenic (ppb)	54													

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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				1.6	2.1	2.5	3.2	4.1	5.2	6.4
100	7.8	9.3	11.0	12.6	14.2	15.7	17.1	18.6	20.0	21.4
200	22.8	24.2	25.6	27.0	28.4	29.9	31.4	32.9	34.5	36.1
300	37.8	39.6	41.3	43.2	45.0	46.9	48.8	50.6	52.5	54.3
400	56.1	57.9	59.7	61.5	63.2	65.0	66.8	68.6	70.3	71.9
500	73.6	75.1	76.6	78.1	79.5	80.9	82.2	83.4	84.6	85.7