

Reference: HOOP224Y
Crude: HOOPS Blend



Crude Summary Report

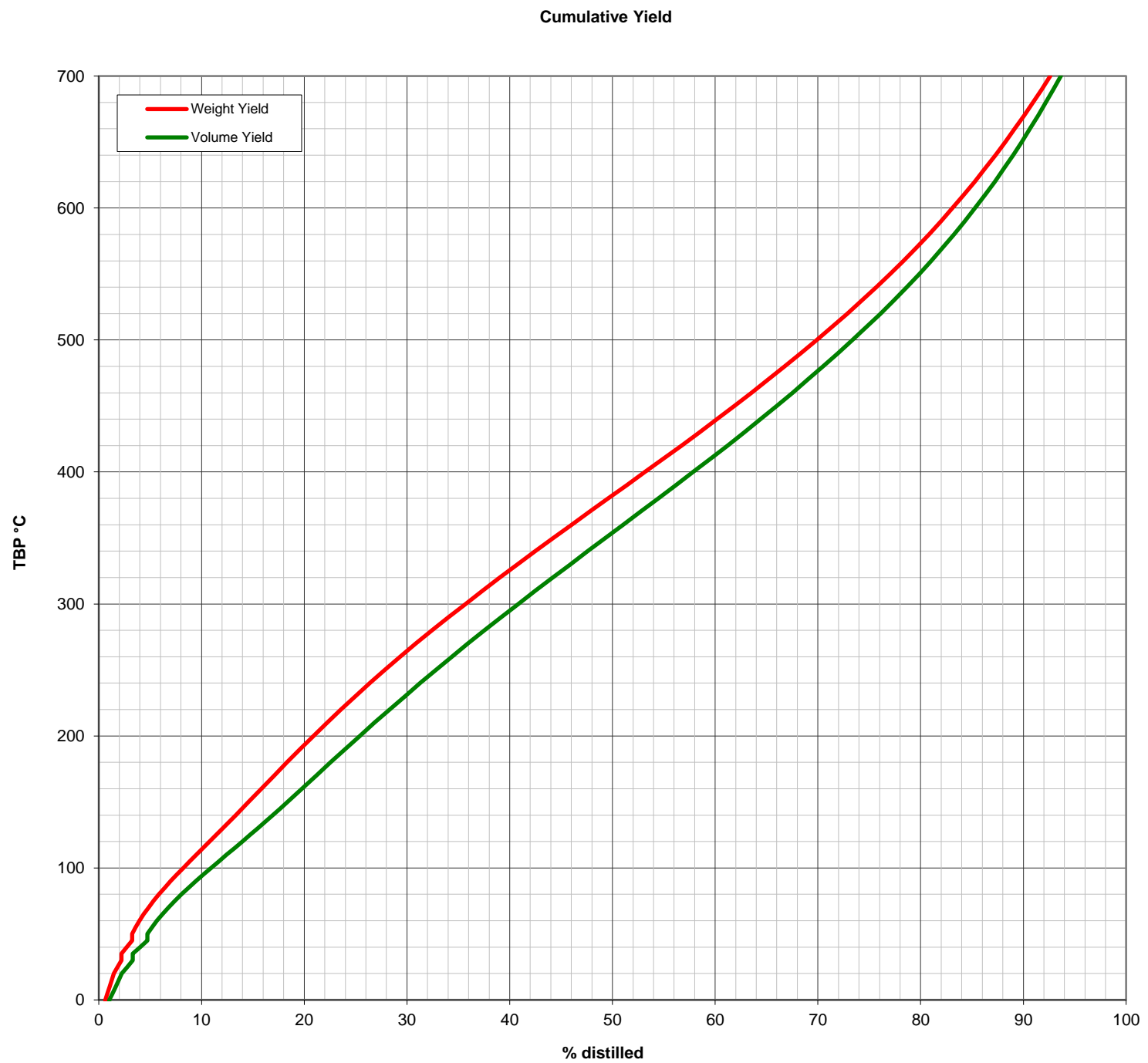
General Information		Molecules (%wt on crude)				Whole Crude Properties			
Reference:	HOOP224Y	methane + ethane	0.03	Density @ 15°C (g/cc)	0.8730				
Name:	HOOPS Blend	propane	0.40	API Gravity	30.5				
Origin:	Texas	isobutane	0.28	Total Sulfur (% wt)	1.60				
Assay Date:	9/13/2024	n-butane	1.01	Pour Point (°C)	-34				
Comments:	Prior to Whale startup	isopentane	0.94	Viscosity @ 20°C (cSt)	16.4				
		n-pentane	1.32	Viscosity @ 40°C (cSt)	10.3				
		cyclopentane	0.08	Nickel (ppm)	9.5				
		C6 paraffins	2.68	Vanadium (ppm)	19.7				
		C6 naphthenes	0.61	Total Nitrogen (ppm)	1269				
		benzene	0.06	Total Acid Number (mgKOH/g)	0.95				
		C7 paraffins	2.27	Mercaptan Sulfur (ppm)	32.8				
		C7 naphthenes	1.05	Hydrogen Sulfide (ppm)	0.0				
		toluene	0.28	Reid Vapor Pressure (kPa)	59.8				

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)		3.1	3.8	6.4	6.3	6.9	7.9	8.6	3.6	52.2	14.1	8.0	7.1	23.0			
Yield (% vol)		4.3	4.7	7.4	7.0	7.4	8.0	8.5	3.4	47.2	13.2	7.4	6.5	20.1			
Cumulative Yield (% wt)		1.2	4.4	8.2	14.6	20.9	27.8	35.7	44.2	47.8	47.8	61.9	69.9	77.0			
Volume Average B.P. (°C)	362	40.9	83	125	175	225	275	325	360	542	409	475	524	660			
Density @ 15°C (g/cc)	0.8730	0.6428	0.7074	0.7467	0.7835	0.8160	0.8546	0.8785	0.9028	0.9638	0.9280	0.9476	0.9583	0.9951			
API Gravity	30.5	88.6	68.5	57.9	49.0	41.8	34.0	29.5	25.2	15.2	20.9	17.7	16.1	10.6			
UOPK	11.97			11.98	11.88	11.81	11.65	11.66	11.56	11.79	11.53	11.65	11.77	11.94			
Molecular Weight (g/mol)				110	139	171	207	250	281	541	332	427	539	1046			
Total Sulfur (% wt)	1.6	0.002	0.008	0.024	0.066	0.195	0.68	1.19	1.45	2.63	1.72	1.97	2.30	3.52			
Mercaptan Sulfur (ppm)	32.8	6.1	34.6	62.7	43.4	42.6	32.3										
Total Nitrogen (ppm)	1269					3	16	96	233	2397	561	1097	1492	4256			
Basic Nitrogen (ppm)	321					2	11	39	75	602	169	314	418	1026			
Total Acid Number (mgKOH/g)	0.95	0.00	0.00	0.00	0.01	0.32	1.01	1.71	1.97	1.21	2.04	1.93	1.54	0.35			
Viscosity @ 20°C (cSt)	16.4				1.35												
Viscosity @ 40°C (cSt)	10.3				1.03	1.64	2.99	6.54	13.0								
Viscosity @ 50°C (cSt)	8.40					1.42	2.48	5.09	9.45	1473							
Viscosity @ 60°C (cSt)										669	26.9	131	489				
Viscosity @ 100°C (cSt)										69.5	18.5	76.5	249				
Viscosity @ 130°C (cSt)											6.07	16.1	35.7	3901			
Viscosity @ 150°C (cSt)														504			
RON (Clear)		76.0	32.9	52.5	28.9												
MON (Clear)		73.3	48.4	53.5	31.1												
Paraffins (% wt)	26.1	97.7	76.5	48.8	47.2												
Naphthenes (%wt)	28.7	2.3	22.1	37.9	41.6												
Aromatics (% wt)	45.3	0.0	1.3	13.3	11.2												
Pour Point (°C)	-34						-46	-27	-7	3	24	16	33	46	57		
Cloud Point (°C)							-44	-25	-5								
Freeze Point (°C)							-54	-40	-21								
Smoke Point (mm)							25	21	16								
Cetane Index (D4737A)							41	47	47	52	51						
Naphthalenes (% vol)							0.1	1.8	7.2	10.5							
Aniline Point (°C)				54.2	57.1	61.8	65.4	68.2	70.4		75.0	81.9	85.9				
Hydrogen (% wt)	13.0	16.6	15.7	14.4	14.3	13.7	13.3	12.8	12.5		12.1	12.1	12.1				
Total Wax (% wt)	5.2									2.9	6.9	5.1	1.7	0.1			
C7 Asphaltenes (% wt)	0.6									1.1	0.0	0.0	2.4				
Micro Carbon Residue (% wt)	5.2									10.0	0.3	2.2	21.8				
Vanadium (ppm)	19.7									37.7	0.0	0.0	85.7				
Nickel (ppm)	9.5									18.2	0.0	0.0	41.4				
Iron (ppm)	2.2									4.3	0.0	0.0	9.7				
Sodium (ppm)	3.0																
Mercury (ppb)	1.0																
Arsenic (ppb)	357																

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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				3.3	4.0	4.7	5.7	6.8	8.1	9.5
100	10.9	12.5	14.0	15.5	16.9	18.4	19.8	21.2	22.6	24.0
200	25.4	26.8	28.3	29.8	31.3	32.8	34.4	35.9	37.5	39.2
300	40.8	42.5	44.2	45.9	47.6	49.3	51.0	52.8	54.5	56.2
400	57.9	59.5	61.2	62.8	64.4	66.0	67.5	69.0	70.5	71.9
500	73.4	74.7	76.1	77.4	78.7	79.9	81.0	82.2	83.3	84.3