

Reference: WTIL220Y
Crude: WTI Light



Crude Summary Report

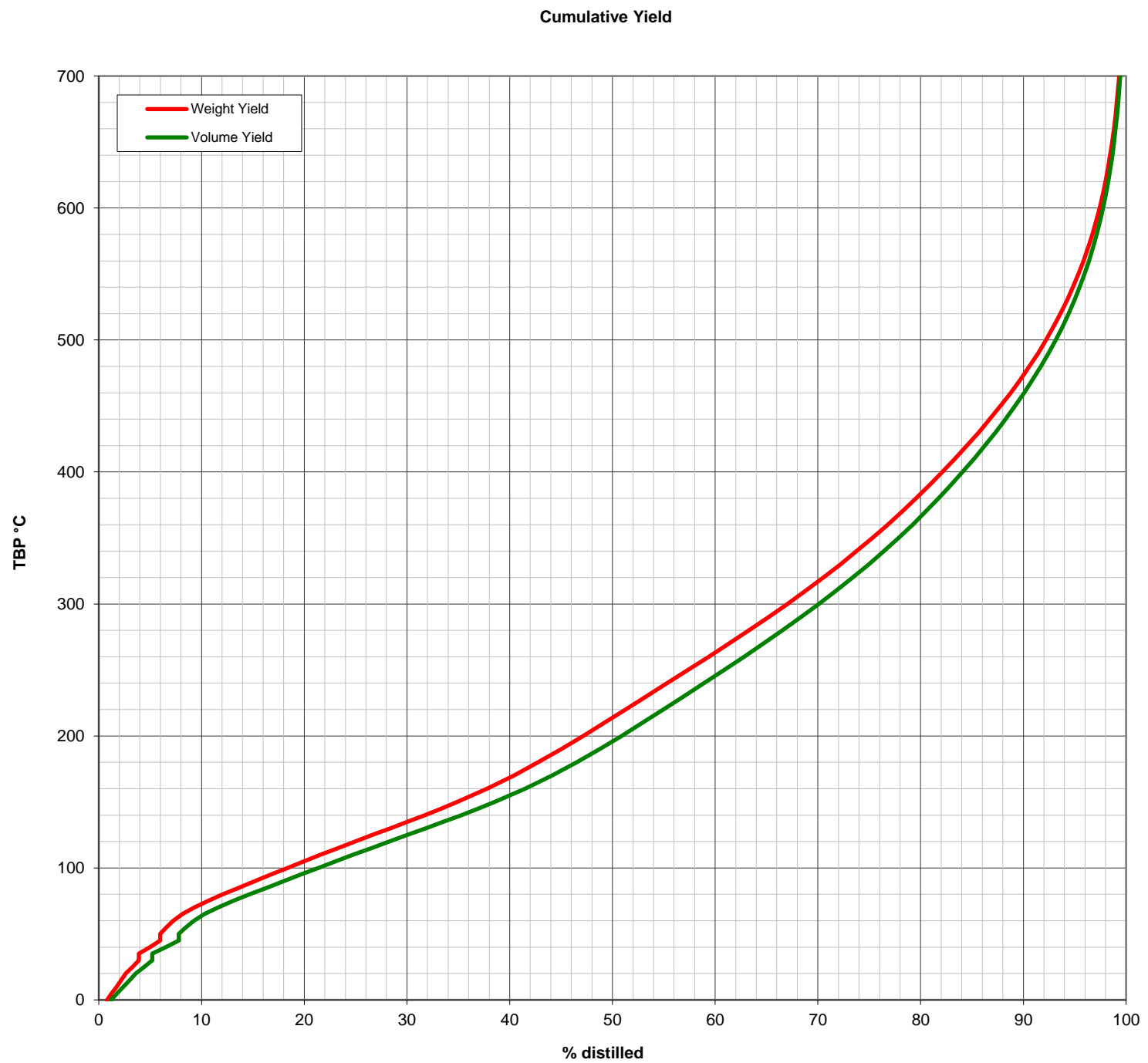
General Information		Molecules (%wt on crude)				Whole Crude Properties			
Reference:	WTIL220Y	methane + ethane	0.01	Density @ 15°C (g/cc)	0.7902				
Name:	WTI Light	propane	0.50	API Gravity	47.5				
Origin:	Texas	isobutane	0.35	Total Sulfur (% wt)	0.05				
Assay Date:	10/23/2020	n-butane	1.37	Pour Point (°C)	-30				
Comments:		isopentane	0.97	Viscosity @ 20°C (cSt)	2.5				
		n-pentane	1.73	Viscosity @ 40°C (cSt)	1.7				
		cyclopentane	0.14	Nickel (ppm)	0.0				
		C6 paraffins	4.43	Vanadium (ppm)	0.0				
		C6 naphthenes	2.79	Total Nitrogen (ppm)	106				
		benzene	0.24	Total Acid Number (mgKOH/g)	0.07				
		C7 paraffins	3.92	Mercaptan Sulfur (ppm)	12.7				
		C7 naphthenes	4.80	Hydrogen Sulfide (ppm)	0.0				
		toluene	0.80	Reid Vapor Pressure (kPa)	56.3				

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)		6.0	10.2	16.5	12.2	10.2	9.7	8.3	2.9	21.8	9.6	4.4	3.2	4.6				
Yield (% vol)		7.3	11.1	17.2	12.3	10.0	9.2	7.8	2.7	19.5	8.7	4.0	2.8	4.0				
Cumulative Yield (% wt)		2.2	8.1	18.4	34.9	47.1	57.4	67.0	75.3	78.2	78.2	87.8	92.2	95.4				
Volume Average B.P. (°C)	231	41.1	83	125	173	225	274	324	360	483	408	474	523	625				
Density @ 15°C (g/cc)	0.7902	0.6437	0.7260	0.7580	0.7805	0.8040	0.8266	0.8394	0.8565	0.8800	0.8672	0.8811	0.8869	0.9018				
API Gravity	47.5	88.3	63.4	55.1	49.7	44.4	39.6	37.0	33.6	29.2	31.6	29.0	28.0	25.3				
UOPK	12.25			11.80	11.91	11.99	12.03	12.20	12.19	12.59	12.34	12.52	12.71	13.01				
Molecular Weight (g/mol)				110	138	173	212	261	299	474	359	470	601	1012				
Total Sulfur (% wt)	0.05	0.002	0.005	0.012	0.020	0.018	0.023	0.056	0.085	0.139	0.106	0.121	0.145	0.218				
Mercaptan Sulfur (ppm)	12.7	1.2	2.5	4.9	8.7	7.6	4.4											
Total Nitrogen (ppm)	106					0	4	37	96	458	188	365	559	1034				
Basic Nitrogen (ppm)	26					0	1	9	22	114	52	98	138	240				
Total Acid Number (mgKOH/g)	0.07	0.00	0.02	0.04	0.07	0.09	0.11	0.12	0.12	0.11	0.13	0.12	0.11	0.08				
Viscosity @ 20°C (cSt)	2.48				1.37													
Viscosity @ 40°C (cSt)	1.72				1.06	1.66	2.90	5.79	10.2									
Viscosity @ 50°C (cSt)	1.47					1.44	2.43	4.59	7.73	48.6	16.3	47.5	102					
Viscosity @ 60°C (cSt)										32.6	12.0	31.9	64.4					
Viscosity @ 100°C (cSt)										9.93	4.71	9.70	16.4	58.4				
Viscosity @ 130°C (cSt)														23.2				
Viscosity @ 150°C (cSt)														14.4				
RON (Clear)		74.9	42.4	59.5	22.0													
MON (Clear)		72.5	59.7	58.2	22.5													
Paraffins (% wt)	44.0	97.1	57.0	34.6	53.3													
Naphthenes (%wt)	45.5	2.9	40.7	53.3	38.0													
Aromatics (% wt)	10.4	0.0	2.3	12.1	8.6													
Pour Point (°C)	-30					-49	-27	-4	8	30	23	41	54	51				
Cloud Point (°C)						-47	-24	-2										
Freeze Point (°C)					-60	-41	-20											
Smoke Point (mm)					32	29	26											
Cetane Index (D4737A)					42	53	60	71	74									
Naphthalenes (% vol)					0.0	0.8	2.2	3.1										
Aniline Point (°C)				56.0	62.2	70.9	79.9	88.5	93.7		101.5	111.9	117.1					
Hydrogen (% wt)	14.4	16.5	15.3	14.2	14.6	14.3	14.2	14.1	13.8		13.7	13.7	13.7					
Total Wax (% wt)	9.8									13.1	18.0	13.7	10.3	4.6				
C7 Asphaltenes (% wt)	0.0									0.0	0.0	0.0	0.1					
Micro Carbon Residue (% wt)	0.1									0.5	0.0	0.2	2.2					
Vanadium (ppm)	0.0									0.0	0.0	0.0	0.2					
Nickel (ppm)	0.0									0.2	0.0	0.0	0.9					
Iron (ppm)	1.2									5.4	0.0	0.0	25.4					
Sodium (ppm)	1.0																	
Mercury (ppb)	1.0																	
Arsenic (ppb)	5																	

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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				5.2	6.5	7.8	9.3	11.6	14.7	18.0
100	21.4	24.8	28.3	31.8	35.3	38.5	41.5	44.1	46.5	48.8
200	50.9	52.9	55.0	56.9	58.9	60.9	62.8	64.7	66.5	68.3
300	70.1	71.8	73.4	74.9	76.4	77.8	79.2	80.5	81.7	82.9
400	84.1	85.2	86.3	87.3	88.3	89.2	90.1	90.9	91.7	92.5
500	93.1	93.8	94.4	95.0	95.5	96.0	96.4	96.8	97.1	97.5