

Reference: AZRLT21Y
Crude: Azeri Light



Crude Summary Report

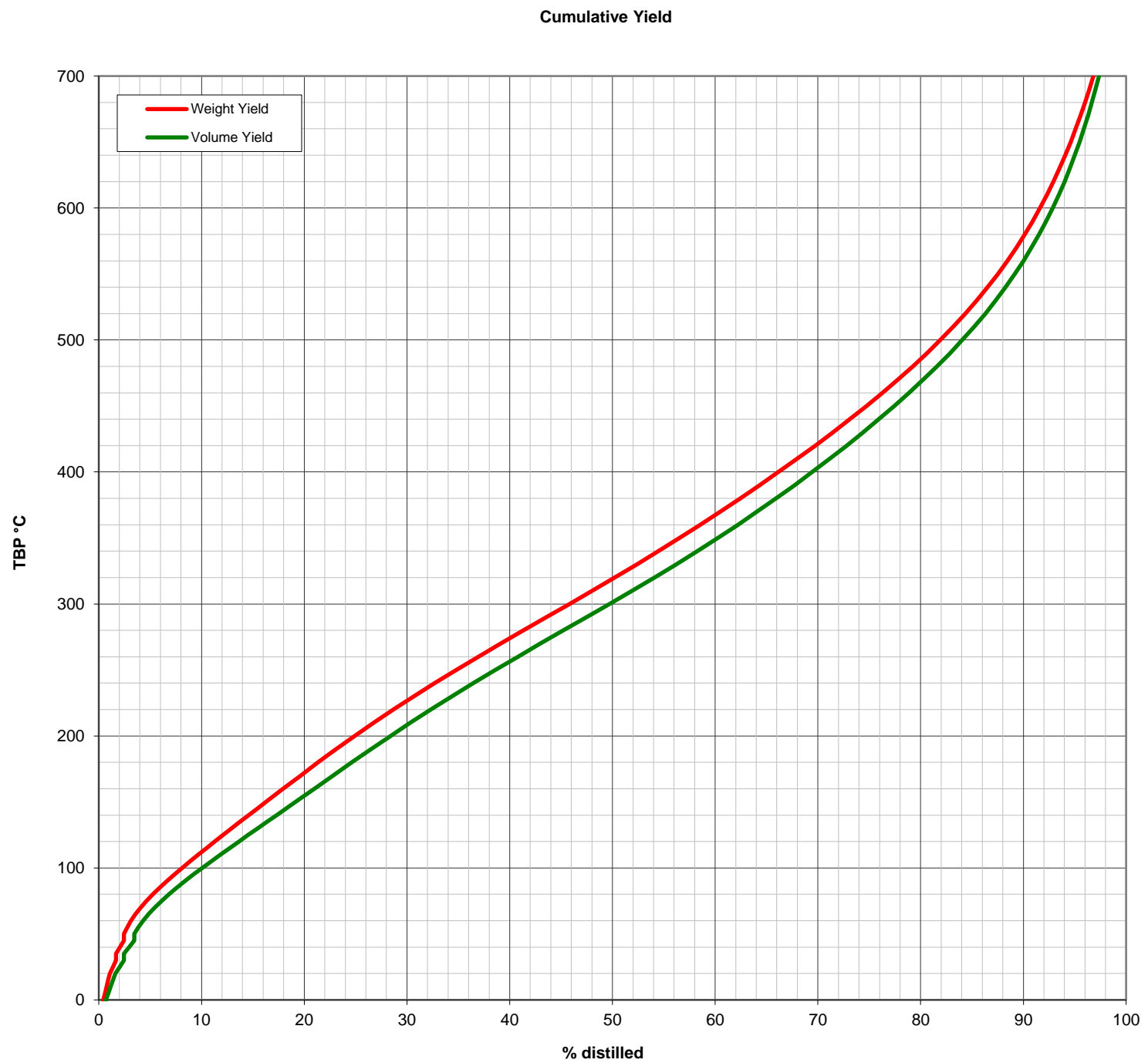
General Information		Molecules (%wt on crude)				Whole Crude Properties			
Reference:	AZRLT21Y	methane + ethane	0.00	Density @ 15°C (g/cc)	0.8463				
Name:	Azeri Light	propane	0.29	API Gravity	35.6				
Origin:	Azerbaijan	isobutane	0.28	Total Sulfur (% wt)	0.18				
Assay Date:	12/10/2021	n-butane	0.76	Pour Point (°C)	-20				
Comments:		isopentane	0.70	Viscosity @ 20°C (cSt)	9.3				
		n-pentane	0.83	Viscosity @ 40°C (cSt)	5.3				
		cyclopentane	0.14	Nickel (ppm)	3.1				
		C6 paraffins	1.67	Vanadium (ppm)	0.9				
		C6 naphthenes	1.10	Total Nitrogen (ppm)	1057				
		benzene	0.15	Total Acid Number (mgKOH/g)	0.48				
		C7 paraffins	1.80	Mercaptan Sulfur (ppm)	6.5				
		C7 naphthenes	1.88	Hydrogen Sulfide (ppm)	0.0				
		toluene	0.56	Reid Vapor Pressure (kPa)	35.1				

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)		2.7	4.5	8.1	8.6	9.9	11.0	10.7	4.0	39.5	14.2	7.2	5.6	12.5	
Yield (% vol)		3.5	5.2	9.1	9.3	10.2	11.1	10.6	3.8	35.9	13.3	6.6	5.1	10.8	
Cumulative Yield (% wt)		0.9	3.6	8.1	16.3	24.9	34.8	45.8	56.5	60.5	60.5	74.7	81.9	87.5	
Volume Average B.P. (°C)	317	42.2	84	125	175	226	275	324	360	509	408	474	524	646	
Density @ 15°C (g/cc)	0.8463	0.6455	0.7330	0.7575	0.7860	0.8164	0.8371	0.8554	0.8769	0.9270	0.8988	0.9136	0.9234	0.9714	
API Gravity	35.6	87.7	61.5	55.2	48.5	41.8	37.5	33.8	29.8	21.1	25.9	23.3	21.7	14.1	
UOPK	12.05			11.81	11.84	11.81	11.89	11.97	11.90	12.08	11.90	12.08	12.21	12.17	
Molecular Weight (g/mol)				110	138	171	211	257	291	497	344	448	568	1020	
Total Sulfur (% wt)	0.18	0.002	0.003	0.007	0.019	0.037	0.075	0.154	0.206	0.369	0.230	0.280	0.358	0.58	
Mercaptan Sulfur (ppm)	6.5	9.4	6.4	9.1	26.3	17.2	6.9								
Total Nitrogen (ppm)	1057					3	38	165	333	2586	639	1027	1396	6233	
Basic Nitrogen (ppm)	319					3	23	67	121	770	249	462	629	1603	
Total Acid Number (mgKOH/g)	0.48	0.02	0.06	0.14	0.33	0.54	0.65	0.72	0.74	0.52	0.72	0.63	0.52	0.24	
Viscosity @ 20°C (cSt)	9.29				1.37										
Viscosity @ 40°C (cSt)	5.33				1.06	1.64	2.90	5.95	11.1						
Viscosity @ 50°C (cSt)	4.24					1.43	2.42	4.68	8.27	163	19.8	69.0	183		
Viscosity @ 60°C (cSt)										96.5	14.2	44.1	108		
Viscosity @ 100°C (cSt)										20.8	5.19	11.8	22.6	470	
Viscosity @ 130°C (cSt)														117	
Viscosity @ 150°C (cSt)														57.4	
RON (Clear)		76.9	41.4	60.6	31.5										
MON (Clear)		75.2	59.0	58.1	31.0										
Paraffins (% wt)	32.9	94.4	58.7	35.8	51.0										
Naphthenes (%wt)	38.5	5.6	37.8	46.4	33.4										
Aromatics (% wt)	28.5	0.0	3.5	17.8	15.6										
Pour Point (°C)	-20						-45	-23	-3	10	25	26	42	51	37
Cloud Point (°C)							-43	-21	-1						
Freeze Point (°C)							-57	-38	-17						
Smoke Point (mm)					26	23	21								
Cetane Index (D4737A)					40	47	55	63	64						
Naphthalenes (% vol)					0.1	2.9	5.3	5.7							
Aniline Point (°C)				51.4	57.5	66.5	74.5	81.0	84.6		91.2	100.2	105.5		
Hydrogen (% wt)	13.6	16.5	15.2	14.0	14.2	13.8	13.8	13.5	13.2		12.9	12.8	12.9		
Total Wax (% wt)	14.1									9.3	11.5	8.4	8.9	7.5	
C7 Asphaltene (% wt)	0.0									0.0	0.0	0.0	0.1		
Micro Carbon Residue (% wt)	1.5									3.8	0.1	1.2	11.5		
Vanadium (ppm)	0.9									2.3	0.0	0.0	7.2		
Nickel (ppm)	3.1									8.0	0.0	0.0	25.2		
Iron (ppm)	1.0									2.6	0.0	0.0	8.1		
Sodium (ppm)	2.8														
Mercury (ppb)	1.0														
Arsenic (ppb)	47														

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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				2.4	2.9	3.5	4.3	5.5	6.8	8.4
100	10.1	11.8	13.7	15.5	17.3	19.1	21.0	22.8	24.6	26.5
200	28.4	30.3	32.3	34.4	36.5	38.6	40.8	43.0	45.2	47.5
300	49.7	51.9	54.1	56.2	58.3	60.3	62.2	64.1	65.9	67.7
400	69.5	71.2	72.8	74.4	75.9	77.4	78.9	80.3	81.6	82.9
500	84.1	85.2	86.3	87.3	88.3	89.2	90.0	90.8	91.5	92.2