

Reference: GLDAH25Z
Crude: Golden Arrowhead



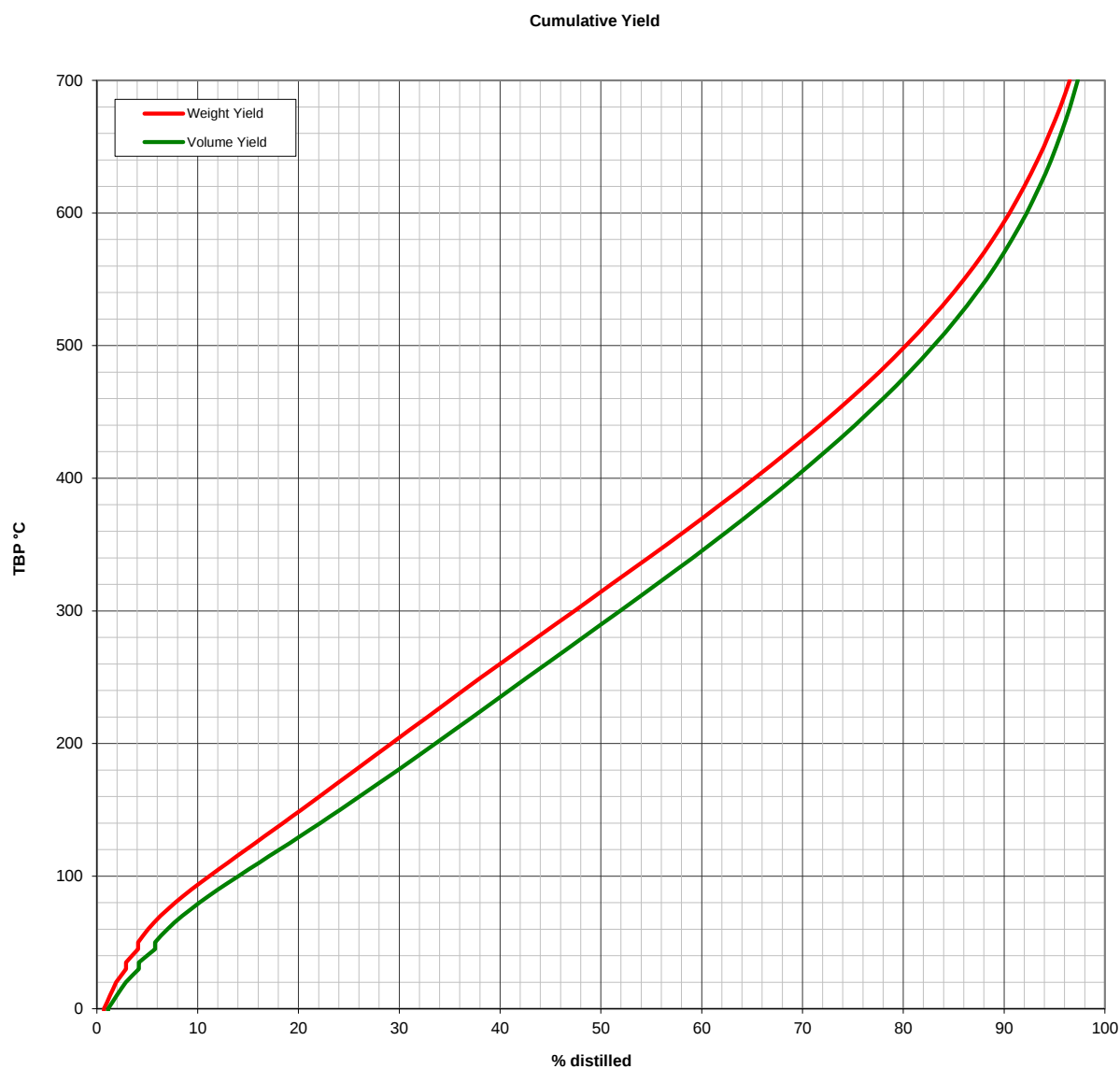
Crude Summary Report

General Information				Molecules (%wt on crude)							Whole Crude Properties				
Reference:	GLDAH25Z			methane + ethane		0.00		Density @ 15°C (g/cc)		0.8420					
Name:	Golden Arrowhead			propane		0.39		API Gravity		36.5					
Origin:	Guyana			isobutane		0.32		Total Sulfur (% wt)		0.25					
				n-butane		1.21		Pour Point (°C)		7					
Assay Date:	6/23/2025			isopentane		0.97		Viscosity @ 20°C (cSt)		8.2					
				n-pentane		1.21		Viscosity @ 40°C (cSt)		4.7					
Comments:				cyclopentane		0.18		Nickel (ppm)		7.8					
				C6 paraffins		2.09		Vanadium (ppm)		3.1					
				C6 naphthenes		1.30		Total Nitrogen (ppm)		1435					
				benzene		0.07		Total Acid Number (mgKOH/g)		0.18					
				C7 paraffins		1.86		Mercaptan Sulfur (ppm)		39.5					
				C7 naphthenes		2.51		Hydrogen Sulfide (ppm)		0.0					
				toluene		0.35		Reid Vapor Pressure (kPa)		55.0					
											Salt (ptb)		20.0		
Cut Data			Atmospheric Cuts									Vacuum Cuts			
Start (°C)	IBP	C5	65	100	150	200	250	300	350	370	370	450	500	550	
End (°C)	FBP	65	100	150	200	250	300	350	370	FBP	450	500	550	FBP	
Yield (% wt)		4.1	5.5	9.1	8.9	9.0	9.2	9.1	3.6	39.9	13.2	7.0	5.8	14.0	
Yield (% vol)		5.3	6.3	10.1	9.5	9.2	9.1	8.9	3.4	35.7	12.4	6.4	5.2	11.8	
Cumulative Yield (% wt)		1.6	5.7	11.2	20.3	29.2	38.2	47.4	56.5	60.1	60.1	73.3	80.3	86.0	
Volume Average B.P. (°C)	307	40.9	83	125	175	225	275	325	360	515	409	474	524	644	
Density @ 15°C (g/cc)	0.8420	0.6450	0.7305	0.7590	0.7927	0.8214	0.8456	0.8600	0.8795	0.9384	0.8954	0.9170	0.9306	0.9988	
API Gravity	36.5	87.9	62.2	54.9	46.9	40.7	35.8	32.9	29.3	19.2	26.5	22.7	20.5	10.1	
UOPK	12.05			11.79	11.74	11.73	11.77	11.91	11.87	11.97	11.95	12.03	12.11	11.83	
Molecular Weight (g/mol)				110	137	170	209	256	290	510	346	446	563	982	
Total Sulfur (% wt)	0.25	0.000	0.000	0.002	0.010	0.033	0.100	0.231	0.304	0.51	0.338	0.404	0.490	0.74	
Mercaptan Sulfur (ppm)	15.0					8	57	271	565	3469	1178	2089	2761	6612	
Total Nitrogen (ppm)	1435					5	41	108	185	1033	364	547	690	2049	
Basic Nitrogen (ppm)	433														
Total Acid Number (mgKOH/g)	0.18	0.01	0.03	0.07	0.13	0.18	0.22	0.24	0.25	0.23	0.26	0.26	0.25	0.19	
Viscosity @ 20°C (cSt)	8.17				1.39										
Viscosity @ 40°C (cSt)	4.68				1.06	1.67	3.03	6.44	12.1						
Viscosity @ 50°C (cSt)	3.72					1.44	2.50	4.98	8.85	346					
Viscosity @ 60°C (cSt)										184	21.6	83.1	269		
Viscosity @ 100°C (cSt)										29.9	15.1	50.7	147		
Viscosity @ 130°C (cSt)											5.18	12.1	25.5	1729	
Viscosity @ 150°C (cSt)														294	
RON (Clear)		76.2	52.1	58.4	39.9										
MON (Clear)		74.3	63.1	57.0	37.0										
Paraffins (% wt)	30.3	95.0	51.4	31.5	42.0										
Naphthenes (%wt)	38.1	5.0	47.2	57.5	42.5										
Aromatics (% wt)	31.6	0.0	1.3	11.0	15.6										
Pour Point (°C)	7					-47	-23	2	15	35		30	45	54	
Cloud Point (°C)						-46	-20	4						53	
Freeze Point (°C)						-55	-39	-16							
Smoke Point (mm)						26	22	19							
Cetane Index (D4737A)						37	44	51	60	62					
Naphthalenes (% vol)						0.1	3.3	7.4	8.2						
Aniline Point (°C)				50.5	55.9	64.3	72.7	81.4	86.3		92.8	99.8	102.5		
Hydrogen (% wt)	13.6	16.5	15.2	14.3	14.1	13.6	13.5	13.4	13.1		12.9	12.8	12.7		
Total Wax (% wt)	12.0									12.0	16.3	15.3	13.9	5.4	
C7 Asphaltenes (% wt)	0.4									1.0		0.0	0.0	2.9	
Micro Carbon Residue (% wt)	2.6									6.6		0.1	1.1	18.4	
Vanadium (ppm)	3.1									7.8		0.0	0.0	22.2	
Nickel (ppm)	7.8									19.6		0.0	0.0	56.0	
Iron (ppm)	3.0									8.0		0.0	0.0	23.0	
Sodium (ppm)	0.2														
Mercury (ppb)	1.0														
Arsenic (ppb)	8														

This assay information is provided to you courtesy of ExxonMobil Technology & Engineering Company (EMTEC) and is based on a range of data and information. While care has been taken in preparing these materials, no representations, warranties or guarantees are made as to their accuracy, reliability, quality, correctness or completeness. Each user must make its own determination and judgment on applying any information in this assay. Any and all use of this information shall be the sole responsibility of the user, and the user releases EMTEC, its parent and its affiliates from any and all claims arising from its use and shall defend and hold EMTEC, its parent and its affiliates harmless from any third party claims arising from the user's application or use of the assay information.

Reference: GLDAH25Z
Crude: Golden Arrowhead

Yield Distribution



Cumulative Volume % Distilled at 10 Degree C (TBP) Intervals

	0	10	20	30	40	50	60	70	80	90
0				4.2	5.0	5.8	7.0	8.5	10.2	12.0
100	14.0	16.1	18.1	20.2	22.2	24.1	26.1	28.0	29.9	31.7
200	33.6	35.4	37.3	39.1	40.9	42.7	44.6	46.4	48.2	50.1
300	51.9	53.7	55.5	57.3	59.1	60.8	62.6	64.3	65.9	67.6
400	69.2	70.7	72.3	73.8	75.2	76.6	78.0	79.3	80.6	81.8
500	83.0	84.2	85.3	86.3	87.3	88.2	89.1	90.0	90.8	91.5