

Reference: GLDAH225Z
Crude: Golden Arrowhead



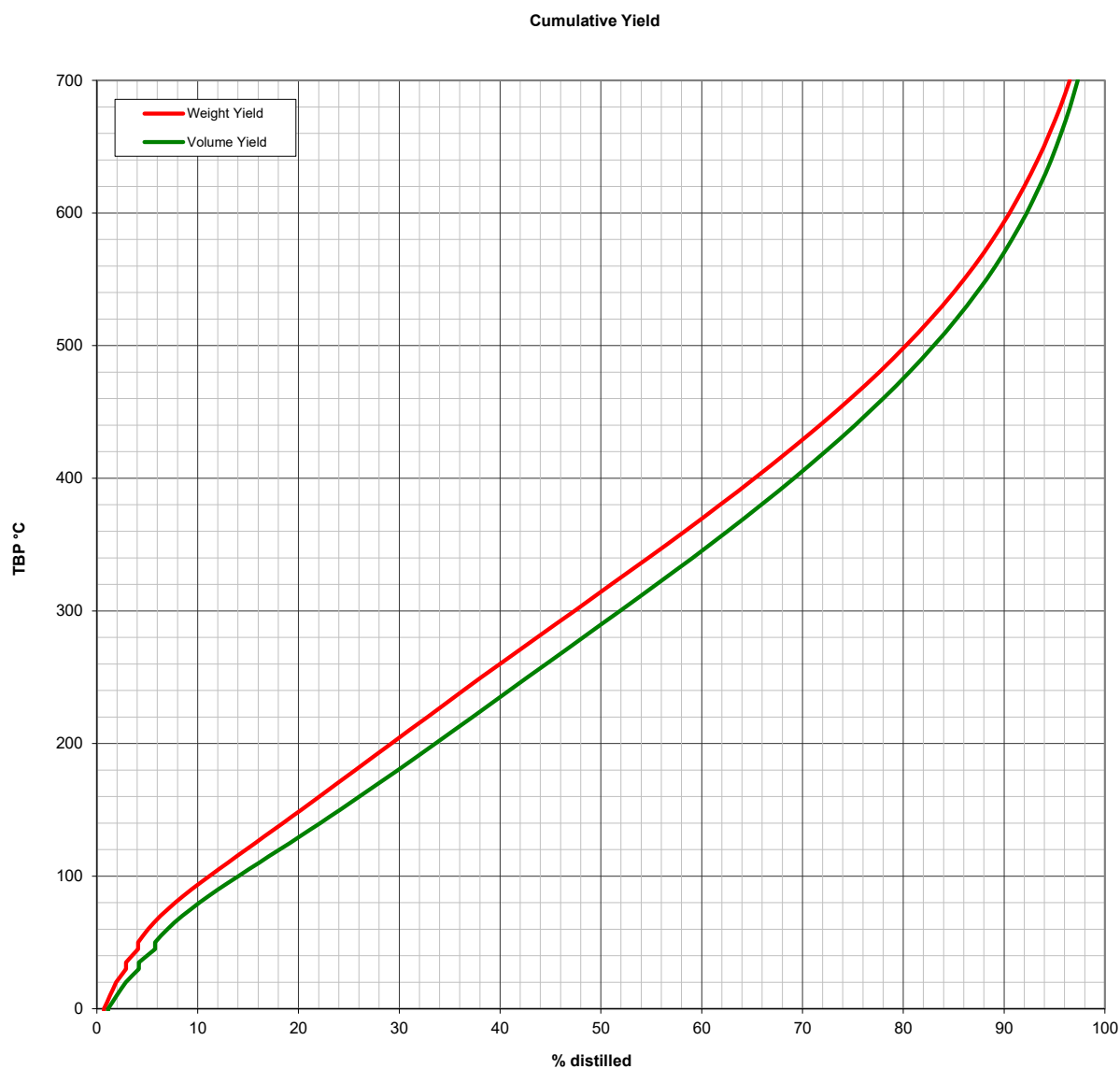
Crude Summary Report

General Information		Molecules (%wt on crude)									Whole Crude Properties				
Reference:	GLDAH225Z	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)					-3				
		isopentane		0.97		Viscosity @ 20°C (cSt)					8.2				
Assay Date:	6/23/2025	n-pentane		1.21		Viscosity @ 40°C (cSt)					4.7				
Updated:	9/18/2025	cyclopentane		0.18		Nickel (ppm)					7.8				
Comments:	Pour Point updated from initial cargoes	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)					15.0				
		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		21.6	83.1	269	
Viscosity @ 60°C (cSt)										184		15.1	50.7	147	
Viscosity @ 100°C (cSt)										29.9		5.18	12.1	25.5	1729
Viscosity @ 130°C (cSt)															294
Viscosity @ 150°C (cSt)															121
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)	-3					-48	-23	2	12	26		30	52	46	38
Cloud Point (°C)						-46	-20	4							
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														

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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				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