

QUAIB14X

		Whole	crude -	Butane and		Hvy Naphtha	Kerosene 330	Diesel 480 -	Vacuum Gas Oil	
		200 to	Lighter -200 to	Lt. Naphtha C5-	165 - 330F 165	- 480F 330 to	- 480F 330 to	650F 480 to	650 - 1000F 650	Vacuum Residue
		1499	60	165F 60 to 165	to 330	480	650	to 1000	1000F+ 1000 to 1499	
		IBP,F,BP,F	IBP,60,F	60,165,F	165,330,F	330,480,F	480,650,F	650,1000,F	1000,F,BP,F	
Cut volume, %	YLD,V,%	100	1.78	6.19	18.76	17.90	22.98	26.75	5.64	
API Gravity	API,none	36.5021	119.62	81.63	53.92	41.61	34.15	23.75	9.44	
Specific Gravity (60/60F)	SPG,60F,none	0.84225	0.56	0.66	0.76	0.82	0.85	0.91	1.00	
Carbon, wt %	_C,%	86.3174	82.47	83.95	85.73	86.05	86.52	87.07	86.87	
Hydrogen, wt %	_H2,%	13.4671	17.53	16.05	14.27	13.93	13.36	12.61	11.81	
Pour point, F	PPT,F	59	-197.18	-160.71	-113.40	-62.17	12.07	105.13	127.71	
Neutralization number (TAN), MG/GM	ACI,mgKOH/g	0.25778	0.26	0.24	0.11	0.04	0.27	0.45	0.39	
Sulfur, wt%	SUL,%	0.11098	0.00	0.00	0.00	0.03	0.10	0.18	0.46	
Viscosity at 20C/68F, cSt	VIS,20C,cSt	5.73452	0.42	0.53	0.83	1.86	6.54	192.53	81741119.48	
Viscosity at 40C/104F, cSt	VIS,40C,cSt	3.30608	0.36	0.44	0.67	1.36	3.89	57.22	1582395.69	
Viscosity at 50C/122F, cSt	VIS,50C,cSt	2.64193	0.34	0.41	0.60	1.19	3.13	35.41	330486.41	
Mercaptan sulfur, ppm	MER,ppm	0.94786	0.00	0.00	0.13	1.68	1.30	0.14	0.00	
Nitrogen, ppm	TN2,ppm	910.176	0.00	0.00	0.43	8.59	78.24	1194.17	8020.38	
CCR, wt%	MCRT,%	1.08284	0.00	0.00	0.00	0.00	0.00	0.26	14.88	
N-Heptane Insolubles (C7 Asphaltene), wt%	AS7,%	0.01184	0.00	0.00	0.00	0.00	0.00	0.00	0.17	
Nickel, ppm	NIK,ppm	3.95577	0.00	0.00	0.00	0.00	0.00	0.00	58.47	
Vanadium, ppm	VAN,ppm	0.30627	0.00	0.00	0.00	0.00	0.00	0.00	4.53	
Calcium, ppm	_CA,ppm	6								
Reid Vapor Pressure (RVP) Whole Crude, psi	RVP,psi	5.5	93.62	13.65	1.17	0.04	0.00	0.00	0.00	
Hydrogen Sulfide (dissolved), ppm	HSD,ppm	0								
Salt content, ptb	SAL,lb/1000bbl	3.3								
Paraffins, vol %	PAR,V,%	28.6133	100.00	79.19	33.06	35.13	34.08	24.78	1.44	
Naphthenes, vol %	NAP,V,%	35.4797	0.00	20.81	57.30	50.93	45.11	39.11	14.12	
Aromatics (FIA), vol %	ARO,V,%	20.0964	0.00	0.00	9.64	13.94	20.82	36.12	84.45	
Distillation type, D-		86	86	86	86	86	86	1160	1160	
ASTM IBP, F	D86P,0.5%,F	D1160P,0.5%,F	61.0172	-97.66	99.07	208.92	366.91	509.26	674.52	1023.33
5 vol%, F	D86P,5%,F	D1160P,5%,F	166.198	-79.37	100.96	212.53	369.01	512.41	681.75	1029.84
10 vol%, F	D86P,10%,F	D1160P,10%,F	220.889	-59.16	101.58	215.04	370.93	514.42	686.97	1034.62
20 vol%, F	D86P,20%,F	D1160P,20%,F	288.645	-10.88	104.52	222.94	377.96	521.57	706.51	1053.11
30 vol%, F	D86P,30%,F	D1160P,30%,F	367.043	21.78	111.96	230.03	384.73	528.68	727.04	1073.97
40 vol%, F	D86P,40%,F	D1160P,40%,F	441.575	26.37	116.49	238.81	393.80	538.49	749.04	1098.23
50 vol%, F	D86P,50%,F	D1160P,50%,F	506.655	35.22	126.45	247.05	402.67	548.35	772.72	1126.43
60 vol%, F	D86P,60%,F	D1160P,60%,F	573.254	37.93	131.70	255.59	412.22	559.50	802.77	1163.97
70 vol%, F	D86P,70%,F	D1160P,70%,F	646.507	40.65	136.60	264.20	421.55	570.86	836.76	1209.26
80 vol%, F	D86P,80%,F	D1160P,80%,F	745.966	43.24	141.10	275.64	431.05	583.52	876.93	1266.64
90 vol%, F	D86P,90%,F	D1160P,90%,F	872.584	45.83	145.21	290.25	440.17	596.58	927.99	1346.45
95 vol%, F	D86P,95%,F	D1160P,95%,F	918.538	49.48	152.17	301.16	448.66	606.60	960.33	1403.59
ASTM EP, F	D86P,99.5%,F	D1160P,99.5%,F	1018.66	61.10	158.46	311.49	458.25	618.58	996.05	1490.15
Freeze point, F	FPT,F		102.841	-185.67	-149.52	-101.94	-50.74	23.61	117.58	164.36
Smoke point, mm	SMO,mm		17.3684	34.40	31.66	27.26	21.11	15.32	8.33	2.75
Naphthalenes (D1840), vol%	NPH,V,%		5.17964	0.00	0.00	0.00	1.95	8.10	9.18	9.15
Viscosity at 100C/212F, cSt	VIS,100C,cSt		1.17508	0.26	0.30	0.40	0.70	1.43	6.95	1747.24
Viscosity at 150C/302F, cSt	VIS,150C,cSt		0.68749	0.20	0.24	0.30	0.47	0.85	2.76	108.19
Cetane Index 1990 (D4737)	CET,none		39.2659	142.58	47.17	26.22	40.64	53.29	53.91	30.40
Cloud point, F	CPT,F		94.0122	-193.04	-156.81	-109.26	-58.21	18.67	110.02	157.13
Aniline pt, F	ANI,F		157.401	181.67	150.97	120.46	135.73	161.09	189.19	162.41