C30+ COMPOSITIONAL ANALYSIS

MaxxID	Client ID	Meter Number	Laboratory Number
	LONG LAKE LIGHT SYNTHETIC		B274330:EG4063

Operator Name	LSD	Well ID
CRUDE QUALITY INC.		

Well Name	Initials of Sampler	Sampling Company
CRUDE QUALITY INC. MINI ASSAY		MAXXAM ANALYTICS

Field or Area	Pool or Zone	Sample Point	Container Identity	Percent Full
		PSC NAPHTHA IBP - 190°C	4L CAN	

Test Recovery	Sample Gathering Point	Solution Gas

Test Type	No.	Multiple Recovery	Interval From: / To:	Elevations (m) KB	Elevations (m) GRD	Well Fluid Status	Well Status Mode

Production Rates: Water m3/d	Oil m3/d	Gas 1000m3/d	Gauge Pressures kPa: Source	As Received	Temperature °C: Source	As Received	Well Status Type	Well Type
					21			

Gas or Condensate Project	Licence No.

Date Sampled Start	Date Sampled End	Date Received	Date Reported	Date Reissued	Analyst
		2012/08/22	2012/09/25	2012/09/25	GS1

COMPOSITION

COMPONENT	MOLE FRACTION	MASS FRACTION	VOLUME FRACTION
N2			
CO2			
H2S			
C1	0.0000	0.0000	0.0000
C2	Trace	Trace	Trace
C3	0.0007	0.0003	0.0004
IC4	0.0217	0.0120	0.0153
NC4	0.0414	0.0229	0.0281
IC5	0.0591	0.0405	0.0465
NC5	0.0489	0.0336	0.0382
C6	0.0979	0.0801	0.0860
C7+	0.7303	0.8106	0.7855
TOTAL	1.0000	1.0000	1.0000

PROPERTIES

RESIDUE	RELATIVE DENSITY @ 15 °C OBSERVED	RELATIVE DENSITY @ 15 °C CALCULATED	RELATIVE MOLECULAR MASS OBSERVED	RELATIVE MOLECULAR MASS CALCULATED	DATA SUMMARY MOLE FRACTION	DATA SUMMARY MASS FRACTION	DATA SUMMARY VOLUME FRACTION
C5+		0.724		108	0.9362	0.9648	0.9562
C6+		0.734		113	0.8282	0.8907	0.8715
C7+	0.741		117	117	0.7303	0.8106	0.7855
C10+					0.1526	0.2149	0.2019
C12+					0.0104	0.0169	0.0151
TOTAL		0.718		105			

Calculated Absolute Density Total Sample: 717.4 kg/m3 @ 15°C
Gas Equivalent Factor: 160.89 m3 Gas/m3 Liquid

** Information not supplied by client -- data derived from LSD information

Results relate only to items tested

Remarks:

C30+ COMPOSITIONAL ANALYSIS

CRUDE QUALITY INC. (Operator Name) | B274330:EG4063 (Laboratory Number)

CRUDE QUALITY INC. MINI ASSAY (Well Name) | PSC NAPHTHA IBP - 190°C (Sample Point)

MAXXAM ANALYTICS (Sampling Company) | (MaxxID) | LONG LAKE LIGHT SYNTHETIC (Client ID)

Date Sampled Start	Date Sampled End	Date Received	Date Reported	Date Reissued	Analyst
		2012/08/22	2012/09/25	2012/09/25	GS1

COMPONENT	BOILING POINT (°C)	MOLE FRACTION	MASS FRACTION	VOLUME FRACTION
Nitrogen	-196			
Carbon Dioxide	-79			
Hydrogen Sulphide	-60			
Methane	-162	0.0000	0.0000	0.0000
Ethane	-89	Trace	Trace	Trace
Propane	-42	0.0007	0.0003	0.0004
Iso-Butane	-12	0.0217	0.0120	0.0153
n-Butane	0	0.0414	0.0229	0.0281
Iso-Pentane	28	0.0591	0.0405	0.0465
n-Pentane	36	0.0489	0.0336	0.0382
Hexanes	37-69	0.0979	0.0801	0.0860
Heptanes	70-98	0.1748	0.1558	0.1563
Octanes	99-126	0.2212	0.2270	0.2224
Nonanes	127-151	0.1817	0.2129	0.2049
Decanes	152-174	0.0907	0.1216	0.1178
Undecanes	175-196	0.0515	0.0764	0.0690
Dodecanes	197-216	0.0102	0.0165	0.0147
Triadecanes	217-236	0.0002	0.0004	0.0004
Tetradecanes	237-253	Trace	Trace	Trace
Pentadecanes	254-271	Trace	Trace	Trace
Hexadecanes	272-287	Trace	Trace	Trace
Heptadecanes	288-302	Trace	Trace	Trace
Octadecanes	303-317	Trace	Trace	Trace
NonaDecanes	318-331	Trace	Trace	Trace
Eicosanes	332-343	Trace	Trace	Trace
Heneicosanes	344-357	Trace	Trace	Trace
Docosanes	358-369	Trace	Trace	Trace
Triacosanes	370-380	Trace	Trace	Trace
Tetracosanes	381-391	0.0000	0.0000	0.0000
Pentacosanes	392-402	0.0000	0.0000	0.0000
Hexacosanes	403-412	0.0000	0.0000	0.0000
Heptacosanes	413-422	0.0000	0.0000	0.0000
Octacosanes	423-432	0.0000	0.0000	0.0000
Nonacosanes	433-441	0.0000	0.0000	0.0000
Triacontanes+	442-449+	0.0000	0.0000	0.0000
Totals		1.0000	1.0000	1.0000
neoHexane	50	0.0000	0.0000	0.0000
Methylcyclopentane	70	0.0423	0.0338	0.0321
Benzene	80	0.0085	0.0063	0.0051
Cyclohexane	81	0.0158	0.0127	0.0116
Methylcyclohexane	101	0.0566	0.0528	0.0490
Toluene	111	0.0209	0.0183	0.0151
Ethylbenzene	136	0.0096	0.0097	0.0080
m&p-Xylene	139	0.0214	0.0216	0.0177
o-Xylene	144	0.0092	0.0093	0.0075
1,2,4-Trimethylbenzene	169	0.0063	0.0075	0.0061

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Remarks: