C30+ COMPOSITIONAL ANALYSIS

MaxxID	Client ID	Meter Number	Laboratory Number
	SURMONT HEAVY BLEND		B274332:EG4072

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
		SHB 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
					25			

Gas or Condensate Project	Licence No.

Date Sampled Start	Date Sampled End	Date Received	Date Reported	Date Reissued	Analyst
		2012/08/22	2012/10/25	2012/10/25	NG

COMPOSITION

COMPONENT	MOLE FRACTION	MASS FRACTION	VOLUME FRACTION
N2			
CO2			
H2S			
C1	0.0000	0.0000	0.0000
C2	Trace	Trace	Trace
C3	0.0009	0.0004	0.0005
IC4	0.0095	0.0049	0.0064
NC4	0.0442	0.0230	0.0284
IC5	0.0461	0.0297	0.0344
NC5	0.0698	0.0450	0.0516
C6	0.1067	0.0822	0.0890
C7+	0.7228	0.8148	0.7897
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+		0.729		115	0.9454	0.9717	0.9647
C6+		0.739		121	0.8295	0.8970	0.8787
C7+	0.747		126	126	0.7228	0.8148	0.7897
C10+					0.3077	0.4083	0.3863
C12+					0.0122	0.0200	0.0178
TOTAL		0.724		112			

Calculated Absolute Density Total Sample: 723.3 kg/m3 @ 15°C
Gas Equivalent Factor: 152.90 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) | B274332:EG4072 (Laboratory Number)

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

MAXXAM ANALYTICS (Sampling Company) | (MaxxID) | SURMONT HEAVY BLEND (Client ID)

Date Sampled Start	Date Sampled End	Date Received	Date Reported	Date Reissued	Analyst
		2012/08/22	2012/10/25	2012/10/25	NG

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	0.0009	0.0004	0.0005
Iso-Butane	-12	0.0095	0.0049	0.0064
n-Butane	0	0.0442	0.0230	0.0284
Iso-Pentane	28	0.0461	0.0297	0.0344
n-Pentane	36	0.0698	0.0450	0.0516
Hexanes	37-69	0.1067	0.0822	0.0890
Heptanes	70-98	0.1292	0.1100	0.1124
Octanes	99-126	0.1474	0.1442	0.1437
Nonanes	127-151	0.1385	0.1523	0.1473
Decanes	152-174	0.1787	0.2251	0.2199
Undecanes	175-196	0.1168	0.1632	0.1486
Dodecanes	197-216	0.0116	0.0176	0.0158
Triadecanes	217-236	0.0001	0.0001	0.0001
Tetradecanes	237-253	Trace	Trace	Trace
Pentadecanes	254-271	Trace	Trace	Trace
Hexadecanes	272-287	Trace	0.0001	0.0001
Heptadecanes	288-302	0.0001	0.0001	0.0001
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	Trace	0.0001	0.0001
Pentacosanes	392-402	0.0001	0.0002	0.0001
Hexacosanes	403-412	Trace	0.0001	0.0001
Heptacosanes	413-422	Trace	0.0001	0.0001
Octacosanes	423-432	Trace	0.0001	0.0001
Nonacosanes	433-441	Trace	0.0002	0.0001
Triacontanes+	442-449+	0.0003	0.0013	0.0011
Totals		1.0000	1.0000	1.0000
neoHexane	50	0.0000	0.0000	0.0000
Methylcyclopentane	70	0.0244	0.0184	0.0176
Benzene	80	0.0039	0.0027	0.0022
Cyclohexane	81	0.0106	0.0080	0.0074
Methylcyclohexane	101	0.0270	0.0237	0.0221
Toluene	111	0.0122	0.0101	0.0084
Ethylbenzene	136	0.0073	0.0069	0.0057
m&p-Xylene	139	0.0188	0.0179	0.0148
o-Xylene	144	0.0069	0.0066	0.0054
1,2,4-Trimethylbenzene	169	0.0119	0.0131	0.0108

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Remarks: