



C30+ COMPOSITIONAL ANALYSIS

BOREALIS HEAVY BLEND

B3A9012:IE1297

MaxID

Client ID

Meter Number

Laboratory Number

CRUDE QUALITY INC.

Operator Name

LSD

Well ID

CRUDE QUALITY INC. MINI ASSAY

MAXXAM ANALYTICS

Well Name

Initials of Sampler

Sampling Company

BHB NAPHTHA IBP - 190°C

4L CAN

Field or Area

Pool or Zone

Sample Point

Container Identity

Percent Full

Test Recovery

Interval

Elevations (m)

Sample Gathering Point

Solution Gas

Test Type

No.

Multiple Recovery

From:

To:

KB

GRD

Well Fluid Status

Well Status Mode

Production Rates

Gauge Pressures kPa

Temperature °C

Well Status Type

Well Type

Water m3/d

Oil m3/d

Gas 1000m3/d

Source

As Received

Source

As Received

21

Gas or Condensate Project

Licence No.

2013/11/25

2014/01/17

NG

Date Sampled Start

Date Sampled End

Date Received

Date Reported

Date Reissued

Analyst

COMPOSITION

COMPONENT	MOLE FRACTION	MASS FRACTION	VOLUME FRACTION
N2			
CO2			
H2S			
C1	0.0000	0.0000	0.0000
C2	Trace	Trace	Trace
C3	0.0005	0.0003	0.0003
IC4	0.0064	0.0043	0.0052
NC4	0.0544	0.0366	0.0424
IC5	0.2021	0.1687	0.1830
NC5	0.2132	0.1781	0.1912
C6	0.1822	0.1816	0.1840
C7+	0.3412	0.4304	0.3939
TOTAL	1.0000	1.0000	1.0000

PROPERTIES

RESIDUE	RELATIVE DENSITY @ 15 °C		RELATIVE MOLECULAR MASS		DATA SUMMARY		
	OBSERVED	CALCULATED	OBSERVED	CALCULATED	MOLE FRACTION	MASS FRACTION	VOLUME FRACTION
C5+		0.682		88	0.9387	0.9588	0.9521
C6+		0.717		101	0.5234	0.6120	0.5779
C7+	0.740		109	109	0.3412	0.4304	0.3939
C10+					0.0508	0.0885	0.0783
C12+					0.0044	0.0094	0.0076
TOTAL		0.677		86			

Calculated Absolute Density Total Sample: 676.4 kg/m3 @ 15°C
 Gas Equivalent Factor: 185.03 m3 Gas/m3 Liquid

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

Results relate only to items tested

Remarks:



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Operator Name

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CRUDE QUALITY INC. MINI ASSAY

BHB NAPHTHA IBP - 190°C

Well Name

Sample Point

MAXXAM ANALYTICS

BOREALIS HEAVY BLEND

Sampling Company

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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	0.0005	0.0003	0.0003
Iso-Butane	-12	0.0064	0.0043	0.0052
n-Butane	0	0.0544	0.0366	0.0424
Iso-Pentane	28	0.2021	0.1687	0.1830
n-Pentane	36	0.2132	0.1781	0.1912
Hexanes	37-69	0.1822	0.1816	0.1840
Heptanes	70-98	0.1504	0.1617	0.1518
Octanes	99-126	0.0970	0.1195	0.1091
Nonanes	127-151	0.0430	0.0607	0.0547
Decanes	152-174	0.0295	0.0484	0.0446
Undecanes	175-196	0.0169	0.0307	0.0261
Dodecanes	197-216	0.0029	0.0058	0.0049
Triadecanes	217-236	0.0002	0.0005	0.0004
Tetradecanes	237-253	Trace	Trace	Trace
Pentadecanes	254-271	0.0001	0.0002	0.0002
Hexadecanes	272-287	0.0002	0.0003	0.0003
Heptadecanes	288-302	0.0002	0.0004	0.0003
Octadecanes	303-317	0.0002	0.0004	0.0003
NonaDecanes	318-331	0.0001	0.0002	0.0001
Eicosanes	332-343	0.0001	0.0003	0.0002
Heneicosanes	344-357	0.0001	0.0002	0.0001
Docosanes	358-369	0.0002	0.0005	0.0003
Triacosanes	370-380	Trace	Trace	Trace
Tetracosanes	381-391	Trace	0.0001	0.0001
Pentacosanes	392-402	Trace	Trace	Trace
Hexacosanes	403-412	Trace	0.0001	0.0001
Heptacosanes	413-422	Trace	Trace	Trace
Octacosanes	423-432	Trace	Trace	Trace
Nonacosanes	433-441	Trace	Trace	Trace
Triacontanes+	442-449+	0.0001	0.0004	0.0003
Totals		1.0000	1.0000	1.0000
neoHexane	50	0.0000	0.0000	0.0000
Methylcyclopentane	70	0.0315	0.0307	0.0275
Benzene	80	0.0108	0.0098	0.0075
Cyclohexane	81	0.0222	0.0216	0.0187
Methylcyclohexane	101	0.0280	0.0318	0.0278
Toluene	111	0.0139	0.0148	0.0115
Ethylbenzene	136	0.0020	0.0024	0.0019
m&p-Xylene	139	0.0072	0.0088	0.0068
o-Xylene	144	0.0021	0.0025	0.0019
1,2,4-Trimethylbenzene	169	0.0008	0.0011	0.0009

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