





CRUDE QUALITY INC.

B698927:PY6402-01

Operator Name

Laboratory Number

CRUDE QUALITY INC. MINI ASSAY

WCS NAPHTHA IBP - 190°C

Well Name

Sample Point

MAXXAM ANALYTICS

Western Canadian Select

Sampling Company

MaxxID

Client ID

2016/11/04

2016/11/21

FA1

Date Sampled Start

Date Sampled End

Date Received

Date Reported

Date Reissued

Analyst

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	0.0068	0.0034	0.0046
Iso-Butane	-12	0.0522	0.0345	0.0417
n-Butane	0	0.1298	0.0859	0.0999
Iso-Pentane	28	0.1414	0.1162	0.1264
n-Pentane	36	0.1491	0.1228	0.1322
Hexanes	37-69	0.1406	0.1379	0.1404
Heptanes	70-98	0.1289	0.1379	0.1308
Octanes	99-126	0.1058	0.1288	0.1186
Nonanes	127-151	0.0548	0.0760	0.0684
Decanes	152-174	0.0396	0.0632	0.0578
Undecanes	175-196	0.0393	0.0700	0.0598
Dodecanes	197-216	0.0097	0.0188	0.0158
Tridecanes	217-236	0.0001	0.0002	0.0002
Tetradecanes	237-253	0.0004	0.0008	0.0006
Pentadecanes	254-271	0.0004	0.0008	0.0007
Hexadecanes	272-287	0.0002	0.0003	0.0003
Heptadecanes	288-302	0.0001	0.0003	0.0002
Octadecanes	303-317	0.0002	0.0004	0.0003
NonaDecanes	318-331	0.0001	0.0004	0.0003
Eicosanes	332-343	0.0002	0.0004	0.0003
Heneicosanes	344-357	0.0002	0.0005	0.0004
Docosanes	358-369	0.0001	0.0003	0.0002
Triacosanes	370-380	Trace	0.0002	0.0001
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
Triacotanes+	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	0.0213	0.0204	0.0183
Benzene	80	0.0066	0.0059	0.0046
Cyclohexane	81	0.0207	0.0199	0.0172
Methylcyclohexane	101	0.0301	0.0337	0.0296
Toluene	111	0.0132	0.0138	0.0107
Ethylbenzene	136	0.0022	0.0026	0.0020
m&p-Xylene	139	0.0103	0.0124	0.0096
o-Xylene	144	0.0035	0.0043	0.0033
1,2,4-Trimethylbenzene	169	0.0039	0.0054	0.0042

\*per Method GPA 2186-M

\*\* Information not supplied by Client -- data derived from LSD information

Results relate only to items tested

Remarks: