



April 7, 2010

CQI Report to Stakeholders

Subject: February 2010 Condensate Results

As of January 1, 2008, the Crude Quality Monitoring Project has modified its condensate testing program. We acknowledge that industry requirements and specifications are different for condensates than for other types of crude. As such, we have updated our condensate testing program in an effort to provide the industry with reliable, accurate, and usable information specifically relevant to condensates. We believe that this information will be valuable for numerous industry purposes, such as better blending data and formulating condensate specifications and guidelines. Should you have any questions regarding this report, or the modified condensate testing program, please contact Crude Quality Inc. at (780) 991-9900 or at crudequality@gmail.com.

Observations:

Attached are detailed C30+ compositional and trace sulphur analyses, as well as historical data from crudemonitor.ca pertaining to typical light ends and bulk properties for Condensate Blend (CRW).

In addition to the attached, we note the following testing results:

	Sample Date	Batch #	Sulphur (wt%)	API Gravity (degree)	Absolute Density (kg/m ³)	MCR (wt%)	Viscosity @ 7.5° C (cSt)	RVP (kPa)	Organo-Phosphates (ppmw)	Total Mercaptans (ppm)	Olefins (wt%)
Current Data	02/15/10	CRW-015	0.24	61.3	733.4	0.47	1.02	75.7	-	109	-
Average To Date			0.18	65.2	719	0.23	0.8	74.6	0.9	103	8xND
Std Dev.			0.09	2.2	7.9	0.14	0.07	3.7	0.23	18	-
Avg+StdDev			0.27	67.3	726.9	0.37	0.87	78.3	1.13	121	-
Avg-StdDev			0.1	63	711.1	0.1	0.74	71	0.67	86	-

Table 1: Summary of CRW current and average properties

The February sample of CRW was generally heavier than average. Consistent with the decrease in C5s x C7s, this sample's density was elevated. Increases were observed for both MCR (0.47 wt% versus 0.23 wt% average) and viscosity (1.02 cSt versus 0.80 cSt average). This sample also contained marginally higher than average volumes of C4s and C14s x C29s.



The sediment values observed for CRW since February 2009 have been tabulated below:

Feb09	Mar09	Apr09	May09	Jun09	Jul09	Aug09	Sep09	Oct09	Nov09	Dec09	Jan10	Feb10
320	80	-	90	130	140	73	43	39	<10	90	46	195

Table 2: Sediment values for CRW, in mg/L, from February 2009 to February 2010

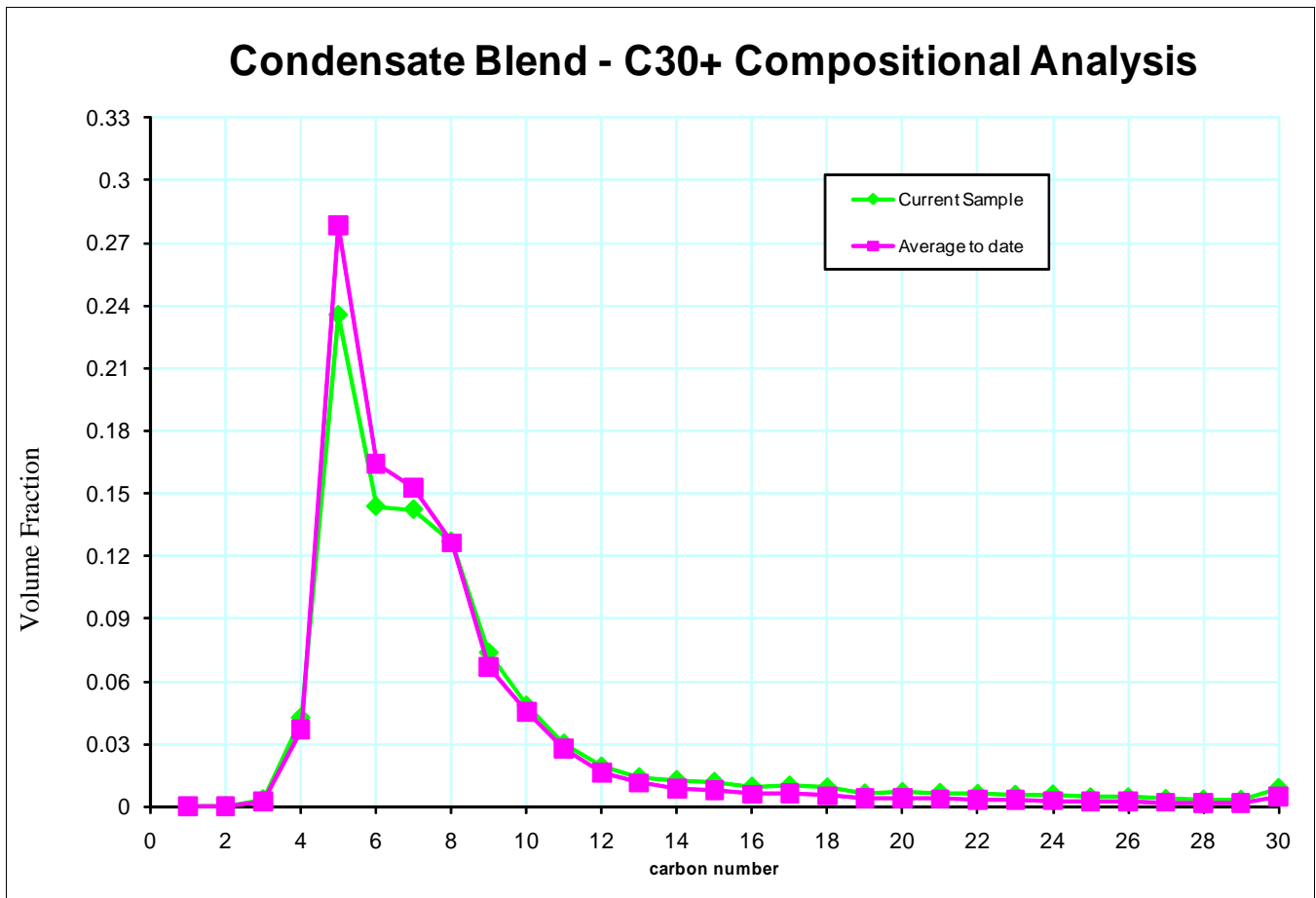


Figure 1: C30+ Compositional Analysis for CRW-015



C30+ COMPOSITIONAL ANALYSIS

B010450:S94405

MaxxID

Client ID

Meter Number

Laboratory Number

CRUDE QUALITY INC.

Operator Name

LSD

Well ID

CRUDE QUALITY INC. FEB10 LIGHT CRUDES

ENBRIDGE

Well Name

Initials of Sampler

Sampling Company

COND. BLEND CRW-015

1L 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

Gas or Condensate Project

Licence No.

2010/02/15

2010/02/25

2010/03/08

SK1,GS1,AS9,JM4,BC2,SM4

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	0.0004	0.0001	0.0003
C3	0.0059	0.0025	0.0036
IC4	0.0119	0.0068	0.0087
NC4	0.0481	0.0275	0.0339
IC5	0.1414	0.1005	0.1157
NC5	0.1478	0.1050	0.1197
C6	0.1583	0.1338	0.1438
C7+	0.4862	0.6238	0.5743
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+		0.726		105	0.9337	0.9631	0.9535
C6+		0.759		119	0.6445	0.7576	0.7181
C7+	0.781		135	130	0.4862	0.6238	0.5743
C10+					0.1346	0.2682	0.2314
C12+					0.0770	0.1844	0.1528
TOTAL		0.719		102			

Calculated Absolute Density Total Sample:
Gas Equivalent Factor:

718.4 kg/m3 @ 15°C
163.69 m3 Gas/m3 Liquid

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

Results relate only to items tested

Remarks:

Distillation Corrected to 101.3 kPa



C30+ COMPOSITIONAL ANALYSIS

CRUDE QUALITY INC.

B010450:S94405

Operator Name

Laboratory Number

CRUDE QUALITY INC. FEB10 LIGHT CRUDES

COND. BLEND CRW-015

Well Name

Sample Point

ENBRIDGE

Sampling Company

MaxxD

Client ID

2010/02/15

2010/02/25

2010/03/08

SK1,GS1,AS9,JM4,BC2,SM4

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	0.0004	0.0001	0.0003
Propane	-42	0.0059	0.0025	0.0036
Iso-Butane	-12	0.0119	0.0068	0.0087
n-Butane	0	0.0481	0.0275	0.0339
Iso-Pentane	28	0.1414	0.1005	0.1157
n-Pentane	36	0.1478	0.1050	0.1197
Hexanes	37-69	0.1583	0.1338	0.1438
Heptanes	70-98	0.1594	0.1449	0.1423
Octanes	99-126	0.1282	0.1332	0.1269
Nonanes	127-151	0.0640	0.0775	0.0737
Decanes	152-174	0.0358	0.0501	0.0484
Undecanes	175-196	0.0218	0.0337	0.0302
Dodecanes	197-216	0.0131	0.0219	0.0192
Triadecanes	217-236	0.0089	0.0162	0.0141
Tetradecanes	237-253	0.0076	0.0149	0.0128
Pentadecanes	254-271	0.0067	0.0140	0.0119
Hexadecanes	272-287	0.0052	0.0114	0.0096
Heptadecanes	288-302	0.0052	0.0122	0.0101
Octadecanes	303-317	0.0045	0.0111	0.0092
NonaDecanes	318-331	0.0029	0.0077	0.0063
Eicosanes	332-343	0.0031	0.0086	0.0070
Heneicosanes	344-357	0.0028	0.0082	0.0066
Docosanes	358-369	0.0026	0.0077	0.0061
Triacosanes	370-380	0.0023	0.0072	0.0057
Tetracosanes	381-391	0.0023	0.0074	0.0059
Pentacosanes	392-402	0.0017	0.0057	0.0045
Hexacosanes	403-412	0.0016	0.0056	0.0045
Heptacosanes	413-422	0.0013	0.0047	0.0037
Octacosanes	423-432	0.0012	0.0043	0.0034
Nonacosanes	433-441	0.0011	0.0043	0.0033
triacontanes+	442-449+	0.0029	0.0113	0.0089
Totals		1.0000	1.0000	1.0000
neoHexane	50	0.0000	0.0000	0.0000
Methylcyclopentane	70	0.0333	0.0276	0.0260
Benzene	80	0.0131	0.0101	0.0082
Cyclohexane	81	0.0272	0.0225	0.0204
Methylcyclohexane	101	0.0401	0.0388	0.0357
Toluene	111	0.0218	0.0198	0.0161
Ethylbenzene	136	0.0031	0.0033	0.0027
m&p-Xylene	139	0.0104	0.0109	0.0089
o-Xylene	144	0.0021	0.0022	0.0018
1,2,4-Trimethylbenzene	169	0.0009	0.0011	0.0009

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

Results relate only to items tested

Remarks:

Distillation Corrected to 101.3 kPa



TRACE SULPHUR ANALYSIS

B010450:S94406

MaxID

Client ID

Meter Number

Laboratory Number

CRUDE QUALITY INC.

Operator Name

LSD

Well ID

CRUDE QUALITY INC. FEB10 LIGHT CRUDES

ENBRIDGE

Well Name

Initials of Sampler

Sampling Company

COND. BLEND CRW-015

1L 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

23.0

As Received

Gas or Condensate Project

Licence No.

2010/02/15

2010/02/25

2010/03/08

GS1

Date Sampled Start

Date Sampled End

Date Received

Date Reported

Date Reissued

Analyst

COMPOSITION		Boiling Pt. (°C)	Sulphur mole ppm	Sulphur mass ppm	PROPERTIES	
Component	Common Name					
Hydrogen Sulphide	H2S	-60.4	<0.5	<0.5	<p>Molecular Wt. (g/mole) Measured</p>	
Carbonyl Sulphide	COS	-50	0.8	<0.5		
Methanethiol	Methyl mercaptan	6.2	20.5	6.0		
Ethanethiol	Ethyl mercaptan	35	101.1	29.7		
Dimethyl Sulphide	DMS	38	19.5	5.7		
Carbon Disulphide	CS2	46.5	4.2	1.2		<p>Molecular Wt. (g/mole) Calculated</p>
Iso-Propanethiol	Iso-propyl mercaptan	58	108.6	31.9		
t-Butanethiol	tert-butyl mercaptan	64	15.0	4.4		
Methyl Ethyl Sulphide	MES	67	14.1	4.1		
n-Propanethiol	Propyl mercaptan	70	22.5	6.6		
Unknown		36-69	1.4	<0.5		
Thiophene/sec-Butanethiol	Thiophene/sec-Butyl mercaptan	84/90	68.2	20.0		
Diethyl Sulphide	DES	92.1	6.3	1.8		
Iso-Butanethiol	Iso-butyl mercaptan	99	3.4	1.0		
n-Butanethiol	Butyl mercaptan	98	8.2	2.4		
Unknown		71-97	19.3	5.7	<p>Onsite H2S</p> <p>ppm(mole) mole%</p>	
Dimethyl Disulphide	DMDS	110	13.9	4.1		
n-Pentanethiol	Pentyl mercaptan	127	10.9	3.2		
Unknown		100-126	71.0	20.8		
n-Hexanethiol	Hexyl mercaptan	151	8.1	2.4		
Unknown		127-150	64.6	19.0		
n-Heptanethiol	Heptyl mercaptan	177	5.2	1.5		
Unknown		152-176	95.9	28.2		
Total Sulphur			8540	2507.1		
<p>Mercaptan Sulphur on Naphtha fraction (IBP 204°C) ASTM D3227 (mass%) Naphtha IBP 204°C (volume %) Elemental Sulphur (mass ppm)</p>						

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

Results relate only to items tested

Remarks:

Light Crude Quality Project Analyses Summary (December 2007)

Crude	Sample Date	No. Samples or Batch #	Sulphur (wt%)	API Density (degree)	Absolute Density (kg/m3)	Sediment (ppmw)	MCR (wt%)	Salt (ptb)	TAN (mgKOH/g)	Nickel (mg/L)	Vanadium (mg/L)
CRW Condensate Blend											
	2005 Q2	3	0.17	62.9	727.0		0.2			43.5	4.8
	2005 Q3	3	0.16	63.3	725.8		0.4			17.9	2.4
	2005 Q4	3	0.17	63.6	724.6		0.3				3.6
	2006 Q1	4	0.16	64.8	720.2		0.3				6.8
	2006 Q2	3	0.21	63.3	725.9		0.3				1.4
	2006 Q3	2	0.17	62.1	730.2		0.2				1.2
	2006 Q4	2	0.13	67.0	712.2		0.1				
	2007 Q1	3	0.13	65.4	718.1		0.2				
	2007 Q2	3	0.10	67.6	710.3		0.1				
	2007 Q3	3	0.13	65.7	717.0		0.2				
	2007 Q4	3	0.22	64.8	720.3		0.2				1.6
	2008 Q1	1	0.39	65.1	719.2		0.4				
	12/1/2007	CRW-753	0.15	67.6	710.2		0.1				
	1/1/2008	CRW-757	0.39	65.1	719.2		0.4				
	Average		0.17	64.6	721.0		0.2			35.0	3.2
	Std Dev		0.07	2.1	7.7		0.1			13.1	2.0
	Avg + StdDev		0.24	66.7	728.7		0.4			48.1	5.2
	Avg - StdDev		0.10	62.5	713.3		0.1			21.9	1.2

Light Crude Quality Project Light Ends Summary (December 2007)

Crude Sample Date	Count of Batches or Batch No.	Ethane (vol%)	Propane (vol%)	Butanes (vol%)	Pentanes (vol%)	Hexanes (vol%)	Heptanes (vol%)	Octanes (vol%)	Nonanes (vol%)	Decanes (vol%)	Benzene (vol%)	Toluene (vol%)	Ethyl Benzene (vol%)	Xylenes (vol%)	
CRW Condensate Blend															
2005 Q2	3	0.02	0.32	3.54	23.63	21.20	15.23	10.08	5.12	2.28	1.15	2.10	0.23	1.86	
2005 Q3	3	0.02	0.23	3.23	23.45	21.28	16.37	10.77	5.51	2.45	1.23	2.34	0.25	2.03	
2005 Q4	3	0.02	0.23	3.15	21.79	21.60	16.33	11.80	6.09	2.40	1.16	2.26	0.30	2.13	
2006 Q1	4	0.02	0.19	2.76	22.50	22.77	14.89	10.86	6.18	2.49	1.23	2.07	0.28	1.92	
2006 Q2	3	0.02	0.27	3.42	22.51	19.93	15.65	10.90	5.69	2.30	1.06	2.08	0.26	1.86	
2006 Q3	2	0.02	0.28	2.96	20.36	19.74	16.38	11.82	6.08	2.52	1.06	2.19	0.29	2.06	
2006 Q4	2	0.02	0.22	3.37	25.43	22.50	15.32	10.35	5.29	2.09	1.13	2.00	0.25	1.82	
2007 Q1	3	0.02	0.24	3.33	24.64	24.26	15.17	10.54	5.29	2.17	1.27	2.10	0.27	1.93	
2007 Q2	3	0.02	0.20	3.22	25.40	23.30	15.51	10.59	5.37	1.96	1.25	2.15	0.27	1.86	
2007 Q3	3	0.02	0.24	3.42	23.97	20.53	15.46	10.25	5.10	2.08	1.08	2.13	0.25	1.82	
2007 Q4	3	0.02	0.26	3.49	24.77	21.60	16.06	11.39	5.70	2.22	1.08	2.15	0.30	1.97	
2008 Q1	1	0.02	0.21	3.06	25.40	21.80	16.14	11.48	5.53	2.05	1.07	2.13	0.31	1.99	
12/1/2007	CRW-753	0.02	0.18	2.89	26.08	22.84	16.97	11.76	5.53	2.07	1.14	2.22	0.3	1.94	
1/1/2008	CRW-757	0.02	0.21	3.06	25.4	21.8	16.14	11.48	5.53	2.05	1.07	2.13	0.31	1.99	
Average		0.02	0.24	3.25	23.56	21.77	15.65	10.85	5.59	2.27	1.16	2.14	0.27	1.93	
Std Dev		0.01	0.06	0.34	2.28	1.95	0.94	0.96	0.65	0.30	0.12	0.16	0.04	0.16	
Avg + StdDev		0.03	0.30	3.59	25.84	23.72	16.59	11.82	6.24	2.56	1.28	2.30	0.31	2.09	
Avg - StdDev		0.01	0.18	2.91	21.28	19.82	14.71	9.89	4.94	1.97	1.04	1.99	0.23	1.78	