



August 14, 2009

CQI Report to Stakeholders

Subject: June 2009 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 lywood@crudequality.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).

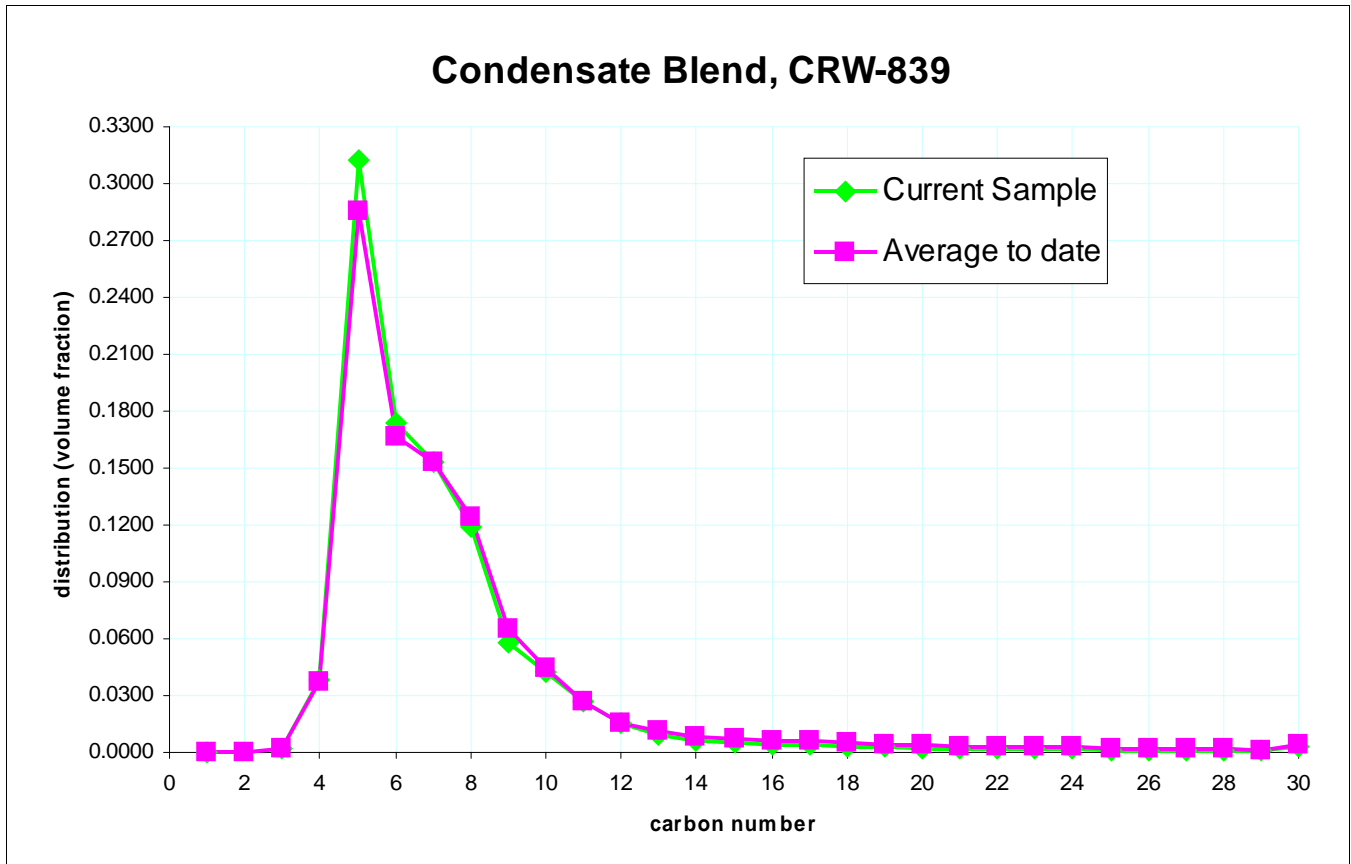
In addition to the attached, we note the following testing results:

	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	06/15/09	CRW-839	0.23	69.1	704.9	0.2	0.71	73	-	139	-
Average To Date			0.19	65.12	719	0.23	0.8	75.5	0.9	101	7xND
Std Dev.			0.08	2.1	7.7	0.13	0.05	2.9	0.23	19	-
Avg+StdDev			0.28	67.3	726.6	0.36	0.85	78.4	1.13	121	-
Avg-StdDev			0.11	63.1	711.3	0.10	0.74	72.6	0.67	82	-

A slightly lighter and less viscous sample of CRW was received for testing in June. Increased pentanes and total mercaptans were observed, while C9s and C14s x C21s were marginally decreased. This sample contained 130 ppmw of sediment, which is about average for this stream.



Figure 1. C30+ Compositional Analysis for CRW-839





C30+ COMPOSITIONAL ANALYSIS

A936019:P76836

MaxxID

Client ID

Meter Number

Laboratory Number

CRUDE QUALITY INC.

Operator Name

LSD

Well ID

CRUDE QUALITY INC. JUN09 LIGHT CRUDES

ENBRIDGE

Well Name

Initials of Sampler

Sampling Company

COND. BLEND CRW-839

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.

2009/06/15

2009/07/15

2009/07/28

MN2,GM1

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	0.0036	0.0017	0.0023
IC4	0.0069	0.0044	0.0054
NC4	0.0438	0.0277	0.0328
IC5	0.1788	0.1402	0.1555
NC5	0.1829	0.1434	0.1574
C6	0.1805	0.1684	0.1742
C7+	0.4035	0.5142	0.4724
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+		0.697		94	0.9457	0.9662	0.9595
C6+		0.731		108	0.5840	0.6826	0.6466
C7+	0.754		117	117	0.4035	0.5142	0.4724
C10+					0.0840	0.1639	0.1422
C12+					0.0357	0.0871	0.0719
TOTAL		0.693		92			

Calculated Absolute Density Total Sample: 692.4 kg/m3 @ 15°C
 Gas Equivalent Factor: 177.73 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.

A936019:P76836

Operator Name

Laboratory Number

CRUDE QUALITY INC. JUN09 LIGHT CRUDES

COND. BLEND CRW-839

Well Name

Sample Point

ENBRIDGE

Sampling Company

MaxxID

Client ID

2009/06/15

2009/07/15

2009/07/28

MN2,GM1

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	0.0036	0.0017	0.0023
Iso-Butane	-12	0.0069	0.0044	0.0054
n-Butane	0	0.0438	0.0277	0.0328
Iso-Pentane	28	0.1788	0.1402	0.1555
n-Pentane	36	0.1829	0.1434	0.1574
Hexanes	37-69	0.1805	0.1684	0.1742
Heptanes	70-98	0.1589	0.1591	0.1531
Octanes	99-126	0.1121	0.1276	0.1191
Nonanes	127-151	0.0485	0.0636	0.0580
Decanes	152-174	0.0300	0.0457	0.0429
Undecanes	175-196	0.0183	0.0311	0.0274
Dodecanes	197-216	0.0098	0.0181	0.0156
Triadecanes	217-236	0.0053	0.0108	0.0093
Tetradecanes	237-253	0.0036	0.0077	0.0065
Pentadecanes	254-271	0.0029	0.0067	0.0056
Hexadecanes	272-287	0.0021	0.0051	0.0042
Heptadecanes	288-302	0.0021	0.0055	0.0045
Octadecanes	303-317	0.0015	0.0040	0.0033
NonaDecanes	318-331	0.0011	0.0033	0.0027
Eicosanes	332-343	0.0010	0.0031	0.0025
Heneicosanes	344-357	0.0008	0.0026	0.0020
Docosanes	358-369	0.0009	0.0029	0.0023
Triacosanes	370-380	0.0006	0.0023	0.0018
Tetracosanes	381-391	0.0007	0.0025	0.0020
Pentacosanes	392-402	0.0006	0.0020	0.0015
Hexacosanes	403-412	0.0005	0.0018	0.0014
Heptacosanes	413-422	0.0005	0.0017	0.0013
Octacosanes	423-432	0.0004	0.0015	0.0011
Nonacosanes	433-441	0.0004	0.0015	0.0012
triacontanes+	442-449+	0.0009	0.0040	0.0031
Totals		1.0000	1.0000	1.0000
neoHexane	50	0.0000	0.0000	0.0000
Methylcyclopentane	70	0.0338	0.0309	0.0285
Benzene	80	0.0139	0.0118	0.0093
Cyclohexane	81	0.0274	0.0251	0.0224
Methylcyclohexane	101	0.0363	0.0387	0.0350
Toluene	111	0.0209	0.0209	0.0167
Ethylbenzene	136	0.0020	0.0024	0.0019
m&p-Xylene	139	0.0124	0.0144	0.0115
o-Xylene	144	0.0035	0.0041	0.0032
1,2,4-Trimethylbenzene	169	0.0033	0.0044	0.0035

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Remarks:



TRACE SULPHUR ANALYSIS

A936019:P76837

MaxxID

Client ID

Meter Number

Laboratory Number

CRUDE QUALITY INC.

Operator Name

LSD

Well ID

CRUDE QUALITY INC. JUN09 LIGHT CRUDES

ENBRIDGE

Well Name

Initials of Sampler

Sampling Company

COND. BLEND CRW-839

VIAL

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.

2009/06/15

2009/07/15

2009/07/28

JSA

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> <p>Molecular Wt. (g/mole) Calculated</p> <p>Onsite H2S</p> <p>ppm(mole) mole%</p>
Carbonyl Sulphide	COS	-50	2.6	0.8	
Methanethiol	Methyl mercaptan	6.2	23.8	7.3	
Ethanethiol	Ethyl mercaptan	35	135.9	41.4	
Dimethyl Sulphide	DMS	38	29.4	9.0	
Carbon Disulphide	CS2	46.5	5.1	1.5	
Iso-Propanethiol	Iso-propyl mercaptan	58	135.4	41.3	
t-Butanethiol	tert-butyl mercaptan	64	17.2	5.2	
Methyl Ethyl Sulphide	MES	67	19.6	6.0	
n-Propanethiol	Propyl mercaptan	70	26.7	8.1	
Unknown		36-69	<0.5	<0.5	
Thiophene/sec-Butanethiol	Thiophene/sec-Butyl mercaptan	84/90	73.4	22.4	
Diethyl Sulphide	DES	92.1	8.8	2.7	
Iso-Butanethiol	Iso-butyl mercaptan	99	2.8	0.8	
n-Butanethiol	Butyl mercaptan	98	9.5	2.9	
Unknown		71-97	16.6	5.1	
Dimethyl Disulphide	DMDS	110	22.3	6.8	
n-Pentanethiol	Pentyl mercaptan	127	4.4	1.3	
Unknown		100-126	53.1	16.2	
n-Hexanethiol	Hexyl mercaptan	151	18.0	5.5	
Unknown		127-150	68.9	21.0	
n-Heptanethiol	Heptyl mercaptan	177	9.5	2.9	
Unknown		152-176	83.9	25.6	
Total Sulphur			6792	2070.0	
<p>Mercaptan Sulphur on Naphtha fraction (IBP 204°C) ASTM D3227 (mass%)</p> <p>Naphtha IBP 204°C (volume %)</p> <p>Elemental Sulphur (mass ppm)</p>					

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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