



October 28, 2009

CQI Report to Stakeholders

Subject: August 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	08/01/09	CRW-846	0.1	67.6	710.2	0.1	0.8	74.3	-	126	-
Average To Date			0.19	65.3	718.8	0.23	0.79	75.6	0.9	103	8xND
Std Dev.			0.08	2.1	7.8	0.13	0.05	2.8	0.23	19	-
Avg+StdDev			0.27	67.4	726.3	0.36	0.85	78.4	1.13	122	-
Avg-StdDev			0.11	63.2	710.9	0.10	0.74	72.8	0.67	84	-

The August sample of CRW was slightly lighter than average, and contained low-end sulphur and MCR. Increased butanes were observed, while C14s x C23s were marginally decreased. This sample contained 73 wppm of sediment, which is lower than has been observed in previous CRW samples.

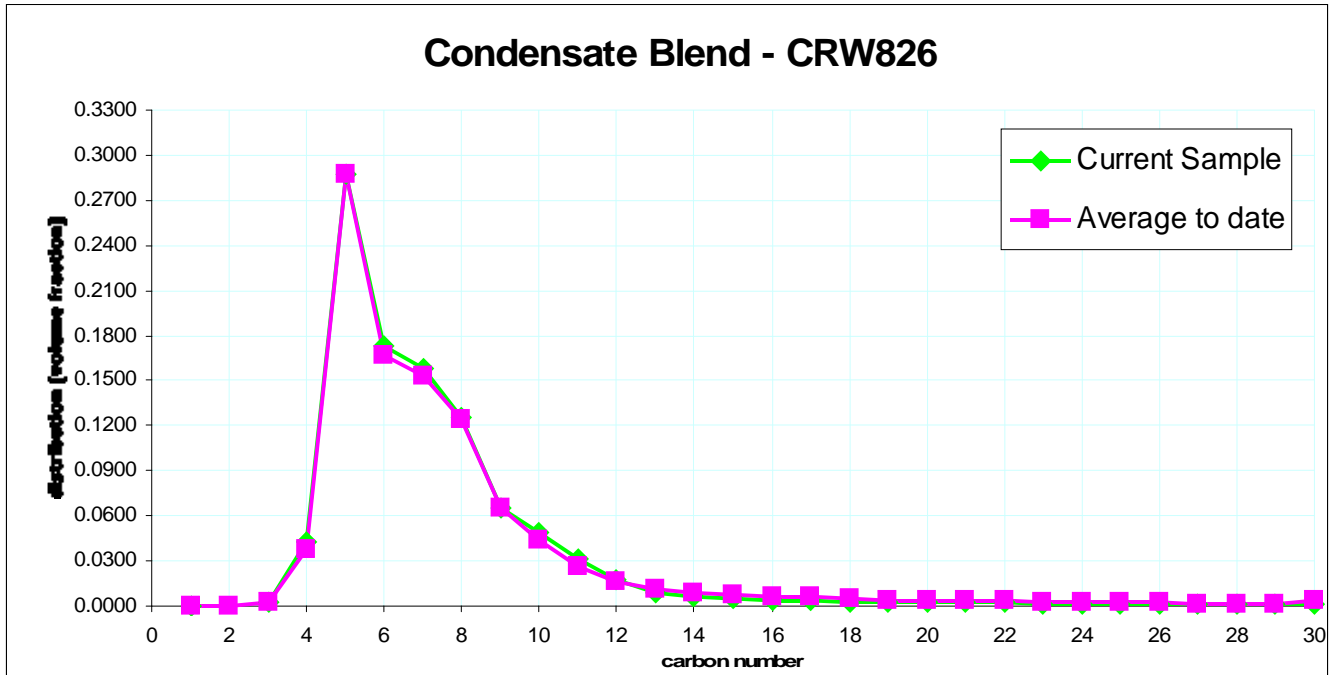


Figure 1: C30+ Compositional Analysis for CRW-826



C30+ COMPOSITIONAL ANALYSIS

A946381:Q47219

MaxxID

Client ID

Meter Number

Laboratory Number

CRUDE QUALITY INC.

Operator Name

LSD

Well ID

CRUDE QUALITY INC. AUG09 LIGHT CRUDES

ENBRIDGE

Well Name

Initials of Sampler

Sampling Company

COND. BLEND CRW-846

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.

2009/08/01

2009/09/09

2009/08/31

2009/10/06

SK1,CB ,DJ2

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	0.0032	0.0015	0.0021
IC4	0.0078	0.0049	0.0060
NC4	0.0500	0.0313	0.0371
IC5	0.1609	0.1250	0.1390
NC5	0.1731	0.1345	0.1480
C6	0.1799	0.1672	0.1731
C7+	0.4251	0.5356	0.4947
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+		0.700		95	0.9390	0.9623	0.9548
C6+		0.731		108	0.6050	0.7028	0.6678
C7+	0.753		117	117	0.4251	0.5356	0.4947
C10+					0.0892	0.1673	0.1461
C12+					0.0340	0.0802	0.0666
TOTAL		0.695		93			

Calculated Absolute Density Total Sample:

694.4 kg/m3 @ 15°C

Gas Equivalent Factor:

176.60 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.

A946381:Q47219

Operator Name

Laboratory Number

CRUDE QUALITY INC. AUG09 LIGHT CRUDES

COND. BLEND CRW-846

Well Name

Sample Point

ENBRIDGE

Sampling Company

Maxx/D

Client ID

2009/08/01

2009/09/09

2009/08/31

2009/10/06

SK1,CB ,DJ2

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	0.0032	0.0015	0.0021
Iso-Butane	-12	0.0078	0.0049	0.0060
n-Butane	0	0.0500	0.0313	0.0371
Iso-Pentane	28	0.1609	0.1250	0.1390
n-Pentane	36	0.1731	0.1345	0.1480
Hexanes	37-69	0.1799	0.1672	0.1731
Heptanes	70-98	0.1646	0.1642	0.1586
Octanes	99-126	0.1172	0.1336	0.1253
Nonanes	127-151	0.0541	0.0705	0.0647
Decanes	152-174	0.0343	0.0519	0.0486
Undecanes	175-196	0.0209	0.0352	0.0309
Dodecanes	197-216	0.0107	0.0197	0.0170
Triadecanes	217-236	0.0053	0.0106	0.0090
Tetradecanes	237-253	0.0032	0.0069	0.0059
Pentadecanes	254-271	0.0024	0.0056	0.0047
Hexadecanes	272-287	0.0019	0.0046	0.0038
Heptadecanes	288-302	0.0019	0.0047	0.0038
Octadecanes	303-317	0.0013	0.0036	0.0029
NonaDecanes	318-331	0.0010	0.0029	0.0024
Eicosanes	332-343	0.0010	0.0031	0.0025
Heneicosanes	344-357	0.0008	0.0025	0.0020
Docosanes	358-369	0.0008	0.0027	0.0021
Triacosanes	370-380	0.0006	0.0021	0.0016
Tetracosanes	381-391	0.0006	0.0021	0.0017
Pentacosanes	392-402	0.0006	0.0020	0.0016
Hexacosanes	403-412	0.0004	0.0013	0.0010
Heptacosanes	413-422	0.0004	0.0015	0.0012
Octacosanes	423-432	0.0003	0.0012	0.0009
Nonacosanes	433-441	0.0003	0.0010	0.0008
Triacontanes+	442-449+	0.0005	0.0021	0.0017
Totals		1.0000	1.0000	1.0000
neoHexane	50	0.0000	0.0000	0.0000
Methylcyclopentane	70	0.0354	0.0320	0.0296
Benzene	80	0.0117	0.0098	0.0077
Cyclohexane	81	0.0255	0.0231	0.0206
Methylcyclohexane	101	0.0357	0.0377	0.0340
Toluene	111	0.0183	0.0181	0.0145
Ethylbenzene	136	0.0022	0.0025	0.0020
m&p-Xylene	139	0.0117	0.0134	0.0107
o-Xylene	144	0.0037	0.0042	0.0033
1,2,4-Trimethylbenzene	169	0.0034	0.0045	0.0036

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Results relate only to items tested

Remarks:

Distillation Corrected to 101.3 kPa



TRACE SULPHUR ANALYSIS

A946381:Q47220

MaxID

Client ID

Meter Number

Laboratory Number

CRUDE QUALITY INC.

Operator Name

LSD

Well ID

CRUDE QUALITY INC. AUG09 LIGHT CRUDES

ENBRIDGE

Well Name

Initials of Sampler

Sampling Company

COND. BLEND CRW-846

1L CAN

Field or Area

Pool or Zone

Sample Point

Container Identity

Percent Full

Test Recovery

Interval

Elevations (m)

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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.

2009/08/01

2009/09/09

2009/08/31

2009/10/06

AG

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	4.3	1.2	Molecular Wt. (g/mole) Measured
Carbonyl Sulphide	COS	-50	<0.5	<0.5	
Methanethiol	Methyl mercaptan	6.2	25.8	7.4	
Ethanethiol	Ethyl mercaptan	35	117.3	33.5	
Dimethyl Sulphide	DMS	38	26.4	7.5	
Carbon Disulphide	CS2	46.5	6.3	1.8	Molecular Wt. (g/mole) Calculated
Iso-Propanethiol	Iso-propyl mercaptan	58	135.8	38.8	
t-Butanethiol	tert-butyl mercaptan	64	20.8	5.9	Onsite H2S ppm(mole) mole%
Methyl Ethyl Sulphide	MES	67	18.1	5.2	
n-Propanethiol	Propyl mercaptan	70	28.7	8.2	
Unknown		36-69	2.4	0.7	
Thiophene/sec-Butanethiol	Thiophene/sec-Butyl mercaptan	84/90	77.3	22.1	
Diethyl Sulphide	DES	92.1	8.4	2.4	
Iso-Butanethiol	Iso-butyl mercaptan	99	4.6	1.3	
n-Butanethiol	Butyl mercaptan	98	9.5	2.7	
Unknown		71-97	19.4	5.5	
Dimethyl Disulphide	DMDS	110	10.9	3.1	
n-Pentanethiol	Pentyl mercaptan	127	1.9	0.5	
Unknown		100-126	64.4	18.4	
n-Hexanethiol	Hexyl mercaptan	151	12.5	3.6	
Unknown		127-150	71.6	20.5	
n-Heptanethiol	Heptyl mercaptan	177	6.5	1.8	
Unknown		152-176	94.8	27.1	
Total Sulphur			3602	1029.0	
<p>Mercaptan Sulphur on Naphtha fraction (IBP 204°C) ASTM D3227 (mass%) Naphtha IBP 204°C (volume %) 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	