



April 30, 2010

CQI Report to Stakeholders

Subject: April 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	04/05/10	CRW-022	0.17	62.6	728.3	0.37	0.96	81	-	89	-
Average To Date			0.18	65	719.6	0.24	0.84	74.7	0.9	103	8xND
Std Dev.			0.08	2.4	8.6	0.14	0.15	3.9	0.23	17	-
Avg+StdDev			0.27	67.4	728.2	0.39	0.99	78.6	1.13	120	-
Avg-StdDev			0.1	62.7	711	0.1	0.69	70.8	0.67	85	-

Table 1: Summary of CRW current and average properties

While the March sample was much heavier than average (CRW-019, density: 747.3 kg/m³), the April 2010 sample CRW had characteristics more consistent with historical values. Density continued to be on the high end of the average range, while RVP was higher than average. The C30+ compositional analysis indicated a slight decrease in C6s along with marginally higher than average C13s x C14s, C19s x C21s, and C26+ components.

No oxygenates were detected in this sample of CRW (as measured by PONAOX(U), with a detection limit of 0.01 wt%).



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

Apr09	May09	Jun09	Jul09	Aug09	Sep09	Oct09	Nov09	Dec09	Jan10	Feb10	Mar10	Apr10
-	90	130	140	73	43	39	<10	90	46	195	133	124

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

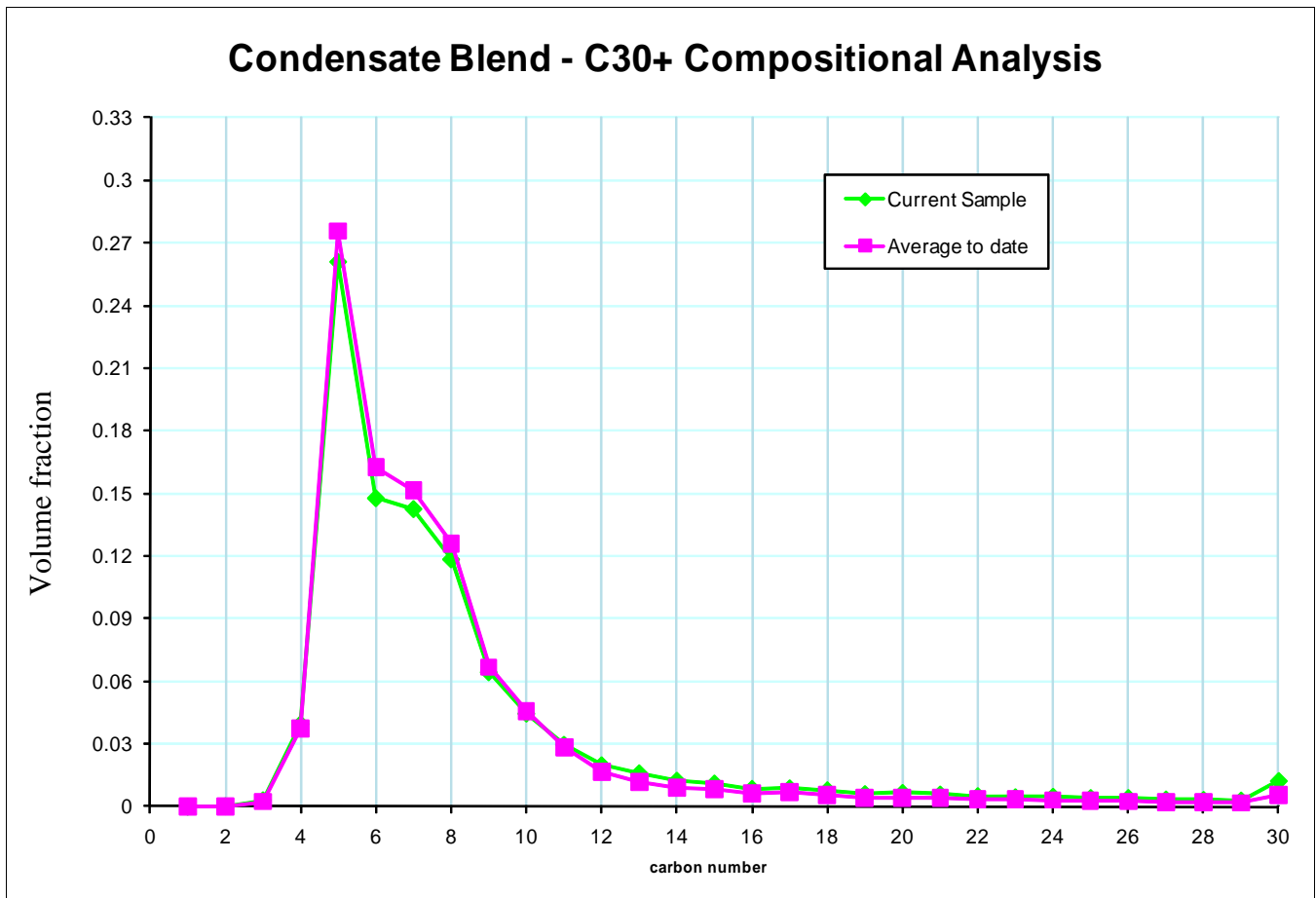


Figure 1: C30+ Compositional Analysis for CRW-022



C30+ COMPOSITIONAL ANALYSIS

B024773:T72233

MaxxID

Client ID

Meter Number

Laboratory Number

CRUDE QUALITY INC.

Operator Name

LSD

Well ID

CRUDE QUALITY INC. APR2010 LIGHT CRUDES

ENBRIDGE

Well Name

Initials of Sampler

Sampling Company

COND. BLEND CRW-022

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

As Received

Gas or Condensate Project

Licence No.

2010/04/05

2010/04/22

2010/04/28

SK1,GS1, JM4,AS9,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	0.0002
C3	0.0049	0.0022	0.0031
IC4	0.0094	0.0055	0.0069
NC4	0.0457	0.0266	0.0327
IC5	0.1562	0.1128	0.1295
NC5	0.1601	0.1159	0.1315
C6	0.1594	0.1377	0.1478
C7+	0.4639	0.5992	0.5483
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+		0.723		103	0.9396	0.9656	0.9571
C6+		0.759		118	0.6233	0.7369	0.6961
C7+	0.783		140	129	0.4639	0.5992	0.5483
C10+					0.1290	0.2591	0.2228
C12+					0.0743	0.1790	0.1485
TOTAL		0.717		100			

Calculated Absolute Density Total Sample:
Gas Equivalent Factor:

716.4 kg/m3 @ 15°C
161.92 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.

B024773:T72233

Operator Name

Laboratory Number

CRUDE QUALITY INC. APR2010 LIGHT CRUDES

COND. BLEND CRW-022

Well Name

Sample Point

ENBRIDGE

Sampling Company

MaxxD

Client ID

2010/04/05

2010/04/22

2010/04/28

SK1,GS1, JM4,AS9,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	0.0002
Propane	-42	0.0049	0.0022	0.0031
Iso-Butane	-12	0.0094	0.0055	0.0069
n-Butane	0	0.0457	0.0266	0.0327
Iso-Pentane	28	0.1562	0.1128	0.1295
n-Pentane	36	0.1601	0.1159	0.1315
Hexanes	37-69	0.1594	0.1377	0.1478
Heptanes	70-98	0.1581	0.1457	0.1426
Octanes	99-126	0.1193	0.1251	0.1185
Nonanes	127-151	0.0575	0.0693	0.0644
Decanes	152-174	0.0334	0.0468	0.0446
Undecanes	175-196	0.0213	0.0333	0.0297
Dodecanes	197-216	0.0133	0.0226	0.0199
Triadecanes	217-236	0.0100	0.0184	0.0161
Tetradecanes	237-253	0.0074	0.0146	0.0125
Pentadecanes	254-271	0.0061	0.0129	0.0111
Hexadecanes	272-287	0.0046	0.0103	0.0086
Heptadecanes	288-302	0.0045	0.0106	0.0088
Octadecanes	303-317	0.0038	0.0095	0.0079
NonaDecanes	318-331	0.0028	0.0075	0.0061
Eicosanes	332-343	0.0030	0.0082	0.0066
Heneicosanes	344-357	0.0025	0.0073	0.0059
Docosanes	358-369	0.0021	0.0064	0.0051
Triacosanes	370-380	0.0019	0.0058	0.0046
Tetracosanes	381-391	0.0019	0.0060	0.0048
Pentacosanes	392-402	0.0016	0.0054	0.0042
Hexacosanes	403-412	0.0015	0.0053	0.0042
Heptacosanes	413-422	0.0012	0.0045	0.0035
Octacosanes	423-432	0.0011	0.0042	0.0033
Nonacosanes	433-441	0.0010	0.0038	0.0030
triacontanes+	442-449+	0.0040	0.0157	0.0123
Totals		1.0000	1.0000	1.0000
neoHexane	50	0.0000	0.0000	0.0000
Methylcyclopentane	70	0.0323	0.0271	0.0255
Benzene	80	0.0144	0.0112	0.0090
Cyclohexane	81	0.0274	0.0231	0.0210
Methylcyclohexane	101	0.0388	0.0382	0.0351
Toluene	111	0.0230	0.0211	0.0173
Ethylbenzene	136	0.0028	0.0030	0.0024
m&p-Xylene	139	0.0142	0.0151	0.0123
o-Xylene	144	0.0036	0.0039	0.0031
1,2,4-Trimethylbenzene	169	0.0039	0.0048	0.0039

** 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

B024773:T72234

MaxID		Client ID		Meter Number		Laboratory Number	
CRUDE QUALITY INC.				LSD		Well ID	
Operator Name CRUDE QUALITY INC. APR2010 LIGHT CRUDES				Initials of Sampler		Sampling Company ENBRIDGE	
Well Name				COND. BLEND CRW-022		1L CAN	
Field or Area		Pool or Zone		Sample Point		Container Identity	
Percent Full							
Test Recovery		Interval		Elevations (m)		Sample Gathering Point	
Solution Gas		From: To:		KB GRD		Well Fluid Status	
Well Status Mode							
Test Type		No.		Multiple Recovery		Well Status Type	
Well Type							
Production Rates		Gauge Pressures kPa		Temperature °C		Gas or Condensate Project	
Water m3/d		Oil m3/d		Gas 1000m3/d		Licence No.	
Source		As Received		23.0			
Source		As Received					
2010/04/05		2010/04/22		2010/04/28		CB	
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	Molecular Wt. (g/mole) Measured
Carbonyl Sulphide	COS		-50	2.1	0.6	
Methanethiol	Methyl mercaptan		6.2	5.6	1.6	
Ethanethiol	Ethyl mercaptan		35	85.5	24.9	Molecular Wt. (g/mole) Calculated
Dimethyl Sulphide	DMS		38	18.1	5.3	
Carbon Disulphide	CS2		46.5	3.2	0.9	
Iso-Propanethiol	Iso-propyl mercaptan		58	102.5	29.8	Onsite H2S ppm(mole) mole%
t-Butanethiol	tert-butyl mercaptan		64	14.2	4.1	
Methyl Ethyl Sulphide	MES		67	15.6	4.5	
n-Propanethiol	Propyl mercaptan		70	19.6	5.7	
Unknown			36-69	<0.5	<0.5	
Thiophene/sec-Butanethiol	Thiophene/sec-Butyl mercaptan		84/90	56.0	16.3	
Diethyl Sulphide	DES		92.1	7.0	2.0	
Iso-Butanethiol	Iso-butyl mercaptan		99	2.4	0.7	
n-Butanethiol	Butyl mercaptan		98	6.2	1.8	
Unknown			71-97	5.1	1.5	
Dimethyl Disulphide	DMDS		110	9.2	2.7	
n-Pentanethiol	Pentyl mercaptan		127	6.6	1.9	
Unknown			100-126	41.7	12.1	
n-Hexanethiol	Hexyl mercaptan		151	2.1	0.6	
Unknown			127-150	51.8	15.1	
n-Heptanethiol	Heptyl mercaptan		177	4.0	1.2	
Unknown			152-176	54.3	15.8	
Total Sulphur				6934	2017.3	
Mercaptan Sulphur on Naphtha fraction (IBP 204°C) ASTM D3227 (mass%) Naphtha IBP 204°C (volume %) Elemental Sulphur (mass ppm)						

** 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	