

Table 1
GLJ Petroleum Consultants
Crude Oil and Natural Gas Liquids
Price Forecast
Effective April 1, 2017

Year	Inflation %	CADUSD Exchange Rate USD/CAD	NYMEX WTI Near Month Contract Crude Oil at Cushing, OK		ICE Brent Near Month Contract Crude Oil	Light, Sweet Crude Oil (40 API, 0.3%S) at Edmonton	Bow River Crude Oil Stream Quality at Hardisty	WCS Crude Oil Stream Quality at Hardisty	Heavy Crude Oil Proxy (12 API) at Hardisty	Light Sour Crude Oil (35 API, 1.2%S) at Cromer	Medium Crude Oil (29 API, 2.0%S) at Cromer	Alberta Natural Gas Liquids (Then Current Dollars)				
			Constant 2017 \$ USD/bbl	Then Current USD/bbl	Then Current USD/bbl	Then Current CAD/bbl	Then Current CAD/bbl	Then Current CAD/bbl	Then Current CAD/bbl	Then Current CAD/bbl	Then Current CAD/bbl	Then Current CAD/bbl	Spec Ethane CAD/bbl	Edmonton Propane CAD/bbl	Edmonton Butane CAD/bbl	Edmonton C5+ Stream Quality CAD/bbl
2007	2.1	0.9352	85.33	72.39	72.71	77.06	53.64	52.38	43.42	71.13	65.71	N/A	49.56	61.78	77.38	
2008	2.4	0.9428	114.97	99.64	98.30	102.90	84.31	82.95	74.94	96.08	93.10	N/A	58.38	75.33	104.78	
2009	0.4	0.8798	69.58	61.78	62.50	66.32	60.18	58.66	54.46	63.84	62.96	N/A	38.03	48.17	68.17	
2010	1.8	0.9711	89.23	79.52	80.25	77.87	68.45	67.27	60.76	76.58	73.76	N/A	46.84	65.91	84.27	
2011	2.9	1.0115	104.88	95.12	110.86	95.53	78.59	77.14	67.64	92.35	88.33	N/A	53.66	74.42	104.17	
2012	1.5	1.0009	100.92	94.21	111.71	86.60	74.42	73.13	63.64	84.51	81.37	N/A	29.04	66.70	100.84	
2013	0.9	0.9711	103.38	97.96	108.77	93.47	76.33	75.01	65.11	92.30	88.13	N/A	38.88	68.81	104.70	
2014	1.9	0.9055	97.22	93.00	99.71	94.58	81.08	81.03	73.73	92.68	89.67	N/A	45.53	69.20	102.44	
2015	1.1	0.7831	50.03	48.78	53.60	57.20	45.50	44.82	39.25	55.49	51.87	N/A	6.49	36.75	60.42	
2016	1.4	0.7551	44.00	43.38	45.05	53.08	39.83	38.96	32.78	51.46	48.84	N/A	13.24	34.48	56.25	
2017 Q1 (e)	2.0	0.7558	51.88	51.88	54.69	63.92	49.81	49.34	42.42	62.28	59.69	N/A	27.53	44.99	69.08	
2017 Q2	2.0	0.7500	50.00	50.00	52.50	62.67	51.07	50.45	44.46	61.41	58.28	9.77	18.80	41.36	67.05	
2017 Q3	2.0	0.7500	52.00	52.00	54.50	65.33	51.29	50.63	43.85	64.03	60.76	10.09	19.60	43.12	69.91	
2017 Q4	2.0	0.7500	54.00	54.00	56.50	68.00	52.90	52.22	45.06	66.64	63.24	10.41	23.12	44.88	72.76	
2017 Full Year	2.0	0.7515	51.97	51.97	54.55	64.98	51.27	50.66	43.95	63.59	60.49	N/A	22.26	43.59	69.70	
2017 Q2-Q4	2.0	0.7500	52.00	52.00	54.50	65.33	51.75	51.10	44.46	64.03	60.76	10.09	20.51	43.12	69.91	
2018	2.0	0.7750	54.90	56.00	58.50	68.39	53.68	53.00	46.15	67.02	63.60	9.55	22.57	47.87	72.49	
2019	2.0	0.8000	59.59	62.00	64.50	72.50	59.45	58.73	52.29	71.05	67.42	10.12	25.38	50.75	76.85	
2020	2.0	0.8250	61.25	65.00	68.00	73.94	61.37	60.63	54.31	72.46	68.76	10.70	25.88	51.76	78.38	
2021	2.0	0.8500	62.82	68.00	71.00	75.29	63.10	62.34	56.10	73.79	70.02	11.30	26.35	52.71	79.81	
2022	2.0	0.8500	64.31	71.00	74.00	78.82	66.68	65.90	59.60	77.25	73.31	11.95	27.59	55.18	83.55	
2023	2.0	0.8500	65.71	74.00	77.00	82.35	70.25	69.42	63.43	80.71	76.59	12.61	28.82	57.65	86.06	
2024	2.0	0.8500	67.03	77.00	80.00	85.88	73.77	72.91	66.86	84.16	79.87	13.29	30.06	60.12	89.75	
2025	2.0	0.8500	68.28	80.00	83.00	89.41	77.34	76.45	70.35	87.62	83.15	13.56	31.29	62.59	93.44	
2026	2.0	0.8500	70.00	83.66	87.25	92.80	81.66	80.74	74.86	90.94	86.30	13.85	32.48	64.96	96.98	
2027+	2.0	0.8500	70.00	+2.0%/yr	+2.0%/yr	+2.0%/yr	+2.0%/yr	+2.0%/yr	+2.0%/yr	+2.0%/yr	+2.0%/yr	+2.0%/yr	+2.0%/yr	+2.0%/yr	+2.0%/yr	

A historical futures contract price is an average of the daily settlement price of the near month contract over the calendar month.

Table 2
GLJ Petroleum Consultants
Natural Gas and Sulphur
Price Forecast
 Effective April 1, 2017

Year	NYMEX Henry Hub		Midwest	Alliance Transfer Pool AECO/NIT Spot Then Current CAD/MMBtu	Spot Then Current CAD/MMBtu	Alberta Plant Gate			Saskatchewan Plant Gate			British Columbia		Sulphur	Alberta	
	Near Month Contract Constant	Then	Price at Chicago Then			Spot		SaskEnergy	Spot	Sumas Spot	Westcoast	Spot	FOB	Sulphur		
	2017 \$	Current	Current			Constant	Then				Station 2	Plant Gate	Vancouver	at Plant		
	USD/MMBtu	USD/MMBtu	USD/MMBtu			CAD/MMBtu	CAD/MMBtu	CAD/MMBtu	CAD/MMBtu	CAD/MMBtu	USD/MMBtu	CAD/MMBtu	CAD/MMBtu	USD/lt	CAD/lt	
2007	8.39	7.12	6.83	6.45	N/A	7.34	6.23	6.20	6.18	6.35	6.52	6.40	6.16	81.66	42.03	
2008	10.26	8.90	8.91	8.16	N/A	9.15	7.94	7.88	8.07	8.04	6.47	8.21	7.99	497.39	488.63	
2009	4.69	4.16	4.05	3.99	N/A	4.27	3.79	3.85	3.87	3.83	3.80	3.90	3.70	57.06	24.57	
2010	4.93	4.40	4.53	4.01	N/A	4.24	3.78	3.77	3.96	3.85	4.12	3.78	3.63	88.94	48.26	
2011	4.44	4.03	4.21	3.62	N/A	3.77	3.42	3.46	3.57	3.58	3.90	3.33	3.18	217.16	171.93	
2012	3.03	2.83	2.92	2.40	N/A	2.37	2.21	2.25	2.31	2.26	2.70	2.30	2.12	201.03	157.91	
2013	3.93	3.73	3.81	3.18	N/A	3.12	2.96	2.98	3.09	3.10	3.71	3.14	2.94	105.74	74.02	
2014	4.47	4.28	5.36	4.50	N/A	4.45	4.26	4.22	4.39	4.42	4.37	4.29	4.07	145.41	110.41	
2015	2.70	2.63	2.85	2.70	N/A	2.53	2.47	2.56	2.71	2.61	2.31	1.80	1.59	139.61	128.14	
2016	2.59	2.55	2.48	2.18	2.36	1.97	1.94	1.93	2.18	2.09	2.17	1.77	1.60	82.96	60.06	
2017 Q1 (e)	3.07	3.07	3.65	2.69	3.10	2.42	2.42	2.55	3.37	2.44	2.75	2.46	2.27	82.60	55.99	
2017 Q2	3.30	3.30	3.30	3.08	3.28	2.81	2.81	2.81	2.91	2.98	2.80	2.68	2.51	82.00	59.33	
2017 Q3	3.40	3.40	3.40	3.17	3.37	2.90	2.90	2.9	3.00	3.07	3.00	2.77	2.60	90.00	70.00	
2017 Q4	3.50	3.50	3.55	3.27	3.47	2.99	2.99	2.99	3.09	3.17	3.30	2.87	2.69	90.00	70.00	
2017 Full Year	3.32	3.32	3.48	3.05	3.31	2.78	2.78	2.81	3.09	2.91	2.96	2.70	2.52	86.15	63.83	
2017 Q2-Q4	3.40	3.40	3.42	3.17	3.37	2.90	2.90	2.90	3.00	3.07	3.03	2.77	2.60	87.33	66.44	
2018	3.14	3.20	3.25	3.01	3.11	2.69	2.74	2.74	2.84	2.91	2.80	2.61	2.44	100.00	79.03	
2019	3.22	3.35	3.40	3.18	3.18	2.80	2.91	2.91	3.01	3.08	3.70	2.88	2.71	102.00	77.50	
2020	3.30	3.50	3.55	3.35	3.35	2.90	3.08	3.08	3.18	3.25	3.20	3.05	2.88	104.04	76.11	
2021	3.42	3.70	3.75	3.53	3.53	3.00	3.25	3.25	3.35	3.43	3.50	3.23	3.05	106.12	74.85	
2022	3.53	3.90	3.95	3.72	3.72	3.11	3.44	3.44	3.54	3.62	3.70	3.42	3.24	108.24	77.34	
2023	3.64	4.10	4.15	3.91	3.91	3.22	3.62	3.62	3.72	3.81	3.90	3.61	3.43	110.41	79.89	
2024	3.75	4.31	4.36	4.11	4.11	3.33	3.82	3.82	3.92	4.01	4.11	3.81	3.63	112.62	82.49	
2025	3.75	4.39	4.44	4.18	4.18	3.33	3.90	3.90	4.00	4.08	4.19	3.88	3.70	114.87	85.14	
2026	3.75	4.48	4.53	4.27	4.27	3.33	3.98	3.98	4.08	4.17	4.28	3.97	3.79	117.17	87.85	
2027+	3.75	+2.0%/yr	+2.0%/yr	+2.0%/yr	+2.0%/yr	3.33	+2.0%/yr	+2.0%/yr	+2.0%/yr	+2.0%/yr	+2.0%/yr	+2.0%/yr	+2.0%/yr	+2.0%/yr	+2.0%/yr	+2.0%/yr

Unless otherwise stated, the gas price reference point is the receipt point on the applicable provincial gas transmission system known as the plant gate.

The plant gate price represents the price before raw gas gathering and processing charges are deducted.

AECO/NIT Spot refers to the same-day spot price averaged over the period.

2017-03-31

Table 3
GLJ Petroleum Consultants
International and Frontier
Price Forecast
 Effective April 1, 2017

Year	Inflation %	CADUSD	GBPUSD	EURUSD	NYMEX WTI Near Month Contract Crude Oil at Cushing, OK		Light Louisiana Sweet Crude Oil		Mexican Mayan Crude Oil		ICE Brent Near Month Contract Crude Oil FOB North Sea		NYMEX Henry Hub Near Month Contract		Nova Scotia Goldboro		National Balancing Point (UK)	
		Exchange Rate USD/CAD	Exchange Rate USD/GBP	Exchange Rate USD/EUR	Then Current USD/bbl	Then Current CAD/bbl	Then Current USD/bbl	Then Current CAD/bbl	Then Current USD/bbl	Then Current CAD/bbl	Then Current USD/bbl	Then Current CAD/bbl	Then Current USD/MMBtu	Then Current CAD/MMBtu	Then Current USD/MMBtu	Then Current CAD/MMBtu	Then Current USD/MMBtu	Then Current CAD/MMBtu
2007	2.1	0.9352	2.0017	1.3393	72.39	76.89	75.36	80.13	59.69	63.30	72.71	77.33	7.12	7.65	6.33	6.84	6.14	6.44
2008	2.4	0.9428	1.8514	1.4573	99.64	104.27	102.31	107.04	83.90	87.62	98.30	102.81	8.90	9.36	8.32	8.77	11.41	12.12
2009	0.4	0.8798	1.5649	1.3930	61.78	69.57	64.31	72.52	56.46	63.55	62.50	70.47	4.16	4.75	3.35	3.87	4.95	5.68
2010	1.8	0.9711	1.5465	1.3274	79.52	81.85	82.78	85.20	70.29	72.35	80.25	82.58	4.40	4.53	3.83	3.96	6.39	6.58
2011	2.9	1.0115	1.6038	1.3920	95.12	94.02	112.33	111.03	98.60	97.52	110.86	109.57	4.03	3.98	3.62	3.58	9.35	9.25
2012	1.5	1.0009	1.5854	1.2861	94.21	94.11	111.77	111.62	99.60	99.50	111.71	111.57	2.83	2.82	2.72	2.72	9.38	9.37
2013	0.9	0.9711	1.5645	1.3285	97.96	100.95	106.19	109.32	97.26	100.13	108.77	112.04	3.73	3.84	5.78	5.94	10.50	10.82
2014	1.9	0.9055	1.6472	1.3288	93.00	102.50	94.24	103.88	85.79	94.53	99.71	109.89	4.28	4.72	7.11	7.86	8.25	9.12
2015	1.1	0.7831	1.5283	1.1097	48.78	62.12	49.43	62.97	44.02	55.99	53.60	68.23	2.63	3.36	3.92	4.94	6.52	8.31
2016	1.4	0.7551	1.3550	1.1066	43.38	57.33	45.08	59.58	36.40	48.08	45.05	59.54	2.55	3.38	2.21	2.95	4.66	6.18
2017 Q1 (e)	2.0	0.7558	1.2383	1.0650	51.88	68.62	53.51	70.79	45.00	59.53	54.69	72.35	3.07	4.06	3.17	4.20	6.01	7.95
2017 Q2	2.0	0.7500	1.2500	1.0750	50.00	66.67	51.45	68.60	44.10	58.80	52.50	70.00	3.30	4.40	2.03	2.71	5.50	7.33
2017 Q3	2.0	0.7500	1.2500	1.0750	52.00	69.33	53.41	71.21	45.78	61.04	54.50	72.67	3.40	4.53	2.03	2.71	5.50	7.33
2017 Q4	2.0	0.7500	1.2500	1.0750	54.00	72.00	55.37	73.83	47.46	63.28	56.50	75.33	3.50	4.67	3.66	4.89	6.00	8.00
2017 Full Year	2.0	0.7515	1.2471	1.0725	51.97	69.16	53.44	71.11	45.59	60.66	54.55	72.59	3.32	4.42	2.72	3.62	5.75	7.65
2017 Q2-Q4	2.0	0.7500	1.2500	1.0750	52.00	69.33	53.41	71.21	45.78	61.04	54.50	72.67	3.40	4.53	2.57	3.43	5.67	7.56
2018	2.0	0.7750	1.2500	1.0750	56.00	72.26	57.91	74.73	49.73	64.16	58.50	75.48	3.20	4.13	3.17	4.08	6.00	7.74
2019	2.0	0.8000	1.2500	1.0750	62.00	77.50	63.86	79.82	55.47	69.34	64.50	80.63	3.35	4.19	3.31	4.14	6.25	7.81
2020	2.0	0.8250	1.2500	1.0750	65.00	78.79	67.32	81.60	58.48	70.88	68.00	82.42	3.50	4.24	3.46	4.20	6.50	7.88
2021	2.0	0.8500	1.2500	1.0750	68.00	80.00	70.29	82.69	61.77	72.67	71.00	83.53	3.70	4.35	3.66	4.31	6.75	7.94
2022	2.0	0.8500	1.2500	1.0750	71.00	83.53	73.26	86.19	65.12	76.61	74.00	87.06	3.90	4.59	3.86	4.54	6.89	8.10
2023	2.0	0.8500	1.2500	1.0750	74.00	87.06	76.23	89.68	67.76	79.72	77.00	90.59	4.10	4.82	4.06	4.77	7.02	8.26
2024	2.0	0.8500	1.2500	1.0750	77.00	90.59	79.20	93.18	70.40	82.82	80.00	94.12	4.31	5.07	4.26	5.02	7.16	8.43
2025	2.0	0.8500	1.2500	1.0750	80.00	94.12	82.17	96.67	73.87	86.91	83.00	97.65	4.39	5.16	4.34	5.11	7.31	8.60
2026	2.0	0.8500	1.2500	1.0750	83.66	98.42	86.38	101.62	77.65	91.36	87.25	102.65	4.48	5.27	4.43	5.21	7.45	8.77
2027+	2.0	0.8500	1.2500	1.0750	+2.0%/yr	+2.0%/yr	+2.0%/yr	+2.0%/yr	+2.0%/yr	+2.0%/yr	+2.0%/yr	+2.0%/yr	+2.0%/yr	+2.0%/yr	+2.0%/yr	+2.0%/yr	+2.0%/yr	+2.0%/yr

A historical futures contract price is an average of the daily settlement price of the near month contract over the calendar month