

**Table 1**  
**GLJ Petroleum Consultants**  
**Crude Oil and Natural Gas Liquids**  
**Price Forecast**  
 Effective January 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	85.35	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	114.99	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	69.60	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	89.25	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	104.91	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	100.94	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	103.41	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	97.24	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	50.04	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	1.5	0.755	43.93	43.30	45.01	52.95	39.71	38.84	32.66	51.34	48.71	N/A	13.03	34.36	56.12	
2017 Q1	2.0	0.750	54.00	54.00	56.00	68.00	52.70	52.02	45.41	66.64	63.24	11.48	29.24	48.96	70.72	
2017 Q2	2.0	0.750	54.00	54.00	56.00	68.00	52.70	52.02	45.41	66.64	63.24	10.99	26.52	48.96	70.72	
2017 Q3	2.0	0.750	56.00	56.00	58.00	70.67	55.33	54.63	47.96	69.25	65.72	10.99	27.56	50.88	73.49	
2017 Q4	2.0	0.750	56.00	56.00	58.00	70.67	55.33	54.63	47.96	69.25	65.72	11.15	30.39	50.88	73.49	
2017 Full Year	2.0	0.750	55.00	55.00	57.00	69.33	54.02	53.32	46.69	67.95	64.48	11.15	28.43	49.92	72.11	
2018	2.0	0.775	57.84	59.00	61.00	72.26	57.52	56.79	50.40	70.81	67.20	9.92	26.74	54.19	74.79	
2019	2.0	0.800	61.51	64.00	66.00	75.00	62.02	61.27	55.03	73.50	69.75	10.52	26.25	56.25	78.75	
2020	2.0	0.825	63.14	67.00	70.00	76.36	63.76	63.00	56.96	74.84	71.02	11.27	26.73	57.27	79.80	
2021	2.0	0.850	65.59	71.00	74.00	78.82	66.68	65.90	59.95	77.25	73.31	11.87	27.59	59.12	82.37	
2022	2.0	0.850	67.02	74.00	77.00	82.35	70.25	69.42	63.43	80.71	76.59	12.54	28.82	61.76	86.06	
2023	2.0	0.850	68.37	77.00	80.00	85.88	73.77	72.91	66.99	84.16	79.87	13.20	30.06	64.41	89.32	
2024	2.0	0.850	69.64	80.00	83.00	89.41	77.34	76.45	70.48	87.62	83.15	13.56	31.29	67.06	92.99	
2025	2.0	0.850	70.84	83.00	86.00	92.94	80.86	79.93	73.63	91.08	86.44	13.83	32.53	69.71	97.59	
2026	2.0	0.850	72.00	86.05	89.64	95.61	84.43	83.47	77.54	93.70	88.92	14.13	33.46	71.71	99.91	
2027+	2.0	0.850	72.00	+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 January 1, 2017

Year	NYMEX Henry Hub Near Month Contract		Midwest Price at Chicago Then Current USD/MMBtu	AECO/NIT Spot Then Current CAD/MMBtu	Alliance Transfer Pool Spot Then Current CAD/MMBtu	Alberta Plant Gate			Saskatchewan Plant Gate			British Columbia		Sulphur FOB Vancouver USD/lt	Alberta Sulphur at Plant Gate CAD/lt
	Constant 2017 \$ USD/MMBtu	Then Current USD/MMBtu				Spot			SaskEnergy CAD/MMBtu	Spot CAD/MMBtu	Sumas Spot USD/MMBtu	Westcoast Station 2 CAD/MMBtu	Spot Plant Gate CAD/MMBtu		
			Constant 2017 \$ CAD/MMBtu	Then Current CAD/MMBtu	ARP CAD/MMBtu										
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	10.27	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	2.19	2.31	1.98	1.95	1.95	2.22	2.09	2.18	1.78	1.60	82.84	60.06
2017 Q1	3.70	3.70	3.85	3.55	3.55	3.30	3.30	3.30	3.40	3.45	3.45	2.95	2.78	80.00	56.67
2017 Q2	3.55	3.55	3.55	3.41	3.41	3.16	3.16	3.16	3.26	3.31	2.75	2.91	2.73	80.00	56.67
2017 Q3	3.55	3.55	3.55	3.41	3.41	3.16	3.16	3.16	3.26	3.31	2.95	2.91	2.73	90.00	70.00
2017 Q4	3.60	3.60	3.65	3.46	3.46	3.20	3.20	3.20	3.30	3.36	3.40	2.96	2.78	90.00	70.00
2017 Full Year	3.60	3.60	3.65	3.46	3.46	3.20	3.20	3.20	3.30	3.36	3.14	2.93	2.76	85.00	63.33
2018	3.14	3.20	3.25	3.10	3.10	2.79	2.85	2.85	2.95	3.00	2.80	2.70	2.52	100.00	79.03
2019	3.27	3.40	3.45	3.27	3.27	2.91	3.02	3.02	3.12	3.17	3.00	2.97	2.80	102.00	77.50
2020	3.39	3.60	3.65	3.49	3.49	3.05	3.24	3.24	3.34	3.39	3.30	3.19	3.01	104.04	76.11
2021	3.51	3.80	3.85	3.67	3.67	3.15	3.41	3.41	3.51	3.57	3.60	3.37	3.19	106.12	74.85
2022	3.62	4.00	4.05	3.86	3.86	3.26	3.60	3.60	3.70	3.76	3.80	3.56	3.38	108.24	77.34
2023	3.73	4.20	4.25	4.05	4.05	3.37	3.79	3.79	3.89	3.95	4.00	3.75	3.57	110.41	79.89
2024	3.75	4.31	4.36	4.16	4.16	3.39	3.90	3.90	4.00	4.06	4.11	3.86	3.68	112.62	82.49
2025	3.75	4.39	4.44	4.24	4.24	3.39	3.97	3.97	4.07	4.14	4.19	3.94	3.76	114.87	85.14
2026	3.75	4.48	4.53	4.32	4.32	3.40	4.06	4.06	4.16	4.22	4.28	4.02	3.84	117.17	87.85
2027+	3.75	+2.0%/yr	+2.0%/yr	+2.0%/yr	+2.0%/yr	3.40	+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.

**Table 3**  
**GLJ Petroleum Consultants**  
**International and Frontier**  
**Price Forecast**  
 Effective January 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	1.5	0.755	1.356	1.107	43.30	57.20	45.01	59.46	36.27	47.89	45.01	59.45	2.55	3.38	2.25	3.00	4.65	6.16
2017 Q1	2.0	0.750	1.250	1.050	54.00	72.00	55.44	73.92	47.04	62.72	56.00	74.67	3.70	4.93	6.65	8.87	6.00	8.00
2017 Q2	2.0	0.750	1.250	1.050	54.00	72.00	55.44	73.92	47.04	62.72	56.00	74.67	3.55	4.73	2.03	2.70	5.50	7.33
2017 Q3	2.0	0.750	1.250	1.050	56.00	74.67	57.42	76.56	48.72	64.96	58.00	77.33	3.55	4.73	2.03	2.70	5.50	7.33
2017 Q4	2.0	0.750	1.250	1.050	56.00	74.67	57.42	76.56	48.72	64.96	58.00	77.33	3.60	4.80	3.56	4.75	6.00	8.00
2017 Full Year	2.0	0.750	1.250	1.050	55.00	73.33	56.43	75.24	47.88	63.84	57.00	76.00	3.60	4.80	3.57	4.76	5.75	7.67
2018	2.0	0.775	1.250	1.050	59.00	76.13	60.39	77.92	51.85	66.90	61.00	78.71	3.20	4.13	3.17	4.08	6.00	7.74
2019	2.0	0.800	1.250	1.050	64.00	80.00	65.34	81.67	56.76	70.95	66.00	82.50	3.40	4.25	3.36	4.20	6.25	7.81
2020	2.0	0.825	1.250	1.050	67.00	81.21	69.30	84.00	60.20	72.97	70.00	84.85	3.60	4.36	3.56	4.32	6.50	7.88
2021	2.0	0.850	1.250	1.050	71.00	83.53	73.26	86.19	64.38	75.74	74.00	87.06	3.80	4.47	3.76	4.42	6.75	7.94
2022	2.0	0.850	1.250	1.050	74.00	87.06	76.23	89.68	67.76	79.72	77.00	90.59	4.00	4.71	3.96	4.66	6.89	8.10
2023	2.0	0.850	1.250	1.050	77.00	90.59	79.20	93.18	70.40	82.82	80.00	94.12	4.20	4.94	4.16	4.89	7.02	8.26
2024	2.0	0.850	1.250	1.050	80.00	94.12	82.17	96.67	73.04	85.93	83.00	97.65	4.31	5.07	4.26	5.02	7.16	8.43
2025	2.0	0.850	1.250	1.050	83.00	97.65	85.14	100.16	76.54	90.05	86.00	101.18	4.39	5.16	4.34	5.11	7.31	8.60
2026	2.0	0.850	1.250	1.050	86.05	101.24	88.74	104.40	79.78	93.86	89.64	105.46	4.48	5.27	4.43	5.21	7.45	8.77
2027+	2.0	0.850	1.250	1.050	+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