



Table 1
GLJ Ltd.
Domestic Crude Oil and Natural Gas Liquids
Price Forecast
Effective October 1, 2021

Year	Inflation %	CADUSD Exchange Rate USD/CAD	WTI Crude Oil (39.6 API, 0.24%S)		Brent Spot Crude Oil (38.3 API, 0.37%S)	MSW, Light Crude Oil (40 API, 0.3%S) at Edmonton	Bow River Crude Oil (21.4 API, 2.8%S) at Hardisty	WCS Crude Oil (20.9 API, 3.5%S) at Hardisty	Heavy Crude Oil Proxy (12 API) at Hardisty	Light Sour Crude Oil (38 API, 1.1%S) at Cromer	Medium Crude Oil (29 API, 2.0%S) at Cromer	Alberta Natural Gas Liquids (Then Current Dollars) at Edmonton				
			Constant	Then	Then	Then	Then	Then	Then	Then	Then	Then	Ethane	Propane	Butane	Condensate
			USD/bbl	USD/bbl	USD/bbl	CAD/bbl	CAD/bbl	CAD/bbl	CAD/bbl	CAD/bbl	CAD/bbl	CAD/bbl	CAD/bbl	CAD/bbl	CAD/bbl	CAD/bbl
2011	2.9	1.0115	111.87	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	107.68	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	110.28	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	103.69	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	53.36	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	46.91	43.38	45.05	53.08	39.83	38.96	32.78	51.46	48.84	N/A	13.40	34.49	56.25	
2017	1.6	0.7712	54.36	50.94	54.80	62.84	50.91	50.53	44.63	62.09	59.96	N/A	28.57	44.46	66.86	
2018	2.3	0.7719	67.96	64.73	71.55	69.22	49.03	49.52	39.80	72.94	69.60	N/A	26.79	32.96	78.60	
2019	1.9	0.7538	58.54	57.02	64.24	69.16	59.26	58.75	54.31	69.65	67.97	N/A	16.98	24.29	70.19	
2020	0.7	0.7463	39.79	39.44	43.28	45.28	36.21	35.56	30.37	45.45	44.01	N/A	16.25	22.02	49.52	
2021 Q1	1.4	0.790	57.79	57.79	61.07	66.51	57.84	57.46	51.67	66.86	65.37	N/A	31.33	28.38	73.43	
2021 Q2	3.4	0.815	66.12	66.12	69.02	77.35	67.79	67.10	61.77	77.05	74.77	N/A	30.61	36.99	81.56	
2021 Q3 (est)	3.9	0.794	70.40	70.40	73.10	84.21	70.78	71.72	64.78	82.06	79.34	N/A	52.66	58.82	86.99	
2021 Q4	0.0	0.790	75.00	75.00	78.00	90.19	80.15	79.75	73.81	91.09	87.94	13.69	65.84	78.47	96.20	
2021 Full Year	2.2	0.797	67.33	67.33	70.30	79.57	69.14	69.01	63.01	79.27	76.85	N/A	45.11	50.66	84.55	
2022	0.0	0.795	72.00	72.00	75.00	85.53	75.87	75.47	69.75	86.39	83.40	12.16	47.04	59.87	91.19	
2023	3.0	0.800	67.00	69.01	72.51	80.64	70.73	70.33	64.92	81.44	78.62	10.26	32.26	48.38	85.01	
2024	2.0	0.800	64.00	67.24	71.24	78.27	68.20	67.80	62.31	79.05	76.31	9.56	31.31	46.96	82.78	
2025	2.0	0.800	64.00	68.58	72.66	79.84	69.54	69.14	63.56	80.64	77.84	9.77	31.94	47.90	84.42	
2026	2.0	0.800	64.00	69.96	74.12	81.43	70.94	70.54	64.86	82.25	79.40	9.98	32.57	48.86	86.12	
2027	2.0	0.800	64.00	71.35	75.59	83.06	72.34	71.94	66.17	83.89	80.99	10.18	33.23	49.84	87.84	
2028	2.0	0.800	64.00	72.78	77.11	84.73	73.77	73.38	67.51	85.57	82.61	10.41	33.89	50.83	89.60	
2029	2.0	0.800	64.00	74.24	78.66	86.41	75.25	74.85	68.89	87.28	84.25	10.63	34.57	51.85	91.39	
2030	2.0	0.800	64.00	75.72	80.22	88.15	76.74	76.34	70.27	89.03	85.95	10.86	35.26	52.89	93.22	
2031+	2.0	0.800	64.00	+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	

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



Table 2
GLJ Ltd.
Domestic Natural Gas
Price Forecast
Effective October 1, 2021

Year	Henry Hub		Alberta			Saskatchewan			British Columbia		Huntingdon/ Sumas Spot	Dawn @ Ontario
	Constant 2021 \$ USD/MMBtu	Then Current USD/MMBtu	AECO/NIT Spot CAD/MMBtu	Plant Gate Spot CAD/MMBtu		Empress ARP CAD/MMBtu	Plant Gate SaskEnergy Spot CAD/MMBtu		Westcoast Station 2 CAD/MMBtu	Spot Plant Gate CAD/MMBtu		
2011	4.74	4.03	3.62	3.42	3.46	3.41	3.57	3.58	3.33	3.18	3.90	4.39
2012	3.23	2.83	2.40	2.21	2.25	2.30	2.31	2.26	2.30	2.12	2.70	3.04
2013	4.19	3.73	3.18	2.96	2.98	3.14	3.09	3.10	3.14	2.94	3.71	4.07
2014	4.77	4.28	4.50	4.26	4.22	4.72	4.39	4.42	4.29	4.07	4.37	5.98
2015	2.88	2.63	2.70	2.47	2.56	2.89	2.71	2.61	1.80	1.59	2.31	2.99
2016	2.76	2.55	2.18	1.94	1.93	2.36	2.18	2.09	1.77	1.60	2.18	2.56
2017	3.22	3.02	2.19	1.93	2.22	2.60	2.41	2.29	1.56	1.34	2.62	3.05
2018	3.22	3.07	1.54	1.33	1.36	3.06	1.68	2.71	1.24	1.03	3.60	3.09
2019	2.60	2.53	1.81	1.59	1.48	2.52	1.73	2.20	1.02	0.75	4.70	2.44
2020	2.15	2.13	2.26	2.03	2.00	2.24	2.45	2.05	2.21	1.94	2.16	1.88
2021 Q1	2.72	2.72	3.16	2.90	2.76	3.22	3.36	3.00	3.09	2.73	3.31	2.95
2021 Q2	2.97	2.97	3.12	2.85	2.70	3.11	3.30	2.89	3.04	2.77	2.82	2.81
2021 Q3 (est)	4.29	4.29	3.60	3.11	3.12	4.06	3.47	3.84	3.54	3.07	3.87	3.88
2021 Q4	5.70	5.70	4.20	3.94	3.94	4.25	4.04	4.02	4.15	3.87	6.20	5.60
2021 Full Year	3.92	3.92	3.52	3.20	3.13	3.66	3.54	3.44	3.45	3.11	4.05	3.81
2022	4.50	4.50	3.75	3.49	3.49	3.80	3.59	3.57	3.70	3.42	4.40	4.45
2023	3.40	3.50	3.20	2.95	2.95	3.25	3.05	3.02	3.20	2.92	3.40	3.45
2024	3.00	3.15	2.99	2.75	2.75	3.04	2.85	2.81	2.99	2.72	3.05	3.10
2025	3.00	3.21	3.05	2.81	2.81	3.10	2.91	2.87	3.05	2.78	3.11	3.16
2026	3.00	3.28	3.12	2.87	2.87	3.17	2.97	2.94	3.12	2.84	3.18	3.23
2027	3.00	3.34	3.17	2.92	2.92	3.22	3.02	2.99	3.17	2.90	3.24	3.29
2028	3.00	3.41	3.24	2.99	2.99	3.29	3.09	3.06	3.24	2.96	3.31	3.36
2029	3.00	3.48	3.31	3.06	3.06	3.36	3.16	3.13	3.31	3.03	3.38	3.43
2030	3.00	3.55	3.37	3.12	3.12	3.42	3.22	3.19	3.37	3.10	3.45	3.50
2031+	3.00	+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

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 gathering and processing charges are deducted.



Table 3
GLJ Ltd.
International Crude Oil
Price Forecast
Effective October 1, 2021

	United States		Europe	Latin America		Mideast Gulf and Mediterranean						Africa	Asia-Pacific		Russia / C.I.S.	
	Cushing, OK WTI	Louisiana LLS*	UK Brent	Mexico Maya	Colombia Vasconia	Oman DME	OPEC Basket	Abu Dhabi Murban	Iran Iran Heavy	Algeria Saharan	Iraq Basrah Light	Nigeria Bonny Light	Indonesia Minas	Malaysia Tapis	Russia ESPO**	Russia Sokol
	39.6 API	35.6 API	38.3 API	21.8 API	24.5 API	34 API	32.7 API	40.2 API	30.2 API	45.3 API	30.5 API	33.4 API	35.3 API	45.2 API	34.8 API	34.8 API
	0.24% S	0.37% S	0.37% S	3.33% S	0.95% S	2.00% S	1.77% S	0.79% S	1.77% S	0.09% S	2.90% S	0.16% S	0.09% S	0.03% S	0.62% S	0.29% S
Year	USD/bbl	USD/bbl	USD/bbl	USD/bbl	USD/bbl	USD/bbl	USD/bbl	USD/bbl	USD/bbl	USD/bbl	USD/bbl	USD/bbl	USD/bbl	USD/bbl	USD/bbl	USD/bbl
2021 Q4	75.00	76.50	78.00	70.20	74.00	76.90	77.40	77.60	76.00	77.20	78.70	77.00	74.00	78.10	77.00	78.00
2022	72.00	73.50	75.00	67.50	71.00	74.70	74.85	75.20	72.80	74.75	75.50	74.25	74.00	74.30	76.50	74.70
2023	69.01	70.51	72.51	65.26	68.51	72.21	72.36	72.71	70.31	72.26	73.01	71.76	71.51	71.81	74.01	72.21
2024	67.24	68.74	71.24	64.12	67.24	70.94	71.09	71.44	69.04	70.99	71.74	70.49	70.24	70.54	72.74	70.94
2025	68.58	70.08	72.66	65.39	68.66	72.36	72.51	72.86	70.46	72.41	73.16	71.91	71.66	71.96	74.16	72.36
2026	69.96	71.46	74.12	66.71	70.12	73.82	73.97	74.32	71.92	73.87	74.62	73.37	73.12	73.42	75.62	73.82
2027	71.35	72.85	75.59	68.04	71.59	75.29	75.44	75.79	73.39	75.34	76.09	74.84	74.59	74.89	77.09	75.29
2028	72.78	74.28	77.11	69.40	73.11	76.81	76.96	77.31	74.91	76.86	77.61	76.36	76.11	76.41	78.61	76.81
2029	74.24	75.74	78.66	70.79	74.66	78.36	78.51	78.86	76.46	78.41	79.16	77.91	77.66	77.96	80.16	78.36
2030	75.72	77.22	80.22	72.20	76.22	79.92	80.07	80.42	78.02	79.97	80.72	79.47	79.22	79.52	81.72	79.92
2031+	+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	+2.0%/yr	+2.0%/yr

* LLS - Light Louisiana Sweet

** ESPO - Eastern Siberian Pacific Ocean Blend

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

GLJ Forecasts a variety of other benchmarks that may not be presented and can be obtained upon request.



Table 4
GLJ Ltd.
International Natural Gas & LNG
Price Forecast
Effective October 1, 2021

Year	US Natural Gas						European Natural Gas			Asia-Pacific	India
	Henry Hub Natural Gas USD/MMBtu	Midwest @ Chicago USD/MMBtu	Rockies Natural Gas USD/MMBtu	Algonquin Natural Gas USD/MMBtu	Malin Natural Gas USD/MMBtu	Permian Natural Gas USD/MMBtu	NBP Natural Gas USD/MMBtu	TTF Natural Gas USD/MMBtu	Russian Natural Gas USD/MMBtu	JKM Natural Gas USD/MMBtu	India Domestic Natural Gas USD/MMBtu
2021 Q4	5.70	5.55	5.50	10.50	5.65	5.20	26.00	25.75	25.95	25.90	15.24
2022	4.50	4.35	4.30	7.50	4.35	4.00	15.75	15.55	15.70	16.75	11.11
2023	3.50	3.35	3.30	5.50	3.35	3.00	8.50	8.40	8.45	8.90	6.75
2024	3.15	3.00	2.95	4.35	3.00	2.65	7.40	7.30	7.35	7.80	5.24
2025	3.21	3.06	3.01	4.44	3.06	2.71	7.55	7.45	7.50	7.95	5.15
2026	3.28	3.13	3.08	4.53	3.13	2.78	7.70	7.60	7.65	8.10	5.25
2027	3.34	3.19	3.14	4.61	3.19	2.84	7.85	7.75	7.80	8.25	5.36
2028	3.41	3.26	3.21	4.71	3.26	2.91	8.00	7.90	7.95	8.40	5.46
2029	3.48	3.33	3.28	4.81	3.33	2.98	8.20	8.10	8.15	8.60	5.59
2030	3.55	3.40	3.35	4.90	3.40	3.05	8.35	8.25	8.30	8.75	5.70
2031+	+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

NBP - National Balancing Point LNG
JKM - Japanese Korean Marker LNG
TTF - Title Transfer Facility LNG
Russian Gas - Average European import border price



Table 5
GLJ Ltd.
Natural Gas Liquids
Price Forecast
Effective October 1, 2021

Year	Canadian Natural Gas Liquids					US Natural Gas Liquids							Asia/Europe/Other	
	Edmonton					Conway			Mont Belvieu				Far East Index	
	Ethane CAD/bbl	Propane CAD/bbl	Butane CAD/bbl	Condensate CAD/bbl	E/P Mix* USD/bbl	Propane USD/bbl	Butane USD/bbl	Condensate USD/bbl	Ethane USD/bbl	Propane USD/bbl	Butane USD/bbl	Condensate USD/bbl	Propane USD/bbl	Butane USD/bbl
2021 Q4	13.69	65.84	78.47	96.20	18.53	52.50	63.75	75.00	21.38	55.50	62.25	73.50	50.70	58.50
2022	12.16	47.04	59.87	91.19	14.62	39.60	50.40	66.24	16.88	41.04	48.24	64.80	48.75	56.25
2023	10.26	32.26	48.38	85.01	11.38	37.96	48.31	63.49	13.13	39.34	46.24	62.11	47.13	54.38
2024	9.56	31.31	46.96	82.78	10.24	36.98	47.07	61.86	11.81	38.33	45.05	60.52	46.31	53.43
2025	9.77	31.94	47.90	84.42	10.44	37.72	48.01	63.09	12.05	39.09	45.95	61.72	47.23	54.50
2026	9.98	32.57	48.86	86.12	10.66	38.48	48.97	64.36	12.30	39.88	46.87	62.96	48.18	55.59
2027	10.18	33.23	49.84	87.84	10.86	39.24	49.94	65.64	12.53	40.67	47.80	64.22	49.14	56.70
2028	10.41	33.89	50.83	89.60	11.08	40.03	50.95	66.96	12.79	41.48	48.76	65.50	50.12	57.83
2029	10.63	34.57	51.85	91.39	11.31	40.83	51.97	68.30	13.05	42.32	49.74	66.82	51.13	58.99
2030	10.86	35.26	52.89	93.22	11.54	41.65	53.00	69.66	13.31	43.16	50.73	68.15	52.15	60.17
2031+	+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

Butane prices at Conway and Mont Belvieu represent a blended price of two thirds normal butane and one third iso-butane.

*Conway E/P mix is blended at 80%-20%



Table 6
GLJ Ltd.
International Exchange Rates
Forecast
Effective October 1, 2021

Year	Inflation %	Canada CADUSD Exchange Rate CAD/USD	UK GBPUSD Exchange Rate GBP/USD	Euro EURUSD Exchange Rate EUR/USD	Norway NOKUSD Exchange Rate USD/NOK	Australia AUDUSD Exchange Rate AUD/USD	China USDCNY Exchange Rate USD/CNY	Japan USDJPY Exchange Rate USD/JPY
2021 Q4	0.0	0.790	1.370	1.170	8.500	0.740	6.50	110.00
2022	0.0	0.795	1.380	1.195	8.500	0.750	6.50	110.00
2023	3.0	0.800	1.380	1.210	8.500	0.750	7.00	110.00
2024	2.0	0.800	1.380	1.210	8.500	0.750	7.00	110.00
2025	2.0	0.800	1.380	1.210	8.500	0.750	7.00	110.00
2026	2.0	0.800	1.380	1.210	8.500	0.750	7.00	110.00
2027	2.0	0.800	1.380	1.210	8.500	0.750	7.00	110.00
2028	2.0	0.800	1.380	1.210	8.500	0.750	7.00	110.00
2029	2.0	0.800	1.380	1.210	8.500	0.750	7.00	110.00
2030	2.0	0.800	1.380	1.210	8.500	0.750	7.00	110.00
2031+	2.0	0.800	1.380	1.210	8.500	0.750	7.00	110.00

GLJ Forecasts a variety of other exchange rates that can be obtained upon request.



Table 7
 GLJ Ltd.
Power and Refined Products
Forecast
 Effective October 1, 2021

Year	Electricity	Hydrogen	Canadian Fuels			US Fuels		
	Alberta AESO CAD/MWh	Alberta SMR w/o CCS & Capex CAD/kg	Diesel ULS* CAD/Ltr	Gasoline Regular CAD/Ltr	Heating Oil CAD/Ltr	Diesel ULS* USD/Gallon	Gasoline Regular USD/Gallon	Heating Oil USD/Gallon
2021 Q4	104.98	0.79	1.71	1.80	1.53	4.50	3.75	3.00
2022	103.13	0.72	1.63	1.71	1.45	4.32	3.60	2.88
2023	95.94	0.62	1.53	1.61	1.37	4.14	3.45	2.76
2024	89.78	0.59	1.49	1.57	1.33	4.03	3.36	2.69
2025	91.57	0.60	1.52	1.60	1.36	4.11	3.43	2.74
2026	93.48	0.61	1.55	1.63	1.38	4.20	3.50	2.80
2027	95.19	0.62	1.58	1.66	1.41	4.28	3.57	2.85
2028	97.18	0.63	1.61	1.69	1.44	4.37	3.64	2.91
2029	99.18	0.64	1.64	1.73	1.47	4.45	3.71	2.97
2030	101.17	0.65	1.67	1.76	1.50	4.54	3.79	3.03
2031+	+2.0%/yr	+2.0%/yr	+2.0%/yr	+2.0%/yr	+2.0%/yr	+2.0%/yr	+2.0%/yr	+2.0%/yr

Canadian fuel prices are national average prices in CAD/Litre

US fuel prices are national average prices in USD/Gallon

* ULS - Ultra Low Sulphur