

McDaniel & Associates Consultants Ltd.

Summary of Price Forecasts

January 1, 2025

Year	Crude Oil Price Forecasts							Liquids Price Forecasts					Gas Price Forecasts								US/CAN Exchange Rate						
	WTI Crude Oil	Brent Crude Oil	Edmonton Light Crude Oil	Alberta Bow River Hardisty Crude Oil	Western Canadian Select Crude Oil	Alberta Heavy Crude Oil	Sask Cromer Medium Crude Oil	Edmonton Ethane	Edmonton Propane	Edmonton Butanes	Edmonton Cond. & Natural Gasolines	U.S. Henry Hub Gas Price	Alberta AECO Spot Price	Alberta Average Plantgate	Alberta Aggregator Plantgate	Empress	Sask. Prov. Gas Plantgate	British Columbia Average Plantgate	British Columbia Station 2	Inflation %							
	\$/bbl	\$/bbl	\$/bbl	\$/bbl	\$/bbl	\$/bbl	\$/bbl	\$/bbl	\$/bbl	\$/bbl	\$/bbl	\$/MMBtu	\$/MMBtu	\$/MMBtu	\$/MMBtu	\$/MMBtu	\$/MMBtu	\$/MMBtu	\$/MMBtu	\$/MMBtu	\$/MMBtu	\$/MMBtu	\$/MMBtu	\$/MMBtu	\$/MMBtu	\$/MMBtu	\$/MMBtu
	(1)	(2)	(3)	(4)	(5)	(6)	(7)					(8)	(9)														
History																											
2014	93.00	99.00	93.50	80.40	79.10	71.20	87.80		45.05	69.60	102.40	4.35	4.40	4.20	4.20	4.55	4.40	4.05	4.20	1.90	0.905						
2015	48.80	52.35	57.75	46.10	44.80	39.55	51.45		6.60	36.50	60.30	2.60	2.80	2.60	2.60	3.00	2.70	2.00	2.10	1.10	0.785						
2016	43.30	43.55	53.90	40.45	39.15	33.35	49.10		13.15	34.35	56.15	2.50	2.10	1.90	1.90	2.30	2.20	1.55	1.65	1.45	0.755						
2017	50.90	54.25	62.85	52.00	50.70	45.20	59.85		28.90	44.60	66.85	3.00	2.40	2.20	2.20	2.85	2.40	1.80	1.95	1.60	0.770						
2018	64.95	71.05	69.65	51.25	49.95	40.00	70.20		27.55	32.80	79.20	3.05	1.55	1.35	1.35	3.00	1.60	1.20	1.40	2.25	0.770						
2019	57.00	64.35	69.00	60.00	58.70	54.80	68.00		17.40	23.55	70.30	2.55	1.60	1.40	1.40	2.75	1.75	1.00	1.15	2.00	0.755						
2020	39.25	41.75	45.00	36.50	35.40	30.70	43.75		16.40	22.15	49.15	2.05	2.25	2.05	2.05	2.30	2.45	2.05	2.20	0.75	0.745						
2021	68.00	70.70	80.35	69.40	68.85	63.15	77.75		43.10	51.15	85.50	3.90	3.55	3.35	3.35	3.90	3.95	3.30	3.45	3.40	0.800						
2022	94.80	100.80	120.75	99.25	99.10	90.95	114.30		50.30	61.15	123.00	6.40	5.55	5.35	5.35	6.70	5.85	5.00	5.15	6.80	0.770						
2023	77.65	82.45	100.40	79.75	79.55	71.45	92.55		29.40	45.55	103.40	2.55	2.95	2.75	2.75	3.10	3.20	2.30	2.45	3.90	0.740						
2024	76.55	80.50	97.50	83.95	83.60	78.05	93.20		30.50	48.50	99.80	2.20	1.45	1.25	1.25	1.55	1.75	0.95	1.10	2.40	0.730						
Forecast																											
2025	72.50	76.50	95.89	82.95	81.99	75.27	90.14	10.20	30.68	47.95	98.89	3.50	2.75	2.55	2.55	2.90	3.05	2.25	2.50	-	0.730						
2026	73.95	78.03	97.11	84.00	83.03	76.23	91.28	13.46	31.08	48.55	100.17	3.83	3.57	3.37	3.37	3.72	3.88	3.06	3.32	2.00	0.730						
2027	75.43	79.59	98.34	85.06	84.08	77.20	92.44	13.73	31.47	49.17	101.46	3.90	3.64	3.43	3.43	3.80	3.95	3.12	3.38	2.00	0.730						
2028	76.94	81.18	100.31	86.76	85.76	78.74	94.29	14.01	32.10	50.15	103.49	3.98	3.71	3.50	3.50	3.87	4.03	3.18	3.45	2.00	0.730						
2029	78.48	82.81	102.31	88.50	87.48	80.31	96.17	14.29	32.74	51.16	105.56	4.06	3.79	3.57	3.57	3.95	4.11	3.25	3.52	2.00	0.730						
2030	80.05	84.46	104.36	90.27	89.23	81.92	98.10	14.57	33.39	52.18	107.67	4.14	3.86	3.64	3.64	4.03	4.20	3.31	3.59	2.00	0.730						
2031	81.65	86.15	106.45	92.08	91.01	83.56	100.06	14.87	34.06	53.22	109.82	4.22	3.94	3.72	3.72	4.11	4.28	3.38	3.66	2.00	0.730						
2032	83.28	87.87	108.57	93.92	92.83	85.23	102.06	15.16	34.74	54.29	112.02	4.31	4.02	3.79	3.79	4.19	4.37	3.45	3.73	2.00	0.730						
2033	84.95	89.63	110.75	95.80	94.69	86.94	104.10	15.47	35.44	55.37	114.26	4.39	4.10	3.87	3.87	4.28	4.45	3.51	3.81	2.00	0.730						
2034	86.64	91.42	112.96	97.71	96.58	88.67	106.18	15.78	36.15	56.48	116.55	4.48	4.18	3.94	3.94	4.36	4.54	3.59	3.88	2.00	0.730						
2035	88.38	93.25	115.22	99.67	98.51	90.45	108.31	16.09	36.87	57.61	118.88	4.57	4.27	4.02	4.02	4.45	4.63	3.66	3.96	2.00	0.730						
2036	90.14	95.12	117.52	101.66	100.48	92.26	110.47	16.41	37.61	58.76	121.25	4.66	4.35	4.10	4.10	4.54	4.72	3.73	4.04	2.00	0.730						
2037	91.95	97.02	119.87	103.69	102.49	94.10	112.68	16.74	38.36	59.94	123.68	4.76	4.44	4.19	4.19	4.63	4.82	3.80	4.12	2.00	0.730						
2038	93.79	98.96	122.27	105.77	104.54	95.98	114.94	17.08	39.13	61.14	126.15	4.85	4.53	4.27	4.27	4.72	4.92	3.88	4.20	2.00	0.730						
2039	95.66	100.94	124.72	107.88	106.63	97.90	117.23	17.42	39.91	62.36	128.68	4.95	4.62	4.35	4.35	4.82	5.01	3.96	4.29	2.00	0.730						
Thereafter	+2%/yr	+2%/yr	+2%/yr	+2%/yr	+2%/yr	+2%/yr	+2%/yr	+2%/yr	+2%/yr	+2%/yr	+2%/yr	+2%/yr	+2%/yr	+2%/yr	+2%/yr	+2%/yr	+2%/yr	+2%/yr	+2%/yr	2.00	0.730						

(1) West Texas Intermediate at Cushing Oklahoma 40 degrees API, 0.5% sulphur
 (2) North Sea Brent Blend 37 degrees API, 1.0% sulphur
 (3) Edmonton Light Sweet 40 degrees API, 0.3% sulphur
 (4) Bow River at Hardisty, Alberta (Heavy stream)
 (5) Western Canadian Select at Hardisty, Alberta
 (6) Heavy crude oil 12 degrees API at Hardisty, Alberta (after deduction of blending costs to reach pipeline quality)
 (7) Midale Cromer crude oil 29 degrees API, 2.0% sulphur
 (8) Historical prices based on AECO 7A (near month prices). 5A (daily price) expected to be equal to 7A over long term. 2024 historical prices: 7A \$1.44/MMBTU, 5A \$1.42/MMBTU
 (9) This forecast also applies to direct sales contracts and the Alberta gas reference price used in the Crown royalty calculations

McDaniel & Associates Consultants Ltd.
Summary of Price Forecasts (Real Prices - 2025 \$)
January 1, 2025

Year	Crude Oil Price Forecasts							Liquids Price Forecasts					Gas Price Forecasts							US/CAN Exchange Rate	
	WTI Crude Oil	Brent Crude Oil	Edmonton Light Crude Oil	Alberta Bow River Hardisty Crude Oil	Western Canadian Select Crude Oil	Alberta Heavy Crude Oil	Sask Cromer Medium Crude Oil	Edmonton Ethane	Edmonton Propane	Edmonton Butanes	Edmonton Cond. & Natural Gasolines	U.S. Henry Hub Gas Price	Alberta AECO Spot Price	Alberta Average Plantgate	Alberta Aggregator Plantgate	Empress	Sask. Prov. Gas Plantgate	British Columbia Average Plantgate	British Columbia Station 2		Inflation %
	\$/bbl	\$/bbl	\$/bbl	\$/bbl	\$/bbl	\$/bbl	\$/bbl	\$/bbl	\$/bbl	\$/bbl	\$/bbl	\$/MMBtu	\$/MMBtu	\$/MMBtu	\$/MMBtu	\$/MMBtu	\$/MMBtu	\$/MMBtu	\$/MMBtu		%
	(1)	(2)	(3)	(4)	(5)	(6)	(7)					(8)	(9)								
History																					
2014	93.00	99.00	93.50	80.40	79.10	71.20	87.80		45.05	69.60	102.40	4.35	4.40	4.20	4.20	4.55	4.40	4.05	4.20	1.90	0.905
2015	48.80	52.35	57.75	46.10	44.80	39.55	51.45		6.60	36.50	60.30	2.60	2.80	2.60	2.60	3.00	2.70	2.00	2.10	1.10	0.785
2016	43.30	43.55	53.90	40.45	39.15	33.35	49.10		13.15	34.35	56.15	2.50	2.10	1.90	1.90	2.30	2.20	1.55	1.65	1.45	0.755
2017	50.90	54.25	62.85	52.00	50.70	45.20	59.85		28.90	44.60	66.85	3.00	2.40	2.20	2.20	2.85	2.40	1.80	1.95	1.60	0.770
2018	64.95	71.05	69.65	51.25	49.95	40.00	70.20		27.55	32.80	79.20	3.05	1.55	1.35	1.35	3.00	1.60	1.20	1.40	2.25	0.770
2019	57.00	64.35	69.00	60.00	58.70	54.80	68.00		17.40	23.55	70.30	2.55	1.60	1.40	1.40	2.75	1.75	1.00	1.15	2.00	0.755
2020	39.25	41.75	45.00	36.50	35.40	30.70	43.75		16.40	22.15	49.15	2.05	2.25	2.05	2.05	2.30	2.45	2.05	2.20	0.75	0.745
2021	68.00	70.70	80.35	69.40	68.85	63.15	77.75		43.10	51.15	85.50	3.90	3.55	3.35	3.35	3.90	3.95	3.30	3.45	3.40	0.800
2022	94.80	100.80	120.75	99.25	99.10	90.95	114.30		50.30	61.15	123.00	6.40	5.55	5.35	5.35	6.70	5.85	5.00	5.15	6.80	0.770
2023	77.65	82.45	100.40	79.75	79.55	71.45	92.55		29.40	45.55	103.40	2.55	2.95	2.75	2.75	3.10	3.20	2.30	2.45	3.90	0.740
2024	76.55	80.50	97.50	83.95	83.60	78.05	93.20		30.50	48.50	99.80	2.20	1.45	1.25	1.25	1.55	1.75	0.95	1.10	2.40	0.730
Forecast																					
2025	72.50	76.50	95.89	82.95	81.99	75.27	90.14	10.20	30.68	47.95	98.89	3.50	2.75	2.55	2.55	2.90	3.05	2.25	2.50	-	0.730
2026	72.50	76.50	95.21	82.35	81.40	74.74	89.49	13.20	30.47	47.60	98.21	3.75	3.50	3.30	3.30	3.65	3.80	3.00	3.25	2.00	0.730
2027	72.50	76.50	94.52	81.76	80.82	74.20	88.85	13.20	30.25	47.26	97.52	3.75	3.50	3.30	3.30	3.65	3.80	3.00	3.25	2.00	0.730
2028	72.50	76.50	94.52	81.76	80.82	74.20	88.85	13.20	30.25	47.26	97.52	3.75	3.50	3.30	3.30	3.65	3.80	3.00	3.25	2.00	0.730
2029	72.50	76.50	94.52	81.76	80.82	74.20	88.85	13.20	30.25	47.26	97.52	3.75	3.50	3.30	3.30	3.65	3.80	3.00	3.25	2.00	0.730
2030	72.50	76.50	94.52	81.76	80.82	74.20	88.85	13.20	30.25	47.26	97.52	3.75	3.50	3.30	3.30	3.65	3.80	3.00	3.25	2.00	0.730
2031	72.50	76.50	94.52	81.76	80.82	74.20	88.85	13.20	30.25	47.26	97.52	3.75	3.50	3.30	3.30	3.65	3.80	3.00	3.25	2.00	0.730
2032	72.50	76.50	94.52	81.76	80.82	74.20	88.85	13.20	30.25	47.26	97.52	3.75	3.50	3.30	3.30	3.65	3.80	3.00	3.25	2.00	0.730
2033	72.50	76.50	94.52	81.76	80.82	74.20	88.85	13.20	30.25	47.26	97.52	3.75	3.50	3.30	3.30	3.65	3.80	3.00	3.25	2.00	0.730
2034	72.50	76.50	94.52	81.76	80.82	74.20	88.85	13.20	30.25	47.26	97.52	3.75	3.50	3.30	3.30	3.65	3.80	3.00	3.25	2.00	0.730
2035	72.50	76.50	94.52	81.76	80.82	74.20	88.85	13.20	30.25	47.26	97.52	3.75	3.50	3.30	3.30	3.65	3.80	3.00	3.25	2.00	0.730
2036	72.50	76.50	94.52	81.76	80.82	74.20	88.85	13.20	30.25	47.26	97.52	3.75	3.50	3.30	3.30	3.65	3.80	3.00	3.25	2.00	0.730
2037	72.50	76.50	94.52	81.76	80.82	74.20	88.85	13.20	30.25	47.26	97.52	3.75	3.50	3.30	3.30	3.65	3.80	3.00	3.25	2.00	0.730
2038	72.50	76.50	94.52	81.76	80.82	74.20	88.85	13.20	30.25	47.26	97.52	3.75	3.50	3.30	3.30	3.65	3.80	3.00	3.25	2.00	0.730
2039	72.50	76.50	94.52	81.76	80.82	74.20	88.85	13.20	30.25	47.26	97.52	3.75	3.50	3.30	3.30	3.65	3.80	3.00	3.25	2.00	0.730

- (1) West Texas Intermediate at Cushing Oklahoma 40 degrees API, 0.5% sulphur
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- (6) Heavy crude oil 12 degrees API at Hardisty, Alberta (after deduction of blending costs to reach pipeline quality)
- (7) Midale Cromer crude oil 29 degrees API, 2.0% sulphur
- (8) Historical prices based on AECO 7A (near month prices). 5A (daily price) expected to be equal to 7A over long term. 2024 historical prices: 7A \$1.44/MMBTU, 5A \$1.42/MMBTU
- (9) This forecast also applies to direct sales contracts and the Alberta gas reference price used in the Crown royalty calculations

McDaniel & Associates Consultants Ltd.

Summary of International Price Forecasts

January 1, 2025

US and Europe Crude Oil and Natural Gas Price Forecasts

Year	Exchange Rates		US Crude Oil		US Natural Gas					Europe Crude Oil		Europe Natural Gas	
	\$US to GBP £	\$US to EUR €	WTI Oil \$US/bbl	LLS Oil \$US/bbl	Henry Hub Gas \$US/MMBtu	CIG Gas \$US/MMBtu	Chicago Gas \$US/MMBtu	Houston Ship Gas \$US/MMBtu	San Juan Gas \$US/MMBtu	UK Brent Crude Oil \$US/bbl	UK Forties Oil \$US/bbl	UK NBP Gas \$US/MMBtu	Dutch TTF Gas \$US/MMBtu
Forecast													
2025	1.25	1.08	72.50	75.00	3.50	3.00	3.20	3.20	3.10	76.50	76.50	13.00	13.00
2026	1.25	1.08	73.95	76.50	3.83	3.30	3.50	3.50	3.40	78.03	78.03	11.73	11.73
2027	1.25	1.08	75.43	78.03	3.90	3.40	3.60	3.60	3.50	79.59	79.59	11.96	11.96
2028	1.25	1.08	76.94	79.59	3.98	3.45	3.65	3.65	3.55	81.18	81.18	12.20	12.20
2029	1.25	1.08	78.48	81.18	4.06	3.50	3.75	3.75	3.65	82.81	82.81	12.45	12.45
2030	1.25	1.08	80.05	82.81	4.14	3.60	3.80	3.80	3.70	84.46	84.46	12.70	12.70
2031	1.25	1.08	81.65	84.46	4.22	3.65	3.90	3.90	3.75	86.15	86.15	12.95	12.95
2032	1.25	1.08	83.28	86.15	4.31	3.75	3.95	3.95	3.85	87.87	87.87	13.21	13.21
2033	1.25	1.08	84.95	87.87	4.39	3.80	4.05	4.05	3.95	89.63	89.63	13.47	13.47
2034	1.25	1.08	86.64	89.63	4.48	3.90	4.10	4.10	4.00	91.42	91.42	13.74	13.74
2035	1.25	1.08	88.38	91.42	4.57	3.95	4.20	4.20	4.10	93.25	93.25	14.02	14.02
2036	1.25	1.08	90.14	93.25	4.66	4.05	4.30	4.30	4.15	95.12	95.12	14.30	14.30
2037	1.25	1.08	91.95	95.12	4.76	4.10	4.40	4.40	4.25	97.02	97.02	14.58	14.58
2038	1.25	1.08	93.79	97.02	4.85	4.20	4.45	4.45	4.35	98.96	98.96	14.88	14.88
2039	1.25	1.08	95.66	98.96	4.95	4.30	4.55	4.55	4.40	100.94	100.94	15.17	15.17

Other International Crude Oil Price Forecasts

Year	Africa and Middle East							Asia		Latin America		Russia
	Nigeria Bonny Light Oil	Algeria Saharan Blend Oil	Kuwait Oil	Saudi Light Oil	Saudi Heavy Oil	UAE Fateh Oil	Iran Light Oil	Indonesia Minas Oil	Malaysia Tapis Oil	Mexico Maya Oil	Columbia Vasconia Oil	Urals Oil
	\$US/bbl	\$US/bbl	\$US/bbl	\$US/bbl	\$US/bbl	\$US/bbl	\$US/bbl	\$US/bbl	\$US/bbl	\$US/bbl	\$US/bbl	\$US/bbl
Forecast												
2025	78.66	78.30	75.40	74.68	74.31	76.13	78.30	75.40	79.75	65.25	75.04	59.81
2026	80.24	79.87	76.91	76.17	75.80	77.65	79.87	76.91	81.35	66.56	76.54	61.01
2027	81.84	81.46	78.45	77.69	77.31	79.20	81.46	78.45	82.97	67.89	78.07	62.23
2028	83.48	83.09	80.02	79.25	78.86	80.78	83.09	80.02	84.63	69.24	79.63	63.47
2029	85.15	84.75	81.62	80.83	80.44	82.40	84.75	81.62	86.32	70.63	81.22	64.74
2030	86.85	86.45	83.25	82.45	82.05	84.05	86.45	83.25	88.05	72.04	82.85	66.04
2031	88.59	88.18	84.91	84.10	83.69	85.73	88.18	84.91	89.81	73.48	84.50	67.36
2032	90.36	89.94	86.61	85.78	85.36	87.44	89.94	86.61	91.61	74.95	86.19	68.71
2033	92.17	91.74	88.34	87.49	87.07	89.19	91.74	88.34	93.44	76.45	87.92	70.08
2034	94.01	93.58	90.11	89.24	88.81	90.98	93.58	90.11	95.31	77.98	89.68	71.48
2035	95.89	95.45	91.91	91.03	90.59	92.80	95.45	91.91	97.21	79.54	91.47	72.91
2036	97.81	97.36	93.75	92.85	92.40	94.65	97.36	93.75	99.16	81.13	93.30	74.37
2037	99.76	99.30	95.63	94.71	94.25	96.54	99.30	95.63	101.14	82.75	95.17	75.86
2038	101.76	101.29	97.54	96.60	96.13	98.48	101.29	97.54	103.17	84.41	97.07	77.37
2039	103.79	103.32	99.49	98.53	98.05	100.45	103.32	99.49	105.23	86.10	99.01	78.92