

	WTI ⁽¹⁾	WCS ⁽²⁾	WCS Differential ⁽³⁾		FX ⁽⁴⁾
	US\$/bbl	US\$/bbl	US\$/bbl	% of WTI	US\$/C\$
2005	\$56.56	\$36.24	(\$20.32)	36.3%	\$0.8260
2006	\$66.22	\$45.04	(\$21.18)	32.5%	\$0.8818
2007	\$72.31	\$49.62	(\$22.69)	30.8%	\$0.9343
2008	\$99.65	\$79.59	(\$20.05)	22.4%	\$0.9428
2009	\$61.80	\$52.14	(\$9.66)	16.1%	\$0.8798
2010	\$79.53	\$65.30	(\$14.23)	17.9%	\$0.9710
2011	\$95.12	\$77.97	(\$17.15)	18.1%	\$1.0114
2012	\$94.20	\$73.17	(\$21.03)	22.2%	\$1.0008
2013	\$97.97	\$72.77	(\$25.20)	26.0%	\$0.9710
2014	\$93.00	\$73.60	(\$19.40)	21.0%	\$0.9055
2015	\$48.80	\$35.28	(\$13.52)	28.6%	\$0.7831
2016	\$43.32	\$29.48	(\$13.84)	32.8%	\$0.7550
2017	\$50.95	\$38.97	(\$11.98)	23.4%	\$0.7712
2018	\$64.77	\$38.46	(\$26.31)	42.3%	\$0.7718
<u>2005</u>					
Jan	\$46.85	\$29.42	(\$17.43)	37.2%	\$0.8161
Feb	\$48.05	\$28.44	(\$19.61)	40.8%	\$0.8066
Mar	\$54.63	\$36.50	(\$18.13)	33.2%	\$0.8223
Apr	\$53.22	\$31.02	(\$22.20)	41.7%	\$0.8091
May	\$49.87	\$27.46	(\$22.41)	44.9%	\$0.7965
June	\$56.42	\$38.16	(\$18.26)	32.4%	\$0.8063
July	\$59.03	\$44.78	(\$14.25)	24.1%	\$0.8179
Aug	\$64.99	\$48.29	(\$16.70)	25.7%	\$0.8306
Sep	\$65.55	\$42.13	(\$23.42)	35.7%	\$0.8492
Oct	\$62.27	\$41.52	(\$20.75)	33.3%	\$0.8492
Nov	\$58.34	\$34.34	(\$24.00)	41.1%	\$0.8467
Dec	\$59.45	\$32.78	(\$26.67)	44.9%	\$0.8613
Avg	\$56.56	\$36.24	(\$20.32)	36.3%	\$0.8260
<u>2006</u>					
Jan	\$65.54	\$38.80	(\$26.74)	40.8%	\$0.8641
Feb	\$61.93	\$28.68	(\$33.25)	53.7%	\$0.8704
Mar	\$62.97	\$36.77	(\$26.20)	41.6%	\$0.8640
Apr	\$70.16	\$52.02	(\$18.14)	25.9%	\$0.8743
May	\$70.96	\$57.29	(\$13.67)	19.3%	\$0.9013
June	\$70.97	\$51.63	(\$19.34)	27.3%	\$0.8978
July	\$74.46	\$57.93	(\$16.53)	22.2%	\$0.8856
Aug	\$73.08	\$55.83	(\$17.25)	23.6%	\$0.8942
Sep	\$63.90	\$41.56	(\$22.34)	35.0%	\$0.8959
Oct	\$59.14	\$36.90	(\$22.24)	37.6%	\$0.8861
Nov	\$59.40	\$39.17	(\$20.23)	34.1%	\$0.8801
Dec	\$62.09	\$43.90	(\$18.19)	29.3%	\$0.8673
Avg	\$66.22	\$45.04	(\$21.18)	32.5%	\$0.8818

	WTI ⁽¹⁾	WCS ⁽²⁾	WCS Differential ⁽³⁾		FX ⁽⁴⁾
	US\$/bbl	US\$/bbl	US\$/bbl	% of WTI	US\$/C\$
<u>2007</u>					
Jan	\$54.35	\$38.05	(\$16.30)	30.0%	\$0.8504
Feb	\$59.39	\$44.43	(\$14.96)	25.2%	\$0.8542
Mar	\$60.74	\$45.60	(\$15.14)	24.9%	\$0.8560
Apr	\$64.04	\$44.03	(\$20.01)	31.2%	\$0.8816
May	\$63.53	\$46.33	(\$17.20)	27.1%	\$0.9013
June	\$67.53	\$47.19	(\$20.34)	30.1%	\$0.9388
July	\$74.15	\$53.06	(\$21.09)	28.4%	\$0.9521
Aug	\$72.36	\$52.76	(\$19.60)	27.1%	\$0.9450
Sep	\$79.63	\$53.00	(\$26.63)	33.4%	\$0.9752
Oct	\$85.66	\$54.69	(\$30.97)	36.2%	\$1.0254
Nov	\$94.63	\$66.29	(\$28.34)	29.9%	\$1.0340
Dec	\$91.74	\$50.02	(\$41.72)	45.5%	\$0.9969
Avg	\$72.31	\$49.62	(\$22.69)	30.8%	\$0.9343
<u>2008</u>					
Jan	\$92.93	\$68.72	(\$24.21)	26.1%	\$0.9890
Feb	\$95.35	\$71.75	(\$23.60)	24.8%	\$1.0009
Mar	\$105.42	\$88.87	(\$16.55)	15.7%	\$0.9980
Apr	\$112.46	\$94.64	(\$17.82)	15.8%	\$0.9863
May	\$125.46	\$104.28	(\$21.18)	16.9%	\$1.0006
June	\$134.02	\$108.15	(\$25.87)	19.3%	\$0.9836
July	\$133.48	\$114.95	(\$18.53)	13.9%	\$0.9875
Aug	\$116.69	\$101.10	(\$15.59)	13.4%	\$0.9484
Sep	\$103.76	\$83.87	(\$19.89)	19.2%	\$0.9449
Oct	\$76.72	\$58.08	(\$18.64)	24.3%	\$0.8440
Nov	\$57.44	\$37.54	(\$19.90)	34.6%	\$0.8209
Dec	\$42.04	\$23.18	(\$18.86)	44.9%	\$0.8100
Avg	\$99.65	\$79.59	(\$20.05)	22.4%	\$0.9428
<u>2009</u>					
Jan	\$41.92	\$29.97	(\$11.95)	28.5%	\$0.8155
Feb	\$39.26	\$31.71	(\$7.55)	19.2%	\$0.8031
Mar	\$48.06	\$40.76	(\$7.30)	15.2%	\$0.7908
Apr	\$49.95	\$43.76	(\$6.19)	12.4%	\$0.8170
May	\$59.21	\$51.64	(\$7.57)	12.8%	\$0.8689
June	\$69.70	\$61.18	(\$8.52)	12.2%	\$0.8877
July	\$64.29	\$54.45	(\$9.84)	15.3%	\$0.8911
Aug	\$71.14	\$60.49	(\$10.65)	15.0%	\$0.9189
Sep	\$69.47	\$59.52	(\$9.95)	14.3%	\$0.9244
Oct	\$75.82	\$65.28	(\$10.54)	13.9%	\$0.9480
Nov	\$78.15	\$65.05	(\$13.10)	16.8%	\$0.9438
Dec	\$74.60	\$61.89	(\$12.71)	17.0%	\$0.9484
Avg	\$61.80	\$52.14	(\$9.66)	16.1%	\$0.8798

	WTI ⁽¹⁾	WCS ⁽²⁾	WCS Differential ⁽³⁾		FX ⁽⁴⁾
	US\$/bbl	US\$/bbl	US\$/bbl	% of WTI	US\$/C\$
2010					
Jan	\$78.40	\$69.28	(\$9.12)	11.6%	\$0.9589
Feb	\$76.45	\$67.91	(\$8.54)	11.2%	\$0.9463
Mar	\$81.29	\$71.82	(\$9.47)	11.6%	\$0.9775
Apr	\$84.58	\$72.02	(\$12.56)	14.9%	\$0.9949
May	\$74.12	\$57.49	(\$16.63)	22.4%	\$0.9616
Jun	\$75.40	\$62.32	(\$13.08)	17.3%	\$0.9635
Jul	\$76.38	\$64.28	(\$12.10)	15.8%	\$0.9590
Aug	\$76.67	\$61.93	(\$14.74)	19.2%	\$0.9602
Sept	\$75.55	\$55.44	(\$20.11)	26.6%	\$0.9680
Oct	\$81.97	\$56.71	(\$25.26)	30.8%	\$0.9823
Nov	\$84.31	\$69.56	(\$14.75)	17.5%	\$0.9874
Dec	\$89.23	\$74.89	(\$14.34)	16.1%	\$0.9924
Avg	\$79.53	\$65.30	(\$14.23)	17.9%	\$0.9710
2011					
Jan	\$89.58	\$71.18	(\$18.40)	20.5%	\$1.0062
Feb	\$89.74	\$63.41	(\$26.33)	29.3%	\$1.0126
Mar	\$102.98	\$79.13	(\$23.85)	23.2%	\$1.0240
Apr	\$110.04	\$89.70	(\$20.34)	18.5%	\$1.0436
May	\$101.36	\$85.66	(\$15.70)	15.5%	\$1.0331
Jun	\$96.29	\$79.42	(\$16.87)	17.5%	\$1.0238
Jul	\$97.34	\$78.31	(\$19.03)	19.5%	\$1.0468
Aug	\$86.34	\$66.51	(\$19.83)	23.0%	\$1.0175
Sept	\$85.62	\$71.61	(\$14.01)	16.4%	\$0.9974
Oct	\$86.43	\$76.54	(\$9.89)	11.4%	\$0.9806
Nov	\$97.16	\$87.32	(\$9.84)	10.1%	\$0.9748
Dec	\$98.58	\$86.86	(\$11.72)	11.9%	\$0.9768
Avg	\$95.12	\$77.97	(\$17.15)	18.1%	\$1.0114
2012					
Jan	\$100.32	\$86.47	(\$13.85)	13.8%	\$0.9869
Feb	\$102.26	\$83.04	(\$19.22)	18.8%	\$1.0035
Mar	\$106.21	\$75.01	(\$31.20)	29.4%	\$1.0061
Apr	\$103.35	\$70.40	(\$32.94)	31.9%	\$1.0075
May	\$94.72	\$75.10	(\$19.61)	20.7%	\$0.9903
Jun	\$82.41	\$66.37	(\$16.04)	19.5%	\$0.9727
Jul	\$87.93	\$64.28	(\$23.65)	26.9%	\$0.9863
Aug	\$94.16	\$69.03	(\$25.13)	26.7%	\$1.0080
Sept	\$94.56	\$78.17	(\$16.39)	17.3%	\$1.0222
Oct	\$89.57	\$79.88	(\$9.69)	10.8%	\$1.0130
Nov	\$86.73	\$72.47	(\$14.27)	16.4%	\$1.0030
Dec	\$88.25	\$57.87	(\$30.37)	34.4%	\$1.0105
Avg	\$94.20	\$73.17	(\$21.03)	22.2%	\$1.0008

	WTI ⁽¹⁾	WCS ⁽²⁾	WCS Differential ⁽³⁾		FX ⁽⁴⁾
	US\$/bbl	US\$/bbl	US\$/bbl	% of WTI	US\$/C\$
<u>2013</u>					
Jan	\$94.83	\$62.11	(\$32.72)	34.5%	\$1.0080
Feb	\$95.32	\$58.41	(\$36.92)	38.7%	\$0.9903
Mar	\$92.96	\$66.72	(\$26.24)	28.2%	\$0.9759
Apr	\$92.07	\$68.87	(\$23.20)	25.2%	\$0.9816
May	\$94.80	\$80.93	(\$13.87)	14.6%	\$0.9805
Jun	\$95.80	\$75.39	(\$20.41)	21.3%	\$0.9695
Jul	\$104.70	\$90.50	(\$14.20)	13.6%	\$0.9613
Aug	\$106.54	\$90.97	(\$15.57)	14.6%	\$0.9607
Sept	\$106.24	\$83.56	(\$22.67)	21.3%	\$0.9669
Oct	\$100.55	\$74.21	(\$26.34)	26.2%	\$0.9649
Nov	\$93.93	\$62.62	(\$31.31)	33.3%	\$0.9531
Dec	\$97.89	\$58.96	(\$38.94)	39.8%	\$0.9399
Avg	\$97.97	\$72.77	(\$25.20)	26.0%	\$0.9710
<u>2014</u>					
Jan	\$94.86	\$65.68	(\$29.17)	30.8%	\$0.9139
Feb	\$100.68	\$81.53	(\$19.14)	19.0%	\$0.9046
Mar	\$100.51	\$79.42	(\$21.09)	21.0%	\$0.9003
Apr	\$102.04	\$79.57	(\$22.47)	22.0%	\$0.9098
May	\$101.80	\$82.73	(\$19.07)	18.7%	\$0.9179
Jun	\$105.15	\$86.56	(\$18.59)	17.7%	\$0.9233
Jul	\$102.39	\$82.73	(\$19.66)	19.2%	\$0.9312
Aug	\$96.08	\$73.89	(\$22.19)	23.1%	\$0.9152
Sept	\$93.03	\$74.35	(\$18.68)	20.1%	\$0.9081
Oct	\$84.34	\$70.60	(\$13.74)	16.3%	\$0.8918
Nov	\$75.81	\$62.87	(\$12.94)	17.1%	\$0.8829
Dec	\$59.29	\$43.24	(\$16.05)	27.1%	\$0.8671
Avg	\$93.00	\$73.60	(\$19.40)	21.0%	\$0.9055
<u>2015</u>					
Jan	\$47.33	\$30.43	(\$16.90)	35.7%	\$0.8254
Feb	\$50.73	\$36.53	(\$14.20)	28.0%	\$0.8000
Mar	\$47.85	\$34.76	(\$13.09)	27.4%	\$0.7926
Apr	\$54.63	\$40.26	(\$14.37)	26.3%	\$0.8110
May	\$59.37	\$47.50	(\$11.87)	20.0%	\$0.8207
Jun	\$59.83	\$51.29	(\$8.54)	14.3%	\$0.8087
Jul	\$50.93	\$43.49	(\$7.44)	14.6%	\$0.7773
Aug	\$42.89	\$29.48	(\$13.41)	31.3%	\$0.7605
Sept	\$45.47	\$26.50	(\$18.97)	41.7%	\$0.7537
Oct	\$46.29	\$32.78	(\$13.51)	29.2%	\$0.7649
Nov	\$42.92	\$27.78	(\$15.14)	35.3%	\$0.7530
Dec	\$37.33	\$22.51	(\$14.82)	39.7%	\$0.7296
Avg	\$48.80	\$35.28	(\$13.52)	28.6%	\$0.7831

	WTI ⁽¹⁾	WCS ⁽²⁾	WCS Differential ⁽³⁾		FX ⁽⁴⁾
	US\$/bbl	US\$/bbl	US\$/bbl	% of WTI	US\$/C\$
<u>2016</u>					
Jan	\$31.78	\$17.88	(\$13.90)	43.7%	\$0.7031
Feb	\$30.62	\$16.30	(\$14.32)	46.8%	\$0.7248
Mar	\$37.96	\$23.47	(\$14.50)	38.2%	\$0.7561
Apr	\$41.13	\$27.88	(\$13.24)	32.2%	\$0.7801
May	\$46.80	\$32.52	(\$14.28)	30.5%	\$0.7727
Jun	\$48.85	\$36.46	(\$12.39)	25.4%	\$0.7754
Jul	\$44.80	\$32.80	(\$12.00)	26.8%	\$0.7663
Aug	\$44.80	\$30.90	(\$13.90)	31.0%	\$0.7696
Sept	\$45.23	\$30.62	(\$14.61)	32.3%	\$0.7629
Oct	\$49.94	\$35.83	(\$14.11)	28.3%	\$0.7547
Nov	\$45.76	\$31.89	(\$13.87)	30.3%	\$0.7442
Dec	\$52.17	\$37.18	(\$14.99)	28.7%	\$0.7502
Avg	\$43.32	\$29.48	(\$13.84)	32.8%	\$0.7550
<u>2017</u>					
Jan	\$52.61	\$37.19	(\$15.42)	29.3%	\$0.7581
Feb	\$53.46	\$39.14	(\$14.32)	26.8%	\$0.7628
Mar	\$49.67	\$35.68	(\$13.99)	28.2%	\$0.7470
Apr	\$51.12	\$36.83	(\$14.28)	27.9%	\$0.7438
May	\$48.54	\$38.84	(\$9.70)	20.0%	\$0.7351
Jun	\$45.20	\$35.80	(\$9.40)	20.8%	\$0.7522
Jul	\$46.68	\$36.37	(\$10.31)	22.1%	\$0.7882
Aug	\$48.06	\$38.50	(\$9.56)	19.9%	\$0.7933
Sept	\$49.88	\$39.93	(\$9.95)	20.0%	\$0.8143
Oct	\$51.59	\$39.87	(\$11.72)	22.7%	\$0.7932
Nov	\$56.66	\$45.52	(\$11.14)	19.7%	\$0.7832
Dec	\$57.95	\$44.02	(\$13.93)	24.0%	\$0.7828
Avg	\$50.95	\$38.97	(\$11.98)	23.4%	\$0.7712
<u>2018</u>					
Jan	\$63.66	\$42.53	(\$21.13)	33.2%	\$0.8046
Feb	\$62.18	\$37.72	(\$24.46)	39.3%	\$0.7943
Mar	\$62.77	\$35.53	(\$27.24)	43.4%	\$0.7731
Apr	\$66.33	\$40.47	(\$25.86)	39.0%	\$0.7854
May	\$69.98	\$53.25	(\$16.73)	23.9%	\$0.7767
Jun	\$67.32	\$52.10	(\$15.22)	22.6%	\$0.7618
Jul	\$70.58	\$52.84	(\$17.75)	25.1%	\$0.7616
Aug	\$67.85	\$48.54	(\$19.30)	28.5%	\$0.7666
Sept	\$70.08	\$40.38	(\$29.71)	42.4%	\$0.7672
Oct	\$70.76	\$41.15	(\$29.61)	41.8%	\$0.7689
Nov	\$56.69	\$11.03	(\$45.66)	80.5%	\$0.7573
Dec	\$48.98	\$5.97	(\$43.01)	87.8%	\$0.7443
Avg	\$64.77	\$38.46	(\$26.31)	42.3%	\$0.7718

- (1) WTI refers to the calendar monthly average based on NYMEX prompt month WTI.
- (2) WCS refers to the average market price for the benchmark Western Canadian Select heavy oil.
- (3) Heavy oil differential refers to the WCS discount to WTI.
- (4) FX rate refers to the Bank of Canada noon day average.

Sources: Bloomberg, NetEnergy, NGX, Bank of Canada