

**Marathon Petroleum Corporation Market Data**

Price information through 11/30/2018

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
	WTI Prompt Price (a)	LLS Prompt Price (a)	ANS Prompt Price (a)	Mid-Con WTI 3-2-1 Crack (ex-RIN) (b)	USGC LLS 3-2-1 Crack (ex-RIN) (b)	WC ANS 3-2-1 Crack (ex-RIN) (b)	Blended Crack (c)	Blended Prompt Crude Price (d)	RVO Cost in Crack	Sweet Delivered Differential (e)	(1) + (10)	(11) - (8)	Sour Delivered Diff. (e)	(1) + (13)	(14) - (8)	Market Structure (g)
Oct-18	70.76	78.93	80.16	15.65	5.74	15.57	11.87	76.12	0.82	(0.11)	70.65	(5.47)	(2.16)	68.60	(7.52)	0.45
Nov-18	56.69	64.75	66.99	13.92	3.62	9.36	8.91	62.23	0.81	(0.34)	56.36	(5.87)	(4.53)	52.16	(10.07)	0.12
Dec-18	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>4Q18</b>	<b>64.05</b>	<b>72.34</b>	<b>74.03</b>	<b>15.02</b>	<b>4.75</b>	<b>12.68</b>	<b>10.84</b>	<b>69.59</b>	<b>0.82</b>	<b>(0.14)</b>	<b>63.90</b>	<b>(5.69)</b>	<b>(3.23)</b>	<b>60.81</b>	<b>(8.78)</b>	<b>0.30</b>

Hypothetical Other Margin Indicator Calculation									Provided Outlook			
(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)		(I)	(J)	(K)	(L)
Crude Throughput (mmbbls)	Non-Crude Throughput (mmbbls)	Total Throughput (mmbbls)	Blended Crack Spread (\$MM)	Sweet Differential (\$MM)	Sour Differential (\$MM)	Market Structure (\$MM)	R&M Margin Indicator (\$MM)		Crude Throughput (MBD)	Other Charge/Feedstocks (MBD)	Sweet Crude Oil Throughput Percentage	Sour Crude Oil Throughput Percentage
(I) x Days in Qtr.	(J) x Days in Qtr.	(A) + (B)	(C) x Col 7	(A) x Col 12 x (K)	(A) x Col 15 x (L)	(A) x Col 16 x %	Sum of (D) thru (G)					
Quarter	255	25	281	3,042	726	1,121	(30)	4,859	2,775	275	50%	50%

(a) Prompt Price represents calendar workday average of prices quoted that month for crude delivered in immediately following month(s).

(b) Crack Spread Calculation: Mid-Con = ((Chicago CBOB Gasoline x 2 + Chicago Ultra Low Sulfur Distillate)/3) - WTI Prompt Price

USGC = ((U.S. Gulf Coast (USGC) CBOB Gasoline x 2 + USGC Ultra Low Sulfur Distillate) /3) - LLS Prompt Price

West Coast = ((LA California Reformulated Gasoline Blendstock for Oxygenate Blending (CARBOB) x 2+ LA California Air Resources Board (CARB) Diesel)/3) - ANS Prompt Price

(c) Beginning 4Q 2018, Blended Mid-Con/USGC/West Coast crack spread is weighted 38%/38%/24% based on MPC's refining capacity by PADD. From Q1 2017 through Q3 2018, the blended spread was weighted 40%/60% Mid-Con/USGC.

(d) Beginning 4Q 2018, Blended WTI/LLS/ANS prompt crude price is weighted 38%/38%/24% based on blended crack spread. From Q1 2017 through Q3 2018, the blended price was weighted 40%/60% Mid-Con/USGC.

(e) Delivered differentials (versus Prompt WTI) for the trade month period beginning with the 26th calendar day two months prior to the prompt month through the 25th day one month prior to the prompt month. The exception is the Maya delivered differential which is calculated on a prompt calendar month basis.

MPC's typical sweet crude oil basket consists of the following crudes: Bakken, Brent, LLS, WTI-Cushing, WTI-Midland

MPC's typical sour crude oil basket consists of the following crudes: ANS, ASCI, Maya, Western Canadian Select.

(f) Delivered cost is based on WTI prompt price plus each respective grade's delivered differential and does not include market structure or other expenses such as transportation, demurrage, etc. Market structure effects are calculated as a separate adjustment (see column 16 and (G) above).

(g) Delivered month market structure (roll). Negative values represent contango and positive values represent backwardation. Beginning 4Q 2018, approximately 40% of MPC's crude oil acquisition volume uses market structure in its acquisition price formula.

All prices and differentials listed are in Dollars per Barrel

Data Sources: NYMEX, Argus, and MPC Estimate

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Price information through 11/30/2018

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
											(1) + (10)	(11) - (8)		(1) + (13)	(14) - (8)	
<b>2018</b>	WTI Prompt Price (a)	LLS Prompt Price (a)	ANS Prompt Price (a)	Mid-Con WTI 3-2-1 Crack (ex-RIN) (b)	USGC LLS 3-2-1 Crack (ex-RIN) (b)	WC ANS 3-2-1 Crack (ex-RIN) (b)	Blended Crack (c)	Blended Prompt Crude Price (d)	RVO Cost in Crack	Sweet Delivered Differential (e)	Sweet Delivered Cost (f)	Prompt Sweet Differential	Sour Delivered Diff. (e)	Sour Delivered Cost (f)	Prompt Sour Differential	Market Structure (g)
Jan-18	63.66	67.74	68.82	12.21	8.03	11.15	9.70	66.11	3.19	1.95	65.61	(0.50)	(2.62)	61.04	(5.07)	(0.03)
Feb-18	62.18	64.46	65.58	7.31	7.52	12.55	7.44	63.55	3.22	1.28	63.46	(0.09)	(4.45)	57.74	(5.81)	0.11
Mar-18	62.77	65.13	66.47	9.92	8.05	17.50	8.80	64.19	2.45	0.27	63.04	(1.15)	(6.75)	56.02	(8.17)	0.26
<b>1Q18</b>	<b>62.89</b>	<b>65.82</b>	<b>67.00</b>	<b>9.89</b>	<b>7.88</b>	<b>13.77</b>	<b>8.69</b>	<b>64.65</b>	<b>2.95</b>	<b>1.17</b>	<b>64.07</b>	<b>(0.59)</b>	<b>(4.60)</b>	<b>58.30</b>	<b>(6.35)</b>	<b>0.12</b>
Apr-18	66.33	69.46	70.73	14.20	10.57	19.62	12.02	68.20	2.00	0.28	66.60	(1.60)	(6.23)	60.10	(8.11)	0.13
May-18	69.98	75.23	76.31	17.93	10.57	18.02	13.51	73.13	1.70	(0.14)	69.84	(3.29)	(3.66)	66.33	(6.80)	0.11
Jun-18	67.32	74.31	75.25	17.54	7.89	13.42	11.75	71.52	1.46	(0.44)	66.88	(4.63)	(2.55)	64.77	(6.74)	0.14
<b>2Q18</b>	<b>67.91</b>	<b>73.03</b>	<b>74.14</b>	<b>16.58</b>	<b>9.69</b>	<b>17.03</b>	<b>12.45</b>	<b>70.98</b>	<b>1.72</b>	<b>(0.11)</b>	<b>67.80</b>	<b>(3.18)</b>	<b>(4.12)</b>	<b>63.79</b>	<b>(7.19)</b>	<b>0.12</b>
Jul-18	70.58	72.75	75.17	15.47	10.93	13.43	12.74	71.88	1.33	1.58	72.16	0.28	(1.18)	69.40	(2.48)	0.51
Aug-18	67.85	72.62	73.72	18.60	10.52	13.53	13.75	70.71	1.25	(1.32)	66.52	(4.19)	(5.77)	62.07	(8.64)	2.22
Sep-18	70.08	77.52	77.76	19.39	7.80	15.43	12.43	74.55	1.15	(1.35)	68.74	(5.81)	(5.46)	64.63	(9.92)	1.08
<b>3Q18</b>	<b>69.43</b>	<b>74.14</b>	<b>75.42</b>	<b>17.79</b>	<b>9.84</b>	<b>14.07</b>	<b>13.02</b>	<b>72.26</b>	<b>1.25</b>	<b>(0.39)</b>	<b>69.04</b>	<b>(3.22)</b>	<b>(4.11)</b>	<b>65.32</b>	<b>(6.94)</b>	<b>1.27</b>
Oct-18	70.76	78.93	80.16	15.65	5.74	15.57	11.87	76.12	0.82	(0.11)	70.65	(5.47)	(2.16)	68.60	(7.52)	0.45
Nov-18	56.69	64.75	66.99	13.92	3.62	9.36	8.91	62.23	0.81	(0.34)	56.36	(5.87)	(4.53)	52.16	(10.07)	0.12
Dec-18																
<b>4Q18</b>	<b>64.05</b>	<b>72.34</b>	<b>74.03</b>	<b>15.02</b>	<b>4.75</b>	<b>12.68</b>	<b>10.84</b>	<b>69.59</b>	<b>0.82</b>	<b>(0.14)</b>	<b>63.90</b>	<b>(5.69)</b>	<b>(3.23)</b>	<b>60.81</b>	<b>(8.78)</b>	<b>0.30</b>
<b>2018 YTD</b>	<b>66.27</b>	<b>71.30</b>	<b>72.58</b>	<b>14.85</b>	<b>8.33</b>	<b>14.55</b>	<b>12.50</b>	<b>69.40</b>	<b>1.75</b>	<b>0.15</b>	<b>66.43</b>	<b>(2.97)</b>	<b>(4.08)</b>	<b>62.20</b>	<b>(7.20)</b>	<b>0.47</b>

	WTI Prompt Price (a)	LLS Prompt Price (a)	ANS Prompt Price (a)	Mid-Con WTI 3-2-1 Crack (ex-RIN) (b)	USGC LLS 3-2-1 Crack (ex-RIN) (b)	WC ANS 3-2-1 Crack (ex-RIN) (b)	Blended Crack (c)	Blended Prompt Crude Price (d)	RVO Cost in Crack	Sweet Delivered Differential (e)	Sweet Delivered Cost (f)	Prompt Sweet Differential	Sour Delivered Diff. (e)	Sour Delivered Cost (f)	Prompt Sour Differential	Market Structure (g)
Jan-17	52.61	54.06	54.21	7.66	7.71	10.61	7.69	53.48	3.55	(0.01)	52.60	(0.88)	(5.65)	46.96	(6.52)	(1.29)
Feb-17	53.46	55.14	55.10	6.47	7.11	14.85	6.85	54.47	2.71	0.40	53.86	(0.61)	(5.40)	48.06	(6.41)	(1.08)
Mar-17	49.67	51.36	52.18	10.30	8.38	15.07	9.15	50.69	2.63	0.20	49.88	(0.81)	(4.82)	44.86	(5.83)	(0.72)
<b>1Q17</b>	<b>51.78</b>	<b>53.39</b>	<b>53.73</b>	<b>8.28</b>	<b>7.77</b>	<b>13.56</b>	<b>7.97</b>	<b>52.75</b>	<b>2.95</b>	<b>0.19</b>	<b>51.97</b>	<b>(0.77)</b>	<b>(5.28)</b>	<b>46.50</b>	<b>(6.24)</b>	<b>(1.03)</b>
Apr-17	51.12	53.14	53.68	12.52	9.21	15.82	10.53	52.33	2.90	0.13	51.25	(1.09)	(4.58)	46.53	(5.80)	(0.62)
May-17	48.54	50.58	50.91	11.13	7.84	16.44	9.16	49.76	3.02	0.67	49.21	(0.56)	(3.21)	45.33	(4.43)	(0.56)
Jun-17	45.20	47.21	47.46	9.92	6.84	14.57	8.07	46.40	3.74	0.43	45.62	(0.78)	(2.93)	42.26	(4.14)	(0.45)
<b>2Q17</b>	<b>48.15</b>	<b>50.17</b>	<b>50.54</b>	<b>11.13</b>	<b>7.90</b>	<b>15.60</b>	<b>9.19</b>	<b>49.36</b>	<b>3.23</b>	<b>0.42</b>	<b>48.57</b>	<b>(0.80)</b>	<b>(3.53)</b>	<b>44.62</b>	<b>(4.75)</b>	<b>(0.54)</b>
Jul-17	46.68	49.01	49.22	12.66	8.80	15.43	10.35	48.08	3.95	0.34	47.01	(1.07)	(3.10)	43.58	(4.50)	(0.30)
Aug-17	48.06	51.08	51.85	15.75	11.55	16.68	13.23	49.87	4.30	0.50	48.56	(1.31)	(2.69)	45.36	(4.51)	(0.27)
Sep-17	49.88	54.84	55.52	17.08	13.64	17.70	15.01	52.85	4.03	0.81	50.68	(2.17)	(2.35)	47.52	(5.33)	(0.20)
<b>3Q17</b>	<b>48.20</b>	<b>51.61</b>	<b>52.18</b>	<b>15.19</b>	<b>11.34</b>	<b>16.61</b>	<b>12.88</b>	<b>50.25</b>	<b>4.11</b>	<b>0.56</b>	<b>48.75</b>	<b>(1.49)</b>	<b>(2.70)</b>	<b>45.50</b>	<b>(4.75)</b>	<b>(0.26)</b>
Oct-17	51.59	57.47	57.71	19.57	8.16	13.54	12.73	55.12	4.04	1.81	53.41	(1.71)	(1.49)	50.11	(5.01)	(0.58)
Nov-17	56.66	62.38	63.02	16.24	7.25	11.38	10.85	60.09	4.35	2.50	59.16	(0.93)	(0.66)	56.00	(4.09)	(0.39)
Dec-17	57.95	63.31	63.85	12.87	5.99	5.44	8.74	61.16	3.59	2.44	60.38	(0.78)	(1.02)	56.93	(4.23)	(0.26)
<b>4Q17</b>	<b>55.30</b>	<b>60.94</b>	<b>61.40</b>	<b>16.31</b>	<b>7.17</b>	<b>10.23</b>	<b>10.83</b>	<b>58.68</b>	<b>3.99</b>	<b>2.25</b>	<b>57.55</b>	<b>(1.13)</b>	<b>(1.05)</b>	<b>54.25</b>	<b>(4.43)</b>	<b>(0.41)</b>
<b>2017 YTD</b>	<b>50.85</b>	<b>54.00</b>	<b>54.44</b>	<b>12.71</b>	<b>8.55</b>	<b>14.02</b>	<b>10.22</b>	<b>52.74</b>	<b>3.57</b>	<b>0.85</b>	<b>51.71</b>	<b>(1.04)</b>	<b>(3.13)</b>	<b>47.72</b>	<b>(5.02)</b>	<b>(0.56)</b>

R&M Margin Indicator Calculation Based on Actuals									Actuals			
(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	
Crude Throughput (mmbbls)	Non-Crude Throughput (mmbbls)	Total Throughput (mmbbls)	Blended Crack Spread (\$MM)	Sweet Differential (\$MM)	Sour Differential (\$MM)	Market Structure (\$MM)	R&M Margin Indicator (\$MM)	Crude Throughput (MBD)	Other Charge/Feedstocks (MBD)	Sweet Crude Oil Throughput Percentage	Sour Crude Oil Throughput Percentage	
(I) x Days in Qtr.	(J) x Days in Qtr.	(A) + (B)	(C) x Col 7	(A) x Col 12 x (K)	(A) x Col 15 x (L)	(A) x Col 16 x %	Sum of (D) thru (G)					
1Q17	136	18	154	1,226	35	569	91	1,920	1,511	197	33%	67%
2Q17	170	14	184	1,692	51	499	60	2,303	1,864	159	38%	62%
3Q17	170	16	186	2,390	109	459	29	2,987	1,845	172	43%	57%
4Q17	169	17	186	2,016	90	397	45	2,548	1,837	187	47%	53%
1Q18	157	14	171	1,489	44	519	(11)	2,041	1,745	160	48%	52%
2Q18	171	15	185	2,308	245	676	(13)	3,216	1,878	160	45%	55%
3Q18	169	18	187	2,434	260	608	(129)	3,174	1,833	199	48%	52%

(a) Prompt Price represents calendar workday average of prices quoted that month for crude delivered in immediately following month(s).

(b) Crack Spread Calculation:

Mid-Con = ((Chicago CBOB Gasoline x 2 + Chicago Ultra Low Sulfur Distillate)/3) - WTI Prompt Price

USGC = ((U.S. Gulf Coast (USGC) CBOB Gasoline x 2 + USGC Ultra Low Sulfur Distillate) /3) - LLS Prompt Price

West Coast = ((LA California Reformulated Gasoline Blendstock for Oxygenate Blending (CARBOB) x 2 + LA California Air Resources Board (CARB) Diesel)/3) - ANS Prompt Price

(c) Beginning 4Q 2018, Blended Mid-Con/USGC/West Coast crack spread is weighted 38%/38%/24% based on MPC's refining capacity by PADD. From Q1 2017 through Q3 2018, the blended spread was weighted 40%/60% Mid-Con/USGC.

(d) Beginning 4Q 2018, Blended WTI/LLS/ANS prompt crude price is weighted 38%/38%/24% based on blended crack spread. From Q1 2017 through Q3 2018, the blended price was weighted 40%/60% Mid-Con/USGC.

(e) Delivered differentials (versus Prompt WTI) for the trade month period beginning with the 26th calendar day two months prior to the prompt month through the 25th day one month prior to the prompt month. The exception is the Maya delivered differential which is calculated on a prompt calendar month basis.

MPC's typical sweet crude oil basket consists of the following crudes: Bakken, Brent, LLS, WTI-Cushing, WTI-Midland

MPC's typical sour crude oil basket consists of the following crudes: ANS, ASCI, Maya, Western Canadian Select.

(f) Delivered cost is based on WTI prompt price plus each respective grade's delivered differential and does not include market structure or other expenses such as transportation, demurrage, etc. Market structure effects are calculated as a separate adjustment (see column 16 and (G) above).

(g) Delivered month market structure (roll). Negative values represent contango and positive values represent backwardation. Beginning 4Q 2018, approximately 40% of MPC's crude oil acquisition volume uses market structure in its acquisition price formula. The formula factor utilized was 60% 1Q through 3Q 2018 and 65% in 2017.

All prices and differentials listed are in Dollars per Barrel  
Data Sources: NYMEX, Argus, and MPC Estimate

# Prompt LLS versus Calendar Month Average (CMA) Delivered Cost example

	1	2	3	4		5	
		<u>Spot LLS</u>	<u>Spot WTI</u>	<u>Spot LLS-WTI Differential</u>		<u>NYMEX WTI</u>	
1	09/26/11	106.94	80.24	26.70		80.24	1
2	09/27/11	109.58	84.45	25.13		84.45	2
3	09/28/11	106.29	81.21	25.08		81.21	3
4	09/29/11	106.14	82.14	24.00		82.14	4
5	09/30/11	103.93	79.20	24.73		79.20	5
6	10/03/11	103.49	77.61	25.88		77.61	6
7	10/04/11	102.27	75.67	26.60		75.67	7
8	10/05/11	106.06	79.68	26.38		79.68	8
9	10/06/11	108.52	82.59	25.93		82.59	9
10	10/07/11	109.31	82.98	26.33		82.98	10
11	10/10/11	111.89	85.41	26.48		85.41	11
12	10/11/11	113.59	85.81	27.78		85.81	12
13	10/12/11	114.72	85.57	29.15		85.57	13
14	10/13/11	113.06	84.23	28.83		84.23	14
15	10/14/11	115.58	86.80	28.78		86.80	15
16	10/17/11	113.58	86.38	27.20		86.38	16
17	10/18/11	113.94	88.34	25.60		88.34	17
18	10/19/11	111.66	86.11	25.55		86.11	18
19	10/20/11	113.10	85.30	27.80		85.30	19
20	10/21/11	115.51	87.23	28.28		87.40	20
21	10/24/11	115.92	91.09	24.83		91.27	21
22	10/25/11	114.88	93.00	21.88		93.17	22
23	Trade Day Average	<b>110.45</b>	<b>84.14</b>	<b>26.31</b>	<b>November Trade Month (Sep 26 - Oct 25)</b>	<b>84.16</b>	23
24	10/26/11	110.55	90.20	20.35		90.20	24
25	10/27/11	114.59	93.96	20.63		93.96	25
26	10/28/11	112.62	93.32	19.30		93.32	26
27	10/31/11	111.79	93.19	18.60		93.19	27
28	Calendar Work Day Average	111.74	86.40	<b>25.34</b>	<b>October Calendar Month Average</b>	86.43	28
29	11/01/11	110.27	92.19	18.08		92.19	29
30	11/02/11	110.54	92.51	18.03		92.51	30
31	11/03/11	111.52	94.07	17.45		94.07	31
32	11/04/11	112.56	94.26	18.30		94.26	32
33	11/07/11	115.47	95.52	19.95		95.52	33
34	11/08/11	116.58	96.80	19.78		96.80	34
35	11/09/11	114.29	95.74	18.55		95.74	35
36	11/10/11	114.78	97.78	17.00		97.78	36
37	11/11/11	115.74	98.99	16.75		98.99	37
38	11/14/11	113.52	98.14	15.38		98.14	38
39	11/15/11	113.95	99.37	14.58		99.37	39
40	11/16/11	114.84	102.59	12.25		102.59	40
41	11/17/11	110.32	98.82	11.50		98.82	41
42	11/18/11	109.91	97.41	12.50		97.41	42
43	11/21/11	108.03	96.68	11.35		96.92	43
44	11/22/11	108.51	97.71	10.80		98.01	44
45	11/23/11	107.77	95.87	11.90		96.17	45
46	11/25/11					96.77	46
47	Trade Day Average	<b>112.29</b>	<b>95.96</b>	<b>16.33</b>	<b>December Trade Month (Oct 26 - Nov 25)</b>	96.03	47
48	11/28/11	109.91	98.21	11.70		98.21	48
49	11/29/11	112.49	99.79	12.70		99.79	49
50	11/30/11	111.91	100.36	11.55		100.36	50
51	Calendar Work Day Average	<b>112.14</b>	<b>97.14</b>	<b>15.00</b>	<b>November Calendar Month Average</b>	<b>97.16</b>	51
52				LLS-WTI November Trade Month Differential		<b>26.31</b>	52
53				November Delivered LLS Value		<b>123.47</b>	53
54				November Prompt LLS Value		<b>112.14</b>	54
55				<b>November Prompt - November CMA Delivered</b> (excludes market structure adjustment)		<b>(11.33)</b>	55