Marathon Petroleum Corporation Market Dat

	1	2	3	4	5	6	7	8	9	10	11 (1) + (10)	12 (11) - (8)	13	14 (1) + (13)	15 (14) - (8)	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)	Sweet Delivered Cost (f)	Prompt Sweet Differential	Sour Delivered Diff. (e)	Sour Delivered Cost (f)	Prompt Sour Differential	Market Structure (g)
Apr-19	63.87	70.68	71.62	21.23	10.39	28.29	18.80	68.32	1.09	2.59	66.47	(1.85)	2.92	66.79	(1.53)	(0.40)
May-19																
Jun-19																
2Q19	63.87	70.68	71.62	21.23	10.39	28.29	18.80	68.32	1.09	2.59	66.47	(1.85)	2.92	66.79	(1.53)	(0.40)

	Hypothetical Other Margin Indicator Calculatio								Provided Outlool			
	(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)				
2nd Quarter	255	11	266	5,005	258	177	41	5,481	2,800	125	55%	45%

(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) Blended Mid-Con/USGC/West Coast crack spread is weighted 38%/38%/24% based on MPC's refining capacity by PADD.

(d) Blended WTI/LLS/ANS prompt crude price is weighted 38%/38%/24% based on blended crack spread.

(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. Approximately 40% of MPC's crude oil acquisition volume uses market structure in its acquisition price

All prices and differentials listed are in Dollars per Barrel

Data Sources: NYMEX, Argus, and MPC Estimate

Marathon Petroleum Corporation Market Data

	1	2	3	4	5	6	7	8	9	10	11 (1) + (10)	12 (11) - (8)	13	14 (1) + (13)	15 (14) - (8)	16
2018	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)
1Q18	62.89	65.82	67.00	9.89	7.88	13.77	8.69	64.65	2.95	1.17	64.07	(0.59)	(4.60)	58.30	(6.35)	0.12
2Q18	67.91	73.03	74.14	16.58	9.69	17.03	12.45	70.98	1.72	(0.11)	67.80	(3.18)	(4.12)	63.79	(7.19)	0.12
3Q18	69.43	74.14	75.42	17.79	9.84	14.07	13.02	72.26	1.25	(0.39)	69.04	(3.22)	(4.11)	65.32	(6.94)	1.27
4Q18	59.34	67.48	69.54	13.08	4.32	11.74	9.43	64.88	0.95	(0.98)	58.36	(6.52)	(3.60)	55.74	(9.14)	0.15

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
2019	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-19	51.55	58.36	60.59	4.28	2.22	8.15	4.43	56.31	1.45	0.39	51.94	(4.37)	0.34	51.89	(4.42)	(0.27)
Feb-19	54.98	63.16	65.19	12.42	3.44	11.88	8.88	60.54	1.50	2.41	57.39	(3.15)	2.46	57.44	(3.10)	(0.36)
Mar-19	58.17	65.59	67.73	18.47	9.86	15.70	14.53	63.28	1.19	2.75	60.92	(2.36)	3.23	61.40	(1.88)	(0.44)
1Q19	54.90	62.34	64.48	11.70	5.23	11.91	9.29	60.03	1.38	1.83	56.73	(3.30)	2.00	56.89	(3.13)	(0.36)
Apr-19	63.87	70.68	71.62	21.23	10.39	28.29	18.80	68.32	1.09	2.59	66.47	(1.85)	2.92	66.79	(1.53)	(0.40)
May-19																
Jun-19																
2Q19	63.87	70.68	71.62	21.23	10.39	28.29	18.80	68.32	1.09	2.59	66.47	(1.85)	2.92	66.79	(1.53)	(0.40)
3Q19																
4Q19																
2019 YTD																

	R&M Margin Indicator Calculation Based on Actuals									Actuals			
	(A) Crude Throughput (mmbbls) (K) x Days in Qtr.	(B) Non-Crude Throughput (mmbbls) (L) x Days in Qtr.	(C) Total Throughput (mmbbls) (A) + (B)	(D) Blended Crack Spread ($MM) (C) x Col 7	(E) Sweet Differential ($MM) (A) x Col 12 x (M)	(F) Sour Differential ($MM) (A) x Col 15 x (N)	(G) Market Structure ($MM) (A) x Col 16 x %	(H) R&M Margin Indicator ($MM) Sum of (D) thru (G)	(I) Reported R&M Margin ($MM)	(J) Reported vs. Indicator R&M Margin ($MM) (I) - (H) (Detail Below)	(K) Crude Throughput (MBD)	(L) Other Charge/ Feedstocks (MBD)	(M) Sweet Crude Oil Throughput Percentage	(N) Sour Crude Oil Throughput Percentage
4Q18	263	23	286	2,699	859	1,198	(15)	4,741	4,313	(428)	2,857	254	50%	50%
1Q19	258	19	278	2,578	412	418	36	3,443	3,100	(344)	2,869	215	48%	52%

All prices and differentials listed are in Dollars per Barrel

Data Sources: NYMEX, Argus, and MPC Estimate

(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. Prior to 4Q 2018, Blended Chicago/ USGC crack spread was weighted 40%/60% based on MPC's refining capacity by PADD.

(d) Beginning 4Q 2018, Blended WTI/LLS/ANS prompt crude price is weighted 38%/38%/24% based on blended crack spread. Prior to 4Q 2018, Blended WTI/LLS prompt crude price was weighted 40%/60% based on blended crack spread.

(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 starting in 4Q 2018: Bakken, Brent, LLS, WTI-Cushing, WTI-Midland
MPC's typical sour crude oil basket consists of the following crudes starting in 4Q 2018: 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