

AP - 111

**HYDROCARBON
SEEP
INTERIM
MEASURES**

From: [Caitlin Fields](#)
To: [Cobrain, Dave, NMENV](#); [Chavez, Carl J, EMNRD](#)
Cc: [Moore, John](#); gjmccartney@marathonpetroleum.com; [Moore, Brian](#); [Heidi Jones](#)
Subject: [EXT] Gallup 2nd Quarter 2020 Hydrocarbon Seep Report
Date: Wednesday, September 30, 2020 9:26:30 AM
Attachments: [image001.png](#)
[2020_2ndQuarter_IM_Seep_Report.pdf](#)

Good Morning,

Please find the 2nd Quarter 2020 Hydrocarbon Seep Report due to NMED by September 30th. Hard copies and a CD were shipped to NMED yesterday. Please contact John Moore if you have any questions.

Have a good day,
Caitlin

Caitlin Fields
Associate Engineer

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Western Refining Southwest, Inc.

A subsidiary of Marathon Petroleum Corporation

I-40 Exit 39
Jamestown, NM 87347

September 28, 2020

Mr. Kevin Pierard, Chief
New Mexico Environmental Department
Hazardous Waste Bureau
2905 Rodeo Park Drive East, Building 1
Santa Fe, New Mexico 87505

RE: Hydrocarbon Seep Interim Measures 2020 Second Quarter Status Report
Marathon Petroleum Company LP, Gallup Refinery
(dba Western Refining Southwest, Inc.)
EPA ID# NMD000333211
HWB-WRG-19-001

Dear Mr. Pierard,

Please find enclosed the Hydrocarbon Seep Interim Measures Status Report for the second quarter of 2020. If you have any questions or comments regarding the information contained herein, please do not hesitate to contact John Moore at 505-879-7643.

Certification

I certify under penalty of law that this document and all attachments were prepared under my direction of supervision according to a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Sincerely,
Marathon Petroleum Company LP, Gallup Refinery

Robert S. Hanks
Refinery General Manager

Enclosure

cc: D. Cobrain, NMED HWB
C. Chavez, OCD
J. Moore, MPC
H. Jones, Trihydro Corporation

QUARTERLY STATUS REPORT
HYDROCARBON SEEP INTERIM MEASURES
MARATHON PETROLEUM COMPANY LP – GALLUP REFINERY
(dba WESTERN REFINING SOUTHWEST, INC)
Second Quarter 2020

Activities conducted during second quarter 2020

- Source Control – The refinery restricted access to all outside contractors and non-essential personnel in early April due to COVID-19. The refinery was also put on idle during the period of restricted access. Prior to the COVID-19 restrictions, one fluid recovery event occurred in the second quarter. Marathon recovered 3,000 gallons of water from the standpipe sumps (S1 – S6) on April 1st, 2020. No measurable separate-phase hydrocarbon (SPH) was recovered. There were no fluid recovery attempts made in the first quarter due to restricted access during a turnaround event and construction/maintenance projects.

Except for MKTF-11, water levels in all relevant MKTF wells in the Hydrocarbon Seep area decreased when compared to first quarter levels. This is likely the result of decreased refinery activity in relation to COVID-19 restrictions and market effects. With the exception of MKTF-14, the decrease in water level in the MKTF wells, in the Hydrocarbon Seep area, was less than 2 feet (ft) (MKTF-14 decreased 2.93 ft). The water level in MKTF-11 increased by 0.21 ft after decreasing 0.83 ft in the first quarter. Marathon will continue to monitor the water levels and resume hydrocarbon recovery next quarter.

Pursuant to New Mexico Environment Department's (NMED) letter of March 5, 2019, the area of the seeps is routinely monitored to evaluate the discharge of hydrocarbons to the land surface where shallow water discharges within the retention ditch and to the south near the original seep location. While the amount of SPH discharging into the retention ditch has reduced from initial recovery rates, the area remains wet, SPH is still present in the soils and will continue to discharge even if not on a consistent basis.

- Source Identification - An Investigation Work Plan (IWP) for Area of Concern (AOC) 35, which includes the area around the Marketing Tanks and the Truck Loading Racks, was approved with modifications on September 12, 2019. However, this investigation was postponed for revision due to a gasoline leak from a transfer pipeline in the Truck Loading area found October 27, 2019. A revised Investigation Work Plan No.2 AOC was submitted to NMED on February 2, 2020 to expand the investigation to include the gasoline release and was disapproved August 31, 2020. The proposed investigation included completing two soil borings along the section of the underground transfer line north of the Truck Loading Rack where the leak was identified in the pipeline, ground water sampling (if water is encounter during soil boring installation), and installing a permanent monitoring well west of the Truck Loading Rack between MTKF-17 and MTKF-33. Marathon will address NMED's comments and submit a revised work plan no later than December 31, 2020.

In prior status reports there was a reference to on-going efforts to locate sources of fresh water leaks within the refinery that may be affecting the distribution of contaminants at the hydrocarbon seep area, as well as in other areas of the refinery. Based on the hydrogeologic setting at the refinery property, it is unlikely that much water would be produced from the seep area without a recharge source other than the limited rainfall that occurs at the refinery. The prior reference was not specific to potentially leaking sewer lines, but also other potential sources such as leaking fire water lines or other piping that transmits fresh water to many locations within the refinery. As stated in the last status report, leaks in the firewater lines have been confirmed and repairs are being made. Marathon also continues to evaluate PW-3 to determine if potable water is being lost through casing leaks.

Activities planned for the third quarter 2020

- Source Control – Marathon will resume and continue recovery operations at the standpipe sumps and the retention ditch using a vacuum truck to pump SPH and water from each of the sumps and the downstream retention ditch. Additional evaluation of the area will be initiated in the future to determine if additional or alternative methods could be more effective.

The gasoline release discovered in October 2019 near the Truck Loading Rack is south of the hydrocarbon seep area. However, gauging of existing monitoring wells near the Marketing Tank Farm indicates the gasoline is migrating to the north and it may be able to reach the hydrocarbon seep area. The area is being monitored and recovery efforts will be adjusted at the standpipe sumps and retention ditch, as necessary.

- Investigation – The Sanitary Lagoon Investigation Report was submitted to NMED on February 17, 2020, providing information on the distribution of SPH in the subsurface of this area. However, due to the gasoline release at the Truck Loading Rack and the possibility of gasoline to migrate along the pipeline leading to the lagoon, the Sanitary Lagoon Investigation did not include the area southeast of the lagoon along the pipeline. Investigation in the area along the pipeline was postponed and will be addressed in a work plan to be submitted to NMED by April 1, 2021.

**Marathon Petroleum Company - Gallup Refinery
Stand Pipes Recovery Records**

DATE	hydrocarbon recovered (gallons)	water pumped (gallons)	total fluid pumped (gallons)				
9/3/2013*	682	3818	4500				
9/3/2013*	367	4133	4500				
9/4/2013	62	3938	4000				
9/6/2013	62	3938	4000				
9/9/2013	30	4470	4500				
9/11/2013	30	4470	4500				
9/13/2013	62	3938	4000				
9/16/2013	135	5140	5275				
9/18/2013	125	4111	4236				
9/24/2013	58	4742	4800				
9/26/2013	16	4220	4236				
10/2/2013	29	4918	4947				
10/8/2013	30	4569	4599				
10/18/2013	109	5059	5168				
10/28/2013	199	5379	5578				
10/29/2013	63	4049	4112				
11/12/2013	205	5275	5480				
11/14/2013	78	5168	5246				
11/18/2013	60	4539	4599				
11/26/2013	80	5168	5248				
12/3/2013	54	5169	5223				
12/6/2013	57	4890	4947				
12/12/2013	54	5169	5223				
12/17/2013	58	4775	4833				
12/24/2013	57	4890	4947	2013 Totals	hydrocarbon recovered	water pumped	total fluid pumped
1/2/2014	88	4687	4775		2,705	111,045	113,750
1/6/2014	56	4947	5003				
1/7/2014	32	3829	3861				
1/9/2014	32	3448	3480				
1/13/2014	29	4688	4717				
1/16/2014	29	4688	4717				
1/22/2014	29	4918	4947				
1/29/2014	30	4449	4479				
1/31/2014	61	4236	4297				
2/4/2014	61	4236	4297				
2/11/2014	60	4539	4599				
2/18/2014	57	4890	4947				
2/25/2014	57	4890	4947				

**Marathon Petroleum Company - Gallup Refinery
Stand Pipes Recovery Records**

DATE	hydrocarbon recovered (gallons)	water pumped (gallons)	total fluid pumped (gallons)
2/28/2014	63	3924	3987
3/4/2014	31	4327	4358
3/7/2014	29	4804	4833
3/12/2014	29	4804	4833
3/14/2014	30	4449	4479
3/17/2014	32	3829	3861
3/19/2014	32	3448	3480
3/24/2014	32	3703	3735
3/28/2014	32	3703	3735
4/1/2014	32	3703	3735
4/3/2014	32	3320	3352
4/7/2014	15	4220	4235
4/15/2014	30	4205	4235
4/23/2014	31	4327	4358
5/1/2014	31	4327	4358
5/7/2014	31	4081	4112
5/14/2014	30	4205	4235
5/22/2014	31	4081	4112
5/29/2014	31	3994	4025
6/6/2014	31	4081	4112
6/13/2014	32	3829	3861
6/20/2014	32	3955	3987
7/3/2014	31	4081	4112
7/10/2014	30	4205	4235
7/18/2014	30	4205	4235
7/28/2014	30	4205	4235
8/4/2014	30	4205	4235
8/14/2014	32	3955	3987
8/20/2014	31	4081	4112
8/29/2014	32	3955	3987
9/4/2014	32	3703	3735
9/11/2014	32	3576	3608
9/18/2014	32	3320	3352
9/26/2014	32	3448	3480
9/30/2014	32	3576	3608
10/7/2014	32	3320	3352
10/14/2014	32	3320	3352
10/21/2014	32	3955	3987
10/30/2014	32	3955	3987
11/7/2014	32	3320	3352
11/12/2014	32	3320	3352
11/18/2014	32	3064	3096
12/4/2014	32	3829	3861
12/9/2014	32	3955	3987
12/15/2014	31	4081	4112
12/24/2014	31	4081	4112

**Marathon Petroleum Company - Gallup Refinery
Stand Pipes Recovery Records**

DATE	hydrocarbon recovered (gallons)	water pumped (gallons)	total fluid pumped (gallons)				
12/30/2014	32	3703	3735	2014 Totals	hydrocarbon recovered	water pumped	total fluid pumped
1/8/2015	31	4081	4112		2,108	242,182	244,290
1/21/2015	31	4327	4358				
1/29/2015	32	3448	3480				
2/6/2015	32	3448	3480				
2/11/2015	32	3320	3352				
3/5/2015	29	4688	4717				
3/12/2015	31	4081	4112				
3/16/2015	31	4081	4112				
3/25/2015	32	3703	3735				
3/31/2015	32	3955	3987				
4/13/2015	32	3829	3861				
4/20/2015	32	3703	3735				
4/27/2015	16	4096	4112				
4/30/2015	16	4096	4112				
5/11/2015	16	4220	4236				
5/29/2015	16	3971	3987				
6/8/2015	16	4096	4112				
6/12/2015	16	4096	4112				
6/16/2015	16	4220	4236				
6/24/2015	15	4583	4599				
7/2/2015	16	4096	4112				
7/8/2015	16	3971	3987				
7/15/2015	15	4343	4358				
7/22/2015	16	4220	4236				
7/30/2015	16	3845	3861				
8/6/2015	16	4220	4236				
8/12/2015	16	3971	3987				
8/17/2015	16	4220	4236				
8/21/2015	16	3845	3861				
8/26/2015	16	4220	4236				
9/2/2015	15	4464	4479				
9/11/2015	14	5154	5168				
9/25/2015	15	4464	4479				
10/2/2015	15	4583	4599				
10/8/2015	16	4220	4236				
10/23/2015	16	4817	4833				
10/29/2015	16	4220	4236				
11/11/2015	14	4933	4947				
11/20/2015	24	5554	5578				
11/30/2015	43	4790	4833				
12/10/2015	56	5323	5379				
12/17/2015	56	4891	4947				
12/24/2015	54	5114	5168				

**Marathon Petroleum Company - Gallup Refinery
Stand Pipes Recovery Records**

DATE	hydrocarbon recovered (gallons)	water pumped (gallons)	total fluid pumped (gallons)				
12/31/2015	54	5114	5168	2015 Totals	hydrocarbon recovered	water pumped	total fluid pumped
1/7/2016	56	5323	5379		1,071	188,634	189,707
1/19/2016	51	5429	5480				
1/26/2016	56	5003	5059				
2/11/2016	54	5221	5275				
2/17/2016	56	4891	4947				
2/25/2016	56	5323	5379				
3/4/2016	47	5625	5672				
3/11/2016	49	5529	5578				
3/17/2016	59	4658	4717				
3/24/2016	45	5717	5762				
3/31/2016	49	5529	5578				
4/6/2016	38	5966	6004				
4/15/2016	40	5888	5928				
4/20/2016	56	5323	5379				
4/27/2016	43	5804	5847				
5/5/2016	47	5625	5672				
5/9/2016	60	4419	4479				
5/10/2016	45	5717	5762				
5/17/2016	40	5888	5928				
5/19/2016	51	5429	5480				
5/24/2016	38	5966	6004				
5/25/2016	49	5529	5578				
5/27/2016	43	5804	5847				
6/1/2016	45	5717	5762				
6/3/2016	51	5429	5480				
6/7/2016	35	6039	6074				
6/9/2016	47	5625	5672				
6/13/2016	40	5888	5928				
6/16/2016	38	5966	6004				
6/20/2016	40	5888	5928				
6/23/2016	49	5529	5578				
6/27/2016	47	5625	5672				
6/30/2016	60	4419	4479				
7/6/2016	232	4768	5000				
7/8/2016	109	3891	4000				
7/11/2016	232	4768	5000				
7/19/2016	300	5300	5600				
7/21/2016	109	3891	4000				
7/25/2016	232	4768	5000				
7/28/2016	109	3891	4000				
8/2/2016	232	4768	5000				
8/9/2016	300	5300	5600				
8/15/2016	232	4768	5000				

**Marathon Petroleum Company - Gallup Refinery
Stand Pipes Recovery Records**

DATE	hydrocarbon recovered (gallons)	water pumped (gallons)	total fluid pumped (gallons)				
8/18/2016	109	3891	4000				
8/23/2016	232	4768	5000				
8/25/2016	109	3891	4000				
8/29/2016	232	4768	5000				
9/1/2016	109	3891	4000				
9/7/2016	232	4768	5000				
9/9/2016	109	4187	4296				
9/12/2016	109	3891	4000				
9/15/2016	109	3891	4000				
9/19/2016	232	4768	5000				
9/27/2016	300	5300	5600				
9/29/2016	109	3891	4000				
10/5/2016	280	5180	5460				
10/7/2016	280	5180	5460				
10/10/2016	280	5180	5460				
10/20/2016	109	3891	4000				
10/26/2016	50	2450	2500				
10/28/2016	109	3891	4000				
11/1/2016	109	3891	4000				
11/3/2016	109	3891	4000				
11/8/2016	109	3891	4000				
11/10/2016	109	3891	4000				
11/14/2016	109	3891	4000				
11/23/2016	109	3891	4000				
12/6/2016	109	3891	4000				
12/8/2016	109	3891	4000				
12/13/2016	303	4697	5000				
12/15/2016	109	3891	4000				
12/20/2016	109	3891	4000				
12/27/2016	400	4600	5000				
12/29/2016	109	3891	4000	2016 Totals	hydrocarbon recovered	water pumped	total fluid pumped
					8,668	357,619	366,287
1/10/2017	109	3891	4000				
1/20/2017	167	4333	4500				
2/2/2017	109	3891	4000				
2/6/2017	231	4769	5000				
2/17/2017	231	4769	5000				
2/20/2017	109	3891	4000				
3/1/2017	109	4891	5000				
3/6/2017	167	4833	5000				
3/9/2017	109	3891	4000				
3/14/2017	231	4769	5000				

**Marathon Petroleum Company - Gallup Refinery
Stand Pipes Recovery Records**

DATE	hydrocarbon recovered (gallons)	water pumped (gallons)	total fluid pumped (gallons)
5/8/2017	303	4697	5000
5/12/2017	167	3833	4000
5/15/2017	167	3833	4000
5/16/2017	10	5590	5600
5/18/2017	10	3090	3100
5/23/2017	40	5560	5600
5/24/2017	232	4768	5000
5/30/2017	20	5980	6000
6/1/2017	10	2990	3000
6/6/2017	100	7900	8000
6/8/2017	10	5990	6000
6/13/2017	10	5990	6000
6/15/2017	50	5950	6000
6/20/2017	10	5990	6000
6/22/2017	10	5990	6000
6/27/2017	20	5980	6000
6/29/2017	10	5990	6000
7/5/2017	10	2990	3000
7/7/2017	50	8950	9000
7/11/2017	10	5990	6000
7/14/2017	10	5990	6000
7/17/2017	10	2990	3000
7/18/2017	20	2980	3000
7/20/2017	50	8950	9000
7/26/2017	75	5925	6000
7/27/2017	50	2950	3000
8/2/2017	75	5425	5500
8/4/2017	10	3490	3500
8/8/2017	25	5475	5500
8/10/2017	20	3480	3500
8/16/2017	15	4485	4500
8/21/2017	50	7950	8000
8/25/2017	25	2975	3000
8/29/2017	50	5950	6000
8/31/2017	20	2980	3000
9/6/2017	15	5985	6000
9/8/2017	15	2985	3000
9/12/2017	25	5975	6000
9/14/2017	75	3925	4000
9/19/2017	49	2951	3000
9/26/2017	49	3751	3800
9/28/2017	25	3775	3800

**Marathon Petroleum Company - Gallup Refinery
Stand Pipes Recovery Records**

DATE	hydrocarbon recovered (gallons)	water pumped (gallons)	total fluid pumped (gallons)				
10/4/2017	50	3450	3500				
10/6/2017	45	3455	3500				
10/10/2017	25	5975	6000				
10/12/2017	50	2950	3000				
10/17/2017	50	5450	5500				
10/19/2017	9	2841	2850				
10/24/2017	19	5981	6000				
10/26/2017	49	2451	2500				
11/1/2017	49	5951	6000				
11/7/2017	50	2950	3000				
11/9/2017	24	4976	5000				
11/14/2017	9	5991	6000				
11/15/2017	9	2991	3000				
11/21/2017	9	5991	6000				
11/22/2017	9	2991	3000				
11/28/2017	9	5991	6000				
11/30/2017	9	2991	3000				
12/4/2017	25	7575	7600				
12/7/2017	25	5975	6000				
12/12/2017	19	7581	7600				
12/14/2017	9	2991	3000				
12/19/2017	9	2991	3000				
12/21/2017	49	5951	6000				
12/27/2017	49	5951	6000	2017 Totals	hydrocarbon recovered	water pumped	total fluid pumped
					4,238	365,712	369,950
1/2/2018	9	7591	7600				
1/4/2018	9	3791	3800				
1/9/2018	9	3791	3800				
1/11/2018	9	7591	7600				
1/15/2018	19	3781	3800				
1/17/2018	19	7581	7600				
1/23/2018	9	3791	3800				
1/31/2018	9	2991	3000				
2/2/2018	9	2991	3000				
2/9/2018	9	5991	6000				
2/13/2018	9	3791	3800				
2/15/2018	9	7591	7600				
2/21/2018	9	5991	6000				
2/27/2018	0	3800	3800				

**Marathon Petroleum Company - Gallup Refinery
Stand Pipes Recovery Records**

DATE	hydrocarbon recovered (gallons)	water pumped (gallons)	total fluid pumped (gallons)				
3/1/2018	0	3000	3000				
3/6/2018	0	3000	3000				
3/8/2018	4	3796	3800				
3/13/2018	4	2996	3000				
3/16/2018	4	2996	3000				
3/20/2018	4	2996	3000		hydrocarbon recovered	water pumped	total fluid pumped
3/22/2018	0	3000	3000	1st Qtr 2018 Totals	153	92,847	93,000
4/3/2018	3	2997	3000				
6/6/2018	3	3097	3100				
6/8/2018	3	3097	3100				
6/12/2018	0	3800	3800				
6/14/2018	0	3000	3000				
6/20/2018	0	3500	3500				
6/21/2018	0	3000	3000				
6/26/2018	0	3000	3000		hydrocarbon recovered	water pumped	total fluid pumped
6/28/2018	0	3000	3000	2nd Qtr 2018 Totals	9	28,491	28,500
2-Jul-18	0	2800	2800				
5-Jul-18	0	3000	3000				
10-Jul-18	0	3000	3000				
12-Jul-18	0	3000	3000				
18-Jul-18	0	3000	3000				
19-Jul-18	0	3000	3000				
24-Jul-18	0	3000	3000				
26-Jul-18	0	3000	3000				
31-Jul-18	0	3000	3000				
2-Aug	0	3000	3000				
7-Aug	0	3000	3000				
9-Aug-18	0	3800	3800				
14-Aug-18	0	3800	3800				
16-Aug-18	0	3100	3100				
20-Aug-18	0	3800	3800				
22-Aug-18	0	3800	3800				
27-Aug-18	0	3800	3800				
29-Aug-18	0	3100	3100				
5-Sep-18	0	3000	3000				
7-Sep-18	0	3000	3000				
10-Sep-18	0	4800	4800				
12-Sep-18	0	6000	6000				
17-Sep-18	0	3000	3000				
19-Sep-18	0	6000	6000				

**Marathon Petroleum Company - Gallup Refinery
Stand Pipes Recovery Records**

DATE	hydrocarbon recovered (gallons)	water pumped (gallons)	total fluid pumped (gallons)				
24-Sep-18	0	3000	3000		hydrocarbon recovered	water pumped	total fluid pumped
26-Sep-18	0	3000	3000	3rd Qtr 2018 Totals	0	89,800	89,800
1-Oct	0	3800	3800				
8-Oct-18	0	3500	3500				
16-Oct-18	0	3000	3000				
18-Oct-18	0	3500	3500				
23-Oct-18	0	3000	3000				
27-Oct-18	0	3100	3100				
1-Nov-18	0	3000	3000				
15-Nov-18	0	3000	3000				
20-Nov-18	0	3100	3100				
23-Nov-18	0	3200	3200				
27-Nov-18	0	3000	3000				
28-Nov-18	0	3000	3000				
3-Dec-18	0	3400	3400				
6-Dec-18	0	3100	3100				
10-Dec-18	0	3000	3000				
14-Dec-18	0	2900	2900				
18-Dec-18	0	2900	2900				
21-Dec-18	0	2500	2500				
24-Dec-18	0	3000	3000				
27-Dec-18	0	3000	3000				
28-Dec-19	0	3200	3200		hydrocarbon recovered	water pumped	total fluid pumped
31-Dec-19	0	3200	3200	4th Qtr 2018 Totals	0	68,400	68,400
3-Jan	0	3000	3000				
12-Jan-19	0	3000	3000				
16-Jan-19	0	2800	2800				
22-Jan-19	0	4500	4500				
29-Jan-19	0	4000	4000				
31-Jan-19	0	3200	3200				
4-Feb	0	3000	3000				
7-Feb	0	4500	4500				
15-Feb-19	0	3100	3100				
28-Mar-19	0	3000	3000		hydrocarbon recovered	water pumped	total fluid pumped
				1st Qtr 2019	0	34,100	34,100
3-Apr	0	3900	3900				
4-Apr	0	3000	3000				

**Marathon Petroleum Company - Gallup Refinery
Stand Pipes Recovery Records**

DATE	hydrocarbon recovered (gallons)	water pumped (gallons)	total fluid pumped (gallons)				
10-Apr-19	0	5800	5800				
19-Apr-19	0	3090	3090				
22-Apr-19	0	5894	5894				
1-May	0	4925	4925				
3-May	0	3109	3109				
20-May-19	0	6150	6150				
24-May-19	0	3119	3119				
29-May-19	0	6242	6242				
09-Jun-19	0	5061	5061				
10-Jun-19	0	6242	6242				
14-Jun-19	0	3119	3119			hydrocarbon recovered	water pumped
26-Jun-19	0	6242	6242	2nd Qtr 2019	0	65,893	65,893
11-Jul-19	0	6242	6242				
17-Jul-19	0	3119	3119				
09-Aug-19	0	3000	3000				
09-Aug-19	0	2700	2700				
13-Aug-19	0	3000	3000				
13-Aug-19	0	2100	2100				
19-Aug-19	0	3096	3096				
26-Aug-19	0	3000	3000				
26-Aug-19	0	2700	2700				
09-Sep-19	0	2500	2500				
09-Sep-19	0	2500	2500				
11-Sep-19	0	3119	3119				
11-Sep-19	0	3049	3049				
19-Sep-19	0	2850	2850				
19-Sep-19	0	3000	3000				
19-Sep-19	0	1200	1200				
26-Sep-19	0	3057	3057			hydrocarbon recovered	water pumped
26-Sep-19	0	3028	3028	3rd Qtr 2019	0	53,260	53,260
02-Oct-19	0	3,050	3,050			hydrocarbon recovered	water pumped
14-Nov-19	0	2,640	2,640	4th Qtr 2019	0	5,690	5,690
31-Mar-20	0	0	0	1st Qtr 2020	0	0	0
01-Apr-20	0	3,000	3000	2nd Qtr 2020	0	3,000	3,000
TOTALS	19,009	1,711,563	1,730,574				

Marathon Petroleum Company - Gallup Refinery
Retention Ditch Recovery Records

DATE	LOADS	water/oil mixture (gallons)	oil (gallons)
4/1/2016	1	5460	NR
4/27/2016	1	5460	NR
4/28/2016	1	5460	NR
5/5/2016	1	5460	NR
5/9/2016	0.75	4200	NR
5/13/2016	1	5460	NR
5/24/2016	1	5460	NR
5/26/2016	0.5	2730	NR
5/27/2016	1	5460	NR
6/1/2016	1	5460	NR
6/2/2016	1	5460	NR
6/6/2016	1	5460	NR
6/8/2016	1	5460	NR
6/9/2016	0.5	2730	NR
6/14/2016	1	5460	NR
6/16/2016	1	5460	NR
6/23/2016	1	5460	NR
6/29/2016	0.5	2730	NR
7/6/2016	1	5460	NR
7/8/2016	1	5460	NR
7/13/2016	1	5460	NR
7/21/2016	1	5460	NR
7/27/2016	1	5460	NR
8/3/2016	1	5460	NR
8/9/2016	2	10920	NR
8/10/2016	0.5	2730	NR
8/16/2016	1	5460	NR
8/17/2016	1	5460	NR
8/18/2016	0.5	2730	NR
8/23/2016	2	10920	NR
8/24/2016	1	5460	NR
8/26/2016	1	5460	NR
8/30/2016	1	5460	NR
9/1/2016	2	10920	NR
9/8/2016	2	10920	NR
9/14/2016	2	10920	NR
10/6/2016	1	5460	NR
10/7/2016	1	5460	NR
10/10/2016	2	10920	NR
10/20/2016	1	5460	NR

Marathon Petroleum Company - Gallup Refinery
Retention Ditch Recovery Records

DATE	LOADS	water/oil mixture (gallons)	oil (gallons)			
10/24/2016	1	5460	NR			
10/26/2016	2	10920	NR			
10/27/2016	1	5460	NR			
10/31/2016	2	10920	NR			
11/8/2016	2	10920	NR			
11/10/2016	3	16380	NR			
11/11/2016	0.77	4200	NR			
11/15/2016	0.5	2730	NR			
11/16/2016	1	5460	NR			
12/6/2016	1	5460	NR			
12/8/2016	1	5460	NR			
12/14/2016	1	5460	NR			
12/15/2016	3	15120	NR	2016 Totals	LOADS	water/oil mixture
					62.52	340,200
2/21/2017	NR	5000	NR			
3/8/2017	NR	10000	NR			
3/10/2017	NR	4000	NR			
3/14/2017	NR	10000	NR			
3/15/2017	NR	4000	NR			
3/16/2017	NR	1250	NR			
3/17/2017	NR	5000	NR			
5/16/2017	1	2000	20			
5/17/2017	3	15000	NR			
5/22/2017	1	5000	NR			
5/23/2017	1	2800	20			
5/24/2017	1	5000	NR			
5/30/2017	1	3500	10			
6/6/2017	1	3100	20			
6/8/2017	2	5800	20			
6/13/2017	1	2900	30			
6/15/2017	1	3000	10			
6/20/2017	1	2000	10			
6/22/2017	1	3000	20			
6/27/2017	2	5500	40			
6/29/2017	1	2500	10			
7/5/2017	2	5600	10			
7/7/2017	1	3000	20			
7/11/2017	1	3000	10			

**Marathon Petroleum Company - Gallup Refinery
Retention Ditch Recovery Records**

DATE	LOADS	water/oil mixture (gallons)	oil (gallons)			
7/14/2017	1	3000	10			
7/18/2017	1	2500	10			
7/20/2017	1	3000	10			
7/27/2017	2	4500	10			
8/3/2017	2	5000	20			
8/4/2017	1	3000	20			
8/9/2017	1	3000	25			
8/16/2017	1	2000	10			
8/25/2017	1	1500	50			
8/31/2017	1	2000	40			
9/7/2017	2	5200	80			
9/15/2017	2	5500	100			
9/20/2017	1	3800	100			
9/26/2017	1	3800	10			
10/4/2017	1	3500	100			
10/12/2017	1	2800	95			
10/19/2017	1	3000	100			
10/26/2017	1	2500	100			
11/1/2017	1	3000	100			
11/7/2017	1	3000	100			
11/15/2017	2	5500	100			
11/22/2017	1	2000	100			
11/28/2017	1	2000	50			
12/4/2017	1	1500	100			
12/14/2017	1	1500	50			
12/19/2017	1	2500	100	2017 Totals	Loads	Oil/water mixture
12/27/2017	1	2000	50		54	194,550
1/4/2018	1	2800	25			
1/9/2018	2	7500	9			
1/15/2018	1	2500	20			
1/23/2018	1	3800	9			
1/31/2018	1	2500	9			
2/2/2018	1	2500	9			
2/13/2018	1	2000	9			
2/21/2018	1	2080	20			
3/6/2018	1	1500	19			
3/13/2018	1	1500	9	# of loads	water/oil mixture	

**Marathon Petroleum Company - Gallup Refinery
Retention Ditch Recovery Records**

DATE	LOADS	water/oil mixture (gallons)	oil (gallons)			
3/22/2018	1	1500	20	1st Qtr 2018	13	32,180
	0	0	0	2nd Qtr 2018	0	0
5-Jul-18	1	1800	36			
12-Jul-18	1	2000	100			
20-Jul-18	1	2000	40			
25-Jul-18	1	1800	36			
27-Jul-18	1	1800	36			
7-Aug-18	1	1900	38			
17-Aug-18	1	2000	80			
22-Aug-18	1	1800	72			
24-Aug-18	1	500	20			
30-Aug-18	1	500	20			
7-Sep-18	1	2000	20			
13-Sep-18	1	1500	30			
14-Sep-18	1	2000	40			
19-Sep-18	1	1500	30			
26-Sep-18	1	1500	30			
28-Sep-18	1	1500	30	3rd Qtr 2018	# of loads 16	water/oil mixture 26,100
16-Oct-18	1	2200	220			
18-Oct-18	1	2000	40			
23-Oct-18	1	1500	30			
1-Nov-18	1	2500	50			
15-Nov-18	1	2500	50			
23-Nov-18	1	2600	52			
6-Dec-18	1	2600	52			
10-Dec-18	1	2000	40			
11-Dec-18	1	300	30			
14-Dec-18	1	2300	46			
13-Jan-19	1	2000	20	4th Qtr 2018	# of loads 10	water/oil mixture 20,500
23-Jan-19	1	2400	48			
31-Jan-19	1	2400	48			
5-Feb	1	2000	20			
28-Mar-19	1	2900	0	1st Qtr 2019	# of loads 5	water/oil mixture 11700
4-Apr	1	2800	28	Totals		

**Marathon Petroleum Company - Gallup Refinery
Retention Ditch Recovery Records**

DATE	LOADS	water/oil mixture (gallons)	oil (gallons)			
19-Apr-19	1	1540	46.2			
14-Jun-19	1	1560	312		# of loads	water/oil mixture
27-Jun-19	1	2400	216	2nd Qtr 2019	4	8300
11-Jul-19	1	500	25			
17-Jul-19	1	594	75			
20-Aug-19	1	2245	45			
29-Aug-19	1	1820	20			
10-Sep-19	1	2077	25			
20-Sep-19	1	2615	25		# of loads	water/oil mixture
30-Sep-19	1	2800	30	3rd Qtr 2019	7	12651
3-Oct-19	1	1,800	25	4th Qtr 2019	1	1,800
31-Mar-20	0	0	0	1st Qtr 2020	0	0
30-Jun-20	0	0	0	2nd Qtr 2020	0	0

Project Totals	171.5	645,981.0	4,324.2
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Totals for oil only includes data since May 2017

From: [Caitlin Fields](#)
To: [Cobrain, Dave, NMENV](#); [Chavez, Carl J, EMNRD](#)
Cc: [Moore, John](#); gjmccartney@marathonpetroleum.com; [Moore, Brian](#); [Caitlin Fields](#)
Subject: [EXT] Gallup 1st Quarter 2020 Hydrocarbon Seep Report
Date: Wednesday, September 30, 2020 9:24:03 AM
Attachments: [image001.png](#)
[2020_1stQuarter_IM_Seep_Report.pdf](#)

Good Morning,

Please find the 1st Quarter 2020 Hydrocarbon Seep Report due to NMED by September 30th. Hard copies and a CD were shipped to NMED yesterday. Please contact John Moore if you have any questions.

Have a good day,
Caitlin

Caitlin Fields
Associate Engineer

1252 Commerce Drive
Laramie, Wyoming 82070
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Western Refining Southwest, Inc.

A subsidiary of Marathon Petroleum Corporation

I-40 Exit 39

Jamestown, NM 87347

September 28, 2020

Mr. Kevin Pierard, Chief
New Mexico Environmental Department
Hazardous Waste Bureau
2905 Rodeo Park Drive East, Building 1
Santa Fe, NM 87505

RE: Hydrocarbon Seep Interim Measures 2020 First Quarter Status Report
Marathon Petroleum Company LP, Gallup Refinery
(dba Western Refining Southwest, Inc.)
EPA ID# NMD000333211
HWB-WRG-19-001

Dear Mr. Pierard:

Please find enclosed the Hydrocarbon Seep Interim Measures Status Report for the first quarter of 2020. If you have any questions or comments regarding the information contained herein, please do not hesitate to contact John Moore at 505-879-7643.

Certification

I certify under penalty of law that this document and all attachments were prepared under my direction of supervision according to a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Sincerely,
Marathon Petroleum Company LP, Gallup Refinery

Robert S. Hanks
Refinery General Manager

Enclosure

cc: D. Cobrain, NMED HWB
C. Chavez, OCD
J. Moore, MPC
H. Jones, Trihydro Corporation

Activities conducted during first quarter 2020

- Source Control – Due to a turnaround event and construction/maintenance projects, non-essential refinery activity was restricted this quarter. Marathon restricted vacuum truck movements during this time, resulting in no fluid recovery activity from the standpipe sumps (S1 – S6) or the retention ditch in the first quarter. During the fourth quarter of 2019, Marathon recovered 5,690 gallons of water from the standpipe sumps with no measurable separate phase hydrocarbon (SPH) recovered.

Water levels in MKTF-01, MKTF-02, and MKTF-26 in the vicinity of the Hydrocarbon Seep Area, increased between 0.25 and 0.62 feet (ft) when compared to the fourth quarter 2019. There were similar water level increases in upgradient wells MKTF-03, MKTF-14, and MKTF-04 and significant water level increases (greater than 2 feet), near the Truck Loading Rack area, in MKTF-05, MKTF-06, and MKTF-07. There was a notable water level decrease in MKTF-11 (0.83 feet) and a significant water level decrease in MKTF-13 (4.91 ft). Marathon will continue to monitor the water levels and resume hydrocarbon recovery next quarter.

Pursuant to New Mexico Environment Department's (NMED) letter of March 5, 2019, the area of the seeps is routinely monitored to evaluate the discharge of hydrocarbons to the land surface where shallow water discharges within the retention ditch and to the south near the original seep location. While the amount of SPH discharging into the retention ditch has reduced from initial recovery rates, the area remains wet, SPH is still present in the soils and will continue to discharge even if not on a consistent basis.

- Source Identification - An Investigation Work Plan (IWP) for Area of Concern (AOC) 35, which includes the area around the Marketing Tanks and the Truck Loading Racks, was approved with modifications on September 12, 2019. However, this investigation was postponed for revision due to a gasoline leak from a transfer pipeline in the Truck Loading area found October 27, 2019. A revised Investigation Work Plan No.2 AOC was submitted to NMED on February 2, 2020 to expand the investigation to include the gasoline release and was disapproved August 31, 2020. The proposed investigation included completing two soil borings along the section of the underground transfer line north of the Truck Loading Rack where the leak was identified in the pipeline, ground water sampling (if water is encountered during soil boring installation), and installing a permanent monitoring well west of the Truck Loading Rack between MTKF-17 and MTKF-33. Marathon will address NMED's comments and submit a revised work plan no later than December 31, 2020.

In prior status reports there was a reference to on-going efforts to locate sources of fresh water leaks within the refinery that may be affecting the distribution of contaminants at the hydrocarbon seep area, as well as in other areas of the refinery. Based on the hydrogeologic setting at the refinery property, it is unlikely that much water would be produced from the seep area without a recharge source other than the limited rainfall that occurs at the refinery. The prior reference was not specific to potentially leaking sewer lines, but also other potential sources such as leaking fire water lines or other piping that transmits fresh water to many locations within the refinery. As stated in the last status report, leaks in the firewater

lines have been confirmed and repairs are being made. Marathon also continues to evaluate PW-3 to determine if potable water is being lost through casing leaks.

Activities planned for the second quarter 2020

- Source Control – Marathon will resume and continue recovery operations at the standpipe sumps and the retention ditch using a vacuum truck to pump SPH and water from each of the sumps and the downstream retention ditch. Additional evaluation of the area will be initiated in the future to determine if additional or alternative methods could be more effective.

The gasoline release discovered in October 2019 near the Truck Loading Rack is south of the hydrocarbon seep area. However, gauging of existing monitoring wells near the Marketing Tank Farm indicates the gasoline is migrating to the north and it may be able to reach the hydrocarbon seep area. The area is being monitored and recovery efforts will be adjusted at the standpipe sumps and retention ditch, as necessary.

- Investigation – The Sanitary Lagoon Investigation Report was submitted to NMED on February 17, 2020, providing information on the distribution of SPH in the subsurface of this area. However, due to the gasoline release at the Truck Loading Rack and the possibility of gasoline to migrate along the pipeline leading to the lagoon, the Sanitary Lagoon Investigation did not include the area southeast of the lagoon along the pipeline. Investigation in the area along the pipeline was postponed and will be addressed in a work plan to be submitted to NMED by April 1, 2021.

**Marathon Petroleum Company - Gallup Refinery
Stand Pipes Recovery Records**

DATE	hydrocarbon recovered (gallons)	water pumped (gallons)	total fluid pumped (gallons)				
9/3/2013*	682	3818	4500				
9/3/2013*	367	4133	4500				
9/4/2013	62	3938	4000				
9/6/2013	62	3938	4000				
9/9/2013	30	4470	4500				
9/11/2013	30	4470	4500				
9/13/2013	62	3938	4000				
9/16/2013	135	5140	5275				
9/18/2013	125	4111	4236				
9/24/2013	58	4742	4800				
9/26/2013	16	4220	4236				
10/2/2013	29	4918	4947				
10/8/2013	30	4569	4599				
10/18/2013	109	5059	5168				
10/28/2013	199	5379	5578				
10/29/2013	63	4049	4112				
11/12/2013	205	5275	5480				
11/14/2013	78	5168	5246				
11/18/2013	60	4539	4599				
11/26/2013	80	5168	5248				
12/3/2013	54	5169	5223				
12/6/2013	57	4890	4947				
12/12/2013	54	5169	5223				
12/17/2013	58	4775	4833				
12/24/2013	57	4890	4947	2013 Totals	hydrocarbon recovered	water pumped	total fluid pumped
1/2/2014	88	4687	4775		2,705	111,045	113,750
1/6/2014	56	4947	5003				
1/7/2014	32	3829	3861				
1/9/2014	32	3448	3480				
1/13/2014	29	4688	4717				
1/16/2014	29	4688	4717				
1/22/2014	29	4918	4947				
1/29/2014	30	4449	4479				
1/31/2014	61	4236	4297				
2/4/2014	61	4236	4297				
2/11/2014	60	4539	4599				
2/18/2014	57	4890	4947				

Marathon Petroleum Company - Gallup Refinery
Stand Pipes Recovery Records

DATE	hydrocarbon recovered (gallons)	water pumped (gallons)	total fluid pumped (gallons)
2/25/2014	57	4890	4947
2/28/2014	63	3924	3987
3/4/2014	31	4327	4358
3/7/2014	29	4804	4833
3/12/2014	29	4804	4833
3/14/2014	30	4449	4479
3/17/2014	32	3829	3861
3/19/2014	32	3448	3480
3/24/2014	32	3703	3735
3/28/2014	32	3703	3735
4/1/2014	32	3703	3735
4/3/2014	32	3320	3352
4/7/2014	15	4220	4235
4/15/2014	30	4205	4235
4/23/2014	31	4327	4358
5/1/2014	31	4327	4358
5/7/2014	31	4081	4112
5/14/2014	30	4205	4235
5/22/2014	31	4081	4112
5/29/2014	31	3994	4025
6/6/2014	31	4081	4112
6/13/2014	32	3829	3861
6/20/2014	32	3955	3987
7/3/2014	31	4081	4112
7/10/2014	30	4205	4235
7/18/2014	30	4205	4235
7/28/2014	30	4205	4235
8/4/2014	30	4205	4235
8/14/2014	32	3955	3987
8/20/2014	31	4081	4112
8/29/2014	32	3955	3987
9/4/2014	32	3703	3735
9/11/2014	32	3576	3608
9/18/2014	32	3320	3352
9/26/2014	32	3448	3480
9/30/2014	32	3576	3608
10/7/2014	32	3320	3352
10/14/2014	32	3320	3352
10/21/2014	32	3955	3987

Marathon Petroleum Company - Gallup Refinery
Stand Pipes Recovery Records

DATE	hydrocarbon recovered (gallons)	water pumped (gallons)	total fluid pumped (gallons)				
10/30/2014	32	3955	3987				
11/7/2014	32	3320	3352				
11/12/2014	32	3320	3352				
11/18/2014	32	3064	3096				
12/4/2014	32	3829	3861				
12/9/2014	32	3955	3987				
12/15/2014	31	4081	4112				
12/24/2014	31	4081	4112				
12/30/2014	32	3703	3735	2014 Totals	hydrocarbon recovered	water pumped	total fluid pumped
1/8/2015	31	4081	4112		2,108	242,182	244,290
1/21/2015	31	4327	4358				
1/29/2015	32	3448	3480				
2/6/2015	32	3448	3480				
2/11/2015	32	3320	3352				
3/5/2015	29	4688	4717				
3/12/2015	31	4081	4112				
3/16/2015	31	4081	4112				
3/25/2015	32	3703	3735				
3/31/2015	32	3955	3987				
4/13/2015	32	3829	3861				
4/20/2015	32	3703	3735				
4/27/2015	16	4096	4112				
4/30/2015	16	4096	4112				
5/11/2015	16	4220	4236				
5/29/2015	16	3971	3987				
6/8/2015	16	4096	4112				
6/12/2015	16	4096	4112				
6/16/2015	16	4220	4236				
6/24/2015	15	4583	4599				
7/2/2015	16	4096	4112				
7/8/2015	16	3971	3987				
7/15/2015	15	4343	4358				
7/22/2015	16	4220	4236				
7/30/2015	16	3845	3861				
8/6/2015	16	4220	4236				
8/12/2015	16	3971	3987				
8/17/2015	16	4220	4236				

Marathon Petroleum Company - Gallup Refinery
Stand Pipes Recovery Records

DATE	hydrocarbon recovered (gallons)	water pumped (gallons)	total fluid pumped (gallons)				
8/21/2015	16	3845	3861				
8/26/2015	16	4220	4236				
9/2/2015	15	4464	4479				
9/11/2015	14	5154	5168				
9/25/2015	15	4464	4479				
10/2/2015	15	4583	4599				
10/8/2015	16	4220	4236				
10/23/2015	16	4817	4833				
10/29/2015	16	4220	4236				
11/11/2015	14	4933	4947				
11/20/2015	24	5554	5578				
11/30/2015	43	4790	4833				
12/10/2015	56	5323	5379				
12/17/2015	56	4891	4947				
12/24/2015	54	5114	5168				
12/31/2015	54	5114	5168	2015 Totals	hydrocarbon recovered	water pumped	total fluid pumped
1/7/2016	56	5323	5379		1,071	188,634	189,707
1/19/2016	51	5429	5480				
1/26/2016	56	5003	5059				
2/11/2016	54	5221	5275				
2/17/2016	56	4891	4947				
2/25/2016	56	5323	5379				
3/4/2016	47	5625	5672				
3/11/2016	49	5529	5578				
3/17/2016	59	4658	4717				
3/24/2016	45	5717	5762				
3/31/2016	49	5529	5578				
4/6/2016	38	5966	6004				
4/15/2016	40	5888	5928				
4/20/2016	56	5323	5379				
4/27/2016	43	5804	5847				
5/5/2016	47	5625	5672				
5/9/2016	60	4419	4479				
5/10/2016	45	5717	5762				
5/17/2016	40	5888	5928				
5/19/2016	51	5429	5480				
5/24/2016	38	5966	6004				

Marathon Petroleum Company - Gallup Refinery
Stand Pipes Recovery Records

DATE	hydrocarbon recovered (gallons)	water pumped (gallons)	total fluid pumped (gallons)
5/25/2016	49	5529	5578
5/27/2016	43	5804	5847
6/1/2016	45	5717	5762
6/3/2016	51	5429	5480
6/7/2016	35	6039	6074
6/9/2016	47	5625	5672
6/13/2016	40	5888	5928
6/16/2016	38	5966	6004
6/20/2016	40	5888	5928
6/23/2016	49	5529	5578
6/27/2016	47	5625	5672
6/30/2016	60	4419	4479
7/6/2016	232	4768	5000
7/8/2016	109	3891	4000
7/11/2016	232	4768	5000
7/19/2016	300	5300	5600
7/21/2016	109	3891	4000
7/25/2016	232	4768	5000
7/28/2016	109	3891	4000
8/2/2016	232	4768	5000
8/9/2016	300	5300	5600
8/15/2016	232	4768	5000
8/18/2016	109	3891	4000
8/23/2016	232	4768	5000
8/25/2016	109	3891	4000
8/29/2016	232	4768	5000
9/1/2016	109	3891	4000
9/7/2016	232	4768	5000
9/9/2016	109	4187	4296
9/12/2016	109	3891	4000
9/15/2016	109	3891	4000
9/19/2016	232	4768	5000
9/27/2016	300	5300	5600
9/29/2016	109	3891	4000
10/5/2016	280	5180	5460
10/7/2016	280	5180	5460
10/10/2016	280	5180	5460
10/20/2016	109	3891	4000
10/26/2016	50	2450	2500

**Marathon Petroleum Company - Gallup Refinery
Stand Pipes Recovery Records**

DATE	hydrocarbon recovered (gallons)	water pumped (gallons)	total fluid pumped (gallons)				
10/28/2016	109	3891	4000				
11/1/2016	109	3891	4000				
11/3/2016	109	3891	4000				
11/8/2016	109	3891	4000				
11/10/2016	109	3891	4000				
11/14/2016	109	3891	4000				
11/23/2016	109	3891	4000				
12/6/2016	109	3891	4000				
12/8/2016	109	3891	4000				
12/13/2016	303	4697	5000				
12/15/2016	109	3891	4000				
12/20/2016	109	3891	4000				
12/27/2016	400	4600	5000				
12/29/2016	109	3891	4000	2016 Totals	hydrocarbon recovered	water pumped	total fluid pumped
					8,668	357,619	366,287
1/10/2017	109	3891	4000				
1/20/2017	167	4333	4500				
2/2/2017	109	3891	4000				
2/6/2017	231	4769	5000				
2/17/2017	231	4769	5000				
2/20/2017	109	3891	4000				
3/1/2017	109	4891	5000				
3/6/2017	167	4833	5000				
3/9/2017	109	3891	4000				
3/14/2017	231	4769	5000				
5/8/2017	303	4697	5000				
5/12/2017	167	3833	4000				
5/15/2017	167	3833	4000				
5/16/2017	10	5590	5600				
5/18/2017	10	3090	3100				
5/23/2017	40	5560	5600				
5/24/2017	232	4768	5000				
5/30/2017	20	5980	6000				
6/1/2017	10	2990	3000				
6/6/2017	100	7900	8000				
6/8/2017	10	5990	6000				

Marathon Petroleum Company - Gallup Refinery
Stand Pipes Recovery Records

DATE	hydrocarbon recovered (gallons)	water pumped (gallons)	total fluid pumped (gallons)
6/13/2017	10	5990	6000
6/15/2017	50	5950	6000
6/20/2017	10	5990	6000
6/22/2017	10	5990	6000
6/27/2017	20	5980	6000
6/29/2017	10	5990	6000
7/5/2017	10	2990	3000
7/7/2017	50	8950	9000
7/11/2017	10	5990	6000
7/14/2017	10	5990	6000
7/17/2017	10	2990	3000
7/18/2017	20	2980	3000
7/20/2017	50	8950	9000
7/26/2017	75	5925	6000
7/27/2017	50	2950	3000
8/2/2017	75	5425	5500
8/4/2017	10	3490	3500
8/8/2017	25	5475	5500
8/10/2017	20	3480	3500
8/16/2017	15	4485	4500
8/21/2017	50	7950	8000
8/25/2017	25	2975	3000
8/29/2017	50	5950	6000
8/31/2017	20	2980	3000
9/6/2017	15	5985	6000
9/8/2017	15	2985	3000
9/12/2017	25	5975	6000
9/14/2017	75	3925	4000
9/19/2017	49	2951	3000
9/26/2017	49	3751	3800
9/28/2017	25	3775	3800
10/4/2017	50	3450	3500
10/6/2017	45	3455	3500
10/10/2017	25	5975	6000
10/12/2017	50	2950	3000
10/17/2017	50	5450	5500
10/19/2017	9	2841	2850

Marathon Petroleum Company - Gallup Refinery
Stand Pipes Recovery Records

DATE	hydrocarbon recovered (gallons)	water pumped (gallons)	total fluid pumped (gallons)				
10/24/2017	19	5981	6000				
10/26/2017	49	2451	2500				
11/1/2017	49	5951	6000				
11/7/2017	50	2950	3000				
11/9/2017	24	4976	5000				
11/14/2017	9	5991	6000				
11/15/2017	9	2991	3000				
11/21/2017	9	5991	6000				
11/22/2017	9	2991	3000				
11/28/2017	9	5991	6000				
11/30/2017	9	2991	3000				
12/4/2017	25	7575	7600				
12/7/2017	25	5975	6000				
12/12/2017	19	7581	7600				
12/14/2017	9	2991	3000				
12/19/2017	9	2991	3000				
12/21/2017	49	5951	6000				
12/27/2017	49	5951	6000	2017 Totals	hydrocarbon recovered	water pumped	total fluid pumped
					4,238	365,712	369,950
1/2/2018	9	7591	7600				
1/4/2018	9	3791	3800				
1/9/2018	9	3791	3800				
1/11/2018	9	7591	7600				
1/15/2018	19	3781	3800				
1/17/2018	19	7581	7600				
1/23/2018	9	3791	3800				
1/31/2018	9	2991	3000				
2/2/2018	9	2991	3000				
2/9/2018	9	5991	6000				
2/13/2018	9	3791	3800				
2/15/2018	9	7591	7600				
2/21/2018	9	5991	6000				
2/27/2018	0	3800	3800				
3/1/2018	0	3000	3000				

Marathon Petroleum Company - Gallup Refinery
Stand Pipes Recovery Records

DATE	hydrocarbon recovered (gallons)	water pumped (gallons)	total fluid pumped (gallons)				
3/6/2018	0	3000	3000				
3/8/2018	4	3796	3800				
3/13/2018	4	2996	3000				
3/16/2018	4	2996	3000				
3/20/2018	4	2996	3000		hydrocarbon recovered	water pumped	total fluid pumped
3/22/2018	0	3000	3000	1st Qtr 2018 Totals	153	92,847	93,000
4/3/2018	3	2997	3000				
6/6/2018	3	3097	3100				
6/8/2018	3	3097	3100				
6/12/2018	0	3800	3800				
6/14/2018	0	3000	3000				
6/20/2018	0	3500	3500				
6/21/2018	0	3000	3000				
6/26/2018	0	3000	3000		hydrocarbon recovered	water pumped	total fluid pumped
6/28/2018	0	3000	3000	2nd Qtr 2018 Totals	9	28,491	28,500
2-Jul-18	0	2800	2800				
5-Jul-18	0	3000	3000				
10-Jul-18	0	3000	3000				
12-Jul-18	0	3000	3000				
18-Jul-18	0	3000	3000				
19-Jul-18	0	3000	3000				
24-Jul-18	0	3000	3000				
26-Jul-18	0	3000	3000				
31-Jul-18	0	3000	3000				
2-Aug	0	3000	3000				
7-Aug	0	3000	3000				
9-Aug-18	0	3800	3800				
14-Aug-18	0	3800	3800				
16-Aug-18	0	3100	3100				
20-Aug-18	0	3800	3800				
22-Aug-18	0	3800	3800				
27-Aug-18	0	3800	3800				
29-Aug-18	0	3100	3100				

Marathon Petroleum Company - Gallup Refinery
Stand Pipes Recovery Records

DATE	hydrocarbon recovered (gallons)	water pumped (gallons)	total fluid pumped (gallons)				
5-Sep-18	0	3000	3000				
7-Sep-18	0	3000	3000				
10-Sep-18	0	4800	4800				
12-Sep-18	0	6000	6000				
17-Sep-18	0	3000	3000				
19-Sep-18	0	6000	6000				
24-Sep-18	0	3000	3000			hydrocarbon recovered	water pumped
26-Sep-18	0	3000	3000	3rd Qtr 2018 Totals	0	89,800	89,800
1-Oct	0	3800	3800				
8-Oct-18	0	3500	3500				
16-Oct-18	0	3000	3000				
18-Oct-18	0	3500	3500				
23-Oct-18	0	3000	3000				
27-Oct-18	0	3100	3100				
1-Nov-18	0	3000	3000				
15-Nov-18	0	3000	3000				
20-Nov-18	0	3100	3100				
23-Nov-18	0	3200	3200				
27-Nov-18	0	3000	3000				
28-Nov-18	0	3000	3000				
3-Dec-18	0	3400	3400				
6-Dec-18	0	3100	3100				
10-Dec-18	0	3000	3000				
14-Dec-18	0	2900	2900				
18-Dec-18	0	2900	2900				
21-Dec-18	0	2500	2500				
24-Dec-18	0	3000	3000				
27-Dec-18	0	3000	3000				
28-Dec-19	0	3200	3200			hydrocarbon recovered	water pumped
31-Dec-19	0	3200	3200	4th Qtr 2018 Totals	0	68,400	68,400
3-Jan	0	3000	3000				
12-Jan-19	0	3000	3000				
16-Jan-19	0	2800	2800				

Marathon Petroleum Company - Gallup Refinery
Stand Pipes Recovery Records

DATE	hydrocarbon recovered (gallons)	water pumped (gallons)	total fluid pumped (gallons)				
22-Jan-19	0	4500	4500				
29-Jan-19	0	4000	4000				
31-Jan-19	0	3200	3200				
4-Feb	0	3000	3000				
7-Feb	0	4500	4500				
15-Feb-19	0	3100	3100				
28-Mar-19	0	3000	3000			hydrocarbon recovered	water pumped
				1st Qtr 2019	0	34,100	total fluid pumped
3-Apr	0	3900	3900				
4-Apr	0	3000	3000				
10-Apr-19	0	5800	5800				
19-Apr-19	0	3090	3090				
22-Apr-19	0	5894	5894				
1-May	0	4925	4925				
3-May	0	3109	3109				
20-May-19	0	6150	6150				
24-May-19	0	3119	3119				
29-May-19	0	6242	6242				
09-Jun-19	0	5061	5061				
10-Jun-19	0	6242	6242				
14-Jun-19	0	3119	3119			hydrocarbon recovered	water pumped
26-Jun-19	0	6242	6242	2nd Qtr 2019	0	65,893	total fluid pumped
11-Jul-19	0	6242	6242				
17-Jul-19	0	3119	3119				
09-Aug-19	0	3000	3000				
09-Aug-19	0	2700	2700				
13-Aug-19	0	3000	3000				
13-Aug-19	0	2100	2100				
19-Aug-19	0	3096	3096				
26-Aug-19	0	3000	3000				
26-Aug-19	0	2700	2700				
09-Sep-19	0	2500	2500				
09-Sep-19	0	2500	2500				
11-Sep-19	0	3119	3119				
11-Sep-19	0	3049	3049				

Marathon Petroleum Company - Gallup Refinery
Stand Pipes Recovery Records

DATE	hydrocarbon recovered (gallons)	water pumped (gallons)	total fluid pumped (gallons)				
19-Sep-19	0	2850	2850				
19-Sep-19	0	3000	3000				
19-Sep-19	0	1200	1200				
26-Sep-19	0	3057	3057			hydrocarbon recovered	water pumped
26-Sep-19	0	3028	3028	3rd Qtr 2019	0	53,260	53,260
02-Oct-19	0	3,050	3,050		hydrocarbon recovered	water pumped	total fluid pumped
14-Nov-19	0	2,640	2,640	4th Qtr 2019	0	5,690	5,690
31-Mar-20	0	0	0	1st Qtr 2020	0	0	0

TOTALS	19,009	1,708,563	1,727,574
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Marathon Petroleum Company - Gallup Refinery
Retention Ditch Recovery Records

DATE	LOADS	water/oil mixture (gallons)	oil (gallons)
4/1/2016	1	5460	NR
4/27/2016	1	5460	NR
4/28/2016	1	5460	NR
5/5/2016	1	5460	NR
5/9/2016	0.75	4200	NR
5/13/2016	1	5460	NR
5/24/2016	1	5460	NR
5/26/2016	0.5	2730	NR
5/27/2016	1	5460	NR
6/1/2016	1	5460	NR
6/2/2016	1	5460	NR
6/6/2016	1	5460	NR
6/8/2016	1	5460	NR
6/9/2016	0.5	2730	NR
6/14/2016	1	5460	NR
6/16/2016	1	5460	NR
6/23/2016	1	5460	NR
6/29/2016	0.5	2730	NR
7/6/2016	1	5460	NR
7/8/2016	1	5460	NR
7/13/2016	1	5460	NR
7/21/2016	1	5460	NR
7/27/2016	1	5460	NR
8/3/2016	1	5460	NR
8/9/2016	2	10920	NR
8/10/2016	0.5	2730	NR
8/16/2016	1	5460	NR
8/17/2016	1	5460	NR
8/18/2016	0.5	2730	NR
8/23/2016	2	10920	NR
8/24/2016	1	5460	NR
8/26/2016	1	5460	NR
8/30/2016	1	5460	NR
9/1/2016	2	10920	NR
9/8/2016	2	10920	NR
9/14/2016	2	10920	NR
10/6/2016	1	5460	NR
10/7/2016	1	5460	NR
10/10/2016	2	10920	NR
10/20/2016	1	5460	NR

**Marathon Petroleum Company - Gallup Refinery
Retention Ditch Recovery Records**

DATE	LOADS	water/oil mixture (gallons)	oil (gallons)			
10/24/2016	1	5460	NR			
10/26/2016	2	10920	NR			
10/27/2016	1	5460	NR			
10/31/2016	2	10920	NR			
11/8/2016	2	10920	NR			
11/10/2016	3	16380	NR			
11/11/2016	0.77	4200	NR			
11/15/2016	0.5	2730	NR			
11/16/2016	1	5460	NR			
12/6/2016	1	5460	NR			
12/8/2016	1	5460	NR			
12/14/2016	1	5460	NR			
12/15/2016	3	15120	NR	2016 Totals	LOADS	water/oil mixture
					62.52	340,200
2/21/2017	NR	5000	NR			
3/8/2017	NR	10000	NR			
3/10/2017	NR	4000	NR			
3/14/2017	NR	10000	NR			
3/15/2017	NR	4000	NR			
3/16/2017	NR	1250	NR			
3/17/2017	NR	5000	NR			
5/16/2017	1	2000	20			
5/17/2017	3	15000	NR			
5/22/2017	1	5000	NR			
5/23/2017	1	2800	20			
5/24/2017	1	5000	NR			
5/30/2017	1	3500	10			
6/6/2017	1	3100	20			
6/8/2017	2	5800	20			
6/13/2017	1	2900	30			
6/15/2017	1	3000	10			
6/20/2017	1	2000	10			
6/22/2017	1	3000	20			
6/27/2017	2	5500	40			
6/29/2017	1	2500	10			
7/5/2017	2	5600	10			
7/7/2017	1	3000	20			
7/11/2017	1	3000	10			
7/14/2017	1	3000	10			

Marathon Petroleum Company - Gallup Refinery
Retention Ditch Recovery Records

DATE	LOADS	water/oil mixture (gallons)	oil (gallons)				
7/18/2017	1	2500	10				
7/20/2017	1	3000	10				
7/27/2017	2	4500	10				
8/3/2017	2	5000	20				
8/4/2017	1	3000	20				
8/9/2017	1	3000	25				
8/16/2017	1	2000	10				
8/25/2017	1	1500	50				
8/31/2017	1	2000	40				
9/7/2017	2	5200	80				
9/15/2017	2	5500	100				
9/20/2017	1	3800	100				
9/26/2017	1	3800	10				
10/4/2017	1	3500	100				
10/12/2017	1	2800	95				
10/19/2017	1	3000	100				
10/26/2017	1	2500	100				
11/1/2017	1	3000	100				
11/7/2017	1	3000	100				
11/15/2017	2	5500	100				
11/22/2017	1	2000	100				
11/28/2017	1	2000	50				
12/4/2017	1	1500	100				
12/14/2017	1	1500	50				
12/19/2017	1	2500	100				
12/27/2017	1	2000	50				
				2017 Totals	54	194,550	1,890
1/4/2018	1	2800	25				
1/9/2018	2	7500	9				
1/15/2018	1	2500	20				
1/23/2018	1	3800	9				
1/31/2018	1	2500	9				
2/2/2018	1	2500	9				
2/13/2018	1	2000	9				
2/21/2018	1	2080	20				
3/6/2018	1	1500	19				
3/13/2018	1	1500	9				
3/22/2018	1	1500	20	1st Qtr 2018	13	32,180	208
	0	0	0	2nd Qtr 2018	0	0	0

**Marathon Petroleum Company - Gallup Refinery
Retention Ditch Recovery Records**

DATE	LOADS	water/oil mixture (gallons)	oil (gallons)				
5-Jul-18	1	1800	36				
12-Jul-18	1	2000	100				
20-Jul-18	1	2000	40				
25-Jul-18	1	1800	36				
27-Jul-18	1	1800	36				
7-Aug-18	1	1900	38				
17-Aug-18	1	2000	80				
22-Aug-18	1	1800	72				
24-Aug-18	1	500	20				
30-Aug-18	1	500	20				
7-Sep-18	1	2000	20				
13-Sep-18	1	1500	30				
14-Sep-18	1	2000	40				
19-Sep-18	1	1500	30				
26-Sep-18	1	1500	30			# of loads	water/oil mixture
28-Sep-18	1	1500	30	3rd Qtr 2018	16	26,100	oil
16-Oct-18	1	2200	220				
18-Oct-18	1	2000	40				
23-Oct-18	1	1500	30				
1-Nov-18	1	2500	50				
15-Nov-18	1	2500	50				
23-Nov-18	1	2600	52				
6-Dec-18	1	2600	52				
10-Dec-18	1	2000	40				
11-Dec-18	1	300	30				
14-Dec-18	1	2300	46			# of loads	water/oil mixture
13-Jan-19	1	2000	20	4th Qtr 2018	10	20,500	oil
23-Jan-19	1	2400	48				
31-Jan-19	1	2400	48				
5-Feb	1	2000	20			# of loads	water/oil mixture
28-Mar-19	1	2900	0	1st Qtr 2019 Totals	5	11700	oil
4-Apr	1	2800	28				
19-Apr-19	1	1540	46.2				
14-Jun-19	1	1560	312			# of loads	water/oil mixture
27-Jun-19	1	2400	216	2nd Qtr 2019	4	8300	oil

**Marathon Petroleum Company - Gallup Refinery
Retention Ditch Recovery Records**

DATE	LOADS	water/oil mixture (gallons)	oil (gallons)				
11-Jul-19	1	500	25				
17-Jul-19	1	594	75				
20-Aug-19	1	2245	45				
29-Aug-19	1	1820	20				
10-Sep-19	1	2077	25				
20-Sep-19	1	2615	25		# of loads	water/oil mixture	oil
30-Sep-19	1	2800	30	3rd Qtr 2019	7	12651	245
3-Oct-19	1	1,800	25	4th Qtr 2019	1	1,800	25
31-Mar-20	0	0	0	1st Qtr 2020	0	0	0

Project Totals	171.5	645,981.0	4,324.2
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Totals for oil only includes data since May 2017