



Western Refining Southwest LLC

A subsidiary of Marathon Petroleum Corporation

I-40 Exit 39
Jamestown, NM 87347

March 15, 2023

Mr. Dave Cobrain, Chief
New Mexico Environmental Department
2905 Rodeo Park Drive East, Bldg. 1
Santa Fe, NM 87505-6303

**RE: 2023 RCRA Financial Assurance Cost Estimate
Western Refining Southwest LLC
(D/B/A Marathon Gallup Refinery)
EPA ID# NMD000333211**

Dear Mr. Cobrain:

Western Refining Southwest LLC (D/B/A Marathon Gallup Refinery) (Western) is submitting the 2023 Financial Assurance (FA) Cost Estimate.

This FA estimate includes costs to address those activities specified in the Complaint and Consent Agreement and Final Order (CAFO) (dated August 26, 2009) for implementation of a remedy for Aeration Lagoons (ALs) AL-1 and AL-2 and the requirements of the Resource Conservation and Recovery Act (RCRA) modified permit effective September 2017. The FA estimates were prepared in accordance with the Code of Federal Regulations Chapter 264 Part 101 and substantially in compliance with the requirements of 40 CFR 264.142 and 264.144.

In addressing the requirements of the CAFO, the original 2009 cost estimate for the ALs (\$1,257,000) has been adjusted annually for inflation each year. The most recent update was conducted in January 2022 (revised February 2023) with an inflation adjusted estimate of \$1,548,900. To prepare the 2023 estimate, the 2022 estimate of \$1,548,900 was multiplied by an annual inflation factor (AIF) of 1.070. The AIF is calculated by taking the most recent fiscal year Gross Domestic Product (GDP) (averaged over the four quarters of 127.1828) and dividing by the previous year's GDP (averaged over the four quarters of 118.866). The GDP is calculated by taking the average of each quarter. The GDP is taken from "Table 1.1.9 – Implicit Price Deflators for Gross Domestic Product" (Bureau of Economic Analysis 2023). The 2023 estimate for the ALs is \$1,657,323 (Table 1).



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In addition, the 2017 Modified RCRA permit was updated in February 2022. This update included restoring eleven Areas of Concern (AOC) to Attachment G, Table G-1 of the Modified RCRA permit as directed by the New Mexico Environment Department. The eleven AOCs have been added to Table 1, but no costs have been added to the AOCs at this time as no remedy activities have been finalized. There are two separate provisions in the 2017 Modified RCRA permit, which require FA estimates. These two provisions can be found in Sections II.D.1 and II.D.2 of the 2017 Modified RCRA permit, and address the post-closure care of the Land Treatment Unit (LTU) and the facility-wide groundwater monitoring, respectively. The FA estimate also includes the Solid Waste Management Units and AOCs (Table 1).

A revised FA estimate for post-closure care of the LTU was prepared in 2010, reflecting the work that had been completed since the first RCRA permit issued in 2000. The 2023 FA estimate includes revisions for updated labor costs and years remaining (Table 2). The FA estimate for 2023 is \$159,357.

Section II.D.2 requires a FA estimate for 20 years of facility-wide groundwater monitoring starting in February of 2014. The initial estimated cost was \$1,762,340 in 2014. The FA estimate reflects the “2022 Facility-Wide Groundwater Monitoring Work Plan” (submitted February 4, 2022). The Facility-Wide Ground Water Monitoring was estimated for 2023 and the years following 2023 (Table 3). The cost estimate for 2023 and subsequent sampling years is \$5,135,322 (Table 1).

The current total FA estimated cost is \$6,952,002 for addressing the Aeration Lagoons pursuant to the CAFO and implementation of the 2017 Modified RCRA Post-Closure Permit LTU and groundwater monitoring.

If you have any questions or comments regarding the information contained herein, please do not hesitate to contact Mr. John Moore at 505-879-7643.



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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,
Western Refining Southwest LLC, Marathon Gallup Refinery

A handwritten signature in blue ink, appearing to read 'Tim Peterkoski', written over the typed name.

Timothy J. Peterkoski
Director of Environment and Climate Strategy

Enclosure

cc: L. Tsinnajinnie, NMED HWB
L. Andress, NMED HWB
C. Eads, NMED HWB
L. King, EPA
L. Barr, NMOCD
K. Luka, Marathon Petroleum Corporation
J. Chen, Marathon Petroleum Corporation
J. Moore, Marathon Gallup Refinery
H. Jones, Trihydro Corporation



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References

Bureau of Economic Analysis. 2023. Table 1.1.9. Implicit Price Deflators for Gross Domestic Product. January 3.

New Mexico Environment Department (NMED). 2022. Resource Conservation and Recovery Act Modified Permit, Effective September 2017. February.

United States Environmental Protection Agency (USEPA). 2009. Complaint and Consent Agreement and Final Order. August 26.

Western Refining Southwest LLC. 2023. 2023 Facility-Wide Groundwater Monitoring Work Plan, Western Refining Southwest LLC, D/B/A Marathon Gallup Refinery. , EPA ID #NMD000333211. January 31.

ATTACHMENT A

**ATTACHMENT A-1. JANUARY 2023 COST ESTIMATE FOR RCRA POST-CLOSURE PERMIT
WESTERN REFINING SOUTHWEST LLC, D/B/A MARATHON GALLUP REFINERY, GALLUP, NEW MEXICO**

Waste Management Area	Corrective Action/Project	Investigation Costs	Remediation Costs	O&M Costs	Total Costs	Notes
RCRA Regulated Units						
LTU	Groundwater & Soil Monitoring	\$0	\$0	\$159,357	\$159,357	Post-closure care for LTU, Table 1A updated to reflect work completed through end of 2022
SWMUs and AOCs						
SWMU 1 – Aeration Basin	Soil investigation & potential remediation	\$0	\$0	\$0	\$0	remediation cost estimate developed Nov. 2009 pursuant to EPA CAFO; remedy not selected by NMED under the Permit
SWMU 2 - Evaporation Ponds	IWP deferred	\$0	\$0	\$0	\$0	
SWMU 3 – Empty Container Storage Area/Bundle Cleaning Pad	IWP deferred	\$0	\$0	\$0	\$0	Investigation Report submitted November 28, 2022
SWMU 4 – Old Burn Pit	IWP due 6/30/2014	\$0	\$0	\$0	\$0	IWP submitted April 22, 2022
SWMU 5 – Landfill Areas	IWP due 9/30/2014	\$0	\$0	\$0	\$0	
SWMU 6 – Tank Farm	IWP deferred	\$0	\$0	\$0	\$0	No final remedy selected; voluntary SPH recovery is conducted once a quarter at three wells & a small passive bioventing system is present, but the operations costs are minimal and no timeframe for operation is specified. No additional O&M costs are included as these actions would be conducted during other routine monitoring events.
SWMU 7 – Fire Training Area	IWP deferred	\$0	\$0	\$0	\$0	already capped; IWP submittal deferred
SWMU 8 – Railroad Rack Lagoon, ditch & fan area	CAC without Controls Approved	\$0	\$0	\$0	\$0	Remediation completed and reports approved by NMED
SWMU 9 – Drainage Ditch Near Inactive Landfarm	IWP due 12/30/2018	\$0	\$0	\$0	\$0	Investigation Report submitted December 31, 2022
SWMU 10 – Sludge Pits	IWP due 9/20/2014	\$0	\$0	\$0	\$0	IWP submitted September 14, 2014 with investigation conducted in 2015 and 2016
SWMU 11 – Secondary Oil Skimmer	IWP due 11/1/2018	\$0	\$0	\$0	\$0	IWP completed in October 2018
SWMU 12 – Contact Wastewater Collection System	IWP deferred	\$0	\$0	\$0	\$0	
SWMU 13 – Drainage Ditch between API Evaporation Ponds and Neutralization Tank Evaporation Ponds	IWP due 6/30/2019	\$0	\$0	\$0	\$0	IWP submitted in May 2019
SWMU 14 – Old API Separator	Soil investigation & potential remediation	\$0	\$0	\$0	\$0	IWP submitted December 1, 2022
AOC 15 – NAPIS	IWP deferred	\$0	\$0	\$0	\$0	IWP Response to Disapproval due March 31, 2023
AOC 16 – NAPIS Overflow Tanks	RA due 9/30/2018	\$0	\$0	\$0	\$0	
AOC 17 – Railroad Loading/Unloading Facility	RA due 12/31/2018	\$0	\$0	\$0	\$0	IWP to be submitted 1st Quarter 2023
AOC 18 – Asphalt Tank Farm	RA due 3/31/2019	\$0	\$0	\$0	\$0	IWP, combined with AOC 24, submitted June 15, 2022
AOC 19 – East Fuel Oil Loading Rack	CAC without Controls Approved	\$0	\$0	\$0	\$0	
AOC 24 – Crude Oil Tank Farm	RA due 12/31/2019	\$0	\$0	\$0	\$0	IWP, combined with AOC 18, submitted June 15, 2022
AOC 25 – Tank 573	CAC without Controls Approved	\$0	\$0	\$0	\$0	
AOC 26 – Process Units	RA due 9/30/2020	\$0	\$0	\$0	\$0	IWP Response to Disapproval submitted June 10, 2022
AOC 27 – Boiler & Cooling Unit Area	RA due 3/31/2020	\$0	\$0	\$0	\$0	
AOC 28 – Warehouse & Maintenance Shop Area	RA due 6/30/2020	\$0	\$0	\$0	\$0	IWP submitted September 16, 2022
AOC 29 – Equipment Yard & Drum Storage Area	RA due 12/31/2020	\$0	\$0	\$0	\$0	
AOC 30 – Laboratory	RA due 6/30/2020	\$0	\$0	\$0	\$0	
AOC 31 – Tank 27 & 28	IWP due 3/31/2021	\$0	\$0	\$0	\$0	Assessment Report submitted March 25, 2021
AOC 34 – Scrap Yard	RA due 6/30/2021	\$0	\$0	\$0	\$0	IWP submitted April 22, 2022 with SWMU 4 and 5
AOC 35 – Main Loading Racks, Crude Slop & Ethanol Unloading /Loading rack, Additive Tank Farm, Retail Tank Farm	IWP due 8/31/2018	\$0	\$0	\$0	\$0	IWP approved December 12, 2022

**ATTACHMENT A-1. JANUARY 2023 COST ESTIMATE FOR RCRA POST-CLOSURE PERMIT
WESTERN REFINING SOUTHWEST LLC, D/B/A MARATHON GALLUP REFINERY, GALLUP, NEW MEXICO**

Waste Management Area	Corrective Action/Project	Investigation Costs	Remediation Costs	O&M Costs	Total Costs	Notes
Groundwater						
Site-wide	Facility-Wide Groundwater Monitoring	\$0	\$0	\$0	\$5,135,322	2023 at \$395,892 (including PW-2 triennial event) + 6 years at \$460,244 (even years included Total Metals) + 5 years at \$395,144 (odd years), and 3 events of PW-2 sampling ; see Table 3
Other Costs						
Aeration Lagoons	CAFO	\$1,657,323	\$0	\$0	\$1,657,323	2022 at \$1,548,900 adjusted by the annual inflation factor of 1.070 to adjust to 2023.
Total Estimated Costs		\$1,657,323	\$0	\$159,357	\$6,952,002	

AOC - Area of Concern

API - American Petroleum Institute

CAC - Corrective Action Complete

CAFO - Consent Agreement and Final Order

EPA - Environmental Protection Agency

IWP - Investigation Work Plan

LTU - Land Treatment Unit

NAPIS - New American Petroleum Institute Separator

NMED - New Mexico Environment Department

O&M - Operations and Maintenance

RA - Release Assessment

RCRA - Resource Conservation and Recovery Act

SPH - Separate phase hydrocarbon

SWMU - Solid Waste Management Unit

Note: New estimates for the LTU and Groundwater costs were prepared by revising quantity of sample analyses and laboratory costs. Because they are new estimates, an inflation adjustment was not necessary.

**ATTACHMENT A-2. LAND TREATMENT UNIT DETAILED COST ESTIMATE (2023)
WESTERN REFINING SOUTHWEST LLC, D/B/A MARATHON GALLUP REFINERY, GALLUP, NEW MEXICO**

Activity	Cost Estimate in 2000 Part B Permit Application			Updated 2023 Cost Estimate		
	Material	Cost Frequency (over 30 years)	Estimated Cost	Material	Cost Frequency (remaining 8 years)	2023 Estimated Costs
MONITORING						
Sample by Zone						
ZOI	4 samples at \$1,450	3	\$17,400	4 samples at \$500 ¹	1	\$2,000
Treatment Zone	4 samples at \$1,450	3	\$17,400	4 samples at \$500 ¹	1	\$2,000
Chinle Slope Wash	1 sample at \$1,650	8	\$13,200	1 sample at \$710 ²	1	\$710
Sonsela	4 samples at \$1,650	8	\$52,800	4 samples at \$710 ²	1	\$2,840
Sample QC	25% of \$100,800		\$25,200	25% of \$7,550		\$1,888
Mobilization/labor						
ZOI & Treatment Zone	3 events at \$1,000/event	3	\$3,000	1 event at \$16,000/event	1	\$16,000
Chinle Slope Wash & Sonsela	8 events at \$2,000/event	8	\$16,000	1 event at \$8,000/event	1	\$8,000
COVER ESTABLISHMENT						
Field Technician	\$10,000	1	\$10,000	completed		\$0
Microtox	\$300 per test	9	\$2,700	completed		\$0
Soil Amendments	352,000 sqft at 0.02/sqft		\$7,040	completed		\$0
Establish Vegetative Cover						
Top Soil	7.8 acres at \$2,000/acre		\$15,600	completed		\$0
Level LTU	7.8 acres at \$950/acre		\$7,410	completed		\$0
Plant Seed	7.8 acres at \$750/acre		\$5,850	completed		\$0
Water	1140 Mgal. At \$1/Mgal		\$1,140	completed		\$0
ROUTINE INSPECTION, MAINTENANCE, & REPAIR						
Site Inspection	Weekly inspection (\$200 annually)	30	\$6,000	\$100 per weekly inspection	416	\$41,600
Security Device	\$100 annually	30	\$3,000	\$220 annually	8	\$1,760
Run-on/Run-off	\$1,000 annually to maintain perimeter berm	30	\$30,000	\$2,500 annually to maintain perimeter berm	8	\$20,000
PREPARE CERTIFICATION						
Certify LTU Closure	120 hours at \$125/hour	120	\$15,000	120 hours at \$144/hour	120	\$17,280
Notice in Deed	6 hours at \$150/hour	6	\$900	6 hours at \$120/hour	6	\$720
Certify Final Closure	120 hours at \$125/hour	120	\$15,000	120 hours at \$144/hour	120	\$17,280
Notice in Deed	6 hours at \$150/hour	6	\$900	6 hours at \$120/hour	6	\$720
Task Total			\$265,540			\$132,798
Gallup Overhead (10%)			\$26,554			\$13,280
Contingency (10%)			\$26,554			\$13,280
TOTAL			\$318,648			\$159,357

LTU - Land Treatment Unit
Mgal. - Million gallons
QC - Quality control
sqft - Square feet
ZOI - Zone of Incorporation

¹ Analytical cost breakdown: Method 8260 at \$45/sample; Method 8270 at \$180/sample; Method 8015 at \$75/sample; Method 200.7/200.8 at \$200/sample

² Analytical cost breakdown: Method 8260 at \$45/sample; Method 8270 at \$180/sample; Method 8015 at \$75/sample; Method 200.7/200.8 at \$200/sample; SM4500 at \$115/sample; Method 300.0 at \$95/sample

ATTACHMENT A-3. FACILITY-WIDE GROUNDWATER MONITORING ANNUAL COST ESTIMATE (2023)
WESTERN REFINING SOUTHWEST LLC, D/B/A MARATHON GALLUP REFINERY, GALLUP, NEW MEXICO

Analysis	Frequency	# of Sample Locations ¹	# of QAQC Samples ²	# of Samples	Cost/Sample	Cost per Year
Quarterly Sampling Events						
8260B - VOCs	Quarterly	96	45	564	\$45	\$25,380
8270C - SVOCs	Quarterly	96	45	564	\$90	\$50,760
8270SIM - SVOCs	Quarterly	96	45	564	\$90	\$50,760
200.7/200.8/245.1 - Metals - Total ³	Quarterly	96	45	564	\$100	\$56,400
200.7/200.8/245.1 - Metals - Dissolved ³	Quarterly, Even Years	96	45	564	\$100	\$56,400
8015B - GRO, DRO	Quarterly	96	45	564	\$75	\$42,300
537.1 - PFAS ⁴	Quarterly	1	1	8	\$250	\$2,000
8011 - EDB	Quarterly	96	45	564	\$30	\$16,920
335.4 - Cyanide	Quarterly	96	45	564	\$25	\$14,100
Gen Chem - BOD, COD, E. Coli	Quarterly	1	0	4	\$80	\$320
analyses subtotal (odd years)						\$258,940
analyses subtotal (even years)						\$315,340
Level III Data Package						
5% of analysis						
analyses and lab package subtotal (odd years)						\$271,887
analyses and lab package subtotal (even years)						\$331,107
Sampling Supplies ⁵	Quarterly	NA	NA	4	\$525	\$2,100
Filters	Quarterly	96	45	564	\$15	\$8,460
Quarterly Events subtotal (Even Years) ³						\$341,667
Quarterly Events subtotal (Odd Years) ³						\$282,447
Semi-Annual Sampling Events⁶						
8260B - VOCs	Semi-Annual	12	NA	24	\$45	\$1,080
8270C - SVOCs	Semi-Annual	12	NA	24	\$90	\$2,160
8270SIM	Semi-Annual	12	NA	24	\$90	\$2,160
Method 200.7/200.8/245.1 - Metals - Total ³	Semi-Annual	12	NA	24	\$100	\$2,400
Method 200.7/200.8/245.1 - Metals - Dissolved ³	Semi-Annual, Even Years	12	NA	24	\$100	\$2,400
8015B - GRO, DRO	Semi-Annual	12	NA	24	\$75	\$1,800
Gen Chem - BOD, COD, E. Coli	Semi-Annual	11	NA	22	\$80	\$1,760
8081 - Pesticides ⁷	Semi-Annual	1	NA	2	\$70	\$140
8011 - EDB	Semi-Annual	12	NA	24	\$30	\$720
335.4 - Cyanide	Semi-Annual	12	NA	24	\$25	\$600
analyses subtotal (odd years)						\$12,820
analyses subtotal (even years)						\$15,220
Level III Data Package						
5% of analysis						
analyses and lab package subtotal (odd years)						\$13,461
analyses and lab package subtotal (even years)						\$15,981
Filters	Semi-Annual	12	NA	24	\$15	\$360
Semiannual Events subtotal (Even Years) ³						\$16,341
Semiannual Events subtotal (Odd Years) ³						\$13,821
Annual Sampling Event¹						
8260B - VOCs	Annual	23	9	32	\$45	\$1,440
8270C - SVOCs	Annual	23	9	32	\$90	\$2,880
8270SIM - SVOCs	Annual	23	9	32	\$90	\$2,880
Method 200.7/200.8/245.1 - Metals - Total ³	Annual	23	9	32	\$100	\$3,200
Method 200.7/200.8/245.1 - Metals - Dissolved ³	Annual, Even Years	23	9	32	\$100	\$3,200
8015B - GRO, DRO	Annual	23	9	32	\$75	\$2,400
8011 - EDB	Annual	23	9	32	\$30	\$960
335.4 - Cyanide	Annual	23	9	32	\$25	\$800
analyses subtotal (odd years)						\$14,560
analyses subtotal (even years)						\$17,760
Level III Data Package						
5% of analysis						
analyses and lab package subtotal (odd years)						\$15,288
analyses and lab package subtotal (even years)						\$18,648
Filters	Annual	23	9	32	\$15	\$480
Annual Events subtotal (Even Years) ³						\$19,128
Annual Events subtotal (Odd Years) ³						\$15,768

**ATTACHMENT A-3. FACILITY-WIDE GROUNDWATER MONITORING ANNUAL COST ESTIMATE (2023)
WESTERN REFINING SOUTHWEST LLC, D/B/A MARATHON GALLUP REFINERY, GALLUP, NEW MEXICO**

Analysis	Frequency	# of Sample Locations ¹	# of QAQC Samples ²	# of Samples	Cost/Sample	Cost per Year
MNA Annual Sampling Event⁸						
8260B - TBA	Annual	13	6	19	\$45	\$855
300.0 - Anions	Annual	13	6	19	\$35	\$665
Method 200.7/200.8 - Metals - Total Fe and Mn	Annual	13	6	19	\$25	\$475
Method 200.7/200.8 - Metals - Dissolved Fe	Annual	13	6	19	\$15	\$285
Methane	Annual	3	1	4	\$55	\$220
4500 - Sulfide	Annual	13	6	19	\$35	\$665
					analyses subtotal	\$3,165
Level III Data Package					5% of analysis	
					analyses and lab package subtotal	\$3,323
Filters	Annual	13	6	19	\$15	\$285
					MNA Annual Event subtotal	\$3,608
Three-Year Sampling Events (next event 2023)⁹						
8260B - VOCs	Every third year	1	NA	1	\$45	\$45
8270C - SVOCs	Every third year	1	NA	1	\$90	\$90
8270SIM - SVOCs	Every third year	1	NA	1	\$90	\$90
Method 200.7/200.8/245.1 - Metals - Total ³	Every third year	1	NA	1	\$100	\$100
Method 200.7/200.8/245.1 - Metals - Dissolved ³	Every third year	1	NA	1	\$100	\$100
8015B - GRO, DRO	Every third year	1	NA	1	\$75	\$75
8011 - EDB	Every third year	1	NA	1	\$30	\$30
335.4 - Cyanide	Every third year	1	NA	1	\$25	\$25
					analyses subtotal	\$555
Level III Data Package					5% of analysis	
					analyses and lab package subtotal	\$583
Filters	Every third year	1	NA	1	\$15	\$15
					Sampling Event subtotal	\$598
Sampling Labor ¹⁰	Four Quarterly Events		12 Days, 10 hour days		\$83/hour \$67/hour	\$72,000
	Two Semiannual Events		1 Day, 10 hour day		\$83/hour \$67/hour	\$3,000
	Annual Event		3 Days, 10 hour days		\$83/hour \$67/hour	\$4,500
	PW-2 event (every 3 years)		1 hour		\$83/hour \$67/hour	\$150
					Labor subtotal	\$79,650
					Annual Total (without PW-2 event) - Even Years³	\$460,244
					Annual Total (without PW-2 event) - Odd Years³	\$395,144
					PW-2 Event Total - Every 3 Years	\$748

Notes:

Annual Total (without PW-2 event) - Even Years: This line item is used for all even years of monitoring.

Annual Total (without PW-2 event) - Odd Years: This line item is used for all odd years of monitoring.

PW-2 Event Total: Used every 3 years including 2023, 2026, 2029, 2032

- Number

BOD - Biological Oxygen Demand
 COD - Chemical Oxygen Demand
 DRO - Diesel Range Organics
 EDB - 1,2 Dibromoethane
 EPA - Environmental Protection Agency
 Fe - Iron
 Gen Chem - General Chemistry
 GRO - Gasoline Range Organics
 Mn - Manganese

MNA - Monitored Natural Attenuation
 NA - Not applicable
 NMED - New Mexico Environment Department
 PFAS - Per- and polyfluoroalkyl substances
 QA/QC - Quality assurance/quality control
 SIM - Selected Ion Monitoring
 SVOCs - Semi-volatile organic compounds
 TBA - tert-Butyl alcohol
 VOCs - Volatile organic compounds

¹ New monitoring wells were installed in 2021 and added to the 2022 and subsequent sampling events: OW-12A, OW-66, OW-67, OW-68, OW-70, RW-2R, MKTF-01R, MKTF-02R, MKTF-04R, MKTF-17R, and MKTF-18R.

² QAQC samples are accounted for in quarterly and annual events. Samples include field duplicates, field blanks, equipment blanks, and trip blanks. QAQC samples are collected at minimum of 1 per day.

³ Total metals are sampled every year. Dissolved metals are only samples in even years. Metals analyses include EPA Methods 200.7, 200.8, and 245.1.

⁴ PFAS analysis completed for monitoring well OW-63 per NMED Comment. NMED. 2020. Disapproval, Annual Groundwater Monitoring Report Gallup Refinery -2019, Western Refining Southwest Inc., Gallup Refinery, EPA ID #NMD000333211, HWB-WRG-20-013. November 23. Comments 25 (Pesticides) and 30 (PFAS).

⁵ Sampling supplies include, bailers, deionized water, and miscellaneous items for sampling.

⁶ QAQC samples included with quarterly sampling event

⁷ Pesticide sample completed for evaporation pond EP-2 semiannually per NMED comment. NMED. 2020. Disapproval, Annual Groundwater Monitoring Report Gallup Refinery -2019, Western Refining Southwest Inc., Gallup Refinery, EPA ID #NMD000333211, HWB-WRG-20-013. November 23. Comments 25 (Pesticides) and 30 (PFAS) and NMED. 2021. Second Disapproval, [Revised] Facility Wide Groundwater Monitoring Work

⁸ MNA sampling includes the following monitoring wells: MKTF-02R, MKTF-04R, MKTF-09, MKTF-10, MKTF-13, MKTF-16, MKTF-17R, MKTF-19, MKTF-20, MKTF-21, MKTF-22, MKTF-24, MKTF-25.

⁹ Production well PW-2 sampled once every 3 years, will be sampled in 2023.

¹⁰ Sampling labor is calculated using two field staff members (\$83/hour and \$67/hour).

¹¹ The sampling requirements addressed in the table are per the Facility-Wide Ground Water Monitoring Work Plan - Updates for 2022 (dated February 2022 - pending approval).