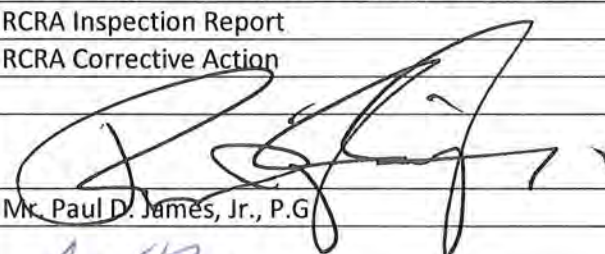


Region 6 Compliance Assurance and Enforcement Division
INSPECTION REPORT

Inspection Date(s):		08/08/2014 through 08/14/2014	
Media:		RCRA – Hazardous Waste	
Regulatory Program(s)		RCRA LQG Compliance / RCRA Corrective Action	
Company Name:		Western Refining Southwest, Inc.	
Facility Name:		Gallup Refinery	
Facility Physical Location:		1-40 Exit 39, 17 Miles East of Gallup, GPS Coordinates: 35°29'14"N 108°25'36"W	
(city, state, zip code)		Gallup, New Mexico 87031	
Mailing address:		92 Giant Crossing Road	
(city, state, zip code)		Gallup, New Mexico 87031	
County/Parish:		McKinley County	
Facility Contact:		Ed Riege ed.Riege@wnr.com	Environmental Manager (505) 722-0217
FRS Number:		110015742703	
Identification/Permit Number:		NMED Permit No. OMB# 2050-0024	
Media Number:		RCRA No. NM000333211	
NAICS:		324110 - Petroleum Refining	
SIC:		2911 - Petroleum Refining	
Facility Representatives:		Mr. Ed Riege Mr. Beck Larsen Mr. Allen Hains Mr. Vic McDaniel Mr. Erik Loera Mr. Alvin Dorsey Ms. Janice Sanchez Mr. Scott Crouch	Environmental Manager Environmental Engineer Manager - Remediation Projects Assist. Refinery Manager WWTP Supervisor Environmental Specialist Environmental Technician Consultant (DiSorbo Consulting, LLC)
			505-722-0217 505-722-0258 915-534-1483 505-726-9569 505-722-3833 505-722-3833 505-722-3833 512-693-4193
EPA Inspectors:		Mr. Paul James Mr. Wm. Mansfield Mr. Charles Barnes	R6 Hazardous Waste Enforcement R6 Hazardous Waste Enforcement R6 Hazardous Waste Enforcement
			214-665-6445 214-665-8321 214-665-6535
Metadata	Title:	Western Refining Southwest, Gallup Refinery, Gallup, Jamestown, McKinley County, New Mexico	
	Author:	US EPA Region 6 Compliance Assurance and Enforcement Division Dallas TX	
	Subject:	RCRA Inspection Report	
	Keywords:	RCRA Corrective Action	
EPA Lead Inspector Signature/Date		 Mr. Paul D. James, Jr., P.G.	11/6/2014 Date
Supervisor Signature/Date		 Dr. H. Troy Stuckey, PhD	11/6/14 Date

SECTION I - INTRODUCTION

Purpose of the Inspection

EPA Region 6 inspectors Mr. Paul James, Mr. William “Bill” Mansfield, and Mr. Charles “Chuck” Barnes arrived at the Gallup Refinery (Facility) at 7:28 on August 12, 2014 for an unannounced RCRA inspection to evaluate both RCRA corrective actions and RCRA compliance. The facility had not been inspected within the previous 24 months.

I, Paul James, along with Mr. Mansfield and Mr. Barnes met with Mr. Ed Riege, Environmental Manager and Mr. Beck Larsen, Environmental Engineer at the opening conference. We presented our credentials to Mr. Riege and Mr. Beck and informed them that this was an EPA RCRA inspection. I handed Mr. Riege a copy of the RCRA Section 3007 that explains EPA’s authority to conduct the inspection. Additionally, I explained their options to claim confidential business information (CBI). No CBI was claimed at the time of the opening conference but later in the inspection CBI was claimed on the Macro Porous Polymer Extraction (MPPE) portion of the waste water treatment plant. No state agency personnel were involved in this inspection.

The scope of the inspection was to conduct the following:

1. Visually inspect the Solid Waste Management Units (SWMU) and Areas of Concern (AOC) defined in Final RCRA Post-Closure Care Permit dated October 2013 (2013 Post-Closure Permit);
2. Evaluate corrective actions taken/completed and compliance actions taken pursuant to Federal Regulations under RCRA Corrective Action, and the 2013 Post-Closure Permit;
3. Visually inspect the Waste water Treatment Plant pursuant to Federal Regulations under RCRA Compliance; and
4. Collect environmental and/or hazardous waste determination samples.

Facility Description

The Gallup Refinery is a small crude oil refinery (23,000 barrels per day) located in McKinley County, New Mexico approximately 17 miles east of Gallup, NM at Exit 39 off of Interstate 40 (I-40), Jamestown, New Mexico. The facility is manned 24 hours a day, 7 days per week, 365 days per year operating on two shifts with approximately 225 full time employees with approximately 35 dedicated contract employees.

Based on the Final 2013 Permit, the Facility was constructed in 1957 by El Paso Natural Gas Company near a railroad depot known locally as “Ciniza.” The refinery was purchased and operated by Shell Oil Company until 1982 when it was purchased by Giant Industries Arizona, Incorporated which owned and operated the Facility until May 2007. Western Refining Southwest, Incorporated acquired Giant Industries and currently operates the Facility as Gallup Refinery.

The refinery is situated on an 810 acre tract of land. The surrounding land is comprised primarily of public lands and is used for cattle and sheep grazing. The nearest population centers include: refinery maintained residences for several employees approximately 0.5 mile south of the refinery process area; a truck stop located within one mile south-southwest of the process area at the I-40 exit; a rural

residential area, Whispering Cedars, with a density of eight to 10 residents per square mile is located about 1.5 miles southwest of the refinery; Iyanbito, a small community, is located within three miles northwest of the refinery; Fort Wingate Military Reservation is within six miles west of the refinery. The largest residential community near the refinery is the city of Gallup, NM which is 17 miles west of the refinery.

The facility receives crude oil via two 6-inch diameter pipelines; the Bisti Pipeline comes from the Four Corners area and enters the refinery property from the north and the Hospah Pipeline comes in from the northeast and is an interconnection with a main interstate pipeline. The refinery also receives natural gas condensate feed-stocks via a 4-inch diameter pipeline that comes in from the west along the I-40 corridor from the Conoco gas plant. Crude oil and other products also arrive at the site via railroad cars. These feed-stocks are sorted into tanks until refined into final products which include propane, butane, naphtha, unleaded gasoline, diesel (low sulfur and ultra-low sulfur), and residual fuel.

The refinery has various processing units that convert crude oil and natural gasoline into finished products. These units include the crude distillation unit which separates crude oil into various fractions including gas, naphtha, light oil, and residuals.

SECTION II – OBSERVATIONS

Day 1 of the Inspection

Site Entry and Opening Conference

Upon site entry, the EPA inspection team had to undergo Western's site safety training prior to beginning the inspection. That process took approximately 30 minutes. The Opening Conference with Western personnel began at 0800 on Tuesday, 12 August 2014. Western personnel in attendance at the Opening Conference were Mr. Riege and Mr. Larsen.

EPA's inspection team, presented credentials to Mr. Riege and Mr. Larsen. I informed them that this was an EPA RCRA inspection. I handed Mr. Riege a copy of the RCRA Section 3007 that explains EPA's authority to conduct the inspection. Additionally, I explained Western's right to claim confidential business information (CBI). No CBI was claimed during the opening conference.

According to Mr. Riege, the Western Gallup Refinery (Facility) is a large quantity generator only. The Facility employs 225 full time personnel and 35 dedicated contract employees. The Facility operates 24 hours per day, seven days a week, and 365 days per year on two shifts from 0600 to 1800 and from 1800 to 0600.

According to Mr. Riege and Mr. Larsen, the waste water treatment plant (WWTP) was constructed in 2012. The WWTP is a new addition to the facility and was constructed in response to conditions in a RCRA 3008(a) CAFO.

Confidential Business Information (CBI) was discussed and Western was asked to identify any CBI before it was given to EPA.

The facility has only one EPA ID number NM000333211. The facility has a storm water discharge permit with two outfall points; one on the west side of the facility and one on the east side of the facility. Storm water falling inside the process area is combined with the process waters and sent through the

process area. According to Mr. Riege and Mr. Larsen, segregation of storm water and process water would be an almost impossible tasking.

The facility was issued a RCRA Post Closure Permit in December 2013 by the New Mexico Environmental Department (NMED). The purpose of the permit was to establish a compliance schedule to remediate and track Solid Waste Management Units (SWMUs) and Areas of Concern (AOCs). Western has filed an appeal over the permit issuance because the AOCs were included without Western's involvement/participation and Western believes the AOCs listed are questionable. According to Mr. Riege, Western is following the terms of the Permit in the intervening period while awaiting a decision on the permit appeal.

The WWTP also operates 24 hours per day, seven days a week, with 2 to 3 people per shift. Discharge from the WWTP is sent to surface impoundments that are constructed of natural materials (local clay soils). According to Western, the clay used to construct these structures has hydraulic conductivity in the 1.0×10^{-4} to 1.0×10^{-8} cm/s range.

Photography permits and area entry permits were required of EPA personnel prior to conducting the inspection. This requirement is part of Western's safety program in order to assure non-sparking equipment is used and to maintain a positive list for personnel, knowing where everyone is in case of emergency and being able to account for everyone on the site.

During the facility discussions, the following documents were requested:

1. Copies of active permits
2. Updated P&ID for the WWTP
3. A map showing the locations of all SWMUs and AOCs.
4. Copies of any air emission studies conducted for the waste management processes, SWMUs, and AOCs
5. Groundwater Monitoring Program analytical results, and reports
6. Groundwater Monitoring Plan
7. Lagoon studies showing VOC analysis for 2012-2013
8. As built P&ID for the WWTP
9. P&ID for production operations
10. Filter press sludge shipping documents
11. Hazardous Waste manifests for the past 12 months
12. GAC shipment documents for the past 12 months

The Opening Conference ended at 0830. The day included reviewing and inspecting the WWTP, SWMUs, and AOCs.

Between 8:30 and 9:53, we obtained access approvals and photography permits. All EPA photographs are presented as Appendix 1 and Appendix 2 to this report. We arrived with Mr. Riege at the WWTP at 9:53 a.m. We spoke with the WWTP operator on duty, Mr. Cipriano Garcia. According to Mr. Garcia, the WWTP operators are trained in the operational functions for the WWTP. The operators are not state certified WWTP operators. The facility does not have a National Pollution Elimination Discharge System (NPEDS) permit as the determination has been made by EPA that the facility does not discharge to the waters of the United States. The WWTP has two personnel on duty for each shift. Mr. Garcia led a tour

of the WWTP and explained the processes. A hard copy of the WWTP flow diagram was obtained and is Appendix 2 to this report.

WWTP Process Flow Discussion and Observations:

This discussion included Western personnel Mr. Riege, Mr. Larsen and Mr. Garcia, and EPA inspectors. According to the Western personnel, the following steps are involved in the treatment process:

1. Waste water and storm water from the process areas flow to equalization/storage tanks T27, T28 and/or T35 then through the API separator. The tanks provide an element of solids settling and phase separation for petroleum products. The API separator is a dual chamber unit. At the time of the inspection, one side of the API separator was down for maintenance and all water was flowing through the single remaining chamber.
2. From the API separator, the water flows to the Dissolved Gas Flotation (DGF) Feed Tank/Clarifier where coagulants and flocculants are added, thence to the DGF tank where solids and petroleum products are skimmed off/decanted to the float tank where solids are skimmed off and sent off site for disposal. Dissolved gases are vented through carbon and hydrogen-sulfide canisters to the atmosphere. During the inspection, a strong odor of hydrogen sulfide was noted indicating a potential process problem.
3. Solids from the API separator, the DGF Feed Tank and the Float Tank are processed through a filter press. Liquids are reintroduced to the treatment process waters while solids are placed in a 30-40 cubic yard roll-off box for disposal off site. During the inspection, it was noted that the filter press and its associated roll-off box had no secondary containment.
4. From the DGF clarifier, waste water flows through two parallel sets of cartridge filter vessels; one set of 250 micron pore size and one set of 10 micron pore size. The parallel placement of the filter vessels were designed to maintain treatment/flow during filter change outs. According to Mr. Garcia, these filters are changed 3 to 4 times per day, sometimes more often, depending on the production operations.
5. From the filter vessels, the waste water is diverted to flow (parallel) through the Macro-Porous Polymer Extraction (MPPE) chamber and/or through two large Granular Activated Carbon (GAC) canisters in series.
6. For the MPPE chamber, steam is introduced to heat the vessel and volatiles are vented to the facility flare. According to Mr. Garcia, the MPPE unit has to be cleaned out pending on the amount of sulfur in the waste water.
7. For GAC treatment, waste water flows through both canister in series. According to Mr. Garcia and Mr. Riege, the GAC canisters were installed 9-12 months ago. Per Mr. Garcia, the waste water does not go through the GAC unit except when the MPPE is not removing benzene to a level below 5 ppm; only then does the waste water process through the GAC canisters.
8. The Sanitary Treatment Pond (STP-1) is a set of aeration lagoons that receive process waste water from the WWTP, sanitary sewer from the facility, and sanitary sewer from the Pilot Travel Center, a neighboring truck stop. STP-1 consist of two long aeration cells. The cells have

mechanical aerators to facilitate atmospheric off gassing. Hydrogen sulfide levels at STP-1 are very high as noted by odor and instrumentation. EPA's MSA Sirius meter showed in excess of 5 ppm as noted by Bill Mansfield during this part of the inspection. The facility's air monitoring units showed comparable results.

9. STP-1 water then empties into the evaporation ponds for final placement. It was noted that the water in evaporation ponds 2 and 3 had a pink hue. The reason for the color is unknown as inquiry was made to Mr. Riege. Later, it was disclosed that the pink hue was due to higher turbidity (local red/pink clay particles suspended in the water).

During the inspection of the WWTP, the GAC canisters and the filter canisters were not shown on the current P&ID diagrams. This was noted to Mr. Riege and Mr. Garcia, and Mr. Riege told us that they would make updates to the drawings before we finish the inspection.

All materials (volatiles) from the refining operation and the WWTP are routed through the flare at the facility according to Mr. Riege.

During the inspection of the WWTP, none of the storage/treatment units were labeled as Hazardous Waste units.

While driving by equalization/storage tanks T27, T28 and/or T35, the inspection team noted that the tanks were not labeled as Hazardous Waste units. I asked Mr. Riege why the tanks are not labeled as such, and Mr. Riege stated that the tanks are part of the waste water treatment. Subsequently, I asked if the WWTP has any permit, and Mr. Riege stated that the WWTP has no permit. Later, I asked where does the treated waste water finally end up, and Mr. Riege stated that the treated waste water ends up in the evaporation ponds and does not leave the refinery's property.

90-Day Hazardous Waste Storage Area Observation:

The inspection team and Mr. Riege met with Mr. Alvin Dorsey at the 90-Day hazardous waste storage area. This area sits on a concrete pad of approximately 45 feet by 45 feet in size. The storage area is enclosed with a chain-linked fence with a locked gate.

The following are regulatory concerns noted during the inspection:

1. One hazardous waste container was leaking (55-gallon steel drum) onto the surface of the containment area.
2. 12 containers with Hazardous Waste labels showed accumulation date of "5/2/2014" which exceeds the 90-day storage limit.
3. Hazardous waste containers had improper aisle spacing between them.

The following are non-regulatory safety/housekeeping concerns noted during the inspection:

4. Empty containers (drums and totes) were stored in the hazardous waste storage area.
5. Nonhazardous waste was stored in the Hazardous Waste storage area.
6. Containers with waste were not covered. These wastes were reported as nonhazardous waste.

These six concerns with the hazardous waste storage area were photo-documented and presented in Appendices 1 and 2.

Corrective Action Facility Tour

During the RCRA corrective action facility tour, photographs were taken and are presented in Appendices 1 and 2. All SWMUs and AOCs identified in the 2013 Post-Closure Permit were inspected during the facility tour. Table 1 identifies the units/areas inspected during the facility tour:

Table 1
List of SWMU and AOC at Gallup Refinery

Note: ☑ = Visually inspected during our facility tour.

Unit ID / Description	Corrective Action Descriptions / Observations
☑ SWMU 1 - Aeration Basins	Investigation Report submitted to NMED. Facility plan is to close in place. During this inspection, stained soil and pooling of liquid was noted.
☑ SWMU 2 - Evaporation Ponds	Work Plan Submittal Date: January 31, 2021. During this inspection, all ponds were intact. Moisture on lower portion of the back walls were noted though, signifying potential leaching. At Pond P-2, a pinkish hue was noted in the water, potentially elevated turbidity from suspended clays.
SWMU 3- Empty Container Storage Area (ECSA) / Heat Exchanger Bundle Cleaning Pad	Work plan submitted to NMED. The area previously used as the ECSA is no longer being used to store empty drums. The area has been closed, a new concrete containment pad has been installed, and the site is now occupied by a heat exchanger cleaning pad. This area was not inspected, but the inspection team did go by the SWMU and noted no concerns.
☑ SWMU 4 - Old Burn Pit	Work plan submitted to NMED. SWMU 4 consists of the old burn pit located approximately 700 feet north of the tank farm and west of the fire training area. The old burn pit area is a triangular site measuring approximately 20 feet by 40 feet and was used to burn acid-soluble oils. During this inspection, it was noted that the area has been capped with native soil and left undisturbed.
☑ SWMU 5 - Landfill Areas	Work plan submitted to NMED. The landfills were used to dispose of non-regulated materials from refinery construction, maintenance, and operational activities, but have been inactive since the early 1980s. These landfill areas are reported to contain inorganic, nonhazardous solid waste and debris from refinery construction, maintenance, and operational activities. During this inspection, it was noted that the area has been capped with native soil and left undisturbed.
SWMU 6 - Tank Farm	Work Plan Submittal Date: December 31, 2019. This area is still an active tank farm consisting of approximately 42 above ground storage tanks. The SWMU consist of several impacted areas within the tank farm. The SWMU was not inspected, but the inspection team did go through the area several times and no visual concerns were noted.

Unit ID / Description	Corrective Action Descriptions / Observations
☒ SWMU 7 - Fire Training Area	Work Plan Submittal Date: March 31, 2015. SWMU 7 is adjacent to (east of) the current fire training area. It is a rectangular flat site measuring approximately 50 feet wide by 80 feet long. Contaminated soils and structures have been removed from the SWMU. During this inspection, it was noted that the area is now flat, barren and not in use. No visual concerns were noted with this SWMU, but the current fire training area had several concerns.
☒ SWMU 8 - Railroad Rack Lagoon and Fan-Out Area	Investigation/Remediation Report submitted to NMED. The overflow ditch and fan-out area was used to manage overflow when the railroad rack lagoon was filled beyond capacity. The railroad rack lagoon has not been used since the mid-1980s. During this inspection, it was noted that the area is now flat, barren and not in use. No visual concerns were noted with
☒ SWMU 9 - Drainage Ditch and Inactive Land-farm	Work Plan Submittal Date: June 30, 2015. The inactive land treatment farm and associated drainage ditch were placed in service in 1958. Land treatment area operations were discontinued in the early 1980s. Oily wastes were formerly biodegraded on this site. During this inspection, it was noted that the area is now flat, barren and not in use. No visual concerns were noted with this SWMU. But adjacent to this area to the west, an underground storage tank was identified with the manhole cover open and an unidentified liquid within. When I asked Mr. Riege about the tank, he stated this was his first time seeing it.
☒ SWMU 10 - Sludge Pits	Work Plan Submittal Date: September 20, 2014. SWMU No. 10, Sludge Pits, (Figure 10-1) consists of two former API separator sludge pits. The sludge pit area is an oblong flat site measuring approximately 120 feet wide by 200 feet long. Within this area, two pits were previously excavated and filled with oily waste from the API separator. In 1980, the sludge was removed from the pits and replaced with clean fill soil. The site was then covered with a layer of clean soil. During this inspection, it was noted that the area is now barren with only utility poles and line running through it. No visual concerns were noted with this SWMU.
SWMU 11 - Secondary Oil Skimmer	Work Plan Submittal Date: December 31, 2015. SWMU No. 11 consists of the secondary oil skimmer located south of the main evaporation ponds. The secondary oil skimmer site is a rectangular area measuring approximately 10 feet wide by 25 feet long, and centered over an earthen storm water drainage ditch. Within this area, a steel box was previously installed and used to collect suspended oil and sediment from storm water flowing through the ditch. This area was not inspected, but the inspection team did go by the SWMU and noted no concerns. No equipment was present.

Unit ID / Description	Corrective Action Descriptions / Observations
SWMU 12 – Contact Waste-water Collection System	Work Plan Submittal Date: March 31, 2016. SWMU No. 12 was a component of the refinery wastewater treatment system. It consisted of a network of underground piping and catch basins that are located beneath various refinery processing units and are used to collect process wastewater. This wastewater flows by gravity through the system to the old API oil/water separator. During this inspection, the API is no longer used and the lines are shut off. Die testing of the lines were conducted showing some issues of leaking. Mr. Riege stated that the underground lines are being repaired/replaced.
☒ SWMU 13 - Drainage Ditch Between API Evap. Ponds and Neutralization Tank Evap. Ponds	Work Plan Submittal Date: June 30, 2016. SWMU No. 13 consists of the small overflow lagoon, known as Pond No. 10, and its associated drainage ditch. The drainage ditch is a component of the refinery wastewater treatment system. Effluent water from Evaporation Pond No. 10 is conveyed along the ditch and distributed to north area evaporation ponds. SWMU No. 13 consists of a man-made earthen channel measuring approximately 20 feet wide by 120 feet long. During this inspection, these channels appeared not to be in use. No visual concerns were noted.
☒ SWMU 14 - Old API Separator	Investigation Report submitted to NMED. This SWMU is located south of the new API units. During our inspection, this SWMU was no longer in service and appeared to have been removed. When asked about the water going to this unit, Mr. Riege stated that all water has been shut off to this unit.
☒ AOC 15 - New API Separator	Work Plan Submittal Date: September 30, 2016. The new API separator consists of two parallel units, approximately 45ft x 8ft x 5ft in dimensions. During this inspection, one unit was open and shut down for maintenance. No visual concerns were noted.
☒ AOC 16- New API Separator Overflow Tanks	Work Plan Submittal Date: September 30, 2016. Currently the AOC consists of two frac-tanks. During this inspection, these tanks were not labeled as hazardous waste. Mr. Riege stated that the tanks are part of the process. It was also noted that the tanks did not have adequate secondary containment.
☒ AOC 17 - Railroad Loading/Unloading Facility	Release Assessment Submittal Date: December 31, 2016. During this inspection, no visual concerns were noted. The inspection team did collect a water sample of the AOC's sump on the second day of the inspection and sent the sample to the NMED contracted lab for analysis.
AOC 18 - Asphalt Tank Farm (tanks 701-709, 713, 714)	Work Plan Submittal Date: June 30, 2017. The Asphalt Tank Farm is located south of the process units and consists of ten above ground storage tanks within one secondary storage berm. During this inspection, the AOC was not inspected, but the inspection team did go by the area several times and no visual concerns were noted.

Unit ID / Description	Corrective Action Descriptions / Observations
AOC 19 - East Fuel Oil Loading Rack	Release Assessment Submittal Date: June 30, 2017. The East Fuel Oil Loading Rack was located north of the Asphalt Tank Farm, AOC 18. During the inspection, this AOC was not inspected.
☒ AOC 20 - Crude Slop and Ethanol Unloading Facility	Release Assessment Submittal Date: September 30, 2017. This area is located northwest of the main loading racks (AOC 21). During this inspection, a tanker truck was beginning to unload. No visual concerns were noted.
☒ AOC 21 - Main Loading Racks	Release Assessment Submittal Date: December 31, 2017. This area consists of approximately five loading bays. Trucks were present and loading during the inspection. No visual concerns were noted.
☒ AOC 22 - Loading Rack Additive Tank Farm	Work Plan Submittal Date: March 31, 2018. This area is located west of Mail Loading Racks (AOC 21) and consist of approximately ten additive tanks and an unloading/loading area. During this inspection, no concerns were noted other than the concrete secondary containment joints around Tanks 901 and 902, where the joint compound appeared to be weathering and may not retain product during an inadvertent spill.
☒ AOC 23 - Retail Fuel Tank Farm (tanks 1-7, 912, 913, 1001, 1002)	Work Plan Submittal Date: March 31, 2018. There are eight product tanks located in this area, residing in one earthen secondary containment. During this inspection, several monitoring wells were identified in the area around the tank farm, and one monitoring well located inside the containment area with a potential issue. The riser pipe, "stickup," on the well is below the berm height of the secondary containment. If a release occurred, the well could act as a conduit for product to enter the baring groundwater unit. A remedy was suggested to Mr. Riege to extend the riser pipe above the berm height.
AOC 24 - Crude Oil Tank Farm (tanks 101 and 102)	Work Plan Submittal Date: June 30, 2018. There are two large crude tanks located in this area, residing in one earthen secondary containment. During this inspection, the AOC was not inspected, but the inspection team did go by the area several times and no visual concerns were noted.
AOC 25 - Tank 573 (Kerosene tank)	Release Assessment Submittal Date: December 31, 2016. This area is located on the south side of the Railroad Loading/Unloading Facility (AOC 17). During this inspection, the AOC was not inspected, but the inspection team did go by the area several times and no visual concerns were noted.
AOC 26 - Process Units	Release Assessment Submittal Date: April 30, 2021. During this inspection, the AOC was not inspected, but the inspection team did go by the area several times and no visual concerns were noted.

Unit ID / Description	Corrective Action Descriptions / Observations
AOC 27 - Boiler and Cooling Unit Area	Release Assessment Submittal Date: September 30, 2018. The Boiler and Cooling Unit Area is divided into two areas and both are adjacent to the processing area. During this inspection, the AOC was not inspected, but the inspection team did go by the area several times and no visual concerns were noted.
AOC 28 - Warehouse and Maintenance Shop Area	Release Assessment Submittal Date: December 31, 2018. This area consists of four buildings: a warehouse, an electrical shop, mechanical shop, and a pipe/welding shop. During this inspection, these buildings were not inspected.
AOC 29 - Equipment Yard and Drum Storage Area	Release Assessment Submittal Date: March 31, 2019. The Equipment Yard and Drum Storage Area is small yard adjacent to the warehouse (AOC 28). During this inspection, the AOC was not inspected, but the inspection team did go by the area several times and no visual concerns were noted.
☒ AOC 30 – Laboratory	Release Assessment Submittal Date: June 30, 2019. The laboratory is adjacent to the warehouse (AOC 28) and it provides preliminary analysis of water from the WWTP as well as for product analysis. Additional compliance samples are sent to an off-site lab for analysis. All WWTP sample remains are put down the drain and sent to the WWTP for treatment/disposal. During this inspection, no visual concerns were noted.
☒ AOC 31 - Tanks 27 and 28	Work Plan Submittal Date: September 30, 2019. Tanks T-27 and T-28 are waste water overflow tanks prior to the waste water going into the API oil/water separators. During this inspection, it was noted that these tanks, as well as equalization tank T-35, were not labelled as hazardous waste. No other visual concerns were noted.
AOC 32 - Flare and Ancillary Tanks (tanks Z85V2, V85V3, Z84-T105)	Work Plan Submittal Date: December 31, 2019. During this inspection, the AOC was not inspected, but the inspection team did go through the area several times and no visual concerns were noted.
☒ AOC 33 - Storm Water Collection System	Work Plan Submittal Date: December 31, 2019. During this inspection, the team inspected both storm water outfalls as well as some of the storm water ditches and ponds. No concerns were noted during this inspection.
☒ AOC 34 - Scrap Yard	Work Plan Submittal Date: June 30, 2020. This AOC is located north of the bulk storage tanks between SWMU 5 and SWMU 7. During this inspection, the inspection team travelled several times through the AOC, and no visual concerns were noted.

During the facility tour/overview, the inspection team spoke with Mr. Tim Coley, Lab Manager. This laboratory provides preliminary analysis of water from the WWTP. Additional compliance samples are sent to an off-site lab for analysis. All sample remains are poured down the drain which goes to the WWTP for treatment/disposal.

During the facility tour/overview, the inspection team spoke with Mr. Cipriano Garcia, WWTP Manager. Mr. Garcia mentioned that Tanks T-27, T-28, and T-35, were last cleaned approximately 3 years ago. These tanks have internal floating roofs. According to Garcia, the WWTP operates with a pH range between 5 & 11 with the target pH as 7.0. Normally, the facility operates around 8.0 pH. The treatment processes are sampled and analyzed at the on-site lab as previously identified. The color of the sample collected had a yellowish tint. Regulatory compliance samples are sent to Hall Environmental in Albuquerque, NM. The normal through put for the WWTP is approximately 200 GPM.

During the facility tour/overview, the inspection team spoke with Mr. Riege concerning AOC -16- New API Separator Overflow Tanks which are two frac-tanks. The tanks were the source of a spill during the week of 3-9 August 2014. The tanks overflowed and the materials discharged to a storm drain. These tanks are normally used to contain water from the process and decant oil/grease/light ends. The tanks have been in the process line for about 18 months. Secondary containment around these tanks is not adequate and was noted to Mr. Riege. The release from the FRAC tanks was approximately one-half mile long and was contained on-site. Materials from the spill were collected and sent off site for disposal.

The GAC canisters have been in the process for about 1 year according to Mr. Garcia and Mr. Riege. There is no secondary containment around the GAC units. The GAC units are recharged about every 10 days or more often if necessary to maintain the regulatory/permit requirement for less than 5 ppm benzene.

The evaporation ponds have aerators in place to enhance VOC removal. According to Mr. Riege, this activity has an air emissions permit.

Per Mr. Riege, surface impoundments, land treatment unit, and landfill do not have synthetic liners; only natural clay liners. There is no specific monitoring for the land treatment unit or the landfill. The entire facility is monitored for groundwater contamination.

Ponds AL1 and AL2 have had draft closure plans submitted to NMED within the past 18 months. Western is waiting for comments/approval/disapproval from NMED prior to proceeding with closure for these ponds.

Sanitary sewage flows into STP-1 and the only treatment in this pond are aerators. Sanitary sewage from within the facility are mixed with process and storm water (that has fallen within the process area) prior to treatment in the WWTP. Sanitary and storm water from the Pilot Truck Terminal immediately adjacent to the Western Refinery also flows to STP-1. This is a contractual arrangement for the refinery purchase when Western bought the facility from Giant. The Pilot facility was a Giant truck stop at the time of the refinery purchase according to Mr. Riege.

During the facility tour, a treatment unit for Acid Solidified Oil (ASO) was observed. According to Mr. Riege, this is a process that was conducted by a contractor; Chemical Transportation, Inc. (CTI). The ASO was treated and solidified with soda ash and lime, then sent to another facility for recovery. CTI is an environmental transportation services company. Telephone 888-444-7077. The trailer holding the equipment had Arizona registration plates. At this point, Western considered the ASO a waste.

Day 2 of the Inspection

The second day of the inspection was planned to collect samples from the WWTP, an area where a petroleum seep was identified, STP-1 sumps, and the Railroad Loading/Unloading Facility sumps. The original plan was to begin sampling at the WWTP, sampling 3-4 points.

Upon arrival and after the inspection team prepared containers for sample collection, the team was told the WWTP was shut down due to scheduled maintenance. I requested a copy of the work order showing/documenting the shutdown had been scheduled prior to our arrival for the inspection. The documentation provided showed the work had been scheduled approximately one week prior to our arrival. The work was to replace grounding buses for the electrical equipment.

This event changed our sampling schedule. Instead of the WWTP, we sampled the seep area and the Railroad Loading Rack. We split samples with Western and shipped the Railroad Loading Rack samples to the NMED laboratory as requested. The seep samples were packed and maintained on ice for shipment to the EPA lab the next day. Samples were to be analyzed for Total VOC, TCLP VOC, TCLP SVOC, and Total Metals. For the QA/QC protocol, the sample suite also includes a matrix spike, a matrix spike duplicate, trip blank, and temperature blank. See the laboratory data package in Appendix 6 for details.

NOTE: The WWTP shutdown was supposed to be completed by 13:30. Maintenance was reportedly scheduled for 3 months prior to this shutdown according to Mr. Erik Loera, Western WWTP Supervisor. The WWTP did not come back on line until after 18:00 according to Mr. Riege. We were not able to execute the sampling on the second day because we had to have the other samples to FedEx prior to 16:00 to meet shipping and holding times.

Before leaving the facility, a list of required documents was provided to Mr. Riege for him and Mr. Hains to be available on day 3 of the inspection.

Day 3 of the Inspection

The third day of the inspection, Mr. Mansfield and I went to the WWTP to collect samples from the process train, while Mr. Barnes met with Mr. Riege, Mr. Hains and Mr. Crouch to conduct the interview and collect relevant documents.

The Interview

Mr. Barnes met with Mr. Hains and Mr. Crouch. Mr. Hains is the corporate remediation manager. Mr. Crouch is a contractor working for Mr. Hains. They were collecting documents to be provided to EPA electronically. Mr. Barnes provided a written letter to Hains listing/identifying the documents that were collected. A copy of that letter is at Appendix 7.

According to Mr. Hains, the groundwater reports submitted to the State contain the Lagoon VOC information that was requested.

Manifests and shipping documents for the previous 6 months were provided. The wastes identified on the manifests were primarily D003 reactive wastes on the WWTP filters. Filters are stored in a 40-yd³ roll-off box and are disposed of in less than 90 days. The only 40-yd³ roll-off box observed during the inspection was at the filter press. There were no 40-yd³ roll-off boxes in the 90-day hazardous waste storage area.

The MPPE unit has problems with plugging because of the high sulfates in the crude and refining process. This causes the system upsets requiring frequent filter changes according to Mr. Hains and Mr. Crouch.

Groundwater drinking supplies are 1000 to 2500 feet Below Ground Surface (BGS). There are 4 potable water wells on the refinery site. Clays underlying the site are 30 to 100 feet thick and have permeability

ranging from 10^{-4} to 10^{-8} cm/sec. The city has a well at 3500 feet BGS. According to documents collected, the upper water bearing unit will produce approximately 100 gal/100ft²/day.

The MPPE and GAC units in the WWTP are constructed in parallel, not in series as initially assumed.

The Sampling

Mr. Mansfield and I made several attempts with Mr. Raul Sanchez, a WWTP operator, to collect a waste water sample at outfall of the WWTP, prior to the discharge to STP-1. Due to hydrogen sulfide levels at 17 ppm (NIOSH REL: C 10 ppm [10-minute]), we withdrew from the sampling ports so Mr. Mansfield and Mr. Sanchez could don SCBAs to complete the sampling event. Several attempts were made to collect a sample, unfortunately the sampling ports were completely plugged and we were unable to retrieve samples. This indicates samples may not be being collected at the sampling points on a regular frequency. When I asked Mr. Sanchez where Western collects their effluent samples, he stated that the samples are taken from sample ports after the MPPE unit and ports after the GAC canisters. Mr. Mansfield and I collected samples with Western from post GAC (sample PT-1) and post MPPE (sample PT-2) sample ports. Samples were to be analyzed for Total VOC, TCLP VOC, TCLP SVOC, and Total Metals. For the QA/QC protocol, the sample suite also includes a matrix spike, a matrix spike duplicate, trip blank, and temperature blank.

The MPPE and GAC units at the WWTP are constructed in parallel, not in series as initially assumed. At the time of the sampling, the WWTP was treating at 198 gallons per minute (GPM). 150 GPM was being treated through the GAC units and 48 GPM were being treated through the MPPE unit.

Samples were shipped under a signed chain of custody to EPA's laboratory in Houston, Texas for analyses. I shipped the sealed sample coolers from the UPS Store in Gallup, New Mexico. See the laboratory data package in Appendix 6 for details.

Closing Conference

A closing conference was held at 13:30 on 14 Aug 2014. Persons in attendance included:

- | | | |
|----|------------------------------|---|
| 1. | Ms. Ann Allen | Western – via telephone |
| 2. | Mr. Victor "Cotton" McDaniel | Western – Refinery Manager |
| 3. | Mr. Allen S. Hains | Western – Corporate Remediation Manager |
| 4. | Mr. Scott Crouch | Western – Contractor |
| 5. | Mr. Beck Larsen | Western – Environmental Engineer |
| 6. | Mr. Charles "Chuck" Barnes | EPA Region 6 |
| 7. | Mr. Paul James | EPA Region 6 |

The Closing Conference consisted of going through photographs that were taken across the facility during the inspection. Mr. Barnes and I discussed each photograph and the various issues represented in the picture.

Specific items identified during the closing conference included:

1. Leaking hazardous waste drum in the 90-day hazardous waste storage area
2. Hazardous waste drums in the HW storage area longer than 90 days

3. WWTP processes and tanks not labeled with HW
4. Inadequate secondary containment at HW management areas

SECTION III – ANALYTICAL RESULTS

All EPA samples were analyzed at EPA Region 6 Laboratory in Houston, Texas. The following samples were sent:

Table 2
List of Samples Collected

Station ID	Description	Laboratory ID	Sample Type	Date Collected
PT-1	Post-GAC Wastewater Sample	1408010-01	Liquid	8/14/14 10:50
PT-1D	Duplicate of Station PT-1	1408010-02	Liquid	8/14/14 10:50
PT-2	Post-MPPE Wastewater Sample	1408010-03	Liquid	8/14/14 11:20
SEEP	Surface soil sample of Seep Area	1408010-07	Solid	8/13/14 13:45
SEEP-1	Duplicate of Station SEEP	1408010-08	Solid	8/13/14 13:45
TB-2	Trip Blank	1408010-04	Liquid	8/14/14 0:00
TB-3	Trip Blank	1408010-05	Liquid	8/14/14 0:00
TB-1	Trip Blank	1408010-06	Liquid	8/13/14 0:00

The analytical report was transmitted to me on September 26, 2014. For the complete laboratory report, see Appendix 7. Analyses included in this report are as followed:

TCLP 1311 VOA/ZHE Prep	VOA TCLP 1311/8260	VOA 8260 Routine List
TCLP 1311 ABN/Pest Prep	ABN TCLP 1311/8270	ABN 8270 Routine List
TCLP 1311 Metals Prep	Metals TCLP ICP 1311/6010B	Metals ICP 6010B
	Solids, Dry Weight	Metals ICP-MS 6020

Totals analysis was performed initially to see if the TCLP was needed. Samples requiring TCLP are listed.

Waste Water Samples – Post Treatment

Sample PT-2 (Post-MPPE Wastewater Sample) had a concentration of Total Benzene at 600 µg/L. Due to the high concentration of benzene, sample PT-2 was reanalyzed with TCLP extraction methods and had a concentration of Benzene at 597 µg/L (0.597 mg/L). This sample exceeds the regulatory limit of 0.5 mg/L.

For comparison, sample PT-1 (Post-GAC wastewater sample) had a concentration of Total Benzene at 18.1 µg/L, and its duplicate sample PT-1D had a concentration of Total Benzene at 17.5 µg/L. For waste water samples, all other compounds/analytes, defined in 40 CFR 261.24, were below regulatory levels.

Surface Soil Samples of Seep Area

Sample SEEP and sample SEEP-1 (duplicate sample of sample SEEP) had no total concentrations that exceeded the EPA's industrial soil screening levels; but there were exceedances in residential soil screening levels for 2-Methylnaphthalene, Naphthalene, Aluminum, Cobalt, Iron, Manganese, and Arsenic (see Table 3). Under TCLP extraction methods, both sample, SEEP and SEEP-1, had no regulatory exceedances.

Table 3
Surface Soil Samples Results from Seep – Only Detectable Total Concentrations Listed

EPA Method	Analyte/Compound	EPA Soil Screening Level		Sample ID	Result (mg/Kg)	Qualifier
		Residential (mg/Kg)	Industrial (mg/Kg)			
EPA 8260C	Cyclohexane	650	2700	SEEP	0.147	N
				SEEP-1	0.424	N
	ortho-Xylene	65	280	SEEP	3.19	J
				SEEP-1	4.72	
EPA8270D	2-Methylnaphthalene	23	300	SEEP	23.0	J
				SEEP-1	23.5	
	Naphthalene	3.8	17	SEEP	8.27	J
				SEEP-1	8.59	
	Pyrene	170	2300	SEEP	4.6	
				SEEP-1	5.39	
EPA6010B	Aluminum	7700	110000	SEEP	8160	
				SEEP-1	7830	
	Barium	1500	22000	SEEP	558	K
				SEEP-1	568	K
	Beryllium	16	230	SEEP-1	0.7	
	Cadmium	7	98	SEEP	0.7	
	Chromium	Chromium(III), Insoluble Salts 12000 180000		SEEP	6.3	
				SEEP-1	6.6	
	Cobalt	2.3	35	SEEP	3.4	
				SEEP-1	3.5	
	Copper	310	4700	SEEP	15.8	
				SEEP-1	7.8	
	Iron	5500	82000	SEEP	15700	
				SEEP-1	4530	
	Manganese	180	2600	SEEP	443	
				SEEP-1	595	
	Zinc	2300	35000	SEEP	262	J
				SEEP-1	52.2	
EPA6020	Arsenic	0.67	3	SEEP	2.1	
				SEEP-1	1.5	
	Lead	400	800	SEEP	25.8	
				SEEP-1	23	

Notes: All results are shown in mg/Kg.

J = The identification of the analyte is acceptable; the reported value is an estimate.

K = The identification of the analyte is acceptable; the reported value may be biased high. The actual value is expected to be less than the reported value.

N = There is presumptive evidence that the analyte is present; the analyte is reported as a tentative identification.

BOLD = Concentration exceeds EPA's Residential Soil Screening Levels.

SECTION IV - AREAS OF CONCERN

Regulatory Compliance Concerns

1. The facility states that the WWTP is exempted from RCRA under the Wastewater Treatment Unit Exemption, aka "Headworks Exemption," 40 CFR § 261.3(a)(2)(iv)(A-G). If this is the case, the units within the WWTP is part of a wastewater treatment facility that is subject to regulation under either Section 402 or Section 307(b) of the Clean Water Act (CWA). Since the WWTP does not and had not discharged into surface waters (waters of the U.S.) or into a Publicly Owned Treatment Works (POTW) sewer system, it is believed that the WWTP does not receive the exemption, and therefore its units fall under RCRA regulations (Part 264/265, Subpart J). If this argument holds true, many infringements are likely at play, including the following concerns:
 - a) Inadequate secondary containment around hazardous waste tanks, 40 CFR § 265.193. It was noted during the preparation of this inspection that a release of hazardous waste water (D018, F038) from the API overflow tanks occurred on August 5, 2014, in which the release flowed approximately 0.5 miles. A C-141 Initial Report was provided to NMED as a result of this release. During my inspection, the secondary containment was still inadequate.
 - b) No secondary containment around Granular Activated Carbon (GAC) canisters, 40 CFR § 265.193 and § 265.31.
 - c) Inadequate secondary containment around filter press and roll off box, 40 CFR § 265.193 and 265.31; and
 - d) Inadequate labeling of hazardous waste tanks. While being accumulated on-site, each container and tank must be labeled or marked clearly with the words "Hazardous Waste," 40 CFR § 262.34(a)(3).
2. In the 90-day hazardous waste storage area, a drum containing iron chelate hazardous waste was leaking onto the ground. The failure to identify the leaking container, and containers that are deteriorating (e.g., cracked, rusted) or leaking must not be used. Waste stored in defective containers must be transferred to containers in good condition or handled in another way that satisfies the requirements in Part 264/265 (40 CFR § 265.171 and § 265.31).
3. Twelve (12) 55-gallon drum hazardous waste containers were identified in the 90-day hazardous waste storage area that exceeded the 90 day accumulation time as defined under 40 CFR § 262.34.
4. Inadequate aisle space in the 90-day hazardous waste storage area. Under 40 CFR § 265.35, the owner or operator must maintain aisle space to allow the unobstructed movement of personnel, fire protection equipment, spill control equipment, and decontamination equipment to any area of facility operation in an emergency, unless aisle space is not needed for any of these purposes.
5. During the facility tour, I noted areas that hazardous waste has leaked or has a potential of leaking onto the ground. These areas include:
 - a) Seep Area (recent hazardous waste release);

- b) API Overflow Tanks (recent hazardous waste release);
- c) Fire Training Area Diesel Tank (inspection team noted contamination outside secondary containment);
- d) The poor condition of the Fire Training Pad (inspection team noted numerous cracks in the containment pad);
- e) The poor condition of the Additive Tank Farm's secondary containment (inspection team noted joint compound has weathered away from the secondary containment seams); and
- f) An old abandoned underground storage tank (inspection team noted UST outside the production area with it lid open and contents inside);

Under 40 CFR § 265.31, Facilities must be maintained and operated to minimize the possibility of a fire, explosion, or any unplanned sudden or non-sudden release of hazardous waste or hazardous waste constituents to air, soil, or surface water which could threaten human health or the environment.

Non-Regulatory Concerns

- 6. The 90-day hazardous waste storage area is not covered and during the monsoons, rainwater can fall, collect inside the storage area, and be discharged without knowledge or containment.
- 7. Multiple types of waste stored in the 90-Day Hazardous Waste Storage Area. While not against the regulation, it is not considered a safe/sound management practice.
- 8. The facility receives and treats sanitary sewage and storm water from an offsite facility. It is unknown what is in those waters.
- 9. Water well was unsecured (missing lock).

Note: Some of these concerns are being addressed, have already been addressed, or will be addressed, according to Mr. Riege email, dated August 22, 2014, Appendix 7.

Section IV – LIST OF APPENDICES

This section should be a numbered list of all the appendices in the inspection report. The Photo log should be Appendix 1. If a permit requirement is attached to support an AOC, only attach the permit cover page and the specific pages needed to document the permit requirement (see example in Appendix 5). Example format:

Appendix 1 – Photo Log – Photos taken with Mr. James' camera

Appendix 2 – Photo Log – Photos taken with Mr. Barnes' camera

Appendix 3 – WWTP Process flow diagram (revision 3)

Appendix 4 – C-141 Form – Hazardous Waste Release on 8/5/2014

Appendix 5 – SWMU / AOC Location Maps

Appendix 6 – Analytical results

Appendix 7 – Correspondences between EPA and Western concerning the Inspection

Appendix 8 – Information on the Seep Area

Region 6 Compliance Assurance and Enforcement Division
INSPECTION REPORT

Appendix 1

Photo Log

Photos taken with Mr. James' camera



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 1

Location: Western Refining - Gallup Refinery, 92 Giant Crossing Road		
City: Gallup	County: McKinley County	State: New Mexico



Photo File Name: P8120001

Date of Photo: 12 August 2014

Time of Photo: 0725

Photographer: Wm. Mansfield

Description: Western Refining entrance sign with facility in background.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 2

Location: Western Refining - Gallup Refinery, 92 Giant Crossing Road		
City: Gallup	County: McKinley County	State: New Mexico



Photo File Name: P8120002

Date of Photo: 12 August 2014

Time of Photo: 1003

Photographer: Wm. Mansfield

Description: Tanks T27, T28 and T35 in background. These tanks are holding and equalization tanks for wastewater prior to treatment.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 3

Location: Western Refining - Gallup Refinery, 92 Giant Crossing Road		
City: Gallup	County: McKinley County	State: New Mexico



Photo File Name: P8120003

Date of Photo: 12 August 2014

Time of Photo: 1003

Photographer: Wm. Mansfield

Description: WWTP - Two API/Oil-Water Separators (one with white lid in background and one without lid in foreground).



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 4

Location: Western Refining - Gallup Refinery, 92 Giant Crossing Road		
City: Gallup	County: McKinley County	State: New Mexico



Photo File Name: P8120004

Date of Photo: 12 August 2014

Time of Photo: 1013

Photographer: Wm. Mansfield

Description: WWTP Clarifier in foreground. WWTP Building in background.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 5

Location: Western Refining - Gallup Refinery, 92 Giant Crossing Road		
City: Gallup	County: McKinley County	State: New Mexico



Photo File Name: P8120005
Date of Photo: 12 August 2014
Time of Photo: 1016
Photographer: Wm. Mansfield
Description: WWTP Float Tank.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 6

Location: Western Refining - Gallup Refinery, 92 Giant Crossing Road		
City: Gallup	County: McKinley County	State: New Mexico



Photo File Name: P8120006

Date of Photo: 12 August 2014

Time of Photo: 1017

Photographer: Wm. Mansfield

Description: WWTP Filter-Cake Press.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 7

Location: Western Refining - Gallup Refinery, 92 Giant Crossing Road		
City: Gallup	County: McKinley County	State: New Mexico



Photo File Name: P8120007

Date of Photo: 12 August 2014

Time of Photo: 1018

Photographer: Wm. Mansfield

Description: WWTP Filter-Cake Press' roll-off box sitting outside of secondary containment.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 8

Location: Western Refining - Gallup Refinery, 92 Giant Crossing Road		
City: Gallup	County: McKinley County	State: New Mexico



Photo File Name: P8120008

Date of Photo: 12 August 2014

Time of Photo: 1020

Photographer: Wm. Mansfield

Description: WWTP Filter-Cake Press' roll-off box sitting outside of secondary containment.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 9

Location: Western Refining - Gallup Refinery, 92 Giant Crossing Road		
City: Gallup	County: McKinley County	State: New Mexico



Photo File Name: P8120009

Date of Photo: 12 August 2014

Time of Photo: 1021

Photographer: Wm. Mansfield

Description: WWTP Filter-Cake Press' roll-off box sitting outside of secondary containment. Noted some spillage on the ground, under and next to the roll-off box.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 10

Location: Western Refining - Gallup Refinery, 92 Giant Crossing Road		
City: Gallup	County: McKinley County	State: New Mexico



Photo File Name: P8120010

Date of Photo: 12 August 2014

Time of Photo: 1025

Photographer: Wm. Mansfield

Description: WWTP - Baker tanks used as grit tanks to stored wastewater from the float tank. Inadequate secondary containment. It was also noted during the inspection that the tanks had an approximate 0.4-0.5 mile release on August 5, 2014.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 11

Location: Western Refining - Gallup Refinery, 92 Giant Crossing Road		
City: Gallup	County: McKinley County	State: New Mexico



Photo File Name: P8120011

Date of Photo: 12 August 2014

Time of Photo: 1032

Photographer: Wm. Mansfield

Description: WWTP - Baker tanks used as grit tanks to stored wastewater from the float tank. Inadequate secondary containment. It was also noted during the inspection that the tanks had an approximate 0.4-0.5 mile release on August 5, 2014.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 12

Location: Western Refining - Gallup Refinery, 92 Giant Crossing Road		
City: Gallup	County: McKinley County	State: New Mexico



Photo File Name: P8120012

Date of Photo: 12 August 2014

Time of Photo: 1046

Photographer: Charles Barnes

Description: WWTP - Sample port after the MPPE unit.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 13

Location: Western Refining - Gallup Refinery, 92 Giant Crossing Road		
City: Gallup	County: McKinley County	State: New Mexico

Not to be publicized

CBI Claimed Photograph

Photo File Name: P8120013

Date of Photo: 12 August 2014

Time of Photo: 1047

Photographer: Charles Barnes

Description: WWTP - Bottom of the MPPE Unit.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 14

Location: Western Refining - Gallup Refinery, 92 Giant Crossing Road		
City: Gallup	County: McKinley County	State: New Mexico



Photo File Name: P8120014

Date of Photo: 12 August 2014

Time of Photo: 1049

Photographer: Wm. Mansfield

Description: WWTP - 10 μ m filter pots in parallel (photo out of focus).



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 15

Location: Western Refining - Gallup Refinery, 92 Giant Crossing Road		
City: Gallup	County: McKinley County	State: New Mexico



Photo File Name: P8120015

Date of Photo: 12 August 2014

Time of Photo: 1049

Photographer: Wm. Mansfield

Description: WWTP - 10 μ m filter pots in parallel (photo out of focus).



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 16

Location: Western Refining - Gallup Refinery, 92 Giant Crossing Road		
City: Gallup	County: McKinley County	State: New Mexico

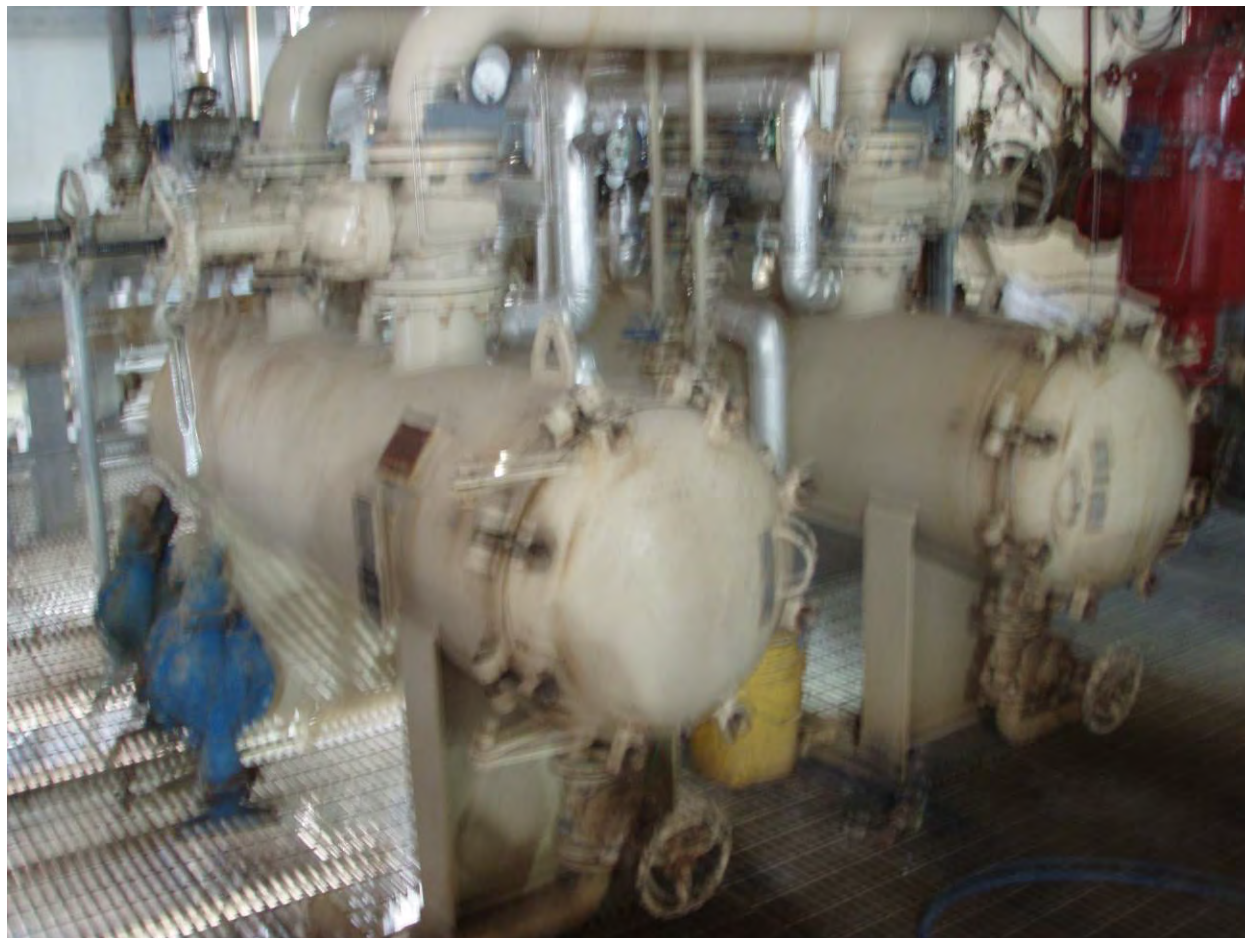


Photo File Name: P8120016

Date of Photo: 12 August 2014

Time of Photo: 1050

Photographer: Wm. Mansfield

Description: WWTP - 10 μ m filter pots in parallel (photo out of focus).



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 17

Location: Western Refining - Gallup Refinery, 92 Giant Crossing Road		
City: Gallup	County: McKinley County	State: New Mexico



Photo File Name: P8120017

Date of Photo: 12 August 2014

Time of Photo: 1052

Photographer: Wm. Mansfield

Description: WWTP - 10 μ m filter pots in parallel (photo in focus).



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 18

Location: Western Refining - Gallup Refinery, 92 Giant Crossing Road		
City: Gallup	County: McKinley County	State: New Mexico



Photo File Name: P8120018

Date of Photo: 12 August 2014

Time of Photo: 1052

Photographer: Wm. Mansfield

Description: WWTP - 250 μ m filter pots in parallel (on right).



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 19

Location: Western Refining - Gallup Refinery, 92 Giant Crossing Road		
City: Gallup	County: McKinley County	State: New Mexico



Photo File Name: P8120019

Date of Photo: 12 August 2014

Time of Photo: 1058

Photographer: Wm. Mansfield

Description: Two WWTP activated carbon canisters with no secondary containment.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 20

Location: Western Refining - Gallup Refinery, 92 Giant Crossing Road		
City: Gallup	County: McKinley County	State: New Mexico



Photo File Name: P8120020

Date of Photo: 12 August 2014

Time of Photo: 1102

Photographer: Wm. Mansfield

Description: Sewer Treatment Pond STP-1



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 21

Location: Western Refining - Gallup Refinery, 92 Giant Crossing Road		
City: Gallup	County: McKinley County	State: New Mexico



Photo File Name: P8120021

Date of Photo: 12 August 2014

Time of Photo: 1115

Photographer: Wm. Mansfield

Description: 90-Day hazardous waste storage yard with leaking drum, labeled as "Hazardous Waste, Accumulation Start Date: 07-11-14, Contents: Iron Chelate". Other drums exceeded the 90 day storage limit (see Charles Barnes inspection photos).



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 22

Location: Western Refining - Gallup Refinery, 92 Giant Crossing Road		
City: Gallup	County: McKinley County	State: New Mexico



Photo File Name: P8120022

Date of Photo: 12 August 2014

Time of Photo: 1425

Photographer: Wm. Mansfield

Description: SWMU-22 - Additive Tank Farm. Noted weak seal joints on the concrete floor of the secondary containment.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 23

Location: Western Refining - Gallup Refinery, 92 Giant Crossing Road		
City: Gallup	County: McKinley County	State: New Mexico



Photo File Name: P8120023

Date of Photo: 12 August 2014

Time of Photo: 1452

Photographer: Wm. Mansfield

Description: Groundwater seep area with noted contamination and soil staining. Six extraction points were identified.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 24

Location: Western Refining - Gallup Refinery, 92 Giant Crossing Road		
City: Gallup	County: McKinley County	State: New Mexico



Photo File Name: P8120024

Date of Photo: 12 August 2014

Time of Photo: 1458

Photographer: Wm. Mansfield

Description: Close-up of contamination seeping from the ground.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 25

Location: Western Refining - Gallup Refinery, 92 Giant Crossing Road		
City: Gallup	County: McKinley County	State: New Mexico



Photo File Name: P8120025

Date of Photo: 12 August 2014

Time of Photo: 1511

Photographer: Wm. Mansfield

Description: Pond P-2 – Noted pinkish hue in the water.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 26

Location: Western Refining - Gallup Refinery, 92 Giant Crossing Road		
City: Gallup	County: McKinley County	State: New Mexico



Photo File Name: P8120026

Date of Photo: 12 August 2014

Time of Photo: 1523

Photographer: Wm. Mansfield

Description: Opened cased steel well (unlocked/unprotected).



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 27

Location: Western Refining - Gallup Refinery, 92 Giant Crossing Road		
City: Gallup	County: McKinley County	State: New Mexico



Photo File Name: P8120027

Date of Photo: 12 August 2014

Time of Photo: 1540

Photographer: Wm. Mansfield

Description: Aeration Lagoon AL-1. Lagoon is no longer used and has not been cleaned out.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 28

Location: Western Refining - Gallup Refinery, 92 Giant Crossing Road		
City: Gallup	County: McKinley County	State: New Mexico



Photo File Name: P8120028

Date of Photo: 12 August 2014

Time of Photo: 1555

Photographer: Wm. Mansfield

Description: New fire training area. Noted cracks and broken seals in the concrete pad.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 29

Location: Western Refining - Gallup Refinery, 92 Giant Crossing Road		
City: Gallup	County: McKinley County	State: New Mexico



Photo File Name: P8120029

Date of Photo: 12 August 2014

Time of Photo: 1558

Photographer: Wm. Mansfield

Description: Fire Training Area – wetted tar like material on ground.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 30

Location: Western Refining - Gallup Refinery, 92 Giant Crossing Road		
City: Gallup	County: McKinley County	State: New Mexico



Photo File Name: P8120030

Date of Photo: 12 August 2014

Time of Photo: 1602

Photographer: Wm. Mansfield

Description: Diesel tank @ Fire Training Area. Noted liquid seeping through secondary containment. Strong diesel odor noted with soils affected.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 31

Location: Western Refining - Gallup Refinery, 92 Giant Crossing Road		
City: Gallup	County: McKinley County	State: New Mexico



Photo File Name: P8120031

Date of Photo: 12 August 2014

Time of Photo: 1619

Photographer: Wm. Mansfield

Description: Abandoned underground storage tank with opened top hatch. Discovered north of tank T554 and north of fence line.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 32

Location: Western Refining - Gallup Refinery, 92 Giant Crossing Road		
City: Gallup	County: McKinley County	State: New Mexico



Photo File Name: P8120032

Date of Photo: 12 August 2014

Time of Photo: 1646

Photographer: Wm. Mansfield

Description: Evaporation ponds.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 33

Location: Western Refining - Gallup Refinery, 92 Giant Crossing Road		
City: Gallup	County: McKinley County	State: New Mexico



Photo File Name: P8120033

Date of Photo: 13 August 2014

Time of Photo: 1107

Photographer: Charles Barnes

Description: Failed attempt to grab waste water sample from Pre-API sample port. No water flow due to system shut down.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 34

Location: Western Refining - Gallup Refinery, 92 Giant Crossing Road		
City: Gallup	County: McKinley County	State: New Mexico



Photo File Name: P8120034

Date of Photo: 13 August 2014

Time of Photo: 1155

Photographer: Wm. Mansfield

Description: Railroad loading rack sump where sample was collected for NMED Hazardous Waste Bureau.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 35

Location: Western Refining - Gallup Refinery, 92 Giant Crossing Road		
City: Gallup	County: McKinley County	State: New Mexico



Photo File Name: P8120035

Date of Photo: 13 August 2014

Time of Photo: 1342

Photographer: Charles Barnes

Description: Soil sampling of the seep west of the facility's operation.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 36

Location: Western Refining - Gallup Refinery, 92 Giant Crossing Road		
City: Gallup	County: McKinley County	State: New Mexico



Photo File Name: P8120036

Date of Photo: 13 August 2014

Time of Photo: 1348

Photographer: Charles Barnes

Description: Soil sampling of the seep west of the facility's operation.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 37

Location: Western Refining - Gallup Refinery, 92 Giant Crossing Road		
City: Gallup	County: McKinley County	State: New Mexico



Photo File Name: P8120037

Date of Photo: 13 August 2014

Time of Photo: 1413

Photographer: Charles Barnes

Description: Soil sampling of the seep west of the facility's operation.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 38

Location: Western Refining - Gallup Refinery, 92 Giant Crossing Road		
City: Gallup	County: McKinley County	State: New Mexico

Not to be publicized

CBI Claimed Photograph

Photo File Name: P8120038

Date of Photo: 14 August 2014

Time of Photo: 0840

Photographer: Wm. Mansfield

Description: WWTP control room PLC screen.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 39

Location: Western Refining - Gallup Refinery, 92 Giant Crossing Road		
City: Gallup	County: McKinley County	State: New Mexico

Not to be publicized

CBI Claimed Photograph

Photo File Name: P8120039

Date of Photo: 14 August 2014

Time of Photo: 0840

Photographer: Wm. Mansfield

Description: WWTP control room PLC screen.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 40

Location: Western Refining - Gallup Refinery, 92 Giant Crossing Road		
City: Gallup	County: McKinley County	State: New Mexico



Photo File Name: P8120040

Date of Photo: 14 August 2014

Time of Photo: 1014

Photographer: Paul James

Description: Failed attempt to grab waste water sample from post-treatment sample ports. Both sample ports were completely caked/corroded.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 41

Location: Western Refining - Gallup Refinery, 92 Giant Crossing Road		
City: Gallup	County: McKinley County	State: New Mexico



Photo File Name: P8120041

Date of Photo: 14 August 2014

Time of Photo: 1050

Photographer: Paul James

Description: Waste water sample being collected from post-carbon treatment sample port.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 42

Location: Western Refining - Gallup Refinery, 92 Giant Crossing Road		
City: Gallup	County: McKinley County	State: New Mexico



Photo File Name: P8120042

Date of Photo: 14 August 2014

Time of Photo: 1059

Photographer: Wm. Mansfield

Description: Waste water sample was collected here from post-MPPE sample port.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 43

Location: Western Refining - Gallup Refinery, 92 Giant Crossing Road		
City: Gallup	County: McKinley County	State: New Mexico



Photo File Name: P8120043

Date of Photo: 14 August 2014

Time of Photo: 1059

Photographer: Wm. Mansfield

Description: Waste water sample was collected here from post-MPPE sample port.

Region 6 Compliance Assurance and Enforcement Division
INSPECTION REPORT

Appendix 2

Photo Log

Photos taken with Mr. Barnes' camera



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 1

Location: Western Refining - Gallup Refinery, 92 Giant Crossing Road		
City: Gallup	County: McKinley County	State: New Mexico



Photo File Name: 2136

Date of Photo: 8/12/14

Time of Photo: 1059

Photographer: C. Barnes

Description: Ponds. Facing west



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 2

Location: Western Refining - Gallup Refinery, 92 Giant Crossing Road		
City: Gallup	County: McKinley County	State: New Mexico



Photo File Name: 2137

Date of Photo: 08/12/2014

Time of Photo: 1059

Photographer: Charles Barnes

Description: STP-1



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 3

Location: Western Refining - Gallup Refinery, 92 Giant Crossing Road		
City: Gallup	County: McKinley County	State: New Mexico



Photo File Name: 2138

Date of Photo: 08/12/2014

Time of Photo: 1100

Photographer: Charles Barnes

Description: STP-1 with aerators



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 4

Location: Western Refining - Gallup Refinery, 92 Giant Crossing Road		
City: Gallup	County: McKinley County	State: New Mexico



Photo File Name: 2139

Date of Photo: 08/12/2014

Time of Photo: 1100

Photographer: Charles Barnes

Description: Pond 1 with STP-1



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 5

Location: Western Refining - Gallup Refinery, 92 Giant Crossing Road		
City: Gallup	County: McKinley County	State: New Mexico



Photo File Name: 2140

Date of Photo: 08/12/2014

Time of Photo: 1106

Photographer: Charles Barnes

Description: Pond 1 and evaporation ponds w/ aerators



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 6

Location: Western Refining - Gallup Refinery, 92 Giant Crossing Road		
City: Gallup	County: McKinley County	State: New Mexico



Photo File Name: 2141

Date of Photo: 08/12/2014

Time of Photo: 1107

Photographer: Charles Barnes

Description: Pond 1 and Evaporation ponds – Pink color noted.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 7

Location: Western Refining - Gallup Refinery, 92 Giant Crossing Road		
City: Gallup	County: McKinley County	State: New Mexico



Photo File Name: 2142

Date of Photo: 08/12/2014

Time of Photo: 1107

Photographer: Charles Barnes

Description: Evaporation Ponds



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 8

Location: Western Refining - Gallup Refinery, 92 Giant Crossing Road		
City: Gallup	County: McKinley County	State: New Mexico



Photo File Name: 2143

Date of Photo: 08/12/2014

Time of Photo: 1107

Photographer: Charles Barnes

Description: Ponds



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 9

Location: Western Refining - Gallup Refinery, 92 Giant Crossing Road		
City: Gallup	County: McKinley County	State: New Mexico



Photo File Name: 2144

Date of Photo: 08/12/2014

Time of Photo: 1107

Photographer: Charles Barnes

Description: Tanks T35, T27 and T28 with ponds



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 10

Location: Western Refining - Gallup Refinery, 92 Giant Crossing Road		
City: Gallup	County: McKinley County	State: New Mexico



Photo File Name: 2145

Date of Photo: 08/12/2014

Time of Photo: 1107

Photographer: Charles Barnes

Description: Tanks T35, T27 and T28 with ponds



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 11

Location: Western Refining - Gallup Refinery, 92 Giant Crossing Road		
City: Gallup	County: McKinley County	State: New Mexico



Photo File Name: 2146

Date of Photo: 08/12/2014

Time of Photo: 1109

Photographer: Charles Barnes

Description: STP-1 with aerators



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 12

Location: Western Refining - Gallup Refinery, 92 Giant Crossing Road		
City: Gallup	County: McKinley County	State: New Mexico



Photo File Name: 2147

Date of Photo: 08/12/2014

Time of Photo: 1122

Photographer: Charles Barnes

Description: HW Storage - Drums



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 13

Location: Western Refining - Gallup Refinery, 92 Giant Crossing Road		
City: Gallup	County: McKinley County	State: New Mexico



Photo File Name: 2148

Date of Photo: 08/12/2014

Time of Photo: 1123

Photographer: Charles Barnes

Description: HW label out of date



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 14

Location: Western Refining - Gallup Refinery, 92 Giant Crossing Road		
City: Gallup	County: McKinley County	State: New Mexico



Photo File Name: 2149

Date of Photo: 08/12/2014

Time of Photo: 1123

Photographer: Charles Barnes

Description: HW label out of date – 5/2/14



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 15

Location: Western Refining - Gallup Refinery, 92 Giant Crossing Road		
City: Gallup	County: McKinley County	State: New Mexico



Photo File Name: 2150

Date of Photo: 08/12/2014

Time of Photo: 1124

Photographer: Charles Barnes

Description: HW Drum Leaking



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 16

Location: Western Refining - Gallup Refinery, 92 Giant Crossing Road		
City: Gallup	County: McKinley County	State: New Mexico



Photo File Name: 2151

Date of Photo: 08/12/2014

Time of Photo: 1128

Photographer: Charles Barnes

Description: HW label out of date



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 17

Location: Western Refining - Gallup Refinery, 92 Giant Crossing Road		
City: Gallup	County: McKinley County	State: New Mexico



Photo File Name: 2152

Date of Photo: 08/12/2014

Time of Photo: 1128

Photographer: Charles Barnes

Description: HW label out of date



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 18

Location: Western Refining - Gallup Refinery, 92 Giant Crossing Road		
City: Gallup	County: McKinley County	State: New Mexico



Photo File Name: 2153

Date of Photo: 08/12/2014

Time of Photo: 1507

Photographer: Charles Barnes

Description: Recovery well at Seep Site



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 19

Location: Western Refining - Gallup Refinery, 92 Giant Crossing Road		
City: Gallup	County: McKinley County	State: New Mexico



Photo File Name: 2154

Date of Photo: 08/12/2014

Time of Photo: 1507

Photographer: Charles Barnes

Description: Seep Site



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 20

Location: Western Refining - Gallup Refinery, 92 Giant Crossing Road		
City: Gallup	County: McKinley County	State: New Mexico



Photo File Name: 2155

Date of Photo: 08/12/2014

Time of Photo: 1530

Photographer: Charles Barnes

Description: Storm water pond near outfall



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 21

Location: Western Refining - Gallup Refinery, 92 Giant Crossing Road		
City: Gallup	County: McKinley County	State: New Mexico



Photo File Name: 2156

Date of Photo: 08/12/2014

Time of Photo: 1530

Photographer: Charles Barnes

Description: Storm water pond with outfall



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 22

Location: Western Refining - Gallup Refinery, 92 Giant Crossing Road		
City: Gallup	County: McKinley County	State: New Mexico



Photo File Name: 2157

Date of Photo: 08/12/2014

Time of Photo: 1532

Photographer: Charles Barnes

Description: Storm water pond near outfall. Noted seep from adjacent ponds at base of berm



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 23

Location: Western Refining - Gallup Refinery, 92 Giant Crossing Road		
City: Gallup	County: McKinley County	State: New Mexico



Photo File Name: 2158

Date of Photo: 08/12/2014

Time of Photo: 1533

Photographer: Charles Barnes

Description: Storm water pond near outfall. Noted seep from adjacent ponds at base of berm



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 24

Location: Western Refining - Gallup Refinery, 92 Giant Crossing Road		
City: Gallup	County: McKinley County	State: New Mexico



Photo File Name: 2159

Date of Photo: 08/12/2014

Time of Photo: 1536

Photographer: Charles Barnes

Description: Noted seep at base of berm



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 25

Location: Western Refining - Gallup Refinery, 92 Giant Crossing Road		
City: Gallup	County: McKinley County	State: New Mexico



Photo File Name: 2160

Date of Photo: 08/12/2014

Time of Photo: 1536

Photographer: Charles Barnes

Description: Noted seep at base of berm



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 26

Location: Western Refining - Gallup Refinery, 92 Giant Crossing Road		
City: Gallup	County: McKinley County	State: New Mexico



Photo File Name: 2161

Date of Photo: 08/12/2014

Time of Photo: 1536

Photographer: Charles Barnes

Description: Bad photo



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 27

Location: Western Refining - Gallup Refinery, 92 Giant Crossing Road		
City: Gallup	County: McKinley County	State: New Mexico



Photo File Name: 2162

Date of Photo: 08/12/2014

Time of Photo: 1546

Photographer: Charles Barnes

Description: Lagoon with oily sludges



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 28

Location: Western Refining - Gallup Refinery, 92 Giant Crossing Road		
City: Gallup	County: McKinley County	State: New Mexico



Photo File Name: 2163

Date of Photo: 08/12/2014

Time of Photo: 1546

Photographer: Charles Barnes

Description: Close up: Lagoon with oily sludges



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 29

Location: Western Refining - Gallup Refinery, 92 Giant Crossing Road		
City: Gallup	County: McKinley County	State: New Mexico



Photo File Name: 2164

Date of Photo: 08/12/2014

Time of Photo: 1546

Photographer: Charles Barnes

Description: Lagoon with oily sludges



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 30

Location: Western Refining - Gallup Refinery, 92 Giant Crossing Road		
City: Gallup	County: McKinley County	State: New Mexico



Photo File Name: 2165

Date of Photo: 08/12/2014

Time of Photo: 1643

Photographer: Charles Barnes

Description: ASO Treatment Unit



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 31

Location: Western Refining - Gallup Refinery, 92 Giant Crossing Road		
City: Gallup	County: McKinley County	State: New Mexico



Photo File Name: 2166

Date of Photo: 08/12/2014

Time of Photo: 1643

Photographer: Charles Barnes

Description: Sign on ASO Treatment Unit



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 32

Location: Western Refining - Gallup Refinery, 92 Giant Crossing Road		
City: Gallup	County: McKinley County	State: New Mexico



Photo File Name: 2167

Date of Photo: 08/12/2014

Time of Photo: 1643

Photographer: Charles Barnes

Description: Plate on ASO Treatment Unit



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 33

Location: Western Refining - Gallup Refinery, 92 Giant Crossing Road		
City: Gallup	County: McKinley County	State: New Mexico



Photo File Name: 2168

Date of Photo: 08/12/2014

Time of Photo: 1644

Photographer: Charles Barnes

Description: CTI/ASO Tanks. Noted secondary containment not adequate.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 34

Location: Western Refining - Gallup Refinery, 92 Giant Crossing Road		
City: Gallup	County: McKinley County	State: New Mexico



Photo File Name: 2168

Date of Photo: 08/12/2014

Time of Photo: 1644

Photographer: Charles Barnes

Description: ASO Treatment Area



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 35

Location: Western Refining - Gallup Refinery, 92 Giant Crossing Road		
City: Gallup	County: McKinley County	State: New Mexico



Photo File Name: 2169

Date of Photo: 08/12/2014

Time of Photo: 1644

Photographer: Charles Barnes

Description: Land Treatment Area



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 36

Location: Western Refining - Gallup Refinery, 92 Giant Crossing Road		
City: Gallup	County: McKinley County	State: New Mexico



Photo File Name: 2170

Date of Photo: 08/12/2014

Time of Photo: 1648

Photographer: Charles Barnes

Description: LTU – SWMU5



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 37

Location: Western Refining - Gallup Refinery, 92 Giant Crossing Road		
City: Gallup	County: McKinley County	State: New Mexico



Photo File Name: 2171

Date of Photo: 08/12/2014

Time of Photo: 1652

Photographer: Charles Barnes

Description: Land Fill

END OF PHOTOS