



Region 6 - Enforcement & Compliance Assurance Division
INSPECTION REPORT

Inspection Date(s):	1/14/2025 – 1/16/2025	
Media Program:	Air	
Regulatory Program(s)	Title V, NESHAP, NSPS	
Company Name:	Martin Operating L.P.	
Facility Name:	Martin Lubricants	
Facility Physical Location:	484 East 6 th Street	
(city, state, zip code)	Smackover, AR 71762	
Mailing address:	484 East 6 th Street	
(city, state, zip code)	Smackover, AR 71762	
County/Parish:	Union County	
Facility Phone Number	(800) 864 - 6275	
Facility Contact:	Chris Crawford	Environmental Specialist
	Chris.crawford@martinmlp.com	
FRS Number:	110038160584	
Identification/Permit Number:	1227-AOP-R9	
Media Identifier Number:	RMP 100000230038	
NAICS:	324110, 324191	
SIC:	2911	
Personnel participating in inspection:		
Sydney Knodl	EPA R6	Inspector
Benjamin Rosenthal	EPA R6	Inspector
Sarah Frey	EPA R6	Inspector
Chris Crawford	Martin Lubricants	Environmental Specialist
Randall Whitmore	Martin Lubricants	Director of Corporate Environmental
Jacob Post	Alliance Technical Group	Managing Consultant
Brian Ricker	Martin Lubricants	VP of Operations
Ryker McDaniel	Martin Lubricants	Refinery Manager
Todd Pearson	Martin Lubricants	Refinery Safety Manager
John Reed	Martin Lubricants	Operations Manager
Jeremy Ward	Martin Lubricants	Electrical and Instrumentation Supervisor
Hager Hollenshead	Martin Lubricants	Electrical and Instrumentation Technician
Jayden Keels	Arkansas Department of Energy and Environment	ADEE Inspector
Jay Northern	Arkansas Department of Energy and Environment	ADEE Inspector
EPA Lead Inspector Signature/Date	SYDNEY KNODL Sydney Knodl Digitally signed by SYDNEY KNODL Date: 2025.03.14 08:51:43 -05'00' Date	

Martin Operation L.P. / Martin Lubricants
Inspection Date 1/14/25 – 1/16/25

Supervisor Signature/Date	Leathers, James Digitally signed by Leathers, James Date: 2025.03.14 09:11:32 -05'00'	
	James Leathers	Date

Section I – INTRODUCTION

PURPOSE OF THE INSPECTION

EPA Region 6 inspectors Ben Rosenthal, Sarah Frey, and I, Sydney Knodl, along with Arkansas Department of Energy and Environment (“ADEE”) investigators Jayden Keels and Jay Northern (“we”, “us”, or “Inspectors”), conducted a Partial Compliance Evaluation (“PCE”) of Martin Operating L.P. (“MOP”), the Smackover Refinery called Martin Lubricants (the “Facility” or “Refinery”) from January 14, 2025 through January 16, 2025. On January 14, 2025, the EPA Inspection team made entry at the facility at 08:11 and presented our credentials to Chris Crawford, Environmental Specialist; Randall Whitmore, Director of Corporate Environmental, Brian Ricker, VP of Refinery Operations; Ryker McDaniel, Refinery Manager; Todd Pearson, Refinery Safety Manager; and Jacob Post, Managing Consultant (“MOP, or “Facility” personnel). I informed MOP personnel that EPA would be conducting an inspection to determine the facility’s compliance with the Clean Air Act. The scope of the inspection was a PCE of the facility’s compliance with its Title V operating permits, the Arkansas State Implementation Plan (“SIP”), and applicable Clean Air Act Regulations listed under Parts 60, 61, and 63 of Title 40 of the Code of Federal Regulations (“CFR”). Specifically, we would be focusing on Benzene and Volatile Organic Compound (“VOC”) regulations (40 CFR Part 61 Subpart FF – National Emission Standard for Benzene Waste Operations and 40 CFR Part 60 - Standards of Performance for New Stationary Sources). Photos and videos taken during the inspection are in Appendix 1 and 2, respectively. A sign-in sheet from the opening and closing conference is in Appendix 3.

FACILITY DESCRIPTION

Martin Operating L.P. owns and operates an oil refinery in Smackover, Arkansas. The Facility has roughly 100 employees. The facility operates 24 hours a day, 7 days a week. MOP operates under CAA Part 70 Permit No. 1227-AOP-R9 issued by the ADEE. The Facility processes napthenic crude oil into naphtha, distillate, lube oils, and asphalt. Locally produced Grade A crude oil is delivered daily and blended with crude from MOP facilities in Beaumont, Texas. The crude is preheated, then passed through an electrostatic desalting unit, which separates salts from the crude. From the desalters, the crude is heated through a series of exchangers and then through the Crude Charger Heater. The crude is then sent to the atmospheric distillation tower, where the oil is separated into naphtha, distillate, No. 2, No. 3, and No. 4 lube oils. According to Mr. McDaniel, the Facility’s average daily processing rate is 5,500 barrels (“bbl”) of crude.

MOP operates an on-site wastewater treatment system. Wastewater from the Refinery is routed through the main sump beneath the primary oily water pump. The primary oily water pump pumps the oily water to the collection system surge tanks for storage and separation before being routed to two covered API oil-water separators (“API separators” or “APIs”. Effluent from the API separators is routed through three moving bed biofilm reactors before being routed to a secondary dissolved air floatation (“DAF”) tank for final biological treatment. Treated water is then passed through a dissolved oxygen tower before discharging to the outfall at Smackover Creek.

Section II – OBSERVATIONS

The inspectors met facility personnel in a conference room on-site for an opening conference. The sign-in sheet for the opening conference is attached in Appendix 3. After presenting our credentials to facility personnel, I explained the scope of the inspection. I stated we would inspect the Facility's wastewater system and evaluate its compliance with the National Emission Standard for Benzene Waste Operations, Subpart FF ("BWON"), the Standards of Performance for VOC Emissions from Petroleum Refinery Wastewater Systems ("QQQ"), and other applicable regulations. I informed facility personnel we would inspect process equipment and wastewater storage tanks to evaluate control requirements for each type of unit.

Mr. Ricker and Mr. McDaniel then provided the following overview of the Facility's operations, current conditions and the wastewater collection and treatment process flow. The Facility has an integrated stormwater and wastewater system. The wastewater collection system consists of several process drainage areas (Appendix 4). Process wastewater and stormwater are pumped to the collection system surge tanks (508, 510, and 519) by the main sump pump. Tank 508 is typically skimmed annually to recover oil from the wastewater. From the surge tanks, which are operated in series, the wastewater is routed to two covered API separators. The Facility conducts QQQ visual inspections at the API separators. The effluent from the APIs is routed to the DAF tank, then to four DAF effluent tanks. From the DAF effluent tanks, the wastewater is routed to a secondary DAF for final biological treatment. Treated wastewater is passed through a dissolved oxygen tower before being discharged to Smackover Creek. Reclaimed oil tanks are unloaded into vacuum trucks monthly or less to return reclaimed ("slop") oil to the crude oil tanks for reprocessing. Oily water removed from the reclaimed oil tanks is routed through the wastewater treatment system. Facility personnel stated the Facility does not conduct EPA Method 21 ("Method 21") monitoring at the Facility.

I informed facility personnel that the inspectors would conduct a site walkthrough and survey several process areas of the Facility, starting with the naphtha storage tanks. As part of the inspection, we conducted Method 21 monitoring using a Thermo Fisher Scientific Toxic Vapor Analyzer ("TVA") Model 2020 and an mPower Electronics' Benzene-Specific NEO Photo Ionization Detector ("PID"). The PID was calibrated for benzene, and a benzene filter tube was utilized when consistent, elevated levels of VOC were indicated by the continuous scanning mode. We also surveyed process equipment for hydrocarbon emissions with a Teledyne FLIR Gx620 optical gas imaging ("OGI") camera ("monitoring equipment").

After calibrating the TVA, inspectors were joined by Mr. Crawford, Mr. Pearson, Mr. Post, Mr. McDaniel, Mr. Jeremy Ward, Electrical and Instrumentation ("E&I") Supervisor, Mr. Hager Hollenshead, E&I Technician, and Mr. John Reid, Operations Manager. Inspectors and facility personnel arrived at the naphtha storage area containing horizontal naphtha product tanks (130-132) and a heavy condensate tank (133) and began monitoring the tanks for VOC leaks. Each tank observed in the area had a sampling point on the west end and a water draw centrally located from the bottom of the tank. According to Facility personnel, the sample points are used for daily product sampling, wherein the line needs to be

flushed before a sample is taken. 9,000 parts per million (“ppm”) VOC emissions were detected using the TVA at the water draw on Tank 132. A flexible hose was connected to the water draw on tank 132 and routed to the sample catch basin on the same tank. According to Facility personnel, this was a winterization measure (Appendix 1 – Photos 1 and 2). We also detected 3,100 ppm VOC emissions with the TVA at the sample point on tank 133. We observed liquid dripping from the sample point (Appendix 1 – Photos 3 and 4) [AOC 1]. The observed tank sampling points were open to the atmosphere with an open sample container located beneath the sampling line, used to catch liquid during the pre-sampling line flush. The drain lines from the sample containers route the material through a hard pipe to a flexible hose to a low point near a sump with no cover. We observed the outlet of the hose placed next to the sump draining onto the ground and detected VOC emissions from the outlet of the hose with the TVA up to 3,000 ppm (Appendix 1 – Photo 6). Facility personnel explained that material in the sump is pumped into the wastewater collection system. Tank 134, located south of the naphtha tanks, collects water draws from all three naphtha tanks and the heavy condensate tank, according to Facility personnel (Appendix 1 - Photo 5). Facility personnel explained that when the level gauge on tank 134 reaches a designated level set by the Facility, the pump automatically turns on and the wastewater is routed to the wastewater collection system.

We then proceeded to the flare at 15:13. No significant hydrocarbon emissions were detected from the flare with OGI. We then observed the DAF and decanter tanks, and no significant emissions were observed or detected with the OGI camera or TVA.

We then proceeded to the area containing reclaimed oil tanks 501-505, 509, 514-518, 522, and 538, surge tanks 508, 510, and 519, and the API separators (“wastewater treatment area”). We observed oil and oily water on the ground underneath the reclaimed oil tanks (Appendix 1 – Photo 8 and 9). Facility personnel explained that tank 538 has an outlet pipe near the top that removes oil from the wastewater in the tank. Emissions were observed from the gooseneck vent on tank 538 using the OGI Camera (Appendix 2 – Video 3). We climbed tank 508 and observed the manway hatch was missing all but 4 bolts. We observed emissions from the hatch with the OGI camera (Appendix 2 – Video 2) [AOC 2]. Also, while on tank 508, we could see the top of the reclaimed oil tanks and observed that the roof of tank 503 had collapsed. We observed hydrocarbon emissions with the OGI camera from the open-top of Tank 503 (Appendix 2 – Video 1) [AOC 3]. The diameter of Tank 503 is 12 feet according to Facility documentation, and we observed the opening in the top of the tank to be approximately 8 feet across (Appendix 1 – Photo 7). At the top of Tank 508, the PID indicated 41 ppm VOC in the breathing zone [AOC 2].

We then observed the API separators, which were installed in 2019. We observed an open access door on the south API (T-4043) and gaps between the cover plates, allowing us to see the liquid inside both APIs (Appendix 1 – Photo 10). On T-4043, we detected VOC emissions over 1,000 ppm with the TVA from the open access door and up to 1,400 ppm from the gaps in the cover plates. On the north API (T-4042) we detected VOC emissions over 2,200 ppm from the gaps in the cover plates [AOC 4]. We observed oil staining from the skimmer motor on top of T-4042 (Appendix 1 – Photo 11) [AOC 5]. We detected 200 ppm VOC from the interface of the cover plate and side wall on T-4043 using the PID.

Inspectors departed the wastewater treatment area at 16:10 and went back to the conference room. We requested all inspection records for the surge tanks, reclaimed oil tanks, and API separators. We requested any work orders regarding Tank 508. The EPA inspection team concluded onsite activities for the day and departed the facility at 17:00.

Inspectors returned to the Facility at 08:10 on January 15, 2025. In the conference room, Facility personnel informed us that many of the operators would not be available due to an upset in the hydrotreater. We reviewed semi-annual API inspection records provided by the Facility [AOC 5]. We also requested the maximum flow rates of the inlet pipes for the surge and reclaimed oil tanks and construction or modification dates for several tanks and pieces of process equipment.

After calibrating the TVA, Inspectors were joined in the field by Mr. Crawford and Mr. Post at 10:50. We proceeded to survey the wastewater treatment area with our monitoring equipment. The manway hatch on tank 508 was still missing all but four of the bolts and emissions were observed with the OGI camera. The PID detected up to 64 ppm VOC and the TVA detected up to 4,400 ppm VOC. We also observed a gauge hatch on the tank that was not latched or kept closed (Appendix 1 – Photo 12). While on tank 508, we observed the collapsed roof of Tank 503 again and observed effluent wastewater discharging into the tank from a pipe at the top of the tank (Appendix 2 – Video 5). Emissions were observed coming out of the top of Tank 503 with the OGI camera (Appendix 2 – Video 4).

Mr. Rosenthal and I then climbed the reclaimed oil tanks catwalk. We detected 113 ppm VOC emissions from the open top of Tank 503 with the PID and 13,000 ppm VOC emissions with the TVA. We observed the hatches on Tanks 501-504, 509, and 518 were not latched and kept closed (Appendix 1 – Photo 13; Appendix 2 – Video 7). We also detected VOC emissions from the gooseneck vents on Tank 518 up to 3,000 ppm, Tank 502 up to 1,009 ppm, and Tank 501 up to 16,000 ppm with the TVA. We observed emissions from the gooseneck vent on Tank 501 with the OGI camera (Appendix 2 – Video 6) [AOC 2]. While Mr. Rosenthal and I were on the catwalk of the reclaimed oil tanks, Dr. Frey observed Tank 502's name plate listed the date built as 1984 and noted the tank list provided by the Facility stated the tank was built in 2007 [AOC 6]. Dr. Frey also observed a large dent near the top of tank 518 (Appendix 1 – Photo 14). Facility personnel were unaware of a possible cause for the dent.

We then proceeded to survey the reclaimed oil drainage area denoted "A-20" in the drainage map included in Appendix 4. We observed wastewater discharging from the outlet of several pipes underneath the reclaimed oil tanks into several open-air drains with a disposition to the wastewater collection system. We detected VOC emissions using the TVA from the drain hub in front of Tank 502 and 504 up to 1,700 ppm and 1,900 ppm, respectively. We also observed hydrocarbon emissions with the OGI camera (Appendix 2 – Video 8). We used a benzene filter tube on the PID and detected 1.53 ppm benzene from the drain hub in front of tank 504 [AOC 7]. Inspectors also observed an out-of-service API separator that contained oily water; the API contained piping that was not equipped with a blind flange or other closure (Appendix 1 – Photo 15 and 16).

Mr. Rosenthal climbed Tank 538 and measured VOC emissions over 14,000 ppm with the TVA from an open hatch on top of the tank and 1,200 ppm approximately six to ten feet downwind of the open gooseneck vent on top of the tank [AOC 2 and 7]. Additionally, the ladder to climb Tank 538 was not bolted down at one of the ground contact points. Visible emissions were observed from the gooseneck vent on Tank 538 using the OGI camera (Appendix 2 – Video 9).

Inspectors then returned to the API separators and observed that the access door on T-4043 was still open and gaps in the cover plate were still present on both API separators [AOC 4]. We used a benzene filter tube on the PID and detected 1.03 ppm benzene from the open access door. VOC emissions were detected with the TVA at these gaps up to 2,200 ppm from T-4043 and up to 3,400 ppm on T-4042. Inspectors also observed a tank (T-4533) connected to the API separators and detected VOC emissions from the PVC outlet vent on the tank up to 517 ppm using the TVA. Dr. Frey observed a leak from a flexible hose connected to a small tote labeled “sulfuric acid”. The leaked material was dripping onto the piping coming from the APIs to the Moving Bed Bioreactors (“MBBR”) (Appendix 1 – Photo 17).

Mr. Rosenthal and I then climbed Tank 510. We observed the manway hatch was missing all but four bolts and observed emissions with the OGI Camera (Appendix 2 – Video 10). Emissions were detected using the PID with a benzene filter tube at 17.93 ppm benzene and the TVA up to 16,400 ppm VOC [AOC 2 and 7]. Inspectors observed Tank 521, which was connected to Tank 510 via a pipe from the top of Tank 510. Facility personnel claimed Tank 521 is normally used to collect oil from tank 510 but is currently out of service.

Mr. Rosenthal and I then climbed Tank 519. A thief hatch on the tank was missing bolts and we detected VOC emissions with the TVA up to 300 ppm [AOC 2]. While Mr. Rosenthal and I were on Tank 519, Dr. Frey observed the name plate on Tank 538, showing a construction date of 2020 (Appendix 1 – Photo 18). Dr. Frey also observed liquid leaking from Tank 515 and corrosion on the side of the tank in the same area as the leak (Appendix 1 – Photo 19). The inspection team departed the wastewater treatment area at 12:50.

We arrived at the process unit access control check-in at 15:10. We were joined by Mr. Crawford, Mr. Post, Mr. McDaniel, and Mr. Pearson. Inspectors returned to the naphtha storage tanks and detected 2,300 ppm VOC with the TVA from the flexible hose attached to Tank 132’s water draw. We also observed visible emissions from the sample point on Tank 133 using the OGI camera (Appendix 2 – Video 11) [AOC 1].

We entered the crude unit at 15:36 and observed and/or measured emissions from the following areas [AOC 7]:

1. From the cooling tower stack with the OGI Camera (Appendix 2 – Video 12).
2. Gooseneck vent on reclaimed oil Tank 538 with the OGI Camera (Appendix 2 – Video 13).
3. Collection box west of main sump up to 3,500 ppm VOC with the TVA and OGI camera (Appendix 2 – Video 14).
4. Main sump: 2,300 ppm VOC with the TVA and OGI camera (Appendix 2 – Video 15).

Inspectors observed a water draw line from Tank 336; Facility personnel explained that all intermediate or untreated lube oil storage tanks have water draws that are piped to the main sump via hard pipe or flexible hoses and routed to the wastewater collection system [AOC 8].

We then observed the atmospheric distillation tower and the vacuum distillation area. According to Facility personnel, the atmospheric distillation tower was installed around 1981, and the vacuum tower was constructed in 2012. The Facility's permit states the vacuum distillation unit was constructed prior to 1983 [AOC 6].

Inspectors continued to Desalter #1 and #2. Facility personnel estimated the installation date of desalter #1 around 1981 and we observed the nameplate on Desalter #2 that stated the unit was installed in 2012 (Appendix 1 – Photo 21) [AOC 6]. We then observed an open 55-gallon drum containing oil connected to an outlet from Desalter #2 (Appendix 1 – Photo 22). We detected emissions from the drum up to 600 ppm VOC with the TVA. Mr. McDaniel explained that this outlet is used for product sampling and to verify the water levels within the unit several times a day. Mr. McDaniel then explained that the wastewater from the desalters is hard piped to the reclaimed oil Tank 538 [AOC 7 and 8].

We then proceeded to crude storage Tank 109 at 16:41. Inspectors observed water draws from Tank 109 and Mr. McDaniel explained that the water draws are routed to the main sump and pumped to the surge tanks. Mr. Crawford explained the water draws were not included in the most recent total annual benzene quantity calculations [AOC 8]. We observed emissions from the top of Tank 109 using the OGI camera from the ground (Appendix 2 – Video 16). Mr. Rosenthal and I climbed Tank 109 and observed emissions from the manway hatch with the OGI camera (Appendix 2 – Video 17). We measured VOC emissions over 80,000 ppm with the TVA from a cylindrical cover on top of the manway hatch and up to 1,500 ppm from the edge of the hatch opening.

We departed the Facility at 17:40.

We arrived at the Facility at 08:20 on January 16, 2025, to review observations and conduct the closing conference.

Section III – AREAS OF CONCERN

EPA Region 6 inspectors conducted a closing conference at Martin Operating L.P. Smackover Refinery at 11:30 on January 16, 2025. During the closing conference, I reviewed eight Areas of Concern noted during the inspection.

- 1) Inspectors observed emissions from Tanks 132 and 133. The EPA inspection team used a TVA to measure concentrations of VOC from sampling points and water draw outlets on Tanks 130-133. VOC emissions at concentrations up to 3,100 ppm and 9,000 ppm were detected from Tank 133's sampling point and Tank 132's water draw outlet, respectively. Per plantwide conditions 10 and 11 in the Facility's Title V Permit, Tanks 130-133 shall not vent to atmosphere.
- 2) Inspectors observed tanks that contain oily wastewater and slop oil with roofs open to the atmosphere. The EPA inspection team observed VOC emissions from open hatches, gooseneck vents, and openings in the tanks listed below. Their associated construction date as listed in the

facility's tanks list is also included. 40 CFR 60.692-3(a) requires slop oil tanks, oil water separators, and storage vessels constructed or modified after May 4, 1987, to have a fixed roof with all openings to be gasketed, latched, and kept closed at all times during operation and requires semiannual inspections to ensure that no cracks or gaps occur between the roof and wall and that access doors and other openings are closed and gasketed properly. The Facility does not conduct QQQ visual inspections on any of these tanks. Reclaimed oil Tanks 522, 517, 516, 515, and 514 also have construction dates after 1987.

Tank #	508	510	519	504	503	518	502	501	509	538
Yr Built	2013	2013	2015	1961	1980	2010	2007	2007	1997	2020

- 3) Inspectors observed a collapsed roof on an operational reclaimed oil tank with detectable emissions. The EPA inspection team observed the roof of Tank 503 was collapsed. Liquid was actively being pumped into this tank. The EPA inspection team used a TVA to measure concentrations of VOC from the opening in the roof and detected 13,000 ppm.
- 4) Inspectors observed an open access door and visible gaps in the cover plates on the API separators. The EPA inspection team observed an open access door on API T-4043. We also observed gaps in the cover plates, allowing us to see the fluid inside on both APIs. The EPA inspection team used a TVA to measure VOC emissions from the API separators and collected the following data:

Date	T-4043	T-4042
1/14/25	Open Access Door: 1,000 ppm Gaps in Cover Plates: 1,400 ppm	Gaps in Cover Plates: 2,200 ppm
1/15/25	Open Access Door: 1,200 ppm Gaps in Cover Plates: 2,200 ppm	Gaps in Cover Plates: 3,400 ppm

Under QQQ oil-water separators shall be equipped with a fixed roof to completely cover the separator tank, slop oil tank, storage vessel, or other auxiliary equipment with no separation between the roof and the wall. Additionally, if the roof has access doors or openings, such doors or openings shall be gasketed, latched, and kept closed at all times during operation of the separator system, except during inspection and maintenance. 40 C.F.R 60.692-3(a)(1) and (3).

- 5) Inspectors observed visual defects on the API separators. The EPA inspection team observed visual defects on the API separators including open access door(s), gaps in the cover plates, and oil staining at the skimmer motor that were not reflected in the report for the most recent visual inspection that conducted in April 2024. The most recent inspection record provided was for an inspection conducted on April 1, 2024. The report stated the separator roof, doors, and other openings were properly sealed. Under QQQ, roof seals, access doors, and other openings shall be checked by visual inspection initially and semiannually thereafter to ensure that no cracks or gaps occur between the roof and wall and that access doors and other openings are closed and gasketed properly. 40 CFR. 60.692-3(a)(4).
- 6) Inspectors observed construction/modification dates on tanks and process equipment data plates that were inconsistent with permit representations. The EPA inspection team reviewed permit documentation, name plates on equipment, and other site maps and observed inconsistencies in equipment numbering and construction dates. Several tanks were observed

with more than one number on them. The permit lists the construction date of the vacuum distillation unit and desalters as pre-1983, and facility personnel stated the tower was built in 2012. Additionally, the nameplate on desalter #2 stated the construction date as 2012. Applicability of statutes including 40 C.F.R. Part 60 Subpart QQQ and GGG is dependent on construction date, among other factors.

- 7) Inspectors observed and detected emissions of benzene and VOC. The EPA inspection team surveyed several pieces of equipment and process units using monitoring equipment and found benzene and/or VOC emissions at the following locations.

Equipment	Location	VOC (ppm)	Benzene with Filter Tube (ppm)
Tank 508	Manway Hatch	4,400	
Tank 510	Manway Hatch	16,510	17.93
Tank 501	Gooseneck Vent	16,000	
Tank 502	Gooseneck Vent	1,000	
Tank 518	Gooseneck Vent	3,000	
Tank 503	Collapsed Roof	13,000	
Tank 504	Gooseneck Vent	300	
Tank 538	Open Hatch	14,000	
	6-10 ft Downwind of Gooseneck Vent	1,200	
Main Sump	Open-Air Grate	2,300	
Collection Box W of Main sump	Open-Air Grate	3,500	
Tank 109	Manway Hatch	80,000	
API T-4043	Open Access Door	1,200	1.03
	Gaps in cover plate	2,200	
API T-4042	Gaps in cover plate	3,400	
Reclaimed Oil Drain 502	Open-Air Drain Hub	1,700	
Reclaimed Oil Drain 503/518	Open-Air Drain Hub	800	
Reclaimed Oil Drain 504	Open-Air Drain Hub	1,900	1.53
Desalter #2	Open 55-Gallon Drum	600	

- 8) Inspectors observed what may be points of generation per 40 C.F.R. Part 61 Subpart FF that were not included in the Facility's most recent Total Annual Benzene ("TAB") report. The EPA inspection team observed several potential points of generation that were not included in the most recent TAB calculations, including but not limited to crude tank water draws, lube oil tank water draws, and naphtha tanks. The Facility may not be representing their TAB quantity correctly in the required reports.

Section IV – FOLLOW UP

On February 19, 2025, EPA and MOP participated in a joint call to discuss actions taken by the facility since the inspection and the facility's applicability to 40 C.F.R Part 60 Subpart QQQ and GGG/GGGa. Facility personnel explained that Tank 503 has been taken out of service and will be inspected, cleaned, and evaluated for further use. Additionally, facility personnel informed the inspectors that after review of the regulation and equipment specifications, the surge Tanks (508, 510, and 519) and the reclaimed oil tanks constructed, reconstructed, or modified after 1987 may be subject to QQQ. Facility personnel were reviewing design documents to determine which reclaimed oil tanks have a design capacity to treat more than 250 gallons per minute of refinery wastewater as of the completion of this report. Facility personnel will bring in a third party to assist them in further applicability determinations. The facility is compiling construction, modification, and/or reconstruction dates for the atmospheric distillation tower, vacuum distillation tower, hydrogen plant, hydrotreater, NaSH plant, surge tanks, and reclaimed oil tanks, as well as the associated capital costs and will provide this information to EPA as requested.

Additional documentation was requested by EPA on January 22, 2025. The following information was received by EPA on January 29 and 30, 2025, after exiting the Facility on:

1. Desalter 2 Sample Drum Disposal Process
2. Reclaimed Oil Tanks List including "Installed in Current Service" Date
3. Monthly PM Tank Inspection SOP
4. Flare Pilot Data
5. API Work Orders

Section V – LIST OF APPENDICES

Appendix 1 – Photograph Log – 22 Photos taken from 1/14/25 – 1/16/25

Appendix 2 – Video Log – # FLIR videos from 1/14/25 – 1/16/25

Appendix 3 – Opening and closing conference sign-in sheets

Appendix 4 – Drainage Map

Martin Operating L.P./ Smackover Refinery
Inspection Date 1/14/25 – 1/16/25

Appendix 1

Photograph Log



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 1

Location: Martin Operating L.P. Smackover Refinery		
City: Smackover	County: Union	State: Arkansas

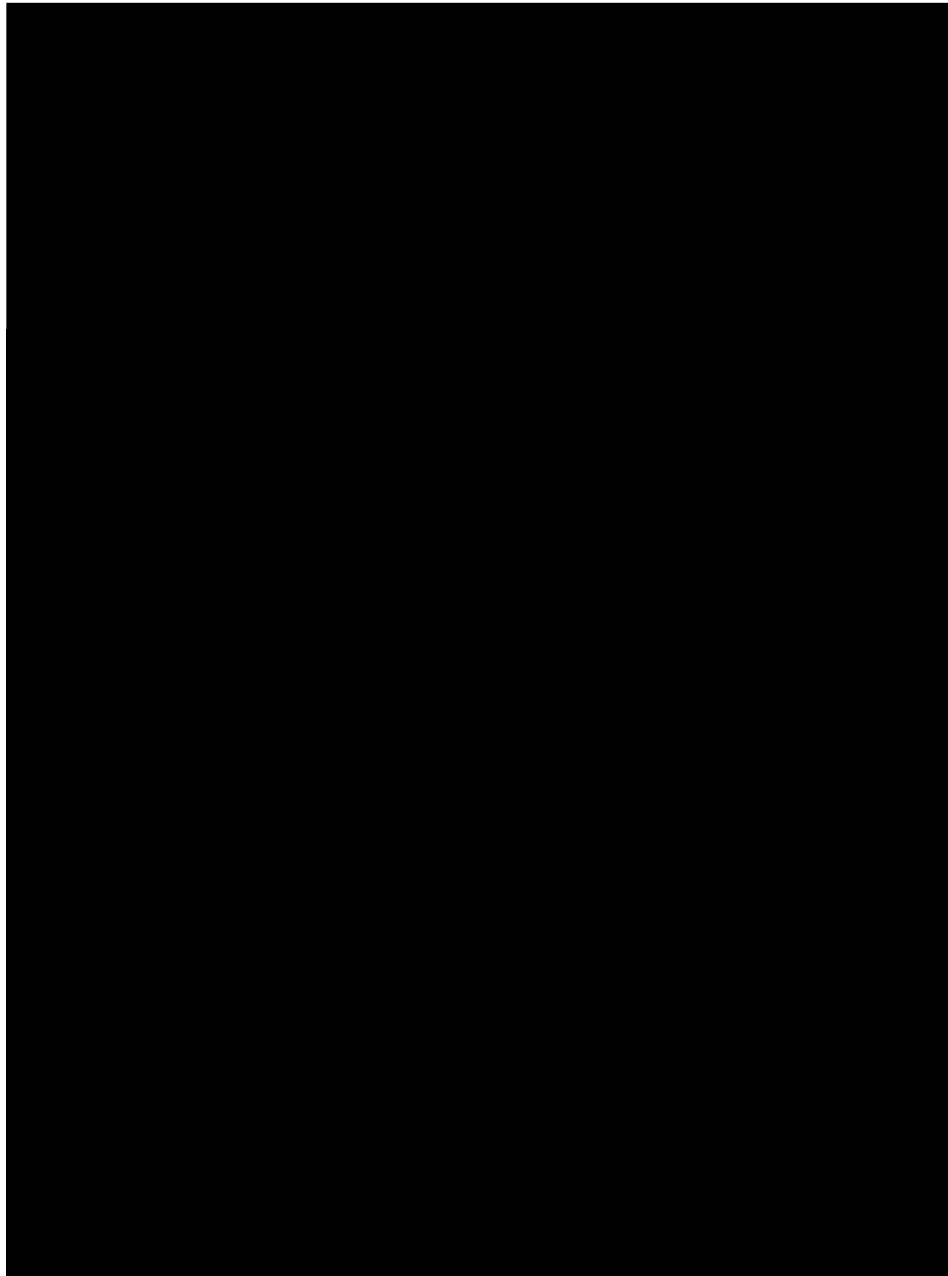


Photo File Name:	DSCN0701.jpg
Date of Photo:	1/14/2025
Time of Photo:	2:45 pm
Photographer:	Sydney Knodl
Description:	Still image from digital camera. Water draw from naphtha tank 132.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 2

Location: Martin Operating L.P. Smackover Refinery		
City: Smackover	County: Union	State: Arkansas

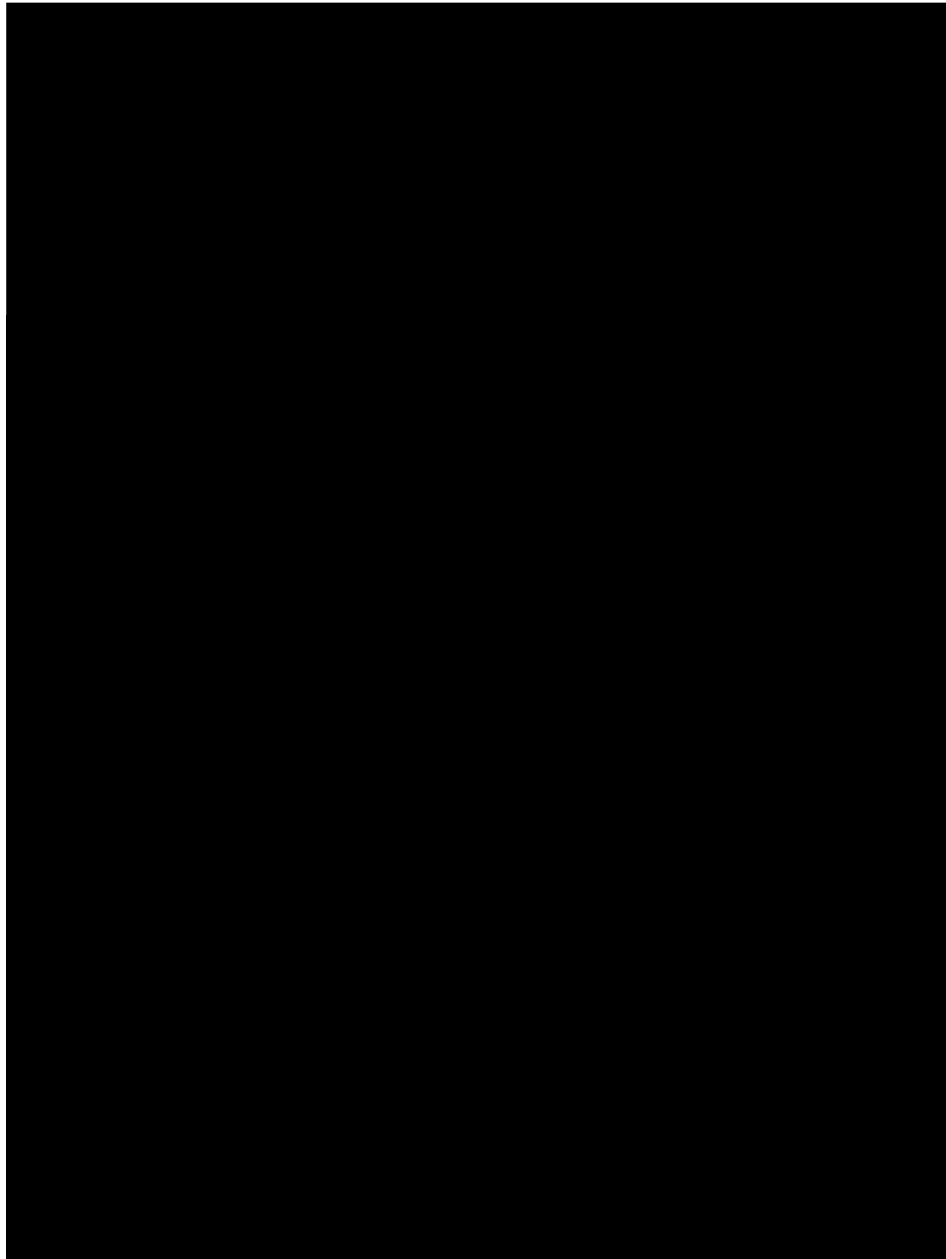


Photo File Name:	DSCN0702.jpg
Date of Photo:	1/14/2025
Time of Photo:	2:46 pm
Photographer:	Sydney Knodl
Description:	Still image from digital camera. Sampling location and open container for excess sample material under naphtha Tank 132.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 3

Location: Martin Operating L.P. Smackover Refinery		
City: Smackover	County: Union	State: Arkansas

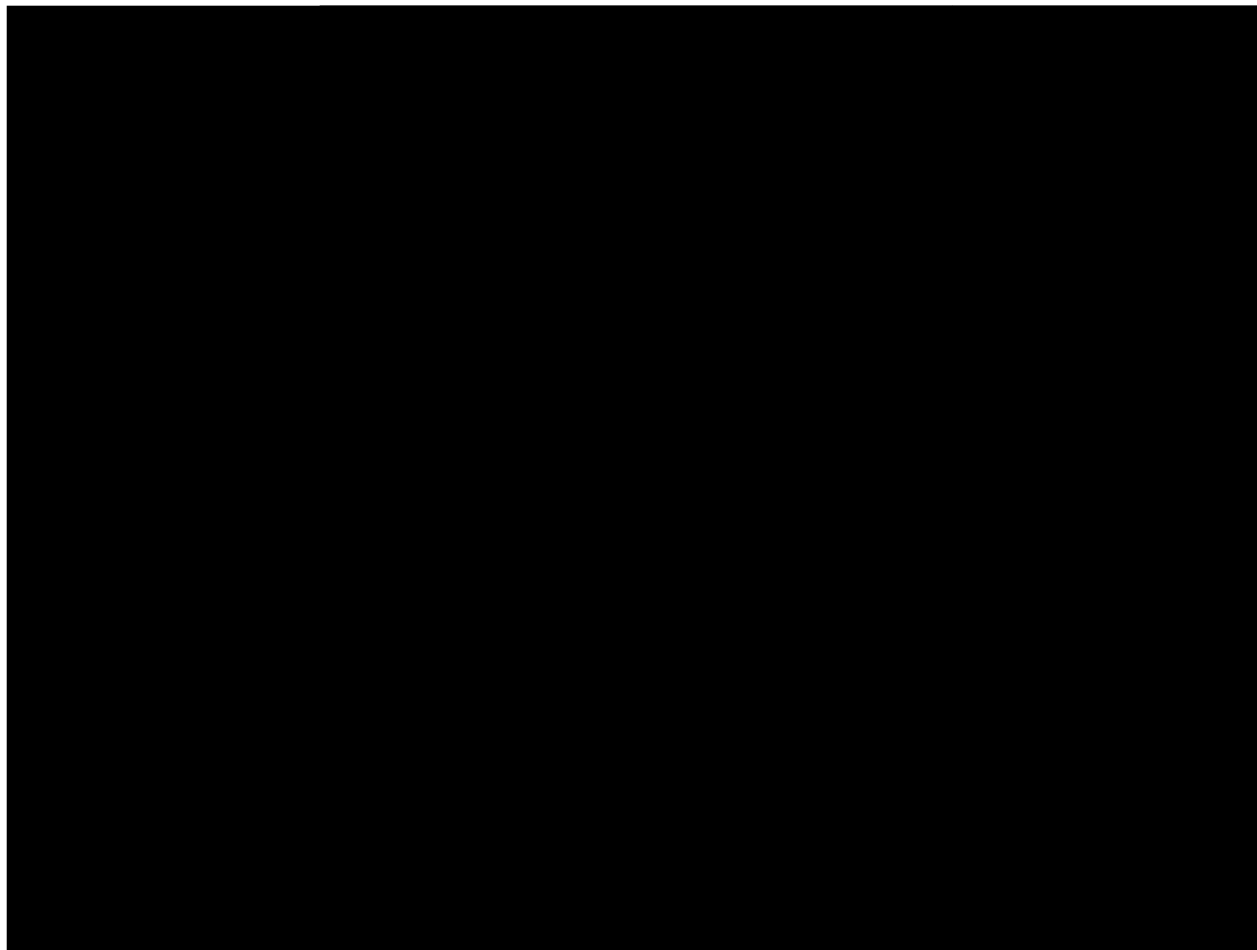


Photo File Name:	DSCN0703.jpg
Date of Photo:	1/14/2025
Time of Photo:	2:58 pm
Photographer:	Sydney Knodl
Description:	Still image from digital camera. Sampling location and open container for excess sample material under heavy condensate Tank 133.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 4

Location: Martin Operating L.P. Smackover Refinery		
City: Smackover	County: Union	State: Arkansas

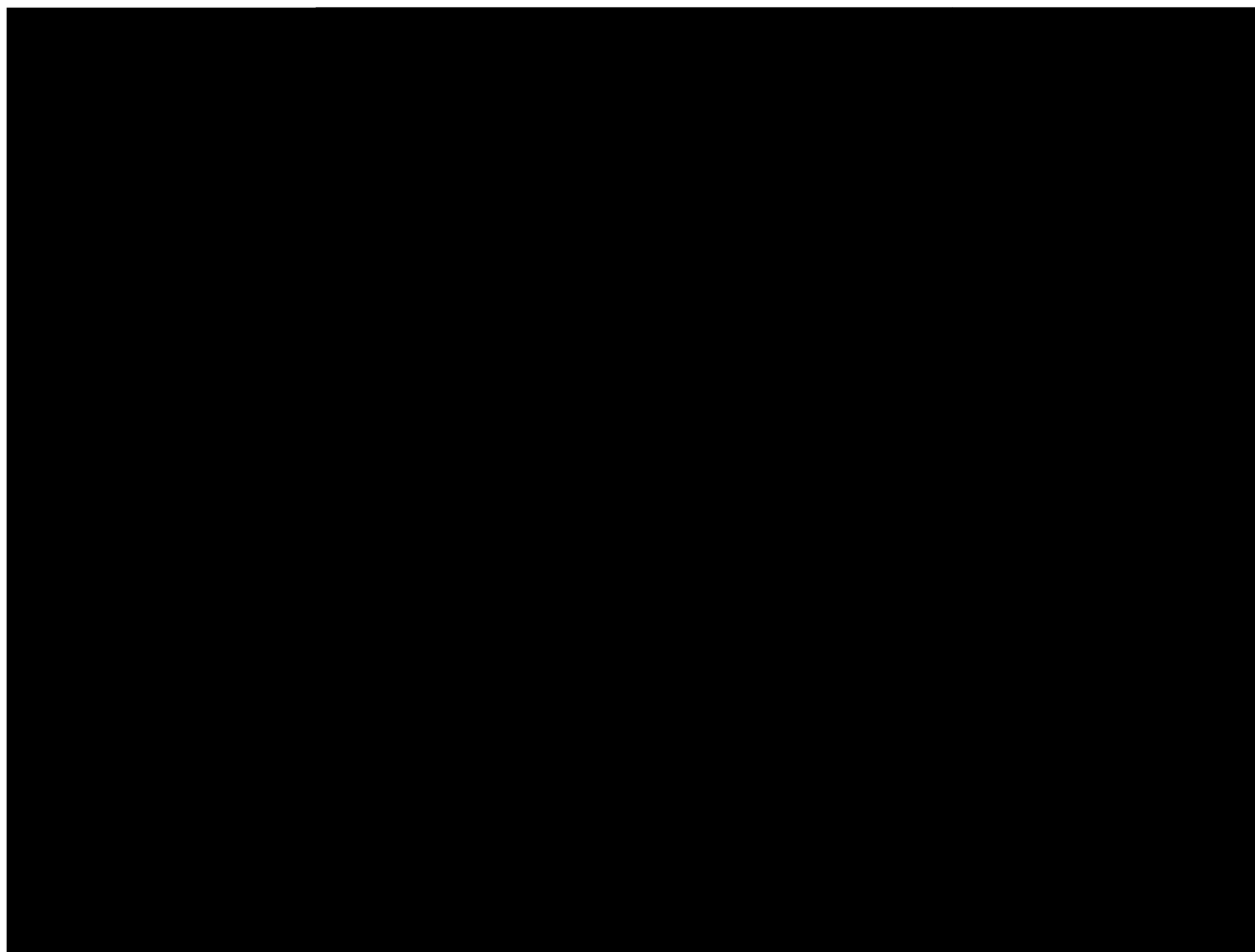


Photo File Name:	DSCN0704.jpg
Date of Photo:	1/14/2025
Time of Photo:	2:59 pm
Photographer:	Sydney Knodl
Description:	Still image from digital camera. Sampling location and open container for excess sample material under heavy condensate Tank 133. Liquid dripping from sampling location.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 5

Location: Martin Operating L.P. Smackover Refinery		
City: Smackover	County: Union	State: Arkansas

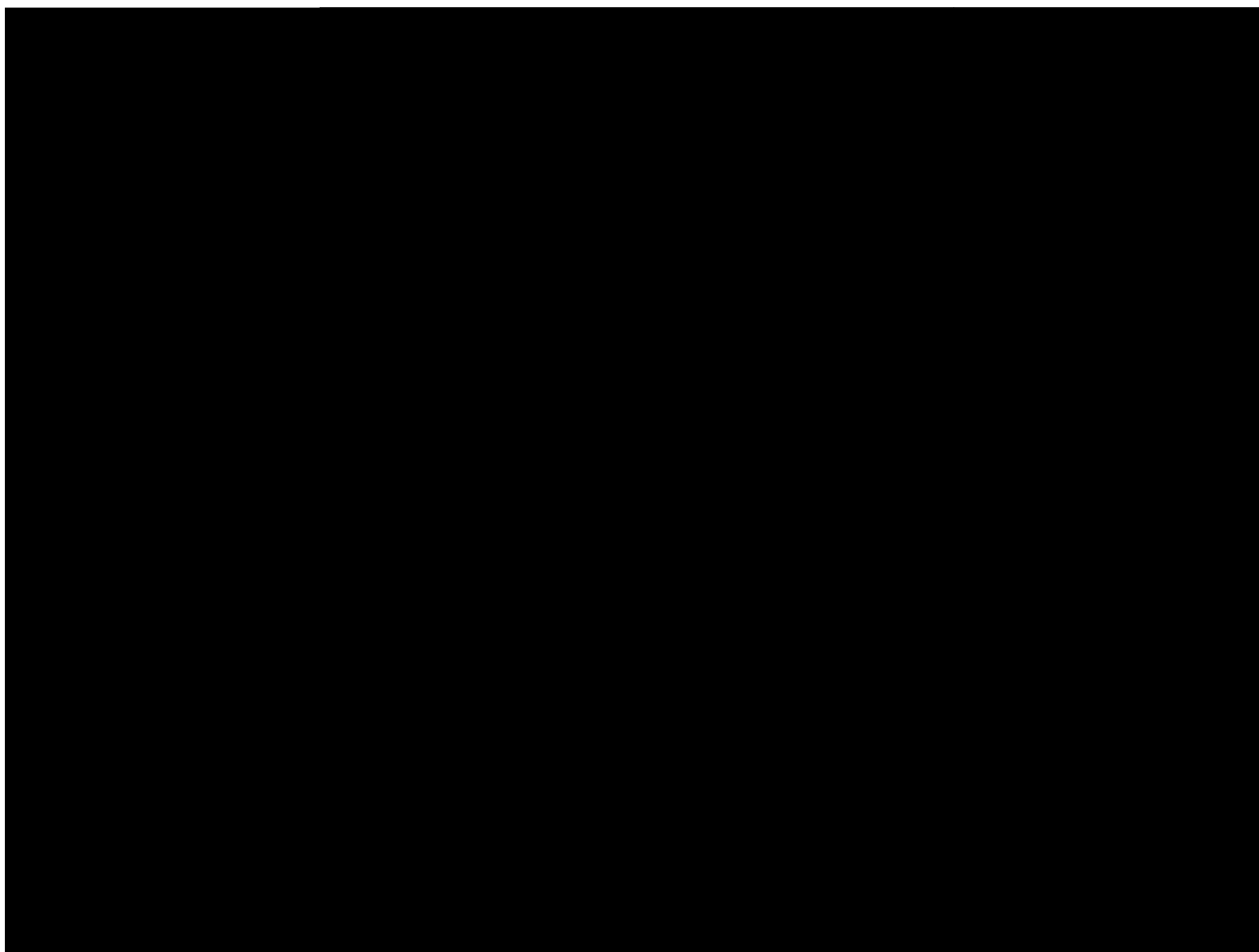


Photo File Name:	DSCN0705.jpg
Date of Photo:	1/14/2025
Time of Photo:	3:04 pm
Photographer:	Sydney Knodl
Description:	Still image from digital camera. Naphtha water draw collection Tank 134 shown with gooseneck vent at the top.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 6

Location: Martin Operating L.P. Smackover Refinery		
City: Smackover	County: Union	State: Arkansas

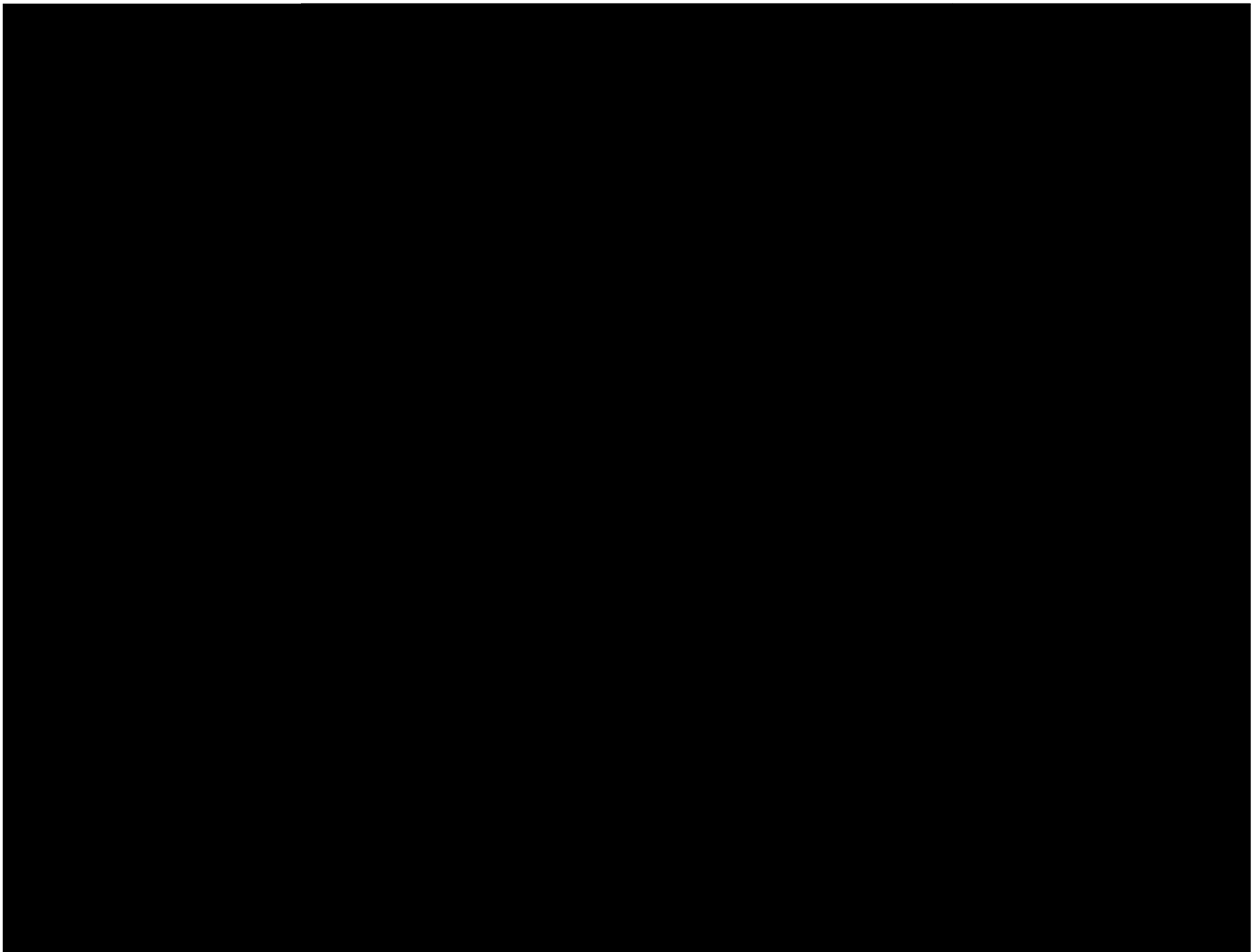


Photo File Name:	DSCN0706.jpg
Date of Photo:	1/14/2025
Time of Photo:	3:09 pm
Photographer:	Sydney Knodl
Description:	Still image from digital camera. Outlet of naptha sampling point drain lines near the sump routed to wastewater treatment.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 7

Location: Martin Operating L.P. Smackover Refinery		
City: Smackover	County: Union	State: Arkansas

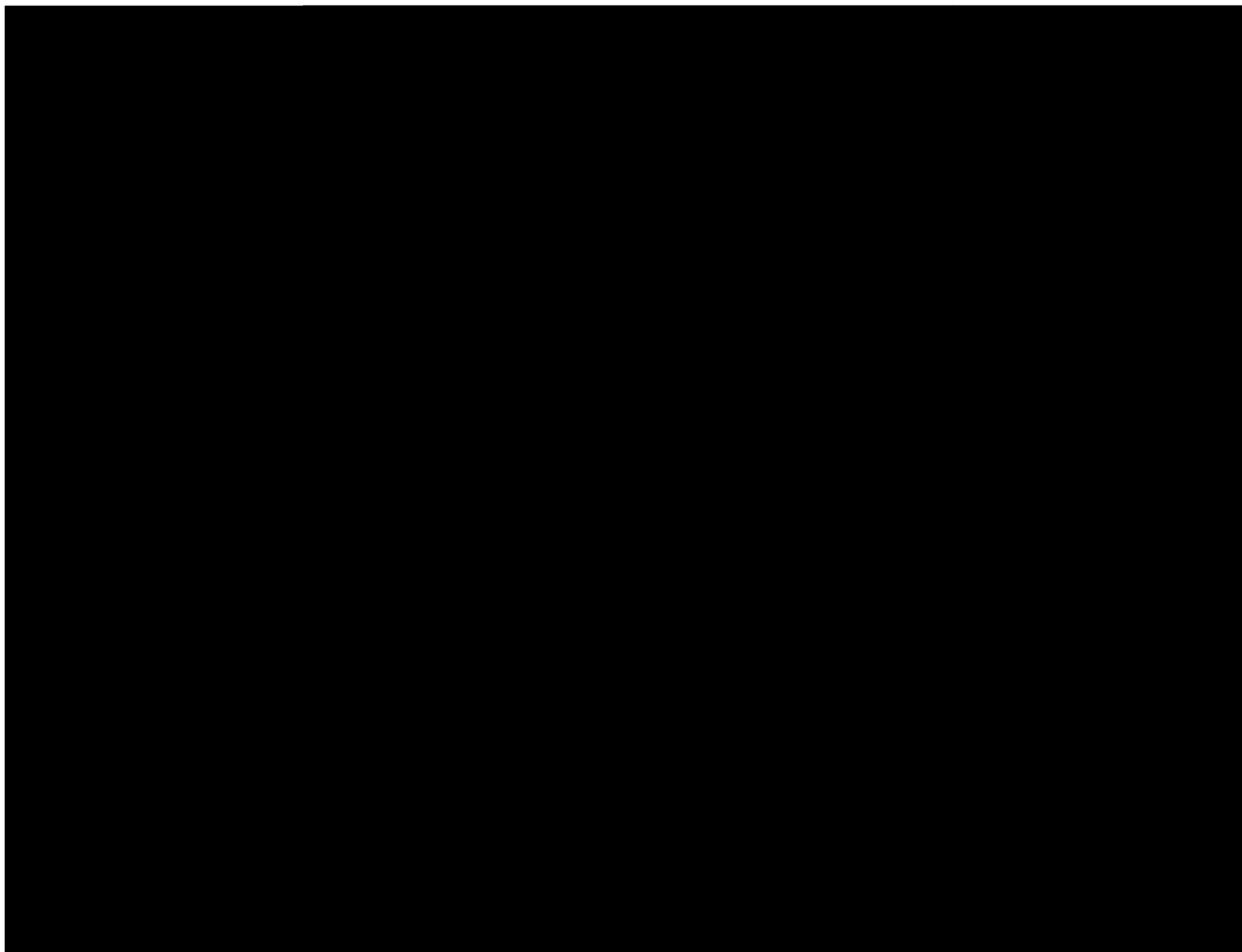


Photo File Name:	DSCN0709.jpg
Date of Photo:	1/14/2025
Time of Photo:	3:39 pm
Photographer:	Sydney Knodl
Description:	Still image from digital camera. Image of collapsed roof of Tank 503.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 8

Location: Martin Operating L.P. Smackover Refinery		
City: Smackover	County: Union	State: Arkansas

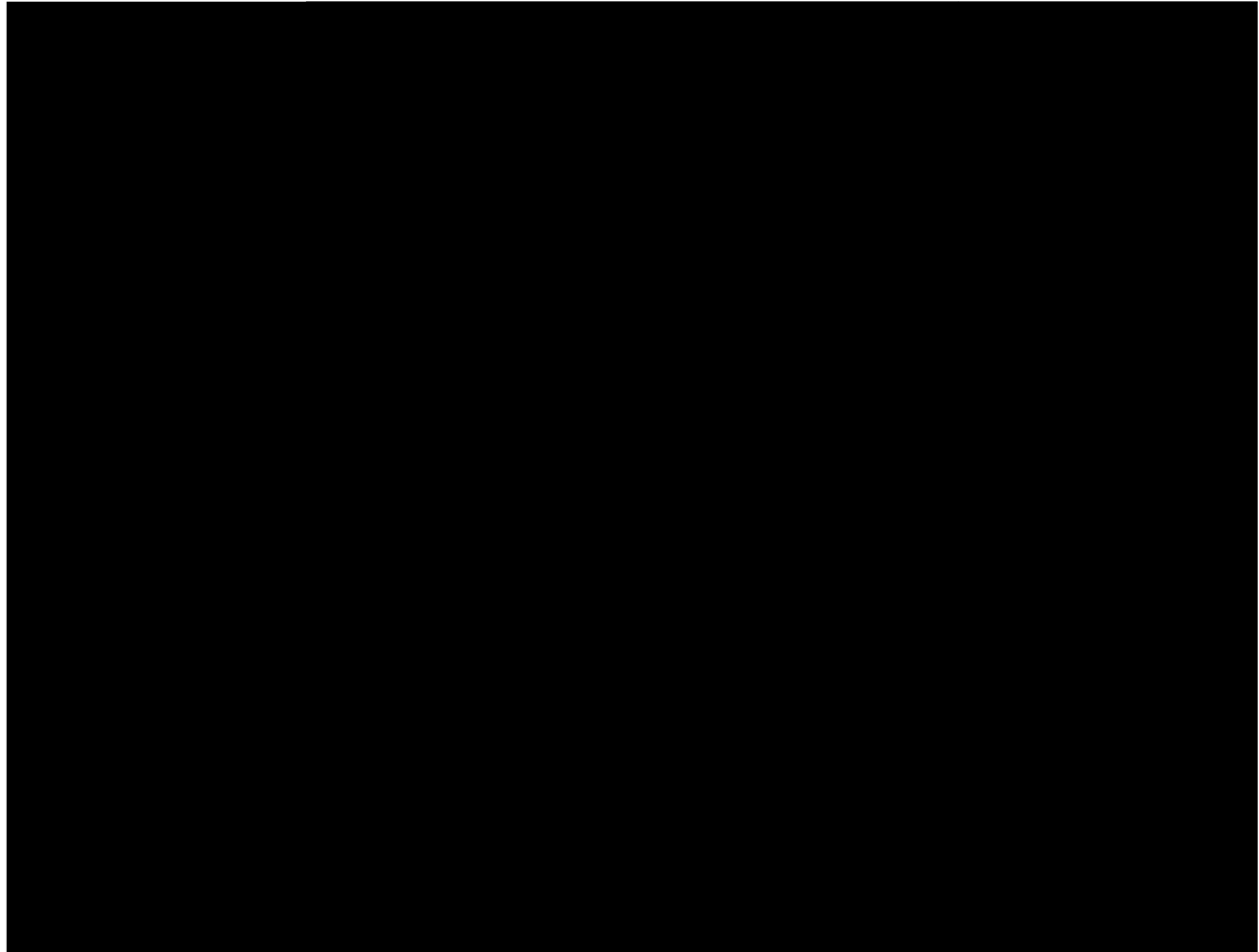


Photo File Name:	DSCN0710.jpg
Date of Photo:	1/14/2025
Time of Photo:	3:47 pm
Photographer:	Sydney Knodl
Description:	Still image from digital camera. Standing water and oil in reclaimed oil tank drainage area.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 9

Location: Martin Operating L.P. Smackover Refinery		
City: Smackover	County: Union	State: Arkansas

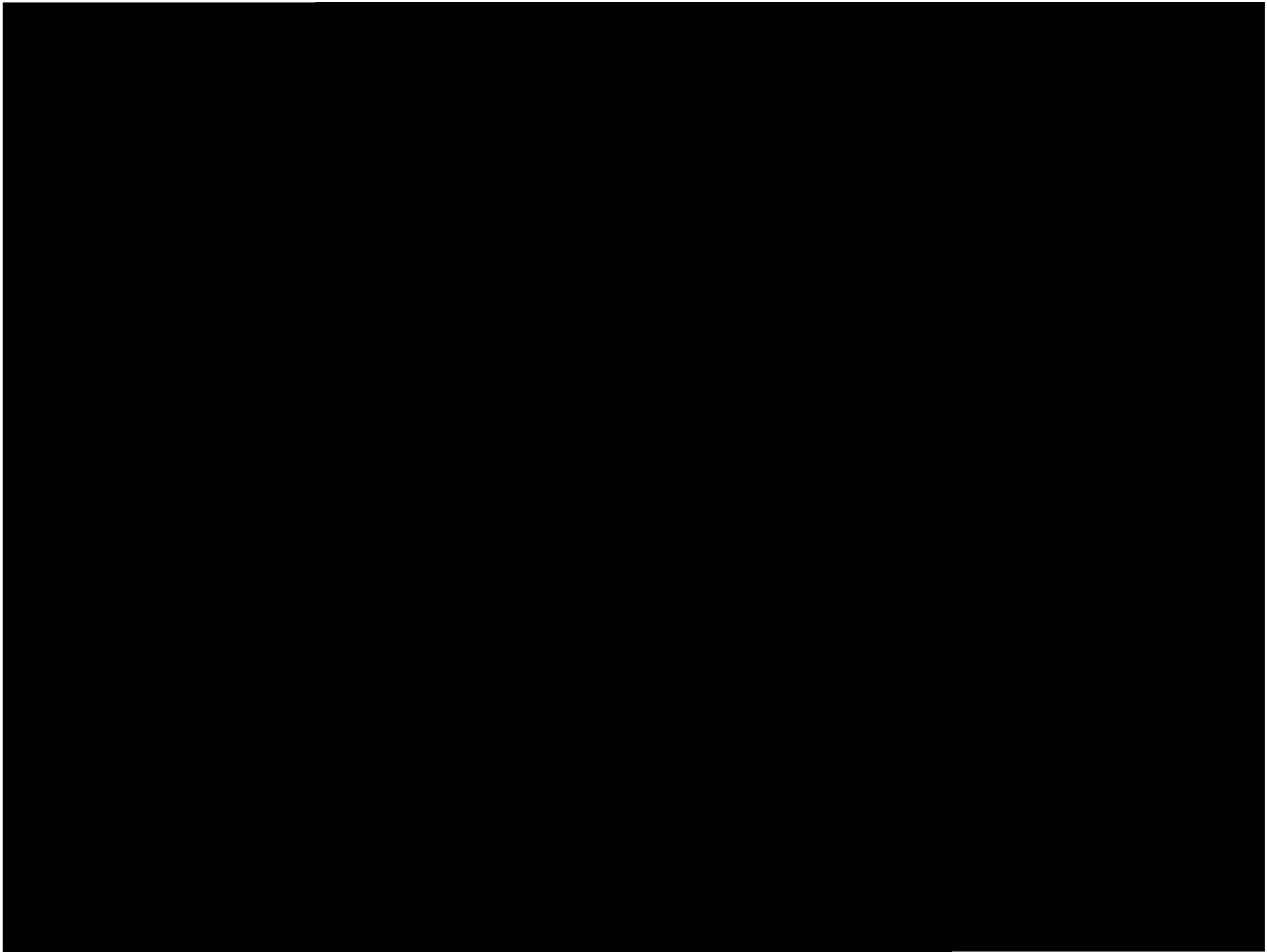


Photo File Name:	DSCN0711.jpg
Date of Photo:	1/14/2025
Time of Photo:	3:52 pm
Photographer:	Sydney Knodl
Description:	Still image from digital camera. Standing water and oil in reclaimed oil tank drainage area.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 10

Location: Martin Operating L.P. Smackover Refinery		
City: Smackover	County: Union	State: Arkansas

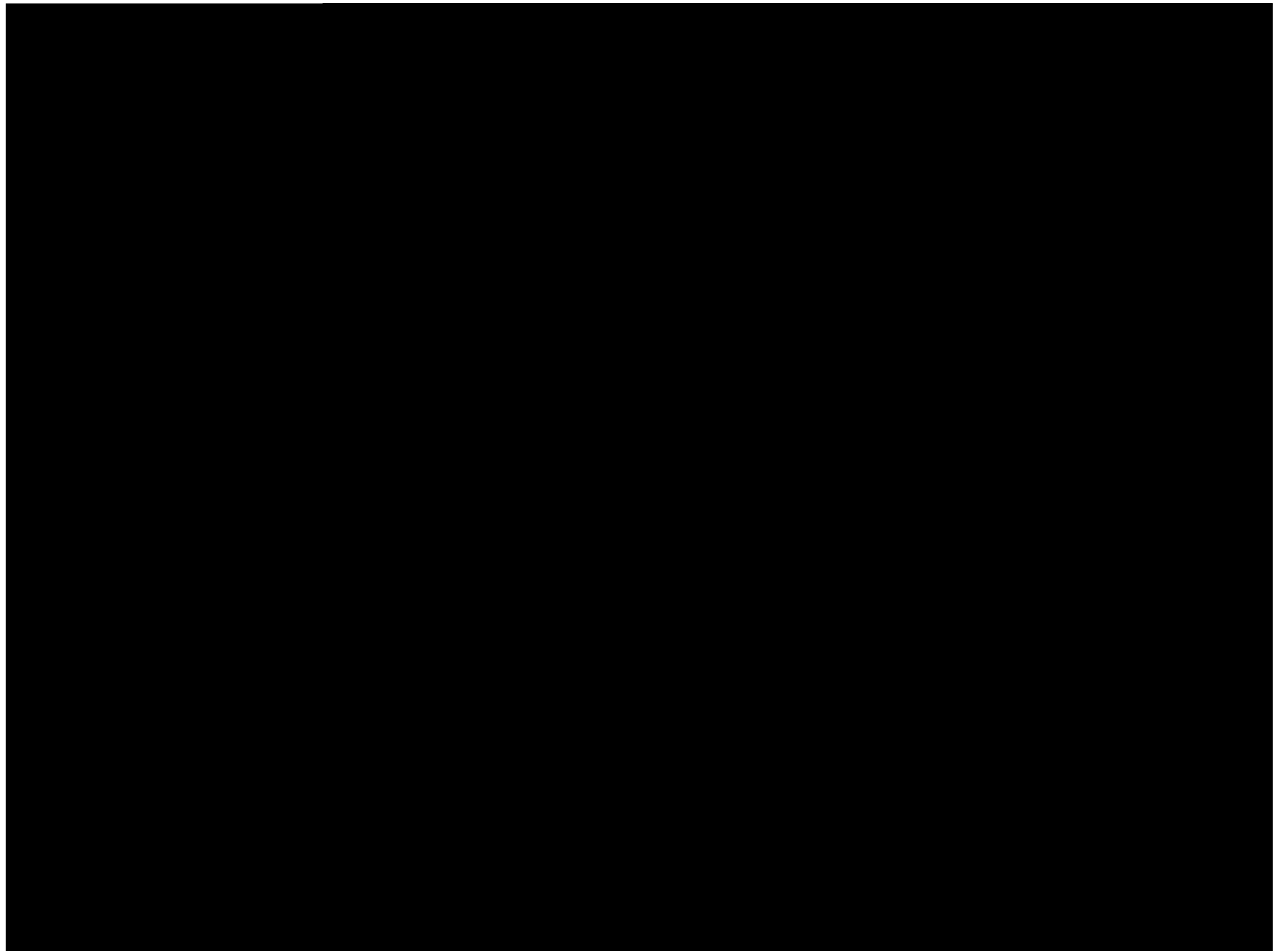


Photo File Name:	DSCN0712.jpg
Date of Photo:	1/14/2025
Time of Photo:	4:01 pm
Photographer:	Sydney Knodl
Description:	Still image from digital camera. Access door on API T-4043 not closed. Closed door visible in background.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 11

Location: Martin Operating L.P. Smackover Refinery		
City: Smackover	County: Union	State: Arkansas

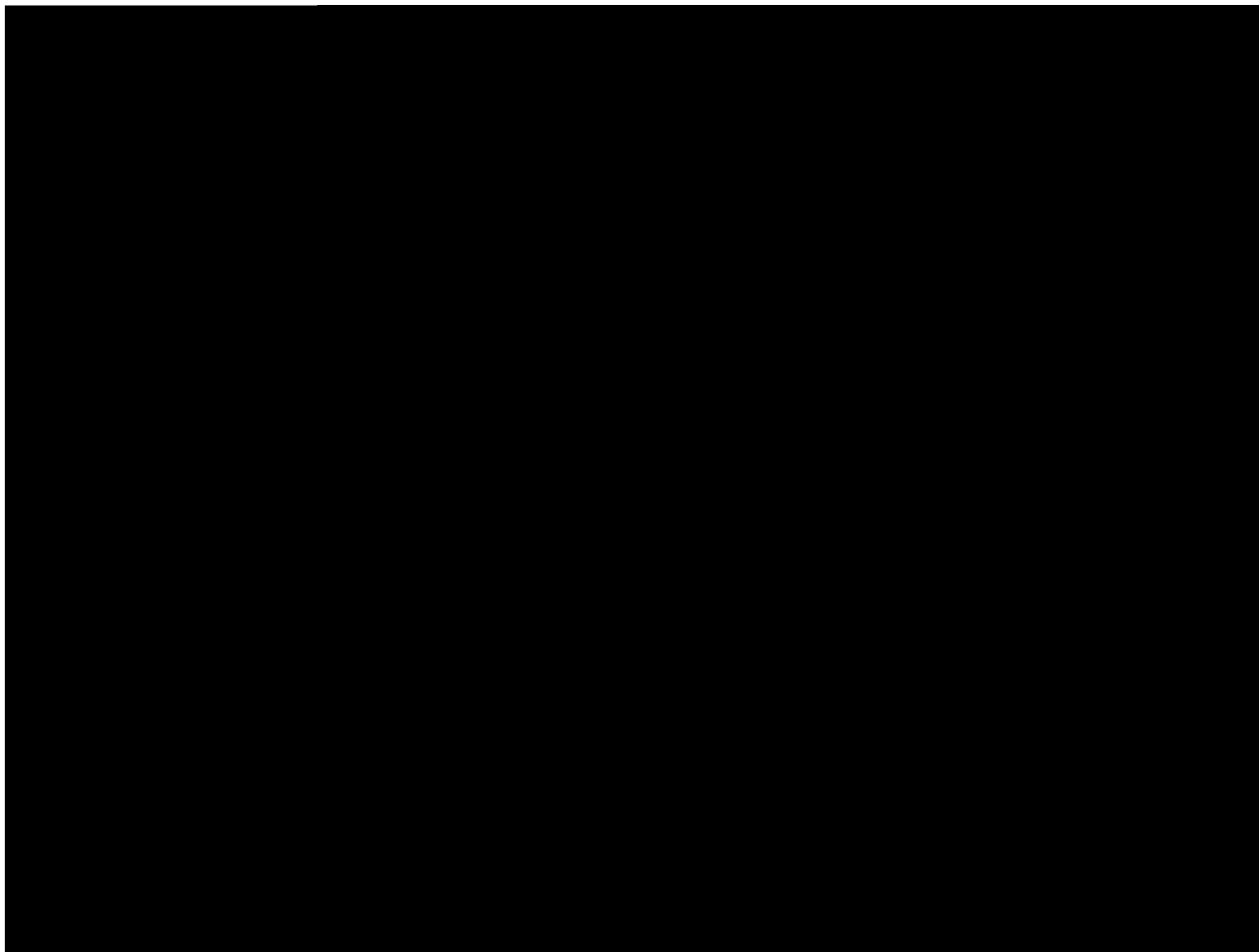


Photo File Name:	DSCN0713.jpg
Date of Photo:	1/14/2025
Time of Photo:	4:03 pm
Photographer:	Ben Rosenthal
Description:	Still image from digital camera. Oil staining on north API (T-4042) skimmer.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 12

Location: Martin Operating L.P. Smackover Refinery		
City: Smackover	County: Union	State: Arkansas

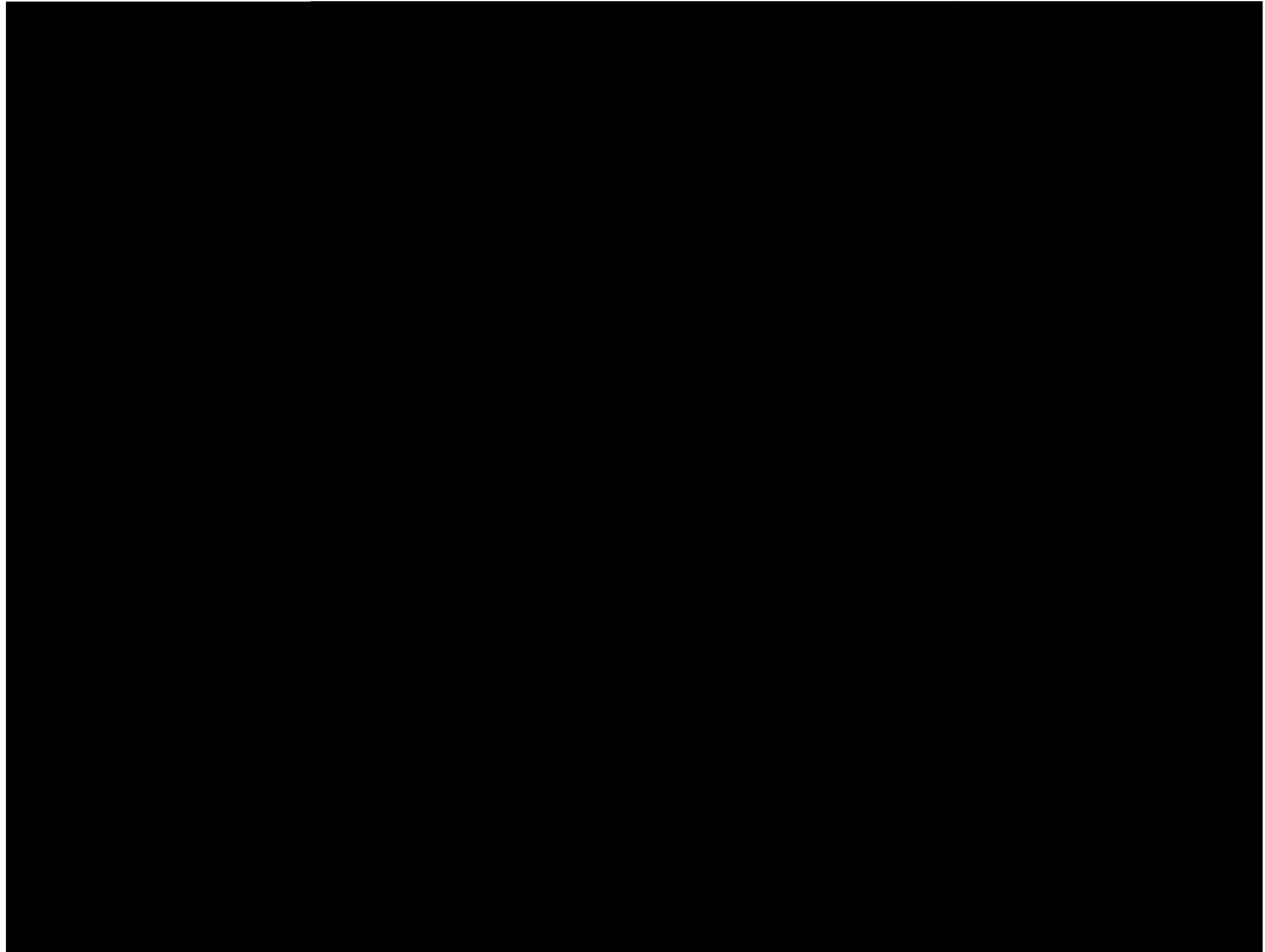


Photo File Name:	FLIR0096.jpg
Date of Photo:	1/15/2025
Time of Photo:	11:18 am
Photographer:	Ben Rosenthal
Description:	Still image from OGI Camera. Gauge hatch on tank 508 was not latched or kept closed.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 13

Location: Martin Operating L.P. Smackover Refinery		
City: Smackover	County: Union	State: Arkansas

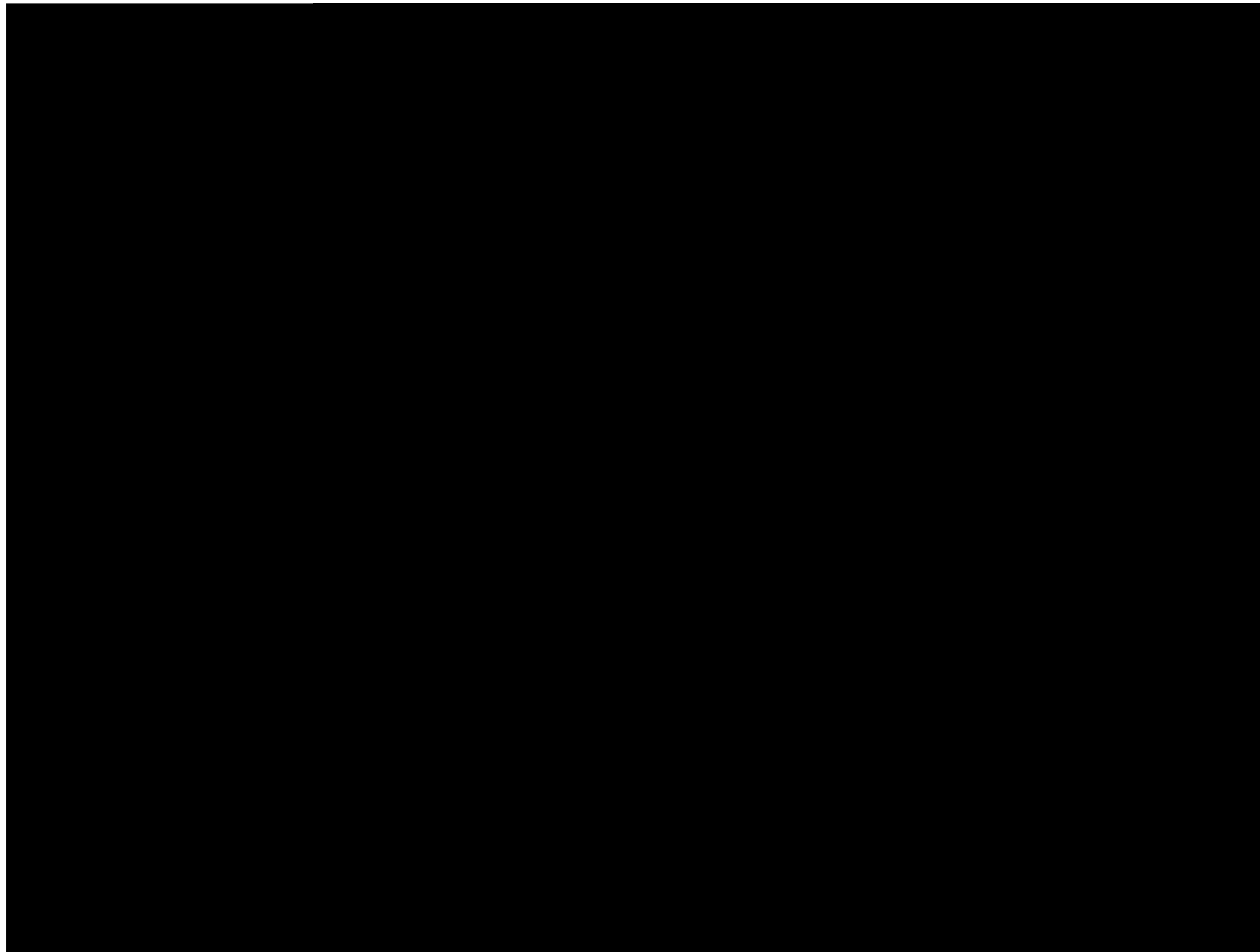


Photo File Name:	FLIR0098.jpg
Date of Photo:	1/15/2025
Time of Photo:	11:28 am
Photographer:	Ben Rosenthal
Description:	Still image from OGI Camera. Unlatched, open hatch on reclaimed oil tank 504.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 14

Location: Martin Operating L.P. Smackover Refinery		
City: Smackover	County: Union	State: Arkansas



Photo File Name:	DSCN0718.jpg
Date of Photo:	1/15/2025
Time of Photo:	11:37 am
Photographer:	Sarah Frey
Description:	Still image from digital camera. Dent in the side of reclaimed oil tank 518



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 15

Location: Martin Operating L.P. Smackover Refinery		
City: Smackover	County: Union	State: Arkansas



Photo File Name:	DSCN0719.jpg
Date of Photo:	1/15/2025
Time of Photo:	11:54 am
Photographer:	Sarah Frey
Description:	Still image from digital camera. Oily water in an out-of-service oil water separator.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 16

Location: Martin Operating L.P. Smackover Refinery		
City: Smackover	County: Union	State: Arkansas

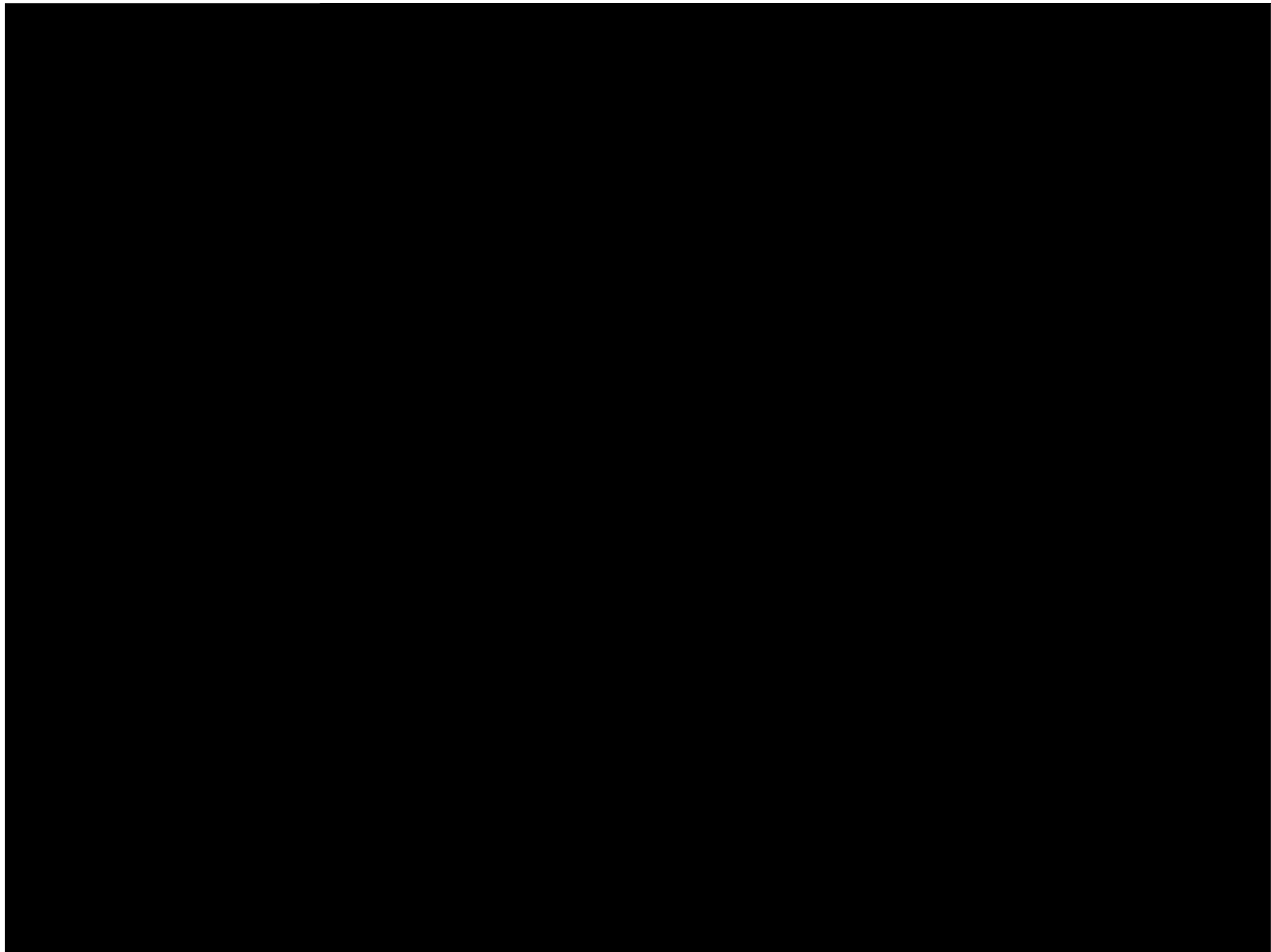


Photo File Name:	DSCN0721.jpg
Date of Photo:	1/15/2025
Time of Photo:	12:02 pm
Photographer:	Sarah Frey
Description:	Still image from digital camera. Piping without a blind flange or closure at an out-of-service API separator with oily water inside.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 17

Location: Martin Operating L.P. Smackover Refinery		
City: Smackover	County: Union	State: Arkansas

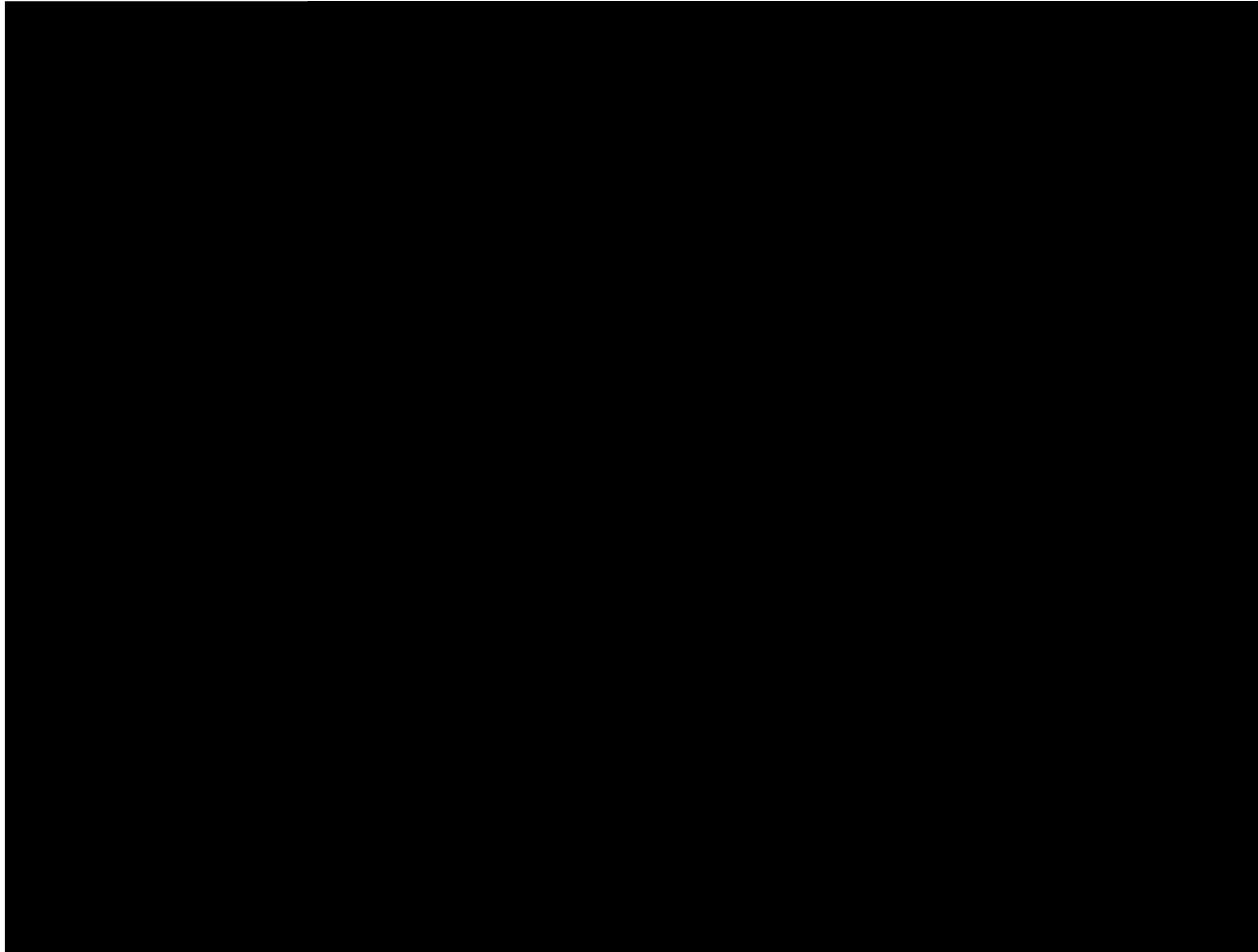


Photo File Name:	DSCN0722.jpg
Date of Photo:	1/15/2025
Time of Photo:	12:10 pm
Photographer:	Sarah Frey
Description:	Still image from digital camera. Sulfuric acid leak dripping onto piping from the APIs to the MBBR



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 18

Location: Martin Operating L.P. Smackover Refinery		
City: Smackover	County: Union	State: Arkansas

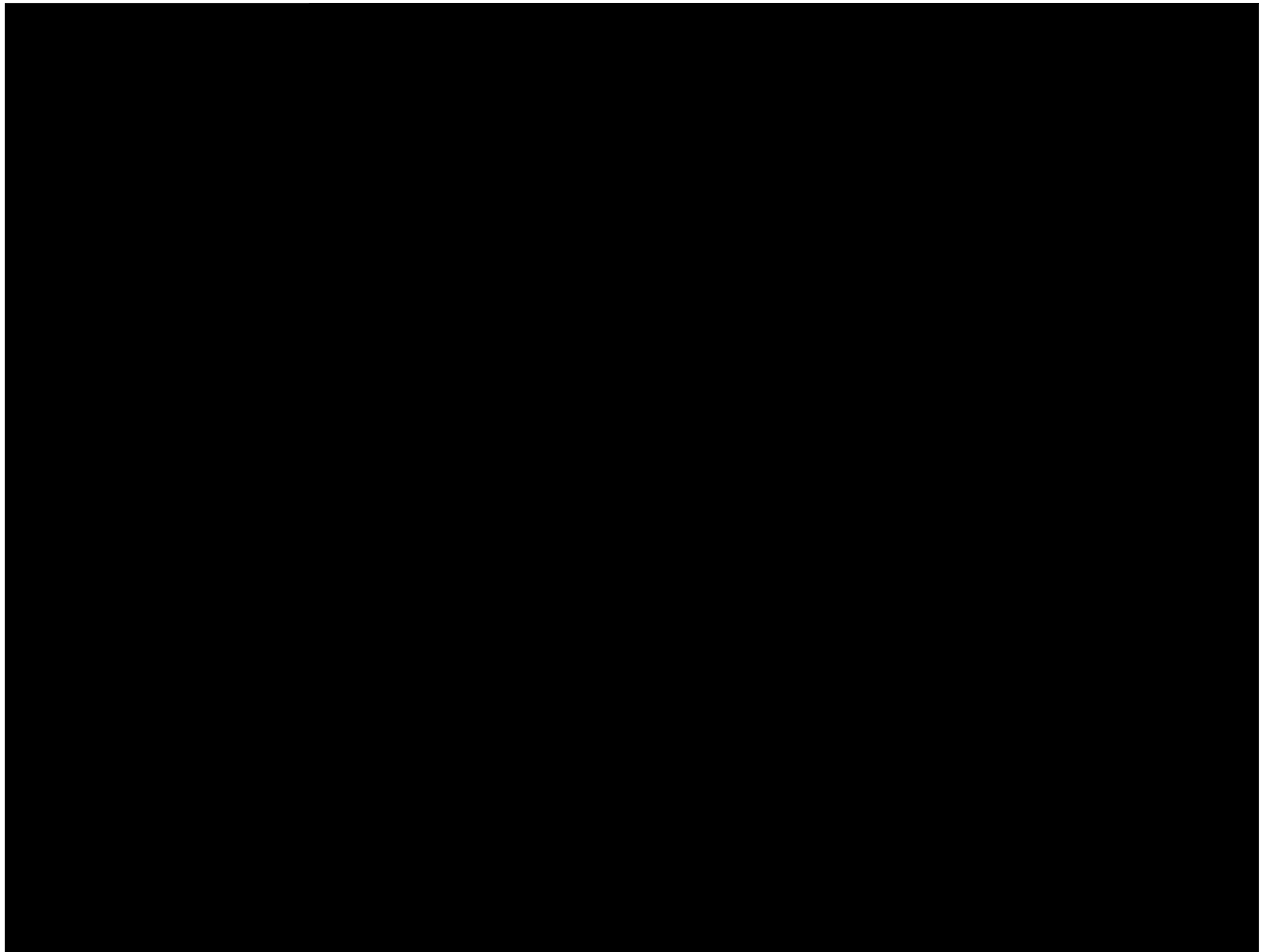


Photo File Name:	DSCN0724.jpg
Date of Photo:	1/15/2025
Time of Photo:	12:19 pm
Photographer:	Sarah Frey
Description:	Still image from digital camera. Name plate on Tank 538 showing built date 2020.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 19

Location: Martin Operating L.P. Smackover Refinery		
City: Smackover	County: Union	State: Arkansas

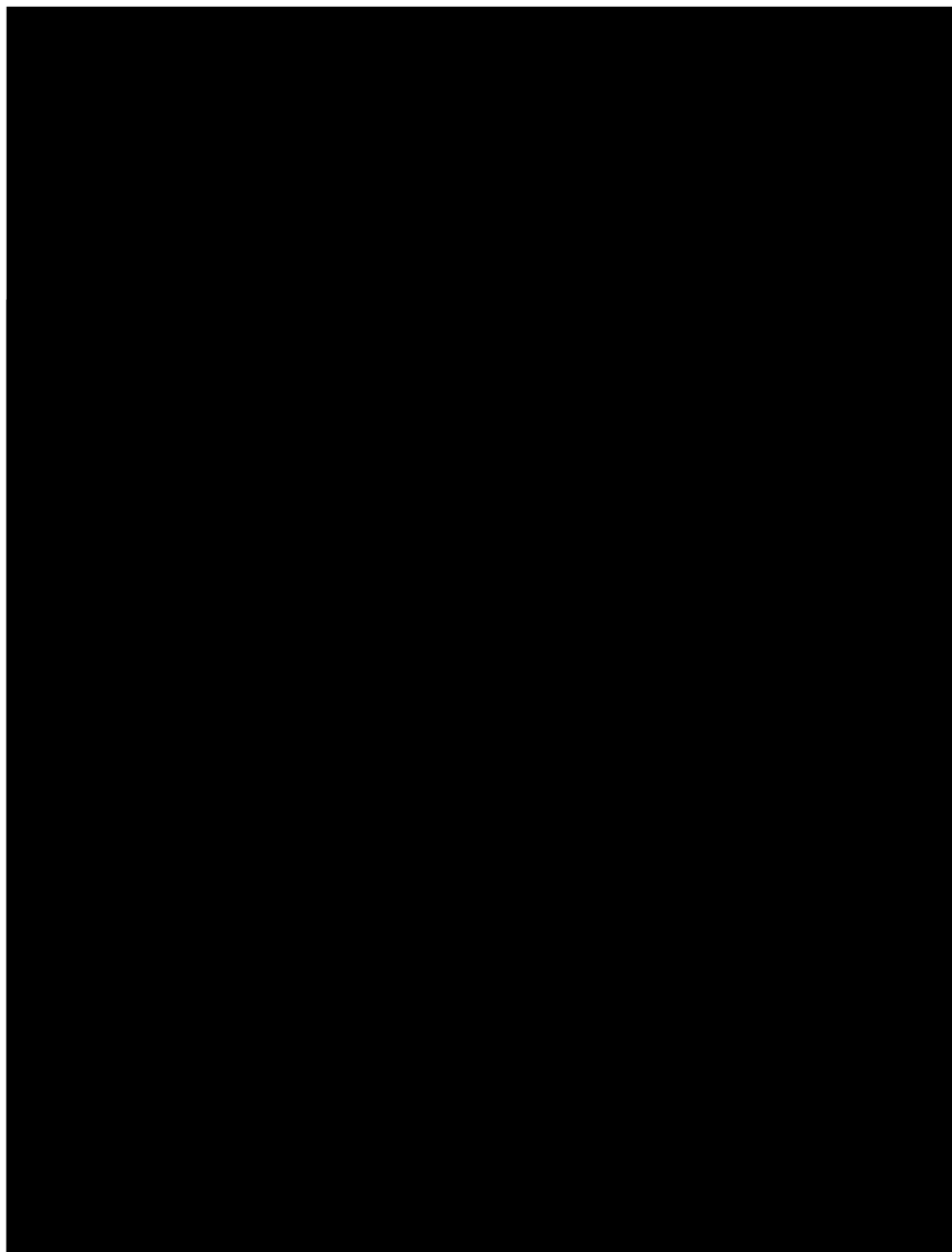


Photo File Name:	DSCN0725.jpg
Date of Photo:	1/15/2025
Time of Photo:	12:46 pm
Photographer:	Sarah Frey
Description:	Still image from digital camera. Liquid leak and rusting depicted on tank 515



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 20

Location: Martin Operating L.P. Smackover Refinery		
City: Smackover	County: Union	State: Arkansas

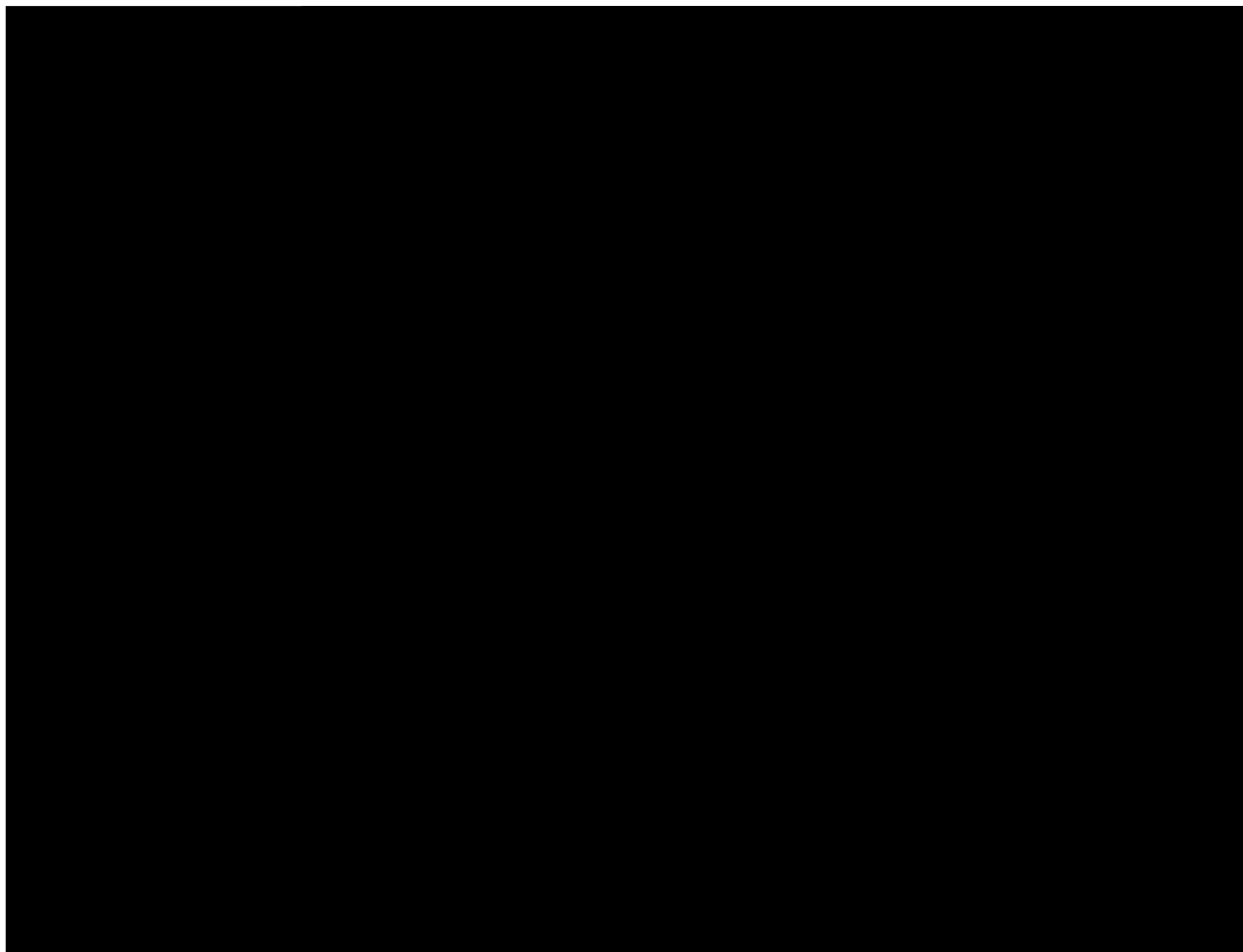


Photo File Name:	DSCN0726.jpg
Date of Photo:	1/15/2025
Time of Photo:	3:51 pm
Photographer:	Sarah Frey
Description:	Still image from digital camera. Process unit drain grate and sump. Concrete did not appear original throughout the area.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 21

Location: Martin Operating L.P. Smackover Refinery		
City: Smackover	County: Union	State: Arkansas

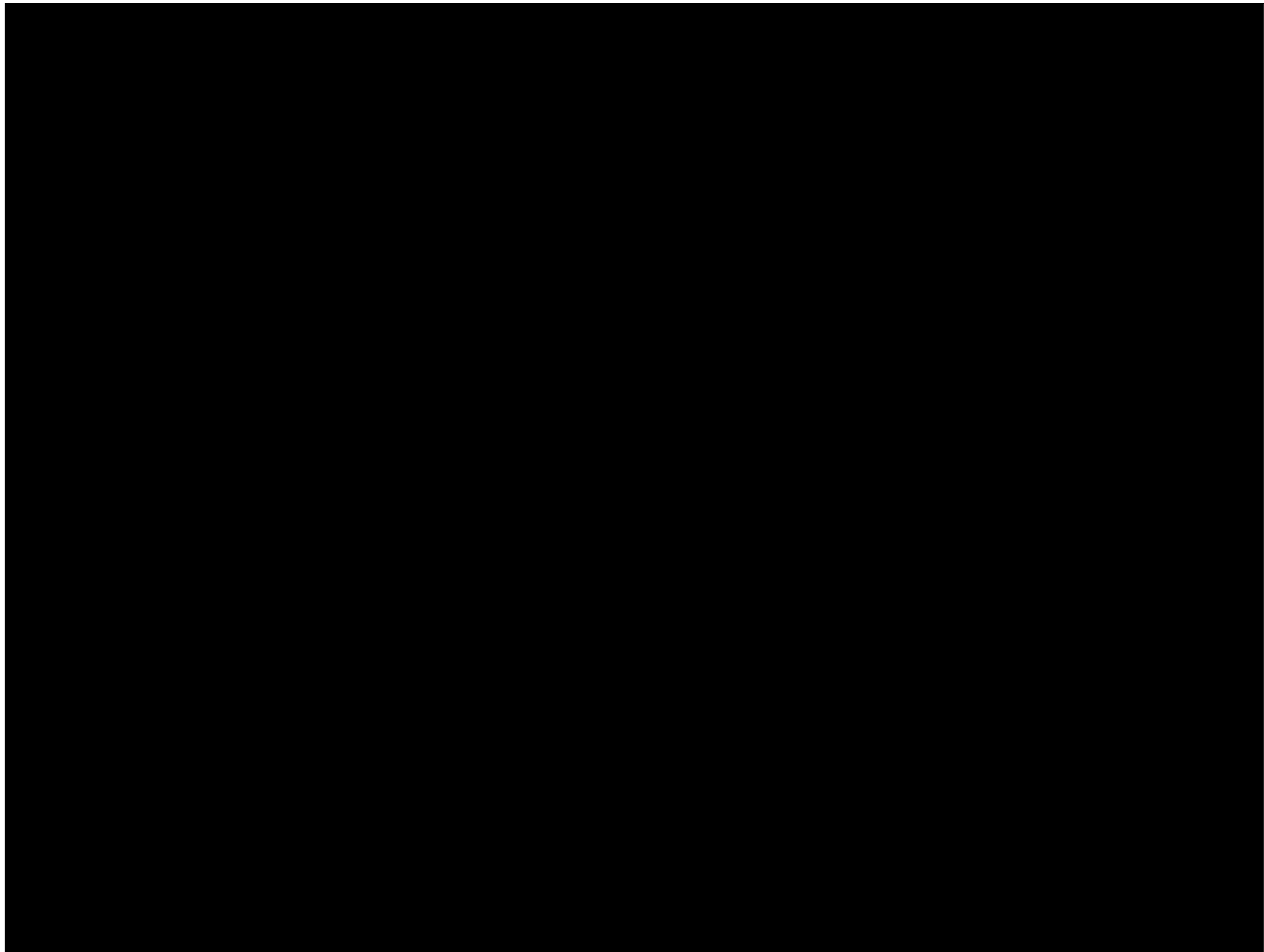


Photo File Name:	DSCN0727.jpg
Date of Photo:	1/15/2025
Time of Photo:	4:25 pm
Photographer:	Sarah Frey
Description:	Still image from digital camera. Name plate on Desalter #2 depicting date of manufacture February 2012.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 22

Location: Martin Operating L.P. Smackover Refinery		
City: Smackover	County: Union	State: Arkansas

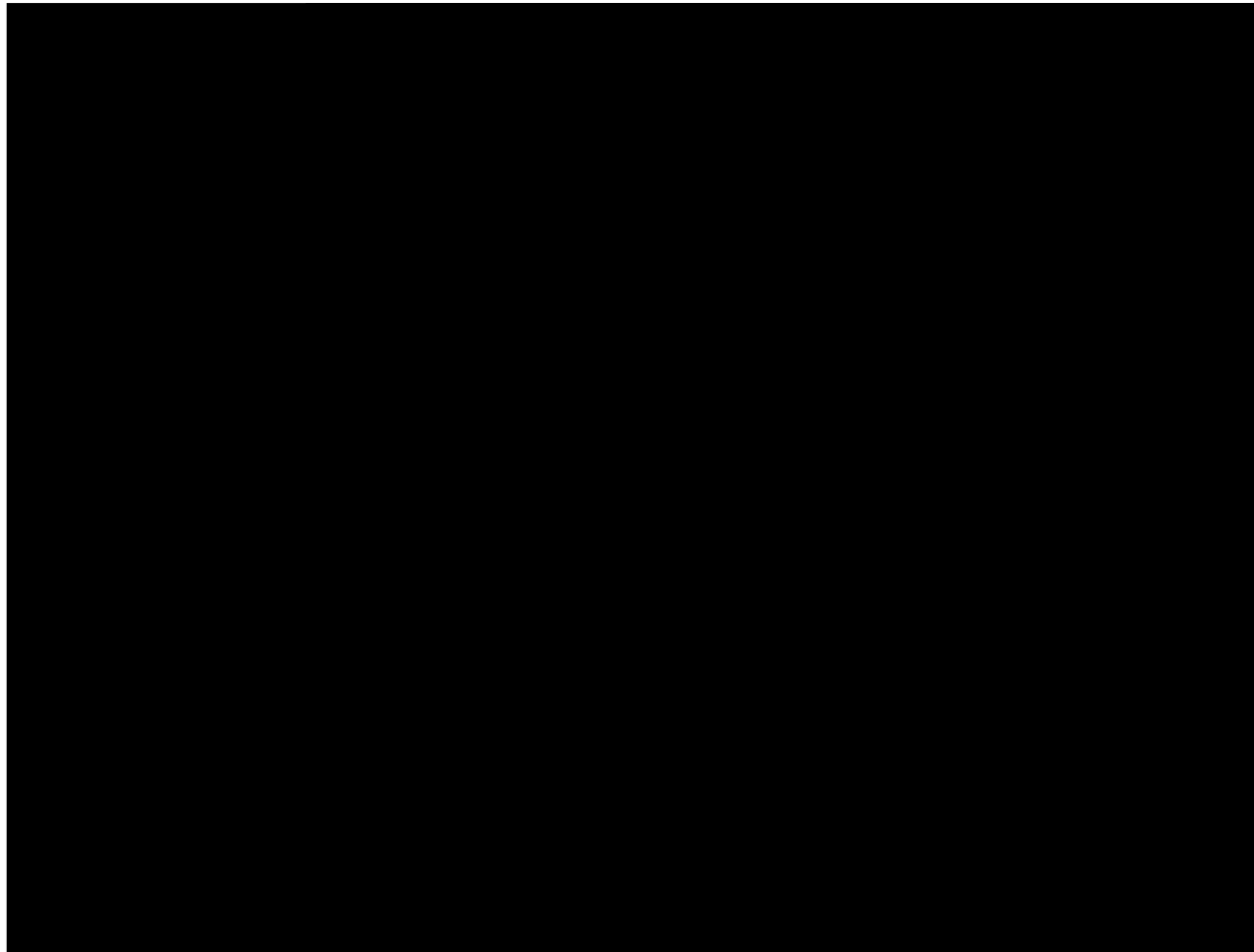


Photo File Name:	DSCN0730.jpg
Date of Photo:	1/15/2025
Time of Photo:	2:29 pm
Photographer:	Sarah Frey
Description:	Still image from digital camera. Desalter #2 sampling manifold and 55-gallon collection drum. Open to atmosphere with visible leaks.

Martin Operating L.P./ Smackover Refinery
Inspection Date 1/14/25 – 1/16/25

Appendix 2

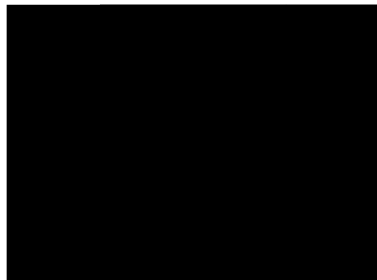
Video Log



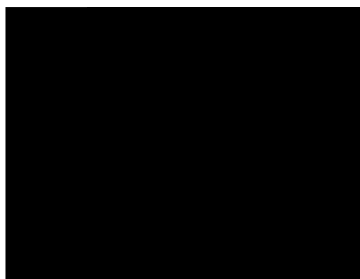
UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Video Log

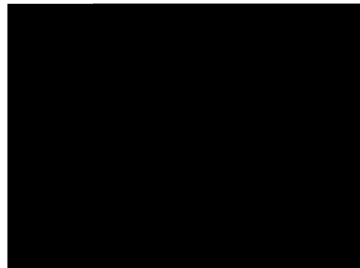
Location: Martin Operating L.P. Smackover Refinery		
City: Smackover	County: Union	State: Arkansas



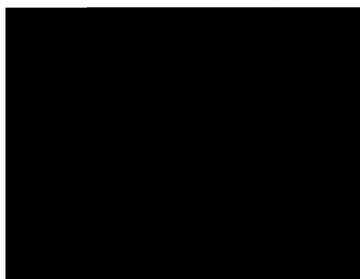
Video File Name: [REDACTED]
 Date of Video: 1/14/2025
 Time of Video: 3:43 pm
 Videographer: Sarah Frey
 Description: Reclaimed oil tank battery. Optical Gas Imaging ("OGI") visualized hydrocarbon emissions from collapsed roof of Tank 503.



Video File Name: [REDACTED]
 Date of Video: 1/14/2025
 Time of Video: 3:47 pm
 Videographer: Sarah Frey
 Description: OGI visualized hydrocarbon emissions observed from the manway hatch on surge tank 508. Missing bolts.



Video File Name: [REDACTED]
 Date of Video: 1/14/2025
 Time of Video: 3:57 pm
 Videographer: Sarah Frey
 Description: OGI visualized hydrocarbon emissions from gooseneck vent on reclaimed oil tank 538.



Video File Name: [REDACTED]
 Date of Video: 1/15/2025
 Time of Video: 11:14 am
 Videographer: Ben Rosenthal
 Description: OGI visualized hydrocarbon emissions from large hole in the roof of 503. Inlet actively pumping liquid into tank.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Video Log

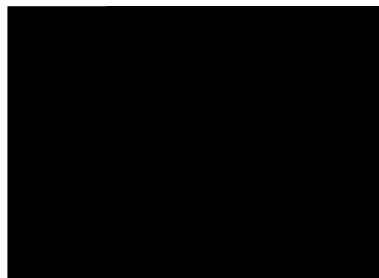
Location: Martin Operating L.P. Smackover Refinery		
City: Smackover	County: Union	State: Arkansas



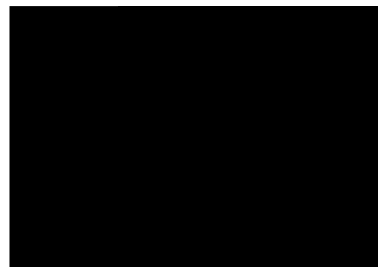
Video File Name: [REDACTED]
 Date of Video: 1/15/2025
 Time of Video: 11:27 am
 Videographer: Ben Rosenthal
 Description: Collapsed roof of tank 503. Inlet actively pumping liquid into tank.



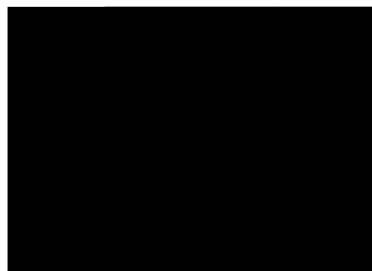
Video File Name: [REDACTED]
 Date of Video: 1/15/2025
 Time of Video: 11:36 am
 Videographer: Ben Rosenthal
 Description: OGI visualized hydrocarbon emissions from gooseneck vent on reclaimed oil tank 501.



Video File Name: [REDACTED]
 Date of Video: 1/15/2025
 Time of Video: 11:38 am
 Videographer: Ben Rosenthal
 Description: Open hatches on reclaimed oil tanks 504, 503, 518, 502, and 501.



Video File Name: [REDACTED]
 Date of Video: 1/15/2025
 Time of Video: 11:46 am
 Videographer: Ben Rosenthal
 Description: OGI visualized hydrocarbon emissions from drain hub in front of tank 502.



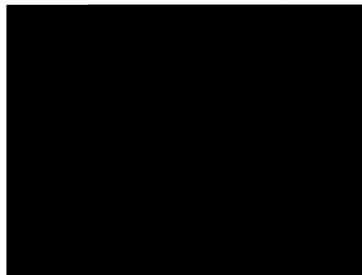
Video File Name: [REDACTED]
 Date of Video: 1/15/2025
 Time of Video: 11:53 am
 Videographer: Ben Rosenthal
 Description: Large plume of OGI visualized hydrocarbon emissions from gooseneck vent on reclaimed oil tank 538.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Video Log

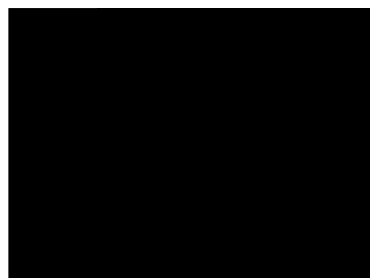
Location: Martin Operating L.P. Smackover Refinery		
City: Smackover	County: Union	State: Arkansas



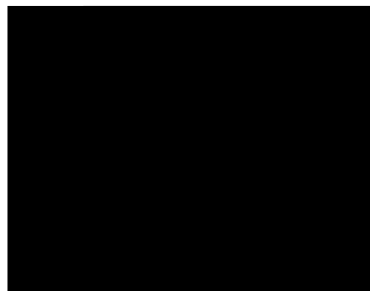
Video File Name: [REDACTED]
 Date of Video: 1/15/2025
 Time of Video: 12:30 pm
 Videographer: Sydney Knodl
 Description: OGI visualized hydrocarbon emissions from the manway hatch on surge tank 510. Missing bolts.



Video File Name: [REDACTED]
 Date of Video: 1/15/2025
 Time of Video: 3:34 pm
 Videographer: Sarah Frey
 Description: OGI visualized hydrocarbon emissions from sample point and open air catch basin on heavy condensate tank 133.



Video File Name: [REDACTED]
 Date of Video: 1/15/2025
 Time of Video: 3:39 pm
 Videographer: Sarah Frey
 Description: OGI visualized hydrocarbon emissions from cooling tower.



Video File Name: [REDACTED]
 Date of Video: 1/15/2025
 Time of Video: 1/15/2025
 Videographer: Sarah Frey
 Description: OGI visualized hydrocarbon emissions from gooseneck vent on reclaimed oil tank 538.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Video Log

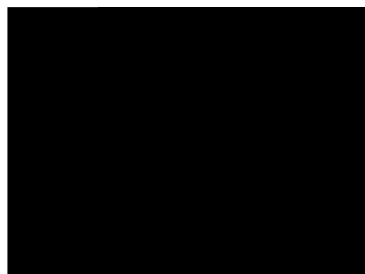
Location: Martin Operating L.P. Smackover Refinery		
City: Smackover	County: Union	State: Arkansas



Video File Name: [REDACTED]
 Date of Video: 1/15/2025
 Time of Video: 3:51 pm
 Videographer: Sarah Frey
 Description: OGI visualized hydrocarbon emissions from sump west of the big bertha sump.



Video File Name: [REDACTED]
 Date of Video: 1/15/2025
 Time of Video: 3:54 pm
 Videographer: Sarah Frey
 Description: OGI visualized hydrocarbon emissions from large sump beneath big bertha.



Video File Name: [REDACTED]
 Date of Video: 1/15/2025
 Time of Video: 4:51 pm
 Videographer: Sarah Frey
 Description: OGI visualized hydrocarbon emissions from the top of crude oil tank 109.



Video File Name: [REDACTED]
 Date of Video: 1/15/2025
 Time of Video: 5:00 pm
 Videographer: Sydney Knodl
 Description: OGI visualized hydrocarbon emissions from manway hatch on crude oil tank 109.

Appendix 3

Opening and Closing Conference Sign-in Sheets

110038160584

Martin Operating LP/Cross Oil Refining

Page 5 of 45

Opening/Pre-Inspection Meeting

Commence opening/pre-inspection meeting

1/14/25 Time: 8:15am

Name	Title	Representing	Telephone No.
Sarah Frey	inspector	EPA	214-665-6499
Sydney Knoll	inspector	EPA	214-665-6534
Ben Rosenthal	inspector	EPA	214-665-6453
CHRISH. CRAWFORD	ENV. SPECIALIST	MARTIN	
Jacob Post	managing consultant	Alliance Tech. Grp.	
Randall C. Cretzinger	Corp. Dir. Enviro	Martin	
Jay Northern	Inspector	ADEQ	801-251-4507
Jayden Keels	Inspector	ADEQ	501-680-8260
Brian Rieker	VP Refining Ops	Martin	
Ryker McDaniel	Refinery Planner	Martin	
Todd Pearson	Refinery Safety	Martin	

Conclude opening/pre-inspection meeting

Time: 8:25am

Initials / Date: SL / 1/14/2025

110038160584

Martin Operating LP/Cross Oil Refining

Exit interview / Out-briefing Meeting

Commenced meeting

Time:

11:30

Name	Title	Representing	Telephone No.
Sydney Knodl	Inspector	EPA	214-665-6536
Sarah Frey	inspector	EPA	214-665-6499
Ben Rosenthal	inspector	EPA	214-665-6453
Jayden Keels	inspector	ADEQ	501-680-8260
Jay Northern	Inspector	ADEQ	501-251-4507
CHRIS H. CRAWFORD	ENV. SPEC.	MARTIN	
Todd Pearson	Refinery Safety Mgr.	Martin	
Ryker McDaniel	REFINERY MGR	MARTIN	
Brian Ricker	VP Refinery Ops	Martin	
Randall Whitaker	Dir Corp Environ	Martin	

Conclude meeting

Time:

12:15

Initials / Date:

87 / 11/16/25

Martin Operating L.P./ Smackover Refinery
Inspection Date 1/14/25 – 1/16/25

Appendix 4

Drainage Map

