CORY SMITH

Albuquerque, New Mexico | (505)419-2687 | Cory.Smith@emnrd.nm.gov

SUMMARY

Environmental and regulatory professional with over 15 years of experience in compliance, supervision, and program management across state and private sectors. Skilled in leading teams, interpreting and applying state and federal regulations, and managing complex environmental and operational projects. Recognized for building collaborative relationships with industry, government agencies, and the public, while ensuring protection of natural resources, public health, and community well being. Skilled at program development, staff training, and technical oversight with a proven track record of delivering results in high-stakes regulatory environments.

CORE COMPETENCIES

- Regulatory Compliance & Enforcement
- Operator Training & Compliance Oversight
- Team Leadership & Staff Development
- Water Quality & Groundwater Protection
- Internal Program Development & Implementation
- Technical Writing & Reporting
- Public Communication & Stakeholder Engagement
- Data Analysis & Risk Assessment
- Regulatory Program Development & Policy Implementation

PROFESSIONAL EXPERIENCE

State of New Mexico – EMNRD, Oil Conservation Division **Oct 2021- Present**

Environmental Scientist Supervisor

- Lead the Environmental Special Projects team overseeing regulatory compliance and environmental programs across New Mexico.
- Supervise, hire, train, and evaluate staff; manage workload distribution, schedules, and performance reviews.
- Designed and managed the Orphaned Well Plugging & Reclamation Program, including contractor procurement, bid evaluation, and compliance with state/federal requirements.
- Oversaw the groundwater protection program- reviewed/approved remediation work plans, closure reports, implementation of standard operating procedures.
- Developed compliance audits, violation letters, and public notices; managed multiple legal enforcement cases.
- Served as the Division Environmental IT & IPRA liaison, designing online permitting systems, workflows, digital compliance forms, coordinating responses, and key search terms.
- Participated in drafting and implementing state regulations, including the Oil & Gas Release, Produce Water Reuse & Recycling, and the Waste Methane Waste Rules.

State of New Mexico – EMNRD, Oil Conservation Division **Mar 2014- Oct 2021**

Environmental Scientist/Specialist

- Reviewed and approved technical permits (pits, tanks, groundwater remediation, waste transport).
- Conducted site inspections, sample collection, audits, and compliance meetings across oil/gas facilities statewide.
- Interpreted hydrology and environmental data to assess risks to groundwater and public health.
- Trained operators, prepared technical guidance documents, and responded to public complaints.
- Investigated releases, directed remediation actions, and ensured regulatory compliance.

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PROFESSIONAL EXPERIENCE

Elm Ridge Exploration **Apr 2008 - Mar 2014**

Instrumentation Technician / Regulatory Compliance Administrator

- Installed, calibrated, troubleshot, and maintained electronic transducers, flow/level meters, and other process control instrumentation to ensure safe and reliable facility operations.
- Developed and maintained compliance documentation for Air Permits, SPCC Plans, Clean Water Act Discharges, and NSR/NOI permitting requirements.
- Managed and administered Leak Detection and Repair (LDAR) programs, including recordkeeping and reporting under KKK/oooo federal standards.
- Responded to pipeline and plant leaks/spills, coordinated remediation activities and ensured compliance with environmental regulations.
- Served as primary liaison with federal, state, and local regulatory agencies to resolve compliance issues and support audits/inspections.
- Coordinated contractor selection, oversight, and performance for environmental and maintenance projects.
- Assisted pipeline and plant operations teams with troubleshooting, operational support, and regulatory training.

Aztec Well Service **May 2004 - May 2007**

Motor Man (Seasonal)

- Supported drilling operations and performed routine equipment maintenance.
- Conducted job safety analyses and adhered to strict safety protocols.
- Assisted with fluid mixing, rig equipment handling, and general site operations.

EDUCATION

San Juan College **2006 - 2008**

A.A.S., Instrumentation Controls Technology

RULEMAKING PROCEEDINGS & IMPLEMENTATIONS

- 19.15.34 NMAC - Produce Water, Drilling Fluids, and Liquid Oil Field Waste, 2015
- 19.15.29 NMAC 0 Release, 2018
- 19.15.27 NMAC - Venting and Flaring of Natura Gas, 2021
- 19.15.28 NMAC - Natural Gas Gathering Systems, 2021

CERTIFICATIONS & TRAINING

- NIMS: 100b, 200b, 300, 400, 700a, 800c, Basic Public Information Officer (PIO) – G-290
- Extensive training in compliance, enforcement, and regulatory program implementation
- TOPCORE Energy Training (University of Colorado School of Mines, PennState, Texas A&M)
- National Environmental Management Academy
  - Principles of Contaminate Transports and Fate in Soil and Groundwater
  - PFAS Transport, Fate, and Remediation Training

DIRECT TESTIMONY OF CORY SMITH

My name is Cory Smith, and I am the Supervisor of the Environmental Special Projects Group of the Energy, Minerals and Natural Resources Department, Oil Conservation Division ("OCD" or "Division"). I hereby present my direct testimony regarding Grand Banks OCD case number 25895. I have an Associates of Applied Science in Instrumentation and Controls Technology from San Juan College. I have served within the OCD for 12 years. I began my career with the OCD in 2014 as an Environmental Specialist in the Aztec Field Office overseeing Part 29 environmental releases and remediations, Part 17 pit registrations, modifications and closures, part 30 ground water remediations, Part 34 produced water recycling permits, and general environmental field inspections. In October of 2021 I was promoted to the Environmental Special Project Supervisor. My current role covers a variety of responsibilities, but specific to this case, I was designated as the Environmental Subject Matter Expert (SME) for the task of modernizing OCD environmental submissions (C-141), and implementation of the methane Waste Rule (C-115B, C-129, etc). I have extensive experience with applying OCD rules to Environmental aspects of oil and gas development and their implementation within OCD Permitting. I have been involved in multiple OCC rulemakings to include the release rule, 19.15.29 NMAC, the produced water rule ,19.15.34 NMAC, and the natural gas waste rule (19.15.27 and 19.15.28 NMAC). Prior to my time at the OCD, I served as an Instrumentation Tech / Regulatory Compliance Admin for Elm Ridge Exploration d.b.a BeeLine Gas Systems and a Motor Man for Aztec Well Service where I was exposed to both Exploration and Midstream Operations in the oil and gas Industry. My resume is attached as **Exhibit 1.**

Throughout my direct testimony I will discuss various topics such as rule requirements for Part 29, “Release Rule”; Part 27 “Methane Waste Rule”; and how Operators submit C-141 and C-129 applications through OCD Permitting.

In 2018 the OCC revised 19.15.29 NMAC “Releases.” The revised rule outlines the requirements and established procedures operators must follow to secure, report, site characterize, remediate, reclaim, and revegetate unauthorized oil, gases, produced water, condensate, or other oil field related waste/contaminants. The 2018 revision included a transitional clause. Operators with ongoing corrective actions under the prior rule and without approved timelines were required to submit updated remediation plans within 90 days. OCD Permitting automatically recorded these extensions as “Site Extension Requests” beginning August 14, 2018. This ensured older incidents were brought into the newer regulatory framework rather than left unresolved.

There are two classifications of unauthorized releases that are based on volumes and not the contents that were released. A Major Release is a release that is greater than 25 BBLS or 500 MCF (gasses) or any volume in which the release resulted in a fire; with reasonable probability reaches a watercourse; endangers public health, or substantially damages property/environment. A Minor Release is any release that is not a Major release and is greater than 5 BBLS or 50 MCF. All Major and Minor releases are prohibited, which is a violation of 19.15.29 NMAC as of August 24, 2021. OCD Permitting displays the release

severity, status, and stage on the Incident Details page to allow Regulators, Operators, and the public to track progress.

Operators have the responsibility to initially respond to Major and Minor release as soon as possible by stopping the sources of the release by performing actions such as closing valves, shutting in wells, etc.; containing the release by building earthen berms, deploying absorbent booms, etc.; site stabilization or removing any free liquid; and lastly, Operators may start remediation immediately. Major releases require Operators to provide notice to the OCD, specifically the Environmental Bureau Chief and appropriate Division District Office, within 24 hours of discovery. This task is generally completed by submitting a Notice of Release (NOR) application through OCD Permitting, which automatically sends email notifications to the Environmental Bureau Chief, Incidents Supervisor, Environmental Field Compliance Supervisor, and the assigned OCD reviewer. Operators are not required to submit an initial notice of release within 24 hours for Minor releases. Operators are then required to submit an initial C-141 within 15 days of the date of discovery for both classifications of releases. As described in the C-141 Guidance Document, each C-141 submission updates the incident status and stage in OCD Permitting. Dates of receipt, approval, or rejection are stored in OCD Permitting on the Incident Details page, creating a transparent review/compliance timeline. **Exhibit 26.**

Operators have 90 days from the date of release discovery to submit a Site Characterization/Remediation plan or a Final Closure report. At this stage of the release

Operators generally must decide on how to approach the remediation of the release. Some limited factors that could affect decision making could be the size/volume of the release, location of the release, distance to landfills/land farms, etc. If the Operator chooses to formally do a Site Characterization/Remediation plan that could include activities such as drilling delineation bore holes, excavating test trenches, and collecting field and laboratory samples following the requirements of 19.15.29.11 NMAC. OCD considers the site to be fully delineated when the vertical and horizontal boundaries of the impacted area have been defined to the Remediation Standards set in Table I of 19.15.29 NMAC, and the top 4' to the Reclamation standards outline in 19.15.29.13 NMAC. Once the site is fully delineated, Operators will submit the Site Characterization data (Depth to Water, Distances to water courses, etc.) along with a proposed Remediation plan/deferral request, that includes remediation timelines, to OCD Permitting within 90 days from the date of discovery following the requirements of 19.15.29.12 NMAC. The proposed remediation plan is reviewed by an OCD Environmental Scientist and either approved (with or without conditions) or rejected. Generally speaking, the most common method of site characterization and remediation that the Division encounters is the "Dig & Haul" method. This method is straight forward in approach and achieves immediate results. Operators who are remediating the release via Dig & Haul may do so "At risk" as this remediation technique generally does not have an approved remediation plan prior to remediation commencing. The Dig & Haul remediation method is done by completing Vertical and Horizontal delineation and remediation through the means of excavation that is guided by field sampling analysis such as field head space analysis, Petroflag/ Field TPH, and

chloride titration strips. Operators will use the field data and/or olfactory sense to determine when to submit the required sampling notice (C-141N) and subsequently collect the 200 square foot laboratory soil confirmation samples as outline in 19.15.29.12.D(1) NMAC. Impacted soils are transported offsite to approved OCD surface waste management facilities. Operators will compile and submit to OCD permitting using form C-141, a report that includes an Executive summary, Site Characterization/Remediation Plan, Remediation closure summary, Laboratory Analysis, scaled site maps, and photos and any other related documentation. OCD Staff will review the submitted report for completeness and compliance, and either approve, approve with conditions, or deny the entire report. OCD Permitting does not allow for partial application approvals. For incidents that occurred within a lined containment, the operator must expose and inspect the liner and certify its integrity. In the event that liner integrity is compromised, Operators will treat the release as if was not in a lined containment, following the Site Characterization/Remediation Plan, Remediation, Reclamation and Vegetation requirements.

Once the Remediation Closure report has been approved most incidents will stay in the status of “Active” and the stage “Remediation Closure Report Approved, Pending Reclamation Report from Operator.” These incidents are considered active, as the operator still must complete reclamation and revegetation. However, reclamation and revegetation for areas that are reasonably needed for production operations or for subsequent drilling operations may be delayed. These areas must be stabilized and maintained to prevent dust

and erosion until those areas are no longer reasonably needed. Once the impacted areas are no longer reasonably needed, the impacted area must be reclaimed to the reclamation standards in the top 4 feet of the impacted area and a reclamation report must be submitted to OCD permitting. All other areas that are not reasonably needed must be reclaimed to the reclamation standards immediately following remediation and are noted in the remediation closure report. These areas are required to be reseeded in the next favorable growing season.

Once reclamation has been completed Operators must submit a reclamation report to OCD permitting for approval. The incident will be in a status of "Active" and stage of "Reclamation Report Approved, Pending Revegetation Report from Operator." Due to the climate of New Mexico, it is possible for release sites to not meet the revegetation requirements in the first favorable growing season. Once revegetation requirements have been met, Operators will submit a revegetation closure report to OCD Permitting for review. Upon approval of the revegetation report restoration is considered complete, and the status of the incident will change to "Inactive", and the stage will be "Restoration Complete."

During the entire Remediation process Operators have the ability to request an extension of time for Site Characterization/Remediation Plan & Remediation Closure reporting requirements. Operators must provide information showing good cause as determined by the Division as to why an extension is needed. Extensions are handled through email/phone communications and are documented in OCD Permitting in the OCD events details sections for older sites or in the Incident Date section for newer sites.

Brittany Hall

Aztec, New Mexico
Brittany.hall@emnrd.nm.gov
505-517-5333

SKILLS PROFILE

- Supervisory Experience in both field and office setting.
- Skilled with field data collection.
- Skilled in writing technical reports.
- Skilled in reviewing technical reports.
- Proficient in sampling techniques, monitoring, and assessment.
- Proficient using Field Data Recorders, GPS units, and other technical equipment.
- Skilled in project management.
- Recognized for quality use and experience of various software/hardware troubleshooting and instruction.

EDUCATION

Bachelor's Degree Columbia Southern University, Environmental Management- 2017
Associate's Degree San Juan College, Occupational Safety- 2016

WORK EXPERIENCE

Environmental Supervisor-Environmental Field Compliance Group
State of New Mexico EMNRD Oil Conservation Division (OCD) – Aztec, NM – April 2025 to Present

Oversees and manages OCD's Environmental Bureau's Environmental Field Inspections Program to ensure goals and objectives are met.

Assigns and directly supervises the work of the Environmental Incidents and Inspections program

Interviews and recommends selection of applicants.

Conducts training of personnel.

Acts upon leave requests, conducts performance evaluations, and administers disciplinary actions.

Has the expertise to coordinate and implement environmental inspections with OCD staff to ensure that they meet legal requirements.

Advises senior management on management issues.

Has in-depth familiarity with the Oil and Gas Act, the Water Quality Act, and Rules.

Environmental Specialist-A
State of New Mexico EMNRD Oil Conservation Division (OCD) – Aztec, NM – August 2022 to April 2025

Support the Orphan Well/facility Plugging and Reclamation program. Specific duties include reviewing third party inspection reports and making recommendations for action; reviewing all plans for compliance with regulations and all program requirements; and track and manage assigned projects.

Support the OCD Incidents Group with managing and reviewing documentation associated with historic releases. Duties also include communicating program requirements with industry/operators.

Assist with the development and testing of OCD Permitting and Standard Operating Procedures.

Environmental Project Scientist
Envirotech, Inc. - Farmington, NM - July 2017 to August 2022

Emergency spill response
Soil sampling
Water sampling
Air sampling including SVE and vapor intrusion sampling
Phase I and II Site Assessments
Spill cleanups
Project oversight
Synthesizing environmental data to create conceptual site models, contaminant distribution and degradation models, and groundwater flow models

Customer Service Manager
City of Farmington-Farmington Regional Animal Shelter - Farmington, NM - September 2013 to July 2017

Customer Service Data analyst
Intake Manager
General animal care
Build and develop monthly reports
Ensure all city and state ordinances are followed
Ensure the health and safety of employees and animals in the shelter

Anesthesia Technician
San Juan Regional Medical Center - Farmington, NM - April 2012 to September 2013

Maintenance of Anesthesia machines
Turn over operating rooms
Assist anesthesia providers with arterial lines, nerve blocks, etc.
BLS certified
Transport patients
Set up anesthesia machine for cases
General cleanliness of Operating Room
Schedule procedures
Answer phones
Safely handle any infectious material and ensure the health and safety of not only me but the patients as well

TRAINING AND CERTIFICATIONS

First Aid/CPR/AED/Bloodborne Pathogens (expired)
SafeLand Training
Asbestos Awareness (expired)
40-Hour HAZWOPER and 8-Hour Refresher Training (expired)

DIRECT TESTIMONY OF BRITTANY HALL

My name is Brittany Hall, and I am the Supervisor for the Environmental Field Compliance Group for the Energy, Minerals and Natural Resources Department, Oil Conservation Division ("OCD" or "Division"). I am providing direct testimony regarding the Notice of Violation (NOV) issued to Buckeye Disposal, LLC, resulting in Division Case No. 25894. I have a Bachelor of Science in Environmental Management (2017) from Columbia Southern University and an Associates of Science in Occupational Safety (2016) from San Juan College. I have been the supervisor for the Environmental Field Compliance Group since April 2025. Prior to holding this position, I was a Senior Environmental Specialist with the Division's Environmental Special Projects group, which I was hired for in August of 2022. During my time as a senior environmental specialist my duties were processing C-141 forms; reviewing historical incidents; and assisting with the oversight and coordination of funds to support OCD awarded vendor contracts for environmental assessment, remediation, restoration, and monitoring contract services associated with orphan oil and gas operations. Specific duties for the oversight and coordination for the orphan oil and gas operations included reviewing third party inspection reports and making recommendations for action; reviewing all plans for compliance with regulations and all program requirements; and tracking and managing assigned projects. In April 2025, I was promoted to my current role, and my duties include daily supervisory activities, performing environmental compliance inspections of well sites and facilities, witness confirmation sampling, and reviewing sampling plans. Prior to my time at OCD, I served as an Environmental Project Scientist for Envirotech, which is an environmental consulting

company located in Farmington, New Mexico from July 2017 to August 2022. My resume is attached as OCD Exhibit 3.

Throughout my direct testimony, I will discuss the timeline of events for each incident listed in the NOV; how the timeline contributed to the civil penalties; and a discussion of the statuses of the Operator's additional open incidents referenced in the NOV. I was directly responsible for drafting the NOV, subject to review and approval by my supervisors.

Incident #nKL1625134663

Based on information provided on the NMOCD Permitting website's Incident page for nKL1625134663, this release was discovered by OCD employees during a field visit on August 16, 2016. On the same day, notification was made to representative of Buckeye Disposal LLC (Operator) that a C-141 needed to be submitted. Additional notes state "the site was in terrible condition. Liner ripped in south eastern corner, 1-1/2 foot of asfalteens [sic] layered with salt crystals." OCD told the operator that the C-141 needed to be filed by September 1, 2016. A call was made to the operator on September 1, 2016, due to a C-141 not being received. The OCD told the operator that if a C-141 was not filed that the operator would receive a Notice of Violation for failure to report. The incident details page is included as **Exhibit 11**. The initial C-141 was received on September 1, 2016. The initial C-141 was approved with conditions on September 7, 2016. The conditions of approval included:

> "Submit Remediation Proposal no Later than 10/7/2016. Provide depth to Ground Water Delineate and Remediate per NMOCD Guidelines. Discrete Samples Accepted ONLY. NMOCD must approve all site investigation & Corrective Activities prior to implementation. Corrective action is site specific and risk based. NMOCD retains the right to require remediation to more stringent levels than proposed in guidelines if warranted by site specific conditions. Notify NMOCD prior to all sampling, to allow opportunity for witness sampling operations."

The Operator submitted a Remediation plan dated October 3, 2016, but the OCD marked "Information Only" which indicates the remediation plan was not approved. Except for a single day fee, for a total of $1,500, for having a release, the Operator did not incur any civil penalties for any of the aforementioned actions.

Per 19.15.29.16 B. NMAC, Responsible parties with ongoing corrective actions/remediation without approved timelines or plans as of August 14, 2018, must submit a Characterization plan or corrective action/Remediation plan with proposed timeframes within 90 days of August 14, 2018. The Operator did not submit a characterization plan or corrective action/remediation plan with proposed timeframes within 90 days of August 14, 2018. OCD received a report titled *Work Plan for Characterization and Remediation of State AF #003 SWD Site* on August 16, 2019. This work plan gives a brief timeline of the incidents, including a summary of emails between the Operator and the New Mexico State Land Office (SLO). This section of the work plan describes actions that the Operator would perform to characterize site conditions. The steps included cleaning and inspection of the liner, sampling and analysis of soils beneath

the liner and outside the containment area, construction of a berm or other containment to prevent fluids from migrating off-site, removal of all unnecessary equipment from the site, and maintenance of the access road. A description of soil sampling activities that were performed on February 14, 2019, are described and the soil sampling results obtained from this event are compared to the least stringent closure criteria found on Table I of 19.15.29 NMAC. The work plan then states “Chloride concentrations in soil samples collected around the containment area in February 2019 range from 960 to 5,520 mg/kg, all well below the OCD numerical limit. Based on these results, chloride concentrations in soil outside the containment area do not require remediation.” The work plan also contains proposed actions in including removal and disposal of the damaged liner from the containment area; inspect the condition of the soil beneath the liner; collect soil samples from six locations and analyze those samples for total petroleum hydrocarbons(TPH), including gasoline-range organics (GRO) (C8-C10), diesel-range organics (DRO) (>C10-C28), and motor oil-range organics (MRO) (>C28-C36) (TPH) and benzene, toluene, ethylbenzene, and xylenes (BTEX), and chloride; collect soil from two of the February 2019 sampling locations that had the highest chloride concentrations to reanalyze for TPH and BTEX as these compounds were not analyzed in February 2019 sampling event. The proposed actions also include comparing the analytical results to the least stringent closure criteria found on Table I of 19.15.29 NMAC to evaluate if additional samples are needed to establish the lateral and vertical extent of the contamination. Once the lateral and vertical extents of the contamination had been established, the Operator then proposed to remove and dispose of contaminated soils, backfill the excavations with clean

and compacted soil, and install a new HDPE liner within the containment. This work plan was denied by the OCD on January 29, 2020, for the following reasons:

> "Horizontal delineation is not complete. Buckeye will need to further assess the horizontal limits of the release to 600 mg/kg. NMOCD recommends for Buckeye Disposal to provide additional sampling locations for preapproval. Depth to groundwater is not adequately identified. When nearby wells are used to determine depth to groundwater, the wells should be no further than ½ mile away from the site, and data should be no more than 25 years old, and well construction information should be provided. Buckeye Disposal (Buckeye) will need to drill a borehole on site to 51' bgs and leave it open for at least 24 hours. If there is no evidence of ground water after 24 hours, the OCD will review Buckeye's remediation plan with a copy of the driller's log (see stipulations below). If Buckeye chooses not to drill a borehole to confirm depth to groundwater, the impacted area will need to be further delineated to closure criteria for water at a depth of <50'. For further clarifications regarding the implementation of the spill rule, visit the OCD website: http://www.emnrd.state.nm.us/OCD/documents/OCDInternalPolicy-SpillRuleClarifications.pdf. NMOCD recommends soil assessment to 4 feet below ground surface or to 600 mg/kg, whichever comes first, to determine the potential vertical remedial efforts. In the future, a completed C-141 must be included with the submittal of incident related documents on the fee portal."

The work plan and the OCD's denial email is included as **Exhibit 10**.

The next event that occurred for this incident was a ninety (90) day extension request. The extension was requested by the Operator as "they are working with the State Land Office and need time to coordinate field activities and obtain access and clearances (i.e., cultural compliance). Results of the characterization activities will be used to develop the remediation plan." The NOV states that this occurred on February 2, 2024, but this is a typo and the extension was requested on February 1, 2024. The OCD approved the extension request on February 1, 2024, and set the new due date to May 2, 2024, as the Operator requested. The email chain for the request and the approval is included in **Exhibit 12.**

On May 2, 2024, the new due date set by the extension request, the Operator failed to submit a complete and accurate Site Characterization and Remediation Plan in violation of *19.15.29.11 NMAC,* and *19.15.29.12 NMAC.* On July 1, 2024, the OCD reached out to the Operator via email asking for an update on the submission of the Site Characterization and Remediation Plan as the incident was 60 days out of compliance. The Operator responded on July 2, 2024, stating:

> "The State Land Office approved Buckeye's site assessment plan (SAP) last Friday (6/28/2024). As you know, the investigation activities proposed in the SAP are needed for the Site Characterization and Remediation Plan that we intend to submit to OCD. We've been including you on the emails to SLO regarding the SAP to keep you updated but should have formally requested another extension. I apologize. I was under the impression that meeting the additional requirements of SLO was inline with us also meeting your expectations for the two documented releases and

collection of data to support remediation and reclamation. We intend to report all data collected during implementation of the SAP to OCD in the Site Characterization and Remediation Plan. SLO just approved the SAP. We still need to obtain a Right-of-Entry permit and consult with the SLO Cultural Resources Office. I'm starting these additional requirements this week and will have a better idea of when we can start investigation activities and submit the Site Characterization and Remediation Plan to OCD after I make headway on these two requirements."

The email chain regarding the requested update is included in **Exhibit 13**.

On September 17, 2024, the OCD sent another email to the Operator as the incident was still out of compliance and the OCD had not received a Site Characterization and Remediation Plan submittal. Additionally, OCD made the Operator aware that no additional extension requests would be approved. OCD also made the Operator aware that enforcement discretion would be used to determine if additional enforcement action is warranted. The Operator responded back on September 18, 2024, to acknowledge the receipt of the email and to inform the OCD that they will be consulting with their legal counsel before sending a formal response. The Operator sent an additional email on September 23, 2024, stating that there was a delay with the right of way paperwork, a cultural resources survey had to be completed, and that the ground at the location is very hard with will necessitate the need for a drill rig to collect the samples. The email also stated: "Please consider this communication to represent our intentions and understanding of the seriousness and urgency of this matter. We not only aim to avoid penalties, but we want to get this project completed and move forward without delay." OCD

responded on the same day requesting to be kept informed of activities occurring at the site, if all SLO requirements had been completed and if the delineation plan could be implemented, if additional sampling had been performed, and what dates the driller would be available to install the soil borings. OCD received a response from the Operator on September 24, 2024, stating that to their understanding, all requirements from SLO had been completed and they were waiting on the driller's schedule to implement the SLO approved delineation plan and no additional sampling had been completed since May 2023. The email chain regarding the requested update is included in **Exhibit 14**.

On October 7, 2024, OCD sent an email to the Operator requesting information regarding when the drill rig would be moved to the site to begin drilling. OCD sent an additional email on November 19, 2024, requesting a detailed timeframe for the remediation and reclamation of the incident. On December 5, 2024, OCD was included on an email the Operator sent to SLO stating:

> "I am sorry, it looks like we might have missed this email from Britany in the Thanksgiving craziness. We are having bi-weekly meetings with John regarding this project. From our last meeting, it is my understanding that we are just waiting on a date from the driller. We discussed the option of using a backhoe to accelerate the sampling, but decided that we will need to wait for the driller as we ran into some very hard layers that the backhoe couldn't break through when we collected the prior samples that were presented to you all last year. I will follow up with John today to verify that this is still the status. I believe the holidays have caused some delays in scheduling. I will send a follow up to this email after speaking with John."

OCD responded to this email on the same day stating:

> "As requested on November 19, 2024, please send a detail timeframe for the remediation and reclamation of incident numbers nOY1813152090 and nKL1625134663. Include any correspondence from all drilling contractors that have been contacted, including correspondence on when rigs are available. Additionally, please include a timeline of events that have occurred since the date of discovery of each incident. These incidents had due dates of May 2, 2024, which was 217 days ago. Per previous emails, the EM survey was completed on October 8th and the results were being processed. Has that been completed? If so, please send a copy of the EM survey with the requested timeframe and timeline."

The Operator responded via email on December 6, 2024, stating:

> "We are analyzing the EM survey data now and expect to be done in a week or two. I understand that it's taking longer than expected to address remediation and reclamation of incidents nOY1813152090 and nKL1625134663; however, our investigation area covers a much larger region than where the two spills occurred (i.e., within the former AST containment) and we are also trying to satisfy SLO requests. We'll let you know once analysis of the EM survey data is complete and have scheduled drilling. After the investigation work is complete, we'll be in a better position to provide a schedule for remediation and reclamation."

The email chain regarding the requested update is included in **Exhibit 15**.

On January 7, 2025, the Operator copied OCD in a response to SLO stating: "Attached is a figure summarizing the EM survey results at the Buckeye State AF #003 site. We used linear regression to provide a preliminary estimate of areas exceeding 600-mg/kg chloride and to delineate potential excavation areas. The linear regression uses soil chloride data from the December 2023 soil sampling. Please note: there are a few areas with elevated TPH that are not addressed on the attached figure and that actual excavation areas will likely be more square and rectangle. The EM survey was conducted in October 2023. We contracted Atkins Engineering to complete the survey. They also captured an aerial photograph of the site with a drone. The aerial is shown in the attached figure. The EM survey was completed using both an EM31 and EM38, and by varying coil spacing and orientation so that we could image different depths. These data are in the GIS we used to prepare the attached figure. We're going to place the raw data on separate maps and send them to you in a separate email (hopefully later today or tomorrow). We've obtained a quote from Atkins Engineering to complete the borehole investigation. I've considered modifying the borehole investigation work some based on the EM survey results but need to discuss it more with Buckeye. We'll obtain SLO approval before moving forward with any changes."

OCD responded to the email on January 8, 2025, stating: "Thank you for the information. As Buckeye Disposal, L.L.C. (222759) has not met previous conditions stipulated by the OCD, Buckeye Disposal and these incidents are now under a compliance review." A copy of the email chain and the attachments supplied by the operator are included in **Exhibit 16.**

On April 8, 2025, the NOV was issued to the Operator. **Exhibit 8.**

On April 11, 2025, the Operator submitted a Site Characterization and Remediation Plan to the OCD through the OCD Permitting website. This report included a description of the site resources including a description of the biological, cultural, soil, and water resources; a brief description of the releases and initial soil characterization activities; a description of additional soil characterization activities that occurred in December 2023 through January 2025; and a proposed remediation and reclamation plan. The proposed remediation and reclamation plan included advancing two exploratory borings to delineate the vertical extent of soil impacts and excavating the impacted soil from a depth of up to 5 feet and replace it with clean fill or in regions where soil impacts exist to depths of at least 4 feet, impacted soil would be removed to 5 feet to allow the placement of 0.5 to 1 foot of low-permeability clay at the base of excavations and at least 4 feet of clean top soil above the clay to support vegetation. Once the soils were excavated and backfilled, the areas would be graded and reseeded to restore them pursuant to 19.15.29.13 NMAC or SW-324, which are the New Mexico State Land Office requirements. These actions were going to be implemented on the former well pad and the pad of the former tank battery with the exceptions of two locations which included the “wash south of the former tank battery location and the suspected reserve pit north of the former State AF #003 SWD well.” The report states there are “areas of impacted soil not caused by Buckeye operations.” The OCD denied the Site Characterization and Remediation plan on May 6, 2025, for incorrectly answering questions on the form C-141; incorrectly characterizing the closure criteria; OCD denied the proposal to excavate soils to a depth of 5 feet and placing a 0.5 to 1 foot

layer of clay at the base of the excavation; OCD denied the proposed excavation areas identified in the report as the entire release area must be delineated and excavated to the most stringent closure criteria; OCD denied the "anticipated confirmation sample locations" depicted in the report as the full extent of contamination would not be represented by the sample locations. A copy of the submitted site characterization and remediation plan and the reasons of rejection are included as **Exhibit 17**.

Incident #nOY1813152090

An Initial C-141 was received on May 11, 2026, for a 30-barrel produced water release. The Initial C-141 indicates that all produced water was recovered as the release occurred within a lined containment. Based on information provided on the OCD Permitting website Incident page for nOY1813152090, a release was discovered by SLO employees during a field visit in January 2018 and impacts outside of the containment were observed. A copy of the initial C-141 is included as **Exhibit 18**. A copy of the Incident Details page is included as **Exhibit 19.**

Per 19.15.29.16 B. NMAC, Responsible parties with ongoing corrective actions/remediation without approved timelines or plans as of August 14, 2018, must submit a characterization plan or corrective action/remediation plan with proposed timeframes within 90 days of August 14, 2018. The Operator did not submit a Site Characterization plan or corrective action/Remediation plan with proposed timeframes within 90 days of August 14, 2018. OCD received a report titled *Work Plan for Characterization and Remediation of State AF #003 SWD Site* on August 16, 2019. This work

plan gives a brief timeline of the incidents, including a summary of emails between the Operator and the New Mexico State Land Office (SLO). This section of the work plan describes actions that the Operator would perform to characterize site conditions. The steps included cleaning and inspection of the liner, sampling and analysis of soils beneath the liner and outside the containment area, construction of a berm or other containment to prevent fluids from migrating off-site, removal of all unnecessary equipment from the site, and maintenance of the access road. A description of soil sampling activities that were performed on February 14, 2019, are described and the soil sampling results obtained from this event are compared to the least stringent closure criteria found on Table I of 19.15.29 NMAC. The work plan then states "Chloride concentrations in soil samples collected around the containment area in February 2019 range from 960 to 5,520 mg/kg, all well below the OCD numerical limit. Based on these results, chloride concentrations in soil outside the containment area do not require remediation." The work plan also contains proposed actions in including removal and disposal of the damaged liner from the containment area; inspect the condition of the soil beneath the liner; collect soil samples from six locations and analyze those samples for total petroleum hydrocarbons(TPH), including gasoline-range organics (GRO) (C8-C10), diesel-range organics (DRO) (>C10-C28), and motor oil-range organics (MRO) (>C28-C36) (TPH) and benzene, toluene, ethylbenzene, and xylenes (BTEX), and chloride; collect soil from two of the February 2019 sampling locations that had the highest chloride concentrations to reanalyze for TPH and BTEX as these compounds were not analyzed in February 2019 sampling event. The proposed actions also include comparing the analytical results to the least stringent

closure criteria found on Table I of 19.15.29 NMAC to evaluate if additional samples are needed to establish the lateral and vertical extent of the contamination. Once the lateral and vertical extents of the contamination had been established, the operator then proposed to remove and dispose of contaminated soils, backfill the excavations with clean and compacted soil, and install a new HDPE liner within the containment. This work plan was denied by the OCD on January 29, 2020, for the following reasons:

> "Horizontal delineation is not complete. Buckeye will need to further assess the horizontal limits of the release to 600 mg/kg. NMOCD recommends for Buckeye Disposal to provide additional sampling locations for preapproval. Depth to groundwater is not adequately identified. When nearby wells are used to determine depth to groundwater, the wells should be no further than ½ mile away from the site, and data should be no more than 25 years old, and well construction information should be provided. Buckeye Disposal (Buckeye) will need to drill a borehole on site to 51' bgs and leave it open for at least 24 hours. If there is no evidence of ground water after 24 hours, the OCD will review Buckeye's remediation plan with a copy of the driller's log (see stipulations below). If Buckeye chooses not to drill a borehole to confirm depth to groundwater, the impacted area will need to be further delineated to closure criteria for water at a depth of <50'. For further clarifications regarding the implementation of the spill rule, visit the OCD website: http://www.emnrd.state.nm.us/OCD/documents/OCDInternalPolicy-SpillRuleClarifications.pdf. NMOCD recommends soil assessment to 4 feet below ground surface or to 600 mg/kg, whichever comes first, to determine the potential

vertical remedial efforts. In the future, a completed C-141 must be included with the submittal of incident related documents on the fee portal."

The work plan and the OCD's denial email is included as **Exhibit 10**.

On September 13, 2023, the Operator submitted a Site Characterization & Remediation plan. The Remediation plan included a description of the release and the initial soil characterization that occurred in February of 2019. A section of the report also describes additional soil characterization that took place in February and May of 2023. The remediation plan also included a proposed plan and approach to restore and reclaim the impacted surface area. The Operator proposed to grade and revegetate the impacted area, without remediation, since the "chloride and TPH concentrations of the soil samples collected at the site in both 2019 and 2023 are below the OCD numerical limits prescribed in Table 1 of 19.15.29.12 NMAC for groundwater deeper than 100 feet bgs." The Remediation plan was denied by the OCD on September 19, 2023. The reasons of rejection included the rejection of the analytical results for the samples collected because the total petroleum hydrocarbons were not analyzed using an acceptable method and all laboratory reports indicate that the samples were not received at the proper temperature and were not received by the laboratories on ice; all samples were not analyzed for all the constituents listed on Table I; the release occurred within 1000 feet of any fresh water well or spring and the responsible party must treat the release as if it occurred less than 50 feet to ground water in Table I of 19.15.29.12 NMAC pursuant to Per 19.15.29.12 C.(4) NMAC; and there is a playa lake located southeast of SB-08. Horizontal and vertical delineation of the site will need to include sample points that will assess if the playa lake has been

impacted by the release. The Operator was given a new remediation due date of December 19, 2023, to submit a complete and accurate report through the OCD Permitting website. The Site Characterization & Remediation plan, and the reason of rejections are included in **Exhibit 21**.

On December 5, 2023, the Operator submitted an extension request via email to the OCD. The reason an extension request was needed was "Last week, Buckeye collected soil samples to better delineate soil impacts and meet the analytical criteria specified in your email below. The samples were submitted to Cardinal Laboratories in Hobbs." The Operator requested a 45-day extension with a new remediation due date of February 2, 2024. OCD approved this extension request. **Exhibit 22.**

The next event that occurred for this incident was a ninety (90) day extension request. The extension was requested by the Operator as "they are working with the State Land Office and need time to coordinate field activities and obtain access and clearances (i.e., cultural compliance). Results of the characterization activities will be used to develop the remediation plan." The NOV states that this occurred on February 2, 2024, but this is a typo and the extension was requested on February 1, 2024. The OCD approved the extension request on February 1, 2024, and set the new remediation due date to May 2, 2024, as the Operator requested. The email chain for the request and the approval is included in **Exhibit 12**.

On May 2, 2024, the new remediation due date set by the extension request, the Operator failed to submit a complete and accurate Site Characterization and Remediation Plan in violation of *19.15.29.11 NMAC,* and *19.15.29.12 NMAC*.

On July 1, 2024, the OCD reached out to the Operator via email asking for an update on the submission of the Site Characterization and Remediation Plan as the incident was 60 days out of compliance. The Operator responded on July 2, 2024, stating "The State Land Office approved Buckeye's site assessment plan (SAP) last Friday (6/28/2024). As you know, the investigation activities proposed in the SAP are needed for the Site Characterization and Remediation Plan that we intend to submit to OCD. We've been including you on the emails to SLO regarding the SAP to keep you updated but should have formally requested another extension. I apologize. I was under the impression that meeting the additional requirements of SLO was inline with us also meeting your expectations for the two documented releases and collection of data to support remediation and reclamation. We intend to report all data collected during implementation of the SAP to OCD in the Site Characterization and Remediation Plan. SLO just approved the SAP. We still need to obtain a Right-of-Entry permit and consult with the SLO Cultural Resources Office. I'm starting these additional requirements this week and will have a better idea of when we can start investigation activities and submit the Site Characterization and Remediation Plan to OCD after I make headway on these two requirements." The email chain regarding the requested update is included in **Exhibit 13**.

On September 17, 2024, the OCD sent another email to the Operator as the incident was still out of compliance and the OCD had not received a Site Characterization and

Remediation Plan submittal. Additionally, OCD made the Operator aware that no additional extension requests would be approved. OCD also made the operator aware that enforcement discretion would be used to determine if additional enforcement action is warranted. The Operator responded back on September 18, 2024, to acknowledge the receipt of the email and to inform the OCD that they will be consulting with their legal counsel before sending a formal response. The operator sent an additional email on September 23, 2024, stating that there was a delay with the right of way paperwork, a cultural resources survey had to be completed, and that the ground at the location is very hard with will necessitate the need for a drill rig to collect the samples. The email also stated "Please consider this communication to represent our intentions and understanding of the seriousness and urgency of this matter. We not only aim to avoid penalties, but we want to get this project completed and move forward without delay." OCD responded on the same day requesting that requested to be kept informed of activities occurring at the site, if all SLO requirements had been completed and if the delineation plan could be implemented, if additional sampling had been performed, and what dates the driller would be available to install the soil borings. OCD received a response from the operator on September 24, 2024, stating that to their understanding, all requirements from SLO had been completed and they were waiting on the driller's schedule to implement the SLO approved delineation plan and no additional sampling had been completed since May 2023. The email chain regarding the requested update is included in **Exhibit 14**.

On October 7, 2024, OCD sent an email to the Operator requesting information regarding when the drill rig would be moved to the site to begin drilling. OCD sent an

additional email on November 19, 2024, requesting a detailed timeframe for the remediation and reclamation of the incident. On December 5, 2024, OCD was included on an email the operator sent to SLO stating:

> "I am sorry, it looks like we might have missed this email from Britany in the Thanksgiving craziness. We are having bi-weekly meetings with John regarding this project. From our last meeting, it is my understanding that we are just waiting on a date from the driller. We discussed the option of using a backhoe to accelerate the sampling, but decided that we will need to wait for the driller as we ran into some very hard layers that the backhoe couldn't break through when we collected the prior samples that were presented to you all last year. I will follow up with John today to verify that this is still the status. I believe the holidays have caused some delays in scheduling. I will send a follow up to this email after speaking with John."

OCD responded to this email on the same day stating:

> "As requested on November 19, 2024, please send a detail timeframe for the remediation and reclamation of incident numbers nOY1813152090 and nKL1625134663. Include any correspondence from all drilling contractors that have been contacted, including correspondence on when rigs are available. Additionally, please include a timeline of events that have occurred since the date of discovery of each incident. These incidents had due dates of May 2, 2024, which was 217 days ago. Per previous emails, the EM survey was completed on October 8th and the

results were being processed. Has that been completed? If so, please send a copy of the EM survey with the requested timeframe and timeline."

The Operator responded via email on December 6, 2024:

"We are analyzing the EM survey data now and expect to be done in a week or two. I understand that it's taking longer than expected to address remediation and reclamation of incidents nOY1813152090 and nKL1625134663; however, our investigation area covers a much larger region than where the two spills occurred (i.e., within the former AST containment) and we are also trying to satisfy SLO requests. We'll let you know once analysis of the EM survey data is complete and have scheduled drilling. After the investigation work is complete, we'll be in a better position to provide a schedule for remediation and reclamation."

The email chain regarding the requested update is included in **Exhibit 15**.

On January 7, 2025, the Operator copied OCD in a response to SLO stating:

"Attached is a figure summarizing the EM survey results at the Buckeye State AF #003 site. We used linear regression to provide a preliminary estimate of areas exceeding 600-mg/kg chloride and to delineate potential excavation areas. The linear regression uses soil chloride data from the December 2023 soil sampling. Please note: there are a few areas with elevated TPH that are not addressed on the attached figure and that actual excavation areas will likely be more square and rectangle. The EM survey was conducted in October 2023. We contracted Atkins Engineering to complete the survey. They also captured an aerial photograph of the

site with a drone. The aerial is shown in the attached figure. The EM survey was completed using both an EM31 and EM38, and by varying coil spacing and orientation so that we could image different depths. These data are in the GIS we used to prepare the attached figure. We're going to place the raw data on separate maps and send them to you in a separate email (hopefully later today or tomorrow). We've obtained a quote from Atkins Engineering to complete the borehole investigation. I've considered modifying the borehole investigation work some based on the EM survey results but need to discuss it more with Buckeye. We'll obtain SLO approval before moving forward with any changes."

OCD responded to the email on January 8, 2025, stating "Thank you for the information. As Buckeye Disposal, L.L.C. (222759) has not met previous conditions stipulated by the OCD, Buckeye Disposal and these incidents are now under a compliance review." A copy of the email chain and the attachments supplied by the operator are included in **Exhibit 16**.

On March 4, 2025, the Operator submitted a Site Characterization and Remediation plan. This Remediation plan included a description of the soils and water resources at the site; a description of the release; an overview of the initial and December 2023 soil characterization activities; an overview of the site assessment plan activities that took place in October 2024 and January 2025; and a proposed remediation and reclamation plan. The remediation and reclamation plan was to be achieved by excavating impacted soil from a depth of up to 4 feet and replace it with clean fill' grading of the remediated areas; and reseeding the remediated areas. The Operator also stated that soils would only be excavated to 4 feet unless "field screening and confirmation soil sampling data indicate

that soil meets the aforementioned standards or consolidated caliche or bedrock is encountered and cannot be penetrated." The plan also included a plan to collect confirmation soil samples which included a statement stating "Buckeye will attempt to determine the vertical extent of TPH impacts to soil at the former tank battery location during soil removal. The January 2025 soil sampling results showed TPH impacts to soil to 8 feet bgs (final depth investigated). The sampling results exceeded the most stringent OCD numerical limit for TPH (100 mg/kg). The TPH impacts appear to be limited to the area of the lined secondary containment."

On March 12, 2025, the OCD rejected the Remediation plan. The reasons of rejection included the release occurred within 1000 feet of any fresh water well or spring and the responsible party must treat the release as if it occurred less than 50 feet to ground water in Table I of 19.15.29.12 NMAC pursuant to Per 19.15.29.12 C.(4) NMAC, as was stated in the last remediation plan rejection; there were several C-141 questions that related to distances from a wetland, karst geology occurrence, occurrence of contamination outside of exploration, development, production, or storage sites and if the release was entirely within a lined containment that were answered incorrectly; and vertical delineation was incomplete. Additionally, the OCD informed the Operator that the attempt to excavate soil to a depth of 4 feet unless one of the following conditions is met: (1) field screening and confirmation soil sampling data indicate that soil meets the aforementioned standards or (2) consolidated caliche or bedrock is encountered and cannot be penetrated and the excavation of impacted soil from a depth of up to 4 feet and replacing it with clean fill was not approved. OCD also rejected the use of all samples

collected on December 1, 2023, due to qualifiers from the lab that stated “Sample container had headspace. Results may be biased low." OCD included the definition of “Responsible party” pursuant to 19.15.29.7 C. NMAC in the reason of rejection to inform the Operator that OCD will hold the Operator of the site responsible for all releases that occurred at the site, including any pipeline releases that may have affected the site. The Operator was also informed that the submitted report was not applicable to incident number NKL1625134663 as the report was not submitted under NKL1625134663. The Operator was required to submit a complete and accurate report through the OCD Permitting website by April 11, 2025. The remediation plan and reason of rejection are included in **Exhibit 23.**

On April 8, 2025, the NOV was issued to the Operator. **Exhibit 8.**

On April 11, 2025, the Operator submitted a Site Characterization and Remediation Plan to the OCD through the OCD Permitting website. This report included a description of the site resources including a description of the biological, cultural, soil, and water resources; a brief description of the releases and initial soil characterization activities; a description of additional soil characterization activities that occurred in December 2023 through January 2025; and a proposed remediation and reclamation plan. The proposed remediation and reclamation plan included advancing two exploratory borings to delineate the vertical extent of soil impacts and excavating the impacted soil from a depth of up to 5 feet and replace it with clean fill or in regions where soil impacts exist to depths of at least 4 feet, impacted soil would be removed to 5 feet to allow the placement of 0.5 to 1 foot of low-permeability clay at the base of excavations and at least 4 feet of clean top soil above

the clay to support vegetation. Once the soils were excavated and backfilled, the areas would be graded and reseeded to restore them pursuant to 19.15.29.13 NMAC or SW-324, which are the New Mexico SLO requirements. These actions were going to be implemented on the former well pad and the pad of the former tank battery with the exceptions of two locations which included the "wash south of the former tank battery location and the suspected reserve pit north of the former State AF #003 SWD well". The report states there are "areas of impacted soil not caused by Buckeye operations". The OCD denied the Site Characterization and Remediation plan on May 6, 2025, for incorrectly answering questions on the form C-141; incorrectly characterizing the closure criteria; OCD denied the proposal to excavate soils to a depth of 5 feet and placing a 0.5 to 1 foot layer of clay at the base of the excavation; OCD denied the proposed excavation areas identified in the report as the entire release area must be delineated and excavated to the most stringent closure criteria; OCD denied the "anticipated confirmation sample locations" depicted in the report as the full extent of contamination would not be represented by the sample locations. A copy of the submitted site characterization and remediation plan and the reasons of rejection are included as **Exhibit 17**.

Calculation of Civil Penalties

The civil penalties were calculated for five (5) separate violations per incident for a total of ten (10) separate violations. **Exhibit 9.** The proposed penalties were calculated by me and approved by OCD leadership as of January 9, 2025. OCD has not proposed to update or modify the proposed penalties since. Each incident violated 19.15.29.(A) NMAC which prohibits major and minor releases, 19.15.29.11 NMAC due to failure to submit an

approvable release characterization, 19.15.29.12 NMAC due to failure to submit an approvable remediation plan, 19.15.29.12 NMAC due to failure to submit an approval remediation closure report, and 19.15.5.11 NMAC for failing to comply with term, condition, or provision of a permit, administrative order, authorization, or approval.

The violation of 19.15.29.(A) NMAC was calculated as a "single day" penalty. The violations of 19.15.29.11(failure to submit release characterization) and 19.15.29.12 NMAC (failure to submit an approvable remediation plan) were calculated as multiple day violations starting on November 11, 2018, and ending on January 9, 2025, for a total of 2,250 days out of compliance. November 11, 2018, was chosen based on 19.15.29.16 NMAC which is the transitional provision. This provision states "A. Responsible parties with current ongoing corrective actions/remediation with approved plans and timelines as of August 14, 2018, do not have to submit revised plans. B. Responsible parties with ongoing corrective actions/remediation without approved timelines or plans as of August 14, 2018, must submit a characterization plan or corrective action/remediation plan with proposed timeframes within 90 days of August 14, 2018." The proposed penalties for this violation are multi-day, ongoing violations, and all proposed penalties attach to daily violations occurring after promulgation of 19.15.5.10.D NMAC. The violations of 19.15.29.12 NMAC (failure to submit an approval remediation closure report) and 19.15.5.11 (failure to comply with term, condition, provision of a permit, administrative order, authorization, or approval) were calculated as multiple day fines starting on May 2, 2024, and ending on January 9, 2025, for a total of 252 days out of compliance. May 2, 2024, was chosen as it was the date

of the due date that was approved in the last extension request. The NOV and civil penalty calculator are included in **Exhibit 9**.

Statuses of Additional Open Incidents

Part of the *Compliance* section of the NOV, OCD required an update on five (5) additional open incidents. OCD required the update to include a summary of all remedial activities performed to date, a timeline for each incident that outlines how and when the incidents will be brought into compliance, and any additional information regarding why these incidents are out of compliance. The five (5) additional open incidents are discussed further below.

i. nAB1927632580 is associated with the New Mexico DU State #001 (API: 30-015-24531) saltwater disposal well. OCD received an initial C-141 on September 10, 2019, for a release of 300 barrels of crude oil and 900 barrels of produced water. The release was discovered on June 14, 2018. The Operator submitted a work plan for the characterization and remediation of the release on September 10, 2019, and the plan was approved by the OCD on October 23, 2020.

ii. nAB1426550986 is associated with the New Mexico DU State #001 (API: 30-015-24531) saltwater disposal well. OCD received an initial C-141 on September 22, 2014, for a release of 700 barrels of produced water. The release was discovered on September 19, 2014.

iii. nPRS0522956951 is associated with the CMB #001 (API: 30-025-31173) saltwater disposal well. The incident file indicates that 1,000 barrels of produced water was released. The Incident Events section of the incident file states “C-141: "6" PVC line broke, fluid contained in dyke Retrieved fluid with vacuum truck. 15'x60' west side of dyke dirt dug up placed on plastic." The incident file is also associated with facility ID *FPRS0522955615 BUCKEY DISPOSAL CBM SWD.* Notes under this facility ID include that the OCD did not receive a complete C-141 for over a month. The notes also describe an inspection that was conducted on August 17, 2025. The inspection indicated that a rainwater puddle on pad tested very high in chloride utilizing a test strip and the tank battery liner was compromised. OCD also directed an employee on site that Buckeye would need to “check the groundwater and build a concrete pad”. Other observations made were that normal routine operations included saltwater being released by trucking activities.

iv. nSAD0430954509 is associated with the CMB #001 (API: 30-025-31173) saltwater disposal well. The incident file indicates that 25 barrels of brine water was released from a production tank. The Incident Event section states “BAD INCIDENT”.

v. nBZH2501038804 is associated with the CMB #001 (API: 30-025-31173) saltwater disposal well and was created after a review of the well file was completed and A C-141 marked as received on October 24, 2008, was found without a corresponding incident number.

OCD received an email on April 25, 2025, from the operator which included a letter titled *Buckeye Disposal, LLC’s response to request for update on open incidents listed*

in Notice of Violation dated April 3, 2025, State AF #003 (30-025-20980) Incident #nKL1625134663 and #n041813152090. This letter included updates for the aforementioned open incidents. The update for nAB1927632580 and nAB1426550986 at the New Mexico DU State #001 (API: 30-015-24531) saltwater disposal well states that remediation plans are being finalized. The update for incident nPRS052956951 included a closure report and a statement that "Buckeye contends that this incident should be closed." OCD does not have any record that this closure report was submitted. The update for nSAD0430954509 states "Buckeye is in the process of locating the files from this release that are in paper format only." The update for incident number nBZH2501038804 state "Buckeye believes that this incident number is associated with the approval of a C-141 for the 2004 and 2005 incidents at the CBM SWD, described *supra* in items 3 and 4." and "Buckeye is in the process of locating the pertinent files for this release that are in paper format only." OCD disagrees that the incident number is associated with the approval of a C-141 for the 2004 and 2005 incidents at the CBM SWD as the referenced initial C-141 is dated as being received by the OCD on October 24, 2008. The letter and associated closure report are included in **Exhibit 24**.

On July 17, 2025, OCD representatives met virtually with the Operator on and their representatives to discuss technical aspects of the remediation, including but not limited to the request of a variance at the site. On October 15, 2025, OCD sent a follow-up email to Buckeye and their representatives as OCD has not received the required submittals or documentation discussed during that meeting. This email included a brief overview of the discussion and set due dates for technical actions, which were as follows:

1. **Soil Delineation:** Complete full vertical and lateral delineation of impacted soils and, if encountered, groundwater or surface water contamination by **November 14, 2025**.

2. **Site Characterization and Remediation Plan:** Submit a complete and accurate plan, including all delineation data and proposed remedial approach, through the **C-141 application on the OCD Permitting website by December 14, 2025**.

3. **Remediation Closure and Reclamation Reports:** Submit complete reports documenting remedial actions and reclamation activities via the **C-141 application by February 12, 2026**.

4. **Revegetation Report:** Submit a revegetation report through the **C-141 application** when vegetative cover meets the requirements of **19.15.29.13(D)(3) NMAC**. A copy of this email is included in **Exhibit 25**.

As of the date of this hearing, OCD has not received Site Characterization and Remediation Plans; Remediation Closure Reports; Reclamation Reports; or Revegetation Reports for incident numbers nOY1813152090 and NKL1625134663. OCD also has not received any submittals for the five (5) additional open incidents referenced in the NOV. As the Operator has not submitted any form C-141s since the issuance of the NOV almost a year ago, the Operator is still out of compliance and additional civil penalties could be calculated. The Operator is out of compliance with the following rules:

- 19.15.29.11 A. (1) through (5) and 19.15.29.11 B. NMAC as the operator has not completed delineation of the site;

- 19.15.29.12 NMAC as the operator has not submitted a complete and accurate remediation plan;
- 19.15.29.12 NMAC as the operator has not submitted a complete and accurate remediation closure report;
- 19.15.29.13 NMAC as the operator has not submitted complete and accurate reclamation report; and
- 19.15.29.13 NMAC as the operator has not submitted complete and accurate revegetation report.

ROSA ROMERO

Ruidoso, NM 88345 | 575 -590-3459 | rosa4100@gmail.com

SKILLS PROFILE

- Supervisory Experience in both field and office setting.
- Skilled with field data collection and survey methods, including the use of backpack electrofishing units, bag seines, and gill nets, as well as radio telemetry, substrate and large woody debris data collection.
- Proficient using Field Data Recorders, GPS units, and other technical equipment.
- Recognized for quality use and experience of various software/hardware troubleshooting and instruction.
- Experience working/living in harsh conditions.
- Experience in teaching, advising in technical training programs and university coursework.
- FEMA Emergency Response Certifications 100, 200, 700 and 800, Emergency Management trained

EDUCATION

Bachelor's Degree Western New Mexico University, Silver City, NM
BS Zoology & Botany minor -2007

EMPLOYMENT HISTORY

OCD Environmental Bureau Chief – New Mexico Office Energy Minerals & Natural Resource Dept.-04/2022-Present
Artesia, NM

- Oversees and manages the Oil Conservation Divisions Environmental Bureau, including the Administrative Permitting Programs, the Environmental Incidents Program, and the Environmental Projects and Compliance group to ensure OCD goals and objectives are met.
- Recommends selection of applicants, conducts training of personnel, acts upon leave requests, conducts performance evaluations administers disciplinary actions.
- Coordinates and implements OCD programs with OCD staff to ensure legal requirements are met.
- Advises senior management on legal and management issues, policies and rules.
- Has an in depth familiarity with the Oil and Gas Act and Rules ad the Water Quality Act and Rules.

Water Resource Professional III – New Mexico Office of the State Engineer. -03/2019-04/2022
Roswell, NM

- Performed advanced water rights analyses for water right applications and made technical recommendations for administrative decisions for water right applications of a complex nature, including modeling parameters, model sensitivity analysis, validity and pertinence of water rights and documentation, analysis of variance requests for well construction and abandonment.
- Provided technical support to junior professionals. Communicated complex water right issues to other agency staff including public attorneys, hydrologists, and engineers from other bureau's. Oversaw and monitored agency compliancewith federal and state regulations, served as an expert witness on water resource matters.
- Determined appropriate actions for noncompliance issues. Completed investigations in which no agency specificguidelines existed.
- Performed water data collection and analysis, including groundwater and surface water analysis and calculation of irrigation water requirements. Reviewed and made recommendations on groundwater and surface water rights documents and applications in accordance with rules and regulations.
- Reviewed water resource permit applications and participated in special projects including field water level measurements, compliance issues and corrective actions, and drafted technical reports based on data collection andanalysis.
- Performed stream flow measurements including steam gage operations, hydrologic calculations, data management andanalysis. Groundwater and surface water analysis. Performed independent water inspections and investigations.
- Evaluated data, performed in depth data analysis using analytics, computer models and GIS databases.
- Participated in interagency water management and planning efforts to effectively manage water resources and the localregional and basin or interstate scale.

Environmental Scientist, State of New Mexico Environment Dept.-12/2013–03/2019

Ruidoso, NM

- Used knowledge of the natural sciences to protect the environment by identifying problems and finding solutionsthat minimize hazards to the health of the environment and the population.
- Analyzed measurements or observations of food, water, and soil to determine regulatory compliance.
- Understood the issues involved and found solutions to protect the environment from degradation, utilized thisunderstanding to design and monitor waste disposal sites, preserve water supplies.
- Conducted research and perform investigations for the purpose of identifying, abating, or eliminating sources of pollutantsor hazards that affect either the environment or the health of the population. Utilized knowledge of various scientific disciplines to collect, synthesize, study, report and take actions based on data derived from measurements or observations of food, soil, water, and other sources. Review plans and permit applications for regulatory compliance and issue construction permits for food, liquid waste, and pool facilities. Completed inspections of construction sites at food facilities and new aquatic facilities for regulatory compliance.
- New Mexico State Representative for the Counsel for the Model Aquatic Health Code, voting member for review of changes to upcoming codes.
- NSPF Certified Pool Operator, Field Service Professional, Inspector, and Recreational Water Illness Certifications, NLAFT, NSPF and ATI Qualified Operator Certified.
- Reviewed course certification materials for compliance with the MAHC
- NLAFT Certified Instructor for Qualified Operators
- Work on the 2-5K liquid waste team to permit and transfer liquid waste system to EHB from Groundwater Bureau.
- Review and approve ATS liquid waste permits; monitor ATS maintenance.
- Certification and continuing educational in all areas of environmental health sciences.
- Educated the general public on federal and state environmental policies.

New Mexico State University, Adjunct Professor-08/2014–05/2015

Alamogordo, NM

- Developed and managed syllabus materials. Was responsible for selecting and compiling tests, assignments and/or onlinediscussion exercises that permit measurement of performance relative to standardized learning objectives.
- Coordinated courseware and curriculum, reviewing any textbook and other courseware changes with the academic department chair and other full-time faculty teaching the course.
- Facilitated Class Instruction and teaching the Human Biology Lab in accordance with learning objectives and session planoutlines specified by the NMSU and coordination of lab material with attached curriculum.
- Evaluated Student Performance. Administered evaluations of student performance based on course deliverables and course rubrics.

Wildlife Technician, United States Forest Service-05/2011–10/2012

Reserve, NM

- Participated in large scale ecosystem restoration project using NEPA guidelines to edit, and evaluate for the Burro Analysis for the Restoration of Forest Health project. Proofread for the final environmental assessment, comment analysis and analyzed effecter determinations for resident Mexican Spotted Owl, Chiricahua Leopard frog and Northern Goshawk populations.
- Planning, maintenance and recovery efforts in collaboration with the US Fish and Wildlife Services and private property owners for Chiricahua Leopard frog ranariums located within the reserve ranger districts. Extant populations captured, recovered and bred in captivity for reintroduction into the wild. Created training materials for statewide CLF survey protocols.
- Crew Leader and supervisor for 2-8 man crew performing inventory and monitoring of threatened and endangered species in the Gila National Forest with special focus on Mexican Spotted Owl, Chiricahua Leopard frog and Northern Goshawk.
- Federal trainings for fire, security awareness, defensive driving, first aid, CPR, horseback, ATV, and survey protocols for Mexican Spotted Owl, Chiricahua Leopard frog and Northern Goshawk. Participated in range monitoring, range transectsurveys and acted as contact person for department including inter and intra agency coordination.

- Maintained daily observation records of endangered species, feedings and facilities maintenance for breeding habitats and captive facilities, including the planning and construction of a sterile ranarium for endangered amphibians. Completed large scale breeding and reintroduction project and participated in housing design for salvaged garter snake population.

State of New Mexico Human Services Department-06/2008-04/2011
Silver City, NM

- Interpretation and utilization of Federal and State policies and procedures to ensure efficiency and accuracy of state andfederal benefits issued applicants. Documentation and accurate record keeping of confidential and legal data. Ensure statistical goals and deadlines are met.
- Head chair of the department's safety committee. Assessed working conditions and handled formal and informal complaints.
- Organized safety training and instructed employees on proper safety policies and procedures.
- Educated the general public in policies and procedures to obtain accurate data collection, handles client complaints, customer service and outreach programs.

Office Manager- Signal Peak, Inc.-02/2005-06/2008
Silver City, NM

- Distributed workload among employees and checked status and progress of work, making necessary adjustments. Served as the first-line interpreter of the protocol for employees. Assessed working conditions and ensured work is done safely and efficiently. Monitors performance and handled informal complaints among employees. Maintained reports on employee performance and recorded work time and leave of employees.
- Performs database review to assess errors and make appropriate corrections to database in Microsoft Access, Optigoldand led technical training and presentations on technical processes and procedures based on factual data.
- Created and maintained technical reports and summaries for business purposes, including instructions for technicalprocesses and business reports for research of anticipated fluctuations in revenue, equipment and supply inventory, budgeting for business growth, and customer data.

Western New Mexico University – Project Assistant-12/2006-08/2007
Silver City, NM

- Assisted in identifying habitat selection cues among rodent communities along a desert riparian cienega. Trapped, handled, and identified rodent, fish, amphibian and mammal species. Surveyed vegetation and identified individual plantspecies.
- Data collected was analyzed using Microsoft Excel, Pc Ordination, and SAS software, and an oral and written report were given.
- Used commonly accepted fisheries and aquatic techniques to collect a variety of field data concerning watershed health including, but not limited to: surveying channel profiles, tallying wood occurrences, measuring substrate dimensions, searching for terrestrial amphibians, collecting biological samples and using water chemistry meters.
- Organized and reviews data from data sheets and field data recorders (FDR's) to identify missing, illegible and/or incorrect data, and make necessary corrections. Downloads data from FDR's, GPS units and water chemistry meters into electronic spreadsheets and/or tables using various software programs.

Western New Mexico University-Con Confianza-Laboratory Assistant/ Mentor- 08/2004-05/2005
Silver City, NM

- Mentoring, counseling, and tutoring of students, and coordination of events between various departments. Teachingproper surveying techniques, equipment maintenance, appropriate handling of chemical compounds, working with aerosols, and neutralization of acidic compounds and disposal of laboratory hazardous materials to students.
- Preparation of agar, slants and other test media, bacterial analysis, gram staining and incubation of media, the identification of micro-organisms and bacteria from water samples.
- Instruction of onsite water quality tests for temperature, pH, Dissolved Oxygen (DO), and conductivity and the detection of pathogenic bacteria in water samples.

Stream International – Senior Support Services Manager -10/2002-03/2004
Silver City, NM

- Supervised a team of representatives, and trained incoming representatives in technical processes, and office procedures for major corporations.
- Computer hardware repair and replacement of PC hardware components and became proficient in the use of Microsoft products and internet-based programs and various software needed to resolve PC hardware and software issues.
- Resolved conflicts with customer satisfaction issues.

Phelps Dodge Mining Company-Security - 11/2000-10/2002
Morenci, AZ
MSHA and HAZMAT trained safety training visitors to the mine, ensured security procedures were followed for the protection of property and employees.

- Trained in basic first aid and management of situations in which dangerous materials are exposed. Detected safetythreats and participated in the proper clean-up of hazardous materials.
- Dispatched for Fire, and accident EMS.

PROFESSIONAL PUBLICATIONS

- Lead author of a technical presentation and publication for The Wildlife Society, February 2013, entitled *Quick ResponseExperimental Post-Wildfire Translocation on the Narrow Headed Gartersnake (Thamnophis rufipuntatus).*
- Co-Presented a technical dissertation for New Mexico Network for Women in Science and Engineering annual meeting,October28, 2006, entitled *The Importance of the Preservation of Native Wildlife of the Southwest*.

VOLUNTEER WORK

- Fort Stanton Cave Restoration Project. 2019-present
- Expanding Your Horizons in Science and Mathematics Annual Conference. 2005-2011
- New Mexico Network for Women in Science and Engineering 2007-2010

REFERENCES

Jack king State of New Mexico Environment Department Bureau Chief (Retired)
Contact Info: Jack@king-projects.com 575-937-8387

Eugene Knight State of New Mexico Environment Department Program Manager (Retired)
Contact Info: Eugene.knight56@gmail.com 575-808-7742

Howie Morales NM State Governors Office District 28
Contact info: 575-590-7804

STATE OF NEW MEXICO
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT
OIL CONSERVATION DIVISION

IN RE: NOTICE OF VIOLATION ISSUED TO BUCKEYE DISPOSAL, LLC

CASE NO. 25894

OIL CONSERVATION DIVISION'S DOCKETING NOTICE

The New Mexico Oil Conservation Division ("OCD"), pursuant to 19.15.5.10(E)(2)(a) NMAC, gives notice that it has docketed the Notice of Violation ("NOV"), a true and correct copy of which is attached as **Exhibit A**, and states the following in support thereof:

1. On or about April 3, 2025, OCD issued an NOV to Buckeye Disposal, LLC ("Buckeye"), OGRID #222759.

2. The NOV identified the factual basis for the alleged violations, the compliance actions required to remedy the alleged violations, and the proposed sanctions.

3. The NOV stated that if Buckeye did not informally resolve the NOV within 30 days of receipt of service, then OCD would proceed to a hearing on July 10, 2025. This hearing date was extended due to the parties' attempts to resolve the NOV informally.

4. OCD willingly extended the informal resolution period to allow Buckeye every reasonable opportunity to comply and engaged in substantial technical communication during the informal resolution period.

5. On or about December 18, 2025, Buckeye disclosed that it was not capable of completing various stages of remediation within revised deadlines required by OCD as of October 2025. On information and belief, Buckeye is not capable of completing the necessary remediation regardless of proposed deadlines.

WHEREFORE, OCD requests that the NOV be docketed for hearing on February 26, 2026.

Respectfully submitted,

Jesse K. Tremaine
Legal Director

Michael Hall
Assistant General Counsel
New Mexico Energy, Minerals and Natural Resources Department
Oil Conservation Division
1220 South St. Francis Drive
Santa Fe, New Mexico 87505
Phone: (505) 231-9312
Email: JesseK.Tremaine@emnrd.nm.gov

BY CERTIFIED ELECTRONIC MAIL

Buckeye Disposal, L.L.C.
Terry Payton
Financial Officer
terry@bergsteinenterprises.com

and

Pieter Bergstein
Member
terry@thestandardenergy.com
P.O. Box 2724
Lubbock, Texas 79408

NOTICE OF VIOLATION

State AF #003 (30-025-20980) Incident #nKL1625134663 and #nOY1813152090

The Director of the Oil Conservation Division ("OCD") issues this Notice of Violation ("NOV") pursuant to 19.15.5.10 NMAC.

(1) Alleged Violators: Buckeye Disposal, LLC, OGRID 222759 ("Operator").

(2) Citation, Nature, and Factual and Legal Basis for Alleged Violation(s):

19.15.29.8 RELEASES:

A. Prohibition. Except as provided in 19.15.27 NMAC or 19.15.28 NMAC, major releases and minor releases are prohibited.

19.15.29.11 SITE ASSESSMENT/CHARACTERIZATION:

After the responsible party has removed all free liquids and recoverable materials, the responsible party must assess soils both vertically and horizontally for potential environmental impacts from any major or minor release containing liquids.

A. Characterization requirements. The responsible party must submit information characterizing the release to the appropriate division district office within 90 days of discovery of the release or characterize the release by submitting a final closure report within 90 days of discovery of the release in accordance with Subsection E of 19.15.29.12 NMAC. The responsible party may seek an extension of time to submit

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characterization information for good cause as determined by the division. The responsible party must submit the following information to the division.

(1) Site map. The responsible party must provide a scaled diagram that shows the potentially impacted area, significant surface features including roads and site infrastructure, location of borings, sample points, monitoring wells and subsurface features such as known pipelines to the extent known at the time of submittal including the source of information regarding subsurface features.

(2) Depth to ground water. The responsible party must determine the depth to ground water where the release occurred. If the exact depth to ground water is unknown, the responsible party must provide a reasonable determination of probable ground water depth using data generated by numeric models, cathodic well lithology, water well data, published information or other tools as approved by the appropriate division district office. If the responsible party uses water well data, the responsible party must provide all pertinent well information.

(3) Wellhead protection area. The responsible party must determine the horizontal distance from all known water sources within a half mile of the release including private and domestic water sources. Water sources are wells, springs or other sources of freshwater extraction. Private and domestic water sources are those water sources used by less than five households for domestic or stock purposes.

(4) Distance to nearest significant watercourse. The responsible party must determine the horizontal distance to the nearest significant watercourse as defined in Subsection P of 19.15.17.7 NMAC within a half mile of any horizontal boundary of the release.

(5) Soil/waste characteristics. The responsible party must determine the lateral and vertical extents of soil contamination, as follows.

19.15.29.12. REMEDIATION AND CLOSURE:

A. The responsible party must remediate all releases regardless of volume.

B.(1) Unless remediation is completed, and a final closure report submitted, within 90 days of discovery of the release, the responsible party must complete division-approved remediation for releases either pursuant to a remediation plan approved pursuant to 19.15.29.12 NMAC or pursuant to an abatement plan in accordance with 19.15.30 NMAC. If the director determines that the release has caused water pollution in excess of the standards and requirements of 19.15.30 NMAC, the director may notify the responsible party that an abatement plan may be required pursuant to 19.15.30 NMAC.

B.(2) Any remediation under 19.15.29 NMAC should be completed as soon as practicable. Any remediation that exceeds 90 days must follow the division-approved timeline in the remediation plan. The responsible party may request an extension of time to remediate upon a showing of good cause as determined by the division.

C.(1) The responsible party must submit a detailed description of proposed remediation measures in accordance with the findings of the site assessment/characterization plan that includes:

(a) delineation results, including laboratory analysis;
(b) a scaled sitemap showing release area with horizontal and vertical delineation points;
(c) estimated volume of impacted material to be remediated;
(d) proposed remediation technique; and

(e) proposed timeline for remediation activities

19.15.29.16 TRANSITIONAL PROVISIONS:

B. Responsible parties with ongoing corrective actions/remediation without approved timelines or plans as of August 14, 2018 must submit a characterization plan or corrective action/remediation plan with proposed timeframes within 90 days of August 14, 2018..

19.15.5.11 ENFORCEABILITY OF PERMITS AND ADMINISTRATIVE ORDERS:

A person who conducts an activity pursuant to a permit, administrative order or other written authorization or approval from the division shall comply with every term, condition and provision of the permit, administrative order, authorization or approval.

State AF #003 (30-025-20980) Incident #NKL1625134663

1. On August 16, 2016, OCD Inspectors identified a release at the State AF #003 (30-025-20980), during a field visit.
2. On September 7, 2016, OCD reviewed and conditionally approved an Initial C-141.
3. On October 7, 2016, Operator submitted an inadequate Remediation Plan not meeting the previous Conditions of Approval in violation of 19.15.5.11 NMAC.
4. On November 12, 2018 Operator failed to submit a Characterization plan or Corrective action/Remediation plan in violation of 19.15.29.16 NMAC.
5. On August 16, 2019, OCD received a report titled *Work Plan for Characterization and Remediation of State AF #003 SWD Site.*
6. On January 29, 2020, OCD rejected the report titled *Work Plan for Characterization and Remediation of State AF #003 SWD Site* for the following reasons:
    a. "Horizontal delineation is not complete. Buckeye will need to further assess the horizontal limits of the release to 600 mg/kg.
    b. NMOCD recommends for Buckeye Disposal to provide additional sampling locations for preapproval.
    c. Depth to groundwater is not adequately identified. When nearby wells are used to determine depth to groundwater, the wells should be no further than ½ mile away from the site, and data should be no more than 25 years old, and well construction information should be provided. Buckeye Disposal (Buckeye) will need to drill a borehole on site to 51' bgs and leave it open for at least 24 hours. If there is no evidence of ground water after 24 hours, the OCD will review Buckeye's remediation plan with a copy of the driller's log (see stipulations below). If Buckeye chooses not to drill a borehole to confirm depth to groundwater, the impacted area will need to be further delineated to closure criteria for water at a depth of <50'. For further clarifications regarding the implementation of the spill rule, visit the OCD website: http://www.emnrd.state.nm.us/OCD/documents/OCDInternalPolicy-SpillRuleClarifications.pdf
    d. NMOCD recommends soil assessment to 4 feet below ground surface or to 600 mg/kg, whichever comes first, to determine the potential vertical remedial efforts."
7. On February 2, 2024, Operator requested an extension of time. Operator requested an additional 90 days as "they are working with the State Land Office and need

time to coordinate field activities and obtain access and clearances (i.e., cultural compliance). Results of the characterization activities will be used to develop the remediation plan." OCD approved the extension of time and a new due date of May 2, 2024 was issued.

8. On May 2, 2024, Operator failed to submit a complete and accurate Site Characterization and Remediation Plan in violation of *19.15.29.11 NMAC,* and *19.15.29.12 NMAC*
9. On July 1, 2024, OCD requested a status update on the submission of a Site Characterization and Remediation Plan via email as the incident was 60 days out of compliance.
10. On July 2, 2024, the Operator responded to the request for a status update. "The State Land Office approved Buckeye's site assessment plan (SAP) last Friday (6/28/2024). As you know, the investigation activities proposed in the SAP are needed for the Site Characterization and Remediation Plan that we intend to submit to OCD. We've been including you on the emails to SLO regarding the SAP to keep you updated but should have formally requested another extension. I apologize. I was under the impression that meeting the additional requirements of SLO was inline with us also meeting your expectations for the two documented releases and collection of data to support remediation and reclamation. We intend to report all data collected during implementation of the SAP to OCD in the Site Characterization and Remediation Plan. SLO just approved the SAP. We still need to obtain a Right-of-Entry permit and consult with the SLO Cultural Resources Office. I'm starting these additional requirements this week and will have a better idea of when we can start investigation activities and submit the Site Characterization and Remediation Plan to OCD after I make headway on these two requirements."
11. On September 17, 2024, OCD sent an email to the Operator reiterating that OCD still had not received a Site Characterization and Remediation plan and the incidents were out of compliance. Additionally, OCD stated "OCD will not approve any additional extension requests for nOY1813152090 and nKL1625134663. Remediation of these releases must be completed pursuant to 19.15.29 NMAC, including submission of approvable remediation plans, remediation closure reports, reclamation reports, and revegetation reports. OCD will use its enforcement discretion to determine if additional enforcement action is warranted. Cooperation from Buckeye Disposal L.L.C. will be considered when determining any enforcement actions, which may include civil penalties."
12. On September 18, 2024, the Operator responded to the email stating "I understand and acknowledge receipt of your email. We are working on this and making strides. With the urgency and importance of our response I feel that it we need to consult with our legal counsel before sending a formal response. I am trying to get a call schedule for tomorrow morning. Please know that we understand the importance of pushing forward with this project and we will do anything we can to prevent further delays."
13. On September 23, 2024, OCD receive an email from the Operator stating that there was a delay with the right of way paperwork, a cultural resources survey had to be completed, an that the ground at the location is very hard with will necessitate the need for a drill rig to collect the samples. The email also stated "Please consider this communication to represent our intentions and understanding of the seriousness and urgency of this matter. We not only aim to

avoid penalties, but we want to get this project completed and move forward without delay."

14. On September 23, 2024, OCD requested to be kept informed, if all SLO requirements had been completed and if the delineation plan could be implemented, if additional soil sampling had been performed, and what dates the driller would be available to install the soil borings.
15. On September 24, 2024, the Operator responded via email stating "It is my understanding that all of the SLO requirements have been completed as the cultural survey was done last week. Once we get a copy of the survey, John or I will provide it to you and SLO. At this point the only thing we are waiting on to implement the SLO approved delineation plan is the driller schedule. As far as I am aware no additional sampling has been done since May of 2023. Once we have confirmed dates from the driller we will share them with you and SLO."
16. On October 7, 2024, OCD sent an email requesting the if the drill rig had been scheduled and asked for the date to be provided.
17. On November 19, 2024, OCD sent an email to the Operator requesting a detailed time frame for the remediation and reclamation of incident numbers nOY1813152090 and nKL1625134663.
18. On December 5, 2024, The Operator copied OCD in an email to the State Land Office (SLO) stating "I am sorry, it looks like we might have missed this email from Britany in the Thanksgiving craziness. We are having bi-weekly meetings with John regarding this project. From our last meeting, it is my understanding that we are just waiting on a date from the driller. We discussed the option of using a backhoe to accelerate the sampling, but decided that we will need to wait for the driller as we ran into some very hard layers that the backhoe couldn't break through when we collected the prior samples that were presented to you all last year. I will follow up with John today to verify that this is still the status. I believe the holidays have caused some delays in scheduling. I will send a follow up to this email after speaking with John."
19. On December 5, 2024, OCD responded to the email received which stated "As requested on November 19, 2024, please send a detail timeframe for the remediation and reclamation of incident numbers nOY1813152090 and nKL1625134663. Include any correspondence from all drilling contractors that have been contacted, including correspondence on when rigs are available. Additionally, please include a timeline of events that have occurred since the date of discovery of each incident. These incidents had due dates of May 2, 2024, which was 217 days ago. Per previous emails, the EM survey was completed on October 8th and the results were being processed. Has that been completed? If so, please send a copy of the EM survey with the requested timeframe and timeline."
20. On December 6, 2024, OCD received a response from the Operator stating "We are analyzing the EM survey data now and expect to be done in a week or two. I understand that it's taking longer than expected to address remediation and reclamation of incidents nOY1813152090 and nKL1625134663; however, our investigation area covers a much larger region than where the two spills occurred (i.e., within the former AST containment) and we are also trying to satisfy SLO requests. We'll let you know once analysis of the EM survey data is complete and have scheduled drilling. After the investigation work is complete, we'll be in a better position to provide a schedule for remediation and reclamation."

21. On January 7, 2025, The Operator copied OCD in a response to SLO stating "Attached is a figure summarizing the EM survey results at the Buckeye State AF #003 site. We used linear regression to provide a preliminary estimate of areas exceeding 600-mg/kg chloride and to delineate potential excavation areas. The linear regression uses soil chloride data from the December 2023 soil sampling. Please note: there are a few areas with elevated TPH that are not addressed on the attached figure and that actual excavation areas will likely be more square and rectangle. The EM survey was conducted in October 2023. We contracted Atkins Engineering to complete the survey. They also captured an aerial photograph of the site with a drone. The aerial is shown in the attached figure. The EM survey was completed using both an EM31 and EM38, and by varying coil spacing and orientation so that we could image different depths. These data are in the GIS we used to prepare the attached figure. We're going to place the raw data on separate maps and send them to you in a separate email (hopefully later today or tomorrow). We've obtained a quote from Atkins Engineering to complete the borehole investigation. I've considered modifying the borehole investigation work some based on the EM survey results but need to discuss it more with Buckeye. We'll obtain SLO approval before moving forward with any changes."
22. On January 8, 2025, OCD responded to the email stating "Thank you for the information. As Buckeye Disposal, L.L.C. (222759) has not met previous conditions stipulated by the OCD, Buckeye Disposal and these incidents are now under a compliance review."
23. As of March 14, 2025, the Operator has yet to submit a C-141 for closure in violation of *19.15.29.12 NMAC*.

State AF #003 (30-025-20980) Incident # NOY1813152090

24. On May 11, 2018, OCD received an Initial C-141 which was subsequently approved with conditions.
25. On August 16, 2019, OCD received a report titled *Work Plan for Characterization and Remediation of State AF #003 SWD Site.*
26. On January 29, 2020, OCD rejected the report titled *Work Plan for Characterization and Remediation of State AF #003 SWD Site* for the following reasons:
    a. "Horizontal delineation is not complete. Buckeye will need to further assess the horizontal limits of the release to 600 mg/kg.
    b. NMOCD recommends for Buckeye Disposal to provide additional sampling locations for preapproval.
    c. Depth to groundwater is not adequately identified. When nearby wells are used to determine depth to groundwater, the wells should be no further than ½ mile away from the site, and data should be no more than 25 years old, and well construction information should be provided. Buckeye Disposal (Buckeye) will need to drill a borehole on site to 51' bgs and leave it open for at least 24 hours. If there is no evidence of ground water after 24 hours, the OCD will review Buckeye's remediation plan with a copy of the driller's log (see stipulations below). If Buckeye chooses not to drill a borehole to confirm depth to groundwater, the impacted area will need to be further delineated to closure criteria for water at a depth of <50'. For further clarifications regarding the implementation of the spill

rule, visit the OCD website: http://www.emnrd.state.nm.us/OCD/documents/OCDInternalPolicy-SpillRuleClarifications.pdf

d. NMOCD recommends soil assessment to 4 feet below ground surface or to 600 mg/kg, whichever comes first, to determine the potential vertical remedial efforts."

27. On September 13, 2023, Operator submitted a Remediation Plan.
28. On September 19, 2023, OCD rejected the Remediation Plan for the following reasons:
    a. "Analytical results for the samples collected will not be accepted for the following reasons: Total petroleum hydrocarbons were not analyzed using an acceptable method. Acceptable methods for each analyte are listed in 19.15.29 NMAC on Table I. Other methods may be used as long as they are approved prior to analysis. All laboratory reports indicate that the samples were not received at the proper temperature and were not received by the laboratories on ice.
    b. All samples will need to be analyzed for all the constituents listed on Table I.
    c. Per 19.15.29.12 C.(4) NMAC If a release occurs within the following areas, the responsible party must treat the release as if it occurred less than 50 feet to ground water in Table I of 19.15.29.12 NMAC: (c) within (ii) 1000 feet of any fresh water well or spring. The release is within 1000 feet of a fresh water well and regardless of depth to groundwater, the release must be delineated, both horizontally and vertically, and remediated to the most stringent closure standards in Table I.
    d. There is a playa lake located southeast of SB-08. Horizontal and vertical delineation of the site will need to include sample points that will assess if the playa lake has been impacted by the release.
    e. 1RP-5056 closed. Refer to incident #NOY1813152090 in all future communication.
    f. Submit a complete report though the OCD Permitting website by 12/19/2023.
    g. Two releases are referred to in the report. Reports can be used for multiple incident numbers but the report will need to be submitted through the OCD Permitting website under each individual incident number."
29. On December 5, 2023, Operator requested an extension of time due to "samples being analyzed by the lab and the operator is waiting on the results." OCD approved the extension of time and a new due date of February 2, 2024 was issued.
30. On February 2, 2024, Operator requested an extension of time. Operator requested an additional 90 days as "they are working with the State Land Office and need time to coordinate field activities and obtain access and clearances (i.e., cultural compliance). Results of the characterization activities will be used to develop the remediation plan." OCD approved the extension of time and a new due date of May 2, 2024 was issued.
31. On May 2, 2024, Operator failed to submit a complete and accurate Site Characterization and Remediation Plan as stated in previous term and conditions in violation of *19.15.5.11 NMAC, 19.15.29.11 NMAC,* and *19.15.29.12 NMAC*.

32. On July 1, 2024, OCD requested a status update on the submission of a Site Characterization and Remediation Plan via email as the incident was 60 days out of compliance.
33. On July 2, 2024, the Operator responded to the request for a status update. “The State Land Office approved Buckeye’s site assessment plan (SAP) last Friday (6/28/2024). As you know, the investigation activities proposed in the SAP are needed for the Site Characterization and Remediation Plan that we intend to submit to OCD. We’ve been including you on the emails to SLO regarding the SAP to keep you updated but should have formally requested another extension. I apologize. I was under the impression that meeting the additional requirements of SLO was inline with us also meeting your expectations for the two documented releases and collection of data to support remediation and reclamation. We intend to report all data collected during implementation of the SAP to OCD in the Site Characterization and Remediation Plan. SLO just approved the SAP. We still need to obtain a Right-of-Entry permit and consult with the SLO Cultural Resources Office. I’m starting these additional requirements this week and will have a better idea of when we can start investigation activities and submit the Site Characterization and Remediation Plan to OCD after I make headway on these two requirements.”
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36. On September 23, 2024, OCD received an email from the Operator stating that there was a delay with the right of way paperwork, a cultural resources survey had to be completed, and that the ground at the location is very hard with will necessitate the need for a drill rig to collect the samples. The email also stated “Please consider this communication to represent our intentions and understanding of the seriousness and urgency of this matter. We not only aim to avoid penalties, but we want to get this project completed and move forward without delay.”
37. On September 23, 2024, OCD requested to be kept informed, and whether all SLO requirements had been completed and if the delineation plan could be implemented, additional soil sampling had been performed, and what dates the driller would be available to install the soil borings.

38. On September 24, 2024, the Operator responded via email stating "It is my understanding that all of the SLO requirements have been completed as the cultural survey was done last week. Once we get a copy of the survey, John or I will provide it to you and SLO. At this point the only thing we are waiting on to implement the SLO approved delineation plan is the driller schedule. As far as I am aware no additional sampling has been done since May of 2023. Once we have confirmed dates from the driller we will share them with you and SLO."
39. On October 7, 2024, OCD sent an email requesting whether the drill rig had been scheduled and asked for the date to be provided.
40. On November 19, 2024, OCD sent an email to the Operator requesting a detailed timeframe for the remediation and reclamation of incident numbers nOY1813152090 and nKL1625134663.
41. On December 5, 2024, The Operator copied OCD in an email to the State Land Office (SLO) stating "I am sorry, it looks like we might have missed this email from Britany in the Thanksgiving craziness. We are having bi-weekly meetings with John regarding this project. From our last meeting, it is my understanding that we are just waiting on a date from the driller. We discussed the option of using a backhoe to accelerate the sampling, but decided that we will need to wait for the driller as we ran into some very hard layers that the backhoe couldn't break through when we collected the prior samples that were presented to you all last year. I will follow up with John today to verify that this is still the status. I believe the holidays have caused some delays in scheduling. I will send a follow up to this email after speaking with John."
42. On December 5, 2024, OCD responded to the email received which stated "As requested on November 19, 2024, please send a detail timeframe for the remediation and reclamation of incident numbers nOY1813152090 and nKL1625134663. Include any correspondence from all drilling contractors that have been contacted, including correspondence on when rigs are available. Additionally, please include a timeline of events that have occurred since the date of discovery of each incident. These incidents had due dates of May 2, 2024, which was 217 days ago. Per previous emails, the EM survey was completed on October 8th and the results were being processed. Has that been completed? If so, please send a copy of the EM survey with the requested timeframe and timeline."
43. On December 6, 2024, OCD received a response from the Operator stating "We are analyzing the EM survey data now and expect to be done in a week or two. I understand that it's taking longer than expected to address remediation and reclamation of incidents nOY1813152090 and nKL1625134663; however, our investigation area covers a much larger region than where the two spills occurred (i.e., within the former AST containment) and we are also trying to satisfy SLO requests. We'll let you know once analysis of the EM survey data is complete and have scheduled drilling. After the investigation work is complete, we'll be in a better position to provide a schedule for remediation and reclamation."
44. On January 7, 2025, The Operator copied OCD in a response to SLO stating "Attached is a figure summarizing the EM survey results at the Buckeye State AF #003 site. We used linear regression to provide a preliminary estimate of areas exceeding 600-mg/kg chloride and to delineate potential excavation areas. The linear regression uses soil chloride data from the December 2023 soil sampling. Please note: there are a few areas with elevated TPH that are not addressed on the attached figure and that actual excavation areas will likely be more square and

rectangle. The EM survey was conducted in October 2023. We contracted Atkins Engineering to complete the survey. They also captured an aerial photograph of the site with a drone. The aerial is shown in the attached figure. The EM survey was completed using both an EM31 and EM38, and by varying coil spacing and orientation so that we could image different depths. These data are in the GIS we used to prepare the attached figure. We're going to place the raw data on separate maps and send them to you in a separate email (hopefully later today or tomorrow). We've obtained a quote from Atkins Engineering to complete the borehole investigation. I've considered modifying the borehole investigation work some based on the EM survey results but need to discuss it more with Buckeye. We'll obtain SLO approval before moving forward with any changes."

45. On January 8, 2025, OCD responded to the email stating "Thank you for the information. As Buckeye Disposal, L.L.C. (222759) has not met previous conditions stipulated by the OCD, Buckeye Disposal and these incidents are now under a compliance review."
46. On March 4, 2025, Operator submitted a Remediation Plan.
47. On March 12, 2025, OCD rejected the Remediation Plan for the following reasons:
    a. "As per the last rejection, per 19.15.29.12 C.(4) NMAC If a release occurs within the following areas, the responsible party must treat the release as if it occurred less than 50 feet to ground water in Table I of 19.15.29.12 NMAC: (c) within (ii) 1000 feet of any fresh water well or spring. The release is within 1000 feet of a fresh water well and regardless of depth to groundwater, the release must be delineated, both horizontally and vertically, and remediated to the most stringent closure standards in Table I.
    b. The question "Any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)" was answered "Between ½ and 1 (mi.)." There is a playa lake located southeast of the former tank battery with in approximately 300 feet.
    c. OCD does not approve the remediation proposal: "Buckeye will attempt to excavate soil to a depth of 4 feet unless one of the following conditions is met: (1) field screening and confirmation soil sampling data indicate that soil meets the aforementioned standards or (2) consolidated caliche or bedrock is encountered and cannot be penetrated."
    d. OCD does not approve the remediation proposal to "excavate impacted soil from a depth of up to 4 feet and replace it with clean fill." The remediation must meet the most stringent closure criteria and the excavations must be advanced past 4 feet below ground surface.
    e. The question regarding the distance to "A wetland" was answered "Between ½ and 1 (mi.)." There is a mapped wetland located southeast of the former tank battery with in approximately 300 feet.
    f. Per 19.15.29.7 C. NMAC, "Responsible party" means the operator, as defined in 19.15.2 NMAC. Notwithstanding the foregoing, the division, in its sole discretion, may also consider a person causing the release, or controlling the location of the release as the responsible party. OCD will hold the operator of the site responsible for all releases that occurred at the site, including any pipeline releases that may have affected the site.
    g. Vertical delineation is incomplete.

h. All samples collected in December 1, 2023 have the qualifier "HDSP-1 for the BTEX and TPH samples. This qualifier indicates "Sample container had headspace. Results may be biased low." OCD will not accept these results.
i. Be advised that this submittal is not applicable to NKL1625134663. This report was not submitted for NKL1625134663. NKL1625134663 is out of compliance.
j. The question "Categorize the risk of this well / site being in a karst geology" was answered "None" but it is categorized as low karst potential.
k. The question "Did the release impact areas not on an exploration, development, production, or storage site" was answered "No" but based off of the data provided in the report this release did impact areas not on an exploration, development, production, or storage site.
l. The question "Was this release entirely contained within a lined containment area" was answered "Yes". Data included in the report indicates that this release want not entirely contained within a lined containment area.
m. Submit a complete and accurate report through the OCD Permitting website by 4/11/2025."

(3) Compliance: No later than thirty (30) business days after issuance of this NOV, Operator shall:

n. Submit a complete and accurate Site Characterization and Remediation Plan pursuant to 19.15.29 NMAC.
o. Submit a complete and accurate Remediation Closure Report and Reclamation Report no later than ninety (90) days after the OCD approves the Site Characterization and Remediation Plan.

No later than fifteen (15) business days after issuance of this NOV, Operator shall:

p. Send an update to OCD staff on the following open incidents:
    i. nAB1927632580
    ii. nAB1426550986
    iii. nPRS0522956951
    iv. nSAD0430954509
    v. nBZH2501038804

    The updates for the abovementioned incidents must include a summary to all remedial activities performed to date, a timeline for each incidents that outlines how and when the incidents will be brought into compliance, and any additional information regarding why these incidents are out of compliance.

(4) Sanction(s): OCD may impose one or more of the following sanctions:

- civil penalty
- modification, suspension, cancellation, or termination of a permit or authorization
- shutting in a well or wells
- plugging and abandonment of a well
- remediation and restoration of a well location and associated facilities, including the removal of surface and subsurface equipment and other materials
- remediation and restoration of a location affected by a spill or release
- forfeiture of financial assurance
- any other remedy authorized by law

For the alleged violations described above and consistent with applicable law, OCD proposes the following sanctions (one or more of which may ultimately be selected):

- Civil Penalty:

OCD proposes a cumulative total of $1,604,500 for ten (10) separate violations related to the State AF #003 (30-025-20980) Incident #NKL1625134663 and Incident #NOY1813152090 as detailed in the civil penalty calculations, attached and incorporated as Exhibit A. The civil penalties were calculated as of 01/09/2025. OCD may recalculate the civil penalties for ongoing violations occurring on or after the date of issuance of this NOV and will take into consideration Operator's good faith effort to comply with the applicable requirements.

The civil penalty calculations are attached. OCD may recalculate the civil penalties for ongoing violations occurring on or after the date of issuance of this NOV and will take into consideration Operator's good faith effort to comply with the applicable requirements.

(5) Informal Review and Resolution: A process is available for the informal review and resolution of the alleged violations in the NOV. To initiate the informal review process, contact the OCD employee identified at the end of this letter. If OCD and the alleged violator agree to resolve the alleged violations in the NOV, the agreement will be incorporated into a stipulated final order signed by both parties and stating that the alleged violator admits OCD's jurisdiction to file the NOV, consents to the specified relief, including the civil penalty, if any, and waives the right of review by the Oil Conservation Commission.

(6) Hearing: If this Notice of Violation is not resolved within thirty (30) days of receipt of service, OCD will hold a hearing on July 10, 2025. Please see 19.15.5.10 NMAC for more information regarding the hearing. However, please note that the hearing does not prohibit OCD from negotiating with the alleged violator at any time to settle the NOV.

For more information regarding this NOV, contact Jesse Tremaine, OCD Legal Director, at (505) 231-9312 or JesseK.Tremaine@emnrd.nm.gov.

Regards,

Gerasimos Razatos
Director (Acting)

4/3/2025
Date

cc: EMNRD-OGC

Alleged Violator	**BUCKEYE DISPOSAL, L.L.C.**
Alleged Violator OGRID	**222759**

History of Non-Compliance	No history	0
Economic Impact	Less than 50 wells or gross sales less than $500,000	0
Total Penalty	**$ 1,604,500**	

API # or Facility ID	Violation Citation	Type of Violation	Description	MinPA($)	Multi Day / Single Day	Days in violation	Days Penalized	Penalty Subtotal	Effort to Comply		Negligence and Willfulness		Factor Subtotal	Outstanding Conditions		TOTAL	Comments
25134663 [30-025-20980] STATE A	29.8(A)	minor or major release	minor release	$ 1,500	Single	1	1	$ 1,500	Minimal Cooperation and Compliance	0.3	Negligence	0.2	1.5	No outstanding conditions	$ 2,500.00	$ 2,250	calculated as a 1 day violation
25134663 [30-025-20980] STATE A	29.11 (Cond. 1)	fail to submit release characterization	have not submitted an approvable characterization	$ 1,000	Multiple	2250	2250	$ 2,250,000	Minimal Cooperation and Compliance	0.3	Probable or Actual Willfulness	0.6	1.9	No outstanding conditions	$ 2,500.00	$ 200,000	calculated from 11/12/2018 (transitional clause of 19.15.29)
25134663 [30-025-20980] STATE A	29.12 (Cond. 1)	fail to submit remediation plan	have not submitted an approvable remediation plan	$ 1,000	Multiple	2250	2250	$ 2,250,000	Minimal Cooperation and Compliance	0.3	Probable or Actual Willfulness	0.6	1.9	No outstanding conditions	$ 2,500.00	$ 200,000	calculated from 11/12/2018 (transitional clause of 19.15.29)
25134663 [30-025-20980] STATE A	29.12 (Cond. 3)	fail to submit C-141 for closure	failure to submit a remediation plan or closure report	$ 500	Multiple	252	252	$ 126,000	Minimal Cooperation and Compliance	0.3	Probable or Actual Willfulness	0.6	1.9	No outstanding conditions	$ 2,500.00	$ 200,000	calculated from 5/2/2024 (approved extension due date)
25134663 [30-025-20980] STATE A	5.11 ($2500)	fail to comply with term, condition, or provision of a permit, administrative order, authorization, or approval	failure to submit a remediation plan or closure report by the date given in the rejected application	$ 2,500	Multiple	252	252	$ 630,000	Minimal Cooperation and Compliance	0.3	Probable or Actual Willfulness	0.6	1.9	No outstanding conditions	$ 2,500.00	$ 200,000	calculated from 5/2/2024 (approved extension due date)
13152090 [30-025-20980] STATE A	29.8(A)	minor or major release	major release	$ 1,500	Single	1	1	$ 1,500	Minimal Cooperation and Compliance	0.3	Negligence	0.2	1.5	No outstanding conditions	$ 2,500.00	$ 2,250	calculated as a 1 day violation
13152090 [30-025-20980] STATE A	29.11 (Cond. 1)	fail to submit release characterization	have not submitted an approvable characterization	$ 1,000	Multiple	2250	2250	$ 2,250,000	Minimal Cooperation and Compliance	0.3	Probable or Actual Willfulness	0.6	1.9	No outstanding conditions	$ 2,500.00	$ 200,000	calculated from 11/12/2018 (transitional clause of 19.15.29)
13152090 [30-025-20980] STATE A	29.12 (Cond. 1)	fail to submit remediation plan	have not submitted an approvable remediation plan	$ 1,000	Multiple	2250	2250	$ 2,250,000	Minimal Cooperation and Compliance	0.3	Probable or Actual Willfulness	0.6	1.9	No outstanding conditions	$ 2,500.00	$ 200,000	calculated from 11/12/2018 (transitional clause of 19.15.29)
13152090 [30-025-20980] STATE A	29.12 (Cond. 3)	fail to submit C-141 for closure	failure to submit a remediation plan or closure report	$ 500	Multiple	252	252	$ 126,000	Minimal Cooperation and Compliance	0.3	Probable or Actual Willfulness	0.6	1.9	No outstanding conditions	$ 2,500.00	$ 200,000	calculated from 5/2/2024 (approved extension due date)
13152090 [30-025-20980] STATE A	5.11 ($2500)	fail to comply with term, condition, or provision of a permit, administrative order, authorization, or approval	failure to submit a remediation plan or closure report by the date given in the rejected application	$ 2,500	Multiple	252	252	$ 630,000	Minimal Cooperation and Compliance	0.3	Probable or Actual Willfulness	0.6	1.9	No outstanding conditions	$ 2,500.00	$ 200,000	calculated from 5/2/2024 (approved extension due date)
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August 14, 2019

Mr. Jim Griswold
Environmental Bureau Chief
Oil Conservation Division
1220 South St. Francis Drive
Santa Fe, NM 87505

Mr. John Winscott
Business Lease Manager
New Mexico State Land Office
310 Old Santa Fe Trail,
Santa Fe NM 87501

Delivered via e-mail: Jim.Griswold@state.nm.us; jwiscott@slo.state.nm.us

Re: Buckeye Disposal, LLC
Work Plan for Characterization and Remediation of State AF #003 SWD Site
Remediation Permits 1RP-4429 and 1RP-5056

Dear Messrs. Griswold and Winscott:

On behalf of Buckeye Disposal, Inc. (Buckeye), Daniel B. Stephens & Associates, Inc. (DBS&A) has prepared this work plan describing activities to characterize the extent of soil impacts caused by two releases of produced water at the off-loading facility at the State AF #003 SWD site (the site). The Site is operated by Buckeye. The facility is located on State of New Mexico Business Lease BL-2050 in Section 8, Township 18 South, Range 35 East, NMPM. This letter summarizes the two releases and actions taken to date, and provides proposed actions to complete site characterization.

Actions to Date

Buckeye submitted Release Notification Forms C-141 to the Oil Conservation Division (OCD) regarding the releases on August 20, 2016 and May 11, 2018. Both releases occurred within the tank containment area, which is lined with 40-mil high-density polyethylene (HDPE) flexible membrane. In response to these notifications, the OCD assigned remediation permit 1RP-4429 on September 7, 2016 and remediation permit 1RP-5056 on May 11, 2018.

On October 3, 2016, Buckeye submitted a work plan to the OCD in response to 1RP-4429. The work plan included the cleaning and removal of the containment liner, collection of soil samples to be submitted for laboratory analyses, removal and replacement of contaminated soil, installation of a new liner, and painting of the facility. A review of OCD's on-line records indicates that OCD received the work plan, but it is unclear whether OCD approved this work plan.

In response to the Release Notification Form C-141 dated May 11, 2018, OCD requested that Buckeye inspect the liner to determine its integrity and submit a report. OCD also issued 1R-5056, which generally reiterates requirements for site characterization provided in 19.15.29.11 NMAC.

In December 2018, e-mails between Buckeye and the State Land Office (SLO) indicated that Buckeye would take the following steps to characterize site conditions: cleaning and inspection of the liner, sampling and analysis of soils beneath the liner and outside the containment area, construction of a berm or other containment to prevent fluids from migrating off-site, removal of all unnecessary equipment from the site, and maintenance of the access road.

On February 14, 2019, a total of seven soil samples were collected from seven locations at the site, as shown on Figure 1. Samples were collected from depths up to 36 inches using a backhoe. The samples were submitted to Cardinal Laboratories in Hobbs, New Mexico and analyzed for total chloride. The sample results are shown on Figure 1 and Table 1. The laboratory report is provided as Attachment 1.

Information available online from the Office of the State Engineer (OSE) indicates that the depth to shallow groundwater at the well closest to the site is 105 feet below ground surface (bgs) (Figure 2). Based on the depth to shallow groundwater (greater than 100 feet), the OCD numerical limit for chloride is 20,000 milligrams per kilogram (mg/kg), as prescribed in Table 1 of 19.15.29.12 NMAC. Chloride concentrations in soil samples collected around the containment area in February 2019 range from 960 to 5,520 mg/kg, all well below the OCD numerical limit. Based on these results, chloride concentrations in soil outside the containment area do not require remediation.

Proposed Characterization

The structural integrity of the HDPE liner in the containment area has been compromised, and the liner needs to be replaced. For example, the liner is no longer secured to the tanks in some areas. Before additional investigation can be done, the HDPE liner will be removed and disposed of properly. OCD and SLO will be notified before this work is initiated.

Once the HDPE liner has been removed, the condition of the underlying soil will be inspected and photographed, and soil samples will be collected inside the containment at six locations. Sample locations will be determined after the liner is removed. A backhoe will be used to excavate into the heavily calichified soil. The lithology of soils encountered will be described. At least two soil samples from each test pit (highest observed contamination and deepest depth investigated) will be submitted for laboratory analysis. Soil samples will be collected directly from the backhoe bucket, placed in clean containers provided by the laboratory, properly labeled, and placed on ice. Chain-of-custody documents will be completed and the samples will be delivered to an analytical laboratory.

In accordance with Table 1 of 19.15.29.12 NMAC, for a site where groundwater is more than 100 feet deep, samples will be submitted for laboratory analysis for the following constituents:

- Total petroleum hydrocarbons (TPH), including gasoline-range organics (GRO) (C8-C10), diesel-range organics (DRO) (>C10-C28), and motor oil-range organics (MRO) (>C28-C36) using EPA method 8015 modified
- Benzene, toluene, ethylbenzene, and total xylenes (BTEX) using EPA method 8021B
- Chloride using standard method 4500-Cl-B.

In addition to the samples collected inside the containment, the two February 2019 sampling locations with the highest chloride concentrations will be resampled and analyzed for TPH and BTEX. This is being done because these compounds were not analyzed for in the February 2019 samples.

Laboratory results will be compared to the OCD numerical limits for sites where groundwater is more than 100 feet deep, per Table 1 of 19.15.29.12 NMAC. If soil results indicate the presence of contamination exceeding OCD numerical limits, additional samples will be collected if required to establish the lateral and vertical extent of contamination. Once the extent of contaminated soil has been established, the contaminated soil will be removed and properly disposed of. The excavated area will be backfilled with clean soil and compacted. A new HDPE liner will be installed within the containment.

Upon completion of site characterization and remediation, Buckeye will complete and submit the Site Characterization and Remediation portions of the Form C-141 to OCD.

When your approval is received, Buckeye will implement this work plan. If you have any questions or comments regarding this work plan, please contact us at (505) 822-9400.

Sincerely,

DANIEL B. STEPHENS & ASSOCIATES, INC.

Bill Casadevall, C.P.G.
Geologist

John Ayarbe, P.G.
Senior Hydrologist

BC/rpf
Attachments
cc: Ryan Mann, State Land Office (rmann@slo.state.nm.us)
Vincent D'Alise, Standard Energy Services (vincent@thestandardenergy.com)
Saskia Bergstein Allen, Bergstein Enterprises (saskia@bergsteinenterprises.com)

Figures

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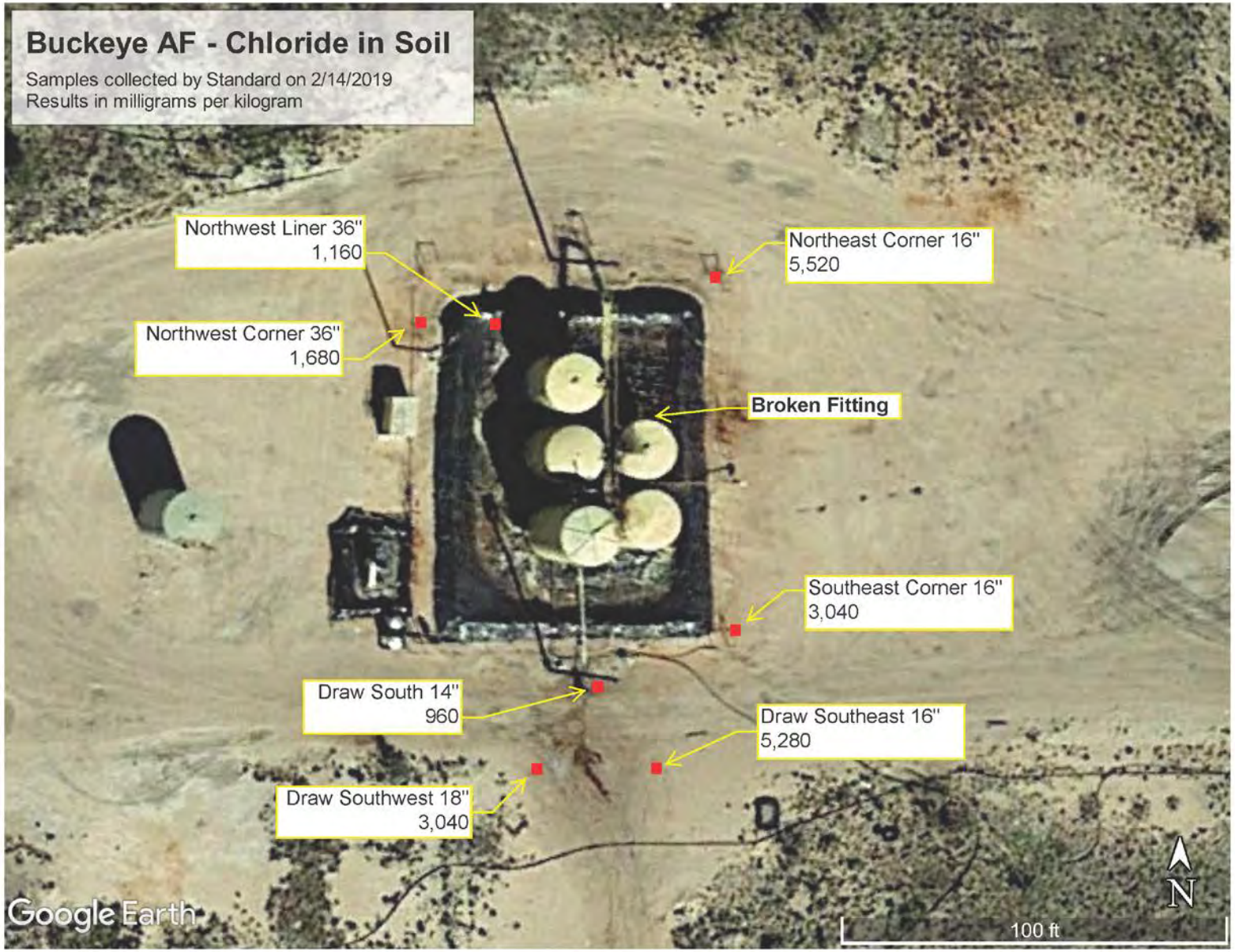

Figure 1

BUCKEYE STATE AF #003
Chloride in Soil

Daniel B. Stephens & Associates, Inc.

8/14/19

OCD Ex. 10-005

Figure 2

BUCKEYE STATE AF #003

Shallow Water Sources within ½ mile of Site

Daniel B. Stephens & Associates, Inc.

8/14/19

Table

Table 1. State AF #003 SWD Site Soil Chemistry, February 14, 2019

Analyte	Concentration (mg/kg)							
	OCD Limit [a]	Draw South 14"	Draw Southeast 16"	Draw Southwest 18"	Northeast Corner 16"	Southeast Corner 16"	Northwest Corner 36"	Northwest Liner 36"
Chloride	20,000	960	5,280	3,040	5,520	3,040	1,680	1,160

Source: Cardinal Laboratories, 2/19/2019

[a] Standards from Table 1 of 19.15.29.12 NMAC for site where depth to groundwater >100 feet.

mg/kg = Milligrams per kilogram

OCD = Oil Conservation Division

Attachment 1

Laboratory Report

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

February 19, 2019

JIM SAYRE

BUCKEYE DISPOSAL, LLC

P. O. BOX 513

HOBBS, NM 88241

RE: BUCKEYE

Enclosed are the results of analyses for samples received by the laboratory on 02/15/19 8:05.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-18-11. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (*). For a complete list of accredited analytes and matrices visit the TCEQ website at www.tceq.texas.gov/field/qa/lab_accred_certif.html.

Cardinal Laboratories is accreditated through the State of Colorado Department of Public Health and Environment for:

Method EPA 552.2	Haloacetic Acids (HAA-5)
Method EPA 524.2	Total Trihalomethanes (TTHM)
Method EPA 524.4	Regulated VOCs (V1, V2, V3)

Accreditation applies to public drinking water matrices.

This report meets NELAP requirements and is made up of a cover page, analytical results, and a copy of the original chain-of-custody. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Celey D. Keene

Celey D. Keene

Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

BUCKEYE DISPOSAL, LLC
JIM SAYRE
P. O. BOX 513
HOBBS NM, 88241
Fax To: UNK-NOWN

Received:	02/15/2019	Sampling Date:	02/14/2019
Reported:	02/19/2019	Sampling Type:	Soil
Project Name:	BUCKEYE	Sampling Condition:	** (See Notes)
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	NOT GIVEN		

Sample ID: DRAW SOUTH 14'' (H900609-01)

Chloride, SM4500Cl-B **mg/kg** **Analyzed By: JH**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**960**	16.0	02/19/2019	ND	432	108	400	0.00	

Sample ID: NORTH EAST CORNER 16'' (H900609-02)

Chloride, SM4500Cl-B **mg/kg** **Analyzed By: JH**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**5520**	16.0	02/19/2019	ND	432	108	400	0.00	

Sample ID: SOUTH EAST CORNER 16'' (H900609-03)

Chloride, SM4500Cl-B **mg/kg** **Analyzed By: JH**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**3040**	16.0	02/19/2019	ND	432	108	400	0.00	

Sample ID: DRAW SOUTHEAST 16'' (H900609-04)

Chloride, SM4500Cl-B **mg/kg** **Analyzed By: JH**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**5280**	16.0	02/19/2019	ND	432	108	400	0.00	

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

BUCKEYE DISPOSAL, LLC
JIM SAYRE
P. O. BOX 513
HOBBS NM, 88241
Fax To: UNK-NOWN

Received:	02/15/2019	Sampling Date:	02/14/2019
Reported:	02/19/2019	Sampling Type:	Soil
Project Name:	BUCKEYE	Sampling Condition:	** (See Notes)
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	NOT GIVEN		

Sample ID: DRAW SOUTH WEST 18'' (H900609-05)

Chloride, SM4500Cl-B **mg/kg** **Analyzed By: JH**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**3040**	16.0	02/19/2019	ND	432	108	400	0.00	

Sample ID: NORTH WEST CORNER 36'' (H900609-06)

Chloride, SM4500Cl-B **mg/kg** **Analyzed By: JH**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**1680**	16.0	02/19/2019	ND	432	108	400	0.00	

Sample ID: NORTH WEST LINER 36'' (H900609-07)

Chloride, SM4500Cl-B **mg/kg** **Analyzed By: JH**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**1160**	16.0	02/19/2019	ND	432	108	400	0.00	

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Notes and Definitions

ND	Analyte NOT DETECTED at or above the reporting limit
RPD	Relative Percent Difference
**	Samples not received at proper temperature of 6°C or below.
***	Insufficient time to reach temperature.
-	Chloride by SM4500Cl-B does not require samples be received at or below 6°C
	Samples reported on an as received basis (wet) unless otherwise noted on report

Cardinal Laboratories

*=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

101 East Marland, Hobbs, NM 88240
(575) 393-2326 FAX (575) 393-2476

Company Name:	Buckeye Disposal	**BILL TO**	
Project Manager:	Jim Sayre	P.O. #:	
Address:	PO Box 513	Company:	
City:	Hobbs State: NM Zip: 88240	Attn:	
Phone #:	575-361-5072 Fax #: 575-393-8352	Address:	
Project #:	Project Owner:	City:	
Project Name:		State: Zip:	
Project Location:	Buckeye	Phone #:	
Sampler Name:	Jim Sayre	Fax #:	

FOR LAB USE ONLY				MATRIX							PRESERV.			SAMPLING		ANALYSIS REQUEST
Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :	ACID/BASE:	ICE / COOL	OTHER :	DATE	TIME	
H900609															CL
1	Draw South 14"	G	1			✓							2-14-19	17:30	✓
2	North East Corner 16"														
3	South East Corner 16"														
4	Draw SouthEast 16"														
5	Draw SouthWest 18"														
6	NorthWest Corner 36"														
7	North West Liner 36"														

Relinquished By:	Date: 2-15-19	Received By:	Phone Result: ☐ Yes ☐ No	Add'l Phone #:
	Time: 0805		Fax Result: ☐ Yes ☐ No	Add'l Fax #:
Relinquished By:	Date:	Received By:	REMARKS:	
	Time:			

Delivered By: (Circle One)	Sample Condition	CHECKED BY: (Initials)
Sampler - UPS - Bus - Other: 19.3c #97	Cool: ☐ Yes ☐ No Intact: ☐ Yes ☐ No	TC

JIM@thestandardenergy.com

From:	Eads, Cristina, EMNRD
To:	"casadevall@geo-logic.com"; "terry@thestandardenergy.com"
Cc:	"rmann@slo.state.nm.us"; "saskia@bergsteinenterprises.com"; Bradford EMNRD Billings (Bradford.Billings@state.nm.us)
Bcc:	Rose-Coss, Dylan H, EMNRD
Subject:	Remediation Plan 1RP-4429 and 1RP-5056
Date:	Wednesday, January 29, 2020 11:21:00 AM

To whom this may concern,

The NMOCD has reviewed the remediation plan titled, **Work Plan for Characterization and Remediation of State AF #003 SWD Site** for RPs 1RP-4429 and 1RP-5056.

This remediation plan is denied for the following reasons:

- Horizontal delineation is not complete. Buckeye will need to further assess the horizontal limits of the release to 600 mg/kg.
- NMOCD recommends for Buckeye Disposal to provide additional sampling locations for preapproval.
- Depth to groundwater is not adequately identified. When nearby wells are used to determine depth to groundwater, **the wells should be no further than ½ mile away from the site, and data should be no more than 25 years old,** and well construction information should be provided. Buckeye Disposal (Buckeye) will need to drill a borehole on site to 51' bgs and leave it open for at least 24 hours. If there is no evidence of ground water after 24 hours, the OCD will review Buckeye's remediation plan with a copy of the driller's log (see stipulations below). If Buckeye chooses not to drill a borehole to confirm depth to groundwater, the impacted area will need to be further delineated to closure criteria for water at a depth of <50'. For further clarifications regarding the implementation of the spill rule, visit the OCD website: http://www.emnrd.state.nm.us/OCD/documents/OCDInternalPolicy-SpillRuleClarifications.pdf
- NMOCD recommends soil assessment to 4 feet below ground surface or to 600 mg/kg, whichever comes first, to determine the potential vertical remedial efforts.

In the future, a completed C-141 must be included with the submittal of incident related documents on the fee portal.

Thank you for your efforts on these releases. If you have any questions, please feel free to contact Brad Billings (Bradford.Billings@state.nm.us) or me (contact information below).

Cristina Eads
Environmental Bureau
EMNRD – Oil Conservation Division
1220 South St. Francis Drive
Santa Fe, New Mexico 87505
505.476.3084
email: Cristina.Eads@state.nm.us

NKL1625134663 2016 MINOR AIA OS @ 30-025-20980

General Incident Information

Edit

Well: [30-025-20980] STATE AF #003
Facility:
Operator: [222759] BUCKEYE DISPOSAL, L.L.C.
Status: Active
Stage: Initial C-141 Approved, Pending submission of Site Characterization / Remediation Plan OR Remediation Closure Report from the operator
Type: Oil Release
Severity:

Incident Location: L-08-18S-35E 1980 FSL 990 FWL
Lat/Long: 32.7605324,-103.4851837 NAD83
District: Hobbs
County: Lea (25)
Surface Owner: State

Severity Indicators

Resulted In Fire: ☐
Resulted In Injury: ☐
Endangered Public Health: ☐
Will or Has Reached Watercourse: ☐
Fresh Water Contamination: ☐
Property Or Environmental Damage: ☐

Notes

Source of Referral: Oil Conservation Division Rep
Action / Escalation:

Department Use Only

Contact Phone:
Contact Email:
Internal Comment:
Confidential: ☐
Reviewer: Brittany Hall Take Reviewership

Contact Details

Contact Name:
Contact Title:

Event Dates

Date of Discovery: 08/16/2016
Initial C-141 Report Due: 8/31/2016
Remediation Closure Report Due: 11/13/2018

Department Notes

Incident Dates

19.15.29 NMAC - RELEASES

Type	Action	Received	Denied	Approved
Remediation Closure Report Extension		08/15/2018		08/15/2018

19.15.30 NMAC - REMEDIATION

Edit

Type	Action	Received	Denied	Approved

Quick Links
- General Incident Informatio
- Materials
- Events
- Orders
- Action Status

Associated Images
- Facility Files (0)
- Incident Files (2)
- Well Files (80)

Associated Inspections
- Incident Inspections
- Incident Field Compliances
- Operator Inspections
- Operator Field Compliance

New Searches
- New Facility Search
- New Incident Search
- New Operator Search
- New Pit Search
- New Well Search

Site Characterization Extension		02/01/2024		02/01/2024
Initial C-141 Report		09/07/2016		09/07/2016

Compositional Analysis of Vented and/or Flared Natural Gas

No Compositional Analysis Found

Incident Materials

Edit

Cause	Source	Material	Volume Unk.	Released	Recovered	Lost	Units
Equipment Failure	Pipeline (Any)	Crude Oil	☐	15	14	1	BBL

The concentration of dissolved chloride in the produced water >10,000 mg/l: ☐ Yes ☑ No

Incident Events

Edit

Date	Detail
10/22/2025	An application [451219] was submitted to OCD for review. It was submitted, indicating that it was an: [C-141] Application for administrative approval of a release notification and corrective action The operator was emailed confirmation of this event.
05/06/2025	Remediation plan denied. See application 451219 for reasons of rejection.
05/06/2025	The (10/22/2025, C-141) application [451219] was rejected by OCD. The operator was emailed with details of this event.
04/11/2025	The (10/22/2025, C-141) application [451219] was assigned to this incident.
09/17/2024	Incident numbers, nOY1813152090 and nKL1625134663, associated with the State AF #003 (30-025-20980) are out of compliance. Both incidents were granted 90-day extension requests on February 1, 2024, to facility Buckeye Disposal's compliance with the New Mexico State Land Office's (SLO) requirements. Site Characterization and Remediation Plans or Remediation Closure Reports were required to be submitted to OCD Permitting no later than May 2, 2024. As of today, September 17, 2024, OCD has not received any submittals for these two incidents. OCD WILL NOT approve any additional extension requests for nOY1813152090 and nKL1625134663. Remediation of these releases must be completed pursuant to 19.15.29 NMAC, including submission of approvable remediation plans, remediation closure reports, reclamation reports, and revegetation reports. OCD will use its enforcement discretion to determine if additional enforcement action is warranted. Cooperation from Buckeye Disposal L.L.C. will be considered when determining any enforcement actions, which may include civil penalties.
02/01/2024	Operator has requested a 90 day extension as they are working with the State Land Office and need time to coordinate field activities and obtain access and clearances (i.e., cultural compliance). Results of the characterization activities will be used to develop the remediation plan. Extension approved new due date is 5/2/2024.
01/29/2020	Remediation Plan denied. Delineation not complete. Depth to groundwater not identified.
09/07/2016	1RP 4429 Jamie Keyes & Kristen Lynch found this site during a field visit. Notification was made to Buckeye Disposal Jim Sayre on 8/16/2016, notifying him that a C-141 needed to be issued and that the site was in terrible condition. Liner ripped in the south eastern corner, 1-1/2 foot of asfalteens layered with salt crystals. NMOCD told him we needed a C-141 by 9/1/2016. On 9/1/2016 a call was made back to Buckeye Disposal letting them know if we did not get a C-141 that they would receive a Notice of Violation for failure to report. Also this facility is missing a sign. Received a C-141 9/1/16, which states: Broken 3" PVC line - Repair Broken 3" PVC line. Inside lined dyke - Repair liner, excavate fluid from inside dyke and mediate dirt inside the lined dyke.

Incident Corrective Actions

No initial response data was found for this incident. Create Initial Response Data

No site characterization data was found for this incident. Create Site Characterization Data

No remediation plan data was found for this incident. Create Remediation Plan Data

No active remediation deferral request was found for this incident. Create Active Remediation Deferral Request Data

No remediation closure report data was found for this incident. Create Remediation Closure Report Data

No reclamation report data was found for this incident. Create Reclamation Report Data

No re-vegetation report data was found for this incident. Create Re-vegetation Report Data

Orders

1RP-4429-0

Applicant:	[237120] BUCKEYE DISPOSAL LLC		
Contact:	Jim Sayre	**Approved By:**	SLO
Reviewer:	Kristen Lynch	**Issuing Office:**	Hobbs

Processing Dates

Received:		**Ordered:**	09/07/2016
Approved:	09/07/2016	**Denied:**	
Expiration:	11/07/2016	**Cancelled:**	

Outlook

RE: [EXTERNAL] Buckeye State AF #003 remediation plan extension request

From Hall, Brittany, EMNRD <Brittany.Hall@emnrd.nm.gov>
Date Thu 2/1/2024 2:13 PM
To Ayarbe, John <jayarbe@geo-logic.com>
Cc saskia@thestandardenergy.com <saskia@thestandardenergy.com>; pieter@thestandardenergy.com <pieter@thestandardenergy.com>

John,

The extension requests for NOY1813152090 and NKL1625134663 are approved. The new due date for the releases is 5/2/2024.

Please include a copy of this and all notifications in the remedial and/or closure reports to ensure the notifications are documented in the project file.

Thank you,
Brittany Hall ● Environmental Specialist
Environmental Bureau Projects Group
EMNRD - Oil Conservation Division
1000 Rio Brazos Road | Aztec, NM 87110
505.517.5333 | Brittany.Hall@emnrd.nm.gov
http://www.emnrd.nm.gov/ocd/

Please be advised that the new Digital C-141 is live as of December 1, 2023. Please review the new Digital C-141 submission Dec 1, 2023 Guidance document posted on the EMRND Website prior to submitting any C-141s. The guidance documents can be found at https://www.emnrd.nm.gov/ocd/ocd-announcements-and-notifications/ or https://www.emnrd.nm.gov/ocd/ocd-forms/.

From: Ayarbe, John <jayarbe@geo-logic.com>
Sent: Thursday, February 1, 2024 10:56 AM
To: Hall, Brittany, EMNRD <Brittany.Hall@emnrd.nm.gov>
Cc: saskia@thestandardenergy.com; pieter@thestandardenergy.com
Subject: [EXTERNAL] Buckeye State AF #003 remediation plan extension request

Hi Brittany,

I'm submitting this email to you on behalf of Buckeye Disposal LLC (Buckeye) to request an extension for the submittal of a revised remediation plan for the State AF #003 site near Hobbs, New Mexico (incident #s NOY1813152090 and NKL1625134663).

We are seeking a 90-day extension from tomorrow (due date of 5/2/2024). We are working with the State Land Office to better characterize conditions at the site and need time to coordinate field activities and obtain access and clearances (i.e., cultural compliance). Results of the characterization activities will be used to develop the remediation plan.

Thanks!

John P. Ayarbe
Senior Hydrogeologist

Daniel B. Stephens & Associates, Inc.
a Geo-Logic Company
6020 Academy Road NE, Suite 100
Albuquerque, New Mexico 87109
Office: (505) 822-9400 | Direct: (505) 353-9137
Mobile: (505) 280-4339
jayarbe@dbstephens.com or jayarbe@geo-logic.com

www.dbstephens.com | [www.geo-logic.com]www.geo-logic.com

Outlook

[EXTERNAL] RE: Remediation plan for nOY1813152090 and nKL1625134663

From Ayarbe, John <jayarbe@geo-logic.com>
Date Tue 7/2/2024 10:32 AM
To Hall, Brittany, EMNRD <Brittany.Hall@emnrd.nm.gov>
Cc Moellenberg, Dalva L. <dlm@gknet.com>; saskia@thestandardenergy.com <saskia@thestandardenergy.com>; pieter@thestandardenergy.com <pieter@thestandardenergy.com>; Smith, Cory, EMNRD <cory.smith@emnrd.nm.gov>; Romero, Rosa, EMNRD <RosaM.Romero@emnrd.nm.gov>; Bratcher, Michael, EMNRD <mike.bratcher@emnrd.nm.gov>

Ms. Hall,

The State Land Office approved Buckeye's site assessment plan (SAP) last Friday (6/28/2024). As you know, the investigation activities proposed in the SAP are needed for the Site Characterization and Remediation Plan that we intend to submit to OCD. We've been including you on the emails to SLO regarding the SAP to keep you updated but should have formally requested another extension. I apologize.

I was under the impression that meeting the additional requirements of SLO was inline with us also meeting your expectations for the two documented releases and collection of data to support remediation and reclamation. We intend to report all data collected during implementation of the SAP to OCD in the Site Characterization and Remediation Plan.

SLO just approved the SAP. We still need to obtain a Right-of-Entry permit and consult with the SLO Cultural Resources Office. I'm starting these additional requirements this week and will have a better idea of when we can start investigation activities and submit the Site Characterization and Remediation Plan to OCD after I make headway on these two requirements.

Thanks!

John P. Ayarbe
Senior Hydrogeologist

Daniel B. Stephens & Associates, Inc.
a Geo-Logic Company
Direct: (505) 353-9137
Mobile: (505) 280-4339

From: Hall, Brittany, EMNRD <Brittany.Hall@emnrd.nm.gov>
Sent: Monday, July 1, 2024 11:39 AM
To: Ayarbe, John <jayarbe@geo-logic.com>
Cc: Moellenberg, Dalva L. <dlm@gknet.com>; saskia@thestandardenergy.com; pieter@thestandardenergy.com; Smith, Cory, EMNRD <cory.smith@emnrd.nm.gov>; Romero, Rosa, EMNRD <RosaM.Romero@emnrd.nm.gov>; Bratcher, Michael, EMNRD <mike.bratcher@emnrd.nm.gov>
Subject: Remediation plan for nOY1813152090 and nKL1625134663

Mr. Ayarbe,

The OCD is requesting a status update on the submission of a Site Characterization and Remediation Plan for the State AF #003 (incident #nOY1813152090 and incident #nKL1625134663). Two extensions were approved on 12/5/2023 and 2/1/2024. The Site Characterization and Remediation Plan was due to the OCD on 5/2/2024 as communicated in email correspondence between you and I on 2/1/2023. These releases are 60 days out of compliance and may be subject to compliance and enforcement penalties which includes civil penalties pursuant to 19.15.5 NMAC.

The OCD has jurisdiction to regulate oil & gas unauthorized releases and the operators who control those locations pursuant to 19.15.29 NMAC. Additional requirements imposed on the operator from other regulatory agencies for potential releases that have not been reported to the OCD are not acceptable reasons to not meet the requirements of 19.15.29 NMAC for the reported releases. Please be advised that any additional unauthorized releases discovered during SLO mandated delineation activities will need to be reported to the OCD.

Does the approval from SLO on 6/26/2024 give Buckeye Disposal, LLC the clearances to begin the delineation of nOY1813152090 and nKL1625134663? Incident nOY1813152090 was discovered 2,258 days ago and nKL1625134663 was discovered 2,876 days ago, yet Buckeye Disposal, LLC has not performed any remediation at the site. The OCD is also requesting a date on when Buckeye will submit a complete Site Characterization and Remediation Plan through OCD Permitting for both incidents.

Thank you,
Brittany Hall ● Environmental Specialist
Environmental Bureau Projects Group
EMNRD - Oil Conservation Division
1000 Rio Brazos Road | Aztec, NM 87110
505.517.5333 | Brittany.Hall@emnrd.nm.gov
http://www.emnrd.nm.gov/ocd/

Please be advised that the new Digital C-141 is live as of December 1, 2023. Please review the new Digital C-141 submission Dec 1, 2023 Guidance document posted on the EMRND Website prior to submitting any C-141s. The guidance documents can be found at https://www.emnrd.nm.gov/ocd/ocd-announcements-and-notifications/ or https://www.emnrd.nm.gov/ocd/ocd-forms/.

Outlook

RE: [EXTERNAL] RE: Buckeye State AF #003 SWD, Site Assessment Plan

From saskia@thestandardenergy.com <saskia@thestandardenergy.com>
Date Tue 9/24/2024 10:02 AM
To Hall, Brittany, EMNRD <Brittany.Hall@emnrd.nm.gov>
Cc Moellenberg, Dalva L. <dlm@gknet.com>; pieter@bergsteinenterprises.com <pieter@bergsteinenterprises.com>; tknight <tknight@slo.state.nm.us>; 'Heltman, Elaine G.' <eheltman@slo.state.nm.us>; 'Crosby, Faith' <fcrosby@slo.state.nm.us>; Smith, Cory, EMNRD <cory.smith@emnrd.nm.gov>; Powell, Brandon, EMNRD <Brandon.Powell@emnrd.nm.gov>; Romero, Rosa, EMNRD <RosaM.Romero@emnrd.nm.gov>; 'Bisbey-Kuehn, Elizabeth A.' <ebisbeykuehn@nmslo.gov>; 'Barnes, Will' <wbarnes@nmslo.gov>; 'Biernoff, Ari' <abiernoff@slo.state.nm.us>; 'Ayarbe, John' <jayarbe@geo-logic.com>

Hi Brittany,

We will keep you updated as the progress continues.

It is my understanding that all of the SLO requirements have been completed as the cultural survey was done last week. Once we get a copy of the survey, John or I will provide it to you and SLO.

At this point the only thing we are waiting on to implement the SLO approved delineation plan is the driller schedule. As far as I am aware no additional sampling has been done since May of 2023.

Once we have confirmed dates from the driller we will share them with you and SLO.

Best,
Saskia

From: Hall, Brittany, EMNRD <Brittany.Hall@emnrd.nm.gov>
Sent: Monday, September 23, 2024 3:34 PM
To: saskia@thestandardenergy.com
Cc: Moellenberg, Dalva L. <dlm@gknet.com>; pieter@bergsteinenterprises.com; tknight <tknight@slo.state.nm.us>; 'Heltman, Elaine G.' <eheltman@slo.state.nm.us>; 'Crosby, Faith' <fcrosby@slo.state.nm.us>; Smith, Cory, EMNRD <cory.smith@emnrd.nm.gov>; Powell, Brandon, EMNRD <Brandon.Powell@emnrd.nm.gov>; Romero, Rosa, EMNRD <RosaM.Romero@emnrd.nm.gov>; 'Bisbey-Kuehn, Elizabeth A.' <ebisbeykuehn@nmslo.gov>; 'Barnes, Will' <wbarnes@nmslo.gov>; 'Biernoff, Ari' <abiernoff@slo.state.nm.us>; 'Ayarbe, John' <jayarbe@geo-logic.com>
Subject: RE: [EXTERNAL] RE: Buckeye State AF #003 SWD, Site Assessment Plan

Saskia,

Thank you for the update. Please continue to keep OCD informed as the delineation of the site is started, in progress, and completed. A remediation plan must be submitted to the OCD through the Permitting website when delineation is complete.

Are all SLO requirements (ROW/ROE, cultural surveys, etc.) completed? If so, can the SLO approved delineation plan be implemented? Has any additional soil sampling been completed at the site since May 2023?

Can you also please provide the dates that the driller will be available to install the soil borings?

Thank you,
Brittany Hall • Environmental Specialist
Environmental Bureau Projects Group

EMNRD - Oil Conservation Division
1000 Rio Brazos Road | Aztec, NM 87110
505.517.5333 | Brittany.Hall@emnrd.nm.gov
http://www.emnrd.nm.gov/ocd/

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From: saskia@thestandardenergy.com <saskia@thestandardenergy.com>
Sent: Monday, September 23, 2024 1:32 PM
To: 'Biernoff, Ari' <abiernoff@slo.state.nm.us>; Hall, Brittany, EMNRD <Brittany.Hall@emnrd.nm.gov>; 'Ayarbe, John' <jayarbe@geo-logic.com>
Cc: Moellenberg, Dalva L. <dlm@gknet.com>; pieter@bergsteinenterprises.com; tknight <tknight@slo.state.nm.us>; 'Heltman, Elaine G.' <eheltman@slo.state.nm.us>; 'Crosby, Faith' <fcrosby@slo.state.nm.us>; Smith, Cory, EMNRD <cory.smith@emnrd.nm.gov>; Powell, Brandon, EMNRD <Brandon.Powell@emnrd.nm.gov>; Romero, Rosa, EMNRD <RosaM.Romero@emnrd.nm.gov>; 'Bisbey-Kuehn, Elizabeth A.' <ebisbeykuehn@nmslo.gov>; 'Barnes, Will' <wbarnes@nmslo.gov>
Subject: FW: [EXTERNAL] RE: Buckeye State AF #003 SWD, Site Assessment Plan

Hi all,

I received a mail delivery failure notification for all of the recipients at SLO on this thread so I am resending it using an alternate email address I have for all the SLO folks.

See update below:

From: saskia@thestandardenergy.com <saskia@thestandardenergy.com>
Sent: Monday, September 23, 2024 2:08 PM
To: 'Biernoff, Ari' <abiernoff@nmslo.gov>; 'Hall, Brittany, EMNRD' <Brittany.Hall@emnrd.nm.gov>; 'Ayarbe, John' <jayarbe@geo-logic.com>
Cc: 'Moellenberg, Dalva L.' <dlm@gknet.com>; 'pieter@thestandardenergy.com' <pieter@thestandardenergy.com>; 'Knight, Tami C.' <tknight@nmslo.gov>; 'Heltman, Elaine G.' <eheltman@nmslo.gov>; 'Crosby, Faith' <fcrosby@nmslo.gov>; 'Smith, Cory, EMNRD' <cory.smith@emnrd.nm.gov>; 'Powell, Brandon, EMNRD' <Brandon.Powell@emnrd.nm.gov>; 'Romero, Rosa, EMNRD' <RosaM.Romero@emnrd.nm.gov>; 'Bisbey-Kuehn, Elizabeth A.' <ebisbeykuehn@nmslo.gov>; 'Barnes, Will' <wbarnes@nmslo.gov>
Subject: RE: [EXTERNAL] RE: Buckeye State AF #003 SWD, Site Assessment Plan

Hi Brittany,

I apologize for the lack in communications directly to you regarding this project. I want to assure you we have been working on this and we have no intention in causing any intentional delays.

We had a delay in the right of way paperwork as there was some confusion on the correct lease to be used. Once we got the correct lease document, we e-signed it and returned it right away.

Before we can complete the agreed upon delineation testing, we had to complete a cultural resources survey. I followed up with John Ayarbe with Daniel B Stephens and he said this survey was completed last week. There are no concerns and we should the report this week.

The ground is very hard at this location so John is currently working on getting cost estimates and schedule availability for a driller to come out and drill boreholes to collect samples. We also believe that with a driller, we will be able to collect better data and minimize disturbance of the site.

I will continue to send you updates once we lock down a date with the driller.

Please consider this communication to represent our intentions and understanding of the seriousness and urgency of this matter. We not only aim to avoid penalties, but we want to get this project completed and move forward without delay.

Best,
Saskia

From: saskia@thestandardenergy.com <saskia@thestandardenergy.com>
Sent: Wednesday, September 18, 2024 4:01 PM
To: 'Biernoff, Ari' <abiernoff@nmslo.gov>; 'Hall, Brittany, EMNRD' <Brittany.Hall@emnrd.nm.gov>; 'Ayarbe, John' <jayarbe@geo-logic.com>
Cc: 'Moellenberg, Dalva L.' <dlm@gknet.com>; 'pieter@thestandardenergy.com' <pieter@thestandardenergy.com>; 'Knight, Tami C.' <tknight@nmslo.gov>; 'Heltman, Elaine G.' <eheltman@nmslo.gov>; 'Crosby, Faith' <fcrosby@nmslo.gov>; 'Smith, Cory, EMNRD' <cory.smith@emnrd.nm.gov>; 'Powell, Brandon, EMNRD' <Brandon.Powell@emnrd.nm.gov>; 'Romero, Rosa, EMNRD' <RosaM.Romero@emnrd.nm.gov>; 'Bisbey-Kuehn, Elizabeth A.' <ebisbeykuehn@nmslo.gov>; 'Barnes, Will' <wbarnes@nmslo.gov>
Subject: RE: [EXTERNAL] RE: Buckeye State AF #003 SWD, Site Assessment Plan

Will do!

Thank you!

Saskia

From: Biernoff, Ari <abiernoff@nmslo.gov>
Sent: Wednesday, September 18, 2024 3:19 PM
To: saskia@thestandardenergy.com; 'Hall, Brittany, EMNRD' <Brittany.Hall@emnrd.nm.gov>; 'Ayarbe, John' <jayarbe@geo-logic.com>
Cc: 'Moellenberg, Dalva L.' <dlm@gknet.com>; pieter@thestandardenergy.com; Knight, Tami C. <tknight@nmslo.gov>; Heltman, Elaine G. <eheltman@nmslo.gov>; Crosby, Faith <fcrosby@nmslo.gov>; 'Smith, Cory, EMNRD' <cory.smith@emnrd.nm.gov>; 'Powell, Brandon, EMNRD' <Brandon.Powell@emnrd.nm.gov>; 'Romero, Rosa, EMNRD' <RosaM.Romero@emnrd.nm.gov>; Bisbey-Kuehn, Elizabeth A. <ebisbeykuehn@nmslo.gov>; Barnes, Will <wbarnes@nmslo.gov>
Subject: RE: [EXTERNAL] RE: Buckeye State AF #003 SWD, Site Assessment Plan

Saskia/Dal et al. –
Please make sure to cc the State Land Office (everyone cc'd on this email) on any communications you have with OCD regarding this site.
/Ari Biernoff

From: saskia@thestandardenergy.com <saskia@thestandardenergy.com>
Sent: Wednesday, September 18, 2024 2:18 PM
To: 'Hall, Brittany, EMNRD' <Brittany.Hall@emnrd.nm.gov>; Biernoff, Ari <abiernoff@nmslo.gov>; 'Ayarbe, John' <jayarbe@geo-logic.com>
Cc: 'Moellenberg, Dalva L.' <dlm@gknet.com>; pieter@thestandardenergy.com; Knight, Tami C. <tknight@nmslo.gov>; Heltman, Elaine G. <eheltman@nmslo.gov>; Crosby, Faith <fcrosby@nmslo.gov>; 'Smith, Cory, EMNRD' <cory.smith@emnrd.nm.gov>; 'Powell, Brandon, EMNRD' <Brandon.Powell@emnrd.nm.gov>; 'Romero, Rosa, EMNRD' <RosaM.Romero@emnrd.nm.gov>
Subject: RE: [EXTERNAL] RE: Buckeye State AF #003 SWD, Site Assessment Plan

Hi Brittany,

I understand and acknowledge receipt of your email.

We are working on this and making strides. With the urgency and importance of our response I feel that it we need to consult with our legal counsel before sending a formal response. I am trying to get a call schedule for tomorrow morning.

Please know that we understand the importance of pushing forward with this project and we will do anything we can to prevent further delays.

Best,
Saskia

From: Hall, Brittany, EMNRD <Brittany.Hall@emnrd.nm.gov>
Sent: Tuesday, September 17, 2024 10:37 AM
To: Biernoff, Ari <abiernoff@slo.state.nm.us>; Ayarbe, John <jayarbe@geo-logic.com>
Cc: Moellenberg, Dalva L. <dlm@gknet.com>; saskia@thestandardenergy.com; pieter@thestandardenergy.com; tknight <tknight@slo.state.nm.us>; Heltman, Elaine G. <eheltman@slo.state.nm.us>; Crosby, Faith <fcrosby@slo.state.nm.us>; Smith, Cory, EMNRD <cory.smith@emnrd.nm.gov>; Powell, Brandon, EMNRD <Brandon.Powell@emnrd.nm.gov>; Romero, Rosa, EMNRD <RosaM.Romero@emnrd.nm.gov>
Subject: RE: [EXTERNAL] RE: Buckeye State AF #003 SWD, Site Assessment Plan

John and Buckeye Disposal L.L.C. representatives,

Incident numbers, nOY1813152090 and nKL1625134663, associated with the State AF #003 (30-025-20980) are out of compliance. Both incidents were granted 90-day extension requests on February 1, 2024, to facility Buckeye Disposal's compliance with the New Mexico State Land Office's (SLO) requirements. Site Characterization and Remediation Plans or Remediation Closure Reports were required to be submitted to OCD Permitting no later than May 2, 2024. As of today, September 17, 2024, OCD has not received any submittals for these two incidents.

OCD will not approve any additional extension requests for nOY1813152090 and nKL1625134663. Remediation of these releases must be completed pursuant to 19.15.29 NMAC, including submission of approvable remediation plans, remediation closure reports, reclamation reports, and revegetation reports. OCD will use its enforcement discretion to determine if additional enforcement action is warranted. Cooperation from Buckeye Disposal L.L.C. will be considered when determining any enforcement actions, which may include civil penalties.

Thank you,
Brittany Hall • Environmental Specialist
Environmental Bureau Projects Group
EMNRD - Oil Conservation Division
1000 Rio Brazos Road | Aztec, NM 87110
505.517.5333 | Brittany.Hall@emnrd.nm.gov
http://www.emnrd.nm.gov/ocd/

Please be advised that the new Digital C-141 is live as of December 1, 2023. Please review the new Digital C-141 submission Dec 1, 2023 Guidance document posted on the EMRND Website prior to submitting any C-141s. The guidance documents can be found at https://www.emnrd.nm.gov/ocd/ocd-announcements-and-notifications/ or https://www.emnrd.nm.gov/ocd/ocd-forms/.

From: Biernoff, Ari <abiernoff@slo.state.nm.us>
Sent: Thursday, September 5, 2024 4:39 PM
To: Ayarbe, John <jayarbe@geo-logic.com>
Cc: Hall, Brittany, EMNRD <Brittany.Hall@emnrd.nm.gov>; Moellenberg, Dalva L. <dlm@gknet.com>; saskia@thestandardenergy.com; pieter@thestandardenergy.com; tknight <tknight@slo.state.nm.us>; Heltman, Elaine G. <eheltman@slo.state.nm.us>; Crosby, Faith <fcrosby@slo.state.nm.us>
Subject: [EXTERNAL] RE: Buckeye State AF #003 SWD, Site Assessment Plan

OK, John. My understanding is that it took Buckeye and/or DBS a month to sign and mail back the ROE permit. Let us know how we can help to keep this process moving. We'll await further updates.
/Ari

From: Ayarbe, John <jayarbe@geo-logic.com>
Sent: Thursday, September 5, 2024 3:46 PM
To: Biernoff, Ari <abiernoff@slo.state.nm.us>
Cc: Hall, Brittany, EMNRD <Brittany.Hall@emnrd.nm.gov>; Dalva Moellenberg <DLM@gknet.com>; saskia@thestandardenergy.com; pieter@thestandardenergy.com; Knight, Tami C. <tknight@slo.state.nm.us>; Heltman, Elaine G. <eheltman@slo.state.nm.us>; Crosby, Faith <fcrosby@slo.state.nm.us>
Subject: [EXTERNAL] RE: Buckeye State AF #003 SWD, Site Assessment Plan

Ari,

I received the Right-of-Entry permit yesterday. I'm coordinating the cultural resource evaluation now. I'll let you know when the cultural resource evaluation is complete and we have the field work scheduled.

Thanks,

John P. Ayarbe
Senior Hydrogeologist

Daniel B. Stephens & Associates, Inc.
a Geo-Logic Company
Direct: (505) 353-9137
Mobile: (505) 280-4339

From: Biernoff, Ari <abiernoff@slo.state.nm.us>
Sent: Wednesday, September 4, 2024 7:01 PM
To: Ayarbe, John <jayarbe@geo-logic.com>
Cc: Hall, Brittany, EMNRD <Brittany.Hall@emnrd.nm.gov>; Dalva Moellenberg <DLM@gknet.com>; saskia@thestandardenergy.com; pieter@thestandardenergy.com; Knight, Tami C. <tknight@slo.state.nm.us>; Heltman, Elaine G. <eheltman@slo.state.nm.us>; Crosby, Faith <fcrosby@slo.state.nm.us>
Subject: RE: Buckeye State AF #003 SWD, Site Assessment Plan

John, can you please give us an update on sampling activities. /Ari Biernoff

---

From: Biernoff, Ari
Sent: Tuesday, July 16, 2024 10:34 AM
To: Ayarbe, John <jayarbe@geo-logic.com>
Cc: Hall, Brittany, EMNRD <Brittany.Hall@emnrd.nm.gov>; Dalva Moellenberg <DLM@gknet.com>; saskia@thestandardenergy.com; pieter@thestandardenergy.com; Knight, Tami C. <tknight@slo.state.nm.us>; Heltman, Elaine G. <eheltman@slo.state.nm.us>; Crosby, Faith <fcrosby@slo.state.nm.us>
Subject: RE: Buckeye State AF #003 SWD, Site Assessment Plan

Thanks for the update.

From: Ayarbe, John <jayarbe@geo-logic.com>
Sent: Tuesday, July 16, 2024 10:33 AM
To: Biernoff, Ari <abiernoff@slo.state.nm.us>
Cc: Hall, Brittany, EMNRD <Brittany.Hall@emnrd.nm.gov>; Dalva Moellenberg <DLM@gknet.com>; saskia@thestandardenergy.com; pieter@thestandardenergy.com; Knight, Tami C. <tknight@slo.state.nm.us>; Heltman, Elaine G. <eheltman@slo.state.nm.us>; Crosby, Faith <fcrosby@slo.state.nm.us>
Subject: [EXTERNAL] Re: Buckeye State AF #003 SWD, Site Assessment Plan

Ari,

Field activities have not started. We submitted our Right-of-Entry application and fees to SLO yesterday. We are also working on the cultural clearance.

Thanks!
John

Sent from my iPhone

> On Jul 16, 2024, at 9:33 AM, Biernoff, Ari <abiernoff@slo.state.nm.us> wrote:
>
> John, has delineation started yet? /Ari Biernoff
>
> ---
>
> **From:** Biernoff, Ari
> **Sent:** Friday, June 28, 2024 8:25 AM
> **To:** Ayarbe, John <jayarbe@geo-logic.com>
> **Cc:** Hall, Brittany, EMNRD <Brittany.Hall@emnrd.nm.gov>; 'Dalva Moellenberg' <DLM@gknet.com>; saskia@thestandardenergy.com; pieter@thestandardenergy.com; Knight, Tami C. <tknight@slo.state.nm.us>; Heltman, Elaine G. <eheltman@slo.state.nm.us>; Crosby, Faith <fcrosby@slo.state.nm.us>
> **Subject:** RE: Buckeye State AF #003 SWD, Site Assessment Plan
>
> John, thanks for addressing our question/comment. We are ready to see DBS/Buckeye proceed with the delineation along the lines we discussed at our meeting last week and memorialized in your letter from yesterday. /Ari Biernoff
>
> ---
>
> **From:** Ayarbe, John <jayarbe@geo-logic.com>
> **Sent:** Thursday, June 27, 2024 6:22 PM
> **To:** Biernoff, Ari <abiernoff@slo.state.nm.us>; Knight, Tami C. <tknight@slo.state.nm.us>
> **Cc:** Hall, Brittany, EMNRD <Brittany.Hall@emnrd.nm.gov>; 'Dalva Moellenberg' <DLM@gknet.com>; saskia@thestandardenergy.com; pieter@thestandardenergy.com
> **Subject:** [EXTERNAL] Buckeye State AF #003 SWD, Site Assessment Plan
>
> Hi Ari and Tami,
>
> Attached is our final version of the letter regarding the conditions of approval for the site assessment plan and our understanding from last week's meeting and subsequent emails.
>
> We're still working to find information showing the Vanguard line.
>
> Thanks!
>
> **John P. Ayarbe**
> Senior Hydrogeologist

Daniel B. Stephens & Associates, Inc.
a Geo-Logic Company
6020 Academy Road NE, Suite 100
Albuquerque, New Mexico 87109
Office: (505) 822-9400 | Direct: (505) 353-9137
Mobile: (505) 280-4339
jayarbe@dbstephens.com or jayarbe@geo-logic.com

www.dbstephens.com | www.geo-logic.com

Outlook

RE: [EXTERNAL] RE: Buckeye State AF #003 SWD, Site Assessment Plan

From Ayarbe, John <jayarbe@geo-logic.com>
Date Fri 12/6/2024 12:01 PM
To Hall, Brittany, EMNRD <Brittany.Hall@emnrd.nm.gov>; saskia@thestandardenergy.com <saskia@thestandardenergy.com>; 'Biernoff, Ari' <abiernoff@nmslo.gov>
Cc Moellenberg, Dalva L. <dlm@gknet.com>; pieter@thestandardenergy.com <pieter@thestandardenergy.com>; 'Heltman, Elaine G.' <eheltman@nmslo.gov>; 'Crosby, Faith' <fcrosby@nmslo.gov>; Smith, Cory, EMNRD <cory.smith@emnrd.nm.gov>; Powell, Brandon, EMNRD <Brandon.Powell@emnrd.nm.gov>; Romero, Rosa, EMNRD <RosaM.Romero@emnrd.nm.gov>; 'Bisbey-Kuehn, Elizabeth A.' <ebisbeykuehn@nmslo.gov>; 'Barnes, Will' <wbarnes@nmslo.gov>; 'Knight, Tami C.' <tknight@nmslo.gov>

Brittany,

We are analyzing the EM survey data now and expect to be done in a week or two. I understand that it's taking longer than expected to address remediation and reclamation of incidents nOY1813152090 and nKL1625134663; however, our investigation area covers a much larger region than where the two spills occurred (i.e., within the former AST containment) and we are also trying to satisfy SLO requests.

We'll let you know once analysis of the EM survey data is complete and have scheduled drilling. After the investigation work is complete, we'll be in a better position to provide a schedule for remediation and reclamation.

Thanks,

John P. Ayarbe
Senior Hydrogeologist

Daniel B. Stephens & Associates, Inc.
a Geo-Logic Company
Direct: (505) 353-9137
Mobile: (505) 280-4339

From: Hall, Brittany, EMNRD <Brittany.Hall@emnrd.nm.gov>
Sent: Thursday, December 5, 2024 1:35 PM
To: saskia@thestandardenergy.com; 'Biernoff, Ari' <abiernoff@nmslo.gov>; Ayarbe, John <jayarbe@geo-logic.com>
Cc: Moellenberg, Dalva L. <dlm@gknet.com>; pieter@thestandardenergy.com; 'Heltman, Elaine G.' <eheltman@nmslo.gov>; 'Crosby, Faith' <fcrosby@nmslo.gov>; Smith, Cory, EMNRD <cory.smith@emnrd.nm.gov>; Powell, Brandon, EMNRD <Brandon.Powell@emnrd.nm.gov>; Romero, Rosa, EMNRD <RosaM.Romero@emnrd.nm.gov>; 'Bisbey-Kuehn, Elizabeth A.' <ebisbeykuehn@nmslo.gov>; 'Barnes, Will' <wbarnes@nmslo.gov>; 'Knight, Tami C.' <tknight@nmslo.gov>
Subject: RE: [EXTERNAL] RE: Buckeye State AF #003 SWD, Site Assessment Plan

Saskia,

As requested on November 19, 2024, please send a detail timeframe for the remediation and reclamation of incident numbers nOY1813152090 and nKL1625134663. Include any correspondence from all drilling contractors that have been contacted,

including correspondence on when rigs are available. Additionally, please include a timeline of events that have occurred since the date of discovery of each incident.

These incidents had due dates of May 2, 2024, which was 217 days ago. Per previous emails, the EM survey was completed on October 8th and the results were being processed. Has that been completed? If so, please send a copy of the EM survey with the requested timeframe and timeline.

Thank you,
Brittany Hall ● Environmental Specialist
Environmental Bureau Projects Group
EMNRD - Oil Conservation Division
1000 Rio Brazos Road | Aztec, NM 87110
505.517.5333 | Brittany.Hall@emnrd.nm.gov
http://www.emnrd.nm.gov/ocd/

Effective 12/1/2024: OCD has updated guidance on karst potential occurrence zones. This notice can be found at: https://www.emnrd.nm.gov/ocd/ocd-announcements-and-notifications/ under "2024 OCD ANNOUNCEMENTS AND NOTIFICATIONS".

The Digital C-141 guidance documents can be found at https://www.emnrd.nm.gov/ocd/ocd-announcements-and-notifications/ or https://www.emnrd.nm.gov/ocd/ocd-forms/.

From: saskia@thestandardenergy.com <saskia@thestandardenergy.com>
Sent: Thursday, December 5, 2024 1:19 PM
To: 'Biernoff, Ari' <abiernoff@nmslo.gov>; Hall, Brittany, EMNRD <Brittany.Hall@emnrd.nm.gov>; 'Ayarbe, John' <jayarbe@geo-logic.com>
Cc: Moellenberg, Dalva L. <dlm@gknet.com>; pieter@thestandardenergy.com; 'Heltman, Elaine G.' <eheltman@nmslo.gov>; 'Crosby, Faith' <fcrosby@nmslo.gov>; Smith, Cory, EMNRD <cory.smith@emnrd.nm.gov>; Powell, Brandon, EMNRD <Brandon.Powell@emnrd.nm.gov>; Romero, Rosa, EMNRD <RosaM.Romero@emnrd.nm.gov>; 'Bisbey-Kuehn, Elizabeth A.' <ebisbeykuehn@nmslo.gov>; 'Barnes, Will' <wbarnes@nmslo.gov>; 'Knight, Tami C.' <tknight@nmslo.gov>
Subject: RE: [EXTERNAL] RE: Buckeye State AF #003 SWD, Site Assessment Plan

As of right now, we have been talking to several drillers to get scheduled. All of them say that we are looking at February before they can schedule our project.

Pieter, John, and I have a call scheduled for early next week to discuss options.

Please accept my apologies as this is a very large scale project and we want to be sure that we get it right. We have no desire to drag this on at all. I will be in touch next week after our meeting.

Best,
Saskia

From: Biernoff, Ari <abiernoff@nmslo.gov>
Sent: Thursday, December 5, 2024 1:54 PM
To: saskia@thestandardenergy.com; 'Hall, Brittany, EMNRD' <Brittany.Hall@emnrd.nm.gov>; 'Ayarbe, John' <jayarbe@geo-logic.com>
Cc: 'Moellenberg, Dalva L.' <dlm@gknet.com>; pieter@thestandardenergy.com; Heltman, Elaine G. <eheltman@nmslo.gov>; Crosby, Faith <fcrosby@nmslo.gov>; 'Smith, Cory, EMNRD' <cory.smith@emnrd.nm.gov>; 'Powell, Brandon, EMNRD' <Brandon.Powell@emnrd.nm.gov>; 'Romero, Rosa, EMNRD' <RosaM.Romero@emnrd.nm.gov>; Bisbey-Kuehn, Elizabeth A. <ebisbeykuehn@nmslo.gov>; Barnes, Will <wbarnes@nmslo.gov>; Knight, Tami C. <tknight@nmslo.gov>
Subject: RE: [EXTERNAL] RE: Buckeye State AF #003 SWD, Site Assessment Plan

Saskia-

You all need to move a lot faster. We've been waiting on the drilling to be scheduled for months. There are numerous vendors that could perform this work. We need a firm date in the near future. This project will not be allowed to drag out for years, or even another year. Work needs to begin soon and analysis is obviously the first step.
/Ari Biernoff

From: saskia@thestandardenergy.com <saskia@thestandardenergy.com>
Sent: Thursday, December 5, 2024 8:45 AM
To: Biernoff, Ari <abiernoff@nmslo.gov>; 'Hall, Brittany, EMNRD' <Brittany.Hall@emnrd.nm.gov>; 'Ayarbe, John' <jayarbe@geo-logic.com>
Cc: 'Moellenberg, Dalva L.' <dlm@gknet.com>; pieter@thestandardenergy.com; Heltman, Elaine G. <eheltman@nmslo.gov>; Crosby, Faith <fcrosby@nmslo.gov>; 'Smith, Cory, EMNRD' <cory.smith@emnrd.nm.gov>; 'Powell, Brandon, EMNRD' <Brandon.Powell@emnrd.nm.gov>; 'Romero, Rosa, EMNRD' <RosaM.Romero@emnrd.nm.gov>; Bisbey-Kuehn, Elizabeth A. <ebisbeykuehn@nmslo.gov>; Barnes, Will <wbarnes@nmslo.gov>; Knight, Tami C. <tknight@nmslo.gov>
Subject: RE: [EXTERNAL] RE: Buckeye State AF #003 SWD, Site Assessment Plan

Hi Ari,

I am sorry, it looks like we might have missed this email from Britany in the Thanksgiving craziness.

We are having bi-weekly meetings with John regarding this project. From our last meeting, it is my understanding that we are just waiting on a date from the driller. We discussed the option of using a backhoe to accelerate the sampling, but decided that we will need to wait for the driller as we ran into some very hard layers that the backhoe couldn't break through when we collected the prior samples that were presented to you all last year.

I will follow up with John today to verify that this is still the status. I believe the holidays have caused some delays in scheduling. I will send a follow up to this email after speaking with John.

Best,
Saskia

From: Biernoff, Ari <abiernoff@nmslo.gov>
Sent: Wednesday, December 4, 2024 5:03 PM
To: Hall, Brittany, EMNRD <Brittany.Hall@emnrd.nm.gov>; Ayarbe, John <jayarbe@geo-logic.com>; saskia@thestandardenergy.com
Cc: Moellenberg, Dalva L. <dlm@gknet.com>; pieter@thestandardenergy.com; Heltman, Elaine G. <eheltman@nmslo.gov>; Crosby, Faith <fcrosby@nmslo.gov>; Smith, Cory, EMNRD <cory.smith@emnrd.nm.gov>; Powell, Brandon, EMNRD <Brandon.Powell@emnrd.nm.gov>; Romero, Rosa, EMNRD <RosaM.Romero@emnrd.nm.gov>; Bisbey-Kuehn, Elizabeth A. <ebisbeykuehn@nmslo.gov>; Barnes, Will <wbarnes@nmslo.gov>; Knight, Tami C. <tknight@nmslo.gov>
Subject: RE: [EXTERNAL] RE: Buckeye State AF #003 SWD, Site Assessment Plan

The lack of communication from Buckeye and its consultants is not going to work. We will have to press our bond claim if we don't get some movement very soon.

From: Biernoff, Ari
Sent: Monday, November 25, 2024 6:34 PM
To: Hall, Brittany, EMNRD <Brittany.Hall@emnrd.nm.gov>; Ayarbe, John <jayarbe@geo-logic.com>; saskia@thestandardenergy.com
Cc: Moellenberg, Dalva L. <dlm@gknet.com>; pieter@thestandardenergy.com; Heltman, Elaine G. <eheltman@nmslo.gov>; Crosby, Faith <fcrosby@nmslo.gov>; Smith, Cory, EMNRD <cory.smith@emnrd.nm.gov>; Powell, Brandon, EMNRD <Brandon.Powell@emnrd.nm.gov>; Romero, Rosa, EMNRD <RosaM.Romero@emnrd.nm.gov>; Bisbey-Kuehn, Elizabeth A. <ebisbeykuehn@nmslo.gov>; Barnes, Will <wbarnes@nmslo.gov>; Knight, Tami C. <tknight@nmslo.gov>
Subject: RE: [EXTERNAL] RE: Buckeye State AF #003 SWD, Site Assessment Plan

Has anyone (John/DBS or Saksia/Buckeye, or counsel) responded to this inquiry? We are concerned that even the preliminary step of conducting drilling and sampling is getting bogged down.

From: Hall, Brittany, EMNRD <Brittany.Hall@emnrd.nm.gov>
Sent: Tuesday, November 19, 2024 7:17 AM
To: Ayarbe, John <jayarbe@geo-logic.com>; saskia@thestandardenergy.com
Cc: Moellenberg, Dalva L. <dlm@gknet.com>; pieter@thestandardenergy.com; Heltman, Elaine G. <eheltman@nmslo.gov>; Crosby, Faith <fcrosby@nmslo.gov>; Smith, Cory, EMNRD <cory.smith@emnrd.nm.gov>; Powell, Brandon, EMNRD <Brandon.Powell@emnrd.nm.gov>; Romero, Rosa, EMNRD <RosaM.Romero@emnrd.nm.gov>; Bisbey-Kuehn, Elizabeth A. <ebisbeykuehn@nmslo.gov>; Barnes, Will <wbarnes@nmslo.gov>; Biernoff, Ari <abiernoff@nmslo.gov>; Knight, Tami C. <tknight@nmslo.gov>
Subject: RE: [EXTERNAL] RE: Buckeye State AF #003 SWD, Site Assessment Plan

John,

Has a drill rig been scheduled? OCD is requesting a detail timeframe for the remediation and reclamation of incident numbers nOY1813152090 and nKL1625134663. Reports were due to the OCD on 5/2/2024 and as of today, no C-141s have been submitted for either incident number.

Thank you,
Brittany Hall ● Environmental Specialist
Environmental Bureau Projects Group
EMNRD - Oil Conservation Division
1000 Rio Brazos Road | Aztec, NM 87110
505.517.5333 | Brittany.Hall@emnrd.nm.gov
http://www.emnrd.nm.gov/ocd/

Effective 12/1/2024: OCD has updated guidance on karst potential occurrence zones. This notice can be found at: https://www.emnrd.nm.gov/ocd/ocd-announcements-and-notifications/ under "2024 OCD ANNOUNCEMENTS AND NOTIFICATIONS".

The Digital C-141 guidance documents can be found at https://www.emnrd.nm.gov/ocd/ocd-announcements-and-notifications/ or https://www.emnrd.nm.gov/ocd/ocd-forms/.

From: Biernoff, Ari <abiernoff@nmslo.gov>
Sent: Monday, November 18, 2024 4:35 PM
To: Ayarbe, John <jayarbe@geo-logic.com>; saskia@thestandardenergy.com; Hall, Brittany, EMNRD <Brittany.Hall@emnrd.nm.gov>; Knight, Tami C. <tknight@nmslo.gov>
Cc: Moellenberg, Dalva L. <dlm@gknet.com>; pieter@thestandardenergy.com; Heltman, Elaine G. <eheltman@nmslo.gov>; Crosby, Faith <fcrosby@nmslo.gov>; Smith, Cory, EMNRD <cory.smith@emnrd.nm.gov>; Powell, Brandon, EMNRD <Brandon.Powell@emnrd.nm.gov>; Romero, Rosa, EMNRD <RosaM.Romero@emnrd.nm.gov>; Bisbey-Kuehn, Elizabeth A. <ebisbeykuehn@nmslo.gov>; Barnes, Will <wbarnes@nmslo.gov>
Subject: RE: [EXTERNAL] RE: Buckeye State AF #003 SWD, Site Assessment Plan

John- please provide us with a time frame for the next step, i.e. drilling and sampling.

From: Ayarbe, John <jayarbe@geo-logic.com>
Sent: Monday, November 18, 2024 3:58 PM
To: saskia@thestandardenergy.com; Biernoff, Ari <abiernoff@nmslo.gov>; 'Hall, Brittany, EMNRD' <Brittany.Hall@emnrd.nm.gov>; Knight, Tami C. <tknight@nmslo.gov>
Cc: 'Moellenberg, Dalva L.' <dlm@gknet.com>; pieter@thestandardenergy.com; Heltman, Elaine G. <eheltman@nmslo.gov>; Crosby, Faith <fcrosby@nmslo.gov>; 'Smith, Cory, EMNRD' <cory.smith@emnrd.nm.gov>; 'Powell, Brandon, EMNRD' <Brandon.Powell@emnrd.nm.gov>; 'Romero, Rosa, EMNRD' <RosaM.Romero@emnrd.nm.gov>; Bisbey-Kuehn, Elizabeth A. <ebisbeykuehn@nmslo.gov>; Barnes, Will <wbarnes@nmslo.gov>
Subject: RE: [EXTERNAL] RE: Buckeye State AF #003 SWD, Site Assessment Plan

Hi Ari,

The EM survey was completed on October 8th. We're processing the results and making plans to drill and sample.

Thanks!

John P. Ayarbe
Senior Hydrogeologist

Daniel B. Stephens & Associates, Inc.
a Geo-Logic Company
Direct: (505) 353-9137
Mobile: (505) 280-4339

From: saskia@thestandardenergy.com <saskia@thestandardenergy.com>
Sent: Tuesday, November 12, 2024 3:43 PM
To: 'Biernoff, Ari' <abiernoff@nmslo.gov>; 'Hall, Brittany, EMNRD' <Brittany.Hall@emnrd.nm.gov>; Ayarbe, John <jayarbe@geo-logic.com>; 'Knight, Tami C.' <tknight@nmslo.gov>
Cc: 'Moellenberg, Dalva L.' <dlm@gknet.com>; pieter@thestandardenergy.com; 'Heltman, Elaine G.' <eheltman@nmslo.gov>; 'Crosby, Faith' <fcrosby@nmslo.gov>; 'Smith, Cory, EMNRD' <cory.smith@emnrd.nm.gov>; 'Powell, Brandon, EMNRD' <Brandon.Powell@emnrd.nm.gov>; 'Romero, Rosa, EMNRD' <RosaM.Romero@emnrd.nm.gov>; 'Bisbey-Kuehn, Elizabeth A.' <ebisbeykuehn@nmslo.gov>; 'Barnes, Will' <wbarnes@nmslo.gov>
Subject: RE: [EXTERNAL] RE: Buckeye State AF #003 SWD, Site Assessment Plan

Hi Ari,

John and I have an touch base call tomorrow and we will report back to you afterwards. I just didn't want you to think we didn't see this or were not responding.

Saskia

From: Biernoff, Ari <abiernoff@nmslo.gov>
Sent: Friday, November 8, 2024 2:16 PM
To: Hall, Brittany, EMNRD <Brittany.Hall@emnrd.nm.gov>; Ayarbe, John <jayarbe@geo-logic.com>; Knight, Tami C. <tknight@nmslo.gov>; saskia@thestandardenergy.com
Cc: Moellenberg, Dalva L. <dlm@gknet.com>; pieter@thestandardenergy.com; Heltman, Elaine G. <eheltman@nmslo.gov>; Crosby, Faith <fcrosby@nmslo.gov>; Smith, Cory, EMNRD <cory.smith@emnrd.nm.gov>; Powell, Brandon, EMNRD <Brandon.Powell@emnrd.nm.gov>; Romero, Rosa, EMNRD <RosaM.Romero@emnrd.nm.gov>; Bisbey-Kuehn, Elizabeth A. <ebisbeykuehn@nmslo.gov>; Barnes, Will <wbarnes@nmslo.gov>
Subject: RE: [EXTERNAL] RE: Buckeye State AF #003 SWD, Site Assessment Plan

John, can you please provide us an update on what activities, if any, have taken place since this last (Oct. 7) correspondence. /Ari Biernoff

---

From: Hall, Brittany, EMNRD <Brittany.Hall@emnrd.nm.gov>
Sent: Monday, October 7, 2024 8:46 AM
To: Ayarbe, John <jayarbe@geo-logic.com>; Knight, Tami C. <tknight@nmslo.gov>; Biernoff, Ari <abiernoff@nmslo.gov>; saskia@thestandardenergy.com
Cc: Moellenberg, Dalva L. <dlm@gknet.com>; pieter@thestandardenergy.com; Heltman, Elaine G. <eheltman@nmslo.gov>; Crosby, Faith <fcrosby@nmslo.gov>; Smith, Cory, EMNRD <cory.smith@emnrd.nm.gov>; Powell, Brandon, EMNRD <Brandon.Powell@emnrd.nm.gov>; Romero, Rosa, EMNRD <RosaM.Romero@emnrd.nm.gov>; Bisbey-Kuehn, Elizabeth A.

<ebisbeykuehn@nmslo.gov>; Barnes, Will <wbarnes@nmslo.gov>
Subject: RE: [EXTERNAL] RE: Buckeye State AF #003 SWD, Site Assessment Plan

Im sorry. Just reread the email and I see the EM survey is scheduled for tomorrow.

Thank you,
Brittany Hall ● Environmental Specialist
Environmental Bureau Projects Group
EMNRD - Oil Conservation Division
1000 Rio Brazos Road | Aztec, NM 87110
505.517.5333 | Brittany.Hall@emnrd.nm.gov
http://www.emnrd.nm.gov/ocd/

Please be advised that the new Digital C-141 is live as of December 1, 2023. Please review the new Digital C-141 submission Dec 1, 2023 Guidance document posted on the EMRND Website prior to submitting any C-141s. The guidance documents can be found at https://www.emnrd.nm.gov/ocd/ocd-announcements-and-notifications/ or https://www.emnrd.nm.gov/ocd/ocd-forms/.

From: Ayarbe, John <jayarbe@geo-logic.com>
Sent: Thursday, October 3, 2024 4:18 PM
To: Knight, Tami C. <tknight@nmslo.gov>; Biernoff, Ari <abiernoff@nmslo.gov>; saskia@thestandardenergy.com; Hall, Brittany, EMNRD <Brittany.Hall@emnrd.nm.gov>
Cc: Moellenberg, Dalva L. <dlm@gknet.com>; pieter@thestandardenergy.com; Heltman, Elaine G. <eheltman@nmslo.gov>; Crosby, Faith <fcrosby@nmslo.gov>; Smith, Cory, EMNRD <cory.smith@emnrd.nm.gov>; Powell, Brandon, EMNRD <Brandon.Powell@emnrd.nm.gov>; Romero, Rosa, EMNRD <RosaM.Romero@emnrd.nm.gov>; Bisbey-Kuehn, Elizabeth A. <ebisbeykuehn@nmslo.gov>; Barnes, Will <wbarnes@nmslo.gov>
Subject: RE: [EXTERNAL] RE: Buckeye State AF #003 SWD, Site Assessment Plan

Tami,

We are working with Atkins Engineering. They're conducting the EM survey and will then support the drilling.

Thanks,

John P. Ayarbe
Senior Hydrogeologist

Daniel B. Stephens & Associates, Inc.
a Geo-Logic Company
Direct: (505) 353-9137
Mobile: (505) 280-4339

From: Knight, Tami C. <tknight@nmslo.gov>
Sent: Thursday, October 3, 2024 11:57 AM
To: Ayarbe, John <jayarbe@geo-logic.com>; Biernoff, Ari <abiernoff@nmslo.gov>; saskia@thestandardenergy.com; 'Hall, Brittany, EMNRD' <Brittany.Hall@emnrd.nm.gov>
Cc: 'Moellenberg, Dalva L.' <dlm@gknet.com>; pieter@thestandardenergy.com; Heltman, Elaine G. <eheltman@nmslo.gov>; Crosby, Faith <fcrosby@nmslo.gov>; 'Smith, Cory, EMNRD' <cory.smith@emnrd.nm.gov>; 'Powell, Brandon, EMNRD' <Brandon.Powell@emnrd.nm.gov>; 'Romero, Rosa, EMNRD' <RosaM.Romero@emnrd.nm.gov>; Bisbey-Kuehn, Elizabeth A.

<ebisbeykuehn@nmslo.gov>; Barnes, Will <wbarnes@nmslo.gov>
Subject: RE: [EXTERNAL] RE: Buckeye State AF #003 SWD, Site Assessment Plan

John

Please get a drill rig booked so this project can move forward in a more timely manner. I know it is possible to estimate when you will need a rig and then you get on their schedule. What drilling company are you using?

Thank you

Tami C. Knight, CHMM
Environmental Specialist
Environmental Compliance Office
505.670-1638
New Mexico State Land Office

tknight@nmslo.gov
nmstatelands.org

****My email has changed from tknight@slo.state.nm.us to tknight@nmslo.gov, please update your records to reflect the change. Note changes: spills@nmslo.gov and eco@nmslo.gov.****

From: Ayarbe, John <jayarbe@geo-logic.com>
Sent: Thursday, October 3, 2024 11:52 AM
To: Biernoff, Ari <abiernoff@nmslo.gov>; saskia@thestandardenergy.com; 'Hall, Brittany, EMNRD' <Brittany.Hall@emnrd.nm.gov>
Cc: 'Moellenberg, Dalva L.' <dlm@gknet.com>; pieter@thestandardenergy.com; Knight, Tami C. <tknight@nmslo.gov>; Heltman, Elaine G. <eheltman@nmslo.gov>; Crosby, Faith <fcrosby@nmslo.gov>; 'Smith, Cory, EMNRD' <cory.smith@emnrd.nm.gov>; 'Powell, Brandon, EMNRD' <Brandon.Powell@emnrd.nm.gov>; 'Romero, Rosa, EMNRD' <RosaM.Romero@emnrd.nm.gov>; Bisbey-Kuehn, Elizabeth A. <ebisbeykuehn@nmslo.gov>; Barnes, Will <wbarnes@nmslo.gov>
Subject: RE: [EXTERNAL] RE: Buckeye State AF #003 SWD, Site Assessment Plan

Ari,

The EM survey of the site is scheduled for next Tuesday (10/8). The borehole investigation will follow but we don't have a date for the drilling yet. Results of the EM survey will guide how best to drill and sample.

Boone Archaeological Resource Consultants, LLC completed the cultural resource survey in September. There were no findings, and their report was submitted to SLO.

Thanks,

John P. Ayarbe
Senior Hydrogeologist

Daniel B. Stephens & Associates, Inc.
a Geo-Logic Company
Direct: (505) 353-9137
Mobile: (505) 280-4339

From: Biernoff, Ari <abiernoff@nmslo.gov>
Sent: Wednesday, September 18, 2024 2:19 PM
To: saskia@thestandardenergy.com; 'Hall, Brittany, EMNRD' <Brittany.Hall@emnrd.nm.gov>; Ayarbe, John <jayarbe@geo-logic.com>
Cc: 'Moellenberg, Dalva L.' <dlm@gknet.com>; pieter@thestandardenergy.com; Knight, Tami C. <tknight@nmslo.gov>; Heltman, Elaine G. <eheltman@nmslo.gov>; Crosby, Faith <fcrosby@nmslo.gov>; 'Smith, Cory, EMNRD' <cory.smith@emnrd.nm.gov>; 'Powell, Brandon, EMNRD' <Brandon.Powell@emnrd.nm.gov>; 'Romero, Rosa, EMNRD' <RosaM.Romero@emnrd.nm.gov>; Bisbey-Kuehn, Elizabeth A. <ebisbeykuehn@nmslo.gov>; Barnes, Will <wbarnes@nmslo.gov>
Subject: RE: [EXTERNAL] RE: Buckeye State AF #003 SWD, Site Assessment Plan

Saskia/Dal et al. –
Please make sure to cc the State Land Office (everyone cc'd on this email) on any communications you have with OCD regarding this site.
/Ari Biernoff

From: saskia@thestandardenergy.com <saskia@thestandardenergy.com>
Sent: Wednesday, September 18, 2024 2:18 PM
To: 'Hall, Brittany, EMNRD' <Brittany.Hall@emnrd.nm.gov>; Biernoff, Ari <abiernoff@nmslo.gov>; 'Ayarbe, John' <jayarbe@geo-logic.com>
Cc: 'Moellenberg, Dalva L.' <dlm@gknet.com>; pieter@thestandardenergy.com; Knight, Tami C. <tknight@nmslo.gov>; Heltman, Elaine G. <eheltman@nmslo.gov>; Crosby, Faith <fcrosby@nmslo.gov>; 'Smith, Cory, EMNRD' <cory.smith@emnrd.nm.gov>; 'Powell, Brandon, EMNRD' <Brandon.Powell@emnrd.nm.gov>; 'Romero, Rosa, EMNRD' <RosaM.Romero@emnrd.nm.gov>
Subject: RE: [EXTERNAL] RE: Buckeye State AF #003 SWD, Site Assessment Plan

Hi Brittany,

I understand and acknowledge receipt of your email.

We are working on this and making strides. With the urgency and importance of our response I feel that it we need to consult with our legal counsel before sending a formal response. I am trying to get a call schedule for tomorrow morning.

Please know that we understand the importance of pushing forward with this project and we will do anything we can to prevent further delays.

Best,
Saskia

From: Hall, Brittany, EMNRD <Brittany.Hall@emnrd.nm.gov>
Sent: Tuesday, September 17, 2024 10:37 AM
To: Biernoff, Ari <abiernoff@slo.state.nm.us>; Ayarbe, John <jayarbe@geo-logic.com>
Cc: Moellenberg, Dalva L. <dlm@gknet.com>; saskia@thestandardenergy.com; pieter@thestandardenergy.com; tknight <tknight@slo.state.nm.us>; Heltman, Elaine G. <eheltman@slo.state.nm.us>; Crosby, Faith <fcrosby@slo.state.nm.us>; Smith, Cory, EMNRD <cory.smith@emnrd.nm.gov>; Powell, Brandon, EMNRD <Brandon.Powell@emnrd.nm.gov>; Romero, Rosa, EMNRD <RosaM.Romero@emnrd.nm.gov>
Subject: RE: [EXTERNAL] RE: Buckeye State AF #003 SWD, Site Assessment Plan

John and Buckeye Disposal L.L.C. representatives,

Incident numbers, nOY1813152090 and nKL1625134663, associated with the State AF #003 (30-025-20980) are out of compliance. Both incidents were granted 90-day extension requests on February 1, 2024, to facility Buckeye Disposal's compliance with the New Mexico State Land Office's (SLO) requirements. Site Characterization and Remediation Plans or Remediation Closure Reports were required to be submitted to OCD Permitting no later than May 2, 2024. As of today, September 17, 2024, OCD has not received any submittals for these two incidents.

OCD will not approve any additional extension requests for nOY1813152090 and nKL1625134663. Remediation of these releases must be completed pursuant to 19.15.29 NMAC, including submission of approvable remediation plans, remediation closure reports, reclamation reports, and revegetation reports. OCD will use its enforcement discretion to determine if additional enforcement action is warranted. Cooperation from Buckeye Disposal L.L.C. will be considered when determining any enforcement actions, which may include civil penalties.

Thank you,
Brittany Hall ● Environmental Specialist
Environmental Bureau Projects Group
EMNRD - Oil Conservation Division
1000 Rio Brazos Road | Aztec, NM 87110
505.517.5333 | Brittany.Hall@emnrd.nm.gov
http://www.emnrd.nm.gov/ocd/

Please be advised that the new Digital C-141 is live as of December 1, 2023. Please review the new Digital C-141 submission Dec 1, 2023 Guidance document posted on the EMRND Website prior to submitting any C-141s. The guidance documents can be found at https://www.emnrd.nm.gov/ocd/ocd-announcements-and-notifications/ or https://www.emnrd.nm.gov/ocd/ocd-forms/.

From: Biernoff, Ari <abiernoff@slo.state.nm.us>
Sent: Thursday, September 5, 2024 4:39 PM
To: Ayarbe, John <jayarbe@geo-logic.com>
Cc: Hall, Brittany, EMNRD <Brittany.Hall@emnrd.nm.gov>; Moellenberg, Dalva L. <dlm@gknet.com>; saskia@thestandardenergy.com; pieter@thestandardenergy.com; tknight <tknight@slo.state.nm.us>; Heltman, Elaine G. <eheltman@slo.state.nm.us>; Crosby, Faith <fcrosby@slo.state.nm.us>
Subject: [EXTERNAL] RE: Buckeye State AF #003 SWD, Site Assessment Plan

CAUTION: This email originated outside of our organization. Exercise caution prior to clicking on links or opening attachments.

OK, John. My understanding is that it took Buckeye and/or DBS a month to sign and mail back the ROE permit. Let us know how we can help to keep this process moving. We'll await further updates.
/Ari

From: Ayarbe, John <jayarbe@geo-logic.com>
Sent: Thursday, September 5, 2024 3:46 PM
To: Biernoff, Ari <abiernoff@slo.state.nm.us>
Cc: Hall, Brittany, EMNRD <Brittany.Hall@emnrd.nm.gov>; Dalva Moellenberg <DLM@gknet.com>; saskia@thestandardenergy.com; pieter@thestandardenergy.com; Knight, Tami C. <tknight@slo.state.nm.us>; Heltman, Elaine

G. <eheltman@slo.state.nm.us>; Crosby, Faith <fcrosby@slo.state.nm.us>
Subject: [EXTERNAL] RE: Buckeye State AF #003 SWD, Site Assessment Plan

Ari,

I received the Right-of-Entry permit yesterday. I'm coordinating the cultural resource evaluation now. I'll let you know when the cultural resource evaluation is complete and we have the field work scheduled.

Thanks,

John P. Ayarbe
Senior Hydrogeologist

Daniel B. Stephens & Associates, Inc.
a Geo-Logic Company
Direct: (505) 353-9137
Mobile: (505) 280-4339

From: Biernoff, Ari <abiernoff@slo.state.nm.us>
Sent: Wednesday, September 4, 2024 7:01 PM
To: Ayarbe, John <jayarbe@geo-logic.com>
Cc: Hall, Brittany, EMNRD <Brittany.Hall@emnrd.nm.gov>; Dalva Moellenberg <DLM@gknet.com>; saskia@thestandardenergy.com; pieter@thestandardenergy.com; Knight, Tami C. <tknight@slo.state.nm.us>; Heltman, Elaine G. <eheltman@slo.state.nm.us>; Crosby, Faith <fcrosby@slo.state.nm.us>
Subject: RE: Buckeye State AF #003 SWD, Site Assessment Plan

John, can you please give us an update on sampling activities. /Ari Biernoff

---

From: Biernoff, Ari
Sent: Tuesday, July 16, 2024 10:34 AM
To: Ayarbe, John <jayarbe@geo-logic.com>
Cc: Hall, Brittany, EMNRD <Brittany.Hall@emnrd.nm.gov>; Dalva Moellenberg <DLM@gknet.com>; saskia@thestandardenergy.com; pieter@thestandardenergy.com; Knight, Tami C. <tknight@slo.state.nm.us>; Heltman, Elaine G. <eheltman@slo.state.nm.us>; Crosby, Faith <fcrosby@slo.state.nm.us>
Subject: RE: Buckeye State AF #003 SWD, Site Assessment Plan

Thanks for the update.

From: Ayarbe, John <jayarbe@geo-logic.com>
Sent: Tuesday, July 16, 2024 10:33 AM
To: Biernoff, Ari <abiernoff@slo.state.nm.us>
Cc: Hall, Brittany, EMNRD <Brittany.Hall@emnrd.nm.gov>; Dalva Moellenberg <DLM@gknet.com>; saskia@thestandardenergy.com; pieter@thestandardenergy.com; Knight, Tami C. <tknight@slo.state.nm.us>; Heltman, Elaine G. <eheltman@slo.state.nm.us>; Crosby, Faith <fcrosby@slo.state.nm.us>
Subject: [EXTERNAL] Re: Buckeye State AF #003 SWD, Site Assessment Plan

Ari,

Field activities have not started. We submitted our Right-of-Entry application and fees to SLO yesterday. We are also working on the cultural clearance.

Thanks!
John

Sent from my iPhone

On Jul 16, 2024, at 9:33 AM, Biernoff, Ari <abiernoff@slo.state.nm.us> wrote:

John, has delineation started yet? /Ari Biernoff

From: Biernoff, Ari
Sent: Friday, June 28, 2024 8:25 AM
To: Ayarbe, John <jayarbe@geo-logic.com>
Cc: Hall, Brittany, EMNRD <Brittany.Hall@emnrd.nm.gov>; 'Dalva Moellenberg' <DLM@gknet.com>; saskia@thestandardenergy.com; pieter@thestandardenergy.com; Knight, Tami C. <tknight@slo.state.nm.us>; Heltman, Elaine G. <eheltman@slo.state.nm.us>; Crosby, Faith <fcrosby@slo.state.nm.us>
Subject: RE: Buckeye State AF #003 SWD, Site Assessment Plan

John, thanks for addressing our question/comment. We are ready to see DBS/Buckeye proceed with the delineation along the lines we discussed at our meeting last week and memorialized in your letter from yesterday. /Ari Biernoff

---

From: Ayarbe, John <jayarbe@geo-logic.com>
Sent: Thursday, June 27, 2024 6:22 PM
To: Biernoff, Ari <abiernoff@slo.state.nm.us>; Knight, Tami C. <tknight@slo.state.nm.us>
Cc: Hall, Brittany, EMNRD <Brittany.Hall@emnrd.nm.gov>; 'Dalva Moellenberg' <DLM@gknet.com>; saskia@thestandardenergy.com; pieter@thestandardenergy.com
Subject: [EXTERNAL] Buckeye State AF #003 SWD, Site Assessment Plan

Hi Ari and Tami,

Attached is our final version of the letter regarding the conditions of approval for the site assessment plan and our understanding from last week's meeting and subsequent emails.

We're still working to find information showing the Vanguard line.

Thanks!

John P. Ayarbe
Senior Hydrogeologist

Daniel B. Stephens & Associates, Inc.
a Geo-Logic Company
6020 Academy Road NE, Suite 100
Albuquerque, New Mexico 87109
Office: (505) 822-9400 | Direct: (505) 353-9137
Mobile: (505) 280-4339
jayarbe@dbstephens.com or jayarbe@geo-logic.com

www.dbstephens.com | www.geo-logic.com

Outlook

RE: [EXTERNAL] EM survey results, Buckeye State AF #003 site

From Hall, Brittany, EMNRD <Brittany.Hall@emnrd.nm.gov>
Date Wed 1/8/2025 7:29 AM
To Ayarbe, John <jayarbe@geo-logic.com>; 'Biernoff, Ari' <abiernoff@nmslo.gov>
Cc saskia@thestandardenergy.com <saskia@thestandardenergy.com>; pieter@thestandardenergy.com <pieter@thestandardenergy.com>; Moellenberg, Dalva L. <dlm@gknet.com>; 'Knight, Tami C.' <tknight@nmslo.gov>; Smith, Cory, EMNRD <cory.smith@emnrd.nm.gov>; Bratcher, Michael, EMNRD <mike.bratcher@emnrd.nm.gov>; Romero, Rosa, EMNRD <RosaM.Romero@emnrd.nm.gov>; Powell, Brandon, EMNRD <Brandon.Powell@emnrd.nm.gov>
Bcc Moander, Chris, EMNRD <Chris.Moander@emnrd.nm.gov>; Tremaine, Jesse, EMNRD <JesseK.Tremaine@emnrd.nm.gov>

1 attachment (1 MB)
AF_Excavation Overview.pdf;

John,

Thank you for the information. As Buckeye Disposal, L.L.C. (222759) has not met previous conditions stipulated by the OCD, Buckeye Disposal and these incidents are now under a compliance review.

Thank you,
Brittany Hall • Environmental Specialist
Environmental Bureau Projects Group
EMNRD - Oil Conservation Division
1000 Rio Brazos Road | Aztec, NM 87110
505.517.5333 | Brittany.Hall@emnrd.nm.gov
http://www.emnrd.nm.gov/ocd/

Effective 12/1/2024: OCD has updated guidance on karst potential occurrence zones. This notice can be found at: https://www.emnrd.nm.gov/ocd/ocd-announcements-and-notifications/ under “2024 OCD ANNOUNCEMENTS AND NOTIFICATIONS”.

The Digital C-141 guidance documents can be found at https://www.emnrd.nm.gov/ocd/ocd-announcements-and-notifications/ or https://www.emnrd.nm.gov/ocd/ocd-forms/.

From: Ayarbe, John <jayarbe@geo-logic.com>
Sent: Tuesday, January 7, 2025 2:36 PM
To: 'Biernoff, Ari' <abiernoff@nmslo.gov>
Cc: saskia@thestandardenergy.com; pieter@thestandardenergy.com; Moellenberg, Dalva L. <dlm@gknet.com>; 'Knight, Tami C.' <tknight@nmslo.gov>; Hall, Brittany, EMNRD <Brittany.Hall@emnrd.nm.gov>
Subject: [EXTERNAL] EM survey results, Buckeye State AF #003 site

Hi Ari,

Attached is a figure summarizing the EM survey results at the Buckeye State AF #003 site. We used linear regression to provide a preliminary estimate of areas exceeding 600-mg/kg chloride and to delineate potential excavation areas. The linear

regression uses soil chloride data from the December 2023 soil sampling. Please note: there are a few areas with elevated TPH that are not addressed on the attached figure and that actual excavation areas will likely be more square and rectangle.

The EM survey was conducted in October 2023. We contracted Atkins Engineering to complete the survey. They also captured an aerial photograph of the site with a drone. The aerial is shown in the attached figure.

The EM survey was completed using both an EM31 and EM38, and by varying coil spacing and orientation so that we could image different depths. These data are in the GIS we used to prepare the attached figure. We're going to place the raw data on separate maps and send them to you in a separate email (hopefully later today or tomorrow).

We've obtained a quote from Atkins Engineering to complete the borehole investigation. I've considered modifying the borehole investigation work some based on the EM survey results but need to discuss it more with Buckeye. We'll obtain SLO approval before moving forward with any changes.

Thanks!

John P. Ayarbe
Senior Hydrogeologist

Daniel B. Stephens & Associates, Inc.
a Geo-Logic Company
6020 Academy Road NE, Suite 100
Albuquerque, New Mexico 87109
Office: (505) 822-9400 | Direct: (505) 353-9137
Mobile: (505) 280-4339
jayarbe@dbstephens.com or jayarbe@geo-logic.com

www.dbstephens.com | www.geo-logic.com

S:\PROJECTS\DB19.1241_BUCKEYE_DU-AF\GIS\MXDS\AF REMEDIATION\EM SURVEY\FOR NMED\AF_EXCAVATION OVERVIEW.MXD

PRELIMINARY SUBJECT TO REVISION
PRIVILEGED AND CONFIDENTIAL

AF17
672
640

AF12
2,400
1,360

AF14
352
496

AF13
96

AF16
3,040
1,410

AF15
160

AF02
368
80

AF01
5,840

AF03
5,600

AF06
1,300

AF05
160

AF04
528

AF11
228

AF07
1,380

AF08
1,150

AF09
48
48

AF10
32

N

0 100 200 ft

Explanation

Borehole ID
Cl^- (mg/l) 2-ft
Cl^- (mg/l) 4-ft

- December 2023 soil sample location
- Proposed soil sample location
- Geophysical survey area
- Predicted 4-ft excavation area
- Predicted 2-ft excavation area
- Detected metal pipeline (dashed where inferred)
- Repaired pipeline (dashed where inferred)

Source: USDA NAIP (2022) and Atkins Engineering (2024)

Notes:
1. Estimated area requiring 2-ft excavation derived from EM38 0.5-m vertical dipole data.
2. Estimated area requiring 4-ft excavation derived from EM38 1-m vertical dipole data.
3. Geophysical data related to December 2023 soil sample results using linear regression.

Figure #

DBS&A a Geo-Logic Company

1/7/2025 DB19.1241

BUCKEYE STATE AF #003

Areas Expected to Exceed 600-mg/kg Chloride Based on Geophysical Survey Results

Proposed Remediation Plan
State AF #003 SWD Site

Prepared for

Buckeye Disposal, Inc.

Prepared by

DBS&A
a Geo-Logic Company

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DB19.1241

April 11, 2025

Table of Contents

List of Figures

List of Tables

List of Appendices

1. Introduction

On behalf of Buckeye Disposal, Inc. (Buckeye), Daniel B. Stephens & Associates, Inc. (DBS&A) has prepared this proposed remediation plan for the State AF #003 SWD site (the site) located on State of New Mexico Business Lease BL-2050 in Section 8, Township 18 South, Range 35 East, NMPM. This is a revised remediation plan that aims to address New Mexico State Land Office (NMSLO) (NMSLO, 2025) and Oil Conservation Division (OCD) (OCD, 2025) comments regarding the original submittal (DBS&A, 2025). Until recently, Buckeye operated a salt water disposal well at the site. Since ceasing disposal well operations, Buckeye has plugged and abandoned the disposal well and has removed the tank battery. The salt water disposal well was plugged and abandoned in April 2023 (Appendix A). Buckeye has also removed the tank battery, including the 40-mil high-density polyethylene (HDPE) flexible membrane liner of the secondary containment, from the site.

On May 17, 2024, DBS&A submitted an Updated Site Assessment Plan (updated SAP) for the site to the New Mexico State Land Office (NMSLO). Brittany Hall of the Oil Conservation Division (OCD) was carbon copied on the submission. Submission of the updated SAP also included DBS&A responses to NMSLO comments on a previous version of the site assessment plan. The updated SAP described investigation activities to delineate the lateral and vertical extents of brine impacts to soil at the site, including several peripheral areas (DBS&A, 2024). Investigation activities included a non-invasive electromagnetic survey and soil sampling. Atkins Engineering Associates, Inc. (Atkins), a subcontractor to DBS&A, completed the electromagnetic survey in October 2024. DBS&A, with support from Buckeye, collected soil samples in January 2025. The electromagnetic survey was completed in accordance with the updated SAP (DBS&A, 2024). The soil samples were collected from two exploratory excavations advanced in the areas of highest soil salinity as indicated by results of the electromagnetic survey: (1) near the former location of the salt water disposal well, and (2) former location of the lined tank battery. Results of the October 2024 electromagnetic survey and January 2025 soil sampling provide sufficient data to initiate remediation at the site, with the understanding that confirmation soil samples will need to be collected and analyzed during remediation to define excavation extents.

Basic information regarding the site is as follows:

- Operator: Buckeye Disposal, Inc. (Buckeye)
- Consultant information: John Ayarbe (DBS&A), (505) 822-9400, jayarbe@geo-logic.com

- Site name: State AF #003 SWD
- API number: 30-025-20980
- State Land Office lease numbers: SW-324 and BL-2050
- OCD incident numbers: NOY1813152090 and NKL1625134663
- Public Land Survey System (PLSS) location: Section 8, Township 18 South, Range 35 East, NMPM
- County: Lea County
- Latitude and longitude: 32°45'37.23"N, 103°29'7.03"W

Buckeye's operational footprint at the site generally consisted of the State AF #003 SWD well pad, former tank battery pad, and the access road connecting them. Buckeye also maintained a pipeline that ran north from the tank battery to the SWD well. There are several other pipelines and facilities (both active and historical) in the vicinity of Buckeye's operational footprint.

This remediation plan is intended to satisfy the requirements of NMSLO and OCD, as stipulated in the NMSLO reclamation rules, SW-324, and Section 13 of 19.15.29 NMAC. It presents background information (Sections 2 and 3), describes characterization activities used to define the lateral and vertical extents of impacts to soil (Section 4), and provides a proposed remediation plan (Section 5). Some of the information presented herein was previously reported in the updated SAP (DBS&A, 2024), including the background descriptions in Sections 2 and 3 and characterization activities summarized in Section 4.1.

2. Site Resources

2.1 Biology

The site is located in the arid Llano Estacado ecoregion. This region hosts a native shortgrass prairie of grama and buffalo grasses. Species such as mesquite and lotebrush are able to establish where native grasses are disturbed (Griffith et al., 2006; Johnson, 2007).

2.2 Cultural Resources

Boone Archeological Resource Consultants, LLC (Boone) conducted a Class III Cultural Resource Survey at the site on behalf of Buckeye (Boone, 2024). The survey was performed in support of the proposed remediation activities. No cultural resources were discovered, and the

archaeological survey findings are deemed negative. Appendix B provides the cover sheet to The Boone report to show compliance with the NMSLO cultural properties protection rule.

2.3 Soil

The Natural Resources Conservation Service (NRCS) map unit for the site is Kimbrough-Lea complex, which NRCS describes as a calcareous, loamy eolian deposit of Pleistocene age overlying indurated caliche of Pliocene age NRCS (2024). Crushed caliche has been placed on the areas of the former locations of the well pad and tank battery, as well as the access road that connects the two locations, giving each area a white appearance. Surface soils of the surrounding undisturbed, vegetated areas consist of eolian sand, consistent with the NRCS description for the region.

2.4 Water

Information available online from the New Mexico Office of the State Engineer (OSE) indicates that the depth to shallow groundwater at the well closest to the site (well L02350) is greater than 100 feet below ground surface (bgs) (Figure 1). Well L02350 is north-northeast of the former location of the tank battery (Figure 1). The well log indicates that the boring for the well was drilled to a total depth of 216 feet bgs in March 1960, and that the boring penetrated a water-bearing zone at 110 feet bgs (Appendix C). The well is currently owned by Intrepid Potash, New Mexico, LLC (Intrepid), is referred to as Intrepid Potash North Well N-4, and is permitted for industrial use. On February 20, 2020, DBS&A contacted Intrepid's East Plant regarding the status of the well and the water level at the well. They reported that the current water level in the well is 115 feet bgs. Based on this information, depth to groundwater at the site is greater than 100 feet bgs.

Appendix D is a map showing the proximity of significant surface water features to the site. It was created using the New Mexico OCD Oil and Gas Map (NM OCD, 2024). The nearest surface water feature to the site is an unnamed drainage approximately 1,900 feet southwest of the former location of the salt water disposal well and approximately 1,000 feet southwest of the former location of the tank battery. A depression is located approximately 390 feet southeast of the former location of the tank battery. The depression is shown as a freshwater pond (PUBF) in the U.S. Fish and Wildlife Service (USFWS) National Wetland Inventory online map (USFWS, 2024). The depression is not a perennial pond, but rather an ephemeral surface water feature.

3. Releases and Initial Soil Characterization

Two releases occurred within the former tank battery secondary containment, which was lined with a 40-mil HDPE flexible membrane. They occurred on August 20, 2016 and May 4, 2018. Buckeye submitted release notification forms (Form C-141) to OCD for these releases (Appendix E). In response to the notifications, OCD assigned remediation permit 1RP-4429 on September 7, 2016 and remediation permit 1RP-5056 on May 11, 2018.

On February 14, 2019, soil samples were collected from seven locations around the perimeter of the tank battery secondary containment, as shown in Figure 2. Samples were collected from depths up to 36 inches using a backhoe. The samples were submitted to Cardinal Laboratories (Cardinal) in Hobbs, New Mexico and analyzed for chloride. Sample results are provided in Figure 2. The Cardinal laboratory report is provided in Appendix F.

In June 2020, a third release occurred near the tank battery from a pipeline operated by Vanguard Natural Resources (Vanguard). The pipeline conveyed produced water to the tank battery for disposal at the salt water disposal well. Buckeye estimates that approximately 50 to 100 barrels of produced water was spilled outside of the tank battery secondary containment. The release occurred on the upstream side of a valve connecting Vanguard's pipeline to the tank battery. Buckeye advised Vanguard of the release from its pipeline and requested that Vanguard take appropriate action regarding the release. Buckeye also verbally notified OCD of the release, but expected that it was Vanguard's responsibility to complete and submit a C-141 Release Notification Form, as Vanguard was the pipeline operator and was responsible for the pipeline; however, Buckeye does not have documentation that Vanguard reported the release to OCD. Because this release occurred outside of the secondary containment, it is likely to have had a more significant impact on soils of the tank battery pad than the two reported releases within the secondary containment.

4. Additional Characterization Activities

Buckeye and DBS&A have completed additional characterization activities at the site since the initial soil sampling was conducted on February 14, 2019. Characterization activities have been expanded to include the pad for the former salt water disposal well and general vicinity of the site. Characterization activities were expanded to support site closure.

4.1 December 2023 Soil Sampling

On December 1, 2023, Buckeye collected additional soil samples from the site. The samples were collected at the pad where the salt water disposal well was located, at the former location of the tank battery, and along the small drainage that runs to the south from the former location of the tank battery. A total of 17 locations were investigated. Samples were collected at depths of 2 and 4 feet. Samples could not be collected at 4 feet at all locations due the presence of well indurated caliche. The samples were collected with a shovel.

The soil samples were submitted to Cardinal, where they were analyzed for the following constituents, in accordance with Table 1 of 19.15.29.12 NMAC:

- Chloride using Standard method (SM) 4500-Cl-B
- Total petroleum hydrocarbons (TPH) using U.S. Environmental Protection Agency (EPA) method 8015B
- Benzene, toluene, ethylbenzene, and total xylenes (BTEX) using EPA method SW-846 8021B

The Cardinal laboratory report is provided in Appendix F, and the analytical results are summarized in Table 1. Figures 3a through 4b show the distributions of soil chloride and TPH based on the analytical results. BTEX constituents were not detected (at detection limits of 0.05 or 0.15 milligrams per kilogram [mg/kg] for each constituent) in the soil samples, and are therefore not mapped. OCD (2025) states that they do not accept the results of the December 2023 soil sampling because the results were qualified by Cardinal due to the presence of headspace in sample containers. OCD (2025) contends that the results may be biased low. It is unlikely that the headspace had significant effect on the results that warrants excluding them from use. The December 2023 sampling results are used herein with other data (e.g., January 2024 soils data) to preliminarily define the extents of soil impacts in support of soil removal. Field screening and confirmation soil sampling will ultimately be used to direct soil removal. Field scientist overseeing soil removal activities will be mindful when preparing confirmation soil samples to avoid or limit headspace.

Chloride concentrations of the soil samples range from 32 mg/kg (AF10 at 2 feet) to 5,840 mg/kg (AF01 at 2 feet). The highest chloride concentration was measured in one of the soil samples collected at the former tank battery location (Figure 3b). TPH concentrations of the soil samples range from non-detect (at a detection limit of 10.0 mg/kg) at a majority of the sample locations to 2,389.6 mg/kg (AF03 at 2 feet). Like for chloride, the highest TPH

concentration was measured in one of the soil samples collected at the former tank battery location (Figure 4b).

Results for 11 of the 23 soil samples exceed the most stringent OCD numerical limit for chloride (600 mg/kg), while results for 4 of the 23 soil samples exceed the most stringent OCD numerical limit for TPH (Table 1). Application of the most stringent OCD numerical limits is based on the proximity of the Intrepid North Well N-4 (OSE number L02350) to the site (Section 2). However, based solely on depth to groundwater, the OCD numerical limits for chloride and TPH are considerably higher, at 20,000 mg/kg and 2,500 mg/kg, respectively. The chloride and TPH concentrations of the soil samples collected at the site in December 2023 are all well below these higher OCD numerical limits.

Soil chloride and TPH concentration distributions correlate with the appearance of site soils. Figures 3a and 4a show the area around the pad of the former salt water disposal well. Soils that are disturbed are white to light tan in color, while undisturbed soils are browner and support vegetation. Sample sites in the disturbed area have chloride concentrations ranging from 640 mg/kg (AF17 at 4 feet) to 3,040 mg/kg (AF16 at 2 feet). TPH concentrations of the disturbed area range from non-detect (AF12 at 2 feet, AF16 at both depths, and AF17 at 2 feet) to 454 mg/kg (AF12 at 4 feet). In undisturbed areas, chloride concentrations range from 96 mg/kg (AF13 at 2 feet) to 496 mg/kg (AF14 at 4 feet), and TPH was not detected.

Figures 3b and 4b show the area around the former tank battery location. Sample sites in the disturbed area have chloride concentrations ranging from 160 mg/kg (AF05 at 2 feet) to 5,840 mg/kg (AF01 at 2 feet) and TPH concentrations ranging from non-detect (AF05, AF06, AF07, and AF08 at 2 feet) to 2,389.6 mg/kg (AF03 at 2 feet). Chloride concentrations in soil in the undisturbed area range from 32 mg/kg (AF10 at 2 feet) to 368 mg/kg (AF02 at 2 feet). Results for TPH in this area are all non-detect.

Soil sample locations AF09 and AF10 were selected near the depression located southeast of the former tank battery location to investigate whether stormwater runoff from the area of the tank battery has impacted soils of the depression. The sample locations were selected where stormwater runoff enters the depression. Chloride concentrations at AF09 and AF10 were 48 and 32 mg/kg, respectively (Figure 3b). TPH was not detected (Figure 4b). These results show that runoff from the site has not affected soils of the depression.

4.2 Site Assessment Plan Implementation

Based on results of the December 2023 soil sampling and at the requests of OCD and NMSLO, Buckeye further characterized impacts to soil in the areas of the former salt water disposal well pad and former tank battery location, as well as the access road that connects them. Proposed characterization activities were described in a Site Assessment Plan, and consisted of a soil salinity surface geophysical survey (Section 4.2.1) and soil sampling (Section 4.2.2) (DBS&A, 2024). The purpose of these characterization activities was to better define the lateral and vertical extents of impacts to soil in support of development of a remediation plan to restore the site to a condition similar to that before Buckeye's lease.

4.2.1 October 2024 Electromagnetic (EM) Survey

On October 8, 2024, Atkins conducted an electromagnetic (EM) geophysical survey and collected drone based aerial photography at the site under the direction of DBS&A. The geophysical survey was completed using two Geonics Limited instruments: (1) an EM31 and (2) an EM38-MK2. Both instruments measure apparent soil electrical conductivity (EC_A), a measure of soil salinity, and soil magnetic susceptibility using electromagnetic induction. The EM31 and EM38-MK2 feature different coil lengths, which allowed for a variety of depths to be investigated. The EM31 has a 12-foot coil that provides an investigation depth of approximately 20 feet when operated in the vertical dipole orientation. The EM38-MK2 has 0.5-meter and 1.0-meter coils. These coils provide investigation depths of approximately 2.5 and 4.9 feet, respectively, when operated in the vertical dipole orientation. The EM geophysical survey was conducted by carrying each instrument across the site at regular intervals to provide coverage of the entire site. The density of measurements and survey extent were determined from real-time readings from the instruments. The readings informed the operator of areas of high soil conductivity, which were given more detailed delineation. A high-precision global positioning system (GPS) unit was paired with the EM instruments to provide location information for the EM readings.

Atkins provided the EM survey data to DBS&A for processing. DBS&A processed the data to create soil conductivity maps for each depth of investigation provided by the two instruments and different coil lengths (i.e., 2.5, 4.9, and 20 feet). Data processing included removing data skewed by magnetic inference caused by metallic objects in the field, such as pipelines and vehicles, which are identifiable by elevated magnetic susceptibility readings. A correction scalar was applied to data from the EM38-MK2 0.5-meter coil to adjust baseline readings to zero. This

calibration step is routine for the 0.5-meter coil on this particular instrument. The data were then interpolated by kriging using R statistical computing software with the gstat package.

The interpolated EM survey were matched to the locations of the December 2023 soil sample points to provide a relationship between EC_A (as measured by the EM instruments) to soil chloride concentration (as measured by Cardinal). DBS&A used linear regression to determine the EC_A values from the EM38-MK2 instrument that equate to a soil chloride concentration of 600 mg/kg. This was done for data from both the 0.5-meter and 1.0-meter coils to identify areas expected to exceed soil chloride concentrations of 600 mg/kg at depths of up to 2 and 4 feet, respectively. Chloride data are not available at deeper depths consistent with the EM31 depth of investigation; therefore, DBS&A did not attempt to relate EC_A readings of this instrument to soil chloride concentration. Notably, the EM31 had much lower EC_A readings across the site than the EM38-MK2, indicating that salinity is lower at depth than near land surface (Figure 5a).

Results from the EM38-MK2 with the 0.5-meter and 1.0-meter coils are shown in Figures 5b and 5c, respectively. Areas predicted to have soil chloride concentrations greater than 600 mg/kg to 2-foot and 4-foot depths are shown in the figures. In general, the predicted areas agree with results from the December 2023 soil sampling. The predictions appear to overestimate some areas, as evidenced by the fact that they include some well vegetated soil. The EM geophysical survey shows regions of high EC_A at the former locations of the State AF #003 SWD well and tank battery (Figure 5b and 5c). Other areas with high EC_A are also present, such as (1) the area of a suspected reserve pit north of the State AF #003 SWD well, (2) the area of a possible pipeline release located between the former salt water disposal well and tank battery, (3) the east end of the former tank battery pad, where a pipeline exist, and (4) the depression to the south of the former tank battery pad. The access road does not show elevated EC_A, indicating that it is not impacted.

4.2.2 January 2025 Soil Sampling

On January 28, 2025, DBS&A's contractor CMB Environmental LLC (CMB) collected soil samples from two exploratory excavations advanced at the site. The exploratory excavations were placed near the former salt water disposal well and at the former tank battery location, in areas with the highest EC_A values and where Buckeye operated (Figures 5a through 5c). Other areas with high EC_A were not investigated further because they were likely impacted by other operators. For instance, pipelines are present at the east end of the former tank battery pad and in the bare area between the former salt water disposal well and tank battery. These pipelines are owned

and operated by others. The interpolated EM geophysical surveys show separation between areas operated by Buckeye and these other areas with high EC_A, including the depression south of the former tank battery location (Figures 5b and 5c). Because the soil sampling was limited to the two indicated areas, the investigation herein differs from that presented in the Site Assessment Plan (DBS&A, 2024).

The exploratory excavations were advanced with a trackhoe and soil samples were collected from the trackhoe bucket. Buckeye provided and operated the trackhoe. Soil samples were collected at 2-foot intervals until refusal was reached, which was 6 feet at the former salt water disposal well pad and 8 feet at the former tank battery location. The purpose of the soil sampling was to define the vertical extents of impacts to soil in the areas where Buckeye operated.

Soil sampled from each 2-foot interval was homogenized in a clean container and then split for field electrical conductance ($EC_{1:5}$) screening and laboratory analyses. Field $EC_{1:5}$ screenings were performed on soil-water mixtures (i.e., paste) consisting of 1 part soil to 5 parts distilled water by volume, and included measurement of specific conductance (EC readings normalized to 25°C). A total of seven soil samples were submitted to Cardinal and analyzed for the following:

- Chloride using SM 4500-Cl-B
- TPH, including gasoline-range organics (GRO) (C8-C10), diesel-range organics (DRO) (>C10-C28), and motor oil-range organics (MRO) (>C28-C36) using EPA method 8015 modified
- BTEX using EPA method SW-846 8021B

The Cardinal laboratory report is provided in Appendix F; results are summarized in Table 2.

The exploratory excavation at the former salt water disposal well pad was placed near the former State AF #003 SWD well (Figures 5a through 5c). The excavation was advanced to a depth of approximately 6 feet, where well-indurated caliche was encountered. A tooth from the trackhoe bucket was broken in an attempt to excavate beyond the caliche. The unconsolidated material above the caliche consisted of odorless, well-sorted, medium-grained red sand. A summary of field EC screening and laboratory results follows:

- Field $EC_{1:5}$ ranged from 1,235 microsiemens per centimeter (µS/cm) (at 4 to 6 feet) to 2,559 µS/cm (at 0 to 2 feet).

- Chloride concentrations ranged from 1,800 mg/kg (at 4 to 6 feet) to 3,200 mg/kg (at 0 to 2 feet).
- TPH and BTEX constituents were not detected in any of samples at detection limits of 10.0 mg/kg and 0.150 mg/kg, respectively.

The exploratory excavation at the former tank battery was placed where the HDPE liner once existed (Figures 5a and 5c). Several excavations were attempted before the trackhoe was able to penetrate beyond 2 feet. The final excavation was advanced to a depth of approximately 8 feet, where refusal was reached. Excavated material consisted of well-sorted, medium-grained tan to brown sand. Petroleum odor and staining were not observed. A summary of field EC screening and laboratory results follows:

- Field $EC_{1:5}$ ranged 600 µS/cm (at 4 to 6 feet) to 2,628 µS/cm (at 0 to 2 feet).
- Chloride concentrations ranged from 688 mg/kg (at 4 to 6 feet) to 4,400 mg/kg (at 0 to 2 feet).
- TPH concentrations ranged from 3,859 mg/kg (at 6 to 8 feet) to 13,968 mg/kg (at 4 to 6 feet).
- BTEX constituents were not detected in any of samples at detection limits of 0.150 mg/kg.

At both exploratory excavations, soil chloride concentrations exceeded 600 mg/kg (the most stringent OCD numerical limit for chloride) at the deepest depths investigated (i.e., 6 feet at the former salt water disposal well pad and 8 feet at the former tank battery location). Soil TPH concentrations at the former tank battery location also exceeds the most stringent OCD numerical limit for TPH (100 mg/kg).

Soil samples were collected from fewer locations than proposed in the Site Assessment Plan (DBS&A, 2024) because information obtained from the October 2024 EM geophysical survey is sufficient to define the lateral extents of impacts to soil to initiate remediation, with the understanding that confirmation soil samples will need to be collected and submitted to a laboratory. Field screening ($EC_{1:5}$) and confirmation soil sampling will ultimately be used to define excavation limits. Soil samples were collected from the two exploratory excavations to assess the vertical extents of impacts to soil. The January 2024 investigation was limited to areas operated by Buckeye because the interpolated EM geophysical survey results show separation between areas operated by Buckeye and the other areas with high EC_A (Figures 5b and 5c). It is reasonable to conclude that the other areas have been impacted by other operators, especially

given the presence of several pipelines at the site. Figure 6 shows NMSLO leases in the vicinity of the site and locations of readily identifiable pipelines. These are not Buckeye pipelines; they are operated by other companies.

5. Proposed Remediation and Reclamation Plan

Buckeye will remediate the impacted areas at the former salt water disposal well pad and the former tank battery location. They will excavate impacted soil from a depth of up to 5 feet and replace it with clean fill. Regions where soil impacts exist to depths of at least 4 feet will have impacted soil removed to 5 feet to allow the placement of 0.5 to 1 foot of low-permeability clay at the base of excavations and at least 4 feet of clean top soil above the clay to support vegetation. This approach ensures a root zone with at least 4 feet of clean soil, while also limiting infiltration of water through deeper horizons, thereby significantly reducing the mobilization potential of contaminants at deeper depths and protecting groundwater quality. The approach also limits excavation depths to provide a safer working environment by reducing engulfing potential. The remediated areas will be graded and seeded to restore them pursuant to 19.15.29.13 NMAC (OCD requirements) and SW-324 (NMSLO requirements). Where OCD and NMSLO requirements differ, NMSLO reclamation requirements will apply. For instance, Buckeye plans to achieve a native plant cover and diversity equal to or exceeding the natural levels in undisturbed soils adjacent to the site (NMSLO requirement). The OCD requirement for establishment of vegetation success is a uniform vegetative cover with a lifeform ratio of ±50 percent of pre-disturbance levels and a total percent plant cover of at least 70 percent of pre-disturbance levels, excluding noxious weeds. The anticipated excavation areas are shown in Figure 7, along with the areas predicted to have greater than 600 mg/kg soil chloride concentrations to 2-foot and 4-foot depths based on the EM geophysical survey.

Buckeye has already removed all infrastructure from the site and plugged and abandoned the disposal well (Appendix A).

5.1 Approach

The purpose of the proposed remediation plan is to restore the two areas to conditions similar to the native landscape and offer groundwater protection. The areas will be graded and then seeded to establish vegetative cover that equals or exceeds the natural levels in undisturbed areas adjacent to the site, per NMSLO reclamation rules and SW-324 (NMSLO, 2018). The proposed remediation plan is described in the following subsections.

5.1.1 Vertical Delineation

Before remediation, Buckeye will advance two exploratory borings to delineate vertical extents of soil impacts. Specifically, these borings will be used to determine whether impacts have reached groundwater. One boring will be placed within the footprint of the former tank battery and the second boring will be placed in the immediate vicinity of the former State AF #003 well site. These locations have the highest constituent concentrations (Section 4) and are expected to have the greatest impacts at depth. Previous attempts at vertical delineation at these two locations using a backhoe and a trackhoe were not successful due to the presence of hard caliche.

Field screening (i.e., EC and photoionization detector [PID] measurements) of soil samples will be conducted. Samples will be collected at 2-foot intervals from land surface to a depth of 10 feet, and then at 5-foot intervals at depths greater than 10 feet. Each borehole will be advanced until field screening indicates vertical delineation of soil impacts. A confirmation sample will be collected from the bottom of each borehole for submittal to Cardinal for the following laboratory analyses:

- Chloride using SM 4500-Cl-B
- TPH, including gasoline-range organics (GRO) (C8-C10), diesel-range organics (DRO) (>C10-C28), and motor oil-range organics (MRO) (>C28-C36) using EPA method 8015 modified
- BTEX using EPA method SW-846 8021B

This additional investigation will build on the January 2025 soil sampling results, which showed TPH impacts in soil to 8 feet bgs (final depth investigated) at the former tank battery. The sampling results exceeded the most stringent OCD numerical limit for TPH (100 mg/kg). The TPH impacts appear to be limited to the former area of the lined secondary containment but the vertical extent of contamination is unknown.

5.1.2 Soil Removal

Buckeye will remove impacted soil using common earthmoving equipment (e.g., a backhoe or trackhoe). Soil from a depth of up to 5 feet with chloride, TPH, BTEX, and/or benzene concentrations greater than the strictest standards provided in Table 1 of 19.15.29.12 NMAC (i.e., 600 mg/kg chloride, 100 mg/kg TPH, 50 mg/kg total BTEX, and 10 mg/kg benzene) will be removed. Buckeye will excavate soil (1) until clean soil is encountered, where depths of impacts

are less than 4 feet, or (2) to a depth of 5 feet, where depths of impacts exceed 4 feet. Excavated soil will be transported off-site to Lea Land LLC in Hobbs, New Mexico.

A field scientist will be present to oversee and document remediation and reclamation activities, including field screen of soil samples to direct the removal. The field scientist will take field $EC_{1:5}$ and PID measurements of the soil samples to determine the lateral and vertical extents of chloride and TPH impacts to soil to be removed (Section 5.1.2). Excavation will continue until screening criteria are met, except where excavations abut areas of impacted soil not caused by Buckeye operations. These exceptions include (1) the wash south of the former tank battery location and (2) the suspected reserve pit north of the former State AF #003 SWD well. The June 2020 Vanguard pipeline release has likely had a more substantial impact on the wash, and Buckeye did not construct or operate in the area of the suspected reserve pit.

Anticipated excavation extents are shown in Figure 7. The northern excavation area (near the former State AF #003 SWD well) is approximately 0.4 acre. The southern excavation area (at the former tank battery location) is approximately 1.6 acres. Assuming an average excavation depth of 5 feet at both locations, the volumes of soil to be removed are approximately 3,200 and 12,900 cubic yards at the northern and southern excavation areas, respectively.

In addition to removing impacted soil, Buckeye will remove emplaced caliche from the access road and pads present on the site. Where possible, this material will be isolated from impacted soils and recycled.

5.1.3 Field Screening and Confirmation Soil Sampling

DBS&A used linear regression to correlate the January 2025 field EC screening (field $EC_{1:5}$) results to the laboratory chloride analytical results to determine a site-specific field $EC_{1:5}$ value that can be used to assess if chloride concentrations in soil are expected to be above or below 600 mg/kg in the field. As shown in Figure 8, there is a strong correlation between field $EC_{1:5}$ and chloride (r^2 = 0.91). A chloride concentration of 600 mg/kg is equivalent to a field $EC_{1:5}$ of 529 µS/cm. To be conservative while directing soil removal activities, the targeted field $EC_{1:5}$ value of 500 µS/cm will be used to guide soil removal (i.e., soil with field $EC_{1:5}$ values greater than 500 µS/cm will be removed).

TPH and BTEX screening will be performed using a PID. Field $EC_{1:5}$ and PID measurements will also be collected as the excavations are advanced.

When both field $EC_{1:5}$ values are at or below 500 µS/cm and PID measurements indicate no hydrocarbons, the lateral or vertical extents of excavation will be considered sufficient, excavation will stop, and confirmation soil samples will be collected for analysis at Cardinal.

Confirmation samples will be collected at regular intervals to demonstrate that all impacted soil has been removed up to a depth of 5 feet. Vertical confirmation samples will be collected from the bottoms of the excavations at locations not excavated to 5 feet. Lateral confirmation samples will be collected from the perimeters of the excavations. Anticipated confirmation sample locations are shown in Figure 7. DBS&A anticipates that one vertical and four lateral samples will be collected from the northern excavation, and that five vertical and seven lateral samples will be collected from the southern excavation. However, the actual number and locations of confirmation samples may change due to the sizes and geometries of the actual excavations, as informed by field screening data.

5.1.4 Soil Replacement, Grading, and Revegetation

Buckeye will obtain clean soil and clay to backfill the excavations from SB Land, LLC (SB Land) in Lovington, New Mexico. SB Land sells caliche, clay, and top soil. Buckeye will purchase top soil and clay for backfilling. Fill materials will consist of non-waste-containing, uncontaminated earthen material with chloride concentrations less than 600 mg/kg (as analyzed by EPA method 300.0). The top soil will be suitable for the establishment of vegetation at the site.

Areas where impacts to soil exceed a depth of 4 feet and soil has been removed to 5 feet will be backfilled with 0.5 to 1 foot of low-permeability clay followed by 4.5 to 4 feet of clean top soil. Buckeye will compact the clay to create an infiltration barrier. The clay layer will significantly reduce the potential for contamination below 5 feet to migrate, and will therefore protect groundwater quality.

The excavations will be backfilled with top soil and then graded and revegetated, as follows:

- *Grade:* The regional topography in the vicinity of the site slopes gently to the southeast at a grade of approximately 0.4 percent. Buckeye will regrade the two areas so that they slope to the southeast at a grade consistent with the regional topography (i.e., less than 1 percent). Sloping will help to restore the natural drainage pattern. Before grading, the crushed caliche that has been placed on the access road and pads of the former salt water disposal well and tank battery locations will be removed. After the caliche is removed, four soil samples will be collected. The soil samples will be taken from various locations along the road to confirm the results of the EM survey (Section 4.2.1).

- *Revegetate:* The site will be revegetated using a seed mix consisting of native plants common to the area (Appendix G). Revegetation will include cross ripping, scarification, seeding, and mulching, as follows:
  - *Scarification:* Scarification will be used to roughen the soil surface and provide a suitable seedbed. It will be performed with common earthmoving equipment. The degree of scarification required for proper seeding will be determined after grading, but will be completed to a depth of 2 to 4 inches. It will be conducted on contour to avoid the development of flow paths parallel to the slope that could promote erosion.
  - *Seeding:* Seeds will be broadcast using common rangeland or other appropriate equipment. Seeds will be allowed to fall freely and will be subsequently covered (e.g., raked). Buckeye will conduct seeding just before the monsoon season to help promote growth and revegetation success. Seed will be applied at the rates specified in Appendix G. This seed mix was selected from those of NMSLO and includes annual quick-cover grasses, cool-season and warm-season grasses, wildflowers, and woody shrubs.
  - Mulching: Buckeye will apply weed-free mulch to the revegetated soil surface to minimize wind and stormwater erosion and to help maintain soil moisture.

Buckeye will use care to not introduce rocks and caliche into the top soil will performing earthwork (e.g., grading and scarification).

The expected total area to be restored is 2.0 acres, and is shown on Figure 7. Upon completion of site remediation and reclamation, Buckeye will complete and submit the site characterization and remediation portions of Form C-141 to OCD.

5.2 Schedule

Buckeye will implement the proposed measures just before the first monsoon season following OCD and NMSLO approval of this remediation plan. The monsoon season is typically between mid-July and September, so the majority of the earthwork is expected to be conducted in May and June and the two remediated areas seeded in mid-July. If necessary, Buckeye will use a water truck to spray irrigate the seeded areas. This may be necessary if monsoonal rainfall is less than expected or delayed.

5.3 Monitoring

Buckeye will have site inspections conducted during the first year after seeding to assess revegetation progress. A field biologist will perform the inspections to assess whether vegetative cover is likely to equal or exceed the natural levels in undisturbed areas adjacent to the two remediated and reclaimed areas (i.e., northern and southern areas). The areas will be reseeded and irrigated as needed.

References

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Figures

Figure 1

BUCKEYE STATE AF #003

Shallow Water Sources within ½ mile of Site

DBS&A a Geo-Logic Company

8/23/2023 DB19.1241

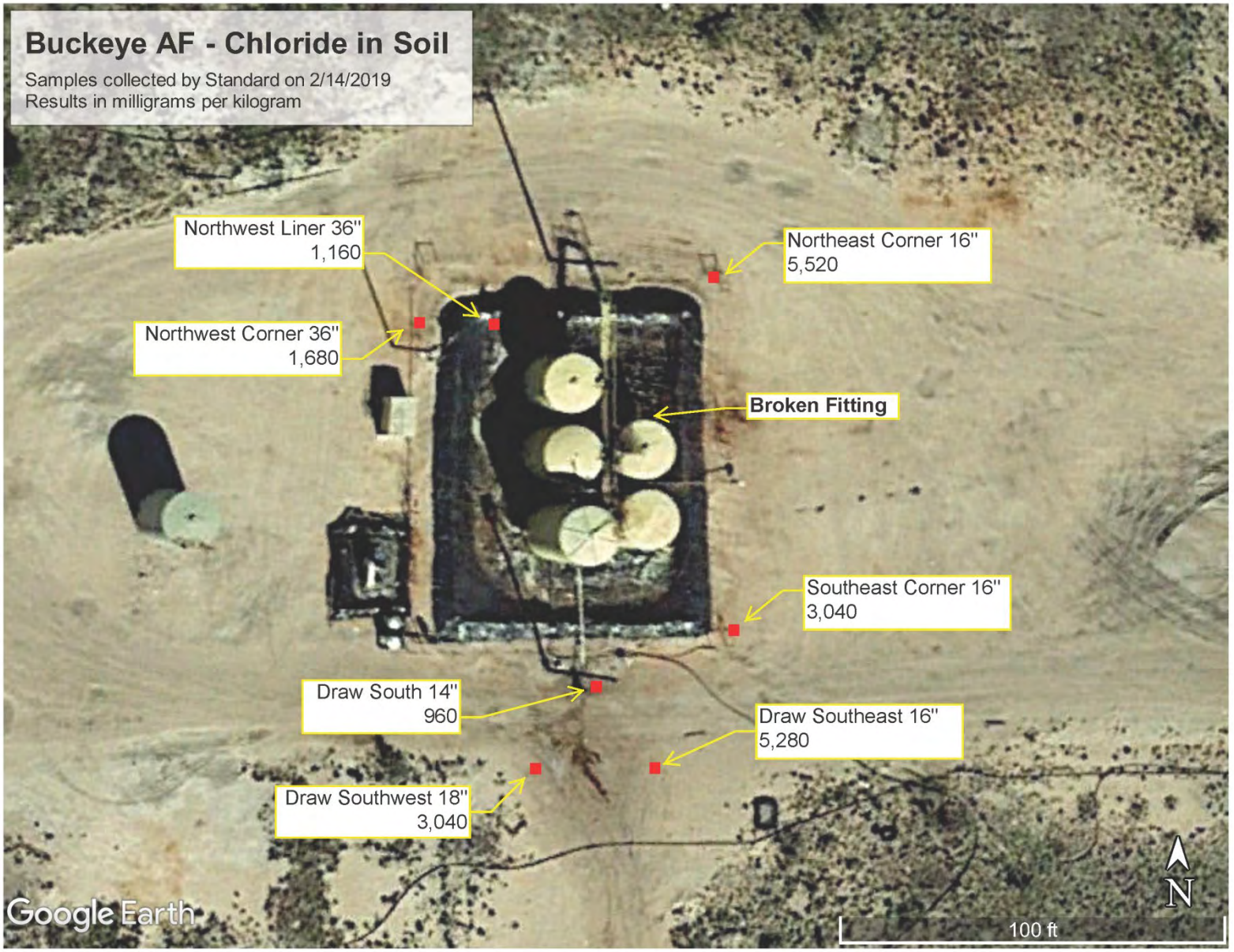


Figure 2

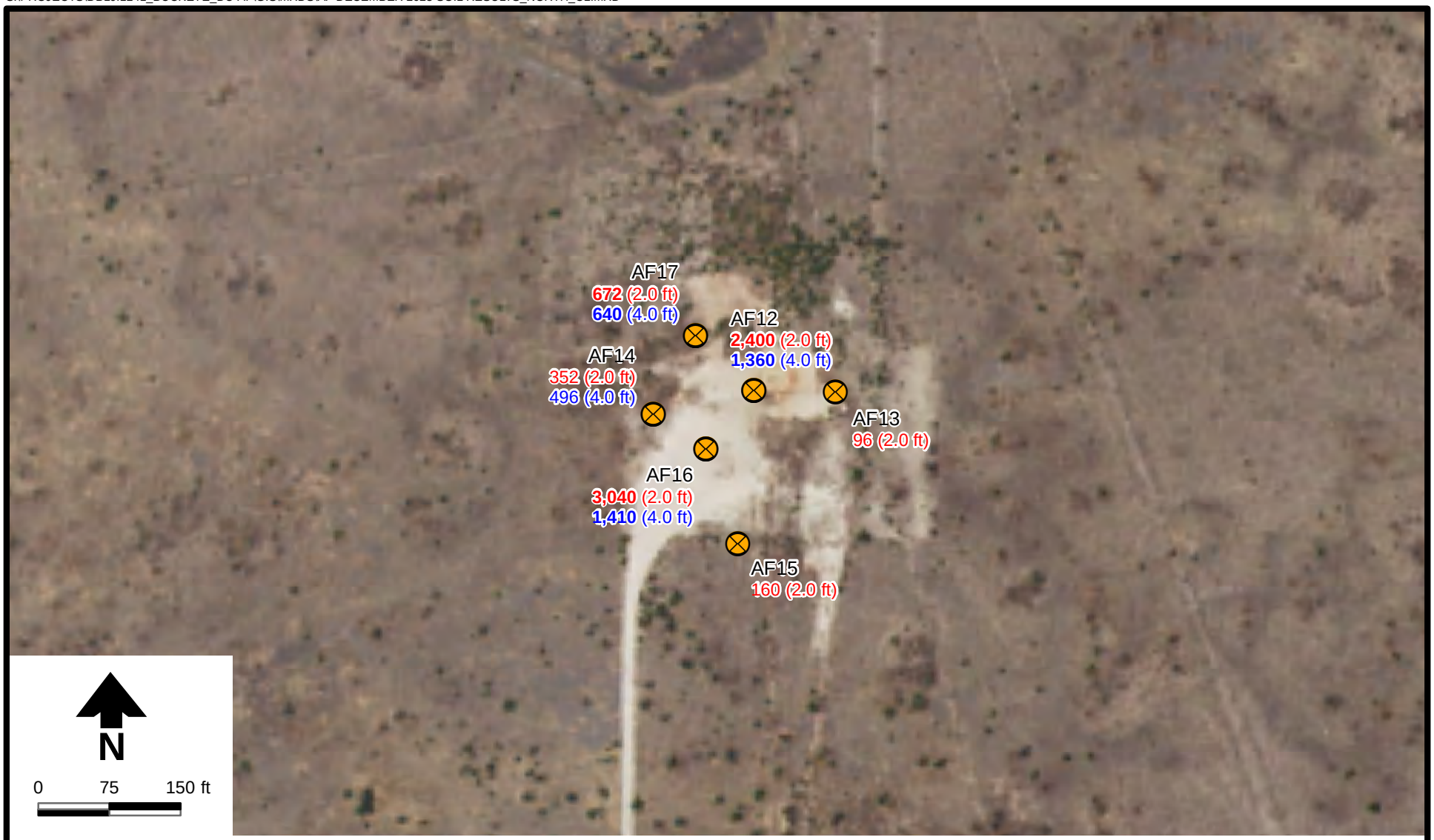
BUCKEYE STATE AF #003

Initial Soil Sampling Results, February 2019

DBS&A a Geo-Logic Company

8/23/2023 DB19.1241

S:\PROJECTS\DB19.1241_BUCKEYE_DU-AF\GIS\MXDS\AF DECEMBER 2023 SOIL RESULTS_NORTH_CL.MXD



Explanation

AF14 Soil Chloride (mg/kg)
352 (2.0 ft) Shallow (Depth)
496 (4.0 ft) Deep (Depth)
⊗ December 2023 sample location

Notes: 1. Soil samples were collected on December 1, 2023.
2. **Bold** indicates concentration greater than or equal to 600 mg/kg.

Source: Aerial imagery (NAIP, 2022).

BUCKEYE STATE AF #003

Soil Chloride Results
Pad of Former Salt Water Disposal Well
December 2023

Figure 3a

DBS&A a Geo-Logic Company

4/16/2024 DB19.1241

S:\PROJECTS\DB19.1241_BUCKEYE_DU-AF\GIS\MXDS\AF DECEMBER 2023 SOIL RESULTS_SOUTH_CL.MXD

Explanation

AF02 Soil Chloride (mg/kg)
368 (2.0 ft) Shallow (Depth)
80 (4.0 ft) Deep (Depth)
December 2023 sample location

Notes: 1. Soil samples were collected on December 1, 2023.
2. **Bold** indicates concentration greater than or equal to 600 mg/kg.

Source: Aerial imagery (NAIP, 2022).

BUCKEYE STATE AF #003

Soil Chloride Results
Former Tank Battery Location
December 2023

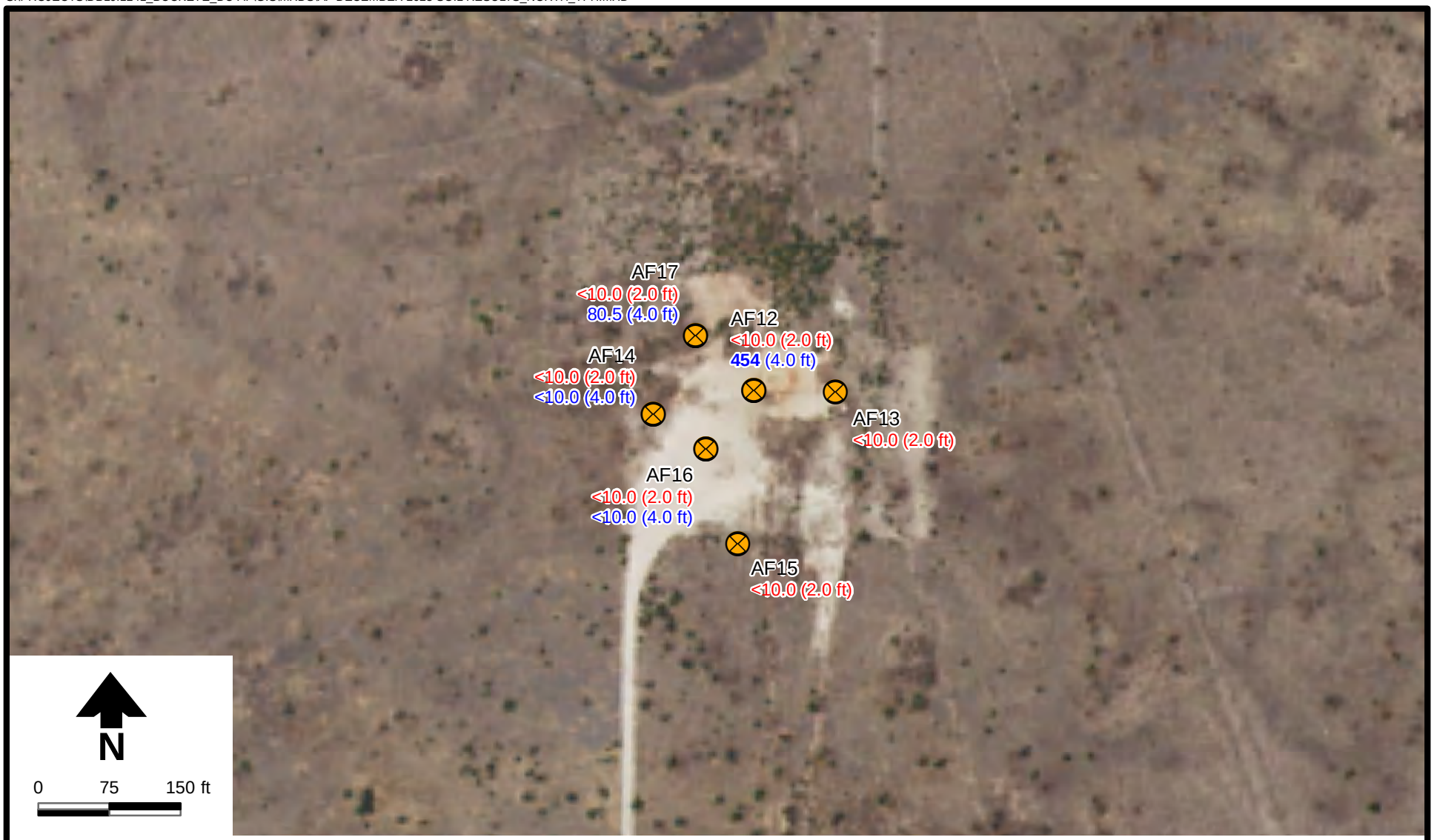
Figure 3b

DBS&A a Geo-Logic Company

4/16/2024 DB19.1241

OCD Ex. 17-025

S:\PROJECTS\DB19.1241_BUCKEYE_DU-AF\GIS\MXDS\AF DECEMBER 2023 SOIL RESULTS_NORTH_TPH.MXD



Explanation

AF17 Soil TPH (mg/kg)
<10.0 (2.0 ft) Shallow (Depth)
80.5 (4.0 ft) Deep (Depth)
December 2023 sample location

Notes: 1. Soil samples were collected on December 1, 2023.
2. TPH = Total Petroleum Hydrocarbons
3. **Bold** indicates concentration greater than or equal to 100 mg/kg.

Source: Aerial imagery (NAIP, 2022).

BUCKEYE STATE AF #003

Soil TPH Results
Pad of Former Salt Water Disposal Well
December 2023

Figure 4a

DBS&A a Geo-Logic Company

4/16/2024 DB19.1241

S:\PROJECTS\DB19.1241_BUCKEYE_DU-AF\GIS\MXDS\AF DECEMBER 2023 SOIL RESULTS_SOUTH_TPH.MXD

Explanation

AF02 Soil TPH (mg/kg)
<10.0 (2.0 ft) Shallow (Depth)
<10.0 (4.0 ft) Deep (Depth)
December 2023 sample location

Notes: 1. Soil samples were collected on December 1, 2023.
2. TPH = Total Petroleum Hydrocarbons
3. **Bold** indicates concentration greater than or equal to 100 mg/kg.

Source: Aerial imagery (NAIP, 2022).

BUCKEYE STATE AF #003

Soil TPH Results
Former Tank Battery Location
December 2023

Figure 4b

DBS&A a Geo-Logic Company

4/16/2024 DB19.1241

S:\PROJECTS\DB19.1241_BUCKEYE_DU-AF\GIS\MXDS\AF REMEDIATION\RECLAMATION PLAN\F05A_AF_EM31_SURVEY.MXD

AF12
2,400
1,360

AF17
672
640

AF13
96

AF14
352
496

Northern Exploratory Excavation
3200
2120
1800

AF16
3,040
1,410

AF15
160

AF02
368
80

Southern Exploratory Excavation
4400
1100
688
2400

AF01
5,840

AF05
160

AF06
1,300

AF04
528

AF03
5,600

AF11
228

AF07
1,380

AF08
1,150

AF09
48
48

AF10
32

N

0 100 200 ft

Explanation

Sample location ID with chloride concentrations (mg/kg)
2 feet
4 feet
6 feet
8 feet

December 2023 soil sample location

January 2025 soil sample location

EM31 vertical dipole survey results

EC_A (µS/cm)

High : 5050

Low : 0

Notes:
1. The EM31 vertical dipole has a depth of investigation of 6 meters (approximately 20 feet).
2. Geophysical survey data processed using simple kriging.

Source: Aerial imagery (ESRI, 2024)

Figure 5a

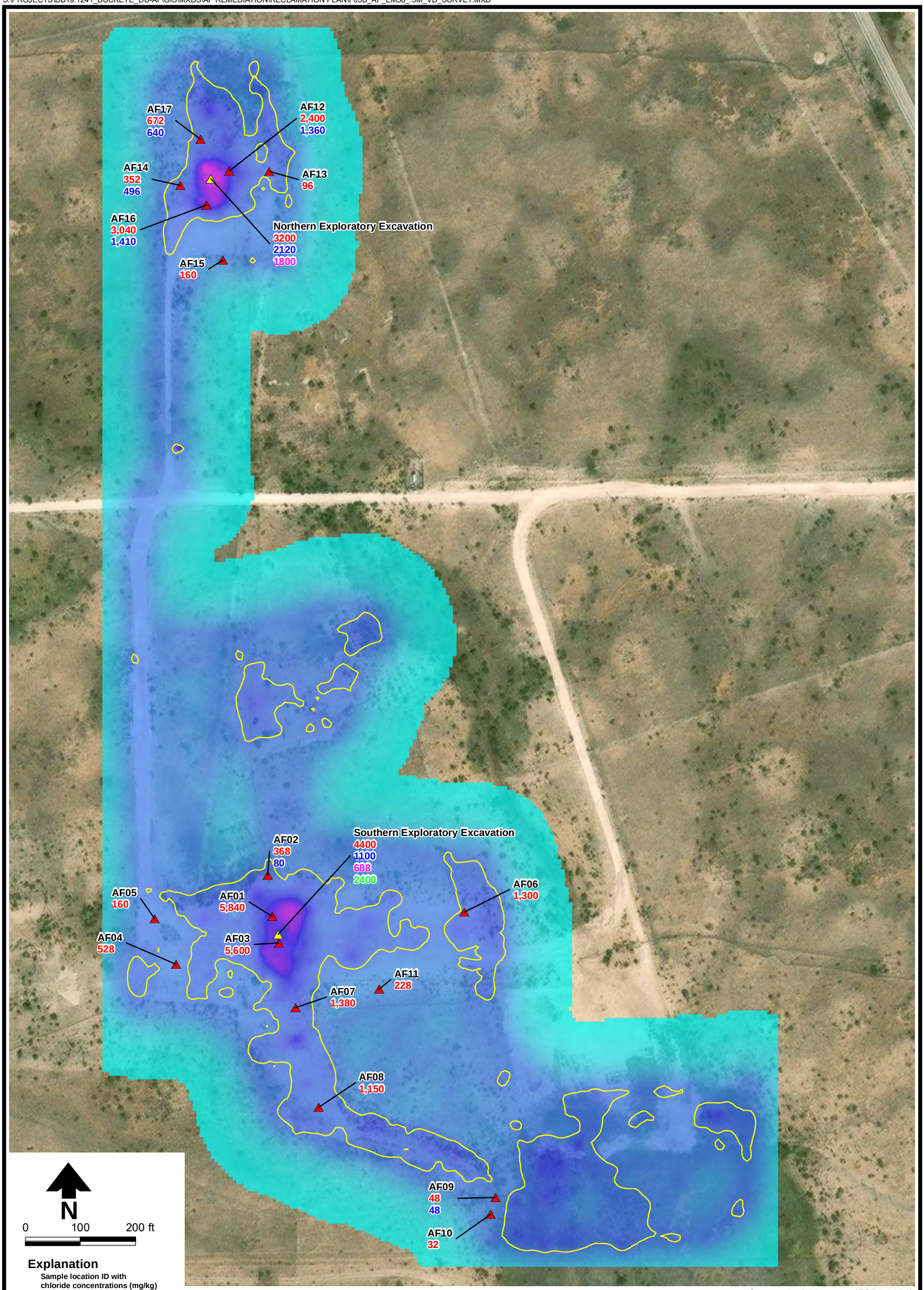
DBS&A a Geo-Logic Company

3/3/2025 DB19.1241

BUCKEYE STATE AF #003

Geophysical Survey Results
EM31 Vertical Dipole

S:\PROJECTS\DB19.1241_BUCKEYE_DU-AF\GIS\MXDS\AF REMEDIATION\RECLAMATION PLAN\F05B_AF_EM38_.5M_VD_SURVEY.MXD



Source: Aerial imagery (ESRI, 2024)

Notes:
1. The EM38 0.5-meter vertical dipole has a depth of investigation of 0.75 meters (approximately 2.5 feet).
2. Estimated area above 600 mg/kg chloride based on linear regression of EC_A and soil chloride sample data from 2 feet bgs.
3. Geophysical survey data processed using simple kriging.

DBS&A a Geo-Logic Company

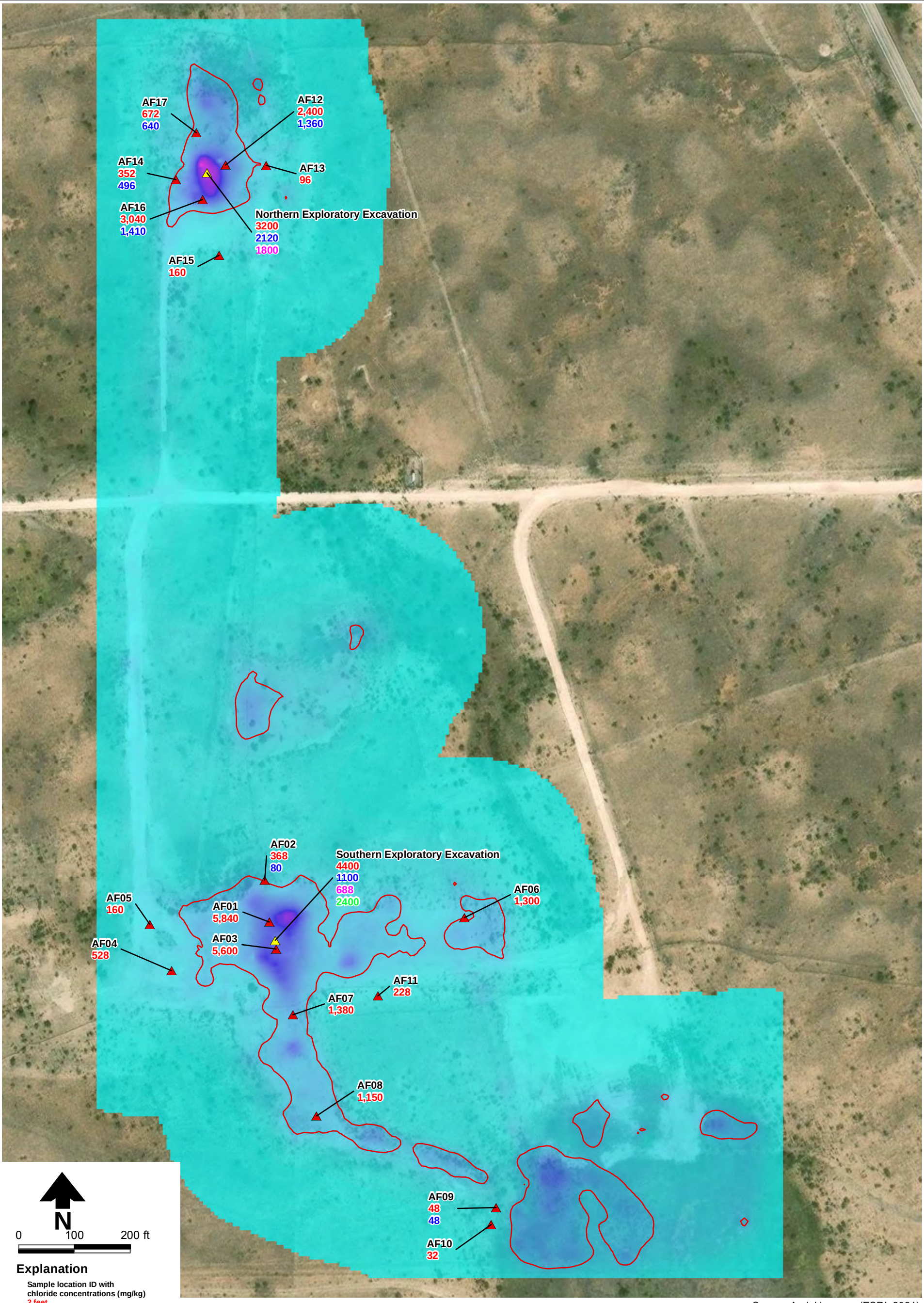
3/3/2025 DB19.1241

BUCKEYE STATE AF #003

Geophysical Survey Results
EM38 Vertical Dipole (0.5-meter Coil)

Figure 5b

S:\PROJECTS\DB19.1241_BUCKEYE_DU-AF\GIS\MXDS\AF REMEDIATION\RECLAMATION PLAN\F05C_AF_EM38_1M_VD_SURVEY.MXD



Source: Aerial imagery (ESRI, 2024)

Notes:
1. The EM38 1-meter vertical dipole has a depth of investigation of 1.5 meters (approximately 5 feet).
2. Area greater than 600 mg/kg chloride based on linear regression of EC_A and soil chloride sample data from 4 feet bgs.
3. Geophysical survey data processed using simple kriging.

DBS&A a Geo-Logic Company

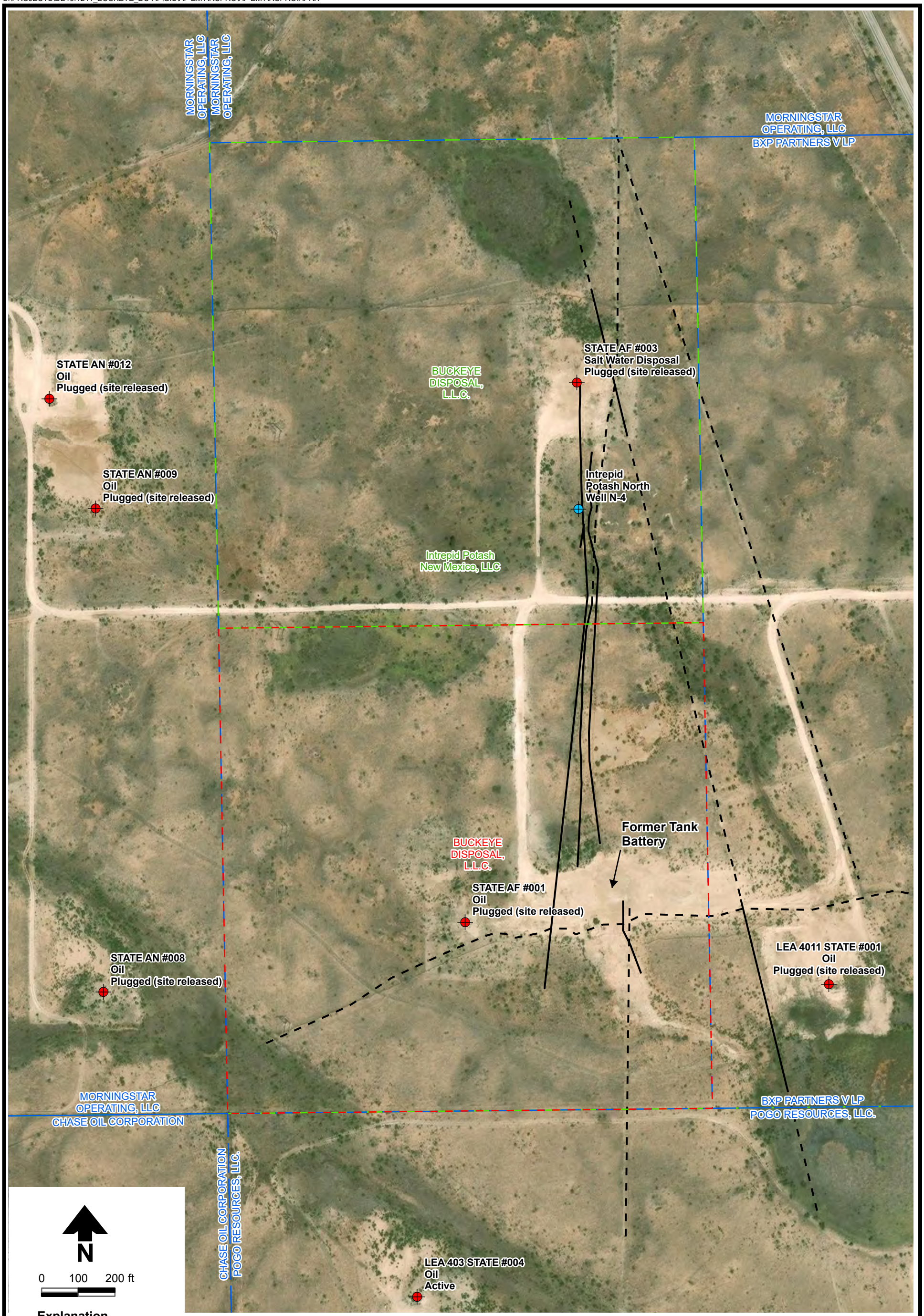
3/3/2025 DB19.1241

BUCKEYE STATE AF #003

Geophysical Survey Results
EM38 Vertical Dipole (1-meter Coil)

Figure 5c

S:\PROJECTS\DB19.1241_BUCKEYE_DU-AF\GIS\AF EM ARCPRO\AF EM ARCPRO.APRX



Notes:
1. Well and facility labels are given in black.
2. NM State Land Office (SLO) lease areas are labeled by the name of the leaseholder. Label colors correspond to the lease boundary symbology. Lease data obtained from SLO website on February 17, 2025.
3. Pipelines are both buried and above ground, determined from site reconnaissance and aerial imagery review. Other pipelines not shown may be present.

Sources: (1) Aerial imagery (ESRI, 2024)
(2) New Mexico Oil Conservation Division (OCD) well data [updated 2/17/2025]
(3) New Mexico Office of the State Engineer (OSE) point of diversion (POD) data [updated 2/10/2025]

Figure 6

DBS&A
a Geo-Logic Company

12/11/2024 DB19.1241

BUCKEYE STATE AF #003

New Mexico State Land Office Leases and Various Operator Pipelines

S:\PROJECTS\DB19.1241_BUCKEYE_DU-AF\GIS\MXDS\AF REMEDIATION\RECLAMATION PLAN\F07_PROPOSED EXCAVATION AREA.MXD

AF17
672
640

AF12
2,400
1,360

AF14
352
496

AF13
96

AF16
3,040
1,410

Northern Exploratory Excavation
3200
2120
1800

AF15
160

AF02
368
80

Southern Exploratory Excavation
4400
1100
688
2400

AF05
160

AF06
1,300

AF01
5,840

AF04
528

AF03
5,600

AF11
228

AF07
1,380

AF08
1,150

AF09
48
48

AF10
32

N

0 100 200 ft

Explanation

Sample location ID with chloride concentrations (mg/kg)
2 feet
4 feet
6 feet
8 feet

- Anticipated confirmation sample location
- December 2023 soil sample location
- January 2025 soil sample location
- Proposed excavation area
- Geophysical survey area
- Predicted 4 foot excavation area
- Predicted 2 foot excavation area
- Pipeline (dashed where inferred)

Source: Aerial imagery (ESRI, 2024; Atkins, 2024)

Notes:
1. Estimated area above 600 mg/kg chloride at 2 feet bgs derived from EM38 0.5-meter vertical dipole data.
2. Estimated area above 600 mg/kg chloride at 4 feet bgs derived from EM38 1-meter vertical dipole data.
3. Geophysical data related to December 2023 soil sample results using linear regression.
4. Pipelines are both buried and above ground, determined from site reconnaissance and aerial imagery review. Other pipelines not shown may be present.

DBS&A a Geo-Logic Company

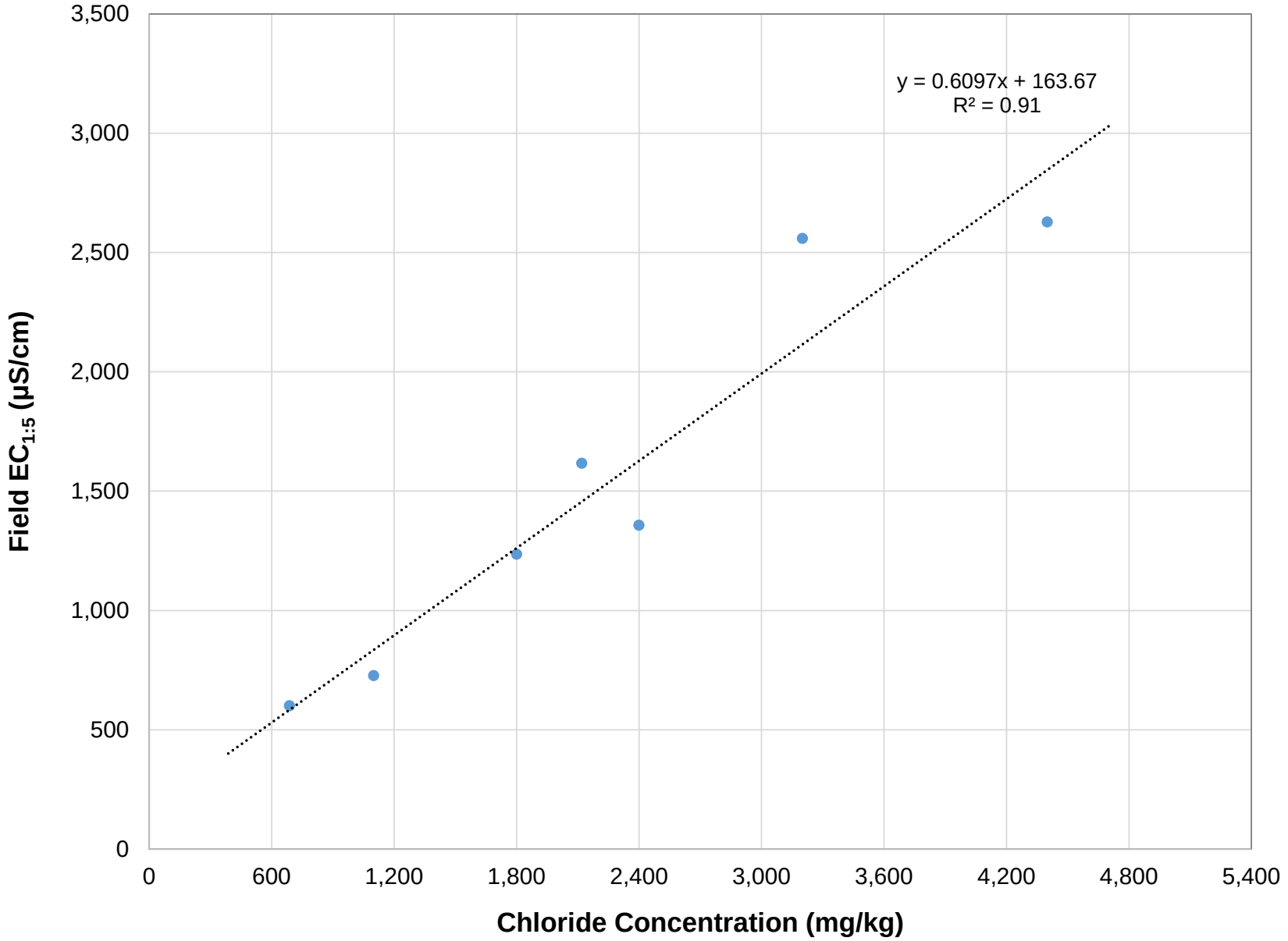
3/3/2025 DB19.1241

BUCKEYE STATE AF #003

Estimated Extents of Proposed Excavation Areas

Figure 7

P:_DB19-1241\AF Reclamation Pln.3-25\Figures\Word\Fig08_Linear Rgrssn.docx



BUCKEYE STATE AF #003

Linear Regression of Field $EC_{1:5}$ vs. Soil Chloride Concentration

Figure 8

DBS&A a Geo-Logic Company

3/3/2025 DB19.1241

Tables

Table 1. Soil Sample Analytical Results, December 2023

Location	Depth (feet)	Concentration (mg/kg)			
		Chloride	TPH	BTEX	Benzene
AF01	2.0	**5,840**	**1,087**	<0.300	<0.050
AF02	2.0	368	<10.0	<0.300	<0.050
AF02	4.0	80	<10.0	<0.300	<0.050
AF03	2.0	**5,600**	**2,389.6**	<0.300	<0.050
AF04	2.0	528	**157.7**	<0.300	<0.050
AF05	2.0	160	<10.0	<0.300	<0.050
AF06	2.0	**1,300**	<10.0	<0.300	<0.050
AF07	2.0	**1,380**	<10.0	<0.300	<0.050
AF08	2.0	**1,150**	<10.0	<0.300	<0.050
AF09	2.0	48	<10.0	<0.300	<0.050
AF09	4.0	48	<10.0	<0.300	<0.050
AF10	2.0	32	<10.0	<0.300	<0.050
AF11	2.0	228	<10.0	<0.300	<0.050
AF12	2.0	**2,400**	**454**	<0.300	<0.050
AF12	4.0	**1,360**	<10.0	<0.300	<0.050
AF13	2.0	96	<10.0	<0.300	<0.050
AF14	2.0	496	<10.0	<0.300	<0.050
AF14	4.0	352	<10.0	<0.300	<0.050
AF15	2.0	160	<10.0	<0.300	<0.050
AF16	2.0	**3,040**	<10.0	<0.300	<0.050
AF16	4.0	**1,410**	<10.0	<0.300	<0.050
AF17	2.0	**672**	<10.0	<0.300	<0.050
AF17	4.0	**640**	80.5	<0.300	<0.050

Bold indicates that value exceeds 600 milligrams per kilogram (mg/kg) for chloride and 100 mg/kg for total petroleum hydrocarbons [TPH]).
BTEX = Benzene, toluene, ethylbenzene, and total xylenes

Table 2. Soil Sample Analytical Results, January 2025

Sample ID	Field $EC_{1:5}$ (µS/cm)	Concentration (mg/kg)				
		Chloride	Total Petroleum Hydrocarbons			
			Gasoline-Range Organics (C6-C10)	Diesel-Range Organics (>C10-C28)	Extended Diesel-Range Organics (>C28-C36)	Total
North Exploratory Excavation 0-2'	2,559	**3,200**	<10.0	<10.0	<10.0	<30.0
North Exploratory Excavation 2'-4'	1,617	**2,120**	<10.0	<10.0	<10.0	<30.0
North Exploratory Excavation 4'-6'	1,235	**1,800**	<10.0	<10.0	<10.0	<30.0
South Exploratory Excavation 0-2'	2,628	**4,400**	338	3,700	674	**4,712**
South Exploratory Excavation 2'-4'	727	**1,100**	299	5,440	979	**6,718**
South Exploratory Excavation 4'-6'	600	**688**	748	10,900	2,320	**13,968**
South Exploratory Excavation 6'-8'	1,357	**2,400**	103	3,150	606	**3,859**

Bold indicates that value exceeds 600 milligrams per kilogram (mg/kg) for chloride and 100 mg/kg for total petroleum hydrocarbons (TPH).
BTEX constituents were not detected above a laboratory detection limit of up to 0.150 mg/kg; therefore, results are not shown.

Appendix A

Record of State AF #003 SWD Plugging and Abandonment

Submit 1 Copy To Appropriate District Office

District I – (575) 393-6161
1625 N. French Dr., Hobbs, NM 88240
District II – (575) 748-1283
811 S. First St., Artesia, NM 88210
District III – (505) 334-6178
1000 Rio Brazos Rd., Aztec, NM 87410
District IV – (505) 476-3460
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy, Minerals and Natural Resources

OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C
Revised July 18,

WELL API NO. 30-025-20980	
5. Indicate Type of Lease STATE ☒ FEE ☐	
6. State Oil & Gas Lease No. E 7723	
SUNDRY NOTICES AND REPORTS ON WELLS (DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH PROPOSALS.)	7. Lease Name or Unit Agreement Name Buckeye State AF
1. Type of Well: Oil Well ☐ Gas Well ☒ Other SWD	8. Well Number 3
2. Name of Operator Buckeye Disposals LLC	9. OGRID Number 222759
3. Address of Operator PO Box 2724 Lubbock, Texas 79408	10. Pool name or Wildcat Wolfcamp
4. Well Location Unit Letter L : 1980 feet from the South line and 990 feet from the West line	
Section 8 Township 185 Range 35E NMPM County Lea	
11. Elevation *(Show whether DR, RKB, RT, GR, etc.)*	

12. Check Appropriate Box to Indicate Nature of Notice, Report or Other Data

NOTICE OF INTENTION TO:				SUBSEQUENT REPORT OF:			
PERFORM REMEDIAL WORK	☐	PLUG AND ABANDON	☒	REMEDIAL WORK	☐	ALTERING CASING	☐
TEMPORARILY ABANDON	☐	CHANGE PLANS	☐	COMMENCE DRILLING OPNS.	☐	P AND A	☒
PULL OR ALTER CASING	☐	MULTIPLE COMPL	☐	CASING/CEMENT JOB	☐		
DOWNHOLE COMMINGLE	☐						
CLOSED-LOOP SYSTEM	☐						
OTHER:	☐			OTHER:	☐		

PNR

13. Describe proposed or completed operations. (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work). SEE RULE 19.15.7.14 NMAC. For Multiple Completions: Attach wellbore diagram of proposed completion or recompletion.

See attachments

Spud Date: Rig Release Date:

I hereby certify that the information above is true and complete to the best of my knowledge and belief.

SIGNATURE TITLE Manager DATE 5-5-23

Type or print name Jack Yates E-mail address: jacke@bengsten enterprises.com PHONE: 806-241-7405

For State Use Only

APPROVED BY: Kerry Fortner TITLE Compliance Officer A DATE 5/5/23

Conditions of Approval (if any):

- Buckeye Disposal LLC
- Buckeye State AF #3
- Start Date-04/03/23 Completed -04-20-23

1. Mon-04/03/23-Arrived on location at 9am, held a 5min tailgate safety meeting, got rig spotted and equipment ready for rig up, rigged up the rig. Waited on BOP to arrive, it arrived at 11.30am, nippled down wellhead and nippled up BOP. Rigged up work floor and tubing equipment, unset packer, crew took lunch break. Begin pulling tubing pulled 299 joints and the PKR secured well shut down.
2. Tues-04/04/23-Arrived on location, held a 5min tailgate safety meeting, opened well 0 psi, wireline arrived at 8am spotted equipment, rigged up tools and equipment, they tried to run in hole no luck. They noticed it was the wrong size tool. They had to run to town to get the correct tool. They arrived at 10:30am connected tool, ran in hole with gauge ring, then ran the bridge plug set it at (9800ft). Pulled out of hole and rigged down. Secured well shut down for the day due to the wind.
3. Wens-04/05/23 Arrived on location, held a 5min tailgate safety meeting. Opened well 0psi, got equipment ready, waited on tubing testers. They arrived at 7:30am got spotted and rigged up. It was a windy morning. They tested 4 stands with the rod style testing method and our derrick man was struggling due to wind to stab the probe from the derrick. I decided to rig them down and get the Bars style testing equipment that would be more time efficient and a safer process. Rigged them down waited on new testing truck to arrive from there yard. Testers Arrived at 10:30 am, spotted in and rigged up we then proceeded to test tubing in the hole. Tested 12 stands had to replace 2 collars tested 15 more stand, crew then took a lunch break. After lunch proceeded to test tubing in the hole. Replaced a total of 6 collars, got tubing tested and rigged down tubing testers, secured well shut down for the day. (During the process of testing about 50 stands left to test, the bars were falling at a very slow rate due to well begin full of water we hooked up vac truck.)
4. Thurs-04/06/23-Arrived on location, held tailgate safety meeting with crew, opened well 0 psi. Waited on cementers to finish rigging up, tied them on to the tubing to test the Bridge Plug, tested it to 500 psi tested good. Circulated well with jell brine. Spotted 25 sacks of cement, laid down 27 joints reversed pump water, to assure the tubing was clear. Waited on a new half pit due to the one on locating having a leak on it. Took a lunch break while it showed up, it arrived we then tied the hoses into the new half pit. Got ready to pump cement plug, pumped 25 sacks of class (8790 ft,) laid down 12 joints pulled 12 stands to the derrick, secured well shut down for the day.

5. Fri-04/07/23-Arrived on location, held a tailgate safety meeting, 0 psi on well opened up BOP, begin to run tubing in the hole to tag plug, tagged plug at 8626" ft. Then proceeded to lay down tubing on the trailer, laid down 62 joints, stood back 202 joints in the derrick. Ran in hole with 4" packer and 202 joints from the derrick, tried to set packer no luck picked up 1 joint worked packer again and got it to set at 6583". Rigged up wireline, perforated at 6800" ft, rigged down wireline, rigged up pump to try and get a pump rate, pressured rite up could not pump into perfs. Called NMODC no answer, waited 30 mins no called was returned. Decided to secure well and shut down for the day.
6. Mon-04/10/23-Arrived on location, held tailgate safety meeting, checked pressure on well 0 psi, opened BOP, NMODC decided to spot plug 50 ft below perfs, unset packer, picked up 7 joints to spot 25 sack plug at 6850" ft . Cement pump would not start. Waited until it was fixed at 10am. Proceeded to pump cement, laid down 12 joints and stood 15 stands back to the derrick WOC 4 hours. Went and tagged 6380" ft laid down 6 joints had rig problems shut down.
7. Tues-04/11/23-Arrived on location, held a tailgate safety meeting, waited on mechanic to arrive, and fix rig. He arrived got it going, laid down 12 joints spotted 25 sack plug at 6110" no tag required laid down 58 joints to 4200" ft. Secured well shut down for the day.
8. Wens-04/12/23-Arrived on location, held tailgate safety meeting, got equipment ready to pump plug cementer took a while to get his numbers ready and pump, did not start pumping until 8:30am. Pumped a 10 sack plug, pulled tubing to the derrick and waited on cement 4hrs. Opened well ran tubing with packer tagged plug at 4051"ft, laid down tubing to the next plug, set packer at 3640"ft. Rigged up wireline, perforated at 3876"ft rigged down wireline. Rigged up pump tried to establish pump rate could not, unset packer picked up 9 joints spotted 25 sacks of cement at 3926". Laid down 12 joints, stood back 15 stands to the derrick secured well shut down.
9. Thurs-04/13/23-Arrived on location, held tailgate safety meeting, opened well, started to run tuning tagged with 6 ft in, tagged way high, made a call to NMOCD and he decided to drill down to the plug that was pumped the day prior at 3926". Begin laying down 32 joints on the trailer and stood the rest in the derrick, pulled 6 stands and the tubing was full waited on mud bucket to arrive. It arrived at 11:30am we then continued pulling tubing, got to the plugged off joints begin to lay them down on the ground, laid down 32 cemented joints. Could not get the drilling equipment till the next day, secured well shut down.

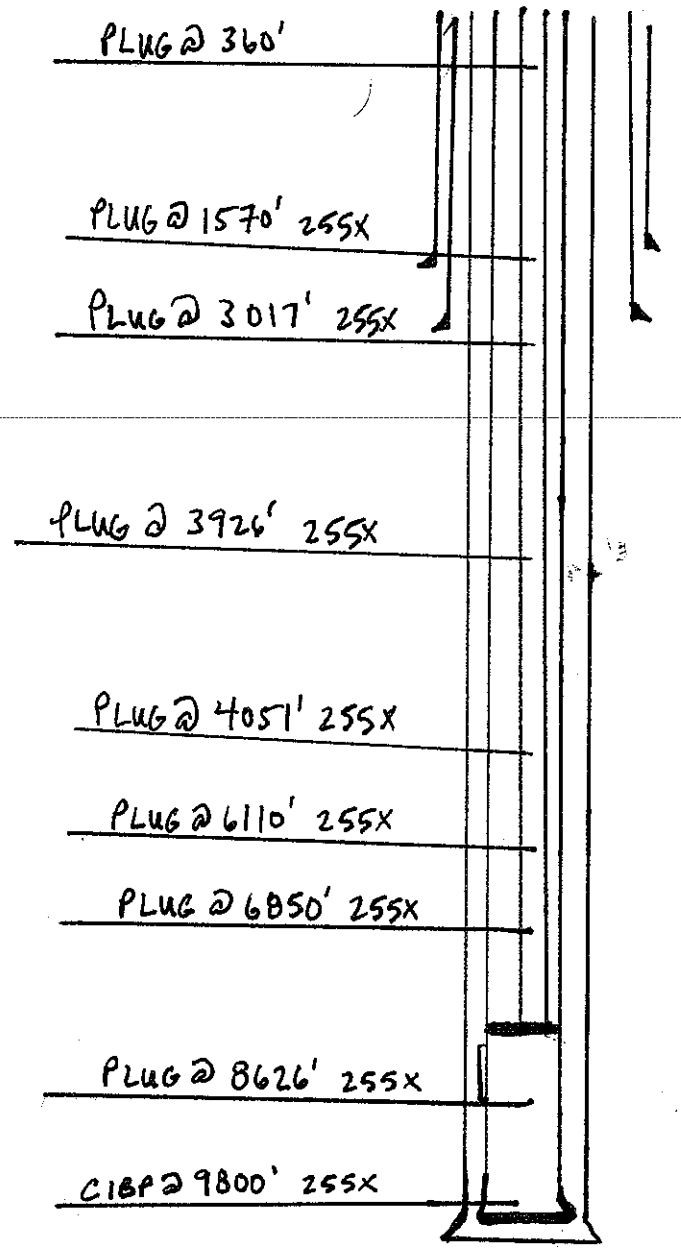
10. Fri-04/14/23-Arrived on location, held tailgate safety meeting, opened well, spotted in drill collars and equipment, tallied the collars, begin to pick the up, picked up bit and 6 drill collars, ran tubing tagged at 2570" set 15 points on it fell through, continued to run tubing to 3988 never tagged on cement. Circulated well clean, POOH with tubing and laid down drill collars, secured well shut down.

11. Mon-04/17/23-Arrived on location, held safety meeting, opened well, begin to run tubing in hole, ran 114 joints from the derrick, picked up 7 joints from trailer, rigged up pump, spotted 25 sacks of cement at 3926” ft. laid down 12 joints stood back 15 stands WOC 4 hrs. Opened well begin to run tubing to tag plug, tagged at 3396” ft, good tag, laid down 10 joints, rigged up pump spotted 25 sacks at 3017” ft. Laid down 50 joints stood back the rest of the tubing secured well shut down.

12. Tues-04/18/23-Arrived on location, held safety meeting, opened well o psi, begin to run tubing to tag plug, tagged at 2517” ft. Laid down tubing to 1302” ft set packer. Secured well waited on wireline to arrive. They arrived got rigged up, perforated at 1520” ft, rigged down wireline, connected pump to try and establish rate, no luck decided to drop 50 ft below the perfs and spot 25 sacks. Picked up 9 joints, spotted 25 sacks, laid down 17 joints, reversed out to clear tubing, stood 16 stands back in derrick shut down due to wind.

13. Wens-04/19/23-Arrived on location, held safety meeting, opened well 0 psi, ran tubing tagged at 1040” ft, good tag, begin to lay down tubing, laid down 31 joints, pulled two stands and picked up packer with 5 joints, set packer rigged up wireline, perforated at 360” ft, rigged down wireline, connected pump to establish rate, pumped 10 bbls at 480 psi, begin to pump 50 sacks of cement into perfs. Shut in pressure was at 200 psi waited on cement to settle for 1hour, opened well, unset packer, laid down 4 joints set packer at 32” ft. Rigged up wireline, they perforated at 150” ft rigged them down. Rigged up pump to see if we could circulate well threw the surface casing, we circulated 20 bbls or water then begin to pump cement, pumped 80 sacks of cement and got good cement to surface stopped pumping. We then unset packer, laid down 1 joint and the packer, rigged down work floor and equipment, nippled down BOP, filled the casing and cellar with cement rigged down cementers and waited for cement to settle. Crew took lunch break, then cleaned and cleared location, got the rig ready for rig down to windy to rig down shut down for the day.
14. Thurs-04/20/23-Arrived on location, held safety meeting, rigged the rig down got it out of the way, waited on the excavator to arrive. Meanwhile crew pressure washed and organized rig. Excavator arrived we dig out the cellar crew assisted with shovels, welder them cut the well head off and welded a cap on there we back filled the well and leveled the grown. Moved rig to the yard shut down for the day. JOP COMPLETED.

BUCKEYE DISPOSAL INC.
STATE AF #3 - P9A SKETCH



District I
1625 N. French Dr., Hobbs, NM 88240
Phone:(575) 393-6161 Fax:(575) 393-0720
District II
811 S. First St., Artesia, NM 88210
Phone:(575) 748-1283 Fax:(575) 748-9720
District III
1000 Rio Brazos Rd., Aztec, NM 87410
Phone:(505) 334-6178 Fax:(505) 334-6170
District IV
1220 S. St Francis Dr., Santa Fe, NM 87505
Phone:(505) 476-3470 Fax:(505) 476-3462

State of New Mexico
Energy, Minerals and Natural Resources
Oil Conservation Division
1220 S. St Francis Dr.
Santa Fe, NM 87505

COMMENTS

Action 213950

COMMENTS

Operator: BUCKEYE DISPOSAL, L.L.C. P.O. Box 2724 Lubbock, TX 79408	OGRID: 222759
	Action Number: 213950
	Action Type: [C-103] Sub. Plugging (C-103P)

COMMENTS

Created By	Comment	Comment Date
plmartinez	DATA ENTRY PM	5/5/2023

OCD Ex. 17-043

District I
1625 N. French Dr., Hobbs, NM 88240
Phone:(575) 393-6161 Fax:(575) 393-0720
District II
811 S. First St., Artesia, NM 88210
Phone:(575) 748-1283 Fax:(575) 748-9720
District III
1000 Rio Brazos Rd., Aztec, NM 87410
Phone:(505) 334-6178 Fax:(505) 334-6170
District IV
1220 S. St Francis Dr., Santa Fe, NM 87505
Phone:(505) 476-3470 Fax:(505) 476-3462

State of New Mexico
Energy, Minerals and Natural Resources
Oil Conservation Division
1220 S. St Francis Dr.
Santa Fe, NM 87505

CONDITIONS

Action 213950

CONDITIONS

Operator: BUCKEYE DISPOSAL, L.L.C. P.O. Box 2724 Lubbock, TX 79408	OGRID: 222759
	Action Number: 213950
	Action Type: [C-103] Sub. Plugging (C-103P)

CONDITIONS

Created By	Condition	Condition Date
kfortner	Need C103Q and marker photo to release	5/5/2023

OCD Ex. 17-044

Appendix B

Boone (2024) NMSLO Cultural Resources Cover Sheet

DBS&A a Geo-Logic Company

Stephanie Garcia Richard, Commissioner of Public Lands
State of New Mexico

NMSLO Cultural Resources Cover Sheet
Exhibit

NMCRIS Activity Number: 156680
(if applicable)

Exhibit Type (select one)

○ **ARMS Inspection/Review** - Summarize the results (select one):

- ☐ (A) The entire area of potential effect or project area has been previously surveyed to current standards and **no cultural properties** were found within the survey area.
- ☐ (B) The entire area of potential effect or project area has been previously surveyed to current standards and **cultural properties were found** within the survey area.
- ☐ (C) The entire area of potential effect or project area has **not** been previously surveyed or **has not been surveyed** to current standards. A complete archaeological survey will be conducted and submitted for review.

◉ **Archaeological Survey**

Findings:

- ☑ **Negative** - No further archaeological review is required.
- ☐ **Positive** - Have avoidance and protection measures been devised? Select one: ☐

Comments:

Project Details:

NMSLO Lease Number (if available):

Cultural Resources Consultant: Boone Archaeological Resource Consultants LLC

Project Proponent (Applicant): Daniel B. Stephens & Associates, Inc.

Project Title/Description: A Class III Archaeological Survey for the Daniel B. Stephens & Associates, Inc. Proposed Buckeye State AF Soil Sampling, Lea County, New Mexico

Project Location:

County(ies): Lea County, NM

PLSS/Section/Township/Range): T18S R35E S8

For NMSLO Agency Use Only:

NMSLO Lease Number: Acknowledgment-Only: ☐

Lease Analyst:

Date Exhibit Routed to Cultural Resources Office:

No person may alter the wording of the questions or layout of the cover sheet. The completion of this cover sheet by itself does not authorize anyone to engage in new surface disturbing activity before the review and approvals required by the Cultural Properties Protections Rule.

Form Revised 12 22

Appendix C

L02350 Well Log

Form WR-23 FIELD ENGR. LOG STATE ENGINEER OFFICE Well [redacted]4

WELL RECORD

INSTRUCTIONS: This form should be executed in triplicate, preferably typewritten, and submitted to the nearest district office of the State Engineer. All sections, except Section 5, shall be answered as completely and accurately as possible when any well is drilled, repaired or deepened. When this form is used as a plugging record, only Section 1A and Section 5 need be completed.

Section 1

#2 on C-2-137-7 OPN: 25-11767			
0			

(Plat of 640 acres)

(A) Owner of well National Potash Co.
Street and Number Box 731
City Carlsbad State New Mexico
Well was drilled under Permit No. ____ and is located in the ____ ¼ SW ¼ SW ¼ of Section 8 Twp. 18 S Rge. 35 E
(B) Drilling Contractor Abbott Bros. License No. WD-46
Street and Number Box 637
City Hobbs State New Mexico
Drilling was commenced March 1 19 60
Drilling was completed March 5 19 60

Elevation at top of casing in feet above sea level ____ Total depth of well 216
State whether well is shallow or artesian Shallow Depth to water upon completion 105

Section 2 PRINCIPAL WATER-BEARING STRATA

No.	Depth in Feet From	Depth in Feet To	Thickness in Feet	Description of Water-Bearing Formation
1	110	135	25	Water Sand
2	180	212	32	Sand & Gravel
3				
4				
5				

Section 3 RECORD OF CASING

Dia in.	Pounds ft.	Threads in	Depth Top	Depth Bottom	Feet	Type Shoe	Perforations From	Perforations To
12 3/4	40	weld	0	216	216	weld	110	210

Section 4 RECORD OF MUDDING AND CEMENTING

Depth in Feet From	Depth in Feet To	Diameter Hole in in.	Tons Clay	No. Sacks of Cement	Methods Used

Section 5 PLUGGING RECORD

Name of Plugging Contractor ____ License No. ____
Street and Number ____ City ____ State ____
Tons of Clay used ____ Tons of Roughage used ____ Type of roughage ____
Plugging method used ____ Date Plugged ____ 19 ____
Plugging approved by: ____ Basin Supervisor

Cement Plugs were placed as follows:

No.	Depth of Plug From	Depth of Plug To	No. of Sacks Used

FOR USE OF STATE ENGINEER ONLY

STATE ENGINEER OFFICE
Date Received 1960 MAR 17 AM 8:37

File No. L-2350 Use Ind. Location No. 18.35.32333[illegible]

OCD Ex. 17-048

Section 6

LOG OF WELL

Depth in Feet From	Depth in Feet To	Thickness in Feet	Color	Type of Material Encountered
0	1	1		Soil
1	15	14		Caliche
15	40	25		Sand
40	50	10		Sandstone
50	110	60		Dry Sand
110	135	25		Water Sand
135	180	45		Tight Sand
180	212	32		Sand & Gravel
212	216	4		Red Bed

L S Elev 3952'
Depth to K Trc 212'
Elev of K Trc 3740'

Loc. No. 18.35.8.31444

Hydro. Survey ____ Field Check X

SOURCE OF ALTITUDE GIVEN

Interpolated from Topo. Sheet X

Determined by Inst. Leveling ____

Other ____

L S Elev 3961
Depth to K Trc 212'
Elev of K Trc 3749'

The undersigned hereby certifies that, to the best of his knowledge and belief, the foregoing is a true and correct record of the above described well.

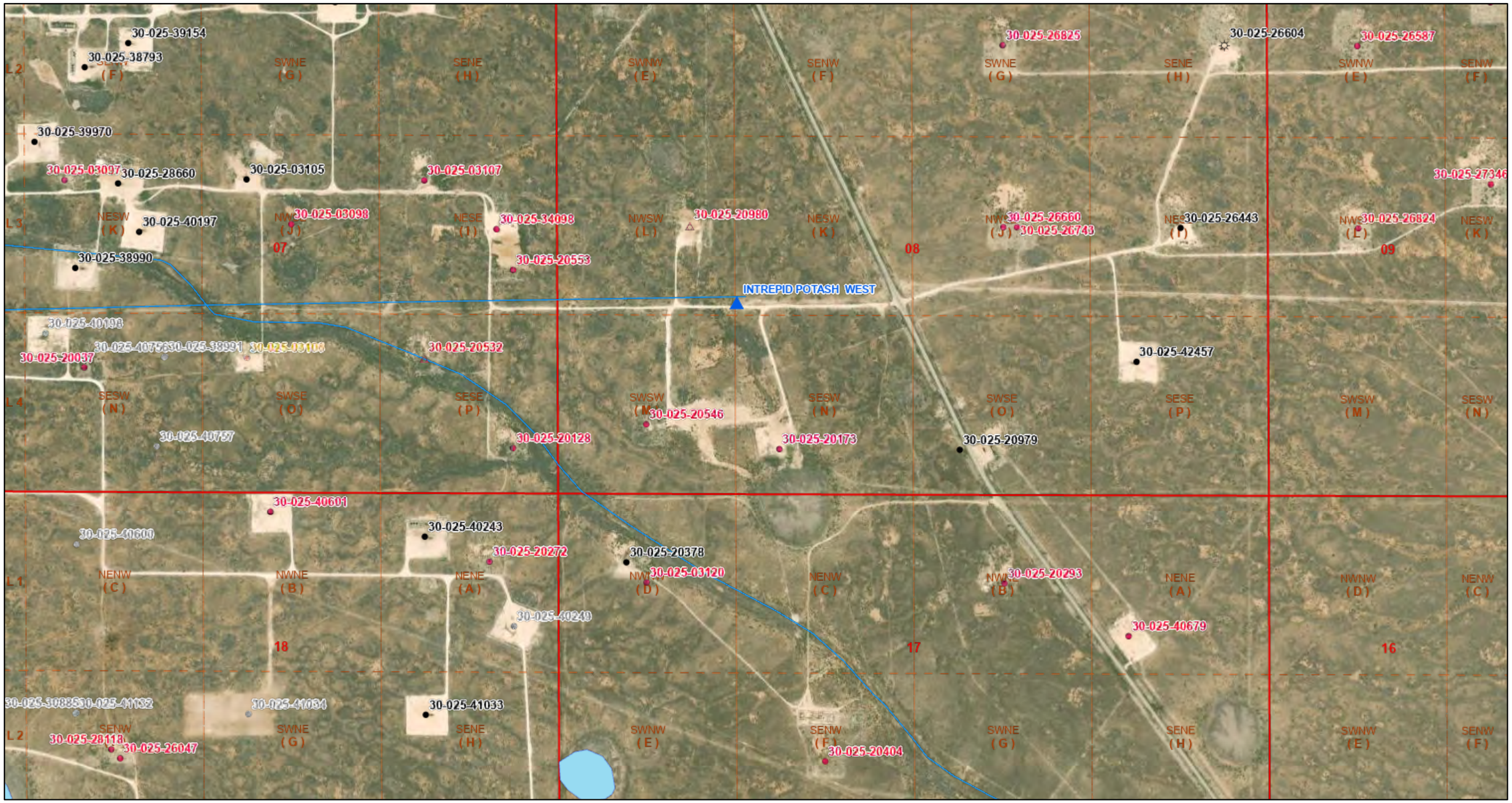
Murrell Abbott
Well Driller

Appendix D

Proximity to Surface Water Features New Mexico OCD Oil and Gas Map

DBS&A a Geo-Logic Company

OCD Well Locations



1/22/2024, 2:56:49 PM

1:10,133

Wells - Large Scale

- Gas, Active
- Oil, Active
- Oil, Cancelled
- Oil, Plugged
- Oil, Temporarily Abandoned
- Salt Water Injection, Plugged
- OSW Water Bodys
- OSE Streams
- NMED Drinking Water Systems
- PLSS Second Division
- PLSS First Division

0 0.1 0.2 0.4 mi

0 0.15 0.3 0.6 km

Oil Conservation Division of the New Mexico Energy, Minerals and Natural Resources Department., Esri, HERE, Garmin, iPC, Maxar, NM OSE, BLM

Appendix E

Release Notification Forms (C-141)

District I
1625 N. French Dr., Hobbs, NM 88240
District II
811 S. First St., Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-141
Revised August 8, 2011

Submit 1 Copy to appropriate District Office in accordance with 19.15.29 NMAC.

Release Notification and Corrective Action

OPERATOR

☒ Initial Report ☐ Final Report

Name of Company: Buckeye Disposals	Contact: Jim Sayre
Address: PO Box 2724 Lubbock, TX 79408	Telephone No.: 575-390-6006
Facility Name: State AF #3	Facility Type: Disposal

Surface Owner	Mineral Owner	API No.: 30-025-20980

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
L	8	185	35E	1980	South Line	990	West Line	Lea County

Latitude: 32.756736 Longitude: 103.484803

NATURE OF RELEASE

Type of Release: Spill	Volume of Release: 15 bbl	Volume Recovered: 14 bbl
Source of Release: 3" PVC Line	Date and Hour of Occurrence	Date and Hour of Discovery
Was Immediate Notice Given? ☐ Yes ☐ No ☐ Not Required	If YES, To Whom?	
By Whom?	Date and Hour	
Was a Watercourse Reached? ☐ Yes ☒ No	If YES, Volume Impacting the Watercourse.	

If a Watercourse was Impacted, Describe Fully.*

Describe Cause of Problem and Remedial Action Taken.*

Broken 3" PVC Line - Repair broken 3" PVC Line.

REVIEWED
By Kristen Lynch at 9:57 am, Sep 07, 2016

Describe Area Affected and Cleanup Action Taken.*

Inside lined dyke – Repair liner, evacuate fluid form inside the dyke and mediate dirt inside the lined dyke.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

Signature: JD Sayre

Printed Name: Jim Sayre

Title: Manager

E-mail Address: jim@thestandardenergy.com

Date: 8/20/16 Phone: 575-390-6006

OIL CONSERVATION DIVISION

CONDITIONALLY
Approved by Environmental Specialist: Kristen Lynch

CONDITIONALLY
Approval Date: 9/07/2016 Expiration Date: 11/07/2016

Conditions of Approval:
Submit Remediation Proposal no Later than 10/7/2016
Provide depth to Ground Water
Delineate and Remediate per NMOCD Guidelines.
Discrete Samples Accepted ONLY. NMOCD must approve all site investigation & Corrective Activities prior to implementation. Corrective action is site specific and risk based. NMOCD retains the right to require remediation to more stringent levels than proposed in guidelines if warranted by site specific conditions. Notify NMOCD prior to all sampling, to allow opportunity for witness sampling operations.

Attached ☐

1RP 4429

nKL1625134663
pKL1625135663

* Attach Additional Sheets If Necessary

HOBBS OCD
MAY 11 2018
RECEIVED

District I
1625 N. French Dr., Hobbs, NM 88240
District II
811 S. First St., Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-141
Revised August 8, 2011

Submit 1 Copy to appropriate District Office in accordance with 19.15.29 NMAC.

Release Notification and Corrective Action

OPERATOR

☑ Initial Report ☐ Final Report

Name of Company Buckeye Disposal	Contact Jim SAYRE
Address	Telephone No. 575-393-8352
Facility Name State AF	Facility Type Disposal

Surface Owner State	Mineral Owner State	API No. 30-025-20980

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
L	8	18S	35E	1980	South	990	West	LEA

Latitude 32.76012 Longitude 103.48457

NATURE OF RELEASE

Type of Release Leak produced water	Volume of Release 30 bbl	Volume Recovered 30 bbl
Source of Release Line Failure	Date and Hour of Occurrence 4-24	Date and Hour of Discovery 4-26-18
Was Immediate Notice Given? ☐ Yes ☑ No ☐ Not Required	If YES, To Whom?	
By Whom?	Date and Hour	
Was a Watercourse Reached? ☐ Yes ☑ No	If YES, Volume Impacting the Watercourse.	

If a Watercourse was Impacted, Describe Fully.*

RECEIVED
By Olivia Yu at 2:23 pm, May 11, 2018

Describe Cause of Problem and Remedial Action Taken.*
Seal on pump went out causing pressure build up & line failure inside dyke & liner

Describe Area Affected and Cleanup Action Taken.*
Inside the liner

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

Signature: Jim Sayre
Printed Name: Jim SAYRE
Title: MANAGER
E-mail Address: jim@thestandardenergy.com
Date: 5-4-18 Phone:

OIL CONSERVATION DIVISION

Approved by Environmental Specialist:

Approval Date: 5/11/2018 Expiration Date:

Conditions of Approval: Attached ☐

see attached directive for historical impacted areas on location.
Please inspect liner in question.
Provide NMOCD with a concise report of the inspection with affirmation the liner has and will continue to contain liquids.

1RP-5056

* Attach Additional Sheets If Necessary

nOY1813152090

pOY1813152414

Operator/Responsible Party,

The OCD has received the form C-141 you provided on _5/11/2018_ regarding an unauthorized release. The information contained on that form has been entered into our incident database and remediation case number _1RP-5056__ has been assigned. **Please refer to this case number in all future correspondence.**

It is the Division's obligation under both the Oil & Gas Act and Water Quality Act to provide for the protection of public health and the environment. Our regulations (19.15.29.11 NMAC) state the following,

> *The responsible person shall complete division-approved corrective action for releases that endanger public health or the environment. The responsible person shall address releases in accordance with a remediation plan submitted to and approved by the division or with an abatement plan submitted in accordance with 19.15.30 NMAC.* [emphasis added]

Release characterization is the first phase of corrective action unless the release is ongoing or is of limited volume and all impacts can be immediately addressed. Proper and cost-effective remediation typically cannot occur without adequate characterization of the impacts of any release. Furthermore, the Division has the ability to impose reasonable conditions upon the efforts it oversees. **As such, the Division is requiring a workplan for the characterization of impacts associated with this release be submitted to the OCD District _1_ office in __Hobbs____ on or before _6/11/2018_. If and when the release characterization workplan is approved, there will be an associated deadline for submittal of the resultant investigation report. Modest extensions of time to these deadlines may be granted, but only with acceptable justification.**

The goals of a characterization effort are: 1) determination of the lateral and vertical extents along with the magnitude of soil contamination. 2) determine if groundwater or surface waters have been impacted. 3) If groundwater or surface waters have been impacted, what are the extents and magnitude of that impact. 4) The characterization of any other adverse impacts that may have occurred (examples: impacts on vegetation, impacts on wildlife, air quality, loss of use of property, etc.). To meet these goals as quickly as possible, the following items must, at a minimum, be addressed in the release characterization workplan and subsequent reporting:

● Horizontal delineation of soil impacts in each of the four cardinal compass directions. Adsorbed soil contamination must be characterized for the following constituents using the associated laboratory methods: benzene, toluene, ethylbenzene, and total xylenes by either Method 8260 or 8021, total petroleum hydrocarbons by Method 8015 extended range (GRO+DRO+MRO; C_6 thru C_{36}), and for chloride by Method 300. This is not an exclusive list of potential contaminants. Analyzed parameters should be modified based on the nature of the released substance(s). Soil sampling must be both within the impacted area and beyond.

● Vertical delineation of soil impacts. Adsorbed soil contamination must be characterized for the following constituents using the associated laboratory methods: benzene, toluene, ethylbenzene, and total xylenes by either Method 8260 or 8021, total petroleum hydrocarbons by Method 8015 extended range (GRO+DRO+MRO; C_6 thru C_{36}), and for chloride by Method 300. As above, this is not an exclusive list of potential contaminants and can be modified. Vertical characterization samples should be taken at depth intervals no greater than five feet apart. Lithologic description of encountered soils must also be provided. At least ten vertical feet of soils with contaminant concentrations at or below these values must be demonstrated as existing above the water table.

● Nominal detection limits for field and laboratory analyses must be provided.

● Composite sampling is not generally allowed.

● Field screening and assessment techniques are acceptable (headspace, titration, EC [include algorithm for validation purposes], EM, etc.), but the sampling and assay procedures must be clearly defined. Copies of field notes are highly desirable. A statistically significant set of split samples must be submitted for confirmatory laboratory analysis, including the laterally farthest and vertically deepest sets of soil samples. Make sure there are at least two soil samples submitted

for laboratory analysis from each borehole or test pit (highest observed contamination and deepest depth investigated). Copies of the actual laboratory results must be provided including chain of custody documentation.

●Probable depth to shallowest protectable groundwater and lateral distance to nearest surface water. If there is an estimate of groundwater depth, the information used to arrive at that estimate must be provided. If there is a reasonable assumption that the depth to protectable water is 50 feet or less, the responsible party should anticipate the need for at least one groundwater monitoring well to be installed in the area of likely maximum contamination.

● If groundwater contamination is encountered, an additional investigation workplan may be required to determine the extents of that contamination. Groundwater and/or surface water samples, if any, must be analyzed by a competent laboratory for volatile organic hydrocarbons (typically Method 8260 full list), total dissolved solids, pH, major anions and cations including chloride and sulfate, dissolved iron, and dissolved manganese. The investigation workplan must provide the groundwater sampling method(s) and sample handling protocols. To the fullest extent possible, aqueous analyses must be undertaken using nominal method detection limits. As with the soil analyses, copies of the actual laboratory results must be provided including chain of custody documentation.

● Accurately scaled and well-drafted site maps must be provided providing the location of borings, test pits, monitoring wells, potentially impacted areas, and significant surface features including roads and site infrastructure that might limit either the release characterization or remedial efforts. Field sketches may be included in subsequent reporting, but should not be considered stand-alone documentation of the site's layout. Digital photographic documentation of the location and fieldwork is recommended, especially if unusual circumstances are encountered.

Nothing herein should be interpreted to preclude emergency response actions or to imply immediate remediation by removal cannot proceed as warranted. Nonetheless, characterization of impacts and confirmation of the effectiveness of remedial efforts must still be provided to the OCD before any release incident will be closed.

Jim Griswold
OCD Environmental Bureau Chief
1220 South St. Francis Drive
Santa Fe, New Mexico 87505
505-476-3465
jim.griswold@state.nm.us

Appendix F

Analytical Laboratory Reports

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

February 19, 2019

JIM SAYRE

BUCKEYE DISPOSAL, LLC

P. O. BOX 513

HOBBS, NM 88241

RE: BUCKEYE

Enclosed are the results of analyses for samples received by the laboratory on 02/15/19 8:05.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-18-11. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (*). For a complete list of accredited analytes and matrices visit the TCEQ website at www.tceq.texas.gov/field/qa/lab_accred_certif.html.

Cardinal Laboratories is accreditated through the State of Colorado Department of Public Health and Environment for:

Method EPA 552.2	Haloacetic Acids (HAA-5)
Method EPA 524.2	Total Trihalomethanes (TTHM)
Method EPA 524.4	Regulated VOCs (V1, V2, V3)

Accreditation applies to public drinking water matrices.

This report meets NELAP requirements and is made up of a cover page, analytical results, and a copy of the original chain-of-custody. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Celey D. Keene

Celey D. Keene

Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

BUCKEYE DISPOSAL, LLC
JIM SAYRE
P. O. BOX 513
HOBBS NM, 88241
Fax To: UNK-NOWN

Received:	02/15/2019	Sampling Date:	02/14/2019
Reported:	02/19/2019	Sampling Type:	Soil
Project Name:	BUCKEYE	Sampling Condition:	** (See Notes)
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	NOT GIVEN		

Sample ID: DRAW SOUTH 14'' (H900609-01)

Chloride, SM4500Cl-B **mg/kg** **Analyzed By: JH**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**960**	16.0	02/19/2019	ND	432	108	400	0.00	

Sample ID: NORTH EAST CORNER 16'' (H900609-02)

Chloride, SM4500Cl-B **mg/kg** **Analyzed By: JH**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**5520**	16.0	02/19/2019	ND	432	108	400	0.00	

Sample ID: SOUTH EAST CORNER 16'' (H900609-03)

Chloride, SM4500Cl-B **mg/kg** **Analyzed By: JH**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**3040**	16.0	02/19/2019	ND	432	108	400	0.00	

Sample ID: DRAW SOUTHEAST 16'' (H900609-04)

Chloride, SM4500Cl-B **mg/kg** **Analyzed By: JH**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**5280**	16.0	02/19/2019	ND	432	108	400	0.00	

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

BUCKEYE DISPOSAL, LLC
JIM SAYRE
P. O. BOX 513
HOBBS NM, 88241
Fax To: UNK-NOWN

Received:	02/15/2019	Sampling Date:	02/14/2019
Reported:	02/19/2019	Sampling Type:	Soil
Project Name:	BUCKEYE	Sampling Condition:	** (See Notes)
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	NOT GIVEN		

Sample ID: DRAW SOUTH WEST 18'' (H900609-05)

Chloride, SM4500Cl-B **mg/kg** **Analyzed By: JH**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**3040**	16.0	02/19/2019	ND	432	108	400	0.00	

Sample ID: NORTH WEST CORNER 36'' (H900609-06)

Chloride, SM4500Cl-B **mg/kg** **Analyzed By: JH**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**1680**	16.0	02/19/2019	ND	432	108	400	0.00	

Sample ID: NORTH WEST LINER 36'' (H900609-07)

Chloride, SM4500Cl-B **mg/kg** **Analyzed By: JH**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**1160**	16.0	02/19/2019	ND	432	108	400	0.00	

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Notes and Definitions

ND	Analyte NOT DETECTED at or above the reporting limit
RPD	Relative Percent Difference
**	Samples not received at proper temperature of 6°C or below.
***	Insufficient time to reach temperature.
-	Chloride by SM4500Cl-B does not require samples be received at or below 6°C
	Samples reported on an as received basis (wet) unless otherwise noted on report

Cardinal Laboratories

*=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

101 East Marland, Hobbs, NM 88240
(575) 393-2326 FAX (575) 393-2476

Company Name: Buckeye Disposal		**BILL TO**
Project Manager: JIM SAYRE		P.O. #:
Address: PO Box 513		Company:
City: Hobbs	State: NM Zip: 88240	Attn:
Phone #: 575-361-5072	Fax #: 575-393-8352	Address:
Project #:	Project Owner:	City:
Project Name:		State: Zip:
Project Location: Buckeye		Phone #:
Sampler Name: JIM SAYRE		Fax #:

FOR LAB USE ONLY Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX: GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :	PRESERV.: ACID/BASE:	ICE / COOL	OTHER :	SAMPLING: DATE	TIME	ANALYSIS REQUEST: Cl
H900609 1	Draw South 14"	G	1			✓							2-14-19	17:30	✓
2	North East Corner 16"	”	”			”							”	”	”
3	South East Corner 16"	”	”			”							”	”	”
4	Draw SouthEast 16"	”	”			”							”	”	”
5	Draw SouthWest 18"	”	”			”							”	”	”
6	NorthWest Corner 36"	”	”			”							”	”	”
7	North West Liner 36"	”	”			”							”	”	”

Relinquished By: [signature] Sayre	Date: 2-15-19 Time: 0805	Received By: Tamara Oldaker	Phone Result: ☐ Yes ☐ No Add'l Phone #:
Relinquished By:	Date: Time:	Received By:	Fax Result: ☐ Yes ☐ No Add'l Fax #:
Delivered By: (Circle One) Sampler - UPS - Bus - Other: 19.3°c #97	Sample Condition Cool Intact ☐ Yes ☑ Yes ☑ No ☐ No	CHECKED BY: (Initials) TC	REMARKS: JIM@thestandardenergy.com

OCD Ex. 17-062

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

December 07, 2023

JACK YATES

STANDARD ENERGY SERVICES

P. O. BOX 2724

LUBBOCK, TX 79408

RE: AF

Enclosed are the results of analyses for samples received by the laboratory on 12/04/23 9:22.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-22-15. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (*). For a complete list of accredited analytes and matrices visit the TCEQ website at www.tceq.texas.gov/field/qa/lab_accred_certif.html.

Cardinal Laboratories is accreditated through the State of Colorado Department of Public Health and Environment for:

Method EPA 552.2	Total Haloacetic Acids (HAA-5)
Method EPA 524.2	Total Trihalomethanes (TTHM)
Method EPA 524.4	Regulated VOCs (V1, V2, V3)

Cardinal Laboratories is accredited through the State of New Mexico Environment Department for:

Method SM 9223-B	Total Coliform and E. coli (Colilert MMO-MUG)
Method EPA 524.2	Regulated VOCs and Total Trihalomethanes (TTHM)
Method EPA 552.2	Total Haloacetic Acids (HAA-5)

Accreditation applies to public drinking water matrices for State of Colorado and New Mexico.

This report meets NELAP requirements and is made up of a cover page, analytical results, and a copy of the original chain-of-custody. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Celey D. Keene

Celey D. Keene

Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

STANDARD ENERGY SERVICES P. O. BOX 2724 LUBBOCK TX, 79408	Project: AF Project Number: 1 Project Manager: JACK YATES Fax To: (575) 234-2873	Reported: 07-Dec-23 13:40

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
01 2FT	H236486-01	Soil	01-Dec-23 06:00	04-Dec-23 09:22
02 2FT	H236486-02	Soil	01-Dec-23 06:00	04-Dec-23 09:22
02 4FT	H236486-03	Soil	01-Dec-23 06:00	04-Dec-23 09:22
03 2FT	H236486-04	Soil	01-Dec-23 06:00	04-Dec-23 09:22
AF 04 2FT	H236486-05	Soil	01-Dec-23 06:00	04-Dec-23 09:22
AF 05 2FT	H236486-06	Soil	01-Dec-23 06:00	04-Dec-23 09:22
AF 06 2FT	H236486-07	Soil	01-Dec-23 06:00	04-Dec-23 09:22
AF 07 2FT	H236486-08	Soil	01-Dec-23 06:00	04-Dec-23 09:22
AF 08 (2FT)	H236486-09	Soil	01-Dec-23 06:00	04-Dec-23 09:22
AF 09 4FT	H236486-10	Soil	01-Dec-23 06:00	04-Dec-23 09:22
AF 09 2FT	H236486-11	Soil	01-Dec-23 06:00	04-Dec-23 09:22
AF 10 2FT	H236486-12	Soil	01-Dec-23 06:00	04-Dec-23 09:22
AF 11 2FT	H236486-13	Soil	01-Dec-23 06:00	04-Dec-23 09:22
AF 12 2FT	H236486-14	Soil	01-Dec-23 06:00	04-Dec-23 09:22
AF 12 4FT	H236486-15	Soil	01-Dec-23 06:00	04-Dec-23 09:22
AF 13 2FT	H236486-16	Soil	01-Dec-23 06:00	04-Dec-23 09:22
AF 14 4FT	H236486-17	Soil	01-Dec-23 06:00	04-Dec-23 09:22
AF 15 2FT	H236486-18	Soil	01-Dec-23 06:00	04-Dec-23 09:22
AF 16 2FT	H236486-19	Soil	01-Dec-23 06:00	04-Dec-23 09:22
AF 16 4FT	H236486-20	Soil	01-Dec-23 06:00	04-Dec-23 09:22
AF 17 2FT	H236486-21	Soil	01-Dec-23 06:00	04-Dec-23 09:22
AF 14 2FT	H236486-22	Soil	01-Dec-23 06:00	04-Dec-23 09:22
AF 17 @ 4FT	H236486-23	Soil	01-Dec-23 06:00	04-Dec-23 09:22

12/07/23 - All sample jars had headspace. BTEX and TPH results may be biased low.

Cardinal Laboratories

*=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

STANDARD ENERGY SERVICES P. O. BOX 2724 LUBBOCK TX, 79408	Project: AF Project Number: 1 Project Manager: JACK YATES Fax To: (575) 234-2873	Reported: 07-Dec-23 13:40

01 2FT

H236486-01 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
Cardinal Laboratories										
Inorganic Compounds										
Chloride	**5840**		16.0	mg/kg	4	3120512	AC	05-Dec-23	4500-Cl-B	
Volatile Organic Compounds by EPA Method 8021										**HDSP-1**
Benzene*	<0.050		0.050	mg/kg	50	3120424	JH/	05-Dec-23	8021B	
Toluene*	<0.050		0.050	mg/kg	50	3120424	JH/	05-Dec-23	8021B	
Ethylbenzene*	<0.050		0.050	mg/kg	50	3120424	JH/	05-Dec-23	8021B	
Total Xylenes*	<0.150		0.150	mg/kg	50	3120424	JH/	05-Dec-23	8021B	
Total BTEX	<0.300		0.300	mg/kg	50	3120424	JH/	05-Dec-23	8021B	
Surrogate: 4-Bromofluorobenzene (PID)			*119 %*	*71.5-134*		*3120424*	JH/	*05-Dec-23*	*8021B*	
Petroleum Hydrocarbons by GC FID										**HDSP-1**
GRO C6-C10*	<10.0		10.0	mg/kg	1	3120427	MS	05-Dec-23	8015B	
DRO >C10-C28*	**801**		10.0	mg/kg	1	3120427	MS	05-Dec-23	8015B	
EXT DRO >C28-C36	**286**		10.0	mg/kg	1	3120427	MS	05-Dec-23	8015B	
Surrogate: 1-Chlorooctane			*82.0 %*	*48.2-134*		*3120427*	MS	*05-Dec-23*	*8015B*	
Surrogate: 1-Chlorooctadecane			*97.5 %*	*49.1-148*		*3120427*	MS	*05-Dec-23*	*8015B*	

Cardinal Laboratories

*=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

STANDARD ENERGY SERVICES P. O. BOX 2724 LUBBOCK TX, 79408	Project: AF Project Number: 1 Project Manager: JACK YATES Fax To: (575) 234-2873	Reported: 07-Dec-23 13:40

02 2FT

H236486-02 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
Cardinal Laboratories										
Inorganic Compounds										
Chloride	**368**		16.0	mg/kg	4	3120512	AC	05-Dec-23	4500-Cl-B	
Volatile Organic Compounds by EPA Method 8021										**HDSP-1**
Benzene*	<0.050		0.050	mg/kg	50	3120424	JH/	05-Dec-23	8021B	
Toluene*	<0.050		0.050	mg/kg	50	3120424	JH/	05-Dec-23	8021B	
Ethylbenzene*	<0.050		0.050	mg/kg	50	3120424	JH/	05-Dec-23	8021B	
Total Xylenes*	<0.150		0.150	mg/kg	50	3120424	JH/	05-Dec-23	8021B	
Total BTEX	<0.300		0.300	mg/kg	50	3120424	JH/	05-Dec-23	8021B	
Surrogate: 4-Bromofluorobenzene (PID)			*113 %*	*71.5-134*		*3120424*	JH/	*05-Dec-23*	*8021B*	
Petroleum Hydrocarbons by GC FID										**HDSP-1**
GRO C6-C10*	<10.0		10.0	mg/kg	1	3120427	MS	05-Dec-23	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	3120427	MS	05-Dec-23	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	3120427	MS	05-Dec-23	8015B	
Surrogate: 1-Chlorooctane			*76.3 %*	*48.2-134*		*3120427*	MS	*05-Dec-23*	*8015B*	
Surrogate: 1-Chlorooctadecane			*75.5 %*	*49.1-148*		*3120427*	MS	*05-Dec-23*	*8015B*	

Cardinal Laboratories

*=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

STANDARD ENERGY SERVICES P. O. BOX 2724 LUBBOCK TX, 79408	Project: AF Project Number: 1 Project Manager: JACK YATES Fax To: (575) 234-2873	Reported: 07-Dec-23 13:40

02 4FT

H236486-03 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
Cardinal Laboratories										
Inorganic Compounds										
Chloride	**80.0**		16.0	mg/kg	4	3120512	AC	05-Dec-23	4500-Cl-B	
Volatile Organic Compounds by EPA Method 8021										**HDSP-1**
Benzene*	<0.050		0.050	mg/kg	50	3120424	JH/	05-Dec-23	8021B	
Toluene*	<0.050		0.050	mg/kg	50	3120424	JH/	05-Dec-23	8021B	
Ethylbenzene*	<0.050		0.050	mg/kg	50	3120424	JH/	05-Dec-23	8021B	
Total Xylenes*	<0.150		0.150	mg/kg	50	3120424	JH/	05-Dec-23	8021B	
Total BTEX	<0.300		0.300	mg/kg	50	3120424	JH/	05-Dec-23	8021B	
Surrogate: 4-Bromofluorobenzene (PID)			*114 %*	*71.5-134*		*3120424*	JH/	*05-Dec-23*	*8021B*	
Petroleum Hydrocarbons by GC FID										**HDSP-1**
GRO C6-C10*	<10.0		10.0	mg/kg	1	3120427	MS	05-Dec-23	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	3120427	MS	05-Dec-23	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	3120427	MS	05-Dec-23	8015B	
Surrogate: 1-Chlorooctane			*84.9 %*	*48.2-134*		*3120427*	MS	*05-Dec-23*	*8015B*	
Surrogate: 1-Chlorooctadecane			*85.8 %*	*49.1-148*		*3120427*	MS	*05-Dec-23*	*8015B*	

Cardinal Laboratories

*=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

STANDARD ENERGY SERVICES P. O. BOX 2724 LUBBOCK TX, 79408	Project: AF Project Number: 1 Project Manager: JACK YATES Fax To: (575) 234-2873	Reported: 07-Dec-23 13:40

03 2FT

H236486-04 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
Cardinal Laboratories										
Inorganic Compounds										
Chloride	**5600**		16.0	mg/kg	4	3120512	AC	05-Dec-23	4500-Cl-B	
Volatile Organic Compounds by EPA Method 8021										**HDSP-1**
Benzene*	<0.050		0.050	mg/kg	50	3120424	JH/	05-Dec-23	8021B	
Toluene*	<0.050		0.050	mg/kg	50	3120424	JH/	05-Dec-23	8021B	
Ethylbenzene*	<0.050		0.050	mg/kg	50	3120424	JH/	05-Dec-23	8021B	
Total Xylenes*	**0.269**		0.150	mg/kg	50	3120424	JH/	05-Dec-23	8021B	
Total BTEX	<0.300		0.300	mg/kg	50	3120424	JH/	05-Dec-23	8021B	
Surrogate: 4-Bromofluorobenzene (PID)			*125 %*	*71.5-134*		*3120424*	JH/	*05-Dec-23*	*8021B*	
Petroleum Hydrocarbons by GC FID										**HDSP-1**
GRO C6-C10*	**51.6**		10.0	mg/kg	1	3120427	MS	05-Dec-23	8015B	
DRO >C10-C28*	**1930**		10.0	mg/kg	1	3120427	MS	05-Dec-23	8015B	
EXT DRO >C28-C36	**408**		10.0	mg/kg	1	3120427	MS	05-Dec-23	8015B	
Surrogate: 1-Chlorooctane			*93.2 %*	*48.2-134*		*3120427*	MS	*05-Dec-23*	*8015B*	
Surrogate: 1-Chlorooctadecane			*107 %*	*49.1-148*		*3120427*	MS	*05-Dec-23*	*8015B*	

Cardinal Laboratories

*=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

STANDARD ENERGY SERVICES P. O. BOX 2724 LUBBOCK TX, 79408	Project: AF Project Number: 1 Project Manager: JACK YATES Fax To: (575) 234-2873	Reported: 07-Dec-23 13:40

AF 04 2FT

H236486-05 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
Cardinal Laboratories										
Inorganic Compounds										
Chloride	**528**		16.0	mg/kg	4	3120512	AC	05-Dec-23	4500-Cl-B	
Volatile Organic Compounds by EPA Method 8021										**HDSP-1**
Benzene*	<0.050		0.050	mg/kg	50	3120424	JH/	05-Dec-23	8021B	
Toluene*	<0.050		0.050	mg/kg	50	3120424	JH/	05-Dec-23	8021B	
Ethylbenzene*	<0.050		0.050	mg/kg	50	3120424	JH/	05-Dec-23	8021B	
Total Xylenes*	<0.150		0.150	mg/kg	50	3120424	JH/	05-Dec-23	8021B	
Total BTEX	<0.300		0.300	mg/kg	50	3120424	JH/	05-Dec-23	8021B	
Surrogate: 4-Bromofluorobenzene (PID)			*118 %*	*71.5-134*		*3120424*	JH/	*05-Dec-23*	*8021B*	
Petroleum Hydrocarbons by GC FID										**HDSP-1**
GRO C6-C10*	<10.0		10.0	mg/kg	1	3120427	MS	05-Dec-23	8015B	
DRO >C10-C28*	**87.4**		10.0	mg/kg	1	3120427	MS	05-Dec-23	8015B	
EXT DRO >C28-C36	**70.3**		10.0	mg/kg	1	3120427	MS	05-Dec-23	8015B	
Surrogate: 1-Chlorooctane			*76.9 %*	*48.2-134*		*3120427*	MS	*05-Dec-23*	*8015B*	
Surrogate: 1-Chlorooctadecane			*76.0 %*	*49.1-148*		*3120427*	MS	*05-Dec-23*	*8015B*	

Cardinal Laboratories

*=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

STANDARD ENERGY SERVICES P. O. BOX 2724 LUBBOCK TX, 79408	Project: AF Project Number: 1 Project Manager: JACK YATES Fax To: (575) 234-2873	Reported: 07-Dec-23 13:40

AF 05 2FT

H236486-06 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
Cardinal Laboratories										
Inorganic Compounds										
Chloride	**160**		16.0	mg/kg	4	3120521	AC	05-Dec-23	4500-Cl-B	
Volatile Organic Compounds by EPA Method 8021										**HDSP-1**
Benzene*	<0.050		0.050	mg/kg	50	3120424	JH/	05-Dec-23	8021B	
Toluene*	<0.050		0.050	mg/kg	50	3120424	JH/	05-Dec-23	8021B	
Ethylbenzene*	<0.050		0.050	mg/kg	50	3120424	JH/	05-Dec-23	8021B	
Total Xylenes*	<0.150		0.150	mg/kg	50	3120424	JH/	05-Dec-23	8021B	
Total BTEX	<0.300		0.300	mg/kg	50	3120424	JH/	05-Dec-23	8021B	
Surrogate: 4-Bromofluorobenzene (PID)			*115 %*	*71.5-134*		*3120424*	JH/	*05-Dec-23*	*8021B*	
Petroleum Hydrocarbons by GC FID										**HDSP-1**
GRO C6-C10*	<10.0		10.0	mg/kg	1	3120428	MS	05-Dec-23	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	3120428	MS	05-Dec-23	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	3120428	MS	05-Dec-23	8015B	
Surrogate: 1-Chlorooctane			*72.9 %*	*48.2-134*		*3120428*	MS	*05-Dec-23*	*8015B*	
Surrogate: 1-Chlorooctadecane			*65.7 %*	*49.1-148*		*3120428*	MS	*05-Dec-23*	*8015B*	

Cardinal Laboratories

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Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

STANDARD ENERGY SERVICES P. O. BOX 2724 LUBBOCK TX, 79408	Project: AF Project Number: 1 Project Manager: JACK YATES Fax To: (575) 234-2873	Reported: 07-Dec-23 13:40

AF 06 2FT

H236486-07 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
Cardinal Laboratories										
Inorganic Compounds										
Chloride	**1300**		16.0	mg/kg	4	3120521	AC	05-Dec-23	4500-Cl-B	
Volatile Organic Compounds by EPA Method 8021										**HDSP-1**
Benzene*	<0.050		0.050	mg/kg	50	3120424	JH/	05-Dec-23	8021B	
Toluene*	<0.050		0.050	mg/kg	50	3120424	JH/	05-Dec-23	8021B	
Ethylbenzene*	<0.050		0.050	mg/kg	50	3120424	JH/	05-Dec-23	8021B	
Total Xylenes*	<0.150		0.150	mg/kg	50	3120424	JH/	05-Dec-23	8021B	
Total BTEX	<0.300		0.300	mg/kg	50	3120424	JH/	05-Dec-23	8021B	
Surrogate: 4-Bromofluorobenzene (PID)			*115 %*	*71.5-134*		*3120424*	JH/	*05-Dec-23*	*8021B*	
Petroleum Hydrocarbons by GC FID										**HDSP-1**
GRO C6-C10*	<10.0		10.0	mg/kg	1	3120428	MS	05-Dec-23	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	3120428	MS	05-Dec-23	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	3120428	MS	05-Dec-23	8015B	
Surrogate: 1-Chlorooctane			*75.7 %*	*48.2-134*		*3120428*	MS	*05-Dec-23*	*8015B*	
Surrogate: 1-Chlorooctadecane			*66.6 %*	*49.1-148*		*3120428*	MS	*05-Dec-23*	*8015B*	

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Analytical Results For:

STANDARD ENERGY SERVICES P. O. BOX 2724 LUBBOCK TX, 79408	Project: AF Project Number: 1 Project Manager: JACK YATES Fax To: (575) 234-2873	Reported: 07-Dec-23 13:40

AF 07 2FT

H236486-08 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
Cardinal Laboratories										
Inorganic Compounds										
Chloride	**1380**		16.0	mg/kg	4	3120521	AC	05-Dec-23	4500-Cl-B	
Volatile Organic Compounds by EPA Method 8021										**HDSP-1**
Benzene*	<0.050		0.050	mg/kg	50	3120424	JH/	05-Dec-23	8021B	
Toluene*	<0.050		0.050	mg/kg	50	3120424	JH/	05-Dec-23	8021B	
Ethylbenzene*	<0.050		0.050	mg/kg	50	3120424	JH/	05-Dec-23	8021B	
Total Xylenes*	<0.150		0.150	mg/kg	50	3120424	JH/	05-Dec-23	8021B	
Total BTEX	<0.300		0.300	mg/kg	50	3120424	JH/	05-Dec-23	8021B	
Surrogate: 4-Bromofluorobenzene (PID)			*113 %*	*71.5-134*		*3120424*	JH/	*05-Dec-23*	*8021B*	
Petroleum Hydrocarbons by GC FID										**HDSP-1**
GRO C6-C10*	<10.0		10.0	mg/kg	1	3120428	MS	05-Dec-23	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	3120428	MS	05-Dec-23	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	3120428	MS	05-Dec-23	8015B	
Surrogate: 1-Chlorooctane			*87.1 %*	*48.2-134*		*3120428*	MS	*05-Dec-23*	*8015B*	
Surrogate: 1-Chlorooctadecane			*80.2 %*	*49.1-148*		*3120428*	MS	*05-Dec-23*	*8015B*	

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Analytical Results For:

STANDARD ENERGY SERVICES P. O. BOX 2724 LUBBOCK TX, 79408	Project: AF Project Number: 1 Project Manager: JACK YATES Fax To: (575) 234-2873	Reported: 07-Dec-23 13:40

AF 08 (2FT)

H236486-09 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
Cardinal Laboratories										
Inorganic Compounds										
Chloride	**1150**		16.0	mg/kg	4	3120521	AC	05-Dec-23	4500-Cl-B	
Volatile Organic Compounds by EPA Method 8021										**HDSP-1**
Benzene*	<0.050		0.050	mg/kg	50	3120424	JH/	05-Dec-23	8021B	
Toluene*	<0.050		0.050	mg/kg	50	3120424	JH/	05-Dec-23	8021B	
Ethylbenzene*	<0.050		0.050	mg/kg	50	3120424	JH/	05-Dec-23	8021B	
Total Xylenes*	<0.150		0.150	mg/kg	50	3120424	JH/	05-Dec-23	8021B	
Total BTEX	<0.300		0.300	mg/kg	50	3120424	JH/	05-Dec-23	8021B	
Surrogate: 4-Bromofluorobenzene (PID)			*115 %*	*71.5-134*		*3120424*	JH/	*05-Dec-23*	*8021B*	
Petroleum Hydrocarbons by GC FID										**HDSP-1**
GRO C6-C10*	<10.0		10.0	mg/kg	1	3120428	MS	05-Dec-23	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	3120428	MS	05-Dec-23	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	3120428	MS	05-Dec-23	8015B	
Surrogate: 1-Chlorooctane			*69.1 %*	*48.2-134*		*3120428*	MS	*05-Dec-23*	*8015B*	
Surrogate: 1-Chlorooctadecane			*62.1 %*	*49.1-148*		*3120428*	MS	*05-Dec-23*	*8015B*	

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Analytical Results For:

STANDARD ENERGY SERVICES P. O. BOX 2724 LUBBOCK TX, 79408	Project: AF Project Number: 1 Project Manager: JACK YATES Fax To: (575) 234-2873	Reported: 07-Dec-23 13:40

AF 09 4FT

H236486-10 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
Cardinal Laboratories										
Inorganic Compounds										
Chloride	**48.0**		16.0	mg/kg	4	3120521	AC	05-Dec-23	4500-Cl-B	
Volatile Organic Compounds by EPA Method 8021										**HDSP-1**
Benzene*	<0.050		0.050	mg/kg	50	3120424	JH/	05-Dec-23	8021B	
Toluene*	<0.050		0.050	mg/kg	50	3120424	JH/	05-Dec-23	8021B	
Ethylbenzene*	<0.050		0.050	mg/kg	50	3120424	JH/	05-Dec-23	8021B	
Total Xylenes*	<0.150		0.150	mg/kg	50	3120424	JH/	05-Dec-23	8021B	
Total BTEX	<0.300		0.300	mg/kg	50	3120424	JH/	05-Dec-23	8021B	
Surrogate: 4-Bromofluorobenzene (PID)			*114 %*	*71.5-134*		*3120424*	JH/	*05-Dec-23*	*8021B*	
Petroleum Hydrocarbons by GC FID										**HDSP-1**
GRO C6-C10*	<10.0		10.0	mg/kg	1	3120428	MS	05-Dec-23	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	3120428	MS	05-Dec-23	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	3120428	MS	05-Dec-23	8015B	
Surrogate: 1-Chlorooctane			*76.1 %*	*48.2-134*		*3120428*	MS	*05-Dec-23*	*8015B*	
Surrogate: 1-Chlorooctadecane			*68.9 %*	*49.1-148*		*3120428*	MS	*05-Dec-23*	*8015B*	

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Analytical Results For:

STANDARD ENERGY SERVICES P. O. BOX 2724 LUBBOCK TX, 79408	Project: AF Project Number: 1 Project Manager: JACK YATES Fax To: (575) 234-2873	Reported: 07-Dec-23 13:40

AF 09 2FT

H236486-11 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
Cardinal Laboratories										
Inorganic Compounds										
Chloride	**48.0**		16.0	mg/kg	4	3120521	AC	05-Dec-23	4500-Cl-B	
Volatile Organic Compounds by EPA Method 8021										**HDSP-1**
Benzene*	<0.050		0.050	mg/kg	50	3120424	JH/	05-Dec-23	8021B	
Toluene*	<0.050		0.050	mg/kg	50	3120424	JH/	05-Dec-23	8021B	
Ethylbenzene*	<0.050		0.050	mg/kg	50	3120424	JH/	05-Dec-23	8021B	
Total Xylenes*	<0.150		0.150	mg/kg	50	3120424	JH/	05-Dec-23	8021B	
Total BTEX	<0.300		0.300	mg/kg	50	3120424	JH/	05-Dec-23	8021B	
Surrogate: 4-Bromofluorobenzene (PID)			*115 %*	*71.5-134*		*3120424*	JH/	*05-Dec-23*	*8021B*	
Petroleum Hydrocarbons by GC FID										**HDSP-1**
GRO C6-C10*	<10.0		10.0	mg/kg	1	3120428	MS	05-Dec-23	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	3120428	MS	05-Dec-23	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	3120428	MS	05-Dec-23	8015B	
Surrogate: 1-Chlorooctane			*88.7 %*	*48.2-134*		*3120428*	MS	*05-Dec-23*	*8015B*	
Surrogate: 1-Chlorooctadecane			*80.8 %*	*49.1-148*		*3120428*	MS	*05-Dec-23*	*8015B*	

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Analytical Results For:

STANDARD ENERGY SERVICES P. O. BOX 2724 LUBBOCK TX, 79408	Project: AF Project Number: 1 Project Manager: JACK YATES Fax To: (575) 234-2873	Reported: 07-Dec-23 13:40

AF 10 2FT

H236486-12 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
Cardinal Laboratories										
Inorganic Compounds										
Chloride	**32.0**		16.0	mg/kg	4	3120521	AC	05-Dec-23	4500-Cl-B	
Volatile Organic Compounds by EPA Method 8021										**HDSP-1**
Benzene*	<0.050		0.050	mg/kg	50	3120424	JH/	05-Dec-23	8021B	
Toluene*	<0.050		0.050	mg/kg	50	3120424	JH/	05-Dec-23	8021B	
Ethylbenzene*	<0.050		0.050	mg/kg	50	3120424	JH/	05-Dec-23	8021B	
Total Xylenes*	<0.150		0.150	mg/kg	50	3120424	JH/	05-Dec-23	8021B	
Total BTEX	<0.300		0.300	mg/kg	50	3120424	JH/	05-Dec-23	8021B	
Surrogate: 4-Bromofluorobenzene (PID)			*116 %*	*71.5-134*		*3120424*	JH/	*05-Dec-23*	*8021B*	
Petroleum Hydrocarbons by GC FID										**HDSP-1**
GRO C6-C10*	<10.0		10.0	mg/kg	1	3120428	MS	05-Dec-23	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	3120428	MS	05-Dec-23	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	3120428	MS	05-Dec-23	8015B	
Surrogate: 1-Chlorooctane			*87.4 %*	*48.2-134*		*3120428*	MS	*05-Dec-23*	*8015B*	
Surrogate: 1-Chlorooctadecane			*78.1 %*	*49.1-148*		*3120428*	MS	*05-Dec-23*	*8015B*	

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Analytical Results For:

STANDARD ENERGY SERVICES P. O. BOX 2724 LUBBOCK TX, 79408	Project: AF Project Number: 1 Project Manager: JACK YATES Fax To: (575) 234-2873	Reported: 07-Dec-23 13:40

AF 11 2FT

H236486-13 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
Cardinal Laboratories										
Inorganic Compounds										
Chloride	**288**		16.0	mg/kg	4	3120521	AC	05-Dec-23	4500-Cl-B	
Volatile Organic Compounds by EPA Method 8021										**HDSP-1**
Benzene*	<0.050		0.050	mg/kg	50	3120424	JH/	05-Dec-23	8021B	
Toluene*	<0.050		0.050	mg/kg	50	3120424	JH/	05-Dec-23	8021B	
Ethylbenzene*	<0.050		0.050	mg/kg	50	3120424	JH/	05-Dec-23	8021B	
Total Xylenes*	<0.150		0.150	mg/kg	50	3120424	JH/	05-Dec-23	8021B	
Total BTEX	<0.300		0.300	mg/kg	50	3120424	JH/	05-Dec-23	8021B	
Surrogate: 4-Bromofluorobenzene (PID)			*110 %*	*71.5-134*		*3120424*	JH/	*05-Dec-23*	*8021B*	
Petroleum Hydrocarbons by GC FID										**HDSP-1**
GRO C6-C10*	<10.0		10.0	mg/kg	1	3120428	MS	05-Dec-23	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	3120428	MS	05-Dec-23	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	3120428	MS	05-Dec-23	8015B	
Surrogate: 1-Chlorooctane			*82.8 %*	*48.2-134*		*3120428*	MS	*05-Dec-23*	*8015B*	
Surrogate: 1-Chlorooctadecane			*75.4 %*	*49.1-148*		*3120428*	MS	*05-Dec-23*	*8015B*	

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Analytical Results For:

STANDARD ENERGY SERVICES P. O. BOX 2724 LUBBOCK TX, 79408	Project: AF Project Number: 1 Project Manager: JACK YATES Fax To: (575) 234-2873	Reported: 07-Dec-23 13:40

AF 12 2FT

H236486-14 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
Cardinal Laboratories										
Inorganic Compounds										
Chloride	**2400**		16.0	mg/kg	4	3120521	AC	05-Dec-23	4500-Cl-B	
Volatile Organic Compounds by EPA Method 8021										**HDSP-1**
Benzene*	<0.050		0.050	mg/kg	50	3120424	JH/	05-Dec-23	8021B	
Toluene*	<0.050		0.050	mg/kg	50	3120424	JH/	05-Dec-23	8021B	
Ethylbenzene*	<0.050		0.050	mg/kg	50	3120424	JH/	05-Dec-23	8021B	
Total Xylenes*	<0.150		0.150	mg/kg	50	3120424	JH/	05-Dec-23	8021B	
Total BTEX	<0.300		0.300	mg/kg	50	3120424	JH/	05-Dec-23	8021B	
Surrogate: 4-Bromofluorobenzene (PID)			*114 %*	*71.5-134*		*3120424*	JH/	*05-Dec-23*	*8021B*	
Petroleum Hydrocarbons by GC FID										**HDSP-1**
GRO C6-C10*	<10.0		10.0	mg/kg	1	3120428	MS	05-Dec-23	8015B	
DRO >C10-C28*	**289**		10.0	mg/kg	1	3120428	MS	05-Dec-23	8015B	
EXT DRO >C28-C36	**165**		10.0	mg/kg	1	3120428	MS	05-Dec-23	8015B	
Surrogate: 1-Chlorooctane			*82.3 %*	*48.2-134*		*3120428*	MS	*05-Dec-23*	*8015B*	
Surrogate: 1-Chlorooctadecane			*80.7 %*	*49.1-148*		*3120428*	MS	*05-Dec-23*	*8015B*	

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Analytical Results For:

STANDARD ENERGY SERVICES P. O. BOX 2724 LUBBOCK TX, 79408	Project: AF Project Number: 1 Project Manager: JACK YATES Fax To: (575) 234-2873	Reported: 07-Dec-23 13:40

AF 12 4FT

H236486-15 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
Cardinal Laboratories										
Inorganic Compounds										
Chloride	**1360**		16.0	mg/kg	4	3120521	AC	05-Dec-23	4500-Cl-B	
Volatile Organic Compounds by EPA Method 8021										**HDSP-1**
Benzene*	<0.050		0.050	mg/kg	50	3120424	JH/	05-Dec-23	8021B	
Toluene*	<0.050		0.050	mg/kg	50	3120424	JH/	05-Dec-23	8021B	
Ethylbenzene*	<0.050		0.050	mg/kg	50	3120424	JH/	05-Dec-23	8021B	
Total Xylenes*	<0.150		0.150	mg/kg	50	3120424	JH/	05-Dec-23	8021B	
Total BTEX	<0.300		0.300	mg/kg	50	3120424	JH/	05-Dec-23	8021B	
Surrogate: 4-Bromofluorobenzene (PID)			*114 %*	*71.5-134*		*3120424*	JH/	*05-Dec-23*	*8021B*	
Petroleum Hydrocarbons by GC FID										**HDSP-1**
GRO C6-C10*	<10.0		10.0	mg/kg	1	3120428	MS	05-Dec-23	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	3120428	MS	05-Dec-23	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	3120428	MS	05-Dec-23	8015B	
Surrogate: 1-Chlorooctane			*82.5 %*	*48.2-134*		*3120428*	MS	*05-Dec-23*	*8015B*	
Surrogate: 1-Chlorooctadecane			*75.3 %*	*49.1-148*		*3120428*	MS	*05-Dec-23*	*8015B*	

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Analytical Results For:

STANDARD ENERGY SERVICES P. O. BOX 2724 LUBBOCK TX, 79408	Project: AF Project Number: 1 Project Manager: JACK YATES Fax To: (575) 234-2873	Reported: 07-Dec-23 13:40

AF 13 2FT

H236486-16 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
Cardinal Laboratories										
Inorganic Compounds										
Chloride	**96.0**		16.0	mg/kg	4	3120521	AC	05-Dec-23	4500-Cl-B	
Volatile Organic Compounds by EPA Method 8021										**HDSP-1**
Benzene*	<0.050		0.050	mg/kg	50	3120424	JH/	05-Dec-23	8021B	
Toluene*	<0.050		0.050	mg/kg	50	3120424	JH/	05-Dec-23	8021B	
Ethylbenzene*	<0.050		0.050	mg/kg	50	3120424	JH/	05-Dec-23	8021B	
Total Xylenes*	<0.150		0.150	mg/kg	50	3120424	JH/	05-Dec-23	8021B	
Total BTEX	<0.300		0.300	mg/kg	50	3120424	JH/	05-Dec-23	8021B	
Surrogate: 4-Bromofluorobenzene (PID)			*113 %*	*71.5-134*		*3120424*	JH/	*05-Dec-23*	*8021B*	
Petroleum Hydrocarbons by GC FID										**HDSP-1**
GRO C6-C10*	<10.0		10.0	mg/kg	1	3120428	MS	05-Dec-23	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	3120428	MS	05-Dec-23	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	3120428	MS	05-Dec-23	8015B	
Surrogate: 1-Chlorooctane			*77.1 %*	*48.2-134*		*3120428*	MS	*05-Dec-23*	*8015B*	
Surrogate: 1-Chlorooctadecane			*70.2 %*	*49.1-148*		*3120428*	MS	*05-Dec-23*	*8015B*	

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Analytical Results For:

STANDARD ENERGY SERVICES P. O. BOX 2724 LUBBOCK TX, 79408	Project: AF Project Number: 1 Project Manager: JACK YATES Fax To: (575) 234-2873	Reported: 07-Dec-23 13:40

AF 14 4FT

H236486-17 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
Cardinal Laboratories										
Inorganic Compounds										
Chloride	**496**		16.0	mg/kg	4	3120521	AC	05-Dec-23	4500-Cl-B	
Volatile Organic Compounds by EPA Method 8021										**HDSP-1**
Benzene*	<0.050		0.050	mg/kg	50	3120424	JH/	05-Dec-23	8021B	
Toluene*	<0.050		0.050	mg/kg	50	3120424	JH/	05-Dec-23	8021B	
Ethylbenzene*	<0.050		0.050	mg/kg	50	3120424	JH/	05-Dec-23	8021B	
Total Xylenes*	<0.150		0.150	mg/kg	50	3120424	JH/	05-Dec-23	8021B	
Total BTEX	<0.300		0.300	mg/kg	50	3120424	JH/	05-Dec-23	8021B	
Surrogate: 4-Bromofluorobenzene (PID)			*110 %*	*71.5-134*		*3120424*	JH/	*05-Dec-23*	*8021B*	
Petroleum Hydrocarbons by GC FID										**HDSP-1**
GRO C6-C10*	<10.0		10.0	mg/kg	1	3120428	MS	05-Dec-23	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	3120428	MS	05-Dec-23	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	3120428	MS	05-Dec-23	8015B	
Surrogate: 1-Chlorooctane			*71.1 %*	*48.2-134*		*3120428*	MS	*05-Dec-23*	*8015B*	
Surrogate: 1-Chlorooctadecane			*63.3 %*	*49.1-148*		*3120428*	MS	*05-Dec-23*	*8015B*	

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Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

STANDARD ENERGY SERVICES P. O. BOX 2724 LUBBOCK TX, 79408	Project: AF Project Number: 1 Project Manager: JACK YATES Fax To: (575) 234-2873	Reported: 07-Dec-23 13:40

AF 15 2FT

H236486-18 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
Cardinal Laboratories										
Inorganic Compounds										
Chloride	**160**		16.0	mg/kg	4	3120521	AC	05-Dec-23	4500-Cl-B	
Volatile Organic Compounds by EPA Method 8021										**HDSP-1**
Benzene*	<0.050		0.050	mg/kg	50	3120424	JH/	05-Dec-23	8021B	
Toluene*	<0.050		0.050	mg/kg	50	3120424	JH/	05-Dec-23	8021B	
Ethylbenzene*	<0.050		0.050	mg/kg	50	3120424	JH/	05-Dec-23	8021B	
Total Xylenes*	<0.150		0.150	mg/kg	50	3120424	JH/	05-Dec-23	8021B	
Total BTEX	<0.300		0.300	mg/kg	50	3120424	JH/	05-Dec-23	8021B	
Surrogate: 4-Bromofluorobenzene (PID)			*113 %*	*71.5-134*		*3120424*	JH/	*05-Dec-23*	*8021B*	
Petroleum Hydrocarbons by GC FID										**HDSP-1**
GRO C6-C10*	<10.0		10.0	mg/kg	1	3120428	MS	05-Dec-23	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	3120428	MS	05-Dec-23	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	3120428	MS	05-Dec-23	8015B	
Surrogate: 1-Chlorooctane			*73.2 %*	*48.2-134*		*3120428*	MS	*05-Dec-23*	*8015B*	
Surrogate: 1-Chlorooctadecane			*65.6 %*	*49.1-148*		*3120428*	MS	*05-Dec-23*	*8015B*	

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Analytical Results For:

STANDARD ENERGY SERVICES P. O. BOX 2724 LUBBOCK TX, 79408	Project: AF Project Number: 1 Project Manager: JACK YATES Fax To: (575) 234-2873	Reported: 07-Dec-23 13:40

AF 16 2FT

H236486-19 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
Cardinal Laboratories										
Inorganic Compounds										
Chloride	**3040**		16.0	mg/kg	4	3120521	AC	05-Dec-23	4500-Cl-B	
Volatile Organic Compounds by EPA Method 8021										**HDSP-1**
Benzene*	<0.050		0.050	mg/kg	50	3120424	JH/	05-Dec-23	8021B	
Toluene*	<0.050		0.050	mg/kg	50	3120424	JH/	05-Dec-23	8021B	
Ethylbenzene*	<0.050		0.050	mg/kg	50	3120424	JH/	05-Dec-23	8021B	
Total Xylenes*	<0.150		0.150	mg/kg	50	3120424	JH/	05-Dec-23	8021B	
Total BTEX	<0.300		0.300	mg/kg	50	3120424	JH/	05-Dec-23	8021B	
Surrogate: 4-Bromofluorobenzene (PID)			*115 %*	*71.5-134*		*3120424*	JH/	*05-Dec-23*	*8021B*	
Petroleum Hydrocarbons by GC FID										**HDSP-1**
GRO C6-C10*	<10.0		10.0	mg/kg	1	3120501	MS	05-Dec-23	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	3120501	MS	05-Dec-23	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	3120501	MS	05-Dec-23	8015B	
Surrogate: 1-Chlorooctane			*73.8 %*	*48.2-134*		*3120501*	MS	*05-Dec-23*	*8015B*	
Surrogate: 1-Chlorooctadecane			*64.8 %*	*49.1-148*		*3120501*	MS	*05-Dec-23*	*8015B*	

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Analytical Results For:

STANDARD ENERGY SERVICES P. O. BOX 2724 LUBBOCK TX, 79408	Project: AF Project Number: 1 Project Manager: JACK YATES Fax To: (575) 234-2873	Reported: 07-Dec-23 13:40

AF 16 4FT

H236486-20 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
Cardinal Laboratories										
Inorganic Compounds										
Chloride	**1410**		16.0	mg/kg	4	3120521	AC	05-Dec-23	4500-Cl-B	
Volatile Organic Compounds by EPA Method 8021										**HDSP-1**
Benzene*	<0.050		0.050	mg/kg	50	3120435	JH/	05-Dec-23	8021B	
Toluene*	<0.050		0.050	mg/kg	50	3120435	JH/	05-Dec-23	8021B	
Ethylbenzene*	<0.050		0.050	mg/kg	50	3120435	JH/	05-Dec-23	8021B	
Total Xylenes*	<0.150		0.150	mg/kg	50	3120435	JH/	05-Dec-23	8021B	
Total BTEX	<0.300		0.300	mg/kg	50	3120435	JH/	05-Dec-23	8021B	
Surrogate: 4-Bromofluorobenzene (PID)			*120 %*	*71.5-134*		*3120435*	JH/	*05-Dec-23*	*8021B*	
Petroleum Hydrocarbons by GC FID										**HDSP-1**
GRO C6-C10*	<10.0		10.0	mg/kg	1	3120501	MS	05-Dec-23	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	3120501	MS	05-Dec-23	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	3120501	MS	05-Dec-23	8015B	
Surrogate: 1-Chlorooctane			*77.6 %*	*48.2-134*		*3120501*	MS	*05-Dec-23*	*8015B*	
Surrogate: 1-Chlorooctadecane			*68.9 %*	*49.1-148*		*3120501*	MS	*05-Dec-23*	*8015B*	

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Analytical Results For:

STANDARD ENERGY SERVICES P. O. BOX 2724 LUBBOCK TX, 79408	Project: AF Project Number: 1 Project Manager: JACK YATES Fax To: (575) 234-2873	Reported: 07-Dec-23 13:40

AF 17 2FT

H236486-21 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
Cardinal Laboratories										
Inorganic Compounds										
Chloride	**672**		16.0	mg/kg	4	3120521	AC	05-Dec-23	4500-Cl-B	
Volatile Organic Compounds by EPA Method 8021										**HDSP-1**
Benzene*	<0.050		0.050	mg/kg	50	3120435	JH/	05-Dec-23	8021B	
Toluene*	<0.050		0.050	mg/kg	50	3120435	JH/	05-Dec-23	8021B	
Ethylbenzene*	<0.050		0.050	mg/kg	50	3120435	JH/	05-Dec-23	8021B	
Total Xylenes*	<0.150		0.150	mg/kg	50	3120435	JH/	05-Dec-23	8021B	
Total BTEX	<0.300		0.300	mg/kg	50	3120435	JH/	05-Dec-23	8021B	
Surrogate: 4-Bromofluorobenzene (PID)			*117 %*	*71.5-134*		*3120435*	JH/	*05-Dec-23*	*8021B*	
Petroleum Hydrocarbons by GC FID										**HDSP-1**
GRO C6-C10*	<10.0		10.0	mg/kg	1	3120501	MS	05-Dec-23	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	3120501	MS	05-Dec-23	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	3120501	MS	05-Dec-23	8015B	
Surrogate: 1-Chlorooctane			*60.2 %*	*48.2-134*		*3120501*	MS	*05-Dec-23*	*8015B*	
Surrogate: 1-Chlorooctadecane			*52.9 %*	*49.1-148*		*3120501*	MS	*05-Dec-23*	*8015B*	

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Analytical Results For:

STANDARD ENERGY SERVICES P. O. BOX 2724 LUBBOCK TX, 79408	Project: AF Project Number: 1 Project Manager: JACK YATES Fax To: (575) 234-2873	Reported: 07-Dec-23 13:40

AF 14 2FT

H236486-22 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
Cardinal Laboratories										
Inorganic Compounds										
Chloride	**352**		16.0	mg/kg	4	3120521	AC	05-Dec-23	4500-Cl-B	
Volatile Organic Compounds by EPA Method 8021										**HDSP-1**
Benzene*	<0.050		0.050	mg/kg	50	3120435	JH/	05-Dec-23	8021B	
Toluene*	<0.050		0.050	mg/kg	50	3120435	JH/	05-Dec-23	8021B	
Ethylbenzene*	<0.050		0.050	mg/kg	50	3120435	JH/	05-Dec-23	8021B	
Total Xylenes*	<0.150		0.150	mg/kg	50	3120435	JH/	05-Dec-23	8021B	
Total BTEX	<0.300		0.300	mg/kg	50	3120435	JH/	05-Dec-23	8021B	
Surrogate: 4-Bromofluorobenzene (PID)			*118 %*	*71.5-134*		*3120435*	JH/	*05-Dec-23*	*8021B*	
Petroleum Hydrocarbons by GC FID										**HDSP-1**
GRO C6-C10*	<10.0		10.0	mg/kg	1	3120501	MS	05-Dec-23	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	3120501	MS	05-Dec-23	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	3120501	MS	05-Dec-23	8015B	
Surrogate: 1-Chlorooctane			*63.2 %*	*48.2-134*		*3120501*	MS	*05-Dec-23*	*8015B*	
Surrogate: 1-Chlorooctadecane			*55.1 %*	*49.1-148*		*3120501*	MS	*05-Dec-23*	*8015B*	

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Analytical Results For:

STANDARD ENERGY SERVICES P. O. BOX 2724 LUBBOCK TX, 79408	Project: AF Project Number: 1 Project Manager: JACK YATES Fax To: (575) 234-2873	Reported: 07-Dec-23 13:40

AF 17 @ 4FT

H236486-23 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
Cardinal Laboratories										
Inorganic Compounds										
Chloride	**640**		16.0	mg/kg	4	3120521	AC	05-Dec-23	4500-Cl-B	
Volatile Organic Compounds by EPA Method 8021										**HDSP-1**
Benzene*	<0.050		0.050	mg/kg	50	3120435	JH/	05-Dec-23	8021B	
Toluene*	<0.050		0.050	mg/kg	50	3120435	JH/	05-Dec-23	8021B	
Ethylbenzene*	<0.050		0.050	mg/kg	50	3120435	JH/	05-Dec-23	8021B	
Total Xylenes*	<0.150		0.150	mg/kg	50	3120435	JH/	05-Dec-23	8021B	
Total BTEX	<0.300		0.300	mg/kg	50	3120435	JH/	05-Dec-23	8021B	
Surrogate: 4-Bromofluorobenzene (PID)			*119 %*	*71.5-134*		*3120435*	JH/	*05-Dec-23*	*8021B*	
Petroleum Hydrocarbons by GC FID										**HDSP-1**
GRO C6-C10*	<10.0		10.0	mg/kg	1	3120501	MS	05-Dec-23	8015B	
DRO >C10-C28*	**68.0**		10.0	mg/kg	1	3120501	MS	05-Dec-23	8015B	
EXT DRO >C28-C36	**12.5**		10.0	mg/kg	1	3120501	MS	05-Dec-23	8015B	
Surrogate: 1-Chlorooctane			*63.9 %*	*48.2-134*		*3120501*	MS	*05-Dec-23*	*8015B*	
Surrogate: 1-Chlorooctadecane			*58.4 %*	*49.1-148*		*3120501*	MS	*05-Dec-23*	*8015B*	

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Analytical Results For:

STANDARD ENERGY SERVICES P. O. BOX 2724 LUBBOCK TX, 79408	Project: AF Project Number: 1 Project Manager: JACK YATES Fax To: (575) 234-2873	Reported: 07-Dec-23 13:40

Inorganic Compounds - Quality Control

Cardinal Laboratories

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 3120512 - 1:4 DI Water										
Blank (3120512-BLK1)				Prepared & Analyzed: 05-Dec-23						
Chloride	ND	16.0	mg/kg							
LCS (3120512-BS1)				Prepared & Analyzed: 05-Dec-23						
Chloride	416	16.0	mg/kg	400		104	80-120			
LCS Dup (3120512-BSD1)				Prepared & Analyzed: 05-Dec-23						
Chloride	432	16.0	mg/kg	400		108	80-120	3.77	20	
Batch 3120521 - 1:4 DI Water										
Blank (3120521-BLK1)				Prepared & Analyzed: 05-Dec-23						
Chloride	ND	16.0	mg/kg							
LCS (3120521-BS1)				Prepared & Analyzed: 05-Dec-23						
Chloride	432	16.0	mg/kg	400		108	80-120			
LCS Dup (3120521-BSD1)				Prepared & Analyzed: 05-Dec-23						
Chloride	432	16.0	mg/kg	400		108	80-120	0.00	20	

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Analytical Results For:

STANDARD ENERGY SERVICES P. O. BOX 2724 LUBBOCK TX, 79408	Project: AF Project Number: 1 Project Manager: JACK YATES Fax To: (575) 234-2873	Reported: 07-Dec-23 13:40

Volatile Organic Compounds by EPA Method 8021 - Quality Control

Cardinal Laboratories

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 3120424 - Volatiles										
Blank (3120424-BLK1)				Prepared: 04-Dec-23 Analyzed: 05-Dec-23						
Benzene	ND	0.050	mg/kg							
Toluene	ND	0.050	mg/kg							
Ethylbenzene	ND	0.050	mg/kg							
Total Xylenes	ND	0.150	mg/kg							
Total BTEX	ND	0.300	mg/kg							
Surrogate: 4-Bromofluorobenzene (PID)	*0.0581*		mg/kg	*0.0500*		*116*	*71.5-134*			
LCS (3120424-BS1)				Prepared: 04-Dec-23 Analyzed: 05-Dec-23						
Benzene	1.99	0.050	mg/kg	2.00		99.3	82.8-130			
Toluene	2.10	0.050	mg/kg	2.00		105	86-128			
Ethylbenzene	2.10	0.050	mg/kg	2.00		105	85.9-128			
m,p-Xylene	4.25	0.100	mg/kg	4.00		106	89-129			
o-Xylene	2.09	0.050	mg/kg	2.00		104	86.1-125			
Total Xylenes	6.34	0.150	mg/kg	6.00		106	88.2-128			
Surrogate: 4-Bromofluorobenzene (PID)	*0.0540*		mg/kg	*0.0500*		*108*	*71.5-134*			
LCS Dup (3120424-BSD1)				Prepared: 04-Dec-23 Analyzed: 05-Dec-23						
Benzene	1.91	0.050	mg/kg	2.00		95.3	82.8-130	4.07	15.8	
Toluene	2.03	0.050	mg/kg	2.00		102	86-128	3.24	15.9	
Ethylbenzene	2.03	0.050	mg/kg	2.00		101	85.9-128	3.44	16	
m,p-Xylene	4.12	0.100	mg/kg	4.00		103	89-129	3.16	16.2	
o-Xylene	2.02	0.050	mg/kg	2.00		101	86.1-125	3.35	16.7	
Total Xylenes	6.13	0.150	mg/kg	6.00		102	88.2-128	3.22	16.3	
Surrogate: 4-Bromofluorobenzene (PID)	*0.0540*		mg/kg	*0.0500*		*108*	*71.5-134*			
Batch 3120435 - Volatiles										
Blank (3120435-BLK1)				Prepared: 04-Dec-23 Analyzed: 05-Dec-23						
Benzene	ND	0.050	mg/kg							
Toluene	ND	0.050	mg/kg							
Ethylbenzene	ND	0.050	mg/kg							
Total Xylenes	ND	0.150	mg/kg							

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Analytical Results For:

STANDARD ENERGY SERVICES P. O. BOX 2724 LUBBOCK TX, 79408	Project: AF Project Number: 1 Project Manager: JACK YATES Fax To: (575) 234-2873	Reported: 07-Dec-23 13:40

Volatile Organic Compounds by EPA Method 8021 - Quality Control

Cardinal Laboratories

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 3120435 - Volatiles										
Blank (3120435-BLK1)				Prepared: 04-Dec-23 Analyzed: 05-Dec-23						
Total BTEX	ND	0.300	mg/kg							
Surrogate: 4-Bromofluorobenzene (PID)	*0.0600*		mg/kg	*0.0500*		*120*	*71.5-134*			
LCS (3120435-BS1)				Prepared: 04-Dec-23 Analyzed: 05-Dec-23						
Benzene	1.77	0.050	mg/kg	2.00		88.7	82.8-130			
Toluene	1.89	0.050	mg/kg	2.00		94.4	86-128			
Ethylbenzene	1.91	0.050	mg/kg	2.00		95.3	85.9-128			
m,p-Xylene	3.90	0.100	mg/kg	4.00		97.4	89-129			
o-Xylene	1.90	0.050	mg/kg	2.00		94.8	86.1-125			
Total Xylenes	5.79	0.150	mg/kg	6.00		96.5	88.2-128			
Surrogate: 4-Bromofluorobenzene (PID)	*0.0577*		mg/kg	*0.0500*		*115*	*71.5-134*			
LCS Dup (3120435-BSD1)				Prepared: 04-Dec-23 Analyzed: 05-Dec-23						
Benzene	1.99	0.050	mg/kg	2.00		99.5	82.8-130	11.4	15.8	
Toluene	2.10	0.050	mg/kg	2.00		105	86-128	10.8	15.9	
Ethylbenzene	2.13	0.050	mg/kg	2.00		107	85.9-128	11.1	16	
m,p-Xylene	4.35	0.100	mg/kg	4.00		109	89-129	11.1	16.2	
o-Xylene	2.12	0.050	mg/kg	2.00		106	86.1-125	11.2	16.7	
Total Xylenes	6.47	0.150	mg/kg	6.00		108	88.2-128	11.1	16.3	
Surrogate: 4-Bromofluorobenzene (PID)	*0.0574*		mg/kg	*0.0500*		*115*	*71.5-134*			

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Analytical Results For:

STANDARD ENERGY SERVICES P. O. BOX 2724 LUBBOCK TX, 79408	Project: AF Project Number: 1 Project Manager: JACK YATES Fax To: (575) 234-2873	Reported: 07-Dec-23 13:40

Petroleum Hydrocarbons by GC FID - Quality Control

Cardinal Laboratories

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 3120427 - General Prep - Organics										
Blank (3120427-BLK1)				Prepared: 04-Dec-23 Analyzed: 05-Dec-23						
GRO C6-C10	ND	10.0	mg/kg							
DRO >C10-C28	ND	10.0	mg/kg							
EXT DRO >C28-C36	ND	10.0	mg/kg							
Surrogate: 1-Chlorooctane	*50.3*		mg/kg	*50.0*		*101*	*48.2-134*			
Surrogate: 1-Chlorooctadecane	*52.1*		mg/kg	*50.0*		*104*	*49.1-148*			
LCS (3120427-BS1)				Prepared: 04-Dec-23 Analyzed: 05-Dec-23						
GRO C6-C10	191	10.0	mg/kg	200		95.4	66.4-123			
DRO >C10-C28	183	10.0	mg/kg	200		91.4	66.5-118			
Total TPH C6-C28	374	10.0	mg/kg	400		93.4	77.6-123			
Surrogate: 1-Chlorooctane	*50.3*		mg/kg	*50.0*		*101*	*48.2-134*			
Surrogate: 1-Chlorooctadecane	*53.6*		mg/kg	*50.0*		*107*	*49.1-148*			
LCS Dup (3120427-BSD1)				Prepared: 04-Dec-23 Analyzed: 05-Dec-23						
GRO C6-C10	190	10.0	mg/kg	200		95.0	66.4-123	0.433	17.7	
DRO >C10-C28	180	10.0	mg/kg	200		90.1	66.5-118	1.41	21	
Total TPH C6-C28	370	10.0	mg/kg	400		92.5	77.6-123	0.912	18.5	
Surrogate: 1-Chlorooctane	*51.4*		mg/kg	*50.0*		*103*	*48.2-134*			
Surrogate: 1-Chlorooctadecane	*52.7*		mg/kg	*50.0*		*105*	*49.1-148*			
Batch 3120428 - General Prep - Organics										
Blank (3120428-BLK1)				Prepared: 04-Dec-23 Analyzed: 05-Dec-23						
GRO C6-C10	ND	10.0	mg/kg							
DRO >C10-C28	ND	10.0	mg/kg							
EXT DRO >C28-C36	ND	10.0	mg/kg							
Surrogate: 1-Chlorooctane	*46.4*		mg/kg	*50.0*		*92.7*	*48.2-134*			
Surrogate: 1-Chlorooctadecane	*44.8*		mg/kg	*50.0*		*89.6*	*49.1-148*			

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Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

STANDARD ENERGY SERVICES P. O. BOX 2724 LUBBOCK TX, 79408	Project: AF Project Number: 1 Project Manager: JACK YATES Fax To: (575) 234-2873	Reported: 07-Dec-23 13:40

Petroleum Hydrocarbons by GC FID - Quality Control

Cardinal Laboratories

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 3120428 - General Prep - Organics										
LCS (3120428-BS1)				Prepared: 04-Dec-23 Analyzed: 05-Dec-23						
GRO C6-C10	177	10.0	mg/kg	200		88.4	66.4-123			
DRO >C10-C28	182	10.0	mg/kg	200		91.2	66.5-118			
Total TPH C6-C28	359	10.0	mg/kg	400		89.8	77.6-123			
Surrogate: 1-Chlorooctane	*48.3*		mg/kg	*50.0*		*96.7*	*48.2-134*			
Surrogate: 1-Chlorooctadecane	*46.1*		mg/kg	*50.0*		*92.2*	*49.1-148*			
LCS Dup (3120428-BSD1)				Prepared: 04-Dec-23 Analyzed: 05-Dec-23						
GRO C6-C10	184	10.0	mg/kg	200		92.0	66.4-123	3.93	17.7	
DRO >C10-C28	182	10.0	mg/kg	200		90.9	66.5-118	0.323	21	
Total TPH C6-C28	366	10.0	mg/kg	400		91.5	77.6-123	1.80	18.5	
Surrogate: 1-Chlorooctane	*51.2*		mg/kg	*50.0*		*102*	*48.2-134*			
Surrogate: 1-Chlorooctadecane	*52.1*		mg/kg	*50.0*		*104*	*49.1-148*			
Batch 3120501 - General Prep - Organics										
Blank (3120501-BLK1)				Prepared & Analyzed: 05-Dec-23						
GRO C6-C10	ND	10.0	mg/kg							
DRO >C10-C28	ND	10.0	mg/kg							
EXT DRO >C28-C36	ND	10.0	mg/kg							
Surrogate: 1-Chlorooctane	*43.4*		mg/kg	*50.0*		*86.7*	*48.2-134*			
Surrogate: 1-Chlorooctadecane	*39.6*		mg/kg	*50.0*		*79.3*	*49.1-148*			
LCS (3120501-BS1)				Prepared & Analyzed: 05-Dec-23						
GRO C6-C10	205	10.0	mg/kg	200		102	66.4-123			
DRO >C10-C28	174	10.0	mg/kg	200		87.2	66.5-118			
Total TPH C6-C28	379	10.0	mg/kg	400		94.8	77.6-123			
Surrogate: 1-Chlorooctane	*47.2*		mg/kg	*50.0*		*94.4*	*48.2-134*			
Surrogate: 1-Chlorooctadecane	*45.8*		mg/kg	*50.0*		*91.6*	*49.1-148*			

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Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

STANDARD ENERGY SERVICES P. O. BOX 2724 LUBBOCK TX, 79408	Project: AF Project Number: 1 Project Manager: JACK YATES Fax To: (575) 234-2873	Reported: 07-Dec-23 13:40

Petroleum Hydrocarbons by GC FID - Quality Control

Cardinal Laboratories

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 3120501 - General Prep - Organics										
LCS Dup (3120501-BSD1)				Prepared & Analyzed: 05-Dec-23						
GRO C6-C10	202	10.0	mg/kg	200		101	66.4-123	1.65	17.7	
DRO >C10-C28	178	10.0	mg/kg	200		89.2	66.5-118	2.29	21	
Total TPH C6-C28	380	10.0	mg/kg	400		95.0	77.6-123	0.181	18.5	
Surrogate: 1-Chlorooctane	*45.2*		mg/kg	*50.0*		*90.5*	*48.2-134*			
Surrogate: 1-Chlorooctadecane	*43.6*		mg/kg	*50.0*		*87.2*	*49.1-148*			

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Notes and Definitions

HDSP-1	Sample container had headspace. Results may be biased low.
ND	Analyte NOT DETECTED at or above the reporting limit
RPD	Relative Percent Difference
**	Samples not received at proper temperature of 6°C or below.
***	Insufficient time to reach temperature.
-	Chloride by SM4500Cl-B does not require samples be received at or below 6°C
	Samples reported on an as received basis (wet) unless otherwise noted on report

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Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

101 East Marland, Hobbs, NM 88240
(575) 393-2326 FAX (575) 393-2476

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Company Name:	Standard Energy Services
Project Manager:	Josh Yates
Address:	816 W County Road
City:	Hobbs State: NM Zip: 88240
Phone #:	806-241-7105 Fax #:
Project #:	1 Project Owner: Victor Braga
Project Name:	AF
Project Location:	SWD
Sampler Name:	David Ortega

BILL TO

P.O. #:	
Company:	Same
Attn:	
Address:	
City:	
State:	Zip:
Phone #:	
Fax #:	

ANALYSIS REQUEST

FOR LAB USE ONLY: H236486

Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX: GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :	PRESERV.: ACID/BASE:	ICE / COOL	OTHER :	SAMPLING: DATE	TIME	Cl	TPH	BTEX
1	01 2FT					✓	✓						12/1/23	6am			
2	02 2FT					✓	✓										
3	02 4FT					✓	✓										
4	03 2FT					✓	✓										
5	AF04 2FT					✓	✓										
6	AF5 2FT					✓	✓										
7	AF6 2FT					✓	✓										
8	AF07 2FT					✓	-										
9	AF08 (2FT)					✓											
10	AF09 4FT					✓											
11	AF09 2FT					✓											

Relinquished By: David Ortega	Date: 12/4/23 Time: 9:22	Received By:	
Relinquished By:	Date: Time:	Received By:	

Verbal Result: ☐ Yes ☐ No Add'l Phone #:
All Results are emailed. Please provide Email address:

REMARKS: Customer aware of sample jars ~~dirt filling~~ All containers have head space 12/4/23 DH 2.0

Delivered By: (Circle One)
Sampler - UPS - Bus - Other:

Observed Temp. °C 2.4c
Corrected Temp. °C

Sample Condition: Cool ☑ Yes ☐ No / Intact ☐ Yes ☐ No

CHECKED BY: (Initials) DH

Turnaround Time: Standard ☐ Rush ☐
Thermometer ID #140
Correction Factor 0°C

Bacteria (only) Sample Condition: Cool ☐ Yes ☐ No / Intact ☐ Yes ☐ No
Observed Temp. °C
Corrected Temp. °C

FORM-006 R 3.4 07/11/23

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CARDINAL Laboratories
101 East Marland, Hobbs, NM 88240
(575) 393-2326 FAX (575) 393-2476

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Company Name:	Standard Energy Services
Project Manager:	Seth Kirby
Address:	916 W Carlsbad
City:	Hobbs State: NM Zip: 88240
Phone #:	806-241-7405 Fax #:
Project #:	1 Project Owner:
Project Name:	AF
Project Location:	SWD
Sampler Name:	

BILL TO

P.O. #:	
Company:	Same
Attn:	
Address:	
City:	
State:	Zip:
Phone #:	
Fax #:	

ANALYSIS REQUEST

FOR LAB USE ONLY Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX: GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER:	PRESERV.: ACID/BASE:	ICE / COOL	OTHER:	SAMPLING: DATE	TIME
H236486														
12	AF 10 2FT					✓							12-1-23	6am
13	AF 11 2FT					✓								
14	AF 12 2FT					✓								
15	AF 12 4FT					✓								
16	AF 13 2FT					✓								
17	AF 14 4FT					✓								
18	AF 15 2FT					✓								
19	AF 16 2FT					✓								
20	AF 16 4FT					✓								
21	AF 17 2FT					✓								
22	AF 14 2FT					✓								

Cl | TPH | BTEX

Relinquished By:	Date: 12/4/23	Received By:	
Relinquished By:	Time: 9:22	Received By:	
	Date:		
	Time:		

Verbal Result: ☐ Yes ☐ No Add'l Phone #:
All Results are emailed. Please provide Email address:

REMARKS:

Delivered By: (Circle One)	Observed Temp. °C 2.4	Sample Condition: Cool ☑ Yes ☐ No	Intact ☑ Yes ☐ No	CHECKED BY: (Initials)	Turnaround Time: Standard ☑ Rush ☐
Sampler - UPS - Bus - Other:	Corrected Temp. °C				Thermometer ID #140 Correction Factor 0°C

Bacteria (only) Sample Condition: Cool ☐ Yes ☐ No Intact ☐ Yes ☐ No Observed Temp. °C Corrected Temp. °C

FORM-006 R 3.4 07/11/23

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CARDINAL Laboratories

101 East Marland, Hobbs, NM 88240
(575) 393-2326 FAX (575) 393-2476

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Company Name:	Stateline Frac
Project Manager:	Zach Wells
Address:	916 W Carlsbad Rd
City:	Hobbs State: NM Zip: 88240
Phone #:	806-241-7485 Fax #:
Project #:	1 Project Owner: Pitchfork Ranch
Project Name:	AFE
Project Location:	Lea Co
Sampler Name:	

BILL TO

P.O. #:	Same
Company:	
Attn:	
Address:	
City:	
State:	Zip:
Phone #:	
Fax #:	

ANALYSIS REQUEST

FOR LAB USE ONLY Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX: GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :	PRESERV.: ACID/BASE:	ICE / COOL	OTHER :	SAMPLING: DATE	TIME	Cl	TPH	BTEX
H236486	03 AFE 17 @ Pitch					X					X		12-1-23	6am	X	X	X

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising whether based in contract or tort, shall be limited to the amount paid by the client for the analyses. All claims including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within 30 days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequental damages, including without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise.

Relinquished By:	Date: 12/4/23	Received By:	Verbal Result: ☐ Yes ☐ No Add'l Phone #:
Daniel Ortega	Time: 9:22		All Results are emailed. Please provide Email address:
Relinquished By:	Date:	Received By:	REMARKS:
	Time:		

Delivered By: (Circle One)	Observed Temp. °C 2.4	Sample Condition Cool: ☑ Yes ☐ No	Intact: ☑ Yes ☐ No	CHECKED BY: (Initials) DH	Turnaround Time: ☑ Standard ☐ Rush
Sampler - UPS - Bus - Other:	Corrected Temp. °C				Thermometer ID #140 Correction Factor 0°C

Bacteria (only) Sample Condition: Cool ☐ Yes ☐ No; Intact ☐ Yes ☐ No; Observed Temp. °C; Corrected Temp. °C

FORM-006 R 3.4 07/11/23

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CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

January 30, 2025

JOHN AYARBE

Daniel B. Stephens & Associates, Inc.

6020 Academy Rd NE, Suite 100

Albuquerque, NM 87109

RE: BUCKEYE STATE AF #003

Enclosed are the results of analyses for samples received by the laboratory on 01/28/25 11:36.

Cardinal Laboratories is accredited through Texas NELAP under certificate number TX-C24-00112. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (*). For a complete list of accredited analytes and matrices visit the TCEQ website at www.tceq.texas.gov/field/qa/lab_accred_certif.html.

Cardinal Laboratories is accreditated through the State of Colorado Department of Public Health and Environment for:

Method EPA 552.2	Haloacetic Acids (HAA-5)
Method EPA 524.2	Total Trihalomethanes (TTHM)
Method EPA 524.4	Regulated VOCs (V1, V2, V3)

Accreditation applies to public drinking water matrices.

This report meets NELAP requirements and is made up of a cover page, analytical results, and a copy of the original chain-of-custody. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Celey D. Keene

Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

Daniel B. Stephens & Associates, Inc.
JOHN AYARBE
6020 Academy Rd NE, Suite 100
Albuquerque NM, 87109
Fax To: (505) 822-8877

Received:	01/28/2025	Sampling Date:	01/28/2025
Reported:	01/30/2025	Sampling Type:	Soil
Project Name:	BUCKEYE STATE AF #003	Sampling Condition:	** (See Notes)
Project Number:	BUCKEYE STATE AF	Sample Received By:	Tamara Oldaker
Project Location:	STANDARD OIL - BUCKEYE , NM		

Sample ID: NORTH EXPLORATORY EXCAVATION 0-2' (H250488-01)

BTEX 8021B mg/kg Analyzed By: JH

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	01/29/2025	ND	1.98	99.0	2.00	2.78	
Toluene*	<0.050	0.050	01/29/2025	ND	2.07	104	2.00	2.39	
Ethylbenzene*	<0.050	0.050	01/29/2025	ND	2.00	99.9	2.00	2.05	
Total Xylenes*	<0.150	0.150	01/29/2025	ND	5.88	98.0	6.00	1.79	
Total BTEX	<0.300	0.300	01/29/2025	ND					

Surrogate: 4-Bromofluorobenzene (PID *93.5 %* *71.5-134*

Chloride, SM4500Cl-B mg/kg Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**3200**	16.0	01/29/2025	ND	432	108	400	3.77	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	01/28/2025	ND	224	112	200	14.8	
DRO >C10-C28*	<10.0	10.0	01/28/2025	ND	236	118	200	16.2	
EXT DRO >C28-C36	<10.0	10.0	01/28/2025	ND					

Surrogate: 1-Chlorooctane *77.6 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *75.4 %* *49.1-148*

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Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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Analytical Results For:

Daniel B. Stephens & Associates, Inc.
JOHN AYARBE
6020 Academy Rd NE, Suite 100
Albuquerque NM, 87109
Fax To: (505) 822-8877

Received:	01/28/2025	Sampling Date:	01/28/2025
Reported:	01/30/2025	Sampling Type:	Soil
Project Name:	BUCKEYE STATE AF #003	Sampling Condition:	** (See Notes)
Project Number:	BUCKEYE STATE AF	Sample Received By:	Tamara Oldaker
Project Location:	STANDARD OIL - BUCKEYE , NM		

Sample ID: NORTH EXPLORATORY EXCAVATION 2'-4' (H250488-02)

BTEX 8021B mg/kg **Analyzed By: JH**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	01/29/2025	ND	1.98	99.0	2.00	2.78	
Toluene*	<0.050	0.050	01/29/2025	ND	2.07	104	2.00	2.39	
Ethylbenzene*	<0.050	0.050	01/29/2025	ND	2.00	99.9	2.00	2.05	
Total Xylenes*	<0.150	0.150	01/29/2025	ND	5.88	98.0	6.00	1.79	
Total BTEX	<0.300	0.300	01/29/2025	ND					

Surrogate: 4-Bromofluorobenzene (PID *94.5 %* *71.5-134*

Chloride, SM4500Cl-B mg/kg **Analyzed By: AC**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**2120**	16.0	01/29/2025	ND	432	108	400	3.77	

TPH 8015M mg/kg **Analyzed By: MS**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	01/28/2025	ND	224	112	200	14.8	
DRO >C10-C28*	<10.0	10.0	01/28/2025	ND	236	118	200	16.2	
EXT DRO >C28-C36	<10.0	10.0	01/28/2025	ND					

Surrogate: 1-Chlorooctane *90.6 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *88.1 %* *49.1-148*

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Celey D. Keene, Lab Director/Quality Manager

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PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

Daniel B. Stephens & Associates, Inc.
JOHN AYARBE
6020 Academy Rd NE, Suite 100
Albuquerque NM, 87109
Fax To: (505) 822-8877

Received:	01/28/2025	Sampling Date:	01/28/2025
Reported:	01/30/2025	Sampling Type:	Soil
Project Name:	BUCKEYE STATE AF #003	Sampling Condition:	** (See Notes)
Project Number:	BUCKEYE STATE AF	Sample Received By:	Tamara Oldaker
Project Location:	STANDARD OIL - BUCKEYE , NM		

Sample ID: NORTH EXPLORATORY EXCAVATION 4'-6' (H250488-03)

BTEX 8021B mg/kg **Analyzed By: JH**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	01/29/2025	ND	1.98	99.0	2.00	2.78	
Toluene*	<0.050	0.050	01/29/2025	ND	2.07	104	2.00	2.39	
Ethylbenzene*	<0.050	0.050	01/29/2025	ND	2.00	99.9	2.00	2.05	
Total Xylenes*	<0.150	0.150	01/29/2025	ND	5.88	98.0	6.00	1.79	
Total BTEX	<0.300	0.300	01/29/2025	ND					

Surrogate: 4-Bromofluorobenzene (PID *94.5 %* *71.5-134*

Chloride, SM4500Cl-B mg/kg **Analyzed By: AC**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**1800**	16.0	01/29/2025	ND	432	108	400	3.77	

TPH 8015M mg/kg **Analyzed By: MS**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	01/28/2025	ND	224	112	200	14.8	
DRO >C10-C28*	<10.0	10.0	01/28/2025	ND	236	118	200	16.2	
EXT DRO >C28-C36	<10.0	10.0	01/28/2025	ND					

Surrogate: 1-Chlorooctane *95.9 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *94.5 %* *49.1-148*

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Celey D. Keene

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

Daniel B. Stephens & Associates, Inc.
JOHN AYARBE
6020 Academy Rd NE, Suite 100
Albuquerque NM, 87109
Fax To: (505) 822-8877

Received:	01/28/2025	Sampling Date:	01/28/2025
Reported:	01/30/2025	Sampling Type:	Soil
Project Name:	BUCKEYE STATE AF #003	Sampling Condition:	** (See Notes)
Project Number:	BUCKEYE STATE AF	Sample Received By:	Tamara Oldaker
Project Location:	STANDARD OIL - BUCKEYE , NM		

Sample ID: SOUTH EXPLORATORY EXCAVATION 0-2' (H250488-04)

BTEX 8021B mg/kg Analyzed By: JH S-04

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	01/29/2025	ND	1.98	99.0	2.00	2.78	
Toluene*	<0.050	0.050	01/29/2025	ND	2.07	104	2.00	2.39	GC-NC
Ethylbenzene*	<0.050	0.050	01/29/2025	ND	2.00	99.9	2.00	2.05	GC-NC
Total Xylenes*	<0.150	0.150	01/29/2025	ND	5.88	98.0	6.00	1.79	GC-NC
Total BTEX	<0.300	0.300	01/29/2025	ND					

Surrogate: 4-Bromofluorobenzene (PID *264 %* *71.5-134*

Chloride, SM4500Cl-B mg/kg Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**4400**	16.0	01/29/2025	ND	432	108	400	3.77	

TPH 8015M mg/kg Analyzed By: MS S-04

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	**338**	10.0	01/28/2025	ND	224	112	200	14.8	
DRO >C10-C28*	**3700**	10.0	01/28/2025	ND	236	118	200	16.2	
EXT DRO >C28-C36	**674**	10.0	01/28/2025	ND					

Surrogate: 1-Chlorooctane *126 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *151 %* *49.1-148*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

Daniel B. Stephens & Associates, Inc.
JOHN AYARBE
6020 Academy Rd NE, Suite 100
Albuquerque NM, 87109
Fax To: (505) 822-8877

Received:	01/28/2025	Sampling Date:	01/28/2025
Reported:	01/30/2025	Sampling Type:	Soil
Project Name:	BUCKEYE STATE AF #003	Sampling Condition:	** (See Notes)
Project Number:	BUCKEYE STATE AF	Sample Received By:	Tamara Oldaker
Project Location:	STANDARD OIL - BUCKEYE , NM		

Sample ID: SOUTH EXPLORATORY EXCAVATION 2'-4' (H250488-05)

BTEX 8021B mg/kg Analyzed By: JH S-04

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	01/29/2025	ND	1.98	99.0	2.00	2.78	
Toluene*	<0.050	0.050	01/29/2025	ND	2.07	104	2.00	2.39	GC-NC
Ethylbenzene*	<0.050	0.050	01/29/2025	ND	2.00	99.9	2.00	2.05	GC-NC
Total Xylenes*	<0.150	0.150	01/29/2025	ND	5.88	98.0	6.00	1.79	GC-NC
Total BTEX	<0.300	0.300	01/29/2025	ND					

Surrogate: 4-Bromofluorobenzene (PID *353 %* *71.5-134*

Chloride, SM4500Cl-B mg/kg Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**1100**	16.0	01/29/2025	ND	432	108	400	3.77	

TPH 8015M mg/kg Analyzed By: MS S-04

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	**299**	10.0	01/28/2025	ND	224	112	200	14.8	
DRO >C10-C28*	**5440**	10.0	01/28/2025	ND	236	118	200	16.2	
EXT DRO >C28-C36	**979**	10.0	01/28/2025	ND					

Surrogate: 1-Chlorooctane *114 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *171 %* *49.1-148*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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Analytical Results For:

Daniel B. Stephens & Associates, Inc.
JOHN AYARBE
6020 Academy Rd NE, Suite 100
Albuquerque NM, 87109
Fax To: (505) 822-8877

Received:	01/28/2025	Sampling Date:	01/28/2025
Reported:	01/30/2025	Sampling Type:	Soil
Project Name:	BUCKEYE STATE AF #003	Sampling Condition:	** (See Notes)
Project Number:	BUCKEYE STATE AF	Sample Received By:	Tamara Oldaker
Project Location:	STANDARD OIL - BUCKEYE , NM		

Sample ID: SOUTH EXPLORATORY EXCAVATION 4'-6' (H250488-06)

BTEX 8021B mg/kg Analyzed By: JH S-04

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	01/29/2025	ND	1.98	99.0	2.00	2.78	
Toluene*	<0.050	0.050	01/29/2025	ND	2.07	104	2.00	2.39	GC-NC
Ethylbenzene*	<0.050	0.050	01/29/2025	ND	2.00	99.9	2.00	2.05	GC-NC
Total Xylenes*	<0.150	0.150	01/29/2025	ND	5.88	98.0	6.00	1.79	GC-NC
Total BTEX	<0.300	0.300	01/29/2025	ND					

Surrogate: 4-Bromofluorobenzene (PID *403 %* *71.5-134*

Chloride, SM4500Cl-B mg/kg Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**688**	16.0	01/29/2025	ND	432	108	400	3.77	

TPH 8015M mg/kg Analyzed By: MS S-06

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	**748**	100	01/29/2025	ND	224	112	200	14.8	
DRO >C10-C28*	**10900**	100	01/29/2025	ND	236	118	200	16.2	
EXT DRO >C28-C36	**2320**	100	01/29/2025	ND					

Surrogate: 1-Chlorooctane *171 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *257 %* *49.1-148*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

Daniel B. Stephens & Associates, Inc.
JOHN AYARBE
6020 Academy Rd NE, Suite 100
Albuquerque NM, 87109
Fax To: (505) 822-8877

Received:	01/28/2025	Sampling Date:	01/28/2025
Reported:	01/30/2025	Sampling Type:	Soil
Project Name:	BUCKEYE STATE AF #003	Sampling Condition:	** (See Notes)
Project Number:	BUCKEYE STATE AF	Sample Received By:	Tamara Oldaker
Project Location:	STANDARD OIL - BUCKEYE , NM		

Sample ID: SOUTH EXPLORATORY EXCAVATION 6'-8' (H250488-07)

BTEX 8021B mg/kg Analyzed By: JH S-04

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	01/29/2025	ND	1.98	99.0	2.00	2.78	
Toluene*	<0.050	0.050	01/29/2025	ND	2.07	104	2.00	2.39	
Ethylbenzene*	<0.050	0.050	01/29/2025	ND	2.00	99.9	2.00	2.05	GC-NC
Total Xylenes*	<0.150	0.150	01/29/2025	ND	5.88	98.0	6.00	1.79	GC-NC
Total BTEX	<0.300	0.300	01/29/2025	ND					

Surrogate: 4-Bromofluorobenzene (PID *166 %* *71.5-134*

Chloride, SM4500Cl-B mg/kg Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**2400**	16.0	01/29/2025	ND	432	108	400	3.77	

TPH 8015M mg/kg Analyzed By: MS S-04

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	**103**	10.0	01/28/2025	ND	224	112	200	14.8	
DRO >C10-C28*	**3150**	10.0	01/28/2025	ND	236	118	200	16.2	
EXT DRO >C28-C36	**606**	10.0	01/28/2025	ND					

Surrogate: 1-Chlorooctane *126 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *163 %* *49.1-148*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Notes and Definitions

S-06	The recovery of this surrogate is outside control limits due to sample dilution required from high analyte concentration and/or matrix interference's.
S-04	The surrogate recovery for this sample is outside of established control limits due to a sample matrix effect.
QR-04	The RPD for the BS/BSD was outside of historical limits.
QR-03	The RPD value for the sample duplicate or MS/MSD was outside of QC acceptance limits due to matrix interference. QC batch accepted based on LCS and/or LCSD recovery and/or RPD values.
GC-NC	8260 confirmation analysis was performed; initial GC results were not supported by GC/MS analysis and are reported as ND.
ND	Analyte NOT DETECTED at or above the reporting limit
RPD	Relative Percent Difference
**	Samples not received at proper temperature of 6°C or below.
***	Insufficient time to reach temperature.
-	Chloride by SM4500Cl-B does not require samples be received at or below 6°C
	Samples reported on an as received basis (wet) unless otherwise noted on report

Cardinal Laboratories

*=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

101 East Marland, Hobbs, NM 88240
(575) 393-2326 FAX (575) 393-2476

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Company Name:	Daniel B. Stephens & Associates, Inc.
Project Manager:	John Ayarbe
Address:	6020 Academy NE Suite 100
City:	Albuquerque State: NM Zip: 87109
Phone #:	505 822 9400 Fax #: N/A
Project #:	Buckeye State AF Project Owner: Standard Oil Co
Project Name:	Buckeye State AF #003
Project Location:	Buckeye New Mexico
Sampler Name:	CM Barnhill, PE

BILL TO

P.O. #:	
Company:	
Attn:	
Address:	
City:	
State:	Zip:
Phone #:	
Fax #:	

ANALYSIS REQUEST

FOR LAB USE ONLY Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX: GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER:	PRESERV.: ACID/BASE:	ICE / COOL	OTHER:	SAMPLING DATE	SAMPLING TIME	TPH GRO/DRO/MRO EPA MOD. 8015	BTEX 8021B	Chloride SM 4500 Cl-B
H250488																	
1	North Exploratory excavation 0'-2'	G	2			X					X		01/28/25	0811	X	X	X
2	North Exploratory excavation 2'-4'	G	2			X					X		01/28/25	0825	X	X	X
3	North Exploratory excavation 4'-6'	G	2			X					X		01/28/25	0838	X	X	X
4	South Exploratory Excavation 0'-2'	G	2			X					X		01/28/25	0937	X	X	X
5	South Exploratory Excavation 2'-4'	G	2			X					X		01/28/25	0946	X	X	X
6	South Exploratory Excavation 4'-6'	G	2			X					X		01/28/25	0954	X	X	X
7	South Exploratory excavation 6'-8'	G	2			X					X		01/28/25	10:24	X	X	X

Relinquished By:	Date: 01/28/25	Received By:	
Relinquished By:	Time: 11:36	Received By:	
Delivered By: (Circle One)	Observed Temp. °C 12.1	Sample Condition Cool Intact	CHECKED BY: (Initials)
Sampler - UPS - Bus - Other:	Corrected Temp. °C 11.5	☐ Yes ☑ Yes ☐ No ☐ No	

Verbal Result: ☐ Yes ☐ No Add'l Phone #:

All Results are emailed. Please provide Email address:

jayarbe@geo-logic.com

REMARKS: 48 hour turn-around time

Any Questions Please Call Cmbe 575 626 1615

Turnaround Time: 48 hour Standard ☐ Rush ☑

Thermometer ID #140
Correction Factor -0.6°C

Bacteria (only) Sample Condition Cool Intact ☐ Yes ☐ Yes ☐ No ☐ No Observed Temp. °C Corrected Temp. °C

† Cardinal cannot accept verbal changes. Please email changes to celey.keene@cardinallabsnm.com

FORM-006 R 3.3 08/08/24

Appendix G

DBS&A Historical Aerial Photograph Review

Memorandum

To: John Ayarbe **Date:** January 31, 2024

From: Jessica Myers

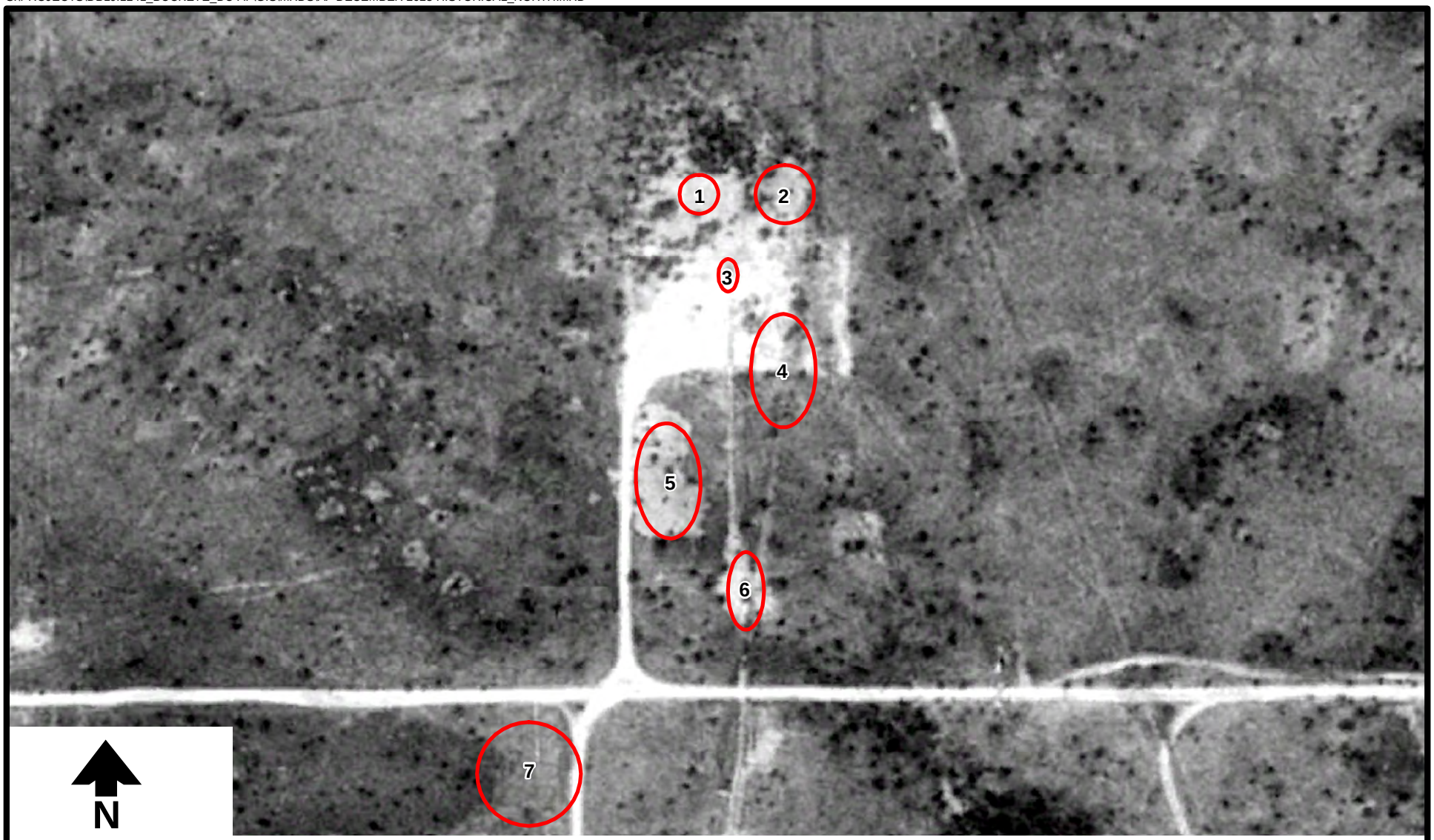
Subject: Buckeye State AF #003, NMSLO Areas of Concern

On August 30, 2023, the New Mexico State Land Office (NMSLO) denied a Remediation Plan submitted for Buckeye State AF #003 dated August 25, 2023, stating that a revised plan must be submitted. This denial included several site maps that outlined "applicable areas needing further investigation, remediation, and reclamation" over recent aerial imagery dated June 2023. Attached to this memorandum are two maps showing these outlined areas over aerial imagery dated 1996, which is before the client leased the property. This memorandum compares the areas of concern between these two dates.

NMSLO identified seven areas of concern in the northern area of the property, around the location of the pad for the former salt water disposal well. The first area is the farthest northwest of the areas, and is located in the center of a disturbed zone that is an offshoot of the main disturbed area around the well pad. In the 1996 aerial photograph, that disturbed zone is present and larger than it is in the 2023 aerial photograph. The second area is the farthest northeast, and encompasses a smaller area of disturbed soil; however, most of the area is vegetated. In the 1996 aerial photograph, the area fully contains disturbed soil. The third area is located in the north-central part of the well pad and appears fully disturbed. The area is also fully disturbed in the 1996 aerial photograph. The fourth area is located around the southeast corner of the well pad area, and covers a mostly disturbed area including a road. In the 1996 aerial photograph, the entire top half of the area is disturbed, while the road is also visible in the bottom half. The fifth area is located east of the access road and south of the well pad, and contains vegetation with no disturbed soil. In the 1996 aerial photograph, the area is fully disturbed. The sixth area is located southeast of the fifth area, and contains a small area of disturbed soil next to a road. In the 1996 aerial photograph, the road is present and the area is fully disturbed. The seventh area is west of the access road and south of another road that trends east-west, which appears partially disturbed. In the 1996 aerial photograph, the area is mostly vegetated.

NMSLO identified six more areas in the southern area of the property, around the former tank battery area. The first area is located along the access road north of the former tank battery site, which contains the road and no other disturbed areas. In the 1996 aerial photograph, the area looks the same as it does in the 2023 aerial imagery. The second area is located east of the first area, which contains a larger disturbed area. In the 1996 aerial photograph, this area is more visibly disturbed than it is in the 2023 aerial imagery. The third area is west of the former tank battery location and is mostly covered in vegetation, with two noticeable disturbed patches. In the 1996 aerial photograph, this area is more disturbed than it is in the 2023 aerial photograph. The fourth area is located where the tank battery once was, and is fully disturbed. In the 1996 aerial photograph, this area was also fully disturbed. The fifth area is located directly east of the fourth area and is fully disturbed. This area was also fully disturbed in the 1996 aerial photograph. The sixth area encompasses the part of the property that slopes downward toward a topographic depression and the slope is mostly disturbed, with some vegetation growing on it. In the 1996 aerial photograph, this area is more disturbed and has considerably less vegetation growing on the slope.

S:\PROJECTS\DB19.1241_BUCKEYE_DU-AF\GIS\MXDS\AF DECEMBER 2023 HISTORICAL_NORTH.MXD



Source: Aerial imagery (Google Earth, 1996).

Explanation

NMSLO area of concern

Figure A-1

BUCKEYE STATE AF #003

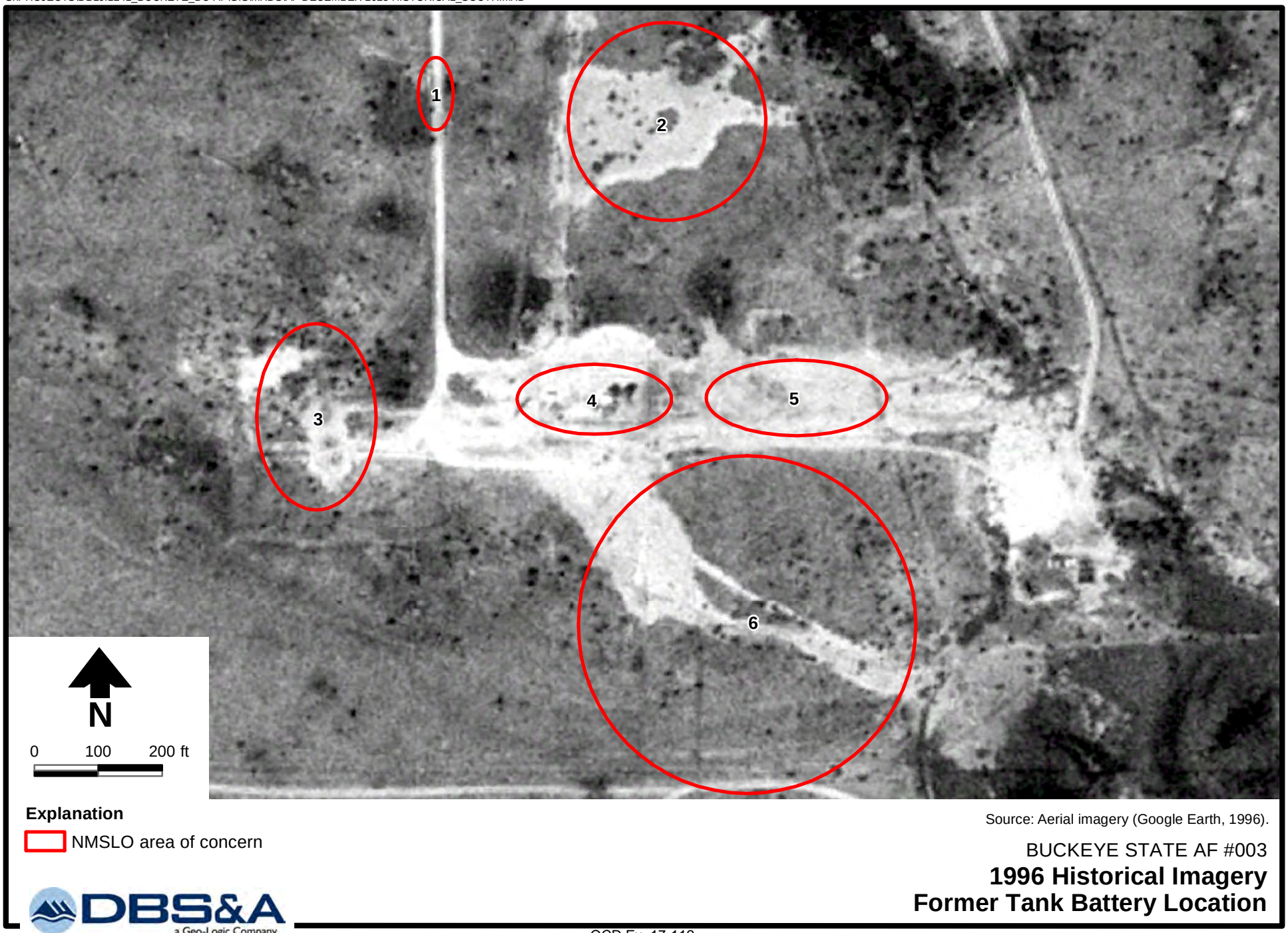
1996 Historical Imagery

Pad of Former Salt Water Disposal Well

DBS&A a Geo-Logic Company

3/19/2024 DB19.1241

S:\PROJECTS\DB19.1241_BUCKEYE_DU-AF\GIS\MXDS\AF DECEMBER 2023 HISTORICAL_SOUTH.MXD



Explanation

NMSLO area of concern

Source: Aerial imagery (Google Earth, 1996).

BUCKEYE STATE AF #003

1996 Historical Imagery
Former Tank Battery Location

DBS&A a Geo-Logic Company

3/19/2024 DB19.1241

Figure A-2


CAT
CAT
CAT
RENTALS
503478
CASE
720


CAT
323
CAT
WAGNER CAT
RENTALS
503478


ARBOR
HT
TOOLS
PRICES


CAT
323
CAT
RENTALS
503478

OCD Ex. 17-117

OCD Ex. 17-120

OCD Ex. 17-f21

OCD Permitting

Rejected by the OCD Fee [C-141] Release Corrective Action (C-141)

Submission Contact, Application, Fee and Payment Details for Application ID: 451219

Return to Under OCD Review

First Name: Terry
Last Name: Payton
Email: terry@bergsteinenterprises.com

Operator: [222759] BUCKEYE DISPOSAL, L.L.C.
Application Status: Rejected by the OCD
Fee Amount: **$150.00**
Pay Amount: $150.00 Credit Card [CC]

Type	ID	District	County	Location
Incident ID	[nKL1625134663]	Hobbs	Lea	L-08-18S-35E 1980 FSL 990 FWL 32.7605324,-103.4851837 NAD83

Attachment Type (Description) Tag(s)	Original Uploaded File Name
Volume Calculation	Provided in the Proposed Remediation Plan.pdf (35 KB)
Water Sources	Provided in the Proposed Remediation Plan.pdf (35 KB)
Scaled Site Map	Provided in the Proposed Remediation Plan.pdf (35 KB)
Field Data	Provided in the Proposed Remediation Plan.pdf (35 KB)
Soil Contaminant	Provided in the Proposed Remediation Plan.pdf (35 KB)
Water Depth	Provided in the Proposed Remediation Plan.pdf (35 KB)
Boring Logs	Provided in the Proposed Remediation Plan.pdf (35 KB)
Photographs	Binder1_Northern exploratory excavation_01282025.pdf (9400.9 KB)
Photographs	Binder2_Southern exploratory excavation_01282025.pdf (15319.1 KB)
Topo Aerial Maps	Provided in the Proposed Remediation Plan.pdf (35 KB)
Lab Data	Provided in the Proposed Remediation Plan.pdf (35 KB)
Proposed Technique	Proposed Remediation Plan_Buckeye State AF 003_4-11-2025.pdf (11137.9 KB)
Scaled Site Map	Provided in the Proposed Remediation Plan.pdf (35 KB)
Estimated Volume	Provided in the Proposed Remediation Plan.pdf (35 KB)
Closure Criteria	Provided in the Proposed Remediation Plan.pdf (35 KB)
Proposed Schedule	Provided in the Proposed Remediation Plan.pdf (35 KB)
	Files: 16 Total Size: **35.5 MB**

Event Dates

Created On: 4/11/2025 2:33 PM
Modified On: 10/22/2025 8:40 AM

Created By: tpayton
Modified By: bhall

Incident Operator	**[222759] BUCKEYE DISPOSAL, L.L.C.**
Incident Type	**Oil Release**
Incident Status	**Remediation Plan Received**
Incident Well	**[30-025-20980] STATE AF #003**
Incident Facility	*Unavailable.*

Location of Release Source

Please answer all the questions in this group.

Δ	Site Name	STATE AF #003
•	Date Release Discovered	08/16/2016
•	Surface Owner	State

Incident Details

Please answer all the questions in this group.

•	Incident Type	Oil Release
•	Did this release result in a fire or is the result of a fire	No
•	Did this release result in any injuries	No
•	Has this release reached or does it have a reasonable probability of reaching a watercourse	No
•	Has this release endangered or does it have a reasonable probability of endangering public health	No
•	Has this release substantially damaged or will it substantially damage property or the environment	No
•	Is this release of a volume that is or may with reasonable probability be detrimental to fresh water	No

Nature and Volume of Release

Material(s) released, please answer all that apply below. Any calculations or specific justifications for the volumes provided should be attached to the follow-up C-141 submission.

•	Crude Oil Released (bbls) Details	Cause: Equipment Failure | Pipeline (Any) | Crude Oil | Released: 15 BBL | Recovered: 14 BBL | Lost: 1 BBL.
•	Produced Water Released (bbls) Details	*Not answered.*
•	Is the concentration of chloride in the produced water >10,000 mg/l	*Not answered.*
•	Condensate Released (bbls) Details	*Not answered.*
•	Natural Gas Vented (Mcf) Details	*Not answered.*
•	Natural Gas Flared (Mcf) Details	*Not answered.*
•	Other Released Details	*Not answered.*
•	Are there **additional details** for the questions above (i.e. any answer containing Other, Specify, Unknown, and/or Fire, or any negative lost amounts)	*Not answered.*

Nature and Volume of Release (continued)

•	Is this a gas only submission (i.e. only significant Mcf values reported)	**No, according to supplied volumes this does not appear to be a "gas only" report.**
•	Was this a major release as defined by Subsection A of 19.15.29.7 NMAC	**No**
•	Reasons why this would be considered a submission for a notification of a major release	*Unavailable.*

With the implementation of the 19.15.27 NMAC (05/25/2021), venting and/or flaring of natural gas (i.e. gas only) are to be submitted on the C-129 form.

Δ	Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices	True	
Δ	All free liquids and recoverable materials have been removed and managed appropriately	True	
•	If all the actions described above have not been undertaken, explain why	*Not answered.*	

Per Paragraph (4) of Subsection B of 19.15.29.8 NMAC the responsible party may commence remediation immediately after discovery of a release. If remediation has begun, please prepare and attach a narrative of actions to date in the follow-up C-141 submission. If remedial efforts have been successfully completed or if the release occurred within a lined containment area (see Subparagraph (a) of Paragraph (5) of Subsection A of 19.15.29.11 NMAC), please prepare and attach all information needed for closure evaluation in the follow-up C-141 submission.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

Δ	I hereby agree and sign off to the above statement	Name: Terry Payton Title: Financial Officer Email: terry@bergsteinenterprises.com Date: 04/11/2025	

Site Characterization

Please answer all the questions in this group (only required when seeking remediation plan approval and beyond). This information must be provided to the appropriate district office no later than 90 days after the release discovery date.

Δ	What is the shallowest depth to groundwater beneath the area affected by the release in feet below ground surface (ft bgs)	Between 100 and 500 (ft.)	
Δ	What method was used to determine the depth to ground water	NM OSE iWaters Database Search	
Δ	Did this release impact groundwater or surface water	No	

What is the minimum distance, between the closest lateral extents of the release and the following surface areas:

Δ	A continuously flowing watercourse or any other significant watercourse	Between 1000 (ft.) and ½ (mi.)	
Δ	Any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)	Between 300 and 500 (ft.)	
Δ	An occupied permanent residence, school, hospital, institution, or church	Greater than 5 (mi.)	
Δ	A spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes	Between 500 and 1000 (ft.)	
Δ	Any other fresh water well or spring	Between 1000 (ft.) and ½ (mi.)	
Δ	Incorporated municipal boundaries or a defined municipal fresh water well field	Greater than 5 (mi.)	
Δ	A wetland	Between 1000 (ft.) and ½ (mi.)	
Δ	A subsurface mine	Greater than 5 (mi.)	
Δ	An (non-karst) unstable area	Greater than 5 (mi.)	
Δ	Categorize the risk of this well / site being in a karst geology	Low	
Δ	A 100-year floodplain	Between 1000 (ft.) and ½ (mi.)	
Δ	Did the release impact areas not on an exploration, development, production, or storage site	Yes	

Remediation Plan

Please answer all the questions that apply or are indicated. This information must be provided to the appropriate district office no later than 90 days after the release discovery date.

Δ	Requesting a remediation plan approval with this submission	Yes	

Attach a comprehensive report demonstrating the lateral and vertical extents of soil contamination associated with the release have been determined, pursuant to 19.15.29.11 NMAC and 19.15.29.13 NMAC.

Δ	Have the lateral and vertical extents of contamination been fully delineated	Yes	
Δ	Was this release entirely contained within a lined containment area	Yes	

Per Subsection B of 19.15.29.11 NMAC unless the site characterization report includes completed efforts at remediation, the report must include a proposed remediation plan in accordance with 19.15.29.12 NMAC, which includes the anticipated timelines for beginning and completing the remediation.

Δ	On what estimated date will the remediation commence	05/19/2025	
Δ	On what date will (or did) the final sampling or liner inspection occur	05/19/2025	
Δ	On what date will (or was) the remediation complete(d)	08/01/2025	
Δ	What is the estimated surface area (in square feet) that will be remediated	87120	

Remediation Plan (continued)

Please answer all the questions that apply or are indicated. This information must be provided to the appropriate district office no later than 90 days after the release discovery date.

This remediation will (or is expected to) utilize the following processes to remediate / reduce contaminants:

(Select all answers below that apply.)

Δ	Is (or was) there affected material present needing to be removed	Yes	
Δ	Is (or was) there a power wash of the lined containment area (to be) performed	No	
Δ	OTHER (Non-listed remedial process)	No	

Per Subsection B of 19.15.29.11 NMAC unless the site characterization report includes completed efforts at remediation, the report must include a proposed remediation plan in accordance with 19.15.29.12 NMAC, which includes the anticipated timelines for beginning and completing the remediation.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

Δ	I hereby agree and sign off to the above statement	Name: Terry Payton Title: Financial Officer Email: terry@bergsteinenterprises.com Date: 04/11/2025	

The OCD recognizes that proposed remediation measures may have to be minimally adjusted in accordance with the physical realities encountered during remediation. If the responsible party has any need to significantly deviate from the remediation plan proposed, then it should consult with the division to determine if another remediation plan submission is required.

Liner Inspection Information

Last liner inspection notification (C-141L) recorded	***{Unavailable.}***
Was all the impacted materials removed from the liner	*Unavailable.*

Remediation Closure Request

Only answer the questions in this group if seeking remediation closure for this release because all remediation steps have been completed.

- Requesting a remediation closure approval with this submission — No

Comments

Conditions of Approval

Reasons of Rejection

Remediation plan denied.

Added on 5/2/2025 by bhall Remove

As per the last rejections, per 19.15.29.12 C.(4) NMAC If a release occurs within the following areas, the responsible party must treat the release as if it occurred less than 50 feet to ground water in Table I of 19.15.29.12 NMAC: (c) within (ii) 1000 feet of any fresh water well or spring. The release is within 1000 feet of a fresh water well and regardless of depth to groundwater, the release must be delineated, both horizontally and vertically, and remediated to the most stringent closure standards in Table I.

Added on 5/2/2025 by bhall Remove

The question "Was this release entirely contained within a lined containment area" was answered "Yes". Data included in the report indicates that this release want not entirely contained within a lined containment area.

Added on 5/2/2025 by bhall Remove

Per 19.15.29.7 C. NMAC, “Responsible party” means the operator, as defined in 19.15.2 NMAC. Notwithstanding the foregoing, the division, in its sole discretion, may also consider a person causing the release, or controlling the location of the release as the responsible party. OCD will hold the operator of the site responsible for releases that occurred at the site, including any pipeline releases that may have affected the site.

Added on 5/2/2025 by bhall Remove

placement of 0.5 to 1 foot of low-permeability clay at the base of excavations and at least 4 feet of clean top soil above the clay to support vegetation." OCD no longer approves the use of liners that are placed on top of contamination as a remediation variance in an effort solely to ensure contamination doesn't migrate further is not equal or better protection, as the contamination will remain in place. A liner request solely to reduce cleanup will be denied.

Added on 5/2/2025 by bhall Remove

OCD does not approve the proposed excavation areas (identified by the blue hatched areas) depicted on Figure 7, Estimated Extents of Proposed Excavation Areas. The entire release area must be remediated to the most stringent closure criteria. This includes the former pit area, any areas that Buckeye contends 3rd party pipeline releases occurred, and any additional areas of contamination that Buckeye has discovered during all site assessment activities.

Added on 5/2/2025 by bhall Remove

OCD does not approve the "anticipated confirmation sample locations" that are illustrated on Figure 7, Estimated Extents of Proposed Excavation Areas as the full extent of contamination is not represented by these sample locations.

Added on 5/2/2025 by bhall Remove

OCD does not approve sections 5.1.4 or 5.2 of the remediation plan.

Added on 5/2/2025 by bhall Remove

In future submittals, do not include the mostly blank sheet of paper that only states "Provided in the Proposed Remediation Plan." The remediation plan either needs 1) to be broken down into the individual tags with the correct portion of the remediation plan attached or 2) all tags need to be included on the one file that contains the entire remediation plan.

Added on 5/2/2025 by bhall Remove

Buckeye's failure to submit an adequate site characterization and remediation plan constitutes an ongoing violation of 15.15.29 NMAC.

Added on 5/6/2025 by bhall Remove

Department Use Only

Contact Phone:
Contact Email:
Internal Comment:
Reviewer: Brittany Hall Take Reviewership

Fee Information

Created On: 4/11/2025 2:33 PM
Created By: tpayton
Type: SB553 A.(2)
PO Number: BNMQ6-250411-C-1410
Amount: $150.00
Modified On: 4/11/2025 2:33 PM
Modified By: tpayton

Payment Information

Created On: 4/11/2025 3:00 PM
Created By: tpayton
Status: Paid
Type: Credit Card
Amount: $150.00
Modified On: 5/6/2025 11:45 AM
Modified By: bhall

HOBBS OCD
MAY 11 2018
RECEIVED

District I
1625 N. French Dr., Hobbs, NM 88240
District II
811 S. First St., Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-141
Revised August 8, 2011

Submit 1 Copy to appropriate District Office in accordance with 19.15.29 NMAC.

Release Notification and Corrective Action

OPERATOR

☑ Initial Report ☐ Final Report

Name of Company Buckeye Disposal	Contact Jim SAYRE
Address	Telephone No. 575-393-8352
Facility Name State AF	Facility Type Disposal

Surface Owner State	Mineral Owner State	API No. 30-025-20980

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
L	8	18S	35E	1980	South	990	West	LEA

Latitude 32.76012 Longitude 103.48457

NATURE OF RELEASE

Type of Release Leak produced water	Volume of Release 30 bbl / Volume Recovered 30 bbl
Source of Release Line failure	Date and Hour of Occurrence 4-24 / Date and Hour of Discovery 4-26-18
Was Immediate Notice Given? ☐ Yes ☑ No ☐ Not Required	If YES, To Whom?
By Whom?	Date and Hour
Was a Watercourse Reached? ☐ Yes ☑ No	If YES, Volume Impacting the Watercourse.

If a Watercourse was Impacted, Describe Fully.*

RECEIVED
By Olivia Yu at 2:23 pm, May 11, 2018

Describe Cause of Problem and Remedial Action Taken.*
seal on pump went out causing pressure build up & line failure inside dyke & liner

Describe Area Affected and Cleanup Action Taken.*
Inside the liner

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

Signature: Jim Sayre
Printed Name: Jim SAYRE
Title: MANAGER
E-mail Address: jim@thestandardenergy.com
Date: 5-4-18 Phone:

OIL CONSERVATION DIVISION

Approved by Environmental Specialist:

Approval Date: 5/11/2018 Expiration Date:

Conditions of Approval: Attached ☐

see attached directive for historical impacted areas on location.
Please inspect liner in question.
Provide NMOCD with a concise report of the inspection with affirmation the liner has and will continue to contain liquids.

1RP-5056

* Attach Additional Sheets If Necessary

nOY1813152090

pOY1813152414

Operator/Responsible Party,

The OCD has received the form C-141 you provided on _5/11/2018_ regarding an unauthorized release. The information contained on that form has been entered into our incident database and remediation case number _1RP-5056__ has been assigned. **Please refer to this case number in all future correspondence.**

It is the Division's obligation under both the Oil & Gas Act and Water Quality Act to provide for the protection of public health and the environment. Our regulations (19.15.29.11 NMAC) state the following,

> *The responsible person shall complete division-approved corrective action for releases that endanger public health or the environment. The responsible person shall address releases in accordance with a remediation plan submitted to and approved by the division or with an abatement plan submitted in accordance with 19.15.30 NMAC.* [emphasis added]

Release characterization is the first phase of corrective action unless the release is ongoing or is of limited volume and all impacts can be immediately addressed. Proper and cost-effective remediation typically cannot occur without adequate characterization of the impacts of any release. Furthermore, the Division has the ability to impose reasonable conditions upon the efforts it oversees. **As such, the Division is requiring a workplan for the characterization of impacts associated with this release be submitted to the OCD District _1_ office in __Hobbs____ on or before _6/11/2018_. If and when the release characterization workplan is approved, there will be an associated deadline for submittal of the resultant investigation report. Modest extensions of time to these deadlines may be granted, but only with acceptable justification.**

The goals of a characterization effort are: 1) determination of the lateral and vertical extents along with the magnitude of soil contamination. 2) determine if groundwater or surface waters have been impacted. 3) If groundwater or surface waters have been impacted, what are the extents and magnitude of that impact. 4) The characterization of any other adverse impacts that may have occurred (examples: impacts on vegetation, impacts on wildlife, air quality, loss of use of property, etc.). To meet these goals as quickly as possible, the following items must, at a minimum, be addressed in the release characterization workplan and subsequent reporting:

● Horizontal delineation of soil impacts in each of the four cardinal compass directions. Adsorbed soil contamination must be characterized for the following constituents using the associated laboratory methods: benzene, toluene, ethylbenzene, and total xylenes by either Method 8260 or 8021, total petroleum hydrocarbons by Method 8015 extended range (GRO+DRO+MRO; C_6 thru C_{36}), and for chloride by Method 300. This is not an exclusive list of potential contaminants. Analyzed parameters should be modified based on the nature of the released substance(s). Soil sampling must be both within the impacted area and beyond.

● Vertical delineation of soil impacts. Adsorbed soil contamination must be characterized for the following constituents using the associated laboratory methods: benzene, toluene, ethylbenzene, and total xylenes by either Method 8260 or 8021, total petroleum hydrocarbons by Method 8015 extended range (GRO+DRO+MRO; C_6 thru C_{36}), and for chloride by Method 300. As above, this is not an exclusive list of potential contaminants and can be modified. Vertical characterization samples should be taken at depth intervals no greater than five feet apart. Lithologic description of encountered soils must also be provided. At least ten vertical feet of soils with contaminant concentrations at or below these values must be demonstrated as existing above the water table.

● Nominal detection limits for field and laboratory analyses must be provided.

● Composite sampling is not generally allowed.

● Field screening and assessment techniques are acceptable (headspace, titration, EC [include algorithm for validation purposes], EM, etc.), but the sampling and assay procedures must be clearly defined. Copies of field notes are highly desirable. A statistically significant set of split samples must be submitted for confirmatory laboratory analysis, including the laterally farthest and vertically deepest sets of soil samples. Make sure there are at least two soil samples submitted

for laboratory analysis from each borehole or test pit (highest observed contamination and deepest depth investigated). Copies of the actual laboratory results must be provided including chain of custody documentation.

●Probable depth to shallowest protectable groundwater and lateral distance to nearest surface water. If there is an estimate of groundwater depth, the information used to arrive at that estimate must be provided. If there is a reasonable assumption that the depth to protectable water is 50 feet or less, the responsible party should anticipate the need for at least one groundwater monitoring well to be installed in the area of likely maximum contamination.

● If groundwater contamination is encountered, an additional investigation workplan may be required to determine the extents of that contamination. Groundwater and/or surface water samples, if any, must be analyzed by a competent laboratory for volatile organic hydrocarbons (typically Method 8260 full list), total dissolved solids, pH, major anions and cations including chloride and sulfate, dissolved iron, and dissolved manganese. The investigation workplan must provide the groundwater sampling method(s) and sample handling protocols. To the fullest extent possible, aqueous analyses must be undertaken using nominal method detection limits. As with the soil analyses, copies of the actual laboratory results must be provided including chain of custody documentation.

● Accurately scaled and well-drafted site maps must be provided providing the location of borings, test pits, monitoring wells, potentially impacted areas, and significant surface features including roads and site infrastructure that might limit either the release characterization or remedial efforts. Field sketches may be included in subsequent reporting, but should not be considered stand-alone documentation of the site's layout. Digital photographic documentation of the location and fieldwork is recommended, especially if unusual circumstances are encountered.

Nothing herein should be interpreted to preclude emergency response actions or to imply immediate remediation by removal cannot proceed as warranted. Nonetheless, characterization of impacts and confirmation of the effectiveness of remedial efforts must still be provided to the OCD before any release incident will be closed.

Jim Griswold
OCD Environmental Bureau Chief
1220 South St. Francis Drive
Santa Fe, New Mexico 87505
505-476-3465
jim.griswold@state.nm.us

OCD Permitting

nOY1813152090 STATE AF #003

General Incident Information

Edit

Well: [30-025-20980] STATE AF #003
Facility:
Operator: [222759] BUCKEYE DISPOSAL, L.L.C.
Status: Active
Stage: Initial C-141 Approved, Pending submission of Site Characterization / Remediation Plan OR Remediation Closure Report from the operator
Type: Produced Water Release
Severity:

Incident Location: L-08-18S-35E 1980 FSL 990 FWL
Lat/Long: 32.7605324,-103.4851837 NAD83
District: Hobbs
County: Lea (25)
Surface Owner: State

Severity Indicators

Resulted In Fire:	☐	Resulted In Injury:	☐
Endangered Public Health:	☐	Will or Has Reached Watercourse:	☐
Fresh Water Contamination:	☐	Property Or Environmental Damage:	☐

Notes

Source of Referral: Other State Agency
Action / Escalation: Referred to Environmental Inspector

Department Use Only

Contact Phone:
Contact Email:
Internal Comment:
Confidential: ☐
Reviewer: Brittany Hall Take Reviewership

Contact Details

Contact Name:
Contact Title:

Event Dates

Date of Discovery: 04/26/2018
Initial C-141 Report Due: 5/11/2018
Remediation Closure Report Due: 12/19/2023

Department Notes

Incident Dates

19.15.29 NMAC - RELEASES

Type	Action	Received	Denied	Approved
Remediation Plan	[438610]	03/04/2025	03/12/2025	
Site Characterization	[438610]	03/04/2025	03/12/2025	

19.15.30 NMAC - REMEDIATION Edit

Type	Action	Received	Denied	Approved

Quick Links
- General Incident Informatio
- Materials
- Events
- Orders
- Action Status

Associated Images
- Facility Files (0)
- Incident Files (3)
- Well Files (80)

Associated Inspections
- Incident Inspections
- Incident Field Compliances
- Operator Inspections
- Operator Field Compliance

New Searches
- New Facility Search
- New Incident Search
- New Operator Search
- New Pit Search
- New Well Search

OCD Ex. 19-001

Initial C-141 Report		05/11/2018		05/11/2018

Compositional Analysis of Vented and/or Flared Natural Gas

No Compositional Analysis Found

Incident Materials

Edit

Cause	Source	Material	Volume Unk.	Released	Recovered	Lost	Units
Equipment Failure	Pump	Produced Water	☐	30	30	0	BBL

The concentration of dissolved chloride in the produced water >10,000 mg/l: ☐ Yes ☑ No

Incident Events

Edit

Date	Detail
10/22/2025	An application [451183] was submitted to OCD for review. It was submitted, indicating that it was an: [C-141] Application for administrative approval of a release notification and corrective action The operator was emailed confirmation of this event.
10/22/2025	An application [438610] was submitted to OCD for review. It was submitted, indicating that it was an: [C-141] Application for administrative approval of a release notification and corrective action The operator was emailed confirmation of this event.
05/06/2025	Remediation plan denied. See application ID 451183 for reasons of rejection.
05/06/2025	The (10/22/2025, C-141) application [451183] was rejected by OCD. The operator was emailed with details of this event.
04/11/2025	The (10/22/2025, C-141) application [451183] was assigned to this incident.
03/12/2025	Remediation plan denied. See application ID for all reasons of rejection. A complete and accurate report must be submitted via the OCD Permitting website by 4/11/2025.
03/12/2025	The (10/22/2025, C-141) application [438610] was rejected by OCD. The operator was emailed with details of this event.
03/04/2025	The (10/22/2025, C-141) application [438610] was assigned to this incident.
09/17/2024	Incident numbers, nOY1813152090 and nKL1625134663, associated with the State AF #003 (30-025-20980) are out of compliance. Both incidents were granted 90-day extension requests on February 1, 2024, to facility Buckeye Disposal's compliance with the New Mexico State Land Office's (SLO) requirements. Site Characterization and Remediation Plans or Remediation Closure Reports were required to be submitted to OCD Permitting no later than May 2, 2024. As of today, September 17, 2024, OCD has not received any submittals for these two incidents. OCD WILL NOT approve any additional extension requests for nOY1813152090 and nKL1625134663. Remediation of these releases must be completed pursuant to 19.15.29 NMAC, including submission of approvable remediation plans, remediation closure reports, reclamation reports, and revegetation reports. OCD will use its enforcement discretion to determine if additional enforcement action is warranted. Cooperation from Buckeye Disposal L.L.C. will be considered when determining any enforcement actions, which may include civil penalties.
02/01/2024	Operator has requested a 90 day extension as they are working with the State Land Office and need time to coordinate field activities and obtain access and clearances (i.e., cultural compliance). Results of the characterization activities will be used to develop the remediation plan. Extension approved new due date is 5/2/2024.
12/05/2023	Extension requested due to samples being analyzed by the lab and the operator is waiting on the results. New due date is 2/2/2024.
09/19/2023	Analytical results for the samples collected will not be accepted for the following reasons: Total petroleum hydrocarbons were not analyzed using an acceptable method. Acceptable methods for each analyte are listed in 19.15.29 NMAC on Table I. Other methods may be used as long as they

	depth to groundwater, the release must be delineated, both horizontally and vertically, and remediated to the most stringent closure standards in Table I. There is a playa lake located southeast of SB-08. Horizontal and vertical delineation of the site will need to include sample points that will assess if the playa lake has been impacted by the release. 1RP-5056 closed. Refer to incident #NOY1813152090 in all future communication. Submit a complete report though the OCD Permitting website by 12/19/2023. Two releases are referred to in the report. Reports can be used for multiple incident numbers but the report will need to be submitted through the OCD Permitting website under each individual incident number.
09/19/2023	The (09/19/2023, C-141) application [265158] was rejected by OCD. The operator was emailed with details of this event.
09/19/2023	An application [265158] was submitted to OCD for review. It was submitted, indicating that it was an: [C-141] Application for administrative approval of a release notification and corrective action The operator was emailed confirmation of this event.
09/13/2023	The (09/19/2023, C-141) application [265158] was assigned to this incident.
07/19/2022	Historic Review of files.. 1/29/20 Remediation Plan denied. Delineation not complete. Depth to groundwater not identified.
05/11/2018	1RP-5056. Seal on pump went out, causing pressure buildup and line failure inside dike and liner. [Reported by NMSLO. Site visit in Jan 2018, indicate impact outside of lined facility.]

Incident Severity

Major release as defined by 19.15.29.7(A) NMAC?	From paragraph A. “Major release” determine using:
☑ Yes ☐ No	(1) an unauthorized release of a volume, excluding gases, of 25 barrels or more.

Incident Corrective Actions

No initial response data was found for this incident.	Create Initial Response Data
No site characterization data was found for this incident.	Create Site Characterization Data
No remediation plan data was found for this incident.	Create Remediation Plan Data
No active remediation deferral request was found for this incident.	Create Active Remediation Deferral Request Data
No remediation closure report data was found for this incident.	Create Remediation Closure Report Data
No reclamation report data was found for this incident.	Create Reclamation Report Data
No re-vegetation report data was found for this incident.	Create Re-vegetation Report Data

Orders

1RP-5056-0

Applicant:	[222759] BUCKEYE DISPOSAL, L.L.C.		
Contact:	Jim Sayre	**Approved By:**	SLO
Reviewer:	Olivia Yu	**Issuing Office:**	Hobbs

Processing Dates

Received:	05/11/2018	**Ordered:**	05/11/2018
Approved:	05/11/2018	**Denied:**	
Expiration:		**Cancelled:**	

Remediation Plan
State AF #003 SWD Site

Prepared for

Buckeye Disposal, Inc.

Prepared by

DBS&A
a Geo-Logic Company

6020 Academy NE, Suite 100
Albuquerque, New Mexico 87109
www.dbstephens.com
DB19.1241

August 25, 2023

Table of Contents

List of Figures

List of Appendices

1. Introduction

On behalf of Buckeye Disposal, Inc. (Buckeye), Daniel B. Stephens & Associates, Inc. (DBS&A) has prepared this remediation plan for the State AF #003 SWD site (the site) located on State of New Mexico Business Lease BL-2050 in Section 8, Township 18 South, Range 35 East, NMPM (API #30-025-20980). Until recently, Buckeye operated a salt water disposal well at the site. Since ceasing disposal well operations, Buckeye has plugged and abandoned the disposal well, removed the tank battery, and characterized impacts to soil at the site, including those from two documented releases. The salt water disposal well was plugged and abandoned in April 2023 (Appendix A).

This remediation plan summarizes the two releases and results of initial soil sampling (Section 2) and characterization activities conducted in February and May 2023 (Section 3), and provides a proposed remediation plan to restore the site in accordance with the requirements of Subsections 12 and 13 of 19.15.29 NMAC (Section 4).

2. Releases and Initial Soil Characterization

The two site releases occurred on August 20, 2016 and May 4, 2018. Buckeye submitted release notification forms (Form C-141) to the Oil Conservation Division (OCD) for these releases (Appendix B). Both releases occurred within the former tank battery secondary containment, which was lined with a 40-mil high-density polyethylene (HDPE) flexible membrane. In response to the notifications, OCD assigned remediation permit 1RP-4429 on September 7, 2016 and remediation permit 1RP-5056 on May 11, 2018.

On February 14, 2019, soil samples were collected from seven locations around the perimeter of the tank battery secondary containment, as shown in Figure 1. Samples were collected from depths up to 36 inches using a backhoe. The samples were submitted to Cardinal Laboratories (Cardinal) in Hobbs, New Mexico and analyzed for chloride. Sample results are provided on Figure 1. The Cardinal laboratory report is provided in Appendix C.

Information available online from the New Mexico Office of the State Engineer (OSE) indicates that the depth to shallow groundwater at the well closest to the site (well L02350) is greater than 100 feet below ground surface (bgs) (Figure 2). Based on this depth to groundwater, the OCD numerical limit for chloride is 20,000 milligrams per kilogram (mg/kg), as prescribed in

Table 1 of 19.15.29.12 NMAC. Chloride concentrations in the soil samples collected around the containment area in February 2019 ranged from 960 to 5,520 mg/kg, all well below the OCD numerical limit. Based on these results, chloride concentrations in soil outside the containment area do not require remediation.

Well L02350 is north-northeast of the former location of the tank battery (Figure 2). The well log indicates that the boring was drilled to a total depth of 216 feet bgs in March 1960, and that the boring penetrated a water-bearing zone at 110 feet bgs (Appendix D). The well is currently owned by Intrepid Potash, New Mexico, LLC, is referred to as Intrepid Potash North Well N-4, and is permitted for industrial use. On February 20, 2020, DBS&A contacted Intrepid Potash's East Plant regarding the status of the well and the water level at the well. They reported that the current water level in the well was 115 feet bgs. Based on this information, depth to groundwater at the site is greater than 100 feet bgs.

3. 2023 Characterization Activities

Buckeye collected additional soil samples at the site after plugging and abandonment of the disposal well and removal of the tank battery, including the 40-mil HDPE flexible membrane liner of the secondary containment. Eight locations were sampled at depths of 1 foot and 3 feet. The soil samples were collected from around the perimeter of the well pad, at the former location of the tank battery, and along a shallow depression that drains to the south. The samples were collected on February 17, 2023 and May 16, 2023 and submitted to Eurofins in Lubbock, Texas, where they were analyzed for chloride and total petroleum hydrocarbons (TPH). The sample results are shown on Figures 3 and 4. The Eurofins laboratory reports are provided in Appendix C.

Chloride concentrations of the soil samples ranged from 137 mg/kg (SB-05 at 1 foot) to 10,600 mg/kg (SB-03 at 1 foot). The highest chloride concentration was measured in the soil sample collected just outside the former location of the tank battery secondary containment. TPH concentrations of the soil samples ranged from 41.8 mg/kg (SB-03 at 3 feet) to 1,880 mg/kg (SB-08 at 1 foot). The highest TPH concentration was measured in the soil sample collected at the south end of the shallow depression that drains to the south. The chloride and TPH concentrations are all below the OCD numerical limits for groundwater deeper than 100 feet bgs, as prescribed in Table 1 of 19.15.29.12 NMAC. The OCD numerical limits for

chloride and TPH based on this groundwater depth are 20,000 mg/kg and 2,500 mg/kg, respectively.

4. Proposed Remediation Plan

Buckeye will restore the impacted surface area of the releases to meet the standards of Table 1 of 19.15.29.12 NMAC, and will restore and reclaim the area pursuant to 19.15.29.13 NMAC. The chloride and TPH concentrations of the soil samples collected at the site in both 2019 and 2023 are below the OCD numerical limits prescribed in Table 1 of 19.15.29.12 NMAC for groundwater deeper than 100 feet bgs. Because the existing site soils meet these numerical limits, Buckeye will use them to restore the site.

Buckeye has already removed all infrastructure from the site (Appendix D) and plugged and abandoned the disposal well (Appendix A). Appendix E provides site photographs taken in March 2023.

4.1 Approach

The purpose of the proposed remediation plan is to restore the site to a condition similar to that before installation and operation of the disposal well. The unvegetated area of the pad will be graded and then seeded to establish vegetative cover that reflects a lifeform ratio of ±50 percent of pre-disturbance levels and a total percent plant cover of at least 70 percent of pre-disturbance levels, excluding noxious weeds [19.15.29.13.D(3) NMAC]. The proposed remediation plan is as follows:

- Grade: The regional topography in the vicinity of the site slopes gently to the southeast at a grade of approximately 0.4 percent. Buckeye will regrade the area of the well pad so that is slopes to the southeast at a grade consistent with the regional topography (i.e., less than 1 percent). Sloping will help to restore the natural drainage pattern.
- Revegetate: The site will be revegetated using a seed mix consisting of native plants common to the area (Appendix F). Revegetation will include scarification, seeding, and mulching, as follows:
    - Scarification: Scarification will be used to loosen compacted areas of soil, roughen the soil surface, and provide a suitable seedbed. It will be performed with common earthmoving equipment. The degree of scarification required for proper seeding will be

determined after grading, but it is typically completed to a depth of 2 to 4 inches. It will be conducted on contour to avoid the development of flow paths parallel to the slope that could promote erosion.

- Seeding: Seeds will be broadcast using common rangeland or other appropriate equipment. Seeds will be allowed to fall freely and will be subsequently covered (e.g., raked). Buckeye will conduct seeding just before the monsoon season to help promote growth and revegetation success. Seed will be applied at the rates specified in Appendix F.
  - The seed mix provided in Appendix F was obtained from the New Mexico Department of Transportation's (NMDOT's) revegetation zones and seed list online map (NMDOT, 2023). This resource provides appropriate seed lists when restoring disturbed land within New Mexico. The lists are based on the major land resource areas of New Mexico defined by the USDA National Resource Conservation Service.
  - The selected seed mix includes annual quick-cover grasses, cool-season and warm-season grasses, wildflowers, and woody shrubs.
- Mulching: Buckeye will apply weed-free mulch to the revegetated soil surface to minimize wind and stormwater erosion and to help maintain soil moisture.

The unvegetated area to be restored is approximately 2.7 acres, and is shown on Figure 5. Upon completion of site remediation, Buckeye will complete and submit the site characterization and remediation portions of Form C-141 to OCD.

4.2 Schedule

Existing site soils meet the appropriate OCD numerical limits prescribed in Table 1 of 19.15.29.12 NMAC. Therefore, site remediation will include only recontouring (i.e., grading) and seeding to reestablish vegetation, not soil removal. Buckeye will implement the proposed measures just before the first monsoon season following OCD and State Land Office (SLO) approval of this remediation plan.

4.3 Monitoring

Buckeye will conduct site inspections during the first year after seeding to assess revegetation progress. If the site does not show revegetation after one growing season, the area will be reseeded as needed.

Reference

New Mexico Department of Transportation (NMDOT). 2023. *2017 Zone 6 seed list: Southern High Plains*. Obtained from NMDOT's Revegetation Zones and Seed List Online Map <https://www.arcgis.com/apps/Viewer/index.html?appid=57543133e0d34c3688df5dfd37d738fe>. Accessed August 22, 2023.

Figures

P:_DB19-1241\AF Remediation Pln.8-23\Figures\Word\Fig01_Intl Cl Rslts.docx

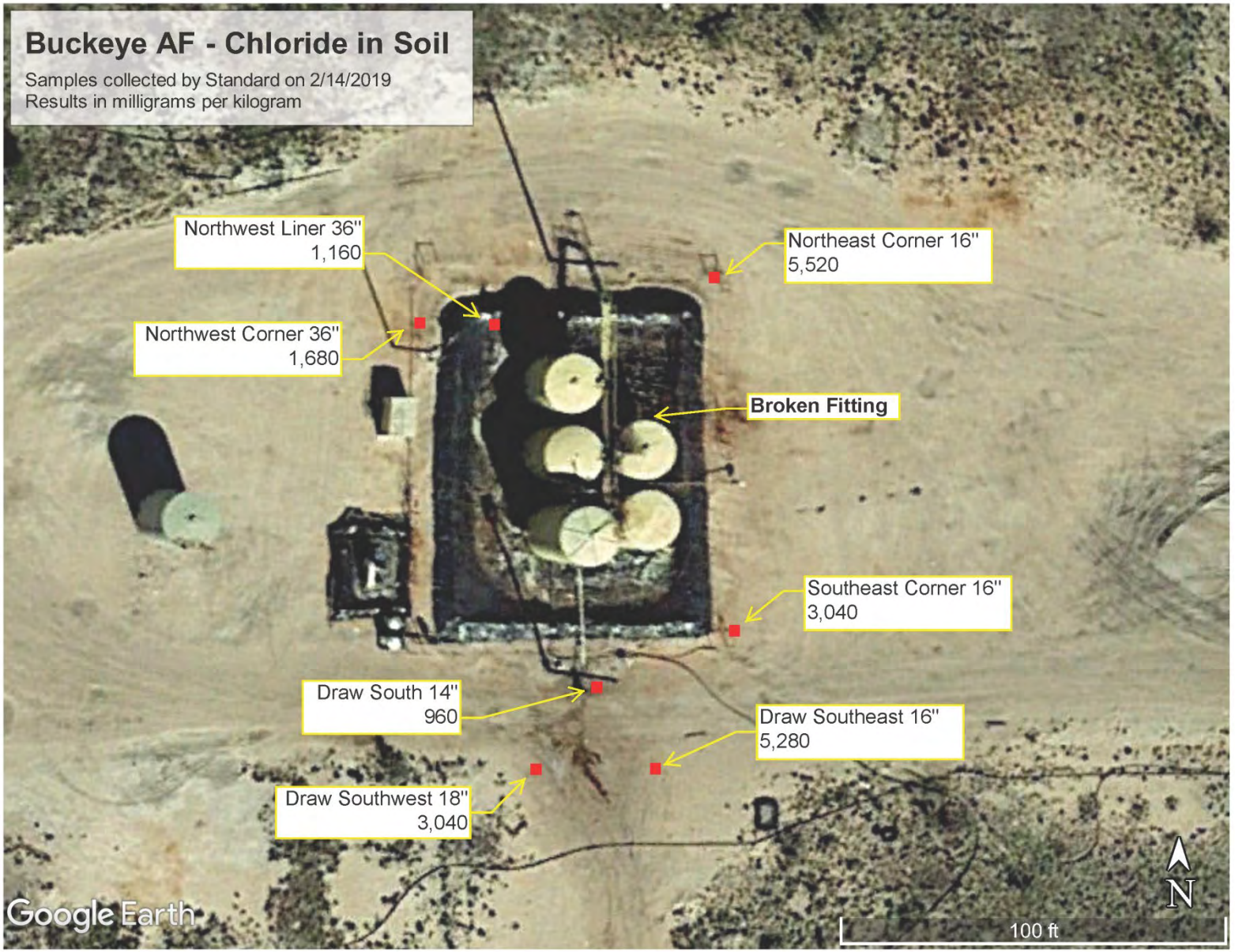


Figure 1

BUCKEYE STATE AF #003

Initial Soil Sampling Results, February 2019

DBS&A a Geo-Logic Company

8/23/2023 DB19.1241

OCD Ex. 21-009

Figure 2

BUCKEYE STATE AF #003

Shallow Water Sources within ½ mile of Site

DBS&A a Geo-Logic Company

8/23/2023 DB19.1241

Source: Aerial imagery (NAIP, 2022)

Explanation

SB-01 Chloride concentration (mg/kg)
2,310 (1.0 ft) Shallow (Depth)
5,580 (3.0 ft) Deep (Depth)
Sample location

BUCKEYE STATE AF #003

Soil Borehole Investigation
Chloride Concentrations in Soil

DBS&A a Geo-Logic Company

8/22/2023 DB19.1241

OCD Ex. 21-011

Figure 3

S:\PROJECTS\DB19.1241_BUCKEYE_DU-AFIG\SMXDS\AF WP.7-23\F03_SOIL CHLORIDE.MXD

Note: TPH = Total Petroleum Hydrocarbons

Source: Aerial imagery (NAIP, 2022).

Explanation

SB-01
371 (1.0 ft) Shallow (Depth)
1,420 (3.0 ft) Deep (Depth)
Sample location

TPH concentration (mg/kg)

BUCKEYE STATE AF #003

Soil Borehole Investigation
TPH Concentrations in Soil

DBS&A a Geo-Logic Company

8/22/2023 DB19.1241

OCD Ex. 21-012

Figure 4

S:\PROJECTS\DB19.1241_BUCKEYE_DU-AFIG\SMXDS\AF WP.7-23\F04_SOIL TPH.MXD

N

0 75 150 ft

Source: Aerial imagery (NAIP, 2022).

Explanation

Revegetation area

S:\PROJECTS\DB19.1241_BUCKEYE_DU-AFIG\SMXDS\AF WP.7-23\F05_RECLAMATION AREA.MXD

DBS&A a Geo-Logic Company

8/22/2023 DB19.1241

BUCKEYE STATE AF #003

Revegetation Area

OCD Ex. 21-013

Figure 5

Appendix A

Record of State AF #003 SWD Plugging and Abandonment

DBS&A a Geo-Logic Company

Submit 1 Copy To Appropriate District Office

District I – (575) 393-6161
1625 N. French Dr., Hobbs, NM 88240
District II – (575) 748-1283
811 S. First St., Artesia, NM 88210
District III – (505) 334-6178
1000 Rio Brazos Rd., Aztec, NM 87410
District IV – (505) 476-3460
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy, Minerals and Natural Resources

OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C
Revised July 18,

WELL API NO.
30-025-20980

5. Indicate Type of Lease
STATE ☒ FEE ☐

6. State Oil & Gas Lease No.
E 7723

SUNDRY NOTICES AND REPORTS ON WELLS

(DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH PROPOSALS.)

7. Lease Name or Unit Agreement Name
Buckeye State AF

1. Type of Well: Oil Well ☐ Gas Well ☒ Other SWD

8. Well Number 3

2. Name of Operator
Buckeye Disposals LLC

9. OGRID Number 222759

3. Address of Operator
PO Box 2724 Lubbock, Texas 79408

10. Pool name or Wildcat
Wolfcamp

4. Well Location
Unit Letter L : 1980 feet from the South line and 990 feet from the West line
Section 8 Township 185 Range 35E NMPM County Lea

11. Elevation *(Show whether DR, RKB, RT, GR, etc.)*

12. Check Appropriate Box to Indicate Nature of Notice, Report or Other Data

NOTICE OF INTENTION TO:				SUBSEQUENT REPORT OF:			
PERFORM REMEDIAL WORK	☐	PLUG AND ABANDON	☒	REMEDIAL WORK	☐	ALTERING CASING	☐
TEMPORARILY ABANDON	☐	CHANGE PLANS	☐	COMMENCE DRILLING OPNS.	☐	P AND A	☒
PULL OR ALTER CASING	☐	MULTIPLE COMPL	☐	CASING/CEMENT JOB	☐		
DOWNHOLE COMMINGLE	☐						
CLOSED-LOOP SYSTEM	☐						
OTHER:	☐			OTHER:	☐		

PNR

13. Describe proposed or completed operations. (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work). SEE RULE 19.15.7.14 NMAC. For Multiple Completions: Attach wellbore diagram of proposed completion or recompletion.

See attachments

Spud Date: Rig Release Date:

I hereby certify that the information above is true and complete to the best of my knowledge and belief.

SIGNATURE [signature] TITLE Manager DATE 5-5-23

Type or print name Jack Yates E-mail address: jacke@bengsten enterprises.com PHONE: 806-241-7405

For State Use Only

APPROVED BY: Kerry Fortner TITLE Compliance Officer A DATE 5/5/23

Conditions of Approval (if any):

- Buckeye Disposal LLC
- Buckeye State AF #3
- Start Date-04/03/23 Completed -04-20-23

1. Mon-04/03/23-Arrived on location at 9am, held a 5min tailgate safety meeting, got rig spotted and equipment ready for rig up, rigged up the rig. Waited on BOP to arrive, it arrived at 11.30am, nippled down wellhead and nippled up BOP. Rigged up work floor and tubing equipment, unset packer, crew took lunch break. Begin pulling tubing pulled 299 joints and the PKR secured well shut down.
2. Tues-04/04/23-Arrived on location, held a 5min tailgate safety meeting, opened well 0 psi, wireline arrived at 8am spotted equipment, rigged up tools and equipment, they tried to run in hole no luck. They noticed it was the wrong size tool. They had to run to town to get the correct tool. They arrived at 10:30am connected tool, ran in hole with gauge ring, then ran the bridge plug set it at (9800ft). Pulled out of hole and rigged down. Secured well shut down for the day due to the wind.
3. Wens-04/05/23 Arrived on location, held a 5min tailgate safety meeting. Opened well 0psi, got equipment ready, waited on tubing testers. They arrived at 7:30am got spotted and rigged up. It was a windy morning. They tested 4 stands with the rod style testing method and our derrick man was struggling due to wind to stab the probe from the derrick. I decided to rig them down and get the Bars style testing equipment that would be more time efficient and a safer process. Rigged them down waited on new testing truck to arrive from there yard. Testers Arrived at 10:30 am, spotted in and rigged up we then proceeded to test tubing in the hole. Tested 12 stands had to replace 2 collars tested 15 more stand, crew then took a lunch break. After lunch proceeded to test tubing in the hole. Replaced a total of 6 collars, got tubing tested and rigged down tubing testers, secured well shut down for the day. (During the process of testing about 50 stands left to test, the bars were falling at a very slow rate due to well begin full of water we hooked up vac truck.)
4. Thurs-04/06/23-Arrived on location, held tailgate safety meeting with crew, opened well 0 psi. Waited on cementers to finish rigging up, tied them on to the tubing to test the Bridge Plug, tested it to 500 psi tested good. Circulated well with jell brine. Spotted 25 sacks of cement, laid down 27 joints reversed pump water, to assure the tubing was clear. Waited on a new half pit due to the one on locating having a leak on it. Took a lunch break while it showed up, it arrived we then tied the hoses into the new half pit. Got ready to pump cement plug, pumped 25 sacks of class (8790 ft,) laid down 12 joints pulled 12 stands to the derrick, secured well shut down for the day.

5. Fri-04/07/23-Arrived on location, held a tailgate safety meeting, 0 psi on well opened up BOP, begin to run tubing in the hole to tag plug, tagged plug at 8626" ft. Then proceeded to lay down tubing on the trailer, laid down 62 joints, stood back 202 joints in the derrick. Ran in hole with 4" packer and 202 joints from the derrick, tried to set packer no luck picked up 1 joint worked packer again and got it to set at 6583". Rigged up wireline, perforated at 6800" ft, rigged down wireline, rigged up pump to try and get a pump rate, pressured rite up could not pump into perfs. Called NMODC no answer, waited 30 mins no called was returned. Decided to secure well and shut down for the day.
6. Mon-04/10/23-Arrived on location, held tailgate safety meeting, checked pressure on well 0 psi, opened BOP, NMODC decided to spot plug 50 ft below perfs, unset packer, picked up 7 joints to spot 25 sack plug at 6850" ft . Cement pump would not start. Waited until it was fixed at 10am. Proceeded to pump cement, laid down 12 joints and stood 15 stands back to the derrick WOC 4 hours. Went and tagged 6380" ft laid down 6 joints had rig problems shut down.
7. Tues-04/11/23-Arrived on location, held a tailgate safety meeting, waited on mechanic to arrive, and fix rig. He arrived got it going, laid down 12 joints spotted 25 sack plug at 6110" no tag required laid down 58 joints to 4200" ft. Secured well shut down for the day.
8. Wens-04/12/23-Arrived on location, held tailgate safety meeting, got equipment ready to pump plug cementer took a while to get his numbers ready and pump, did not start pumping until 8:30am. Pumped a 10 sack plug, pulled tubing to the derrick and waited on cement 4hrs. Opened well ran tubing with packer tagged plug at 4051"ft, laid down tubing to the next plug, set packer at 3640"ft. Rigged up wireline, perforated at 3876"ft rigged down wireline. Rigged up pump tried to establish pump rate could not, unset packer picked up 9 joints spotted 25 sacks of cement at 3926". Laid down 12 joints, stood back 15 stands to the derrick secured well shut down.
9. Thurs-04/13/23-Arrived on location, held tailgate safety meeting, opened well, started to run tuning tagged with 6 ft in, tagged way high, made a call to NMOCD and he decided to drill down to the plug that was pumped the day prior at 3926". Begin laying down 32 joints on the trailer and stood the rest in the derrick, pulled 6 stands and the tubing was full waited on mud bucket to arrive. It arrived at 11:30am we then continued pulling tubing, got to the plugged off joints begin to lay them down on the ground, laid down 32 cemented joints. Could not get the drilling equipment till the next day, secured well shut down.

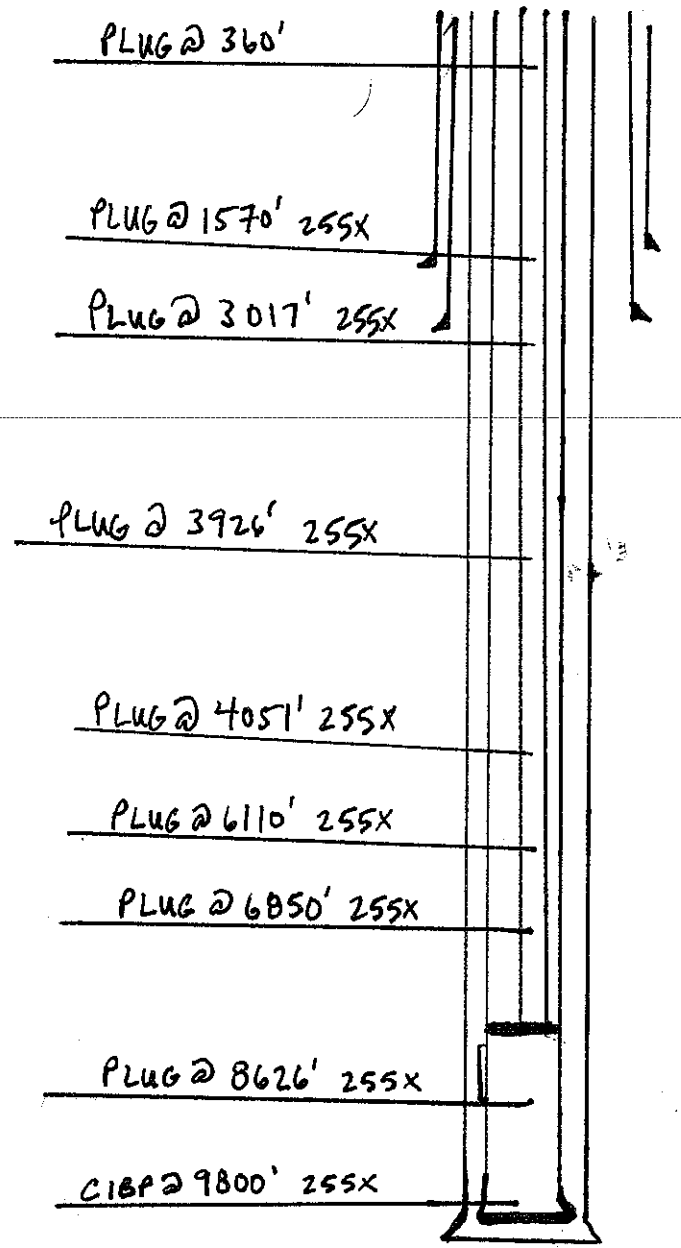
10. Fri-04/14/23-Arrived on location, held tailgate safety meeting, opened well, spotted in drill collars and equipment, tallied the collars, begin to pick the up, picked up bit and 6 drill collars, ran tubing tagged at 2570" set 15 points on it fell through, continued to run tubing to 3988 never tagged on cement. Circulated well clean, POOH with tubing and laid down drill collars, secured well shut down.

11. Mon-04/17/23-Arrived on location, held safety meeting, opened well, begin to run tubing in hole, ran 114 joints from the derrick, picked up 7 joints from trailer, rigged up pump, spotted 25 sacks of cement at 3926” ft. laid down 12 joints stood back 15 stands WOC 4 hrs. Opened well begin to run tubing to tag plug, tagged at 3396” ft, good tag, laid down 10 joints, rigged up pump spotted 25 sacks at 3017” ft. Laid down 50 joints stood back the rest of the tubing secured well shut down.

12. Tues-04/18/23-Arrived on location, held safety meeting, opened well o psi, begin to run tubing to tag plug, tagged at 2517” ft. Laid down tubing to 1302” ft set packer. Secured well waited on wireline to arrive. They arrived got rigged up, perforated at 1520” ft, rigged down wireline, connected pump to try and establish rate, no luck decided to drop 50 ft below the perfs and spot 25 sacks. Picked up 9 joints, spotted 25 sacks, laid down 17 joints, reversed out to clear tubing, stood 16 stands back in derrick shut down due to wind.

13. Wens-04/19/23-Arrived on location, held safety meeting, opened well 0 psi, ran tubing tagged at 1040” ft, good tag, begin to lay down tubing, laid down 31 joints, pulled two stands and picked up packer with 5 joints, set packer rigged up wireline, perforated at 360” ft, rigged down wireline, connected pump to establish rate, pumped 10 bbls at 480 psi, begin to pump 50 sacks of cement into perfs. Shut in pressure was at 200 psi waited on cement to settle for 1hour, opened well, unset packer, laid down 4 joints set packer at 32” ft. Rigged up wireline, they perforated at 150” ft rigged them down. Rigged up pump to see if we could circulate well threw the surface casing, we circulated 20 bbls or water then begin to pump cement, pumped 80 sacks of cement and got good cement to surface stopped pumping. We then unset packer, laid down 1 joint and the packer, rigged down work floor and equipment, nippled down BOP, filled the casing and cellar with cement rigged down cementers and waited for cement to settle. Crew took lunch break, then cleaned and cleared location, got the rig ready for rig down to windy to rig down shut down for the day.
14. Thurs-04/20/23-Arrived on location, held safety meeting, rigged the rig down got it out of the way, waited on the excavator to arrive. Meanwhile crew pressure washed and organized rig. Excavator arrived we dig out the cellar crew assisted with shovels, welder them cut the well head off and welded a cap on there we back filled the well and leveled the grown. Moved rig to the yard shut down for the day. JOP COMPLETED.

BUCKEYE DISPOSAL INC.
STATE AF #3 - P9A SKETCH



District I
1625 N. French Dr., Hobbs, NM 88240
Phone:(575) 393-6161 Fax:(575) 393-0720
District II
811 S. First St., Artesia, NM 88210
Phone:(575) 748-1283 Fax:(575) 748-9720
District III
1000 Rio Brazos Rd., Aztec, NM 87410
Phone:(505) 334-6178 Fax:(505) 334-6170
District IV
1220 S. St Francis Dr., Santa Fe, NM 87505
Phone:(505) 476-3470 Fax:(505) 476-3462

State of New Mexico
Energy, Minerals and Natural Resources
Oil Conservation Division
1220 S. St Francis Dr.
Santa Fe, NM 87505

COMMENTS

Action 213950

COMMENTS

Operator: BUCKEYE DISPOSAL, L.L.C. P.O. Box 2724 Lubbock, TX 79408	OGRID: 222759
	Action Number: 213950
	Action Type: [C-103] Sub. Plugging (C-103P)

COMMENTS

Created By	Comment	Comment Date
plmartinez	DATA ENTRY PM	5/5/2023

OCD Ex. 21-020

District I
1625 N. French Dr., Hobbs, NM 88240
Phone:(575) 393-6161 Fax:(575) 393-0720
District II
811 S. First St., Artesia, NM 88210
Phone:(575) 748-1283 Fax:(575) 748-9720
District III
1000 Rio Brazos Rd., Aztec, NM 87410
Phone:(505) 334-6178 Fax:(505) 334-6170
District IV
1220 S. St Francis Dr., Santa Fe, NM 87505
Phone:(505) 476-3470 Fax:(505) 476-3462

State of New Mexico
Energy, Minerals and Natural Resources
Oil Conservation Division
1220 S. St Francis Dr.
Santa Fe, NM 87505

CONDITIONS

Operator: BUCKEYE DISPOSAL, L.L.C. P.O. Box 2724 Lubbock, TX 79408	OGRID: 222759
	Action Number: 213950
	Action Type: [C-103] Sub. Plugging (C-103P)

CONDITIONS

Created By	Condition	Condition Date
kfortner	Need C103Q and marker photo to release	5/5/2023

Appendix B

Release Notification Forms (C-141)

District I
1625 N. French Dr., Hobbs, NM 88240
District II
811 S. First St., Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-141
Revised August 8, 2011

Submit 1 Copy to appropriate District Office in accordance with 19.15.29 NMAC.

Release Notification and Corrective Action

OPERATOR

☒ Initial Report ☐ Final Report

Name of Company: Buckeye Disposals	Contact: Jim Sayre
Address: PO Box 2724 Lubbock, TX 79408	Telephone No.: 575-390-6006
Facility Name: State AF #3	Facility Type: Disposal

Surface Owner	Mineral Owner	API No.: 30-025-20980

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
L	8	185	35E	1980	South Line	990	West Line	Lea County

Latitude: 32.756736 Longitude: 103.484803

NATURE OF RELEASE

Type of Release: Spill	Volume of Release: 15 bbl	Volume Recovered: 14 bbl
Source of Release: 3" PVC Line	Date and Hour of Occurrence	Date and Hour of Discovery
Was Immediate Notice Given? ☐ Yes ☐ No ☐ Not Required	If YES, To Whom?	
By Whom?	Date and Hour	
Was a Watercourse Reached? ☐ Yes ☒ No	If YES, Volume Impacting the Watercourse.	

If a Watercourse was Impacted, Describe Fully.*

Describe Cause of Problem and Remedial Action Taken.*

Broken 3" PVC Line - Repair broken 3" PVC Line.

REVIEWED
By Kristen Lynch at 9:57 am, Sep 07, 2016

Describe Area Affected and Cleanup Action Taken.*

Inside lined dyke – Repair liner, evacuate fluid form inside the dyke and mediate dirt inside the lined dyke.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

Signature: JD Sayre

Printed Name: Jim Sayre

Title: Manager

E-mail Address: jim@thestandardenergy.com

Date: 8/20/16 Phone: 575-390-6006

OIL CONSERVATION DIVISION

CONDITIONALLY
Approved by Environmental Specialist: Kristen Lynch

CONDITIONALLY
Approval Date: 9/07/2016 Expiration Date: 11/07/2016

Conditions of Approval:
Submit Remediation Proposal no Later than 10/7/2016
Provide depth to Ground Water
Delineate and Remediate per NMOCD Guidelines.
Discrete Samples Accepted ONLY. NMOCD must approve all site investigation & Corrective Activities prior to implementation. Corrective action is site specific and risk based. NMOCD retains the right to require remediation to more stringent levels than proposed in guidelines if warranted by site specific conditions. Notify NMOCD prior to all sampling, to allow opportunity for witness sampling operations.

Attached ☐

1RP 4429

nKL1625134663
pKL1625135663

* Attach Additional Sheets If Necessary

HOBBS OCD
MAY 11 2018
RECEIVED

District I
1625 N. French Dr., Hobbs, NM 88240
District II
811 S. First St., Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-141
Revised August 8, 2011

Submit 1 Copy to appropriate District Office in accordance with 19.15.29 NMAC.

Release Notification and Corrective Action

OPERATOR

☑ Initial Report ☐ Final Report

Name of Company Buckeye Disposal	Contact Jim SAYRE
Address	Telephone No. 575-393-8352
Facility Name State AF	Facility Type Disposal

Surface Owner State	Mineral Owner State	API No. 30-025-20980

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
L	8	18S	35E	1980	South	990	West	LEA

Latitude 32.76012 Longitude 103.48457

NATURE OF RELEASE

Type of Release Leak produced water	Volume of Release 30 bbl	Volume Recovered 30 bbl
Source of Release Line Failure	Date and Hour of Occurrence 4-24	Date and Hour of Discovery 4-26-18
Was Immediate Notice Given? ☐ Yes ☑ No ☐ Not Required	If YES, To Whom?	
By Whom?	Date and Hour	
Was a Watercourse Reached? ☐ Yes ☑ No	If YES, Volume Impacting the Watercourse.	

If a Watercourse was Impacted, Describe Fully.*

RECEIVED
By Olivia Yu at 2:23 pm, May 11, 2018

Describe Cause of Problem and Remedial Action Taken.*
Seal on pump went out causing pressure build up & line failure inside dyke & liner

Describe Area Affected and Cleanup Action Taken.*
Inside the liner

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

Signature: Jim Sayre
Printed Name: Jim SAYRE
Title: MANAGER
E-mail Address: jim@thestandardenergy.com
Date: 5-4-18 Phone:

OIL CONSERVATION DIVISION

Approved by Environmental Specialist:

Approval Date: 5/11/2018 Expiration Date:

Conditions of Approval: Attached ☐

see attached directive for historical impacted areas on location.
Please inspect liner in question.
Provide NMOCD with a concise report of the inspection with affirmation the liner has and will continue to contain liquids.

1RP-5056

* Attach Additional Sheets If Necessary

nOY1813152090

pOY1813152414

Operator/Responsible Party,

The OCD has received the form C-141 you provided on _5/11/2018_ regarding an unauthorized release. The information contained on that form has been entered into our incident database and remediation case number _1RP-5056__ has been assigned. **Please refer to this case number in all future correspondence.**

It is the Division's obligation under both the Oil & Gas Act and Water Quality Act to provide for the protection of public health and the environment. Our regulations (19.15.29.11 NMAC) state the following,

> *The responsible person shall complete division-approved corrective action for releases that endanger public health or the environment. The responsible person shall address releases in accordance with a remediation plan submitted to and approved by the division or with an abatement plan submitted in accordance with 19.15.30 NMAC.* [emphasis added]

Release characterization is the first phase of corrective action unless the release is ongoing or is of limited volume and all impacts can be immediately addressed. Proper and cost-effective remediation typically cannot occur without adequate characterization of the impacts of any release. Furthermore, the Division has the ability to impose reasonable conditions upon the efforts it oversees. **As such, the Division is requiring a workplan for the characterization of impacts associated with this release be submitted to the OCD District _1_ office in __Hobbs____ on or before _6/11/2018_. If and when the release characterization workplan is approved, there will be an associated deadline for submittal of the resultant investigation report. Modest extensions of time to these deadlines may be granted, but only with acceptable justification.**

The goals of a characterization effort are: 1) determination of the lateral and vertical extents along with the magnitude of soil contamination. 2) determine if groundwater or surface waters have been impacted. 3) If groundwater or surface waters have been impacted, what are the extents and magnitude of that impact. 4) The characterization of any other adverse impacts that may have occurred (examples: impacts on vegetation, impacts on wildlife, air quality, loss of use of property, etc.). To meet these goals as quickly as possible, the following items must, at a minimum, be addressed in the release characterization workplan and subsequent reporting:

● Horizontal delineation of soil impacts in each of the four cardinal compass directions. Adsorbed soil contamination must be characterized for the following constituents using the associated laboratory methods: benzene, toluene, ethylbenzene, and total xylenes by either Method 8260 or 8021, total petroleum hydrocarbons by Method 8015 extended range (GRO+DRO+MRO; C_6 thru C_{36}), and for chloride by Method 300. This is not an exclusive list of potential contaminants. Analyzed parameters should be modified based on the nature of the released substance(s). Soil sampling must be both within the impacted area and beyond.

● Vertical delineation of soil impacts. Adsorbed soil contamination must be characterized for the following constituents using the associated laboratory methods: benzene, toluene, ethylbenzene, and total xylenes by either Method 8260 or 8021, total petroleum hydrocarbons by Method 8015 extended range (GRO+DRO+MRO; C_6 thru C_{36}), and for chloride by Method 300. As above, this is not an exclusive list of potential contaminants and can be modified. Vertical characterization samples should be taken at depth intervals no greater than five feet apart. Lithologic description of encountered soils must also be provided. At least ten vertical feet of soils with contaminant concentrations at or below these values must be demonstrated as existing above the water table.

● Nominal detection limits for field and laboratory analyses must be provided.

● Composite sampling is not generally allowed.

● Field screening and assessment techniques are acceptable (headspace, titration, EC [include algorithm for validation purposes], EM, etc.), but the sampling and assay procedures must be clearly defined. Copies of field notes are highly desirable. A statistically significant set of split samples must be submitted for confirmatory laboratory analysis, including the laterally farthest and vertically deepest sets of soil samples. Make sure there are at least two soil samples submitted

for laboratory analysis from each borehole or test pit (highest observed contamination and deepest depth investigated). Copies of the actual laboratory results must be provided including chain of custody documentation.

●Probable depth to shallowest protectable groundwater and lateral distance to nearest surface water. If there is an estimate of groundwater depth, the information used to arrive at that estimate must be provided. If there is a reasonable assumption that the depth to protectable water is 50 feet or less, the responsible party should anticipate the need for at least one groundwater monitoring well to be installed in the area of likely maximum contamination.

● If groundwater contamination is encountered, an additional investigation workplan may be required to determine the extents of that contamination. Groundwater and/or surface water samples, if any, must be analyzed by a competent laboratory for volatile organic hydrocarbons (typically Method 8260 full list), total dissolved solids, pH, major anions and cations including chloride and sulfate, dissolved iron, and dissolved manganese. The investigation workplan must provide the groundwater sampling method(s) and sample handling protocols. To the fullest extent possible, aqueous analyses must be undertaken using nominal method detection limits. As with the soil analyses, copies of the actual laboratory results must be provided including chain of custody documentation.

● Accurately scaled and well-drafted site maps must be provided providing the location of borings, test pits, monitoring wells, potentially impacted areas, and significant surface features including roads and site infrastructure that might limit either the release characterization or remedial efforts. Field sketches may be included in subsequent reporting, but should not be considered stand-alone documentation of the site's layout. Digital photographic documentation of the location and fieldwork is recommended, especially if unusual circumstances are encountered.

Nothing herein should be interpreted to preclude emergency response actions or to imply immediate remediation by removal cannot proceed as warranted. Nonetheless, characterization of impacts and confirmation of the effectiveness of remedial efforts must still be provided to the OCD before any release incident will be closed.

Jim Griswold
OCD Environmental Bureau Chief
1220 South St. Francis Drive
Santa Fe, New Mexico 87505
505-476-3465
jim.griswold@state.nm.us

Appendix C

Analytical Laboratory Reports

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

February 19, 2019

JIM SAYRE

BUCKEYE DISPOSAL, LLC

P. O. BOX 513

HOBBS, NM 88241

RE: BUCKEYE

Enclosed are the results of analyses for samples received by the laboratory on 02/15/19 8:05.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-18-11. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (*). For a complete list of accredited analytes and matrices visit the TCEQ website at www.tceq.texas.gov/field/qa/lab_accred_certif.html.

Cardinal Laboratories is accreditated through the State of Colorado Department of Public Health and Environment for:

Method EPA 552.2	Haloacetic Acids (HAA-5)
Method EPA 524.2	Total Trihalomethanes (TTHM)
Method EPA 524.4	Regulated VOCs (V1, V2, V3)

Accreditation applies to public drinking water matrices.

This report meets NELAP requirements and is made up of a cover page, analytical results, and a copy of the original chain-of-custody. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Celey D. Keene

Celey D. Keene

Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

BUCKEYE DISPOSAL, LLC
JIM SAYRE
P. O. BOX 513
HOBBS NM, 88241
Fax To: UNK-NOWN

Received:	02/15/2019	Sampling Date:	02/14/2019
Reported:	02/19/2019	Sampling Type:	Soil
Project Name:	BUCKEYE	Sampling Condition:	** (See Notes)
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	NOT GIVEN		

Sample ID: DRAW SOUTH 14'' (H900609-01)

Chloride, SM4500Cl-B **mg/kg** **Analyzed By: JH**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**960**	16.0	02/19/2019	ND	432	108	400	0.00	

Sample ID: NORTH EAST CORNER 16'' (H900609-02)

Chloride, SM4500Cl-B **mg/kg** **Analyzed By: JH**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**5520**	16.0	02/19/2019	ND	432	108	400	0.00	

Sample ID: SOUTH EAST CORNER 16'' (H900609-03)

Chloride, SM4500Cl-B **mg/kg** **Analyzed By: JH**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**3040**	16.0	02/19/2019	ND	432	108	400	0.00	

Sample ID: DRAW SOUTHEAST 16'' (H900609-04)

Chloride, SM4500Cl-B **mg/kg** **Analyzed By: JH**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**5280**	16.0	02/19/2019	ND	432	108	400	0.00	

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

BUCKEYE DISPOSAL, LLC
JIM SAYRE
P. O. BOX 513
HOBBS NM, 88241
Fax To: UNK-NOWN

Received:	02/15/2019	Sampling Date:	02/14/2019
Reported:	02/19/2019	Sampling Type:	Soil
Project Name:	BUCKEYE	Sampling Condition:	** (See Notes)
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	NOT GIVEN		

Sample ID: DRAW SOUTH WEST 18'' (H900609-05)

Chloride, SM4500Cl-B **mg/kg** **Analyzed By: JH**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**3040**	16.0	02/19/2019	ND	432	108	400	0.00	

Sample ID: NORTH WEST CORNER 36'' (H900609-06)

Chloride, SM4500Cl-B **mg/kg** **Analyzed By: JH**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**1680**	16.0	02/19/2019	ND	432	108	400	0.00	

Sample ID: NORTH WEST LINER 36'' (H900609-07)

Chloride, SM4500Cl-B **mg/kg** **Analyzed By: JH**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**1160**	16.0	02/19/2019	ND	432	108	400	0.00	

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Notes and Definitions

ND	Analyte NOT DETECTED at or above the reporting limit
RPD	Relative Percent Difference
**	Samples not received at proper temperature of 6°C or below.
***	Insufficient time to reach temperature.
-	Chloride by SM4500Cl-B does not require samples be received at or below 6°C
	Samples reported on an as received basis (wet) unless otherwise noted on report

Cardinal Laboratories

*=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

101 East Marland, Hobbs, NM 88240
(575) 393-2326 FAX (575) 393-2476

Company Name:	Buckeye Disposal	**BILL TO**	
Project Manager:	Jim Sayre	P.O. #:	
Address:	PO Box 513	Company:	
City:	Hobbs State: NM Zip: 88240	Attn:	
Phone #:	575-361-5072 Fax #: 575-393-8352	Address:	
Project #:	Project Owner:	City:	
Project Name:		State: Zip:	
Project Location:	Buckeye	Phone #:	
Sampler Name:	Jim Sayre	Fax #:	

FOR LAB USE ONLY Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX: GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :	PRESERV.: ACID/BASE:	ICE / COOL	OTHER :	SAMPLING: DATE	TIME	ANALYSIS REQUEST: TC
H900609															
1	Draw South 14"	G	1			✓							2-14-19	17:30	✓
2	North East Corner 16"														
3	South East Corner 16"														
4	Draw SouthEast 16"														
5	Draw SouthWest 18"														
6	NorthWest Corner 36"														
7	North West Liner 36"														

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising whether based in contract or tort, shall be limited to the amount paid by the client for the analyses. All claims including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within 30 days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequental damages, including without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise.

Relinquished By: JD Sayre	Date: 2-15-19 Time: 0805	Received By: Tamara Oldaker	Phone Result: ☐ Yes ☐ No Add'l Phone #:
Relinquished By:	Date: Time:	Received By:	Fax Result: ☐ Yes ☐ No Add'l Fax #:
Delivered By: (Circle One) Sampler - UPS - Bus - Other: 19.3c #97	Sample Condition Cool: ☐ Yes ☐ No Intact: ☐ Yes ☐ No	CHECKED BY: (Initials) TC	REMARKS: JIM@thestandardenergy.com

eurofins | Environment Testing

1

ANALYTICAL REPORT

PREPARED FOR

Attn: Jack Yates
Buckeye Disposals
2310 Fordham
Lubbock, Texas 79408

Generated 2/28/2023 4:40:04 PM Revision 1

JOB DESCRIPTION

State AF #3

JOB NUMBER

820-7494-1

Eurofins Lubbock
6701 Aberdeen Ave.
Suite 8
Lubbock TX 79424

See page two for job notes and contact information.

my EOL

Authorization

Holly Taylor

Generated
2/28/2023 4:40:04 PM
Revision 1

Authorized for release by
Holly Taylor, Project Manager
Holly.Taylor@et.eurofinsus.com
(806)794-1296

TPH = 10,000 mg/kg
Cl = 3,000 mg/kg

Eurofins Lubbock

Job Notes

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing South Central, LLC Project Manager.

2

Table of Contents

Definitions/Glossary

Client: Buckeye Disposals
Project/Site: State AF #3

Job ID: 820-7494-1

Qualifiers

GC Semi VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.

HPLC/IC

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.
U	Indicates the analyte was analyzed for but not detected.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Case Narrative

Client: Buckeye Disposals
Project/Site: State AF #3

Job ID: 820-7494-1

Job ID: 820-7494-1

Laboratory: Eurofins Lubbock

4

Narrative

Job Narrative
820-7494-1

Revision
The report being provided is a revision of the original report sent on 2/27/2023. The report (revision 1) is being revised to correct the data due to analyst error per AJ (email).

Receipt
The samples were received on 2/21/2023 3:06 PM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 22.6° C.

Receipt Exceptions

The following samples were received at the laboratory outside the required temperature criteria: 1. Battery (820-7494-1), 2. North Side (820-7494-2), 3. South Side (820-7494-3), 4. SW Corner (820-7494-4), 5. NW Corner (820-7494-5) and 6. East Side (820-7494-6). This does not meet regulatory requirements. The client was contacted regarding this issue, and the laboratory was instructed to proceed with analysis.

GC Semi VOA
Method TX 1005: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-47141 and analytical batch 880-47136 were outside control limits for one or more analytes, see QC Sample Results for detail. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery is within acceptance limits.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

General Chemistry
Method 300.0: The matrix spike / matrix spike duplicate (MS/MSD) recoveries and precision for preparation batch 880-47148 and analytical batch 880-47261 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample / laboratory sample control duplicate (LCS/LCSD) precision was within acceptance limits.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Organic Prep
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Client Sample Results

Client: Buckeye Disposals
Project/Site: State AF #3

Job ID: 820-7494-1

5

Client Sample ID: 1. Battery

Lab Sample ID: 820-7494-1
Matrix: Solid
Date Collected: 02/17/23 09:30
Date Received: 02/21/23 15:06

Method: TCEQ TX 1005 - Texas - Total Petroleum Hydrocarbon (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C12	33.5	J	50.0	15.0	mg/Kg		02/24/23 08:37	02/24/23 18:00	1
>C12-C28	236		50.0	15.0	mg/Kg		02/24/23 08:37	02/24/23 18:00	1
>C28-C35	101		50.0	15.0	mg/Kg		02/24/23 08:37	02/24/23 18:00	1
Total TPH 1005	371		50.0	15.0	mg/Kg			02/26/23 14:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane (Surr)	*110*		*70 - 130*	*02/24/23 08:37*	*02/24/23 18:00*	*1*
o-Terphenyl (Surr)	*97*		*70 - 130*	*02/24/23 08:37*	*02/24/23 18:00*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	2310	F1	24.8	1.96	mg/Kg			02/27/23 03:11	5

Client Sample ID: 2. North Side

Lab Sample ID: 820-7494-2
Matrix: Solid
Date Collected: 02/17/23 09:30
Date Received: 02/21/23 15:06

Method: TCEQ TX 1005 - Texas - Total Petroleum Hydrocarbon (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C12	32.0	J	49.8	14.9	mg/Kg		02/24/23 08:37	02/24/23 17:39	1
>C12-C28	42.5	J	49.8	14.9	mg/Kg		02/24/23 08:37	02/24/23 17:39	1
>C28-C35	<14.9	U	49.8	14.9	mg/Kg		02/24/23 08:37	02/24/23 17:39	1
Total TPH 1005	74.5		49.8	14.9	mg/Kg			02/26/23 14:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane (Surr)	*96*		*70 - 130*	*02/24/23 08:37*	*02/24/23 17:39*	*1*
o-Terphenyl (Surr)	*90*		*70 - 130*	*02/24/23 08:37*	*02/24/23 17:39*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1570		25.0	1.97	mg/Kg			02/27/23 03:28	5

Client Sample ID: 3. South Side

Lab Sample ID: 820-7494-3
Matrix: Solid
Date Collected: 02/17/23 09:30
Date Received: 02/21/23 15:06

Method: TCEQ TX 1005 - Texas - Total Petroleum Hydrocarbon (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C12	26.7	J	49.9	15.0	mg/Kg		02/24/23 08:37	02/24/23 18:20	1
>C12-C28	524		49.9	15.0	mg/Kg		02/24/23 08:37	02/24/23 18:20	1
>C28-C35	210		49.9	15.0	mg/Kg		02/24/23 08:37	02/24/23 18:20	1
Total TPH 1005	761		49.9	15.0	mg/Kg			02/26/23 14:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane (Surr)	*119*		*70 - 130*	*02/24/23 08:37*	*02/24/23 18:20*	*1*
o-Terphenyl (Surr)	*104*		*70 - 130*	*02/24/23 08:37*	*02/24/23 18:20*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	10600		99.4	7.85	mg/Kg			02/27/23 03:33	20

Client Sample Results

Client: Buckeye Disposals
Project/Site: State AF #3

Job ID: 820-7494-1

5

Client Sample ID: 4. SW Corner

Lab Sample ID: 820-7494-4

Date Collected: 02/17/23 09:30
Matrix: Solid
Date Received: 02/21/23 15:06

Method: TCEQ TX 1005 - Texas - Total Petroleum Hydrocarbon (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C12	30.3	J	49.9	15.0	mg/Kg		02/24/23 08:37	02/24/23 17:18	1
>C12-C28	26.8	J	49.9	15.0	mg/Kg		02/24/23 08:37	02/24/23 17:18	1
>C28-C35	<15.0	U	49.9	15.0	mg/Kg		02/24/23 08:37	02/24/23 17:18	1
Total TPH 1005	57.1		49.9	15.0	mg/Kg			02/26/23 14:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane (Surr)	*99*		*70 - 130*	*02/24/23 08:37*	*02/24/23 17:18*	*1*
o-Terphenyl (Surr)	*92*		*70 - 130*	*02/24/23 08:37*	*02/24/23 17:18*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1040		25.0	1.98	mg/Kg			02/27/23 03:39	5

Client Sample ID: 5. NW Corner

Lab Sample ID: 820-7494-5

Date Collected: 02/17/23 09:30
Matrix: Solid
Date Received: 02/21/23 15:06

Method: TCEQ TX 1005 - Texas - Total Petroleum Hydrocarbon (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C12	25.7	J	49.9	15.0	mg/Kg		02/24/23 08:37	02/24/23 18:42	1
>C12-C28	228		49.9	15.0	mg/Kg		02/24/23 08:37	02/24/23 18:42	1
>C28-C35	130		49.9	15.0	mg/Kg		02/24/23 08:37	02/24/23 18:42	1
Total TPH 1005	384		49.9	15.0	mg/Kg			02/26/23 14:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane (Surr)	*99*		*70 - 130*	*02/24/23 08:37*	*02/24/23 18:42*	*1*
o-Terphenyl (Surr)	*87*		*70 - 130*	*02/24/23 08:37*	*02/24/23 18:42*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	137		5.00	0.395	mg/Kg			02/27/23 03:45	1

Client Sample ID: 6. East Side

Lab Sample ID: 820-7494-6

Date Collected: 02/17/23 09:30
Matrix: Solid
Date Received: 02/21/23 15:06

Method: TCEQ TX 1005 - Texas - Total Petroleum Hydrocarbon (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C12	25.5	J	50.0	15.0	mg/Kg		02/24/23 08:37	02/24/23 19:02	1
>C12-C28	453		50.0	15.0	mg/Kg		02/24/23 08:37	02/24/23 19:02	1
>C28-C35	143		50.0	15.0	mg/Kg		02/24/23 08:37	02/24/23 19:02	1
Total TPH 1005	622		50.0	15.0	mg/Kg			02/26/23 14:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane (Surr)	*116*		*70 - 130*	*02/24/23 08:37*	*02/24/23 19:02*	*1*
o-Terphenyl (Surr)	*103*		*70 - 130*	*02/24/23 08:37*	*02/24/23 19:02*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	3540		24.8	1.96	mg/Kg			02/27/23 04:02	5

Surrogate Summary

Client: Buckeye Disposals
Project/Site: State AF #3

Job ID: 820-7494-1

Method: TX 1005 - Texas - Total Petroleum Hydrocarbon (GC)

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	1CO (70-130)	OTPH (70-130)
820-7494-1	1. Battery	110	97
820-7494-2	2. North Side	96	90
820-7494-3	3. South Side	119	104
820-7494-4	4. SW Corner	99	92
820-7494-5	5. NW Corner	99	87
820-7494-6	6. East Side	116	103
LCS 880-47141/2-A	Lab Control Sample	98	87
LCSD 880-47141/3-A	Lab Control Sample Dup	113	97
MB 880-47141/1-A	Method Blank	124	118

Surrogate Legend

1CO = 1-Chlorooctane (Surr)

OTPH = o-Terphenyl (Surr)

6

QC Sample Results

Client: Buckeye Disposals
Project/Site: State AF #3

Job ID: 820-7494-1

Method: TX 1005 - Texas - Total Petroleum Hydrocarbon (GC)

Lab Sample ID: MB 880-47141/1-A
Matrix: Solid
Analysis Batch: 47136

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 47141

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C12	<15.0	U	50.0	15.0	mg/Kg		02/24/23 08:37	02/24/23 08:58	1
>C12-C28	<15.0	U	50.0	15.0	mg/Kg		02/24/23 08:37	02/24/23 08:58	1
>C28-C35	<15.0	U	50.0	15.0	mg/Kg		02/24/23 08:37	02/24/23 08:58	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane (Surr)	*124*		*70 - 130*	*02/24/23 08:37*	*02/24/23 08:58*	*1*
o-Terphenyl (Surr)	*118*		*70 - 130*	*02/24/23 08:37*	*02/24/23 08:58*	*1*

Lab Sample ID: LCS 880-47141/2-A
Matrix: Solid
Analysis Batch: 47136

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 47141

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
C6-C12	1000	859.2		mg/Kg		86	75 - 125
>C12-C28	1000	841.4		mg/Kg		84	75 - 125

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1-Chlorooctane (Surr)	*98*		*70 - 130*
o-Terphenyl (Surr)	*87*		*70 - 130*

Lab Sample ID: LCSD 880-47141/3-A
Matrix: Solid
Analysis Batch: 47136

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 47141

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
C6-C12	1000	811.4		mg/Kg		81	75 - 125	6	25
>C12-C28	1000	879.1		mg/Kg		88	75 - 125	4	25

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1-Chlorooctane (Surr)	*113*		*70 - 130*
o-Terphenyl (Surr)	*97*		*70 - 130*

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-47148/1-A
Matrix: Solid
Analysis Batch: 47261

Client Sample ID: Method Blank
Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.395	U	5.00	0.395	mg/Kg			02/27/23 02:54	1

Lab Sample ID: LCS 880-47148/2-A
Matrix: Solid
Analysis Batch: 47261

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	250	258.3		mg/Kg		103	90 - 110

QC Sample Results

Client: Buckeye Disposals
Project/Site: State AF #3

Job ID: 820-7494-1

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCSD 880-47148/3-A
Matrix: Solid
Analysis Batch: 47261

Client Sample ID: Lab Control Sample Dup
Prep Type: Soluble

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride			250	254.7		mg/Kg		102	90 - 110	1	20

Lab Sample ID: 820-7494-1 MS
Matrix: Solid
Analysis Batch: 47261

Client Sample ID: 1. Battery
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	2310	F1	1240	2966	F1	mg/Kg		53	90 - 110

Lab Sample ID: 820-7494-1 MSD
Matrix: Solid
Analysis Batch: 47261

Client Sample ID: 1. Battery
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	2310	F1	1240	2969	F1	mg/Kg		53	90 - 110	0	20

QC Association Summary

Client: Buckeye Disposals
Project/Site: State AF #3

Job ID: 820-7494-1

GC Semi VOA

Analysis Batch: 47136

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-7494-1	1. Battery	Total/NA	Solid	TX 1005	47141
820-7494-2	2. North Side	Total/NA	Solid	TX 1005	47141
820-7494-3	3. South Side	Total/NA	Solid	TX 1005	47141
820-7494-4	4. SW Corner	Total/NA	Solid	TX 1005	47141
820-7494-5	5. NW Corner	Total/NA	Solid	TX 1005	47141
820-7494-6	6. East Side	Total/NA	Solid	TX 1005	47141
MB 880-47141/1-A	Method Blank	Total/NA	Solid	TX 1005	47141
LCS 880-47141/2-A	Lab Control Sample	Total/NA	Solid	TX 1005	47141
LCSD 880-47141/3-A	Lab Control Sample Dup	Total/NA	Solid	TX 1005	47141

Prep Batch: 47141

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-7494-1	1. Battery	Total/NA	Solid	TX_1005_S_Prep	
820-7494-2	2. North Side	Total/NA	Solid	TX_1005_S_Prep	
820-7494-3	3. South Side	Total/NA	Solid	TX_1005_S_Prep	
820-7494-4	4. SW Corner	Total/NA	Solid	TX_1005_S_Prep	
820-7494-5	5. NW Corner	Total/NA	Solid	TX_1005_S_Prep	
820-7494-6	6. East Side	Total/NA	Solid	TX_1005_S_Prep	
MB 880-47141/1-A	Method Blank	Total/NA	Solid	TX_1005_S_Prep	
LCS 880-47141/2-A	Lab Control Sample	Total/NA	Solid	TX_1005_S_Prep	
LCSD 880-47141/3-A	Lab Control Sample Dup	Total/NA	Solid	TX_1005_S_Prep	

Analysis Batch: 47250

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-7494-1	1. Battery	Total/NA	Solid	TX 1005	
820-7494-2	2. North Side	Total/NA	Solid	TX 1005	
820-7494-3	3. South Side	Total/NA	Solid	TX 1005	
820-7494-4	4. SW Corner	Total/NA	Solid	TX 1005	
820-7494-5	5. NW Corner	Total/NA	Solid	TX 1005	
820-7494-6	6. East Side	Total/NA	Solid	TX 1005	

HPLC/IC

Leach Batch: 47148

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-7494-1	1. Battery	Soluble	Solid	DI Leach	
820-7494-2	2. North Side	Soluble	Solid	DI Leach	
820-7494-3	3. South Side	Soluble	Solid	DI Leach	
820-7494-4	4. SW Corner	Soluble	Solid	DI Leach	
820-7494-5	5. NW Corner	Soluble	Solid	DI Leach	
820-7494-6	6. East Side	Soluble	Solid	DI Leach	
MB 880-47148/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-47148/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-47148/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
820-7494-1 MS	1. Battery	Soluble	Solid	DI Leach	

QC Association Summary

Client: Buckeye Disposals
Project/Site: State AF #3

Job ID: 820-7494-1

HPLC/IC (Continued)

Leach Batch: 47148 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-7494-1 MSD	1. Battery	Soluble	Solid	DI Leach	

Analysis Batch: 47261

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-7494-1	1. Battery	Soluble	Solid	300.0	47148
820-7494-2	2. North Side	Soluble	Solid	300.0	47148
820-7494-3	3. South Side	Soluble	Solid	300.0	47148
820-7494-4	4. SW Corner	Soluble	Solid	300.0	47148
820-7494-5	5. NW Corner	Soluble	Solid	300.0	47148
820-7494-6	6. East Side	Soluble	Solid	300.0	47148
MB 880-47148/1-A	Method Blank	Soluble	Solid	300.0	47148
LCS 880-47148/2-A	Lab Control Sample	Soluble	Solid	300.0	47148
LCSD 880-47148/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	47148
820-7494-1 MS	1. Battery	Soluble	Solid	300.0	47148
820-7494-1 MSD	1. Battery	Soluble	Solid	300.0	47148

8

Lab Chronicle

Client: Buckeye Disposals
Project/Site: State AF #3

Job ID: 820-7494-1

Client Sample ID: 1. Battery

Lab Sample ID: 820-7494-1
Matrix: Solid

Date Collected: 02/17/23 09:30
Date Received: 02/21/23 15:06

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	TX_1005_S_Prep			10.01 g	10 mL	47141	02/24/23 08:37	AM	EET MID
Total/NA	Analysis	TX 1005		1	1 uL	1 uL	47136	02/24/23 18:00	SM	EET MID
Total/NA	Analysis	TX 1005		1			47250	02/26/23 14:36	SM	EET MID
Soluble	Leach	DI Leach			5.05 g	50 mL	47148	02/24/23 10:27	KS	EET MID
Soluble	Analysis	300.0		5			47261	02/27/23 03:11	CH	EET MID

Client Sample ID: 2. North Side

Lab Sample ID: 820-7494-2
Matrix: Solid

Date Collected: 02/17/23 09:30
Date Received: 02/21/23 15:06

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	TX_1005_S_Prep			10.04 g	10 mL	47141	02/24/23 08:37	AM	EET MID
Total/NA	Analysis	TX 1005		1	1 uL	1 uL	47136	02/24/23 17:39	SM	EET MID
Total/NA	Analysis	TX 1005		1			47250	02/26/23 14:36	SM	EET MID
Soluble	Leach	DI Leach			5.01 g	50 mL	47148	02/24/23 10:27	KS	EET MID
Soluble	Analysis	300.0		5			47261	02/27/23 03:28	CH	EET MID

Client Sample ID: 3. South Side

Lab Sample ID: 820-7494-3
Matrix: Solid

Date Collected: 02/17/23 09:30
Date Received: 02/21/23 15:06

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	TX_1005_S_Prep			10.02 g	10 mL	47141	02/24/23 08:37	AM	EET MID
Total/NA	Analysis	TX 1005		1	1 uL	1 uL	47136	02/24/23 18:20	SM	EET MID
Total/NA	Analysis	TX 1005		1			47250	02/26/23 14:36	SM	EET MID
Soluble	Leach	DI Leach			5.03 g	50 mL	47148	02/24/23 10:27	KS	EET MID
Soluble	Analysis	300.0		20			47261	02/27/23 03:33	CH	EET MID

Client Sample ID: 4. SW Corner

Lab Sample ID: 820-7494-4
Matrix: Solid

Date Collected: 02/17/23 09:30
Date Received: 02/21/23 15:06

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	TX_1005_S_Prep			10.03 g	10 mL	47141	02/24/23 08:37	AM	EET MID
Total/NA	Analysis	TX 1005		1	1 uL	1 uL	47136	02/24/23 17:18	SM	EET MID
Total/NA	Analysis	TX 1005		1			47250	02/26/23 14:36	SM	EET MID
Soluble	Leach	DI Leach			5 g	50 mL	47148	02/24/23 10:27	KS	EET MID
Soluble	Analysis	300.0		5			47261	02/27/23 03:39	CH	EET MID

Lab Chronicle

Client: Buckeye Disposals
Project/Site: State AF #3

Job ID: 820-7494-1

Client Sample ID: 5. NW Corner

Lab Sample ID: 820-7494-5

Date Collected: 02/17/23 09:30
Matrix: Solid
Date Received: 02/21/23 15:06

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	TX_1005_S_Prep			10.02 g	10 mL	47141	02/24/23 08:37	AM	EET MID
Total/NA	Analysis	TX 1005		1	1 uL	1 uL	47136	02/24/23 18:42	SM	EET MID
Total/NA	Analysis	TX 1005		1			47250	02/26/23 14:36	SM	EET MID
Soluble	Leach	DI Leach			5 g	50 mL	47148	02/24/23 10:27	KS	EET MID
Soluble	Analysis	300.0		1			47261	02/27/23 03:45	CH	EET MID

Client Sample ID: 6. East Side

Lab Sample ID: 820-7494-6

Date Collected: 02/17/23 09:30
Matrix: Solid
Date Received: 02/21/23 15:06

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	TX_1005_S_Prep			10.01 g	10 mL	47141	02/24/23 08:37	AM	EET MID
Total/NA	Analysis	TX 1005		1	1 uL	1 uL	47136	02/24/23 19:02	SM	EET MID
Total/NA	Analysis	TX 1005		1			47250	02/26/23 14:36	SM	EET MID
Soluble	Leach	DI Leach			5.04 g	50 mL	47148	02/24/23 10:27	KS	EET MID
Soluble	Analysis	300.0		5			47261	02/27/23 04:02	CH	EET MID

Laboratory References:

EET MID = Eurofins Midland, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440

9

Accreditation/Certification Summary

Client: Buckeye Disposals
Project/Site: State AF #3

Job ID: 820-7494-1

Laboratory: Eurofins Midland

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704400-22-25	06-30-23

10

Method Summary

Client: Buckeye Disposals
Project/Site: State AF #3

Job ID: 820-7494-1

Method	Method Description	Protocol	Laboratory
TX 1005	Texas - Total Petroleum Hydrocarbon (GC)	TCEQ	EET MID
300.0	Anions, Ion Chromatography	EPA	EET MID
DI Leach	Deionized Water Leaching Procedure	ASTM	EET MID
TX_1005_S_Prep	Extraction - Texas Total petroleum Hyrdocarbons	TCEQ	EET MID

Protocol References:

ASTM = ASTM International
EPA = US Environmental Protection Agency
TCEQ = Texas Commission of Environmental Quality

Laboratory References:

EET MID = Eurofins Midland, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440

Sample Summary

Client: Buckeye Disposals
Project/Site: State AF #3

Job ID: 820-7494-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
820-7494-1	1. Battery	Solid	02/17/23 09:30	02/21/23 15:06
820-7494-2	2. North Side	Solid	02/17/23 09:30	02/21/23 15:06
820-7494-3	3. South Side	Solid	02/17/23 09:30	02/21/23 15:06
820-7494-4	4. SW Corner	Solid	02/17/23 09:30	02/21/23 15:06
820-7494-5	5. NW Corner	Solid	02/17/23 09:30	02/21/23 15:06
820-7494-6	6. East Side	Solid	02/17/23 09:30	02/21/23 15:06

12

Loc: 820
7494

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Chain of Custody

Houston, TX (281) 240-4200, Dallas, TX (214) 902-0300
Midland, TX (432) 704-5440, San Antonio, TX (210) 509-3334
EL Paso, TX (915) 585-3443, Lubbock, TX (806) 794-1296
Hobbs, NM (575) 392-7550, Carlsbad, NM (575) 988-3199

820-7494 Chain of Custody

www.xenco.com Page 1 of 1

Project Manager:	JACK YATES	Bill to: (if different)	
Company Name:	Buckeye Disposals	Company Name:	
Address:	2310 FORDHAM	Address:	
City, State ZIP:	LUBBOCK, TX 79408	City, State ZIP:	
Phone:	806 241-7405	Email:	~~jack@thestandardenergy.com~~

Work Order Comments

Program: UST/PST ☐ PRP ☐ Brownfields ☐ RRC ☐ Superfund ☐
State of Project:
Reporting: Level II ☐ Level III ☐ PST/UST ☐ TRRP ☐ Level IV ☐
Deliverables: EDD ☐ ADaPT ☐ Other:

Project Name:	~~AF SWD~~	Turn Around	
Project Number:	State AF #3	☐ Routine	☐ Rush
Project Location:		Due Date:	
Sampler's Name:		TAT starts the day received by the lab, if received by 4:30pm	
PO #:			

ANALYSIS REQUEST — Pres. Code — Parameters: HYDROCARBONS, CHLORIDES

Preservative Codes

None: NO — DI Water: H_2O
Cool: Cool — MeOH: Me
HCL: HC — HNO_3: HN
H_2SO_4: H_2 — NaOH: Na
H_3PO_4: HP
$NaHSO_4$: NABIS
$Na_2S_2O_3$: $NaSO_3$
Zn Acetate+NaOH: Zn
NaOH+Ascorbic Acid: SAPC

SAMPLE RECEIPT	Temp Blank:	Yes (No)	Wet Ice:	Yes (No)
Samples Received Intact:	(Yes) No		Thermometer ID:	IR-4
Cooler Custody Seals:	Yes No (N/A)		Correction Factor:	-0.1
Sample Custody Seals:	Yes No (N/A)		Temperature Reading:	22.7
Total Containers:	6		Corrected Temperature:	22.6

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/ Comp	# of Cont	Sample Comments
1. BATTERY		2/17/23	930Am	[illegible]			
2. NORTH SIDE		|	|				
3. SOUTH SIDE		|	|				
4. SW CORNER		|	|				
5. NW CORNER		|	|				
6. EAST SIDE		|	|				

PAID
$410 by CC

Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO_2 Na Sr Tl Sn U V Zn
Circle Method(s) and Metal(s) to be analyzed TCLP / SPLP 6010 : 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Tl U Hg: 1631 / 245.1 / 7470 / 7471

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1 [signature]	[signature]	2/21/23 15:06	2		
3			4		
5			6		

Revised Date: 08/25/2020 Rev. 2020.2

jack@bernsteinenterprises.com

Login Sample Receipt Checklist

Client: Buckeye Disposals

Job Number: 820-7494-1

Login Number: 7494
List Number: 1
Creator: Ruggles, Ashley

List Source: Eurofins Lubbock

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	False	No ice per client request.
Cooler Temperature is acceptable.	False	Cooler temperature outside required temperature criteria.
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	

14

Login Sample Receipt Checklist

Client: Buckeye Disposals

Job Number: 820-7494-1

Login Number: 7494
List Number: 2
Creator: Rodriguez, Leticia

List Source: Eurofins Midland
List Creation: 02/22/23 12:07 PM

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	

14

Sept, Oct 2022

73K

+ Nov 84K

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ANALYTICAL REPORT

PREPARED FOR

Attn: Jack Yates
Buckeye Disposals
2310 Fordham
Lubbock, Texas 79408

Generated 5/26/2023 10:23:42 AM

JOB DESCRIPTION

State AF #3

JOB NUMBER

820-8586-1

Eurofins Lubbock
6701 Aberdeen Ave.
Suite 8
Lubbock TX 79424

See page two for job notes and contact information.

myEOL

Eurofins Lubbock

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing South Central, LLC Project Manager.

Authorization

Generated
5/26/2023 10:23:42 AM

Authorized for release by
Holly Taylor, Project Manager
Holly.Taylor@et.eurofinsus.com
(806)794-1296

Table of Contents

Definitions/Glossary

Client: Buckeye Disposals
Project/Site: State AF #3

Job ID: 820-8586-1

Qualifiers

GC Semi VOA

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
S1+	Surrogate recovery exceeds control limits, high biased.
U	Indicates the analyte was analyzed for but not detected.

HPLC/IC

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Case Narrative

Client: Buckeye Disposals
Project/Site: State AF #3

Job ID: 820-8586-1

Job ID: 820-8586-1

Laboratory: Eurofins Lubbock

Narrative

Job Narrative
820-8586-1

Receipt
The samples were received on 5/24/2023 1:09 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 23.3°C

GC Semi VOA
Method TX_1005: The surrogate recovery for the blank associated with preparation batch 880-54171 and analytical batch 880-54123 was outside the upper control limits.

Method TX_1005: Surrogate recovery for the following samples were outside control limits: (CCV 880-54123/31), (CCV 880-54123/57) and (CCV 880-54123/58). Evidence of matrix interferences is not obvious.

Method TX_1005: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-54171 and analytical batch 880-54123 were outside control limits for one or more analytes. See QC Sample Results for detail. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery is within acceptance limits.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

HPLC/IC
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Client Sample Results

Client: Buckeye Disposals
Project/Site: State AF #3

Job ID: 820-8586-1

Client Sample ID: Site #1 @ 3'

Lab Sample ID: 820-8586-1

Date Collected: 05/16/23 13:00
Matrix: Solid
Date Received: 05/24/23 13:09

Method: TCEQ TX 1005 - Texas - Total Petroleum Hydrocarbon (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C12	85.6		49.9	15.0	mg/Kg		05/25/23 13:41	05/26/23 00:04	1
>C12-C28	1070		49.9	15.0	mg/Kg		05/25/23 13:41	05/26/23 00:04	1
>C28-C35	261		49.9	15.0	mg/Kg		05/25/23 13:41	05/26/23 00:04	1
Total TPH 1005	1420		49.9	15.0	mg/Kg			05/26/23 08:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane (Surr)	*106*		*70 - 130*	*05/25/23 13:41*	*05/26/23 00:04*	*1*
o-Terphenyl (Surr)	*109*		*70 - 130*	*05/25/23 13:41*	*05/26/23 00:04*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	5880		49.9	3.94	mg/Kg			05/26/23 00:29	10

Client Sample ID: Site #2 @ 3'

Lab Sample ID: 820-8586-2

Date Collected: 05/16/23 13:00
Matrix: Solid
Date Received: 05/24/23 13:09

Method: TCEQ TX 1005 - Texas - Total Petroleum Hydrocarbon (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C12	<13.2	U	44.1	13.2	mg/Kg		05/25/23 13:41	05/25/23 21:00	1
>C12-C28	72.5	F1	44.1	13.2	mg/Kg		05/25/23 13:41	05/25/23 21:00	1
>C28-C35	20.6	J	44.1	13.2	mg/Kg		05/25/23 13:41	05/25/23 21:00	1
Total TPH 1005	93.1		44.1	13.2	mg/Kg			05/26/23 08:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane (Surr)	*101*		*70 - 130*	*05/25/23 13:41*	*05/25/23 21:00*	*1*
o-Terphenyl (Surr)	*106*		*70 - 130*	*05/25/23 13:41*	*05/25/23 21:00*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	2640		25.0	1.98	mg/Kg			05/26/23 00:46	5

Client Sample ID: Site #3 @ 3'

Lab Sample ID: 820-8586-3

Date Collected: 05/16/23 13:00
Matrix: Solid
Date Received: 05/24/23 13:09

Method: TCEQ TX 1005 - Texas - Total Petroleum Hydrocarbon (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C12	<12.7	U	42.3	12.7	mg/Kg		05/25/23 13:41	05/25/23 22:42	1
>C12-C28	41.8	J	42.3	12.7	mg/Kg		05/25/23 13:41	05/25/23 22:42	1
>C28-C35	<12.7	U	42.3	12.7	mg/Kg		05/25/23 13:41	05/25/23 22:42	1
Total TPH 1005	41.8	J	42.3	12.7	mg/Kg			05/26/23 08:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane (Surr)	*98*		*70 - 130*	*05/25/23 13:41*	*05/25/23 22:42*	*1*
o-Terphenyl (Surr)	*100*		*70 - 130*	*05/25/23 13:41*	*05/25/23 22:42*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	2540		25.0	1.98	mg/Kg			05/26/23 00:51	5

Client Sample ID: Site #4 @ 3'

Lab Sample ID: 820-8586-4

Date Collected: 05/16/23 13:00
Matrix: Solid
Date Received: 05/24/23 13:09

Method: TCEQ TX 1005 - Texas - Total Petroleum Hydrocarbon (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C12	<11.9	U	39.6	11.9	mg/Kg		05/25/23 13:41	05/25/23 23:02	1
>C12-C28	**55.1**		39.6	11.9	mg/Kg		05/25/23 13:41	05/25/23 23:02	1
>C28-C35	<11.9	U	39.6	11.9	mg/Kg		05/25/23 13:41	05/25/23 23:02	1
Total TPH 1005	**55.1**		39.6	11.9	mg/Kg			05/26/23 08:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane (Surr)	*99*		*70 - 130*	*05/25/23 13:41*	*05/25/23 23:02*	*1*
o-Terphenyl (Surr)	*102*		*70 - 130*	*05/25/23 13:41*	*05/25/23 23:02*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**2460**		24.8	1.96	mg/Kg			05/26/23 00:57	5

Client Sample ID: Site #5 @ 3'

Lab Sample ID: 820-8586-5

Date Collected: 05/16/23 13:00
Matrix: Solid
Date Received: 05/24/23 13:09

Method: TCEQ TX 1005 - Texas - Total Petroleum Hydrocarbon (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C12	<12.6	U	41.9	12.6	mg/Kg		05/25/23 13:41	05/25/23 23:23	1
>C12-C28	**57.2**		41.9	12.6	mg/Kg		05/25/23 13:41	05/25/23 23:23	1
>C28-C35	**13.0**	**J**	41.9	12.6	mg/Kg		05/25/23 13:41	05/25/23 23:23	1
Total TPH 1005	**70.2**		41.9	12.6	mg/Kg			05/26/23 08:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane (Surr)	*93*		*70 - 130*	*05/25/23 13:41*	*05/25/23 23:23*	*1*
o-Terphenyl (Surr)	*90*		*70 - 130*	*05/25/23 13:41*	*05/25/23 23:23*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**3040**		25.2	1.99	mg/Kg			05/26/23 01:02	5

Client Sample ID: Site #6 @ 3'

Lab Sample ID: 820-8586-6

Date Collected: 05/16/23 13:00
Matrix: Solid
Date Received: 05/24/23 13:09

Method: TCEQ TX 1005 - Texas - Total Petroleum Hydrocarbon (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C12	<13.2	U	43.9	13.2	mg/Kg		05/25/23 13:41	05/25/23 23:44	1
>C12-C28	**203**		43.9	13.2	mg/Kg		05/25/23 13:41	05/25/23 23:44	1
>C28-C35	**87.5**		43.9	13.2	mg/Kg		05/25/23 13:41	05/25/23 23:44	1
Total TPH 1005	**291**		43.9	13.2	mg/Kg			05/26/23 08:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane (Surr)	*98*		*70 - 130*	*05/25/23 13:41*	*05/25/23 23:44*	*1*
o-Terphenyl (Surr)	*100*		*70 - 130*	*05/25/23 13:41*	*05/25/23 23:44*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**922**		5.01	0.396	mg/Kg			05/26/23 01:07	1

Client Sample Results

Client: Buckeye Disposals
Project/Site: State AF #3

Job ID: 820-8586-1

Client Sample ID: Site #7 @ 1'

Lab Sample ID: 820-8586-7

Date Collected: 05/16/23 13:00
Matrix: Solid
Date Received: 05/24/23 13:09

Method: TCEQ TX 1005 - Texas - Total Petroleum Hydrocarbon (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C12	<74.8	U	249	74.8	mg/Kg		05/25/23 13:41	05/26/23 01:25	5
>C12-C28	1160		249	74.8	mg/Kg		05/25/23 13:41	05/26/23 01:25	5
>C28-C35	433		249	74.8	mg/Kg		05/25/23 13:41	05/26/23 01:25	5
Total TPH 1005	1590		249	74.8	mg/Kg			05/26/23 08:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane (Surr)	*98*		*70 - 130*	*05/25/23 13:41*	*05/26/23 01:25*	*5*
o-Terphenyl (Surr)	*103*		*70 - 130*	*05/25/23 13:41*	*05/26/23 01:25*	*5*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	2820		24.9	1.97	mg/Kg			05/26/23 01:13	5

Client Sample ID: Site #7 @ 3'

Lab Sample ID: 820-8586-8

Date Collected: 05/16/23 13:00
Matrix: Solid
Date Received: 05/24/23 13:09

Method: TCEQ TX 1005 - Texas - Total Petroleum Hydrocarbon (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C12	<74.9	U	250	74.9	mg/Kg		05/25/23 13:41	05/26/23 01:46	5
>C12-C28	1320		250	74.9	mg/Kg		05/25/23 13:41	05/26/23 01:46	5
>C28-C35	515		250	74.9	mg/Kg		05/25/23 13:41	05/26/23 01:46	5
Total TPH 1005	1840		250	74.9	mg/Kg			05/26/23 08:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane (Surr)	*99*		*70 - 130*	*05/25/23 13:41*	*05/26/23 01:46*	*5*
o-Terphenyl (Surr)	*102*		*70 - 130*	*05/25/23 13:41*	*05/26/23 01:46*	*5*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	2680		24.8	1.96	mg/Kg			05/26/23 01:18	5

Client Sample ID: Site #8 @1'

Lab Sample ID: 820-8586-9

Date Collected: 05/16/23 13:00
Matrix: Solid
Date Received: 05/24/23 13:09

Method: TCEQ TX 1005 - Texas - Total Petroleum Hydrocarbon (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C12	<15.0	U	50.0	15.0	mg/Kg		05/25/23 13:41	05/26/23 00:24	1
>C12-C28	1480		50.0	15.0	mg/Kg		05/25/23 13:41	05/26/23 00:24	1
>C28-C35	402		50.0	15.0	mg/Kg		05/25/23 13:41	05/26/23 00:24	1
Total TPH 1005	1880		50.0	15.0	mg/Kg			05/26/23 08:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane (Surr)	*97*		*70 - 130*	*05/25/23 13:41*	*05/26/23 00:24*	*1*
o-Terphenyl (Surr)	*99*		*70 - 130*	*05/25/23 13:41*	*05/26/23 00:24*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	4110		50.4	3.98	mg/Kg			05/26/23 09:09	10

Client Sample Results

Client: Buckeye Disposals
Project/Site: State AF #3

Job ID: 820-8586-1

Client Sample ID: Site #8 @3'

Lab Sample ID: 820-8586-10

Date Collected: 05/16/23 13:00

Matrix: Solid

Date Received: 05/24/23 13:09

Method: TCEQ TX 1005 - Texas - Total Petroleum Hydrocarbon (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C12	<14.9	U	49.8	14.9	mg/Kg		05/25/23 13:41	05/26/23 00:45	1
>C12-C28	**1130**		49.8	14.9	mg/Kg		05/25/23 13:41	05/26/23 00:45	1
>C28-C35	**298**		49.8	14.9	mg/Kg		05/25/23 13:41	05/26/23 00:45	1
Total TPH 1005	**1430**		49.8	14.9	mg/Kg			05/26/23 08:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane (Surr)	*100*		*70 - 130*	*05/25/23 13:41*	*05/26/23 00:45*	*1*
o-Terphenyl (Surr)	*102*		*70 - 130*	*05/25/23 13:41*	*05/26/23 00:45*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**6190**		50.1	3.96	mg/Kg			05/26/23 09:14	10

Surrogate Summary

Client: Buckeye Disposals
Project/Site: State AF #3

Job ID: 820-8586-1

Method: TX 1005 - Texas - Total Petroleum Hydrocarbon (GC)

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)											
		1CO	OTPH										
Lab Sample ID	Client Sample ID	(70-130)	(70-130)										
820-8586-1	Site #1 @ 3'	106	109										
820-8586-2	Site #2 @ 3'	101	106										
820-8586-2 MS	Site #2 @ 3'	97	92										
820-8586-2 MSD	Site #2 @ 3'	96	89										
820-8586-3	Site #3 @ 3'	98	100										
820-8586-4	Site #4 @ 3'	99	102										
820-8586-5	Site #5 @ 3'	93	90										
820-8586-6	Site #6 @ 3'	98	100										
820-8586-7	Site #7 @ 1'	98	103										
820-8586-8	Site #7 @ 3'	99	102										
820-8586-9	Site #8 @1'	97	99										
820-8586-10	Site #8 @3'	100	102										
LCS 880-54171/2-A	Lab Control Sample	111	106										
LCSD 880-54171/3-A	Lab Control Sample Dup	105	106										
MB 880-54171/1-A	Method Blank	175 S1+	180 S1+										

Surrogate Legend

1CO = 1-Chlorooctane (Surr)

OTPH = o-Terphenyl (Surr)

QC Sample Results

Client: Buckeye Disposals
Project/Site: State AF #3

Job ID: 820-8586-1

Method: TX 1005 - Texas - Total Petroleum Hydrocarbon (GC)

Lab Sample ID: MB 880-54171/1-A
Matrix: Solid
Analysis Batch: 54123

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 54171

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C12	<15.0	U	50.0	15.0	mg/Kg		05/25/23 13:41	05/25/23 19:59	1
>C12-C28	<15.0	U	50.0	15.0	mg/Kg		05/25/23 13:41	05/25/23 19:59	1
>C28-C35	<15.0	U	50.0	15.0	mg/Kg		05/25/23 13:41	05/25/23 19:59	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane (Surr)	*175*	*S1+*	*70 - 130*	*05/25/23 13:41*	*05/25/23 19:59*	*1*
o-Terphenyl (Surr)	*180*	*S1+*	*70 - 130*	*05/25/23 13:41*	*05/25/23 19:59*	*1*

Lab Sample ID: LCS 880-54171/2-A
Matrix: Solid
Analysis Batch: 54123

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 54171

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
C6-C12			1000	977.5		mg/Kg		98	75 - 125		
>C12-C28			1000	1062		mg/Kg		106	75 - 125		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1-Chlorooctane (Surr)	*111*		*70 - 130*
o-Terphenyl (Surr)	*106*		*70 - 130*

Lab Sample ID: LCSD 880-54171/3-A
Matrix: Solid
Analysis Batch: 54123

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 54171

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
C6-C12			1000	940.1		mg/Kg		94	75 - 125	4	25
>C12-C28			1000	1038		mg/Kg		104	75 - 125	2	25

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1-Chlorooctane (Surr)	*105*		*70 - 130*
o-Terphenyl (Surr)	*106*		*70 - 130*

Lab Sample ID: 820-8586-2 MS
Matrix: Solid
Analysis Batch: 54123

Client Sample ID: Site #2 @ 3'
Prep Type: Total/NA
Prep Batch: 54171

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
C6-C12	<13.2	U	998	838.9		mg/Kg		84	75 - 125		
>C12-C28	72.5	F1	998	723.0	F1	mg/Kg		65	75 - 125		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1-Chlorooctane (Surr)	*97*		*70 - 130*
o-Terphenyl (Surr)	*92*		*70 - 130*

Method: TX 1005 - Texas - Total Petroleum Hydrocarbon (GC) (Continued)

Lab Sample ID: 820-8586-2 MSD
Matrix: Solid
Analysis Batch: 54123

Client Sample ID: Site #2 @ 3'
Prep Type: Total/NA
Prep Batch: 54171

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
C6-C12	<13.2	U	997	840.0		mg/Kg		84	75 - 125	0	25
>C12-C28	72.5	F1	997	687.5	F1	mg/Kg		62	75 - 125	5	25

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1-Chlorooctane (Surr)	*96*		*70 - 130*
o-Terphenyl (Surr)	*89*		*70 - 130*

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-54136/1-A
Matrix: Solid
Analysis Batch: 54185

Client Sample ID: Method Blank
Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.395	U	5.00	0.395	mg/Kg			05/25/23 22:35	1

Lab Sample ID: LCS 880-54136/2-A
Matrix: Solid
Analysis Batch: 54185

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	250	248.1		mg/Kg		99	90 - 110

Lab Sample ID: LCSD 880-54136/3-A
Matrix: Solid
Analysis Batch: 54185

Client Sample ID: Lab Control Sample Dup
Prep Type: Soluble

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	250	256.9		mg/Kg		103	90 - 110	4	20

Lab Sample ID: MB 880-54133/1-A
Matrix: Solid
Analysis Batch: 54227

Client Sample ID: Method Blank
Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.395	U	5.00	0.395	mg/Kg			05/26/23 06:38	1

Lab Sample ID: LCS 880-54133/2-A
Matrix: Solid
Analysis Batch: 54227

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	250	252.7		mg/Kg		101	90 - 110

Lab Sample ID: LCSD 880-54133/3-A
Matrix: Solid
Analysis Batch: 54227

Client Sample ID: Lab Control Sample Dup
Prep Type: Soluble

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	250	253.6		mg/Kg		101	90 - 110	0	20

QC Association Summary

Client: Buckeye Disposals
Project/Site: State AF #3

Job ID: 820-8586-1

GC Semi VOA

Analysis Batch: 54123

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-8586-1	Site #1 @ 3'	Total/NA	Solid	TX 1005	54171
820-8586-2	Site #2 @ 3'	Total/NA	Solid	TX 1005	54171
820-8586-3	Site #3 @ 3'	Total/NA	Solid	TX 1005	54171
820-8586-4	Site #4 @ 3'	Total/NA	Solid	TX 1005	54171
820-8586-5	Site #5 @ 3'	Total/NA	Solid	TX 1005	54171
820-8586-6	Site #6 @ 3'	Total/NA	Solid	TX 1005	54171
820-8586-7	Site #7 @ 1'	Total/NA	Solid	TX 1005	54171
820-8586-8	Site #7 @ 3'	Total/NA	Solid	TX 1005	54171
820-8586-9	Site #8 @1'	Total/NA	Solid	TX 1005	54171
820-8586-10	Site #8 @3'	Total/NA	Solid	TX 1005	54171
MB 880-54171/1-A	Method Blank	Total/NA	Solid	TX 1005	54171
LCS 880-54171/2-A	Lab Control Sample	Total/NA	Solid	TX 1005	54171
LCSD 880-54171/3-A	Lab Control Sample Dup	Total/NA	Solid	TX 1005	54171
820-8586-2 MS	Site #2 @ 3'	Total/NA	Solid	TX 1005	54171
820-8586-2 MSD	Site #2 @ 3'	Total/NA	Solid	TX 1005	54171

Prep Batch: 54171

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-8586-1	Site #1 @ 3'	Total/NA	Solid	TX_1005_S_Prep	
820-8586-2	Site #2 @ 3'	Total/NA	Solid	TX_1005_S_Prep	
820-8586-3	Site #3 @ 3'	Total/NA	Solid	TX_1005_S_Prep	
820-8586-4	Site #4 @ 3'	Total/NA	Solid	TX_1005_S_Prep	
820-8586-5	Site #5 @ 3'	Total/NA	Solid	TX_1005_S_Prep	
820-8586-6	Site #6 @ 3'	Total/NA	Solid	TX_1005_S_Prep	
820-8586-7	Site #7 @ 1'	Total/NA	Solid	TX_1005_S_Prep	
820-8586-8	Site #7 @ 3'	Total/NA	Solid	TX_1005_S_Prep	
820-8586-9	Site #8 @1'	Total/NA	Solid	TX_1005_S_Prep	
820-8586-10	Site #8 @3'	Total/NA	Solid	TX_1005_S_Prep	
MB 880-54171/1-A	Method Blank	Total/NA	Solid	TX_1005_S_Prep	
LCS 880-54171/2-A	Lab Control Sample	Total/NA	Solid	TX_1005_S_Prep	
LCSD 880-54171/3-A	Lab Control Sample Dup	Total/NA	Solid	TX_1005_S_Prep	
820-8586-2 MS	Site #2 @ 3'	Total/NA	Solid	TX_1005_S_Prep	
820-8586-2 MSD	Site #2 @ 3'	Total/NA	Solid	TX_1005_S_Prep	

Analysis Batch: 54212

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-8586-1	Site #1 @ 3'	Total/NA	Solid	TX 1005	
820-8586-2	Site #2 @ 3'	Total/NA	Solid	TX 1005	
820-8586-3	Site #3 @ 3'	Total/NA	Solid	TX 1005	
820-8586-4	Site #4 @ 3'	Total/NA	Solid	TX 1005	

QC Association Summary

Client: Buckeye Disposals
Project/Site: State AF #3

Job ID: 820-8586-1

GC Semi VOA (Continued)

Analysis Batch: 54212 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-8586-5	Site #5 @ 3'	Total/NA	Solid	TX 1005	
820-8586-6	Site #6 @ 3'	Total/NA	Solid	TX 1005	
820-8586-7	Site #7 @ 1'	Total/NA	Solid	TX 1005	
820-8586-8	Site #7 @ 3'	Total/NA	Solid	TX 1005	
820-8586-9	Site #8 @1'	Total/NA	Solid	TX 1005	
820-8586-10	Site #8 @3'	Total/NA	Solid	TX 1005	

HPLC/IC

Leach Batch: 54133

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-8586-9	Site #8 @1'	Soluble	Solid	DI Leach	
820-8586-10	Site #8 @3'	Soluble	Solid	DI Leach	
MB 880-54133/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-54133/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-54133/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	

Leach Batch: 54136

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-8586-1	Site #1 @ 3'	Soluble	Solid	DI Leach	
820-8586-2	Site #2 @ 3'	Soluble	Solid	DI Leach	
820-8586-3	Site #3 @ 3'	Soluble	Solid	DI Leach	
820-8586-4	Site #4 @ 3'	Soluble	Solid	DI Leach	
820-8586-5	Site #5 @ 3'	Soluble	Solid	DI Leach	
820-8586-6	Site #6 @ 3'	Soluble	Solid	DI Leach	
820-8586-7	Site #7 @ 1'	Soluble	Solid	DI Leach	
820-8586-8	Site #7 @ 3'	Soluble	Solid	DI Leach	
MB 880-54136/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-54136/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-54136/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	

Analysis Batch: 54185

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-8586-1	Site #1 @ 3'	Soluble	Solid	300.0	54136
820-8586-2	Site #2 @ 3'	Soluble	Solid	300.0	54136
820-8586-3	Site #3 @ 3'	Soluble	Solid	300.0	54136
820-8586-4	Site #4 @ 3'	Soluble	Solid	300.0	54136
820-8586-5	Site #5 @ 3'	Soluble	Solid	300.0	54136
820-8586-6	Site #6 @ 3'	Soluble	Solid	300.0	54136
820-8586-7	Site #7 @ 1'	Soluble	Solid	300.0	54136
820-8586-8	Site #7 @ 3'	Soluble	Solid	300.0	54136
MB 880-54136/1-A	Method Blank	Soluble	Solid	300.0	54136
LCS 880-54136/2-A	Lab Control Sample	Soluble	Solid	300.0	54136
LCSD 880-54136/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	54136

Analysis Batch: 54227

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-8586-9	Site #8 @1'	Soluble	Solid	300.0	54133
820-8586-10	Site #8 @3'	Soluble	Solid	300.0	54133
MB 880-54133/1-A	Method Blank	Soluble	Solid	300.0	54133
LCS 880-54133/2-A	Lab Control Sample	Soluble	Solid	300.0	54133

QC Association Summary

Client: Buckeye Disposals
Project/Site: State AF #3

Job ID: 820-8586-1

HPLC/IC (Continued)

Analysis Batch: 54227 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCSD 880-54133/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	54133

Lab Chronicle

Client: Buckeye Disposals
Project/Site: State AF #3

Job ID: 820-8586-1

Client Sample ID: Site #1 @ 3'

Lab Sample ID: 820-8586-1

Date Collected: 05/16/23 13:00
Matrix: Solid
Date Received: 05/24/23 13:09

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	TX_1005_S_Prep			10.03 g	10 mL	54171	05/25/23 13:41	AJ	EET MID
Total/NA	Analysis	TX 1005		1	1 uL	1 uL	54123	05/26/23 00:04	SM	EET MID
Total/NA	Analysis	TX 1005		1			54212	05/26/23 08:07	SM	EET MID
Soluble	Leach	DI Leach			5.01 g	50 mL	54136	05/25/23 10:06	KS	EET MID
Soluble	Analysis	300.0		10			54185	05/26/23 00:29	CH	EET MID

Client Sample ID: Site #2 @ 3'

Lab Sample ID: 820-8586-2

Date Collected: 05/16/23 13:00
Matrix: Solid
Date Received: 05/24/23 13:09

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	TX_1005_S_Prep			11.35 g	10 mL	54171	05/25/23 13:41	AJ	EET MID
Total/NA	Analysis	TX 1005		1	1 uL	1 uL	54123	05/25/23 21:00	SM	EET MID
Total/NA	Analysis	TX 1005		1			54212	05/26/23 08:07	SM	EET MID
Soluble	Leach	DI Leach			5 g	50 mL	54136	05/25/23 10:06	KS	EET MID
Soluble	Analysis	300.0		5			54185	05/26/23 00:46	CH	EET MID

Client Sample ID: Site #3 @ 3'

Lab Sample ID: 820-8586-3

Date Collected: 05/16/23 13:00
Matrix: Solid
Date Received: 05/24/23 13:09

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	TX_1005_S_Prep			11.82 g	10 mL	54171	05/25/23 13:41	AJ	EET MID
Total/NA	Analysis	TX 1005		1	1 uL	1 uL	54123	05/25/23 22:42	SM	EET MID
Total/NA	Analysis	TX 1005		1			54212	05/26/23 08:07	SM	EET MID
Soluble	Leach	DI Leach			5 g	50 mL	54136	05/25/23 10:06	KS	EET MID
Soluble	Analysis	300.0		5			54185	05/26/23 00:51	CH	EET MID

Client Sample ID: Site #4 @ 3'

Lab Sample ID: 820-8586-4

Date Collected: 05/16/23 13:00
Matrix: Solid
Date Received: 05/24/23 13:09

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	TX_1005_S_Prep			12.64 g	10 mL	54171	05/25/23 13:41	AJ	EET MID
Total/NA	Analysis	TX 1005		1	1 uL	1 uL	54123	05/25/23 23:02	SM	EET MID
Total/NA	Analysis	TX 1005		1			54212	05/26/23 08:07	SM	EET MID
Soluble	Leach	DI Leach			5.04 g	50 mL	54136	05/25/23 10:06	KS	EET MID
Soluble	Analysis	300.0		5			54185	05/26/23 00:57	CH	EET MID

Lab Chronicle

Client: Buckeye Disposals
Project/Site: State AF #3

Job ID: 820-8586-1

Client Sample ID: Site #5 @ 3'

Lab Sample ID: 820-8586-5

Date Collected: 05/16/23 13:00
Matrix: Solid
Date Received: 05/24/23 13:09

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	TX_1005_S_Prep			11.93 g	10 mL	54171	05/25/23 13:41	AJ	EET MID
Total/NA	Analysis	TX 1005		1	1 uL	1 uL	54123	05/25/23 23:23	SM	EET MID
Total/NA	Analysis	TX 1005		1			54212	05/26/23 08:07	SM	EET MID
Soluble	Leach	DI Leach			4.96 g	50 mL	54136	05/25/23 10:06	KS	EET MID
Soluble	Analysis	300.0		5			54185	05/26/23 01:02	CH	EET MID

Client Sample ID: Site #6 @ 3'

Lab Sample ID: 820-8586-6

Date Collected: 05/16/23 13:00
Matrix: Solid
Date Received: 05/24/23 13:09

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	TX_1005_S_Prep			11.38 g	10 mL	54171	05/25/23 13:41	AJ	EET MID
Total/NA	Analysis	TX 1005		1	1 uL	1 uL	54123	05/25/23 23:44	SM	EET MID
Total/NA	Analysis	TX 1005		1			54212	05/26/23 08:07	SM	EET MID
Soluble	Leach	DI Leach			4.99 g	50 mL	54136	05/25/23 10:06	KS	EET MID
Soluble	Analysis	300.0		1			54185	05/26/23 01:07	CH	EET MID

Client Sample ID: Site #7 @ 1'

Lab Sample ID: 820-8586-7

Date Collected: 05/16/23 13:00
Matrix: Solid
Date Received: 05/24/23 13:09

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	TX_1005_S_Prep			10.03 g	10 mL	54171	05/25/23 13:41	AJ	EET MID
Total/NA	Analysis	TX 1005		5	1 uL	1 uL	54123	05/26/23 01:25	SM	EET MID
Total/NA	Analysis	TX 1005		1			54212	05/26/23 08:07	SM	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	54136	05/25/23 10:06	KS	EET MID
Soluble	Analysis	300.0		5			54185	05/26/23 01:13	CH	EET MID

Client Sample ID: Site #7 @ 3'

Lab Sample ID: 820-8586-8

Date Collected: 05/16/23 13:00
Matrix: Solid
Date Received: 05/24/23 13:09

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	TX_1005_S_Prep			10.01 g	10 mL	54171	05/25/23 13:41	AJ	EET MID
Total/NA	Analysis	TX 1005		5	1 uL	1 uL	54123	05/26/23 01:46	SM	EET MID
Total/NA	Analysis	TX 1005		1			54212	05/26/23 08:07	SM	EET MID
Soluble	Leach	DI Leach			5.05 g	50 mL	54136	05/25/23 10:06	KS	EET MID
Soluble	Analysis	300.0		5			54185	05/26/23 01:18	CH	EET MID

Lab Chronicle

Client: Buckeye Disposals
Project/Site: State AF #3

Job ID: 820-8586-1

Client Sample ID: Site #8 @1'

Lab Sample ID: 820-8586-9

Date Collected: 05/16/23 13:00
Matrix: Solid
Date Received: 05/24/23 13:09

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	TX_1005_S_Prep			10.00 g	10 mL	54171	05/25/23 13:41	AJ	EET MID
Total/NA	Analysis	TX 1005		1	1 uL	1 uL	54123	05/26/23 00:24	SM	EET MID
Total/NA	Analysis	TX 1005		1			54212	05/26/23 08:07	SM	EET MID
Soluble	Leach	DI Leach			4.96 g	50 mL	54133	05/25/23 10:01	KS	EET MID
Soluble	Analysis	300.0		10	50 mL	50 mL	54227	05/26/23 09:09	CH	EET MID

Client Sample ID: Site #8 @3'

Lab Sample ID: 820-8586-10

Date Collected: 05/16/23 13:00
Matrix: Solid
Date Received: 05/24/23 13:09

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	TX_1005_S_Prep			10.05 g	10 mL	54171	05/25/23 13:41	AJ	EET MID
Total/NA	Analysis	TX 1005		1	1 uL	1 uL	54123	05/26/23 00:45	SM	EET MID
Total/NA	Analysis	TX 1005		1			54212	05/26/23 08:07	SM	EET MID
Soluble	Leach	DI Leach			4.99 g	50 mL	54133	05/25/23 10:01	KS	EET MID
Soluble	Analysis	300.0		10	50 mL	50 mL	54227	05/26/23 09:14	CH	EET MID

Laboratory References:

EET MID = Eurofins Midland, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440

Accreditation/Certification Summary

Client: Buckeye Disposals
Project/Site: State AF #3

Job ID: 820-8586-1

Laboratory: Eurofins Midland

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704400-22-25	06-30-23

Method Summary

Client: Buckeye Disposals
Project/Site: State AF #3

Job ID: 820-8586-1

Method	Method Description	Protocol	Laboratory
TX 1005	Texas - Total Petroleum Hydrocarbon (GC)	TCEQ	EET MID
300.0	Anions, Ion Chromatography	EPA	EET MID
DI Leach	Deionized Water Leaching Procedure	ASTM	EET MID
TX_1005_S_Prep	Extraction - Texas Total petroleum Hyrdocarbons	TCEQ	EET MID

Protocol References:

ASTM = ASTM International

EPA = US Environmental Protection Agency

TCEQ = Texas Commission of Environmental Quality

Laboratory References:

EET MID = Eurofins Midland, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440

Sample Summary

Client: Buckeye Disposals
Project/Site: State AF #3

Job ID: 820-8586-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
820-8586-1	Site #1 @ 3'	Solid	05/16/23 13:00	05/24/23 13:09
820-8586-2	Site #2 @ 3'	Solid	05/16/23 13:00	05/24/23 13:09
820-8586-3	Site #3 @ 3'	Solid	05/16/23 13:00	05/24/23 13:09
820-8586-4	Site #4 @ 3'	Solid	05/16/23 13:00	05/24/23 13:09
820-8586-5	Site #5 @ 3'	Solid	05/16/23 13:00	05/24/23 13:09
820-8586-6	Site #6 @ 3'	Solid	05/16/23 13:00	05/24/23 13:09
820-8586-7	Site #7 @ 1'	Solid	05/16/23 13:00	05/24/23 13:09
820-8586-8	Site #7 @ 3'	Solid	05/16/23 13:00	05/24/23 13:09
820-8586-9	Site #8 @1'	Solid	05/16/23 13:00	05/24/23 13:09
820-8586-10	Site #8 @3'	Solid	05/16/23 13:00	05/24/23 13:09

Loc: 820
8586

ins | Environment Testing Xenco

Chain of Custody

Houston, TX (281) 240-4200, Dallas, TX (214) 902-0300
Midland, TX (432) 704-5440, San Antonio, TX (210) 509-3334
EL Paso, TX (915) 585-3443, Lubbock, TX (806) 794-1296
Hobbs, NM (575) 392-7550, Carlsbad, NM (575) 988-3199

820-8586 Chain of Custody

www.xenco.com Page _____ of _____

Project Manager:		Bill to: (if different)	
Company Name:	~~Sten State AF~~ Buckeye Disp	Company Name:	
Address:		Address:	
City, State ZIP:		City, State ZIP:	
Phone:	Email:		

Work Order Comments

Program: UST/PST ☐ PRP ☐ Brownfields ☐ RRC ☐ Superfund ☐
State of Project:
Reporting: Level II ☐ Level III ☐ PST/UST ☐ TRRP ☐ Level IV ☐
Deliverables: EDD ☐ ADaPT ☐ Other:

Project Name:	STATE AF #3	Turn Around	Pres. Code
Project Number:		☑ Routine ☐ Rush	
Project Location:		Due Date:	
Sampler's Name:		TAT starts the day received by the lab, if received by 4:30pm	
PO #:			

SAMPLE RECEIPT			
Temp Blank:	Yes (No)	Wet Ice:	Yes (No)
Samples Received Intact:	(Yes) No	Thermometer ID:	IR-4
Cooler Custody Seals:	Yes No (N/A)	Correction Factor:	+0.1
Sample Custody Seals:	Yes No (N/A)	Temperature Reading:	23.2
Total Containers:	10	Corrected Temperature:	23.3

ANALYSIS REQUEST — Parameters: Cl, TPH

Preservative Codes

None: NO; DI Water: H_2O; Cool: Cool; MeOH: Me; HCL: HC; HNO_3: HN; H_2SO_4: H_2; NaOH: Na; H_3PO_4: HP; $NaHSO_4$: NABIS; $Na_2S_2O_3$: $NaSO_3$; Zn Acetate+NaOH: Zn; NaOH+Ascorbic Acid: SAPC

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/ Comp	# of Cont	Sample Comments
Site #1 @ 3'		5-16-23	1PM	3'			
Site #2 @ 3'				3'			
Site #3 @ 3'				3'			
Site #4 @ 3'				3'			
Site #5 @ 3'				3'			
Site #6 @ 3'				3'			
Site #7 @ 1'				1'			
Site #7 @ 3'				3'			
Site #8 @ 1'				1'			
Site #8 @ 3'				3'			

Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO_2 Na Sr Tl Sn U V Zn
Circle Method(s) and Metal(s) to be analyzed TCLP / SPLP 6010 : 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Tl U Hg: 1631 / 245.1 / 7470 / 7471

	Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1		Teddy Randell Le	5/24/23 1309			
3				4		
5				6		

Revised Date: 08/25/2020 Rev. 2020.2

Login Sample Receipt Checklist

Client: Buckeye Disposals

Job Number: 820-8586-1

Login Number: 8586

List Number: 1

Creator: Lee, Randell

List Source: Eurofins Lubbock

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	False	Refer to Job Narrative for details.
Cooler Temperature is acceptable.	N/A	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	

Login Sample Receipt Checklist

Client: Buckeye Disposals

Job Number: 820-8586-1

Login Number: 8586
List Number: 2
Creator: Rodriguez, Leticia

List Source: Eurofins Midland
List Creation: 05/25/23 11:10 AM

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	

Appendix D

L02350 Well Log

Form WR-23 FIELD ENGR. LOG STATE ENGINEER OFFICE Well [redacted]4

WELL RECORD

INSTRUCTIONS: This form should be executed in triplicate, preferably typewritten, and submitted to the nearest district office of the State Engineer. All sections, except Section 5, shall be answered as completely and accurately as possible when any well is drilled, repaired or deepened. When this form is used as a plugging record, only Section 1A and Section 5 need be completed.

Section 1

#2 on C-2-137-7 OPN: 25-11767			
0			

(Plat of 640 acres)

(A) Owner of well National Potash Co.
Street and Number Box 731
City Carlsbad State New Mexico
Well was drilled under Permit No. ____ and is located in the ____ ¼ SW ¼ SW ¼ of Section 8 Twp. 18 S Rge. 25 E
(B) Drilling Contractor Abbott Bros. License No. WD-46
Street and Number Box 637
City Hobbs State New Mexico
Drilling was commenced March 1 19 60
Drilling was completed March 5 19 60

Elevation at top of casing in feet above sea level ____ Total depth of well 216
State whether well is shallow or artesian Shallow Depth to water upon completion 105

Section 2 PRINCIPAL WATER-BEARING STRATA

No.	Depth in Feet From	Depth in Feet To	Thickness in Feet	Description of Water-Bearing Formation
1	110	135	25	Water Sand
2	180	212	32	Sand & Gravel
3				
4				
5				

Section 3 RECORD OF CASING

Dia in.	Pounds ft.	Threads in	Depth Top	Depth Bottom	Feet	Type Shoe	Perforations From	Perforations To
12 3/4	40	weld	0	216	216	weld	110	210

Section 4 RECORD OF MUDDING AND CEMENTING

Depth in Feet From	Depth in Feet To	Diameter Hole in in.	Tons Clay	No. Sacks of Cement	Methods Used

Section 5 PLUGGING RECORD

Name of Plugging Contractor ____ License No. ____
Street and Number ____ City ____ State ____
Tons of Clay used ____ Tons of Roughage used ____ Type of roughage ____
Plugging method used ____ Date Plugged ____ 19 ____
Plugging approved by: ____ Basin Supervisor

Cement Plugs were placed as follows:

No.	Depth of Plug From	Depth of Plug To	No. of Sacks Used

FOR USE OF STATE ENGINEER ONLY

STATE ENGINEER OFFICE
Date Received 1960 MAR 17 AM 8:37

File No. L-2350 Use Ind. Location No. 18.35S.32333[illegible]

OCD Ex. 21-080

Section 6

LOG OF WELL

Depth in Feet From	Depth in Feet To	Thickness in Feet	Color	Type of Material Encountered
0	1	1		Soil
1	15	14		Caliche
15	40	25		Sand
40	50	10		Sandstone
50	110	60		Dry Sand
110	135	25		Water Sand
135	180	45		Tight Sand
180	212	32		Sand & Gravel
212	216	4		Red Bed

L S Elev 3952'
Depth to K Trc 212'
Elev of K Trc 3740'

Loc. No. 18.35.8.31444

Hydro. Survey ____ Field Check X

SOURCE OF ALTITUDE GIVEN

Interpolated from Topo. Sheet X

Determined by Inst. Leveling ____

Other ____

L S Elev 3961
Depth to K Trc 212'
Elev of K Trc 3749'

The undersigned hereby certifies that, to the best of his knowledge and belief, the foregoing is a true and correct record of the above described well.

Murrell Abbott
Well Driller

Appendix E

Site Photographs
March 2023

DBS&A
a Geo-Logic Company

1. Empty ASTs staged for removal

2. Unvegetated area to be reclaimed

Appendix F

Revegetation Seed Mix

2017 Zone 6 Seed List: Southern High Plains

Common Name	Botanical Name	Lbs of PLS*/Acre
Annual quick-cover grasses		
Oats	*Avena sativa*	0.50
Sterile triticale	*Triticum aestivum X Secale cereale'Quickguard'*	0.50
Cool-season grasses		
Bottlebrush squirreltail	*Elymus elymoides*	1.75
New Mexico feathergrass	*Hesperostipa neomexicana*	1.00
Western wheatgrass	*Agropyron smithii*	1.75
Warm-season grasses		
Alkali sacaton	*Sporobolus airoides*	0.20
Blue grama	*Bouteloua gracilis var. Alma***	0.50
Buffalograss	*Bouteloua dactyloides*	1.00
Galleta	*Pleuraphis jamesii var. Viva***	1.00
Little bluestem	*Schizachyrium scoparium*	0.50
Sand dropseed	*Sporobolus cryptandrus*	0.05
Sideoats grama	*Bouteloua curtipendula var. Vaughn***	0.50
Wildflowers		
Blanket flower	*Gaillardia pulchella*	0.30
Common sunflower	*Helianthus annuus*	1.00
Dotted gayfeather	*Liatris punctata*	0.50
Hairy golden aster	*Heterotheca villosa*	0.20
Prairie aster	*Machaeranthera tanacetifolia*	0.20
Prairie coneflower	*Ratibida columnifera*	0.20
Purple prairie clover	*Dalea purpurea var. purpurea*	0.30
Scarlet globemallow	*Sphaeralcea coccinea*	0.30
White prairie clover	*Dalea candida*	0.20

Woody Shrubs

Four-wing saltbush	*Atriplex canescens*	0.40
Sand sage	*Artemisia filifolia*	0.05
Spanish bayonet	*Yucca glauca*	0.50
Winterfat	*Krascheninnikovia lanata*	0.20

***PURE LIVE SEED/ACRE TOTAL**	**12.10**

**** Local, wild-sourced genotypes preferred. Provide specified registered variety only if wild-sourced seed is unavailable.**

OCD Permitting

Rejected by the OCD Fee [C-141] Release Corrective Action (C-141)

Submission Contact, Application, Fee and Payment Details for Application ID: 265158

Return to Under OCD Review

First Name: Terry
Last Name: Payton
Email: terry@bergsteinenterprises.com

Operator: [222759] BUCKEYE DISPOSAL, L.L.C.
Application Status: Rejected by the OCD
Fee Amount: **$150.00**
Pay Amount: $150.00 Credit Card [CC]

Type	ID	District	County	Location
Incident ID	[nOY1813152090]	Hobbs	Lea	L-08-18S-35E 1980 FSL 990 FWL 32.7605324,-103.4851837 NAD83

Attachment Type (Description) Tag(s)	Original Uploaded File Name
C-141	Remediation Plan_State AF #003_8-25-2023.pdf (6433.8 KB)
	Files: 1 Total Size: **6.3 MB**

Event Dates

Created On: 9/13/2023 5:34 PM
Modified On: 9/19/2023 12:52 PM

Created By: tpayton
Modified By: bhall

Department Notes

Questions

Comments

Conditions of Approval

Reasons of Rejection

Analytical results for the samples collected will not be accepted for the following reasons: Total petroleum hydrocarbons were not analyzed using an acceptable method. Acceptable methods for each analyte are listed in 19.15.29 NMAC on Table I. Other methods may be used as long as they are approved prior to analysis. All laboratory reports indicate that the samples were not received at the proper temperature and were not received by the laboratories on ice.

Added on 9/19/2023 by bhall Remove

All samples will need to be analyzed for all the constituents listed on Table I.

Added on 9/19/2023 by bhall Remove

Per 19.15.29.12 C.(4) NMAC If a release occurs within the following areas, the responsible party must treat the release as if it occurred less than 50 feet to ground water in Table I of 19.15.29.12 NMAC: (c) within (ii) 1000 feet of any fresh water well or spring. The release is within 1000 feet of a fresh water well and regardless of depth to groundwater, the release must be delineated, both horizontally and vertically, and remediated to the most stringent closure standards in Table I.

Added on 9/19/2023 by bhall Remove

Added on 9/19/2023 by bhall Remove

Two releases are referred to in the report. Reports can be used for multiple incident numbers but the report will need to be submitted through the OCD Permitting website under each individual incident number.

Added on 9/19/2023 by bhall Remove

Department Use Only

Contact Phone:
Contact Email:
Internal Comment:
Reviewer: Take Reviewership

Fee Information

Created On: 9/13/2023 5:34 PM
Created By: tpayton
Type: SB553 A.(2)
PO Number: B5EFL-230913-C-1410
Amount: $150.00
Modified On: 9/13/2023 5:34 PM
Modified By: tpayton

Payment Information

Created On: 9/13/2023 5:49 PM
Created By: tpayton
Status: Paid
Type: Credit Card
Amount: $150.00
Modified On: 9/19/2023 12:52 PM
Modified By: bhall

From:	Hall, Brittany, EMNRD
To:	"Ayarbe, John"
Cc:	"saskia@thestandardenergy.com"; "Jack Yates"
Subject:	RE: [EXTERNAL] FW: The Oil Conservation Division (OCD) has rejected the application, Application ID: 265158
Date:	Tuesday, December 5, 2023 7:41:00 AM

Good morning John,
The extension request for NOY1813152090 is approved. The new due date is February 2, 2024.
Please include a copy of this and all notifications in the remedial and/or closure reports to ensure the notifications are documented in the project file.
Please be advised that the new Digital C-141 is live as of December 1, 2023. Please review the new Digital C-141 submission Dec 1, 2023 Guidance document posted on the EMRND Website prior to submitting any C-141s. The guidance documents can be found at https://www.emnrd.nm.gov/ocd/ocd-announcements-and-notifications/ or https://www.emnrd.nm.gov/ocd/ocd-forms/.
Please let me know if you have any questions regarding the Digital C-141.
Thank you,

Brittany Hall ● Environmental Specialist
Environmental Bureau Projects Group
EMNRD - Oil Conservation Division
1000 Rio Brazos Road | Aztec, NM 87110
505.517.5333 | Brittany.Hall@emnrd.nm.gov
http://www.emnrd.nm.gov/ocd/

From: Ayarbe, John
Sent: Monday, December 4, 2023 8:17 PM
To: Hall, Brittany, EMNRD
Cc: saskia@thestandardenergy.com; 'Jack Yates'
Subject: [EXTERNAL] FW: The Oil Conservation Division (OCD) has rejected the application, Application ID: 265158

Hi Brittany,
I'm submitting this email to you on behalf of Buckeye Disposal LLC (Buckeye) to request an extension for the submittal of a revised remediation plan for the State AF #003 site near Hobbs, New Mexico (incident #NOY1813152090). Last week, Buckeye collected soil samples to better delineate soil impacts and meet the analytical criteria specified in your email below. The samples were submitted to Cardinal Laboratories in Hobbs.
We are seeking a 45 day extension (due date of 2/2/204).
Thanks!

John P. Ayarbe
Senior Hydrogeologist
Daniel B. Stephens & Associates, Inc.
a Geo-Logic Company
Direct: (505) 353-9137
Mobile: (505) 280-4339

From: Saskia Bergstein <saskia@thestandardenergy.com>
Sent: Wednesday, September 20, 2023 7:45 AM
To: Ayarbe, John <jayarbe@geo-logic.com>
Subject: FW: The Oil Conservation Division (OCD) has rejected the application, Application ID: 265158

From: Terry Payton <terry@thestandardenergy.com>
Sent: Tuesday, September 19, 2023 1:57 PM
To: Saskia Allen <saskia@thestandardenergy.com>; Jack Yates <Jack@thestandardenergy.com>
Subject: FW: The Oil Conservation Division (OCD) has rejected the application, Application ID: 265158
Does this need to be sent to Daniel B. Stephens?
Terry Payton
Financial Officer
Bergstein Enterprises, Ltd.
PO Box 191
Lubbock, TX 79408
Office: 806-741-1080
Fax: 806-741-1301

"Standard Energy Services is a Platinum Safety Award winning company."

From: OCDOnline@state.nm.us [mailto:OCDOnline@state.nm.us]
Sent: Tuesday, September 19, 2023 1:53 PM
To: terry@bergsteinenterprises.com
Subject: The Oil Conservation Division (OCD) has rejected the application, Application ID: 265158

To whom it may concern (c/o Terry Payton for BUCKEYE DISPOSAL, L.L.C.),

The OCD has rejected the submitted *Application for administrative approval of a release notification and corrective action* (C-141), for incident ID (n#) nOY1813152090, for the following reasons:

- **Analytical results for the samples collected will not be accepted for the following reasons: Total petroleum hydrocarbons were not analyzed using an acceptable method. Acceptable methods for each analyte are listed in 19.15.29 NMAC on Table I. Other methods may be used as long as they are approved prior to analysis. All laboratory reports indicate that the samples were not received at the proper temperature and were not received by the laboratories on ice.**
- **All samples will need to be analyzed for all the constituents listed on Table I.**
- **Per 19.15.29.12 C.(4) NMAC If a release occurs within the following areas, the responsible party must treat the release as if it occurred less than 50 feet to ground**

water in Table I of 19.15.29.12 NMAC: (c) within (ii) 1000 feet of any fresh water well or spring. The release is within 1000 feet of a fresh water well and regardless of depth to groundwater, the release must be delineated, both horizontally and vertically, and remediated to the most stringent closure standards in Table I.

- **There is a playa lake located southeast of SB-08. Horizontal and vertical delineation of the site will need to include sample points that will assess if the playa lake has been impacted by the release.**
- **1RP-5056 closed. Refer to incident #NOY1813152090 in all future communication.**
- **Submit a complete report though the OCD Permitting website by 12/19/2023.**
- **Two releases are referred to in the report. Reports can be used for multiple incident numbers but the report will need to be submitted through the OCD Permitting website under each individual incident number.**

The rejected C-141 can be found in the OCD Online: Permitting - Action Status, under the Application ID: 265158.
Please review and make the required correction(s) prior to resubmitting.
If you have any questions why this application was rejected or believe it was rejected in error, please contact me prior to submitting an additional C-141.

Thank you,
Brittany Hall
Projects Environmental Specialist - A
505-517-5333
Brittany.Hall@emnrd.nm.gov

New Mexico Energy, Minerals and Natural Resources Department
1220 South St. Francis Drive
Santa Fe, NM 87505

Proposed Remediation Plan
State AF #003 SWD Site

Prepared for

Buckeye Disposal, Inc.

Prepared by

DBS&A
a Geo-Logic Company

6020 Academy NE, Suite 100
Albuquerque, New Mexico 87109
www.dbstephens.com
DB19.1241

March 3, 2025

Table of Contents

List of Figures

List of Tables

List of Appendices

1. Introduction

On behalf of Buckeye Disposal, Inc. (Buckeye), Daniel B. Stephens & Associates, Inc. (DBS&A) has prepared this proposed remediation plan (SAP) for the State AF #003 SWD site (the site) located on State of New Mexico Business Lease BL-2050 in Section 8, Township 18 South, Range 35 East, NMPM. Until recently, Buckeye operated a salt water disposal well at the site. Since ceasing disposal well operations, Buckeye has plugged and abandoned the disposal well and has removed the tank battery. The salt water disposal well was plugged and abandoned in April 2023 (Appendix A). Buckeye has also removed the tank battery, including the 40-mil high-density polyethylene (HDPE) flexible membrane liner of the secondary containment, from the site.

On May 17, 2024, DBS&A submitted an Updated Site Assessment Plan (updated SAP) for the site to the New Mexico State Land Office (NMSLO). Brittany Hall of the Oil Conservation Division (OCD) was carbon copied on the submission. Submission of the updated SAP also included DBS&A responses to NMSLO comments on a previous version of the site assessment plan. The updated SAP described investigation activities to delineate the lateral and vertical extents of brine impacts to soil at the site, including several peripheral areas (DBS&A, 2024). Investigation activities included a non-invasive electromagnetic survey and soil sampling. Atkins Engineering Associates, Inc. (Atkins), a subcontractor to DBS&A, completed the electromagnetic survey in October 2024. DBS&A, with support from Buckeye, collected soil samples in January 2025. The electromagnetic survey was completed in accordance with the updated SAP (DBS&A, 2024). The soil samples were collected from two exploratory excavations advanced in the areas of highest soil salinity as indicated by results of the electromagnetic survey: (1) near the former location of the salt water disposal well, and (2) former location of the lined tank battery. Results of the October 2024 electromagnetic survey and January 2025 soil sampling provide sufficient data to initiate remediation at the site, with the understanding that confirmation soil samples will need to be collected and analyzed during remediation to define excavation extents.

Basic information regarding the site is as follows:

- Operator: Buckeye Disposal, Inc. (Buckeye)
- Consultant information: John Ayarbe (DBS&A), (505) 822-9400, jayarbe@geo-logic.com
- Site name: State AF #003 SWD
- API number: 30-025-20980

- State Land Office lease numbers: SW-324 and BL-2050
- OCD incident numbers: NOY1813152090 and NKL1625134663
- Public Land Survey System (PLSS) location: Section 8, Township 18 South, Range 35 East, NMPM
- County: Lea County
- Latitude and longitude: 32°45'37.23"N, 103°29'7.03"W

Buckeye's operational footprint at the site generally consisted of the State AF #003 SWD well pad, former tank battery pad, and the access road connecting them. Buckeye also maintained a pipeline that ran north from the tank battery to the SWD well. There are several other pipelines and facilities (both active and historical) in the vicinity of Buckeye's operational footprint.

This remediation plan is intended to satisfy the requirements of NMSLO and OCD, as stipulated in the NMSLO reclamation rules, SW-324, and Section 13 of 19.15.29 NMAC. It presents background information (Sections 2 and 3), describes characterization activities used to define the lateral and vertical extents of impacts to soil (Section 4), and provides a proposed remediation plan (Section 5). Some of the information presented herein was previously reported in the updated SAP (DBS&A, 2024), including the background descriptions in Sections 2 and 3 and characterization activities summarized in Section 4.1.

2. Site Soils and Water Resources

The Natural Resources Conservation Service (NRCS) map unit for the site is Kimbrough-Lea complex, which NRCS describes as a calcareous, loamy eolian deposit of Pleistocene age overlying indurated caliche of Pliocene age NRCS (2024). Crushed caliche has been placed on the areas of the former locations of the well pad and tank battery, as well as the access road that connects the two locations, giving each area a white appearance. Surface soils of the surrounding undisturbed, vegetated areas consist of eolian sand, consistent with the NRCS description for the region.

Information available online from the New Mexico Office of the State Engineer (OSE) indicates that the depth to shallow groundwater at the well closest to the site (well L02350) is greater than 100 feet below ground surface (bgs) (Figure 1). Well L02350 is north-northeast of the former location of the tank battery (Figure 1). The well log indicates that the boring for the well was drilled to a total depth of 216 feet bgs in March 1960, and that the boring penetrated a

water-bearing zone at 110 feet bgs (Appendix B). The well is currently owned by Intrepid Potash, New Mexico, LLC (Intrepid), is referred to as Intrepid Potash North Well N-4, and is permitted for industrial use. On February 20, 2020, DBS&A contacted Intrepid's East Plant regarding the status of the well and the water level at the well. They reported that the current water level in the well is 115 feet bgs. Based on this information, depth to groundwater at the site is greater than 100 feet bgs.

Appendix C is a map showing the proximity of significant surface water features to the site. It was created using the New Mexico OCD Oil and Gas Map (NM OCD, 2024). The nearest surface water feature to the site is an unnamed drainage approximately 1,900 feet southwest of the former location of the salt water disposal well and approximately 1,000 feet southwest of the former location of the tank battery. A depression is located approximately 390 feet southeast of the former location of the tank battery. The depression is shown as a freshwater pond (PUBF) in the U.S. Fish and Wildlife Service (USFWS) National Wetland Inventory online map (USFWS, 2024). The depression is not a perennial pond, but rather an ephemeral surface water feature.

3. Releases and Initial Soil Characterization

Two releases occurred within the former tank battery secondary containment, which was lined with a 40-mil HDPE flexible membrane. They occurred on August 20, 2016 and May 4, 2018. Buckeye submitted release notification forms (Form C-141) to OCD for these releases (Appendix D). In response to the notifications, OCD assigned remediation permit 1RP-4429 on September 7, 2016 and remediation permit 1RP-5056 on May 11, 2018.

On February 14, 2019, soil samples were collected from seven locations around the perimeter of the tank battery secondary containment, as shown in Figure 2. Samples were collected from depths up to 36 inches using a backhoe. The samples were submitted to Cardinal Laboratories (Cardinal) in Hobbs, New Mexico and analyzed for chloride. Sample results are provided in Figure 2. The Cardinal laboratory report is provided in Appendix E.

In June 2020, a third release occurred near the tank battery from a pipeline operated by Vanguard Natural Resources (Vanguard). The pipeline conveyed produced water to the tank battery for disposal at the salt water disposal well. Buckeye estimates that approximately 50 to 100 barrels of produced water was spilled outside of the tank battery secondary containment. The release occurred on the upstream side of a valve connecting Vanguard's pipeline to the tank battery. Buckeye advised Vanguard of the release from its pipeline and requested that

Vanguard take appropriate action regarding the release. Buckeye also verbally notified OCD of the release, but expected that it was Vanguard's responsibility to complete and submit a C-141 Release Notification Form, as Vanguard was the pipeline operator and was responsible for the pipeline; however, Buckeye does not have documentation that Vanguard reported the release to OCD. Because this release occurred outside of the secondary containment, it is likely to have had a more significant impact on soils of the tank battery pad than the two reported releases within the secondary containment.

4. Additional Characterization Activities

Buckeye and DBS&A have completed additional characterization activities at the site since the initial soil sampling was conducted on February 14, 2019. Characterization activities have been expanded to include the pad for the former salt water disposal well and general vicinity of the site. Characterization activities were expanded to support site closure.

4.1 December 2023 Soil Sampling

On December 1, 2023, Buckeye collected additional soil samples from the site. The samples were collected at the pad where the salt water disposal well was located, at the former location of the tank battery, and along the small drainage that runs to the south from the former location of the tank battery. A total of 17 locations were investigated. Samples were collected at depths of 2 and 4 feet. Samples could not be collected at 4 feet at all locations due the presence of well indurated caliche. The samples were collected with a shovel.

The soil samples were submitted to Cardinal, where they were analyzed for the following constituents, in accordance with Table 1 of 19.15.29.12 NMAC:

- Chloride using Standard method (SM) 4500-Cl-B
- Total petroleum hydrocarbons (TPH) using U.S. Environmental Protection Agency (EPA) method 8015B
- Benzene, toluene, ethylbenzene, and total xylenes (BTEX) using EPA method SW-846 8021B

The Cardinal laboratory report is provided in Appendix E, and the analytical results are summarized in Table 1. Figures 3a through 4b show the distributions of soil chloride and TPH based on the analytical results. BTEX constituents were not detected (at detection limits of

0.05 or 0.15 milligrams per kilogram [mg/kg] for each constituent) in the soil samples, and are therefore not mapped.

Chloride concentrations of the soil samples range from 32 mg/kg (AF10 at 2 feet) to 5,840 mg/kg (AF01 at 2 feet). The highest chloride concentration was measured in one of the soil samples collected at the former tank battery location (Figure 3b). TPH concentrations of the soil samples range from non-detect (at a detection limit of 10.0 mg/kg) at a majority of the sample locations to 2,389.6 mg/kg (AF03 at 2 feet). Like for chloride, the highest TPH concentration was measured in one of the soil samples collected at the former tank battery location (Figure 4b).

Results for 11 of the 23 soil samples exceed the most stringent OCD numerical limit for chloride (600 mg/kg), while results for 4 of the 23 soil samples exceed the most stringent OCD numerical limit for TPH (Table 1). Application of the most stringent OCD numerical limits is based on the proximity of the Intrepid North Well N-4 (OSE number L02350) to the site (Section 2). However, based solely on depth to groundwater, the OCD numerical limits for chloride and TPH are considerably higher, at 20,000 mg/kg and 2,500 mg/kg, respectively. The chloride and TPH concentrations of the soil samples collected at the site in December 2023 are all well below these higher OCD numerical limits.

Soil chloride and TPH concentration distributions correlate with the appearance of site soils. Figures 3a and 4a show the area around the pad of the former salt water disposal well. Soils that are disturbed are white to light tan in color, while undisturbed soils are browner and support vegetation. Sample sites in the disturbed area have chloride concentrations ranging from 640 mg/kg (AF17 at 4 feet) to 3,040 mg/kg (AF16 at 2 feet). TPH concentrations of the disturbed area range from non-detect (AF12 at 2 feet, AF16 at both depths, and AF17 at 2 feet) to 454 mg/kg (AF12 at 4 feet). In undisturbed areas, chloride concentrations range from 96 mg/kg (AF13 at 2 feet) to 496 mg/kg (AF14 at 4 feet), and TPH was not detected.

Figures 3b and 4b show the area around the former tank battery location. Sample sites in the disturbed area have chloride concentrations ranging from 160 mg/kg (AF05 at 2 feet) to 5,840 mg/kg (AF01 at 2 feet) and TPH concentrations ranging from non-detect (AF05, AF06, AF07, and AF08 at 2 feet) to 2,389.6 mg/kg (AF03 at 2 feet). Chloride concentrations in soil in the undisturbed area range from 32 mg/kg (AF10 at 2 feet) to 368 mg/kg (AF02 at 2 feet). Results for TPH in this area are all non-detect.

Soil sample locations AF09 and AF10 were selected near the depression located southeast of the former tank battery location to investigate whether stormwater runoff from the area of the tank battery has impacted soils of the depression. The sample locations were selected where stormwater runoff enters the depression. Chloride concentrations at AF09 and AF10 were 48 and 32 mg/kg, respectively (Figure 3b). TPH was not detected (Figure 4b). These results show that runoff from the site has not affected soils of the depression.

4.2 Site Assessment Plan Implementation

Based on results of the December 2023 soil sampling and at the requests of OCD and NMSLO, Buckeye further characterized impacts to soil in the areas of the former salt water disposal well pad and former tank battery location, as well as the access road that connects them. Proposed characterization activities were described in a Site Assessment Plan, and consisted of a soil salinity surface geophysical survey (Section 4.2.1) and soil sampling (Section 4.2.2) (DBS&A, 2024). The purpose of these characterization activities was to better define the lateral and vertical extents of impacts to soil in support of development of a remediation plan to restore the site to a condition similar to that before Buckeye's lease.

4.2.1 October 2024 Electromagnetic (EM) Survey

On October 8, 2024, Atkins conducted an electromagnetic (EM) geophysical survey and collected drone based aerial photography at the site under the direction of DBS&A. The geophysical survey was completed using two Geonics Limited instruments: (1) an EM31 and (2) an EM38-MK2. Both instruments measure apparent soil electrical conductivity (EC_A), a measure of soil salinity, and soil magnetic susceptibility using electromagnetic induction. The EM31 and EM38-MK2 feature different coil lengths, which allowed for a variety of depths to be investigated. The EM31 has a 12-foot coil that provides an investigation depth of approximately 20 feet when operated in the vertical dipole orientation. The EM38-MK2 has 0.5-meter and 1.0-meter coils. These coils provide investigation depths of approximately 2.5 and 4.9 feet, respectively, when operated in the vertical dipole orientation. The EM geophysical survey was conducted by carrying each instrument across the site at regular intervals to provide coverage of the entire site. The density of measurements and survey extent were determined from real-time readings from the instruments. The readings informed the operator of areas of high soil conductivity, which were given more detailed delineation. A high-precision global positioning system (GPS) unit was paired with the EM instruments to provide location information for the EM readings.

Atkins provided the EM survey data to DBS&A for processing. DBS&A processed the data to create soil conductivity maps for each depth of investigation provided by the two instruments and different coil lengths (i.e., 2.5, 4.9, and 20 feet). Data processing included removing data skewed by magnetic inference caused by metallic objects in the field, such as pipelines and vehicles, which are identifiable by elevated magnetic susceptibility readings. A correction scalar was applied to data from the EM38-MK2 0.5-meter coil to adjust baseline readings to zero. This calibration step is routine for the 0.5-meter coil on this particular instrument. The data were then interpolated by kriging using R statistical computing software with the gstat package.

The interpolated EM survey were matched to the locations of the December 2023 soil sample points to provide a relationship between EC_A (as measured by the EM instruments) to soil chloride concentration (as measured by Cardinal). DBS&A used linear regression to determine the EC_A values from the EM38-MK2 instrument that equate to a soil chloride concentration of 600 mg/kg. This was done for data from both the 0.5-meter and 1.0-meter coils to identify areas expected to exceed soil chloride concentrations of 600 mg/kg at depths of up to 2 and 4 feet, respectively. Chloride data are not available at deeper depths consistent with the EM31 depth of investigation; therefore, DBS&A did not attempt to relate EC_A readings of this instrument to soil chloride concentration. Notably, the EM31 had much lower EC_A readings across the site than the EM38-MK2, indicating that salinity is lower at depth than near land surface (Figure 5a).

Results from the EM38-MK2 with the 0.5-meter and 1.0-meter coils are shown in Figures 5b and 5c, respectively. Areas predicted to have greater than 600-mg/kg soil chloride concentrations to 2-foot and 4-foot depths are shown in the figures. In general, the predicted areas agree with results from the December 2023 soil sampling. The predictions appear to overestimate some areas, as evidenced by the fact that they include some well vegetated soil. The EM geophysical survey shows regions of high EC_A at the former locations of the State AF #003 SWD well and tank battery (Figure 5b and 5c). Other areas with high EC_A are also present, such as (1) the area of a suspected reserve pit north of the State AF #003 SWD well, (2) the area of a possible pipeline release located between the former salt water disposal well and tank battery, (3) the east end of the former tank battery pad, where a pipeline exist, and (4) the depression to the south of the former tank battery pad. The access road does not show elevated EC_A, indicating that it is not impacted.

4.2.2 January 2025 Soil Sampling

On January 28, 2025, DBS&A's contractor CMB Environmental LLC (CMB) collected soil samples from two exploratory excavations advanced at the site. The exploratory excavations were placed near the former salt water disposal well and at the former tank battery location, in areas with the highest EC_A values and where Buckeye operated (Figures 5a through 5c). Other areas with high EC_A were not investigated further because they were likely impacted by other operators. For instance, pipelines are present at the east end of the former tank battery pad and in the bare area between the former salt water disposal well and tank battery. Other operators are responsible for these pipelines and presumably any releases. The interpolated EM geophysical surveys show separation between areas operated by Buckeye and these other areas with high EC_A, including the depression south of the former tank battery location (Figures 5b and 5c). Because the soil sampling was limited to the two indicated areas, the investigation herein differs from that presented in the Site Assessment Plan (DBS&A, 2024).

The exploratory excavations were advanced with a trackhoe and soil samples were collected from the trackhoe bucket. Buckeye provided and operated the trackhoe. Soil samples were collected at 2-foot intervals until refusal was reached, which was 6 feet at the former salt water disposal well pad and 8 feet at the former tank battery location. The purpose of the soil sampling was to define the vertical extents of impacts to soil in the areas where Buckeye operated.

Soil sampled from each 2-foot interval was homogenized in a clean container and then split for field electrical conductance ($EC_{1:5}$) screening and laboratory analyses. Field $EC_{1:5}$ screenings were performed on soil-water mixtures (i.e., paste) consisting of 1 part soil to 5 parts distilled water by volume, and included measurement of specific conductance (EC readings normalized to 25°C). A total of seven soil samples were submitted to Cardinal and analyzed for the following:

- Chloride using SM 4500-Cl-B
- TPH, including gasoline-range organics (GRO) (C8-C10), diesel-range organics (DRO) (>C10-C28), and motor oil-range organics (MRO) (>C28-C36) using EPA method 8015 modified
- BTEX using EPA method SW-846 8021B

The Cardinal laboratory report is provided in Appendix E; results are summarized in Table 2.

The exploratory excavation at the former salt water disposal well pad was placed near the former State AF #003 SWD well (Figures 5a through 5c). The excavation was advanced to a depth of approximately 6 feet, where well-indurated caliche was encountered. A tooth from the trackhoe bucket was broken in an attempt to excavate beyond the caliche. The unconsolidated material above the caliche consisted of odorless, well-sorted, medium-grained red sand. A summary of field EC screening and laboratory results follows:

- Field $EC_{1:5}$ ranged from 1,235 microsiemens per centimeter (µS/cm) (at 4 to 6 feet) to 2,559 µS/cm (at 0 to 2 feet).
- Chloride concentrations ranged from 1,800 mg/kg (at 4 to 6 feet) to 3,200 mg/kg (at 0 to 2 feet).
- TPH and BTEX constituents were not detected in any of samples at detection limits of 10.0 mg/kg and 0.150 mg/kg, respectively.

The exploratory excavation at the former tank battery was placed where the HDPE liner once existed (Figures 5a and 5c). Several excavations were attempted before the trackhoe was able to penetrate beyond 2 feet. The final excavation was advanced to a depth of approximately 8 feet, where refusal was reached. Excavated material consisted of well-sorted, medium-grained tan to brown sand. Petroleum odor and staining were not observed. A summary of field EC screening and laboratory results follows:

- Field $EC_{1:5}$ ranged 600 µS/cm (at 4 to 6 feet) to 2,628 µS/cm (at 0 to 2 feet).
- Chloride concentrations ranged from 688 mg/kg (at 4 to 6 feet) to 4,400 mg/kg (at 0 to 2 feet).
- TPH concentrations ranged from 3,859 mg/kg (at 6 to 8 feet) to 13,968 mg/kg (at 4 to 6 feet).
- BTEX constituents were not detected in any of samples at detection limits of 0.150 mg/kg.

At both exploratory excavations, soil chloride concentrations exceeded 600 mg/kg (the most stringent OCD numerical limit for chloride) at the deepest depths investigated (i.e., 6 feet at the former salt water disposal well pad and 8 feet at the former tank battery location). Soil TPH concentrations at the former tank battery location also exceeds the most stringent OCD numerical limit for TPH (100 mg/kg).

Soil samples were collected from fewer locations than proposed in the Site Assessment Plan (DBS&A, 2024) because information obtained from the October 2024 EM geophysical survey is sufficient to define the lateral extents of impacts to soil to initiate remediation, with the understanding that confirmation soil samples will need to be collected and submitted to a laboratory. Field screening ($EC_{1:5}$) and confirmation soil sampling will ultimately be used to define excavation limits. Soil samples were collected from the two exploratory excavations to assess the vertical extents of impacts to soil. The January 2024 investigation was limited to areas operated by Buckeye because the interpolated EM geophysical survey results show separation between areas operated by Buckeye and the other areas with high EC_A (Figures 5b and 5c). It is reasonable to conclude that the other areas have been impacted by other operators, especially given the presence of several pipelines at the site. Figure 6 shows NMSLO leases in the vicinity of the site and locations of readily identifiable pipelines. These are not Buckeye pipelines; they are operated by other companies.

5. Proposed Remediation and Reclamation Plan

Buckeye will remediate the impacted areas at the former salt water disposal well pad and the former tank battery location. They will excavate impacted soil from a depth of up to 4 feet and replace it with clean fill. The remediated areas will be graded and seeded to restore them pursuant to 19.15.29.13 NMAC (OCD requirements) and SW-324 (NMSLO requirements). Where OCD and NMSLO requirements differ, NMSLO reclamation requirements will apply. For instance, Buckeye plans to achieve a native plant cover and diversity equal to or exceeding the natural levels in undisturbed soils adjacent to the site (NMSLO requirement). The OCD requirement for establishment of vegetation success is a uniform vegetative cover with a lifeform ratio of ±50 percent of pre-disturbance levels and a total percent plant cover of at least 70 percent of pre-disturbance levels, excluding noxious weeds. The anticipated excavation areas are shown in Figure 7, along with the areas predicted to have greater than 600 mg/kg soil chloride concentrations to 2-foot and 4-foot depths based on the EM geophysical survey.

Buckeye has already removed all infrastructure from the site and plugged and abandoned the disposal well (Appendix A).

5.1 Approach

The purpose of the proposed remediation plan is to restore the two areas to conditions similar to the native landscape. The areas will be graded and then seeded to establish vegetative cover

that equals or exceeds the natural levels in undisturbed areas adjacent to the site, per NMSLO reclamation rules and SW-324 (NMSLO, 2018). The proposed remediation plan is described in the following subsections.

5.1.1 Soil Removal

Buckeye will remove impacted soil using common earthmoving equipment (e.g., a backhoe or trackhoe). Soil from a depth of up to 4 feet with chloride, TPH, BTEX, and/or benzene concentrations greater than the strictest standards provided in Table 1 of 19.15.29.12 NMAC (i.e., 600 mg/kg chloride, 100 mg/kg TPH, 50 mg/kg total BTEX, and 10 mg/kg benzene) will be removed. Buckeye will attempt to excavate soil to a depth of 4 feet unless one of the following conditions is met: (1) field screening and confirmation soil sampling data indicate that soil meets the aforementioned standards or (2) consolidated caliche or bedrock is encountered and cannot be penetrated. As described in Section 4, during soil sampling, caliche was often present at depths less than 4 feet. The caliche is well indurated and can be difficult to impossible to penetrate with common earthmoving equipment. Excavated soil will be transported off-site to Lea Land LLC in Hobbs, New Mexico.

A field scientist will be present to oversee and document remediation and reclamation activities, including field screen of soil samples to direct the removal. The field scientist will take field $EC_{1:5}$ and PID measurements of the soil samples to determine the lateral and vertical extents of chloride and TPH impacts to soil to be removed (Section 5.1.2). Excavation will continue until screening criteria are met, except where excavations abut areas of impacted soil not caused by Buckeye operations. These exceptions include (1) the wash south of the former tank battery location and (2) the suspected reserve pit north of the former State AF #003 SWD well. The June 2020 Vanguard pipeline release has likely had a more substantial impact on the wash, and Buckeye did not construct or operate in the area of the suspected reserve pit.

Anticipated excavation extents are shown in Figure 7. The northern excavation area (near the former State AF #003 SWD well) is approximately 0.4 acre. The southern excavation area (at the former tank battery location) is approximately 1.6 acres. Assuming an excavation depth of 4 feet at both locations, the volumes of soil to be removed are approximately 2,700 and 10,100 cubic yards at the northern and southern excavation areas, respectively.

In addition to removing impacted soil, Buckeye will remove emplaced caliche from the access road and pads present on the site. Where possible, this material will be isolated from impacted soils and recycled.

5.1.2 Field Screening and Confirmation Soil Sampling

DBS&A used linear regression to correlate the January 2025 field EC screening (field $EC_{1:5}$) results to the laboratory chloride analytical results to determine a site-specific field $EC_{1:5}$ value that can be used to assess if chloride concentrations in soil are expected to be above or below 600 mg/kg in the field. As shown in Figure 8, there is a strong correlation between field $EC_{1:5}$ and chloride (r^2 = 0.91). A chloride concentration of 600 mg/kg is equivalent to a field $EC_{1:5}$ of 529 µS/cm. To be conservative while directing soil removal activities, the targeted field $EC_{1:5}$ value of 500 µS/cm will be used to guide soil removal (i.e., soil with field $EC_{1:5}$ values greater than 500 µS/cm will be removed).

TPH and BTEX screening will be performed using a photoionization detector (PID). Field $EC_{1:5}$ and PID measurements will also be collected as the excavations are advanced.

When both field $EC_{1:5}$ values are at or below 500 µS/cm and PID measurements indicate no hydrocarbons, the lateral or vertical extents of excavation will be considered sufficient, excavation will stop, and confirmation soil samples will be collected for analysis at Cardinal.

Confirmation samples will be collected at regular intervals to demonstrate that all impacted soil has been removed up to a depth of 4 feet. Vertical confirmation samples will be collected from the bottoms of the excavations at locations not excavated to 4 feet. Lateral confirmation samples will be collected from the perimeters of the excavations. Anticipated confirmation sample locations are shown in Figure 7. DBS&A anticipates that one vertical and four lateral samples will be collected from the northern excavation, and that five vertical and seven lateral samples will be collected from the southern excavation. However, the actual number and locations of confirmation samples may change due to the sizes and geometries of the actual excavations, as informed by field screening data.

Buckeye will attempt to determine the vertical extent of TPH impacts to soil at the former tank battery location during soil removal. The January 2025 soil sampling results showed TPH impacts to soil to 8 feet bgs (final depth investigated). The sampling results exceeded the most stringent OCD numerical limit for TPH (100 mg/kg). The TPH impacts appear to be limited to the area of the lined secondary containment.

5.1.3 Soil Replacement, Grading, and Revegetation

Buckeye will obtain clean soil to backfill the excavations from SB Land, LLC (SB Land) in Lovington, New Mexico. SB Land sells caliche, clay, and top soil. Buckeye will purchase top soil

for backfilling. The top soil will consist of non-waste-containing, uncontaminated earthen material with chloride concentrations less than 600 mg/kg (as analyzed by EPA method 300.0). The top soil will be suitable for the establishment of vegetation at the site.

The excavations will be backfilled with top soil and then graded and revegetated, as follows:

- *Grade:* The regional topography in the vicinity of the site slopes gently to the southeast at a grade of approximately 0.4 percent. Buckeye will regrade the two areas so that they slope to the southeast at a grade consistent with the regional topography (i.e., less than 1 percent). Sloping will help to restore the natural drainage pattern. Before grading, the crushed caliche that has been placed on the access road and pads of the former salt water disposal well and tank battery locations will be removed.
- *Revegetate:* The site will be revegetated using a seed mix consisting of native plants common to the area (Appendix F). Revegetation will include cross ripping, scarification, seeding, and mulching, as follows:
  - *Scarification:* Scarification will be used to roughen the soil surface and provide a suitable seedbed. It will be performed with common earthmoving equipment. The degree of scarification required for proper seeding will be determined after grading, but will be completed to a depth of 2 to 4 inches. It will be conducted on contour to avoid the development of flow paths parallel to the slope that could promote erosion.
  - *Seeding:* Seeds will be broadcast using common rangeland or other appropriate equipment. Seeds will be allowed to fall freely and will be subsequently covered (e.g., raked). Buckeye will conduct seeding just before the monsoon season to help promote growth and revegetation success. Seed will be applied at the rates specified in Appendix F. This seed mix was selected from those of NMSLO and includes annual quick-cover grasses, cool-season and warm-season grasses, wildflowers, and woody shrubs.
  - Mulching: Buckeye will apply weed-free mulch to the revegetated soil surface to minimize wind and stormwater erosion and to help maintain soil moisture.

Buckeye will use care to not introduce rocks and caliche into the top soil will performing earthwork (e.g., grading and scarification).

The expected total area to be restored is 2.0 acres, and is shown on Figure 7. Upon completion of site remediation and reclamation, Buckeye will complete and submit the site characterization and remediation portions of Form C-141 to OCD.

5.2 Schedule

Buckeye will implement the proposed measures just before the first monsoon season following OCD and NMSLO approval of this remediation plan. The monsoon season is typically between mid-July and September, so the majority of the earthwork is expected to be conducted in May and June and the two remediated areas seeded in mid-July. If necessary, Buckeye will use a water truck to spray irrigate the seeded areas. This may be necessary if monsoonal rainfall is less than expected or delayed.

5.3 Monitoring

Buckeye will have site inspections conducted during the first year after seeding to assess revegetation progress. A field biologist will perform the inspections to assess whether vegetative cover is likely to equal or exceed the natural levels in undisturbed areas adjacent to the two remediated and reclaimed areas (i.e., northern and southern areas). The areas will be reseeded and irrigated as needed.

References

Daniel B. Stephens & Associates, Inc. (DBS&A). 2024. *Site assessment plan, State AF #003 SWD Site*. Prepared for Buckeye Disposal, Inc. May 17, 2024.

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New Mexico State Land Office (NMSLO). 2018. *New Mexico State Land Office salt water disposal easement, No. SW-324 renewal, State AF #3, 30-025-20980.* January 23, 2018.

NMSLO. 2023. Environmental Compliance Office document review checklists associated with the review of the remediation plan for State AF #003 SWD Site and Tank Battery. Prepared by T. Knight, CHMM, Environmental Specialist. August 30, 2023.

U.S. Fish and Wildlife Service (USFWS). 2024. National Wetland Inventory, Surface Waters and Wetlands. Accessed January 22, 2024. <https://www.fws.gov/program/national-wetlands-inventory/wetlands-mapper>.

Figures

Figure 1

BUCKEYE STATE AF #003

Shallow Water Sources within ½ mile of Site

DBS&A a Geo-Logic Company

8/23/2023 DB19.1241

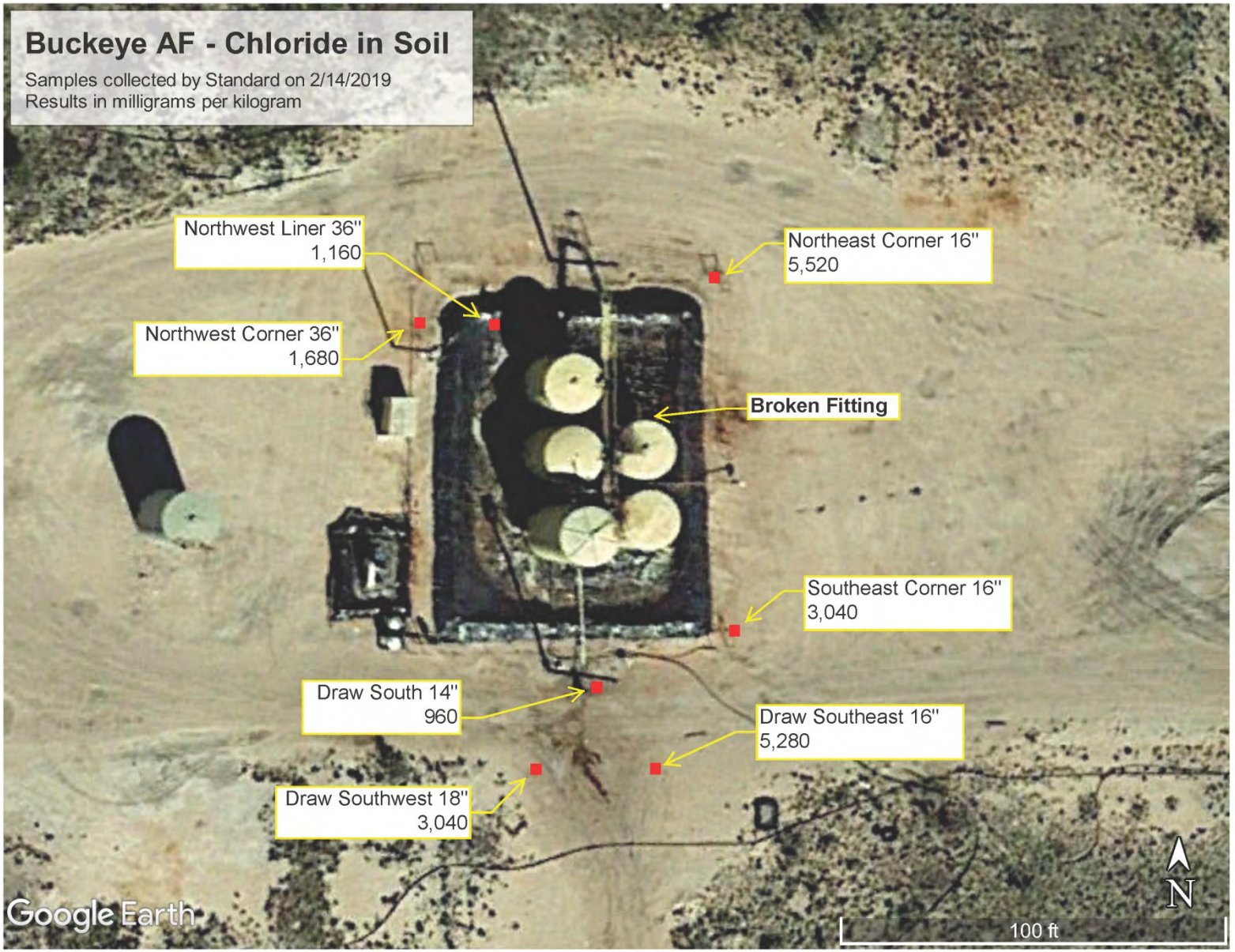


Figure 2

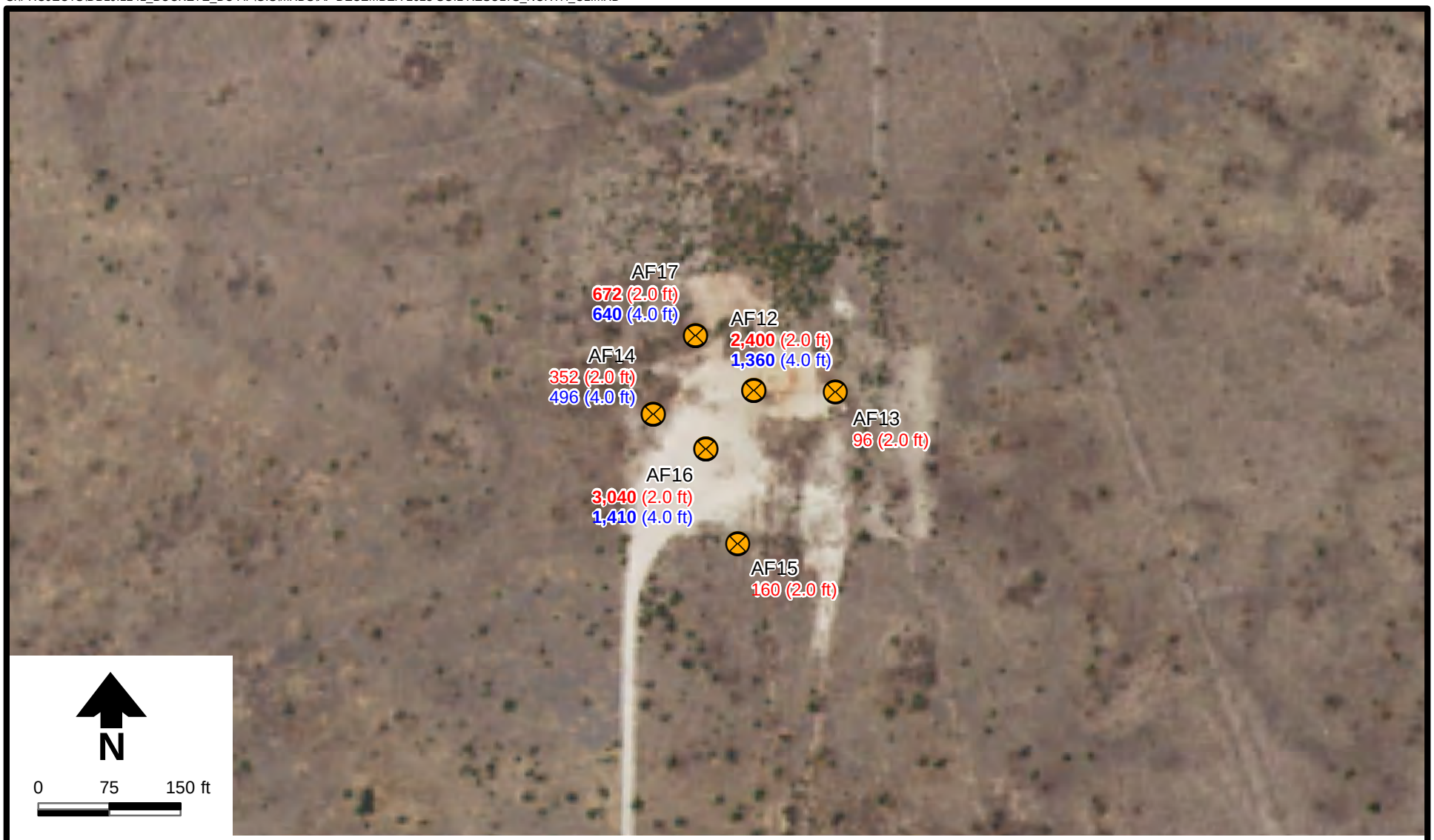
BUCKEYE STATE AF #003

Initial Soil Sampling Results, February 2019

DBS&A a Geo-Logic Company

8/23/2023 DB19.1241

S:\PROJECTS\DB19.1241_BUCKEYE_DU-AF\GIS\MXDS\AF DECEMBER 2023 SOIL RESULTS_NORTH_CL.MXD



Explanation

AF14 Soil Chloride (mg/kg)
352 (2.0 ft) Shallow (Depth)
496 (4.0 ft) Deep (Depth)
December 2023 sample location

Notes: 1. Soil samples were collected on December 1, 2023.
2. **Bold** indicates concentration greater than or equal to 600 mg/kg.

Source: Aerial imagery (NAIP, 2022).

BUCKEYE STATE AF #003

Soil Chloride Results
Pad of Former Salt Water Disposal Well
December 2023

Figure 3a

DBS&A a Geo-Logic Company

4/16/2024 DB19.1241

S:\PROJECTS\DB19.1241_BUCKEYE_DU-AF\GIS\MXDS\AF DECEMBER 2023 SOIL RESULTS_SOUTH_CL.MXD

Explanation

AF02 Soil Chloride (mg/kg)
368 (2.0 ft) Shallow (Depth)
80 (4.0 ft) Deep (Depth)
December 2023 sample location

Notes: 1. Soil samples were collected on December 1, 2023.
2. **Bold** indicates concentration greater than or equal to 600 mg/kg.

Source: Aerial imagery (NAIP, 2022).

BUCKEYE STATE AF #003

Soil Chloride Results
Former Tank Battery Location
December 2023

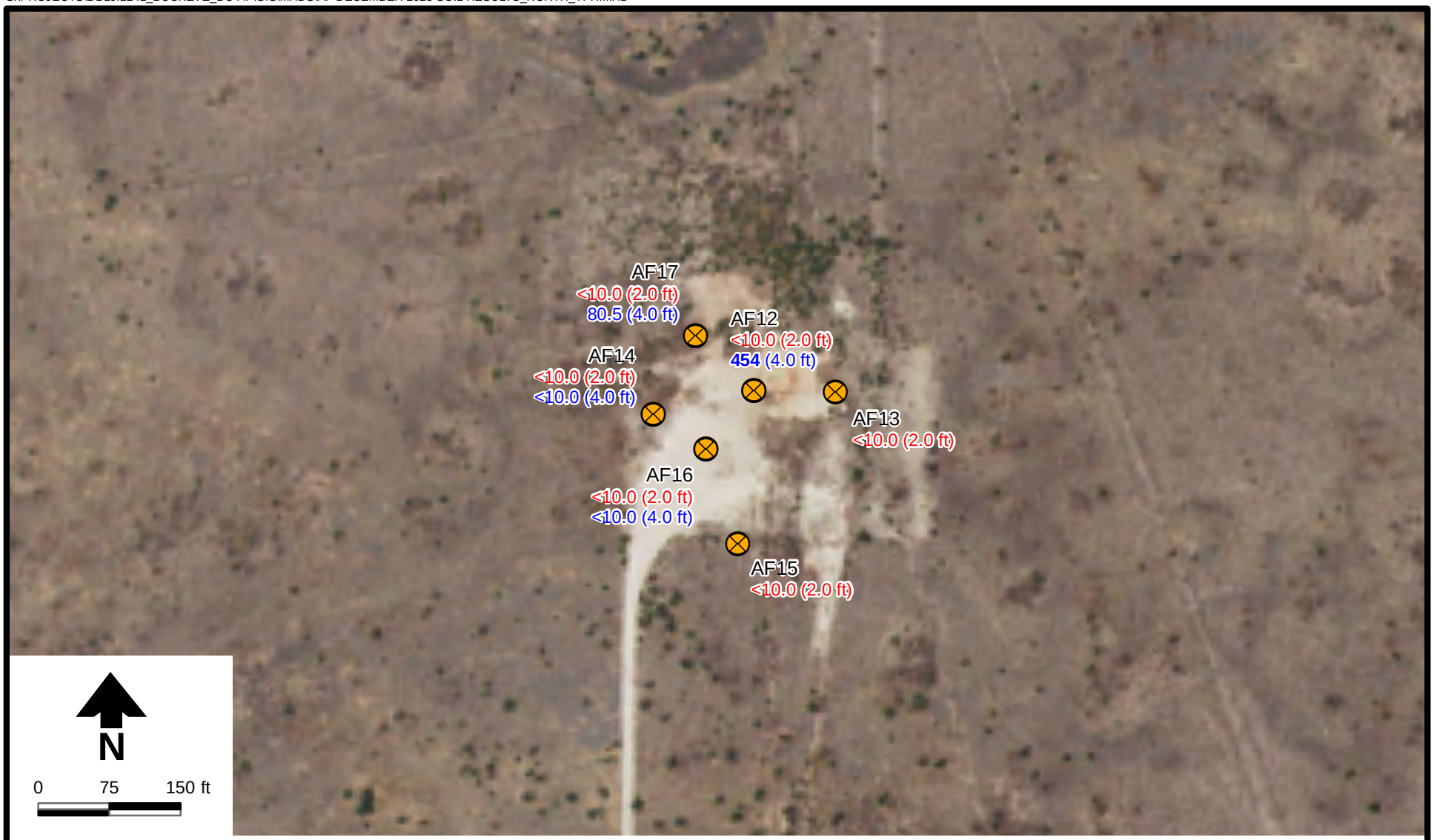
Figure 3b

DBS&A a Geo-Logic Company

4/16/2024 DB19.1241

OCD Ex. 23-023

S:\PROJECTS\DB19.1241_BUCKEYE_DU-AF\GIS\MXDS\AF DECEMBER 2023 SOIL RESULTS_NORTH_TPH.MXD



Explanation

AF17 Soil TPH (mg/kg)
<10.0 (2.0 ft) Shallow (Depth)
80.5 (4.0 ft) Deep (Depth)
December 2023 sample location

Notes: 1. Soil samples were collected on December 1, 2023.
2. TPH = Total Petroleum Hydrocarbons
3. **Bold** indicates concentration greater than or equal to 100 mg/kg.

Source: Aerial imagery (NAIP, 2022).

BUCKEYE STATE AF #003

Soil TPH Results
Pad of Former Salt Water Disposal Well
December 2023

Figure 4a

DBS&A a Geo-Logic Company

4/16/2024 DB19.1241

S:\PROJECTS\DB19.1241_BUCKEYE_DU-AF\GIS\MXDS\AF DECEMBER 2023 SOIL RESULTS_SOUTH_TPH.MXD

Explanation

AF02 Soil TPH (mg/kg)
<10.0 (2.0 ft) Shallow (Depth)
<10.0 (4.0 ft) Deep (Depth)
December 2023 sample location

Notes: 1. Soil samples were collected on December 1, 2023.
2. TPH = Total Petroleum Hydrocarbons
3. **Bold** indicates concentration greater than or equal to 100 mg/kg.

Source: Aerial imagery (NAIP, 2022).

BUCKEYE STATE AF #003

Soil TPH Results
Former Tank Battery Location
December 2023

Figure 4b

DBS&A a Geo-Logic Company

4/16/2024 DB19.1241

S:\PROJECTS\DB19.1241_BUCKEYE_DU-AF\GIS\MXDS\AF REMEDIATION\RECLAMATION PLAN\F05A_AF_EM31_SURVEY.MXD

AF12
2,400
1,360

AF17
672
640

AF13
96

AF14
352
496

Northern Exploratory Excavation
3200
2120
1800

AF16
3,040
1,410

AF15
160

AF02
368
80

Southern Exploratory Excavation
4400
1100
688
2400

AF01
5,840

AF05
160

AF06
1,300

AF04
528

AF03
5,600

AF11
228

AF07
1,380

AF08
1,150

AF09
48
48

AF10
32

N

0 100 200 ft

Explanation

Sample location ID with chloride concentrations (mg/kg)
2 feet
4 feet
6 feet
8 feet

December 2023 soil sample location

January 2025 soil sample location

EM31 vertical dipole survey results

EC_A (µS/cm)

High : 5050

Low : 0

Notes: 1. The EM31 vertical dipole has a depth of investigation of 6 meters (approximately 20 feet).
2. Geophysical survey data processed using simple kriging.

Source: Aerial imagery (ESRI, 2024)

Figure 5a

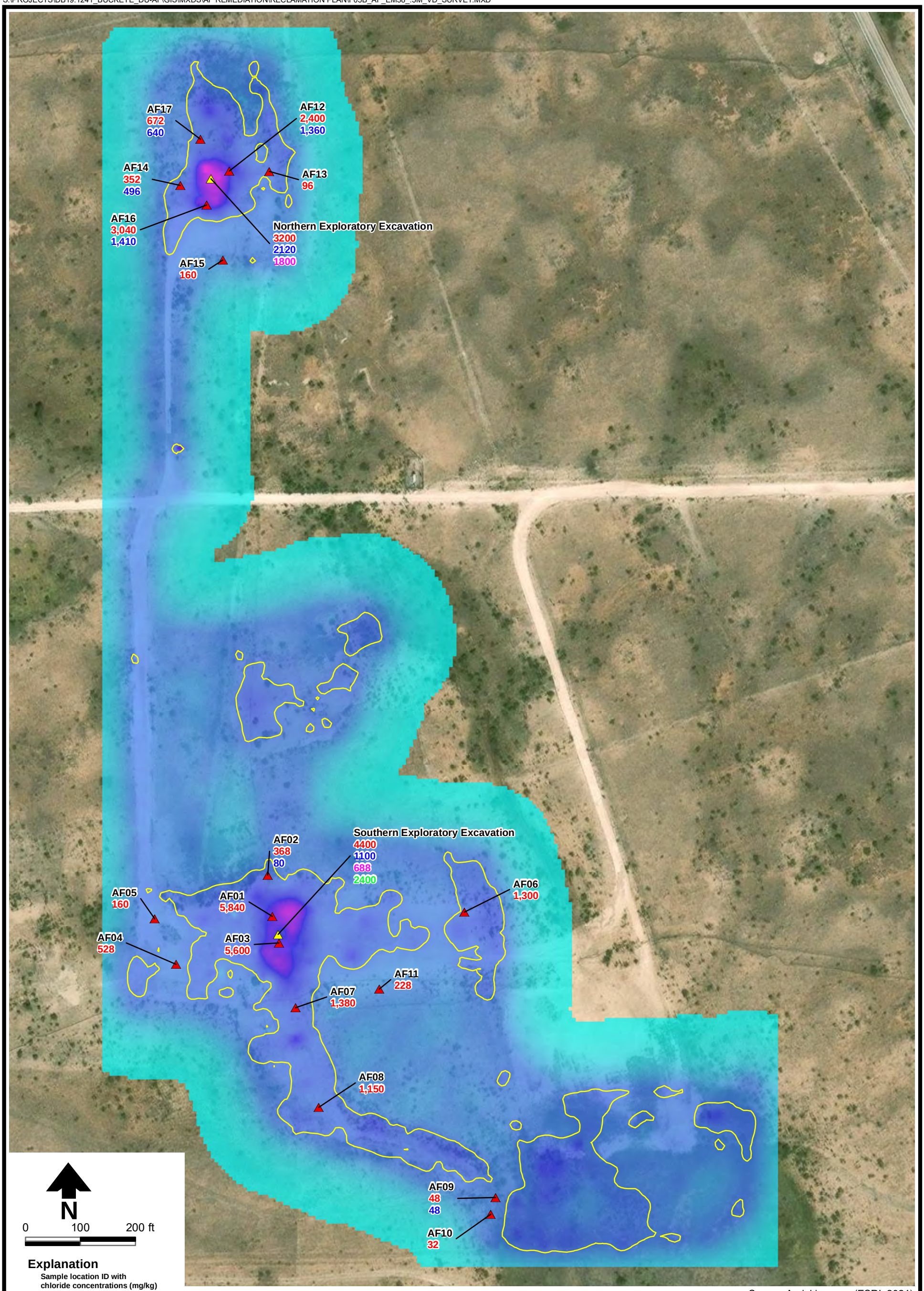
DBS&A a Geo-Logic Company

3/3/2025 DB19.1241

BUCKEYE STATE AF #003

Geophysical Survey Results
EM31 Vertical Dipole

S:\PROJECTS\DB19.1241_BUCKEYE_DU-AF\GIS\MXDS\AF REMEDIATION\RECLAMATION PLAN\F05B_AF_EM38_.5M_VD_SURVEY.MXD



Source: Aerial imagery (ESRI, 2024)

Notes:
1. The EM38 0.5-meter vertical dipole has a depth of investigation of 0.75 meters (approximately 2.5 feet).
2. Estimated area above 600 mg/kg chloride based on linear regression of EC_A and soil chloride sample data from 2 feet bgs.
3. Geophysical survey data processed using simple kriging.

DBS&A a Geo-Logic Company

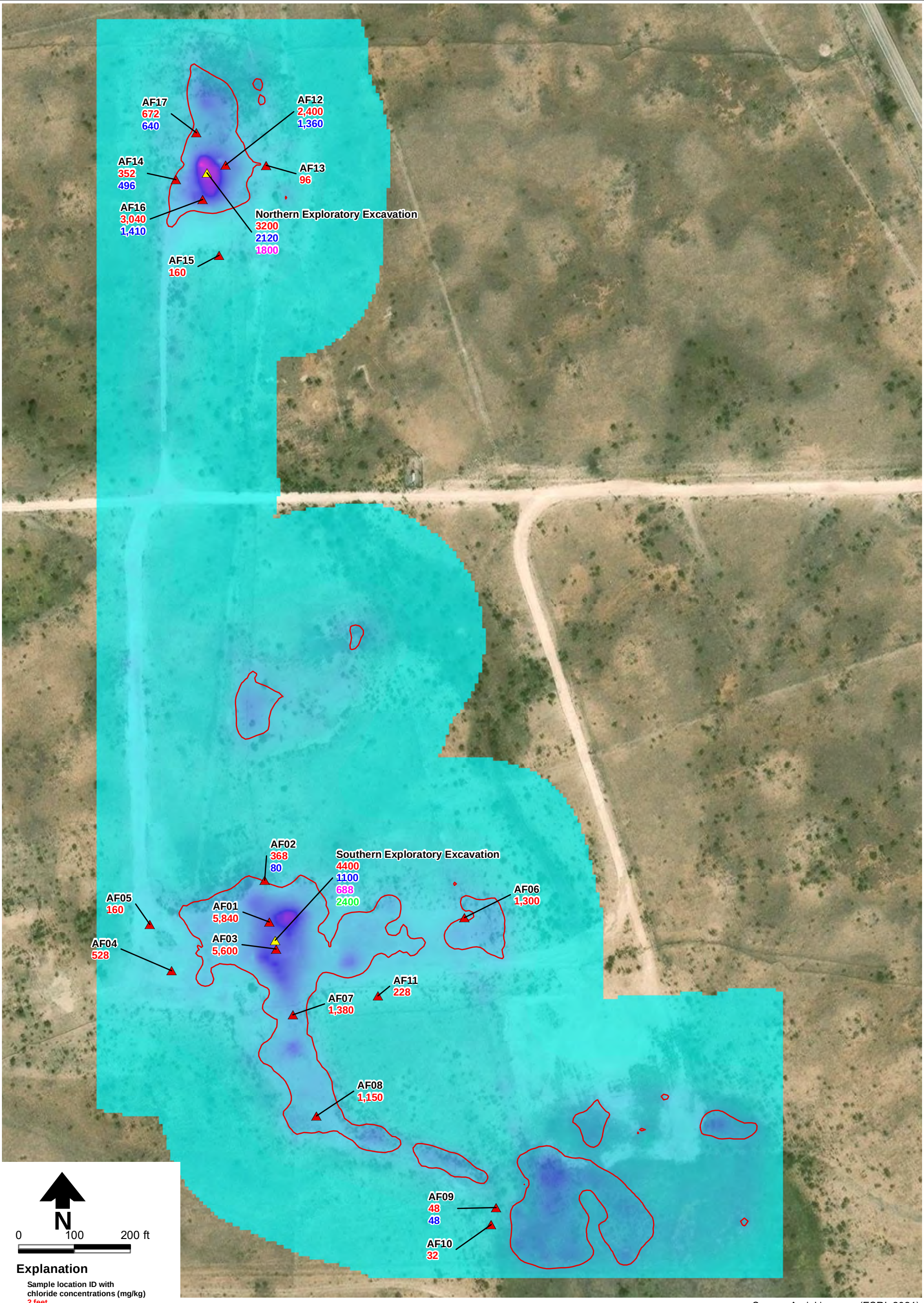
3/3/2025 DB19.1241

BUCKEYE STATE AF #003

Geophysical Survey Results
EM38 Vertical Dipole (0.5-meter Coil)

Figure 5b

S:\PROJECTS\DB19.1241_BUCKEYE_DU-AF\GIS\MXDS\AF REMEDIATION\RECLAMATION PLAN\F05C_AF_EM38_1M_VD_SURVEY.MXD



Source: Aerial imagery (ESRI, 2024)

Notes:
1. The EM38 1-meter vertical dipole has a depth of investigation of 1.5 meters (approximately 5 feet).
2. Area greater than 600 mg/kg chloride based on linear regression of EC_A and soil chloride sample data from 4 feet bgs.
3. Geophysical survey data processed using simple kriging.

DBS&A a Geo-Logic Company

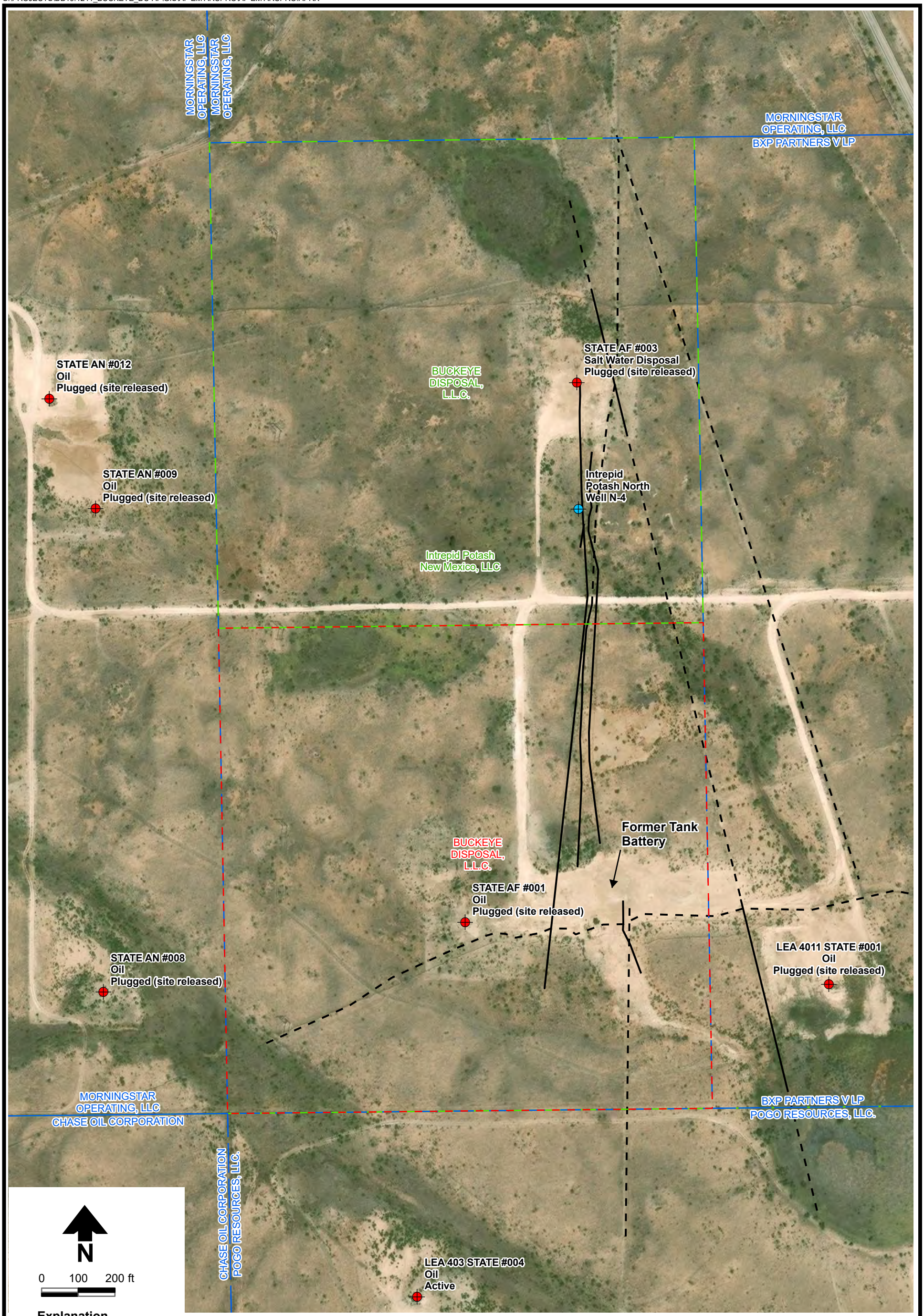
3/3/2025 DB19.1241

BUCKEYE STATE AF #003

Geophysical Survey Results
EM38 Vertical Dipole (1-meter Coil)

Figure 5c

S:\PROJECTS\DB19.1241_BUCKEYE_DU-AF\GIS\AF EM ARCPRO\AF EM ARCPRO.APRX



Notes:
1. Well and facility labels are given in black.
2. NM State Land Office (SLO) lease areas are labeled by the name of the leaseholder. Label colors correspond to the lease boundary symbology. Lease data obtained from SLO website on February 17, 2025.
3. Pipelines are both buried and above ground, determined from site reconnaissance and aerial imagery review. Other pipelines not shown may be present.

Sources: (1) Aerial imagery (ESRI, 2024)
(2) New Mexico Oil Conservation Division (OCD) well data [updated 2/17/2025]
(3) New Mexico Office of the State Engineer (OSE) point of diversion (POD) data [updated 2/10/2025]

Figure 6

DBS&A
a Geo-Logic Company

12/11/2024 DB19.1241

BUCKEYE STATE AF #003

New Mexico State Land Office Leases and Various Operator Pipelines

S:\PROJECTS\DB19.1241_BUCKEYE_DU-AF\GIS\MXDS\AF REMEDIATION\RECLAMATION PLAN\F07_PROPOSED EXCAVATION AREA.MXD

AF17
672
640

AF12
2,400
1,360

AF14
352
496

AF13
96

AF16
3,040
1,410

Northern Exploratory Excavation
3200
2120
1800

AF15
160

AF02
368
80

Southern Exploratory Excavation
4400
1100
688
2400

AF05
160

AF06
1,300

AF01
5,840

AF04
528

AF03
5,600

AF11
228

AF07
1,380

AF08
1,150

AF09
48
48

AF10
32

N

0 100 200 ft

Explanation

Sample location ID with chloride concentrations (mg/kg)
2 feet
4 feet
6 feet
8 feet

- Anticipated confirmation sample location
- December 2023 soil sample location
- January 2025 soil sample location
- Proposed excavation area
- Geophysical survey area
- Predicted 4 foot excavation area
- Predicted 2 foot excavation area
- Pipeline (dashed where inferred)

Source: Aerial imagery (ESRI, 2024; Atkins, 2024)

Notes:
1. Estimated area above 600 mg/kg chloride at 2 feet bgs derived from EM38 0.5-meter vertical dipole data.
2. Estimated area above 600 mg/kg chloride at 4 feet bgs derived from EM38 1-meter vertical dipole data.
3. Geophysical data related to December 2023 soil sample results using linear regression.
4. Pipelines are both buried and above ground, determined from site reconnaissance and aerial imagery review. Other pipelines not shown may be present.

DBS&A a Geo-Logic Company

3/3/2025 DB19.1241

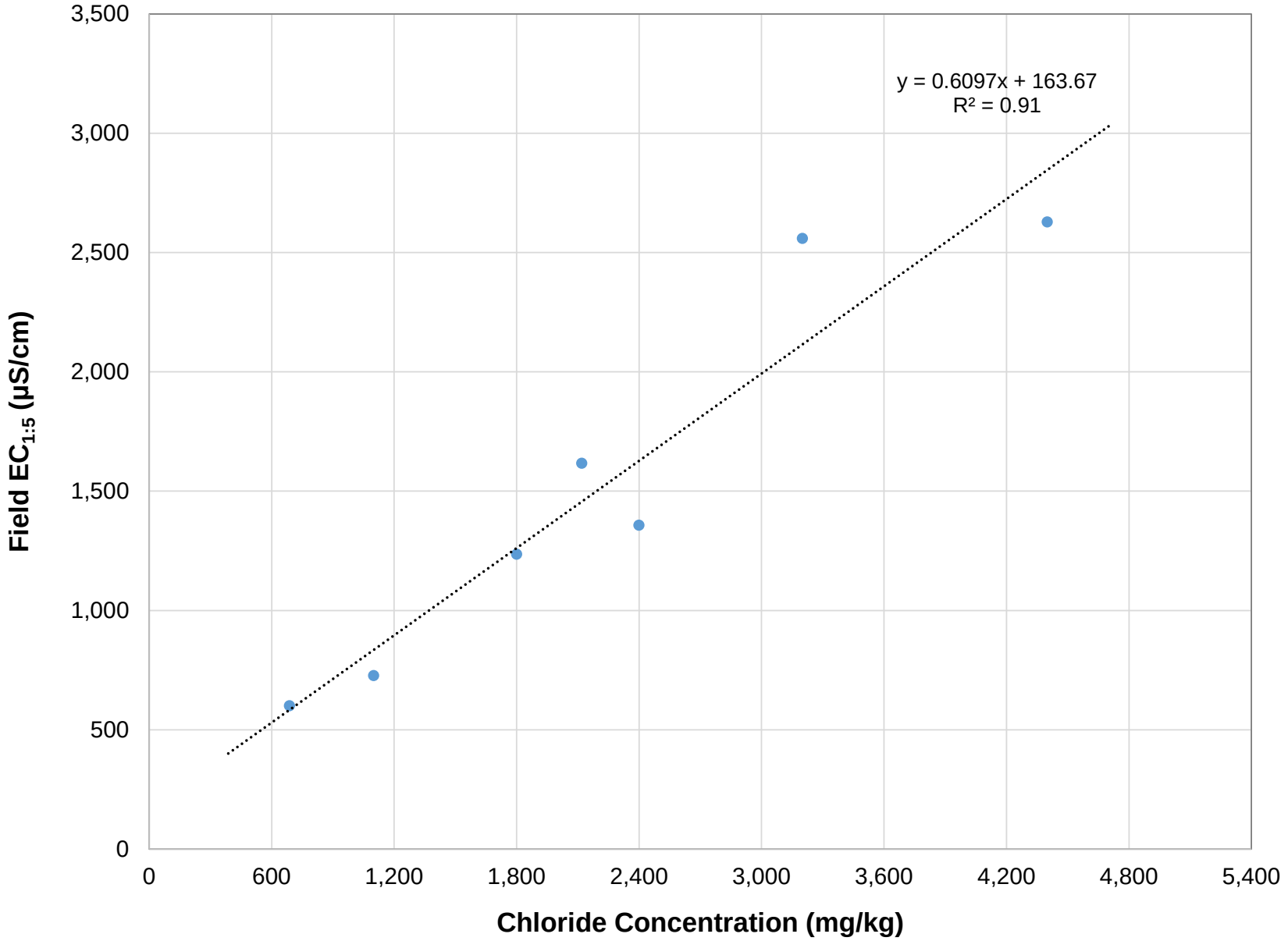
BUCKEYE STATE AF #003

Estimated Extents of Proposed Excavation Areas

Figure 7

OCD Ex. 23-030

P:_DB19-1241\AF Reclamation Pln.3-25\Figures\Word\Fig08_Linear Rgrssn.docx



BUCKEYE STATE AF #003

Linear Regression of Field $EC_{1:5}$ vs. Soil Chloride Concentration

Figure 8

DBS&A a Geo-Logic Company

3/3/2025 DB19.1241

OCD Ex. 23-031

Tables

Table 1. Soil Sample Analytical Results, December 2023

Location	Depth (feet)	Concentration (mg/kg)			
		Chloride	TPH	BTEX	Benzene
AF01	2.0	**5,840**	**1,087**	<0.300	<0.050
AF02	2.0	368	<10.0	<0.300	<0.050
AF02	4.0	80	<10.0	<0.300	<0.050
AF03	2.0	**5,600**	**2,389.6**	<0.300	<0.050
AF04	2.0	528	**157.7**	<0.300	<0.050
AF05	2.0	160	<10.0	<0.300	<0.050
AF06	2.0	**1,300**	<10.0	<0.300	<0.050
AF07	2.0	**1,380**	<10.0	<0.300	<0.050
AF08	2.0	**1,150**	<10.0	<0.300	<0.050
AF09	2.0	48	<10.0	<0.300	<0.050
AF09	4.0	48	<10.0	<0.300	<0.050
AF10	2.0	32	<10.0	<0.300	<0.050
AF11	2.0	228	<10.0	<0.300	<0.050
AF12	2.0	**2,400**	**454**	<0.300	<0.050
AF12	4.0	**1,360**	<10.0	<0.300	<0.050
AF13	2.0	96	<10.0	<0.300	<0.050
AF14	2.0	496	<10.0	<0.300	<0.050
AF14	4.0	352	<10.0	<0.300	<0.050
AF15	2.0	160	<10.0	<0.300	<0.050
AF16	2.0	**3,040**	<10.0	<0.300	<0.050
AF16	4.0	**1,410**	<10.0	<0.300	<0.050
AF17	2.0	**672**	<10.0	<0.300	<0.050
AF17	4.0	**640**	80.5	<0.300	<0.050

Bold indicates that value exceeds 600 milligrams per kilogram (mg/kg) for chloride and 100 mg/kg for total petroleum hydrocarbons [TPH]).
BTEX = Benzene, toluene, ethylbenzene, and total xylenes

Table 2. Soil Sample Analytical Results, January 2025

Sample ID	Field $EC_{1:5}$ (µS/cm)	Concentration (mg/kg)				
			Total Petroleum Hydrocarbons			
		Chloride	Gasoline-Range Organics (C6-C10)	Diesel-Range Organics (>C10-C28)	Extended Diesel-Range Organics (>C28-C36)	Total
North Exploratory Excavation 0-2'	2,559	**3,200**	<10.0	<10.0	<10.0	<30.0
North Exploratory Excavation 2'-4'	1,617	**2,120**	<10.0	<10.0	<10.0	<30.0
North Exploratory Excavation 4'-6'	1,235	**1,800**	<10.0	<10.0	<10.0	<30.0
South Exploratory Excavation 0-2'	2,628	**4,400**	338	3,700	674	**4,712**
South Exploratory Excavation 2'-4'	727	**1,100**	299	5,440	979	**6,718**
South Exploratory Excavation 4'-6'	600	**688**	748	10,900	2,320	**13,968**
South Exploratory Excavation 6'-8'	1,357	**2,400**	103	3,150	606	**3,859**

Bold indicates that value exceeds 600 milligrams per kilogram (mg/kg) for chloride and 100 mg/kg for total petroleum hydrocarbons (TPH).
BTEX constituents were not detected above a laboratory detection limit of up to 0.150 mg/kg; therefore, results are not shown.

Appendix A

Record of State AF #003 SWD Plugging and Abandonment

Submit 1 Copy To Appropriate District Office

District I – (575) 393-6161
1625 N. French Dr., Hobbs, NM 88240
District II – (575) 748-1283
811 S. First St., Artesia, NM 88210
District III – (505) 334-6178
1000 Rio Brazos Rd., Aztec, NM 87410
District IV – (505) 476-3460
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy, Minerals and Natural Resources

OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C
Revised July 18,

WELL API NO. 30-025-20980	
5. Indicate Type of Lease STATE ☒ FEE ☐	
6. State Oil & Gas Lease No. E 7723	
SUNDRY NOTICES AND REPORTS ON WELLS (DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH PROPOSALS.)	7. Lease Name or Unit Agreement Name Buckeye State AF
1. Type of Well: Oil Well ☐ Gas Well ☒ Other SWD	8. Well Number 3
2. Name of Operator Buckeye Disposals LLC	9. OGRID Number 222759
3. Address of Operator PO Box 2724 Lubbock, Texas 79408	10. Pool name or Wildcat Wolfcamp
4. Well Location Unit Letter L : 1980 feet from the South line and 990 feet from the West line Section 8 Township 185 Range 35E NMPM County Lea	
	11. Elevation *(Show whether DR, RKB, RT, GR, etc.)*

12. Check Appropriate Box to Indicate Nature of Notice, Report or Other Data

NOTICE OF INTENTION TO:				SUBSEQUENT REPORT OF:			
PERFORM REMEDIAL WORK	☐	PLUG AND ABANDON	☒	REMEDIAL WORK	☐	ALTERING CASING	☐
TEMPORARILY ABANDON	☐	CHANGE PLANS	☐	COMMENCE DRILLING OPNS.	☐	P AND A	☒
PULL OR ALTER CASING	☐	MULTIPLE COMPL	☐	CASING/CEMENT JOB	☐		
DOWNHOLE COMMINGLE	☐						
CLOSED-LOOP SYSTEM	☐						
OTHER:	☐			OTHER:	☐		

PNR

13. Describe proposed or completed operations. (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work). SEE RULE 19.15.7.14 NMAC. For Multiple Completions: Attach wellbore diagram of proposed completion or recompletion.

See attachments

Spud Date: Rig Release Date:

I hereby certify that the information above is true and complete to the best of my knowledge and belief.

SIGNATURE Jack Yates TITLE Manager DATE 5-5-23

Type or print name Jack Yates E-mail address: jack@bengsten enterprises.com PHONE: 806-241-7405

For State Use Only

APPROVED BY: Kerry Fortner TITLE Compliance Officer A DATE 5/5/23

Conditions of Approval (if any):

- Buckeye Disposal LLC
- Buckeye State AF #3
- Start Date-04/03/23 Completed -04-20-23

1. Mon-04/03/23-Arrived on location at 9am, held a 5min tailgate safety meeting, got rig spotted and equipment ready for rig up, rigged up the rig. Waited on BOP to arrive, it arrived at 11.30am, nippled down wellhead and nippled up BOP. Rigged up work floor and tubing equipment, unset packer, crew took lunch break. Begin pulling tubing pulled 299 joints and the PKR secured well shut down.
2. Tues-04/04/23-Arrived on location, held a 5min tailgate safety meeting, opened well 0 psi, wireline arrived at 8am spotted equipment, rigged up tools and equipment, they tried to run in hole no luck. They noticed it was the wrong size tool. They had to run to town to get the correct tool. They arrived at 10:30am connected tool, ran in hole with gauge ring, then ran the bridge plug set it at (9800ft). Pulled out of hole and rigged down. Secured well shut down for the day due to the wind.
3. Wens-04/05/23 Arrived on location, held a 5min tailgate safety meeting. Opened well 0psi, got equipment ready, waited on tubing testers. They arrived at 7:30am got spotted and rigged up. It was a windy morning. They tested 4 stands with the rod style testing method and our derrick man was struggling due to wind to stab the probe from the derrick. I decided to rig them down and get the Bars style testing equipment that would be more time efficient and a safer process. Rigged them down waited on new testing truck to arrive from there yard. Testers Arrived at 10:30 am, spotted in and rigged up we then proceeded to test tubing in the hole. Tested 12 stands had to replace 2 collars tested 15 more stand, crew then took a lunch break. After lunch proceeded to test tubing in the hole. Replaced a total of 6 collars, got tubing tested and rigged down tubing testers, secured well shut down for the day. (During the process of testing about 50 stands left to test, the bars were falling at a very slow rate due to well begin full of water we hooked up vac truck.)
4. Thurs-04/06/23-Arrived on location, held tailgate safety meeting with crew, opened well 0 psi. Waited on cementers to finish rigging up, tied them on to the tubing to test the Bridge Plug, tested it to 500 psi tested good. Circulated well with jell brine. Spotted 25 sacks of cement, laid down 27 joints reversed pump water, to assure the tubing was clear. Waited on a new half pit due to the one on locating having a leak on it. Took a lunch break while it showed up, it arrived we then tied the hoses into the new half pit. Got ready to pump cement plug, pumped 25 sacks of class (8790 ft,) laid down 12 joints pulled 12 stands to the derrick, secured well shut down for the day.

5. Fri-04/07/23-Arrived on location, held a tailgate safety meeting, 0 psi on well opened up BOP, begin to run tubing in the hole to tag plug, tagged plug at 8626" ft. Then proceeded to lay down tubing on the trailer, laid down 62 joints, stood back 202 joints in the derrick. Ran in hole with 4" packer and 202 joints from the derrick, tried to set packer no luck picked up 1 joint worked packer again and got it to set at 6583". Rigged up wireline, perforated at 6800" ft, rigged down wireline, rigged up pump to try and get a pump rate, pressured rite up could not pump into perfs. Called NMODC no answer, waited 30 mins no called was returned. Decided to secure well and shut down for the day.
6. Mon-04/10/23-Arrived on location, held tailgate safety meeting, checked pressure on well 0 psi, opened BOP, NMODC decided to spot plug 50 ft below perfs, unset packer, picked up 7 joints to spot 25 sack plug at 6850" ft . Cement pump would not start. Waited until it was fixed at 10am. Proceeded to pump cement, laid down 12 joints and stood 15 stands back to the derrick WOC 4 hours. Went and tagged 6380" ft laid down 6 joints had rig problems shut down.
7. Tues-04/11/23-Arrived on location, held a tailgate safety meeting, waited on mechanic to arrive, and fix rig. He arrived got it going, laid down 12 joints spotted 25 sack plug at 6110" no tag required laid down 58 joints to 4200" ft. Secured well shut down for the day.
8. Wens-04/12/23-Arrived on location, held tailgate safety meeting, got equipment ready to pump plug cementer took a while to get his numbers ready and pump, did not start pumping until 8:30am. Pumped a 10 sack plug, pulled tubing to the derrick and waited on cement 4hrs. Opened well ran tubing with packer tagged plug at 4051"ft, laid down tubing to the next plug, set packer at 3640"ft. Rigged up wireline, perforated at 3876"ft rigged down wireline. Rigged up pump tried to establish pump rate could not, unset packer picked up 9 joints spotted 25 sacks of cement at 3926". Laid down 12 joints, stood back 15 stands to the derrick secured well shut down.
9. Thurs-04/13/23-Arrived on location, held tailgate safety meeting, opened well, started to run tuning tagged with 6 ft in, tagged way high, made a call to NMOCD and he decided to drill down to the plug that was pumped the day prior at 3926". Begin laying down 32 joints on the trailer and stood the rest in the derrick, pulled 6 stands and the tubing was full waited on mud bucket to arrive. It arrived at 11:30am we then continued pulling tubing, got to the plugged off joints begin to lay them down on the ground, laid down 32 cemented joints. Could not get the drilling equipment till the next day, secured well shut down.

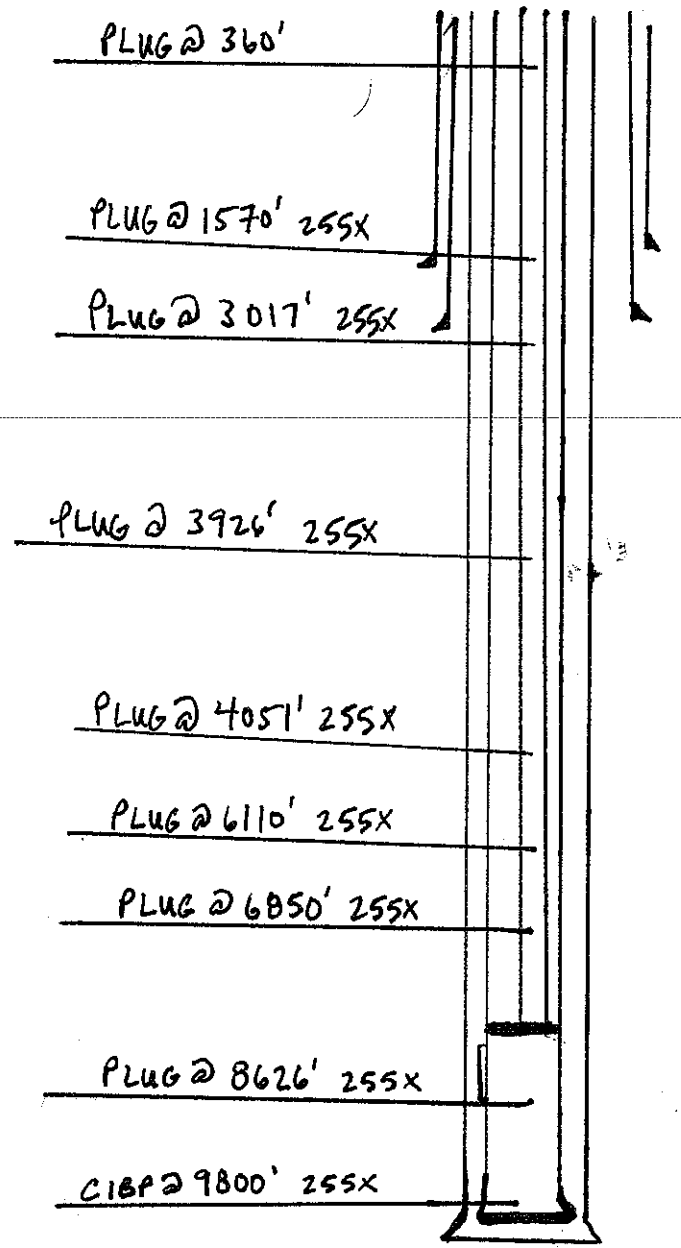
10. Fri-04/14/23-Arrived on location, held tailgate safety meeting, opened well, spotted in drill collars and equipment, tallied the collars, begin to pick the up, picked up bit and 6 drill collars, ran tubing tagged at 2570" set 15 points on it fell through, continued to run tubing to 3988 never tagged on cement. Circulated well clean, POOH with tubing and laid down drill collars, secured well shut down.

11. Mon-04/17/23-Arrived on location, held safety meeting, opened well, begin to run tubing in hole, ran 114 joints from the derrick, picked up 7 joints from trailer, rigged up pump, spotted 25 sacks of cement at 3926” ft. laid down 12 joints stood back 15 stands WOC 4 hrs. Opened well begin to run tubing to tag plug, tagged at 3396” ft, good tag, laid down 10 joints, rigged up pump spotted 25 sacks at 3017” ft. Laid down 50 joints stood back the rest of the tubing secured well shut down.

12. Tues-04/18/23-Arrived on location, held safety meeting, opened well o psi, begin to run tubing to tag plug, tagged at 2517” ft. Laid down tubing to 1302” ft set packer. Secured well waited on wireline to arrive. They arrived got rigged up, perforated at 1520” ft, rigged down wireline, connected pump to try and establish rate, no luck decided to drop 50 ft below the perfs and spot 25 sacks. Picked up 9 joints, spotted 25 sacks, laid down 17 joints, reversed out to clear tubing, stood 16 stands back in derrick shut down due to wind.

13. Wens-04/19/23-Arrived on location, held safety meeting, opened well 0 psi, ran tubing tagged at 1040” ft, good tag, begin to lay down tubing, laid down 31 joints, pulled two stands and picked up packer with 5 joints, set packer rigged up wireline, perforated at 360” ft, rigged down wireline, connected pump to establish rate, pumped 10 bbls at 480 psi, begin to pump 50 sacks of cement into perfs. Shut in pressure was at 200 psi waited on cement to settle for 1hour, opened well, unset packer, laid down 4 joints set packer at 32” ft. Rigged up wireline, they perforated at 150” ft rigged them down. Rigged up pump to see if we could circulate well threw the surface casing, we circulated 20 bbls or water then begin to pump cement, pumped 80 sacks of cement and got good cement to surface stopped pumping. We then unset packer, laid down 1 joint and the packer, rigged down work floor and equipment, nippled down BOP, filled the casing and cellar with cement rigged down cementers and waited for cement to settle. Crew took lunch break, then cleaned and cleared location, got the rig ready for rig down to windy to rig down shut down for the day.
14. Thurs-04/20/23-Arrived on location, held safety meeting, rigged the rig down got it out of the way, waited on the excavator to arrive. Meanwhile crew pressure washed and organized rig. Excavator arrived we dig out the cellar crew assisted with shovels, welder them cut the well head off and welded a cap on there we back filled the well and leveled the grown. Moved rig to the yard shut down for the day. JOP COMPLETED.

BUCKEYE DISPOSAL INC.
STATE AF #3 - P9A SKETCH



District I
1625 N. French Dr., Hobbs, NM 88240
Phone:(575) 393-6161 Fax:(575) 393-0720
District II
811 S. First St., Artesia, NM 88210
Phone:(575) 748-1283 Fax:(575) 748-9720
District III
1000 Rio Brazos Rd., Aztec, NM 87410
Phone:(505) 334-6178 Fax:(505) 334-6170
District IV
1220 S. St Francis Dr., Santa Fe, NM 87505
Phone:(505) 476-3470 Fax:(505) 476-3462

State of New Mexico
Energy, Minerals and Natural Resources
Oil Conservation Division
1220 S. St Francis Dr.
Santa Fe, NM 87505

COMMENTS

Action 213950

COMMENTS

Operator: BUCKEYE DISPOSAL, L.L.C. P.O. Box 2724 Lubbock, TX 79408	OGRID: 222759
	Action Number: 213950
	Action Type: [C-103] Sub. Plugging (C-103P)

COMMENTS

Created By	Comment	Comment Date
plmartinez	DATA ENTRY PM	5/5/2023

OCD Ex. 23-041

District I
1625 N. French Dr., Hobbs, NM 88240
Phone:(575) 393-6161 Fax:(575) 393-0720
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811 S. First St., Artesia, NM 88210
Phone:(575) 748-1283 Fax:(575) 748-9720
District III
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Phone:(505) 334-6178 Fax:(505) 334-6170
District IV
1220 S. St Francis Dr., Santa Fe, NM 87505
Phone:(505) 476-3470 Fax:(505) 476-3462

State of New Mexico
Energy, Minerals and Natural Resources
Oil Conservation Division
1220 S. St Francis Dr.
Santa Fe, NM 87505

CONDITIONS

Operator: BUCKEYE DISPOSAL, L.L.C. P.O. Box 2724 Lubbock, TX 79408	OGRID: 222759
	Action Number: 213950
	Action Type: [C-103] Sub. Plugging (C-103P)

CONDITIONS

Created By	Condition	Condition Date
kfortner	Need C103Q and marker photo to release	5/5/2023

Appendix B

L02350 Well Log

Form WR-23 FIELD ENGR. LOG STATE ENGINEER OFFICE Well [redacted]4

WELL RECORD

INSTRUCTIONS: This form should be executed in triplicate, preferably typewritten, and submitted to the nearest district office of the State Engineer. All sections, except Section 5, shall be answered as completely and accurately as possible when any well is drilled, repaired or deepened. When this form is used as a plugging record, only Section 1A and Section 5 need be completed.

Section 1

#2 on C-2-137-7 OPN: 25-11767			
0			

(Plat of 640 acres)

(A) Owner of well National Potash Co.
Street and Number Box 731
City Carlsbad State New Mexico
Well was drilled under Permit No. ____ and is located in the ____ ¼ ____ ¼ ____ ¼ of Section 8 Twp. 18 S Rge. 25 E
(B) Drilling Contractor Abbott Bros. License No. WD-46
Street and Number Box 637
City Hobbs State New Mexico
Drilling was commenced March 1 19 60
Drilling was completed March 5 19 60

Elevation at top of casing in feet above sea level ____ Total depth of well 216
State whether well is shallow or artesian Shallow Depth to water upon completion 105

Section 2 PRINCIPAL WATER-BEARING STRATA

No.	Depth in Feet From	Depth in Feet To	Thickness in Feet	Description of Water-Bearing Formation
1	110	135	25	Water Sand
2	180	212	32	Sand & Gravel
3				
4				
5				

Section 3 RECORD OF CASING

Dia in.	Pounds ft.	Threads in	Depth Top	Depth Bottom	Feet	Type Shoe	Perforations From	Perforations To
12 3/4	40	weld	0	216	216	weld	110	210

Section 4 RECORD OF MUDDING AND CEMENTING

Depth in Feet From	Depth in Feet To	Diameter Hole in in.	Tons Clay	No. Sacks of Cement	Methods Used

Section 5 PLUGGING RECORD

Name of Plugging Contractor ____ License No. ____
Street and Number ____ City ____ State ____
Tons of Clay used ____ Tons of Roughage used ____ Type of roughage ____
Plugging method used ____ Date Plugged ____ 19 ____
Plugging approved by: ____ Basin Supervisor

Cement Plugs were placed as follows:

No.	Depth of Plug From	Depth of Plug To	No. of Sacks Used

FOR USE OF STATE ENGINEER ONLY

STATE ENGINEER OFFICE
1960 MAR 17 AM 8:37

Date Received ____

File No. L-2350 Use Ind. Location No. 18.35S.32333[illegible]

OCD Ex. 23-044

Section 6

LOG OF WELL

Depth in Feet From	Depth in Feet To	Thickness in Feet	Color	Type of Material Encountered
0	1	1		Soil
1	15	14		Caliche
15	40	25		Sand
40	50	10		Sandstone
50	110	60		Dry Sand
110	135	25		Water Sand
135	180	45		Tight Sand
180	212	32		Sand & Gravel
212	216	4		Red Bed

L S Elev 3952'
Depth to K Trc 212'
Elev of K Trc 3740'

Loc. No. 18.35.8.31444

Hydro. Survey ____ Field Check X

SOURCE OF ALTITUDE GIVEN

Interpolated from Topo. Sheet X

Determined by Inst. Leveling ____

Other ____

L S Elev 3961
Depth to K Trc 212'
Elev of K Trc 3749'

The undersigned hereby certifies that, to the best of his knowledge and belief, the foregoing is a true and correct record of the above described well.

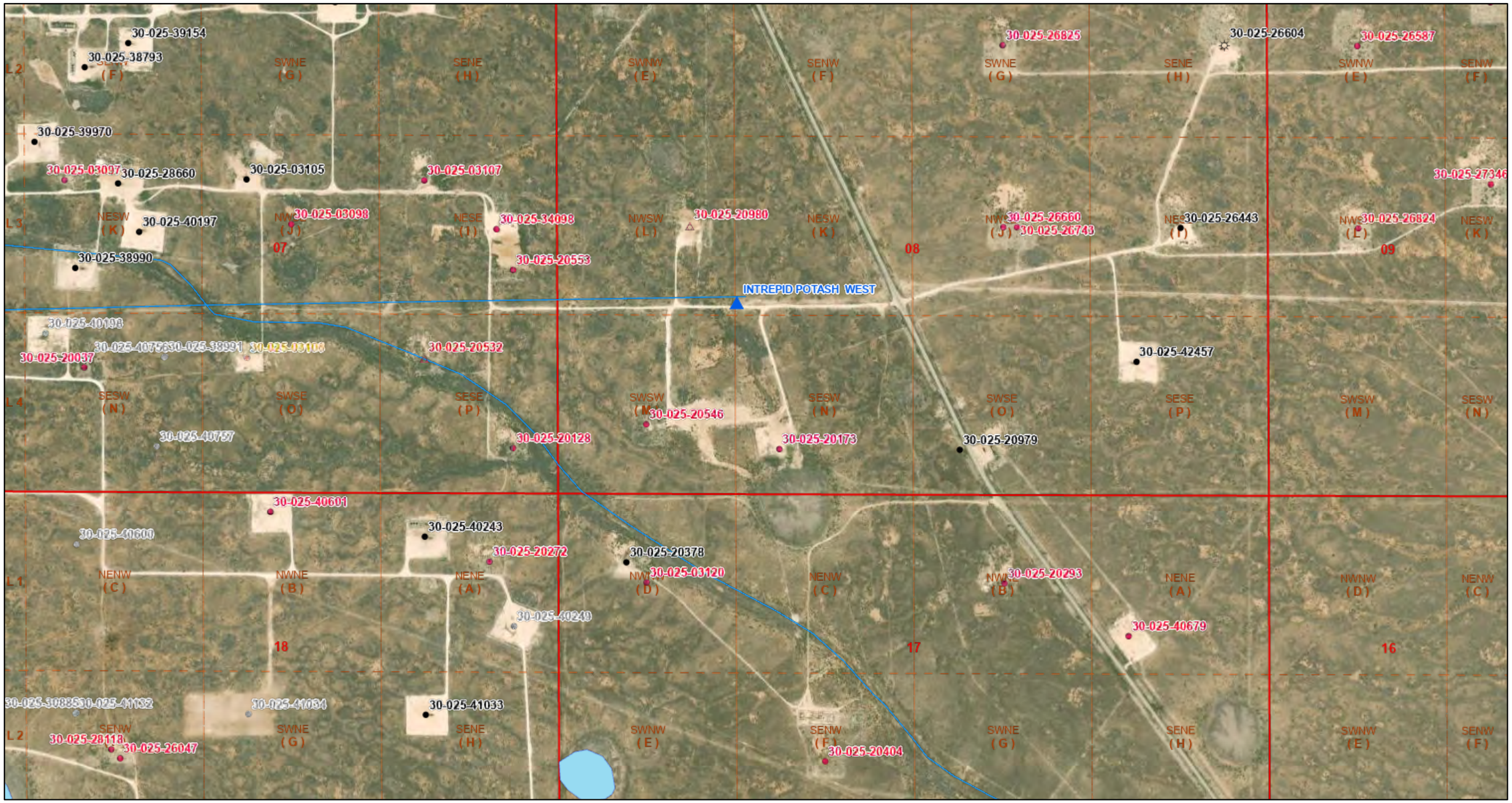
Murrell Abbott
Well Driller

Appendix C

Proximity to Surface Water Features New Mexico OCD Oil and Gas Map

DBS&A a Geo-Logic Company

OCD Well Locations



1/22/2024, 2:56:49 PM

1:10,133

Wells - Large Scale

- Gas, Active
- Oil, Active
- Oil, Cancelled
- Oil, Plugged
- Oil, Temporarily Abandoned
- Salt Water Injection, Plugged
- OSW Water Bodys
- OSE Streams
- NMED Drinking Water Systems
- PLSS Second Division
- PLSS First Division

0 0.1 0.2 0.4 mi

0 0.15 0.3 0.6 km

Oil Conservation Division of the New Mexico Energy, Minerals and Natural Resources Department., Esri, HERE, Garmin, iPC, Maxar, NM OSE, BLM

Appendix D

Release Notification Forms (C-141)

District I
1625 N. French Dr., Hobbs, NM 88240
District II
811 S. First St., Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-141
Revised August 8, 2011

Submit 1 Copy to appropriate District Office in accordance with 19.15.29 NMAC.

Release Notification and Corrective Action

OPERATOR

☒ Initial Report ☐ Final Report

Name of Company: Buckeye Disposals	Contact: Jim Sayre
Address: PO Box 2724 Lubbock, TX 79408	Telephone No.: 575-390-6006
Facility Name: State AF #3	Facility Type: Disposal

Surface Owner	Mineral Owner	API No.: 30-025-20980

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
L	8	185	35E	1980	South Line	990	West Line	Lea County

Latitude: 32.756736 Longitude: 103.484803

NATURE OF RELEASE

Type of Release: Spill	Volume of Release: 15 bbl	Volume Recovered: 14 bbl
Source of Release: 3" PVC Line	Date and Hour of Occurrence	Date and Hour of Discovery
Was Immediate Notice Given? ☐ Yes ☐ No ☐ Not Required	If YES, To Whom?	
By Whom?	Date and Hour	
Was a Watercourse Reached? ☐ Yes ☒ No	If YES, Volume Impacting the Watercourse.	

If a Watercourse was Impacted, Describe Fully.*

Describe Cause of Problem and Remedial Action Taken.*

Broken 3" PVC Line - Repair broken 3" PVC Line.

REVIEWED
By Kristen Lynch at 9:57 am, Sep 07, 2016

Describe Area Affected and Cleanup Action Taken.*

Inside lined dyke – Repair liner, evacuate fluid form inside the dyke and mediate dirt inside the lined dyke.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

Signature: JD Sayre

Printed Name: Jim Sayre

Title: Manager

E-mail Address: jim@thestandardenergy.com

Date: 8/20/16 Phone: 575-390-6006

OIL CONSERVATION DIVISION

CONDITIONALLY
Approved by Environmental Specialist: Kristen Lynch

CONDITIONALLY
Approval Date: 9/07/2016 Expiration Date: 11/07/2016

Conditions of Approval:
Submit Remediation Proposal no Later than 10/7/2016
Provide depth to Ground Water
Delineate and Remediate per NMOCD Guidelines.
Discrete Samples Accepted ONLY. NMOCD must approve all site investigation & Corrective Activities prior to implementation. Corrective action is site specific and risk based. NMOCD retains the right to require remediation to more stringent levels than proposed in guidelines if warranted by site specific conditions. Notify NMOCD prior to all sampling, to allow opportunity for witness sampling operations.

Attached ☐

1RP 4429

nKL1625134663
pKL1625135663

* Attach Additional Sheets If Necessary

HOBBS OCD
MAY 11 2018
RECEIVED

District I
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State of New Mexico
Energy Minerals and Natural Resources

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-141
Revised August 8, 2011

Submit 1 Copy to appropriate District Office in accordance with 19.15.29 NMAC.

Release Notification and Corrective Action

OPERATOR

☑ Initial Report ☐ Final Report

Name of Company Buckeye Disposal	Contact Jim SAYRE
Address	Telephone No. 575-393-8352
Facility Name State AF	Facility Type Disposal

Surface Owner State	Mineral Owner State	API No. 30-025-20980

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
L	8	18S	35E	1980	South	990	West	LEA

Latitude 32.76012 Longitude 103.48457

NATURE OF RELEASE

Type of Release Leak produced water	Volume of Release 30 bbl	Volume Recovered 30 bbl
Source of Release Line Failure	Date and Hour of Occurrence 4-24	Date and Hour of Discovery 4-26-18
Was Immediate Notice Given? ☐ Yes ☑ No ☐ Not Required	If YES, To Whom?	
By Whom?	Date and Hour	
Was a Watercourse Reached? ☐ Yes ☑ No	If YES, Volume Impacting the Watercourse.	

If a Watercourse was Impacted, Describe Fully.*

RECEIVED
By Olivia Yu at 2:23 pm, May 11, 2018

Describe Cause of Problem and Remedial Action Taken.*
Seal on pump went out causing pressure build up & line failure inside dyke & liner

Describe Area Affected and Cleanup Action Taken.*
Inside the liner

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

Signature: Jim Sayre
Printed Name: Jim SAYRE
Title: MANAGER
E-mail Address: jim@thestandardenergy.com
Date: 5-4-18 Phone:

OIL CONSERVATION DIVISION

Approved by Environmental Specialist:

Approval Date: 5/11/2018 Expiration Date:

Conditions of Approval: Attached ☐

see attached directive for historical impacted areas on location.
Please inspect liner in question.
Provide NMOCD with a concise report of the inspection with affirmation the liner has and will continue to contain liquids.

1RP-5056

* Attach Additional Sheets If Necessary

nOY1813152090

pOY1813152414

Operator/Responsible Party,

The OCD has received the form C-141 you provided on _5/11/2018_ regarding an unauthorized release. The information contained on that form has been entered into our incident database and remediation case number _1RP-5056__ has been assigned. **Please refer to this case number in all future correspondence.**

It is the Division's obligation under both the Oil & Gas Act and Water Quality Act to provide for the protection of public health and the environment. Our regulations (19.15.29.11 NMAC) state the following,

> *The responsible person shall complete division-approved corrective action for releases that endanger public health or the environment. The responsible person shall address releases in accordance with a remediation plan submitted to and approved by the division or with an abatement plan submitted in accordance with 19.15.30 NMAC.* [emphasis added]

Release characterization is the first phase of corrective action unless the release is ongoing or is of limited volume and all impacts can be immediately addressed. Proper and cost-effective remediation typically cannot occur without adequate characterization of the impacts of any release. Furthermore, the Division has the ability to impose reasonable conditions upon the efforts it oversees. **As such, the Division is requiring a workplan for the characterization of impacts associated with this release be submitted to the OCD District _1_ office in __Hobbs____ on or before _6/11/2018_. If and when the release characterization workplan is approved, there will be an associated deadline for submittal of the resultant investigation report. Modest extensions of time to these deadlines may be granted, but only with acceptable justification.**

The goals of a characterization effort are: 1) determination of the lateral and vertical extents along with the magnitude of soil contamination. 2) determine if groundwater or surface waters have been impacted. 3) If groundwater or surface waters have been impacted, what are the extents and magnitude of that impact. 4) The characterization of any other adverse impacts that may have occurred (examples: impacts on vegetation, impacts on wildlife, air quality, loss of use of property, etc.). To meet these goals as quickly as possible, the following items must, at a minimum, be addressed in the release characterization workplan and subsequent reporting:

● Horizontal delineation of soil impacts in each of the four cardinal compass directions. Adsorbed soil contamination must be characterized for the following constituents using the associated laboratory methods: benzene, toluene, ethylbenzene, and total xylenes by either Method 8260 or 8021, total petroleum hydrocarbons by Method 8015 extended range (GRO+DRO+MRO; C_6 thru C_{36}), and for chloride by Method 300. This is not an exclusive list of potential contaminants. Analyzed parameters should be modified based on the nature of the released substance(s). Soil sampling must be both within the impacted area and beyond.

● Vertical delineation of soil impacts. Adsorbed soil contamination must be characterized for the following constituents using the associated laboratory methods: benzene, toluene, ethylbenzene, and total xylenes by either Method 8260 or 8021, total petroleum hydrocarbons by Method 8015 extended range (GRO+DRO+MRO; C_6 thru C_{36}), and for chloride by Method 300. As above, this is not an exclusive list of potential contaminants and can be modified. Vertical characterization samples should be taken at depth intervals no greater than five feet apart. Lithologic description of encountered soils must also be provided. At least ten vertical feet of soils with contaminant concentrations at or below these values must be demonstrated as existing above the water table.

● Nominal detection limits for field and laboratory analyses must be provided.

● Composite sampling is not generally allowed.

● Field screening and assessment techniques are acceptable (headspace, titration, EC [include algorithm for validation purposes], EM, etc.), but the sampling and assay procedures must be clearly defined. Copies of field notes are highly desirable. A statistically significant set of split samples must be submitted for confirmatory laboratory analysis, including the laterally farthest and vertically deepest sets of soil samples. Make sure there are at least two soil samples submitted

for laboratory analysis from each borehole or test pit (highest observed contamination and deepest depth investigated). Copies of the actual laboratory results must be provided including chain of custody documentation.

●Probable depth to shallowest protectable groundwater and lateral distance to nearest surface water. If there is an estimate of groundwater depth, the information used to arrive at that estimate must be provided. If there is a reasonable assumption that the depth to protectable water is 50 feet or less, the responsible party should anticipate the need for at least one groundwater monitoring well to be installed in the area of likely maximum contamination.

● If groundwater contamination is encountered, an additional investigation workplan may be required to determine the extents of that contamination. Groundwater and/or surface water samples, if any, must be analyzed by a competent laboratory for volatile organic hydrocarbons (typically Method 8260 full list), total dissolved solids, pH, major anions and cations including chloride and sulfate, dissolved iron, and dissolved manganese. The investigation workplan must provide the groundwater sampling method(s) and sample handling protocols. To the fullest extent possible, aqueous analyses must be undertaken using nominal method detection limits. As with the soil analyses, copies of the actual laboratory results must be provided including chain of custody documentation.

● Accurately scaled and well-drafted site maps must be provided providing the location of borings, test pits, monitoring wells, potentially impacted areas, and significant surface features including roads and site infrastructure that might limit either the release characterization or remedial efforts. Field sketches may be included in subsequent reporting, but should not be considered stand-alone documentation of the site's layout. Digital photographic documentation of the location and fieldwork is recommended, especially if unusual circumstances are encountered.

Nothing herein should be interpreted to preclude emergency response actions or to imply immediate remediation by removal cannot proceed as warranted. Nonetheless, characterization of impacts and confirmation of the effectiveness of remedial efforts must still be provided to the OCD before any release incident will be closed.

Jim Griswold
OCD Environmental Bureau Chief
1220 South St. Francis Drive
Santa Fe, New Mexico 87505
505-476-3465
jim.griswold@state.nm.us

Appendix E

Analytical Laboratory Reports

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

February 19, 2019

JIM SAYRE

BUCKEYE DISPOSAL, LLC

P. O. BOX 513

HOBBS, NM 88241

RE: BUCKEYE

Enclosed are the results of analyses for samples received by the laboratory on 02/15/19 8:05.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-18-11. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (*). For a complete list of accredited analytes and matrices visit the TCEQ website at www.tceq.texas.gov/field/qa/lab_accred_certif.html.

Cardinal Laboratories is accreditated through the State of Colorado Department of Public Health and Environment for:

Method EPA 552.2	Haloacetic Acids (HAA-5)
Method EPA 524.2	Total Trihalomethanes (TTHM)
Method EPA 524.4	Regulated VOCs (V1, V2, V3)

Accreditation applies to public drinking water matrices.

This report meets NELAP requirements and is made up of a cover page, analytical results, and a copy of the original chain-of-custody. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Celey D. Keene

Celey D. Keene

Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

BUCKEYE DISPOSAL, LLC
JIM SAYRE
P. O. BOX 513
HOBBS NM, 88241
Fax To: UNK-NOWN

Received:	02/15/2019	Sampling Date:	02/14/2019
Reported:	02/19/2019	Sampling Type:	Soil
Project Name:	BUCKEYE	Sampling Condition:	** (See Notes)
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	NOT GIVEN		

Sample ID: DRAW SOUTH 14'' (H900609-01)

Chloride, SM4500Cl-B **mg/kg** **Analyzed By: JH**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**960**	16.0	02/19/2019	ND	432	108	400	0.00	

Sample ID: NORTH EAST CORNER 16'' (H900609-02)

Chloride, SM4500Cl-B **mg/kg** **Analyzed By: JH**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**5520**	16.0	02/19/2019	ND	432	108	400	0.00	

Sample ID: SOUTH EAST CORNER 16'' (H900609-03)

Chloride, SM4500Cl-B **mg/kg** **Analyzed By: JH**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**3040**	16.0	02/19/2019	ND	432	108	400	0.00	

Sample ID: DRAW SOUTHEAST 16'' (H900609-04)

Chloride, SM4500Cl-B **mg/kg** **Analyzed By: JH**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**5280**	16.0	02/19/2019	ND	432	108	400	0.00	

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

BUCKEYE DISPOSAL, LLC
JIM SAYRE
P. O. BOX 513
HOBBS NM, 88241
Fax To: UNK-NOWN

Received:	02/15/2019	Sampling Date:	02/14/2019
Reported:	02/19/2019	Sampling Type:	Soil
Project Name:	BUCKEYE	Sampling Condition:	** (See Notes)
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	NOT GIVEN		

Sample ID: DRAW SOUTH WEST 18'' (H900609-05)

Chloride, SM4500Cl-B **mg/kg** **Analyzed By: JH**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**3040**	16.0	02/19/2019	ND	432	108	400	0.00	

Sample ID: NORTH WEST CORNER 36'' (H900609-06)

Chloride, SM4500Cl-B **mg/kg** **Analyzed By: JH**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**1680**	16.0	02/19/2019	ND	432	108	400	0.00	

Sample ID: NORTH WEST LINER 36'' (H900609-07)

Chloride, SM4500Cl-B **mg/kg** **Analyzed By: JH**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**1160**	16.0	02/19/2019	ND	432	108	400	0.00	

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Notes and Definitions

ND	Analyte NOT DETECTED at or above the reporting limit
RPD	Relative Percent Difference
**	Samples not received at proper temperature of 6°C or below.
***	Insufficient time to reach temperature.
-	Chloride by SM4500Cl-B does not require samples be received at or below 6°C
	Samples reported on an as received basis (wet) unless otherwise noted on report

Cardinal Laboratories

*=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

101 East Marland, Hobbs, NM 88240
(575) 393-2326 FAX (575) 393-2476

		BILL TO	
Company Name: Buckeye Disposal		P.O. #:	
Project Manager: Jim Sayre		Company:	
Address: PO Box 513		Attn:	
City: Hobbs	State: NM Zip: 88240	Address:	
Phone #: 575-361-5072	Fax #: 575-393-8352	City:	
Project #:	Project Owner:	State:	Zip:
Project Name:		Phone #:	
Project Location: Buckeye		Fax #:	
Sampler Name: Jim Sayre			

Lab I.D. (FOR LAB USE ONLY)	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX: GROUNDWATER	MATRIX: WASTEWATER	MATRIX: SOIL	MATRIX: OIL	MATRIX: SLUDGE	MATRIX: OTHER :	PRESERV.: ACID/BASE:	PRESERV.: ICE / COOL	PRESERV.: OTHER :	SAMPLING: DATE	SAMPLING: TIME	ANALYSIS REQUEST: Cl
H900609 1	Draw South 14"	G	1			✓							2-14-19	17:30	✓
2	North East Corner 16"	G	1			✓							2-14-19	17:30	✓
3	South East Corner 16"	G	1			✓							2-14-19	17:30	✓
4	Draw South East 16"	G	1			✓							2-14-19	17:30	✓
5	Draw South West 18"	G	1			✓							2-14-19	17:30	✓
6	North West Corner 36"	G	1			✓							2-14-19	17:30	✓
7	North West Liner 36"	G	1			✓							2-14-19	17:30	✓

Relinquished By: J.D. Sayre	Date: 2-15-19 Time: 0805	Received By: Tamara Oldaker	Phone Result: ☐ Yes ☐ No Add'l Phone #:
Relinquished By:	Date: Time:	Received By:	Fax Result: ☐ Yes ☐ No Add'l Fax #:
Delivered By: (Circle One) Sampler - UPS - Bus - Other: 19.3c #97	Sample Condition: Cool ☐ Yes ☑ No; Intact ☑ Yes ☐ No	CHECKED BY: (Initials) TO	REMARKS: JIM@thestandardenergy.com

OCD Ex. 23-058

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

December 07, 2023

JACK YATES

STANDARD ENERGY SERVICES

P. O. BOX 2724

LUBBOCK, TX 79408

RE: AF

Enclosed are the results of analyses for samples received by the laboratory on 12/04/23 9:22.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-22-15. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (*). For a complete list of accredited analytes and matrices visit the TCEQ website at www.tceq.texas.gov/field/qa/lab_accred_certif.html.

Cardinal Laboratories is accreditated through the State of Colorado Department of Public Health and Environment for:

Method EPA 552.2	Total Haloacetic Acids (HAA-5)
Method EPA 524.2	Total Trihalomethanes (TTHM)
Method EPA 524.4	Regulated VOCs (V1, V2, V3)

Cardinal Laboratories is accredited through the State of New Mexico Environment Department for:

Method SM 9223-B	Total Coliform and E. coli (Colilert MMO-MUG)
Method EPA 524.2	Regulated VOCs and Total Trihalomethanes (TTHM)
Method EPA 552.2	Total Haloacetic Acids (HAA-5)

Accreditation applies to public drinking water matrices for State of Colorado and New Mexico.

This report meets NELAP requirements and is made up of a cover page, analytical results, and a copy of the original chain-of-custody. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Celey D. Keene

Celey D. Keene

Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

STANDARD ENERGY SERVICES P. O. BOX 2724 LUBBOCK TX, 79408	Project: AF Project Number: 1 Project Manager: JACK YATES Fax To: (575) 234-2873	Reported: 07-Dec-23 13:40

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
01 2FT	H236486-01	Soil	01-Dec-23 06:00	04-Dec-23 09:22
02 2FT	H236486-02	Soil	01-Dec-23 06:00	04-Dec-23 09:22
02 4FT	H236486-03	Soil	01-Dec-23 06:00	04-Dec-23 09:22
03 2FT	H236486-04	Soil	01-Dec-23 06:00	04-Dec-23 09:22
AF 04 2FT	H236486-05	Soil	01-Dec-23 06:00	04-Dec-23 09:22
AF 05 2FT	H236486-06	Soil	01-Dec-23 06:00	04-Dec-23 09:22
AF 06 2FT	H236486-07	Soil	01-Dec-23 06:00	04-Dec-23 09:22
AF 07 2FT	H236486-08	Soil	01-Dec-23 06:00	04-Dec-23 09:22
AF 08 (2FT)	H236486-09	Soil	01-Dec-23 06:00	04-Dec-23 09:22
AF 09 4FT	H236486-10	Soil	01-Dec-23 06:00	04-Dec-23 09:22
AF 09 2FT	H236486-11	Soil	01-Dec-23 06:00	04-Dec-23 09:22
AF 10 2FT	H236486-12	Soil	01-Dec-23 06:00	04-Dec-23 09:22
AF 11 2FT	H236486-13	Soil	01-Dec-23 06:00	04-Dec-23 09:22
AF 12 2FT	H236486-14	Soil	01-Dec-23 06:00	04-Dec-23 09:22
AF 12 4FT	H236486-15	Soil	01-Dec-23 06:00	04-Dec-23 09:22
AF 13 2FT	H236486-16	Soil	01-Dec-23 06:00	04-Dec-23 09:22
AF 14 4FT	H236486-17	Soil	01-Dec-23 06:00	04-Dec-23 09:22
AF 15 2FT	H236486-18	Soil	01-Dec-23 06:00	04-Dec-23 09:22
AF 16 2FT	H236486-19	Soil	01-Dec-23 06:00	04-Dec-23 09:22
AF 16 4FT	H236486-20	Soil	01-Dec-23 06:00	04-Dec-23 09:22
AF 17 2FT	H236486-21	Soil	01-Dec-23 06:00	04-Dec-23 09:22
AF 14 2FT	H236486-22	Soil	01-Dec-23 06:00	04-Dec-23 09:22
AF 17 @ 4FT	H236486-23	Soil	01-Dec-23 06:00	04-Dec-23 09:22

12/07/23 - All sample jars had headspace. BTEX and TPH results may be biased low.

Cardinal Laboratories

*=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

STANDARD ENERGY SERVICES P. O. BOX 2724 LUBBOCK TX, 79408	Project: AF Project Number: 1 Project Manager: JACK YATES Fax To: (575) 234-2873	Reported: 07-Dec-23 13:40

01 2FT

H236486-01 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
Cardinal Laboratories										
Inorganic Compounds										
Chloride	**5840**		16.0	mg/kg	4	3120512	AC	05-Dec-23	4500-Cl-B	
Volatile Organic Compounds by EPA Method 8021										**HDSP-1**
Benzene*	<0.050		0.050	mg/kg	50	3120424	JH/	05-Dec-23	8021B	
Toluene*	<0.050		0.050	mg/kg	50	3120424	JH/	05-Dec-23	8021B	
Ethylbenzene*	<0.050		0.050	mg/kg	50	3120424	JH/	05-Dec-23	8021B	
Total Xylenes*	<0.150		0.150	mg/kg	50	3120424	JH/	05-Dec-23	8021B	
Total BTEX	<0.300		0.300	mg/kg	50	3120424	JH/	05-Dec-23	8021B	
Surrogate: 4-Bromofluorobenzene (PID)			*119 %*	*71.5-134*		*3120424*	JH/	*05-Dec-23*	*8021B*	
Petroleum Hydrocarbons by GC FID										**HDSP-1**
GRO C6-C10*	<10.0		10.0	mg/kg	1	3120427	MS	05-Dec-23	8015B	
DRO >C10-C28*	**801**		10.0	mg/kg	1	3120427	MS	05-Dec-23	8015B	
EXT DRO >C28-C36	**286**		10.0	mg/kg	1	3120427	MS	05-Dec-23	8015B	
Surrogate: 1-Chlorooctane			*82.0 %*	*48.2-134*		*3120427*	MS	*05-Dec-23*	*8015B*	
Surrogate: 1-Chlorooctadecane			*97.5 %*	*49.1-148*		*3120427*	MS	*05-Dec-23*	*8015B*	

Cardinal Laboratories

*=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

STANDARD ENERGY SERVICES P. O. BOX 2724 LUBBOCK TX, 79408	Project: AF Project Number: 1 Project Manager: JACK YATES Fax To: (575) 234-2873	Reported: 07-Dec-23 13:40

02 2FT

H236486-02 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
Cardinal Laboratories										
Inorganic Compounds										
Chloride	**368**		16.0	mg/kg	4	3120512	AC	05-Dec-23	4500-Cl-B	
Volatile Organic Compounds by EPA Method 8021										**HDSP-1**
Benzene*	<0.050		0.050	mg/kg	50	3120424	JH/	05-Dec-23	8021B	
Toluene*	<0.050		0.050	mg/kg	50	3120424	JH/	05-Dec-23	8021B	
Ethylbenzene*	<0.050		0.050	mg/kg	50	3120424	JH/	05-Dec-23	8021B	
Total Xylenes*	<0.150		0.150	mg/kg	50	3120424	JH/	05-Dec-23	8021B	
Total BTEX	<0.300		0.300	mg/kg	50	3120424	JH/	05-Dec-23	8021B	
Surrogate: 4-Bromofluorobenzene (PID)			*113 %*	*71.5-134*		*3120424*	JH/	*05-Dec-23*	*8021B*	
Petroleum Hydrocarbons by GC FID										**HDSP-1**
GRO C6-C10*	<10.0		10.0	mg/kg	1	3120427	MS	05-Dec-23	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	3120427	MS	05-Dec-23	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	3120427	MS	05-Dec-23	8015B	
Surrogate: 1-Chlorooctane			*76.3 %*	*48.2-134*		*3120427*	MS	*05-Dec-23*	*8015B*	
Surrogate: 1-Chlorooctadecane			*75.5 %*	*49.1-148*		*3120427*	MS	*05-Dec-23*	*8015B*	

Cardinal Laboratories

*=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

STANDARD ENERGY SERVICES P. O. BOX 2724 LUBBOCK TX, 79408	Project: AF Project Number: 1 Project Manager: JACK YATES Fax To: (575) 234-2873	Reported: 07-Dec-23 13:40

02 4FT

H236486-03 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
Cardinal Laboratories										
Inorganic Compounds										
Chloride	**80.0**		16.0	mg/kg	4	3120512	AC	05-Dec-23	4500-Cl-B	
Volatile Organic Compounds by EPA Method 8021										**HDSP-1**
Benzene*	<0.050		0.050	mg/kg	50	3120424	JH/	05-Dec-23	8021B	
Toluene*	<0.050		0.050	mg/kg	50	3120424	JH/	05-Dec-23	8021B	
Ethylbenzene*	<0.050		0.050	mg/kg	50	3120424	JH/	05-Dec-23	8021B	
Total Xylenes*	<0.150		0.150	mg/kg	50	3120424	JH/	05-Dec-23	8021B	
Total BTEX	<0.300		0.300	mg/kg	50	3120424	JH/	05-Dec-23	8021B	
Surrogate: 4-Bromofluorobenzene (PID)			*114 %*	*71.5-134*		*3120424*	JH/	*05-Dec-23*	*8021B*	
Petroleum Hydrocarbons by GC FID										**HDSP-1**
GRO C6-C10*	<10.0		10.0	mg/kg	1	3120427	MS	05-Dec-23	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	3120427	MS	05-Dec-23	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	3120427	MS	05-Dec-23	8015B	
Surrogate: 1-Chlorooctane			*84.9 %*	*48.2-134*		*3120427*	MS	*05-Dec-23*	*8015B*	
Surrogate: 1-Chlorooctadecane			*85.8 %*	*49.1-148*		*3120427*	MS	*05-Dec-23*	*8015B*	

Cardinal Laboratories

*=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

STANDARD ENERGY SERVICES P. O. BOX 2724 LUBBOCK TX, 79408	Project: AF Project Number: 1 Project Manager: JACK YATES Fax To: (575) 234-2873	Reported: 07-Dec-23 13:40

03 2FT

H236486-04 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
Cardinal Laboratories										
Inorganic Compounds										
Chloride	**5600**		16.0	mg/kg	4	3120512	AC	05-Dec-23	4500-Cl-B	
Volatile Organic Compounds by EPA Method 8021										**HDSP-1**
Benzene*	<0.050		0.050	mg/kg	50	3120424	JH/	05-Dec-23	8021B	
Toluene*	<0.050		0.050	mg/kg	50	3120424	JH/	05-Dec-23	8021B	
Ethylbenzene*	<0.050		0.050	mg/kg	50	3120424	JH/	05-Dec-23	8021B	
Total Xylenes*	**0.269**		0.150	mg/kg	50	3120424	JH/	05-Dec-23	8021B	
Total BTEX	<0.300		0.300	mg/kg	50	3120424	JH/	05-Dec-23	8021B	
Surrogate: 4-Bromofluorobenzene (PID)			*125 %*	*71.5-134*		*3120424*	JH/	*05-Dec-23*	*8021B*	
Petroleum Hydrocarbons by GC FID										**HDSP-1**
GRO C6-C10*	**51.6**		10.0	mg/kg	1	3120427	MS	05-Dec-23	8015B	
DRO >C10-C28*	**1930**		10.0	mg/kg	1	3120427	MS	05-Dec-23	8015B	
EXT DRO >C28-C36	**408**		10.0	mg/kg	1	3120427	MS	05-Dec-23	8015B	
Surrogate: 1-Chlorooctane			*93.2 %*	*48.2-134*		*3120427*	MS	*05-Dec-23*	*8015B*	
Surrogate: 1-Chlorooctadecane			*107 %*	*49.1-148*		*3120427*	MS	*05-Dec-23*	*8015B*	

Cardinal Laboratories

*=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

STANDARD ENERGY SERVICES P. O. BOX 2724 LUBBOCK TX, 79408	Project: AF Project Number: 1 Project Manager: JACK YATES Fax To: (575) 234-2873	Reported: 07-Dec-23 13:40

AF 04 2FT

H236486-05 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
Cardinal Laboratories										
Inorganic Compounds										
Chloride	**528**		16.0	mg/kg	4	3120512	AC	05-Dec-23	4500-Cl-B	
Volatile Organic Compounds by EPA Method 8021										**HDSP-1**
Benzene*	<0.050		0.050	mg/kg	50	3120424	JH/	05-Dec-23	8021B	
Toluene*	<0.050		0.050	mg/kg	50	3120424	JH/	05-Dec-23	8021B	
Ethylbenzene*	<0.050		0.050	mg/kg	50	3120424	JH/	05-Dec-23	8021B	
Total Xylenes*	<0.150		0.150	mg/kg	50	3120424	JH/	05-Dec-23	8021B	
Total BTEX	<0.300		0.300	mg/kg	50	3120424	JH/	05-Dec-23	8021B	
Surrogate: 4-Bromofluorobenzene (PID)			*118 %*	*71.5-134*		*3120424*	JH/	*05-Dec-23*	*8021B*	
Petroleum Hydrocarbons by GC FID										**HDSP-1**
GRO C6-C10*	<10.0		10.0	mg/kg	1	3120427	MS	05-Dec-23	8015B	
DRO >C10-C28*	**87.4**		10.0	mg/kg	1	3120427	MS	05-Dec-23	8015B	
EXT DRO >C28-C36	**70.3**		10.0	mg/kg	1	3120427	MS	05-Dec-23	8015B	
Surrogate: 1-Chlorooctane			*76.9 %*	*48.2-134*		*3120427*	MS	*05-Dec-23*	*8015B*	
Surrogate: 1-Chlorooctadecane			*76.0 %*	*49.1-148*		*3120427*	MS	*05-Dec-23*	*8015B*	

Cardinal Laboratories

*=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

STANDARD ENERGY SERVICES P. O. BOX 2724 LUBBOCK TX, 79408	Project: AF Project Number: 1 Project Manager: JACK YATES Fax To: (575) 234-2873	Reported: 07-Dec-23 13:40

AF 05 2FT

H236486-06 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
Cardinal Laboratories										
Inorganic Compounds										
Chloride	**160**		16.0	mg/kg	4	3120521	AC	05-Dec-23	4500-Cl-B	
Volatile Organic Compounds by EPA Method 8021										**HDSP-1**
Benzene*	<0.050		0.050	mg/kg	50	3120424	JH/	05-Dec-23	8021B	
Toluene*	<0.050		0.050	mg/kg	50	3120424	JH/	05-Dec-23	8021B	
Ethylbenzene*	<0.050		0.050	mg/kg	50	3120424	JH/	05-Dec-23	8021B	
Total Xylenes*	<0.150		0.150	mg/kg	50	3120424	JH/	05-Dec-23	8021B	
Total BTEX	<0.300		0.300	mg/kg	50	3120424	JH/	05-Dec-23	8021B	
Surrogate: 4-Bromofluorobenzene (PID)			*115 %*	*71.5-134*		*3120424*	JH/	*05-Dec-23*	*8021B*	
Petroleum Hydrocarbons by GC FID										**HDSP-1**
GRO C6-C10*	<10.0		10.0	mg/kg	1	3120428	MS	05-Dec-23	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	3120428	MS	05-Dec-23	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	3120428	MS	05-Dec-23	8015B	
Surrogate: 1-Chlorooctane			*72.9 %*	*48.2-134*		*3120428*	MS	*05-Dec-23*	*8015B*	
Surrogate: 1-Chlorooctadecane			*65.7 %*	*49.1-148*		*3120428*	MS	*05-Dec-23*	*8015B*	

Cardinal Laboratories

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Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

STANDARD ENERGY SERVICES P. O. BOX 2724 LUBBOCK TX, 79408	Project: AF Project Number: 1 Project Manager: JACK YATES Fax To: (575) 234-2873	Reported: 07-Dec-23 13:40

AF 06 2FT

H236486-07 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
Cardinal Laboratories										
Inorganic Compounds										
Chloride	**1300**		16.0	mg/kg	4	3120521	AC	05-Dec-23	4500-Cl-B	
Volatile Organic Compounds by EPA Method 8021										**HDSP-1**
Benzene*	<0.050		0.050	mg/kg	50	3120424	JH/	05-Dec-23	8021B	
Toluene*	<0.050		0.050	mg/kg	50	3120424	JH/	05-Dec-23	8021B	
Ethylbenzene*	<0.050		0.050	mg/kg	50	3120424	JH/	05-Dec-23	8021B	
Total Xylenes*	<0.150		0.150	mg/kg	50	3120424	JH/	05-Dec-23	8021B	
Total BTEX	<0.300		0.300	mg/kg	50	3120424	JH/	05-Dec-23	8021B	
Surrogate: 4-Bromofluorobenzene (PID)			*115 %*	*71.5-134*		*3120424*	JH/	*05-Dec-23*	*8021B*	
Petroleum Hydrocarbons by GC FID										**HDSP-1**
GRO C6-C10*	<10.0		10.0	mg/kg	1	3120428	MS	05-Dec-23	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	3120428	MS	05-Dec-23	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	3120428	MS	05-Dec-23	8015B	
Surrogate: 1-Chlorooctane			*75.7 %*	*48.2-134*		*3120428*	MS	*05-Dec-23*	*8015B*	
Surrogate: 1-Chlorooctadecane			*66.6 %*	*49.1-148*		*3120428*	MS	*05-Dec-23*	*8015B*	

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Analytical Results For:

STANDARD ENERGY SERVICES P. O. BOX 2724 LUBBOCK TX, 79408	Project: AF Project Number: 1 Project Manager: JACK YATES Fax To: (575) 234-2873	Reported: 07-Dec-23 13:40

AF 07 2FT

H236486-08 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
Cardinal Laboratories										
Inorganic Compounds										
Chloride	**1380**		16.0	mg/kg	4	3120521	AC	05-Dec-23	4500-Cl-B	
Volatile Organic Compounds by EPA Method 8021										**HDSP-1**
Benzene*	<0.050		0.050	mg/kg	50	3120424	JH/	05-Dec-23	8021B	
Toluene*	<0.050		0.050	mg/kg	50	3120424	JH/	05-Dec-23	8021B	
Ethylbenzene*	<0.050		0.050	mg/kg	50	3120424	JH/	05-Dec-23	8021B	
Total Xylenes*	<0.150		0.150	mg/kg	50	3120424	JH/	05-Dec-23	8021B	
Total BTEX	<0.300		0.300	mg/kg	50	3120424	JH/	05-Dec-23	8021B	
Surrogate: 4-Bromofluorobenzene (PID)			*113 %*	*71.5-134*		*3120424*	JH/	*05-Dec-23*	*8021B*	
Petroleum Hydrocarbons by GC FID										**HDSP-1**
GRO C6-C10*	<10.0		10.0	mg/kg	1	3120428	MS	05-Dec-23	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	3120428	MS	05-Dec-23	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	3120428	MS	05-Dec-23	8015B	
Surrogate: 1-Chlorooctane			*87.1 %*	*48.2-134*		*3120428*	MS	*05-Dec-23*	*8015B*	
Surrogate: 1-Chlorooctadecane			*80.2 %*	*49.1-148*		*3120428*	MS	*05-Dec-23*	*8015B*	

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Analytical Results For:

STANDARD ENERGY SERVICES P. O. BOX 2724 LUBBOCK TX, 79408	Project: AF Project Number: 1 Project Manager: JACK YATES Fax To: (575) 234-2873	Reported: 07-Dec-23 13:40

AF 08 (2FT)

H236486-09 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
Cardinal Laboratories										
Inorganic Compounds										
Chloride	**1150**		16.0	mg/kg	4	3120521	AC	05-Dec-23	4500-Cl-B	
Volatile Organic Compounds by EPA Method 8021										**HDSP-1**
Benzene*	<0.050		0.050	mg/kg	50	3120424	JH/	05-Dec-23	8021B	
Toluene*	<0.050		0.050	mg/kg	50	3120424	JH/	05-Dec-23	8021B	
Ethylbenzene*	<0.050		0.050	mg/kg	50	3120424	JH/	05-Dec-23	8021B	
Total Xylenes*	<0.150		0.150	mg/kg	50	3120424	JH/	05-Dec-23	8021B	
Total BTEX	<0.300		0.300	mg/kg	50	3120424	JH/	05-Dec-23	8021B	
Surrogate: 4-Bromofluorobenzene (PID)			*115 %*	*71.5-134*		*3120424*	JH/	*05-Dec-23*	*8021B*	
Petroleum Hydrocarbons by GC FID										**HDSP-1**
GRO C6-C10*	<10.0		10.0	mg/kg	1	3120428	MS	05-Dec-23	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	3120428	MS	05-Dec-23	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	3120428	MS	05-Dec-23	8015B	
Surrogate: 1-Chlorooctane			*69.1 %*	*48.2-134*		*3120428*	MS	*05-Dec-23*	*8015B*	
Surrogate: 1-Chlorooctadecane			*62.1 %*	*49.1-148*		*3120428*	MS	*05-Dec-23*	*8015B*	

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Analytical Results For:

STANDARD ENERGY SERVICES P. O. BOX 2724 LUBBOCK TX, 79408	Project: AF Project Number: 1 Project Manager: JACK YATES Fax To: (575) 234-2873	Reported: 07-Dec-23 13:40

AF 09 4FT

H236486-10 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
Cardinal Laboratories										
Inorganic Compounds										
Chloride	**48.0**		16.0	mg/kg	4	3120521	AC	05-Dec-23	4500-Cl-B	
Volatile Organic Compounds by EPA Method 8021										**HDSP-1**
Benzene*	<0.050		0.050	mg/kg	50	3120424	JH/	05-Dec-23	8021B	
Toluene*	<0.050		0.050	mg/kg	50	3120424	JH/	05-Dec-23	8021B	
Ethylbenzene*	<0.050		0.050	mg/kg	50	3120424	JH/	05-Dec-23	8021B	
Total Xylenes*	<0.150		0.150	mg/kg	50	3120424	JH/	05-Dec-23	8021B	
Total BTEX	<0.300		0.300	mg/kg	50	3120424	JH/	05-Dec-23	8021B	
Surrogate: 4-Bromofluorobenzene (PID)			*114 %*	*71.5-134*		*3120424*	JH/	*05-Dec-23*	*8021B*	
Petroleum Hydrocarbons by GC FID										**HDSP-1**
GRO C6-C10*	<10.0		10.0	mg/kg	1	3120428	MS	05-Dec-23	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	3120428	MS	05-Dec-23	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	3120428	MS	05-Dec-23	8015B	
Surrogate: 1-Chlorooctane			*76.1 %*	*48.2-134*		*3120428*	MS	*05-Dec-23*	*8015B*	
Surrogate: 1-Chlorooctadecane			*68.9 %*	*49.1-148*		*3120428*	MS	*05-Dec-23*	*8015B*	

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Analytical Results For:

STANDARD ENERGY SERVICES P. O. BOX 2724 LUBBOCK TX, 79408	Project: AF Project Number: 1 Project Manager: JACK YATES Fax To: (575) 234-2873	Reported: 07-Dec-23 13:40

AF 09 2FT

H236486-11 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
Cardinal Laboratories										
Inorganic Compounds										
Chloride	**48.0**		16.0	mg/kg	4	3120521	AC	05-Dec-23	4500-Cl-B	
Volatile Organic Compounds by EPA Method 8021										**HDSP-1**
Benzene*	<0.050		0.050	mg/kg	50	3120424	JH/	05-Dec-23	8021B	
Toluene*	<0.050		0.050	mg/kg	50	3120424	JH/	05-Dec-23	8021B	
Ethylbenzene*	<0.050		0.050	mg/kg	50	3120424	JH/	05-Dec-23	8021B	
Total Xylenes*	<0.150		0.150	mg/kg	50	3120424	JH/	05-Dec-23	8021B	
Total BTEX	<0.300		0.300	mg/kg	50	3120424	JH/	05-Dec-23	8021B	
Surrogate: 4-Bromofluorobenzene (PID)			*115 %*	*71.5-134*		*3120424*	JH/	*05-Dec-23*	*8021B*	
Petroleum Hydrocarbons by GC FID										**HDSP-1**
GRO C6-C10*	<10.0		10.0	mg/kg	1	3120428	MS	05-Dec-23	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	3120428	MS	05-Dec-23	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	3120428	MS	05-Dec-23	8015B	
Surrogate: 1-Chlorooctane			*88.7 %*	*48.2-134*		*3120428*	MS	*05-Dec-23*	*8015B*	
Surrogate: 1-Chlorooctadecane			*80.8 %*	*49.1-148*		*3120428*	MS	*05-Dec-23*	*8015B*	

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Analytical Results For:

STANDARD ENERGY SERVICES P. O. BOX 2724 LUBBOCK TX, 79408	Project: AF Project Number: 1 Project Manager: JACK YATES Fax To: (575) 234-2873	Reported: 07-Dec-23 13:40

AF 10 2FT

H236486-12 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
Cardinal Laboratories										
Inorganic Compounds										
Chloride	**32.0**		16.0	mg/kg	4	3120521	AC	05-Dec-23	4500-Cl-B	
Volatile Organic Compounds by EPA Method 8021										**HDSP-1**
Benzene*	<0.050		0.050	mg/kg	50	3120424	JH/	05-Dec-23	8021B	
Toluene*	<0.050		0.050	mg/kg	50	3120424	JH/	05-Dec-23	8021B	
Ethylbenzene*	<0.050		0.050	mg/kg	50	3120424	JH/	05-Dec-23	8021B	
Total Xylenes*	<0.150		0.150	mg/kg	50	3120424	JH/	05-Dec-23	8021B	
Total BTEX	<0.300		0.300	mg/kg	50	3120424	JH/	05-Dec-23	8021B	
Surrogate: 4-Bromofluorobenzene (PID)			*116 %*	*71.5-134*		*3120424*	JH/	*05-Dec-23*	*8021B*	
Petroleum Hydrocarbons by GC FID										**HDSP-1**
GRO C6-C10*	<10.0		10.0	mg/kg	1	3120428	MS	05-Dec-23	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	3120428	MS	05-Dec-23	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	3120428	MS	05-Dec-23	8015B	
Surrogate: 1-Chlorooctane			*87.4 %*	*48.2-134*		*3120428*	MS	*05-Dec-23*	*8015B*	
Surrogate: 1-Chlorooctadecane			*78.1 %*	*49.1-148*		*3120428*	MS	*05-Dec-23*	*8015B*	

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Analytical Results For:

STANDARD ENERGY SERVICES P. O. BOX 2724 LUBBOCK TX, 79408	Project: AF Project Number: 1 Project Manager: JACK YATES Fax To: (575) 234-2873	Reported: 07-Dec-23 13:40

AF 11 2FT

H236486-13 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
Cardinal Laboratories										
Inorganic Compounds										
Chloride	**288**		16.0	mg/kg	4	3120521	AC	05-Dec-23	4500-Cl-B	
Volatile Organic Compounds by EPA Method 8021										**HDSP-1**
Benzene*	<0.050		0.050	mg/kg	50	3120424	JH/	05-Dec-23	8021B	
Toluene*	<0.050		0.050	mg/kg	50	3120424	JH/	05-Dec-23	8021B	
Ethylbenzene*	<0.050		0.050	mg/kg	50	3120424	JH/	05-Dec-23	8021B	
Total Xylenes*	<0.150		0.150	mg/kg	50	3120424	JH/	05-Dec-23	8021B	
Total BTEX	<0.300		0.300	mg/kg	50	3120424	JH/	05-Dec-23	8021B	
Surrogate: 4-Bromofluorobenzene (PID)			*110 %*	*71.5-134*		*3120424*	JH/	*05-Dec-23*	*8021B*	
Petroleum Hydrocarbons by GC FID										**HDSP-1**
GRO C6-C10*	<10.0		10.0	mg/kg	1	3120428	MS	05-Dec-23	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	3120428	MS	05-Dec-23	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	3120428	MS	05-Dec-23	8015B	
Surrogate: 1-Chlorooctane			*82.8 %*	*48.2-134*		*3120428*	MS	*05-Dec-23*	*8015B*	
Surrogate: 1-Chlorooctadecane			*75.4 %*	*49.1-148*		*3120428*	MS	*05-Dec-23*	*8015B*	

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Analytical Results For:

STANDARD ENERGY SERVICES P. O. BOX 2724 LUBBOCK TX, 79408	Project: AF Project Number: 1 Project Manager: JACK YATES Fax To: (575) 234-2873	Reported: 07-Dec-23 13:40

AF 12 2FT

H236486-14 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
Cardinal Laboratories										
Inorganic Compounds										
Chloride	**2400**		16.0	mg/kg	4	3120521	AC	05-Dec-23	4500-Cl-B	
Volatile Organic Compounds by EPA Method 8021										**HDSP-1**
Benzene*	<0.050		0.050	mg/kg	50	3120424	JH/	05-Dec-23	8021B	
Toluene*	<0.050		0.050	mg/kg	50	3120424	JH/	05-Dec-23	8021B	
Ethylbenzene*	<0.050		0.050	mg/kg	50	3120424	JH/	05-Dec-23	8021B	
Total Xylenes*	<0.150		0.150	mg/kg	50	3120424	JH/	05-Dec-23	8021B	
Total BTEX	<0.300		0.300	mg/kg	50	3120424	JH/	05-Dec-23	8021B	
Surrogate: 4-Bromofluorobenzene (PID)			*114 %*	*71.5-134*		*3120424*	JH/	*05-Dec-23*	*8021B*	
Petroleum Hydrocarbons by GC FID										**HDSP-1**
GRO C6-C10*	<10.0		10.0	mg/kg	1	3120428	MS	05-Dec-23	8015B	
DRO >C10-C28*	**289**		10.0	mg/kg	1	3120428	MS	05-Dec-23	8015B	
EXT DRO >C28-C36	**165**		10.0	mg/kg	1	3120428	MS	05-Dec-23	8015B	
Surrogate: 1-Chlorooctane			*82.3 %*	*48.2-134*		*3120428*	MS	*05-Dec-23*	*8015B*	
Surrogate: 1-Chlorooctadecane			*80.7 %*	*49.1-148*		*3120428*	MS	*05-Dec-23*	*8015B*	

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Analytical Results For:

STANDARD ENERGY SERVICES P. O. BOX 2724 LUBBOCK TX, 79408	Project: AF Project Number: 1 Project Manager: JACK YATES Fax To: (575) 234-2873	Reported: 07-Dec-23 13:40

AF 12 4FT

H236486-15 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
Cardinal Laboratories										
Inorganic Compounds										
Chloride	**1360**		16.0	mg/kg	4	3120521	AC	05-Dec-23	4500-Cl-B	
Volatile Organic Compounds by EPA Method 8021										**HDSP-1**
Benzene*	<0.050		0.050	mg/kg	50	3120424	JH/	05-Dec-23	8021B	
Toluene*	<0.050		0.050	mg/kg	50	3120424	JH/	05-Dec-23	8021B	
Ethylbenzene*	<0.050		0.050	mg/kg	50	3120424	JH/	05-Dec-23	8021B	
Total Xylenes*	<0.150		0.150	mg/kg	50	3120424	JH/	05-Dec-23	8021B	
Total BTEX	<0.300		0.300	mg/kg	50	3120424	JH/	05-Dec-23	8021B	
Surrogate: 4-Bromofluorobenzene (PID)			*114 %*	*71.5-134*		*3120424*	JH/	*05-Dec-23*	*8021B*	
Petroleum Hydrocarbons by GC FID										**HDSP-1**
GRO C6-C10*	<10.0		10.0	mg/kg	1	3120428	MS	05-Dec-23	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	3120428	MS	05-Dec-23	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	3120428	MS	05-Dec-23	8015B	
Surrogate: 1-Chlorooctane			*82.5 %*	*48.2-134*		*3120428*	MS	*05-Dec-23*	*8015B*	
Surrogate: 1-Chlorooctadecane			*75.3 %*	*49.1-148*		*3120428*	MS	*05-Dec-23*	*8015B*	

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Analytical Results For:

STANDARD ENERGY SERVICES P. O. BOX 2724 LUBBOCK TX, 79408	Project: AF Project Number: 1 Project Manager: JACK YATES Fax To: (575) 234-2873	Reported: 07-Dec-23 13:40

AF 13 2FT

H236486-16 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
Cardinal Laboratories										
Inorganic Compounds										
Chloride	**96.0**		16.0	mg/kg	4	3120521	AC	05-Dec-23	4500-Cl-B	
Volatile Organic Compounds by EPA Method 8021										**HDSP-1**
Benzene*	<0.050		0.050	mg/kg	50	3120424	JH/	05-Dec-23	8021B	
Toluene*	<0.050		0.050	mg/kg	50	3120424	JH/	05-Dec-23	8021B	
Ethylbenzene*	<0.050		0.050	mg/kg	50	3120424	JH/	05-Dec-23	8021B	
Total Xylenes*	<0.150		0.150	mg/kg	50	3120424	JH/	05-Dec-23	8021B	
Total BTEX	<0.300		0.300	mg/kg	50	3120424	JH/	05-Dec-23	8021B	
Surrogate: 4-Bromofluorobenzene (PID)			*113 %*	*71.5-134*		*3120424*	JH/	*05-Dec-23*	*8021B*	
Petroleum Hydrocarbons by GC FID										**HDSP-1**
GRO C6-C10*	<10.0		10.0	mg/kg	1	3120428	MS	05-Dec-23	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	3120428	MS	05-Dec-23	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	3120428	MS	05-Dec-23	8015B	
Surrogate: 1-Chlorooctane			*77.1 %*	*48.2-134*		*3120428*	MS	*05-Dec-23*	*8015B*	
Surrogate: 1-Chlorooctadecane			*70.2 %*	*49.1-148*		*3120428*	MS	*05-Dec-23*	*8015B*	

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Analytical Results For:

STANDARD ENERGY SERVICES P. O. BOX 2724 LUBBOCK TX, 79408	Project: AF Project Number: 1 Project Manager: JACK YATES Fax To: (575) 234-2873	Reported: 07-Dec-23 13:40

AF 14 4FT

H236486-17 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
Cardinal Laboratories										
Inorganic Compounds										
Chloride	**496**		16.0	mg/kg	4	3120521	AC	05-Dec-23	4500-Cl-B	
Volatile Organic Compounds by EPA Method 8021										**HDSP-1**
Benzene*	<0.050		0.050	mg/kg	50	3120424	JH/	05-Dec-23	8021B	
Toluene*	<0.050		0.050	mg/kg	50	3120424	JH/	05-Dec-23	8021B	
Ethylbenzene*	<0.050		0.050	mg/kg	50	3120424	JH/	05-Dec-23	8021B	
Total Xylenes*	<0.150		0.150	mg/kg	50	3120424	JH/	05-Dec-23	8021B	
Total BTEX	<0.300		0.300	mg/kg	50	3120424	JH/	05-Dec-23	8021B	
Surrogate: 4-Bromofluorobenzene (PID)			*110 %*	*71.5-134*		*3120424*	JH/	*05-Dec-23*	*8021B*	
Petroleum Hydrocarbons by GC FID										**HDSP-1**
GRO C6-C10*	<10.0		10.0	mg/kg	1	3120428	MS	05-Dec-23	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	3120428	MS	05-Dec-23	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	3120428	MS	05-Dec-23	8015B	
Surrogate: 1-Chlorooctane			*71.1 %*	*48.2-134*		*3120428*	MS	*05-Dec-23*	*8015B*	
Surrogate: 1-Chlorooctadecane			*63.3 %*	*49.1-148*		*3120428*	MS	*05-Dec-23*	*8015B*	

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Analytical Results For:

STANDARD ENERGY SERVICES P. O. BOX 2724 LUBBOCK TX, 79408	Project: AF Project Number: 1 Project Manager: JACK YATES Fax To: (575) 234-2873	Reported: 07-Dec-23 13:40

AF 15 2FT

H236486-18 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
Cardinal Laboratories										
Inorganic Compounds										
Chloride	**160**		16.0	mg/kg	4	3120521	AC	05-Dec-23	4500-Cl-B	
Volatile Organic Compounds by EPA Method 8021										**HDSP-1**
Benzene*	<0.050		0.050	mg/kg	50	3120424	JH/	05-Dec-23	8021B	
Toluene*	<0.050		0.050	mg/kg	50	3120424	JH/	05-Dec-23	8021B	
Ethylbenzene*	<0.050		0.050	mg/kg	50	3120424	JH/	05-Dec-23	8021B	
Total Xylenes*	<0.150		0.150	mg/kg	50	3120424	JH/	05-Dec-23	8021B	
Total BTEX	<0.300		0.300	mg/kg	50	3120424	JH/	05-Dec-23	8021B	
Surrogate: 4-Bromofluorobenzene (PID)			*113 %*	*71.5-134*		*3120424*	JH/	*05-Dec-23*	*8021B*	
Petroleum Hydrocarbons by GC FID										**HDSP-1**
GRO C6-C10*	<10.0		10.0	mg/kg	1	3120428	MS	05-Dec-23	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	3120428	MS	05-Dec-23	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	3120428	MS	05-Dec-23	8015B	
Surrogate: 1-Chlorooctane			*73.2 %*	*48.2-134*		*3120428*	MS	*05-Dec-23*	*8015B*	
Surrogate: 1-Chlorooctadecane			*65.6 %*	*49.1-148*		*3120428*	MS	*05-Dec-23*	*8015B*	

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Analytical Results For:

STANDARD ENERGY SERVICES P. O. BOX 2724 LUBBOCK TX, 79408	Project: AF Project Number: 1 Project Manager: JACK YATES Fax To: (575) 234-2873	Reported: 07-Dec-23 13:40

AF 16 2FT

H236486-19 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
Cardinal Laboratories										
Inorganic Compounds										
Chloride	**3040**		16.0	mg/kg	4	3120521	AC	05-Dec-23	4500-Cl-B	
Volatile Organic Compounds by EPA Method 8021										**HDSP-1**
Benzene*	<0.050		0.050	mg/kg	50	3120424	JH/	05-Dec-23	8021B	
Toluene*	<0.050		0.050	mg/kg	50	3120424	JH/	05-Dec-23	8021B	
Ethylbenzene*	<0.050		0.050	mg/kg	50	3120424	JH/	05-Dec-23	8021B	
Total Xylenes*	<0.150		0.150	mg/kg	50	3120424	JH/	05-Dec-23	8021B	
Total BTEX	<0.300		0.300	mg/kg	50	3120424	JH/	05-Dec-23	8021B	
Surrogate: 4-Bromofluorobenzene (PID)			*115 %*	*71.5-134*		*3120424*	JH/	*05-Dec-23*	*8021B*	
Petroleum Hydrocarbons by GC FID										**HDSP-1**
GRO C6-C10*	<10.0		10.0	mg/kg	1	3120501	MS	05-Dec-23	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	3120501	MS	05-Dec-23	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	3120501	MS	05-Dec-23	8015B	
Surrogate: 1-Chlorooctane			*73.8 %*	*48.2-134*		*3120501*	MS	*05-Dec-23*	*8015B*	
Surrogate: 1-Chlorooctadecane			*64.8 %*	*49.1-148*		*3120501*	MS	*05-Dec-23*	*8015B*	

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Analytical Results For:

STANDARD ENERGY SERVICES P. O. BOX 2724 LUBBOCK TX, 79408	Project: AF Project Number: 1 Project Manager: JACK YATES Fax To: (575) 234-2873	Reported: 07-Dec-23 13:40

AF 16 4FT

H236486-20 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
Cardinal Laboratories										
Inorganic Compounds										
Chloride	**1410**		16.0	mg/kg	4	3120521	AC	05-Dec-23	4500-Cl-B	
Volatile Organic Compounds by EPA Method 8021										**HDSP-1**
Benzene*	<0.050		0.050	mg/kg	50	3120435	JH/	05-Dec-23	8021B	
Toluene*	<0.050		0.050	mg/kg	50	3120435	JH/	05-Dec-23	8021B	
Ethylbenzene*	<0.050		0.050	mg/kg	50	3120435	JH/	05-Dec-23	8021B	
Total Xylenes*	<0.150		0.150	mg/kg	50	3120435	JH/	05-Dec-23	8021B	
Total BTEX	<0.300		0.300	mg/kg	50	3120435	JH/	05-Dec-23	8021B	
Surrogate: 4-Bromofluorobenzene (PID)			*120 %*	*71.5-134*		*3120435*	JH/	*05-Dec-23*	*8021B*	
Petroleum Hydrocarbons by GC FID										**HDSP-1**
GRO C6-C10*	<10.0		10.0	mg/kg	1	3120501	MS	05-Dec-23	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	3120501	MS	05-Dec-23	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	3120501	MS	05-Dec-23	8015B	
Surrogate: 1-Chlorooctane			*77.6 %*	*48.2-134*		*3120501*	MS	*05-Dec-23*	*8015B*	
Surrogate: 1-Chlorooctadecane			*68.9 %*	*49.1-148*		*3120501*	MS	*05-Dec-23*	*8015B*	

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Analytical Results For:

STANDARD ENERGY SERVICES P. O. BOX 2724 LUBBOCK TX, 79408	Project: AF Project Number: 1 Project Manager: JACK YATES Fax To: (575) 234-2873	Reported: 07-Dec-23 13:40

AF 17 2FT

H236486-21 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
Cardinal Laboratories										
Inorganic Compounds										
Chloride	**672**		16.0	mg/kg	4	3120521	AC	05-Dec-23	4500-Cl-B	
Volatile Organic Compounds by EPA Method 8021										**HDSP-1**
Benzene*	<0.050		0.050	mg/kg	50	3120435	JH/	05-Dec-23	8021B	
Toluene*	<0.050		0.050	mg/kg	50	3120435	JH/	05-Dec-23	8021B	
Ethylbenzene*	<0.050		0.050	mg/kg	50	3120435	JH/	05-Dec-23	8021B	
Total Xylenes*	<0.150		0.150	mg/kg	50	3120435	JH/	05-Dec-23	8021B	
Total BTEX	<0.300		0.300	mg/kg	50	3120435	JH/	05-Dec-23	8021B	
Surrogate: 4-Bromofluorobenzene (PID)			*117 %*	*71.5-134*		*3120435*	JH/	*05-Dec-23*	*8021B*	
Petroleum Hydrocarbons by GC FID										**HDSP-1**
GRO C6-C10*	<10.0		10.0	mg/kg	1	3120501	MS	05-Dec-23	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	3120501	MS	05-Dec-23	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	3120501	MS	05-Dec-23	8015B	
Surrogate: 1-Chlorooctane			*60.2 %*	*48.2-134*		*3120501*	MS	*05-Dec-23*	*8015B*	
Surrogate: 1-Chlorooctadecane			*52.9 %*	*49.1-148*		*3120501*	MS	*05-Dec-23*	*8015B*	

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Analytical Results For:

STANDARD ENERGY SERVICES P. O. BOX 2724 LUBBOCK TX, 79408	Project: AF Project Number: 1 Project Manager: JACK YATES Fax To: (575) 234-2873	Reported: 07-Dec-23 13:40

AF 14 2FT

H236486-22 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
Cardinal Laboratories										
Inorganic Compounds										
Chloride	**352**		16.0	mg/kg	4	3120521	AC	05-Dec-23	4500-Cl-B	
Volatile Organic Compounds by EPA Method 8021										**HDSP-1**
Benzene*	<0.050		0.050	mg/kg	50	3120435	JH/	05-Dec-23	8021B	
Toluene*	<0.050		0.050	mg/kg	50	3120435	JH/	05-Dec-23	8021B	
Ethylbenzene*	<0.050		0.050	mg/kg	50	3120435	JH/	05-Dec-23	8021B	
Total Xylenes*	<0.150		0.150	mg/kg	50	3120435	JH/	05-Dec-23	8021B	
Total BTEX	<0.300		0.300	mg/kg	50	3120435	JH/	05-Dec-23	8021B	
Surrogate: 4-Bromofluorobenzene (PID)			*118 %*	*71.5-134*		*3120435*	JH/	*05-Dec-23*	*8021B*	
Petroleum Hydrocarbons by GC FID										**HDSP-1**
GRO C6-C10*	<10.0		10.0	mg/kg	1	3120501	MS	05-Dec-23	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	3120501	MS	05-Dec-23	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	3120501	MS	05-Dec-23	8015B	
Surrogate: 1-Chlorooctane			*63.2 %*	*48.2-134*		*3120501*	MS	*05-Dec-23*	*8015B*	
Surrogate: 1-Chlorooctadecane			*55.1 %*	*49.1-148*		*3120501*	MS	*05-Dec-23*	*8015B*	

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Analytical Results For:

STANDARD ENERGY SERVICES P. O. BOX 2724 LUBBOCK TX, 79408	Project: AF Project Number: 1 Project Manager: JACK YATES Fax To: (575) 234-2873	Reported: 07-Dec-23 13:40

AF 17 @ 4FT

H236486-23 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
Cardinal Laboratories										
Inorganic Compounds										
Chloride	**640**		16.0	mg/kg	4	3120521	AC	05-Dec-23	4500-Cl-B	
Volatile Organic Compounds by EPA Method 8021										**HDSP-1**
Benzene*	<0.050		0.050	mg/kg	50	3120435	JH/	05-Dec-23	8021B	
Toluene*	<0.050		0.050	mg/kg	50	3120435	JH/	05-Dec-23	8021B	
Ethylbenzene*	<0.050		0.050	mg/kg	50	3120435	JH/	05-Dec-23	8021B	
Total Xylenes*	<0.150		0.150	mg/kg	50	3120435	JH/	05-Dec-23	8021B	
Total BTEX	<0.300		0.300	mg/kg	50	3120435	JH/	05-Dec-23	8021B	
Surrogate: 4-Bromofluorobenzene (PID)			*119 %*	*71.5-134*		*3120435*	JH/	*05-Dec-23*	*8021B*	
Petroleum Hydrocarbons by GC FID										**HDSP-1**
GRO C6-C10*	<10.0		10.0	mg/kg	1	3120501	MS	05-Dec-23	8015B	
DRO >C10-C28*	**68.0**		10.0	mg/kg	1	3120501	MS	05-Dec-23	8015B	
EXT DRO >C28-C36	**12.5**		10.0	mg/kg	1	3120501	MS	05-Dec-23	8015B	
Surrogate: 1-Chlorooctane			*63.9 %*	*48.2-134*		*3120501*	MS	*05-Dec-23*	*8015B*	
Surrogate: 1-Chlorooctadecane			*58.4 %*	*49.1-148*		*3120501*	MS	*05-Dec-23*	*8015B*	

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Analytical Results For:

STANDARD ENERGY SERVICES P. O. BOX 2724 LUBBOCK TX, 79408	Project: AF Project Number: 1 Project Manager: JACK YATES Fax To: (575) 234-2873	Reported: 07-Dec-23 13:40

Inorganic Compounds - Quality Control

Cardinal Laboratories

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 3120512 - 1:4 DI Water										
Blank (3120512-BLK1)				Prepared & Analyzed: 05-Dec-23						
Chloride	ND	16.0	mg/kg							
LCS (3120512-BS1)				Prepared & Analyzed: 05-Dec-23						
Chloride	416	16.0	mg/kg	400		104	80-120			
LCS Dup (3120512-BSD1)				Prepared & Analyzed: 05-Dec-23						
Chloride	432	16.0	mg/kg	400		108	80-120	3.77	20	
Batch 3120521 - 1:4 DI Water										
Blank (3120521-BLK1)				Prepared & Analyzed: 05-Dec-23						
Chloride	ND	16.0	mg/kg							
LCS (3120521-BS1)				Prepared & Analyzed: 05-Dec-23						
Chloride	432	16.0	mg/kg	400		108	80-120			
LCS Dup (3120521-BSD1)				Prepared & Analyzed: 05-Dec-23						
Chloride	432	16.0	mg/kg	400		108	80-120	0.00	20	

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Analytical Results For:

STANDARD ENERGY SERVICES P. O. BOX 2724 LUBBOCK TX, 79408	Project: AF Project Number: 1 Project Manager: JACK YATES Fax To: (575) 234-2873	Reported: 07-Dec-23 13:40

Volatile Organic Compounds by EPA Method 8021 - Quality Control

Cardinal Laboratories

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 3120424 - Volatiles										
Blank (3120424-BLK1)				Prepared: 04-Dec-23 Analyzed: 05-Dec-23						
Benzene	ND	0.050	mg/kg							
Toluene	ND	0.050	mg/kg							
Ethylbenzene	ND	0.050	mg/kg							
Total Xylenes	ND	0.150	mg/kg							
Total BTEX	ND	0.300	mg/kg							
Surrogate: 4-Bromofluorobenzene (PID)	*0.0581*		mg/kg	*0.0500*		*116*	*71.5-134*			
LCS (3120424-BS1)				Prepared: 04-Dec-23 Analyzed: 05-Dec-23						
Benzene	1.99	0.050	mg/kg	2.00		99.3	82.8-130			
Toluene	2.10	0.050	mg/kg	2.00		105	86-128			
Ethylbenzene	2.10	0.050	mg/kg	2.00		105	85.9-128			
m,p-Xylene	4.25	0.100	mg/kg	4.00		106	89-129			
o-Xylene	2.09	0.050	mg/kg	2.00		104	86.1-125			
Total Xylenes	6.34	0.150	mg/kg	6.00		106	88.2-128			
Surrogate: 4-Bromofluorobenzene (PID)	*0.0540*		mg/kg	*0.0500*		*108*	*71.5-134*			
LCS Dup (3120424-BSD1)				Prepared: 04-Dec-23 Analyzed: 05-Dec-23						
Benzene	1.91	0.050	mg/kg	2.00		95.3	82.8-130	4.07	15.8	
Toluene	2.03	0.050	mg/kg	2.00		102	86-128	3.24	15.9	
Ethylbenzene	2.03	0.050	mg/kg	2.00		101	85.9-128	3.44	16	
m,p-Xylene	4.12	0.100	mg/kg	4.00		103	89-129	3.16	16.2	
o-Xylene	2.02	0.050	mg/kg	2.00		101	86.1-125	3.35	16.7	
Total Xylenes	6.13	0.150	mg/kg	6.00		102	88.2-128	3.22	16.3	
Surrogate: 4-Bromofluorobenzene (PID)	*0.0540*		mg/kg	*0.0500*		*108*	*71.5-134*			
Batch 3120435 - Volatiles										
Blank (3120435-BLK1)				Prepared: 04-Dec-23 Analyzed: 05-Dec-23						
Benzene	ND	0.050	mg/kg							
Toluene	ND	0.050	mg/kg							
Ethylbenzene	ND	0.050	mg/kg							
Total Xylenes	ND	0.150	mg/kg							

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Analytical Results For:

STANDARD ENERGY SERVICES P. O. BOX 2724 LUBBOCK TX, 79408	Project: AF Project Number: 1 Project Manager: JACK YATES Fax To: (575) 234-2873	Reported: 07-Dec-23 13:40

Volatile Organic Compounds by EPA Method 8021 - Quality Control

Cardinal Laboratories

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 3120435 - Volatiles										
Blank (3120435-BLK1)				Prepared: 04-Dec-23 Analyzed: 05-Dec-23						
Total BTEX	ND	0.300	mg/kg							
Surrogate: 4-Bromofluorobenzene (PID)	*0.0600*		mg/kg	*0.0500*		*120*	*71.5-134*			
LCS (3120435-BS1)				Prepared: 04-Dec-23 Analyzed: 05-Dec-23						
Benzene	1.77	0.050	mg/kg	2.00		88.7	82.8-130			
Toluene	1.89	0.050	mg/kg	2.00		94.4	86-128			
Ethylbenzene	1.91	0.050	mg/kg	2.00		95.3	85.9-128			
m,p-Xylene	3.90	0.100	mg/kg	4.00		97.4	89-129			
o-Xylene	1.90	0.050	mg/kg	2.00		94.8	86.1-125			
Total Xylenes	5.79	0.150	mg/kg	6.00		96.5	88.2-128			
Surrogate: 4-Bromofluorobenzene (PID)	*0.0577*		mg/kg	*0.0500*		*115*	*71.5-134*			
LCS Dup (3120435-BSD1)				Prepared: 04-Dec-23 Analyzed: 05-Dec-23						
Benzene	1.99	0.050	mg/kg	2.00		99.5	82.8-130	11.4	15.8	
Toluene	2.10	0.050	mg/kg	2.00		105	86-128	10.8	15.9	
Ethylbenzene	2.13	0.050	mg/kg	2.00		107	85.9-128	11.1	16	
m,p-Xylene	4.35	0.100	mg/kg	4.00		109	89-129	11.1	16.2	
o-Xylene	2.12	0.050	mg/kg	2.00		106	86.1-125	11.2	16.7	
Total Xylenes	6.47	0.150	mg/kg	6.00		108	88.2-128	11.1	16.3	
Surrogate: 4-Bromofluorobenzene (PID)	*0.0574*		mg/kg	*0.0500*		*115*	*71.5-134*			

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Analytical Results For:

STANDARD ENERGY SERVICES P. O. BOX 2724 LUBBOCK TX, 79408	Project: AF Project Number: 1 Project Manager: JACK YATES Fax To: (575) 234-2873	Reported: 07-Dec-23 13:40

Petroleum Hydrocarbons by GC FID - Quality Control

Cardinal Laboratories

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 3120427 - General Prep - Organics										
Blank (3120427-BLK1)				Prepared: 04-Dec-23 Analyzed: 05-Dec-23						
GRO C6-C10	ND	10.0	mg/kg							
DRO >C10-C28	ND	10.0	mg/kg							
EXT DRO >C28-C36	ND	10.0	mg/kg							
Surrogate: 1-Chlorooctane	*50.3*		mg/kg	*50.0*		*101*	*48.2-134*			
Surrogate: 1-Chlorooctadecane	*52.1*		mg/kg	*50.0*		*104*	*49.1-148*			
LCS (3120427-BS1)				Prepared: 04-Dec-23 Analyzed: 05-Dec-23						
GRO C6-C10	191	10.0	mg/kg	200		95.4	66.4-123			
DRO >C10-C28	183	10.0	mg/kg	200		91.4	66.5-118			
Total TPH C6-C28	374	10.0	mg/kg	400		93.4	77.6-123			
Surrogate: 1-Chlorooctane	*50.3*		mg/kg	*50.0*		*101*	*48.2-134*			
Surrogate: 1-Chlorooctadecane	*53.6*		mg/kg	*50.0*		*107*	*49.1-148*			
LCS Dup (3120427-BSD1)				Prepared: 04-Dec-23 Analyzed: 05-Dec-23						
GRO C6-C10	190	10.0	mg/kg	200		95.0	66.4-123	0.433	17.7	
DRO >C10-C28	180	10.0	mg/kg	200		90.1	66.5-118	1.41	21	
Total TPH C6-C28	370	10.0	mg/kg	400		92.5	77.6-123	0.912	18.5	
Surrogate: 1-Chlorooctane	*51.4*		mg/kg	*50.0*		*103*	*48.2-134*			
Surrogate: 1-Chlorooctadecane	*52.7*		mg/kg	*50.0*		*105*	*49.1-148*			
Batch 3120428 - General Prep - Organics										
Blank (3120428-BLK1)				Prepared: 04-Dec-23 Analyzed: 05-Dec-23						
GRO C6-C10	ND	10.0	mg/kg							
DRO >C10-C28	ND	10.0	mg/kg							
EXT DRO >C28-C36	ND	10.0	mg/kg							
Surrogate: 1-Chlorooctane	*46.4*		mg/kg	*50.0*		*92.7*	*48.2-134*			
Surrogate: 1-Chlorooctadecane	*44.8*		mg/kg	*50.0*		*89.6*	*49.1-148*			

Cardinal Laboratories

*=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

STANDARD ENERGY SERVICES P. O. BOX 2724 LUBBOCK TX, 79408	Project: AF Project Number: 1 Project Manager: JACK YATES Fax To: (575) 234-2873	Reported: 07-Dec-23 13:40

Petroleum Hydrocarbons by GC FID - Quality Control

Cardinal Laboratories

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 3120428 - General Prep - Organics										
LCS (3120428-BS1)				Prepared: 04-Dec-23 Analyzed: 05-Dec-23						
GRO C6-C10	177	10.0	mg/kg	200		88.4	66.4-123			
DRO >C10-C28	182	10.0	mg/kg	200		91.2	66.5-118			
Total TPH C6-C28	359	10.0	mg/kg	400		89.8	77.6-123			
Surrogate: 1-Chlorooctane	*48.3*		mg/kg	*50.0*		*96.7*	*48.2-134*			
Surrogate: 1-Chlorooctadecane	*46.1*		mg/kg	*50.0*		*92.2*	*49.1-148*			
LCS Dup (3120428-BSD1)				Prepared: 04-Dec-23 Analyzed: 05-Dec-23						
GRO C6-C10	184	10.0	mg/kg	200		92.0	66.4-123	3.93	17.7	
DRO >C10-C28	182	10.0	mg/kg	200		90.9	66.5-118	0.323	21	
Total TPH C6-C28	366	10.0	mg/kg	400		91.5	77.6-123	1.80	18.5	
Surrogate: 1-Chlorooctane	*51.2*		mg/kg	*50.0*		*102*	*48.2-134*			
Surrogate: 1-Chlorooctadecane	*52.1*		mg/kg	*50.0*		*104*	*49.1-148*			
Batch 3120501 - General Prep - Organics										
Blank (3120501-BLK1)				Prepared & Analyzed: 05-Dec-23						
GRO C6-C10	ND	10.0	mg/kg							
DRO >C10-C28	ND	10.0	mg/kg							
EXT DRO >C28-C36	ND	10.0	mg/kg							
Surrogate: 1-Chlorooctane	*43.4*		mg/kg	*50.0*		*86.7*	*48.2-134*			
Surrogate: 1-Chlorooctadecane	*39.6*		mg/kg	*50.0*		*79.3*	*49.1-148*			
LCS (3120501-BS1)				Prepared & Analyzed: 05-Dec-23						
GRO C6-C10	205	10.0	mg/kg	200		102	66.4-123			
DRO >C10-C28	174	10.0	mg/kg	200		87.2	66.5-118			
Total TPH C6-C28	379	10.0	mg/kg	400		94.8	77.6-123			
Surrogate: 1-Chlorooctane	*47.2*		mg/kg	*50.0*		*94.4*	*48.2-134*			
Surrogate: 1-Chlorooctadecane	*45.8*		mg/kg	*50.0*		*91.6*	*49.1-148*			

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Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

STANDARD ENERGY SERVICES P. O. BOX 2724 LUBBOCK TX, 79408	Project: AF Project Number: 1 Project Manager: JACK YATES Fax To: (575) 234-2873	Reported: 07-Dec-23 13:40

Petroleum Hydrocarbons by GC FID - Quality Control

Cardinal Laboratories

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 3120501 - General Prep - Organics										
LCS Dup (3120501-BSD1)				Prepared & Analyzed: 05-Dec-23						
GRO C6-C10	202	10.0	mg/kg	200		101	66.4-123	1.65	17.7	
DRO >C10-C28	178	10.0	mg/kg	200		89.2	66.5-118	2.29	21	
Total TPH C6-C28	380	10.0	mg/kg	400		95.0	77.6-123	0.181	18.5	
Surrogate: 1-Chlorooctane	*45.2*		mg/kg	*50.0*		*90.5*	*48.2-134*			
Surrogate: 1-Chlorooctadecane	*43.6*		mg/kg	*50.0*		*87.2*	*49.1-148*			

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Notes and Definitions

HDSP-1	Sample container had headspace. Results may be biased low.
ND	Analyte NOT DETECTED at or above the reporting limit
RPD	Relative Percent Difference
**	Samples not received at proper temperature of 6°C or below.
***	Insufficient time to reach temperature.
-	Chloride by SM4500Cl-B does not require samples be received at or below 6°C
	Samples reported on an as received basis (wet) unless otherwise noted on report

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Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

101 East Marland, Hobbs, NM 88240
(575) 393-2326 FAX (575) 393-2476

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Company Name:	Standard Energy Services
Project Manager:	Josh Yates
Address:	816 W County Road
City:	Hobbs State: NM Zip: 88240
Phone #:	806-241-7005 Fax #:
Project #:	1 Project Owner: Pitcher Bros.
Project Name:	AF
Project Location:	SWD
Sampler Name:	Daniel Ortega

BILL TO

P.O. #:	
Company:	Same
Attn:	
Address:	
City:	
State:	Zip:
Phone #:	
Fax #:	

ANALYSIS REQUEST

FOR LAB USE ONLY H236486 Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX: GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :	PRESERV.: ACID/BASE:	ICE / COOL	OTHER :	SAMPLING: DATE	TIME	Cl	TPH	BTEX
1	01 2FT					✓	✓						12/1/23	6am			
2	02 2FT					✓	✓										
3	02 4FT					✓	✓										
4	03 2FT					✓	✓										
5	AF04 2FT					✓	✓										
6	AF5 2FT					✓	✓										
7	AF6 2FT					✓	✓										
8	AF07 2FT					✓	-										
9	AF08 (2FT)					✓											
10	AF09 4FT					✓											
11	AF09 2FT					✓											

Relinquished By: Daniel Ortega	Date: 12/4/23 Time: 9:22	Received By:	
Relinquished By:	Date: Time:	Received By:	
Delivered By: (Circle One) Sampler - UPS - Bus - Other:	Observed Temp. °C 2.4 Corrected Temp. °C	Sample Condition Cool: Yes / No Intact: Yes / No	CHECKED BY: (Initials)

Verbal Result: ☐ Yes ☐ No Add'l Phone #:
All Results are emailed. Please provide Email address:

REMARKS: Customer aware of sample jars ~~dirt filling~~ All containers have head space 12/4/23 DH 2.0

Turnaround Time: Standard ☐ Rush ☐
Thermometer ID #140
Correction Factor 0°C

Bacteria (only) Sample Condition
Cool: ☐ Yes ☐ No Intact: ☐ Yes ☐ No
Observed Temp. °C
Corrected Temp. °C

FORM-006 R 3.4 07/11/23

† Cardinal cannot accept verbal changes. Please email changes to celey.keene@cardinallabsnm.com

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101 East Marland, Hobbs, NM 88240
(575) 393-2326 FAX (575) 393-2476

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Company Name: Standard Energy Services
Project Manager: Seth Kirby
Address: 916 W Carlsbad
City: Hobbs State: NM Zip: 88240
Phone #: 806-241-7405 Fax #:
Project #: 1 Project Owner:
Project Name: AF
Project Location: SWD
Sampler Name:

BILL TO
P.O. #:
Company: Same
Attn:
Address:
City:
State: Zip:
Phone #:
Fax #:

ANALYSIS REQUEST: GRO, DRO, BTEX

FOR LAB USE ONLY Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX: GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER:	PRESERV.: ACID/BASE:	ICE / COOL	OTHER:	SAMPLING: DATE	TIME
H236486														
12	AF 10 2FT					✓							12-1-23	6am
13	AF 11 2FT					✓								
14	AF 12 2FT					✓								
15	AF 12 4FT					✓								
16	AF 13 2FT					✓								
17	AF 14 4FT					✓								
18	AF 15 2FT					✓								
19	AF 16 2FT					✓								
20	AF 16 4FT					✓								
21	AF 17 2FT					✓								
22	AF 14 2FT					✓								

GRO
DRO
BTEX

Relinquished By: Daniel Ortega Date: 12/4/23 Time: 9:22 Received By:
Relinquished By: Date: Time: Received By:

Verbal Result: ☐ Yes ☐ No Add'l Phone #:
All Results are emailed. Please provide Email address:
REMARKS:

Delivered By: (Circle One) Sampler - UPS - Bus - Other:
Observed Temp. °C 2.4 Corrected Temp. °C
Sample Condition: Cool ☑ Yes ☐ No Intact ☑ Yes ☐ No
CHECKED BY: (Initials) DH

Turnaround Time: Standard ☑ Rush ☐
Thermometer ID #140 Correction Factor 0°C
Bacteria (only) Sample Condition: Cool ☐ Yes ☐ No Intact ☐ Yes ☐ No Observed Temp. °C Corrected Temp. °C

FORM-006 R 3.4 07/11/23

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CARDINAL Laboratories

101 East Marland, Hobbs, NM 88240
(575) 393-2326 FAX (575) 393-2476

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Company Name:	Stateline Frac
Project Manager:	Zach Wells
Address:	916 W Carlsbad Rd
City:	Hobbs State: NM Zip: 88240
Phone #:	806-241-7485 Fax #:
Project #:	1 Project Owner: Pitchfork Ranch
Project Name:	AI
Project Location:	Lea Co
Sampler Name:	

BILL TO

P.O. #:	Same
Company:	
Attn:	
Address:	
City:	
State:	Zip:
Phone #:	
Fax #:	

ANALYSIS REQUEST

FOR LAB USE ONLY Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX: GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :	PRESERV.: ACID/BASE:	ICE / COOL	OTHER :	SAMPLING: DATE	TIME	Cl	TPH	BTEX
H236486	03 AF 17 @ 4ft					✓							12-1-23	6am			

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising whether based in contract or tort, shall be limited to the amount paid by the client for the analyses. All claims including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within 30 days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequental damages, including without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise.

Relinquished By: Daniel Ortega	Date: 12/4/23 Time: 9:22	Received By:	Verbal Result: ☐ Yes ☐ No Add'l Phone #:
Relinquished By:	Date: Time:	Received By:	All Results are emailed. Please provide Email address:
			REMARKS:

Delivered By: (Circle One)	Observed Temp. °C 2.4	Sample Condition Cool: ☑ Yes ☐ No	Intact: ☑ Yes ☐ No	CHECKED BY: (Initials) DH	Turnaround Time: ☐ Standard ☑ Rush
Sampler - UPS - Bus - Other:	Corrected Temp. °C				Thermometer ID #140 Correction Factor 0°C

Bacteria (only) Sample Condition: Cool ☐ Yes ☐ No; Intact ☐ Yes ☐ No; Observed Temp. °C; Corrected Temp. °C

FORM-006 R 3.4 07/11/23

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CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

January 30, 2025

JOHN AYARBE

Daniel B. Stephens & Associates, Inc.

6020 Academy Rd NE, Suite 100

Albuquerque, NM 87109

RE: BUCKEYE STATE AF #003

Enclosed are the results of analyses for samples received by the laboratory on 01/28/25 11:36.

Cardinal Laboratories is accredited through Texas NELAP under certificate number TX-C24-00112. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (*). For a complete list of accredited analytes and matrices visit the TCEQ website at www.tceq.texas.gov/field/qa/lab_accred_certif.html.

Cardinal Laboratories is accreditated through the State of Colorado Department of Public Health and Environment for:

Method EPA 552.2	Haloacetic Acids (HAA-5)
Method EPA 524.2	Total Trihalomethanes (TTHM)
Method EPA 524.4	Regulated VOCs (V1, V2, V3)

Accreditation applies to public drinking water matrices.

This report meets NELAP requirements and is made up of a cover page, analytical results, and a copy of the original chain-of-custody. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Celey D. Keene

Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

Daniel B. Stephens & Associates, Inc.
JOHN AYARBE
6020 Academy Rd NE, Suite 100
Albuquerque NM, 87109
Fax To: (505) 822-8877

Received:	01/28/2025	Sampling Date:	01/28/2025
Reported:	01/30/2025	Sampling Type:	Soil
Project Name:	BUCKEYE STATE AF #003	Sampling Condition:	** (See Notes)
Project Number:	BUCKEYE STATE AF	Sample Received By:	Tamara Oldaker
Project Location:	STANDARD OIL - BUCKEYE , NM		

Sample ID: NORTH EXPLORATORY EXCAVATION 0-2' (H250488-01)

BTEX 8021B mg/kg Analyzed By: JH

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	01/29/2025	ND	1.98	99.0	2.00	2.78	
Toluene*	<0.050	0.050	01/29/2025	ND	2.07	104	2.00	2.39	
Ethylbenzene*	<0.050	0.050	01/29/2025	ND	2.00	99.9	2.00	2.05	
Total Xylenes*	<0.150	0.150	01/29/2025	ND	5.88	98.0	6.00	1.79	
Total BTEX	<0.300	0.300	01/29/2025	ND					

Surrogate: 4-Bromofluorobenzene (PID *93.5 %* *71.5-134*

Chloride, SM4500Cl-B mg/kg Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**3200**	16.0	01/29/2025	ND	432	108	400	3.77	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	01/28/2025	ND	224	112	200	14.8	
DRO >C10-C28*	<10.0	10.0	01/28/2025	ND	236	118	200	16.2	
EXT DRO >C28-C36	<10.0	10.0	01/28/2025	ND					

Surrogate: 1-Chlorooctane *77.6 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *75.4 %* *49.1-148*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

Daniel B. Stephens & Associates, Inc.
JOHN AYARBE
6020 Academy Rd NE, Suite 100
Albuquerque NM, 87109
Fax To: (505) 822-8877

Received:	01/28/2025	Sampling Date:	01/28/2025
Reported:	01/30/2025	Sampling Type:	Soil
Project Name:	BUCKEYE STATE AF #003	Sampling Condition:	** (See Notes)
Project Number:	BUCKEYE STATE AF	Sample Received By:	Tamara Oldaker
Project Location:	STANDARD OIL - BUCKEYE , NM		

Sample ID: NORTH EXPLORATORY EXCAVATION 2'-4' (H250488-02)

BTEX 8021B mg/kg Analyzed By: JH

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	01/29/2025	ND	1.98	99.0	2.00	2.78	
Toluene*	<0.050	0.050	01/29/2025	ND	2.07	104	2.00	2.39	
Ethylbenzene*	<0.050	0.050	01/29/2025	ND	2.00	99.9	2.00	2.05	
Total Xylenes*	<0.150	0.150	01/29/2025	ND	5.88	98.0	6.00	1.79	
Total BTEX	<0.300	0.300	01/29/2025	ND					

Surrogate: 4-Bromofluorobenzene (PID *94.5 %* *71.5-134*

Chloride, SM4500Cl-B mg/kg Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**2120**	16.0	01/29/2025	ND	432	108	400	3.77	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	01/28/2025	ND	224	112	200	14.8	
DRO >C10-C28*	<10.0	10.0	01/28/2025	ND	236	118	200	16.2	
EXT DRO >C28-C36	<10.0	10.0	01/28/2025	ND					

Surrogate: 1-Chlorooctane *90.6 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *88.1 %* *49.1-148*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

Daniel B. Stephens & Associates, Inc.
JOHN AYARBE
6020 Academy Rd NE, Suite 100
Albuquerque NM, 87109
Fax To: (505) 822-8877

Received:	01/28/2025	Sampling Date:	01/28/2025
Reported:	01/30/2025	Sampling Type:	Soil
Project Name:	BUCKEYE STATE AF #003	Sampling Condition:	** (See Notes)
Project Number:	BUCKEYE STATE AF	Sample Received By:	Tamara Oldaker
Project Location:	STANDARD OIL - BUCKEYE , NM		

Sample ID: NORTH EXPLORATORY EXCAVATION 4'-6' (H250488-03)

BTEX 8021B mg/kg **Analyzed By: JH**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	01/29/2025	ND	1.98	99.0	2.00	2.78	
Toluene*	<0.050	0.050	01/29/2025	ND	2.07	104	2.00	2.39	
Ethylbenzene*	<0.050	0.050	01/29/2025	ND	2.00	99.9	2.00	2.05	
Total Xylenes*	<0.150	0.150	01/29/2025	ND	5.88	98.0	6.00	1.79	
Total BTEX	<0.300	0.300	01/29/2025	ND					

Surrogate: 4-Bromofluorobenzene (PID *94.5 %* *71.5-134*

Chloride, SM4500Cl-B mg/kg **Analyzed By: AC**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**1800**	16.0	01/29/2025	ND	432	108	400	3.77	

TPH 8015M mg/kg **Analyzed By: MS**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	01/28/2025	ND	224	112	200	14.8	
DRO >C10-C28*	<10.0	10.0	01/28/2025	ND	236	118	200	16.2	
EXT DRO >C28-C36	<10.0	10.0	01/28/2025	ND					

Surrogate: 1-Chlorooctane *95.9 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *94.5 %* *49.1-148*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

Daniel B. Stephens & Associates, Inc.
JOHN AYARBE
6020 Academy Rd NE, Suite 100
Albuquerque NM, 87109
Fax To: (505) 822-8877

Received:	01/28/2025	Sampling Date:	01/28/2025
Reported:	01/30/2025	Sampling Type:	Soil
Project Name:	BUCKEYE STATE AF #003	Sampling Condition:	** (See Notes)
Project Number:	BUCKEYE STATE AF	Sample Received By:	Tamara Oldaker
Project Location:	STANDARD OIL - BUCKEYE , NM		

Sample ID: SOUTH EXPLORATORY EXCAVATION 0-2' (H250488-04)

BTEX 8021B mg/kg Analyzed By: JH S-04

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	01/29/2025	ND	1.98	99.0	2.00	2.78	
Toluene*	<0.050	0.050	01/29/2025	ND	2.07	104	2.00	2.39	GC-NC
Ethylbenzene*	<0.050	0.050	01/29/2025	ND	2.00	99.9	2.00	2.05	GC-NC
Total Xylenes*	<0.150	0.150	01/29/2025	ND	5.88	98.0	6.00	1.79	GC-NC
Total BTEX	<0.300	0.300	01/29/2025	ND					

Surrogate: 4-Bromofluorobenzene (PID *264 %* *71.5-134*

Chloride, SM4500Cl-B mg/kg Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**4400**	16.0	01/29/2025	ND	432	108	400	3.77	

TPH 8015M mg/kg Analyzed By: MS S-04

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	**338**	10.0	01/28/2025	ND	224	112	200	14.8	
DRO >C10-C28*	**3700**	10.0	01/28/2025	ND	236	118	200	16.2	
EXT DRO >C28-C36	**674**	10.0	01/28/2025	ND					

Surrogate: 1-Chlorooctane *126 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *151 %* *49.1-148*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

Daniel B. Stephens & Associates, Inc.
JOHN AYARBE
6020 Academy Rd NE, Suite 100
Albuquerque NM, 87109
Fax To: (505) 822-8877

Received:	01/28/2025	Sampling Date:	01/28/2025
Reported:	01/30/2025	Sampling Type:	Soil
Project Name:	BUCKEYE STATE AF #003	Sampling Condition:	** (See Notes)
Project Number:	BUCKEYE STATE AF	Sample Received By:	Tamara Oldaker
Project Location:	STANDARD OIL - BUCKEYE , NM		

Sample ID: SOUTH EXPLORATORY EXCAVATION 2'-4' (H250488-05)

BTEX 8021B mg/kg Analyzed By: JH S-04

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	01/29/2025	ND	1.98	99.0	2.00	2.78	
Toluene*	<0.050	0.050	01/29/2025	ND	2.07	104	2.00	2.39	GC-NC
Ethylbenzene*	<0.050	0.050	01/29/2025	ND	2.00	99.9	2.00	2.05	GC-NC
Total Xylenes*	<0.150	0.150	01/29/2025	ND	5.88	98.0	6.00	1.79	GC-NC
Total BTEX	<0.300	0.300	01/29/2025	ND					

Surrogate: 4-Bromofluorobenzene (PID *353 %* *71.5-134*

Chloride, SM4500Cl-B mg/kg Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**1100**	16.0	01/29/2025	ND	432	108	400	3.77	

TPH 8015M mg/kg Analyzed By: MS S-04

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	**299**	10.0	01/28/2025	ND	224	112	200	14.8	
DRO >C10-C28*	**5440**	10.0	01/28/2025	ND	236	118	200	16.2	
EXT DRO >C28-C36	**979**	10.0	01/28/2025	ND					

Surrogate: 1-Chlorooctane *114 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *171 %* *49.1-148*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

Daniel B. Stephens & Associates, Inc.
JOHN AYARBE
6020 Academy Rd NE, Suite 100
Albuquerque NM, 87109
Fax To: (505) 822-8877

Received:	01/28/2025	Sampling Date:	01/28/2025
Reported:	01/30/2025	Sampling Type:	Soil
Project Name:	BUCKEYE STATE AF #003	Sampling Condition:	** (See Notes)
Project Number:	BUCKEYE STATE AF	Sample Received By:	Tamara Oldaker
Project Location:	STANDARD OIL - BUCKEYE , NM		

Sample ID: SOUTH EXPLORATORY EXCAVATION 4'-6' (H250488-06)

BTEX 8021B mg/kg Analyzed By: JH S-04

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	01/29/2025	ND	1.98	99.0	2.00	2.78	
Toluene*	<0.050	0.050	01/29/2025	ND	2.07	104	2.00	2.39	GC-NC
Ethylbenzene*	<0.050	0.050	01/29/2025	ND	2.00	99.9	2.00	2.05	GC-NC
Total Xylenes*	<0.150	0.150	01/29/2025	ND	5.88	98.0	6.00	1.79	GC-NC
Total BTEX	<0.300	0.300	01/29/2025	ND					

Surrogate: 4-Bromofluorobenzene (PID *403 %* *71.5-134*

Chloride, SM4500Cl-B mg/kg Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**688**	16.0	01/29/2025	ND	432	108	400	3.77	

TPH 8015M mg/kg Analyzed By: MS S-06

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	**748**	100	01/29/2025	ND	224	112	200	14.8	
DRO >C10-C28*	**10900**	100	01/29/2025	ND	236	118	200	16.2	
EXT DRO >C28-C36	**2320**	100	01/29/2025	ND					

Surrogate: 1-Chlorooctane *171 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *257 %* *49.1-148*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

Daniel B. Stephens & Associates, Inc.
JOHN AYARBE
6020 Academy Rd NE, Suite 100
Albuquerque NM, 87109
Fax To: (505) 822-8877

Received:	01/28/2025	Sampling Date:	01/28/2025
Reported:	01/30/2025	Sampling Type:	Soil
Project Name:	BUCKEYE STATE AF #003	Sampling Condition:	** (See Notes)
Project Number:	BUCKEYE STATE AF	Sample Received By:	Tamara Oldaker
Project Location:	STANDARD OIL - BUCKEYE , NM		

Sample ID: SOUTH EXPLORATORY EXCAVATION 6'-8' (H250488-07)

BTEX 8021B mg/kg Analyzed By: JH S-04

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	01/29/2025	ND	1.98	99.0	2.00	2.78	
Toluene*	<0.050	0.050	01/29/2025	ND	2.07	104	2.00	2.39	
Ethylbenzene*	<0.050	0.050	01/29/2025	ND	2.00	99.9	2.00	2.05	GC-NC
Total Xylenes*	<0.150	0.150	01/29/2025	ND	5.88	98.0	6.00	1.79	GC-NC
Total BTEX	<0.300	0.300	01/29/2025	ND					

Surrogate: 4-Bromofluorobenzene (PID *166 %* *71.5-134*

Chloride, SM4500Cl-B mg/kg Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**2400**	16.0	01/29/2025	ND	432	108	400	3.77	

TPH 8015M mg/kg Analyzed By: MS S-04

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	**103**	10.0	01/28/2025	ND	224	112	200	14.8	
DRO >C10-C28*	**3150**	10.0	01/28/2025	ND	236	118	200	16.2	
EXT DRO >C28-C36	**606**	10.0	01/28/2025	ND					

Surrogate: 1-Chlorooctane *126 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *163 %* *49.1-148*

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Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Notes and Definitions

S-06	The recovery of this surrogate is outside control limits due to sample dilution required from high analyte concentration and/or matrix interference's.
S-04	The surrogate recovery for this sample is outside of established control limits due to a sample matrix effect.
QR-04	The RPD for the BS/BSD was outside of historical limits.
QR-03	The RPD value for the sample duplicate or MS/MSD was outside of QC acceptance limits due to matrix interference. QC batch accepted based on LCS and/or LCSD recovery and/or RPD values.
GC-NC	8260 confirmation analysis was performed; initial GC results were not supported by GC/MS analysis and are reported as ND.
ND	Analyte NOT DETECTED at or above the reporting limit
RPD	Relative Percent Difference
**	Samples not received at proper temperature of 6°C or below.
***	Insufficient time to reach temperature.
-	Chloride by SM4500Cl-B does not require samples be received at or below 6°C
	Samples reported on an as received basis (wet) unless otherwise noted on report

Cardinal Laboratories

*=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

101 East Marland, Hobbs, NM 88240
(575) 393-2326 FAX (575) 393-2476

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Company Name:	Daniel B. Stephens & Associates, Inc.
Project Manager:	John Ayarbe
Address:	6020 Academy NE Suite 100
City:	Albuquerque State: NM Zip: 87109
Phone #:	505 822 9400 Fax #: N/A
Project #:	Buckeye State AF Project Owner: Standard Oil Co
Project Name:	Buckeye State AF #003
Project Location:	Buckeye New Mexico
Sampler Name:	CM Barnhill, PE

BILL TO

P.O. #:	
Company:	
Attn:	
Address:	
City:	
State:	Zip:
Phone #:	
Fax #:	

ANALYSIS REQUEST

FOR LAB USE ONLY Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX: GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER:	PRESERV.: ACID/BASE:	ICE / COOL	OTHER:	SAMPLING DATE	SAMPLING TIME	TPH GRO/DRO/MRO EPA MOD. 8015	BTEX 8021B	Chloride SM 4500 Cl-B
H250488																	
1	North Exploratory excavation 0'-2'	G	2			X					X		01/28/25	0811	X	X	X
2	North Exploratory excavation 2'-4'	G	2			X					X		01/28/25	0825	X	X	X
3	North Exploratory excavation 4'-6'	G	2			X					X		01/28/25	0838	X	X	X
4	South Exploratory Excavation 0'-2'	G	2			X					X		01/28/25	0937	X	X	X
5	South Exploratory Excavation 2'-4'	G	2			X					X		01/28/25	0946	X	X	X
6	South Exploratory Excavation 4'-6'	G	2			X					X		01/28/25	0954	X	X	X
7	South Exploratory excavation 6'-8'	G	2			X					X		01/28/25	10:24	X	X	X

Relinquished By:	Date: 01/28/25	Received By:	
Relinquished By:	Time: 11:36	Received By:	
Delivered By: (Circle One) Sampler - UPS - Bus - Other:	Observed Temp. °C 12.1 Corrected Temp. °C 11.5	Sample Condition Cool: Yes / No Intact: Yes / No	CHECKED BY: (Initials)

Verbal Result: ☐ Yes ☐ No Add'l Phone #:

All Results are emailed. Please provide Email address: jayarbe@geo-logic.com

REMARKS: 48 hour turn-around time
Any Questions Please Call Cmbe 575 626 1615

Turnaround Time: 48 hour Standard ☐ Rush ☒

Thermometer ID #140
Correction Factor -0.6°C

Bacteria (only) Sample Condition
Cool: ☐ Yes ☐ No Intact: ☐ Yes ☐ No Observed Temp. °C
Corrected Temp. °C

FORM-006 R 3.3 08/08/24

† Cardinal cannot accept verbal changes. Please email changes to celey.keene@cardinallabsnm.com

Appendix F

DBS&A Historical Aerial Photograph Review

Memorandum

To: John Ayarbe **Date:** January 31, 2024

From: Jessica Myers

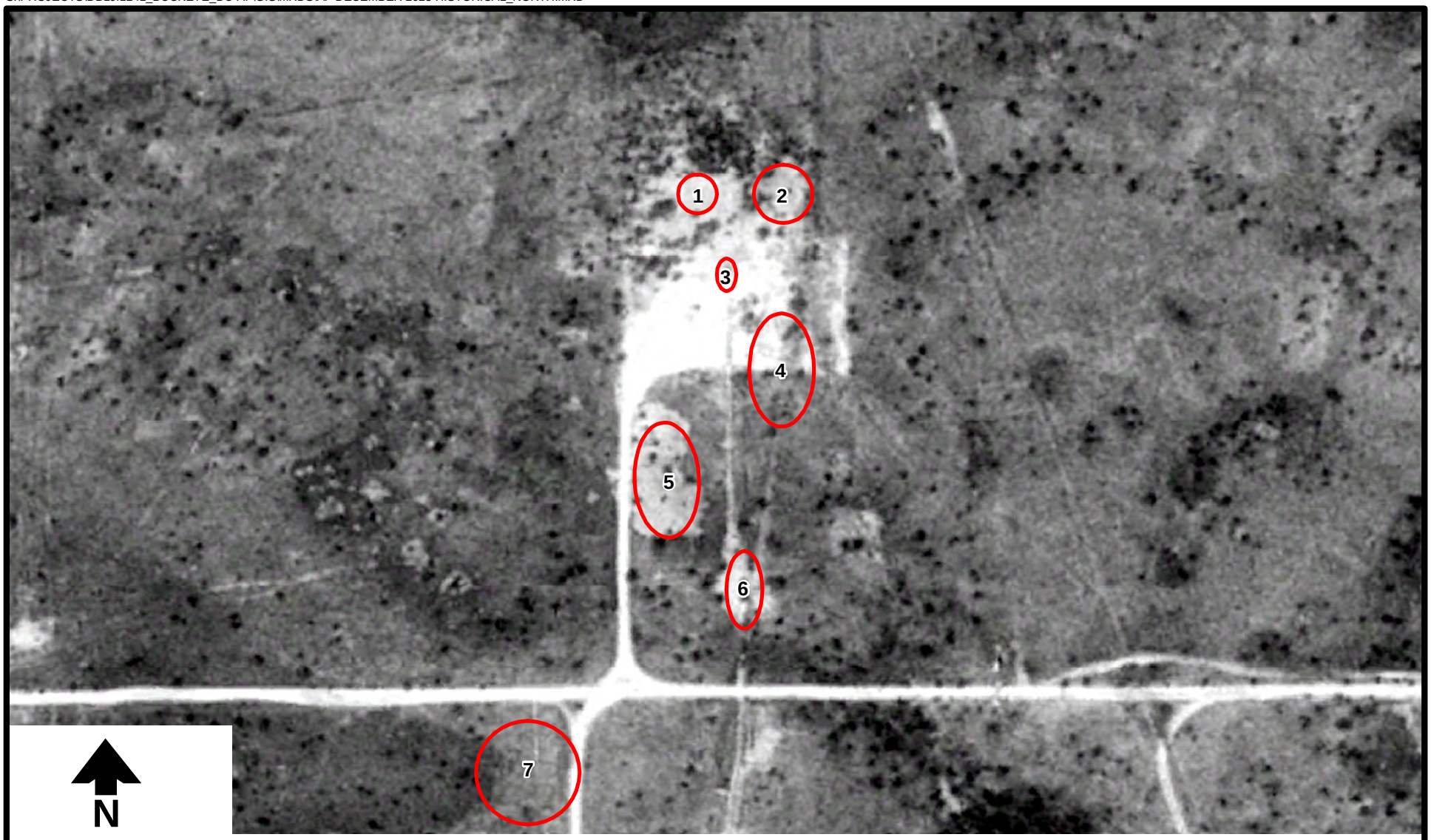
Subject: Buckeye State AF #003, NMSLO Areas of Concern

On August 30, 2023, the New Mexico State Land Office (NMSLO) denied a Remediation Plan submitted for Buckeye State AF #003 dated August 25, 2023, stating that a revised plan must be submitted. This denial included several site maps that outlined "applicable areas needing further investigation, remediation, and reclamation" over recent aerial imagery dated June 2023. Attached to this memorandum are two maps showing these outlined areas over aerial imagery dated 1996, which is before the client leased the property. This memorandum compares the areas of concern between these two dates.

NMSLO identified seven areas of concern in the northern area of the property, around the location of the pad for the former salt water disposal well. The first area is the farthest northwest of the areas, and is located in the center of a disturbed zone that is an offshoot of the main disturbed area around the well pad. In the 1996 aerial photograph, that disturbed zone is present and larger than it is in the 2023 aerial photograph. The second area is the farthest northeast, and encompasses a smaller area of disturbed soil; however, most of the area is vegetated. In the 1996 aerial photograph, the area fully contains disturbed soil. The third area is located in the north-central part of the well pad and appears fully disturbed. The area is also fully disturbed in the 1996 aerial photograph. The fourth area is located around the southeast corner of the well pad area, and covers a mostly disturbed area including a road. In the 1996 aerial photograph, the entire top half of the area is disturbed, while the road is also visible in the bottom half. The fifth area is located east of the access road and south of the well pad, and contains vegetation with no disturbed soil. In the 1996 aerial photograph, the area is fully disturbed. The sixth area is located southeast of the fifth area, and contains a small area of disturbed soil next to a road. In the 1996 aerial photograph, the road is present and the area is fully disturbed. The seventh area is west of the access road and south of another road that trends east-west, which appears partially disturbed. In the 1996 aerial photograph, the area is mostly vegetated.

NMSLO identified six more areas in the southern area of the property, around the former tank battery area. The first area is located along the access road north of the former tank battery site, which contains the road and no other disturbed areas. In the 1996 aerial photograph, the area looks the same as it does in the 2023 aerial imagery. The second area is located east of the first area, which contains a larger disturbed area. In the 1996 aerial photograph, this area is more visibly disturbed than it is in the 2023 aerial imagery. The third area is west of the former tank battery location and is mostly covered in vegetation, with two noticeable disturbed patches. In the 1996 aerial photograph, this area is more disturbed than it is in the 2023 aerial photograph. The fourth area is located where the tank battery once was, and is fully disturbed. In the 1996 aerial photograph, this area was also fully disturbed. The fifth area is located directly east of the fourth area and is fully disturbed. This area was also fully disturbed in the 1996 aerial photograph. The sixth area encompasses the part of the property that slopes downward toward a topographic depression and the slope is mostly disturbed, with some vegetation growing on it. In the 1996 aerial photograph, this area is more disturbed and has considerably less vegetation growing on the slope.

S:\PROJECTS\DB19.1241_BUCKEYE_DU-AF\GIS\MXDS\AF DECEMBER 2023 HISTORICAL_NORTH.MXD



Source: Aerial imagery (Google Earth, 1996).

Explanation

NMSLO area of concern

Figure A-1

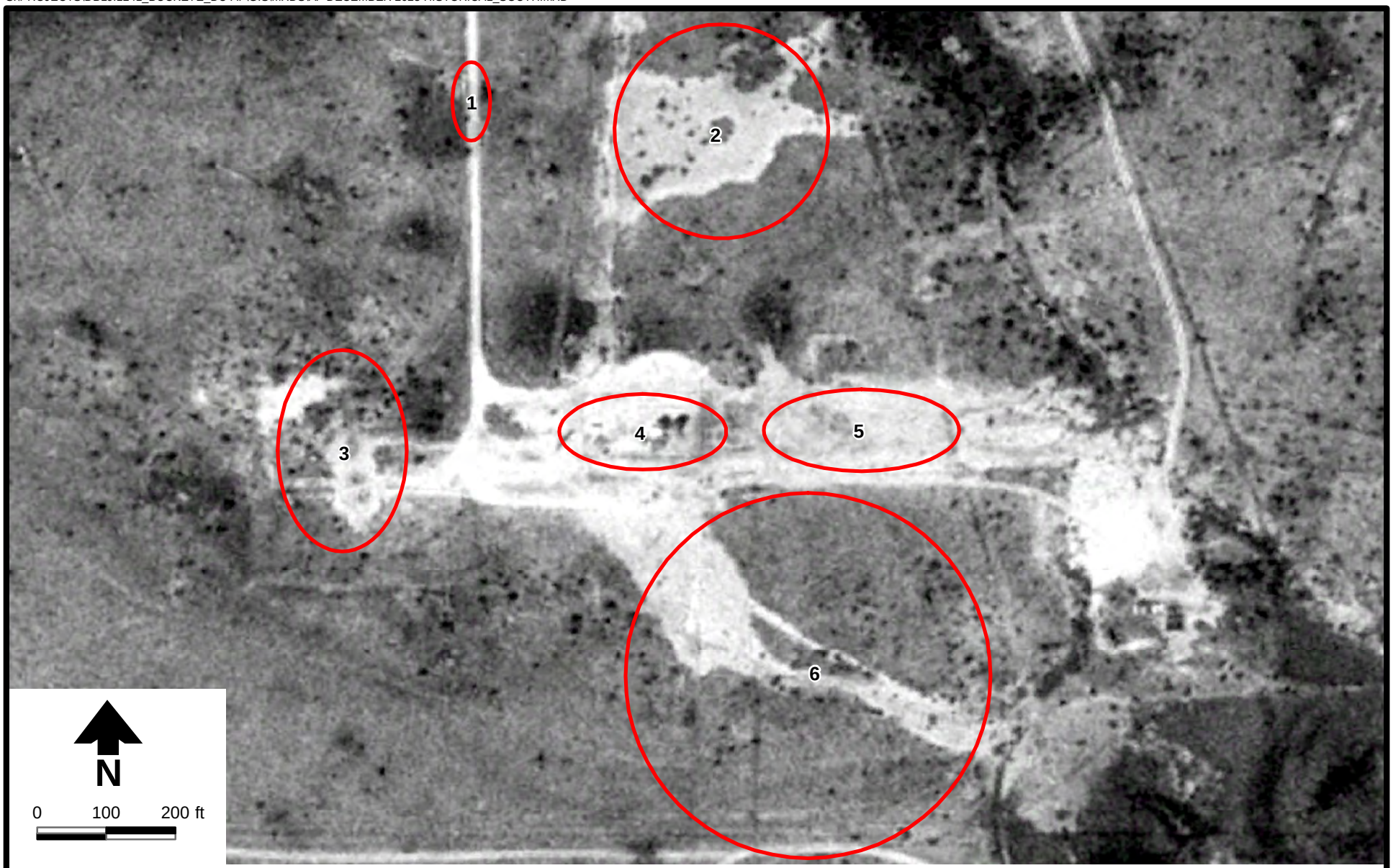
DBS&A
a Geo-Logic Company

3/19/2024 DB19.1241

BUCKEYE STATE AF #003

1996 Historical Imagery
Pad of Former Salt Water Disposal Well

S:\PROJECTS\DB19.1241_BUCKEYE_DU-AF\GIS\MXDS\AF DECEMBER 2023 HISTORICAL_SOUTH.MXD



Explanation

NMSLO area of concern

Source: Aerial imagery (Google Earth, 1996).

BUCKEYE STATE AF #003

1996 Historical Imagery
Former Tank Battery Location

DBS&A a Geo-Logic Company

3/19/2024 DB19.1241

Figure A-2

OCD Permitting

Rejected by the OCD Fee [C-141] Release Corrective Action (C-141)

Submission Contact, Application, Fee and Payment Details for Application ID: 438610

Return to Under OCD Review

First Name: Terry
Last Name: Payton
Email: terry@bergsteinenterprises.com

Operator: [222759] BUCKEYE DISPOSAL, L.L.C.
Application Status: Rejected by the OCD
Fee Amount: **$150.00**
Pay Amount: $150.00 Credit Card [CC]

Type	ID	District	County	Location
Incident ID	[nOY1813152090]	Hobbs	Lea	L-08-18S-35E 1980 FSL 990 FWL 32.7605324,-103.4851837 NAD83

Attachment Type (Description) Tag(s)	Original Uploaded File Name
Volume Calculation	_Appx D compiled.pdf (1072.9 KB)
Water Sources	Appx C_OSW Water Bodies.pdf (607.8 KB)
Scaled Site Map	F06_ Facility Overview.pdf (1880.8 KB)
Field Data	2025 Januar y 28th DBS&A Soil Sampling Buckeye State AF.pdf (916.2 KB)
Soil Contaminant	_Compiled figures.pdf (3512.8 KB)
Water Depth	F01_ShallowSource.pdf (464 KB)
Boring Logs	2025 Januar y 28th DBS&A Soil Sampling Buckeye State AF.pdf (916.2 KB)
Photographs	Binder1_Northern exploratory excavation_01282025.pdf (9400.9 KB)
Photographs	Binder2_Southern exploratory excavation_01282025.pdf (15319.1 KB)
Topo Aerial Maps	_Compiled figures.pdf (3512.8 KB)
Lab Data	_Appx E compiled.pdf (2951.7 KB)
Proposed Technique	_Proposed Remediation Plan_Buckeye State AF 003_3-03-2025.pdf (10551.7 KB)
Scaled Site Map	F07_Proposed excavation area.pdf (4953.6 KB)
Estimated Volume	_Proposed Remediation Plan_Buckeye State AF 003_3-03-2025.pdf (10551.7 KB)
Closure Criteria	_Proposed Remediation Plan_Buckeye State AF 003_3-03-2025.pdf (10551.7 KB)
Proposed Schedule	_Proposed Remediation Plan_Buckeye State AF 003_3-03-2025.pdf (10551.7 KB)
	Files: 16 Total Size: **85.7 MB**

Questions

Prerequisites

Incident Operator	**[222759] BUCKEYE DISPOSAL, L.L.C.**
Incident Type	**Produced Water Release**
Incident Status	**Remediation Plan Received**
Incident Well	**[30-025-20980] STATE AF #003**
Incident Facility	*Unavailable.*

Location of Release Source

Please answer all the questions in this group.

Site Name	STATE AF #003
Date Release Discovered	04/26/2018
Surface Owner	State

Incident Details

Please answer all the questions in this group.

Incident Type	Produced Water Release
Did this release result in a fire or is the result of a fire	No
Did this release result in any injuries	No
Has this release reached or does it have a reasonable probability of reaching a watercourse	No
Has this release endangered or does it have a reasonable probability of endangering public health	No
Has this release substantially damaged or will it substantially damage property or the environment	No
Is this release of a volume that is or may with reasonable probability be detrimental to fresh water	No

Nature and Volume of Release

Material(s) released, please answer all that apply below. Any calculations or specific justifications for the volumes provided should be attached to the follow-up C-141 submission.

Crude Oil Released (bbls) Details	*Not answered.*
Produced Water Released (bbls) Details	Cause: Equipment Failure | Pump | Produced Water | Released: 30 BBL | Recovered: 30 BBL | Lost: 0 BBL.
Δ Is the concentration of chloride in the produced water >10,000 mg/l	Yes
Condensate Released (bbls) Details	*Not answered.*
Natural Gas Vented (Mcf) Details	*Not answered.*
Natural Gas Flared (Mcf) Details	*Not answered.*
Other Released Details	*Not answered.*
Are there **additional details** for the questions above (i.e. any answer containing Other, Specify, Unknown, and/or Fire, or any negative lost amounts)	*Not answered.*

Nature and Volume of Release (continued)

Is this a gas only submission (i.e. only significant Mcf values reported)	**No, according to supplied volumes this does not appear to be a "gas only" report.**
Was this a major release as defined by Subsection A of 19.15.29.7 NMAC	**Yes**
Reasons why this would be considered a submission for a notification of a major release	**From paragraph A. "Major release" determine using: 1. Any unauthorized release of a volume, excluding gases, of 25 barrels or more.**

Δ	The source of the release has been stopped	True	
Δ	The impacted area has been secured to protect human health and the environment	True	
Δ	Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices	True	
Δ	All free liquids and recoverable materials have been removed and managed appropriately	True	
•	If all the actions described above have not been undertaken, explain why	*Not answered.*	

Per Paragraph (4) of Subsection B of 19.15.29.8 NMAC the responsible party may commence remediation immediately after discovery of a release. If remediation has begun, please prepare and attach a narrative of actions to date in the follow-up C-141 submission. If remedial efforts have been successfully completed or if the release occurred within a lined containment area (see Subparagraph (a) of Paragraph (5) of Subsection A of 19.15.29.11 NMAC), please prepare and attach all information needed for closure evaluation in the follow-up C-141 submission.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

Δ	I hereby agree and sign off to the above statement	Name: Terry Payton Title: Financial Officer Email: terry@bergsteinenterprises.com Date: 03/04/2025	

Site Characterization

Please answer all the questions in this group (only required when seeking remediation plan approval and beyond). This information must be provided to the appropriate district office no later than 90 days after the release discovery date.

Δ	What is the shallowest depth to groundwater beneath the area affected by the release in feet below ground surface (ft bgs)	Between 100 and 500 (ft.)	
Δ	What method was used to determine the depth to ground water	Direct Measurement	
Δ	Did this release impact groundwater or surface water	No	

What is the minimum distance, between the closest lateral extents of the release and the following surface areas:

Δ	A continuously flowing watercourse or any other significant watercourse	Between 1000 (ft.) and ½ (mi.)	
Δ	Any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)	Between ½ and 1 (mi.)	
Δ	An occupied permanent residence, school, hospital, institution, or church	Greater than 5 (mi.)	
Δ	A spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes	Between 1000 (ft.) and ½ (mi.)	
Δ	Any other fresh water well or spring	Between 500 and 1000 (ft.)	
Δ	Incorporated municipal boundaries or a defined municipal fresh water well field	Greater than 5 (mi.)	
Δ	A wetland	Between ½ and 1 (mi.)	
Δ	A subsurface mine	Greater than 5 (mi.)	
Δ	An (non-karst) unstable area	Greater than 5 (mi.)	
Δ	Categorize the risk of this well / site being in a karst geology	None	
Δ	A 100-year floodplain	Between 1000 (ft.) and ½ (mi.)	
Δ	Did the release impact areas not on an exploration, development, production, or storage site	No	

Remediation Plan

Please answer all the questions that apply or are indicated. This information must be provided to the appropriate district office no later than 90 days after the release discovery date.

Δ	Requesting a remediation plan approval with this submission	Yes	

Attach a comprehensive report demonstrating the lateral and vertical extents of soil contamination associated with the release have been determined, pursuant to 19.15.29.11 NMAC and 19.15.29.13 NMAC.

Δ	Have the lateral and vertical extents of contamination been fully delineated	Yes	
Δ	Was this release entirely contained within a lined containment area	Yes	

Per Subsection B of 19.15.29.11 NMAC unless the site characterization report includes completed efforts at remediation, the report must include a proposed remediation plan in accordance with 19.15.29.12 NMAC, which includes the anticipated timelines for beginning and completing the remediation.

Δ	On what estimated date will the remediation commence	05/05/2025	

The OCD recognizes that proposed remediation measures may have to be minimally adjusted in accordance with the physical realities encountered during remediation. If the responsible party has any need to significantly deviate from the remediation plan proposed, then it should consult with the division to determine if another remediation plan submission is required.

Remediation Plan (continued)

Please answer all the questions that apply or are indicated. This information must be provided to the appropriate district office no later than 90 days after the release discovery date.

This remediation will (or is expected to) utilize the following processes to remediate / reduce contaminants:

(Select all answers below that apply.)

Δ	Is (or was) there affected material present needing to be removed	Yes	
Δ	Is (or was) there a power wash of the lined containment area (to be) performed	No	
Δ	OTHER (Non-listed remedial process)	No	

Per Subsection B of 19.15.29.11 NMAC unless the site characterization report includes completed efforts at remediation, the report must include a proposed remediation plan in accordance with 19.15.29.12 NMAC, which includes the anticipated timelines for beginning and completing the remediation.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

Δ	I hereby agree and sign off to the above statement	Name: Terry Payton Title: Financial Officer Email: terry@bergsteinenterprises.com Date: 03/04/2025	

The OCD recognizes that proposed remediation measures may have to be minimally adjusted in accordance with the physical realities encountered during remediation. If the responsible party has any need to significantly deviate from the remediation plan proposed, then it should consult with the division to determine if another remediation plan submission is required.

Liner Inspection Information

Last liner inspection notification (C-141L) recorded	***{Unavailable.}***
Was all the impacted materials removed from the liner	*Unavailable.*

Remediation Closure Request

Only answer the questions in this group if seeking remediation closure for this release because all remediation steps have been completed.

- Requesting a remediation closure approval with this submission — No

Comments

Conditions of Approval

Reasons of Rejection

Remediation plan denied.

Added on 3/11/2025 by bhall *Remove*

As per the last rejection, per 19.15.29.12 C.(4) NMAC If a release occurs within the following areas, the responsible party must treat the release as if it occurred less than 50 feet to ground water in Table I of 19.15.29.12 NMAC: (c) within (ii) 1000 feet of any fresh water well or spring. The release is within 1000 feet of a fresh water well and regardless of depth to groundwater, the release must be delineated, both horizontally and vertically, and remediated to the most stringent closure standards in Table I.

Added on 3/11/2025 by bhall *Remove*

The question "Any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)" was answered "No". Any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)". There is a playa lake located southeast of the former tank battery with in approximately 300 feet.

advanced past 4 feet below ground surface.

Added on 3/12/2025 by bhall Remove

The question regarding the distance to "A wetland". There is a mapped wetland located southeast of the former tank battery with in approximately 300 feet.

Added on 3/12/2025 by bhall Remove

Per 19.15.29.7 C. NMAC, “Responsible party” means the operator, as defined in 19.15.2 NMAC. Notwithstanding the foregoing, the division, in its sole discretion, may also consider a person causing the release, or controlling the location of the release as the responsible party. OCD will hold the operator of the site responsible for all releases that occurred at the site, including any pipeline releases that may have affected the site.

Added on 3/12/2025 by bhall Remove

Vertical delineation is incomplete.

Added on 3/12/2025 by bhall Remove

All samples collected in December 1, 2023 have the qualifier "HDSP-1 for the BTEX and TPH samples. This qualifier indicates "Sample container had headspace. Results may be biased low." OCD will not accept these results.

Added on 3/12/2025 by bhall Remove

Be advised that this submittal is not applicable to NKL1625134663. This report was not submitted for NKL1625134663. NKL1625134663 is out of compliance.

Added on 3/12/2025 by bhall Remove

The question "Categorize the risk of this well / site being in a karst geology" was answered "None" but it is categorized as low karst potential.

Added on 3/12/2025 by bhall Remove

The question "Did the release impact areas not on an exploration, development, production, or storage site" was answered "No" but based off of the data provided in the report this release did impact areas not on an exploration, development, production, or storage site.

Added on 3/12/2025 by bhall Remove

The question "Was this release entirely contained within a lined containment area" was answered "Yes". Data included in the report indicates that this release want not entirely contained within a lined containment area.

Added on 3/12/2025 by bhall Remove

Submit a complete and accurate report through the OCD Permitting website by 4/11/2025.

Added on 3/12/2025 by bhall Remove

Department Use Only

Contact Phone:
Contact Email:
Internal Comment:
Reviewer: Brittany Hall Take Reviewership

Fee Information

Created On: 3/4/2025 8:56 AM
Created By: tpayton
Type: SB553 A.(2)
PO Number: 6W6J1-250304-C-1410
Amount: $150.00
Modified On: 3/4/2025 8:56 AM
Modified By: tpayton

Payment Information

Created On: 3/4/2025 10:52 AM
Created By: tpayton
Status: Paid
Type: Credit Card
Amount: $150.00
Modified On: 3/12/2025 10:14 AM
Modified By: bhall

Dalva L. Moellenberg
Shareholder
Direct: (505) 989-7278
Email: dlm@gknet.com

April 24, 2025

Via Electronic Mail Only
Jesse K. Tremaine
OCD Legal Director
Oil Conservation Division
Energy, Minerals and Natural Resources Department
1220 South St. Francis Drive
Santa Fe, N.M., 87505
jessek.tremaine@emnrd.gov

Re: ***Buckeye Disposal, LLC's response to request for update on open incidents listed in Notice of Violation dated April 3, 2025, State AF #003 (30-025-20980) Incident #nKL1625134663 and #n041813152090***

Dear Mr. Tremaine:

On behalf of our client, Buckeye Disposal, LLC ("Buckeye") (OGRID No. 222759), we provide the following update, as required by the April 3, 2025 Notice of Violation issued by the OCD, referencing State AF #003 (30-025-20980), Incident #nKL1625134663, and #n041813152090 (the "NOV"). The NOV requires Buckeye to send an update to the Oil Conservation Division ("OCD") within 15 business days of receipt (for the OCD's records, Buckeye received the NOV in an April 8, 2025 email) on the following open incidents:

i. nAB1927632580
ii. nAB1426550986
iii. nPRS0522956951
iv. nSAD0430954509
v. nBZH2501038804

Buckeye herein timely provides the following updates on these open incidents:

1) nAB1927632580: This incident number corresponds to the November 2018 release at Buckeye DU New Mexico State OO1, a salt water disposal site. The C-141 was filed by Buckeye on July 3, 2019 and revised on August 16, 2019. It was approved by OCD on October 2, 2019. Buckeye submitted its Work Plan for Characterization and Remediation of the site on September 10, 2019. OCD approved the Work Plan on October 23, 2020. OCD e-permitting currently shows the status of this incident as "Remediation Plan Approved, Pending submission of Remediation Closure Report from the operator." Buckeye's consultant has been working on the finalization of a revised remediation plan and has recently determined the depth to groundwater beneath the site and is revising the

remediation plan accordingly. Characterization work has been completed at this site, and a final remediation plan is being developed for excavation and remediation of impacted soils.

2) nAB1426550986: This incident number corresponds to a 2014 release following a lightning strike at NM DU ST #1 salt water disposal well. Buckeye submitted its C-141 on September 22, 2014, which was approved by OCD on the same day. OCD completed a site inspection on March 3, 2015. Buckeye's consultant has been working on the finalization of a remediation plan. The Buckeye employees in the Carlsbad office who worked on this 2014 project are no longer with the company, and all files were stored onsite. Buckeye will need to visit the Carlsbad office to obtain further information on the work conducted at this site.

3) nPRS052956951: This incident number corresponds to a 2005 incident involving a broken PVC line at a CBM SWD (saltwater disposal well), located southwest of Hobbs in Lea County. Buckeye was unable to locate this incident file on OCD Online Imaging. OCD e-permitting currently shows the status of this incident as "Closure Not Approved, Pending submission of C-141 from the operator." Buckeye submitted its Spill Remediation and Workplan to OCD on July 9, 2005 which contained a C-141. On September 10, 2005, Buckeye submitted to OCD its Closure Report. The Closure Report stated that excavation had been completed, the tank battery area was cleaned out and re-graveled, and pending OCD approval Buckeye would begin backhauling contaminated soils. Buckeye attaches these reports to this letter for the OCD's reference. Buckeye contends that this incident should be closed.

4) nSAD0430954509: This incident number corresponds to a 2004 incident at CBM SWD. Buckeye was unable to locate this incident file on OCD Online Imaging. OCD e-permitting currently shows the status of this incident as "Closure Not Approved, Pending submission of C-141 from the operator." Buckeye is in the process of locating the files from this release that are in paper format only.

5) nBZH2501038804: Buckeye believes that this incident number is associated with the approval of a C-141 for the 2004 and 2005 incidents at the CBM SWD, described *supra* in items 3 and 4. OCD Online Imaging has a C-141 approved by OCD on October 24, 2008 for CBM #1, describing a release due to a busted hose. The OCD conditions of approval to the C-141 on OCD Online Imaging states: "created incident number to track initial C-141 found in well files that was not associated with an incident or RP#." OCD e-permitting currently shows the status as "Initial C-141 Approved, Pending submission of Site Characterization / Remediation Plan OR Remediation Closure Report from the operator." Buckeye is in the process of locating the pertinent files for this release that are in paper format only.

Buckeye appreciates the opportunity to work with the OCD to resolve the incidents listed above. Please do not hesitate to contact us with questions regarding the update provided herein.

Very truly yours,

GALLAGHER & KENNEDY, P.A.

By: 
Dalva L. Moellenberg

DLM:SHC

Attachments:
1. Buckeye CBM Disposal Closure 09.2005
2. Buckeye CMB Disposal Spill Remediation 07.09.2005

July 9, 2005

NMOCD Environmental
ATTN: Paul Sheeley
1625 N. French Drive
Hobbs, NM 88240

RE: Buckeye Disposal
Spill Remediation and Workplan

Mr. Sheeley:

I am providing you a work plan for the above referenced spill. We are continuing to work at the site, as you requested, due to the shallow groundwater.

If you have any questions, please call.

Sincerely,

Eddie W. Seay, Agent
601 W. Illinois
Hobbs, NM 88242
(505)390-2454
seay04@leaco.net

cc: Buckeye Disposal
Zia Transportation
393-8352

BUCKEYE DISPOSAL
Unit P, Sect. 24, T. 19 S., R. 37 E.
WORK PLAN

Purpose:

The purpose of this work plan is to clean up and remediate in and around the battery area due to a recent spill, see attached C-141. The plan will allow remediation in a manner that will protect the environment and the groundwater in the immediate area.

Investigation & Remediation:

Buckeye will continue to excavate the contaminated soils both around the battery and in the adjacent pasture, as you requested. When all contamination has been removed and stored in plastic, sampling will be conducted of the site, and the OCD will be notified. We will continue to excavate and haul soil until a cleanup level of 100 ppm or less TPH is obtained. Clean soil will be used to replace the contamination and we will properly berm site. Buckeye will notify the OCD of all activities and report all sampling and associated information as required.

Buckeye will follow all environmental and safety guidelines in its endeavor to restore compliance.

District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-141
Revised October 10, 2003

Submit 2 Copies to appropriate District Office in accordance with Rule 116 on back side of form

Release Notification and Corrective Action

OPERATOR

☑ Initial Report ☐ Final Report

Name of Company Buckeye Disposal	Contact Danny Dorman
Address W. County Rd. Hobbs n.m.	Telephone No. 393-8352
Facility Name CBM	Facility Type SWD

Surface Owner Pete McNeill	Mineral Owner	Lease No.

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
P	24	19-S	37-E	467	P	E	S	Lea

Latitude_____ Longitude_____

NATURE OF RELEASE

Type of Release Water & oil Residue	Volume of Release 100 bbls Volume Recovered 95 bbls
Source of Release Busted Line	Date and Hour of Occurrence 6-16 Date and Hour of Discovery 6-17
Was Immediate Notice Given? ☑ Yes ☐ No ☐ Not Required	If YES, To Whom? O.C.D. Johnny Robinson
By Whom? Danny Dorman	Date and Hour 6-17-05 1000 am
Was a Watercourse Reached? ☐ Yes ☑ ~~No~~	If YES, Volume Impacting the Watercourse.

If a Watercourse was Impacted, Describe Fully.*

Describe Cause of Problem and Remedial Action Taken.*
6" PVC Line Broke, Fluid contained in Dyke
Retrieved Fluid with Vacuum Truck

Describe Area Affected and Cleanup Action Taken.*
15' x 66 west side of Dyke
Dirt Dug up Placed on Plastic.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

Signature: Danny Dorman	OIL CONSERVATION DIVISION
Printed Name: Danny Dorman	Approved by District Supervisor:
Title: Asst. Manager	Approval Date: / Expiration Date:
E-mail Address: ~~[illegible]~~ pieterbergstein@bts-online.com	Conditions of Approval: (NIC) / Attached ☐
Date: 6-24-05 Phone: 393-8352	

* Attach Additional Sheets If Necessary

BUCKEYE DISPOSAL
Unit P Sect. 24, T. 19 S., R. 37 E.
GPS: 32 38′ 23″ N
103 11′ 52″ W

CLOSURE

Prepared by
Eddie Seay Consulting
September 2005

September 10, 2005

NMOCD Environmental
ATTN: Paul Sheeley
1625 N. French Drive
Hobbs, NM 88240

RE: Buckeye Disposal
Spill Remediation

Mr. Sheeley:

Buckeye has completed the excavation phase of its remediation. As you and I discussed, we would like to backfill the excavated area with clean soil, level, contour and seed.

Buckeye has excavated approximately 500 cu. yds. of soil from around the berm area and trenches in the pasture. The soil was placed on plastic until excavation was finished. The soil will be hauled to Sundance for Disposal. Clean soil from McNeill Ranch will be used to backfill excavated area.

The tank battery area was cleaned out to the plastic liner, which covers the entire tank area. After plastic was exposed, gravel was put back down on plastic to hold in place and keep from blowing. Berms were re-constructed around the entire battery area to contain future spillage.

Find attached photos, analytical of excavation and map.

This should finalize the cleanup of this spill as it pertains to the attached C-141. Whenever you give us approval, we will begin backhauling and disposing of contaminated soils. We will notify OCD of any work and file a final report of all activities.

Sincerely,

Eddie W. Seay

Eddie W. Seay, Agent
601 W. Illinois
Hobbs, NM 88242
(505)392-2236
seay04@leaco.net

New Mexico Office of the State Engineer
Well Reports and Downloads

Township: 19S Range: 37E Sections: 24

NAD27 X: Y: Zone: Search Radius:

County: Basin: Number: Suffix:

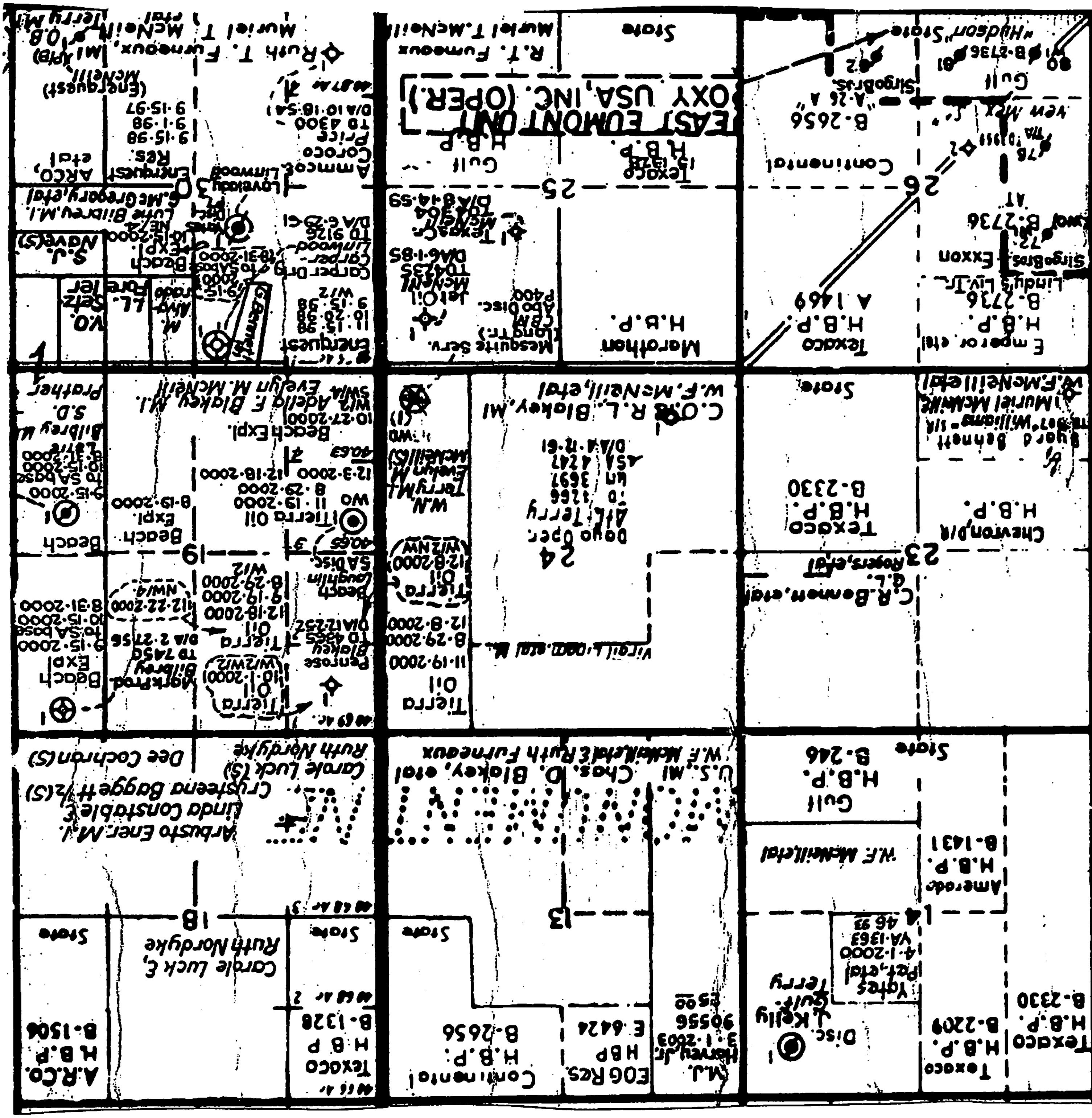
Owner Name: (First) (Last) ○ Non-Domestic ○ Domestic ◉ All

Well / Surface Data Report | Avg Depth to Water Report | Water Column Report | Clear Form | WATERS Menu | Help

AVERAGE DEPTH OF WATER REPORT 06/29/2005

								(Depth Water in Feet)		
Bsn	Tws	Rng	Sec	Zone	X	Y	Wells	Min	Max	Avg
L	19S	37E	24				2	48	48	48

Record Count: 2


EAST EUMONT UNIT
OXY USA, INC. (OPER.)
25
26
24
23
13
14
30
19
18
Marathon
Continental
Texaco
Gulf
State
W.F. McNeill, etal
C.R. Bennett, etal
Tierra Oil
Beach Expl.
Dayo Oper.
Chevron
Amerada
Arbusto Ener. M.I.
EOG Res.
A.R.Co.

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State of New Mexico
Energy Minerals and Natural Resources

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-141
Revised October 10, 2003

Submit 2 Copies to appropriate District Office in accordance with Rule 116 on back side of form

Release Notification and Corrective Action

OPERATOR

☑ Initial Report ☐ Final Report

Name of Company Buckeye Disposal	Contact Danny Dorman
Address W. County Rd. Hobbs n.m.	Telephone No. 393-8352
Facility Name CBM	Facility Type SWD

Surface Owner Pale McNeill	Mineral Owner	Lease No.

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P	24	19-S	37-E	467	P	E	S	Lea

Latitude_____ Longitude_____

NATURE OF RELEASE

Type of Release WATER & oil RESIDUE	Volume of Release 100066bls Volume Recovered 97566bls
Source of Release BUSTED LINE	Date and Hour of Occurrence 6-16 Date and Hour of Discovery 6-17
Was Immediate Notice Given? ☑ Yes ☐ No ☐ Not Required	If YES, To Whom? O.C.D. JOHNNY ROBINSON
By Whom? DANNY DORMAN	Date and Hour 6-17-05 1000 am
Was a Watercourse Reached? ☐ Yes ☑ ~~No~~	If YES, Volume Impacting the Watercourse.

If a Watercourse was Impacted, Describe Fully.*

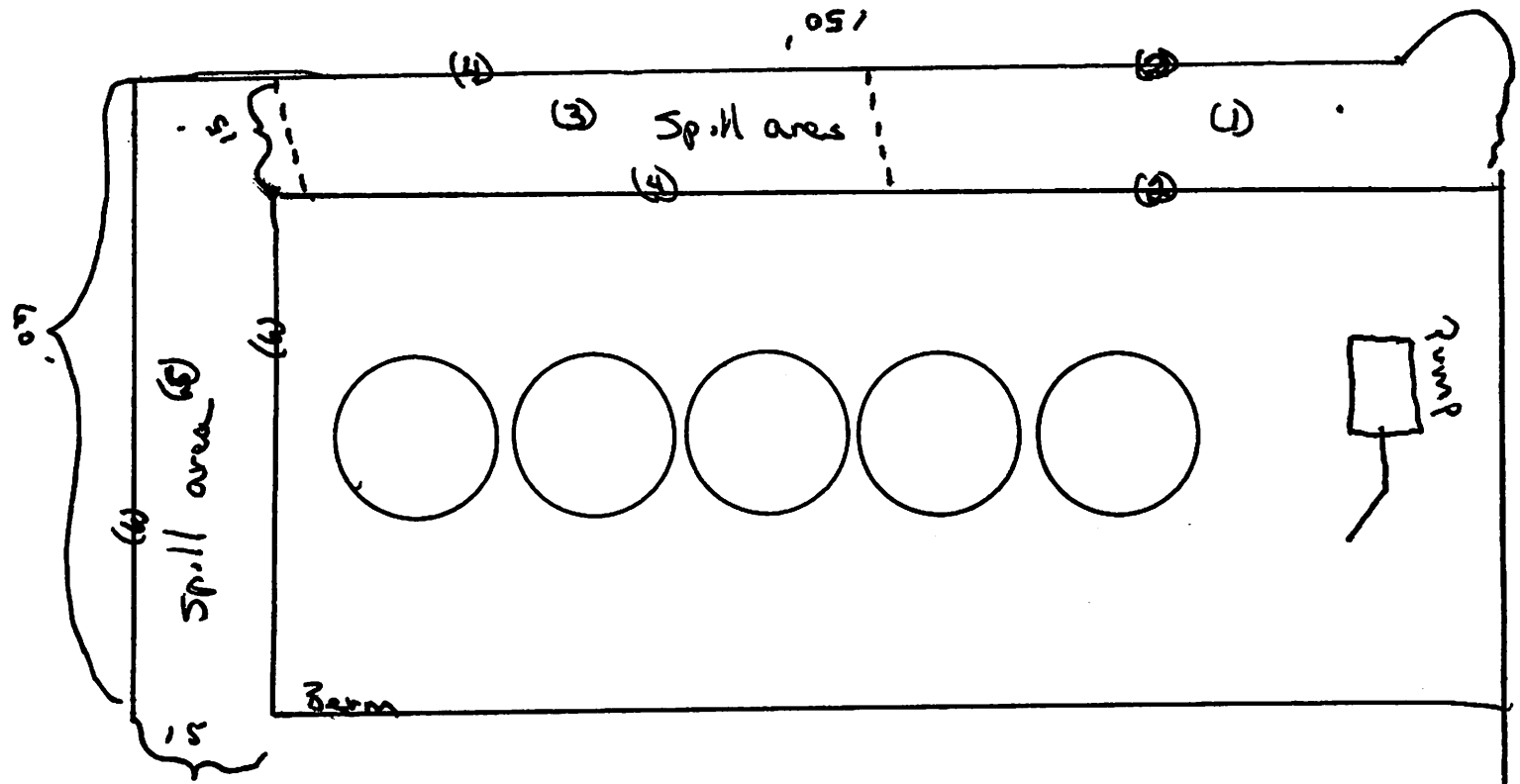
Describe Cause of Problem and Remedial Action Taken.*
6" PVC LINE BROKE, FLUID CONTAINED IN DYKE
RETRIEVED FLUID WITH VACUUM TRUCK

Describe Area Affected and Cleanup Action Taken.*
15' X 66 WEST SIDE OF DYKE
DIRT DUG UP PLACED ON PLASTIC.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

Signature: Danny Dorman	OIL CONSERVATION DIVISION
Printed Name: DANNY DORMAN	Approved by District Supervisor:
Title: ASST. MANAGER	Approval Date: / Expiration Date:
E-mail Address: pieterbergsteinENTS-online.com	Conditions of Approval: (INC) / Attached ☐
Date: 6-24-05 Phone: 393-8352	

* Attach Additional Sheets If Necessary



Depth of excavated area is approximately 3 to 4 feet.

Load Area

Buckeye SWD

→z

CARDINAL LABORATORIES, INC.

2111 Beechwood, Abilene, TX 79603 101 East Marland, Hobbs, NM 88240
(915) 673-7001 Fax (915) 673-7020 (505) 393-2326 Fax (505) 393-2476

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Page____ of____

Company Name:	Eddie Seay Consulting	BILL TO	PO #:
Project Manager:	Eddie Seay	Company:	
Address:	1601 W Illinois	Attn:	
City:	Hobbs State: NM Zip: 88242	Address:	
Phone #:	2-2236	City:	
Fax #:	2-6949	State:	Zip:
Project #:	Buckeye Project Owner: P. Bernstein	Phone #:	
Project Name:	Buckeye SWD	Fax #:	
Project Location:			

FOR LAB USE ONLY				MATRIX						PRES.			SAMPLING		ANALYSIS REQUEST													
LAB I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER:	ACID:	ICE / COOL	OTHER:	DATE	TIME	TPH (8015)	Chloride												
H10117-1	SWD - 1	G	1			✓					✓		8/26	8:40	✓	✓												
-2	SWD - 2	G	1			✓					✓		"	9:00	✓	✓												
-3	SWD - 3	G	1			✓					✓		"	9:20	✓	✓												
-4	SWD - 4	G	1			✓					✓		"	9:50	✓	✓												
-5	SWD - 5	G	1			✓					✓		"	10:15	✓	✓												
-6	SWD - 6	G	1			✓					✓		"	10:45	✓	✓												

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising whether based in contract or tort, shall be limited to the amount paid by the client for the analyses. All claims including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within 30 days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise.

Terms and Conditions: Interest will be charged on all accounts more than 30 days past due at the rate of 24% per annum from the original date of invoice, and all costs of collections, including attorney's fees.

Sampler Relinquished:	Date: 8/26	Received By:	Phone Result ☐ Yes ☐ No Additional Fax #:
Eddie W Seay	Time: 12:45		Fax Result: ☐ Yes ☐ No
Relinquished By:	Date:	Received By: (Lab Staff)	REMARKS: 1 - N Bottom 4 - Middle Side
	Time:		2 - N Side 5 - S Bottom
Delivered By: (Circle One)		Sample Condition Cool ☑ Yes ☐ No / Intact ☑ Yes ☐ No	CHECKED BY: (Initials)	3. M Bottom 6 - S Sides
Sampler - UPS - Bus - Other:			

† Cardinal cannot accept verbal changes. Please fax written changes to 915-673-7020.

ARDINAL LABORATORIES

PHONE (325) 673-7001 • 2111 BEECHWOOD • ABILENE, TX 79603
PHONE (505) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

ANALYTICAL RESULTS FOR
EDDIE SEAY CONSULTING
ATTN: EDDIE SEAY
601 W. ILLINIOS
HOBBS, NM 88242
FAX TO: (505) 392-6949

Receiving Date: 08/26/05
Reporting Date: 08/31/05
Project Owner: P. BERNSTEIN
Project Name: BUCKEYE SWD
Project Location: NOT GIVEN

Sampling Date: 08/26/05
Sample Type: SOIL
Sample Condition: COOL & INTACT
Sample Received By: BC
Analyzed By: BC/AH

LAB NUMBER	SAMPLE ID	GRO (C_6-C_{10}) (mg/Kg)	DRO (>C_{10}-C_{28}) (mg/Kg)	Cl* (mg/Kg)
ANALYSIS DATE		08/26/05	08/26/05	08/29/05
H10117-1	SWD-1	<10.0	100	240
H10117-2	SWD-2	<10.0	<10.0	80
H10117-3	SWD-3	<10.0	16.1	144
H10117-4	SWD-4	<10.0	189	240
H10117-5	SWD-5	<10.0	31.8	80
H10117-6	SWD-6	<10.0	<10.0	64
Quality Control		796	781	1000
True Value QC		800	800	1000
% Recovery		99.5	97.6	100
Relative Percent Difference		8.3	7.6	2.0

METHODS: TPH GRO & DRO: EPA SW-846 8015 M; Cl^-: Std. Methods 4500-Cl^-B
*Analyses performed on 1:4 w:v aqueous extracts.

Chemist

8/31/05
Date

H10117.XLS

From:	Romero, Rosa, EMNRD
To:	Moellenberg, Dalva L.; samantha.catalano@gknet.com; Hall, Brittany, EMNRD; Powell, Brandon, EMNRD; Bratcher, Michael, EMNRD; Tremaine, Jesse, EMNRD
Cc:	Ayarbe, John; Williams, Ethan
Subject:	Buckeye Technical Meeting
Date:	Wednesday, October 15, 2025 9:29:12 AM
Attachments:	image001.png

Greetings,

The New Mexico Oil Conservation Division (OCD) is issuing this correspondence as a formal follow-up to the meeting held with DBS&A regarding the former tank battery site. As of the date of this follow up, OCD has not received the required submittals or documentation discussed during that meeting. The following summary reiterates OCD's expectations and establishes definitive deadlines for compliance.

During the meeting, DBS&A indicated that delineation activities had been performed to approximately forty (40) feet below ground surface. OCD clarified that data submitted by email is not accepted and that all site characterization data, remediation plans, and reports must be submitted through the **C-141 application on the OCD Permitting website**. Submittals made outside of this process will not be reviewed or entered into the administrative record. DBS&A also discussed the possibility of obtaining a variance for remediation at depth. OCD stated that **variances will not be considered until complete vertical and lateral delineation of contamination has been achieved**. Additionally, OCD provided examples of successful remediation projects addressing contamination at similar depths without variances. OCD reiterates that alternative or in-situ remediation methods will only be considered once full delineation is complete and supporting data demonstrate that the proposed approach is protective of groundwater, human health, and the environment. A shallow excavation capped with a liner is **not an acceptable remedy**, as contamination would remain in place and fail to provide adequate protection. DBS&A's proposal to blend or dilute impacted soils is **not an approvable remediation approach** under OCD regulations.

To achieve compliance with 19.15.29 NMAC for nOY1813152090 and NKL1625134663, the following technical actions are required within the specified timeframes:

1. **Soil Delineation:** Complete full vertical and lateral delineation of impacted soils and, if encountered, groundwater or surface water contamination by **November 14, 2025**.
2. **Site Characterization and Remediation Plan:** Submit a complete and accurate plan, including all delineation data and proposed remedial approach, through the **C-141 application on the OCD Permitting website by December 14, 2025**.
3. **Remediation Closure and Reclamation Reports:** Submit complete reports documenting remedial actions and reclamation activities via the **C-141 application by February 12, 2026**.
4. **Revegetation Report:** Submit a revegetation report through the **C-141 application**

when vegetative cover meets the requirements of **19.15.29.13(D)(3) NMAC**.

Failure to comply with the specified deadlines and to correct all violations identified in the NOV may result in the assessment of additional civil penalties. Please be advised that continued noncompliance could also prompt further enforcement actions by OCD, including the evaluation of the five additional open incidents under Buckeye Disposal, L.L.C.'s OGRID. OCD strongly encourages prompt and complete resolution of all outstanding compliance issues to avoid escalation of enforcement and additional penalties.

OCD expects immediate attention to these requirements. Please direct all submittals through the OCD Permitting website. Technical questions regarding this matter may be directed to Brittany.Hall@emnrd.nm.gov.

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Oil Conservation Division

NOTICE
Process Updates re: Submissions of Form C-141 Release Notification and Corrective Actions.

12/01/2023

The OCD (Oil Conservation Division) is in the process of updating its current OCD Permitting C-141 incident process and procedures that have largely been unchanged since the implementation of the 2018 release rule. The three current available incident statuses are: Closure Not Approved, Closure Approved, and Cancelled. OCD has determined that these established statuses do not reflect actual practice and project in the field or provide operators and the public with the ability to quickly and properly evaluate the status of an unauthorized release.

The C-141 form is used by Operators to notify, request approvals, and communicate the progress of unauthorized Oil & Gas releases pursuant to 19.15.29 NMAC. The update to OCD Permitting will provide better alignment with the provisions of 19.15.29 NMAC, digitize the C-141 form, and incorporate both into OCD permitting. Today's update will include the addition of 16 new incident statuses and a completely digitized version of the C-141. The new incident procedures will provide more accurate management and tracking of incident statuses throughout the lifecycle of a release. The update released today is the first of several phases and likely the biggest change to current operations. Future phases will focus on refinement and include new submission pipelines for C-141 applications as they are developed, which will allow OCD to prioritize applications by type.

The document posted on the EMNRD Website titled "Procedures for Implementation of the Spill Rule" released September 6, 2019, is no longer valid as the release of this Notice and is replaced by this document.

With today's OCD Permitting release, and in anticipation of upcoming developments, certain aspects of the OCD Incident review processes will be adjusted without altering the existing OCD policy. The first major change is that Form C-141 will now be completely digital and contained within OCD Permitting. Operators will no longer need to attach a signed copy to their C-141 applications. The new digital C-141 consists of a series of questions that the Operator is required to answer, in addition to attaching supporting documents. The questions were historically found in the attached documents. The information gathered from the questions will assist OCD in prioritizing and efficiently reviewing incident applications.

Pending C-141 submittals that are currently under OCD review do not need to be resubmitted. OCD will continue to process pending C-141 using the current C-141 method. After processing, the incident will be

given the proper status based upon the submission. New or subsequent C-141 submissions shall adhere to the new revised process.

It is important to note that, as of this release, OCD does not intend to retrospectively review incidents marked with a "Closure Approved Status" from 2018 to the present. These incidents will be granted a legacy closure status of "Incident Closure Approved". Although there are no immediate plans to revisit closed incidents, Operators are reminded to adhere to any rules or conditions of approval pertaining to deferrals, reclamation, or revegetation. OCD reserves the right to evaluate these sites in the future.

Below are a few examples of the proposed additional detailed statuses to be implemented and may be changed during future development.

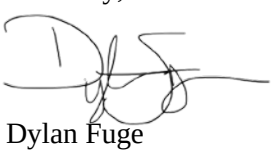
- Notification/ Initial Stage: 19.15.29.10 NMAC
  - Notification Received, Pending Initial C-141 from Operator.
  - Initial C-141 Accepted, Pending Submission of Site Char & Remediation Plan OR Remediation Closure Report from the operator.

- Remediation Stage: 19.15.29.11 & 12 NMAC
  - Site Characterization & Remediation Plan Submitted, Pending OCD Review.
  - Site Characterization & Remediation Plan Approved, Pending Remediation Closure Report from Operator.
  - Remediation Deferred, Pending Remediation Closure Report from Operator. **(Note: releases will not be closed in the OCD system while in this stage)**
  - Remediation Closure Report Approved, Pending Reclamation Report from Operator. **(Note: releases will not be closed in the OCD system while in this stage)**

- Restoration/Reclamation/Re-vegetation Stage: 19.15.29.13 NMAC
  - Reclamation Report Received, Pending OCD Review. **(Note: releases will not be closed in the OCD system while in this stage)**
  - Re-vegetation Extension approved, Pending Re-vegetation report from Operator.
  - Restoration Complete **(Release will be considered "closed" in this status)**
  - Incident Closure Approved **(For historic releases)**

The redesign is currently in the first phase of development and the examples provided in this notice and attached documents are subject to change. Additional notices will be posted on the Divisions website prior to implementation. If you have any questions regarding this notice, please email the OCD Environmental general e-mail box at ocd.enviro@emnrd.nm.gov with the subject line of Notice: Digital C-141 and Incident Status Change.

Sincerely,



Dylan Fuge

Deputy Secretary

Oil Conservation Division Director (Acting)

Procedures for Implementation of the Digital C-141 and the release rule (19.15.29 NMAC).

This document serves as a comprehensive guide for OCD Environmental Bureau Staff and regulated Operators outlining the implementation of the digital C-141, updated incident statuses, and formalizing the existing release rule (19.15.29 NMAC) as of August 14, 2018. This updated version aims to address emerging issues and ensure uniform responses fostering consistency in our approach to rule implementation.

Definitions

Non- waste Containing Material:
Material that does not contain trash/debris and is less than 600 mg/kg chlorides, or background levels whichever is greater; 100 mg/kg TPH; 50 mg/kg BTEX; and 10 mg/kg Benzene. Soils that have been treated, remediated, or land farmed and meet the above concentrations are acceptable. Soil blending or mixing of contaminated soils with cleaner soils for the purpose of reducing chloride/hydrocarbon concentrations is not acceptable.

Remediation:
Remediating impacted soil to Table I Standards or other applicable remediation closure standards by completing an OCD approved Remediation Plan.

Reclamation:
Perform backfilling, compacting, and stabilizing to prevent erosion and ponding of water in impacted areas and reclaiming those areas to contain non- waste containing material based on final land use. OR a soil cover approved by federal, state, or tribal agencies on lands managed or owned by those agencies that provide equal to or better protection of fresh water, human health, or the environment.

Revegetation:
Uniform vegetative cover has been established that reflects a life-form ratio of plus or minus fifty percent of pre-disturbance levels and a total percent plant cover of at least seventy percent of pre-disturbance levels, excluding noxious weeds OR a vegetative cover approved by federal, state, or tribal agencies on lands managed or owned by those agencies that provide equal to or better protection of fresh water, human health, or the environment.

Restoration:
When an unauthorized release has been remediated, reclaimed, and revegetated to a condition that existed prior to the release or their final land use.

Significant watercourse:
A watercourse with a defined bed and bank either named or identified by a dashed blue line on a USGS 7.5-minute quadrangle map or the next lower order tributary with a defined bed and bank of such watercourse.

Unstable Area:
A location that is susceptible to natural or human-induced events or forces capable of impairing the integrity of some or all a division-approved facility's structural components. Examples of unstable areas are areas of poor foundation conditions, areas susceptible to mass earth movements, and karst terrain

areas where karst topography is developed because of dissolution of limestone, dolomite, or other soluble rock. Characteristic physiographic features of karst terrain include sinkholes, sinking streams, caves, large springs, and blind valleys.

Watercourse:
A river, creek, arroyo, canyon, draw or wash or other channel having definite banks and bed with visible evidence of the occasional flow of water.

Variance Request:
The responsible party may file a written request for a variance for any requirement of 19.15.29 NMAC with the appropriate division district office. A variance requested in accordance with 19.15.29.14 NMAC must provide equal or greater protection of fresh water, public health, and the environment.

C-141 Form Family Application Types

Notice of Release (NOR)
The NOR is a notification that allows the Operators to quickly create an incident in OCD Permitting and to meet the major release reporting requirements.

Operators will use this application when they:

- Must create an incident number in OCD Permitting for all reportable releases.
- Must report a major release which meets the requirements of 19.15.29.10.A within 24 hours of discovery.

  Pursuant to 19.15.2.12.B NMAC this will be the preferred method to report major releases. Be advised if an operator chooses to call in the release or send an e-mail, they will still be required to fill out this NOR as a condition of approval, as it is essential to OCD's records.

This notification does NOT replace the required initial C-141 application as it is designed to collect the bare minimum of information to quickly communicate with the OCD.

See ***Figure 1*** for a step-by-step guide to uploading a Notice of Release.

Notice of Legacy Release (NOR)
The Notice of Legacy Release application type is designated based upon the answers provided in the completion of the NOR application. While completing a NOR if the user enters a date of discovery prior to 8/15/2018, the notification type will automatically change to a Notice of Legacy Release.

Operators will use this application when:

- Create an incident number in OCD Permitting for a release prior to 8/15/2018.

This notification does NOT replace the required initial C-141 application as it is designed to collect the bare minimum of information to quickly communicate with the OCD.

See ***Figure 1*** for a step-by-step guide to uploading a Notice of Release.

Release Corrective Action (C-141)

The C-141 application type is a multipurpose application that allows Operators to submit the different C-141 subtypes (described below) based upon the answers provided in the applications. The applications cost $150 and Operators have the ability to move through the entire C-141 life cycle based upon the information provided. For example, operators can submit an initial C-141 and a Remediation Closure Report in the same application.

Operators will use this Application to submit:

- Initial C-141
- Site Characterization and Remediation Plan
- Deferral Request
- Remediation Closure Report
- Reclamation Report
- Re-vegetation Report

Initial C-141 (C-141-v-initial)

This C-141 application type is designated based upon the answers provided in the completion of the Release Corrective Action (C-141) multipurpose application. C-141 submissions that do not request a review of a remediation plan will be classified as an Initial C-141.

Operators will use this application to submit:

- An Initial C-141 confirming the data provided in the NOR within 15 days of discovery of an authorized released pursuant to 19.15.29.10.A(2) & 19.15.29.10.B NMAC.

See ***Figure 2*** for a step-by-step guide to uploading an Initial C-141 application.

Site Characterization and Remediation Plan (C-141-v-Plan)

This C-141 application type is a subtype of the Release Corrective Action (C-141) multipurpose application. This form is not submitted independently and is a C-141 submission type that has a request to review a Site Characterization and Remediation Plan.

Operators will use this application to submit:

- A Site Characterization and Remediation Plan C-141 within 90 days* of discovery of an unauthorized released pursuant to 19.15.29.11.B NMAC
- A Remediation Closure Report within 90 days* of discovery of an authorized release pursuant to 19.15.29.12.B(1) NMAC.

See ***Figure 3*** for a step-by-step guide to uploading a Site Characterization and Remediation.

* 90 days are for sites that have not been granted an extension or any other Division approved timeframe.

Note Dig and Haul remediations are the ONLY remediation approach that is preapproved by the OCD. Any other type of remediation commenced by the operator without Division approval may result in additional remediation.

Notification of Sampling (C-141N)

The Notification of Sampling is a notification application that allows the Operators to notify the OCD of any confirmation closure sampling. This application is not for the use of submitting sampling plans and any such plans received in this application type will not be reviewed or accepted.

Operators Will use this application to:

- Notify the OCD two (2) business days prior to conducting final sampling pursuant to 19.15.29.12.D(1)(a) NMAC.

  Pursuant to 19.15.2.12.B NMAC this will be the preferred method for reporting all sampling events. Be advised if an operator chooses to call in the final sampling notification or send an e-mail, they will still be required to fill out this Notification as a condition of approval, as it is essential to OCD's records.

Operators may request a variance to the two (2) business day notice of sampling via email however, a notification application must also be submitted for that sampling event. Failure to complete the notification of confirmation sampling may result in the samples not being accepted for closure.

See ***Figure 4*** for a step-by-step guide to uploading a Notification of Sampling.

Notification of Liner Inspection (C-141L)
The Notification of Liner Inspection is a notification application that allows the Operators to notify the OCD of any integrity Liner confirmation inspections.

Operators will use this Application to:

- Notify the OCD two (2) business days prior to conducting a liner integrity inspection pursuant to 19.15.29.11.A(5)(a)(ii) NMAC

  Pursuant to 19.15.2.12.B NMAC this will be the preferred method to reporting all liner inspection events. Be advised if an operator chooses to call in the liner inspection notification or send an e-mail, they will still be required to fill out this Notification as a condition of approval, as it is essential to OCD's records.

Operators may request a variance to the two (2) business day notice of Liner inspection via email however, a notification application must also be submitted for that inspection event. Failure to complete the notification of Liner inspection may result in the inspection not being accepted for closure.

See Figure 4 for a step-by-step guide to uploading a Notification of Liner Inspection.

Remediation Closure Report (C-141-v-Closure)
This C-141 application type is a subtype of the Release Corrective Action (C-141) multipurpose application. This form is not submitted independently and is a C-141 submission type that has a request to review a Remediation Closure Report.

Operators will use this Application to submit:

- A Remediation Closure Report within 90 days* of discovery of an authorized release pursuant to 19.15.29.12.B(1) NMAC.

See ***Figure 5*** for a step-by-step guide to uploading a Remediation Closure Report.

* 90 days are for sites that have not been granted an extension or any other Division approved timeframe.

Reclamation Report (C-141-v-Reclmation)
This C-141 application type is a subtype of the Release Corrective Action (C-141) multipurpose application. This form is not submitted independently and is a C-141 submission type that has a request to review a Reclamation Report.

Operators will use this Application to submit:

- A Reclamation Report pursuant to 19.15.29.13.D & 19.15.29.13.D(1) NMAC.

See ***Figure 6*** for a step-by-step guide to uploading a Reclamation Report.

Re-Vegetation Report (C-141-v-Revegetation)
This C-141 application type is a subtype of the Release Corrective Action (C-141) multipurpose application. This form is not submitted independently and is a C-141 submission type that has a request to review a Reclamation Report. The Applications cost $150 to submit.

Operators will use this Application to submit:

- A Reclamation Report pursuant to 19.15.29.13.D & 19.15.29.13.D(1) NMAC.

See ***Figure 7*** for a step-by-step guide to uploading a Remediation Closure Report.

Cancellation Request (C-141C)
The Cancellation Request application allows the Operators to cancel incidents that were created in error. This application does not require a submission fee.

- Operators will use this application when they need to Cancel an incident because:
    - Association API#, Facility # were incorrectly recorded.
    - Locational Data, Unit Letter, Section, Township, Range, Latitude and Longitude incorrectly recorded.
    - Duplicate incidents were reported.
    - False incident or incident was not reportable.
    - Venting/Flaring event was incorrectly reported on C-141 and needs to be reported on C-129.
    - Responsible operator incorrectly reported.

Alternative Remediation Report (C-141AR)
The Alternative Remediation Report Application allows operators to submit reports that are required from an approved remediation plan. To access this submission Users, need to navigate to the OCD All Forms section.

Operators Will use this Application when:

- To submit Scheduled Reports of Remediation activities.

This application is only for submissions of scheduled reports of remediation activities. Any request to change Remediation Plans or Request for Remediation closure will be rejected.

Application Statuses

For clarification, when discussing statuses there are two different status types in OCD Permitting, applications statuses and Incident statuses.

Application Statuses are given to individual applications like C-103 or C-141 and pertain to 1 specific submission. Applications that have a fee associated to them have also have a Purchase Order # (PO#). All applications have an Application ID commonly referred to as an "App ID" or "Action ID." Applications can be searched by left clicking Operator Data and selecting Action Status. Below are all the possible application statuses.

Draft (DRAFT)
An application has been created by a user and has not been submitted to the OCD for review. Users can return to this application at any time and edit the details. To remove a draft application from your list, users can delete the application by clicking the blue Delete button.

Pending Payment (PPAYM)
This is an application in which the user has clicked the "Make Payment" button, and the payment was unsuccessful or pending reconciliation. These applications cannot be edited or returned to and will be automatically rejected or reconciled from the system within 7 days.

Under OCD Review (SUBMITTED)
The application has successfully been submitted to the OCD and is pending reviewing.

Approved (APPROVED)
The application has been reviewed by the OCD and has been approved. The information in the application has been accepted into the OCD database and image files/attachments are sent to imaging for record keeping.

Rejected (REJECTED)
The application has been reviewed by the OCD and has been rejected. The information in the application will not be accepted into the OCD database and image files/attachments will not be sent to imaging for record keeping.

New Incident Statuses

Just like Application Status, Incidents have their own unique status. Incidents are always identified in OCD permitting by an incident number that will start with the letter N and will be proceeded typically by 3 letters and 10 numbers Example: NAPP2331233024. Incident statuses automatically update when received and the approved dates are added to the Incident Dates section. This process is largely automated and is driven by C-141 Application submissions. Incidents statuses are not affected by rejected applications. The incident status will always display the furthest submitted or approved status.

Example: An incident has an approved Site Characterization and Remediation Plan. A C-141 application requesting remediation closure is submitted and subsequently rejected. The status of this incident will be *Remediation Plan Approved, Pending submission of Remediation Closure Report* from the operator because the last approved application was the remediation plan C-141 application.

Notification Received, Pending OCD Review:
Displayed when the Operator has submitted a Notice of Release (NOR) Application and it is currently being reviewed by the OCD.

Notification Accepted, Pending submission of Initial C-141 from the operator:
Displayed when the Operator has submitted a Notice of Release (NOR) Application and it has been approved by the OCD.

Initial C-141 Received, Pending OCD Review:
Displayed when the Operator has submitted an initial C-141 Application, and it is currently being reviewed by the OCD.

Initial C-141 Approved, Pending submission of Site Characterization / Remediation Plan OR Remediation Closure Report from the operator:
Displayed when the Operator has submitted an initial C-141 Application, and it has been approved the OCD.

Remediation Plan Received, Pending OCD Review:
Displayed when the Operator has submitted a Site Characterization & Remediation plan C-141 Application, and it is currently being reviewed by the OCD.

Remediation Plan Approved, Pending submission of Remediation Closure Report from the operator:
Displayed when the Operator has submitted a Site Characterization & Remediation plan C-141 Application, and it has been approved by the OCD.

Deferral Request Received, Pending OCD Review:
Displayed when the Operator has submitted a Deferral request C-141 Application, and it is currently being reviewed by the OCD.

Deferral Request Approved, Pending submission of Remediation Closure Report from the operator:
Displayed when the Operator has submitted a Deferral request C-141 Application, and it has been approved by the OCD.

Remediation Closure Report Received, Pending OCD Review:
Displayed when the Operator has submitted a Remediation Closure request C-141 Application, and it is currently being reviewed by the OCD.

Remediation Closure Report Approved, Pending submission of Reclamation Report from the operator:
Displayed when the Operator has submitted a Remediation Closure request C-141 Application, and it has been approved by the OCD.

Reclamation Report Received, Pending OCD Review:
Displayed when the Operator has submitted a Reclamation Report C-141 Application, and it is currently being reviewed by the OCD.

Reclamation Report Approved, Pending submission of Re-vegetation Report from the operator:
Displayed when the Operator has submitted a Reclamation Report C-141 Application, and it has been approved by the OCD.

Re-vegetation Report Received, Pending OCD Review:
Displayed when the Operator has submitted a Re-vegetation Report C-141 Application, and it is currently being reviewed by the OCD.

Re-vegetation Report Approved, Restoration Complete:
Displayed when the Operator has submitted a Re-vegetation Report C-141 Application, and it has been approved by the OCD. This status indicates that no further action is required by the Operator.

Legacy Incident Status.

Incident Closure Approved:
Displayed when the incident was in the historic "Closure Approved" status prior to December 1, 2023. Operators are still required to follow any Conditions of Approval or reclamation requirements that were approved.

Closure Not Approved, Pending submission of C-141 from the operator:
Displayed when the incident was created prior to December 1, 2023 and the incident does not have any pending applications for OCD review. This status is a default status if the Division cannot determine a status due to missing information. This status will change and follow the new statuses when the Operator submits an application or if any incident dates are manual added by the OCD.

C-129 Incident Status.

C-129 Venting and Flaring Incident status were also affected by the new incident changes. The following are the new status for incidents created by C-129 submissions only.

Notification Accepted, Pending Submission of Amended C-129 from Operator:
Displayed when the User has submitted a Notice of Major Venting and Flaring (NOMVF) and is required to submit a C-129A to complete reporting within 15 days. See December 7, 2021 C-129 Guidance document for additional information.

Initial C-129 Accepted, Operator Required to follow Monthly/annual Waste Rule Reporting Requirements.:
Displayed when the User has submitted a complete C-129. No additional action is required for this incident however, Users are required to follow C-115B and Annual certification Reporting requirements. See December 7, 2021 C-129 Guidance document for additional information.

Amended C-129 Accepted, Operator Required to follow Monthly/annual Waste Rule Reporting Requirements.:
Displayed when the User has submitted an Amended C-129. No additional action is required for this incident however, Users are required to follow C-115B and Annual certification Reporting requirements. See December 7, 2021 C-129 Guidance document for additional information.

Cancelled:
Displayed when the User has submitted a cancelation C-129C No additional action is required for this incident. See December 7, 2021 C-129 Guidance document for additional information.

Frequently Asked Questions

I. DETERMINING DEPTH TO GROUNDWATER:

A. The remediation levels provided in Table I are largely dependent upon depth to groundwater. As such, the OCD focuses upon depth to water estimation. As written, 19.15.11(A)(2) NMAC allows for various means of determining depth to groundwater. If nearby wells are used, it is preferable if they are situated within ½-mile of the release, the water level information is no more than 25 years old, and well construction information is provided. If the water level information does not meet these criteria, the OCD may require boring to a limited depth for verification. If the operator has applicable information which does not meet the above preference, OCD will review it on a case-by-case basis to determine if it is acceptable.

B. If the water well information is representative of a confined aquifer (often described as "artesian"), the depth to water in the well will be considered the depth to the bottom of the upper confining layer, not the observed water level in the well.

C. It is important to note that wells installed for water supply purposes may not be screened across shallower, less-productive zones. The less-productive zones might contain protectable water.

D. Operators are still required to provide depth to ground water determinations even if a criteria like "High Karst" automatically requires the most stringent remediation requirements.

II. VOLUME CALCULATIONS:

A. Responsible parties have asked why the new form C-141 requires volume calculations and why there is a question on the release notification form regarding the concentration of chloride in the produced water. Under 19.15.29.11(A)(5)(c) NMAC, the vertical extent of chloride contamination must be delineated to less than 600 mg/kg even when the depth to groundwater is between 50 and 100 feet if any produced water released contains more than 10,000 mg/kg of chloride and the volume released is either unknown or more than 200 barrels of unrecovered water. The volume released can be accomplished in any number of ways, but it must be reasonable. Otherwise, the OCD will consider the volume as unknown, and the responsible party must delineate accordingly.

1. It is important to note that this does not affect the remediation requirements under Table I, only the site characterization limits.

B. Remediation and reclamation surface area/volume calculations are used to assist OCD in determining deferrals, variances, and compliance.

III. RELEASE DELINEATION:

A. Horizontal and vertical delineation, as required in 19.15.29 NMAC, must be completed to both the Remediation Standards of Table I and the Reclamation requirements of 19.15.29.13 NMAC. This is to ensure that the release did not migrate to areas no longer reasonably needed for production or subsequent drilling activities and to identify areas/volumes that are required to be reclaimed. Deferrals will not be considered without complete delineation.

IV. LINERS USED AS A REMEIDATION APPROACH:

A. Synthetic liners that are placed on top of contamination as a remediation variance in an effort solely to ensure contamination doesn't migrate further is not equal or better protection, as the contamination will remain in place. **Variances with a liner request solely to reduce cleanup will be denied**.

B. OCD may also require landowner concurrence for any variance request to permanently leave contamination in place.

V. REMEDIATION OF AREAS REASONABLY NEEDED VS AREAS NOT REASONABLY NEEDED:

A. All areas, regardless of if they are in an area reasonably needed for production operations or subsequent drilling operations, must be remediated to the remediation requirements in Table I of 19.15.29 NMAC as soon as possible.

B. Only the areas immediately under or around production equipment where remediation could cause a major facility deconstruction may be granted a deferral of remediation. The area must be fully delineated and cannot pose an imminent risk.

   1. Major facility deconstruction typically involves concrete poured pads, structures, engineered designed facilities that include automation/electrical lines, sprayed in liners, etc. OCD will review each deferral request on a case-by-case basis.

VI. RECLAMATION OF AREAS REASONABLY NEEDED VS AREAS NOT RESONABLY NEEDED:

A. Reclamation of areas that are NOT reasonably needed for production operations or subsequent drilling operations, must be reclaimed as soon as possible following remediation.

B. Reclamation of areas that are still reasonably needed for production operations or subsequent drilling operations are NOT required to be reclaimed immediately following remediation. These areas are required to be fully delineated, compacted, covered, paved or otherwise stabilized in a manner that minimizes dust and erosion.

   1. Once these areas are no longer reasonably needed, they must be reclaimed within 90 days. This normally occurs at plugging & abandonment or during a major facility deconstruction.

VII. REMEDIATION CLOSURE SAMPLING PLANS:

A. If a responsible party wishes to remediate a spill within 90 days of its discovery without submitting a remediation plan, the closure samples must reflect the gathering of composites representative of no more than 200 square feet per composite sample per 19.15.29.12(D)(1)(c) NMAC. Alternative sampling plans will only be allowed with written permission from the OCD. In accordance with 19.15.29.12(D)(1)(b) NMAC, there are no listed standards as to what a responsible party can base an alternative sampling plan upon. Therefore, the OCD may request justifications or methods used in constructing the plan such that an appropriate decision can be made. OCD staff can provide verbal approval, however, it must be followed up in writing, such as in an email.

VIII. REMEDIATION CLOSURE SAMPLING NOTICE & LINER INSPECTION NOTICES:

A. The responsible party is required to provide notice two (2) business days prior to final sample collection or liner inspections pursuant to 19.15.29.12.D(1)(a) and 19.15.29.11.A(5)(a)(ii) NMAC.

B. If a responsible party determines the release site may meet remediation closure standards during delineation activities and wish to use those samples for remediation closure, the responsible party must provide proper two (2) business day notice to the OCD pursuant to 19.15.29.12 NMAC.

IX. BACKGROUND SAMPLES:

A. The rule speaks of "background" chloride concentrations in three places: 19.15.29.11(A)(5)(c) NMAC, regarding unknown or large volume releases; as a footnote to Table I; and in 19.15.29.13(D)(1) NMAC regarding reclamation. When obtaining information to determine background limits, a grab, not composite, sample(s) should be gathered in endemic areas undisturbed by oil and gas activities, nominally uphill from the release area, no closer than 50 feet but no farther than 100 feet from the lateral and horizontal extents of a release's impact or disturbed areas. The background sampling should be representative of the entire horizontal and vertical extent of the release.

B. There are no natural background levels for TPH, BTEX, or Benzene.

X. GROUND WATER IMPACTS:

A. The regulatory oversight of all releases is initially covered under 19.15.29 NMAC. However, once a determination is made that groundwater or surface water has been impacted, corrective action is carried out under the provisions of 19.15.30 NMAC. These provisions potentially require the development of Stage 1 (investigation) and Stage 2 (remediation) abatement plans. There are also requirements for public notice.

B. Furthermore, 19.15.30 NMAC does not have numeric cleanup levels for contaminated soils. As written:
"The responsible person shall abate the vadose zone so that water contaminants in the vadose zone will not with reasonable probability contaminate groundwater or surface water in excess of the standards in Subsections B and C of 19.15.30.9 NMAC, through leaching, percolating or other transport mechanisms, or as the water table elevation fluctuates." (19.15.30.9(A) NMAC).

C. 19.15.30.9(B) and (C) NMAC refer to standards found in the Water Quality Control Commission regulations; 20.6.2 and 20.6.4 NMAC.

XI. FEES:

A. The new fees legislation took effect July 1, 2019, and requires a $150 filing fee to accompany each C-141 submission. This includes any submittal of a digital C-141, including but not limited to: Initial C-141s, Site characterization & Remediation plans, Remediation Closure Reports, Reclamation Reports, and Revegetation reports. Requests and notifications made separate from the C-141 do not require a fee, this includes but is not limited to: separate alternative sampling plans, notifications, cancelations, alternative remediation reports.

FIGURE 1

SUBMITTING A NOTIFICATION OF RELEASE (NOR)

Log into OCD Permitting and ensure that you are Logged into the Correct OGRID if you have access to multiples. It is very important that the correct OGRID is selected as the Responsible Party of the incident will be assigned to the reporting OGRID.

1. Left Click on the Submissions tab in the top right of the website.
2. Left Click on Releases and Select [NOTIFY] Notification of Release

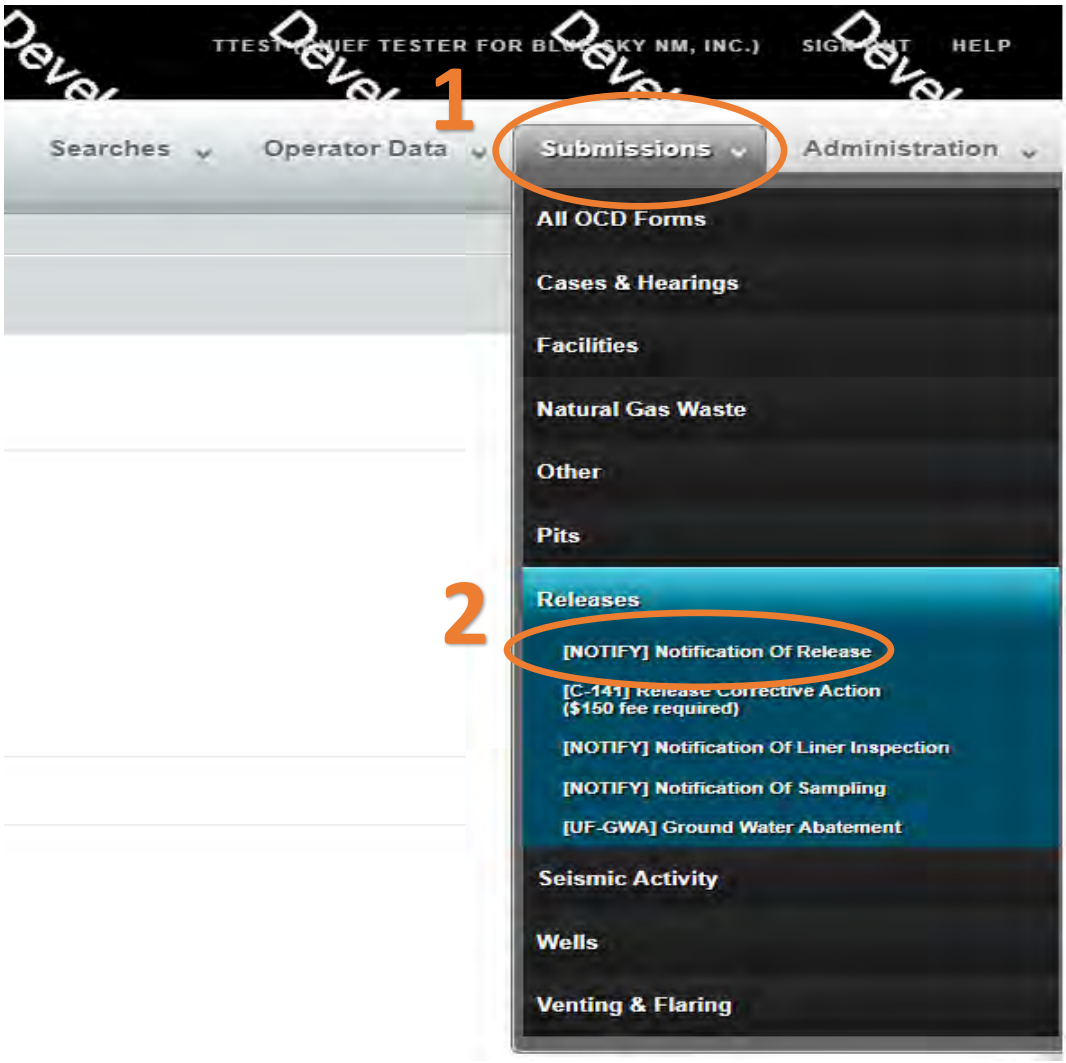


FIGURE 1

SUBMITTING A NOTIFICATION OF RELEASE (NOR)

On this Permitting page Users can review the status of all previous submitted NOR Applications from their current OGRID . The user can also resume working on a previous draft version of the application by left clicking on the PO Number hyperlink. Applications types that are under OCD Review or have been Approved/ Rejected cannot be modified.

3. To create a new Notice of Release Application scroll down and left click on the New NOR Application button.

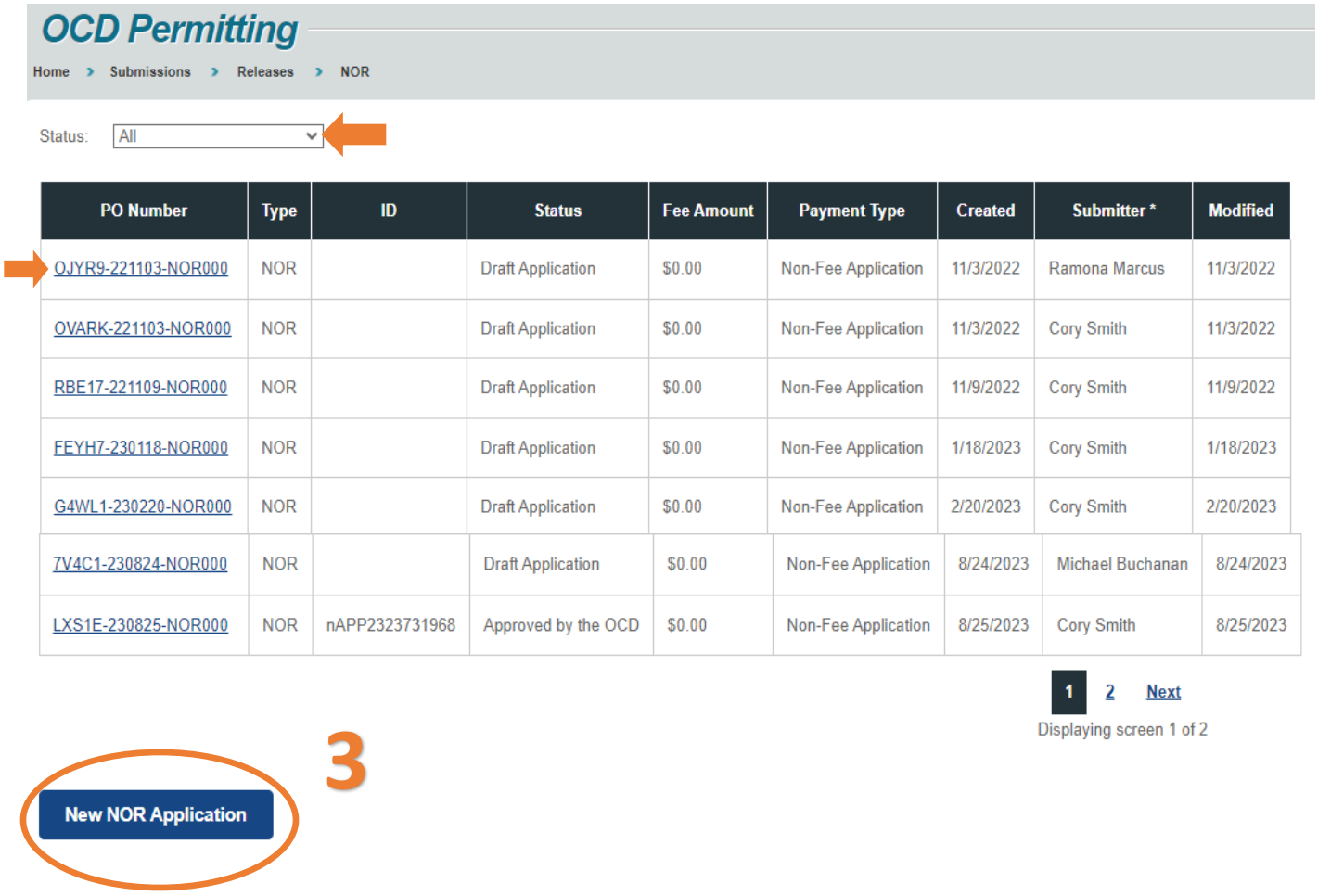


FIGURE 1

SUBMITTING A NOTIFICATION OF RELEASE (NOR)

3a. OCD Permitting general functions will display any errors in the orange ribbon band at the top of your screen and inline while working through the applications.

The Submissions Contact Application, Fee Payment section of the NOR is automatically filled out based upon the Users default contact information. The contact e-mail used in this section is where any approvals/ rejections will be sent too. In the even that you are submitting this on behalf of another member of your organization you may edit the contact information by clicking on the edit submissions contact details button.

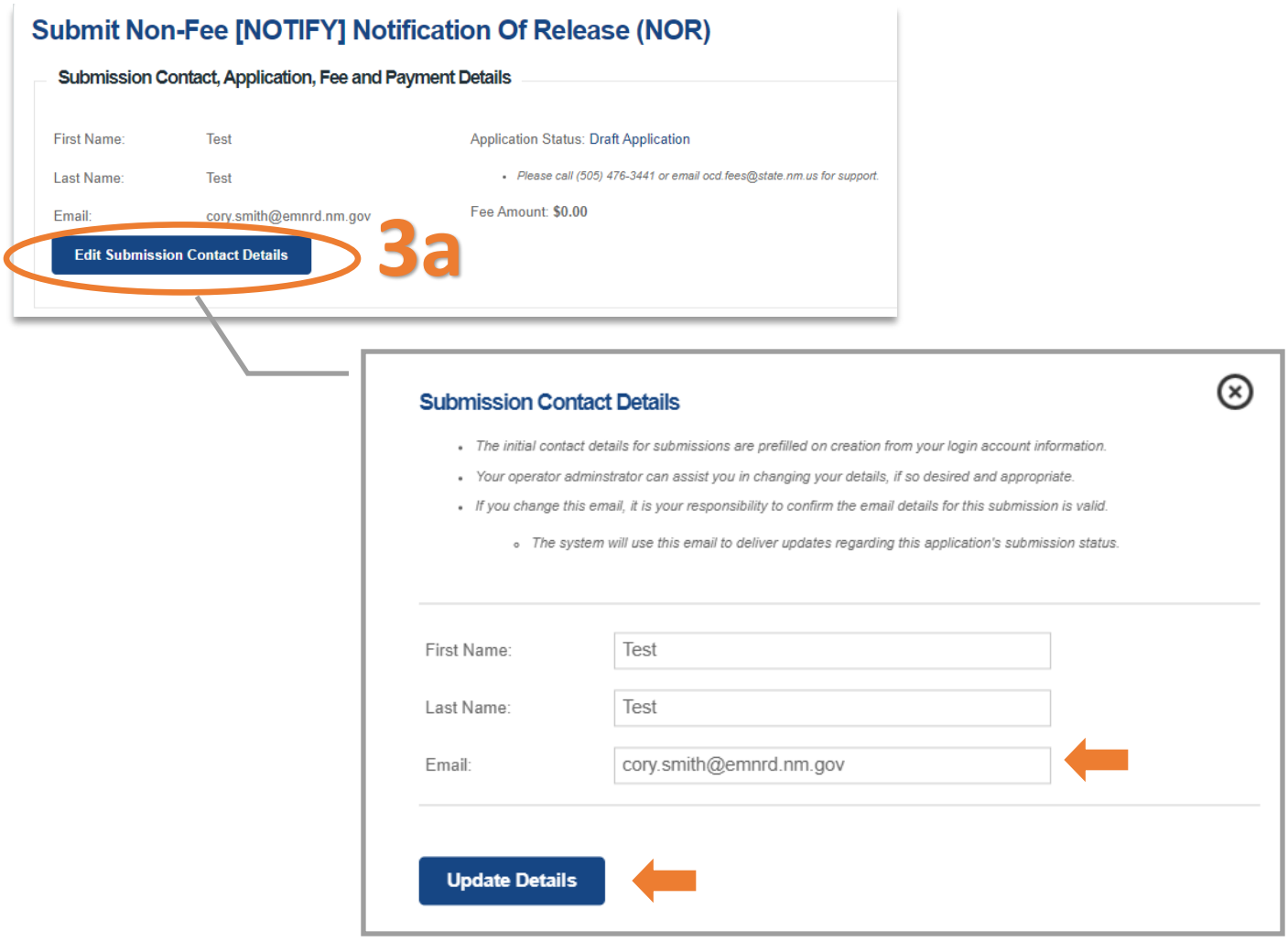
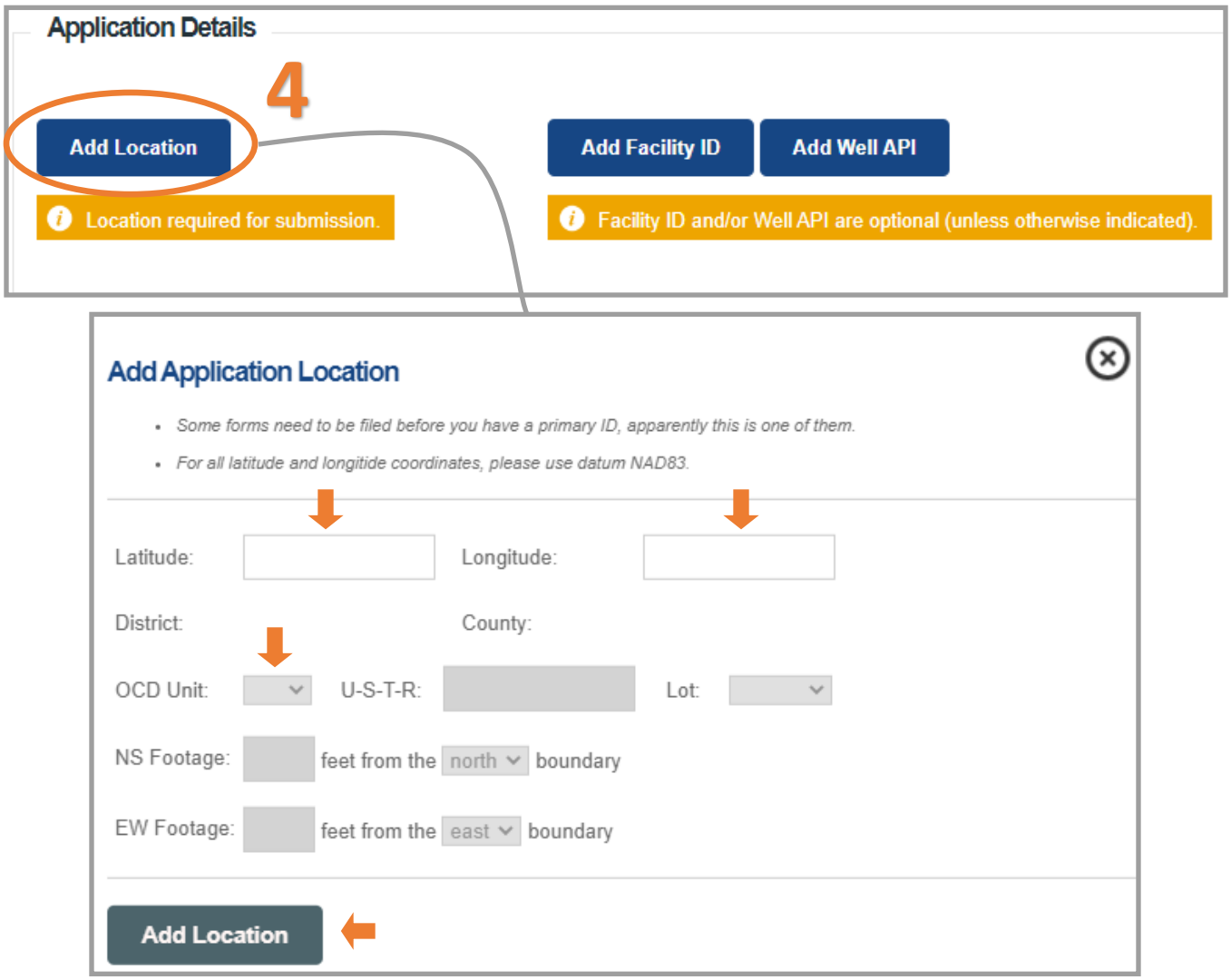


FIGURE 1

SUBMITTING A NOTIFICATION OF RELEASE (NOR)

4. Add the location of release. This location should be as close as possible to the Point of Release.



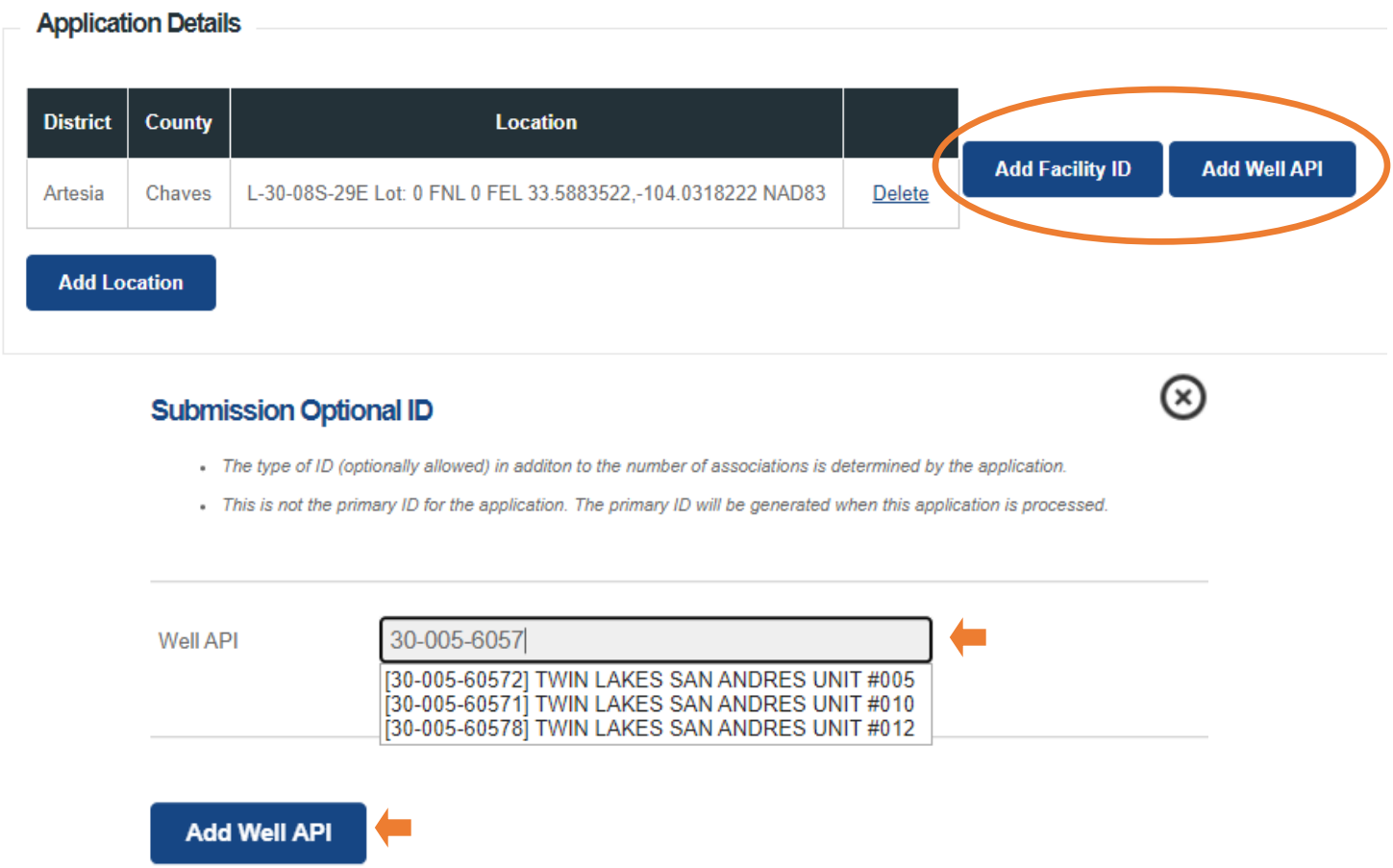
Latitude and Longitude should be in Decimal Degrees and to 5 Decimal positions. If your location ends with a zero add a 1 to it. Example: 33.588210 = 33.5882101.

The Section, Township, and Range is automatically generated based upon the provided coordinates. The User only has to input the OCD unit letter. If you do not have the OCD unit letter, this information can be found on the OCD Public GIS website.

FIGURE 1

SUBMITTING A NOTIFICATION OF RELEASE (NOR)

If most release occur at a well site or facility (Tank Battery etc.) to add an API or Facility ID click on the applicable blue button.



Start by typing in the API # or the well name into the box. A drop down list will appear and you can select the well where the release occurred. This same type of function works with Facility ID numbers.

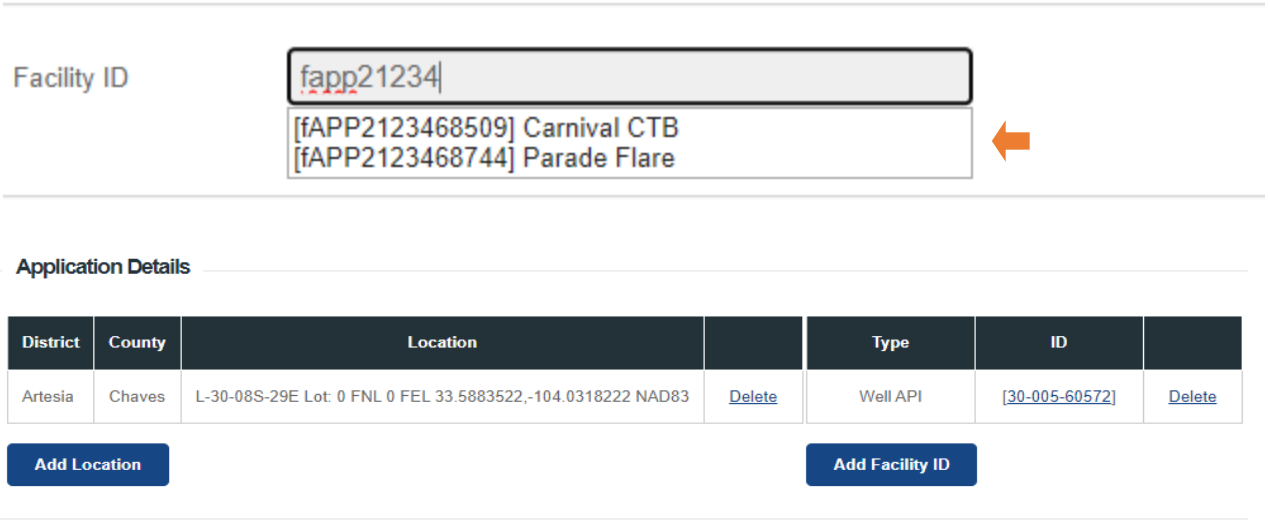


FIGURE 1

SUBMITTING A NOTIFICATION OF RELEASE (NOR)

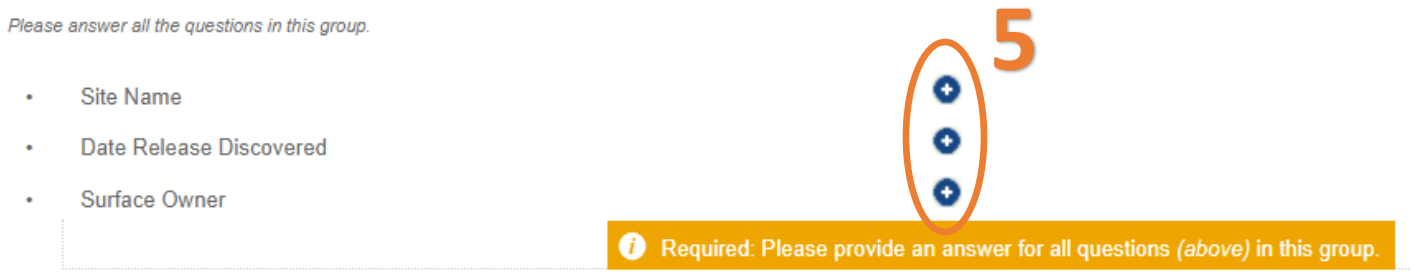
General OCD Permitting functionality is to ask questions and the answer is provided typically by clicking on the ⊕ symbol next to the question. Any questions that are required to be answered prior to the submission of the application, are flagged by an Orange Box indicating that they are required.

5. Answer the following questions by left clicking the button.

Site Name: Name of the release identified by the User, (May be different then Well name or Facility Name).

Date Of Discovery: The date in which the Operator discovered the release and sets the compliance timeline for notifications and remediation due dates.

Surface Owner: Surface owner at the point of release.



Type in or select the appropriate answer for your release. **It is important to note that if you press the enter key after typing in your answers they will not be saved**. You must enter the information and then click the blue Save button. If you accidently entered a question you can back out of the question by click on the X in the top right of the question prompt. This functionality is for all questions in OCD Permitting.

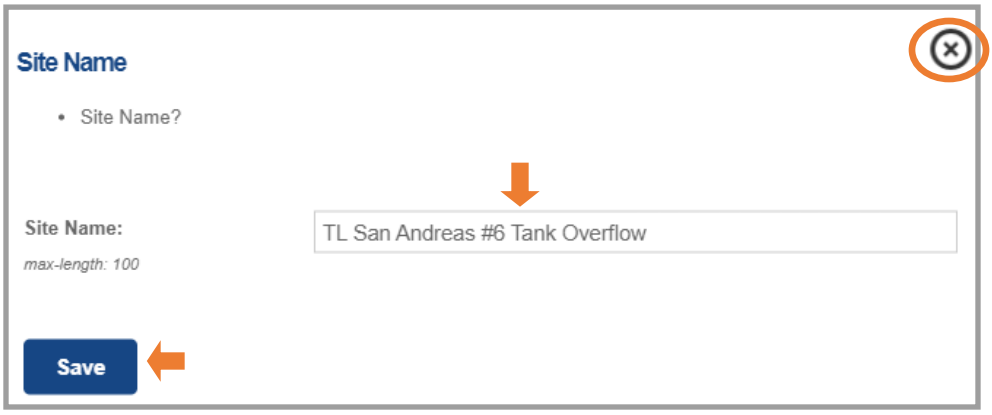
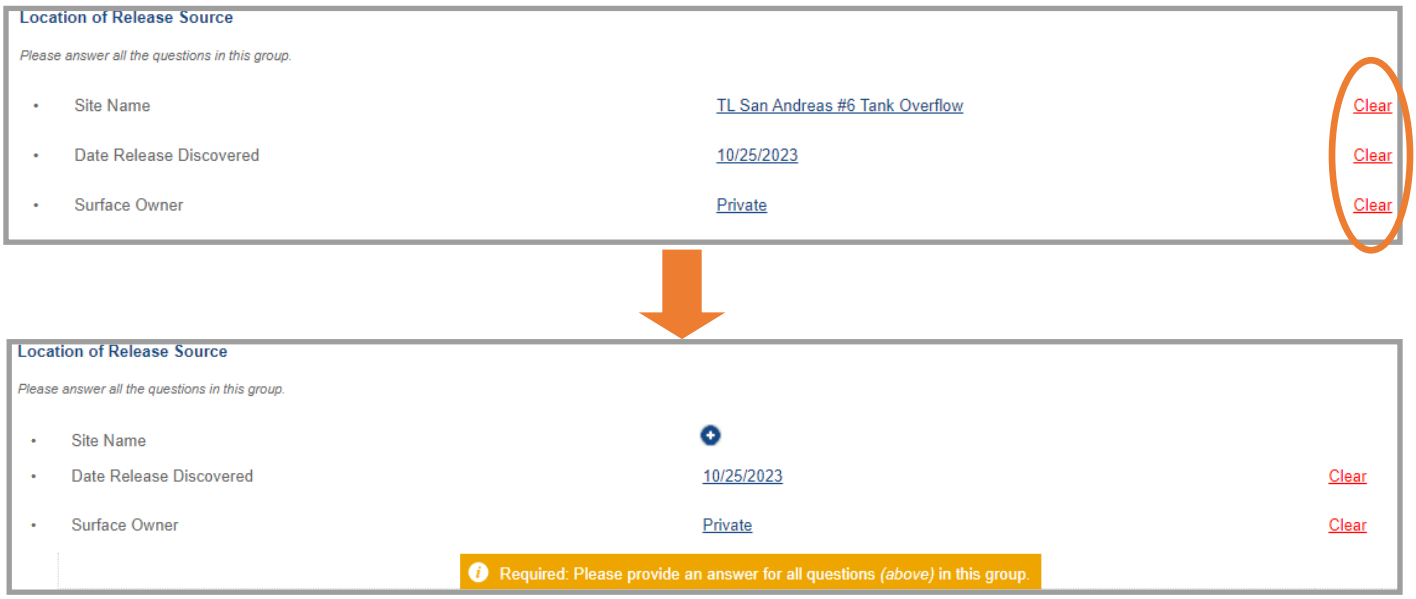


FIGURE 1

SUBMITTING A NOTIFICATION OF RELEASE (NOR)

In the event that a mistake was made the User has the ability to clear the questions answer by left clicking on The **Red** "Clear" button to the right of the questions.

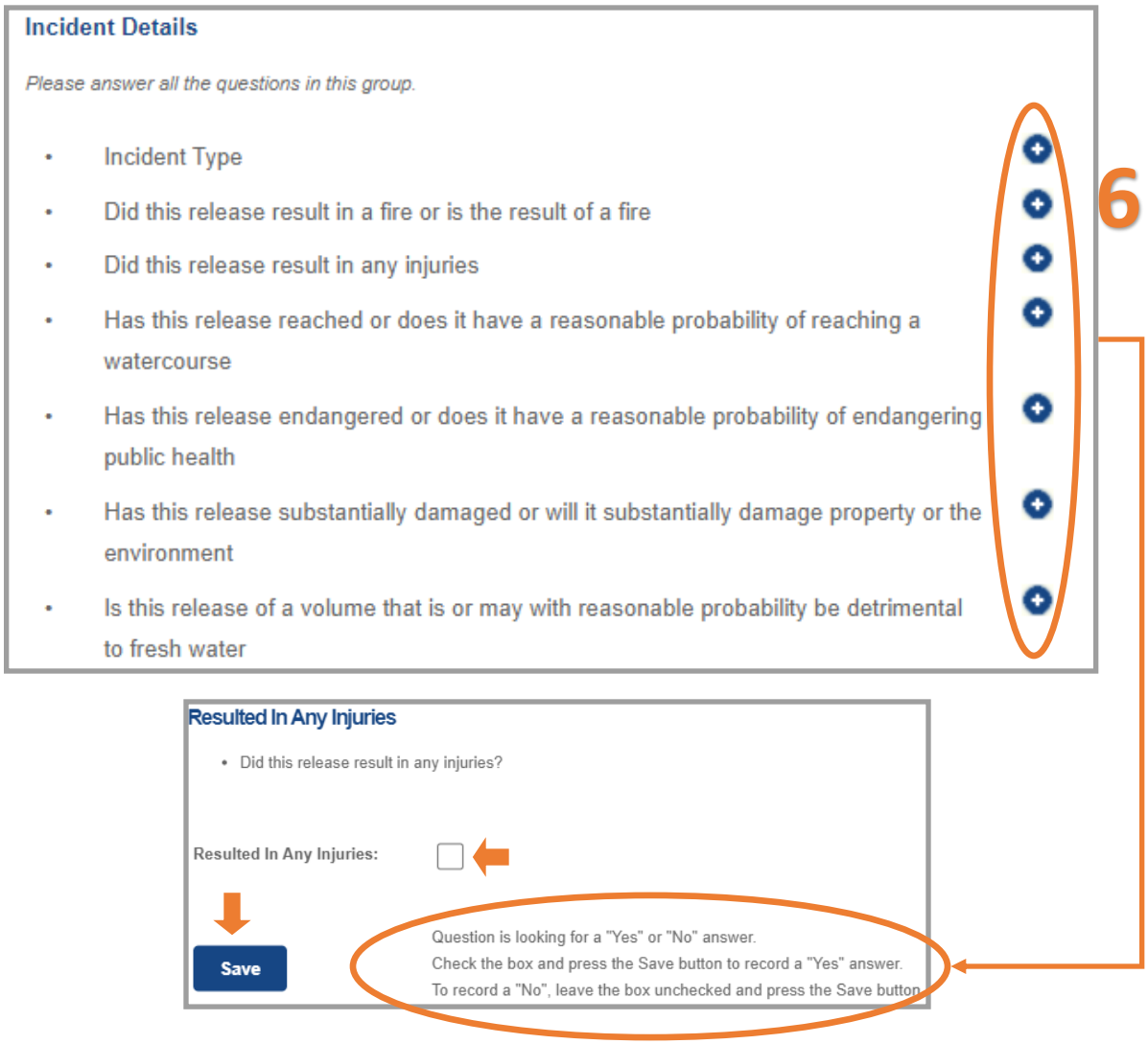


This functionality works for all questions in the Notice of Release and C-141 Corrective Action Applications.

FIGURE 1

SUBMITTING A NOTIFICATION OF RELEASE (NOR)

6. Left click the Blue buttons to the right of the each of the questions to answer.



Incident Type: Select the category that best fits your release. In the event that your release contains two different types select the category that had the highest volume. Released 50 BBLs of Produce water and 10 BBL of oil release type would be Produce water.

Has this release reached or does it have a reasonable probability of reaching a watercourse.:
river, creek, arroyo, canyon, draw or wash or other channel having definite banks and bed with visible evidence of the occasional flow of water to include significant water courses and their next lower tributary as defined in 19.15.17 NMAC.

Has this release substantially damaged or will it substantially damage property or the environment:
Examples: destroyed Oil & Gas equipment, impacted Public Roads, Wildlife and Livestock, Impacted private property like homes, cars, animals etc.

Is this release of a volume that is or may with reasonable probability be detrimental to fresh water:

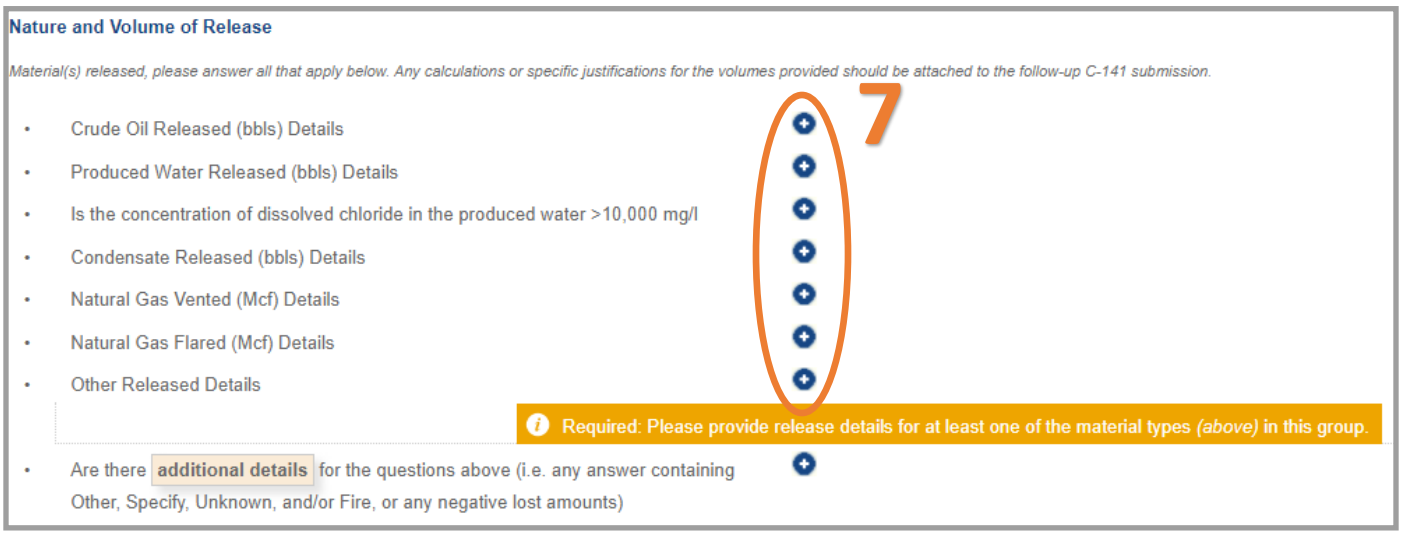
Example: A release of 5 **gallons** of an extremely hazardous chemical.

FIGURE 1

SUBMITTING A NOTIFICATION OF RELEASE (NOR)

7. The user must provide at a minimum one nature and volume of the release. During the NOR stage OCD understands that Operators may not have all of the information and the information is subject to change. Operators will have the opportunity to change and confirm the release volumes/types when submitting the follow up initial C-141 within 15 days.

The “Other Released Details” is only if your release does not fit one of the above material types and should not be used for unknown volumes. If the User selects the “Other Release Details” they will be required to provide additional details.



Fill out the Cause, source, released and recovered volume.

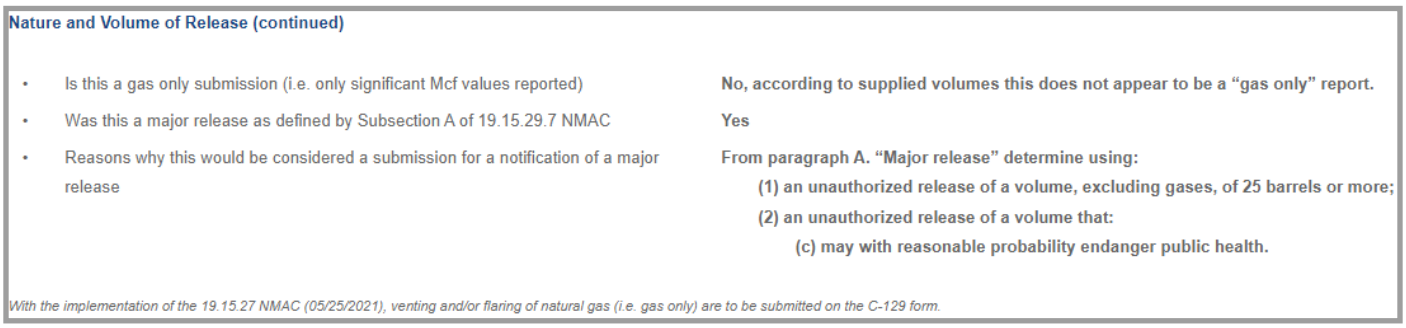
Released Volume = Total volume released including any volume that was recovered.

If the volume is unknown check the “Unknown Released Amount” Check box.

FIGURE 1

SUBMITTING A NOTIFICATION OF RELEASE (NOR)

Review the Automated information based upon the answers provided by the User. Verify that the correct incident severity Major/Minor is be applied to the incident.



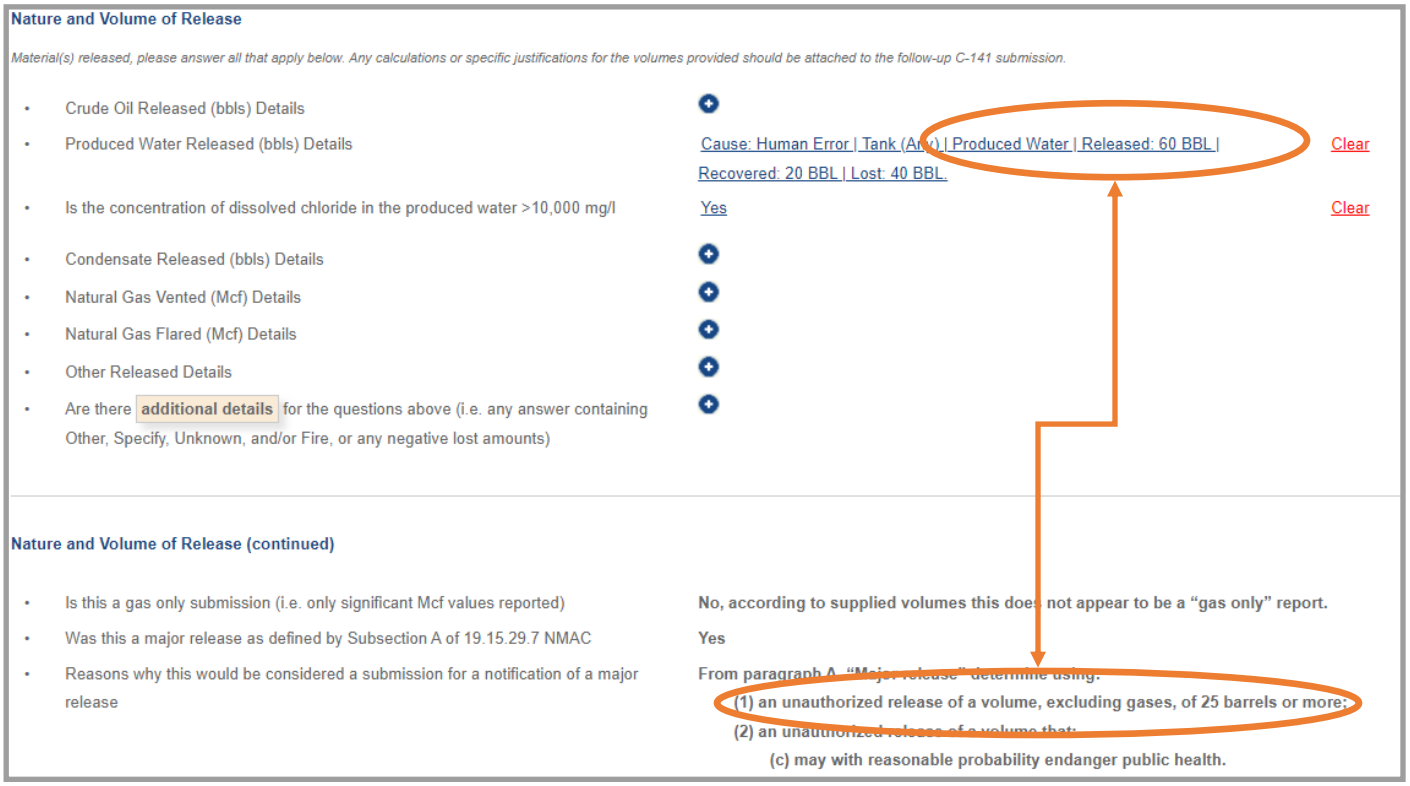
Nature and Volume of Release (continued)

• Is this a gas only submission (i.e. only significant Mcf values reported)	No, according to supplied volumes this does not appear to be a "gas only" report.
• Was this a major release as defined by Subsection A of 19.15.29.7 NMAC	Yes
• Reasons why this would be considered a submission for a notification of a major release	From paragraph A. "Major release" determine using: (1) an unauthorized release of a volume, excluding gases, of 25 barrels or more; (2) an unauthorized release of a volume that: (c) may with reasonable probability endanger public health.

With the implementation of the 19.15.27 NMAC (05/25/2021), venting and/or flaring of natural gas (i.e. gas only) are to be submitted on the C-129 form.

Is this a gas only submission (i.e. only significant Mcf values reported)

If the Answer to this question is Yes, that means the user has reported a gas only release and that release should be reported through the C-129 application. The User will not be able to move forward with submitting an NOR application.



Nature and Volume of Release

Material(s) released, please answer all that apply below. Any calculations or specific justifications for the volumes provided should be attached to the follow-up C-141 submission.

• Crude Oil Released (bbls) Details	⊕	
• Produced Water Released (bbls) Details	Cause: Human Error | Tank (Any) | Produced Water | Released: 60 BBL | Recovered: 20 BBL | Lost: 40 BBL.	Clear
• Is the concentration of dissolved chloride in the produced water >10,000 mg/l	Yes	Clear
• Condensate Released (bbls) Details	⊕	
• Natural Gas Vented (Mcf) Details	⊕	
• Natural Gas Flared (Mcf) Details	⊕	
• Other Released Details	⊕	
• Are there **additional details** for the questions above (i.e. any answer containing Other, Specify, Unknown, and/or Fire, or any negative lost amounts)	⊕	

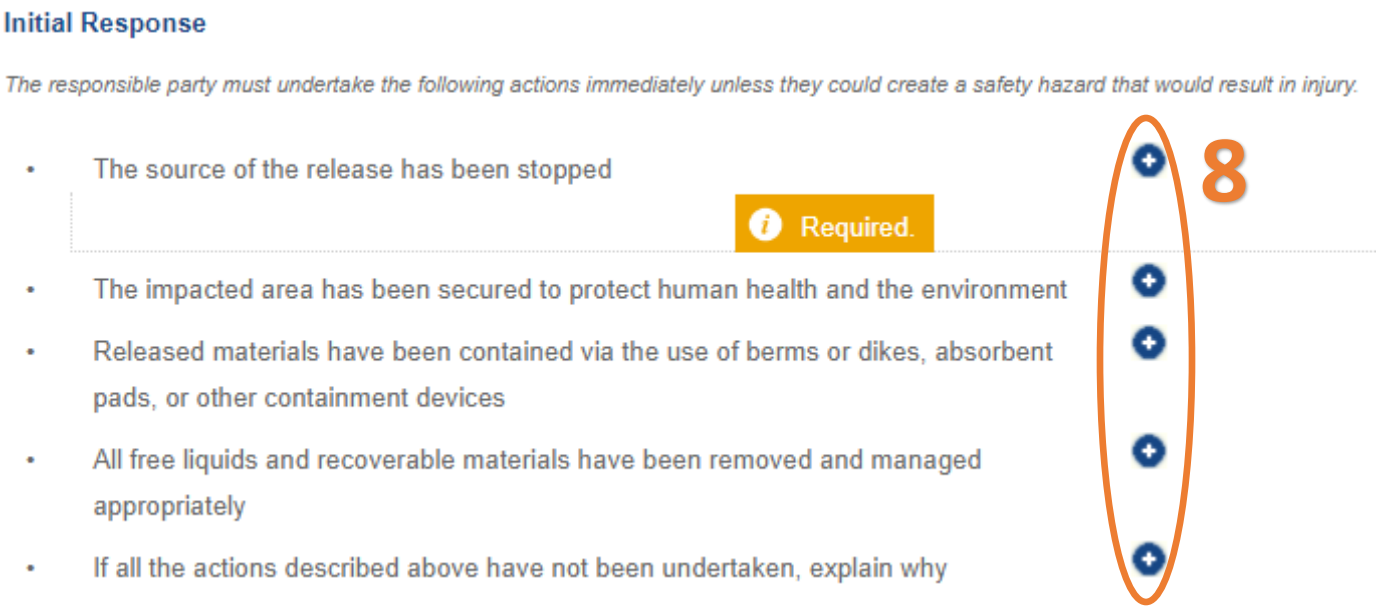
Nature and Volume of Release (continued)

• Is this a gas only submission (i.e. only significant Mcf values reported)	No, according to supplied volumes this does not appear to be a "gas only" report.
• Was this a major release as defined by Subsection A of 19.15.29.7 NMAC	Yes
• Reasons why this would be considered a submission for a notification of a major release	From paragraph A. "Major release" determine using: (1) an unauthorized release of a volume, excluding gases, of 25 barrels or more; (2) an unauthorized release of a volume that: (c) may with reasonable probability endanger public health.

FIGURE 1

SUBMITTING A NOTIFICATION OF RELEASE (NOR)

8. Answer all the questions regarding the responsible party's initial response to a release.



The source of the release has been stopped:

Examples: Pump was turned off, valves were closed, etc.

The impacted area has been secured to protect human health and the environment:

Examples: Area has been fenced/cordoned off, Dry watch attendant on site etc.

All free liquids and recoverable materials have been removed and managed appropriately :

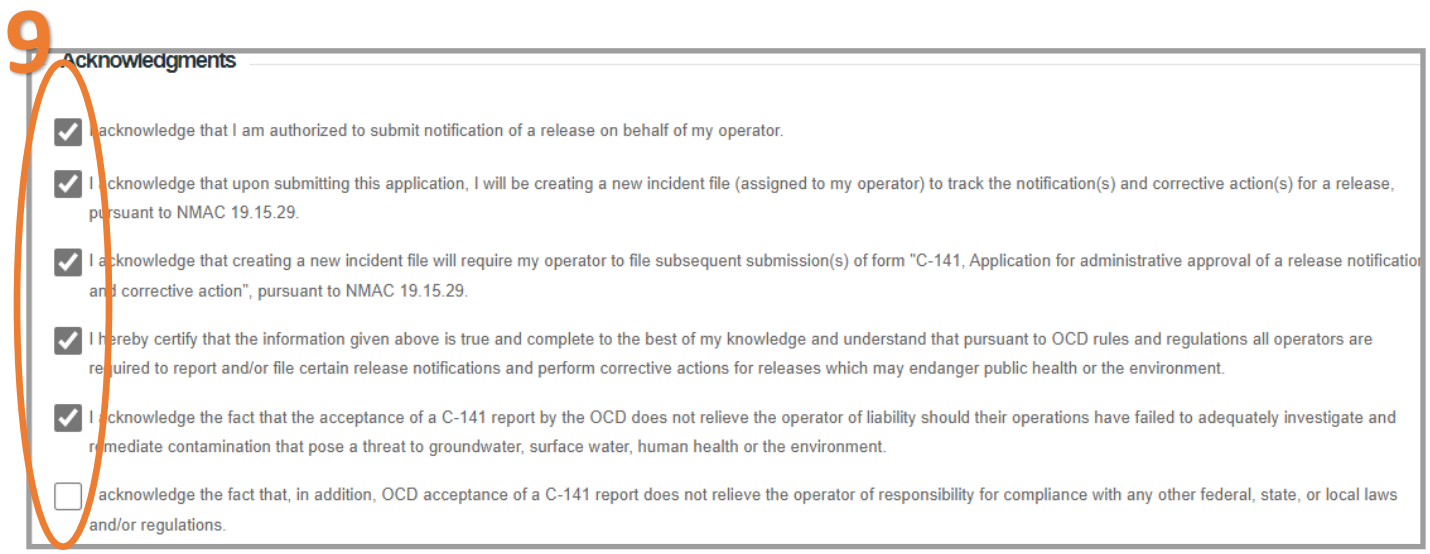
Example: Vac truck recovered all free standing liquids and disposed of them at the nearest SWD.

NOTE: allowing free standing liquids to soak into the ground with no attempt to recover the liquids is a violation pursuant to 19.15.29.8.C NMAC and is subject to civil penalties under 19.15.5 NMAC.

FIGURE 1

SUBMITTING A NOTIFICATION OF RELEASE (NOR)

9. Read and understand each Acknowledgement by left clicking in the check box.
NOTE: A Submission of a NOR is not an initial C-141.



10. Review your NOR application for accuracy and completeness. This is the last chance before submitting the document to the OCD to make any corrections to this data. Operators will have the ability to modify these questions/response on the Initial C-141 submitted within 15 days from the date of discovery. Once you are ready to submit to the OCD click the blue Submit to OCD button. Clicking the Delete button will clear the entire application and remove it from your application queue.

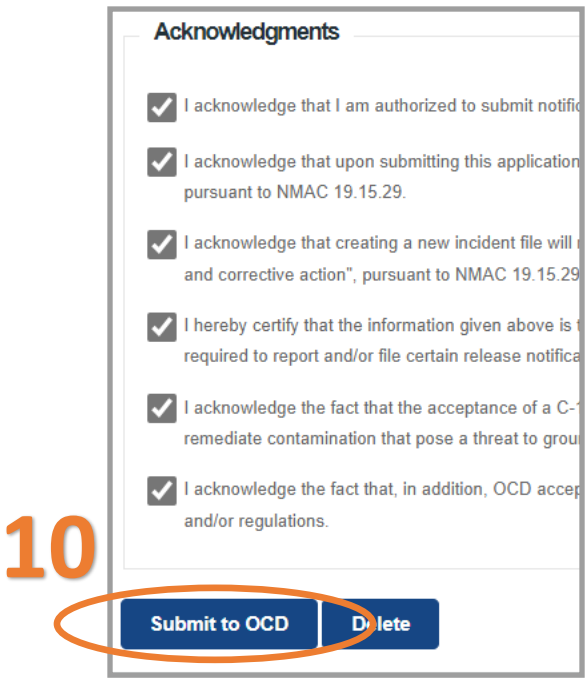
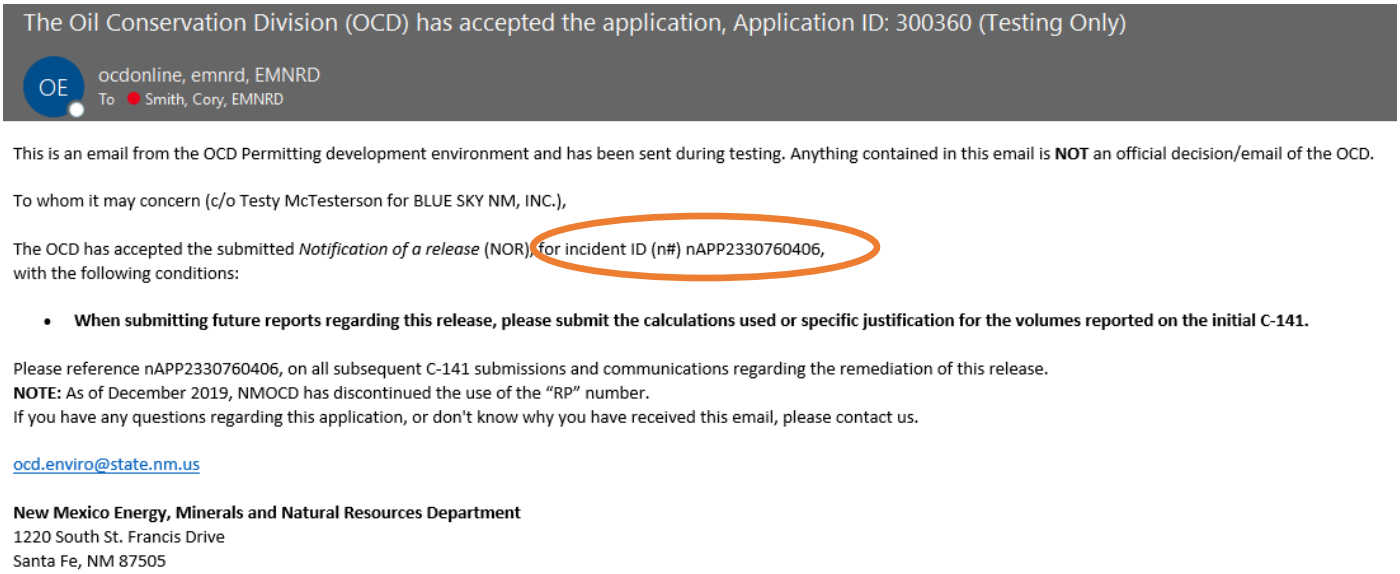


FIGURE 1

SUBMITTING A NOTIFICATION OF RELEASE (NOR)

Once the user has submitted the Notice of Release to the OCD. The user email which was identified in step 3a will receive an email from emnrd.ocdonline@emnrd.nm.gov indicated that the NOR application ID# has been accepted. Additionally the email will provide the User with the incident # (napp2330760406) that will be required for all future C-141 submissions or communication with the OCD.

This completes submitting a Notification of Release.



The Oil Conservation Division (OCD) has accepted the application, Application ID: 300360 (Testing Only)

OE ocdonline, emnrd, EMNRD
To Smith, Cory, EMNRD

This is an email from the OCD Permitting development environment and has been sent during testing. Anything contained in this email is **NOT** an official decision/email of the OCD.

To whom it may concern (c/o Testy McTesterson for BLUE SKY NM, INC.),

The OCD has accepted the submitted *Notification of a release* (NOR) for incident ID (n#) nAPP2330760406,
with the following conditions:

- **When submitting future reports regarding this release, please submit the calculations used or specific justification for the volumes reported on the initial C-141.**

Please reference nAPP2330760406, on all subsequent C-141 submissions and communications regarding the remediation of this release.
NOTE: As of December 2019, NMOCD has discontinued the use of the "RP" number.
If you have any questions regarding this application, or don't know why you have received this email, please contact us.

ocd.enviro@state.nm.us

New Mexico Energy, Minerals and Natural Resources Department
1220 South St. Francis Drive
Santa Fe, NM 87505

FIGURE 2

SUBMITTING AN INITIAL C-141(C-141-V-INITIAL)

Log into OCD Permitting and ensure that you are Logged into the Correct OGRID if you have access to multi-ples. It is very important that the correct OGRID is selected as the Responsible Party of the incident will be assigned to the reporting OGRID.

1. Left Click on the Submissions tab in the top right of the website.
2. Left Click on Releases and Select [C-141] Release Corrective Action ($150 fee required)

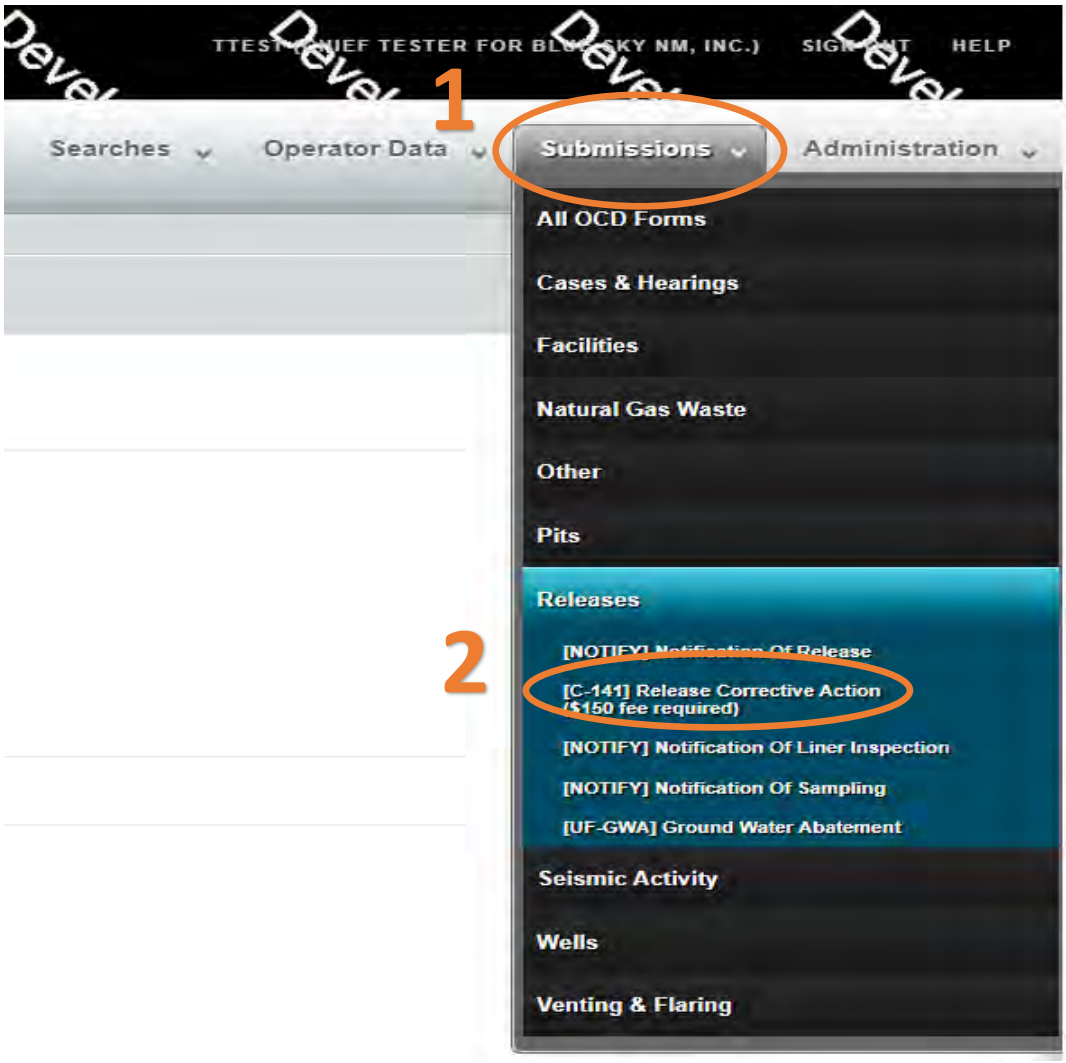
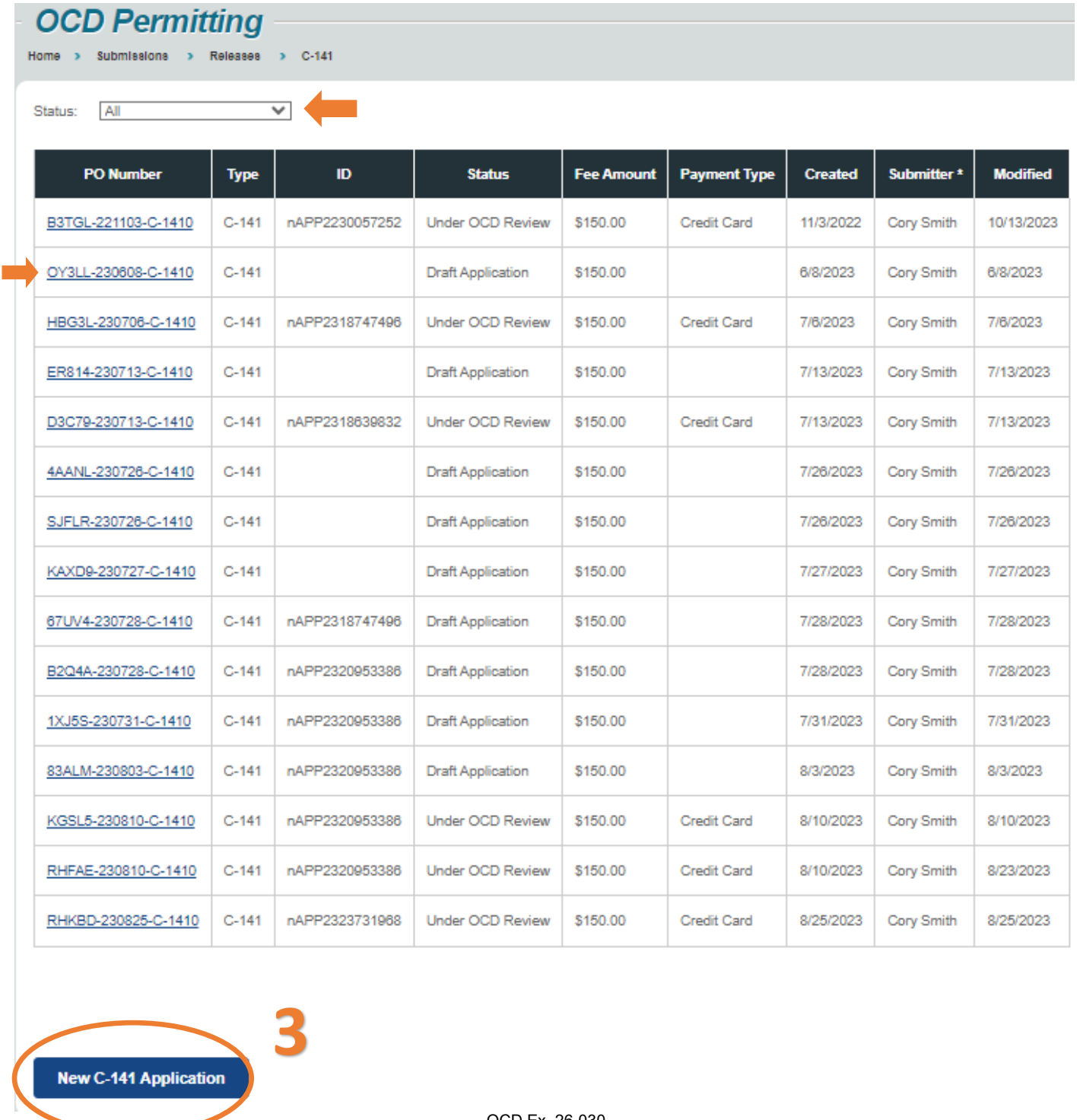


FIGURE 2

SUBMITTING AN INITIAL C-141(C-141-V-INITIAL)

On this Permitting page Users can review the status of all previous submitted C-141 Applications for their current OGRID . The user can also resume working on a previous draft version of the application by left clicking on the PO Number hyperlink. Applications types that are under OCD Review or have been Approved/ Rejected cannot be modified.

3. To create a new C-141 Application scroll down and left click on the "New C-141 Application" button.



PO Number	Type	ID	Status	Fee Amount	Payment Type	Created	Submitter *	Modified
B3TGL-221103-C-1410	C-141	nAPP2230057252	Under OCD Review	$150.00	Credit Card	11/3/2022	Cory Smith	10/13/2023
OY3LL-230608-C-1410	C-141		Draft Application	$150.00		6/8/2023	Cory Smith	6/8/2023
HBG3L-230706-C-1410	C-141	nAPP2318747496	Under OCD Review	$150.00	Credit Card	7/6/2023	Cory Smith	7/6/2023
ER814-230713-C-1410	C-141		Draft Application	$150.00		7/13/2023	Cory Smith	7/13/2023
D3C79-230713-C-1410	C-141	nAPP2318639832	Under OCD Review	$150.00	Credit Card	7/13/2023	Cory Smith	7/13/2023
4AANL-230726-C-1410	C-141		Draft Application	$150.00		7/26/2023	Cory Smith	7/26/2023
SJFLR-230726-C-1410	C-141		Draft Application	$150.00		7/26/2023	Cory Smith	7/26/2023
KAXD9-230727-C-1410	C-141		Draft Application	$150.00		7/27/2023	Cory Smith	7/27/2023
67UV4-230728-C-1410	C-141	nAPP2318747496	Draft Application	$150.00		7/28/2023	Cory Smith	7/28/2023
B2Q4A-230728-C-1410	C-141	nAPP2320953386	Draft Application	$150.00		7/28/2023	Cory Smith	7/28/2023
1XJ5S-230731-C-1410	C-141	nAPP2320953386	Draft Application	$150.00		7/31/2023	Cory Smith	7/31/2023
83ALM-230803-C-1410	C-141	nAPP2320953386	Draft Application	$150.00		8/3/2023	Cory Smith	8/3/2023
KGSL5-230810-C-1410	C-141	nAPP2320953386	Under OCD Review	$150.00	Credit Card	8/10/2023	Cory Smith	8/10/2023
RHFAE-230810-C-1410	C-141	nAPP2320953386	Under OCD Review	$150.00	Credit Card	8/10/2023	Cory Smith	8/23/2023
RHKBD-230825-C-1410	C-141	nAPP2323731968	Under OCD Review	$150.00	Credit Card	8/25/2023	Cory Smith	8/25/2023

FIGURE 2

SUBMITTING AN INITIAL C-141(C-141-V-INITIAL)

3a. OCD Permitting general functions will display any errors in the orange ribbon band at the top of the screen and inline while working through the applications.

The Submissions Contact Application, Fee Payment section of the C-141 is automatically filled out based up-on the Users default contact information. The contact e-mail used in this section is where any approvals/ rejections will be sent too. In the even that you are submitting this on behalf of another member of your organization you may edit the contact information by clicking on the edit submissions contact details button.

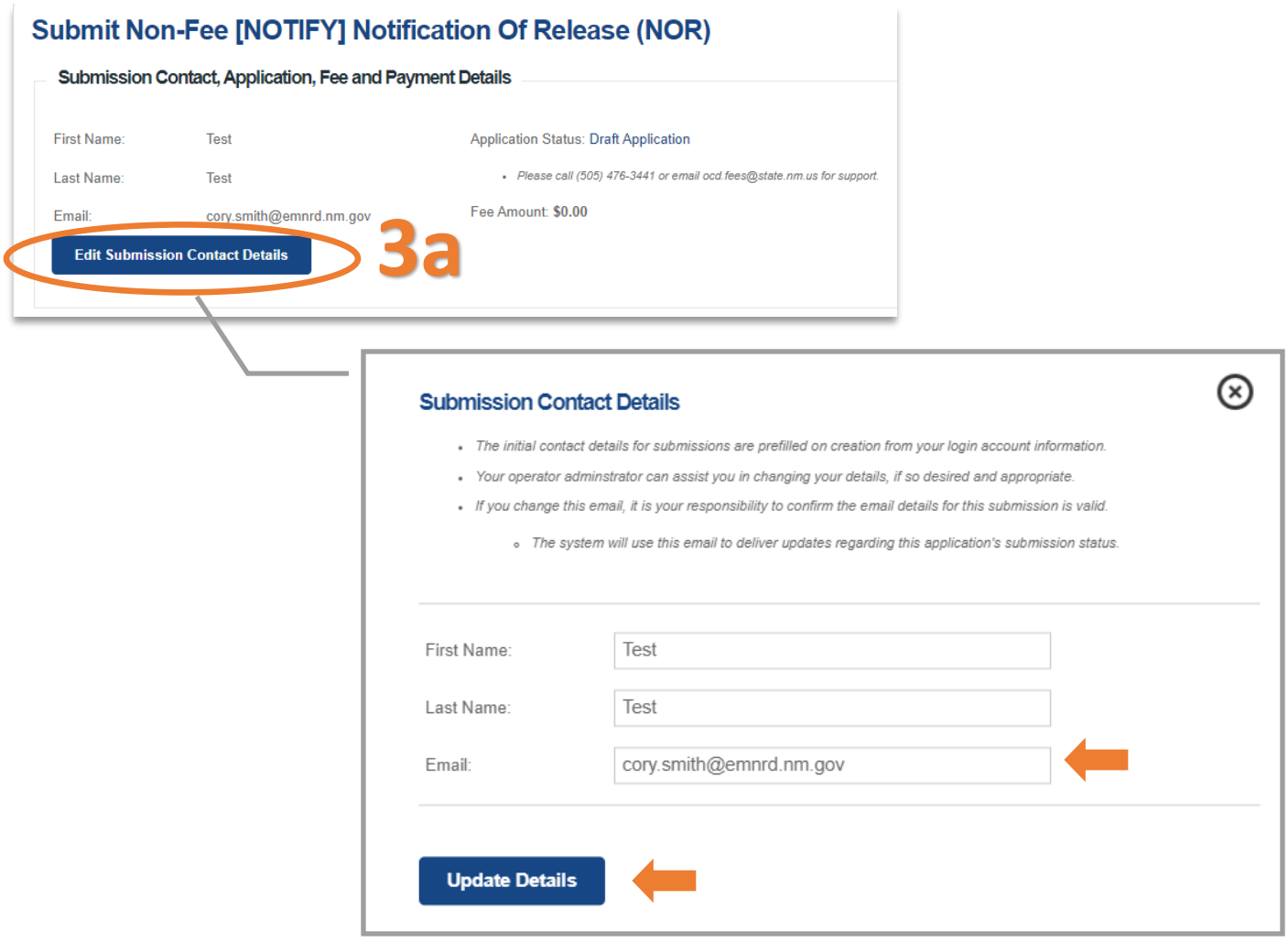


FIGURE 2

SUBMITTING AN INITIAL C-141(C-141-V-INITIAL)

4. Add the incident ID # from your Notice of Release (NOR) E-mail or from your records. Alternatively if in your NOR application you gave your release a custom site name you can also search by typing in the name into the box.

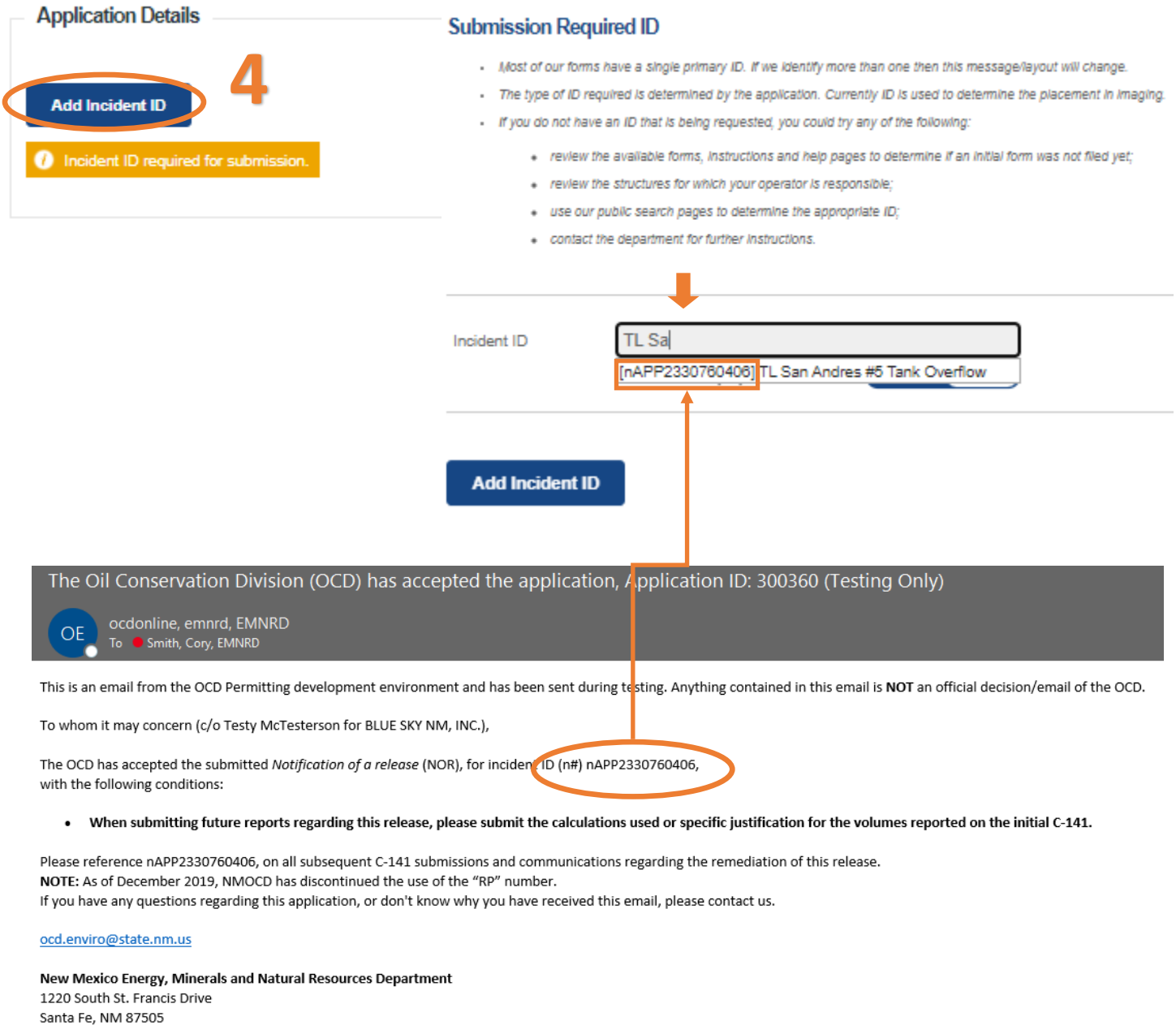


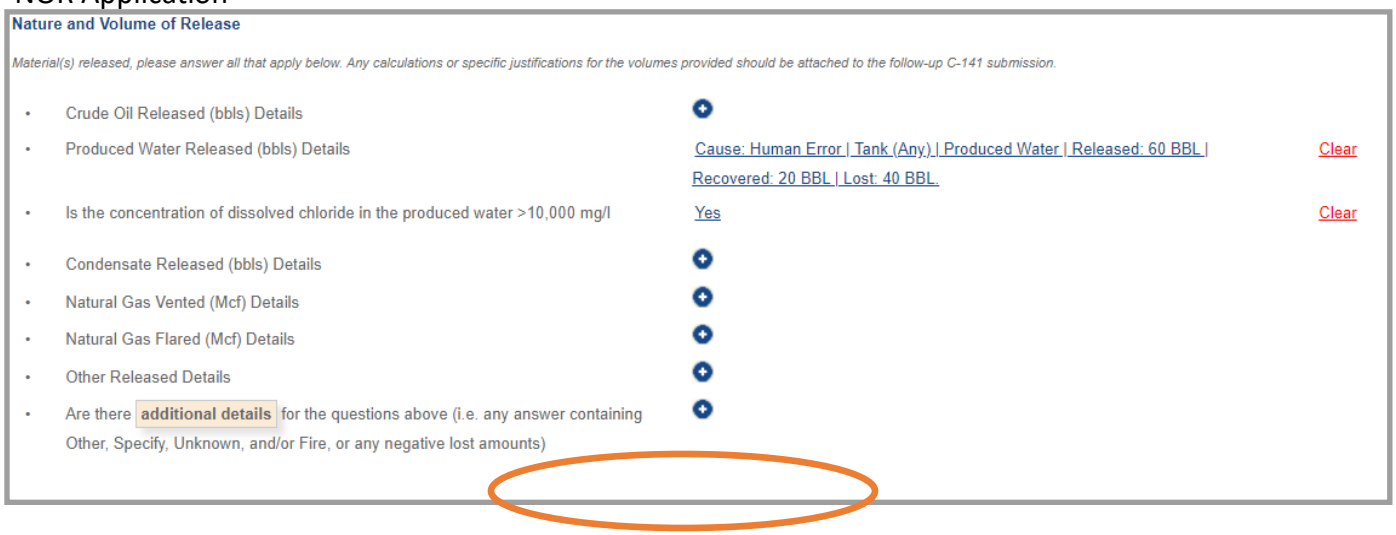
FIGURE 2

SUBMITTING AN INITIAL C-141(C-141-V-INITIAL)

Once you have entered a valid incident number the applications will populate all of the C-141 questions. You may notice that the questions are identical to the Notice of Release and that some of the questions will already have answers in them. These answers are populated from the **APPROVED** NOR applications that was submitted in Figure 1. This functionality works for all C-141 submissions allowing the User to correct/validate data provided to the OCD with each submission. Pre-populated answers only works with approved data therefor any answers provided in an application that is Under OCD Review or that was Rejected will be required to be reentered for each submission until the questions are in an approved application.

Example: The User answered the Nature and Volume of Release in the Notice of Release applications (Figure 1). Now when submitting the Initial C-141 the User has the ability to change the answers for any corrections. Since the C-141 Initial is the confirmation of the Notice of Release the User also has to submit the volume Calculations that validates the information provided.

NOR Application



C-141 Application

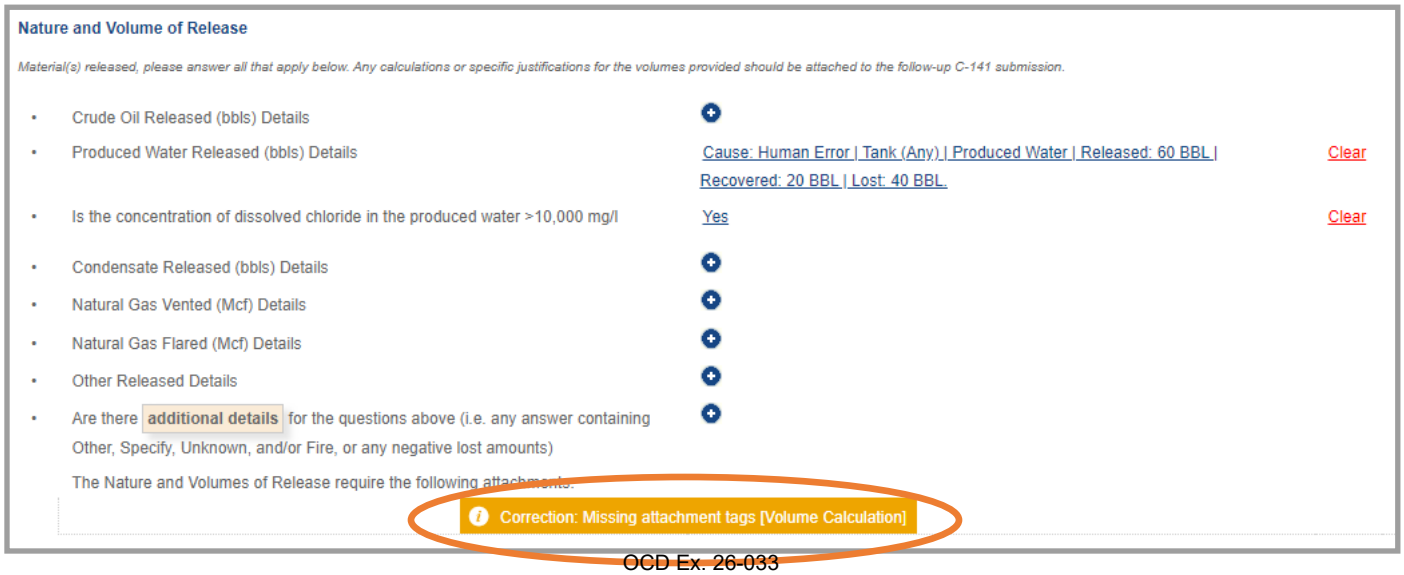


FIGURE 2

SUBMITTING AN INITIAL C-141(C-141-V-INITIAL)

5. Review the answers to all of the questions and make changes as needed. If there are no changes the User must provide the missing attachment for Volume Calculations.
5a. To add an attachment scroll to the top of the application left click the Blue Add attachment button.
5b. Select the type of attachment you are uploading from the drop down list. Left click the "Choose File" button to select the file from your computer to upload. Once you have selected the file you wish to upload save the upload by left clicking the Upload selected Files.

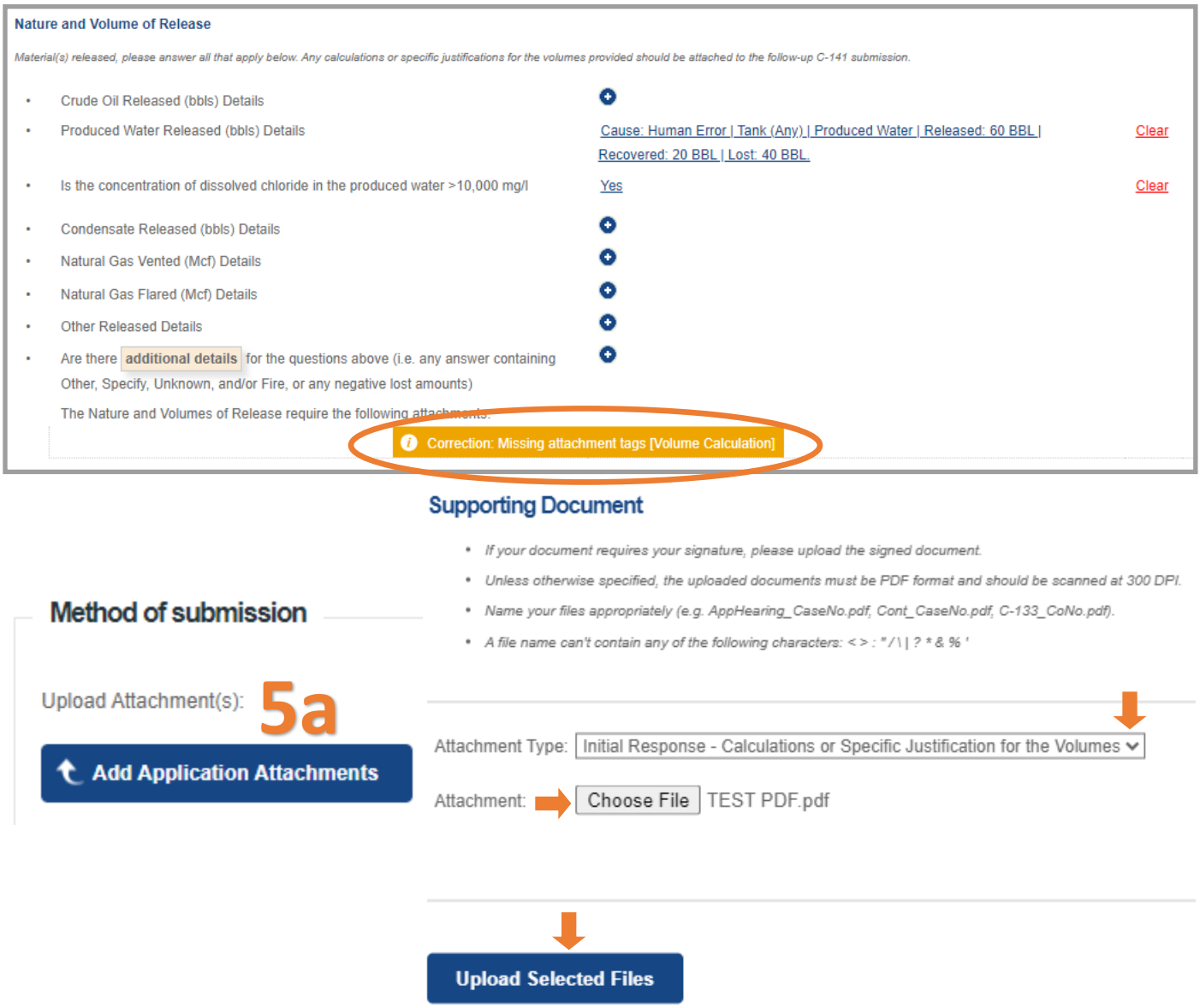
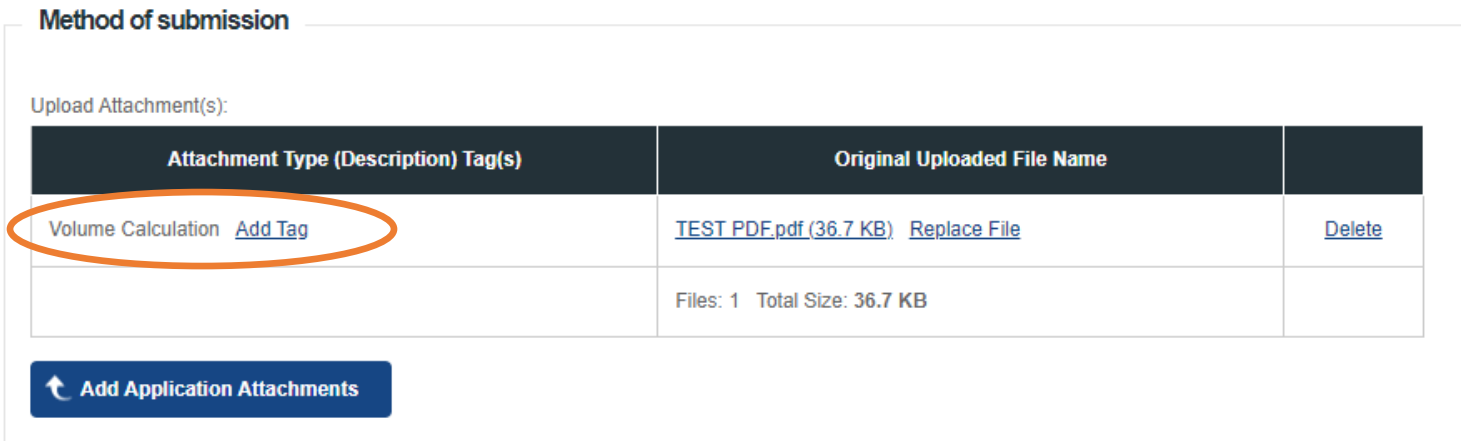


FIGURE 2

SUBMITTING AN INITIAL C-141(C-141-V-INITIAL)

Users may upload multiple attachments to each application. At this current time, the User may also add multiple tags to a single file that may contain multiple attachments types. Attachment types/tags is an area that will be focused on in phase 2 of the C-141 update.



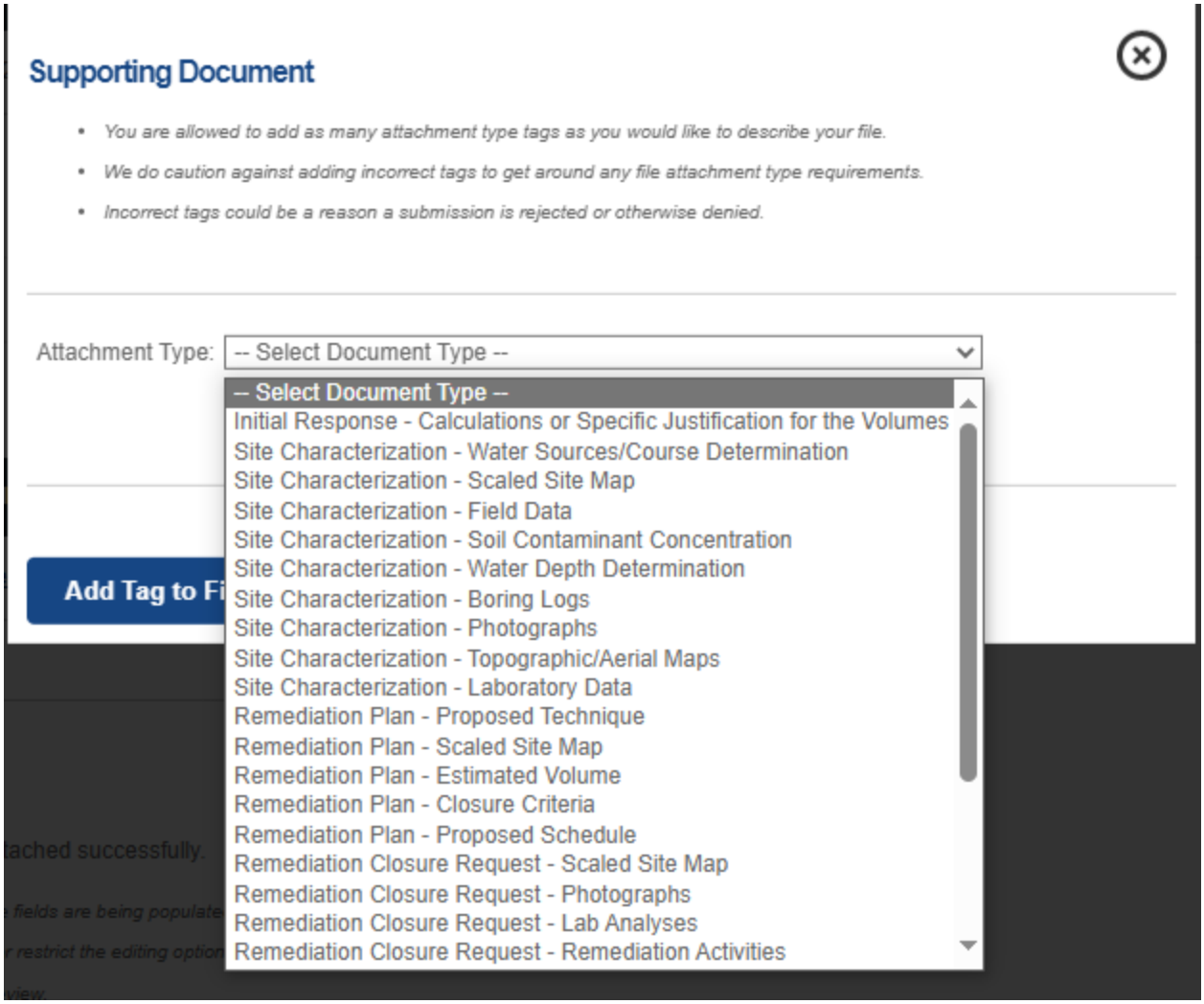


FIGURE 2

SUBMITTING AN INITIAL C-141(C-141-V-INITIAL)

6. Once the volume calculations have been uploaded, the User will need to Sign/Certify that information. If the user changes any of the information in this section they will have to sign again.

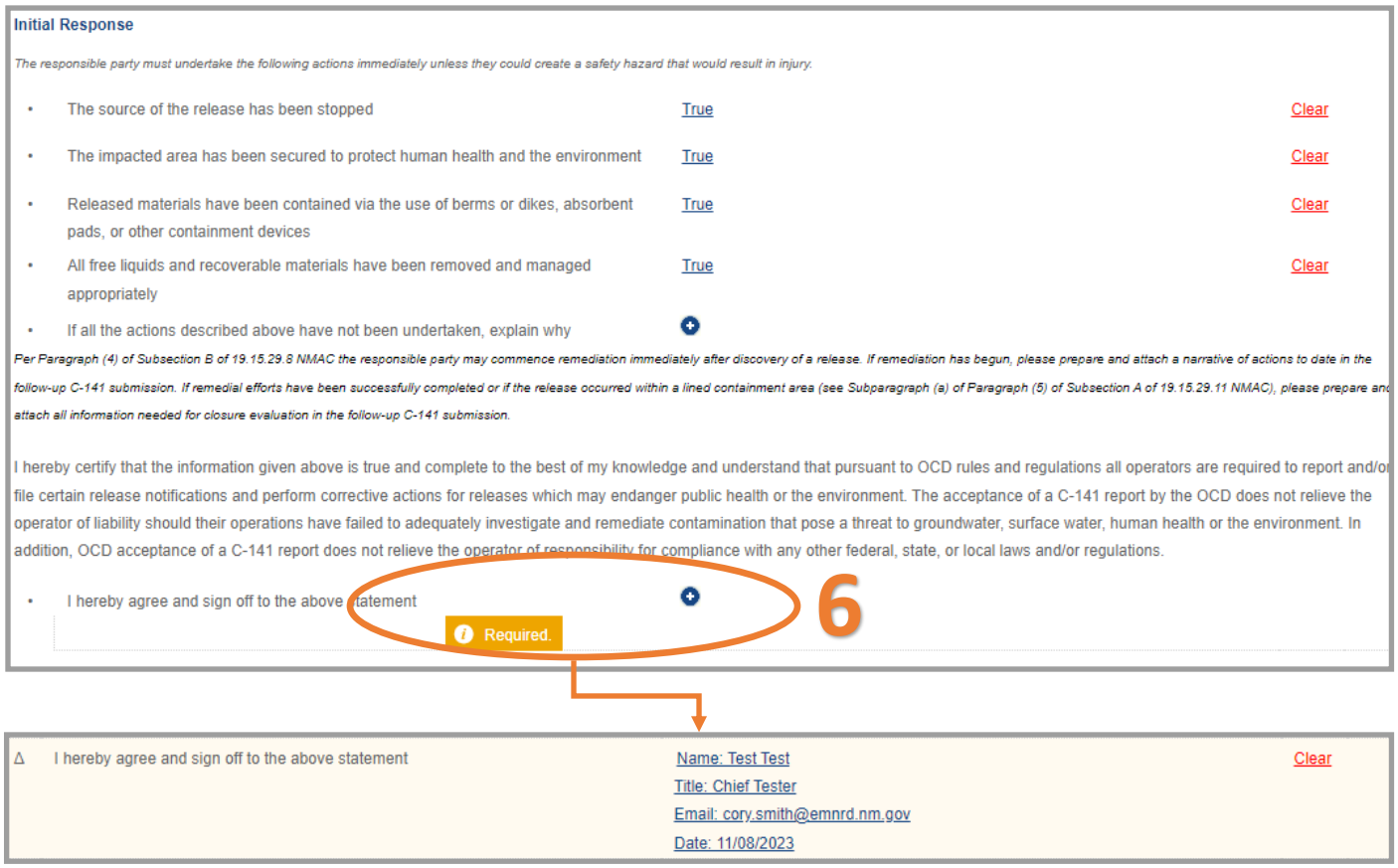


FIGURE 2

SUBMITTING AN INITIAL C-141(C-141-V-INITIAL)

Site Characterization information is Optional when submitting an Initial C-141. User may choose to provide this information which will assist the OCD in prioritizing releases for processing. This information will become required when attempting to move any further past an initial C-141.

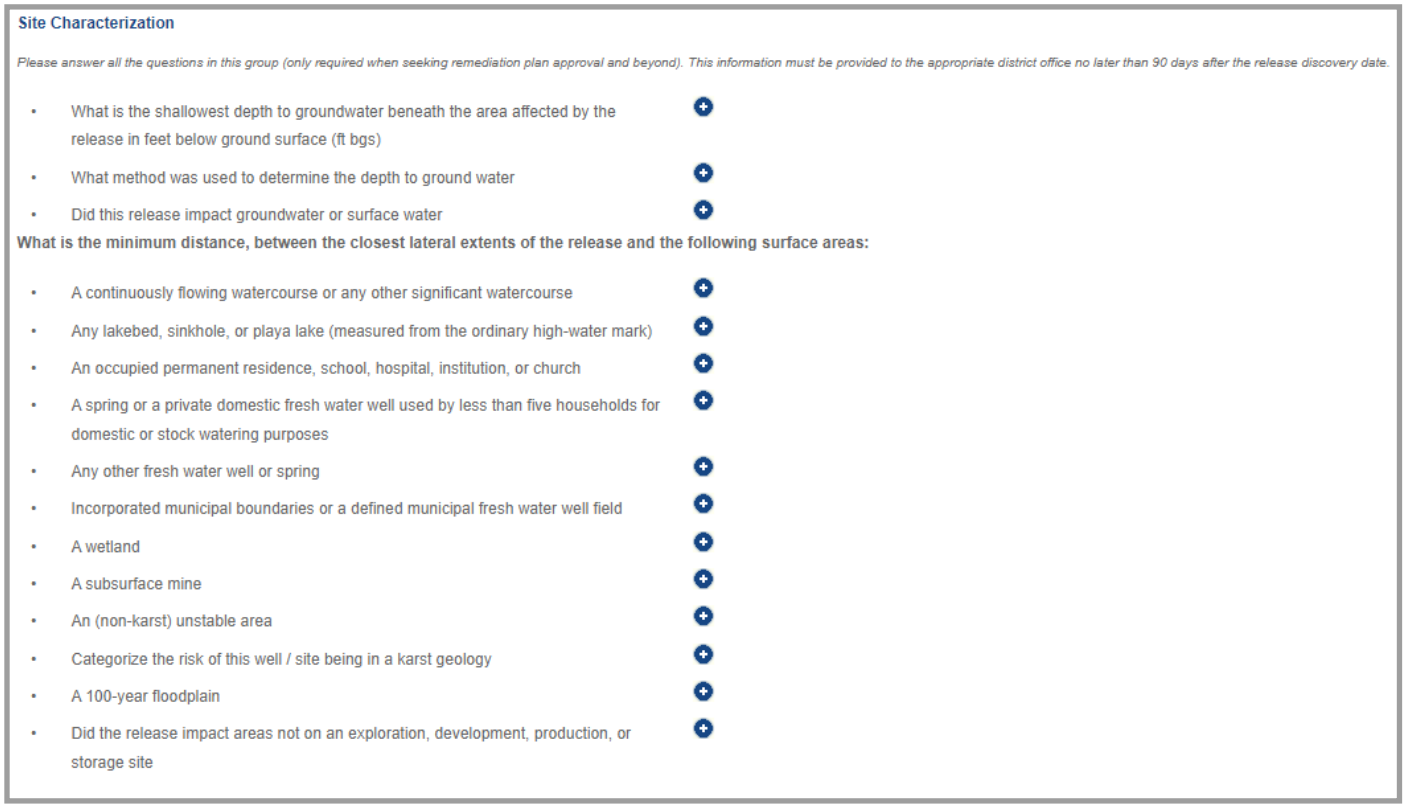
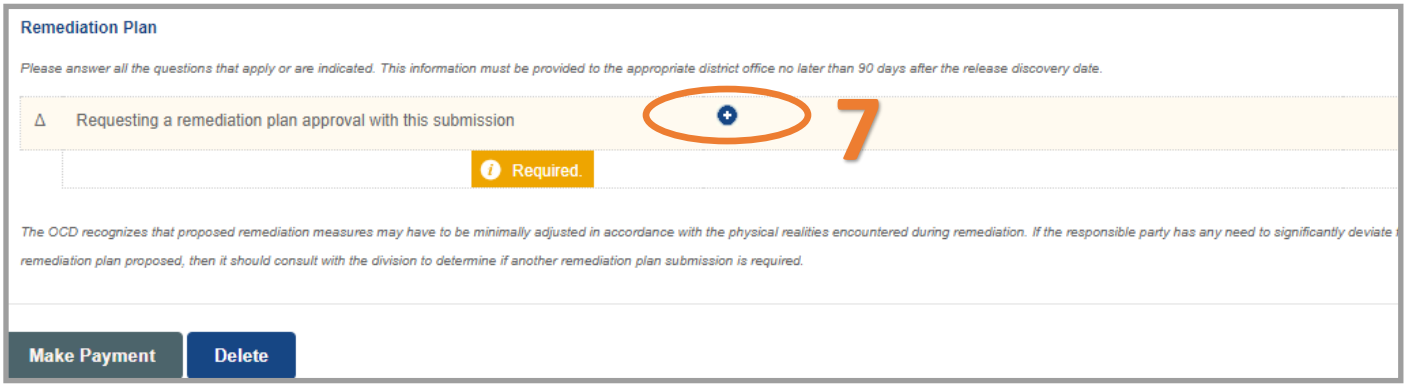


FIGURE 2

SUBMITTING AN INITIAL C-141(C-141-V-INITIAL)

7. Lasty the User now must answer if they are requestion a Remediation plan approval with this submission. If the user answer no this submission will be classified as a Initial C-141. If the User selects yes and there is not an approved Initial C-141 on file this submission will ALSO count as a Initial C-141 + Remediation plan.

Please note that OCD does not approve partial applications in the event that the User submits an Initial + Remediation Plan and the application is rejected both C-141 will be rejected.



8. Review your C-141 Initial application for accuracy and completeness. This is the last chance before submitting the document to the OCD to make any corrections to this data. Operators will have the ability to modify these questions/response on any subsequent C-141 submission. To submit the application to the OCD click the Make Payment button. You will be directed to a Third Party website to process payment.

Clicking the Delete button will clear the entire application and remove it from your application que.

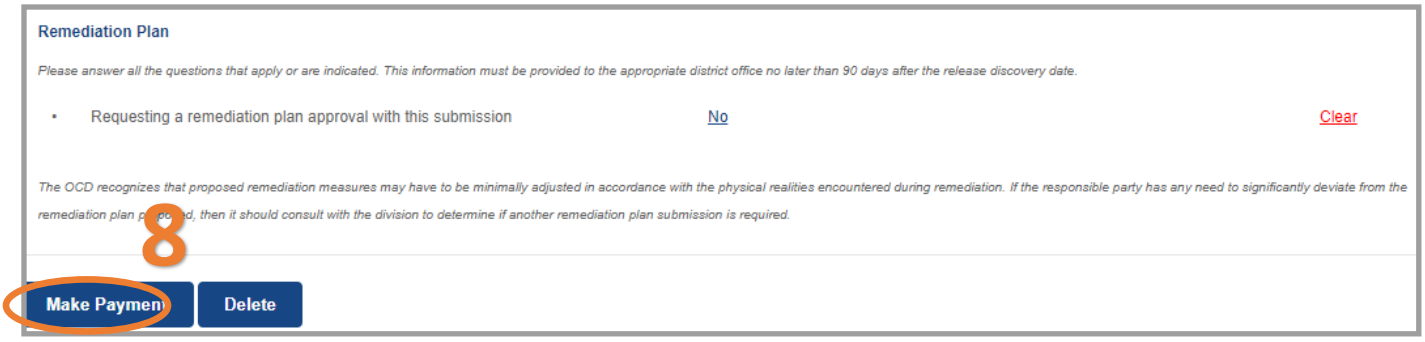


FIGURE 2

SUBMITTING AN INITIAL C-141(C-141-V-INITIAL)

Once the user has submitted the C-141 Initial to the OCD. The user email which was identified in step 3a will receive an email from emnrd.ocdonline@emnrd.nm.gov that is the receipt and proof of submission to the OCD. The receipt provides an PO Number that can be searched on the OCD Action Status Page.

Thank you for your fee application payment! Your receipt is attached.

PO Number: 6CPC7-231107-C-1410
Payment Date: 11/8/2023
Payment Amount: $150.00
Payment Type: Credit Card

Application Type: Application for administrative approval of a release notification and corrective action
Fee Amount: $150.00
Application Status: Under OCD Review

OGRID: 300825
First Name: Test
Last Name: Test
Email: cory.smith@emnrd.nm.gov

At this state the Initial C-141 Application is Under OCD Review (Submitted) and the incident status will change to reflect the current status of the incident.

Status: Under OCD Review

PO Number	Type	ID	Status	Fee Amount	Payment Type	Created	Submitter *	Modified
6CPC7-231107-C-1410	C-141	nAPP2330760406	Under OCD Review	$150.00	Credit Card	11/7/2023	Test Test	11/8/2023

OCD Permitting

Home > Searches > Incidents > Incident Details

NAPP2330760406 TL SAN ANDRES #5 TANK OVERFLOW @ 30-005-60572

General Incident Information

Site Name: TL San Andres #5 Tank Overflow
Well: [30-005-60572] TWIN LAKES SAN ANDRES UNIT #005
Facility:
Operator: [300825] BLUE SKY NM, INC.
Status: Initial C-141 Received, Pending OCD Review
Type: Produced Water Release
District: Artesia

Severity: Major
Surface Owner: Private
County: Chaves (05)

FIGURE 2

SUBMITTING AN INITIAL C-141(C-141-V-INITIAL)

As the Application is Reviewed and Processed by the OCD the status of the application will change to Approved or Rejected and the Status of the Incident will also change. In the below example the applications was approved.

Status: Approved by the OCD

PO Number	Type	ID	Status	Fee Amount	Payment Type	Created	Submitter *	Modified
6CPC7-231107-C-1410	C-141	nAPP2330760406	Approved by the OCD	$150.00	Credit Card	11/7/2023	Test Test	11/8/2023

OCD Permitting

Home > Searches > Incidents > Incident Details

NAPP2330760406 TL SAN ANDRES #5 TANK OVERFLOW @ 30-005-60572

General Incident Information

Site Name:	TL San Andres #5 Tank Overflow		
Well:	[30-005-60572] TWIN LAKES SAN ANDRES UNIT #005		
Facility:			
Operator:	[300825] BLUE SKY NM, INC.		
Status:	Initial C-141 Approved, Pending submission of Site Characterization / Remediation Plan OR Remediation Closure Report from the operator		
Type:	Produced Water Release	Severity:	Major
		Surface Owner:	Private
District:	Artesia	County:	Chaves (05)

Additional on approval/rejection of an application the user email who was identified in step 3a will received an email with the Incident# and any conditions of approval / reasons for rejection. This completes the Initial C-141 process.

To whom it may concern (c/o Test Test for BLUE SKY NM, INC.),

The OCD has approved the submitted *Application for administrative approval of a release notification and corrective action* (C-141), for incident ID (n#) nAPP2330760406,
with the following conditions:

- **None**

The signed C-141 can be found in the OCD Online: Imaging under the incident ID (n#).

If you have any questions regarding this application, please contact me.

Thank you,
Cory Smith
Environmental Projects Supervisor
505-419-2687
cory.smith@emnrd.nm.gov

This contact information is from the OCD Reviewer who reviewed the application.

FIGURE 3

SUBMITTING A SITE CHARECTERIZATION & REMEDIATION PLAN(C-141-V-PLAN)

Site Characterizations and Remediation plans (Remediation Plans) are required to be submitted together. This section of the C-141 is used to characterize the site by determining depth to water, distances to significant water course, flood plains, unstable ground etc. In addition to the Characterization the user will also provide the OCD with the Remediation plan that was executed or the proposed remediation plan that include times lines.

1. Left Click on the Submissions tab in the top right of the website.
2. Left Click on Releases and Select [C-141] Release Corrective Action ($150 fee required).

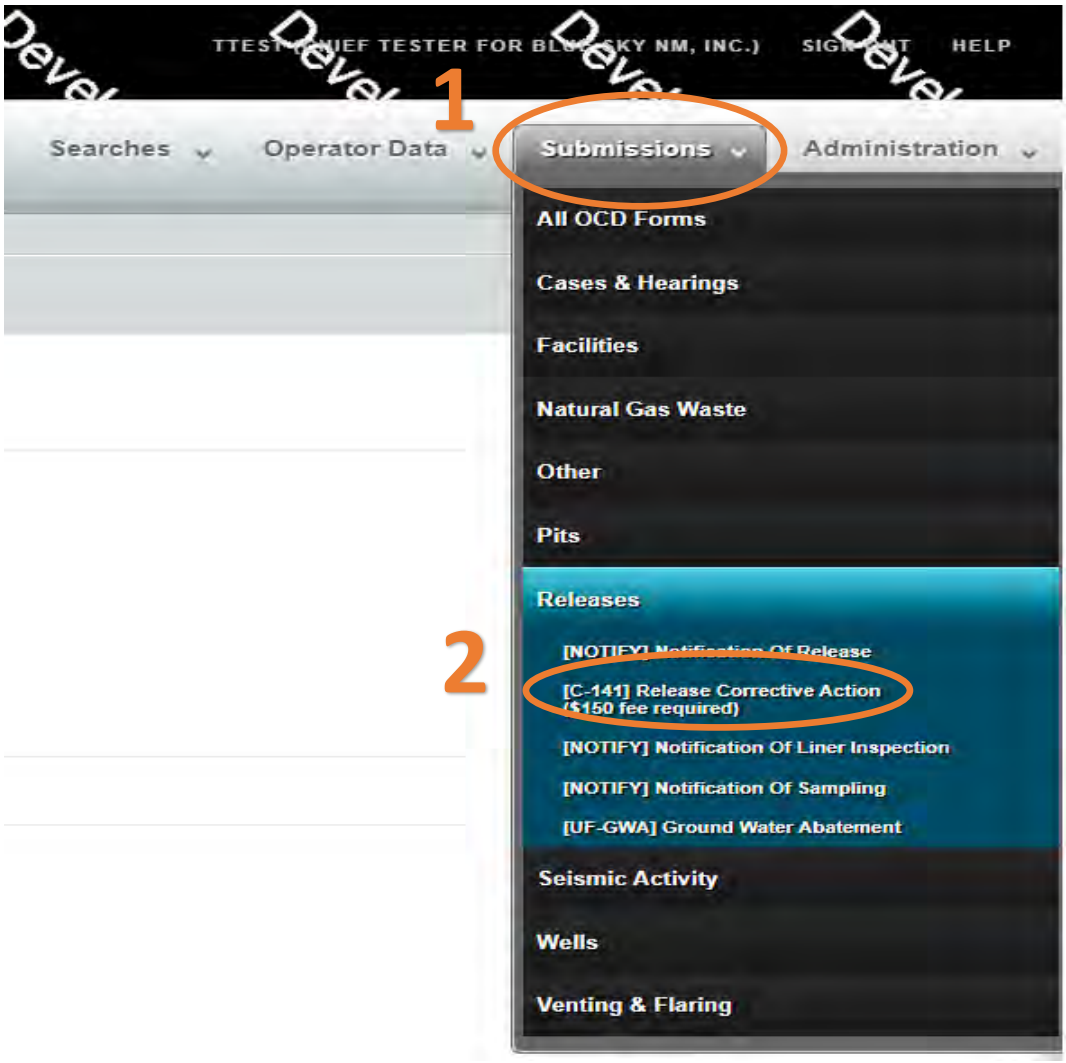
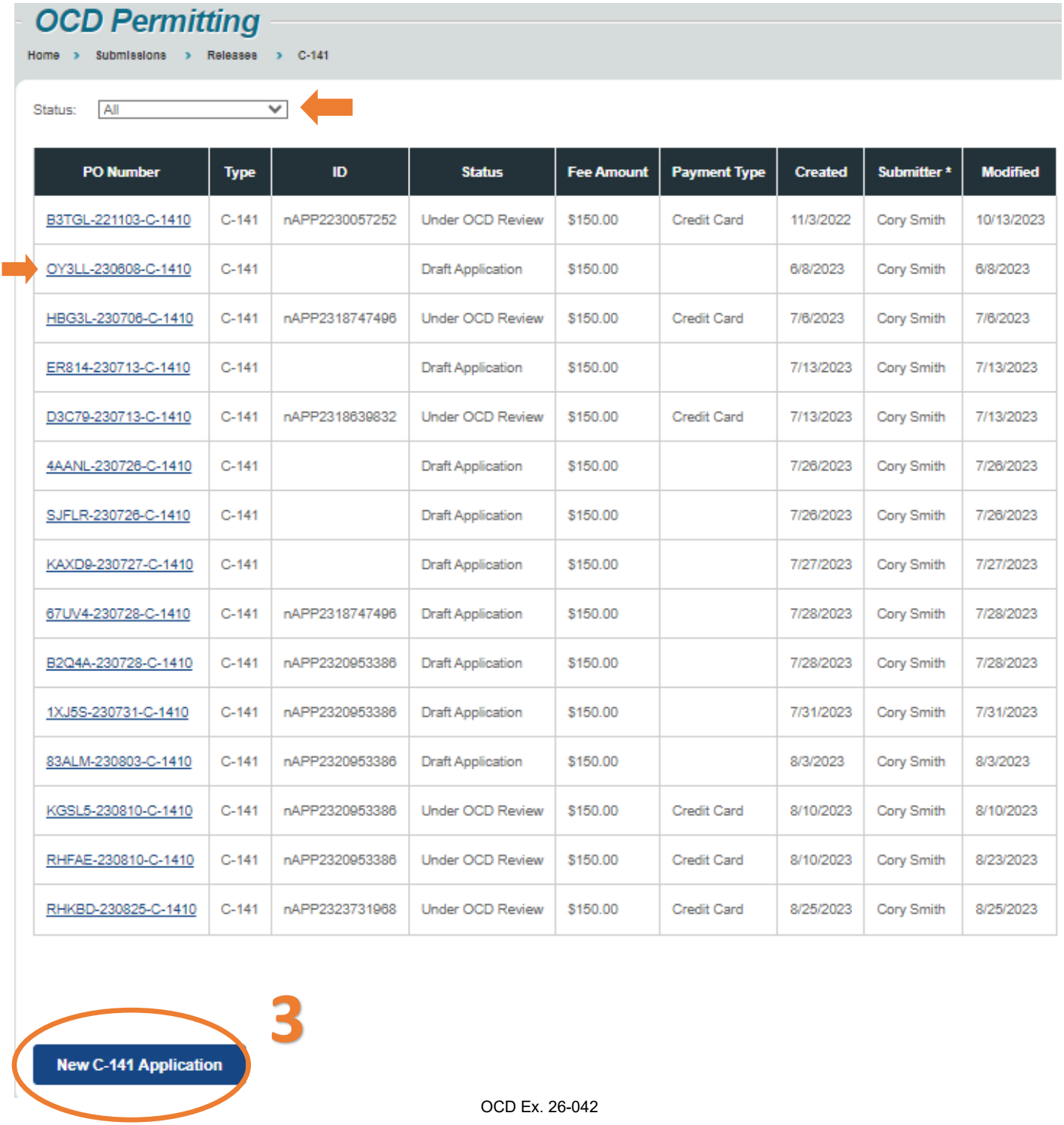


FIGURE 3

SUBMITTING A SITE CHARECTERIZATION & REMEDIATION PLAN(C-141-V-PLAN)

On this Permitting page Users can review the status of all previous submitted C-141 Applications for their current OGRID . The user can also resume working on a previous draft version of the application by left clicking on the PO Number hyperlink. Applications types that are under OCD Review or have been Approved/ Rejected cannot be modified.

3. To create a new C-141 Application scroll down and left click on the New C-141 Application button.



PO Number	Type	ID	Status	Fee Amount	Payment Type	Created	Submitter *	Modified
B3TGL-221103-C-1410	C-141	nAPP2230057252	Under OCD Review	$150.00	Credit Card	11/3/2022	Cory Smith	10/13/2023
OY3LL-230608-C-1410	C-141		Draft Application	$150.00		6/8/2023	Cory Smith	6/8/2023
HBG3L-230706-C-1410	C-141	nAPP2318747496	Under OCD Review	$150.00	Credit Card	7/6/2023	Cory Smith	7/6/2023
ER814-230713-C-1410	C-141		Draft Application	$150.00		7/13/2023	Cory Smith	7/13/2023
D3C79-230713-C-1410	C-141	nAPP2318639832	Under OCD Review	$150.00	Credit Card	7/13/2023	Cory Smith	7/13/2023
4AANL-230726-C-1410	C-141		Draft Application	$150.00		7/26/2023	Cory Smith	7/26/2023
SJFLR-230726-C-1410	C-141		Draft Application	$150.00		7/26/2023	Cory Smith	7/26/2023
KAXD9-230727-C-1410	C-141		Draft Application	$150.00		7/27/2023	Cory Smith	7/27/2023
67UV4-230728-C-1410	C-141	nAPP2318747496	Draft Application	$150.00		7/28/2023	Cory Smith	7/28/2023
B2Q4A-230728-C-1410	C-141	nAPP2320953386	Draft Application	$150.00		7/28/2023	Cory Smith	7/28/2023
1XJ5S-230731-C-1410	C-141	nAPP2320953386	Draft Application	$150.00		7/31/2023	Cory Smith	7/31/2023
83ALM-230803-C-1410	C-141	nAPP2320953386	Draft Application	$150.00		8/3/2023	Cory Smith	8/3/2023
KGSL5-230810-C-1410	C-141	nAPP2320953386	Under OCD Review	$150.00	Credit Card	8/10/2023	Cory Smith	8/10/2023
RHFAE-230810-C-1410	C-141	nAPP2320953386	Under OCD Review	$150.00	Credit Card	8/10/2023	Cory Smith	8/23/2023
RHKBD-230825-C-1410	C-141	nAPP2323731968	Under OCD Review	$150.00	Credit Card	8/25/2023	Cory Smith	8/25/2023

FIGURE 3

SUBMITTING A SITE CHARECTERIZATION & REMEDIATION PLAN(C-141-V-PLAN)

3a. OCD Permitting general functions will display any errors in the orange ribbon band at the top of your screen and inline while working through the applications.

The Submissions Contact Application, Fee Payment section of the C-141 is automatically filled out based upon the User's default contact information. The contact E-mail used in this section is where any approvals/ rejections will be sent too. In the even that you are submitting this on behalf of another member of your organization you may edit the contact information by clicking on the edit submissions contact details button

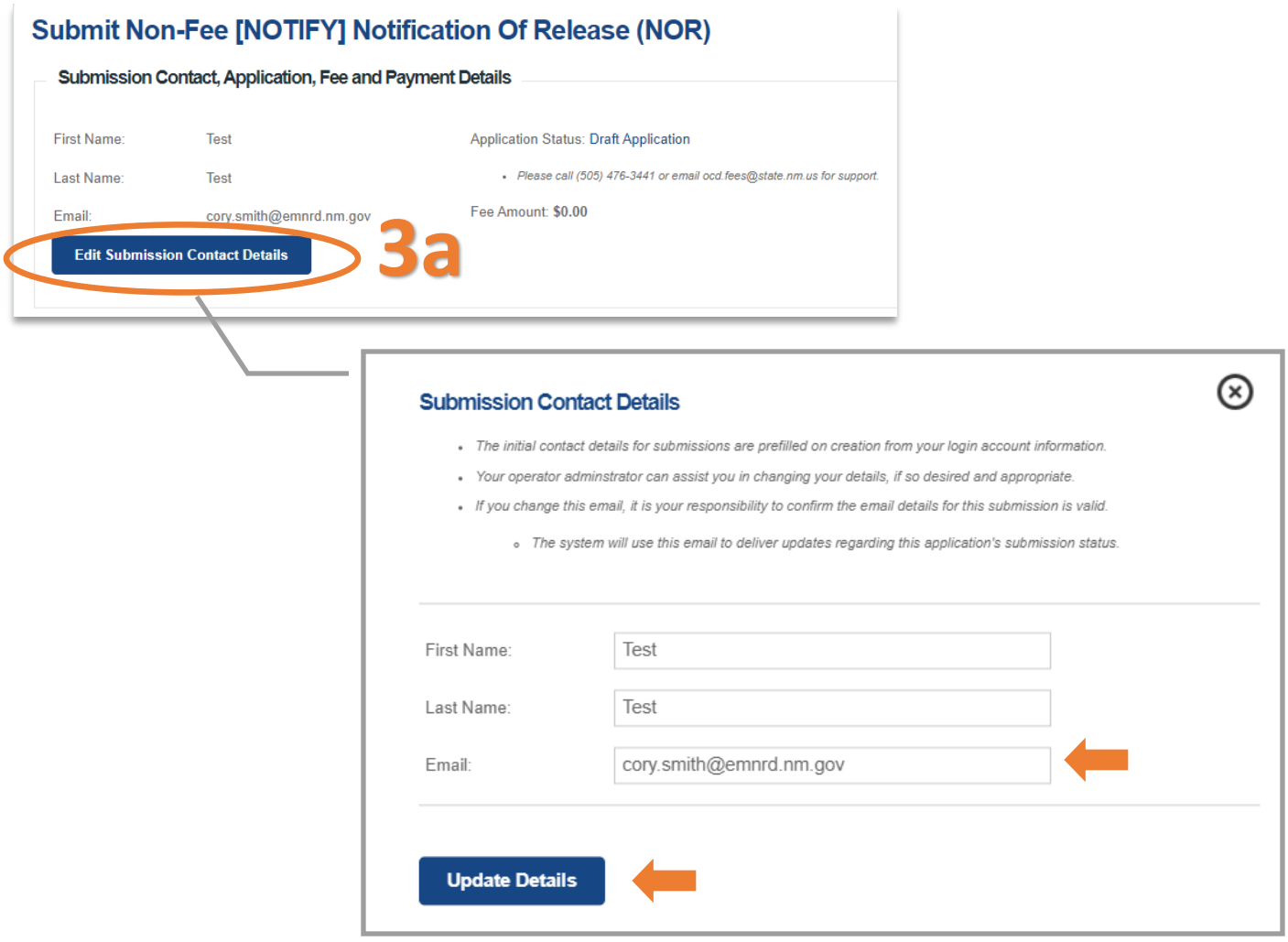


FIGURE 3

SUBMITTING A SITE CHARECTERIZATION & REMEDIATION PLAN(C-141-V-PLAN)

4. Add the incident ID # from your Notice of Release (NOR) e-mail, C-141 Initial or from your records. Alternatively if in your NOR application you gave your release a custom site name you can also search by typing in the name into the box.

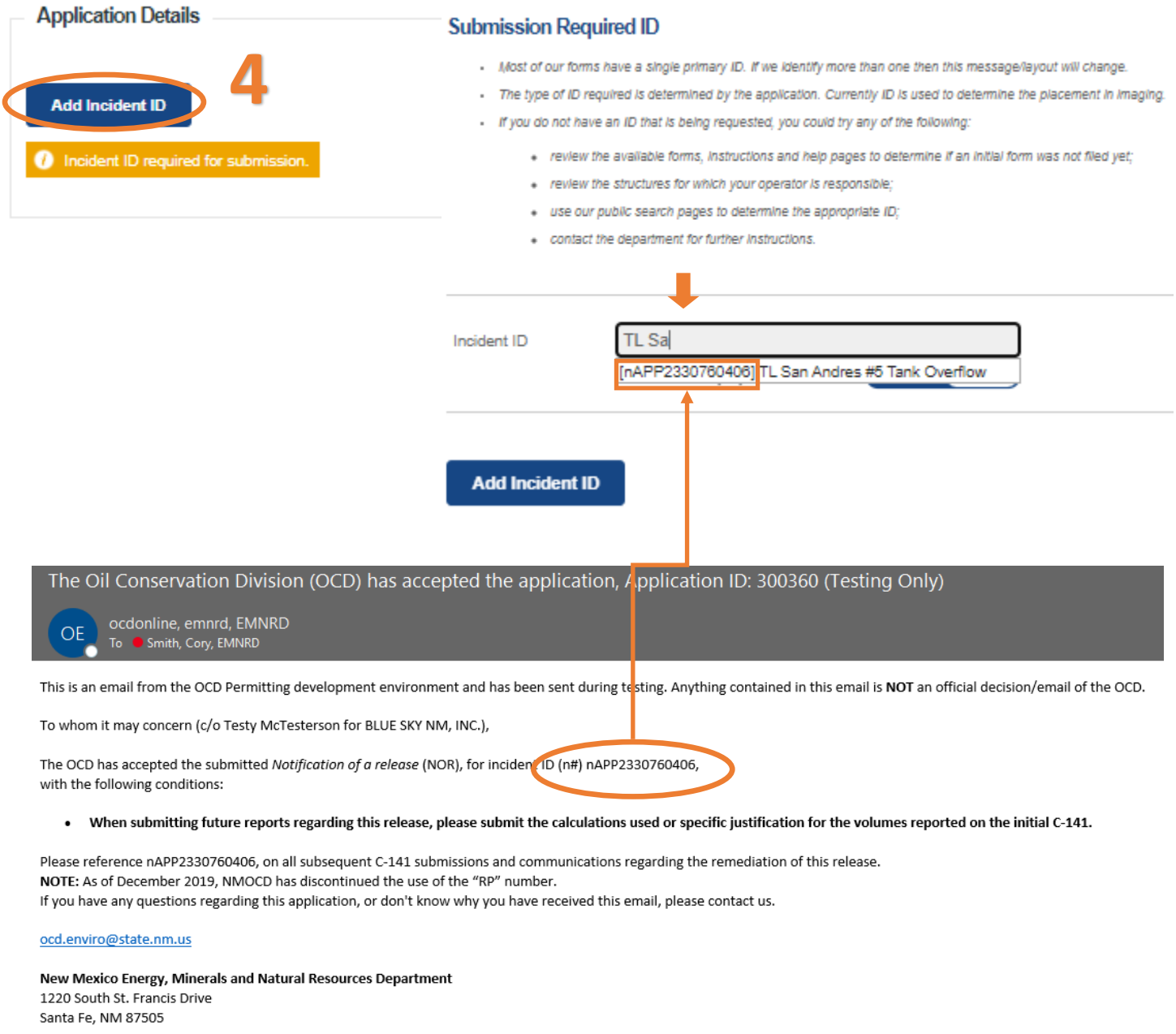


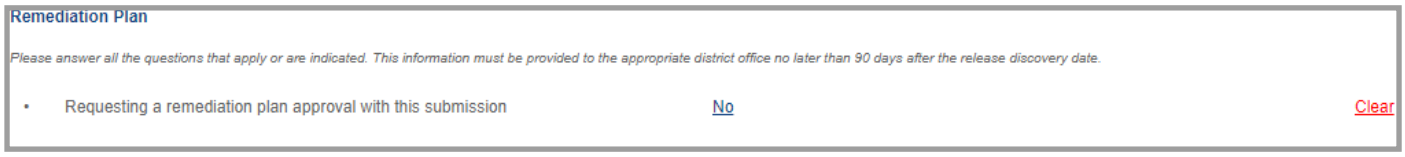
FIGURE 3

SUBMITTING A SITE CHARECTERIZATION & REMEDIATION PLAN(C-141-V-PLAN)

Once you have entered a valid incident number the applications will populate all of the C-141 questions. You may notice that the questions are identical to the Initial C-141 and that some of the questions will already have answers in them. These answers are populated from the **APPROVED** NOR/C-141 applications that were submitted in Figure 1/2. This functionality works for all C-141 submissions allowing the User to correct/ validate data provided to the OCD with each submission. Pre-populated answers only works with approved data therefor any answers provided in an application that is Under OCD Review or that was Rejected will be required to be reentered for each submission until the questions are in an approved application.

Example: The User answered the Requesting Remediation Plan Approval with this submission in the C-141 Initial (Figure 1) as "No". This answer signaled to OCD Permitting that the C-141 Application was an Initial C-141. Now that the User wants to submit a Remediation plan for approval they need to change the answer to this question to "Yes" .

C-141 Initial Application



C-141 Remediation Plan Application: By answering "Yes" additional Remediation Plan questions pop up.

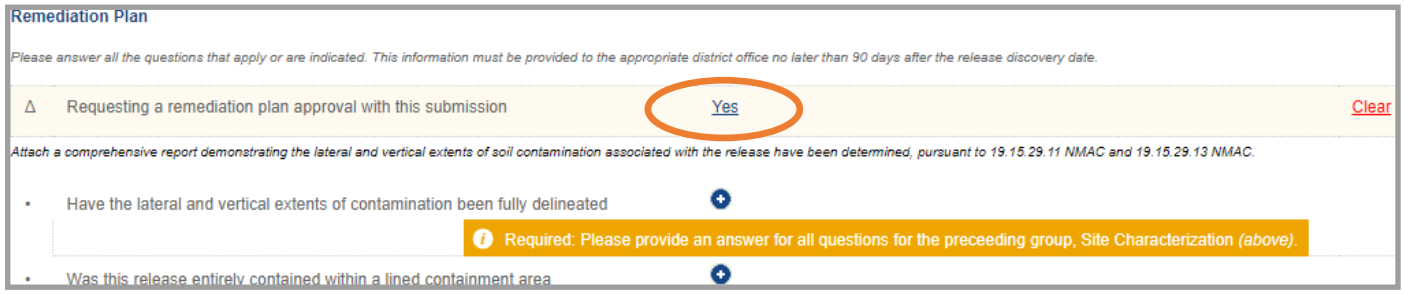
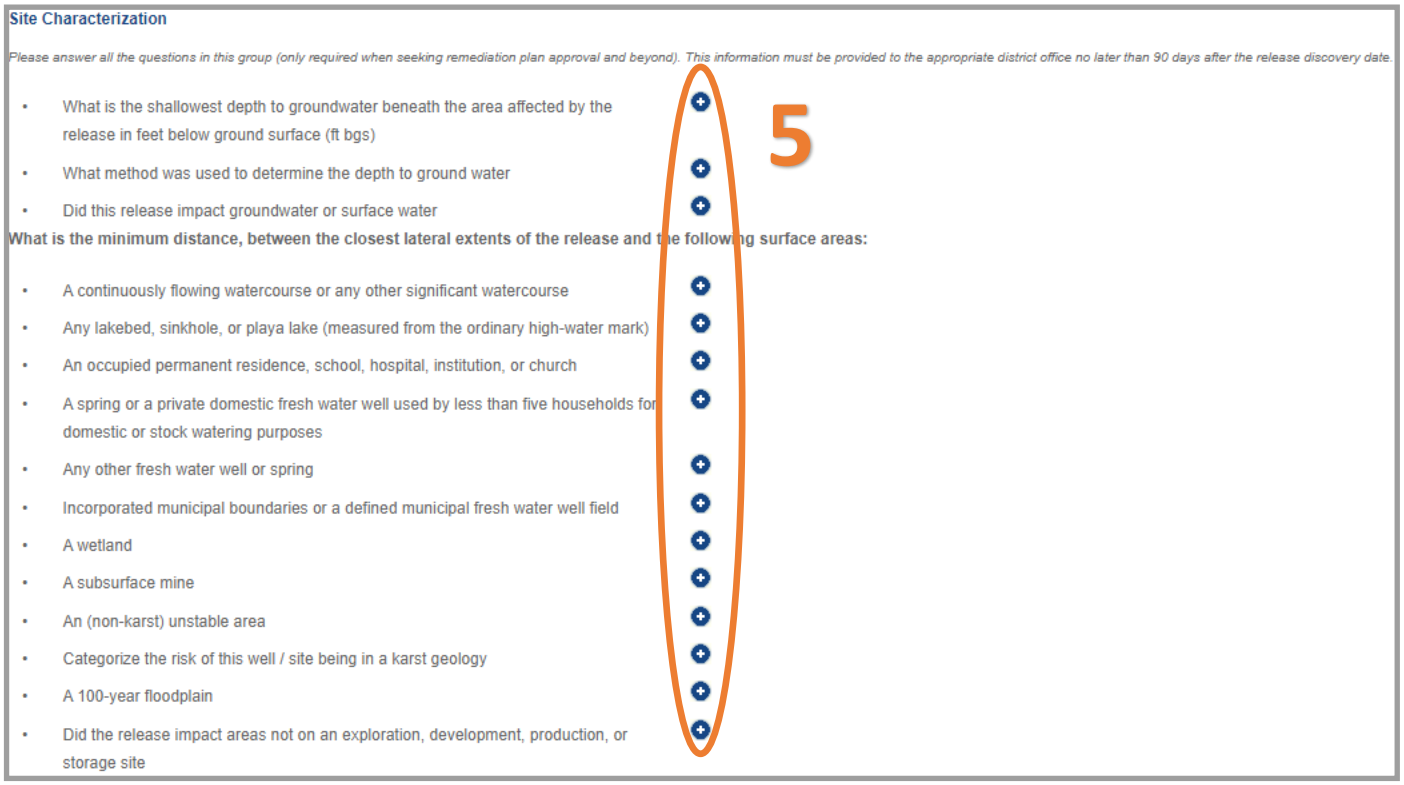


FIGURE 3

SUBMITTING A SITE CHARECTERIZATION & REMEDIATION PLAN(C-141-V-PLAN)

5. Once the User selects Yes to Requesting a Remediation Plan approval the Site Characterization section is no longer optional and is now required to be answered. User will be familiar with these questions as they are directly from the historic C-141 form with one change. Instead of Yes/No Question OCD is introducing additional ranges to all of the questions. These changes are designed to allow the OCD to prioritize incidents.

User will need to make sure that their attached maps/topo's scales allow the OCD to verify the data.



NOTE: Selecting anything Less than 200' has the same effect on the closure standard per the rule.

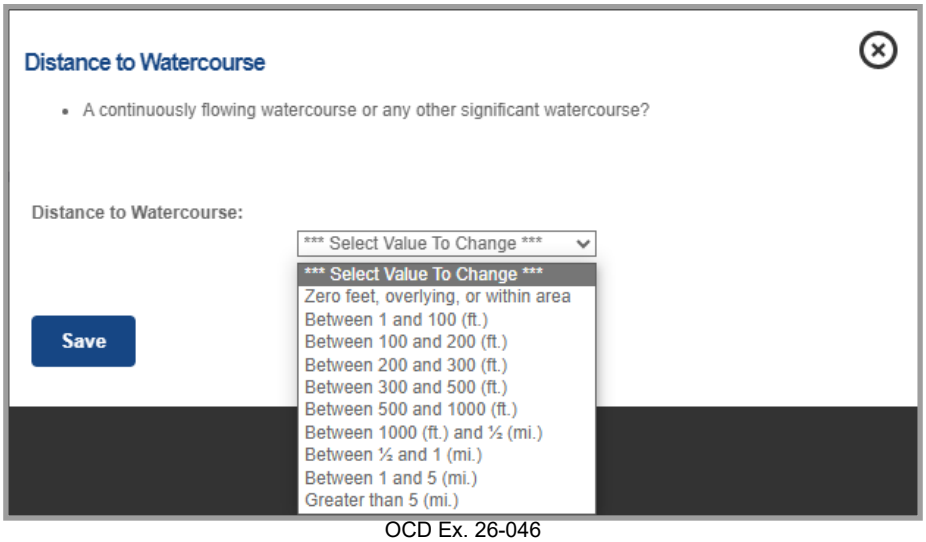


FIGURE 3

SUBMITTING A SITE CHARECTERIZATION & REMEDIATION PLAN(C-141-V-PLAN)

6. Answer the Question “Looking for Remediation Plan Approval with this submission” as “Yes” this will open all open additional questions that are required to be answer prior to submission of a Remediation plan. The Remediation Plan section is designed to allow multiple type’s of Remediation Plans from traditional dig & haul, Liner inspections and Soil Vapor Extraction etc. Please keep in mind that Responsible party’s ar re-quired to Remediate using a Division **APPROVED** Plan. Any remediation done without an Approved plan may require additional remediation.

7. Answer the Required Questions.

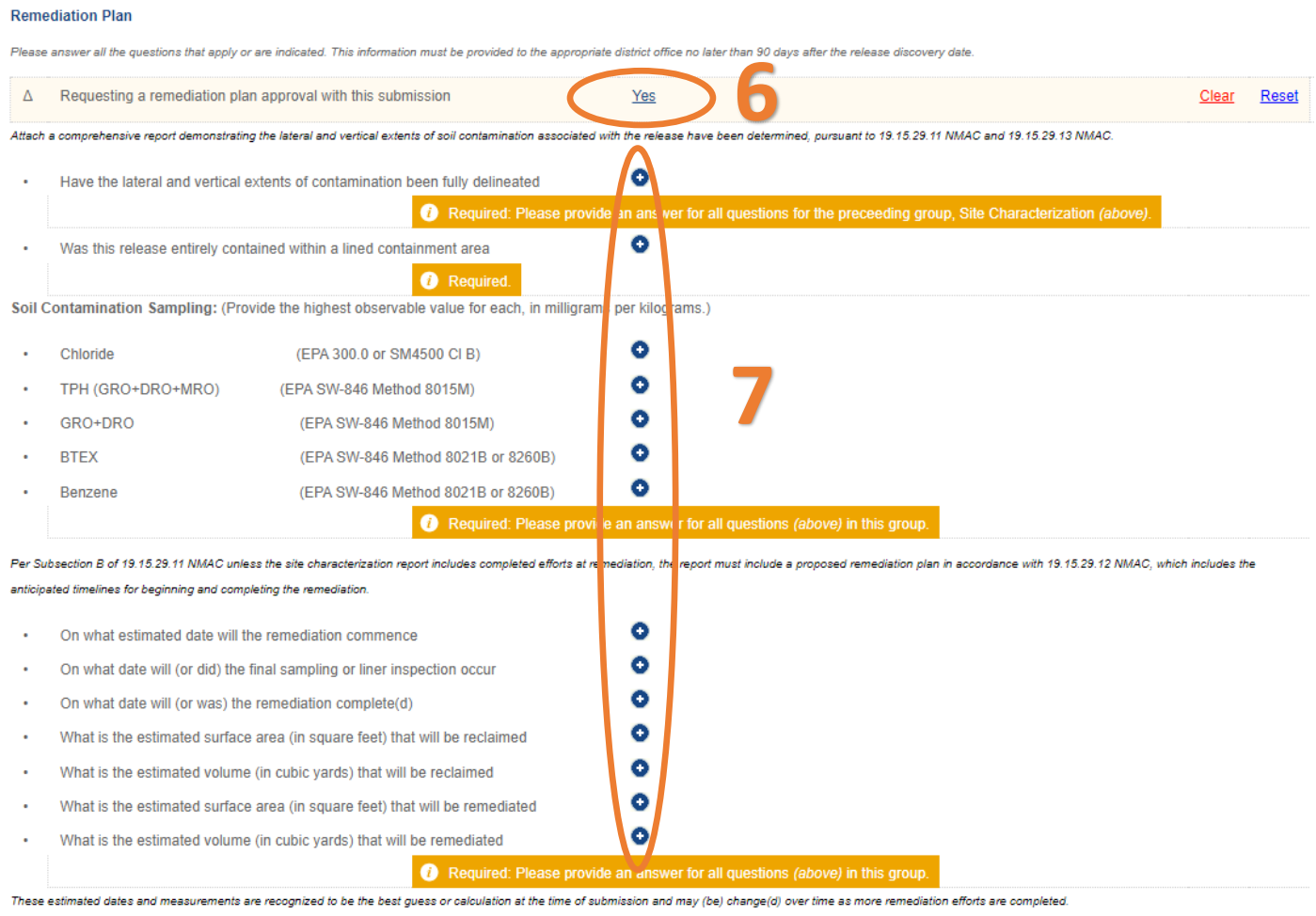


FIGURE 3

SUBMITTING A SITE CHARECTERIZATION & REMEDIATION PLAN(C-141-V-PLAN)

7. Continued.

Δ	Have the lateral and vertical extents of contamination been fully delineated	No

All submitted remediation plans must be fully delineated except Dig & Haul which will be delineated at remediation. Answering “No” to this question will prevent Users from moving forward in Deferral situations.

Δ	Was this release entirely contained within a lined containment area	No

If your release was entirely contained within a Lined Containment answer this question “Yes” answering “No” to this question prompts remediation questions that are not applicable to Liner remediations.

Soil Contamination Sampling: (Provide the highest observable value for each, in milligrams per kilograms.)

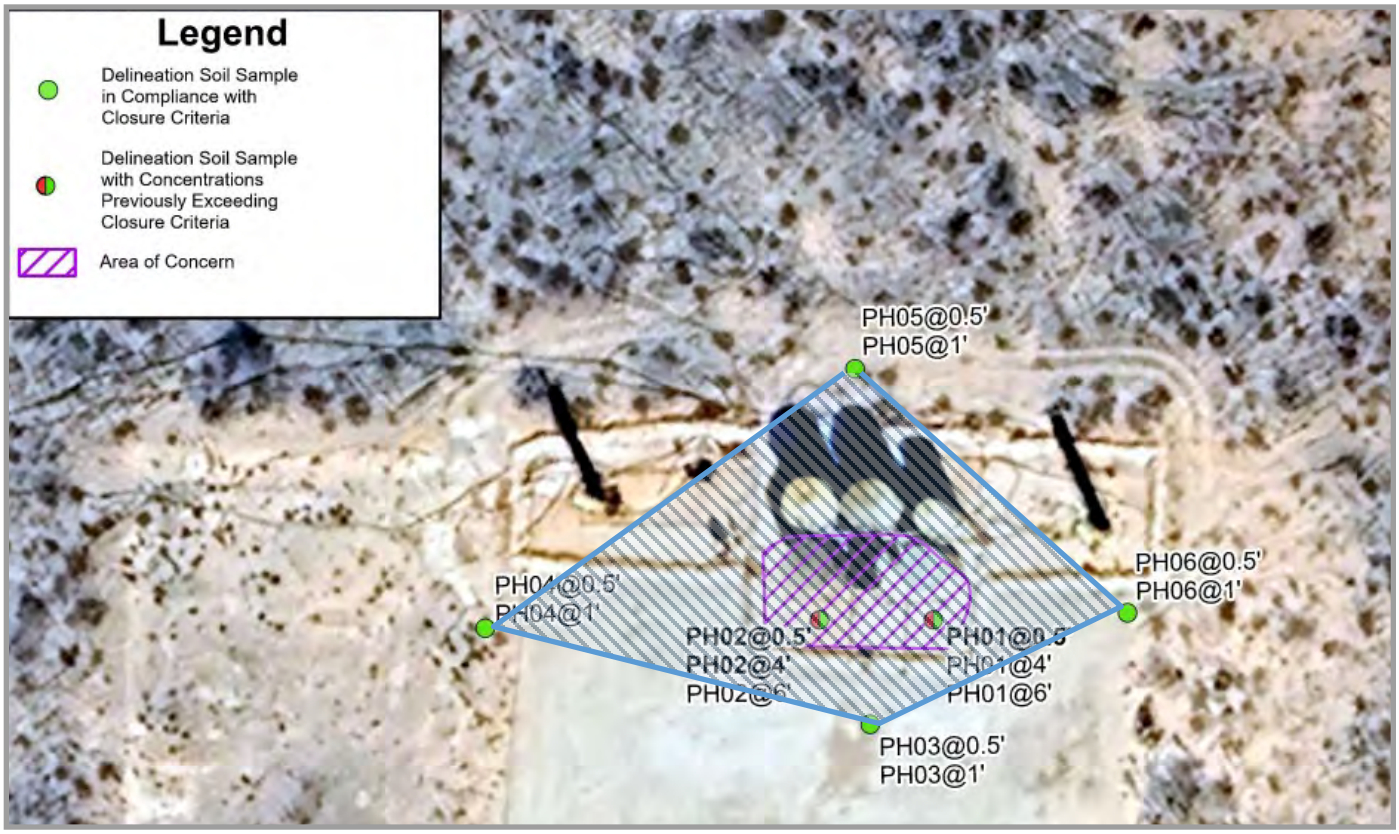
Δ	Chloride	(EPA 300.0 or SM4500 Cl B)	12688
Δ	TPH (GRO+DRO+MRO)	(EPA SW-846 Method 8015M)	1370
Δ	GRO+DRO	(EPA SW-846 Method 8015M)	258
Δ	BTEX	(EPA SW-846 Method 8021B or 8260B)	0
Δ	Benzene	(EPA SW-846 Method 8021B or 8260B)	0

If Characterization has already been done please identify the Highest observed values the most common constituents from Table I. In the Event that the release was not sample for one of the above input a ZERO is an acceptable answer. If Site Characterization wasn't not done until remediation (Dig & Haul) enter the highest observed data from confirmation samples is also acceptable.

FIGURE 3

SUBMITTING A SITE CHARECTERIZATION & REMEDIATION PLAN(C-141-V-PLAN)

7. Continued.



- What is the estimated surface area (in square feet) that will be remediated
- What is the estimated volume (in cubic yards) that will be remediated

Remediated = Areas/volume that do not meet the Table I Standards represented by the purple shaded area above.

- What is the estimated surface area (in square feet) that will be reclaimed
- What is the estimated volume (in cubic yards) that will be reclaimed

Reclaimed = Areas/Volume from the nearest delineation points to the Area of Concern that meet the reclamation standards of 19.15.13 NMAC. This should include areas that are still reasonably needed for production operations/subsequent drilling operations represented by the light blue shaded area above.

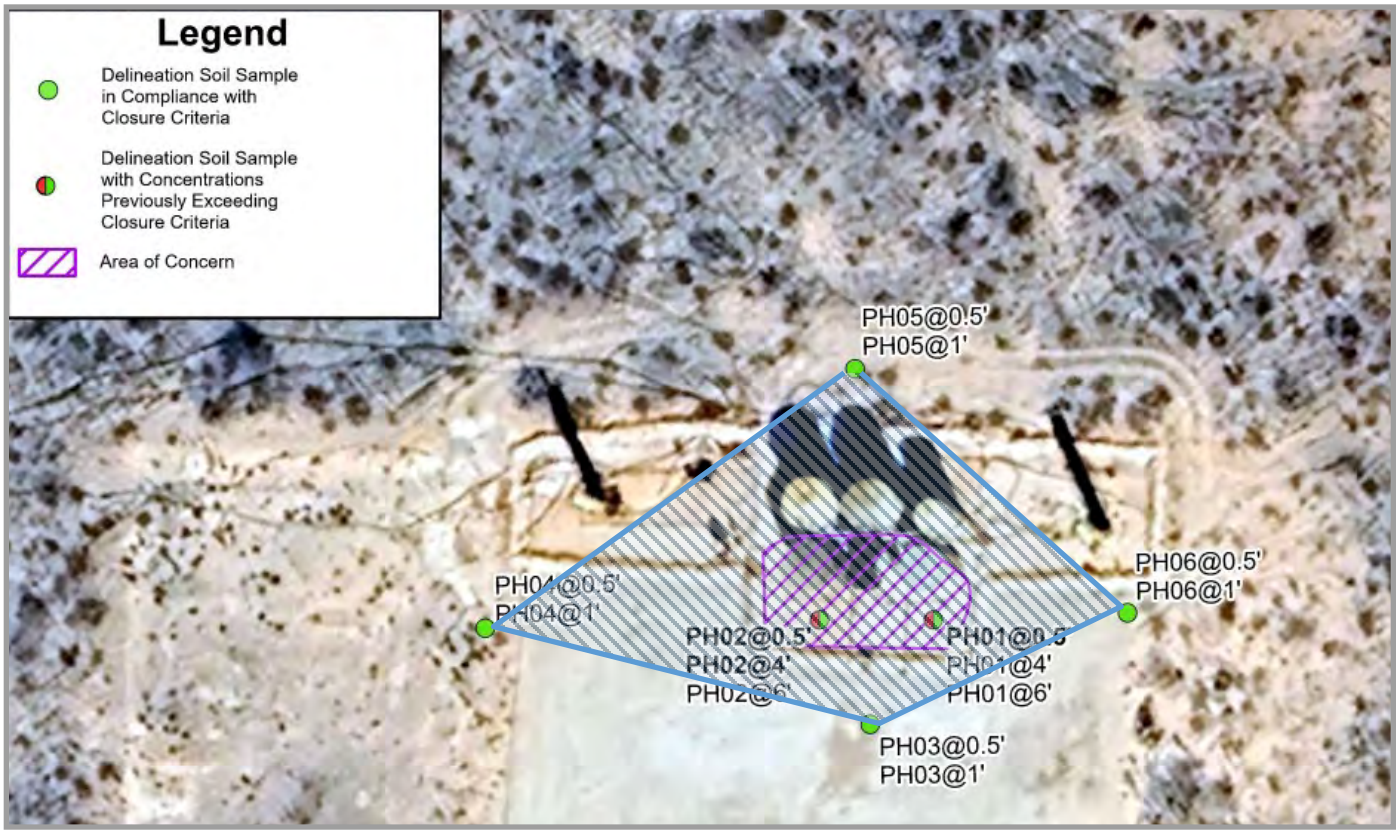
The Responsible Party **will not** have to reclaim those areas **until** they are no longer reasonably needed however these areas **must be fully** delineated.

The OCD highly recommends vertically delineating the upper four feet of the release in areas where depth is greater than 50' and does not include any criteria that would require the release to be treated as depth to groundwater is less than 50' (i.e. located in high karst, etc.) to the most stringent closure criteria in order to correctly calculate the area and volume of areas that will be reclaimed when they are no longer reasonably needed for production.

FIGURE 3

SUBMITTING A SITE CHARECTERIZATION & REMEDIATION PLAN(C-141-V-PLAN)

7. Continued.



- What is the estimated surface area (in square feet) that will be remediated
- What is the estimated volume (in cubic yards) that will be remediated

- What is the estimated surface area (in square feet) that will be reclaimed
- What is the estimated volume (in cubic yards) that will be reclaimed

Example of Completed Questions

Δ	On what estimated date will the remediation commence	11/15/2023
Δ	On what date will (or did) the final sampling or liner inspection occur	11/17/2023
Δ	On what date will (or was) the remediation complete(d)	11/20/2023
Δ	What is the estimated surface area (in square feet) that will be reclaimed	10642
Δ	What is the estimated volume (in cubic yards) that will be reclaimed	1576.6
Δ	What is the estimated surface area (in square feet) that will be remediated	1650
Δ	What is the estimated volume (in cubic yards) that will be remediated	367

FIGURE 3

SUBMITTING A SITE CHARECTERIZATION & REMEDIATION PLAN(C-141-V-PLAN)

8.Remediation Plan (continued) This allows the User to designate how the responsible party will remediate the release. The User is only required to select at a minimum one remediation approach, but if multiple apply please answer all applicable questions. Additionally this section is designed to be a high level overview of the requested remediation approach, the User will still need to include all applicable documentation for the proposed remediation technique.

*Note The example remediation techniques are examples only and do not indicate OCD approval to implement the remediation technique. Responsible party's must have a Division approved remediation plan any remediation done without an approved plan may require additional remediation.

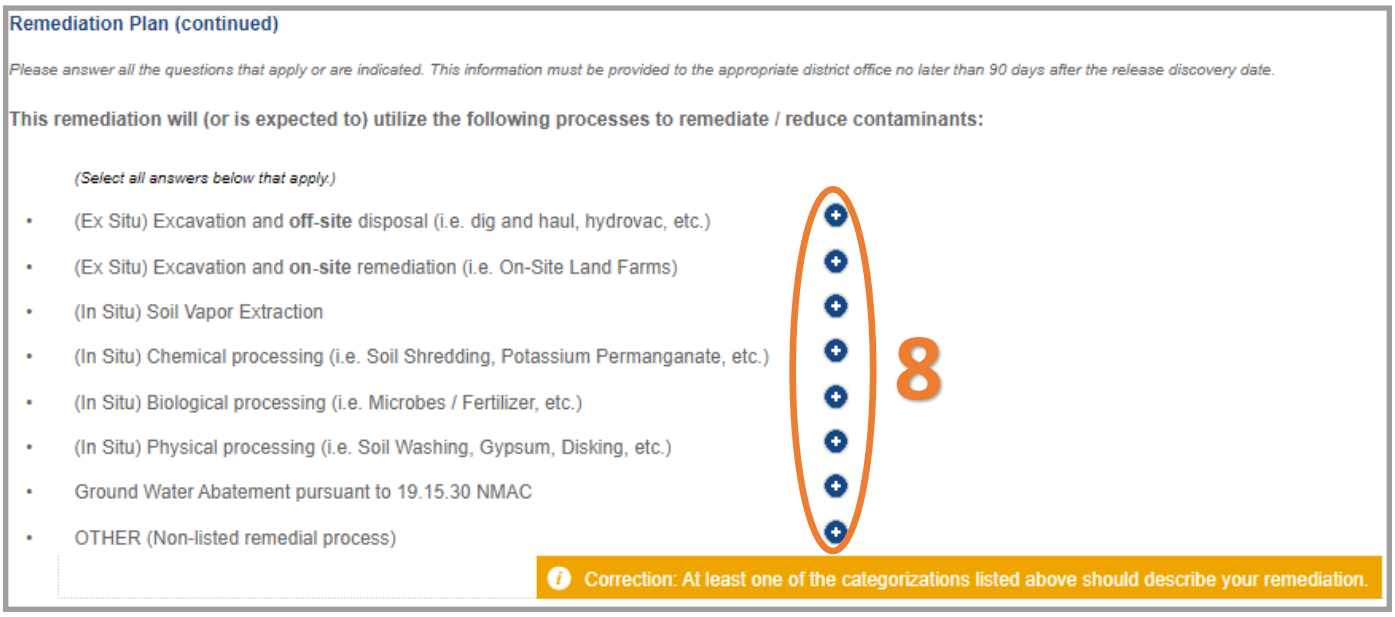


FIGURE 3

SUBMITTING A SITE CHARECTERIZATION & REMEDIATION PLAN(C-141-V-PLAN)

8.Remediation Plan (continued)

Example Dig and Haul

Δ	(Ex Situ) Excavation and **off-site** disposal (i.e. dig and haul, hydrovac, etc.)	Yes
Δ	Which OCD approved facility will be used for **off-site** disposal	R360 Artesia LLC LANDFARM [fEEM0112340644]
•	**OR** which OCD approved well (API) will be used for **off-site** disposal	⊕
•	**OR** is the **off-site** disposal site, to be used, out-of-state	⊕
•	**OR** is the **off-site** disposal site, to be used, an NMED facility	⊕

User will be required to select the Facility (R360 Above) were the impacted soil will be sent to.

Example Hydrovac to SWD

Δ	(Ex Situ) Excavation and **off-site** disposal (i.e. dig and haul, hydrovac, etc.)	Yes
•	Which OCD approved facility will be used for **off-site** disposal	⊕
Δ	**OR** which OCD approved well (API) will be used for **off-site** disposal	30-015-45034 RUSTLER BREAKS SWD #006
•	**OR** is the **off-site** disposal site, to be used, out-of-state	⊕
•	**OR** is the **off-site** disposal site, to be used, an NMED facility	⊕

Users who intend to dispose of PW at an Salt Water Disposal or other type of Well will use this section.

Example Out of State Disposal

Δ	(Ex Situ) Excavation and **off-site** disposal (i.e. dig and haul, hydrovac, etc.)	Yes
•	Which OCD approved facility will be used for **off-site** disposal	⊕
•	**OR** which OCD approved well (API) will be used for **off-site** disposal	⊕
Δ	**OR** is the **off-site** disposal site, to be used, out-of-state	Yes
Δ	In which state is the disposal taking place	Texas
Δ	What is the name of the out-of-state facility	ACME Land Farm
•	**OR** is the **off-site** disposal site, to be used, an NMED facility	⊕

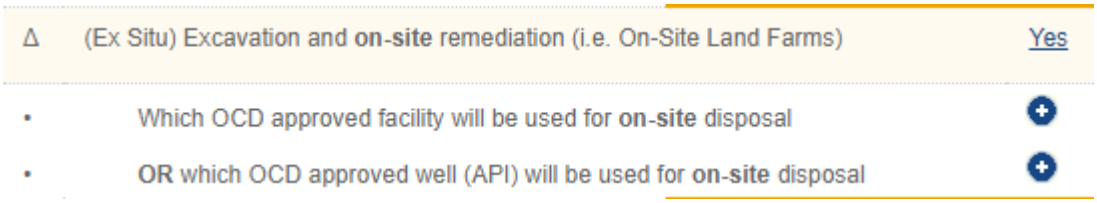
Out of State disposal must be in compliance with any applicable Rules/Regulations of the receiving State.

FIGURE 3

SUBMITTING A SITE CHARECTERIZATION & REMEDIATION PLAN(C-141-V-PLAN)

8. Remediation Plan (continued)

Example Onsite Land Farm



Onsite Land farms require approval of an additional permit through the OCD pursuant to 19.15.36 NMAC

9. When requestion Remediation Plan Approval the User must submit 1 or more attachments that include the below attachment tags. User must review their attached document to ensure that all of the items being requested are in their attached file. Attachments/Tags will be likely change in future development. To add an attachment scroll to the top of the application left click the Blue Add Attachment Button. Select the type of attachment you are uploading from the drop down list. Left click the Choose file button to select the file from your computer to upload. Once you have selected the file you wish to upload save the upload by left clicking the Upload selected Files. Repeat this process for multiple Attachments.

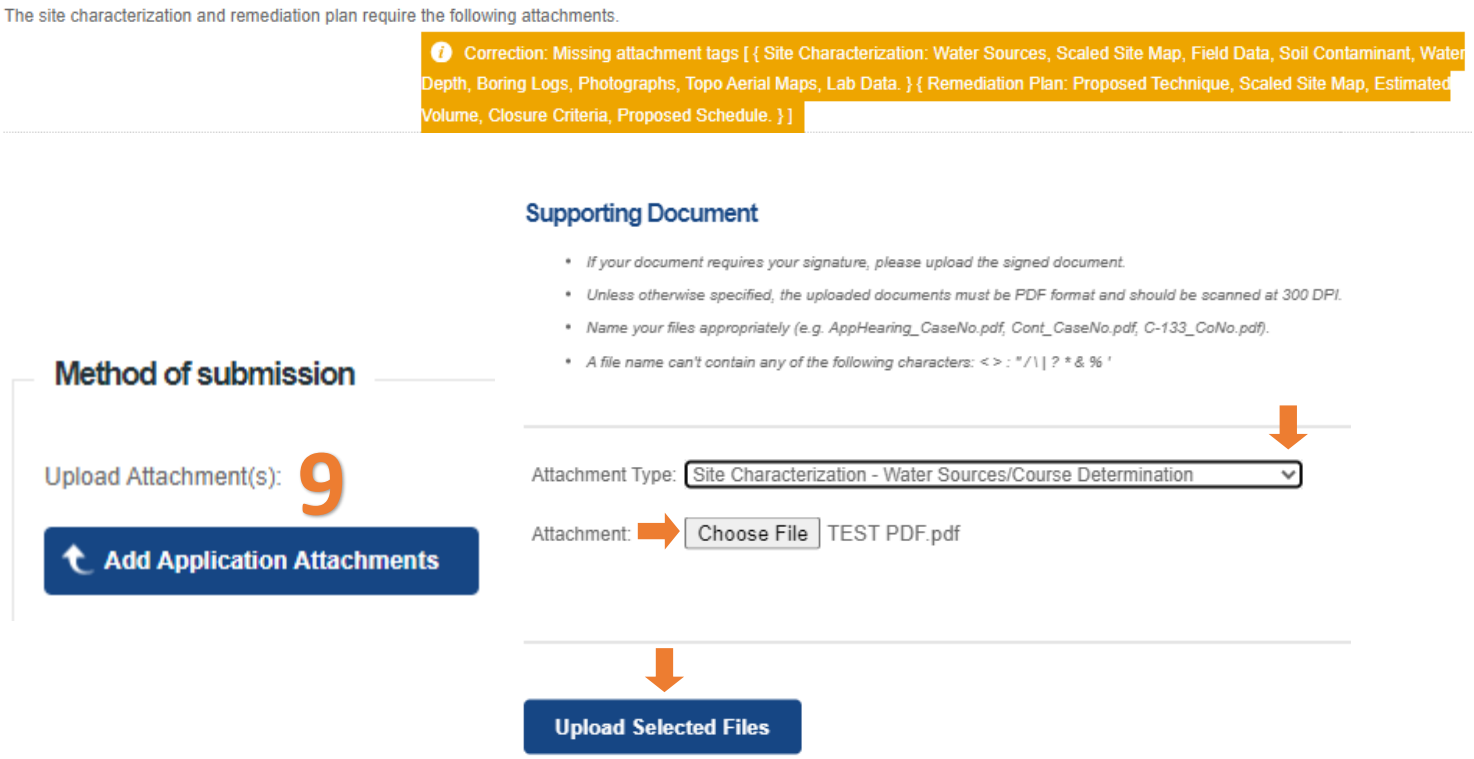


FIGURE 3

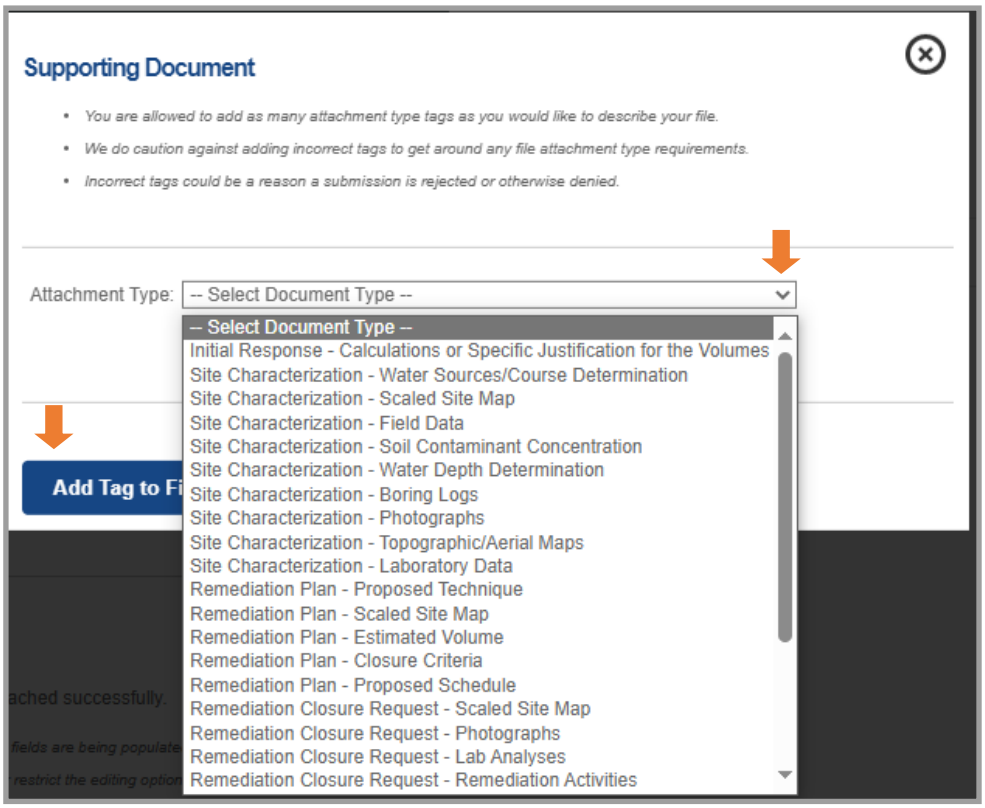
SUBMITTING A SITE CHARECTERIZATION & REMEDIATION PLAN(C-141-V-PLAN)

9.Remediation Plan Attachments (continued)

At this current time User may also add multiple tags to a single file that may contain multiple attachments types. To add multiple tags Left click the Add Tag button next to the Attached File. Select the Tag type from the Drop down and Left click Add Tag to file. Repeat this step to add multiple tags.

Upload Attachment(s):

Attachment Type (Description) Tag(s)	Original Uploaded File Name	
Water Sources, Scaled Site Map Add Tag	TEST PDF.pdf (36.7 KB) Replace File	Delete
	Files: 1 Total Size: 36.7 KB	



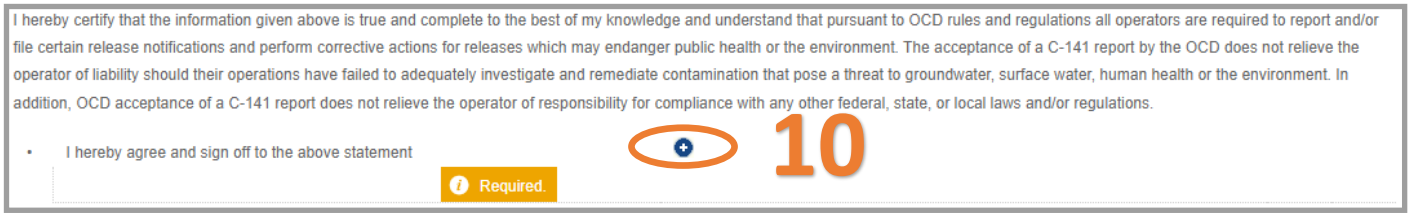
Upload Attachment(s):

Attachment Type (Description) Tag(s)	Original Uploaded File Name	
Water Sources, Scaled Site Map, Field Data, Soil Contaminant, Water Depth, Boring Logs, Photographs, Topo Aerial Maps, Lab Data, Proposed Technique, Scaled Site Map, Estimated Volume, Closure Criteria, Proposed Schedule Add Tag	TEST PDF.pdf (36.7 KB) Replace File	Delete
	Files: 1 Total Size: 36.7 KB	

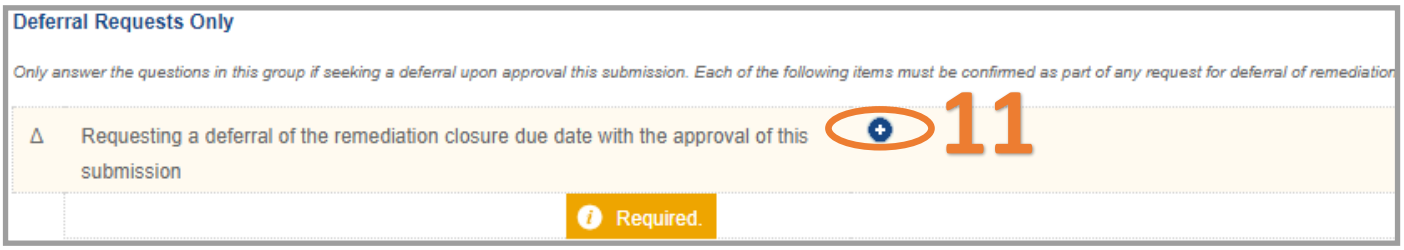
FIGURE 3

SUBMITTING A SITE CHARECTERIZATION & REMEDIATION PLAN(C-141-V-PLAN)

10. Once all of the questions have been Answered the User must Certify and Digital Sign the application.



11. The User must answer if they are requesting a Deferral with this submission. If answered no this submission will be classified as a Remediation Plan. If Answered Yes the submission will be identified as a Deferral Request. This submission will also count as an Initial C-141 + Remediation Plan + Deferral if there are no previous approved dates on file.



11a. The User must complete the following questions for Deferral Request. Sites that have not been delineated pursuant to 19.15.11 NMAC cannot be granted a deferral. Contamination in areas that don't require a major facility deconstruction, or pose an imminent risk to human health or the Environment cannot be deferred.

Major Facility Deconstruction: Typically involves concrete poured pads, structures, engineered designed facilities that include automation/electrical lines, sprayed in liners, etc. OCD will review each deferral request on a case by case basis.

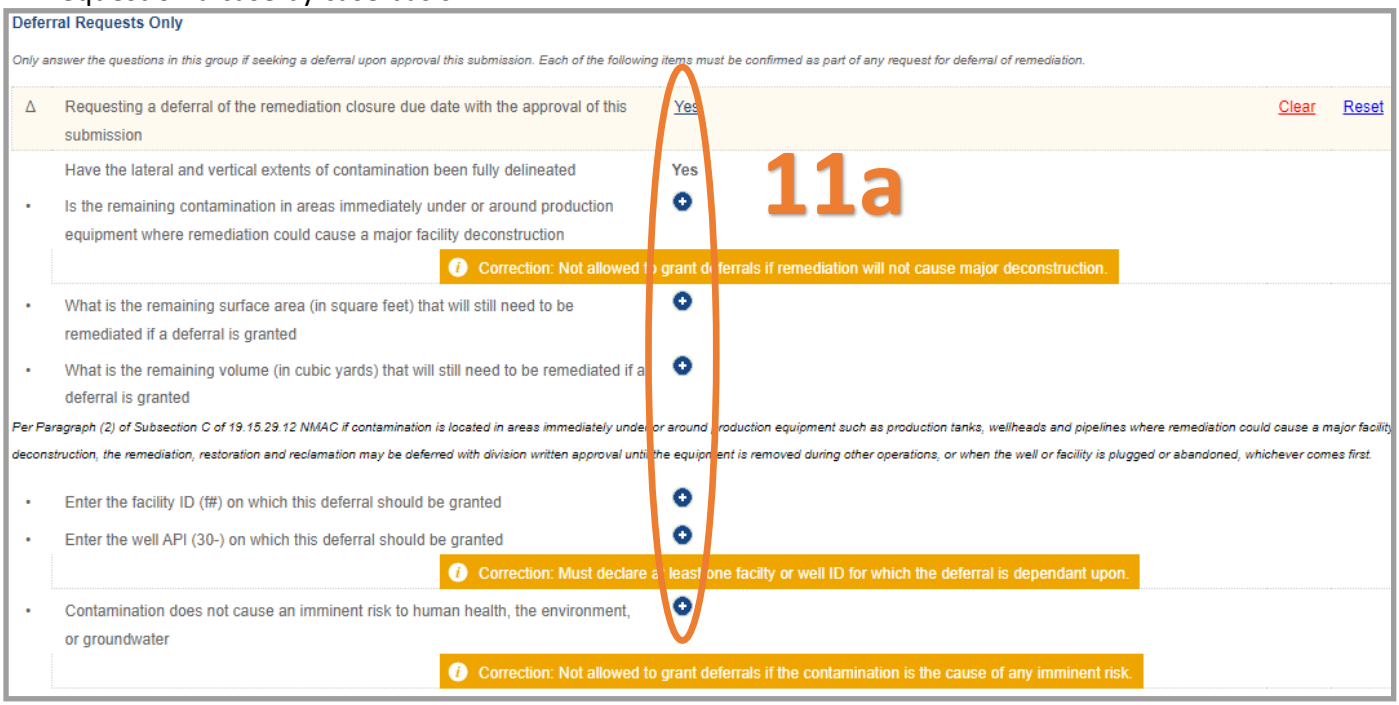
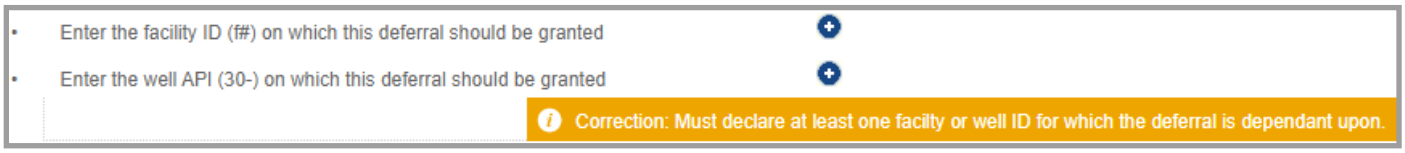


FIGURE 3

SUBMITTING A SITE CHARECTERIZATION & REMEDIATION PLAN(C-141-V-PLAN)

11a *Continued* User will need to Identify which facility/API# that they are requesting the Deferral should be granted on. If your release is on a one Well pad the enter the API#. If your release is on a multi-well pad then include at least 1 API# from the pad and/or the Facility ID# if applicable. These API#/Facilities may be different then the main association as identified in the NOR application.



12. The User now must answer if they are requestion a Remediation Closure approval with this submission. If the user answer no this submission will be classified as a Remediation Plan. If the User selects yes and there is not an approved Initial C-141 on file this submission will ALSO count as a Initial C-141 + Remediation plan + Remediation Closure Request (Figure 5).

    Please note that OCD does not approve partial applications in the event that the User submits an Initial + Remediation Plan and the application is rejected both C-141 will be rejected.

13. Review your C-141 application for accuracy and completeness. This is the last chance before submitting the document to the OCD to make any corrections to this data. Operators will have the ability to modify these questions/response on any subsequent C-141 submission. To submit the application to the OCD click the Make Payment button. You will be directed to a Third Party website to process payment.

Clicking the Delete button will clear the entire application and remove it from your application queue.

FIGURE 3

SUBMITTING A SITE CHARECTERIZATION & REMEDIATION PLAN(C-141-V-PLAN)

Once the user has submitted the C-141 Remediation Plan to the OCD. The User email which was identified in step 3a will receive an email from emnrd.ocdonline@emnrd.nm.gov that is the receipt and proof of submission to the OCD. The receipt provides a PO Number that can be searched on the OCD Action Status page.

PO Number: KITLT-231108-C-1410
Payment Date: 11/13/2023
Payment Amount: $150.00
Payment Type: Credit Card

Application Type: Application for administrative approval of a release notification and corrective action
Fee Amount: $150.00
Application Status: Under OCD Review

OGRID: 300825
First Name: Test
Last Name: Test
Email: cory.smith@emnrd.nm.gov

At this state the Remediation Plan C-141 Application is Under OCD Review (Submitted) and the incident status will change to reflect the current status of the incident.

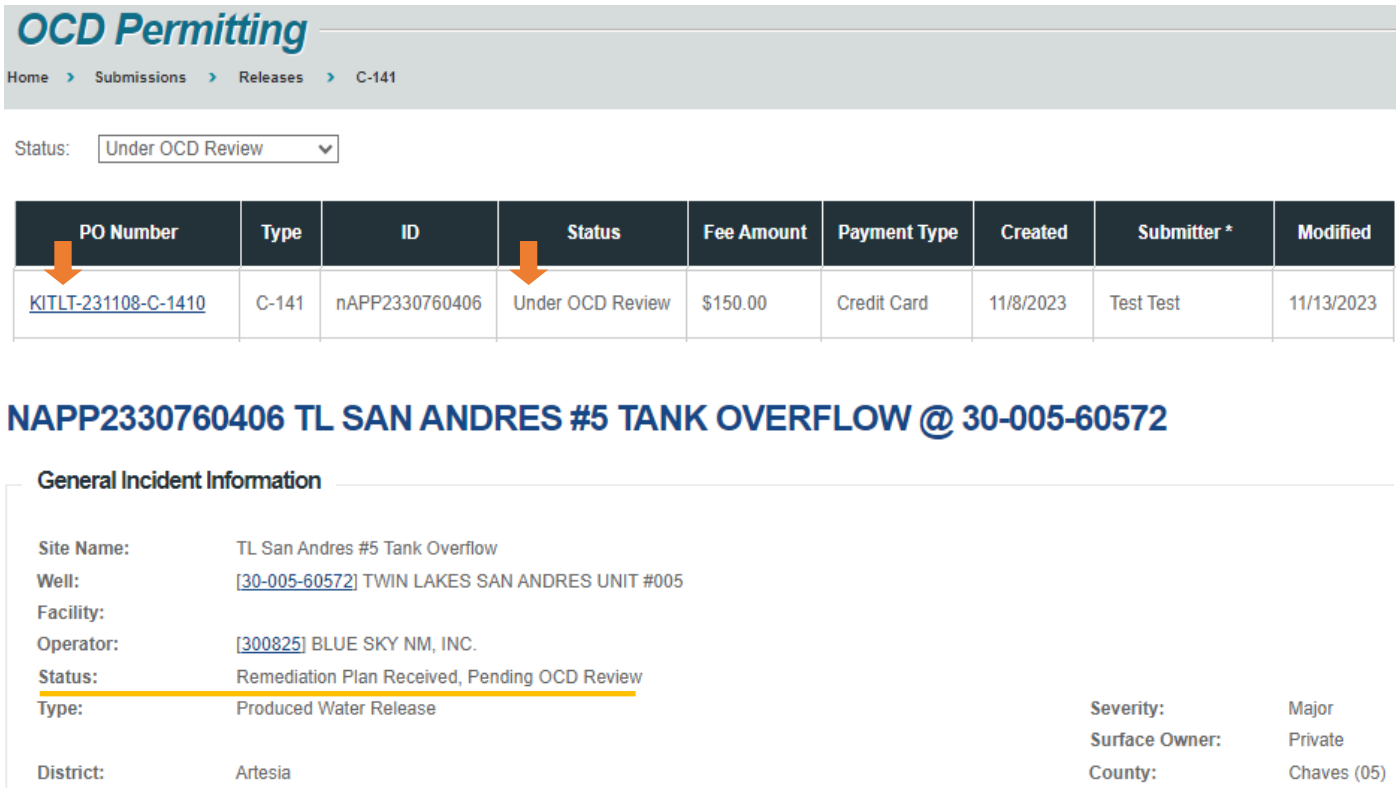
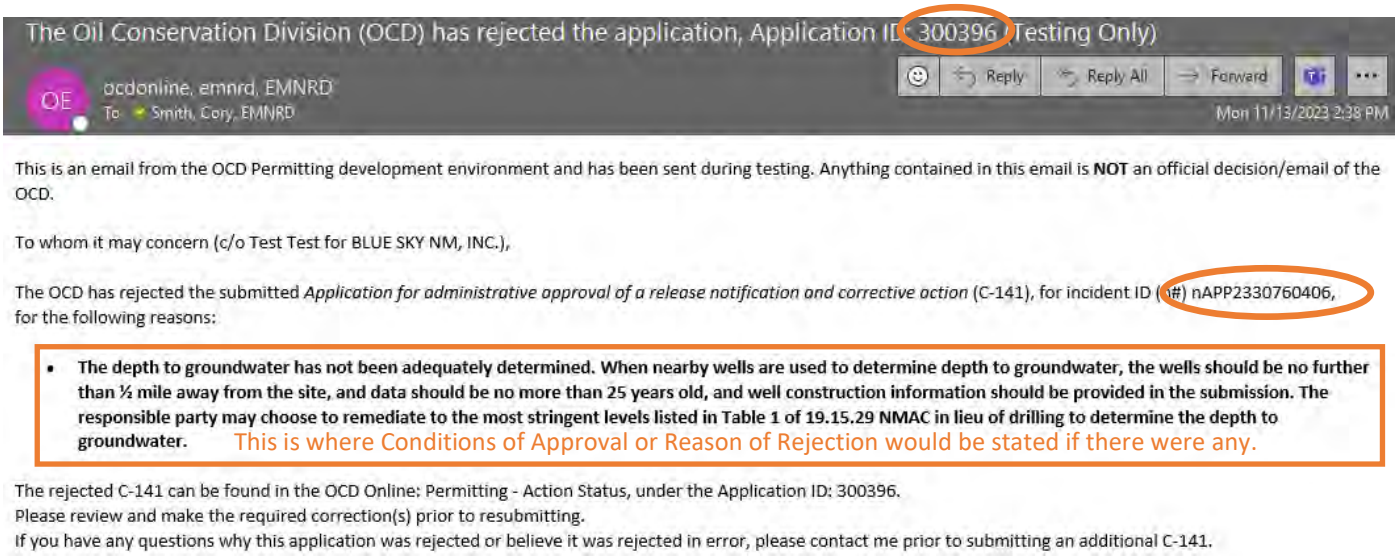


FIGURE 3

SUBMITTING A SITE CHARECTERIZATION & REMEDIATION PLAN(C-141-V-PLAN)

Example of Rejected Application.



The Oil Conservation Division (OCD) has rejected the application, Application ID: 300396 (Testing Only)

ocdonline, emnrd, EMNRD
To: Smith, Cory, EMNRD

Reply | Reply All | Forward

Mon 11/13/2023 2:38 PM

This is an email from the OCD Permitting development environment and has been sent during testing. Anything contained in this email is **NOT** an official decision/email of the OCD.

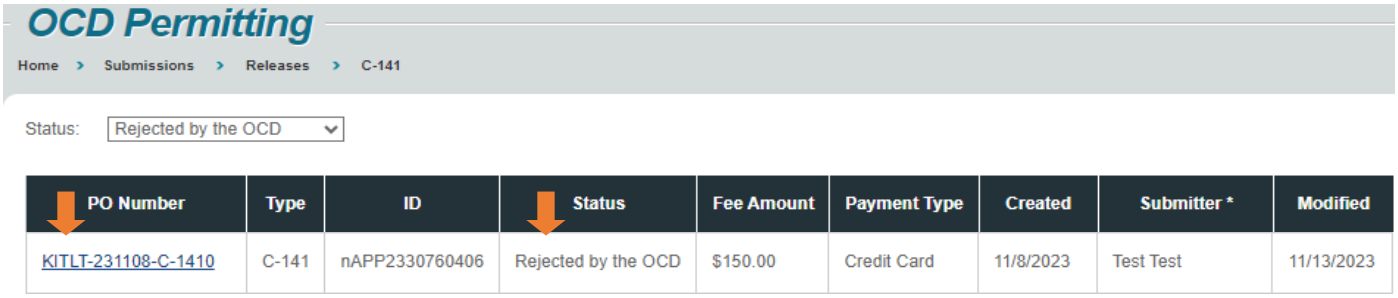
To whom it may concern (c/o Test Test for BLUE SKY NM, INC.),

The OCD has rejected the submitted *Application for administrative approval of a release notification and corrective action* (C-141), for incident ID (#) nAPP2330760406, for the following reasons:

- **The depth to groundwater has not been adequately determined. When nearby wells are used to determine depth to groundwater, the wells should be no further than ½ mile away from the site, and data should be no more than 25 years old, and well construction information should be provided in the submission. The responsible party may choose to remediate to the most stringent levels listed in Table 1 of 19.15.29 NMAC in lieu of drilling to determine the depth to groundwater.** This is where Conditions of Approval or Reason of Rejection would be stated if there were any.

The rejected C-141 can be found in the OCD Online: Permitting - Action Status, under the Application ID: 300396.
Please review and make the required correction(s) prior to resubmitting.
If you have any questions why this application was rejected or believe it was rejected in error, please contact me prior to submitting an additional C-141.

At this state the Remediation Plan C-141 Application is has been Processed (Approved or Rejected) and the incident status will change to reflect the current status of the incident.



OCD Permitting

Home > Submissions > Releases > C-141

Status: Rejected by the OCD

PO Number	Type	ID	Status	Fee Amount	Payment Type	Created	Submitter *	Modified
KITLT-231108-C-1410	C-141	nAPP2330760406	Rejected by the OCD	$150.00	Credit Card	11/8/2023	Test Test	11/13/2023

Remember rejected applications do not show a rejected status but will display the furthest along APPROVED application. In this case the last accept application was the Initial C-141 which was approved.

NAPP2330760406 TL SAN ANDRES #5 TANK OVERFLOW @ 30-005-60572

General Incident Information

Site Name:	TL San Andres #5 Tank Overflow		
Well:	[30-005-60572] TWIN LAKES SAN ANDRES UNIT #005		
Facility:			
Operator:	[300825] BLUE SKY NM, INC.		
Status:	Initial C-141 Approved, Pending submission of Site Characterization / Remediation Plan OR Remediation Closure Report from the operator		
Type:	Produced Water Release	**Severity:**	Major
		Surface Owner:	Private
District:	Artesia	**County:**	Chaves (05)

FIGURE 4

SUBMITTING LINER AND SAMPLING NOTICES (C-141L & C-141N)

OCD is implementing two "New" submission pipelines that accompany C-141 submissions. The Notification of Liner Inspection (C-141L) is required pursuant to 19.15.29.11.A(5)(a)(ii) NMAC and the Notification of Final "Confirmation" Sampling (C-141N) is required pursuant to 19.15.29.12.D(1)(a). Historically, these notifications were processed via phone/e-mail which have been proven to be unwieldy and inefficient. Users will now complete the Notices through OCD permitting.

SUBMITTING A LINER INSPECTION NOTICE

Operators will use this notice when they have a release entirely contained in a lined containment and are ready to provide the required 2 business day notice for the final liner inspection.

1. Left Click on the Submissions tab in the top right of the website.
2. Left Click on Releases and Select [NOTIFY] Notification of Liner Inspection.

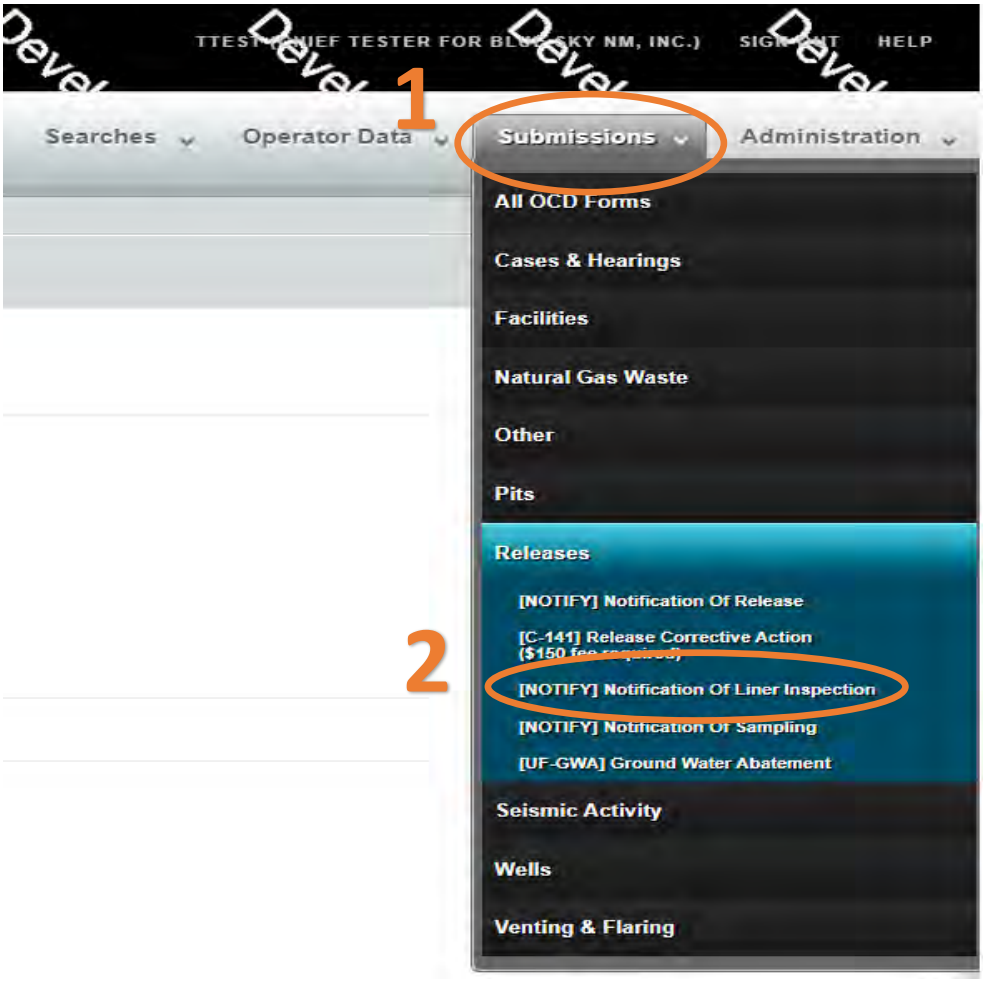


FIGURE 4

SUBMITTING LINER AND SAMPLING NOTICES (C-141L & C-141N)

On this Permitting page, users can review the status of all previous created/submitted/approved/rejected Notification of Liner Inspection for their current OGRID . The User can also resume working on a previous draft version of the application by left clicking on the PO Number hyperlink. Applications types that are under OCD Review or have been Approved/Rejected cannot be modified.

3. To create a new C-141 Application scroll down and left click on the New C-141 Application button.

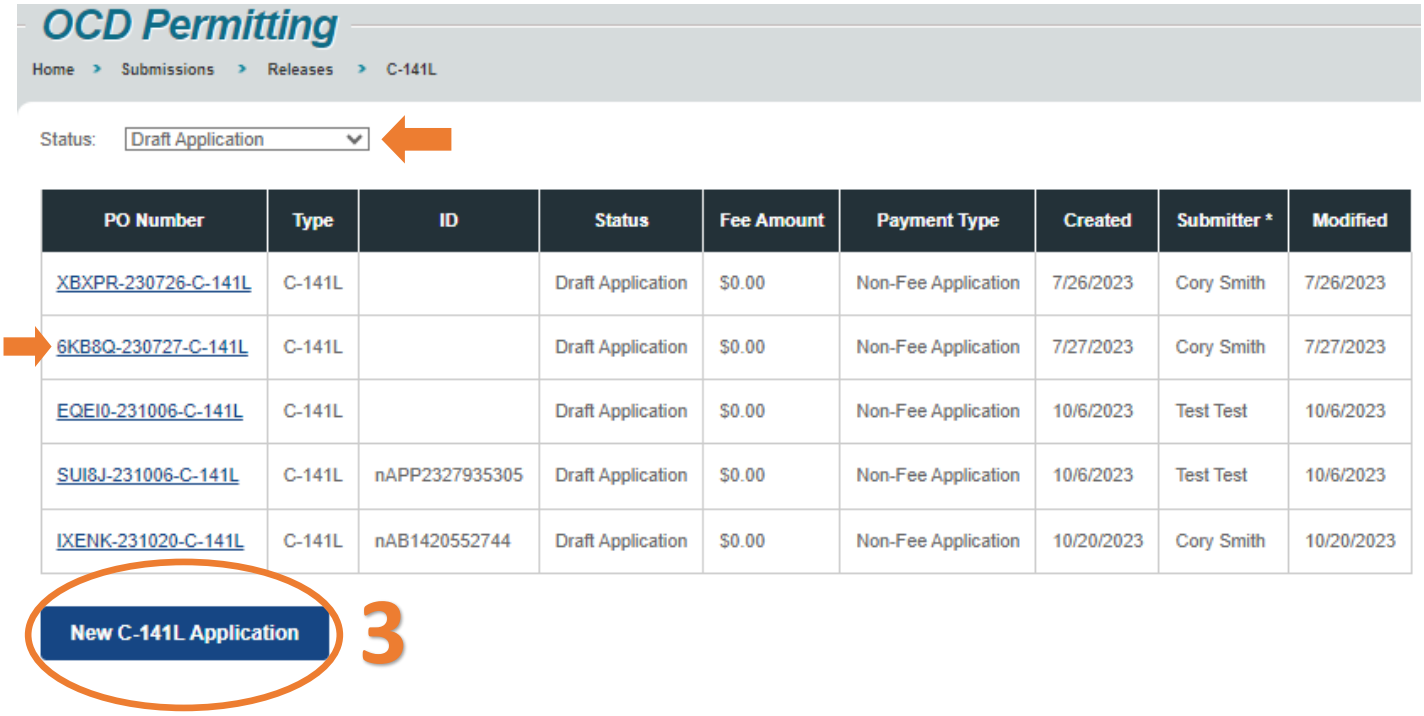


FIGURE 4

SUBMITTING LINER AND SAMPLING NOTICES (C-141L & C-141N)

3a. OCD Permitting general functions will display any errors in the orange ribbon band at the top of your screen and inline while working through the applications.

The Submissions Contact Application, Fee Payment section of the C-141 is automatically filled out based up-on the User's default contact information. The contact e-mail used in this section is where any approvals/ rejections will be sent too. In the event that you are submitting this on behalf of another member of your organization you may edit the contact information by clicking on the edit submissions contact details button.

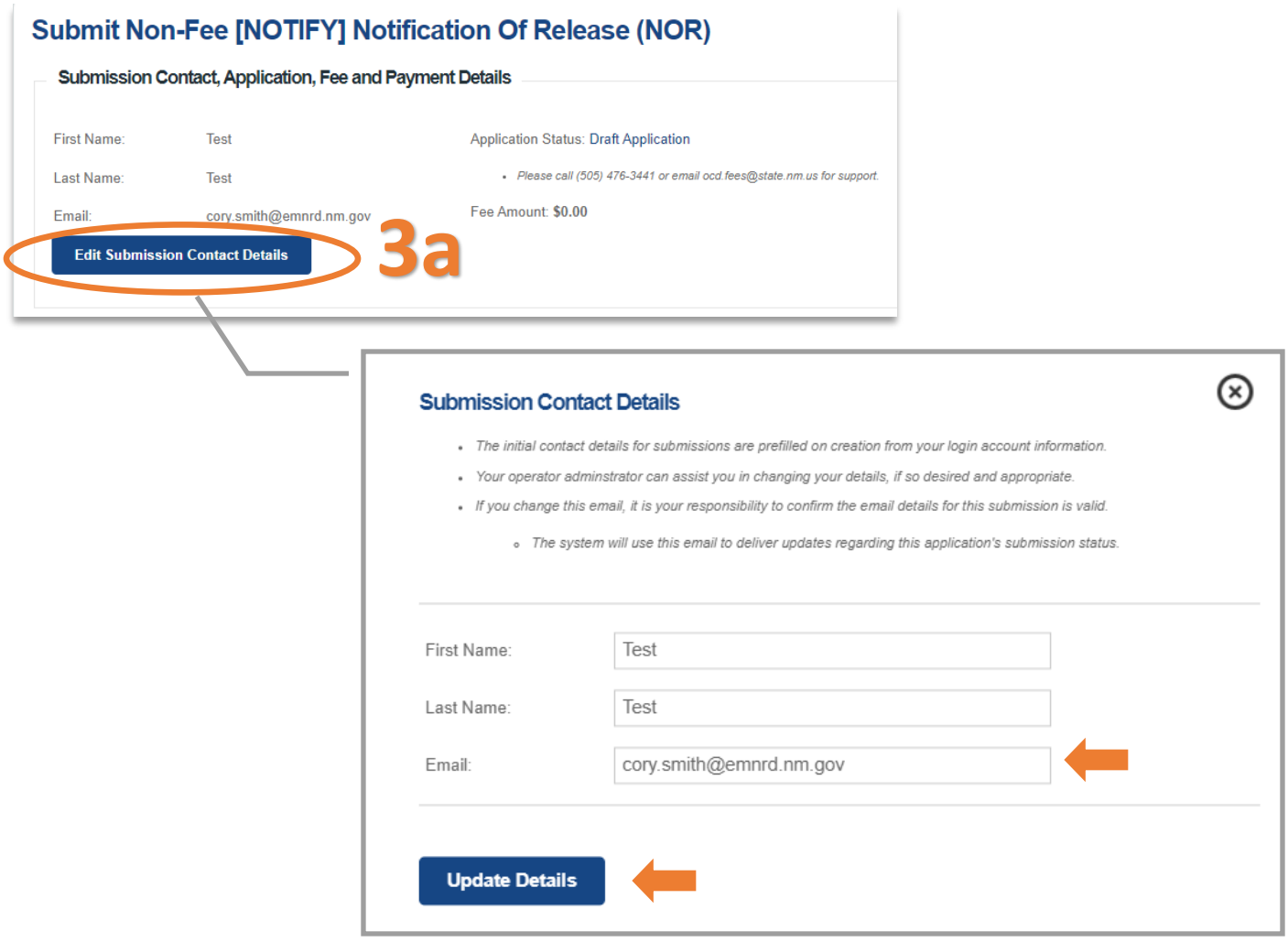


FIGURE 4

SUBMITTING LINER AND SAMPLING NOTICES (C-141L & C-141N)

4. Add the incident ID # from your Notice of Release (NOR) e-mail, C-141 Initial or from your records. Alternatively, if in your NOR application, you gave your release a custom site name you can also search by typing in the name into the box.

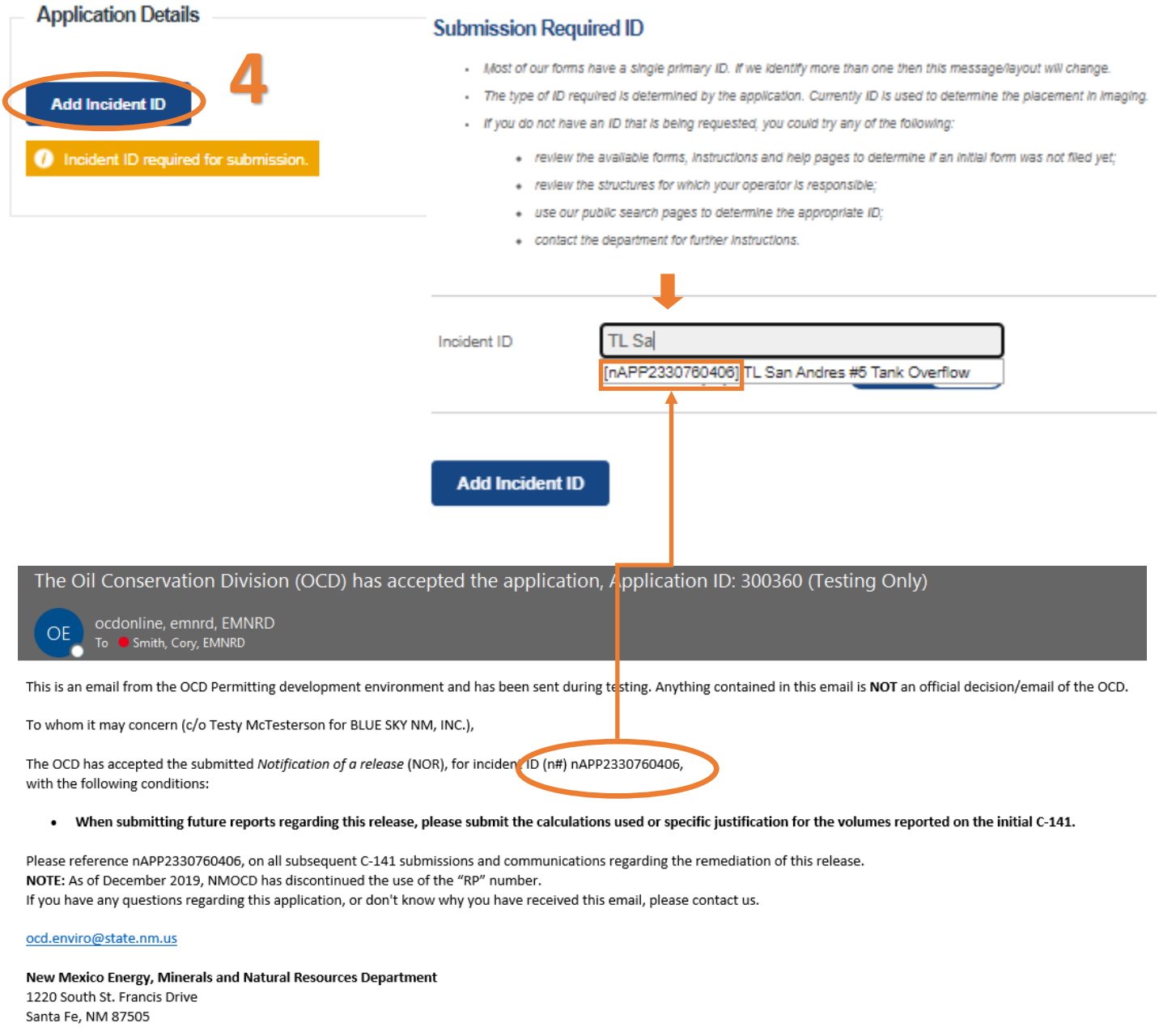
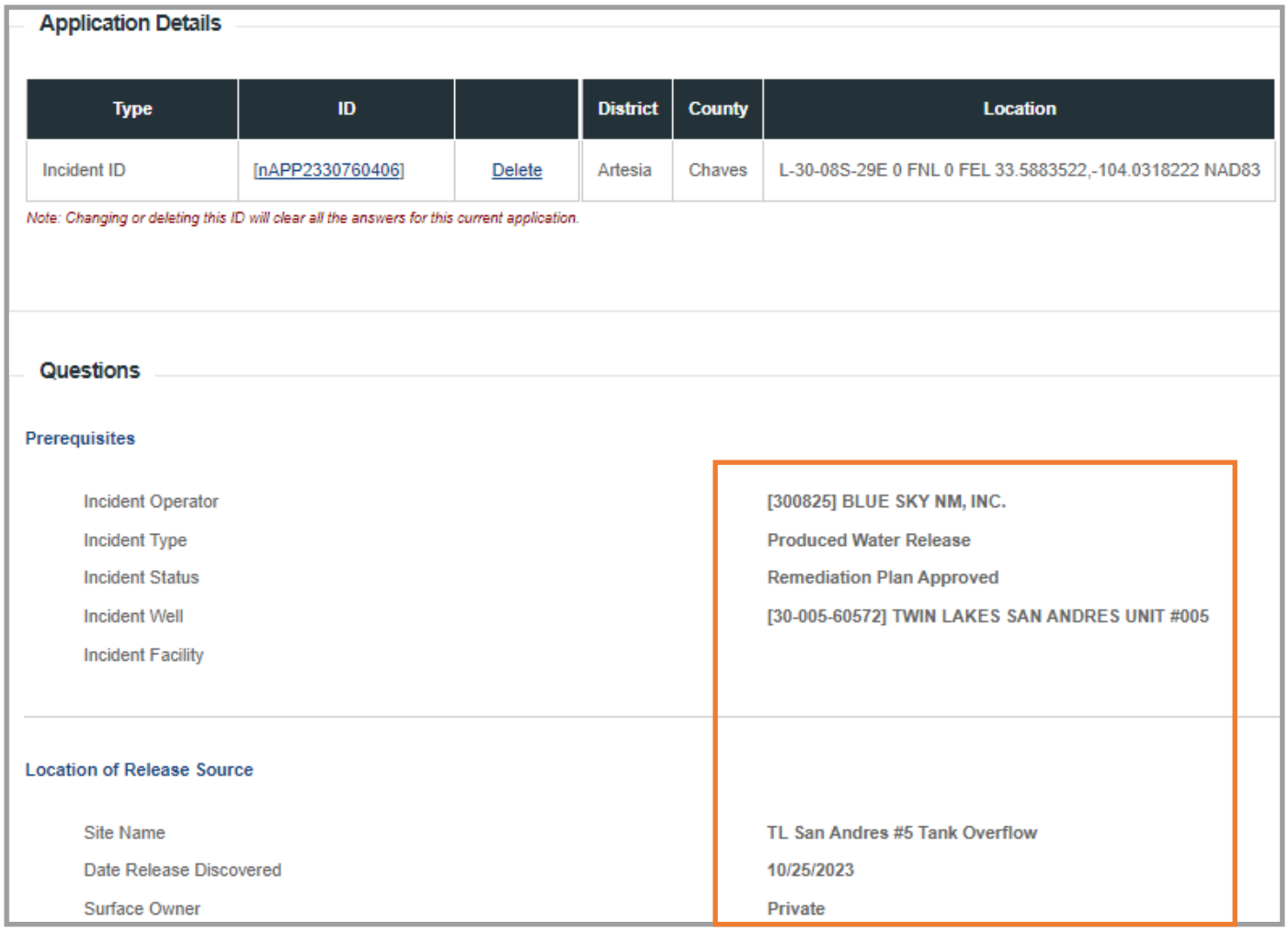


FIGURE 4

SUBMITTING LINER AND SAMPLING NOTICES (C-141L & C-141N)

Once you have entered a valid incident number the applications will populate data based upon answers that were submitted in the Notice Of Release application and the status of the incident based upon approvals of C-141 applications. Users should verify that the data is correct and that they are providing notice to the correct incident.



Application Details

Type	ID		District	County	Location
Incident ID	[nAPP2330760406]	Delete	Artesia	Chaves	L-30-08S-29E 0 FNL 0 FEL 33.5883522,-104.0318222 NAD83

Note: Changing or deleting this ID will clear all the answers for this current application.

Questions

Prerequisites

Incident Operator	[300825] BLUE SKY NM, INC.
Incident Type	Produced Water Release
Incident Status	Remediation Plan Approved
Incident Well	[30-005-60572] TWIN LAKES SAN ANDRES UNIT #005
Incident Facility	

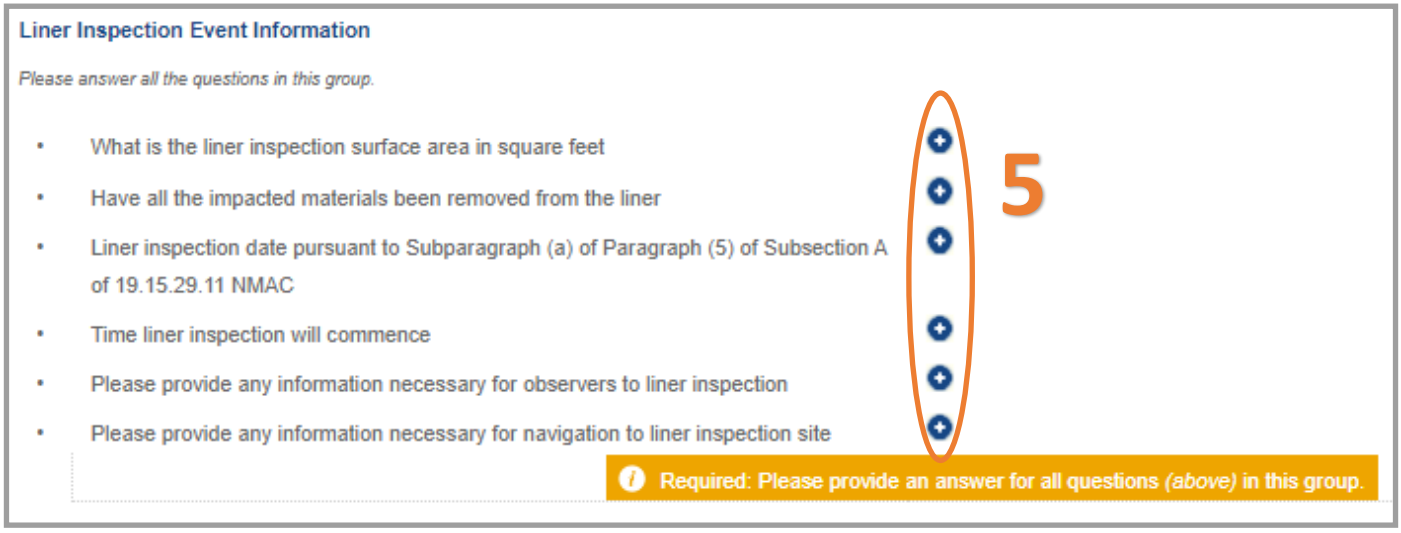
Location of Release Source

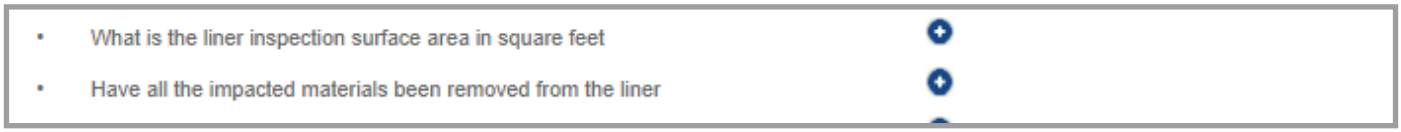
Site Name	TL San Andres #5 Tank Overflow
Date Release Discovered	10/25/2023
Surface Owner	Private

FIGURE 4

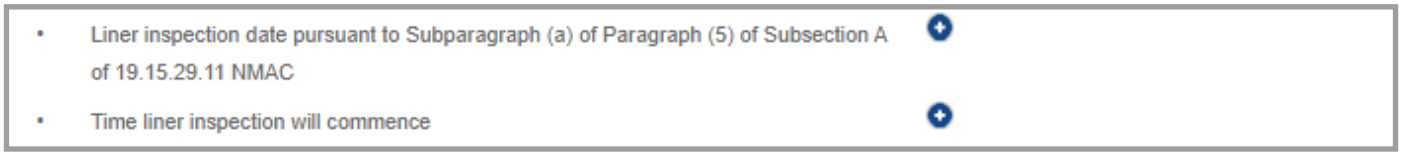
SUBMITTING LINER AND SAMPLING NOTICES (C-141L & C-141N)

5. Liner Inspections have 6 required questions that must be answered prior to submission.

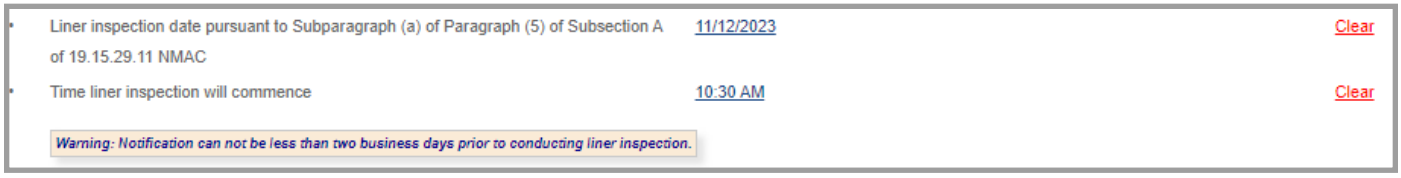




Users will provide the surface area rounded to the nearest whole number of the liner that is to be inspected. Additionally **all** impacted materials (i.e. gravel/sand) must be removed prior to the inspection so that the entire area of the liner that was impacted is visible for inspection.



Users will provide the Date (MM/DD/YYYY) and Time (hh:mm: AM/PM Mountain Time) that the liner inspection is scheduled. Inspections that are completed outside of the notified time may be rejected by the OCD, and additional inspections may be required. In the event that the date/time changes, submit an additional notice ASAP.

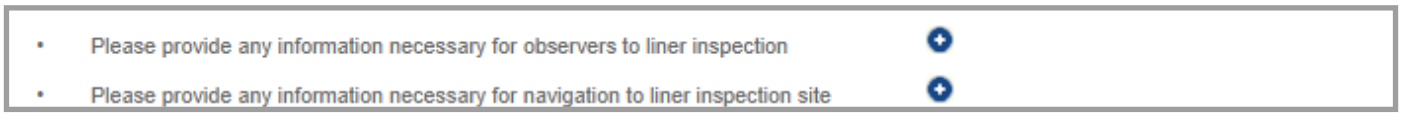


NOTE: At this current time, due to this being a new process, OCD Permitting will provide a warning that your notice does not meet the requirements of two business days. The User may continue to submit applications with this error. However, this will likely change in future development. This is a compliance issues pursuant to 19.15.29.11.A(5)(a)(ii) NMAC and can be subject to compliance actions pursuant to 19.15.5 NMAC.

FIGURE 4

SUBMITTING LINER AND SAMPLING NOTICES (C-141L & C-141N)

5. *Continued*



Users will provide any information necessary for the Observers of the Liner inspection:
Examples: Business contact phone numbers. Details of the inspection.

Users will provide any info necessary for navigation to the Liner Inspection Site.
Examples: 23 miles south of Artesia turn Left at Mile Post. Location has a locked gate etc.

Follow best practices for not including Personal Identifiable Information (PII), This data is public DO NOT include any gate combination codes, or Private Names/Addresses/Phone Numbers, only Business contacts. OCD anticipates that Notifications of Liner Inspections and Sampling will be further developed in later phases.

6. Review your Notification for accuracy and completeness. This is the last chance to make any corrections to this data before submitting the document to the OCD.

Clicking the Delete button will clear the entire application and remove it from your application queue.

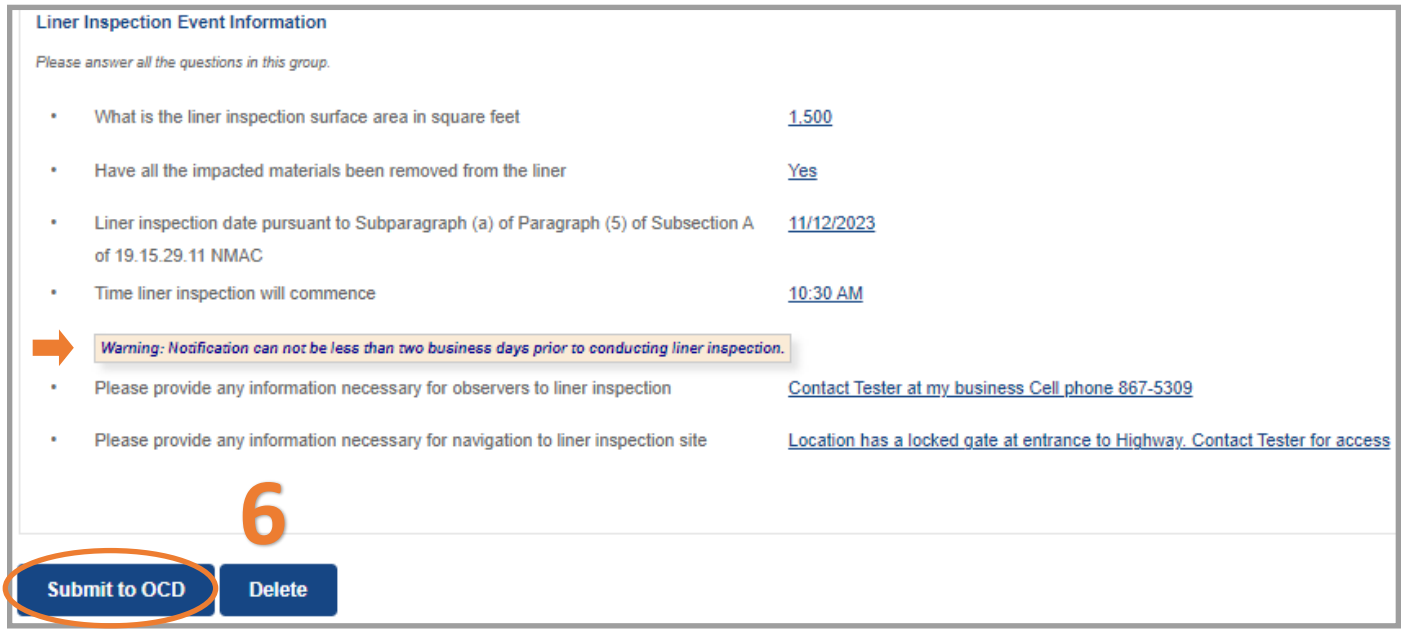
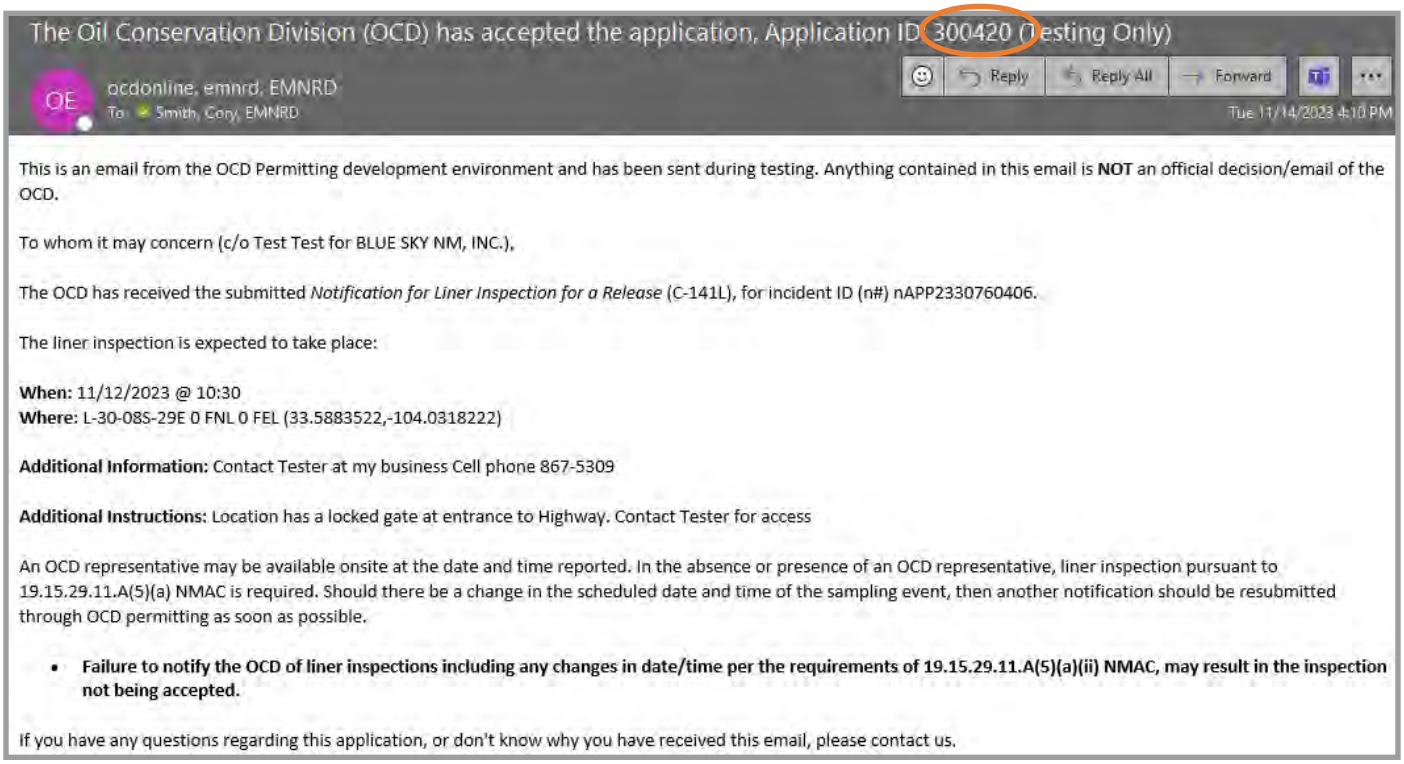


FIGURE 4

SUBMITTING LINER AND SAMPLING NOTICES (C-141L & C-141N)

Once the user has submitted the Notice of Liner Inspection to the OCD, the user email which was identified in step 3a will receive an email from emnrd.ocdonline@emnrd.nm.gov indicated that the Notice was accepted. Additionally, the email will provide the user with the incident # (napp2330760406) for verification.

OCD Permitting also automatically will notify the assigned incident review of the notice and adds a sampling Notice date to the incident Date Stack.



The Oil Conservation Division (OCD) has accepted the application, Application ID: 300420 (Testing Only)

OE ocdonline, emnrd, EMNRD
To: Smith, Cory, EMNRD

Reply | Reply All | Forward

Tue 11/14/2023 4:10 PM

This is an email from the OCD Permitting development environment and has been sent during testing. Anything contained in this email is **NOT** an official decision/email of the OCD.

To whom it may concern (c/o Test Test for BLUE SKY NM, INC.),

The OCD has received the submitted *Notification for Liner Inspection for a Release* (C-141L), for incident ID (n#) nAPP2330760406.

The liner inspection is expected to take place:

When: 11/12/2023 @ 10:30
Where: L-30-08S-29E 0 FNL 0 FEL (33.5883522,-104.0318222)

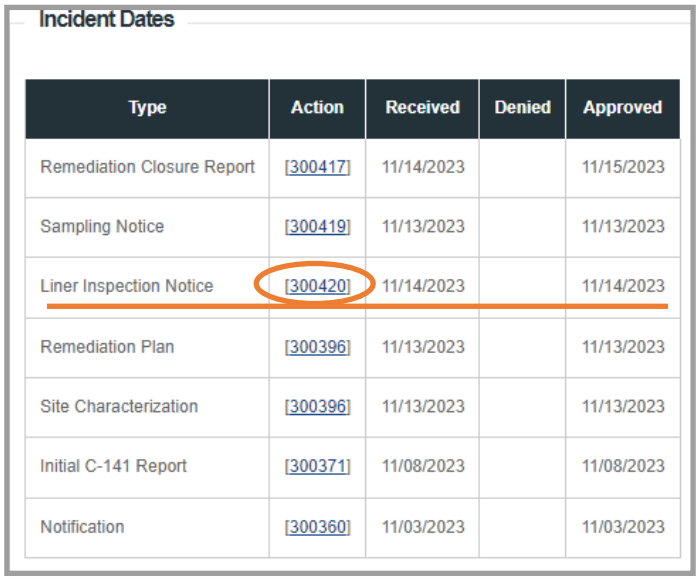
Additional Information: Contact Tester at my business Cell phone 867-5309

Additional Instructions: Location has a locked gate at entrance to Highway. Contact Tester for access

An OCD representative may be available onsite at the date and time reported. In the absence or presence of an OCD representative, liner inspection pursuant to 19.15.29.11.A(5)(a) NMAC is required. Should there be a change in the scheduled date and time of the sampling event, then another notification should be resubmitted through OCD permitting as soon as possible.

- **Failure to notify the OCD of liner inspections including any changes in date/time per the requirements of 19.15.29.11.A(5)(a)(ii) NMAC, may result in the inspection not being accepted.**

If you have any questions regarding this application, or don't know why you have received this email, please contact us.



Incident Dates

Type	Action	Received	Denied	Approved
Remediation Closure Report	[300417]	11/14/2023		11/15/2023
Sampling Notice	[300419]	11/13/2023		11/13/2023
Liner Inspection Notice	[300420]	11/14/2023		11/14/2023
Remediation Plan	[300396]	11/13/2023		11/13/2023
Site Characterization	[300396]	11/13/2023		11/13/2023
Initial C-141 Report	[300371]	11/08/2023		11/08/2023
Notification	[300360]	11/03/2023		11/03/2023

FIGURE 4

SUBMITTING LINER AND SAMPLING NOTICES (C-141L & C-141N)

SUBMITTING A SAMPLING NOTICE

Operators will use this notice when they have a release not entirely contained in a lined containment and are ready to provide the required 2 business day notice for Confirmation "Final" sampling for areas that have been remediated.

1. Left Click on the Submissions tab in the top right of the website.
2. Left Click on Releases and Select [NOTIFY] Notification of Sampling.

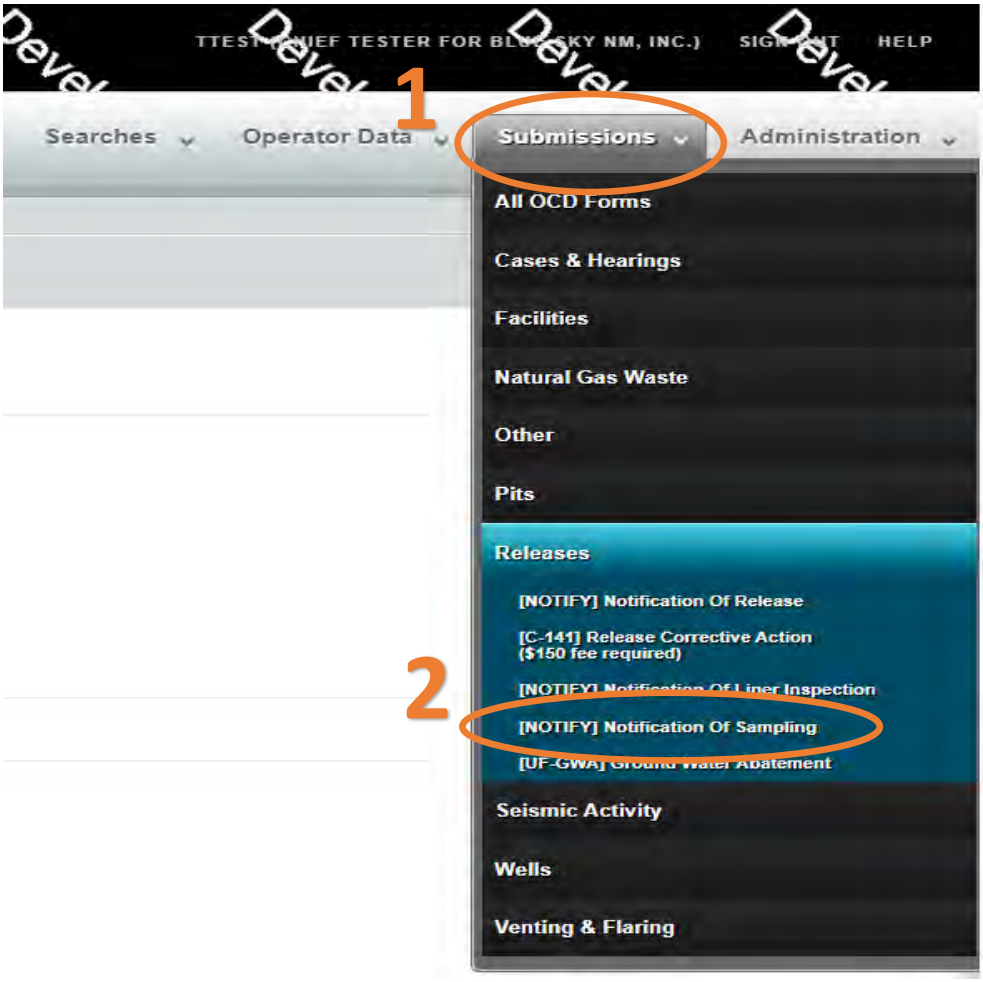


FIGURE 4

SUBMITTING LINER AND SAMPLING NOTICES (C-141L & C-141N)

On this Permitting page users can review the status of all previous created/submitted/approved/rejected Notification of Liner Inspection for their current OGRID . The user can also resume working on a previous draft version of the application by left clicking on the PO Number hyperlink. Applications types that are under OCD Review or have been Approved/Rejected cannot be modified.

3. To create a new C-141 Application scroll down and left click on the New C-141 Application button.

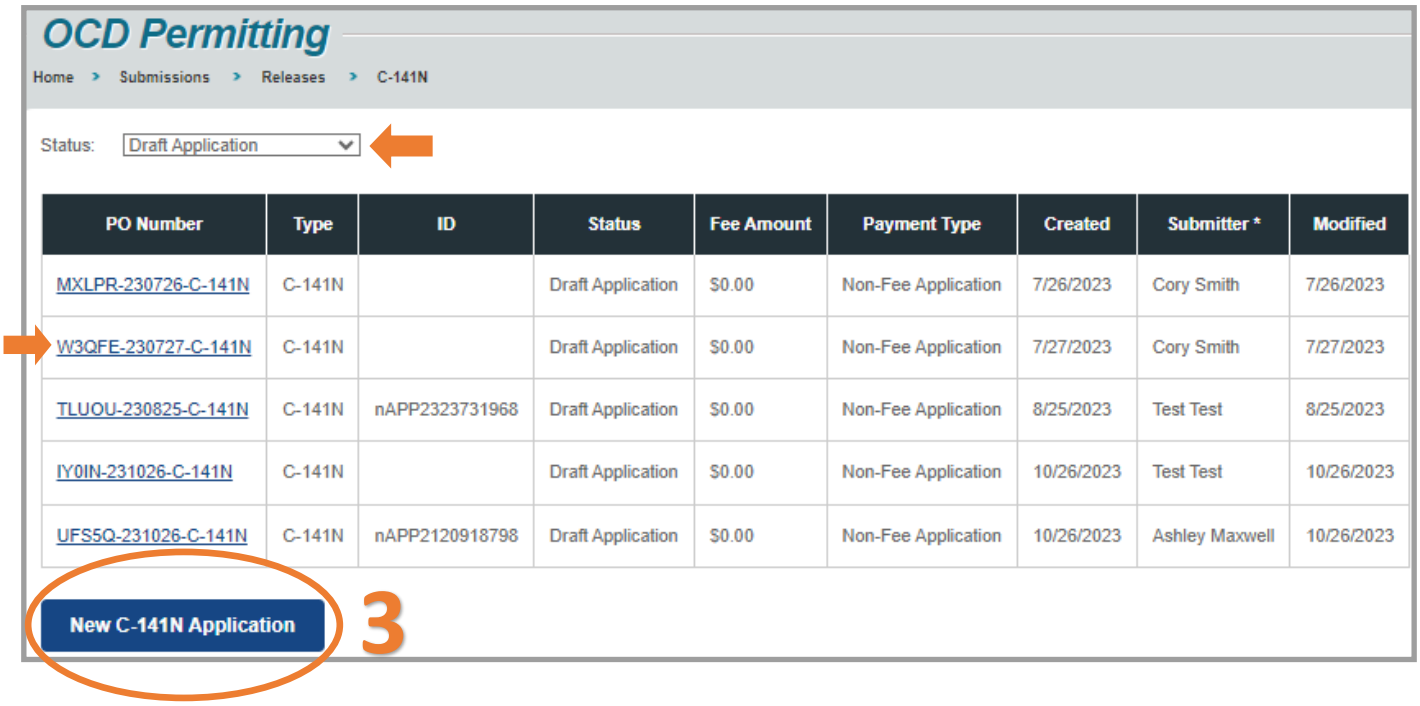


FIGURE 4

SUBMITTING LINER AND SAMPLING NOTICES (C-141L & C-141N)

3a. OCD Permitting general functions will display any errors in the orange ribbon band at the top of your screen and inline while working through the applications.

The Submissions Contact Application, Fee Payment section of the C-141 is automatically filled out based upon the users default contact information. The contact e-mail used in this section is where any approvals/ rejections will be sent too. In the even that you are submitting this on behalf of another member of your organization you may edit the contact information by clicking on the edit submissions contact details button.

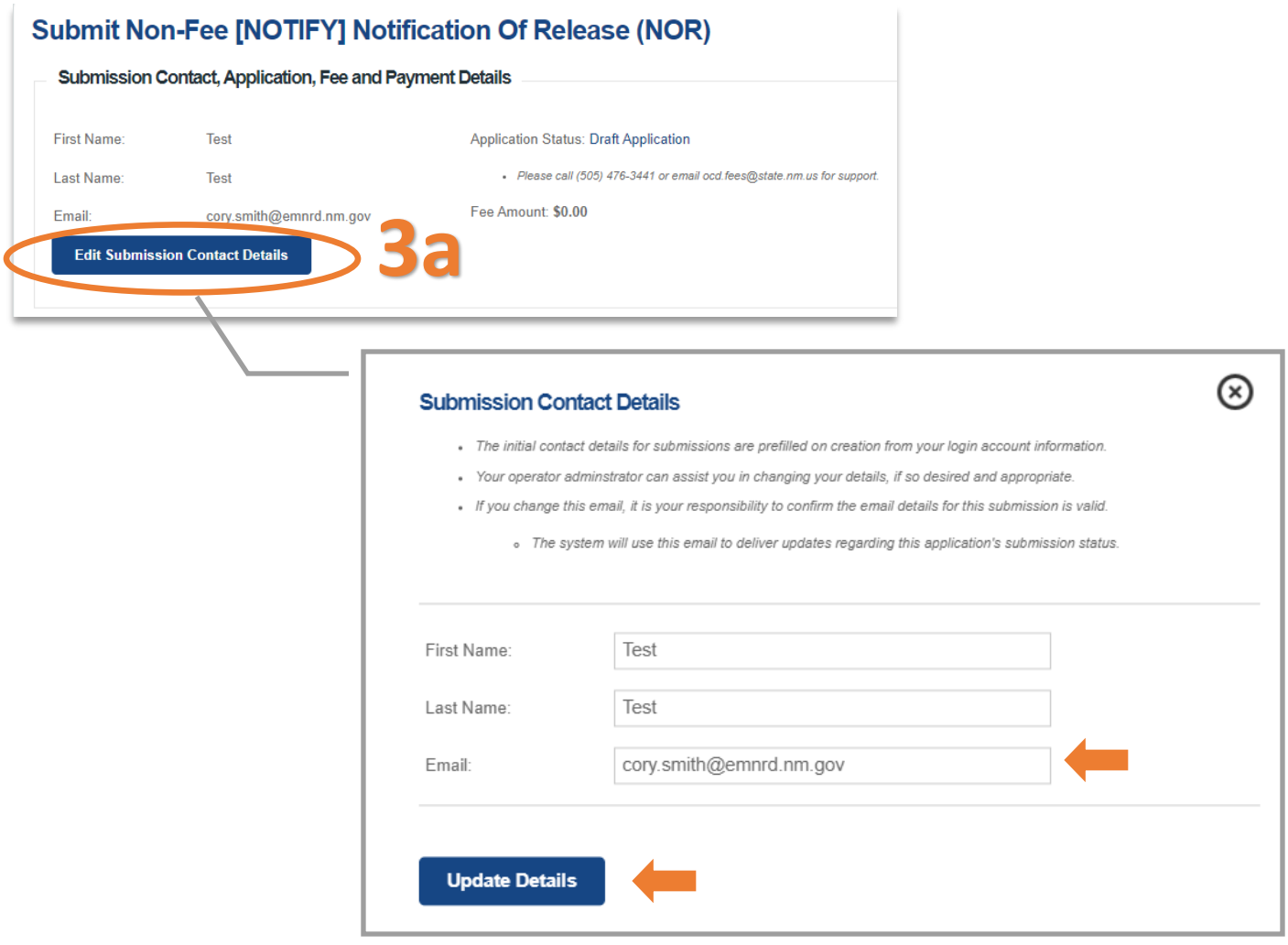


FIGURE 4

SUBMITTING LINER AND SAMPLING NOTICES (C-141L & C-141N)

4. Add the incident ID # from your Notice of Release (NOR) e-mail, C-141 Initial or from your records. Alternatively if in your NOR application you gave your release a custom site name, you can also search by typing in the name into the box.

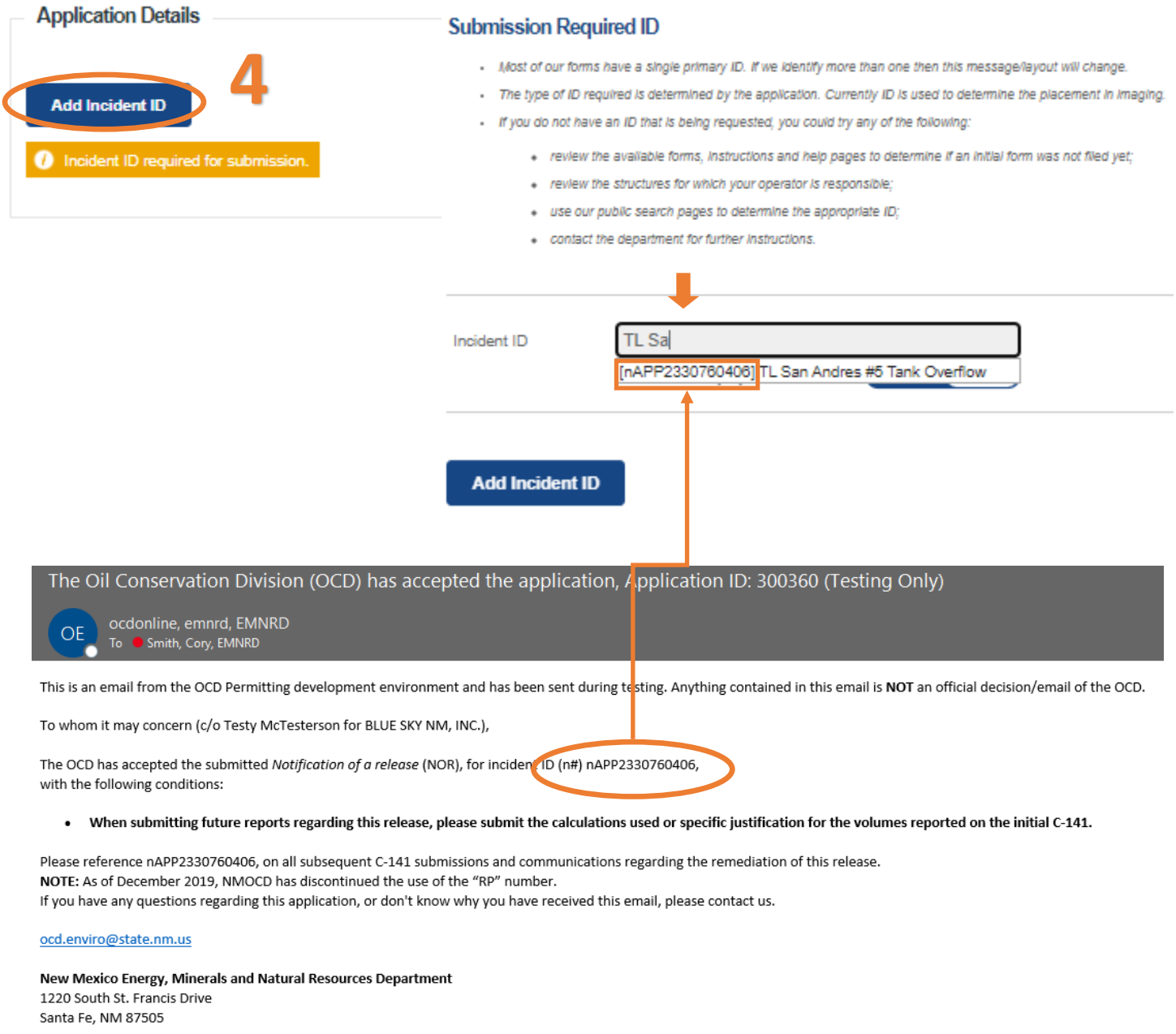
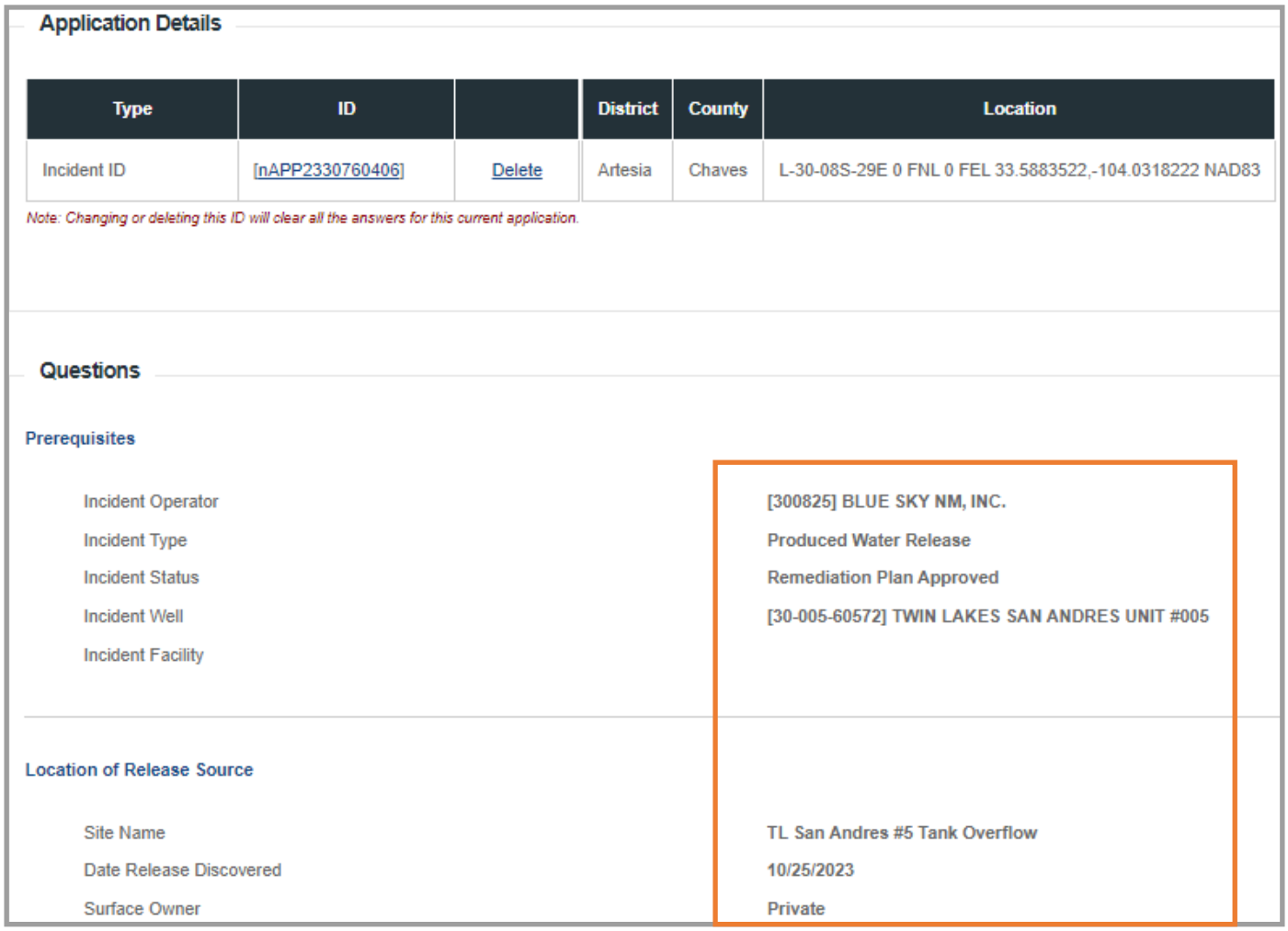


FIGURE 4

SUBMITTING LINER AND SAMPLING NOTICES (C-141L & C-141N)

Once you have entered a valid incident number the applications will populate data based upon answers that were submitted in the Notice Of Release application and the status of the incident based upon approvals of C-141 applications. Users should verify that the data is correct and that they are providing notice to the correct incident.



Application Details

Type	ID		District	County	Location
Incident ID	[nAPP2330760406]	Delete	Artesia	Chaves	L-30-08S-29E 0 FNL 0 FEL 33.5883522,-104.0318222 NAD83

Note: Changing or deleting this ID will clear all the answers for this current application.

Questions

Prerequisites

Incident Operator	[300825] BLUE SKY NM, INC.
Incident Type	Produced Water Release
Incident Status	Remediation Plan Approved
Incident Well	[30-005-60572] TWIN LAKES SAN ANDRES UNIT #005
Incident Facility	

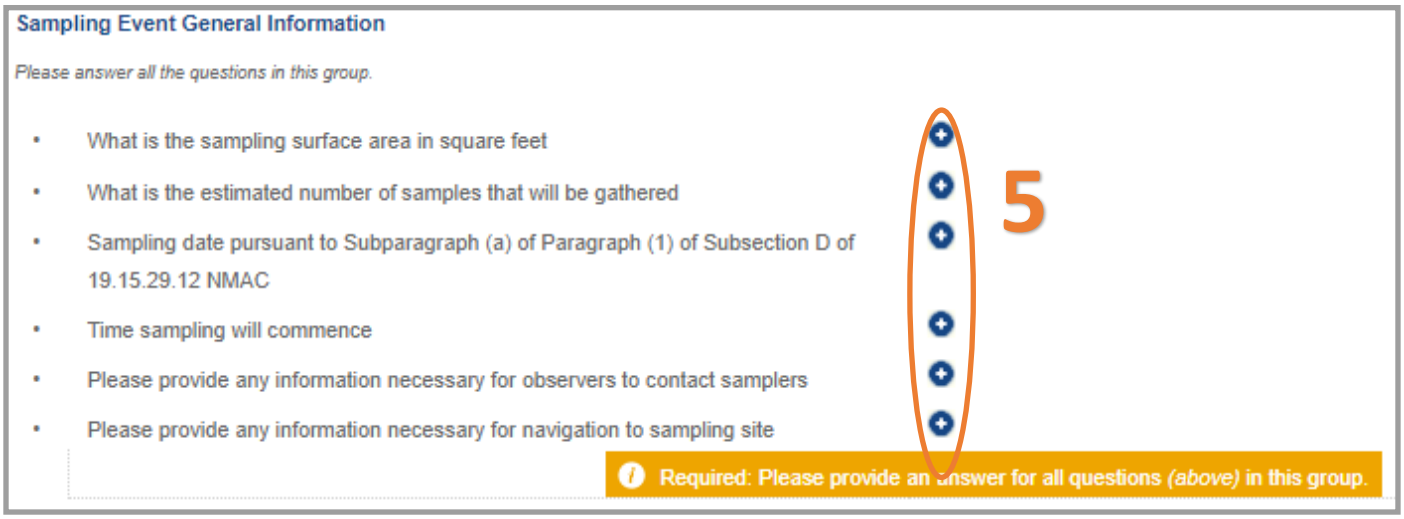
Location of Release Source

Site Name	TL San Andres #5 Tank Overflow
Date Release Discovered	10/25/2023
Surface Owner	Private

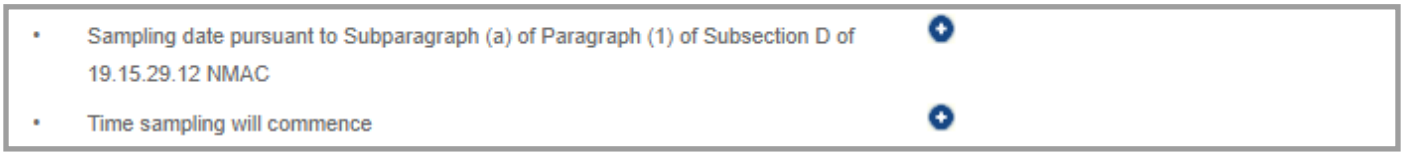
FIGURE 4

SUBMITTING LINER AND SAMPLING NOTICES (C-141L & C-141N)

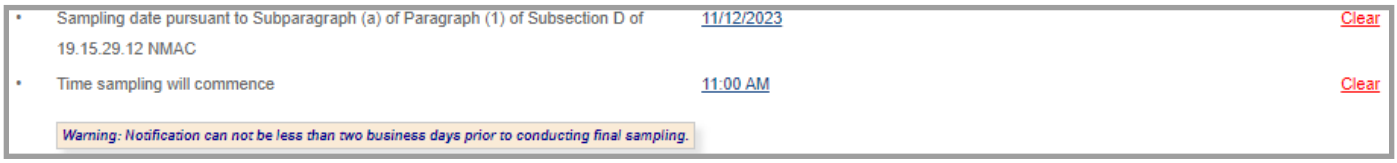
5. Sampling Notifications have 6 required questions that must be answered prior to submission.



Users will provide the surface area rounded to the nearest whole number of the area that is intended to be sampled for this notice. Additionally, the user will provide the estimated number of samples that will be collected during this sampling event. In general this number should be Surface Area / 200sqft. Alterative sampling plans may still be approved in remediation plans or via e-mail.



Users will provide the Date (MM/DD/YYYY) and Time (hh:mm: AM/PM Mountain Time) of the scheduled sampling notification. Samples that are collected outside of the notified time may be rejected by the OCD, and additional samples may be required. In the event that the date/time changes, submit an addition-al notice ASAP.

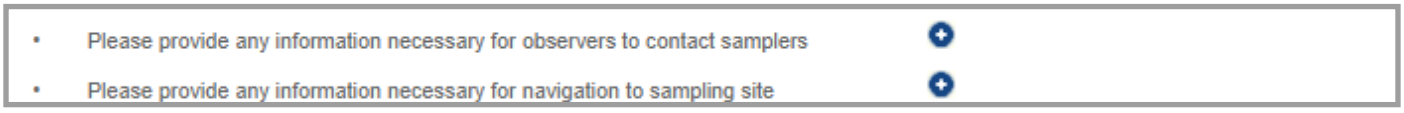


NOTE: At this current time due to this being a new process OCD Permitting will provide a warning that your notice does not meet the requirements of two business days. User may continue to submit applications with this error this will likely change in future development. This is a compliance issues pursuant to 19.15.29.12.D (1)(a) NMAC and can be subject to compliance actions pursuant to 19.15.5 NMAC.

FIGURE 4

SUBMITTING LINER AND SAMPLING NOTICES (C-141L & C-141N)

5. *Continued*



Users will provide any information necessary for the Observers of the Sampling Event. **This section is NOT to be used to request alternative sampling size or approvals of sampling plans.**
Examples: Business contact phone numbers. Details of the inspection.

Users will provide any info necessary for Navigation to the Sampling event Site.
Examples: 23 miles south of Artesia turn Left at Mile Post. Location has a locked gate etc.

Follow best practice for not including Personal Identifiable Information (PII). This data is public DO NOT include any gate combination codes, or Private Names/Addresses/Phone Numbers, only Business contacts. OCD anticipates that Notifications of Liner Inspections and Sampling will be further developed in later phases.

6. Review your Notification for accuracy and completeness. This is the last chance to make any corrections to this data before submitting the document to the OCD.

Clicking the Delete button will clear the entire application and remove it from your application queue.

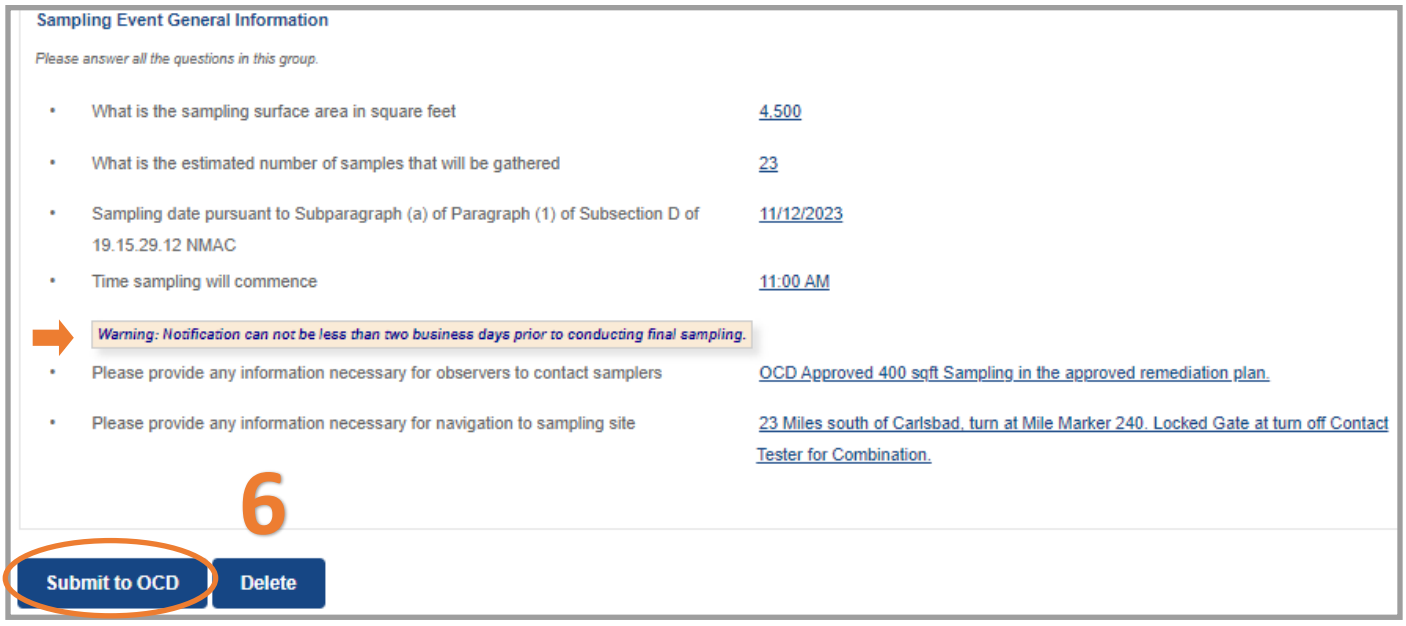


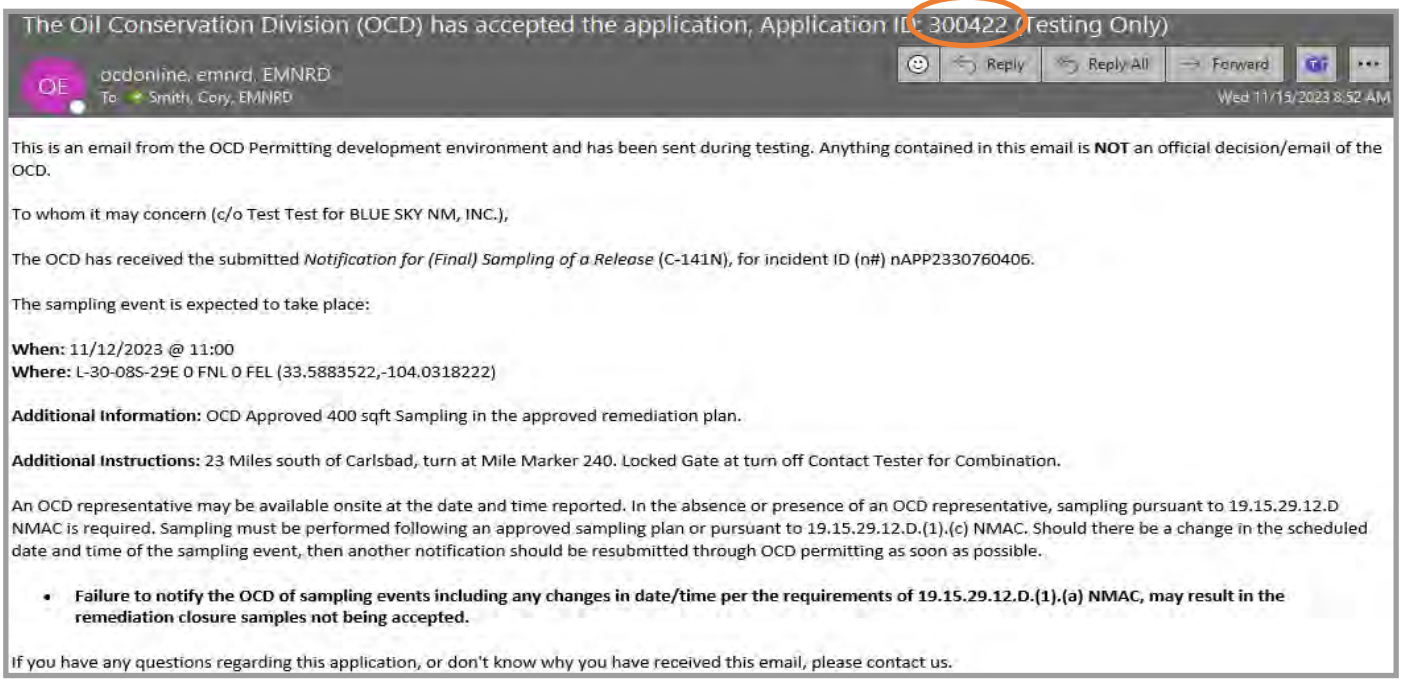
FIGURE 4

SUBMITTING LINER AND SAMPLING NOTICES(C-141L & C-141N)

Once the User has submitted the Notice of Sampling to the OCD. The User email which was identified in step 3a will receive an email from emnrd.ocdonline@emnrd.nm.gov indicated that the Notice was accepted. Additionally the email will provide the User with the incident # (napp2330760406) for verification.

OCD Permitting also automatically will notify the assigned incident review of the notice and adds a sampling Notice date to the incident Date Stack.

This complete submitting a Notification of Sampling.



The Oil Conservation Division (OCD) has accepted the application, Application ID: 300422 (Testing Only)

OE ocdonline, emnrd, EMNRD
To Smith, Cory, EMNRD

Reply | Reply All | Forward

Wed 11/15/2023 8:52 AM

This is an email from the OCD Permitting development environment and has been sent during testing. Anything contained in this email is **NOT** an official decision/email of the OCD.

To whom it may concern (c/o Test Test for BLUE SKY NM, INC.),

The OCD has received the submitted *Notification for (Final) Sampling of a Release* (C-141N), for incident ID (n#) nAPP2330760406.

The sampling event is expected to take place:

When: 11/12/2023 @ 11:00
Where: L-30-08S-29E 0 FNL 0 FEL (33.5883522,-104.0318222)

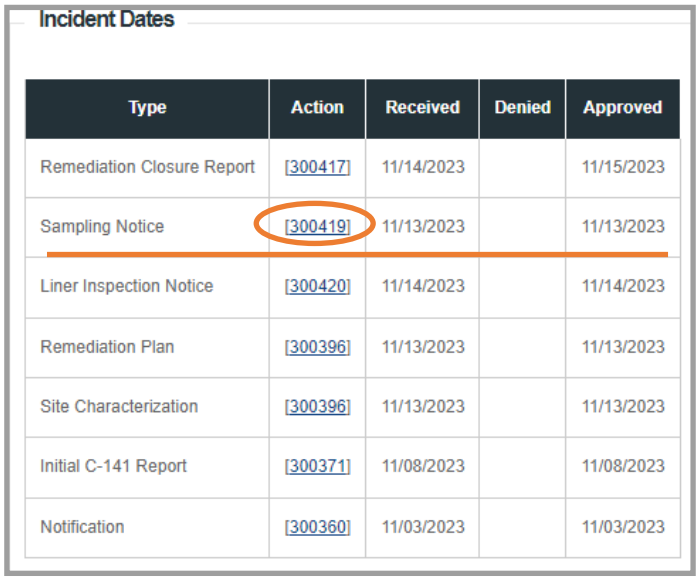
Additional Information: OCD Approved 400 sqft Sampling in the approved remediation plan.

Additional Instructions: 23 Miles south of Carlsbad, turn at Mile Marker 240. Locked Gate at turn off Contact Tester for Combination.

An OCD representative may be available onsite at the date and time reported. In the absence or presence of an OCD representative, sampling pursuant to 19.15.29.12.D NMAC is required. Sampling must be performed following an approved sampling plan or pursuant to 19.15.29.12.D.(1).(c) NMAC. Should there be a change in the scheduled date and time of the sampling event, then another notification should be resubmitted through OCD permitting as soon as possible.

- **Failure to notify the OCD of sampling events including any changes in date/time per the requirements of 19.15.29.12.D.(1).(a) NMAC, may result in the remediation closure samples not being accepted.**

If you have any questions regarding this application, or don't know why you have received this email, please contact us.



Incident Dates

Type	Action	Received	Denied	Approved
Remediation Closure Report	[300417]	11/14/2023		11/15/2023
Sampling Notice	[300419]	11/13/2023		11/13/2023
Liner Inspection Notice	[300420]	11/14/2023		11/14/2023
Remediation Plan	[300396]	11/13/2023		11/13/2023
Site Characterization	[300396]	11/13/2023		11/13/2023
Initial C-141 Report	[300371]	11/08/2023		11/08/2023
Notification	[300360]	11/03/2023		11/03/2023

FIGURE 5

SUBMITTING A REMEDIATION CLOSURE REQUEST(C-141-V-Closure)

Remediation Closure Request can be submitted from the Initial C-141 Application within 15 days of discovery however, this is a very rare event. Most C-141 Closure Requests will be submitted with a Dig & Haul remediation plan that has been completed. Regardless of "When" the application is sent in, the remediation closure section of the C-141 is used to ensure the responsible party has met the closure conditions outlined in 19.15.29.12 NMAC. To submit a Remediation Closure Request follow the directions below.

1. Left Click on the Submissions tab in the top right of the website.
2. Left Click on Releases and Select [C-141] Release Corrective Action ($150 fee required)

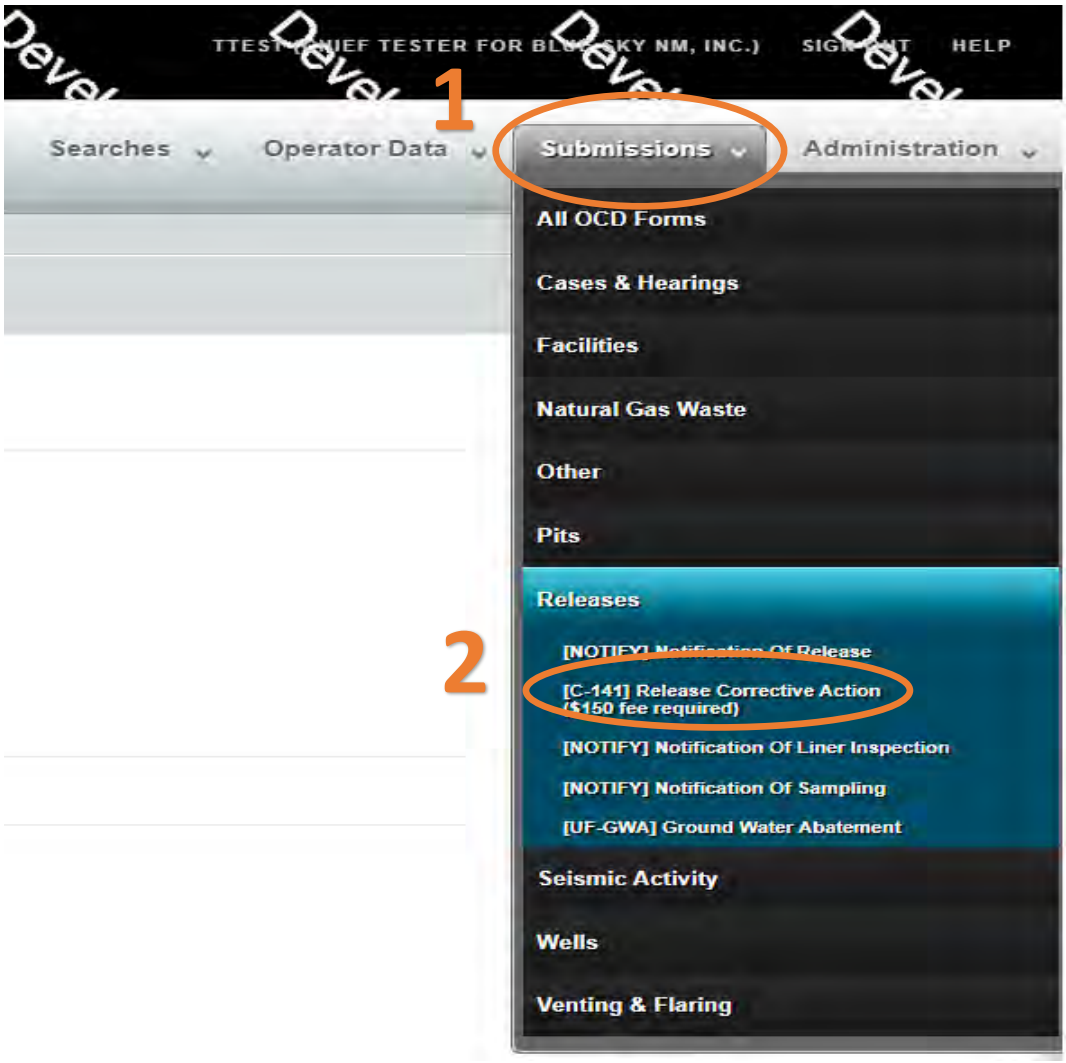


FIGURE 5

SUBMITTING A REMEDIATION CLOSURE REQUEST(C-141-V-Closure)

On this Permitting page, users can review the status of all previous submitted C-141 applications for their current OGRID . The User can also resume working on a previous draft version of the application by left clicking on the PO Number hyperlink. Application types that are under OCD Review or have been Approved/ Rejected cannot be modified.

3. To create a new C-141 Application scroll down and left click on the New C-141 Application button.

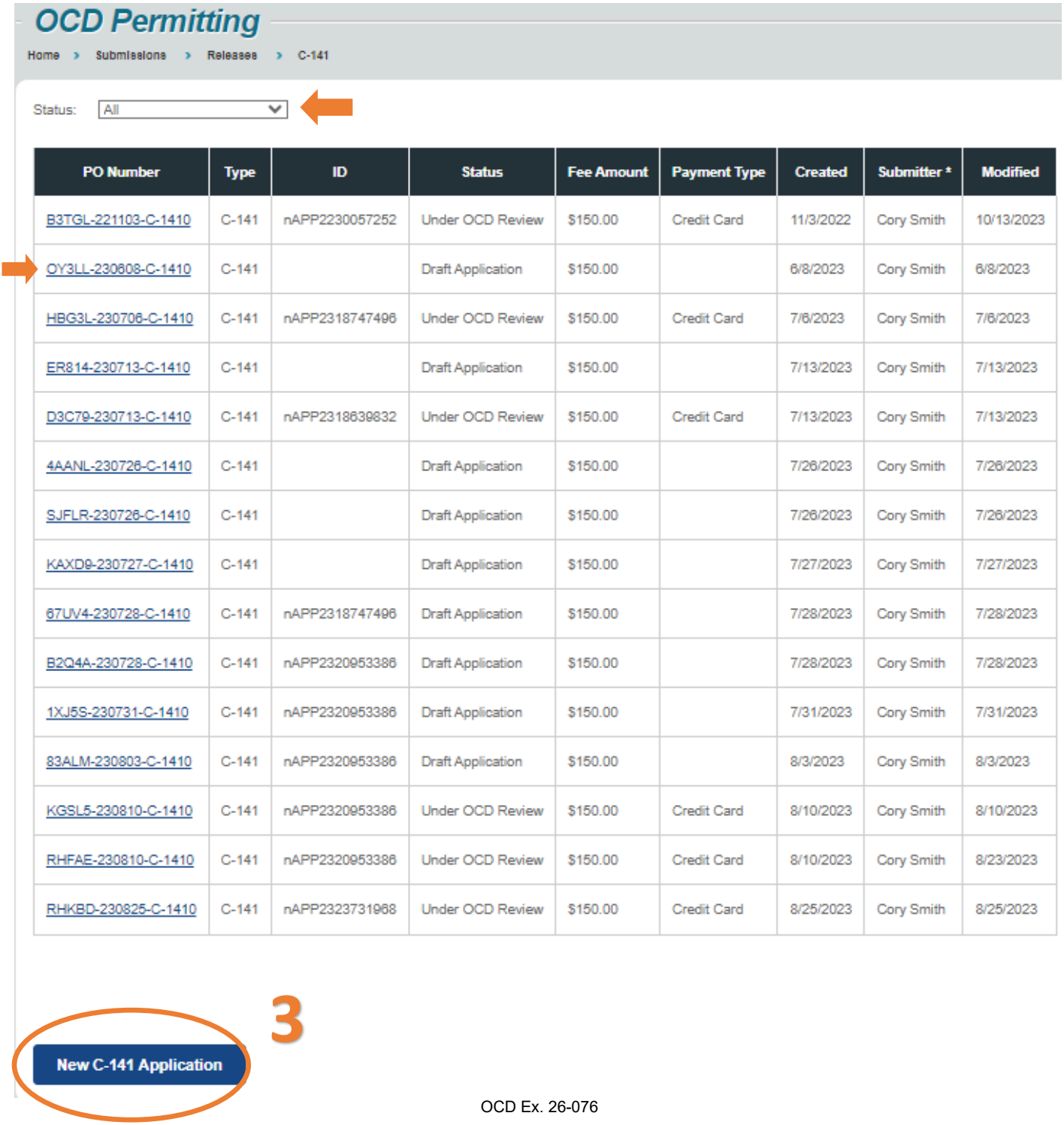


FIGURE 5

SUBMITTING A REMEDIATION CLOSURE REQUEST(C-141-V-Closure)

3a. OCD Permitting general functions will display any errors in the orange ribbon band at the top of your screen and inline while working through the applications.

The Submissions Contact Application, Fee Payment section of the C-141 is automatically filled out based up-on the Users default contact information. The contact E-mail used in this section is where any approvals/ rejections will be sent too. In the even that you are submitting this on behalf of another member of your Organization you may edit the contact information by clicking on the edit submissions contact details button.

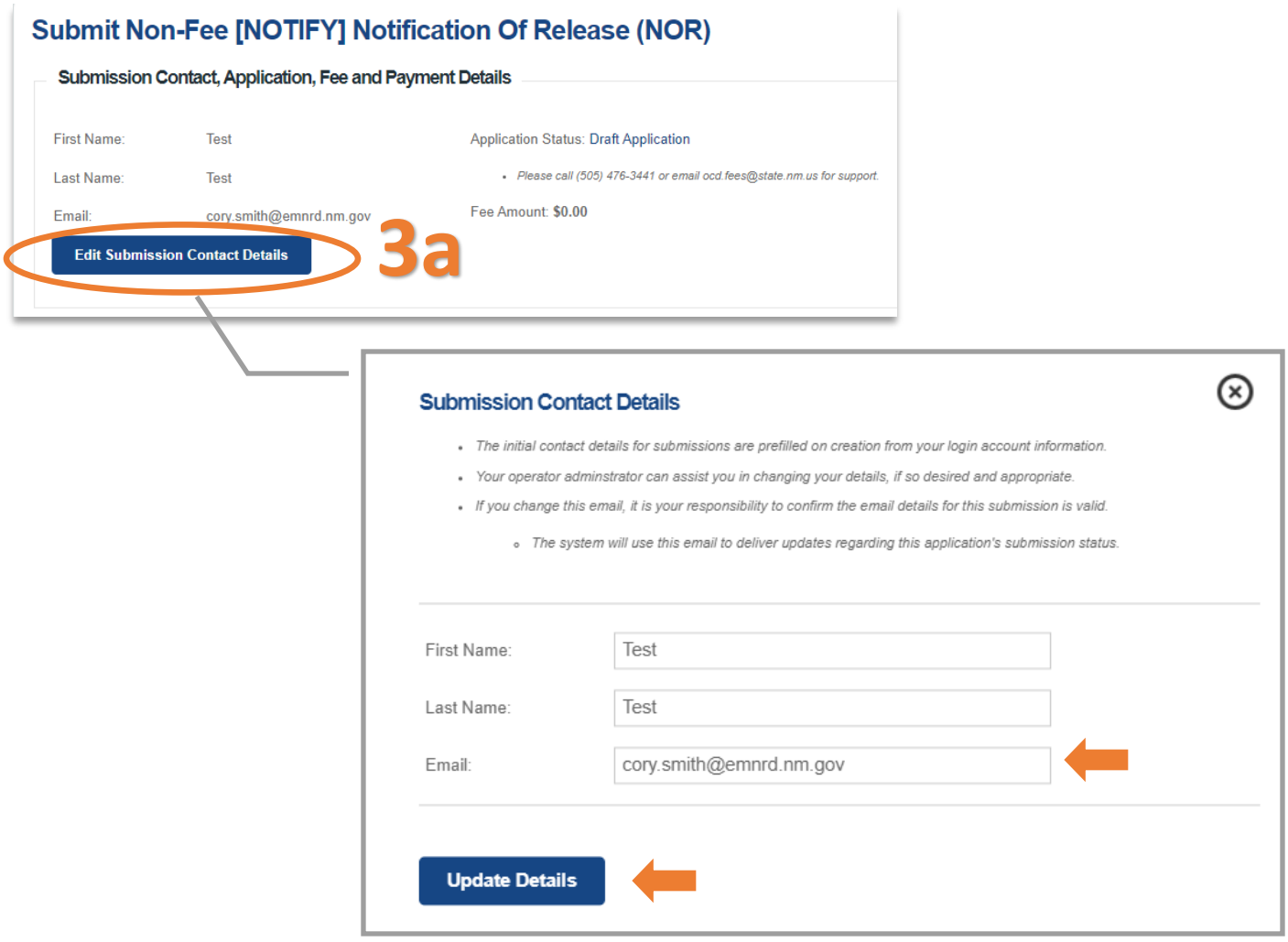


FIGURE 5

SUBMITTING A REMEDIATION CLOSURE REQUEST(C-141-V-Closure)

4. Add the incident ID # from your Notice of Release (NOR) e-mail, C-141 Initial or from your records. Alternatively if in your NOR application you gave your release a custom site name you can also search by typing in the name into the box.

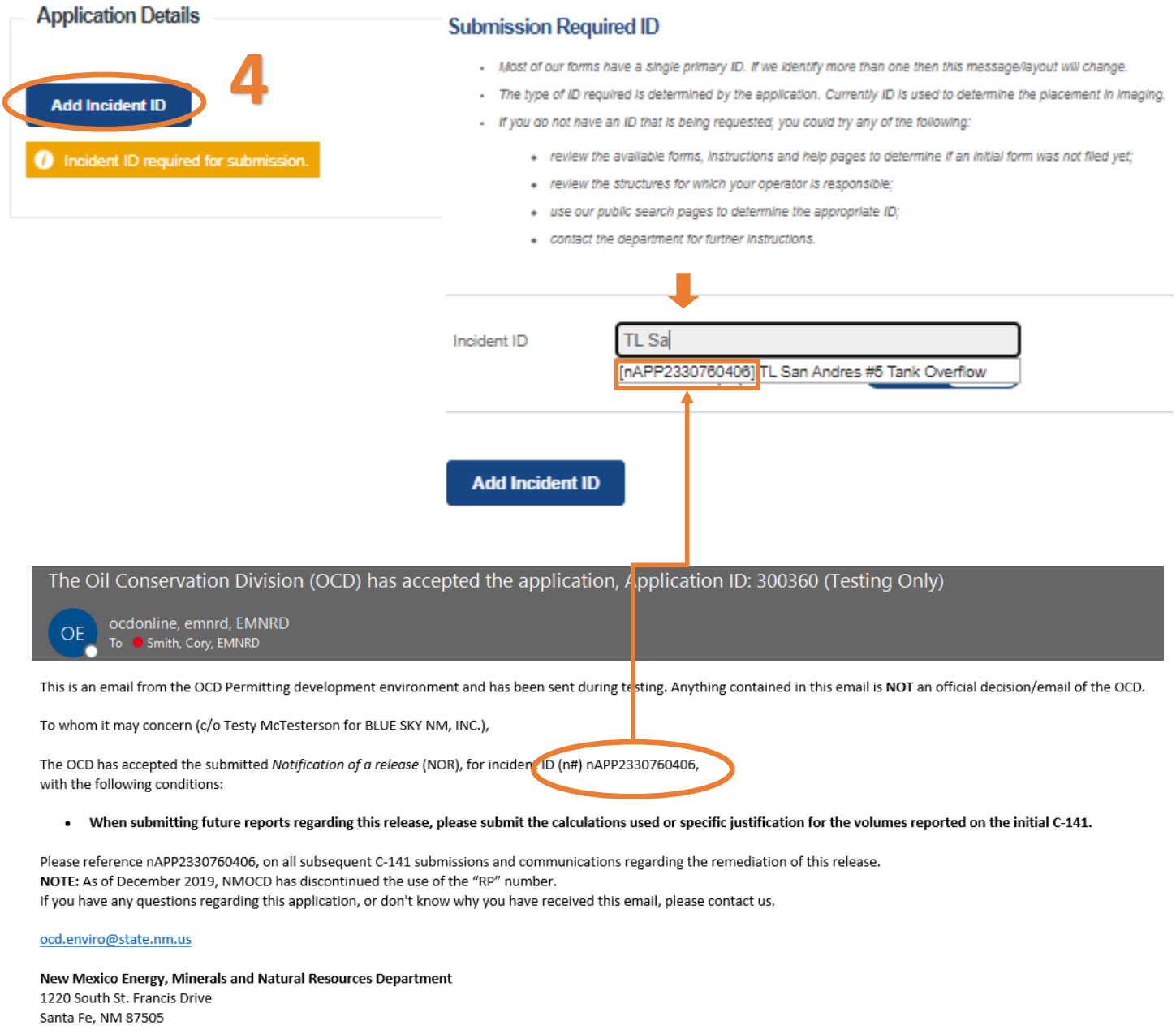


FIGURE 5

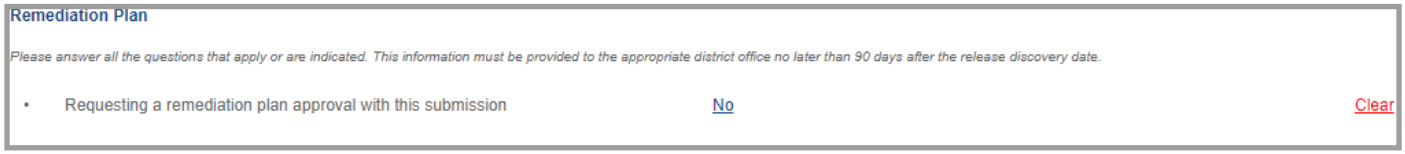
SUBMITTING A REMEDIATION CLOSURE REQUEST(C-141-V-Closure)

Once you have entered a valid incident number the applications will populate all of the C-141 questions. You may notice that the questions are identical to the Initial/ Remediation Plan C-141 and that some of the questions will already have answers in them. These answers are populated from the **APPROVED** NOR/C-141 applications that were submitted in Figure 1/2/3. This functionality works for all C-141 submissions allowing the User to correct/validate data provided to the OCD with each submission. Pre-populated answers only appear with approved data therefore, any answers provided in an application that is Under OCD Review or that was Rejected will be required to be reentered for each submission until the questions are in an approved application.

Please note, that if the user changes answers to previously approved questions they will also have to include updated attachments for that section.

Example: The user answered the Requesting Remediation Plan Approval with this submission in the C-141 Initial (Figure 1) as "No". This answer signaled to OCD Permitting that the C-141 Application was an Initial C-141. Now that the User wants to submit a Remediation plan for approval they need to change the answer to this question to "Yes" .

C-141 Initial Application



C-141 Remediation Plan Application: By Answer yes additional Remediation Plan questions pop up.

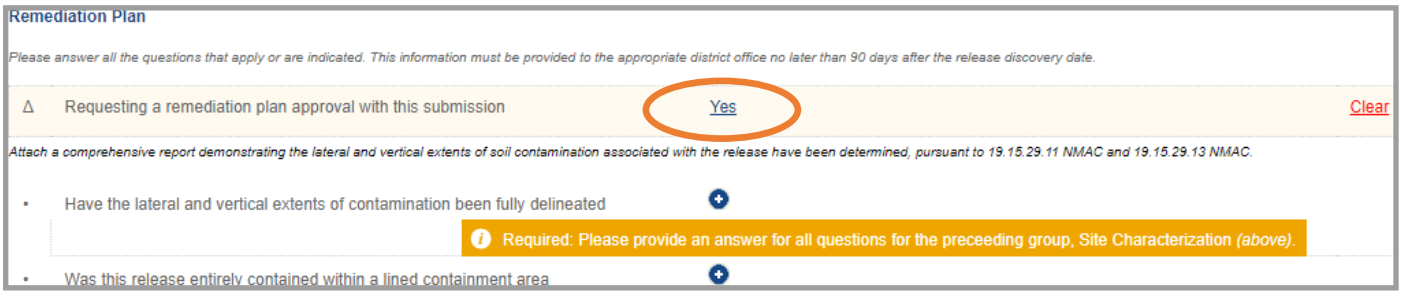


FIGURE 5

SUBMITTING A REMEDIATION CLOSURE REQUEST(C-141-V-Closure)

5. Using the Data from Figure 1/2/3 this submission will pick up where those ones left off. Please keep in mind that the User have the ability to submit ALL DATA from Figure 1/2/3 in ONE application if possible. In most cases the User will not have remediation closure request data within 15 days of discovery and will be submitted after a Initial C-141 application has been submitted.

To Start a Remediation Closure request , scroll all the way down to the bottom of the C-141 Application and Answer the Following question as “Yes”. This will flag OCD Permitting that the User is submitting a Closure Request and will reflect the appropriate Incident status upon submission.

Note: Incorrect submission types where the attachments don’t match up will be rejected. I.E Submitting a Remediation Closure Request under the Remediation Plan.

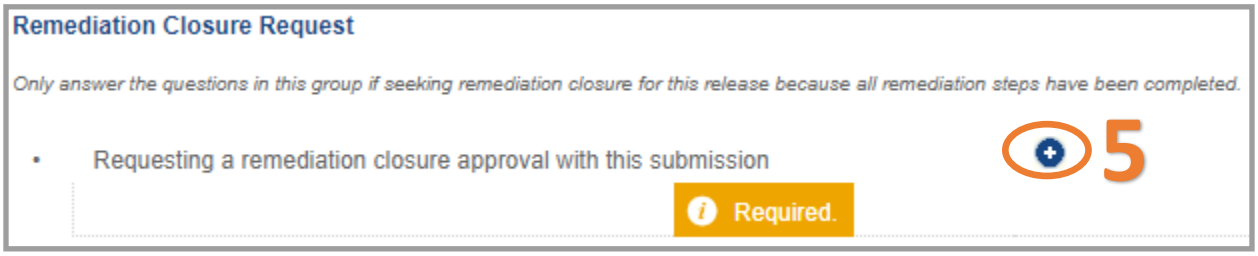


FIGURE 5

SUBMITTING A REMEDIATION CLOSURE REQUEST(C-141-V-Closure)

6. Additional Remediation Closure questions will become required upon answering “Yes”. The User must answer all required questions in this section to move forward.

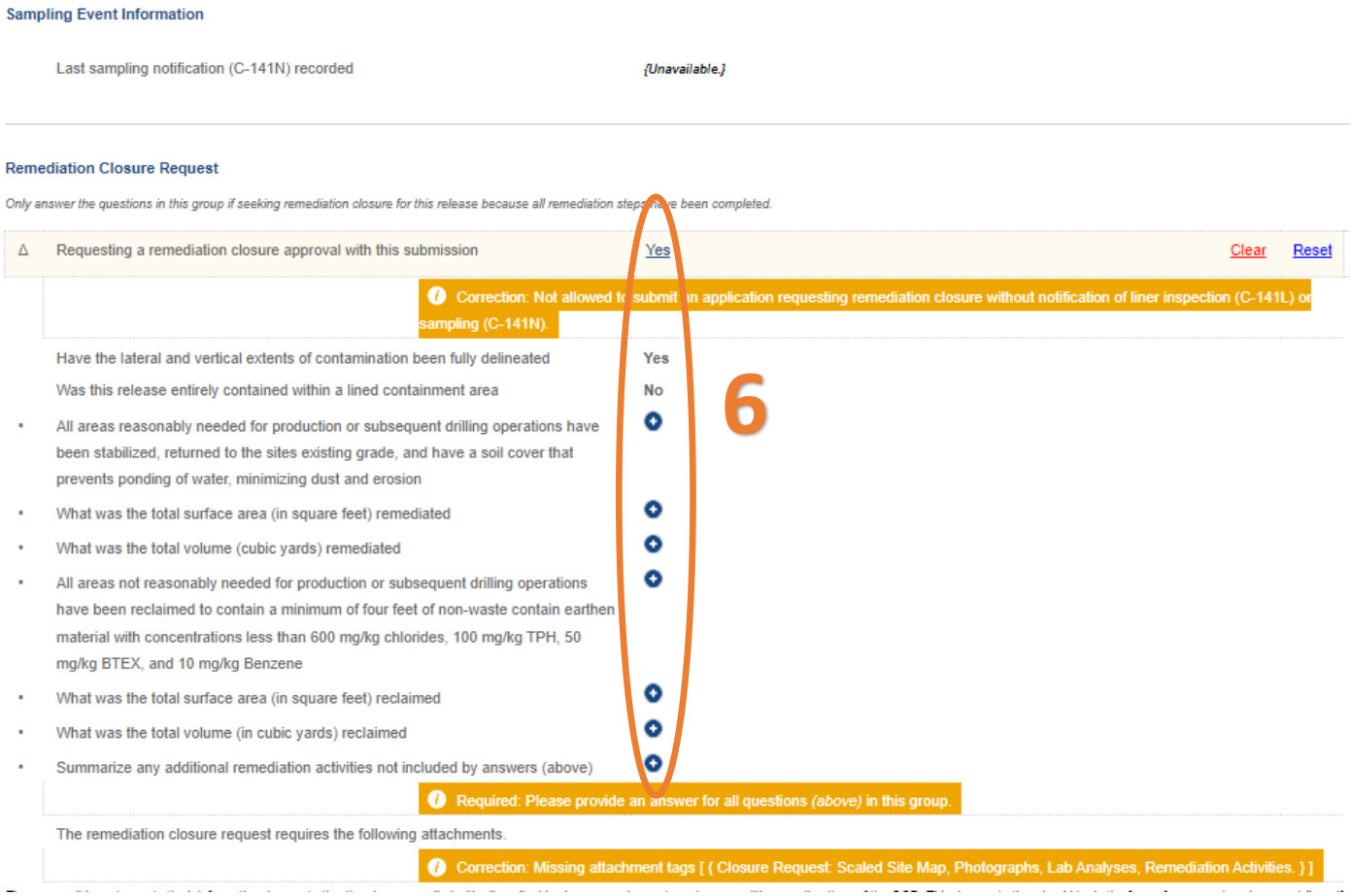


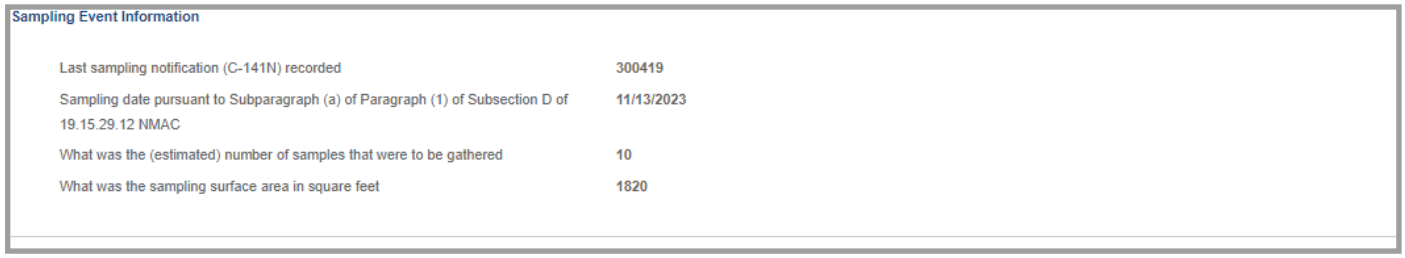
FIGURE 5

SUBMITTING A REMEDIATION CLOSURE REQUEST(C-141-V-Closure)

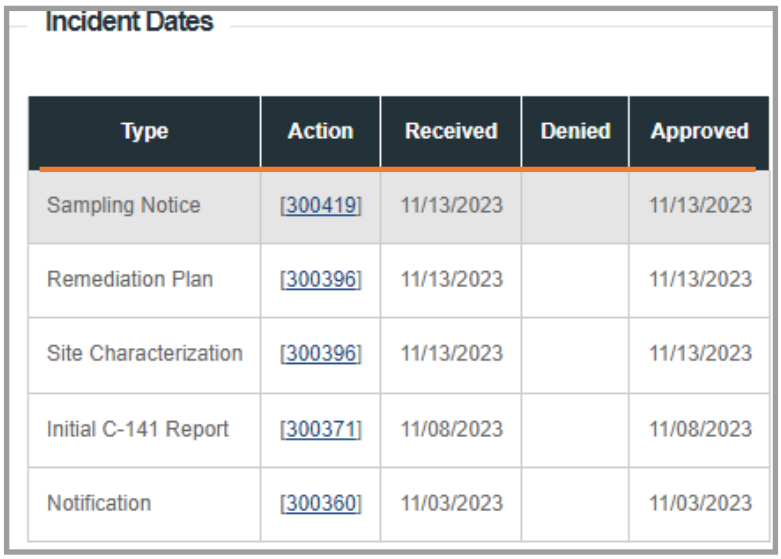
6. *Continued*

If the Sampling Event Information is showing {Unavailable.] that means the User has not submitted a sampling notice to the OCD. Pursuant to 19.15.29.12.D(1)(a), Operators are required to provide the OCD two business days notification prior to the collection of final sampling. Figure 4 will detail this process in detail. However, for the Remediation Closure Report the user needs to know that they may not request remediation closure without a confirmation sampling notice on file. OCD will use the provide information from sampling notices to schedule onsite inspections and to reference Laboratory Chain of Custody and the number of samples collected.

Samples that are collected without proper notification may not be accepted for Remediation closure and the responsible party may be required to collect additional confirmation samples.



Above is an example of a completed Sampling Event Information. This section will display the last submitted notification. However, for multiple sampling notices, sample dates are also recorded in the incident details.



Incident Dates

Type	Action	Received	Denied	Approved
Sampling Notice	[300419]	11/13/2023		11/13/2023
Remediation Plan	[300396]	11/13/2023		11/13/2023
Site Characterization	[300396]	11/13/2023		11/13/2023
Initial C-141 Report	[300371]	11/08/2023		11/08/2023
Notification	[300360]	11/03/2023		11/03/2023

FIGURE 5

SUBMITTING A REMEDIATION CLOSURE REQUEST(C-141-V-Closure)

6. *Continued*

All areas reasonable needed for production Operations or subsequent drilling operations **do not have to be reclaimed** immediately but those areas must be backfilled and stabilized. These areas will be required to be reclaimed at a later date and will be reported in the Reclamation Report request (Figure 6)

Now that remediation has been completed, total surface area and total volume of remediated impacts are known to the Operator. **<u>These should not be estimates</u>.**

All areas **NOT** reasonable needed for production Operations or subsequent drilling **operations have to be reclaimed** immediately. This means that those areas must be non waste containing and meet the reclamations standards of 600 mg/kg Chlorides (or background) 100 mg/kg TPH, 50 mg/kg BTEX, 10 mg/kg Benzene. They must also be stabilized, returned to existing grade and have a soil cover that prevents ponding and erosion.

User must provide the total area and volume of areas not reasonable needed for production or subsequent drilling operations that were reclaimed at the time of Remediation Closure Request. If all impacted areas are reasonable needed then the User will answer “Yes” and report “0” area and volume reclaimed.

FIGURE 5

SUBMITTING A REMEDIATION CLOSURE REQUEST(C-141-V-Closure)

7. When requestion Remediation Closure Approval the User must submit 1 or more attachments that include the below attachment tags. Users must review their attached document to ensure that all of the items being requested are in the attached file(s). Attachments/Tags will likely change in future development. To add an attachment scroll to the top of the application left click the Blue Add Attachment Button. Select the type of attachment you are uploading from the drop down list. Left click the Choose file button to select the file from your computer to upload. Once you have selected the file you wish to upload save the upload by left clicking the Upload selected Files. Repeat this process for multiple Attachments.

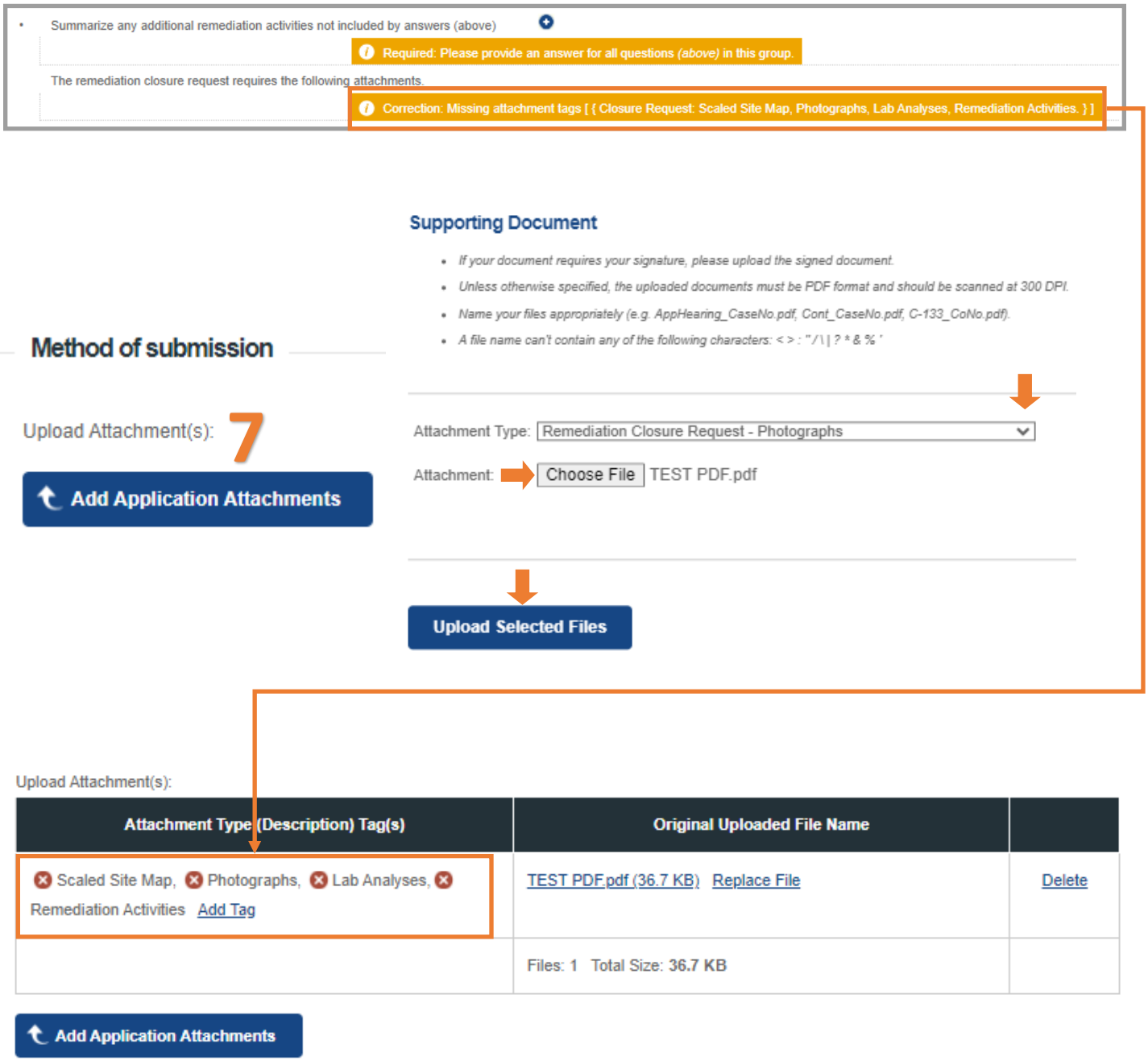


FIGURE 5

SUBMITTING A REMEDIATION CLOSURE REQUEST(C-141-V-Closure)

Example of a Completed Remediation Closure Request.

Sampling Event Information

Last sampling notification (C-141N) recorded	300419
Sampling date pursuant to Subparagraph (a) of Paragraph (1) of Subsection D of 19.15.29.12 NMAC	11/13/2023
What was the (estimated) number of samples that were to be gathered	10
What was the sampling surface area in square feet	1820

Remediation Closure Request

Only answer the questions in this group if seeking remediation closure for this release because all remediation steps have been completed.

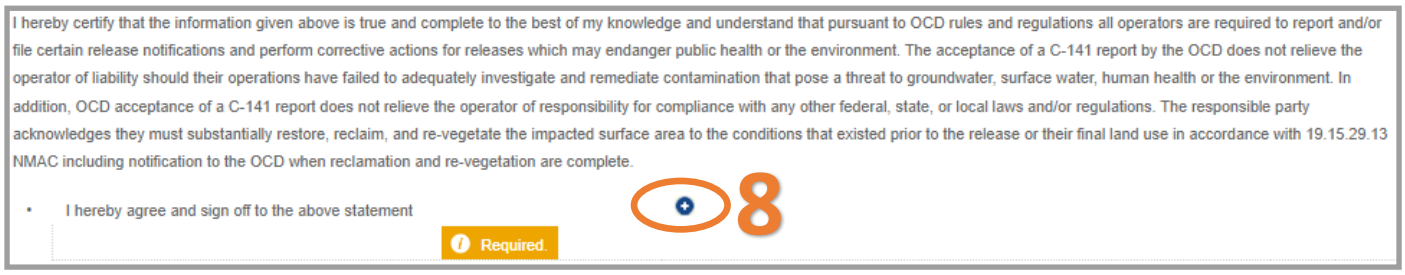
Δ	Requesting a remediation closure approval with this submission	Yes	Clear	Reset
	Have the lateral and vertical extents of contamination been fully delineated	Yes		
	Was this release entirely contained within a lined containment area	No		
Δ	All areas reasonably needed for production or subsequent drilling operations have been stabilized, returned to the sites existing grade, and have a soil cover that prevents ponding of water, minimizing dust and erosion	Yes	Clear	Reset
Δ	What was the total surface area (in square feet) remediated	1820	Clear	Reset
Δ	What was the total volume (cubic yards) remediated	410	Clear	Reset
Δ	All areas not reasonably needed for production or subsequent drilling operations have been reclaimed to contain a minimum of four feet of non-waste contain earthen material with concentrations less than 600 mg/kg chlorides, 100 mg/kg TPH, 50 mg/kg BTEX, and 10 mg/kg Benzene	Yes	Clear	Reset
Δ	What was the total surface area (in square feet) reclaimed	0	Clear	Reset
Δ	What was the total volume (in cubic yards) reclaimed	0	Clear	Reset
Δ	Summarize any additional remediation activities not included by answers (above)	Release was contained to Areas reasonable needed for Production.	Clear	Reset

The responsible party must attach information demonstrating they have complied with all applicable closure requirements and any conditions or directives of the OCD. This demonstration should be in the form of a comprehensive report (in .pdf format) including a scaled site map, sampling diagrams, relevant field notes, photographs of any excavation prior to backfilling, laboratory data including chain of custody documents of final sampling, and a narrative of the remedial activities. Refer to 19.15.29.12 NMAC.

FIGURE 5

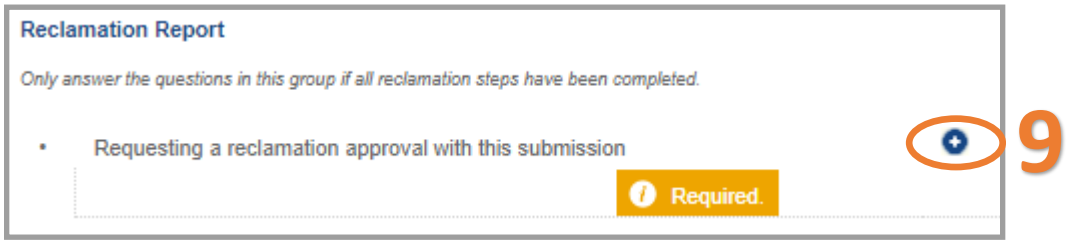
SUBMITTING A REMEDIATION CLOSURE REQUEST(C-141-V-Closure)

8. Once all of the questions have been answered. The user should review the answers and then Sign/Certify the data for submission.



9. The User now must answer if they are requesting a Reclamation Report approval with this submission. If the user answers "no", this submission will be classified as a Remediation Closure Report. If the User selects yes and there is not an approved Initial C-141/Remediation Plan on file this submission will ALSO count as a Initial C-141 + Remediation plan + Remediation Closure Request + Reclamation Report (Figure 6).

Please note that OCD does not approve partial applications in the event that the User submits an Initial C-141 + Remediation Plan + Remediation Closure and the application is rejected, all C-141 types will be rejected.



10. Review your C-141 application for accuracy and completeness. This is the last chance before submitting the document to the OCD to make any corrections to this data. Operators will have the ability to modify these questions/response on any subsequent C-141 submission. To submit the application to the OCD click the Make Payment button. You will be directed to a Third Party website to process payment.

Clicking the Delete button will clear the entire application and remove it from your application que.

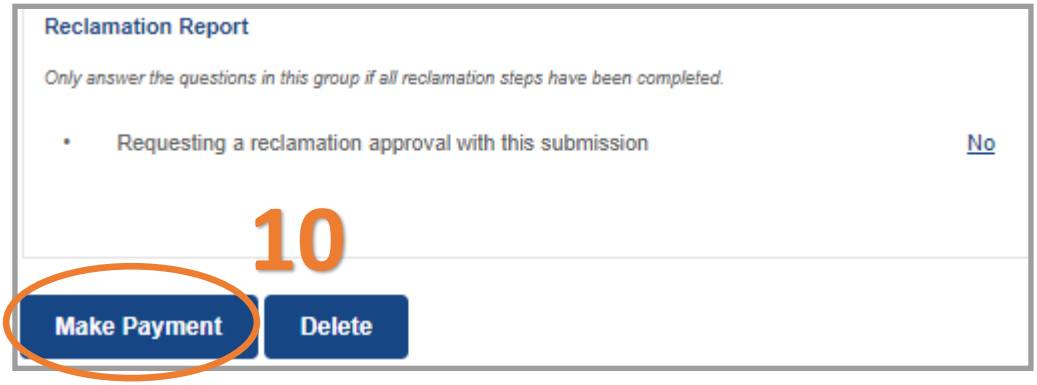


FIGURE 5

SUBMITTING A REMEDIATION CLOSURE REQUEST(C-141-V-Closure)

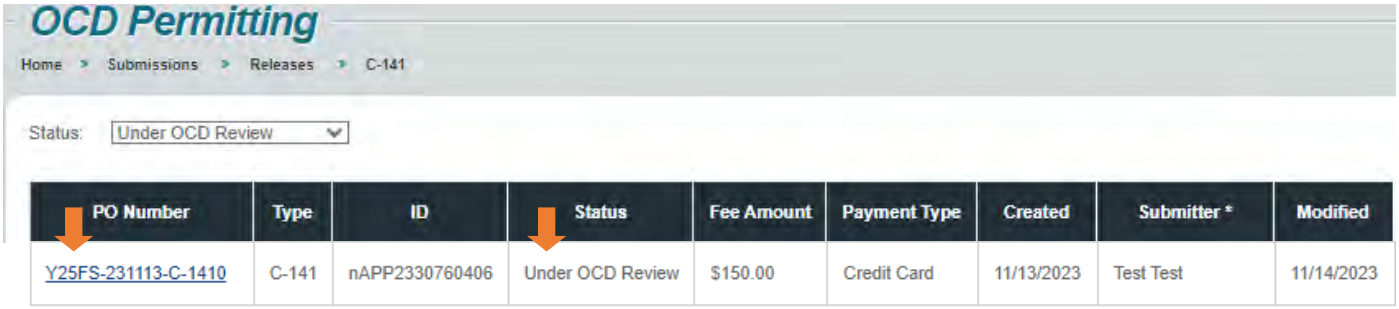
Once the user has submitted the C-141 Remediation Closure Report to the OCD. The user email which was identified in step 3a will receive an email from emnrd.ocdonline@emnrd.nm.gov that is the receipt and proof of submission to the OCD. The receipt provides an PO Number that can be searched on the OCD Action Status Page.

PO Number: Y25FS-231113-C-1410
Payment Date: 11/14/2023
Payment Amount: $150.00
Payment Type: Credit Card

Application Type: Application for administrative approval of a release notification and corrective action
Fee Amount: $150.00
Application Status: Under OCD Review

OGRID: 300825
First Name: Test
Last Name: Test
Email: cory.smith@emnrd.nm.gov

At this state the Remediation Closure Report C-141 Application is Under OCD Review (Submitted) and the incident status will change to reflect the current status of the incident.



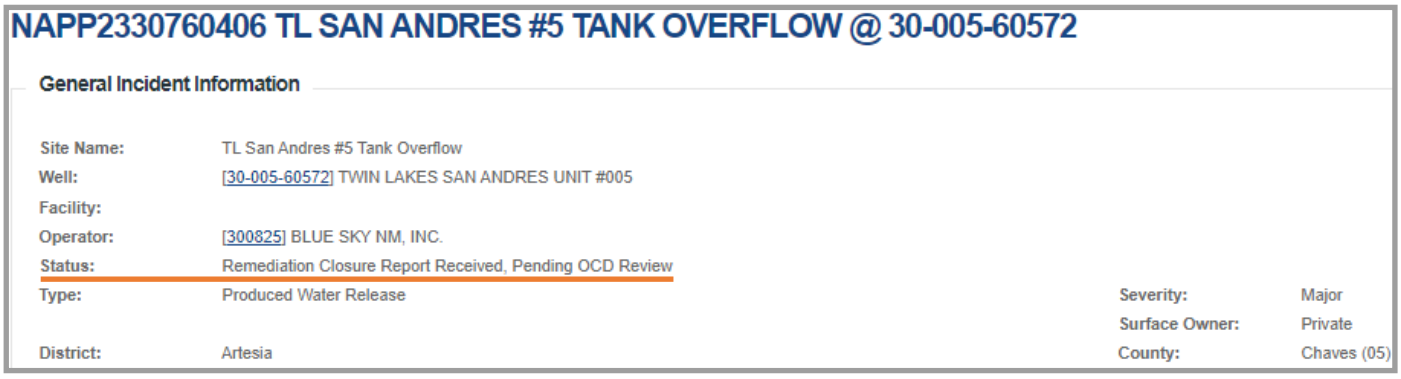
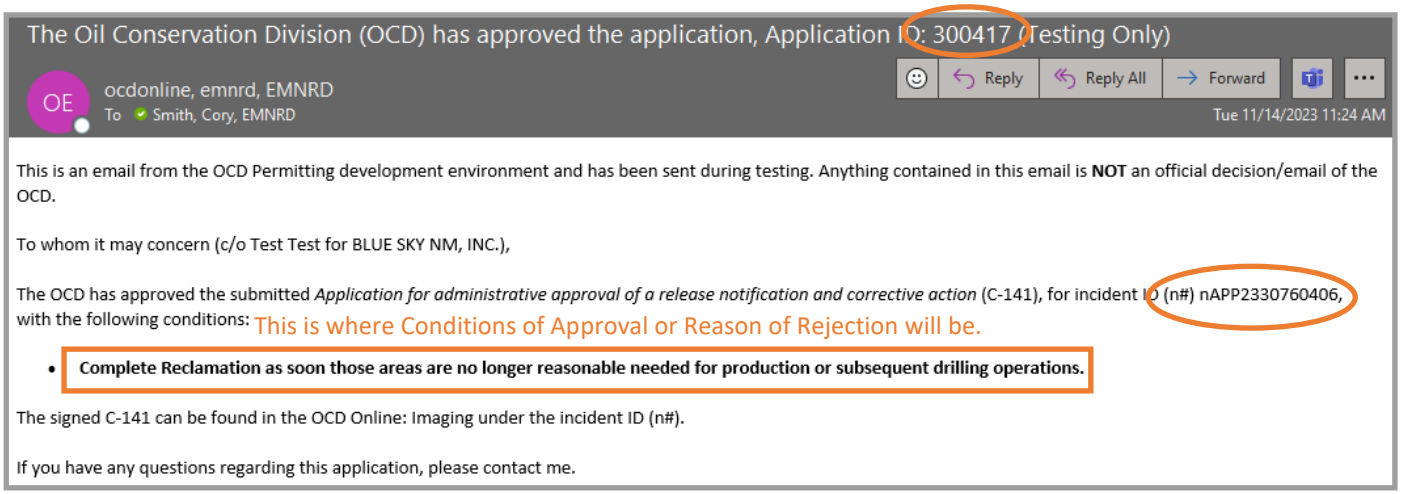


FIGURE 5

SUBMITTING A REMEDIATION CLOSURE REQUEST(C-141-V-Closure)

Example of Accepted Application.



The Oil Conservation Division (OCD) has approved the application, Application ID: 300417 (Testing Only)

OE ocdonline, emnrd, EMNRD
To Smith, Cory, EMNRD

Reply | Reply All | Forward

Tue 11/14/2023 11:24 AM

This is an email from the OCD Permitting development environment and has been sent during testing. Anything contained in this email is **NOT** an official decision/email of the OCD.

To whom it may concern (c/o Test Test for BLUE SKY NM, INC.),

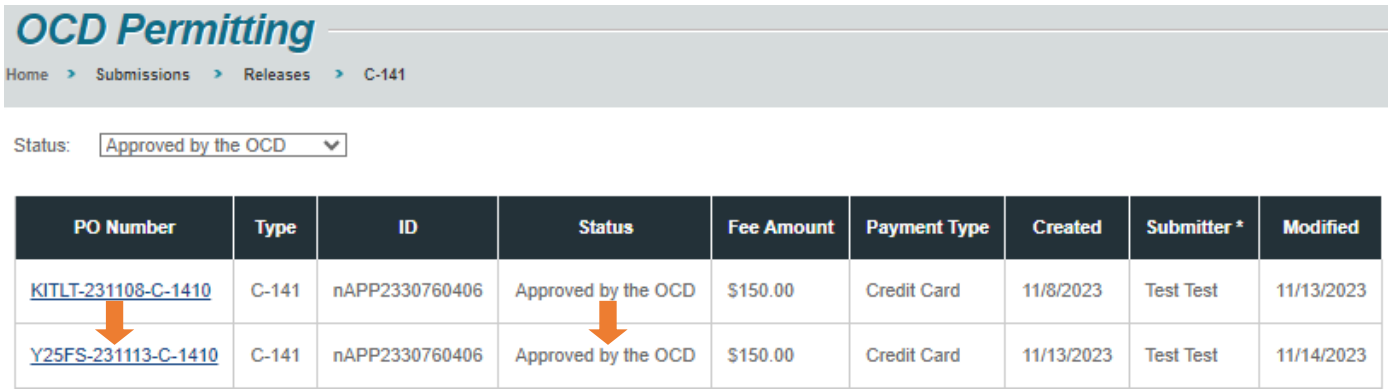
The OCD has approved the submitted *Application for administrative approval of a release notification and corrective action* (C-141), for incident ID (n#) nAPP2330760406, with the following conditions: This is where Conditions of Approval or Reason of Rejection will be.

- **Complete Reclamation as soon those areas are no longer reasonable needed for production or subsequent drilling operations.**

The signed C-141 can be found in the OCD Online: Imaging under the incident ID (n#).

If you have any questions regarding this application, please contact me.

At this state the Remediation Plan C-141 Application is has been Processed (Approved or Rejected) and the incident status will change to reflect the current status of the incident.



OCD Permitting

Home > Submissions > Releases > C-141

Status: Approved by the OCD

PO Number	Type	ID	Status	Fee Amount	Payment Type	Created	Submitter *	Modified
KITLT-231108-C-1410	C-141	nAPP2330760406	Approved by the OCD	$150.00	Credit Card	11/8/2023	Test Test	11/13/2023
Y25FS-231113-C-1410	C-141	nAPP2330760406	Approved by the OCD	$150.00	Credit Card	11/13/2023	Test Test	11/14/2023

NAPP2330760406 TL SAN ANDRES #5 TANK OVERFLOW @ 30-005-60572

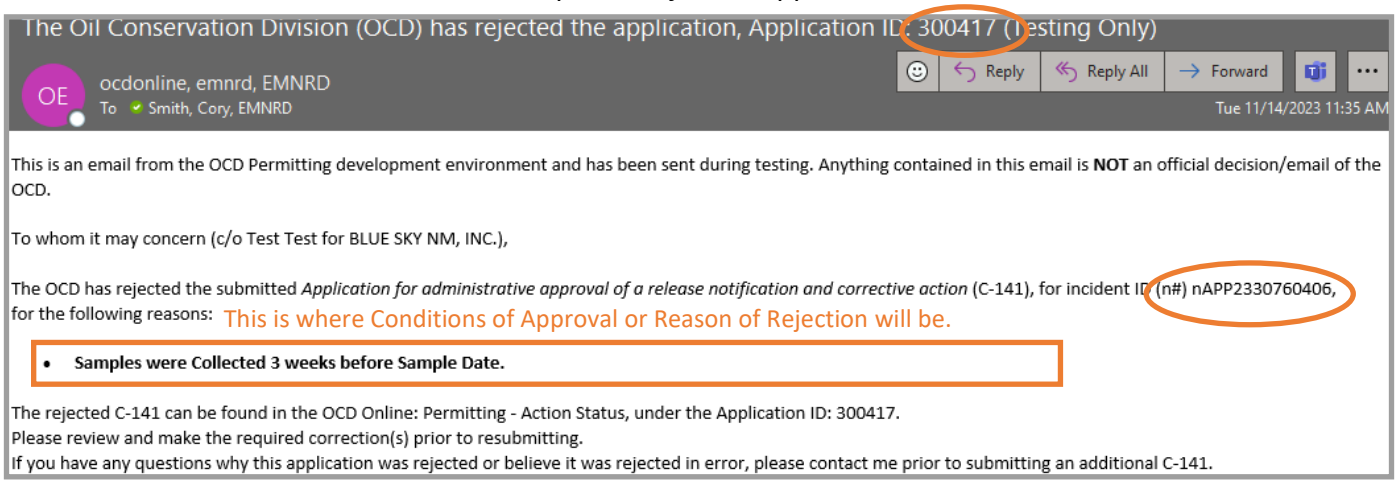
General Incident Information

Site Name:	TL San Andres #5 Tank Overflow		
Well:	[30-005-60572] TWIN LAKES SAN ANDRES UNIT #005		
Facility:			
Operator:	[300825] BLUE SKY NM, INC.		
Status:	Remediation Closure Report Approved, Pending submission of Reclamation Report from the operator		
Type:	Produced Water Release	Severity:	Major
		Surface Owner:	Private
District:	Artesia	County:	Chaves (05)

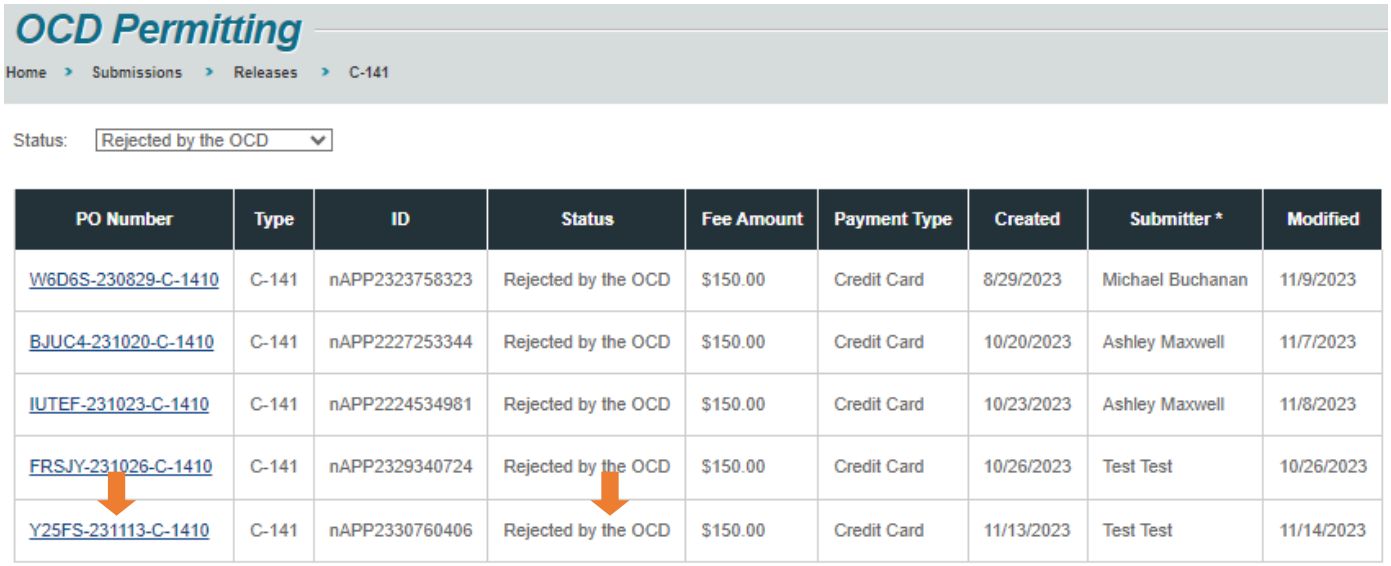
FIGURE 5

SUBMITTING A REMEDIATION CLOSURE REQUEST(C-141-V-Closure)

Example of Rejected Application.



At this state the Remediation Plan C-141 Application is has been Processed (Approved or Rejected) and the incident status will change to reflect the current status of the incident.



PO Number	Type	ID	Status	Fee Amount	Payment Type	Created	Submitter *	Modified
W6D6S-230829-C-1410	C-141	nAPP2323758323	Rejected by the OCD	$150.00	Credit Card	8/29/2023	Michael Buchanan	11/9/2023
BJUC4-231020-C-1410	C-141	nAPP2227253344	Rejected by the OCD	$150.00	Credit Card	10/20/2023	Ashley Maxwell	11/7/2023
IUTEF-231023-C-1410	C-141	nAPP2224534981	Rejected by the OCD	$150.00	Credit Card	10/23/2023	Ashley Maxwell	11/8/2023
FRSJY-231026-C-1410	C-141	nAPP2329340724	Rejected by the OCD	$150.00	Credit Card	10/26/2023	Test Test	10/26/2023
Y25FS-231113-C-1410	C-141	nAPP2330760406	Rejected by the OCD	$150.00	Credit Card	11/13/2023	Test Test	11/14/2023

Remember rejected Applications do not show a rejected status but will display the furthest along APPROVED application. In this case the last accept application was the Remediation Plan which was approved.

FIGURE 6

SUBMITTING A RECLAMATION REPORT(C-141-V-Reclmation)

Reclamation Reports can be submitted from the Initial C-141 Application within 15 days of Discovery however, this is a very rare event. Most C-141 Reclamation reports will be submitted with a Dig & Haul remediation closure request when the release is not in an area reasonable needed for production or subsequent drilling operations. For areas that are reasonable needed for production or subsequent drilling operations Reclamation reports will be sent in when those areas no longer reasonable needed and Reclamation has been completed. Regardless of "When" the application is sent in the reclamation report section of the C-141 is used to ensure the responsible party has met the Reclamation conditions outlined in 19.15.29.13 NMAC. To submit a Reclamation Report follow the directions below.

1. Left Click on the Submissions tab in the top right of the website.

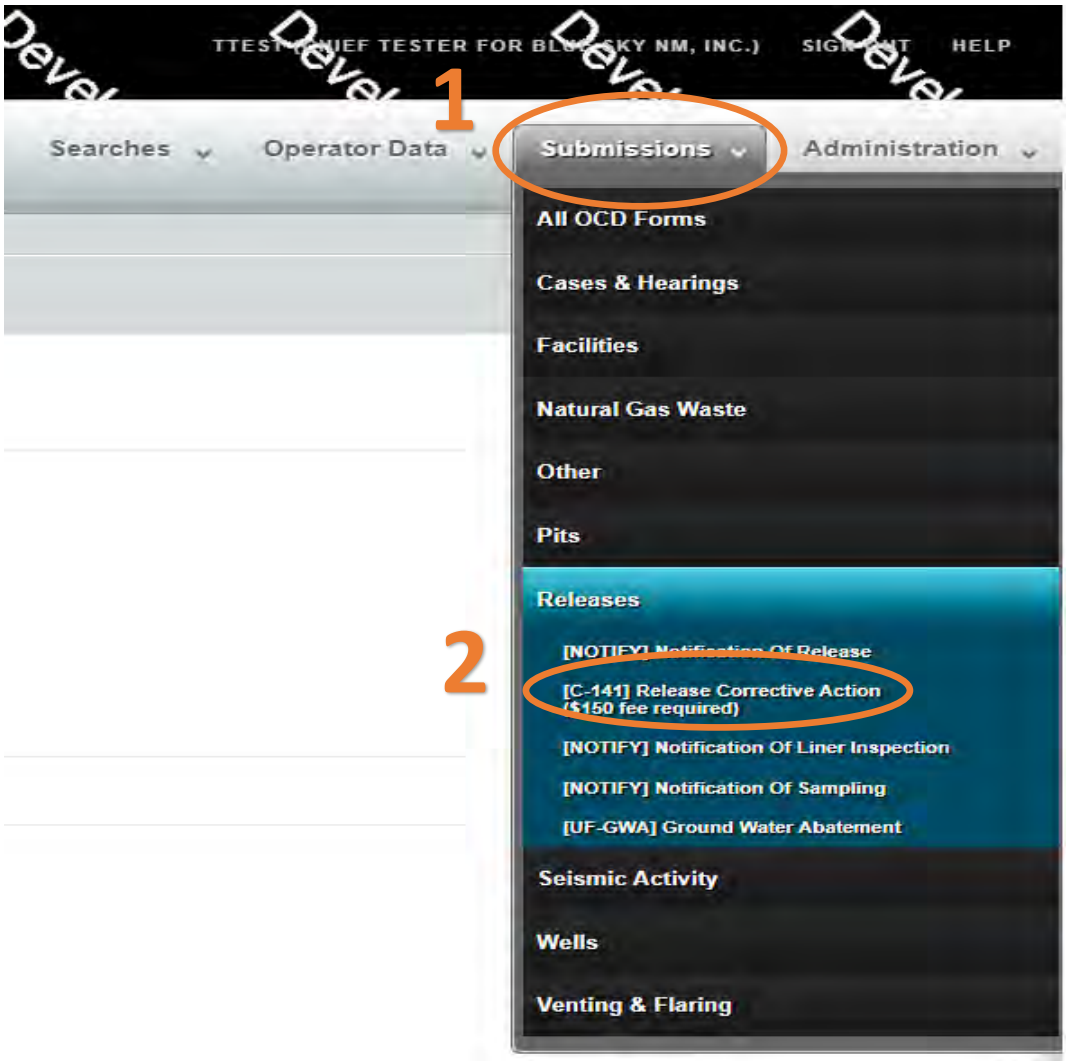
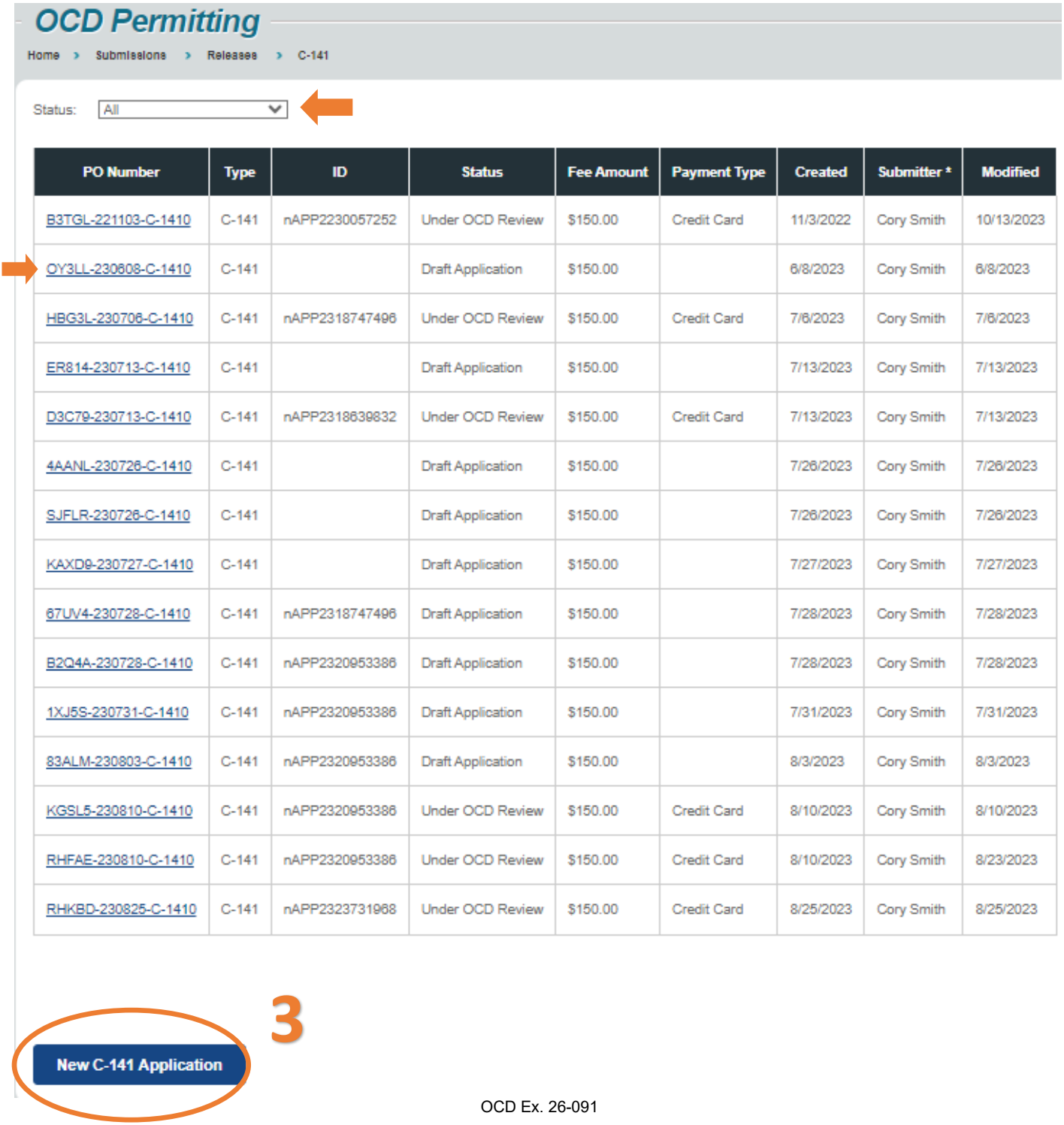


FIGURE 6

SUBMITTING A RECLAMATION REPORT(C-141-V-Reclmation)

On this Permitting page Users can review the status of all previous submitted C-141 Applications for their current OGRID . The user can also resume working on a previous draft version of the application by left clicking on the PO Number hyperlink. Applications types that are under OCD Review or have been Approved/ Rejected cannot be modified.

3. To create a new C-141 Application scroll down and left click on the New C-141 Application button.



PO Number	Type	ID	Status	Fee Amount	Payment Type	Created	Submitter *	Modified
B3TGL-221103-C-1410	C-141	nAPP2230057252	Under OCD Review	$150.00	Credit Card	11/3/2022	Cory Smith	10/13/2023
OY3LL-230608-C-1410	C-141		Draft Application	$150.00		6/8/2023	Cory Smith	6/8/2023
HBG3L-230706-C-1410	C-141	nAPP2318747496	Under OCD Review	$150.00	Credit Card	7/6/2023	Cory Smith	7/6/2023
ER814-230713-C-1410	C-141		Draft Application	$150.00		7/13/2023	Cory Smith	7/13/2023
D3C79-230713-C-1410	C-141	nAPP2318639832	Under OCD Review	$150.00	Credit Card	7/13/2023	Cory Smith	7/13/2023
4AANL-230726-C-1410	C-141		Draft Application	$150.00		7/26/2023	Cory Smith	7/26/2023
SJFLR-230726-C-1410	C-141		Draft Application	$150.00		7/26/2023	Cory Smith	7/26/2023
KAXD9-230727-C-1410	C-141		Draft Application	$150.00		7/27/2023	Cory Smith	7/27/2023
67UV4-230728-C-1410	C-141	nAPP2318747496	Draft Application	$150.00		7/28/2023	Cory Smith	7/28/2023
B2Q4A-230728-C-1410	C-141	nAPP2320953386	Draft Application	$150.00		7/28/2023	Cory Smith	7/28/2023
1XJ5S-230731-C-1410	C-141	nAPP2320953386	Draft Application	$150.00		7/31/2023	Cory Smith	7/31/2023
83ALM-230803-C-1410	C-141	nAPP2320953386	Draft Application	$150.00		8/3/2023	Cory Smith	8/3/2023
KGSL5-230810-C-1410	C-141	nAPP2320953386	Under OCD Review	$150.00	Credit Card	8/10/2023	Cory Smith	8/10/2023
RHFAE-230810-C-1410	C-141	nAPP2320953386	Under OCD Review	$150.00	Credit Card	8/10/2023	Cory Smith	8/23/2023
RHKBD-230825-C-1410	C-141	nAPP2323731968	Under OCD Review	$150.00	Credit Card	8/25/2023	Cory Smith	8/25/2023

FIGURE 6

SUBMITTING A RECLAMATION REPORT(C-141-V-Reclmation)

3a. OCD Permitting general functions will display any errors in the orange ribbon band at the top of your screen and inline while working through the applications.

The Submissions Contact Application, Fee Payment section of the C-141 is automatically filled out based upon the Users default contact information. The contact E-mail used in this section is where any approvals/ rejections will be sent too. In the even that you are submitting this on behalf of another member of your Organization you may edit the contact information by clicking on the edit submissions contact details button

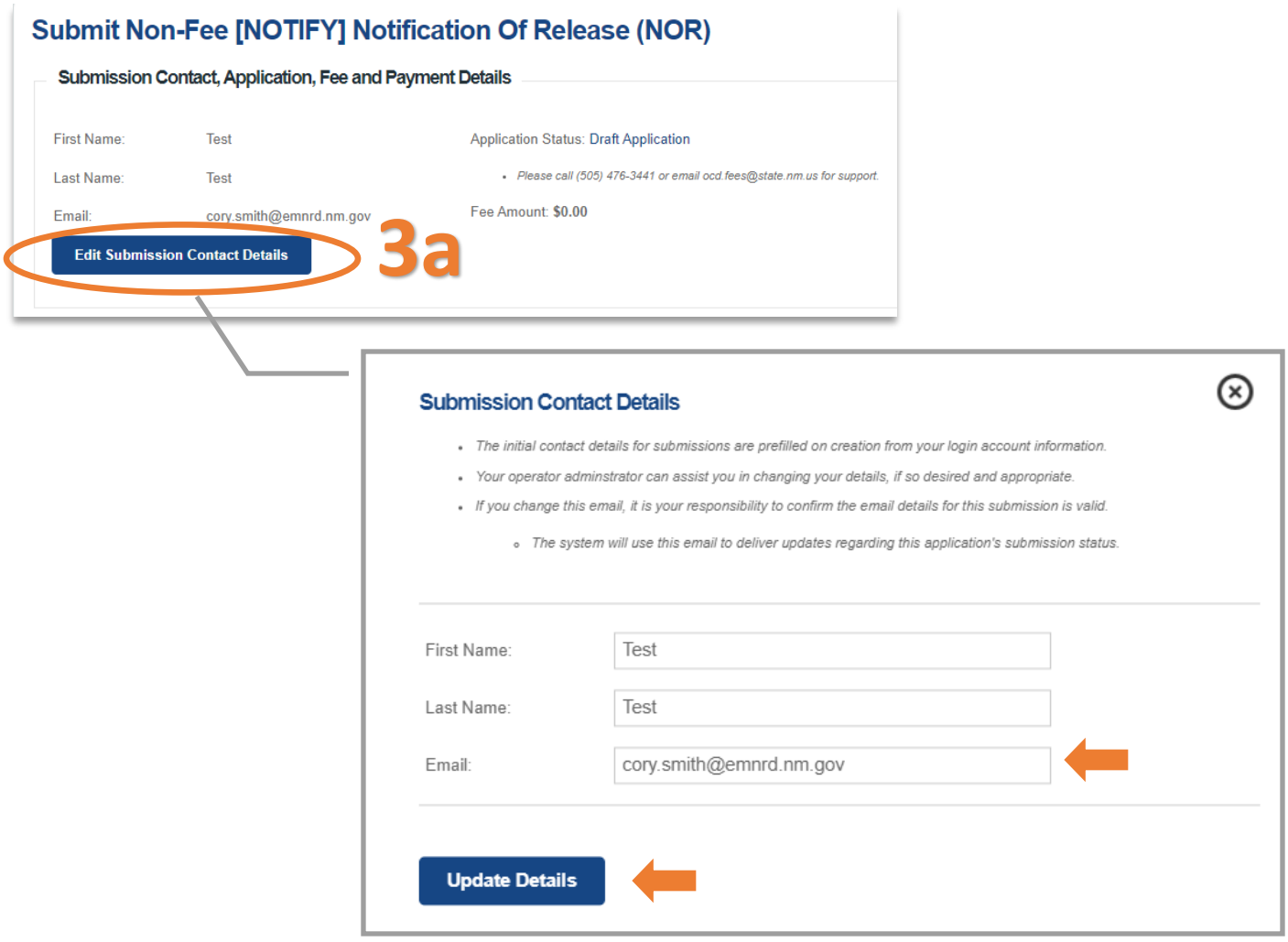


FIGURE 6

SUBMITTING A RECLAMATION REPORT(C-141-V-Reclmation)

4. Add the incident ID # from your Notice of Release (NOR) E-mail, C-141 Initial or from your records. Alternatively if in your NOR application you gave your release a custom site name you can also search by typing in the name into the box.

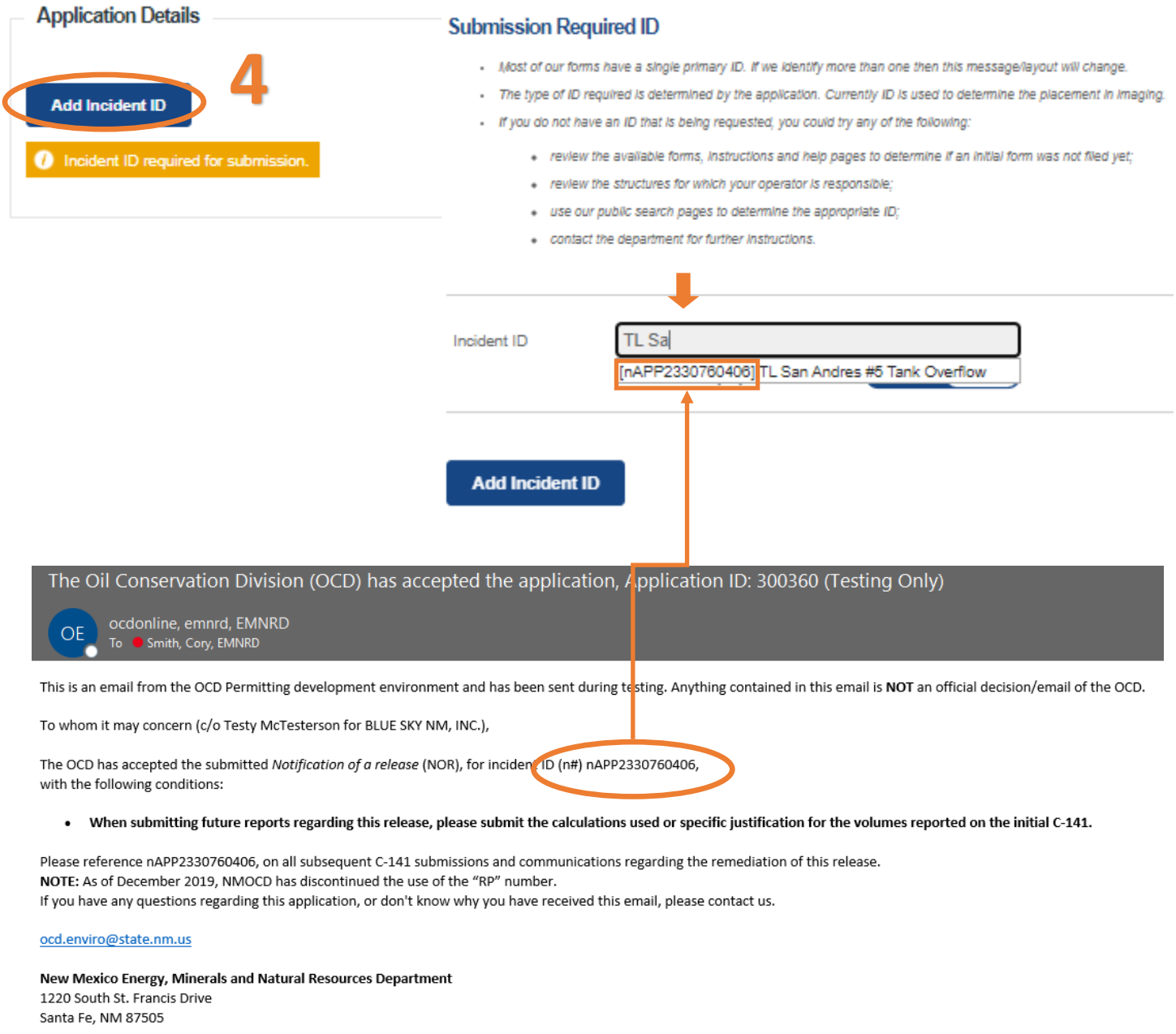


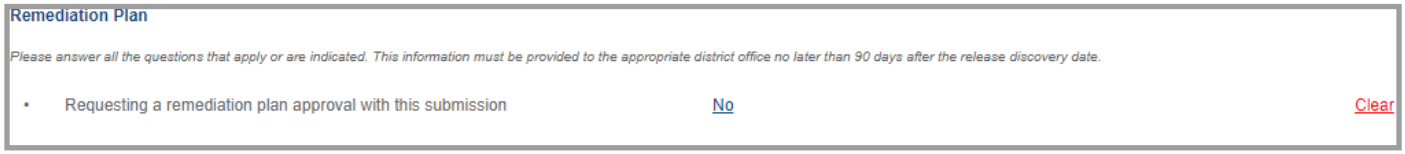
FIGURE 6

SUBMITTING A RECLAMATION REPORT(C-141-V-Reclmation)

Once you have entered a valid incident number the applications will populate all of the C-141 questions. You may notice that the questions are identical to the Initial/Remediation Plans and Remediation Closure C-141 and that some of the questions will already have answers in them. These answers are populated from the **APPROVED** NOR/C-141 applications that were submitted in Figure 1/2/3/5. This functionality works for all C-141 submissions allowing the User to correct/validate data provided to the OCD with each submission. Pre-populated answers only works with approved data therefor any answers provided in an application that is Under OCD Review or that was Rejected will be required to be reentered for each submission until the questions are in an approved application. Please Note that if the User changes answers to previously approved questions they will also have to include updated attachments for that section.

Example: The User answered the Requesting Remediation Plan Approval with this submission in the C-141 Initial (Figure 1) as "No". This answer signaled to OCD Permitting that the C-141 Application was an Initial C-141. Now that the User wants to submit a Remediation plan for approval they need to change the answer to this question to "Yes"

C-141 Initial Application



C-141 Remediation Plan Application: By Answer yes additional Remediation Plan questions pop up.

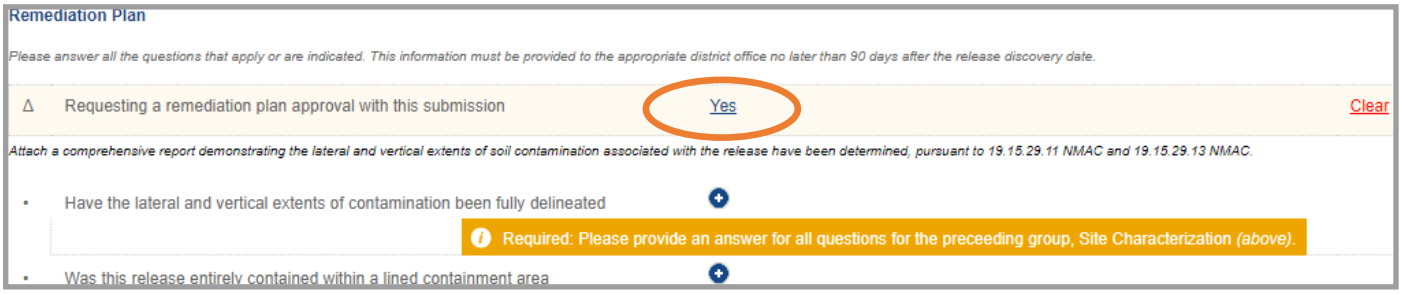
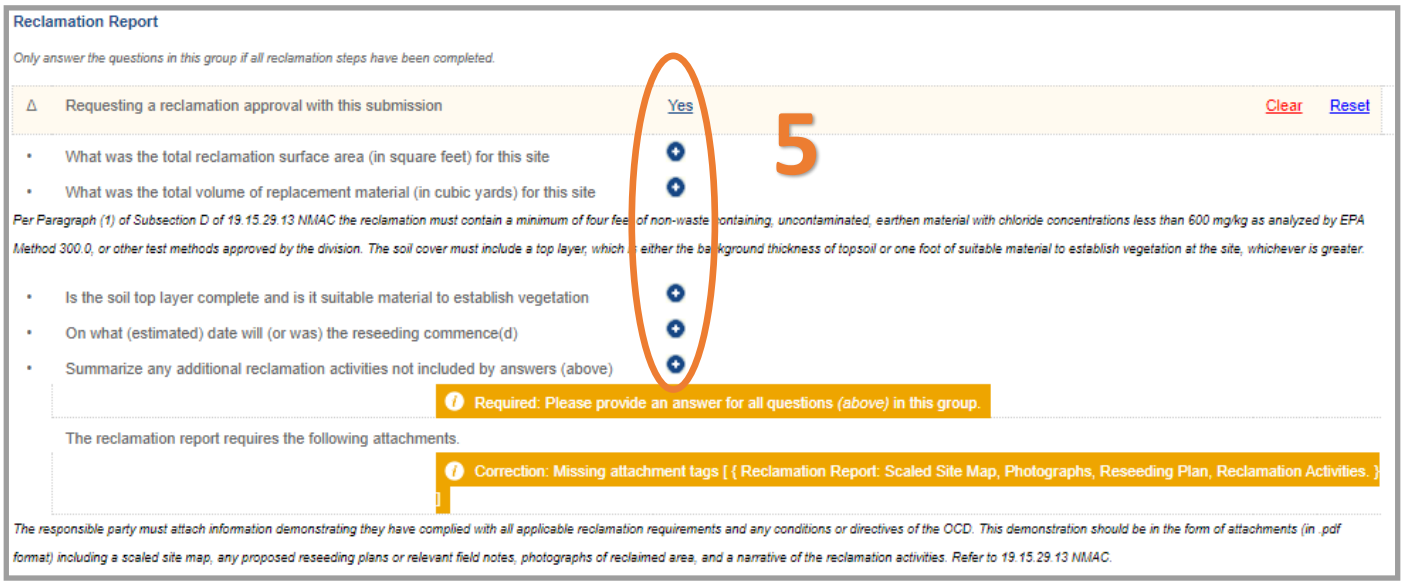


FIGURE 6

SUBMITTING A RECLAMATION REPORT(C-141-V-Reclmation)

5. Once the User selects Yes to Requesting a Reclamation Report approval the Reclamation Report questions will appear and are required to be answered.



This is a "New" Process to the OCD as historically this information was typically provided in a "Closure report" now identified as a Remediation Closure Report. Due to the Incident status changes OCD is now divesting this section to be a standalone report. Users who have releases in areas not reasonably needed for production or subsequent drilling operations will likely complete this section at the same time as requesting Remediation Closure. This is ideal as the Remediation Closure Request will have scaled site maps, sample locations, pictures and other attachments that are needed to verify that remediation/reclamation has been completed.

Responsible Parties must reclaim all releases once those areas are no longer reasonably needed for production or subsequent drilling operations. This condition is typically achieved when the well/facility is Plugged and Abandoned which could be a significant time from the Date of Discovery. Responsible Parties should review their approved Site Characterization and Remediation Plan for areas that were characterized and identified to be reclaimed.

A Reclamation Report as mentioned above is very similar to a Remediation Closure report and will need to include essentially the same information as required in 19.15.29.12 NMAC.

Please include the following information in your Reclamation report.

1. Executive Summary of the Reclamation Activities
2. Scaled Site Map
3. Sampling Locations & Laboratory Data
4. Photographs
5. Reseeding Plan to Include Seed Mix and Estimated Reseeding Dates.

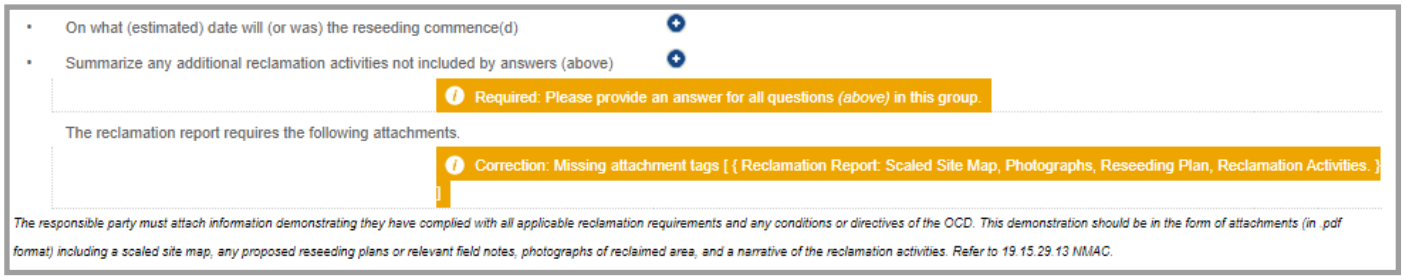
FIGURE 6

SUBMITTING A RECLAMATION REPORT(C-141-V-Reclmation)

5. *Continued*

Users will provide the total area and volume of material that was reclaimed. Users should consult the estimated area/volume from their Site Characterization and Remediation Plan.

Pursuant to 19.15.29.13.D(1) the Reclamation soil cover must include a top layer, which is either the back-ground thickness of topsoil or one foot of suitable material to establish vegetation at the site, whichever is greater.



Users will need to provide the best estimated date when Reseeding will commence. Users also have the opportunity to provide any additional information for the reclamation report.

Reclamation Report

Only answer the questions in this group if all reclamation steps have been completed.

Δ	Requesting a reclamation approval with this submission	Yes
Δ	What was the total reclamation surface area (in square feet) for this site	10650
Δ	What was the total volume of replacement material (in cubic yards) for this site	1600

Per Paragraph (1) of Subsection D of 19.15.29.13 NMAC the reclamation must contain a minimum of four feet of non-waste containing, uncontaminated, earthen material with cl
Method 300.0, or other test methods approved by the division. The soil cover must include a top layer, which is either the background thickness of topsoil or one foot of suitable

Δ	Is the soil top layer complete and is it suitable material to establish vegetation	Yes
Δ	On what (estimated) date will (or was) the reseeding commence(d)	03/01/2024
Δ	Summarize any additional reclamation activities not included by answers (above)	Reseeding will be initiated in the spring.

FIGURE 6

SUBMITTING A RECLAMATION REPORT(C-141-V-Reclmation)

6. When requestion Reclamation Approval the User must submit 1 or more attachments that include the below attachment tags. Users must review their attached document to ensure that all of the items being requested are in the attached file(s). Attachments/Tags will likely change in future development. To add an attachment scroll to the top of the application left click the Blue Add Attachment Button. Select the type of attachment you are uploading from the drop down list. Left click the Choose file button to select the file from your computer to upload. Once you have selected the file you wish to upload save the upload by left clicking the Upload selected Files. Repeat this process for multiple Attachments.

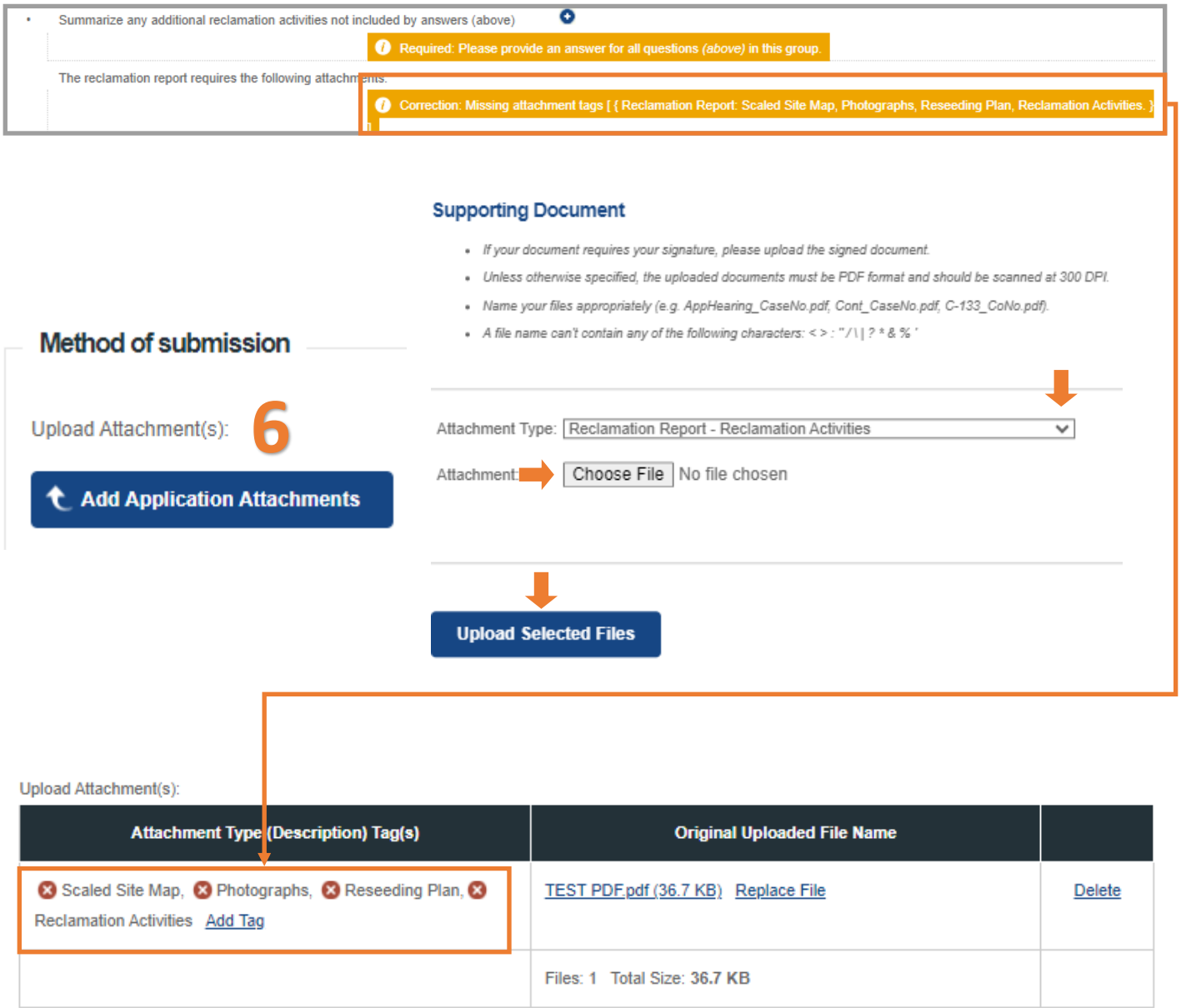
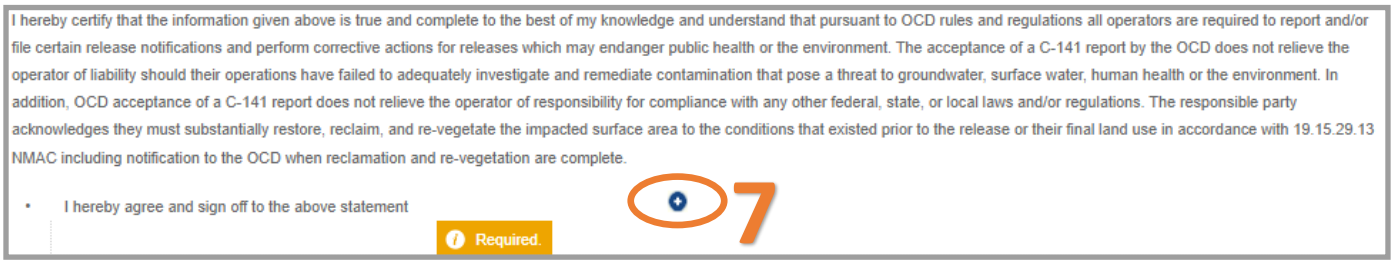


FIGURE 6

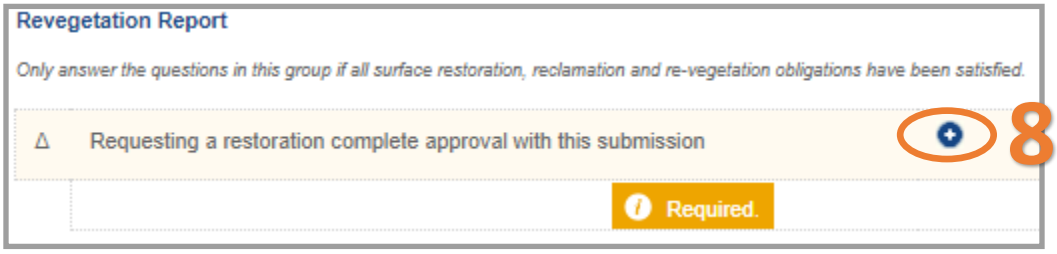
SUBMITTING A RECLAMATION REPORT(C-141-V-Reclmation)

7. Once all of the questions have been answered. The user should review the answers and then Sign/Certify the data for submission.



8. The User now must answer if they are requesting a Revegetation Report approval with this submission. If the user answers "no", this submission will be classified as a Reclamation Report. If the User selects yes the application will be viewed as a Revegetation Report. Please be aware that if there is not an approved Initial C-141/Remediation Plan/Remediation Closure/Reclamation Report on file the submission will ALSO count as all of those types.

Please note that OCD does not approve partial applications in the event that the User submits multiple C-141 types and the application is rejected, all C-141 types will be rejected.



9. Review your C-141 application for accuracy and completeness. This is the last chance before submitting the document to the OCD to make any corrections to this data. Operators will have the ability to modify these questions/response on any subsequent C-141 submission. To submit the application to the OCD click the Make Payment button. You will be directed to a Third Party website to process payment.

Clicking the Delete button will clear the entire application and remove it from your application que.

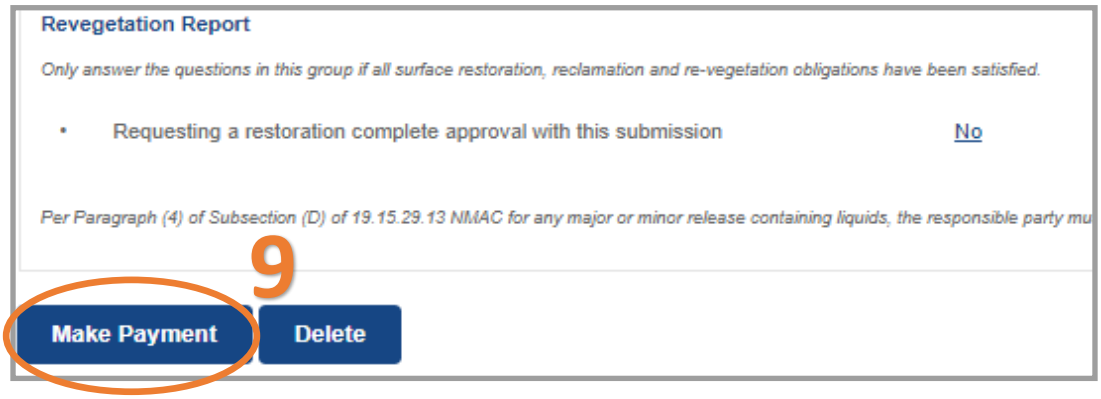


FIGURE 6

SUBMITTING A RECLAMATION REPORT(C-141-V-Reclmation)

Once the user has submitted the C-141 Reclamation Report to the OCD. The user email which was identified in step 3a will receive an email from emnrd.ocdonline@emnrd.nm.gov that is the receipt and proof of submission to the OCD. The receipt provides a PO Number that can be searched on the OCD Action Status Page.

PO Number: 4E8LQ-231115-C-1410
Payment Date: 11/15/2023
Payment Amount: $150.00
Payment Type: Credit Card

Application Type: Application for administrative approval of a release notification and corrective action
Fee Amount: $150.00
Application Status: Under OCD Review

OGRID: 300825
First Name: Test
Last Name: Test
Email: cory.smith@emnrd.nm.gov

At this state the Reclamation Report C-141 Application is Under OCD Review (Submitted) and the incident status will change to reflect the current status of the incident.

OCD Permitting

Home > Submissions > Releases > C-141

Status: Under OCD Review

PO Number	Type	ID	Status	Fee Amount	Payment Type	Created	Submitter *	Modified
YGLL0-231020-C-1410	C-141	nAPP2226353908	Under OCD Review	$150.00	Credit Card	10/20/2023	Ashley Maxwell	10/20/2023
GOD86-231020-C-1410	C-141	nAPP2225225752	Under OCD Review	$150.00	Credit Card	10/20/2023	Ashley Maxwell	10/20/2023
4MA74-231023-C-1410	C-141	nAPP2225141826	Under OCD Review	$150.00	Credit Card	10/23/2023	Ashley Maxwell	10/23/2023
TGG4W-231102-C-1410	C-141	nAPP2322646789	Under OCD Review	$150.00	Credit Card	11/2/2023	Test Test	11/2/2023
IHWWC-231109-C-1410	C-141	nAPP2323758323	Under OCD Review	$150.00	Credit Card	11/9/2023	Michael Buchanan	11/9/2023
D6D6A-231109-C-1410	C-141	nAPP2215863582	Under OCD Review	$150.00	Credit Card	11/9/2023	Ashley Maxwell	11/9/2023
4E8LQ-231115-C-1410	C-141	nAPP2330760406	Under OCD Review	$150.00	Credit Card	11/15/2023	Test Test	11/15/2023

NAPP2330760406 TL SAN ANDRES #5 TANK OVERFLOW @ 30-005-60572

General Incident Information

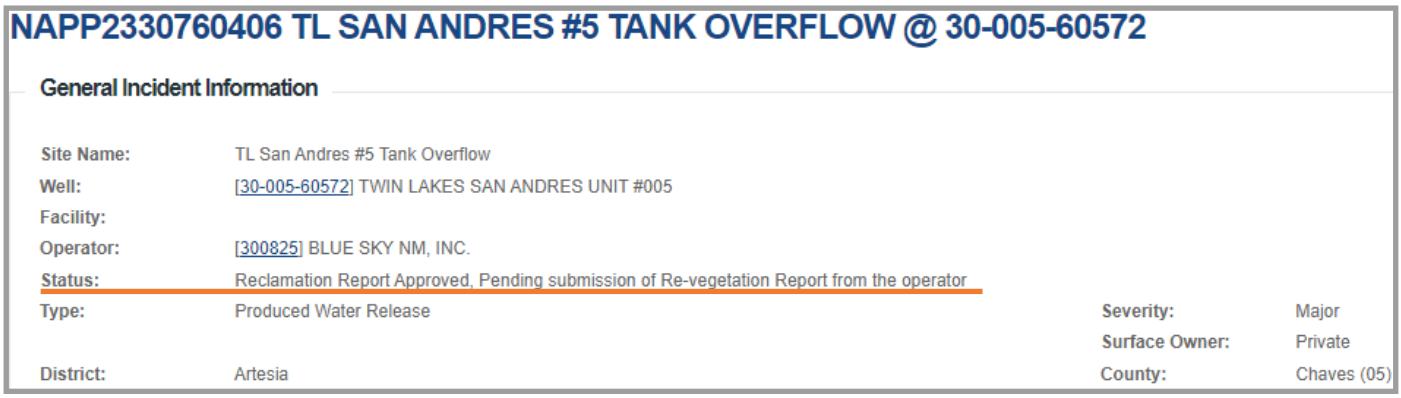
Site Name: TL San Andres #5 Tank Overflow
Well: [30-005-60572] TWIN LAKES SAN ANDRES UNIT #005
Facility:
Operator: [300825] BLUE SKY NM, INC.
Status: Reclamation Report Received, Pending OCD Review
Type: Produced Water Release
District: Artesia
Severity: Major
Surface Owner: Private
County: Chaves (05)

FIGURE 6

SUBMITTING A RECLAMATION REPORT(C-141-V-Reclmation)

The Reclamation Report works exactly like the other applications where the User identified in Step 3a will receive email's with Conditions of Approvals or Reasons for Rejections. See Figure 5 for detailed examples of Approved/Rejected status. Below are the incident status associated to the Reclamation Report.

Example of Approved



Remember rejected Applications do not show a rejected status but will display the furthest along APPROVED application. In this case the last accept application was the Remediation Closure Report.

Example of Rejected

FIGURE 7

SUBMITTING A REVEGETATION REPORT(C-141-V-Revegetation)

Revegetation Reports can be submitted after the completion of the Reclamation Report. The approved Reclamation plan will have detailed the seed mixture, proposed seeding dates and any other requirements imposed by Federal, State, or Tribal requirements if applicable. At a minimum the OCD will consider Revegetation complete when all disturbed areas have a uniform vegetative cover, that has been established and reflects a life-form ratio of plus or minus fifty percent of pre-disturbance levels and a total percent plant cover of at least seventy percent of pre-disturbance levels, excluding noxious weeds.

The revegetation report section of the C-141 is used to ensure the responsible party has met the Revegetation conditions outlined in 19.15.29.13 NMAC.

To submit a Revegetation Report follow the directions below.

1. Left Click on the Submissions tab in the top right of the website.
2. Left Click on Releases and Select [C-141] Release Corrective Action ($150 fee required)

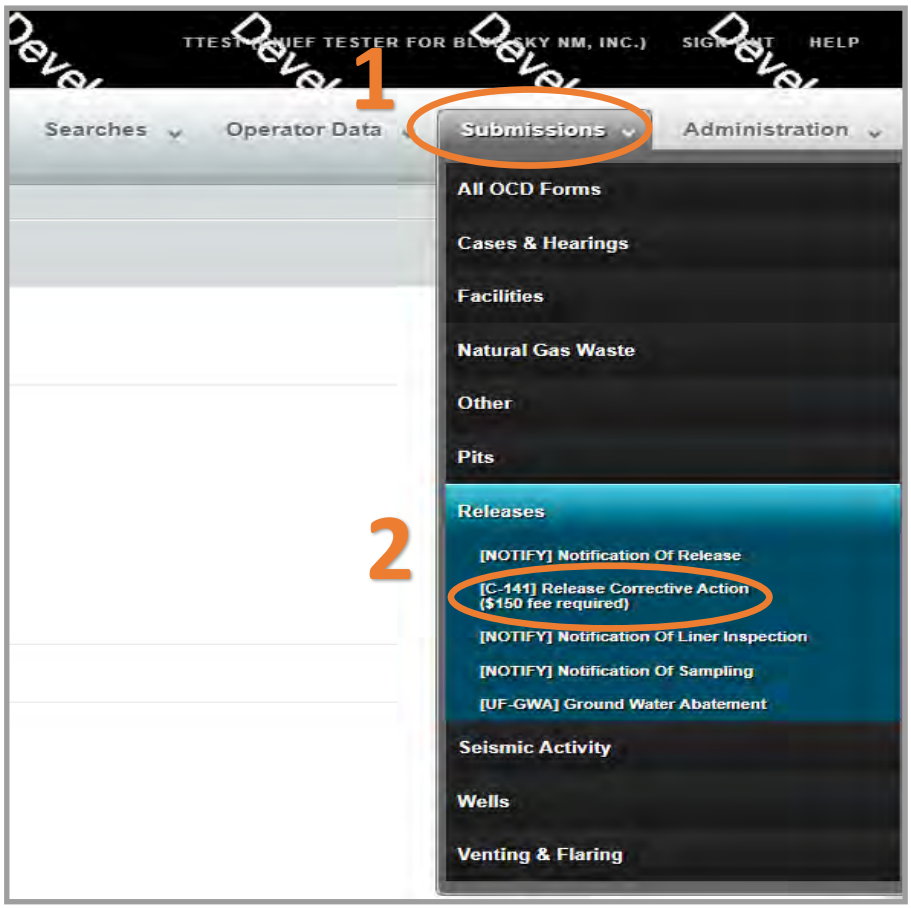
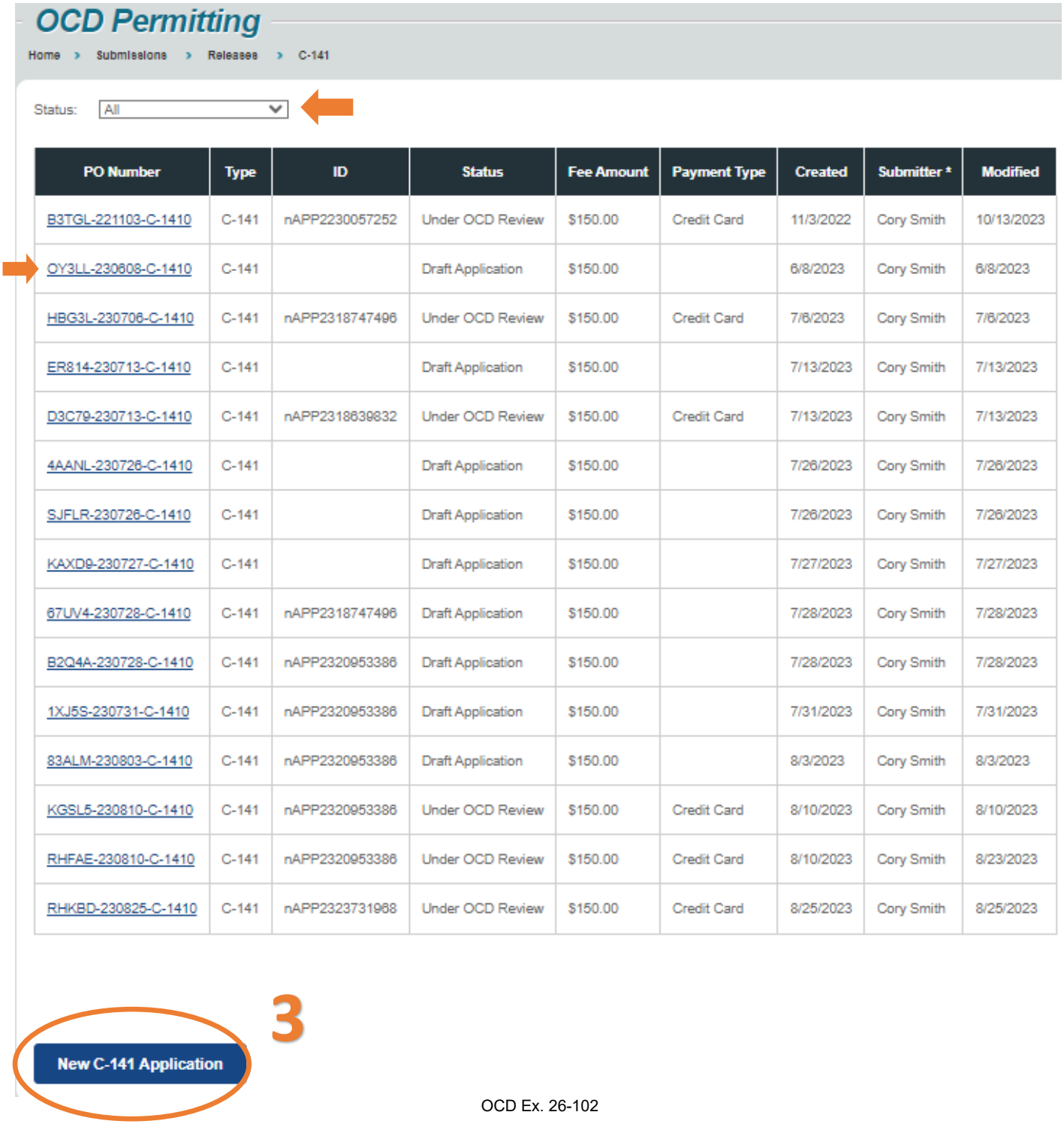


FIGURE 7

SUBMITTING A REVEGETATION REPORT(C-141-V-Revegetation)

On this Permitting page Users can review the status of all previous submitted C-141 Applications for their current OGRID . The user can also resume working on a previous draft version of the application by left clicking on the PO Number hyperlink. Applications types that are under OCD Review or have been Approved/ Rejected cannot be modified.

3. To create a new C-141 Application scroll down and left click on the New C-141 Application button.



PO Number	Type	ID	Status	Fee Amount	Payment Type	Created	Submitter *	Modified
B3TGL-221103-C-1410	C-141	nAPP2230057252	Under OCD Review	$150.00	Credit Card	11/3/2022	Cory Smith	10/13/2023
OY3LL-230608-C-1410	C-141		Draft Application	$150.00		6/8/2023	Cory Smith	6/8/2023
HBG3L-230706-C-1410	C-141	nAPP2318747496	Under OCD Review	$150.00	Credit Card	7/6/2023	Cory Smith	7/6/2023
ER814-230713-C-1410	C-141		Draft Application	$150.00		7/13/2023	Cory Smith	7/13/2023
D3C79-230713-C-1410	C-141	nAPP2318639832	Under OCD Review	$150.00	Credit Card	7/13/2023	Cory Smith	7/13/2023
4AANL-230726-C-1410	C-141		Draft Application	$150.00		7/26/2023	Cory Smith	7/26/2023
SJFLR-230726-C-1410	C-141		Draft Application	$150.00		7/26/2023	Cory Smith	7/26/2023
KAXD9-230727-C-1410	C-141		Draft Application	$150.00		7/27/2023	Cory Smith	7/27/2023
67UV4-230728-C-1410	C-141	nAPP2318747496	Draft Application	$150.00		7/28/2023	Cory Smith	7/28/2023
B2Q4A-230728-C-1410	C-141	nAPP2320953386	Draft Application	$150.00		7/28/2023	Cory Smith	7/28/2023
1XJ5S-230731-C-1410	C-141	nAPP2320953386	Draft Application	$150.00		7/31/2023	Cory Smith	7/31/2023
83ALM-230803-C-1410	C-141	nAPP2320953386	Draft Application	$150.00		8/3/2023	Cory Smith	8/3/2023
KGSL5-230810-C-1410	C-141	nAPP2320953386	Under OCD Review	$150.00	Credit Card	8/10/2023	Cory Smith	8/10/2023
RHFAE-230810-C-1410	C-141	nAPP2320953386	Under OCD Review	$150.00	Credit Card	8/10/2023	Cory Smith	8/23/2023
RHKBD-230825-C-1410	C-141	nAPP2323731968	Under OCD Review	$150.00	Credit Card	8/25/2023	Cory Smith	8/25/2023

FIGURE 7

SUBMITTING A REVEGETATION REPORT(C-141-V-Revegetation)

3a. OCD Permitting general functions will display any errors in the orange ribbon band at the top of your screen and inline while working through the applications.

The Submissions Contact Application, Fee Payment section of the C-141 is automatically filled out based up-on the Users default contact information. The contact E-mail used in this section is where any approvals/ rejections will be sent too. In the even that you are submitting this on behalf of another member of your Organization you may edit the contact information by clicking on the edit submissions contact details button

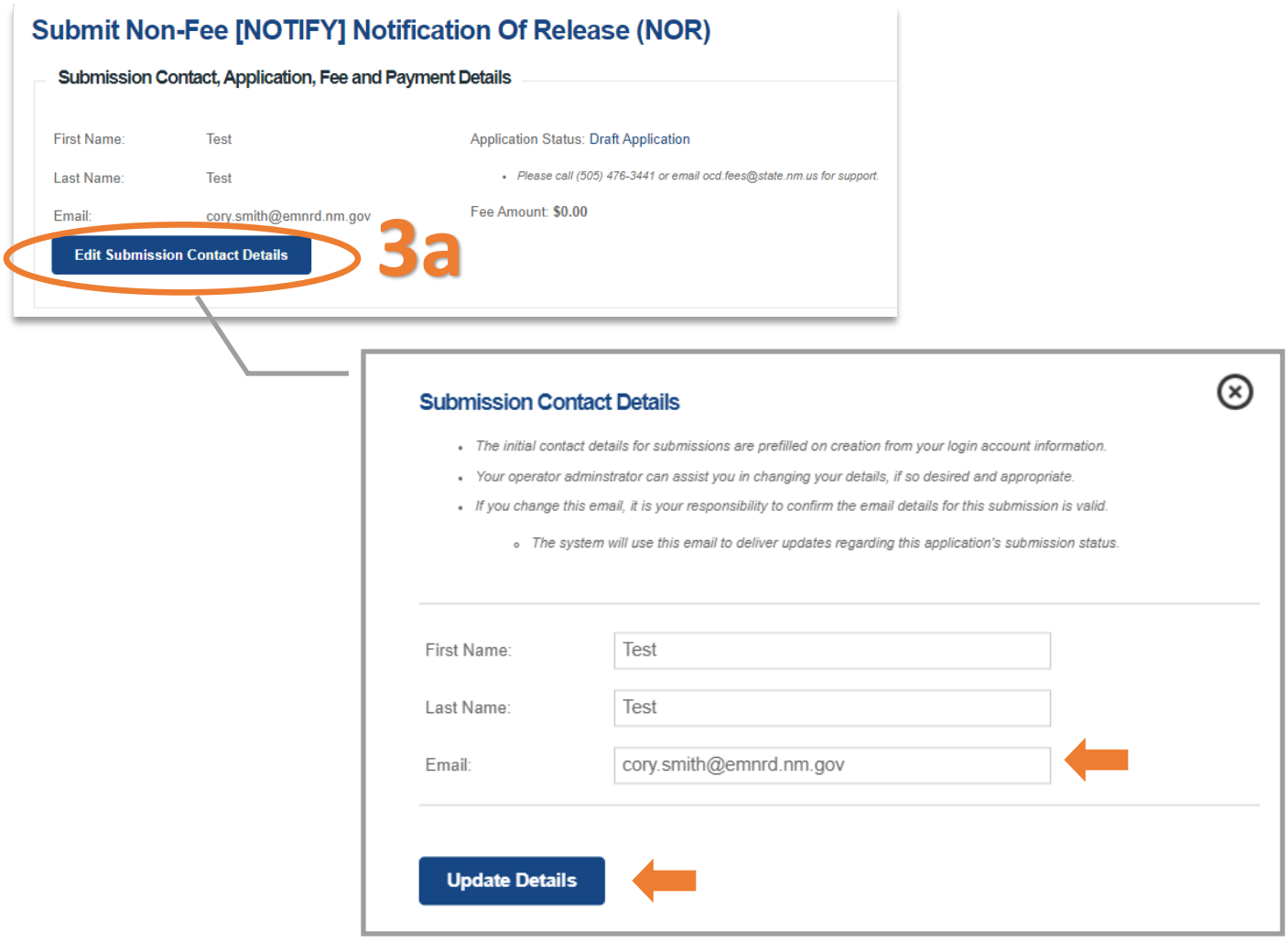


FIGURE 7

SUBMITTING A REVEGETATION REPORT(C-141-V-Revegetation)

4. Add the incident ID # from your Notice of Release (NOR) E-mail, C-141 Initial or from your records. Alternatively if in your NOR application you gave your release a custom site name you can also search by typing in the name into the box.

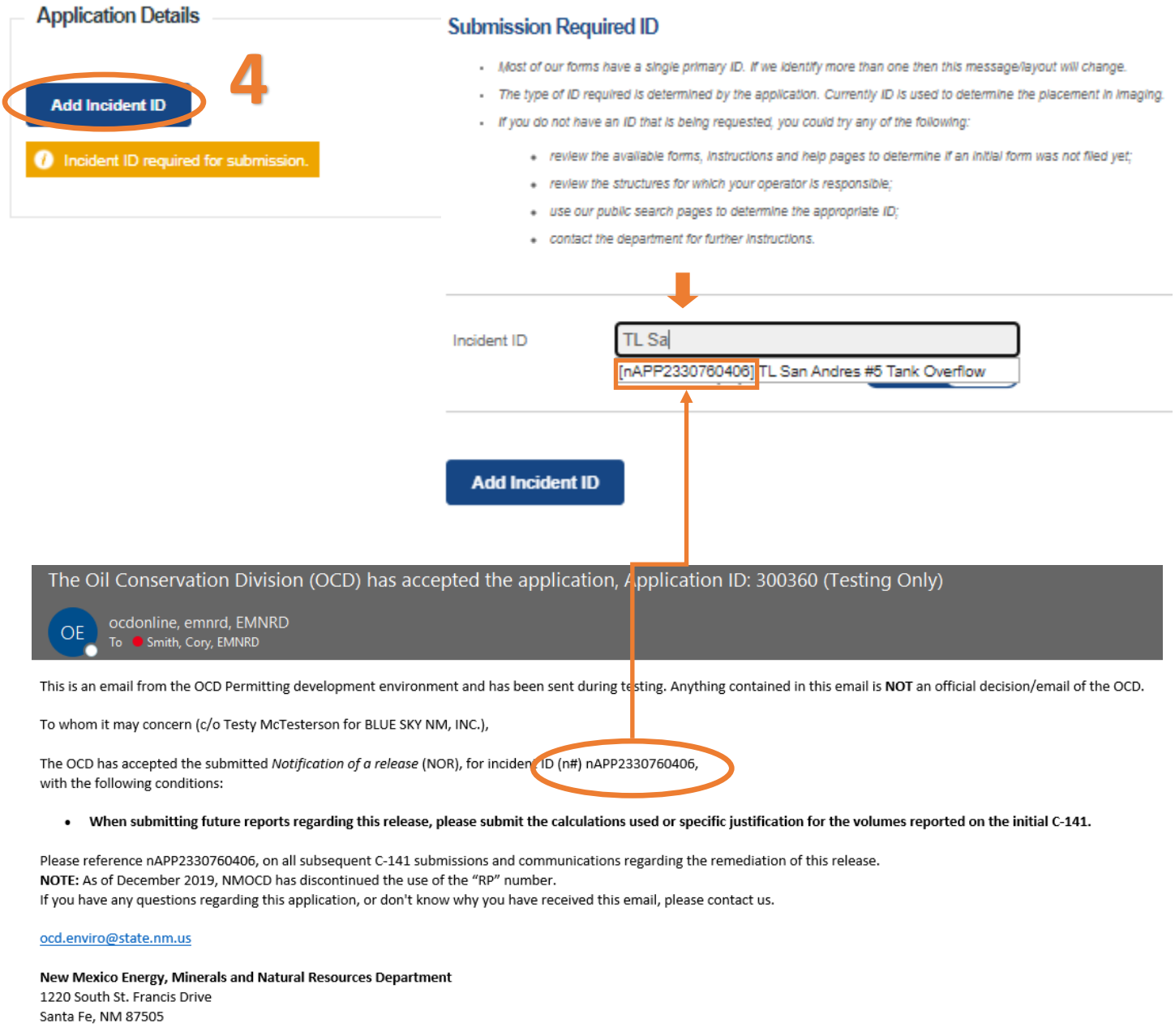


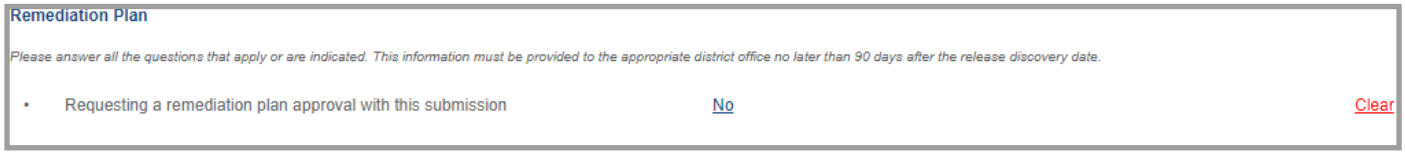
FIGURE 7

SUBMITTING A REVEGETATION REPORT(C-141-V-Revegetation)

Once you have entered a valid incident number the applications will populate all of the C-141 questions. You may notice that the questions are identical to the Initial/Remediation Plans and Remediation Closure C-141 and that some of the questions will already have answers in them. These answers are populated from the **APPROVED** NOR/C-141 and the applications that were submitted in Figure 1/2/3/5/6. This functionality works for all C-141 submissions allowing the User to correct/validate data provided to the OCD with each submission. Pre-populated answers only works with approved data therefor any answers provided in an application that is Under OCD Review or that was Rejected will be required to be reentered for each submission until the questions are in an approved application. Please Note that if the User changes answers to previously approved questions they will also have to include updated attachments for that section.

Example: The User answered the Requesting Remediation Plan Approval with this submission in the C-141 Initial (Figure 1) as "No". This answer signaled to OCD Permitting that the C-141 Application was an Initial C-141. Now that the User wants to submit a Remediation plan for approval they need to change the answer to this question to "Yes"

C-141 Initial Application



C-141 Remediation Plan Application: By Answer yes additional Remediation Plan questions pop up.

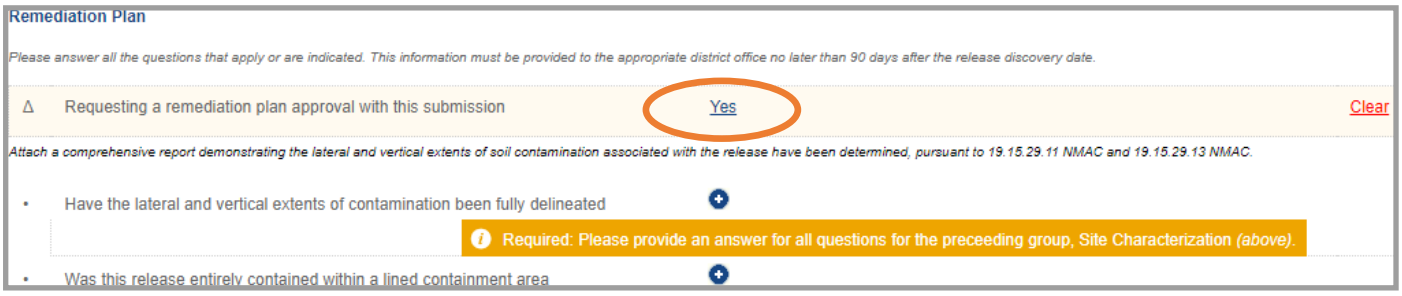
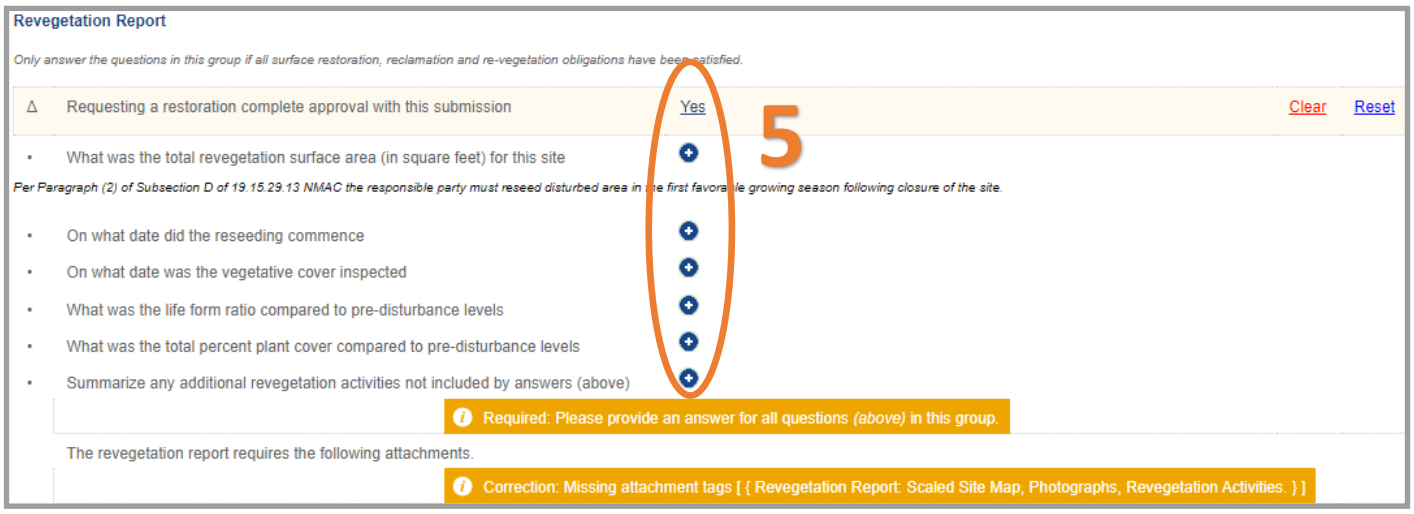


FIGURE 7

SUBMITTING A REVEGETATION REPORT(C-141-V-Revegetation)

5. To start a Revegetation Report the User selects Yes to Requesting a Restoration Complete approval the Revegetation Report questions will appear and are required to be answered.



This is a "New" Process to the OCD as historically Revegetation information was very rarely provided to the OCD. Due to the Incident status changes OCD is now divesting this section to be a standalone report. Responsible Parties are required to Revegetate all unauthorized releases. Revegetation occurs in the first favorable growing season follow the completion of reclamation. As discussed in Figure 6 Reclamation time frames depend on if the release is in an area reasonably needed for production or subsequent drilling operations. For releases that are a cross between Areas reasonable need and not reasonable needed, responsible parties should Revegetate in the first favorable growing season following reclamation for each area.

The Revegetation Report will be submitted when ALL areas have met the requirements of 19.15.29.13 NMAC.

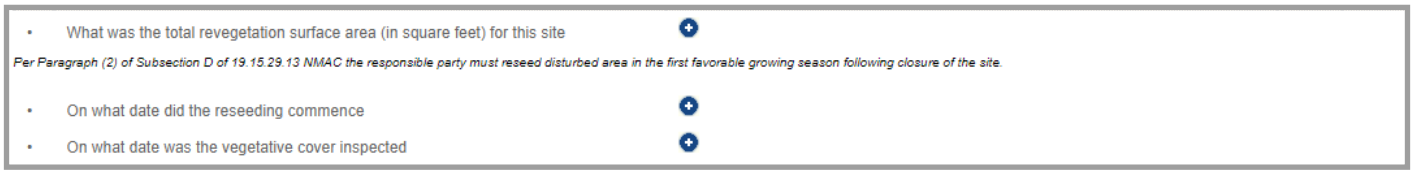
A Reclamation Report will need to include the following information.

1. Executive Summary of the Revegetation Activities
2. Scaled Site Map
3. Revegetation report/inspection –Detailing the life form ratio / no noxious weeds.
4. Photographs

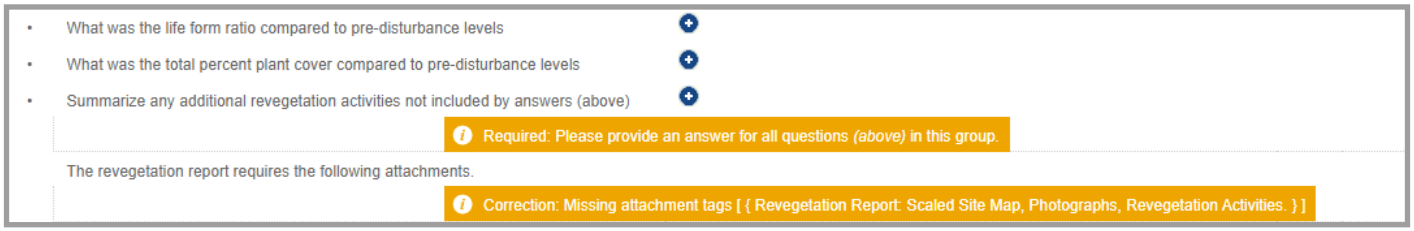
FIGURE 7

SUBMITTING A REVEGETATION REPORT(C-141-V-Revegetation)

5. *Continued*



Users will provide the total area that was revegetated. Users will also provide the date the reseeding was done and the date in which the "final" vegetative cover inspection was completed. The Revegetation report and photographs from this inspection should be include in your report.



Pursuant to 19.15.29.13.D(3) the Revegetation and therefore Restoration will be considered complete when uniform vegetative cover has been established that reflects a life-form ratio of plus or minus fifty percent of pre-disturbance levels and a total percent plant cover of at least seventy percent of pre-disturbance levels, excluding noxious weeds for all disturbed areas . Users will provide the OCD this information from their "Final" vegetation cover inspection

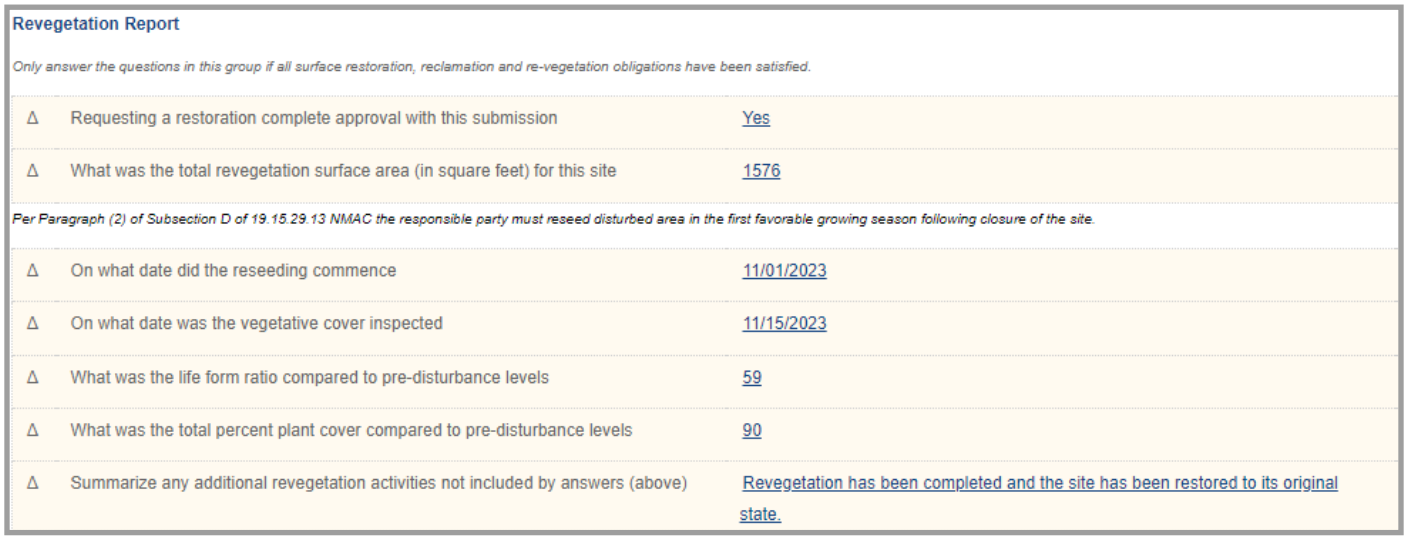


FIGURE 7

SUBMITTING A REVEGETATION REPORT(C-141-V-Revegetation)

6. When requestion Revegetation/Restoration Approval the User must submit 1 or more attachments that include the below attachment tags. Users must review their attached document to ensure that all of the items being requested are in the attached file(s). Attachments/Tags will likely change in future development. To add an attachment scroll to the top of the application left click the Blue Add Attachment Button. Select the type of attachment you are uploading from the drop down list. Left click the Choose file button to select the file from your computer to upload. Once you have selected the file you wish to upload save the upload by left clicking the Upload selected Files. Repeat this process for multiple Attachments.

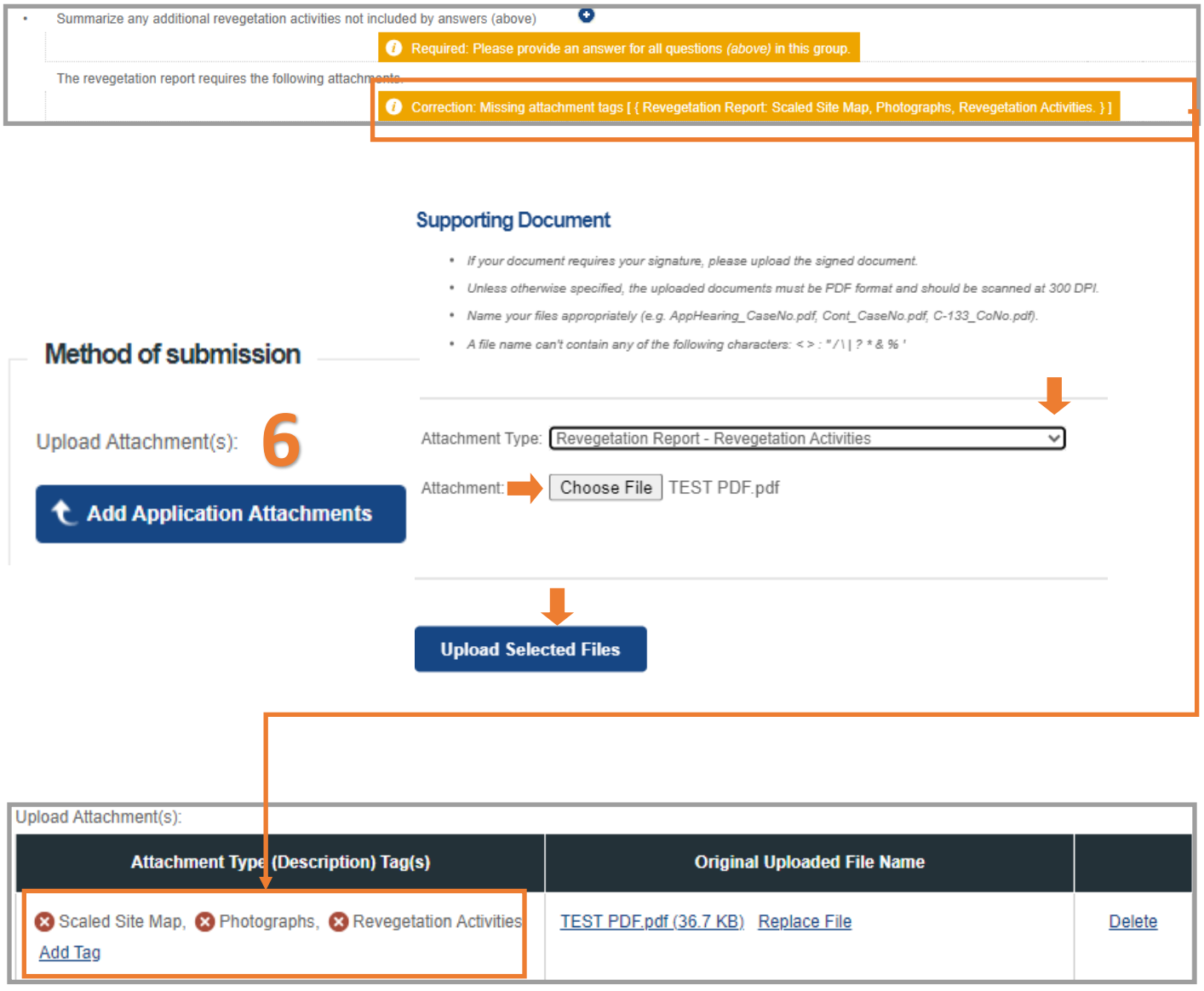
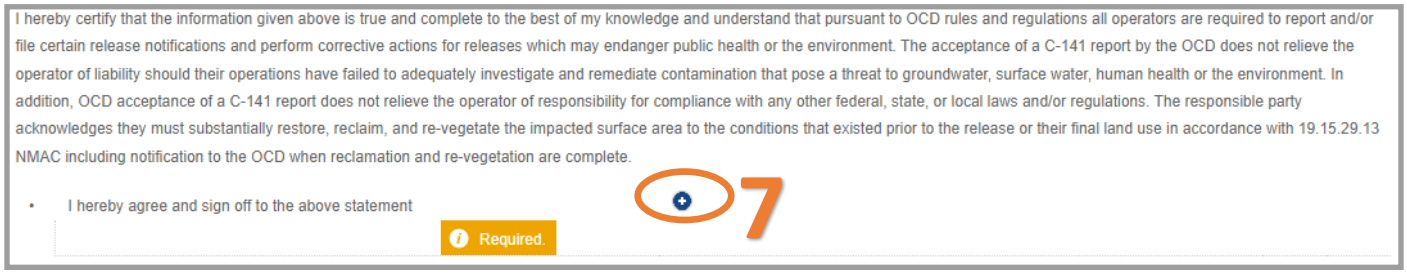


FIGURE 7

SUBMITTING A REVEGETATION REPORT(C-141-V-Revegetation)

7. Once all of the questions have been answered. The user should review the answers and then Sign/Certify the data for submission.



9. Review your C-141 application for accuracy and completeness. This is the last chance before submitting the document to the OCD to make any corrections to this data. Operators will have the ability to modify these questions/response on any subsequent C-141 submission. To submit the application to the OCD click the Make Payment button. You will be directed to a Third Party website to process payment.

Clicking the Delete button will clear the entire application and remove it from your application que.

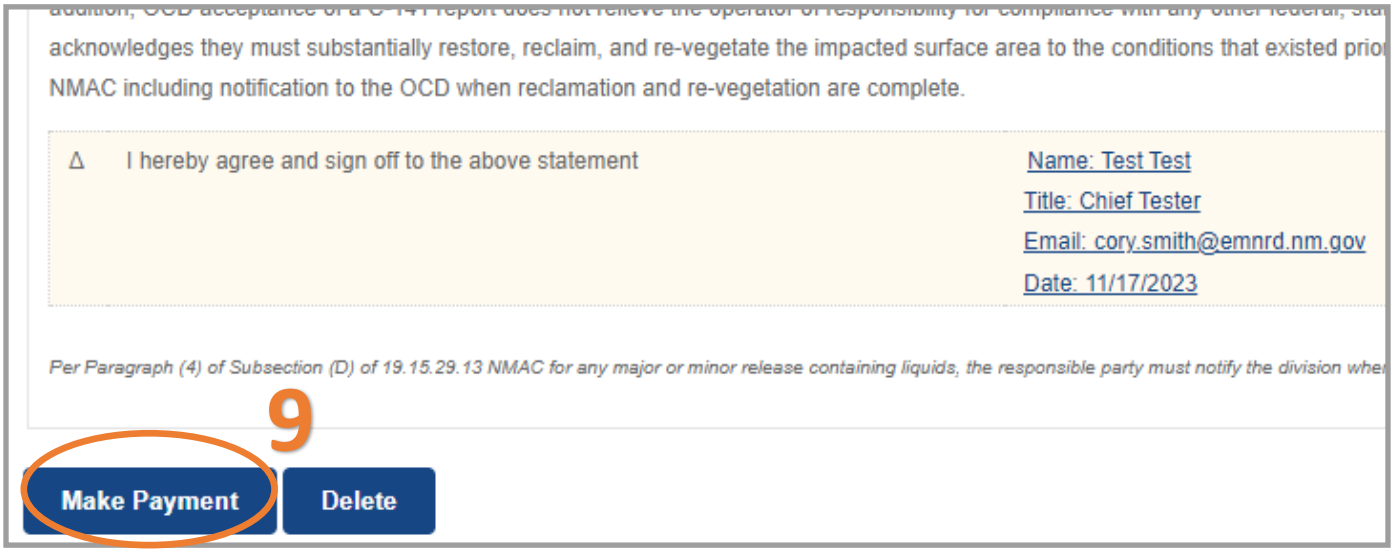


FIGURE 7

SUBMITTING A REVEGETATION REPORT(C-141-V-Revegetation)

Once the user has submitted the C-141 Revegetation Report to the OCD. The user email which was identified in step 3a will receive an email from emnrd.ocdonline@emnrd.nm.gov that is the receipt and proof of submission to the OCD. The receipt provides a PO Number that can be searched on the OCD Action Status Page.

PO Number: M70TQ-231117-C-1410
Payment Date: 11/17/2023
Payment Amount: $150.00
Payment Type: Credit Card

Application Type: Application for administrative approval of a release notification and corrective actio
Fee Amount: $150.00
Application Status: Under OCD Review

OGRID: 300825
First Name: Test
Last Name: Test
Email: cory.smith@emnrd.nm.gov

At this state the Revegetation Report C-141 Application is Under OCD Review (Submitted) and the incident status will change to reflect the current status of the incident.

OCD Permitting

Home > Submissions > Releases > C-141

Status: Under OCD Review

PO Number	Type	ID	Status	Fee Amount	Payment Type	Created	Submitter *	Modified
YGLL0-231020-C-1410	C-141	nAPP2226353908	Under OCD Review	$150.00	Credit Card	10/20/2023	Ashley Maxwell	10/20/2023
GOD86-231020-C-1410	C-141	nAPP2225225752	Under OCD Review	$150.00	Credit Card	10/20/2023	Ashley Maxwell	10/20/2023
4MA74-231023-C-1410	C-141	nAPP2225141826	Under OCD Review	$150.00	Credit Card	10/23/2023	Ashley Maxwell	10/23/2023
TGG4W-231102-C-1410	C-141	nAPP2322646789	Under OCD Review	$150.00	Credit Card	11/2/2023	Test Test	11/2/2023
IHWWC-231109-C-1410	C-141	nAPP2323758323	Under OCD Review	$150.00	Credit Card	11/9/2023	Michael Buchanan	11/9/2023
D6D6A-231109-C-1410	C-141	nAPP2215863582	Under OCD Review	$150.00	Credit Card	11/9/2023	Ashley Maxwell	11/9/2023
4E8LQ-231[illegible]-C-1410	C-141	nAPP2330760406	Under OCD Review	$150.00	Credit Card	11/15/2023	Test Test	11/15/2023
M70TQ-231117-C-1410	C-141	nAPP2330760406	Under OCD Review	$150.00	Credit Card	11/17/2023	Test Test	11/17/2023

NAPP2330760406 TL SAN ANDRES #5 TANK OVERFLOW @ 30-005-60572

General Incident Information

Site Name: TL San Andres #5 Tank Overflow
Well: [30-005-60572] TWIN LAKES SAN ANDRES UNIT #005
Facility:
Operator: [300825] BLUE SKY NM, INC.
Status: Re-vegetation Report Received, Pending OCD Review
Type: Produced Water Release
District: Artesia
Severity: Major
Surface Owner: Private
County: Chaves (05)

FIGURE 7

SUBMITTING A REVEGETATION REPORT(C-141-V-Revegetation)

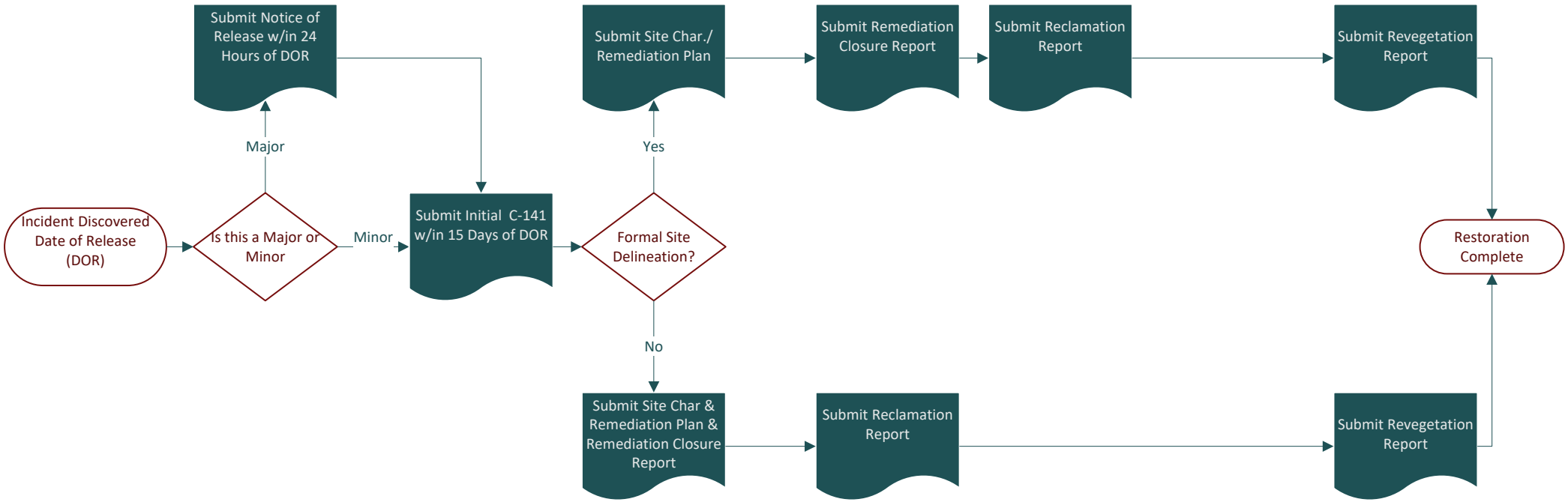
The Revegetation Report works exactly like the other applications where the User identified in Step 3a will receive email's with Conditions of Approvals or Reasons for Rejections. See Figure 5 for detailed examples of Approved/Rejected status. Below are the incident status associated to the Revegetation Report.
This is the final C-141 once the Revegetation Report is approved Restoration is considered Complete.

Example of Approved

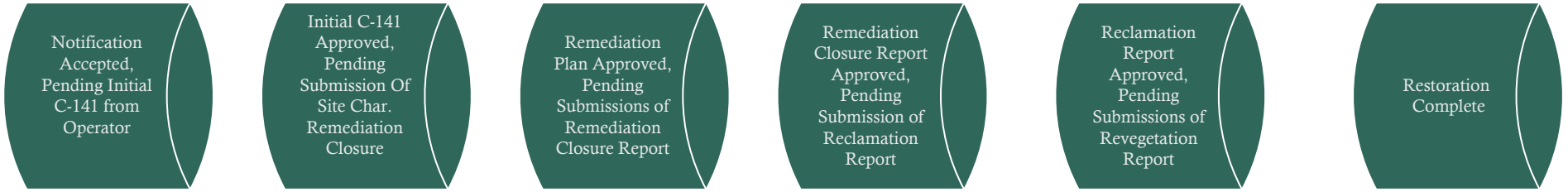
Remember rejected Applications do not show a rejected status but will display the furthest along APPROVED application. In this case the last accept application was the Remediation Closure Report.

Example of Rejected

Simple Incident Time Line



Simplified Linear Incident Status



Major Release Notice Example

From: OCDOnline@emnrd.nm.gov <OCDOnline@emnrd.nm.gov>
Sent: Thursday, February 12, 2026 9:29 AM
To: Bratcher, Michael, EMNRD <mike.bratcher@emnrd.nm.gov>
Cc: Romero, Rosa, EMNRD <RosaM.Romero@emnrd.nm.gov>; Hall, Brittany, EMNRD <Brittany.Hall@emnrd.nm.gov>
Subject: OCD Notified of Major Release

To whom it may concern (c/o supervisory staff for the OCD Environmental Bureau),

The Oil Conservation Division (OCD) has been notified of a major release in Eddy county for District 2 that was reported to have occurred/discovered on 02/11/2026.

The release was submitted by [371643] SOLARIS WATER MIDSTREAM, LLC on a recently processed NOR application ([553289]).

The incident [nAPP2604334149] 1041 Booster Pump Release has been created and assigned for review by Shelly Wells.

To whom it may concern (c/o Matthew Green for SOLARIS WATER MIDSTREAM, LLC),

The OCD has accepted the submitted ***Notification of a release*** (NOR), for incident ID (n#) nAPP2604334149,
with the following conditions:

- **When submitting future reports regarding this release, please submit the calculations used or specific justification for the volumes reported on the initial C-141.**

Please reference nAPP2604334149, on all subsequent C-141 submissions and communications regarding the remediation of this release.
NOTE: As of December 2019, NMOCD has discontinued the use of the "RP" number.
If you have any questions regarding this application, or don't know why you have received this email, please contact us.

ocd.enviro@emnrd.nm.gov

New Mexico Energy, Minerals and Natural Resources Department
1220 South St. Francis Drive
Santa Fe, NM 87505

C-141 Incident Details

OCD Permitting

Home › Searches › Incidents › Incident Details

nAPP2513556445 ROSS DRAW UNIT #043

General Incident Information

Well:	[30-015-42017] ROSS DRAW UNIT #043		
Facility:			
Operator:	[246289] WPX Energy Permian, LLC		
Status:	Active		
Stage:	Remediation Closure Report Approved, Pending submission of Reclamation Report from the operator		
Type:	Produced Water Release	**Severity:**	
Incident Location:	I-22-26S-30E 2260 FSL 640 FEL		
Lat/Long:	32.0269012,-103.8626175 NAD83		
District:	Artesia	**County:**	Eddy (15)
Surface Owner:	Federal		

Severity Indicators

Resulted In Fire:	☐	**Resulted In Injury:**	☐
Endangered Public Health:	☐	**Will or Has Reached Watercourse:**	☐
Fresh Water Contamination:	☐	**Property Or Environmental Damage:**	☐

C-141 Incident Details

Severity Indicators

Resulted In Fire:	☐	Resulted In Injury:	☐
Endangered Public Health:	☐	Will or Has Reached Watercourse:	☐
Fresh Water Contamination:	☐	Property Or Environmental Damage:	☐

Event Dates

Date of Discovery:	05/14/2025	Initial C-141 Report Due:	5/29/2025
		Remediation Closure Report Due:	04/27/2026

C-141 Incident Details

Incident Dates

19.15.29 NMAC - RELEASES

Type	Action	Received	Denied	Approved
Remediation Closure Report	[527035]	11/18/2025		01/26/2026
Sampling Notice	[512751]	10/07/2025		10/07/2025
Sampling Notice	[512750]	10/07/2025		10/07/2025
Sampling Notice	[508737]	09/24/2025		09/24/2025
Sampling Notice	[508736]	09/24/2025		09/24/2025
Sampling Notice	[508735]	09/24/2025		09/24/2025
Sampling Notice	[507064]	09/18/2025		09/18/2025
Sampling Notice	[507063]	09/18/2025		09/18/2025
Sampling Notice	[505666]	09/12/2025		09/12/2025
Sampling Notice	[505665]	09/12/2025		09/12/2025
Sampling Notice	[472080]	06/09/2025		06/09/2025
Sampling Notice	[470243]	06/03/2025		06/03/2025
Sampling Notice	[470026]	06/02/2025		06/02/2025
Sampling Notice	[470024]	06/02/2025		06/02/2025
Remediation Plan	[527035]	11/18/2025		01/26/2026
Site Characterization	[527035]	11/18/2025		01/26/2026
Initial C-141 Report	[465093]	05/20/2025		05/20/2025
Notification	[463941]	05/15/2025		05/15/2025

C-141 Incident Details

Incident Materials

Cause	Source	Material	Volume				Units
			Unk.	Released	Recovered	Lost	
Equipment Failure	Producing Well	Produced Water	☐	50	40	10	BBL
Equipment Failure	Producing Well	Crude Oil	☐	3	2	1	BBL

The concentration of dissolved chloride in the produced water >10,000 mg/l: ☑ Yes ☐ No

Cause of Release OR Additional Details provided for materials released:

1" nipple on wellhead broke at threads allowing fluids to be released to pad surface and small amount off pad.

C-141 Incident Details

Incident Events

Date	Detail
01/26/2026	App ID 527035: Remediation closure report approved, release resolved.
01/26/2026	The (01/26/2026, C-141) application [527035] was accepted by OCD. The operator was emailed with details of this event.
01/26/2026	An application [527035] was submitted to OCD for review. It was submitted, indicating that it was an: [C-141] Application for administrative approval of a release notification and corrective action The operator was emailed confirmation of this event.
11/17/2025	The (01/26/2026, C-141) application [527035] was assigned to this incident.
11/12/2025	7-day time extension request is approved. Remediation Due date updated to November 17, 2025 Email submitted on 11/07/2025 via third party states, "Earth Systems R & R (ESRR) on behalf of WPX Energy Permian (WPX) is requesting a final extension to the current deadline for a report required in 19.15.29.12.B(1) NMAC at the Ross Draw Unit #043 (Site). Remediation and restoration activities have been completed, and a corrective action closure report is in final review by ESRR. WPX requests an additional 7 days to the November 10, 2025, deadline for the release associated with Incident Number nAPP2513556445, to allow additional time to submit the subsequent corrective action closure report. WPX anticipates submitting the closure report by November 17, 2025".
10/07/2025	The (10/07/2025, C-141N) application [512751] was assigned to this incident.
10/07/2025	The (10/07/2025, C-141N) application [512750] was assigned to this incident.
09/24/2025	The (09/24/2025, C-141N) application [508737] was assigned to this incident.
09/24/2025	The (09/24/2025, C-141N) application [508736] was assigned to this incident.
09/24/2025	The (09/24/2025, C-141N) application [508735] was assigned to this incident.
09/18/2025	The (09/18/2025, C-141N) application [507064] was assigned to this incident.
09/18/2025	The (09/18/2025, C-141N) application [507063] was assigned to this incident.

C-141 Incident Details

09/17/2025	Email received from operator/consultant. Sampling activities for September 18th and 19th, 2025 will need to be rescheduled due to a change in schedule by the WPX third-party contractor performing the remediation.
09/12/2025	The (09/12/2025, C-141N) application [505666] was assigned to this incident.
09/12/2025	The (09/12/2025, C-141N) application [505665] was assigned to this incident.
08/12/2025	Time extension requested has been granted for 90-days. Remediation Due date has been updated to November 10, 2025. Email submitted on 08/11/2025 via third party states, "A produced water and crude oil release was discovered on May 14, 2025, and was subsequently assigned Incident Number nAPP2431628896 and assessed by ESRR on May 18, 2025. On May 22, 2025, ESRR placed oil absorbent booms in off pad areas approved by the BLM to help mitigate impacts. On June 5 and 6, 2025, ESRR performed initial delineation activities via hand tools and oversaw initial excavation efforts on pad by WPX to help mitigate further impacts to off pad areas. ESRR, on behalf of WPX consulted with their approved qualified biologist as well as an archaeologist from Boone Archaeological Resource Consultants, LLC (Boone) for an assessment evaluation related to biological and cultural aspects. A botanical survey for special status plant species with potential to occur in the area [i.e., Coryphantha robustispina ssp. scheeri (Sheer's beehive cactus)] yielded negative findings. No species of concern were observed within 100-meters of the proposed work area. A negative cultural report was submitted to the BLM by Boone on June 13, 2025. Continued remediation activities are anticipated to begin end of August 2025. WPX requests an extension of the August 12, 2025, deadline for the release associated with Incident Number nAPP2513556445, to allow additional time for continued remediation and to allow ESRR to complete a subsequent corrective action closure report upon favorable confirmation laboratory analyticals".
06/09/2025	The (06/09/2025, C-141N) application [472080] was assigned to this incident.
06/03/2025	The (06/03/2025, C-141N) application [470243] was assigned to this incident.
06/02/2025	The (06/02/2025, C-141N) application [470026] was assigned to this incident.
06/02/2025	The (06/02/2025, C-141N) application [470024] was assigned to this incident.
05/20/2025	The (05/20/2025, C-141) application [465093] was accepted by OCD. The operator was emailed with details of this event.

C-141 Incident Details

05/20/2025	An application [465093] was submitted to OCD for review. It was submitted, indicating that it was an: [C-141] Application for administrative approval of a release notification and corrective action The operator was emailed confirmation of this event.
05/20/2025	The (05/20/2025, C-141) application [465093] was assigned to this incident.
05/15/2025	The (05/15/2025, NOR) application [463941] was assigned to this incident.
05/15/2025	New incident created by the operator, upon the submission of notification of release.
05/14/2025	Release discovered by the operator.

C-141 Incident Details

Incident Severity

Major release as defined by 19.15.29.7(A) NMAC?

☑ Yes ☐ No

From paragraph A. "Major release" determine using:

(1) an unauthorized release of a volume, excluding gases, of 25 barrels or more.

Incident Corrective Actions

Initial Response

☑ The source of the release has been stopped.

☑ The impacted area has been secured to protect human health and the environment.

☑ Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices.

☑ All free liquids and recoverable materials have been removed and managed appropriately.

If all the actions described above have not been undertaken, explain why:

C-141 Incident Details

Site Characterization

What is the shallowest depth to groundwater beneath the area affected by the release?	Between 100 and 500 (ft.) bgs
What method was used to determine the depth to ground water?	Attached Document
Did this release impact groundwater or surface water?	☐ Yes ☑ No
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?	Between 1000 (ft.) and ½ (mi.)
Are the lateral extents of the release within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)?	Between 1 and 5 (mi.)
Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church?	Greater than 5 (mi.)
Are the lateral extents of the release within 500 horizontal feet of a spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes?	Between 1 and 5 (mi.)
Are the lateral extents of the release within 1000 feet of any other fresh water well or spring?	Between 1 and 5 (mi.)
Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh water well field?	Greater than 5 (mi.)
Are the lateral extents of the release within 300 feet of a wetland?	Between 1000 (ft.) and ½ (mi.)
Are the lateral extents of the release overlying a subsurface mine?	Greater than 5 (mi.)
Are the lateral extents of the release overlying an (non-karst) unstable area?	Greater than 5 (mi.)
Categorize the risk of this well / site being in a karst geology?	Medium
Are the lateral extents of the release within a 100-year floodplain?	Between 1 and 5 (mi.)
Did the release impact areas not on an exploration, development, production, or storage site?	☑ Yes ☐ No

C-141 Incident Details

Remediation Plan

Have the lateral and vertical extents of contamination been fully delineated?			☑ Yes ☐ No
Was this release entirely contained within a lined containment area?			☐ Yes ☑ No
	Chloride ***	(EPA 300.0 or SM4500 Cl B)	23600 (mg/kg)
	TPH (GRO+DRO+MRO)	(EPA SW-846 Method 8015M)	12300 (mg/kg)
	GRO+DRO	(EPA SW-846 Method 8015M)	12300 (mg/kg)
	BTEX	(EPA SW-846 Method 8021B or 8260B)	0 (mg/kg)
	Benzene	(EPA SW-846 Method 8021B or 8260B)	0 (mg/kg)
On what estimated date will the remediation commence?			09/19/2025
On what date will (or did) the final sampling occur?			10/09/2025
On what date will (or was) the remediation complete(d)			10/21/2025
What is the estimated surface area (in square feet) that will be reclaimed?			30400 (sq ft)
What is the estimated volume (in cubic yards) that will be reclaimed?			5004 (cu yds)
What is the estimated surface area (in square feet) that will be remediated?			30400 (sq ft)
What is the estimated volume (in cubic yards) that will be remediated?			5004 (cu yds)

This remediation will (or is expected to) utilize the following processes to remediate / reduce contaminants:

☑ (Ex Situ) Excavation and **off-site** disposal (i.e. dig and haul, hydrovac, etc.)

Which OCD approved facility will be used for **off-site** disposal? [fEEM0112334510] HALFWAY DISPOSAL AND LANDFILL

☐ OTHER (Non-listed remedial process)?

C-141 Incident Details

Remediation Closure Report

Have the lateral and vertical extents of contamination been fully delineated?	☑ Yes ☐ No
Was this release entirely contained within a lined containment area?	☐ Yes ☑ No
All areas reasonably needed for production or subsequent drilling operations have been stabilized, returned to the sites existing grade, and have a soil cover that prevents ponding of water, minimizing dust and erosion?	☑ Yes ☐ No
What was the total surface area (in square feet) remediated?	30400 (sq ft)
What was the total volume (cubic yards) remediated?	5004 (cu yd)
All areas not reasonably needed for production or subsequent drilling operations have been reclaimed to contain a minimum of four feet of non-waste contain earthen material with concentrations less than 600 mg/kg chlorides, 100 mg/kg TPH, 50 mg/kg BTEX, and 10 mg/kg Benzene?	☑ Yes ☐ No
What was the total surface area (in square feet) reclaimed?	30400 (sq ft)
What was the total volume (in cubic yards) reclaimed?	5004 (cu yd)

☑ OTHER (Non-listed remedial process)?

Site Remediated

No reclamation report data was found for this incident.

No re-vegetation report data was found for this incident.