

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

Pit, Below-Grade Tank, or
Proposed Alternative Method Permit or Closure Plan Application

Type of action: Below grade tank registration
 Permit of a pit or proposed alternative method
 Closure of a pit, below-grade tank, or proposed alternative method
 Modification to an existing permit/or registration
 Closure plan only submitted for an existing permitted or non-permitted pit, below-grade tank,
or proposed alternative method

Instructions: Please submit one application (Form C-144) per individual pit, below-grade tank or alternative request

Please be advised that approval of this request does not relieve the operator of liability should operations result in pollution of surface water, ground water or the environment. Nor does approval relieve the operator of its responsibility to comply with any other applicable governmental authority's rules, regulations or ordinances.

1.
Operator: _____ OGRID #: _____
Address: _____
Facility or well name: _____
API Number: _____ OCD Permit Number: _____
U/L or Qtr/Qtr _____ Section _____ Township _____ Range _____ County: _____
Center of Proposed Design: Latitude _____ Longitude _____ NAD83
Surface Owner: Federal State Private Tribal Trust or Indian Allotment

2.
 Pit: Subsection F, G or J of 19.15.17.11 NMAC
Temporary: Drilling Workover
 Permanent Emergency Cavitation P&A Multi-Well Fluid Management Low Chloride Drilling Fluid yes no
 Lined Unlined Liner type: Thickness _____ mil LLDPE HDPE PVC Other _____
 String-Reinforced
Liner Seams: Welded Factory Other _____ Volume: _____ bbl Dimensions: L _____ x W _____ x D _____

3.
 Below-grade tank: Subsection I of 19.15.17.11 NMAC
Volume: _____ bbl Type of fluid: _____
Tank Construction material: _____
 Secondary containment with leak detection Visible sidewalls, liner, 6-inch lift and automatic overflow shut-off
 Visible sidewalls and liner Visible sidewalls only Other _____
Liner type: Thickness _____ mil HDPE PVC Other _____

4.
 Alternative Method:
Submittal of an exception request is required. Exceptions must be submitted to the Santa Fe Environmental Bureau office for consideration of approval.

5.
Fencing: Subsection D of 19.15.17.11 NMAC (Applies to permanent pits, temporary pits, and below-grade tanks)
 Chain link, six feet in height, two strands of barbed wire at top (Required if located within 1000 feet of a permanent residence, school, hospital, institution or church)
 Four foot height, four strands of barbed wire evenly spaced between one and four feet
 Alternate. Please specify _____

6.
Netting: Subsection E of 19.15.17.11 NMAC (*Applies to permanent pits and permanent open top tanks*)
 Screen Netting Other _____
 Monthly inspections (If netting or screening is not physically feasible)

7.
Signs: Subsection C of 19.15.17.11 NMAC
 12"x 24", 2" lettering, providing Operator's name, site location, and emergency telephone numbers
 Signed in compliance with 19.15.16.8 NMAC

8.
Variations and Exceptions:
 Justifications and/or demonstrations of equivalency are required. Please refer to 19.15.17 NMAC for guidance.
Please check a box if one or more of the following is requested, if not leave blank:
 Variance(s): Requests must be submitted to the appropriate division district for consideration of approval.
 Exception(s): Requests must be submitted to the Santa Fe Environmental Bureau office for consideration of approval.

9.
Siting Criteria (regarding permitting): 19.15.17.10 NMAC
Instructions: The applicant must demonstrate compliance for each siting criteria below in the application. Recommendations of acceptable source material are provided below. Siting criteria does not apply to drying pads or above-grade tanks.

General siting

Ground water is less than 25 feet below the bottom of a low chloride temporary pit or below-grade tank.
 - NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells Yes No
 NA

Ground water is less than 50 feet below the bottom of a Temporary pit, permanent pit, or Multi-Well Fluid Management pit .
 NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells Yes No
 NA

Within incorporated municipal boundaries or within a defined municipal fresh water well field covered under a municipal ordinance adopted pursuant to NMSA 1978, Section 3-27-3, as amended. **(Does not apply to below grade tanks)**
 - Written confirmation or verification from the municipality; Written approval obtained from the municipality Yes No

Within the area overlying a subsurface mine. **(Does not apply to below grade tanks)**
 - Written confirmation or verification or map from the NM EMNRD-Mining and Mineral Division Yes No

Within an unstable area. **(Does not apply to below grade tanks)**
 - Engineering measures incorporated into the design; NM Bureau of Geology & Mineral Resources; USGS; NM Geological Society; Topographic map Yes No

Within a 100-year floodplain. **(Does not apply to below grade tanks)**
 - FEMA map Yes No

Below Grade Tanks

Within 100 feet of a continuously flowing watercourse, significant watercourse, lake bed, sinkhole, wetland or playa lake (measured from the ordinary high-water mark).
 - Topographic map; Visual inspection (certification) of the proposed site Yes No

Within 200 horizontal feet of a spring or a fresh water well used for public or livestock consumption;.
 - NM Office of the State Engineer - iWATERS database search; Visual inspection (certification) of the proposed site Yes No

Temporary Pit using Low Chloride Drilling Fluid (maximum chloride content 15,000 mg/liter)

Within 100 feet of a continuously flowing watercourse, or any other significant watercourse or within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark). (Applies to low chloride temporary pits.)
 - Topographic map; Visual inspection (certification) of the proposed site Yes No

Within 300 feet from a occupied permanent residence, school, hospital, institution, or church in existence at the time of initial application.
 - Visual inspection (certification) of the proposed site; Aerial photo; Satellite image Yes No

Within 200 horizontal feet of a spring or a private, domestic fresh water well used by less than five households for domestic or stock watering purposes, or 300feet of any other fresh water well or spring, in existence at the time of the initial application.
 NM Office of the State Engineer - iWATERS database search; Visual inspection (certification) of the proposed site Yes No

Within 100 feet of a wetland.
 - US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site Yes No

Temporary Pit Non-low chloride drilling fluid

Within 300 feet of a continuously flowing watercourse, or any other significant watercourse, or within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark).
 - Topographic map; Visual inspection (certification) of the proposed site Yes No

Within 300 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application.
 - Visual inspection (certification) of the proposed site; Aerial photo; Satellite image Yes No

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, or 1000 feet of any other fresh water well or spring, in the existence at the time of the initial application;
 - NM Office of the State Engineer - iWATERS database search; Visual inspection (certification) of the proposed site Yes No

Within 300 feet of a wetland.
 - US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site Yes No

Permanent Pit or Multi-Well Fluid Management Pit

Within 300 feet of a continuously flowing watercourse, or 200 feet of any other significant watercourse, or lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark).
 - Topographic map; Visual inspection (certification) of the proposed site Yes No

Within 1000 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application.
 - Visual inspection (certification) of the proposed site; Aerial photo; Satellite image Yes No

Within 500 horizontal feet of a spring or a fresh water well used for domestic or stock watering purposes, in existence at the time of initial application.
 - NM Office of the State Engineer - iWATERS database search; Visual inspection (certification) of the proposed site Yes No

Within 500 feet of a wetland.
 - US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site Yes No

10. Temporary Pits, Emergency Pits, and Below-grade Tanks Permit Application Attachment Checklist: Subsection B of 19.15.17.9 NMAC
Instructions: Each of the following items must be attached to the application. Please indicate, by a check mark in the box, that the documents are attached.

- Hydrogeologic Report (Below-grade Tanks) - based upon the requirements of Paragraph (4) of Subsection B of 19.15.17.9 NMAC
 - Hydrogeologic Data (Temporary and Emergency Pits) - based upon the requirements of Paragraph (2) of Subsection B of 19.15.17.9 NMAC
 - Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19.15.17.10 NMAC
 - Design Plan - based upon the appropriate requirements of 19.15.17.11 NMAC
 - Operating and Maintenance Plan - based upon the appropriate requirements of 19.15.17.12 NMAC
 - Closure Plan (Please complete Boxes 14 through 18, if applicable) - based upon the appropriate requirements of Subsection C of 19.15.17.9 NMAC and 19.15.17.13 NMAC
- Previously Approved Design (attach copy of design) API Number: _____ or Permit Number: _____

11. Multi-Well Fluid Management Pit Checklist: Subsection B of 19.15.17.9 NMAC
Instructions: Each of the following items must be attached to the application. Please indicate, by a check mark in the box, that the documents are attached.

- Design Plan - based upon the appropriate requirements of 19.15.17.11 NMAC
 - Operating and Maintenance Plan - based upon the appropriate requirements of 19.15.17.12 NMAC
 - A List of wells with approved application for permit to drill associated with the pit.
 - Closure Plan (Please complete Boxes 14 through 18, if applicable) - based upon the appropriate requirements of Subsection C of 19.15.17.9 NMAC and 19.15.17.13 NMAC
 - Hydrogeologic Data - based upon the requirements of Paragraph (4) of Subsection B of 19.15.17.9 NMAC
 - Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19.15.17.10 NMAC
- Previously Approved Design (attach copy of design) API Number: _____ or Permit Number: _____

12.

Permanent Pits Permit Application Checklist: Subsection B of 19.15.17.9 NMAC

Instructions: Each of the following items must be attached to the application. Please indicate, by a check mark in the box, that the documents are attached.

- Hydrogeologic Report - based upon the requirements of Paragraph (1) of Subsection B of 19.15.17.9 NMAC
- Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19.15.17.10 NMAC
- Climatological Factors Assessment
- Certified Engineering Design Plans - based upon the appropriate requirements of 19.15.17.11 NMAC
- Dike Protection and Structural Integrity Design - based upon the appropriate requirements of 19.15.17.11 NMAC
- Leak Detection Design - based upon the appropriate requirements of 19.15.17.11 NMAC
- Liner Specifications and Compatibility Assessment - based upon the appropriate requirements of 19.15.17.11 NMAC
- Quality Control/Quality Assurance Construction and Installation Plan
- Operating and Maintenance Plan - based upon the appropriate requirements of 19.15.17.12 NMAC
- Freeboard and Overtopping Prevention Plan - based upon the appropriate requirements of 19.15.17.11 NMAC
- Nuisance or Hazardous Odors, including H₂S, Prevention Plan
- Emergency Response Plan
- Oil Field Waste Stream Characterization
- Monitoring and Inspection Plan
- Erosion Control Plan
- Closure Plan - based upon the appropriate requirements of Subsection C of 19.15.17.9 NMAC and 19.15.17.13 NMAC

13.

Proposed Closure: 19.15.17.13 NMAC

Instructions: Please complete the applicable boxes, Boxes 14 through 18, in regards to the proposed closure plan.

- Type: Drilling Workover Emergency Cavitation P&A Permanent Pit Below-grade Tank Multi-well Fluid Management Pit
 Alternative
- Proposed Closure Method: Waste Excavation and Removal
 Waste Removal (Closed-loop systems only)
 On-site Closure Method (Only for temporary pits and closed-loop systems)
 In-place Burial On-site Trench Burial
 Alternative Closure Method

14.

Waste Excavation and Removal Closure Plan Checklist: (19.15.17.13 NMAC) **Instructions:** Each of the following items must be attached to the closure plan. Please indicate, by a check mark in the box, that the documents are attached.

- Protocols and Procedures - based upon the appropriate requirements of 19.15.17.13 NMAC
- Confirmation Sampling Plan (if applicable) - based upon the appropriate requirements of Subsection C of 19.15.17.13 NMAC
- Disposal Facility Name and Permit Number (for liquids, drilling fluids and drill cuttings)
- Soil Backfill and Cover Design Specifications - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC
- Re-vegetation Plan - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC
- Site Reclamation Plan - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC

15.

Siting Criteria (regarding on-site closure methods only): 19.15.17.10 NMAC

Instructions: Each siting criteria requires a demonstration of compliance in the closure plan. Recommendations of acceptable source material are provided below. Requests regarding changes to certain siting criteria require justifications and/or demonstrations of equivalency. Please refer to 19.15.17.10 NMAC for guidance.

Ground water is less than 25 feet below the bottom of the buried waste. - NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NA
Ground water is between 25-50 feet below the bottom of the buried waste - NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NA
Ground water is more than 100 feet below the bottom of the buried waste. - NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NA
Within 100 feet of a continuously flowing watercourse, or 200 feet of any other significant watercourse, lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark). - Topographic map; Visual inspection (certification) of the proposed site	<input type="checkbox"/> Yes <input type="checkbox"/> No
Within 300 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application. - Visual inspection (certification) of the proposed site; Aerial photo; Satellite image	<input type="checkbox"/> Yes <input type="checkbox"/> No
Within 300 horizontal feet of a private, domestic fresh water well or spring used for domestic or stock watering purposes, in existence at the time of initial application. - NM Office of the State Engineer - iWATERS database; Visual inspection (certification) of the proposed site	<input type="checkbox"/> Yes <input type="checkbox"/> No
Written confirmation or verification from the municipality; Written approval obtained from the municipality	<input type="checkbox"/> Yes <input type="checkbox"/> No
Within 300 feet of a wetland. US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site	<input type="checkbox"/> Yes <input type="checkbox"/> No
Within incorporated municipal boundaries or within a defined municipal fresh water well field covered under a municipal ordinance	<input type="checkbox"/> Yes <input type="checkbox"/> No

adopted pursuant to NMSA 1978, Section 3-27-3, as amended. - Written confirmation or verification from the municipality; Written approval obtained from the municipality	<input type="checkbox"/> Yes <input type="checkbox"/> No
Within the area overlying a subsurface mine. - Written confirmation or verification or map from the NM EMNRD-Mining and Mineral Division	<input type="checkbox"/> Yes <input type="checkbox"/> No
Within an unstable area. - Engineering measures incorporated into the design; NM Bureau of Geology & Mineral Resources; USGS; NM Geological Society; Topographic map	<input type="checkbox"/> Yes <input type="checkbox"/> No
Within a 100-year floodplain. - FEMA map	<input type="checkbox"/> Yes <input type="checkbox"/> No

16. **On-Site Closure Plan Checklist:** (19.15.17.13 NMAC) *Instructions: Each of the following items must be attached to the closure plan. Please indicate, by a check mark in the box, that the documents are attached.*

- Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19.15.17.10 NMAC
- Proof of Surface Owner Notice - based upon the appropriate requirements of Subsection E of 19.15.17.13 NMAC
- Construction/Design Plan of Burial Trench (if applicable) based upon the appropriate requirements of Subsection K of 19.15.17.11 NMAC
- Construction/Design Plan of Temporary Pit (for in-place burial of a drying pad) - based upon the appropriate requirements of 19.15.17.11 NMAC
- Protocols and Procedures - based upon the appropriate requirements of 19.15.17.13 NMAC
- Confirmation Sampling Plan (if applicable) - based upon the appropriate requirements of 19.15.17.13 NMAC
- Waste Material Sampling Plan - based upon the appropriate requirements of 19.15.17.13 NMAC
- Disposal Facility Name and Permit Number (for liquids, drilling fluids and drill cuttings or in case on-site closure standards cannot be achieved)
- Soil Cover Design - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC
- Re-vegetation Plan - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC
- Site Reclamation Plan - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC

17. **Operator Application Certification:**

I hereby certify that the information submitted with this application is true, accurate and complete to the best of my knowledge and belief.

Name (Print): _____ Title: _____

Signature: _____ Date: _____

e-mail address: _____ Telephone: _____

18. **OCD Approval:** Permit Application (including closure plan) Closure Plan (only) OCD Conditions (see attachment)

OCD Representative Signature: Joel Stone **Approval Date:** _____

Title: _____ **OCD Permit Number:** _____

19. **Closure Report (required within 60 days of closure completion):** 19.15.17.13 NMAC

Instructions: Operators are required to obtain an approved closure plan prior to implementing any closure activities and submitting the closure report. The closure report is required to be submitted to the division within 60 days of the completion of the closure activities. Please do not complete this section of the form until an approved closure plan has been obtained and the closure activities have been completed.

Closure Completion Date: _____

20. **Closure Method:**

Waste Excavation and Removal On-Site Closure Method Alternative Closure Method Waste Removal (Closed-loop systems only)

If different from approved plan, please explain.

21. **Closure Report Attachment Checklist:** *Instructions: Each of the following items must be attached to the closure report. Please indicate, by a check mark in the box, that the documents are attached.*

- Proof of Closure Notice (surface owner and division)
- Proof of Deed Notice (required for on-site closure for private land only)
- Plot Plan (for on-site closures and temporary pits)
- Confirmation Sampling Analytical Results (if applicable)
- Waste Material Sampling Analytical Results (required for on-site closure)
- Disposal Facility Name and Permit Number
- Soil Backfilling and Cover Installation
- Re-vegetation Application Rates and Seeding Technique
- Site Reclamation (Photo Documentation)

On-site Closure Location: Latitude _____ Longitude _____ NAD: 1927 1983

22.

Operator Closure Certification:

I hereby certify that the information and attachments submitted with this closure report is true, accurate and complete to the best of my knowledge and belief. I also certify that the closure complies with all applicable closure requirements and conditions specified in the approved closure plan.

Name (Print): _____ Title: _____

Signature: _____ Date: _____

e-mail address: _____ Telephone: _____

Mudge LS 023 M Release



Notes: Soil Samples collected by Simcoe on 8/14/2025 and 9/5/2025

- Reportable spill
- Sample
- ⚙ Well

Mudge LS 023 M BGT Leak

Location: Sec 5, T31N, R1W

BP AMERICA PRODUCTION COMPANY
SAN JUAN BASIN, NORTHWEST NEW MEXICO

BELOW-GRADE TANK CLOSURE PLAN

This plan will address the standard protocols and procedures for closure of below-grade tanks (BGTs) on BP America Production Company (BP) well sites. As stipulated in Paragraph A of 19.15.17.13 NMAC, BP shall close a BGT within the time periods provided in 19.15.17.13 NMAC, or by an earlier date that the New Mexico Oil Conservation Division (NMOCD) requires because of imminent danger to fresh water, public health, safety or the environment. If deviations from this plan are necessary, any specific changes will be included on form C-144 and approved by the NMOCD. BP shall close an existing BGT that does not meet the requirements of Paragraphs (1) through (4) of Subsection I of 19.15.17.11 NMAC or is not included in Paragraph (5) of Subsection I of 19.15.17.11 NMAC within five years after June 16, 2008, if not retrofit with a BGT that complies with the BP NMOCD approved BGT design attached to the BP Design and Construction Plan. BP shall close an existing BGT that does not meet the requirements of Paragraphs (1) through (4) of Subsection I of 19.15.17.11 NMAC, if not previously retrofitted to comply with the BP NMOCD approved BGT Design attached to the BP Design and Construction Plan, prior to any sale or change in operator pursuant to 19.15.9.9 NMAC. BP shall close the permitted BGT within 60 days of cessation of the BGTs operation or as required by the transitional provisions of Subsection B, D, or E of 19.15.17.17 NMAC.

General Closure Plan

1. BP shall notify the surface owner by certified mail that it plans to close a BGT. Evidence of mailing of the notice to the address of the surface owner shown in the county tax records demonstrates compliance with this requirement.
2. BP shall notify the division District III office verbally or by other means at least 72 hours, but not more than one (1) week, prior to any closure operation. The notice shall include the operator's name, and the location to be closed by unit letter, section, township and range. If the BGT closure is associated with a particular well, then the notice shall also include the well's name, number and API number.
3. BP shall remove liquids and sludge from the BGT prior to implementing a closure method and dispose of the liquids and sludge in a NMOCD's division-approved facility. The facilities to be used are:
 - a. BP Crouch Mesa Landfarm, Permit NM-02-003 (Solids)
 - b. JFJ Landfarm, Permit NM-01-010(B) (Solids and Sludge)
 - c. Basin Disposal, Permit NM-01-0005 (Liquids)
 - d. Envirotech Inc Soil Remediation Facility, Permit NM-01-0011 (Solids and Sludge)
 - e. BP Operated E.E. Elliott SWD #1, API 30-045-27799 (Liquids)
 - f. BP Operated 13 GCU SWD #1, API 30-045-28601 (Liquids)
 - g. BP Operated GCU 259 SWD, API 30-045-20006 (Liquids)
 - h. BP Operated GCU 306 SWD, API 30-045-24286 (Liquids)
 - i. BP Operated GCU 307 SWD, API 30-045-24248 (Liquids)
 - j. BP Operated GCU 328 SWD, API 30-045-24735 (Liquids)
 - k. BP Operated Pritchard SWD #1, API 30-045-28351 (Liquids)

BP BGT Closure Plan 04-01-2010

4. BP shall remove the BGT and dispose of it in a NMOCD approved facility or recycle, reuse, or reclaim it in a manner that the NMOCD approves. If a liner is present and must be disposed of it will be cleaned by scraping any soils or other attached materials on the liner to a de minimus amount and disposed at a permitted solid waste facility, pursuant to Subparagraph (m) of Paragraph (1) of Subsection C of 19.15.35.8 NMAC. Documentation as to the final disposition of the removed BGT will be provided in the final closure report.
5. BP shall remove any on-site equipment associated with a BGT unless the equipment is required for well production.
6. BP shall test the soils beneath the BGT to determine whether a release has occurred. BP shall collect at a minimum: a five (5) point composite sample and individual grab samples from any area that is wet, discolored or showing other evidence of a release and analyze for BTEX, TPH and chlorides. The testing methods for those constituents are as follows;

Constituents	Testing Method	Release Verification (mg/Kg)
Benzene	US EPA Method SW-846 8021B or 8260B	0.2
Total BTEX	US EPA Method SW-846 8021B or 8260B	50
TPH	US EPA Method SW-846 418.1	100
Chlorides	US EPA Method 300.0 or 4500B	250 or background

Notes: mg/Kg = milligram per kilogram, BTEX = benzene, toluene, ethylbenzene, and total xylenes, TPH = total petroleum hydrocarbons. Other EPA methods that the division approves may be applied to all constituents listed. Chloride closure standards will be determined by which ever concentration level is greatest.

7. BP shall notify the division District III office of its results on form C-141.
8. If it is determined that a release has occurred, then BP will comply with 19.15.30 NMAC and 19.15.29 NMAC, as appropriate.
9. If the sampling demonstrates that a release has not occurred or that any release does not exceed the concentrations specified above, then BP shall backfill the excavation, with compacted, non-waste containing, earthen material; construct a division-prescribed soil cover, re-contour and re-vegetate the location. The location will be reclaimed if it is not with in the active process area.
10. BP shall reclaim the BGT location and all areas associated with the BGT including associated access roads to a safe and stable condition that blends with the surrounding undisturbed area. BP shall substantially restore the impacted surface area to the condition that existed prior to oil and gas operations by placement of the soil cover as provided in Subsection H of 19.15.17.13 NMAC, re-contour the location and associated areas to a contour that approximates the original contour and blends with the surrounding topography and re-vegetate according to Subsection I of 19.15.17.13 NMAC.
11. The soil cover for closures where the BGT has been removed or remediated to the NMOCD's satisfaction shall consist of the background thickness of topsoil or one foot of suitable material to establish vegetation at the site, whichever is greater. The soil

12. BP shall seed the disturbed area the first growing season after closure of the BGT. Seeding will be accomplished by drilling on the contour whenever practical or by other division-approved methods. Vegetative cover will be, at a minimum, 70% of the native perennial vegetative cover (un-impacted by overgrazing, fire or other intrusion damaging to native vegetation), consisting of at least three native plant species, including at least one grass, but not including noxious weeds, and maintenance of that cover through two successive growing seasons. During the two growing seasons that prove viability, there shall be no artificial irrigation of the vegetation.
13. BP shall seed, plant and re-seed pursuant to Paragraph (3) of Subsection I of 19.15.17.13 NMAC, until the location successfully achieves the required vegetative cover.
14. Pursuant to Paragraph (5) of Subsection I of 19.15.17.13 NMAC, BP shall notify the NMOCD when it has seeded or planted and when it successfully achieves re-vegetation.
15. Within 60 days of closure completion, BP shall submit a closure report on NMOCD's form C-144, and will include the following;
 - a. proof of closure notification (surface owner and NMOCD)
 - b. sampling analytical reports; information required by 19.15.17 NMAC;
 - c. disposal facility name and permit number
 - d. details on back-filling, capping, covering, and where applicable re-vegetation application rates and seeding techniques and
 - e. site reclamation, photo documentation. Disposal Facility Name and Permit Number
16. BP shall certify that all information in the report and attachments is accurate, truthful, and compliant with all applicable closure requirements and conditions specified in the approved closure plan.

Sante Fe Main Office
Phone: (505) 476-3441

General Information
Phone: (505) 629-6116

Online Phone Directory
<https://www.emnrd.nm.gov/ocd/contact-us>

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

QUESTIONS

Action 497837

QUESTIONS

Operator: SIMCOE LLC 1199 Main Ave., Suite 101 Durango, CO 81301	OGRID: 329736
	Action Number: 497837
	Action Type: [NOTIFY] Notification Of Release (NOR)

QUESTIONS

Location of Release Source	
<i>Please answer all the questions in this group.</i>	
Site Name	Mudge LS 023M
Date Release Discovered	08/14/2025
Surface Owner	Federal

Incident Details	
<i>Please answer all the questions in this group.</i>	
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	
<i>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.</i>	
Crude Oil Released (bbls) Details	Not answered.
Produced Water Released (bbls) Details	Cause: Corrosion Tank (Any) Produced Water Released: 13 BBL Recovered: 5 BBL Lost: 8 BBL.
Is the concentration of chloride in the produced water >10,000 mg/l	No
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.

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Phone: (505) 476-3441

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Phone: (505) 629-6116

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

QUESTIONS, Page 2

Action 497837

QUESTIONS (continued)

Operator: SIMCOE LLC 1199 Main Ave., Suite 101 Durango, CO 81301	OGRID: 329736
	Action Number: 497837
	Action Type: [NOTIFY] Notification Of Release (NOR)

QUESTIONS

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	<i>Unavailable.</i>
<i>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.</i>	

Initial Response

The responsible party must undertake the following actions immediately unless they could create a safety hazard that would result in injury.

The source of the release has been stopped	True
The impacted area has been secured to protect human health and the environment	True
Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices	True
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	Released free liquids were recovered via vac truck, remaining impacted material is contained within the dig of the BGT.

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 19.15.29.11(A)(5)(a) NMAC), please prepare and attach all information needed for closure evaluation in the follow-up C-141 submission.

Sante Fe Main Office
Phone: (505) 476-3441

General Information
Phone: (505) 629-6116

Online Phone Directory
<https://www.emnrd.nm.gov/ocd/contact-us>

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

ACKNOWLEDGMENTS

Action 497837

ACKNOWLEDGMENTS

Operator: SIMCOE LLC 1199 Main Ave., Suite 101 Durango, CO 81301	OGRID: 329736
	Action Number: 497837
	Action Type: [NOTIFY] Notification Of Release (NOR)

ACKNOWLEDGMENTS

<input checked="" type="checkbox"/>	I acknowledge that I am authorized to submit notification of a release on behalf of my operator.
<input checked="" type="checkbox"/>	I acknowledge that upon submitting this application, I will be creating a new incident file (assigned to my operator) to track the notification(s) and corrective action(s) for a release, pursuant to NMAC 19.15.29.
<input checked="" type="checkbox"/>	I acknowledge that creating a new incident file will require my operator to file subsequent submission(s) of form "C-141, Application for administrative approval of a release notification and corrective action", pursuant to NMAC 19.15.29.
<input checked="" type="checkbox"/>	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.
<input checked="" type="checkbox"/>	I acknowledge the fact that 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.
<input checked="" type="checkbox"/>	I acknowledge the fact that, 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.

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

CONDITIONS

Action 497837

CONDITIONS

Operator: SIMCOE LLC 1199 Main Ave., Suite 101 Durango, CO 81301	OGRID: 329736
	Action Number: 497837
	Action Type: [NOTIFY] Notification Of Release (NOR)

CONDITIONS

Created By	Condition	Condition Date
jbrann	When submitting future reports regarding this release, please submit the calculations used or specific justification for the volumes reported on the initial C-141.	8/20/2025

Soil Sampling Results						
Mudge LS 023 M						
Parameter	SS01 8/14/2025 5-Point Comp Base	SS02 8/14/2025 N. Sidewall	SS03 8/14/2025 E. Sidewall	SS04 8/14/2025 S. Sidewall	SS05 8/14/2025 W. Sidewall	Units
Depth	5-6	2	2	2	2	Feet - BGS
Chloride	ND	ND	ND	ND	ND	ppm
Benzene	ND	ND	ND	ND	ND	mg/kg
Toluene	ND	ND	ND	ND	ND	mg/kg
Ethylbenzene	0.036	ND	ND	ND	ND	mg/kg
Total Xylenes	0.420	ND	ND	ND	ND	mg/kg
Total BTEX	0.456	ND	ND	ND	ND	mg/kg
TPH (GRO)	ND	ND	ND	ND	ND	mg/kg
TPH (DRO)	ND	ND	ND	ND	ND	mg/kg
TPH (EXT DRO)	ND	ND	ND	ND	ND	mg/kg
Total TPH	ND	ND	ND	ND	ND	mg/kg

Parameter	SS06 9/5/2025 N. Sidewall	SS07 9/5/2025 E. Sidewall	SS08 9/5/2025 S. Sidewall	SS09 9/5/2025 W. Sidewall	SS10 9/5/2025 5-Point comp base	Units
Depth	1	1	1	1	6	Feet - BGS
Chloride	ND	35.000	ND	ND	ND	ppm
Benzene	ND	ND	ND	ND	ND	mg/kg
Toluene	ND	ND	ND	ND	ND	mg/kg
Ethylbenzene	ND	ND	ND	ND	ND	mg/kg
Total Xylenes	ND	0.033	ND	ND	ND	mg/kg
Total BTEX	ND	0.033	ND	ND	ND	mg/kg
TPH (GRO)	ND	ND	ND	ND	ND	mg/kg
TPH (DRO)	ND	ND	ND	ND	ND	mg/kg
TPH (EXT DRO)	ND	ND	ND	ND	ND	mg/kg
Total TPH	ND	ND	ND	ND	ND	mg/kg

Notes:

PID - Photoionization Detector

BTEX - Benzene, Toluene, Ethylbenzene, and total Xylenes

TPH - Total Petroleum Hydrocarbons

GRO - Gasoline Range Organics

DRO - Diesel Range Organics

EXT - Extended

Report to:
Jerrid Brann



envirotech

Practical Solutions for a Better Tomorrow

Analytical Report

IKAV Energy Inc.

Project Name: Mudge LS 023 M

Work Order: E508176

Job Number: 20095-0001

Received: 8/14/2025

Revision: 1

Report Reviewed By:

Walter Hinchman
Laboratory Director
8/18/25

5796 U.S. Hwy 64
Farmington, NM 87401

Phone: (505) 632-1881
Envirotech-inc.com



Envirotech Inc. certifies the test results meet all requirements of TNI unless noted otherwise.
Statement of Data Authenticity: Envirotech Inc, attests the data reported has not been altered in any way.
Partial or incomplete reproduction of this report is prohibited, unless approved by Envirotech Inc.
Envirotech Inc, holds the Utah TNI certification NM00979 for data reported.
Envirotech Inc, holds the Texas TNI certification T104704557 for data reported.



Date Reported: 8/18/25

Jerrid Brann
1199 Main Ave. Suite 242
Durango, CO 81301

Project Name: Mudge LS 023 M
Workorder: E508176
Date Received: 8/14/2025 4:54:00PM

Jerrid Brann,

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 8/14/2025 4:54:00PM, under the Project Name: Mudge LS 023 M.

The analytical test results summarized in this report with the Project Name: Mudge LS 023 M apply to the individual samples collected, identified and submitted bearing the project name on the enclosed chain-of-custody. Subcontracted sample analyses not conducted by Envirotech, Inc., are attached in full as issued by the subcontract laboratory.

Please review the Chain-of-Custody (COC) and Sample Receipt Checklist (SRC) for any issues regarding sample receipt temperature, containers, preservation etc. To best understand your test results, review the entire report summarizing your sample data and the associated quality control batch data.

All reported data in this analytical report were analyzed according to the referenced method(s) and are in compliance with the latest NELAC/TNI standards, unless otherwise noted. Samples or analytical quality control parameters not meeting specific QC criteria are qualified with a data flag. Data flag definitions are located in the Notes and Definitions section of this analytical report.

If you have any questions concerning this report, please feel free to contact Envirotech, Inc.

Respectfully,

Walter Hinchman
Laboratory Director
Office: 505-632-1881
Cell: 775-287-1762
whinchman@envirotech-inc.com

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Sample Summary

IKAV Energy Inc. 1199 Main Ave. Suite 242 Durango CO, 81301	Project Name:	Mudge LS 023 M	Reported: 08/18/25 15:24
	Project Number:	20095-0001	
	Project Manager:	Jerrid Brann	

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
SS01 5-POINT BASE	E508176-01A	Soil	08/14/25	08/14/25	Glass Jar, 4 oz.
SS02 N. SIDEWALL	E508176-02A	Soil	08/14/25	08/14/25	Glass Jar, 4 oz.
SS03 E. SIDEWALL	E508176-03A	Soil	08/14/25	08/14/25	Glass Jar, 4 oz.
SS04 S. SIDEWALL	E508176-04A	Soil	08/14/25	08/14/25	Glass Jar, 4 oz.
SS05 W. SIDEWALL	E508176-05A	Soil	08/14/25	08/14/25	Glass Jar, 4 oz.



Sample Data

IKAV Energy Inc. 1199 Main Ave. Suite 242 Durango CO, 81301	Project Name:	Mudge LS 023 M	Reported: 8/18/2025 3:24:37PM
	Project Number:	20095-0001	
	Project Manager:	Jerrid Brann	

SS01 5-POINT BASE

E508176-01

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B		mg/kg	mg/kg	Analyst: BA		Batch: 2533121
Benzene	ND	0.0250	1	08/15/25	08/15/25	
Ethylbenzene	0.0357	0.0250	1	08/15/25	08/15/25	
Toluene	ND	0.0250	1	08/15/25	08/15/25	
o-Xylene	0.0358	0.0250	1	08/15/25	08/15/25	
p,m-Xylene	0.384	0.0500	1	08/15/25	08/15/25	
Total Xylenes	0.420	0.0250	1	08/15/25	08/15/25	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
		98.8 %	70-130	08/15/25	08/15/25	
Nonhalogenated Organics by EPA 8015D - GRO		mg/kg	mg/kg	Analyst: BA		Batch: 2533121
Gasoline Range Organics (C6-C10)	ND	20.0	1	08/15/25	08/15/25	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
		96.2 %	70-130	08/15/25	08/15/25	
Nonhalogenated Organics by EPA 8015D - DRO/ORO		mg/kg	mg/kg	Analyst: NV		Batch: 2533120
Diesel Range Organics (C10-C28)	ND	25.0	1	08/15/25	08/16/25	
Oil Range Organics (C28-C36)	ND	50.0	1	08/15/25	08/16/25	
<i>Surrogate: n-Nonane</i>						
		104 %	61-141	08/15/25	08/16/25	
Anions by EPA 300.0/9056A		mg/kg	mg/kg	Analyst: IY		Batch: 2533130
Chloride	ND	20.0	1	08/15/25	08/15/25	



Sample Data

IKAV Energy Inc. 1199 Main Ave. Suite 242 Durango CO, 81301	Project Name:	Mudge LS 023 M	Reported: 8/18/2025 3:24:37PM
	Project Number:	20095-0001	
	Project Manager:	Jerrid Brann	

SS02 N. SIDEWALL

E508176-02

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg		Analyst: BA		Batch: 2533121
Benzene	ND	0.0250	1	08/15/25	08/15/25	
Ethylbenzene	ND	0.0250	1	08/15/25	08/15/25	
Toluene	ND	0.0250	1	08/15/25	08/15/25	
o-Xylene	ND	0.0250	1	08/15/25	08/15/25	
p,m-Xylene	ND	0.0500	1	08/15/25	08/15/25	
Total Xylenes	ND	0.0250	1	08/15/25	08/15/25	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
		97.5 %	70-130	08/15/25	08/15/25	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: BA		Batch: 2533121
Gasoline Range Organics (C6-C10)	ND	20.0	1	08/15/25	08/15/25	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
		95.6 %	70-130	08/15/25	08/15/25	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: NV		Batch: 2533120
Diesel Range Organics (C10-C28)	ND	25.0	1	08/15/25	08/16/25	
Oil Range Organics (C28-C36)	ND	50.0	1	08/15/25	08/16/25	
<i>Surrogate: n-Nonane</i>						
		92.1 %	61-141	08/15/25	08/16/25	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: IY		Batch: 2533130
Chloride	ND	20.0	1	08/15/25	08/15/25	



Sample Data

IKAV Energy Inc. 1199 Main Ave. Suite 242 Durango CO, 81301	Project Name: Mudge LS 023 M Project Number: 20095-0001 Project Manager: Jerrid Brann	Reported: 8/18/2025 3:24:37PM
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SS03 E. SIDEWALL

E508176-03

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg		Analyst: BA		Batch: 2533121
Benzene	ND	0.0250	1	08/15/25	08/15/25	
Ethylbenzene	ND	0.0250	1	08/15/25	08/15/25	
Toluene	ND	0.0250	1	08/15/25	08/15/25	
o-Xylene	ND	0.0250	1	08/15/25	08/15/25	
p,m-Xylene	ND	0.0500	1	08/15/25	08/15/25	
Total Xylenes	ND	0.0250	1	08/15/25	08/15/25	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
		99.6 %	70-130	08/15/25	08/15/25	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: BA		Batch: 2533121
Gasoline Range Organics (C6-C10)	ND	20.0	1	08/15/25	08/15/25	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
		96.6 %	70-130	08/15/25	08/15/25	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: NV		Batch: 2533120
Diesel Range Organics (C10-C28)	ND	25.0	1	08/15/25	08/16/25	
Oil Range Organics (C28-C36)	ND	50.0	1	08/15/25	08/16/25	
<i>Surrogate: n-Nonane</i>						
		97.2 %	61-141	08/15/25	08/16/25	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: IY		Batch: 2533130
Chloride	ND	20.0	1	08/15/25	08/15/25	



Sample Data

IKAV Energy Inc. 1199 Main Ave. Suite 242 Durango CO, 81301	Project Name: Mudge LS 023 M Project Number: 20095-0001 Project Manager: Jerrid Brann	Reported: 8/18/2025 3:24:37PM
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SS04 S. SIDEWALL

E508176-04

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg		Analyst: BA		Batch: 2533121
Benzene	ND	0.0250	1	08/15/25	08/15/25	
Ethylbenzene	ND	0.0250	1	08/15/25	08/15/25	
Toluene	ND	0.0250	1	08/15/25	08/15/25	
o-Xylene	ND	0.0250	1	08/15/25	08/15/25	
p,m-Xylene	ND	0.0500	1	08/15/25	08/15/25	
Total Xylenes	ND	0.0250	1	08/15/25	08/15/25	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
		100 %	70-130	08/15/25	08/15/25	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: BA		Batch: 2533121
Gasoline Range Organics (C6-C10)	ND	20.0	1	08/15/25	08/15/25	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
		96.1 %	70-130	08/15/25	08/15/25	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: NV		Batch: 2533120
Diesel Range Organics (C10-C28)	ND	25.0	1	08/15/25	08/16/25	
Oil Range Organics (C28-C36)	ND	50.0	1	08/15/25	08/16/25	
<i>Surrogate: n-Nonane</i>						
		92.1 %	61-141	08/15/25	08/16/25	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: IY		Batch: 2533130
Chloride	ND	20.0	1	08/15/25	08/15/25	



Sample Data

IKAV Energy Inc. 1199 Main Ave. Suite 242 Durango CO, 81301	Project Name:	Mudge LS 023 M	Reported: 8/18/2025 3:24:37PM
	Project Number:	20095-0001	
	Project Manager:	Jerrid Brann	

SS05 W. SIDEWALL

E508176-05

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg		Analyst: BA		Batch: 2533121
Benzene	ND	0.0250	1	08/15/25	08/15/25	
Ethylbenzene	ND	0.0250	1	08/15/25	08/15/25	
Toluene	ND	0.0250	1	08/15/25	08/15/25	
o-Xylene	ND	0.0250	1	08/15/25	08/15/25	
p,m-Xylene	ND	0.0500	1	08/15/25	08/15/25	
Total Xylenes	ND	0.0250	1	08/15/25	08/15/25	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
		100 %	70-130	08/15/25	08/15/25	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: BA		Batch: 2533121
Gasoline Range Organics (C6-C10)	ND	20.0	1	08/15/25	08/15/25	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
		96.3 %	70-130	08/15/25	08/15/25	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: NV		Batch: 2533120
Diesel Range Organics (C10-C28)	ND	25.0	1	08/15/25	08/16/25	
Oil Range Organics (C28-C36)	ND	50.0	1	08/15/25	08/16/25	
<i>Surrogate: n-Nonane</i>						
		96.1 %	61-141	08/15/25	08/16/25	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: IY		Batch: 2533130
Chloride	ND	20.0	1	08/15/25	08/15/25	



QC Summary Data

IKAV Energy Inc. 1199 Main Ave. Suite 242 Durango CO, 81301	Project Name:	Mudge LS 023 M	Reported: 8/18/2025 3:24:37PM
	Project Number:	20095-0001	
	Project Manager:	Jerrid Brann	

Volatile Organics by EPA 8021B

Analyst: BA

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2533121-BLK1)

Prepared: 08/15/25 Analyzed: 08/15/25

Benzene	ND	0.0250							
Ethylbenzene	ND	0.0250							
Toluene	ND	0.0250							
o-Xylene	ND	0.0250							
p,m-Xylene	ND	0.0500							
Total Xylenes	ND	0.0250							
Surrogate: 4-Bromochlorobenzene-PID	8.11		8.00		101	70-130			

LCS (2533121-BS1)

Prepared: 08/15/25 Analyzed: 08/15/25

Benzene	5.54	0.0250	5.00		111	70-130			
Ethylbenzene	5.33	0.0250	5.00		107	70-130			
Toluene	5.47	0.0250	5.00		109	70-130			
o-Xylene	5.23	0.0250	5.00		105	70-130			
p,m-Xylene	10.7	0.0500	10.0		107	70-130			
Total Xylenes	15.9	0.0250	15.0		106	70-130			
Surrogate: 4-Bromochlorobenzene-PID	7.98		8.00		99.7	70-130			

Matrix Spike (2533121-MS1)

Source: E508172-01

Prepared: 08/15/25 Analyzed: 08/15/25

Benzene	5.17	0.0250	5.00	ND	103	70-130			
Ethylbenzene	4.96	0.0250	5.00	ND	99.1	70-130			
Toluene	5.10	0.0250	5.00	ND	102	70-130			
o-Xylene	4.90	0.0250	5.00	ND	98.0	70-130			
p,m-Xylene	9.97	0.0500	10.0	ND	99.7	70-130			
Total Xylenes	14.9	0.0250	15.0	ND	99.1	70-130			
Surrogate: 4-Bromochlorobenzene-PID	8.10		8.00		101	70-130			

Matrix Spike Dup (2533121-MSD1)

Source: E508172-01

Prepared: 08/15/25 Analyzed: 08/15/25

Benzene	5.14	0.0250	5.00	ND	103	70-130	0.643	27	
Ethylbenzene	4.91	0.0250	5.00	ND	98.3	70-130	0.833	26	
Toluene	5.06	0.0250	5.00	ND	101	70-130	0.871	20	
o-Xylene	4.88	0.0250	5.00	ND	97.7	70-130	0.365	25	
p,m-Xylene	9.90	0.0500	10.0	ND	99.0	70-130	0.720	23	
Total Xylenes	14.8	0.0250	15.0	ND	98.5	70-130	0.603	26	
Surrogate: 4-Bromochlorobenzene-PID	8.02		8.00		100	70-130			



QC Summary Data

IKAV Energy Inc. 1199 Main Ave. Suite 242 Durango CO, 81301	Project Name: Mudge LS 023 M Project Number: 20095-0001 Project Manager: Jerrid Brann	Reported: 8/18/2025 3:24:37PM
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Nonhalogenated Organics by EPA 8015D - GRO

Analyst: BA

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec % %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2533121-BLK1)

Prepared: 08/15/25 Analyzed: 08/15/25

Gasoline Range Organics (C6-C10)	ND	20.0							
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.66		8.00		95.8	70-130			

LCS (2533121-BS2)

Prepared: 08/15/25 Analyzed: 08/18/25

Gasoline Range Organics (C6-C10)	54.8	20.0	50.0		110	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.86		8.00		98.2	70-130			

Matrix Spike (2533121-MS2)

Source: E508172-01

Prepared: 08/15/25 Analyzed: 08/15/25

Gasoline Range Organics (C6-C10)	49.0	20.0	50.0	ND	98.1	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.72		8.00		96.6	70-130			

Matrix Spike Dup (2533121-MSD2)

Source: E508172-01

Prepared: 08/15/25 Analyzed: 08/15/25

Gasoline Range Organics (C6-C10)	48.5	20.0	50.0	ND	97.0	70-130	1.08	20	
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.71		8.00		96.3	70-130			



QC Summary Data

IKAV Energy Inc. 1199 Main Ave. Suite 242 Durango CO, 81301	Project Name: Mudge LS 023 M Project Number: 20095-0001 Project Manager: Jerrid Brann	Reported: 8/18/2025 3:24:37PM
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Nonhalogenated Organics by EPA 8015D - DRO/ORO

Analyst: NV

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2533120-BLK1)

Prepared: 08/15/25 Analyzed: 08/15/25

Diesel Range Organics (C10-C28)	ND	25.0							
Oil Range Organics (C28-C36)	ND	50.0							
Surrogate: <i>n</i> -Nonane	47.4		50.0		94.8	61-141			

LCS (2533120-BS1)

Prepared: 08/15/25 Analyzed: 08/15/25

Diesel Range Organics (C10-C28)	274	25.0	250		110	66-144			
Surrogate: <i>n</i> -Nonane	52.5		50.0		105	61-141			

Matrix Spike (2533120-MS1)

Source: E508174-03

Prepared: 08/15/25 Analyzed: 08/15/25

Diesel Range Organics (C10-C28)	264	25.0	250	ND	106	56-156			
Surrogate: <i>n</i> -Nonane	50.1		50.0		100	61-141			

Matrix Spike Dup (2533120-MSD1)

Source: E508174-03

Prepared: 08/15/25 Analyzed: 08/15/25

Diesel Range Organics (C10-C28)	251	25.0	250	ND	100	56-156	5.15	20	
Surrogate: <i>n</i> -Nonane	49.5		50.0		98.9	61-141			



QC Summary Data

IKAV Energy Inc. 1199 Main Ave. Suite 242 Durango CO, 81301	Project Name:	Mudge LS 023 M	Reported: 8/18/2025 3:24:37PM
	Project Number:	20095-0001	
	Project Manager:	Jerrid Brann	

Anions by EPA 300.0/9056A

Analyst: IY

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2533130-BLK1)

Prepared: 08/15/25 Analyzed: 08/15/25

Chloride	ND	20.0							
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LCS (2533130-BS1)

Prepared: 08/15/25 Analyzed: 08/15/25

Chloride	256	20.0	250		102	90-110			
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Matrix Spike (2533130-MS1)

Source: E508176-02

Prepared: 08/15/25 Analyzed: 08/15/25

Chloride	254	20.0	250	ND	101	80-120			
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Matrix Spike Dup (2533130-MSD1)

Source: E508176-02

Prepared: 08/15/25 Analyzed: 08/15/25

Chloride	255	20.0	250	ND	102	80-120	0.614	20	
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QC Summary Report Comment:

Calculations are based off of the raw (non-rounded) data. However, for reporting purposes all QC data is rounded to three significant figures. Therefore, hand calculated values may differ slightly.



Definitions and Notes

IKAV Energy Inc. 1199 Main Ave. Suite 242 Durango CO, 81301	Project Name: Mudge LS 023 M Project Number: 20095-0001 Project Manager: Jerrid Brann	Reported: 08/18/25 15:24
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ND Analyte NOT DETECTED at or above the reporting limit

NR Not Reported

RPD Relative Percent Difference

DNI Did Not Ignite

DNR Did not react with the addition of acid or base.

Note (1): Methods marked with ** are non-accredited methods.

Note (2): Soil data is reported on an "as received" weight basis, unless reported otherwise.



Chain of Custody

Released to Imaging: 12/12/2025 1:25:14 PM

Received by OCD: 12/5/2025 10:21:46 AM

Client Information		Invoice Information		Lab Use Only		TAT		State			
Client: IKAV Energy		Company: IKAV Energy		Lab WO#		1D 2D 3D Std		NM		CO UT TX	
Project Name: MUDGE LS 023 M		Address: 1199 Main Ave Suite 101		E508176		Job Number		SE			
Project Manager: Jerrid Brann		City, State, Zip: Durango, CO 81301		20095-0201							
Address: 1199 Main Ave Suite 101		Phone: 970-394-0250									
City, State, Zip: Durango, CO 81301		Email: jerrid.brann@ikavenergy.com									
Phone: 970-39-0250		Miscellaneous:									
Email: jerrid.brann@ikavenergy.com											

Sample Information										Analysis and Method								EPA Program				
Time Sampled	Date Sampled	Matrix	No. of Containers	Sample ID		Field	Filter	Lab Number	DRO/DRO by 8015	GRO/DRO by 8015	BTEX by 8021	VOC by 8260	Chloride 300.0	BGDOC - NM	TCEQ 1005 - TX	RCRA 8 Metals	Cation/Anion Pig	ECMC Table 915-1	SDWA	CWA	RCRA	
16:00	8-14-25	SOIL	1	SS01	S-POINT BASE			1	X	X	X	X										
15:35	8-14-25	SOIL	1	SS02	N. SIDEWALL			2	X	X	X	X										
15:45	8-14-25	SOIL	1	SS03	E. SIDEWALL			3	X	X	X	X										
15:50	8-14-25	SOIL	1	SS04	S. SIDEWALL			4	X	X	X	X										
15:55	8-14-25	SOIL	1	SS05	W. SIDEWALL			5	X	X	X	X										

Additional Instructions:

I, (field sampler), attest to the validity and authenticity of this sample. I am aware that tampering with or intentionally mislabeling the sample location, date or time of collection is considered fraud and may be grounds for legal action.

Sampled by: <u>JERRID BRANN</u>						Samples requiring thermal preservation must be received on ice the day they are sampled or received packed in ice at an avg temp above 0 but less than 6 °C on subsequent days.					
Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time	Lab Use Only Received on ice: <input checked="" type="radio"/> Y <input type="radio"/> N T1 _____ T2 _____ T3 _____ AVG Temp °C _____ Container type: g - glass, p - poly/plastic, ag - amber glass, v - VOA					
<u>[Signature]</u>	8-14-25	16:54	<u>[Signature]</u>	8-14-25	16:54						
Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time						
Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time						

Note: Samples are discarded 14 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at the client expense. The report for the analysis of the above samples is applicable only to those samples received by the laboratory with this COC. The liability of the laboratory is limited to the amount paid for on the report.



Page 30 of 55

Envirotech Analytical Laboratory

Printed: 8/14/2025 5:06:24PM

Sample Receipt Checklist (SRC)

Instructions: Please take note of any NO checkmarks.

If we receive no response concerning these items within 24 hours of the date of this notice, all the samples will be analyzed as requested.

Client: IKAV Energy Inc. Date Received: 08/14/25 16:54 Work Order ID: E508176
Phone: (970) 828-4060 Date Logged In: 08/14/25 17:02 Logged In By: Noe Soto
Email: jerrid.brann@ikavenergy.com Due Date: 08/18/25 07:00 (2 day TAT)

Chain of Custody (COC)

- 1. Does the sample ID match the COC? Yes
2. Does the number of samples per sampling site location match the COC? Yes
3. Were samples dropped off by client or carrier? Yes
4. Was the COC complete, i.e., signatures, dates/times, requested analyses? Yes
5. Were all samples received within holding time? Yes

Carrier: Jerrid Brann

Note: Analysis, such as pH which should be conducted in the field, i.e, 15 minute hold time, are not included in this discussion.

Comments/Resolution

Sample Turn Around Time (TAT)

- 6. Did the COC indicate standard TAT, or Expedited TAT? Yes

Sample Cooler

- 7. Was a sample cooler received? Yes
8. If yes, was cooler received in good condition? Yes
9. Was the sample(s) received intact, i.e., not broken? Yes
10. Were custody/security seals present? No
11. If yes, were custody/security seals intact? NA
12. Was the sample received on ice? Yes

Note: Thermal preservation is not required, if samples are received within 15 minutes of sampling

- 13. See COC for individual sample temps. Samples outside of 0°C-6°C will be recorded in comments.

Sample Container

- 14. Are aqueous VOC samples present? No
15. Are VOC samples collected in VOA Vials? NA
16. Is the head space less than 6-8 mm (pea sized or less)? NA
17. Was a trip blank (TB) included for VOC analyses? NA
18. Are non-VOC samples collected in the correct containers? Yes
19. Is the appropriate volume/weight or number of sample containers collected? Yes

Field Label

- 20. Were field sample labels filled out with the minimum information:
Sample ID? Yes
Date/Time Collected? Yes
Collectors name? Yes

Sample Preservation

- 21. Does the COC or field labels indicate the samples were preserved? No
22. Are sample(s) correctly preserved? NA
24. Is lab filtration required and/or requested for dissolved metals? No

Multiphase Sample Matrix

- 26. Does the sample have more than one phase, i.e., multiphase? No
27. If yes, does the COC specify which phase(s) is to be analyzed? NA

Subcontract Laboratory

- 28. Are samples required to get sent to a subcontract laboratory? No
29. Was a subcontract laboratory specified by the client and if so who? NA Subcontract Lab: NA

Client Instruction

Empty box for client instruction.

Signature of client authorizing changes to the COC or sample disposition.

Date



envirotech Inc.

Report to:
Jerrid Brann



envirotech

Practical Solutions for a Better Tomorrow

Analytical Report

IKAV Energy Inc.

Project Name: MUDGE LS 23M

Work Order: E509039

Job Number: 20095-0001

Received: 9/5/2025

Revision: 2

Report Reviewed By:

Walter Hinchman
Laboratory Director
9/9/25

5796 U.S. Hwy 64
Farmington, NM 87401

Phone: (505) 632-1881
Envirotech-inc.com



Envirotech Inc. certifies the test results meet all requirements of TNI unless noted otherwise.
Statement of Data Authenticity: Envirotech Inc, attests the data reported has not been altered in any way.
Partial or incomplete reproduction of this report is prohibited, unless approved by Envirotech Inc.
Envirotech Inc, holds the Utah TNI certification NM00979 for data reported.
Envirotech Inc, holds the Texas TNI certification T104704557 for data reported.



Date Reported: 9/9/25

Jerrid Brann
1199 Main Ave. Suite 242
Durango, CO 81301

Project Name: MUDGE LS 23M
Workorder: E509039
Date Received: 9/5/2025 9:53:00AM

Jerrid Brann,

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 9/5/2025 9:53:00AM, under the Project Name: MUDGE LS 23M.

The analytical test results summarized in this report with the Project Name: MUDGE LS 23M apply to the individual samples collected, identified and submitted bearing the project name on the enclosed chain-of-custody. Subcontracted sample analyses not conducted by Envirotech, Inc., are attached in full as issued by the subcontract laboratory.

Please review the Chain-of-Custody (COC) and Sample Receipt Checklist (SRC) for any issues regarding sample receipt temperature, containers, preservation etc. To best understand your test results, review the entire report summarizing your sample data and the associated quality control batch data.

All reported data in this analytical report were analyzed according to the referenced method(s) and are in compliance with the latest NELAC/TNI standards, unless otherwise noted. Samples or analytical quality control parameters not meeting specific QC criteria are qualified with a data flag. Data flag definitions are located in the Notes and Definitions section of this analytical report.

If you have any questions concerning this report, please feel free to contact Envirotech, Inc.

Respectfully,

Walter Hinchman
Laboratory Director
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Cell: 775-287-1762
whinchman@envirotech-inc.com

Raina Schwanz
Laboratory Administrator
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Sample Summary

IKAV Energy Inc. 1199 Main Ave. Suite 242 Durango CO, 81301	Project Name:	MUDGE LS 23M	Reported: 09/09/25 15:06
	Project Number:	20095-0001	
	Project Manager:	Jerrid Brann	

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
SS06 N. SIDEWALL	E509039-01A	Soil	09/05/25	09/05/25	Glass Jar, 4 oz.
SS07 E. SIDEWALL	E509039-02A	Soil	09/05/25	09/05/25	Glass Jar, 4 oz.
SS08 .S. SIDEWALL	E509039-03A	Soil	09/05/25	09/05/25	Glass Jar, 4 oz.
SS09 W. SIDEWALL	E509039-04A	Soil	09/05/25	09/05/25	Glass Jar, 4 oz.
SS10 BASE COMP	E509039-05A	Soil	09/05/25	09/05/25	Glass Jar, 4 oz.



Sample Data

IKAV Energy Inc. 1199 Main Ave. Suite 242 Durango CO, 81301	Project Name:	MUDGE LS 23M	Reported: 9/9/2025 3:06:07PM
	Project Number:	20095-0001	
	Project Manager:	Jerrid Brann	

SS06 N. SIDEWALL

E509039-01

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg		Analyst: BA		Batch: 2536085
Benzene	ND	0.0250	1	09/05/25	09/07/25	
Ethylbenzene	ND	0.0250	1	09/05/25	09/07/25	
Toluene	ND	0.0250	1	09/05/25	09/07/25	
o-Xylene	ND	0.0250	1	09/05/25	09/07/25	
p,m-Xylene	ND	0.0500	1	09/05/25	09/07/25	
Total Xylenes	ND	0.0250	1	09/05/25	09/07/25	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
		92.3 %	70-130	09/05/25	09/07/25	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: BA		Batch: 2536085
Gasoline Range Organics (C6-C10)	ND	20.0	1	09/05/25	09/07/25	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
		87.4 %	70-130	09/05/25	09/07/25	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: HM		Batch: 2537002
Diesel Range Organics (C10-C28)	ND	25.0	1	09/08/25	09/08/25	
Oil Range Organics (C28-C36)	ND	50.0	1	09/08/25	09/08/25	
<i>Surrogate: n-Nonane</i>						
		93.0 %	61-141	09/08/25	09/08/25	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: TP		Batch: 2537015
Chloride	ND	20.0	1	09/08/25	09/08/25	



Sample Data

IKAV Energy Inc. 1199 Main Ave. Suite 242 Durango CO, 81301	Project Name: MUDGE LS 23M Project Number: 20095-0001 Project Manager: Jerrid Brann	Reported: 9/9/2025 3:06:07PM
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SS07 E. SIDEWALL

E509039-02

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg		Analyst: BA		Batch: 2536085
Benzene	ND	0.0250	1	09/05/25	09/07/25	
Ethylbenzene	ND	0.0250	1	09/05/25	09/07/25	
Toluene	ND	0.0250	1	09/05/25	09/07/25	
o-Xylene	0.0330	0.0250	1	09/05/25	09/07/25	
p,m-Xylene	ND	0.0500	1	09/05/25	09/07/25	
Total Xylenes	0.0330	0.0250	1	09/05/25	09/07/25	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>		92.8 %	70-130	09/05/25	09/07/25	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg		Analyst: BA		Batch: 2536085
Gasoline Range Organics (C6-C10)	ND	20.0	1	09/05/25	09/07/25	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>		86.1 %	70-130	09/05/25	09/07/25	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg		Analyst: HM		Batch: 2537002
Diesel Range Organics (C10-C28)	ND	25.0	1	09/08/25	09/08/25	
Oil Range Organics (C28-C36)	ND	50.0	1	09/08/25	09/08/25	
<i>Surrogate: n-Nonane</i>		98.0 %	61-141	09/08/25	09/08/25	
Anions by EPA 300.0/9056A	mg/kg	mg/kg		Analyst: TP		Batch: 2537015
Chloride	35.0	20.0	1	09/08/25	09/08/25	



Sample Data

IKAV Energy Inc. 1199 Main Ave. Suite 242 Durango CO, 81301	Project Name: MUDGE LS 23M Project Number: 20095-0001 Project Manager: Jerrid Brann	Reported: 9/9/2025 3:06:07PM
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SS08 .S. SIDEWALL

E509039-03

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg		Analyst: BA		Batch: 2536085
Benzene	ND	0.0250	1	09/05/25	09/07/25	
Ethylbenzene	ND	0.0250	1	09/05/25	09/07/25	
Toluene	ND	0.0250	1	09/05/25	09/07/25	
o-Xylene	ND	0.0250	1	09/05/25	09/07/25	
p,m-Xylene	ND	0.0500	1	09/05/25	09/07/25	
Total Xylenes	ND	0.0250	1	09/05/25	09/07/25	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>		92.5 %	70-130	09/05/25	09/07/25	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg		Analyst: BA		Batch: 2536085
Gasoline Range Organics (C6-C10)	ND	20.0	1	09/05/25	09/07/25	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>		88.3 %	70-130	09/05/25	09/07/25	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg		Analyst: HM		Batch: 2537002
Diesel Range Organics (C10-C28)	ND	25.0	1	09/08/25	09/08/25	
Oil Range Organics (C28-C36)	ND	50.0	1	09/08/25	09/08/25	
<i>Surrogate: n-Nonane</i>		99.0 %	61-141	09/08/25	09/08/25	
Anions by EPA 300.0/9056A	mg/kg	mg/kg		Analyst: TP		Batch: 2537015
Chloride	ND	20.0	1	09/08/25	09/08/25	



Sample Data

IKAV Energy Inc. 1199 Main Ave. Suite 242 Durango CO, 81301	Project Name: MUDGE LS 23M Project Number: 20095-0001 Project Manager: Jerrid Brann	Reported: 9/9/2025 3:06:07PM
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SS09 W. SIDEWALL

E509039-04

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg		Analyst: BA		Batch: 2536085
Benzene	ND	0.0250	1	09/05/25	09/07/25	
Ethylbenzene	ND	0.0250	1	09/05/25	09/07/25	
Toluene	ND	0.0250	1	09/05/25	09/07/25	
o-Xylene	ND	0.0250	1	09/05/25	09/07/25	
p,m-Xylene	ND	0.0500	1	09/05/25	09/07/25	
Total Xylenes	ND	0.0250	1	09/05/25	09/07/25	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>		93.0 %	70-130	09/05/25	09/07/25	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg		Analyst: BA		Batch: 2536085
Gasoline Range Organics (C6-C10)	ND	20.0	1	09/05/25	09/07/25	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>		87.5 %	70-130	09/05/25	09/07/25	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg		Analyst: HM		Batch: 2537002
Diesel Range Organics (C10-C28)	ND	25.0	1	09/08/25	09/08/25	
Oil Range Organics (C28-C36)	ND	50.0	1	09/08/25	09/08/25	
<i>Surrogate: n-Nonane</i>		99.5 %	61-141	09/08/25	09/08/25	
Anions by EPA 300.0/9056A	mg/kg	mg/kg		Analyst: TP		Batch: 2537015
Chloride	ND	20.0	1	09/08/25	09/08/25	



Sample Data

IKAV Energy Inc. 1199 Main Ave. Suite 242 Durango CO, 81301	Project Name:	MUDGE LS 23M	Reported: 9/9/2025 3:06:07PM
	Project Number:	20095-0001	
	Project Manager:	Jerrid Brann	

SS10 BASE COMP

E509039-05

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg		Analyst: BA		Batch: 2536085
Benzene	ND	0.0250	1	09/05/25	09/07/25	
Ethylbenzene	ND	0.0250	1	09/05/25	09/07/25	
Toluene	ND	0.0250	1	09/05/25	09/07/25	
o-Xylene	ND	0.0250	1	09/05/25	09/07/25	
p,m-Xylene	ND	0.0500	1	09/05/25	09/07/25	
Total Xylenes	ND	0.0250	1	09/05/25	09/07/25	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>		85.2 %	70-130	09/05/25	09/07/25	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg		Analyst: BA		Batch: 2536085
Gasoline Range Organics (C6-C10)	ND	20.0	1	09/05/25	09/07/25	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>		84.1 %	70-130	09/05/25	09/07/25	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg		Analyst: HM		Batch: 2537002
Diesel Range Organics (C10-C28)	ND	25.0	1	09/08/25	09/09/25	
Oil Range Organics (C28-C36)	ND	50.0	1	09/08/25	09/09/25	
<i>Surrogate: n-Nonane</i>		94.9 %	61-141	09/08/25	09/09/25	
Anions by EPA 300.0/9056A	mg/kg	mg/kg		Analyst: TP		Batch: 2537015
Chloride	ND	20.0	1	09/08/25	09/08/25	



QC Summary Data

IKAV Energy Inc. 1199 Main Ave. Suite 242 Durango CO, 81301	Project Name:	MUDGE LS 23M	Reported: 9/9/2025 3:06:07PM
	Project Number:	20095-0001	
	Project Manager:	Jerrid Brann	

Volatile Organics by EPA 8021B

Analyst: BA

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	

Blank (2536085-BLK1)

Prepared: 09/05/25 Analyzed: 09/07/25

Benzene	ND	0.0250							
Ethylbenzene	ND	0.0250							
Toluene	ND	0.0250							
o-Xylene	ND	0.0250							
p,m-Xylene	ND	0.0500							
Total Xylenes	ND	0.0250							
Surrogate: 4-Bromochlorobenzene-PID	7.41		8.00		92.7	70-130			

LCS (2536085-BS1)

Prepared: 09/05/25 Analyzed: 09/07/25

Benzene	4.95	0.0250	5.00		98.9	70-130			
Ethylbenzene	4.69	0.0250	5.00		93.9	70-130			
Toluene	4.94	0.0250	5.00		98.8	70-130			
o-Xylene	4.80	0.0250	5.00		96.0	70-130			
p,m-Xylene	9.45	0.0500	10.0		94.5	70-130			
Total Xylenes	14.2	0.0250	15.0		95.0	70-130			
Surrogate: 4-Bromochlorobenzene-PID	7.37		8.00		92.1	70-130			

Matrix Spike (2536085-MS1)

Source: E509038-02

Prepared: 09/05/25 Analyzed: 09/07/25

Benzene	5.70	0.0250	5.00	ND	114	70-130			
Ethylbenzene	5.46	0.0250	5.00	ND	109	70-130			
Toluene	5.59	0.0250	5.00	ND	112	70-130			
o-Xylene	5.52	0.0250	5.00	0.0433	110	70-130			
p,m-Xylene	11.0	0.0500	10.0	ND	110	70-130			
Total Xylenes	16.5	0.0250	15.0	0.0433	110	70-130			
Surrogate: 4-Bromochlorobenzene-PID	7.42		8.00		92.7	70-130			

Matrix Spike Dup (2536085-MSD1)

Source: E509038-02

Prepared: 09/05/25 Analyzed: 09/07/25

Benzene	5.15	0.0250	5.00	ND	103	70-130	10.1	27	
Ethylbenzene	4.95	0.0250	5.00	ND	98.9	70-130	9.98	26	
Toluene	5.06	0.0250	5.00	ND	101	70-130	9.90	20	
o-Xylene	5.00	0.0250	5.00	0.0433	99.1	70-130	9.93	25	
p,m-Xylene	9.96	0.0500	10.0	ND	99.6	70-130	9.58	23	
Total Xylenes	15.0	0.0250	15.0	0.0433	99.4	70-130	9.70	26	
Surrogate: 4-Bromochlorobenzene-PID	7.33		8.00		91.6	70-130			



QC Summary Data

IKAV Energy Inc. 1199 Main Ave. Suite 242 Durango CO, 81301	Project Name: MUDGE LS 23M Project Number: 20095-0001 Project Manager: Jerrid Brann	Reported: 9/9/2025 3:06:07PM
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Nonhalogenated Organics by EPA 8015D - GRO

Analyst: BA

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2536085-BLK1)

Prepared: 09/05/25 Analyzed: 09/07/25

Gasoline Range Organics (C6-C10)	ND	20.0							
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.15		8.00		89.4	70-130			

LCS (2536085-BS2)

Prepared: 09/05/25 Analyzed: 09/07/25

Gasoline Range Organics (C6-C10)	48.7	20.0	50.0		97.5	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.09		8.00		88.7	70-130			

Matrix Spike (2536085-MS2)

Source: E509038-02

Prepared: 09/05/25 Analyzed: 09/07/25

Gasoline Range Organics (C6-C10)	48.9	20.0	50.0	ND	97.8	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.26		8.00		90.7	70-130			

Matrix Spike Dup (2536085-MSD2)

Source: E509038-02

Prepared: 09/05/25 Analyzed: 09/07/25

Gasoline Range Organics (C6-C10)	49.6	20.0	50.0	ND	99.2	70-130	1.50	20	
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.28		8.00		91.0	70-130			



QC Summary Data

IKAV Energy Inc. 1199 Main Ave. Suite 242 Durango CO, 81301	Project Name: MUDGE LS 23M Project Number: 20095-0001 Project Manager: Jerrid Brann	Reported: 9/9/2025 3:06:07PM
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Nonhalogenated Organics by EPA 8015D - DRO/ORO

Analyst: HM

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2537002-BLK1)

Prepared: 09/08/25 Analyzed: 09/08/25

Diesel Range Organics (C10-C28)	ND	25.0							
Oil Range Organics (C28-C36)	ND	50.0							
Surrogate: n-Nonane	46.9		50.0		93.9	61-141			

LCS (2537002-BS1)

Prepared: 09/08/25 Analyzed: 09/08/25

Diesel Range Organics (C10-C28)	238	25.0	250		95.3	66-144			
Surrogate: n-Nonane	46.5		50.0		93.0	61-141			

Matrix Spike (2537002-MS1)

Source: E509039-02

Prepared: 09/08/25 Analyzed: 09/08/25

Diesel Range Organics (C10-C28)	255	25.0	250	ND	102	56-156			
Surrogate: n-Nonane	49.0		50.0		98.0	61-141			

Matrix Spike Dup (2537002-MSD1)

Source: E509039-02

Prepared: 09/08/25 Analyzed: 09/08/25

Diesel Range Organics (C10-C28)	243	25.0	250	ND	97.2	56-156	5.02	20	
Surrogate: n-Nonane	47.5		50.0		95.1	61-141			



QC Summary Data

IKAV Energy Inc. 1199 Main Ave. Suite 242 Durango CO, 81301	Project Name:	MUDGE LS 23M	Reported: 9/9/2025 3:06:07PM
	Project Number:	20095-0001	
	Project Manager:	Jerrid Brann	

Anions by EPA 300.0/9056A

Analyst: TP

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2537015-BLK1)

Prepared: 09/08/25 Analyzed: 09/08/25

Chloride	ND	20.0							
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LCS (2537015-BS1)

Prepared: 09/08/25 Analyzed: 09/08/25

Chloride	262	20.0	250		105	90-110			
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Matrix Spike (2537015-MS1)

Source: E509039-04

Prepared: 09/08/25 Analyzed: 09/08/25

Chloride	263	20.0	250	ND	105	80-120			
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Matrix Spike Dup (2537015-MSD1)

Source: E509039-04

Prepared: 09/08/25 Analyzed: 09/08/25

Chloride	263	20.0	250	ND	105	80-120	0.177	20	
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QC Summary Report Comment:

Calculations are based off of the raw (non-rounded) data. However, for reporting purposes all QC data is rounded to three significant figures. Therefore, hand calculated values may differ slightly.



Definitions and Notes

IKAV Energy Inc. 1199 Main Ave. Suite 242 Durango CO, 81301	Project Name: MUDGE LS 23M Project Number: 20095-0001 Project Manager: Jerrid Brann	Reported: 09/09/25 15:06
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ND Analyte NOT DETECTED at or above the reporting limit

NR Not Reported

RPD Relative Percent Difference

DNI Did Not Ignite

DNR Did not react with the addition of acid or base.

Note (1): Methods marked with ** are non-accredited methods.

Note (2): Soil data is reported on an "as received" weight basis, unless reported otherwise.



Chain of Custody

Client Information		Invoice Information		Lab Use Only		TAT		State					
Client: IKAV Energy		Company: IKAV Energy		Lab WO#	Job Number	1D	2D	3D	Std	NM	CO	UT	TX
Project Name: MUDGE LS 23m		Address: 1199 Main Ave Suite 101		E509039	20095-0001		X		X	X			
Project Manager: Jerrid Brann		City, State, Zip: Durango, CO 81301		Phone: 970-394-0250									
Address: 1199 Main Ave Suite 101		Email: jerrid.brann@ikavenergy.com		Miscellaneous:									
City, State, Zip: Durango, CO 81301													
Phone: 970-39-0250													
Email: jerrid.brann@ikavenergy.com													

Sample Information											Analysis and Method								EPA Program			Remarks
Time Sampled	Date Sampled	Matrix	No. of Containers	Sample ID	Field	Filter	Lab Number	DRO/DRO by 8015	GRO/DRO by 8015	BTEX by 8021	VOC by 8260	Chloride 300.0	BGDOC - NM	TCEQ 1005 - TX	RCRA 8 Metals	Cation/Anion Pkg	ECMC Table 915-1	SDWA	CWA	RCRA		
Compliance																		Y	or	N		
PWSID #																						
8:18	9-5-25	SOIL	1	SS06 N. SIDEWALL			1	X	X	X	X										5.4	
8:23	9-5-25	SOIL	1	SS07 E. SIDEWALL			2	X	X	X	X										5.2	
8:27	9-5-25	SOIL	1	SS08 S. SIDEWALL			3	X	X	X	X										5.6	
8:33	9-5-25	SOIL	1	SS09 W. SIDEWALL			4	X	X	X	X										5.0	
8:40	9-5-25	SOIL	1	SS10 BASE COMP			5	X	X	X	X										5.1	

Additional Instructions:

I, (field sampler), attest to the validity and authenticity of this sample. I am aware that tampering with or intentionally mislabeling the sample location, date or time of collection is considered fraud and may be grounds for legal action.

Sampled by: <u>JERRID BRANN</u>												Samples requiring thermal preservation must be received on ice the day they are sampled or received packed in ice at an avg temp above 0 but less than 6 °C on subsequent days. Received on ice: <input checked="" type="radio"/> Y <input type="radio"/> N T1 _____ T2 _____ T3 _____ AVG Temp °C _____		
Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time									
<i>[Signature]</i>	9-5-25	9:53	<i>[Signature]</i>	9-5-25	9:53									
Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time									
Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time									
Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time									

Sample Matrix: S - Soil, Sd - Solid, Sg - Sludge, A - Aqueous, O - Other _____ Container Type: g - glass, p - poly/plastic, ag - amber glass, v - VOA

Note: Samples are discarded 14 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at the client expense. The report for the analysis of the above samples is applicable only to those samples received by the laboratory with this COC. The liability of the laboratory is limited to the amount paid for on the report.

Envirotech Analytical Laboratory

Printed: 9/5/2025 10:43:38AM

Sample Receipt Checklist (SRC)

Instructions: Please take note of any NO checkmarks.

If we receive no response concerning these items within 24 hours of the date of this notice, all the samples will be analyzed as requested.

Client: IKAV Energy Inc.	Date Received: 09/05/25 09:53	Work Order ID: E509039
Phone: (970) 828-4060	Date Logged In: 09/05/25 10:40	Logged In By: Caitlin Mars
Email: jerrid.brann@ikavenergy.com	Due Date: 09/09/25 07:00 (2 day TAT)	

Chain of Custody (COC)

- 1. Does the sample ID match the COC? Yes
- 2. Does the number of samples per sampling site location match the COC? Yes
- 3. Were samples dropped off by client or carrier? Yes
- 4. Was the COC complete, i.e., signatures, dates/times, requested analyses? Yes
- 5. Were all samples received within holding time? Yes

Carrier: Jerrid Brann

Note: Analysis, such as pH which should be conducted in the field, i.e, 15 minute hold time, are not included in this discussion.

Comments/Resolution

Sample Turn Around Time (TAT)

- 6. Did the COC indicate standard TAT, or Expedited TAT? Yes

Sample Cooler

- 7. Was a sample cooler received? Yes
- 8. If yes, was cooler received in good condition? Yes
- 9. Was the sample(s) received intact, i.e., not broken? Yes
- 10. Were custody/security seals present? No
- 11. If yes, were custody/security seals intact? NA
- 12. Was the sample received on ice? Yes

Note: Thermal preservation is not required, if samples are received within 15 minutes of sampling

- 13. See COC for individual sample temps. Samples outside of 0°C-6°C will be recorded in comments.

Sample Container

- 14. Are aqueous VOC samples present? No
- 15. Are VOC samples collected in VOA Vials? NA
- 16. Is the head space less than 6-8 mm (pea sized or less)? NA
- 17. Was a trip blank (TB) included for VOC analyses? NA
- 18. Are non-VOC samples collected in the correct containers? Yes
- 19. Is the appropriate volume/weight or number of sample containers collected? Yes

Field Label

- 20. Were field sample labels filled out with the minimum information:
 - Sample ID? Yes
 - Date/Time Collected? Yes
 - Collectors name? Yes

Sample Preservation

- 21. Does the COC or field labels indicate the samples were preserved? No
- 22. Are sample(s) correctly preserved? NA
- 24. Is lab filtration required and/or requested for dissolved metals? No

Multiphase Sample Matrix

- 26. Does the sample have more than one phase, i.e., multiphase? No
- 27. If yes, does the COC specify which phase(s) is to be analyzed? NA

Subcontract Laboratory

- 28. Are samples required to get sent to a subcontract laboratory? No
- 29. Was a subcontract laboratory specified by the client and if so who? NA Subcontract Lab: NA

Client Instruction

Signature of client authorizing changes to the COC or sample disposition.

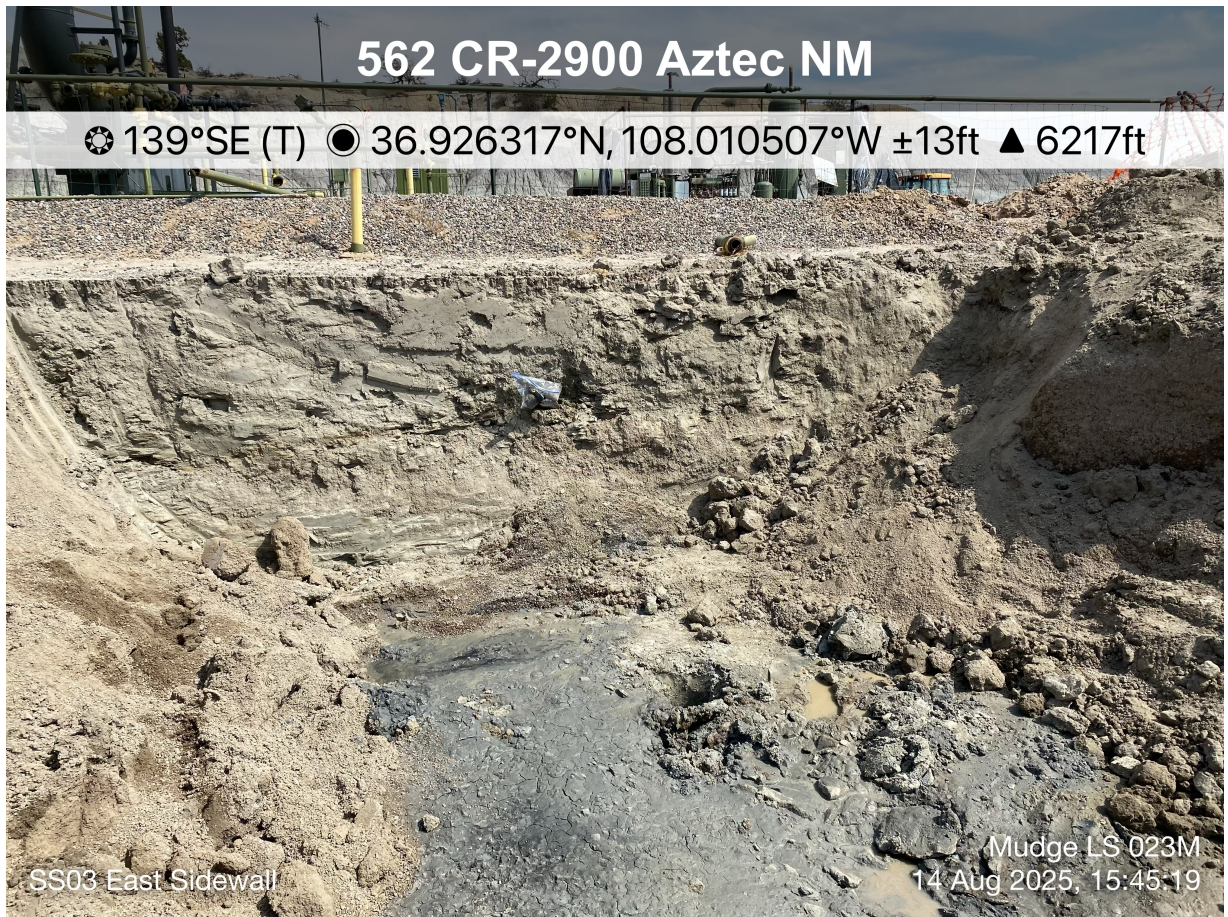
Date



envirotech Inc.







562 CR-2900 Aztec NM

☉ 218°SW (T) ● 36.926330°N, 108.010502°W ±16ft ▲ 6216ft



SS04 South Sidewall

Mudge LS 023M
14 Aug 2025, 15:51:12

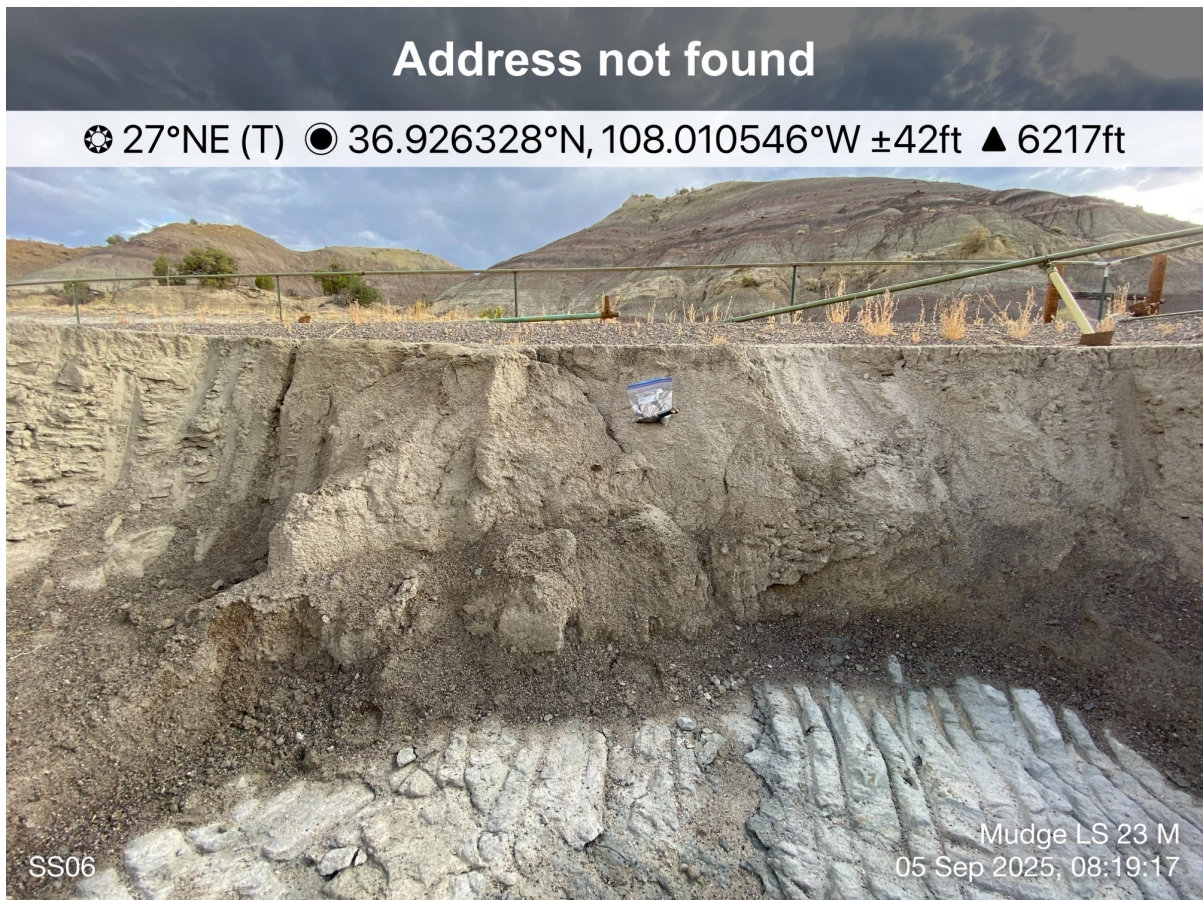
Address not found

☉ 296°NW (T) ● 36.926305°N, 108.010501°W ±29ft ▲ 6216ft



SS05 West Sidewall

Mudge LS 023M
14 Aug 2025, 15:57:37







Sante Fe Main Office
Phone: (505) 476-3441

General Information
Phone: (505) 629-6116

Online Phone Directory
<https://www.emnrd.nm.gov/ocd/contact-us>

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

CONDITIONS

Action 532218

CONDITIONS

Operator: SIMCOE LLC 1199 Main Ave., Suite 101 Durango, CO 81301	OGRID: 329736
	Action Number: 532218
	Action Type: [C-144] Below Grade Tank Plan (C-144B)

CONDITIONS

Created By	Condition	Condition Date
joel.stone	Upon the cessation of all production operations in the area associated with well API 30-045-30632 (Mudge LS #023M), the operator shall complete the requirements of 19.15.17.13 NMAC for the area associated with this below-grade tank and notify the OCD when restoration, reclamation, and re-vegetation are complete.	12/12/2025