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APPROVED

April 26, 2023

New Mexico Oil Conservation Division
5200 Oakland Avenue, N.E., Suite 100
Albuquerque, New Mexico 87113

RE: Incident Deferral Request
nAPP2203953141-NVA 131 (2022) Release

Dear Reviewer,

This letter is to request deferral of remediation at the NVA 131 Tank Battery associated with Incident nAPP2203953141. While it is understood that a deferral does not relieve Cross Timbers of the requirement to remediate the impact area and the pad to the specific closure standards outlined 19.15.29.13 NMAC, remediation beyond the cleanup efforts to date is impractical, unsafe, and not cost effective at this time.

The attached files outline specific deferral points along with site delineation efforts and associated laboratory analysis.

If you have any questions regarding this request, please contact Alan Kane with Kane Environmental Engineering Inc. at (281) 370-6580 or email: alanjkane@comcast.net or Russell Hamm at (918) 693-4833 or email: rhammenviro@gmail.com.

Respectfully,

A handwritten signature in black ink that reads "Russell Hamm".

Russell Hamm
Environmental Specialist
Kane Environmental Engineering, Inc.

Enclosures

cc: Cross Timbers Energy
File

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 Department

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

Form C-141
Revised August 24, 2018
Submit to appropriate OCD District office

Incident ID	nAPP2203953141
District RP	
Facility ID	
Application ID	79780

Release Notification

Responsible Party

Responsible Party	CROSS TIMBERS ENERGY, LLC	OGRID	298299
Contact Name	SAMANNTHA AVARELLO	Contact Telephone	817-334-7747
Contact email	SAVARELLO@TXOENERGY.COM	Incident # (assigned by OCD)	nAPP2203953141
Contact mailing address	400 W 7TH STREET, FORT WORTH, TX 76102		

Location of Release Source

Latitude 32.846337 Longitude -103.535883
(NAD 83 in decimal degrees to 5 decimal places)

Site Name	NORTH VACUUM ABO 131 BTY	Site Type	FACILITY
Date Release Discovered	02/04/2022	API# (if applicable)	

Unit Letter	Section	Township	Range	County
M	11	17S	34E	LEA

Surface Owner: ☒ State ☐ Federal ☐ Tribal ☐ Private (Name: _____)

Nature and Volume of Release

Material(s) Released (Select all that apply and attach calculations or specific justification for the volumes provided below)

<input checked="" type="checkbox"/> Crude Oil	Volume Released (bbls) 80	Volume Recovered (bbls) 66
<input type="checkbox"/> Produced Water	Volume Released (bbls)	Volume Recovered (bbls)
	Is the concentration of dissolved chloride in the produced water >10,000 mg/l?	<input type="checkbox"/> Yes <input type="checkbox"/> No
<input type="checkbox"/> Condensate	Volume Released (bbls)	Volume Recovered (bbls)
<input type="checkbox"/> Natural Gas	Volume Released (Mcf)	Volume Recovered (Mcf)
<input type="checkbox"/> Other (describe)	Volume/Weight Released (provide units)	Volume/Weight Recovered (provide units)

Cause of Release

DIRECT LINE ON LACT UNIT FROZE AND BUSTED, RELEASING OIL IN TANK IN SIDE OF BERM

<p>Was this a major release as defined by 19.15.29.7(A) NMAC?</p> <p><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No</p>	<p>If YES, for what reason(s) does the responsible party consider this a major release?</p>
<p>If YES, was immediate notice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)?</p> <p>ONLINE NOR SUBMITTED</p>	

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

Released to Imaging: 7/20/2023 3:19:23 PM

Incident ID	nAPP2203953141
District RP	
Facility ID	
Application ID	

Site Assessment/Characterization

This information must be provided to the appropriate district office no later than 90 days after the release discovery date.

What is the shallowest depth to groundwater beneath the area affected by the release?	105' (ft bgs)
Did this release impact groundwater or surface water?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
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?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 1000 feet of any other fresh water well or spring?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh water well field?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 300 feet of a wetland?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release overlying a subsurface mine?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release overlying an unstable area such as karst geology?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within a 100-year floodplain?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Did the release impact areas not on an exploration, development, production, or storage site?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

Attach a comprehensive report (electronic submittals in .pdf format are preferred) demonstrating the lateral and vertical extents of soil contamination associated with the release have been determined. Refer to 19.15.29.11 NMAC for specifics.

Characterization Report Checklist: *Each of the following items must be included in the report.*

- ☒ Scaled site map showing impacted area, surface features, subsurface features, delineation points, and monitoring wells.
- ☒ Field data
- ☒ Data table of soil contaminant concentration data
- ☒ Depth to water determination
- ☒ Determination of water sources and significant watercourses within ½-mile of the lateral extents of the release
- ☒ Boring or excavation logs
- ☒ Photographs including date and GIS information
- ☒ Topographic/Aerial maps
- ☒ Laboratory data including chain of custody

If the site characterization report does not include completed efforts at remediation of the release, the report must include a proposed remediation plan. That plan must include the estimated volume of material to be remediated, the proposed remediation technique, proposed sampling plan and methods, anticipated timelines for beginning and completing the remediation. The closure criteria for a release are contained in Table 1 of 19.15.29.12 NMAC, however, use of the table is modified by site- and release-specific parameters.

Oil Conservation Division

Incident ID	nAPP2203953141
District RP	
Facility ID	
Application ID	

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.

Printed Name: Samanntha Avarello Title: EHS Coordinator

Signature: Samanntha Avarello Date: 03/20/2023

email: savarello@txoenergy.com Telephone: 817-334-7747

OCD Only

Received by: Jocelyn Harimon Date: 04/28/2023

Incident ID	nAPP2203953141
District RP	
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Application ID	

Remediation Plan

Remediation Plan Checklist: *Each of the following items must be included in the plan.*

- ☐ Detailed description of proposed remediation technique
- ☐ Scaled sitemap with GPS coordinates showing delineation points
- ☐ Estimated volume of material to be remediated
- ☐ Closure criteria is to Table 1 specifications subject to 19.15.29.12(C)(4) NMAC
- ☐ Proposed schedule for remediation (note if remediation plan timeline is more than 90 days OCD approval is required)

Deferral Requests Only: *Each of the following items must be confirmed as part of any request for deferral of remediation.*

- ☒ Contamination must be in areas immediately under or around production equipment where remediation could cause a major facility deconstruction.
- ☒ Extents of contamination must be fully delineated.
- ☒ Contamination does not cause an imminent risk to human health, the environment, or groundwater.

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.

Printed Name: Samanntha Avarello Title: EHS Coordinator
Signature: Samanntha Avarello Date: 03/20/2023
email: savarello@txoenergy.com Telephone: 817-334-7747

OCD Only

Received by: Jocelyn Harimon Date: 04/28/2023

☐ Approved ☐ Approved with Attached Conditions of Approval ☐ Denied ☐ Deferral Approved

Signature: Nelson Velez Date: 07/20/2023

Incident ID	nAPP2203953141
District RP	
Facility ID	
Application ID	

Closure

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 (electronic submittals in .pdf format are preferred) 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.

Closure Report Attachment Checklist: Each of the following items must be included in the closure report.

- ☐ A scaled site and sampling diagram as described in 19.15.29.11 NMAC
- ☐ Photographs of the remediated site prior to backfill or photos of the liner integrity if applicable (Note: appropriate OCD District office must be notified 2 days prior to liner inspection)
- ☐ Laboratory analyses of final sampling (Note: appropriate ODC District office must be notified 2 days prior to final sampling)
- ☐ Description of remediation activities

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. The responsible party acknowledges they must substantially restore, reclaim, and re-vegetate the impacted surface area to the conditions that existed prior to the release or their final land use in accordance with 19.15.29.13 NMAC including notification to the OCD when reclamation and re-vegetation are complete.

Printed Name: _____ Title: _____

Signature: _____ Date: _____

email: _____ Telephone: _____

OCD Only

Received by: _____ Date: _____

Closure approval by the OCD does not relieve the responsible party of liability should their operations have failed to adequately investigate and remediate contamination that poses a threat to groundwater, surface water, human health, or the environment nor does not relieve the responsible party of compliance with any other federal, state, or local laws and/or regulations.

Closure Approved by: _____ Date: _____

Printed Name: _____ Title: _____

Sampling Event Results & Deferral Request Lea County, New Mexico

NVA 131 (2022) Battery Release nAPP2203953141

Prepared for:



**400 W 7th St,
Fort Worth, TX 76102**



**PREPARED BY:
KANE ENVIRONMENTAL ENGINEERING, INC.
2351 EAST STATE HIGHWAY 21
Lincoln, TX 78948
REGISTRATION # F-2355
PROJECT No. 23-131**

MARCH 2023

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1.0 INTRODUCTION

1.0 INTRODUCTION

On February 4, 2022 Cross Timbers Energy discovered a frozen and leaking LACT Direct line inside of the NVA 131 Battery Berm. The leak released approximately 80bbls of oil. A vacuum truck picked up approximately all 66bbls of the released oil with the volume based on its return to an onsite storage tank where measurements were taken. The release was reported to the OCD on February 8, 2022 on Form C-141 as required.

The location of this release makes remediation efforts beyond what has already been completed in the cleanup extremely difficult and uneconomical. The area impacted by the release requesting deferral is within a tank battery berm, surrounded by fencing, between storage tanks, and in an area with surface and subsurface lines that prevent the use of mechanical equipment and limit the safety of hand digging. Sample points were based on the few points equipment could access.

A site investigation and sampling event took place on the week of 2/13/2023 to fully delineate the impacts in accordance with 19.15.29.12 NMAC (C)(2) prior to requesting deferral. North Vacuum BAO Unit WSW 101 and the recently completed DTW1 wells were utilized to determine depth to groundwater in the area and compare the analysis to the Table I requirements. DTW 1 is approximately 0.7 miles Northwest of the NVA 131 Battery release area. Detailed information about this well can be found in **Appendix G**.

2.0 FIELD ACTIVITIES

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2.1 Sampling Procedures

NVA 131 Battery -Lea County

Soil - Soil samples were collected using a skid steer equipped with a hydraulic auger. Augured samples were collected in 1-foot intervals at depths from surface to 4-feet below ground surface (bgs). Without major deconstruction of the facility additional sampling beyond what has been completed is not possible. The samples were placed in the appropriate sample containers, labeled, and placed on ice.

All the samples were transported under Chain of Custody Record and Relinquished to Cardinal Laboratories.

2.2 Decontamination Procedures

Soil - The auger was cleaned using a pressure washer between sample intervals and sample locations.

2.3 Site Specific Sampling Activities

The specific sampling procedures and activities used to collect samples are provided below.

NVA 131 Battery:

Spill Accumulation Area - Soil samples were collected using a skid steer equipped with a hydraulic auger. Samples were collected in 1-foot intervals at depths from surface to 4 feet below ground surface (bgs).

Samples were collected in the bermed area and around the LACT line where the release occurred to fully delineate the drainage area and area of known pooling. Sampling location and approximate impact maps are provided in **Appendix A**. Each sample point was cataloged with a Trimble GPS unit utilizing WGS84 Datum information. A location catalog is provided in **Appendix F**.

Each sample was analyzed for Chlorides, Total Petroleum Hydrocarbons (TPH GRO+DRO+MRO) & (TPH GRO+DRO) and Benzene, Toluene, Ethylbenzene, mixed isomer Xylenes (BTEX) utilizing the following required methods:

Chloride	EPA 300.0 or SM4500 Cl B
TPH (GRO+DRO+MRO)	EPA SW-846 Method 8015M
GRO+DRO	EPA SW-846 Method 8015M
BTEX	EPA SW-846 Method 8021B or 8260B
Benzene	EPA SW-846 Method 8021B or 8260B

3.0 PROPOSED DEFERRAL

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Following receipt of the analytical data, a detailed comparison was made with respect to the 19.15.29.12 NMAC Table I-Closure Criteria for Soils Impacted by a Release (**Appendix C**).

As a result of the review, some constituents of concern are above the >100 feet to ground water regulator limit. Additionally, several do not meet the more stringent closure standard of 19.15.29.13 NMAC which states: The reclamation must contain a minimum of four feet of non-waste containing, uncontaminated, earthen material with chloride concentrations less than 600 mg/kg (or the most stringent standards of the Table I).

- Sample Points **NVA 131 (2022) A and NVA 131 (2022) B** reflect the area of the concentrated pooling (near the release) and exceed the regulatory closure limit for the majority of the constituents. However, **NVA 131 (2022) A** only exceed the total TPH (GRO+DRO +MRO) by 22mg/kg at the four-foot interval with no other exceedances at this depth and **NVA 131 (2022) B** reflects the closure standard for all required constituents at the four-foot depth.
- Sample Point **NVA 131 (2022) E** exceeds the total TPH (GRO+DRO +MRO) at both the surface to one-foot and two to three-foot intervals but does not exceed any other closure standards and reflects the closure standard for all required constituents at the four-foot depth.
- Sample Point **NVA 131 (2022) F and NVA 131 G (2022) B** only exceed the total TPH (GRO+DRO +MRO) at the surface to one-foot interval but do not exceed any other closure standards and reflect the closure standard for all required constituents at all other depths.

Deferral Points Requested:

NVA 131 2002 A
NVA 131 2002 B
NVA 131 2002 E
NVA 131 2002 F
NVA 131 2002 G

Clean Sample Points Requiring NO ACTION:

South Water Station C
South Water Station D

The total impact area is approximately 2400 square feet. The analysis from **NVA 131 (2022) C and NVA 131 D** demonstrates an area of clean soils between the two berms that does not require any additional actions. The remaining impacts in the Western berm around **NVA 131 (2022) A and NVA 131 (2022) B** is approximately 600 square feet and requires remediation to a depth at least four feet. Upon facility closure this will require remediation of approximately 89 cubic yards. The remaining impacts in the




Eastern berm around **NVA 131 (2022) E, NVA 131 (2022) F, and NVA 131 (2022) G** is approximately 600 square feet and requires remediation to a varying depth from one to three-feet. Upon facility closure this will require remediation of approximately 45 cubic yards.

Provided photographs (**Appendix B**) demonstrate the contaminated soil is located in areas immediately under or around production equipment allowing deferral in accordance with 19.15.29.12 NMAC (C)(2) and where remediation could cause a major facility deconstruction. Additionally, this document reflects that the contamination is delineated and does not cause an imminent risk to human health, the environment, or ground water. Final remediation and reclamation shall take place in accordance with 19.15.29.12 and 19.15.29.13 NMAC once the site is no longer being used for oil and gas operations.

Appendix A

APPENDIX A-KEY

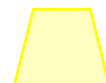
Topographic and Satellite Imagery Scaled Maps of Approximate Impact area and Sample Locations

-  -Clean sample point from surface to 4' according to 19.15.29.13 NMAC (as confirmed by supplied lab analysis)
-  -Sample point from surface to 4' exceeds the Table I closure criteria according to 19.15.29.13 NMAC for the top four feet of non-waste containing material but, is below the closure standard for a release with ground water >100' BGS (as confirmed by supplied lab analysis)
-  -Sample point from surface to 4' exceeds the Table I closure criteria for soil impacted by a release with ground water >100' BGS (as confirmed by supplied lab analysis)

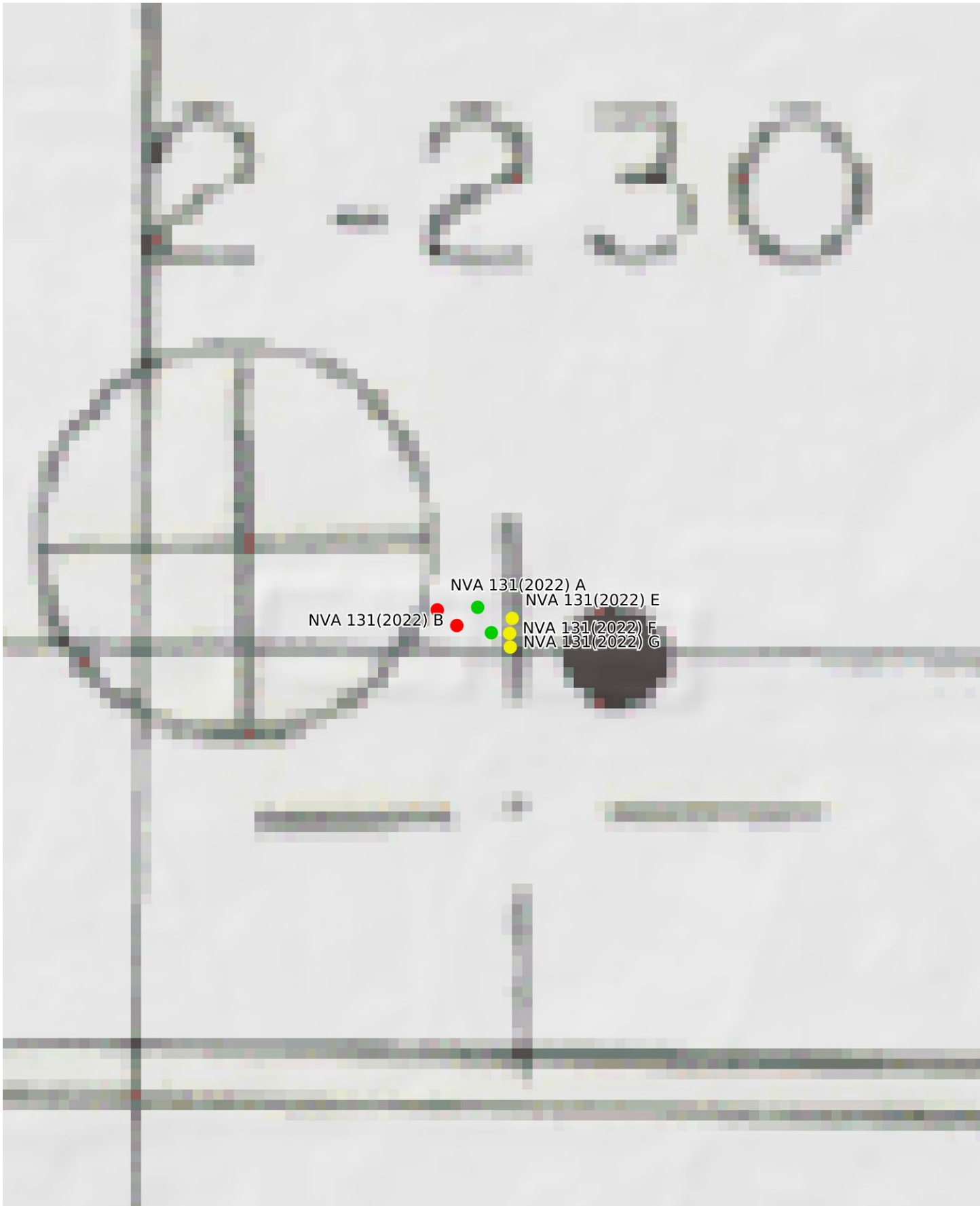
Note: Yellow and Red impact markers are for information only and would only have a bearing on impacts below four-feet. It is understood that all materials from surface to a depth of four feet will need to meet the 19.15.29.13 NMAC closure standard: The reclamation must contain a minimum of four feet of non-waste containing, uncontaminated, earthen material with chloride concentrations less than 600 mg/kg (or the most stringent standards of the Table I).



-Initial impact area as reported by the submitted C-141



-Requested deferral area



Mercator Projection
WGS84
UTM Zone 13S


0.1 km
mi
Scale **1:1000** 1 inch = 83 feet





Mercator Projection
WGS84
UTM Zone 13S


0.1 km
mi
Scale **1:1000** 1 inch = 83 feet

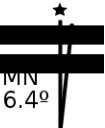




Mercator Projection
WGS84
UTM Zone 13S


km
mi

Scale **1:600** 1 inch = 50 feet



Appendix B

Appendix B -Sampling Event Photographs



Appendix B -Sampling Event Photographs



Appendix C

NVA 131 (2022) Release-nAPP2203953141-Project 23-131

Cardinal Labs 2/22/2023 Reports

Table I of 19.15.29.12 NMAC-Closure Criteria for Soils Impacted by a Release

Minimum depth below any point within the horizontal boundary of the release to ground water less than
10,000 mg/l TDS

Constituent	Chloride***	TPH (GRO+DRO+MRO)	GRO+DRO	BTEX	Benzene
Reg-Limit ->100 feet to GW	20,000 mg/kg	2,500 mg/kg	1,000 mg/kg	50 mg/kg	10 mg/kg
Reg-Limit -<50 feet to GW	600 mg/kg	100 mg/kg	NA	50 mg/kg	10 mg/kg
Sample:	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
NVA 131(2022) A-1	624	7478	6228	56.9	2.08
NVA 131(2022) A-2	592	3144	2827	228	14.6
NVA 131(2022) A-3	416	1365	1256	160	8.62
NVA 131(2022) A-4	352	122	122	9.58	0.241
NVA 131(2022) B-1	368	4510	3410	<0.300	0.068
NVA 131(2022) B-2	384	2820	2170	<0.300	<0.050
NVA 131(2022) B-3	112	586.6	492	<0.300	<0.050
NVA 131(2022) B-4	128	42.8	42.8	<0.300	<0.050
NVA 131(2022) C-1	112	<10.0	<10.0	<0.300	<0.050
NVA 131(2022) C-2	64	<10.0	<10.0	<0.300	<0.050
NVA 131(2022) C-3	80	<10.0	<10.0	<0.300	<0.050
NVA 131(2022) C-4	16	<10.0	<10.0	<0.300	<0.050
NVA 131(2022) D-1	48	36.2	17	<0.300	<0.050
NVA 131(2022) D-2	48	<10.0	<10.0	<0.300	<0.050
NVA 131(2022) D-3	32	<10.0	<10.0	<0.300	<0.050
NVA 131(2022) D-4	80	<10.0	<10.0	<0.300	<0.050
NVA 131(2022) E-1	160	112.3	58.1	<0.300	<0.050
NVA 131(2022) E-2	144	<10.0	<10.0	<0.300	<0.050
NVA 131(2022) E-3	80	140.4	75.6	<0.300	<0.050
NVA 131(2022) E-4	48	60.2	32.9	<0.300	<0.050
NVA 131(2022) F-1	304	591	278	<0.300	<0.050
NVA 131(2022) F-2	336	<10.0	<10.0	<0.300	<0.050
NVA 131(2022) F-3	192	<10.0	<10.0	<0.300	<0.050
NVA 131(2022) F-4	112	<10.0	<10.0	<0.300	<0.050
NVA 131(2022) G-1	272	336	181	<0.300	<0.050
NVA 131(2022) G-2	160	12.1	12.1	<0.300	<0.050
NVA 131(2022) G-3	48	<10.0	<10.0	<0.300	<0.050
NVA 131(2022) G-4	48	<10.0	<10.0	<0.300	<0.050

Green cells are non-waste containing sample points according to 19.15.29.13 NMAC

Yellow cells exceed the Table I closure criteria according to 19.15.29.13 NMAC for the top four feet of non-waste containing material but, are below the closure standard for a release with ground water >100' BGS

Red cells exceed the surface to 4' Table I closure criteria for soil impacted by a release with ground water >100' BGS

Chloride*** ***This applies to releases of produced water or other fluids, which may contain chlorid

Chloride*** EPA 300.0 or SM4500 Cl B

TPH (GRO+DRO+MRO) EPA SW-846 Method 8015M

GRO+DRO EPA SW-846 Method 8015M

BTEX EPA SW-846 Method 8021B or 8260B

Benzene EPA SW-846 Method 8021B or 8260B

Appendix D



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

February 21, 2023

ALAN KANE

KANE ENVIROMENTAL

8816 BIG VIEW DRIVE

AUSTIN, TX 78730

RE: NVA 131 2022

Enclosed are the results of analyses for samples received by the laboratory on 02/15/23 13:50.

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 accredited 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,

A handwritten signature in black ink that reads "Celey D. Keene". The signature is written in a cursive style with a large, stylized 'C' and 'K'.

Celey D. Keene

Lab Director/Quality Manager



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

Analytical Results For:

KANE ENVIROMENTAL
 ALAN KANE
 8816 BIG VIEW DRIVE
 AUSTIN TX, 78730
 Fax To:

Received: 02/15/2023
 Reported: 02/21/2023
 Project Name: NVA 131 2022
 Project Number: 23-121
 Project Location: NONE GIVEN

Sampling Date: 02/14/2023
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: NVA 131-22 A 1' (H230714-01)

BTEX 8021B		mg/kg		Analyzed By: ZZZ					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	2.08	0.500	02/20/2023	ND	1.96	97.9	2.00	7.74	
Toluene*	16.0	0.500	02/20/2023	ND	1.93	96.5	2.00	5.52	
Ethylbenzene*	8.89	0.500	02/20/2023	ND	2.05	103	2.00	7.03	
Total Xylenes*	29.9	1.50	02/20/2023	ND	6.23	104	6.00	6.25	
Total BTEX	56.9	3.00	02/20/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID) 94.5 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	624	16.0	02/17/2023	ND	400	100	400	0.00	

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*	708	50.0	02/17/2023	ND	192	96.0	200	0.151		
DRO >C10-C28*	6150	50.0	02/17/2023	ND	189	94.5	200	2.14		
EXT DRO >C28-C36	1250	50.0	02/17/2023	ND						

Surrogate: 1-Chlorooctane 145 % 48.2-134

Surrogate: 1-Chlorooctadecane 413 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

KANE ENVIROMENTAL
 ALAN KANE
 8816 BIG VIEW DRIVE
 AUSTIN TX, 78730
 Fax To:

Received: 02/15/2023
 Reported: 02/21/2023
 Project Name: NVA 131 2022
 Project Number: 23-121
 Project Location: NONE GIVEN

Sampling Date: 02/14/2023
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: NVA 131-22 A 2' (H230714-02)

BTEx 8021B		mg/kg		Analyzed By: ZZZ					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	14.6	0.500	02/20/2023	ND	1.96	97.9	2.00	7.74	
Toluene*	87.2	0.500	02/20/2023	ND	1.93	96.5	2.00	5.52	
Ethylbenzene*	57.0	0.500	02/20/2023	ND	2.05	103	2.00	7.03	
Total Xylenes*	68.8	1.50	02/20/2023	ND	6.23	104	6.00	6.25	
Total BTEX	228	3.00	02/20/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID) 104 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	592	16.0	02/17/2023	ND	400	100	400	0.00	
TPH 8015M		mg/kg		Analyzed By: MS					
				S-06					

Surrogate: 1-Chlorooctane		162 %	48.2-134							
Surrogate: 1-Chlorooctadecane		196 %	49.1-148							

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Analytical Results For:

KANE ENVIROMENTAL
 ALAN KANE
 8816 BIG VIEW DRIVE
 AUSTIN TX, 78730
 Fax To:

Received: 02/15/2023
 Reported: 02/21/2023
 Project Name: NVA 131 2022
 Project Number: 23-121
 Project Location: NONE GIVEN

Sampling Date: 02/14/2023
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: NVA 131-22 A 3' (H230714-03)

BTEx 8021B		mg/kg		Analyzed By: ZZZ					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	8.62	0.500	02/21/2023	ND	1.96	97.9	2.00	7.74	
Toluene*	60.3	0.500	02/21/2023	ND	1.93	96.5	2.00	5.52	
Ethylbenzene*	35.5	0.500	02/21/2023	ND	2.05	103	2.00	7.03	
Total Xylenes*	55.9	1.50	02/21/2023	ND	6.23	104	6.00	6.25	
Total BTEX	160	3.00	02/21/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID) 102 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	416	16.0	02/17/2023	ND	400	100	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	413	50.0	02/17/2023	ND	192	96.0	200	0.151	
DRO >C10-C28*	843	50.0	02/17/2023	ND	189	94.5	200	2.14	
EXT DRO >C28-C36	109	50.0	02/17/2023	ND					

Surrogate: 1-Chlorooctane 122 % 48.2-134

Surrogate: 1-Chlorooctadecane 140 % 49.1-148

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Analytical Results For:

KANE ENVIROMENTAL
 ALAN KANE
 8816 BIG VIEW DRIVE
 AUSTIN TX, 78730
 Fax To:

Received: 02/15/2023
 Reported: 02/21/2023
 Project Name: NVA 131 2022
 Project Number: 23-121
 Project Location: NONE GIVEN

Sampling Date: 02/14/2023
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: NVA 131-22 A 4' (H230714-04)

BTEx 8021B		mg/kg		Analyzed By: ZZZ					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	0.241	0.050	02/20/2023	ND	1.96	97.9	2.00	7.74	
Toluene*	2.54	0.050	02/20/2023	ND	1.93	96.5	2.00	5.52	
Ethylbenzene*	2.60	0.050	02/20/2023	ND	2.05	103	2.00	7.03	
Total Xylenes*	4.20	0.150	02/20/2023	ND	6.23	104	6.00	6.25	
Total BTEX	9.58	0.300	02/20/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID) 123 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	352	16.0	02/17/2023	ND	400	100	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	30.8	10.0	02/20/2023	ND	211	106	200	4.60	QM-07, QR-03
DRO >C10-C28*	91.2	10.0	02/20/2023	ND	225	113	200	5.66	QR-03
EXT DRO >C28-C36	<10.0	10.0	02/20/2023	ND					

Surrogate: 1-Chlorooctane 98.8 % 48.2-134

Surrogate: 1-Chlorooctadecane 103 % 49.1-148

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Analytical Results For:

KANE ENVIROMENTAL
 ALAN KANE
 8816 BIG VIEW DRIVE
 AUSTIN TX, 78730
 Fax To:

Received: 02/15/2023
 Reported: 02/21/2023
 Project Name: NVA 131 2022
 Project Number: 23-121
 Project Location: NONE GIVEN

Sampling Date: 02/14/2023
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: NVA 131-22 B 1' (H230714-05)

BTEX 8021B		mg/kg		Analyzed By: ZZZ					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	0.068	0.050	02/20/2023	ND	1.96	97.9	2.00	7.74	
Toluene*	0.093	0.050	02/20/2023	ND	1.93	96.5	2.00	5.52	
Ethylbenzene*	<0.050	0.050	02/20/2023	ND	2.05	103	2.00	7.03	
Total Xylenes*	<0.150	0.150	02/20/2023	ND	6.23	104	6.00	6.25	
Total BTEX	<0.300	0.300	02/20/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID) 94.5 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	368	16.0	02/17/2023	ND	400	100	400	0.00		

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*	<50.0	50.0	02/20/2023	ND	211	106	200	4.60	
DRO >C10-C28*	3410	50.0	02/20/2023	ND	225	113	200	5.66	
EXT DRO >C28-C36	1100	50.0	02/20/2023	ND					

Surrogate: 1-Chlorooctane 100 % 48.2-134

Surrogate: 1-Chlorooctadecane 284 % 49.1-148

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Analytical Results For:

KANE ENVIROMENTAL
 ALAN KANE
 8816 BIG VIEW DRIVE
 AUSTIN TX, 78730
 Fax To:

Received: 02/15/2023
 Reported: 02/21/2023
 Project Name: NVA 131 2022
 Project Number: 23-121
 Project Location: NONE GIVEN

Sampling Date: 02/14/2023
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: NVA 131-22 B 2' (H230714-06)

BTEx 8021B		mg/kg		Analyzed By: ZZZ						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	02/20/2023	ND	1.96	97.9	2.00	7.74		
Toluene*	<0.050	0.050	02/20/2023	ND	1.93	96.5	2.00	5.52		
Ethylbenzene*	<0.050	0.050	02/20/2023	ND	2.05	103	2.00	7.03		
Total Xylenes*	<0.150	0.150	02/20/2023	ND	6.23	104	6.00	6.25		
Total BTEX	<0.300	0.300	02/20/2023	ND						

Surrogate: 4-Bromofluorobenzene (PID) 94.4 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	384	16.0	02/17/2023	ND	400	100	400	0.00		

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*	<50.0	50.0	02/20/2023	ND	211	106	200	4.60	
DRO >C10-C28*	2170	50.0	02/20/2023	ND	225	113	200	5.66	
EXT DRO >C28-C36	650	50.0	02/20/2023	ND					

Surrogate: 1-Chlorooctane 91.5 % 48.2-134

Surrogate: 1-Chlorooctadecane 215 % 49.1-148

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Analytical Results For:

KANE ENVIROMENTAL
 ALAN KANE
 8816 BIG VIEW DRIVE
 AUSTIN TX, 78730
 Fax To:

Received: 02/15/2023
 Reported: 02/21/2023
 Project Name: NVA 131 2022
 Project Number: 23-121
 Project Location: NONE GIVEN

Sampling Date: 02/14/2023
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: NVA 131-22 B 3' (H230714-07)

BTEx 8021B		mg/kg		Analyzed By: ZZZ						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	02/20/2023	ND	1.96	97.9	2.00	7.74		
Toluene*	<0.050	0.050	02/20/2023	ND	1.93	96.5	2.00	5.52		
Ethylbenzene*	<0.050	0.050	02/20/2023	ND	2.05	103	2.00	7.03		
Total Xylenes*	<0.150	0.150	02/20/2023	ND	6.23	104	6.00	6.25		
Total BTEX	<0.300	0.300	02/20/2023	ND						

Surrogate: 4-Bromofluorobenzene (PID) 94.3 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	112	16.0	02/17/2023	ND	400	100	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<50.0	50.0	02/20/2023	ND	211	106	200	4.60	
DRO >C10-C28*	492	50.0	02/20/2023	ND	225	113	200	5.66	
EXT DRO >C28-C36	94.6	50.0	02/20/2023	ND					

Surrogate: 1-Chlorooctane 118 % 48.2-134

Surrogate: 1-Chlorooctadecane 144 % 49.1-148

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Analytical Results For:

KANE ENVIROMENTAL
 ALAN KANE
 8816 BIG VIEW DRIVE
 AUSTIN TX, 78730
 Fax To:

Received: 02/15/2023
 Reported: 02/21/2023
 Project Name: NVA 131 2022
 Project Number: 23-121
 Project Location: NONE GIVEN

Sampling Date: 02/14/2023
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: NVA 131-22 B 4' (H230714-08)

BTEx 8021B		mg/kg		Analyzed By: ZZZ						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	02/20/2023	ND	1.96	97.9	2.00	7.74		
Toluene*	<0.050	0.050	02/20/2023	ND	1.93	96.5	2.00	5.52		
Ethylbenzene*	<0.050	0.050	02/20/2023	ND	2.05	103	2.00	7.03		
Total Xylenes*	<0.150	0.150	02/20/2023	ND	6.23	104	6.00	6.25		
Total BTEX	<0.300	0.300	02/20/2023	ND						

Surrogate: 4-Bromofluorobenzene (PID) 101 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	128	16.0	02/17/2023	ND	400	100	400	0.00		

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	02/20/2023	ND	211	106	200	4.60	
DRO >C10-C28*	42.8	10.0	02/20/2023	ND	225	113	200	5.66	
EXT DRO >C28-C36	<10.0	10.0	02/20/2023	ND					

Surrogate: 1-Chlorooctane 69.4 % 48.2-134

Surrogate: 1-Chlorooctadecane 73.6 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

KANE ENVIROMENTAL
 ALAN KANE
 8816 BIG VIEW DRIVE
 AUSTIN TX, 78730
 Fax To:

Received: 02/15/2023
 Reported: 02/21/2023
 Project Name: NVA 131 2022
 Project Number: 23-121
 Project Location: NONE GIVEN

Sampling Date: 02/14/2023
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: NVA 131-22 C 1' (H230714-09)

BTEx 8021B		mg/kg		Analyzed By: ZZZ						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	02/20/2023	ND	1.96	97.9	2.00	7.74		
Toluene*	<0.050	0.050	02/20/2023	ND	1.93	96.5	2.00	5.52		
Ethylbenzene*	<0.050	0.050	02/20/2023	ND	2.05	103	2.00	7.03		
Total Xylenes*	<0.150	0.150	02/20/2023	ND	6.23	104	6.00	6.25		
Total BTEX	<0.300	0.300	02/20/2023	ND						

Surrogate: 4-Bromofluorobenzene (PID) 97.4 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	112	16.0	02/17/2023	ND	400	100	400	0.00		

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	02/20/2023	ND	211	106	200	4.60	
DRO >C10-C28*	<10.0	10.0	02/20/2023	ND	225	113	200	5.66	
EXT DRO >C28-C36	<10.0	10.0	02/20/2023	ND					

Surrogate: 1-Chlorooctane 84.0 % 48.2-134

Surrogate: 1-Chlorooctadecane 87.9 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

KANE ENVIROMENTAL
 ALAN KANE
 8816 BIG VIEW DRIVE
 AUSTIN TX, 78730
 Fax To:

Received: 02/15/2023
 Reported: 02/21/2023
 Project Name: NVA 131 2022
 Project Number: 23-121
 Project Location: NONE GIVEN

Sampling Date: 02/14/2023
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: NVA 131-22 C 2' (H230714-10)

BTEx 8021B		mg/kg		Analyzed By: ZZZ						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	02/20/2023	ND	1.96	97.9	2.00	7.74		
Toluene*	<0.050	0.050	02/20/2023	ND	1.93	96.5	2.00	5.52		
Ethylbenzene*	<0.050	0.050	02/20/2023	ND	2.05	103	2.00	7.03		
Total Xylenes*	<0.150	0.150	02/20/2023	ND	6.23	104	6.00	6.25		
Total BTEX	<0.300	0.300	02/20/2023	ND						

Surrogate: 4-Bromofluorobenzene (PID) 105 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	64.0	16.0	02/17/2023	ND	400	100	400	0.00		

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	02/20/2023	ND	211	106	200	4.60	
DRO >C10-C28*	<10.0	10.0	02/20/2023	ND	225	113	200	5.66	
EXT DRO >C28-C36	<10.0	10.0	02/20/2023	ND					

Surrogate: 1-Chlorooctane 57.3 % 48.2-134

Surrogate: 1-Chlorooctadecane 57.8 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

KANE ENVIROMENTAL
 ALAN KANE
 8816 BIG VIEW DRIVE
 AUSTIN TX, 78730
 Fax To:

Received: 02/15/2023
 Reported: 02/21/2023
 Project Name: NVA 131 2022
 Project Number: 23-121
 Project Location: NONE GIVEN

Sampling Date: 02/14/2023
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: NVA 131-22 C 3' (H230714-11)

BTEx 8021B		mg/kg		Analyzed By: ZZZ						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	02/20/2023	ND	1.96	97.9	2.00	7.74		
Toluene*	<0.050	0.050	02/20/2023	ND	1.93	96.5	2.00	5.52		
Ethylbenzene*	<0.050	0.050	02/20/2023	ND	2.05	103	2.00	7.03		
Total Xylenes*	<0.150	0.150	02/20/2023	ND	6.23	104	6.00	6.25		
Total BTEX	<0.300	0.300	02/20/2023	ND						

Surrogate: 4-Bromofluorobenzene (PID) 111 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	80.0	16.0	02/17/2023	ND	416	104	400	0.00		

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	02/21/2023	ND	211	106	200	4.60	
DRO >C10-C28*	<10.0	10.0	02/21/2023	ND	225	113	200	5.66	
EXT DRO >C28-C36	<10.0	10.0	02/21/2023	ND					

Surrogate: 1-Chlorooctane 108 % 48.2-134

Surrogate: 1-Chlorooctadecane 115 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

KANE ENVIROMENTAL
 ALAN KANE
 8816 BIG VIEW DRIVE
 AUSTIN TX, 78730
 Fax To:

Received: 02/15/2023
 Reported: 02/21/2023
 Project Name: NVA 131 2022
 Project Number: 23-121
 Project Location: NONE GIVEN

Sampling Date: 02/14/2023
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: NVA 131-22 C 4' (H230714-12)

BTEx 8021B		mg/kg		Analyzed By: ZZZ						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	02/20/2023	ND	1.96	97.9	2.00	7.74		
Toluene*	<0.050	0.050	02/20/2023	ND	1.93	96.5	2.00	5.52		
Ethylbenzene*	<0.050	0.050	02/20/2023	ND	2.05	103	2.00	7.03		
Total Xylenes*	<0.150	0.150	02/20/2023	ND	6.23	104	6.00	6.25		
Total BTEX	<0.300	0.300	02/20/2023	ND						

Surrogate: 4-Bromofluorobenzene (PID) 110 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	16.0	16.0	02/17/2023	ND	416	104	400	0.00		

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	02/20/2023	ND	211	106	200	4.60	
DRO >C10-C28*	<10.0	10.0	02/20/2023	ND	225	113	200	5.66	
EXT DRO >C28-C36	<10.0	10.0	02/20/2023	ND					

Surrogate: 1-Chlorooctane 87.4 % 48.2-134

Surrogate: 1-Chlorooctadecane 90.8 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

KANE ENVIROMENTAL
 ALAN KANE
 8816 BIG VIEW DRIVE
 AUSTIN TX, 78730
 Fax To:

Received: 02/15/2023
 Reported: 02/21/2023
 Project Name: NVA 131 2022
 Project Number: 23-121
 Project Location: NONE GIVEN

Sampling Date: 02/14/2023
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: NVA 131-22 D 1' (H230714-13)

BTEx 8021B		mg/kg		Analyzed By: ZZZ						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	02/20/2023	ND	1.96	97.9	2.00	7.74		
Toluene*	<0.050	0.050	02/20/2023	ND	1.93	96.5	2.00	5.52		
Ethylbenzene*	<0.050	0.050	02/20/2023	ND	2.05	103	2.00	7.03		
Total Xylenes*	<0.150	0.150	02/20/2023	ND	6.23	104	6.00	6.25		
Total BTEX	<0.300	0.300	02/20/2023	ND						

Surrogate: 4-Bromofluorobenzene (PID) 113 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	48.0	16.0	02/17/2023	ND	416	104	400	0.00		

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	02/20/2023	ND	211	106	200	4.60	
DRO >C10-C28*	17.0	10.0	02/20/2023	ND	225	113	200	5.66	
EXT DRO >C28-C36	19.2	10.0	02/20/2023	ND					

Surrogate: 1-Chlorooctane 71.6 % 48.2-134

Surrogate: 1-Chlorooctadecane 74.8 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

KANE ENVIROMENTAL
 ALAN KANE
 8816 BIG VIEW DRIVE
 AUSTIN TX, 78730
 Fax To:

Received: 02/15/2023
 Reported: 02/21/2023
 Project Name: NVA 131 2022
 Project Number: 23-121
 Project Location: NONE GIVEN

Sampling Date: 02/14/2023
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: NVA 131-22 D 2' (H230714-14)

BTEx 8021B		mg/kg		Analyzed By: ZZZ						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	02/20/2023	ND	1.96	97.9	2.00	7.74		
Toluene*	<0.050	0.050	02/20/2023	ND	1.93	96.5	2.00	5.52		
Ethylbenzene*	<0.050	0.050	02/20/2023	ND	2.05	103	2.00	7.03		
Total Xylenes*	<0.150	0.150	02/20/2023	ND	6.23	104	6.00	6.25		
Total BTEX	<0.300	0.300	02/20/2023	ND						

Surrogate: 4-Bromofluorobenzene (PID) 114 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	48.0	16.0	02/17/2023	ND	416	104	400	0.00		

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	02/20/2023	ND	211	106	200	4.60	
DRO >C10-C28*	<10.0	10.0	02/20/2023	ND	225	113	200	5.66	
EXT DRO >C28-C36	<10.0	10.0	02/20/2023	ND					

Surrogate: 1-Chlorooctane 89.9 % 48.2-134

Surrogate: 1-Chlorooctadecane 93.3 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

KANE ENVIROMENTAL
 ALAN KANE
 8816 BIG VIEW DRIVE
 AUSTIN TX, 78730
 Fax To:

Received: 02/15/2023
 Reported: 02/21/2023
 Project Name: NVA 131 2022
 Project Number: 23-121
 Project Location: NONE GIVEN

Sampling Date: 02/14/2023
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: NVA 131-22 D 3' (H230714-15)

BTEx 8021B		mg/kg		Analyzed By: ZZZ						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	02/20/2023	ND	1.96	97.9	2.00	7.74		
Toluene*	<0.050	0.050	02/20/2023	ND	1.93	96.5	2.00	5.52		
Ethylbenzene*	<0.050	0.050	02/20/2023	ND	2.05	103	2.00	7.03		
Total Xylenes*	<0.150	0.150	02/20/2023	ND	6.23	104	6.00	6.25		
Total BTEx	<0.300	0.300	02/20/2023	ND						

Surrogate: 4-Bromofluorobenzene (PID) 106 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	32.0	16.0	02/17/2023	ND	416	104	400	0.00		

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	02/20/2023	ND	211	106	200	4.60	
DRO >C10-C28*	<10.0	10.0	02/20/2023	ND	225	113	200	5.66	
EXT DRO >C28-C36	<10.0	10.0	02/20/2023	ND					

Surrogate: 1-Chlorooctane 56.0 % 48.2-134

Surrogate: 1-Chlorooctadecane 56.3 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

KANE ENVIROMENTAL
 ALAN KANE
 8816 BIG VIEW DRIVE
 AUSTIN TX, 78730
 Fax To:

Received: 02/15/2023
 Reported: 02/21/2023
 Project Name: NVA 131 2022
 Project Number: 23-121
 Project Location: NONE GIVEN

Sampling Date: 02/14/2023
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: NVA 131-22 D 4' (H230714-16)

BTEx 8021B		mg/kg		Analyzed By: ZZZ						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	02/20/2023	ND	1.96	97.9	2.00	7.74		
Toluene*	<0.050	0.050	02/20/2023	ND	1.93	96.5	2.00	5.52		
Ethylbenzene*	<0.050	0.050	02/20/2023	ND	2.05	103	2.00	7.03		
Total Xylenes*	<0.150	0.150	02/20/2023	ND	6.23	104	6.00	6.25		
Total BTEX	<0.300	0.300	02/20/2023	ND						

Surrogate: 4-Bromofluorobenzene (PID) 114 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	80.0	16.0	02/17/2023	ND	416	104	400	0.00		

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	02/20/2023	ND	211	106	200	4.60	
DRO >C10-C28*	<10.0	10.0	02/20/2023	ND	225	113	200	5.66	
EXT DRO >C28-C36	<10.0	10.0	02/20/2023	ND					

Surrogate: 1-Chlorooctane 109 % 48.2-134

Surrogate: 1-Chlorooctadecane 116 % 49.1-148

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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-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.
QM-07	The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.
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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A handwritten signature in black ink, appearing to read "Celey D. Keene", is written over a horizontal line.

Celey D. Keene, Lab Director/Quality Manager



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

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

1/2

Company Name: KANE ENV. ENGR. INC. Project Manager: Russel Ham Address: 2351 East Highway 21 City: Lovelock State: TX Zip: 78948 Phone #: 281 639 9590 Fax #: Project #: 23-121 Project Owner: Project Name: NVA131 2022 Project Location: Sampler Name: Billy Stocker FOR LAB USE ONLY		P.O. #: Company: SAU Attn: Address: City: State: Zip: Phone #: Fax #:																																																																																																																																																											
Lab I.D. H230714		Sample I.D.																																																																																																																																																											
<table border="1"> <thead> <tr> <th>Lab I.D.</th> <th>Sample I.D.</th> <th>(G)RAB OR (C)OMP.</th> <th># CONTAINERS</th> <th>MATRIX</th> <th>PRESERV.</th> <th>SAMPLING</th> <th>DATE</th> <th>TIME</th> <th>TPH GRO</th> <th>TPH DRO</th> <th>TPH MRO</th> <th>BTEX</th> <th>Chloride</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>NVA 131-22 A1'</td> <td>G</td> <td></td> <td></td> <td></td> <td></td> <td>12-14-22</td> <td>9:54a</td> <td>✓</td> <td>✓</td> <td>✓</td> <td>✓</td> <td>✓</td> </tr> <tr> <td>2</td> <td>NVA 131-22 A2'</td> <td>G</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>9:54a</td> <td>✓</td> <td>✓</td> <td>✓</td> <td>✓</td> <td>✓</td> </tr> <tr> <td>3</td> <td>NVA 131-22 A3'</td> <td>G</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>10:45a</td> <td>✓</td> <td>✓</td> <td>✓</td> <td>✓</td> <td>✓</td> </tr> <tr> <td>4</td> <td>NVA 131-22 A4'</td> <td>G</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>11:15a</td> <td>✓</td> <td>✓</td> <td>✓</td> <td>✓</td> <td>✓</td> </tr> <tr> <td>5</td> <td>NVA 131-22 B1'</td> <td>G</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>11:45a</td> <td>✓</td> <td>✓</td> <td>✓</td> <td>✓</td> <td>✓</td> </tr> <tr> <td>6</td> <td>NVA 131-22 B2'</td> <td>G</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>12:15p</td> <td>✓</td> <td>✓</td> <td>✓</td> <td>✓</td> <td>✓</td> </tr> <tr> <td>7</td> <td>NVA 131-22 B3'</td> <td>G</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>12:45p</td> <td>✓</td> <td>✓</td> <td>✓</td> <td>✓</td> <td>✓</td> </tr> <tr> <td>8</td> <td>NVA 131-22 B4'</td> <td>G</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>1:15p</td> <td>✓</td> <td>✓</td> <td>✓</td> <td>✓</td> <td>✓</td> </tr> <tr> <td>9</td> <td>NVA 131-22 C1'</td> <td>G</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>1:45p</td> <td>✓</td> <td>✓</td> <td>✓</td> <td>✓</td> <td>✓</td> </tr> <tr> <td>10</td> <td>NVA 131-22 C2'</td> <td>G</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>✓</td> <td>✓</td> <td>✓</td> <td>✓</td> <td>✓</td> </tr> </tbody> </table>		Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX	PRESERV.	SAMPLING	DATE	TIME	TPH GRO	TPH DRO	TPH MRO	BTEX	Chloride	1	NVA 131-22 A1'	G					12-14-22	9:54a	✓	✓	✓	✓	✓	2	NVA 131-22 A2'	G						9:54a	✓	✓	✓	✓	✓	3	NVA 131-22 A3'	G						10:45a	✓	✓	✓	✓	✓	4	NVA 131-22 A4'	G						11:15a	✓	✓	✓	✓	✓	5	NVA 131-22 B1'	G						11:45a	✓	✓	✓	✓	✓	6	NVA 131-22 B2'	G						12:15p	✓	✓	✓	✓	✓	7	NVA 131-22 B3'	G						12:45p	✓	✓	✓	✓	✓	8	NVA 131-22 B4'	G						1:15p	✓	✓	✓	✓	✓	9	NVA 131-22 C1'	G						1:45p	✓	✓	✓	✓	✓	10	NVA 131-22 C2'	G							✓	✓	✓	✓	✓	Relinquished By: Alan Ka Date: 4/5/23 Time: 9:45a Received By: [Signature] Date: 4/5/23 Time: 9:35a Observed Temp. °C: 0.3 Corrected Temp. °C: -0.3 Turnaround Time: Thermometer ID #113 Correction Factor -0.8°C	
Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX	PRESERV.	SAMPLING	DATE	TIME	TPH GRO	TPH DRO	TPH MRO	BTEX	Chloride																																																																																																																																																
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Relinquished By: [Signature] Date: 4/5/23 Time: 9:45a Received By: [Signature] Date: 4/5/23 Time: 9:35a Observed Temp. °C: 0.3 Corrected Temp. °C: -0.3		Vertical Result: <input type="checkbox"/> Yes <input type="checkbox"/> No Add'l Phone #: All Results are emailed. Please provide Email address:																																																																																																																																																											
Remarks:		Standard: <input checked="" type="checkbox"/> Bacteria (only) Sample Condition: Observed Temp. °C: Corrected Temp. °C:																																																																																																																																																											

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

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

2/2

BILL TO

ANALYSIS REQUEST

Company Name: Kane Env. Engr. Inc.

Project Manager: Russell Haman

Address: 2351 East Highway 21

City: Lincoln State: TX Zip: 78546

Phone #: 281 639 9590 Fax #:

Project #: 23-121 Project Owner:

Project Name: NVA 131 2022

Project Location:

Sampler Name: Billy Steward

FOR LAB USE ONLY

MATRIX

PRESERV

SAMPLING

Lab I.D. Sample I.D.

H230714

11 NV4 131-22 C3' B (G)RAB OR (C)OMP.
12 NV4 131-22 C4' G # CONTAINERS
13 NV4 131-22 D1' G GROUNDWATER
14 NV4 131-22 D2' G WASTEWATER
15 NV4 131-22 D3' G SOIL
16 NV4 131-22 D4' G OIL
G SLUDGE
G OTHER:
X ACID/BASE:
X ICE / COOL
X OTHER:

(G)RAB OR (C)OMP.

CONTAINERS

GROUNDWATER

WASTEWATER

SOIL

OIL

SLUDGE

OTHER:

ACID/BASE:

ICE / COOL

OTHER:

DATE

TIME

X

X

X

X

X

X

X

X

X

X

X

X

X

X

X

X

X

X

X

X

X

X

X

X

X

X

X

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Relinquished By:

Date: 2/15/23

Received By:

Verbal Result: ☐ Yes ☐ No

Add'l Phone #:

Please provide Email address:

Relinquished By:

Date: 2/15/23

Received By:

REMARKS:

Standard

Rush

Bacteria (only)

Cool Intact

Yes

No

Corrected Temp. °C

Observed Temp. °C

Sample Condition

Corrected Temp. °C

Observed Temp. °C

Sample Condition

Observed Temp. °C

Sample Condition

Observed Temp. °C

Sample Condition

Observed Temp. °C

Sample Condition

Observed Temp. °C

Sample Condition

Observed Temp. °C

Sample Condition

Delivered By: (Circle One)

Observed Temp. °C

0.3

Sample Condition

Cool Intact

Yes

No

Yes

No

Checked By:

(Initials)

Turnaround Time:

Standard

Rush

Bacteria (only)

Cool Intact

Yes

No

Corrected Temp. °C

Observed Temp. °C

Sample Condition

Corrected Temp. °C

Observed Temp. °C

Sample Condition

Observed Temp. °C

Sample Condition

Observed Temp. °C

Sample Condition

Observed Temp. °C

Sample Condition

Observed Temp. °C

Sample Condition

Observed Temp. °C

Sample Condition

Observed Temp. °C

Sample Condition

Observed Temp. °C

Sample Condition

Observed Temp. °C

Sample Condition

Observed Temp. °C

Sample Condition

Observed Temp. °C

Sample Condition

FORM-006 R 3.5 07/10/22

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

February 22, 2023

ALAN KANE

KANE ENVIROMENTAL

8816 BIG VIEW DRIVE

AUSTIN, TX 78730

RE: NAU 131-22

Enclosed are the results of analyses for samples received by the laboratory on 02/16/23 8:00.

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 accredited 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,

A handwritten signature in black ink that reads "Celey D. Keene". The signature is written in a cursive, flowing style.

Celey D. Keene

Lab Director/Quality Manager



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

Analytical Results For:

KANE ENVIROMENTAL
 ALAN KANE
 8816 BIG VIEW DRIVE
 AUSTIN TX, 78730
 Fax To:

Received: 02/16/2023
 Reported: 02/22/2023
 Project Name: NAU 131-22
 Project Number: 23-131
 Project Location: NOT GIVEN

Sampling Date: 02/15/2023
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: NAU 131-22 G 1' (H230729-01)

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	02/21/2023	ND	2.00	100	2.00	5.91	
Toluene*	<0.050	0.050	02/21/2023	ND	1.99	99.6	2.00	5.55	
Ethylbenzene*	<0.050	0.050	02/21/2023	ND	1.97	98.3	2.00	4.73	
Total Xylenes*	<0.150	0.150	02/21/2023	ND	6.02	100	6.00	3.49	
Total BTEX	<0.300	0.300	02/21/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID) 102 % 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	272	16.0	02/20/2023	ND	400	100	400	3.92		

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	02/21/2023	ND	209	104	200	6.03	
DRO >C10-C28*	181	10.0	02/21/2023	ND	230	115	200	5.27	QM-07
EXT DRO >C28-C36	155	10.0	02/21/2023	ND					

Surrogate: 1-Chlorooctane 97.7 % 48.2-134

Surrogate: 1-Chlorooctadecane 112 % 49.1-148

Cardinal Laboratories

*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

KANE ENVIROMENTAL
 ALAN KANE
 8816 BIG VIEW DRIVE
 AUSTIN TX, 78730
 Fax To:

Received: 02/16/2023
 Reported: 02/22/2023
 Project Name: NAU 131-22
 Project Number: 23-131
 Project Location: NOT GIVEN

Sampling Date: 02/15/2023
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: NAU 131-22 G 2' (H230729-02)

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	02/21/2023	ND	2.00	100	2.00	5.91		
Toluene*	<0.050	0.050	02/21/2023	ND	1.99	99.6	2.00	5.55		
Ethylbenzene*	<0.050	0.050	02/21/2023	ND	1.97	98.3	2.00	4.73		
Total Xylenes*	<0.150	0.150	02/21/2023	ND	6.02	100	6.00	3.49		
Total BTEX	<0.300	0.300	02/21/2023	ND						

Surrogate: 4-Bromofluorobenzene (PID) 102 % 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	160	16.0	02/20/2023	ND	400	100	400	3.92		

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	02/20/2023	ND	209	104	200	6.03	
DRO >C10-C28*	12.1	10.0	02/20/2023	ND	230	115	200	5.27	
EXT DRO >C28-C36	<10.0	10.0	02/20/2023	ND					

Surrogate: 1-Chlorooctane 94.0 % 48.2-134

Surrogate: 1-Chlorooctadecane 106 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

KANE ENVIROMENTAL
 ALAN KANE
 8816 BIG VIEW DRIVE
 AUSTIN TX, 78730
 Fax To:

Received: 02/16/2023
 Reported: 02/22/2023
 Project Name: NAU 131-22
 Project Number: 23-131
 Project Location: NOT GIVEN

Sampling Date: 02/15/2023
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: NAU 131-22 G 3' (H230729-03)

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	02/21/2023	ND	2.00	100	2.00	5.91		
Toluene*	<0.050	0.050	02/21/2023	ND	1.99	99.6	2.00	5.55		
Ethylbenzene*	<0.050	0.050	02/21/2023	ND	1.97	98.3	2.00	4.73		
Total Xylenes*	<0.150	0.150	02/21/2023	ND	6.02	100	6.00	3.49		
Total BTEx	<0.300	0.300	02/21/2023	ND						

Surrogate: 4-Bromofluorobenzene (PID) 102 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	48.0	16.0	02/20/2023	ND	400	100	400	3.92		

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	02/20/2023	ND	209	104	200	6.03	
DRO >C10-C28*	<10.0	10.0	02/20/2023	ND	230	115	200	5.27	
EXT DRO >C28-C36	<10.0	10.0	02/20/2023	ND					

Surrogate: 1-Chlorooctane 91.3 % 48.2-134

Surrogate: 1-Chlorooctadecane 105 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

KANE ENVIROMENTAL
 ALAN KANE
 8816 BIG VIEW DRIVE
 AUSTIN TX, 78730
 Fax To:

Received: 02/16/2023
 Reported: 02/22/2023
 Project Name: NAU 131-22
 Project Number: 23-131
 Project Location: NOT GIVEN

Sampling Date: 02/15/2023
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: NAU 131-22 G 4' (H230729-04)

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	02/21/2023	ND	2.00	100	2.00	5.91		
Toluene*	<0.050	0.050	02/21/2023	ND	1.99	99.6	2.00	5.55		
Ethylbenzene*	<0.050	0.050	02/21/2023	ND	1.97	98.3	2.00	4.73		
Total Xylenes*	<0.150	0.150	02/21/2023	ND	6.02	100	6.00	3.49		
Total BTEX	<0.300	0.300	02/21/2023	ND						

Surrogate: 4-Bromofluorobenzene (PID) 100 % 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	48.0	16.0	02/20/2023	ND	400	100	400	3.92		

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	02/20/2023	ND	209	104	200	6.03	
DRO >C10-C28*	<10.0	10.0	02/20/2023	ND	230	115	200	5.27	
EXT DRO >C28-C36	<10.0	10.0	02/20/2023	ND					

Surrogate: 1-Chlorooctane 90.8 % 48.2-134

Surrogate: 1-Chlorooctadecane 101 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

KANE ENVIROMENTAL
 ALAN KANE
 8816 BIG VIEW DRIVE
 AUSTIN TX, 78730
 Fax To:

Received: 02/16/2023
 Reported: 02/22/2023
 Project Name: NAU 131-22
 Project Number: 23-131
 Project Location: NOT GIVEN

Sampling Date: 02/15/2023
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: NAU 131-22 E 1' (H230729-05)

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	02/21/2023	ND	2.00	100	2.00	5.91	
Toluene*	<0.050	0.050	02/21/2023	ND	1.99	99.6	2.00	5.55	
Ethylbenzene*	<0.050	0.050	02/21/2023	ND	1.97	98.3	2.00	4.73	
Total Xylenes*	<0.150	0.150	02/21/2023	ND	6.02	100	6.00	3.49	
Total BTEx	<0.300	0.300	02/21/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID) 99.7 % 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	160	16.0	02/20/2023	ND	400	100	400	3.92	

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	02/21/2023	ND	209	104	200	6.03	
DRO >C10-C28*	58.1	10.0	02/21/2023	ND	230	115	200	5.27	
EXT DRO >C28-C36	54.2	10.0	02/21/2023	ND					

Surrogate: 1-Chlorooctane 97.0 % 48.2-134

Surrogate: 1-Chlorooctadecane 113 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

KANE ENVIROMENTAL
 ALAN KANE
 8816 BIG VIEW DRIVE
 AUSTIN TX, 78730
 Fax To:

Received: 02/16/2023
 Reported: 02/22/2023
 Project Name: NAU 131-22
 Project Number: 23-131
 Project Location: NOT GIVEN

Sampling Date: 02/15/2023
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: NAU 131-22 E 2' (H230729-06)

BTX 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	02/21/2023	ND	2.00	100	2.00	5.91	
Toluene*	<0.050	0.050	02/21/2023	ND	1.99	99.6	2.00	5.55	
Ethylbenzene*	<0.050	0.050	02/21/2023	ND	1.97	98.3	2.00	4.73	
Total Xylenes*	<0.150	0.150	02/21/2023	ND	6.02	100	6.00	3.49	
Total BTX	<0.300	0.300	02/21/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID) 102 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	144	16.0	02/20/2023	ND	400	100	400	3.92	

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	02/20/2023	ND	209	104	200	6.03	
DRO >C10-C28*	<10.0	10.0	02/20/2023	ND	230	115	200	5.27	
EXT DRO >C28-C36	<10.0	10.0	02/20/2023	ND					

Surrogate: 1-Chlorooctane 98.3 % 48.2-134

Surrogate: 1-Chlorooctadecane 114 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

KANE ENVIROMENTAL
 ALAN KANE
 8816 BIG VIEW DRIVE
 AUSTIN TX, 78730
 Fax To:

Received: 02/16/2023
 Reported: 02/22/2023
 Project Name: NAU 131-22
 Project Number: 23-131
 Project Location: NOT GIVEN

Sampling Date: 02/15/2023
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: NAU 131-22 E 3' (H230729-07)

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	02/21/2023	ND	2.00	100	2.00	5.91	
Toluene*	<0.050	0.050	02/21/2023	ND	1.99	99.6	2.00	5.55	
Ethylbenzene*	<0.050	0.050	02/21/2023	ND	1.97	98.3	2.00	4.73	
Total Xylenes*	<0.150	0.150	02/21/2023	ND	6.02	100	6.00	3.49	
Total BTEx	<0.300	0.300	02/21/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID) 101 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	80.0	16.0	02/20/2023	ND	400	100	400	3.92		

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	02/21/2023	ND	209	104	200	6.03	
DRO >C10-C28*	75.6	10.0	02/21/2023	ND	230	115	200	5.27	
EXT DRO >C28-C36	64.8	10.0	02/21/2023	ND					

Surrogate: 1-Chlorooctane 97.9 % 48.2-134

Surrogate: 1-Chlorooctadecane 113 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

KANE ENVIROMENTAL
 ALAN KANE
 8816 BIG VIEW DRIVE
 AUSTIN TX, 78730
 Fax To:

Received: 02/16/2023
 Reported: 02/22/2023
 Project Name: NAU 131-22
 Project Number: 23-131
 Project Location: NOT GIVEN

Sampling Date: 02/15/2023
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: NAU 131-22 E 4' (H230729-08)

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	02/21/2023	ND	2.00	100	2.00	5.91	
Toluene*	<0.050	0.050	02/21/2023	ND	1.99	99.6	2.00	5.55	
Ethylbenzene*	<0.050	0.050	02/21/2023	ND	1.97	98.3	2.00	4.73	
Total Xylenes*	<0.150	0.150	02/21/2023	ND	6.02	100	6.00	3.49	
Total BTEX	<0.300	0.300	02/21/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID) 102 % 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	48.0	16.0	02/20/2023	ND	400	100	400	3.92	

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	02/21/2023	ND	209	104	200	6.03	
DRO >C10-C28*	32.9	10.0	02/21/2023	ND	230	115	200	5.27	
EXT DRO >C28-C36	27.3	10.0	02/21/2023	ND					

Surrogate: 1-Chlorooctane 95.9 % 48.2-134

Surrogate: 1-Chlorooctadecane 109 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

KANE ENVIROMENTAL
 ALAN KANE
 8816 BIG VIEW DRIVE
 AUSTIN TX, 78730
 Fax To:

Received: 02/16/2023
 Reported: 02/22/2023
 Project Name: NAU 131-22
 Project Number: 23-131
 Project Location: NOT GIVEN

Sampling Date: 02/15/2023
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: NAU 131-22 F 1' (H230729-09)

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	02/21/2023	ND	2.00	100	2.00	5.91	
Toluene*	<0.050	0.050	02/21/2023	ND	1.99	99.6	2.00	5.55	
Ethylbenzene*	<0.050	0.050	02/21/2023	ND	1.97	98.3	2.00	4.73	
Total Xylenes*	<0.150	0.150	02/21/2023	ND	6.02	100	6.00	3.49	
Total BTEX	<0.300	0.300	02/21/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID) 99.2 % 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	304	16.0	02/20/2023	ND	400	100	400	3.92		

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	02/21/2023	ND	209	104	200	6.03	
DRO >C10-C28*	278	10.0	02/21/2023	ND	230	115	200	5.27	
EXT DRO >C28-C36	313	10.0	02/21/2023	ND					

Surrogate: 1-Chlorooctane 94.4 % 48.2-134

Surrogate: 1-Chlorooctadecane 99.9 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

KANE ENVIROMENTAL
 ALAN KANE
 8816 BIG VIEW DRIVE
 AUSTIN TX, 78730
 Fax To:

Received: 02/16/2023
 Reported: 02/22/2023
 Project Name: NAU 131-22
 Project Number: 23-131
 Project Location: NOT GIVEN

Sampling Date: 02/15/2023
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: NAU 131-22 F 2' (H230729-10)

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	02/21/2023	ND	2.00	100	2.00	5.91	
Toluene*	<0.050	0.050	02/21/2023	ND	1.99	99.6	2.00	5.55	
Ethylbenzene*	<0.050	0.050	02/21/2023	ND	1.97	98.3	2.00	4.73	
Total Xylenes*	<0.150	0.150	02/21/2023	ND	6.02	100	6.00	3.49	
Total BTEx	<0.300	0.300	02/21/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID) 102 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	336	16.0	02/20/2023	ND	400	100	400	3.92	

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	02/21/2023	ND	209	104	200	6.03	
DRO >C10-C28*	<10.0	10.0	02/21/2023	ND	230	115	200	5.27	
EXT DRO >C28-C36	<10.0	10.0	02/21/2023	ND					

Surrogate: 1-Chlorooctane 98.4 % 48.2-134

Surrogate: 1-Chlorooctadecane 114 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

KANE ENVIROMENTAL
 ALAN KANE
 8816 BIG VIEW DRIVE
 AUSTIN TX, 78730
 Fax To:

Received: 02/16/2023
 Reported: 02/22/2023
 Project Name: NAU 131-22
 Project Number: 23-131
 Project Location: NOT GIVEN

Sampling Date: 02/15/2023
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: NAU 131-22 F 3' (H230729-11)

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	02/21/2023	ND	2.00	100	2.00	5.91		
Toluene*	<0.050	0.050	02/21/2023	ND	1.99	99.6	2.00	5.55		
Ethylbenzene*	<0.050	0.050	02/21/2023	ND	1.97	98.3	2.00	4.73		
Total Xylenes*	<0.150	0.150	02/21/2023	ND	6.02	100	6.00	3.49		
Total BTEx	<0.300	0.300	02/21/2023	ND						

Surrogate: 4-Bromofluorobenzene (PID) 102 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	192	16.0	02/20/2023	ND	400	100	400	3.92		

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	02/21/2023	ND	209	104	200	6.03	
DRO >C10-C28*	<10.0	10.0	02/21/2023	ND	230	115	200	5.27	
EXT DRO >C28-C36	<10.0	10.0	02/21/2023	ND					

Surrogate: 1-Chlorooctane 98.5 % 48.2-134

Surrogate: 1-Chlorooctadecane 112 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

KANE ENVIROMENTAL
 ALAN KANE
 8816 BIG VIEW DRIVE
 AUSTIN TX, 78730
 Fax To:

Received: 02/16/2023
 Reported: 02/22/2023
 Project Name: NAU 131-22
 Project Number: 23-131
 Project Location: NOT GIVEN

Sampling Date: 02/15/2023
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: NAU 131-22 F 4' (H230729-12)

BTEx 8021B		mg/kg		Analyzed By: ZZZ						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	02/21/2023	ND	2.10	105	2.00	2.72		
Toluene*	<0.050	0.050	02/21/2023	ND	2.12	106	2.00	1.99		
Ethylbenzene*	<0.050	0.050	02/21/2023	ND	2.32	116	2.00	0.362		
Total Xylenes*	<0.150	0.150	02/21/2023	ND	7.00	117	6.00	1.59		
Total BTEx	<0.300	0.300	02/21/2023	ND						

Surrogate: 4-Bromofluorobenzene (PID) 119 % 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	112	16.0	02/20/2023	ND	400	100	400	3.92		

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	02/21/2023	ND	209	104	200	6.03	
DRO >C10-C28*	<10.0	10.0	02/21/2023	ND	230	115	200	5.27	
EXT DRO >C28-C36	<10.0	10.0	02/21/2023	ND					

Surrogate: 1-Chlorooctane 85.4 % 48.2-134

Surrogate: 1-Chlorooctadecane 98.0 % 49.1-148

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Notes and Definitions

QM-07	The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.
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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A handwritten signature in black ink, appearing to read "Celey D. Keene".

Celey D. Keene, Lab Director/Quality Manager



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

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

1/2

BILL TO

ANALYSIS REQUEST

Company Name: *Kane Environmental Products Inc.*
Project Manager:

P.O. #:

Address: *2351 East Highway 21*
City: *Liberal* State: *TX* Zip: *78948*

Company: *Kane*

Phone #: *261 439 9570* Fax #:

Attn:

Project #: *23-131* Project Owner:

Address:

Project Name: *NAU 131-22*

City:

Project Location: *NAU 131-22*

State:

Sample Name: *NAU 131-22*

Phone #:

FOR LAB USE ONLY

Fax #:

Lab I.D. Sample I.D.

1330789

NAU 131-22 GIC

(G)RAB OR (C)OMP.

CONTAINERS

GROUNDWATER

WASTEWATER

SOIL

OIL

SLUDGE

OTHER :

ACID/BASE:

ICE / COOL

OTHER :

DATE

TIME

TPH GRO

TPH DRD

TPH MRO

BTEX

Chlorides

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 claims are based upon any of the above stated reasons or otherwise.

Relinquished By:

Date: *2/14/23*

Received By:

Verbal Result: ☐ Yes ☐ No ☐ Add'l Phone #:

All Results are emailed. Please provide Email address:

Relinquished By:

Date: *2/14/23*

Received By:

REMARKS:

Delivered By: (Circle One)

Observed Temp. °C

Sample Condition

CHECKED BY: (Initials)

Turnaround Time:

Standard

☐

Bacteria (only)

Sample Condition

Sampler - UPS - Bus - Other:

Corrected Temp. °C

Cool Intact

Yes ☐ No ☐

Thermometer ID #113

Rush

☐

Cool Intact

Observed Temp. °C

FORM-006-R-3-3-0711/0222

† Cardinal cannot accept verbal changes. Please email changes to celey.keene@cardinallabsnm.com



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

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

4/2

Company Name: **KANE ENV. ENG. INC.**

Project Manager:

Address: **2351 East Highway 21**City: **Lindero** State: **TX** Zip: **76946**

Phone #: _____ Fax #: _____

Project #: **23-131** Project Owner:

Project Name:

Project Location: **NH 131-22**Sample Name: **Alum Kan**

FOR LAB USE ONLY

BILL TO

ANALYSIS REQUEST

P.O. #:

Company: **San**

Attn:

Address:

City:

State:

Phone #:

Fax #:

MATRIX

PRESERV

SAMPLING

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

TPH GRO

TPH DRO

TPH MRO

BTEX

Chloride

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.

Relinquished By:

Date: **2/14/23**

Received By:

Verbal Result:

Yes ☐ No ☐

Add'l Phone #:

All Results are emailed. Please provide Email address:

Relinquished By:

Date: **2/14/23**

Received By:

REMARKS:

Delivered By: (Circle One)

Observed Temp. °C

Sample Condition

CHECKED BY: (Initials)

Turnaround Time:

Standard

Cool Intact

Bacteria (only)

Cool Intact

Sample Condition

Observed Temp. °C

Corrected Temp. °C

Sampler - UPS - Bus - Other:

Corrected Temp. °C

Cool Intact

CHECKED BY: (Initials)

Thermometer ID #113

Correction Factor -0.6°C

Cool Intact

Bacteria (only)

Cool Intact

Sample Condition

Observed Temp. °C

Corrected Temp. °C

FORM-006 REV 07/16/22

† Cardinal cannot accept verbal changes. Please email changes to celey.keene@cardinalabnm.com

Appendix E

NVA 131 (2022) Release-nAPP2203953141-Project 23-131

Photo Ionization Detector (PID) Readings

2/14-15/2023	Time	Reading
NVA 131(2022) A-1	9:15	180.8
NVA 131(2022) A-2	9:45	1604.0
NVA 131(2022) A-3	10:15	533.0
NVA 131(2022) A-4	10:45	878.3
NVA 131(2022) B-1	11:15	9.7
NVA 131(2022) B-2	11:45	7.6
NVA 131(2022) B-3	12:15	6
NVA 131(2022) B-4	12:45	4.8
NVA 131(2022) C-1	13:15	2.8
NVA 131(2022) C-2	13:45	4
NVA 131(2022) C-3	14:15	2.7
NVA 131(2022) C-4	14:45	1.8
NVA 131(2022) D-1	15:15	0.9
NVA 131(2022) D-2	15:45	1.1
NVA 131(2022) D-3	16:15	1.2
NVA 131(2022) D-4	16:45	0.5
NVA 131(2022) E-1	8:15	1.1
NVA 131(2022) E-2	8:33	4.5
NVA 131(2022) E-3	8:45	1.4
NVA 131(2022) E-4	9:10	1
NVA 131(2022) F-1	9:45	0.7
NVA 131(2022) F-2	10:05	1.4
NVA 131(2022) F-3	10:15	0.2
NVA 131(2022) F-4	10:25	2.2
NVA 131(2022) G-1	10:40	1.2
NVA 131(2022) G-2	10:47	1.7
NVA 131(2022) G-3	11:00	0.7
NVA 131(2022) G-4	11:15	0.8

Appendix F

NVA 131 (2022) Release-nAPP2203953141-Project 23-131

Trimble GPS-WGS84 Readings

	Latitude	Longitude
NVA 131(2022) A	32.84641531	-103.53591251
NVA 131(2022) B	32.84638810	-103.53587252
NVA 131(2022) C	32.84641565	-103.53582846
NVA 131(2022) D	32.84637495	-103.53579967
NVA 131(2022) E	32.84640010	-103.53575646
NVA 131(2022) F	32.84637413	-103.53576155
NVA 131(2022) G	32.84635070	-103.53576020

Appendix G

Depth to Water-Borehole Installation Lea County, New Mexico

DTW 1

Prepared for:



**400 W 7th St,
Fort Worth, TX 76102**



**PREPARED BY:
KANE ENVIRONMENTAL ENGINEERING, INC.
2351 EAST STATE HIGHWAY 21
Lincoln, TX 78948
REGISTRATION # F-2355
PROJECT No. 23-136**

FEBRUARY 2023

TABLE OF CONTENTS

1.0 INTRODUCTION

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2.2 Lithologic Logging Procedures

2.3 Site Specific Drilling Activity

APPENDICIES

Appendix A -Topographic Map of Borehole Location

Appendix B -Borehole Log

Appendix C -1 Call Notification Records

1.0 INTRODUCTION

1.0 INTRODUCTION

On February 7, 2023 Kane Environmental Engineering along with Scarborough Drilling installed a borehole near Buckeye New Mexico to determine the depth to water on behalf of Cross Timbers Energy.

Borehole, DTW 1 is a piezometer borehole installed with the intention of determining depth to water in the Buckeye Field as required to the adequately conduct site assessment and characterization requirements of 19.15.29.11(A)(2) for soil remediation efforts.

DTW 1 is located in rural Lea, County at latitude 32.85639 and longitude -103.54134. A Trimble GEO 7X, GPS using the WGS84 Datum was utilized to verify the location with an accuracy of approximately 16 inches. A topographic map of this position has been provided in **Appendix A**. Notification and records under NMAC 19.27.4.29(N), while available, are not required as groundwater was not expected to be encountered and was not encountered after allowing the boreholes to develop over a 96-hour period.

2.0 FIELD ACTIVITIES

2.0 FIELD ACTIVITIES

2.1 Drilling Equipment

DTW 1 -Lea County

Drilling Equipment- Scarborough Drilling utilizes a conventional rotary drilling rig, with a 5-inch air rotary tricone bit and air rotary cuttings removal system.

2.2 Lithologic Logging Procedures

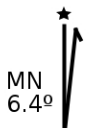
Logs- Borehole lithology data was collected by a Professional Geologist (P.G.) representing Kane Environmental Engineering. Borehole log data is provided in **Appendix B**.

2.3 Site Specific Drilling Activity

The specific borehole lithology evaluation procedures and activities are provided below.

DTW 1 – After the required NM 1 Calls were made and the site was cleared (**See Appendix C**). Scarborough Drilling mobilized and began installing the borehole at the DTW 1 location. The location data was verified with the GEO 7X Trimble GPS unit utilizing WGS84 Datum information. The borehole was advanced to a depth of 105-feet the afternoon of February 7th and completed the same day. Upon reaching 105-feet and removing the drill stem, 2-inch schedule 40 PVC casing was installed. The borehole was screened from 85-feet through 105-feet. The borehole remained open for over 96-hours and allowed to develop. A water level probe was lowered to the bottom of the well after the development period and the borehole was verified to be dry. The borehole casing was then removed and the hole backfilled with the required bentonite material.

Appendix A



Appendix B

Kane Environmental Engineering Boring/Completion Log		Kane Environmental Engineering 2351 E. State Highway 21 Lincoln, TX 78948 Phone: 281-379-6580		1 OF 1
CLIENT: Morning Star Partners PROJECT: Depth to Water Program PROJECT NUMBER: LOCATION: Buckeye, N.M. BORING/WELL NAME: DTW 1 KANE REP: J. Rosen DRILLING METHOD: Coventional Rotary SAMPLING METHODS: Air Rotary Cuttings TOP CSG ELEV: GRND. ELEV:		Piezometer DTW 1		
START/END: February 7, 2023		DRILLER: Scarborough Drilling: License 2969AKP 3068AKP		
5" borehole with tricone bit		LATITUDE: 32° 51' 23.02" N LONGITUDE: 103° 32' 28.83" W		
	CASING	DEPTH IN FEET	SOIL AND DRILLING DESCRIPTION	
			0 - 1.0' Topsoil, silty fine sand (SM-SP), w/angular pieces of caliche, brown, dry 1.0 - 19' Caliche, white to buff, lithified, hard	
		20	19 - 105' Sand (SP), creme to tan, very fine grained, soft, moisture content increases with depth Sand contains random thin interbeds of hard caliche	
		40		
		60	Switch to drag bit at 60', and add minimal water/foam to enhance cuttings removal	
		80		
		100	Total depth (from ground surface) 105 feet No groundwater encountered upon completion of drilling	
		120	Machine slotted, threaded, Schedule 40 PVC screen from 85 - 105 feet bgs, blank casing surface to 85 ft	

Appendix C

From: Jerry Elrod <jerryelrod@comcast.net>
Sent: Wednesday, February 8, 2023 9:50 AM
To: Alan Kane
Subject: DTW 1 Fwd: NM811 Ticket Confirmation: 23JA230306

No more messages for this one

----- Forwarded Message -----

Subject: NM811 Ticket Confirmation: 23JA230306

Date: Mon, 23 Jan 2023 10:16:39 -0700

From: eticket@nm811.org <eticket@nm811.org>

To: jerryelrod@comcast.net <jerryelrod@comcast.net>

NM811 LOCATE REQUEST

TICKET NUMBER:	23JA230306	Update of:	
Ticket Type:	Standard Locate	For Code:	AUTOEMAIL
Creation Date:	01/23/23 10:16	Seq Num:	1

Excavator Information

Company:	Kane Environmental Engineering	Main Contact Phone:	(281) 374-0658
Address:	6519 Craigway Road	Secondary Phone:	2813706580
City, St, Zip:	Spring, TX 77389	Main Contact Email:	jerryelrod@comcast.net
Company Phone:	(281) 374-0658	Alternate Contact:	
Company Fax:		Alternate Contact Phone:	12813740658
Main Contact:	Jerry Elrod	Alternate Contact Email:	jerryelrod@comcast.net

Work Information

State:	NM	Work To Begin:	01/26/23 AT 00:01
County:	LEA	Expire Date:	02/15/23 AT 23:59
Place:	RURAL LEA		
Address:	DTW 1		
Intersection:	TAD		
Work Type:	Bore-Auger - Holes	Working For:	Morning Star
Pre-marked:	No	Mechanical Boring:	No
Contact Prior to Locating:	No	Contact After Locating:	Yes

Driving Directions

From Buckeye, north on SR 238 for 4.0 miles. Turn left (west) on un-named road and travel 1.9 miles

Spotting Instructions

50 feet radius of 32 51 23.02 n, -103 32 28.83

Remarks

NO

TRSQ: [W8T17SR34ES03SE] [W8T17SR34ES10NE]

Utilities Notified:

<u>Code</u>	<u>Name</u>	<u>Manually Added</u>
CTFS	CT FIELD SERVICES	False

--

Regards,
Jerry Elrod

Kane Environmental Engineering
281-374-0658

Appendix H

[Quoted text hidden]

alanjkane@comcast.net <alanjkane@comcast.net>

Wed, Feb 1, 2023 at 12:24 PM

To: "Nobui, Jennifer, EMNRD" <Jennifer.Nobui@emnrd.nm.gov>, "Velez, Nelson, EMNRD" <Nelson.Velez@emnrd.nm.gov>, Russell Hamm <rhammenviro@gmail.com>, Debbie Stratton <debbiestratton@comcast.net>, Samanntha Avarello <savarello@mspartners.com>, Dan Guillotte <dguillotte@mspartners.com>
Cc: "Hall, Brittany, EMNRD" <Brittany.Hall@emnrd.nm.gov>, "Bratcher, Michael, EMNRD" <mike.bratcher@emnrd.nm.gov>, "Harimon, Jocelyn, EMNRD" <Jocelyn.Harimon@emnrd.nm.gov>

Jennifer, we would also like to make notification for these sites. We hope to sample these next week and this will likely occur 2/9 or 2/10.

NAPP2124634903	NVA 95
----------------	--------

NAPP2203953141	NVA 131 BATTERY
----------------	-----------------

NAPP2102543043	NVA 165
----------------	---------

Thanks

Alan Kane

[Quoted text hidden]

Nobui, Jennifer, EMNRD <Jennifer.Nobui@emnrd.nm.gov>

Wed, Feb 1, 2023 at 12:56 PM

To: "alanjkane@comcast.net" <alanjkane@comcast.net>, "Velez, Nelson, EMNRD" <Nelson.Velez@emnrd.nm.gov>, Russell Hamm <rhammenviro@gmail.com>, Debbie Stratton <debbiestratton@comcast.net>, Samanntha Avarello <savarello@mspartners.com>, Dan Guillotte <dguillotte@mspartners.com>
Cc: "Bratcher, Michael, EMNRD" <mike.bratcher@emnrd.nm.gov>, "Harimon, Jocelyn, EMNRD" <Jocelyn.Harimon@emnrd.nm.gov>

[Quoted text hidden]

alanjkane@comcast.net <alanjkane@comcast.net>

Mon, Feb 13, 2023 at 7:48 AM

To: "Nobui, Jennifer, EMNRD" <Jennifer.Nobui@emnrd.nm.gov>, "Velez, Nelson, EMNRD" <Nelson.Velez@emnrd.nm.gov>, Russell Hamm <rhammenviro@gmail.com>, Debbie Stratton <debbiestratton@comcast.net>, Samanntha Avarello <savarello@mspartners.com>, Dan Guillotte <dguillotte@mspartners.com>
Cc: "Bratcher, Michael, EMNRD" <mike.bratcher@emnrd.nm.gov>, "Harimon, Jocelyn, EMNRD" <Jocelyn.Harimon@emnrd.nm.gov>

Jennifer, we would also like to make notification for these sites. We hope to sample this next week and this will likely occur 2/15 - 2/17.

NRM2003036134	STATE N BATTERY
---------------	-----------------

NAPP2035151755	STATE N BATTERY
----------------	-----------------

NCH1903864587	BRIDGES STATE 507
---------------	-------------------

NAPP2203953141	NVA 131 BATTERY
----------------	-----------------

Alan Kane

[Quoted text hidden]

Harimon, Jocelyn, EMNRD <Jocelyn.Harimon@emnrd.nm.gov>

Mon, Feb 13, 2023 at 10:12 AM

To: "alanjkane@comcast.net" <alanjkane@comcast.net>, "Nobui, Jennifer, EMNRD" <Jennifer.Nobui@emnrd.nm.gov>, "Velez, Nelson, EMNRD" <Nelson.Velez@emnrd.nm.gov>, Russell Hamm <rhammenviro@gmail.com>, Debbie Stratton <debbiestratton@comcast.net>, Samanntha Avarello <savarello@mspartners.com>, Dan Guillotte <dguillotte@mspartners.com>
Cc: "Bratcher, Michael, EMNRD" <mike.bratcher@emnrd.nm.gov>

Alan,

Thank you for the notification. 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.

JH

Jocelyn Harimon • Environmental Specialist

Environmental Bureau

EMNRD - Oil Conservation Division

1220 South St. Francis Drive | Santa Fe, NM 87505

(505)469-2821 | Jocelyn.Harimon@emnrd.nm.gov

[http:// www.emnrd.nm.gov](http://www.emnrd.nm.gov)



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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 211783

CONDITIONS

Operator: CROSS TIMBERS ENERGY, LLC 400 West 7th Street Fort Worth, TX 76102	OGRID: 298299
	Action Number: 211783
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
nvelez	Deferral request approved. Remediation Due date left open until plug and abandonment of the facility is completed.	7/20/2023