

## \*\*\*\*\* LIQUID SPILLS - VOLUME CALCULATIONS \*\*\*\*\*

Location of spill: \_\_\_\_\_

Date of Spill: \_\_\_\_\_

Site Soil Type: \_\_\_\_\_

Average Daily Production: \_\_\_\_\_ BBL Oil \_\_\_\_\_ BBL Water

**Total Area Calculations**

Total Surface Area	width		length		wet soil depth	oil (%)
Rectangle Area #1	100 ft	X	22 ft	X	2 in	0%
Rectangle Area #2	0 ft	X	0 ft	X	0 in	0%
Rectangle Area #3	0 ft	X	0 ft	X	0 in	0%
Rectangle Area #4	0 ft	X	0 ft	X	0 in	0%
Rectangle Area #5	0 ft	X	0 ft	X	0 in	0%
Rectangle Area #6	0 ft	X	0 ft	X	0 in	0%
Rectangle Area #7	0 ft	X	0 ft	X	0 in	0%
Rectangle Area #8	0 ft	X	0 ft	X	0 in	0%

Porosity \_\_\_\_\_ 0.15 gal per gal

**Saturated Soil Volume Calculations:**

		<u>H2O</u>	<u>OIL</u>
Area #1	2200 sq. ft.	367 cu. ft.	cu. ft.
Area #2	0 sq. ft.	cu. ft.	cu. ft.
Area #3	0 sq. ft.	cu. ft.	cu. ft.
Area #4	0 sq. ft.	cu. ft.	cu. ft.
Area #5	0 sq. ft.	cu. ft.	cu. ft.
Area #6	0 sq. ft.	cu. ft.	cu. ft.
Area #7	0 sq. ft.	cu. ft.	cu. ft.
Area #8	0 sq. ft.	cu. ft.	cu. ft.
Total Solid/Liquid Volume:	2,200 sq. ft.	367 cu. ft.	cu. ft.

**Estimated Volumes Spilled**

	<u>H2O</u>	<u>OIL</u>
Liquid in Soil:	9.8 BBL	0.0 BBL
Liquid Recovered :	0.0 BBL	0.0 BBL
Spill Liquid	9.8 BBL	0.0 BBL
Total Spill Liquid:	9.8	

**Recovered Volumes**

Estimated oil recovered: 0.0 BBL  
 Estimated water recovered: 0.0 BBL

Soil Type	Porosity
Clay	0.15
Peat	0.40
Glacial Sediments	0.13
Sandy Clay	0.12
Silt	0.16
Loess	0.25
Fine Sand	0.16
Medium Sand	0.25
Coarse Sand	0.26
Gravelly Sand	0.26
Fine Gravel	0.26
Medium Gravel	0.25
Coarse Gravel	0.18
Sandstone	0.25
Siltstone	0.18
Shale	0.05
Limestone	0.13
Basalt	0.19
Volcanic Tuff	0.20
Standing Liquids	

**Remediation Response & Reclamation  
Closure Report  
Incident ID No. nAPP2304339443  
Novo Oil & Gas – Rana Salada Pad J  
- Produced Water Release  
Discovery Date: February 11, 2023  
Eddy County, New Mexico**

***Prepared for:***  
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**April 08, 2024**



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### **ACRONYMS AND ABBREVIATIONS**

Altamira	Altamira-US, LLC
Novo	Novo Oil & Gas Northern Delaware, LLC
Permian Resources	Permian Resources Operating, LLC
bgs	below ground surface
mg/Kg	milligram per kilogram
NMOCD	New Mexico Oil Conservation District
BLM	Bureau of Land Management
TPH	Total Petroleum Hydrocarbons
BTEX	Benzene, Toluene, Ethylbenzene, Xylenes





## 1.0 INTRODUCTION

Permian Resources Operating, LLC (Permian Resources/Novo Oil & Gas Northern Delaware, LLC (Novo Oil & Gas) (OGRID No. 372920) operate multiple produced water pipelines within an established right-of-way (ROW). The ROW and associated produced water pipelines collect and transport produced water from various locations and stations that pump to the Rana Salada Pad J location. The Rana Salada Pad J Site is located in field name Purple Sage – Wolfcamp, T23S, R28E, Section 1, in Eddy County, New Mexico. On February 11, 2023, field personnel for Novo Oil & Gas discovered a release of produced water from a hole in a valve connected to a frac tank. The frac tank and point of release is located on the operational pad area. The Site is located on property owned by the BLM. The release area is located approximately 1.7 miles northwest of the intersection of Highway 605 and Highway 31, latitude 32.342268, longitude W-104.048758 (**Figure 1 and Figure 2**). This Remediation Response & Reclamation Closure Report has been prepared to document response actions and site closure efforts.

### 1.1 Release Details and Initial Response

On February 11, 2023, at approximately 8:00 am a release of produced water occurred as a result of a hole in a valve that connected to an onsite frac tank. Approximately 10 barrels of produced water was released onto the ground on the Site around the temporary frac tanks. Novo estimated the recovery of approximately 8 barrels of produced water. The Site and release area is depicted on **Figure 3**.

The release of produced water was identified by Novo Oil & Gas personnel and steps were taken to mitigate further release and contain produced water. The facility is manned 24-hours per day. Once identified, the release was stopped, and the valve was temporarily blinded until final replacement. The release occurred entirely on the active operational pad area covered with approximately 1-1.5 feet of caliche base material. The release area covered an approximate surface area of 1,952 square feet.

The release volume was calculated based on visual observation of the leaking valve and the extent of water observed on the ground surface. The calculated volume of the release was 10 barrels.

### 1.2 Notification

Based on the quantity of produced water released (10 barrels) being less than 25 barrels, the release was determined to be a minor release per 19.15.29.7.A NMAC. Notification was provided by Bryan Haney of Altamira by phone and email to the New Mexico Oil Conservation District (NMOCD) and BLM on February 12, 2023. The initial online release notification C-141 was submitted to the NMOCD on February 12, 2023. The OCD issued incident ID# nAPP2304339443 and approval dated February 12, 2023.

The C-141 Release Notification Form was submitted to the online portal on February 12, 2023 (**Appendix A**).



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### **1.3 Project Objectives**

The project objectives were to: 1) conduct release cleanup efforts, 2) physically remove affected soil containing constituent concentrations that exceed the NMOCD Closure Criteria with groundwater greater than 51 feet, and 3) restore and reclaim the remediated areas.

### **1.4 Regulatory Framework**

The Site is subject to environmental regulatory oversight by the NMOCD. Notification and response action activities were conducted in accordance with guidelines outlined in 19.15.29 NMAC. The release occurred on property owned by the BLM. Novo will provide all documentation and this Remediation Response & Reclamation Site Closure Report to the BLM.

## **2.0 STANDARD OF CARE, LIMITATIONS, & RELIANCE**

### **2.1 Standard of Care**

Altamira's services were performed in accordance with standards customarily provided by a firm rendering the same or similar services in the area during the same period of time. Altamira makes no warranties, expressed or implied, as to the services performed hereunder. Additionally, Altamira does not warrant the work of laboratories, regulatory agencies, or other third parties supplying information used in the preparation of the report.

### **2.2 Additional Limitations**

Findings, conclusions, and recommendations resulting from these services are based upon information derived from the services performed under this scope of work and it should be noted that this information is subject to change over time. Certain indicators of the presence of hazardous substances, petroleum products, or other constituents may have been latent, inaccessible, unobservable, or not present during these services, and Altamira cannot represent that the Site contains no hazardous substances, toxic materials, petroleum products, or other latent conditions beyond those identified during this scope of services. Environmental conditions at other areas or portions of the Site may vary from those encountered at actual sample locations. Altamira's findings and recommendations are based solely upon data available to Altamira at the time of these services.

## **3.0 RECEPTOR AND WATER SOURCES SURVEY**

### **3.1 Wellhead Protection Discussion**

During assessment field activities, Altamira field personnel conducted a 0.5-mile radius search of the surrounding area to determine the presence of any known private or domestic water sources. During the search, no water wells, or springs were identified within 0.5 miles of the release area. Altamira also reviewed available maps, satellite imagery, and reviewed the New Mexico Office of



the State Engineers GIS database to search for known water wells. In review of the State Engineers GIS database, no water wells, monitoring wells or other subsurface water conveyances were identified within 0.5 miles of the release area. Several environmental soil borings were identified, but have been plugged and abandoned. The environmental soil borings were associated with former Novo release sites and plugging reports have been submitted to the State Engineer's Office.

The BLM indicated based on their search that the Site area is situated within a medium karst environment.

There are no sensitive receptors, wetlands, or known subsurface mines within 300 feet of the Site.

Based on review of the FEMA Flood Map for the site area, the release area is located in Zone X "Area of Minimal Flood Hazard" (FIRM Panel 35015C1350D).

### 3.2 Significant Water Source Discussion

Altamira conducted a review of the significant watercourses nearest the release area. The Pecos River is located approximately 0.9 miles southwest of the Site. The release did not result in any adverse effects to the Pecos River. Salt Lake is located approximately 3.0 miles southeast of the Site area. No other watercourses were identified within a 0.5-mile radius of the release area.

### 3.3 Determination of Depth to Groundwater

Soil boring SB-11 was installed in April 2022 on an adjacent Site just west of the Rana Salada release area (Hades North Loop Site). Soil boring SB-11 was advanced to a depth of 51-feet below ground surface. The purpose of advancing soil boring SB-11 to 51-feet was to determine if groundwater was present below 51-feet. During boring advancement, variations of dry unconsolidated soil and rock were observed. During advancement of soil boring SB-11, groundwater (saturation) was not encountered. The borehole was advanced to 51 feet below ground surface and allowed to stay open for a period of time to monitor for the presence of groundwater. The non-presence of groundwater was verified with an electronic water level probe. The soil boring log and a figure depicting SB-11 and Rana Salada Pad J are provided in **Appendix C**.

Based on the lines of evidence provided above, groundwater is not present from the surface to 51-feet below ground surface in the area of the release. Based on this site-specific information, analytical data results for soil deeper than four feet will be compared to Closure Criteria for Soils based on groundwater encountered at depths greater than 51 feet below ground surface. This includes comparison of soil sample results below four feet to cleanup standards for chlorides to 10,000 mg/kg, total TPH to 2,500 mg/kg and TPH C6 – C28 less than 1,000 mg/kg.

The NMOCD approved the depth to groundwater determination and site characterization in an email dated November 9, 2022 (**Appendix C**).



## 4.0 REMEDIATION

Remediation efforts associated with the release at Rana Salada Pad J occurred during two different time periods due to the temporary use of 10 frac tanks within the release area. Initial remediation efforts were conducted between February 12, 2023 and February 27, 2023 in the main release area that excluded the immediate area of the 10 temporary frac tanks used for managing produced water. Final remediation and reclamation efforts were conducted between March 18, 2024, and April 05, 2024 in the area of the former 10 frac tanks and PJN-9.

Based on the volume of the release, Novo determined the best course of action was to move directly to remediation of the affected soil located on Rana Salada Pad J. Affected soil was mechanically and hydro-excavated and loaded into trucks for transport and disposal. Confirmation soil sampling was conducted to determine the effectiveness of soil remediation efforts. Details regarding the affected soil remediation and post excavation confirmation soil sampling are provided below.

### 4.1 Confirmation Soil Sampling and Analysis Plan

Confirmation soil samples collected post excavation were analyzed by Cardinal Laboratories in Hobbs, New Mexico, accredited by the National Environmental Laboratory Accreditation Program (NELAP) for environmental sample analysis requirements. The sampling program and laboratory methods used for the analysis for the project are listed in the following table. Altamira utilized the Oil Conservation Commission guidance and regulations under Title 19, Chapter 15, Part 29 to address the release and constituents of concern. The executed chain-of-custody documents and laboratory reports are provided in **Appendix F**.

Sample Media	Analysis	Laboratory Method
Soil	Total Petroleum Hydrocarbons (TPH)	8015M
Soil	Benzene, Toluene, Ethylbenzene, Xylenes (BTEX)	8260B
Soil	Chlorides	4500-CI-B

### 4.2 Soil Remediation Activities

Email notification of sampling for the initial remediation effort was provided to the NMOCD and BLM on February 12, 2023. Online Notification (C-141N) was prepared and submitted on March 13, 2024, for the final remediation and sampling effort under and adjacent to the former frac tank



area. Details regarding the affected soil remediation and post excavation confirmation soil sampling are provided below.

During February 2023 and March-April 2024, Novo/Permian Resources conducted soil remediation and reclamation activities at the release Site. The visible release footprint was irregular shaped and extended within the operational pad area generally to the north, south, and east of the point of release. A GPS grade survey system was used to identify the approximate boundary of the release area in relation to the adjacent pad area and active equipment and pipelines. A grid system was established to identify the excavation areas and 200-square foot confirmation soil sample grid areas. The excavation and sample grids were identified and marked using GPS and are depicted on **Figure 3**. The sample grids were assigned a unique grid ID that ties to the analytical data table and figure. The Site ground surface consisted of imported crushed caliche base material ranging in depth from one to 1.5 feet. No vegetation was present on the operational pad area.

Rouge Field Services conducted the initial soil excavation in the larger portion of the release area. On March 18, 2024, Standard Safety acquired onsite remediation responsibilities and completed the remediation and reclamation process on April 05, 2024. Soil remediation was conducted using mechanical and hydro-excavation soil removal methods. The upper four feet of non-wasting soil material was evaluated based on the strictest cleanup levels established by the NMOCD (refer to **Table 1**). Soil below four feet was evaluated based on NMOCD standards for depth to water greater than 51 feet below ground surface. This evaluation was presented and approved by the NMOCD (November 09, 2022). Confirmation soil sampling was conducted to determine the effectiveness of soil remediation efforts. Site photographs are provided in **Appendix B**. Field documentation is provided in **Appendix D**. Excavated soil was either stockpiled or direct loaded to trucks. Water and saturated soils derived from hydro-excavation were placed into a plastic lined and bermed area and allowed to dry prior to transport and disposal.

Following excavation at each grid, confirmation soil samples were collected and submitted to Cardinal Laboratories for analysis. If analytical data results showed a chemical constituent exceeded the Closure Criteria Level, soil in that particular grid area (floor or side-wall) was further excavated and resampled. Laboratory analysis for soil samples for grids that were further excavated were only analyzed for those chemical constituents that previously exceeded the Closure Criteria level in the previous depth interval. This process continued until the concentration of all targeted chemical constituents were below the respective Closure Criteria levels for soils in the upper four feet and below four feet.

Confirmation floor and side-wall soil samples were collected within each 200 square foot (or less) grid and consisted of a 5-point composite sample (generally one from the center and one outward near each corner area). Note that grids facing the former frac tanks were defined laterally by remediation for incident ID: nAPP2222756518; thus defining the side-wall on those sides. This work was conducted during March-April 2024 (refer to **Figure 3** showing the remediation area adjacent to grids that were backfilled with clean fill materials in March-April 2024).

Analytical results for each confirmation grid sample were evaluated to the most stringent criteria per *Table 1 – Closure Criteria for Soils Impacted by a Release* in the upper 4 feet of soil profile. Soil below four feet was evaluated based on NMOCD standards for depth to water greater than 51 feet below ground surface. Analytical data results are presented on **Table 1**.



### 4.3 Waste Management

Excavated soil was loaded into trucks for transport and disposal at R360 Environmental Solutions, LLC – Halfway Facility (NM1-006) located at 6601 Hobbs Highway US 62/180 mile marker 66 between Carlsbad and Hobbs, New Mexico; and LeaLand, LLC disposal facility located at mile marker 64 US Highway 62/180 between Carlsbad and Hobbs, New Mexico (Permit Number WM-01-035 – New Mexico). Manifests for affected soil are provided in **Appendix E**.

## 5.0 DATA RESULTS & EVALUATION

Altamira utilized guidance from 19.15.29 NMAC, specifically *Table I - Closure Criteria for Soils Impacted by a Release* to assess soil sample analytical data collected at the Site. Depth to groundwater near the site was investigated and determined to be greater than 51 feet below ground surface. The most stringent closure criteria action levels were utilized to evaluate analytical results for remediation in the 0-4' soil interval. Closure criteria for soils located below four feet were utilized to evaluate soil sample results below four feet. Analytical results are provided in **Table 1** and Laboratory Analytical Data Reports are provided in **Appendix F**.

As previously described, work and confirmation soil sample grids and side-walls were measured and marked on grid areas (less than 200 square feet). The overall grid area was set-up in a conservative manner so that grids included known and suspected affected soil areas, but also overlapped into known unaffected soil areas. Excavation and confirmation sampling grids were measured and maintained using a GPS grade survey unit to ensure accuracy and consistency. The remediation area and associated sample grids are depicted on **Figure 3**.

### 5.1 Confirmation Soil Sampling Results

#### 5.1.1 Chlorides

All confirmation soil samples were analyzed for chlorides to determine completion of soil remediation. Analytical results showed chloride results in the upper four feet were remediated to the Closure Criteria of 600 mg/kg. Chloride results below the upper four feet were remediated to the Closure Criteria of 10,000 mg/kg. Side-wall samples PJN-9 Sidewall-4, Sidewall-5A, and Sidewall-6 were collected from 4-8 feet below ground surface since soil in the adjacent grid of the side-wall was clean backfill material. **Remediation of chlorides in soil has been completed.**

#### 5.1.2 TPH

TPH was analyzed on all initial confirmation soil samples. Analytical results showed TPH was detected in multiple confirmation soil samples with all but one (PJN-9) being below the applicable Closure Criteria. Soil at grid area PJN-9 was extended to 8-feet below ground surface. Analytical results for confirmation sample PJN-9 (8-8.5') showed detected concentrations below the Closure Criteria. All other floor and side-wall confirmation soil samples exhibited either low detectable concentrations of TPH or no detectable concentrations of TPH above the laboratory reporting limit. **Remediation of TPH in soil has been completed.**

#### 5.1.3 BTEX

BTEX was analyzed on all initial confirmation soil samples. For the purpose of assessment and in accordance with regulatory guidance, benzene and total BTEX concentrations were compared to an assessment level of 10 mg/kg and 50 mg/kg, respectively. Total BTEX concentrations were





detected in seven grid samples; however, concentrations were significantly below 50 mg/kg. All remaining grids and side-walls exhibited no detectable concentrations of BTEX above the laboratory reporting limit. Benzene was not detected above the laboratory reporting limit in any of the confirmation soil samples. **Remediation of BTEX in soil has been completed.**

## 5.2 Final Data Evaluation

Following remediation/excavation activities to remove affected soil, confirmation soil samples were collected per the NMAC guidelines. Analytical data demonstrate remediation efforts (affected soil removal) have been completed. Final soil sample concentrations of chlorides, TPH, and BTEX in each grid and side-wall were either not detected above the laboratory reporting limit (not detected) or if detected were below all applicable Closure Criteria standards. As a result, no further response or remediation action is necessary.

## 6.0 RESTORATION & RECLAMATION

### 6.1 Restoration and Reclamation Activities

Following remediation activities, the excavated site area was reclaimed and restored to its original condition. Borrow areas were sampled prior to use of the material onsite. Analytical results for the soil borrow areas are provided on **Table 2**. The excavated remediation area was backfilled using native topsoil (similar to existing silty-sandy very fine-grained soil) from a nearby native soil borrow source from four feet to approximately 1.5 feet below ground surface. The top soil horizon was compacted in one foot lifts. The pad interval from approximately 1.5 feet to the surface was backfilled and compacted with crushed caliche material to reform the operational pad area. The entire remediation area was graded and contoured to promote proper drainage and eliminate erosion of the pad or native surrounding soils. Care was taken to ensure proper natural drainage to prevent erosion and transport of sediments off-site.

Since the Site is the location of active operational oil and gas activities, re-vegetation is not necessary at this time.

## 7.0 CONCLUSIONS

On February 11, 2023, at approximately 8:00 am a release of produced water occurred as a result of a hole in a valve that connected to an onsite frac tank. Approximately 10 barrels of produced water was released onto the ground on the Site around the temporary frac tanks. Novo estimated the recovery of approximately 8 barrels of produced water. During early 2023 and early 2024, Novo/Permian Resources conducted remediation and reclamation efforts to remove affected soil and restore the area to pre-release conditions.

Analytical data results for post excavation confirmation soil samples validate the completion of affected soil removal from the release area.

- The approximate release surface area is estimated at 1,952 square feet.

Remediation Response & Reclamation Closure Report  
Novo Oil & Gas – Rana Salada Pad J – Produced Water Release  
Discovery Date: February 11, 2023



- 
- A total of 25 confirmation composite soil samples were collected from the excavation floors and side-walls for laboratory analysis to confirm remediation effectiveness.
  - Depth to groundwater at the Site is greater than 51 feet below ground surface.
  - The NMOCD approved the use of higher Closure Criteria for soils below 4 feet based on depth to groundwater greater than 51 feet and site characterization information.
  - Soil on-site has been remediated to chloride levels less than 600 mg/kg in the upper four feet and to levels less than 10,000 mg/kg below the upper four feet of soil.
  - Final TPH and BTEX concentrations were detected below the Closure Criteria.
  - Reclamation efforts have been completed on the pad.
  - Seeding will not be conducted since the release occurred on the operational pad area.
  - No further response action/remediation is necessary for this release Site.
  - Novo/Permian Resources would respectfully like to request regulatory closure for Incident ID: nAPP2304339443.



Remediation Response & Reclamation Closure Report  
Novo Oil & Gas – Rana Salada Pad J – Produced Water Release  
Discovery Date: February 11, 2023

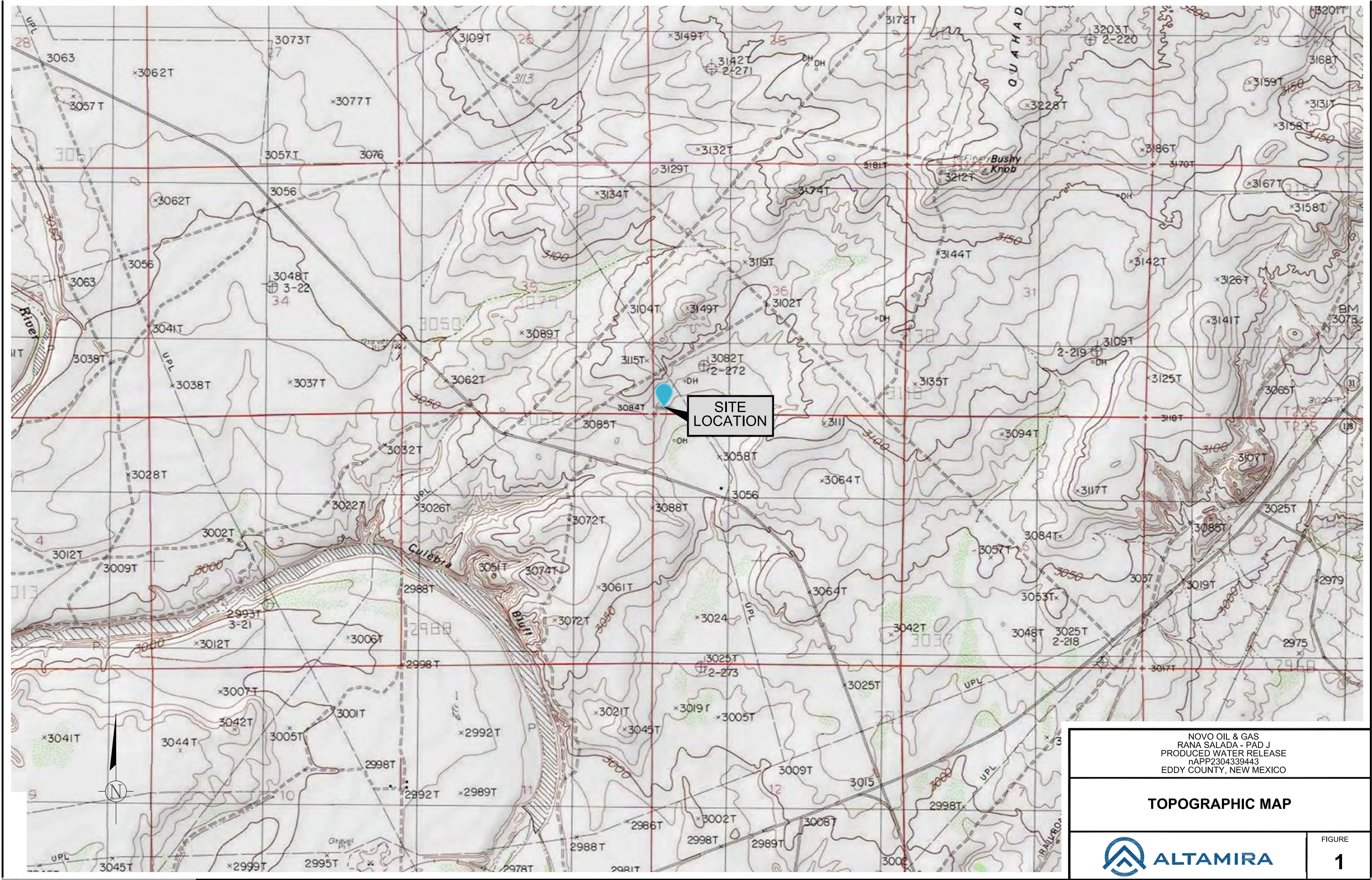


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## FIGURES

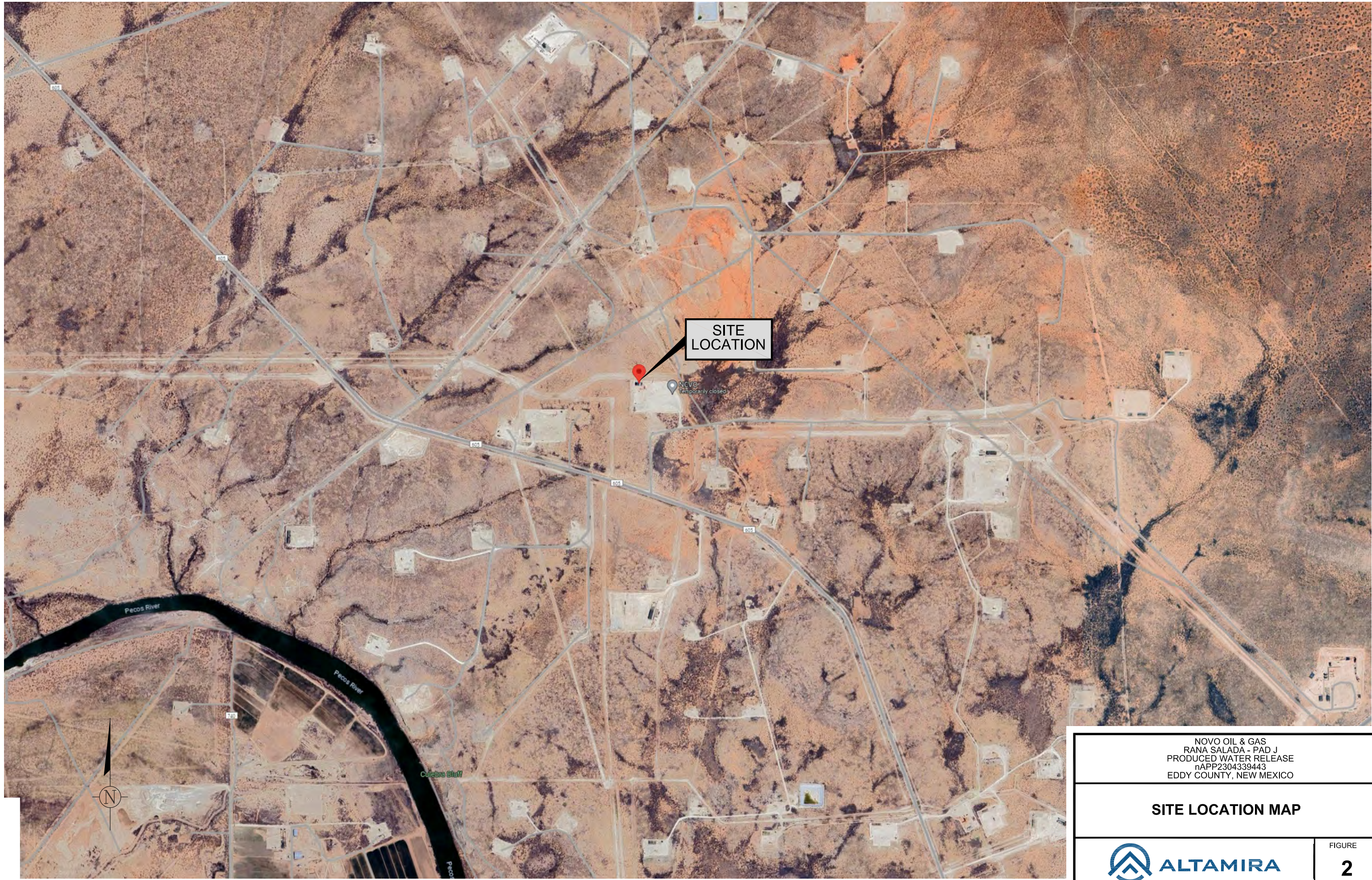


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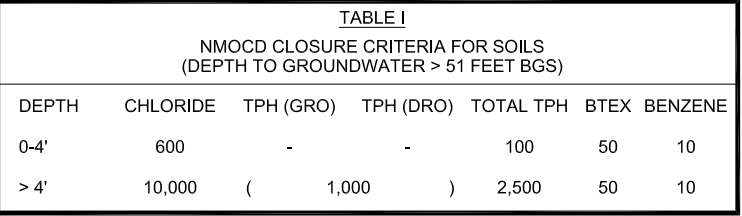



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<p>NOVO OIL &amp; GAS          RANA SALADA - PAD J          PRODUCED WATER RELEASE          nAPP2304339443          EDDY COUNTY, NEW MEXICO</p>	
<p><b>ON-SITE RESPONSE          ACTION &amp; SAMPLE GRID MAP</b></p>	
	<p>FIGURE  <b>3</b></p>

Remediation Response & Reclamation Closure Report  
Novo Oil & Gas – Rana Salada Pad J – Produced Water Release  
Discovery Date: February 11, 2023



**TABLE 1**  
Soil Analytical Data – Post Excavation Soil Samples (mg/kg)

**Table 1**  
**Analytical Data Summary -**  
**Post Excavation Soil Samples (mg/kg)**  
**Novo Oil Gas - Rana Salada Pad J - Produced Water Release (02/11/2023)**  
**Incident ID: nAPP2304339443**  
**Near Loving, Eddy County, New Mexico**

Analyte Method			Chloride 4500-Cl-B	BTEX 8021B	Benzene 8021B	TPH (C6-C10) 8015M	TPH (>C10-28) 8015M	TPH (>C28-36) 8015M	TPH 8015M
Table I - Closure Criteria (0-4')			600	50	10	-	-	-	100
Table I - Closure Criteria (4-100')			10000	50	10	1,000			2,500
Sample ID	Sample Date								
PJN-1 (4-4.5')	2/18/2023		2,360	1.17	<0.05	18.3	219	14.9	252.2
PJN-2 (4-4.5')	2/18/2023		2,920	16.2	<0.05	124	653	51.1	828.1
PJN-3 (4-4.5')	2/18/2023		2,280	4.28	<0.05	98.1	665	39.4	802.5
PJN-4 (4-4.5')	2/18/2023		3,960	1.58	<0.05	39	389	25	453
PJN-5 (4-4.5')	2/18/2023		3,160	<0.30	<0.05	<10.0	110	<10.0	110
PJN-6 (4-4.5')	2/18/2023		496	1.72	<0.05	57	757	67.2	881.2
PJN-7 (4-4.5')	2/18/2023		544	<0.30	<0.05	<10.0	99.3	<10.0	99.3
PJN-8 (4-4.5')	2/18/2023		320	<0.30	<0.05	<10.0	64.5	<10.0	64.5
PJN-9 (4-4.5')	2/18/2023		4,560	22.9	<0.05	533	1,570	111	2214
PJN-9 (5.5-6')	2/27/2023		-	-	-	1,340	5,830	394	7564
PJN-9 (8-8.5')	3/18/2024		-	-	-	23.9	173	<10.0	196.9
PJN-10 (4-4.5')	2/18/2023		256	14.6	<0.05	198	757	47.5	1002.5
PJN-11 (4-4.5')	2/18/2023		448	<0.30	<0.05	<10.0	<10.0	<10.0	<10.0
PJN-12 (4-4.5')	2/18/2023		28	<0.30	<0.05	<10.0	28	<10.0	28
PJN-13 (3-3.5')	2/18/2023		208	<0.30	<0.05	<10.0	25.4	<10.0	25.4
PJN-14 (3-3.5')	2/18/2023		480	<0.30	<0.05	<10.0	<10.0	<10.0	<10.0
PJN-15 (4-4.5')	2/18/2023		1,330	<0.30	<0.05	<10.0	<10.0	<10.0	<10.0
G-67 (4-4.5')	3/18/2024		688	<0.300	<0.050	<10.0	<10.0	<10.0	<10.0

Table 1  
Analytical Data Summary -  
Post Excavation Soil Samples (mg/kg)  
Novo Oil Gas - Rana Salada Pad J - Produced Water Release (02/11/2023)  
Incident ID: nAPP2304339443  
Near Loving, Eddy County, New Mexico

Analyte Method			Chloride 4500-Cl-B	BTEX 8021B	Benzene 8021B	TPH (C6-C10) 8015M	TPH (>C10-28) 8015M	TPH (>C28-36) 8015M	TPH 8015M
Table I - Closure Criteria (0-4')			600	50	10	-	-	-	100
Table I - Closure Criteria (4-100')			10000	50	10	1,000			2,500
Sample ID	Sample Date								
PJN Sidewall-1 (0-3')	2/18/2023		592	<0.30	<0.05	<10.0	<10.0	<10.0	<10.0
PJN Sidewall-2 (0-4')	2/18/2023		192	<0.30	<0.05	<10.0	<10.0	<10.0	<10.0
PJN Sidewall-3 (0-4')	2/18/2023		144	<0.30	<0.05	<10.0	<10.0	<10.0	<10.0
PJN-9 Sidewall-4 (4-8')	3/18/2024		2,080	<0.30	<0.05	<10.0	<10.0	<10.0	<10.0
Grid Sidewall sampled 4-8' only - sidewall abuts grid with clean backfill from 0-4'									
PJN-9 Sidewall-5 (4-8')	3/18/2024		-	-	-	134	1,860	218	2212
PJN-9 Sidewall-5A (4-8')	3/29/2024		3,040	<0.30	<0.05	<10.0	<10.0	<10.0	<10.0
Grid Sidewall sampled 4-8' only - sidewall abuts grid with clean backfill from 0-4'									
PJN-9 Sidewall-6 (4-8')	3/18/2024		1,960	<0.30	<0.05	14.8	380	24.8	419.6
Grid Sidewall sampled 4-8' only - sidewall abuts grid with clean backfill from 0-4'									

**Notes:**

All results are in mg/kg

Closure Criteria Soils - Table I of 19.15.29.12 NMAC

TPH - Total Petroleum Hydrocarbons - includes GRO, DRO, MRO

BTEX - Benzene, Toluene, Ethylbenzene, Xylenes

&lt;RL - results were not detected above the Laboratory Reporting Limit

- Not analyzed

Bold indicates a detection above the Laboratory Sample Reporting Limit

Shading indicates that a detected result exceeded the NMOCD Table 1 Closure Criteria Levels

\* - Closure Criteria based on depth to groundwater greater than 51 feet below ground surface

**APPROVED BY NMOCD on November 9, 2022**

Remediation Response & Reclamation Closure Report  
Novo Oil & Gas – Rana Salada Pad J – Produced Water Release  
Discovery Date: February 11, 2023



**TABLE 2**  
Soil Analytical Data – Soil Borrow Area (mg/kg)



Table 2  
Analytical Data Summary -  
Soil Borrow Area (mg/kg)  
Novo Oil Gas - Rana Salada Pad-J - Produced Water Release  
Incident ID: nAPP2304339443  
Near Loving, Eddy County, New Mexico

Analyte	Chloride	BTEX	Benzene	TPH (C6-C10)	TPH (C10-28)	TPH (C28-36)	TPH
Method	4500-Cl-B	8260B	8260B	8015M	8015M	8015M	8015M
Table I - Closure Criteria (0-4')	600	50	10	-	-	-	100
Table I - Closure Criteria (>4')*	10,000	50	10	1,000	-	-	2,500
Sample ID	Sample Date						
Backfill-1	11/21/2022	128	<0.150	<0.025	<10.0	<10.0	<10.0
Backfill-2	11/21/2022	32	<0.150	<0.025	<10.0	<10.0	<10.0
Backfill-1 Surface	10/31/2023	112	<0.300	<0.050	<10.0	<10.0	<10.0
Backfill-2 Surface	10/31/2023	320	<0.300	<0.050	<10.0	<10.0	<10.0

**Notes:**

All results are in mg/kg

Closure Criteria Soils - Table I of 19.15.29.12 NMAC

TPH - Total Petroleum Hydrocarbons - includes GRO, DRO, MRO

BTEX - Benzene, Toluene, Ethylbenzene, Xylenes

&lt;RL - results were not detected above the Laboratory Reporting Limit

- Not analyzed

Bold indicates a detection above the Laboratory Sample Reporting Limit

Shading indicates that a detected result exceeded the NMOCD Table 1 Closure Criteria Levels

\* - Closure Criteria based on depth to groundwater greater than 51 feet below ground surface

**APPROVED BY NMOCD on November 9, 2022**

Remediation Response & Reclamation Closure Report  
Novo Oil & Gas – Rana Salada Pad J – Produced Water Release  
Discovery Date: February 11, 2023



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**APPENDIX A**  
Notification and Agency Correspondence

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	nAPP2304339443
District RP	
Facility ID	
Application ID	185198

Release Notification

Responsible Party

Responsible Party: Novo Oil & Gas Northern Delaware, LLC	OGRID 372920
Contact Name: Kurt A. Shipley	Contact Telephone: 405-286-3916
Contact email: kshipley@novooog.com	Incident # (assigned by OCD): nAPP2304339443
Contact mailing address: 1001 West Wilshire Blvd., Suite 206 Oklahoma City, OK 73116	

Location of Release Source

Latitude 32.342268° Longitude -104.048758°  
(NAD 83 in decimal degrees to 5 decimal places)

Site Name: Rana Salada – Pad J Frac Tank Release	Site Type: Produced Water Line (production)
Date Release Discovered: 02/11/2023 at 8:00 am	API# (if applicable)

Unit Letter	Section	Township	Range	County
D	36	T22S	R28E	Eddy

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 type="checkbox"/> Crude Oil	Volume Released (bbls)	Volume Recovered (bbls)
<input checked="" type="checkbox"/> Produced Water	Volume Released (bbls): 10	Volume Recovered (bbls): 8
	Is the concentration of dissolved chloride in the produced water >10,000 mg/l?	<input checked="" 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

The leak occurred due to a hole in the valve connected to the frac tank. The release was stopped and the valve was blinded to prevent further leaking.

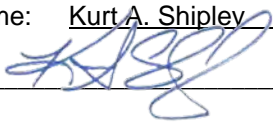
Volume Calculation – based on visual impact adjacent to frac tank

Incident ID	nAPP2304339443
District RP	
Facility ID	
Application ID	185198

Was this a major release as defined by 19.15.29.7(A) NMAC?  <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, for what reason(s) does the responsible party consider this a major release?  Minor event, less than 25 barrels
If YES, was immediate notice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)?  Notification was provided by Bryan Haney on February 12, 2023, at 11:30 am by phone. Notification was made to the NMOCD – Artesia Division Office (575.626.0857). A recorded message was provided on the hotline voicemail (Mike Bratcher). Email notification of the minor release was also provided by Bryan Haney to the OCD Spill Hotline ( <a href="mailto:OCD.Enviro@state.nm.us">OCD.Enviro@state.nm.us</a> ) on February 12, 2023, at 11:30 am. Email notification was provided to by Bryan Haney to the BLM on February 12, 2023 at 11:30 (Crisha Morgan and Jim Amos). Bryan Haney with Altamira-US (on behalf of Novo Oil & Gas Northern Delaware, LLC.) submitted notification of a release (NOR) on the online OCD system on February 12, 2023.	

### Initial Response

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

<input checked="" type="checkbox"/> The source of the release has been stopped. <input checked="" type="checkbox"/> The impacted area has been secured to protect human health and the environment. <input checked="" type="checkbox"/> Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices. <input checked="" type="checkbox"/> All free liquids and recoverable materials have been removed and managed appropriately.	
If all the actions described above have <u>not</u> been undertaken, explain why:  All actions above have been completed.	
Per 19.15.29.8 B. (4) NMAC the responsible party may commence remediation immediately after discovery of a release. If remediation has begun, please attach a narrative of actions to date. If remedial efforts have been successfully completed or if the release occurred within a lined containment area (see 19.15.29.11(A)(5)(a) NMAC), please attach all information needed for closure evaluation.	
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: <u>Kurt A. Shipley</u>	Title: <u>Chief Operating Officer</u>
Signature: 	Date: <u>February 12, 2023</u>
email: <u><a href="mailto:kshipley@novooog.com">kshipley@novooog.com</a></u>	Telephone: <u>405-286-3916</u>
<b><u>OCD Only</u></b>  Received by: _____ Date: _____	

**From:** [OCDOnline@state.nm.us](mailto:OCDOnline@state.nm.us)  
**To:** [Bryan Haney](#)  
**Subject:** The Oil Conservation Division (OCD) has approved the application, Application ID: 185494  
**Date:** Monday, February 13, 2023 3:29:00 PM

---

To whom it may concern (c/o Bryan Haney for NOVO OIL & GAS NORTHERN DELAWARE, LLC),

The OCD has approved the submitted *Application for administrative approval of a release notification and corrective action* (C-141), for incident ID (n#) nAPP2304339443, with the following conditions:

- **None**

The signed C-141 can be found in the OCD Online: Imaging under the incident ID (n#).

If you have any questions regarding this application, please contact me.

Thank you,  
Jocelyn Harimon  
Environmental Specialist  
575-748-1283  
[Jocelyn.Harimon@emnrd.nm.gov](mailto:Jocelyn.Harimon@emnrd.nm.gov)

**New Mexico Energy, Minerals and Natural Resources Department**  
1220 South St. Francis Drive  
Santa Fe, NM 87505



**United States Department of Interior**  
**Bureau of Land Management**  
**Major Undesirable Event Report**

Report Type: Initial 24-Hour <input checked="" type="checkbox"/> 15-Day/Final <input type="checkbox"/> Other/Follow-up <input type="checkbox"/>					
BLM Field Office: Carlsbad, NM			State: New Mexico		
BLM Contact: Crisha Morgan			Date of this Report: 02/12/2023		
Company Official Reporting to BLM: Kurt Shipley and Bryan Haney (Altamira)					
Operator: Novo Oil & Gas Northern Delaware, LLC					
Date/Time of Occurrence: 02/11/2023 at 8:00 am			Date/Time BLM Notified: 02/12/2023 – 11:30am		
Field/Unit Name: D			Lease Number:		
State: NM	County: Eddy	Twp: T22S	Rng: R28E	Sec: 36	Qtr:
Latitude/ Longitude: 32.342268, -104.048758					
Surface Ownership: BLM/Private		Federal: <input checked="" type="checkbox"/>	Indian: <input type="checkbox"/>	State: <input type="checkbox"/>	FEE <input type="checkbox"/>
<b>Type and Relevant Details of Event</b>					
Oil Spill <input type="checkbox"/>	Oil/Water Spill <input type="checkbox"/>	Gas Venting <input type="checkbox"/>	Toxic Fluid Spill <input type="checkbox"/>		
Saltwater Spill <input checked="" type="checkbox"/>	Other Spill (Specific) <input type="checkbox"/>	Blowout <input type="checkbox"/>	Fire <input type="checkbox"/>		
Injury <input type="checkbox"/>	Fatality <input type="checkbox"/>	Property Damage <input type="checkbox"/>	Explosion <input type="checkbox"/>		
Nature and Cause of Event: Minor release approximately 10 bbl of produced water. Release occurred on the <u>Novo Rana Salad Pad-J</u> as a result of a hole in a valve connected to a frac tank.					
Environmental Impact: Leak onto pad area around frac tanks (active pad area only – did not impact off site property)					
Time Required to Control Event (Hours):		Approximately 1 hour			
Volume Discharged or Consumed:		Oil: <u>0</u> bbls	Water: <u>10</u> bbls	Gas: ____ mcf	
Volumes Recovered:		Oil: <u>0</u> bbls	Water: <u>8</u> bbls		
Net Volume Lost:		Oil: <u>0</u> bbls	Water: <u>2</u> bbls	Gas: ____ mcf	
Action Taken to Control Event: Use vacuum truck to remove standing recoverable liquids. Use earth moving equipment to scrape and remove affected soil area					
Resulting Damage: minor surface impact to active pad area – no other damage					
Clean-Up Procedures: Use of vacuum truck and soil excavation machinery to remove standing liquids and affected soil.					
Cause/Extent of Personal Injury: None					
Actions the operator has taken or will take to prevent a recurrence of the incident: Equipment has been repaired.					
Agency Notification List: (Federal/ State/ Local):	Agency Name	Contact Name	Date/Time		
	NMOCD	Mike Bratcher (email)	02/12/2023 at 11:30am		
	NMOCD	Online Portal – Notify	02/12/2023 at 11:50am		
	BLM	Jim Amos/Crisha Morgan (email)	02/12/2023 at 11:30 am		

Remarks: Include available Major Undesirable Events (MUE) history (attach additional sheet, if needed) for the past 3 years of the same well. Include pictures, if available.

None associated with this equipment on Pad J.

**From:** [Bryan Haney](#)  
**To:** [Morgan, Crisha A](#); [Amos, James A](#); [BLM NM CFO REALTY Spill](#)  
**Cc:** [Kurt Shipley](#); [Dara Tatum](#)  
**Subject:** Minor Release Notification - Novo Rana Salada Pad-J Frac Tank Release (02/11/2023)  
**Date:** Sunday, February 12, 2023 11:30:00 AM  
**Attachments:** [image001.png](#)

---

Crisha and Jim,

Please accept this email as written notification regarding a Minor release that occurred at Novo Rana Salada Pad-J. The release occurred as a result of a hole in the valve connected to a frac tank. The release was discovered at approximately 8:00am on February 11, 2023. Novo personnel estimate approximately 10 bbl of produced water released to the adjacent ground surface. Approximately 8 bbl of produced water was recovered. The area is being over excavated to the best extent practicable. Soil samples will be collected on February 13-14, 2023.

Novo will submit the C-141 online and submit the MUE to the BLM.

If you have any questions please let Kurt or I know.

Thank you both,

**Bryan Haney, TX P.G**

**Senior Project Manager** | 361.658.3126 |

Bryan.Haney@altamira-us.com

[altamira-us.com](http://altamira-us.com)





**From:** [Bryan Haney](#)  
**To:** [Bratcher, Michael, EMNRD](#); [Hamlet, Robert, EMNRD](#)  
**Cc:** [Kurt Shipley](#); [Dara Tatum](#)  
**Subject:** Minor Release Notification - Novo Rana Salada Pad-J Frac Tank Release (02/11/2023)  
**Date:** Sunday, February 12, 2023 11:29:00 AM  
**Attachments:** [image001.png](#)

---

Mike and Rob,

Please accept this email as written notification regarding a Minor release that occurred at Novo Rana Salada Pad-J. The release occurred as a result of a hole in the valve connected to a frac tank. The release was discovered at approximately 8:00am on February 11, 2023. Novo personnel estimate approximately 10 bbl of produced water released to the adjacent ground surface. Approximately 8 bbl of produced water was recovered. The area is being over excavated to the best extent practicable. Soil samples will be collected on February 13-14, 2023.

Novo will submit the C-141 online and submit the MUE to the BLM.

If you have any questions please let Kurt or I know.

Thank you both,

**Bryan Haney, TX P.G**

Senior Project Manager | 361.658.3126 |

Bryan.Haney@altamira-us.com

[altamira-us.com](http://altamira-us.com)



**From:** [OCDOnline@state.nm.us](mailto:OCDOnline@state.nm.us)  
**To:** [Bryan Haney](#)  
**Subject:** The Oil Conservation Division (OCD) has accepted the application, Application ID: 185198  
**Date:** Sunday, February 12, 2023 11:57:59 AM

---

To whom it may concern (c/o Bryan Haney for NOVO OIL & GAS NORTHERN DELAWARE, LLC),

The OCD has accepted the submitted *Notification of a release* (NOR), for incident ID (n#) nAPP2304339443,  
with the following conditions:

- **When submitting future reports regarding this release, please submit the calculations used or specific justification for the volumes reported on the initial C-141.**

Please reference nAPP2304339443, on all subsequent C-141 submissions and communications regarding the remediation of this release.

**NOTE:** As of December 2019, NMOCD has discontinued the use of the “RP” number.

If you have any questions regarding this application, or don't know why you have received this email, please contact us.

[ocd.enviro@state.nm.us](mailto:ocd.enviro@state.nm.us)

**New Mexico Energy, Minerals and Natural Resources Department**  
1220 South St. Francis Drive  
Santa Fe, NM 87505

**From:** [Hamlet, Robert, EMNRD](#)  
**To:** [Bryan Haney](#)  
**Cc:** [Kurt Shipley](#); [Dara Tatum](#); [Bratcher, Michael, EMNRD](#); [Nobui, Jennifer, EMNRD](#); [Harimon, Jocelyn, EMNRD](#)  
**Subject:** (Final Extension) Novo Oil and Gas - Pad J Releases - (Due to Frac Tanks)  
**Date:** Monday, April 10, 2023 10:49:34 AM  
**Attachments:** [image003.png](#)

---

RE: Incident #**NAPP2222756518** and **NAPP2304339443**

**Bryan,**

Your request for an extension to **July 10th, 2023** is approved. This will be the **final extension** for these releases. Please include this e-mail correspondence in the remediation and/or closure report.

**Robert Hamlet** • Environmental Specialist - Advanced  
Environmental Bureau  
EMNRD - Oil Conservation Division  
506 W. Texas Ave. | Artesia, NM 88210  
575.909.0302 | [robert.hamlet@state.nm.us](mailto:robert.hamlet@state.nm.us)  
<http://www.emnrd.state.nm.us/OCD/>



---

**From:** Bryan Haney <[Bryan.Haney@altamira-us.com](mailto:Bryan.Haney@altamira-us.com)>  
**Sent:** Monday, April 10, 2023 8:31 AM  
**To:** Hamlet, Robert, EMNRD <[Robert.Hamlet@emnrd.nm.gov](mailto:Robert.Hamlet@emnrd.nm.gov)>; Bratcher, Michael, EMNRD <[mike.bratcher@emnrd.nm.gov](mailto:mike.bratcher@emnrd.nm.gov)>  
**Cc:** Kurt Shipley <[kshipley@novoog.com](mailto:kshipley@novoog.com)>; Dara Tatum <[dtatum@novoog.com](mailto:dtatum@novoog.com)>  
**Subject:** [EXTERNAL] Novo Oil and Gas - Pad J Releases - Time Extension Request (Due to Frac Tanks)

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

Rob and Mike,

Per your suggestion in January, 2023, Novo is requesting another time extension/time deferment for this Site due to the (10) frac tanks remaining onsite. In your last correspondence, you had suggested we send a request each 90-days until the frac tanks are removed and we can complete remediation efforts immediately around and under the frac tanks.

To-date, there are actually two releases that have occurred at this site associated with this equipment.

The original release nAPP2222756518 that occurred on 9/13/0222, and

The more recent release nAPP2304339443 that occurred on 2/11/2023

Novo has completed as much of the soil remediation as possible associated with both releases. Novo is working on a permanent solution to this situation.

If you have any questions or need further information, please let us know.

Thank you

**Bryan Haney, TX P.G**

Senior Project Manager | 361.658.3126 |

[Bryan.Haney@altamira-us.com](mailto:Bryan.Haney@altamira-us.com)

[altamira-us.com](http://altamira-us.com)



**From:** [Bryan Haney](#)  
**To:** [Hamlet, Robert, EMNRD](#); [Bratcher, Michael, EMNRD](#)  
**Cc:** [Kurt Shipley](#); [Dara Tatum](#)  
**Subject:** Novo Oil and Gas - Pad J Releases - Time Extension Request (Due to Frac Tanks)  
**Date:** Monday, April 10, 2023 9:30:00 AM  
**Attachments:** [image001.png](#)

---

Rob and Mike,

Per your suggestion in January, 2023, Novo is requesting another time extension/time deferment for this Site due to the (10) frac tanks remaining onsite. In your last correspondence, you had suggested we send a request each 90-days until the frac tanks are removed and we can complete remediation efforts immediately around and under the frac tanks.

To-date, there are actually two releases that have occurred at this site associated with this equipment.

The original release nAPP2222756518 that occurred on 9/13/0222, and  
The more recent release nAPP2304339443 that occurred on 2/11/2023

Novo has completed as much of the soil remediation as possible associated with both releases.  
Novo is working on a permanent solution to this situation.

If you have any questions or need further information, please let us know.

Thank you

**Bryan Haney, TX P.G**

**Senior Project Manager** | 361.658.3126 |

Bryan.Haney@altamira-us.com

[altamira-us.com](http://altamira-us.com)



**From:** [Hamlet, Robert, EMNRD](#)  
**To:** [Bryan Haney](#)  
**Cc:** [Kurt Shipley](#); [Dara Tatum](#); [Bratcher, Michael, EMNRD](#); [Nobui, Jennifer, EMNRD](#); [Harimon, Jocelyn, EMNRD](#)  
**Subject:** (Extension Approval) Incident #NAPP2222756518 and NAPP2304339443  
**Date:** Tuesday, May 9, 2023 12:12:41 PM  
**Attachments:** [image003.png](#)

---

RE: Incident **#NAPP2222756518 and NAPP2304339443**

**Bryan,**

Your request for an extension to **January 10th, 2024** is approved. Keep us updated on the facility construction timeline. Please include this e-mail correspondence in the remediation and/or closure report.

**Robert Hamlet** • Environmental Specialist - Advanced  
Environmental Bureau  
EMNRD - Oil Conservation Division  
506 W. Texas Ave. | Artesia, NM 88210  
575.909.0302 | [robert.hamlet@state.nm.us](mailto:robert.hamlet@state.nm.us)  
<http://www.emnrd.state.nm.us/OCD/>



---

**From:** Bryan Haney <[Bryan.Haney@altamira-us.com](mailto:Bryan.Haney@altamira-us.com)>  
**Sent:** Tuesday, May 9, 2023 10:52 AM  
**To:** Hamlet, Robert, EMNRD <[Robert.Hamlet@emnrd.nm.gov](mailto:Robert.Hamlet@emnrd.nm.gov)>  
**Cc:** Kurt Shipley <[kshipley@novoog.com](mailto:kshipley@novoog.com)>; Dara Tatum <[dtatum@novoog.com](mailto:dtatum@novoog.com)>; Bratcher, Michael, EMNRD <[mike.bratcher@emnrd.nm.gov](mailto:mike.bratcher@emnrd.nm.gov)>; Nobui, Jennifer, EMNRD <[Jennifer.Nobui@emnrd.nm.gov](mailto:Jennifer.Nobui@emnrd.nm.gov)>; Harimon, Jocelyn, EMNRD <[Jocelyn.Harimon@emnrd.nm.gov](mailto:Jocelyn.Harimon@emnrd.nm.gov)>  
**Subject:** [EXTERNAL] RE: Incident #NAPP2222756518 and NAPP2304339443 - REQUEST FOR EXTENSION (Both Incident IDs)

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

Rob, Mike, and Jocelyn,

Thank you for taking the time to talk with Kurt and I this morning regarding the situation at Pad-J. Per your request, we are providing this email **to request a time extension of six (6) months** to complete remediation activities associated with both incidents.

I have attached a Response Action Figure for each incident that shows the excavation and sample gridding that has been completed. The figures also depict areas where the grid or side-wall failed.

For the areas previously excavated, those in green have meet Closure Criteria. Soils in the upper 4 feet meet standards using Closure Criteria for the 0-4' interval. Soils below 4 feet have met Closure Criteria standards for groundwater greater than 51 feet criteria. All excavated soil has been transported and disposed of at the R360 facility near Hobbs, NM. The remaining area underneath the frac tanks will be remediated and sampled as soon as they are removed from service.

As Kurt discussed, NOVO received the permit from the BLM this week to construct the new facility. Novo will proceed with final planning stages, order equipment, and initiate construction for the facility. Once this is complete, the frac tanks and associated piping, pumps, and ancillary equipment will be removed from the Site. This will then allow Novo to complete the remaining remediation underneath the frac tank area and submit a final Closure Report for each incident.

If you have any questions regarding remediation completed to-date or current/planned operations please reach out to me or Kurt and we would be happy to provide.

Thank you again for your time and help,

Bryan

### Bryan Haney, TX P.G

Senior Project Manager | 361.658.3126 |

[Bryan.Haney@altamira-us.com](mailto:Bryan.Haney@altamira-us.com)

[altamira-us.com](http://altamira-us.com)



---

**From:** Hamlet, Robert, EMNRD <[Robert.Hamlet@emnrd.nm.gov](mailto:Robert.Hamlet@emnrd.nm.gov)>

**Sent:** Monday, April 10, 2023 10:49 AM

**To:** Bryan Haney <[Bryan.Haney@altamira-us.com](mailto:Bryan.Haney@altamira-us.com)>

**Cc:** Kurt Shipley <[kshipley@novoog.com](mailto:kshipley@novoog.com)>; Dara Tatum <[dtatum@novoog.com](mailto:dtatum@novoog.com)>; Bratcher, Michael, EMNRD <[mike.bratcher@emnrd.nm.gov](mailto:mike.bratcher@emnrd.nm.gov)>; Nobui, Jennifer, EMNRD <[Jennifer.Nobui@emnrd.nm.gov](mailto:Jennifer.Nobui@emnrd.nm.gov)>; Harimon, Jocelyn, EMNRD <[jocelyn.harimon@emnrd.nm.gov](mailto:jocelyn.harimon@emnrd.nm.gov)>

**Subject:** (Final Extension) Novo Oil and Gas - Pad J Releases - (Due to Frac Tanks)

RE: Incident #**NAPP2222756518** and **NAPP2304339443**

**Bryan,**

Your request for an extension to **July 10th, 2023** is approved. This will be the **final extension** for these releases. Please include this e-mail correspondence in the remediation and/or closure report.

**Robert Hamlet** • Environmental Specialist - Advanced

Environmental Bureau  
EMNRD - Oil Conservation Division  
506 W. Texas Ave. | Artesia, NM 88210  
575.909.0302 | [robert.hamlet@state.nm.us](mailto:robert.hamlet@state.nm.us)  
<http://www.emnrd.state.nm.us/OCD/>



---

**From:** Bryan Haney <[Bryan.Haney@altamira-us.com](mailto:Bryan.Haney@altamira-us.com)>  
**Sent:** Monday, April 10, 2023 8:31 AM  
**To:** Hamlet, Robert, EMNRD <[Robert.Hamlet@emnrd.nm.gov](mailto:Robert.Hamlet@emnrd.nm.gov)>; Bratcher, Michael, EMNRD <[mike.bratcher@emnrd.nm.gov](mailto:mike.bratcher@emnrd.nm.gov)>  
**Cc:** Kurt Shipley <[kshipley@novooog.com](mailto:kshipley@novooog.com)>; Dara Tatum <[dtatum@novooog.com](mailto:dtatum@novooog.com)>  
**Subject:** [EXTERNAL] Novo Oil and Gas - Pad J Releases - Time Extension Request (Due to Frac Tanks)

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

Rob and Mike,

Per your suggestion in January, 2023, Novo is requesting another time extension/time deferment for this Site due to the (10) frac tanks remaining onsite. In your last correspondence, you had suggested we send a request each 90-days until the frac tanks are removed and we can complete remediation efforts immediately around and under the frac tanks.

To-date, there are actually two releases that have occurred at this site associated with this equipment.

The original release nAPP2222756518 that occurred on 9/13/0222, and  
The more recent release nAPP2304339443 that occurred on 2/11/2023

Novo has completed as much of the soil remediation as possible associated with both releases.  
Novo is working on a permanent solution to this situation.

If you have any questions or need further information, please let us know.

Thank you

**Bryan Haney, TX P.G**

Senior Project Manager | 361.658.3126 |

[Bryan.Haney@altamira-us.com](mailto:Bryan.Haney@altamira-us.com)

[altamira-us.com](http://altamira-us.com)





**From:** [Bryan Haney](#)  
**To:** [Hamlet, Robert, EMNRD](#)  
**Cc:** [Kurt Shipley](#); [Dara Tatum](#); [Bratcher, Michael, EMNRD](#); [Nobui, Jennifer, EMNRD](#); [Harimon, Jocelyn, EMNRD](#)  
**Subject:** RE: Incident #NAPP222756518 and NAPP2304339443 - REQUEST FOR EXTENSION (Both Incident IDs)  
**Date:** Tuesday, May 9, 2023 11:52:00 AM  
**Attachments:** [Novo Pad J Response Action Figure - nAPP2304339443.pdf](#)  
[image001.png](#)  
[Novo Pad J Response Action Figure - nAPP222756518.pdf](#)

---

Rob, Mike, and Jocelyn,

Thank you for taking the time to talk with Kurt and I this morning regarding the situation at Pad-J. Per your request, we are providing this email **to request a time extension of six (6) months** to complete remediation activities associated with both incidents.

I have attached a Response Action Figure for each incident that shows the excavation and sample gridding that has been completed. The figures also depict areas where the grid or side-wall failed. For the areas previously excavated, those in green have meet Closure Criteria. Soils in the upper 4 feet meet standards using Closure Criteria for the 0-4' interval. Soils below 4 feet have met Closure Criteria standards for groundwater greater than 51 feet criteria. All excavated soil has been transported and disposed of at the R360 facility near Hobbs, NM. The remaining area underneath the frac tanks will be remediated and sampled as soon as they are removed from service.

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If you have any questions regarding remediation completed to-date or current/planned operations please reach out to me or Kurt and we would be happy to provide.

Thank you again for your time and help,

Bryan

**Bryan Haney, TX P.G**

Senior Project Manager | 361.658.3126 |

[Bryan.Haney@altamira-us.com](mailto:Bryan.Haney@altamira-us.com)

[altamira-us.com](http://altamira-us.com)



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**Sent:** Monday, April 10, 2023 10:49 AM

**To:** Bryan Haney <Bryan.Haney@altamira-us.com>  
**Cc:** Kurt Shipley <kshipley@novoog.com>; Dara Tatum <dtatum@novoog.com>; Bratcher, Michael, EMNRD <mike.bratcher@emnrd.nm.gov>; Nobui, Jennifer, EMNRD <Jennifer.Nobui@emnrd.nm.gov>; Harimon, Jocelyn, EMNRD <Jocelyn.Harimon@emnrd.nm.gov>  
**Subject:** (Final Extension) Novo Oil and Gas - Pad J Releases - (Due to Frac Tanks)

RE: Incident #**NAPP2222756518** and **NAPP2304339443**

**Bryan,**

Your request for an extension to **July 10th, 2023** is approved. This will be the **final extension** for these releases. Please include this e-mail correspondence in the remediation and/or closure report.

**Robert Hamlet** • Environmental Specialist - Advanced  
Environmental Bureau  
EMNRD - Oil Conservation Division  
506 W. Texas Ave. | Artesia, NM 88210  
575.909.0302 | [robert.hamlet@state.nm.us](mailto:robert.hamlet@state.nm.us)  
<http://www.emnrd.state.nm.us/OCD/>



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**From:** Bryan Haney <[Bryan.Haney@altamira-us.com](mailto:Bryan.Haney@altamira-us.com)>  
**Sent:** Monday, April 10, 2023 8:31 AM  
**To:** Hamlet, Robert, EMNRD <[Robert.Hamlet@emnrd.nm.gov](mailto:Robert.Hamlet@emnrd.nm.gov)>; Bratcher, Michael, EMNRD <[mike.bratcher@emnrd.nm.gov](mailto:mike.bratcher@emnrd.nm.gov)>  
**Cc:** Kurt Shipley <[kshipley@novoog.com](mailto:kshipley@novoog.com)>; Dara Tatum <[dtatum@novoog.com](mailto:dtatum@novoog.com)>  
**Subject:** [EXTERNAL] Novo Oil and Gas - Pad J Releases - Time Extension Request (Due to Frac Tanks)

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

Rob and Mike,

Per your suggestion in January, 2023, Novo is requesting another time extension/time deferment for this Site due to the (10) frac tanks remaining onsite. In your last correspondence, you had suggested we send a request each 90-days until the frac tanks are removed and we can complete remediation efforts immediately around and under the frac tanks.

To-date, there are actually two releases that have occurred at this site associated with this equipment.

The original release nAPP2222756518 that occurred on 9/13/0222, and  
The more recent release nAPP2304339443 that occurred on 2/11/2023

Novo has completed as much of the soil remediation as possible associated with both releases.  
Novo is working on a permanent solution to this situation.

If you have any questions or need further information, please let us know.

Thank you

**Bryan Haney, TX P.G**

Senior Project Manager | 361.658.3126 |

[Bryan.Haney@altamira-us.com](mailto:Bryan.Haney@altamira-us.com)

[altamira-us.com](http://altamira-us.com)



**From:** [Bryan Haney](#)  
**To:** [Hamlet, Robert, EMNRD](#)  
**Cc:** [Bratcher, Michael, EMNRD](#); [Nobui, Jennifer, EMNRD](#); [Harimon, Jocelyn, EMNRD](#); [Montgomery Floyd, Kevin Hart](#)  
**Subject:** RE: (Extension Approval) Incident #NAPP2222756518 and NAPP2304339443 (Pad J Sites)  
**Date:** Tuesday, January 9, 2024 10:21:00 AM  
**Attachments:** [Novo Pad J Response Action Figure - nAPP2304339443.pdf](#)  
[image001.png](#)  
[Novo Pad J Response Action Figure - nAPP2222756518.pdf](#)

---

Rob, Mike, Jennifer, and Jocelyn, Rob, Mike, and Jocelyn,

As you may be aware, the Novo Oil and Gas assets were purchased by Earthstone in 2023, and then both were purchased by Permian Resources in late 2023. With the transfer of assets, the original timeline for installation of a permanent water tank at the Pad-J Site has been put on hold. However, Permian Resource has indicated that they do plan to install the new water tank in 2024. In the meantime, the 10 frac tanks currently being used at the site remain in use and are vital to water management operations. As discussed in our team call in 2023, there was an agreement that the frac tanks were necessary and remediation would be best fit following the removal of the 10 frac tanks.

On behalf of Permian Resources, we are providing this email **to request a time extension of eight (8) months** to complete remediation activities associated with both incidents. It is anticipated that the new water tank can be constructed and the frac tanks removed during this period of time (permits and construction dependent).

I have attached a Response Action Figure for each incident that shows the excavation and sample gridding that has been completed. The figures also depict areas where the grid or side-wall failed. For the areas previously excavated, those in green have meet Closure Criteria. Soils in the upper 4 feet meet standards using Closure Criteria for the 0-4' interval. Soils below 4 feet have met Closure Criteria standards for groundwater greater than 51 feet criteria. All excavated soil has been transported and disposed of at the R360 facility near Hobbs, NM. The remaining area underneath the frac tanks will be remediated and sampled as soon as they are removed from service.

If you would like any further information or think that a team call would be helpful please let us know. Thank you for your consideration on this project.

Bryan

**Bryan Haney, TX P.G**

Senior Project Manager | 361.658.3126 |

Corpus Christi, Texas

[Bryan.Haney@altamira-us.com](mailto:Bryan.Haney@altamira-us.com)

[altamira-us.com](http://altamira-us.com)



---

**From:** Hamlet, Robert, EMNRD <Robert.Hamlet@emnrd.nm.gov>  
**Sent:** Tuesday, May 9, 2023 12:13 PM  
**To:** Bryan Haney <Bryan.Haney@altamira-us.com>  
**Cc:** Kurt Shipley <kshipley@novoog.com>; Dara Tatum <dtatum@novoog.com>; Bratcher, Michael, EMNRD <mike.bratcher@emnrd.nm.gov>; Nobui, Jennifer, EMNRD <Jennifer.Nobui@emnrd.nm.gov>; Harimon, Jocelyn, EMNRD <Jocelyn.Harimon@emnrd.nm.gov>  
**Subject:** (Extension Approval) Incident #NAPP2222756518 and NAPP2304339443

RE: Incident **#NAPP2222756518 and NAPP2304339443**

**Bryan,**

Your request for an extension to **January 10th, 2024** is approved. Keep us updated on the facility construction timeline. Please include this e-mail correspondence in the remediation and/or closure report.

**Robert Hamlet** • Environmental Specialist - Advanced  
Environmental Bureau  
EMNRD - Oil Conservation Division  
506 W. Texas Ave. | Artesia, NM 88210  
575.909.0302 | [robert.hamlet@state.nm.us](mailto:robert.hamlet@state.nm.us)  
<http://www.emnrd.state.nm.us/OCD/>



---

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**Sent:** Tuesday, May 9, 2023 10:52 AM  
**To:** Hamlet, Robert, EMNRD <[Robert.Hamlet@emnrd.nm.gov](mailto:Robert.Hamlet@emnrd.nm.gov)>  
**Cc:** Kurt Shipley <[kshipley@novoog.com](mailto:kshipley@novoog.com)>; Dara Tatum <[dtatum@novoog.com](mailto:dtatum@novoog.com)>; Bratcher, Michael, EMNRD <[mike.bratcher@emnrd.nm.gov](mailto:mike.bratcher@emnrd.nm.gov)>; Nobui, Jennifer, EMNRD <[Jennifer.Nobui@emnrd.nm.gov](mailto:Jennifer.Nobui@emnrd.nm.gov)>; Harimon, Jocelyn, EMNRD <[Jocelyn.Harimon@emnrd.nm.gov](mailto:Jocelyn.Harimon@emnrd.nm.gov)>  
**Subject:** [EXTERNAL] RE: Incident #NAPP2222756518 and NAPP2304339443 - REQUEST FOR EXTENSION (Both Incident IDs)

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Rob, Mike, and Jocelyn,

Thank you for taking the time to talk with Kurt and I this morning regarding the situation at Pad-J. Per your request, we are providing this email **to request a time extension of six (6) months** to complete remediation activities associated with both incidents.

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Thank you again for your time and help,

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Senior Project Manager | 361.658.3126 |

[Bryan.Haney@altamira-us.com](mailto:Bryan.Haney@altamira-us.com)

[altamira-us.com](http://altamira-us.com)



---

**From:** Hamlet, Robert, EMNRD <[Robert.Hamlet@emnrd.nm.gov](mailto:Robert.Hamlet@emnrd.nm.gov)>

**Sent:** Monday, April 10, 2023 10:49 AM

**To:** Bryan Haney <[Bryan.Haney@altamira-us.com](mailto:Bryan.Haney@altamira-us.com)>

**Cc:** Kurt Shipley <[kshipley@novoog.com](mailto:kshipley@novoog.com)>; Dara Tatum <[dtatum@novoog.com](mailto:dtatum@novoog.com)>; Bratcher, Michael, EMNRD <[mike.bratcher@emnrd.nm.gov](mailto:mike.bratcher@emnrd.nm.gov)>; Nobui, Jennifer, EMNRD

<[Jennifer.Nobui@emnrd.nm.gov](mailto:Jennifer.Nobui@emnrd.nm.gov)>; Harimon, Jocelyn, EMNRD <[Jocelyn.Harimon@emnrd.nm.gov](mailto:Jocelyn.Harimon@emnrd.nm.gov)>

**Subject:** (Final Extension) Novo Oil and Gas - Pad J Releases - (Due to Frac Tanks)

RE: Incident #**NAPP2222756518** and **NAPP2304339443**

**Bryan,**

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**Robert Hamlet** • Environmental Specialist - Advanced  
Environmental Bureau  
EMNRD - Oil Conservation Division  
506 W. Texas Ave. | Artesia, NM 88210  
575.909.0302 | [robert.hamlet@state.nm.us](mailto:robert.hamlet@state.nm.us)  
<http://www.emnrd.state.nm.us/OCD/>



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**Sent:** Monday, April 10, 2023 8:31 AM  
**To:** Hamlet, Robert, EMNRD <[Robert.Hamlet@emnrd.nm.gov](mailto:Robert.Hamlet@emnrd.nm.gov)>; Bratcher, Michael, EMNRD <[mike.bratcher@emnrd.nm.gov](mailto:mike.bratcher@emnrd.nm.gov)>  
**Cc:** Kurt Shipley <[kshipley@novoog.com](mailto:kshipley@novoog.com)>; Dara Tatum <[dtatum@novoog.com](mailto:dtatum@novoog.com)>  
**Subject:** [EXTERNAL] Novo Oil and Gas - Pad J Releases - Time Extension Request (Due to Frac Tanks)

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Rob and Mike,

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To-date, there are actually two releases that have occurred at this site associated with this equipment.

The original release nAPP2222756518 that occurred on 9/13/0222, and  
The more recent release nAPP2304339443 that occurred on 2/11/2023

Novo has completed as much of the soil remediation as possible associated with both releases.  
Novo is working on a permanent solution to this situation.

If you have any questions or need further information, please let us know.

Thank you

**Bryan Haney, TX P.G**

Senior Project Manager | 361.658.3126 |



**From:** [OCDOnline@state.nm.us](mailto:OCDOnline@state.nm.us)  
**To:** [Bryan Haney](#)  
**Subject:** The Oil Conservation Division (OCD) has accepted the application, Application ID: 323042  
**Date:** Wednesday, March 13, 2024 3:27:36 PM

---

To whom it may concern (c/o Bryan Haney for NOVO OIL & GAS NORTHERN DELAWARE, LLC),

The OCD has received the submitted *Notification for (Final) Sampling of a Release* (C-141N), for incident ID (n#) nAPP2304339443.

The sampling event is expected to take place:

**When:** 03/18/2024 @ 09:00

**Where:** D-36-22S-28E 0 FNL 0 FEL (32.342268,-104.048758)

**Additional Information:** Jimmy Gonzalez - Altamira - 361-207-4228  
Bryan Haney - Altamira - 361-658-3126

**Additional Instructions:** From Carlsbad NM. follow 62/180 East to Nm.176 East follow for 19 Miles, turn right onto San Simone Rd. follow for 4.1 Miles, Turn left at powerlines with three transformers side by side. follow for 1 Mile, turn right follow for .4 miles turn right into Gordita 6 CTB

**Spotting Instructions**

Four corners Marked with Stakes and white flagging NW Marker 32.415024, -103.411791 NE Marker 32.415032, -103.410785 SE Marker 32.414555, -103.410775 SW Marker 32.414544, -103.411794

An OCD representative may be available onsite at the date and time reported. In the absence or presence of an OCD representative, sampling pursuant to 19.15.29.12.D NMAC is required. Sampling must be performed following an approved sampling plan or pursuant to 19.15.29.12.D.(1).(c) NMAC. Should there be a change in the scheduled date and time of the sampling event, then another notification should be resubmitted through OCD permitting as soon as possible.

- **Failure to notify the OCD of sampling events including any changes in date/time per the requirements of 19.15.29.12.D.(1).(a) NMAC, may result in the remediation closure samples not being accepted.**

If you have any questions regarding this application, or don't know why you have received this email, please contact us.

**New Mexico Energy, Minerals and Natural Resources Department**  
1220 South St. Francis Drive  
Santa Fe, NM 87505

**From:** [Bryan Haney](#)  
**To:** [Hamlet, Robert, EMNRD](#)  
**Cc:** [Bratcher, Michael, EMNRD](#); [Maxwell, Ashley, EMNRD](#); [Montgomery Floyd](#); [Matthew Taylor](#)  
**Subject:** REQUEST FOR TIME EXTENSION: Novo J-Pad Sites - nAPP2222756518 and nAPP2304339443  
**Date:** Wednesday, April 3, 2024 1:49:00 PM  
**Attachments:** [image001.png](#)

---

Rob,

The current timeframe for project completion and reporting is set to expire on April 8, 2024 for both incidents above. We are actively working on both to complete remediation efforts, which we anticipate being completed by early next week. We will then prepare and upload Remediation and Reclamation Closure Reports for both incidents. We would like to request at 30-day extension from April 8, 2024 to complete onsite efforts and reporting.

Thank you for your consideration,  
Bryan

**Bryan Haney, TX P.G**

Senior Project Manager | 361.658.3126 |

Corpus Christi, Texas

[Bryan.Haney@altamira-us.com](mailto:Bryan.Haney@altamira-us.com)

[altamira-us.com](http://altamira-us.com)



**From:** [Hamlet, Robert, EMNRD](#)  
**To:** [Bryan Haney](#)  
**Cc:** [Bratcher, Michael, EMNRD](#); [Maxwell, Ashley, EMNRD](#); [Montgomery Floyd](#); [Matthew Taylor](#)  
**Subject:** (Extension Denied) Novo J-Pad Sites - nAPP2222756518 and nAPP2304339443  
**Date:** Wednesday, April 3, 2024 2:43:57 PM  
**Attachments:** [image003.png](#)

---

RE: Incident #**NAPP2222756518** and **NAPP2304339443**

**Bryan,**

Multiple extensions have been granted for these releases. Your request for another extension is **denied**. Include this e-mail correspondence in the remediation and/or closure report.

**Robert Hamlet** • Environmental Specialist - Advanced

Environmental Bureau

EMNRD - Oil Conservation Division

506 W. Texas Ave. | Artesia, NM 88210

575.909.0302 | [robert.hamlet@state.nm.us](mailto:robert.hamlet@state.nm.us)

<http://www.emnrd.state.nm.us/OCD/>



---

**From:** Bryan Haney <[Bryan.Haney@altamira-us.com](mailto:Bryan.Haney@altamira-us.com)>

**Sent:** Wednesday, April 3, 2024 12:49 PM

**To:** Hamlet, Robert, EMNRD <[Robert.Hamlet@emnrd.nm.gov](mailto:Robert.Hamlet@emnrd.nm.gov)>

**Cc:** Bratcher, Michael, EMNRD <[mike.bratcher@emnrd.nm.gov](mailto:mike.bratcher@emnrd.nm.gov)>; Maxwell, Ashley, EMNRD <[Ashley.Maxwell@emnrd.nm.gov](mailto:Ashley.Maxwell@emnrd.nm.gov)>; Montgomery Floyd <[Montgomery.Floyd@permianres.com](mailto:Montgomery.Floyd@permianres.com)>; Matthew Taylor <[Matthew.Taylor@permianres.com](mailto:Matthew.Taylor@permianres.com)>

**Subject:** [EXTERNAL] REQUEST FOR TIME EXTENSION: Novo J-Pad Sites - nAPP2222756518 and nAPP2304339443

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Rob,

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Bryan

**Bryan Haney, TX P.G**

**Senior Project Manager** | 361.658.3126 |

**Corpus Christi, Texas**

[Bryan.Haney@altamira-us.com](mailto:Bryan.Haney@altamira-us.com)

[altamira-us.com](http://altamira-us.com)



*Remediation Response & Reclamation Closure Report  
Novo Oil & Gas – Rana Salada Pad J – Produced Water Release  
Discovery Date: February 11, 2023*



**APPENDIX B**  
Photographic Documentation

**Appendix B**  
**Photograph Log**  
**Rana Salada Pad J Produced Water Release**  
**Incident ID: nAPP2304339443**



View west at soil remediation on south side of frac tanks



View east at soil remediation area on south side of frac tanks



**Appendix B**  
**Photograph Log**  
**Rana Salada Pad J Produced Water Release**  
**Incident ID: nAPP2304339443**



View north at excavated area south and east of frac tanks



View north at soil excavation along the east side of the frac tanks



**Appendix B**  
**Photograph Log**  
**Rana Salada Pad J Produced Water Release**  
**Incident ID: nAPP2304339443**



View west at soil excavation along the north side of the frac tanks



View northwest at backfilled remediation area



**Appendix B**  
**Photograph Log**  
**Rana Salada Pad J Produced Water Release**  
**Incident ID: nAPP2304339443**



View southwest at backfilled remediation area



View south at PJN-9 grid – additional soil excavation in April-March 2024

**Appendix B  
Photograph Log  
Rana Salada Pad J Produced Water Release  
Incident ID: nAPP2304339443**



Backfill at PJN-9 grid



April 5, 2024 - View north at final reclaimed area following remediation efforts



**Appendix B  
Photograph Log  
Rana Salada Pad J Produced Water Release  
Incident ID: nAPP2304339443**



April 5, 2024 - View northeast at final reclaimed area following remediation efforts

Remediation Response & Reclamation Closure Report  
Novo Oil & Gas – Rana Salada Pad J – Produced Water Release  
Discovery Date: February 11, 2023



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**APPENDIX C**  
Depth to Groundwater Documentation



**Re: Rana Salada Pad J Produced Water Release (02/11/2023)**  
**Novo Oil & Gas (Permian Resources Operating, LLC)**  
**Incident ID: nAPP2304339443**  
**Depth to Groundwater Determination**

### **Depth to Water Determination**

Soil boring SB-11 was installed in April 2022 on an adjacent Site just west of the Rana Salada Pad J release area. Soil boring SB-11 was advanced to a depth of 51-feet below ground surface. The purpose of advancing soil boring SB-11 to 51-feet was to determine if groundwater was present below 51-feet. During boring advancement, variations of dry unconsolidated soil and rock were observed. During advancement of soil boring SB-11, groundwater (saturation) was not encountered. The borehole was advanced to 51 feet below ground surface and allowed to stay open for a period of time to monitor for the presence of groundwater. The non-presence of groundwater was verified with an electronic water level probe. The soil boring log and a figure depicting SB-11 and Rana Salada Pad J are attached.

Based on the lines of evidence provided above, groundwater is not present from the surface to 51-feet below ground surface in the area of the release. Based on this site-specific information, analytical data results for soil deeper than four feet will be compared to Closure Criteria for Soils based on groundwater encountered at depths greater than 51 feet below ground surface. This includes comparison of soil sample results below four feet to cleanup standards for chlorides to 10,000 mg/kg, total TPH to 2,500 mg/kg (TPH C6 – C28 less than 1,000 mg/kg).

In an email dated November 9, 2022, the NMOCD approved the depth to groundwater determination.

**Aerial Map – SB-11 Location to Site**

**Soil Boring Log SB-11**

**Email Correspondence – NMOCD approval on Depth to Groundwater Determination**

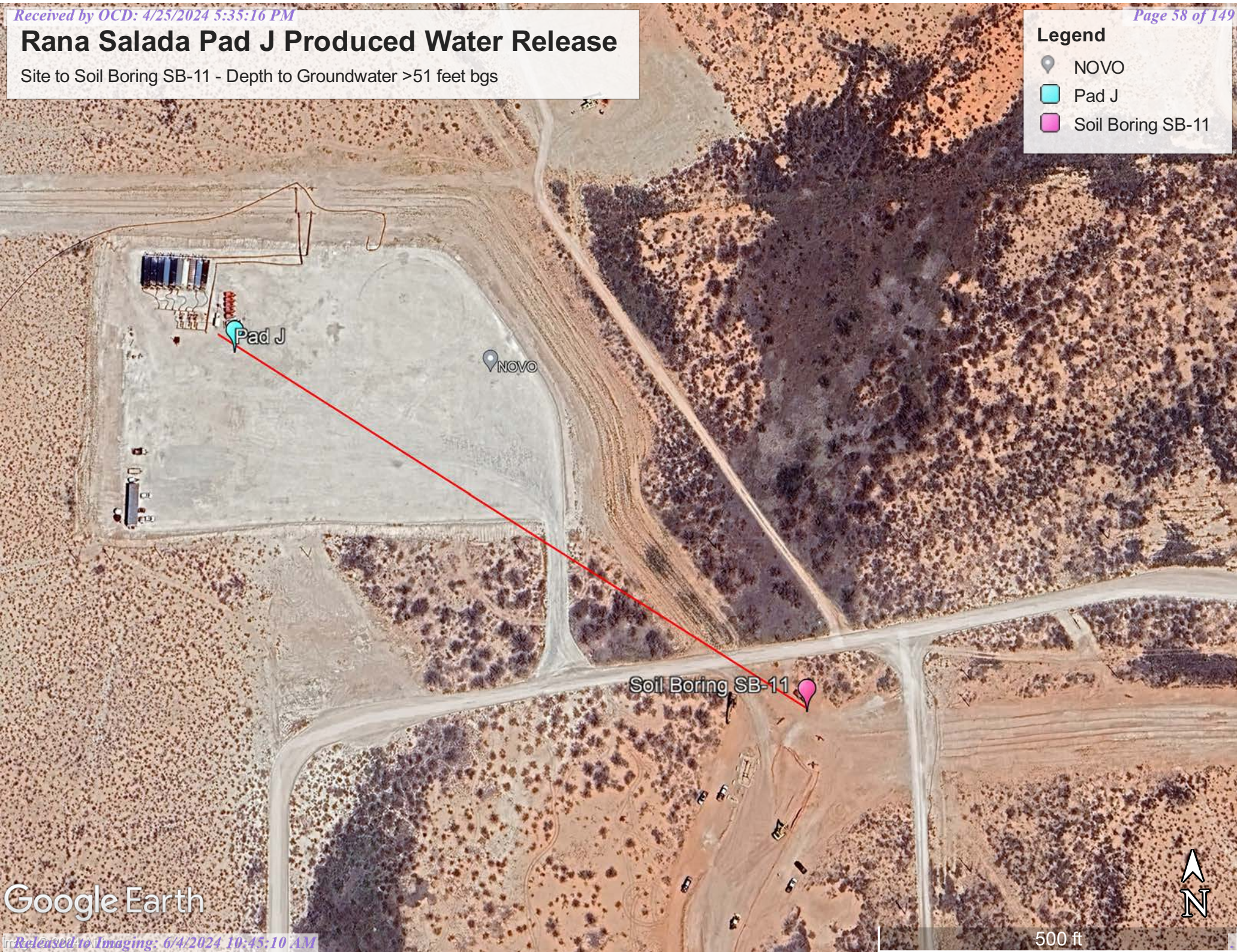


# Rana Salada Pad J Produced Water Release

Site to Soil Boring SB-11 - Depth to Groundwater >51 feet bgs

## Legend

- NOVO
- Pad J
- Soil Boring SB-11



Google Earth



BORING RECORD									
GEOLOG. UNIT	DEPTH (FEET)	LITHOLOGIC DESCRIPTION	UNIFIED SOIL CLASSIFICATION	GRAPHIC LOG	SAMPLE				REMARKS
					NUMBER	QVW READING	RECOVERY	DEPTH	
		N 32.34047 W -104.04576							
	0	GROUND SURFACE:							
	0	CO-6.5 Roddis Brown fine sand & silt Dry loose			0.0		X		
					0.0		X		
					0.0		X		
					0.0		X		
	5	(6.5-12.5) Tan Fine sand & silt Intermittent pea gravel pebbles < 0.25" Dry			0.0		X		
					0.0		X		
	10				0.0		X		
					0.0		X		
	15	(12.25-35) Loose fine sand with caliche light Dry soil harder more compacted with depth			0.0		X		
					0.0		X		
	20	(35-48) caliche & fine sand Dry trace silt loose			0.0		X		
					0.0		X		
	25	(48-51) Greenish Brown clay med plasticity moist, Groundwater not encountered at 51'			0.0		X		
		TD=51' BGS			0.0		X		
		Sample for			0.0		X		
		0-1 0926			0.0		X		
		1-2 0927			0.0		X		
		2-3 0928			0.0		X		
		3-4 0729			0.0		X		
	30	5-6 0932			0.0		X		
		7-8 0933			0.0		X		
		9-10 0934			0.0		X		
		11-12 0936			0.0		X		
		14-15 0937			0.0		X		
	35	19-20 0952			0.0		X		

CME CONTINUOUS AUGER SAMPLER STANDARD PENETRATION TEST UNDISTURBED SAMPLE WATER TABLE (24 HOURS)	WATER TABLE (TIME OF BORING) LABORATORY TEST LOCATION PENETROMETER (TONS/SQ. FT.) NR: NO RECOVERY
---	--

<b>ALTAMIRA</b> 3700 West Robinson St., Suite 200 • Norman, Oklahoma 73072 • 405-701-5058 www.altamira-us.com	PROJECT NAME NOVO Oil & Gas - Hades North Loop Produced Water Release
	PROJECT NUMBER NVONM2202
	BORING NUMBER SB-11
	DATE DRILLED: 4/26/2022 DRILLING METHOD: Direct Push/Air Rotary DRILLED BY: Envirotech Drilling LOGGED BY: [Signature] CHECKED BY: [Signature] DRAWN BY: [Signature]



BORING RECORD								
GEOLOG. UNIT	DEPTH (FEET)	LITHOLOGIC DESCRIPTION	UNIFIED SOIL CLASSIFICATION	GRAPHIC LOG	SAMPLE			REMARKS
					NUMBER	OWN READING	RECOVERY	
		N 32.34047 W -104.04576						BACKGROUND OWN READING: SOIL: 0.0 PPM AIR: 0.0 PPM
	35	GROUND SURFACE:						35
	45				60		X	45
	50				60		X	50
	55				60		X	55
	60				60		X	60
	65				60		X	65
	70				60		X	70
	75				60		X	75
	80				60		X	80
	85				60		X	85
	90				60		X	90
	95				60		X	95
	100				60		X	100
	105				60		X	105
	110				60		X	110
	115				60		X	115
	120				60		X	120
	125				60		X	125
	130				60		X	130
	135				60		X	135
	140				60		X	140
	145				60		X	145
	150				60		X	150
	155				60		X	155
	160				60		X	160
	165				60		X	165
	170				60		X	170
	175				60		X	175
	180				60		X	180
	185				60		X	185
	190				60		X	190
	195				60		X	195
	200				60		X	200
	205				60		X	205
	210				60		X	210
	215				60		X	215
	220				60		X	220
	225				60		X	225
	230				60		X	230
	235				60		X	235
	240				60		X	240
	245				60		X	245
	250				60		X	250
	255				60		X	255
	260				60		X	260
	265				60		X	265
	270				60		X	270
	275				60		X	275
	280				60		X	280
	285				60		X	285
	290				60		X	290
	295				60		X	295
	300				60		X	300
	305				60		X	305
	310				60		X	310
	315				60		X	315
	320				60		X	320
	325				60		X	325
	330				60		X	330
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	360				60		X	360
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	375				60		X	375
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	385				60		X	385
	390				60		X	390
	395				60		X	395
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	405				60		X	405
	410				60		X	410
	415				60		X	415
	420				60		X	420
	425				60		X	425
	430				60		X	430
	435				60		X	435
	440				60		X	440
	445				60		X	445
	450				60		X	450
	455				60		X	455
	460				60		X	460
	465				60		X	465
	470				60		X	470
	475				60		X	475
	480				60		X	480
	485				60		X	485
	490				60		X	490
	495				60		X	495
	500				60		X	500
	505				60		X	505
	510				60		X	510
	515				60		X	515
	520				60		X	520
	525				60		X	525
	530				60		X	530
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	595				60		X	595
	600				60		X	600
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	610				60		X	610
	615				60		X	615
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	625				60		X	625
	630				60		X	630
	635				60		X	635
	640				60		X	640
	645				60		X	645
	650				60		X	650
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	760				60		X	760
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	770				60		X	770
	775				60		X	775
	780				60		X	780
	785				60		X	785
	790				60		X	790
	795				60		X	795
	800				60		X	800
	805				60		X	805
	810				60		X	810
	815				60		X	815
	820				60		X	820
	825				60		X	825
	830				60		X	830
	835				60		X	835
	840				60		X	840
	845				60		X	845
	850				60		X	850
	855				60		X	855
	860				60		X	860
	865				60		X	865
	870				60		X	870
	875				60		X	875
	880				60		X	880
	885				60		X	885
	890				60		X	890
	895				60		X	895
	900				60		X	900
	905				60		X	905
	910				60		X	910
	915				60		X	915
	920				60		X	920
	925				60		X	925
	930				60		X	930
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	940				60		X	940
	945				60		X	945
	950				60		X	950
	955				60		X	955
	960				60		X	960
	965				60		X	965
	970				60		X	970
	975				60		X	975



**From:** [Bratcher, Michael, EMNRD](#)  
**To:** [Bryan Haney](#)  
**Cc:** [Hamlet, Robert, EMNRD](#)  
**Subject:** RE: [EXTERNAL] Fwd: nAPP2222756518 - Novo Rana Salada Pad J Release - Depth to Groundwater Determination - Application to soil remediation  
**Date:** Wednesday, November 9, 2022 9:34:46 AM

---

Bryan,

This data is acceptable as determination that DTGW is >50' bgs in this area. There is another boring that went to 55' approximately 250 yards ne of the current release site that was determined to be dry as well.

Please include this and all correspondence, including attachments, in the remediation/closure report to insure inclusion in the project file.

Thank you,

**Mike Bratcher** • Incident Supervisor  
Environmental Bureau  
EMNRD - Oil Conservation Division  
506 W. Texas Ave | Artesia, NM 88210  
(575) 626-0857 | [mike.bratcher@emnrd.nm.gov](mailto:mike.bratcher@emnrd.nm.gov) *NOTE NEW EMAIL ADDRESS*  
<http://www.emnrd.state.nm.us/OCD/>



---

**From:** Bryan Haney <[Bryan.Haney@altamira-us.com](mailto:Bryan.Haney@altamira-us.com)>  
**Sent:** Wednesday, November 9, 2022 7:14 AM  
**To:** Bratcher, Michael, EMNRD <[mike.bratcher@emnrd.nm.gov](mailto:mike.bratcher@emnrd.nm.gov)>  
**Subject:** [EXTERNAL] Fwd: nAPP2222756518 - Novo Rana Salada Pad J Release - Depth to Groundwater Determination - Application to soil remediation

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

Hey Mike,

I sent the information below to Rob but it looks like he is out for a few days. Can you review the information and let me know if this request is acceptable? The depth to groundwater greater than 51 feet is as accepted for the Novo Hades North Loop site. Thanks for your help

Bryan

Sent from my iPhone

Begin forwarded message:

**From:** Bryan Haney <[bryan.haney@altamira-us.com](mailto:bryan.haney@altamira-us.com)>  
**Date:** November 8, 2022 at 10:01:00 AM CST  
**To:** "Hamlet, Robert, EMNRD" <[Robert.Hamlet@emnrd.nm.gov](mailto:Robert.Hamlet@emnrd.nm.gov)>  
**Cc:** Kurt Shipley <[kshipley@novoog.com](mailto:kshipley@novoog.com)>, Dara Tatum <[dtatum@novoog.com](mailto:dtatum@novoog.com)>  
**Subject:** nAPP2222756518 - Novo Rana Salada Pad J Release - Depth to Groundwater Determination - Application to soil remediation

Rob,

Just following up on the email below. We are nearing completion of soil remediation activities at the Novo Pad J site and have several areas that are excavated to 4 feet bgs.

I have attached the soil boring log for SB-11 located approximately 900 feet southeast of the Rana Salada Pad J release site (see attached google earth image).

Based on this data, cleanup levels for chlorides according to Table I would be 600 mg/kg for groundwater < or equal to 50 feet bgs, and 10,000 mg/kg for groundwater greater than 50 feet bgs.

We would just like to get final confirmation from you on this prior to backfilling our remediation area.

Thank you,

Bryan

**Bryan Haney, TX P.G**

Senior Project Manager | 361.658.3126 |

[Bryan.Haney@altamira-us.com](mailto:Bryan.Haney@altamira-us.com)

[altamira-us.com](http://altamira-us.com)

---

**From:** Bryan Haney  
**Sent:** Thursday, November 3, 2022 12:49 PM  
**To:** Hamlet, Robert, EMNRD <[Robert.Hamlet@emnrd.nm.gov](mailto:Robert.Hamlet@emnrd.nm.gov)>  
**Subject:** RE: (Extension Approval) nAPP2222756518 - Novo Rana Salada Pad J Release

Rob,

We are conducting soil remediation activities at the Novo Pad J location this week and

next. Looks like we may have some portions of the excavation that may extend to 4 feet.

The Novo Hades North Loop site is located approximately 150-200 yards from the Pad J Site. We installed a deep soil boring at the Hades site to determine if groundwater was present shallower than 51 feet bgs. Groundwater was not observed above 51 feet bgs and as a results, we would defer to a cleanup level of 10,000 mg/kg for chlorides below 4 feet. Since the two sites are very close to each other and the Pad J site is topographically higher by approximately 10 feet, I would like to use the demonstration of depth to groundwater from Hades for the Pad J site.

Please let me know if you have any concerns with this approach or need further information.

Thank you for your help,

Bryan

**Bryan Haney, TX P.G**

Senior Project Manager | 361.658.3126 |

[Bryan.Haney@altamira-us.com](mailto:Bryan.Haney@altamira-us.com)

[altamira-us.com](http://altamira-us.com)

---

**From:** Hamlet, Robert, EMNRD <[Robert.Hamlet@emnrd.nm.gov](mailto:Robert.Hamlet@emnrd.nm.gov)>

**Sent:** Wednesday, October 19, 2022 3:40 PM

**To:** Bryan Haney <[Bryan.Haney@altamira-us.com](mailto:Bryan.Haney@altamira-us.com)>

**Cc:** Kurt Shipley <[kshipley@novoog.com](mailto:kshipley@novoog.com)>; Dara Tatum <[dtatum@novoog.com](mailto:dtatum@novoog.com)>; Bratcher, Michael, EMNRD <[mike.bratcher@emnrd.nm.gov](mailto:mike.bratcher@emnrd.nm.gov)>; Nobui, Jennifer, EMNRD <[Jennifer.Nobui@emnrd.nm.gov](mailto:Jennifer.Nobui@emnrd.nm.gov)>; Harimon, Jocelyn, EMNRD <[Jocelyn.Harimon@emnrd.nm.gov](mailto:Jocelyn.Harimon@emnrd.nm.gov)>

**Subject:** (Extension Approval) nAPP2222756518 - Novo Rana Salada Pad J Release

RE: Incident #**NAPP2222756518**

**Bryan,**

Your request for an extension to **January 11th, 2022** is approved. Please include this e-mail correspondence in the remediation and/or closure report.

**Robert Hamlet** • Environmental Specialist - Advanced  
Environmental Bureau  
EMNRD - Oil Conservation Division  
506 W. Texas Ave.| Artesia, NM 88210

575.909.0302 | [robert.hamlet@state.nm.us](mailto:robert.hamlet@state.nm.us)  
<http://www.emnrd.state.nm.us/OCD/>

---

**From:** Bryan Haney <[Bryan.Haney@altamira-us.com](mailto:Bryan.Haney@altamira-us.com)>  
**Sent:** Wednesday, October 19, 2022 2:26 PM  
**To:** Hamlet, Robert, EMNRD <[Robert.Hamlet@emnrd.nm.gov](mailto:Robert.Hamlet@emnrd.nm.gov)>  
**Cc:** Kurt Shipley <[kshipley@novoog.com](mailto:kshipley@novoog.com)>; Dara Tatum <[dtatum@novoog.com](mailto:dtatum@novoog.com)>  
**Subject:** [EXTERNAL] nAPP2222756518 - Novo Rana Salada Pad J Release - REQUEST FOR TIME EXTENSION

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

Rob,

This release occurred on August 13, 2022 – it is considered a minor release based on volume.

Novo has had active equipment in the immediate area since the release. Novo is planning to start hydro-excavation starting 10/24/2022, followed by confirmation sampling for TPH, BTEX and chlorides per guidance. Although we have not encountered the 90 days yet, I am anticipating that with remediation and sampling, followed by reporting we may need some extra time to complete. Novo would like to request a 60-day extension to complete all remediation and closure reporting.

Thanks for your consideration and please let me know if you have any questions.

Bryan

**Bryan Haney, TX P.G**

**Senior Project Manager** | 361.658.3126 |

[Bryan.Haney@altamira-us.com](mailto:Bryan.Haney@altamira-us.com)  
[altamira-us.com](http://altamira-us.com)

*Remediation Response & Reclamation Closure Report  
Novo Oil & Gas – Rana Salada Pad J – Produced Water Release  
Discovery Date: February 11, 2023*



**APPENDIX D**  
Field Documentation

2/12/2023

Wado J Pad New leak (2/11/2023)

0930 Depart Hotel

0951 @ location met up with Juan &amp; Roque walked

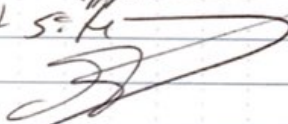
Spill Area

1011 Ryan Arrived on site & we walked spill/Aspen south side of tanks looks ~~good~~ like excavation activities may be deep enough approx 3-3.5'. East and south side of tanks need more excavation as soil is still wet

1030 took photos of Spill/excavated Areas

Spill was from second tank from East spill spread South approx 15' then toward East approx 18' under 12" poly lines then North approx 10' from edge of berm to west to about 4th tank Area South of tanks excavated to approx 3-3.5' Area under poly lines excavated to approx 2' Area between poly lines & side & immediately behind Fractank excavated approx 1' North of poly line behind tanks excavated approx 2'.

1040 Depart Site



Scale: 1 square = \_\_\_\_\_

Rite in the Rain



12/18/2023

Navo Benasafada T Pad

Objectives: collect soil samples &amp; Grids

Weather: 30-40s 15mph south wind P/T cloudy

Personnel: O'Brien J. Kuntz

1049 Arrived @ Location Begin measuring for grids &amp; sampling

1208 setting up to begin sampling will use Stainless Steel hand trowls decontaminated with Alconox &amp; distilled water Rinsed with distilled water between samples

1219 Begin sample collection

1300 All samples collected Samples PSN-1 to PSN-12 are

(4-4.5') 1 sample PSN-13, 14, 15 are 3-3.5'. collect 0-3

Side wall samples south wall / from south wall

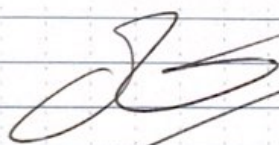
(PSN-Side wall-3 (0-4) 1 from East wall (PSN-Side wall-2 (0-4)

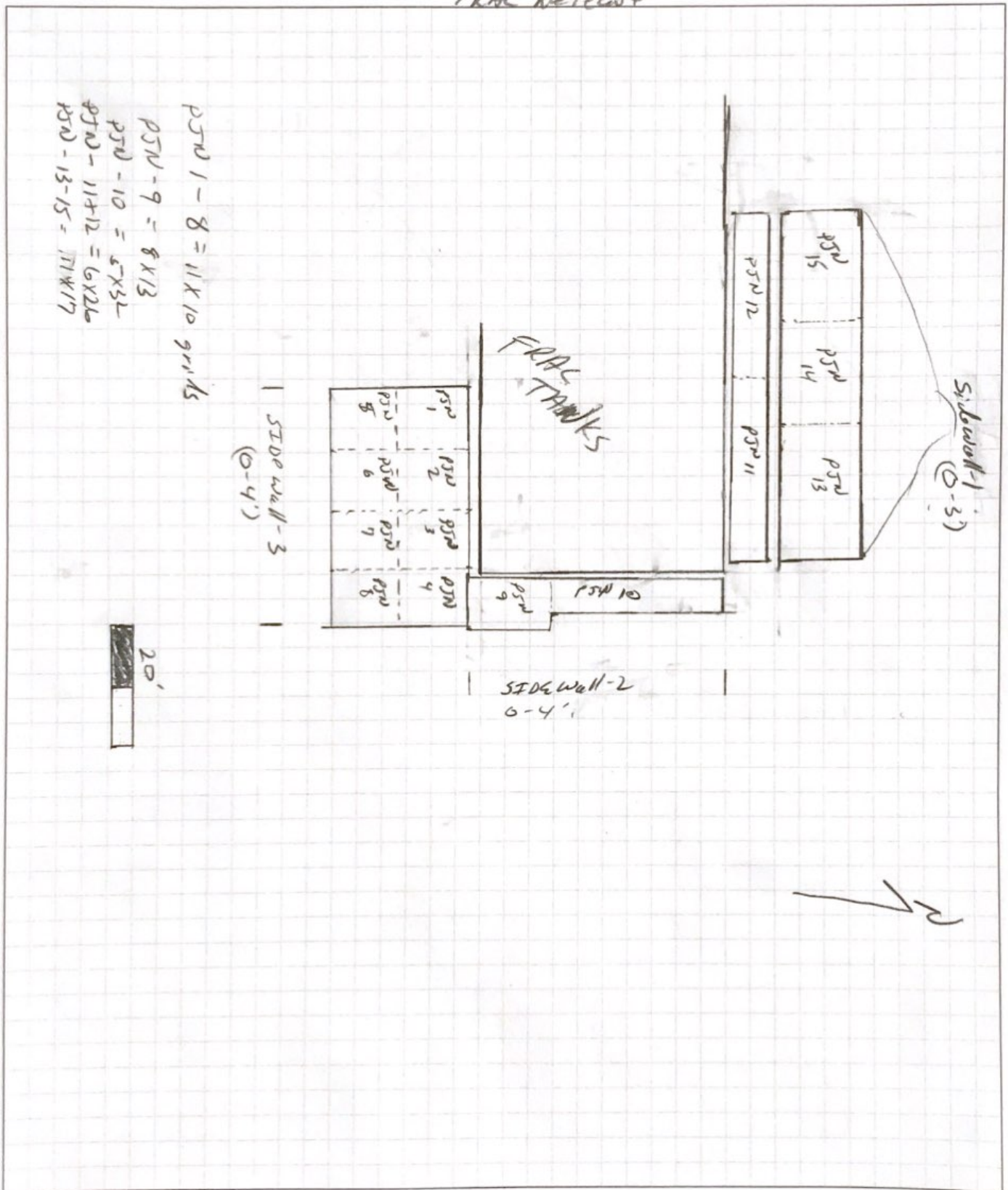
1 from North wall (PSN-Side wall-3 (0-3) All samples in cooler on

ICE

1310 Took site photos of grids

1320 off site



Client: NoboPage: 1 of 1Date: 2/12/2023Project: Runa Salada Spad  
FRAC ReleaseBy: CB





ALTAMIRA

Client: NOVO Oil & GasProject: NOVO M 2302 / 001Page: 1 of 1Date: 2/27/2023By: Higinio Gonzalez

Rana Salada J Pad Release.

Weather: Cold, Sunny

Wind: NE 3MPH

Objective: Collect RJN-9 for verification sample.

Staff on site: Higinio Gonzalez

Arrived on site at 0930, Came from other NOVO site. Using site figure, located RJN-9 to collect for resampling. Sample depth was at 5.5 to 6 Feet, collected in 5 random locations of the grid and placed into sample jar on ice. grid failed for TPH so that's the only analysis to be run at the lab. Left site at 1005.



Client: Permian Resources  
 Project: NVOVM ~~21/2002/001~~  
 2401

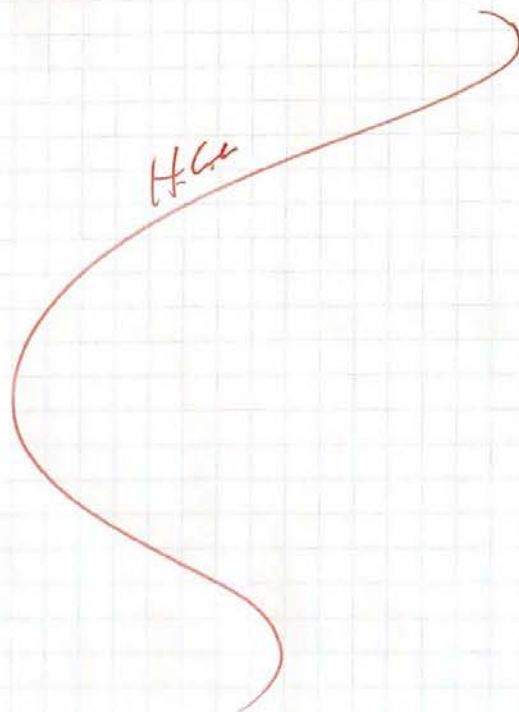
Page: 1 of 1  
 Date: 3-18-24  
 By: H. Gonzalez

Weather: Cool, Sunny Light rain

Staff on site: H. Gonzalez, Standard Safety crew.

- Arrived on site at 0712, filled out ISA, Attended safety meeting.
- Planned excavation with crew supervisor on waste soil Stagny, haul truck ingress and egress on which areas to begin excavation at.
- Digging on G-59 began at 0755.
- Collected PSN-9 and 3 Sidevents in that area at 0830
- Digging on the rest of the contaminated area began at 0840.
- collected 14 samples at 1200, G 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87.
- collected G 68, 67, SW 2, 4 at 1430.
- Left to lab in Hobbs at 1500.

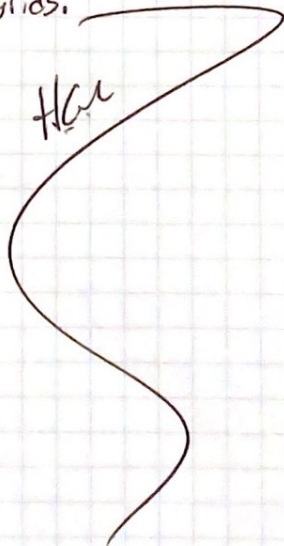
• Equipment on site: Excavator  
 Front end loader  
 2 operators, 1 Spotter, 1 Supervisor (Victor.)





Client: Permian ResourcesProject: NVONM 2401/001Page: 1 of 1Date: 3/29/24By: H. Gonzalez

- Weather: Cold, Sunny
- Staff on Site: H. Gonzalez
- Arrived on site at 0715, filled out JSA, held safety meeting.
- Planned out Sidewall excavation in the "PSN-9" location, and areas with Pussed floors and sidewalls to backfill.
- Began excavation on PSN-9 Sidewall at 0750, extended wall further 2' East, however, noted staining in soil as well as hydrocarbon smell, therefore wall was extended a further 6" for a total extension of 2.5', then collected sample PSN-9 Sidewall-SA (4-8.5')
- Backfill began at 0830 on newly excavated areas to the west of PSN-9.
- Backfill performed using 3' of native soil, with the top cap being 1' of Caliche.
- Backfill areas will be compacted using bucket of front end loader once all layers of soil and base are up to surrounding grade on all sides of the excavation.
- Stockpile for backfill material is already on site.
- Left site at 1145. Remainder of backfill will be completed pending lab results on failed grids.





Client: Permian ResourcesProject: WONM 2401/001Page: 1 of 1  
Date: 4/5/2024  
By: H. Gonzalez

Weather: Cool, sunny, High winds  
Staff on Site: H. Gonzalez

PJN-9 Backfill

- Arrived on site at 1430, signed JSA documents.
- Backfill started on the PJN-9 area.
- Current depth of area to backfill is 8' Bf. with backfilled material covering the north and south walls from previous remediation.
- filling bottom 6.75' with native soil and top 1.25' with Caliche base material, compacting with front bucket on front end loader.
- Backfilling complete at 1556.

H.G.

*Remediation Response & Reclamation Closure Report  
Novo Oil & Gas – Rana Salada Pad J – Produced Water Release  
Discovery Date: February 11, 2023*



**APPENDIX E**  
Waste Management Documentation





(PLEASE PRINT)

\*REQUIRED INFORMATION\*

Name \_\_\_\_\_

Phone No. \_\_\_\_\_

## GENERATOR

NO. 621753

Operator No. \_\_\_\_\_  
Operators Name Maria Lopez  
Address \_\_\_\_\_  
City, State, Zip Salt Lake  
Phone No. \_\_\_\_\_

Permit/RRC No. \_\_\_\_\_  
Lease/Well \_\_\_\_\_  
Name & No. \_\_\_\_\_  
County \_\_\_\_\_  
API No. \_\_\_\_\_  
Rig Name & No. \_\_\_\_\_  
AFE/PO No. \_\_\_\_\_

## EXEMPT E&amp;P Waste/Service Identification and Amount (place volume next to waste type in barrels or cubic yards)

	NON-INJECTABLE WATERS	INJECTABLE WATERS
Oil Based Muds	Washout Water (Non-Injectable)	Washout Water (Injectable)
Oil Based Cuttings	Completion Fluid/Flow Back (Non-Injectable)	Completion Fluid/Flow Back (Injectable)
Waste Based Muds	Produced Water (Non-Injectable)	Produced Water (Injectable)
Water Based Cuttings	Gathering Line Water/Waste (Non-Injectable)	Gathering Line Water/Waste (Injectable)
Produced Formation Solids		
Tank Bottoms	INTERNAL USE ONLY	OTHER EXEMPT WASTES (type and generation process of the waste)
E&P Contaminated Soil	Truck Washout (exempt waste)	
Gas Plant Waste		

WASTE GENERATION PROCESS: ☐ DRILLING ☐ COMPLETION ☐ PRODUCTION ☐ GATHERING LINES

## NON-EXEMPT E&amp;P Waste/Service Identification and Amount

All non-exempt E&amp;P waste must be analysed and be below threshold limits for toxicity (TCLP), ignitability, Corrosivity and Reactivity.

Non-Exempt Other \_\_\_\_\_ \*please select from Non-Exempt Waste List on back

QUANTITY 200 B - BARRELS L - LIQUID Y - YARDS E - EACH

I hereby certify that the above listed material(s), is (are) not hazardous waste as defined by 40 CFR Part 261 or any applicable state law. That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

- ☐ RCRA EXEMPT: Oil field wastes generated from oil and gas exploration and production operation and are not mixed with non-exempt waste (R360 Accepts certifications on a per load basis only)
- ☐ RCRA NON-EXEMPT: Oil field waste which is non-hazardous that does not exceed the minimum standards for waste hazardous by characteristics established in RCRA regulations, 40 CFR 261.21-261.24, or listed hazardous waste as defined by 40 CFR, part 261, subpart D, as amended. The following documentation demonstrating the waste as non-hazardous is attached. (Check the appropriate items as provided)
- ☐ MSDS Information ☐ RCRA Hazardous Waste Analysis ☐ Other (Provide Description Below)
- ☐ EMERGENCY NON-OILFIELD Emergency non-hazardous, non-oilfield waste that has been ordered by the Department of Public Safety (the order, documentation of non-hazardous waste determination and a description of the waste must accompany this form)

(PRINT) AUTHORIZED AGENT'S SIGNATURE

DATE

SIGNATURE

## TRANSPORTER

Transporter's Name MT Logistics LLC  
Address 1000 W. 10th St. Suite 100  
Phone No. 505-241-1111

Driver's Name John Doe  
Phone No. 505-241-1111  
Truck No. 111

I hereby certify that the above named material(s) was/were picked up at the Generator's site listed above and delivered without incident to the disposal facility listed below.

SHIPMENT DATE

DRIVER'S SIGNATURE

DELIVERY DATE

DRIVER'S SIGNATURE

## TRUCK TIME STAMP

IN: \_\_\_\_\_ OUT: \_\_\_\_\_

## DISPOSAL FACILITY

## RECEIVING AREA

Name/No. \_\_\_\_\_

Site Name/ Permit No. Halfway Facility / NM1-006  
Address 6601 Hobbs Hwy US 62 / 180 Mile Marker 66 Carlsbad, NM 88220

Phone No. 575-887-6504

NORM READINGS TAKEN? (Circle One) YES NO  
PASS THE PAINT FILTER TEST? (Circle One) YES NO

If YES, was reading > 50 micro roentgens? (Circle One) YES NO  
NORM (mR/hr) \_\_\_\_\_

## TANK BOTTOMS

	Feet	Inches	BS&W/BBLs Received	Free Water	Total Received	BS&W (%)
1st Gauge						
2nd Gauge						
Received						

I hereby certify that the above load material has been (circle one): ACCEPTED DENIED If denied, why?

NAME (PRINT)

DATE

TITLE

SIGNATURE

C-138

donc@northstarforms.com (877)499-0492

White - R360 ORIGINAL

Yellow- TRANSPORTER COPY

Pink- GENERATOR SITE COPY

Gold- RETURN TO GENERATOR

308.R360-5240





(PLEASE PRINT)

\*REQUIRED INFORMATION\*

Name \_\_\_\_\_

Phone No. \_\_\_\_\_

## GENERATOR

NO. 7005434

Operator No. \_\_\_\_\_  
Operators Name \_\_\_\_\_  
Address \_\_\_\_\_  
City, State, Zip \_\_\_\_\_  
Phone No. \_\_\_\_\_

Permit/RRC No. \_\_\_\_\_  
Lease/Well Name & No. \_\_\_\_\_  
County \_\_\_\_\_  
API No. \_\_\_\_\_  
Rig Name & No. \_\_\_\_\_  
AFE/PO No. \_\_\_\_\_

## EXEMPT E&amp;P Waste/Service Identification and Amount (place volume next to waste type in barrels or cubic yards)

Oil Based Muds	NON-INJECTABLE WATERS	INJECTABLE WATERS
Oil Based Cuttings	Washout Water (Non-Injectable)	Washout Water (Injectable)
Waste Based Muds	Completion Fluid/Flow Back (Non-Injectable)	Completion Fluid/Flow Back (Injectable)
Water Based Cuttings	Produced Water (Non-Injectable)	Produced Water (Injectable)
Produced Formation Solids	Gathering Line Water/Waste (Non-Injectable)	Gathering Line Water/Waste (Injectable)
Tank Bottoms	INTERNAL USE ONLY	OTHER EXEMPT WASTES (type and generation process of the waste)
E&P Contaminated Soil	Truck Washout (exempt waste)	
Gas Plant Waste		

WASTE GENERATION PROCESS: ☐ DRILLING ☐ COMPLETION ☐ PRODUCTION ☐ GATHERING LINES

## NON-EXEMPT E&amp;P Waste/Service Identification and Amount

All non-exempt E&amp;P waste must be analysed and be below threshold limits for toxicity (TCLP), Ignitability, Corrosivity and Reactivity.

Non-Exempt Other \_\_\_\_\_ \*please select from Non-Exempt Waste List on back

QUANTITY \_\_\_\_\_ B - BARRELS \_\_\_\_\_ L - LIQUID \_\_\_\_\_ Y - YARDS \_\_\_\_\_ E - EACH

I hereby certify that the above listed material(s), is (are) not hazardous waste as defined by 40 CFR Part 261 or any applicable state law. That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

- ☐ RCRA EXEMPT: Oil field wastes generated from oil and gas exploration and production operation and are not mixed with non-exempt waste (R360 Accepts certifications on a per load basis only)
- ☐ RCRA NON-EXEMPT: Oil field waste which is non-hazardous that does not exceed the minimum standards for waste hazardous by characteristics established in RCRA regulations, 40 CFR 261.21-261.24, or listed hazardous waste as defined by 40 CFR, part 261, subpart D, as amended. The following documentation demonstrating the waste as non-hazardous is attached. (Check the appropriate items as provided)
- ☐ MSDS Information ☐ RCRA Hazardous Waste Analysis ☐ Other (Provide Description Below)
- ☐ EMERGENCY NON-OILFIELD: Emergency non-hazardous, non-oilfield waste that has been ordered by the Department of Public Safety (the order, documentation of non-hazardous waste determination and a description of the waste must accompany this form)

(PRINT) AUTHORIZED AGENTS SIGNATURE

DATE

SIGNATURE

## TRANSPORTER

Transporter's Name \_\_\_\_\_  
Address \_\_\_\_\_  
Phone No. \_\_\_\_\_

Driver's Name \_\_\_\_\_  
Phone No. \_\_\_\_\_  
Truck No. \_\_\_\_\_

I hereby certify that the above named material(s) was/were picked up at the Generator's site listed above and delivered without incident to the disposal facility listed below.

SHIPMENT DATE

DRIVER'S SIGNATURE

DELIVERY DATE

DRIVER'S SIGNATURE

## TRUCK TIME STAMP

IN: \_\_\_\_\_ OUT: \_\_\_\_\_

## DISPOSAL FACILITY

## RECEIVING AREA

Name/No. \_\_\_\_\_

Site Name/ Permit No. \_\_\_\_\_  
Address \_\_\_\_\_

Halfway Facility / NM1-006

6601 Hobbs Hwy US 62 / 180 Mile Marker 66 Carlsbad, NM 88220

Phone No. 575-887-6504

NORM READINGS TAKEN? (Circle One) YES NO  
PASS THE PAINT FILTER TEST? (Circle One) YES NO

If YES, was reading > 50 micro roentgens? (Circle One) YES NO  
NORM (mR/hr) \_\_\_\_\_

## TANK BOTTOMS

	Feet	Inches	BS&W/BBLS Received	BS&W (%)
1st Gauge				
2nd Gauge				
Received				

I hereby certify that the above load material has been (circle one): ACCEPTED DENIED If denied, why? \_\_\_\_\_

NAME (PRINT)

DATE

TITLE

SIGNATURE

C-138

donc@northstarforms.com (877)499-0492

White - R360 ORIGINAL

Yellow - TRANSPORTER COPY

Pink - GENERATOR SITE COPY

Gold - RETURN TO GENERATOR

308.R360-5240





(PLEASE PRINT)

\*REQUIRED INFORMATION\*

Name \_\_\_\_\_

Phone No. \_\_\_\_\_

## GENERATOR

NO. 7005844

Operator No. \_\_\_\_\_  
Operators Name Nova oil + Gas  
Address \_\_\_\_\_  
City, State, Zip \_\_\_\_\_  
Phone No. \_\_\_\_\_

Permit/RRC No. \_\_\_\_\_  
Lease/Well \_\_\_\_\_  
Name & No. The #1 pad 14000 Booth Station  
County Eddy  
API No. \_\_\_\_\_  
Rig Name & No. \_\_\_\_\_  
AFE/PO No. \_\_\_\_\_

## EXEMPT E&amp;P Waste/Service Identification and Amount (place volume next to waste type in barrels or cubic yards)

	NON-INJECTABLE WATERS	INJECTABLE WATERS
Oil Based Muds	Washout Water (Non-Injectable)	Washout Water (Injectable)
Oil Based Cuttings	Completion Fluid/Flow Back (Non-Injectable)	Completion Fluid/Flow Back (Injectable)
Waste Based Muds	Produced Water (Non-Injectable)	Produced Water (Injectable)
Water Based Cuttings	Gathering Line Water/Waste (Non-Injectable)	Gathering Line Water/Waste (Injectable)
Produced Formation Solids		
Tank Bottoms	INTERNAL USE ONLY	OTHER EXEMPT WASTES (type and generation process of the waste)
E&P Contaminated Soil	Truck Washout (exempt waste)	
Gas Plant Waste		

WASTE GENERATION PROCESS: ☐ DRILLING ☐ COMPLETION ☐ PRODUCTION ☐ GATHERING LINES

## NON-EXEMPT E&amp;P Waste/Service Identification and Amount

All non-exempt E&amp;P waste must be analysed and be below threshold limits for toxicity (TCLP), Ignitability, Corrosivity and Reactivity.

Non-Exempt Other \_\_\_\_\_ \*please select from Non-Exempt Waste List on back

QUANTITY B - BARRELS L - LIQUID Y - YARDS E - EACH

I hereby certify that the above listed material(s), is (are) not hazardous waste as defined by 40 CFR Part 261 or any applicable state law. That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

- ☒ RCRA EXEMPT: Oil field wastes generated from oil and gas exploration and production operation and are not mixed with non-exempt waste (R360 Accepts certifications on a per load basis only)
- ☐ RCRA NON-EXEMPT: Oil field waste which is non-hazardous that does not exceed the minimum standards for waste hazardous by characteristics established in RCRA regulations, 40 CFR 261.21-261.24, or listed hazardous waste as defined by 40 CFR, part 261, subpart D, as amended. The following documentation demonstrating the waste as non-hazardous is attached. (Check the appropriate items as provided)
- ☐ MSDS Information ☐ RCRA Hazardous Waste Analysis ☐ Other (Provide Description Below)
- ☐ EMERGENCY NON-OILFIELD: Emergency non-hazardous, non-oilfield waste that has been ordered by the Department of Public Safety (the order, documentation of non-hazardous waste determination and a description of the waste must accompany this form)

(PRINT) AUTHORIZED AGENTS SIGNATURE

DATE

SIGNATURE

## TRANSPORTER

Transporter's Name CR1 Holdings  
Address 4507 W Canyon Hwy Hobbs, NM 88240  
Phone No. 575-293-1087

Driver's Name Edgar Espinoza / Ivan Morales  
Phone No. 575-393-1087  
Truck No. 118

I hereby certify that the above named material(s) was/were picked up at the Generator's site listed above and delivered without incident to the disposal facility listed below.

SHIPMENT DATE

DRIVER'S SIGNATURE

DELIVERY DATE

DRIVER'S SIGNATURE

## TRUCK TIME STAMP

IN: \_\_\_\_\_ OUT: \_\_\_\_\_

## DISPOSAL FACILITY

## RECEIVING AREA

Name/No. \_\_\_\_\_

Site Name/ Permit No. Halfway Facility / NM1-006  
Address 6601 Hobbs Hwy US 62 / 180 Mile Marker 66 Carlsbad, NM 88220

Phone No. 575-887-6504

NORM READINGS TAKEN? (Circle One) YES NO  
PASS THE PAINT FILTER TEST? (Circle One) YES NO

If YES, was reading > 50 micro roentgens? (Circle One) YES NO  
NORM (mR/hr) \_\_\_\_\_

## TANK BOTTOMS

	Feet	Inches	BS&W/BBLs Received	BS&W (%)
1st Gauge				
2nd Gauge				
Received				

I hereby certify that the above load material has been (circle one): ACCEPTED DENIED If denied, why?

NAME (PRINT)

DATE

TITLE

SIGNATURE

C-138

dnc@northstarforms.com (877)499-0492

White - R360 ORIGINAL

Yellow- TRANSPORTER COPY

Pink- GENERATOR SITE COPY

Gold- RETURN TO GENERATOR

308.R360-5240





(PLEASE PRINT)

\*REQUIRED INFORMATION\*

Name \_\_\_\_\_

Phone No. \_\_\_\_\_

**GENERATOR**NO. **7005853**

Operator No. \_\_\_\_\_  
Operators Name Noro oil fields  
Address \_\_\_\_\_  
City, State, Zip \_\_\_\_\_  
Phone No. \_\_\_\_\_

Permit/RRC No. \_\_\_\_\_  
Lease/Well \_\_\_\_\_  
Name & No. 5.144 Northstar Station  
County \_\_\_\_\_  
API No. \_\_\_\_\_  
Rig Name & No. \_\_\_\_\_  
AFE/PO No. \_\_\_\_\_

**EXEMPT E&P Waste/Service Identification and Amount (place volume next to waste type in barrels or cubic yards)**

Oil Based Muds	_____	NON-INJECTABLE WATERS	_____	INJECTABLE WATERS	_____
Oil Based Cuttings	_____	Washout Water (Non-Injectable)	_____	Washout Water (Injectable)	_____
Waste Based Muds	_____	Completion Fluid/Flow Back (Non-Injectable)	_____	Completion Fluid/Flow Back (Injectable)	_____
Water Based Cuttings	_____	Produced Water (Non-Injectable)	_____	Produced Water (Injectable)	_____
Produced Formation Solids	_____	Gathering Line Water/Waste (Non-Injectable)	_____	Gathering Line Water/Waste (Injectable)	_____
Tank Bottoms	_____	INTERNAL USE ONLY	_____	OTHER EXEMPT WASTES (type and generation process of the waste)	_____
E&P Contaminated Soil	_____	Truck Washout (exempt waste)	_____		
Gas Plant Waste	_____				

WASTE GENERATION PROCESS: ☐ DRILLING ☐ COMPLETION ☐ PRODUCTION ☐ GATHERING LINES**NON-EXEMPT E&P Waste/Service Identification and Amount**

All non-exempt E&amp;P waste must be analysed and be below threshold limits for toxicity (TCLP), Ignitability, Corrosivity and Reactivity.

Non-Exempt Other \_\_\_\_\_ \*please select from Non-Exempt Waste List on back

QUANTITY B - BARRELS L - LIQUID Y - YARDS E - EACH

I hereby certify that the above listed material(s), is (are) not hazardous waste as defined by 40 CFR Part 261 or any applicable state law. That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

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- ☐ RCRA NON-EXEMPT: Oil field waste which is non-hazardous that does not exceed the minimum standards for waste hazardous by characteristics established in RCRA regulations, 40 CFR 261.21-261.24, or listed hazardous waste as defined by 40 CFR, part 261, subpart D, as amended. The following documentation demonstrating the waste as non-hazardous is attached. (Check the appropriate items as provided)
- ☐ MSDS Information ☐ RCRA Hazardous Waste Analysis ☐ Other (Provide Description Below)
- ☐ EMERGENCY NON-OILFIELD Emergency non-hazardous, non-oilfield waste that has been ordered by the Department of Public Safety (the order, documentation of non-hazardous waste determination and a description of the waste must accompany this form)

(PRINT) AUTHORIZED AGENTS SIGNATURE

DATE

SIGNATURE

**TRANSPORTER**

Transporter's Name LRI Holdings LLC  
Address \_\_\_\_\_  
Phone No. \_\_\_\_\_

Driver's Name \_\_\_\_\_  
Phone No. 315 237 1287  
Truck No. \_\_\_\_\_

I hereby certify that the above named material(s) was/were picked up at the Generator's site listed above and delivered without incident to the disposal facility listed below.

SHIPMENT DATE

DRIVER'S SIGNATURE

DELIVERY DATE

DRIVER'S SIGNATURE

**TRUCK TIME STAMP****DISPOSAL FACILITY****RECEIVING AREA**

IN: \_\_\_\_\_ OUT: \_\_\_\_\_

Name/No. \_\_\_\_\_

Site Name/ Permit No. Halfway Facility / NM1-006  
Address 6601 Hobbs Hwy US 62 / 180 Mile Marker 66 Carlsbad, NM 88220

Phone No. 575-887-6504

NORM READINGS TAKEN? (Circle One) YES NO  
PASS THE PAINT FILTER TEST? (Circle One) YES NO

If YES, was reading > 50 micro roentgens? (Circle One) YES NO  
NORM (mR/hr) \_\_\_\_\_

**TANK BOTTOMS**

	Feet	Inches
1st Gauge	_____	_____
2nd Gauge	_____	_____
Received	_____	_____

BS&W/BBLs Received	_____	BS&W (%)	_____
Free Water	_____		
Total Received	_____		

I hereby certify that the above load material has been (circle one): ACCEPTED DENIED If denied, why? \_\_\_\_\_

NAME (PRINT)

DATE

TITLE

SIGNATURE

C-138

donc@northstarforms.com (877)499-0492

White - R360 ORIGINAL

Yellow - TRANSPORTER COPY

Pink - GENERATOR SITE COPY

Gold - RETURN TO GENERATOR

308.R360-5240





(PLEASE PRINT)

\*REQUIRED INFORMATION\*

Name \_\_\_\_\_

Phone No. \_\_\_\_\_

**GENERATOR**

NO. 7005618

Operator No. \_\_\_\_\_  
Operators Name Nova  
Address \_\_\_\_\_  
City, State, Zip \_\_\_\_\_  
Phone No. \_\_\_\_\_

Permit/RRC No. \_\_\_\_\_  
Lease/Well Name & No. J. Pod Hades Boasting Springs  
County \_\_\_\_\_  
API No. \_\_\_\_\_  
Rig Name & No. \_\_\_\_\_  
AFE/PO No. \_\_\_\_\_

**EXEMPT E&P Waste/Service Identification and Amount (place volume next to waste type in barrels or cubic yards)**

	NON-INJECTABLE WATERS	INJECTABLE WATERS
Oil Based Muds	_____	_____
Oil Based Cuttings	_____	_____
Waste Based Muds	_____	_____
Water Based Cuttings	_____	_____
Produced Formation Solids	_____	_____
Tank Bottoms	_____	_____
E&P Contaminated Soil	_____	_____
Gas Plant Waste	_____	_____
	INTERNAL USE ONLY	OTHER EXEMPT WASTES (type and generation process of the waste)
	Truck Washout (exempt waste) _____	

WASTE GENERATION PROCESS: ☐ DRILLING ☐ COMPLETION ☒ PRODUCTION ☐ GATHERING LINES**NON-EXEMPT E&P Waste/Service Identification and Amount**

All non-exempt E&amp;P waste must be analysed and be below threshold limits for toxicity (TCLP), ignitability, Corrosivity and Reactivity.

Non-Exempt Other \_\_\_\_\_ \*please select from Non-Exempt Waste List on back

QUANTITY 15 B - BARRELS L - LIQUID Y - YARDS E - EACH

I hereby certify that the above listed material(s), is (are) not hazardous waste as defined by 40 CFR Part 261 or any applicable state law. That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

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- ☐ RCRA NON-EXEMPT: Oil field waste which is not hazardous that does not exceed the minimum standards for waste hazardous by characteristics established in RCRA regulations, 40 CFR 261.21-261.24, or listed hazardous waste as defined by 40 CFR, part 261, subpart D, as amended. The following documentation demonstrating the waste as non-hazardous is attached. (Check the appropriate items as provided)
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- ☐ EMERGENCY NON-OILFIELD: Emergency non-hazardous, non-oilfield waste that has been ordered by the Department of Public Safety (the order, documentation of non-hazardous waste determination and a description of the waste must accompany this form)

(PRINT) AUTHORIZED AGENTS SIGNATURE

DATE

SIGNATURE

**TRANSPORTER**

Transporter's Name CRU Holdings  
Address 1527 N. 1st St. Suite 100  
Albuquerque NM 87102  
Phone No. 505-383-1070

Driver's Name Jose R. Salinas  
Phone No. \_\_\_\_\_  
Truck No. 120

I hereby certify that the above named material(s) was/were picked up at the Generator's site listed above and delivered without incident to the disposal facility listed below.

SHIPMENT DATE

DRIVER'S SIGNATURE

DELIVERY DATE

DRIVER'S SIGNATURE

**TRUCK TIME STAMP**

IN: \_\_\_\_\_ OUT: \_\_\_\_\_

**DISPOSAL FACILITY****RECEIVING AREA**

Name/No. \_\_\_\_\_

Site Name/ Permit No. Halfway Facility / NM1-006  
Address 6601 Hobbs Hwy US 62 / 180 Mile Marker 66 Carlsbad, NM 88220

Phone No. 575-887-6504

NORM READINGS TAKEN? (Circle One) YES NO  
PASS THE PAINT FILTER TEST? (Circle One) YES NO

If YES, was reading > 50 micro roentgens? (Circle One) YES NO  
NORM (mR/hr) \_\_\_\_\_

**TANK BOTTOMS**

	Feet	Inches	BS&W/BBLS Received	BS&W (%)
1st Gauge	_____	_____	_____	_____
2nd Gauge	_____	_____	Free Water	_____
Received	_____	_____	Total Received	_____

I hereby certify that the above load material has been (circle one): ACCEPTED DENIED If denied, why? \_\_\_\_\_

NAME (PRINT)

DATE

TITLE

SIGNATURE

C-138

done@northstarforms.com (877)499-0492

White - R360 ORIGINAL

Yellow - TRANSPORTER COPY

Pink - GENERATOR SITE COPY

Gold - RETURN TO GENERATOR

308.R360-5240





(PLEASE PRINT)

\*REQUIRED INFORMATION\*

Name \_\_\_\_\_

Phone No. \_\_\_\_\_

## GENERATOR

NO. 7005859

Operator No. \_\_\_\_\_  
Operators Name Novo Oil/Gas  
Address \_\_\_\_\_  
City, State, Zip \_\_\_\_\_  
Phone No. \_\_\_\_\_

Permit/RRC No. \_\_\_\_\_  
Lease/Well Name & No. J. Paul Hobbs Booster Station  
County El Paso  
API No. \_\_\_\_\_  
Rig Name & No. Novo Oil/Gas  
AFE/PO No. \_\_\_\_\_

## EXEMPT E&amp;P Waste/Service Identification and Amount (place volume next to waste type in barrels or cubic yards)

	NON-INJECTABLE WATERS	INJECTABLE WATERS
Oil Based Muds	Washout Water (Non-Injectable)	Washout Water (Injectable)
Oil Based Cuttings	Completion Fluid/Flow Back (Non-Injectable)	Completion Fluid/Flow Back (Injectable)
Waste Based Muds	Produced Water (Non-Injectable)	Produced Water (Injectable)
Water Based Cuttings	Gathering Line Water/Waste (Non-Injectable)	Gathering Line Water/Waste (Injectable)
Produced Formation Solids		
Tank Bottoms	INTERNAL USE ONLY	OTHER EXEMPT WASTES (type and generation process of the waste)
E&P Contaminated Soil	Truck Washout (exempt waste)	
Gas Plant Waste		

WASTE GENERATION PROCESS: ☐ DRILLING ☐ COMPLETION ☐ PRODUCTION ☐ GATHERING LINES

## NON-EXEMPT E&amp;P Waste/Service Identification and Amount

All non-exempt E&amp;P waste must be analysed and be below threshold limits for toxicity (TCLP), Ignitability, Corrosivity and Reactivity.

Non-Exempt Other \_\_\_\_\_ \*please select from Non-Exempt Waste List on back

QUANTITY B - BARRELS L - LIQUID Y - YARDS E - EACH

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- ☐ RCRA NON-EXEMPT: Oil field waste which is non-hazardous that does not exceed the minimum standards for waste hazardous by characteristics established in RCRA regulations, 40 CFR 261.21-261.24, or listed hazardous waste as defined by 40 CFR, part 261, subpart D, as amended. The following documentation demonstrating the waste as non-hazardous is attached. (Check the appropriate items as provided)
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- ☐ EMERGENCY NON-OILFIELD Emergency non-hazardous, non-oilfield waste that has been ordered by the Department of Public Safety (the order, documentation of non-hazardous waste determination and a description of the waste must accompany this form)

(PRINT) AUTHORIZED AGENTS SIGNATURE

DATE

SIGNATURE

## TRANSPORTER

Transporter's Name Novo Holdings LLC  
Address 1307 W. Orleans Blvd, El Paso, TX 79902  
Phone No. 525-393-1079

Driver's Name Salvador Sustaita  
Phone No. 525-393-1079  
Truck No. RG-119

I hereby certify that the above named material(s) was/were picked up at the Generator's site listed above and delivered without incident to the disposal facility listed below.

SHIPMENT DATE

DRIVER'S SIGNATURE

DELIVERY DATE

DRIVER'S SIGNATURE

## TRUCK TIME STAMP

## DISPOSAL FACILITY

## RECEIVING AREA

IN: \_\_\_\_\_ OUT: \_\_\_\_\_

Name/No. \_\_\_\_\_

Site Name/ Permit No. Halfway Facility / NM1-006  
Address 6601 Hobbs Hwy US 62 / 180 Mile Marker 66 Carlsbad, NM 88220

Phone No. 575-887-6504

NORM READINGS TAKEN? (Circle One) YES NO  
PASS THE PAINT FILTER TEST? (Circle One) YES NO

If YES, was reading > 50 micro roentgens? (Circle One) YES NO  
NORM (mR/hr) \_\_\_\_\_

## TANK BOTTOMS

	Feet	Inches	BS&W/BBLs Received	BS&W (%)
1st Gauge				
2nd Gauge			Free Water	
Received			Total Received	

I hereby certify that the above load material has been (circle one): ACCEPTED DENIED If denied, why? \_\_\_\_\_

NAME (PRINT)

DATE

TITLE

SIGNATURE

C-138

donc@northstarforms.com (877)499-0492

White - R360 ORIGINAL

Yellow- TRANSPORTER COPY

Pink- GENERATOR SITE COPY

Gold- RETURN TO GENERATOR

308.R360-5240





(PLEASE PRINT)

\*REQUIRED INFORMATION\*

Name \_\_\_\_\_

Phone No. \_\_\_\_\_

**GENERATOR**NO. **7005865**

Operator No. \_\_\_\_\_  
Operators Name Norio  
Address \_\_\_\_\_  
City, State, Zip \_\_\_\_\_  
Phone No. \_\_\_\_\_

Permit/RRC No. \_\_\_\_\_  
Lease/Well \_\_\_\_\_  
Name & No. Hades Packer Station  
County Eddy  
API No. \_\_\_\_\_  
Rig Name & No. \_\_\_\_\_  
AFE/PO No. \_\_\_\_\_

**EXEMPT E&P Waste/Service Identification and Amount (place volume next to waste type in barrels or cubic yards)**

Oil Based Muds	_____	NON-INJECTABLE WATERS	_____	INJECTABLE WATERS	_____
Oil Based Cuttings	_____	Washout Water (Non-Injectable)	_____	Washout Water (Injectable)	_____
Waste Based Muds	_____	Completion Fluid/Flow Back (Non-Injectable)	_____	Completion Fluid/Flow Back (Injectable)	_____
Water Based Cuttings	_____	Produced Water (Non-Injectable)	_____	Produced Water (Injectable)	_____
Produced Formation Solids	_____	Gathering Line Water/Waste (Non-Injectable)	_____	Gathering Line Water/Waste (Injectable)	_____
Tank Bottoms	_____	INTERNAL USE ONLY	_____	OTHER EXEMPT WASTES (type and generation process of the waste)	_____
E&P Contaminated Soil	_____	Truck Washout (exempt waste)	_____		
Gas Plant Waste	_____				

WASTE GENERATION PROCESS: ☐ DRILLING ☒ COMPLETION ☐ PRODUCTION ☐ GATHERING LINES**NON-EXEMPT E&P Waste/Service Identification and Amount**

All non-exempt E&amp;P waste must be analysed and be below threshold limits for toxicity (TCLP), Ignitability, Corrosivity and Reactivity.

Non-Exempt Other \_\_\_\_\_ \*please select from Non-Exempt Waste List on back

QUANTITY 0 B - BARRELS L - LIQUID Y - YARDS E - EACH

I hereby certify that the above listed material(s), is (are) not hazardous waste as defined by 40 CFR Part 261 or any applicable state law. That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

- ☐ RCRA EXEMPT: Oil field wastes generated from oil and gas exploration and production operation and are not mixed with non-exempt waste (R360 Accepts certifications on a per load basis only)
- ☐ RCRA NON-EXEMPT: Oil field waste which is non-hazardous that does not exceed the minimum standards for waste hazardous by characteristics established in RCRA regulations, 40 CFR 261.21-261.24, or listed hazardous waste as defined by 40 CFR, part 261, subpart D, as amended. The following documentation demonstrating the waste as non-hazardous is attached. (Check the appropriate items as provided)
- ☐ MSDS Information ☐ RCRA Hazardous Waste Analysis ☐ Other (Provide Description Below)
- ☐ EMERGENCY NON-OILFIELD: Emergency non-hazardous, non-oilfield waste that has been ordered by the Department of Public Safety (the order, documentation of non-hazardous waste determination and a description of the waste must accompany this form)

(PRINT) AUTHORIZED AGENTS SIGNATURE \_\_\_\_\_

DATE \_\_\_\_\_

SIGNATURE \_\_\_\_\_

**TRANSPORTER**

Transporter's Name CR I Holdings LLC  
Address 4501 W. Carlsbad Hwy  
Hobbs NM 88240  
Phone No. 575-393-1089

Driver's Name Timmy Trammel  
Phone No. \_\_\_\_\_  
Truck No. 124

I hereby certify that the above named material(s) was/were picked up at the Generator's site listed above and delivered without incident to the disposal facility listed below.

SHIPMENT DATE \_\_\_\_\_

DRIVER'S SIGNATURE \_\_\_\_\_

DELIVERY DATE \_\_\_\_\_

DRIVER'S SIGNATURE \_\_\_\_\_

**TRUCK TIME STAMP**

IN: \_\_\_\_\_ OUT: \_\_\_\_\_

**DISPOSAL FACILITY****RECEIVING AREA**

Name/No. \_\_\_\_\_

Site Name/ Permit No. Halfway Facility / NM1-006  
Address 6601 Hobbs Hwy US 62 / 180 Mile Marker 66 Carlsbad, NM 88220

Phone No. 575-887-6504

NORM READINGS TAKEN? (Circle One) YES NO  
PASS THE PAINT FILTER TEST? (Circle One) YES NO

If YES, was reading > 50 micro roentgens? (Circle One) YES NO  
NORM (mR/hr) \_\_\_\_\_

**TANK BOTTOMS**

1st Gauge	Feet _____	Inches _____	BS&W/BBLS Received	_____	BS&W (%)	_____
2nd Gauge	_____	_____	Free Water	_____		
Received	_____	_____	Total Received	_____		

I hereby certify that the above load material has been (circle one): ACCEPTED DENIED If denied, why? \_\_\_\_\_

NAME (PRINT) \_\_\_\_\_

DATE \_\_\_\_\_

TITLE \_\_\_\_\_

SIGNATURE \_\_\_\_\_

C-138

donc@northstarforms.com (877)499-0492

White - R360 ORIGINAL

Yellow- TRANSPORTER COPY

Pink- GENERATOR SITE COPY

Gold- RETURN TO GENERATOR

308.R360-5240





(PLEASE PRINT)

\*REQUIRED INFORMATION\*

Name \_\_\_\_\_

Phone No. \_\_\_\_\_

## GENERATOR

NO. 7005619

Operator No. \_\_\_\_\_  
Operators Name Noro  
Address \_\_\_\_\_  
City, State, Zip \_\_\_\_\_  
Phone No. \_\_\_\_\_

Permit/RRC No. \_\_\_\_\_  
Lease/Well \_\_\_\_\_  
Name & No. J. Paul Hobbs Bros. Co.  
County Santa Fe  
API No. \_\_\_\_\_  
Rig Name & No. \_\_\_\_\_  
AFE/PO No. \_\_\_\_\_

## EXEMPT E&amp;P Waste/Service Identification and Amount (place volume next to waste type in barrels or cubic yards)

Oil Based Muds	_____	NON-INJECTABLE WATERS	_____	INJECTABLE WATERS	_____
Oil Based Cuttings	_____	Washout Water (Non-Injectable)	_____	Washout Water (Injectable)	_____
Waste Based Muds	_____	Completion Fluid/Flow Back (Non-Injectable)	_____	Completion Fluid/Flow Back (Injectable)	_____
Water Based Cuttings	_____	Produced Water (Non-Injectable)	_____	Produced Water (Injectable)	_____
Produced Formation Solids	_____	Gathering Line Water/Waste (Non-Injectable)	_____	Gathering Line Water/Waste (Injectable)	_____
Tank Bottoms	_____	INTERNAL USE ONLY	_____	OTHER EXEMPT WASTES (type and generation process of the waste)	_____
E&P Contaminated Soil	_____	Truck Washout (exempt waste)	1		
Gas Plant Waste	_____				

WASTE GENERATION PROCESS: ☐ DRILLING ☐ COMPLETION ☐ PRODUCTION ☐ GATHERING LINES

## NON-EXEMPT E&amp;P Waste/Service Identification and Amount

All non-exempt E&amp;P waste must be analysed and be below threshold limits for toxicity (TCLP), Ignitability, Corrosivity and Reactivity.

Non-Exempt Other \_\_\_\_\_ \*please select from Non-Exempt Waste List on back

QUANTITY bin delivery B - BARRELS L - LIQUID Y - YARDS E - EACH

I hereby certify that the above listed material(s), is (are) not hazardous waste as defined by 40 CFR Part 261 or any applicable state law. That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

- ☐ RCRA EXEMPT: Oil field wastes generated from oil and gas exploration and production operation and are not mixed with non-exempt waste (R360 Accepts certifications on a per load basis only)
- ☐ RCRA NON-EXEMPT: Oil field waste which is non-hazardous that does not exceed the minimum standards for waste hazardous by characteristics established in RCRA regulations, 40 CFR 261.21-261.24, or listed hazardous waste as defined by 40 CFR, part 261, subpart D, as amended. The following documentation demonstrating the waste as non-hazardous is attached. (Check the appropriate items as provided)
- ☐ MSDS Information ☐ RCRA Hazardous Waste Analysis ☐ Other (Provide Description Below)
- ☐ EMERGENCY NON-OILFIELD: Emergency non-hazardous, non-oilfield waste that has been ordered by the Department of Public Safety (the order, documentation of non-hazardous waste determination and a description of the waste must accompany this form)

(PRINT) AUTHORIZED AGENTS SIGNATURE

DATE

SIGNATURE

## TRANSPORTER

Transporter's Name CRH Holdings  
Address 4501 W. Carlsbad Hwy  
Hobbs NM 88240  
Phone No. 505-373-1017

Driver's Name Seamus Cetina  
Phone No. \_\_\_\_\_  
Truck No. 120

I hereby certify that the above named material(s) was/were picked up at the Generator's site listed above and delivered without incident to the disposal facility listed below.

SHIPMENT DATE

DRIVER'S SIGNATURE

DELIVERY DATE

DRIVER'S SIGNATURE

## TRUCK TIME STAMP

## DISPOSAL FACILITY

## RECEIVING AREA

IN: \_\_\_\_\_ OUT: \_\_\_\_\_

Name/No. \_\_\_\_\_

Site Name/Permit No. Halfway Facility / NM1-006  
Address 6601 Hobbs Hwy US 62 / 180 Mile Marker 66 Carlsbad, NM 88220

Phone No. 575-887-6504

NORM READINGS TAKEN? (Circle One) YES NO If YES, was reading > 50 micro roentgens? (Circle One) YES NO  
PASS THE PAINT FILTER TEST? (Circle One) YES NO NORM (mR/hr) \_\_\_\_\_

## TANK BOTTOMS

	Feet	Inches	BS&W/BBLs Received	BS&W (%)
1st Gauge			Free Water	
2nd Gauge			Total Received	
Received				

I hereby certify that the above load material has been (circle one): ACCEPTED DENIED If denied, why? \_\_\_\_\_

NAME (PRINT)

DATE

TITLE

SIGNATURE

C-138

donc@northstarforms.com (877)499-0492

White - R360 ORIGINAL

Yellow- TRANSPORTER COPY

Pink- GENERATOR SITE COPY

Gold- RETURN TO GENERATOR

308.R360-5240





## NEW MEXICO NON-HAZARDOUS OILFIELD WASTE MANIFEST

(PLEASE PRINT)

\*REQUIRED INFORMATION\*

Name \_\_\_\_\_

Phone No. \_\_\_\_\_

## GENERATOR

NO. 7005854

Operator No. \_\_\_\_\_  
Operators Name Wolo Oil & Gas  
Address \_\_\_\_\_  
City, State, Zip \_\_\_\_\_  
Phone No. \_\_\_\_\_

Permit/RRC No. \_\_\_\_\_  
Lease/Well \_\_\_\_\_  
Name & No. Wolo Oil & Gas  
County 22dy  
API No. \_\_\_\_\_  
Rig Name & No. Wind Holes Transfer Station  
AFE/PO No. \_\_\_\_\_

## EXEMPT E&amp;P Waste/Service Identification and Amount (place volume next to waste type in barrels or cubic yards)

	NON-INJECTABLE WATERS	INJECTABLE WATERS
Oil Based Muds	Washout Water (Non-Injectable)	Washout Water (Injectable)
Oil Based Cuttings	Completion Fluid/Flow Back (Non-Injectable)	Completion Fluid/Flow Back (Injectable)
Waste Based Muds	Produced Water (Non-Injectable)	Produced Water (Injectable)
Water Based Cuttings	Gathering Line Water/Waste (Non-Injectable)	Gathering Line Water/Waste (Injectable)
Produced Formation Solids		
Tank Bottoms	INTERNAL USE ONLY	OTHER EXEMPT WASTES (type and generation process of the waste)
E&P Contaminated Soil	Truck Washout (exempt waste)	
Gas Plant Waste		

WASTE GENERATION PROCESS: ☐ DRILLING ☐ COMPLETION ☐ PRODUCTION ☐ GATHERING LINES

## NON-EXEMPT E&amp;P Waste/Service Identification and Amount

All non-exempt E&amp;P waste must be analysed and be below threshold limits for toxicity (TCLP), Ignitability, Corrosivity and Reactivity.

Non-Exempt Other \_\_\_\_\_ \*please select from Non-Exempt Waste List on back

QUANTITY 70 B - BARRELS L - LIQUID Y - YARDS E - EACH

I hereby certify that the above listed material(s), is (are) not hazardous waste as defined by 40 CFR Part 261 or any applicable state law. That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

☐ RCRA EXEMPT: Oil field wastes generated from oil and gas exploration and production operation and are not mixed with non-exempt waste (R360 Accepts certifications on a per load basis only)☐ RCRA NON-EXEMPT: Oil field waste which is non-hazardous that does not exceed the minimum standards for waste hazardous by characteristics established in RCRA regulations, 40 CFR 261.21-261.24, or listed hazardous waste as defined by 40 CFR, part 261, subpart D, as amended. The following documentation demonstrating the waste as non-hazardous is attached. (Check the appropriate items as provided)☐ MSDS Information ☐ RCRA Hazardous Waste Analysis ☐ Other (Provide Description Below)☐ EMERGENCY NON-OILFIELD Emergency non-hazardous, non-oilfield waste that has been ordered by the Department of Public Safety (the order, documentation of non-hazardous waste determination and a description of the waste must accompany this form)

(PRINT) AUTHORIZED AGENTS SIGNATURE

DATE

SIGNATURE

## TRANSPORTER

Transporter's Name CRI Holdings LLC  
Address 4501 Carlisbad Hwy  
Hobbs NM 88240  
Phone No. (505) 393-1029

Driver's Name Michael Williams  
Phone No. (505) 393-1049  
Truck No. 106

I hereby certify that the above named material(s) was/were picked up at the Generator's site listed above and delivered without incident to the disposal facility listed below.

SHIPMENT DATE

DRIVER'S SIGNATURE

DELIVERY DATE

DRIVER'S SIGNATURE

## TRUCK TIME STAMP

IN: \_\_\_\_\_ OUT: \_\_\_\_\_

## DISPOSAL FACILITY

## RECEIVING AREA

Name/No. \_\_\_\_\_

Site Name/ Permit No. Halfway Facility / NM1-006  
Address 6601 Hobbs Hwy US 62 / 180 Mile Marker 66 Carlsbad, NM 88220

Phone No. 575-887-6504

NORM READINGS TAKEN? (Circle One) YES NO  
PASS THE PAINT FILTER TEST? (Circle One) YES NO

If YES, was reading > 50 micro roentgens? (Circle One) YES NO  
NORM (mR/hr) \_\_\_\_\_

## TANK BOTTOMS

Feet Inches

1st Gauge		
2nd Gauge		
Received		

BS&W/BBLs Received		BS&W (%)	
Free Water			
Total Received			

I hereby certify that the above load material has been (circle one): ACCEPTED DENIED If denied, why?

NAME (PRINT)

DATE

TITLE

SIGNATURE

C-138

donc@northstarforms.com (877)499-0492

White - R360 ORIGINAL

Yellow - TRANSPORTER COPY

Pink - GENERATOR SITE COPY

Gold - RETURN TO GENERATOR

308.R360-5240



## NEW MEXICO NON-HAZARDOUS OILFIELD WASTE MANIFEST

Company Man Contact Information

(PLEASE PRINT)

\*REQUIRED INFORMATION\*

Name \_\_\_\_\_

Phone No. \_\_\_\_\_

## GENERATOR

NO. 7005735

Generator No. \_\_\_\_\_

Permit/RRC No. \_\_\_\_\_

Operators Name \_\_\_\_\_

Lease/Well \_\_\_\_\_

Address \_\_\_\_\_

Name &amp; No. \_\_\_\_\_

City, State, Zip \_\_\_\_\_

County \_\_\_\_\_

Phone No. \_\_\_\_\_

API No. \_\_\_\_\_

Rig Name &amp; No. \_\_\_\_\_

AFE/PO No. \_\_\_\_\_

## EXEMPT E&amp;P Waste/Service Identification and Amount (place volume next to waste type in barrels or cubic yards)

Oil Based Muds	_____	NON-INJECTABLE WATERS	_____	INJECTABLE WATERS	_____
Oil Based Cuttings	_____	Washout Water (Non-Injectable)	_____	Washout Water (Injectable)	_____
Waste Based Muds	_____	Completion Fluid/Flow Back (Non-Injectable)	_____	Completion Fluid/Flow Back (Injectable)	_____
Water Based Cuttings	_____	Produced Water (Non-Injectable)	_____	Produced Water (Injectable)	_____
Produced Formation Solids	_____	Gathering Line Water/Waste (Non-Injectable)	_____	Gathering Line Water/Waste (injectable)	_____
Tank Bottoms	_____	INTERNAL USE ONLY	_____	OTHER EXEMPT WASTES (type and generation process of the waste)	_____
E&P Contaminated Soil	_____	Truck Washout (exempt waste)	_____		
Gas Plant Waste	_____				

WASTE GENERATION PROCESS: ☐ DRILLING ☐ COMPLETION ☐ PRODUCTION ☐ GATHERING LINES

## NON-EXEMPT E&amp;P Waste/Service Identification and Amount

All non-exempt E&amp;P waste must be analysed and be below threshold limits for toxicity (TCLP), Ignitability, Corrosivity and Reactivity.

Non-Exempt Other \_\_\_\_\_ \*please select from Non-Exempt Waste List on back

QUANTITY B - BARRELS L - LIQUID Y - YARDS E - EACH

I hereby certify that the above listed material(s), is (are) not hazardous waste as defined by 40 CFR Part 261 or any applicable state law. That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

☐ RCRA EXEMPT: Oil field wastes generated from oil and gas exploration and production operation and are not mixed with non-exempt waste (R360 Accepts certifications on a per load basis only)☐ RCRA NON-EXEMPT: Oil field waste which is non-hazardous that does not exceed the minimum standards for waste hazardous by characteristics established in RCRA regulations, 40 CFR 261.21-261.24, or listed hazardous waste as defined by 40 CFR, part 261, subpart D, as amended. The following documentation demonstrating the waste as non-hazardous is attached. (Check the appropriate items as provided)☐ MSDS Information ☐ RCRA Hazardous Waste Analysis ☐ Other (Provide Description Below)☐ EMERGENCY NON-OILFIELD: Emergency non-hazardous, non-oilfield waste that has been ordered by the Department of Public Safety (the order, documentation of non-hazardous waste determination and a description of the waste must accompany this form)

(PRINT) AUTHORIZED AGENTS SIGNATURE

DATE

SIGNATURE

## TRANSPORTER

Transporter's Name \_\_\_\_\_

Driver's Name \_\_\_\_\_

Address \_\_\_\_\_

Phone No. \_\_\_\_\_

Phone No. \_\_\_\_\_

Truck No. \_\_\_\_\_

I hereby certify that the above named material(s) was/were picked up at the Generator's site listed above and delivered without incident to the disposal facility listed below.

SHIPMENT DATE

DRIVER'S SIGNATURE

DELIVERY DATE

DRIVER'S SIGNATURE

## TRUCK TIME STAMP

IN: \_\_\_\_\_ OUT: \_\_\_\_\_

## DISPOSAL FACILITY

## RECEIVING AREA

Name/No. \_\_\_\_\_

Site Name/

Halfway Facility / NM1-006

Phone No. 575-887-6504

Permit No. \_\_\_\_\_

Address 6601 Hobbs Hwy US 62 / 180 Mile Marker 66 Carlsbad, NM 88220

NORM READINGS TAKEN? (Circle One) YES NO

If YES, was reading &gt; 50 micro roentgens? (Circle One) YES NO

PASS THE PAINT FILTER TEST? (Circle One) YES NO

NORM (mR/hr) \_\_\_\_\_

## TANK BOTTOMS

Feet

Inches

1st Gauge	_____	_____
2nd Gauge	_____	_____
Received	_____	_____

BS&W/BLS Received	_____	BS&W (%)	_____
Free Water	_____		
Total Received	_____		

I hereby certify that the above load material has been (circle one):

ACCEPTED

DENIED

If denied, why? \_\_\_\_\_

NAME (PRINT)

DATE

TITLE

SIGNATURE

C-138

donc@northstarforms.com (877)499-0492

White - R360 ORIGINAL

Yellow- TRANSPORTER COPY

Pink- GENERATOR SITE COPY

Gold- RETURN TO GENERATOR

308.R360-5240





(PLEASE PRINT)

\*REQUIRED INFORMATION\*

Company Man Contact Information

Name \_\_\_\_\_

Phone No. \_\_\_\_\_

## GENERATOR

NO. 7001017

Operator No. \_\_\_\_\_

Permit/RRC No. \_\_\_\_\_

Operators Name \_\_\_\_\_

Lease/Well \_\_\_\_\_

Address \_\_\_\_\_

Name &amp; No. \_\_\_\_\_

City, State, Zip \_\_\_\_\_

County \_\_\_\_\_

Phone No. \_\_\_\_\_

API No. \_\_\_\_\_

Rig Name &amp; No. \_\_\_\_\_

AFE/PO No. \_\_\_\_\_

## EXEMPT E&amp;P Waste/Service Identification and Amount (place volume next to waste type in barrels or cubic yards)

	NON-INJECTABLE WATERS	INJECTABLE WATERS
Oil Based Muds	_____	_____
Oil Based Cuttings	_____	_____
Waste Based Muds	_____	_____
Water Based Cuttings	_____	_____
Produced Formation Solids	_____	_____
Tank Bottoms	_____	_____
E&P Contaminated Soil	_____	_____
Gas Plant Waste	_____	_____
	INTERNAL USE ONLY	OTHER EXEMPT WASTES (type and generation process of the waste)
	Truck Washout (exempt waste)	_____

WASTE GENERATION PROCESS: ☐ DRILLING ☐ COMPLETION ☐ PRODUCTION ☐ GATHERING LINES

## NON-EXEMPT E&amp;P Waste/Service Identification and Amount

All non-exempt E&amp;P waste must be analysed and be below threshold limits for toxicity (TCLP), Ignitability, Corrosivity and Reactivity.

Non-Exempt Other \_\_\_\_\_ \*please select from Non-Exempt Waste List on back

QUANTITY B - BARRELS L - LIQUID Y - YARDS E - EACH

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(PRINT) AUTHORIZED AGENTS SIGNATURE

DATE

SIGNATURE

## TRANSPORTER

Transporter's Name \_\_\_\_\_

Driver's Name \_\_\_\_\_

Address \_\_\_\_\_

Phone No. \_\_\_\_\_

Phone No. \_\_\_\_\_

Truck No. \_\_\_\_\_

I hereby certify that the above named material(s) was/were picked up at the Generator's site listed above and delivered without incident to the disposal facility listed below.

SHIPMENT DATE

DRIVER'S SIGNATURE

DELIVERY DATE

DRIVER'S SIGNATURE

## TRUCK TIME STAMP

## DISPOSAL FACILITY

## RECEIVING AREA

IN: \_\_\_\_\_ OUT: \_\_\_\_\_

Name/No. \_\_\_\_\_

Site Name/  
Permit No. **Halfway Facility / NM1-006**  
Address **6601 Hobbs Hwy US 62 / 180 Mile Marker 66 Carlsbad, NM 88220**Phone No. **575-887-6504**NORM READINGS TAKEN? (Circle One) YES NO  
PASS THE PAINT FILTER TEST? (Circle One) YES NOIf YES, was reading > 50 micro roentgens? (Circle One) YES NO  
NORM (mR/hr) \_\_\_\_\_

## TANK BOTTOMS

	Feet	Inches
1st Gauge	_____	_____
2nd Gauge	_____	_____
Received	_____	_____

BS&W/BBLS Received	_____	BS&W (%)	_____
Free Water	_____		_____
Total Received	_____		_____

I hereby certify that the above load material has been (circle one):

ACCEPTED

DENIED

If denied, why? \_\_\_\_\_

NAME (PRINT)

DATE

TITLE

SIGNATURE

C-138

donc@northstarforms.com (877)499-0492

White - R360 ORIGINAL

Yellow- TRANSPORTER COPY

Pink- GENERATOR SITE COPY

Gold- RETURN TO GENERATOR

308.R360-5240





(PLEASE PRINT)

\*REQUIRED INFORMATION\*

Name John TinsleyPhone No. 505-253-1875

## GENERATOR

NO. 617289

Operator No. \_\_\_\_\_  
Operators Name Northstar  
Address \_\_\_\_\_  
City, State, Zip \_\_\_\_\_  
Phone No. \_\_\_\_\_

Permit/RRC No. \_\_\_\_\_  
Lease/Well \_\_\_\_\_  
Name & No. Spill Hydro Break Station  
County \_\_\_\_\_  
API No. \_\_\_\_\_  
Rig Name & No. \_\_\_\_\_  
AFE/PO No. \_\_\_\_\_

## EXEMPT E&amp;P Waste/Service Identification and Amount (place volume next to waste type in barrels or cubic yards)

Oil Based Muds	_____	NON-INJECTABLE WATERS	_____	INJECTABLE WATERS	_____
Oil Based Cuttings	_____	Washout Water (Non-Injectable)	_____	Washout Water (Injectable)	_____
Waste Based Muds	_____	Completion Fluid/Flow Back (Non-Injectable)	_____	Completion Fluid/Flow Back (Injectable)	_____
Water Based Cuttings	_____	Produced Water (Non-Injectable)	_____	Produced Water (Injectable)	_____
Produced Formation Solids	_____	Gathering Line Water/Waste (Non-Injectable)	_____	Gathering Line Water/Waste (Injectable)	_____
Tank Bottoms	_____	INTERNAL USE ONLY	_____	OTHER EXEMPT WASTES (type and generation process of the waste)	_____
E&P Contaminated Soil	_____	Truck Washout (exempt waste)	_____		
Gas Plant Waste	_____				

WASTE GENERATION PROCESS: ☐ DRILLING ☐ COMPLETION ☐ PRODUCTION ☐ GATHERING LINES

## NON-EXEMPT E&amp;P Waste/Service Identification and Amount

All non-exempt E&amp;P waste must be analysed and be below threshold limits for toxicity (TCLP), Ignitability, Corrosivity and Reactivity.

Non-Exempt Other \_\_\_\_\_ \*please select from Non-Exempt Waste List on back

QUANTITY 20 B - BARRELS L - LIQUID Y - YARDS E - EACH

I hereby certify that the above listed material(s), is (are) not hazardous waste as defined by 40 CFR Part 261 or any applicable state law. That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

- ☐ RCRA EXEMPT: Oil field wastes generated from oil and gas exploration and production operation and are not mixed with non-exempt waste (R360 Accepts certifications on a per load basis only)
- ☐ RCRA NON-EXEMPT: Oil field waste which is non-hazardous that does not exceed the minimum standards for waste hazardous by characteristics established in RCRA regulations, 40 CFR 261.21-261.24, or listed hazardous waste as defined by 40 CFR, part 261, subpart D, as amended. The following documentation demonstrating the waste as non-hazardous is attached. (Check the appropriate items as provided)
- ☐ MSDS Information ☐ RCRA Hazardous Waste Analysis ☐ Other (Provide Description Below)
- ☐ EMERGENCY NON-OILFIELD Emergency non-hazardous, non-oilfield waste that has been ordered by the Department of Public Safety (the order, documentation of non-hazardous waste determination and a description of the waste must accompany this form)

(PRINT) AUTHORIZED AGENTS SIGNATURE

DATE

SIGNATURE

## TRANSPORTER

Transporter's Name Northstar  
Address 6601 Hobbs Hwy US 62 / 180 Mile Marker 66 Carlsbad, NM 88220  
Phone No. 505-253-1875

Driver's Name John Tinsley  
Phone No. 505-253-1875  
Truck No. 108

I hereby certify that the above named material(s) was/were picked up at the Generator's site listed above and delivered without incident to the disposal facility listed below.

SHIPMENT DATE

DRIVER'S SIGNATURE

DELIVERY DATE

DRIVER'S SIGNATURE

## TRUCK TIME STAMP

IN: \_\_\_\_\_ OUT: \_\_\_\_\_

## DISPOSAL FACILITY

## RECEIVING AREA

Name/No. \_\_\_\_\_

Site Name/ Halfway Facility / NM1-006  
Permit No. \_\_\_\_\_  
Address 6601 Hobbs Hwy US 62 / 180 Mile Marker 66 Carlsbad, NM 88220

Phone No. 575-887-6504

NORM READINGS TAKEN? (Circle One) YES NO

If YES, was reading &gt; 50 micro roentgens? (Circle One) YES NO

PASS THE PAINT FILTER TEST? (Circle One) YES NO

NORM (mR/hr) \_\_\_\_\_

## TANK BOTTOMS

	Feet	Inches
1st Gauge	_____	_____
2nd Gauge	_____	_____
Received	_____	_____

BS&W/BBLs Received	_____	BS&W (%)	_____
Free Water	_____		
Total Received	_____		

I hereby certify that the above load material has been (circle one): ACCEPTED DENIED If denied, why? \_\_\_\_\_

NAME (PRINT)

DATE

TITLE

SIGNATURE

C-138

donc@northstarforms.com (877)499-0492

White - R360 ORIGINAL

Yellow- TRANSPORTER COPY

Pink- GENERATOR SITE COPY

Gold- RETURN TO GENERATOR

308.R360-5240





(PLEASE PRINT)

\*REQUIRED INFORMATION\*

Name

Phone No.

## GENERATOR

NO. 7005920

Operator No. \_\_\_\_\_  
Operators Name \_\_\_\_\_  
Address \_\_\_\_\_  
City, State, Zip \_\_\_\_\_  
Phone No. \_\_\_\_\_

Permit/RRC No. \_\_\_\_\_  
Lease/Well Name & No. \_\_\_\_\_  
County \_\_\_\_\_  
API No. \_\_\_\_\_  
Rig Name & No. \_\_\_\_\_  
AFE/PO No. \_\_\_\_\_

## EXEMPT E&amp;P Waste/Service Identification and Amount (place volume next to waste type in barrels or cubic yards)

Oil Based Muds	NON-INJECTABLE WATERS	INJECTABLE WATERS
Oil Based Cuttings	Washout Water (Non-Injectable)	Washout Water (Injectable)
Waste Based Muds	Completion Fluid/Flow Back (Non-Injectable)	Completion Fluid/Flow Back (Injectable)
Water Based Cuttings	Produced Water (Non-Injectable)	Produced Water (Injectable)
Produced Formation Solids	Gathering Line Water/Waste (Non-Injectable)	Gathering Line Water/Waste (Injectable)
Tank Bottoms	INTERNAL USE ONLY	OTHER EXEMPT WASTES (type and generation process of the waste)
E&P Contaminated Soil	Truck Washout (exempt waste)	
Gas Plant Waste		

WASTE GENERATION PROCESS: ☐ DRILLING ☐ COMPLETION ☐ PRODUCTION ☐ GATHERING LINES

## NON-EXEMPT E&amp;P Waste/Service Identification and Amount

All non-exempt E&amp;P waste must be analysed and be below threshold limits for toxicity (TCLP), Ignitability, Corrosivity and Reactivity.

Non-Exempt Other \_\_\_\_\_ \*please select from Non-Exempt Waste List on back

QUANTITY 20 YPS B - BARRELS L - LIQUID Y - YARDS E - EACH

I hereby certify that the above listed material(s), is (are) not hazardous waste as defined by 40 CFR Part 261 or any applicable state law. That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

- ☐ RCRA EXEMPT: Oil field wastes generated from oil and gas exploration and production operation and are not mixed with non-exempt waste (R360 Accepts certifications on a per load basis only)
- ☐ RCRA NON-EXEMPT: Oil field waste which is non-hazardous that does not exceed the minimum standards for waste hazardous by characteristics established in RCRA regulations, 40 CFR 261.21-261.24, or listed hazardous waste as defined by 40 CFR, part 261, subpart D, as amended. The following documentation demonstrating the waste as non-hazardous is attached. (Check the appropriate items as provided)
- ☐ MSDS Information ☐ RCRA Hazardous Waste Analysis ☐ Other (Provide Description Below)
- ☐ EMERGENCY NON-OILFIELD Emergency non-hazardous, non-oilfield waste that has been ordered by the Department of Public Safety (the order, documentation of non-hazardous waste determination and a description of the waste must accompany this form)

(PRINT) AUTHORIZED AGENTS SIGNATURE

DATE

SIGNATURE

## TRANSPORTER

Transporter's Name \_\_\_\_\_  
Address \_\_\_\_\_  
Phone No. \_\_\_\_\_

Driver's Name \_\_\_\_\_  
Phone No. \_\_\_\_\_  
Truck No. \_\_\_\_\_

I hereby certify that the above named material(s) was/were picked up at the Generator's site listed above and delivered without incident to the disposal facility listed below.

SHIPMENT DATE

DRIVER'S SIGNATURE

DELIVERY DATE

DRIVER'S SIGNATURE

## TRUCK TIME STAMP

## DISPOSAL FACILITY

## RECEIVING AREA

IN: \_\_\_\_\_ OUT: \_\_\_\_\_

Name/No. \_\_\_\_\_

Site Name/ Permit No. \_\_\_\_\_  
Address \_\_\_\_\_

Halfway Facility / NM1-006

6601 Hobbs Hwy US 62 / 180 Mile Marker 66 Carlsbad, NM 88220

Phone No. 575-887-6504

NORM READINGS TAKEN? (Circle One) YES NO  
PASS THE PAINT FILTER TEST? (Circle One) YES NO

If YES, was reading > 50 micro roentgens? (Circle One) YES NO  
NORM (mR/hr) \_\_\_\_\_

## TANK BOTTOMS

	Feet	Inches	BS&W/BBLS Received	BS&W (%)
1st Gauge				
2nd Gauge				
Received				

I hereby certify that the above load material has been (circle one): ACCEPTED DENIED If denied, why?

NAME (PRINT)

DATE

TITLE

SIGNATURE

C-138

donc@northstarforms.com (877)499-0492

White - R360 ORIGINAL

Yellow - TRANSPORTER COPY

Pink - GENERATOR SITE COPY

Gold - RETURN TO GENERATOR

308.R360-5240





(PLEASE PRINT)

\*REQUIRED INFORMATION\*

Name \_\_\_\_\_

Phone No. \_\_\_\_\_

## GENERATOR

NO. 7005882

Operator No. \_\_\_\_\_  
Operators Name Novo Oil & Gas  
Address \_\_\_\_\_  
City, State, Zip \_\_\_\_\_  
Phone No. \_\_\_\_\_

Permit/RRC No. \_\_\_\_\_  
Lease/Well Name & No. Plano Sub 3 2111  
County Elm  
API No. \_\_\_\_\_  
Rig Name & No. TRAC Industries Drilling Services  
AFE/PO No. \_\_\_\_\_

## EXEMPT E&amp;P Waste/Service Identification and Amount (place volume next to waste type in barrels or cubic yards)

Oil Based Muds	_____	NON-INJECTABLE WATERS	_____	INJECTABLE WATERS	_____
Oil Based Cuttings	_____	Washout Water (Non-Injectable)	_____	Washout Water (Injectable)	_____
Waste Based Muds	_____	Completion Fluid/Flow Back (Non-Injectable)	_____	Completion Fluid/Flow Back (Injectable)	_____
Water Based Cuttings	_____	Produced Water (Non-Injectable)	_____	Produced Water (Injectable)	_____
Produced Formation Solids	_____	Gathering Line Water/Waste (Non-Injectable)	_____	Gathering Line Water/Waste (Injectable)	_____
Tank Bottoms	_____	INTERNAL USE ONLY	_____	OTHER EXEMPT WASTES (type and generation process of the waste)	_____
E&P Contaminated Soil	_____	Truck Washout (exempt waste)	_____		_____
Gas Plant Waste	_____		_____		_____

WASTE GENERATION PROCESS: ☒ DRILLING ☐ COMPLETION ☐ PRODUCTION ☐ GATHERING LINES

## NON-EXEMPT E&amp;P Waste/Service Identification and Amount

All non-exempt E&amp;P waste must be analysed and be below threshold limits for toxicity (TCLP), Ignitability, Corrosivity and Reactivity.

Non-Exempt Other \_\_\_\_\_ \*please select from Non-Exempt Waste List on back

QUANTITY 20 B - BARRELS L - LIQUID Y - YARDS E - EACH

I hereby certify that the above listed material(s), is (are) not hazardous waste as defined by 40 CFR Part 261 or any applicable state law. That each waste has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulation.

- ☒ RCRA EXEMPT: Oil field wastes generated from oil and gas exploration and production operation and are not mixed with non-exempt waste (R360 Accepts certifications on a per load basis only)
- ☐ RCRA NON-EXEMPT: Oil field waste which is non-hazardous that does not exceed the minimum standards for waste hazardous by characteristics established in RCRA regulations, 40 CFR 261.21-261.24, or listed hazardous waste as defined by 40 CFR, part 261, subpart D, as amended. The following documentation demonstrating the waste as non-hazardous is attached. (Check the appropriate items as provided)
- ☐ MSDS Information ☐ RCRA Hazardous Waste Analysis ☐ Other (Provide Description Below)
- ☐ EMERGENCY NON-OILFIELD Emergency non-hazardous, non-oilfield waste that has been ordered by the Department of Public Safety (the order, documentation of non-hazardous waste determination and a description of the waste must accompany this form)

(PRINT) AUTHORIZED AGENTS SIGNATURE \_\_\_\_\_

DATE \_\_\_\_\_

SIGNATURE \_\_\_\_\_

## TRANSPORTER

Transporter's Name CRS Holdings LLC  
Address 1501 W. Carlsbad Hwy  
Hobbs NM 88240  
Phone No. 575 343 1049

Driver's Name Clarence Mathews  
Phone No. 575 343 1049  
Truck No. 20110

I hereby certify that the above named material(s) was/were picked up at the Generator's site listed above and delivered without incident to the disposal facility listed below.

SHIPMENT DATE \_\_\_\_\_

DRIVER'S SIGNATURE \_\_\_\_\_

DELIVERY DATE \_\_\_\_\_

DRIVER'S SIGNATURE \_\_\_\_\_

## TRUCK TIME STAMP

IN: \_\_\_\_\_ OUT: \_\_\_\_\_

## DISPOSAL FACILITY

## RECEIVING AREA

Name/No. \_\_\_\_\_

Site Name/ Permit No. Halfway Facility / NM1-006  
Address 6601 Hobbs Hwy US 62 / 180 Mile Marker 66 Carlsbad, NM 88220

Phone No. 575-887-6504

NORM READINGS TAKEN? (Circle One) YES NO  
PASS THE PAINT FILTER TEST? (Circle One) YES NO

If YES, was reading > 50 micro roentgens? (Circle One) YES NO  
NORM (mR/hr) \_\_\_\_\_

## TANK BOTTOMS

	Feet	Inches
1st Gauge	_____	_____
2nd Gauge	_____	_____
Received	_____	_____

BS&W/BBLs Received	_____	BS&W (%)	_____
Free Water	_____		_____
Total Received	_____		_____

I hereby certify that the above load material has been (circle one): ACCEPTED DENIED If denied, why? \_\_\_\_\_

NAME (PRINT) \_\_\_\_\_

DATE \_\_\_\_\_

TITLE \_\_\_\_\_

SIGNATURE \_\_\_\_\_

C-138

donc@northstarforms.com (877)499-0492

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Yellow- TRANSPORTER COPY

Pink- GENERATOR SITE COPY

Gold- RETURN TO GENERATOR

308.R360-5240





# LEA LAND, LLC SURFACE WASTE LANDFILL

MILE MARKER #64 US HWY 62/180 • 30 MILES EAST OF CARLSBAD, NM • PHONE (575) 887-4048

<b>NON-HAZARDOUS WASTE MANIFEST</b>		<b>No.</b> 202271	<b>Trailer No.</b> STANDARD 009	
<b>GENERATOR</b>	<b>Company Name:</b> Permian Resources		<b>Address:</b> 300 N. Marienfield St., #1000 Midland, TX 79701	
	<b>Phone:</b> (432) 695-4222		<b>Disposal Date:</b> 03-19-2024 09:38 AM	
	<b>Name Or Description Of Waste Shipped:</b>			
	<input checked="" type="checkbox"/> RCRA Exempt <input type="checkbox"/> RCRA Non-Exempt			
	<b>Weight (lbs):</b> 44560, 45220                      TA 89780			
<b>TRANSPORTER</b>	<b>Lease/Job Name:</b> PAD J			
	<b>Generator's Representative:</b> Montgomery Floyd			
	<b>Name:</b> Standard Safety & Supply			
	<b>Emergency Contact:</b> Luis Gavaldon			
	<b>Emergency Contact Phone:</b> (432) 741-2509			
<b>DISPOSAL FACILITY</b>	<b>Transporter: Acknowledgment of Delivery of Material</b>			
	<b>Printed/Typed Name (Impreso/Mecanografico):</b> <i>Jaime de la Rosa</i>			
	<b>Signature (Firma):</b> <i>[Signature]</i> <b>Date:</b> 03-19-2024 09:38 AM			
	<b>Lea Land, LLC</b>		<b>Mile Marker 64, U.S. Hwy 62/180, 30 Miles East Of Carlsbad, NM</b>	
	<b>Permit No:</b> NM-1-0035-New Mexico		<b>(575) 887-4048</b>	
<b>DISPOSAL FACILITY</b>	<b>Comments:</b>			
	<b>Disposal Facility's Certification:</b> I Hereby Certify That The Above-Described Wastes Were Delivered To This Facility.			
	<b>Authorized Signature:</b> <i>[Signature]</i>		<b>Unit No:</b> IIA	<b>Date:</b> 03-19-2024
			<b>Time:</b> 09:38 AM	

LEA LAND, LLC  
1300 WEST MAIN STREET • OKLAHOMA CITY, OK 73106 • PHONE (405) 236-4257



Remediation Response & Reclamation Closure Report  
Novo Oil & Gas – Rana Salada Pad J – Produced Water Release  
Discovery Date: February 11, 2023



**Appendix F**  
Laboratory Analytical Data Reports



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

February 21, 2023

BRYAN HANEY

ALTAMIRA - US

14229 PUNTA BONAIRE DR.

CORPUS CHRISTI, TX 78418

RE: NOVO J PAD NEW RELEASE

Enclosed are the results of analyses for samples received by the laboratory on 02/20/23 16:40.

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](http://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:**

ALTAMIRA - US  
 BRYAN HANEY  
 14229 PUNTA BONAIRE DR.  
 CORPUS CHRISTI TX, 78418  
 Fax To:

Received: 02/20/2023  
 Reported: 02/21/2023  
 Project Name: NOVO J PAD NEW RELEASE  
 Project Number: NOVONM2302/001  
 Project Location: LOVING NM

Sampling Date: 02/18/2023  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: PJN 1 (4-4.5') (H230779-01)**

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	02/20/2023	ND	2.03	101	2.00	4.82	
Toluene*	0.074	0.050	02/20/2023	ND	1.97	98.4	2.00	4.67	
Ethylbenzene*	0.052	0.050	02/20/2023	ND	1.93	96.3	2.00	4.65	GC-NC1
Total Xylenes*	1.05	0.150	02/20/2023	ND	5.92	98.6	6.00	4.17	
Total BTX	1.17	0.300	02/20/2023	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	2360	16.0	02/21/2023	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*	18.3	10.0	02/21/2023	ND	193	96.4	200	1.68	
DRO >C10-C28*	219	10.0	02/21/2023	ND	230	115	200	6.06	
EXT DRO >C28-C36	14.9	10.0	02/21/2023	ND					

Surrogate: 1-Chlorooctane 94.9 % 48.2-134

Surrogate: 1-Chlorooctadecane 117 % 49.1-148

Cardinal Laboratories

\*=Accredited Analyte

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 client for 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 thirty (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 the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

ALTAMIRA - US  
 BRYAN HANEY  
 14229 PUNTA BONAIRE DR.  
 CORPUS CHRISTI TX, 78418  
 Fax To:

Received:	02/20/2023	Sampling Date:	02/18/2023
Reported:	02/21/2023	Sampling Type:	Soil
Project Name:	NOVO J PAD NEW RELEASE	Sampling Condition:	Cool & Intact
Project Number:	NOVONM2302/001	Sample Received By:	Tamara Oldaker
Project Location:	LOVING NM		

**Sample ID: PJN 2 (4-4.5') (H230779-02)**

BTEx 8021B		mg/kg		Analyzed By: JH				S-04	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	02/21/2023	ND	2.03	101	2.00	4.82	
Toluene*	1.35	0.050	02/21/2023	ND	1.97	98.4	2.00	4.67	
Ethylbenzene*	0.661	0.050	02/21/2023	ND	1.93	96.3	2.00	4.65	GC-NC1
Total Xylenes*	14.2	0.150	02/21/2023	ND	5.92	98.6	6.00	4.17	
Total BTEX	16.2	0.300	02/21/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID) 209 % 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	2920	16.0	02/21/2023	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*	124	10.0	02/21/2023	ND	193	96.4	200	1.68	
DRO >C10-C28*	653	10.0	02/21/2023	ND	230	115	200	6.06	
EXT DRO >C28-C36	51.1	10.0	02/21/2023	ND					

Surrogate: 1-Chlorooctane 104 % 48.2-134

Surrogate: 1-Chlorooctadecane 126 % 49.1-148

Cardinal Laboratories

\*=Accredited Analyte

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 client for 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 thirty (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 the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager





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

**Analytical Results For:**

ALTAMIRA - US  
 BRYAN HANEY  
 14229 PUNTA BONAIRE DR.  
 CORPUS CHRISTI TX, 78418  
 Fax To:

Received: 02/20/2023  
 Reported: 02/21/2023  
 Project Name: NOVO J PAD NEW RELEASE  
 Project Number: NOVONM2302/001  
 Project Location: LOVING NM

Sampling Date: 02/18/2023  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: PJN 3 (4-4.5') (H230779-03)**

BTEx 8021B		mg/kg	Analyzed By: JH					S-04	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	02/21/2023	ND	2.03	101	2.00	4.82	
Toluene*	<b>0.297</b>	0.050	02/21/2023	ND	1.97	98.4	2.00	4.67	
Ethylbenzene*	<b>0.184</b>	0.050	02/21/2023	ND	1.93	96.3	2.00	4.65	GC-NC1
Total Xylenes*	<b>3.79</b>	0.150	02/21/2023	ND	5.92	98.6	6.00	4.17	
Total BTEX	<b>4.28</b>	0.300	02/21/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID) 158 % 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	<b>2280</b>	16.0	02/21/2023	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*	<b>98.1</b>	10.0	02/21/2023	ND	193	96.4	200	1.68	
DRO >C10-C28*	<b>665</b>	10.0	02/21/2023	ND	230	115	200	6.06	
EXT DRO >C28-C36	<b>39.4</b>	10.0	02/21/2023	ND					

Surrogate: 1-Chlorooctane 112 % 48.2-134

Surrogate: 1-Chlorooctadecane 137 % 49.1-148

Cardinal Laboratories

\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

ALTAMIRA - US  
 BRYAN HANEY  
 14229 PUNTA BONAIRE DR.  
 CORPUS CHRISTI TX, 78418  
 Fax To:

Received: 02/20/2023  
 Reported: 02/21/2023  
 Project Name: NOVO J PAD NEW RELEASE  
 Project Number: NOVONM2302/001  
 Project Location: LOVING NM

Sampling Date: 02/18/2023  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: PJN 4 (4-4.5') (H230779-04)**

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	2.03	101	2.00	4.82		
Toluene*	0.072	0.050	02/21/2023	ND	1.97	98.4	2.00	4.67		
Ethylbenzene*	0.068	0.050	02/21/2023	ND	1.93	96.3	2.00	4.65	GC-NC1	
Total Xylenes*	1.44	0.150	02/21/2023	ND	5.92	98.6	6.00	4.17		
Total BTEX	1.58	0.300	02/21/2023	ND						

Surrogate: 4-Bromofluorobenzene (PID) 130 % 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	3960	16.0	02/21/2023	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*	39.0	10.0	02/21/2023	ND	193	96.4	200	1.68	
DRO >C10-C28*	389	10.0	02/21/2023	ND	230	115	200	6.06	
EXT DRO >C28-C36	25.0	10.0	02/21/2023	ND					

Surrogate: 1-Chlorooctane 96.3 % 48.2-134

Surrogate: 1-Chlorooctadecane 117 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager





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**Analytical Results For:**

ALTAMIRA - US  
 BRYAN HANEY  
 14229 PUNTA BONAIRE DR.  
 CORPUS CHRISTI TX, 78418  
 Fax To:

Received: 02/20/2023  
 Reported: 02/21/2023  
 Project Name: NOVO J PAD NEW RELEASE  
 Project Number: NOVONM2302/001  
 Project Location: LOVING NM

Sampling Date: 02/18/2023  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: PJN 5 (4-4.5') (H230779-05)**

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	2.03	101	2.00	4.82		
Toluene*	<0.050	0.050	02/21/2023	ND	1.97	98.4	2.00	4.67		
Ethylbenzene*	<0.050	0.050	02/21/2023	ND	1.93	96.3	2.00	4.65		
Total Xylenes*	<0.150	0.150	02/21/2023	ND	5.92	98.6	6.00	4.17		
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	3160	16.0	02/21/2023	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	189	94.7	200	7.74	
DRO >C10-C28*	110	10.0	02/21/2023	ND	189	94.7	200	5.06	
EXT DRO >C28-C36	<10.0	10.0	02/21/2023	ND					

Surrogate: 1-Chlorooctane 96.3 % 48.2-134

Surrogate: 1-Chlorooctadecane 107 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

ALTAMIRA - US  
 BRYAN HANEY  
 14229 PUNTA BONAIRE DR.  
 CORPUS CHRISTI TX, 78418  
 Fax To:

Received:	02/20/2023	Sampling Date:	02/18/2023
Reported:	02/21/2023	Sampling Type:	Soil
Project Name:	NOVO J PAD NEW RELEASE	Sampling Condition:	Cool & Intact
Project Number:	NOVONM2302/001	Sample Received By:	Tamara Oldaker
Project Location:	LOVING NM		

**Sample ID: PJN 6 (4-4.5') (H230779-06)**

BTEx 8021B		mg/kg		Analyzed By: JH				S-04	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	02/21/2023	ND	2.03	101	2.00	4.82	
Toluene*	<0.050	0.050	02/21/2023	ND	1.97	98.4	2.00	4.67	
Ethylbenzene*	0.108	0.050	02/21/2023	ND	1.93	96.3	2.00	4.65	GC-NC1
Total Xylenes*	1.61	0.150	02/21/2023	ND	5.92	98.6	6.00	4.17	
Total BTEX	1.72	0.300	02/21/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID) 151 % 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	<b>496</b>	16.0	02/21/2023	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*	<b>57.0</b>	10.0	02/21/2023	ND	189	94.7	200	7.74	
DRO >C10-C28*	<b>757</b>	10.0	02/21/2023	ND	189	94.7	200	5.06	
EXT DRO >C28-C36	<b>67.2</b>	10.0	02/21/2023	ND					

Surrogate: 1-Chlorooctane 121 % 48.2-134

Surrogate: 1-Chlorooctadecane 144 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager





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**Analytical Results For:**

ALTAMIRA - US  
 BRYAN HANEY  
 14229 PUNTA BONAIRE DR.  
 CORPUS CHRISTI TX, 78418  
 Fax To:

Received:	02/20/2023	Sampling Date:	02/18/2023
Reported:	02/21/2023	Sampling Type:	Soil
Project Name:	NOVO J PAD NEW RELEASE	Sampling Condition:	Cool & Intact
Project Number:	NOVONM2302/001	Sample Received By:	Tamara Oldaker
Project Location:	LOVING NM		

**Sample ID: PJN 7 (4-4.5') (H230779-07)**

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	2.03	101	2.00	4.82		
Toluene*	<0.050	0.050	02/21/2023	ND	1.97	98.4	2.00	4.67		
Ethylbenzene*	<0.050	0.050	02/21/2023	ND	1.93	96.3	2.00	4.65		
Total Xylenes*	<0.150	0.150	02/21/2023	ND	5.92	98.6	6.00	4.17		
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	544	16.0	02/21/2023	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	189	94.7	200	7.74	
DRO >C10-C28*	99.3	10.0	02/21/2023	ND	189	94.7	200	5.06	
EXT DRO >C28-C36	<10.0	10.0	02/21/2023	ND					

Surrogate: 1-Chlorooctane 104 % 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:**

ALTAMIRA - US  
 BRYAN HANEY  
 14229 PUNTA BONAIRE DR.  
 CORPUS CHRISTI TX, 78418  
 Fax To:

Received: 02/20/2023  
 Reported: 02/21/2023  
 Project Name: NOVO J PAD NEW RELEASE  
 Project Number: NOVONM2302/001  
 Project Location: LOVING NM

Sampling Date: 02/18/2023  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: PJN 8 (4-4.5') (H230779-08)**

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	2.03	101	2.00	4.82		
Toluene*	<0.050	0.050	02/21/2023	ND	1.97	98.4	2.00	4.67		
Ethylbenzene*	<0.050	0.050	02/21/2023	ND	1.93	96.3	2.00	4.65		
Total Xylenes*	<0.150	0.150	02/21/2023	ND	5.92	98.6	6.00	4.17		
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	320	16.0	02/21/2023	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	189	94.7	200	7.74	
DRO >C10-C28*	64.5	10.0	02/21/2023	ND	189	94.7	200	5.06	
EXT DRO >C28-C36	<10.0	10.0	02/21/2023	ND					

Surrogate: 1-Chlorooctane 74.4 % 48.2-134

Surrogate: 1-Chlorooctadecane 81.7 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager





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**Analytical Results For:**

ALTAMIRA - US  
 BRYAN HANEY  
 14229 PUNTA BONAIRE DR.  
 CORPUS CHRISTI TX, 78418  
 Fax To:

Received:	02/20/2023	Sampling Date:	02/18/2023
Reported:	02/21/2023	Sampling Type:	Soil
Project Name:	NOVO J PAD NEW RELEASE	Sampling Condition:	Cool & Intact
Project Number:	NOVONM2302/001	Sample Received By:	Tamara Oldaker
Project Location:	LOVING NM		

**Sample ID: PJN 9 (4-4.5') (H230779-09)**

BTEx 8021B		mg/kg		Analyzed By: JH				S-04	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	02/21/2023	ND	2.03	101	2.00	4.82	
Toluene*	1.85	0.050	02/21/2023	ND	1.97	98.4	2.00	4.67	
Ethylbenzene*	0.875	0.050	02/21/2023	ND	1.93	96.3	2.00	4.65	GC-NC1
Total Xylenes*	20.2	0.150	02/21/2023	ND	5.92	98.6	6.00	4.17	
Total BTEX	22.9	0.300	02/21/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID) 250 % 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	4560	16.0	02/21/2023	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*	533	10.0	02/21/2023	ND	189	94.7	200	7.74	
DRO >C10-C28*	1570	10.0	02/21/2023	ND	189	94.7	200	5.06	
EXT DRO >C28-C36	111	10.0	02/21/2023	ND					

Surrogate: 1-Chlorooctane 103 % 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:**

ALTAMIRA - US  
 BRYAN HANEY  
 14229 PUNTA BONAIRE DR.  
 CORPUS CHRISTI TX, 78418  
 Fax To:

Received:	02/20/2023	Sampling Date:	02/18/2023
Reported:	02/21/2023	Sampling Type:	Soil
Project Name:	NOVO J PAD NEW RELEASE	Sampling Condition:	Cool & Intact
Project Number:	NOVONM2302/001	Sample Received By:	Tamara Oldaker
Project Location:	LOVING NM		

**Sample ID: PJN 10 (4-4.5') (H230779-10)**

BTX 8021B		mg/kg		Analyzed By: JH				S-04	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	02/21/2023	ND	2.03	101	2.00	4.82	
Toluene*	1.03	0.050	02/21/2023	ND	1.97	98.4	2.00	4.67	
Ethylbenzene*	0.566	0.050	02/21/2023	ND	1.93	96.3	2.00	4.65	GC-NC1
Total Xylenes*	13.0	0.150	02/21/2023	ND	5.92	98.6	6.00	4.17	
Total BTX	14.6	0.300	02/21/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID) 197 % 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	256	16.0	02/21/2023	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*	198	10.0	02/21/2023	ND	189	94.7	200	7.74	
DRO >C10-C28*	757	10.0	02/21/2023	ND	189	94.7	200	5.06	
EXT DRO >C28-C36	47.5	10.0	02/21/2023	ND					

Surrogate: 1-Chlorooctane 88.7 % 48.2-134

Surrogate: 1-Chlorooctadecane 96.4 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager





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**Analytical Results For:**

ALTAMIRA - US  
 BRYAN HANEY  
 14229 PUNTA BONAIRE DR.  
 CORPUS CHRISTI TX, 78418  
 Fax To:

Received: 02/20/2023  
 Reported: 02/21/2023  
 Project Name: NOVO J PAD NEW RELEASE  
 Project Number: NOVONM2302/001  
 Project Location: LOVING NM

Sampling Date: 02/18/2023  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: PJN 11 (4-4.5') (H230779-11)**

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	2.03	101	2.00	4.82		
Toluene*	<0.050	0.050	02/21/2023	ND	1.97	98.4	2.00	4.67		
Ethylbenzene*	<0.050	0.050	02/21/2023	ND	1.93	96.3	2.00	4.65		
Total Xylenes*	<0.150	0.150	02/21/2023	ND	5.92	98.6	6.00	4.17		
Total BTEX	<0.300	0.300	02/21/2023	ND						

Surrogate: 4-Bromofluorobenzene (PID) 99.7 % 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	448	16.0	02/21/2023	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	189	94.7	200	7.74	
DRO >C10-C28*	<10.0	10.0	02/21/2023	ND	189	94.7	200	5.06	
EXT DRO >C28-C36	<10.0	10.0	02/21/2023	ND					

Surrogate: 1-Chlorooctane 77.2 % 48.2-134

Surrogate: 1-Chlorooctadecane 83.6 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

ALTAMIRA - US  
 BRYAN HANEY  
 14229 PUNTA BONAIRE DR.  
 CORPUS CHRISTI TX, 78418  
 Fax To:

Received: 02/20/2023  
 Reported: 02/21/2023  
 Project Name: NOVO J PAD NEW RELEASE  
 Project Number: NOVONM2302/001  
 Project Location: LOVING NM

Sampling Date: 02/18/2023  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: PJN 12 (4-4.5') (H230779-12)**

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	2.03	101	2.00	4.82		
Toluene*	<0.050	0.050	02/21/2023	ND	1.97	98.4	2.00	4.67		
Ethylbenzene*	<0.050	0.050	02/21/2023	ND	1.93	96.3	2.00	4.65		
Total Xylenes*	<0.150	0.150	02/21/2023	ND	5.92	98.6	6.00	4.17		
Total BTEX	<0.300	0.300	02/21/2023	ND						

Surrogate: 4-Bromofluorobenzene (PID) 98.7 % 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	1550	16.0	02/21/2023	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	189	94.7	200	7.74	
DRO >C10-C28*	28.0	10.0	02/21/2023	ND	189	94.7	200	5.06	
EXT DRO >C28-C36	<10.0	10.0	02/21/2023	ND					

Surrogate: 1-Chlorooctane 109 % 48.2-134

Surrogate: 1-Chlorooctadecane 123 % 49.1-148

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\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager





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**Analytical Results For:**

ALTAMIRA - US  
 BRYAN HANEY  
 14229 PUNTA BONAIRE DR.  
 CORPUS CHRISTI TX, 78418  
 Fax To:

Received: 02/20/2023  
 Reported: 02/21/2023  
 Project Name: NOVO J PAD NEW RELEASE  
 Project Number: NOVONM2302/001  
 Project Location: LOVING NM

Sampling Date: 02/18/2023  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: PJN 13 (3-3.5') (H230779-13)**

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	2.03	101	2.00	4.82		
Toluene*	<0.050	0.050	02/21/2023	ND	1.97	98.4	2.00	4.67		
Ethylbenzene*	<0.050	0.050	02/21/2023	ND	1.93	96.3	2.00	4.65		
Total Xylenes*	<0.150	0.150	02/21/2023	ND	5.92	98.6	6.00	4.17		
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	208	16.0	02/21/2023	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	189	94.7	200	7.74	
DRO >C10-C28*	25.4	10.0	02/21/2023	ND	189	94.7	200	5.06	
EXT DRO >C28-C36	<10.0	10.0	02/21/2023	ND					

Surrogate: 1-Chlorooctane 82.4 % 48.2-134

Surrogate: 1-Chlorooctadecane 92.7 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

ALTAMIRA - US  
 BRYAN HANEY  
 14229 PUNTA BONAIRE DR.  
 CORPUS CHRISTI TX, 78418  
 Fax To:

Received:	02/20/2023	Sampling Date:	02/18/2023
Reported:	02/21/2023	Sampling Type:	Soil
Project Name:	NOVO J PAD NEW RELEASE	Sampling Condition:	Cool & Intact
Project Number:	NOVONM2302/001	Sample Received By:	Tamara Oldaker
Project Location:	LOVING NM		

**Sample ID: PJN 14 (3-3.5') (H230779-14)**

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	2.03	101	2.00	4.82		
Toluene*	<0.050	0.050	02/21/2023	ND	1.97	98.4	2.00	4.67		
Ethylbenzene*	<0.050	0.050	02/21/2023	ND	1.93	96.3	2.00	4.65		
Total Xylenes*	<0.150	0.150	02/21/2023	ND	5.92	98.6	6.00	4.17		
Total BTEX	<0.300	0.300	02/21/2023	ND						

Surrogate: 4-Bromofluorobenzene (PID) 101 % 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	480	16.0	02/21/2023	ND	400	100	400	3.92	QM-07	

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	189	94.7	200	7.74	
DRO >C10-C28*	<10.0	10.0	02/21/2023	ND	189	94.7	200	5.06	
EXT DRO >C28-C36	<10.0	10.0	02/21/2023	ND					

Surrogate: 1-Chlorooctane 81.3 % 48.2-134

Surrogate: 1-Chlorooctadecane 89.7 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager





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**Analytical Results For:**

ALTAMIRA - US  
 BRYAN HANEY  
 14229 PUNTA BONAIRE DR.  
 CORPUS CHRISTI TX, 78418  
 Fax To:

Received: 02/20/2023  
 Reported: 02/21/2023  
 Project Name: NOVO J PAD NEW RELEASE  
 Project Number: NOVONM2302/001  
 Project Location: LOVING NM

Sampling Date: 02/18/2023  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: PJN 15 (3-3.5') (H230779-15)**

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	2.03	101	2.00	4.82		
Toluene*	<0.050	0.050	02/21/2023	ND	1.97	98.4	2.00	4.67		
Ethylbenzene*	<0.050	0.050	02/21/2023	ND	1.93	96.3	2.00	4.65		
Total Xylenes*	<0.150	0.150	02/21/2023	ND	5.92	98.6	6.00	4.17		
Total BTEX	<0.300	0.300	02/21/2023	ND						

Surrogate: 4-Bromofluorobenzene (PID) 98.4 % 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	1330	16.0	02/21/2023	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	202	101	200	1.97	
DRO >C10-C28*	<10.0	10.0	02/21/2023	ND	190	95.1	200	6.96	
EXT DRO >C28-C36	<10.0	10.0	02/21/2023	ND					

Surrogate: 1-Chlorooctane 89.4 % 48.2-134

Surrogate: 1-Chlorooctadecane 92.2 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

ALTAMIRA - US  
 BRYAN HANEY  
 14229 PUNTA BONAIRE DR.  
 CORPUS CHRISTI TX, 78418  
 Fax To:

Received: 02/20/2023  
 Reported: 02/21/2023  
 Project Name: NOVO J PAD NEW RELEASE  
 Project Number: NOVONM2302/001  
 Project Location: LOVING NM

Sampling Date: 02/18/2023  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: PJN SIDEWALL - 1 (0-3') (H230779-16)**

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	2.03	101	2.00	4.82		
Toluene*	<0.050	0.050	02/21/2023	ND	1.97	98.4	2.00	4.67		
Ethylbenzene*	<0.050	0.050	02/21/2023	ND	1.93	96.3	2.00	4.65		
Total Xylenes*	<0.150	0.150	02/21/2023	ND	5.92	98.6	6.00	4.17		
Total BTEx	<0.300	0.300	02/21/2023	ND						

Surrogate: 4-Bromofluorobenzene (PID) 99.5 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	592	16.0	02/21/2023	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	202	101	200	1.97	
DRO >C10-C28*	<10.0	10.0	02/21/2023	ND	190	95.1	200	6.96	
EXT DRO >C28-C36	<10.0	10.0	02/21/2023	ND					

Surrogate: 1-Chlorooctane 79.2 % 48.2-134

Surrogate: 1-Chlorooctadecane 80.7 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager





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**Analytical Results For:**

ALTAMIRA - US  
 BRYAN HANEY  
 14229 PUNTA BONAIRE DR.  
 CORPUS CHRISTI TX, 78418  
 Fax To:

Received: 02/20/2023  
 Reported: 02/21/2023  
 Project Name: NOVO J PAD NEW RELEASE  
 Project Number: NOVONM2302/001  
 Project Location: LOVING NM

Sampling Date: 02/18/2023  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: PJN SIDEWALL - 2 (0-4') (H230779-17)**

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	2.03	101	2.00	4.82		
Toluene*	<0.050	0.050	02/21/2023	ND	1.97	98.4	2.00	4.67		
Ethylbenzene*	<0.050	0.050	02/21/2023	ND	1.93	96.3	2.00	4.65		
Total Xylenes*	<0.150	0.150	02/21/2023	ND	5.92	98.6	6.00	4.17		
Total BTEX	<0.300	0.300	02/21/2023	ND						

Surrogate: 4-Bromofluorobenzene (PID) 99.0 % 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	192	16.0	02/21/2023	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	202	101	200	1.97	
DRO >C10-C28*	<10.0	10.0	02/21/2023	ND	190	95.1	200	6.96	
EXT DRO >C28-C36	<10.0	10.0	02/21/2023	ND					

Surrogate: 1-Chlorooctane 104 % 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:**

ALTAMIRA - US  
 BRYAN HANEY  
 14229 PUNTA BONAIRE DR.  
 CORPUS CHRISTI TX, 78418  
 Fax To:

Received:	02/20/2023	Sampling Date:	02/18/2023
Reported:	02/21/2023	Sampling Type:	Soil
Project Name:	NOVO J PAD NEW RELEASE	Sampling Condition:	Cool & Intact
Project Number:	NOVONM2302/001	Sample Received By:	Tamara Oldaker
Project Location:	LOVING NM		

**Sample ID: PJN SIDEWALL - 3 (0-4') (H230779-18)**

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	2.07	103	2.00	4.03		
Toluene*	<0.050	0.050	02/21/2023	ND	1.99	99.7	2.00	4.25		
Ethylbenzene*	<0.050	0.050	02/21/2023	ND	1.93	96.5	2.00	4.17		
Total Xylenes*	<0.150	0.150	02/21/2023	ND	5.88	98.0	6.00	4.57		
Total BTEx	<0.300	0.300	02/21/2023	ND						

Surrogate: 4-Bromofluorobenzene (PID) 101 % 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	144	16.0	02/21/2023	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	202	101	200	1.97	
DRO >C10-C28*	<10.0	10.0	02/21/2023	ND	190	95.1	200	6.96	
EXT DRO >C28-C36	<10.0	10.0	02/21/2023	ND					

Surrogate: 1-Chlorooctane 78.6 % 48.2-134

Surrogate: 1-Chlorooctadecane 79.1 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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### Notes and Definitions

S-04	The surrogate recovery for this sample is outside of established control limits due to a sample matrix effect.
QM-07	The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.
GC-NC1	8260 confirmation analysis was performed; initial GC results were not supported by GC/MS analysis and are biased high with interfering compounds.
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

Company Name: Altamira		<b>BILL TO</b>		ANALYSIS REQUEST	
Project Manager: Bryan Haney		P.O. #: Direct Bill Novo			
Address: 14229 Punta Bonaire		Company: Oil and Gas			
City: Corpus Christi		Attn:			
Phone #: 361-658-3126		Address:			
Project #: <del>Altamira-204001</del> NV0842302/001		City:			
Project Name: <del>Novo Corrosion Case</del> Release		State:			
Project Location: Loving New Mexico		Zip:			
Sample Name: O. Gonzalez, S. Waters, J. Gonzalez		Phone #:			
FOR LAB USE ONLY		Fax #:			
Lab I.D.		Sample I.D.			
<div style="display: flex; justify-content: space-between;"> <div> <p>1 PN 1 (4-4.5')</p> <p>2 PN 2 (4-4.5')</p> <p>3 PN 3 (4-4.5')</p> <p>4 PN 4 (4-4.5')</p> <p>5 PN 5 (4-4.5')</p> <p>6 PN 6 (4-4.5')</p> <p>7 PN 7 (4-4.5')</p> <p>8 PN 8 (4-4.5')</p> <p>9 PN 9 (4-4.5')</p> <p>10 PN 10 (4-4.5')</p> </div> <div> <p>(G)RAB OR (C)OMP.</p> <p># CONTAINERS</p> <p>GROUNDWATER</p> <p>WASTEWATER</p> <p>SOIL</p> <p>OIL</p> <p>SLUDGE</p> <p>OTHER:</p> <p>ACID/BASE:</p> <p>ICE / COOL</p> <p>OTHER:</p> </div> <div> <p>DATE</p> <p>TIME</p> </div> </div>		<div style="display: flex; justify-content: space-between;"> <div> <p>B T E X</p> <p>T P H</p> <p>C H L O R I D E S</p> </div> <div> <p>DATE</p> <p>TIME</p> </div> </div>			
<p>1 PN 1 (4-4.5') X</p> <p>2 PN 2 (4-4.5') X</p> <p>3 PN 3 (4-4.5') X</p> <p>4 PN 4 (4-4.5') X</p> <p>5 PN 5 (4-4.5') X</p> <p>6 PN 6 (4-4.5') X</p> <p>7 PN 7 (4-4.5') X</p> <p>8 PN 8 (4-4.5') X</p> <p>9 PN 9 (4-4.5') X</p> <p>10 PN 10 (4-4.5') X</p>		<p>21/8/23 12:20 X</p> <p>21/8/23 12:22 X</p> <p>21/8/23 12:24 X</p> <p>21/8/23 12:26 X</p> <p>21/8/23 12:28 X</p> <p>21/8/23 12:30 X</p> <p>21/8/23 12:32 X</p> <p>21/8/23 12:34 X</p> <p>21/8/23 12:36 X</p> <p>21/8/23 12:38 X</p>			

Reinquisitioned By:

Received By:

Time: 8:30:23

Date: 10/10

Time:

Date:

Delivered By: (Circle One) ☒ UPS ☐ Bus ☐ Other:

Observed Temp.: 11.1°C

Corrected Temp.: 11.7°C

Sample Condition: ☒ Cool ☐ Intact

Checked By: (Initials)

Turnaround Time: Standard ☒ Rush ☐

Thermometer ID #113

Correction Factor: -0.5°C

Bacteria (only) ☒ Sample Condition ☒ Observed Temp.: 11.1°C

Corrected Temp.: 11.7°C

REMARKS: 24 HR IT

Verbal Result: ☐ Yes ☒ No

Add'l Phone #:

All Results are emailed. Please provide Email address:



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

### CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

† Cardinal cannot accept verbal changes. Please email changes to [celey.keene@cardinallabsnm.com](mailto:celey.keene@cardinallabsnm.com)



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

February 28, 2023

BRYAN HANEY

ALTAMIRA - US

14229 PUNTA BONAIRE DR.

CORPUS CHRISTI, TX 78418

RE: NOVO RANA SALADA J PAD RELEASE

Enclosed are the results of analyses for samples received by the laboratory on 02/27/23 16:48.

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](http://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:**

ALTAMIRA - US  
 BRYAN HANEY  
 14229 PUNTA BONAIRE DR.  
 CORPUS CHRISTI TX, 78418  
 Fax To:

Received:	02/27/2023	Sampling Date:	02/27/2023
Reported:	02/28/2023	Sampling Type:	Soil
Project Name:	NOVO RANA SALADA J PAD RELEASE	Sampling Condition:	Cool & Intact
Project Number:	NVONM 2302/001	Sample Received By:	Tamara Oldaker
Project Location:	LOVING, NEW MEXICO		

**Sample ID: PJN - 9 5.5-6' (H230905-01)**

TPH 8015M	mg/kg	Analyzed By: MS						S-04	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>GRO C6-C10*</b>	<b>1340</b>	10.0	02/27/2023	ND	186	93.2	200	0.908	
<b>DRO &gt;C10-C28*</b>	<b>5830</b>	10.0	02/27/2023	ND	200	100	200	0.195	
<b>EXT DRO &gt;C28-C36</b>	<b>394</b>	10.0	02/27/2023	ND					

Surrogate: 1-Chlorooctane 386 % 48.2-134

Surrogate: 1-Chlorooctadecane 129 % 49.1-148

Cardinal Laboratories

\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

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### Notes and Definitions

S-04	The surrogate recovery for this sample is outside of established control limits due to a sample matrix effect.
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



ANALYSIS REQUEST

† Cardinal cannot accept verbal changes. Please email changes to [celey.keene@cardinallabsnm.com](mailto:celey.keene@cardinallabsnm.com)



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---

March 26, 2024

BRYAN HANEY

ALTAMIRA - US

14229 PUNTA BONAIRE DR.

CORPUS CHRISTI, TX 78418

RE: RANA SALADA J-PAD FRAC TANK RELEASE

Enclosed are the results of analyses for samples received by the laboratory on 03/18/24 16:53.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-23-16. 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/ga/lab\\_accred\\_certif.html](http://www.tceq.texas.gov/field/ga/lab_accred_certif.html).

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

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

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

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

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

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

Sincerely,

Celey D. Keene

Lab Director/Quality Manager



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

**Analytical Results For:**

ALTAMIRA - US  
14229 PUNTA BONAIRE DR.  
CORPUS CHRISTI TX, 78418

Project: RANA SALADA J-PAD FRAC TANK |  
Project Number: NVONM 2302/001  
Project Manager: BRYAN HANEY  
Fax To:

Reported:  
26-Mar-24 12:00

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
PJN - 9 8-8.5'	H241398-01	Soil	18-Mar-24 08:30	18-Mar-24 16:53
PJN - 9 SIDEWALL - 4 0-8'	H241398-02	Soil	18-Mar-24 08:32	18-Mar-24 16:53
PJN - 9 SIDEWALL - 5 0-8'	H241398-03	Soil	18-Mar-24 08:34	18-Mar-24 16:53
PJN - 9 SIDEWALL - 6 0-8'	H241398-04	Soil	18-Mar-24 08:36	18-Mar-24 16:53

03/26/24 - Client added TPH on 03/22/24 (see COC). This is the revised report and will replace the one sent on 03/22/24.

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

ALTAMIRA - US  
14229 PUNTA BONAIRE DR.  
CORPUS CHRISTI TX, 78418

Project: RANA SALADA J-PAD FRAC TANK |  
Project Number: NVONM 2302/001  
Project Manager: BRYAN HANEY  
Fax To:

Reported:  
26-Mar-24 12:00

**PJN - 9 8-8.5'****H241398-01 (Soil)**

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
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**Cardinal Laboratories****Petroleum Hydrocarbons by GC FID**

GRO C6-C10*	23.9		10.0	mg/kg	1	4031926	MS	20-Mar-24	8015B	
DRO >C10-C28*	173		10.0	mg/kg	1	4031926	MS	20-Mar-24	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	4031926	MS	20-Mar-24	8015B	
Surrogate: 1-Chlorooctane			91.3 %	48.2-134		4031926	MS	20-Mar-24	8015B	
Surrogate: 1-Chlorooctadecane			98.0 %	49.1-148		4031926	MS	20-Mar-24	8015B	

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**Analytical Results For:**

ALTAMIRA - US  
14229 PUNTA BONAIRE DR.  
CORPUS CHRISTI TX, 78418

Project: RANA SALADA J-PAD FRAC TANK I  
Project Number: NVONM 2302/001  
Project Manager: BRYAN HANEY  
Fax To:

Reported:  
26-Mar-24 12:00

**PJN - 9 SIDEWALL - 4 0-8'****H241398-02 (Soil)**

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
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**Cardinal Laboratories****Petroleum Hydrocarbons by GC FID**

GRO C6-C10*	<10.0		10.0	mg/kg	1	4032231	MS	22-Mar-24	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	4032231	MS	22-Mar-24	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	4032231	MS	22-Mar-24	8015B	
Surrogate: 1-Chlorooctane			88.4 %	48.2-134		4032231	MS	22-Mar-24	8015B	
Surrogate: 1-Chlorooctadecane			83.3 %	49.1-148		4032231	MS	22-Mar-24	8015B	

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

ALTAMIRA - US  
14229 PUNTA BONAIRE DR.  
CORPUS CHRISTI TX, 78418

Project: RANA SALADA J-PAD FRAC TANK I  
Project Number: NVONM 2302/001  
Project Manager: BRYAN HANEY  
Fax To:

Reported:  
26-Mar-24 12:00

**PJN - 9 SIDEWALL - 5 0-8'****H241398-03 (Soil)**

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
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**Cardinal Laboratories****Petroleum Hydrocarbons by GC FID**

<b>GRO C6-C10*</b>	<b>134</b>		10.0	mg/kg	1	4032231	MS	22-Mar-24	8015B	
<b>DRO &gt;C10-C28*</b>	<b>1860</b>		10.0	mg/kg	1	4032231	MS	22-Mar-24	8015B	
<b>EXT DRO &gt;C28-C36</b>	<b>218</b>		10.0	mg/kg	1	4032231	MS	22-Mar-24	8015B	
<i>Surrogate: 1-Chlorooctane</i>			100 %	48.2-134		4032231	MS	22-Mar-24	8015B	
<i>Surrogate: 1-Chlorooctadecane</i>			124 %	49.1-148		4032231	MS	22-Mar-24	8015B	

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

ALTAMIRA - US  
14229 PUNTA BONAIRE DR.  
CORPUS CHRISTI TX, 78418

Project: RANA SALADA J-PAD FRAC TANK I  
Project Number: NVONM 2302/001  
Project Manager: BRYAN HANEY  
Fax To:

Reported:  
26-Mar-24 12:00

**PJN - 9 SIDEWALL - 6 0-8'****H241398-04 (Soil)**

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
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**Cardinal Laboratories****Petroleum Hydrocarbons by GC FID**

<b>GRO C6-C10*</b>	<b>14.8</b>		10.0	mg/kg	1	4032231	MS	22-Mar-24	8015B	
<b>DRO &gt;C10-C28*</b>	<b>380</b>		10.0	mg/kg	1	4032231	MS	22-Mar-24	8015B	
<b>EXT DRO &gt;C28-C36</b>	<b>24.8</b>		10.0	mg/kg	1	4032231	MS	22-Mar-24	8015B	
<i>Surrogate: 1-Chlorooctane</i>			89.0 %	48.2-134		4032231	MS	22-Mar-24	8015B	
<i>Surrogate: 1-Chlorooctadecane</i>			91.5 %	49.1-148		4032231	MS	22-Mar-24	8015B	

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Celey D. Keene, Lab Director/Quality Manager





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**Analytical Results For:**

ALTAMIRA - US  
14229 PUNTA BONAIRE DR.  
CORPUS CHRISTI TX, 78418

Project: RANA SALADA J-PAD FRAC TANK |  
Project Number: NVONM 2302/001  
Project Manager: BRYAN HANEY  
Fax To:

Reported:  
26-Mar-24 12:00

**Petroleum Hydrocarbons by GC FID - Quality Control****Cardinal Laboratories**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch 4031926 - General Prep - Organics****Blank (4031926-BLK1)**

Prepared: 19-Mar-24 Analyzed: 20-Mar-24

GRO C6-C10	ND	10.0	mg/kg							
DRO >C10-C28	ND	10.0	mg/kg							
EXT DRO >C28-C36	ND	10.0	mg/kg							
Surrogate: 1-Chlorooctane	39.6		mg/kg	50.0		79.1	48.2-134			
Surrogate: 1-Chlorooctadecane	44.1		mg/kg	50.0		88.2	49.1-148			

**LCS (4031926-BS1)**

Prepared: 19-Mar-24 Analyzed: 20-Mar-24

GRO C6-C10	216	10.0	mg/kg	200		108	66.4-123			
DRO >C10-C28	212	10.0	mg/kg	200		106	66.5-118			
Total TPH C6-C28	428	10.0	mg/kg	400		107	77.6-123			
Surrogate: 1-Chlorooctane	50.3		mg/kg	50.0		101	48.2-134			
Surrogate: 1-Chlorooctadecane	51.6		mg/kg	50.0		103	49.1-148			

**LCS Dup (4031926-BS1)**

Prepared: 19-Mar-24 Analyzed: 20-Mar-24

GRO C6-C10	201	10.0	mg/kg	200		101	66.4-123	7.18	17.7	
DRO >C10-C28	196	10.0	mg/kg	200		98.0	66.5-118	7.87	21	
Total TPH C6-C28	397	10.0	mg/kg	400		99.2	77.6-123	7.52	18.5	
Surrogate: 1-Chlorooctane	50.0		mg/kg	50.0		100	48.2-134			
Surrogate: 1-Chlorooctadecane	53.0		mg/kg	50.0		106	49.1-148			

**Batch 4032231 - General Prep - Organics****Blank (4032231-BLK1)**

Prepared &amp; Analyzed: 22-Mar-24

GRO C6-C10	ND	10.0	mg/kg							
DRO >C10-C28	ND	10.0	mg/kg							
EXT DRO >C28-C36	ND	10.0	mg/kg							
Surrogate: 1-Chlorooctane	38.8		mg/kg	50.0		77.6	48.2-134			
Surrogate: 1-Chlorooctadecane	35.8		mg/kg	50.0		71.5	49.1-148			

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

ALTAMIRA - US	Project: RANA SALADA J-PAD FRAC TANK	Reported:
14229 PUNTA BONAIRE DR.	Project Number: NVONM 2302/001	26-Mar-24 12:00
CORPUS CHRISTI TX, 78418	Project Manager: BRYAN HANEY	
	Fax To:	

Petroleum Hydrocarbons by GC FID - Quality Control

Cardinal Laboratories

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch 4032231 - General Prep - Organics

LCS (4032231-BS1)		Prepared & Analyzed: 22-Mar-24								
GRO C6-C10	189	10.0	mg/kg	200		94.5	66.4-123			
DRO >C10-C28	197	10.0	mg/kg	200		98.4	66.5-118			
Total TPH C6-C28	386	10.0	mg/kg	400		96.4	77.6-123			
Surrogate: 1-Chlorooctane	42.9		mg/kg	50.0		85.8	48.2-134			
Surrogate: 1-Chlorooctadecane	42.9		mg/kg	50.0		85.7	49.1-148			
LCS Dup (4032231-BSD1)		Prepared & Analyzed: 22-Mar-24								
GRO C6-C10	196	10.0	mg/kg	200		98.0	66.4-123	3.63	17.7	
DRO >C10-C28	202	10.0	mg/kg	200		101	66.5-118	2.87	21	
Total TPH C6-C28	398	10.0	mg/kg	400		99.6	77.6-123	3.24	18.5	
Surrogate: 1-Chlorooctane	44.7		mg/kg	50.0		89.3	48.2-134			
Surrogate: 1-Chlorooctadecane	45.2		mg/kg	50.0		90.3	49.1-148			

Cardinal Laboratories

\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



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Notes and Definitions

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

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A handwritten signature in black ink, appearing to read "Celey D. Keene".

Celey D. Keene, Lab Director/Quality Manager





CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

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

Company Name: Altamira

BILL TO

ANALYSIS REQUEST

Project Manager: Bryan Haney

P.O. #:

Address: 4229 Punta Bonaire

Company: Direct Bill Permian

City: Corpus Christi

State: TX ZIP: 78412

Attn:

Phone #: 361-658-3126

Address:

Project: NVONM 2302/001

City:

Project Name: Rana Salada J-Pad Frac Tank Release

State: ZIP:

Project Location: Loving, New Mexico

Phone #:

Sampler Name: Higino Gonzalez

Fax #:

FOR LAB USE ONLY

(G)RAB OR (C)OMP.

# CONTAINERS

GROUNDWATER

WASTEWATER

SOIL

OIL

SLUDGE

OTHER:

ACID/BASE:

CEI COOL

OTHER:

DATE

TIME

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Lab I.D.

Sample I.D.

H241398

1 PUN-Q 8-8.5'  
2 PUN-Q 8-8.5'  
3 PUN-Q 8-8.5'  
4 PUN-Q 8-8.5'

(G)RAB OR (C)OMP.

# CONTAINERS

GROUNDWATER

WASTEWATER

SOIL

OIL

SLUDGE

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CEI COOL

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Relinquished By:

Date:

Time:

(G)RAB OR (C)OMP.

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FORM-006 R 3.2 10/07/21

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

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

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March 28, 2024

BRYAN HANEY

ALTAMIRA - US

14229 PUNTA BONAIRE DR.

CORPUS CHRISTI, TX 78418

RE: RANA SALADA J-PAD FRAC TANK RELEASE

Enclosed are the results of analyses for samples received by the laboratory on 03/18/24 16:53.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-23-16. 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/ga/lab\\_accred\\_certif.html](http://www.tceq.texas.gov/field/ga/lab_accred_certif.html).

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

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

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

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

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

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

Sincerely,

Celey D. Keene

Lab Director/Quality Manager



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

**Analytical Results For:**

ALTAMIRA - US  
14229 PUNTA BONAIRE DR.  
CORPUS CHRISTI TX, 78418

Project: RANA SALADA J-PAD FRAC TANK I  
Project Number: NVONM 2302/001  
Project Manager: BRYAN HANEY  
Fax To:

Reported:  
28-Mar-24 10:01

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
PJN - 9 8-8.5'	H241398-01	Soil	18-Mar-24 08:30	18-Mar-24 16:53
PJN - 9 SIDEWALL - 4 4-8'	H241398-02	Soil	18-Mar-24 08:32	18-Mar-24 16:53
PJN - 9 SIDEWALL - 5 4-8'	H241398-03	Soil	18-Mar-24 08:34	18-Mar-24 16:53
PJN - 9 SIDEWALL - 6 4-8'	H241398-04	Soil	18-Mar-24 08:36	18-Mar-24 16:53

03/26/24 - Client added TPH on 03/22/24 (see COC). This is the revised report and will replace the one sent on 03/22/24.

03/28/24 - Client added BTEX, Chloride and changed the sample IDs on -02, -03 and -04 (see COC). This is the 2nd revision of the report and will replace the one sent on 03/26/24.

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A handwritten signature in black ink, appearing to read "Celey D. Keene".

Celey D. Keene, Lab Director/Quality Manager





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**Analytical Results For:**

ALTAMIRA - US  
14229 PUNTA BONAIRE DR.  
CORPUS CHRISTI TX, 78418

Project: RANA SALADA J-PAD FRAC TANK |  
Project Number: NVONM 2302/001  
Project Manager: BRYAN HANEY  
Fax To:

Reported:  
28-Mar-24 10:01

**PJN - 9 8-8.5'****H241398-01 (Soil)**

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
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**Cardinal Laboratories****Petroleum Hydrocarbons by GC FID**

<b>GRO C6-C10*</b>	<b>23.9</b>		10.0	mg/kg	1	4031926	MS	20-Mar-24	8015B	
<b>DRO &gt;C10-C28*</b>	<b>173</b>		10.0	mg/kg	1	4031926	MS	20-Mar-24	8015B	
<b>EXT DRO &gt;C28-C36</b>	<b>&lt;10.0</b>		10.0	mg/kg	1	4031926	MS	20-Mar-24	8015B	
<i>Surrogate: 1-Chlorooctane</i>			91.3 %	48.2-134	4031926	MS	20-Mar-24	8015B		
<i>Surrogate: 1-Chlorooctadecane</i>			98.0 %	49.1-148	4031926	MS	20-Mar-24	8015B		

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**Analytical Results For:**

ALTAMIRA - US  
14229 PUNTA BONAIRE DR.  
CORPUS CHRISTI TX, 78418

Project: RANA SALADA J-PAD FRAC TANK |  
Project Number: NVONM 2302/001  
Project Manager: BRYAN HANEY  
Fax To:

Reported:  
28-Mar-24 10:01

**PJN - 9 SIDEWALL - 4 4-8'****H241398-02 (Soil)**

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
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**Cardinal Laboratories****Inorganic Compounds**

Chloride	2080		16.0	mg/kg	4	4032721	CT	27-Mar-24	4500-Cl-B	
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**Volatile Organic Compounds by EPA Method 8021**

Benzene*	<0.050		0.050	mg/kg	50	4032703	JH	27-Mar-24	8021B	
Toluene*	<0.050		0.050	mg/kg	50	4032703	JH	27-Mar-24	8021B	
Ethylbenzene*	<0.050		0.050	mg/kg	50	4032703	JH	27-Mar-24	8021B	
Total Xylenes*	<0.150		0.150	mg/kg	50	4032703	JH	27-Mar-24	8021B	
Total BTEX	<0.300		0.300	mg/kg	50	4032703	JH	27-Mar-24	8021B	

Surrogate: 4-Bromofluorobenzene (PID) 104 % 71.5-134 4032703 JH 27-Mar-24 8021B

**Petroleum Hydrocarbons by GC FID**

GRO C6-C10*	<10.0		10.0	mg/kg	1	4032231	MS	22-Mar-24	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	4032231	MS	22-Mar-24	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	4032231	MS	22-Mar-24	8015B	

Surrogate: 1-Chlorooctane 88.4 % 48.2-134 4032231 MS 22-Mar-24 8015B

Surrogate: 1-Chlorooctadecane 83.3 % 49.1-148 4032231 MS 22-Mar-24 8015B

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**Analytical Results For:**

ALTAMIRA - US  
14229 PUNTA BONAIRE DR.  
CORPUS CHRISTI TX, 78418

Project: RANA SALADA J-PAD FRAC TANK I  
Project Number: NVONM 2302/001  
Project Manager: BRYAN HANEY  
Fax To:

Reported:  
28-Mar-24 10:01

**PJN - 9 SIDEWALL - 5 4-8'****H241398-03 (Soil)**

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
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**Cardinal Laboratories****Petroleum Hydrocarbons by GC FID**

<b>GRO C6-C10*</b>	<b>134</b>		10.0	mg/kg	1	4032231	MS	22-Mar-24	8015B	
<b>DRO &gt;C10-C28*</b>	<b>1860</b>		10.0	mg/kg	1	4032231	MS	22-Mar-24	8015B	
<b>EXT DRO &gt;C28-C36</b>	<b>218</b>		10.0	mg/kg	1	4032231	MS	22-Mar-24	8015B	
Surrogate: 1-Chlorooctane			100 %	48.2-134		4032231	MS	22-Mar-24	8015B	
Surrogate: 1-Chlorooctadecane			124 %	49.1-148		4032231	MS	22-Mar-24	8015B	

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**Analytical Results For:**

ALTAMIRA - US  
14229 PUNTA BONAIRE DR.  
CORPUS CHRISTI TX, 78418

Project: RANA SALADA J-PAD FRAC TANK |  
Project Number: NVONM 2302/001  
Project Manager: BRYAN HANEY  
Fax To:

Reported:  
28-Mar-24 10:01

**PJN - 9 SIDEWALL - 6 4-8'****H241398-04 (Soil)**

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
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**Cardinal Laboratories****Inorganic Compounds**

<b>Chloride</b>	<b>1960</b>		16.0	mg/kg	4	4032721	CT	27-Mar-24	4500-Cl-B	
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**Volatile Organic Compounds by EPA Method 8021**

Benzene*	<0.050		0.050	mg/kg	50	4032703	JH	27-Mar-24	8021B	
Toluene*	<0.050		0.050	mg/kg	50	4032703	JH	27-Mar-24	8021B	
Ethylbenzene*	<0.050		0.050	mg/kg	50	4032703	JH	27-Mar-24	8021B	
Total Xylenes*	<0.150		0.150	mg/kg	50	4032703	JH	27-Mar-24	8021B	
Total BTEX	<0.300		0.300	mg/kg	50	4032703	JH	27-Mar-24	8021B	

Surrogate: 4-Bromofluorobenzene (PID)			116 %		71.5-134	4032703	JH	27-Mar-24	8021B	
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**Petroleum Hydrocarbons by GC FID**

<b>GRO C6-C10*</b>	<b>14.8</b>		10.0	mg/kg	1	4032231	MS	22-Mar-24	8015B	
<b>DRO &gt;C10-C28*</b>	<b>380</b>		10.0	mg/kg	1	4032231	MS	22-Mar-24	8015B	
<b>EXT DRO &gt;C28-C36</b>	<b>24.8</b>		10.0	mg/kg	1	4032231	MS	22-Mar-24	8015B	

Surrogate: 1-Chlorooctane			89.0 %		48.2-134	4032231	MS	22-Mar-24	8015B	
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Surrogate: 1-Chlorooctadecane			91.5 %		49.1-148	4032231	MS	22-Mar-24	8015B	
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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

ALTAMIRA - US  
14229 PUNTA BONAIRE DR.  
CORPUS CHRISTI TX, 78418

Project: RANA SALADA J-PAD FRAC TANK |  
Project Number: NVONM 2302/001  
Project Manager: BRYAN HANEY  
Fax To:

Reported:  
28-Mar-24 10:01

**Inorganic Compounds - Quality Control****Cardinal Laboratories**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC Limits	RPD	RPD Limit	Notes
<b>Batch 4032721 - 1:4 DI Water</b>									
<b>Blank (4032721-BLK1)</b>					Prepared & Analyzed: 27-Mar-24				
Chloride	ND	16.0	mg/kg						
<b>LCS (4032721-BS1)</b>					Prepared & Analyzed: 27-Mar-24				
Chloride	400	16.0	mg/kg	400		100	80-120		
<b>LCS Dup (4032721-BSD1)</b>					Prepared & Analyzed: 27-Mar-24				
Chloride	416	16.0	mg/kg	400		104	80-120	3.92	20

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

ALTAMIRA - US  
14229 PUNTA BONAIRE DR.  
CORPUS CHRISTI TX, 78418

Project: RANA SALADA J-PAD FRAC TANK |  
Project Number: NVONM 2302/001  
Project Manager: BRYAN HANEY  
Fax To:

Reported:  
28-Mar-24 10:01

**Volatile Organic Compounds by EPA Method 8021 - Quality Control****Cardinal Laboratories**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch 4032703 - Volatiles****Blank (4032703-BLK1)**

Prepared &amp; Analyzed: 27-Mar-24

Benzene	ND	0.050	mg/kg							
Toluene	ND	0.050	mg/kg							
Ethylbenzene	ND	0.050	mg/kg							
Total Xylenes	ND	0.150	mg/kg							
Total BTEX	ND	0.300	mg/kg							
Surrogate: 4-Bromofluorobenzene (PID)	0.0513		mg/kg	0.0500		103	71.5-134			

**LCS (4032703-BS1)**

Prepared &amp; Analyzed: 27-Mar-24

Benzene	2.22	0.050	mg/kg	2.00		111	82.8-130			
Toluene	2.23	0.050	mg/kg	2.00		111	86-128			
Ethylbenzene	2.16	0.050	mg/kg	2.00		108	85.9-128			
m,p-Xylene	4.40	0.100	mg/kg	4.00		110	89-129			
o-Xylene	2.13	0.050	mg/kg	2.00		106	86.1-125			
Total Xylenes	6.53	0.150	mg/kg	6.00		109	88.2-128			
Surrogate: 4-Bromofluorobenzene (PID)	0.0502		mg/kg	0.0500		100	71.5-134			

**LCS Dup (4032703-BS1)**

Prepared &amp; Analyzed: 27-Mar-24

Benzene	2.12	0.050	mg/kg	2.00		106	82.8-130	4.82	15.8	
Toluene	2.11	0.050	mg/kg	2.00		106	86-128	5.44	15.9	
Ethylbenzene	2.06	0.050	mg/kg	2.00		103	85.9-128	4.97	16	
m,p-Xylene	4.20	0.100	mg/kg	4.00		105	89-129	4.58	16.2	
o-Xylene	2.03	0.050	mg/kg	2.00		101	86.1-125	4.88	16.7	
Total Xylenes	6.23	0.150	mg/kg	6.00		104	88.2-128	4.68	16.3	
Surrogate: 4-Bromofluorobenzene (PID)	0.0508		mg/kg	0.0500		102	71.5-134			

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Celey D. Keene, Lab Director/Quality Manager





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**Analytical Results For:**

ALTAMIRA - US  
14229 PUNTA BONAIRE DR.  
CORPUS CHRISTI TX, 78418

Project: RANA SALADA J-PAD FRAC TANK I  
Project Number: NVONM 2302/001  
Project Manager: BRYAN HANEY  
Fax To:

Reported:  
28-Mar-24 10:01

**Petroleum Hydrocarbons by GC FID - Quality Control****Cardinal Laboratories**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC Limits	RPD	RPD Limit	Notes
---------	--------	--------------------	-------	----------------	------------------	----------------	-----	--------------	-------

**Batch 4031926 - General Prep - Organics****Blank (4031926-BLK1)**

Prepared: 19-Mar-24 Analyzed: 20-Mar-24

GRO C6-C10	ND	10.0	mg/kg						
DRO >C10-C28	ND	10.0	mg/kg						
EXT DRO >C28-C36	ND	10.0	mg/kg						
Surrogate: 1-Chlorooctane	39.6		mg/kg	50.0		79.1	48.2-134		
Surrogate: 1-Chlorooctadecane	44.1		mg/kg	50.0		88.2	49.1-148		

**LCS (4031926-BS1)**

Prepared: 19-Mar-24 Analyzed: 20-Mar-24

GRO C6-C10	216	10.0	mg/kg	200		108	66.4-123		
DRO >C10-C28	212	10.0	mg/kg	200		106	66.5-118		
Total TPH C6-C28	428	10.0	mg/kg	400		107	77.6-123		
Surrogate: 1-Chlorooctane	50.3		mg/kg	50.0		101	48.2-134		
Surrogate: 1-Chlorooctadecane	51.6		mg/kg	50.0		103	49.1-148		

**LCS Dup (4031926-BS1)**

Prepared: 19-Mar-24 Analyzed: 20-Mar-24

GRO C6-C10	201	10.0	mg/kg	200		101	66.4-123	7.18	17.7
DRO >C10-C28	196	10.0	mg/kg	200		98.0	66.5-118	7.87	21
Total TPH C6-C28	397	10.0	mg/kg	400		99.2	77.6-123	7.52	18.5
Surrogate: 1-Chlorooctane	50.0		mg/kg	50.0		100	48.2-134		
Surrogate: 1-Chlorooctadecane	53.0		mg/kg	50.0		106	49.1-148		

**Batch 4032231 - General Prep - Organics****Blank (4032231-BLK1)**

Prepared &amp; Analyzed: 22-Mar-24

GRO C6-C10	ND	10.0	mg/kg						
DRO >C10-C28	ND	10.0	mg/kg						
EXT DRO >C28-C36	ND	10.0	mg/kg						
Surrogate: 1-Chlorooctane	38.8		mg/kg	50.0		77.6	48.2-134		
Surrogate: 1-Chlorooctadecane	35.8		mg/kg	50.0		71.5	49.1-148		

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**Analytical Results For:**

ALTAMIRA - US  
14229 PUNTA BONAIRE DR.  
CORPUS CHRISTI TX, 78418

Project: RANA SALADA J-PAD FRAC TANK |  
Project Number: NVONM 2302/001  
Project Manager: BRYAN HANEY  
Fax To:

Reported:  
28-Mar-24 10:01

**Petroleum Hydrocarbons by GC FID - Quality Control****Cardinal Laboratories**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch 4032231 - General Prep - Organics****LCS (4032231-BS1)**

Prepared &amp; Analyzed: 22-Mar-24

GRO C6-C10	189	10.0	mg/kg	200		94.5	66.4-123			
DRO >C10-C28	197	10.0	mg/kg	200		98.4	66.5-118			
Total TPH C6-C28	386	10.0	mg/kg	400		96.4	77.6-123			
Surrogate: 1-Chlorooctane	42.9		mg/kg	50.0		85.8	48.2-134			
Surrogate: 1-Chlorooctadecane	42.9		mg/kg	50.0		85.7	49.1-148			

**LCS Dup (4032231-BS1)**

Prepared &amp; Analyzed: 22-Mar-24

GRO C6-C10	196	10.0	mg/kg	200		98.0	66.4-123	3.63	17.7	
DRO >C10-C28	202	10.0	mg/kg	200		101	66.5-118	2.87	21	
Total TPH C6-C28	398	10.0	mg/kg	400		99.6	77.6-123	3.24	18.5	
Surrogate: 1-Chlorooctane	44.7		mg/kg	50.0		89.3	48.2-134			
Surrogate: 1-Chlorooctadecane	45.2		mg/kg	50.0		90.3	49.1-148			

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### Notes and Definitions

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

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A handwritten signature in cursive script, appearing to read "Celey D. Keene", written in black ink.

Celey D. Keene, Lab Director/Quality Manager







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

April 05, 2024

BRYAN HANEY

ALTAMIRA - US

14229 PUNTA BONAIRE DR.

CORPUS CHRISTI, TX 78418

RE: RANA SALADA J-PAD FRAC TANK RELEASE

Enclosed are the results of analyses for samples received by the laboratory on 04/01/24 8:00.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-23-16. 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](http://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



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**Analytical Results For:**

ALTAMIRA - US  
 BRYAN HANEY  
 14229 PUNTA BONAIRE DR.  
 CORPUS CHRISTI TX, 78418  
 Fax To:

Received:	04/01/2024	Sampling Date:	03/29/2024
Reported:	04/05/2024	Sampling Type:	Soil
Project Name:	RANA SALADA J-PAD FRAC TANK RELEA	Sampling Condition:	Cool & Intact
Project Number:	NVONM 2302/001	Sample Received By:	Shalyn Rodriguez
Project Location:	LOVING, NEW MEXICO		

**Sample ID: PJN - 9 SIDEWALL - 5A (4-8.5') (H241652-01)**

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	04/03/2024	ND	1.90	95.0	2.00	3.97	
Toluene*	<0.050	0.050	04/03/2024	ND	1.91	95.6	2.00	3.26	
Ethylbenzene*	<0.050	0.050	04/03/2024	ND	1.83	91.4	2.00	3.72	
Total Xylenes*	<0.150	0.150	04/03/2024	ND	5.56	92.7	6.00	3.24	
Total BTEX	<0.300	0.300	04/03/2024	ND					

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

Chloride, SM4500Cl-B		mg/kg		Analyzed By: CT						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	3040	16.0	04/03/2024	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	04/02/2024	ND	209	105	200	0.942		
DRO >C10-C28*	<10.0	10.0	04/02/2024	ND	213	107	200	0.843		
EXT DRO >C28-C36	<10.0	10.0	04/02/2024	ND						

Surrogate: 1-Chlorooctane 116 % 48.2-134

Surrogate: 1-Chlorooctadecane 121 % 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 "C. D. Keene", written over a horizontal line.

Celey D. Keene, Lab Director/Quality Manager



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**District II**  
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**District III**  
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Phone:(505) 334-6178 Fax:(505) 334-6170  
**District IV**  
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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

QUESTIONS  
  
Action 333581

QUESTIONS

Operator: NOVO OIL & GAS NORTHERN DELAWARE, LLC 300 N. Marienfeld St Ste 1000 Midland, TX 79701	OGRID:	372920
	Action Number:	333581
	Action Type:	[C-141] Remediation Closure Request C-141 (C-141-v-Closure)

QUESTIONS

Prerequisites	
Incident ID (n#)	nAPP2304339443
Incident Name	NAPP2304339443 NOVO RANA SALADA PAD-J FRAC TANK RELEASE @ 0
Incident Type	Produced Water Release
Incident Status	Remediation Closure Report Received

Location of Release Source	
Please answer all the questions in this group.	
Site Name	NOVO RANA SALADA PAD-J FRAC TANK RELEASE
Date Release Discovered	02/11/2023
Surface Owner	Federal

Incident Details	
Please answer all the questions in this group.	
Incident Type	Produced Water Release
Did this release result in a fire or is the result of a fire	No
Did this release result in any injuries	No
Has this release reached or does it have a reasonable probability of reaching a watercourse	No
Has this release endangered or does it have a reasonable probability of endangering public health	No
Has this release substantially damaged or will it substantially damage property or the environment	No
Is this release of a volume that is or may with reasonable probability be detrimental to fresh water	No

Nature and Volume of Release	
Material(s) released, please answer all that apply below. Any calculations or specific justifications for the volumes provided should be attached to the follow-up C-141 submission.	
Crude Oil Released (bbls) Details	Not answered.
Produced Water Released (bbls) Details	Cause: Equipment Failure   Tank (Any)   Produced Water   Released: 10 BBL   Recovered: 8 BBL   Lost: 2 BBL.
Is the concentration of chloride in the produced water >10,000 mg/l	Yes
Condensate Released (bbls) Details	Not answered.
Natural Gas Vented (Mcf) Details	Not answered.
Natural Gas Flared (Mcf) Details	Not answered.
Other Released Details	Not answered.
Are there additional details for the questions above (i.e. any answer containing Other, Specify, Unknown, and/or Fire, or any negative lost amounts)	leak occurred from hole in valve at frac tank



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QUESTIONS, Page 2

Action 333581

**QUESTIONS (continued)**

Operator: NOVO OIL & GAS NORTHERN DELAWARE, LLC 300 N. Marienfeld St Ste 1000 Midland, TX 79701	OGRID:
	372920
	Action Number:
	333581
Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)	

**QUESTIONS**

Nature and Volume of Release (continued)	
Is this a gas only submission (i.e. only significant Mcf values reported)	No, according to supplied volumes this does not appear to be a "gas only" report.
Was this a major release as defined by Subsection A of 19.15.29.7 NMAC	No
Reasons why this would be considered a submission for a notification of a major release	Unavailable.
With the implementation of the 19.15.27 NMAC (05/25/2021), venting and/or flaring of natural gas (i.e. gas only) are to be submitted on the C-129 form.	

**Initial Response**

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

The source of the release has been stopped	True
The impacted area has been secured to protect human health and the environment	True
Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices	True
All free liquids and recoverable materials have been removed and managed appropriately	True
If all the actions described above have not been undertaken, explain why	Not answered.

Per Paragraph (4) of Subsection B of 19.15.29.8 NMAC the responsible party may commence remediation immediately after discovery of a release. If remediation has begun, please prepare and attach a narrative of actions to date in the follow-up C-141 submission. If remedial efforts have been successfully completed or if the release occurred within a lined containment area (see Subparagraph (a) of Paragraph (5) of Subsection A of 19.15.29.11 NMAC), please prepare and attach all information needed for closure evaluation in the follow-up C-141 submission.

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

I hereby agree and sign off to the above statement	Name: Montgomery Floyd Title: Environmental Manager Email: montgomery.floyd@permianres.com Date: 04/25/2024
--	--

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**State of New Mexico**  
**Energy, Minerals and Natural Resources**  
**Oil Conservation Division**  
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**Santa Fe, NM 87505**

QUESTIONS, Page 3

Action 333581

**QUESTIONS (continued)**

Operator: NOVO OIL & GAS NORTHERN DELAWARE, LLC 300 N. Marienfeld St Ste 1000 Midland, TX 79701	OGRID:
	372920
	Action Number:
	333581
	Action Type:
	[C-141] Remediation Closure Request C-141 (C-141-v-Closure)

**QUESTIONS****Site Characterization**

Please answer all the questions in this group (only required when seeking remediation plan approval and beyond). This information must be provided to the appropriate district office no later than 90 days after the release discovery date.

What is the shallowest depth to groundwater beneath the area affected by the release in feet below ground surface (ft bgs)	Between 75 and 100 (ft.)
What method was used to determine the depth to ground water	Direct Measurement
Did this release impact groundwater or surface water	No
<b>What is the minimum distance, between the closest lateral extents of the release and the following surface areas:</b>	
A continuously flowing watercourse or any other significant watercourse	Between ½ and 1 (mi.)
Any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)	Between 1 and 5 (mi.)
An occupied permanent residence, school, hospital, institution, or church	Between 1 and 5 (mi.)
A spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes	Between 1 and 5 (mi.)
Any other fresh water well or spring	Between 1 and 5 (mi.)
Incorporated municipal boundaries or a defined municipal fresh water well field	Greater than 5 (mi.)
A wetland	Greater than 5 (mi.)
A subsurface mine	Between 1 and 5 (mi.)
An (non-karst) unstable area	Between 1 and 5 (mi.)
Categorize the risk of this well / site being in a karst geology	Medium
A 100-year floodplain	Between ½ and 1 (mi.)
Did the release impact areas not on an exploration, development, production, or storage site	No

**Remediation Plan**

Please answer all the questions that apply or are indicated. This information must be provided to the appropriate district office no later than 90 days after the release discovery date.

Requesting a remediation plan approval with this submission	Yes
Attach a comprehensive report demonstrating the lateral and vertical extents of soil contamination associated with the release have been determined, pursuant to 19.15.29.11 NMAC and 19.15.29.13 NMAC.	
Have the lateral and vertical extents of contamination been fully delineated	Yes
Was this release entirely contained within a lined containment area	No

**Soil Contamination Sampling:** (Provide the highest observable value for each, in milligrams per kilograms.)

Chloride	(EPA 300.0 or SM4500 Cl B)	4560
TPH (GRO+DRO+MRO)	(EPA SW-846 Method 8015M)	7564
GRO+DRO	(EPA SW-846 Method 8015M)	7170
BTEX	(EPA SW-846 Method 8021B or 8260B)	22.9
Benzene	(EPA SW-846 Method 8021B or 8260B)	0.1

Per Subsection B of 19.15.29.11 NMAC unless the site characterization report includes completed efforts at remediation, the report must include a proposed remediation plan in accordance with 19.15.29.12 NMAC, which includes the anticipated timelines for beginning and completing the remediation.

On what estimated date will the remediation commence	02/12/2023
On what date will (or did) the final sampling or liner inspection occur	03/29/2024
On what date will (or was) the remediation complete(d)	04/05/2024
What is the estimated surface area (in square feet) that will be reclaimed	1952
What is the estimated volume (in cubic yards) that will be reclaimed	308
What is the estimated surface area (in square feet) that will be remediated	1952
What is the estimated volume (in cubic yards) that will be remediated	308

These estimated dates and measurements are recognized to be the best guess or calculation at the time of submission and may (be) change(d) over time as more remediation efforts are completed.

The OCD recognizes that proposed remediation measures may have to be minimally adjusted in accordance with the physical realities encountered during remediation. If the responsible party has any need to significantly deviate from the remediation plan proposed, then it should consult with the division to determine if another remediation plan submission is required.

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

QUESTIONS, Page 4

Action 333581

**QUESTIONS (continued)**

Operator: NOVO OIL & GAS NORTHERN DELAWARE, LLC 300 N. Marienfeld St Ste 1000 Midland, TX 79701	OGRID:	372920
	Action Number:	333581
	Action Type:	[C-141] Remediation Closure Request C-141 (C-141-v-Closure)

**QUESTIONS**

<b>Remediation Plan (continued)</b>	
<i>Please answer all the questions that apply or are indicated. This information must be provided to the appropriate district office no later than 90 days after the release discovery date.</i>	
<b>This remediation will (or is expected to) utilize the following processes to remediate / reduce contaminants:</b>	
<i>(Select all answers below that apply.)</i>	
(Ex Situ) Excavation and <b>off-site</b> disposal (i.e. dig and haul, hydrovac, etc.)	Yes
Which OCD approved facility will be used for <b>off-site</b> disposal	LEA LAND LANDFILL [fEEM0112342028]
<b>OR</b> which OCD approved well (API) will be used for <b>off-site</b> disposal	Not answered.
<b>OR</b> is the <b>off-site</b> disposal site, to be used, out-of-state	Not answered.
<b>OR</b> is the <b>off-site</b> disposal site, to be used, an NMED facility	Not answered.
(Ex Situ) Excavation and <b>on-site</b> remediation (i.e. On-Site Land Farms)	No
(In Situ) Soil Vapor Extraction	No
(In Situ) Chemical processing (i.e. Soil Shredding, Potassium Permanganate, etc.)	No
(In Situ) Biological processing (i.e. Microbes / Fertilizer, etc.)	No
(In Situ) Physical processing (i.e. Soil Washing, Gypsum, Disking, etc.)	No
Ground Water Abatement pursuant to 19.15.30 NMAC	No
OTHER (Non-listed remedial process)	No
<i>Per Subsection B of 19.15.29.11 NMAC unless the site characterization report includes completed efforts at remediation, the report must include a proposed remediation plan in accordance with 19.15.29.12 NMAC, which includes the anticipated timelines for beginning and completing the remediation.</i>	
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.	
I hereby agree and sign off to the above statement	Name: Montgomery Floyd Title: Environmental Manager Email: montgomery.floyd@permianres.com Date: 04/25/2024
<i>The OCD recognizes that proposed remediation measures may have to be minimally adjusted in accordance with the physical realities encountered during remediation. If the responsible party has any need to significantly deviate from the remediation plan proposed, then it should consult with the division to determine if another remediation plan submission is required.</i>	



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**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

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Action 333581

QUESTIONS (continued)

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[C-141] Remediation Closure Request C-141 (C-141-v-Closure)	

QUESTIONS

Deferral Requests Only	
Only answer the questions in this group if seeking a deferral upon approval this submission. Each of the following items must be confirmed as part of any request for deferral of remediation.	
Requesting a deferral of the remediation closure due date with the approval of this submission	No

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Action 333581

**QUESTIONS (continued)**

Operator: NOVO OIL & GAS NORTHERN DELAWARE, LLC 300 N. Marienfeld St Ste 1000 Midland, TX 79701	OGRID:	372920
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**QUESTIONS**

Sampling Event Information	
Last sampling notification (C-141N) recorded	323042
Sampling date pursuant to Subparagraph (a) of Paragraph (1) of Subsection D of 19.15.29.12 NMAC	03/18/2024
What was the (estimated) number of samples that were to be gathered	4
What was the sampling surface area in square feet	250

**Remediation Closure Request**

*Only answer the questions in this group if seeking remediation closure for this release because all remediation steps have been completed.*

Requesting a remediation closure approval with this submission	Yes
Have the lateral and vertical extents of contamination been fully delineated	Yes
Was this release entirely contained within a lined containment area	No
All areas reasonably needed for production or subsequent drilling operations have been stabilized, returned to the sites existing grade, and have a soil cover that prevents ponding of water, minimizing dust and erosion	Yes
What was the total surface area (in square feet) remediated	1952
What was the total volume (cubic yards) remediated	308
All areas not reasonably needed for production or subsequent drilling operations have been reclaimed to contain a minimum of four feet of non-waste contain earthen material with concentrations less than 600 mg/kg chlorides, 100 mg/kg TPH, 50 mg/kg BTEX, and 10 mg/kg Benzene	Yes
What was the total surface area (in square feet) reclaimed	1952
What was the total volume (in cubic yards) reclaimed	308
Summarize any additional remediation activities not included by answers (above)	Remediation and reclamation on pad is complete.

*The responsible party must attach information demonstrating they have complied with all applicable closure requirements and any conditions or directives of the OCD. This demonstration should be in the form of a comprehensive report (in .pdf format) including a scaled site map, sampling diagrams, relevant field notes, photographs of any excavation prior to backfilling, laboratory data including chain of custody documents of final sampling, and a narrative of the remedial activities. Refer to 19.15.29.12 NMAC.*

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.

I hereby agree and sign off to the above statement	Name: Montgomery Floyd Title: Environmental Manager Email: montgomery.floyd@permianres.com Date: 04/25/2024
--	--

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Action 333581

QUESTIONS (continued)

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QUESTIONS

Reclamation Report	
Only answer the questions in this group if all reclamation steps have been completed.	
Requesting a reclamation approval with this submission	No



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CONDITIONS  
  
Action 333581

CONDITIONS

Operator: NOVO OIL & GAS NORTHERN DELAWARE, LLC 300 N. Marienfeld St Ste 1000 Midland, TX 79701	OGRID: 372920
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CONDITIONS

Created By	Condition	Condition Date
scwells	None	6/4/2024