



Memorandum

To: Nelson Velez, New Mexico Oil Conservation Division (NMOCD)
From: Mitch Killough, Hilcorp Energy Company (Hilcorp)
Date: 7/3/2023
Subject: Culpepper Martin 100S – Final Form C-141 Submittal (Closure Request)

On 4/4/2023 at approximately 10:00 AM (MT), Hilcorp Energy Company (Hilcorp) discovered a 54-bbl release of produced water at the Culpepper Martin 100S in San Juan County, NM. Shortly after commencing the unloading of produced water from a Hilcorp-owned storage tank, fluids began spilling from the third-party water hauling truck onto the pad. The spilled fluids migrated across the pad and flowed off location in an easterly direction. Upon inspection and discussions with the third-party, it was determined that during the unloading process, a valve on the truck was not closed properly, which allowed fluids to escape the truck.

On behalf of CNJ Oilfield Services, Animas Environmental Services presents the enclosed *Clearance Report* for NMOCD review and final approval. Site assessment activities were conducted at the Site to address the release of produced water that was discovered on 4/4/2023. Laboratory analytical results for the soil samples indicate concentrations are compliant with the Site Closure Criteria and no further actions are required. As such, Hilcorp respectfully requests closure for Incident Number nAPP2310736718.

Enclosures: Form C-141
Clearance Report – Culpepper Martin 100S Release (*dated 5/5/2023*)

Hilcorp Energy Company
1111 Travis Street, Houston, Texas 77002
T 713.209.2400 F 713.289.2750

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

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

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

Incident ID	nAPP2310736718
District RP	
Facility ID	
Application ID	

Release Notification

Responsible Party

Responsible Party Hilcorp Energy Company	OGRID 372171
Contact Name Mitch Killough	Contact Telephone 713-757-5247
Contact email mkillough@hilcorp.com	Incident # nAPP2310736718
Contact mailing address 1111 Travis Street, Houston, Texas 77002	

Location of Release Source

Latitude 36.9686241 _____ Longitude -108.1127167 _____
(NAD 83 in decimal degrees to 5 decimal places)

Site Name Culpepper Martin 100S	Site Type Well
Date Release Discovered: 4/4/2023 @ 10:00 (MT)	API# 30-045-34394

Unit Letter	Section	Township	Range	County
I	20	32N	12W	San Juan

Surface Owner: State Federal Tribal Private (Name: Montoya Land Company)

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) 54 bbls	Volume Recovered (bbls) 1 bbl
	Is the concentration of dissolved chloride in the produced water >10,000 mg/l?	<input type="checkbox"/> Yes <input checked="" 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

On 4/4/2023 at approximately 10:00 AM (MT), Hilcorp Energy Company (Hilcorp) discovered a 54-bbl release of produced water at the Culpepper Martin 100S in San Juan County, NM. Shortly after commencing the unloading of produced water from a Hilcorp-owned storage tank, fluids began spilling from the third-party water hauling truck onto the pad. The spilled fluids migrated across the pad and flowed off location in an easterly direction before terminating approximately 300 ft from the site. Upon inspection and discussions with the third-party, it was determined that during the unloading process, a valve on the truck was not closed properly, which allowed fluids to escape the truck.

State of New Mexico
Oil Conservation Division

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Was this a major release as defined by 19.15.29.7(A) NMAC? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If YES, for what reason(s) does the responsible party consider this a major release? The spill amount exceeded 25 bbls.
If YES, was immediate notice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)? Yes. Mitch Killough provided a 24-hour notice via email to the NMOCD on 4/5/2023 at 9:00 am (CT).	

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 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: When the fluids were released from the water hauling truck, this event occurred outside secondary containment and flowed off pad.
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> Mitch Killough </u> Title: <u> Environmental Specialist </u>
Signature: <u>  </u> Date: <u> 04/17/2023 </u>
email: <u> mkillough@hilcorp.com </u> Telephone: <u> 713-757-5247 </u>
<u>OCD Only</u> Received by: _____ Date: _____

Incident ID	nAPP2310736718
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Site Assessment/Characterization

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

What is the shallowest depth to groundwater beneath the area affected by the release?	<u><50</u> (ft bgs)
Did this release impact groundwater or surface water?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Are the lateral extents of the release within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 500 horizontal feet of a spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 1000 feet of any other fresh water well or spring?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh water well field?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 300 feet of a wetland?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release overlying a subsurface mine?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release overlying an unstable area such as karst geology?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within a 100-year floodplain?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Did the release impact areas not on an exploration, development, production, or storage site?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No

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

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

- Scaled site map showing impacted area, surface features, subsurface features, delineation points, and monitoring wells.
- Field data
- Data table of soil contaminant concentration data
- Depth to water determination
- Determination of water sources and significant watercourses within 1/2-mile of the lateral extents of the release
- Boring or excavation logs
- Photographs including date and GIS information
- Topographic/Aerial maps
- Laboratory data including chain of custody

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

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Oil Conservation Division

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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: Mitch Killough Title: Environmental Specialist

Signature:  Date: 07/03/2023

email: mkillough@hilcorp.com Telephone: 713-757-5247

OCD Only

Received by: Shelly Wells Date: 7/3/2023

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Application ID	

Closure

The responsible party must attach information demonstrating they have complied with all applicable closure requirements and any conditions or directives of the OCD. This demonstration should be in the form of a comprehensive report (electronic submittals in .pdf format are preferred) including a scaled site map, sampling diagrams, relevant field notes, photographs of any excavation prior to backfilling, laboratory data including chain of custody documents of final sampling, and a narrative of the remedial activities. Refer to 19.15.29.12 NMAC.

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

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

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations. The responsible party acknowledges they must substantially restore, reclaim, and re-vegetate the impacted surface area to the conditions that existed prior to the release or their final land use in accordance with 19.15.29.13 NMAC including notification to the OCD when reclamation and re-vegetation are complete.

Printed Name: Mitch Killough Title: Environmental Specialist

Signature:  Date: 07/03/2023

email: mkillough@hilcorp.com Telephone: 713-757-5247

OCD Only

Received by: Shelly Wells Date: 7/3/2023

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

Closure Approved by: Nelson Velez Date: 09/25/2023

Printed Name: Nelson Velez Title: Environmental Specialist - Adv



May 5, 2023

Craig Nelson
CNJ Oilfield Services
PO Box 568
Farmington, NM 87499
Email: cnelson@cnjoilfieldsvcs.com

RE: CLEARANCE REPORT
Culpepper Martin 100S Release
Incident # NAPP2310736718
API: 30-045-34394
NE¼ SE¼, Section 20, T32N, R12W
San Juan County, New Mexico

Dear Mr. Nelson:

A produced water release was discovered on April 4, 2023, and resulted from a valve on a CNJ Oilfield Services truck being improperly closed, which allowed produced water to spill during the unloading process. Hilcorp Energy Company (Hilcorp) estimated that as much as 54 barrels (bbls) of produced water was released and migrated across the pad and flowed off location in an easterly direction. On April 5, 2023, Hilcorp reported the release of produced water at the Culpepper Martin 100S (API: 30-045-34394) to Mr. Nelson Velez of the New Mexico Oil Conservation Division (NMOCD).

1.0 Site Information

1.1 Location

Site Name – Culpepper Martin 100S
Legal Description – NE¼ SE¼, Section 20, T32N, R12W, San Juan County, New Mexico
Release Latitude/Longitude – N36.968631, W108.112070
Land Jurisdiction – Private – Montoya Cattle Company
Figure 1. Topographic Site Location Map
Figure 2. Aerial Site Location Map

624 E Comanche St.
Farmington, NM 87401
505-564-2281
animasenvironmental.com

2.0 Site Ranking

In accordance with NMAC 19.15.29.12 Table I (August 2018), release closure criteria are based on the minimum depth to groundwater within the horizontal extent of the release area:

- **Known Water Sources:** Stock ponds are located approximately 1,300 feet (ft) to the south and 1,430 ft to the west of the release site.
- **Depth to Groundwater:** Cathodic reports could not be located for oil and gas wells within one-half mile. Depth to water records were located for Well SJ 04315 less than 1 mile from the release location with a depth to water of 50 ft bgs. A pit permit for the Culpepper Martin 100S indicated depth to groundwater less than 50 ft bgs. Based on these records, depth to groundwater at the site was determined to be less than 50 ft bgs.
- **Sensitive Receptor Determination:** The release site is located less than 300 ft (approximately 190 ft south) away from a continuously flowing watercourse or other significant watercourse as defined in 19.15.29.12 NMAC, an unnamed arroyo which ultimately drains to the La Plata River.

NMOCD Action levels are:

- 10 milligrams per kilogram (mg/kg) benzene and 50 mg/kg of benzene, toluene, ethylbenzene, and total xylenes (BTEX);
- 100 mg/kg total petroleum hydrocarbons (TPH) as gasoline-range organics (GRO), diesel-range organics (DRO), and motor oil-range organics (MRO); and
- 600 mg/kg chlorides.

3.0 Delineation Soil Sampling

On April 5, 2023, Animas Environmental Services, LLC, (AES) responded to the location for delineation sampling. A total of 16 5-point composite and 2 6-point composite soil samples were collected. Samples were field screened for volatile organic compounds (VOCs) with an organic vapor meter (OVM), and all samples returned a VOC reading of 0.0 parts per million (ppm). Samples were then submitted for laboratory analysis at Hall Environmental Analytical Laboratory (Hall) in Albuquerque, New Mexico.

Each of the composite samples were laboratory analyzed for chloride per U.S. Environmental Protection Agency (USEPA) Method 300.0, and three select composite samples were also analyzed for TPH (as GRO, DRO, and MRO) per USEPA Method 8015M/D, and for BTEX per USEPA Method 8021B. Samples were collected from approximately 6 inches below ground surface (bgs). The samples selected for TPH and

BTEX analysis were collected from the spill source area (SC-1), an area of pooling (SC-3), and the northwestern extent of the spill area (SC-12). All samples returned analytical results below laboratory detection limits and NMOCD standards.

Based on the results of delineation sampling, AES recommended that CNJ scrape 6 inches of potentially contaminated soils off the extents of the area delineated during the April 5, 2023, site visit. CNJ consulted with the property owner who indicated that he would prefer not to have the soil disturbed. AES contacted Nelson Velez on April 21, 2023, and Mr. Velez suggested that one discrete grab sample from the surface be collected at the release point, and analyzed for BTEX, TPH (as GRO, DRO, and MRO), and chlorides. Mr. Velez indicated that if these analyses returned results below NMOCD action levels, then no additional work would be necessary.

4.0 Confirmation Soil Sampling

On April 24, 2023, AES provided notification of confirmation sampling to NMOCD and on April 27, 2023, AES collected one discrete grab sample from the surface at the release location.

3.1 Field Data

Clearance of soil samples was achieved through laboratory analysis. Field notes are attached.

3.2 Laboratory Analyses

The samples collected for laboratory analysis were placed into new, clean, laboratory-supplied containers, which were then labeled, placed on ice, and logged onto sample chain of custody records. The samples were maintained on ice until delivery to the analytical laboratory, Hall Environmental Analysis Laboratory (Hall) in Albuquerque, New Mexico. All samples were laboratory analyzed for:

- BTEX per USEPA Method 8021B;
- TPH as GRO, DRO, MRO per USEPA Method 8015M/D; and
- Chlorides per USEPA Method 300.0.

3.3 Laboratory Analytical Results

All laboratory analytical results indicated benzene, total BTEX, TPH (as GRO, DRO, and MRO), and chlorides in all samples were below applicable action levels. Laboratory results are on Figure 3. The laboratory analytical report is attached.

5.0 Conclusions

On April 5, 2023, AES collected delineation samples at a produced water release at the Culpepper Martin 100S. Based on delineation sampling results below laboratory detection limits, the property owner requested that site surface not be disturbed. AES returned to the site on April 27, 2023, and collected one discrete grab sample at the surface of the release site. Laboratory analytical results reported benzene, total BTEX, TPH (as GRO/DRO/MRO), and chloride concentrations as *below* applicable NMOCD action levels in all samples. No further action is recommended at this time.

If you have any questions about this report or site conditions, please do not hesitate to contact me at (505) 486-9250 or Angela Ledgerwood, Senior Project Manager, at (720) 537-6650.

Sincerely,



Lany Cupps
Environmental Coordinator



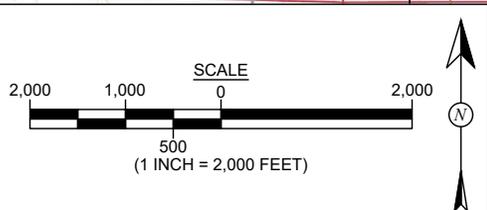
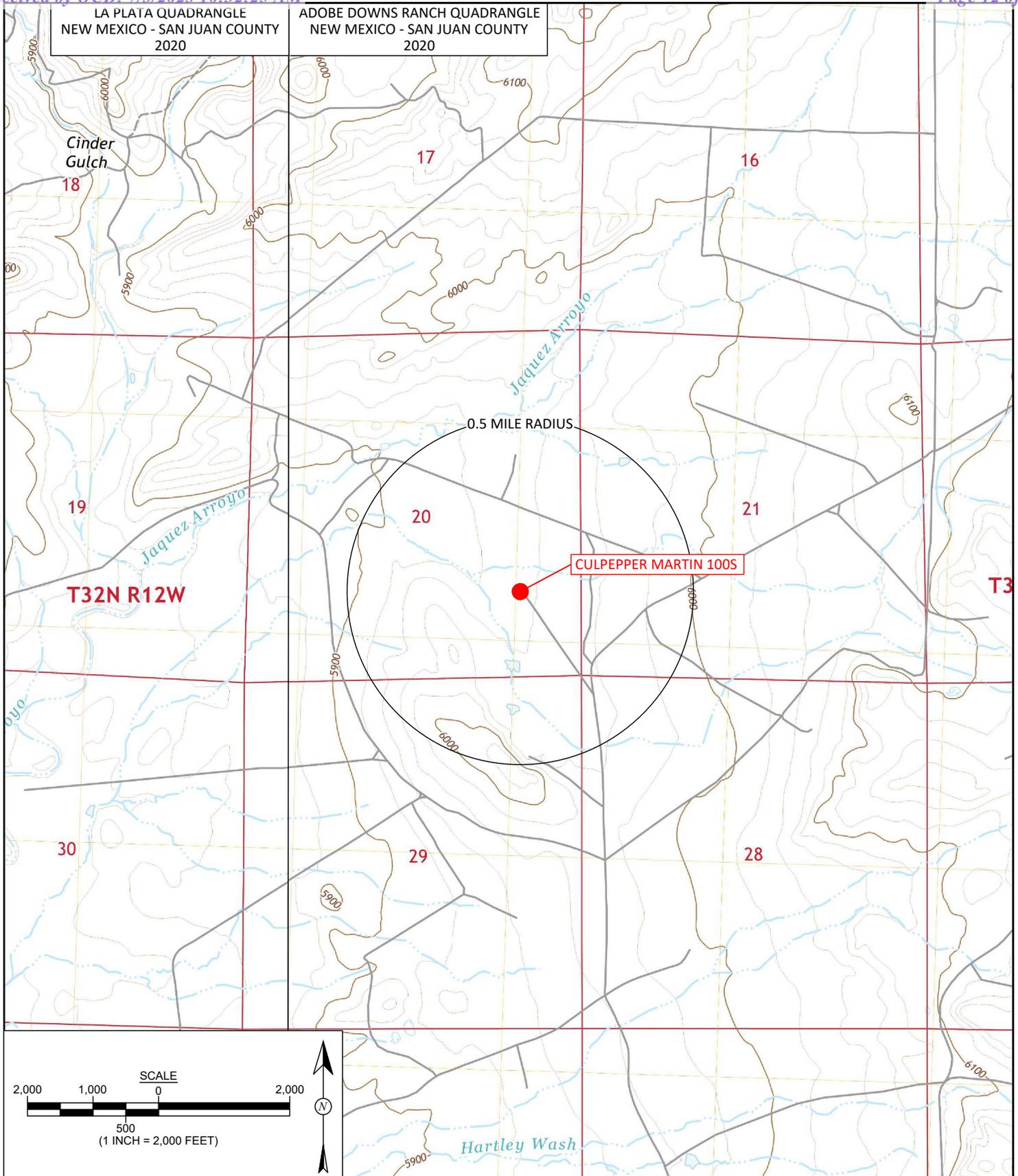
Angela Ledgerwood
Senior Project Manager

Attachments:

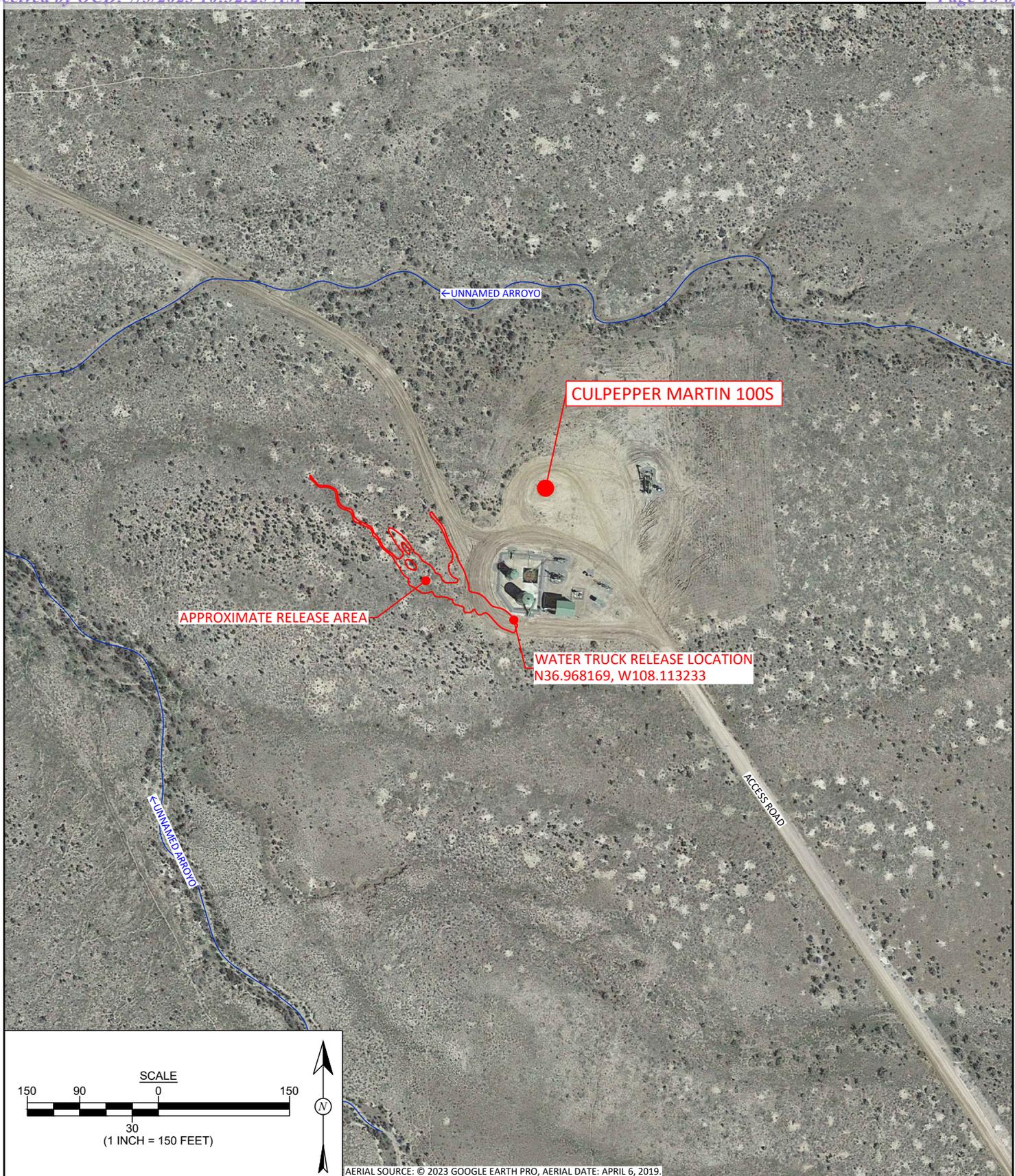
- Figure 1. Topographic Site Location Map
- Figure 2. Aerial Site Location Map
- Figure 3. Soil Sample Locations and Results
- Photograph Log
- Field Notes
- Hall Analytical Reports 2304337 and 2304C18
- Notifications and Correspondence
- NMOCD Site Assessment/Characterization Ranking

Shared Documents/Reports/2023.04.13 Culpepper Martin 100S Exc Clearance Report LC.docx

Attachments



 <p>animas environmental services Farmington, NM animasenvironmental.com</p>	<p>DRAWN BY: C. Lameman</p>	<p>DATE DRAWN: April 13, 2023</p>	<p>FIGURE 1</p> <p>TOPOGRAPHIC SITE LOCATION MAP CNJ OILFIELD SERVICES CULPEPPER MARTIN 100S API: 30-045-34394 NE1/4 SE1/4, SECTION 20, T32N, R12W SAN JUAN COUNTY, NEW MEXICO N36.968631, W108.112070</p>
	<p>REVISIONS BY: C. Lameman</p>	<p>DATE REVISED: April 13, 2023</p>	
	<p>CHECKED BY: E. McNally</p>	<p>DATE CHECKED: April 13, 2023</p>	
	<p>APPROVED BY: E. McNally</p>	<p>DATE APPROVED: April 13, 2023</p>	



AERIAL SOURCE: © 2023 GOOGLE EARTH PRO, AERIAL DATE: APRIL 6, 2019.



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Farmington, NM
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DRAWN BY: C. Lameman	DATE DRAWN: April 13, 2023
REVISIONS BY: C. Lameman	DATE REVISED: April 13, 2023
CHECKED BY: L. Cupps	DATE CHECKED: April 13, 2023
APPROVED BY: E. McNally	DATE APPROVED: April 13, 2023

FIGURE 2

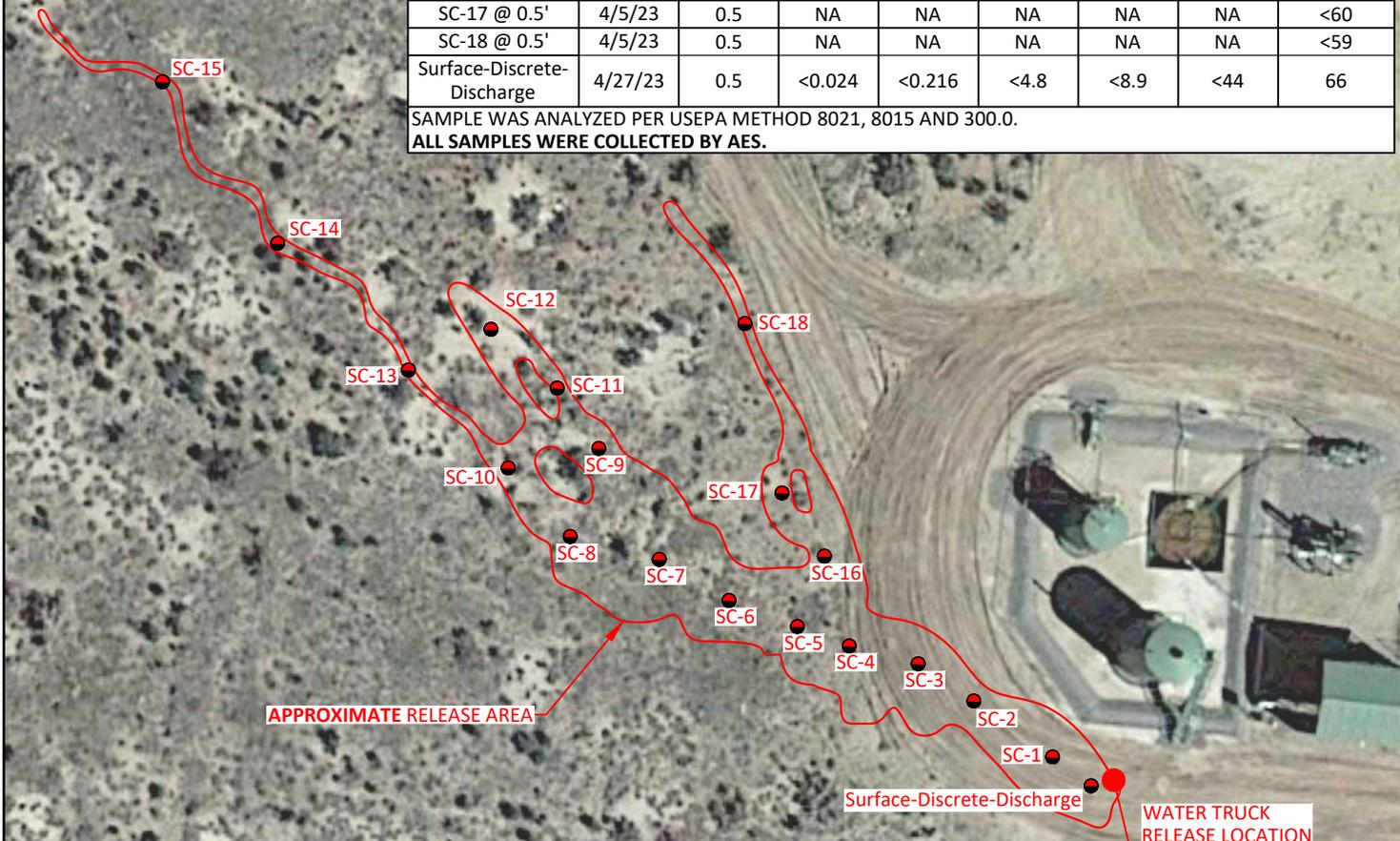
AERIAL SITE LOCATION MAP
 CNJ OILFIELD SERVICES
 CULPEPPER MARTIN 100S
 API: 30-045-34394
 NE1/4 SE1/4, SECTION 20, T32N, R12W
 SAN JUAN COUNTY, NEW MEXICO
 N36.968631, W108.112070

LEGEND

● SAMPLE LOCATIONS

Laboratory Analytical Results								
Sample ID	Date	Depth (ft)	Benzene (mg/kg)	Total BTEX (mg/kg)	TPH-GRO (mg/kg)	TPH-DRO (mg/kg)	TPH-MRO (mg/kg)	Chlorides (mg/kg)
NMOCD ACTION LEVEL			10	50	100			600
SC-1 @ 0.5'	4/5/23	0.5	<0.024	<0.210	<4.9	<9.4	<47	<60
SC-2 @ 0.5'	4/5/23	0.5	NA	NA	NA	NA	NA	<60
SC-3 @ 0.5'	4/5/23	0.5	<0.025	<0.225	<5.0	<9.7	<48	<59
SC-4 @ 0.5'	4/5/23	0.5	NA	NA	NA	NA	NA	<60
SC-5 @ 0.5'	4/5/23	0.5	NA	NA	NA	NA	NA	<59
SC-6 @ 0.5'	4/5/23	0.5	NA	NA	NA	NA	NA	<60
SC-7 @ 0.5'	4/5/23	0.5	NA	NA	NA	NA	NA	<60
SC-8 @ 0.5'	4/5/23	0.5	NA	NA	NA	NA	NA	<60
SC-9 @ 0.5'	4/5/23	0.5	NA	NA	NA	NA	NA	<61
SC-10 @ 0.5'	4/5/23	0.5	NA	NA	NA	NA	NA	<60
SC-11 @ 0.5'	4/5/23	0.5	NA	NA	NA	NA	NA	<60
SC-12 @ 0.5'	4/5/23	0.5	<0.024	<0.220	<4.9	<10	<50	<59
SC-13 @ 0.5'	4/5/23	0.5	NA	NA	NA	NA	NA	<60
SC-14 @ 0.5'	4/5/23	0.5	NA	NA	NA	NA	NA	<59
SC-15 @ 0.5'	4/5/23	0.5	NA	NA	NA	NA	NA	<60
SC-16 @ 0.5'	4/5/23	0.5	NA	NA	NA	NA	NA	<60
SC-17 @ 0.5'	4/5/23	0.5	NA	NA	NA	NA	NA	<60
SC-18 @ 0.5'	4/5/23	0.5	NA	NA	NA	NA	NA	<59
Surface-Discrete-Discharge	4/27/23	0.5	<0.024	<0.216	<4.8	<8.9	<44	66

SAMPLE WAS ANALYZED PER USEPA METHOD 8021, 8015 AND 300.0.
ALL SAMPLES WERE COLLECTED BY AES.



SCALE

40 20 0 40

10
(1 INCH = 40 FEET)

N

NOTE: ALL SAMPLES WERE 5-POINT COMPOSITE SAMPLE OF A 200 SQ. FT. AREA AT A 0.5 FT DEPTH.

AERIAL SOURCE: © 2023 GOOGLE EARTH PRO, AERIAL DATE: APRIL 6, 2019.



animas environmental services
 Farmington, NM
 animasenvironmental.com

DRAWN BY: C. Lameman	DATE DRAWN: April 13, 2023
REVISIONS BY: C. Lameman	DATE REVISED: May 4, 2023
CHECKED BY: L. Cupps	DATE CHECKED: May 4, 2023
APPROVED BY: E. McNally	DATE APPROVED: May 4, 2023

FIGURE 3

AERIAL SITE MAP AND SAMPLE LOCATIONS
 CNJ OILFIELD SERVICES
 CULPEPPER MARTIN 1005
 API: 30-045-34394
 NE1/4 SE1/4, SECTION 20, T32N, R12W
 SAN JUAN COUNTY, NEW MEXICO
 N36.968631, W108.112070

Photo 1: Culpepper Martin 100S, 04/05/2023



Photo 2: Release Location, 04/05/2023



CNJ Oilfield Services
 Culpepper Martin 100S Release Clearance Report
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Photo 3: Area of pooling, 04/05/2023



Photo 4: Spill path, 04/05/2023



CNJ Oilfield Services
Culpepper Martin 100S Release Clearance Report
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Photo 5: Confirmation sampling at release location, 04/27/2023



CNJ Oilfield Services
Culpepper Martin 100S Release Clearance Report
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Soil Sample Collection Field Form

Client: C & J Tracking
 Site Name: Culpepper Martin
 OnSite Contact: Craig
 Location: 36.9686241, -108.1127167
 Land Jurisdiction: _____
 County/State: San Juan County, New Mexico

Date: 4-5-2023
 AES Personnel: C. Lamoreaux
 Site Arrival Time: 1351
 Site Departure Time: 1750



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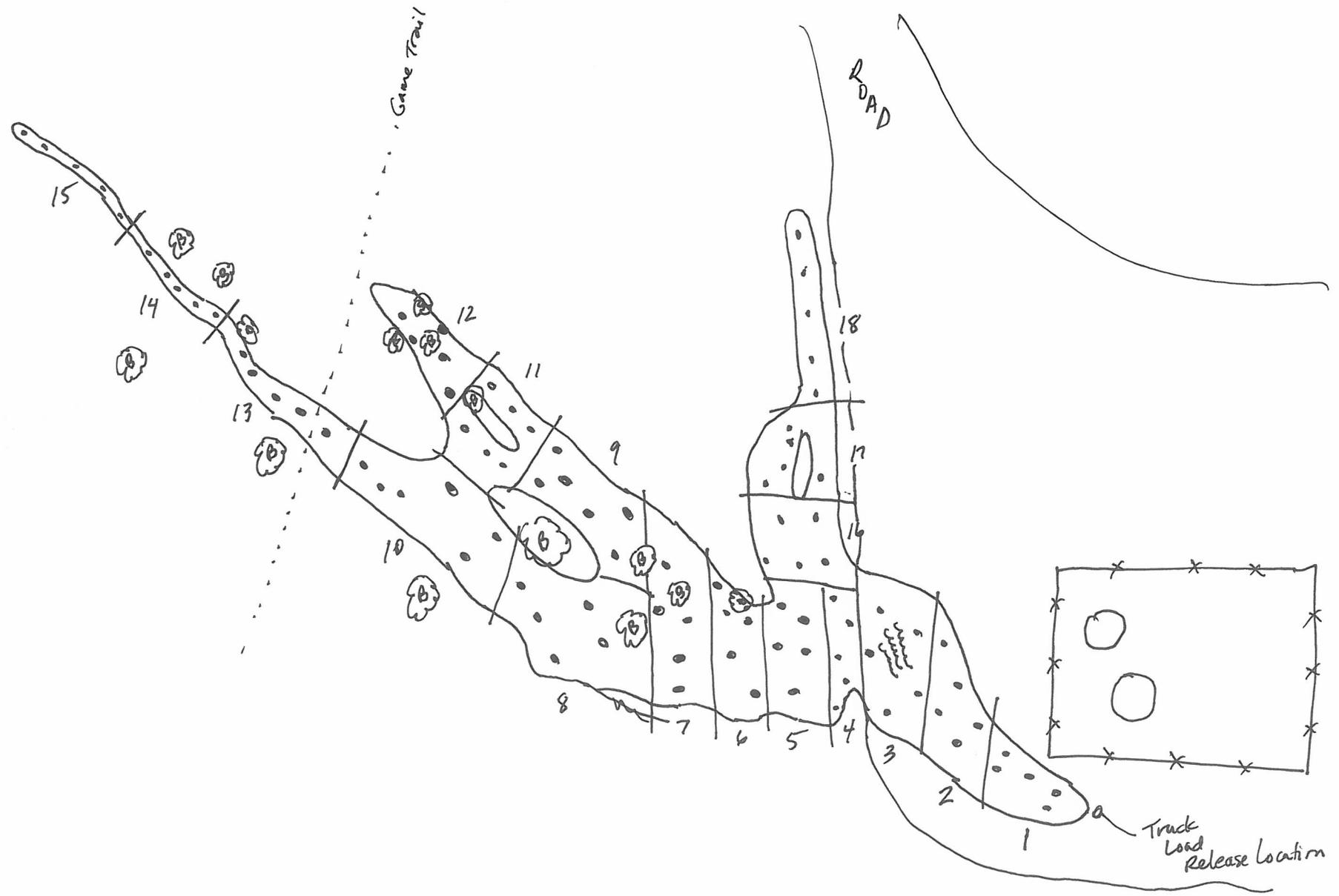
Site Notes/Details: Release from a pump truck @ night. Large surface Release of Produced water. Pumper and Craig said the water is not produce ~~was~~ condensate but just salt water.

* - offsite

Sample ID	Sample Date	Sample Time	Sample Depth	Sample Location	Composite (Y/N)	Sample Observations (Soil Type, PID, Impacted, etc.)	NO - No odor NS - No stain
SC-1	4-5-23	14:16	0.5	@ release spot (AS)	Y ^{5pt}	OVM = 0.0 ppm @ 14:24 Tan-Brown, Sand w/ clay, No odor, No stains	
SC-2		14:21		NW of RS		OVM = 0.0 ppm @ 14:35 Brown, Sand w/ clay, NO, NS	
SC-3		14:34		Large pool NW of SC-2 off site		OVM = 0.0 ppm @ 14:45 Standing H ₂ O Area. Brown, Sand w/ clay, NO, NS	
SC-4		14:59				OVM = 0.0 ppm @ 15:10 Tan-Brown, Sand, NO, NS	
SC-5		15:04		See Map pg 3		OVM = 0.0 ppm @ 15:26 S.A.A	
SC-6		15:08		See Map pg 2		OVM = 0.0 ppm @ 15:27 ^a SAA Tan-Brown, Sand, NO, NS, organics (Roots)	
SC-7		15:18				OVM = 0.0 ppm @ 15:44 SAA	
SC-8		15:28				OVM = 0.0 ppm @ 15:45 SAA	
SC-9		15:35			6pt	OVM = 0.0 ppm @ 16:00 SAA 6pt (lost track)	
SC-10		15:40				OVM = 0.0 ppm @ 16:01 SAA 6pt (lost track)	
SC-11		15:43			6pt	OVM = 0.0 ppm @ 16:02 SAA 6pt (lost track)	
SC-12		15:51				OVM = 0.0 ppm @ 16:25 SAA	
SC-13		15:54				OVM = 0.0 ppm @ 16:27 SAA	
SC-14		15:57				OVM = 0.0 ppm @ 16:28 SAA	
SC-15		16:10				OVM = 0.0 ppm @ 16:28 @ end of Main flow SAA	
SC-16		16:16		Along Road		OVM = 0.0 ppm @ 16:29 SAA	
SC-17		16:19		Along Road		OVM = 0.0 ppm @ 16:30 SAA	
SC-18		16:22		Along Road		OVM = 0.0 ppm @ 16:31 @ end of small flow SAA	

Sample Collection Location Sketch/Site Map:

NOT TO SCALE



↑ NORTH



Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

April 13, 2023

Lany Cupps

Animas Environmental Services
624 E. Comanche
Farmington, NM 87401
TEL: (505) 564-2281
FAX (505) 324-2022

RE: Culpepper Martin 100S

OrderNo.: 2304337

Dear Lany Cupps:

Hall Environmental Analysis Laboratory received 18 sample(s) on 4/7/2023 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. In order to properly interpret your results, it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0901

Sincerely,

A handwritten signature in black ink, appearing to read "Andy Freeman", is written over a white background.

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report

Lab Order **2304337**

Date Reported: **4/13/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental Services

Client Sample ID: SC-1@0.5'

Project: Culpepper Martin 100S

Collection Date: 4/5/2023 2:16:00 PM

Lab ID: 2304337-001

Matrix: SOIL

Received Date: 4/7/2023 6:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: JMT
Chloride	ND	60		mg/Kg	20	4/10/2023 11:57:37 PM	74233
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: DGH
Diesel Range Organics (DRO)	ND	9.4		mg/Kg	1	4/10/2023 11:58:19 PM	74212
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	4/10/2023 11:58:19 PM	74212
Surr: DNOP	117	69-147		%Rec	1	4/10/2023 11:58:19 PM	74212
EPA METHOD 8015D: GASOLINE RANGE							Analyst: CCM
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	4/10/2023 6:52:00 PM	74206
Surr: BFB	88.1	37.7-212		%Rec	1	4/10/2023 6:52:00 PM	74206
EPA METHOD 8021B: VOLATILES							Analyst: CCM
Benzene	ND	0.024		mg/Kg	1	4/10/2023 6:52:00 PM	74206
Toluene	ND	0.049		mg/Kg	1	4/10/2023 6:52:00 PM	74206
Ethylbenzene	ND	0.049		mg/Kg	1	4/10/2023 6:52:00 PM	74206
Xylenes, Total	ND	0.097		mg/Kg	1	4/10/2023 6:52:00 PM	74206
Surr: 4-Bromofluorobenzene	88.3	70-130		%Rec	1	4/10/2023 6:52:00 PM	74206

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Analytical Report

Lab Order **2304337**

Date Reported: **4/13/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental Services

Client Sample ID: SC-2@0.5'

Project: Culpepper Martin 100S

Collection Date: 4/5/2023 2:21:00 PM

Lab ID: 2304337-002

Matrix: SOIL

Received Date: 4/7/2023 6:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: JMT
Chloride	ND	60		mg/Kg	20	4/10/2023 6:04:45 PM	74213

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Analytical Report

Lab Order **2304337**

Date Reported: **4/13/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental Services

Client Sample ID: SC-3@0.5'

Project: Culpepper Martin 100S

Collection Date: 4/5/2023 2:34:00 PM

Lab ID: 2304337-003

Matrix: SOIL

Received Date: 4/7/2023 6:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: JMT
Chloride	ND	59		mg/Kg	20	4/11/2023 12:09:57 AM	74233
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: DGH
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	4/11/2023 12:08:57 AM	74212
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	4/11/2023 12:08:57 AM	74212
Surr: DNOP	119	69-147		%Rec	1	4/11/2023 12:08:57 AM	74212
EPA METHOD 8015D: GASOLINE RANGE							Analyst: CCM
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	4/10/2023 7:56:00 PM	74206
Surr: BFB	93.8	37.7-212		%Rec	1	4/10/2023 7:56:00 PM	74206
EPA METHOD 8021B: VOLATILES							Analyst: CCM
Benzene	ND	0.025		mg/Kg	1	4/10/2023 7:56:00 PM	74206
Toluene	ND	0.050		mg/Kg	1	4/10/2023 7:56:00 PM	74206
Ethylbenzene	ND	0.050		mg/Kg	1	4/10/2023 7:56:00 PM	74206
Xylenes, Total	ND	0.10		mg/Kg	1	4/10/2023 7:56:00 PM	74206
Surr: 4-Bromofluorobenzene	90.3	70-130		%Rec	1	4/10/2023 7:56:00 PM	74206

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Analytical Report

Lab Order **2304337**

Date Reported: **4/13/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental Services

Client Sample ID: SC-4@0.5'

Project: Culpepper Martin 100S

Collection Date: 4/5/2023 2:59:00 PM

Lab ID: 2304337-004

Matrix: SOIL

Received Date: 4/7/2023 6:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: JMT
Chloride	ND	60		mg/Kg	20	4/10/2023 6:17:10 PM	74213

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Analytical Report

Lab Order **2304337**

Date Reported: **4/13/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental Services

Client Sample ID: SC-5@0.5'

Project: Culpepper Martin 100S

Collection Date: 4/5/2023 3:04:00 PM

Lab ID: 2304337-005

Matrix: SOIL

Received Date: 4/7/2023 6:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: JMT
Chloride	ND	59		mg/Kg	20	4/10/2023 6:29:35 PM	74213

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Analytical Report

Lab Order **2304337**

Date Reported: **4/13/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental Services

Client Sample ID: SC-6@0.5'

Project: Culpepper Martin 100S

Collection Date: 4/5/2023 3:08:00 PM

Lab ID: 2304337-006

Matrix: SOIL

Received Date: 4/7/2023 6:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: JMT
Chloride	ND	60		mg/Kg	20	4/10/2023 6:41:59 PM	74213

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Analytical Report

Lab Order **2304337**

Date Reported: **4/13/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental Services

Client Sample ID: SC-7@0.5'

Project: Culpepper Martin 100S

Collection Date: 4/5/2023 3:18:00 PM

Lab ID: 2304337-007

Matrix: SOIL

Received Date: 4/7/2023 6:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: JMT
Chloride	ND	60		mg/Kg	20	4/10/2023 6:54:24 PM	74213

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Analytical Report

Lab Order **2304337**

Date Reported: **4/13/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental Services

Client Sample ID: SC-8@0.5'

Project: Culpepper Martin 100S

Collection Date: 4/5/2023 3:28:00 PM

Lab ID: 2304337-008

Matrix: SOIL

Received Date: 4/7/2023 6:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: JMT
Chloride	ND	60		mg/Kg	20	4/10/2023 7:06:48 PM	74213

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Analytical Report

Lab Order **2304337**

Date Reported: **4/13/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental Services

Client Sample ID: SC-9@0.5'

Project: Culpepper Martin 100S

Collection Date: 4/5/2023 3:35:00 PM

Lab ID: 2304337-009

Matrix: SOIL

Received Date: 4/7/2023 6:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: JMT
Chloride	ND	61		mg/Kg	20	4/10/2023 7:19:12 PM	74213

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Analytical Report

Lab Order **2304337**

Date Reported: **4/13/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental Services

Client Sample ID: SC-10@0.5'

Project: Culpepper Martin 100S

Collection Date: 4/5/2023 3:40:00 PM

Lab ID: 2304337-010

Matrix: SOIL

Received Date: 4/7/2023 6:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: JMT
Chloride	ND	60		mg/Kg	20	4/11/2023 12:22:18 AM	74233

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Analytical Report

Lab Order **2304337**

Date Reported: **4/13/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental Services

Client Sample ID: SC-11@0.5'

Project: Culpepper Martin 100S

Collection Date: 4/5/2023 3:43:00 PM

Lab ID: 2304337-011

Matrix: SOIL

Received Date: 4/7/2023 6:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: JMT
Chloride	ND	60		mg/Kg	20	4/11/2023 12:34:39 AM	74233

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Analytical Report

Lab Order **2304337**

Date Reported: **4/13/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental Services

Client Sample ID: SC-12@0.5'

Project: Culpepper Martin 100S

Collection Date: 4/5/2023 3:51:00 PM

Lab ID: 2304337-012

Matrix: SOIL

Received Date: 4/7/2023 6:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: SNS
Chloride	ND	59		mg/Kg	20	4/11/2023 2:51:16 PM	74252
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: DGH
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	4/11/2023 12:19:33 AM	74212
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	4/11/2023 12:19:33 AM	74212
Surr: DNOP	99.6	69-147		%Rec	1	4/11/2023 12:19:33 AM	74212
EPA METHOD 8015D: GASOLINE RANGE							Analyst: CCM
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	4/10/2023 9:01:00 PM	74206
Surr: BFB	90.4	37.7-212		%Rec	1	4/10/2023 9:01:00 PM	74206
EPA METHOD 8021B: VOLATILES							Analyst: CCM
Benzene	ND	0.024		mg/Kg	1	4/10/2023 9:01:00 PM	74206
Toluene	ND	0.049		mg/Kg	1	4/10/2023 9:01:00 PM	74206
Ethylbenzene	ND	0.049		mg/Kg	1	4/10/2023 9:01:00 PM	74206
Xylenes, Total	ND	0.098		mg/Kg	1	4/10/2023 9:01:00 PM	74206
Surr: 4-Bromofluorobenzene	89.5	70-130		%Rec	1	4/10/2023 9:01:00 PM	74206

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Analytical Report

Lab Order **2304337**

Date Reported: **4/13/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental Services

Client Sample ID: SC-13@0.5'

Project: Culpepper Martin 100S

Collection Date: 4/5/2023 3:54:00 PM

Lab ID: 2304337-013

Matrix: SOIL

Received Date: 4/7/2023 6:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: SNS
Chloride	ND	60		mg/Kg	20	4/11/2023 3:03:41 PM	74252

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Analytical Report

Lab Order **2304337**

Date Reported: **4/13/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental Services

Client Sample ID: SC-14@0.5'

Project: Culpepper Martin 100S

Collection Date: 4/5/2023 3:59:00 PM

Lab ID: 2304337-014

Matrix: SOIL

Received Date: 4/7/2023 6:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: SNS
Chloride	ND	59		mg/Kg	20	4/11/2023 3:16:06 PM	74252

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Analytical Report

Lab Order **2304337**

Date Reported: **4/13/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental Services

Client Sample ID: SC-15@0.5'

Project: Culpepper Martin 100S

Collection Date: 4/5/2023 4:10:00 PM

Lab ID: 2304337-015

Matrix: SOIL

Received Date: 4/7/2023 6:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: SNS
Chloride	ND	60		mg/Kg	20	4/11/2023 3:28:30 PM	74252

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Analytical Report

Lab Order **2304337**

Date Reported: **4/13/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental Services

Client Sample ID: SC-16@0.5'

Project: Culpepper Martin 100S

Collection Date: 4/5/2023 4:16:00 PM

Lab ID: 2304337-016

Matrix: SOIL

Received Date: 4/7/2023 6:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: SNS
Chloride	ND	60		mg/Kg	20	4/11/2023 3:40:55 PM	74252

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Analytical Report

Lab Order **2304337**

Date Reported: **4/13/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental Services

Client Sample ID: SC-17@0.5'

Project: Culpepper Martin 100S

Collection Date: 4/5/2023 4:19:00 PM

Lab ID: 2304337-017

Matrix: SOIL

Received Date: 4/7/2023 6:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: SNS
Chloride	ND	60		mg/Kg	20	4/11/2023 3:53:19 PM	74252

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of standard limits. If undiluted results may be estimated.		

Analytical Report

Lab Order **2304337**

Date Reported: **4/13/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental Services

Client Sample ID: SC-18@0.5'

Project: Culpepper Martin 100S

Collection Date: 4/5/2023 4:22:00 PM

Lab ID: 2304337-018

Matrix: SOIL

Received Date: 4/7/2023 6:45:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: SNS
Chloride	ND	59		mg/Kg	20	4/11/2023 4:05:43 PM	74252

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of standard limits. If undiluted results may be estimated.		

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 2304337

13-Apr-23

Client: Animas Environmental Services

Project: Culpepper Martin 100S

Sample ID: MB-74233	SampType: mblk	TestCode: EPA Method 300.0: Anions								
Client ID: PBS	Batch ID: 74233	RunNo: 95903								
Prep Date: 4/10/2023	Analysis Date: 4/10/2023	SeqNo: 3472554	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: LCS-74233	SampType: ics	TestCode: EPA Method 300.0: Anions								
Client ID: LCSS	Batch ID: 74233	RunNo: 95903								
Prep Date: 4/10/2023	Analysis Date: 4/10/2023	SeqNo: 3472555	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	15	1.5	15.00	0	97.2	90	110			

Sample ID: MB-74213	SampType: mblk	TestCode: EPA Method 300.0: Anions								
Client ID: PBS	Batch ID: 74213	RunNo: 95905								
Prep Date: 4/7/2023	Analysis Date: 4/10/2023	SeqNo: 3472742	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: LCS-74213	SampType: ics	TestCode: EPA Method 300.0: Anions								
Client ID: LCSS	Batch ID: 74213	RunNo: 95905								
Prep Date: 4/7/2023	Analysis Date: 4/10/2023	SeqNo: 3472743	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	93.8	90	110			

Sample ID: MB-74252	SampType: MBLK	TestCode: EPA Method 300.0: Anions								
Client ID: PBS	Batch ID: 74252	RunNo: 95942								
Prep Date: 4/11/2023	Analysis Date: 4/11/2023	SeqNo: 3474420	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: LCS-74252	SampType: LCS	TestCode: EPA Method 300.0: Anions								
Client ID: LCSS	Batch ID: 74252	RunNo: 95942								
Prep Date: 4/11/2023	Analysis Date: 4/11/2023	SeqNo: 3474421	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	15	1.5	15.00	0	98.2	90	110			

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quantitative Limit
- S % Recovery outside of standard limits. If undiluted results may be estimated.
- B Analyte detected in the associated Method Blank
- E Above Quantitation Range/Estimated Value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 2304337

13-Apr-23

Client: Animas Environmental Services

Project: Culpepper Martin 100S

Sample ID: LCS-74202	SampType: LCS	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: LCSS	Batch ID: 74202	RunNo: 95894								
Prep Date: 4/7/2023	Analysis Date: 4/10/2023	SeqNo: 3472132	Units: %Rec							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	4.5		5.000		90.2	69	147			

Sample ID: MB-74202	SampType: MBLK	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: PBS	Batch ID: 74202	RunNo: 95894								
Prep Date: 4/7/2023	Analysis Date: 4/10/2023	SeqNo: 3472133	Units: %Rec							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	8.7		10.00		87.2	69	147			

Sample ID: LCS-74212	SampType: LCS	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: LCSS	Batch ID: 74212	RunNo: 95894								
Prep Date: 4/7/2023	Analysis Date: 4/10/2023	SeqNo: 3472642	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	50	10	50.00	0	101	61.9	130			
Surr: DNOP	5.6		5.000		113	69	147			

Sample ID: MB-74212	SampType: MBLK	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: PBS	Batch ID: 74212	RunNo: 95894								
Prep Date: 4/7/2023	Analysis Date: 4/10/2023	SeqNo: 3472644	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	10		10.00		102	69	147			

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quantitative Limit
- S % Recovery outside of standard limits. If undiluted results may be estimated.
- B Analyte detected in the associated Method Blank
- E Above Quantitation Range/Estimated Value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 2304337

13-Apr-23

Client: Animas Environmental Services

Project: Culpepper Martin 100S

Sample ID: ics-74206	SampType: LCS	TestCode: EPA Method 8015D: Gasoline Range								
Client ID: LCSS	Batch ID: 74206	RunNo: 95904								
Prep Date: 4/7/2023	Analysis Date: 4/10/2023	SeqNo: 3472695	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	23	5.0	25.00	0	92.2	70	130			
Surr: BFB	1900		1000		191	37.7	212			

Sample ID: mb-74206	SampType: MBLK	TestCode: EPA Method 8015D: Gasoline Range								
Client ID: PBS	Batch ID: 74206	RunNo: 95904								
Prep Date: 4/7/2023	Analysis Date: 4/10/2023	SeqNo: 3472696	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	890		1000		88.9	37.7	212			

Sample ID: 2304337-001ams	SampType: MS	TestCode: EPA Method 8015D: Gasoline Range								
Client ID: SC-1@0.5'	Batch ID: 74206	RunNo: 95904								
Prep Date: 4/7/2023	Analysis Date: 4/10/2023	SeqNo: 3472698	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	22	4.8	24.25	0	90.6	70	130			
Surr: BFB	1900		969.9		197	37.7	212			

Sample ID: 2304337-001amsd	SampType: MSD	TestCode: EPA Method 8015D: Gasoline Range								
Client ID: SC-1@0.5'	Batch ID: 74206	RunNo: 95904								
Prep Date: 4/7/2023	Analysis Date: 4/10/2023	SeqNo: 3472699	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	21	4.9	24.41	0	87.6	70	130	2.69	20	
Surr: BFB	1900		976.6		194	37.7	212	0	0	

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quantitative Limit
- S % Recovery outside of standard limits. If undiluted results may be estimated.
- B Analyte detected in the associated Method Blank
- E Above Quantitation Range/Estimated Value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 2304337

13-Apr-23

Client: Animas Environmental Services

Project: Culpepper Martin 100S

Sample ID: ics-74206	SampType: LCS	TestCode: EPA Method 8021B: Volatiles								
Client ID: LCSS	Batch ID: 74206	RunNo: 95904								
Prep Date: 4/7/2023	Analysis Date: 4/10/2023	SeqNo: 3472712			Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.90	0.025	1.000	0	89.7	80	120			
Toluene	0.89	0.050	1.000	0	88.7	80	120			
Ethylbenzene	0.86	0.050	1.000	0	86.4	80	120			
Xylenes, Total	2.6	0.10	3.000	0	85.6	80	120			
Surr: 4-Bromofluorobenzene	0.90		1.000		90.1	70	130			

Sample ID: mb-74206	SampType: MBLK	TestCode: EPA Method 8021B: Volatiles								
Client ID: PBS	Batch ID: 74206	RunNo: 95904								
Prep Date: 4/7/2023	Analysis Date: 4/10/2023	SeqNo: 3472713			Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	0.88		1.000		88.3	70	130			

Sample ID: 2304337-003ams	SampType: MS	TestCode: EPA Method 8021B: Volatiles								
Client ID: SC-3@0.5'	Batch ID: 74206	RunNo: 95904								
Prep Date: 4/7/2023	Analysis Date: 4/10/2023	SeqNo: 3472716			Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.87	0.025	0.9940	0	88.0	68.8	120			
Toluene	0.89	0.050	0.9940	0	89.3	73.6	124			
Ethylbenzene	0.88	0.050	0.9940	0	88.7	72.7	129			
Xylenes, Total	2.6	0.099	2.982	0	87.7	75.7	126			
Surr: 4-Bromofluorobenzene	0.90		0.9940		90.6	70	130			

Sample ID: 2304337-003amsd	SampType: MSD	TestCode: EPA Method 8021B: Volatiles								
Client ID: SC-3@0.5'	Batch ID: 74206	RunNo: 95904								
Prep Date: 4/7/2023	Analysis Date: 4/10/2023	SeqNo: 3472717			Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.85	0.025	0.9980	0	85.3	68.8	120	2.72	20	
Toluene	0.85	0.050	0.9980	0	85.5	73.6	124	3.93	20	
Ethylbenzene	0.84	0.050	0.9980	0	84.0	72.7	129	5.10	20	
Xylenes, Total	2.5	0.10	2.994	0	82.9	75.7	126	5.27	20	
Surr: 4-Bromofluorobenzene	0.91		0.9980		90.8	70	130	0	0	

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quantitative Limit
- S % Recovery outside of standard limits. If undiluted results may be estimated.
- B Analyte detected in the associated Method Blank
- E Above Quantitation Range/Estimated Value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit



Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

Sample Log-In Check List

Client Name: Animas Environmental Services

Work Order Number: 2304337

RcptNo: 1

Received By: Tracy Casarrubias 4/7/2023 6:45:00 AM

Completed By: Tracy Casarrubias 4/7/2023 7:15:08 AM

Reviewed By: [Handwritten signature]

Chain of Custody

1. Is Chain of Custody complete? Yes [checked] No [] Not Present []

2. How was the sample delivered? Courier

Log In

3. Was an attempt made to cool the samples? Yes [checked] No [] NA []

4. Were all samples received at a temperature of >0° C to 6.0°C Yes [checked] No [] NA []

5. Sample(s) in proper container(s)? Yes [checked] No []

6. Sufficient sample volume for indicated test(s)? Yes [checked] No []

7. Are samples (except VOA and ONG) properly preserved? Yes [checked] No []

8. Was preservative added to bottles? Yes [] No [checked] NA []

9. Received at least 1 vial with headspace <1/4" for AQ VOA? Yes [] No [] NA [checked]

10. Were any sample containers received broken? Yes [] No [checked]

11. Does paperwork match bottle labels? (Note discrepancies on chain of custody) Yes [checked] No []

12. Are matrices correctly identified on Chain of Custody? Yes [checked] No []

13. Is it clear what analyses were requested? Yes [checked] No []

14. Were all holding times able to be met? (If no, notify customer for authorization.) Yes [checked] No []

of preserved bottles checked for pH: (<2 or >12 unless noted) Adjusted? Checked by: [Handwritten signature]

Special Handling (if applicable)

15. Was client notified of all discrepancies with this order? Yes [] No [] NA [checked]

Person Notified: [] Date: []
By Whom: [] Via: [] eMail [] Phone [] Fax [] In Person []
Regarding: []
Client Instructions: []

16. Additional remarks:

17. Cooler Information

Table with 7 columns: Cooler No, Temp °C, Condition, Seal Intact, Seal No, Seal Date, Signed By. Row 1: 1, 2.4, Good, Yes, Yogi, [], []



Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

May 03, 2023

Lany Cupps
Animas Environmental Services
624 E. Comanche
Farmington, NM 87401
TEL: (505) 564-2281
FAX (505) 324-2022

RE: Culpepper Martin 100S

OrderNo.: 2304C18

Dear Lany Cupps:

Hall Environmental Analysis Laboratory received 1 sample(s) on 4/28/2023 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. In order to properly interpret your results, it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0901

Sincerely,

A handwritten signature in black ink, appearing to read 'Andy Freeman', is written in a cursive style.

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report

Lab Order **2304C18**

Date Reported: **5/3/2023**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Animas Environmental Services

Client Sample ID: Surface-Discrete-Discharge

Project: Culpepper Martin 100S

Collection Date: 4/27/2023 11:09:00 AM

Lab ID: 2304C18-001

Matrix: SOIL

Received Date: 4/28/2023 7:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: SNS
Chloride	66	60		mg/Kg	20	5/2/2023 5:33:25 PM	74697
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: DGH
Diesel Range Organics (DRO)	ND	8.9		mg/Kg	1	5/2/2023 3:00:18 AM	74658
Motor Oil Range Organics (MRO)	ND	44		mg/Kg	1	5/2/2023 3:00:18 AM	74658
Surr: DNOP	76.0	69-147		%Rec	1	5/2/2023 3:00:18 AM	74658
EPA METHOD 8015D: GASOLINE RANGE							Analyst: JJP
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	5/1/2023 9:48:43 PM	74644
Surr: BFB	61.0	37.7-212		%Rec	1	5/1/2023 9:48:43 PM	74644
EPA METHOD 8021B: VOLATILES							Analyst: JJP
Benzene	ND	0.024		mg/Kg	1	5/1/2023 9:48:43 PM	74644
Toluene	ND	0.048		mg/Kg	1	5/1/2023 9:48:43 PM	74644
Ethylbenzene	ND	0.048		mg/Kg	1	5/1/2023 9:48:43 PM	74644
Xylenes, Total	ND	0.096		mg/Kg	1	5/1/2023 9:48:43 PM	74644
Surr: 4-Bromofluorobenzene	87.4	70-130		%Rec	1	5/1/2023 9:48:43 PM	74644

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Above Quantitation Range/Estimated Value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of standard limits. If undiluted results may be estimated.		

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 2304C18

03-May-23

Client: Animas Environmental Services

Project: Culpepper Martin 100S

Sample ID: MB-74697	SampType: MBLK	TestCode: EPA Method 300.0: Anions								
Client ID: PBS	Batch ID: 74697	RunNo: 96480								
Prep Date: 5/2/2023	Analysis Date: 5/2/2023	SeqNo: 3495973	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: LCS-74697	SampType: LCS	TestCode: EPA Method 300.0: Anions								
Client ID: LCSS	Batch ID: 74697	RunNo: 96480								
Prep Date: 5/2/2023	Analysis Date: 5/2/2023	SeqNo: 3495974	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	94.5	90	110			

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quantitative Limit
- S % Recovery outside of standard limits. If undiluted results may be estimated.
- B Analyte detected in the associated Method Blank
- E Above Quantitation Range/Estimated Value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 2304C18

03-May-23

Client: Animas Environmental Services

Project: Culpepper Martin 100S

Sample ID: LCS-74658	SampType: LCS		TestCode: EPA Method 8015M/D: Diesel Range Organics							
Client ID: LCSS	Batch ID: 74658		RunNo: 96420							
Prep Date: 5/1/2023	Analysis Date: 5/1/2023		SeqNo: 3492767		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	40	10	50.00	0	79.7	61.9	130			
Surr: DNOP	4.0		5.000		79.1	69	147			

Sample ID: MB-74658	SampType: MBLK		TestCode: EPA Method 8015M/D: Diesel Range Organics							
Client ID: PBS	Batch ID: 74658		RunNo: 96420							
Prep Date: 5/1/2023	Analysis Date: 5/1/2023		SeqNo: 3492768		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	8.4		10.00		83.9	69	147			

Sample ID: LCS-74700	SampType: LCS		TestCode: EPA Method 8015M/D: Diesel Range Organics							
Client ID: LCSS	Batch ID: 74700		RunNo: 96460							
Prep Date: 5/2/2023	Analysis Date: 5/2/2023		SeqNo: 3494835		Units: %Rec					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	4.1		5.000		81.2	69	147			

Sample ID: MB-74700	SampType: MBLK		TestCode: EPA Method 8015M/D: Diesel Range Organics							
Client ID: PBS	Batch ID: 74700		RunNo: 96460							
Prep Date: 5/2/2023	Analysis Date: 5/2/2023		SeqNo: 3494839		Units: %Rec					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	7.5		10.00		75.1	69	147			

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quantitative Limit
- S % Recovery outside of standard limits. If undiluted results may be estimated.
- B Analyte detected in the associated Method Blank
- E Above Quantitation Range/Estimated Value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 2304C18

03-May-23

Client: Animas Environmental Services

Project: Culpepper Martin 100S

Sample ID: ics-74644	SampType: LCS		TestCode: EPA Method 8015D: Gasoline Range							
Client ID: LCSS	Batch ID: 74644		RunNo: 96418							
Prep Date: 4/28/2023	Analysis Date: 5/1/2023		SeqNo: 3493108		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	21	5.0	25.00	0	84.7	70	130			
Surr: BFB	4700		1000		475	37.7	212			S

Sample ID: mb-74644	SampType: MBLK		TestCode: EPA Method 8015D: Gasoline Range							
Client ID: PBS	Batch ID: 74644		RunNo: 96418							
Prep Date: 4/28/2023	Analysis Date: 5/1/2023		SeqNo: 3493109		Units: mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	760		1000		75.8	37.7	212			

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quantitative Limit
- S % Recovery outside of standard limits. If undiluted results may be estimated.
- B Analyte detected in the associated Method Blank
- E Above Quantitation Range/Estimated Value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 2304C18

03-May-23

Client: Animas Environmental Services

Project: Culpepper Martin 100S

Sample ID: LCS-74644	SampType: LCS	TestCode: EPA Method 8021B: Volatiles								
Client ID: LCSS	Batch ID: 74644	RunNo: 96418								
Prep Date: 4/28/2023	Analysis Date: 5/1/2023	SeqNo: 3493111	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.85	0.025	1.000	0	85.4	80	120			
Toluene	0.88	0.050	1.000	0	88.1	80	120			
Ethylbenzene	0.89	0.050	1.000	0	88.8	80	120			
Xylenes, Total	2.7	0.10	3.000	0	90.1	80	120			
Surr: 4-Bromofluorobenzene	0.92		1.000		92.4	70	130			

Sample ID: mb-74644	SampType: MBLK	TestCode: EPA Method 8021B: Volatiles								
Client ID: PBS	Batch ID: 74644	RunNo: 96418								
Prep Date: 4/28/2023	Analysis Date: 5/1/2023	SeqNo: 3493112	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	0.91		1.000		91.4	70	130			

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quantitative Limit
- S % Recovery outside of standard limits. If undiluted results may be estimated.
- B Analyte detected in the associated Method Blank
- E Above Quantitation Range/Estimated Value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit



Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

Sample Log-In Check List

Client Name: Animas Environmental Services
Work Order Number: 2304C18
RcptNo: 1

Received By: Tracy Casarrubias 4/28/2023 7:00:00 AM
Completed By: Tracy Casarrubias 4/28/2023 7:35:37 AM
Reviewed By: [Signature] 4-28-23

Chain of Custody

- 1. Is Chain of Custody complete? Yes [checked] No [] Not Present []
2. How was the sample delivered? Courier

Log In

- 3. Was an attempt made to cool the samples? Yes [checked] No [] NA []
4. Were all samples received at a temperature of >0° C to 6.0°C Yes [checked] No [] NA []
5. Sample(s) in proper container(s)? Yes [checked] No []
6. Sufficient sample volume for indicated test(s)? Yes [checked] No []
7. Are samples (except VOA and ONG) properly preserved? Yes [checked] No []
8. Was preservative added to bottles? Yes [] No [checked] NA []
9. Received at least 1 vial with headspace <1/4" for AQ VOA? Yes [] No [] NA [checked]
10. Were any sample containers received broken? Yes [] No [checked]
11. Does paperwork match bottle labels? Yes [checked] No []
12. Are matrices correctly identified on Chain of Custody? Yes [checked] No []
13. Is it clear what analyses were requested? Yes [checked] No []
14. Were all holding times able to be met? Yes [checked] No []

of preserved bottles checked for pH:
(<2 or >12 unless noted)
Adjusted?
Checked by: Jm 4/28/23

Special Handling (if applicable)

- 15. Was client notified of all discrepancies with this order? Yes [] No [] NA [checked]

Person Notified: [] Date: []
By Whom: [] Via: [] eMail [] Phone [] Fax [] In Person []
Regarding: []
Client Instructions: []

16. Additional remarks:

17. Cooler Information

Table with 7 columns: Cooler No, Temp °C, Condition, Seal Intact, Seal No, Seal Date, Signed By. Row 1: 1, 3.9, Good, Yes, Yogi, [], []

Mitch Killough

From: Mitch Killough
Sent: Wednesday, April 5, 2023 10:00 AM
To: Velez, Nelson, EMNRD
Cc: OCD.Enviro@state.nm.us; Matt Henderson
Subject: RE: Hilcorp Energy Company - 24-Hour Release Notification - Culpepper Martin 100S

Tracking:	Recipient	Delivery	Read
	Velez, Nelson, EMNRD		
	OCD.Enviro@state.nm.us		
	Matt Henderson	Delivered: 4/5/2023 10:00 AM	Read: 4/5/2023 10:01 AM

Hi Nelson.

On 4/4/2023 at approximately 10:00 AM (MT), Hilcorp Energy Company (Hilcorp) discovered a 54-bbl release of produced water at the Culpepper Martin 100S (API: 30-045-34394) in San Juan County, NM (36.968631, -108.112070). Shortly after commencing the unloading of produced water from a Hilcorp-owned storage tank, fluids began spilling from the third-party water hauling truck onto the pad. The spilled fluids migrated across the pad and flowed off location in an easterly direction before terminating approximately 300 ft from the site. Upon inspection and discussions with the third-party, it was determined that during the unloading process, a valve on the truck was not closed properly, which allowed fluids to escape the truck. Only 1 bbl of spilled fluid could be recovered following the release. At this time, Hilcorp is in discussions with the third-party regarding spill cleanup expectations. The site is located on private surface owned by Montoya Cattle Company.

An initial C-141 will be submitted by Hilcorp to the NMOCD no later than 4/19/2023.

Please contact me if you have any questions. Thanks.

Mitch Killough
Environmental Specialist
Hilcorp Energy Company
1111 Travis Street
Houston, TX 77002
713-757-5247 (office)
281-851-2338 (cell)
mkillough@hilcorp.com

Lany Cupps

From: Velez, Nelson, EMNRD <Nelson.Velez@emnrd.nm.gov>
Sent: Monday, April 24, 2023 2:45 PM
To: Lany Cupps
Cc: Craig Nelson; Angela Ledgerwood; Smith, Cory, EMNRD
Subject: Re: [EXTERNAL] Sampling Notification - Culpepper Martin 100S Produced Water Release

Howdy Lany,

Thank you for the notice. For whatever reason, if the sampling timeframe is altered, please notify the OCD as soon as possible so we may adjust our schedule(s). Failure to notify the OCD of this change may result in the sample not being accepted.

Please keep a copy of this communication for inclusion within the appropriate report submittal.

The OCD requires a copy of all correspondence relative to remedial activities be included in all proposals and/or final closure reports. Correspondence required to be included in reports may include, but not limited to, notifications for liner inspections, sample events, spill/release/fire, and request for time extensions or variances.

Please reference incident # NAPP2310736718 for all future correspondence related to this matter. Thanks again.

Regards,

Nelson Velez • Environmental Specialist - Adv
Environmental Bureau | EMNRD - Oil Conservation Division
1000 Rio Brazos Road | Aztec, NM 87410
(505) 469-6146 | nelson.velez@emnrd.nm.gov
<http://www.emnrd.state.nm.us/OCD/>



From: Lany Cupps <lcupps@animasenvironmental.com>
Sent: Monday, April 24, 2023 2:29 PM
To: Velez, Nelson, EMNRD <Nelson.Velez@emnrd.nm.gov>
Cc: Craig Nelson <cnelson@cnjoilfieldsvcs.com>; Angela Ledgerwood <aledgerwood@animasenvironmental.com>
Subject: [EXTERNAL] Sampling Notification - Culpepper Martin 100S Produced Water Release

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

Good afternoon Nelson,

AES is planning to perform sampling at the Culpepper Martin 100S (API: 30-045-34394) produced water release location on Thursday, April 27, 2023.

Per your conversation with my colleague Angela on 4/21/23, one discrete grab sample from the surface at the release point will be collected and analyzed for BTEX per 8021, TPH GRO/DRO/MRO per 8015, and chlorides per 300.0.

Please reach out with any questions or concerns.

Thank you,

Lany Cupps
Environmental Coordinator
Animas Environmental Services, LLC
www.animasenvironmental.com
505.486.9250 mobile



NMOCD Site Assessment/Characterization, Remediation & Closure

Site Name:	Culpepper Martin 100S
API or Facility#:	30-045-34394
Lat/Long:	N36.9686241 W108.1127167
TRS:	I-20-32N-12W
Land Jurisdiction:	Private
County:	San Juan
Determination made by:	David Reese
Date:	4/11/2023

Wellhead Protection Area Assessment:

Determine the horizontal distance from all known water sources within 1/2 mile of the release including private and domestic water sources. Water sources are wells, springs or other sources of fresh water extraction. Private and domestic water sources are those water sources used by less than five households for domestic or stock purposes. (NMAC 19.15.29.11A.3)

Water Source Type (well/spring/stock pond)	ID (if available)	Latitude	Longitude	Distance
Stock pond		36.96478	-108.11346	1,300' to S
Stock pond		36.96977	-108.11773	1,430' to W

Distance to Nearest Significant Watercourse (NMAC 19.15.29.11A.4)

an unnamed blue-line wash is 190 feet to the North, ultimately drains to the La Plata River

Depth to Groundwater Determination (NMAC 19.15.29.11A.2)

Water well	Pit permit Culpepper Martin 100S, DTW <50'; Well SJ 04315 < 1 mile away, DTW = 50 feet
Elevation Differential	
Water Wells	no registered wells within 1/2 mile
Cathodic Report Nearby Wells	

Sensitive Receptor Determination

**"If a release occurs within the following areas, the responsible party must treat the release as if it occurred less than 50 feet to ground water in Table I of 19.15.29.12 NMAC" (NMAC 19.15.29.12.C.4)*

	Yes	No
<300' of any continuously flowing watercourse or any other significant watercourse	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<200' of any lakebed, sinkhole or playa lake (measured from the Ordinary High Water Mark)	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<300' of an occupied permanent residence, school, hospital, institution or church	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<500' of a spring or private/domestic water well used by <5 households for domestic or stock watering purposes	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<1000' of any water well or spring	<input type="checkbox"/>	<input checked="" type="checkbox"/>
within incorporated municipal boundaries or within a defined municipal fresh water well field	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<300' of a wetland	<input type="checkbox"/>	<input checked="" type="checkbox"/>
within the area overlying a subsurface mine	<input type="checkbox"/>	<input checked="" type="checkbox"/>
within an unstable area	<input type="checkbox"/>	<input checked="" type="checkbox"/>
within a 100-year floodplain	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Explain any 'Yes' Marks:
 an unnamed blue-line wash (a legal "significant watercourse") is 190 feet to the North

Actual Depth to Groundwater is:	≤50 <input checked="" type="checkbox"/>	50-100 <input type="checkbox"/>	>100 <input type="checkbox"/>
*Treat Depth to Groundwater as if it is ≤ 50 ft?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
	≤50	50-100	>100
Release Action Levels are...			
Benzene	10	10	10
BTEX (mg/kg)	50	50	50
8015 TPH (GRO/DRO) (mg/kg)	Not Applicable	1,000	1,000
8015 TPH (GRO/DRO/MRO) (mg/kg)	100	2,500	2,500
Chlorides (mg/kg)	600	10,000	20,000

NMAC 19.15.29.12 Table I. Release Action Levels are determined by the depth below bottom of pit to groundwater.

District I
 1625 N. French Dr., Hobbs, NM 88240
 Phone:(575) 393-6161 Fax:(575) 393-0720

District II
 811 S. First St., Artesia, NM 88210
 Phone:(575) 748-1283 Fax:(575) 748-9720

District III
 1000 Rio Brazos Rd., Aztec, NM 87410
 Phone:(505) 334-6178 Fax:(505) 334-6170

District IV
 1220 S. St Francis Dr., Santa Fe, NM 87505
 Phone:(505) 476-3470 Fax:(505) 476-3462

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

CONDITIONS

Action 235472

CONDITIONS

Operator: HILCORP ENERGY COMPANY 1111 Travis Street Houston, TX 77002	OGRID: 372171
	Action Number: 235472
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
nvelez	None	9/25/2023