District I
625 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	NRM2003539361
District RP	
Facility ID	
Application ID	

Release Notification

Responsible Party

Responsible Party Dugan Production Corp.	OGRID 006515
Contact Name Kevin Smaka	Contact Telephone 505-325-1821
Contact email kevin.smaka@duganproduction.com	Incident # *(assigned by OCD)* NRM2003539361
Contact mailing address PO Box 420, Farmington, NM 87499	

Location of Release Source

Latitude 36.440149 Longitude -108.17006

(NAD 83 in decimal degrees to 5 decimal places)

Site Name West Bisti Pipeline	Site Type Oil pipeline
Date Release Discovered 12/13/19	API# *(if applicable)*

Unit Letter	Section	Township	Range	County
O	36	26N	13W	San Juan

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)

☒ Crude Oil	Volume Released (bbls) 33	Volume Recovered (bbls) 0
☐ Produced Water	Volume Released (bbls)	Volume Recovered (bbls)
	Is the concentration of dissolved chloride in the produced water >10,000 mg/l?	☐ Yes ☐ No
☐ Condensate	Volume Released (bbls)	Volume Recovered (bbls)
☐ Natural Gas	Volume Released (Mcf)	Volume Recovered (Mcf)
☐ Other (describe)	Volume/Weight Released (provide units)	Volume/Weight Recovered (provide units)

Cause of Release
Pipeline corrosion

State of New Mexico
Oil Conservation Division

Incident ID	
District RP	
Facility ID	
Application ID	

Was this a major release as defined by 19.15.29.7(A) NMAC? ☒ Yes ☐ No	If YES, for what reason(s) does the responsible party consider this a major release?
If YES, was immediate notice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)? Immediate notice was given by Kevin Smaka on 12/13/19 to the BLM, BIA, Cory Smith and Brandon Powell of the NMOCD, and Jim Griswold of the NMOCD Environmental Department.	

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.

☒ The impacted area has been secured to protect human health and the environment.

☒ Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices.

☒ All free liquids and recoverable materials have been removed and managed appropriately.

If all the actions described above have not been undertaken, explain why:

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: _____ Title: _____

Signature: _____ Date: _____

email: _____ Telephone: _____

OCD Only

Received by: _____ Date: _____

State of New Mexico
Oil Conservation Division

Incident ID	
District RP	
Facility ID	
Application ID	

Site Assessment/Characterization

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

What is the shallowest depth to groundwater beneath the area affected by the release?	_____ (ft bgs)
Did this release impact groundwater or surface water?	☐ Yes ☐ No
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?	☐ Yes ☐ 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)?	☐ Yes ☐ No
Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church?	☐ Yes ☐ 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?	☐ Yes ☐ No
Are the lateral extents of the release within 1000 feet of any other fresh water well or spring?	☐ Yes ☐ No
Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh water well field?	☐ Yes ☐ No
Are the lateral extents of the release within 300 feet of a wetland?	☐ Yes ☐ No
Are the lateral extents of the release overlying a subsurface mine?	☐ Yes ☐ No
Are the lateral extents of the release overlying an unstable area such as karst geology?	☐ Yes ☐ No
Are the lateral extents of the release within a 100-year floodplain?	☐ Yes ☐ No
Did the release impact areas **not** on an exploration, development, production, or storage site?	☐ Yes ☐ No

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

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

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

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

State of New Mexico
Oil Conservation Division

Incident ID	
District RP	
Facility ID	
Application ID	

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

Printed Name: _____ Title: _____

Signature: _____ Date: _____

email: _____ Telephone: _____

OCD Only

Received by: _____ Date: _____

State of New Mexico
Oil Conservation Division

Incident ID	
District RP	
Facility ID	
Application ID	

Remediation Plan

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

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

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

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

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

Printed Name: _____ Title: _____

Signature: _____ Date: _____

email: _____ Telephone: _____

OCD Only

Received by: _____ Date: _____

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

Signature: _____ Date: _____

State of New Mexico
Oil Conservation Division

Incident ID	
District RP	
Facility ID	
Application ID	

Closure

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

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

- [X] A scaled site and sampling diagram as described in 19.15.29.11 NMAC
- [X] 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)
- [X] Laboratory analyses of final sampling (Note: appropriate ODC District office must be notified 2 days prior to final sampling)
- [X] 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: Kevin Smaka Title: Engineer

Signature: Kevin Smaka Date: 5/1/2020

email: kevin.smaka@duganproduction.com Telephone: 505-325-1821 x1049

OCD Only

Received by: OCD Date: 5/5/2020

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: Cory Smith Date: 8/4/2020

Printed Name: Cory Smith Title: Environmental Specialist

West Bisti Unit Pipeline Spill

Closure Report

On 12/13/2019 Dugan Production Corp. personnel discovered a pipeline leak located near Dugan Production's West Bisti Unit #156. At that time Dugan dispatched crews to stop the leak source, contain the spill to prevent further contamination and remove any free liquids to protect the environment and public health as much as possible. To reach these ends, Dugan closed the valve that was supplying crude to the pipeline which in turn eliminated the source. All visibly contaminated soil was stockpiled and later hauled to the Envirotech land farm for remediation. After stopping the source and disposing of the visually contaminated soil a fence was constructed around the broken pipe as well as barriers and berms were constructed prevent the public access to spill site.

On Thursday January 9th, Dugan collected soil samples to determine whether further remedial activities were needed to remediate the impacted soils. Results were above the allowed limits for TPH in table 1 of the "Spill Rule". At this point Dugan crews removed the next foot of soil to allow for complete remediation.

Samples were again collected after excavating another foot of dirt on 3/6/2020. Results indicated we were below the allowed limits in table but due to the fact we were operating in the top four feet of the surface we would need to remediate even further to be in compliance with OCD rules.

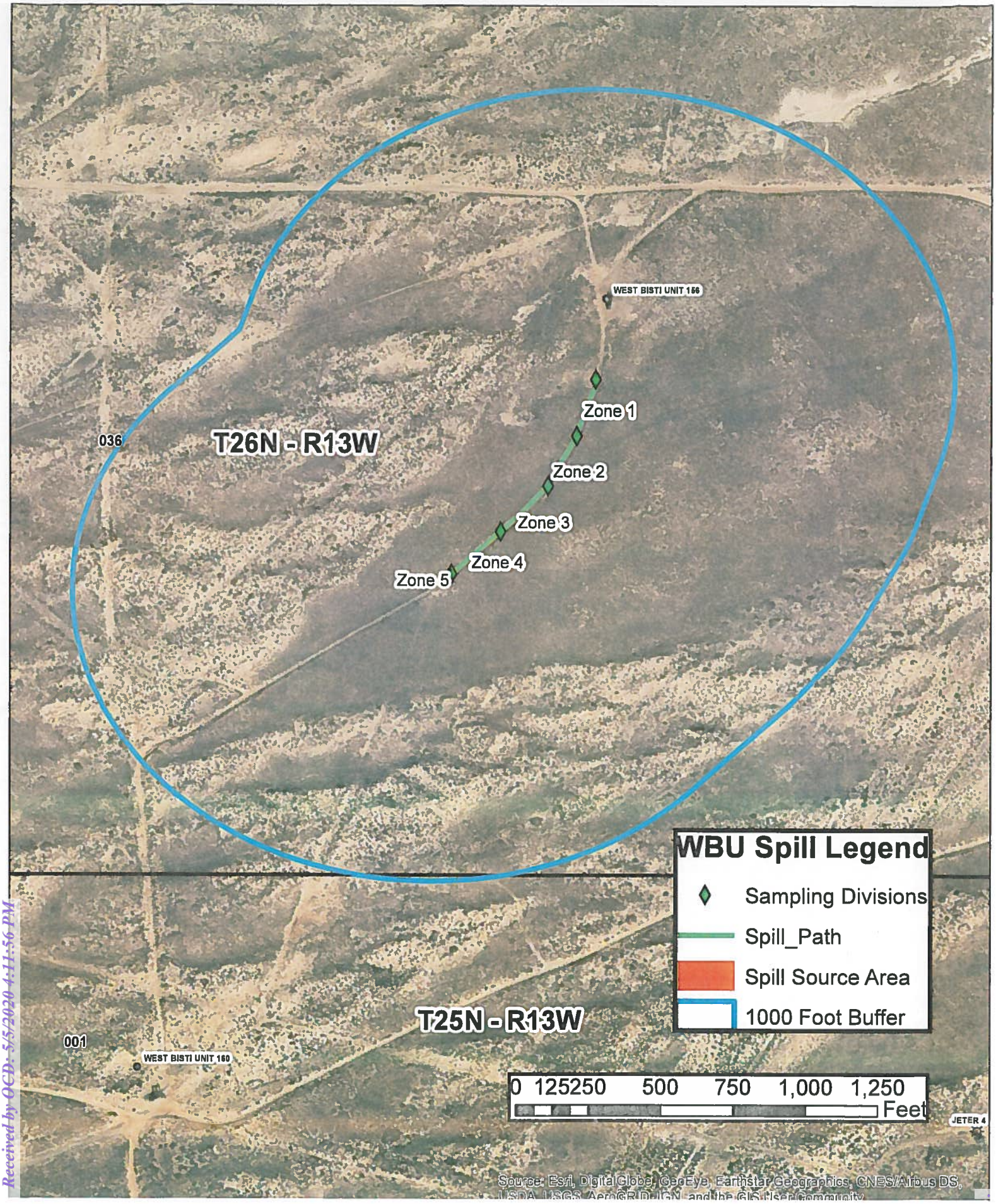
From here Dugan removed another foot of soil and sampled the soils verify that soil conditions were in the allowed limits of the NMOCD. Sampling was conducted on 3/20/2020. Results came back and confirmed that all contaminants meet the standards in table 1 and no further remedial work was needed.

Once the site was determined to have been remediated Dugan backfilled the holes around the spill and returned the pipeline to service.

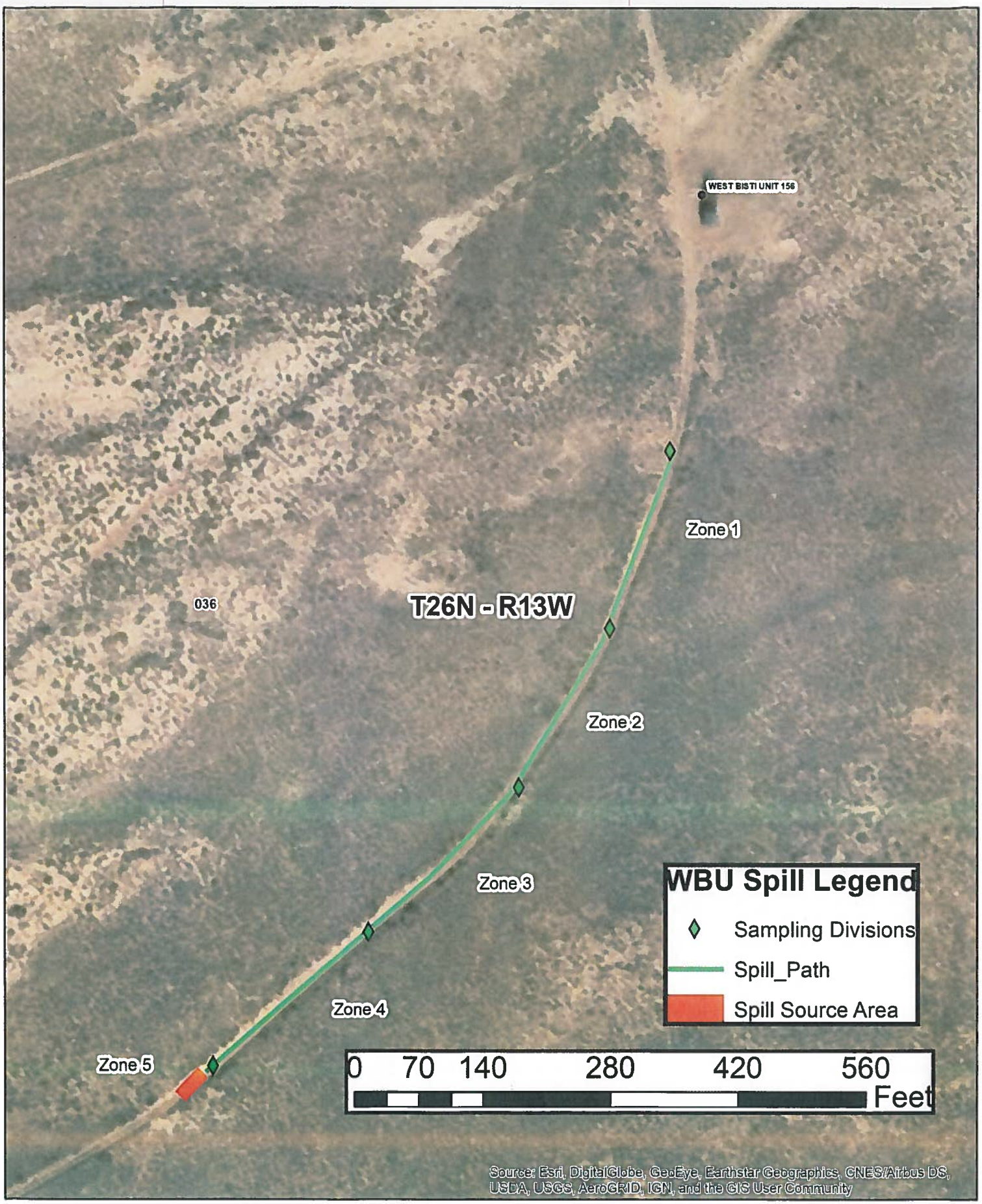
For record purposes the estimated volume of the spill was 33 bbl. Dugan removed the first 3 feet of earth from areas that had been impacted by the spill.

This closure report was due on 4/15/2020. Due to the complications and challenges presented by the Covid-19 pandemic Dugan is late in submitting this closure report. Dugan regrets being late in submitting the needed documents for closure and hopes as we move forward into a new normal that these issues will be eliminated.

WBU 156 Pipeline Spill Area

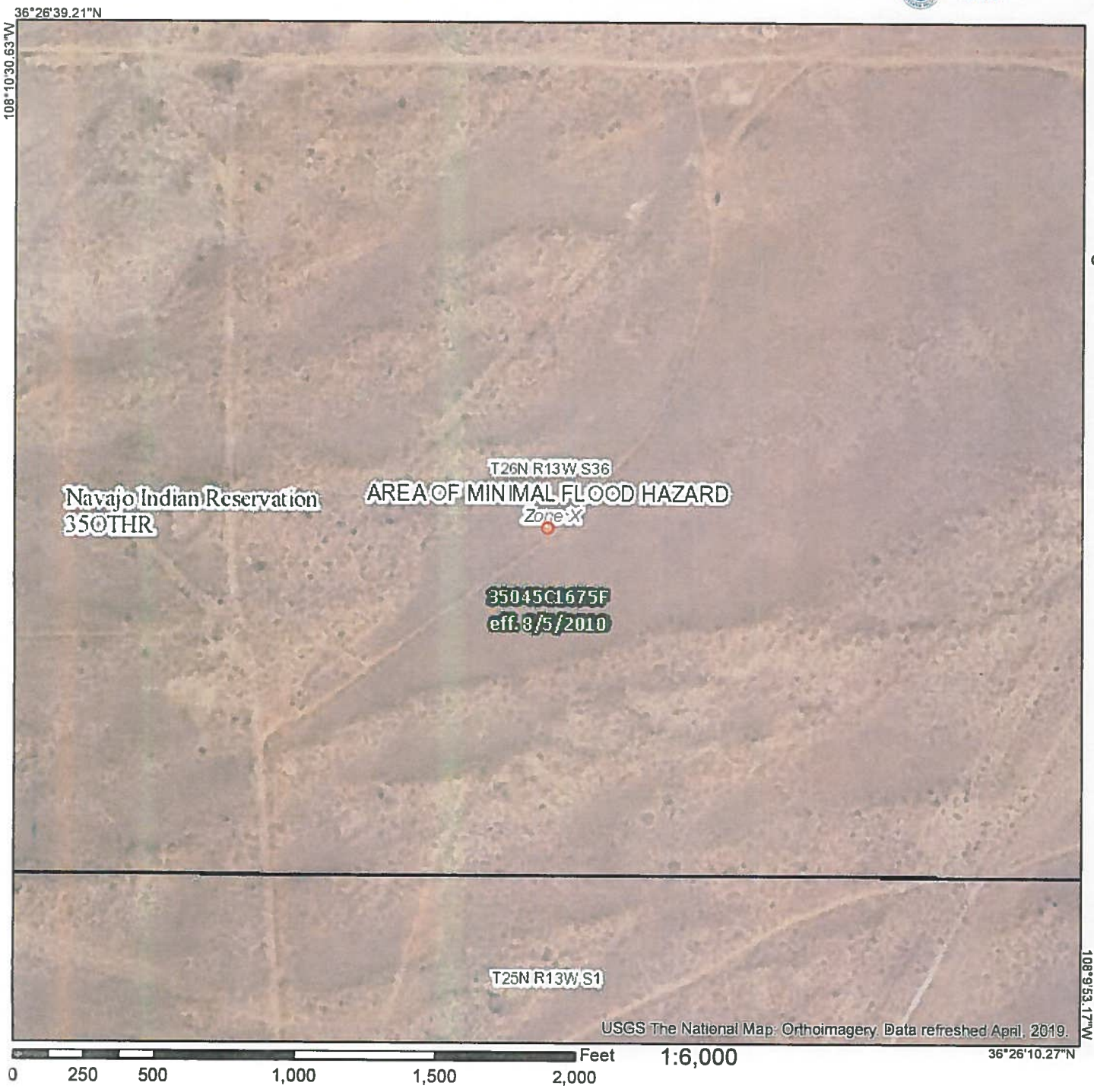


WBU 156 Pipeline Spill Area



National Flood Hazard Layer FIRMette

FEMA



Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

SPECIAL FLOOD HAZARD AREAS	Without Base Flood Elevation (BFE) Zone A, V, A99
	With BFE or Depth Zone AE, AO, AH, VE, AR
	Regulatory Floodway
OTHER AREAS OF FLOOD HAZARD	0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile Zone X
	Future Conditions 1% Annual Chance Flood Hazard Zone X
	Area with Reduced Flood Risk due to Levee. See Notes. Zone X
	Area with Flood Risk due to Levee Zone D
OTHER AREAS	NO SCREEN Area of Minimal Flood Hazard Zone X
	Effective LOMRs
	Area of Undetermined Flood Hazard Zone D
GENERAL STRUCTURES	Channel, Culvert, or Storm Sewer
	Levee, Dike, or Floodwall
OTHER FEATURES	20.2 Cross Sections with 1% Annual Chance
	17.5 Water Surface Elevation
	Coastal Transect
	513 Base Flood Elevation Line (BFE)
	Limit of Study
	Jurisdiction Boundary
	Coastal Transect Baseline
	Profile Baseline
	Hydrographic Feature
MAP PANELS	Digital Data Available
	No Digital Data Available
	Unmapped

N

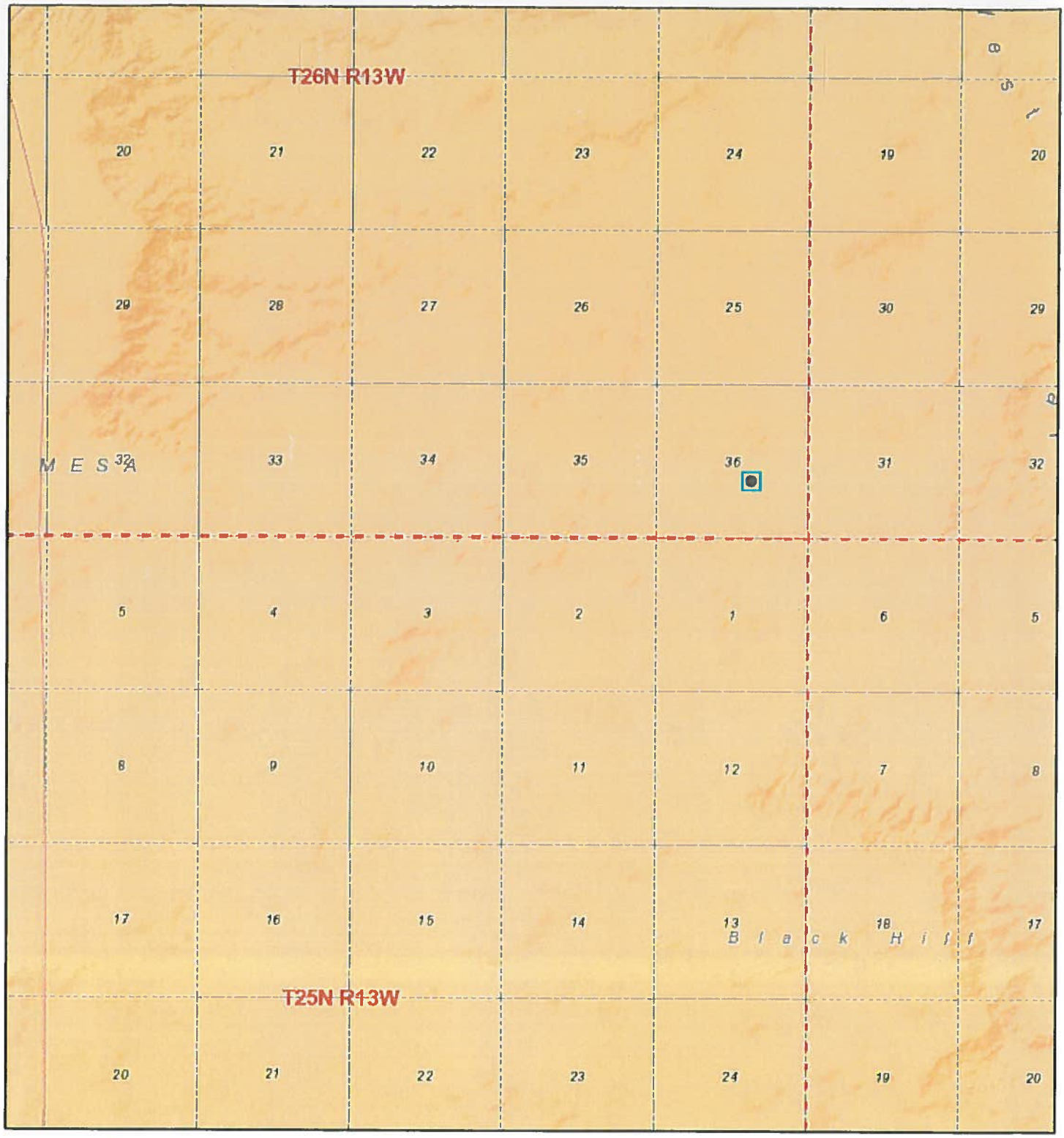
The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 4/30/2020 at 5:02:15 PM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.

Active Mines in New Mexico



4/30/2020, 3:04:33 PM

1:72,224

0 0.5 1 2 mi

0 0.75 1.5 3 km

U.S. Bureau of Land Management - New Mexico State Office, Sources: Esri, USGS, NOAA, Sources: Esri, Garmin, USGS, NPS

EMNRD MMD GIS Coordinator

NM Energy, Minerals and Natural Resources Department (http://nm-emnrd.maps.arcgis.com/apps/webappviewer/index.html?id=1b5e577974664d689b47790897ca2795)

New Mexico Office of the State Engineer

Active & Inactive Points of Diversion

(with Ownership Information)

No PODs found.

PLSS Search:

Section(s): 36 Township: 26N Range: 13W

West Bisti Unit #157 Hydrogeologic Report

The West Bisti Unit #157 is located on Navajo Nation Trust Lands within the Navajo Indian Irrigation Project (NIIP), San Juan County, New Mexico. Water used for irrigation on NIIP is transported to the area from Cutter Dam and Navajo Dam over 25-30 miles to the north and east through an elaborate, cement lined canal system. The area is characterized as very arid with abundant dunes surrounding patches of "Badlands" topography with a sparse cover of grass and sage.

A records search of the NM Office of the State Engineer – iWATERS database was conducted on a three square mile area centered on the West Bisti Unit #157 location (Exhibit 2). No water wells were located in the area of the below grade tank. The results of the search are shown on Exhibit 1.

The main source of stock water in the region is encountered in valley-fill deposits in existing arroyos at shallow depths of approximately 15 – 50 feet below the surface and stock tanks constructed on surface shale in the confluences and upper reaches of arroyos. The proposed below grade tank is not located in an arroyo; the nearest arroyo is located over 2500 feet to the southeast (Exhibit 2).

The Nacimiento Formation extends from the surface down to a depth of approximately 70 feet. The interval is comprised of mudstone, shale and traces of siltstone. The interval is not expected to yield significant volumes of groundwater

The underlying Ojo Alamo Sandstone ranges from 70 feet down to a depth of approximately 160 feet and is comprised of a coarse grained alluvial sandstone inter-bedded with lenses of mudstone and occasional conglomeratic sandstone. There are no shallow Ojo Alamo water wells in the area. The Ojo Alamo is exposed in outcrop 6-miles west and in Gallegos Wash (breeches surface down to over 100 feet) 3-miles east. The Ojo Alamo may yield marginal quantities of water for livestock, however, the water quality is poor (> 1,000 ppm total dissolved solids and high in sulfate) (Stone, 1983).

The underlying Kirtland Shale ranges from 160 feet down to 930 feet. From 270-480 there are silty sands (10-15 feet thick) inter-bedded with shale. These silty sands may contain minimal amounts of poor quality ground water. The Kirtland from 440 down to 930 is all shale with a trace of siltstone stringers.

Excessive drilling depth, to breeched sands with unpredictable variations in reservoir quality and water quality have discouraged the drilling of water wells in the in the subject area.

Based on electric open hole logs, the iWATERS database and literature reviewed, poor quality ground water might be found at a depth of approximately 70-160 feet from the lower Ojo Alamo Sandstone. Also, silty sands in the Kirtland shale from 270-480 feet might contain ground water.

This Hydrogeologic Report was prepared by Mr. Kurt Fagrelius, Geologist for Dugan Production. Mr. Fagrelius has been employed as a geologist for Dugan for the past 31-years, received a MS in Geology from NMIMT in Socorro, NM and a BS in Geology from FLC in Durango, CO.

Stone, W.J., Lyford, F.P., Frenzel, P.F., Mizell, N.H., and Padgett, E.T., 1983, Hydrogeology and water resources of San Juan Basin, New Mexico: New Mexico Bureau of Mines and Mineral Resources Hydrologic Report 6, 70 p.

Brown, D.R., and Stone, W.J., 1979, Hydrogeology of Aztec quadrangle, San Juan County, New Mexico: New Mexico Bureau of Mines and Mineral Resources Hydrogeologic Sheet 1.

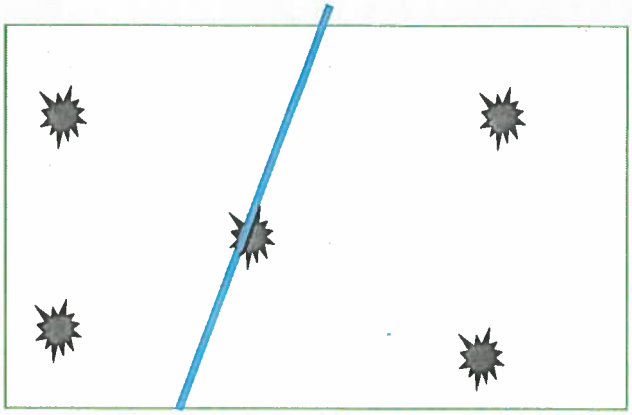
Levings, G.W., Craigg, S.D., Dam, W.L. Kernodle, J.M., and Thorn, C.R., 1990, Hydrogeology of the San Jose, Nacimiento, and Animas Formations in the San Juan Structural Basin, New Mexico, Colorado, Arizona and Utah: U.S. Geological Survey, Atlas HA-720-A, Sheet 1 and 2.

Thorn, C.R., Levings, G.W., Craigg, S.D., Dam, W.L., and Kernodle, J.M., 1990, Hydrogeology of the Ojo Alamo Sandstone in the San Juan Structural Basin, New Mexico, Colorado, Arizona and Utah: U.S. Geological Survey, Atlas HA-720-B, Sheet 1 and 2.

West Bisti Unit Pipeline Spill

Sampling Diagrams

This first sketch represents an area of 200' x1'. Samples were collected every 40'. In total there were 4 areas sampled in this long narrow area. Samples were collected after this fashion in zones 1-4 which have been identified on the map.



This sampling diagram represents the area that was contaminated by the pipeline leaking prior to accumulating sufficient volume to flow down the nearby two track road. The blue line represents the pipeline. This area is roughly 10' x 20'. Samples were collected directly beneath the pipeline and in the four corners of the excavated contaminated soil. Samples from zone 5 were collected as described in this diagram.

For additional clarity the sampling results and scale map will be labeled in manner that plainly identifies the sampling point and the corresponding sampling result.

envirotech
Analytical Laboratory

Analytical Report

Report Summary

Client: Dugan Production Corp.

Samples Received: 1/30/2020
Job Number: 06094-0177
Work Order: P001093
Project Name/Location: WBU #156

Report Reviewed By: Walter Hinchman Date: 2/5/20

Walter Hinchman, Laboratory Director

NELAP ACCREDITED TNI LABORATORY

Envirotech Inc. certifies the test results meet all requirements of TNI unless footnoted otherwise.
Statement of Data Authenticity: Envirotech, Inc, attests the data reported has not been altered in any way.
Partial or incomplete reproduction of this report is prohibited, unless approved by Envirotech, Inc.
Envirotech, Inc, holds the Utah TNI certification NM009792018-1 for the data reported.
Envirotech, Inc, holds the Texas TNI certification T104704557-19-2 for the data reported.

envirotech
Analytical Laboratory

Dugan Production Corp.	Project Name:	WBU #156	
PO Box 420	Project Number:	06094-0177	Reported:
Farmington NM, 87499	Project Manager:	Mike Sandoval	02/05/20 10:20

Analytical Report for Samples

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
WBU #156 #1	P001093-01A	Soil	01/30/20	01/30/20	Glass Jar, 4 oz.
WBU #156 #2	P001093-02A	Soil	01/30/20	01/30/20	Glass Jar, 4 oz.
WBU #156 #3	P001093-03A	Soil	01/30/20	01/30/20	Glass Jar, 4 oz.
WBU #156 #4	P001093-04A	Soil	01/30/20	01/30/20	Glass Jar, 4 oz.
WBU #156 #5	P001093-05A	Soil	01/30/20	01/30/20	Glass Jar, 4 oz.

envirotech
Analytical Laboratory

Dugan Production Corp.	Project Name:	WBU #156	
PO Box 420	Project Number:	06094-0177	Reported:
Farmington NM, 87499	Project Manager:	Mike Sandoval	02/05/20 10:20

WBU #156 #1
P001093-01 (Solid)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Volatile Organics by EPA 8021									
Benzene	ND	0.0250	mg/kg	1	2005039	01/31/20	02/01/20	EPA 8021B	
Toluene	ND	0.0250	mg/kg	1	2005039	01/31/20	02/01/20	EPA 8021B	
Ethylbenzene	ND	0.0250	mg/kg	1	2005039	01/31/20	02/01/20	EPA 8021B	
p,m-Xylene	ND	0.0500	mg/kg	1	2005039	01/31/20	02/01/20	EPA 8021B	
o-Xylene	ND	0.0250	mg/kg	1	2005039	01/31/20	02/01/20	EPA 8021B	
Total Xylenes	ND	0.0250	mg/kg	1	2005039	01/31/20	02/01/20	EPA 8021B	
Surrogate: 4-Bromochlorobenzene-PID		*100 %*	*50-150*		*2005039*	*01/31/20*	*02/01/20*	*EPA 8021B*	
Nonhalogenated Organics by 8015 - DRO/ORO									
Diesel Range Organics (C10-C28)	**126**	25.0	mg/kg	1	2005034	01/31/20	01/31/20	EPA 8015D	
Oil Range Organics (C28-C40)	**55.0**	50.0	mg/kg	1	2005034	01/31/20	01/31/20	EPA 8015D	
Surrogate: n-Nonane		*95.4 %*	*50-200*		*2005034*	*01/31/20*	*01/31/20*	*EPA 8015D*	
Nonhalogenated Organics by 8015 - GRO									
Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg	1	2005039	01/31/20	02/01/20	EPA 8015D	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*86.9 %*	*50-150*		*2005039*	*01/31/20*	*02/01/20*	*EPA 8015D*	
Anions by 300.0/9056A									
Chloride	ND	20.0	mg/kg	1	2005037	01/31/20	01/31/20	EPA 300.0/9056A	

envirotech
Analytical Laboratory

Dugan Production Corp.	Project Name:	WBU #156	
PO Box 420	Project Number:	06094-0177	**Reported:**
Farmington NM, 87499	Project Manager:	Mike Sandoval	02/05/20 10:20

WBU #156 #2
P001093-02 (Solid)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Volatile Organics by EPA 8021									
Benzene	ND	0.0250	mg/kg	1	2005039	01/31/20	02/01/20	EPA 8021B	
Toluene	ND	0.0250	mg/kg	1	2005039	01/31/20	02/01/20	EPA 8021B	
Ethylbenzene	ND	0.0250	mg/kg	1	2005039	01/31/20	02/01/20	EPA 8021B	
p,m-Xylene	ND	0.0500	mg/kg	1	2005039	01/31/20	02/01/20	EPA 8021B	
o-Xylene	ND	0.0250	mg/kg	1	2005039	01/31/20	02/01/20	EPA 8021B	
Total Xylenes	ND	0.0250	mg/kg	1	2005039	01/31/20	02/01/20	EPA 8021B	
Surrogate: 4-Bromochlorobenzene-PID		*101 %*	*50-150*		*2005039*	*01/31/20*	*02/01/20*	*EPA 8021B*	
Nonhalogenated Organics by 8015 - DRO/ORO									
Diesel Range Organics (C10-C28)	172	25.0	mg/kg	1	2005034	01/31/20	01/31/20	EPA 8015D	
Oil Range Organics (C28-C40)	77.8	50.0	mg/kg	1	2005034	01/31/20	01/31/20	EPA 8015D	
Surrogate: n-Nonane		*92.0 %*	*50-200*		*2005034*	*01/31/20*	*01/31/20*	*EPA 8015D*	
Nonhalogenated Organics by 8015 - GRO									
Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg	1	2005039	01/31/20	02/01/20	EPA 8015D	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*87.4 %*	*50-150*		*2005039*	*01/31/20*	*02/01/20*	*EPA 8015D*	
Anions by 300.0/9056A									
Chloride	ND	20.0	mg/kg	1	2005037	01/31/20	01/31/20	EPA 300.0/9056A	

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Dugan Production Corp.	Project Name:	WBU #156	
PO Box 420	Project Number:	06094-0177	**Reported:**
Farmington NM, 87499	Project Manager:	Mike Sandoval	02/05/20 10:20

WBU #156 #3
P001093-03 (Solid)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Volatile Organics by EPA 8021									
Benzene	ND	0.0250	mg/kg	1	2005039	01/31/20	02/01/20	EPA 8021B	
Toluene	ND	0.0250	mg/kg	1	2005039	01/31/20	02/01/20	EPA 8021B	
Ethylbenzene	ND	0.0250	mg/kg	1	2005039	01/31/20	02/01/20	EPA 8021B	
p,m-Xylene	ND	0.0500	mg/kg	1	2005039	01/31/20	02/01/20	EPA 8021B	
o-Xylene	ND	0.0250	mg/kg	1	2005039	01/31/20	02/01/20	EPA 8021B	
Total Xylenes	ND	0.0250	mg/kg	1	2005039	01/31/20	02/01/20	EPA 8021B	
Surrogate: 4-Bromochlorobenzene-PID		*103 %*		*50-150*	*2005039*	*01/31/20*	*02/01/20*	*EPA 8021B*	
Nonhalogenated Organics by 8015 - DRO/ORO									
Diesel Range Organics (C10-C28)	**1000**	25.0	mg/kg	1	2005034	01/31/20	01/31/20	EPA 8015D	
Oil Range Organics (C28-C40)	**321**	50.0	mg/kg	1	2005034	01/31/20	01/31/20	EPA 8015D	
Surrogate: n-Nonane		*111 %*		*50-200*	*2005034*	*01/31/20*	*01/31/20*	*EPA 8015D*	
Nonhalogenated Organics by 8015 - GRO									
Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg	1	2005039	01/31/20	02/01/20	EPA 8015D	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*86.5 %*		*50-150*	*2005039*	*01/31/20*	*02/01/20*	*EPA 8015D*	
Anions by 300.0/9056A									
Chloride	ND	20.0	mg/kg	1	2005037	01/31/20	01/31/20	EPA 300.0/9056A	

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Analytical Laboratory

Dugan Production Corp.	Project Name:	WBU #156	
PO Box 420	Project Number:	06094-0177	**Reported:**
Farmington NM, 87499	Project Manager:	Mike Sandoval	02/05/20 10:20

WBU #156 #4
P001093-04 (Solid)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Volatile Organics by EPA 8021									
Benzene	ND	0.0250	mg/kg	1	2005039	01/31/20	02/01/20	EPA 8021B	
Toluene	ND	0.0250	mg/kg	1	2005039	01/31/20	02/01/20	EPA 8021B	
Ethylbenzene	ND	0.0250	mg/kg	1	2005039	01/31/20	02/01/20	EPA 8021B	
p,m-Xylene	ND	0.0500	mg/kg	1	2005039	01/31/20	02/01/20	EPA 8021B	
o-Xylene	ND	0.0250	mg/kg	1	2005039	01/31/20	02/01/20	EPA 8021B	
Total Xylenes	ND	0.0250	mg/kg	1	2005039	01/31/20	02/01/20	EPA 8021B	
Surrogate: 4-Bromochlorobenzene-PID		*102 %*		*50-150*	*2005039*	*01/31/20*	*02/01/20*	*EPA 8021B*	
Nonhalogenated Organics by 8015 - DRO/ORO									
Diesel Range Organics (C10-C28)	**166**	25.0	mg/kg	1	2005034	01/31/20	01/31/20	EPA 8015D	
Oil Range Organics (C28-C40)	**82.7**	50.0	mg/kg	1	2005034	01/31/20	01/31/20	EPA 8015D	
Surrogate: n-Nonane		*92.7 %*		*50-200*	*2005034*	*01/31/20*	*01/31/20*	*EPA 8015D*	
Nonhalogenated Organics by 8015 - GRO									
Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg	1	2005039	01/31/20	02/01/20	EPA 8015D	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*86.7 %*		*50-150*	*2005039*	*01/31/20*	*02/01/20*	*EPA 8015D*	
Anions by 300.0/9056A									
Chloride	ND	20.0	mg/kg	1	2005037	01/31/20	01/31/20	EPA 300.0/9056A	

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Analytical Laboratory

Dugan Production Corp.	Project Name:	WBU #156	
PO Box 420	Project Number:	06094-0177	**Reported:**
Farmington NM, 87499	Project Manager:	Mike Sandoval	02/05/20 10:20

WBU #156 #5
P001093-05 (Solid)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Volatile Organics by EPA 8021									
Benzene	ND	0.0250	mg/kg	1	2005039	01/31/20	02/01/20	EPA 8021B	
Toluene	ND	0.0250	mg/kg	1	2005039	01/31/20	02/01/20	EPA 8021B	
Ethylbenzene	ND	0.0250	mg/kg	1	2005039	01/31/20	02/01/20	EPA 8021B	
p,m-Xylene	ND	0.0500	mg/kg	1	2005039	01/31/20	02/01/20	EPA 8021B	
o-Xylene	ND	0.0250	mg/kg	1	2005039	01/31/20	02/01/20	EPA 8021B	
Total Xylenes	ND	0.0250	mg/kg	1	2005039	01/31/20	02/01/20	EPA 8021B	
Surrogate: 4-Bromochlorobenzene-PID		*99.9 %*		*50-150*	*2005039*	*01/31/20*	*02/01/20*	*EPA 8021B*	
Nonhalogenated Organics by 8015 - DRO/ORO									
Diesel Range Organics (C10-C28)	44.6	25.0	mg/kg	1	2005034	01/31/20	01/31/20	EPA 8015D	
Oil Range Organics (C28-C40)	ND	50.0	mg/kg	1	2005034	01/31/20	01/31/20	EPA 8015D	
Surrogate: n-Nonane		*98.0 %*		*50-200*	*2005034*	*01/31/20*	*01/31/20*	*EPA 8015D*	
Nonhalogenated Organics by 8015 - GRO									
Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg	1	2005039	01/31/20	02/01/20	EPA 8015D	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*87.3 %*		*50-150*	*2005039*	*01/31/20*	*02/01/20*	*EPA 8015D*	
Anions by 300.0/9056A									
Chloride	ND	20.0	mg/kg	1	2005037	01/31/20	01/31/20	EPA 300.0/9056A	

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Dugan Production Corp.	Project Name:	WBU #156	
PO Box 420	Project Number:	06094-0177	**Reported:**
Farmington NM, 87499	Project Manager:	Mike Sandoval	02/05/20 10:20

Volatile Organics by EPA 8021 - Quality Control

Envirotech Analytical Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 2005039 - Purge and Trap EPA 5030A										
Blank (2005039-BLK1)				Prepared: 01/31/20 1 Analyzed: 02/01/20 1						
Benzene	ND	0.0250	mg/kg							
Toluene	ND	0.0250	"							
Ethylbenzene	ND	0.0250	"							
p,m-Xylene	ND	0.0500	"							
o-Xylene	ND	0.0250	"							
Total Xylenes	ND	0.0250	"							
Surrogate: 4-Bromochlorobenzene-PID	*7.75*		"	*8.00*		*96.9*	*50-150*			
LCS (2005039-BS1)				Prepared: 01/31/20 1 Analyzed: 02/01/20 1						
Benzene	4.96	0.0250	mg/kg	5.00		99.2	70-130			
Toluene	5.08	0.0250	"	5.00		102	70-130			
Ethylbenzene	5.01	0.0250	"	5.00		100	70-130			
p,m-Xylene	9.96	0.0500	"	10.0		99.6	70-130			
o-Xylene	4.96	0.0250	"	5.00		99.1	70-130			
Total Xylenes	14.9	0.0250	"	15.0		99.4	70-130			
Surrogate: 4-Bromochlorobenzene-PID	*7.98*		"	*8.00*		*99.8*	*50-150*			
Matrix Spike (2005039-MS1)		**Source: P001091-01**		Prepared: 01/31/20 1 Analyzed: 02/01/20 1						
Benzene	5.01	0.0250	mg/kg	5.00	ND	100	54.3-133			
Toluene	5.13	0.0250	"	5.00	ND	102	61.4-130			
Ethylbenzene	5.05	0.0250	"	5.00	ND	101	61.4-133			
p,m-Xylene	10.0	0.0500	"	10.0	ND	100	63.3-131			
o-Xylene	4.97	0.0250	"	5.00	ND	99.4	63.3-131			
Total Xylenes	15.0	0.0250	"	15.0	ND	99.9	63.3-131			
Surrogate: 4-Bromochlorobenzene-PID	*8.02*		"	*8.00*		*100*	*50-150*			
Matrix Spike Dup (2005039-MSD1)		**Source: P001091-01**		Prepared: 01/31/20 1 Analyzed: 02/01/20 1						
Benzene	5.01	0.0250	mg/kg	5.00	ND	100	54.3-133	0.0609	20	
Toluene	5.11	0.0250	"	5.00	ND	102	61.4-130	0.354	20	
Ethylbenzene	5.05	0.0250	"	5.00	ND	101	61.4-133	0.139	20	
p,m-Xylene	10.0	0.0500	"	10.0	ND	100	63.3-131	0.161	20	
o-Xylene	4.99	0.0250	"	5.00	ND	99.8	63.3-131	0.418	20	
Total Xylenes	15.0	0.0250	"	15.0	ND	100	63.3-131	0.246	20	
Surrogate: 4-Bromochlorobenzene-PID	*8.02*		"	*8.00*		*100*	*50-150*			

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Dugan Production Corp.	Project Name:	WBU #156	
PO Box 420	Project Number:	06094-0177	Reported:
Farmington NM, 87499	Project Manager:	Mike Sandoval	02/05/20 10:20

Nonhalogenated Organics by 8015 - DRO/ORO - Quality Control

Envirotech Analytical Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 2005034 - DRO Extraction EPA 3570										
Blank (2005034-BLK1)				Prepared: 01/31/20 0 Analyzed: 01/31/20 1						
Diesel Range Organics (C10-C28)	ND	25.0	mg/kg							
Oil Range Organics (C28-C40)	ND	50.0	"							
Surrogate: n-Nonane	*45.9*		"	*50.0*		*91.7*	*50-200*			
LCS (2005034-BS1)				Prepared: 01/31/20 0 Analyzed: 01/31/20 1						
Diesel Range Organics (C10-C28)	513	25.0	mg/kg	500		103	38-132			
Surrogate: n-Nonane	*50.7*		"	*50.0*		*101*	*50-200*			
Matrix Spike (2005034-MS1)		**Source: P001095-01**		Prepared: 01/31/20 0 Analyzed: 01/31/20 1						
Diesel Range Organics (C10-C28)	513	25.0	mg/kg	500	ND	103	38-132			
Surrogate: n-Nonane	*53.0*		"	*50.0*		*106*	*50-200*			
Matrix Spike Dup (2005034-MSD1)		**Source: P001095-01**		Prepared: 01/31/20 0 Analyzed: 01/31/20 1						
Diesel Range Organics (C10-C28)	480	25.0	mg/kg	500	ND	96.0	38-132	6.63	20	
Surrogate: n-Nonane	*46.5*		"	*50.0*		*92.9*	*50-200*			

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Dugan Production Corp.	Project Name:	WBU #156	
PO Box 420	Project Number:	06094-0177	**Reported:**
Farmington NM, 87499	Project Manager:	Mike Sandoval	02/05/20 10:20

Nonhalogenated Organics by 8015 - GRO - Quality Control

Envirotech Analytical Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 2005039 - Purge and Trap EPA 5030A										
Blank (2005039-BLK1)				Prepared: 01/31/20 1 Analyzed: 02/01/20 1						
Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg							
Surrogate: 1-Chloro-4-fluorobenzene-FID	*6.94*		"	*8.00*		*86.8*	*50-150*			
LCS (2005039-BS2)				Prepared: 01/31/20 1 Analyzed: 02/01/20 1						
Gasoline Range Organics (C6-C10)	49.0	20.0	mg/kg	50.0		98.1	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	*7.04*		"	*8.00*		*87.9*	*50-150*			
Matrix Spike (2005039-MS2)		Source: P001091-01		Prepared: 01/31/20 1 Analyzed: 02/01/20 2						
Gasoline Range Organics (C6-C10)	49.7	20.0	mg/kg	50.0	ND	99.5	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	*7.05*		"	*8.00*		*88.1*	*50-150*			
Matrix Spike Dup (2005039-MSD2)		Source: P001091-01		Prepared: 01/31/20 1 Analyzed: 02/01/20 2						
Gasoline Range Organics (C6-C10)	48.9	20.0	mg/kg	50.0	ND	97.9	70-130	1.64	20	
Surrogate: 1-Chloro-4-fluorobenzene-FID	*7.01*		"	*8.00*		*87.6*	*50-150*			

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Dugan Production Corp.	Project Name:	WBU #156	
PO Box 420	Project Number:	06094-0177	**Reported:**
Farmington NM, 87499	Project Manager:	Mike Sandoval	02/05/20 10:20

Anions by 300.0/9056A - Quality Control

Envirotech Analytical Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 2005037 - Anion Extraction EPA 300.0/9056A										
Blank (2005037-BLK1)				Prepared: 01/31/20 0 Analyzed: 01/31/20 1						
Chloride	ND	20.0	mg/kg							
LCS (2005037-BS1)				Prepared: 01/31/20 0 Analyzed: 01/31/20 1						
Chloride	253	20.0	mg/kg	250		101	90-110			
Matrix Spike (2005037-MS1)		Source: P001094-01		Prepared: 01/31/20 0 Analyzed: 01/31/20 1						
Chloride	348	20.0	mg/kg	250	75.2	109	80-120			
Matrix Spike Dup (2005037-MSD1)		Source: P001094-01		Prepared: 01/31/20 0 Analyzed: 01/31/20 1						
Chloride	358	20.0	mg/kg	250	75.2	113	80-120	2.82	20	

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

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Dugan Production Corp.	Project Name:	WBU #156	
PO Box 420	Project Number:	06094-0177	**Reported:**
Farmington NM, 87499	Project Manager:	Mike Sandoval	02/05/20 10:20

Notes and Definitions

ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
RPD	Relative Percent Difference
**	Methods marked with ** are non-accredited methods.

Soil data is reported on an "as received" weight basis, unless reported otherwise.

Project Information

Chain of Custody

Page 1 of

Client:	Dugan Production
Project:	WBU #156
Project Manager:	Mike Sandoval
Address:	
City, State, Zip	
Phone:	505-330-0928
Email:	

Report Attention

Report due by:	
Attention:	
Address:	
City, State, Zip	
Phone:	
Email:	

Lab Use Only

Lab WO#	Job Number
P001093	06094-0177

TAT: 1D | 3D

EPA Program: RCRA | CWA | SDWA

State: NM | CO | UT | AZ | TX | OK

Analysis and Method: DRO/ORO by 8015 | GRO/DRO by 8015 | BTEX by 8021 | VOC by 8260 | Metals 6010 | Chloride 300.0

Time Sampled	Date Sampled	Matrix	No Containers	Sample ID	Lab Number	Remarks
10:00	1-30-20	S	1	WBU #156 #1	1	
10:15	1-30-20	S	1	— — #2	2	
10:20	1-30-20	S	1	— — #3	3	
10:40	1-30-20	S	1	— — #4	4	
10:50	1-30-20	S	1	WBU #156 #5	5	

Additional Instructions:

I, (field sampler), attest to the validity and authenticity of this sample. I am aware that tampering with or intentionally mislabelling the sample location, date or time of collection is considered fraud and may be grounds for legal action. Sampled by: Michael Sandoval #10

Samples requiring thermal preservation must be received on ice the day they are sampled or received packed in ice at an avg temp above 0 but less than 6 °C on subsequent days.

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
	1-30-20	4:23	Raia Lopez	1/30/20	16:23
Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time

Lab Use Only

Received on ice: (Y) N

T1 T2 T3

AVG Temp °C 4

Sample Matrix: S - Soil, Sd - Solid, Sg - Sludge, A - Aqueous, O - Other

Container Type: g - glass, p - poly/plastic, ag - amber glass, v - VOA

Note: Samples are discarded 30 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at the client expense. The report for the analysis of the above samples is applicable only to those samples received by the laboratory with this COC. The liability of the laboratory is limited to the amount paid for on the report.

envirotech Analytical Laboratory

5795 US Highway 64, Farmington, NM 87401

24 Hour Emergency Response Phone (800) 362-1879

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labadmin@envirotech-inc.com

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Analytical Laboratory

Analytical Report

Report Summary

Client: Dugan Production Corp.

Samples Received: 3/6/2020
Job Number: 06094-0177
Work Order: P003036
Project Name/Location: WBU #160

Report Reviewed By: Walter Hinchman Date: 3/10/20

Walter Hinchman, Laboratory Director

NELAP ACCREDITED TNI LABORATORY

Envirotech Inc. certifies the test results meet all requirements of TNI unless footnoted otherwise.
Statement of Data Authenticity: Envirotech, Inc, attests the data reported has not been altered in any way.
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Envirotech, Inc, holds the Utah TNI certification NM009792018-1 for the data reported.
Envirotech, Inc, holds the Texas TNI certification T104704557-19-2 for the data reported.

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Dugan Production Corp.	Project Name:	WBU #160	
PO Box 420	Project Number:	06094-0177	**Reported:**
Farmington NM, 87499	Project Manager:	Mike Sandoval	03/10/20 12:42

Analytical Report for Samples

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
WBU #160 #1	P003036-01A	Soil	03/06/20	03/06/20	Glass Jar, 4 oz.
WBU #160 #2	P003036-02A	Soil	03/06/20	03/06/20	Glass Jar, 4 oz.
WBU #160 #3	P003036-03A	Soil	03/06/20	03/06/20	Glass Jar, 4 oz.
WBU #160 #4	P003036-04A	Soil	03/06/20	03/06/20	Glass Jar, 4 oz.

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Dugan Production Corp.	Project Name:	WBU #160	
PO Box 420	Project Number:	06094-0177	**Reported:**
Farmington NM, 87499	Project Manager:	Mike Sandoval	03/10/20 12:42

WBU #160 #1
P003036-01 (Solid)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Nonhalogenated Organics by 8015 - DRO/ORO									
Diesel Range Organics (C10-C28)	**227**	25.0	mg/kg	1	2011003	03/09/20	03/10/20	EPA 8015D	
Oil Range Organics (C28-C40)	**99.5**	50.0	mg/kg	1	2011003	03/09/20	03/10/20	EPA 8015D	
Surrogate: n-Nonane		*93.7 %*		*50-200*	*2011003*	*03/09/20*	*03/10/20*	*EPA 8015D*	
Nonhalogenated Organics by 8015 - GRO									
Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg	1	2011005	03/09/20	03/10/20	EPA 8015D	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*93.3 %*		*50-150*	*2011005*	*03/09/20*	*03/10/20*	*EPA 8015D*	

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Dugan Production Corp.	Project Name:	WBU #160	
PO Box 420	Project Number:	06094-0177	**Reported:**
Farmington NM, 87499	Project Manager:	Mike Sandoval	03/10/20 12:42

WBU #160 #2
P003036-02 (Solid)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Nonhalogenated Organics by 8015 - DRO/ORO									
Diesel Range Organics (C10-C28)	**154**	25.0	mg/kg	1	2011003	03/09/20	03/10/20	EPA 8015D	
Oil Range Organics (C28-C40)	**70.0**	50.0	mg/kg	1	2011003	03/09/20	03/10/20	EPA 8015D	
Surrogate: n-Nonane		*95.6 %*		*50-200*	*2011003*	*03/09/20*	*03/10/20*	*EPA 8015D*	
Nonhalogenated Organics by 8015 - GRO									
Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg	1	2011005	03/09/20	03/10/20	EPA 8015D	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*94.4 %*		*50-150*	*2011005*	*03/09/20*	*03/10/20*	*EPA 8015D*	

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Dugan Production Corp.	Project Name:	WBU #160	
PO Box 420	Project Number:	06094-0177	**Reported:**
Farmington NM, 87499	Project Manager:	Mike Sandoval	03/10/20 12:42

WBU #160 #3
P003036-03 (Solid)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Nonhalogenated Organics by 8015 - DRO/ORO									
Diesel Range Organics (C10-C28)	**142**	25.0	mg/kg	1	2011003	03/09/20	03/10/20	EPA 8015D	
Oil Range Organics (C28-C40)	**68.9**	50.0	mg/kg	1	2011003	03/09/20	03/10/20	EPA 8015D	
Surrogate: n-Nonane		*92.8 %*		*50-200*	*2011003*	*03/09/20*	*03/10/20*	*EPA 8015D*	
Nonhalogenated Organics by 8015 - GRO									
Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg	1	2011005	03/09/20	03/10/20	EPA 8015D	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*94.0 %*		*50-150*	*2011005*	*03/09/20*	*03/10/20*	*EPA 8015D*	

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Dugan Production Corp.	Project Name:	WBU #160	
PO Box 420	Project Number:	06094-0177	**Reported:**
Farmington NM, 87499	Project Manager:	Mike Sandoval	03/10/20 12:42

WBU #160 #4
P003036-04 (Solid)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Nonhalogenated Organics by 8015 - DRO/ORO									
Diesel Range Organics (C10-C28)	**38.6**	25.0	mg/kg	1	2011003	03/09/20	03/10/20	EPA 8015D	
Oil Range Organics (C28-C40)	ND	50.0	mg/kg	1	2011003	03/09/20	03/10/20	EPA 8015D	
Surrogate: n-Nonane		*87.8 %*		*50-200*	*2011003*	*03/09/20*	*03/10/20*	*EPA 8015D*	
Nonhalogenated Organics by 8015 - GRO									
Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg	1	2011005	03/09/20	03/10/20	EPA 8015D	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*94.8 %*		*50-150*	*2011005*	*03/09/20*	*03/10/20*	*EPA 8015D*	

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Dugan Production Corp.	Project Name:	WBU #160	
PO Box 420	Project Number:	06094-0177	**Reported:**
Farmington NM, 87499	Project Manager:	Mike Sandoval	03/10/20 12:42

Nonhalogenated Organics by 8015 - DRO/ORO - Quality Control

Envirotech Analytical Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 2011003 - DRO Extraction EPA 3570										
Blank (2011003-BLK1)				Prepared & Analyzed: 03/09/20 1						
Diesel Range Organics (C10-C28)	ND	25.0	mg/kg							
Oil Range Organics (C28-C40)	ND	50.0	"							
Surrogate: n-Nonane	*43.8*		"	*50.0*		*87.7*	*50-200*			
LCS (2011003-BS1)				Prepared & Analyzed: 03/09/20 1						
Diesel Range Organics (C10-C28)	413	25.0	mg/kg	500		82.6	38-132			
Surrogate: n-Nonane	*44.7*		"	*50.0*		*89.4*	*50-200*			
Matrix Spike (2011003-MS1)		**Source: P003033-01**		Prepared & Analyzed: 03/09/20 1						
Diesel Range Organics (C10-C28)	848	50.0	mg/kg	500	379	93.8	38-132			
Surrogate: n-Nonane	*53.4*		"	*50.0*		*107*	*50-200*			
Matrix Spike Dup (2011003-MSD1)		**Source: P003033-01**		Prepared & Analyzed: 03/09/20 1						
Diesel Range Organics (C10-C28)	847	50.0	mg/kg	500	379	93.6	38-132	0.130	20	
Surrogate: n-Nonane	*55.5*		"	*50.0*		*111*	*50-200*			

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Analytical Laboratory

Dugan Production Corp.	Project Name:	WBU #160	
PO Box 420	Project Number:	06094-0177	**Reported:**
Farmington NM, 87499	Project Manager:	Mike Sandoval	03/10/20 12:42

Nonhalogenated Organics by 8015 - GRO - Quality Control

Envirotech Analytical Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 2011005 - Purge and Trap EPA 5030A										
Blank (2011005-BLK1)				Prepared: 03/09/20 1 Analyzed: 03/09/20 2						
Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg							
Surrogate: 1-Chloro-4-fluorobenzene-FID	*7.39*		"	*8.00*		*92.4*	*50-150*			
LCS (2011005-BS2)				Prepared: 03/09/20 1 Analyzed: 03/09/20 2						
Gasoline Range Organics (C6-C10)	46.5	20.0	mg/kg	50.0		93.1	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	*7.59*		"	*8.00*		*94.9*	*50-150*			
Matrix Spike (2011005-MS2)		**Source: P003036-01**		Prepared: 03/09/20 1 Analyzed: 03/10/20 0						
Gasoline Range Organics (C6-C10)	51.2	20.0	mg/kg	50.0	ND	102	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	*7.62*		"	*8.00*		*95.2*	*50-150*			
Matrix Spike Dup (2011005-MSD2)		**Source: P003036-01**		Prepared: 03/09/20 1 Analyzed: 03/10/20 0						
Gasoline Range Organics (C6-C10)	50.0	20.0	mg/kg	50.0	ND	100	70-130	2.49	20	
Surrogate: 1-Chloro-4-fluorobenzene-FID	*7.52*		"	*8.00*		*94.0*	*50-150*			

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

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Dugan Production Corp.	Project Name:	WBU #160	
PO Box 420	Project Number:	06094-0177	**Reported:**
Farmington NM, 87499	Project Manager:	Mike Sandoval	03/10/20 12:42

Notes and Definitions

ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
RPD	Relative Percent Difference
**	Methods marked with ** are non-accredited methods.

Soil data is reported on an "as received" weight basis, unless reported otherwise.

Project Information

Chain of Custody

1-Day

Page 1 of 1

Page 10 of 10

Client: Dugan Production
Project: WBU #160
Project Manager: Mike Sandel
Address:
City, State, Zip
Phone:
Email:

Report Attention
Report due by:
Attention:
Address:
City, State, Zip
Phone:
Email:

Lab Use Only
Lab WO# P003036
Job Number 06094-0177

TAT: 1D [X] 3D

EPA Program: RCRA, CWA, SDWA

State: NM [X], CO, UT, AZ, TX, OK

Analysis and Method

Time Sampled	Date Sampled	Matrix	No Containers	Sample ID	Lab Number	DRO/ORO by 8015	GRO/DRO by 8015 +ORO	BTEX by 8021	VOC by 8260	Metals 6010	Chloride 300.0						Remarks
10:17	3-6-20	S	1	WBU #160 #1	1		X										
10:24			1	— — #2	2												
10:34			1	— — — #3	3												
10:37			1	WBU #160 #4	4												

Additional Instructions: Need Tues AM final -th only need TPH

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

Samples requiring thermal preservation must be received on ice the day they are sampled or received packed in ice at an avg temp above 0 but less than 6 °C on subsequent days.

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
[signature]	3-6-2020	4:41	[signature]	03-06-20	16:43
Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time

Lab Use Only
Received on Ice: (Y) N
T1 ____ T2 ____ T3 ____
AVG Temp °C 4.0

Sample Matrix: S - Soil, Sd - Solid, Sg - Sludge, A - Aqueous, O - Other ______

Container Type: g - glass, p - poly/plastic, ag - amber glass, v - VOA

Note: Samples are discarded 30 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at the client expense. The report for the analysis of the above samples is applicable only to those samples received by the laboratory with this COC. The liability of the laboratory is limited to the amount paid for on the report.

envirotech Analytical Laboratory
5795 US Highway 64, Farmington, NM 87401
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envirotech-inc.com
labadmin@envirotech-inc.com

envirotech
Analytical Laboratory

Analytical Report

Report Summary

Client: Dugan Production Corp.

Samples Received: 3/20/2020
Job Number: 06094-177
Work Order: P003112
Project Name/Location: WBU #160

Report Reviewed By: Walter Hinchman Date: 3/25/20

Walter Hinchman, Laboratory Director

NELAP ACCREDITED TNI LABORATORY

Envirotech Inc. certifies the test results meet all requirements of TNI unless footnoted otherwise.
Statement of Data Authenticity: Envirotech, Inc, attests the data reported has not been altered in any way.
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Envirotech, Inc, holds the Utah TNI certification NM009792018-1 for the data reported.
Envirotech, Inc, holds the Texas TNI certification T104704557-19-2 for the data reported.

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Dugan Production Corp.	Project Name:	WBU #160	
PO Box 420	Project Number:	06094-177	**Reported:**
Farmington NM, 87499	Project Manager:	Mike Sandoval	03/25/20 11:10

Analytical Report for Samples

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
WBU #160 1	P003112-01A	Soil	03/20/20	03/20/20	Glass Jar, 4 oz.
WBU #160 2	P003112-02A	Soil	03/20/20	03/20/20	Glass Jar, 4 oz.
WBU #160 3	P003112-03A	Soil	03/20/20	03/20/20	Glass Jar, 4 oz.

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Dugan Production Corp.	Project Name:	WBU #160	
PO Box 420	Project Number:	06094-177	**Reported:**
Farmington NM, 87499	Project Manager:	Mike Sandoval	03/25/20 11:10

WBU #160 1
P003112-01 (Solid)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Volatile Organics by EPA 8021									
Benzene	ND	0.0250	mg/kg	1	2013002	03/23/20	03/23/20	EPA 8021B	
Toluene	ND	0.0250	mg/kg	1	2013002	03/23/20	03/23/20	EPA 8021B	
Ethylbenzene	ND	0.0250	mg/kg	1	2013002	03/23/20	03/23/20	EPA 8021B	
p,m-Xylene	ND	0.0500	mg/kg	1	2013002	03/23/20	03/23/20	EPA 8021B	
o-Xylene	ND	0.0250	mg/kg	1	2013002	03/23/20	03/23/20	EPA 8021B	
Total Xylenes	ND	0.0250	mg/kg	1	2013002	03/23/20	03/23/20	EPA 8021B	
Surrogate: 4-Bromochlorobenzene-PID		*106 %*		*50-150*	*2013002*	*03/23/20*	*03/23/20*	*EPA 8021B*	
Nonhalogenated Organics by 8015 - DRO/ORO									
Diesel Range Organics (C10-C28)	ND	25.0	mg/kg	1	2013001	03/23/20	03/23/20	EPA 8015D	
Oil Range Organics (C28-C40)	ND	50.0	mg/kg	1	2013001	03/23/20	03/23/20	EPA 8015D	
Surrogate: n-Nonane		*103 %*		*50-200*	*2013001*	*03/23/20*	*03/23/20*	*EPA 8015D*	
Nonhalogenated Organics by 8015 - GRO									
Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg	1	2013002	03/23/20	03/23/20	EPA 8015D	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*93.1 %*		*50-150*	*2013002*	*03/23/20*	*03/23/20*	*EPA 8015D*	
Anions by 300.0/9056A									
Chloride	ND	20.0	mg/kg	1	2013003	03/23/20	03/23/20	EPA 300.0/9056A	

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Dugan Production Corp.	Project Name:	WBU #160	
PO Box 420	Project Number:	06094-177	**Reported:**
Farmington NM, 87499	Project Manager:	Mike Sandoval	03/25/20 11:10

WBU #160 2
P003112-02 (Solid)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Volatile Organics by EPA 8021									
Benzene	ND	0.0250	mg/kg	1	2013002	03/23/20	03/23/20	EPA 8021B	
Toluene	ND	0.0250	mg/kg	1	2013002	03/23/20	03/23/20	EPA 8021B	
Ethylbenzene	ND	0.0250	mg/kg	1	2013002	03/23/20	03/23/20	EPA 8021B	
p,m-Xylene	ND	0.0500	mg/kg	1	2013002	03/23/20	03/23/20	EPA 8021B	
o-Xylene	ND	0.0250	mg/kg	1	2013002	03/23/20	03/23/20	EPA 8021B	
Total Xylenes	ND	0.0250	mg/kg	1	2013002	03/23/20	03/23/20	EPA 8021B	
Surrogate: 4-Bromochlorobenzene-PID		*107 %*	*50-150*		*2013002*	*03/23/20*	*03/23/20*	*EPA 8021B*	
Nonhalogenated Organics by 8015 - DRO/ORO									
Diesel Range Organics (C10-C28)	ND	25.0	mg/kg	1	2013001	03/23/20	03/23/20	EPA 8015D	
Oil Range Organics (C28-C40)	ND	50.0	mg/kg	1	2013001	03/23/20	03/23/20	EPA 8015D	
Surrogate: n-Nonane		*99.5 %*	*50-200*		*2013001*	*03/23/20*	*03/23/20*	*EPA 8015D*	
Nonhalogenated Organics by 8015 - GRO									
Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg	1	2013002	03/23/20	03/23/20	EPA 8015D	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*92.8 %*	*50-150*		*2013002*	*03/23/20*	*03/23/20*	*EPA 8015D*	
Anions by 300.0/9056A									
Chloride	ND	20.0	mg/kg	1	2013003	03/23/20	03/23/20	EPA 300.0/9056A	

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Dugan Production Corp.	Project Name:	WBU #160	
PO Box 420	Project Number:	06094-177	**Reported:**
Farmington NM, 87499	Project Manager:	Mike Sandoval	03/25/20 11:10

WBU #160 3
P003112-03 (Solid)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Volatile Organics by EPA 8021									
Benzene	ND	0.0250	mg/kg	1	2013002	03/23/20	03/23/20	EPA 8021B	
Toluene	ND	0.0250	mg/kg	1	2013002	03/23/20	03/23/20	EPA 8021B	
Ethylbenzene	ND	0.0250	mg/kg	1	2013002	03/23/20	03/23/20	EPA 8021B	
p,m-Xylene	ND	0.0500	mg/kg	1	2013002	03/23/20	03/23/20	EPA 8021B	
o-Xylene	ND	0.0250	mg/kg	1	2013002	03/23/20	03/23/20	EPA 8021B	
Total Xylenes	ND	0.0250	mg/kg	1	2013002	03/23/20	03/23/20	EPA 8021B	
Surrogate: 4-Bromochlorobenzene-PID		*108 %*	*50-150*		*2013002*	*03/23/20*	*03/23/20*	*EPA 8021B*	
Nonhalogenated Organics by 8015 - DRO/ORO									
Diesel Range Organics (C10-C28)	ND	25.0	mg/kg	1	2013001	03/23/20	03/23/20	EPA 8015D	
Oil Range Organics (C28-C40)	ND	50.0	mg/kg	1	2013001	03/23/20	03/23/20	EPA 8015D	
Surrogate: n-Nonane		*98.4 %*	*50-200*		*2013001*	*03/23/20*	*03/23/20*	*EPA 8015D*	
Nonhalogenated Organics by 8015 - GRO									
Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg	1	2013002	03/23/20	03/23/20	EPA 8015D	
Surrogate: 1-Chloro-4-fluorobenzene-FID		*92.2 %*	*50-150*		*2013002*	*03/23/20*	*03/23/20*	*EPA 8015D*	
Anions by 300.0/9056A									
Chloride	ND	20.0	mg/kg	1	2013003	03/23/20	03/23/20	EPA 300.0/9056A	

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Dugan Production Corp.	Project Name:	WBU #160	
PO Box 420	Project Number:	06094-177	Reported:
Farmington NM, 87499	Project Manager:	Mike Sandoval	03/25/20 11:10

Volatile Organics by EPA 8021 - Quality Control

Envirotech Analytical Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 2013002 - Purge and Trap EPA 5030A										
Blank (2013002-BLK1)				Prepared: 03/23/20 0 Analyzed: 03/23/20 1						
Benzene	ND	0.0250	mg/kg							
Toluene	ND	0.0250	"							
Ethylbenzene	ND	0.0250	"							
p,m-Xylene	ND	0.0500	"							
o-Xylene	ND	0.0250	"							
Total Xylenes	ND	0.0250	"							
Surrogate: 4-Bromochlorobenzene-PID	*8.44*		"	*8.00*		*105*	*50-150*			
LCS (2013002-BS1)				Prepared: 03/23/20 0 Analyzed: 03/23/20 1						
Benzene	5.01	0.0250	mg/kg	5.00		100	70-130			
Toluene	5.03	0.0250	"	5.00		101	70-130			
Ethylbenzene	5.04	0.0250	"	5.00		101	70-130			
p,m-Xylene	10.1	0.0500	"	10.0		101	70-130			
o-Xylene	5.06	0.0250	"	5.00		101	70-130			
Total Xylenes	15.1	0.0250	"	15.0		101	0-200			
Surrogate: 4-Bromochlorobenzene-PID	*8.58*		"	*8.00*		*107*	*50-150*			
Matrix Spike (2013002-MS1)		**Source: P003109-01**		Prepared: 03/23/20 0 Analyzed: 03/23/20 1						
Benzene	4.79	0.0250	mg/kg	5.00	ND	95.8	54.3-133			
Toluene	4.81	0.0250	"	5.00	ND	96.2	61.4-130			
Ethylbenzene	4.80	0.0250	"	5.00	ND	96.1	61.4-133			
p,m-Xylene	9.62	0.0500	"	10.0	ND	96.2	63.3-131			
o-Xylene	4.84	0.0250	"	5.00	ND	96.8	63.3-131			
Total Xylenes	14.5	0.0250	"	15.0	ND	96.4	0-200			
Surrogate: 4-Bromochlorobenzene-PID	*8.55*		"	*8.00*		*107*	*50-150*			
Matrix Spike Dup (2013002-MSD1)		**Source: P003109-01**		Prepared: 03/23/20 0 Analyzed: 03/23/20 1						
Benzene	5.03	0.0250	mg/kg	5.00	ND	101	54.3-133	4.83	20	
Toluene	5.03	0.0250	"	5.00	ND	101	61.4-130	4.49	20	
Ethylbenzene	5.03	0.0250	"	5.00	ND	101	61.4-133	4.69	20	
p,m-Xylene	10.1	0.0500	"	10.0	ND	101	63.3-131	4.46	20	
o-Xylene	5.05	0.0250	"	5.00	ND	101	63.3-131	4.24	20	
Total Xylenes	15.1	0.0250	"	15.0	ND	101	0-200	4.39	200	
Surrogate: 4-Bromochlorobenzene-PID	*8.54*		"	*8.00*		*107*	*50-150*			

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Dugan Production Corp.	Project Name:	WBU #160	
PO Box 420	Project Number:	06094-177	**Reported:**
Farmington NM, 87499	Project Manager:	Mike Sandoval	03/25/20 11:10

Nonhalogenated Organics by 8015 - DRO/ORO - Quality Control

Envirotech Analytical Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 2013001 - DRO Extraction EPA 3570										
Blank (2013001-BLK1)				Prepared & Analyzed: 03/23/20 0						
Diesel Range Organics (C10-C28)	ND	25.0	mg/kg							
Oil Range Organics (C28-C40)	ND	50.0	"							
Surrogate: n-Nonane	*47.3*		"	*50.0*		*94.5*	*50-200*			
LCS (2013001-BS1)				Prepared & Analyzed: 03/23/20 0						
Diesel Range Organics (C10-C28)	431	25.0	mg/kg	500		86.3	38-132			
Surrogate: n-Nonane	*47.4*		"	*50.0*		*94.9*	*50-200*			
Matrix Spike (2013001-MS1)		**Source: P003109-01**		Prepared: 03/23/20 0 Analyzed: 03/23/20 1						
Diesel Range Organics (C10-C28)	428	25.0	mg/kg	500	ND	85.5	38-132			
Surrogate: n-Nonane	*48.2*		"	*50.0*		*96.5*	*50-200*			
Matrix Spike Dup (2013001-MSD1)		**Source: P003109-01**		Prepared: 03/23/20 0 Analyzed: 03/23/20 1						
Diesel Range Organics (C10-C28)	430	25.0	mg/kg	500	ND	86.1	38-132	0.613	20	
Surrogate: n-Nonane	*48.3*		"	*50.0*		*96.5*	*50-200*			

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Dugan Production Corp.	Project Name:	WBU #160	
PO Box 420	Project Number:	06094-177	**Reported:**
Farmington NM, 87499	Project Manager:	Mike Sandoval	03/25/20 11:10

Nonhalogenated Organics by 8015 - GRO - Quality Control

Envirotech Analytical Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 2013002 - Purge and Trap EPA 5030A										
Blank (2013002-BLK1)				Prepared: 03/23/20 0 Analyzed: 03/23/20 1						
Gasoline Range Organics (C6-C10)	ND	20.0	mg/kg							
Surrogate: 1-Chloro-4-fluorobenzene-FID	*7.25*		"	*8.00*		*90.6*	*50-150*			
LCS (2013002-BS2)				Prepared: 03/23/20 0 Analyzed: 03/23/20 1						
Gasoline Range Organics (C6-C10)	42.8	20.0	mg/kg	50.0		85.5	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	*7.42*		"	*8.00*		*92.8*	*50-150*			
Matrix Spike (2013002-MS2)		**Source: P003109-01**		Prepared: 03/23/20 0 Analyzed: 03/23/20 1						
Gasoline Range Organics (C6-C10)	38.2	20.0	mg/kg	50.0	ND	76.4	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	*7.58*		"	*8.00*		*94.8*	*50-150*			
Matrix Spike Dup (2013002-MSD2)		**Source: P003109-01**		Prepared: 03/23/20 0 Analyzed: 03/23/20 1						
Gasoline Range Organics (C6-C10)	39.7	20.0	mg/kg	50.0	ND	79.4	70-130	3.79	20	
Surrogate: 1-Chloro-4-fluorobenzene-FID	*7.51*		"	*8.00*		*93.9*	*50-150*			

envirotech
Analytical Laboratory

Dugan Production Corp.	Project Name:	WBU #160	
PO Box 420	Project Number:	06094-177	**Reported:**
Farmington NM, 87499	Project Manager:	Mike Sandoval	03/25/20 11:10

Anions by 300.0/9056A - Quality Control

Envirotech Analytical Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 2013003 - Anion Extraction EPA 300.0/9056A										
Blank (2013003-BLK1)				Prepared: 03/23/20 0 Analyzed: 03/23/20 1						
Chloride	ND	20.0	mg/kg							
LCS (2013003-BS1)				Prepared: 03/23/20 0 Analyzed: 03/23/20 1						
Chloride	253	20.0	mg/kg	250		101	90-110			
Matrix Spike (2013003-MS1)		Source: P003109-01		Prepared: 03/23/20 0 Analyzed: 03/23/20 1						
Chloride	251	20.0	mg/kg	250	ND	100	80-120			
Matrix Spike Dup (2013003-MSD1)		Source: P003109-01		Prepared: 03/23/20 0 Analyzed: 03/23/20 1						
Chloride	253	20.0	mg/kg	250	ND	101	80-120	1.17	20	

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

envirotech
Analytical Laboratory

Dugan Production Corp.	Project Name:	WBU #160	
PO Box 420	Project Number:	06094-177	**Reported:**
Farmington NM, 87499	Project Manager:	Mike Sandoval	03/25/20 11:10

Notes and Definitions

ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
RPD	Relative Percent Difference
**	Methods marked with ** are non-accredited methods.

Soil data is reported on an "as received" weight basis, unless reported otherwise.

Project Information

Chain of Custody

Page 1 of 1

Page 11 of 11

Client:	Duggan Production
Project:	WBU #160
Project Manager:	Mike Sandoval
Address:	
City, State, Zip	
Phone:	505-330-0929
Email:	
Report due by:	

Bill To

Attention:	
Address:	
City, State, Zip	
Phone:	
Email:	

Lab Use Only

Lab WO#	Job Number
P003112	01094-0177

TAT: 1D | 3D

EPA Program: RCRA | CWA | SDWA

State: NM | CO | UT | AZ | TX | OK

Analysis and Method

Time Sampled	Date Sampled	Matrix	No Containers	Sample ID	Lab Number	DRO/ORO by 8015	GRO/DRO by 8015	BTEX by 8021	VOC by 8260	Metals 6010	Chloride 300.0	Remarks
10:30	3-20-20	S	1	WBU #160 1	1	X	X	X			X	
10:40	3-20-20	S	1	WBU #160 2	2	X	X	X			X	
11:00	3-20-20	S	1	WBU #160 3	3	X	X	X			X	

Additional Instructions:

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

Samples requiring thermal preservation must be received on ice the day they are sampled or received packed in ice at an avg temp above 0 but less than 6 °C on subsequent days.

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
Mike Sandoval	3-20-2020	4:45	Rain Lopez	3/20/20	16:48
Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time

Lab Use Only

Received on ice: (Y) / N.

T1 T2 T3

AVG Temp °C 4

Sample Matrix: S - Soil, Sd - Solid, Sg - Sludge, A - Aqueous, O - Other

Container Type: g - glass, p - poly/plastic, ag - amber glass, v - VOA

Note: Samples are discarded 30 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at the client expense. The report for the analysis of the above samples is applicable only to those samples received by the laboratory with this COC. The liability of the laboratory is limited to the amount paid for on the report.

envirotech Analytical Laboratory

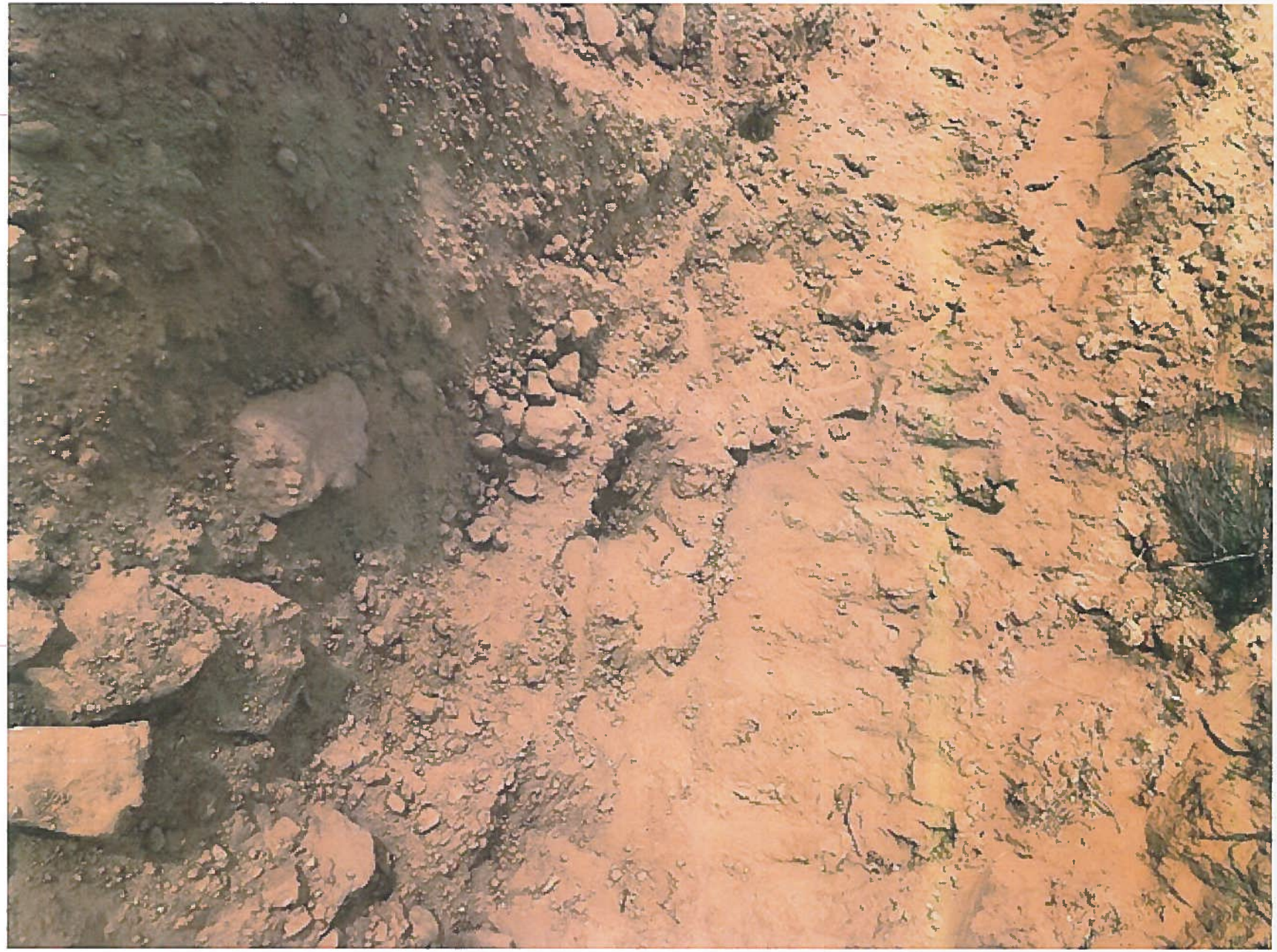
5795 US Highway 64, Farmington, NM 87401

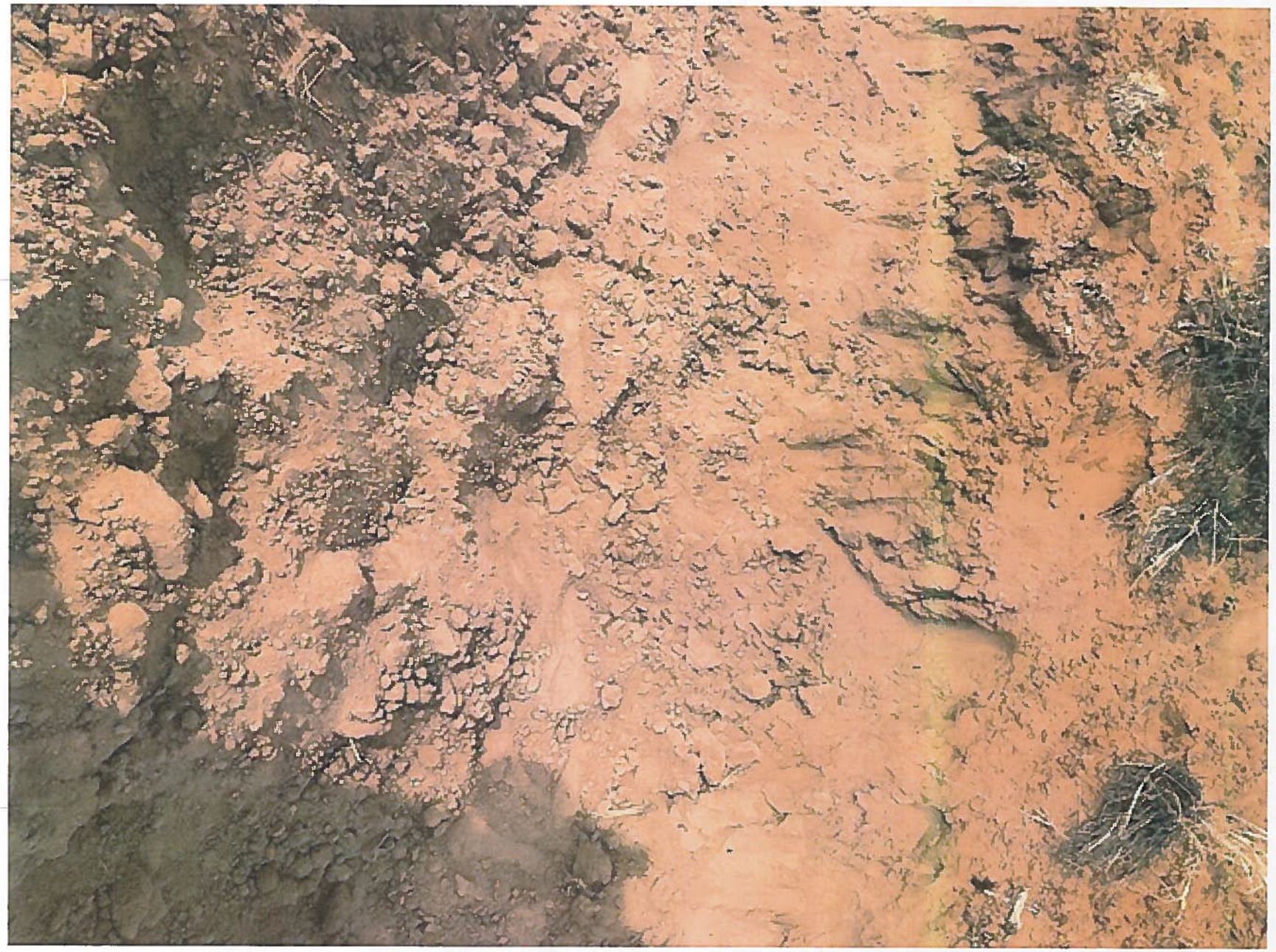
24 Hour Emergency Response Phone (800) 362-1879

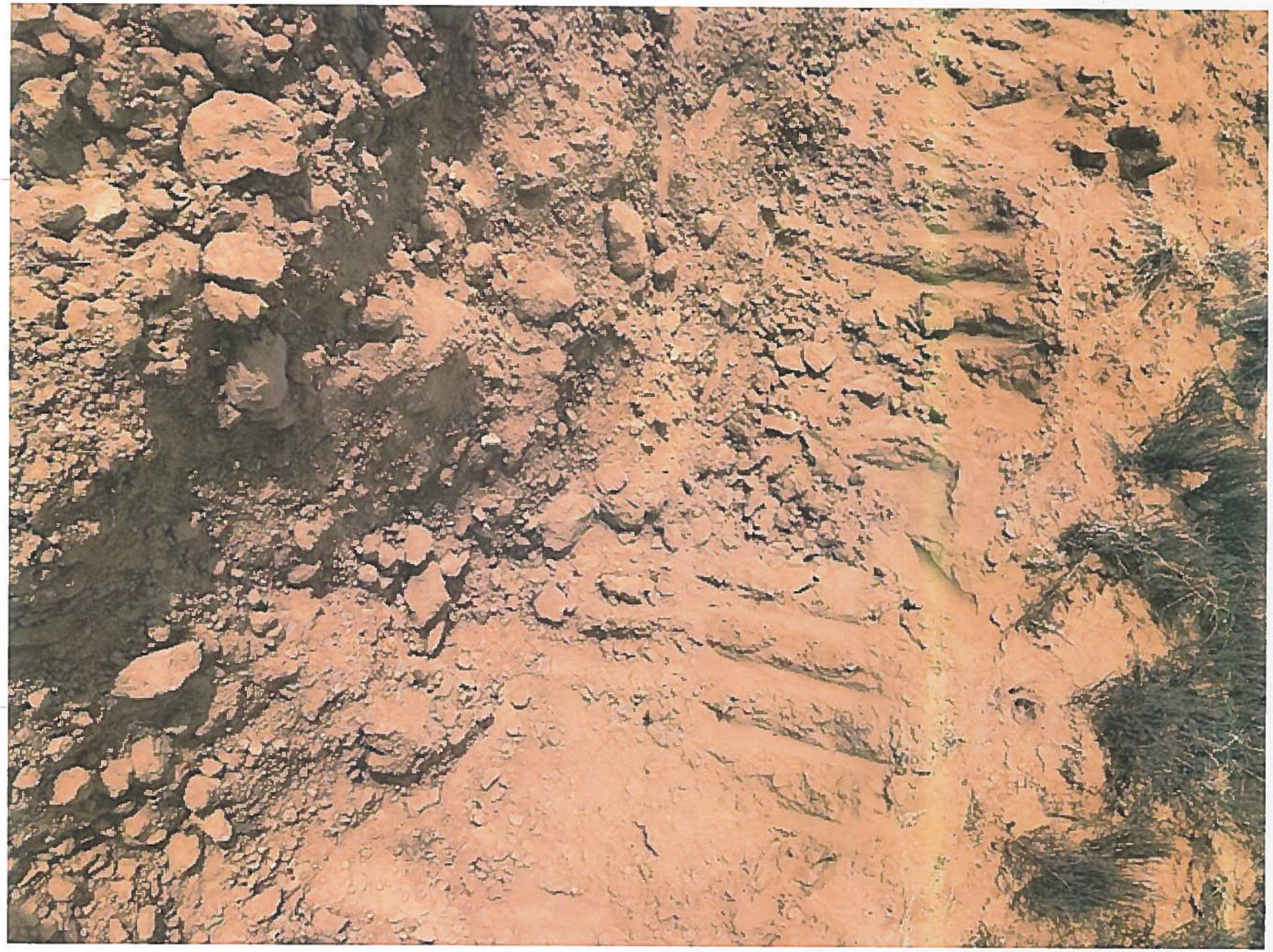
Ph (505) 632-1881 Fx (505) 632-1865

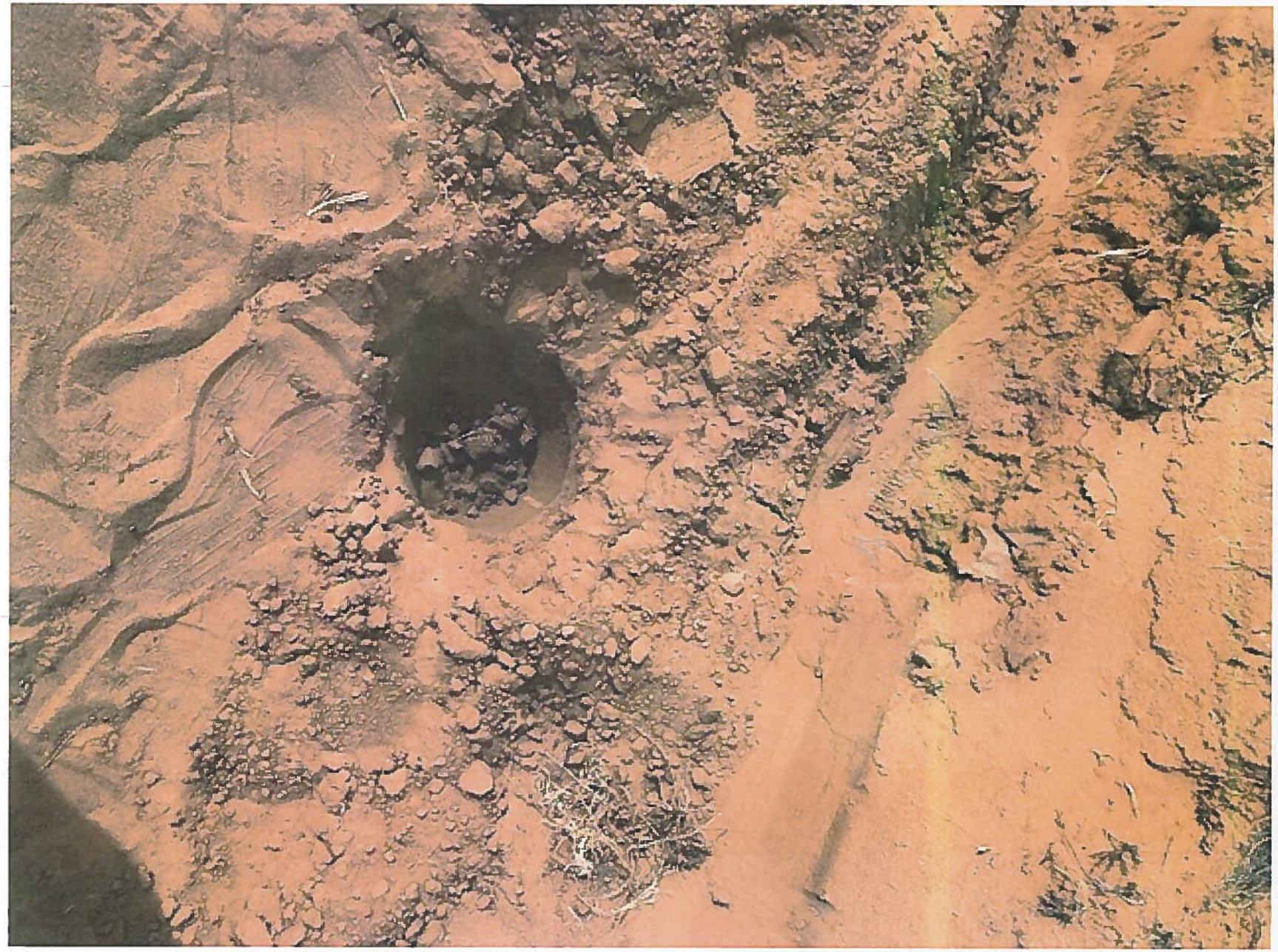
envirotech-inc.com

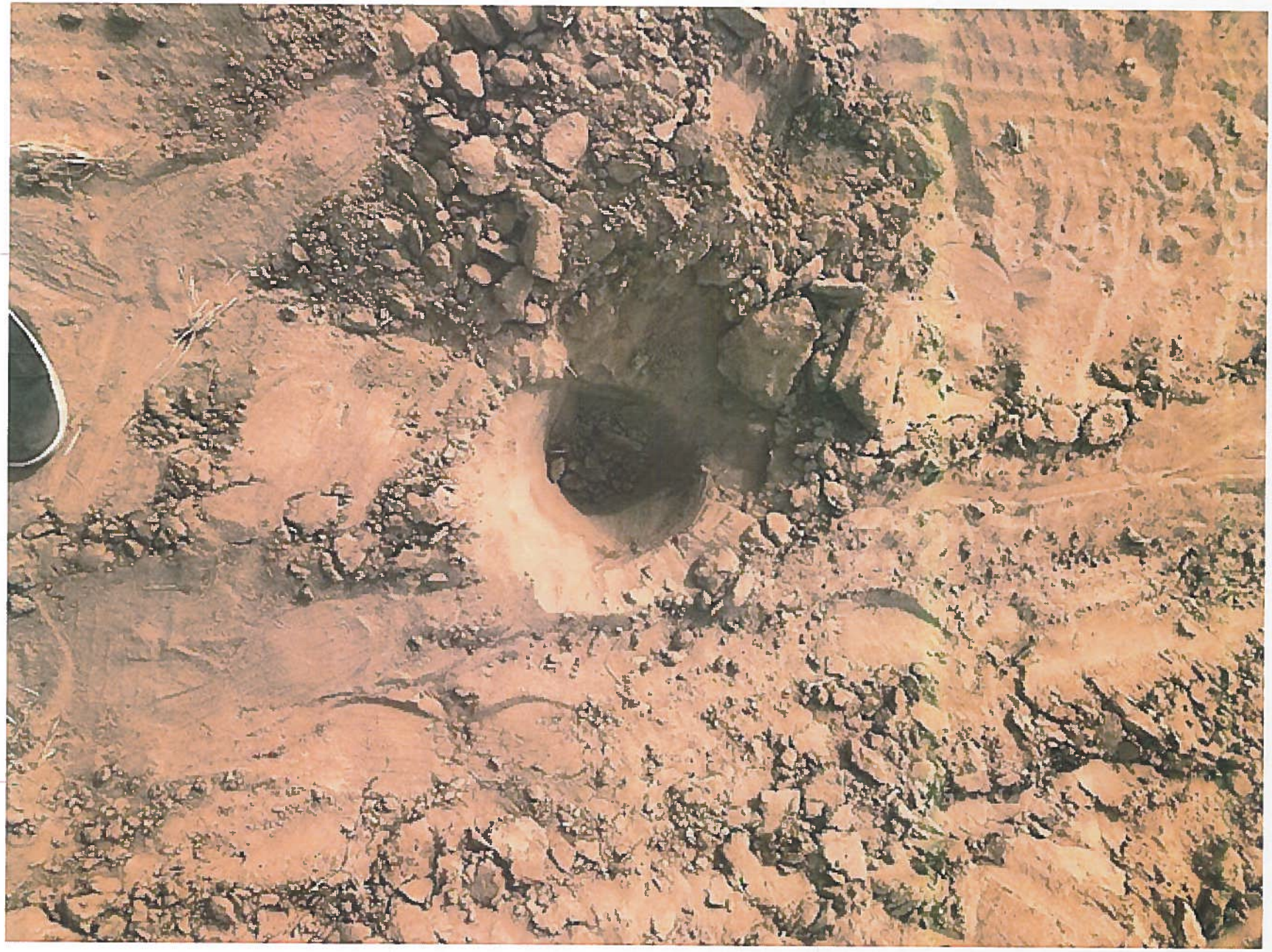
labadmin@envirotech-inc.com

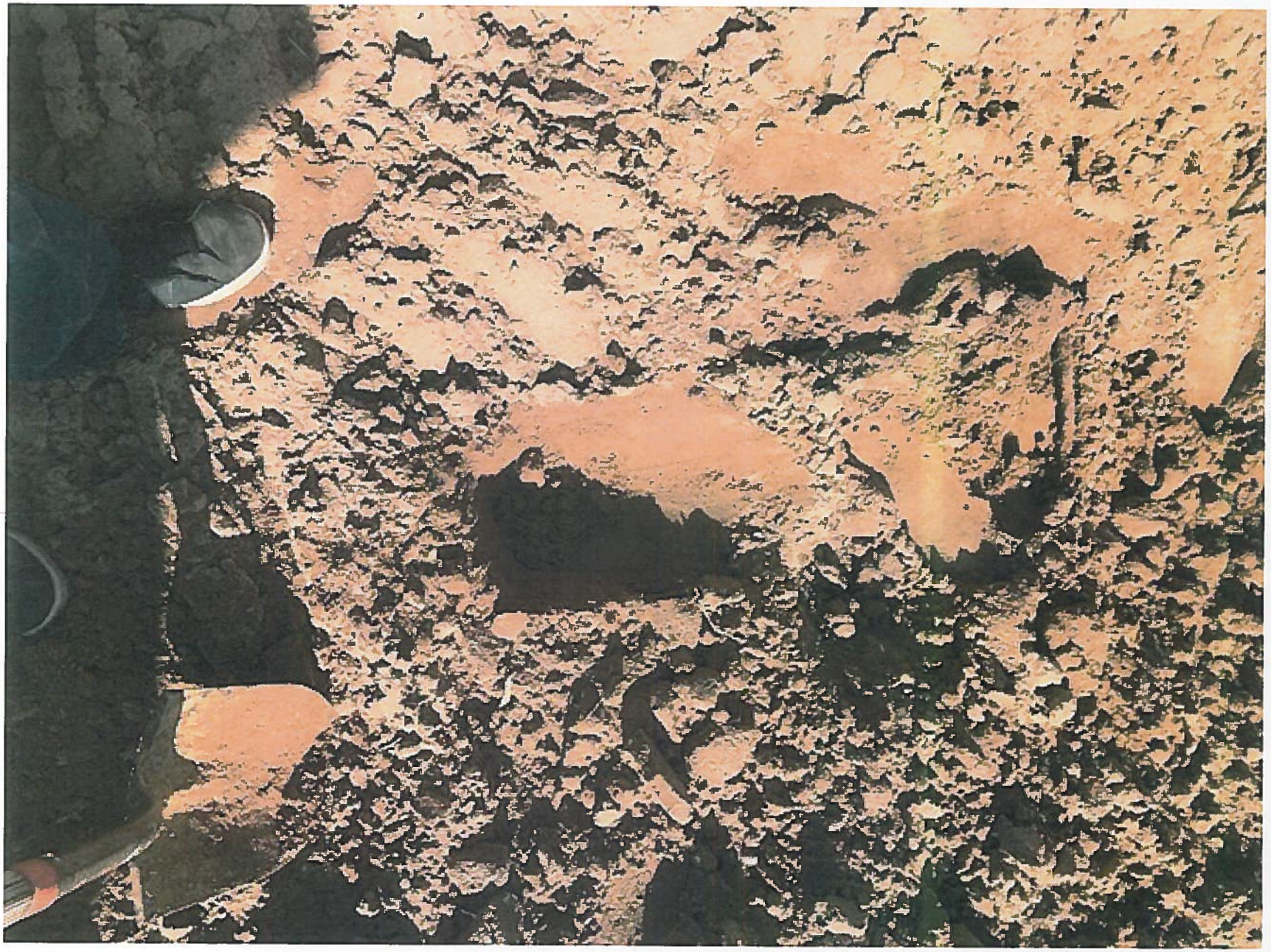


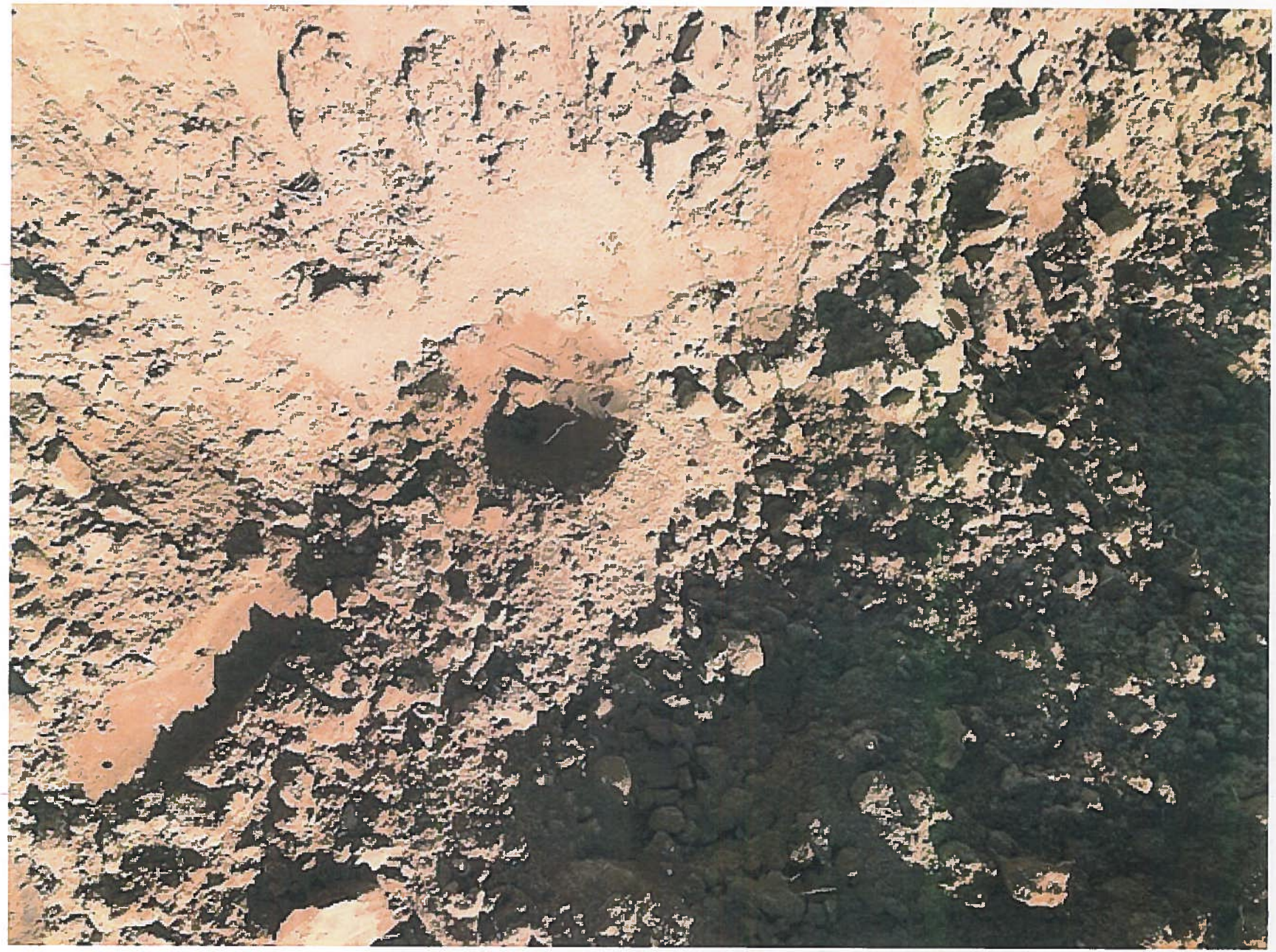


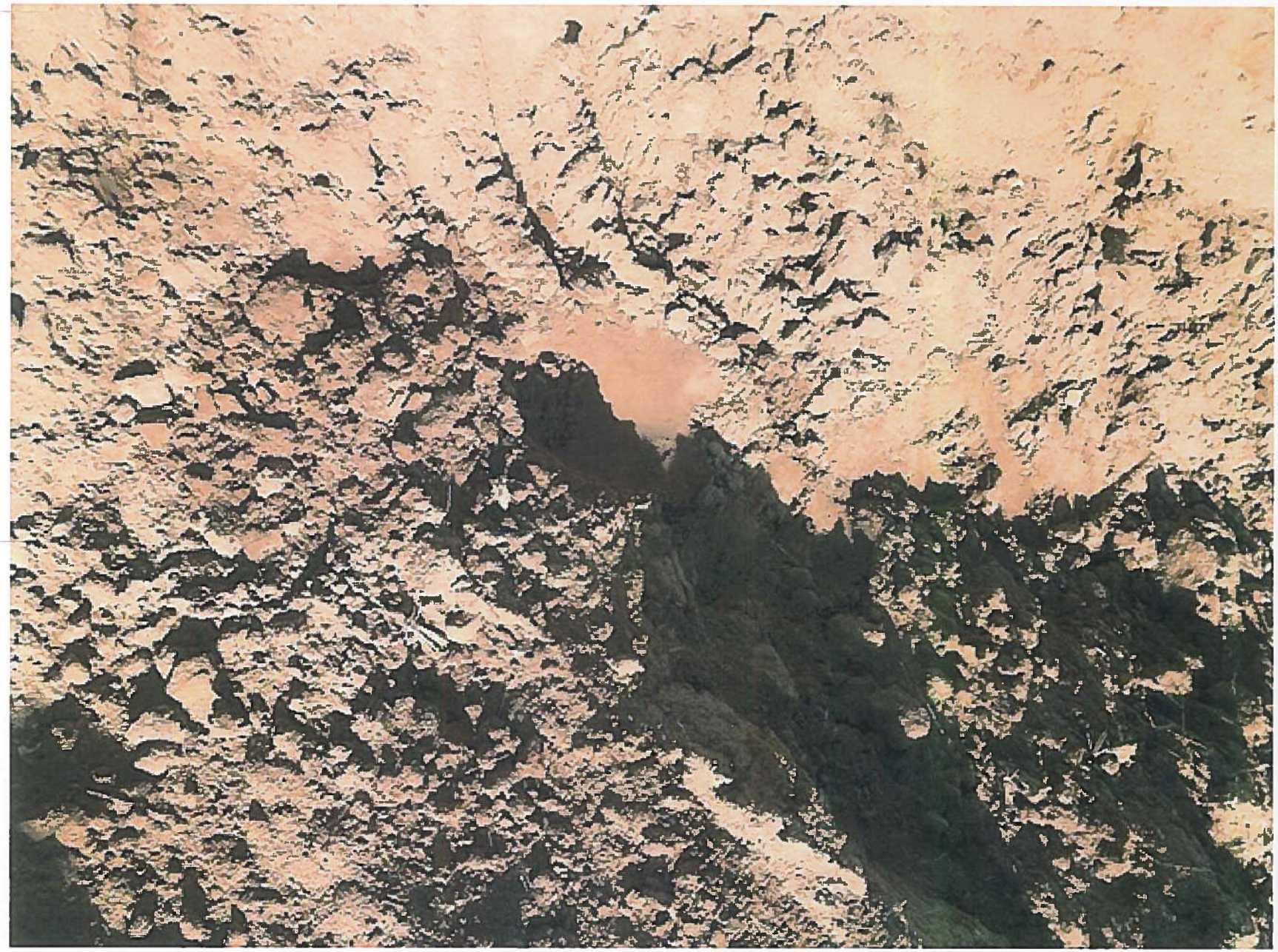


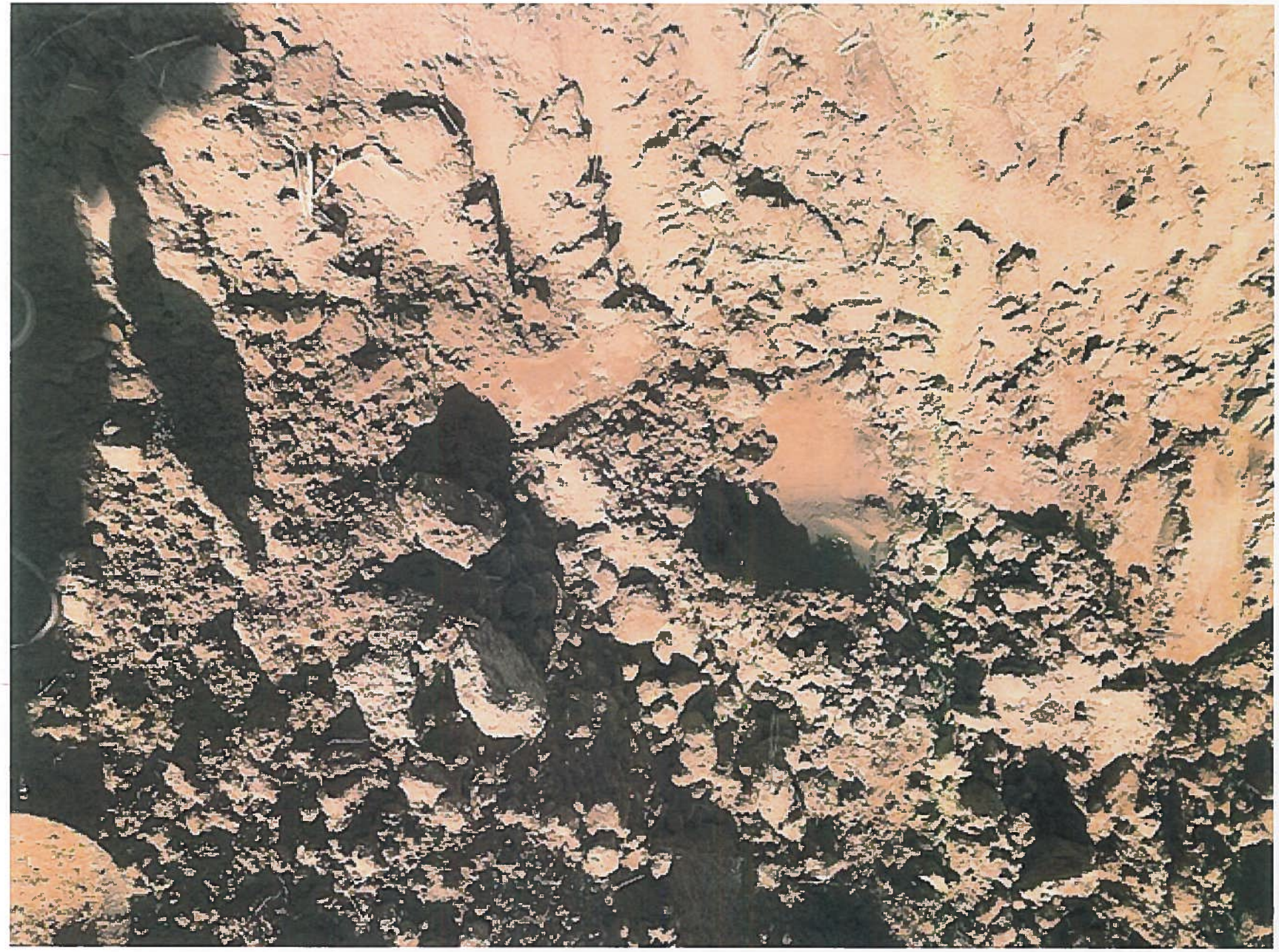


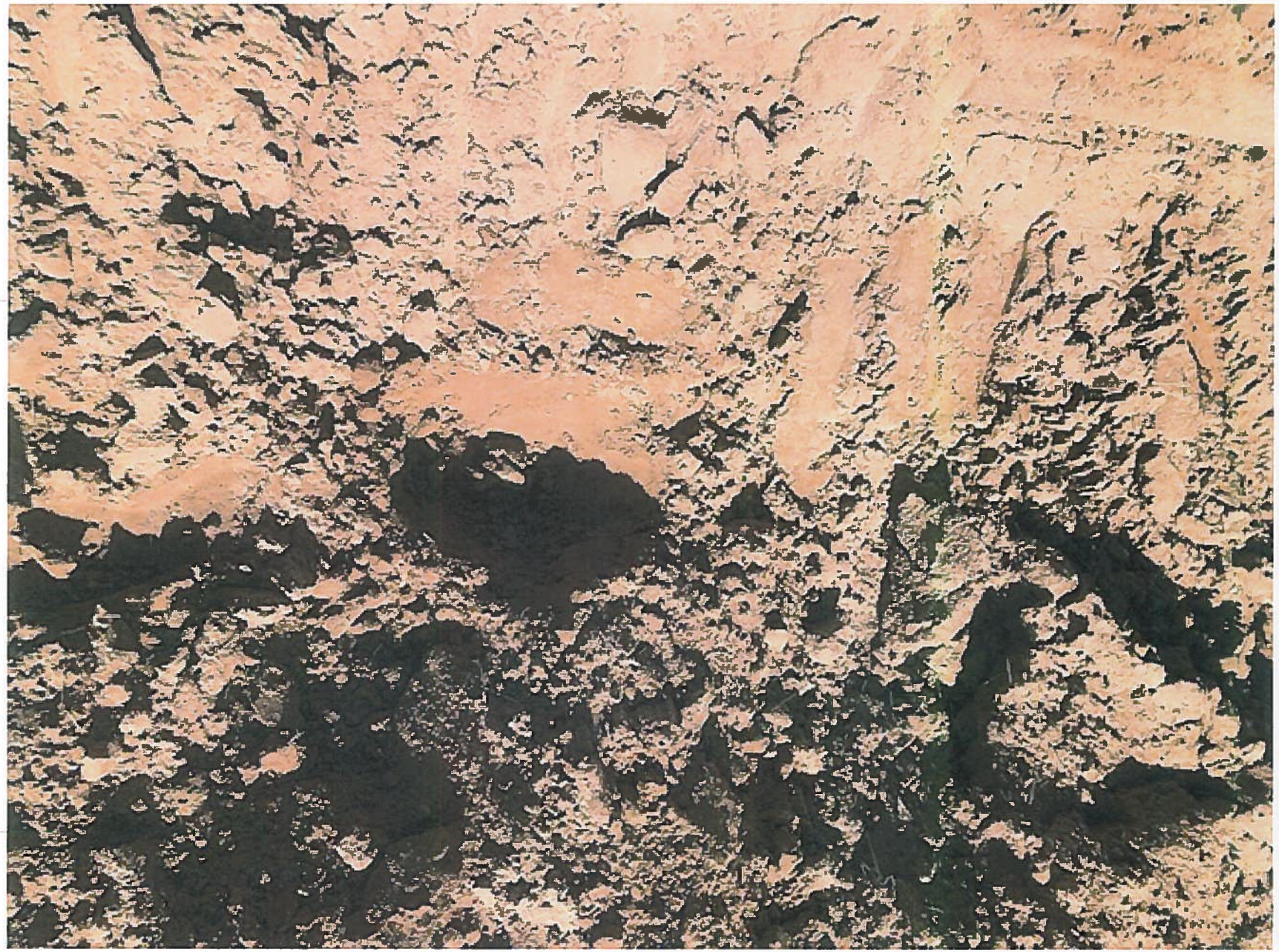


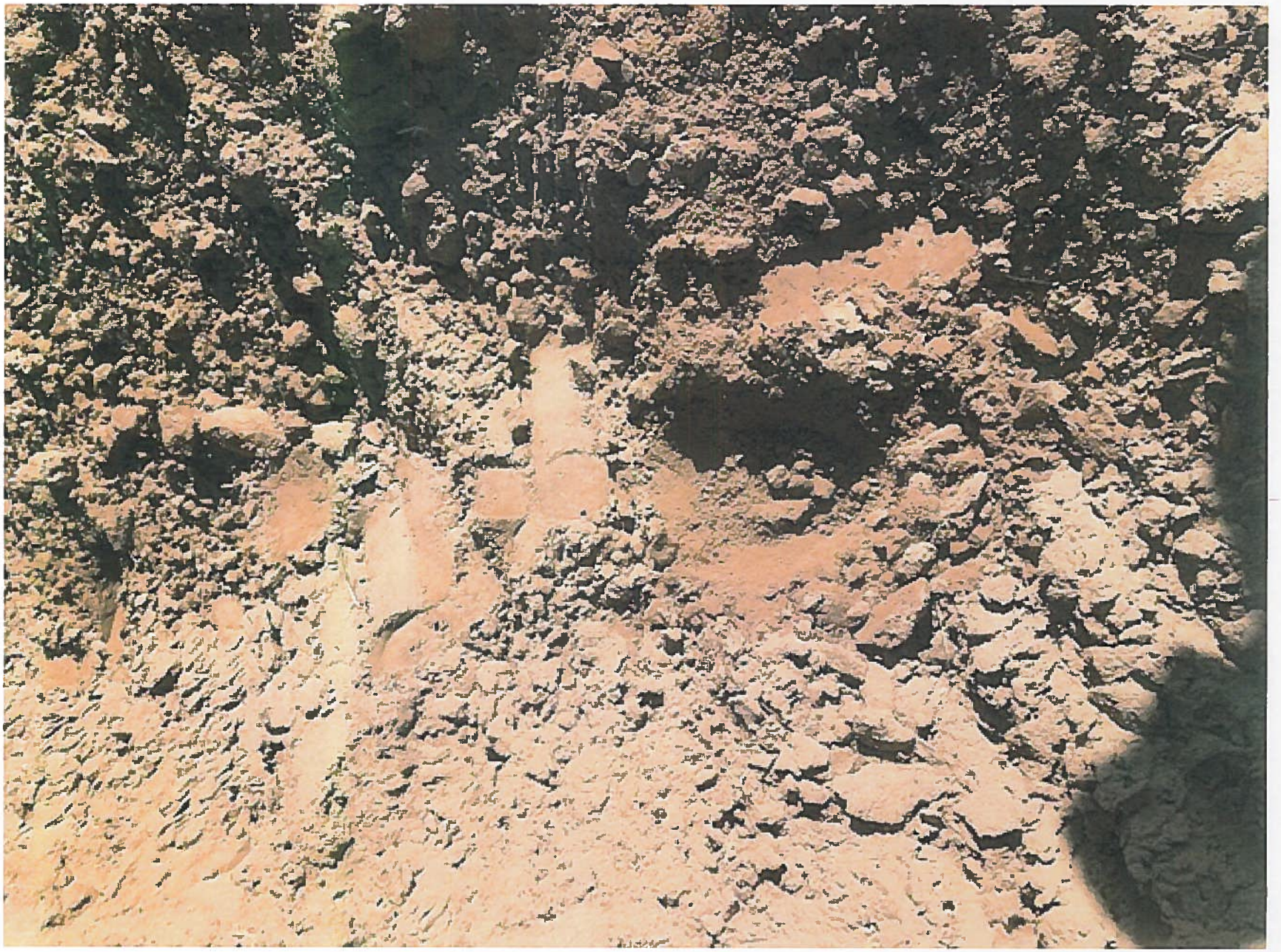


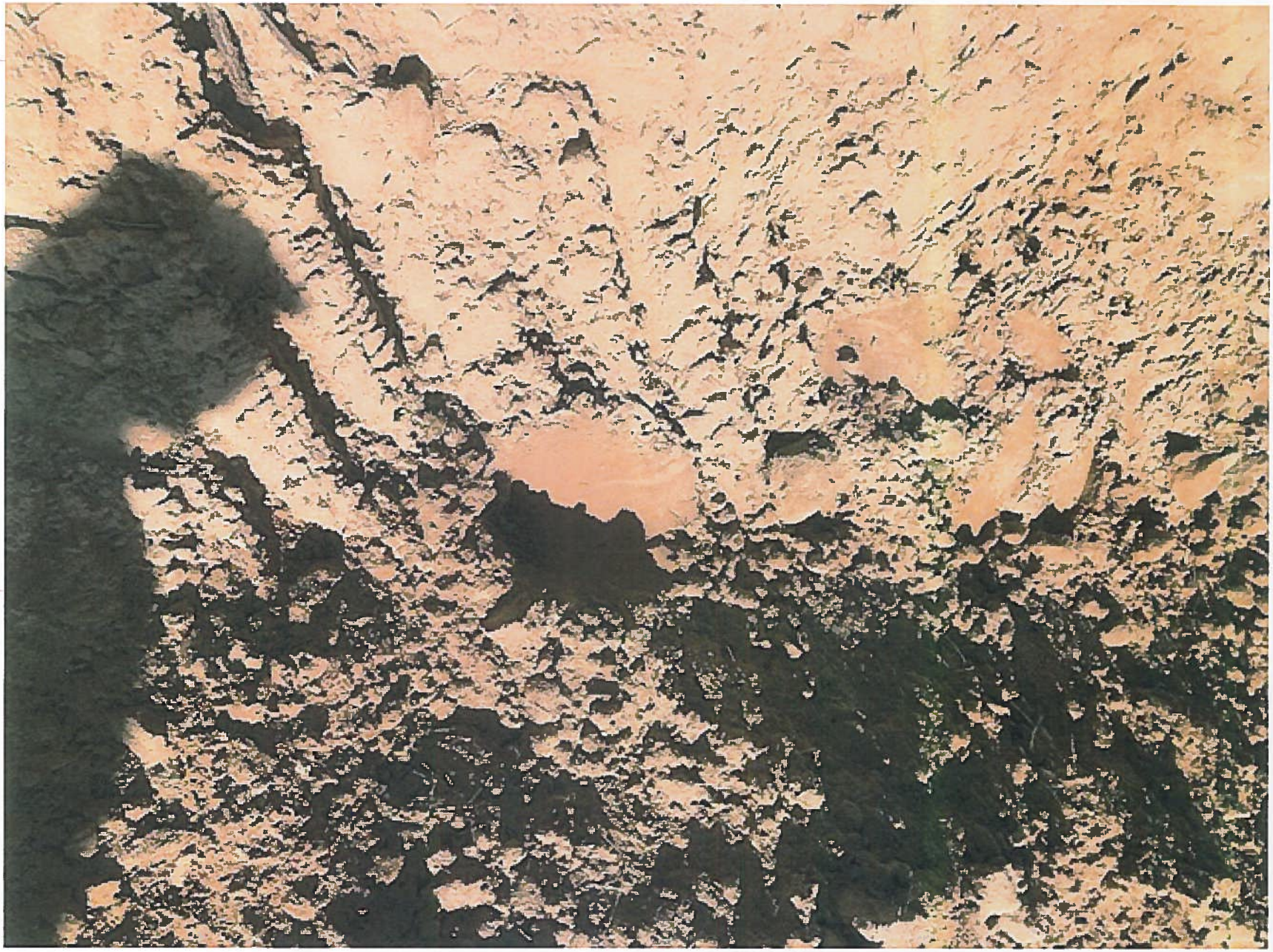


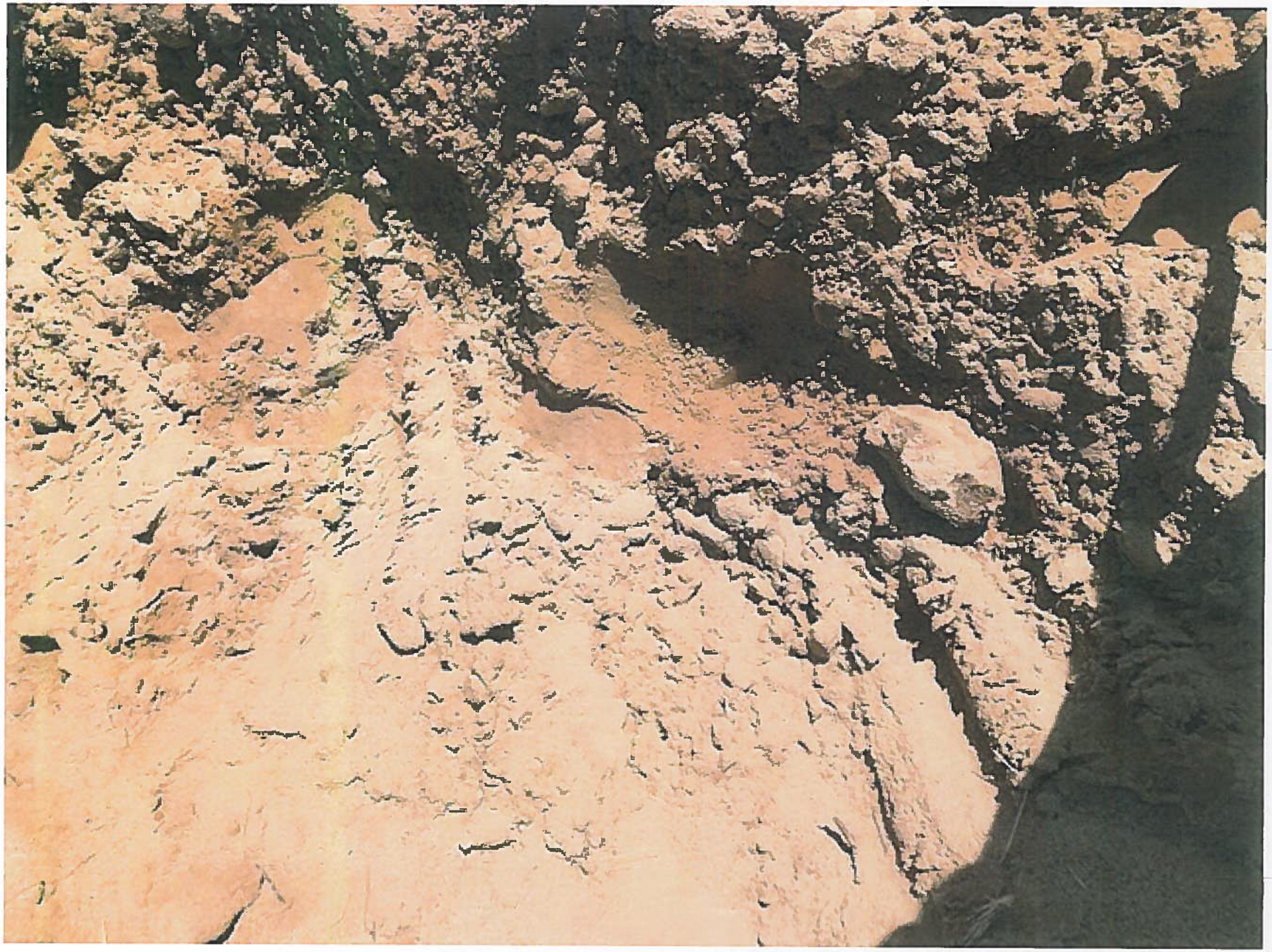












Tyra Feil

From: Kevin Smaka
Sent: Tuesday, May 05, 2020 3:05 PM
To: Tyra Feil
Subject: FW: Major Spill release notification

From: Kevin Smaka
Sent: Friday, December 13, 2019 5:04 PM
To: 'Smith, Cory, EMNRD' <Cory.Smith@state.nm.us>; 'Brandon.Powell@state.nm.us' <Brandon.Powell@state.nm.us>; 'bertha.spencer@BIA.gov' <bertha.spencer@BIA.gov>; 'Thomas, Leigh' <l1thomas@blm.gov>; 'Jim.Griswold@state.nm.us' <Jim.Griswold@state.nm.us>
Cc: John Alexander (John.Alexander@duganproduction.com) <John.Alexander@duganproduction.com>; Bill Armenta <Bill.Armenta@duganproduction.com>
Subject: Major Spill release notification

Everyone,

Dugan Production Corp. discovered an oil spill on a pipeline that connects Dugan's West Bisti Unit #156 and West Bisti Unit #160.

As directed in NMAC 19.25.29.10 the following is being provided:
Dugan Production Corp. is the responsible party. OGRID # is 006515. Contact person is Kevin Smaka. Contact number is 505-325-1821. Contact e-mail is kevin.smaka@duganproduction.com. Mailing address is Box 420 Farmington NM 87499.

Spill source is located at 36.440135, -108.169993. Site name is west bisti unit pipeline. Site type is pipeline. Date discovered is 12/13/2019.
PLSS location is J-36-26N-13W.

Release is crude oil. Volume is estimated at 33 bbl. Cause of release is a pipeline leak. This is a major spill and all parties were notified within 24 hours of discovery. I, Kevin Smaka, notified the NM OCD district 3 office, (Cory Smith and Brandon Powell) NM OCD Environmental Bureau Chief (Jim Griswold) BLM (Whitney Thomas) and BIA (Bertha Spencer) by email on 12/13/19 at 5:00 PM that a major release occurred.

The source was stopped. A fence was constructed around the contaminated soil. A berm was built on the downslope side of contaminated soil to prevent further spreading. All free liquids were removed.

If you have concerns or questions please contact me.

Kevin Smaka
Regulatory Engineer
Dugan Production Corp.
505-486-6207

Tyra Feil

From: Kevin Smaka
Sent: Tuesday, May 05, 2020 3:04 PM
To: Tyra Feil
Subject: FW: Notice of Sampling

From: Kevin Smaka
Sent: Monday, January 27, 2020 11:26 AM
To: 'Smith, Cory, EMNRD' <Cory.Smith@state.nm.us>; 'bertha.spencer@BIA.gov' <bertha.spencer@BIA.gov>; 'kwchristesen@blm.gov' <kwchristesen@blm.gov>
Cc: Mike Sandoval <Mike.Sandoval@duganproduction.com>
Subject: Notice of Sampling

Everyone,

You are being notified of Dugan's plan to collect soil samples to verify successful remediation of a pipeline spill located near Dugan's West Bisti Unit #156.

We plan to collect samples on Thursday, 1/30/2020. We will meet at the WBU # 156 well at 10 in the morning and walk to the nearby spill site and collect samples.

The following is being provided for your convenience:
API# 30-045-05618
J-36-26N-13W
Spill source point (Long/Lat) -108.169581 36.439980

If you have questions please contact me

Kevin Smaka
Regulatory Engineer
Dugan Production Corp.
505-486-6207

Tyra Feil

From: Kevin Smaka
Sent: Tuesday, May 05, 2020 3:03 PM
To: Tyra Feil
Subject: FW: Notice of Sampling

From: Kevin Smaka
Sent: Monday, March 2, 2020 2:27 PM
To: 'Smith, Cory, EMNRD' <Cory.Smith@state.nm.us>; bertha.spencer@BIA.gov; kwchristesen@blm.gov
Cc: Mike Sandoval <Mike.Sandoval@duganproduction.com>
Subject: Notice of Sampling

Everyone,

Dugan will be sampling soils at a pipeline spill located near Dugan's West Bisti Unit #156.
We will start on Friday, 3/6/2020 @ 10:00 AM. We will meet at the WBU #156 and walk to the spill area.

The following is provided for your convenience:

API: 30-045-05618
J-36-26N-13W
36.442894,-108.1683273

Kevin Smaka
Regulatory Engineer
Dugan Production Corp.
505-486-6207

Tyra Feil

From: Kevin Smaka
Sent: Tuesday, May 05, 2020 3:02 PM
To: Tyra Feil
Subject: FW: Pipeline Remediation Sampling and BGT

From: Kevin Smaka
Sent: Tuesday, March 17, 2020 10:56 AM
To: Smith, Cory, EMNRD <Cory.Smith@state.nm.us>; 'Thomas, Leigh' <l1thomas@blm.gov>; bertha.spencer@BIA.gov; kwchristesen@blm.gov; 'Johnson, David' <djohnson@slo.state.nm.us>
Cc: Mike Sandoval <Mike.Sandoval@duganproduction.com>
Subject: Pipeline Remediation Sampling and BGT

Dugan Production is providing notice to you of our intentions to conduct sampling at a remediated spill location and sampling of a pit that was partially completed by a former operator. We will meet Friday morning, 3/17/2020 @ 10:00 AM to sample. We will meet at the WBU #156.

The pipeline spill is the located near Dugan's WBU #156 well. API # 30-045-05618

The BGT is related to an issue where Dugan acquired a well that apparently went through the initial closure process but never received final closure. In an effort to be compliant and complete the closure Dugan plans to sample the BGT area to verify that closure can proceed. At which point Dugan will finish filling the hole and remediate the BGT area.

The Well is the West Bisti State 26-13-36 #2, API# 30-045-29076, M-36-26N-13W, 1192 FSL & 819 FWL.

Kevin Smaka
Regulatory Engineer
Dugan Production Corp.
505-486-6207