

CROSS TIMBERS ENERGY,LLC  
STATE N BATTERY

NRM2003036134

F-11-17S-34E

Part I

Site Characteristic,  
Remediation Plan.

Part 2 filed in incident  
files in edocs. These  
documents have NOT  
been APPROVED or  
REVIEWED.

**State of New Mexico**  
**Energy, Minerals and Natural Resources Department**  
**Oil Conservation Division**

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**Receipt of Fee Application Payment**



**PO Number: E3HWE-200831-C-1410**

Payment Date: 8/31/2020 3:57:58 PM

Payment Amount: \$150.00

Payment Type: Credit Card

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Application Type: Application for administrative approval of a release notification and corrective action.

Fee Amount: \$150.00

Application Status: Pending Document Delivery

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OGRID: 298299

First Name: Samanntha

Last Name: Avarello

Email: savarello@mspartners.com

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**IMPORTANT:** If you are mailing or delivering your application, you must print and include your receipt of payment as the first page on your application. All mailed and delivered applications must be sent to the following address: 1220 S. St. Francis Dr., Santa Fe, NM 87505. For inquiries, reference the PO Number listed above.

# CROSS TIMBERS ENERGY, LLC

## Remediation Work Plan

State N Battery  
NRM2003036134  
F-11-17S-34E ON OE

Cross Timbers Energy, LLC discovered the spill on December 04, 2019. The leak resulted from corrosion on a 3" steel pipeline. The steel line was replaced with 1800' of 2" poly pipe. A vacuum truck was called to location and recovered 8 of the 10 bbls released. The initial C-141 report was submitted to your office on December 18, 2019, see attached.

Cross Timbers personnel conducted initial site assessment no groundwater, surface water or any other significant watercourse was affected. Ground water depth is reported to be 130 feet by the State Engineering Office. The most current information available is attached.

The entire contaminated surface area is approximately 55' x 55'. The vertical depth of the hydrocarbon contamination is approximately 6" with the exception of the soil adjacent to the leaking pipeline. That area was excavated down to clean soil, approximately 30" deep x 6' long x 36" wide. The hydrocarbon saturated soil, approximately 24 yards was removed from location using a backhoe and trucked to Gandy Marley disposal site.

Field Samples were collected on six sample points. Each sample was tested for Chlorides, TPH, and BTEX. Based on the analysis, we are recommending bioremediation, more specifically, Biostimulation. Biostimulation involves the addition of rate-limiting nutrients to accelerate biodegradation by indigenous microorganisms. When an oil spill occurs, it results in a huge influx of carbon into the impacted environment. Carbon is the basic structural component of living matter, and in order for the indigenous microorganisms to be able to convert this carbon into more biomass, they need significantly more nitrogen and phosphorus than is normally present in the environment. Both of these elements are essential ingredients of protein and nucleic acids of living organisms, see attached NRT FACT SHEET.

### BIOREMEDIATION IN OIL SPILL RESPONSE

Albert D. Venosa  
U.S. EPA, Cincinnati, OH 45268  
Tel: 513-569-7668

The specific action plan will consist of incorporating nutrients, nitrogen and phosphorus into the affected soil. This will be done mechanically with a rotor tiller to a depth of 15 to 20 inches. This allows oxygen to interact with the nitrogen and phosphorus to convert the carbon into biomass. It is Cross Timbers intention to have the soil at acceptable limits within 90 days of receiving this plan.



# CROSS TIMBERS ENERGY, LLC

The site will be monitored and retested as necessary. Your office will be notified at a minimum of 2 business days prior to closure sampling. In addition, Cross Timbers will substantially restore the impacted surface area to the condition that existed prior to the release. This will be done by seeding the area with native grasses/vegetation.

Please feel free to contact me with any questions you have on the proposed remediation plan request.

Regards,



Samanntha Avarello

Regulatory Technician

MorningStar Partners LLC/Cross Timbers Energy LLC/Southland Royalty Co LLC

400 W 7<sup>th</sup> St, Fort Worth, TX 76102

817-334-7747



District I  
1625 N. French Dr., Hobbs, NM 88240  
District II  
811 S. First St., Artesia, NM 88210  
District III  
1000 Rio Brazos Road, Aztec, NM 87410  
District IV  
1220 S. St. Francis Dr., Santa Fe, NM 87505

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

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

Incident ID	NRM2003036134
District RP	
Facility ID	
Application ID	

## Release Notification

### Responsible Party

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

### Location of Release Source

Latitude 32.850021 Longitude -103.533482  
(NAD 83 in decimal degrees to 5 decimal places)

Site Name	STATE N BATTERY	Site Type	OIL BATTERY
Date Release Discovered	12/04/2019	API# (if applicable)	

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

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

### Nature and Volume of Release

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

<input checked="" type="checkbox"/> Crude Oil	Volume Released (bbls)	10 BBLS	Volume Recovered (bbls)	8 BBLS
<input type="checkbox"/> Produced Water	Volume Released (bbls)		Volume Recovered (bbls)	
	Is the concentration of dissolved chloride in the produced water >10,000 mg/l?		<input type="checkbox"/> Yes <input type="checkbox"/> No	
<input type="checkbox"/> Condensate	Volume Released (bbls)		Volume Recovered (bbls)	
<input type="checkbox"/> Natural Gas	Volume Released (Mcf)		Volume Recovered (Mcf)	
<input type="checkbox"/> Other (describe)	Volume/Weight Released (provide units)		Volume/Weight Recovered (provide units)	

Cause of Release Old and fraile pipeline



Form C-141

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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 type="checkbox"/> Yes <input checked="" type="checkbox"/> 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)?  	

**Initial Response**

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

<input checked="" type="checkbox"/> The source of the release has been stopped. <input checked="" type="checkbox"/> The impacted area has been secured to protect human health and the environment. <input checked="" type="checkbox"/> Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices. <input checked="" type="checkbox"/> All free liquids and recoverable materials have been removed and managed appropriately.	
If all the actions described above have <u>not</u> been undertaken, explain why:  	
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>SAMANTHA AVARELLO</u>	Title: <u>REGULATORY TECHNICIAN</u>
Signature: <u></u>	Date: <u>12/12/2019</u>
email: <u>SAVARELLO@MSPARTNERS.COM</u>	Telephone: <u>817-334-7747</u>
<b><u>OCD Only</u></b>	
Received by: <u>Ramona Marcus</u>	Date: <u>2/6/2020</u>

Form C-141

State of New Mexico  
Oil Conservation Division

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Incident ID	NRM2003036134
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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>139</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 type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 500 horizontal feet of a spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 1000 feet of any other fresh water well or spring?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh water well field?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 300 feet of a wetland?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release overlying a subsurface mine?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release overlying an unstable area such as karst geology?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within a 100-year floodplain?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Did the release impact areas <b>not</b> 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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## Remediation Plan

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

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

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

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

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

Printed Name: Samanntha Avarello Title: Regulatory Technician

Signature: Samanntha Avarello Date: 08/31/2020

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

**OCD Only**

Received by: Cristina Eads Date: 08/31/2020

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

Signature: Cristina Eads Date: 10/28/2020



# STATE ENGINEER OFFICE

## WELL RECORD

## Section 1. GENERAL INFORMATION

(A) Owner of well Mobil Exploration & Producing, U.S., Inc. North Vacuum ABO # 304  
 Street or Post Office Address P.O. Box 1475 Owner's Well No. \_\_\_\_\_  
 City and State Lovington, New Mexico 88260

Well was drilled under Permit No. L-3846-X and is located in the:

300' FSL - 2100' FWL

a. 1/4 1/4 SW 1/4 SW 1/4 of Section 11 Township 17S Range 34E N.M.P.M.

b. Tract No. \_\_\_\_\_ of Map No. \_\_\_\_\_ of the \_\_\_\_\_

c. Lot No. \_\_\_\_\_ of Block No. \_\_\_\_\_ of the \_\_\_\_\_  
 Subdivision, recorded in Lea County.

d. X= \_\_\_\_\_ feet, Y= \_\_\_\_\_ feet, N.M. Coordinate System \_\_\_\_\_ Zone in  
 the \_\_\_\_\_ Grant.

(B) Drilling Contractor Abbott Bros. Drilling License No. WD-46

Address P.O. Box 637, Hobbs, New Mexico 88240

Drilling Began 6/17/91 Completed 6/25/91 Type tools Cable Size of hole 18 in.

Elevation of land surface or \_\_\_\_\_ at well is \_\_\_\_\_ ft. Total depth of well 201 ft.

Completed well is ☒ shallow ☐ artesian. Depth to water upon completion of well 130 ft.

## Section 2. PRINCIPAL WATER-BEARING STRATA

Depth in Feet		Thickness in Feet	Description of Water-Bearing Formation	Estimated Yield (gallons per minute)
From	To			
124	196	72	Sand	

## Section 3. RECORD OF CASING

Diameter (inches)	Pounds per foot	Threads per in.	Depth in Feet		Length (feet)	Type of Shoe	Perforations	
			Top	Bottom			From	To
14	37	Welded	0	202	202	None	102	202

## Section 4. RECORD OF MUDDING AND CEMENTING

Depth in Feet		Hole Diameter	Sacks of Mud	Cubic Feet of Cement	Method of Placement
From	To				

## Section 5. PLUGGING RECORD

Plugging Contractor \_\_\_\_\_

Address \_\_\_\_\_

Plugging Method \_\_\_\_\_

Date Well Plugged \_\_\_\_\_

Plugging approved by: \_\_\_\_\_

State Engineer Representative

No.	Depth in Feet		Cubic Feet of Cement
	Top	Bottom	
1			
2			
3			
4			

## FOR USE OF STATE ENGINEER ONLY

Date Received June 27, 1991

Quad \_\_\_\_\_ FWL \_\_\_\_\_ FSL \_\_\_\_\_

File No. L-3846-X Use SRO Location No. 17.34.11.3441341

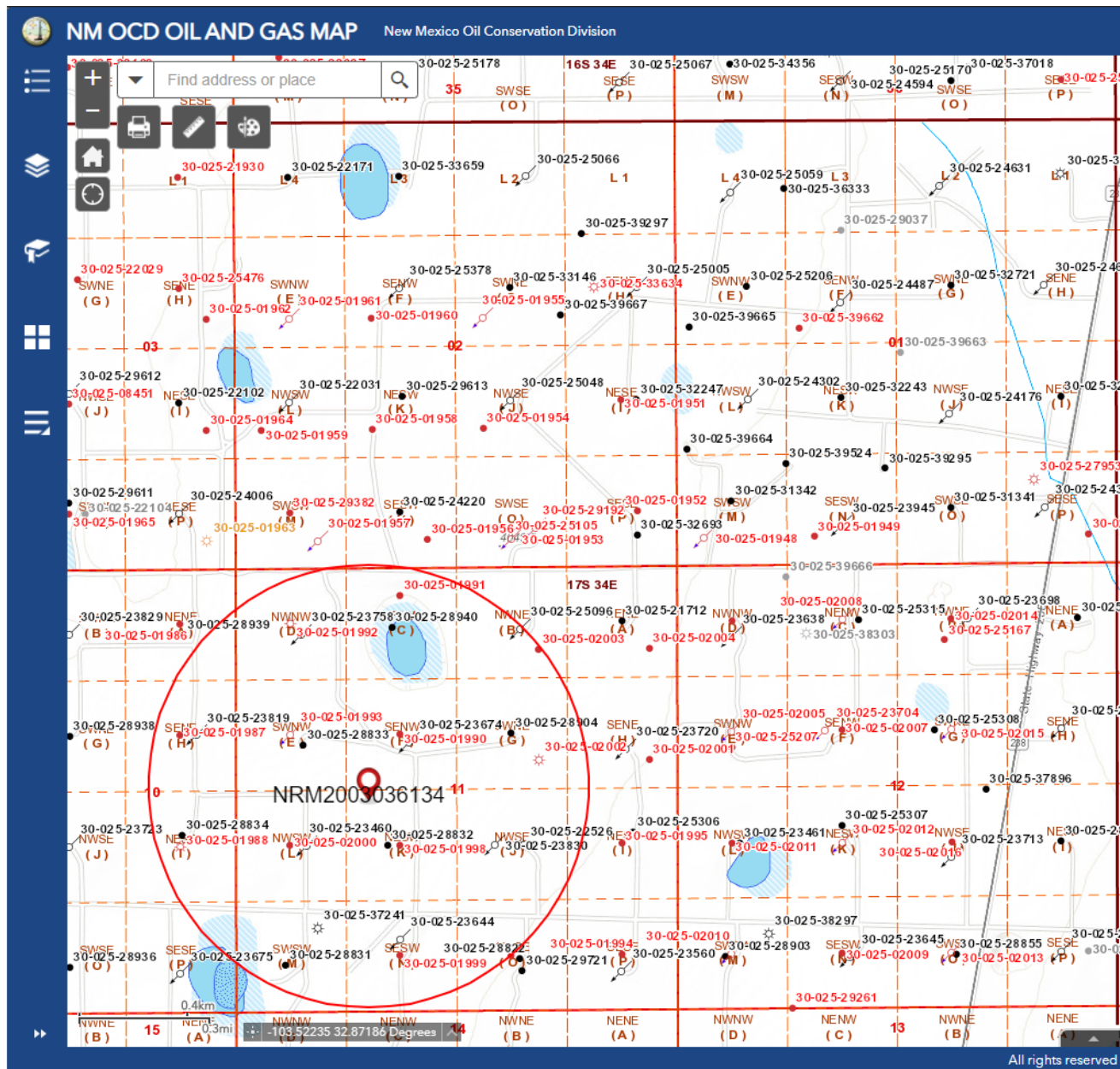
3441341

[illegible]

94 JUN 27 10 10 08  
STATE DEPARTMENT OFFICE  
ROSWELL, NEW MEXICO

Murrell Abbott  
Driller H.B.

**INSTRUCTIONS:** This form should be executed in triplicate, preferably typewritten, and submitted to the appropriate district office of the State Engineer. All questions, except Section 5, shall be answered as completely and accurately as possible when any well is drilled, repaired or deepened. When this form is used as a plugging record, only Section 1(a) and Section 2 shall be completed.



HALF MILE RADIUS