Pit, Closed-Loop System, Below-Grade Tank, or Proposed Alternative Method Permit or Closure Plan Application

| Type of action: Permit of a pit, closed-loop system, below-grade tank, or proposed alternative method Closure of a pit, closed-loop system, below-grade tank, or proposed alternative method Modification to an existing permit Closure plan only submitted for an existing permitted or non-permitted pit, closed-loop system, below-grade tank, or proposed alternative method | | | |
|--|--|--|--|
| Instructions: Please submit one application (Form C-144) per individual pit, closed-loop system, below-grade tank or alternative request | | | |
| Please be advised that approval of this request does not relieve the operator of liability should operations result in pollution of surface water, ground water or the environment. Nor does approval relieve the operator of its responsibility to comply with any other applicable governmental authority's rules, regulations or ordinances | | | |
| Operator: CML Exploration, LLC OGRID #: 256512 | | | |
| Address: PO Box 890 Snyder, Texas 79550 | | | |
| Facility or well name: Paddy 19 State #3 | | | |
| API Number: 30-025-38591 OCD Permit Number: 11-00767 | | | |
| U/L or Qtr/Qtr F Section 19 Township 17S Range 33E County: Lea | | | |
| Center of Proposed Design: Latitude <u>32.821</u> Longitude <u>103.707</u> NAD. □1927 ⋈ 1983 | | | |
| Surface Owner: Federal State Private Tribal Trust or Indian Allotment | | | |
| Pit: Subsection F or G of 19.15.17.11 NMAC | | | |
| 4. | | | |
| Below-grade tank: Subsection I of 19.15.17.11 NMAC Volume: bbl Type of fluid: | | | |
| Tank Construction material: | | | |
| Secondary containment with leak detection Visible sidewalls, liner, 6-inch lift and automatic overflow shut-off | | | |
| ☐ Visible sidewalls and liner ☐ Visible sidewalls only ☐ Other | | | |
| Liner type: Thickness mil | | | |
| 5. Alternative Method: | | | |
| Submittal of an exception request is required. Exceptions must be submitted to the Santa Fe Environmental Bureau office for consideration of approval. | | | |

| 6. Fencing: Subsection D of 19.15.17.11 NMAC (Applies to permanent pits, temporary pits, and below-grade tanks) | | | |
|---|------------|--|--|
| Chain link, six feet in height, two strands of barbed wire at top (Required if located within 1000 feet of a permanent residence, school, hospital, institution or church) | | | |
| Four foot height, four strands of barbed wire evenly spaced between one and four feet | | | |
| Alternate. Please specify | | | |
| 7. | | | |
| Netting: Subsection E of 19.15.17.11 NMAC (Applies to permanent pits and permanent open top tanks) | | | |
| Screen Netting Other | | | |
| Monthly inspections (If netting or screening is not physically feasible) | | | |
| 8. Signs: Subsection C of 19.15.17.11 NMAC | | | |
| ☐ 12"x 24", 2" lettering, providing Operator's name, site location, and emergency telephone numbers | | | |
| Signed in compliance with 19.15.3.103 NMAC | | | |
| | | | |
| Administrative Approvals and Exceptions: | | | |
| Justifications and/or demonstrations of equivalency are required. Please refer to 19.15.17 NMAC for guidance. Please check a box if one or more of the following is requested, if not leave blank: | | | |
| Administrative approval(s): Requests must be submitted to the appropriate division district or the Santa Fe Environmental Bureau | office for | | |
| consideration of approval. Exception(s): Requests must be submitted to the Santa Fe Environmental Bureau office for consideration of approval. | | | |
| 10. | | | |
| Siting Criteria (regarding permitting): 19.15.17.10 NMAC | | | |
| Instructions: The applicant must demonstrate compliance for each siting criteria below in the application. Recommendations of acceptable source | | | |
| material are provided below. Requests regarding changes to certain siting criteria may require administrative approval from the appro- office or may be considered an exception which must be submitted to the Santa Fe Environmental Bureau office for consideration of a | | | |
| Applicant must attach justification for request. Please refer to 19.15.17.10 NMAC for guidance. Siting criteria does not apply to drying pads or above-grade tanks associated with a closed-loop system. | | | |
| Ground water is less than 50 feet below the bottom of the temporary pit, permanent pit, or below-grade tank. | Yes No | | |
| - NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells | | | |
| Within 300 feet of a continuously flowing watercourse, or 200 feet of any other significant watercourse or lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark). | Yes No | | |
| - Topographic map; Visual inspection (certification) of the proposed site | | | |
| Within 300 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application. | Yes No | | |
| (Applies to temporary, emergency, or cavitation puts and below-grade tanks) Visual inspection (certification) of the proposed site; Aerial photo; Satellite image | I NA | | |
| Within 1000 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application. | ☐ Yes ☐ No | | |
| (Applies to permanent pits) Visual inspection (certification) of the proposed site; Aerial photo; Satellite image | │ | | |
| Within 500 horizontal feet of a private, domestic fresh water well or spring that less than five households use for domestic or stock | ☐ Yes ☐ No | | |
| watering purposes, or within 1000 horizontal feet of any other fresh water well or spring, in existence at the time of initial application. - NM Office of the State Engineer - iWATERS database search; Visual inspection (certification) of the proposed site | | | |
| Within incorporated municipal boundaries or within a defined municipal fresh water well field covered under a municipal ordinance | □ V□ N- | | |
| adopted pursuant to NMSA 1978, Section 3-27-3, as amended. | ∐ Yes ☐ No | | |
| - Written confirmation or verification from the municipality; Written approval obtained from the municipality | | | |
| Within 500 feet of a wetland. US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site | ☐ Yes ☐ No | | |
| Within the area overlying a subsurface mine. | | | |
| - Written confirmation or verification or map from the NM EMNRD-Mining and Mineral Division | Yes No | | |
| Within an unstable area. | ☐ Yes ☐ No | | |
| Engineering measures incorporated into the design; NM Bureau of Geology & Mineral Resources; USGS; NM Geological Society; Topographic map | | | |
| Within a 100-year floodplain FEMA map | ☐ Yes ☐ No | | |
| 1 EMIX mup | : | | |

| Hydrogeologic Data (Temporary and Emergency Pits) - based upon the requirements of Paragraph (2) of Subsection B of 19.15.17.9 NMAC Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19.15.17.10 NMAC Design Plan - based upon the appropriate requirements of 19.15.17.11 NMAC Operating and Maintenance Plan - based upon the appropriate requirements of 19.15.17.12 NMAC Closure Plan (Please complete Boxes 14 through 18, if applicable) - based upon the appropriate requirements of Subsection C of 19.15.17.9 NMAC and 19.15.17.13 NMAC |
|--|
| Previously Approved Design (attach copy of design) API Number: or Permit Number: |
| Closed-loop Systems Permit Application Attachment Checklist: Subsection B of 19.15.17.9 NMAC Instructions: Each of the following items must be attached to the application. Please indicate, by a check mark in the box, that the documents are attached. Geologic and Hydrogeologic Data (only for on-site closure) - based upon the requirements of Paragraph (3) of Subsection B of 19.15.17.9 Siting Criteria Compliance Demonstrations (only for on-site closure) - based upon the appropriate requirements of 19.15.17.10 NMAC Design Plan - based upon the appropriate requirements of 19.15.17.11 NMAC Operating and Maintenance Plan - based upon the appropriate requirements of 19.15.17.12 NMAC Closure Plan (Please complete Boxes 14 through 18, if applicable) - based upon the appropriate requirements of Subsection C of 19.15.17.9 NMAC |
| Previously Approved Design (attach copy of design) API Number: |
| Previously Approved Operating and Maintenance Plan API Number:(Applies only to closed-loop system that use |
| above ground steel tanks or haul-off bins and propose to implement waste removal for closure) |
| Dermanent Pits Permit Application Checklist: Subsection B of 19.15.17.9 NMAC |
| 14. <u>Proposed Closure</u> : 19.15.17.13 NMAC Instructions: Please complete the applicable boxes, Boxes 14 through 18, in regards to the proposed closure plan. |
| Type: Drilling Workover Emergency Cavitation P&A Permanent Pit Below-grade Tank Closed-loop System Alternative Proposed Closure Method: Waste Excavation and Removal Waste Removal (Closed-loop systems only) On-site Closure Method (Only for temporary pits and closed-loop systems) In-place Burial On-site Trench Burial Alternative Closure Method (Exceptions must be submitted to the Santa Fe Environmental Bureau for consideration) |
| 15. |
| Waste Excavation and Removal Closure Plan Checklist: (19.15.17.13 NMAC) Instructions: Each of the following items must be attached to the closure plan. Please indicate, by a check mark in the box, that the documents are attached. ☐ Protocols and Procedures - based upon the appropriate requirements of 19.15.17.13 NMAC ☐ Confirmation Sampling Plan (if applicable) - based upon the appropriate requirements of Subsection F of 19.15 17.13 NMAC ☐ Disposal Facility Name and Permit Number (for liquids, drilling fluids and drill cuttings) ☐ Soil Backfill and Cover Design Specifications - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC ☐ Re-vegetation Plan - based upon the appropriate requirements of Subsection G of 19.15.17.13 NMAC ☐ Site Reclamation Plan - based upon the appropriate requirements of Subsection G of 19.15.17.13 NMAC |

| Disposal Facility Name: Disposal Facility Permit Number: Disposal Facility Name: Disposal Facility Permit Number: Will any of the proposed closed-loop system operations and associated activities occur on or in areas that will not be used for future service at Yes (If yes, please provide the information below) No Required for impacted areas which will not be used for future service and operations: Soil Backfill and Cover Design Specifications based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC | nd operations? | |
|---|----------------|--|
| Will any of the proposed closed-loop system operations and associated activities occur on or in areas that will not be used for future service at Yes (If yes, please provide the information below) No Required for impacted areas which will not be used for future service and operations: | nd operations? | |
| ☐ Yes (If yes, please provide the information below) ☐ No Required for impacted areas which will not be used for future service and operations: | nd operations? | |
| Required for impacted areas which will not be used for future service and operations: Soil Backfill and Cover Design Specifications based upon the appropriate requirements of Subsection H of 19 15 17 13 NMAC | | |
| Required for impacted areas which will not be used for future service and operations: Soil Backfill and Cover Design Specifications based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC Re-vegetation Plan - based upon the appropriate requirements of Subsection G of 19.15.17.13 NMAC Site Reclamation Plan - based upon the appropriate requirements of Subsection G of 19.15.17.13 NMAC | | |
| Siting Criteria (regarding on-site closure methods only): 19.15.17.10 NMAC Instructions: Each siting criteria requires a demonstration of compliance in the closure plan. Recommendations of acceptable source material are provided below. Requests regarding changes to certain siting criteria may require administrative approval from the appropriate district office or may be considered an exception which must be submitted to the Santa Fe Environmental Bureau office for consideration of approval. Justifications and/or demonstrations of equivalency are required. Please refer to 19.15.17.10 NMAC for guidance. | | |
| NN 4 000 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 | Yes No | |
| ADMON CIT OF E THE TERROLLIS A FROND BY THE TAX A THE | Yes 🗌 No NA | |
| ANALOSS CALOURE I INVERTINGALIA A ARGONDA ARIA AR | Yes 🗌 No NA | |
| Within 300 feet of a continuously flowing watercourse, or 200 feet of any other significant watercourse or lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark). - Topographic map; Visual inspection (certification) of the proposed site | Yes 🗌 No | |
| Within 300 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application. - Visual inspection (certification) of the proposed site; Aerial photo; Satellite image | Yes No | |
| Within 500 horizontal feet of a private, domestic fresh water well or spring that less than five households use for domestic or stock watering purposes, or within 1000 horizontal feet of any other fresh water well or spring, in existence at the time of initial application. - NM Office of the State Engineer - iWATERS database; Visual inspection (certification) of the proposed site | Yes 🗌 No | |
| Within incorporated municipal boundaries or within a defined municipal fresh water well field covered under a municipal ordinance adopted pursuant to NMSA 1978, Section 3-27-3, as amended. - Written confirmation or verification from the municipality; Written approval obtained from the municipality | Yes 🗌 No | |
| Within 500 feet of a wetland. - US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site | Yes 🗌 No | |
| Within the area overlying a subsurface mine. - Written confirmation or verification or map from the NM EMNRD-Mining and Mineral Division | Yes No | |
| Within an unstable area. - Engineering measures incorporated into the design; NM Bureau of Geology & Mineral Resources; USGS; NM Geological Society; Topographic map | Yes 🗌 No | |
| Within a 100-year floodplain FEMA map | Yes 🗌 No | |
| On-Site Closure Plan Checklist: (19.15.17.13 NMAC) Instructions: Each of the following items must be attached to the closure plan. Please indicate, by a check mark in the box, that the documents are attached. Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19.15.17.10 NMAC Proof of Surface Owner Notice - based upon the appropriate requirements of Subsection F of 19.15.17.13 NMAC Construction/Design Plan of Burial Trench (if applicable) based upon the appropriate requirements of 19.15.17.11 NMAC Construction/Design Plan of Temporary Pit (for in-place burial of a drying pad) - based upon the appropriate requirements of 19.15.17.13 NMAC Protocols and Procedures - based upon the appropriate requirements of 19.15.17.13 NMAC Waste Material Sampling Plan (if applicable) - based upon the appropriate requirements of Subsection F of 19.15.17.13 NMAC Disposal Facility Name and Permit Number (for liquids, drilling fluids and drill cuttings or in case on-site closure standards cannot be achieved) Soil Cover Design - based upon the appropriate requirements of Subsection I of 19.15.17.13 NMAC Re-vegetation Plan - based upon the appropriate requirements of Subsection G of 19.15.17.13 NMAC | | |

Porter 414 Per Conservation Uniform Par (Lo. 8)

| 19. Operator Application Certification: | | |
|---|--|--|
| I hereby certify that the information submitted with this application is tru | e, accurate and complete to the best of my knowledge and belief. | |
| | Title: Engineer | |
| Signature: Date: 12 | 2/2/08 | |
| e-mail address_vonroedern@cmlexp.com Telephone: 325 | -573-1938 | |
| OCD Approval: Permit Application (including closure plan) | losure Plan (only) OCD Conditions (see attachment) | |
| OCD Representative Signature: | Approval Date: 12/11/08 | |
| Title: Geologist | OCD Permit Number: <u>P1-00767</u> | |
| Closure Report (required within 60 days of closure completion): Subsection K of 19.15.17.13 NMAC Instructions: Operators are required to obtain an approved closure plan prior to implementing any closure activities and submitting the closure report. The closure report is required to be submitted to the division within 60 days of the completion of the closure activities. Please do not complete this section of the form until an approved closure plan has been obtained and the closure activities have been completed. | | |
| | ☐ Closure Completion Date: | |
| 22. Closure Method: Waste Excavation and Removal On-Site Closure Method If different from approved plan, please explain. | Alternative Closure Method Waste Removal (Closed-loop systems only) | |
| 23. Closure Report Regarding Waste Removal Closure For Closed-loop Systems That Utilize Above Ground Steel Tanks or Haul-off Bins Only: Instructions: Please indentify the facility or facilities for where the liquids, drilling fluids and drill cuttings were disposed. Use attachment if more than two facilities were utilized. | | |
| Disposal Facility Name: | Disposal Facility Permit Number: | |
| Disposal Facility Name: | Disposal Facility Permit Number: | |
| Were the closed-loop system operations and associated activities performed on or in areas that will not be used for future service and operations? Yes (If yes, please demonstrate compliance to the items below) \(\subseteq \text{No} \) | | |
| Required for impacted areas which will not be used for future service and Site Reclamation (Photo Documentation) Soil Backfilling and Cover Installation Re-vegetation Application Rates and Seeding Technique | operations [.] | |
| 24. Closure Report Attachment Checklist: Instructions: Fach of the folia | wing items must be attached to the closure report. Please indicate, by a check | |
| mark in the box, that the documents are attached. Proof of Closure Notice (surface owner and division) Proof of Deed Notice (required for on-site closure) Plot Plan (for on-site closures and temporary pits) Confirmation Sampling Analytical Results (if applicable) Waste Material Sampling Analytical Results (required for on-site closures) Disposal Facility Name and Permit Number Soil Backfilling and Cover Installation Re-vegetation Application Rates and Seeding Technique Site Reclamation (Photo Documentation) On-site Closure Location: Latitude | | |
| 25. Operator Closure Certification: | | |
| I hereby certify that the information and attachments submitted with this closure report is true, accurate and complete to the best of my knowledge and belief. I also certify that the closure complies with all applicable closure requirements and conditions specified in the approved closure plan. | | |
| Name (Print): Nolan von Roeder | Title: Engineer | |
| Signature: Wol - Wol | Date: <u>12/2/08</u> | |
| e-mail address: vonroedern@cmlexp.com | Telephone: 325-573-1938 | |

1 Drilling Pit Closure Plan-Paddy 19 State #3

1.1 Location - Plate 1

The site is in Unit Letter F Section 19, T17S R 33E. Plate 1 shows the location of the site relative to Lovington, NM.

1.2 General Setting - Plates 2 - 4

Plate 2 is a topographic map of the site and the nearby environs showing depth to water and water level elevation data from the USGS database. Plate 3 is an aerial photograph of the site showing the USGS data as well as the land use as oil and gas production and grazing. Plate 4 is a geologic map of the general area showing water well data from the Office of the State Engineer database and USGS data.

1.3 Protocols and Procedures for Pit Closure

- 1. TCT Construction will excavate the cuttings and residual drilling mud from the drilling pit using a bulldozer and trackhoe
- 2. TCT Construction will temporarily place the material on the caliche pad then use the trackhoe to load the excavated material on to trucks
- 3. Trucks will transport the excavated material to the Lea Land Landfill (Permit #35) for disposal.
- 4. TCT will:
 - a. Implement the Rule 116 Investigation sampling using the trackhoe, or
 - b. Prepare the excavation to permit a drilling rig to collect samples for vertical delineation of possible impact.

1.4 Confirmation Sampling Plan

After the residual drilling mud, cuttings and liner are removed from the drilling pit we will:

- 1. Collect a five-point composite sample from the vadose zone 1-foot below the liner to determine if:
 - a. Benzene, as determined by EPA SW-846 method 8021B or 8260B, exceeds 0.2 mg/kg;
 - b. Total BTEX, as determined by EPA SW-846 method 8021B or 8260B, exceeds 50 mg/kg;
 - c. The GRO and DRO combined fraction, as determined by EPA SW-846 method 8015M, exceeds 500 mg/kg;
 - d. TPH, as determined by EPA method 8015M (GRO+DRO+MRO) exceeds 2500 mg/kg; and
 - e. Chloride, as determined by EPA method 300.1, exceeds 1,000 mg/kg.
- 2. Collect individual grab samples from any area that is wet, discolored or showing other evidence of a release;
- 3. Analyze these grab samples for benzene, total BTEX, TPH, the GRO and DRO combined fraction and chloride using methods noted above.

1.5 Disposal Facility Name

Lea Land, NMOCD Permit #35

1.6 Soil Backfill and Cover Design

The cover design will be selected to protect ground water and restore surface contours and vegetation. Because we anticipate a loss of liner integrity, we will submit a cover design for NMOCD approval upon consideration of the results of the sampling described above.

1.7 Re-vegetation Plan

The first growing season after placement of a soil cover and at a time recommended by the NMSU extension agent, CML will seed or plant the disturbed areas with a seed mix approved by the landowner that includes at least three native plant species, including at least one grass, but not including noxious weeds.

CML will accomplish seeding by drilling on the contour whenever practical or by other division-approved methods. CML will monitor the site until:

- Vegetative cover equals 70% of the native perennial vegetative cover (unimpacted by overgrazing, fire or other intrusion damaging to native vegetation), and
- The vegetative cover remains through two successive growing seasons.

During the two growing seasons that prove viability, there shall be no artificial irrigation of the vegetation. CML will repeat seeding or planting until it successfully achieves the required vegetative cover.

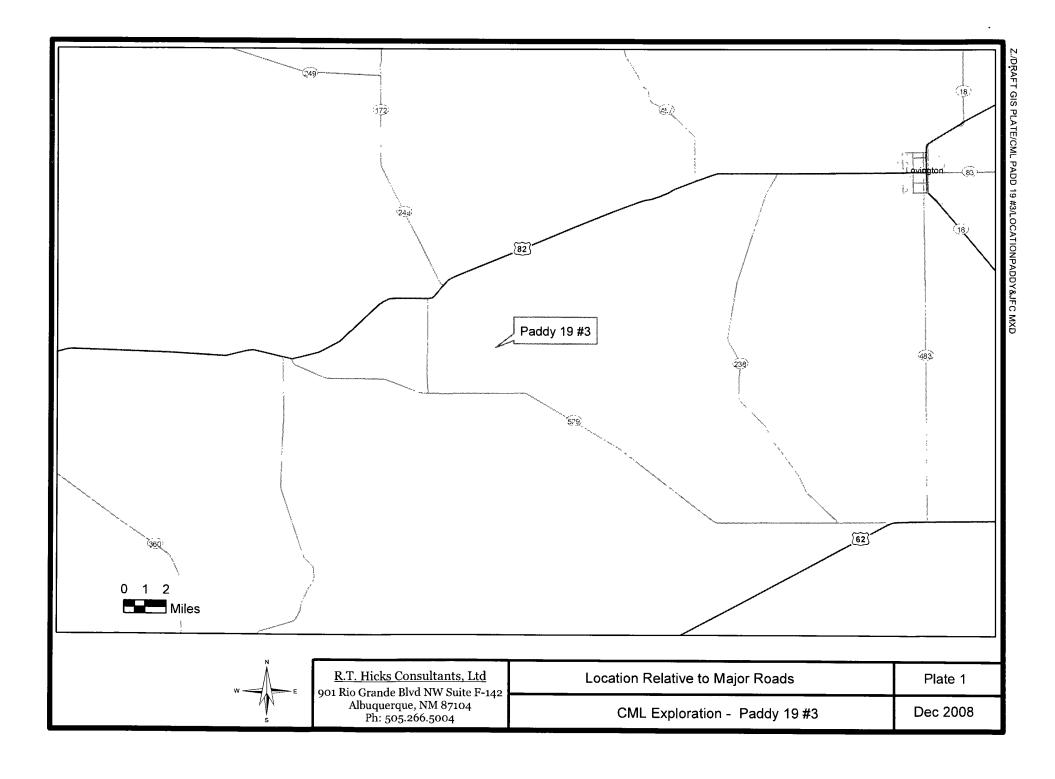
If conditions are not favorable for the establishment of vegetation, such as periods of drought, CML will request to delay seeding or planting until soil moisture conditions become favorable

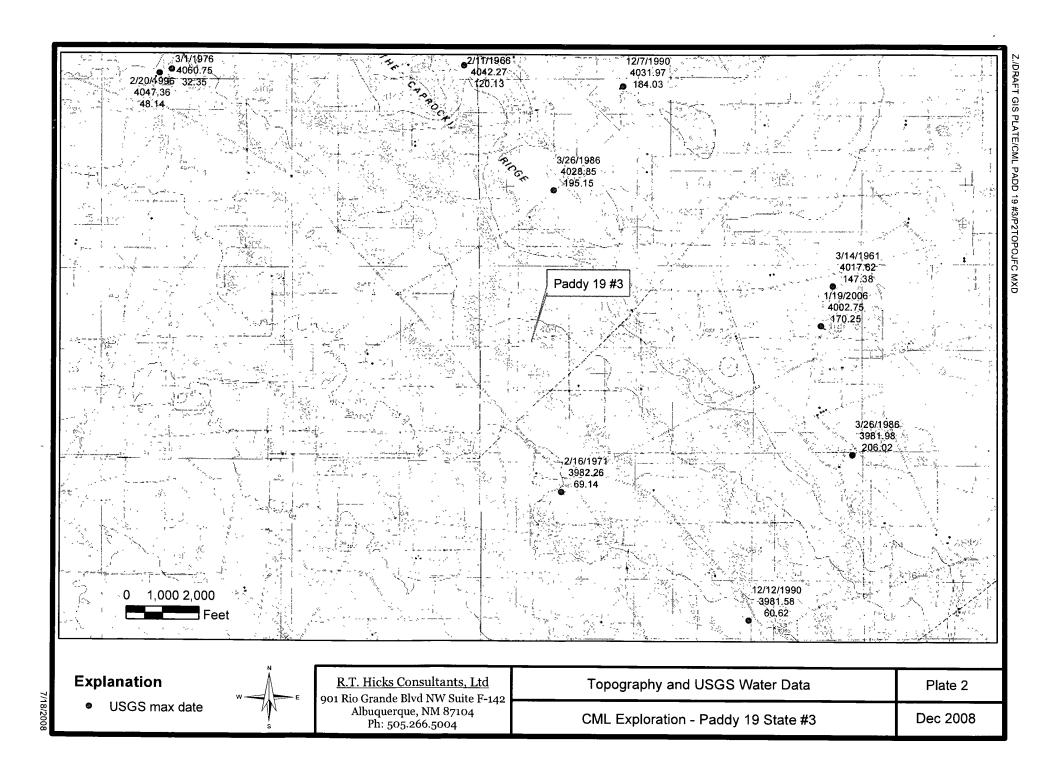
CML will notify the division when it has seeded or planted and when it successfully achieves re-vegetation.

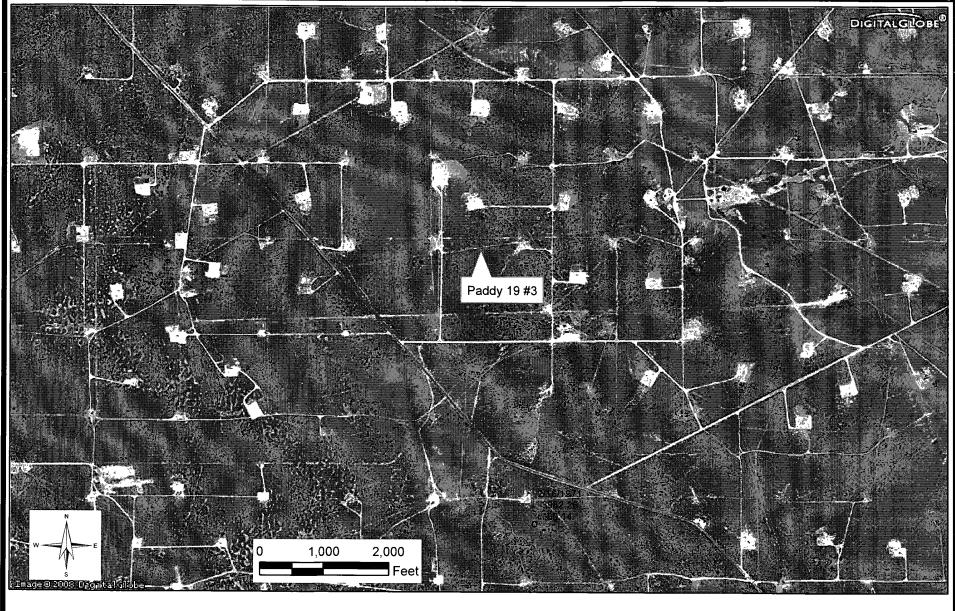
1.8 Site Reclamation Plan

CML will reclaim the location and all areas associated with the site including associated access roads to a safe and stable condition that blends with the surrounding undisturbed area. CML will substantially restore any impacted surface area to the condition that existed prior to oil and gas operations by placement of a soil cover as selected based on sampling results and re-grade the location and associated areas to a contour that approximates the original contour and blends with the surrounding topography.

Paddy 19 #3 API no. 30-025-38591 Page 2





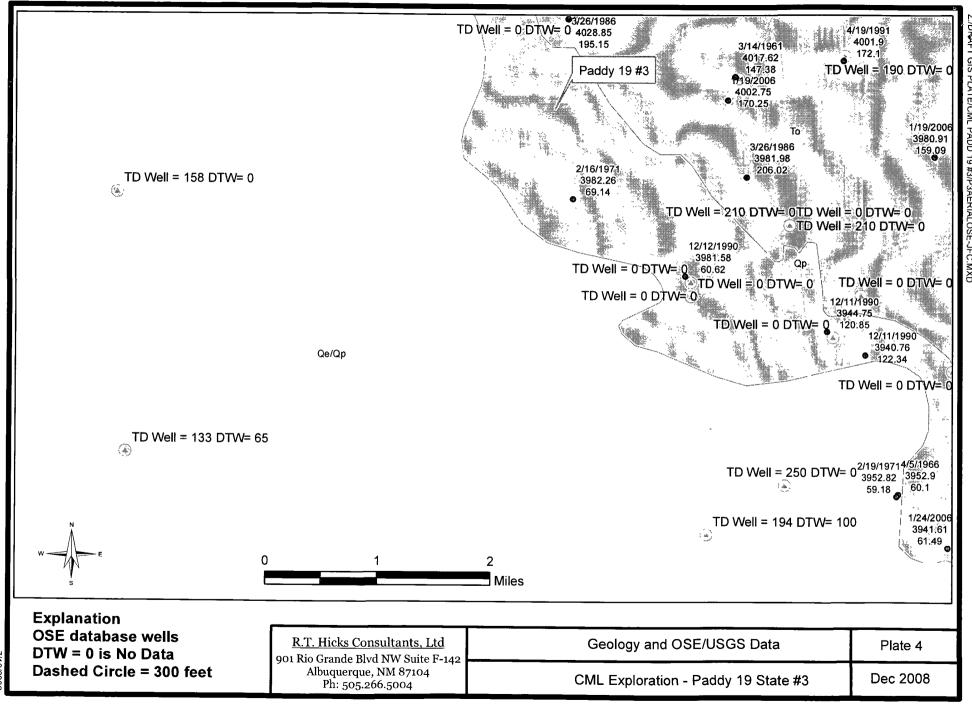


R.T. Hicks Consultants, Ltd 901 Rio Grande Blvd NW Suite F-142 Albuquerque, NM 87104 Ph: 505.266.5004 Areal Image Showing Land Use and USGS Data

Plate 3

CML Exploration - Paddy 19 State #3

Dec 2008



//18/2008

R. T. HICKS CONSULTANTS, LTD.

901 Rio Grande Blvd NW ▲ Suite F-142 ▲ Albuquerque, NM 87104 ▲ 505.266.5004 ▲ Fax: 505.266-0745

December 2, 2008

Larry Johnson
Oil Conservation Division
1625 N. French Drive
Hobbs, NM 88240
Via Email and FedEx

RE: CML Exploration, Paddy 19 State #3, Unit F, Section 19, T17S, R33E

API #:30-025-38591

Dear Larry,

Enclosed please find a C-144 form (with the original operator signature!) and a Drilling Pit Closure Plan for the above referenced site. We believe we need NMOCD approval to excavate and properly dispose of pit cuttings. TCT Construction is available to do this work the week of December 15th and we hope you will have time to review and approve the enclosed form so that we may begin excavation this month.

Once the pit cuttings are excavated, we will complete sampling as described herein. We anticipate a loss of liner integrity at this site and will submit a plan for investigation and characterization under Rule 116 if sampling results indicate this is needed. Regardless of sampling results, a more detailed cover design and site restoration plan will be submitted for NMOCD approval upon review of sampling results.

If you have questions regarding the enclosed form and closure plan, please contact me or Mr. Nolan van Roeder of CML Exploration, LLC.

Sincerely,

R.T. Hicks Consultants, Ltd.

Katie Lee

Project Scientist

Katie Lee_

Copy: CML Exploration, Nolan van Roeder