District I
1625 N. French Dr , Hobbs, NM 88240
District II
1301 W. Grand Avenue, 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

AUG 25 2009

Form C-144
July 21, 2008

For temporary pits, closed-loop systems, and below-grade tanks, submit to the appropriate NMOCD District Office.
For permanent pits and exceptions submit to the Santa Fe Environmental Bureau office and provide a copy to the appropriate NMOCD District Office.

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.

1.
Operator: McKay Oil Corporation c/o Penroc Oil OGRID #: 14424
Address: 1515 Calle Sur, Hobbs, NM 88240
Facility or well name: 4 Mile Draw "B" Federal 7-Y
API Number: 30-005-63900 OCD Permit Number:
U/L or Qtr/Qtr M Section 15 Township 6S Range 22E County: Chaves
Center of Proposed Design: Latitude N 33° 47.424' Longitude W 104° 42.913' NAD: ☒ 1927 ☐ 1983
Surface Owner: ☒ Federal ☐ State ☐ Private ☐ Tribal Trust or Indian Allotment

2.
☒ **Pit:** Subsection F or G of 19.15.17.11 NMAC
Temporary: ☒ Drilling ☐ Workover
☐ Permanent ☐ Emergency ☐ Cavitation ☐ P&A
☒ Lined ☐ Unlined Liner type: Thickness 20 mil ☒ LLDPE ☐ HDPE ☐ PVC ☐ Other
☒ String-Reinforced
Liner Seams: ☒ Welded ☐ Factory ☐ Other Volume: 800 bbl Dimensions: L 80 x W 90 x D 7

3.
☐ **Closed-loop System:** Subsection H of 19.15.17.11 NMAC
Type of Operation: ☐ P&A ☐ Drilling a new well ☐ Workover or Drilling (Applies to activities which require prior approval of a permit or notice of intent)
☐ Drying Pad ☐ Above Ground Steel Tanks ☐ Haul-off Bins ☐ Other
☐ Lined ☐ Unlined Liner type: Thickness mil ☐ LLDPE ☐ HDPE ☐ PVC ☐ Other
Liner Seams: ☐ Welded ☐ Factory ☐ Other

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 ☐ HDPE ☐ PVC ☐ Other

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.

RULE 50 Form C-144 REVISED

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

9.

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 appropriate district office or may be considered an exception which must be submitted to the Santa Fe Environmental Bureau office for consideration of approval. 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. - NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells	☐ Yes ☒ No
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. *(Applies to temporary, emergency, or cavitation pits and below-grade tanks)* - Visual inspection (certification) of the proposed site; Aerial photo; Satellite image	☐ Yes ☒ No ☐ NA
Within 1000 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application. *(Applies to permanent pits)* - Visual inspection (certification) of the proposed site; Aerial photo; Satellite image	☐ Yes ☒ No ☐ NA
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 search; 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

11.
Temporary Pits, Emergency Pits, and Below-grade Tanks 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.

- ☐ Hydrogeologic Report (Below-grade Tanks) - based upon the requirements of Paragraph (4) of Subsection B of 19.15.17.9 NMAC
- ☐ 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: _____

12.
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 and 19.15.17.13 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)*

13.
Permanent Pits Permit Application 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.

- ☐ Hydrogeologic Report - based upon the requirements of Paragraph (1) of Subsection B of 19.15.17.9 NMAC
- ☐ Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19.15.17.10 NMAC
- ☐ Climatological Factors Assessment
- ☐ Certified Engineering Design Plans - based upon the appropriate requirements of 19.15.17.11 NMAC
- ☐ Dike Protection and Structural Integrity Design - based upon the appropriate requirements of 19.15.17.11 NMAC
- ☐ Leak Detection Design - based upon the appropriate requirements of 19.15.17.11 NMAC
- ☐ Liner Specifications and Compatibility Assessment - based upon the appropriate requirements of 19.15.17.11 NMAC
- ☐ Quality Control/Quality Assurance Construction and Installation Plan
- ☐ Operating and Maintenance Plan - based upon the appropriate requirements of 19.15.17.12 NMAC
- ☐ Freeboard and Overtopping Prevention Plan - based upon the appropriate requirements of 19.15.17.11 NMAC
- ☐ Nuisance or Hazardous Odors, including H_2S, Prevention Plan
- ☐ Emergency Response Plan
- ☐ Oil Field Waste Stream Characterization
- ☐ Monitoring and Inspection Plan
- ☐ Erosion Control Plan
- ☐ Closure Plan - based upon the appropriate requirements of Subsection C of 19.15.17.9 NMAC and 19.15.17.13 NMAC

14.
Proposed Closure: 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 I of 19.15.17.13 NMAC
- ☐ Site Reclamation Plan - based upon the appropriate requirements of Subsection G of 19.15.17.13 NMAC

16.
Waste Removal Closure For Closed-loop Systems That Utilize Above Ground Steel Tanks or Haul-off Bins Only: (19.15.17.13.D NMAC)
Instructions: Please indentify the facility or facilities for the disposal of liquids, drilling fluids and drill cuttings. Use attachment if more than two facilities are required.

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 and operations?
☐ 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
☐ Re-vegetation Plan - based upon the appropriate requirements of Subsection I of 19.15.17.13 NMAC
☐ Site Reclamation Plan - based upon the appropriate requirements of Subsection G of 19.15.17.13 NMAC

17.
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.

Ground water is less than 50 feet below the bottom of the buried waste. - NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells	☐ Yes ☒ No ☐ NA
Ground water is between 50 and 100 feet below the bottom of the buried waste - NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells	☐ Yes ☒ No ☐ NA
Ground water is more than 100 feet below the bottom of the buried waste. - NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells	☒ 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

18.
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 19.15.17.11 NMAC
☒ 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
☒ Waste Material Sampling Plan - 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 H of 19.15.17.13 NMAC
☒ Re-vegetation Plan - based upon the appropriate requirements of Subsection I of 19.15.17.13 NMAC
☒ Site Reclamation Plan - based upon the appropriate requirements of Subsection G of 19.15.17.13 NMAC

19.
Operator Application Certification:

I hereby certify that the information submitted with this application is true, accurate and complete to the best of my knowledge and belief.

Name (Print): M. Y. (Merch) Merchant Title: Legal Agent for McKay Oil Corporation

Signature: [signature] Date: August 14, 2009

e-mail address: mymerch@penrocoil.com Telephone: (575) 492-1236

20.
OCD Approval: ☐ Permit Application (including closure plan) ☒ Closure Plan (only) ☒ OCD Conditions (see attachment)

OCD Representative Signature: Signed By Mike Bratcher **Approval Date:** SEP 29 2009

Title: Env. Spec. **OCD Permit Number:** N/A

21.
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 ☐ Alternative Closure Method ☐ Waste Removal (Closed-loop systems only)

☐ If different from approved plan, please explain.

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) ☐ No

Required for impacted areas which will not be used for future service and operations

☐ Site Reclamation (Photo Documentation)
☐ Soil Backfilling and Cover Installation
☐ Re-vegetation Application Rates and Seeding Technique

24.
Closure Report Attachment Checklist: ***Instructions: Each of the following 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 closure)
☐ 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 Longitude NAD: ☐ 1927 ☐ 1983

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): Title:

Signature: Date:

e-mail address: Telephone:

N.M. Oil Cons. Dist. 2
1301 W. Grand Avenue
Artesia, NM 88210

Form 3160-3
(April 2004)

Month - Year
MAR - 9 2007
OCD - ARTESIA, NM

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER

FORM APPROVED
OMB No 1004-0137
Expires March 31, 2007

5. Lease Serial No.
NM 36193

6. If Indian, Allotee or Tribe Name

1a. Type of work: ☑ DRILL ☐ REENTER

7. If Unit or CA Agreement, Name and No.
34883

1b. Type of Well: ☐ Oil Well ☑ Gas Well ☐ Other ☑ Single Zone ☐ Multiple Zone

8. Lease Name and Well No.
Four Mile Draw B Federal 7Y

2. Name of Operator
McKay Oil Corporation 14424

9. API Well No.
30-005-63900

3a. Address **PO Box 2014**
Roswell NM, 88202-2014

3b. Phone No. *(include area code)*
505-623-4735

10. Field and Pool, or Exploratory
W. Pecos ABO Slope

4. Location of Well *(Report location clearly and in accordance with any State requirements *)*
At surface **695' FSL & 660' FWL Sec. 15, T6S, R22E**
At proposed prod. zone **1666'FSL & 2332' FWL Sec. 15, T6S, R22E**

11. Sec., T. R. M. or Blk. and Survey or Area
T6S, R22E

14. Distance in miles and direction from nearest town or post office*
Approximatly 25 miles

12. County or Parish
Chaves

13. State
NM

15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any)
660'

16. No. of acres in lease
927.51

17. Spacing Unit dedicated to this well
160'

18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft.
2000'

19 Proposed Depth
3,200'

20. BLM/BIA Bond No. on file

21. Elevations (Show whether DF, KDB, RT, GL, etc.)
4358'

22. Approximate date work will start*
02/23/2007

23. Estimated duration
7 - 10 days

24. Attachments

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No.1, shall be attached to this form:

1. Well plat certified by a registered surveyor.
2. A Drilling Plan.
3. A Surface Use Plan (if the location is on National Forest System Lands, the SUPO shall be filed with the appropriate Forest Service Office).
4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above).
5. Operator certification
6. Such other site specific information and/or plans as may be required by the authorized officer.

25. Signature — Name *(Printed/Typed)* **James Schultz** — Date **03/05/2007**

Title **Agent**

Approved by *(Signature)* — Name *(Printed/Typed)* — Date

Title — Office

Application approval does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.
Conditions of approval, if any, are attached.

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

**(Instructions on page 2)*

APPROVED
MAR - 7 2007
GARY GOURLEY
PETROLEUM ENGINEER

MCKAY OIL CORPORATION

4 MILE DRAW "B" FEDERAL 7-Y

ON SITE CLOSURE PLAN

Protocols and Procedures, Sampling, Disposal and Site Reclamation

The reserve drilling pit at the McKay Oil Corporation, 4 Mile Draw "B" Federal 7-Y site will be closed on site, by trench burial methods. Depth to groundwater at the site is approximately 350 feet.

The burial pit will be constructed with dimensions of approximately 100 feet x 30 feet, and will be approximately 20 feet in depth. The bottom of the pit will be prepared with a firm, smooth surface prior to the installation of a 20 mil plasic liner covering the entire bottom and sides of the burial pit. The liner will extend over the sides of the pit, to allow for covering of the introduced pit contents.

The contents of the reserve drilling pit will be mixed with clean, dry soil (not to exceed a 3:1 ratio) so as to provide sufficient support for the burial pits final cover. A five-point composite sample will be collected from the reserve drilling pit contents and submitted to an NMOCD approved laboratory for analysis of BTEX, TPH, chlorides and WQCC standards (EPA method 1312). Upon receipt of laboratory confirmation from the soil sample that benzene is less than 0.2 mg/kg, total BTEX is less than 50 mg/kg, TPH is less than 2500 mg/kg, GRO and DRO is less than 500 mg/kg, chloride is less than 3000 mg/kg, and the WQCC sample is below all drinking water standards, the contents of the reserve drilling pit will be placed inside the burial pit (over the liner). Any hydrocarbon impacted or excess soil will be hauled to Gandy Marley Disposal Facility, Permit # NM-711-1-0020.

A five-point composite soil sample will be collected from below the liner of the reserve drilling pit and submitted to an NMOCD approved laboratory for analysis of BTEX, TPH and chlorides. Individual grab samples will be collected from any area that is wet, discolored or showing any evidence of a release.

Upon receipt of laboratory confirmation from soil samples that benzene is less than 0.2 mg/kg, total BTEX is less than 50 mg/kg, TPH is less than 2500 mg/kg, GRO and DRO is less than 500 mg/kg, and chloride is less than 3000 mg/kg, the contents of the burial pit will be encapsulated with the 20 mil liner, and covered by an additional 20 mil liner cover. The encapsulated material will be covered with a minimum of four (4) feet of clean soil and compacted. One (1) foot of topsoil will be placed above the compacted soil and contoured to surface grade.

The reserve drilling pit will be backfilled with clean soil to a depth of approximately one (1) foot below ground surface and compacted. One (1) foot of topsoil will be placed above the compacted soil and contoured to surface grade. The entire area will be re-seeded with a native grass seed mixture.

A final report will be submitted to the NMOCD within 60 days of completion of closure activities.

MCKAY OIL CORPORATION

4 MILE DRAW "B" FEDERAL 7-Y

ALTERNATIVE CLOSURE PLAN – WASTE EXCAVATION AND REMOVAL

Protocols and Procedures, Sampling, Disposal, Soil Backfill and Site Reclamation

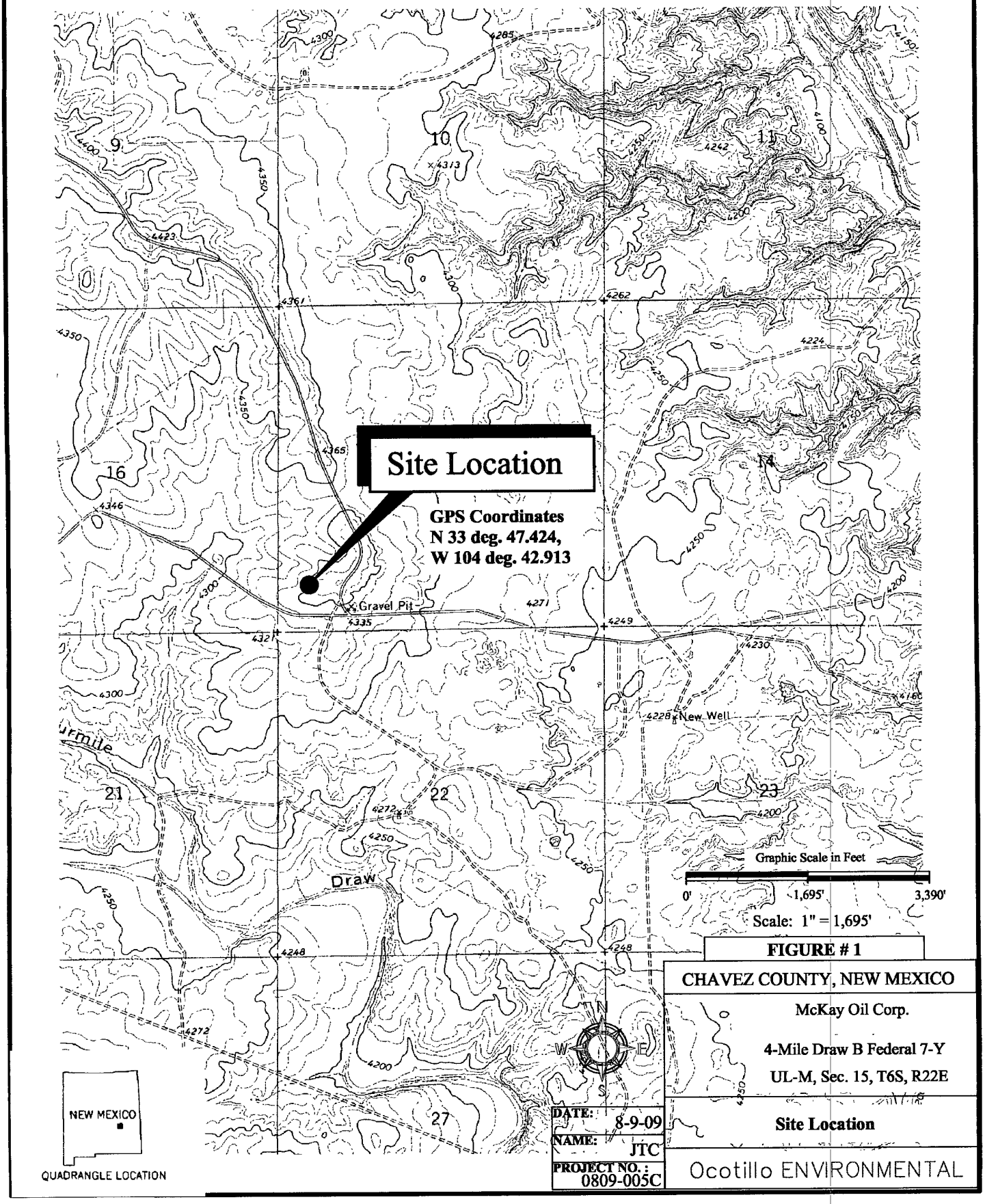
The original closure plan at the McKay Oil Corporation, 4 Mile Draw "B" Federal 7-Y reserve drilling pit was to close on site, by trench burial methods. Depth to groundwater at the site is approximately 350 feet.

If laboratory analyses of mixed waste from the reserve drilling pit report concentrations that exceed the New Mexico Oil Conservation Division standards for on-site burial, the pit liner and all contents of the reserve drilling pit will be removed from the site to Gandy-Marley (Permit # NM-711-1-0020).

A five-point composite sample will be collected from below the pit liner and submitted to an NMOCD approved laboratory for analysis of BTEX, TPH, chlorides. Upon receipt of laboratory confirmation from the soil sample that benzene is less than 0.2 mg/kg, total BTEX is less than 50 mg/kg, TPH is less than 2500 mg/kg, GRO and DRO is less than 500 mg/kg, and chloride is less than 3000 mg/kg, the reserve drilling pit will be backfilled with stockpiled soil removed during construction of the drilling pit.

The reserve drilling pit will be backfilled with clean soil to a depth of approximately one (1) foot below ground surface and compacted. One (1) foot of topsoil will be placed above the compacted soil and contoured to surface grade. The entire area will be re-seeded with a native grass seed mixture.

A final report will be submitted to the NMOCD within 60 days of completion of closure activities.


Site Location
GPS Coordinates
N 33 deg. 47.424,
W 104 deg. 42.913
Gravel Pit
New Well
Draw
Graphic Scale in Feet
0'
1,695'
3,390'
Scale: 1" = 1,695'
NEW MEXICO
QUADRANGLE LOCATION
FIGURE # 1
CHAVEZ COUNTY, NEW MEXICO
McKay Oil Corp.
4-Mile Draw B Federal 7-Y
UL-M, Sec. 15, T6S, R22E
Site Location
DATE: 8-9-09
NAME: JTC
PROJECT NO.: 0809-005C
Ocotillo ENVIRONMENTAL

New Mexico Office of the State Engineer

Point of Diversion by Location

(with Owner Information)

No PODs found.

Basin/County Search:

County: Chaves

PLSS Search:

Q16: SW **Q4:** SW **Section(s):** 15 **Township:** 06S **Range:** 22E

New Mexico Office of the State Engineer
Water Column/Average Depth to Water

No records found.

Basin/County Search:

County: Chaves

PLSS Search:

Section(s): 15 **Township:** 06S **Range:** 22E

New Mexico Office of the State Engineer
Water Column/Average Depth to Water

No records found.

Basin/County Search:

County: Chaves

PLSS Search:

Section(s): 14 **Township:** 06S **Range:** 22E

New Mexico Office of the State Engineer
Water Column/Average Depth to Water

No records found.

Basin/County Search:

County: Chaves

PLSS Search:

Section(s): 16 **Township:** 06S **Range:** 22E

New Mexico Office of the State Engineer
Water Column/Average Depth to Water

No records found.

Basin/County Search:

County: Chaves

PLSS Search:

Section(s): 10 **Township:** 06S **Range:** 22E

New Mexico Office of the State Engineer
Water Column/Average Depth to Water

(quarters are 1=NW 2=NE 3=SW 4=SE)

(quarters are smallest to largest) (NAD83 UTM in meters) (In feet)

POD Number	Sub basin	Use	County	Q 64	Q 16	Q 4	Sec	Tws	Rng	X	Y	Depth Well	Depth Water	Water Column
RA 09795		STK	CH	2	2	3	22	06S	22E	526847	3737826*	650		
											Average Depth to Water.		--	
											Minimum Depth:		--	
											Maximum Depth:		--	

Record Count: 1

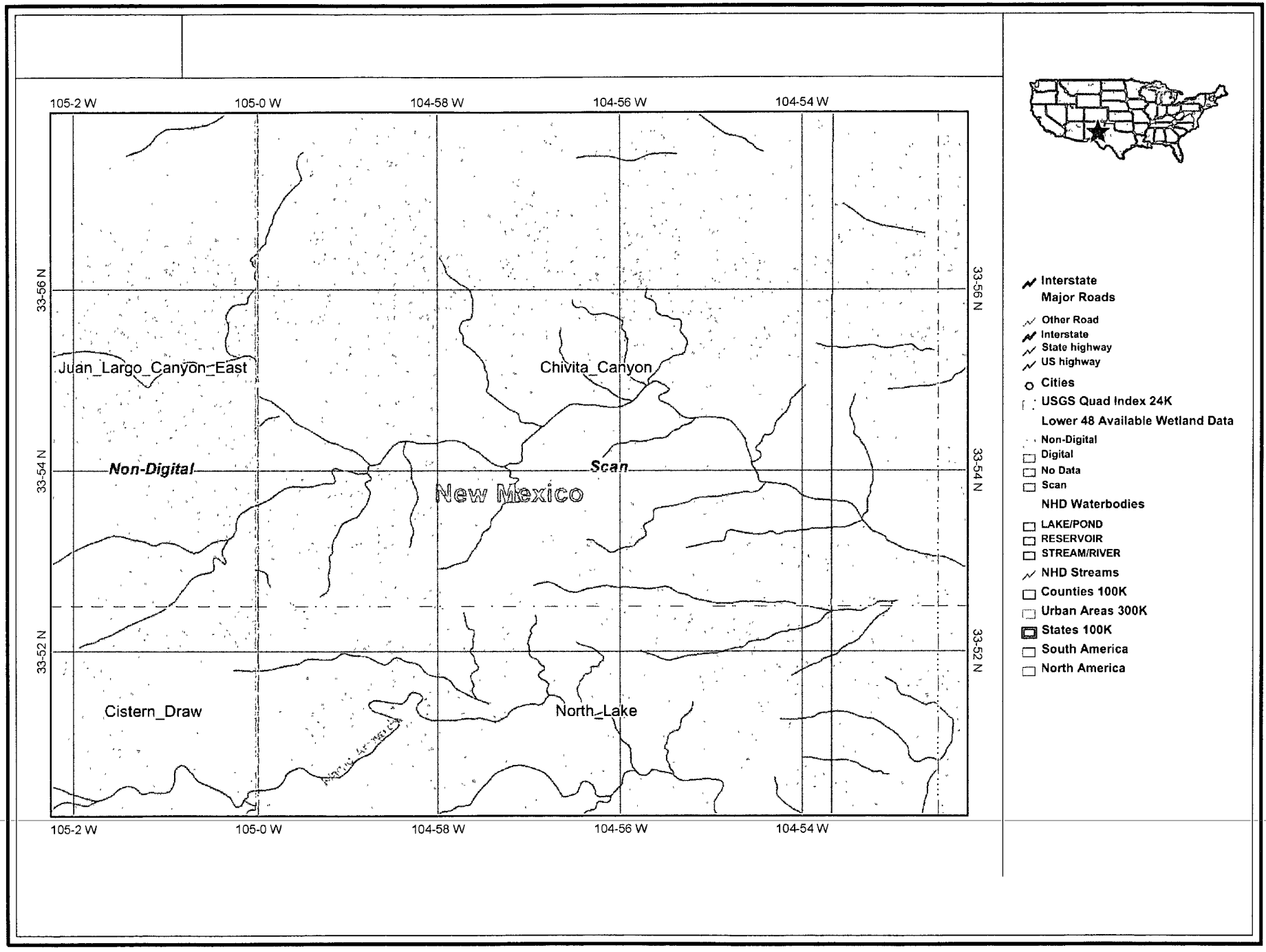
Basin/County Search:

County: Chaves

PLSS Search:

Section(s): 22 **Township:** 06S **Range:** 22E

***UTM location was derived from PLSS - see Help**


105-2 W
105-0 W
104-58 W
104-56 W
104-54 W
33-56 N
33-54 N
33-52 N
Juan_Largo_Canyon_East
Chivita_Canyon
Non-Digital
Scan
New Mexico
Cistern_Draw
North_Lake
Interstate
Major Roads
Other Road
Interstate
State highway
US highway
Cities
USGS Quad Index 24K
Lower 48 Available Wetland Data
Non-Digital
Digital
No Data
Scan
NHD Waterbodies
LAKE/POND
RESERVOIR
STREAM/RIVER
NHD Streams
Counties 100K
Urban Areas 300K
States 100K
South America
North America

MMQonline Public Version

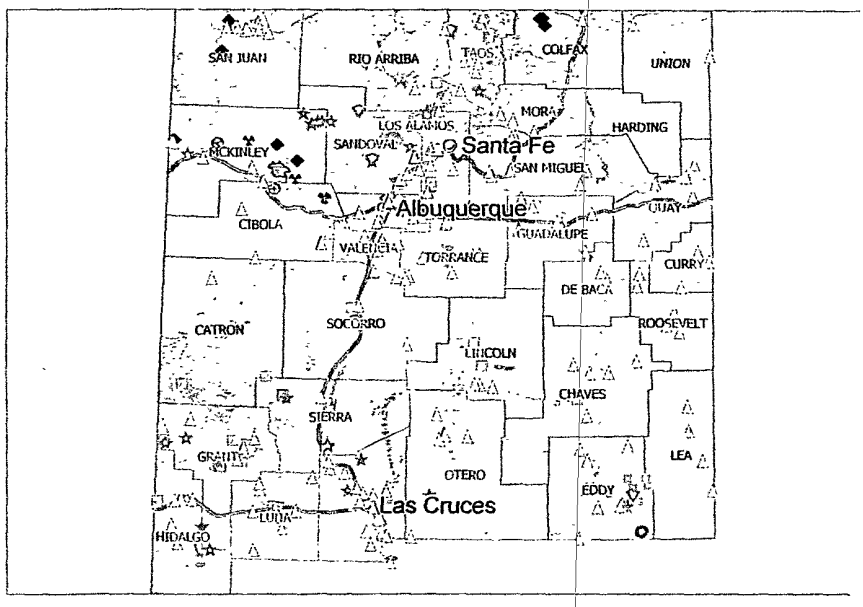
Mines, Mills & Quarries Commodity Groups

- Aggregate & Stone Mines
- Coal Mines
- Industrial Minerals Mines
- Industrial Minerals Mills
- Metal Mines and Mill Concentrate
- Potash Mines & Refineries
- Smelters & Refinery Ops.
- Uranium Mines
- Uranium Mills

Population

- Cities - Big 3

Transportation



SCALE 1 : 7,476,555

100 0 100 200 300

MILES

N

Bill Richardson
Governor

Joanna Prukop
Cabinet Secretary

Mark Fesmire
Division Director
Oil Conservation Division

Conditions of approval for onsite disposal of drilling pit contents:

Samples are to be obtained from pit contents and analyses ran per 19.15.17.13. Paragraph F [NMAC]. In the event the analytical requirements are not met, onsite disposal will not be permitted and the alternative closure method will be required.

Sample analyses of pit contents are to be submitted to NMOCD and approval granted prior to closure of burial trench.

Per 19.15.17 NMAC, Operator shall notify the District Office at least 72 hours, but not more than one week, prior to commencement of closure operations. The notice shall include the operator's name and the location to be closed by unit letter, section, township and range. The notice shall also include the well name, number and API number.

Notify NMOCD District 2 Office 48 hours prior to obtaining samples from drilling pit contents.

Notify NMOCD District 2 Office 48 hours prior to obtaining samples from drilling pit bottom.

Adherence to all requirements per 19.15.17 [NMAC]