District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W Grand Avenue, Artesia, NM 88210
District III
1000 Rto 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

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.

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Proposed Alternative Method Permit or Closure Plan Application

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٠	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 tan	k, or proposed alternative method
Instructi	ons: Please submi	t one application (Form C-144) per individual pit, closed-loop system, below-grade tank or alternative request
	* *	equest does not relieve the operator of liability should operations result in pollution of surface water, ground water or the

Please be advised t environment. Nor does approval relieve the operator of its responsibility to comply with any other applicable governmental authority's rules, regulations or ordinances Operator: Pro NM Energy, Inc.. OGRID #: 018118 Address: 460 St. Michael's Drive, Building 300, Santa Fe, NM 87505 Facility or well name: Bisti Otero 30 #1E API Number: 30-045-34767 OCD Permit Number: U/L or Qtr/Qtr J Section 30 Township 25 N Range 10 W County: San Juan Center of Proposed Design: Latitude 36.37008° N Longitude 107.93543° W NAD: 1927 1983 Surface Owner: Federal State Private Tribal Trust or Indian Allotment ☑ 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: bbl <u>7,753</u> Dimensions: L <u>100'</u> x W <u>55'</u> x D <u>10'</u> 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 ☐ Drying Pad ☐ Above Ground Steel Tanks ☐ Hauf-off Bins ☐ Other ☐ Lined ☐ Unlined Liner type: Thickness _____mil ☐ LLDPE ☐ HDPE ☐ PVC ☐ Other _____ Liner Seams: Welded Factory Other Below-grade tank: Subsection I of 19.15.17.11 NMAC 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

Alternative Method:

Submittal of an exception request is required. Exceptions must be submitted to the Santa Fe Environmental Bureau office for consideration of approval.

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 19.15.17.12 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: 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)
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 ₂ S, 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
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)
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

Waste Removal Closure For Closed-loop Systems That Utilize Above Ground Steel Tanks or Haul-off Instructions: Please indentify the facility or facilities for the disposal of liquids, drilling fluids and drill c facilities are required.		
•	Number:	
	Number:	
Will any of the proposed closed-loop system operations and associated activities occur on or in areas that we are also activities occur on or in areas activities occur on or in areas activities occur on or in a constant of the activities occur on or in areas activities occur on or in a constant of the activities occur on or in areas activities occur on or in a constant of the activities occur on or in a constant of the activities occur on or in areas activities occur on or in a constant of the activities occur on or in areas activities occur on or in a constant of the activities occur on or in a constant of the activities occur on or in areas activities occur on or in areas activities occur on or in a constant of the activities occur on or in a constant of the activities occur on or in a constant of the activities occur on or in a constant of the activities		ons?
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 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 NM		
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, Recomme provided below. Requests regarding changes to certain siting criteria may require administrative approvacions considered an exception which must be submitted to the Santa Fe Environmental Bureau office for considermonstrations of equivalency are required. Please refer to 19.15.17.10 NMAC for guidance.	al from the appropriate district office or ma	y be
Ground water is less than 50 feet below the bottom of the buried waste. - NM Office of the State Engineer - 1WATERS database search; USGS; Data obtained from nearby waste.	☐ Yes ☒ N☐ NA	lo .
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 was a search of the State Engineer - iWATERS database search; USGS; Data obtained from nearby was a search of the State Engineer - iWATERS database search; USGS; Data obtained from nearby was a search of the State Engineer - iWATERS database search; USGS; Data obtained from nearby was a search of the State Engineer - iWATERS database search; USGS; Data obtained from nearby was a search of the State Engineer - iWATERS database search; USGS; Data obtained from nearby was a search of the State Engineer - iWATERS database search; USGS; Data obtained from nearby was a search of the State Engineer - iWATERS database search; USGS; Data obtained from nearby was a search of the State Engineer - iWATERS database search; USGS; Data obtained from nearby was a search of the State Engineer - iWATERS database search of the Engineer - iWATERS database search o	vells Yes 🖾 N	lo .
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 waste.	vells Yes \(\simega \) NA	lo
Within 300 feet of a continuously flowing watercourse, or 200 feet of any other significant watercourse or lake (measured from the ordinary high-water mark). - Topographic map; Visual inspection (certification) of the proposed site	akebed, sinkhole, or playa Yes 🛛 N	lo :
Within 300 feet from a permanent residence, school, hospital, institution, or church in existence at the time - Visual inspection (certification) of the proposed site; Aerial photo; Satellite image	of initial application.	lo .
Within 500 horizontal feet of a private, domestic fresh water well or spring that less than five households us watering purposes, or within 1000 horizontal feet of any other fresh water well or spring, in existence at the - NM Office of the State Engineer - iWATERS database; Visual inspection (certification) of the prop	time of initial application.	lo ·
Within incorporated municipal boundaries or within a defined municipal fresh water well field covered und adopted pursuant to NMSA 1978, Section 3-27-3, as amended. - Written confirmation or verification from the municipality; Written approval obtained from the municipality.		lo [*]
Within 500 feet of a wetland US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification	n) of the proposed site	lo
Within the area overlying a subsurface mine. - Written confirmation or verification or map from the NM EMNRD-Mining and Mineral Division	☐ Yes ⊠ N	lo .
 Within an unstable area. Engineering measures incorporated into the design; NM Bureau of Geology & Mineral Resources; Society; Topographic map 	USGS; NM Geological ☐ Yes ☒ N	lo
Within a 100-year floodplain FEMA map	☐ Yes ☒ N	lo
On-Site Closure Plan Checklist: (19.15.17.13 NMAC) Instructions: Each of the following items must 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 Proof of Surface Owner Notice - based upon the appropriate requirements of Subsection F of 19.15.1 Construction/Design Plan of Burial Trench (if applicable) based upon the appropriate requirements of 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 Confirmation Sampling Plan (if applicable) - based upon the appropriate requirements of Subsection Waste Material Sampling Plan - based upon the appropriate requirements of Subsection F of 19.15.17 Disposal Facility Name and Permit Number (for liquids, drilling fluids and drill cuttings or in case of 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 G of 19.15.17.13 NMAC	O NMAC 7.13 NMAC of 19.15.17.11 NMAC propriate requirements of 19.15.17.11 NMAC F of 19.15.17.13 NMAC 7.13 NMAC n-site closure standards cannot be achieved)	C

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): BRIAN WOOD Title. CONSULTANT
Signature: Date: <u>3-27-09</u>
e-mail address: brian@permitswest.com Telephone. (505) 466-8120
OCD Approval: Permit Application (including closure plan) Closure Plan (only) COD Conditions (see attachment)
OCD Representative Signature: Branchen Delle Approval Date: 4-23-09
OCD Representative Signature: Branslon Fell Approval Date: 4-23-09 Title: Enviro 15 pec OCD Permit Number:
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 <i>will not</i> 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
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:



POWER OF ATTORNEY

Know All Men By These Presents:

THA" I, Jolene Dicks, the Secretary of Pro NM Energy, Inc., with offices at 460 St. Michael's Drive, Suite 300, Santa Fe, New Mexico 87505, have made; constituted and appointed, and by these presents do make, constitute and appoint Br an Wood, of Permits West, Inc., whose address is 37 Verano Loap. Santa Fe, New Mexico 87505, my true and lawful attorney, for me, and in my name, place and stead, and to my use to sign any and all forms submitted on behalf of Fro NM Energy, Inc. to the New Mexico Oil Conservation Division.

This ?ower of Attorney shall be effective June 16, 2008.

IN WITNESS Whereof, I have hereunto set my hand this 4th day of December, 2008.

Jølene Dicks, Secretary , Tro NM Energy, Inc.

Corporate Acknowledgment

STATE OF NEW MEXICO

22

COUNTY OF SANTA FE

Before me, a Notary Public in and for said County and State, on this 4th day of December 2008, personally appeared Jolene Dicks, the Secretary of Pro NM Energy, Inc., a New Mexico corporation, on behalf of said corporation.

ernro ssion Expires:

Notary Public, State of New Mexico

Siting Criteria

1. Ground water is >100' below the bottom of the pit. Depth to water in the closest (>1,300' southeast) water well (windmill at Navajo Miracle Church) is 572' (according to the Navajo Department of Water Resources). Office of the State Engineer records for the township and a map showing the two wells are attached as Exhibits A and B. The church well is not in the state's records.

6,650' well ground elevation
- 10' deep pit
6,640' pit bottom elevation

≥6,720' church well ground elevation -572' depth to water 6,148' water level elevation

6,640' bottom of pit
- 6,148' water level elevation
492' depth to water

- 2. Pit is not within 300' of a continuously flowing watercourse. Pit is not within 200' of any other significant watercourse as defined by OCD. Closest first order tributary of Gallegos Canyon is >1 mile north (Exhibit B).
- 3. Pit is not within 300' of any building. Closest buildings (2 vacant houses) are >1,300' southeast (Exhibits B & C).
- 4. Pit is not within 1,000' of any fresh water well or spring (Exhibits A & B).
- 5. Pit is not within municipal boundaries or within a municipal fresh water well field (Exhibits A & B).
- 6. Pit is not within 500' of a wetland (Exhibit D).
- 7. Pit does not overly a mine (Exhibit E).
- 8. Pit is not in an unstable area. No evidence of earth movement was found



during a January 2, 2008 inspection. Maximum grade is ≈5% (Exhibit F).

- 9. Pit is not within a 100 year flood plain (Exhibit G).
- 10. C-102 is attached as Exhibit H.
- 11. Closure notice to surface owner (FIMO) is attached as Exhibit I.

<u>Hydrogeology</u>

Surface formation is the Nacimiento. According to Stone et al in Hydrogeology and water resources of San Juan Basin, New Mexico, the Nacimiento is mainly a mudstone. There are also medium to coarse grained sandstone layers in the Nacimiento. Transmissivities of 100 feet² per day can be found in the coarser continuous sandstones. Water in the more extensive sandstones has a specific conductance of 1,500 μ mhos. Specific conductance is >2,000 μ mhos in the finer grained sandstones. The Brown water well produces from the Nacimiento.

Pit will be in the Nacimiento. Bottom of the pit (6,640') is $\approx 600'$ above the top of the Ojo Alamo sandstone which was found at 6,040' in a well in the SWSW 29-25n-10w (30-045-05216).

Alternative for 19.15.17.11 D. (3)

Pro NM Energy is proposing an alternate fence. Sheep graze in the project area and hog wire has been found to be more effective than just barbed wire. The operator will fence the pit with a minimum 48" high fence. Fence will consist of minimum 36" woven wire (hog wire) topped with at least 1 strand of barbed wire.

Alternative for 19.15.17.11 F. (2)

Pro NM Energy is proposing alternate (vertical) slopes for the 100' long sides of the pit. Alternate is requested to minimize well site footprint. This allows a smaller rig to be used. Rig must be close to the deep part of the pit



since the pump is on the rig itself. Pro NM Energy will install extra liner to allow for some slack and avoid stress and strain. Pro NM Energy will also install two rope ladders - one on each of the 100' long sides.

Alternative for 19.15.17.13 F. (1) (d)

If the well goes into production, then an alternate interim marking system will be used to allow for safer and more efficient operations. A minimum 4" $\,$ 0. D. steel pipe will be set at least 36" deep at the center of the pit. A threaded collar will be on the top of the pipe. A minimum 12" \times 12" steel plate will welded atop the threaded collar. Top of the plate will be flush with ground level. The standard location information listed will be welded onto the plate, plus a notation that it marks an on site buried temporary pit. Upon plugging the well, the plate will be removed and the pit marked as described in 19.15.17.13 F. (1) (d).

Executed this 27th day of March, 2009.

Brian Wood, Consultant

Permits West, Inc.

37 Verano Loop, Santa Fe, NM 87508

(505) 466-8120

FAX: (505) 466-9682

Cellular: (505) 699-2276

The operator's field representative is:

Max Gallegos Pro NM Energy, Inc. 460 St. Michael's Drive, Building 300 Santa Fe, NM 87505 (505) 988-4171 or (505) 690-6751



NMOCD Rules

19.15.17.11 DESIGN AND CONSTRUCTION SPECIFICATIONS:

- A. General specifications. An operator shall design and construct a pit, closed-loop-system, below-grade tank or sump to contain liquids and solids and prevent contamination of fresh water and protect public health and the environment.
- **B.** Stockpiling of topsoil. Prior to constructing a pit or closed-looped system, except a pit constructed in an emergency, the operator shall strip and stockpile the topsoil for use as the final cover or fill at the time of closure.
- C. Signs. The operator shall post an upright sign not less than 12 inches by 24 inches with lettering not less than two inches in height in a conspicuous place on the fence surrounding the pit, closed-loop system or below-grade tank, unless the pit, closed-loop system or below-grade tank is located on a site where there is an existing well, signed in compliance with 19.15.3.103 NMAC, that is operated by the same operator. The operator shall post the sign in a manner and location such that a person can easily read the legend. The sign shall provide the following information: the operator's name; the location of the site by quarter-quarter or unit letter, section, township and range; and emergency telephone numbers.

D. Fencing.

- (1) The operator shall fence or enclose a pit or below-grade tank in a manner that prevents unauthorized access and shall maintain the fences in good repair. Fences are not required if there is an adequate surrounding perimeter fence that prevents unauthorized access to the well site or facility, including the pit or below-grade tank. During drilling or work over operations, the operator is not required to fence the edge of the pit adjacent to the drilling or work over rig.
- (2) The operator shall fence or enclose a pit or below grade tank located within 1000-feet of a permanent residence, school, hospital, institution or church with a chain link security fence, at least six feet in height with at least two strands of barbed wire at the top. The operator shall ensure that all gates associated with the fence are closed and locked when responsible personnel are not on site. During drilling or work over operations, the operator is not required to fence the edge of the temporary pit adjacent to the drilling or work over rig.
- (3) The operator shall fence any other pit or below grade tank to exclude livestock with a four foot fence that has at least four strands of barbed wire evenly spaced in the interval between one foot and four feet above ground level.—The appropriate division district office may approve an



alternative to this requirement if the operator demonstrates that an alternative provides equivalent or better protection. The appropriate division district office may impose additional fencing requirements for protection of wildlife in particular areas.

The operator will fence the pit with a minimum 48" high fence. Fence will consist of minimum 36" woven wire (hog wire) topped with at least 1 strand of barbed wire.

- E. Netting. The operator shall ensure that a permanent pit or a permanent open top tank is screened, netted or otherwise rendered non-hazardous to wildlife, including migratory birds. Where netting or screening is not feasible, the operator shall on a monthly basis inspect for, and within 30 days of discovery, report discovery of dead migratory birds or other wildlife to the appropriate wildlife agency and to the appropriate division district office in order to facilitate assessment and implementation of measures to prevent incidents from reoccurring.
- **F.** Temporary pits. The operator shall design and construct a temporary pit in accordance with the following requirements.
- (1) The operator shall design and construct a temporary pit to ensure the confinement of liquids to prevent unauthorized releases.
- slopes consisting of a firm, unyielding base, smooth and free of rocks, debris, sharp edges or irregularities to prevent the liner's rupture or tear. The operator shall-construct a temporary pit so that the slopes are no steeper than two horizontal feet to one vertical foot (2H:1V). The short (55' wide) side slopes will be no steeper than two horizontal feet to one vertical foot (2H:1V). The long (100' wide) side slopes will be vertical. The appropriate division district office may approve an alternative to the slope requirement if the operator demonstrates that it can construct and operate the temporary pit in a safe manner to prevent contamination of fresh water and protect public health and the environment.
- (3) The operator shall design and construct a temporary pit with a geomembrane liner. The geomembrane liner shall consist of 20-mil string reinforced LLDPE or equivalent liner material that the appropriate division district office approves. The geomembrane liner shall be composed of an impervious, synthetic material that is resistant to petroleum hydrocarbons, salts and acidic and alkaline solutions. The liner material shall be resistant to ultraviolet light. Liner compatibility shall comply with EPA SW-846 method 9090A.
- (4) The operator shall minimize liner seams and orient them up and down, not across a slope. The operator shall use factory welded seams where possible. Prior to field



seaming, the operator shall overlap liners four to six inches and orient seams parallel to the line of maximum slope, i. e., oriented along, not across, the slope. The operator shall minimize the number of field seams in corners and irregularly shaped areas. Qualified personnel shall perform field seaming. The operator shall weld field liner seams.

- (5) Construction shall avoid excessive stress-strain on the liner.
- (6) Geotextile is required under the liner where needed to reduce localized stress-strain or protuberances that may otherwise compromise the liner's integrity.
- (7) The operator shall anchor the edges of all liners in the bottom of a compacted earth-filled trench. The anchor trench shall be at least 18 inches deep.
- (8) The operator shall ensure that the liner is protected from any fluid force or mechanical damage at any point of discharge into or suction from the lined temporary pit by using an ≈ 8 " O. D. PVC pipe at a ≈ 45 ° angle.
- (9) The operator shall design and construct a temporary pit to prevent run-on of surface water. A berm, ditch, proper sloping or other diversion shall surround a temporary pit to prevent run-on of surface water. During drilling operations, the edge of the temporary pit adjacent to the drilling or work over rig is not required to have run-on protection if the operator is using the temporary pit to collect liquids escaping from the drilling or work over rig and run-on will not result in a breach of the temporary pit.
- (10) The volume of a temporary pit shall not exceed 10 acre-feet, including freeboard.
- (11) The part of a temporary pit used to vent or flare gas during a drilling or work over operation that is designed to allow liquids to drain to a separate temporary pit does not require a liner, unless the appropriate division district office requires an alternative design in order to protect surface water, ground water and the environment. The operator shall not allow freestanding liquids to remain on the unlined portion of a temporary pit used to vent or flare gas.

19.15.17.12 OPERATIONAL REQUIREMENTS:

- A. General specifications. An operator shall maintain and operate a pit, closed-loop-system, below-grade tank or sump in accordance with the following requirements.
 - (1) The operator shall operate and maintain a pit, closed-loop system, below-



grade tank or sump to contain liquids and solids and maintain the integrity of the liner, liner system or secondary containment system, prevent contamination of fresh water and protect public health and the environment.

- (2) The operator shall recycle, reuse or reclaim or dispose of all drilling fluids in a manner, approved by division rules, that prevents the contamination of fresh water and protects public health and the environment. *Operator will haul such fluids to the Basin Disposal*. (NM-01-005) evaporation pond (3-29n-11w).
- (3) The operator shall not discharge into or store any hazardous waste in a pit, closed-loop system, below-grade tank or sump.
- (4) If any pit liner's integrity is compromised, or if any penetration of the liner occurs above the liquid's surface, then the operator shall notify the appropriate division district office within 48 hours of the discovery and repair the damage or replace the liner.
- (5) If a pit, below-grade tank, closed-loop system or sump develops a leak, or if any penetration of the pit liner, below-grade tank, closed-loop system or sump occurs below the liquid's surface, then the operator shall remove all liquid above the damage or leak line within 48 hours, notify the appropriate division district office within 48 hours of the discovery and repair the damage or replace the pit liner, below-grade tank, closed-loop system or sump.
- (6) The injection or withdrawal of liquids from a pit shall be accomplished through a header, diverter or other hardware that prevents damage to the liner by erosion, fluid jets or impact from installation and removal of hoses or pipes.
- (7) The operator shall operate and install a pit, below-grade tank or sump to prevent the collection of surface water run-on.
- (8) The operator shall install, or maintain on site, an oil absorbent boom or other device to contain and remove oil from a pit's surface.
- **B.** Temporary pits. An operator shall maintain and operate a temporary pit in accordance with the following additional requirements.
- (1) Only fluids used or generated during the drilling or work over process may be discharged into a temporary pit. The operator shall maintain a temporary pit free of miscellaneous solid waste or debris. The operator shall use a tank made of steel or other material, which the appropriate division district office approves, to contain hydrocarbon-based drilling



fluids. Immediately after cessation of a drilling or work over operation, the operator shall remove any visible or measurable layer of oil from the surface of a drilling or work over pit.

- (2) The operator shall maintain at least 2 feet of freeboard for a temporary pit.
- (3) The operator shall inspect a temporary pit containing drilling fluids at least daily while the drilling or work over rig is on-site. Thereafter, the operator shall inspect the temporary pit weekly so long as liquids remain in the temporary pit. The operator shall maintain a log of such inspections and make the log available for the appropriate division district office's review upon request. The operator shall file a copy of the log with the appropriate division district office when the operator closes the temporary pit.
- (4) The operator shall remove all free liquids from a temporary pit within 30 days from the date that the operator releases the drilling or work over rig. The operator shall note the date of the drilling or work over rig's release on form C-105 or C-103 upon well or work over completion. The appropriate division district office may grant an extension of up to three months.
- (5) The operator shall remove any liquids from the temporary pit used for cavitation within 48 hours after completing cavitation. The operator may request and receive additional time to remove the liquids from the temporary pit used for cavitation if the operator demonstrates to the appropriate division district office's satisfaction that it is not feasible to access the location with 48 hours.

19.15.17.13 CLOSURE REQUIREMENTS:

- A. Time requirements for closure. An operator shall close a pit, elosed-loop system or below-grade tank within the time periods provided in 19.15.17.13 NMAC, or by an earlier date that the division requires because of imminent danger to fresh water, public health or the environment.
- (1) An operator shall cease discharging into an existing unlined permanent pit that is permitted by or registered with the division within two years after June 16, 2008. An operator shall close an existing unlined permanent pit that is permitted by or registered with the division within three years after June 16, 2008.
- (2) An operator shall cease discharging into an existing, lined or unlined, permanent pitthat is not permitted by or registered with the division on or by June 16, 2008. An operator shall closean existing, lined or unlined, permanent pit that is not permitted by or registered with the division within-



six months after June 16, 2008.

- (3) An operator shall close an existing unlined temporary pit within three months after June 16, 2008.
- (4) An operator shall close an existing below-grade tank that does not meet the requirements of Paragraphs (1) through (4) of Subsection I of 19.15.17.11 NMAC or is not included in Paragraph (5) of Subsection I of 19.15.17.11 NMAC within five years after June 16, 2008, if not retrofitted to comply with Paragraphs (1) through (4) of Subsection I of 19.15.17.11 NMAC.
- (5) An operator shall close any other permitted permanent pit within 60 days of cessation of operation of the permanent pit in accordance with a closure plan that the environmental bureau in the division's Santa Fe office approves.
- (6) An operator shall close any other permitted temporary pit within six months from the date that the operator releases the drilling or work over rig. The appropriate division district office may grant an extension not to exceed three months.
- **B.** Closure methods for temporary pits. The operator of a temporary pit shall remove all liquids from the temporary pit prior to closure and dispose of the liquids in a division-approved facility or recycle, reuse or reclaim the liquids in a manner that the appropriate division district office approves. The operator shall close the temporary pit by one of the following methods.
 - (1) Waste excavation and removal.
- (2) On-site burial. The operator shall demonstrate and comply with the siting requirements in Subsection C of 19.15.17.10 NMAC and the closure requirements and standards of Subsection F of 19.15.17.13 NMAC if the proposed closure method of a temporary pit involves on-site burial.
- F. On-site closure methods. The following closure requirements and standards apply if the operator proposes a closure method for a drying pad associated with a closed-loop system or a temporary pit pursuant to Paragraph (2) of Subsection D of 19.15.17.13 NMAC or Paragraph (2) of Subsection B of 19.15.17.13 NMAC that involves on-site burial, or an alternative closure method pursuant to Paragraph (3) of Subsection D of 19.15.17.13 NMAC or Paragraph (3) of Subsection B of 19.15.17.13 NMAC and Subsection B of 19.15.17.15 NMAC.
 - (1) General requirements.
- (a) Any proposed on-site closure method shall comply with the siting criteria specified in Subsection C of 19.15.17.10 NMAC.
 - (b) The operator shall provide the surface owner notice of the operator's



proposal of an on-site closure method. The operator shall attach the proof of notice to the permit application.

- (c) The operator shall comply with the closure requirements and standards of Paragraphs (2) and (3), as applicable, of Subsection F of 19.15.17.13 NMAC if the proposed closure method for a drying pad associated with a closed-loop system or for a temporary pit involves on-site burial pursuant to Paragraph (2) of Subsection D of 19.15.17.13 NMAC or Paragraph (2) of Subsection B of 19.15.17.13 NMAC, or involves an alternative closure method pursuant to Paragraph (3) of Subsection D of 19.15.17.13 NMAC or Paragraph (3) of Subsection B of 19.15.17.15 NMAC.
- (d) The operator shall place a steel marker at the center of an on-site burial. The steel marker shall be not less than four inches in diameter and shall be cemented in a three-foot deep hole at a minimum. The steel marker shall extend at least four feet above mean ground level and at least three feet below ground level. The operator name, lease name and well number and location, including unit letter, section, township and range, and that the marker designates an on-site burial location shall be welded, stamped or otherwise permanently engraved into the metal of the steel marker. A person shall not build permanent structures over an on-site burial without the appropriate division district office's written approval. A person shall not remove an on-site burial marker without the division's written permission.

If the well goes into production, then an alternate interim marking system will be used to allow for safer and more efficient operations. A minimum 4" O. D. steel pipe will be set at least 36" deep at the center of the pit. A threaded collar will be on the top of the pipe. A minimum 12" x 12" steel plate will welded atop the threaded collar. Top of the plate will be flush with ground level. The same information listed in the preceding paragraph will be welded onto the plate, plus a notation that it marks an on site buried temporary pit. Upon plugging the well, the plate will be removed and the pit marked as described in the preceding paragraph.

- (e) The operator shall report the exact location of the on-site burial on form C-105 filed with the division.
- (f) The operator shall file a deed notice identifying the exact location of the on-site burial with the county clerk in the county where the on-site burial occurs.
 - (2) In-place burial.



- (a) Where the operator meets the siting criteria specified in Paragraphs (2) or (3) of Subsection C of 19.15.17.10 NMAC and the applicable waste criteria specified in Subparagraphs (c) or (d) of Paragraph (2) of Subsection F of 19.15.17.13 NMAC, an operator may use in-place burial (burial in the existing temporary pit) for closure of a temporary pit or bury the contents of a drying pad associated with a closed-loop system in a temporary pit that the operator constructs in accordance with Paragraphs (1) through (6) and (10) of Subsection F of 19.15.17.11 NMAC for closure of a drying pad associated with a closed loop system.
- (b) Prior to closing an existing temporary pit—or to placing the contents from a drying pad associated with a closed-loop system into a temporary pit that the operator constructs for disposal, the operator shall stabilize or solidify the contents to a bearing capacity sufficient to support the temporary pit's final cover. The operator shall not mix the contents with soil or other material at a mixing ratio of greater than 3:1, soil or other material to contents.
- Where ground water will be between 50 and 100 feet below the bottom of the buried waste, the operator shall collect at a minimum, a five point, composite sample of the contents of the drying pad associated with a closed-loop system or the contents of a temporary pit after treatment or stabilization, if treatment or stabilization is required, to demonstrate that benzene, as determined by EPA SW-846 method 8021 B or 8260B, does not exceed 0.2 mg/kg; total BTEX, as determined by EPA SW-846 method 8021 B or 8260B, does not exceed 50 mg/kg; TPH, as determined by EPA SW-846 method 418.1 or other EPA method approved that the division approves, does not exceed 2500 mg/kg; the GRO and DRO combined-fraction, as determined by EPA SW-846 method 8015M, does not exceed 500 mg/kg; and chlorides, as determined by EPA method 300.1, do not exceed 500 mg/kg or the background-concentration, whichever is greater. The operator may collect the composite sample prior to treatment or stabilization to demonstrate that the contents do not exceed these concentrations. However, if the contents collected prior to treatment or stabilization exceed the specified concentrations the operator shall collect a second five point, composite sample of the contents after treatment or stabilization to demonstrate that the contents do not exceed these concentrations.
- (d) Where the ground water will be more than 100 feet below the bottom of the buried waste, the operator shall collect at a minimum, a five point, composite sample of the contents of the drying pad associated with a closed-loop system or the contents of a temporary pit after treatment or stabilization, if treatment or stabilization is required, to demonstrate that benzene, as determined by EPA SW-846 method 8021B or 8260B, does not exceed 0.2 mg/kg; total BTEX, as determined by EPA SW-846 method 8021B or 8260B, does not exceed 50 mg/kg; the GRO and DRO combined fraction, as determined by EPA SW-846 method 8015M, does not



exceed 500 mg/kg; TPH, as determined by EPA method 418.1 or other EPA method that the division approves, does not exceed 2500 mg/kg; and chlorides, as determined by EPA method 300.1, do not exceed 1000 mg/kg or the background concentration, whichever is greater. The operator may collect the composite sample prior to treatment or stabilization to demonstrate that the contents do not exceed these concentrations. However, if the contents collected prior to treatment or stabilization exceed the specified concentrations the operator shall collect a second five point, composite sample of the contents after treatment or stabilization to demonstrate that the contents do not exceed these concentrations.

- (e) Upon closure of a temporary pit, or closure of a temporary pit thatthe operator constructs for burial of the contents of a drying pad associated with a closed-loopsystem, the operator shall cover the geomembrane lined, filled, temporary pit with compacted, non-waste containing, earthen material; construct a division-prescribed soil cover; recontour and revegetate the site. The division-prescribed soil cover, recontouring and revegetation shall comply with Subsections G, H and I of 19.15.17.13 NMAC.
 - **G.** Reclamation of pit locations, on-site burial locations and drying pad locations.
- (1) Once the operator has closed a pit or trench or is no longer using a drying pad, below-grade tank or an area associated with a closed-loop system, pit, trench or below-grade tank, the operator shall reclaim the pit location, drying pad location, below-grade tank location or trench location and all areas associated with the closed-loop system, pit, trench or below-grade tank including associated access roads to a safe and stable condition that blends with the surrounding undisturbed area. The operator shall substantially restore the impacted surface area to the condition that existed prior to oil and gas operations by placement of the soil cover as provided in Subsection H of 19.15.17.13 NMAC, recontour the location and associated areas to a contour that approximates the original contour and blends with the surrounding topography and revegetate according to Subsection I of 19.15.17.13 NMAC.
- (2) The operator may propose an alternative to the revegetation requirement if the operator demonstrates that the proposed alternative effectively prevents erosion, and protects fresh water, human health and the environment. The proposed alternative shall be agreed upon by the surface owner. The operator shall submit the proposed alternative, with written documentation that the surface owner agrees to the alternative, to the division for approval.



H. Soil cover designs.

- (1) The soil cover for closures where the operator has removed the pit contents or remediated the contaminated soil to the division's satisfaction shall consist of the background thickness of topsoil or one foot of suitable material to establish vegetation at the site, whichever is greater.
- (2) The soil cover for burial-in-place or trench burial shall consist of a minimum of four feet of compacted, non-waste containing, earthen material. The soil cover shall include either the background thickness of topsoil or one foot of suitable material to establish vegetation at the site, whichever is greater.
- (3) The operator shall construct the soil cover to the site's existing grade and prevent ponding of water and erosion of the cover material.

1. Re-vegetation.

- (1) The first growing season after the operator closes a pit or trench or is no longer using a drying pad, below-grade tank or an area associated with a closed-loop system, pit or below-grade tank including access roads, the operator shall seed or plant the disturbed areas.
- (2) The operator shall accomplish seeding by drilling on the contour whenever practical or by other division-approved methods. The operator shall obtain vegetative cover that equals 70% of the native perennial vegetative cover (un-impacted by overgrazing, fire or other intrusion damaging to native vegetation) consisting of at least three native plant species, including at least one grass, but not including noxious weeds, and maintain that cover through two successive growing seasons. During the two growing seasons that prove viability, there shall be no artificial irrigation of the vegetation.
- (3) The operator shall repeat seeding or planting until it successfully achieves the required vegetative cover.
- (4) When conditions are not favorable for the establishment of vegetation, such as periods of drought, the division may allow the operator to delay seeding or planting until soil moisture conditions become favorable or may require the operator to use additional cultural techniques such as mulching, fertilizing, irrigating, fencing or other practices.
- (5) The operator shall notify the division when it has seeded or planted and when it successfully achieves re-vegetation.



J. Closure notice.

- (1) The operator shall notify the surface owner by certified mail, return receipt requested, that the operator plans to close a temporary pit, a permanent pit, a below-grade tank or where the operator has approval for on-site closure. Evidence of mailing of the notice to the address of the surface owner shown in the county tax records is sufficient to demonstrate compliance with this requirement.
 - (2) The operator of a temporary pit or below-grade tank or an operator who is approved for on-site closure shall notify the appropriate division district office verbally or by other means at least 72 hours, but not more than one week, prior to any closure operation. The notice shall include the operator's name and the location to be closed by unit letter, section, township and range. If the closure is associated with a particular well, then the notice shall also include the well's name, number and API number.
- K. Closure report. Within 60 days of closure completion, the operator shall submit a closure report on form C-144, with necessary attachments to document all closure activities including sampling results; information required by 19.15.17 NMAC; a plot plan; and details on back-filling, capping and covering, where applicable. In the closure report, the operator shall certify that all information in the report and attachments is correct and that the operator has complied with all applicable closure requirements and conditions specified in the approved closure plan. If the operator used a temporary pit, the operator shall provide a plat of the pit location on form C-105 within 60 days of closing the temporary pit.

The operator shall file a deed notice identifying the exact location of the on-site burial with the county clerk in the county where the on-site burial occurs.





New Mexico Office of the State Engineer

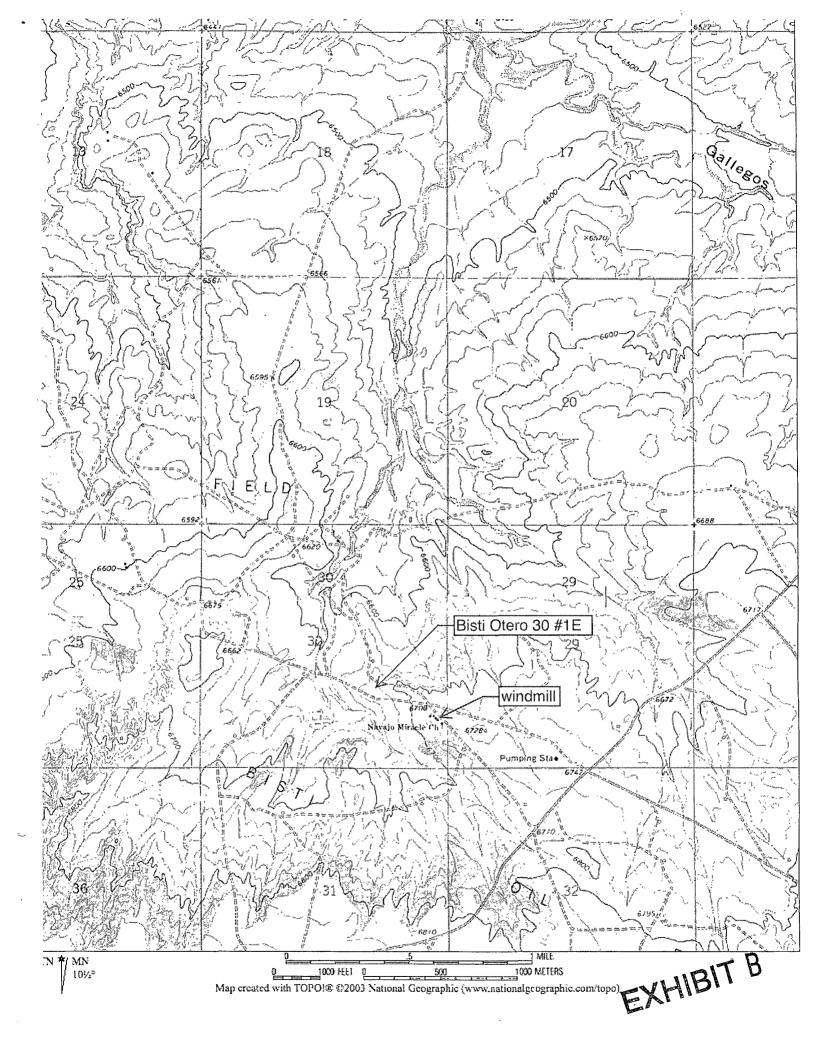
Point of Diversion by Location

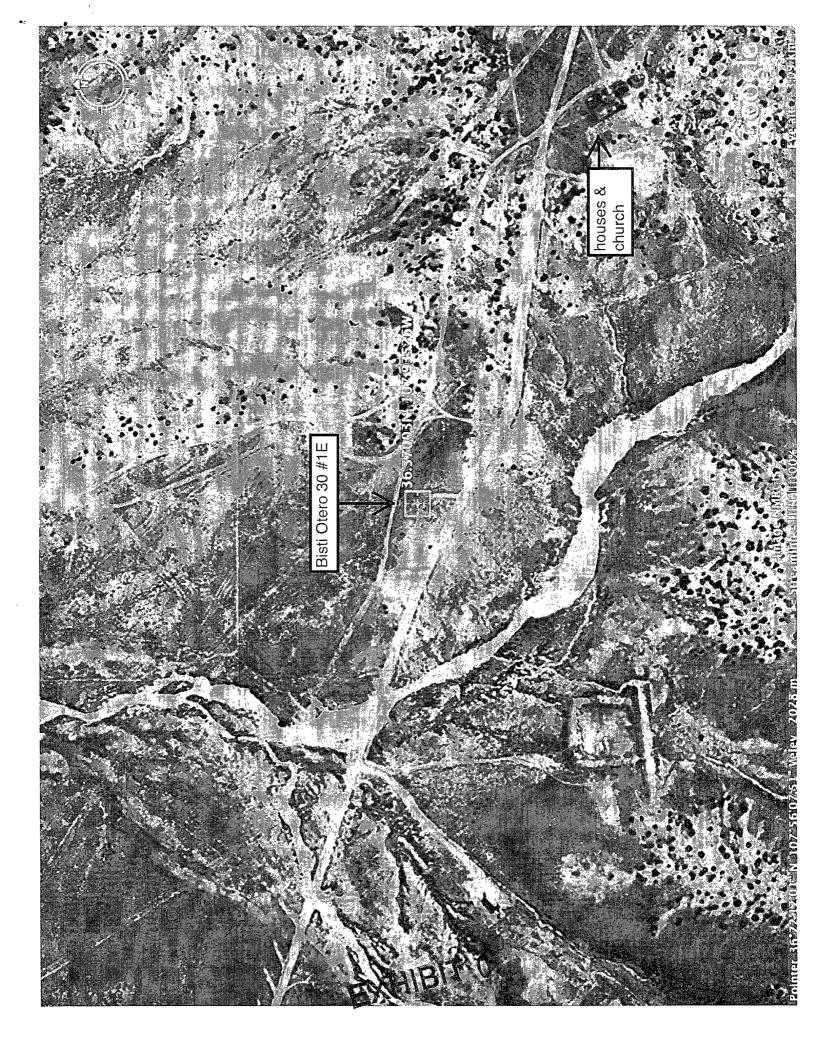
(acre ft per annum)		(quarters are 1=NW 2=NE 3=SW 4=SE) (quarters are smallest to largest) (NAD83 UTM in meters)					(in feet)					
WR File Nbr RG 31794	Use Diversion	n County Catron	POD Number RG 31794	Granţ	Source	q q q 6416 4 Sec 3 4 11	Tws Rng 25N 10W	X 243192	Y Start Date 4033255	Finish Date		Depth Water
RG 36933	SAN	3 Unknown	RG 36933		Shallow	2 2 3 11	25N 10W	242903	4033769 02/15/1983	07/20/1983	180	60
SJ 01715	STK	15 San Juan	SJ 01715	,	Shallow	4 4 22	25N 10W	241895	4030074 07/13/1963	01/30/1964	637	250
SJ 02377	DOM	3 San Juan	SJ 02377	-		2 3 2 06	25N 10W	236941	4035959			

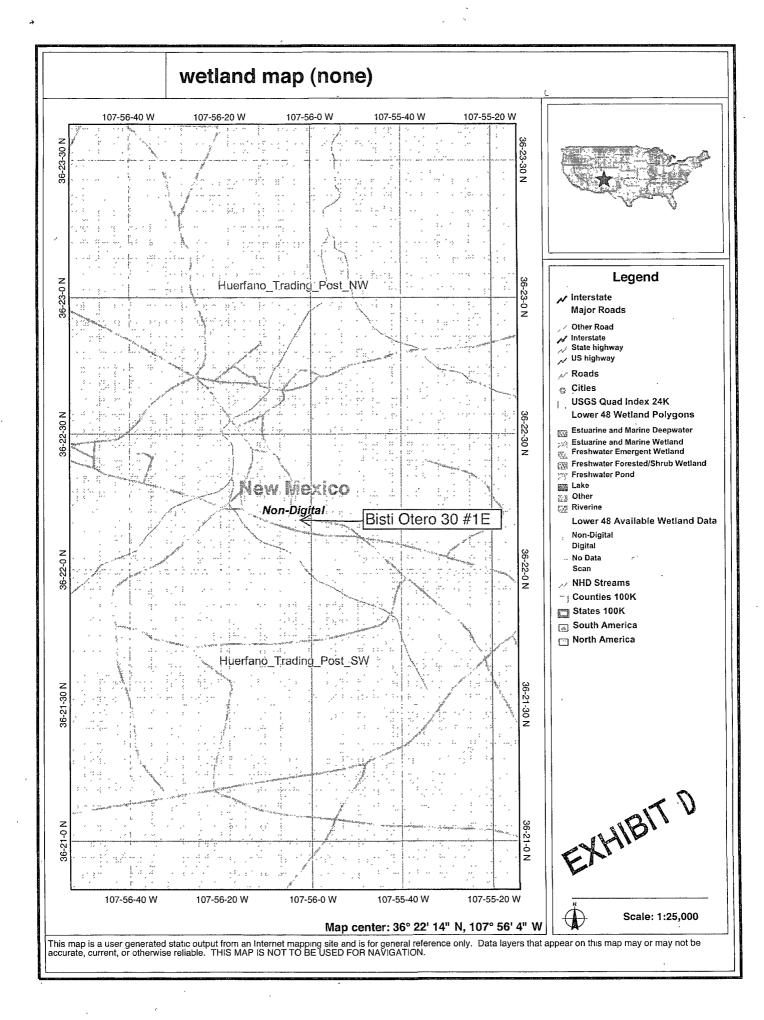
Record Count: 4



data is furnished by the NMOSE/ISC and is accepted by the recipient with the expressed understanding that the OSE/ISC make no warranties, expressed or implied, concerning the accuracy, completeness, bility, usability, or suitability for any particular purpose of the data.







MMQonline Public Version

Mines, Mills & Quarries Commodity Groups

△ Aggregate & Stone Mines

◆ Coal Mines

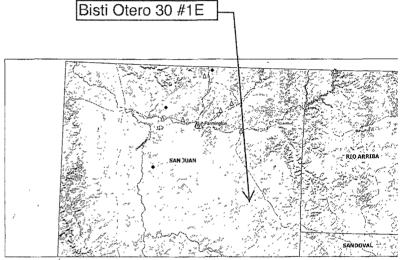
⅓ Industrial Minerals Mines

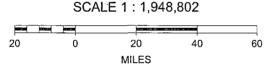
⅓ Industrial Minerals Mills

☑ Metal Mines and Mill Concentrate

№ Potash Mines & Refineries

℅ Smelters & Refinery Ops.







EXHIBITE

WELL PAD DIAGRAM PRO NM ENERGY INC. COMPANY:_ BISTI OTERO 30 No. 1-E LEASE: _ 1890 FSL 1900 FEL FOOTAGE:_ SEC.: _____30 TWN: _______, RNG: ______ , NMPM ELEVATION: 6650' SCALE IN FEET 25 F 7.4 100' B F 3.3 80, RESERVE PIT 125, 55' X 100; 6 С 4 2.6 WELLHEAD BACK REAR F 3.8 100, LAYDOWN S 74.53' E F 1.9 120' 125, 1 C 3.1 **NEW ACCESS** 223 FT. 100 B' C 3.0 125 2 C, C 7.6

EXHIBITE



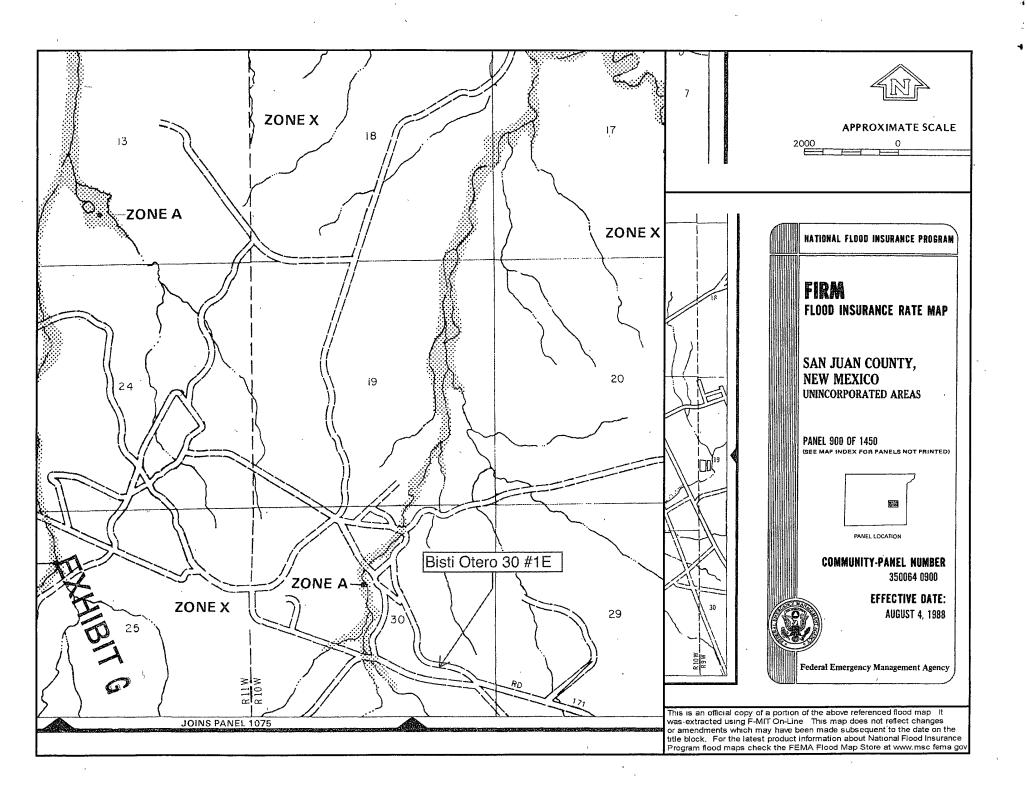
Daggett Enterprises, Inc. Surveying and Oil Field Services P. O. Box 510 •Farmington, NM 87499 Phone (505) 326-1772 • Fax (505) 326-6019 NEW MEXICO L.S. 8894

CADFILE: PROCO4_PL8 ROW#: PRODO4 DATE: 11/14/07

NOTE:

C 0.4

DAGGETT ENTERPRISES, INC. IS NOT LIABLE FOR UNDERGROUND UTILITIES OR PIPELINES. NEW MEXICO ONE CALL TO BE NOTIFIED 48 HOURS PRIOR TO EXCAVATION OR CONSTRUCTION.



DISTRICT I 1625 N. French Dr., Hobbs, N.M. 88240

DISTRICT II 1301 W. Grand Ave., Artesia, N.M. 88210

DISTRICT III 1000 Rio Brazos Rd., Aztec, N.M. 87410 State of New Mexico Energy, Minerals & Natural Resources Department

OIL CONSERVATION DIVISION 1220 South St. Francis Dr. Santa Fe, NM 87505

Form C-102 Revised October 12, 2005

Submit to Appropriate District Office State Lease - 4 Copies

Fee Lease - 3 Copies

☐ AMENDED REPORT

DISTRICT IV
1220 South St. Francis Dr., Santa Fe, NM 87505

WELL LOCATION AND ACREAGE DEDICATION PLAT

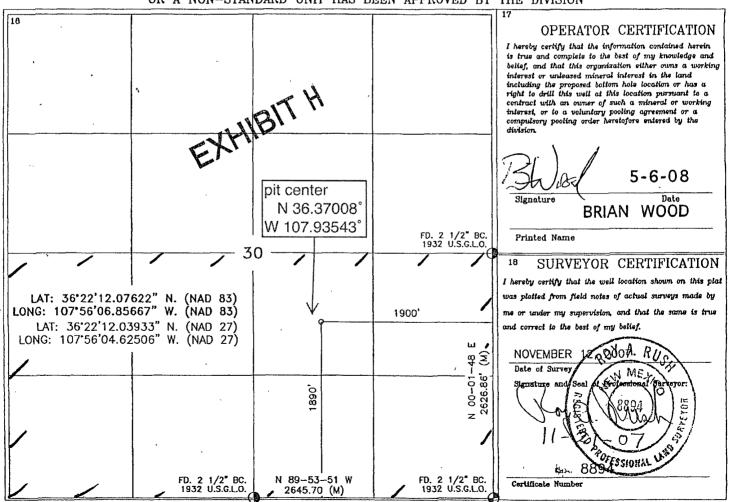
SOOHS-3	4767	71599 Code	BASIN DAKOTA "	Pool Name
Property Code		¢ Pr	operty Name	.º Well Number
37459	•	BISTI	1-E	
OGRID No.		8 Op	⁹ Elevation	
018118		PRO NM	6650	
		¹⁰ Sur	face Location	-

UL or lot no. Section Township Range Lot Idn Feet from the North/South line Feet from the East/West line County J 30 25-N 10-W 1890 SOUTH 1900 **EAST** SAN JUAN

11 Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
12 Dedicated Acres			13 Joint or	Infill	¹⁴ Consolidation C	ode	¹⁵ Order No.		,
318.92	5/2	2	•			С			

NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION



March 26, 2009

Jeffrey Henry Federal Indian Minerals Office 1235 LaPlata highway, Suite B Farmington, NM 87401

Dear Jeffrey,

As required by NMOCD pit rule Subsection F of 19.15.17.13 NMAC, I am notifying FIMO as surface owner that Pro NM Energy, Inc. plans to close its Bisti Otero 30 #1E temporary (reserve) pit (after it is built and used) using on site closure (burial) in the same pit.

The well is staked at 1890 FSL & 1900 FEL 30-25n-10w, San Juan County, NM. The well is on lease NO-G-9502-1283. API number is 30-045-34453

Please call me if you have any questions.

Sincerely,

Brian Wood

EXHIBIT I

137	U.S. Postal Service CERTIFIED MAIL RECEIPT (Domestic Mail Only; No insurance Coverage Provided) Fordelivery information visit our website at www.usps.com	
-0	OFFICIAL USE	
1830 0000 0E8I	Postage Certified Fee A 70 Postmark Here Return Receipt Fee (Endorsement Required) Plestricted Delivery Fee (Endorsement Required) Total Postage & Fees 5 3 3	į
7008	Sireet, Apt. No.; or PO Box No. City, State, ZIP+4	
	PS:Form 3800, Adgust 2005 SeerBeverse Jof Instr	·