ROSWELL FIELD OFFICE

Form 3160 -3
(April 2004)

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

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER

5. Lease Serial No.
NMNM-120891

6. If Indian, Allotee or Tribe Name

Ia. Typeofwork-: ☐ DRILL ☒ REENTER

7 If Unit or CA Agreement, Name and No.

Ib. Type of Well: ☒ Oil Well ☐ Gas Well ☐ Other ☐ Single Zone ☐ Multiple Zone

8, Lease Name and Well No.
Monopoly Federal #1

2. Name of Operator
Mack Energy Corporation

9. API Well No.

3a. Address
P.O. Box 960 Artesia, NM 88211-0960

3b. PhoneNo. *(include area code)*
(575)748-1288

10. Field and Pool, or Exploratory
Devonian

4. Location of Well *(Report location clearly andinaccorounce with any State requirements*)*
At surface 2428' FSL & 1154' FEL
At proposed prod. zone

I 1. Sec., T. R. M. or Blk. and Survey or Area
Sec. 6 T13S R29E

14. Distance in miles and direction from nearest town or post office*
11 miles north of Loco Hills, NM

12. County or Parish
Chaves

13. State
NM

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

16. No. of acres in lease
480.19

17. Spacing Unit dedicated to this well
40

18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. 1320

19. Proposed Depth
9,500'

20. BLM/BIA Bond No. on file
NMB000286

2 1. Elevations (Show whether DF, KDB, RT, GL, etc.)
3,674' GL

22 Approximate date work will start*
4/16/2009

2.3. Estimated duration
2 days

24. Attachments

ROSWELL CONTROLLED WATER BASIN

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 Jerry W. Sherrell
Name *(Printed/Typed)* Jerry W. Sherrell
Date 3/17/09

Title
Production Clerk

Approved by *(Signature)* Angel Mayes
Name *(Printed/Typed)* Angel Mayes
Date 8-11-09.

Title Assistant Field Manager, Lands And Minerals
Office ROSWELL FIELD OFFICE

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

APPROVED FOR 2 YEARS

Title 18 U.S.C. Section 1001 and Tide 43 U.S.C. Section 1212, make it a crime for any person knowirilly and willfully to make to any department or agency ofthe United States any false, fictitious or fraudulent statements or representations as to any matter within its juris iction.

**(Instructions on page 2)*

Engineering O.K.: 04-08-2009: A.A.

APPROVAL SUBJECT TO
GENERAL REQUIREMENTS AND
SPECIAL STIPULATIONS ATTACHED

State of New Mexico
Energy, Minerals and Natural Resources Department

Submit to Appropriate District Office
State Lease - 4 copies
Fee Lease - 3 copies

DISTRICT I
P.O. Box 1980, Hobbs, NM 88240

DISTRICT II
P.O. Drawer DD, Artesia, NM 88210

DISTRICT III
1000 Rio Brazos Rd., Aztec, NM 87410

OIL CONSERVATION DIVISION

P.O. Box 2088
Santa Fe, New Mexico 87504-2088

Form C-102
Revised 1-1-89

FEB 17 1994
ROSWELL, NEW MEXICO

WELL LOCATION AND ACREAGE DEDICATION PLAT

All Distances must be from the outer boundaries of the section

Operator	Lease	Well No.
Mack Energy Corporation	Monopoly Federal	1

Unit Letter	Section	Township	Range	County
I	6	13 South	29 East NMPM	Chaves

Actual Footage Location of Well: 2428 feet from the South line and 1154 feet from the East line

Ground level Elev.	Producing Formation	Pool	Dedicated Acreage:
3674	Devonian	Wildcat	40 Acres

1. Outline the acreage dedicated to the subject well by colored pencil or hachure marks on the plat below.

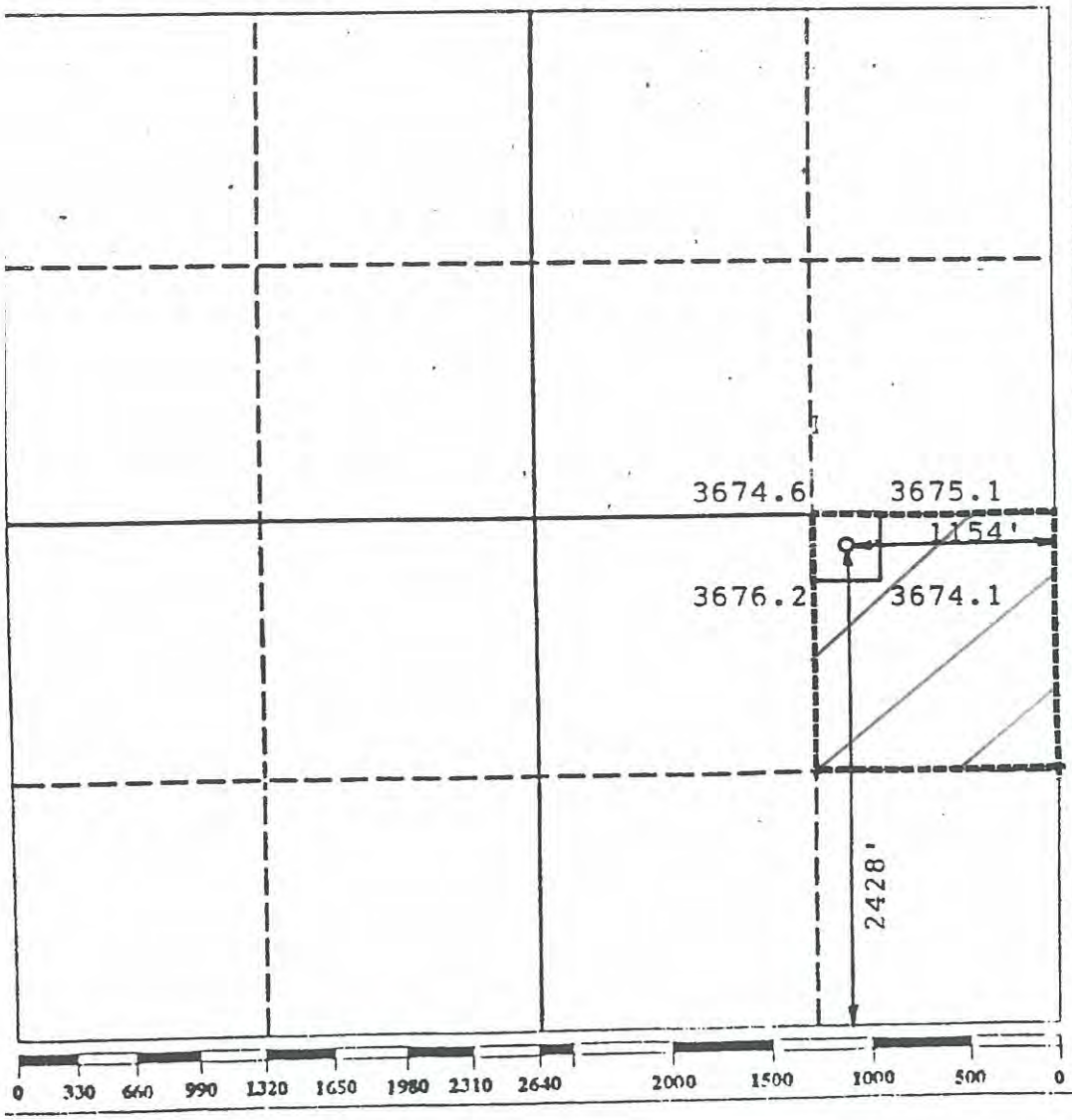
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).

3. If more than one lease of different ownership is dedicated to the well, have the interest of all owners been consolidated by communitization, unitization, force-pooling, etc.?

☐ Yes ☐ No If answer is "yes" type of consolidation _____

If answer is "no" list the owners and tract descriptions which have actually been consolidated. (Use reverse side of this form if necessary. _____

No allowable will be assigned to the well until all interests have been consolidated (by communitization, unitization, forced-pooling, or otherwise) or until a non-standard unit, eliminating such interest, has been approved by the Division.



OPERATOR CERTIFICATION

I hereby certify that the information contained herein in true and complete to the best of my knowledge and belief.

Signature: Jerry W. Sherrell

Printed Name: Production Clerk

Position: Mack Energy Corporation

Company: 3/16/2009

Date:

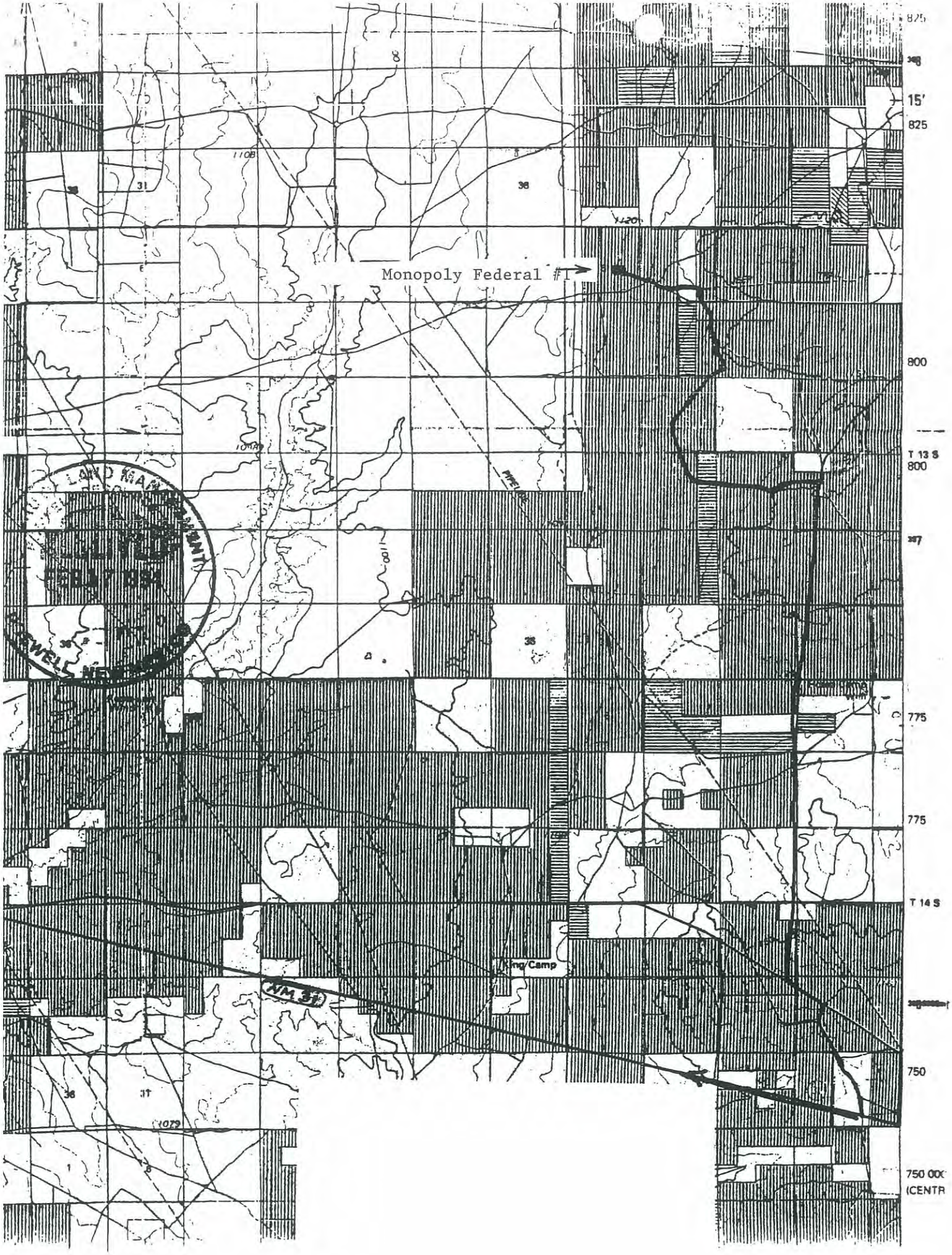
SURVEYOR CERTIFICATION

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervison, and that the same is true and correct to the best of my knowledge and belief.

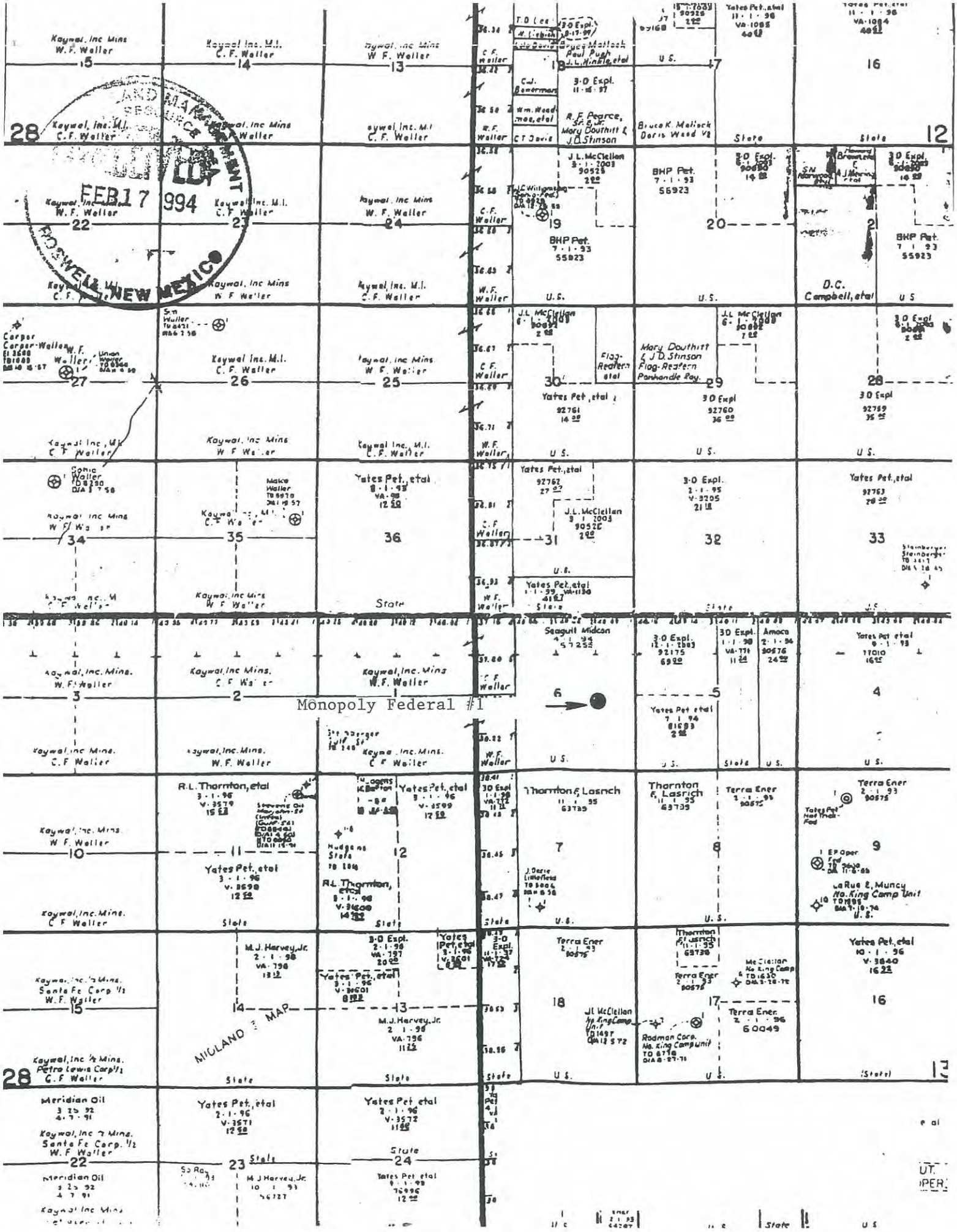
Date Surveyed: January 28, 1994

Signature & Seal of Professional Surveyor: P.R. Patton

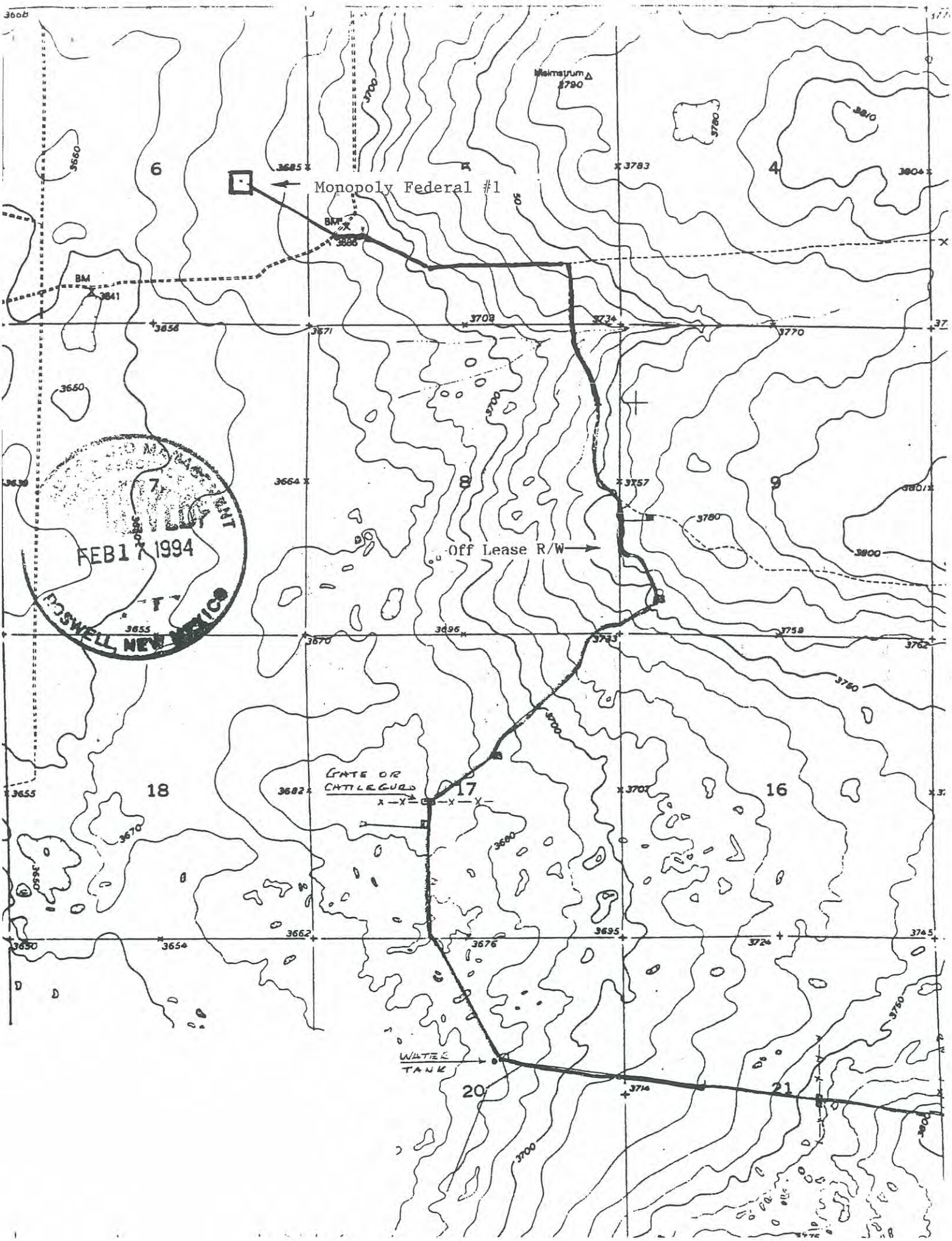
Certificate No. 8112



Monopoly Federal #1
15'
825
800
T 13 S
800
775
775
T 14 S
750
750 000
(CENTR
King Camp
NM 31



Monopoly Federal #1
MIDLAND MAP
FEB 17 1994
ROSWELL NEW MEXICO
Kaywal, Inc Mins
W.F. Waller
C.F. Waller
Yates Pet., etal
BHP Pet.
Bruce K. Mallock
Doris Wood
Mary Douthitt & J.D. Stinson
Flag-Redfern etal
Panhandle Roy.
Seagull Midcon
Amoco
Thornton & Lasrich
Terra Ener
R.L. Thornton, etal
M.J. Harvey, Jr.
Meridian Oil
Santa Fe Corp. 1/2
Petro Lewis Corp 1/2
State
U.S.


Monopoly Federal #1
Off Lease R/W
GATE OR CATTLEGUARD
WATER TANK
Meimstrum
BM
6
4
7
8
9
18
17
16
20
21
FEB 17 1994
ROSWELL, NEW MEXICO

Attached to Form 3160-3
Mack Energy Corporation
Monopoly Federal #1
2428 FSL & 1154 FEL Unit I, Sec. 6 T13S R29E
Chaves County, NM

DRILLING PROGRAM

1. Geologic Name of Surface Formation

Quaternary

2. Estimated Tops of Important Geologic Markers:

Quaternary	Surface		
Yates	710'	Abo	5592'
Queen	1401'	Wolfcamp	6625'
San Andres	1961'	Strawn	7480'
Glorietta	3362'	Atoka	7620'
Tubb	4800'	Devonian	9163'
		Monteya	9800'

3. Estimated Depths of Anticipated Fresh Water, Oil and Gas:

Water Sand	150'	Fresh Water
Yates	710'	Oil/Gas
San Abdres	1961'	Oil/Gas
Tubb	4800'	Oil/Gas
Wolfcamp	6625'	Oil/Gas
Devonian	9163'	Oil/Gas

No other formations are expected to give up oil, gas or fresh water in measurable quantities. Setting 13 3/8" casing to 330' and circulating cement back to surface will protect the surface fresh water sand. Salt Section will be protected by setting 5 ½" casing to 9500' and circulating cement back to surface. Any shallower zones above TD, which contain commercial quantities of oil and/or gas, will have cement circulated across them by cementing 5 1/2" production casing, sufficient cement will be pumped to circulate back to surface.

4. Casing Program:

Hole Size	Interval	OD Casing	Wt, Grade, Jt, cond, collapse/burst/tension
17 ½"	0-330'	13 3/8"	Existing
12 ½"	0-2092'	8 5/8"	Existing
7 7/8"	0-9500'	5 1/2"	17#, L-80, LT&C, New, 1.273/2.762/2.580

5. Cement Program:

13 3/8" Surface Casing: Class C, 370sx, existing.
8 5/8" Intermediate Casing: Class C, 950sx, existing.
5 ½" Production Casing: Class C, 800sx, yield 1.32.

6. Minimum Specifications for Pressure Control:

The blowout preventer equipment (BOP) shown in Exhibit #9 will consist of a double ram-type (3000 psi WP) minimum preventer. This unit will be hydraulically operated and the ram type preventer will be equipped with blind rams on top of 4 1/2" drill pipe rams on bottom. The BOP will be nippled up on the 8 5/8" surface casing and tested to 1000 psi using the rig pump and used continuously until TD is reached. All BOP's and accessory equipment will be tested to 1000 psi before drilling out of surface casing. Pipe rams will be operationally checked each 24-hour period. Blind rams will be operationally checked on each trip out of the hole. These checks will be noted on the daily tour sheets. Other accessories to the BOP equipment (Exhibit #10) will include a Kelly cock and floor safety valve and choke lines and choke manifold (Exhibit #11) with a minimum 3000 psi WP rating.

7. Types and Characteristics of the Proposed Mud System:

The well will be drilled to TD with a combination of brine, cut brine and polymer mud system. The applicable depths and properties of this system are as follows:

DEPTH	TYPE	WEIGHT	VISCOSITY	WATERLOSS
0-450'	Fresh Water	8.5	28	N.C.
450'-TD	Cut Brine	9.1	29	N.C.

Sufficient mud materials to maintain mud properties and meet minimum lost circulation and weight increase requirements will be kept at the well site at all times.

8. Auxiliary Well Control and Monitoring Equipment:

A. Kelly cock will be kept in the drill string at all times.

B. A full opening drill pipe-stabbing valve with proper drill pipe connections will be on the rig floor at all times.

9. Logging, Testing and Coring Program:

A. The electric logging program will consist of GR-Dual Laterolog, Spectral Density, Dual Spaced Neutron, CSNG Log and will be ran from T.D. to 9 5/8 casing shoe.

B. Drill Stem test is not anticipated.

C. No conventional coring is anticipated.

D. Further testing procedures will be determined after the 5 1/2" production casing has been cemented at TD based on drill shows and log evaluation.

10. Abnormal Conditions, Pressures, Temperatures and Potential Hazards:

No abnormal pressures or temperatures are anticipated. The estimated bottom hole at TD is 120 degrees and estimated maximum bottom hole pressure is 3250 psig. Low levels of Hydrogen sulfide have been monitors in producing wells in the area, so H2S may be present while drilling of the well; a plan is attached to the Drilling program. No major loss of circulation zones has been reported in offsetting wells.

11. Anticipated Starting Date and Duration of Operations:

Road and location work will not begin until approval has been received from the BLM. The anticipated spud date is April 16, 2009. Once commenced, the drilling operation should be finished in approximately 10 days. If the well is productive, an additional 30 days will be required for completion and testing before a decision is made to install permanent facilities.

SURFACE USE AND OPERATING PLAN

1. Existing & Proposed Access Roads

A. The well site and elevation plat for the proposed well is shown in Exhibit #1. It was staked by John West Engineering, Hobbs, NM.

B. All roads to the location are shown in Exhibit below. The existing lease roads are illustrated and are adequate for travel during drilling and production operations. Upgrading existing roads prior to drilling well will be done where necessary.

C. Directions to Location: From Hwy #31, go east .5 miles of mile marker 20, turn north on Jemina Road for 8.9 miles, turn left northwest 1.8 miles. Take north fork for .9 miles, then northeast for 1 mile, then north-northwest for 1.2 miles, turn west 1.2 miles to location.

D. Routine grading and maintenance of existing roads will be conducted as necessary to maintain their condition as long as any operations continue on this lease.

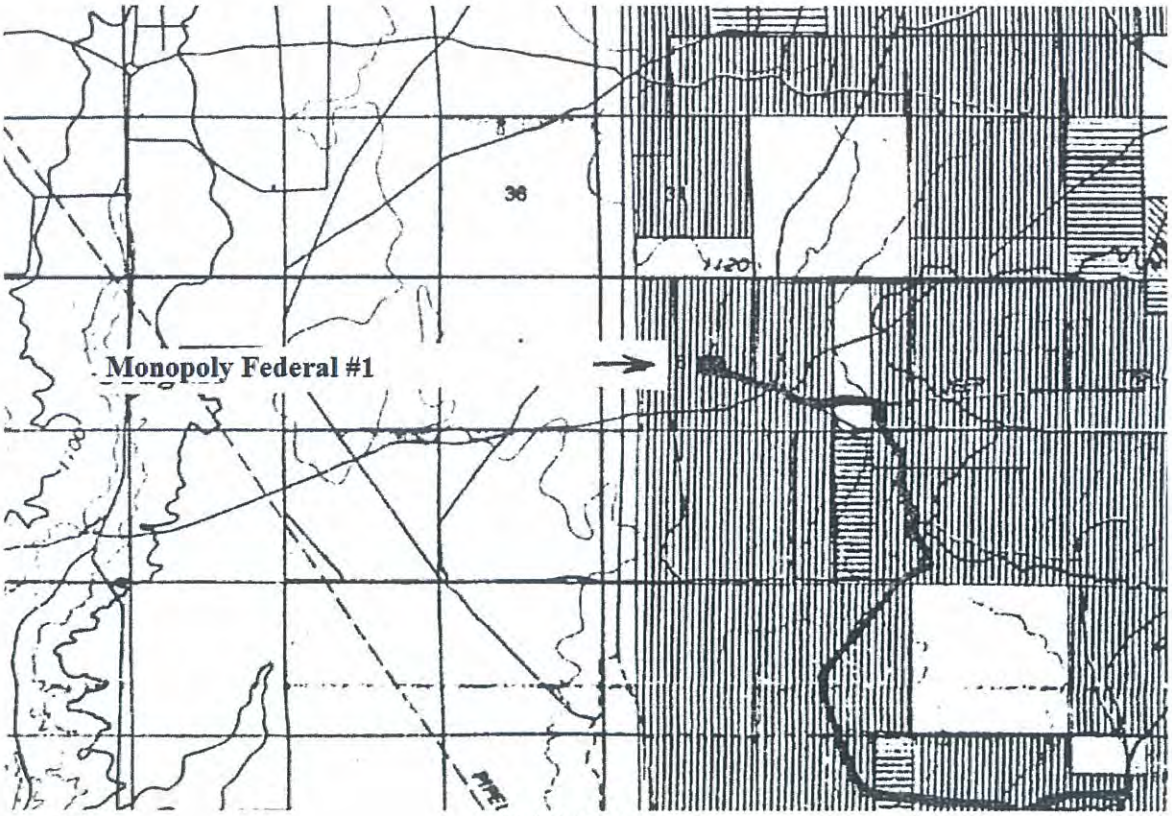


Exhibit #4

2. Proposed Access Road:

Exhibit #3 shows the 0' of new access road to be constructed. The road will be constructed as follows:

A. The Maximum width of the running surface will be 14'. The road will be crowned and ditched and constructed of 6" rolled and compacted caliche. Ditches will be at 3:1 slope and 4 feet wide. Water will be diverted where necessary to avoid ponding, prevent erosion, maintain good drainage, and to be consistent with local drainage patterns.

B. The average grade will be less than 1%.

C. No turnouts are planned.

D. No culverts, cattleguard, gates, low water crossings or fence cuts are necessary.

E. Surfacing material will consist of native caliche. Caliche will be obtained from the nearest BLM approved caliche pit.

F. The proposed access road as shown in Exhibit #3 has been centerline flagged by John West Engineering, Hobbs, New Mexico.

3. Location of Existing Wells & Proposed flow lines for New Wells:

Exhibit #4 shows all existing wells within a one-mile radius of this well. Proposed flow lines, follow an archaeologically approved route to the TB, at the #1 well.

4. Location of Existing and/or Proposed Facilities:

A. Mack Energy Corporation does not operate a production facility on this lease.

B. If the well is productive, contemplated facilities will be as follows:

1) San Andres Completion: Will be sent to the Monopoly Federal Com TB located at the #1 well. The Facility is shown in Exhibit #5.

2) The tank battery and facilities including all flow lines and piping will be installed according to API specifications.

3) Any additional caliche will be obtained from a BLM approved caliche pit. Any additional construction materials will be purchased from contractors.

4) It will be necessary to run electric power if this well is productive. Power will be run by CVE and they will send in a separate plan for power.

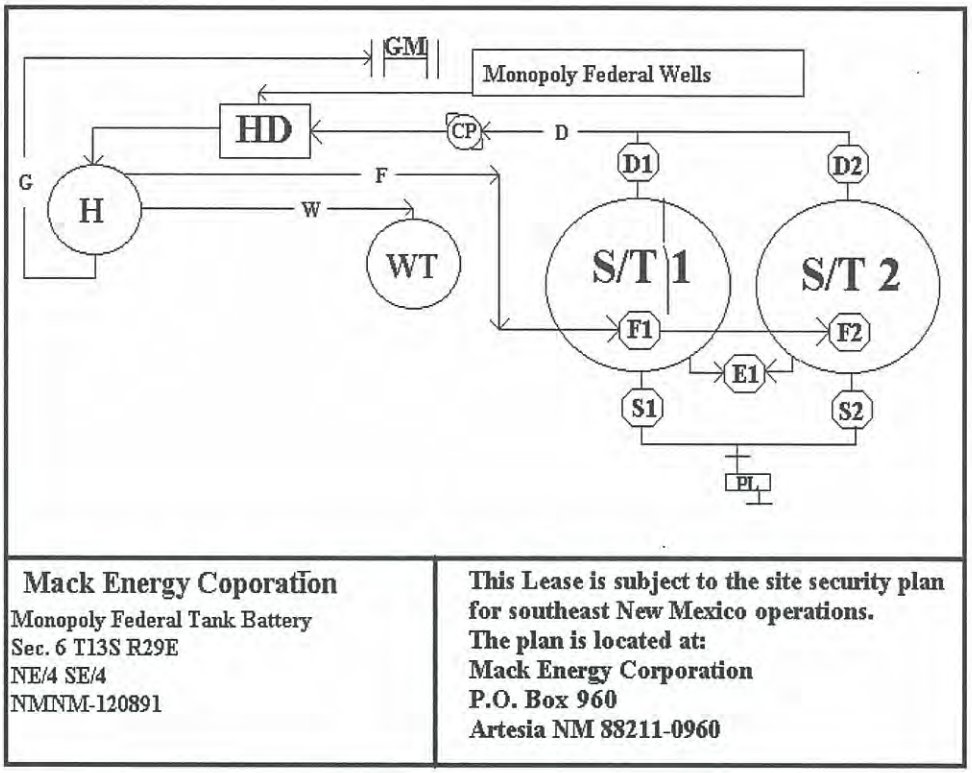


Exhibit #5

A. If the well is productive, rehabilitation plans are as follows:

1) Topsoil removed from the drill site will be used to recontour the surrounding area to the original natural level, as nearly as possible, and reseeded as per BLM specifications.

5. Location and Type of Water Supply:

The well will be drilled with combination brine and fresh water mud system as outlined in the drilling program. The water will be obtained from commercial water stations in the area and hauled to location by transport truck over the existing and proposed access roads shown in Exhibit #4. If a commercial fresh water source is nearby, fasline may be laid along existing road ROW's and fresh water pumped to the well. No water well will be drilled on the location.

6. Source of Construction Materials:

All caliche required for construction of the drill pad and proposed new access road (approximately 2500 cubic yards) will be obtained from a BLM approved caliche pit.

7. Methods of Handling Water Disposal:

A. Drill cuttings not retained for evaluation purposes will be disposed into the steel tanks and hauled to an approved facility.

B. Drilling fluids will be contained in steel tanks using a closed loop system.

C. Water produced from the well during completion may be disposed into a steel tank. After the well is permanently placed on production, produced water will be collected in tanks (fiberglass) until pumped to an approved disposal system; produced oil will be collected in steel tanks until sold.

D. Garbage and trash produced during drilling or completion operations will be collected in a trash bin and hauled to an approved landfill. All water and fluids will be disposed of into an approved facility. No toxic waste or hazardous chemicals will be produced by this operation.

E. After the rig is moved out and the well is either completed or abandoned, all waste materials will be cleaned up within 30 days. In the event of a dry hole only a dry hole marker will remain.

8. Ancillary Facilities:

No airstrip, campsite or other facilities will be built as a result of the operation on this well.

9. Well Site Layout:

A. The drill pad layout, with elevations staked by John West Engineering, is shown in Exhibit #6. Dimensions of the pad are shown. Topsoil, if available, will be stockpiled per BLM specifications. Because the pad is almost level no major cuts will be required.

B. Diagram below shows the proposed orientation of the location. No permanent living facilities are planned, but a temporary foreman/toolpusher's trailer will be on location during the drilling operations.

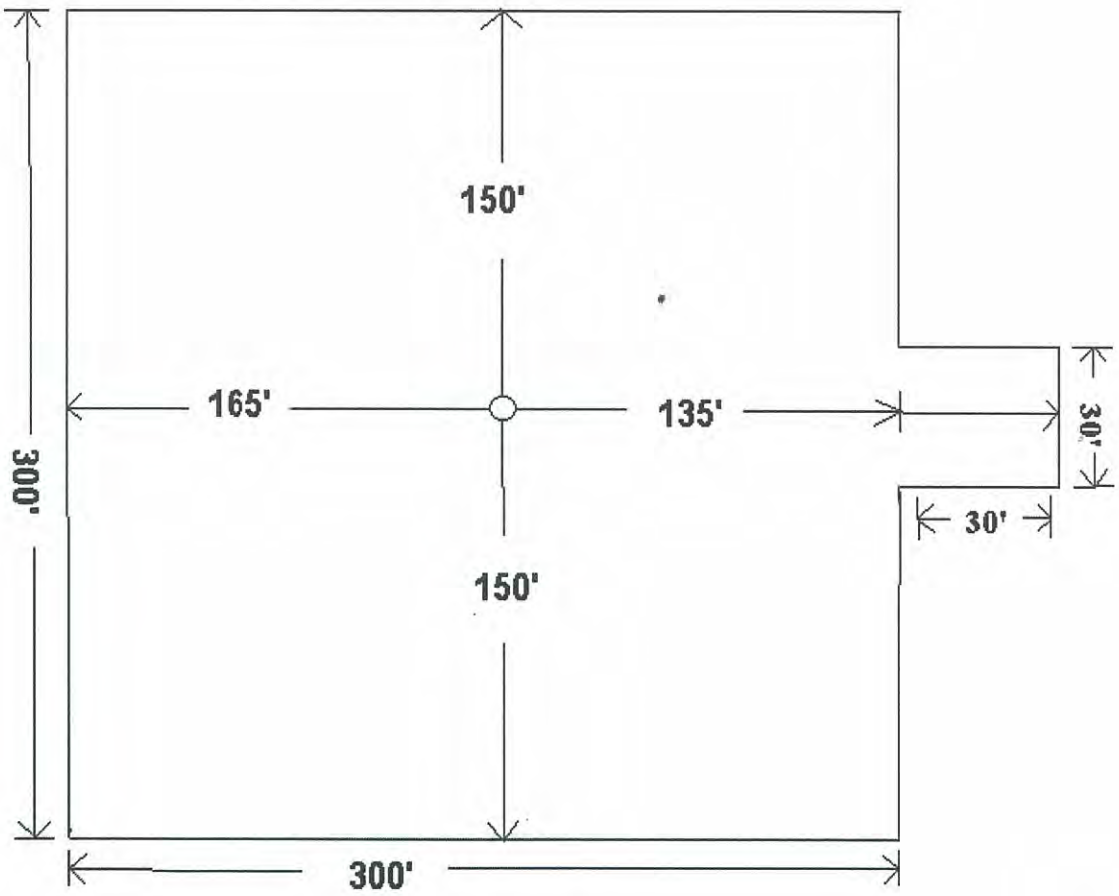


Exhibit #6

10. Plans for Restoration of the Surface:

A. Upon completion of the proposed operations, if the well is completed, any additional caliche required for facilities will be obtained from a BLM approved caliche pit.

B. In the event of a dry hole. Topsoil removed from the drill site will be used to recontour the area to its original natural level and reseeded as per BLM specifications.

11. Surface Ownership:

The well site and lease is located entirely on Federal surface. We have notified the surface lessee of the impending operations. According to BLM the leasee is Bogel Limited Company, Lewis Derrick, P.O. Box 460 Dexter, NM 88230.

12. Other Information:

A. The area around the well site is grassland and the topsoil is sandy. The vegetation is native scrub grass with sagebrush.

B. There is no permanent or live water in the immediate area.

C. A Cultural Resources Examination has been requested and will be forwarded to your office in the near future.

13. Lessee's and Operator's Representative:

The Mack Energy Corporation representative responsible for assuring compliance with the surface use plan is as follows:

Jerry W. Sherrell
Mack Energy Corporation
P.O. Box 960
Artesia, NM 88211-0960
Phone (575) 748-1288 (office)

Mack Energy Corporation
Onshore Order #6
Hydrogen Sulfide Drilling Operation Plan

I. HYDROGEN SULFIDE TRAINING

All personnel, whether regularly assigned, contracted, or employed on an unscheduled basis, will receive training from a qualified instructor in the following areas prior to commencing drilling operations on this well:

1. The hazards an characteristics of hydrogen sulfide (H2S)
2. The proper use and maintenance of personal protective equipment and life support systems.
3. The proper use of H2S detectors alarms warning systems, briefing areas, evacuation procedures, and prevailing winds.
4. The proper techniques for first aid and rescue procedures.

In addition, supervisory personnel will be trained in the following areas:

1. The effects of H2S on metal components. If high tensile tubular are to be used, personnel well be trained in their special maintenance requirements.
2. Corrective action and shut-in procedures when drilling or reworking a well and blowout prevention and well control procedures.
3. The contents and requirements of the H2S Drilling Operations Plan and Public Protection Plan.

There will be an initial training session just prior to encountering a known or probable H2S zone (within 3 days or 500 feet) and weekly H2S and well control drills for all personnel in each crew. The initial training session shall include a review of the site specific H2S Drilling Operations Plan and the Public Protection Plan. **The concentrations of H2S of wells in this area from surface to TD are low enough that a contingency plan is not required.**

II. H2S SAFETY EQUIPMENT AND SYSTEMS

Note: All H2S safety equipment and systems will be installed, tested, and operational when drilling reaches a depth of 500 feet above, or three days prior to penetrating the first zone containing or reasonable expected to contain H2S.

1. **Well Control Equipment:**

   A. Flare line.

   B. Choke manifold.

   C. Blind rams and pipe rams to accommodate all pipe sizes with properly sized closing unit.

   D. Auxiliary equipment may include if applicable: annular preventer & rotating head.

2. **Protective equipment for essential personnel:**

   A. Mark II Survive air 30-minute units located in the doghouse and at briefing areas, as indicated on well site diagram.

3. **H2S detection and monitoring equipment:**

   A. 1 portable H2S monitors positioned on location for best coverage and response. These units have warning lights and audible sirens when H2S levels of 20 PPM are reached.

4. **Visual warning systems:**

   A. Wind direction indicators as shown on well site diagram (Exhibit #8).

   B. Caution/Danger signs (Exhibit #7) shall be posted on roads providing direct access to location. Signs will be painted a high visibility yellow with black lettering of sufficient size to be readable at a reasonable distance from the immediate location. Bilingual signs will be used, when appropriate. See example attached.

5. **Mud program:**

   A. The mud program has been designed to minimize the volume of H2S circulated to surface. Proper mud weight, safe drilling practices and the use of H2S scavengers will minimize hazards when penetrating H2S bearing zones.

6. **Metallurgy:**

   A. All drill strings, casings, tubing, wellhead, blowout preventer, drilling spool, kill lines, choke manifold and lines, and valves shall be suitable for H2S service.

   B. All elastomers used for packing and seals shall be H2S trim.

7. **Communication:**

   A. Radio communications in company vehicles including cellular telephone and 2-way radio.

   B. Land line (telephone) communication at Office.

8. **Well testing:**

   A. Drill stem testing will be performed with a minimum number of personnel in the immediate vicinity, which are necessary to safely and adequately conduct the test. The drill stem testing will be conducted during daylight hours and formation fluids will not be flowed to the surface. All drill-stem-testing operations conducted in an H2S environment will use the closed chamber method of testing.

   B. There will be no drill stem testing.

EXHIBIT #7

WARNING

YOU ARE ENTERING AN H2S

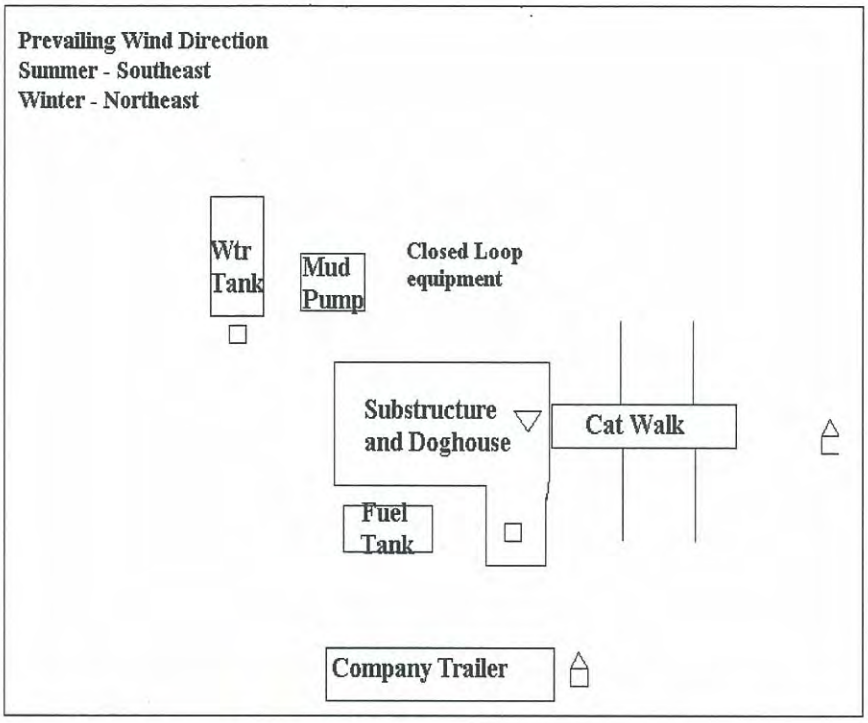
AUTHORIZED PERSONNEL ONLY

1. BEARDS OR CONTACT LENSES NOT ALLOWED
2. HARD HATS REQUIRED
3. SMOKING IN DESIGNATED AREAS ONLY
4. BE WIND CONSCIOUS AT ALL TIMES
5. CHECK WITH MACK ENERGY FOREMAN AT OFFICE

MACK ENERGY CORPORATION

1-575-748-1288

DRILLING LOCATION H2S SAFTY EQUIPMENT
Exhibit # 8



H2S Monitors with alarms at the bell nipple

Wind Direction Indicators

Safe Briefing areas with caution signs and breathing equipment min 150 feet from

Mack Energy Corporation Call List, Chaves County

Artesia (575)	Cellular	Office	Home
Jim Krogman	746-5515	748-1288	746-2674
Lonnie Archer	746-7889	748-1288	365-2998
Donald Archer	748-7875	748-1288	748-2287
Chris Davis	746-7132	748-1288	
Kevin Garrett	746-7423	748-1288	

Agency Call List (575)

Roswell

State Police.....622-7200
City Police.....624-6770
Sheriff's Office.....624-7590
Ambulance.....624-7590
Fire Department.....624-7590
LEPC (Local Emergency Planning Committee.....624-6770
NMOCD.....748-1283
Bureau of Land Management.....627-0272

Emergency Services

Boots & Coots IWC.....1-800-256-9688 or (281)931-8884
Cudd pressure Control.....(915)699-0139 or (915)563-3356
Halliburton.....746-2757
B. J. Services.....746-3569

Flight For Life-Lubbock, TX.....(806)743-9911
Aerocare-Lubbock, TX.....(806)747-8923
Med Flight Air Amb-Albuquerque, NM.....(505)842-4433
Lifeguard Air Med Svc. Albuquerque, NM.....(505)272-3115

Attachment to Exhibit #9
NOTES REGARDING THE BLOWOUT PREVENTERS
Monopoly Federal #1
Chaves County, New Mexico

1. Drilling nipple to be so constructed that it can be removed without use of a welder through rotary table opening, with minimum I.D. equal to preventer bore.

2. Wear ring to be properly installed in head.

3. Blow out preventer and all fittings must be in good condition, 2000 psi WP minimum.

4. All fittings to be flanged.

5. Safety valve must be available on rig floor at all times with proper connections, valve to be full 2000 psi WP minimum.

6. All choke and fill lines to be securely anchored especially ends of choke lines.

7. Equipment through which bit must pass shall be at least as large as the diameter of the casing being drilled through.

8. Kelly cock on Kelly.

9. Extension wrenches and hands wheels to be properly installed.

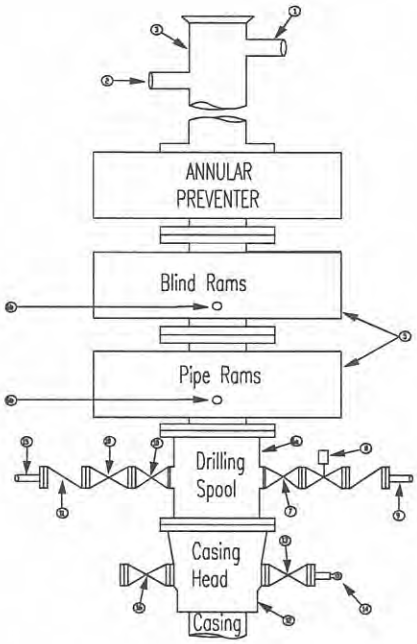
10. Blow out preventer control to be located as close to driller's position as feasible.

11. Blow out preventer closing equipment to include minimum 40-gallon accumulator, two independent sources of pump power on each closing unit installation all API specifications.

Mack Energy Corporation
Minimum Blowout Preventer Requirements
3000 psi Working Pressure
3 MWP
EXHIBIT #10

Stack Requirements

NO.	Items	Min. I.D.	Min. Nominal
1	Flowline		2"
2	Fill up line		2"
3	Drilling nipple		
4	Annular preventer		
5	Two single or one dual hydraulically operated rams		
6a	Drilling spool with 2" min. kill line and 3" min choke line outlets		2" Choke
6b	2" min. kill line and 3" min. choke line outlets in ram. (Alternate to 6a above)		
7	Valve Gate Plug	3 1/8	
8	Gate valve-power operated	3 1/8	
9	Line to choke manifold		3"
10	Valve Gate Plug	2 1/16	
11	Check valve	2 1/16	
12	Casing head		
13	Valve Gate Plug	1 13/16	
14	Pressure gauge with needle valve		
15	Kill line to rig mud pump manifold		2"



OPTIONAL

16	Flanged Valve	1 13/16	

CONTRACTOR'S OPTION TO FURNISH:

1. All equipment and connections above bradenhead or casinghead. Working pressure of preventers to be 2000 psi minimum.
2. Automatic accumulator (80 gallons, minimum) capable of closing BOP in 30 seconds or less and, holding them closed against full rated working pressure.
3. BOP controls, to be located near drillers' position.
4. Kelly equipped with Kelly cock.
5. Inside blowout preventer or its equivalent on derrick floor at all times with proper threads to fit pipe being used.
6. Kelly saver-sub equipped with rubber casing protector at all times.
7. Plug type blowout preventer tester.
8. Extra set pipe rams to fit drill pipe in use on location at all times.
9. Type RX ring gaskets in place of Type R.

MEC TO FURNISH:

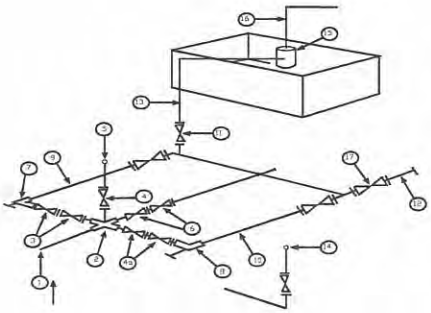
1. Bradenhead or casing head and side valves.
2. Wear bushing. If required.

GENERAL NOTES:

1. Deviations from this drawing may be made only with the express permission of MEC's Drilling Manager.
2. All connections, valves, fittings, piping, etc., subject to well or pump pressure must be flanged (suitable clamp connections acceptable) and have minimum working pressure equal to rated working pressure of preventers up through choke valves must be full opening and suitable for high pressure mud service.
3. Controls to be of standard design and each marked, showing opening and closing position
4. Chokes will be positioned so as not to hamper or delay changing of choke beans. Replaceable parts for adjustable choke, or bean sizes, retainers, and choke wrenches to be conveniently located for immediate use.
5. All valves to be equipped with hand-wheels or handles ready for immediate use.
6. Choke lines must be suitably anchored.
7. Handwheels and extensions to be connected and ready for use.
8. Valves adjacent to drilling spool to be kept open. Use outside valves except for emergency.
9. All seamless steel control piping (2000 psi working pressure) to have flexible joints to avoid stress. Hoses will be permitted.
10. Casinghead connections shall not be used except in case of emergency.
11. Does not use kill line for routine fill up operations.

Mack Energy Corporation

Exhibit #11
MIMIMUM CHOKE MANIFOLD
3,000, 5,000, and 10,000 PSI Working Pressure
3M will be used
3 MWP - 5 MWP - 10 MWP



Mud Pit

Reserve Pit

*** Location of separator optional**

Below Substructure

Mimimum requirements

		3,000 MWP			5,000 MWP			10,000 MWP		
No.		**I.D.**	**NOMINAL**	**Rating**	**I.D.**	**Nominal**	**Rating**	**I.D.**	**Nominal**	**Rating**
1	Line from drilling Spool		3"	3,000		3"	5,000		3"	10,000
2	Cross 3" x 3" x 3" x 2"			3,000			5,000			
2	Cross 3" x 3" x 3" x 2"									10,000
3	Valve Gate Plug	3 1/8		3,000	3 1/8		5,000	3 1/8		10,000
4	Valve Gate Plug	1 13/16		3,000	1 13/16		5,000	1 13/16		10,000
4a	Valves (1)	2 1/16		3,000	2 1/16		5,000	2 1/16		10,000
5	Pressure Gauge			3,000			5,000			10,000
6	Valve Gate Plug	3 1/8		3,000	3 1/8		5,000	3 1/8		10,000
7	Adjustable Choke (3)	2"		3,000	2"		5,000	2"		10,000
8	Adjustable Choke	1"		3,000	1"		5,000	2"		10,000
9	Line		3"	3,000		3"	5,000		3"	10,000
10	Line		2"	3,000		2"	5,000		2"	10,000
11	Valve Gate Plug	3 1/8		3,000	3 1/8		5,000	3 1/8		10,000
12	Line		3"	1,000		3"	1,000		3"	2,000
13	Line		3"	1,000		3"	1,000		3"	2,000
14	Remote reading compound Standpipe pressure quage			3,000			5,000			10,000
15	Gas Separator		2' x5'			2' x5'			2' x5'	
16	Line		4"	1,000		4"	1,000		4"	2,000
17	Valve Gate Plug	3 1/8		3,000	3 1/8		5,000	3 1/8		10,000

(1) Only one required in Class 3M
(2) Gate valves only shall be used for Class 10 M
(3) Remote operated hydraulic choke required on 5,000 psi and 10,000 psi for drilling.

EQUIPMENT SPECIFICATIONS AND INSTALLATION INSTRUCTION

1. All connections in choke manifold shall be welded, studded, flanged or Cameron clamp of comparable rating.
2. All flanges shall be API 6B or 6BX and ring gaskets shall be API RX or BX. Use only BX for 10 MWP.
3. All lines shall be securely anchored.
4. Chokes shall be equipped with tungsten carbide seats and needles, and replacements shall be available.
5. Choke manifold pressure and standpipe pressure gauges shall be available at the choke manifold to assist in regulating chokes. As an alternate with automatic chokes, a choke manifold pressure gauge shall be located on the rig floor in conjunction with the standpipe pressure gauge.
6. Line from drilling spool to choke manifold should bee as straight as possible. Lines downstream from chokes shall make turns by large bends or 90 degree bends using bull plugged tees.

CERTIFICATION

I hereby certify that I, or person under my direct supervision, have inspected the proposed drill site and access route; that I am familiar with the conditions which currently exist; that the statements made in this APD are to the best of my knowledge, true and correct; and the work associated with the operations proposed herein will be performed by Mack Energy Corporation and its contractors and subcontractors in conformity with this plan and the terms and conditions which it is approved. This statement is subject to the provisions of 18 U.S.C. 1001 for the filing of a false statement.

Date: 3-17-09 Signed: Jerry W. Sherrell

Jerry W. Sherrell

United States Department of the Interior
Bureau of Land Management
Roswell Field Office

Re-entry

Refer To: 3160-3

March 20, 2009

To: AFM, Lands & Minerals, RFO

From: Geologist, RFO

Subject: Geologic Review of Application for Permit to Drill

Operator: Mack Energy Corporation

Well Name and Number: Monoply Federal No. 1

Location: 2428' FSL & 1154' FEL

Section: 6, T. 13 S., R. 29 E., NMPM

County: Chaves State: NM

Lease No.: NM-120891 Date APD Rec'd: 3/19/08

1. Surface Elevation **X** Surface Geology **X**

2. Geologic Marker Tops (from reports on surrounding wells):

Geologic Marker	Depth
Rustler Anhy.	195'
T/Salt	248'
B/Salt	610'
Yates	755'
Queen	1485'
Grayburg	1800'
San Andres	2070'

Marker tops taken from the North King Camp Unit No. 3 located in the SW¼NE¼, Sec. 20, T. 13 S., R. 29 E., NMPM.

Geologic Marker	Depth
Yates	710'
7 Rvrs.	834'
Queen	1401'
San Andres	1961'
Glorieta	3362'
Tubb	4800'
Abo	5592'
Wolfcamp	6625'
Strawn	7480'
Atoka	7620'
Chester Ls.	8478'
Miss	8574'
Woodford	9140'
Sil-Dev	9163'

Marker tops taken from the Seagull Federal No. 1 well located in theNEW¼SE¼, sec. 6, T. 13 S., R. 29 E., NMPM

3. Fresh Water Information: Useable water is anticipated to be encountered between 100 to 250'feet. Useable water is found in the Triassic age rocks and the Artesia Group. Therefore the surface casing should be set at 250 to 275 ft.

Does surface casing protect the useable water? Re-entry probably set deep enough.

Controlled Water Basin: Roswell

4. Geologic Hazards? Yes

H2S X Karst **X** Abnormal Pressures X Other X

Remarks: Although no H2S has been reported in the area, it is always a potential hazard. Possible high pressure water zone in the Grayburg. Possible lost circulation in the Grayburg and San Andres Formations. There are some indications of Karst type structures (sinkholes and solution cavities) reflected on the topographic map.

5. Other Mineral Deposits: Possible salt strings which should not cause undo problems

6. References:

-New Mexico State Engineer's Water Well Listings;
-Eddy County H2S List;
-New Mexico State Engineer's water well listings

7. No active mining claims are located in this vicinity.

Geologist Signature: /s/ J. S. Simitz Date: 3/20/09

Bureau of Land Management, Roswell Field Office
Environmental Assessment Checklist, DOI-BLM-NM-P010-2009-94

Resources	Not Present on Site	No Impacts	May Be Impacts	Mitigation Included	BLM Reviewer	Date
Air Quality			X	X	/s/ Michael McGee Hydrologist	4/28/09
Soil			X	X		
Watershed Hydrology			X	X		
Floodplains	X					
Water Quality - Surface			X	X		
Water Quality - Ground		X			/s/ John S. Simitz Geologist	4/8/09
Cultural Resources	X				/s/Rebecca L. Hill 09-R-072A Archaeologist	22May2009
Native American Religious Concerns	X					
Paleontology	X					
Areas of Critical Environmental Concern	X				/s/J H Parman Plan & Environ. Coord.	3/31/09
Farmlands, Prime or Unique		X			Realty /s/Sanderford	7/29/09
Rights-of-Way		X				
Invasive, Non-native Species			X	X	*/s/ Joseph M. Navarro* Range Mgmt. Spec.	3/27/09
Vegetation			X	X		
Livestock Grazing			X	X		
Wastes, Hazardous or Solid		X			Richard G. Hill Environ. Prot. Specialist	3/23/09
Threatened or Endangered Species	X				/s/ Randy Howard Biologist	4/8/09
Special Status Species			X	X		
Wildlife			X	X		
Wetlands/Riparian Zones	X					
Wild and Scenic Rivers	X				/s/ Bill Murry Outdoor Rec. Planer	4/9/09
Wilderness	X					
Recreation		X				
Visual Resources		X				
Cave/Karst		X				
Environmental Justice		X			Richard G. Hill Environ. Prot. Specialist	3/23/09
Public Health and Safety		X				
Solid Mineral Resources		X			/s/ Jerry Dutchover Geologist	06/10/09
Fluid Mineral Resources		X			/s/ John S. Simitz Geologist	4/8/09

Department of the Interior
Bureau of Land Management

Roswell Field Office
2909 W. Second Street
Roswell, New Mexico 88201

Project: Monopoly Federal #1
Location: Section 6, T. 13 S., R. 29 E.
Applicant: Mack Energy Corporation
Roswell Field Office: (505) 627-0272

EA Log Number: DOI-BLM-NM-P010-2009-94
Lease Number: NM-120891
Rights-of-Way Number: NM-122268
File Code: 3160

Finding of No Significant Impact

Based on the analysis of potential environmental impacts contained in the attached environmental assessment, I have determined the proposed action and the right-of-way is not expected to have significant impacts on the environment and that preparation of an Environmental Impact Statement is not warranted.

Decision Record

It is my decision to implement the Proposed Action as described within the Environmental Assessment DOI-BLM-NM-P010-2009-94; to approve the Application for Permit to Drill authorizing Mack Energy Corporation to drill and complete; the Monopoly Federal #1 oil well located 2428' FSL & 1154' FEL, Section 6, T. 13 S., R. 29 E., Chaves County, New Mexico. Road Right-of-Way NM-122268 is approved for a distance of approximately 7.42-miles and a width of 30-feet, aggregating 27.00 acres.

Rational: The Bureau of Land Management staff has reviewed the environmental assessment and identified site-specific mitigation measures to avoid or minimize surface impacts resulting from the construction of these projects. The well pad and access road will remain as long term impacts. The cumulative impacts to the environment from existing and new development have been identified.

The proposed actions are in conformance with the 1997 Roswell Resource Management Plan 1997, as amended, and conforms to the land-use planning terms and conditions required under 43 CFR 1610.5. These actions do not conflict with existing Chaves County land-use planning or zoning.

Administrative Review and Appeal: Under BLM regulations, this Decision Record (DR) is subject to administrative review in accordance with 43 CFR 3165. Any request for administrative review of this DR must include information required under 43 CFR 3165.3(b) (State Director Review), including all supporting documentation. Such a request must be filed in

writing with the State Director, Bureau of Land Management, 1474 Rodeo Road, Santa Fe, NM 87505, no later than 20 business days after this DR is received or considered to have been received.

Any party who is adversely affected by the State Director's decision may appeal that decision to the Interior Board of Land Appeals, as provided in 43 CFR 3165.4.

Prepared by:

Date 6-AUG-2009

Brian A. Novosak,
Natural Resource Specialist

Prepared by:

Date 8-6-09

Scott Sanderford
Realty Specialist

Reviewed by:

Date 8/11/09

J. H. Parman
Planning Coordinator

Approved by:

Date August 11, 2009

Angel Mayes,
Assistant Field Manager,
Lands and Minerals

BUREAU OF LAND MANAGEMENT
ROSWELL FIELD OFFICE
ENVIRONMENTAL ASSESSMENT # DOI-BLM-NM-P010-2009-94 for
Monopoly Federal #1

1.0 Introduction

Mack Energy Corporation has filed an Application for Permit to Drill on March 19, 2009 for the Monopoly Federal #1 oil well. The proposed action includes a right-of-way (ROW) approximately 7.42-miles long. The proposed Federal Land Policy and Management Act (FLPMA) Title V ROW, NM-122268, would provide and off-lease access road to the Monopoly Federal #1. As shown on the project map, the ROW will be ±7.42-miles long and 30-feet wide, aggregating approximately 27 .00 acres. The ROW begins at the north end of Teresa road and trends northwest to the well. Only that portion of the proposed ROW within section 5 is new disturbance. The remainder of the proposed ROW falls wholly within existing ROW NM-90313.

This site-specific analysis tiers into and incorporates by reference the information and analysis contained in the Roswell Resource Area Resource Management Plan (RMP), as amended. This document is available for review at the Roswell Office. This project EA addresses site-specific resources and/or impacts that are not specifically covered within the RMP, as required by the National Environmental Policy Act of 1969 (NEPA), as amended (Public Law 91-90, 42 U.S.C. 4321 et seq.).

1.1 Purpose and Need

The purpose is to process an Application for Permit to Drill (APD), and a FLPMA Title V ROW application for an off-lease access road. The need for this action is found in BLM policy which is to make mineral resources available for disposal and to encourage development of mineral resources to meet national, regional, and local needs. The Mineral Leasing Act of 1920 (MLA), as amended [30 USC 181 et seq.], authorizes the BLM to issue oil and gas leases for the exploration of oil and gas, and permit the development of those leases. This environmental assessment will analyze the impacts of the proposed action and the alternatives.

An approved APD and associated ROW, issued by the BLM, would authorize the applicant to construct a road, pad and drill the well.

1.2 Conformance with Applicable Land Use Plan and Other Environmental Assessments

Pursuant to 40 Code of Federal Regulations (CFR) 1508.28 and 1502.21, this site-specific EA tiers to and incorporates by reference the information and analysis contained in the 1997 Roswell RMP, as amended. The RMP is available for review at the Roswell Field Office, Roswell, New Mexico. This EA addresses the resources and impacts on a site-specific basis as required by the National Environmental Policy Act (NEPA) of 1969, as amended (Public Law 91-90, 42 USC

4321 et seq.) and conforms to the Roswell Resource Management Plan October 1997 as amended, Mineral Leasing Act of 1920 (MLA), as amended [30 USC 181 et seq.], and Title V of the Federal Land Policy and Management Act of October 21, 1976 (90 Stat. 2776; 43 U.S.C. 1761).

1.3 Relationships to Statutes, Regulations, or Other Plans

This EA also conforms to the requirements of the Clean Water Act (33 USC 1251 et seq.), National Historic Preservation Act (16 USC 470 et seq.), the Endangered Species Act, as amended (16 USC 1531 et seq.), the Clean Air Act (42 USC 7401 et seq.), and the Energy Policy Act of 2005 (Public Law 109-58, 119 STAT. 594).

Roswell Field Office staff reviewed the proposed action and determined it would be in compliance with threatened and endangered species management guidelines outlined in Biological Assessments Cons. #2-22-96-F-102, Cons. #22420-2006-I-0144, and Cons. #22420-2007-TA-0033. No further consultation with the U.S. Fish and Wildlife Service is required. .

Compliance with Section 106 responsibilities of the National Historic Preservation Act are adhered to by following the BLM – New Mexico State Historic Preservation Officer protocol agreement, which is authorized by the National Programmatic Agreement between the *BLM*, the *Advisory Council on Historic Preservation*, and the *National Conference of State Historic Preservation Officers,* and other applicable BLM handbooks.

Additionally, the Operator is required to:

- Comply with all applicable Federal, State and local laws and regulations.
- A U.S. Army Corps of Engineers Section 404 permit for any discharge of dredge and fill materials may also be required. A New Mexico Surface Water Quality Bureau 401 certification may also be required under a U.S. Army COE Section 404 permit. Operators are required to obtain all necessary permits and approvals prior to any disturbance activities.
- Obtain the necessary permits for the drilling, completion and production of the well, including water rights appropriations, the installation of water management facilities, water discharge permits, and relevant air quality permits.
- Certify that a Surface Use Agreement has been reached with private landowners where required.

The proposed project would not be in conflict with any State, local, or county plans.

2.0 Alternatives Including the Proposed Action

2.1 Alternative A – No Action

The BLM NEPA Handbook (H-1790-1) and the National Environmental Policy Act and associated Code of Federal Regulations state that for EAs on externally initiated proposed actions, the No Action Alternative means that the proposed activity would not take place. The No Action Alternative is presented for baseline analysis of resource impacts, and if selected, would deny the approval of the proposed application. Current land and resource uses would continue to occur in the proposed project area. No mitigation measures would be required.

2.2 Alternative B – Proposed Action

On March 19, 2009, Mack Energy Corporation submitted an Application for Permit to Drill, to re-enter an existing well in Sec. 6, T. 13 S., R. 29 E., NMPM, Chaves County, New Mexico. The Monopoly Federal #1 was formerly described as the Seagull Federal #1.

The location for the proposed re-entry:

Surface Location: 2428′ FSL and 1154′ FEL,
Sec. 6, T. 13 S., R. 29 E., NMPM, Chaves County, New Mexico

WELL PAD: The proposed well pad would be 300 feet long by 300 feet wide with 30 foot by 30 foot stinger. No reserve pit will be constructed; the well will be drilled with a closed loop system. The well pad will be located within a 600 ft by 600 ft area that has been surveyed for the presence of cultural resources. A rotary drilling rig would be used to drill the well to a depth of 9,500'.

Mack Energy has applied for an off-lease road ROW, NM-122268, to access the Monopoly Federal #1. As shown on the project map, the ROW will be ±7.42-miles long and 30-feet wide, aggregating approximately 27 .00 acres. The road will have a maximum width of 14' and will be crowned and ditched. Ditches will be at 3:1 slope and 4 feet wide. Water will be diverted where necessary to avoid ponding, prevent erosion, maintain good drainage, and to be consistent with local drainage patterns. The average grade will be less than 1%.

The ROW begins at the north end of Teresa road and trends northwest to the well. Only that portion of the proposed ROW within section 5 is new disturbance. The remainder of the proposed ROW falls wholly within existing ROW NM-90313. ROWs for related infrastructure, power-lines, pipelines, etc, applied for within the proposed 30-foot wide alignment, may be granted without further analysis.

The location for the proposed off-lease road:

New Mexico Principle Meridian, Chaves County, New Mexico,
T. 13 S., R. 29 E.,
Sec. 5, S½SE¼SE¼;
Sec. 8, E½SE¼, and E½SE¼NE¼;
Sec. 9, W½SW¼, and W½SW¼NW¼;
Sec. 17, N½NE¼, SW¼NE¼, SE¼SE¼NW¼, E½SW¼, and SW¼SW¼SE¼;
Sec. 20, W½NE¼, and NE¼NE¼NW¼;
Sec. 21, N½;

Sec. 22, E½SW¼, and S½NW¼;
Sec. 27, W½;
Sec. 34, W½.

T. 14 S., R. 29 E.,
Sec. 3, Lot 4;
Sec. 4, Lot 1, and E½SE¼NE¼.

Applicant: Mack Energy Corporation
P.O. Box 960
Artesia, New Mexico 88211-0960

Surface Owner: Private Surface and Bureau of Land Management Minerals

2.3 Alternative C – Preferred Alternative

No alternatives to the proposed action (Alternative B – Proposed Action) were identified as the result of the onsite inspection conducted on March 23, 2009.

3.0 Description of Affected Environment

This section describes the environment that would be affected by implementation of the alternatives described in Section 2. Aspects of the affected environment described in this section focus on the relevant major resources or issues. Certain critical environmental components require analysis under BLM policy.

Only the aspects of the affected environment that are potentially impacted are described. The following elements are not present: Areas of Critical Environmental Concern (ACECs), Prime or Unique Farmlands, Floodplains, Paleontology, Wild and Scenic Rivers, Wilderness or Wilderness Study Areas (WSA), and Wild Horses and Burros.

The proposed well is located in Chaves County, New Mexico and described in the 1997 Roswell RMP Record of Decision. The proposed well and the associated infrastructure fall within the reasonable foreseeable development scenario. Additional general information on air quality in these areas is contained in Chapter 3 of the Roswell Draft RMP/Environmental Impact Statement.

In addition to the air quality information in the RMPs cited above, new information about Greenhouse gases (GHGs) and their effects on national and global climate conditions has emerged since the RMPs were prepared. On-going scientific research has identified the potential impacts of GHG emissions such as carbon dioxide (CO_2) methane (CH_4); nitrous oxide (NO); water vapor; and several trace gasses on global climate. Through complex interactions on a global scale, GHG emissions cause a net warming effect of the atmosphere, primarily by decreasing the amount of heat energy radiated by the earth back into space. Although GHG levels have varied for millennia (along with corresponding variations in climatic conditions), industrialization and burning of fossil carbon sources have caused GHG concentrations to

increase measurably, and may contribute to overall climatic changes, typically referred to as global warming.

This EA incorporates an analysis of the contributions of the proposed action to GHG emissions and a general discussion of potential impacts to climate.

3.1 Air Resources

Air quality and climate are the components of air resources, which include applications, activities, and management of the air resource. Therefore, the BLM must consider and analyze the potential effects of BLM and BLM-authorized activities on air resources as part of the planning and decision making process.

The Environmental Protection Agency (EPA) has the primary responsibility for regulating air quality, including seven nationally regulated ambient air pollutants. Regulation of air quality is also delegated to some states. Air quality is determined by atmospheric pollutants and chemistry, dispersion meteorology and terrain, and also includes applications of noise, smoke management, and visibility. Climate is the composite of generally prevailing weather conditions of a particular region throughout the year, averaged over a series of years. GHG's and the potential effects of GHG emissions on climate are not regulated by the EPA, however climate has the potential to influence renewable and non-renewable resource management.

3.1.1 Air Quality

The area of the proposed action is considered a Class II air quality area. A Class II area allows moderate amounts air quality degradation. The primary sources of air pollution are dust from blowing wind on disturbed or exposed soil and exhaust emissions from motorized equipment.

Air quality in the area near proposed well is generally good and is not located in any of the areas designated by the Environmental Protection Agency as "non-attainment areas" for any listed pollutants regulated by the Clean Air Act.

Greenhouse gases, including carbon dioxide (CO2) and methane (CH4), and the potential effects of GHG emissions on climate, are not regulated by the EPA under the Clean Air Act. However, climate has the potential to influence renewable and non-renewable resource management. The EPA's Inventory of US Greenhouse Gas Emissions and Sinks found that in 2006, total US GHG emissions were over 6 billion metric tons and that total US GHG emissions have increased by 14.1% from 1990 to 2006. The report also noted that GHG emissions fell by 1.5% from 2005 to 2006. This decrease was, in part, attributed to the increased use of natural gas and other alternatives to burning coal in electric power generation.

The levels of these GHGs are expected to continue increasing. The rate of increase is expected to slow as greater awareness of the potential environmental and economic costs associated with increased levels of GHG's result in behavioral and industrial adaptations.

3.1.2 Climate

Global mean surface temperatures have increased nearly 1.0°C (1.8°F) from 1890 to 2006 (Goddard Institute for Space Studies, 2007). However, observations and predictive models indicate that average temperature changes are likely to be greater in the Northern Hemisphere. Without additional meteorological monitoring systems, it is difficult to determine the spatial and temporal variability and change of climatic conditions, but increasing concentrations of GHGs are likely to accelerate the rate of climate change.

In 2001, the Intergovernmental Panel on Climate Change (IPCC) predicted that by the year 2100, global average surface temperatures would increase 1.4 to 5.8°C (2.5 to 10.4°F) above 1990 levels. The National Academy of Sciences (2006) supports these predictions, but has acknowledged that there are uncertainties regarding how climate change may affect different regions. Computer model predictions indicate that increases in temperature will not be equally distributed, but are likely to be accentuated at higher latitudes. Warming during the winter months is expected to be greater than during the summer, and increases in daily minimum temperatures is more likely than increases in daily maximum temperatures.

A 2007 US Government Accountability Office (GAO) Report on Climate Change found that, "federal land and water resources are vulnerable to a wide range of effects from climate change, some of which are already occurring. These effects include, among others: 1) physical effects such as droughts, floods, glacial melting, and sea level rise; 2) biological effects, such as increases in insect and disease infestations, shifts in species distribution, and changes in the timing of natural events; and 3) economic and social effects, such as adverse impacts on tourism, infrastructure, fishing, and other resource uses." It is not, however, possible to predict with any certainty regional or site specific effects on climate relative to the proposed lease parcels and subsequent actions.

In New Mexico, a recent study indicated that the mean annual temperatures have exceeded the global averages by nearly 50% since the 1970's (Enquist and Gori). Similar to trends in national data, increases in mean winter temperatures in the southwest have contributed to this rise. When compared to baseline information, periods between 1991 and 2005 show temperature increases in over 95% of the geographical area of New Mexico. Warming is greatest in the northwestern, central, and southwestern parts of the state.

3.2 Cultural Resources

This project falls within the Southeastern New Mexico Archaeological Region. This region contains the following cultural/temporal periods: Paleoindian (ca. 12,000-8,000 B.C.), Archaic (ca. 8000 B.C. –A.D. 950), Ceramic (ca. A.D. 600-1540) Protohistoric and Spanish Colonial (ca. A.D. 1400-1821), and Mexican and American Historical (ca. A.D. 1822 to early 20th century). Sites representing any or all of these periods are known to occur within the region. A more complete discussion can be found in *Living on the Land: 11,000 Years of Human Adaptation in Southeastern New Mexico An Overview of Cultural Resources in the Roswell District, Bureau of Land Management* published in 1989 by the U.S. Department of the Interior, Bureau of Land Management. A cultural resource inventory shall be conducted of the area of effect for the proposed project prior to any ground disturbing activities.

3.3 Native American Religious Concerns

A review of existing information indicates the proposed action is outside any known Traditional Cultural Property.

3.4 Environmental Justice

Executive Order 12898 requires Federal agencies to assess projects to ensure there is no disproportionately high or adverse environmental, health, or safety impacts on minority and low-income populations.

3.5 Invasive, Non-native Species

There are no known populations of invasive or noxious weed species on the proposed access road and well pad.

Infestations of noxious weeds can have a disastrous impact on biodiversity and natural ecosystems. Noxious weeds affect native plant species by out-competing native vegetation for light, water and soil nutrients. Noxious weeds cause estimated losses to producers $2 to $3 billion annually. These losses are attributed to: (1) Decreased quality of agricultural products due to high levels of competition from noxious weeds; (2) decreased quantity of agricultural products due to noxious weed infestations; and (3) costs to control and/or prevent the noxious weeds.

Further, noxious weeds can negatively affect livestock and dairy producers by making forage either unpalatable or toxic to livestock, thus decreasing livestock productivity and potentially increasing producers' feed and animal health care costs. Increased costs to operators are eventually borne by consumers.

Noxious weeds also affect recreational uses, and reduce realty values of both the directly influenced and adjacent properties.

Recent federal legislation has been enacted requiring state and county agencies to implement noxious weed control programs. Monies would be made available for these activities from the federal government, generated from the federal tax base. Therefore, all citizens and taxpayers of the United States are directly affected when noxious weed control prevention is not exercised.

3.6 Wildlife

The vegetation found at this site provides habitat to a large range of wildlife species. Some of the common mammals are mule deer, pronghorn, badger, coyote, fox, jackrabbit, cottontails, kangaroo rats, and pocket gophers. It also provides habitat for a variety of grassland and desert birds. Important passerine birds include meadowlarks, horned larks, lark buntings, Cassin's sparrows, lark sparrows, Chihuahuan ravens, and loggerhead shrikes. Other birds include scaled quail, mourning doves, roadrunners, common nighthawks, killdeer, and a variety of raptors

including red tailed and Swainson's hawks, northern harriers, great horned owls, and burrowing owls. It also provides habitat to a large variety of common lizards and snakes.

3.7 Threatened or Endangered Species

There are no known threatened or endangered species of plant or animals within the project area. The list of federal threatened, endangered and candidate species reviewed for this EA can be found in Appendix 11 of the Roswell Approved RMP (AP11-2).

Under Section 7 of the Endangered Species Act of 1973 (as amended), the BLM is required to consult with the U.S. Fish and Wildlife Service on any proposed action which may affect Federal listed threatened or endangered species or species proposed for listing. RFO reviewed and determined the proposed action is in compliance with listed species management guidelines outlined in Biological Assessments Cons. #2-22-96-F-102, Cons. #22420-2006-I-0144, and Cons. #22420-2007-TA-0033. No further consultation with the Service is required.

3.8 Special Status Species

There are no known special status species in the project area.

In accordance with BLM Manual 6840, BLM manages certain sensitive species not federally listed as threatened or endangered in order to prevent or reduce the need to list them as threatened or endangered in the future. Included in this category are State listed endangered species and Federal candidate species which receive no special protections under the Endangered Species Act.

3.9 Wastes, Hazardous or Solid

The well will be drilled with a Closed Loop System and the drill hole cuttings will be properly disposed at a waste disposal site.

3.10 Water Quality

Surface:

Surface water within the area is affected by geology, precipitation, and water erosion. Factors that currently affect surface water resources include livestock grazing management, oil and gas development, recreational use and brush control treatments. No perennial surface water is found on public land in the area. Ephemeral surface water within the area may be located in tributaries, playas, alkali lakes and stock tanks.

Ground:

Groundwater within the area is affected by geology and precipitation. The groundwater in this area is primarily used for livestock with a very few used for domestic purposes. Usable water is

anticipated to be encountered between 100 to 250'feet. Useable water is found in the Triassic age rocks and the Artesia Group. Therefore the surface casing should be set at 250 to 275 ft.

3.11 Wetlands /Riparian Zones

The watershed and hydrology in the area is affected by land and water use practices. The degree to which hydrologic processes are affected by land and water use depends on location, extent, timing and the type of activity. Factors that currently cause short-lived alterations to the hydrologic regime in the area include livestock grazing management, recreational use activities, groundwater pumping and also oil and gas developments such as a well pad, permanent and temporary road, pipeline and powerline.

3.12 Mineral Resources

There are no known nearby federal sources of construction material (caliche/gravel) for surfacing the access road and well pad. Material may possibly be obtained by the operator from abandoned oil and gas pads and roads.

3.13 Soil

The Soil Survey of Chaves County, New Mexico, Southern Part (USDA Soil Conservation Service 1980) was used to describe and analyze impacts to soil from the proposed action. The soil map units represented in the project area are:

Berino-Cacique association, 0 to 3 percent slopes (Be) Runoff of the Berino soil is very slow and the hazard of water erosion is slight and the hazard of soil blowing is moderate. Runoff of the Cacique soil is slow and the hazard of water erosion is slight and the hazard of soil blowing is moderate.

3.14 Watershed – Hydrology

The watershed and hydrology in the area is affected by land and water use practices. The degree to which hydrologic processes are affected by land and water use depends on the location, extent, timing and the type of activity. Factors that currently cause short-lived alterations to the hydrologic regime in the area include livestock grazing management, recreational use activities, groundwater pumping and also oil and gas developments such as well pads, permanent roads, temporary roads, pipelines, and powerlines.

3.15 Vegetation

This lease is within the Mixed Desert Shrub community as identified in the Roswell Resource Management Plan/Environmental Impact Statement (RMP/EIS). Appendix 11 of the Draft RMP/EIS describes the Desired Plant Community (DPC) concept and identifies the components of each community. Descriptions of these communities may be found in the Roswell Resource Management Plan, Pages 2-45 to 2-49.

Other shrubs which are potentially found in either the Mixed Desert Shrub community include catclaw mimosa (*Mimosa biuncifera*), apache plume (*Fallugia paradoxia*), cholla (*Opuntia imbricata.*), sotol (*Dasylirion leiophyllum*), winterfat (*Eurotia lanata*), wolfberry (*Lycium berlandieri*), threadleaf groundsel (*Senecio longilobus*), mountain mahogany (*Cercocarpus montanus*), dalea species (*Dalea spp.*), sumac species (*Rhus spp.*), juniper (*Juniperus spp.*), oak species (*Quercus spp.*), Bigelow sagebrush (*Artemisia bigelovii*), four-wing saltbush (*Atriplex canescens*), yerba-de pasmo (*Baccharis pteronioides*), ephedra species (*Ephedra spp.*), range ratany (*Krameria glandulosa*), javelinabush (*Condalia ericoides*), mesquite *(Prosopis glandulosa)* and creosote *(Larrea tridentata).*

The Ecological Site Description for the well pads and access roads; [Sandy SD-3 (Southern Desertic Basins, Plains & Mountains)].

3.16 Livestock Grazing/Range

These proposed actions are located on BLM grazing allotment #65075 Turkey Track. Current permitted use is 4,587 AU's year long @ 52% public land for 28,623 AUM's Animal Unit Months. Cattle and horses are the class of livestock authorized.

3.17 Visual Resources

Visual Resource Management (VRM) on public land is conducted in accordance with BLM Handbook 8410 and BLM Manual 8411.

3.18 Recreation

The area around the proposed action site is primarily used by recreational visitors engaged in hunting, caving, sightseeing, driving for pleasure, off-highway vehicle use, and other recreational activities. Non-recreation visitors include oil and gas industrial workers and ranchers.

3.19 Cave/Karst

While the proposed action is located in the *Medium Potential Karst Area*, no surface cave/karst features were observed in the immediate vicinity of the proposed actions.

3.20 Public Health and Safety

The project will not be detrimental to the public health. The operator will insure that all phases of the project operations are conducted in workman like manner. Precautionary procedures and/or measures will be strictly adhered to in order provide a safe and sound working environment for the life of the well.

4.0 Environmental Consequences and Proposed Mitigation Measures

Alternative A – No Action

Under the No Action Alternative, the proposed wells would not be drilled. There would be no new impacts from oil and gas production to the resources. The No Action Alternative would result in the continuation of the current land and resource uses in the project area and is used as the baseline for comparison of alternatives.

Alternative B – Proposed Action

Under the Proposed Action, the well will be drilled as originally proposed in the APD, incorporating mitigation measures to reduce the potential impact to the environment. Descriptions of potential impacts on individual resources for action alternatives is presented in the following text.

Described are mitigation measures that could be incorporated by the BLM where appropriate as Conditions of Approval attached to the permit.

Descriptions of potential impacts on individual resources for action alternatives is presented in the following text. Also described are mitigation measures that could be incorporated by the BLM where appropriate as Conditions of Approval attached to the permit. The changes to the proposed action which resulted in development of Alternative C as the preferred alternative have reduced the potential impact to the environment which will result from this action.

4.1 Air Resources

4.1.1 Direct and Indirect Effects

Air Quality

Air quality would temporary be directly impacted with pollution from exhaust emissions, chemical odors, and dust that would be caused by the motorized equipment used to construct the access road, well pad, and by the drilling rig that will be used to drill the well. Dust dissemination would discontinue upon completion of the construction phase of the access road and well pad. Air pollution from the motorized equipment would discontinue at the completion of the drilling phase of the operations. The winds that frequent the southeastern part of New Mexico generally disperse the odors and emissions. The impacts to air quality would be greatly reduced as the construction and drilling phases are completed. Other factors that currently affect air quality in the area include dust from livestock herding activities, dust from recreational use, and dust from use of roads for vehicular traffic.

The federal Clean Air Act requires that air pollutant emissions be controlled from all significant sources in areas that do not meet the national ambient Air quality standards. The New Mexico Air Quality Bureau (NMAQB) is responsible for enforcing the state and national ambient air quality standards in New Mexico. Any emission source must comply with the NMAQB regulations (USDI, BLM 2003b). At the present time, the counties that lie within the jurisdictional boundaries of the Roswell Field Office are classified as in attainment of all state and national ambient air quality standards as defined in the Clean Air Act of 1972, as amended (USDI, BLM 2003b).

The Environmental Protection Agency (EPA), on October 17, 2006, issued a final ruling on the lowering of the National Ambient Air Quality Standard (NAAQS) for particulate matter ranging from 2.5 micron or smaller particle size. This ruling became effective on December 18, 2006, stating that the 24-hour standard for PM2.5, was lowered to 35 ug/m³ from the previous standard of 65 ug/m³. This revised PM2.5 daily NAAQS was promulgated to better protect the public from short-term particle exposure. The significant threshold of 35 ug/m³ daily PM2.5 NAAQS is not expected to be exceeded under the proposed action.

Over the last 10 years, the leasing of Federal oil and gas mineral estate in Roswell Field Office has resulted in an average total of 60 wells drilled on federal leases annually. These wells would contribute a small percentage of the total emissions (including GHG's) from oil and gas activities in New Mexico.

Potential impacts of development could include increased air borne soil particles blown from new well pads or roads, exhaust emissions from drilling equipment, compressors, vehicles, and dehydration and separation facilities, as well as potential releases of GHG and volatile organic compounds during drilling or production activities. The amount of increased emissions cannot be quantified at this time since it is unknown how many wells might be drilled, the types of equipment needed if a well were to be completed successfully (e.g. compressor, separator, dehydrator), or what technologies may be employed by a given company for drilling any new wells. The degree of impact will also vary according to the characteristics of the geologic formations from which production occurs.

The reasonable and foreseeable development scenario developed for the Roswell RMP demonstrated 60 wells would be drilled annually for Federal minerals. Current APD permitting trends within the field office confirm that these assumptions are still accurate. This level of exploration and production would contribute a small incremental increase in overall hydrocarbon emissions, including GHGs, released into the planet's atmosphere. When compared to total national or global emissions, the amount released as a result of potential production from the proposed lease tracts would not have a measurable effect on climate change due to uncertainty and incomplete and unavailable information.

Consumption of oil and gas developed from the proposed well is expected to produce GHGs. Consumption is driven by a variety of complex interacting factors including energy costs, energy efficiency, availability of other energy sources, economics, demography, and weather or climate.

Climate

The assessment of GHG emissions and climate change is in its formative phase. It is currently not feasible to know with certainty the net impacts from the proposed action on climate. The inconsistency in results of scientific models used to predict climate change at the global scale coupled with the lack of scientific models designed to predict climate change on regional or local scales, limits the ability to quantify potential future impacts of decisions made at this level. When further information on the impacts to climate change is known, such information would be incorporated into the BLM's planning and NEPA documents as appropriate.

4.1.2 Mitigation

The EPA's inventory data breaks down the total US sources of GHG gases by major categories that include "Natural Gas Systems" and "Petroleum Systems." The inventory lists the contributions of natural gas and petroleum systems to total CO2 and CH4 emissions (natural gas and petroleum systems do not produce significant amounts of any of the other greenhouse gases). For Natural Gas Systems, the EPA categorizes emissions from distinct stages of the larger category of natural gas systems. These stages include field production, processing, transmission and storage, and distribution. The BLM has regulatory jurisdiction only over field production. Petroleum Systems sub-activities include production field operations, crude oil transportation, and crude oil refining. Within the petroleum systems emission categories, the BLM has authority to regulate production field operations.

The BLM's regulatory jurisdiction over field production of Natural Gas Systems and production field operations of Petroleum Systems has resulted in the development of "Best Management Practices (BMPs)" designed to reduce impacts to air quality by reducing all emissions from field production and operations. The future development of the lease parcels may be subject to appropriate conditions of approval (COAs) to reduce or mitigate GHG emissions. This may occur at the project level through additional analysis. Specific measures developed at the project stage would be incorporated as COAs in the approved APD, and are binding on the operator. Typical measures may include: flare hydrocarbon and gases at high temperatures in order to reduce emissions of incomplete combustion; water dirt roads during periods of high use in order to reduce fugitive dust emissions; require that vapor recovery systems be maintained and functional in areas where petroleum liquids are stored; and revegetate areas of the pad not required for production facilities to reduce the amount of dust from the pads.

The EPA data show that improved practices and technology and changing economics have reduced emissions from oil and gas exploration and development (Inventory of US Greenhouse Gas Emissions and Sinks: 1990-2006). One of the factors in this improvement is the adoption by industry of the Best Management Practices proposed by the EPA's Natural Gas Energy Star program. The Roswell Field Office will work with industry to facilitate the use of the relevant BMPs for operations proposed on federal mineral leases where such mitigation is consistent with agency policy.

4.2 Cultural Resources

A cultural resource inventory was conducted for the area of effect (09-R-072A), no Historic Properties were identified. No cultural resources will be affected.

4.3 Native American Religious Concerns

To date, the area to be affected by project construction has not been identified by interested tribes as being of tribal concern.

4.4 Environmental Justice

No minority or low income populations would be directly affected in the vicinity of the proposed action. Indirect impacts could include impacts due to overall employment opportunities related to the oil and gas and service support industry in the region, as well as the economic benefits to State and County governments related to royalty payments and severance taxes. Other impacts could include a small increase in activity and noise disturbance in areas used for grazing, or hunting. However, these impacts would apply to all public land users in the project area.

4.5 Invasive, Non-native Species

4.5.1 Direct and Indirect Impacts

The construction of an access road and well pad may unintentionally contribute to the establishment and spread of noxious weeds. Noxious weed seed could be carried to and from the project areas by construction equipment, the drilling rig and transport vehicles. The main mechanism for seed dispersion on the road and well pad is by equipment and vehicles that were previously used and or driven across or through noxious weed infested areas. The potential for the dissemination of invasive and noxious weed seed may be elevated by the use of construction equipment typically contracted out to companies that may be from other geographic areas in the region.

4.5.2 Mitigation

The operator shall be held responsible if noxious weeds become established within the areas of operations (access road and/or well pad). Weed control shall be required on the disturbed land where noxious weeds exist, which includes the roads, pads, associated pipeline corridor, and adjacent land affected by the establishment of weeds due to this action. The operator shall consult with the Authorized Officer for acceptable weed control methods, which include following EPA and BLM requirements and policies.

4.6 Wildlife

4.6.1 Direct and Indirect Impacts

Some small wildlife species may be killed and their dens or nests destroyed during construction of the access road and well pad. The construction of the access road and well pad could cause fragmentation of wildlife habitat. The short-term negative impact to wildlife would occur during the construction phase of the operations would be due to noise and habitat destruction. In general, most wildlife species would become habituated to the new facilities. For other wildlife species with a low tolerance to activities, the operations on the well pad would continue to displace wildlife from the area due to disturbances by the high volumes of vehicle traffic during equipment maintenance.

4.6.2 Mitigation

Netting storage tanks and installation of cones on separator stacks would alleviate losses of wildlife species. Interim reclamation and final rehabilitation through revegetation would return to wildlife previous levels.

4.7 Wastes, Hazardous or Solid

4.7.1 Direct and Indirect Impacts

The lease parcels fall under environmental regulations that impact exploration and production waste management and disposal practices and impose responsibility and liability for protection of human health and the environment from harmful waste management practices or discharges.

4.7.2 Mitigation

None required.

4.8 Water Quality:

Surface:

4.8.1A Direct and Indirect Impacts

Surface disturbance from the construction of the well pad, closed system or steel tanks, access road, pipelines, and powerlines can result in degradation of surface water quality and groundwater quality from non-point source pollution, increased soil losses, and increased gully erosion.

Potential direct impacts that would occur due to construction of the well pad, access road, pipelines, and powerlines include increased surface water runoff and off-site sedimentation brought about by soil disturbance: increased salt loading and water quality impairment of surface waters; channel morphology changes due to road and pipeline crossings; and possible contamination of surface waters by produced water. The magnitude of these impacts to water resources would depend on the proximity of the disturbance to the drainage channel, slope aspect and gradient, degree and area of soil disturbance, soil character, duration and time within which construction activity would occur, and the timely implementation and success or failure of mitigation measures.

Direct impacts would likely be greatest shortly after the start of construction activities and would likely decrease in time due to natural stabilization, and reclamation efforts. Construction activities would occur over a relatively short period; therefore, the majority of the disturbance would be intense but short lived. Direct impacts to surface water quality would be minor, short-term impacts which may occur during storm flow events. Indirect impacts to water-quality related resources, such as fisheries, would not occur.

Petroleum products and other chemicals, accidentally spilled, could result in surface and groundwater contamination. Similarly, possible leaks from closed loop systems or steel tanks could degrade surface and ground water quality. Authorization of the proposed projects would require full compliance with BLM directives and stipulations that relate to surface and groundwater protection.

4.8.2A Mitigation

The use of a closed system or steel tanks would reduce or eliminate the seepage of drilling fluid into the soil and groundwater. Spills of produced fluids (e.g., saltwater, oil, and/or condensate in the event of a breech, overflow, or spill from storage tanks) could result in contamination of the soil onsite, or offsite, and may potentially impact surface and groundwater resources in the long term.

A containment structure shall be constructed to hold the capacity of the entire contents of the largest production tank, plus 24 hour production, unless more stringent protective requirements are deemed necessary by the Authorized Officer.

B. Groundwater:

4.8.1B Direct and Indirect Impacts

Spills or produced fluids (e.g., saltwater, oil, and/or condensate in the event of a breech, overflow, or spill from storage tanks) could result in contamination of the soil onsite, or offsite, and may potentially impact surface and groundwater resources in the long term. Petroleum products and other chemicals, accidentally leaked through casing, could result in surface and groundwater contamination. Similarly, possible leaks and overflow from closed systems could degrade ground water quality.

4.8.2B Mitigation

The use of steel tanks or closed systems would reduce or eliminate seepage of contaminates into the soil, surface waters and potentially into the groundwater.

The existing well bore has surface casing in-place at a depth of 330 ft and intermediate set at a depth of 2092 ft. Therefore, no casing or cementing requirements will be imposed on the well for the protection of water.

4.9 Mineral Resources - No impacts

4.10 Soil

4.10.1 Direct and Indirect Impacts

Direct impacts resulting from these surface disturbing activities include removal of vegetation, exposure of the soil, mixing of horizons, compaction, loss of top soil productivity and

susceptibility to wind and water erosion. Wind erosion would be expected to be a minor contributor to soil erosion with the possible exception of dust from vehicle traffic. These impacts could result in increased indirect impacts such as runoff, erosion and off-site sedimentation. Activities that could cause these types of indirect impacts include construction and operation of well site, access road, gas pipelines and production facilities.

Contamination of soil from drilling and production wastes mixed into soil or spilled on the soil surfaces could cause a long-term reduction in site productivity. Some of these direct impacts can be reduced or avoided through proper design, construction and maintenance and implementation of best management practices.

Additional soil impacts associated with lease development would occur when heavy precipitation causes water erosion damage. When water saturated segment(s) on the access road become impassable, vehicles may still be driven over the road. Consequently, deep tire ruts would develop. Where impassable segments are created from deep rutting, unauthorized driving may occur outside the designated route of the access road.

4.10.2 Mitigation

The topsoil will be stripped to approximately 6 inches in depth within the area designated for construction of the well pad. The operator shall stockpile the stripped topsoil on the side of the well pad. The topsoil will be used for interim and final reclamation of the surface disturbance created by the construction of the well pad. The direct and indirect impacts to soil resulting from the surface disturbing activities will be mitigated through the instructions and/or orders for surface reclamation/restoration of the disturbed areas.

Upon abandonment of the well and/or when the access road is no longer in service the Authorized Officer shall issue instructions and/or orders for surface reclamation/restoration of the disturbed areas as described in the attached Conditions of Approval.

A containment structure shall be constructed to hold the capacity of the entire contents of the largest production tank, plus 24 hour production, unless more stringent protective requirements are deemed necessary by the Authorized Officer.

Road constructions requirements and regular maintenance would alleviate potential impacts to the access road from water erosion damage.

4.11 Watershed - Hydrology

4.11.1 Direct and Indirect Impacts

Construction and surface disturbance activities from the construction of the well pad, access road, pipelines and powerlines can result in long term and short term alterations to the hydrologic regime. Peak and low flow of perennial streams, ephemeral, and intermittent rivers and streams would be directly affected by an increase in impervious surfaces resulting from the construction of the well pad and road. The potential hydrologic effects to peak flow is reduced infiltration

where surface flows can move more quickly to perennial or ephemeral rivers and streams, causing peak flow to occur earlier and be larger. Increased magnitude and volume of peak flow can cause bank erosion, channel widening, downward incision and disconnection from the floodplain. The potential hydrologic effects to low flow is reduced surface storage and groundwater recharge, resulting in reduced baseflow to perennial, ephemeral, and intermittent rivers and streams. The direct impact would be that hydrologic processes may be altered where the perennial, ephemeral, and intermittent river and stream system responds by changing physical parameters, such as channel configuration. These changes may in turn impact chemical parameters and ultimately the aquatic ecosystem.

Long term direct and indirect impacts to the watershed and hydrology would continue for the life of the well and would decrease once all well pad and road surfacing material has been removed and reclamation of the well pad, access road, pipelines, and powerlines has taken place. Short term direct and indirect impacts to the watershed and hydrology from access roads that are not surfaced with material would occur and would likely decrease in time due to reclamation efforts.

4.11.2 Mitigation

The topsoil will be stripped to approximately 6 inches in depth within the area designated for construction of the well pad. The operator shall stockpile the stripped topsoil on the side of the well pad. The topsoil will be used for interim and final reclamation of the surface disturbance created by the construction of the well pad. Upon abandonment of the well and/or when the access road is no longer in service the Authorized Officer will issue instructions and/or orders for surface reclamation/restoration of the disturbed areas as described in the attached Conditions of Approval.

4.12 Vegetation

4.12.1 Direct and Indirect Impacts

Vegetative recovery on the access road and well pad would depend on life of the well. Native vegetation would encroach on the well pad over time and where high volumes of vehicular traffic occur; the areas driven over would remain unvegetated. If it is a producing well, reclamation would not commence until the well is a depleted producer and is plugged and abandoned. If the well is drilled as a dry hole and is plugged, the reclamation of the access road and well pad would immediately follow. The impacts to the vegetation would be short-term if the reclamation efforts of the disturbed areas have re-vegetated successfully within a few years.

4.12.2 Mitigation

No impact to vegetation is anticipated. However measures will be taken in the event impacts to vegetation are found.

4.13 Livestock Grazing/Range

4.13.1 Direct and Indirect Impacts

During the construction and drilling phases of the well, there would be some minor disruption of livestock grazing in the pastures, specifically on the well pad. The increase of vehicle traffic within the project areas could lead to conflicts with livestock.

4.13.2 Mitigation

If any conflicts with livestock do arise as a result of the access road and well pad construction, mitigation measures will be taken, and consultation with the allottee will mitigate those impacts

4.14 Visual Resources

The proposed action is located in an area designated VRM Class IV. Visual Resource Management (VRM) on public land is conducted in accordance with BLM Handbook 8410 and BLM Manual 8411.

The objective of Class IV is to: "Provide for management activities which require major modification of the existing character of the landscape. The level of change to the characteristic landscape can be high. These management activities may dominate the view and be the major focus of viewer attention. However, every attempt should be made to reduce or eliminate activity impacts through careful location, minimal disturbance, and repeating the basic landscape elements."

4. 14.1 Direct and Indirect Impacts

Facilities, such as condensate and produced water or oil storage tanks that rise above eight feet, would provide a geometrically strong vertical and horizontal visual contrast in form and line to the characteristic landscape and vegetation, which have flat, horizontal to slightly rolling form and line. The construction of an access road, well pad and other ancillary facilities would slightly modify the existing area visual resources.

4.14.2 Mitigation

Through color manipulation, by painting well facilities to blend with the rolling to flat vegetative and/or landform setting with a gray-green to brownish color, the view is expected to favorably blend with the form, line, color and texture of the existing landscape. The semi-gloss color Juniper Green from the standard environmental colors (June 2008) also closely approximates the brownish color of the setting. All facilities, including the meter building, would be painted this color.

4.15 Recreation

Oil and gas activities would have little or no affect on recreational opportunities within this area. Large blocks of public land would allow recreationist to use public land and avoid the oil and gas facilities within the area.

4.16 Cave/Karst

While the proposed action is located in the *Medium Potential Karst Area*, no surface cave/karst features were observed in the immediate vicinity of the proposed actions.

4.17 Public Health and Safety

The construction and drilling operations will be conducted in a safe workman like manner and no impacts are anticipated to occur when the operations are conducted in a professional constructive manner.

4.18 Cumulative Impacts

The leased area of the proposed action has been industrialized with oil and gas well development. The surface disturbance for each project that has been permitted has created a spreading out of land use fragmentation. The cumulative impacts fluctuate with the gradual reclamation of well abandonments and the creation of new additional surface disturbances in the construction of new access roads and well pads. The ongoing process of restoration of abandonments and creating new disturbances for drilling new wells gradually accumulates as the minerals are extracted from the land. Preserving as much land as possible and applying appropriate mitigation measures will alleviate the cumulative impacts.

Due to the absence of regulatory requirements to measure GHG emissions and the variability of oil and gas activities on federal minerals, it is not possible to accurately quantify potential GHG emissions in the affected areas as a result of making the proposed tracts available for leasing. Some general assumptions however can be made: leasing the proposed tracts may contribute to drilling new wells.

The New Mexico Greenhouse Gas Inventory and Reference Case Projection 1990-2020 (Inventory) estimates that approximately 17.3 million metric tons of natural gas and 2.3 million metric tons of natural gas emissions are projected by 2010 as a result of oil and natural gas production, processing, transmission and distribution. As of 2008, there were 23,196 oil wells and 27, 778 gas wells in New Mexico.

An average of 50 wells per year is drilled for Federal minerals within the Roswell Field Office, 22 oil wells and 28 natural gas wells. An average of 22 new oil wells a year represent approximately less than 0.01 percent of the total number of oil wells in the State based on the Inventory above. The average number of 28 new gas wells drilled are also less than 0.01 percent of the total number of gas wells in the State based on Inventory data. Both are indicators of the level of activity in the field office.

These average number of oil and gas wells drilled annually in the Field Office and probable GHG emission levels, when compared to the total GHG emission estimates from the total number of oil and gas wells in the State, represent an incremental contribution to the total regional and global GHG emission levels. This incremental contribution to global GHG gases cannot be translated into effects on climate change globally or in the area of these site-specific actions. As oil and gas and natural gas production technology continues to improve in the future, one assumption is that it may be feasible to further reduce GHG emissions.

Regarding the linkage between climate change related warming and associated impacts, an assessment of the IPCC states that difficulties remain in attributing observed temperature

changes at smaller than continental scales. Therefore, it is currently beyond the scope of existing science to predict climate change on regional or local scales resulting from specific sources of GHG emissions.

The total number of wells that might be drilled cannot be stated with certainty. The number of wells that might be drilled is dependent on the success of the first wells drilled, the amount and quality of the fluid minerals produced, and production techniques.

Much of the land adjacent to the lease has been leased for fluid minerals. New, producing wells within the lease will likely spur interest in the surrounding area. The number of wells that might be drilled cannot be determined at this time.

Due to loss of habitat or competition from other species whose ranges may shift northward, the population of some animal species may be reduced or increased. Less snow at lower elevations would likely impact the timing and quantity of snowmelt, which, in turn, could impact water resources and species dependant on historic water conditions. Forests at higher elevations in New Mexico, for example, have been exposed to warmer and drier conditions over a ten year period. Should the trend continue, the habitats and identified drought sensitive species in these forested areas and higher elevations may also be more affected by climate change.

While it is likely that there will be no significant cumulative impact from the proposed actions, continued oil and gas development, and other surface-disturbing activities in these areas, may potentially have negative cumulative impacts on vegetation, soil, water, livestock, wildlife and visual resources.

4.18.1 Residual Impacts

Direct impacts to the local environment detailed above remain throughout the life of the proposed operation; however, these impacts would be substantially reduced by mitigation measures.

4.18.2 Mitigation Measures

Mitigation measures have been identified and have been incorporated into stipulations and are made part of the permit. These measures include but are not limited to dust control, noxious weed control, road construction, maintenance, and termination.

5.0 Consultation/Coordination

This section includes individuals or organizations from the public and its' users, the interdisciplinary team, and permittees that were contacted during the development of this document.

Table 5.0 Summary of Public Contacts Made During Preparation of Document and Interdisciplinary Team Present at the Onsite Inspection.

Public Contact	Title	Organization	Present at Onsite?
Jerry Sherrell	Land Man	Mack Energy Corp.	Yes
Lewis Derrick	Foreman	Bogel Limited Company	No
ID Team Member	Title	Organization	Present at Onsite?
Richard G. Hill	Environmental Protection Specialist	RFO	Yes

6.0 Appendices

The Roswell Field Office; Exhibit A: General Location Map,, Exhibit B: Pecos District-RFO, Conditions of Approval, and the special requirements derived from this EA, would be applied to this proposed action to minimize the surface disturbance and conserve the surrounding landscape.

6.1.0 References

EPA Inventory of US Greenhouse Gas Emissions and Sinks: 1990-2006. Environmental Protection Agency, Washington, D.C.

EPA, Natural Gas Star Program (2006 data) at: http://www.epa.gov/gasstar/accomplish.htm. Environmental Protection Agency, Washington, D.C.

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U.S. Department of the Interior, Bureau of Land Management. 1997. Roswell Approved Resource Management and Plan Record of Decision. Roswell, New Mexico.

U.S. Department of the Interior, Bureau of Land Management. 2008. Special Status Species Resource Management Plan Amendment and Record of Decision. Roswell, New Mexico.

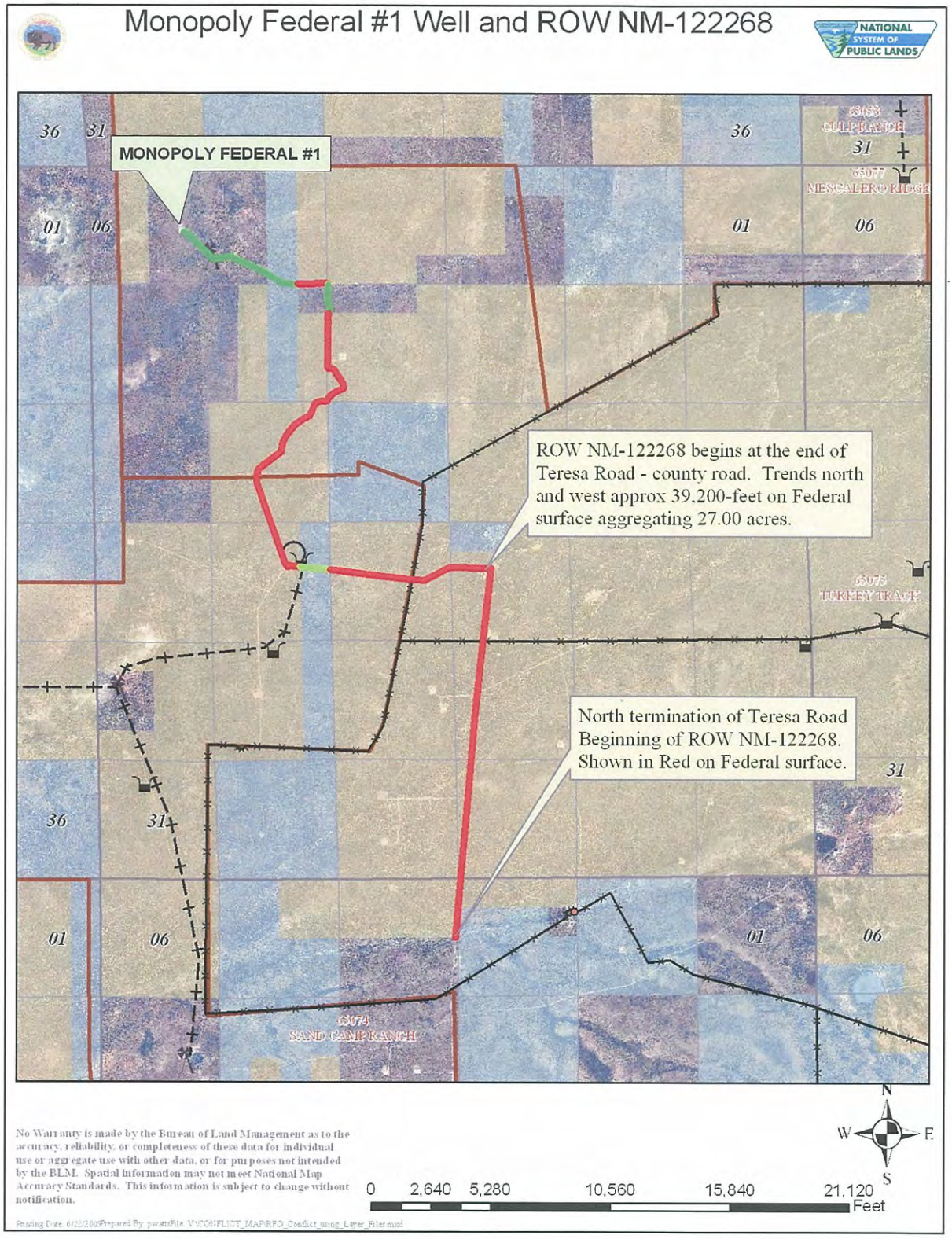
6.2.3 Other Supporting Information

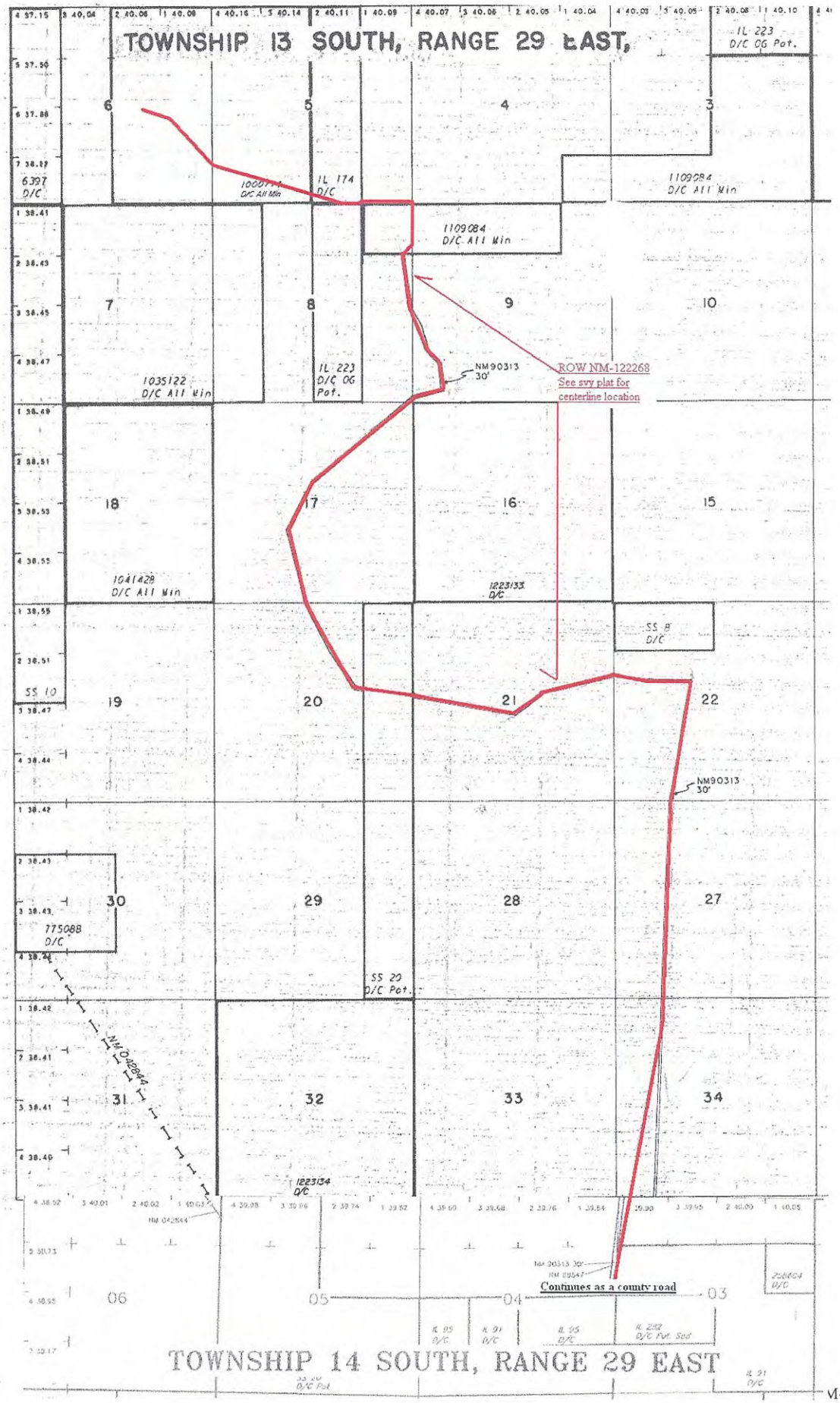
Exhibit A: Maps

Exhibit B: COAs - Stipulations

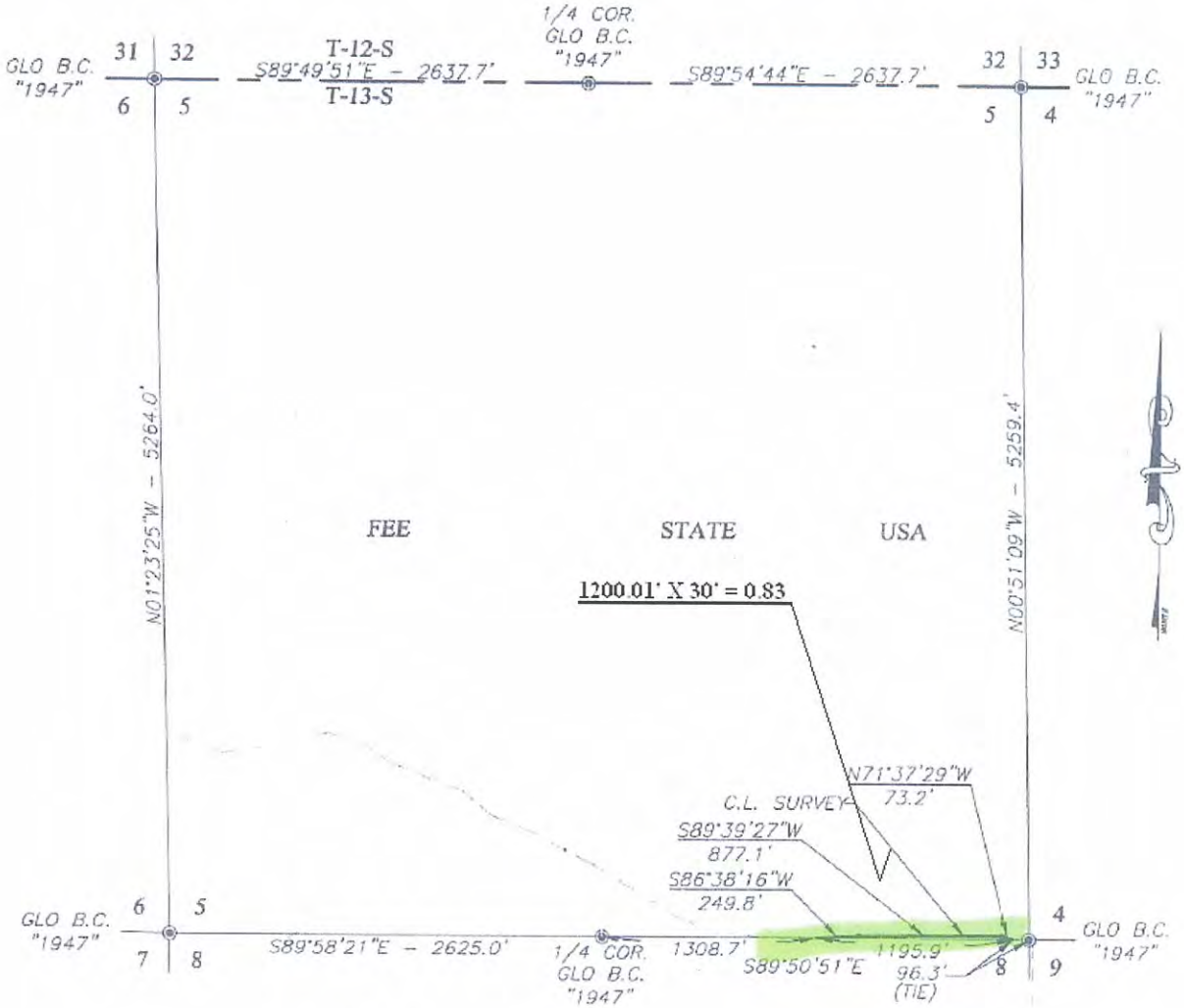
NMP0130:SSanderford:ss: NMP0130:SSanderford:ss:8/6/09:575-627-0287:N:\Case Files - Electronic\NM-122268 Mack Monopoly Access Road\NM-P010-2009-94-EA Monopoly Fed #1 August 5 2009.docx

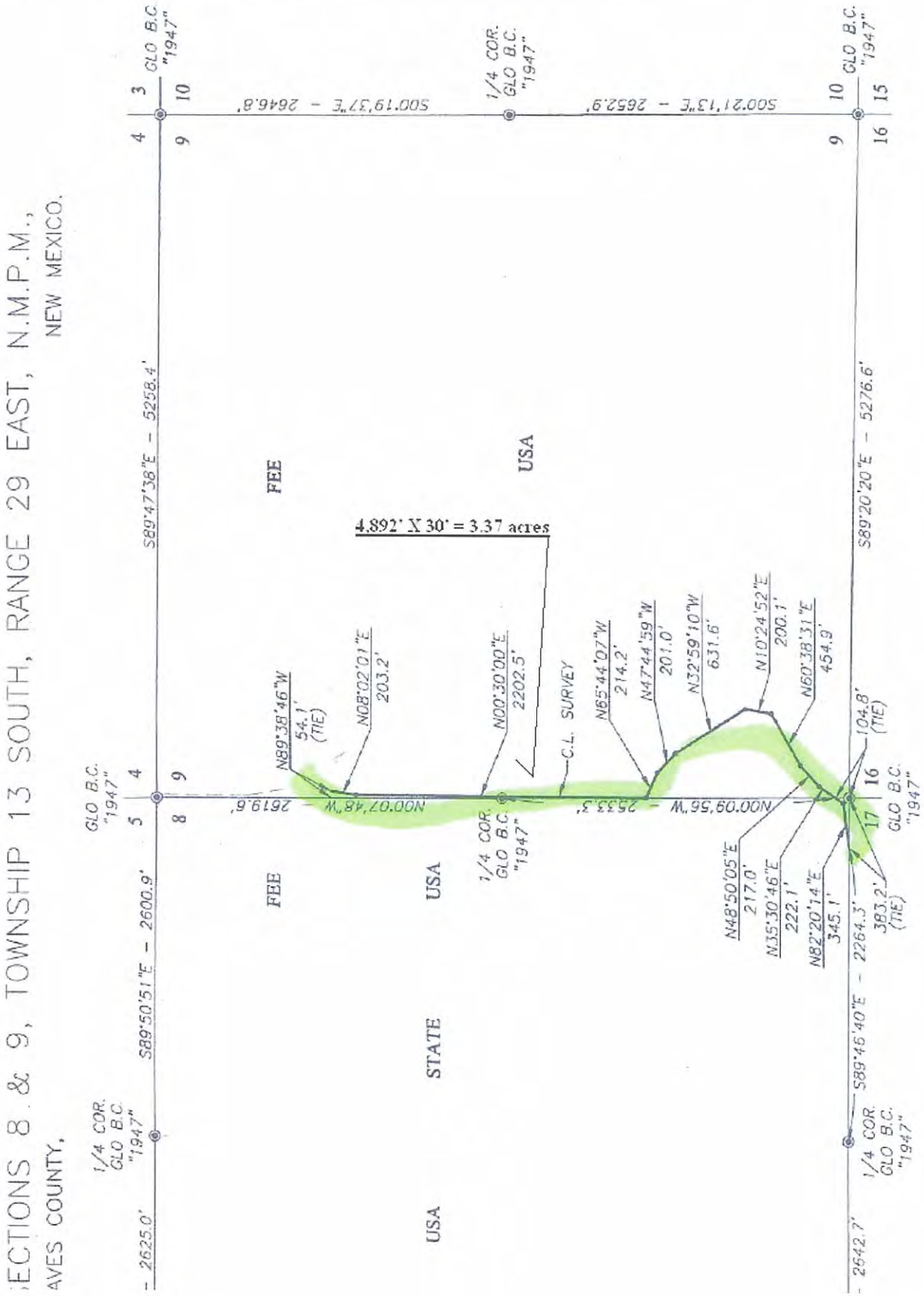
Exhibit A Maps



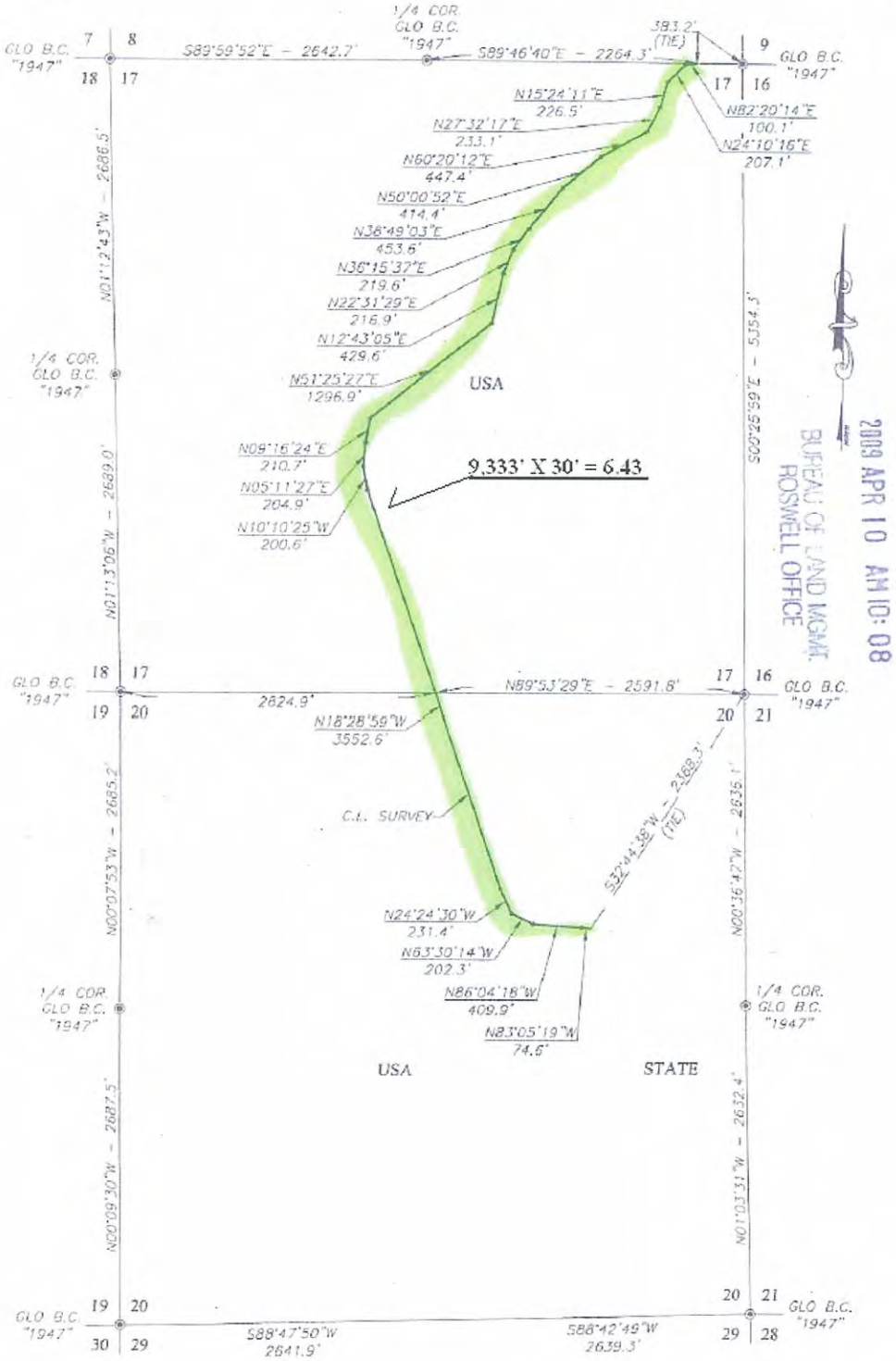

TOWNSHIP 13 SOUTH, RANGE 29 EAST,
IL 223
D/C OG Pot.
6397
D/C
IL 174
D/C
1109084
D/C All Min
1109084
D/C All Min
1035122
D/C All Min
IL 223
D/C OG
Pot.
NM90313
30'
ROW NM-122268
See svy plat for
centerline location
1041428
D/C All Min
1223133
D/C
SS 8
D/C
SS 10
NM90313
30'
775088
D/C
SS 20
D/C Pot.
NM 042844
1223134
D/C
Continues as a county road
TOWNSHIP 14 SOUTH, RANGE 29 EAST

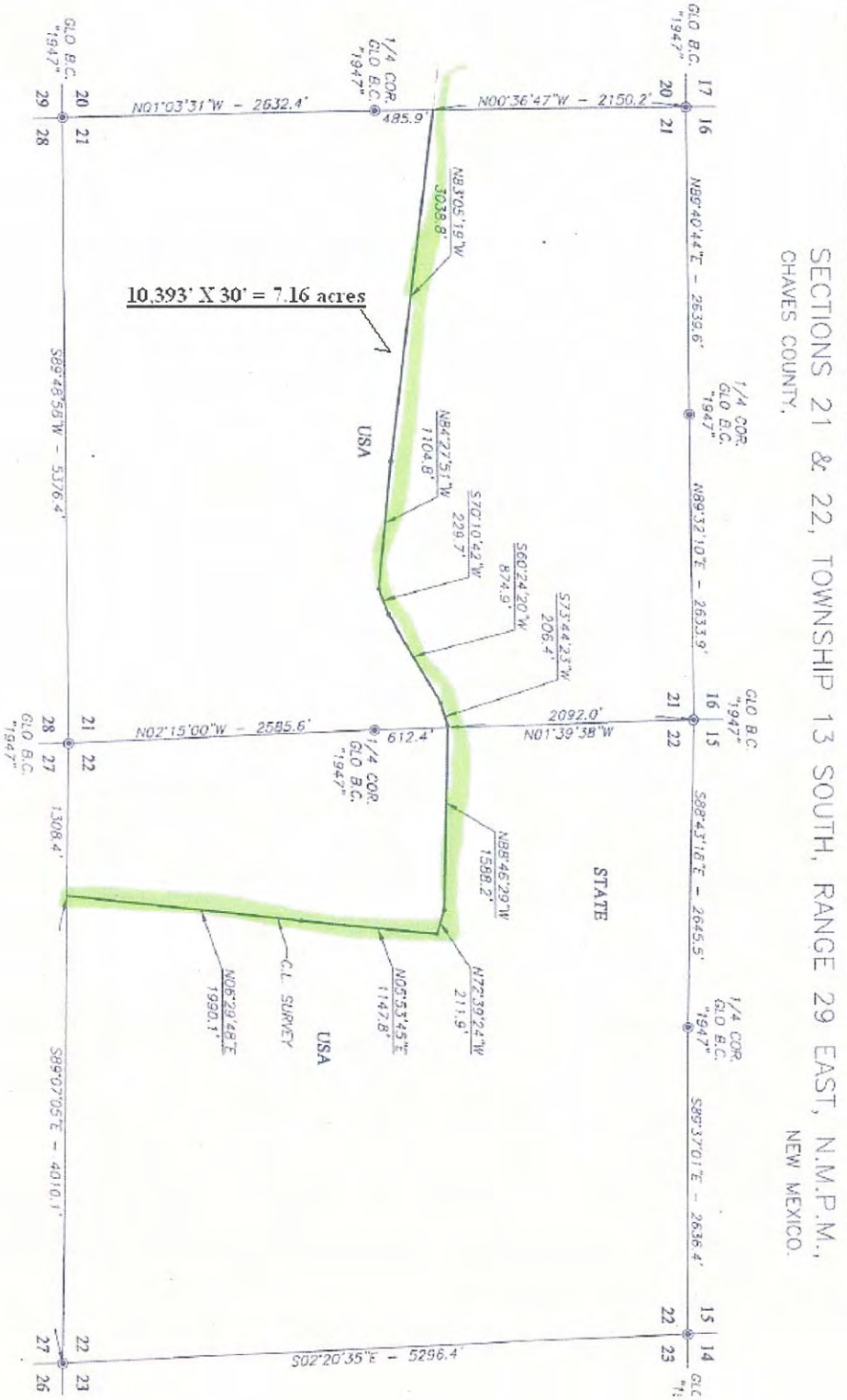
SECTION 5, TOWNSHIP 13 SOUTH, RANGE 29 EAST, N.M.P.M.,
CHAVES COUNTY, NEW MEXICO.



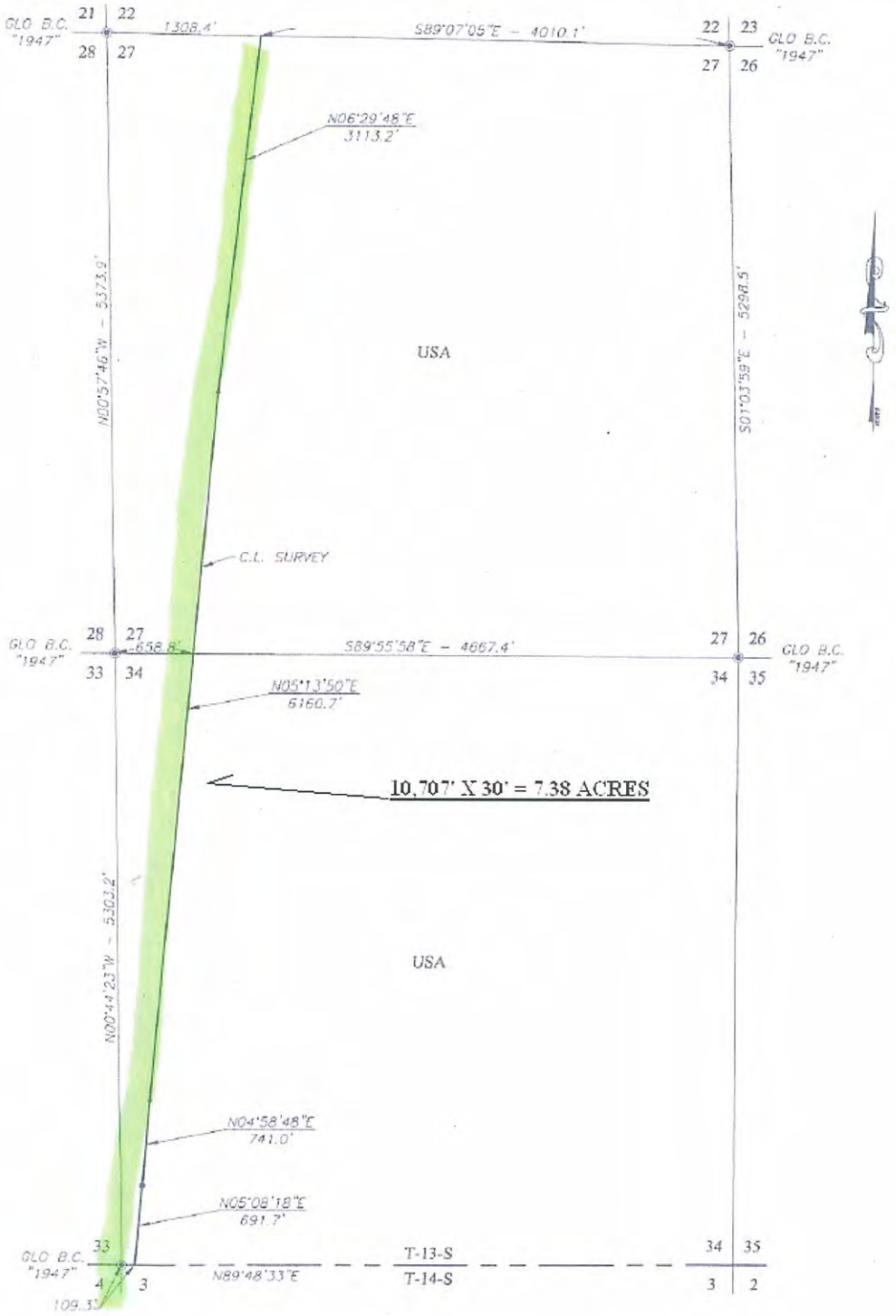

ECTIONS 8 & 9, TOWNSHIP 13 SOUTH, RANGE 29 EAST, N.M.P.M.,
AVES COUNTY, NEW MEXICO.
GLO B.C. "1947"
1/4 COR. GLO B.C. "1947"
S89°50'51"E - 2600.9'
S89°47'38"E - 5258.4'
S89°20'20"E - 5276.6'
S89°46'40"E - 2264.3'
2625.0'
2542.7'
S00°19'37"E - 2646.8'
S00°21'13"E - 2652.9'
N00°07'48"W - 2619.6'
N00°09'56"W - 2533.3'
FEE
USA
STATE
4,892' X 30' = 3.37 acres
N89°38'46"W 54.1' (TIE)
N08°02'01"E 203.2'
N00°30'00"E 2202.5'
C.L. SURVEY
N65°44'07"W 214.2'
N47°44'59"W 201.0'
N32°59'10"W 631.6'
N10°24'52"E 200.1'
N60°38'31"E 454.9'
104.8' (TIE)
N48°50'05"E 217.0'
N35°30'46"E 222.1'
N82°20'14"E 345.1'
383.2' (TIE)

SECTIONS 17 & 20 TOWNSHIP 13 SOUTH, RANGE 29 EAST, N.M.P.M.
CHAVES COUNTY, NEW MEXICO

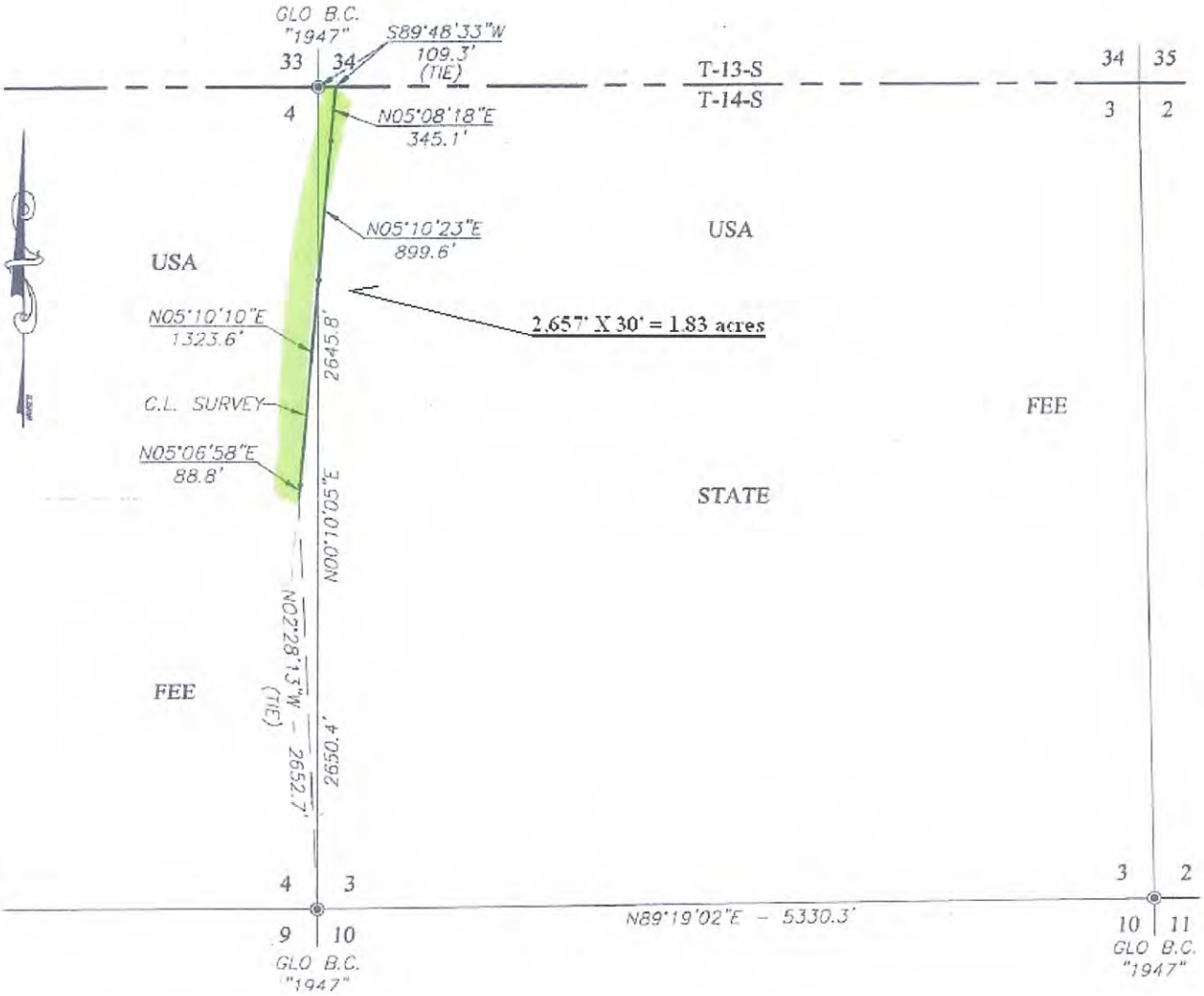



SECTIONS 21 & 22, TOWNSHIP 13 SOUTH, RANGE 29 EAST, N.M.P.M.,
CHAVES COUNTY, NEW MEXICO.
10,393' X 30' = 7.16 acres
USA
STATE
USA
C.L. SURVEY
N00°36'47"W - 2150.2'
N01°03'31"W - 2632.4'
N89°40'44"E - 2639.6'
N89°32'10"E - 2633.9'
S88°43'16"E - 2645.5'
S89°37'01"E - 2636.4'
S02°20'35"E - 5296.4'
S89°07'05"E - 4010.1'
S89°48'55"W - 5376.4'
N02°15'00"W - 2585.6'
N01°39'38"W
2092.0'
485.9'
612.4'
1308.4'
N83°05'19"W 3038.8'
N84°27'51"W 7104.8'
S70°10'42"W 229.7'
S60°24'20"W 874.9'
S73°44'23"W 206.4'
N88°46'29"W 1588.2'
N72°39'24"W 211.9'
N05°53'45"E 1147.8'
N06°29'48"E 1990.1'
GLO B.C. "1947"
1/4 COR. GLO B.C. "1947"

SECTIONS 27 & 3 TOWNSHIP 13 SOUTH, RANGE 29 EAST, N.M.P.M.
CHAVES COUNTY, NEW MEXICO



SECTIONS 3 & 4, TOWNSHIP 14 SOUTH, RANGE 29 EAST, N.M.P.M.,
CHAVES COUNTY, NEW MEXICO.



NMP0130:SSanderford:ss: NMP0130:SSanderford:ss:8/5/09:575-627-0287:N:\Case Files - Electronic\NM-122268 Mack Monopoly Access Road\122268 Exhibit A Maps.doc

BLM Serial Number: NM-122268
Company Reference: Mack Energy Corporation
Exhibit B Stipulations

The holder shall construct, operate, and maintain the facilities, improvements, and structures within this right-of-way in strict conformity with the stipulations which are made part of the grant. Any relocation, additional construction, or use that is not in accord with the approved stipulations, shall not be initiated without the prior written approval of the authorized officer. A copy of the complete right-of-way grant, including all stipulations, shall be made available on the right-of-way area during construction, operation, and termination to the authorized officer. Noncompliance with the above will be grounds for an immediate temporary suspension of activities if it constitutes a threat to public health and safety or the environment.

The holder shall designate a representative(s) who shall have the authority to act upon and to implement instructions from the authorized officer. The holder's representative shall be available for communication with the authorized officer within a reasonable time when construction or other surface disturbing activities are underway.

The holder shall contact the authorized officer at least 10 days prior to the anticipated start of construction and/or any surface disturbing activities. The authorized officer may require and schedule a preconstruction conference with the holder prior to the holder's commencing construction and/or surface disturbing activities on the right-of-way. The holder and/or his representative shall attend this conference. The holder's contractor, or agents involved with construction and/or any surface disturbing activities associated with the right-of-way, shall also attend this conference to review the stipulations of the grant including the plans(s) of development.

The holder shall conduct all activities associated with the construction, operation, and termination of the right-of-way within the authorized limits of the right-of-way.

The holder shall provide for the safety of the public entering the right-of-way. This includes, but is not limited to, barricades for open trenches, flag men/women with communication systems for single-lane roads without visible turnouts, and attended gates for blasting operations.

The holder shall permit free and unrestricted public access to and upon the right-of-way for all lawful purposes except for those specific areas designated as restricted by the authorized officer to protect the public, wildlife, livestock, or facilities constructed within the right-of-way.

Construction-related traffic shall be restricted to routes approved by the authorized officer. New access roads or cross-country vehicle travel will not be permitted unless prior written approval is given by the authorized officer. Authorized roads used by the holder shall be rehabilitated or maintained when construction activities are complete as approved by the authorized officer.

No construction or routine maintenance activities shall be performed during periods when the soil is too wet to adequately support construction equipment. If such equipment creates ruts in excess of three inches deep, the soil shall be deemed too wet to adequately support construction equipment.

The holder shall maintain the right-of-way in a safe, usable condition, as directed by the authorized officer. (A regular maintenance program shall include, but is not limited to, blading, ditching, culvert installation and surfacing).

The holder shall meet Federal, State, and local emission standards for air quality.

Any cultural and/or Paleontological resource (historic or prehistoric site or object) discovered by the holder, or any person working on his behalf, on public or Federal land shall be immediately reported to the authorized officer. Holder shall suspend all operations in the immediate area of such discovery until written authorization to proceed is issued by the authorized officer. An evaluation of the discovery will be made by the authorized officer to determine appropriate actions to prevent the loss of significant cultural or scientific values. The holder will be responsible for the cost of evaluation and any decision as to proper mitigation measures will be made by the authorized officer after consulting with the holder.

Construction sites shall be maintained in a sanitary condition at all times; waste materials at those sites shall be disposed of promptly at an appropriate waste disposal site. "Waste" means all discarded matter including, but not limited to, human waste, trash, garbage, refuse, oil drums, petroleum products, ashes, and equipment.

The holder(s) shall comply with all applicable Federal laws and regulations existing or hereafter enacted or promulgated. In any event, the holder(s) shall comply with the Toxic Substances Control Act of 1976, as amended (15 U.S.C. 2601, et seq.) with regard to any toxic substances that are used, generated by or stored on the right-of-way or on facilities authorized under this right-of-way grant. (See 40 CFR, Part 702-799 and especially, provisions on polychlorinated biphenyls, 40 CFR 761.1-761.193.) Additionally, any release of toxic substances (leaks, spills, etc.) in excess of the reportable quantity established by 40 CFR, Part 117 shall be reported as required by the Comprehensive Environmental Response, Compensation and Liability Act of 1980, Section 102b. A copy of any report required or requested by any Federal agency or State government as a result of a reportable release or spill of any toxic substances shall be furnished to the authorized officer concurrent with the filing of the reports to the involved Federal agency or State government.

The holder of the Right-of-Way agrees to indemnify the United States against any liability arising from the release of any hazardous substance or hazardous waste (as these terms are defined in the Comprehensive Environmental Response, Compensation and Liability Act of 1980, 42 U.S.C. 9601, et seq. or the Resource Conservation and Recovery Act of 1976, 42 U.S.C. 6901 et seq.) on the right-of-way (unless the release or threatened release is wholly unrelated to the right-of-way holder's activity on the right-of-way. This agreement applies without regard to whether a release is caused by the holder, its agent, or unrelated third parties.

Power or high-pressure clean all equipment of all mud, dirt, and plants immediately prior to moving into and off of the project area. Any gravel or fill to be used must come from weed-free sources. Inspect gravel pits and fill sources to identify weed-free sources. No soil spoil that could potentially contain noxious weed seeds shall be transported out of the area where it is created. If seeding is required, it must be certified noxious weed free. If the applicant is required to mulch, that also must be weed free.

Any use of herbicides/pesticides shall comply with the applicable Federal and State laws. Herbicides/pesticides and shall be used only in accordance with their registered uses and within limitations imposed by the Secretary of the Interior. Prior to the use of pesticides, holder shall obtain from the Authorized Officer (AO) written approval of a plan showing the type and quantity of materials to be used, pest(s) to be controlled, method of application, location of storage and disposal of containers, and any other information deemed necessary by the AO. Emergency use of pesticides shall be approved in writing by the AO prior to use.

Prior to termination of the right-of-way, the holder shall contact the authorized officer to arrange a joint inspection of the right-of-way. This inspection will be held to agree to an acceptable termination (and rehabilitation) plan. This plan shall include, but is not limited to, removal of facilities, drainage structures, or surface material, re-contouring, top soiling, or seeding. The authorized officer must approve the plan in writing prior to the holder's commencement of any termination activities.

The access road shall have a driving surface that creates the smallest possible surface disturbance and does not exceed fourteen (14) feet in width. The maximum width of surface disturbance, when constructing the access road, shall not exceed thirty (30) feet.

Surfacing material is not required on the new access road driving surface. If the operator elects to surface the new access road or pad, the surfacing material may be required to be removed at the time of reclamation.

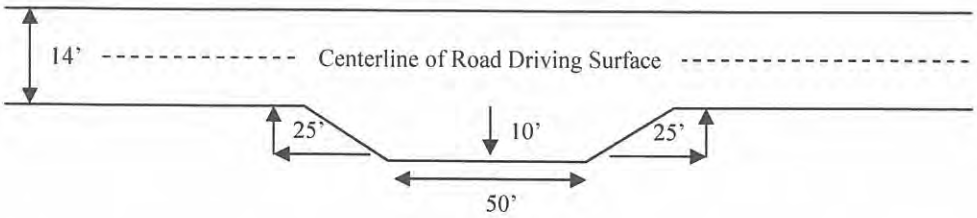
Where possible, no improvements should be made on the unsurfaced access road other than to remove vegetation as necessary, road irregularities, safety issues, or to fill low areas that may sustain standing water.

The Authorized Officer reserves the right to require surfacing of any portion of the access road at any time deemed necessary. Surfacing may be required in the event the road deteriorates, erodes, road traffic increases, or it is determined to be beneficial for future field development. The surfacing depth and type of material will be determined at the time of notification.

Crowning shall be done on the access road driving surface. The road crown shall have a grade of approximately 2% (i.e., a 1" crown on a 14' wide road). The road shall conform to Figure 1; cross section and plans for typical road construction.

Vehicle turnouts shall be constructed on the road. Turnouts shall be intervisible with interval spacing distance less than 1000 feet. Turnouts shall be constructed on all blind curves. Turnouts shall conform to the following diagram:

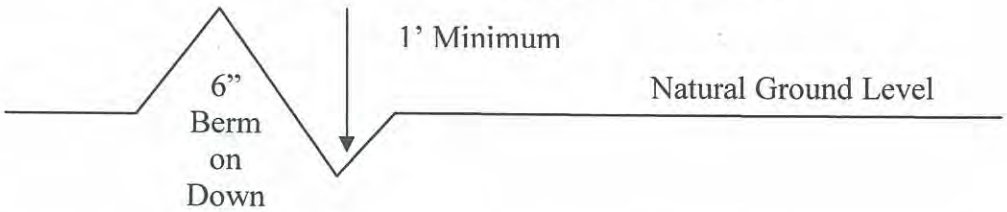
Standard Turnout – Plan View



Drainage control systems shall be constructed on the entire length of road (e.g. ditches, sidehill outsloping and insloping, lead-off ditches, culvert installation, and low water crossings).

A typical lead-off ditch has a minimum depth of 1 foot below and a berm of 6 inches above natural ground level. The berm shall be on the down-slope side of the lead-off ditch.

Cross Section Of Typical Lead-off Ditch



All lead-off ditches shall be graded to drain water with a 1 percent minimum to 3 percent maximum ditch slope. The spacing interval are variable for lead-off ditches and shall be determined according to the formula for spacing intervals of lead-off ditches, but may be amended depending upon existing soil types and centerline road slope (in %);

Formula For Spacing Interval Of Lead-off Ditches

Example - On a 4% road slope that is 400 feet long, the water flow shall drain water into a lead-off ditch. Spacing interval shall be determined by the following formula:

400 foot road with 4% road slope: $\frac{400'}{4\%} + 100' = 200'$ lead-off ditch interval

Appropriately sized culvert(s) shall be installed at the deep waterway channel flow crossing.

Any existing cattleguard(s) on the access road shall be repaired or replaced if they are damaged or have deteriorated beyond practical use. The operator shall be responsible for the condition of the existing cattleguard(s) that are in place and are utilized during lease operations.

PECOS DISTRICT - RFO
CONDITIONS OF APPROVAL

August 5, 2009

OPERATORS NAME: **Mack Energy Corporation**
LEASE NO.: **NM-120891**
WELL NAME & NO: **Monopoly Federal #1**
SURFACE HOLE FOOTAGE: **2428' FSL & 1154' FEL**
LOCATION: **Section 6, T. 13 S., R. 29 E., NMPM**
COUNTY: **Chaves County, New Mexico**

GENERAL PROVISIONS

The approval of the Application For Permit To Drill (APD) is in compliance with all applicable laws and regulations: 43 Code of Federal Regulations 3160, the lease terms, Onshore Oil and Gas Orders, Notices To Lessees, New Mexico Oil Conservation Division (NMOCD) Rules, National Historical Preservation Act As Amended, and instructions and orders of the Authorized Officer. Any request for a variance shall be submitted to the Authorized Officer on Form 3160-5, Sundry Notices and Report on Wells.

I. PERMIT EXPIRATION

If the permit terminates prior to drilling and drilling cannot be commenced within 60 days after expiration, an operator is required to submit Form 3160-5, Sundry Notices and Reports on Wells, requesting surface reclamation requirements for any surface disturbance. However, if the operator will be able to initiate drilling within 60 days after the expiration of the permit, the operator must have set the conductor pipe in order to allow for an extension of 60 days beyond the expiration date of the APD (Filing of a Sundry Notice is required for this 60 day extension).

II. ARCHAEOLOGICAL, PALEONTOLOGY & HISTORICAL SITES

Any cultural and/or paleontological resource discovered by the operator or by any person working on the operator's behalf shall immediately report such findings to the Authorized Officer. The operator is fully accountable for the actions of their contractors and subcontractors. The operator shall suspend all operations in the immediate area of such discovery until written authorization to proceed is issued by the Authorized Officer. An evaluation of the discovery shall be made by the Authorized Officer to determine the appropriate actions that shall be required to prevent the loss of significant cultural or scientific values of the discovery. The operator shall be held responsible for the cost of the proper mitigation measures that the Authorized Officer assesses after consultation with the operator on the evaluation and decisions of the discovery. Any unauthorized collection or disturbance of cultural or paleontological resources may result in a shutdown order by the Authorized Officer.

III. NOXIOUS WEEDS

The operator shall be held responsible if noxious weeds become established within the areas of operations (access road and/or well pad). Weed control shall be required on the disturbed land where noxious weeds exist, which includes the roads, pads, associated pipeline corridor, and adjacent land affected by the establishment of weeds due to this action. The operator shall consult with the Authorized Officer for acceptable weed control methods, which include following EPA and BLM requirements and policies.

IV. CONSTRUCTION

A. NOTIFICATION:

The BLM shall administer compliance and monitor construction of the access road and well pad. Notify the Roswell Field Office at (505) 627-0247 at least 3 working days prior to commencing construction of the access road and/or well pad.

When construction operations are being conducted on this well, the operator shall have the approved Application for Permit to Drill and Conditions of Approval on the well site and they shall be made available upon request by the Authorized Officer.

B. TOPSOIL:

The topsoil will be stripped to approximately 6 inches in depth within the area designated for construction of the well pad. The operator shall stockpile the stripped topsoil adjacent to the constructed well pad. The topsoil will be used for interim and final reclamation of the surface disturbance created by the construction of the well pad.

C. CLOSED SYSTEMS OR STEEL TANKS: **No reserve pit will be used.**

Steel tanks are required for drilling operations: No Pits Allowed.

The operator shall properly dispose of drilling contents at an authorized disposal site.

D. FEDERAL MINERAL MATERIALS PIT:

Payment shall be made to the BLM prior to removal of any federal mineral materials from any site. Call the Roswell Field Office at (505) 627-0236.

E. WELL PAD SURFACING:

Surfacing of the well pad is not required.

If the operator elects to surface the well pad, the surfacing material may be required to be removed at the time of reclamation.

The well pad shall be constructed in a manner which creates the smallest possible surface disturbance, consistent with safety and operational need.

F. ON LEASE ACCESS ROADS:

Road Egress and Ingress

The on lease access road shall be constructed to access the corner of the well pad.

Road Width

The access road shall have a driving surface that creates the smallest possible surface disturbance and does not exceed fourteen (14) feet in width. The maximum width of surface disturbance, when constructing the access road, shall not exceed thirty (30) feet.

Surfacing

Surfacing material is not required on the new access road driving surface. If the operator elects to surface the new access road or pad, the surfacing material may be required to be removed at the time of reclamation.

Where possible, no improvements should be made on the unsurfaced access road other than to remove vegetation as necessary, road irregularities, safety issues, or to fill low areas that may sustain standing water.

The Authorized Officer reserves the right to require surfacing of any portion of the access road at any time deemed necessary. Surfacing may be required in the event the road deteriorates, erodes, road traffic increases, or it is determined to be beneficial for future field development. The surfacing depth and type of material will be determined at the time of notification.

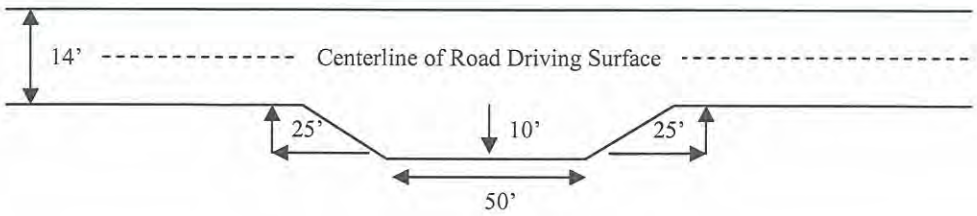
Crowning

Crowning shall be done on the access road driving surface. The road crown shall have a grade of approximately 2% (i.e., a 1" crown on a 14' wide road). The road shall conform to Figure 1; cross section and plans for typical road construction.

Turnouts

Vehicle turnouts shall be constructed on the road. Turnouts shall be intervisible with interval spacing distance less than 1000 feet. Turnouts shall be constructed on all blind curves. Turnouts shall conform to the following diagram:

Standard Turnout – Plan View

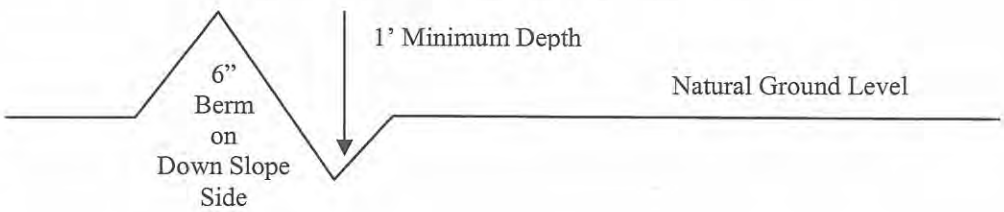


Drainage

Drainage control systems shall be constructed on the entire length of road (e.g. ditches, sidehill outsloping and insloping, lead-off ditches, culvert installation, and low water crossings).

A typical lead-off ditch has a minimum depth of 1 foot below and a berm of 6 inches above natural ground level. The berm shall be on the down-slope side of the lead-off ditch.

Cross Section Of Typical Lead-off Ditch



All lead-off ditches shall be graded to drain water with a 1 percent minimum to 3 percent maximum ditch slope. The spacing interval are variable for lead-off ditches and shall be determined according to the formula for spacing intervals of lead-off ditches, but may be amended depending upon existing soil types and centerline road slope (in %);

Formula For Spacing Interval Of Lead-off Ditches

Example - On a 4% road slope that is 400 feet long, the water flow shall drain water into a lead-off ditch. Spacing interval shall be determined by the following formula:

400 foot road with 4% road slope: $\frac{400'}{4\%} + 100' = 200'$ lead-off ditch interval

Culvert Installations

Appropriately sized culvert(s) shall be installed at the deep waterway channel flow crossing.

Cattleguards

An appropriately sized cattleguard(s) sufficient to carry out the project shall be installed and maintained at fence crossing(s).

Any existing cattleguard(s) on the access road shall be repaired or replaced if they are damaged or have deteriorated beyond practical use. The operator shall be responsible for the condition of the existing cattleguard(s) that are in place and are utilized during lease operations.

A gate shall be constructed and fastened securely to H-braces.

Fence Requirement

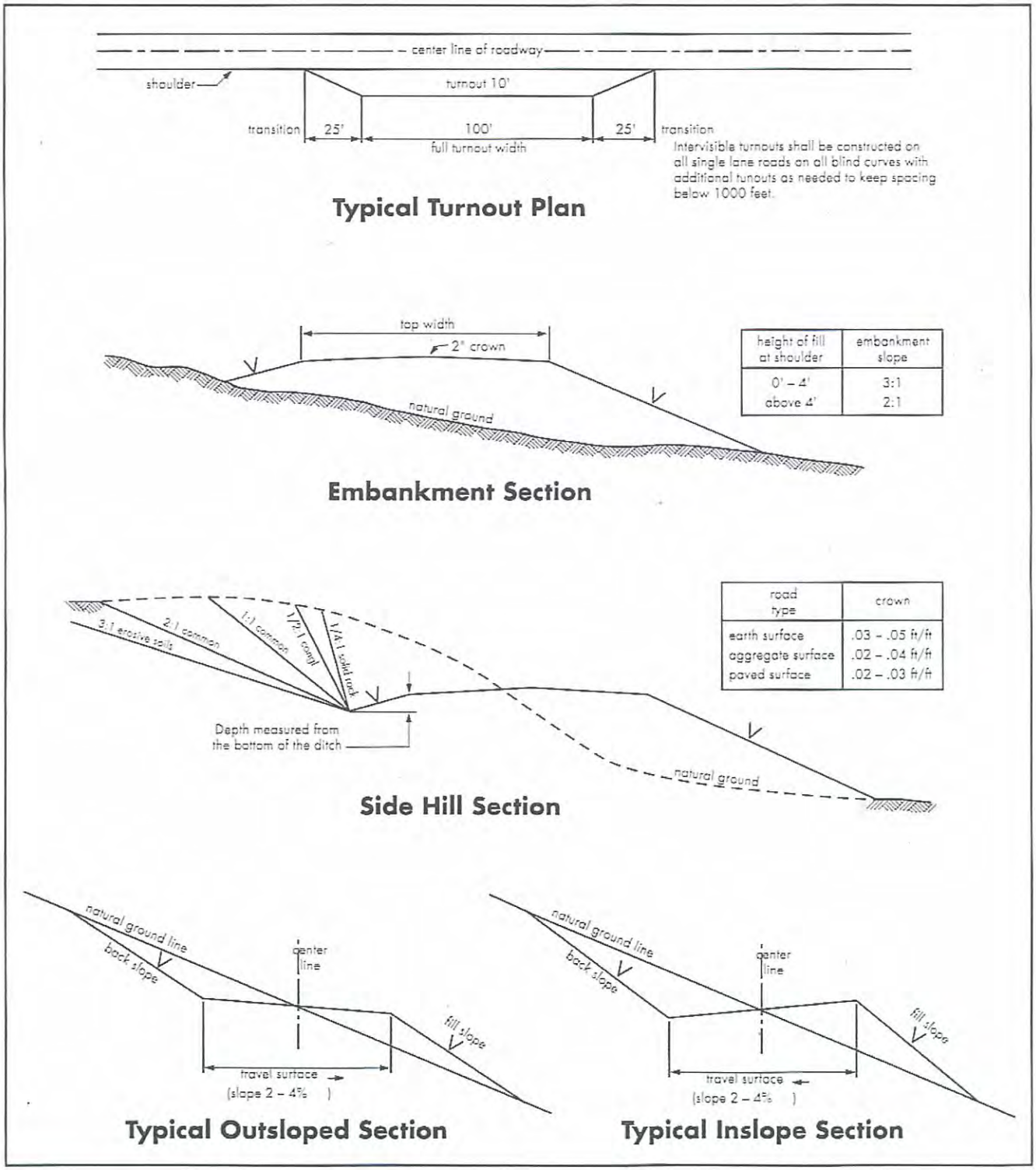
Where entry is required across a fence line, the fence shall be braced and tied off on both sides of the passageway prior to cutting.

The operator shall notify the private surface landowner or the grazing allotment holder prior to crossing any fence(s).

Public Access

Public access on this road shall not be restricted by the operator without specific written approval granted by the Authorized Officer.

Figure 1 – Cross Sections and Plans For Typical Road Sections



V. DRILLING

A. DRILLING OPERATIONS REQUIREMENTS

1. Call the Roswell Field Office, 2909 West Second St., Roswell NM 88201. During office hours call (575) 627-0205 and (575) 910-6024 after hours call. Engineer on call during office hours call (575) 627-0272 or after hours call (575) 626-5749.

A. DRILLING OPERATIONS REQUIREMENTS

1. Call the Roswell Field Office, 2909 West Second St., Roswell, NM 88201. During office hours call (575) 627-0205 or after office hours call (575) 910-6024. Engineer on call during office hours call (575) 627-0275 or after office hours call (575) 626-5749.

2. The BLM is to be notified a minimum of 24 hours in advance for a representative to witness:

   a. Spudding well
   b. Setting and/or Cementing of **5-1/2** inch production casing string

The BLM is to be notified a minimum of 4 hours in advance for a representative to witness:

BOPE Tests

3. Unless the production casing has been run and cemented or the well has been properly plugged, the drilling rig shall not be removed from over the hole without prior approval.

The well is a re-entry with surface casing in-place. A closed loop, fresh water drilling system will be used to drill to the base of the usable water protection casing at 330 feet. All drilling mud and polymers used will be water based and non-toxic. Put a berm around the steel tanks sufficient to contain any leaks or over-flows.

B. CASING

1. Minimum required fill of cement behind the **5-1/2** inch production casing is **sufficient to tie back 500 feet above the uppermost perforation in the pay zone.**

2. The **5-1/2** inch production casing shall be new or reconditioned and tested casing and meet API standards for new casing. The use of reconditioned and tested casing shall be subject to approval by the authorized officer. Approval will be contingent upon the wall thickness of any casing being verified to be at least 87-1/2 per cent of the nominal wall thickness of new casing.

C. PRESSURE CONTROL

1. Before drilling into the **cement plug set below the base of the 13-3/8 inch surface casing from 400 feet to 300 feet**, the blowout preventer assembly shall consist of a minimum of One Annular Preventer or Two Ram-Type Preventers and a Kelly Cock/Stabbing Valve.

2. Before drilling into the **cement plug set below the base of the 13-3/8 inch surface casing from 400 feet to 300 feet**, minimum working pressure of the blowout preventer and related equipment (BOPE) shall be **2000** psi.

3. The BOPE shall be installed before drilling into the **cement plug set at the base of the 8-5/8 inch intermediate casing from 2140 feet to 1950 feet**, and shall be tested as described in Onshore Order No. 2. Any equipment failing to test satisfactorily shall be repaired or replaced.

a. The BLM Roswell Field office shall be notified a minimum of 4 hours in advance for a representative to witness the tests.

b. The tests shall be done by an independent service company.

c. The BOP/BOPE test shall include a low pressure test from 250 to 300 psi. The test will be held for a minimum of 10 minutes if test is done with a test plug and 30 minutes without a test plug.

d. All tests are required to be recorded on a calibrated test chart. A copy of the BOP/BOPE test chart and a copy of independent service company test will be submitted to the BLM Roswell Field Office at 2909 West Second Street, Roswell, New Mexico 88201.

e. Testing fluid must be water or an appropriate clear liquid suitable for sub-freezing temperatures. Use of drilling mud for testing is not permitted since it can mask small leaks.

f. Testing must be done in a safe workman like manner. Hard line connections shall be required.

VI. PRODUCTION

Placement of Production Facilities

Production facilities should be placed on the well pad to allow for maximum interim recontouring and revegetation of the well location.

Containment Structures

The containment structure shall be constructed to hold the capacity of the entire contents of the largest tank, plus 24 hour production, unless more stringent protective requirements are deemed necessary by the Authorized Officer.

Painting Requirement

All above-ground structures including meter housing that are not subject to safety requirements shall be painted a flat non-reflective paint color, Juniper Green (Standard Environmental Color Chart June 2008).

VII. INTERIM RECLAMATION

During the life of the development, all disturbed areas not needed for active support of production operations should undergo "interim" reclamation in order to minimize the environmental impacts of development on other resources and uses. Earthwork for interim and final reclamation must be completed within 6 months of well completion or well plugging (weather permitting). The operator shall submit a Sundry Notices and Reports on Wells (Notice of Intent), Form 3160-5, prior to conducting interim reclamation.

During reclamation, the removal of caliche is important to increasing the success of revegetating the site. Removed caliche may be used in road repairs, fire walls or for building other roads and locations. In addition, in order to operate the well or complete workover operations, it may be necessary to drive, park and operate on restored interim vegetation within the previously disturbed area. Disturbing revegetated areas for production or workover operations will be allowed. If there is significant disturbance and loss of vegetation, the area will need to be revegetated. Communicate with the appropriate BLM office for any exceptions/exemptions if needed.

PECOS DISTRICT
SEED MIX FOR
Ecological Site: Shallow Sand SD-3
Ecological Site: Sandy SD-3

Common Name and Preferred Variety	Scientific Name	Pounds of Pure Live Seed Per Acre
Black grama	*(Bouteloua eriopoda)*	3.0
or Blue grama,	*(Bouteloua gracilis)*	
Sideoats grama	*(Bouteloua curtipendula)*	2.0
Sand dropseed	*(Sporobolus cryptandrus)*	1.5
or Mesa dropseed	*(S. flexuosus)*	
or Spike dropseed	*(S. contractus)*	
Desert or Scarlet	*(Sphaeralcea ambigua)*	1.0
Globemallow or	*(S. coccinea)*	
Croton	*(Croton* spp.*)*	1.0
TOTAL POUNDS PURE LIVE SEED (pls) PER ACRE		8.5

Certified Weed Free Seed
IF ONE SPECIES IS NOT AVAILABLE,
INCREASE ALL OTHERS PROPORTIONATELY
Use no less than 4 species, including 1 forb
No less than 8.5 pounds pls per acre shall be applied

C. FINAL ABANDONMENT & REHABILITATION REQUIREMENTS
VIII. FINAL ABANDONMENT & REHABILITATION REQUIREMENTS

a) Upon abandonment of the well and/or when the access road is no longer in service, a Notice of Intent for Final Abandonment with the proposed surface restoration procedure must be submitted for approval.

b) On private surface/federal mineral estate land the reclamation procedures on the road and well pad shall be accomplished in accordance with the Private Surface Land Owner agreements and a copy of the release is to be submitted upon abandonment.

c) Upon abandonment of the well, all casing shall be cut-off at the base of the cellar or 3-feet below final restored ground level (whichever is deeper). A 4-inch pipe, 10 feet in length, shall be installed 4 feet above ground and embedded in cement. The following information shall be permanently inscribed on the dry hole marker: Well name and number, the name of the operator, the lease serial number, the surveyed location (the quarter-quarter section, section, township and range or other authorized survey designation acceptable to the authorized officer; such as metes and bounds).

d) Surface Reclamation must be completed within 6 months of well plugging. If the operator proposes to modify the plans for surface reclamation approved on the APD, the operator must attach these modifications to the Subsequent Report of Plug and Abandon using Sundry Notices and Reports on Wells, Form 3160-5.

NMP0130:SSanderford:ss: NMP0130:SSanderford:ss:8/5/09:575-627-0287:N:\Case Files - Electronic\NM-120891 - Monopoly\COA's Monopoly Federal #1.docx

United States Department of the Interior
BUREAU OF LAND MANAGEMENT
Pecos District

Carlsbad Field Office
620 E. Greene
Carlsbad, NM 88220

Roswell Field Office
2909 W. Second St.
Roswell, NM 88021

www.nm.blm.gov

TAKE PRIDE IN AMERICA

In reply refer to
1310 (500)

NOV 13 2006

Dear Operator:

Both the Bureau of Land Management (BLM) and the oil and gas industry recognize that mineral development is one of many uses on the public lands in New Mexico. Since oil and gas development is only meant to be a temporary use of the surface, interim reclamation of disturbed areas not needed for active support of production operations is a very important 'best management practice'. In an effort to insure continued access and availability of public minerals, it is in the best interests of the oil and gas industry and BLM to work together towards reclaiming lands not actively used for safe and economical production.

Recognizing that a "one size fits all" approach is not practical, I am asking our lessees and operators to work with BLM staff to find solutions on reclaiming disturbed areas. In keeping with best management practices, locations and roads should have the smallest surface impact possible while balancing the need for safety, terrain, depth of the well and good engineering practices. As I have indicated at our working group meetings, where terrain permits, roads and locations may be built with minimal or no caliche for surfacing. The BLM acknowledges that there will be areas, such as in sandy soils, where surfacing materials may be necessary for a well pad, or portions of the road. These details can be worked out at the time of the onsite inspection.

At the time reserve pits are to be reclaimed, operators should work with a BLM surface management specialist to devise the best strategies to reduce the size of the location. BLM is aware that safety requirements do not allow vehicles within the area of guy anchors. Any reductions should allow for remedial well operations, as well as safe and efficient removal of oil and gas. We also recognize that pad sizes will vary depending upon whether a tank battery is present, onsite terrain and soils at each location. Our goal is to minimize the footprint required for safe operations, while achieving our commitment to multiple land use.

During reclamation, the removal of caliche from a road and location when that material is no longer necessary is important to increasing the success of revegetating the site. Removed caliche may be used in road repairs, or for building other roads and locations. We also recognize that in sandy dunal areas significant interim reclamation may not be feasible. In addition, in order to operate the well or complete workover operations, it may be necessary to drive, park and operate on restored interim vegetation within the previously disturbed area. Disturbing revegetated areas for production or workover operations will be allowed, since they will usually do little or no damage to the surface. If there is significant disturbance and loss of vegetation, the area will

need to be revegetated within a reasonable period after use. The BLM also acknowledges that there will be exceptions, and I urge operators to communicate with the appropriate BLM office if an exemption to interim reclamation is needed.

While change does not come easy for any of us, our combined efforts to reduce the footprint of mineral activities will go a long way in demonstrating our ability to harmonize oil and gas development with other uses on the public lands. I really appreciate your efforts in this area and look forward to our continued work together.

Sincerely,

Douglas J. Burger
Pecos District Manager

BUREAU OF LAND MANAGEMENT
CASE RECORDATION
(LIVE) SERIAL REGISTER PAGE

01 12-22-1987;101STAT1330;30USC181 ET SEQ
Case Type 312021: O&G LSE COMP PD -1987
Commodity 459: OIL & GAS L
Case Disposition: AUTHORIZED

Total Acres
480.190

Serial Number
NMNM-- - 120891

Serial Number: NMNM-- - 120891

Name & Address			Int Rel	%Interest
CHASE OIL CORP	PO BOX 1767	ARTESIA NM 882111767	LESSEE	100.000000000

Serial Number: NMNM-- - 120891

Mer Twp Rng	Sec	SType	Nr Suff	Subdivision	District/Resource Area	County	Mgmt Agency
23 0130S 0290E	006	ALIQ		S2NE,SENW,E2SW,SE;	ROSWELL FO	CHAVES	BUREAU OF LAND MGMT
23 0130S 0290E	006	LOTS		1,2,3;	ROSWELL FO	CHAVES	BUREAU OF LAND MGMT

Serial Number: NMNM-- - 120891

Act Date	Code	Action	Action Remarks	Pending Office
05/30/2008	387	CASE ESTABLISHED	200807009;	
06/30/2008	299	PROTEST FILED	SUSAN H BELL;	
07/01/2008	299	PROTEST FILED	WESTERN ENVR LAW CTR;	
07/01/2008	299	PROTEST FILED	WILD EARTH GUARDIANS;	
07/16/2008	143	BONUS BID PAYMENT RECD	$962.00;	
07/16/2008	191	SALE HELD		
07/16/2008	267	BID RECEIVED	$481000.00;	
07/24/2008	143	BONUS BID PAYMENT RECD	$480038.00;	
09/08/2008	298	PROTEST DISMISSED	SUSAN H BELL;	
10/24/2008	298	PROTEST DISMISSED	WILD EARTH GUARDIANS;	
10/31/2008	237	LEASE ISSUED		
10/31/2008	298	PROTEST DISMISSED	WESTERN ENVR LAW CTR;	
10/31/2008	974	AUTOMATED RECORD VERIF	BTM	
11/01/2008	496	FUND CODE	05;145003	
11/01/2008	530	RLTY RATE - 12 1/2%		
11/01/2008	868	EFFECTIVE DATE		
11/17/2008	042	CASE SENT TO	RROMERO;	
10/31/2018	763	EXPIRES		

Serial Number: NMNM-- - 120891

Line Nr	Remarks
0002	STIPULATIONS ATTACHED TO LEASE:
0003	SENM-S-22 PRAIRIE CHICKENS
0004	SENM-S-23 SAND DUNE LIZARD
0005	SENM-S-39 PLAN OF DEVELOPMENT

NO WARRANTY IS MADE BY BLM
FOR USE OF THE DATA FOR
PURPOSES NOT INTENDED BY BLM

UNITED STATES DEPT OF INTERIOR

BUREAU OF LAND MANAGEMENT

BOND ABSTRACT

BLM BOND NO: NMB000286
DOCUMENT ID: B001473
CASE TYPE: 310434 O&G BOND ALL LANDS

DISPOSITION: ACCEPTED

NAME AND ADDRESS OF BOND PARTIES

B90000369 BONDED PRINCIPAL
MACK ENERGY CORP
PO BOX 960
ARTESIA NM 882110960

NAME AND ADDRESS OF SURETY PARTIES

S20030005001 SURETY
U.S. SPECIALTY INSURANCE
COMPANY
13403 NORTHWEST FREEWAY
HOUSTON TX 770406094

SERIAL NUMBER(s):

BOND AREA: STATEWIDE
TYPE OF LAND: FEDERAL-PUBLIC
BOND TYPE: SURETY

STATES COVERED: NM
BOND AMOUNT:$25,000

BONDED ACTIVITY/PURPOSE

GENERAL LSE/DRILLING
PROTECTION SURFACE OWNER
EXPLORATION
OPERATOR

COMMODITY(IES)

OIL & GAS L

ACTION CODE	ACTION DATE	ACTION TAKEN	ACTION REMARKS	PENDING
468	03/28/2005	BOND FILED		NM92110
469	03/29/2005	BOND ACCEPTED	EFF 03/29/05;	
974	03/29/2005	AUTOMATED RECORD VERIF	TF/TF	
478	08/29/2005	RIDER FILED	ASSSUMPTION	NM92100
479	09/01/2005	RIDER ACCEPTED	GULF 58 59 88 NM2151	
974	09/01/2005	AUTOMATED RECORD VERIF	MCS	

GENERAL REMARKS

LINE # REMARK

OPERATOR MACK ENERGY CORPORATION

WELL NAME #1 MONOPOLY FEDERAL

LOCATION 2428' F S L & 1154' F E L, SEC. 6 T. 13 S., R. 29 E.

LEASE NO. NM-120891 PROD ___ NON-PROD ___ EFF DATE 11-01-2008

BOND COVERAGE INDIVIDUAL ___ STATEWIDE X (NMB000286) NATIONWIDE ___

ACREAGE DEDICATED TO WELL 40.00

COM AGR REQUIRED Y ___ N ✓ ORTHODOX LOCATION Y ___ N ✓

NOS REC. N/A APD REC. 3/19/09 10-DAY LTR SENT ___

DEFICIENCIES NOTED ___ (DATE CORR.)

IS OPERATOR A LESSEE OR OPERATING RIGHTS OWNER ? YES ___ NO X

TECHNICAL CHECKLIST	COMMENTS
✓ 1. PLAT	Engineering O.K.: 04-08-2009: D.R.D.
✓ 2. ELEVATION	
✓ 3. SURFACE GEOLOGY	
✓ 4. GEOLOGIC TOP	
✓ 5. PROPOSED DEPTH	
✓ 6. TARGETED FORMATION	
✓ 7. ANTICIPATED WATER-OIL GAS, ETC	Re-Entry
✓ 8. CASING/CEMENT PROGRAM	13 3/8" Surface Casing Already Set @ 330'; 8 5/8" Intermediate Casing Already Set @ 2092'
✓ 9. WELL CONTROL PROG (BOP, ETC)	
✓ 10. MUD PROGRAM	
✓ 11. TEST-LOG-CORE, ETC PROGRAMS	
✓ 12. H2S OR OTHER HAZARDS	
✓ 13. PET WITNESS WATER BASIN OR OTHER	
14. OTHER	

United States Department of the Interior
BUREAU OF LAND MANAGEMENT
Pecos District
Roswell Field Office
2909 West Second Street
Roswell, New Mexico 88201-2019
www.nm.blm.gov

TAKE PRIDE IN AMERICA

IN REPLY REFER TO:
(510)3160
NM-12089

3/23/09

Bogel Limited Company
ATTN: Mr. Lewis Derrick
P.O. Box 460
Dexter, New Mexico 88230

Dear Mr. Derrick:

Mack Energy Corporation has recently applied for a permit to drill the Monopoly Federal #1oil well. The well is located in the NE¼SE¼ of Section 6, Township 13 South, Range 29 East.

This location is on your private surface and federal minerals. The well is also within the boundaries of your existing Bureau of Land Management grazing allotment #65075. As a courtesy, the BLM is notifying you of the possibility of drilling activities occurring in the section mentioned above, that may affect your ranch operations.

An onsite will be conducted on the access road and well pad location; your attendance would be appreciated. When the onsite is scheduled you will be notified of the time and date. If you have any questions on this federal action please contact me at the Roswell Field Office - BLM, telephone number (505) 627-0247.

Respectfully,
/S/ Richard G. Hill

Environmental Protection Specialist

Richard Hill/RFO/NM/BLM/DOI
03/23/2009 10:45 AM

To Richard Hill/RFO/NM/BLM/DOI@BLM
cc
bcc
Subject Re: MONOPOLY FEDERAL #1 ONSITE SCHEDULED

Interdisciplinary Team, the onsite date is March 26, 2009 not (3/23/09). Thanks

Richard Hill/RFO/NM/BLM/DOI

Richard Hill/RFO/NM/BLM/DOI
03/23/2009 09:21 AM

To APD Resources-Pendley
cc
Subject MONOPOLY FEDERAL #1 ONSITE SCHEDULED

Interdisciplinary Team, an onsite has been scheduled for the **MONOPOLY FEDERAL #1 APD**. On **Thursday (3/23/09) at 9:30 AM** we will meet with Jerry Sherrell Sr., at the junction of the Aberdeen (SR249) State Road and Jemina County Road. There are maps on the Shared Directory that will show you how to get there. Mark your calendars. See you there. Thanks

BUREAU OF LAND MANAGEMENT
CASE RECORDATION
(LIVE) SERIAL REGISTER PAGE

Run Date/Time: 03/20/09 07:54 AM

01 10-21-1976;090STAT2776;43USC1761
Case Type 281001: ROW-ROADS
Commodity 971: NON-ENERGY FACILITIES
Case Disposition: AUTHORIZED

Total Acres 36.020

Serial Number NMNM-- - 090313

Serial Number: NMNM-- - 090313

Name & Address			Int Rel	%Interest
THORNTON OPERATING CO	7928 VISTA RIDGE DR N	FORT WORTH TX 761324529	HOLDER/BILLEE	100.000000000

Serial Number: NMNM-- - 090313

Mer Twp Rng	Sec	SType	Nr Suff	Subdivision	District/Resource Area	County	Mgmt Agency
23 0130S 0290E	008	ALIQ		SENE,E2SE;	ROSWELL FO	CHAVES	BUREAU OF LAND MGMT
23 0130S 0290E	009	ALIQ		W2SW;	ROSWELL FO	CHAVES	BUREAU OF LAND MGMT
23 0130S 0290E	017	ALIQ		N2NE,SWNE,SENW,E2SW;	ROSWELL FO	CHAVES	BUREAU OF LAND MGMT
23 0130S 0290E	020	ALIQ		W2NE,SENE,NENW;	ROSWELL FO	CHAVES	BUREAU OF LAND MGMT
23 0130S 0290E	021	ALIQ		S2NE,S2NW,NESW,N2SE;	ROSWELL FO	CHAVES	BUREAU OF LAND MGMT
23 0130S 0290E	022	ALIQ		S2NW;	ROSWELL FO	CHAVES	BUREAU OF LAND MGMT
23 0130S 0290E	027	ALIQ		N2NW,SWNW,W2SW;	ROSWELL FO	CHAVES	BUREAU OF LAND MGMT
23 0130S 0290E	034	ALIQ		W2W2;	ROSWELL FO	CHAVES	BUREAU OF LAND MGMT
23 0140S 0290E	003	ALIQ		NWNW;	ROSWELL FO	CHAVES	BUREAU OF LAND MGMT
23 0140S 0290E	004	ALIQ		SENE;	ROSWELL FO	CHAVES	BUREAU OF LAND MGMT

Serial Number: NMNM-- - 090313

Act Date	Code	Action	Action Remarks	Pending Office
02/18/1994	124	APLN RECD		
02/23/1994	065	COST RECOV (MON) RECD	$50.00;	
02/23/1994	971	COST RECOV (PROC) RECD	$125.00;	
03/09/1994	241	AUTH OFFERED APPLICANT		
03/23/1994	307	ROW GRANTED-ISSUED		
03/23/1994	503	LENGTH IN MILES	9.90;	
03/23/1994	504	WIDTH IN FEET (TOTAL)	30;	
04/04/1994	140	ASGN FILED		
04/04/1994	392	MONIES RECEIVED	$50.00;ASSIGNMENT	
04/08/1994	139	ASGN APPROVED	FROM SEAGULL MIDCON;	
10/03/2006	393	DEC ISSUED	43 CFR 2806.15(B)(3);	
11/01/2006	950	COMPLIANCE APPROVED		
03/01/2007	111	RENTAL RECEIVED	$216.40;1YR/07	
03/19/2007	065	COST RECOV (MON) RECD	$104.00;AMENDMENT	
03/19/2007	153	POST AUTH APLN RECD		
03/19/2007	971	COST RECOV (PROC) RECD	$104.00;AMENDMENT	
03/26/2007	304	AUTH AMENDED/MODIFIED	+502 14600;	
10/15/2007	111	RENTAL RECEIVED	$62.76;ADD'L RENT 07	
01/02/2008	111	RENTAL RECEIVED	$309.05;1YR/08	
01/08/2009	111	RENTAL RECEIVED	$1095.47;6YRS/09-14	
01/14/2009	974	AUTOMATED RECORD VERIF	LA;	
04/04/2010	853	COMPL/REVIEW DUE DATE		DIVISION OF LANDS & MINERALS
03/23/2014	763	EXPIRES		

Line Nr Remarks

Serial Number: NMNM-- - 090313

NO WARRANTY IS MADE BY BLM
FOR USE OF THE DATA FOR
PURPOSES NOT INTENDED BY BLM

0002 ACCESS ROAD;
0003 SEAGULL FEDERAL #1;

NO WARRANTY IS MADE BY BLM
FOR USE OF THE DATA FOR
PURPOSES NOT INTENDED BY BLM

BUREAU OF LAND MANAGEMENT
CASE RECORDATION
(LIVE) SERIAL REGISTER PAGE

01 12-22-1987;101STAT1330;30USC181 ET SEQ
Case Type 312021: O&G LSE COMP PD -1987
Commodity 459: OIL & GAS L
Case Disposition: AUTHORIZED

Total Acres 480.190

Serial Number NMNM-- - 120891

Serial Number: NMNM-- - 120891

Name & Address			Int Rel	%Interest
CHASE OIL CORP	PO BOX 1767	ARTESIA NM 882111767	LESSEE	100.000000000

Serial Number: NMNM-- - 120891

Mer Twp Rng	Sec	SType	Nr Suff	Subdivision	District/Resource Area	County	Mgmt Agency
23 0130S 0290E	006	ALIQ		S2NE,SENW,E2SW,SE;	ROSWELL FO	CHAVES	BUREAU OF LAND MGMT
23 0130S 0290E	006	LOTS		1,2,3;	ROSWELL FO	CHAVES	BUREAU OF LAND MGMT

Serial Number: NMNM-- - 120891

Act Date	Code	Action	Action Remarks	Pending Office
05/30/2008	387	CASE ESTABLISHED	200807009;	
06/30/2008	299	PROTEST FILED	SUSAN H BELL;	
07/01/2008	299	PROTEST FILED	WESTERN ENVR LAW CTR;	
07/01/2008	299	PROTEST FILED	WILD EARTH GUARDIANS;	
07/16/2008	143	BONUS BID PAYMENT RECD	$962.00;	
07/16/2008	191	SALE HELD		
07/16/2008	267	BID RECEIVED	$481000.00;	
07/24/2008	143	BONUS BID PAYMENT RECD	$480038.00;	
09/08/2008	298	PROTEST DISMISSED	SUSAN H BELL;	
10/24/2008	298	PROTEST DISMISSED	WILD EARTH GUARDIANS;	
10/31/2008	237	LEASE ISSUED		
10/31/2008	298	PROTEST DISMISSED	WESTERN ENVR LAW CTR;	
10/31/2008	974	AUTOMATED RECORD VERIF	BTM	
11/01/2008	496	FUND CODE	05;145003	
11/01/2008	530	RLTY RATE - 12 1/2%		
11/01/2008	868	EFFECTIVE DATE		
11/17/2008	042	CASE SENT TO	RROMERO;	
10/31/2018	763	EXPIRES		

Serial Number: NMNM-- - 120891

Line Nr	Remarks
0002	STIPULATIONS ATTACHED TO LEASE:
0003	SENM-S-22 PRAIRIE CHICKENS
0004	SENM-S-23 SAND DUNE LIZARD
0005	SENM-S-39 PLAN OF DEVELOPMENT

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FOR USE OF THE DATA FOR
PURPOSES NOT INTENDED BY BLM

APD PROCESSING TRACKING SLIP - Well Name Location Lease Number

	Well Name = #1 MONOPOLY FEDERAL		
	Lease Number = NM-120891		
	location = T. 13 S., R. 29 E., Sec. 6		

Date	Process Description	Team Member	Task Complete Check Mark
3/19/09	APD Received	la	✓
3/19/09	Land Law Examiner Review/Login file setup etc	la	✓
3/19/09	Land Law Examiner provides copy of maps to GIS	la	✓
3/19/09	APD Maps to GIS	la	✓
3/19/09	Land Law Examiner provides LR2K serial Reg page for oil and gas lease - review expiration date if less then 60 days provide information to manager	la	✓
N/A	NOS Previous to APD Yes Date of NOS	la	✓
N/A	NOS On-site Date	la	✓
3/19/09	Management Receives APD	la	✓
	Manager assignes APD for processing		
	APD reviewed for Administrative Deficiencies		
	ROW needed for project - The ROW request will initially go to Scott - when application arrives I will assign the RS to process		
	APD Administrative Deficiencies letter sent to operator		
	Deficiencies Due		
	Deficiencies Received		
	APD Administrative Deficiencies Complete - BIGINS 30 days processing time for APD		
	NEPA Begins		
	Has the Arch Survey been Received for Project Yes - Continue with NEPA NO Next step		
	Additional special reports necessary prepare request to operator		
	letter prepared requesting Arch Survey and/or other special reports		
	arch survey and/or other special reports received Restart APD 30day clock		
	anticipated 30 day APD completion		

Linda

United States Department of the Interior
Bureau of Land Management
ROSWELL FIELD OFFICE
2909 W. SECOND STREET
ROSWELL, NM 88201 -2019
Phone: (575) 627-0272

Receipt

No: 1889752

Transaction #: 1951658
Date of Transaction: 03/19/2009

CUSTOMER:	MACK ENERGY CORPORATION PO BOX 960 ARTESIA,NM 88211-0960 US

LINE #	QTY	DESCRIPTION	REMARKS	UNIT PRICE	TOTAL
1	1.00	OIL & GAS / APPLICATION FOR PERMIT TO DRILL (APD) / APD FEE		4000.00	4000.00
				TOTAL:	**$4,000.00**

PAYMENT INFORMATION				
1	AMOUNT:	4000.00	POSTMARKED:	03/17/2009
	TYPE:	CHECK	RECEIVED:	03/19/2009
	CHECK NO:	13282		
	NAME:	MACK ENERGY CORPORATION PO BOX 960 ARTESIA NM 88211-0960 US		

REMARKS
MONOPLY FEDERAL #1

This receipt was generated by the automated BLM Collections and Billing System and is a paper representation of a portion of the official electronic record contained therein.

13282

MACK ENERGY CORPORATION
PO BOX 960
ARTESIA, NM 88211
(575) 748-1288

FILE COPY

DATE March 17, 2009

32-61-1110

PAY TO THE ORDER OF Bureau of Land Management $ **4,000.00**

Four thousand dollars and no/100******** DOLLARS

Security Features Included Details on Back

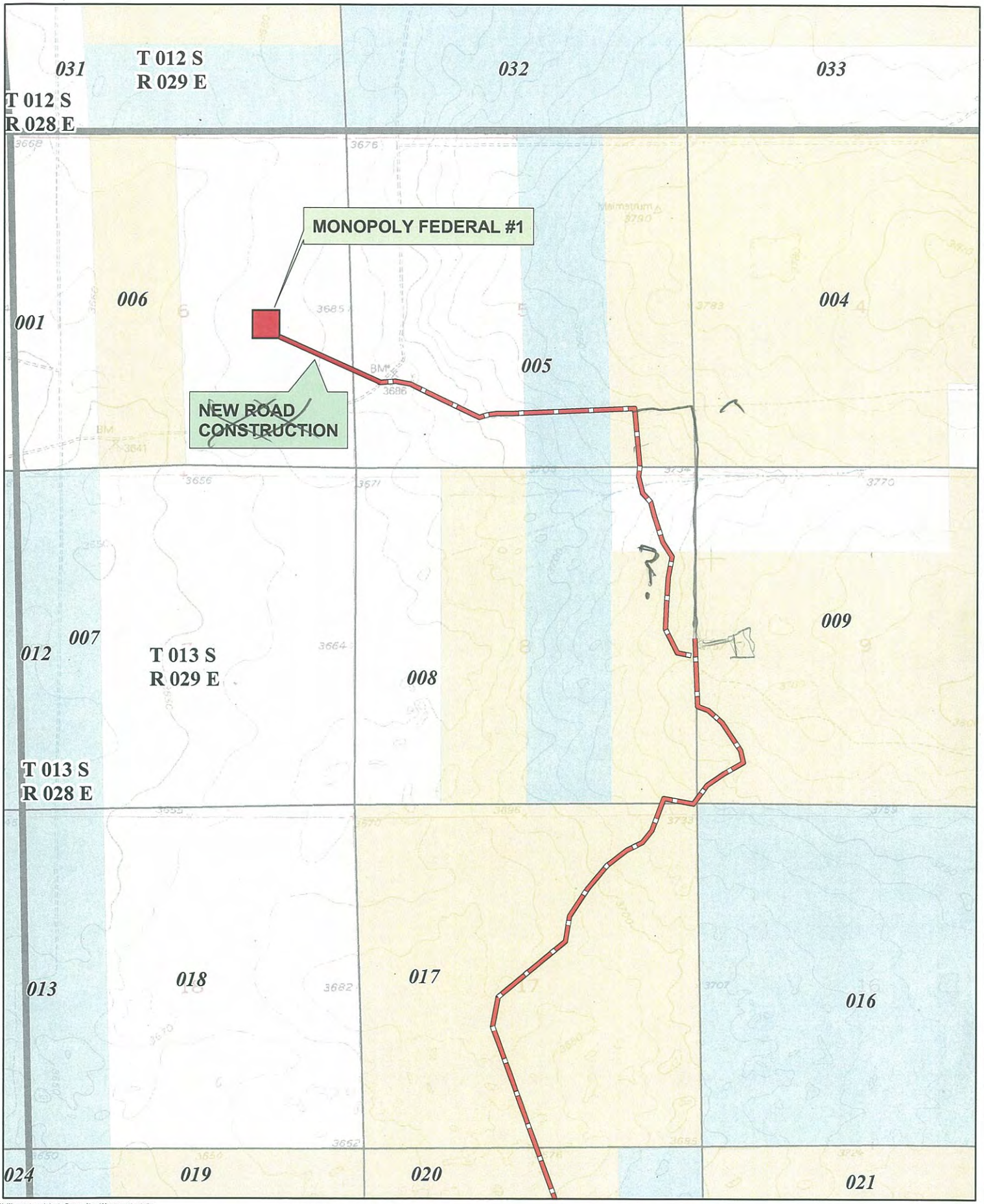
JPMorgan Private Bank
JPMorgan Chase Bank, N.A.
Dallas, Texas

FOR Monopoly Federal #1

MP

⑈013282⑈ ⑆111000614⑆ 1823423148⑈

CHANGE TO MEET YOUR NEEDS



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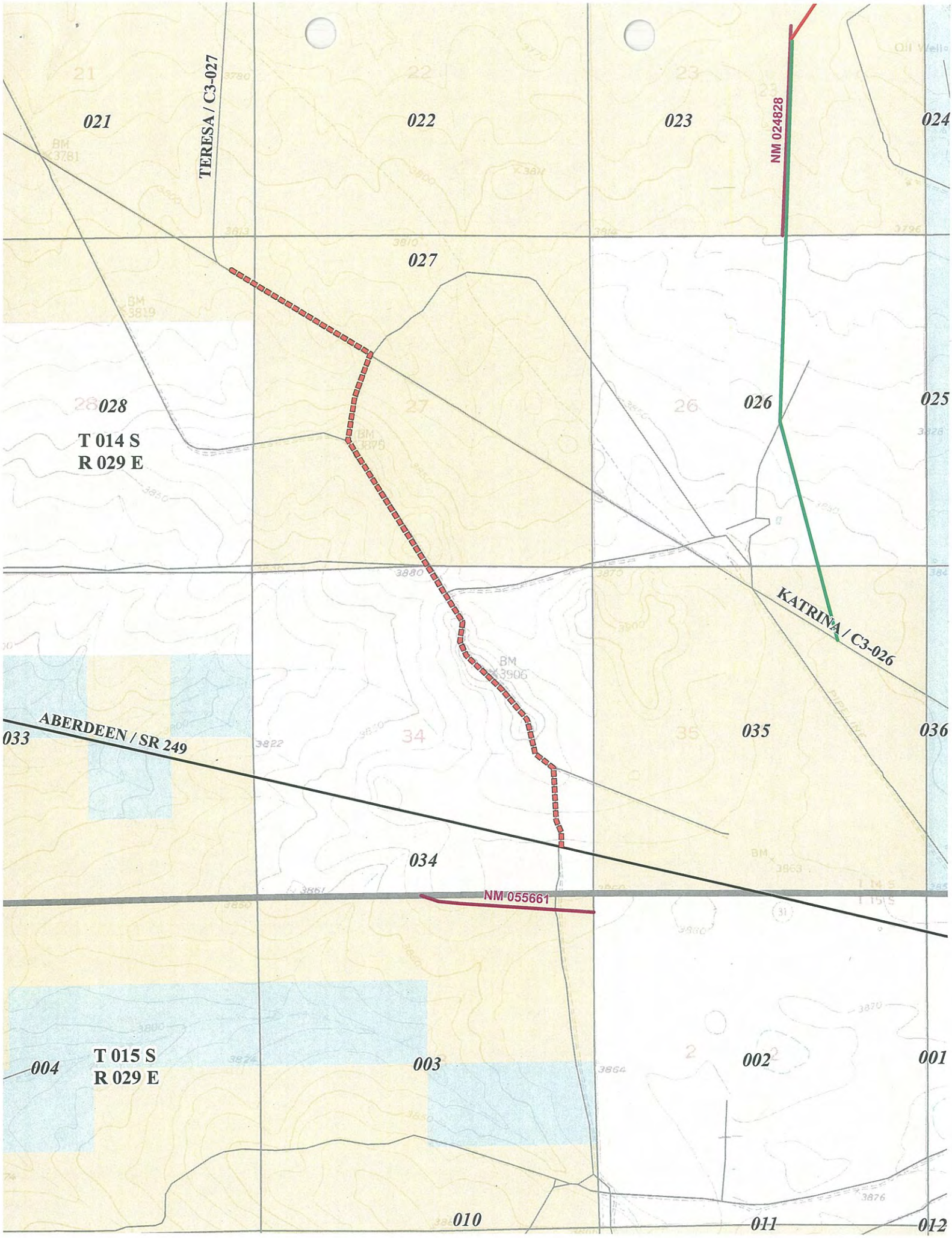
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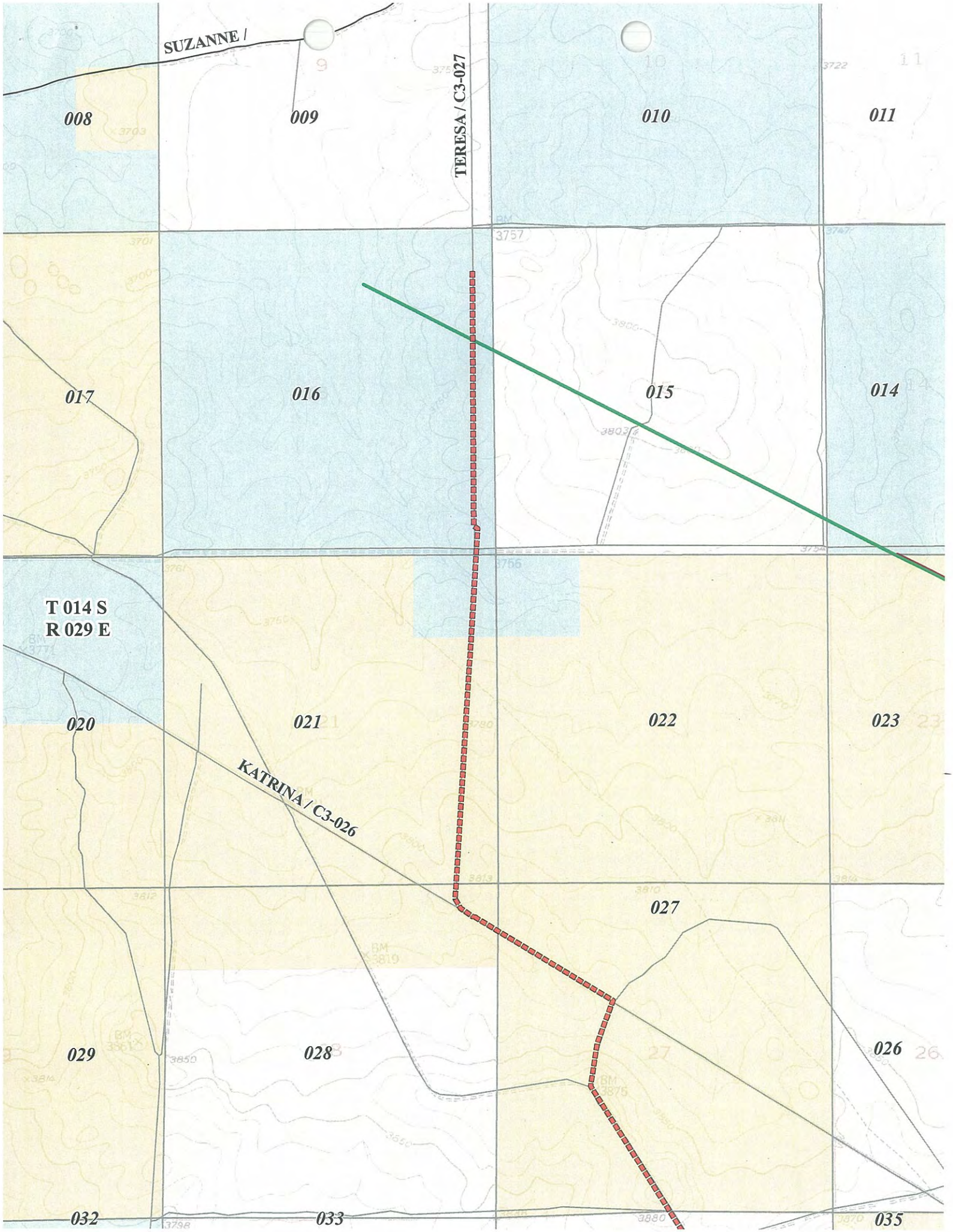
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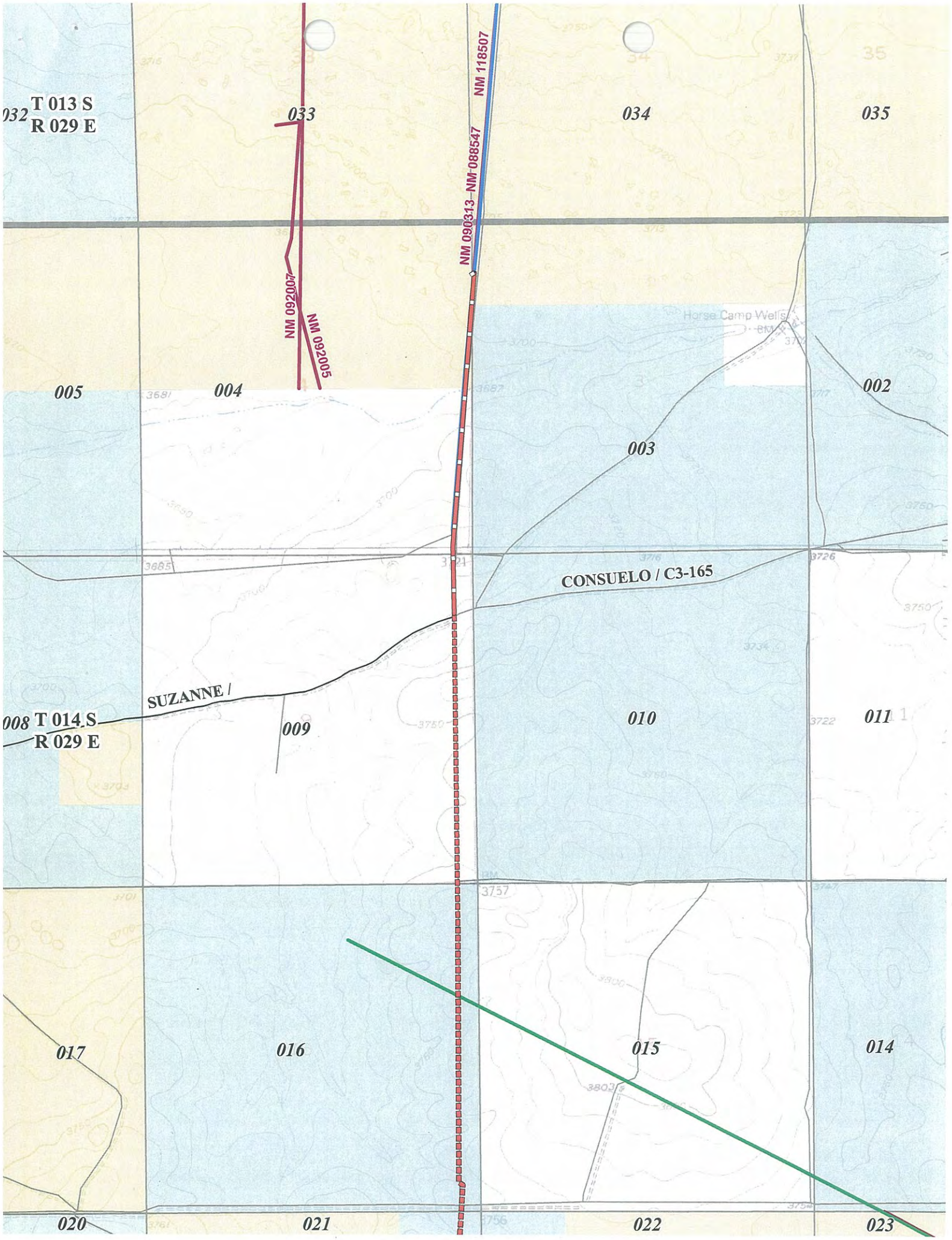
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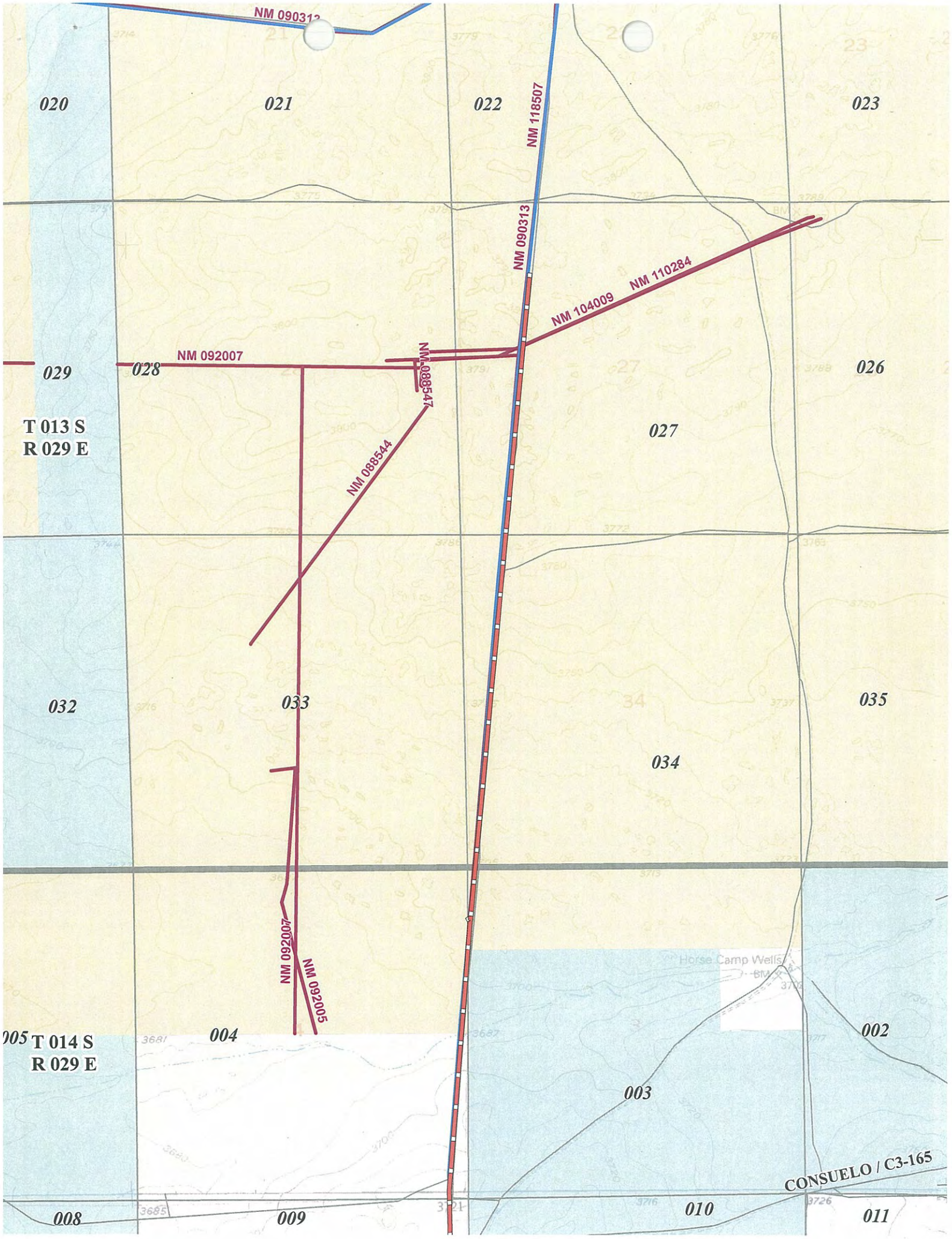
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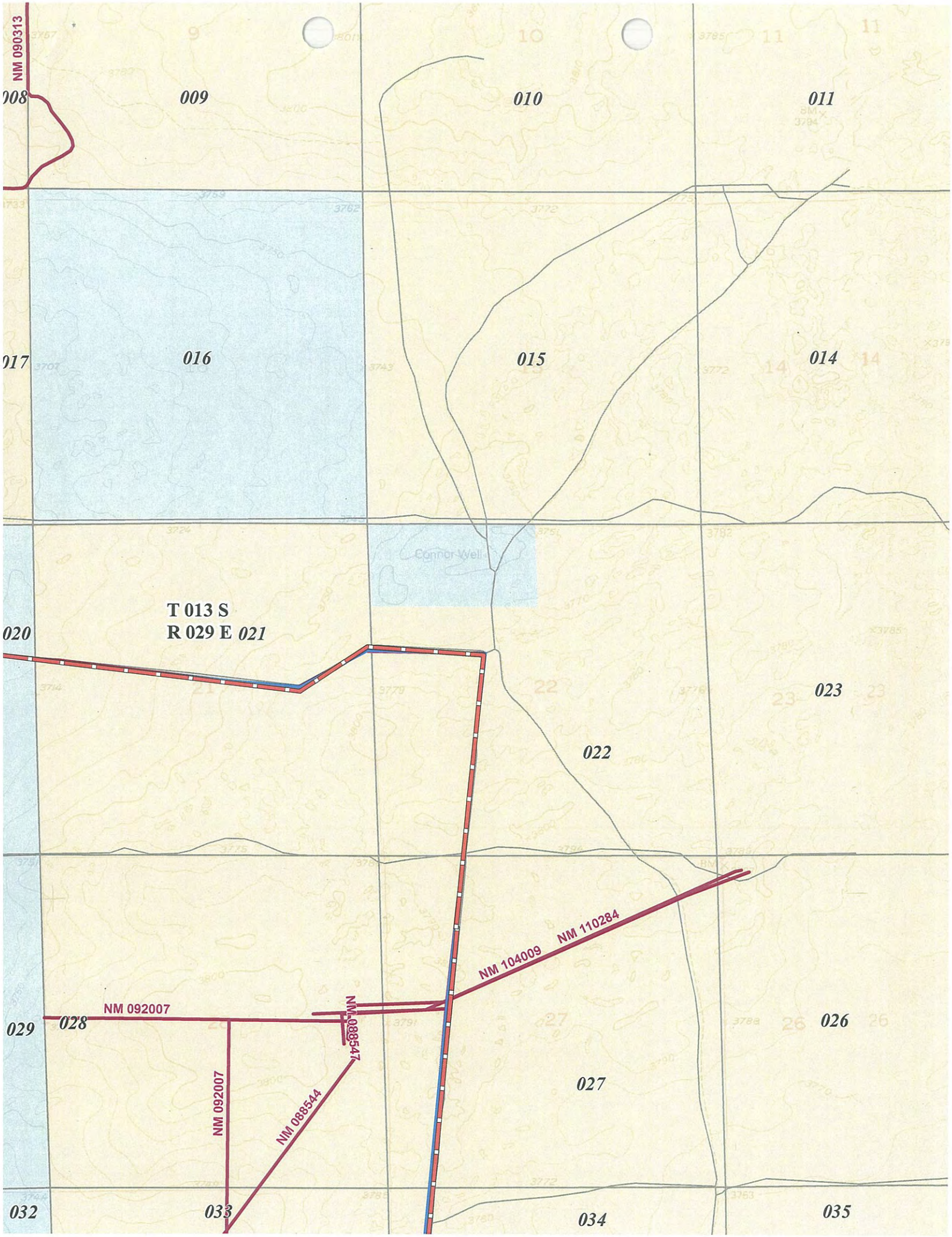
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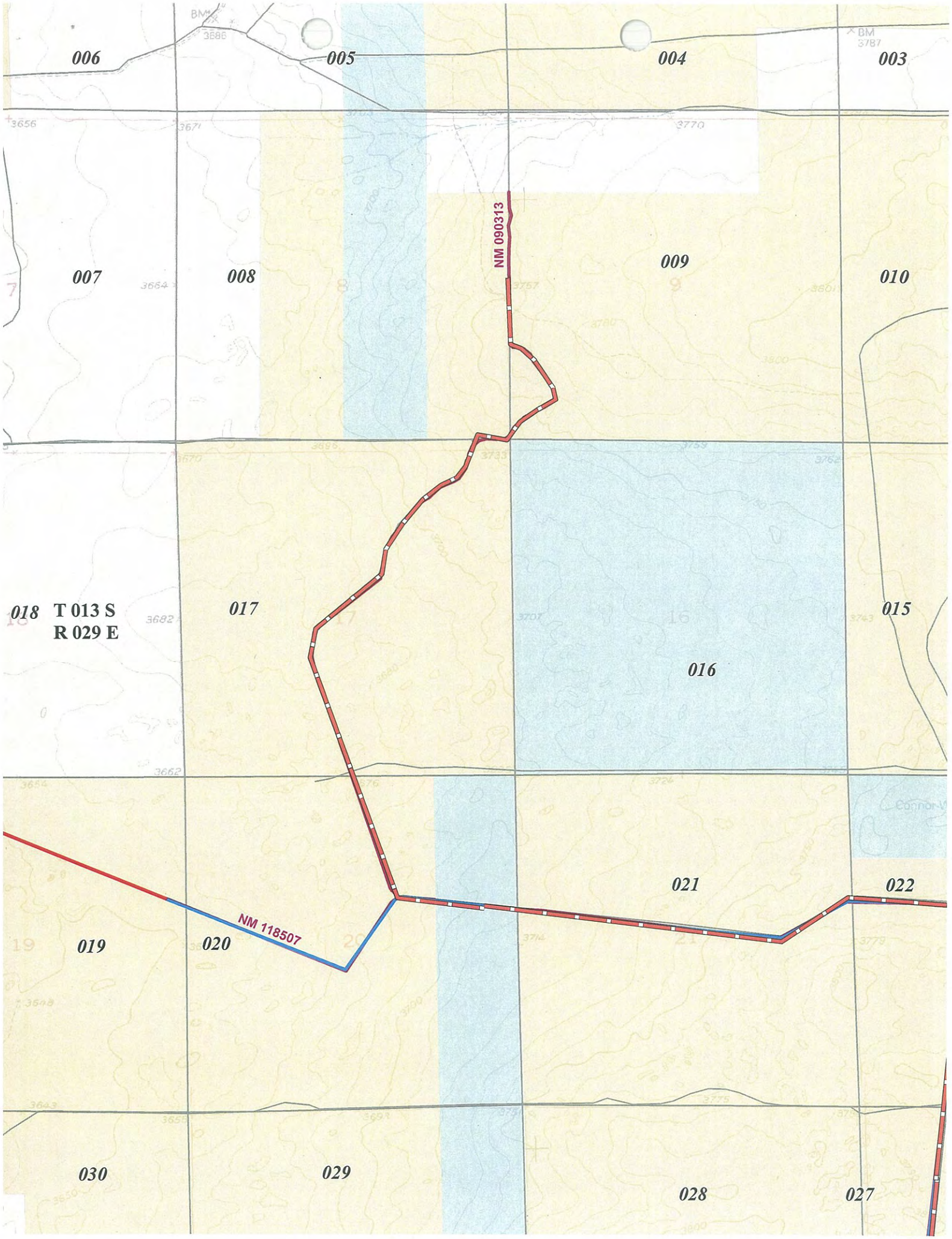
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MONOPOLY FEDERAL #1
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004
001
005
NEW ROAD
CONSTRUCTION
T 013 S
R 029 E
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009
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R 028 E
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TOWNSHIP 13 SOUTH, RANGE

CHAVES CO

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STATUS OF PUBLIC DOMAIN
LAND AND MINERAL TITLES

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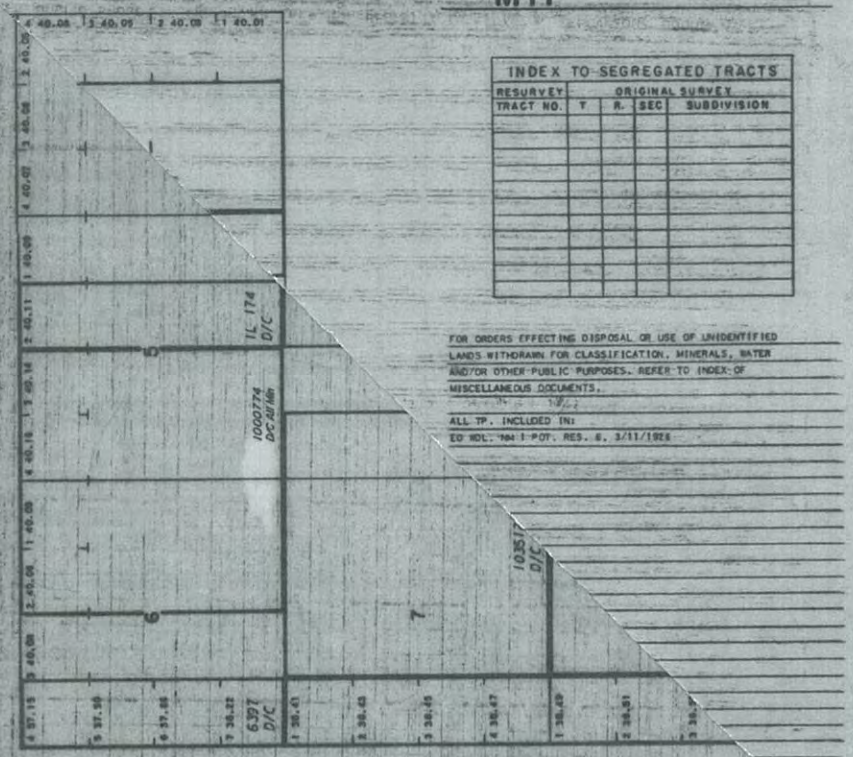

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RESURVEY	ORIGINAL SURVEY			
TRACT NO.	T	R.	SEC	SUBDIVISION

FOR ORDERS EFFECTING DISPOSAL OR USE OF UNIDENTIFIED LANDS WITHDRAWN FOR CLASSIFICATION, MINERALS, WATER AND/OR OTHER PUBLIC PURPOSES, REFER TO INDEX OF MISCELLANEOUS DOCUMENTS.

ALL TP. INCLUDED IN:
EO WDL. NM 1 POT. RES. 6, 3/11/1926