AT5-09-359

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HOBBSOCD

OCD Hobbs

Form 3160-3
(April 2004)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

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

APPLICATION FOR PERMIT TO DRILL OR REENTER

5. Lease Serial No. LC058626B

6. If Indian, Allotee or Tribe Name

1a. Type of work: ☑ DRILL ☐ REENTER

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

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

8. Lease Name and Well No. <37775>
Elliott Federal 29 #1

2. Name of Operator
Range Operating New Mexico, Inc. <227588>

9. API Well No.
30-025-39486

3a. Address 100 Throckmorton St., Ste. 1200
Fort Worth, TX 76102

3b Phone No. (include area code)
817-869-4216

10. Field and Pool, or Exploratory
Blinbry/Tubb/Drinkard/Abo

4. Location of Well (Report location clearly and in accordance with any State requirements.*)
At surface 990' FSL & 790' FEL Unit P
At proposed prod. zone 990' FSL & 790' FEL

11. Sec., T. R. M. or Blk. and Survey or Area
Unit P, Sec. 29, T22S, R37E

14. Distance in miles and direction from nearest town or post office*
5 miles SW from Eunie

12. County or Parish
Lea

13. State
NM

15. Distance from proposed* location to nearest property or lease line, ft (Also to nearest drig. unit line, if any)	16. No. of acres in lease	17. Spacing Unit dedicated to this well
	40	40
18 Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft.	19. Proposed Depth	20. BLM/BIA Bond No. on file
	7050	NM2399
21. Elevations (Show whether DF, KDB, RT, GL, etc.)	22. Approximate date work will start*	23. Estimated duration
3356 GR	07/15/2009	18 days

24. Attachments

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

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

25. Signature	Name (Printed/Typed)	Date
	Paula Hale	03/18/2009

Title: Sr. Reg. Sp.

Approved by (Signature)	Name (Printed/Typed)	Date
/s/ Don Peterson	/s/ Don Peterson	JUL 22 2009

Title: For FIELD MANAGER

Office: CARLSBAD FIELD OFFICE

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

APPROVAL FOR TWO YEARS

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

*(Instructions on page 2)

Capitan Controlled Water Basin

Conditions of Approval Approval to drill & test all new zones separate, but cannot produce Downhole commingle until DHC is approved in Hobbs District office according to R-11363

SEE ATTACHED FOR CONDITIONS OF APPROVAL

KZ

APPROVAL SUBJECT TO GENERAL REQUIREMENTS AND SPECIAL STIPULATIONS ATTACHED

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United State Department of the Interior

Bureau of Land Management

ROSWELL FIELD OFFICE
2902 West Second Street
Roswell, New Mexico 88201

Statement Accepting Responsibility for Operations

Operator Name: Range Operating New Mexico, Inc.
Street or Box: 100 Throckmorton St., St. 1200
City, State: Fort Worth, TX
Zip Code: 76102

The undersigned accepts all applicable terms, conditions, stipulations and restrictions concerning operations conducted on the leased land or portion thereof, as described below:

Lease No.:

Legal Description of Land:	Sec. 29, T22S, R37E SE/4 of SE/4
Formations:	Blinebry-Tubb-Drinkard-Abo
Bond Coverage: (State, Nationwide or Individual)	Statewide
BLM Bond File No.:	NM2399

Authorized Signature: Joanna Priddy

Title: Petroleum Engineer

Date: 03/18/2009

DISTRICT I
1625 N. French Dr., Hobbs, NM 88240
DISTRICT II
1301 W. Grand Avenue, Artesia, NM 88210
DISTRICT III
1000 Rio Brazos Rd., Aztec, NM 87410
DISTRICT IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy, Minerals and Natural Resources Department

OIL CONSERVATION DIVISION

1220 South St. Francis Dr.
Santa Fe, New Mexico 87505

Form C-102
Revised October 12, 2005

Submit to Appropriate District Office
State Lease – 4 Copies
Fee Lease – 3 Copies

WELL LOCATION AND ACREAGE DEDICATION PLAT

☐ AMENDED REPORT

API Number	Pool Code	Pool Name
30-025-39486	06660	Blinebry Oil & Gas

Property Code	Property Name	Well Number
37775	ELLIOTT FEDERAL "29"	1

OGRID No.	Operator Name	Elevation
227588	RANGE OPERATING	3356'

Surface Location

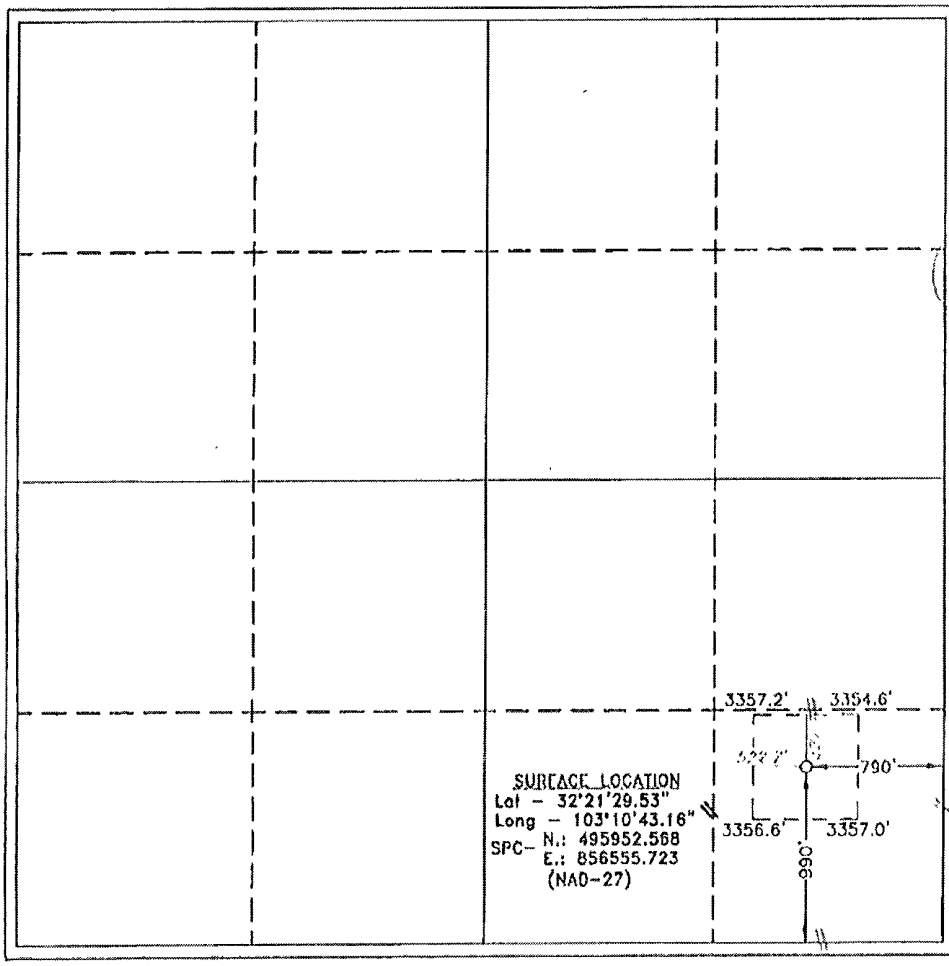
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
P	29	22 S	37 E		990	SOUTH	790	EAST	LEA

Bottom Hole Location If Different From Surface

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County

Dedicated Acres	Joint or Infill	Consolidation Code	Order No.
40			

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



OPERATOR CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.

3-18-2009
Signature Date

Paula Hale
Printed Name

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 belief.

FEBRUARY 17, 2009
Date Surveyed

Signature & Seal of Professional Surveyor

W.O. No. 21156

Certificate No. Gary L. Jones 7977

BASIN SURVEYS

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WELL LOCATION AND ACREAGE DEDICATION PLAT

☐ AMENDED REPORT

API Number	Pool Code	Pool Name
30-025-39486	60240	Tubb Oil & Gas

Property Code	Property Name	Well Number
37775	ELLIOTT FEDERAL "29"	1

OGRID No.	Operator Name	Elevation
227588	RANGE OPERATING	3356'

Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
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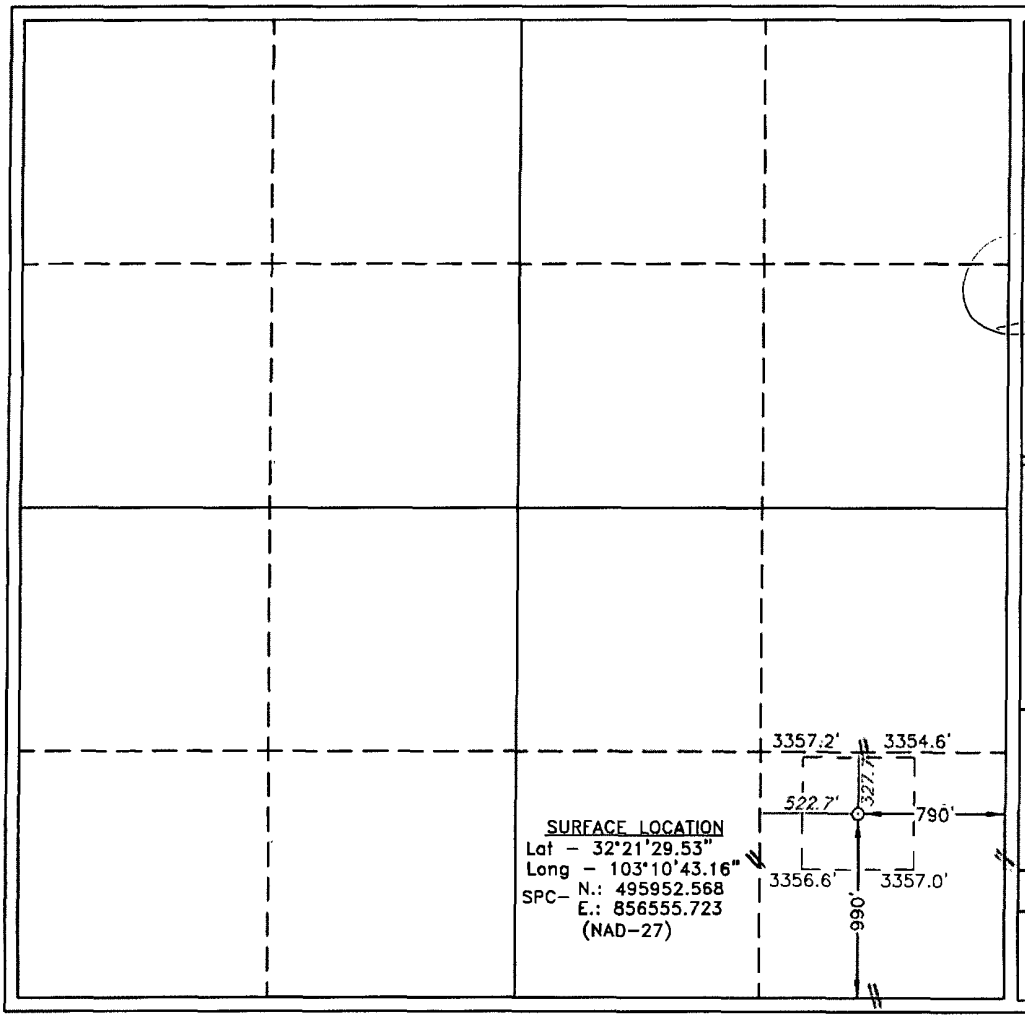

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WELL LOCATION AND ACREAGE DEDICATION PLAT

☐ AMENDED REPORT

API Number	Pool Code	Pool Name
30-025-39486	19190	Drinkard

Property Code	Property Name	Well Number
32775	ELLIOTT FEDERAL "29"	1

OGRID No.	Operator Name	Elevation
227588	RANGE OPERATING	3356'

Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
P	29	22 S	37 E		990	SOUTH	790	EAST	LEA

Bottom Hole Location If Different From Surface

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County

Dedicated Acres	Joint or Infill	Consolidation Code	Order No.
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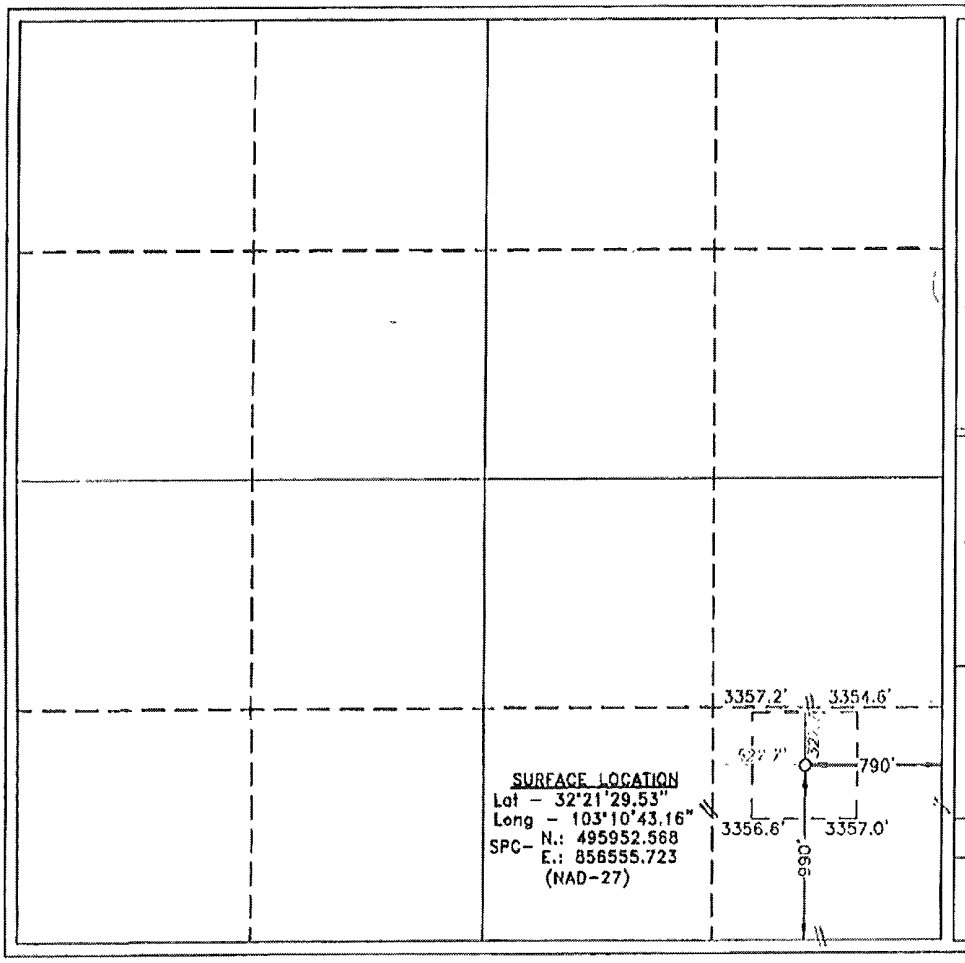

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WELL LOCATION AND ACREAGE DEDICATION PLAT

☐ AMENDED REPORT

API Number	Pool Code	Pool Name
30-025-39486	62700	Wantz; Abo

Property Code	Property Name	Well Number
37775	ELLIOTT FEDERAL "29"	1

OGRID No.	Operator Name	Elevation
227588	RANGE OPERATING	3356'

Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
P	29	22 S	37 E		990	SOUTH	790	EAST	LEA

Bottom Hole Location If Different From Surface

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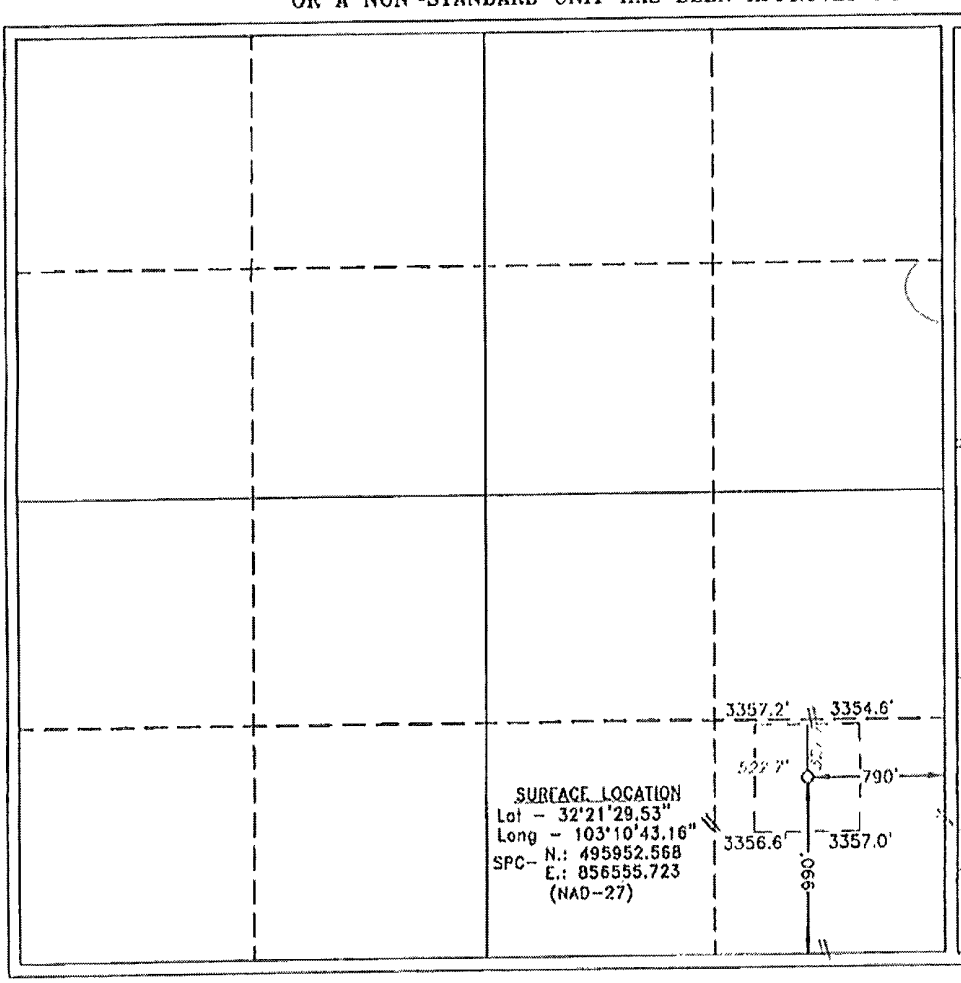

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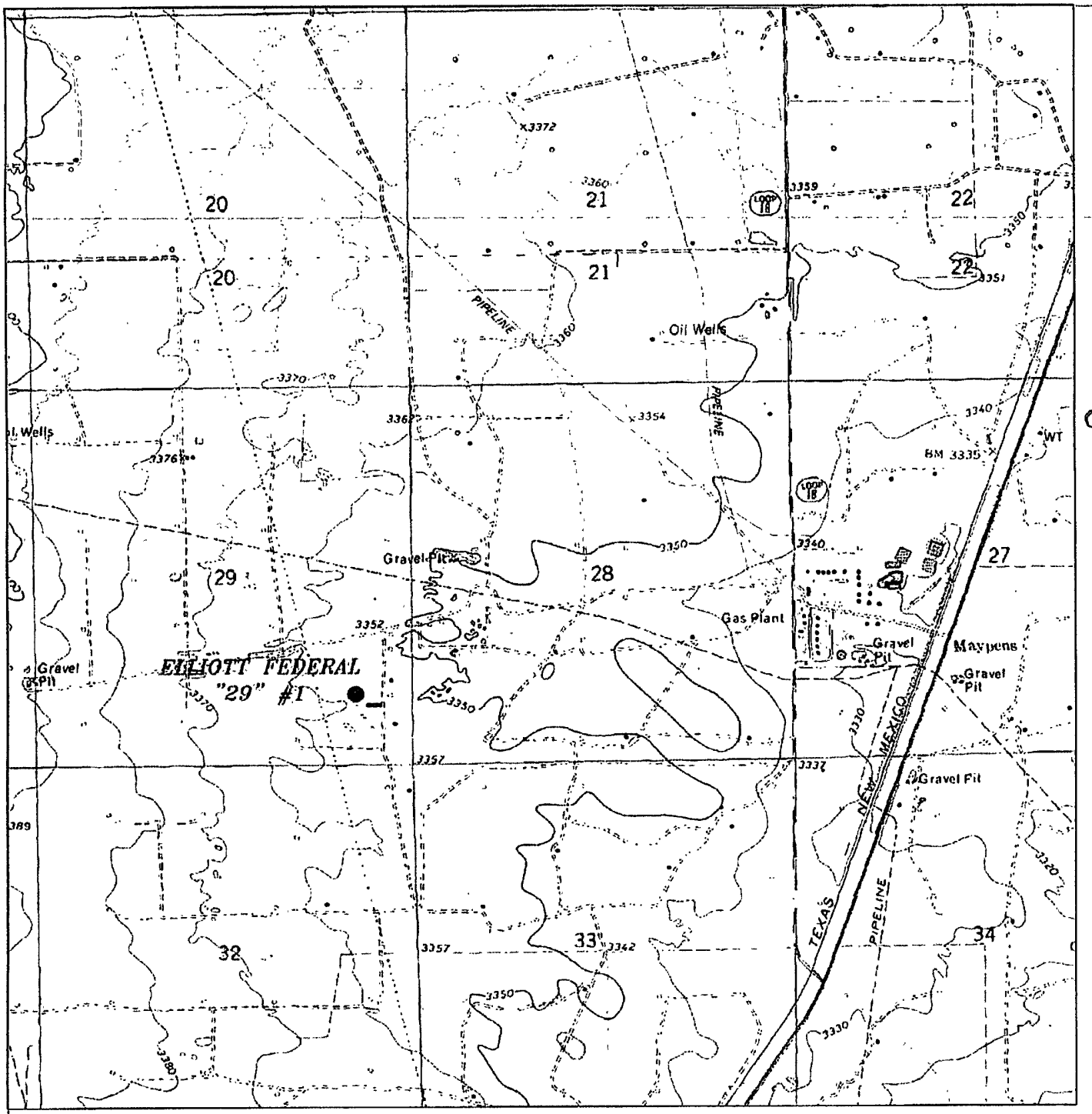


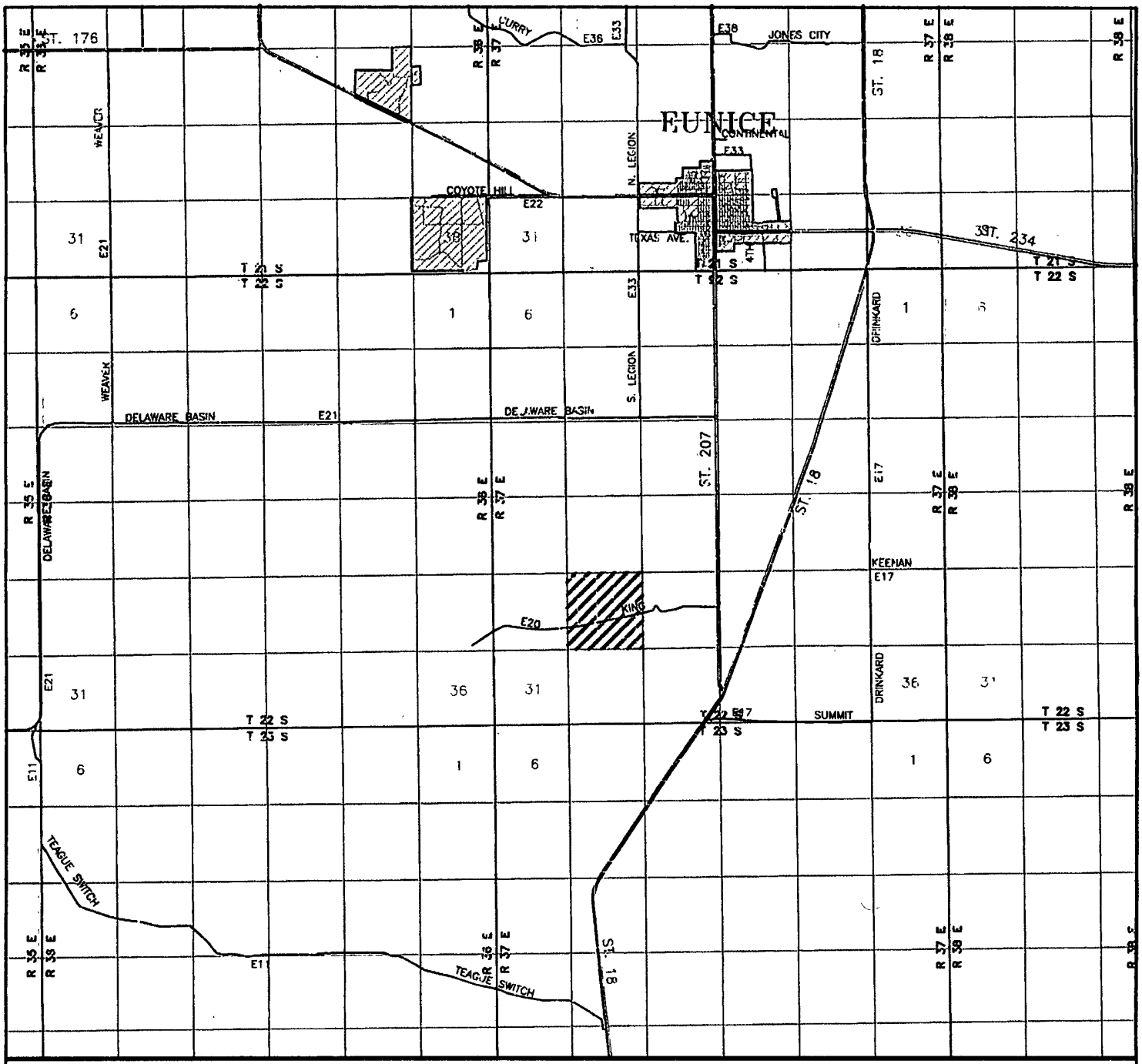
ELLIOTT FEDERAL "29" #1
Located at 990' FSL AND 790' FEL
Section 29, Township 22 South, Range 37 East,
N.M.P.M., Lea County, New Mexico.

basin surveys
focused on excellence in the oilfield
P.O. Box 1786
1120 N. West County Rd.
Hobbs, New Mexico 88241
(575) 393-7316 - Office
(575) 392-2206 - Fax
basinsurveys.com

W.O. Number:	21156
Survey Date:	02-17-2009
Scale:	1" = 2000'
Date:	02-18-2009

RANGE OPERATING

EXHIBIT A



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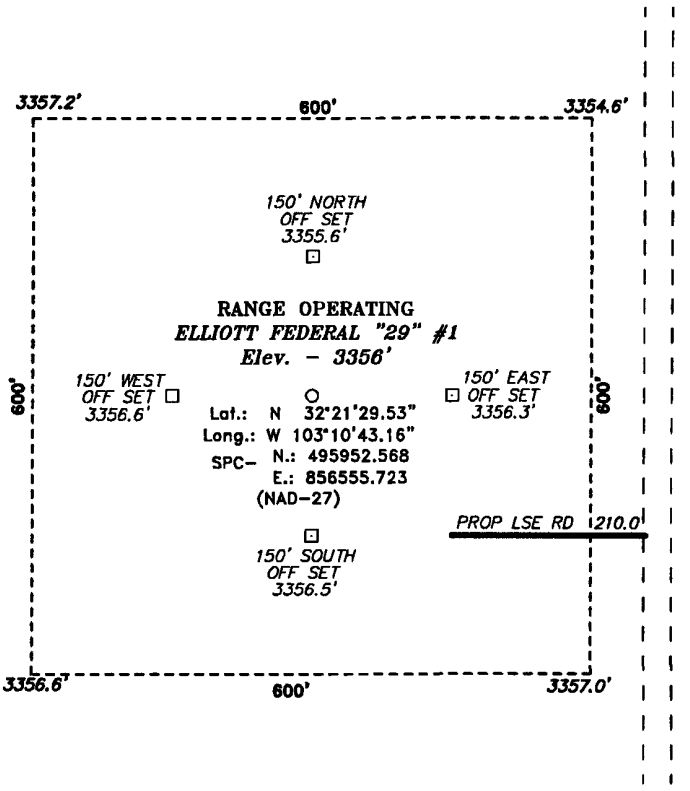
basinsurveys.com

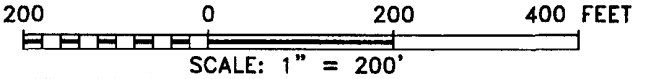
W.O. Number:	21156
Survey Date:	02-17-2009
Scale	1" = 2000'
Date:	02-18-2009

RANGE OPERATING

EXHIBIT B

SECTION 29, TOWNSHIP 22 SOUTH, RANGE 37 EAST, N.M.P.M.,
LEA COUNTY, NEW MEXICO.





Directions to Location:

FROM THE JUNCTION OF HWY 18 AND HWY 207, GO NORTH 1.1 MILES TO CO. RD. KING, ON KING GO 1.1 MILES WEST TO LEASE ROAD, ON LEASE ROAD GO SOUTH 0.1 MILES TO PROPOSED LEASE ROAD.

BASIN SURVEYS P.O. BOX 1786 – HOBBS, NEW MEXICO

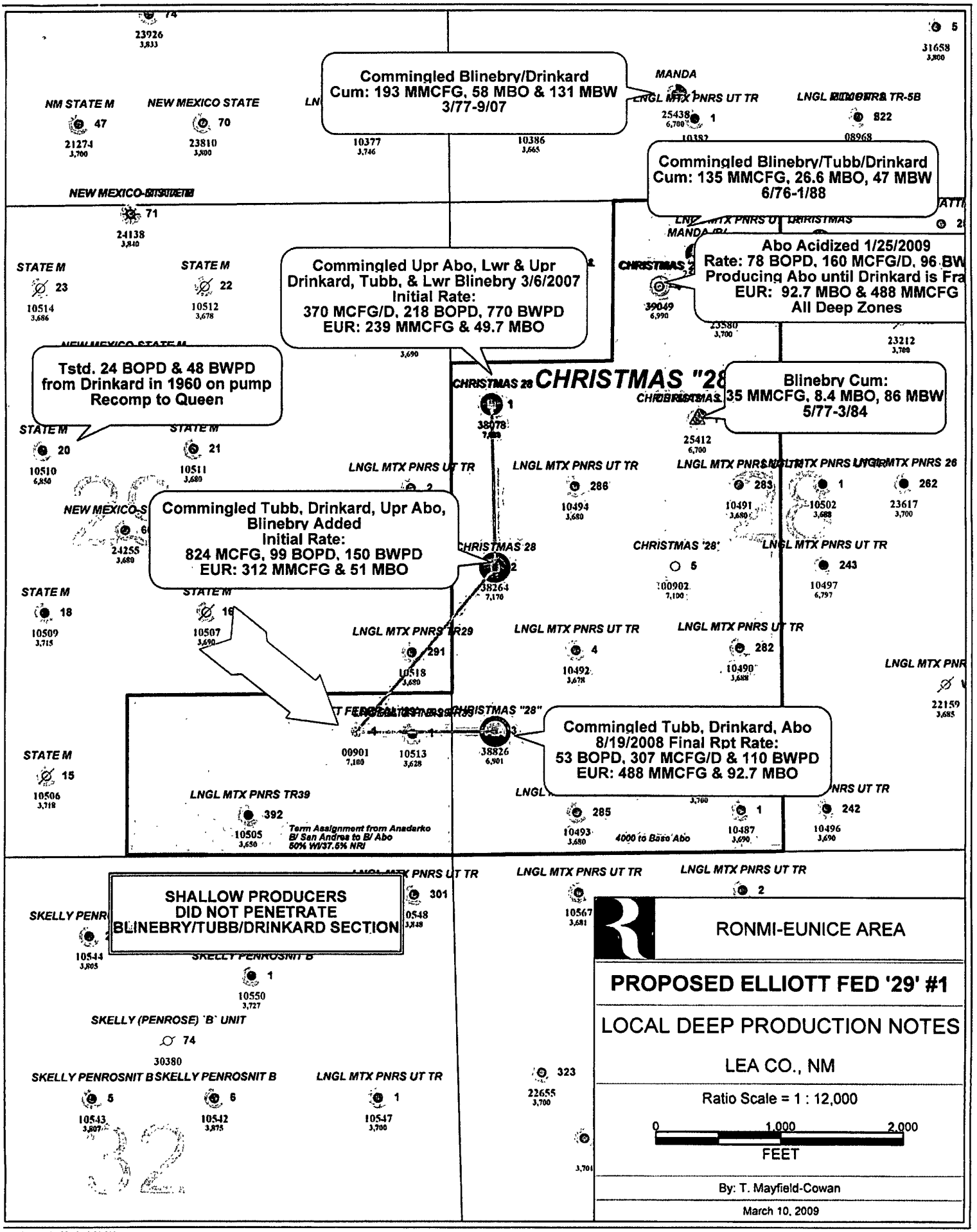
W.O. Number: 21156	Drawn By: J. M. SMALL
Date: 02-18-2009	Disk: 21156 JMS

RANGE OPERATING

REF: ELLIOTT FEDERAL "29" #1 / WELL PAD TOPO

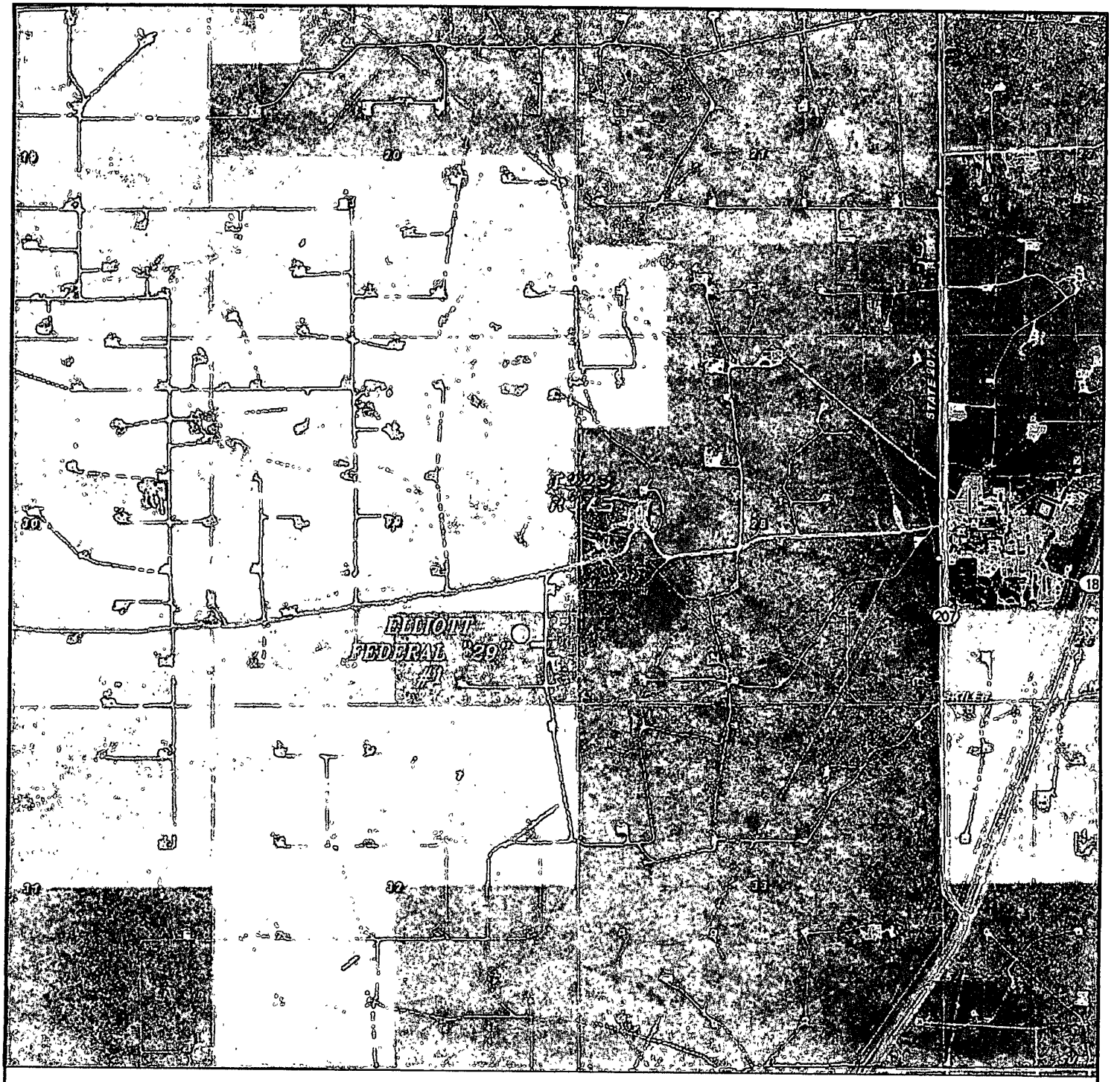
THE ELLIOTT FEDERAL "29" #1 LOCATED 990' FROM THE SOUTH LINE AND 790' FROM THE EAST LINE OF SECTION 29, TOWNSHIP 22 SOUTH, RANGE 37 EAST, N.M.P.M., LEA COUNTY, NEW MEXICO.

Survey Date: 02-17-2009	Sheet 1 of 1 Sheets



PETRA 3/10/2009 10:46:01 AM

EXHIBIT D



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W.O. Number: 21156

Scale: 1" = 2000'

YELLOW TINT - USA LAND
BLUE TINT - STATE LAND
NATURAL COLOR - FEE LAND

RANGE OPERATING

EUNICE FIELD (Blinebry/Tubb/Drinkard)
Range Operating NM, Inc. Elliott Federal '29' #1
Geological Data for Permit
Prepared by Terri Mayfield-Cowan 2/19/2009

I) WELL OBJECTIVES

The objective of the well is to drill and evaluate the Penrose-Skelly through Abo Formations and complete the well as a Blinebry/Tubb/Drinkard producer. Secondary targets are the Abo and San Andres Formations.

II) LOCATION

	990' FSL & 790' FEL
	Section 29-T22S-R37E
	Lea County, New Mexico
	Lat: 32.3582028
	Long: -103.1786556
Bottom-hole Location:	same, vertical
Elevation:	GL: 3356 ft
	Est. KB: 3369 ft
Directions to Location:	From the junction of Hwy 18 & Hwy 207, Go North 1.1 mi. to Co. Rd. King, Go 1.1 mi. West on King to lease road. On lease road, go South 0.1 mi. to proposed lease road.
Access to Location:	Unrestricted

III) PROGNOSIS

Upr Permian Rustler Fm	+2225 ft	1144 ft MD	Not Reservoir Rock
Upr Permian Penrose-Skelly Fm	-145 ft	3514 ft MD	Oil, gas, water poss
Upr Permian San Andres Fm	-565 ft	3934 ft MD	Gas, oil, water likely
Upr Permian Glorieta Fm	-1710 ft	5079 ft MD	Oil, gas, water likely
Upr Permian Blinebry Fm	-2065 ft	5434 ft MD*	Oil, gas, water likely
Lwr Permian Tubb Fm	-2730 ft	6099 ft MD*	Oil, gas, water poss
Lwr Permian Drinkard Fm	-2875 ft	6244 ft MD*	Oil, gas, water likely
Lwr Permian Abo	-3310ft	6679 ft MD+	Tight oil & gas likely
Proposed TD:	**-3700 ft**	**7050 ft MD**	**Tight oil & gas likely**
Est. BHP @TD: 2750 psi			**Water poss**

*= Primary Reservoir Targets
+= Secondary Reservoir Targets

IV) PRIMARY RESERVOIR TARGETS

Upper Permian **Blinebry Formation**

Rock Type:	Dolostone
Thickness:	Est. 680 ft, 15 ft. net pay
Avg. Porosity:	9%; ranges from 6% -11%
Est. Reservoir Temp.:	120° F
Est. Reservoir Press.:	2200 psi (assuming no pressure depletion)

Lower Permian **Tubb Formation**

Rock Type:	Silty Dolostone
Thickness:	Est. 140 ft., 10 ft. net pay
Avg. Porosity:	9%, Ranges from 4%-10%
Est. Reservoir Temp.:	130 degrees F
Est. Reservoir Press.:	2500 psi, assuming no pressure depletion

Lower Permian **Drinkard Formation**

Rock Type: Dolostone
Thickness: Est. 430 ft., 85 ft. Net Pay
Avg. Porosity: 12%, Ranges from 2%-24%
Est. Reservoir Temp.: 135 degrees F
Est. Reservoir Press.: 2650 psi, assuming no pressure depletion

V) SECONDARY RESERVOIR TARGETS

1) Upper Permian **Penrose-Skelly** through **San Andres Dolostones-** likely significant depletion in Penrose-Skelly through Grayburg intervals
2) Lower Permian **Abo Formation**-possible lower permeability oil production

VI) EVALUATION

Mudlogging: Mud System 10.1 lbs/gal Brine-Suttles Unit on @2500' w/ gas monitoring equipment & cuttings collected

Wireline Logs: Upon TD Schlumberger will run PEX-HRLA, MCFL, HNGS, TLD, w/BHC Sonic-Rotary Sidewall Cores as optional services

VII) POTENTIAL HAZARDS/PITFALLS

Abnormal Pressure/Temperature Zones:	Possibilty of partial depletion within Queen to San Andres Formations
Fractured/Lost Circulation Zones:	See above-**Will tag mud if circulation is lost in primary pay interval**
Presence of H_2S or CO_2:	None expected
Faults Intersecting the Wellbore:	None expected

Elliott Federal 29 #1
DRILLING PROGRAM

PROPOSED DEPTH: 7050' MD / 7050' TVD
GROUND ELEVATION: 3356'
KB: 13'
LOCATION: 990' FSL & 790' FEL, Sec 29, T 22 S, R 37 E, Lea County, NM
ANTICIPATED PRODUCTIVE FORMATION: Blinebry/Tubb/Drinkard/Abo

1. **Geologic Name of Surface Formation**

   a. Permian

2. **Estimated Tops of Geological Markers & Depths of Anticipated Fresh Water, Oil or Gas:**

a.	Rustler	1144'	Not Reservoir Rock
b.	Penrose-Skelly	3475'	Oil, gas, water poss
c.	San Andres	3934'	Gas, oil, water likely
d.	Glorieta	5079'	Oil, gas, water likely
e.	Blinebry	5434'	Oil, gas, water likely
f.	Tubb	6099'	Oil, gas, water poss
g.	Drinkard	6244'	Oil, gas, water likely
h.	Abo	6679'	Tight oil & gas likely
Proposed TD:		7050	Tight oil & gas likely, Water poss

No other formations are expected to yield oil, gas or fresh water in measurable volumes. Potash / fresh water sands will be protected by setting 8 5/8" casing at 1110' and circulating cement to surface.

3. **Casing Program:**

Hole Size	Depth	OD Csg	Weight	Collar	Grade	New/Used
12 1/4"	0'–~~1110'~~ 1170	8 5/8"	24#	ST&C	J-55	New
7 7/8"	0' – ~~7150'~~ 7050	5 /12"	17#	LT&C	J-55/N80	New

See COA

Csg Size	Burst	Collapse	Tension
8 -5/8"	1.1	2.6	10.8
5-1/2"	2.0	1.6	2.4

Safety factors: Burst 1.1 Collapse 1.2 Tension 1.6

4. Cement Program: ← See COA

a. 8 5/8" Surface:

Cement to surface with 350sx 35:65 Poz C, 6% Bentonite, 5% salt, .25# Celloflake, 12.8 ppg, 1.90 cu ft/sx, Tail-150sx C, 1% CaC12, .25# Celloflake 14.8 ppg, 1.34 cu ft/sx, TOC @ surface.

b. 5 1/2" Production:

SINGLE STAGE JOB:

1100' to 5000'
4000' x .1733 x 1.2 = 831 cuft /2.45 cuft/sk = 340 sks ~ 350 sks Lead
LEAD: 50/50 (Poz/Class C) + 10% gel + 5% salt + additives Density = 11.8 ppg Yield = 2.45 cuft/sk

5000' to 7050'
2050' x .1733 x 1.2 = 426 cuft/1.29 cuft/sk = 330 sks ~ 350 sks Tail
TAIL: 50/50 (Poz/Class C) + 2% gel + 5% salt + additives Density = 14.2 ppg Yield = 1.29 cuft/sk

2 STAGE JOB:

First Stage:

3500' to 5000'
1500' x .1733 x 1.2 = 312 cuft /2.45 cuft/sk = 127 sks ~ 150 sks Lead
LEAD: 50/50 (Poz/Class C) + 10% gel + 5% salt + additives Density = 11.8 ppg Yield = 2.45 cuft/sk

5000' to 7050'
2050' x .1733 x 1.2 = 426 cuft/1.29 cuft/sk = 330 sks ~ 350 sks Tail
TAIL: 50/50 (Poz/Class C) + 2% gel + 5% salt + additives Density = 14.2 ppg Yield = 1.29 cuft/sk

Second Stage:
1100' to 3500'
2500' x .1733 x 1.2 = 520 cuft /2.45 cuft/sk = 212 sks ~ 250 sks Lead
LEAD: 50/50 (Poz/Class C) + 10% gel + 5% salt + additives Density = 11.8 ppg Yield = 2.45 cuft/sk

c. The above cement volumes could be revised pending the caliper measurement from the open hole logs. The top of cement is designed to reach approximately 200' above the 8 5/8" casing shoe.

See COA

5. Pressure Control Equipment:

The blowout preventor equipment (BOP) as shown below will consist of a (2M system) double ram type (3000 psi WP) preventor and rotating head. Both units will be hydraulically operated and the ram type preventor will be equipped with blind rams on top and 4 1/2 " drill pipe rams on bottom. The BOP will be installed on the 8 5/8" surface casing and utilized continuously until total depth is reached. **ALL BOP's and associated equipment will be tested ~~to 1000 psi high~~ and 250 psi low ~~with the rig pump~~.** Prior to drilling out the 8 5/8" casing shoe, the BOP's AND Hydril will be tested per BLM Drilling Operations Order #2. Per Don Robinson — operator will use a complete 3M system. Pipe rams will be operated and checked each 24-hour period and each time the drill pipe is out of the hole. These functional tests will be documented on the daily driller's log. A 2" kill line and 3" choke line will be incorporated in the drilling spool below the ram-type BOP. Other accessory BOP equipment will include a Kelly cock, floor safety valve, choke lines and choke manifold having a minimum 2000 psi WP rating.

See COA

7/20/09 MC

6. Proposed Mud Circulation System

Depth	Mud Wt.	Visc	Fluid Loss	Type System
0' – 1110'	8.4	32-40	NC	Fresh Water
1110'–7050'	9.3–10	29	NC	Cut Brine/Brine

See COA

The necessary mud products for weight addition and fluid loss control will be on location at all times.

7. Auxiliary Well Control and Monitoring Equipment:

a. A Kelly cock will be in the drill string at all times.
b. A full-opening drill pipe stabbing valve having the appropriate connections will be on the rig floor at all times.
c. Hydrogen Sulfide detection equipment will be in operation after drilling out the 8 5/8" casing shoe until the 5 1/2" casing is cemented. Breathing equipment will be on location upon drilling the 8 5/8" shoe until total depth is reached.

8. Logging, Coring, and Testing Program:

Mudlogging: Mud System 10.1 lbs/gal Brine-Suttles Unit on @2500' w/ gas monitoring equipment & cuttings collected
Drillstem Tsts: No DST's are planned-should the need for a DST arise, a procedure, equipment to be used & safety measures will be provided via sundry notice to the BLM
Wireline Logs: Upon TD, the following open hole logs will be run from TD to surface casing point:

1. Dual Laterolog-Micro Guard, Spectral Gamma Ray, Compensated neutron, Spectral Density
2. Delta T Sonic & Rotary Sidewall Cores are optional services for the open hole
3. From Surface Casing point to Surface, Compensated neutron & Gamma Ray will be run in cased portion of hole

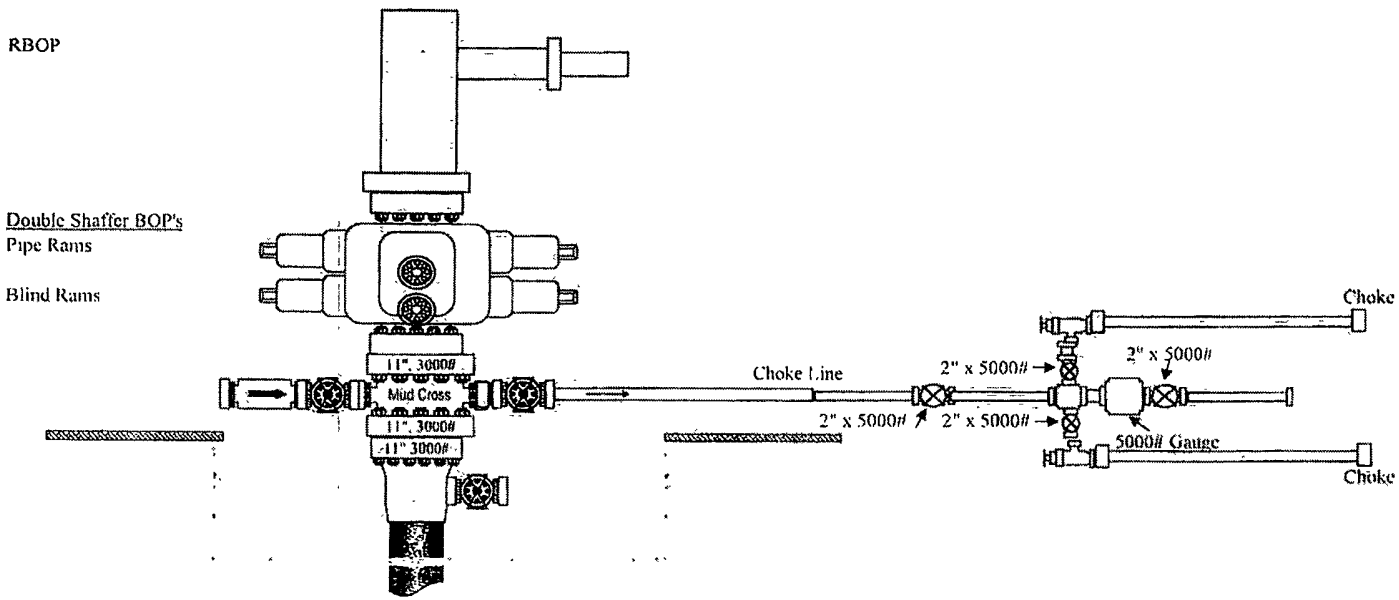
Whole Coring: No Whole Coring in planned.

9. Potential Hazards:

a. No abnormal pressures or temperatures are expected. There is no known presence of H2S in this area. If H2S is encountered the operator will comply with the provisions of Onshore Oil and Gas Order No. 6 No lost circulation is expected to occur. All personnel will be familiar with all aspects of safe operation of equipment being used to drill this well. Estimated BHP 2800 psi and Estimated BHT 130°. No H2S is anticipated to be encountered.

10. Anticipated Starting Date and Duration of Operations:

a. Road and location construction will begin after the BLM has approved the APD. Anticipated spud date will be as soon after BLM approval and as soon as a rig will be available. Move in operations and drilling is expected to take 15 days. If production casing is run then an additional 30 days will be needed to complete well and construct surface facilities and/or lay flow lines in order to place well on production.

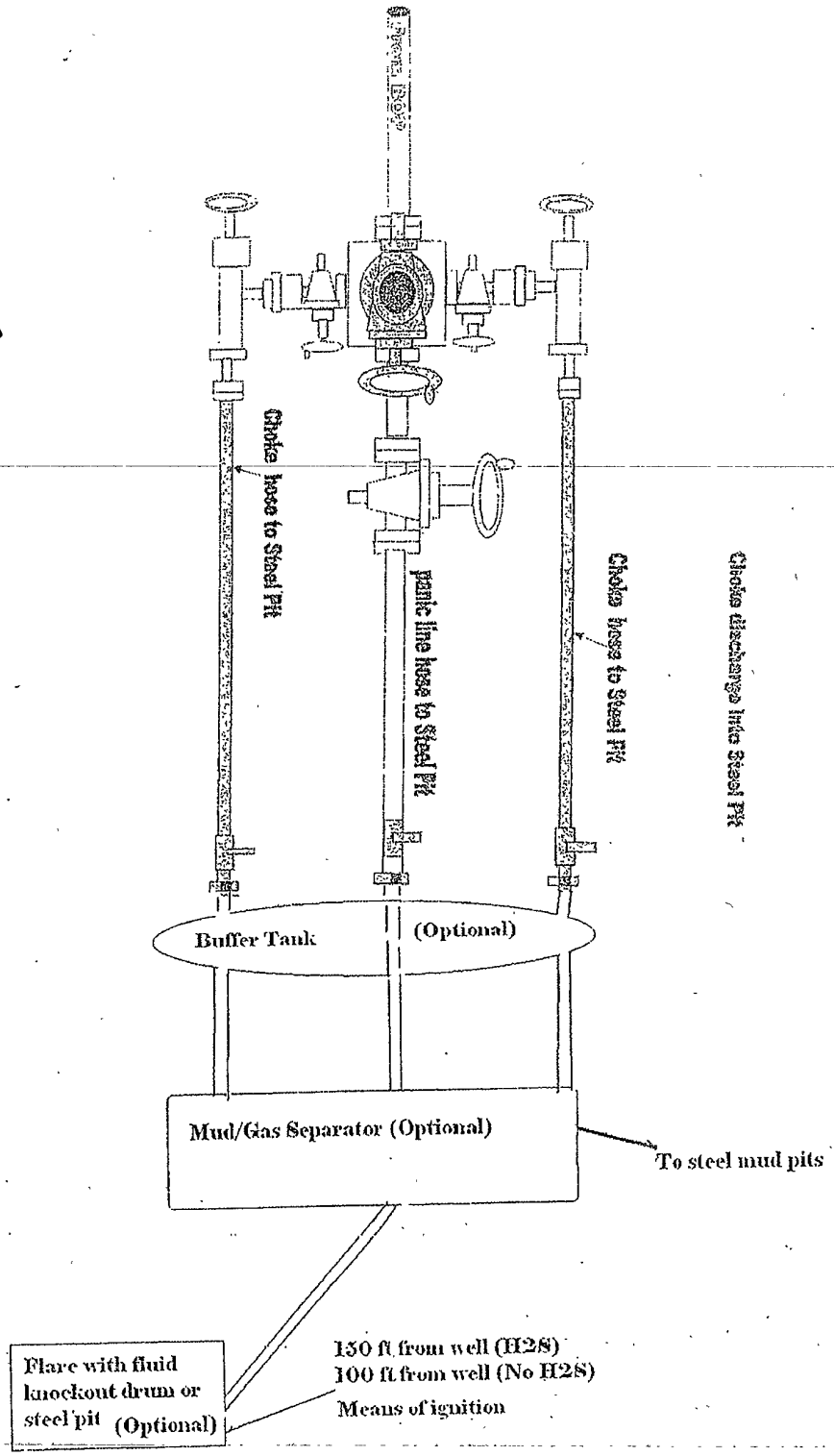


To meet 3M standard—
an annular preventer is required.

BHL
7/20/09

3 000# BOP manifold system

(Suggested configuration)



RANGE OPERATING NEW MEXICO, INC.

(Elliott Federal #21)
HYDROGEN SULFIDE (H_2S) CONTINGENCY PLAN

Assumed 100 ppm ROE + 3000'
100 ppm H_2S concentration shall trigger activation of this 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 and characteristics of hydrogen sulfide (H_2S)
2. The proper use and maintenance of personal protective equipment and life support systems.
3. The proper use of H_2S 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 H_2S on metal components. If high tensile tubular are to be used, personnel will 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 requirement of the H_2S Drilling Operations Plan and Public Protection Plan.

There will be an initial training session just prior to encountering a known or probable H_2S zone (within 3 days or 500 feet) and weekly H_2S and well control drills for all personnel in each crew. The initial training session shall include a review of the site specific H_2S Drilling Operations Plan and the Public Protection Plan. **The concentrations of H_2S of wells in this area from surface to TD are low enough that a contingency plan is not required.**

II. H_2S SAFETY EQUIPMENT AND SYSTEMS

Note: All H_2S 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 reasonably expected to contain H_2S.

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. **H_2S detection and monitoring equipment:**

   A. 1 portable H_2S monitor positioned on location for best coverage and response. These units have warning lights and audible sirens when H_2S levels of 20 ppm are reached.

4. **Visual warning systems:**

   A. Wind direction indicators as shown on well site diagram (Exhibit C).
   B. Caution/Danger signs 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.

5. **Mud program:**

   A. Proper mud weight, safe drilling practice and the use of H_2S scavengers will minimize hazards when penetrating H_2S 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 H_2S service.
   B. All elastomers used for packing and seals shall be H_2S trim.

7. **Well testing:**

   A. There will be no drill stem testing.

H_2S CONTINGENCY PLAN EMERGENCY CONTACTS

Range Operating New Mexico, Inc.

	(575) 631.9025
	(817) 870-2601
Answering Service (During Non-Office Hours)	(575) 631-9025

Key Personnel

On-the-scene Coordinator(s):	
Chris Garcia (Prod. Supervisor)	(Work) (575) 394.1485 (Cell) (575) 631-9025
Saturnino Martinez	(Work) (575) 394-1485 (Cell) (575) 631-6532
VP of Operations: George Teer	(Work) (817) 869-4213
Operations: Saturnino Martinez	(Work) (575) 394-1485 (Cell) (575) 631-6532
Logistics: Chris Garcia	(Work) (575) 394-1485 (Cell) (575) 631-9025
Saturnino Martinez	(Work) (575) 394-1485 (Cell) (575) 631-6532

VP Environmental & Safety: Mark Hansen (Work) (817) 869-4217 (Cell) (972) 653-0381

Emergency Response Organizations

Fire Dept	(875) 394-3258
Ambulance (911)	(575) 394-3258
Police Dept.	(575) 394-2112
Lea County Sheriff	(575) 394-2020
EM Tech (Environmental Service)	(800) 336-0909
NMOCD	(575) 393-6161
Bureau of Land Management	(575) 887-6544
National Emergency Response Center	(800) 424-8802
Local Emergency Planning Committee	(575) 885-3581
NM Environmental Dept	(575) 3934302
CKEMTREC (any chemical info)	(800) 424-9300

New Mexico Emergency Response Commission (Santa Fe)	505-476-9600
24 Hour	505-827-9126
New Mexico State Emergency Operations Center	505-476-9635

Other

Boots & Coots IWC	800-256-9688 or 281-931-8884
Cudd PressureControl	505-393-4111
B. J. Services	575-746-3569
Med Flight Air Amb – 2301 Yale Blvd SE #D3, Albuq., NM	505-842-4433
S B Air Med Service – 2505 Clark Carr Loop SE, Albuq., NM	505-842-4949
TriState CareFlight 5 – Santa Fe	505-424-1588

NOTES REGARDING THE BLOWOUT PREVENTERS
(Elliott Federal 29 #1)
Lea 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. Blowout preventer and all fittings must be in good condition, 3000 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 3000 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. Blowout preventer control to be located as close to driller's position as feasible.

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

PECOS DISTRICT
CONDITIONS OF APPROVAL

OPERATOR'S NAME:	Range Operating New Mexico, Inc.
LEASE NO.:	LC058626B
WELL NAME & NO.:	Elliott Federal 29 # 1
SURFACE HOLE FOOTAGE:	990' FSL & 790' FEL
BOTTOM HOLE FOOTAGE	Same
LOCATION:	Section 29, T. 22 S., R 37 E., NMPM
COUNTY:	LeaCounty, New Mexico

TABLE OF CONTENTS

Standard Conditions of Approval (COA) apply to this APD. If any deviations to these standards exist or special COAs are required, the section with the deviation or requirement will be checked below.

I. 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.

II. 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.)

III. 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.

IV. NOXIOUS WEEDS

The operator shall be held responsible if noxious weeds become established within the areas of operations. 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.

V. SPECIAL REQUIREMENT(S)

1. Timing Limitation Stipulation/Condition of Approval for Lesser Prairie-Chicken: Oil and gas activities including 3-D geophysical exploration, and drilling will not be allowed in lesser prairie-chicken habitat during the period from March 1st through June 15th annually. During that period, other activities that produce noise or involve human activity, such as the maintenance of oil and gas facilities, geophysical exploration other than 3-D operations, and pipeline, road, and well pad construction, will be allowed except between 3:00 am and 9:00 am. The 3:00 am to 9:00 am restriction will not apply to normal, around-the-clock operations, such as venting, flaring, or pumping, which do not require a human presence during this period. Additionally, no new drilling will be allowed within up to 200 meters of leks known at the time of permitting. Normal vehicle use on existing roads will not be restricted. Exhaust noise from pump jack engines must be muffled or otherwise controlled so as not to exceed 75 db measured at 30 ft. from the source of the noise.

2. Ground-level Abandoned Well Marker to avoid raptor perching: Upon the plugging and subsequent abandonment of the well, the well marker will be installed at ground level on a plate containing the pertinent information for the plugged well. For more installation details, contact the Carlsbad Field Office at 575-234-5972.

VI. CONSTRUCTION

A. NOTIFICATION

The BLM shall administer compliance and monitor construction of the access road and well pad. Notify the Hobbs Field Station at (575) 393-3612 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 APD and Conditions of Approval (COA) on the well site and they shall be made available upon request by the Authorized Officer.

B. TOPSOIL

There is no measurable soil on this well pad to stockpile. No topsoil stockpile is required.

C. RESERVE PITS

The operator has applied for a closed-loop system. The operator shall properly dispose of drilling contents at an authorized disposal site.

D. FEDERAL MINERAL MATERIALS PIT

If the operator elects to surface the access road and/or well pad, mineral materials extracted during construction of the reserve pit may be used for surfacing the well pad and access road and other facilities on the lease.

Payment shall be made to the BLM prior to removal of any additional federal mineral materials from any site other than the reserve pit. Call the
Carlsbad Field Office at (575) 234-5972.

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 needs.

F. ON LEASE ACCESS ROADS

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.

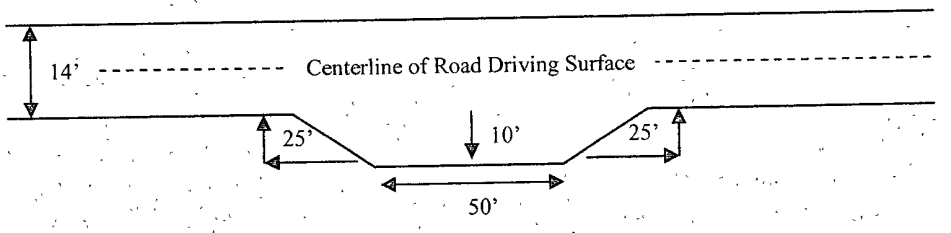
The Authorized Officer reserves the right to require surfacing of any portion of the access road at any time deemed necessary. Surfacing may be required in the event the road deteriorates, erodes, road traffic increases, or it is determined to be beneficial for future field development. The surfacing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

Ditching
Ditching shall be required on both sides of the road.

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:

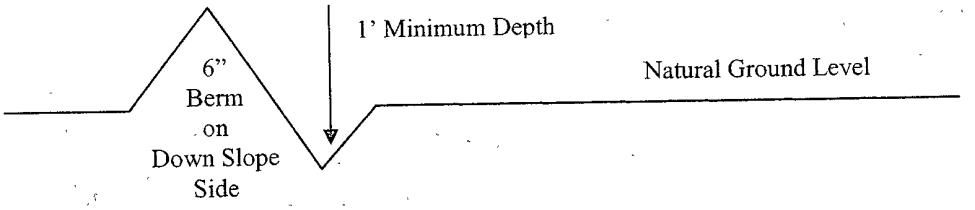
Standard Turnout – Plan View



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 a 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.

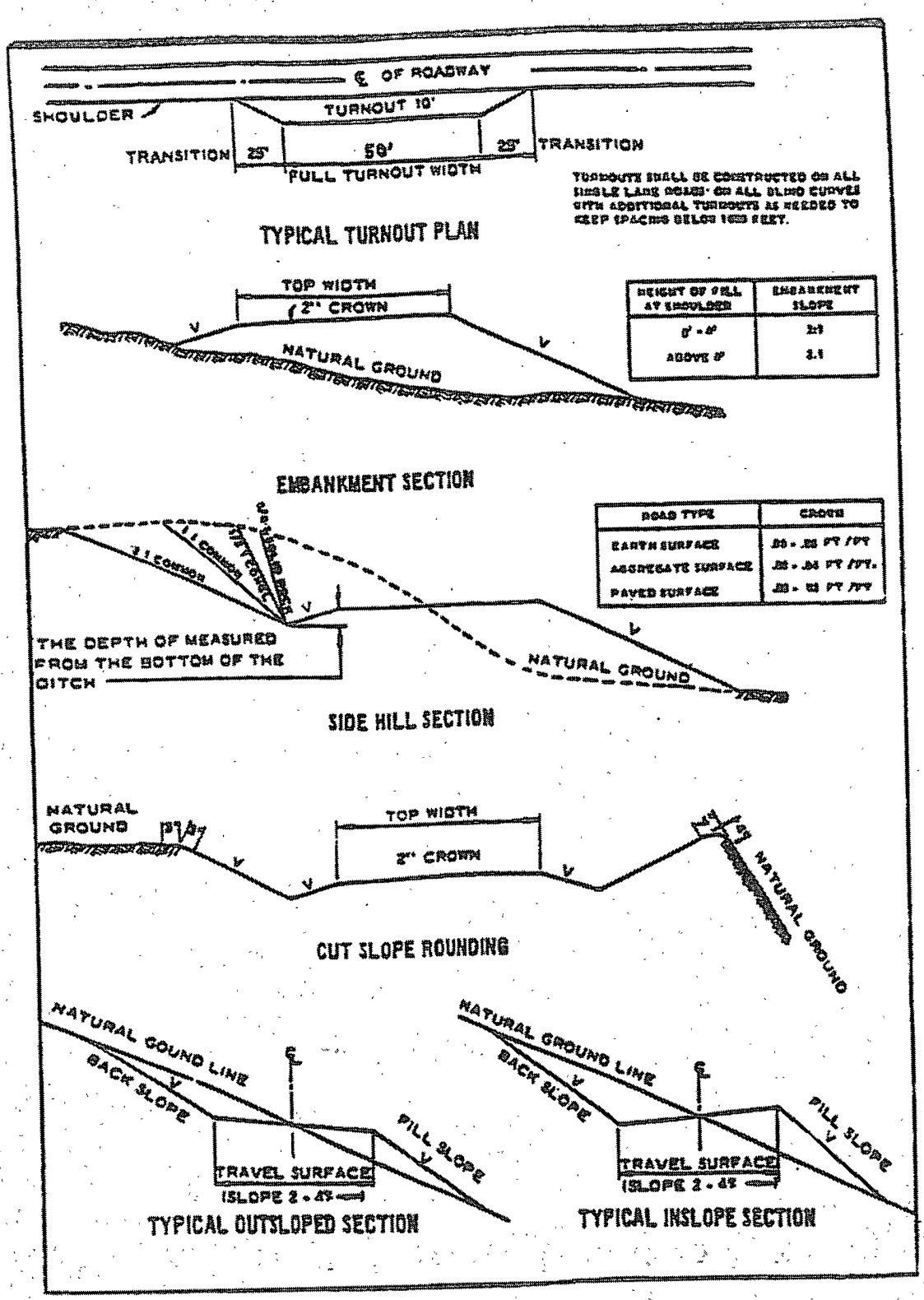
A gate shall be constructed and fastened securely to H-braces.

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



VII. DRILLING

A. DRILLING OPERATIONS REQUIREMENTS

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

a. Spudding well
b. Setting and/or Cementing of all casing strings
c. BOPE tests

☒ **Lea County**
Call the Hobbs Field Station, 414 West Taylor, Hobbs NM 88240,
(575) 393-3612

1. **Although Hydrogen Sulfide has not been reported in this section, it is always a potential hazard. If Hydrogen Sulfide is encountered, please report measured amounts and formations to the BLM.**

2. 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.

B. CASING

Changes to the approved APD casing and cement program require submitting a sundry and receiving approval prior to work. Failure to obtain approval prior to work will result in an Incident of Non-Compliance being issued.

Centralizers required on surface casing per Onshore Order 2.III.B.1.f.

Wait on cement (WOC) time for a primary cement job will be a minimum 18 hours for a water basin, 24 hours in the potash area, or 500 pounds compressive strength, whichever is greater for all casing strings. Provide compressive strengths including hours to reach required 500 pounds compressive strength prior to cementing each casing string. See individual casing strings for details regarding lead cement slurry requirements.

No pea gravel permitted for remedial or fall back remedial without prior authorization from the BLM engineer.

Possible lost circulation in the Grayburg and San Andres formations.

1. The **8-5/8** inch surface casing shall be set **at approximately 1170 feet (a minimum of 25 feet into the Rustler Anhydrite and above the salt)** and cemented to the surface. **If the salt is encountered at a shallower depth, the casing is to be set a minimum of 25 feet above the salt. Fresh water mud to be used to setting depth.**

    a. If cement does not circulate to the surface, the appropriate BLM office shall be notified and a temperature survey utilizing an electronic type temperature survey with a surface log readout will be used or a cement bond log shall be run to verify the top of the cement.

    b. Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry.

    c. Wait on cement (WOC) time for a remedial job will be a minimum of 4 hours after bringing cement to surface or 500 pounds compressive strength, whichever is greater.

    d. If cement falls back, remedial cementing will be done prior to drilling out that string.

2. The minimum required fill of cement behind the **5-1/2** inch production casing is:

    ☒ Cement should tie-back at least 200 feet into previous casing string. Operator shall provide method of verification.

    Operator has proposed a single stage and a two stage cementing job.

    1. Single stage – additional cement may be required as the volume proposed results in an excess cement calculation of 18%.

    2. Two stage with DV tool at 3500' – both stages may require additional cement as the proposed volumes result in 19% excess on the first stage and 17% excess on the second stage.

3. If hardband drill pipe is rotated inside casing, returns will be monitored for metal. If metal is found in samples, drill pipe will be pulled and rubber protectors which have a larger diameter than the tool joints of the drill pipe will be installed prior to continuing drilling operations.

C. PRESSURE CONTROL

1. All blowout preventer (BOP) and related equipment (BOPE) shall comply with well control requirements as described in Onshore Oil and Gas Order No. 2 and API RP 53 Sec. 17.

2. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the surface casing shoe shall be **3000 (3M)** psi.

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

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

   b. The results of the test shall be reported to the appropriate BLM office.

   c. 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 appropriate BLM office.

   d. 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.

   e. **Effective November 1, 2008, no variances will be granted on reduced pressure tests on the surface casing and BOP/BOPE. Onshore Order 2 requirements will be in effect.**

D. DRILL STEM TEST

If drill stem tests are performed, Onshore Order 2.III.D shall be followed.

WWI 070909

VIII. PRODUCTION (POST DRILLING)

A. WELL STRUCTURES & FACILITIES

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
Shale Green, Munsell Soil Color Chart # 5Y 4/2

IX. INTERIM RECLAMATION & RESERVE PIT CLOSURE

A. INTERIM RECLAMATION

If the well is a producer, interim reclamation shall be conducted on the well site in accordance with the orders of the Authorized Officer. The operator shall submit a Sundry Notices and Reports on Wells (Notice of Intent), Form 3160-5, prior to conducting 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.

Operators should work with BLM surface management specialists to devise the best strategies to reduce the size of the location. Any reductions should allow for remedial well operations, as well as safe and efficient removal of oil and gas.

During reclamation, the removal of caliche is important to increasing the success of revegetating the site. Removed caliche may be used for road repairs, fire walls or for building other roads and locations. 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.

Seed Mixture 2, for Sandy Sites

The holder shall seed all disturbed areas with the seed mixture listed below. The seed mixture shall be planted in the amounts specified in pounds of pure live seed (PLS)* per acre. There shall be no primary or secondary noxious weeds in the seed mixture. Seed will be tested and the viability testing of seed will be done in accordance with State law (s) and within nine (9) months prior to purchase. Commercial seed will be either certified or registered seed. The seed container will be tagged in accordance with State law(s) and available for inspection by the authorized officer.

Seed will be planted using a drill equipped with a depth regulator to ensure proper depth of planting where drilling is possible. The see mixture will be evenly and uniformly planted over the disturbed area (smaller/heavier seeds have a tendency to drop the bottom of the drill and are planted first). The holder shall take appropriate measures to ensure this does not occur. Where drilling is not possible, seed will be broadcast and the area shall be raked or chained to cover the seed. When broadcasting the seed, the pounds per acre are to be doubled. The seeding will be repeated until a satisfactory stand is established as determined by the authorized officer. Evaluation of growth will not be made before completion of at least one full growing season after seeding.

Species to be planted in pounds of pure live seed* per acre:

Species	lb/acre
Sand dropseed (Sporobolus cryptandrus)	1.0
Sand love grass (Eragrostis trichodes)	1.0
Plains bristlegrass (Setaria macrostachya)	2.0

*Pounds of pure live seed:

Pounds of seed **x** percent purity **x** percent germination = pounds pure live seed

X. FINAL ABANDONMENT & REHABILITATION REQUIREMENTS

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 and restoration of all disturbed areas.

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 agreement.