New Mexico Oil Conservation Division, District I 1625 N. French Drive Hobbs, NM 88240

Form 3160 -3 (April 2004)			FORM APP OMB No. 10 Expires March	04-0137
UNITED STATES DEPARTMENT OF THE N BUREAU OF LAND MANA		-	5. Lease Serial No. NMLC0032573B	
APPLICATION FOR PERMIT TO D	- ,		6. If Indian, Allotee or	Tribe Name
Ia. Type of work: DRILL REENTED	R		7 If Unit or CA Agreeme	ent, Name and No.
Ib. Type of Well: Oil Well Gas Well Other	Single Zone Multip	ole Zone	8 Lease Name and Well Elliott	B #12
2. Name of Operator Range Operating New Mexico, Inc.	(227588	?	9. API Well No. 30-025	37735
3a. Address 777 Main St., Ste. 800 Fort Worth, TX 76102	3b. Phone No. (include area code) 817-810-1916		10. Field and Peol, or Exp Tubb-Drinkard	loratory
4. Location of Well (Report location clearly and in accordance with any At surface 330' FSL & 1980' FEL Per Variation	rain Soon Venda	Herle	11. Sec., T. R. M. or Blk.a	
At proposed prod. zone	Unit D		6, T22S, R37E, N	
 Distance in miles and direction from nearest town or post office* 2 miles SE from Eunice, NM 			12. County or Parish Lea County	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 360	17. Spacing	Unit dedicated to this well	· . • .
 18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. 	19. Proposed Depth 6800	20. BO009	IA Bond No on file	
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 3443'	22 Approximate date work will sta 02/01/2006	u • 520	23. Estimated duration 9	
			Controlled Wete	r Beein
 The following, completed in accordance with the requirements of Onshor Well plat certified by a registered surveyor. A Drilling Plan. A Surface Use Plan (if the location is on National Forest System is SUPO shall be filed with the appropriate Forest Service Office). 	 Bond to cover t Item 20 above). Lands, the Operator certification 	the operation cation specific infor	s torm: s unless covered by an exi rmation and/or plans as ma	
25. Signature	Name (Printed/Typed) Paula Hale		Da	ite 01/12/2006
Title Sr. Reg. Sp.				
Approved by (Signapure) Joe G. Lara	Name (Printed/Typed),	се G.	Lara	^{ate} FEB 1 7 2006
AGETING FIELD MANAGER	CARL	SBAD	FIELD OF	FICE
Application approval does not warrant or certify that the applicant hold conduct operations thereon. Conditions of approval, if any, are attached.	s legal or equitable title to those rig		ect lease which would enti ROVAL FO	
Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a cr States any false, fictitious or fraudulent statements or representations as t	ime for any person knowingly and to any matter within its jurisdiction.	willfully to m	ake to any department or a	gency of the United

*(Instructions on page 2)

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Approval subject to General Requirements and Special Stipulations Attached

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INSTRUCTIONS

GENERAL: This form is designed for submitting proposals to perform certain well operations, as indicated on Federal and Indian lands and leases for action by appropriate Federal agencies, pursuant to applicable Federal laws and regulations. Any necessary special instructions concerning the use of this form and the number of copies to be submitted, particularly with regard to local, area, or regional procedures and practices, either are shown below or will be issued by, or may be obtained from local Federal offices.

ITEM 1: If the proposal is to redrill to the same reservoir at a different subsurface location or to a new reservoir, use this form with appropriate notations. Consult applicable Federal regulations concerning subsequent work proposals or reports on the well.

ITEM 4: Locations on Federal or Indian land should be described in accordance with Federal requirements. Consult local Federal offices for specific instructions.

ITEM 14: Needed only when location of well cannot readily be found by road from the land or lease description. A plat, or plats, separate or on this reverse side, showing the roads to, and the surveyed location of, the well, and any other required information, should be furnished when required by Federal agency offices.

ITEMS 15 AND 18: If well is to be, or has been directionally drilled, give distances for subsurface location of hole in any present or objective productive zone.

ITEM 22: Consult applicable Federal regulations, or appropriate officials, concerning approval of the proposal before operations are started.

BLM would like you to know that you do not have to respond to this or any other Federal agency-sponsored information collection unless it displays a currently valid OMB control number.

NOTICE

The Privacy Act of 1974 and regulation in 43 CFR 2.48(d) provide that you be furnished the following information in connection with information required by this application.

AUTHORITY: 30 U.S.C. 181 et seq., 25 U.S.C. 396; 43 CFR 3160

PRINCIPAL PURPOSES: The information will be used to: (1) process and evaluate your application for a permit to drill a new oil, gas, or service well or to reenter a plugged and abandoned well; and (2) document, for administrative use, information for the management, disposal and use of National Resource Lands and resources including (a) analyzing your proposal to discover and extract the Federal or Indian resources encountered; (b) reviewing procedures and equipment and the projected impact on the land involved; and (c) evaluating the effects of the proposed operation on the surface and subsurface water and other environmental impacts.

ROUTINE USE: Information from the record and/or the record will be transferred to appropriate Federal, State, and local or foreign agencies, when relevant to civil, criminal or regulatory investigations or prosecution, in connection with congressional inquiries and for regulatory responsibilities.

EFFECT OF NOT PROVIDING INFORMATION: Filing of this application and disclosure of the information is mandatory only if you elect to initiate a drilling or reentry operation on an oil and gas lease.

BURDEN HOURS STATEMENT

Public reporting burden for this form is estimated to average 1 hour per response, including the time for reviewing instructions, gathering and maintaining data, and completing and reviewing the form. Direct comments regarding the burden estimate or any other aspect of this form to U.S. Department of the Interior, Bureau of Land Management (1004-0137), Bureau Information Collection Clearance Officer, (WO-630) MS 401 LS, 1849 C Street, NW., Washington, D.C. 20240.

The Paperwork Reduction Act of 1995 requires us to inform you that:

This information is being collected to allow evaluation of the technical, safety, and environmental factors involved with drilling for oil and/or gas on Federal and Indian oil and gas leases.

This information will be used to analyze and approve applications.

Response to this request is mandatory only if the operator elects to initiate drilling or reentry operations on an oil and gas lease.

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:777 Main Street, Suite 800City, State:Fort Worth, TXZip 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:

Formations:

NMLC0032573B

Sec. 6, T22S, R37E SW/4 SE/4

Tubb, Drinkard

Bond Coverage: (State, Nationwide or Individual)

BLM Bond File No.:

NM2399

Statewide

2 madelin Authorized Signature:

Title: Petroleum Engineer

Date: 1/25/2006

United State Department of the Interior

x . . .

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: 777 Main Street, Suite 800 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 .: NMLC0032573B Legal Description of Land: Sec. 6, T22S, R37E SE/4 SW/4 Formations: Tubb, Drinkard Bond Coverage: (State, Nationwide of Individual) Statewide **BLM Bond File No.:** B000881 Authorized Signature: Title: Petroleum Engineer Date: 1/12/2006

Multi-Point Surface Use Operating Plan Range Operating New Mexico, Inc. Elliott B Federal No. 12

This plan is submitted with form 3160-3, Applications for Permit to Drill, covering the above described well. The purpose of this plan is to describe the location of the proposed well, and the proposed construction. And the procedures to be followed in rehabilitation of the surface after completion of the operations, so that a complete appraisal can be made of the environmental affects associated with the operation.

1. Existing Roads:

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- A. <u>Exhibit A</u> is a portion of a road map showing the location of the proposed well. The proposed location is situated approximately 1.5 miles SW of Eunice, New Mexico.
- B. Directions: See Exhibit B
- 2. Planned Access Road
 - A. The proposed well site is located 330' FSL & 1,890' FEL of Section 6-T22S-R37E.
- 3. Location of Existing Wells:
 - A. There is one (1) existing well in the vicinity as shown on Exhibit D
- 4. Location of Existing and/or Proposed Facilities
 - A. The Layout of the well pad, drilling rig and reserve pit are shown in Exhibit B & C.
 - B. In the event that this well is productive, the current tank battery and production facilities will be utilized.
 - C. The production facility consists of two 210 bbl steel oil storage tanks, one 500 bbl water tank, two vertical separators for production and one vertical separator for testing.

5. Location and Type of Water Supply:

y . . .

- A. The well is to be drilled with both fresh and brine water to be hauled to the location by truck and will be bought from commercial sources.
- 6. Source of Construction Material:
 - A. Any caliche required for construction of the well pad will be obtained from company-owned caliche pit.
- 7. Methods of Handling Waste Disposal:
 - A. Drill cuttings will be disposed of in the drilling pits.
 - B. Drilling fluids will be allowed to evaporate in the drilling pits until the pits are dry.
 - C. Oil produced during operations will be stored in tanks and hauled off site.
 - D. Human sewage will be contained in a portable chemical toilet, transported from the site and disposed of at an approved site.
 - E. Trash will be deposited in a metal container and hauled to an approved disposal site.
 - F. Within 30 days following drilling and/or completion operations, trash and debris will be hauled to an approved disposal site.
- 8. Ancillary Facilities

None

- 9. Well site Layout:
 - A. <u>Exhibit B</u> shows the dimensions of the well pad. Location of the major rig components, and well pad orientation are shown <u>Exhibit C</u>.
 - B. Topography of the area is relatively level across the entire location. Fills should be no more than 3' deep. The location will be capped with 4" to 6" of caliche.
 - C. No diversion ditches are planned.
 - D. The pad has been staked and flagged and an archeological study conducted and attached with this permit application.

10. Plans for Restoration of the Surface:

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- A. Upon completion of drilling, completion and production operations, the area disturbed by the project will be restored to BLM specifications or to as near their former natural condition as possible.
- B. All of the caliche material will be removed and the area will be leveled to pre-project grade.
- C. No drainage systems will be needed on the site.
- D. No segregation of soils is planned at this time as it is a blow sand area.
- E. Waste disposal was outlined in Section 7.
- F. Re-vegetation and fertilization will be as per BLM stipulations.
- G. All areas not used for production will be restored after completion of the well. The existing roads will not be restored.
- 11. Other Information
 - A. The general location of this site is a sandy desert and mesquite brush area. The soil has a very small amount of vegetation and stockpiling of material is not planned.
 - B. The vegetation is desert scrub characterized by various species of cacti, acacia, and mesquite.
 - C. Wildlife species that occur in the area include: rabbits, mule deer, coyote, snakes and various rodents.
 - D. No river is in the general area of the well site.
 - E. An archaeological survey of the site and proposed access road has been conducted and the report is attached.

12. Surface Owner's Name and Address:

Range Operating New Mexico, Inc. 777 Main Street, Suite. 800 Fort Worth, TX 76102

- 13. Operator's Representative and Certification.
 - A. The field representatives responsible for assuring compliance with the approved surface use plan are:

	Office	Mobile
District Engineer Bryan Surles	817-810-1971	817-360-9663
Field Foreman Chris Garcia	505-394-1485	325-277-8621

B. I hereby certify that I, or persons 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 plan are to the best of my knowledge, true and correct; and that the work associated with operations proposed herein will be performed by Range Operating New Mexico, Inc. and it contractors and subcontractors in conformity with this plan and the terms and conditions under which it is approved. This statement is subject to the provisions of the 18 U.S.C. 1001 for the filing of a false statement.

DATE: 1/12/06

Bryan Surles District Engineer

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NOTICE TO SURFACE OWNER

Surface Owner

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Notice Date

1-26-06

Range Operating New Mexico, Inc. 777 Main St., Ste. 800 Fort Worth, TX 76102

LOCATION VERIFICATION MAP



VICINITY MAP

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SCALE: 1'' = 2 MILES

SEC. <u>6</u> TWP. <u>22–S</u> RGE. <u>37–E</u> SURVEY <u>N.M.P.M.</u> COUNTY <u>LEA</u> DESCRIPTION <u>330' FSL & 1890' FEL</u> ELEVATION <u>3443'</u> RANGE OPERATING OPERATOR <u>NEW MEXICO, INC.</u> LEASE <u>ELLIOTT B FEDERAL</u>









PETRA 1/4/2006 10:32:51 AM

EXHIBIT D

TITLE PAGE/ABSTRACT/ NEGATIVE SITE REPORT

1/03		CFC	D/RFO		
1. BLM Report No.	1. BLM Report No. 2. Reviewer's Initials/Date 3. M ACCEPTED () REJECTED () 3. M				
4. Type of Report:	Negative (X)	Positi	ve()		
5. Title of Report: Class III a well No. 12. Author(s): Danny & Ann Boo	-	survey of a pad and ac	cess road Elliott "B" Fed.	6. Fieldwork I	Date: 24 Nov. 2005
			<u></u>	7. Report Date	: 25 Nov. 2005
8. Consultant Name & Add	ress:			9. Cultural Res	source Permit No.
Boone Archaeological	Services			BLM: 190-2	2920-05-G
2030 North Canal			·	STATE: N	<i>4</i> -05-157
Carlsbad, NM 88220				·····	
Direct Charge: Danny Be				10. Consultan	-
Field Personnel Name: I	Danny Boone			BAS 11-05-	-24
Phone: (505) 885-1352					
11. Customer Name: Range		1		12. Customer	Project No.:
Responsible Individual: Bry	an Suries				
Address: P.O. Box 300					
Loving, New Mexi	co 88256				
Phone: (505) 441-0178					
13.Land Status	BLM	STATE	PRIVATE	OTHER	TOTAL
a. Area Surveyed (acres)	0	0	8.26 (+/-) Fed. Min	. 0	8.26 (-/+) Fed. Min.
b. Area of Effect (acres)	0	0	3.67 (-/+) Fed. Min	. 0	3.67 (+/-) Fed. Min.
14. Linear: Length: 150' (+/-) See 16 b.	Wi	dth: NA		
Block: 600' x 600'					
15. Location: (Maps Attache	d if Negative S	Survey)			
a. State: New Mexico					
b. County: Lea					
c. BLM Field Office: Ca	arsbad				
d. Nearest City or Town	: Eunice, NM				
e. Legal Location: T 22	S, R 37E, Sect	ion 6, SW¼ SE¼.			
f. Well Pad Footages: 33	30' FSL, 1890'	FEL			
g. USGS 7.5 Map Name	e(s) and Code 1	Number(s): EUNICE, 1	NM, (1969, Photo Rev. 197	9) 32103-D2	

1/03

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16.	Project	Data:

a. Records Search: Date of BLM File Review: 17 Nov. 2005 Name of Reviewer: Danny Boone

Date of ARMS Data Review: 22 Nov. 2005 Name of Reviewer: Ann Boone

Findings: No previously recorded sites are within 1.0 mile.

b. Description of Undertaking: The proposed access road connects to an existing lease road that is within the southeast portion of the pad survey area. In the extreme northwest corner there is an existing operating oil well, a buried pipeline in the northwest portion, one OHEL in the extreme northeast portion and a west to east trending lease road in the northern portion. Survey acres were estimated on the 600 by 600 feet pad. Impact acres are unknown but were estimated on a 400 by 400 feet pad. A plat for the project is attached to this report.

c. Environmental Setting:

Topography: Mildly undulating dunal plain.

Vegetation: Overall groundcover is approximately 35% consisting primarily of shinoak, mesquite, yucca cactus, snakeweed, yucca catus, assorted grasses and other flora.

NRCS: Peyote-Maljamar-Kermit association: Gently undulating and rolling, deep, sandy soils.

d. Field Methods:

Transects: A parallel grid spaced 15 meters or less apart.

Crew Size: One

Time in Field: 2.0 hours.

e. Artifacts Collected: None

17. Cultural Resource Findings:

Responsible Archaeologist

a. Identification and description: None

b. Evaluation of significance of Each Resource:

18. Management Summary (Recommendations):

Archaeological clearance of a pad and access road for the Elliott "B" Fed. well No. 12 for Range Operating New Mexico, INC. as presently staked is recommended. If cultural resources are encountered at any time all activity should cease and the BLM archaeologist notified immediately.

19.

I certify that the information provided above is correct and accurate and meets all appreciable BLM standards.

Signature

26 Nov. 2005 Date



BAS

DISTRICT I 1625 N. PRENCE DR., HORBS, NM (18240	Energy, Minerals an	d Natural Resources Department
DISTRICT II 1301 V. grand avenue, artesia, n	M 68210		ATION DIVISION ST. FRANCIS DR.
DISTRICT III 1000 Rio Brazos Rd., Aztec,	NM 87410		ew Mexico 87505
DISTRICT IV 1220 s. st. France dr., santa fi	, NM 87505	WELL LOCATION AND	ACREAGE DEDICATION P
API Number		Pool Code	Po
30-025-3	1735	19190	Drinkard
Property Code		Prop	erty Name
301545		ELLIOTT	B FEDERAL
OGRID No.		Oper	ator Name
227588		RANGE OPERATIN	G NEW MEXICO, INC.
		Surfa	ce Location
III. or lot No. Section	Tornehin	Banan Lat Ida Bast for	All North (Grade Very Total

Form C-102 Revised JUNE 10, 2003 Submit to Appropriate District Office State Lease - 4 Copies Fee Lease - 3 Copies

LISTRICT IV	R., SANTA PE,	NM 87505	WELL LO	CATION	AND A	CREAG	E DEDICATI	ON PLAT	🗆 AMENDI	ED REPORT
1	Number	. ~	1	Pool Code				Pool Name		
30-02	5-37	735	1919	0		D	rinkard			
Property (Code				Prope	rty Name			Well Num	nber
301545				EL	LIOTT	B FEDI	ERAL		12	
OGRID N	D.					tor Name		·····	Elevatio	n
227588			RAN	GE OPE	RATING	S NEW	MEXICO, IN	IC.	3443	3'
					Surfac	e Locati	on			
UL or lot No.	Section	Township	Range	Lot Idn	Feet from	m the N	orth/South line	Feet from the	East/West line	County
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			Bottom	Hole Loo	cation I	í Differe	nt From Sur	face	• • • • • • • • • • • • • • • • • • •	•
UL or lot No.	Section	Township	Range	Lot Idn	Feet from	m the N	orth/South line	Feet from the	Bast/West line	County

State of New Mexico

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ſ	Dedicated Acres	Joint or	Infill	Consolidation (Code Or	der No.	F			
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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







Range Operating New Mexico Elliott B Federal #12 Lea County, NM Drilling Program

Prepared 12/20/2005

 PROPOSED DEPTH:
 6,800' MD / 6,800' TVD

 GROUND ELEVATION:
 3,443'

 KB:
 17'

LOCATION: 330' FSL & 1890' FEL, Section 6-T22S-R37E, Lea County, NM

ANTICIPATED PRODUCTIVE FORMATION: Tubb-Drinkard

API NO:

GENERAL:

The Elliott B Federal #12 will be a 6,800' Tubb-Drinkard test in Lea County, New Mexico drilled on a daywork basis by United Rig #30. An 12-1/4" surface hole will be drilled to +/-1200'. A string of 8-5/8" casing will be run and cemented to surface.

Nipple up BOPs and test same, drilling will continue with a 7-7/8" hole to a total depth of 6,800'. Actual TD will be spaced so that casing will be landed where the casing head can be screwed on. After electric-logging the open-hole interval, a string of 5-1/2" casing will be run and cemented from total depth to 1,000' and the tubing head installed.

ESTIMATED FORMATION TOPS: (Log Depths)

Upper Permian Rustler Fm	+2375 ft	1079 ft MD
Upper Permian PS Fm	-29 ft	3484 ft MD
Upper Permian San Andres Fm	- 440 ft	3895 ft MD 🛛 +
Upper Permian Glorieta Fm	-1649 ft	5104 ft MD +
Upper Permian Blinebry Fm	-2076 ft	5531 ft MD *
Lower Permian Tubb Fm	-2684 ft	6139 ft MD *
Lower Permian Drinkard Fm	-2867 ft	6322 ft MD *
Lower Permian Abo Fm	-3251 ft	6706 ft MD
PTD	-3346 ft	6800 ft MD

*= Primary Reservoir Targets

+= Secondary Reservoir Targets

DETAILED DRILLING PROCEDURE

TIMES AND EVENTS TO NOTE ON DRILLING REPORT:

A. SPUD (date and time)

. . . .

- B. TD (each interval date and time)
- C. CEMENT IN PLACE (date and time)
- D. RIG RELEASE (date and time)

BOTTOM HOLE ASSEMBLIES

- BHA #1: (0-1200') Bit, (2) 8" DC, (10) 6.25" DC's
- BHA #2: (1200'-6000') Bit, (2) 6.25" DC's, IBS, (1) 6.25" DC, IBS, (22) 6.25" DC's
- BHA #3: (6000'-6800') Bit, (22) 6.25" DC's

The IBS's will be layed down prior to drilling the Tubb.

USE OF RT TOOL

Two RT tools will be run, one 500' above the top of the collars and the other at 1500' above the top the first RT tool.

MUD PROGRAM

INTERVAL	MUD WEIGHT	FUNNEL VIS.	API Fluid Loss
0' - 1200'	8.4 - 9.4	32-34	NC
1200' - 6000'	10.0	28	NC
6000' - 6800'	10.0 - 10.2	30-33	10cc

- 1) Level and build an all-weather location and access road.
- 2) MIRU United Rig #30. Perform rig safety inspection and ensure that everything is in proper working order prior to spudding well.
- 3) Notify NMOCD of intent to spud, run casing and cement each 24 hours in advance 505-748-1283.
- 4) Spud well with 12-1/4" mill tooth bit. BHA should consist of 3-8" drill collars and 6" drill collars. Drill to +/- 1200' with surveys at 500' and 1000' (Actual depth will be determined by the length of the casing). Circulate hole clean. Sweep and condition hole to run casing. Pull out of hole, lay down BHA.

- **NOTE:** Mud through this interval will be a native spud mud supplemented with Bentonite. Lime may be used to flocculate the mud and increase the yield point to clean the hole. Mix paper for seepage control. Utilize all solids control equipment to control drill solids. Run as fine of mesh shaker screens as possible. Use water to control mud weight and viscosity. Maintain mud weight at 8.4 9.0 ppg.
- 5) Rig up casing crew and run 8-5/8", 24#, J-55 casing as follows:
 - 1-8-5/8" Texas Pattern Shoe 1-8-5/8" Insert Float Collar 1-8-5/8" x 11" Centralizer 10' above shoe 1-8-5/8" x 11" Centralizer every other joint 1-8-5/8" Stop Ring

- 6) Circulate for at least bottoms up plus one casing volume with mud prior to cementing. Cement surface casing according to cement recommendation. NOTE: Have field bin, cement, and circulating equipment on location prior to casing job.
 - a) Review rates, pressures, displacement volumes and casing pressure rating with Service Company and rig personnel. All cement slurries are to be lab tested; both a pilot test and a test of the actual field blend. Report results, including 24 hour compressive strengths, to the office. (See Cement Testing Requirements below). Also keep two samples of each dry cement in the event that a problem is encountered while cementing. Discard this sample if all indications are positive.
 - b) Cement well as follows: Pump 20 bbl fresh water followed by 200 sks of Lead: 35/65 POZ:Class C + 6% D020 + 5% (BWOW) D044 + 1 pps D130, @ 12.8 ppg, followed by 180 sks Tail: Class C + 1% S001 + 0.1 pps D130 @ 14.8 ppg. Displace with fresh water, bump plug with w/ 500 psi over final pump pressure.
 - c) If cement is not circulated to surface, contact the office and the NMOCD and prepare to run 1" pipe and top out cement. Have 1" pipe on location for possible top-out.
 - d) If cement falls, fill 12-1/4" X 8-5/8" annulus with cement.
- 7) Release pressure and check for flow back. Set casing on bottom. If float is holding, base nipple up of wellhead and BOP on the surface cement samples. Well must stand at least 8 hours total before any testing of casing is performed as per NMOCD.
- After cementing casing, weld on 8-5/8" flange type casing head. Test BOP blind rams & choke manifold to 250# low & 3000# high. Pick up Bit #2 (7-7/8") & BHA, trip in hole, test BOP pipe rams to 250# low & 3000#. <u>Pressure test casing to 1000 psi for 30 minutes prior to drilling out shoe.</u> Clearly report this test information of the daily drilling report.

MUD NOTES: See Mud Program for details

After cementing 8-5/8" casing circ pit with brine water. Mix paper for seepage control. Utilize pre-hydrated Gel/Lime sweeps for flushing the hole. Run all available solids control equipment to control weight. Add brine water as needed to maintain volume. Add LCM to system only as needed. Use batch LCM treatment if losses occur and maintain as needed.

- 9) Drill ahead with brine water in 7-7/8" hole taking deviation surveys every ± 500' or nearest bit run per NMOCD rules. Use sweeps as needed to clean hole. Drill to ± 6800; exact TD will be determined by the length of the casing. Sweep and condition hole in preparation for logging. Spot a 50 bbl, 40-42 visc pill prior to POOH for logs. Strap out of hole.
- 10) RU Wireline Truck and Tools. Log well as instructed by Range Operating NM. Rotary sidewall cores may be required along with RFT's.

- 11) Make a conditioning trip prior to running casing. Trip into hole with BHA and drill pipe, break circulation at 6800'. Ream last two stands to bottom. Circulate and condition hole. Maintain viscosity of 28. TOH laying down 4-1/2" drill pipe and drill collars. Clear floor and prepare to run casing.
- 12) Rig up casing crew and run 5-1/2", 17#, J-55, LT&C as follows:
 - a) Float shoe (thread-lock)

- b) 1 jt. 5-1/2", 17#, J-55, LT&C casing (thread-lock)
- c) Float collar (thread-lock)
- d) 5-1/2", 17#, J-55, LT&C Casing to surface.

The float shoe, bottom joint of 5-1/2" casing and the float collar should be thread-locked (do not weld pipe). Run 1 centralizer 5' above shoe with limit clamp, one on the next collar, one just below the float collar with limit clamp and one per joint up to 4500'.

- 13) Circulate mud for at least bottoms up plus one casing volume prior to cementing.
- 14) Cement the production casing as follows. Re-figure cement volumes on a basis of: caliper + 20% + 50 sx. Precede cement with 20 bbl fresh water, 500 gals superflush, 20 bbl fresh water.

Cement well as follows:

Lead: **370** sks of 50/50 POZ:Class C + 10% D020 + 5% (BWOW) D044 + 0.25 pps D29 + 0.2% D046. Slurry weight = 12.0 ppg, Yield = 2.39 cf/sk followed by:

Tail: **350** sks of 50/50 POZ:Class C + 2% D020 + 5% (BWOW) D044 + 0.25 pps D29 + 0.2% D046 + 0.2% D167+ 4 pps D042. Slurry weight = 14.2 ppg, Yield = 1.38 cf/sk. Displace with fresh water.

Review rates, pressures, displacement volumes and casing pressure rating with Service Company and rig personnel. All cement slurries are to be lab tested; both a pilot test and a test of the actual field blend. Report results, including 24 hour compressive strengths, to the office. (See Cement Testing Requirements below). Also keep two samples of each dry cement.

- a) Have additional water storage on location as necessary for mixing cement. Have water analyzed by cementing company for compatibility with cement and chemicals.
- b) Reciprocate pipe during cement job. Take special care to move pipe very slowly on the down stroke. Pump spacer and cement at 7-8 BPM. When the last cement has been pumped, maintain rate at 7-8 BPM. Displace with fresh water. When reaching displacement to shoe joint minus 10 bbls slow pump rate to 2 barrels per minute or less prior to bumping plug. Bleed off pressure and check for backflow. If negative, remove the cap and drop the opening bomb for the second stage job.
- c) Bump plug with 500 psi over final displacement pressure and hold pressure for 15 minutes.
- 15) Release pressure and check for flow back. If floats are holding, continue to make preparations to hang 5-1/2" casing one
 (1) foot off bottom. If floats do not hold, wait 12 hours on cement.
- 16) Set 5-1/2" slips in "A" section with full string weight. Nipple down BOP, Nipple up well head.
- 17) Install cap. Clean mud pits and release rig.

CEMENT TESTING REQUIREMENTS:

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- Laboratory Blend: Obtain thickening time, rheology, water loss, and compressive strengths of the laboratory cement blend with a water sample of the actual water to be used in cementing for each cement slurry to be pumped.
- Field Blend: Obtain thickening time of the field cement blend with a water sample of the actual water to be used in cementing for each slurry to be pumped. If the thickening time of the field blend is consistent with the thickening time of the laboratory blend, proceed with the cement job. If not, wait on the compressive strength results. Regardless of thickening time results, obtain all of the compressive strengths of field blend to compare with the compressive strengths of the laboratory blend.

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	d less lades to estimate	MINER CENTRAL	Restore and the	and the second se
Don Robinson	Drilling Manager	(469) 450-2281	(972) 317-8345	(817) 509-1506
George Allen Teer	VP of Operations	(817) 723-1107	(817) 491-3740	(817) 870-2601
Bryan Surles	District Engineer	(817) 360-9663	(817) 346-8188	(817) 810-1971
Martin Emery	Chief Geologist	(817) 366-3693	(817) 430-4861	(817) 870-2601
Paula Haie	Sr. Regulatory Sp.	(817) 773-6002		(817) 810-1916

United Rig Company, Artesia, NM	Rig Company	Angel Salazar	(505) 623-7730
United Rig #30			
Nova Mud, Inc - Hobbs, NM	Drlg Mud	Dale Welch	(800) 530-8786
Master Tubulars – Midland, TX	Casing & Tubing	Randy Martin	(800) 682-8996
Suttles Logging, Inc Midland, TX	Mudlogging	Sam Samford	(432) 687-3148
Schlumberger-Artesia, NM	Cementing Service	Lynn Northcutt	(505)748-1392 cell (505) 365-7510
National – Hobbs, NM	Well Heads		(505) 393-9928
TFH –Hobbs, NM	Dirt Contractor		(505) 397-3270
Weatherford -Artesia, NM	Float Equipment		
Halliburton Logging –Hobbs, NM	Open Hole Logs	Michael Escriva Tommy Johnson	(505) 392-7543
Allen's Casing Crew -Hobbs, TX	Csg Crew		
Riverside- Carlsbad, TX	Water -		(505) 885-6663
National –Hobbs, NM	General Supplies		(505) 393-9928
TFHHobbs, NM	Fork Lift		(505) 397-3270
Abbot Brothers	Conductor setting		
RTO Sales & Lease	Satellite Internet		(432) 550-5678





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EUNICE PROSPECT (Blinebry/Tubb/Drinkard) Elliott "B" Fed. No. 12 Well Objectives/Prognosis/Evaluation December 20, 2005

GENERAL		
Operator:	Range Operating NM, Inc. (100%)	
Partners/WI:	none	
Proposed Well Designation:	Elliott "B" Fed. No. 12	
API No.:	30-025-	
Well Classification:	PUD	
Confidentiality Status:	Restricted, no information release without	ut approval
PTD (Permit Depth):	6800 ft MD	
Anticipated Spud Date:		
Estimated Days to Drill:	20	
Drilling Contractor:		
Expected Type of Hydrocarbon:	Oil/Gas, Gravity and GOR variable	
Contacts:	Tom Brace, Geol. Mgr.	(817)810-1926
	Martin Emery, Project Geologist	(817)810-1951
	Steve Chapman, Reservoir Engineer	(817)810-1912
	Bobby Ebeier, Landman	(817)810-1987
	Don Robinson, Drilling Mgr.	(817)509-1506

II) WELL OBJECTIVES

The objective of the well is to drill and evaluate the Blinebry, Tubb, and Drinkard Formations and complete the well as a Blinebry-Drinkard producer. The expected EUR for the well is 1194 MMCFGE. The expected IP is 400 MCFG & 90 BO/D.

Bryan Surles, Oper. Eng.

(817)810-1971

III) LOCATION

LOCATION	
Surface Location:	330 ft FSL 1890 ft FEL
	Section 6-T22S-R37E
	Lea County, New Mexico
	Lat: 32 deg 24' 51.78"
	Long: 103 deg 11' 57.56"
Bottom-hole Location:	same, vertical
Elevation:	GL: 3442 ft
	KB: 3454 ft
Directions to Location:	From the intersection of the St. Rd. #207 (Loop 18) and Co.
	Rd. #21 (Delaware Basin Rd.) go west on Co. Rd. #21 for
	approx. 2.6 mi to a caliche road on the right. Turn right
	(north) and go approx. 1.6 mi. Turn right (SE) and go approx.
	0.5 mi. Turn right (SW) and go approx. 0.3 mi. The location
	is approx. 300 ft west.
Access to Location:	Unrestricted

IV) PROGNOSIS

Upper Permian Rustler Fm	+2375 ft	1079 ft MD
Upper Permian PS Fm	-29 ft	3484 ft MD
Upper Permian San Andres Fm	-440 ft	3895 ft MD +
Upper Permian Glorieta Fm	-1649 ft	5104 ft MD +
Upper Permian Blinebry Fm	-2028 ft	5482 ft MD *
Lower Permian Tubb Fm	-2684 ft	6139 ft MD *
Lower Permian Drinkard Fm	-2867 ft	6322 ft MD *
Lower Permian Abo Fm	-3251 ft	6706 ft MD
PTD	-3346 ft	6800 ft MD

*= Primary Reservoir Targets

+= Secondary Reservoir Targets

EUNICE PROSPECT (Blinebry/Tubb/Drinkard) Elliott "B" Fed. No. 12 Well Objectives/Prognosis/Evaluation

V) PRIMARY RESERVOIR TARGETS

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Upper Permian Blinebry DOL Rock Type:

Rock Type:	crypto-c xlln DOL
Thickness:	50-75 ft net pay
Avg. Porosity:	8%; ranges from 2-18%
Avg. Perm.:	? md
Est. Reservoir Temp.:	120°F
Est. Reservoir Press.:	2200 psi (assuming no pressure depletion)

Lower Permian Tubb DOL Rock Type:

Rock Type:	crypto-c xlln DOL
Thickness:	10-15 ft net pay
Avg. Porosity:	8%; ranges from 2-15%
Avg. Perm.:	? md
Est. Reservoir Temp.:	130°F
Est. Reservoir Press.:	2480 psi (assuming no pressure depletion)

Lower Permian Drinkard DOL

Ciman Drinkaru DOL	
Rock Type:	crypto-c xlln DOL
Thickness:	50-75 ft net pay
Avg. Porosity:	12%; ranges from 2-20%
Avg. Perm.:	? md
Est. Reservoir Temp.:	135°F
Est. Reservoir Press.:	2640 psi (assuming no pressure depletion)

VI) SECONDARY RESERVOIR TARGETS

Upper Permian San Andres DOL & Glorieta/Paddock DOL

VII) PROPOSED WELL DESIGN

Drilling Fluids/Additives: Brine, 10.1 lbs/gal Casing Design:

VIII) EVALUATION

LVALUATION			
Mud-Logging:			
Contractor:		LES LOGGING	, INC.
		: (432)687-3148	
		sutlog.com	
Basic Requirements:		gs lithology descri	
		ows/fluorescence/	
	Gas m	onitoring, chroma	tography, gas ratios
	Penetra	ation rate/depth, r	ig operations, bit and mud
	proper	ties	
	One m	an unit	
Correlation:	Please	use the following	logs for correlation and refer to
	Section	n (X) for offset we	ell tops:
	1)	CHEVRON	
		Mattern NCT	"D" No. 13
		810 ft FSL & 1	930 ft FWL
		Section 6-T22S	-R37E
		30-025-25057	
	2)	RONMI	
		Elliott "B" No	.7
		1980 ft FSL &	1780 ft FEL
		Section 6-T22S	S-R37E
		30-025-24544	
Sampling:	2500-6	6800 ft MD	10 ft samples
	Collec	t 1 dry sample per	r interval
Reporting:			ily reports/logs to:
		n Emery	(Primary)
		10-1951 (wk)	memery@rangeresources.com
		10-1988 (fax)	
		30-4861 (hm)	
	• •	66-3693 (cell)	
Distribution:	see att	ached distribution	

EUNICE PROSPECT (Blinebry/Tubb/Drinkard) Elliott "B" Fed. No. 12 Well Objectives/Prognosis/Evaluation

VIII) EVALUATION (cont)

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Conventional Coring:

None

Open-Hole DSTs: DST Contractor: DST Program: Distribution:

None see attached distribution

Open-Hole Logging: Contractor: Logging Program:

HALLIBURTON 2500-6800 ft MD (TD)

Optional 5000-6800 ft

Grayburg Formations

primary pay interval

None expected

None expected

SGR-DSN-SDL-DLL-MSFL-FWS (delta T) (log GR-Neutron to surface) GR-RSCT

Possibilty of partial depletion within Queen to

See above; Please tag mud if circulation is lost in

-

Distribution:

see attached distribution

IX) POTENTIAL HAZARDS/PITFALLS Problematic Drilling Zones: Abnormal Pressure/Temperature Zones:

Fractured/Lost Circulation Zones:

Presence of H₂S or CO₂: Faults Intersecting the Wellbore:

X) CORRELATION LOG TOPS:

	CHEVRON	RONMI
Correlations	Mattern NCT "D" No. 13	Elliott "B" No. 7
	Sec. 6-T22S-R37E	Sec. 6-T22S-R37E
	KB: 3471 ft	KB: 3457 ft
Upper Permian Rustler Fm	(+2373') 1098'	NL
Upper Permian PS Fm	(15') 3476'	(-36') 3493'
Upper Permian San Andres Fm	(430') 3901'	(-449') 3903'
Upper Permian Glorieta Fm	(-1649') 5120'	(1649') 5106'
Upper Permian Blinebry Fm	(-2078').5549'	(-2075') 5532'
Lower Permian Tubb Fm	(-2683') 6154'	(-2690') 6147'
Lower Permian Drinkard Fm	(-2865') 6336'	(-2872') 6329'
Lower Permian Abo Fm	NDE	(-3247') 6704'
TD .	6715	9466'

Prepared by: Martin Emery Date: December 20, 2005 Revised:

SPECIAL DRILLING STIPULATIONS

THE FOLLOWING DATA IS REQUIRED ON THE WELL SIGN

Operator's Name:	Range Operating New Mexico, Inc	Well Name & #:	_Elliott B Fed #12
Location 330	FSL& <u>1890</u> FEL; Sec. <u>6</u> , T. <u>22</u> S	., R. 37 <u>-</u> E.	
Lease #:	2573B County:	Lea State	e: <u>New Mexico</u>

The Special stipulations check marked below are applicable to the above described well and approval of this application to drill is conditioned upon compliance with such stipulations in addition to the General Requirements. The permittee should be familiar with the General Requirements, a copy of which is available from a Bureau of Land Management office. EACH PERMITTEE HAS THE RIGHT OF ADMINISTRATIVE APPEAL TO THESE STIPULATIONS PURSUANT TO TITLE 43 CRF 3165.3 AND 3165.4.

This permit is valid for a period of one year from the date of approval or until lease expiration or termination whichever is shorter.

I. SPECIAL ENVIRONMENT REQUIREMENTS

() Lesser Prairie Chicken (stips attached)	() Flood plain (stips attached)
() San Simon Swale (stips attached)	() Other

II. ON LEASE - SURFACE REQUIREMENTS PRIOR TO DRILLING

(X) The BLM will monitor construction of this drill site. Notify the (X) Carlsbad Field Office at (505) 234-5972 () Hobbs Office (505) 393-3612, at least 3 working days prior to commencing construction.

() Roads and the drill pad for this well must be surfaced with _____ inches of compacted caliche upon completion of well and it is determined to be a producer.

() All topsoil and vegetation encountered during the construction of the drill site area will be stockpiled and made available for resurfacing of the disturbed area after completion of the drilling operation. Topsoil on the subject location is approximately _____inches in depth. Approximately _____cubic yards of topsoil material will be stockpiled for reclamation.

() Other.

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III. WELL COMPLETION REQUIREMENTS

() A Communitization Agreement covering the acreage dedicated to the well must be filed for approval with the BLM. The effective date of the agreement must be prior to any sales.

(x) Surface Restoration: If the well is a producer, the reserve pit(s) will be backfilled when dry, and cut-and-fill slopes will be reduced to a slope of 3:1 or less. All areas of the pad not necessary for production must be re-contoured to resemble the original contours of the surrounding terrain, and topsoil must be re-distributed and re-seeded with a drill equipped with a depth indicator (set at depth of $\frac{1}{2}$ inch) with the following seed mixture, in pounds of Pure Live Seed (PLS), per acre.

() A. Seed Mixture 1 (Loamy Sites) Side Oats Grama (<i>Bouteloua curtipendula</i>) 5.0 Sand Dropseed (<i>Sporobolus cryptandrus</i>) 1.0	 (X) B. Seed Mixture 2 (Sandy Sites) Sand Dropseed (Sporobolus crptandrus) 1.0 Sand Lovegrass (Eragostis trichodes) 1.0 Plains Bristlegrass (Setaria magrostachya) 2.0 	
() C. Seed Mixture 3 (Shallow Sites) Side oats Grama (<i>Boute curtipendula</i>) 1.0	 () D. Seed Mixture 4 (Gypsum Sites) Alkali Sacaton (Sporobollud airoides) 1.0 Four-Wing Saltbush (Atriplex canescens) 5.0 	

() OTHER SEE ATTACHED SEED MIXTURE

Seeding should be done either late in the fall (September 15 - November 15, before freeze up, or early as possible the following spring to take advantage of available ground moisture.

() Other

RESERVE PIT CONSTRUCTION STANDARDS

The reserve pit shall be constructed entirely in cut material and lined with 6-mil plastic. Mineral material extracted from within the boundary of the APD during construction of the well pad and reserve pits and be used for the construction of this well pad and its immediate access road only, as long as that portion of the access road it is use on remains on-lease. Removal of any additional material from this location for construction or improvement of other well pads and other access or lease roads must first be purchased from BLM.

<u>Reclamation</u>: Reclamation of this type of deep pit will consist of pushing the pit walls into the pit when sufficiently dry to support track equipment. The pit liner is NOT TO BE RUPTURED to facilitate drying; a ten month period after completion of the well is allowed for drying of the pit contents.

The pit area must be contoured to the natural terrain with all contaminated drilling mud buried with at least 3 feet of clean soil. The reclaimed area will then be seeded as specified in this permit.

OPTIONAL PIT CONSTRUCTION STANDARDS

The reserve pit may be constructed in predominantly fill material if:

(1) Lined as specified above and

(2) A temporary or emergency pit may be constructed immediately adjacent to the reserve pit as long as the pit remains within the APD boundary. Mineral material removed from this pit may be used for the construction of this well pad only and its immediate access road, as long as that portion of the access road the material is used on remains on-lease. Removal of any material from the APD boundary for use on other well locations or roads must first be purchased from BLM.

Reclamation of the reserve pit consists of bulldozing all reserve pit contents and contaminants into the borrow pit and covering with a minimum of 3 feet of clean soil material. The entire area must be re-contoured, all trash removed, and reseeded as specified in this permit.

CULTURAL

Whether or not an archaeological survey has been completed and notwithstanding that operations are being conducted as approved, the lessee/operator/grantee shall notify the BLM immediately if previously unidentified cultural resources are observed during surface disturbing operations. From the time of the observation, the lessee/operator/grantee shall avoid operations that will result in disturbance to these cultural resources until directed to process by BLM.

TRASH PIT STIPS

All trash, junk, and other waste material shall be contained in trash cages or bins to prevent scattering and will be removed and deposited in an approved sanitary landfill. Burial on site is not permitted.

BLM SERIAL #: LC-0032573B COMPANY REFERENCE: Range Operating New Mexico, Inc WELL # & NAME: Elliott B Federal #12

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 <u>no</u> 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	l <u>b/acre</u>
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

CONDITIONS OF APPROVAL - DRILLING

Operator's Name: Well Name & No:			Incorporated	
Location: Surface: Lease: NMLC 032 Lea County, New	: 330' FSL & 2573-B Mexico /	1980' FEL, 1890 Des E-Mail J 1-24-	Sec.06, T. 22 S. Dom Pieche 7 El. EN	R. 37 E. Jak

I. DRILLING OPERATIONS REQUIREMENTS:

1. The Bureau of Land Management (BLM) is to be notified at the Roswell Field Office, 2909 West Second St., Roswell, NM 88201, (505) 627-0272 for wells in Chaves and Roosevelt Counties; the Carlsbad Field Office, 620 East Greene St., Carlsbad, NM 88220, (505) 361-2822 for wells in Eddy County; and the Hobbs Field Station, 414 West Taylor, Hobbs NM 88240, (505) 393-3612 for wells in Lea County, in sufficient time for a representative to witness:

A. Spudding

B. Cementing casing: 8 % inch; 5 1/2 inch

C. BOP Tests

2. A Hydrogen Sulfide (H2S) Drilling Plan is not required for this wellbore. However, H2S poisonous gas is found in sporadic locations throughout this region in the Tansill, Yates, Seven Rivers, estimated to be at 2600 ft. The operator shall confirm all rig personnel has been trained in H2S safety awareness and inform the mudlogger of potential H2S.

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.

4. Submit a Sundry Notice (Form 3160-5, one original and five copies) for each casing string, describing the casing and cementing operations. Include pertinent information such as; spud date, hole size, casing (size, weight, grade and thread type), cement (type, quantity and top), water zones and problems or hazards encountered. The Sundry shall be submitted within 15 days of completion of each casing string. The reports may be combined into the same Sundry if they fall within the same 15 day time frame.

5. The API No. assigned to the well by NMOCD shall be included on the subsequent report of setting the first casing string.

II. CASING:

1. The <u>8 %</u> inch shall be set at <u>1200 Feet with cement circulated to the surface. This string must be set into the anhydrite and must be set above the Top of the Salt</u>. If cement does not circulate to the surface the appropriate BLM office shall be notified and a temperature survey or cement bond log shall be run to verify the top of the cement. Remedial cementing shall be completed prior to drilling out that string.

2. The <u>minimum required fill of cement</u> behind the <u>5 ½</u> inch Production casing is to <u>Tie Back into the 8 % inch shoe by</u> at least 200 ft.

III. PRESSURE CONTROL:

1. All BOP systems and related equipment shall comply with well control requirements as described in Onshore Oil and Gas Order No. 2. The BOP and related equipment shall be installed and operational before drilling below the $\underline{8\%}$ inch casing shoe and shall be tested as described in Onshore Order No. 2. Any equipment failing to test satisfactorily shall be repaired or replaced.

2. Minimum working pressure of the blowout preventer and related equipment (BOPE) shall be <u>2 M</u> psi.

III. Pressure Control (continued):

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3. The appropriate BLM office shall be notified in sufficient time for a representative to witness the test.

-The test shall be done by an independent service company

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

-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.

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

-Both low pressure and high pressure testing of BOPE is required.

Ggourley 01/25/06

BLM Serial #: LC-0032573B

Company Reference: Range Operating New Mexico, Inc Well # & Name: Elliott B Federal #12

STANDARD STIPULATIONS FOR PERMANENT RESOURCE ROADS CARLSBAD FIELD OFFICE

A copy of the grant and attachments, including stipulations, survey plat and/or map, will be on location during construction. BLM personnel may request to you a copy of your permit during construction to ensure compliance with all stipulations.

The holder/grantee/permittee shall hereafter be identified as the holder in these stipulations. The Authorized Officer is the person who approves the Application for Permit to Drill (APD) and/or Right-of-Way (ROW).

GENERAL REQUIREMENTS

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A. The holder shall indemnify the United States against any liability for damage to life or property arising from the occupancy or use of public lands under this grant.

B. The holder shall comply with all applicable Federal laws and regulations existing or hereafter enacted or promulgated. In any event, the holder 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 by this 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, 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.

C. The holder 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, 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.

D. If, during any phase of the construction, operation, maintenance, or termination of the road, any oil or other pollutant should be discharged, impacting Federal lands, the control and total removal, disposal, and cleaning up of such oil of other pollutant, wherever found, shall be the responsibility of the holder, regardless of fault. Upon failure of the holder to control, dispose of, or clean up such discharge on or affecting Federal lands, or to repair all

damages to Federal lands resulting there from the Authorized Officer may take such measures as deemed necessary to control and cleanup the discharge and restore the area, including, where appropriate, the aquatic environment and fish and wildlife habitats, at the full expense of the holder. Such action by the Authorized Officer shall not relieve the holder of any liability or responsibility.

E. The holder shall minimize disturbance to existing fences and other improvements on public domain surface. The holder is required to promptly repair improvements to at least their former state. Functional use of these improvements will be maintained at all times.

The holder will make a documented good-faith effort to contact the owner of any improvements prior to disturbing them. When necessary to pass through a fence line, the fence shall be braced on both sides of the passageway prior to cutting of the fence.

F. The Holder shall ensure that the entire right-of-way, including the driving surface, ditching and drainage control structures, road verges and any construction sites or zones, will be kept free of the following plant species: Malta starthistle, African rue, Scotch thistle and salt cedar. The Holder agrees to comply with the following stipulations:

1. ROAD WIDTH AND GRADE

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The road will have a driving surface of 14 feet (all roads shall have a minimum driving surface of 12 feet, unless local conditions dictate a different width). The maximum grade is 10 percent unless the box below is checked. Maximum width of surface disturbance from construction will be 30 feet.

Those segments of road where grade is in excess of 10% for more than 300 feet shall be designed by a professional engineer.

2. CROWNING AND DITCHING

Crowning with materials on site and ditching on one side of the road on the uphill side will be required. The road cross-section will conform to the cross section diagrams in Figure 1. If conditions dictate, ditching may be required for both sides of the road; if local conditions permit, a flat-bladed road may be considered (if these conditions exist, check the appropriate box below). The crown shall have a grade of approximately 2% (i.e., 1" crown on a 12' wide road).

 \times Ditching will be required on both sides of the roadway as shown on the attached map or as staked in the field.

Flat-blading is authorized on segment(s) delineated on the attached map.

3. DRAINAGE

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Drainage control shall be ensured over the entire road through the use of borrow ditches, out-sloping, in-sloping, natural rolling topography, lead-off (turnout)-ditches, culverts, and/or drainage dips.

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

FOR TURNOUT DITCHES
Spacing interval
400' - 150'
250' - 125'
200' - 100'
150' - 75'

A typical lead-off ditch has a minimum depth of 1 foot below and a berm 6 inches above natural ground level. The berm will be on the down-slope side of the lead-off ditch. The ditch end will tie into vegetation whenever possible.

For this road the spacing interval for lead-off ditches shall be at

imes 400 foot intervals.

_____ foot intervals.

locations staked in the field as per spacing intervals above.

locations delineated on the attached map.

B. Culvert pipes shall be used for cross drains where drainage dips or low water crossings are not feasible. The minimum culvert diameter must be 18 inches. Any culvert pipe installed shall be of sufficient diameter to pass the anticipated flow of water. Culvert location and required diameter are shown on the attached map (Further details can be obtained from the Roswell District Office or the appropriate Resource Area Office).

C. On road slopes exceeding 2%, drainage dips shall drain water into an adjacent leadoff ditch. Drainage dip location and spacing shall be determined by the formula:

spacing interval = 400' + 100' road slope in %

Example: 4% slope: spacing interval = $\frac{400}{4}$ + 100 = 200 feet

4. TURNOUTS

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Unless otherwise approved by the Authorized Officer, vehicle turnouts will be required. Turnouts will be located at 2000-foot intervals, or the turnouts will be intervisible, whichever is less. Turnouts will conform to the following diagram:

----- CENTER LINE OF ROADWAY ------



STANDARD TURNOUT - PLAN VIEW

5. SURFACING

Surfacing of the road or those portions identified on the attached map may, at the direction of the Authorized Officer, be required, if necessary, to maintain traffic within the right-ofway with caliche, gravel, or other surfacing material which shall be approved by the Authorized Officer. When surfacing is required, surfacing materials will be compacted to a minimum thickness of six inches with caliche material. The width of surfacing shall be no less than the driving surface. Prior to using any mineral materials from an existing or proposed Federal source, authorization must be obtained from the Authorized Officer.

A sales contract for the removal of mineral materials (caliche, sand, gravel, fill dirt, etc.) from an authorized pit, site, or on location must be obtained from the BLM prior to using any such mineral material from public lands. Contact the BLM solid minerals staff for the various options to purchase mineral material.

6. CATTLEGUARDS

Where used, all cattleguard grids and foundation designs and construction shall meet the American Association of State Highway and Transportation Officials (AASHTO) Load Rating H-20, although AASHTO U-80 rated grids shall be required where heavy loads (exceeding H-20 loading), are anticipated (See BLM standard drawings for cattleguards). Cattleguard grid length shall not be less than 8 feet and width of not less than 14 feet. A wire gate (16-foot minimum width) will be provided on one side of the cattleguard unless requested otherwise by the surface user.

7. MAINTENANCE

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The holder shall maintain the road in a safe, usable condition. A maintenance program shall include, but not be limited to blading, ditching, culvert installation, culvert cleaning, drainage installation, cattleguard maintenance, and surfacing.

8. PUBLIC ACCESS

Public access along this road will not be restricted by the holder without specific written approval being granted by the Authorized Officer. Gates or cattleguards on public lands will not be locked or closed to public use unless closure is specifically determined to be necessary and is authorized in writing by the Authorized Officer.

9. CULTURAL RESOURCES

Any cultural and/or paleontological resource (historic or prehistoric site or object) discovered by the holder, or any person working on the holder's behalf, on public or Federal land shall be immediately reported to the authorized officer. The 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 the proper mitigation measures will be made by the authorized officer after consulting with the holder.

10. SPECIAL STIPULATIONS:

See reclamation stipulations attached.

District 1 1625 N. French Dr., Hobbs, NM 88240 District II 1301 W. Grand Avenue, Artesia, NM 88210 District III '1000 Rio Brazos Road, Aztec, NM 87410 District IV 1220 S. St. Francis Dr., Santa Fe, NM 87505 State of New Mexico Energy Minerals and Natural Resources

Form C-144 June 1, 2004

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

For drilling and production facilities, submit to appropriate NMOCD District Office. For downstream facilities, submit to Santa Fe office

Is pit or below-grade tan	de Tank Registration or Closur k covered by a "general plan"? Yes [] No [r below-grade tank] Closure of a pit or below-grad		
Operator: Range Operating New Mexico, Inc. Telephone Address: 777 Main St., Ste. 800, Ft. Worth, TX 76102 Facility or well name: Elliott B Federal #12 API #:_3 County: Lea Latitude _ Surface Owner: Federal] State] Private]	e: <u>817/810-1916</u> e-mail address: <u>phale(</u> 10-025- 37735 U/L or Qtr/Qtr <u>0</u>	@rangeresources.com	
Pit Type: Drilling ⊠ Production □ Disposal □ Workover □ Emergency □ Lined ⊠ Unlined □ Liner type: Synthetic ⊠ Thickness 12_mil Clay □ Pit Volume 6.000_bbl	Below-grade tank Volume: bbl Double: bbl Double-walled, with leak detection? Yes If not,		
Depth to ground water (vertical distance from bottom of pit to seasonal high water elevation of ground water.)	Less than 50 feet 50 feet or more, but less than 100 feet 100 feet or more	(20 points) (10 points) (0 points)	
Wellhead protection area: (Less than 200 feet from a private domestic water source, or less than 1000 feet from all other water sources.)	Yes No	(20 points) (0 points)	
Distance to surface water: (horizontal distance to all wetlands, playas, irrigation canals, ditches, and perennial and ephemeral watercourses.)	Less than 200 feet 200 feet or more, but less than 1000 feet 1000 feet or more	(20 points) (10 points) (0 points)	
	Ranking Score (Total Points)		

If this is a pit closure: (1) Attach a diagram of the facility showing the pit's relationship to other equipment and tanks. (2) Indicate disposal location: (check the onsite box if your are burying in place) onsite in offsite in forfsite, name of facility _______. (3) Attach a general description of remedial action taken including remediation start date and end date. (4) Groundwater encountered: No Yes I If yes, show depth below ground surface ______ft. and attach sample results.

(5) Attach soil sample results and a diagram of sample locations and excavations.

Additional Comments: Pit will also have a felt liner under the sysnthetic liner.

I hereby certify that the information above is true and complete to the best of my knowledge and belief. I further certify that the above-described pit or below-grade tank has been/will be constructed or closed according to NMOCD guidelines \Box , a general permit \boxtimes , or an (attached) alternative OCD-approved plan \Box .

Date: <u>1/12/06</u>.

Printed Name/Title Paula Hale

Le <u>lee</u> Signature

Your certification and NMOCD approval of this application/closure does not relieve the operator of liability should the contents of the pit or tank contaminate ground water or otherwise endanger public health or the environment. Nor does it relieve the operator of its responsibility for compliance with any other federal, state, or local laws and/or regulations.

Approval: Printed Name/Title	PETROLEUM ENGINEER	Signature	MAR 0 1 2006
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The send	ler of this message has requested a read receipt. Click here to send a receipt.				
Mull, Don	na, EMNRD				
From:	Phillips, Dorothy, EMNRD	Sent:	Wed 3/1/2006 9:08	АМ	
To:	Mull, Donna, EMNRD				
Cc:					
Subject:	RE: Financial Assurance Requirement				
Attachmer	nts:		· · ·	÷	والمعادية الم

Donna, Paladin has 9 Inactive wells and it owns 61 wells and they are allowed to have only 2 inactive wells - I am asking Gail about this one also.

Pogo has 719 wells and are allowed 7 wells and they have 15 inactive and are purchsing 23 inactive from Arch but they do not appear on Jane's list. I have asked Gail about Pogo to see if she has contacted them. The system has been updated so that whenever an operator tries to do an operator change if they are out of compliance with Rule 40 a Warning appears that they are out of compliance and to contact me. I refer them either to Gail or Daniel. They let me know when to proceed with the operator change. However, Pogo submitted the name change before this was in place. Will let you know what Gail says. All the rest are okay.

From: Mull, Donna, EMNRD Sent: Wednesday, March 01, 2006 7:42 AM To: Phillips, Dorothy, EMNRD Subject: Financial Assurance Requirement

Dorothy, These Operators have Intent to drill in District 1 for approval:

Trilogy Operating Inc, (21602) Range Operating New Mexico Inc. (227588) Marbob Energy Corp. (14049) Paladin Energy Corp. (164070) Energen Resources Corp (162928) Marathon Oil Co. (14021) BTA Oil Producers (3002) Northstar Operating Co. (152527) EverQuest Energy Corp (212929) Yates Petroleum Corp (35575) Arch Petroleum Inc, (962) Chevron USA Inc (4323) Pogo Producing Co. (17891)

Please check if the Financial Assurance Requirements are OK for these operators to drill. Thanks Donna