Form 3160-3
(April 2004)

OCD-HOBBS

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

ATS-07-490

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER

5 Lease Serial No.
LC 060825B

6. If Indian, Allotee or Tribe Name

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

1a. Type of work: ☑ DRILL ☐ REENTER

8. Lease Name and Well No. (303746)
Eva Blinebry B #4

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

9. API Well No.
30-025-38624

2. Name of Operator
Range Operating New Mexico, Inc. (227558)

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
Teague Paddock; Imperial
Blinebry, Tubb and Drinkard

4. Location of Well *(Report location clearly and in accordance with any State requirements.*)*
At surface **813' FNL & 1827' FWL** Unit C
At proposed prod. zone **813' FNL & 1827' FWL** Capitan Controlled Water Basin

11. Sec., T. R. M. or Blk. and Survey or Area
Unit C, Sec. 34, T23S, R37E

14. Distance in miles and direction from nearest town or post office*
12 miles South from Eunice, NM

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)	813 813	16 No. of acres in lease **40**	17 Spacing Unit dedicated to this well **40**
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft.	**840**	19. Proposed Depth **6700**	20 BLM/BIA Bond No. on file **NM2399**
21 Elevations (Show whether DF, KDB, RT, GL, etc.) **3287**		22. Approximate date work will start* **11/01/2007**	23. Estimated duration **14 days**

Received
NOV 2007
HOBBS
OCD

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	**09/14/2007**

Title
Sr. Reg. Sp.

Approved by *(Signature)* /s/Dorothy M. Morgan	Name *(Printed/Typed)* /s/Dorothy M. Morgan	Date NOV 6 2007
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)

SEE ATTACHED FOR
CONDITIONS OF APPROVAL

APPROVAL SUBJECT TO
GENERAL REQUIREMENTS
AND SPECIAL STIPULATIONS
ATTACHED

Conditions of Approval: Approval to recomplete & test new zone, but cannot produce Downhole commingle until DHC is approved in Hobbs District office according to R-11363.

State of New Mexico

Energy, Minerals and Natural Resources Department

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

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
30-025-38604	58300 / ~~06660~~ 33600	Teague Paddock / Blinebry ~~Oil & Gas~~ / Imperial Tubb-Drinkard

Property Code	Property Name	Well Number
303746	EVA BLINEBRY B	4

OGRID No.	Operator Name	Elevation
227588	RANGE OPERATING NEW MEXICO, INC.	3287'

Surface Location

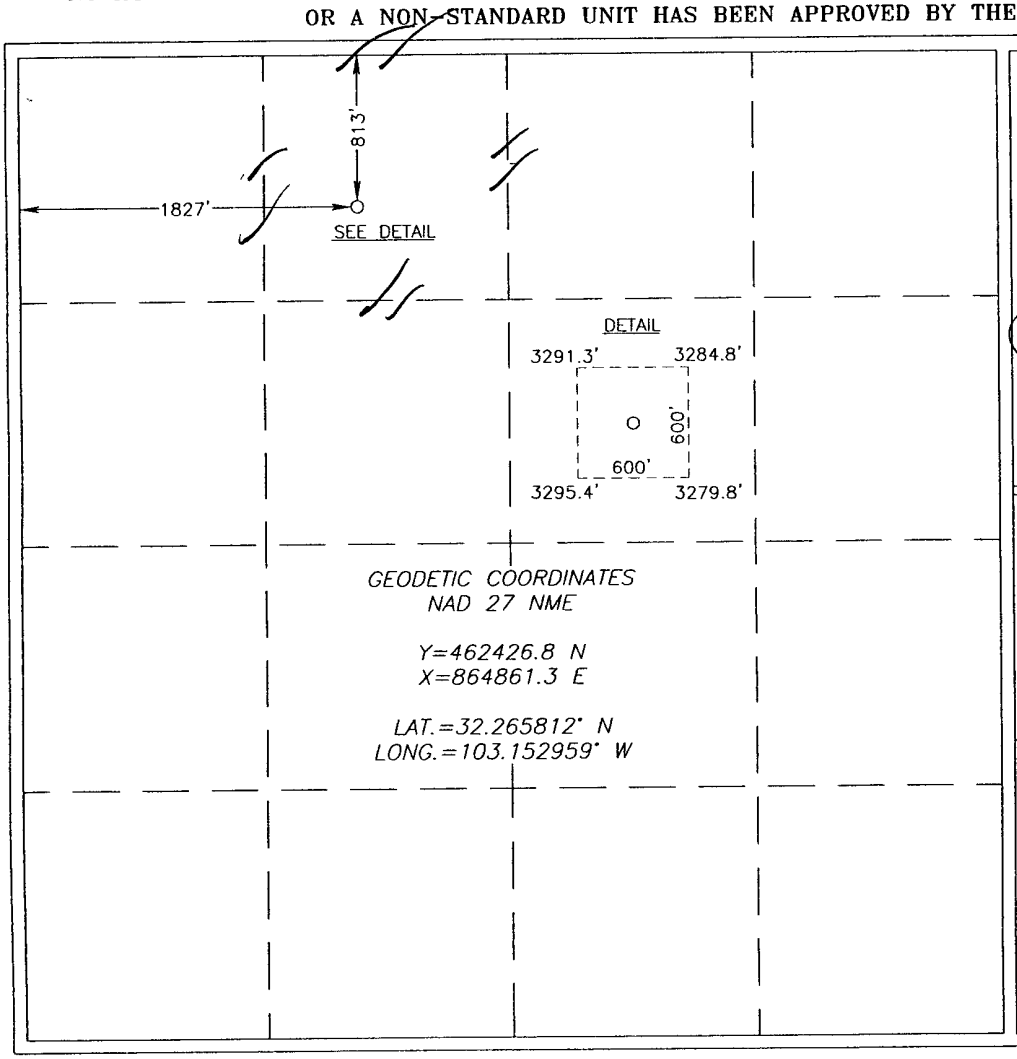
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
C	34	23-S	37-E		813	NORTH	1827	WEST	LEA

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 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 or has a right to drill this well at this location pursuant to a contract with an owner of such mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.

Signature 9-14-07 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 supervision, and that the same is true and correct to the best of my belief.

Date Surveyed 7/19/07 AR

Signature & Seal of Professional Surveyor 7/24/07

RONALD J. EIDSON NEW MEXICO 3239 REGISTERED PROFESSIONAL SURVEYOR

Certificate No. GARY EIDSON 12641
RONALD J. EIDSON 3239

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., Ste. 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.:	LC-060825B
Legal Description of Land:	Sec. 34, T23S, R37E NE/4 NW/4
Formations:	Tubb, Drinkard
Bond Coverage: (State, Nationwide or Individual)	Statewide
BLM Bond File No.:	NM2339

Authorized Signature: Joanna Winderton

Title: Petroleum Engineer

Date: 9-14-07

RANGE OPERATING NEW MEXICO, INC.
100 THROCKMORTON ST., SUITE 1200
FORT WORTH, TEXAS 76102
817.870.2601
817.870.2316 (FAX)

September 14, 2007

United States Department of the Interior
Bureau of Land Management
Carlsbad Field Office
620 East Greene Street
Carlsbad, NM 88220-6292

Re: Eva Blinebry "B" #4 Well
W/2 of Section 34, T23S, R37E
Lea County, NM

Gentlemen:

The surface owner on the subject well is D. K. Boyd Oil & Gas Co., whose address is P. O. Box 11351, Midland, TX 79702. Please accept this letter as my testimony that I have made a verbal agreement to pay surface damages to D. K. Boyd Oil & Gas Co. on the subject well. Please call me if you have any questions.

Very truly yours,

Robert Ebeier
Senior Landman

NOTICE TO SURFACE OWNER

Surface Owner

D. K. Boyd Oil & Gas Co.
P. O. Box 11351
Midland, TX 79702

Notice Date

9-14-07

Drilling Program
EVA BLINEBRY 'B" #4
Lea County, NM

September 14, 2007

Surface Location: **813' FNL & 1827' FWL**
Section 34-T23S-R37E
Lea County, New Mexico
Lat: 32.265812
Long: -103.152959

Bottom-hole Location: same, vertical

Elevation: GL: 3287 ft
Est. KB: 3297 ft

Directions to Location: From the intersection of St. Hwy #18 & Co. Rd. E-11 (Teague Switch Rd.), go S on St. Hwy #18 ~ 1 mi. Turn left and go east ~ 0.6 miles. Turn right and go southeast ~ 0.4 mi. almost to windmill. Turn left & go E ~ 0.8 mi. Turn left & go N ~ 0.2 mi. Turn right & go E & then N ~ 0.5 mi. on new road. The drillsite is ~ 175 ft. to the W.

Access to Location: Unrestricted

1. **Geologic Name of Surface Formation**

a. Permian

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

Upr Permian Rustler Fm	+2260 ft	1042 ft MD	Not Reservoir Rock
Upr Permian Penrose-Skelly Fm	-75 ft	3377 ft MD	Oil, gas, water poss
Upr Permian San Andres Fm	-495 ft	3797 ft MD	Oil, gas, water poss
Upr Permian Glorieta Fm	-1620 ft	4922 ft MD	Oil, gas, water poss
Upr Permian Blinebry Fm	-2005 ft	5307 ft MD*	Oil, gas, water poss
Lwr Permian Tubb Fm	-2623 ft	5925 ft MD+	Tight oil & gas poss
Lwr Permian Drinkard Fm	-2785 ft	6087 ft MD+	Tight oil & gas poss
Lwr Permian Abo	-3200 ft	6502 ft MD+	Tight oil & gas poss
Proposed TD:	**-3398 ft**	**6700 ft MD**	**Tight oil & gas likely**
Est. BHP @TD: 2100 psi			**Water poss**

*= Primary Reservoir Targets
+= Secondary Reservoir Targets

PRIMARY RESERVOIR TARGETS

Upper Permian **Blinebry Formation**

Rock Type: Dolostone
Thickness: ~625 ft
Avg. Porosity: 10%; ranges from 6% -15%
Est. Reservoir Temp.: 110° F
Est. Reservoir Press.: 2100 psi (assuming no pressure depletion)

SECONDARY RESERVOIR TARGETS

1) Upper Permian **Penrose-Skelly** through **San Andres Dolostone** likely significant depletion
2) Lower Permian **Tubb, Drinkard** & **Abo Siliciclastics & Dolostones** likely lower quality Hydrocarbon reservoirs with low permeability & possibly water

3. **Casing Program;**

Hole Size	Hole Interval	OD Csg	Casing Interval	Weight	Collar	Grade
12 ¼"	0' - +/-1200'	8 5/8"	0' - +/-1200'	24#	LT&C	J-55
7 7/8"	0' - +/-6700'	5 ½"	0' - +/-6900'	17#	LT&C	J-55

Design Parameter Factors:

Casing Size	Collapse Design Factor	Burst Design Factor	Tension Design Factor
8 5/8"	2.4	4.7	9.8
5 ½"	1.3	1.5	2.7

4. **Cement Program: (Hole conditions may require cementing in two stages)**

a. 8 5/8 Surface — Cement to surface with Lead: 350 sks of 35/65 POZ:Class C + 6% Gel + 5% (BWOW) NaCl, @ 12.8 ppg, Yield = 1.94 ft^3. Tail: 150 sks Class C + 1% $CaCl_2$ @ 14.8 ppg, Yield = 1.32 ft^3. Displace with fresh water, bump plug with 500 psi over final pump pressure. TOC - surface.

b. 5 ½ Production — Cement Lead: 370 sks of 50/50 POZ:Class C + 10% Gel + 5% NaCl. Slurry weight= 11.8 ppg, Yield = 2.4 cf/sk Tail: 300 sks of 50/50 POZ:Class C + 2% Gel + 5% (BWOW) NaCl, Slurry weight = 14.2 ppg, Yield = 1.38 cf/sk. Displace with fresh water. TOC =/-1000'

The above cement volumes could be revised pending the caliper measurement from the open hole logs. The top of cement on surface casing is designed to reach the surface. All casing is new and API approved.

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.

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.

6. **Proposed Mud Circulation System**

Depth	Mud Wt.	Visc.	Fluid Loss	Type System
0 – 1200'	8.4 – 9.4	32-34	NC	Water
1200 – 6000'	10.0	28	NC	Brine
6000' – 6700'	10.0 – 10.2	30-33	10cc	Dispersed

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 connection 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 ½" 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: 1. Upon TD, the following open hole logs will be run from TD to surface casing point: 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:**

No abnormal pressures or temperatures are expected. All personnel will be familiar with all aspects of safe operations of equipment being used to drill this well. Estimated BHP 2800 psi and Estimated BHT 130°.

10. **Anticipated Starting Date and Duration of Operations:**

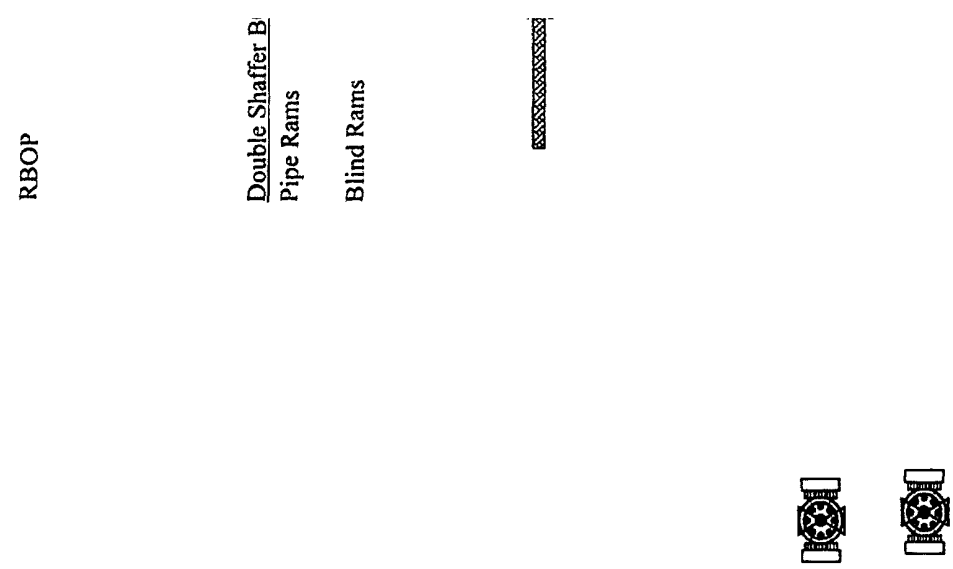
a. Road and location construction will begin after the BLM has approved the APD. Anticipated spud date will be as soon after BLM approval and as soon as a rig will be available. Move in operations and drilling is expected to take 7-10 days. If production casing is run then an additional 30 days will be needed to complete well and construct surface facilities and/or lay flow lines in order to place well on production.

Name	Position	Cell Phone	Home Phone	Office Phone
Don Robinson	Drilling Manager	(469) 450-2281	(972) 317-8345	(817) 869-4128
George Allen Teer	VP of Operations	(817) 723-1107	(817) 491-3740	(817) 870-2601
Deanna Poindexter	District Engineer	(817) 422-8378	(432) 638-9718	(817) 869-4127
Terri Mayfield-Cowan	Geologist	(682) 429-7493	(817) 448-9848	(817) 869-4256
Paula Hale	Sr. Regulatory Sp.	(817) 773-6002	(817) 558-7399	(817) 869-4216

Company Name	Service	Contact Person	Telephone No
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
TFH –Hobbs, NM	Fork Lift		(505) 397-3270
Abbot Brothers	Conductor setting		
RTO Sales & Lease	Satellite Internet		(432) 550-5678

NOTES REGARDING THE BLOWOUT PREVENTERS
Eva Blinebry B #4
Lea County, New Mexico

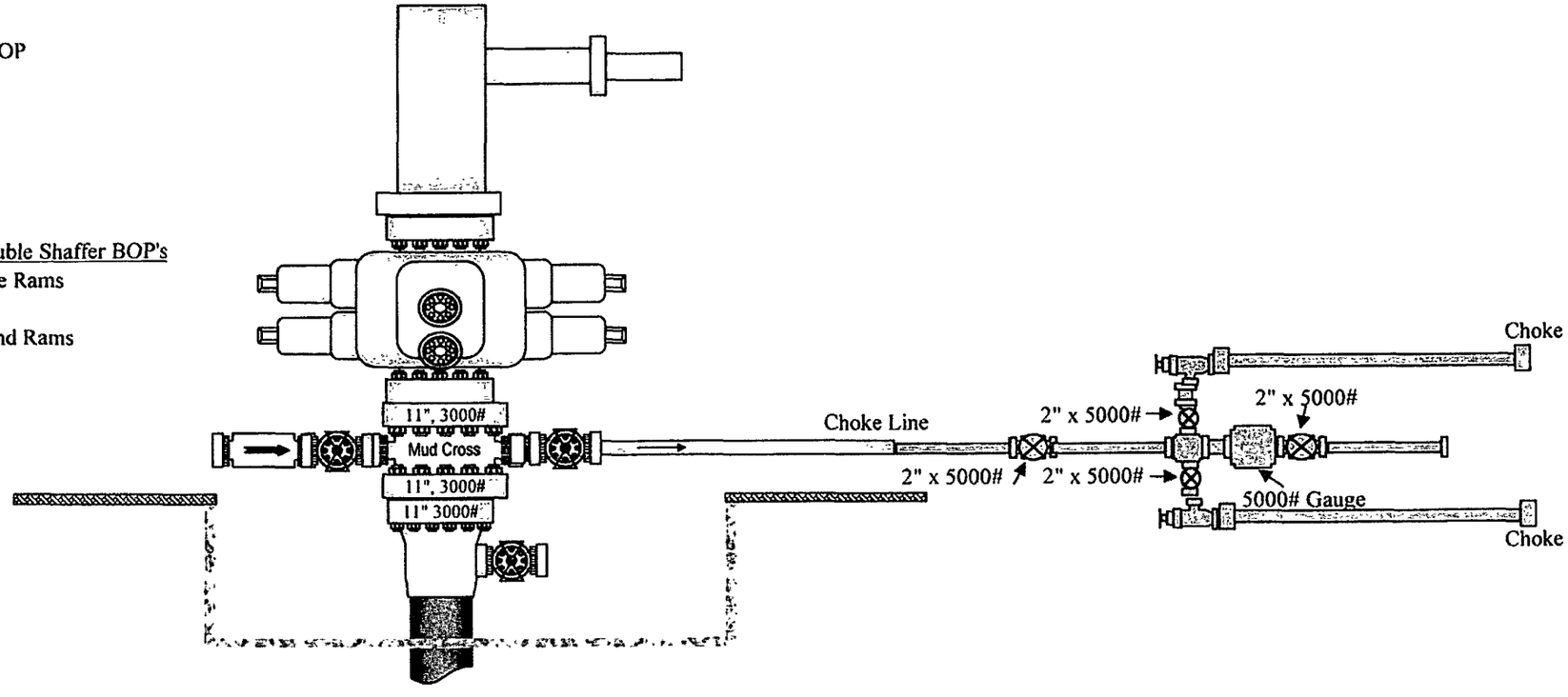
1. Drilling nipple to be so constructed that it can be removed without use of a welder through rotary table opening, with minimum I.D. equal to preventer bore.
2. Wear ring to be properly installed in head.
3. Blowout preventer and all fittings must be in good condition, 3000 psi WP minimum.
4. All fittings 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.



RBOP

<u>Double Shaffer BOP's</u>
Pipe Rams

Blind Rams



TEAGUE FIELD (Blinebry/Tubb/Drinkard)
Range Operating NM, Inc. Eva Blinebry 'B' Federal #4
Geological Data for Permit
Prepared by Terri Mayfield-Cowan 6/12/2007

I) WELL OBJECTIVES

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

II) LOCATION

	990' FNL & 1650' FWL
	Section 34-T23S-R37E
	Lea County, New Mexico
	Lat: 32.265326
	Long: -103.153531
Bottom-hole Location:	same, vertical
Elevation:	GL: 3292.4 ft Est. KB: 3302.4 ft
Directions to Location:	Approx. 12 miles south of Eunice, NM on HWY #18. Turn left and go east at Lease Rd. (Marker 19). Go east for approx 0.5 miles. Turn right and go southeast then east for approx 1.5 miles to an existing pump unit and tank battery. From the northwest corner of existing well follow road north to northwest for approx 1141 feet to the southwest corner of the # 5 location, then northwest for 752 feet to the southeast corner of the location #4.
Access to Location:	Unrestricted

III) PROGNOSIS

Upr Permian Rustler Fm	+2260 ft	1042 ft MD	Not Reservoir Rock
Upr Permian Penrose-Skelly Fm	-75 ft	3377 ft MD	Oil, gas, water poss
Upr Permian San Andres Fm	-495 ft	3797 ft MD	Oil, gas, water poss
Upr Permian Glorieta Fm	-1620 ft	4922 ft MD	Oil, gas, water poss
Upr Permian Blinebry Fm	-2005 ft	5307 ft MD*	Oil, gas, water poss
Lwr Permian Tubb Fm	-2623 ft	5925 ft MD+	Tight oil & gas poss
Lwr Permian Drinkard Fm	-2785 ft	6087 ft MD+	Tight oil & gas poss
Lwr Permian Abo	-3200 ft	6502 ft MD+	Tight oil & gas poss
Proposed TD:	**-3398 ft**	**6700 ft MD**	**Tight oil & gas likely**
Est. BHP @TD:2550 psi			**Water poss**

*= Primary Reservoir Targets
+= Secondary Reservoir Targets

IV) PRIMARY RESERVOIR TARGETS

Upper Permian **Blinebry Formation**

Rock Type:	Dolostone
Thickness:	~625 ft
Avg. Porosity:	10%; ranges from 6% -15%
Est. Reservoir Temp.:	110° F
Est. Reservoir Press.:	2100 psi (assuming no pressure depletion)

V) SECONDARY RESERVOIR TARGETS

1) Upper Permian **Penrose-Skelly** through **San Andres Dolostone** likely significant depletion
2) Lower Permian **Tubb, Drinkard** & **Abo Siliciclastics & Dolostones** likely lower quality Hydrocarbon reservoirs with low permeability & possibly water

VI) EVALUATION

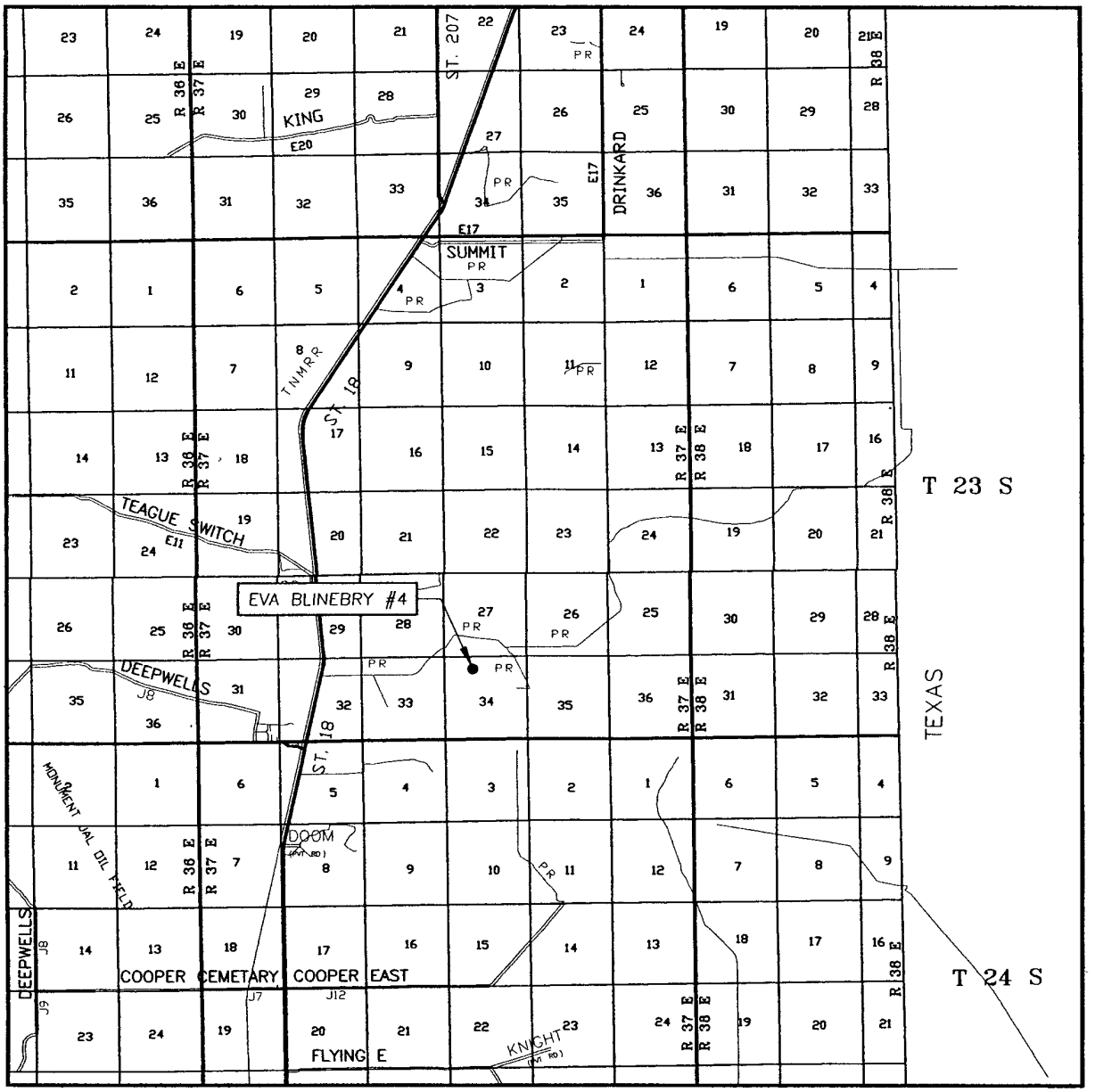
Mudlogging: Mud System 10.1 lbs/gal Brine-Suttles Unit on @2500' w/ gas monitoring equipment & cuttings collected

Wireline Logs: Upon TD Halliburton will run DLL, MGRD, CSNG, DSN, SDL w/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-**Please 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

VICINITY MAP



SCALE: 1" = 2 MILES

SEC. 34 TWP. 23-S RGE. 37-E

SURVEY N.M.P.M.

COUNTY LEA STATE NEW MEXICO

DESCRIPTION 813' FNL & 1827' FWL

ELEVATION 3287'

OPERATOR RANGE OPERATING NEW MEXICO INC.

LEASE EVA BLINEBRY

PROVIDING SURVEYING SERVICES
SINCE 1946
JOHN WEST SURVEYING COMPANY
412 N. DAL PASO
HOBBS, N.M. 88240
(505) 393-3117

EXHIBIT B

PECOS DISTRICT
CONDITIONS OF APPROVAL

OPERATOR'S NAME:	Range Operating New Mexico, Inc
LEASE NO.:	LC-060825B
WELL NAME & NO.:	Eva Blinebry B #4
SURFACE HOLE FOOTAGE:	813' FNL & 1827 FWL
BOTTOM HOLE FOOTAGE	
LOCATION:	Section 34, T. 23 S., R 37 E., NMPM
COUNTY:	Lea County, 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)

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 15 through June 15 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.

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 (505) 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 reserve pit shall be constructed and closed in accordance with the NMOCD rules.

The reserve pit shall be constructed 100' X 50' on the North side of the well pad.

The reserve pit shall be constructed, so that upon completion of drilling operations, the dried pit contents shall be buried a minimum depth of three feet below ground level. Should the pit content level not meet the three foot minimum depth requirement, the excess contents shall be removed until the required minimum depth of three feet below ground level has been met. The operator shall properly dispose of the excess contents at an authorized disposal site.

The reserve pit shall be constructed and maintained so that runoff water from outside the location is not allowed to enter the pit. The berms surrounding the entire perimeter of the pit shall extend a minimum of two (2) feet above ground level. At no time will standing fluids in the pit be allowed to rise above ground level.

The reserve pit shall be fenced on three (3) sides during drilling operations. The fourth side shall be fenced immediately upon rig release.

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 (505) 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.

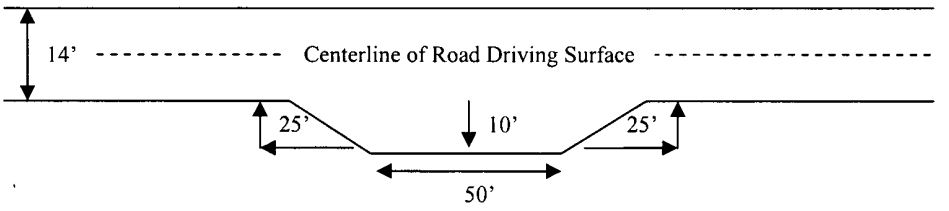
Crowning
Crowning shall be done on the access road driving surface. The road crown shall have a grade of approximately 2% (i.e., a 1" crown on a 14' wide road). The road shall conform to Figure 1; cross section and plans for typical road construction.

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

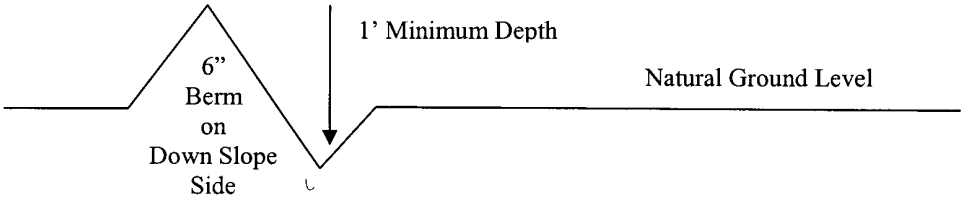


Drainage

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.

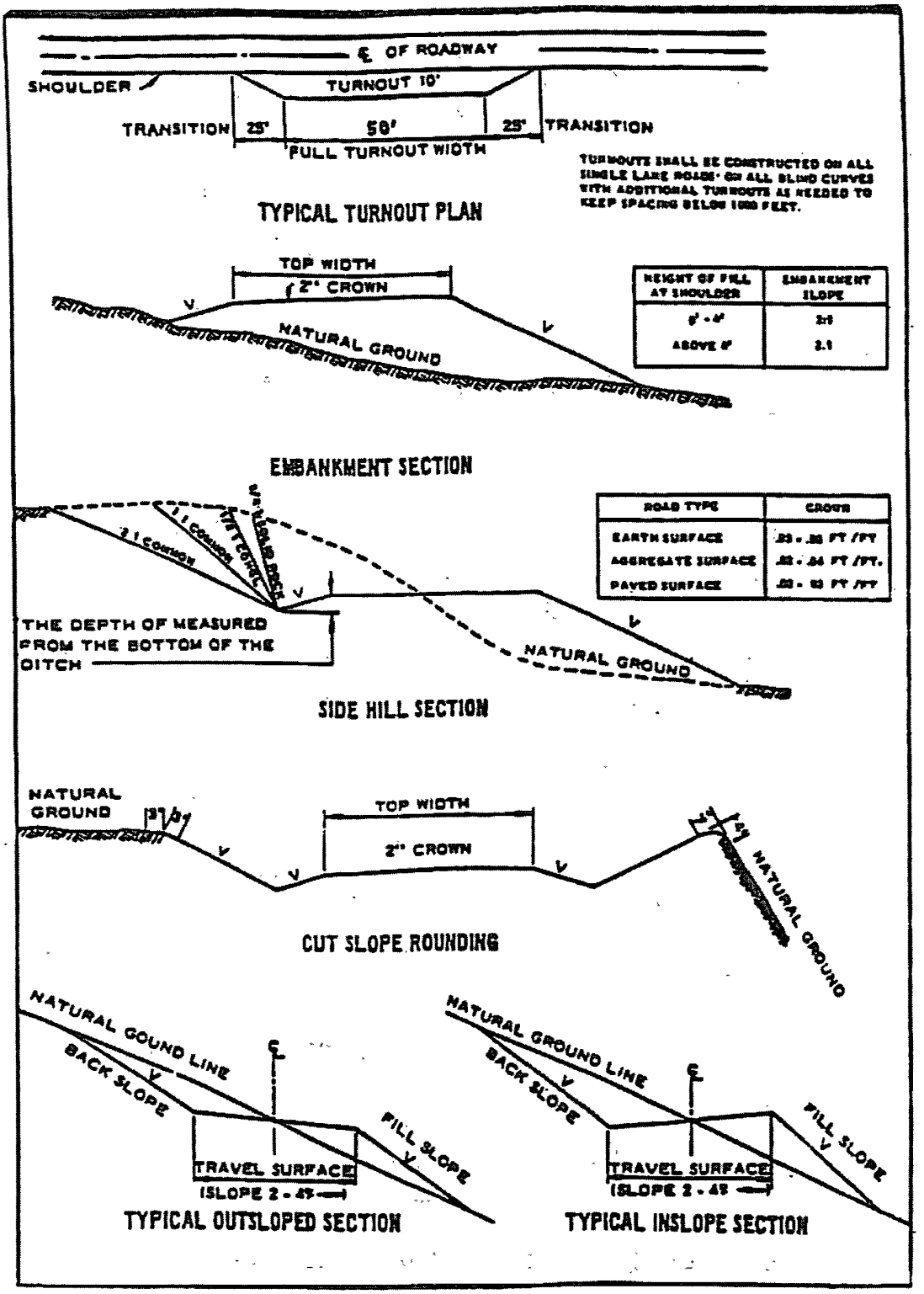
A gate shall be constructed and fastened securely to H-braces.

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, (505) 393-3612

1. **Although Hydrogen Sulfide has not been reported in this section, it has been reported in this township measuring 20-400 ppm in the gas stream and 310-10,000 ppm in STVs from the Grayburg, Blinebry, Tubb-Drinkard, Abo, and Devonian formations**

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

1. The **8-5/8** inch surface casing shall be set **a minimum of 25 feet into the Rustler Anhydrite and above the Salt at approximately 1200** feet and cemented to the surface.
   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 will be a minimum 18 hours for a water basin, 24 hours in the potash area, or 500 pounds compressive strength, whichever is greater. (This is to include the lead cement).
   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 action will be done prior to drilling out that string.

Possible lost circulation and water flows in the Artesia Group.

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.

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. 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. **BOP/BOPE is to be tested to 2000 psi – no variance given on two string system.**

Engineer on call phone (after hours): **Carlsbad: (505) 706-2779**

WWI 102507

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

VRM Facility Requirement
Low-profile tanks not greater than eight-feet-high shall be used.

B. PIPELINES

C. ELECTRIC LINES

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.

At the time reserve pits are to be reclaimed, 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.

B. RESERVE PIT CLOSURE

The reserve pit, when dried and closed, shall be recontoured, all trash removed, and reseeded as follows:

Seed Mixture for LPC Sand/Shinnery 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 seed 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
Plains Bristlegrass	5lbs/A
Sand Bluestem	5lbs/A
Little Bluestem	3lbs/A
Big Bluestem	6lbs/A
Plains Coreopsis	2lbs/A
Sand Dropseed	1lbs/A
**Four-winged Saltbush	5lbs/A

* This can be used around well pads and other areas where caliche cannot be removed.

*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.

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

State of New Mexico
Energy Minerals and Natural Resources

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

Form C-144
June 1, 2004

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

Pit or Below-Grade Tank Registration or Closure

Is pit or below-grade tank covered by a "general plan"? Yes ☐ No ☐
Type of action: Registration of a pit or below-grade tank ☐ Closure of a pit or below-grade tank ☐

Operator: Range Operating New Mexico, Inc. Telephone: 817-869-4216 e-mail address: phale@rangeresources.com
Address: 100 Throckmorton St., Ste. 1200, Fort Worth, TX 76102
Facility or well name: Eva Blinebry B #4 API #: 30-025-38604 U/L or Qtr/Qtr C Sec 34 T 23S R 37E
County: Lea Latitude 32.265812°N Longitude 103.152959°W NAD: 1927 ☐ 1983 ☐
Surface Owner: Federal ☒ State ☐ Private ☐ Indian ☐

Pit	**Below-grade tank**	
Type: Drilling ☒ Production ☐ Disposal ☐ Workover ☐ Emergency ☐ Lined ☐ Unlined ☐ Liner type: Synthetic ☒ Thickness 12 mil Clay ☐ Pit Volume 6,000 bbl	Volume: ____bbl Type of fluid: _____ Construction material: _____ Double-walled, with leak detection? Yes ☐ If not, explain why not.	
Depth to ground water (vertical distance from bottom of pit to seasonal high water elevation of ground water.) ≈ 80'	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)	10

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 ☐ offsite ☐ If offsite, name of facility_____. (3) Attach a general description of remedial action taken including remediation start date and end date. (4) Groundwater encountered: No ☐ Yes ☐ 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 synthetic 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 ☐, a general permit ☐, or an (attached) alternative OCD-approved plan ☐.**

Date: 9-14-07
Printed Name/Title Paula Hale Signature Paula Hale

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 CHRIS WILLIAMS/ DIST. SUPV Signature Chris Williams Date: 11/15/07

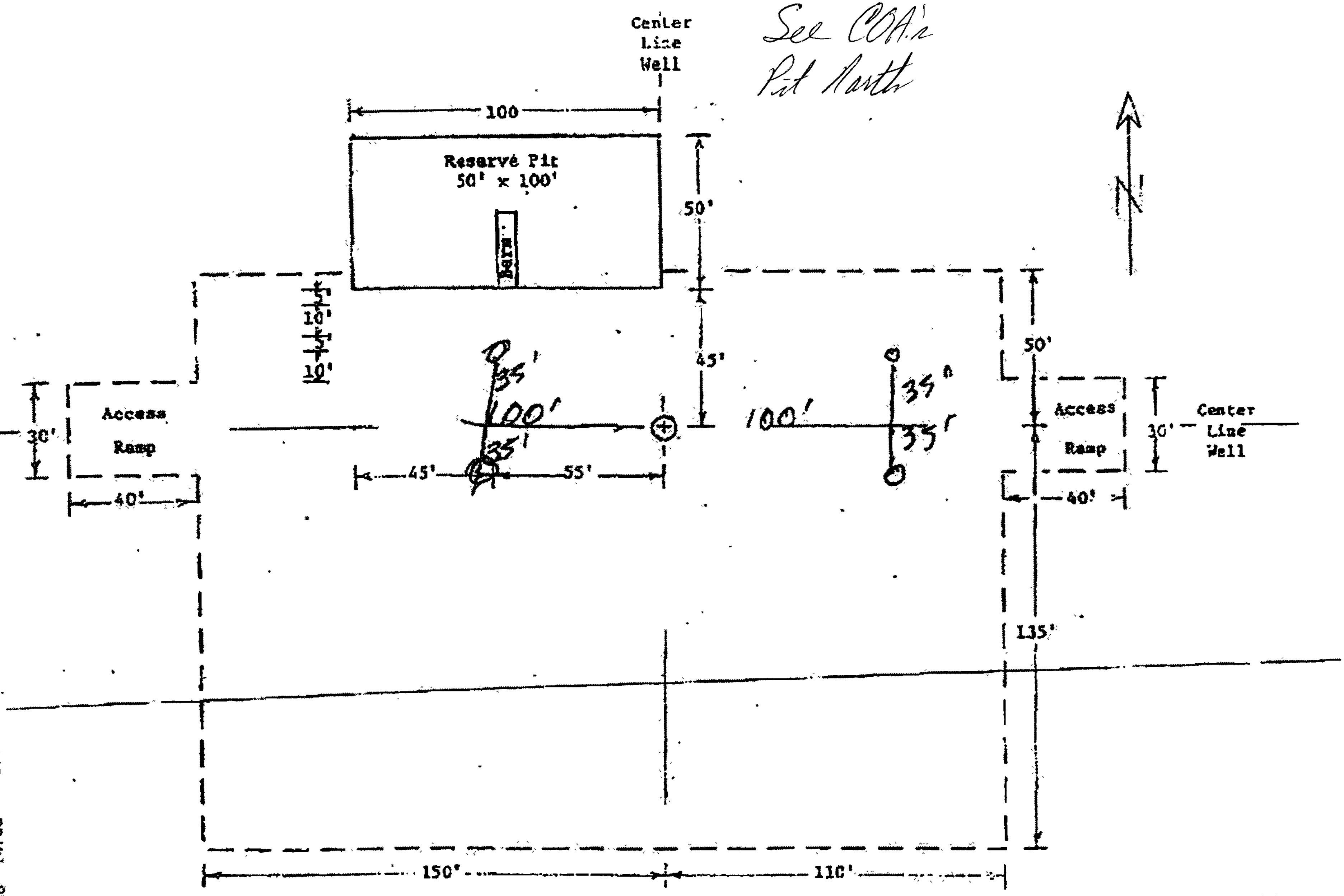


EXHIBIT C

UNITED DRILLING, INC.

LOCATION PLAT

RIG # 2X 630