Form 3160-3 (Apr:i 2004)		OCD-HOBBS		FORM API OMB No 1 Expires Mar	PROVED ATS-07- 004-0137 ch 31, 2007	-491
DEPARTMENT OF THE INTERIOR			5 Lease Serial No. LC 060825B			
APPLICATION FOR F	F LAND MANAGEN PERMIT TO DRIL			6. If Indian, Allotee on	Tribe Name	
la. Type of work: 🚺 DRILL	REENTER	Split Esta	te	7 If Unit or CA Agreen	nent, Name and No.	
	Other	Single Zone Multip		8. Lease Name and We Eva Blinebry B		46>
1b. Type of Well: ✓ Oil Well Gas Well 2. Name of Operator Range Operating New		100750	à	9. API Well No. 30 - 025	- 35572P0	71
3a. Address 100 Throckmorton St., Ste. 1200 Fort Worth, TX 76102	3b. Ph	ione No. (include area code) 17-869-4216	T	10 Field and Pool for Ex Blinebry Tubb	ploratory D-ARIES	A
4. Location of Well (Report location clearly and it	n accordance with any State	requirements *)	<u> 4</u>	11. Sec., T. R.M. or Blk	and Survey or Area	
At surface 1650' FNL & 2310	'FWL Q	itan Controlled Water	Basin	/ Unit F, Sec. 34, T23S, R37E		
14 Distance in miles and direction from nearest tow		, <u> </u>		12 County or Parish Lea	13. State	
12 miles South from Eunice, NM 15 Distance from proposed* 1650	16]	No. of acres in lease	17. Spacir	g Unit dedicated to this we		
15 Distance from proposed 1650 location to nearest property or lease line, ft (Also to nearest drig, unit line, if any) 1650	40		40			
18 Distance from proposed location* to nearest well, drilling, completed,	1	Proposed Depth		BIA Bond No. on file		
applied for, on this lease, ft		700 Approximate date work will sta	NM2399		<u>on</u>	
 Elevations (Show whether DF, KDB, RT, GL, 3272 	, etc.)	08/01/2007		14		
The following, completed in accordance with the req		Attachments				
 Well plat certified by a registered surveyor. A Drilling Plan. A Surface Use Plan (if the location is on Natio SUPO shall be filed with the appropriate Forest 	onal Forest System Lands	4 Bond to cover t Item 20 above).	he operation cation specific in	ons unless covered by an o formation and/or plans as		
25 (Signature	/	Name (Printed/Typed) Paula Hale			Date 07/16/2007	
Title Sr. Reg. Sp.	,,,,					
Approved by (Signature) /s/ Don Pe	terson	Name (Printed/Typed) /s/	Don	Peterson	DatSEP 1 3 2007	
Title FIELD MANAGER)			IELD OFFIC		
Application approval does not warrant or certify th conduct operations thereon. Qualities of approval, if any, are attached.	at the applicant holds lega	al or equitable title to those rig	hts in the su	bject lease which would e	ntitle the applicant to RTWOYEARS	
Tive 18 U.S.C. Section 1001 and Title 43 U.S.C. Sect States any false, fictitious or fraudulent statements	ion 1212, make it a crime or representations as to any	for any person knowingly and matter within its jurisdiction.	willfully to	make to any department o	r agency of the United	
*(Instructions on page 2)						
SEE ATTACHED FOR CONDITIONS OF APPRO	137	SIP 9:47 SEP		AP AROKAV SL Ge nerab Reg An onsporal At tato aed ed	IBLIBJECT TO BURLIREMENTS ISTIPULATIC	S INS
	\$ S.	1534				

RANGE OPERATING NEW MEXICO, INC.

100 Тнгоскмогтол St., Suite 1200 Fort Worth, Texas 76102 817.870.2601 817.870.2316 (fax)

July 13, 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" #5 Well W/2 of Section 34, T23S, R37E Lea County, NM

Gentlemen:

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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,

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Robert Ebeier Senior Landman



NOTICE TO SURFACE OWNER

Surface Owner

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

Notice Date

7-16-07

LOCATION VERIFICATION MAP



SCALE: 1'' = 2000'

SEC. <u>34</u> TWP. <u>23-S</u> RGE. <u>37-E</u>

- SURVEY_____N.M.P.M.
- COUNTY___LEA___STATE_NEW_MEXICO
- DESCRIPTION 1650' FNL & 2310' FWL

ELEVATION <u>3272</u>

OPERATOR<u>RANGE OPERATING NEW MEXICO</u>, INC. LEASE<u>EVA BLINEBRY "B" FEDERAL</u> U.S.G.S. TOPOGRAPHIC MAP

RATTLESNAKE CANYON, N.M.

CONTOUR INTERVAL: RATTLESNAKE CANYON, N.M. – 10'



EXHIBIT A

VICINITY MAP



SEC. <u>34</u> TWP. <u>23-S</u> RGE. <u>37-E</u>

- SURVEY N.M.P.M.
- COUNTY___LEA__STATE_NEW_MEXICO
- DESCRIPTION 1650' FNL & 2310' FWL

OPERATOR RANGE OPERATING NEW MEXICO, INC. LEASE <u>EVA BLINEBRY "B" FEDERAL</u>



EXHIBIT B

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Revised Drilling Program EVA BLINEBRY 'B" #5 Lea County, NM

August 29, 2007

Surface Location: 1650' FNL & 2310' FWL Section 34-T23S-R37E Lea County, New Mexico Lat: 32.263512 Long: -103.151395'

Bottom-hole Location: same, vertical

Elevation: GL: 3272 ft Est. KB: 3282 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.

Access to Location: Unrestricted

1. Geologic Name of Surface Formation

a. Permian

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

Proposed TD: Est. BHP @TD: 2100 psi	-3418 ft	6700 ft MD	Tight oil & gas likely Water poss
Lwr Permian Abo	-3195 ft	6477 ft MD+	Tight oil & gas poss
Lwr Permian Drinkard Fm	2765 ft	6047 ft MD+	Tight oil & gas poss
Lwr Permian Tubb Fm	-2605 ft	5887 ft MD+	Tight oil & gas poss
Upr Permian Blinebry Fm	-2010 ft	5292 ft MD*	Oil, gas, water poss
Upr Permian Glorieta Fm	-1620 ft	4902 ft MD	Oil, gas, water poss
Upr Permian San Andres Fm	-510 ft	3792 ft MD	Oil, gas, water poss
Upr Permian Penrose-Skelly Fm	-80 ft	3362 ft MD	Oil, gas, water poss
Upr Permian Rustler Fm	+2250 ft	1032 ft MD	Not Reservoir Rock

*= Primary Reservoir Targets += Secondary Reservoir Targets

PRIMARY RESERVOIR TARGETS

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Upper Permian Blinebry Formation

Dolostone
~625 ft
10%; ranges from 6% -15%
110° F
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 guality Hydrocarbon reservoirs with low permeability & possibly water

3. Casir	ng Program;					
<u>Hole Size</u>	Hole Interval	OD Csg	Casing Interval	<u>Weight</u>	<u>Collar</u>	<u>Grade</u>
12 ¼" 7 7/8"	0' - +/-1200' 0' - +/-6700'	8 5/8" 5 ½"	0' - +/-1200' 0' - +/-6700'	24# 15.5#	ST&C LT&C	J-55 J-55
Design Para <u>Casing Size</u>	meter Factors: <u>Collapse De</u>	sign Factor	<u>Burst Design Fa</u>	<u>ictor Ter</u>	ision Desi	ign Factor
8 5/8"	2.4		4.7	9.8		

1.5

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, Slurry weight = 12.8 ppg, Yield = 1.94 ft ³ /sk. Tail: 150 sks Class C + 1% CaCl ₂ , Slurry weight = 14.8 ppg, Yield = 1.32 ft ³ /sk. 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'

2.7

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:**

5 1/2"

1.3

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**

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Depth	Mud Wt	<u>Visc.</u>	Fluid Loss	<u>Type System</u>
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:

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

<u>Drillstem Tsts:</u> 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.





1301 W. Grand Avenue, Artesia, NM 88210 <u>District III</u> 1000 Rio Brazos Road, Aztec, NM 87410 <u>District IV</u> 1220 S. St Francis Dr, Santa Fe, NM 87505 Pit or Be	State of New Mexico Energy Minerals and Natural Resources Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, NM 87505 or Below-Grade Tank Registration or C			Form C-144 June 1, 2004 ling and production facilities, submit to ate NMOCD District Office. Instream facilities, submit to Santa Fe
Is nit or belo	w-orade tan	k covered by a "general plan"? Yes or below-grade tank 🔲 Closure of a pit or b	: 🗌 No [
Type of action' Registred Operator Range Operating New Mexico, Inc. Address. 100 Throckmorton St., Ste. 1200, Fort V Facility or well name: Eva Blinebry B #5 County. Lea 1983	Telephon Vorth, TX 7 API #:	e <u>817-869-4216</u> e-mail addre	ess <u>pha</u>	le@rangeresources.com
Pit Type: Drilling ⊠ Production □ Disposal □ Workover □ Emergency □ Lined Unlined □ Liner type Synthetic ⊠ Thickness 12_mil Pit Volume 6,000 bbl		Below-grade tank Volumebbl Type of fluid Construction material [.] Double-walled, with leak detection? Yes		
Depth to ground water (vertical distance from bottom of pit high water elevation of ground water.)	to seasonal	Less than 50 feet 50 feet or more, but less than 100 feet 100 feet or more	\subset	(20 points) (10 points) (0 points)
Wellhead protection area: (Less than 200 feet from a privat water source, or less than 1000 feet from all other water sou		Yes No		(20 points) (0 points)
Distance to surface water (horizontal distance to all wetlan irrigation canals, ditches, and perennial and ephemeral wate		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 sl your are burying in place) onsite i offsite i If offsite, nar remediation start date and end date. (4) Groundwater encoun (5) Attach soil sample results and a diagram of sample location Additional Comments. Pit will also have a felt liner under the Manored of the week.	ne of facility tered No [] ons and excava	(3) Attach a Ycs [] If yes, show depth below ground sur tions.	a general de rface	escription of remedial action taken including
I hereby certify that the information above is true and comp has been/will be constructed or closed according to NMC Date: <u>7-17-07</u> Printed Name/Title <u>Paula Hale</u> Your certification and NMOCD approval of this application otherwise endanger public health or the environment Nor	OCD guidelin	es [], a general permit [], or an (attached	d) alternal	of the pit or tank contaminate ground water or
Approval Printed Name/Title CHRIS WILLIAMS/DIST. 5400 Signature Chris William Date 9/27/07				