Form 3160-3 (April 2004)

UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

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

5. Lease Serial No.
7 MAD _ 5 DM 2NNING 1-0254

	ZNIGHTYN-	y 2544	9	
5.	If Indian, A	Allotee	or Tribe	Name

APPLICATION FOR PERMIT	TO DRILL OR	REENTER	ECEIVE	D N/A	
la. Type of work:	ENTER	210 FA	OLITE OLIMB.	J. If Unit or CA Agree	ment, Name and No.
lb. Type of Well: ✓ Oil Well Gas Well Other	✓ Sir	ngle ZoneMultip	ole Zone	8. Lease Name and W BISTI GALLU	
2. Name of Operator ELM RIDGE EXPLORATION CO	OMPANY, LLC			9. API Well No 34	2//
3a. Address P. O. BOX 156 BLOOMFIELD, NM 87413	1	(include area code) 32-3476		10. Field and Pool, or E	
4. Location of Well (Report location clearly and in accordance we At surface 2275' FNL & 2295' FWL At proposed prod. zone SAME	rith any State requirem	ents.*)		11. Sec., T. R. M. or Bl	•
14. Distance in miles and direction from nearest town or post office 26 MILES SSE OF FARMINGTON, NM	e*			12. County or Parish SAN JUAN	13. State
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) 365'	16. No. of a	cres in lease	-	g Unit dedicated to this w	rell
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. 1,159'(BC 22-1)	19. Proposed 5,000'	Depth	Į	BIA Bond No. on file STATE WIDE 88620	1C
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 6,364' GL	22. Approxim	nate date work will star	rt*	23. Estimated duration 3 WEEKS	
·	24. Attac	hments			
The following, completed in accordance with the requirements of C	Onshore Oil and Gas	Order No.1, shall be a	ttached to th	is form:	
Well plat certified by a registered surveyor. A Drilling Plan. A Surface Use Plan (if the location is on National Forest Sy SUPO shall be filed with the appropriate Forest Service Office.		Item 20 above). 5. Operator certific	cation specific info	ns unless covered by an	may be required by the
25. Signature	1	(Printed/Typed) BRIAN WOOD			Date 03/02/2007
Title	PHON	E: (505) 466-8120	FAX	X: (505) 466-9682	
Approved by Signature Manlie Les	Name	(Printed/Typed)			Date 3/26/1
Title ATM	Office	170			
Application approval does not warrant or certify that the applican conduct operations thereon. Conditions of approval, if any, are attached.	nt holds legal or equi	table title to those righ	its in the sub	ject lease which would e	ntitle the applicant to
Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make States any false, fictitious or fraudulent statements or representation	it a crime for any pons as to any matter v	erson knowingly and vithin its jurisdiction.	willfully to n	nake to any department o	r agency of the United

*(Instructions on page 2)

DRILLING OPERATIONS AUTHORIZED ARE SUBJECT TO COMPLIANCE WITH ATTACHED "GENERAL REQUIREMENTS". NOTEY AZTLO COU ZA SELA. PRIOR TO CASING & CEMENT

This action is subject to technical and procedural review pursuant to 43 CFR 3165.3 and appeal pursuant to 43 CFR 3165.4

NWOCD

3/28/07



DISTRICT I 1625 N. French Dr., Hobbs, N.M. 66240

State of New Mexico Energy, Minerals & Natural Resources Department

Form C-102 Revised August 15, 2000

DISTRICT II 811 South First, Artesia, N.M. 88210

DISTRICT III 1000 Rio Brazos Rd., Aztec, N.M. 87410

OIL CONSERVATION DIVISION 2040 South Pacheco Santa Fe, NM 87505

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

DISTRICT IV 2040 South Pacheco, Santa Fe, NM 87505

FND 2 1/2" BC GLO 1911

2007 MAR -5 AMENDED REPORT

10201

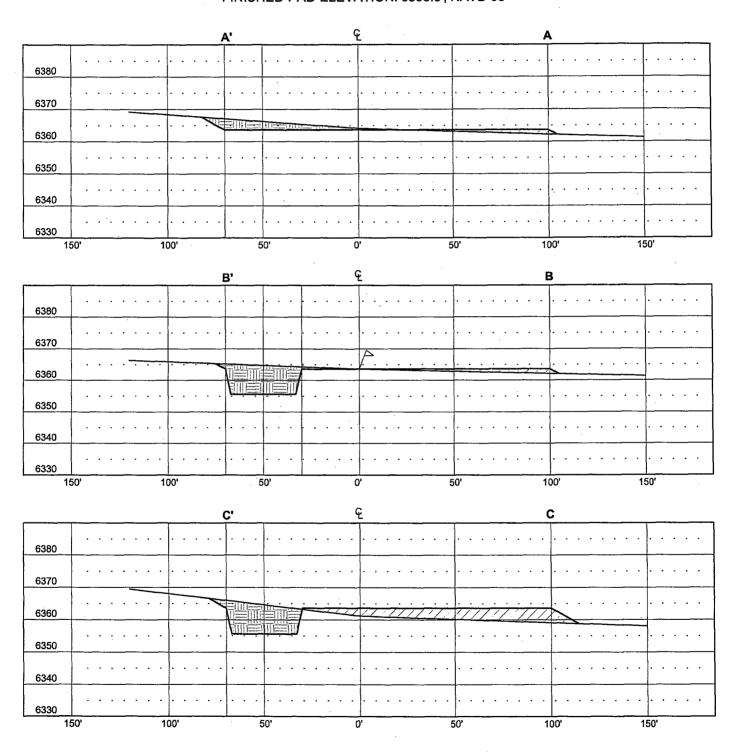
Certificate Number

40 South Pache	co. Santa	** ** **		OCATIO	NÎ AND	٨٨٦	REAGE DEDI		ON DE		1 2: 4	5
3 0-0	Number 145-	34211	1	*Peol Code 5890	IA WIATA	ACI	BISTI LOW			CEIVER)	
		770011		7030				LIX		Tilka Tı	ON NM	ell Number
Property C	_ :1					perty h	JP 22				100	* 6
36291								··········				
OGRID No		•				rator 1					•	Elevation
149	032			ELI		·	RATION, LLC		·····			6364'
		·	· · · · · · · · · · · · · · · · · · ·	T			Location					
UL or lot no.	Section	Township	Range	Lot idn	Feet from		North/South line		rom the 295'	East/We WE		SAN JUAN
<u> </u>	.22	25N	12W	<u> </u>	<u> </u>		NORTH		293	AAC"	21	JAN JUAN
			¹¹ Bott	om Hole								
UL or lot no.	Section	Township	Range	Lot Idn	Feet fron	the	North/South line	Feet 1	from the	East/We		County
								<u> </u>		RCV	D MAR?	707
Dedicated Acre	38 .	80	13 Joint or	Infilt	14 Consolid	ation C	ode:	15 Orde	r No.	OIL	CONS.	DTU.
							•				DIST.	
FND 2 1/2 BC GLD 1911	-2295'-	OR A I	" W	5270 5277	36.38767 N 108.10006 4 (NAD 198	w	EN APPROVED	1	17 (OPERA' Correlly that nd complets re	the information the best	ERTIFICATI ation contained he of my knowledge I WOOD JLTANT 2, 2007
N 0'02' W N 0'02' W			·		· · ·		.		I hereby ca was plotted me or und and correct	ritin that to from field or my super to the best to th	he well local states of extension, and to may be BER 1	5: 2006 onal survey

. ◆ Submit 3 Copies To Appropriate District	State of New Mexico	Form C-103
Office <u>District I</u>	Energy, Minerals and Natural Resources	May 27, 2004
1625 N. French Dr., Hobbs, NM 88240 District II	ON CONCERNATION DURISON	WELL API NO. 30-045- 3421
1301 W. Grand Ave., Artesia, NM 88210 District III	OIL CONSERVATION DIVISION 1220 South St. Francis Dr.	5. Indicate Type of Lease
1000 Rio Brazos Rd., Aztec, NM 87410	Santa Fe, NM 87505	STATE FEE 6. State Oil & Gas Lease No.
<u>District IV</u> 1220 S. St. Francis Dr., Santa Fe, NM 87505	Sana 1 6, 14.1 67505	NMNM-025449
SUNDRY NOTIC	CES AND REPORTS ON WELLS ALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A	7. Lease Name or Unit Agreement Name
DIFFERENT RESERVOIR. USE "APPLICA" PROPOSALS.)	ATION FOR PERMIT" (FORM C-101) FOR SUCH	BISTI GALLUP 22
	as Well Other	8. Well Number 6
2. Name of Operator ELM RIDGE EXPLORATION COM	MANY II C	9. OGRID Number 149052
3. Address of Operator	MPAN 1, LLC	10. Pool name or Wildcat
P. O. BOX 156, BLOOMFIELD, NN	M 87413	BISTI LOWER-GALLUP
4. Well Location Unit Letter: F	2275' FNL & 2295' FWL	
Section 22	Township 25 North Range 12 West	NMPM SAN JUAN County
Section 22	11. Elevation (Show whether DR, RKB, RT, GR, etc.	
	6,364' GL	
Pit)or Below-grade Tank Application For	<u> Closure </u>	on from manufact confine waters >2002
Pit Liner Thickness: 12 mil		struction Material
	k Appropriate Box to Indicate Nature of No.	
	•••	· · · · · ·
NOTICE OF INT PERFORM REMEDIAL WORK ☐		BSEQUENT REPORT OF: RK ☐ ALTERING CASING ☐
TEMPORARILY ABANDON		RILLING OPNS. P AND A
PULL OR ALTER CASING	MULTIPLE COMPL CASING/CEMEN	
OTHER: DRILLING PIT	OTHER:	П
	eted operations. (Clearly state all pertinent details, and	d give pertinent dates, including estimated date of
	SEE RULE 1103. For Multiple Completions: Attac	ch wellbore diagram of proposed completion or
recompletion.		
I hereby certify that the information at	bove is true and complete to the best of my knowledg	e and belief. I further certify that any pit or below-grade tank
has been/will be constructed or closed accord		iched) alternative OCD-approved plan 🔲.
	uniglo rivioco guidennes loga general perinit 🗀 or an (atta	,
SIGNATURE	TITLE: CONSULTANT	DATE: MAR. 2, 2007
Type or print name: BRIAN WOOD	$\sim V$	
	TITLE: CONSULTANT	DATE: MAR. 2, 2007 Telephone No.: (505) 466-8120
Type or print name: BRIAN WOOD For State Use Only APPROVED BY:	TITLE: CONSULTANT	DATE: MAR. 2, 2007 Telephone No.: (505) 466-8120 MAR 2 8 2667
Type or print name: BRIAN WOOD For State Use Only	TITLE: CONSULTANT E-mail address: brian@permitswest.com	DATE: MAR. 2, 2007 Telephone No.: (505) 466-8120 MAD 2 2 2007

ELM RIDGE EXPLORATION, LLC

BISTI GALLUP 22 #6
2275' FNL & 2295' FWL
LOCATED IN THE SE/4 NW/4 OF
SECTION 22, T25N, R12W, N.M.P.M.,
SAN JUAN COUNTY, NEW MEXICO
GROUND ELEVATION: 6364', NAVD 88
FINISHED PAD ELEVATION: 6363.6', NAVD 88



VERT. SCALE: 1" = 30' HORZ. SCALE: 1" = 50' JOB No.: ERE011 DATE: 11/21/06





Russell Surveying 1409 W. Aztec Blvd. #5 Aztec, New Mexico 87410 (505) 334-8637

Drilling Program

1. ESTIMATED FORMATION TOPS

GL Depth	KB Depth	<u>Elevation</u>
0'	12'	+6,364'
1,114'	1,126'	+5,250'
1,139'	1,151'	+5,225'
1,314'	1,326'	+5,050'
1,514'	1,526'	+4,850'
2,539'	2,551'	+3,825'
3,614'	3,626'	+2,750'
3,764'	3,776'	+2,600'
4,664'	4,676'	+1,700'
5,000'	5,012'	+1,364'
	0' 1,114' 1,139' 1,314' 1,514' 2,539' 3,614' 3,764' 4,664'	0' 12' 1,114' 1,126' 1,139' 1,151' 1,314' 1,326' 1,514' 1,526' 2,539' 2,551' 3,614' 3,626' 3,764' 3,776' 4,664' 4,676'

2. NOTABLE ZONES

Oil &/or Gas Zones	Water Zones	<u>Coal Zone</u>
Fruitland	Nacimiento	Fruitland
Pictured Cliffs	Fruitland	•
Gallup	Pictured Cliffs	

Water zones will be protected with casing, cement, and weighted mud. Fresh water encountered during drilling will be recorded by depth, cased, and cemented. Oil and gas shows will be tested for commercial potential based on the well site geologist's recommendations.



3. PRESSURE CONTROL

The drilling contract has not yet been awarded. Thus the exact BOP model to be used is not yet known. A typical 2,000 psi model is on PAGE 3.

A \geq 2,000 psi BOP and choke manifold system will be installed and tested to 2,000 psi before drilling surface casing plug. It will remain in use until the well is completed or abandoned. A safety valve and sub with a full opening valve to fit the drill pipe and collars will be available on the rig floor in the open position at all times for use when kelly is not in use.

All BOP mechanical and pressure tests will be recorded on the driller's log. BOPs will be inspected and opened and closed at least daily to assure good mechanical working order. Inspections will be recorded on the daily drilling report. Pressure tests will be conducted before drilling out from under all casing strings which are set and cemented in place.

4. CASING & CEMENT

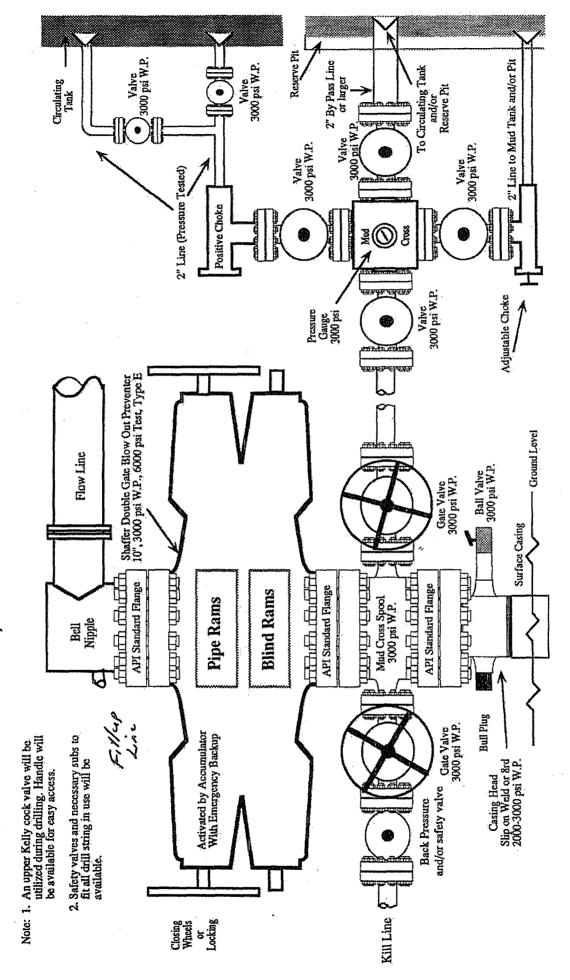
Hole Size	<u>O. D.</u>	Pounds/Foot	<u>Grade</u>	<u>Type</u>	<u>Age</u>	<u>Depth Set</u>
12-1/4"	8-5/8"	24	J-55 or K-55	ST&C ·	New	350'
7-7/8"	5-1/2"	1 0.5 15.5	J-55	LT&C	New	5,000'

Surface casing will be cemented to the surface with ≈ 290 cubic feet (≈ 245 sacks) Class B with 1/4 pound per sack cellophane + 2% CaCl₂. Yield = 1.18 cubic feet per sack. Weight = 15.2 pounds per gallon. Volume = 100% excess. Centralizers will be installed on the middle of the shoe joint and every other centralizer thereafter.

Production casing will be cemented to the surface in 2 stages with a stage tool set @ \approx 3,500'. Centralizers will be installed on the middle of the shoe joint and on every joint thereafter (\approx 2 dozen centralizers). Thread lock the guide shoe, bottom of float collar, and bottom of stage tool only. Use API casing dope.



2,000 PSI BOP SYSTEM



Note: This equipment is designed to meet requirements for a 2-M rating standard per 43 CFR part 3160 (amended). Proper operation and testing of equipment will be carried out per standard. 2,000 psi equipment can be substituted in the drawing to meet minimum requirements per standard.

First stage volume will be ≈ 525 cubic feet consisting of ≈ 125 sacks of Halliburton light with 65/35 poz mix + 1/4 pound per sack cellophane + 2% CaCl₂ (yield = 1.87 cubic feet per sack, weight = 12.7 pounds per gallon) followed by ≈ 250 sacks Class B with 2% CaCl₂ (yield = 1.18 cubic feet per sack, weight = 15.2 pounds per gallon). Volume = >100% excess, but caliper logs will be used to determine actual volume needed.

Second stage volume will be $\approx 1,215$ cubic feet consisting of ≈ 618 sacks of Halliburton light with 65/35 poz mix + 1/4 pound per sack cellophane + 2% CaCl₂ (yield = 1.87 cubic feet per sack, weight = 12.7 pounds per gallon) followed by ≈ 50 sacks of Class B with 2% CaCl₂ (yield = 1.18 cubic feet per sack, weight = 15.2 pounds per gallon). Volume = >100% excess, but caliper logs will be used to determine actual volume needed.

5. MUD PROGRAM

<u>Depth</u>	<u>Type</u>	ppg	<u>Viscosity</u>	Fluid Loss	<u>H</u> q
0' - 350'	Fresh water gel chem	9.0	50	NC	9
350' - TD	Fresh water gel chem	9.0	38 - 50	6.0	9

Enough material to maintain mud properties, control lost circulation, and contain a blowout will be at the well site while drilling. Mud will be checked hourly by rig personnel. Material to soak up possible oil or fuel spills will be on site.

6. CORES, TESTS, & LOGS

No cores or drill stem tests are planned. DIL/GR logs will be run from TD to surface. CNL/FDC logs may be run over selected segments. Samples will be collected every $\approx 10^{\circ}$ through the Gallup. Samples will be collected every $\approx 30^{\circ}$ elsewhere.



7. DOWN HOLE CONDITIONS

No abnormal pressures, temperatures, or hydrogen sulfide are expected. Maximum expected bottom hole pressure will be $\leq 2,150$ psi.

8. OTHER INFORMATION

The anticipated spud date is April 30, 2007. It is expected it will take 1 week to drill and 2 weeks to complete the well.

