Form 3160-3 (September 2001)

**UNITED STATES** DEPARTMENT OF THE INTERIOR Expedited Row

FORM APPROVED

OMB No. 1004-0136

Expires January 31, 200
5. Lease Serial No.

BUREAU OF LAND M	ANAGEMENI			NW 013642			
APPLICATION FOR PERMIT T	O DRILL OR R	EENTER		6. If Indian, Allottee of	or Tribe Name		
				NA			
la. Type of Work: DRILL RE	ENTER			7. If Unit or CA Agree	ment, Name and No.		
	22			NA			
1b. Type of Well: Oil Well Gas Well Other	П	ingle Zone 🔲 Mult	iple Zone	8. Lease Name and We	il No.		
		ingle Zone	ipie Zone	Gardner C 3A			
1 COPICO FIRM				9. API Well No.	-32056		
3a. Address 909 Fanin, St13	200 3b. Phone No	o. (include area code)	<del></del>	10. Field and Pool, or E			
P.O. Box 489 Aztec, NM. 87410 Howston, Tx 77		The second secon	7. Pr.	Basin Fruitland Coal			
4. Location of Well (Report location clearly and in accordance			A 4 / 2 / 3 / 3	11. Sec., T., R., M., or I			
At surface SE/SE S31, T32N, R8W 940' FSL & 6	•	195 Mar 9		P	·		
At proposed prod. zone same	1	(K) MY2	200	``			
		so skilling	1/4/4 (Co.	\$31, T32N, 8W (P)	12 64-4-		
14. Distance in miles and direction from nearest town or post off	ice*			12. County or Parish	13. State		
29 miles Northeast of Aztec, NM  15. Distance from proposed*	146 2564	V-5 - V-5	Tiz o	San Juan	NM		
location to nearest	16. No. 01 A	Acres in lease	17. Spacing	nit dedicated to this w	./		
property or lease line, ft. (Also to nearest drig, unit line, if any) NA	2264.04	and the second	, l-a	260	355/2		
18. Distance from proposed location*	19. Propose	d Depth	20. BLM/F	IA Bond No. on file			
to nearest well, drilling, completed,							
applied for, on this lease, ft. NA	3406'		400 GH 0	471			
21. Elevations (Show whether DF, KDB, RT, GL, etc.)	1	imate date work will s	start*	23. Estimated duration			
6512' GL	March 1, 2	004		30 days			
	24. Attac	chments					
The following, completed in accordance with the requirements of	Onshore Oil and Gas	Order No. 1, shall be a	ttached to this	form:			
Well plat certified by a registered surveyor.	1	A Bond to sower th	ha amazatiana	unless servered by on a	wisting bond on file (se		
2. A Drilling Plan.		Item 20 above).		unless covered by an ex	cisting bond on the (se		
3. A Surface Use Plan (if the location is on National Forest S	ystem Lands, the	5. Operator certific					
SUPO shall be filed with the appropriate Forest Service Office	e).	6. Such other site authorized offic		rmation and/or plans as	may be required by th		
25. Signature	Nama	(Printed/Typed)			Date		
	i	ohnson		;	2/4/03		
Title	,50113	Ollison		<u></u>	2/4/03		
Field Operations Manager							
11 (7)	Name	(Printed/Typed)		- I	Date		
/s/ David J. Mankiewic	2				MAR 1 2 2004		
Title	Office						
Application approval does not warrant or certify that the applicant	holds legal or equitab	ole title to those rights	in the subject	lease which would entitle	the applicant to conduct		
operations thereon.  Conditions of approval, if any, are attached.							
	1		- 4:11C .II . 4	1 41	A Cal - II		
Fitle 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, States any false, fictitious or fraudulent statements or representation	make it a crime for an ons as to any matter w	ny person knowingly a Fithin its jurisdiction.	ind willfully t	o make to any departmen	t or agency of the Unite		
(Instructions on reverse)							
•							
			,	<i>*</i> .			
This are the probability review purplies probability review purplies	ennical and it to 43 CER 3165.3	UPPER TO CONTRACT OF THE COMPANY	INS AUTHOR	SED ARL	**************************************		
and appeal pursuant to 43	CFR 3165.4	SUBJECT TO COMPL "GENERAL REQUIRE	HANGE WITH MENTS".	ATTACHED			

DISTRICT I P.O. Box 1960, Hobbs, N.M. 88241-1980

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

DISTRICT III

1000 Rio Brezos Rd., Asteo, N.M. 87410

DISTRICT IV

## OIL CONSERVATION DIVISION

P.O. Box 2088 Santa Fe, NM 87504-2088

State of New Mexico Energy. Minerals & Natural Resources Department

Form C-102 Revised Febuary 21, 1994

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

2040 South Pacheco, Santa Fe, NM 87504-2086  AMENDED REPORT											
WELL LOCATION AND ACREAGE DEDICATION PLAT  30-045-37056 Pool Code  71629 Basin Fruitland Coal											
201	Number	27056		*Pool Cods 7/62	<u>,                                      </u>	Basin Fl		Pool Nam	**Coal		
Property C	ode	Juse	7 -	1160	7 Property	Name	щ	Tlang	wai		Well Number
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YOGRID N		49	CM11		*Operato		_				* Elevation
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#### GARDNER C 3A

Sec. 31-T32N-R8W, 940' FSL & 675' FEL

San Juan Co., New Mexico

Lease NM 013642

#### **Drilling Program**

### 1) Geological name of surface formation -

Estimated tops of important geological markers:

San Jose	Surface
Ojo	2209'
Kirtland Shale	2282'
Fruitland Coal	3079'
Pict. Cliff	3406'
TD	3406'

# 2) Estimated depths at which oil, gas, water, and mineral bearing formation will be found:

Useable Water	0' to 2282'
Salt Water	2282' to 3079'
Oil and Gas	3079' to 3406'

## 3) Pressure Control Equipment:

- a. 10-inch 900 series or 2,000 psi test double gate hydraulic with 4-1/2" pipe rams and 10-inch series 900 hydril above 10-inch series casinghead and cross spool with flanged outlets. See BOP diagram at Exhibit F-1 for drawing of choke lines, kill lines and choke manifold. Procedures will include waiting on cement 12 hours, nipple up blowout preventer (BOP) assembly and test to 70% of yield of casing or 1,500 psi maximum. The production casinghead pressure rating will be 3,000 psi.
- b. Type of BOP rams: Blind rams and pipe rams are used as shown on the BOP diagram at Exhibit F-1. Occasionally, the position of the rams is reversed depending on the drilling contractor's methods.
- c. The choke manifold and header will have 2-inch choke outlets, a 2-inch straight through the line with 2-inch adjustable chokes installed. The inlet line will be a 2-inch line. All of the above are rated at 1,500 psi working pressure (WP). The choke manifold and header system will have manual control valves; no hydraulic valves will be installed. Casing testing procedure Surface casing will be tested at 750 psi with 1,000 psi maximum after cementing in place and before drilling out of shoe. Intermediate and production casing will be tested to 1,500 psi after cementing in place and after drilling to the required depth.
- d. Hydraulic controls to close the BOPs are located on the rig floor; the hydraulic remote control is located in the bottom doghouse. There will be no manual controls on the BOP.
- e. BOP testing procedures and frequency:
  - 1. Hydril (3,000WP) will be tested to 70% of yield of casing or 1,500 psi maximum.

#### GARDNER C 3A

Sec. 31-T32N-R8W, 940' FSL & 675' FEL San Juan Co., New Mexico

Lease NM 013642

- 2. Double ram BOPs will be tested to 70% of yield of casing or 1,500 psi maximum.
- 3. BOPs will be tested upon installation, after casing is run and on each bit trip.
- f. Casinghead connections will be 2-inch; these outlets will usually be bull plugged during drilling operations. No pumping through these connections is allowed except in emergency to keep from wearing out the head.
- g. The drilling spool will be a series 900 2,000 psi WP with a 2-inch kill line and a 2-inch outlet.

## 4) Proposed Casing Program:

Surface Casing Program:	Hole Size				<u>Depth</u>
Surface Casing	12 ¼"	9 5/8"	36.0#	J-55 STC	New @ 220'
Intermediate Casing	8 3/4"	7"	23#	J-55 LTC	New @ 3069'
Production Liner	6 ¼"	5 ½"	15.5#	J-55 LTC	New @ 3406'

Proposed setting depth, amount and type of cement including additives:

9 5/8" Surface Casing – Surface to 220' – Cement with 119 sxs class G (15.8 ppg, yield 1.16 cf/sx) Cement + 2% Calcium Chloride + 0.25 lbs/sx. D-29 cellophane, volume: 137.8 cf., includes 100% excess. Three centralizers will be run on the bottom 3 joints, starting at the shoe joint.

7" Intermediate Casing – Surface to 3069' –

Lead cement with 339 sxs. 65/35 class G poz, 6% gel, 0.25 lbs/sx D-29 cellophane, (wt. 12.7 ppg, yield 1.75), Tail with 100 sxs. 50/50 class G poz, 2% gel, 0.25 lbs/sx D-29 cellophane, 2% calcium chloride, (wt 13.5 ppg, yield 1.28), includes 50% excess. Two centralizers will be run on the bottom two joints, then every 10<sup>th</sup> joint thereafter or (+/-) 400', and turbolizers to impact a swirling action, will be placed just below and into the base of the OJO Alamo.

5 ½" Production Liner 2989' to 3406' – Will not cement.

### 5) Mud Program:

0' - 220' - Spud mud and water treated with gel lime.

220' - 3069' - Lime mud, water and polymer.

3069' - 3406' - Air-foam

#### 6) Testing, Logging, and Coring Program:

No drill stem tests, cores, will be taken, a CBL log will be run if cement does not circulate to surface on intermediate casing.