

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER

FORM APPROVED
OMB No. 1004-0136
Expires January 31, 2004

5. Lease Serial No.

NM 013642

6. If Indian, Allottee or Tribe Name

NA

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

NA

8. Lease Name and Well No.

Gardner C 5A

9. API Well No.

30045 32054

10. Field and Pool, or Exploratory

Basin Fruitland Coal

11. Sec., T., R., M., or Blk. and Survey or Area

S26, T32N, R9W (O)

12. County or Parish

San Juan

13. State

NM

1a. Type of Work: ☒ DRILL

☐ REENTER

1b. Type of Well: ☐ Oil Well ☒ Gas Well ☐ Other

☐ Single Zone ☐ Multiple Zone

2. Name of Operator

Peoples Energy
Keech Exploration Company LLC

3a. Address

909 Fannin St. 1300
P.O. Box 480 Aztec, NM 87410 Houston Tx 77010

3b. Phone No. (include area code)

(505) 334-9111

4. Location of Well (Report location clearly and in accordance with any State requirements. *)

At surface SW/SE S26, T32N, R9W 665' FSL & 1655' FEL

At proposed prod. zone same

14. Distance in miles and direction from nearest town or post office*

19 miles Northeast of Aztec, NM

15. Distance from proposed*
location to nearest
property or lease line, ft.
(Also to nearest drig. unit line, if any) NA

16. No. of Acres in lease

2264.04

17. Spacing Unit dedicated to this well

322.24
320 S/2

18. Distance from proposed location*
to nearest well, drilling, completed,
applied for, on this lease, ft.

NA

19. Proposed Depth

3419'

20. BLM/BIA Bond No. on file

400 GH 0471

21. Elevations (Show whether DF, KDB, RT, GL, etc.)

6544' GL

22. Approximate date work will start*

March 1, 2004

23. Estimated duration

30 days

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)

Don Johnson

Date

12/5/03

Title

Field Operations Manager

Approved by (Signature)

Name (Printed/Typed)

Date

MAR 12 2004

Title

/s/ David J. Mankiewicz

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.

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 reverse)

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

DRILLING OPERATIONS AUTHORIZED ARE
SUBJECT TO COMPLIANCE WITH ATTACHED
"GENERAL REQUIREMENTS".

NMOCD

RECEIVED
MAR 02 - 5 PM 1:52
BTO Production, NM

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

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

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

DISTRICT IV
2040 South Pacheco, Santa Fe, NM 87504-2088

State of New Mexico
Energy, Minerals & Natural Resources Department

OIL CONSERVATION DIVISION

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

Form C-102

Revised February 21, 1994

Instructions on back

Submit to Appropriate District Office

State Lease - 4 Copies

Fee Lease - 3 Copies

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number 30-045-32054	Pool Code 71629	Pool Name Basin Fruitland Coal
Property Code 5659	Property Name 33363 GARDNER C	Well Number 5A
OGED No. 12807	Operator Name KOCH EXPLORATION	Elevation 6544

¹⁰ Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
0	26	32 N	9 W		665	SOUTH	1655	EAST	SAN JUAN

¹¹ 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 322.24	Joint or Infill	Consolidation Code	Order No.
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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

16 S 88°37' W 5297.16' RECEIVED MAR 24 2004 API #30-045-28012 GARDNER C5	SECTION 26		5252.28'	17 OPERATOR CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief. Signature Lance F. Harmon Printed Name Vice President - Land Title 9/19/03 Date
	Existing Well Gardner C5 1680' FSL & 1010' FWL API #30-045-28012	NM013642	1655'	
N 34°17' E S 88°20' W	665'	5360.52'	N 210° E	

GARDNER C 5A

Sec. 26-T32N-R9W, 665' FSL & 1655' 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	2126'
Kirtland Shale	2181'
Fruitland Coal	3046'
Pict. Cliff	3419'
TD	3419'

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

Useable Water	0' to 2181'
Salt Water	2181' to 3046'
Oil and Gas	3046' to 3419'

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 5A

Sec. 26-T32N-R9W, 665' FSL & 1655' FEL

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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				Depth
Surface Casing	12 ¼"	9 5/8"	36.0#	J-55 STC	New @ 220'
Intermediate Casing	8 ¾"	7"	23#	J-55 LTC	New @ 3036'
Production Liner	6 ¼"	5 ½"	15.5#	J-55 LTC	New @ 3419'

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 3036' –

Lead cement with 335 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 10th 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 2956' to 3419' – Will not cement.

5) Mud Program:

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

220' – 3036' – Lime mud, water and polymer.

3036' – 3419' – 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.