Form 3160-3 (September 2001) Expires January 31, 2004 UNITED STATES Lease Serial No. DEPARTMENT OF THE INTERIOR NM 013642 BUREAU OF LAND MANAGEMENT APPLICATION FOR PERMIT TO DRILL OR REENTER ARE 20 6. If Indian, Allottee or Tribe Name 7. If Unit or CA Agreement, Name and No. C la. Type of Work: DRILL DRILL REENTER co NA 8. Lease Name and Well No. 1b. Type of Well: Oil Well Gas Well Other Single Zone Multiple Zone Gardner C 2A 2. Name of Operator Peoples Energy 9. API Well No. 3004 Koch Exploration Company LLC 3a. Address 3b. Phone No. (include area code) 904 Fanin S+1300 10. Field and Pool, or Exploratory 30. Box 489 Aztec, NM 87410 Hovstan TX 77010 (505) 334-9111 Basin Fruitland Coal 11. Sec., T., R., M., or Blk. and Survey or Area Location of Well (Report location clearly and in accordance with any State requirements. *) At surface NE/NW S31, T32N, R8W 940' FNL & 1385' FWL At proposed prod. zone same S31, T32N, 8W (C) 14. Distance in miles and direction from nearest town or post office* 12. County or Parish 13. State NM 32 miles Northeast of Aztec, NM San Juan Distance from proposed* 17. Spacing Unit dedicated to this well 16. No. of Acres in lease location to nearest property or lease line, ft.
(Also to nearest drig. unit line, if any) NA 2264.04 271.25 N/2 18. Distance from proposed location 19. Proposed Depth 20. BLM/BIA Bond No. on file to nearest well, drilling, completed, applied for, on this lease, ft. 3544' 400 GH 0471 21. Elevations (Show whether DF, KDB, RT, GL, etc.) 22. Approximate date work will start* 23. Estimated duration March 1, 2004 30 days 6665 GL 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. 4. Bond to cover the operations unless covered by an existing bond on file (see 2. A Drilling Plan. Item 20 above). 5. Operator certification. 3. A Surface Use Plan (if the location is on National Forest System Lands, the 6. Such other site specific information and/or plans as may be required by the SUPO shall be filed with the appropriate Forest Service Office). authorized officer. 25. Signature Name (Printed/Typed) 12/4/03 Don Johnson Title Field Operations M Approved by (Signature) Name (Printed/Typed) Date MAR 2004 Title Office **New David J. Markiewii?** 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)

Diversing Planthold Astronomy Additional Supplements of the Control of the Astronomy General Requirements.

This acres is subject to technical and procedural review pursuant to 43 CFR 3165 3

and appeal pursuant to 43 CFR 3165

DISTRICT I State of New Mexico Energy, Minerals & Natural Resources Department Form C-102 P.O. Box 1980, Hobbs, N.M. 88241-1980 Revised Febuary 21, 1994 DISTRICT II Instructions on back 811 South First, Artesia, N.M. 86210 OIL CONSERVATION DIVISION Submit to Appropriate District Office DISTRICT III State Lease - 4 Copies P.O. Box 2088 MAR 2004 Santa Fe, NM 87504-2088 1000 Rio Brazou Rd., Asteo, N.M. 87410 Fee Lease - 3 Copies DISTRICT IV AMENDED REPORT 2040 South Pacheco, Santa Fe, NM 87504-2088 WELL LOCATION AND ACREAGE DEDICATION PLAT Pool Cods ¹ API - Number Pool Name Basin Fruitland Coa 71629 70-04S Vell Number Property Code Property Name 5659 GARDNER C **2A** Operator Name OGRID No. * Elevation KOCH EXPLORATION 6665 ¹⁰ Surface Location Feet from the North/South line UL or lot no. Section Lot Ida Feet from the Rast/Vest line County 8 W 1385 31 32 N 940 **NORTH WEST** SAN JUAN C ¹¹Bottom Hole Location If Different From Surface North/South line Lot Idn Feet from the Feet from the UL or lot no. Section Township Range Rast/Vest line County 18 Dedicated Acres 15 Joint or Infill 14 Consolidation Code "Order No. 271,25 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 515.46 S 89°23" W 2626.8 17 OPERATOR CERTIFICATION I havely vertify that the information or lets to the best of my knowledge and belief 1385 NM013642 Existing Well Gardner C2 1810' FNI9& 1500' FEL API #30-045-27983 Title Date SECTION 31 18 SURVEYOR CERTIFICATION tted from flaid notes of actual surv or under my expervision, and that the ea correct to the best of my belief. 8/22/03 Date of Survey 0,56 z

GENEOER

MN 10012 TEEP 070

S 89°48':W : 2682.24'

489.06

1344.42

GARDNER C 2A

Sec. 31-T32N-R8W, 940' FNL & 1385' FWL

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	2322'
Kirtland Shale	2397'
Fruitland Coal	3207'
Pict. Cliff	3544'
TD	3544'

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

Useable Water	0' to 2397'		
Salt Water	2397' to 3207'		
Oil and Gas	3207' to 3544'		

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 2A

Sec. 31-T32N-R8W, 940' FNL & 1385' FWL

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 @ 3195'
Production Liner	6 ¼"	5 ½"	15.5#	J-55 LTC	New @ 3544'

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 3195' – Lead cement with 355 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 3115' to 3544' – Will not cement.

5) Mud Program:

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

220' - 3195' - Lime mud, water and polymer.

3195' - 3544' - 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.