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Form 3160-3  
(September 2001)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, 20045. Lease Serial No.  
SF-080245-B6. If Indian, Allottee or Tribe Name  
N/A7. If Unit or CA Agreement, Name and No.  
N/A8. Lease Name and Well No.  
AB Geren 1A9. API Well No.  
30045 3139210. Field and Pool, or Exploratory  
Basin Fruitland Coal11. Sec., T., R., M., or Blk. and Survey or Area  
Sec. 21, T29N, R9W

C

12. County or Parish  
San Juan13. State  
NM1a. Type of Work: ☒ DRILL ☐ REENTER1b. Type of Well: ☐ Oil Well ☒ Gas Well ☐ Other ☒ Single Zone ☐ Multiple Zone

2. Name of Operator

Koch Exploration Company, LLC

3a. Address  
20 East Greenway Plaza  
Houston, Texas 770463b. Phone No. (include area code)  
713-544-4318

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

At surface NW/4 Sec. 21, T29N, R9W, 1370' FNL & 1950' FWL  
At proposed prod. zone (Same) 920 1575

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

2 miles southeast of Blanco, NM

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

1370'

16. No. of Acres in lease

640

17. Spacing Unit dedicated to this well

320 W/2

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

3650'

19. Proposed Depth

2400'

20. BLM/BIA Bond No. on file

400 GH. 0471

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

5649' GR 5682

22. Approximate date work will start\*

available rig

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

Rolf A. Ornelas

Name (Printed/Typed)

Rolf A. Ornelas

Date

Feb 07, 03

Title

Sr. Engineer

Approved by (Signature)

DM

Name (Printed/Typed)

Date

5-29-03

Title

DM

Office

Application approval does not warrant or certify the 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)

DRILLING OPERATIONS AUTHORIZED ARE  
SUBJECT TO COMPLIANCE WITH ATTACHED  
"GENERAL REQUIREMENTS".This action is subject to technical and  
procedural review pursuant to 43 CFR 3165.3  
and appeal pursuant to 43 CFR 3165.4

NMOCD

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 30-045-31392	Pool Code 71629	Pool Name Basin Fruitland Coal
Property Code 18432	Property Name A.B. GEREN	Well Number IA
OGED No. 12807	Operator Name KOCH EXPLORATION	Elevation 5682

<sup>10</sup> Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
C	21	29 N	9 W		920	NORTH	1575	WEST	SAN JUAN

<sup>11</sup> 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	Joint or Infill	Consolidation Code	Order No.

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

S 69°19'23" W 2622.02'	S 88°57' W 2571.36'	<b>17 OPERATOR CERTIFICATION</b> I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.  Signature Rolf Ornela Printed Name Senior Engineer Title 4/23/03 Date	
5136.63 (M) 1575'	5172.42'		<b>18 SURVEYOR CERTIFICATION</b> I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.  3/24/02 Date of Survey Signature and Seal of Professional Surveyor:  HENRY P. BROADHURST NEW MEXICO REGISTERED PROFESSIONAL SURVEYOR 11393
N 0°21'16" W SF-080245-B	SECTION 21		
5134.80 (R)	Existing Well A.B. Geren #1 API #30-045-27401 475' FSL & 1060' FWL		
N 0°22' W S 89°30' W	5235.12'		

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENTFORM APPROVED  
Budget Bureau No. 1004-0135  
Expires: March 31, 1993

## SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to deepen or reentry to a different reservoir  
Use "APPLICATION FOR PERMIT—" for such proposals

SUBMIT IN TRIPLICATE

## 1. Type of Well

☐ Oil  
Well☒ Gas  
Well☐ Other

## 2. Name of Operator

Koch Exploration Company, LLC

## 3. Address and Telephone No.

20 Greenway Plaza, Houston, Texas 77046

(713) 544-4318

## 4. Location of Well (Footage, Sec., T., R., M., or Survey Description)

S21, T29N, R9W (C)  
920' FNL & 1575' FWL  
NE/4 NW/4

2003 (111) 056 F

## 5. Lease Designation and Serial No.

SF080245B

## 6. If Indian, Allottee or Tribe Name

NA

## 7. If Unit or CA, Agreement Designation

NA

## 8. Well Name and No.

A B Geren 1A

## 9. API Well No.

3004531392

## 10. Field and Pool, or Exploratory Area

Basin Fruitland Coal

## 11. County or Parish, State

San Juan County  
New Mexico

## 12. CHECK APPROPRIATE BOX(s) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

## TYPE OF SUBMISSION

☒ Notice of Intent☐ Subsequent Report☐ Final Abandonment Notice

## TYPE OF ACTION

☐ Abandonment☐ Recompletion☐ Plugging Back☐ Casing Repair☐ Altering Casing☒ Other Supplement to APD☐ Change of Plans☐ New Construction☐ Non-Routine Fracturing☐ Water Shut-Off☐ Conversion to Injection☐ Dispose Water

(Note: Report results of multiple completion on Well Completion or Recompletion Report and I no form.)

13. Describe Proposed or Compelled Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)\*

Due to presence of Brack's Cactus and archeological sites, this location had to be moved. Original footages were 1370' FNL & 1950' FWL SE/4 NW/4 of Section 21, T29N, R9W (F). We moved approximately 400' to the Northwest. Elevation has increased by 33'.

Archeological Survey Report Addendum No. 02-138A has been submitted to the BLM by San Juan County Museum Association, DCA in Bloomfield, NM. A Threatened and Endangered Species Survey was conducted in March, 2003 by Biosphere Environmental Sciences and Technologies, LLC (B.E.S.T.).

Original APD submitted, February 2003, was incomplete. Please see attached additional information to be included in the Drilling Program.

I hereby certify that the foregoing is true and correct

Signed

Title District Superintendent

Date

4-25-03

(This space for signature of District Superintendent)

MAY 29 2003

Approved by

Title

Date

Conditions of approval, if any:

Koch Exploration Company, LLC  
Basin Fruitland Infill Well

**A B Geren 1A**

S21 - T29N - R9W

San Juan County, NM

**Proj'd. TD: 2,435'**

**Casing Program:**

<b>Hole Size</b>	<b>Grade, size of Casing</b>	<b>Weight per Foot</b>	<b>Setting Depth</b>
12 1/4" Hole	8 5/8" J-55 ST&C	24.0#	150
7 7/8" Hole	4 1/2" J-55 LT&C	10.5#	2,435

Circulate 9-5/8" cement to surface - Volumes to be adjusted to new casings depths

Circulate 7" cement to surface - Volumes to be adjusted to new casing depths

100% excess on surface casing

50% excess on production casing

**Centralizers Program:**

Surface Casing: 3 Centralizers will be ran on the bottom 3 joints, starting at the shoe joint

Production Casing: 2 Centralizers will be ran on the bottom 2 joints, then every 10th joint thereafter or +/-400', and Centralizers to impact a swirling action will be placed just below and into the base of the Ojo Alamo.

**Estimated Formation Tops:**

San Jose	Surface
Ojo	1283'
Kirtland Shale	1343'
Fruitland Coal	1949'
Pictured Cliff	2290'
TD	<b>2435'</b>

**Estimated Formation Pressures:**

Fruitland Coal	600 psi
Bottom Hole	200 psi

**Estimated Depths of Usable Water, Salt Water and Oil/Gas Bearing Formations:**

Fresh/Usable	0' to 1343'
Salt Water	1343' to 1949'
Oil and gas	1950' to 2435'

**AB Geren #1A**

Sec. 21-T29N-R9W, 1370' FNL & 1580' FWL

San Juan Co., New Mexico

Lease SF 080245B

**Drilling Program****1) Geological name of surface formation -**

Estimated tops of important geological markers:

San Jose	Surface
Ojo	1250'
Kirtland Shale	1310'
Fruitland Coal	1916'
Pict. Cliffs	2257'
TD	2,400'

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

Fresh Water	0' to 200'
Salt Water	201' to 1916'
Oil and Gas	1916' to 2400'

**3) Pressure Control Equipment:**

- a. 10-inch 900 series or 3,000 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 3,000 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 3,000 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 3,000 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.

**AB Geren #1A**

Sec. 21-T29N-R9W, 1370' FNL &amp; 1580' FWL

San Juan Co., New Mexico

Lease SF 080245B

## e. BOP testing procedures and frequency:

1. Hydril (3,000WP) will be tested to 70% of yield of casing or 3,000 psi maximum.
  2. Double ram BOPs will be tested to 70% of yield of casing or 3,000 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 3,000 psi WP with a 2-inch kill line and a 2-inch outlet.

**4) Proposed Casing Program:**

## Surface Casing Program:

Surface Casing	8 5/8"	24.0#	J-55 STC	New
Production Casing	4 1/2"	10.5#	J-55 LTC	New

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

8 5/8" Surface Casing – Surface to 150' – Cement with 100 sks type III (14.6 ppg, slurry yield 1.39 cf/sk) Cement + 2% bwoc Calcium Chloride + .25 lbs/sk Cello Flake + 59.2% Fresh Water. Cement Properties: Volume: 138.1 cf., includes 100% excess.

4 1/2" Production Casing – Surface to 2400' –

Lead with 299 sks Premium Lite FM (12.1 ppg, slurry Yield 2.15 cf/sk) + 3% bwoc Calcium Chloride + .25 lb/sk Cello Flake + .4% bwoc FL-52 + 8% bwoc Bentonite + .4% bwoc Sodium Metasilicate + 3 lb/sk Pheno Seal + 116.1 % Fresh Water. Volume: 640.1 cf., includes 50% excess.

Tail with 110 sks Type III Cement (14.0 ppg, slurry Yield 1.54 cf/sk) + 2% bwoc Calcium Chloride + .25 lb/sk Cello Flake + .2% bwoc FL-52 + 68.9% Fresh Water. Volume: 165.7 cf., includes 50% excess

**5) Mud Program:**

0' – 150' – Spud mud and water treated with gel lime.

150' – 2,400' – Lime mud, water and polymer.