

RECEIVED

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

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

2004 MAY 25 PM

APPLICATION FOR PERMIT TO DRILL OR REENTER

1a. Type of work: <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER		5. Lease Serial No. SF 80000A
1b. Type of Well: <input type="checkbox"/> Oil Well <input checked="" type="checkbox"/> Gas Well <input type="checkbox"/> Other <input type="checkbox"/> Single Zone <input type="checkbox"/> Multiple Zone		6. If Indian, Allottee or Tribe Name NA
2. Name of Operator Koch Exploration Company, LLC		7. If Unit or CA Agreement, Name and No. NA
3a. Address PO Box 489 Aztec, NM 87410		8. Lease Name and Well No. A B Geren 3A
3b. Phone No. (include area code) (505) 334-9111		9. API Well No. 30045 32382
4. Location of Well (Report location clearly and in accordance with any State requirements) At surface 1700' FNL & 985' FWL At proposed prod. zone Same		10. Field and Pool, or Exploratory Basin Fruitland Coal
14. Distance in miles and direction from nearest town or post office*		11. Sec., T. R. M. or Blk. and Survey or Area S24, T29N, R9W (E)
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any)	16. No. of acres in lease 812.28	17. Spacing Unit dedicated to this well 296.26 W/2
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft.	19. Proposed Depth 2599'	20. BLM/BIA Bond No. on file 400 GH 0471
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 5949' GL	22. Approximate date work will start* 06/20/2004	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. | 4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above). |
| 2. A Drilling Plan. | 5. Operator certification |
| 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). | 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 5/25/04
Title Field Operations Manager		
Approved by (Signature) 	Name (Printed/Typed) AFEH	Date 7-12-04
Title FFD		

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 page 2)

NMOCD

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

This action is subject to technical and
procedural review pursuant to 43 CFR 3165.5
and appeal pursuant to 43 CFR 3165.4

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 30045-32382		Pool Code 71629	Pool Name Basin Fruitland Coal
Property Code 18432	Property Name A.B. GEREN		Well Number 3A
OGRID No. 12807	Operator Name KOCH EXPLORATION Company, LLC		Elevation 5949

¹⁰ Surface Location

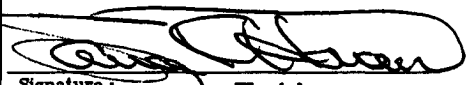

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
E	24	29 N	9 W		1700	NORTH	985	WEST	SAN JUAN

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

¹² Dedicated Acres	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ 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

16 5207.40' 1700' 985'	N 89°16' W	5074.74'	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 Date April 7, 2004	
	SECTION 24			
	Existing Well A B Geren 3 1485' FSL & 1280' FWL API #30-045-27386			
	1480'			
N 0°32' E 1485' N 89°48'58" W		4866.12'	18 SURVEYOR CERTIFICATION 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. 3/30/04 Date of Survey Signature and Professional Surveyor 4/4/04  Certificate Number	

Submit 3 Copies To Appropriate District
Office
District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Ave., Artesia, NM 88210
District III
1000 Rio Brazos Rd., Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM
87505

State of New Mexico
Energy, Minerals and Natural Resources

Form C-103
March 4, 2004

OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

SUNDRY NOTICES AND REPORTS ON WELLS (DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH PROPOSALS.)		WELL API NO.
1. Type of Well: Oil Well <input type="checkbox"/> Gas Well <input checked="" type="checkbox"/> Other		5. Indicate Type of Lease FEDERAL STATE <input type="checkbox"/> FEE <input type="checkbox"/>
2. Name of Operator Koch Exploration Company, LLC		6. State Oil & Gas Lease No. SF 80000A
3. Address of Operator PO Box 489, Aztec, NM 87410		7. Lease Name or Unit Agreement Name A B Geren
4. Well Location Unit Letter <u>E</u> : <u>1700</u> feet from the <u>North</u> line and <u>985</u> feet from the <u>West</u> line Section <u>24</u> Township <u>29N</u> Range <u>9W</u> NMPM San Juan County		8. Well Number 3A
11. Elevation (Show whether DR, RKB, RT, GR, etc.) 5949' GR		9. OGRID Number 12807
		10. Pool name or Wildcat Basin Fruitland Coal

Pit or Below-grade Tank Application (For pit or below-grade tank closures, a form C-144 must be attached)

Pit Location: UL E Sect 24 Twp 29N Rng 9W Pit type Drilling/Completion Depth to Groundwater <50' Distance from nearest fresh water well > 1000'
Distance from nearest surface water <50' Below-grade Tank Location UL Sect Twp Rng ;
 feet from the line and feet from the line

12. Check Appropriate Box to Indicate Nature of Notice, Report or Other Data	
NOTICE OF INTENTION TO:	SUBSEQUENT REPORT OF:
PERFORM REMEDIAL WORK <input type="checkbox"/> PLUG AND ABANDON <input type="checkbox"/>	REMEDIAL WORK <input type="checkbox"/> ALTERING CASING <input type="checkbox"/>
TEMPORARILY ABANDON <input type="checkbox"/> CHANGE PLANS <input type="checkbox"/>	COMMENCE DRILLING OPNS. <input type="checkbox"/> PLUG AND ABANDONMENT <input type="checkbox"/>
PULL OR ALTER CASING <input type="checkbox"/> MULTIPLE COMPLETION <input type="checkbox"/>	CASING TEST AND CEMENT JOB <input type="checkbox"/>
OTHER: Drill new well on Federal Lease-Pit Location <input checked="" type="checkbox"/>	OTHER: <input type="checkbox"/>

13. Describe proposed or completed operations. (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work). SEE RULE 1103. For Multiple Completions: Attach wellbore diagram of proposed completion or recompletion.

We intend to drill a new gas well. The drilling/completion pit will be built according to the General Pit Guidelines on file at the NMOCD Aztec Office. All NMOCD Guidelines will be followed for construction, maintenance, and closure of this pit.

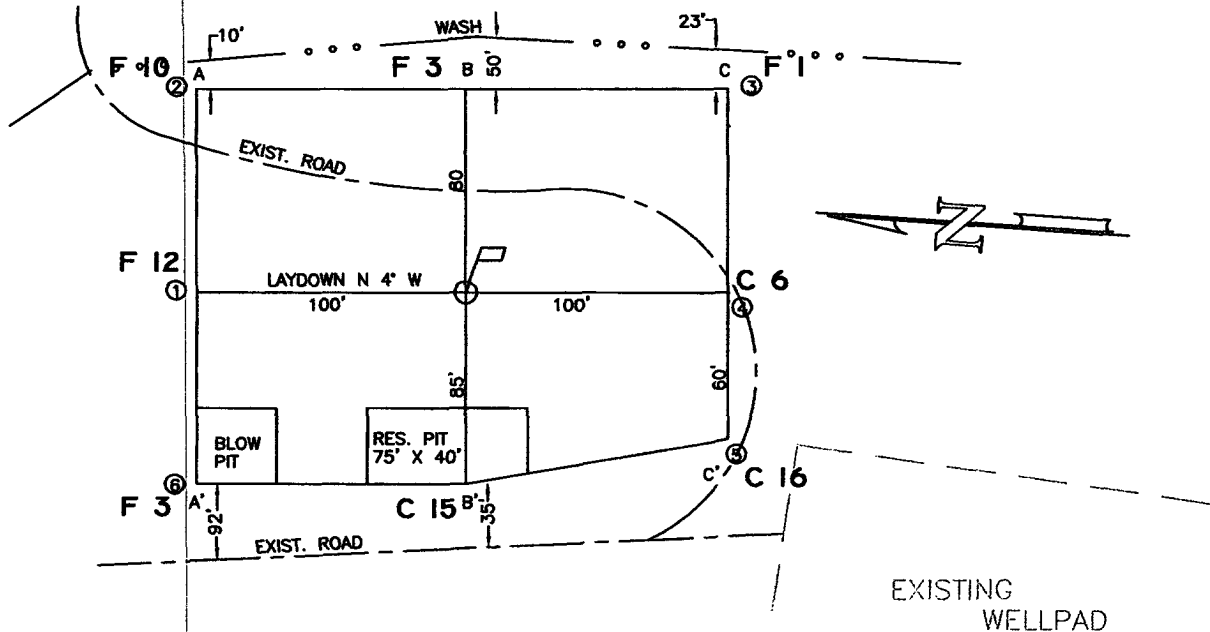
I hereby certify that the information above is true and complete to the best of my knowledge and belief. I further certify that any pit or below-grade tank has been/will be constructed or closed according to NMOCD guidelines ☐, a general permit ☒ or an (attached) alternative OCD-approved plan ☐.

SIGNATURE Don Johnson TITLE Field Operation Manager DATE 5/25/04

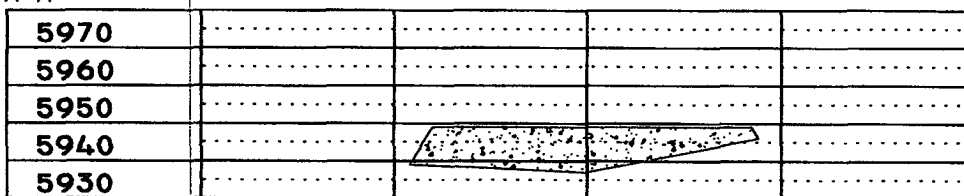
Type or print name Don Johnson E-mail address: johnso4d@kochind.com Telephone No. 505-334-9111

(This space for State use)

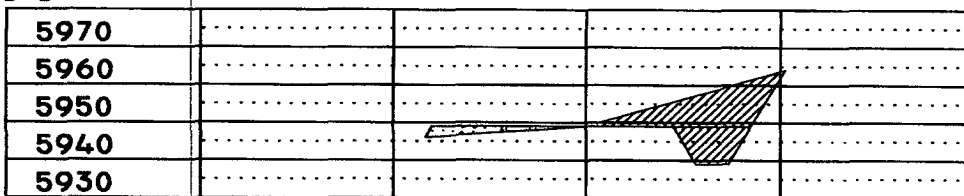
APPROVED BY TITLE DATE
Conditions of approval, if any:



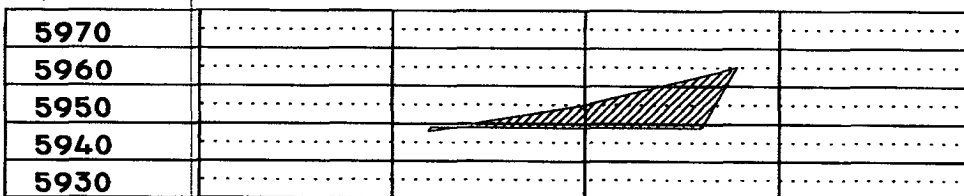
ELEVATION A-A'



B-B'



C-C'



LEASE: A.B. GEREN #3A

FOOTAGE: 1700' FNL, 985' FWL

SEC. 24 TWN. 29-N RNG. 9-W N.M.P.M.

LATITUDE: 36°42'49" LONGITUDE: 107°44'12"

ELEVATION: 5949

KOCH EXPLORATION AZTEC, NEW MEXICO

SURVEYED: 3/30/04

REV. DATE:

APP. BY C.F.W.

DRAWN BY: T.G.

DATE DRAWN: 3/31/04

FILE NAME: 947CF01

UNITED
FIELD SERVICES INC.

P.O. BOX 3651
FARMINGTON, NM 87499
OFFICE: (505) 334-0408

A B Geren #3A

S24, T29N, R9W, 1700' FNL & 985 FWL

San Juan Co., New Mexico

Lease SF 80000A

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

Estimated tops of important geological markers:

San Jose	Surface
Ojo	1434'
Kirtland Shale	1530'
Fruitland Coal	2141'
Pict. Cliffs	2479'
TD	2599'

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

Fresh Water	0' to 1530'
Salt Water	1530' to 2141'
Oil and Gas	2141' to 2599'

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 750 psi maximum. The production casinghead pressure rating will be 3,000 psi or greater.
- 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 5,000 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 750 psi maximum after cementing in place and before drilling out of shoe. Production casing will be tested to +/- 4,000 psi after cementing in place and after drilling to the required depth. The production tubing head pressure rating will be 5,000 psi. Anticipated frac pressure, 3200# (not to exceed wellhead pressure ratings or 85% of casing pressure ratings).
- d. Hydraulic controls to close the BOPs are located near the rig floor; the hydraulic remote control is located near the doghouse. There will be no manual controls on the BOP.
- e. BOP testing procedures and frequency:

A B Geren #3A

S24, T29N, R9W, 1700' FNL & 985 FWL

San Juan Co., New Mexico

Lease SF 80000A

1. Hydril (3,000WP) will be rated at >750 psi.
 2. Double ram BOPs will be tested 750 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:

Surface Casing	12 1/4" hole	8 5/8"	24.0#	J-55 STC	New
Production Casing	6 3/4" hole	4 1/2"	10.5#	J-55 STC	New

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

8 5/8" Surface Casing – Surface to 150' – Cement with 105 sks Class B (15.6 ppg, slurry yield 1.18 cf/sk) Cement + 2% Calcium Chloride + .25 lbs/sk Cello Flake. Cement Properties: Volume: 123.9.1 cf., includes 100% excess. Three (3) centralizers will be run on the bottom 3 joints, starting at the shoe joint.



4 1/2" Production Casing – Surface to 2599' – Cement volumes will be adjusted to actual setting depths:

Lead with 220 sks Class B (12.5 ppg, slurry Yield 2.09 cf/sk) + 2% Sodium Metasilicate + .25 lb/sk Cello Flake + 3pps Gilsonite + 11.10 gal/sk Fresh Water. Volume: 460 cf., includes 50% excess.

Tail with 75 sks Class B Cement (14.5 ppg, slurry Yield 1.55 cf/sk) + 4% Bentonite Gel + .25 lb/sk Cello Flake + 2% CaCl + 3 pps Gilsonite. Volume: 105 cf. includes 50% excess. Volumes will be adjusted to setting depth. Three (3) centralizers will be run on the bottom three joints, then every 10th joint thereafter or (+ or-) 400' and turbolators to impact a swirling action will be placed just below and into the base of the Ojo Alamo.

5) Mud Program:

0' – 150' – Spud mud and/or water and polymer.
150' – 2599' - Lime mud, water and polymer.

6) Testing, Logging, and Coring Program:

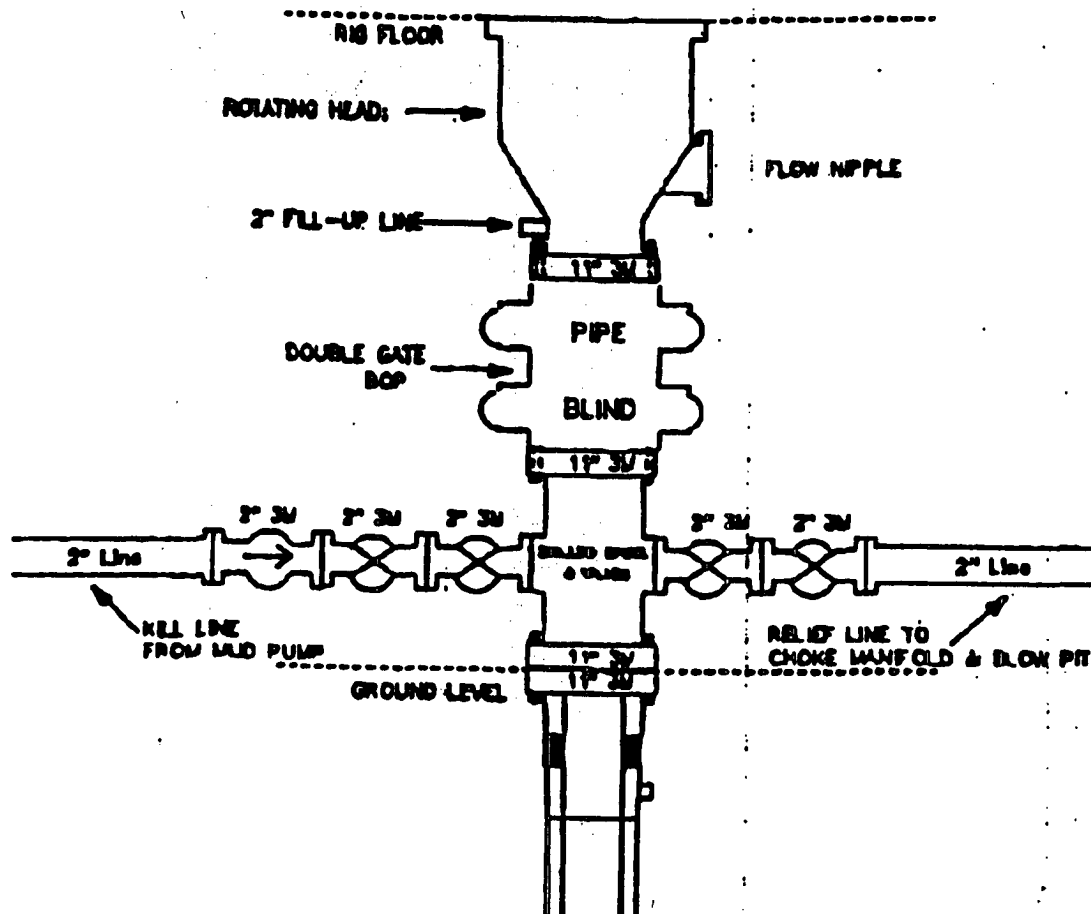
No drill stem tests or cores will be taken.

Logging: Production Casing – First Run – Gamma Ray – Casing Collar Locator – Cement Bond Log. (If cement circulates to surface, no CBL will be run.)
Second Run – Gamma Ray – Gas Spectrum Log; or Gamma Ray-DIL,

FOUR CORNERS
P. O. BOX 1067
8681 U.S. HWY. 84
FARMINGTON, NEW MEXICO 87400

TELEPHONE: (505) 326-3371
FAX: (505) 326-3370

Drilling Rig 3000 psi System



11" Bore (10" Nominal), 3000psi working pressure minimum double gate BOP to be equipped with blind and pipe rams. A rotating head on the top of the rams. All BOP equipment is 3000psi working pressure.

Note: A floor safety valve and upper kelly cock with handle will be available.

Exhibit "F-1"