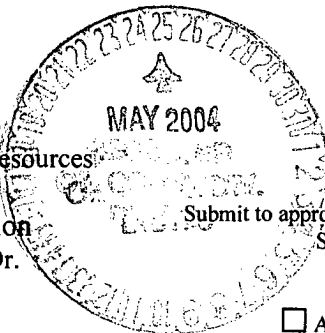


District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505



Form C-101
March 4, 2004

Submit to appropriate District Office
State Lease - 6 Copies
Fee Lease - 5 Copies

☐ AMENDED REPORT

APPLICATION FOR PERMIT TO DRILL, RE-ENTER, DEEPEN, PLUGBACK, OR ADD A ZONE

¹ Operator Name and Address Koch Exploration Company, LLC PO Box 489, Aztec, NM 87410		OGRID Number 12807
		API Number 30 - 045-32360
³ Property Code 18433	⁵ Property Name Aggie State 32	⁶ Well No. 1A

⁷ Surface Location

UL or lot no	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
J	32	29N	9W		1840	South	1475	East	San Juan

⁸ Proposed 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
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⁹ Proposed Pool 1 Basin Fruitland Coal	¹⁰ Proposed Pool 2
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Drilling Pit Location and Other Information

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
J	32	29N	9W		1840	South	1475	East	San Juan

Depth to ground water <50'	Distance from nearest fresh water well >1000'	Distance from nearest surface water <200'
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¹¹ Work Type Code N	¹² Well Type Code G	¹³ Cable/Rotary R	¹⁴ Lease Type Code S	¹⁵ Ground Level Elevation 6242'
¹⁶ Multiple N	¹⁷ Proposed Depth 2672'	¹⁸ Formation Basin Fruitland Coal	¹⁹ Contractor D&D Services, LLC	²⁰ Spud Date June 20, 2004

²¹ Proposed Casing and Cement Program

Hole Size	Casing Size	Casing weight/foot	Setting Depth	Sacks of Cement	Estimated TOC
12 1/4"	8 5/8"	24#	150'	105	Surface
6 3/4"	4 1/2"	10.5#	2672'	303	Surface

²² Describe the proposed program. If this application is to DEEPEN or PLUG BACK, give the data on the present productive zone and proposed new productive zone. Describe the blowout prevention program, if any. Use additional sheets if necessary.

We intend to drill a new gas well. Please see attached Drilling Plan for blowout prevention program.

²³ I hereby certify that the information given above is true and complete to the best of my knowledge and belief. I further certify that the drilling pit will be constructed according to NMOCD guidelines ☐ a general permit ☒ or an (attached) alternative OCD-approved plan ☐.

Signature:

Printed name: Don Johnson

Title: Field Operations Manager

E-mail Address: johnso4d@kochind.com

Date: 5/25/04

Phone: (505)334-9111

OIL CONSERVATION DIVISION

Approved by:

Title: DEPUTY OIL & GAS INSPECTOR, DISTRICT

Approval Date: MAY 25 2004

Expiration Date: MAY 25 2005

Conditions of Approval:

Attached ☐

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

¹ API Number 30-045-32360		² Pool Code 71629		³ Pool Name Basin Fruitland Coal		
⁴ Property Code 18433		⁵ Property Name AGGIE STATE 32			⁶ Well Number IA	
⁷ OGRID No. 12807		⁸ Operator Name KOCH EXPLORATION Company, LLC			⁹ Elevation 6242	

¹⁰ Surface Location


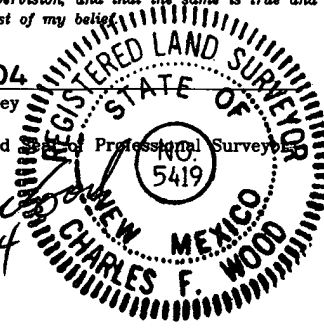
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
J	32	29 N	9 W		1840	SOUTH	1475	EAST	SAN JUAN

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

¹² Dedicated Acres 320	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ 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 5105.76'	S 89°33' W	Existing Well Aggie State 32-1 2070' FNL & 810' FEL API #30-045-28090 SECTION 32	2070'	5237.76'	5140.08'	¹⁷ OPERATOR CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief	
	Signature 						
	Printed Name Lance F. Harmon						
	Title Vice President - Land						
						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	
						Date of Survey 3/30/04	
						Signature and Seal of Professional Surveyor  4/4/04	
N 1°56' E	N 89°56' W	1840'	1475'	5188.92'	N 2°34' E	Certificate Number	

Aggie State 32-1A

S32, T29N, R9W, 1840' FSL & 1475 FEL

San Juan Co., New Mexico

Lease E 6153

Drilling Program

1) Geological name of surface formation -

Estimated tops of important geological markers:

San Jose	Surface
Ojo	1463'
Kirtland Shale	1568'
Fruitland Coal	2206'
Pict. Cliffs	2552'
TD	2672'

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

Fresh Water	0' to 1568'
Salt Water	1568' to 2206'
Oil and/or Gas	2206' to 2672'

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. 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 will be used. 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 2,000 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:

1. Hydril (3,000WP) will be rated at > 750 psi.

Aggie State 32-1A

S32, T29N, R9W, 1840' FSL & 1475 FEL

San Juan Co., New Mexico

Lease E 6153

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. *Circulate cement*

4 1/2" Production Casing – Surface to 2672' – Cement volumes will be adjusted to actual setting depths:

Lead with 227 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: 474 cf. includes 50% excess.

Tail with 76 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: 106 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'–2672' - 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,
No Open Hole Logs are planned.

Aggie State 32-1A

S32, T29N, R9W, 1840' FSL & 1475 FEL

San Juan Co., New Mexico

Lease E 6153

7) Expected Pressures –

Fruitland Fm. 600 psi

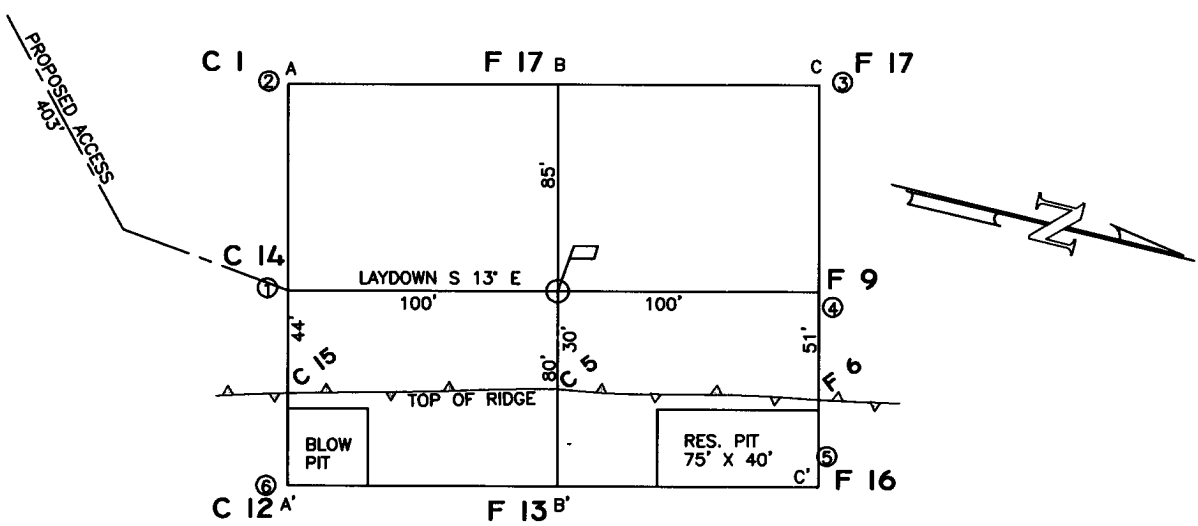
Bottom Hole 200 psi

No abnormal pressures, temperature or poisonous gas anticipated.

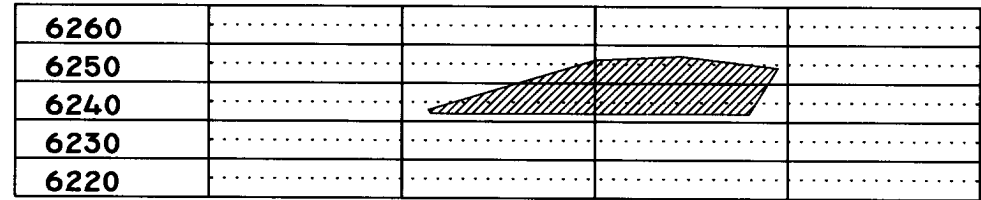
8) Drilling Tools: 2 5" Drill Collars with 3-1/2" IF Connections
3-1/2" Drill Pipe with 3-1/2" IF Connections

Anticipated Spud Date: June 20, 2004

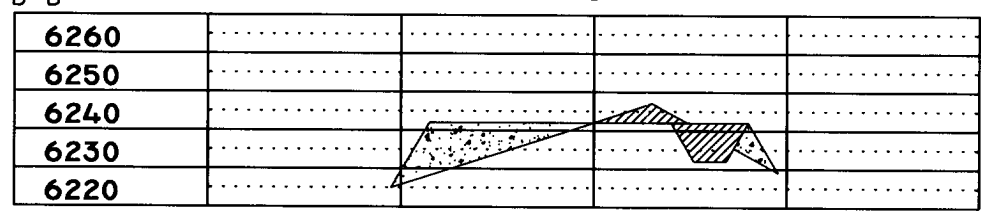
Anticipated Completion Date: July 20, 2004



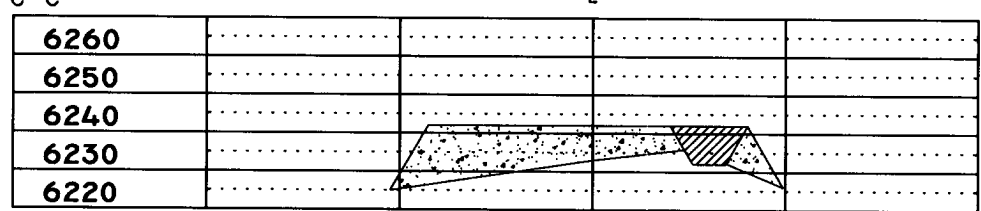
ELEVATION A-A'



B-B'



C-C'



LEASE: AGGIE STATE 32 #1A

FOOTAGE: 1840' FSL, 1475' FEL

SEC. 32 TWN. 29-N RNG. 9-W N.M.P.M.

LATITUDE: 36°40'50" LONGITUDE: 107°48'04"

ELEVATION: 6242

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: 949CF01
		P.O. BOX 3651 FARMINGTON, NM 87499 OFFICE: (505) 334-0408