Form	3160
41	10021

### UNITED STATES

SUBMIT IN TRIPLICATE.

FORM APPROVED

OMB NO 1004-0136

V P E 7. TE 1) P 364 - 04- (130)

	(July 1992) DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT			5. LEASE DESIGNATION AND SERIAL NO.		
APPLICATION FOR PERMIT TO DRILL OR DEEPEN				NM-013642		
			6. IF	6. IF INDIAN, ALLOTTEE OR TRIBE NAME NA		
DRILL X DEEPEN DEEPEN		i i	7. UNIT AGREEMENT NAME NA S758			
b. TYPE OF WELL  OIL WELL GAS WELL GOTHER SINGLE ZONE Z  NAME OF OPERATOR  1891977			8. FARM OR LEASE NAME, WELL NO.  Gardner 6  9. APLWELL NO.			
		· -				
Coch Exploration Comp			7.7.7. Y. A.	30-045-3	30740	
ADDRESS AND TELEPHONE NO. O. Box 489, Aztec, NM (505) 334-9111		· /\	10. FIELD AND POOL, OR WILDCAT			
O Box 489, Aziec, N	cation clearly and in accordance with an		** ****	Blanco Mesa Verde		
LOCATION OF WELL (Report lost to the state of the state o	705' FNL & 2465' FWL	CHANGE OF		EC., T., R., M., OR BLK A		
t proposed prod. zone	Same		* S25	5, T32N, R9W (C		
A DISTANCE IN MILES AND DIR	ECTION FROM NEAREST TOWN OI	R POST OFFICE*	3.3	OUNTY OR PARISH	13. STATE NM	
Approx. 18 miles NE of	Aztec, NM			ı Juan	INIVI	
S. DISTANCE FROM PROPOSED* EAREST PROPERTY OR LEASE	LINE, FT. (Also to 705'	16. NO. OF ACRES IN LEASE 317.06		IGNED TO THIS WELL 317.06 N	72	
B. DISTANCE FROM PROPOSED* BEAREST WELL, DRILLING, CON	LOCATION TO 1019'	19, PROPOSED DEPTH	20, ROTARY OR CABL	e tools Rotary		
PPLIED FOR ON THE LEASE, FI	III DE LEDI, OIL	6500'	<u> </u>	APPROXIMATE DATE W	ORK WILL START*	
I. ELEVATIONS (Show whether Di	F, RT, GR, etc. 6874' GR			_10	/1/2001	
	0074 OK	PROPOSED CASING AND	EMENTING PROGRAM			
3	GRADE, SIZE OF CASING	WEIGHT PER FOOT	SETTING DE		QUANTITY OF CEMENT	
SIZE OF HOLE 12 1/4"	9 5/8" J-55	36#	220' +/-		112 sacks Circ	
	7 57 0 0 0					
	7" J-55	23#	4250' +	/-	510 sacks Circ	
8 3/4" 6 1/4" See Attached	7" J-55 4 1/2" J-55 ction is subject to techniques review pursuant to	10.5# cel end 43 CFR 8168.6	ORILLING	COTTO A TONG AL	203 sacks Lement to 4 ITHORIZED AND WITH ATTACHED	
8 3/4" 6 1/4" See Attached This approved and ap	4 1/2" J-55 ction is subject to technicular review pursuant to openi pursuant to 43 CPF	10.5# col and 43 CFR \$165.5 R \$165.4.	DRILLING (SUBJECT )	OPERATIONS ALTO GOMPLIANCE	203 sacks General to g THORIZED AND E WITH ATTACHED TB"	
8 3/4" 6 1/4" See Attached This a proceed and as	4 1/2" J-55 ction is subject to technique review pursuant to peak pursuant to 43 CPF	10.5#	DRILLING (SUBJECT )	OPERATIONS ALTO GOMPLIANCE	203 sacks General to 4 ITHORIZED AND E WITH ATTACHED TS"	
8 3/4" 6 1/4" See Attached This a proceed and as	4 1/2" J-55 ction is subject to technicular review pursuant to openi pursuant to 43 CPF	10.5#	DRILLING (SUBJECT )	OPERATIONS ALTO GOMPLIANCE REQUIREMENT	203 sacks General to 4  THORIZED ARE E WITH ATTACHED TO deepen directionally, give pertinent data	
8 3/4" 6 1/4" See Attached This a proceed and as	4 1/2" J-55 ction is subject to technique review pursuant to peak pursuant to 43 CPF	10.5#	ORHLING GUBJECT TO GENERAL	OPERATIONS ALTO GOMPLIANCE REQUIREMENT	203 sacks General to 9 ITHORIZED AND E WITH ATTACHED TB"	
8 3/4" 6 1/4" See Attached This approved and approved approved approved and approved ap	4 1/2" J-55  ction is subject to technical review pursuant to peak pursuant to A3 CPP  POSED PROGRAM: If proposal is to deep and true vertical depths. Give blowout previous process.	pen, give data on present productive zone venter program, if any.	ORHLING GUBJECT TO GENERAL	OPERATIONS AND GOMPLIANCE REQUIREMENT	or deepen directionally, give pertinent data	
8 3/4" 6 1/4" See Attached This approved and approved approved approved and approved ap	4 1/2" J-55  ction is subject to technical review pursuant to peak pursuant to A3 CPP  POSED PROGRAM: If proposal is to deep and true vertical depths. Give blowout previous process.	pen, give data on present productive zone venter program, if any.	6500' DRILLING ( BUBJECT 1 "GENERAL	OPERATIONS AND GOMPLIANCE REQUIREMENT	or deepen directionally, give pertinent data	
8 3/4" 6 1/4" See Attached This approved and as	POSED PROGRAM: If proposal is to deep ant true vertical depths. Give blowout prevuese)	pen, give data on present productive zone venter program, if any.  TITLE:Operations Manager	6500' DRILLING ( BUBJECT 1 "GENERAL  and proposed new productive  APPROVAL DATE:	OPERATIONS AND GOMPLIANCE REQUIREMENT  DATE:	or deepen directionally, give pertinent data  7/3/6./	
8 3/4" 6 1/4" See Attached This approved and as 1/2 and	POSED PROGRAM. If proposal is to deep and true vertical depths. Give blowout previous or certify that the applicant holds legal or	pen, give data on present productive zone venter program, if any.  TITLE:Operations Manager	6500' DRILLING ( BUBJECT 1 "GENERAL  and proposed new productive  APPROVAL DATE:	OPERATIONS AND GOMPLIANCE REQUIREMENT  DATE:	or deepen directionally, give pertinent data  7/3/8/	
8 3/4" 6 1/4" See Attached This approved and as a series of the subsurface locations and measured a subsurface locatio	POSED PROGRAM. If proposal is to deep and true vertical depths. Give blowout previous or certify that the applicant holds legal or	pen, give data on present productive zone venter program, if any.  TITLE:Operations Manager	6500' DRILLING ( BUBJECT 1 "GENERAL  and proposed new productive  APPROVAL DATE:	OPERATIONS AND GOMPLIANCE REQUIREMENT  DATE:	or deepen directionally, give pertinent data  7/3/8/	

District 1 PO Box 1980, Hobbs, NM 88241-1980 District II 811 South First, Artesia, NM 88210 District III 1000 Rio Brazon Rd., Aztec, NM 87410

District IV

# State of New Mexico Energy, officerais & Natural Resources Department

1 01111 C-102 Revised October 18, 1994 Instructions on back Submit to Appropriate District Office

State Lease - 4 Copies Fee Lease - 3 Copies

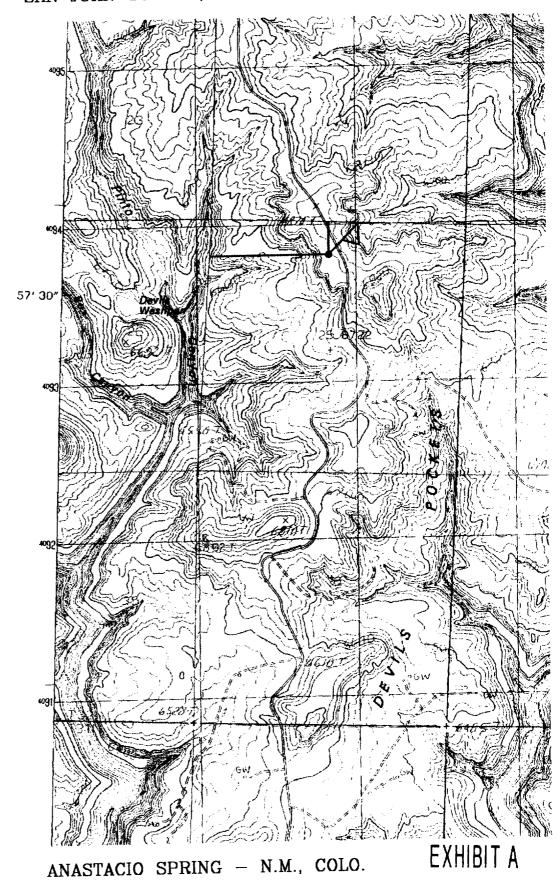
☐ AMENDED REPORT

OIL CONSERVATION DIVISION 2040 South Pacheco Santa Fe, NM 87505

2040 South Pacheco, Santa Fe, NM 87505 WELL LOCATION AND ACREAGE DEDICATION PLAT Pool Name 1 Pool Code Verde Blanco Mesa \* Well Number <sup>3</sup> Property Nume Property Code 6 GARDNER <u>5656</u> \* Elevation Operator Name OGRID No. 6874' KOCH EXPLORATION 12807 10 Surface Location Feet from the East/West line County North/South line Feet from the Lot Ida Township Runge Section UL or lot no. SAN JUAN WEST 2465' NORTH 705' Bottom Hole Location If Different From Surface East/West line County North/South line Feet from the Feet from the Lot Idn Township Range UL or lot no. Section 15 Order No. 14 Consolidation Code 12 Dedicated Acres " Joint or Infill 317.06 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 17 OPERATOR CERTIFICATION 5229.84 N88°56'W I hereby certify that the information contained herein is 2614.92 true and complete to the best of my knowledge and belief 705'-1 2 <del>2465</del> 5261.52 NM-Printed Na 5239.74 8 6 2630.76 5 Title Date ---- SECTION 25 18SURVEYOR 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. 6 11 12 04/24/01 C. Date of Survey N00°49'E 16 15 14 13 Nb2°10'E Certificate Number 5355.24 N89908'W PROPESSION

# KOCH EXPLORATION CO. GARDNER #6

705' FNL, 2465' FWL, EL. 6874
SECTION 25, T-32-N, R-9-W, N.M.P.M.,
SAN JUAN COUNTY, NEW MEXICO



Gardner #6 ==> EXPEDITED Right-of-Way!

Sec 25-T32N-R9W, 705' FNL & 2465' 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
Nacimiento	918 feet
Ojo	2,023 feet
Kirtland Shale	2,278 feet
Fruitland Coal	3,427 feet
Picture Cliff	3,753 feet
TD	6,500 feet

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

Fresh Water 0 feet to 200 feet
Salt Water 201 feet to 3,200 feet
Oil and Gas 3,201 feet to 6,500 feet

# 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** 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. 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.

## Gardner #6 ==> EXPEDITED Right-of-Way!

Sec 25-T32N-R9W, 705' FNL & 2465' FWL

San Juan Co., New Mexico

Lease NM-013642

- e. BOP testing procedures and frequency:
  - 1. Hydrill (3,000 WP) 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 easing 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	9 5/8 inch	36.0# J-55 STC	New
Intermediate Casing	7 inch	23.0# J-55 STC	New
Production Casing	4 ½ inch	10.5# J-55 STC	New

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

9-5/8 inch Surface Casing - Surface to 220 feet - Cement with 112 sx "Type III Cement" with 2% CaCl<sub>2</sub> + 0.25 lbs/sack Celloflake (14.6 lb/gal; 1.39 cf/sk; 6.67 gal/sk) Volume: 155 scf. 100% Excess.

7 inch Intermediate Casing – Surface to 4250 feet With DV Stage Tool @ +/- 3200 feet, Stage 1: cement with 170 sacks "Type III Cement" + 0.25 lbs/sk Cello Flake + 1% CaCI<sub>2</sub>, Volume: 238 scf, (14.5# lb/gal; 1.4 cf/sk; 6.82 gal/sk) Stage 2: Lead cement of 290 sacks Premium Lite FM + 8% Bentonite +0.4% Sodium Metasilicate + 1% CaCI<sub>2</sub> Volume: 621 scf, (12.0# lb/gal; 2.15 cf/sk; 12.08 gal/sk), Tail cement of 50 sacks Type III + 1% CaCI<sub>2</sub> + 0.25 lbs/sk Cello Flake. Volume: 65 scf, (14.5# lb/gal; 1.4 cf/sk; 6.82 gal/sk).

4-½ inch Production Casing – Surface to 6500'. Cement 4000' to 6500' – Lead with 30 sacks Premium Lite High Strength FM + 3% Potassium Chloride + 0.25 lbs/sk Cello Flake + 2% Pheno Seal + 0.4% FL-52. Volume: 122 scf, (10.5# lb/gal; 4.06 cf/sk; 25.70 gal/sk). Tail with 173 sacks Premium Liter High Strength FM + 3% Potassium Chloride + 0.25 lbs/sk Cello Flake + 2% Pheno Seal + 0.4% FL-52. Volume: 401 scf, (12.0# lb/gal; 2.32 cf/sk; 12.82 gal/sk). Cement 4000' to 6500' – Lead with 30 sacks Premium Liter High Strength Chloride + 0.25 lbs/sk Cello Flake + 2% Pheno Seal + 0.4% FL-52. Volume: 401 scf, (12.0# lb/gal; 2.32 cf/sk; 12.82 gal/sk).

#### 5. Mud Program:

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

220 feet - 4250 feet - Lime mud, water and polymer.

4250 feet - 6,500 feet - air, produced or fresh water, soap and polymer

## 6. Testing, Logging and Coring Program:

No drill stem tests or cores will be taken.