



*Note to File:*  
State of New Mexico  
OIL CONSERVATION COMMISSION

From  
MICHAEL E. STOGNER  
PETROLEUM ENGINEER

*MS.*

# Memo

To

*Talked w/ Rick Sepulveda*

*1) 9:45 a.m. Monday Nov. 3, 2003*

*2) 9:10 a.m. Monday Nov. 17, 2003*

*the SW 1/4 of Section 27 is a  
Federal lease w/ 100 WI owner  
by Forish.*

P.O. BOX 2088  
LAND OFFICE BUILDING  
SANTA FE, NEW MEXICO 87501  
505-827-5811

CMD :  
OG5SECT

ONGARD  
INQUIRE LAND BY SECTION

10/15/03 12:18:16  
OGOMES -TQB9  
PAGE NO: 1

Sec : 27 Twp : 14S Rng : 29E Section Type : NORMAL

D 40.00	C 40.00	B 40.00	A 40.00
Federal owned	Federal owned	Federal owned	Federal owned
A		A	
E 40.00	F 40.00	G 40.00	H 40.00
Federal owned	Federal owned	Federal owned	Federal owned
		A	A

PF01 HELP	PF02	PF03 EXIT	PF04 GoTo	PF05	PF06
PF07 BKWD	PF08 FWD	PF09 PRINT	PF10 SDIV	PF11	PF12

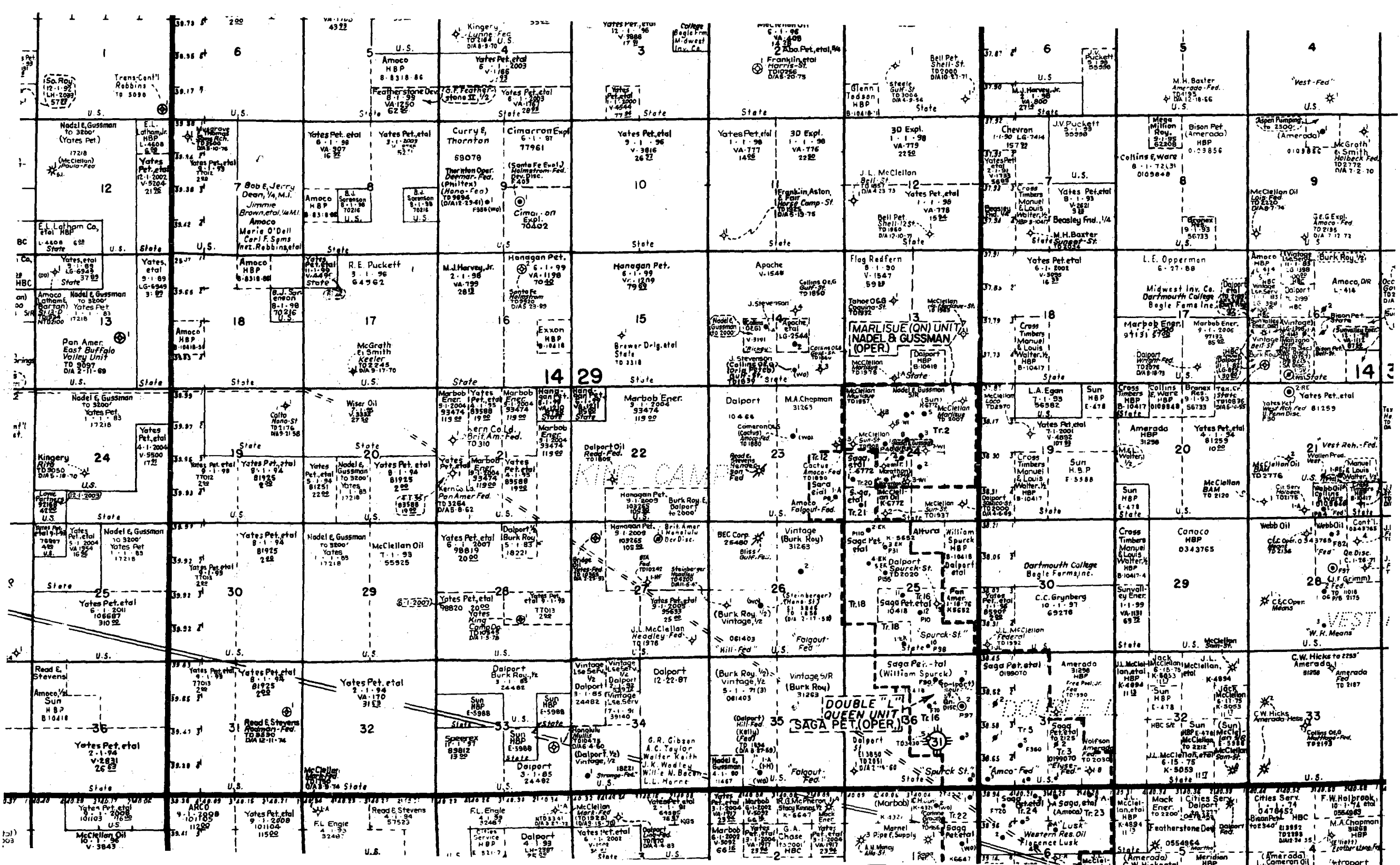
CMD :  
OG5SECTONGARD  
INQUIRE LAND BY SECTION10/15/03 12:18:27  
OGOMES -TQB9  
PAGE NO: 2

Sec : 27 Twp : 14S Rng : 29E Section Type : NORMAL

L 40.00  Federal owned	K 40.00  Federal owned	J 40.00  Federal owned	I 40.00  Federal owned
M 40.00  Federal owned	N 40.00  Federal owned	O 40.00  Federal owned	P 40.00  Federal owned
			A

*Handwritten notes:*  
A circle around section M.  
A large 'X' over section K.  
Text 'Fossil' and '100%' written over section N.  
Text 'WI' written over section N.  
Text 'C. J. J. J.' written over section N.

PF01 HELP  
PF07 BKWDPF02  
PF08 FWDPF03 EXIT  
PF09 PRINTPF04 GoTo  
PF10 SDIVPF05  
PF11PF06  
PF12



CMD : ONGARD 10/15/03 12:18:43  
OG6C101 C101-APPLICATION FOR PERMIT TO DRILL OGOMES -TQB9

OGRID Idn : 214263 API Well No: 30 5 441 APD Status(A/C/P): A  
Opr Name, Addr: PRE-ONGARD WELL OPERATOR Aprvl/Cncl Date : 01-01-1900  
1220 S ST FRANCIS  
SANTA FE,NM BADADDR

Prop Idn: 30041 PRE-ONGARD WELL Well No: 1

	U/L	Sec	Township	Range	Lot	Idn	North/South	East/West
	---	---	-----	-----	-----	-----	-----	-----
Surface Locn : G	27	14S	29E				FTG 2310 F N	FTG 2310 F E
OCD U/L : G		API	County	5				

Work typ(N/E/D/P/A) : N Well typ(O/G/M/I/S/W/C): O Cable/Rotary (C/R) :  
Lease typ(F/S/P/N/J/U/I): F Ground Level Elevation :

State Lease No: Multiple Comp (S/M/C) :  
Prpsd Depth : Prpsd Frmtn : BTA OIL PRODUCERS /FEDERAL HF

E0009: Enter data to modify record

PF01 HELP	PF02	PF03 EXIT	PF04 GoTo	PF05	PF06 CONFIRM
PF07	PF08	PF09 PRINT	PF10 C102	PF11 HISTORY	PF12

N.M. Oil Cons. DIV-Dist. 2  
1301 W. Grand Avenue  
Artesia, NM 88210

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER

FORM APPROVED  
OMB No. 1004-0136  
Expires November 30, 2000

1a. Type of Work: <input type="checkbox"/> DRILL <input checked="" type="checkbox"/> REENTER		5. Lease Serial No. NM-103265
1b. Type of Well: <input type="checkbox"/> Oil Well <input checked="" type="checkbox"/> Gas Well <input type="checkbox"/> Other <input checked="" type="checkbox"/> Single Zone <input type="checkbox"/> Multiple Zone		6. If Indian, Allottee or Tribe Name
2. Name of Operator Fossil Operating, Inc.		7. If Unit or CA Agreement, Name and No.
3a. Address 9870 Plano Rd. Dallas, TX 75238		8. Lease Name and Well No. Fossil Operating Fed. Com. #2
3b. Phone No. (include area code) 972-681-8047		9. APL Well No. 30-005-00441
4. Location of Well (Report location clearly and in accordance with any State requirements) At surface 2310' FNL & 2310' FEL At proposed prod. zone same		10. Field and Pool, or Exploratory Wildcat (Wolfcamp)
14. Distance in miles and direction from nearest town or post office* 24 miles east of Hagerman, NM		11. Sec., T., R., M., or Blk. and Survey or Area Sec. 27-T14S-R29E
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) 330'	16. No. of Acres in lease 360	12. County or Parish Chaves
17. Spacing Unit dedicated to this well 320	18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. 1345'	13. State NM
19. Proposed Depth 10,242'	20. BLM/BIA Bond No. on file NMB-000036	
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 3827' GL	22. Approximate date work will start* 9/27/03	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 <i>George R. Smith</i>	Name (Printed/Typed) George R.. Smith	Date 9/12/03
Title agent for Fossil Operating, Inc.		
Approved by (Signature) <i>LARRY D. BRAY</i>	Name (Printed/Typed) LARRY D. BRAY	Date OCT 07 2003
Title Assistant Field Manager, Lands And Minerals	Office ROSWELL FIELD OFFICE	APPROVED FOR 1 YEAR

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)

Lease Responsibility Statement: Fossil Operating, Inc. accepts all applicable terms, conditions, stipulations, and restrictions concerning operations conducted on the leased land or portion thereof.

NSL-

RECEIVED  
2003 SEP 18 PM 4 27  
BUREAU OF LAND MGMT.  
ROSWELL FIELD OFFICE  
George R. Smith, agent

NEW MEXICO OIL CONSERVATION COMMISSION  
WELL LOCATION AND ACREAGE DEDICATION PLAT

FORM C-128  
Revised 5/1/57

SEE INSTRUCTIONS FOR COMPLETING THIS FORM ON THE REVERSE SIDE

SECTION A

Operator Fossil Operating, Inc. <b>B. T. A. OIL PRODUCERS</b>		Lease Fossil Operating Fed. Com. <b>"HF"</b>		Well No. <b>1</b>
Unit Letter <b>Q</b>	Section <b>27</b>	Township <b>14 South</b>	Range <b>29 East</b>	County <b>CHAVES</b>
Actual Footage Location of Well: <b>2310</b> feet from the <b>North</b> line and <b>2310</b> feet from the <b>East</b> line				
Ground Level Elev. <b>5826.8</b>	Producing Formation Wolfcamp(1) <b>DEVONIAN-(2nd Obj.)</b>	Pool Undesignated Wolfcamp <b>KING CAMP (ABANDONED)</b>	Dedicated Acreage: <b>320 40</b> Acres	

1. Is the Operator the only owner in the dedicated acreage outlined on the plat below? YES ☒ NO ☐ ("Owner" means the person who has the right to drill into and to produce from any pool and to appropriate the production either for himself or for himself and another. (63-3-29 (e) NMSA 1935 Comp.)
2. If the answer to question one is "no," have the interests of all the owners been consolidated by communitization agreement or otherwise? YES ☐ NO ☐ If answer is "yes," Type of Consolidation \_\_\_\_\_
3. If the answer to question two is "no," list all the owners and their respective interests below:

Owner	Land Description

RECEIVED

JUN 19 1961

U. S. GEOLOGICAL SURVEY  
ARTESIA, NEW MEXICO

CERTIFICATION

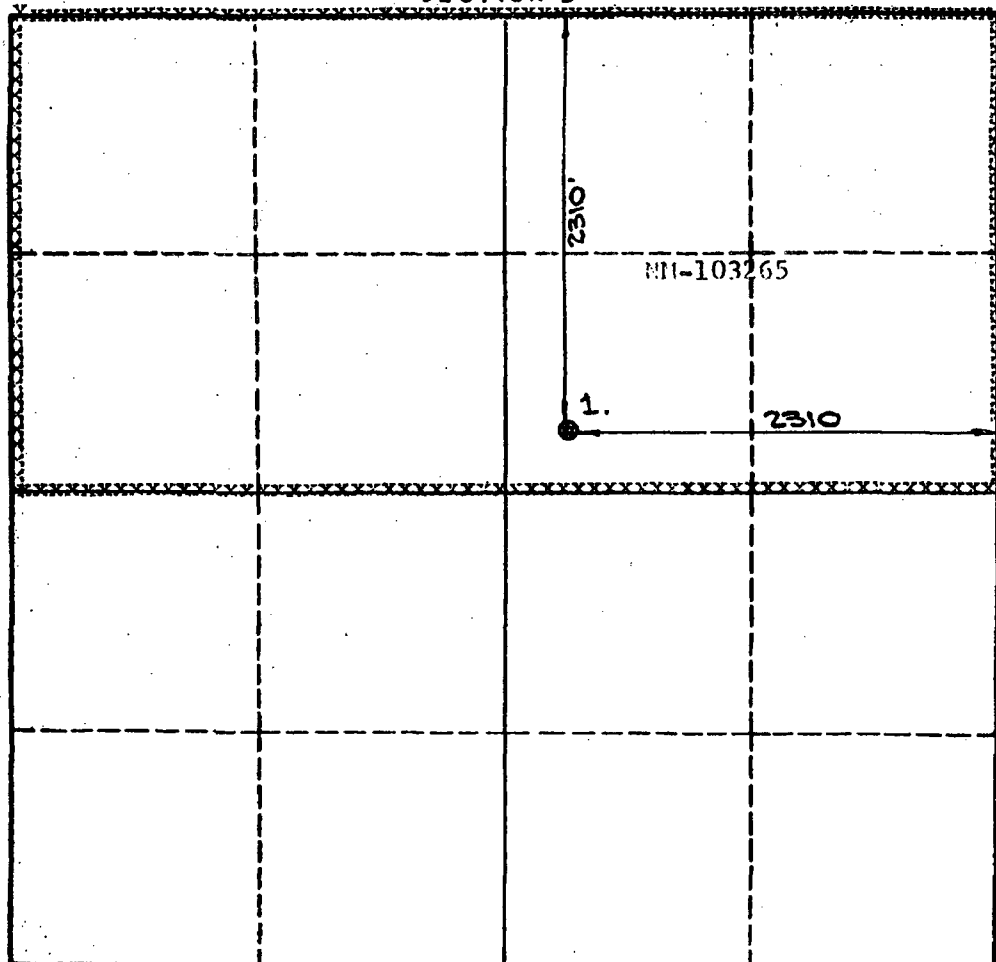
I hereby certify that the information in SECTION A above is true and complete to the best of my knowledge and belief.

Name	<b>J. B. Taylor</b>
Position	<b>Engineer</b>
Company	<b>B. T. A. Oil Producers</b>
Date	<b>June 15, 1961.</b>

I hereby certify that the well location shown on the plat in SECTION B 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 knowledge and belief.

Date Surveyed	<b>June 15, 1961</b>
Registered Engineer and/or Land Surveyor	<b>J. B. Taylor</b>
Certificate No.	<b>1000</b>

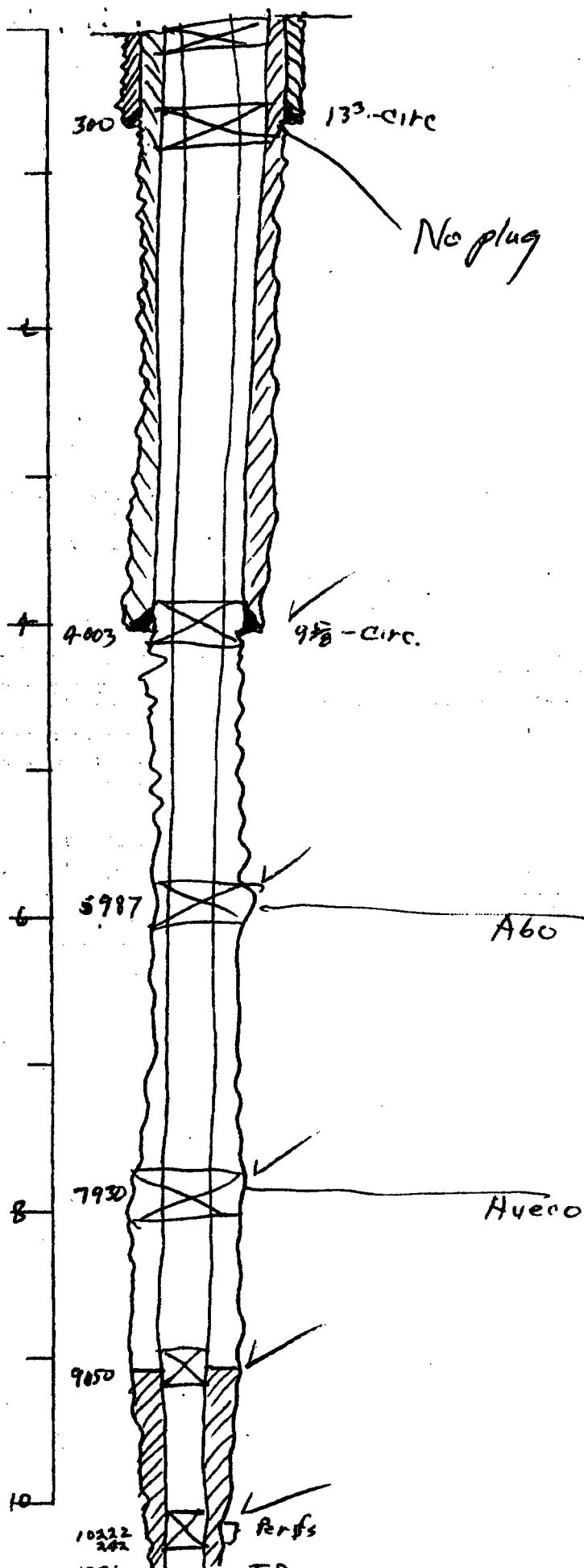
SECTION B



0 330 660 990 1320 1650 1980 2310 2640 2000 1500 1000 500 0

Sec. 27 T. 14 S., R. 29 E.  
 Operator B. A.  
 Well No. 1 Honolulu  
 Lease No. NM 04614-A  
 Who by Glenn Rader Date 3-15-61

T.D.  
 Tools  
 Hole sizes  
 Pipe & fill-up  
 Geologic tops  
 Surface water  
 Other water  
 Porous & lost circ. zones  
 DST  
 Marker with identification  
 Heavy mud in void zones  
 Fill pits  
 Clean location  
 Oil & Gas shows



Drilled to 8230 w/air



## **DRILLING PROFILE**

Tie back 13 3/8" surface casing and 8 5/8" intermediate casing to surface. Weld on "A" and "B" sections to appropriate casing. Test surface casing and test intermediate "B" section. Nipple up BOP, check all BOP lines, and test BOP.

Drill and clean out 17 sack surface plug using Cut Brine weighing 9.2-9.4 ppg. Go in hole to 3,950' 20 sack plug and drill out. Clean out to intermediate shoe and circulate all cement returns from plugs to reserve pit using 50-60 viscous Salt Water Gel pills. Begin treating system with biocide for any bacteria. Test intermediate shoe with leak off test.

Continue in hole and clean out 5,200' 20 sack plug. At 5,800' circulate the hole clean and sweep the hole with additional viscous pills with all returns going to the reserve pit. Raise the viscosity as needed to keep the hole clean. Adjust pH to 10 only as needed with Caustic Soda and treat cement as plugs are drilled at 6,500' (20 sks), 8,000' (20 sks), 8,400' (20 sks), and 10,142' (20 sks). Treat plugs as they are drilled with Bicarb and Sapp additions. Control solids with a high speed shaker and fresh water dilution. Lower filtrate to 12cc or less with Drispac and White Starch by the time the Wolfcamp is encountered at approximately 7,200'.

Have the filtrate to 6cc or less by the time the Woodford is reached at 10,160'. Should the Abo, Wolfcamp or Woodford shales prove to be troublesome add 1-4 ppb of Soltex to the system to aid in inhibition.

Clean hole out for tests or logging. Lay down drill string and change rams in BOP for 5 1/2" casing. Run production casing as designed.

## APPLICATION FOR DRILLING

**FOSSIL OPERATING, INC.**  
Fossil Operating Federal Com., Well No. 2  
2310' FNL & 2310' FEL, Sec. 27-T14S-R29E  
Chaves County, New Mexico  
Lease No.: NM-103265  
(Development Well Re-entry)

In conjunction with Form 3160-3, Application for Permit to Drill subject well, FOSSIL Operating, Inc. submits the following items of pertinent information in accordance with BLM requirements:

1. The geologic surface formation is recent Permian with quaternary alluvium and other surficial deposits.
2. The estimated tops of geologic markers are as follows:

Anhydrite	300'	Abo	5945'
Yates	1045'	Wolfcamp	7200'
Queen	1790'	Strawn	8670'
Grayburg	2135'	Atoka	9200'
San Andres	2410'	Chester	9450'
Glorieta	3910'	Missippian	9675'
Tubb	5230'	Devonian	10,232'
		T.D.	10,232

3. The estimated depths at which water, oil or gas formations are anticipated to be encountered:

Water: Surface water between 100' - 300'.

Oil: Possible in the Queen, San Andres, and Devonian

Gas: Possible in the Wolfcamp and Atoka.

4. Proposed Casing Program:

HOLE SIZE	CASING SIZE	WEIGHT	GRADE	JOINT	SETTING DEPTH	QUANTITY OF CEMENT
17 1/2"	13 3/8"	48.0#	J-55	ST&C	332'	Circ. 220 sx circ. to surface-Csg in hole
12 1/4"	8 5/8"	24.0#	J-55	ST&C	4,000'	Circ. 550 sx circ. to surface-Csg in hole
7 7/8"	5 1/2"	17.0#	N-80	LT&C	10,242'	640 sx "H"

5. Proposed Control Equipment: A 11" 5000 psi wp Shaffer, LWS Double Gate BOP will be installed on the 13 3/8" casing and operated as a 3000 psi wp system. Casing and BOP will be tested, as described in Onshore Order No. 2, before drilling out with the 7 7/8" to a maximum pressure of 1500 psi wp, and will be tested weekly. See Exhibit "E".

6. MUD PROGRAM:	MUD WEIGHT	VIS.	W/L CONTROL
0' - 5,800': Cut Brine mud:	9.2 - 9.4 ppg	28	No W/L control
5,800' - 7,200': Brine mud:	9.2 - 9.6 ppg	34 - 36	No W/L control
7,200' - 10,000': Brine mud	9.4 - 9.8 ppg	36 - 40	W/L control 12 cc +/-
10,000' - 10,242': Brine mud + add	9.6 - 10.0 ppg	40 - 42	W/L control 6 cc +/-

7. Auxiliary Equipment: Blowout Preventer, gas detector, Kelly cock, pit level monitor, flow sensors and stabbing valve.

8. Testing, Logging, and Coring Program:

Drill Stem Tests: None unless conditions warrant.

Logging: T.D to int. casing: -Schlumberger Platform Express

T.D. to Surface: GR-Neutron

Coring: Rotary Sidewall: as dictated by logs.

Fossil Operating, Inc.  
Fossil Operating Federal Com., Well No. 2  
Page 2

9. No abnormal pressures or temperatures are anticipated. In the event abnormal pressures are encountered the proposed mud program will be modified to increase the mud weight. Estimated evacuated BHP = 4620 psi and a surface pressure of 2310 psi with a temperature of 165°.
10. H<sub>2</sub>S: None expected.
11. Anticipated starting date: September 25, 2003.  
Anticipated completion of drilling operations: Approximately 30 days.

## **MULTI POINT SURFACE USE AND OPERATIONS PLAN**

**FOSSIL OPERATING, INC.**  
Fossil Operating Federal, Well No. 2  
2310' FNL & 2310' FEL, Sec. 27-T14S-R29E  
Chaves County, New Mexico  
Lease No.: NM-103265  
(Development Well - Re-entry)

This plan is submitted with the Application for Permit to Drill the above described well. The purpose of the plan is to describe the location of the proposed well, the proposed construction activities and operations plan to be followed in rehabilitating the surface and environmental effects associated with the operations.

### **1. EXISTING ROADS:**

- A. Exhibit "A" is a portion of a USGS Topographic map showing the location of the proposed well as staked. The well site location is approximately 22.7 road miles east of Hagerman, NM. Traveling east of Hagerman on N.M. Highway 249 there will be 20.7 miles of paved highway and 2 miles of county road.
- B. Directions: Travel east from Hagerman, NM on N. M. Highway 249 for approximately 20.7 miles to a County road (Jemina Rd) and cattleguard on the north (left) that runs north. Continue north for 1.6 miles; then turn right (east) on Katrina Rd for .3 mile to the access road that will run north for 200 feet to the southeast corner of the P/A well site, the Honolulu Fed. #1 drilled by BTA Oil Prod.

### **2. PLANNED ACCESS ROAD:**

- A. Length and Width: The access roads will run directly to the southeast corner of the well site. No additional roads will be required. The existing roads are color coded on Exhibit "A".
- B. Construction: None required.
- C. Turnouts: None required.
- D. Culverts: None.
- E. Cuts and Fills: None required.
- F. Gates, Cattle guards. None.
- G. Off lease right of way: None required.

### **3. LOCATION OF EXISTING WELLS:**

- A. Existing wells within a two-mile radius are shown on Exhibit "C".

### **4. LOCATION OF EXISTING AND/OR PROPOSED FACILITIES;**

- A. Fossil Operating, Inc. has no production facilities on the lease by this time.
- B. If the well proves to be commercial, the necessary production facilities, gas separation-process equipment and tank battery will be installed on the drilling pad

**FOSSIL OPERATING, INC.**

Fossil Operating Federal, Well No. 2

Page 2

**5. LOCATION AND TYPE OF WATER SUPPLY:**

- A. It is planned to drill the proposed well with brine water that will be obtained from private or commercial sources and will be transported over the existing and proposed access roads

**6. SOURCE OF CONSTRUCTION MATERIALS:**

- A. Caliche for resurfacing the well site pad, if required, will be obtained from the Fossil Oper. Fed. #1 well site location in the SENE Sec. 27, and the existing access road. A backup Federal pit is located in SE4 Sec. 20-T14S-R29E. No surface materials will be disturbed except those necessary for actual grading and watering of the existing drill site and access road.

**7. METHODS OF HANDLING WASTE DISPOSAL:**

- A. Drill cuttings will be disposed of in the reserve pits.
- B. Drilling fluids will be allowed to evaporate in the reserve pits until the pits are dry.
- C. All pits will be fenced with normal fencing materials to prevent livestock from entering the area.
- D. Water produced during operations will be collected in tanks until hauled to an approved disposal system, or a separate disposal application will be submitted to the BLM for approval.
- E. Oil produced during operations will be stored in tanks until sold.
- F. Current laws and regulations pertaining to the disposal of human waste will be complied with.
- G. Trash, waste paper, garbage and junk will be contained in trash bins to prevent scattering by the wind and will be removed for deposit in an approved sanitary landfill within 30 days after finishing drilling and/or completion operations.

**8. ANCILLARY FACILITIES:**

- A. None required.

**9. WELL SITE LAYOUT:**

- A. Exhibit "D" shows the relative location and dimensions of the well pad, reserve pits, and major rig components. The pad and pit area has been staked and flagged, 400' X 400'.
- B. Mat Size: 225' X 165', plus 100' X 100' reserve pits on the west.
- C. Cut & Fill: The existing location will require grading and watering.
- D. The surface will be topped with compacted caliche, as needed, and the reserve pits will be plastic lined.

**10. PLANS FOR RESTORATION OF THE SURFACE:**

- A. After completion of drilling and/or completion operations, all equipment and other material not required for operations will be removed. Pits will be filled and the location cleaned of all trash and junk to leave the well site in an aesthetically pleasing a condition as possible.
- B. Any unguarded pits containing fluids will be fenced until they are filled.
- C. If the proposed well is non-productive, all rehabilitation and/or vegetation requirements of the Bureau of Land Management will be complied with and will be accomplished as expeditiously as possible. All pits will be filled and leveled as soon as they are dry enough to be worked.

**11. OTHER INFORMATION:**

- A. Topography: The proposed well site and access road are located on a gentle 1.4% slope to the northwest. The location has an elevation of 3827' GL.
- B. Soil: The topsoil at the well site is a light tan sandy loam soil with some with possible underlying caliche rock. The soil is part of the Tencee gravelly sandy loam series.
- C. Flora and Fauna: The vegetation cover has a sparse grass cover of threeawn, grama, dropseed, bush muhly, along with plants of mesquite, yucca, broomweed, sage, cacti and miscellaneous weeds and wildflowers. The wildlife consists of rabbits, coyotes, antelope, rattlesnakes, lizards, dove, quail and other wildlife typical of the semi-arid desert land.
- D. Ponds and Streams: None.
- E. Residences and Other Structures: None in the immediate vicinity.
- F. Land Use: Cattle grazing.

**11. OTHER INFORMATION:     cont.....**

- G. Surface Ownership: The proposed well site and access road are on Federal surface and minerals.
- H. There is no evidence of archaeological, historical or cultural sites on the existing pad and road area. No archaeological survey will be required, since no new surface disturbance will be required.

**12. OPERATOR'S REPRESENTATIVE:**

- A. The field representative for assuring compliance with the approved use and operations plan is as follows:


Calvin Wallen  
Fossil Operating, Inc.  
P.O. Box 181688  
Dallas, TX 75218  
Office Phone: (972) 681-8047  
Cell Phone: (214) 668-0101

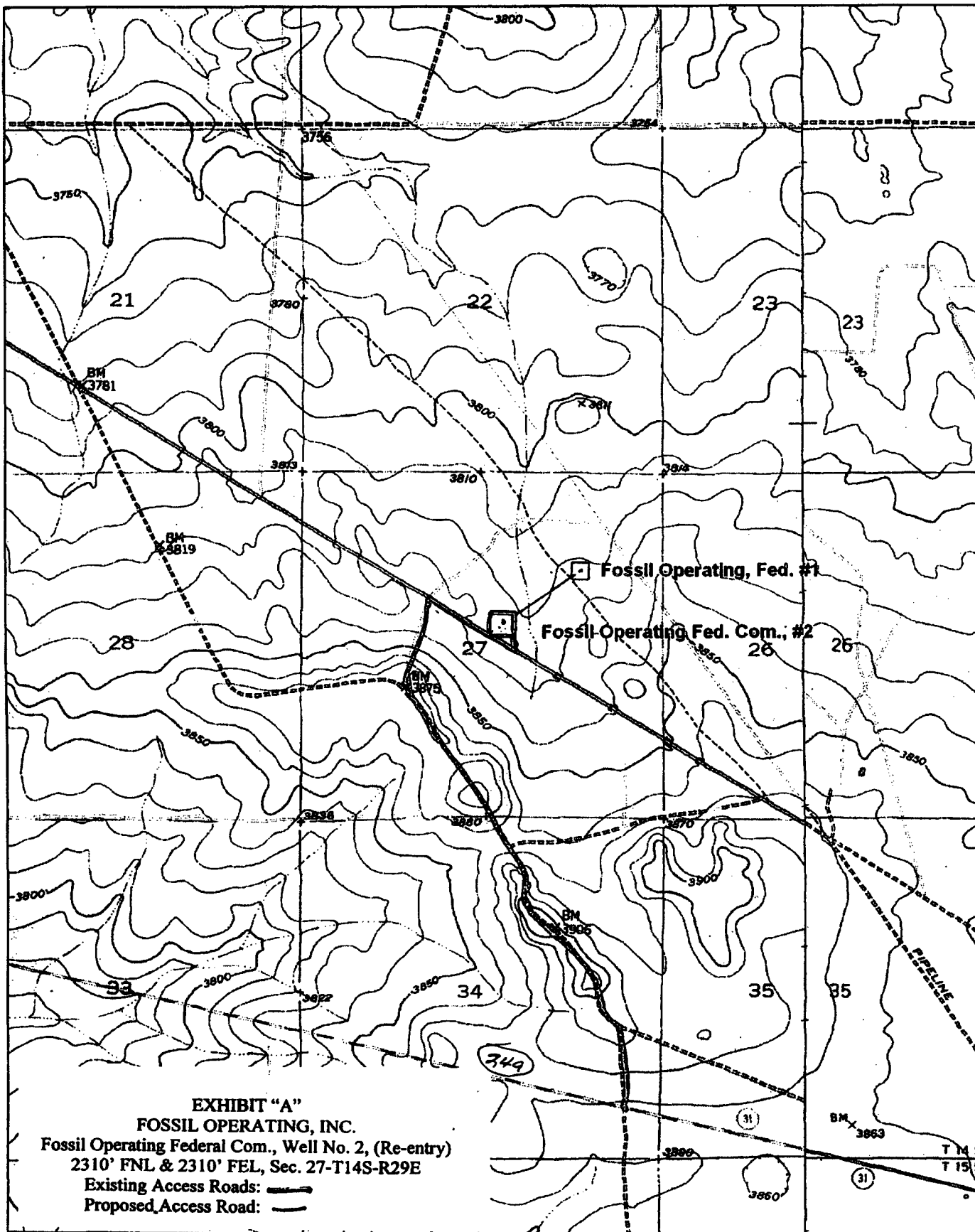
**FOSSIL OPERATING, INC.**  
Fossil Operating Federal, Well No. 2  
Page 4

**13. CERTIFICATION:**

I hereby certify that I have inspected the proposed drill site and access route; that I am familiar with the conditions which presently exist the statements made in the plan are, to the best of my knowledge, true and correct; and, that the work associated with the operations proposed herein will be performed by Fossil Operating, Inc. and its contractors and subcontractors in conformity with this plan and the terms and conditions under which it is approved. This statement is subject to the provisions of 18 U.S.C. 1001 for the filing of a false statement.

September 12 2003

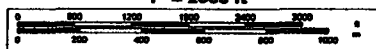
  
\_\_\_\_\_  
George R. Smith  
Agent for: Fossil Operating, Inc.



DELORME

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www.delorme.com

Scale 1 : 24,000  
1" = 2000 ft





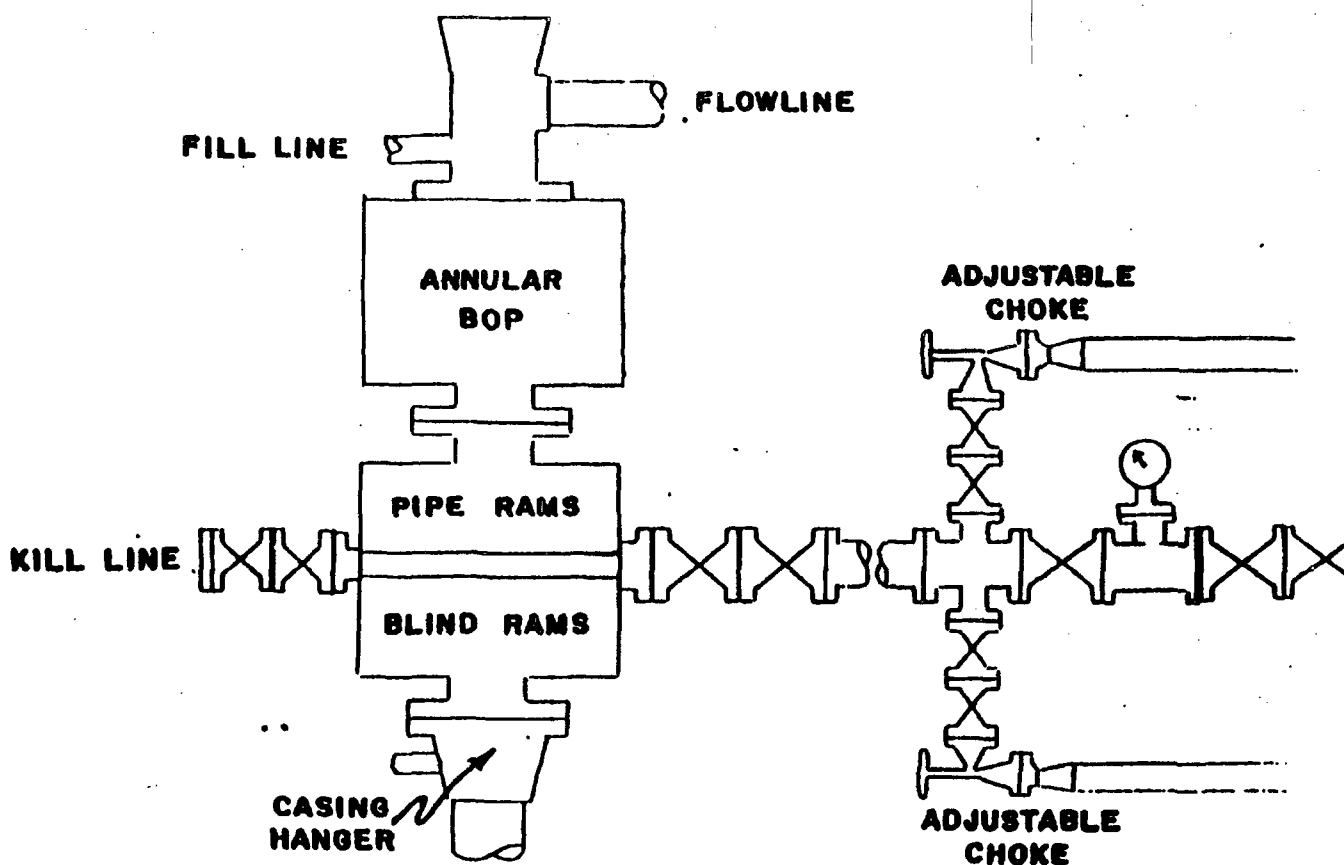




**RIG #2**

**BLOWOUT PREVENTOR ARRANGEMENT**

**11" SHAFFER TYPE LWS, 5000 psi WP**  
**11" CAMERON SPHERICAL, 5000 psi WP**  
**120 GALLON, 5 STATION KOOMEY ACCUMULATOR**  
**5000 psi WP CHOKE MANIFOLD**



**EXHIBIT "E"**  
**FOSSIL OPERATING, INC.**  
Fossil Operating Federal Com., Well No. 2  
BOP Specifications