Form 3160-3 (August 1999)

# N.M. Oil Cons. DIV-Dist. 2 1301 W. Grand Avenue

UNITED SATTESIA NM 88210
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

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

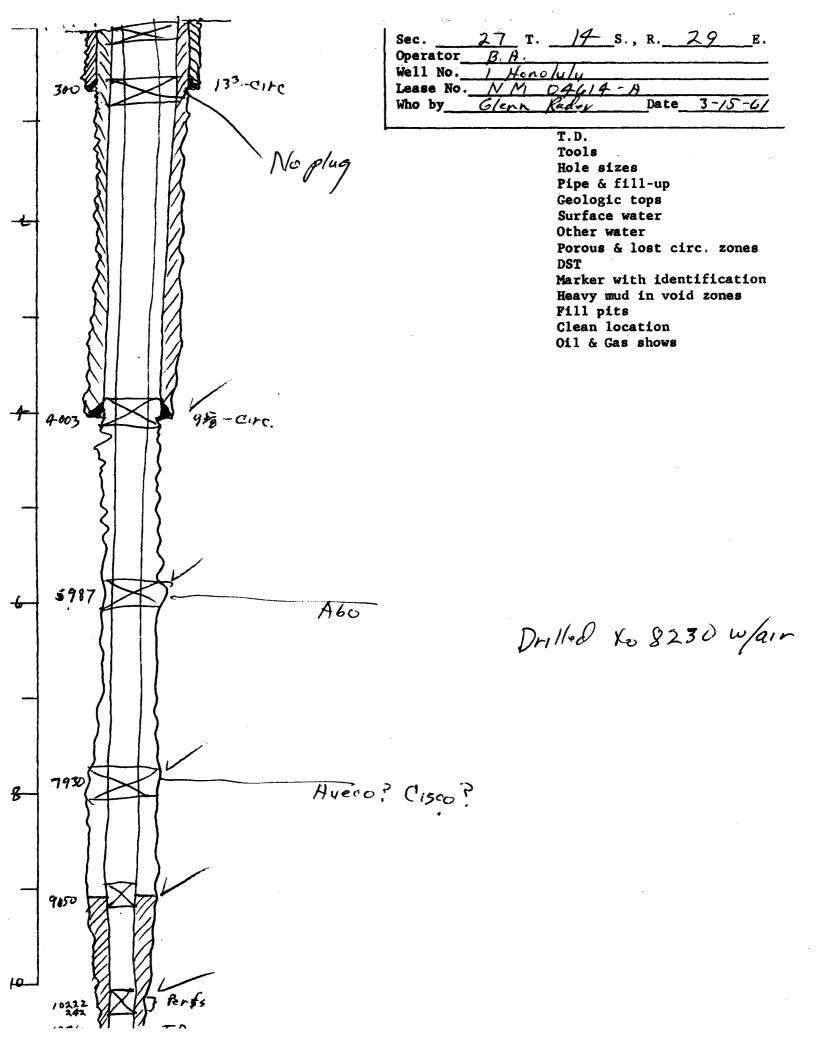
5. Lease Serial No. NM-103265

APPLICATION FOR PERMIT TO DR	6. If Indian, Allottee or Tribe Name					
la. Type of Work: DRILL REENTER			7. If Unit or CA Agreement, Name and No.			
1b. Type of Well: Oil Well Gas Well Other	<b>☑</b> s	ng la Toba 7 & 1 Mal	iple Zone	8. Lease Name and W Fossil Operating Fe		#2
2. Name of Operator	5	A O		9. APL Well No.		
Fossil Operating, Inc.		Ť	5	30 00	<u> 25 ~ </u>	00441
3a. Address	3b. Plyange No	. (incl <b>ide</b> a <b>rga</b> rpode)	1415	10. Field and Pool, or	Explorator	y .
			5	Wildcat (Wolfcamp)		
4. Location of Well (Report location clearly and in accordance with an Atomorphic 2240) ENL 8 2240) EEL  Atomorphic 2240 ENL 8 2240 EEL	ny Stale Requi	OCOIS ARTECIA	16,	11. Sec., T., R., M., or	Blk. and S	urvey or Area
At surface 2310' FNL & 2310' FEL	125	THICSIA	~7/ 28/			
At proposed prod. zone same	/29	, ید	<i>ĕ</i> ₹	Sec. 27-T14S-R29	E	
14. Distance in miles and direction from nearest town or post office*		05/22232426		12. County or Parish 13. State		13. State
24 miles east of Hagerman, NM		3000		Chaves		NM
15. Distance from proposed* location to nearest property or lease line, ft.	16. No. of A	cres in lease	17. Spacii	ng Unit dedicated to this v	well	
(Also to nearest drig. unit line, if any) 330	360	<del> </del>	320			,
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft.  1345'	19. Propose	d Depth	NMB-0	BIA Bond No. on file		
21. Elevations (Show whether DF, KDB, RT, GL, etc.)	10,242'	imate date work will		23. Estimated duratio	n	
3827' GL	9/27/03 30 days					
	24. Atta	chments				
<ol> <li>Well plat certified by a registered surveyor.</li> <li>A Drilling Plan.</li> <li>A Surface Use Plan (if the location is on National Forest System I SUPO shall be filed with the appropriate Forest Service Office).</li> </ol>	Lands, the	Item 20 above) 5. Operator certifi	cation. specific inf	ns unless covered by an ormation and/or plans a	_	·
25. Signature	Name	(Printed/Typed)			Date	
George Smith	1	eorge R Smith 9/12/03				
Title		<del></del>				
agent for Fossil Operating, Inc.						
Approved by (Signature) /S/LARRY D. SRAY	Name	(Printed Typed) SLARRY D. (	BRAY		DÖCT	o 7 2003
Title Assistant Field Manager, Lands And Minerals	Offic	ROSWELL FIR	LD OFF	APPROVE	D FOR 1	YEAR
Application approval does not warrant or certify that the applicant holds leperations thereon. Conditions of approval, if any, are attached.	egal or equita	ble title to those rights	in the subjec	t lease which would entit	le the appli	cant to conduct
Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it States any false, fictitious or fraudulent statements or representations as to	a crime for a	ny person knowingly vithin its jurisdiction.	and willfully	to make to any departme	ent or agen	cy of the United
*(Instructions on reverse)	···					
Lease Responsibility Statement: Fossil Operation restrictions concerning operations conducted on	ng, Inc. acc the leased	epts all applicable land or portion the	ereoi.	eorge R. Smith, age	SFP <b>RE</b>	<u>l</u>

FORM C-128 Revised 5/1/57

# NEW MEXICO OIL CONSERVATION COMMISSION WELL LOCATION AND ACREAGE DEDICATION PLAT

	SEE	INSTRUCTIONS	FOR COMPL	ETING THIS FO	RM ON THE	REVERSE SIDE	· · · · · · · · · · · · · · · · · · ·
			S	ECTION A			
B. T.	ail Operation A. OIL PROP	ng, Inc. Duckrs		ease Fossil	Operatin	g Fed. Com.	Well No.
Init Letter	Section 27	Township 34 9	outh	Range	Count	CHAVIS	
ectual Footage L	ocation of #cll; feet from the	North	line and	2310	feet from t	he <b>East</b>	line
round Level Ele		Formation Wol		Pool Undesi	gnated W		Dedicated Acreage:
5826.8	DI	evonian-(2n	d Obj.)	KING CAMP	(ABANDONI	ED)	320 <b>40</b> Acres
who has the ri another. (65- . If the answer t	ght to drill into d -3-29 (e) NMSA to question one i	and to produce fr 1935 Comp.)	om any pool o	and to appropriate	the producti	ion either for hi	("Owner" means the personnself or for himself and itization agreement or other-
				id their respectiv	e interests b	elow:	RECEIVE
Owner				Land De	scription		
							JUN 1 9 1961
							U. S. GEOLOGICAL SU ARTESIA, NEW MEX
V	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	SECTIO	N B	×	***************************************	***	CERTIFICATION
		XXXXXXXXXX	1.	731C	)	in SECT plete to belief.  Name  Position  Company  Ba Ta	certify that the information ION A above is true and comthe best of my knowledge and Taylor  To B. Taylor  Engineer  A. Oil Producers  une 15, 1961.
						shown on plotted fi surveys o supervisi	eyed Supplied 18 18 18 18 18 18 18 18 18 18 18 18 18



# 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 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 ½" 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 WE	IGHT GRAI	DE JOINT	SETTING DEPTH	QUANTITY OF CEMENT
17 1/2"	13 3/8" 48	8.0# J-5	5 ST&0	332'	Circ. 220 sx circ. to surface-Csg in hole
12 1/4"	8 5/8" 24	4.0# J-5	5 ST&0	2 4,000'	Circ. 550 sx circ. to surface-Csg in hole
7 <b>7</b> /8"	5 1/2" 1	7.0# N-8	30 LT&0	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>3</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".

# 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.

## FOSSIL OPERATING, INC.

Fossil Operating Federal, Well No. 2 Page 3

#### 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

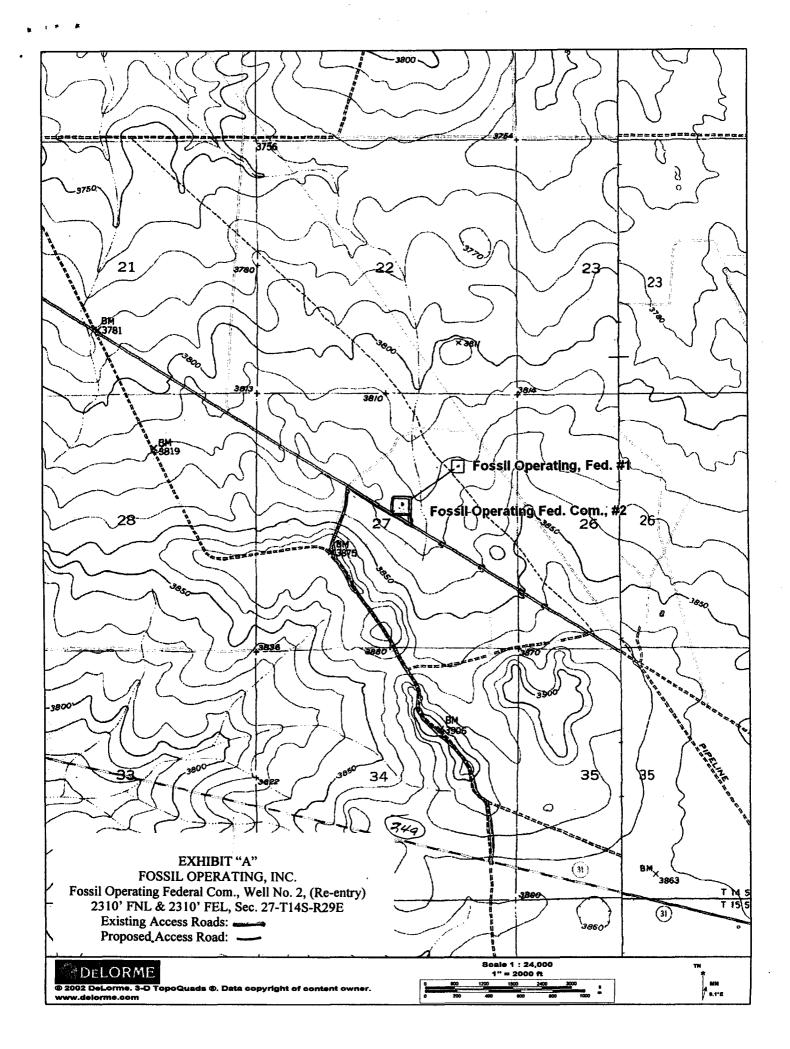
### 13. CERTIFICATION:

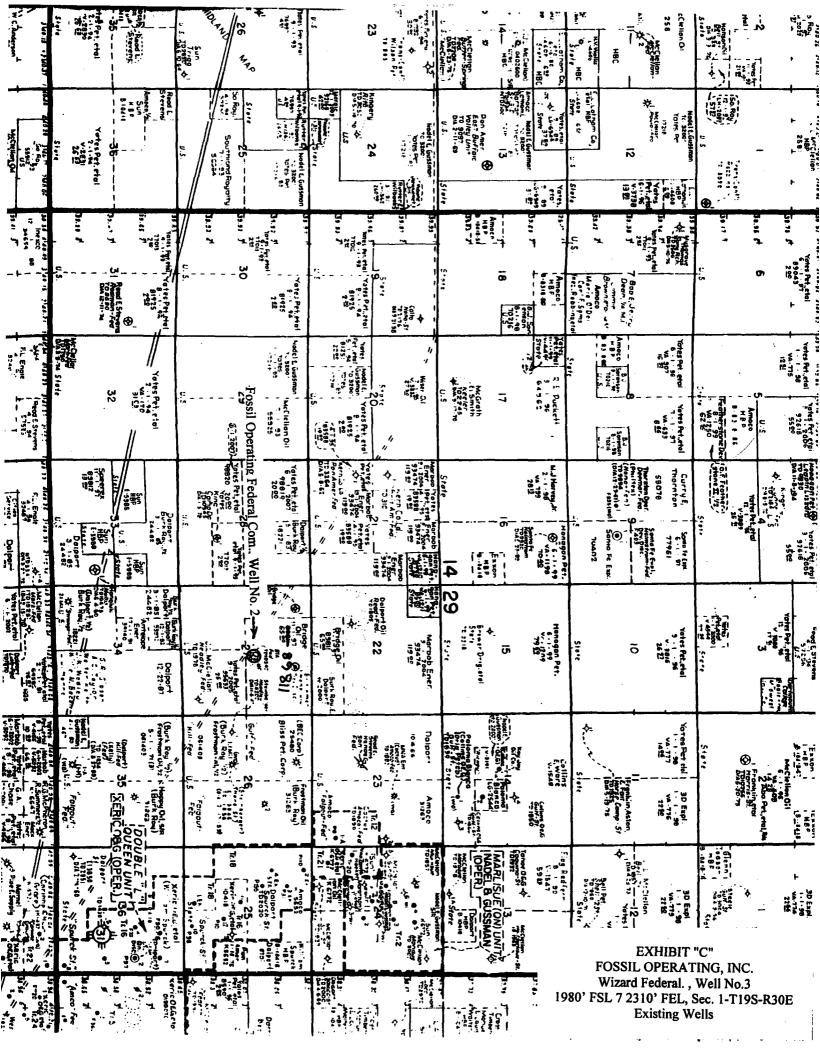
I hereby certify that I have inspected the proposed drill site and access route; that I am familiar with the conditions which presently exist the statements made in the plan are, to the best of my knowledge, true and correct; and, that the work associated with the operations proposed herein will be performed 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.





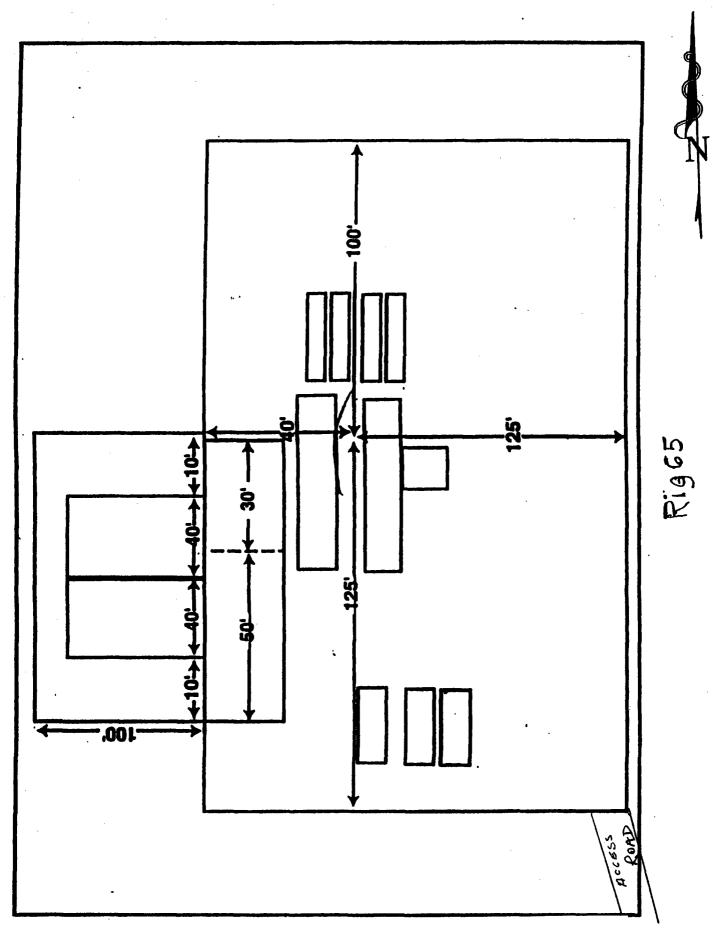


EXHIBIT "D"
FOSSIL OPERATING, INC.
Fossil Operating Federal Com., Well No. 2
Pad & Pit Layout

# BLOWOUT PREVENTOR ARRANGEMENT

II SHAFFER TYPE LWS, 5000 psi WP
II CAMERON SPHERICAL, 5000 psi WP
I20 GALLON, 5 STATION KOOMEY ACCUMULATOR
5000 psi WP CHOKE MANIFOLD

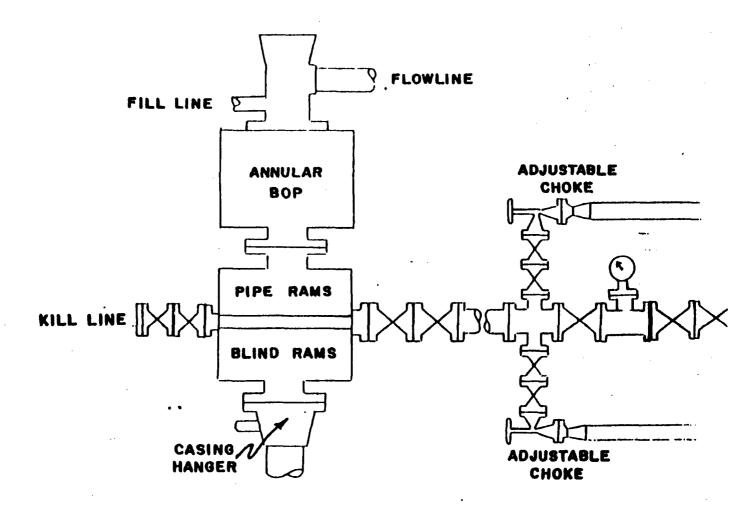


EXHIBIT "E"
FOSSIL OPERATING, INC.
Fossil Operating Federal Com., Well No. 2
BOP Specifications