

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

NOV 29 2007

Form 3160-3  
(April 2004)

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT



OCD-ARTESIA

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

APPLICATION FOR PERMIT TO DRILL OR REENTER

1a. Type of work: <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER		5. Lease Serial No. NM 32323
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 McKay Oil Corporation		7. If Unit or CA Agreement, Name and No
3a. Address PO Box 2014 Roswell, NM 88202-2014	3b. Phone No. (include area code) 505-623-4735	8. Lease Name and Well No. Snakeweed B Fed. #1
4. Location of Well (Report location clearly and in accordance with any State requirements *) At surface 2080'FWL & 1980'FSL (Unit K), Sec. 18, T6S, R23E At proposed prod. zone ROSWELL CONTROLLED WATER BASIN		9. API Well No. 30-005-64002
14. Distance in miles and direction from nearest town or post office* Approximately 25 miles		10. Field and Pool, or Exploratory W. Pecos ABO Slope
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drg unit line, if any) 1980'		11. Sec., T, R, M or Bik and Survey or Area Sec. 18, T6S, R23E
16. No. of acres in lease 2009.00		12. County or Parish Chaves
17. Spacing Unit dedicated to this well 160'		13. State NM
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. 1000'		19. Proposed Depth 4000'
20. BLM/BIA Bond No. on file		
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 4138'	22. Approximate date work will start* 08/19/2007	23. Estimated duration 7-10 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) James L. Schultz	Date 07/19/2007
Title Agent		

Approved by (Signature) /s/ Angel Mayes	Name (Printed/Typed) /s/ Angel Mayes	Date NOV 19 2007
Title Assistant Field Manager, Lands And Minerals	Office ROSWELL FIELD OFFICE	APPROVED FOR 2 YEARS

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 USC Section 1001 and Title 43 USC 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)

NSL is required to produce

BRYAN G. ARANT  
DISTRICT II GEOLOGIST

## DISTRICT I

1625 N. FRENCH DR., HOBBES, NM 88240

## DISTRICT II

1301 W. GRAND AVENUE, 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 Department

OIL CONSERVATION DIVISION  
1220 SOUTH ST. FRANCIS DR.  
Santa Fe, New Mexico 87505

Form C-10

Revised JUNE 10, 20

Submit to Appropriate District Office

State Lease - 4 Copies

Fee Lease - 3 Copies

## WELL LOCATION AND ACREAGE DEDICATION PLAT

☐ AMENDED REPORT

API Number		Pool Code 82740	Pool Name
Property Code 26901	Property Name SNAKEWEED FEDERAL B		Well Number 1
OCRID No. 14424	Operator Name McKAY OIL CORPORATION		Elevation 4090'

## Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
K	18	6-S	23-E		1980	SOUTH	2080	WEST	CHAVES

## 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

Dedicated Acres	Joint or Infill	Consolidation Code	Order No.
160			

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

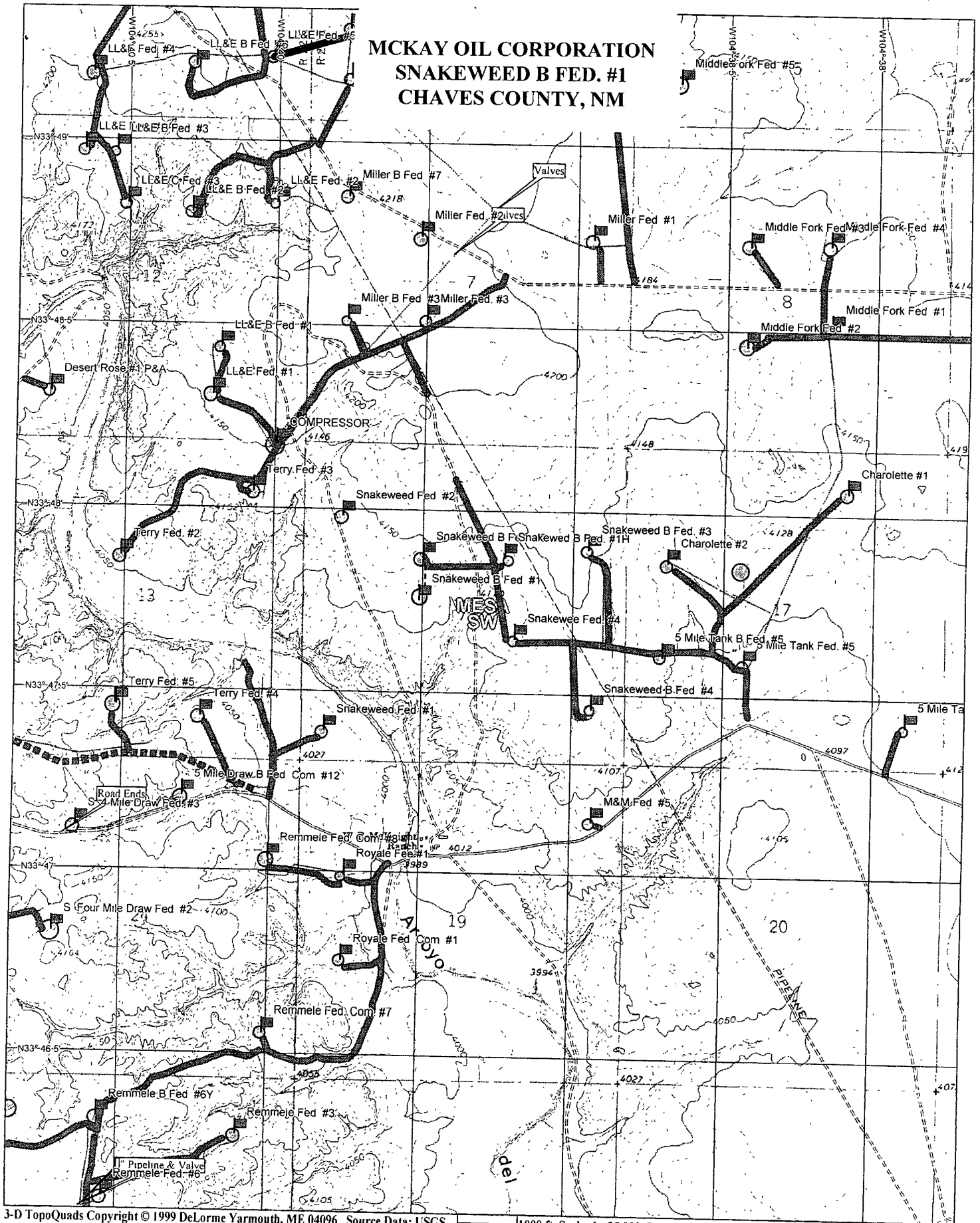
<p>GEODETIC COORDINATES NAD 27 NME</p> <p>Y=1016512.1 N X=401501.6 E</p> <p>LAT.=33°47'37.97" N LONG.=104°39'27.16" W</p>	<p><b>OPERATOR CERTIFICATION</b></p> <p>I hereby certify the the information contained herein is true and complete to the best of my knowledge and belief</p> <p><i>James Schultz</i> Signature James Schultz Printed Name Agent Title 03/18/05 Date</p>
	<p><b>SURVEYOR CERTIFICATION</b></p> <p>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.</p> <p>OCTOBER 27, 2004</p> <p>Date Surveyed JR</p> <p>Signature &amp; Seal of Professional Surveyor</p> <p><i>Gary D. Edson</i> 11/02/04 04.11.1439</p> <p>Certificate No. GARY EDSON 12641</p>

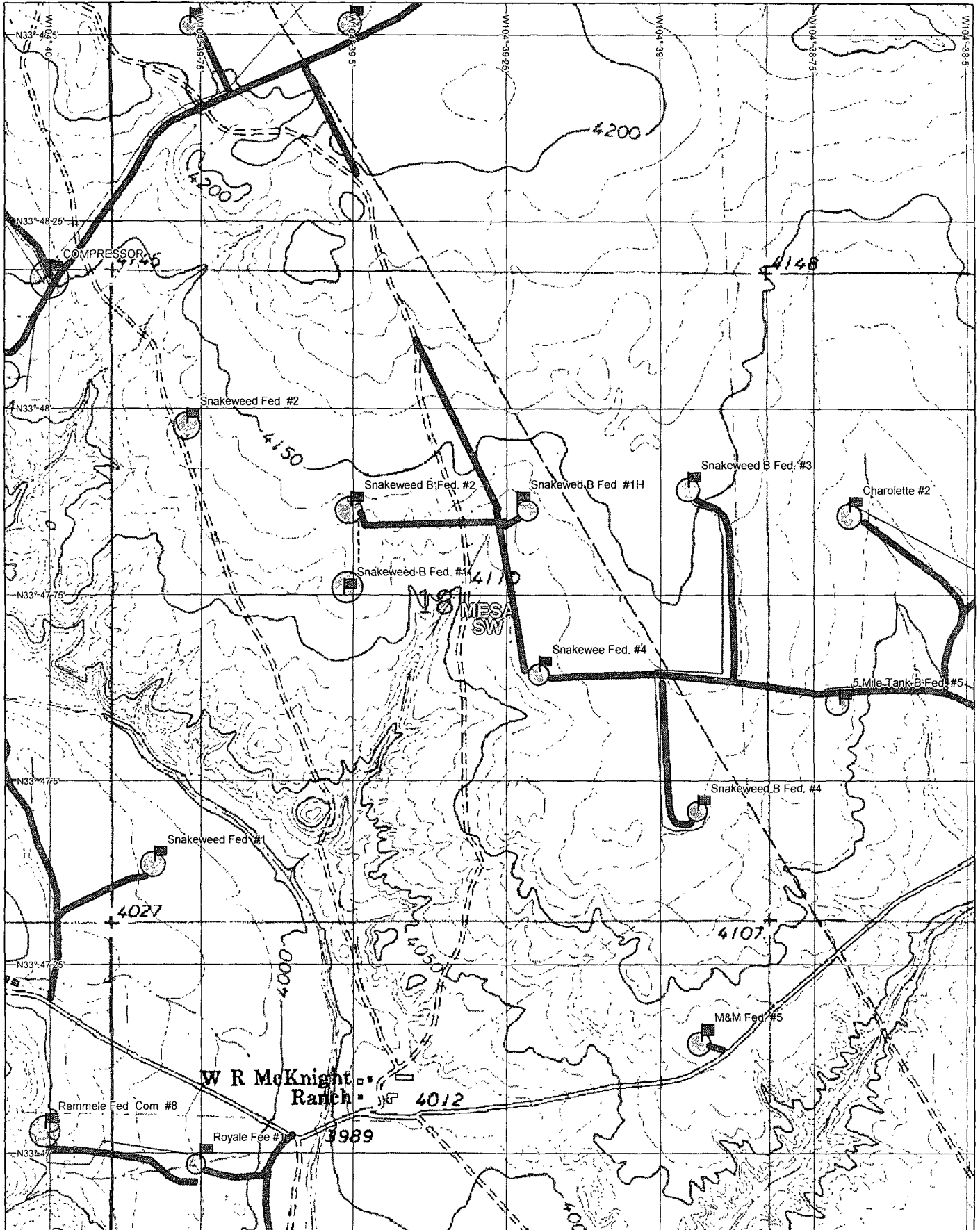
**PERTINENT INFORMATION**

FOR  
MCKAY OIL CORPORATION  
SNAKEWEED B #1  
2080' FWL & 1980' FSL Sec. 18, T6S, R23E  
Chaves County, New Mexico

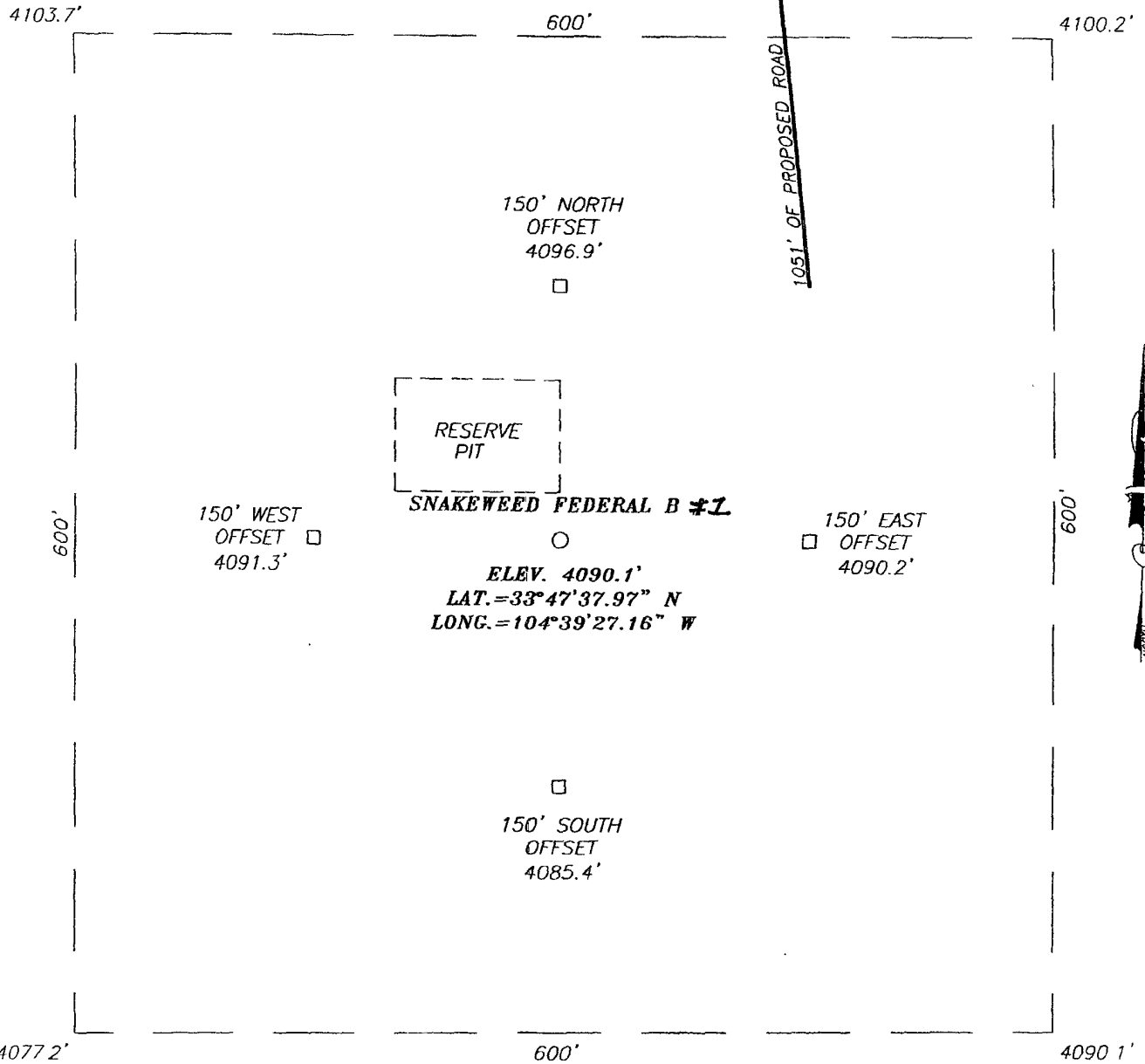
<u>LOCATED:</u>	25 air miles Northwest of Roswell, NM.
<u>LEASE NUMBER:</u>	NM 32323
<u>LEASE ISSUED:</u>	11/1/1978
<u>RECORD LESSEE:</u>	McKay Petroleum Corporation
<u>BOND COVERAGE:</u>	Operator's \$25,000 Statewide
<u>AUTHORITY TO OPERATE:</u>	Assignment of Operating Rights
<u>ACRES IN LEASE:</u>	2009.00
<u>SURFACE OWNERSHIP:</u>	Federal
<u>OWNER:</u>	USA-BLM
<u>POOL RULES:</u>	General Statewide Rules
<u>EXHIBITS:</u>	A. Road and Well Map B. Contour Map C. Rig Layout D. BOP Diagram E. Lease Map

# **MCKAY OIL CORPORATION SNAKEWEED B FED. #1 CHAVES COUNTY, NM**





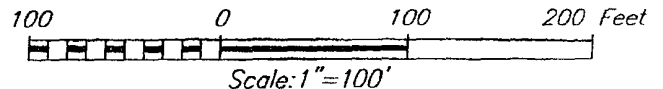
**SECTION 18, TOWNSHIP 6 SOUTH, RANGE 23 EAST, N.M.P.M.,**  
 CHAVES COUNTY, NEW MEXICO



4077.2' 600' 4090.1'

**DIRECTIONS TO LOCATION**

FROM THE INTERESECTION OF U.S. HWY. # 208 AND CO. RD. #40 (STARGRASS RD.) GO WEST ON CO. RD. #40 FOR APPROX. 2.5 MILES TO A CALICHE ROAD ON THE RIGHT. TURN RIGHT (NORTH) AND GO APPROX. 2.0 MILES, TURN LEFT (WEST) AND GO APPROX. 1.0 MILES. FOLLOW ROAD NORTH PAST THE MIDDLE FORK #1 WELL. TURN WEST THRU CATTLEGUARD AND GO APPROX. 1.2 MILES. TURN SOUTH THRU CATTLEGUARD AND FOLLOW ROAD. GO WEST APPROX. 0.25 MILES. TURN SOUTH AND GO APPROX. 0.85 MILES. PROPOSED LOCATION IS APPROX. 850' WEST ACROSS PASTURE.



**McKAY OIL CORPORATION**

SNAKEWEED FEDERAL B #2 WELL  
 LOCATED 1980 FEET FROM THE SOUTH LINE  
 AND 2080 FEET FROM THE WEST LINE OF SECTION 18,  
 TOWNSHIP 6 SOUTH, RANGE 23 EAST, N.M.P.M.,  
 CHAVES COUNTY, NEW MEXICO.

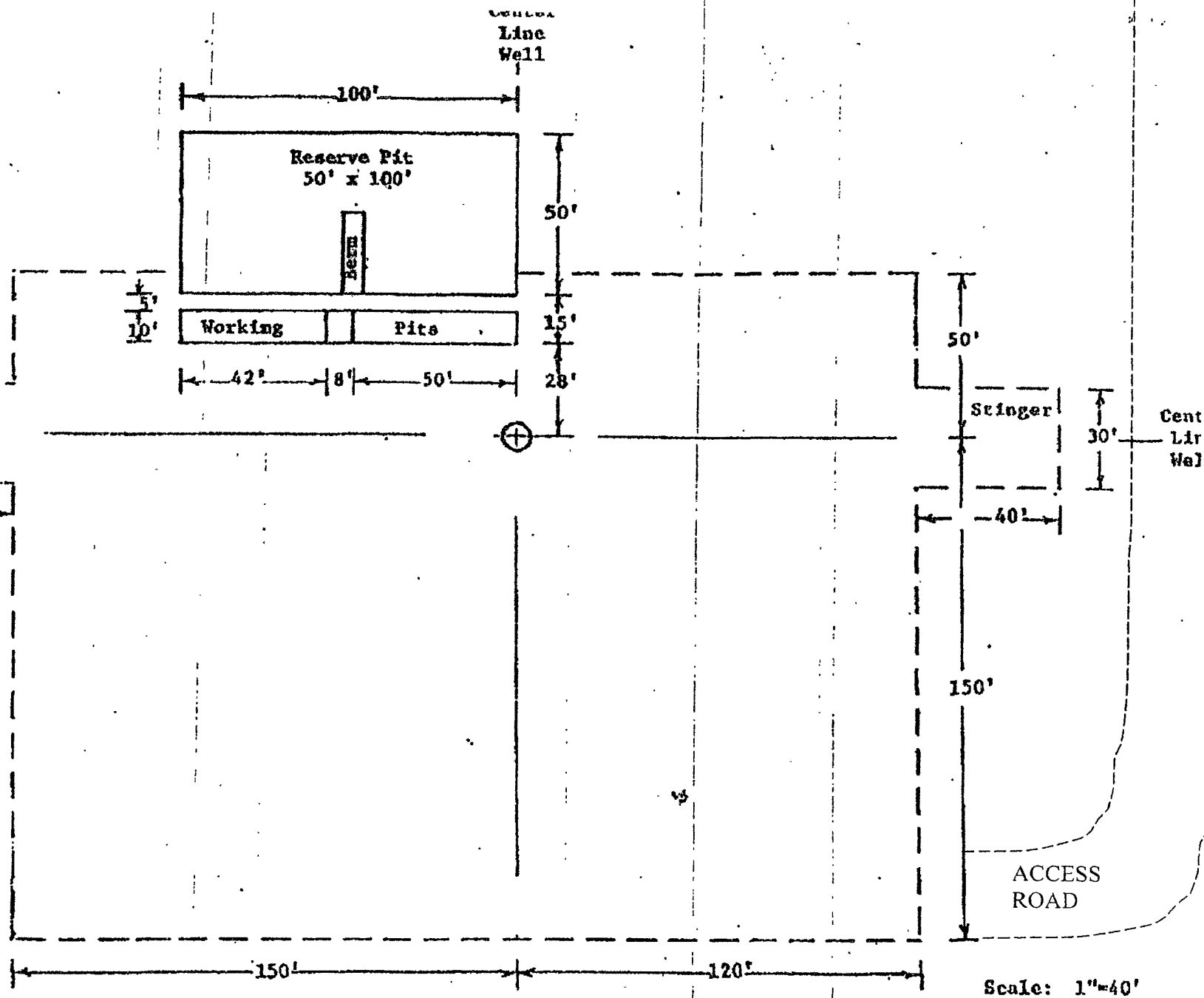
Survey Date: 10/27/04	Sheet 1 of 1 Sheets
W.O. Number: 04.11.1439	Dr By: J.R.
Date: 11/2/04	Disk: CD#10
04111439	Scale: 1"=100



PROVIDING SURVEYING SERVICES  
 SINCE 1948

**JOHN WEST SURVEYING COMPANY**

412 N. DAL PASO  
 HOBBS, N.M. 88240  
 (505) 393-3117



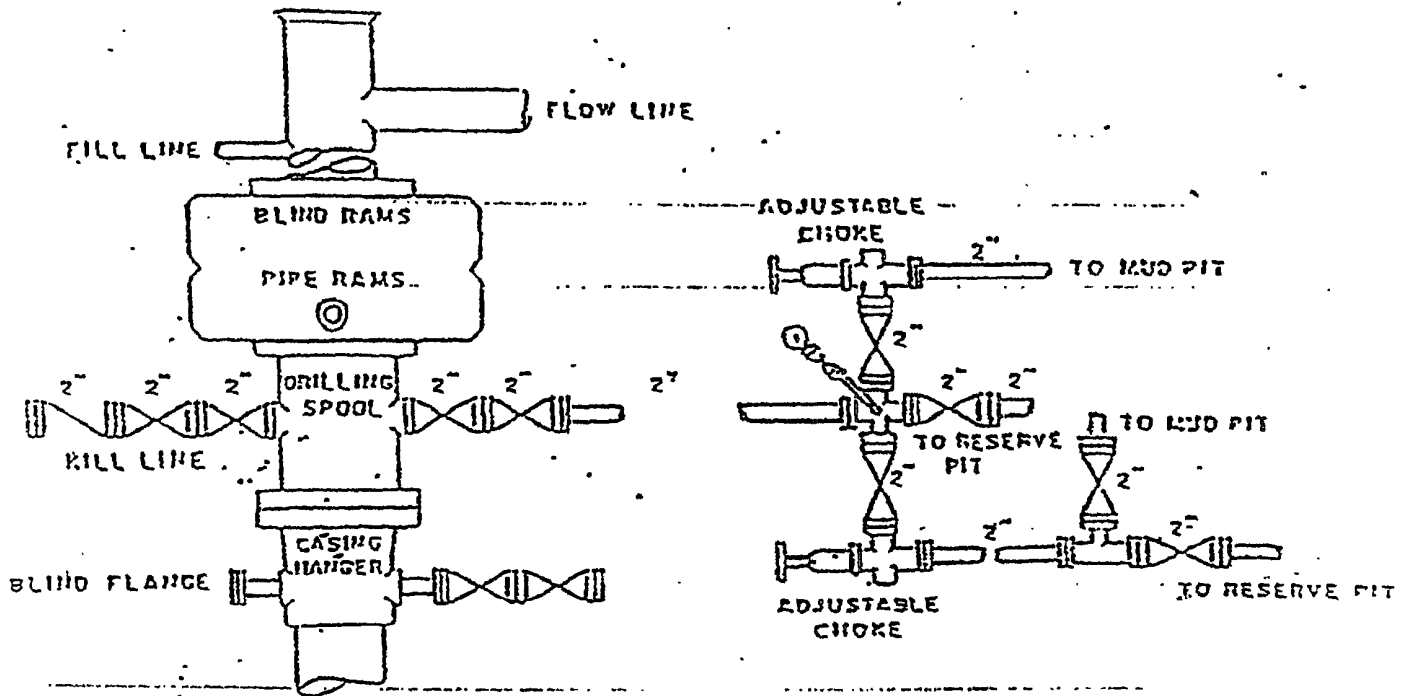
MCKAY OIL CORPORATION

Snakeweed B #2

NE4SW4 of Section 18, T6S, R23E

Chaves County, New Mexico

EXHIBIT "D"



## SUPPLEMENTAL DRILLING DATA

MCKAY OIL CORPORATION  
SNAKEWEED B #1  
2080' FWL & 1980' FSL Sec. 18, T6S, R23E

Chaves County, New Mexico

The following items supplement Form 3160-3 in accordance with instruction contained in Onshore Oil and Gas Order No. 1:

1. SURFACE FORMATION: San Andres

2. ESTIMATED TOPS OF GEOLOGICAL MARKERS:

Yeso - 921'  
Tubb - 2417'  
Abo - 2630'

3. ESTIMATED DEPTHS TO WATER, OIL OR GAS FORMATIONS:

Fresh Water - In surface formation above 600'  
Gas - In Abo Formation below 2630'

4. PROPOSED CASING PROGRAM:

12-1/4" hole	8-5/8" X-42	24#	950'+
7-7/8" hole	5-1/2" J-55	15.5#	TD

5. PROPOSED CEMENTING PROGRAM:

Surface to 950'	class "C" - 350 sxs cemented and circulated to surface.
Production Casing	class "C" - 300 sxs cemented with adequate cover.

6. PROPOSED DRILLING PROGRAM:

McKay Oil Corporation proposes to drill and test the ABO formation. Approximately 950' of surface casing will be set and cemented to surface. 5-1/2" production casing will be set and cemented with adequate cover, perforated and stimulated as needed for production.

7. PRESSURE CONTROL EQUIPMENT: Blowout preventer will consist of 2 ram, 2M system. A sketch of the BOP is attached.
8. CIRCULATION MEDIUM: Air Drilling
9. AUXILIARY EQUIPMENT: Full-opening drill string safety valve fit for the drill string in use, will be kept on the rig floor at all times.
10. TESTING, LOGGING AND CORING PROGRAM:
  - Samples: Catch samples from surface to TD.
  - DST's: None.
  - Logging: GR-CNL, Dual Lateral MSFL from surface to TD.
  - Coring: None.
11. ABNORMAL PRESSURES, TEMPERATURES OR HYDROGEN SULFIDE:  
None anticipated.
12. ANTICIPATED STARTING DATE: ASAP  
Drilling should be completed within 10 days. Completion operations (perforations and stimulation) will follow drilling operations.

## MULTI-POINT SURFACE USE AND OPERATIONS PLAN

MCKAY OIL CORPORATION  
SNAKEWEED B #1  
2080' FWL & 1980' FSL Sec. 18, T6S, R23E

Chaves County, New Mexico

NM 32323

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, the magnitude of necessary surface disturbance involved, and the procedures to be followed in rehabilitating the surface after completion of the operation so that a complete appraisal can be made of the environmental effects associated with the operation.

### 1. EXISTING ROADS:

A. Exhibit "A" is a portion of a road map showing the location of the proposed well is staked. The well is approximately 21 miles north of Roswell, NM.

B. Directions: Heading North out of Roswell, New Mexico on U.S. 285 for approximately 21 miles and turn left on county road just before mile marker 137 (Cottonwood Road). Go approximately 4 3/4 miles, then turn north for approximately 1 1/4 miles, and then turn south for 1/8 mile to the location.

### 2. PLANNED ACCESS ROAD:

A. Length and Width: 1/8 mile long and 20' wide.

B. Surface Materials: Sand, gravel and caliche where needed.

C. Turnouts: None

D. Maximum Grade: No more than 3%.

E. Drain Design: Road will have drainage ditches on both sides and a crowned top, with culverts and/or low water crossings as necessary.

F. Culverts: None.

G. Cuts and Fill: None.

H. Gates, Cattle guards: None needed. Already in place.

I. Top Soil: Very little.

3. LOCATION OF EXISTING WELLS:

A. A map indicating the location of adjacent wells is attached.

4. LOCATION OF EXISTING AND/OR PROPOSED FACILITIES:

A: See Exhibit "A" for location of existing lease wells. If the well is commercial, production facilities and tank battery will be constructed.

B. Cuts and Fills: Less than 30' of cut and fill will be required for the pad size of 400' x 400'. (See Exhibit "D")

C. Top Soil: Any top soil which can sustain plant vegetation will be bladed and piled for future rehabilitation.

5. LOCATION AND TYPE OF WATER SUPPLY:

A. Water will be purchased from a commercial source and trucked to the location over existing and proposed access roads.

6. SOURCE OF CONSTRUCTION MATERIALS:

A. Closest Pit to the location.

7. METHODS OF HANDLING WASTE DISPOSAL:

A. Drill cuttings will be disposed of in the drilling pits.

B. Drilling fluids will be allowed to evaporate in the drilling pits until the pits are dry.

C. Water produced during test will be disposed of in the drilling pits. Oil produced during tests will be stored in test tanks until sold.

D. Current laws and regulations pertaining to the disposal of human waste will be complied with.

E. Trash, waste paper, garbage, and junk will be placed in portable receptacles and hauled from the location upon completion of drilling and completion operations.

F. All trash and debris will be removed from the well site within 30 days after finishing drilling and/or completion operations.

8. ANCILLARY FACILITIES:

A. None necessary.

9. WELL SITE LAYOUT:

A. Exhibit "C" indicates the relation location and dimensions of the well pad, mud pits, reserve pit and major rig equipment.

B. The location slopes very slightly to the east and southeast.

C. The reserve pit will be lined with plastic to prevent loss of water.

10. PLANS FOR RESTORATION OF THE SURFACE:

A. After completion of drilling and/or completion operations, all equipment and other material not needed 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 conditions as possible.

B. Any unguarded pits containing fluids will be fenced until they are filled.

C. If the well is non-productive or abandoned, the disturbed area will be rehabilitated using the preserved soil mentioned in 2.I. and 4.C.

11. OTHER INFORMATION:

A. Topography: The topography is a gradual slope to the south in the vicinity of the access road and south-southwest in the vicinity of the drill pad. Regional slope is south-southwest toward the Arroyo del Macho which is south-southwest of the location.

B. Soil: Sandy loam with limestone outcropping.

C. Flora and Fauna: The flora consists of typical desert vegetation, such as yucca, cactus and various grasses. Fauna consists of desert wildlife such as coyotes, rodents, snakes, deer and antelope.

D. Ponds and Streams: Arroyo del Macho south-southwest of the proposed location.

E. Residences and other Structures: The David Corn ranch house (old W.R. McKnight Ranch) is approximately 1 mile to the south-southwest.

F. Archaeological, Historical and Other Cultural Sites: An archeological survey was previously provided.

G. Land Use: Grazing.


H. Surface Ownership: USA-BLM.

12. OPERATOR'S REPRESENTATIVE:

James Robinson  
Roswell, New Mexico  
(505) 623-4735 (O)  
(505) 626-8759 (C)

13. CERTIFICATION:

I hereby certify that I, or persons under my direct supervision, have inspected the proposed drill site and access route; that I am familiar with the conditions which presently exists; that the statements made in this plan are, to the best of my knowledge true and correct; that the work associated with the operations proposed herein will be performed by MCKAY OIL CORPORATION and its sub-contractors in conformity with this plan and the terms and conditions under which it is approved. This statement is subject to provisions of 18 USC 1001 for the filing of a false statement.

  
\_\_\_\_\_  
SIGNATURE

7-19-07  
\_\_\_\_\_  
DATE

**Southwest Petroleum  
Land Services, LLC**

100 N Pennsylvania  
Roswell, NM 88203  
(505) 622-6713  
(505) 622-9282 fax

July 19, 2007

Oil Conservation Division  
Bryan Arrant  
1301 W. Grand Avenue  
Artesia, NM

Re: H2S Contingency Plan-Snakeweed B Federal #1

Bryan,

Please see attached Contingency Plan-H2S for the Snakeweed B Federal #1 located 2080' FWL & 1980' FSL, Sec 18, T6S, R23E, Chaves County. Should you need any further information, please contact me at 505-626-6879

Sincerely,



Jim Schultz  
Agent for McKay Oil Corporation

MCKAY OIL CORPORATION  
PO BOX 2014  
ROSWELL, NM 88202-2014  
505-623-4735

HYDROGEN SULFIDE (H<sub>2</sub>S) CONTINGENCY PLAN FOR THE  
SNAKEWEED B FEDERAL #1  
SURFACE LOCATION: 2080' FWL & 1980' FSL  
LOCATED IN SEC 18, T6S, R23E IN  
CHAVES COUNTY, NEW MEXICO

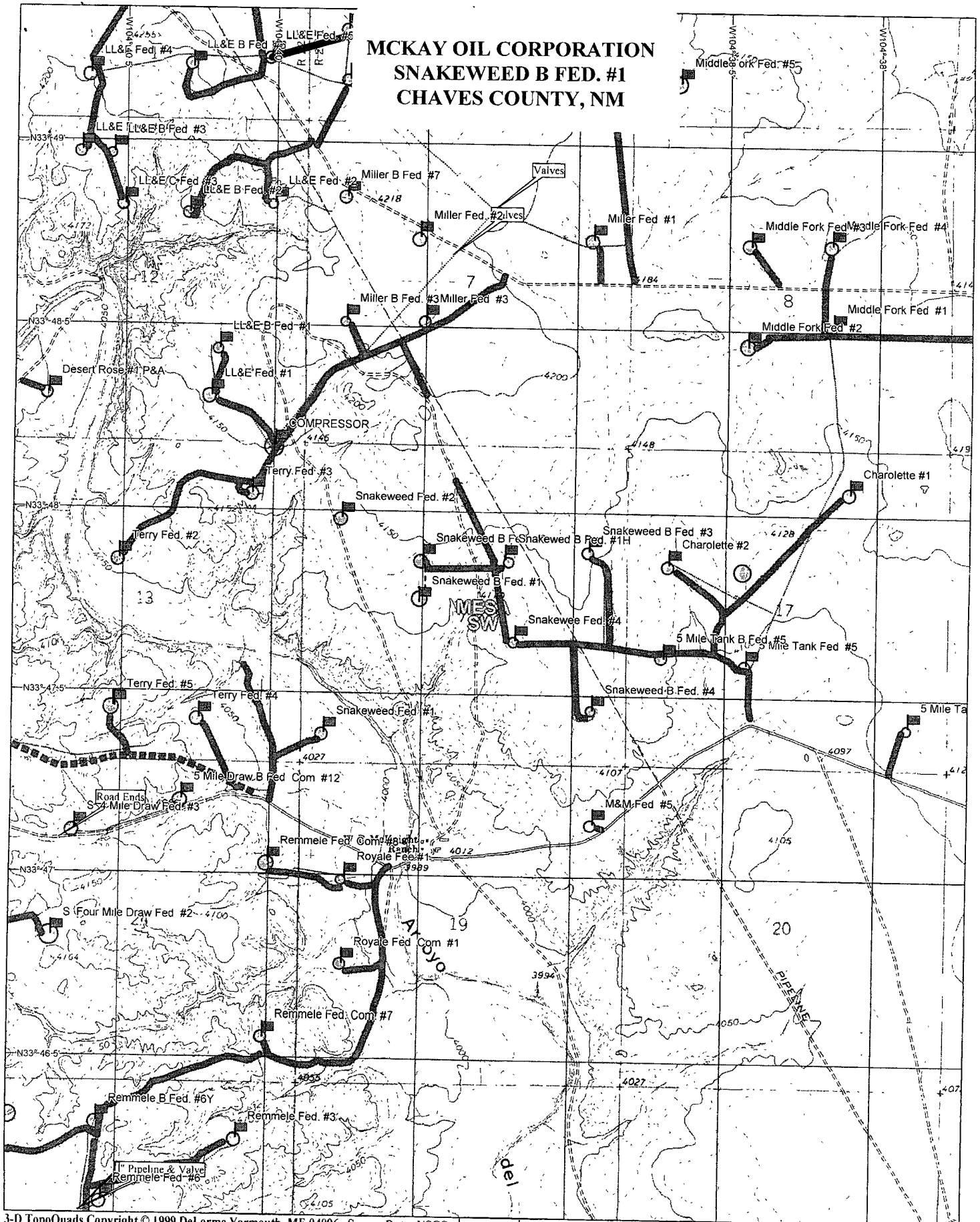
NO HYDROGEN SULFIDE OR OTHER HAZARDOUS GASES OR FLUIDS HAVE  
BEEN ENCOUNTERED, REPORTED OR KNOWN TO EXIST AT THIS DEPTH IN  
THIS AREA.

## **SNAKEWEED B #1**

This is an open drilling Site. H2S monitoring equipment and emergency response equipment will be used within 500' of zones known to contain H2S, including warning signs, wind indicators and H2S monitor. Pumpers carry (MICROPACKS) H2S pocket testers at all times. Pulling units have an H2S indicator that puts off light and alarm on any indication of H2S being present.

MAPS – SEE ATTACHED

# **MCKAY OIL CORPORATION SNAKEWEED B FED. #1 CHAVES COUNTY, NM**





## EMERGENCY PROCEDURES

In the case of a release of gas containing H<sub>2</sub>S, the first responder must isolate the area and prevent entry by other persons into the 100 ppm ROE. Additionally the first responder must evacuate any public spaces encompassed by the 100 ppm ROE. First responder must take care not to injure themselves during this operation. Company and or local officials must be contacted to aid in this operation. Evacuation of the public should be beyond the 100 ppm ROE.

All responders must have training in the detection of H<sub>2</sub>S measures for protection against the gas, equipment used for protection and emergency response. Additionally, responders must be equipped with H<sub>2</sub>S monitors and air packs in order to control the release. Use the “buddy system” to ensure no injuries occur during the response.

## IGNITION OF GAS SOURCE

Should control of the well be considered lost and ignition considered, take care to protect against exposure of sulfur Dioxide (SO<sub>2</sub>). Intentional ignition must be coordinated with the NMOCD and local officials. Additionally the NM State Police may become involved. NM State Police shall be the Incident Command on scene of any major release. Take care to protect downwind whenever there is an ignition of the gas.

## CHARACTERISTICS OF H<sub>2</sub>S & SO<sub>2</sub>

COMMON NAME	CHEMICAL FORMULA	SPECIFIC GRAVITY	THRESHOLD LIMIT	HAZARDOUS LIMIT	LETHAL CONCENTRATION
HYDROGEN SULFIDE	H <sub>2</sub> S	1.189 AIR=1	10 PPM <sub>4</sub>	100 PPM/HR	600 PPM
SULFUR DIOXIDE	SO <sub>2</sub>	2.21 AIR=1	2 PPM	N/A	1000 PPM

## CONTACTING AUTHORITIES

McKay Oil Corporation personnel must liaison with local and state agencies to ensure a proper response to a major release. Additionally, the OCD must be notified of the release as soon as possible but no later than 4 hours. Agencies will ask for information such as type and volume of release, wind direction, location of release, etc. be prepared with all information available. The following call list of essential and potential responders must be in coordination with the State of New Mexico’s Hazardous Materials Emergency Response Plan (HMER).

## MCKAY OIL CORPORATION CALL LIST

CHAVES COUNTY (505)	OFFICE	CELL PHONE	HOME PHONE
RANCE DENTON	625-1154	(303) 887-0030	
JIM ROBINSON	625-1154	626-8579	624-1093
ROY MCKAY	623-4735	626-8571	623-4735

### CHAVES COUNTY (505) ROSWELL

STATE POLICE	622-7200
CITY POLICE	911 or 624-6770
SHERIFF'S OFFICE	624-6500
AMBULANCE	911
FIRE DEPARTMENT	624-6800
LEPC (Local Emergency Planning Committee)	Teresa Barncastle 624-6770 ext 129
NMOCD	748-1283
ENMMC (Hospital)	622-8170

# EXHIBIT A

OPERATORS NAME: McKay Oil Corporation

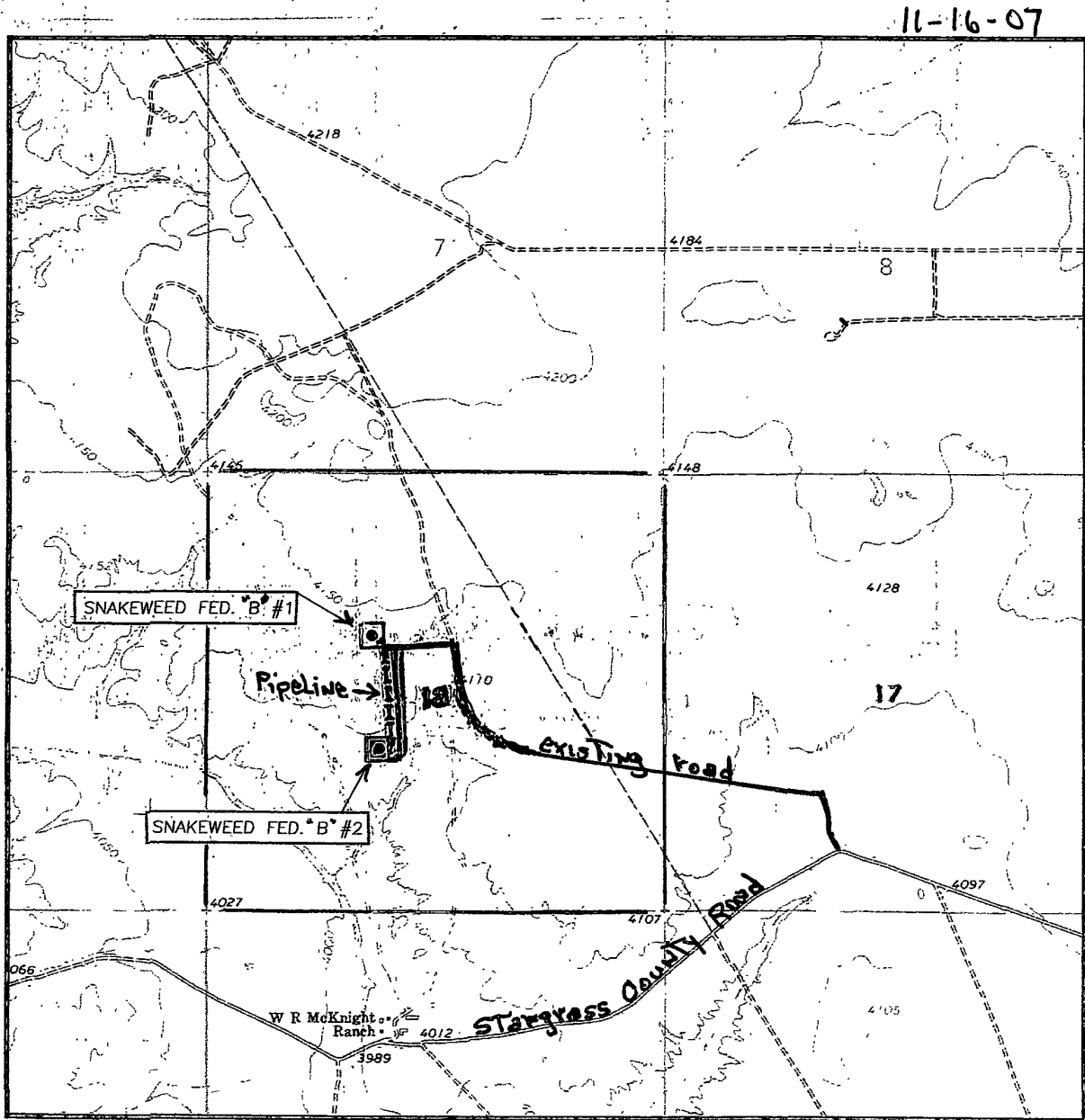
LEASE NO.: NM-32323

WELL NAME & NO: Snakeweed "B" Federal #1

SURFACE HOLE FOOTAGE: NE $\frac{1}{4}$ SW $\frac{1}{4}$  - 1980' FSL & 2080' FWL

LOCATION: Section 18, T. 6 S., R. 23 E., NMPM

COUNTY: Chaves County, New Mexico



## V. DRILLING

### A. DRILLING OPERATIONS REQUIREMENTS

1. Call the Roswell Field Office, 2909 West Second St., Roswell NM 88201. During office hours call (505) 627-0205.

A. Well spud

B. Cementing casing: 8-5/8 inch 5-1/2 inch

C. BOP tests

2. Unless the production casing has been run and cemented or the well has been properly plugged, the drilling rig shall not be removed from over the hole without prior approval.

3. Submit a Sundry Notice (Form 3160-5, one original and five copies) for each casing string, describing the casing and cementing operations. Include pertinent information such as; spud date, hole size, casing (size, weight, grade and thread type), cement (type, quantity and top), water zones and problems or hazards encountered. The Sundry shall be submitted within 15 days of completion of each casing string. The reports may be combined into the same Sundry if they fall within the same 15-day time frame.

4. The API No. assigned to the well by NMOCD shall be included on the subsequent report of setting the first casing string.

### B. CASING:

1. The 8-5/8 inch surface casing shall be set at approximately 950 feet and cement circulated to the surface. If cement does not circulate to the surface the appropriate BLM office shall be notified and a temperature survey or cement bond log shall be run to verify the top of the cement. Remedial cementing shall be completed prior to drilling out that string.

2. The minimum required fill of cement behind the 5-1/2 inch production casing is to reach a minimum of 500 feet above the top of the uppermost perforation.

### C. PRESSURE CONTROL

Onshore Oil and Gas Order No. 2. The BOP and related equipment shall be installed and operational before drilling below the 8-5/8 inch casing shoe and shall be tested as described in Onshore Order No. 2. Any equipment failing to test satisfactorily shall be repaired or replaced.

2. Minimum working pressure of the blowout preventer and related equipment (BOPE) shall be 2000 psi.

3. The appropriate BLM office shall be notified in sufficient time for a representative to witness the tests.