

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

Form 3160-3
(April 2004)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

RECEIVED

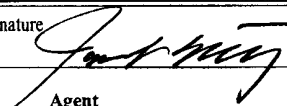
FORM APPROVED
OMB No. 1004-0137
Expires March 31, 2007

APPLICATION FOR PERMIT TO DRILL OR REENTER AUG 24 2005

1a. Type of work: <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER		5. Lease Serial No. NM-36194	
1b. Type of Well: <input type="checkbox"/> Oil Well <input checked="" type="checkbox"/> Gas Well <input type="checkbox"/> Other <input type="checkbox"/> Single Zone <input type="checkbox"/> Multiple Zone		6. If Indian, Allottee or Tribe Name	
2. Name of Operator McKay Oil Corporation 14424		7. If Unit or CA Agreement, Name and No.	
3a. Address PO Box 2014 Roswell, NM 88202-2014		8. Lease Name and Well No. 35057 South Four Mile Draw C Federal 1	
3b. Phone No. (include area code) 505-623-4735		9. API Well No. 30-005-63766	
4. Location of Well (Report location clearly and in accordance with any State requirements.) At surface 660' FNL & 890' FWL At proposed prod. zone D		10. Field and Pool, or Exploratory W. Pecos 280 Slope 700	
11. Sec., T. R. M. or Blk. and Survey or Area Lot D, sec 22, T6S, R22E		12. County or Parish Chaves	
13. State NM		14. Distance in miles and direction from nearest town or post office* 25 miles	
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any)		16. No. of acres in lease 2418.07	
17. Spacing Unit dedicated to this well 160'		18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft.	
19. Proposed Depth 4500'		20. BLM/BIA Bond No. on file	
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 4326'		22. Approximate date work will start* 05/01/2005	
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:

- Well plat certified by a registered surveyor.
- A Drilling Plan.
- A Surface Use Plan (if the location is on National Forest System Lands, the SUPO shall be filed with the appropriate Forest Service Office).
- Bond to cover the operations unless covered by an existing bond on file (see Item 20 above).
- Operator certification
- Such other site specific information and/or plans as may be required by the authorized officer.

25. Signature 	Name (Printed/Typed) James Schultz	Date 5-10-05 0372072895
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Approved by (Signature) /S/LARRY D. BRAY	Name (Printed/Typed) /S/LARRY D. BRAY	Date AUG 23 2005
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 page 2)

State of New Mexico

DISTRICT I

1626 N. FRENCH DR., HOBBES, NM 88240

Energy, Minerals and Natural Resources Department

Form C-102

DISTRICT II

1301 W. GRAND AVENUE, ARTESIA, NM 88210

OIL CONSERVATION DIVISION

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

Revised JUNE 10, 2003
Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

DISTRICT III

1000 Rio Brazos Rd., Aztec, NM 87410

DISTRICT IV

1220 S. ST. FRANCIS DR., SANTA FE, NM 87505

WELL LOCATION AND ACREAGE DEDICATION PLAT

☐ AMENDED REPORT

API Number	Pool Code 82740	Pool Name Pecos Slope; Abq, West
Property Code	Property Name SOUTH FOUR MILE DRAW C FEDERAL	Well Number 1
GRID No.	Operator Name McKAY OIL CORPORATION	Elevation 4326'

Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
D	22	6-S	22-E		660	NORTH	890	WEST	CHAVES

Bottom Hole Location If Different From Surface

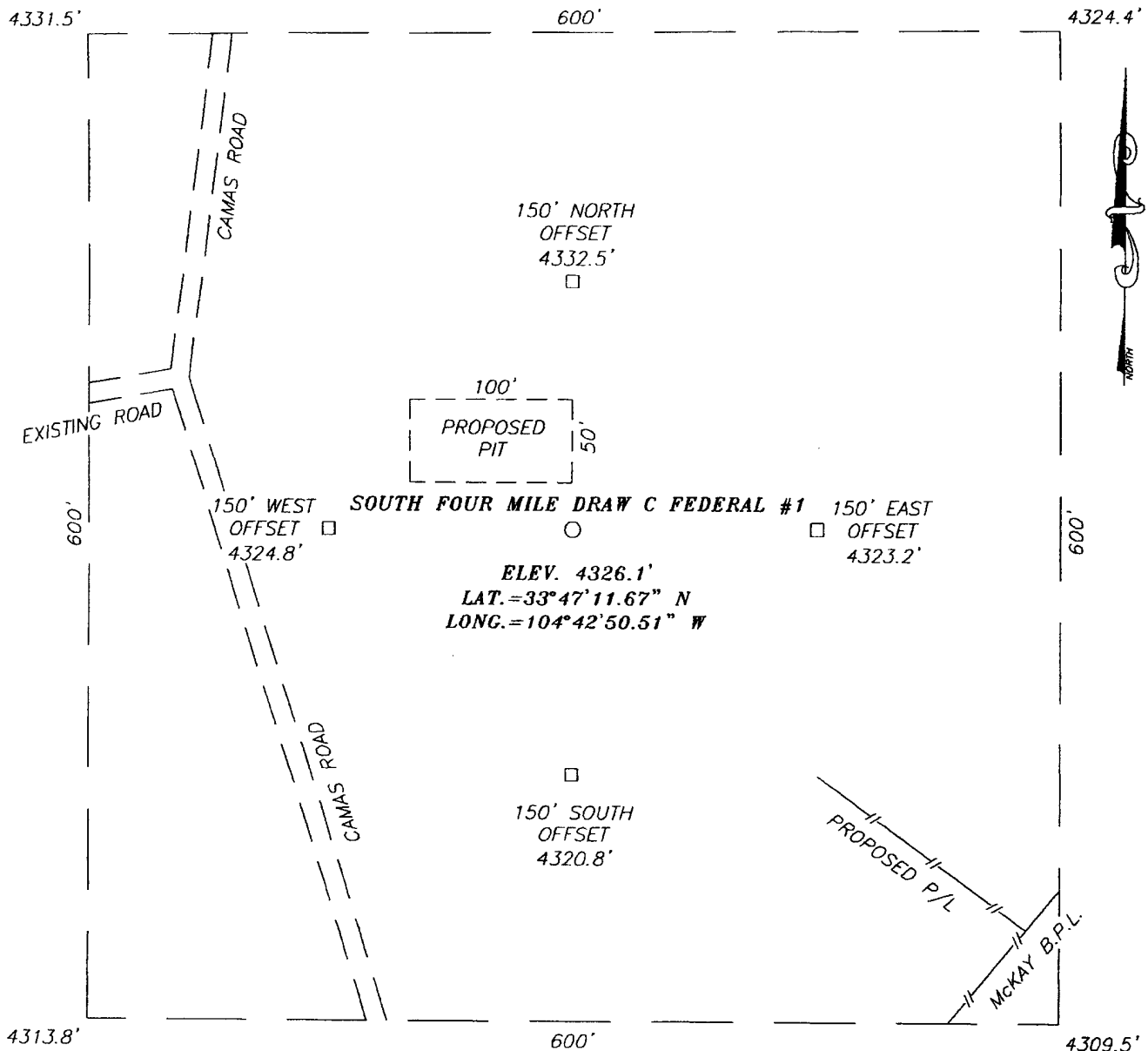
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County

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

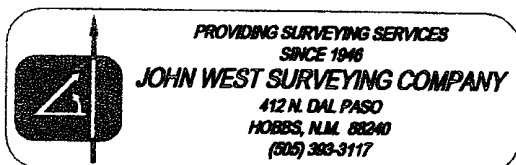
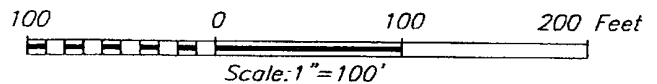
<p>Diagram showing well location with geodetic coordinates and dimensions. The diagram includes a grid with dimensions: 4331.5', 4324.4', 4313.8', 4309.5', 890', 600', 660'. The well location is marked with a circle and labeled 'WELL LOCATION'. The geodetic coordinates are listed as: Y=1013912.1 N, X=384830.6 E, LAT.=33°47'11.67" N, LONG.=104°42'50.51" W.</p>	<h3>OPERATOR CERTIFICATION</h3> <p>I hereby certify the the information contained herein is true and complete to the best of my knowledge and belief.</p> <p>Signature: <i>James Schultz</i> Printed Name: James Schultz</p> <p>Agent: _____ Title: _____ Date: 05/02/05</p> <h3>SURVEYOR CERTIFICATION</h3> <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>Date Surveyed: APRIL 12, 2005</p> <p>Signature: <i>Barry A. Edmon</i> Professional Surveyor: _____ Date: 4/27/05</p> <p>Certificate No. CARY 80889 12841</p>
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SECTION 22, TOWNSHIP 6 SOUTH, RANGE 22 EAST, N.M.P.M.,
 CHAVES COUNTY, NEW MEXICO



DIRECTIONS TO LOCATION

FROM THE INTERSECTION OF U.S. HWY. #285 AND CR. #40 (STARGRASS RD.). GO WEST ON CR. RD. #40 APPROX. 8.3 MILES TO CAMAS RD. AND TURN LEFT (SOUTH). GO APPROX. 0.2 MILES. THIS LOCATION IS APPROX. 175' EAST OF ROAD.

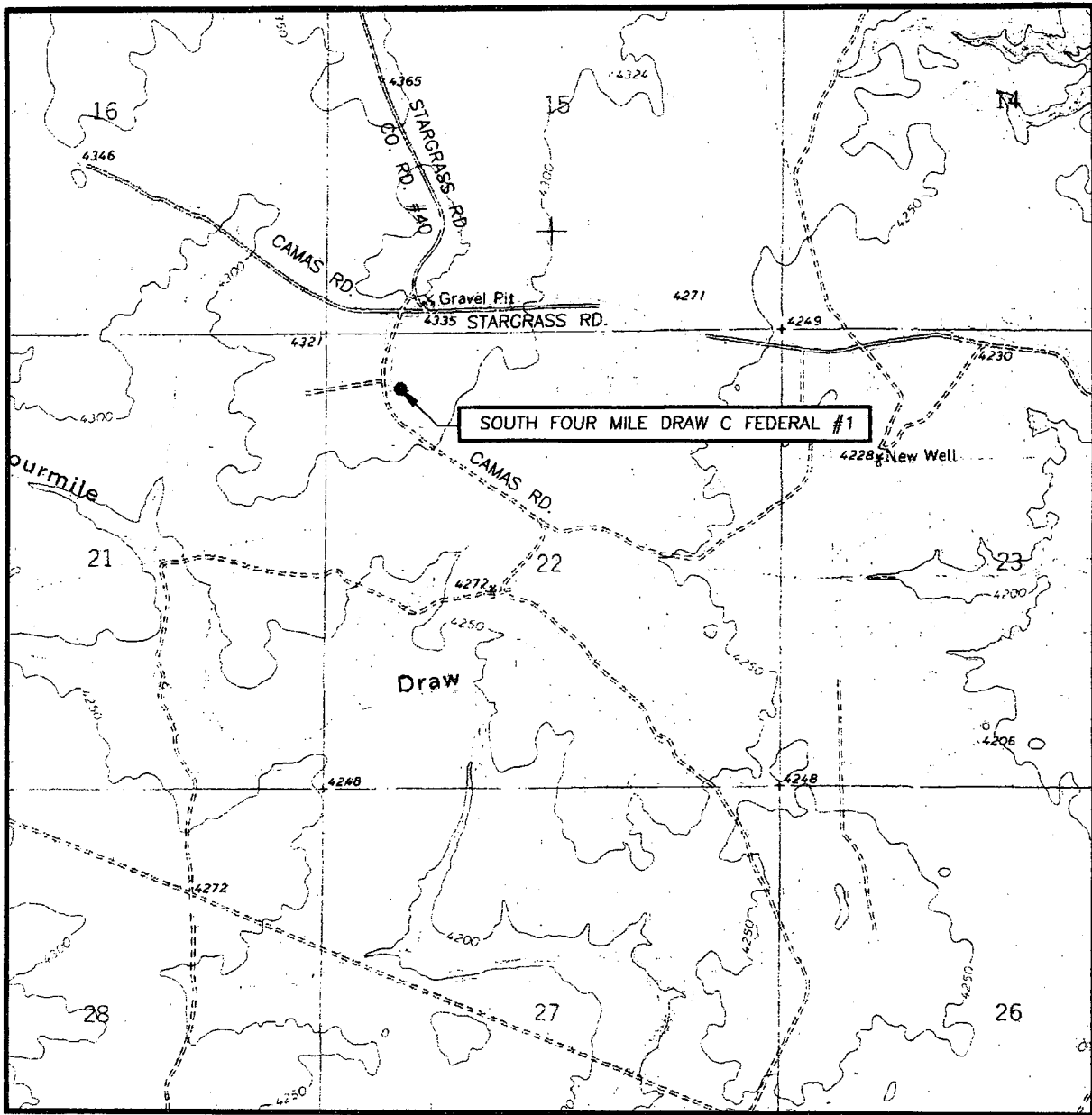


McKAY OIL CORPORATION

SOUTH FOUR MILE DRAW C FEDERAL #1 WELL
 LOCATED 660 FEET FROM THE NORTH LINE
 AND 890 FEET FROM THE WEST LINE OF SECTION 22,
 TOWNSHIP 6 SOUTH, RANGE 22 EAST, N.M.P.M.,
 CHAVES COUNTY, NEW MEXICO.

Survey Date: 04/12/05		Sheet 1 of 1 Sheets	
W.O. Number: 04.11.1640		Dr By: DEL	Rev 1:N/A
Date: 04/21/05	Disk: CD#4	04111640	Scale: 1"=100'

LOCATION VERIFICATION MAP



SCALE: 1" = 2000'

CONTOUR INTERVAL:
MEAS SW, N.M. - 10'

SEC. 22 TWP. 6-S RGE. 22-E

SURVEY _____ N.M.P.M.

COUNTY _____ CHAVES

DESCRIPTION 660' FNL & 890' FWL

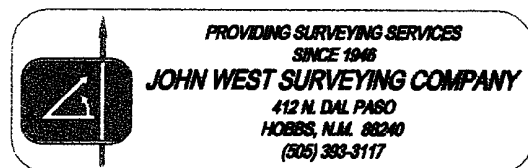
ELEVATION _____ 4326'

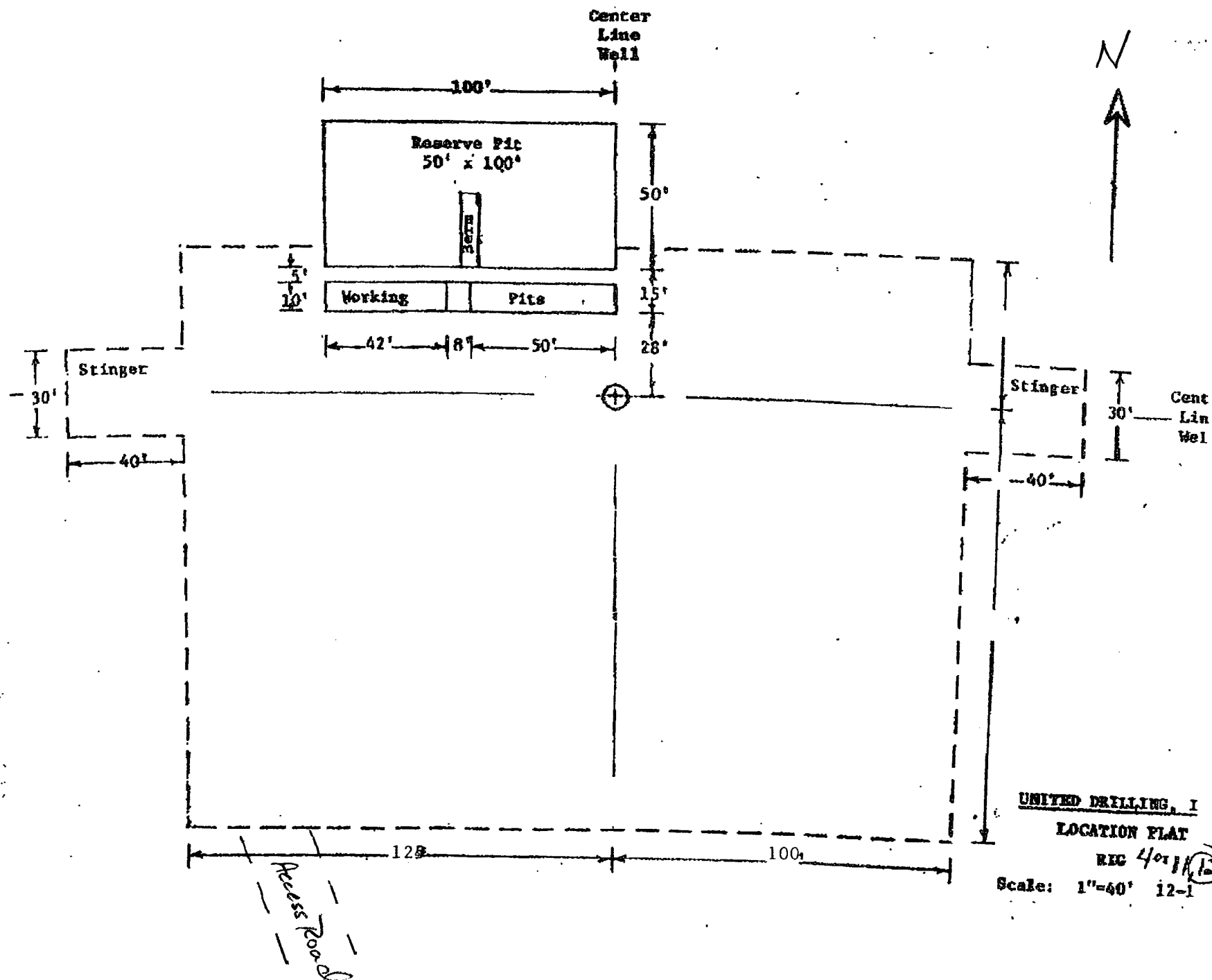
OPERATOR _____ McKAY OIL CORPORATION

LEASE SOUTH FOUR MILE DRAW C FEDERAL

U.S.G.S. TOPOGRAPHIC MAP

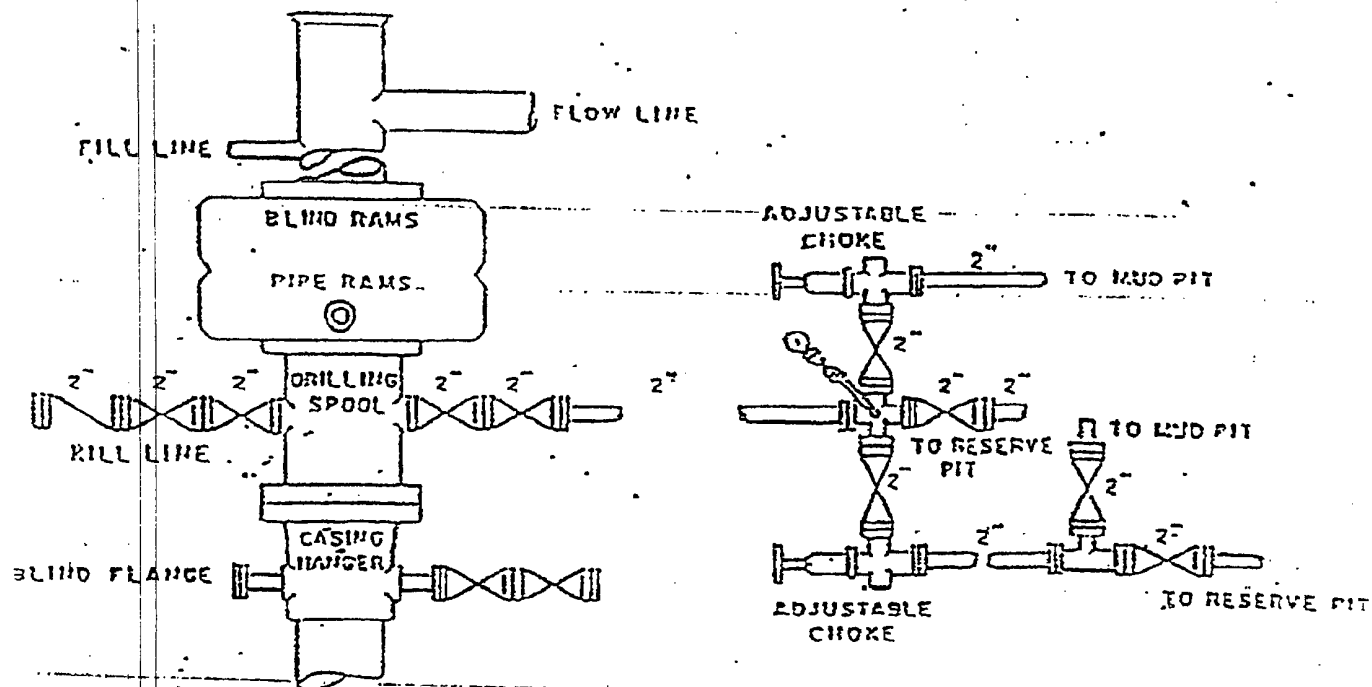
MEAS SW, N.M.





McKay Oil Corporation
South Four Mile Draw C Federal 1
Section 22, T6S, R22E
Chaves County, New Mexico

Exhibit "D"



SUPPLEMENTAL DRILLING DATA

MCKAY OIL CORPORATION
SOUTH FOUR MILE DRAW C FEDERAL 1
660' FNL & 890' FWL Sec 22, T6S, R22E

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	-	1077'
Tubb	-	2573'
Abo	-	2801'

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

Fresh Water	-	In surface formation above 600'
Gas	-	In Abo Formation below 2801'

4. PROPOSED CASING PROGRAM:

12-1/4" hole	8-5/8" J-55	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: As soon as possible.
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
SOUTH FOUR MILE DRAW C FEDERAL 1
660' FNL & 890FWL Sec 22, T6S, R22E

Chaves County, New Mexico

NM 36194

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: From the intersection of U.S. Highway #285 and County Road #40 (Stargrass Rd), go west on CR Rd. #40 approximately 8.3 miles to Camas Rd. Turn left on Camas Rd. and go South approximately 0.2 miles. This location is approximately 175' east of road.

2. PLANNED ACCESS ROAD:

A. Length and Width: Using existing road.

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

C. Turnouts: None

D. Maximum Grade: No more than 3%.

E. Drain Design: not applicable

F. Culverts: None.

G. Cuts and Fill: None.

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

**Southwest Petroleum
Land Services, LLC**

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

May 3, 2005

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

Re: H2S Contingency Plan-Lookout Federal B #3

Bryan,

Please see attached Contingency Plan-H2S for the South Four Mile Draw C Federal 1 located in Sec 22, T6S, R22E 660' FNL & 890' FWL in 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 (H₂S) CONTINGENCY PLAN FOR THE
SOUTH FOUR MILE DRAW C FEDERAL 1
LOCATED IN SEC 22, T6S, R22E IN
CHAVES COUNTY, NEW MEXICO

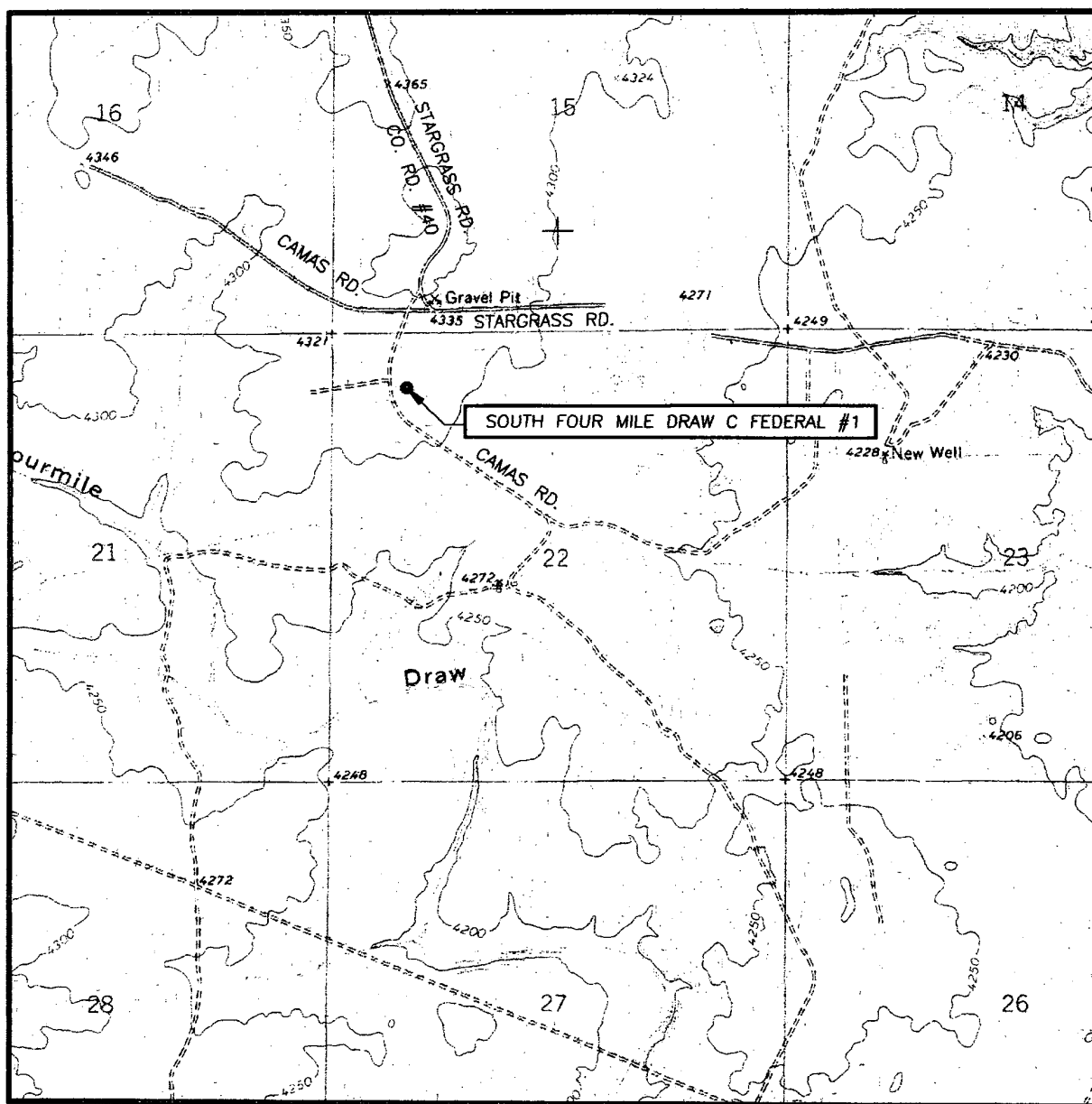
NO HYDROGEN SULFIDE OR OTHER HAZARDOUS GASES OR FLUIDS HAVE
BEEN ENCOUNTERED, REPORTED OR KNOWN TO EXIST AT THIS DEPTH IN
THIS AREA.

SOUTH FOUR MILE DRAW C FEDERAL 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

LOCATION VERIFICATION MAP



SCALE: 1" = 2000'

CONTOUR INTERVAL:
MEAS SW, N.M. - 10'

SEC. 22 TWP. 6-S RGE. 22-E

SURVEY N.M.P.M.

COUNTY CHAVES

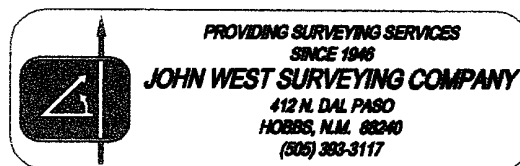
DESCRIPTION 660' FNL & 890' FWL

ELEVATION 4326'

OPERATOR McKAY OIL CORPORATION

LEASE SOUTH FOUR MILE DRAW C FEDERAL

U.S.G.S. TOPOGRAPHIC MAP
MEAS SW, N.M.



EMERGENCY PROCEDURES

In the case of a release of gas containing H₂S, 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 H₂S measures for protection against the gas, equipment used for protection and emergency response. Additionally, responders must be equipped with H₂S 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 (SO₂). 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 H₂S & SO₂

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

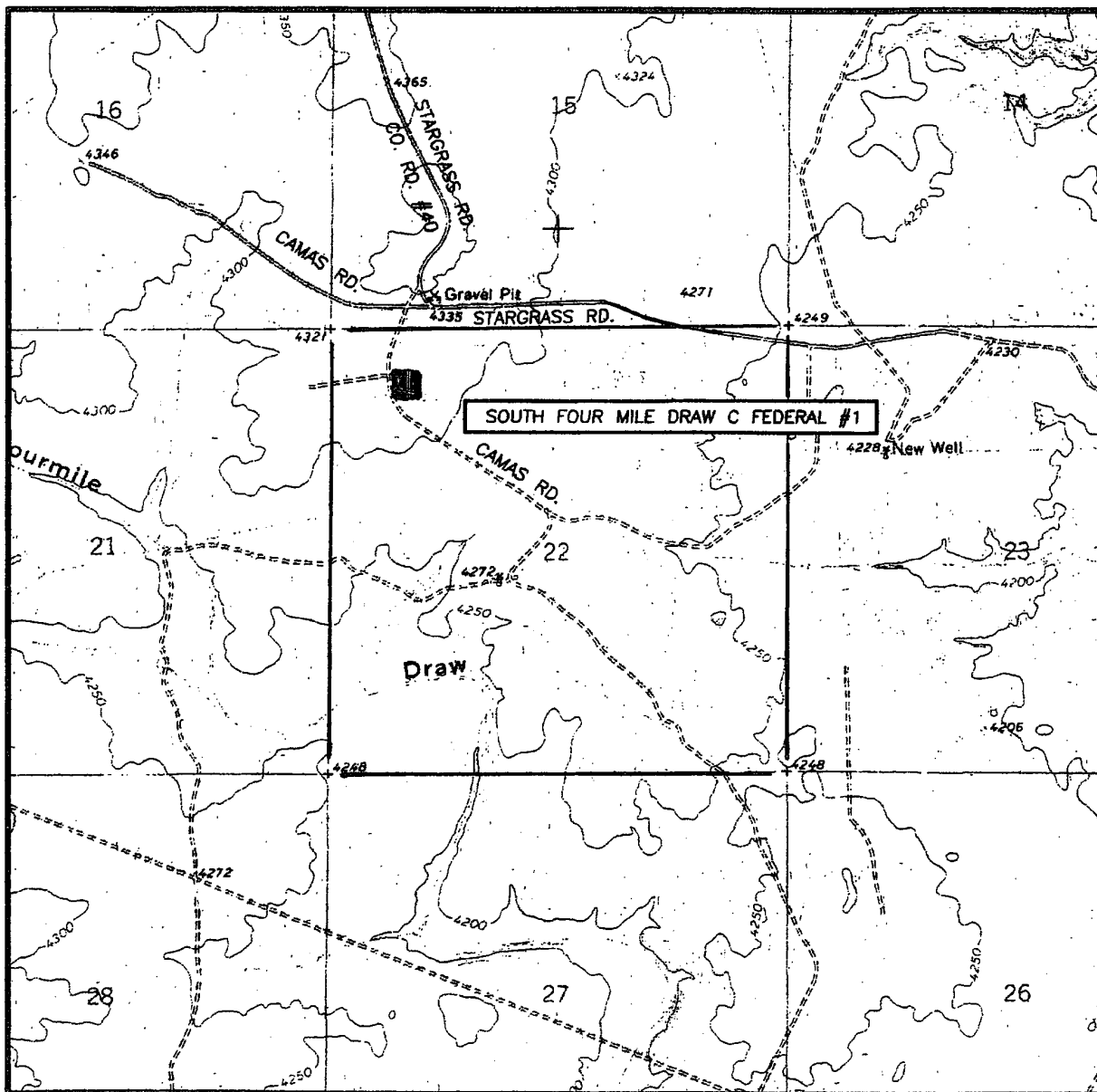
CHAVES COUNTY (505)	OFFICE	CELL PHONE	HOME PHONE
HUMBERTO PEREZ	625-1154	626-8580	627-1985
JIM ROBINSON	625-1154	626-8579	624-1093
APRIL MCKAY	623-4735	626-8575	625-2848

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-36194
WELL NAME & NO: South Four Mile Draw "C" Federal #1
QUARTER/QUARTER & FOOTAGE: NW¼NW¼ - 660' FNL & 890' FWL
LOCATION: Section 22, T. 6 S., R. 22 E., NMPM
COUNTY: Chaves County, New Mexico





United States Department of the Interior
BUREAU OF LAND MANAGEMENT
Roswell Field Office
2909 West Second Street
Roswell, New Mexico 88201

EXHIBIT B

1 of 5 pages

WELL DRILLING REQUIREMENTS

OPERATORS NAME: McKay Oil Corporation LEASE NO.: NM-36194
WELL NAME & NO: South Four Mile Draw "C" Federal #1
QUARTER/QUARTER & FOOTAGE: NW¼NW¼ - 660' FNL & 890' FWL
LOCATION: Section 22, T. 6 S., R. 22 E., NMPM
COUNTY: Chaves County, New Mexico

I. GENERAL PROVISIONS:

- A. The operator has the right of administrative review of these requirements pursuant to 43 CFR 3165.1(a).
- B. The operator shall hereafter be identified as the holder in these requirements. The Authorized Officer is the person who approves the Well Drilling Requirements.

II. WELL PAD CONSTRUCTION REQUIREMENTS:

- A. The BLM shall administer compliance and monitor construction of the access road and well pad. Notify Richard G. Hill at least 3 working days (72 Hours) prior to commencing construction of the access road and/or well pad. Roswell Field Office number (505) 627-0247.
- B. Prior to commencing construction of the access road, well pad, or other associated developments, the holder shall provide the dirt contractor with a copy of the approved APD signature page, a copy of the location map (EXHIBIT A), a copy of pages 1 & 2 from the Well Drilling Requirements (EXHIBIT B), and a copy of the Permanent Resource Road Requirements (EXHIBIT D).
- C. The holder shall stockpile the topsoil from the surface of the well pad for reclamation purposes. The topsoil on the South Four Mile Draw "C" Federal #1 well pad is approximate 6 inches in depth. Approximately 800 cubic yards of topsoil shall be stockpiled on the Southeast corner of the well pad, opposite the reserve pit. Upon reclamation of the well pad, the topsoil stockpile shall be redistributed over the disturbed areas. See Well Drilling Requirements - VI. Seeding Requirements - for reclamation of the well pad.

D. Reserve Pit Requirements:

- 1. The reserve pit shall be constructed 50' X 100' on the **North** side of the well pad.
- 2. The reserve pit shall be constructed to a minimum depth of four (4) feet below ground level. The reserve pit shall be constructed, so that the cuttings in the reserve pit can be buried a minimum depth of three (3) feet below ground level. See Exhibit E – Surface Reclamation/Restoration Requirements.
- 3. A synthetic or fabricated liner 12 mil in thickness shall be used to line the reserve pit. The liner shall meet ASTM standards that are designed to be resistant to the reserve pit contents.

4. The reserve pit shall be fenced on three (3) sides during drilling operations. The fourth side shall be fenced immediately upon rig release.
5. The reserve pit shall be constructed so as not to leak, break, or allow discharge of drilling muds. Under no circumstances will the reserve pit be cut to drain drilling muds on the well location.
6. The reserve pit shall not be located in any natural drainage.
7. The reserve pit shall be equipped to deter entry by birds, bats, other wildlife, and livestock, if the reserve pit contains any oil and/or toxic fluids.
8. Drilling muds shall be properly disposed of before the reserve pit is reclaimed. Drilling muds can be allowed to evaporate in the reserve pit or be removed and transported to an authorized disposal site. The reserve pit shall be backfilled when dry.
9. Dumping of junk or trash into the reserve pit is not allowed. Junk or trash shall be removed from within the reserve pit before the reserve pit is reclaimed. **Junk or trash shall not be buried in the reserve pit.**

E. Federal Mineral Materials Pit Requirements:

1. Caliche, gravel, or other related materials from new or existing pits on Federal mineral estate shall not be taken without prior approval from the authorized officer. Contact Jerry Dutchover at (505) 627 -0236.
2. Payment for any Federal mineral materials that will be used to surface the access road and the well pad is required prior to removal of the mineral materials.
3. Mineral Materials extracted during construction of the reserve pit may be used for development of the pad and access road as needed, for the S. Four Mile Draw "C" Federal #1 gas well only. Removal of any additional material on location must be purchased from BLM prior to removal of any material.
 - a. An optional mineral material pit may be constructed within the archaeologically cleared area. The mineral material removed in the process can be used for pad and access road construction. However, a mineral material sales contract must be purchased from the BLM prior to removal of any material.

F. Well Pad Surfacing Requirement:

The well pad shall be surfaced with 6 inches of compacted caliche, gravel, or other approved surfacing material. The well pad shall be surfaced prior to drilling operations. See **Permanent Resource Road Requirements - EXHIBIT D - requirement #4, for road surfacing.**

G. Cave Requirements:

1. If, during any construction activities any sinkholes or cave openings are discovered, all construction activities shall immediately cease. Contact **Larry Bray** at (505) 627-0250.
2. The BLM Authorized Officer will, within 24 hours of notification in "A" above, conduct an on-the-ground field inspection for karst. At the field inspection the authorized field inspector will authorize or suggest mitigating measures to lessen the damage to the karst environment. A verbal order to proceed or stop the operation will be issued at that time.

III. DRILLING OPERATION REQUIREMENTS:

A. GENERAL DRILLING REQUIREMENTS:

1. The Bureau of Land Management (BLM) is to be notified at the Roswell Field Office, 2909 West Second St., Roswell NM 88201, (505) 627-0272 in sufficient time for a representative to witness:

A. Spudding B. Cementing casing: 8 $\frac{5}{8}$ inch 5 $\frac{1}{2}$ 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 $\frac{5}{8}$ inch surface casing shall be set at 950' 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 $\frac{1}{2}$ inch intermediate casing is **cement shall extend upward a minimum of 500 feet above the uppermost perforation.**

C. PRESSURE CONTROL:

1. All BOP systems and related equipment shall comply with well control requirements as described in Onshore Oil and Gas Order No. 2. The BOP and related equipment shall be installed and operational before drilling below the 8 $\frac{5}{8}$ 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.

A. The results of the test shall be reported to the appropriate BLM office.

B. Testing fluid must be water or an appropriate clear liquid suitable for sub-freezing temperatures. Use of drilling mud for testing is not permitted since it can mask small leaks.

C. Testing must be done in a safe workman-like manner. Hard line connections shall be required.