

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. TYPE OF WORK DRILL <input checked="" type="checkbox"/> DEEPEN <input type="checkbox"/> PLUG BACK <input type="checkbox"/>		
b. TYPE OF WELL OIL WELL <input type="checkbox"/> GAS WELL <input checked="" type="checkbox"/> OTHER <input type="checkbox"/>		
2. NAME OF OPERATOR McKay Oil Corporation ✓		
3. ADDRESS OF OPERATOR P.O. Box 2014, Roswell, New Mexico 88202 O. C. D. ARTESIA OFFICE		
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements) At surface 990' FWL-990' FNL At proposed prod. zone same		
14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE* 34 air miles from Roswell, NM		
15. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drlg. unit line, if any)	990'	16. NO. OF ACRES IN LEASE 1,923.32
18. DISTANCE FROM PROPOSED LOCATION* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT.	none	19. PROPOSED DEPTH 3,400
21. ELEVATIONS (Show whether DF, RT, GR, etc.) 4,419 GR		20. ROTARY OR CABLE TOOLS Rotary
		22. APPROX. DATE WORK WILL START* ASAP

PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
9 7/8"	7"	23# J-55	700'	850 cf cement circ.
6 1/4"	4 1/2"	9.5# J-55	TD	Sufficient to isolate all water, oil and gas.

We propose to drill and test the Abo formation. Approximately 700' of surface casing will be set and cemented to surface. If commercial, 4 1/2" production casing will be run and cemented with adequate cover, perforated and stimulated as needed for production.

AIR DRILL FROM SURFACE TO TD.

BOP PROGRAM: Blowout preventer stack will consist of at least a rotary head with stripper rubber and 4" blow line with control valve.

Gas is not dedicated.

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen or plug back, give data on present productive zone and proposed new productive zone. If proposal is to drill or deepen directionally, give pertinent data on subsurface locations and measured and true vertical depths. Give blowout preventer program, if any.

24. SIGNED [Signature] TITLE Agent DATE 4-7-91

(This space for Federal or State office use)

PERMIT NO. \_\_\_\_\_ APPROVAL DATE \_\_\_\_\_

APPROVED BY S/Homer Meyer, Acting TITLE Area Manager DATE APR 25 1991

CONDITIONS OF APPROVAL, IF ANY:

APPROVAL OF THIS APPLICATION 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.

PLEASE BE ADVISED THAT THERE WILL BE NO EXCAVATION OF FEDERALLY OWNED MINERAL MATERIAL FOR CONSTRUCTION OF THE ACCESS ROAD OR PAD WITHOUT PAYMENT IN ADVANCE.

Under the U.S.C. Section 1001, knowingly and fraudulently making any statement or representation to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

1944-1945

1944-1945  
1944-1945  
1944-1945

1944-1945

Submit to Appropriate  
District Office  
State Lease - 4 copies  
Fee Lease - 3 copies

State of New Mexico  
Energy, Minerals and Natural Resources Department

Form C-102  
Revised 1-1-89

OIL CONSERVATION DIVISION

P.O. Box 2088  
Santa Fe, New Mexico 87504-2088

DISTRICT I  
P.O. Box 1980, Hobbs, NM 88240

DISTRICT II  
P.O. Drawer DD, Artesia, NM 88210

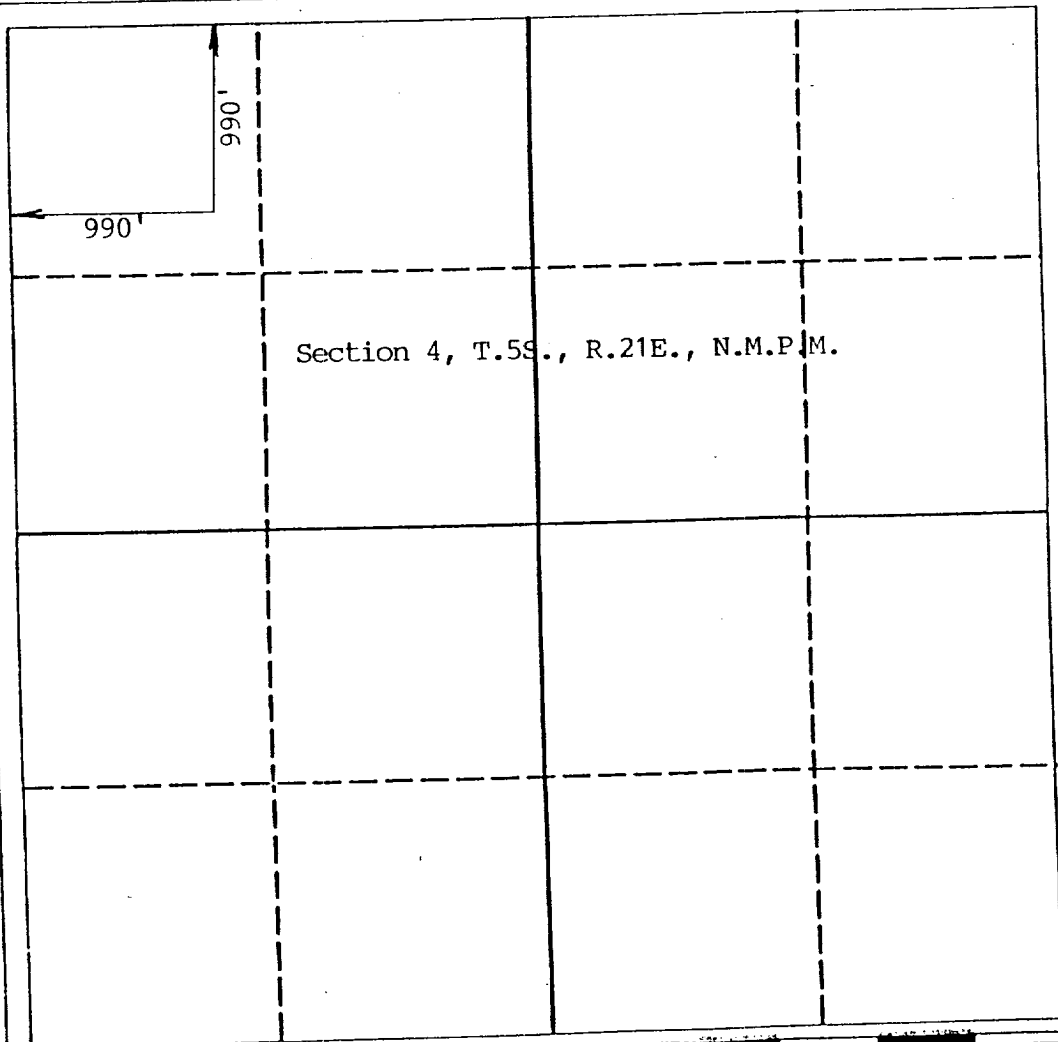
DISTRICT III  
1000 Rio Brazos Rd., Aztec, NM 87410

WELL LOCATION AND ACREAGE DEDICATION PLAT

All Distances must be from the outer boundaries of the section

Operator McKay Oil Corporation			Lease Theresa Federal		Well No. #1
Unit Letter D	Section 4	Township 5S.	Range 21E.	County Chaves	NMPM
Actual Footage Location of Well: 990 feet from the West line and 990 feet from the North line					
Ground level Elev. 4419	Producing Formation ABO		Pool W. Pecos Slope Abo		Dedicated Acreage: 160 Acres

1. Outline the acreage dedicated to the subject well by colored pencil or hatchure marks on the plat below.
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).
3. If more than one lease of different ownership is dedicated to the well, have the interest of all owners been consolidated by communitization, unitization, force-pooling, etc.?  
☐ Yes ☒ No If answer is "yes" type of consolidation \_\_\_\_\_  
If answer is "no" list the owners and tract descriptions which have actually been consolidated. (Use reverse side of this form if necessary).  
No allowable will be assigned to the well until all interests have been consolidated (by communitization, unitization, forced-pooling, or otherwise) or until a non-standard unit, eliminating such interest, has been approved by the Division.



OPERATOR CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.

Signature

Printed Name

Sam L. Shackelford

Position

Agent

Company

McKay Oil Corp.

Date

4-7-91

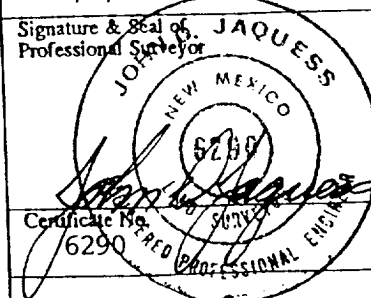
SURVEYOR CERTIFICATION

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 knowledge and belief.

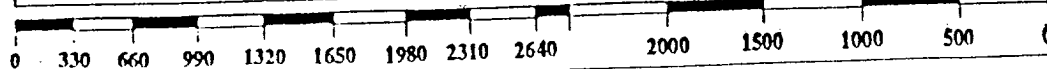
Date Surveyed

4/2/91

Signature & Seal of  
Professional Surveyor



Certificate No.  
6290



**PERTINENT INFORMATION**

For

MCKAY OIL CORPORATION  
Theresa Federal #1  
NW/4NW/4 of Sec. 4, T-5S, R-21E  
Chaves County, New Mexico

<u>LOCATED:</u>	35 air miles Northwest of Roswell, N.M.
<u>LEASE NUMBER:</u>	NM-78339
<u>LEASE ISSUED</u>	May 1, 1981
<u>RECORD LESSEE:</u>	McKay Oil Corporation McKay Children,s Trust
<u>BOND COVERAGE:</u>	Lessee's \$25,000 Statewide
<u>AUTHORITY TO OPERATE:</u>	Designation of Operator
<u>ACRES IN LEASE:</u>	1,923.32 acres, more or less
<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 F. Location Topography

## SUPPLEMENTAL DRILLING DATA

MCKAY OIL CORPORATION  
Theresa Federal #1  
NW/4NW/4 of Sec. 4, T-5S, R-21E  
Chaves County, New Mexico

NM-78340

The following items supplement Form 9-331C in accordance with instruction contained in NTL-6.

1. SURFACE FORMATION: San Andres
2. ESTIMATED TOPS OF GEOLOGICAL MARKERS:

Yeso	-	680'
Tubb	-	2380'
Abo	-	3080'
3. ESTIMATED DEPTHS TO WATER, OIL OR GAS FORMATION:

Fresh Water	-	In surface formation above 600'
Gas	-	In Abo formation below 3080'
4. PROPOSED CASING PROGRAM: See Form 9-331C
5. PRESSURE CONTROL EQUIPMENT: Blowout preventer will consist of a control head 1,500#WP and 3,000# test pressure. Upon availability of air rig the blowout preventer will consist of Rotary Head with a rotating rubber with 2,000#Wp and 4,000# test pressure and a steel Blooey Line with 1,500#WP valve. A sketch of the BOP is attached.
6. CIRCULATING MEDIUM:

Fresh water through surface, then Abo water through remainder to TD.
7. 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.

8. 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
9. ABNORMAL PRESSURES, TEMPERATURES OR HYDROGEN SULFIDE:  
None anticipated.
10. ANTICIPATED STARTING DATE: On or before May 1, 1991  
Drilling should be completed within 60 days.  
Completion operations (perforations and stimulation)  
will follow drilling operations.

## MULTI-POINT SURFACE USE AND OPERATIONS PLAN

McKAY OIL CORPORATION  
Theresa Federal #1  
NW/4NW/4 Sec. 4-5S-21E  
Chaves County, N.M.

NM-78339

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 as staked. The well is approximately 35 miles North of Roswell, N.M.
- B. Directions: Heading North out of Roswell, New Mexico on U.S. 285 for approximately 23 miles and turn left on county road just before mile marker 137 (Cottonwood Road). Go approximately 3.0 miles, then turn north for 1 1/4 miles, then west to the cattleguard, turn west for 2 3/4 miles, then turn north in SW/4SW/4 of sec. 31 for 3 miles, then west for 3/4 miles to TX-NM pipeline, then continue along pipeline 3.0 miles, then south-west 3/4 mile to location.

### 2. PLANNED ACCESS ROAD:

- A. Length and Width: 6 3/4 miles long and 14' wide.
- B. Surfacing Materials: Sand, gravel and caliche where needed.
- C. Turnouts: two
- D. Maximum Grade: No more than 3%.
- E. Drainage 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, Cattleguards: Cattleguards will be installed at fence crossing in SE/4SE/4NE/4 of sec. 24, 5S-21E and NW/4NW/4 of sec. 4, 5S-21E.
  - 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 10' of cut and fill will be required for the pad size of 125' x 125'. (see Exhibit "F")
  - C. Top Soil: Any top soil which can sustain plant vegetation will be bladed and piled for future rehabilitation.
5. LOCATION AND TYPE AF 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. State Pit located in the SE/4SE/4 Sec. 36-5S-21E.
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 buried in a separate trash pit and covered with a minimum of 24 inches of dirt or deposited in an approved sanitary landfill. All waste material will be contained by a netted container to prevent scattering by the wind. Location of the trash pit is shown on Exhibit "C".
  - F. All trash and debris will be buried or 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. Exhiabit "C" indicates the relation location and demensions of the well pad, mud pits, reserve pit and major rig equipment.
  - B. The location slopes to the southwest.
  - 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 condition 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 distrubed area will be rehabilitated using the preserved soil mentioned in 2. I. and 4. C.
11. OTHER INFORMATION:
- A. Topography: The topography has a slope to the

southwest in the vicinity of the access road and southwest in the vicinity of the drill pad. Regional slope is southwest toward the Fifteen Mile Arroyo which is approximately 1/2 mile from 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 or Streams: Fifteen Mile Arroyo 1/2 mile southwest of the proposed location.
- E. Residences and other Structures: The J. M. Lewis ranch house is approximately 2 1/2 miles east of this location.
- F. Archaeological, Historical and Other Cultural Sites: An Archaeologist from Roswell, NM (A.S.C. Co.) has checked and approved this site and access road.
- G. Land Use: Grazing
- H. Surface Ownership: Federal

12. OPERATOR'S REPRESENTATIVE:

Gary Richburg  
Roswell, New Mexico  
(505) 623-4735

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.

4-7-91  
DATE:

[Signature]



[illegible][illegible][illegible]

MCKAY OIL CORPORATION  
Theresa Federal #1  
NW/4NW/4 of Sec. 4, T-5S, R-21E  
Chaves County, New Mexico

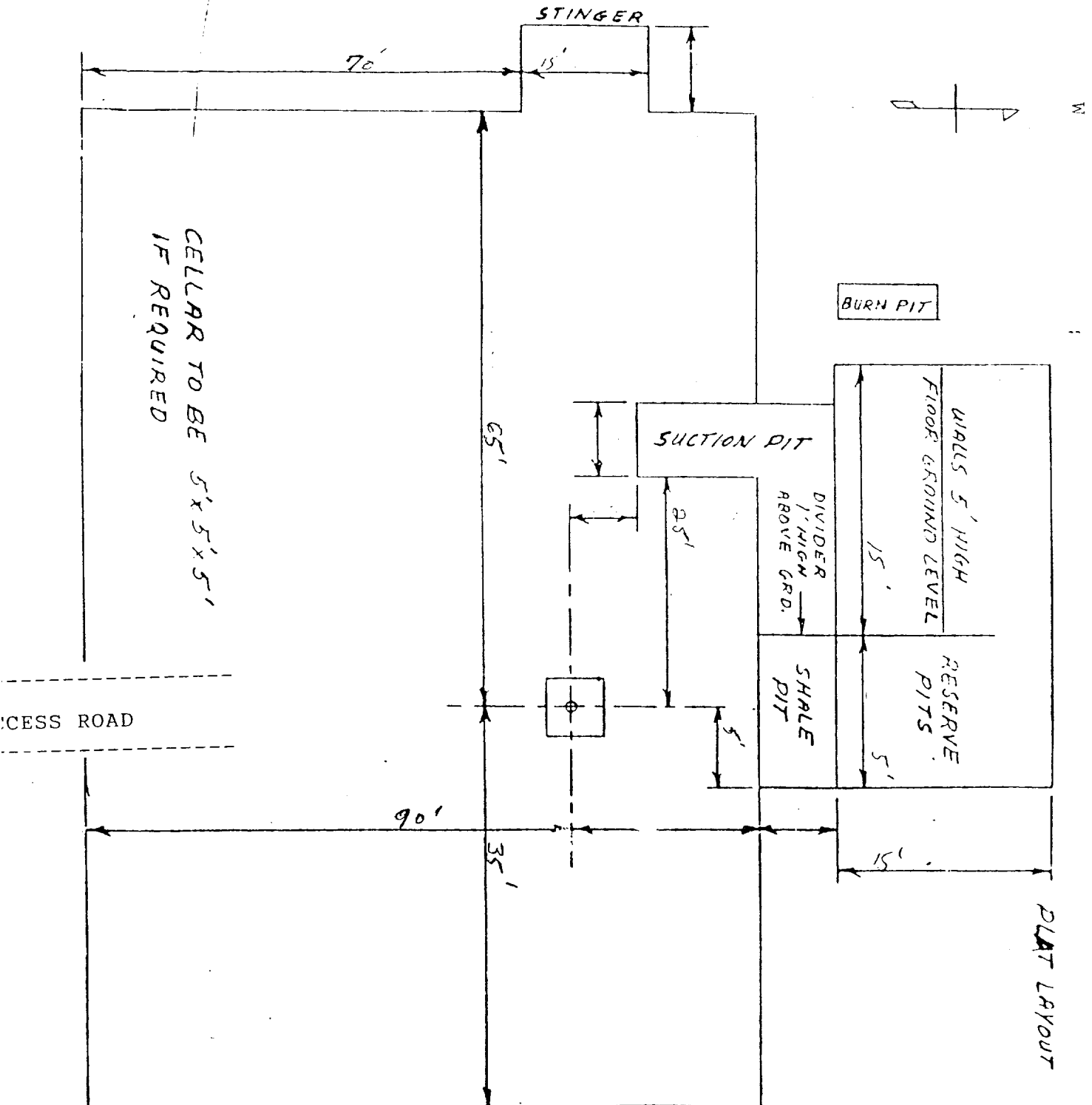
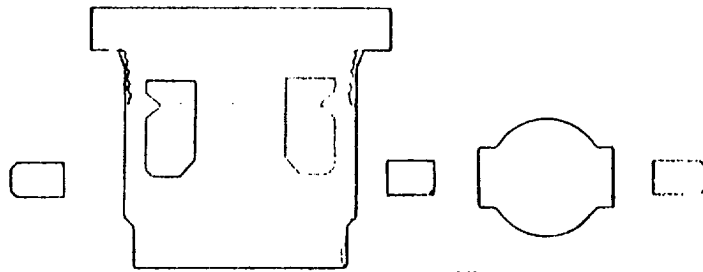


EXHIBIT C

AIR RIG CONTROL HEAD

full 10" opening



4" valve 1500# wp 3000# test

head 1500# wp 3000# test

EXHIBIT "D-1"

The map displays a 6x6 grid of sections, numbered 1 through 36. The central section, 16, is labeled 'MCKAY OIL CORPORATION Theresa Federal #1 NW/4NW/4 of Sec. 4, T-5S, R-21E Chaves County, New Mexico'. The map includes numerous annotations such as 'MCKAY OIL', 'ARROYO DEL NACHO UNIT', and 'MEXCO OIL (OPMER)'. It also shows well locations with names like 'WELL 1', 'WELL 2', and 'WELL 3'. The map is divided into four quadrants by a central vertical line and a horizontal line, with section numbers 20, 21, 22, and 23 visible in the corners.



JOHN D. JAQUESS  
CONSULTING ENGINEERS  
P.O. Box 2565  
ROSWELL, NEW MEXICO 88201  
(505) 622-8866

JOB \_\_\_\_\_ GRID ELEVATIONS \_\_\_\_\_

SHEET NO \_\_\_\_\_ OF \_\_\_\_\_

CALCULATED BY \_\_\_\_\_ DATE \_\_\_\_\_

CHECKED BY \_\_\_\_\_ DATE \_\_\_\_\_

SCALE \_\_\_\_\_

NW  
4420

400'

NE  
4430

400'

4419 ○

400'

SW  
4408

400'

SE  
4419

THERESA FEDERAL #1  
990 FWL, 990 FNL, SECTION 4  
T.5S., R.21E., N.M.P.M.  
CHAVES COUNTY, NEW MEXICO

F. Culverts: None

G. Cuts and Fill: none

H. Gates, Cattleguards: Cattleguards will be installed at fence crossing in SE/4SE/4NE/4 of sec. 24, 5S-21E, NW/4NW/4 of sec. 4, 5S-21E and NW/4NE/4 of sec. 10, 5S-21E.

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 10' of cut and fill will be required for the pad size of 125' x 125'. (see Exhibit "F")

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.

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A. State Pit located in the SE/4SE/4 Sec. 36-5S-21E.

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

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