

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

CISF

Form 3160-3
(August 1999)



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 checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER | | 5. Lease Serial No. N705110-A |
| 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 N/A |
| 2. Name of Operator Tropicana Operating, Inc. 6222 | | 7. If Unit or CA Agreement, Name and No. N/A 30764 |
| 3a. Address 1000 W. Grand Ave., Ste. 100, Artesia, NM 88210 | | 8. Lease Name and Well No. Tropicana 9/12/02/Carlsbad |
| 3b. Phone No. (include area code) (505) 683-5003 | | 9. API Well No. 30-015-32517 |
| 4. Location of Well (Report location clearly and in accordance with any State requirements. *) At surface 1980' FSL & 660' FEL ut. I At proposed prod. zone 1980' FSL & 660' FEL | | 10. Field and Pool, or Exploratory N/A |
| 14. Distance in miles and direction from nearest town or post office* 11 miles N from Carlsbad | | 11. Sec., T., R., M., or Blk. and Survey or Area Sec. 12 T-20 R-26 E |
| 15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) 660' | 16. No. of Acres in lease 160.00 | 12. County or Parish Eddy |
| 18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. 2300' | 19. Proposed Depth 10,500' | 13. State NM |
| 21. Elevations (Show whether DF, KDB, RT, GL, etc.) 3310' GR | 22. Approximate date work will start* 12/14/2002 | 17. Spacing Unit dedicated to this well 300.00 |
| 24. Attachments | | 20. BLM/BIA Bond No. on file 3104/9430-351 |
| | | 23. Estimated duration 30 days |

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 <i>Joe G. Lara</i> | Name (Printed/Typed) Joe G. Lara | Date 10/2/02 |
| Title Carlsbad District | | |
| Approved by (Signature) IS/ JOE G. LARA | Name (Printed/Typed) IS/ JOE G. LARA | Date NOV 04 2002 |
| Title ALTIMS FIELD MANAGER | Office CARLSBAD FIELD OFFICE | |

Application approval does not warrant or certify the 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.

APPROVAL FOR 1 YEAR

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)

Carlsbad Controlled Water Basin

APPROVAL SUBJECT TO
GENERAL REQUIREMENTS AND
SPECIAL STIPULATIONS
ATTACHED

State of New Mexico

Energy, Minerals and Natural Resources Department

Form C-102

DISTRICT I

P.O. Box 1980, Hobbs, NM 88241-1980

Revised February 10, 1994

DISTRICT II

P.O. Drawer DD, Artesia, NM 88211-0719

Submit to Appropriate District Office

State Lease - 4 Copies

Fee Lease - 3 Copies

OIL CONSERVATION DIVISION

P.O. Box 2088

Santa Fe, New Mexico 87504-2088

DISTRICT III

1000 Rio Brazos Rd., Aztec, NM 87410

DISTRICT IV

P.O. BOX 2088, SANTA FE, N.M. 87504-2088

WELL LOCATION AND ACREAGE DEDICATION PLAT

☐ AMENDED REPORT

| | | |
|---------------|---|--------------------|
| API Number | Pool Code | Pool Name |
| Property Code | Property Name TROPICANA 12 FED COM | Well Number 1 |
| OGRID No. | Operator Name DISCOVERY OPERATING, INC | Elevation 3309' |

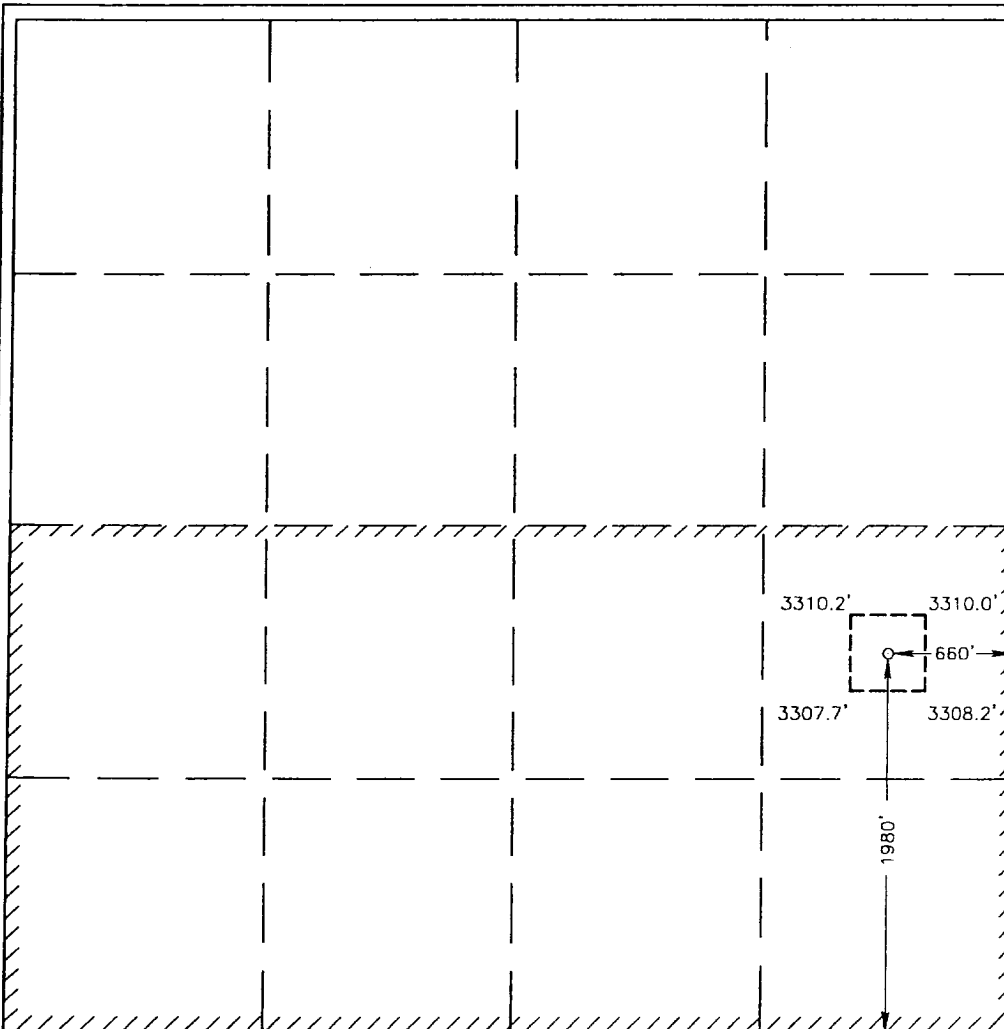
Surface Location

| UL or lot No. | Section | Township | Range | Lot Idn | Feet from the | North/South line | Feet from the | East/West line | County |
|---------------|---------|----------|-------|---------|---------------|------------------|---------------|----------------|--------|
| 1 | 12 | 20-S | 26-E | | 1980 | SOUTH | 660 | EAST | EDDY |

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 320 | Joint or Infill | Consolidation Code | Order No. | | | | | | |

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



OPERATOR CERTIFICATION

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

Stacey Campbell
Signature
Stacey Campbell
Printed Name
Engineering Assistant
Title
10/2/02
Date

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 belief.

JUNE 10, 2002

Date Surveyed: AWB
Signature & Seal of
Professional Surveyor

Ronald J. Eidson
02.11.0425

Certificate No. RONALD J. EIDSON 3239
GARY EIDSON 12641

United States Department of the Interior

BUREAU OF LAND MANAGEMENT

Roswell Resource Area
2909 W. 2nd St.
Roswell, New Mexico 88201

Statement Accepting Responsibility for Operations

Operator name: Discovery Operating, Inc.
Street or Box : 800 N. Marienfeld, Suite 100
City, State : Midland, Texas
Zip code, : 79701

The undersigned accepts all applicable terms, conditions, stipulations, and restrictions concerning operations conducted on the leased land or portion thereof, as described below:

Lease No. : NM 05110-A

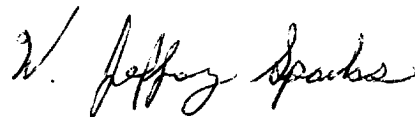
Legal Description of land: 1980' FSL & 660' FEL
Sec. 12, T-20-S, R-26-E
Eddy County, NM

Formation (s) (if applicable): Wildcat
McMillian Morrow

Bond Coverage: (State if individually bonded or another's bond)
Statewide

BLM Bond File No.: 3104 (943c-3st)

Authorized Signature :



Title : Vice President

Date : 10/2/02

SUPPLEMENTAL DRILLING DATA

Discovery Operating, Inc.
Tropicana 12 Fed Com

1. **Surface Formation:** Quaternary

2. **Estimated Tops of Geological Markers:**

| | |
|---------------------|-------------------------|
| Queen (620') | Penn Shale (8150') |
| Grayburg (900') | Strawn (9060') |
| San Andres (1570') | Atoka (9615') |
| Bone Spring (2530') | Morrow (9850') |
| Wolfcamp (7815') | Mississippian (10,370') |

3. **Anticipated Possible Water and Hydrocarbon Bearing Zones:**

| | |
|--------------------------|----------------------|
| Fresh Water – above 300' | Atoka – Hydrocarbon |
| Wolfcamp – Hydrocarbon | Morrow – Hydrocarbon |
| Strawn - Hydrocarbon | |

4. **Proposed Casing and Cementing:**

| <u>Casing Size</u> | <u>Setting Depth</u> | | <u>Wt</u> | <u>Grade Joint</u> | |
|----------------------------------|----------------------|-----------|-----------|--------------------|------|
| | <u>From</u> | <u>To</u> | | | |
| 13 ³ / ₈ " | 0 | 500 | 48# | H-40 | ST&C |
| 9 ⁵ / ₈ " | 0 | 2,900 | 40# | J-55 | ST&C |
| 5 ¹ / ₂ " | 0 | 10,500 | 17# | N-80 | LT&C |

13³/₈" casing will be cemented with sufficient cement to circulate.

9⁵/₈" casing will be cemented with sufficient cement to circulate.

5¹/₂" casing will be cemented with sufficient cement to bring the top to 6,500'.

5. **Pressure Control Equipment:**

Blowout preventer equipment will consist of a Shaffer LWS hydraulic double 11" x 5000 psi. A Shaffer 11" x 5000 psi Choke manifold 4" x 5000 psi flanged connections. Koomey 8-station accumulator closing unit with remote control.

A sketch of the BOP stack is attached.

6. **Circulating Medium:**

Surface to 500': Fresh water mud (8.9 – 9.2)

500' to 2,900': Salt water mud (10.0)

2,900' to 7,500': Fresh water mud (8.7 – 8.9)

7,500' to 10,500': Salt water mud (10.2+)

7. Auxiliary Equipment:

Drill string safety valves will be maintained on the rig floor in the open position while drilling operations are in progress.

8. Testing, Coring and Logging Programs:

Drill Stem tests will be made if sample data and drilling rate are sufficient to indicate a test is warranted.

It is planned that electric logs will include a sonic, neutron, density and resistivity.

No coring is planned.

9. Abnormal Pressures, Temperatures, or Hydrogen Sulfide Gas:

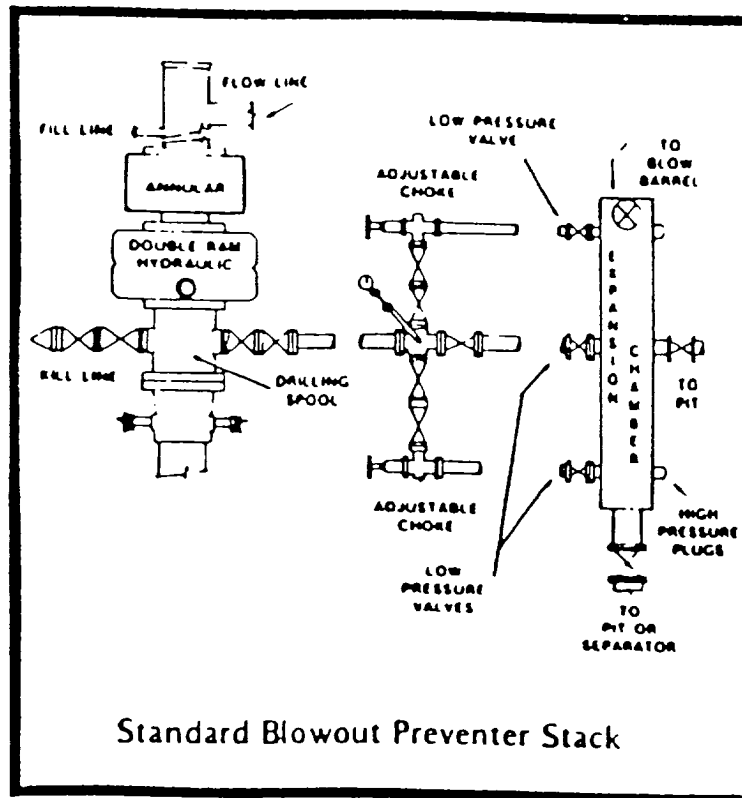
No abnormal pressures, temperatures or H₂ S is expected.

10. Anticipated Starting Date:

12/01/2002

BLOWOUT PREVENTERS

One Shaffer LWS hydraulic double 11" x 5,000 p.s.i. One Shaffer 11" x 5,000 p.s.i. Choke manifold 4" x 5,000 p.s.i. flanged connections. Koomey 8-station accumulator closing unit with remote control.



SURFACE USE AND OPERATIONS PLAN

Discovery Operating, Inc.
Tropicana 12 Fed Com
1980' FSL & 660' FEL
Sec. 12, T-20-S, R-26-E
Eddy County, New Mexico

Located: 11 miles NW of Carlsbad, NM

Federal Lease Number: NM 05110-A

Lease Issued: 11/01/1951

| | | |
|-----------------------|------------------------|----------|
| Record Lessee: | Sharbro Oil Ltd. Co. | 16.6667% |
| | Yates Drilling Co. | 66.6667% |
| | Lillie M. Yates Estate | 16.6666% |

Acres in Lease: 160.00

Surface Ownership: Bureau of Land Management

Grazing Permittee: None

Pool: McMillian Morrow

Pool Rules: Statewide rules

Attachments:

- A. General Road Map
- B. Plat Showing Existing Wells and Roads
- C. Drilling Rig Layout
- D. Topo Plat

1. Existing Roads:

- a. Attachment A is a portion of a road map showing the location of the proposed well as it is staked. Travel north out of Carlsbad on Canal Road (1208) which then turns into Illinois Camp Road (C-206). Turn left at Lake Road (C-34) and go northwesterly approximately 7.8 miles where the Tropicana 12 Fed Com #1 lies approximately 390 feet north from Lake Road.
- b. Attachment B is a plat showing existing roads in the vicinity of the well site.
- c. We will be converting portions of un-maintained ranch road to caliche road as detailed below.

2. Planned Access Road:

- a. Length and Width: Access road will require 131 feet of new caliche road that extends from the southern boundary of the pad south 131 feet to paved County Road 34 (Lake Road). This road will be 12 feet wide. The road has been staked.
- b. Surfacing Material: Will be material found in place. If that material is found to be inadequate, then six inches of caliche, watered, compacted and graded will be used.
- c. Maximum Grade: None.
- d. Turnouts: None.
- e. Drainage Design: The new road will be crowned with drainage to both sides.
- f. Culverts: None required.
- g. Cuts and Fills: Does not apply
- h. Gates and Cattle Guards: No new cattle guards will be required.

3. Location of Existing Wells:

- a. Existing wells in the immediate area are shown on Attachment B.

4. Location of Existing and/or Proposed Facilities:

- a. Necessary production facilities for this well will be located on the well pad.

5. Location and Type of Water Supply:

- a. Water will be trucked.

6. **Source of Construction Materials:**

- a. It is planned to use material found in place for construction. If this material is inadequate, then caliche will be used.

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 tests will be disposed of in the drilling pits. Oil produced during tests will be stored in 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 collected in trash trailers and disposed of offsite. *- IN AN APPROVED SANITARY LANDFILL (JL)*
- f. All trash and debris will be ~~buried~~ *NO! (JL)* or removed from the well site within 30 days after finishing drilling, and/or completion operations.

8. **Ancillary Facilities:**

- a. None required.

9. **Well Site Layout:**

- a. Attachment C shows the relative location and dimensions of the well pad, mud pits, reserve pits, trash pit and the location of the major rig components.
- b. Necessary cut and fill will be very minor. Clearing and leveling of the well will be required.
- c. The pad and pit area have been staked and flagged.

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 will be cleaned of all trash and junk to leave the well site in an as aesthetically pleasing condition as possible.
- b. Any unguarded pits containing fluids will be fenced until they are filled.
- c. After abandonment, all equipment, trash and junk will be removed and the well site cleaned. Any special rehabilitation and or special re-vegetation requirements of the surface management agency will be complied with and accomplished as expeditiously as possible.

11. Other Information:

- a. Topography: The land surface at the well site is native grass with a regional slope being to the west.
- b. Soil: Top soil at the well site is flat silty loam with limestone rocks.
- c. Flora and Fauna: The vegetative cover is consistent with the Chihuahuan Desert Scrub, including creosote, mesquite, yucca, desert sumac, Christmas cholla, and various grasses. Average visibility was 65 percent due to the vegetative cover.
- d. Ponds and Streams: Brentley Lake is northwest of location.
- e. Residences and other Structures: There are no occupied dwellings or windmills within 2 miles of the drill site.
- f. Archaeological, Historical and Cultural Sites: None observed in the area.
- g. Land Use: Grazing.
- h. Surface Ownership: Federal

12. Operators Representative:

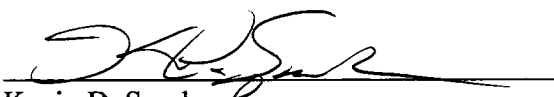
The representative responsible for assuring compliance with the approved Surface Use Operations Plan is:

Kevin D. Sparks
Discovery Operating, Inc.
800 N. Marienfeld, Suite 100
Midland, TX 79701
Office Phone: (915) 683-5203
Home Phone: (915) 699-6948

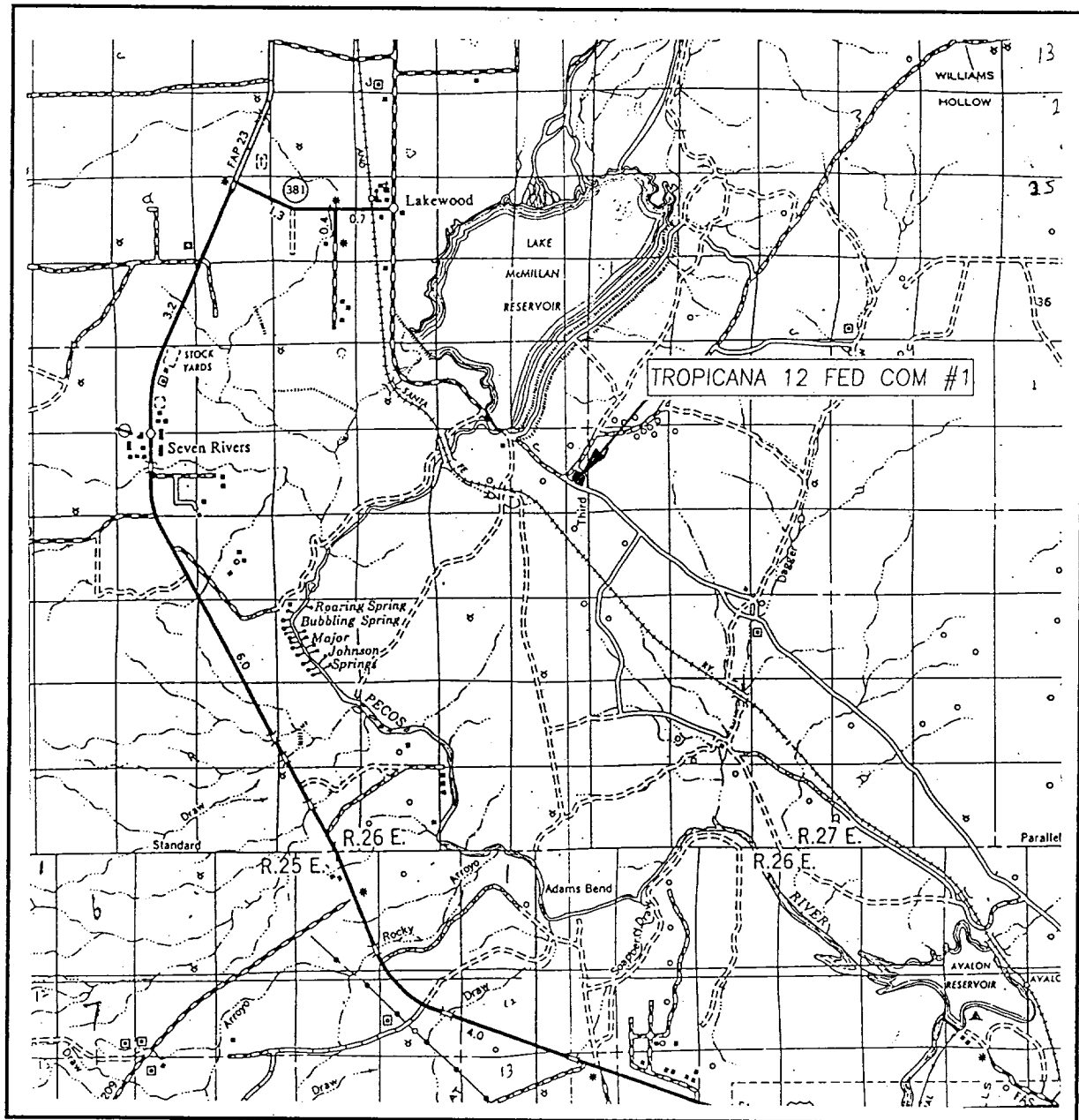
13. Certification:

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 that presently exist; that the statements made in this 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 Discovery Operating, Inc. and its contractors and sub-contractors in conformity with this plan and the terms and conditions under which it is approved.

10/2/02
Date


Kevin D. Sparks
Discovery Operating, Inc.

VICINITY MAP



SCALE: 1" = 2 MILES

SEC. 12 TWP. 20-S RGE. 26-E

SURVEY N.M.P.M.

COUNTY EDDY

DESCRIPTION 1980' FSL & 660' FEL

ELEVATION 3309'

OPERATOR DISCOVERY OPERATING, INC.

LEASE TROPICANA 12 FED COM

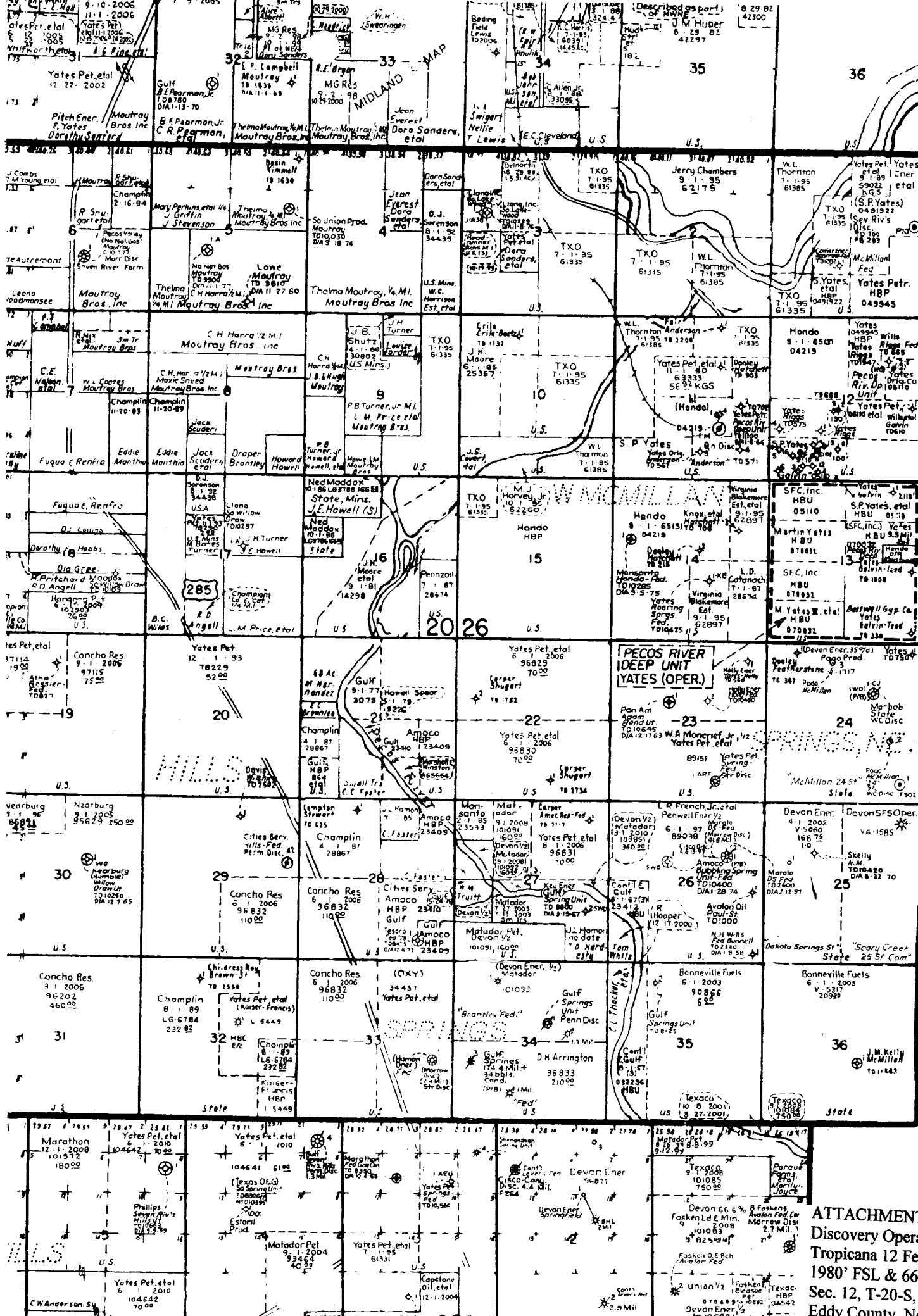
JOHN WEST SURVEYING
HOBBS, NEW MEXICO

ATTACHMENT A
Discovery Operating, Inc.
Tropicana 12 Fed Com
1980' FSL & 660' FEL
Sec. 12, T-20-S, R-26-E
Eddy County, New Mexico

393-3117

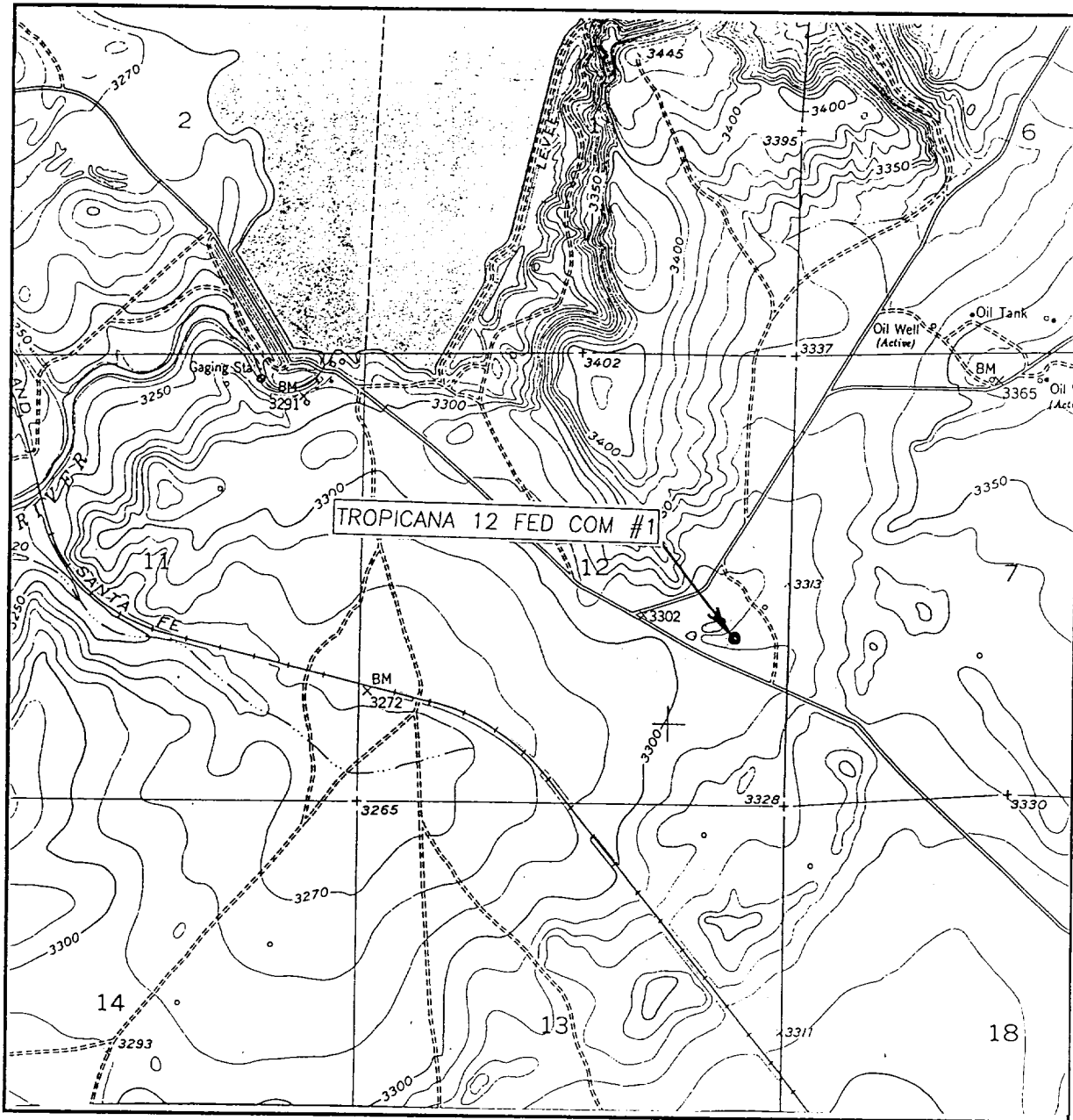
EDDY, East

T 20 S



ATTACHMENT B
Discovery Operating, Inc.
Tropicana 12 Fed Com
1980' FSL & 660' FEL
Sec. 12, T-20-S, R-26-E
Eddy County, New Mexico

LOCATION VERIFICATION MAP



SCALE: 1" = 2000'

CONTOUR INTERVAL: 10'
LAKE McMILLAN SOUTH, N.M.

SEC. 12 TWP. 20-S RGE. 26-E

SURVEY N.M.P.M.

COUNTY EDDY

DESCRIPTION 1980' FSL & 660' FEL

ELEVATION 3309'

OPERATOR DISCOVERY OPERATING, INC

LEASE TROPICANA 12 FED COM

U.S.G.S. TOPOGRAPHIC MAP
LAKE McMILLAN SOUTH, N.M.

JOHN WEST SURVEYING
HOBBS, NEW MEXICO
(505) 393-3117

ATTACHMENT D
Discovery Operating, Inc.
Tropicana 12 Fed Com
1980' FSL & 660' FEL
Sec. 12, T-20-S, R-26-E
Eddy County, New Mexico