

OCD-ARTESIA

SUBMIT IN T. CATE*
(Other instructions on
reverse side)FORM APPROVED
OMB NO. 1004-0136
Expires: February 28, 1995UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR DEEPEN

1a. TYPE OF WORK

DRILL ☒DEEPEN ☐

b. TYPE OF WELL

OIL
WELL ☐GAS
WELL ☒OTHER ☐SINGLE
ZONE ☐MULTIPLE
ZONE ☐

2. NAME OF OPERATOR

Trilogy Operating, Inc

3. ADDRESS AND TELEPHONE NO.

P. O. Box 7606, Midland, Texas 79708 915/686-2027

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)

At surface 810' FSL & 1830' FEL

At proposed prod. zone 1780' FSL & 1830' FEL

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*

20 miles south of Hope

15. DISTANCE FROM PROPOSED*

LOCATION TO NEAREST
PROPERTY OR LEASE LINE, FT
(Also to nearest drg. unit line, if any)

660

16. NO. OF ACRES IN LEASE

640

17. NO. OF ACRES ASSIGNED
TO THIS WELL

320

18. DISTANCE FROM PROPOSED LOCATION*
TO NEAREST WELL, DRILLING, COMPLETED,
OR APPLIED FOR, ON THIS LEASE, FT.

1980

19. PROPOSED DEPTH

8600

20. ROTARY OR CABLE TOOLS

Rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.)

-4310' GR

Hewitt Controlled Water Basin

22. APPROX. DATE WORK WILL START*

04/30/02

23.

PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	GRADE, SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
12 1/4	8 5/8" - J55	32#	1400'	660 sx - circulate
7 7/8	5 1/2" - N80	17#	8600	824 sx - TOC @ 5000'

SUBJECT WELL IS PLANNED AS A 8600' VERTICAL WELL
PRIMARY DRILLING TARGETS ARE THE MORROW & CISCO FORMATIONS

ATTANMENTS INCLUDED ARE AS FOLLOWS:

- 1) Certified Location Plat
- 2) Drilling Plan with Attachments
- 3) Surface use plan with attachments

APPROVAL SUBJECT TO
GENERAL REQUIREMENTS AND
SPECIAL STIPULATIONS
ATTACHEDRECEIVED
2002 FEB 19 PM 10 52
BUREAU OF LAND MGMT.
CIRCLEHEAD FIELD OFFICE

IN ABOVE SPACE DESCRIBE PROGRAM: If proposal is to deepen, 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

TITLE Drilling Engineer

DATE 02/15/02

(This space for Federal or State office use)

PERMIT NO.

APPROVAL DATE

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:

APPROVED BY

/S/ JOE G. LARA

ACTING
TITLE

FIELD MANAGER

DATE

MAY 10 2002

*See Instructions On Reverse Side

APPROVAL FOR 1 YEAR

Title 18 U.S.C. Section 1001, makes 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.

UNITED STATES **OCD-ARTES**
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
Budget Bureau No. 1004-0135
Expires: March 31, 1993

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to deepen or reentry to a different reservoir.
Use "APPLICATION FOR PERMIT-" for such proposals

SUBMIT IN TRIPLICATE

1. Type of Well

☐ Oil Well ☒ Gas Well ☐ Other

2. Name of Operator

Trilogy Operating, Inc

3. Address and Telephone No.

P. O. Box 7606, Midland, Texas 79708 915/686-2027

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)

860' FSL & 1780' FEL
Sec 24 - T20S - R21E

5. Lease Designation and Serial No.

NM102001

6. If Indian, Allottee or Tribe Name

7. If Unit or CA, Agreement Designation

8. Well Name and No.

Mad Max # 2

9. API Well No.

10. Field and Pool, or Exploratory Area

Little Box Canyon-Morrow

11. County or Parish, State

Eddy Co., NM

12. CHECK APPROPRIATE BOX(s) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION

- ☐ Notice of Intent
☐ Subsequent Report
☐ Final Abandonment Notice

TYPE OF ACTION

- ☐ Abandonment
☐ Recompletion
☐ Plugging Back
☐ Casing Repair
☐ Altering Casing
☐ Other _____
- ☒ Change of Plans
☐ New Construction
☐ Non-Routine Fracturing
☐ Water Shut-Off
☐ Conversion to Injection
☐ Dispose Water

(Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

13. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)

As per the Recommendation of Barry Hunt, BLM - Carlsbad, NM the Mad Max # 2 location has been moved to avoid contact with potential Archaeology sites.

The new location is 860' FSL & 1780' FEL - location and road has been Archaeologically cleared

The old location was 660' FSL & 1830' FEL

PLEASE ATTACH TO PENDING APD DATED 2/15/02

ENCLOSED ARE NEW SURVEY PLATS FOR THE CHANGED LOCATION

RECEIVED
2002 MAR 22 PM 3 08
BUREAU OF LAND MGMT.
CARLSBAD FIELD OFFICE

14. I hereby certify that the foregoing is true and correct

Signed [Signature]
(This space for Federal or State office use)

Title Petroleum Engineer

Date 03/20/02

Approved by /S/ JOE G. LARA
Conditions of approval, if any.

Title FIELD MANAGER

Date MAY 10 2002

Title 18 U.S.C. Section 1001, makes 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.

*See instruction on Reverse Side

DISTRICT I
P.O. Box 1988, Hobbs, NM 88241-1988

State of New Mexico
Energy, Minerals and Natural Resources Department

Form C-102
Revised February 10, 1994
Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

DISTRICT II
P.O. Drawer 80, Lordsburg, NM 88211-0719

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 Little Box Canyon - Morrow
Property Code	Property Name MAD MAX	Well Number 2
OGRID No. 021602	Operator Name TRILOGY OPERATING INC.	Elevation 4319'

Surface Location

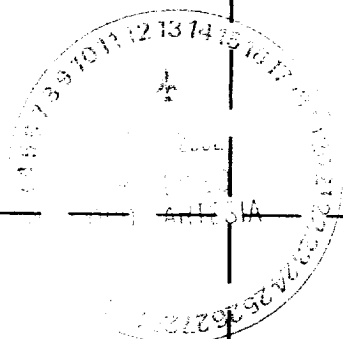
UL or lot No. 0	Section 24	Township 20-S	Range 21-E	Lot Idn	Feet from the 860	North/South line SOUTH	Feet from the 1780	East/West line EAST	County EDDY
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Bottom Hole Location If Different From Surface

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
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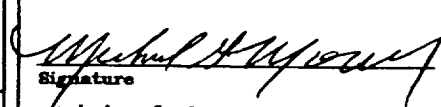
Dedicated Acres	Joint or Infill	Consolidation Code	Order No.
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NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED
OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

	LOT 1
	41.56 ACRES LOT 2
	41.77 ACRES LOT 3
	41.97 ACRES LOT 4
GEODETIC COORDINATES NAD 27 NME Y = 564700.6 X = 373392.2 LAT = 32°33'06.47"N LONG = 104°44'39.23"W Mad Max	4310.6' 4315.2' 4322.7' 4310.8' 860' 1780'
42.18 ACRES	

OPERATOR CERTIFICATION

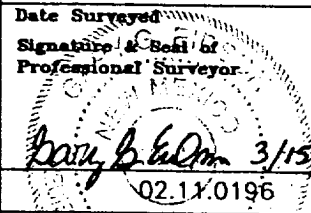
I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.


Signature
Michael G. Mooney
Printed Name
Petroleum Engineer
Title
3/20/02
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.

MARCH 13, 2002

Date Surveyed
Signature & Seal of Professional Surveyor

3/15/02
02.1X.0196

Certificate No. RONALD J. EIDSON 3239
GARY EIDSON 12641

DRILLING PLAN

Attachment to BLM Form 3160-3

Trilogy Operating, Inc.

Well: Mad Max # 2

660 FSL, 1830 FEL

Section 24, T20S-R21E

Eddy County, New Mexico

1. Surface Geological Formation

Quaternary Formation

2. Estimated Tops of Geological Markers

<u>Formation</u>	<u>TVD</u>
Glorieta	1540
Tubb Sand	3215
Abo Dolomite	3950
Cisco	6315
Canyon	6900
Wolfcamp	5175
Lower Morrow	8075
Mississippian	8550

3. Estimated Tops of Possible Water, Oil, Gas or Mineral:

Sands above 300'	Water
Cisco and Morrow	Oil or Gas

4. Pressure Control Equipment

<u>Interval, TVD</u>	<u>Pressure Control Equipment</u>
0' -1400'	Rotating Head
1400' - TD	11" 3M psi double ram preventer with 3M psi annular preventer

Exhibits 1,2 and 3 show the BOP stack arrangement, the choke manifold arrangements and the BOP specifications, respectively. The BOPE will be hydraulically tested per BLM requirements outlined by Onshore II and Gas Order No.2. Pipe rams and blind rams will be functioned on each trip out of the hole. All BOPE checks and tests will be witnessed by Trilogy's representative and will be noted on the IADC daily drilling report. Accessories to BOPE will include an upper kelly cock, lower kelly cock, and floor safety valve: all with pressure rating equivalent to the BOP stack.

5. Proposed Casing and Cementing Program

	<u>Hole Size</u>	<u>Interval M.D.</u>	<u>Casing Size</u>	<u>Weight & Grade</u>
Surface	12-1/4"	0'-1400'	8-5/8"	32.0# J-55
Production	7-7/8"	0'-8600'	5-1/2"	17.0# J-55

Cement Program: (Actual volumes will be based on caliper log when available)

1st Lead – 200 sxs Class "H"
+10% A-10B
+10 #/sx Gilsonite
+1/4 #/sx CeloFlake
+1% CaCl

2nd Lead – 260 sxs 35"65 Poz "C"
+6% Bentonite
+1% Cacl
+5 #/sxs Gilsonite

Tail – 200 sxs Class "C"
+2% CaCl

Production – Cement to 5000' as follows:

5-1/2" Casing

1st Stage: Lead Slurry – 129 sks Class "C" +2 lb/sk Sodium Chloride 0.4% FL25 +15% Bentonite

Tail Slurry – 695 sks (15:61:11) Poz: Class "C" CSE + .3% FL-52. Total 1484 ft.'

6. Mud Program

<u>Depth</u>	<u>Mud Type</u>	<u>Weight ppg</u>	<u>Funnel Viscosity</u>	<u>Water Loss</u>
0'-1400'	Air Drilled			
1400-6750'	FW/Brine	8.4/9.0	28-30	NC
6750-8600'	XCD Polymer	9.0/9.2	34-36	8-10 cc

7. Auxiliary Equipment

Upper Kelly Cock, Lower Kelly Cock, and Full Opening Stabbing Valve

8. Testing, Coring and Logging Program

- A. Drill Stem Tests – None planned
- B. Coring – None planned
- C. Logging – Mud logging planned from 1400' to TD
- D. Electric Logs
 - Open Hole: DLL/MLL, CNL/LDT, GR: Shoe of 8-5/8" csg to TD
 - Cased Hole: GR/CCL TD to top cement in prod csg

9. Anticipated Abnormal Temperature, Pressure, or Hazards

Normally have severe lost circulation from surface to 1400'. Air drilling should alleviate this. Lost circulation is not anticipated below 1400'.

10. Anticipated Starting Date and Duration of Operations

Pending favorable weather and permit approval, construction work on this location is planned to begin in April, 2002. Construction work will require 5 days, move-in and rig up rotary tools, 1 day, drill and complete, 30 days. It is planned to spud the well in April, 2002.

DRILLING OPERATIONS
CLASS -1: NORMAL PRESSURE < 10PPG
OPTION - 2: MMS STANDARD; SINGLE SIZE DRILL STRING

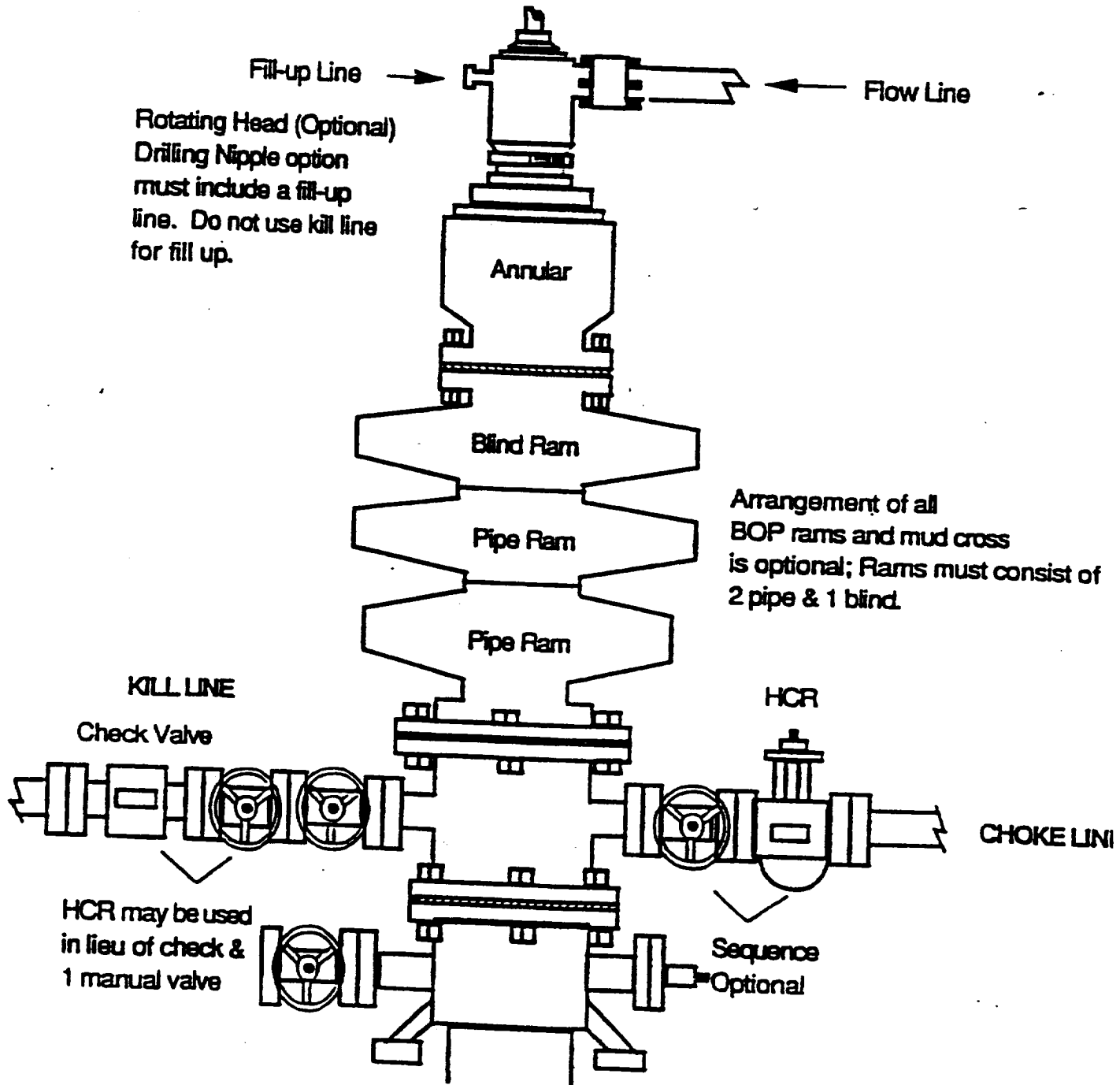
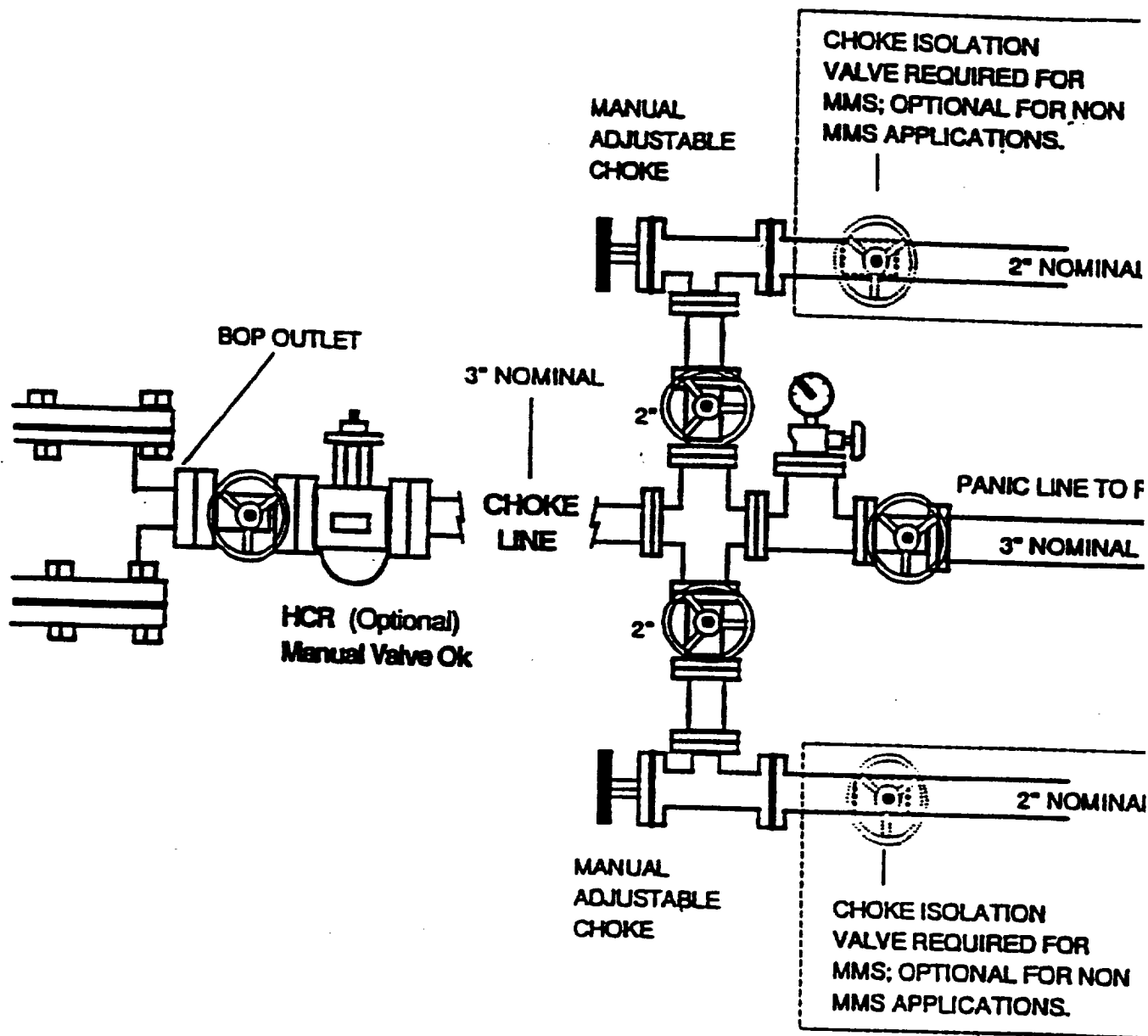


Exhibit 1

**DRILLING OF JOINS
CHOKE MANIFOLD
2M AND 3M SERVICE**



BLOWOUT PREVENTION EQUIPMENT SPECIFICATIONS

1. All BOP equipment shall be fluid and/or mechanically operated.
2. BOP's and all fittings will be in good working condition.
3. Equipment through which the bit must pass shall be at least as large as the casing size being drilled.
4. The nipple above the BOP shall be at least the same size as the last casing set.
5. The upper kelly cock with handle and lower kelly cock shall be rated at the BOP working pressure.
6. A floor safety valve (full opening) or drill string BOP with appropriate pressure ratings shall be available on the rig floor with connections or subs to fit any tool joint in the string.
7. The minimum size choke line shall be 3 inches nominal diameter, with a minimum size for vent lines downstream of chokes of 2 inches nominal, and vent lines which by-pass shall be a minimum of 3 inches nominal and as straight as possible.
8. All valves, fittings and lines between the closing unit and the blowout preventer stack should be of steel construction with rated working pressure at least equal to working pressure rating of the stack. Lines shall be bundled and protected from damage.
9. Minimum size for kill line is 2 inches nominal.
10. Ram type preventers shall be equipped with extension hand wheels or hydraulic locks.

SURFACE USE PLAN

Attachment to BLM Form 3160-3

Trilogy Operating, Inc.

Well: Mad Max # 2

660 FSL, 1830 FEL

Section 24, T20S-R21E

Eddy County, New Mexico

1. Directions to location Existing Roads

From Hope N.M. go south on Eddy County Rd # 12 19.4 miles to the proposed access Road and then North to location approximately 0.27 miles. Exhibits "4" and "5" are the Vicinity Map and the Location Verification Map.

- A. The proposed development wellsite is staked as shown on the certified location plat attached.
- B. The existing roads will require improvement. Any existing sections of road that needs improvement or repair will be fixed to a condition equal to that of the good sections of the existing road. All roads will be maintained in a condition equal to that which existed prior to the start of the construction.

2. Planned Access Roads

- A. Approximately 1200' of new access road will be required.
- B. New access roads will have a 12' wide travel lane and be surfaced with 6" compacted caliche.
- C. Turnouts: None
- D. Culverts: Used if needed.
- E. Cuts and fills: No major road cuts or fills will be necessary.

3. Location of Existing Wells

- A. The existing wells within a one-mile radius of this location are shown on Exhibit "6".

4. Location of Existing or Proposed Facilities

- A. Existing Facilities – No facilities currently exist for this well.
- B. New Facilities Proposed – If a successful Morrow producer is completed, surface facilities will consist of a separator, line heater and collection tanks for oil and water.

5. Location and Type of Water Supply

Fresh and brine water used in drilling and completion operations will be purchased from independent trucking companies located in Artesia or Carlsbad, New Mexico. The water will be hauled over existing and new roads to the locations.

6. Source of Construction Materials

Caliche for the road and well pad construction will be from the designated BLM caliche pit.

7. Methods of Handling Waste Disposal

- A. Drill cuttings will be handled in the reserve pit and buried during reclamation operations.
- B. Trash, waste paper, garbage and junk will be contained in a fenced trash trailer to prevent scattering by the wind and hauled to a municipal sanitary landfill. The supplier will pick up all sacked drilling mud. The drilling contractor will haul away any chemicals that they used while drilling.
- C. Toilet facilities will be provided for human waste. Sewage disposal facilities will be in accordance with State and Local Regulations.
- D. Drilling fluids will be handled as follows. The free water will be either hauled to the reserve pit of the next drilling well for re-use or hauled to a permitted SWD. If any mud is hauled away it will be disposed of at an approved mud disposal site. Remaining drilling fluids will be allowed to evaporate in the reserve pit until dry enough for reclamation.
- E. Any fluids produced during swab testing the well while the pulling unit is on location will be collected in a test tank. Produced water will be hauled to a permitted SWD. Oil produced will remain in the test tank until sold and hauled from the site.

8. Auxiliary Facilities

No new facilities will be built during drilling of this well. A trailer will be used as an office and temporary living quarters for wellsite supervision.

9. Wellsite Layout

- A. Exhibit "7" shows the proposed wellsite layout and dimensions. Major rig components and reserve pits are shown.
- B. No significant cuts or fills will be required.
- C. The reserve pits will be plastic lined with minimum 6 mil double x laminated plastic. The liner will overlap the pit dikes and be anchored down. The reserve pit will be fenced on three sides during drilling operations. After drilling operations have ceased the fourth side of the pit will be fenced.

10. Plans for Reclamation of the Surface

- A. In a timely manner, after finishing the drilling and/or completion operations all equipment and other material not needed for production operations will be removed. The location will be cleared of all trash and debris then any ruts, etc. will be filled. The cellar will be filled around the wellhead.

- B. Any pits containing fluids will be fenced until they are filled. The NMOCD pit netting rules will be followed. The reserve pits will be reclaimed by deep burying the drill cuttings. The pit area will be leveled and contoured to conform to the surrounding area. A stockpile of topsoil from the location construction will be evenly distributed over the disturbed area. Re-vegetation procedures will comply with BLM standards.
- C. Upon abandonment of the well, surface restoration will be in accordance with the surface owner requirements and will be accomplished as expediently as possible.

11. **Surface Ownership**

The surface for the wellsite locations is on BLM surface and minerals and Leased by Corrales Livestock Corp., Hope, New Mexico.

12. **Additional Information**

- A. Topography: Hilly with canyons. Location is in a relatively flat area.
- B. Vegetation includes mesquite, catclaw, creasote, broom snakeweed, various cacti, shin oak, sand sage, narrowleaf yucca, and mixed grasses.
- C. The soil is stony and rocky with loamy soils over limestone.
- D. Primary use of the land is livestock grazing and accessing producing wells.
- E. There is an unoccupied dwelling 1.4 miles away.
- F. An archeological block survey will be prepared; a copy of which will be sent to your office.
- G. The selected dirt contractor will be furnished with an approved copy of the Surface Use Plan and any additional stipulations prior to beginning and work.

13. **Operator's Representatives**

Michael G. Mooney
Trilogy Operating, Inc.
P.O. Box 7606
Midland, TX 79708
(915) 686-2027

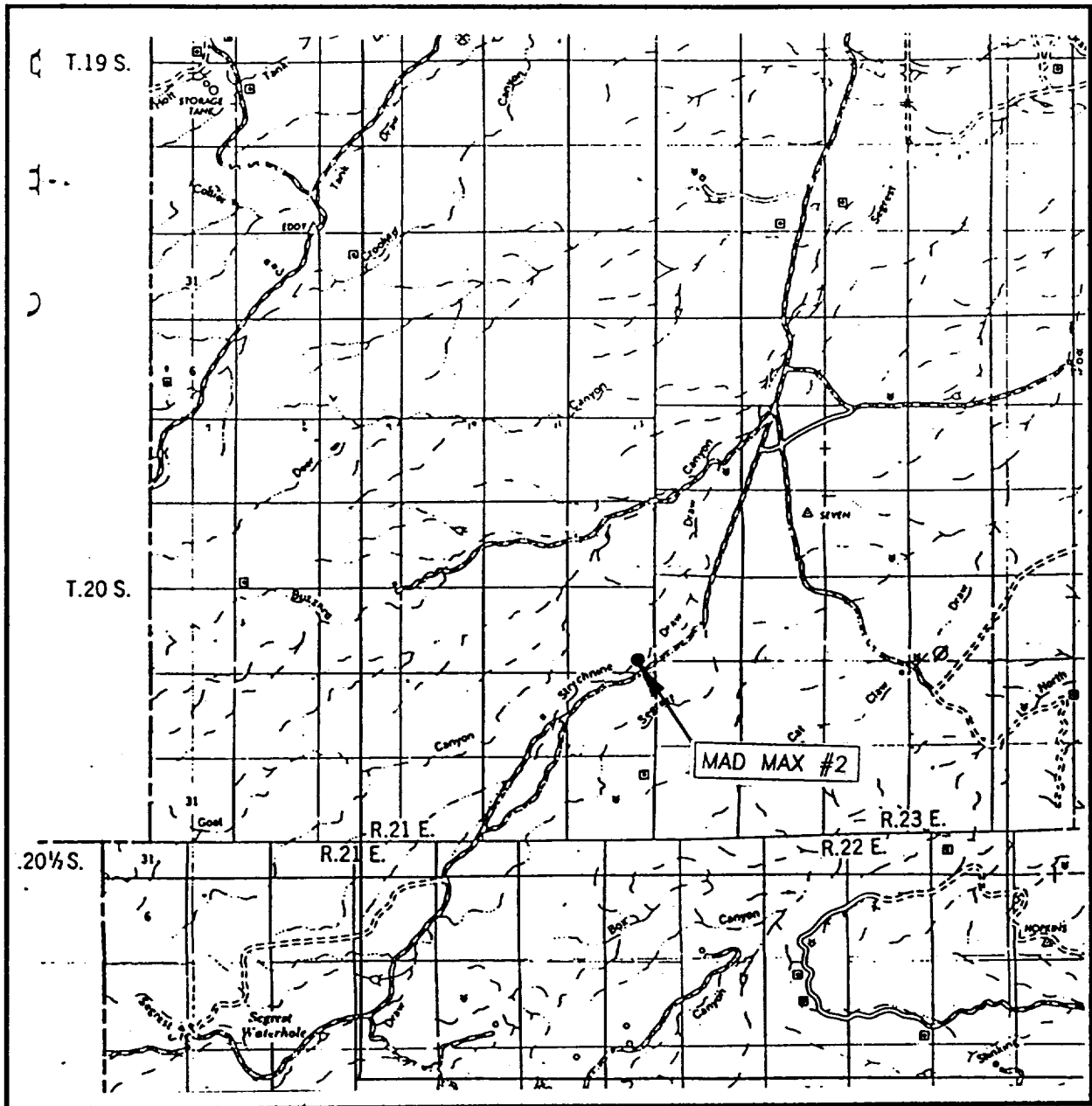
Certification

I hereby certify that I, or persons under my direct supervision, have inspected the proposed drillsite and access route; that I am familiar with the conditions that currently exist; that the statements made in this plan are, to the best of my knowledge, true and correct. The work associated with the operations proposed herein will be performed by Trilogy 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 filing of a false statement.


Michael G. Mooney
Drilling Engineer


Date

VICINITY MAP



SCALE: 1" = 2 MILES

SEC. 24 TWP. 20-S RGE. 21E

SURVEY N.M.P.M.

COUNTY EDDY

DESCRIPTION 660' FSL & 1830' FEL

ELEVATION 4316'

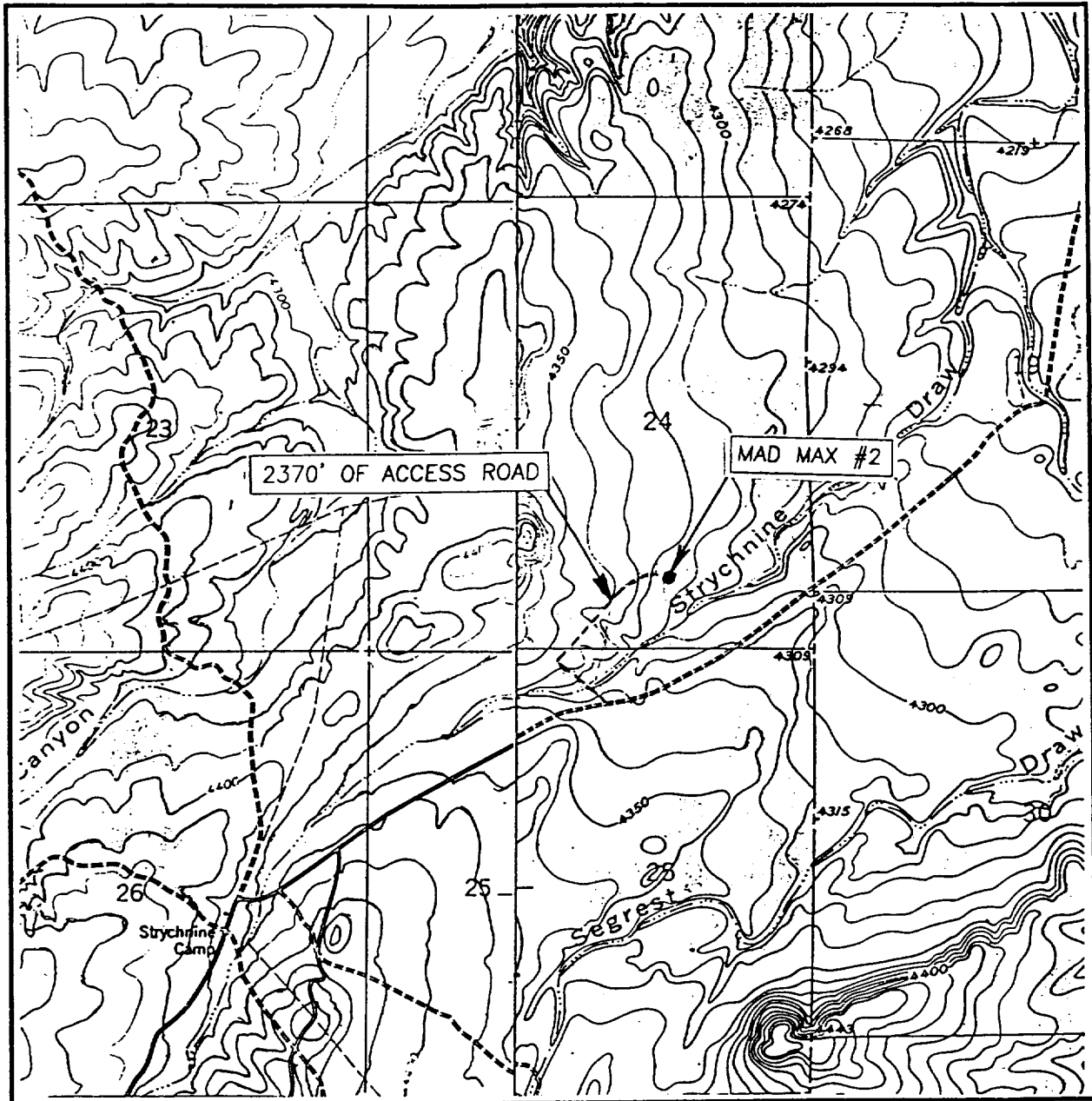
OPERATOR TRILOGY OPERATING INC.

LEASE MAD MAX

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

Exhibit 4

LOCATION VERIFICATION MAP



SCALE: 1" = 2000'

CONTOUR INTERVAL: 10'
BOX CANYON RANCH, N.M.

SEC. 24 TWP. 20-S RGE. 21E

SURVEY N.M.P.M.

COUNTY EDDY

DESCRIPTION 860' FSL & 1780' FEL

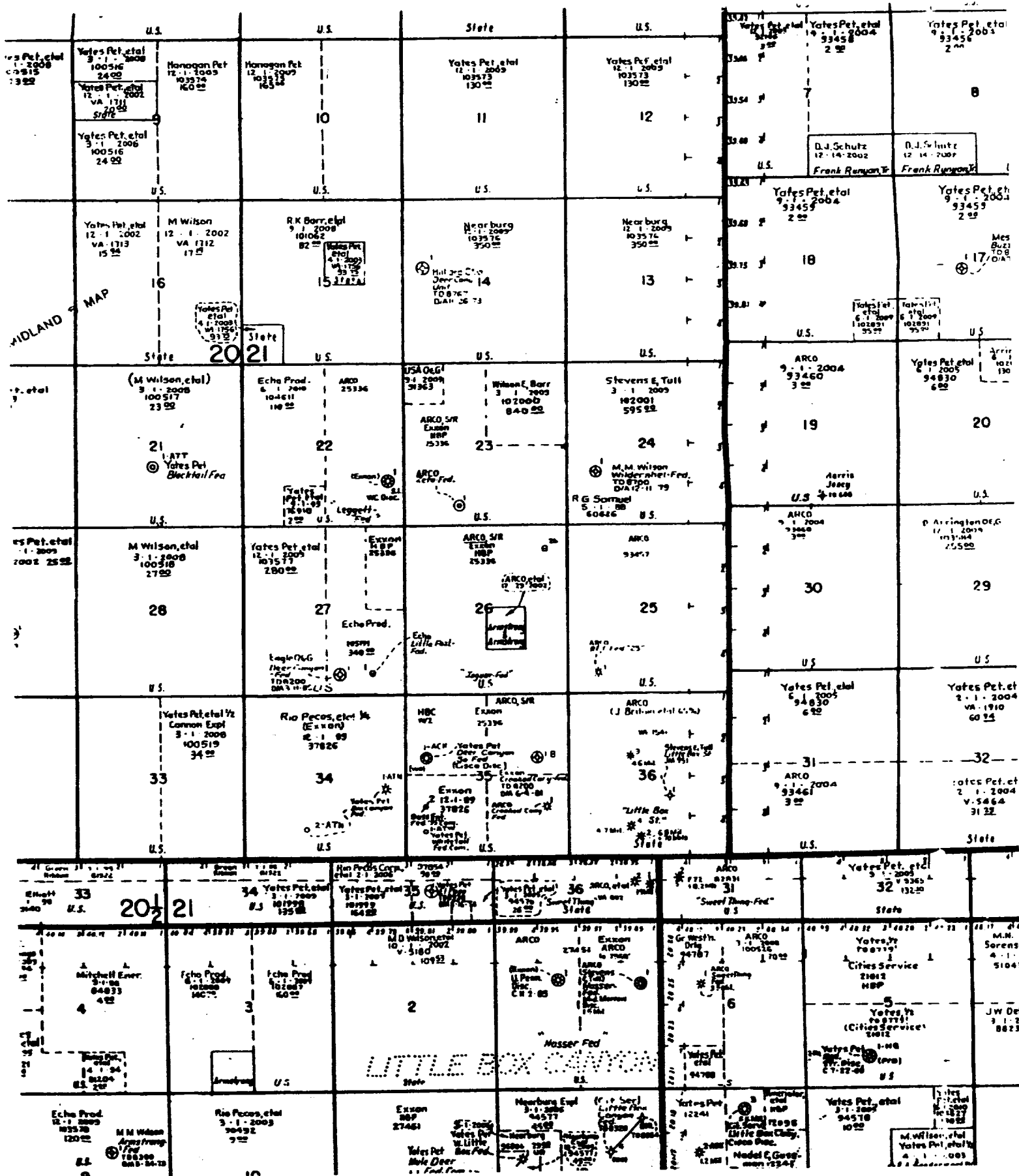
ELEVATION 4319'

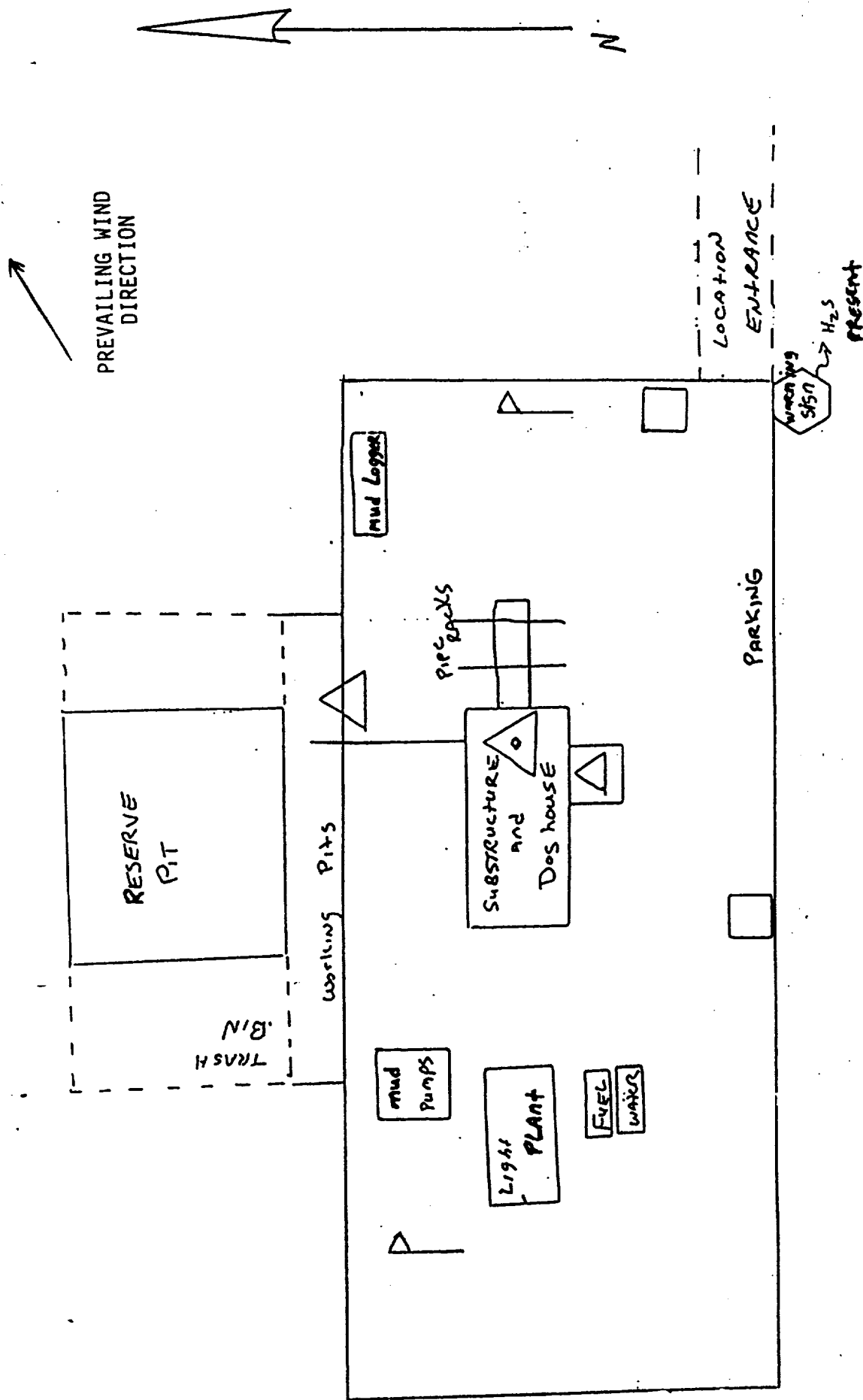
OPERATOR TRILOGY OPERATING INC.

LEASE MAD MAX

U.S.G.S. TOPOGRAPHIC MAP
BOX CANYON RANCH, N.M.

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





△ - H₂S monitors with ALARMS

P - WIND DIRECTION INDICATORS

□ - SAFE BRIEFING AREAS WITH CAUTION SIGNS