N.M. Oil Cons. Division
1625 N. French Dr.
Hobbs, NM 88240

Form 3160-3
(September 2001)

K-57

FORM APPROVED
OMB No. 1004-0136
Expires January 31, 2004

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

899

APPLICATION FOR PERMIT TO DRILL OR REENTER

5. Lease Serial No.: NM - 19143

6. If Indian, Allottee or Tribe Name:

1a. Type of Work: ☒ DRILL ☐ REENTER

7. If Unit or CA Agreement, Name and No.:

1b. Type of Well: ☐ Oil Well ☒ Gas Well ☐ Other ☒ Single Zone ☐ Multiple Zone

8. Lease Name and Well No.: Rio Blanco "4" Fed Com No.3

2. Name of Operator: Robert E. Landreth

9. API Well No.: 30-025-36425

3a. Address: 505 N. Big Spring, Ste. 507 Midland, Texas 79701

3b. Phone No. *(include area code)*: (432) 684-4781

10. Field and Pool, or Exploratory: North Bell Lake - Ellenburger

4. Location of Well *(Report location clearly and in accordance with any State requirements. *)*
At surface 1650' FSL & 1650' FEL of Section 4 (J)
At proposed prod. zone

11. Sec., T., R., M., or Blk. and Survey or Area: Sec. 4, T23S, R34E, N.M.P.M.

14. Distance in miles and direction from nearest town or post office*: 20 miles west of Jal, NM

12. County or Parish: Lea County

13. State: NM

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	17. Spacing Unit dedicated to this well
1650'	160	640
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft.	**19. Proposed Depth**	**20. BLM/BIA Bond No. on file**
NA	17,600'	NM 2925
21. Elevations (Show whether DF, KDB, RT, GL, etc.)	**22. Approximate date work will start***	**23. Estimated duration**
3400' GL	October 1, 2003	100 Days

SEP 2003
RECEIVED

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.
2. A Drilling Plan.
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).
4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above).
5. Operator certification.
6. Such other site specific information and/or plans as may be required by the authorized officer.

25. Signature	Name *(Printed/Typed)*	Date
W. Kurt Finkbeiner	W. Kurt Finkbeiner	8/26/03

Title: Operations Engineer

Approved by *(Signature)*	Name *(Printed/Typed)*	Date
/S/ JOE G. LARA	/S/ JOE G LARA	SEP 24 2003

Title	Office
ACTING FIELD MANAGER	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 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 as to any matter within its jurisdiction.

OPER. OGRID NO. 25827
PROPERTY NO. 36425
POOL CODE 96385
EFF. DATE 9-29-03
API NO. 30-025-36425

Capitan Controlled Water Basin

APPROVAL SUBJECT TO GENERAL REQUIREMENTS AND SPECIAL STIPULATIONS ATTACHED

K

DISTRICT I
1625 N. French Dr., Hobbs, NM 88240

DISTRICT II
811 South First, Artesia, NM 88210

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

DISTRICT IV
2040 South Pacheco, Santa Fe, NM 87505

State of New Mexico
Energy, Minerals and Natural Resources Department

OIL CONSERVATION DIVISION

2040 South Pacheco
Santa Fe, New Mexico 87504-2088

Form C-102
Revised March 17, 1999

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

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number	Pool Code	Pool Name
30-025-36425	96385	North Bell Lake - Ellenburger (Gas)

Property Code	Property Name	Well Number
32724	RIO BLANCO "4" FEDERAL COM	3

OGRID No.	Operator Name	Elevation
025827	ROBERT E. LANDRETH	3400'

Surface Location

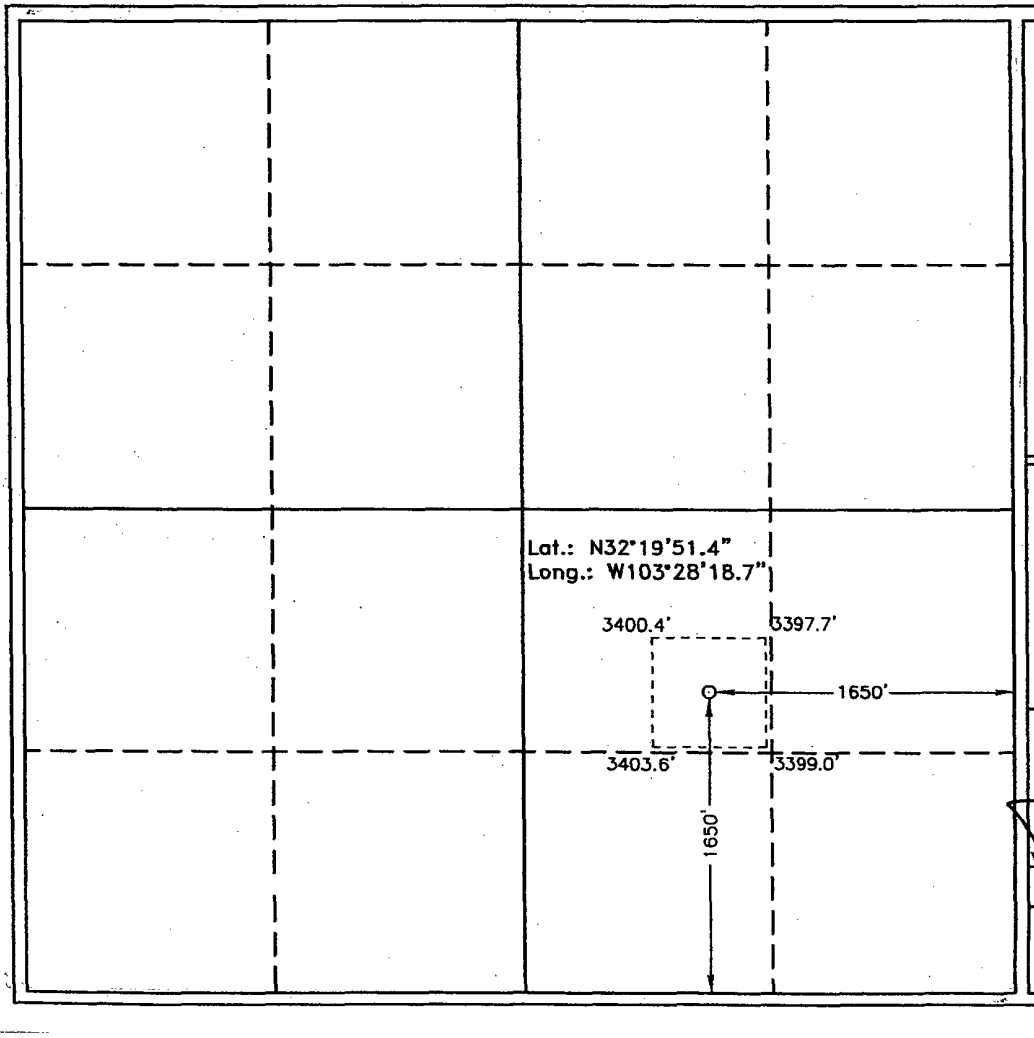
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
J	4	23 S	34 E		1650	SOUTH	1650	EAST	LEA

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.
640			

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.

W. Kurt Finkbeiner
Signature

W. Kurt Finkbeiner
Printed Name

Operations Engineer
Title

August 26, 2003
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 supervison, and that the same is true and correct to the best of my belief.

AUGUST 6, 2003
Date Surveyed

Signature & Seal of Professional Surveyor

GARY L. JONES
NEW MEXICO
7977
REGISTERED PROFESSIONAL LAND SURVEYOR

W.O. No. 351

Certificate No. Gary L. Jones 7977

BASIN SURVEYS

STATEMENT ACCEPTING RESPONSIBILITY FOR OPERATIONS

Robert E. Landreth accepts all applicable terms, conditions, stipulations, and restrictions concerning operations conducted on the leased land or portion thereof, as described below:

LEASE NO:	NM-19143
LEGAL DESCRIPTION:	SE/4 Section 4, T-23-S, R-34-E Lea County, New Mexico
FORMATION(S):	All
BOND COVERAGE:	$25,000
BLM BOND FILE:	NM2925

Robert E. Landreth
By:

Robert E. Landreth
Owner

Date: August 19, 2003

STATEMENT OF SURFACE OWNER/OPERATOR AGREEMENT

RIO BLANCO "4" FED COM NO. 3
Section 4, T-23-S, R34-E
Lea County, New Mexico

Mr. Jim Keller, 1021 CR CC, Oakley, Kansas 67748 is the surface owner of all the lands that will be used for the location and access road to drill the Rio Blanco "4" Fed Com No. 3. Robert E. Landreth through his agent and co-working interest owner, EGL Resources, Inc., has reached an agreement with Mr. Keller as to the requirements for the protection of surface resources and reclamation of disturbed areas and/or damages in lieu thereof.

By:

Robert E. Landreth
Owner

Date: August 26, 2003

DRILLING PROGRAM

ROBERT E. LANDRETH
RIO BLANCO "4" FED COM NO. 3
1650' FSL & 1650' FEL, Section 4, T-23-S, R34-E
Lea County, New Mexico

In conjunction with Form 3160-3, Application for Permit to Drill, Robert E. Landreth submits the following items of pertinent information in accordance with Onshore Oil & Gas Order No. 1, and with all other applicable Federal and State regulations.

1. **Geologic Name of Surface Formation**: Alluvium

2. **Estimated Tops of Significant Geologic Markers:**

Rustler	2,225'	Mississippian	13,928'
Capitan Reef Porosity	4,300'	Woodford	14,338'
Delaware	5,165'	Devonian	14,521'
Bone Spring	8,440'	Fusselman	15,620'
Wolfcamp	11,151'	Montoya	16,176'
Strawn	11,608'	Simpson	16,544'
Atoka	11,891'	Ellenburger	17,115'
Morrow	12,449'	**Total Depth**	**17,600'**

3. **The estimated depths at which water, oil or gas formations are expected:**

Substance	Formation	Depth	Comments
Water	Capitan Reef	4,300' (top of porosity)	Chlorides are 28,000 ppm. If lost circulation occurs, will drill with fresh water. Casing will be set in Delaware Lime and cement circulated to surface.
Gas	Atoka	11,891'	
Gas	Middle Morrow	12,900'	
Gas	Devonian	14,521'	
Gas	Ellenburger	17,115'	

No fresh water is expected in this area. The potentially productive horizons shown above will be protected by the casing and cementing programs shown in items No. 5 and No. 6 of this Drilling Program.

4. **Pressure Control Equipment:**
A Blow-out Preventer rated to at least 5,000 psi WP will be used to drill the interval from 800' to 5,190' (see Exhibit No. la).

A Blow-out Preventer rated at 10,000 psi WP will be used to drill the interval from 5,190' to 17,600' (see Exhibit No. 1b).

The appropriate choke manifold will be used a s shown by attached Exhibit No. 1c.

The Blow-out Preventer and chokes will be remote hydraulically operated. They will be tested when installed, before drilling out each casing string, at any time there is a repair requiring a pressure seal to be broken in the assemble and at least once every 30 days while drilling. The Blow-out Preventer will be worked at least once each day while drilling, and the blind rams will be worked on trips when there is no drill pipe in the hole.

An upper Kelly cock and full opening stabbing valve will be used.

5. **Proposed Casing Program:**

String	Interval	Hole Size	Casing Size	Weight	Grade	Thread	Condition
Surface	0' – 800'	26"	20"	94#	H-40	BTC	New
1st Intermediate	0' – 2,250'	18 ¾"	16"	84#	K-55	BTC	New
2nd Intermediate	0' – 5,190'	14 ¾"	13 3/8"	72#	P-110HC	SLX	New
Production	0' – 11,800'	12 ¼"	9 5/8"	53.50#	P-110HC	LTC	New
Drilling Liner	11,500' – 14,200'	8 ½"	7 ¾"	46.10#	T-95	FL45	New
Production Liner	13,900' – 17,600'	6 ½"	5"	21.40#	L-80	FL45	New

The casing design is subject to revision based on geologic conditions encountered.

6. **Proposed Cementing Program:**

a. Surface Casing: Cement 20" casing with 1220 sacks of class "C" with 4% gel, 1% Ca Cl_2 and ¼ lb per sack Celloflake (weight 13.5 ppg and yield 1.73 cu ft/sk). Tail-in with 285 sacks class "C" with 1% Ca Cl_2 and ¼ lb per sack Celloflake (weight 14.8 ppg and yield 1.33 cu ft/sk). Circulate cement to surface.

b. 1st Intermediate Casing: Cement 16" casing with 720 sacks of 50:50 Poz class "C" with 5% salt, 10% gel, ¼ lb per sack Celloflake and 4 lbs per sack gilsonite (weight 11.9 ppg and yield 2.47 cu ft/sk). Tail-in with 200 sacks class "C" with 1% Ca Cl_2 and ¼ lb per sack Celloflake (weight 14.8 ppg and yield 1.33 cu ft/sk). Circulate cement to surface.

c. 2nd Intermediate Casing: Cement 13 3/8" casing with 675 sacks of 50:50 Poz class "C" with 5% salt, 10% gel, ¼ lb per sack Celloflake and 4 lbs per sack gilsonite (weight 11.9 ppg and yield 2.47 cu ft/sk). Tail-in with 200 sacks class "C" with ¼ lb per sack Celloflake (weight 14.8 ppg and yield 1.32 cu ft/sk). Circulate cement to surface. Note: If lost circulation is experienced in the Capitan Reef interval then a DV Tool will be utilized above the lost circulation interval, depending upon the severity of the problem.

d. Production Casing: Cement 9 5/8" casing with 870 sacks of 50:50 Poz class "H" with 5% salt, 10% gel, 4 lbs per sack gilsonite and ¼ lb per sack Celloflake (weight 11.9 ppg and yield 2.47 cu ft/sk). Tail-in with 1115 sacks of 50:50 Poz class "H" with 2% gel, 0.3% uniflac, 0.2% dispersant and 0.2% retarder (weight 14.4 ppg and yield 1.28 cu ft/sk). Calculated top of cement at 4000'.

e. Drilling Liner: Pump a spacer system of 25 barrels of MUDPUSH MPUSH II mixed at 14.0 ppg then cement 7 ¾" casing with 310 sacks of class "H" with ½ gal per sk of gas block additive, 0.15 gal per sack of saltbond II, 0.025 gal per sack retarder, 0.1% antisettling agent and 0.05% of antifoaming agent (weight 15.6 ppg and yield 1.9 cu ft/sk). Calculated top of cement at 11,200'.

f. Production Liner: Pump a spacer system of 25 barrels of MUDPUSH MPUSH II mixed at 14.0 ppg then cement 5" casing with 455 sacks of class "H" with 1 ½ gals per sk of gas block additive, 0.15 gal per sack of saltbond II, 0.035 gal per sack retarder, 0.1% antisettling agent and 0.05% of antifoaming agent (weight 15.6 ppg and yield 1.19 cu ft/sk). Calculated top of cement at 13,600'.

7. **Mud Program:**

Interval	Type Mud	Mud Weight	Mud Viscosity	Fluid Loss	Remarks
0'–800'	Fresh Water	8.4 – 9.4	34–36	NC	
800'–2,250'	~~Brine~~ Fresh Water	~~10.0~~ 8.4-9.4	28	~~NC~~ 12-15 cc < 4200'	
2,250'–5,190'	Brine/Fresh Water	10.0/8.5	28	NC	Drill out with brine water. If circulation is lost in the Capitan Reef porosity switch to fresh water and dry drill to csg point. Water loss Control 12 cc ±
5,190'–11,800'	Fresh/Brackish Water	8.3 – 9.3	28	NC	Have solids and gas control equipment in place and operational prior to drilling into the Wolfcamp and two bins of barite available. Also, have a gas buster, PVT equipment, a linear shale shaker and a centrifuge installed and operational.
11,800'–14,200'	Brine Water	10.0 – 13.1	38–42	10.0–6.0	Mud-up with an XCD Polymer and Drispac system to obtain a viscosity of 38 – 40 and an initial mud weight of 11.4 ppg prior to drilling into the Atoka at 11,890'. Reduce the fluid loss to 6 cc or less prior to drilling into the Morrow at 12,450'. Raise the mud weight as necessary with barite additions to control gas influx into the well.
14,200'-17,600'	Brackish Water	8.4-8.7	28	NC	Circulate a controlled portion of the reserve pit. Use small amounts of MF-55 to flocculate fine solids and keep the fluid clean. No abnormal pressures are anticipated in this section of the well.

8. **Testing, Logging and Coring Program:**

a. Possible Drill Stem Tests (all DST's will be justified on the basis of a valid show of oil or gas): Morrow, Devonian and Ellenburger.

b. Mud Logger: Two-man unit from 5,190' to TD.

c. Electric Logs:

5,190' – 17,600':
Compensated Neutron/Litho-Density/GR and Dual Laterolog w/MSFL & GR or High Resolution Induction Log & GR.

Surface – 5,190':
Compensated Neutron, Gamma Ray and caliper (through casing).

d. Coring: No conventional cores are planned.

9. Abnormal Conditions, Pressures, Temperatures & Potential Hazards:

a. Capitan Reef Porosity: Lost circulation may occur. If it does, the Reef will be dry-drilled using fresh water.

b. Pennsylvanian Interval: High pressured zones could possibly be encountered while drilling this interval. The estimated bottom hole pressure could be as high as 9000 psi. Sufficient barite will be on location to raise the mud weight as necessary to control gas influx into the well.

c. Devonian Interval: Low levels of hydrogen sulfide gas are expected to be encountered. As per Exhibit No. 2, Hydrogen Sulfide Drilling Operations Plan, all H_2S safety equipment and systems will be installed, tested and operational when drilling reaches a depth of 500 feet above the Devonian or three days prior to penetration of the Devonian, whichever comes first.

d. Ellenburger Interval: No abnormal conditions are anticipated. The expected bottom hole temperature is 225° F.

MULTI-POINT SURFACE USE AND OPERATIONS PLAN

ROBERT E. LANDRETH
RIO BLANCO "4" FED COM NO. 3
1650' FSL & 1650' FEL, Section 4, T-23-S, R34-E
Lea County, New Mexico

This plan is submitted as an attachment to Form 3160-3, Application for Permit to Drill, covering the above described well.

1. Existing Roads

A. Exhibit No. 3 is a topographic map which shows the location of the proposed wellsite and roads in the vicinity. All roads will be maintained in a condition equal to that which existed prior to the start of the construction. The proposed location is situated approximately 20 miles west of Jal, New Mexico.

B. Exhibit No. 4 is a Lea County Road Map that shows the existing roads in the general area of the proposed location.

C. Directions: From the intersection of State Hwy 128 & CR-21, follow CR-21 North 8.0 miles and then back East 2.4 miles, turn North and go 0.3 mile to the proposed location.

2. Planned Access Road

A. Exhibit No. 5 shows the planned access road and the proposed wellsite as staked.

B. Build ± 0.3 mile of new road from the existing road to the proposed location.

C. The access road will be crowned and ditched to a 14' wide travel surface with a 30' right-of-way.

D. The gradient on all roads will be less than 1.00%.

E. No turnouts are expected.

F. If needed, the road will be surfaced with a minimum of 6" of compacted caliche. This material will be obtained from a local source.

G. The centerline for the new access road has been staked and flagged. Earthwork will be as required by field conditions.

H. Culverts should not be required in the access road.

I. Fence cuts will not be required; therefore, no gates or cattleguards will be installed.

3. Location of Existing Wells Within a One-Mile Radius

A. Water wells – none in immediate vicinity.

B. Disposal wells – none known.

C. Drilling wells or reentry – As shown on Exhibit No. 6.

D. Producing wells – as shown on Exhibit No. 6.

E. Abandoned wells – As shown on Exhibit No. 6.

4. Location of Existing and/or Proposed Facilities

A. If upon completion, the Rio Blanco "4" Fed Com No. 3 is a producer Robert E. Landreth will furnish maps or plats showing "On Well Pad Facilities" and "Off Well Pad Facilities" (if needed) on a Sundry Notice, Form 3160-5, before construction of these facilities starts.

5. Location and Type of Water Supply

A. It is planned to drill the well with both fresh water and brine water systems. Both types of waters will be hauled to the location by truck over existing roads and the Planned Access Road described in item 2 above. Both types will be obtained from commercial sources.

6. Sources of Construction Materials

A. Any caliche required for construction of the drilling pad will be obtained from drill site excavations or from a local source. These materials will be transported over existing roads and the Planned Access Road described in Item No. 2 above.

7. Methods of Handling Waste Disposal

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

B. Drilling fluids will be allowed to evaporate in the reserve pits until the pits are dry enough for backfilling. In the event drilling fluids will not evaporate in a reasonable period of time, they will be transported by tank truck to a State approved disposal site.

C. Water produced during operations will be either placed in the reserve pits and allowed to evaporate or collected in tanks until hauled to an approved disposal system or a separate disposal application will be submitted to the BLM for appropriate approval.

D. Oil produced during operations will be stored in tanks until sold.

E. Sewage from trailer houses will drain into holes with a minimum depth of 10'. A "Porta John" will be provided for the rig crews. This will be properly maintained and removed after drilling operations are completed.

F. Trash, waste paper, garbage, and junk will be collected in trash trailers and disposed of in an approved waste facility such as a land fill. The trash trailers will contain all of the material to prevent scattering by the wind.

G. All mud materials including salts will be picked up by the mud supplier and transported back to their warehouse facilities.

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

8. Ancillary Facilities

A. No camps or airstrips will be constructed.

9. Wellsite Layout

A. Exhibit No. 2 is the Hydrogen Sulfide Drilling Operations Plan.

B. Exhibit No. 7 (scale 1" = 50') and Exhibit No. 5 show the proposed wellsite layout. Exhibit No. 7 also shows the proposed location of the reserve pit, trash trailer and living facilities.

C. Mud pits in the active circulation system will be steel pits.

D. The reserve pit will be lined with a polyethylene liner that will be 6 mils in thickness. The pit liner will extend a minimum of 2' over the reserve pit walls so that it can be anchored down.

E. The reserve pit will be fenced on three sides with four strands of barbed wire during drilling and completion operations. The fourth side will be fenced after drilling has been completed. If the well is a producer, the reserve pit fence will be torn down. The reserve pit and those areas of the location not essential to production facilities will be reclaimed and seeded per BLM requirements.

10. Plans for Restoration of Surface

Rehabilitation of the location and reserve pit will start in a timely manner after all drilling operations cease. The type of reclamation will depend on whether the well is a producer or a dry hole.

However, in either event, the reserve pit will be allowed to dry properly, and fluid removed and disposed of in the manner as previously noted in Item No. 7B. The pit area will then be leveled and contoured to conform to the original and surrounding area. Drainage systems, if any, will be reshaped to the original configuration with provisions made to alleviate erosion. These may need to be modified in certain circumstances to prevent inundation of the location pad and surface facilities. After the area has been shaped and contoured, top soil from the spoil pile (if any) will be placed over the disturbed area to the extent possible. Revegetation procedures will comply with BLM standards.

If the well is a dry hole, the pad and road area will be recontoured to match the existing terrain. Topsoil will be spread to the extent possible. Revegetation will comply with BLM standards.

Should the well be a producer, the previously noted procedures will apply to those areas that are not required for production facilities.

11. Other Information

A. The topography is relatively flat. The topsoil along the access route and at the wellsite is sand. Vegetation is moderately sparse and consists of mesquite, shinnery oak and prairie grasses.

B. The surface ownership at the well location and of the lands that the access road will cross is privately owned by Jim Keller, 1021 CR CC, Oakley, Kansas 67748.

C. The land is used for oil and gas production and livestock grazing.

D. An archaeological survey has been conducted for the location and new access road. A copy of this report is attached to the APD.

E. There are no buildings of any kind in the area.

12. Operator's Representative

A. The field representative responsible for assuring compliance with the approved surface use plan is:

W. Kurt Finkbeiner
Operations Engineer
Robert E. Landreth
505 N. Big Spring, Suite 507
Midland, Texas 79701
432/684-4781

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 currently 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 Robert E. Landreth 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 the filing of a false statement.

Name: W. Kurt Finkbeiner
W. Kurt Finkbeiner

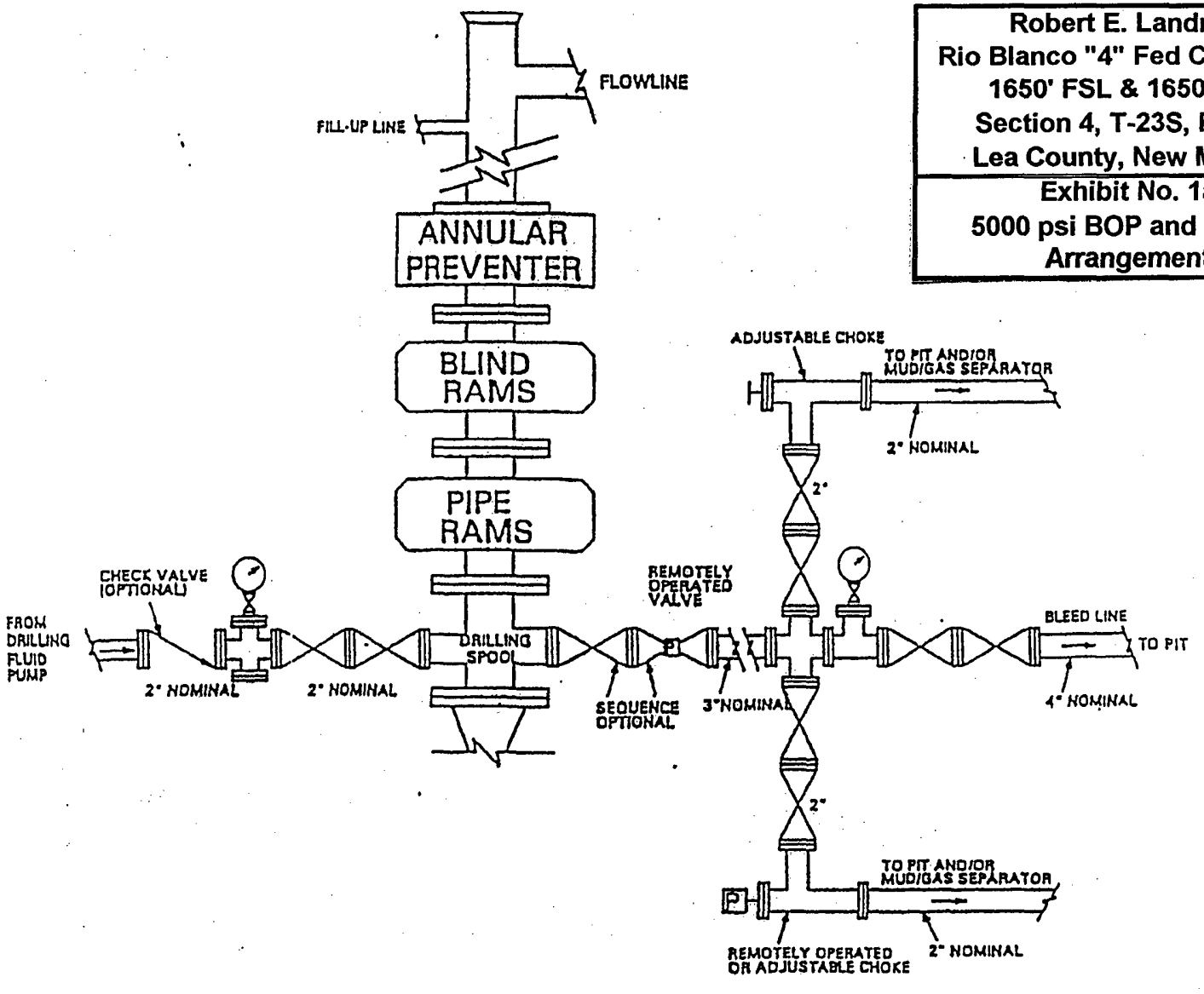
Title: Operations Engineer

Date: August 26, 2003

PROPOSED 5-M BOPE AND CHOKE ARRANGEMENT

Robert E. Landreth
Rio Blanco "4" Fed Com No. 3
1650' FSL & 1650' FEL
Section 4, T-23S, R-34-E
Lea County, New Mexico

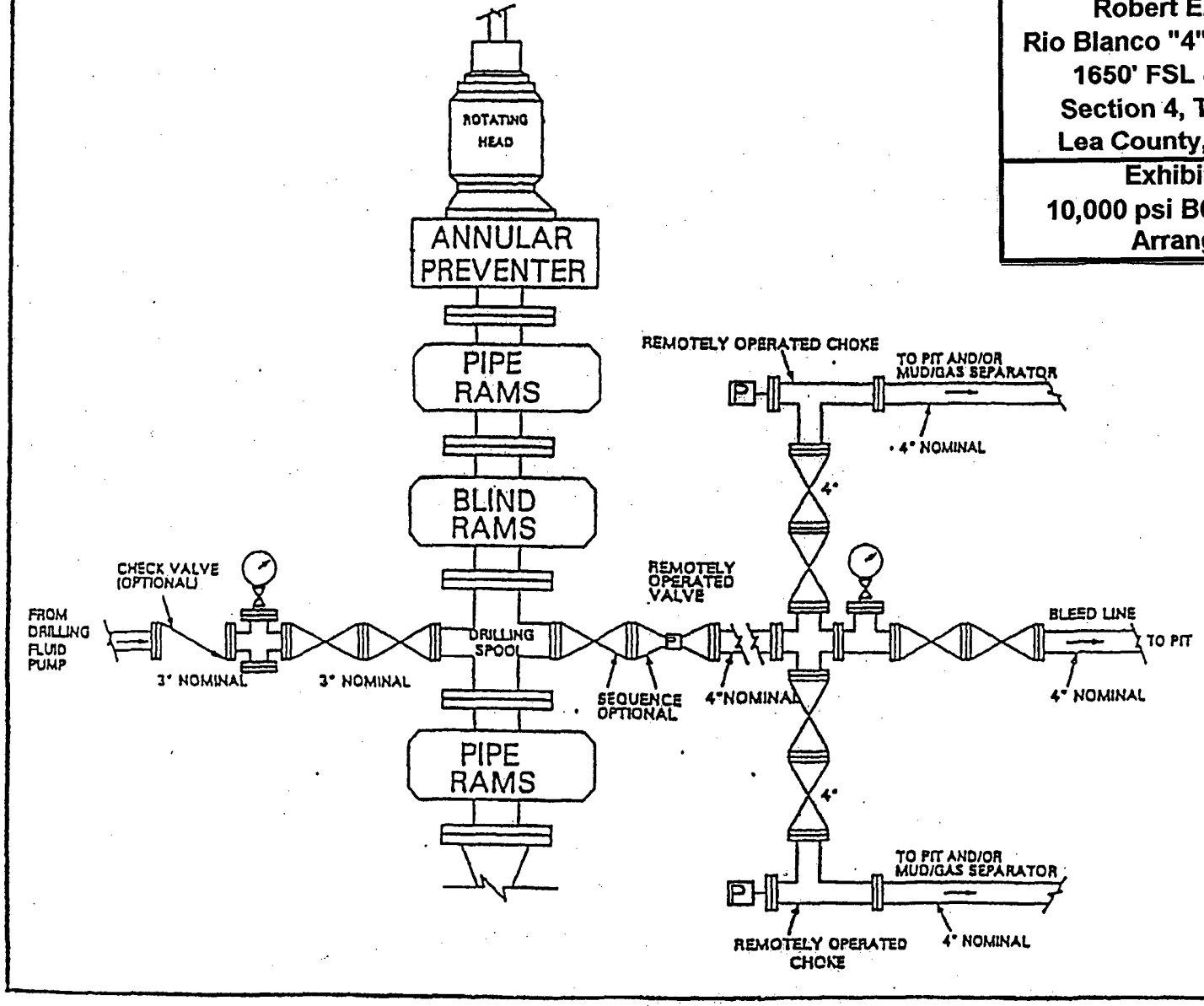
Exhibit No. 1a
5000 psi BOP and Choke Arrangement



PROPOSED 10-M BOPE AND CHOKE ARRANGEMENT

Robert E. Landreth
Rio Blanco "4" Fed Com No. 3
1650' FSL & 1650' FEL
Section 4, T-23S, R-34-E
Lea County, New Mexico

Exhibit No. 1b
10,000 psi BOP and Choke Arrangement

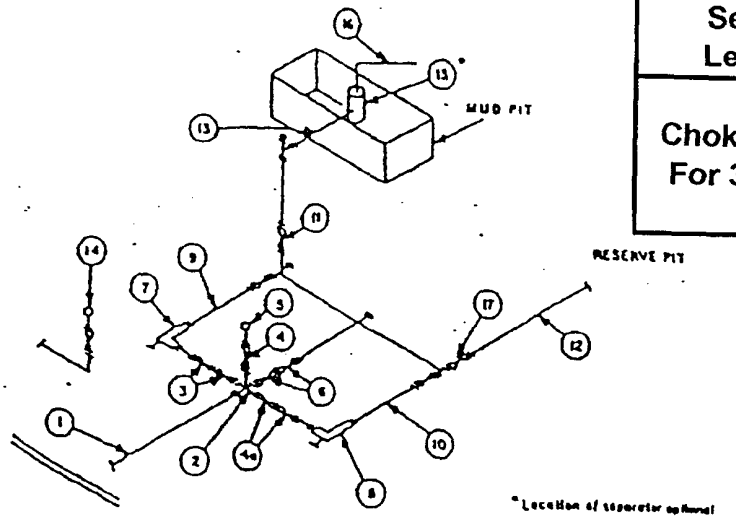


Robert E. Landreth
Rio Blanco "4" Fed Com No. 3
1650' FSL & 1650' FEL
Section 4, T-23S, R-34-E
Lea County, New Mexico

Exhibit No. 1c
Choke Manifold Requirements For 3000, 5000 and 10000 psi Working Pressure

MINIMUM CHOKE MANIFOLD
3,000, 5,000 and 10,000 PSI Working Pressure

3 MWP - 5 MWP - 10 MWP



MINIMUM REQUIREMENTS										
		3,000 MWP			5,000 MWP			10,000 MWP		
No.		I.D.	NOMINAL	RATING	I.D.	NOMINAL	RATING	I.D.	NOMINAL	RATING
1	Line from drilling spool		3"	3,000		3"	5,000		3"	10,000
2	Cross 3"x3"x3"x2"			3,000			5,000			
	Cross 3"x3"x3"x3"									10,000
3	Valves(1) Gate ☐ Plug ☐(2)	3-1/8"		3,000	3-1/8"		5,000	3-1/8"		10,000
4	Valve Gate ☐ Plug ☐(2)	1-13/16"		3,000	1-13/16"		5,000	1-13/16"		10,000
4a	Valves(1)	2-1/16"		3,000	2-1/16"		5,000	3-1/8"		10,000
5	Pressure Gauge			3,000			5,000			10,000
6	Valves Gate ☐ Plug ☐(2)	3-1/8"		3,000	3-1/8"		5,000	3-1/8"		10,000
7	Adjustable Choke(3)	2"		3,000	2"		5,000	2"		10,000
8	Adjustable Choke	1"		3,000	1"		5,000	2"		10,000
9	Line		3"	3,000		3"	5,000		3"	10,000
10	Line		2"	3,000		2"	5,000		3"	10,000
11	Valves Gate ☐ Plug ☐(2)	3-1/8"		3,000	3-1/8"		5,000	3-1/8"		10,000
12	Lines		3"	1,000		3"	1,000		3"	2,000
13	Lines		3"	1,000		3"	1,000		3"	2,000
14	Remote reading compound standpipe pressure gauge			3,000			5,000			10,000
15	Gas Separator		2'x5'			2'x5'			2'x5'	
16	Line		4"	1,000		4"	1,000		4"	2,000
17	Valves Gate ☐ Plug ☐(2)	3-1/8"		3,000	3-1/8"		5,000	3-1/8"		10,000

(1) Only one required in Class 3M.

(2) Gate valves only shall be used for Class 10M.

(3) Remote operated hydraulic choke required on 5,000 psi and 10,000 psi for drilling.

EQUIPMENT SPECIFICATIONS AND INSTALLATION INSTRUCTIONS

1. All connections in choke manifold shall be welded, studded, flanged or Cameron clamp of comparable rating.
2. All flanges shall be API 6B or 6BX and ring gaskets shall be API RX or BX. Use only BX for 10 MWP.
3. All lines shall be securely anchored.
4. Chokes shall be equipped with tungsten carbide seats and needles, and replacements shall be available.
5. Choke manifold pressure and standpipe pressure gauges shall be available at the choke manifold to assist in regulating chokes. As an alternate with automatic chokes, a choke manifold pressure gauge shall be located on the rig floor in conjunction with the standpipe pressure gauge.
6. Line from drilling spool to choke manifold should be as straight as possible. Lines downstream from chokes shall make turns by large bends or 90° bends using bull plugged tees.
7. Discharge lines from chokes, choke bypass and from top of gas separator should vent as far as practical from the well.

HYDROGEN SULFIDE DRILLING OPERATIONS PLAN

EXHIBIT NO. 2
ROBERT E. LANDRETH
RIO BLANCO "4" FED COM NO. 3
1650' FSL & 1650' FEL, Section 4, T-23-S, R34-E
Lea County, New Mexico

I. Hydrogen Sulfide Training:

All personnel, whether regularly assigned, contracted or employed on an unscheduled basis, will receive training from a qualified instructor in the following areas prior to commencing drilling operations on this well.

1. The hazards and characteristics of hydrogen sulfide (H_2S).

2. The proper use and maintenance of personal protective equipment and life support systems.

3. The proper use of H_2S detectors, alarms, warning systems, briefing areas, evacuation procedures and prevailing winds.

4. The proper techniques of first aid and rescue procedures.

In addition the supervisory personnel will be trained in the following areas:

1. The effects of H_2S on metal components. If high tensile tubulars are to be used, personnel will be trained in their special maintenance requirements.

2. Corrective action and shut-in procedures when drilling or reworking a well and blowout prevention and well control procedures.

3. The contents and requirements of the H_2S Drilling Operations Plan.

There will be an initial training session just prior to encountering a known or probable H_2S zone (within 3 days or 500 feet) and weekly H_2S and well control drills for all personnel in each crew. The initial training session will include a review of the site specific H_2S Drilling Operations Plan. This plan will be available at the well site. All personnel will be required to carry documentation that they have received the proper training. All training sessions will be recorded on the driller's log or its equivalent.

II. H_2S Safety Equipment and Systems:

NOTE: All H_2S safety equipment and systems will be installed, tested, and operational when drilling reaches a depth of 500 feet above or three days prior to penetrating the first zone containing or reasonably expected to contain H_2S.

1. **Well Control Equipment:**

   A. Flare line.

   B. Choke manifold.

   C. Blind rams and pipe rams to accommodate all pipe sizes with properly sized closing unit.

   D. Auxiliary equipment to include: annular preventer, mud gas separator (if necessary) and rotating head.

   E. Flare gun and flares to ignite well when H_2S is present and gas volume is sufficient to flare.

2. **Protective Equipment for Essential Personnel:**

   A. 5-minute escape units located in the doghouse and a location accessible to the derrickman. 30-minute air units will be located at briefing areas, as indicated on well site diagram.

3. **H_2S Detection and Monitoring Equipment:**

   A. 3 – portable H_2S monitors positioned on location for best coverage and response, normally at the shale shaker, rig floor and bellnipple. These units have warning lights and audible sirens that will activate when H_2S levels in air reach 10 and 15 ppm, respectively.

   B. 1 – portable SO2 monitor positioned near flare line during H_2S flaring operations.

   C. The detection and monitoring system will be installed, calibrated, tested and maintained in accordance with the manufacturer's recommendation. All tests of the H_2S monitoring system will be recorded on the driller's log or its equivalent.

4. **Visual Warning Systems:**

   A. Wind direction indicators will be installed at prominent locations and at different elevations so that at least one wind direction indicator will be visible from all work areas (including the briefing areas) at all times.

   B. Caution/Danger signs will be posted on roads providing direct access to location. Signs will be painted a high visibility yellow with black lettering of sufficient size to be read by all persons entering the well site. The signs should also include the following warning (in smaller lettering): **DO NOT APPROACH IF RED FLAG IS FLYING**.

5. **Alternate Escape Route:**

A. An alternate escape route will be designated if the entrance road cannot be used for any reason, such as a change in wind direction.

6. **Mud Program:**

A. The mud program has been designed to minimize the volume of H_2S circulated to the surface. Proper mud weight, safe drilling practices and the use of H_2S scavengers when necessary will minimize hazards when penetrating H_2S bearing zones.

B. A Mud-gas separator will be utilized (if necessary).

7. **Metallurgy:**

A. All drill strings, casings, tubing, wellhead, blowout preventers, drilling spools, kill lines, choke manifold and line valves will be suitable for H_2S service.

B. All elastomers used for packing and seals will be H_2S trimmed.

8. **Communications**:

A. Two briefing areas for assembly of personnel during emergency conditions will be located a minimum of 150 feet from the well bore (See Exhibit No. 7).

B. Radio communications will be available in company vehicles and rig doghouse.

9. **Well Testing:**

A. Drill stem testing will be performed with a minimum number of personnel in the immediate vicinity, which are necessary to safely and adequately conduct the test. The drill stem testing of any know formation that contains H_2S will be conducted during daylight hours.

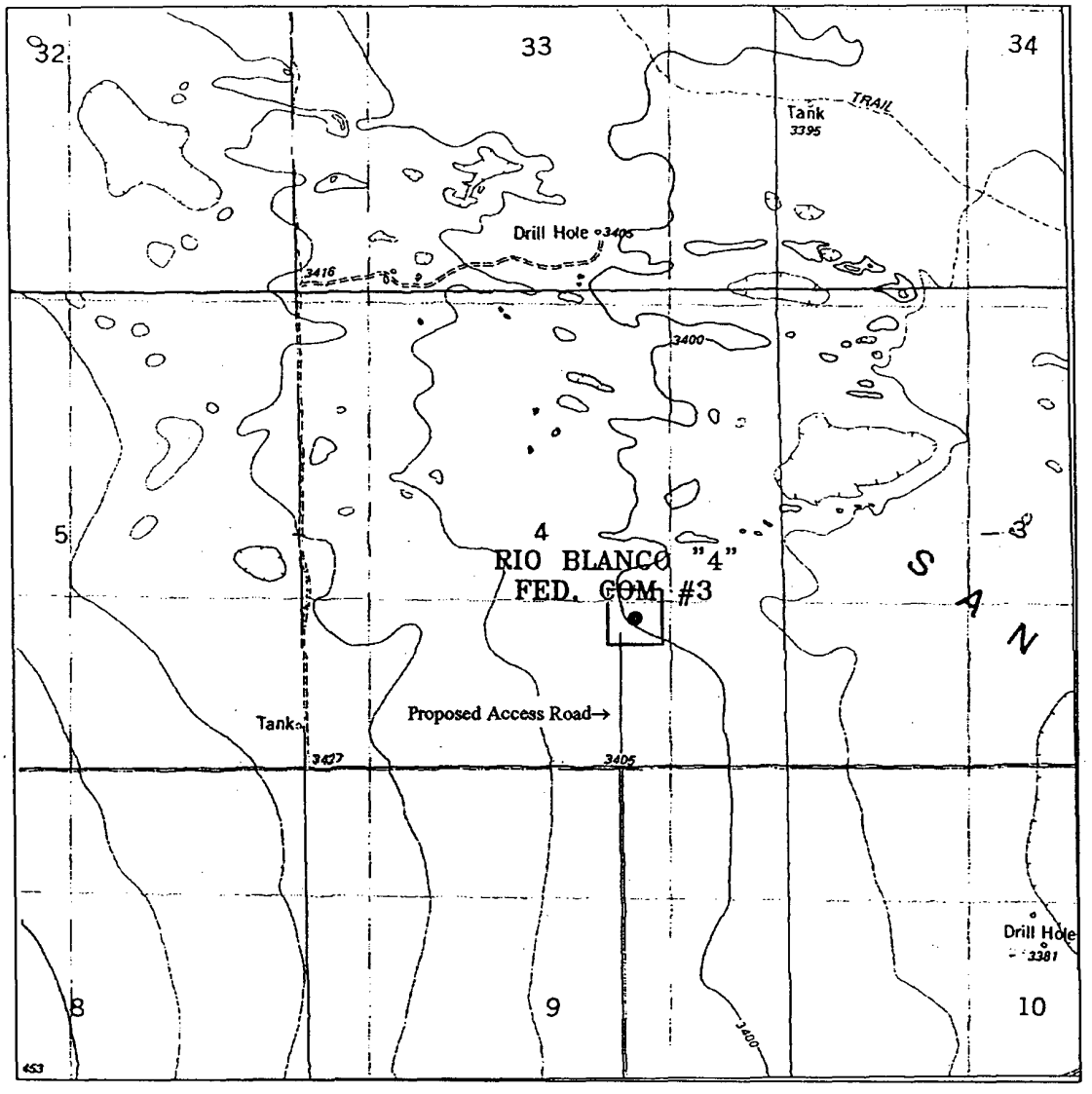


EXHIBIT NO. 3

RIO BLANCO "4" FEDERAL COM #3
Located at 1650' FSL and 1650' FEL
Section 4, Township 23 South, Range 34 East,
N.M.P.M., Lea County, New Mexico.

basin surveys
focused on excellence in the oilfield

P.O. Box 1786
1120 N. West County Rd.
Hobbs, New Mexico 88241
(505) 393-7316 - Office
(505) 392-3074 - Fax
basinsurveys.com

W.O. Number:	3517AA - KJG CD#5
Survey Date:	08-06-2003
Scale:	1" = 2000'
Date:	08-07-2003

ROBERT E. LANDRETH

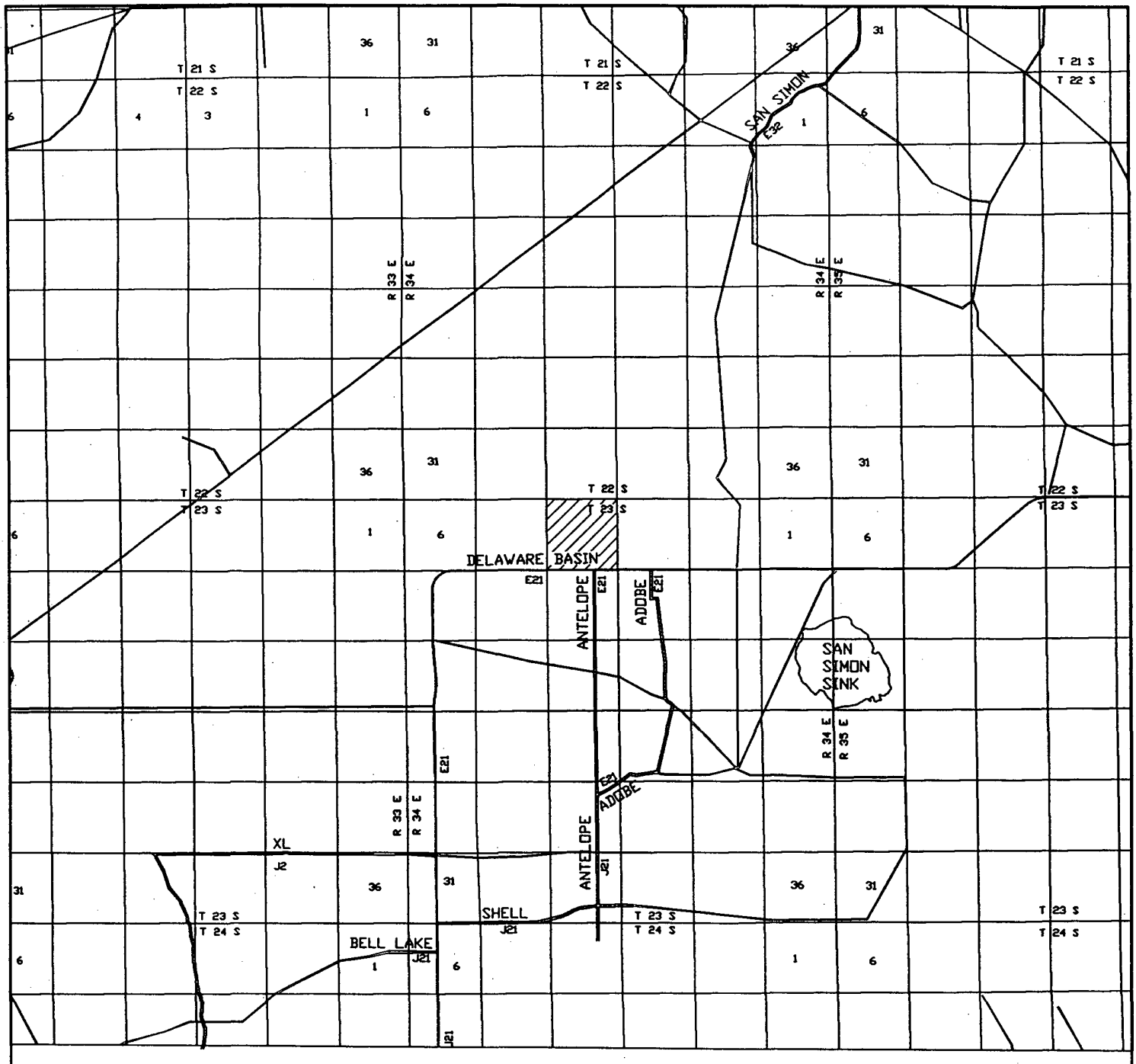


EXHIBIT NO. 4

RIO BLANCO "4" FEDERAL COM #3
Located at 1650' FSL and 1650' FEL
Section 4, Township 23 South, Range 34 East,
N.M.P.M., Lea County, New Mexico.

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(505) 392-3074 - Fax
basinsurveys.com

W.O. Number:	3517AA - KJG CD#5
Survey Date:	08-06-2003
Scale:	1" = 2 MILES
Date:	08-07-2003

ROBERT E. LANDRETH

SECTION 4, TOWNSHIP 23 SOUTH, RANGE 34 EAST, N.M.P.M.,

LEA COUNTY, NEW MEXICO.

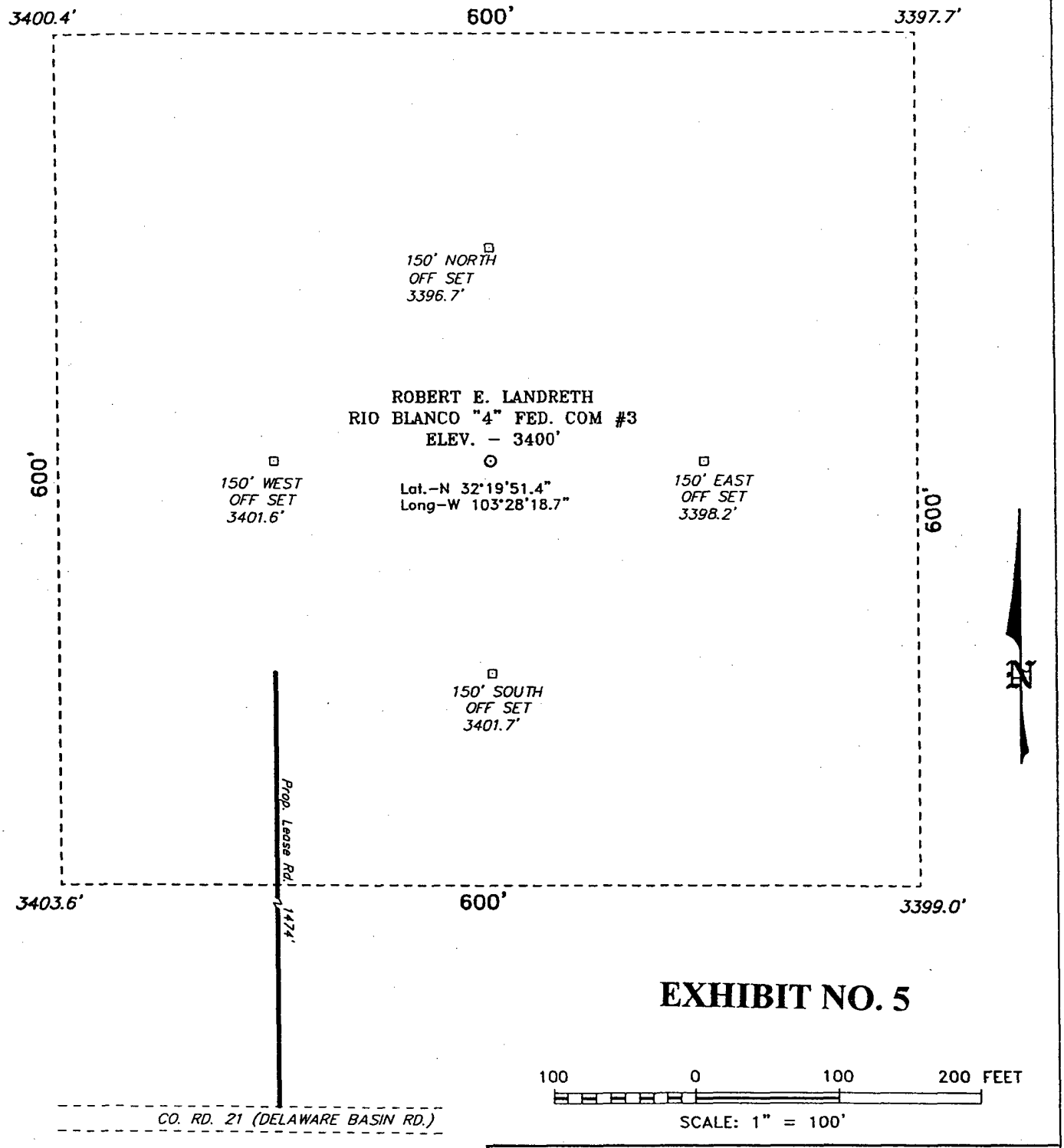


EXHIBIT NO. 5

100 0 100 200 FEET

SCALE: 1" = 100'

Directions to Location:

PROPOSED LEASE ROAD TO WELL IS LOCATED AT THE INTERSECTION OF DELAWARE BASIN ROAD AND ANTELOPE ROAD, BOTH MARKED COUNTY ROAD E-21.

BASIN SURVEYS P.O. BOX 1786 - HOBBS, NEW MEXICO

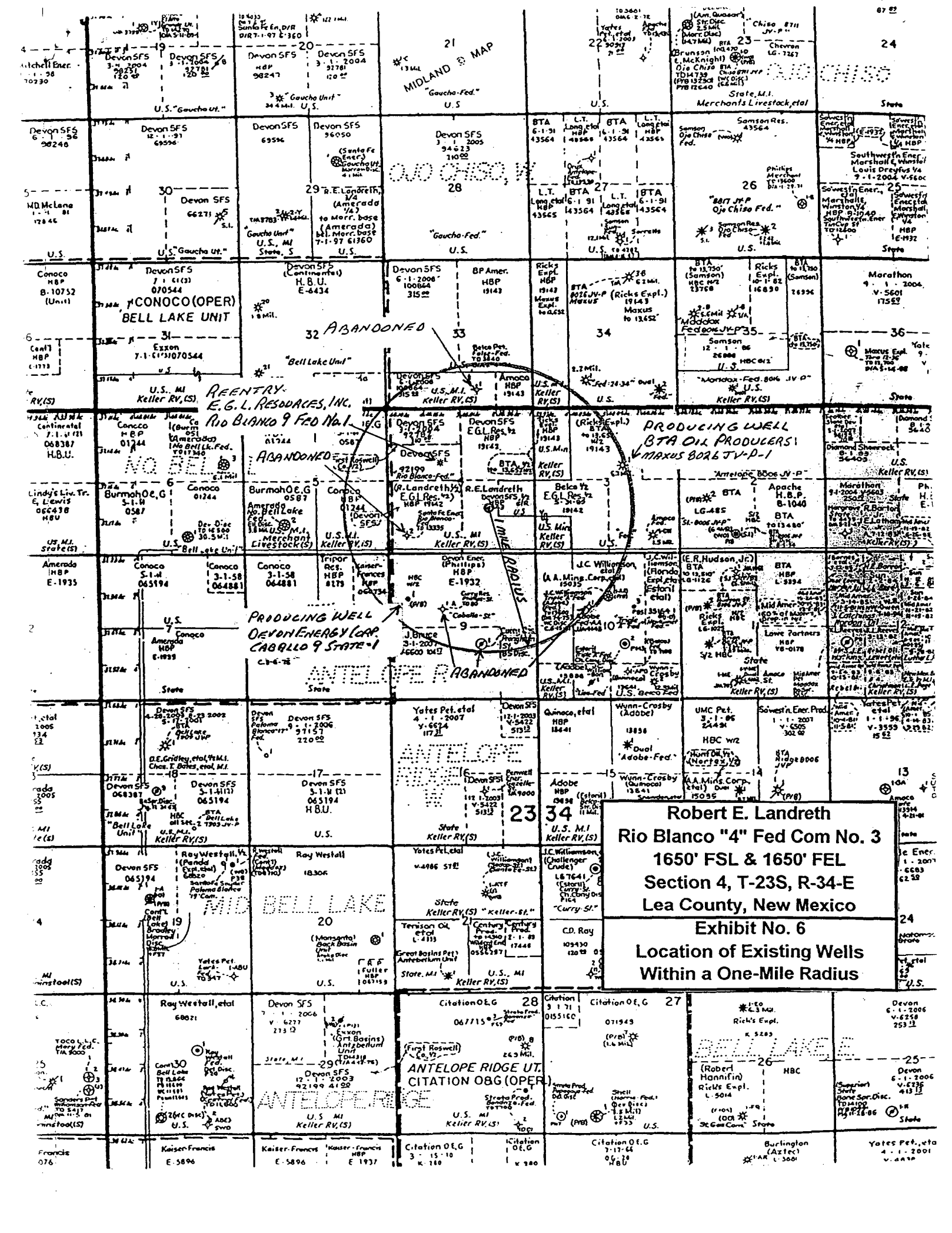
W.O. Number: 3517	Drawn By: K. GOAD
Date: 08-07-2003	Disk: KJG CD#4 - 3517A.DWG

ROBERT E. LANDRETH

REF: RIO BLANCO "4" FED. COM #3 / Well Pad Topo

THE RIO BLANCO "4" FED. COM No. 3 LOCATED 1650' FROM THE SOUTH LINE AND 1650' FROM THE EAST LINE OF SECTION 4, TOWNSHIP 23 SOUTH, RANGE 34 EAST, N.M.P.M., LEA COUNTY, NEW MEXICO.

Survey Date: 08-06-2003	Sheet 1 of 1 Sheets


MIDLAND MAP
REENTRY-
E.G.L. RESOURCES, INC.
RIO BLANCO 9 FED No. 1
ABANDONED
PRODUCING WELL
DEVON ENERGY CORP.
CABALLO 9 STATE-1
ABANDONED
1 MILE RADIUS
PRODUCING WELL
BTA OIL PRODUCERS
MAXUS 8026 JV-P-1
CONOCO (OPER)
BELL LAKE UNIT
ANTELOPE RIDGE
ANTELOPE RIDGE UT.
CITATION 08G (OPER.)
Robert E. Landreth
Rio Blanco "4" Fed Com No. 3
1650' FSL & 1650' FEL
Section 4, T-23S, R-34-E
Lea County, New Mexico
Exhibit No. 6
Location of Existing Wells
Within a One-Mile Radius

Robert E. Landreth
Rio Blanco "4" Fed Com No. 3
1650' FSL & 1650' FEL
Section 4, T-23S, R-34-E
Lea County, New Mexico

Drilling Pad

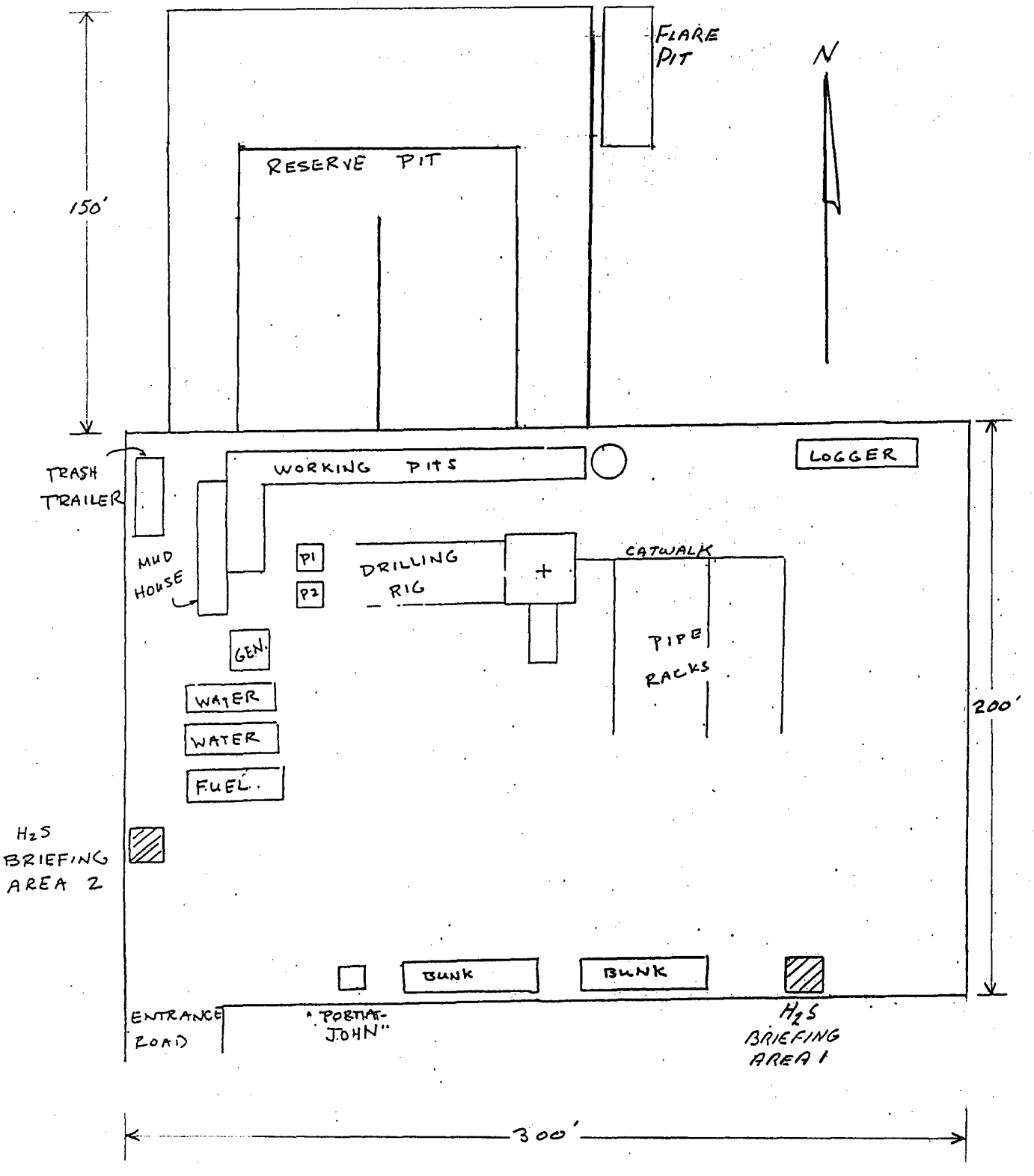


EXHIBIT NO. 7

SCALE 1" = 50'

TITLE PAGE/ABSTRACT/NEGATIVE SITE REPORT

1. BLM Report No.

2. Reviewer's Initials/Date..... Accepted ( ) Rejected ( )

3. NMCRIS Number **84676**

4. Type of Report: Negative (**X**) Positive ( )

5. Title of Report: **A Cultural Resource Survey of the Rio Blanco "4" Federal Com. #3 Well Location and Road, Lea County, New Mexico**

6. FieldworkDate(s) **06Aug2003**

Author: **Don Clifton**

7. Report Date: **12Aug2003**

8. Consultant Name& Address:
Direct Charge: **Don Clifton**
Field Personel Names: **Don Clifton, Sidney Clifton**
Address: **P. O. Box 30, Pep, N.M. 88126**
Phone: **(505) 675-2360**

9. Cultural Resource Permit No.: **#83-2920-02-0**

10. Consultant Report No.: **484**

11. Client Name: **Robert Landreth Oil and Gas Exploration**
Responsible Individual: **Kurt Finkbeiner**
Address:**505 N. Big Spring, Suite 507, Midland, Tx 79701**
Phone: **915-684-4781**

13. Land Status	BLM	State	Private	Other	Total
a. Area Surveyed			**13.1 acres**		**13.1 acres**
b. Area of Effect			**3.1 acres**		**3.1 acres**

14. Linear: Length: **1400'** Width: **150'**

15. Location:
a. State: **New Mexico**
b. County: **Lea**
c. BLM Office: **Carlsbad**
d. Nearest City or Town: **Eunice**
e. Legal Description: T **23S** R**34E** Sec.**4** **SE¼ NW¼ SE¼**

F. Well Pad Footages: **1,650'fsl/1,650'fel**

g. USGS 7.5' Map: **San Simon Sink, N.M. 1984 32103 C4**

16. Project Data:
a. Records Search:
Date of BLM File Review: **04Aug2003** Name of Reviewer: **Don Clifton**
Date of ARMS Data Review: **03Aug2003** Name of Reviewer: **Don Clifton**
Findings: **There are 8 previously recorded archaeological sites within one mile of the proposed well location. One site, LA133277, is 300' to the west of the proposed access road.**
b. Description of Undertaking: **Landreth Oil and Gas Exploration proposes to construct the Rio Blanco Federal Com. #3 well location and access road. The new access road connects to Lea County Road 21.**
c. Environmental Setting: **The proposed well location is approximately 23 miles southwest of Eunice, New Mexico in an area known as San Simon Swale. This narrow, shallow valley is characterized by low stablized dunes with areas of active parabolic dunes along its eastern margins.**

The area of the proposed location is one of low stabilized dunes. Soils are classified as Pyote and Maljamar fine sands. Observed soils are a mantle of loose tan aeolian sands with red/brown sands exposed in eroded areas.

The vegetation of the area is a grasslands with scattered mesquite, sandsage, narrow leaf yucca, shinnery oak and mixed grasses.

d. Field Methods: **The proposed well location was examined by walking a series of east'west transects spaced no wider than 50' apart. The access road was inspected by walking 3 linear transects spaced 50' apart which covered a 150' wide area.**

e. Artifacts Collected:**None**

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17. Cultural Resource Findings: **No cultural resources were observed within the areas inspected.**
a. Location and Indentification of Each Resource:
b. Evaluation of Significance of Each Resource:

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18. Management Summary: **It is recommended that construction proceed without any additional cultural resource investigations.**

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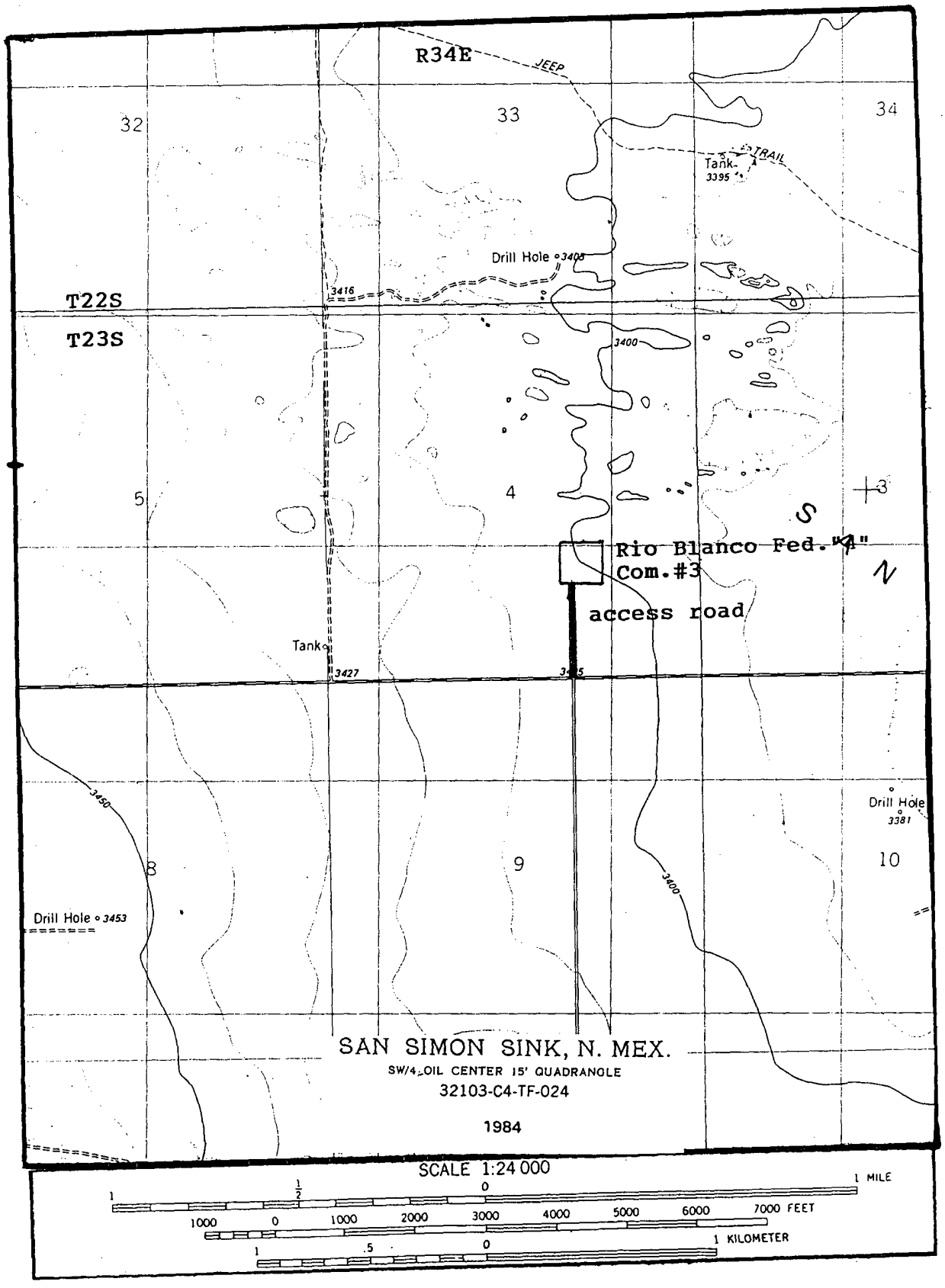
19. I certify the information provided is correct and accurate to my knowledge and meets all applicable BLM standards.

Responsible Archaeologist: Don Clifton Date August 12, 2003


R34E
JEEP
32
33
34
TRAIL
Tank
3395
Drill Hole 3408
3416
T22S
T23S
3400
5
4
3
Rio Blanco Fed. "A" Com. #3
access road
Tank
3427
3450
Drill Hole 3381
8
9
10
3400
Drill Hole 3453
SAN SIMON SINK, N. MEX.
SW/4 OIL CENTER 15' QUADRANGLE
32103-C4-TF-024
1984
SCALE 1:24 000
1 MILE
7000 FEET
1 KILOMETER