

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

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. NMLC-064490
1b. Type of Well: <input type="checkbox"/> Oil Well <input checked="" type="checkbox"/> Gas Well <input type="checkbox"/> Other <input type="checkbox"/> Single Zone <input type="checkbox"/> Multiple Zone		6. If Indian, Allottee or Tribe Name
2. Name of Operator J. Cleo Thompson and James Cleo Thompson		7. If Unit or CA Agreement, Name and No.
3a. Address P.O. Box 12577 Midland, TX 79768	3b. Phone No. (include area code) (432) 550-8887	8. Lease Name and Well No. Mesa Federal, Well No. 1
4. Location of Well (Report location clearly and in accordance with any State requirements. *) At surface 660' FNL & 660' FEL At proposed prod. zone same		9. API Well No. 50-015-33140
14. Distance in miles and direction from nearest town or post office* 4 road miles west of Carlsbad, NM		10. Field and Pool, or Exploratory Undesignated Carlsbad Morrow, South
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 1800	11. Sec., T., R., M., or Blk. and Survey or Area Sec. 15-T22S-R26E
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. 4750'	19. Proposed Depth 11,600'	12. County or Parish Eddy
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 3220' GL	22. Approximate date work will start* December 10, 2003	13. State NM
23. Estimated duration 5 - 6 weeks		
24. Attachments CARLSBAD CONTROLLED WATER BASIN		

RECEIVED
DEC 11 2003
OCD-ARTESIA

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) George R. Smith	Date 11/18/03
Title Agent		
Approved by (Signature) /s/ Joe G. Lara	Name (Printed/Typed) /s/ Joe G. Lara	Date 10 DEC 2003
Title FIELD MANAGER	Office CARLSBAD FIELD OFFICE	

Application approval does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Conditions of approval, if any, are attached.

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)

Lease Responsibility Statement: J. CLEO THOMPSON and JAMES CLEO THOMPSON, JR., L.P. accepts all applicable terms, conditions, stipulations, and restrictions concerning operations conducted on the leased land or portion thereof.

**APPROVAL SUBJECT TO
 GENERAL REQUIREMENTS
 AND SPECIAL STIPULATIONS
 ATTACHED**

George R. Smith, agent

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

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 DD, Artesia, NM 88211-0710

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 Undesignated Carlsbad Morrow
Property Code	Property Name MESA FEDERAL		Well Number 1
OGRID No. 11181	Operator Name J. CLEO THOMPSON & JAMES CLEO THOMPSON, JR., L.P.		Elevation 3220'

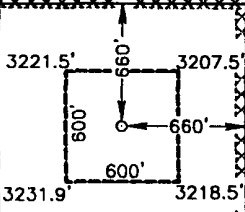
Surface Location

UL or lot No. A	Section 15	Township 22-S	Range 26-E	Lot Idn	Feet from the 660	North/South line NORTH	Feet from the 660	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
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

		GEODETIC COORDINATES NAD 27 NME Y = 508484.6 N X = 518383.9 E LAT. 32°23'52.53"N LONG. 104°16'25.58"W

OPERATOR CERTIFICATION

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


Signature

George R. Smith

Printed Name

agent

Title

November 19, 2003

Date

SURVEYOR CERTIFICATION

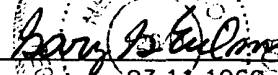
I hereby certify that the well location shown
on this plat was plotted from field notes of
actual surveys made by me or under my
supervision and that the same is true and
correct to the best of my belief.

SEPTEMBER 23, 2003

Date Surveyed L.A.

Signature & Seal of
Professional Surveyor



 9/25/03
03.14.1060

Certificate No. GARY EDSON

12841

APPLICATION FOR DRILLING

J. CLEO THOMPSON AND JAMES CLEO THOMPSON, JR., L.P.

Mesa Federal, Well No. 1
660' FNL & 660' FEL, Sec. 15-T22S-R26E
Eddy County, New Mexico
Lease No.: LC-064490
(Exploratory Well)

In conjunction with Form 3160-3, Application for Permit to Drill subject well, J. Cleo Thompson and James Cleo Thompson, Jr., L.P. submits the following items of pertinent information in accordance with BLM requirements:

1. The geologic surface formation is recent Permian with quaternary alluvium and other surficial deposits.
2. The estimated tops of geologic markers are as follows:

Delaware	2,200'	Strawn	10,100'
Brushy Canyon	3,350'	Atoka	10,400'
Bone Spring	5,050'	Morrow	10,550'
Wolfcamp	8,700'	Morrow Sand	10,820'
Penn	9,700'	Barnett	11,460'
		T.D.	11,600'

3. The estimated depths at which water, oil or gas formations are anticipated to be encountered:

Water: Surface water between 100' - 1400'.

Oil: Possible in the Delaware below 2200'.

Gas: Possible in the Bone Spring below 5050' Wolfcamp, Strawn, Atoka and the Morrow below 10,550'.

4. Proposed Casing Program:

HOLE SIZE	CASING SIZE	WEIGHT	GRADE	JOINT	SETTING DEPTH	QUANTITY OF CEMENT	WITNESS
17 1/2"	13 3/8"	48.0#	J-55	STC	0 - 500'	Circ. 300 sx "C" to surface.	
12 1/4"	9 5/8 "	36.0#	J-55	STC	0 - 2,500'	Circ. 2100 sx "C" to surface.	WITNESS
7 7/8"	5 1/2"	17.0#	S-95	LTC	0 - 400'		
7 7/8"	5 1/2"	17.0#	N-80	LTC	0 - 10,000'		
7 7/8"	5 1/2"	17.0#	S-95	LTC	10,000 - 11,600'	600 sx "H" TOC 9,000'	

5. Proposed Control Equipment: A 12" 5000 psi wp Shaffer Type LWS Double Gate BOP will be installed on the 13 3/8" casing. Casing and BOP will be tested to maximum estimated surface pressures of 2552 psi, as per Onshore Oil & Gas Order #2, before drilling out with 7 7/8" and will be tested weekly. See Exhibit "E".

6. MUD PROGRAM:	MUD WEIGHT	VIS.	W/L CONTROL
0' - 500': Fresh water mud:	8.6 - 9.2 ppg	34 - 36	No W/L control
500' - 2,500': Fresh water mud	8.4 - 8.5 ppg	28 - 29	No W/L control
2,500' - 8,600': Fresh water mud:	8.4 - 8.6 ppg	28 - 29	No W/L control
8,600' - 9,600': Cut Brine mud:	9.4 - 9.7 ppg	28 - 29	No W/L control
9,600' - 11,600': Brine w/Dynazan	9.4 - 9.7 ppg	34 - 40	W/L control 10 - 6 cc +/-

7. Auxiliary Equipment: Blowout Preventer, gas detector, Kelly cock, and stabbing valve.

J. CLEO THOMPSON and JAMES CLEO THOMPSON, JR., L.P.

Mesa Federal, Well No. 1

Page 2

8. Testing, Logging, and Coring Program:

Drill Stem Tests: As deemed necessary in Strawn, Wolfcamp, and Morrow

Logging: T.D.to1900': GR-CAL-CNL-LDT-CNL-MICRO

1900' to surface: GR/Neutron

Coring: Sidewall coring as dictated for the Morrow.

9. No abnormal pressures or temperatures are anticipated. In the event abnormal pressures are encountered the proposed mud program will be modified to increase the mud weight. Estimated evacuated BHP = 5104 psi and estimated surface pressure of 2552 psi with a temperature of 176°.

10. H₂S: None expected.

11. Anticipated starting date: December 10, 2003.

Anticipated completion of drilling operations: Approximately 30 - 40 days.

MULTI POINT SURFACE USE AND OPERATIONS PLAN

J. CLEO THOMPSON & JAMES CLEO THOMPSON, JR., L.P.

Mesa Federal, Well No. 1
660' FNL & 660' FEL, Sec. 15-T22S-R26E
Eddy County, New Mexico
Lease No.: LC-064490
(Exploratory Well)

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 to be followed in rehabilitating the surface and environmental effects associated with the operations.

1. EXISTING ROADS:

- A. Exhibit "A" is a portion of a BLM minerals map showing the location of the proposed well as staked. The well site location is approximately 5 road miles west of Carlsbad, NM. Travel west of Carlsbad truck bypass through Happy Valley on paved Jones Rd. (County Rd. # 427) for approximately 1.9 miles and 2 miles of gravel ranch/oilfield road.
- B. Directions: Travel west of the west truck bypass in Carlsbad (Happy Valley) on Jones Rd. (County Rd. # 427) for 1.9 miles to a gravel road on the south. Turn south through a locked gate for .9 mile to a recently ripped road leading to the P/A Paloma Fed. Com., #1 well site. The start of the proposed access road and pipeline is on the northeast corner of this well pad and will run southeast for 4500' to the southwest corner of the proposed well site.

2. PLANNED ACCESS ROAD:

- A. Length and Width: The proposed access road will be approximately 4500 feet long. The proposed and existing roads are color coded on Exhibits "A".
- B. Construction: The proposed and existing access road will be constructed and repaired by grading and topping with compacted caliche. The surface will be properly drained.
- C. Turnouts: There will be at least 3 turnouts, as needed, increasing the width to 20 feet for passing.
- D. Culverts: None, but there will be four low water crossings.
- E. Cuts and Fills: None required except at the low water crossings.
- F. Gates, Cattle guards: There will be one cattleguard required.
- G. Off lease right of way: A Federal right of way for the S2NE4, Sec 9-T22S-R26E was transferred from Chi Operating and two fee surface agreements are included with this APD. The Federal surface, W2SW4 of Sec. 10, is on the same lease as the well.

3. LOCATION OF EXISTING WELLS:

- A. Existing wells within a two-mile radius are shown on Exhibit "C".

4. LOCATION OF EXISTING AND/OR PROPOSED FACILITIES;

- A. J. Cleo Thompson and James Cleo Thompson, Jr., L.P. has no production facilities on the lease at this time.
- B. If the well proves to be commercial, the necessary production facilities, gas separation-process equipment and tank battery, if required, will be installed on the drilling pad. A 6" steel gas pipeline with 2100 psi maximum pressure rating and operating pressures of 450 psi will be buried parallel to the proposed access road from the well pad back to the pipeline hookup at the Paloma Fed. #1 well site.

5. LOCATION AND TYPE OF WATER SUPPLY:

- A. It is planned to drill the proposed well with fresh water that will be obtained from private or commercial sources and will be transported over the existing and proposed access roads

6. SOURCE OF CONSTRUCTION MATERIALS:

- A. Caliche for surfacing the proposed access road and well site pad will be obtained from the location, if available, or from the P/A Paloma Fed. #1 well site. A backup pit would be to use bottoms from a Federal pit in NE4 SW4 Sec. 11-T22S-R25E. No surface materials will be disturbed except those necessary for actual grading and leveling of the drill site and access road.

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.
- C. All pits will be fenced with normal fencing materials to prevent livestock from entering the area.
- D. Water produced during operations will be collected in tanks until hauled to an approved disposal system, or a separate disposal application will be submitted to the BLM for approval.
- E. Oil produced during operations will be stored in tanks until sold.
- F. Current laws and regulations pertaining to the disposal of human waste will be complied with.
- G. Trash, waste paper, garbage and junk will be contained in trash bins to prevent scattering by the wind and will be removed for deposit in an approved sanitary landfill within 30 days after finishing drilling and/or completion operations.

8. ANCILLARY FACILITIES:

- A. None required.

J. CLEO THOMPSON & JAMES CLEO THOMPSON, JR., L.P.

Mesa Federal, Well No. 1

Page 3

9. WELL SITE LAYOUT:

- A. Exhibit "D" shows the relative location and dimensions of the well pad, reserve pits, and major rig components. The pad and pit area has been staked and flagged, 600' X 600'.
- B. Mat Size: 285' X 192', plus 150' X 125' reserve pits on the North.
- C. Cut & Fill: The location will require a 3 – 4.5 foot cut on the southwest with fill to the northeast.
- D. The surface will be topped with compacted caliche and the reserve pits will be plastic lined. A berm or water diversion will be placed west of the road to divert the rain runoff to the south side of the pad.

10. PLANS FOR RESTORATION OF THE SURFACE:

- A. After completion of drilling and/or completion operations, all equipment and other material not required 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 a condition as possible.
- B. Any unguarded pits containing fluids will be fenced until they are filled.
- C. If the proposed well is non-productive, all rehabilitation and/or vegetation requirements of the Bureau of Land Management will be complied with and will be accomplished as expeditiously as possible. All pits will be filled and leveled as soon as they are dry enough to be worked.

11. OTHER INFORMATION:

- A. Topography: The proposed well site and access road are located on a 3-4% slope to the northeast on the northeast lower slope of The Hackberry Hills and 600' southwest of the Hackberry Watershed Levee. The surface of the location is at the base of the 3576' peak of the Hackberry Hills with an elevation of 3220' GL.
- B. Soil: The topsoil at the well site is a moderately light colored, calcareous, gravelly very shallow soil with hard fractured limestone at or near the surface. The location has heavy weathered bedrock, which may require some blasting. The soil is part of the Ector stony loam soil series.
- C. Flora and Fauna: The vegetation cover has a very sparse grass cover, with the primary cover being plants of mesquite, yucca, broomweed, catclaw, creosote bush, cacti and miscellaneous weeds and wildflowers. The wildlife consists of rabbits, coyotes, antelope, deer, rattlesnakes, lizards, dove, quail and other wildlife typical of the semi-arid desert land.
- D. Ponds and Streams: None except intermittent running draws and canyons when it rains and the canal south of the levee, which is approximately 600 feet northeast of the well.
- E. Residences and Other Structures: None in the immediate vicinity, but a Carlsbad subdivision is .5 mile to the northeast.
- F. Land Use: Cattle grazing.
- G. Surface Ownership: The proposed well site and part of the access road is on fee surface with Federal minerals.

J. CLEO THOMPSON & JAMES CLEO THOMPSON, JR., L.P.

Mesa Federal, Well No. 1

Page 4

11. OTHER INFORMATION:

- H. There is no evidence of archaeological, historical or cultural sites in the staked area. Archaeological Survey Consultants, P. O. Box D, Roswell, NM 88202, are conducting an archaeological survey and their report will be submitted to the appropriate government agencies.

12. OPERATOR'S REPRESENTATIVE:


- A. The field representative for assuring compliance with the approved use and operations plan is as follows:

Jim Stevens
J. Cleo Thompson & James Cleo Thompson, Jr., L.P.
P. O. Box 12577
Odessa, TX 79768
Office Phone: (432) 550-8887
Cell Phone: (432) 664-2917

13. CERTIFICATION:

I hereby certify that I have inspected the proposed drill site and access route; that I am familiar with the conditions which presently exist; that the statements made in the 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 J. Cleo Thompson and James Cleo Thompson, Jr., L.P. 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.

November 18, 2003


George R. Smith
Agent for: J. Cleo Thompson and James Cleo Thompson, Jr., L.P.

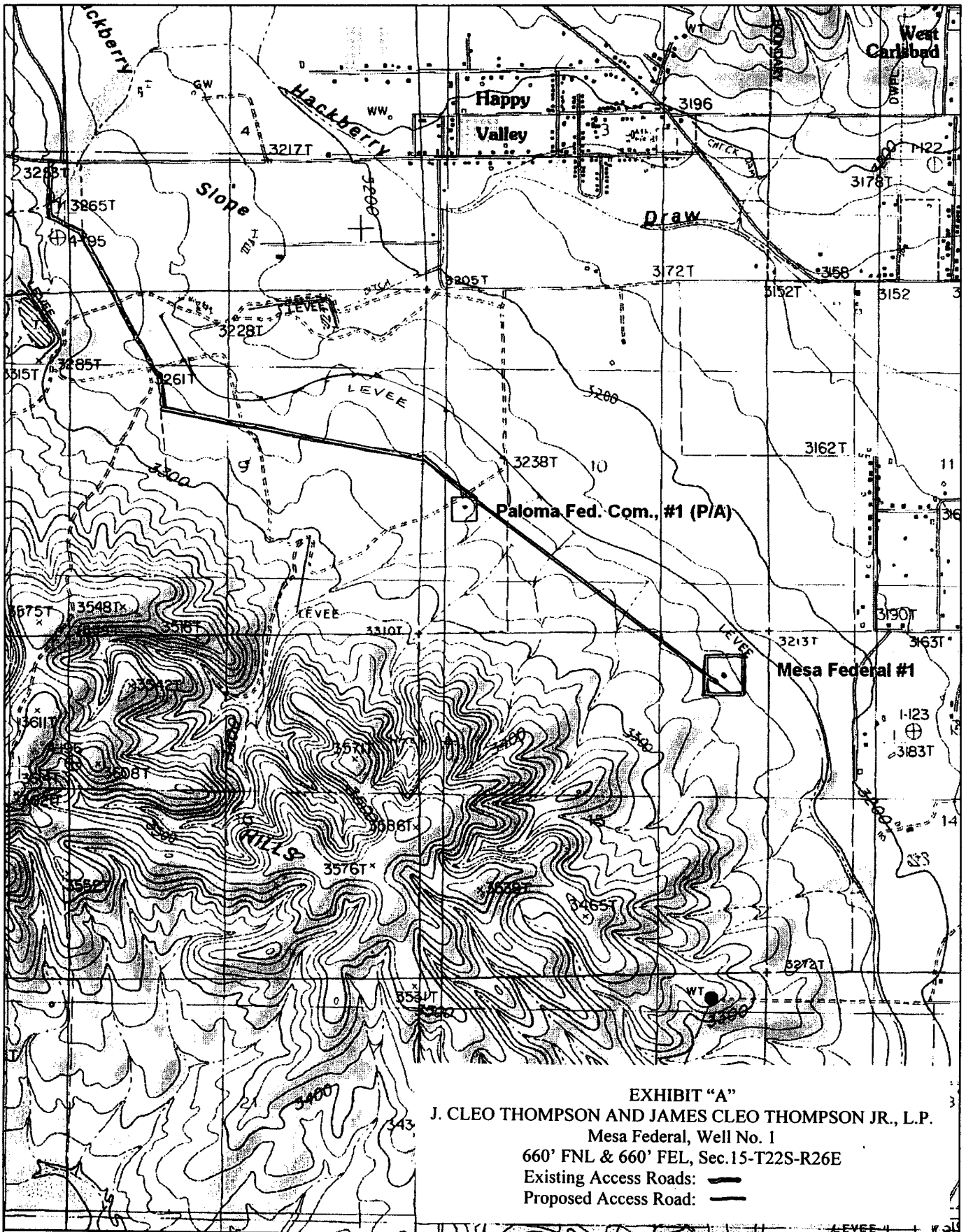
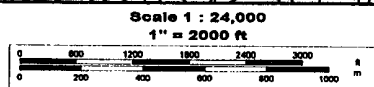


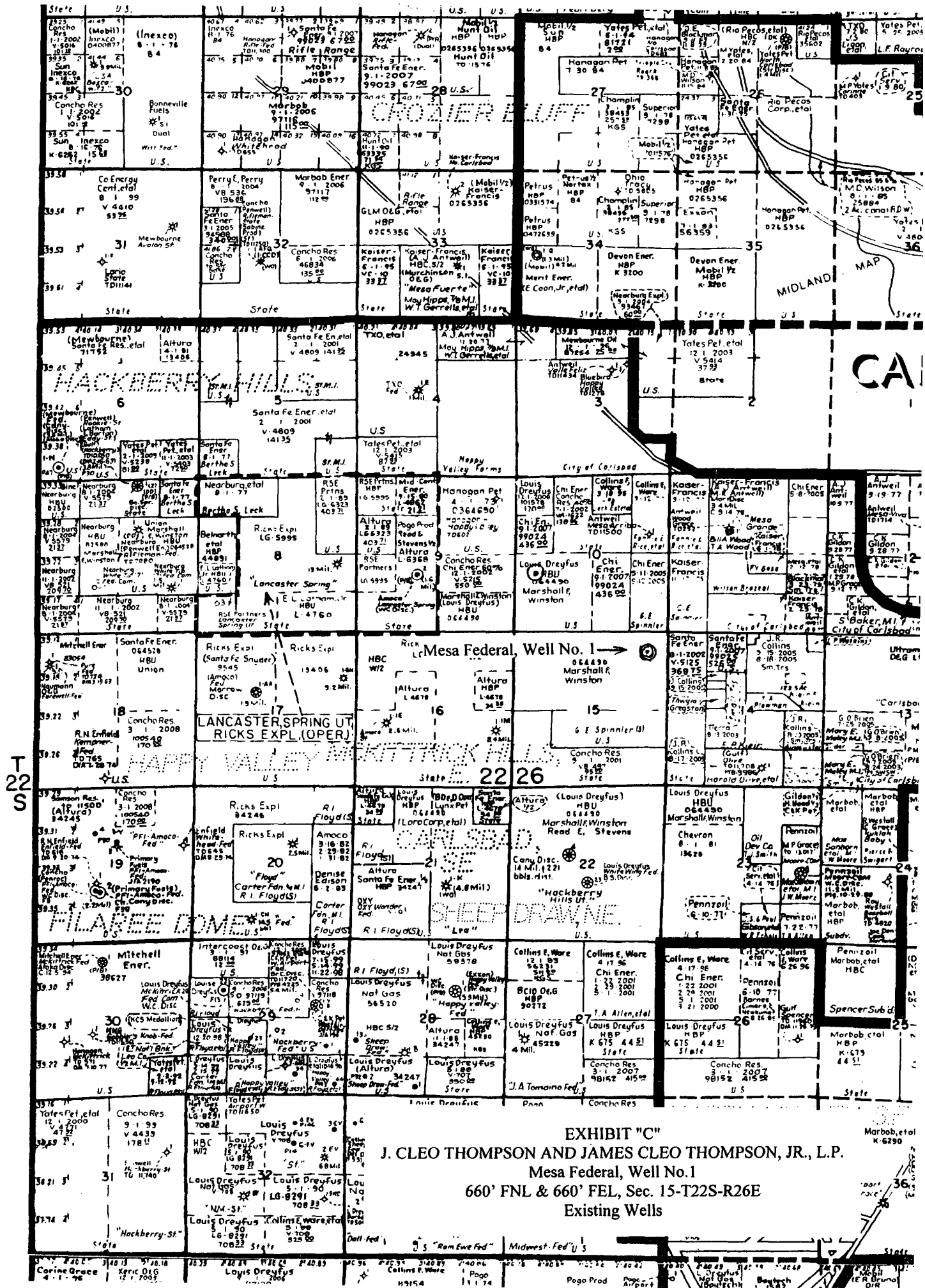
EXHIBIT "A"
 J. CLEO THOMPSON AND JAMES CLEO THOMPSON JR., L.P.
 Mesa Federal, Well No. 1
 660' FNL & 660' FEL, Sec.15-T22S-R26E
 Existing Access Roads: —
 Proposed Access Road: - - -

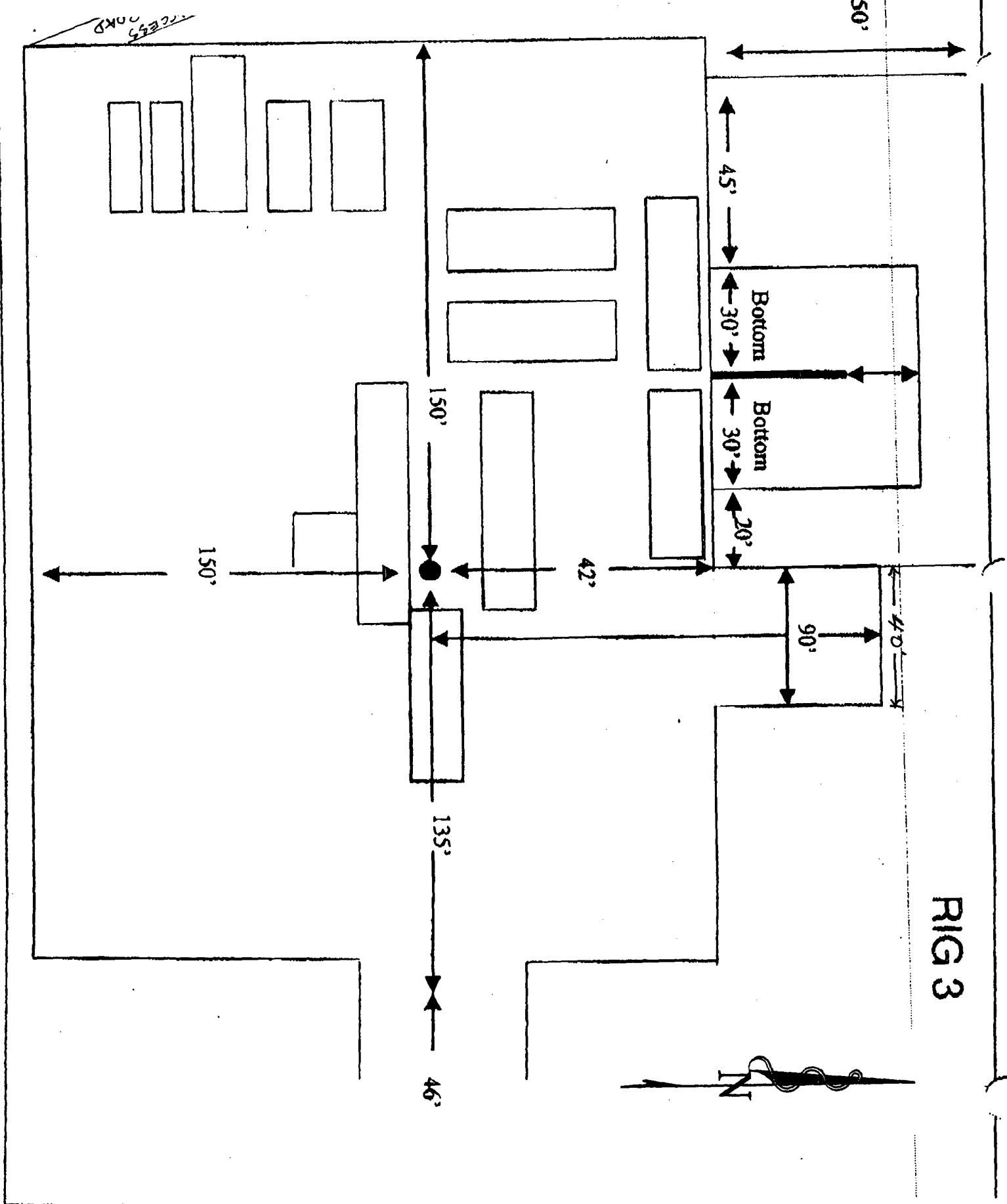
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RIG 3

EXHIBIT "D"

J. CLEO THOMPSON AND JAMES CLEO THOMPSON, JR., L.P.

Mesa Federal, Well No. 1

Pad & Pit Layout

T-101 P.005/005 F-374

4320021505

5000 PSI WORKING PRESSURE BLOWOUT PREVENTER STACK

EXHIBIT C-1

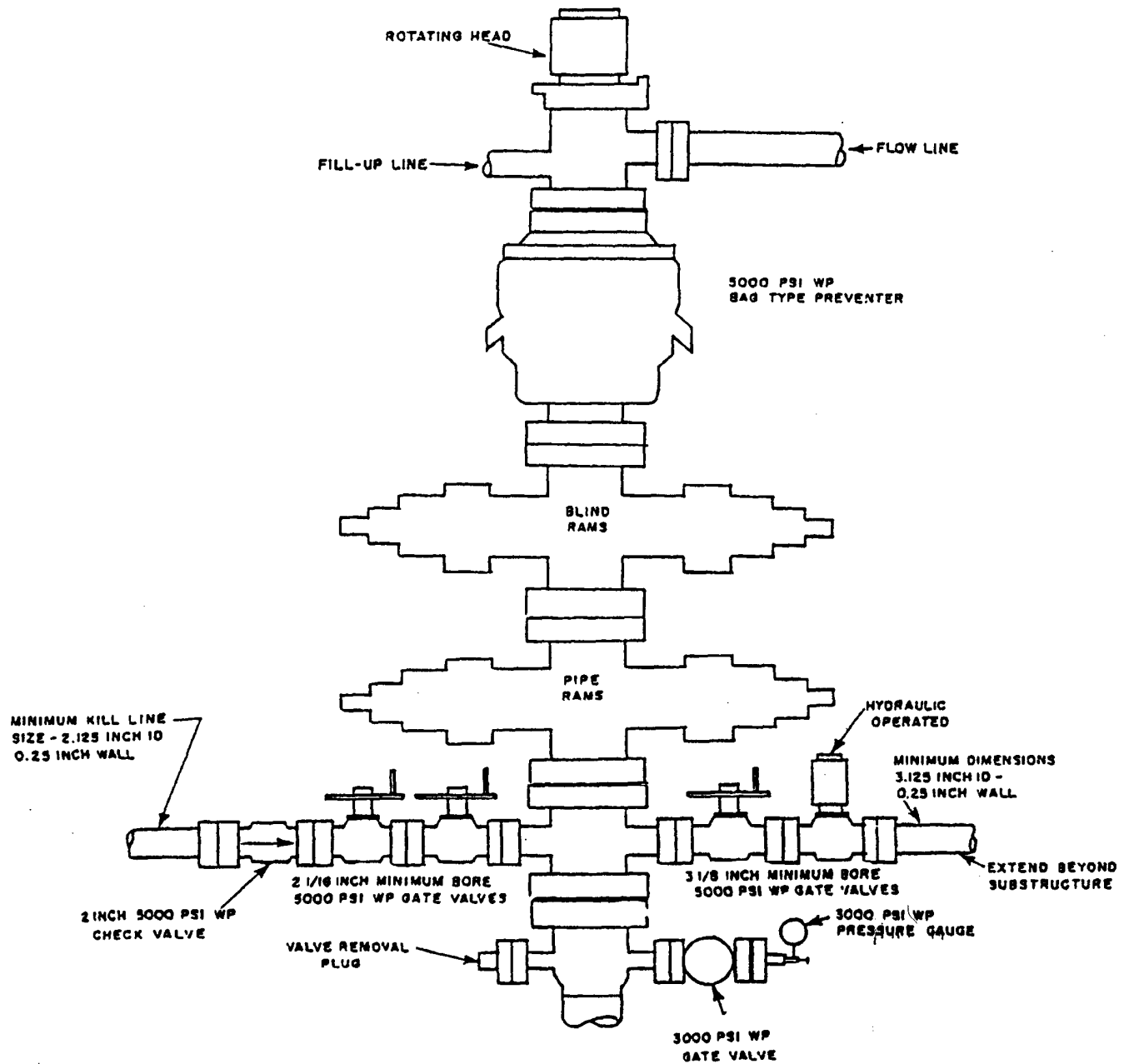
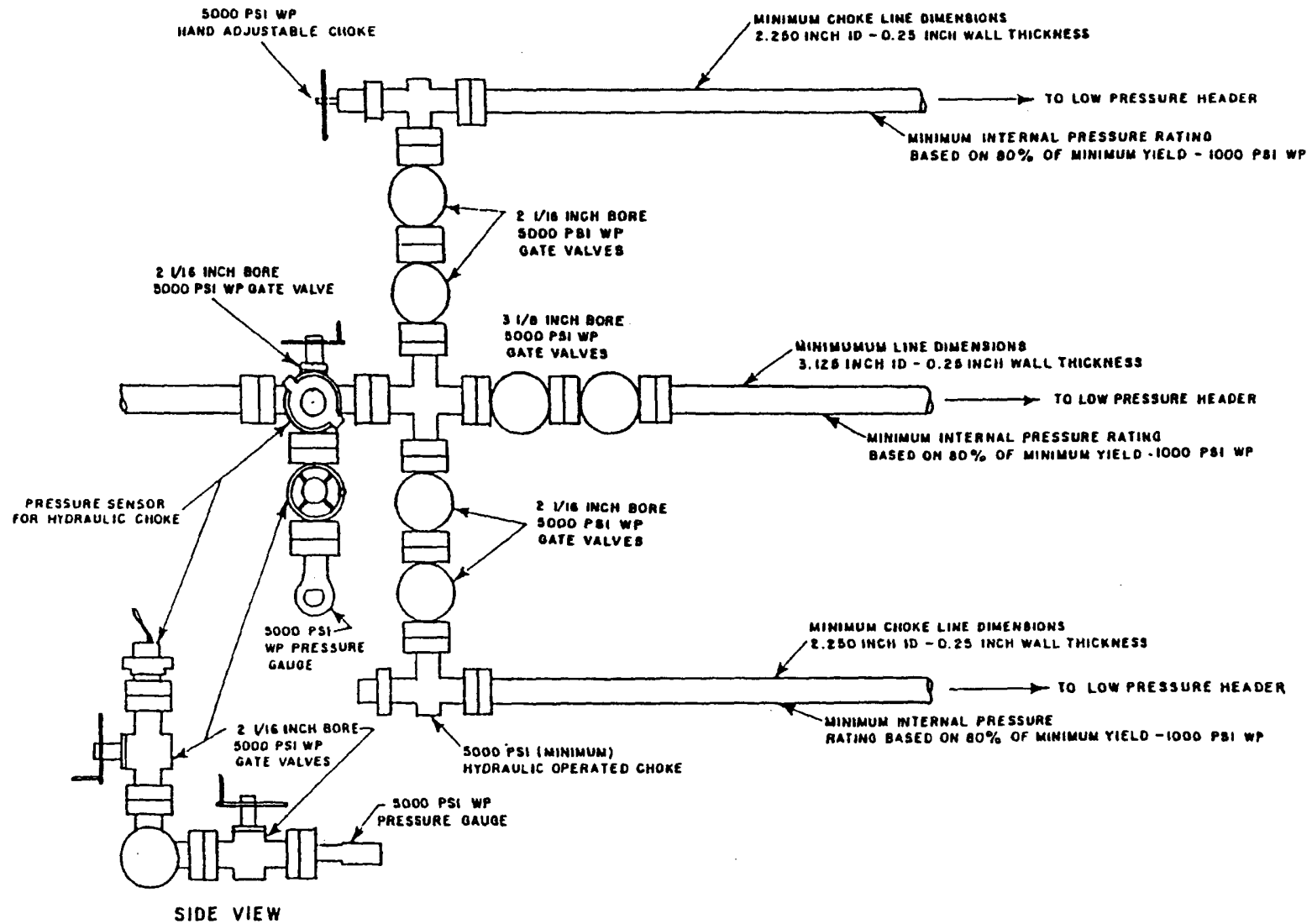


EXHIBIT "E"
J. CLEO THOMPSON AND JAMES CLEO THOMPSON, JR., L.P.
Mesa Federal, Well No. 1
BOP Specifications



5000 PSI WORKING PRESSURE CHOKE MANIFOLD

EXHIBIT C-2

SELF-CERTIFICATION STATEMENT
FROM LESSEE/OPERATOR

SURFACE OWNER IDENTIFICATION

Federal or Indian Lease No. NMLC-064490

I hereby certify to the Authorized Officer of the Bureau of Land Management that I have reached one of the following agreements with the Surface Owner, or after failure of my good faith effort to come to an agreement of any kind with the Surface Owner, have provided a bond and will provide evidence of service of such bond to the Surface Owner:

- 1) ☒ I have a ^{verbal} signed access agreement to enter the leased lands;
- 2) I have a signed waiver from the surface owner;
- 3) I have entered into an agreement regarding compensation to the surface owner for damages for loss of crops and tangible improvements;
- 4) because I have been unable to reach either 1), 2), or 3) with the surface owner, I have obtained a bond to cover loss of crops and damages to tangible improvements and served the surface owner with a copy of the bond.

Surface owner information: (if available after diligent effort)

Surface Owner Name: M. DARR BERNETT

Surface Owner Address: PO BOX 51510, Midland, TX 79710

Surface Owner Phone Number: 432-684-4336

Signed this 12th day of NOV, 2003.

J. CLEO THOMPSON

(Name of lessee/operator)

J. E. STEVENS, OPNS MANAGER

I (Surface Owner) accept ☒ do not accept the lessee or operator's Surface Owner Agreement under 1, 2, or 3 above

Signed this 17th day of Nov, 2003

M. DARR BERNETT

(Signature of Surface Owner if an agreement has been reached)

M. DARR BERNETT

Attachment 1-1

SELF-CERTIFICATION STATEMENT
FROM LESSEE/OPERATOR

SURFACE OWNER IDENTIFICATION

Federal or Indian Lease No. NMLC 064490

I hereby certify to the Authorized Officer of the Bureau of Land Management that I have reached one of the following agreements with the Surface Owner; or after failure of my good-faith effort to come to an agreement of any kind with the Surface Owner, have provided a bond and will provide evidence of service of such bond to the Surface Owner:

- 1) _____ I have a signed access agreement to enter the leased lands;
- 2) _____ I have a signed waiver from the surface owner;
- 3) ☒ I have entered into an agreement regarding compensation to the surface owner for damages for loss of crops and tangible improvements.
- 4) _____ because I have been unable to reach either 1), 2), or 3) with the surface owner, I have obtained a bond to cover loss of crops and damages to tangible improvements and served the surface owner with a copy of the bond.

Surface owner information: (if available after diligent effort)

Surface Owner Name: DON NYMAN
Surface Owner Address: 1728 SOUTHEAST 40TH TERRACE
CAPE CORAL, FL 33904
Surface Owner Phone Number: _____

Signed this 21TH day of SE, 2003

J. CLEO THOMPSON
(Name of lessee/operator)

J. E. Stumm OPERATIONS MAN.

I (Surface Owner) accept ☒ do not accept _____ the lessee or operator's Surface Owner Agreement under 1, 2, or 3 above

Signed this 29 day of September 2003

Don Nyman G.P. Nyman Ltd Partners L.P.
(Signature of Surface Owner if an agreement has been reached)

Attachment 1-1