If earthen pits are used in association with the drilling of this well, an OCD pit permit must be obtained prior to pit construction.

RECEIVED
DEC 2006
OCD - ARTESIA

Form 3160-3
(April 2004)

FORM APPROVED
OMB No. 1004-0137
Expires March 31, 2007

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR RE[illegible]S

1a. Type of work: [X] DRILL [ ] REENTER	5. Lease Serial No. LC 064490
	6. If Indian, Allotee or Tribe Name
	7. If Unit or CA Agreement, Name and No. 33202
1b. Type of Well: [ ] Oil Well [X] Gas Well [ ] Other [ ] Single Zone [ ] Multiple Zone	8. Lease Name and Well No. MESA FEDERAL, WELL #2
2. Name of Operator THOMPSON, J. CLEO	9. API Well No. 30-015 - 35780
3a. Address P.O. BOX 12577 ODESSA, TX 79768	3b. Phone No. (include area code) (432)550-8887
	10. Field and Pool, or Exploratory (78060) Carlsbad; Morrow, South
4. Location of Well (Report location clearly and in accordance with any State requirements.*) At surface 660' FNL & 1850' FWL At proposed prod. zone SAME	11. Sec., T. R. M. or Blk. and Survey or Area SEC. 15-T22S-R26E
14. Distance in miles and direction from nearest town or post office* 4 MILES WEST OF CARLSBAD	12. County or Parish EDDY / 13. State NM

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	17. Spacing Unit dedicated to this well 320
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. 2787'	19. Proposed Depth 11,600	20. BLM/BIA Bond No. on file NM-0348
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 3316'	22. Approximate date work will start* NOVEMBER 1, 2006	23. Estimated duration 5 - 6 WEEKS

24. Attachments

CARLSBAD CONTROLLED WATER BASIN

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 Doug K. Dietrich	Name (Printed/Typed) DOUG DIETRICH	Date 9/14/06
Title PETROLEUM ENGINEER		
Approved by (Signature) /s/ James Stovall	Name (Printed/Typed) /s/ James Stovall	Date DEC 05 2006
Title ACTING 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 page 2)

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.

SEE ATTACHED FOR CONDITIONS OF APPROVAL

APPROVAL SUBJECT TO GENERAL REQUIREMENTS AND SPECIAL STIPULATIONS ATTACHED

Doug Dietrich, Petroleum Engr.

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

DISTRICT II
1301 W. Grand Ave., Artesia, NM 88210

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

DISTRICT IV
1220 St. Francis Dr., Santo Fe, NM 87505

State of New Mexico
Energy, Minerals and Natural Resources Department

OIL CONSERVATION DIVISION
1220 South St. Francis Drive
Santa Fe, NM 87505

Form C-102
Revised October 12, 2005

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

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

1 API Number	2 Pool Code	3 Pool Name
30-015-35280	73960	Carlsbad; Morrow, South

4 Property Code	5 Property Name	6 Well Number
33202	MESA FEDERAL	2

7 OGRID No.	8 Operator Name	9 Elevation
11181	J. CLEO THOMPSON & JAMES CLEO THOMPSON, JR., L.P.	3316'

10 Surface Location

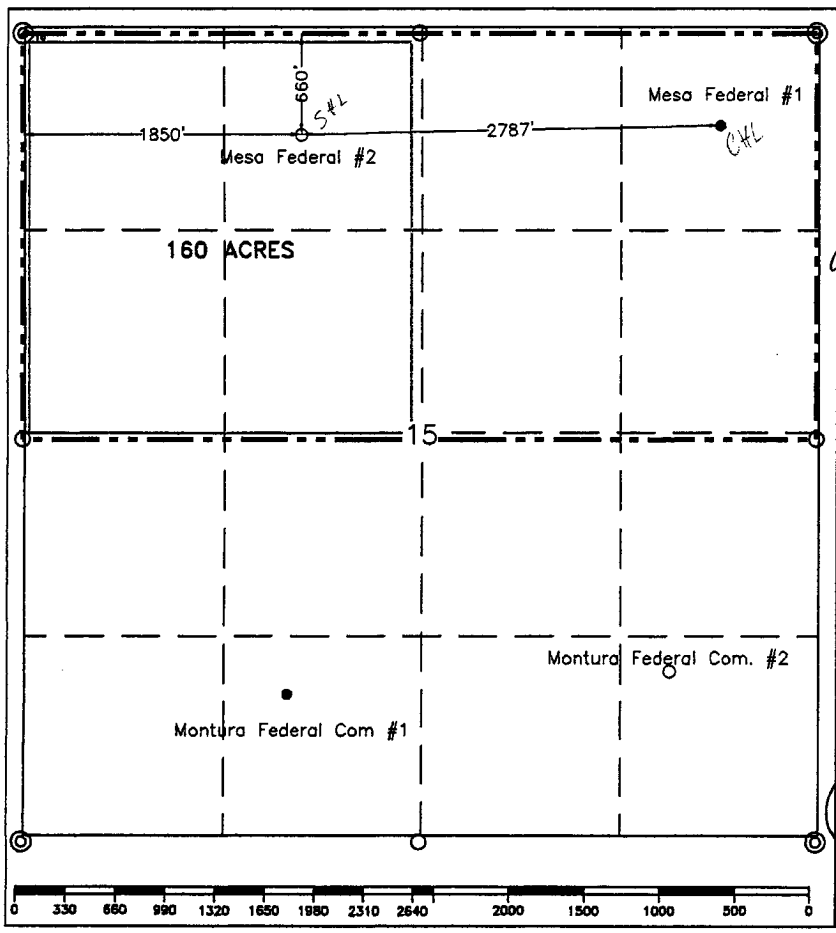
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	7 County
C	15	22-S	26-E		660'	North	1850'	West	Eddy

11 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	7 County

12 Dedicated Acres	13 Joint or Infill	14 Consolidation Code	15 Order No.
~~160~~ 320			

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.



17 OPERATOR CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.

J2Stevens 10/4/06
Signature Date

Jim Stevens
Printed Name

18 SURVEYOR CERTIFICATION

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

March 13, 2006
Date of Survey

Signature & Seal of Professional Surveyor:

Certificate No. 7254 John S. Piper

○ = Staked Location • = Producing Well ⚷ = Injection Well ⟡ = Water Supply Well ✦ = Plugged & Abandon Well
◎ = Found Section Corner, 2 or 3" Iron Pipe & GLO B.C. ○ = Found /4 Section Corner, 1" Iron Pipe & GLO B.C.

ADDITIONAL INFORMATION ON THE LOCATION

State Plane Coordinates			
Northing 508490.24		Easting 556782.10	
Latitude 32°23'52.432"		Longitude 104°16'59.854"	
Zone	North American Datum	Combined Grid Factor	Coordinate File
East	1983	0.999909	Carlsbad.Crd
Drawing File		Field Book	
Carlsbad.Dwg		Eddy #8, Pg. 56	

DRILLING PROGRAM

J. Cleo Thompson & James Cleo Thompson, Jr., L.P.
Oil Producers

Mesa Federal #2
650' FNL & 1850' FWL, Sec. 15, T22S, R26E
Eddy County, New Mexico

In accordance with form 3160 and our application to drill, please find the following items as included in the proposed drilling program.

1. Estimated tops of geological markers:

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

2. Estimated depths to water, oil, or gas formations.

Water: Surface water between 100' – 1400'
Oil: Possible in the Delaware below 2200'
Gas: Possible in the Bone Spring below 5,050 & the Wolfcamp, Strawn, Atoka and Morrow.

3. Proposed Casing Program:

Hole Size	Setting Depth	Csg Size & Weight	Grade/Joint
			H-40
17 ½"	0' to 500'	13 3/8", 48# per foot	~~J-55~~/ ST&C
12 ¼"	0' to 2500'	9 5/8", 36# per foot	J-55/ ST&C
8 ¾"	0' to 1,000'	5 ½", 17# per foot	P-110/ LTC
8 ¾"	1,000' to 10,000'	5 ½", 17# per foot	N-80/ LTC
8 ¾"	10,000' to 11,600'	5 ½", 17# per foot	P-110/ LTC

4. Pressure Control Equipment:

The blowout preventer equipment (BOP) will be a 12", 5,000 psi working pressure stack with both blind and pipe rams. In addition a annular preventer rated to 5,000 psi will be installed on top of the stack. A diagram of the BOP stack and choke manifold is attached. All BOP and accessory equipment will be tested according to Onshore order #2 before drilling out with the 8 ¾" hole and tested weekly.

5. Proposed Mud Program:

Mud Program		Mud Weight	Viscosity	Waterloss
0' to 500'	Fresh Wtr	8.6 to 9.2 ppg	34 to 36	NC
500' to 2,500'	Fresh Wtr	8.4 to 8.5 ppg	28 to 29	NC
2,500' to 8,600'	Fresh Wtr	8.4 to 8.6 ppg	28 to 29	NC
8,600' to 9,600'	Cut Brine	9.4 to 9.7 ppg	28 to 29	NC
9,600' to 11,600'	Brine	9.4 to 9.7 ppg	34 to 40	10 to 6 cc

6. Proposed Cementing Program:

13 3/8" Surface: 180 sxs "H" + 10% A10 + 10# LCM + ¼ # Celloflake + 1% CaCl
Lead cement 228 sxs 35:65:6 "C" + 2% CaCl + ¼ # Cello + 5# LCM 1
Tail cement 200 sxs "C" + 2% CaCl. TOC at surface.

9 5/8" Int: 360 sxs H + 10% A-10 + 10# LCM-1 + 1% CaCl + ¼ # CelloFlake
Lead Cement 800 sxs 50:50:10 + 5% Salt + 5# LCM-1 + ¼ # CelloFlake
Tail Cement 200 sxs "C" + 2% CaCl. TOC at surface.

5 ½" Prod: Two stage cement job w/ DV tool at +/- 7,000'
1st stage - Pump 725 sxs 15-61-11 "H" + 6% FL 52 + 5% Salt + 3# LCM.
2nd stage - pump 800 sxs 35:65:6 + 3% FL-52 + 3% SMS + 2% KCL + ¼ # Cello Flake.
Tail Cement pump 750 sxs C + 1% FL-62 + 3% CD-32 + .2% SMS.

7. Auxiliary Equipment:

Blowout preventer, gas detector, kelly cock and stabbing valve.

8. Testing, Logging and Coring Program:

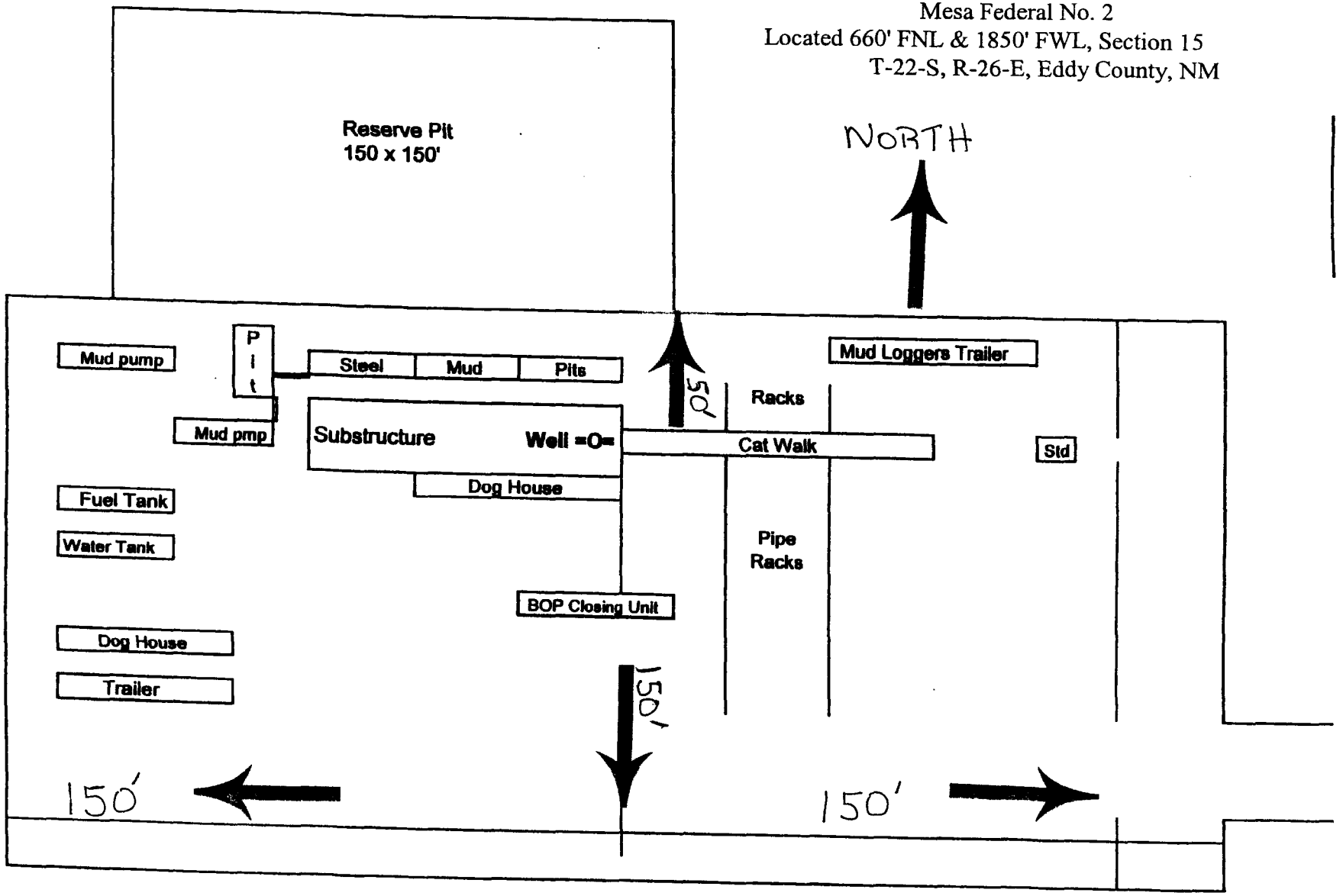
Drill Stem Tests: As deemed necessary in the Strawn, Atoka and Morrow
Logging: Platform Express TD to Intermediate Csg
(Possible FMI & Repeat Formation Tester)
Coring: No coring anticipated

9. No abnormal pressures or temperatures are anticipated. In the eventabnormal pressures are encountered the proposed mud program will be modified to safely handle the increased pressures. The estimated BHP is estimated to be 5100 psi with a temperature of 160 degrees.

10. H2S: None expected

11. Anticipated Start Date: November 1, 2006
Anticipated Drilling Time: Approximately 30 to 40 days

EXHIBIT "D"
J. Cleo Thompson & James Cleo Thompson, Jr., L.P.
Mesa Federal No. 2
Located 660' FNL & 1850' FWL, Section 15
T-22-S, R-26-E, Eddy County, NM



Rig Location Schematic

5000 PSI WORKING PRESSURE BLOWOUT PREVENTER STACK

EXHIBIT C-1

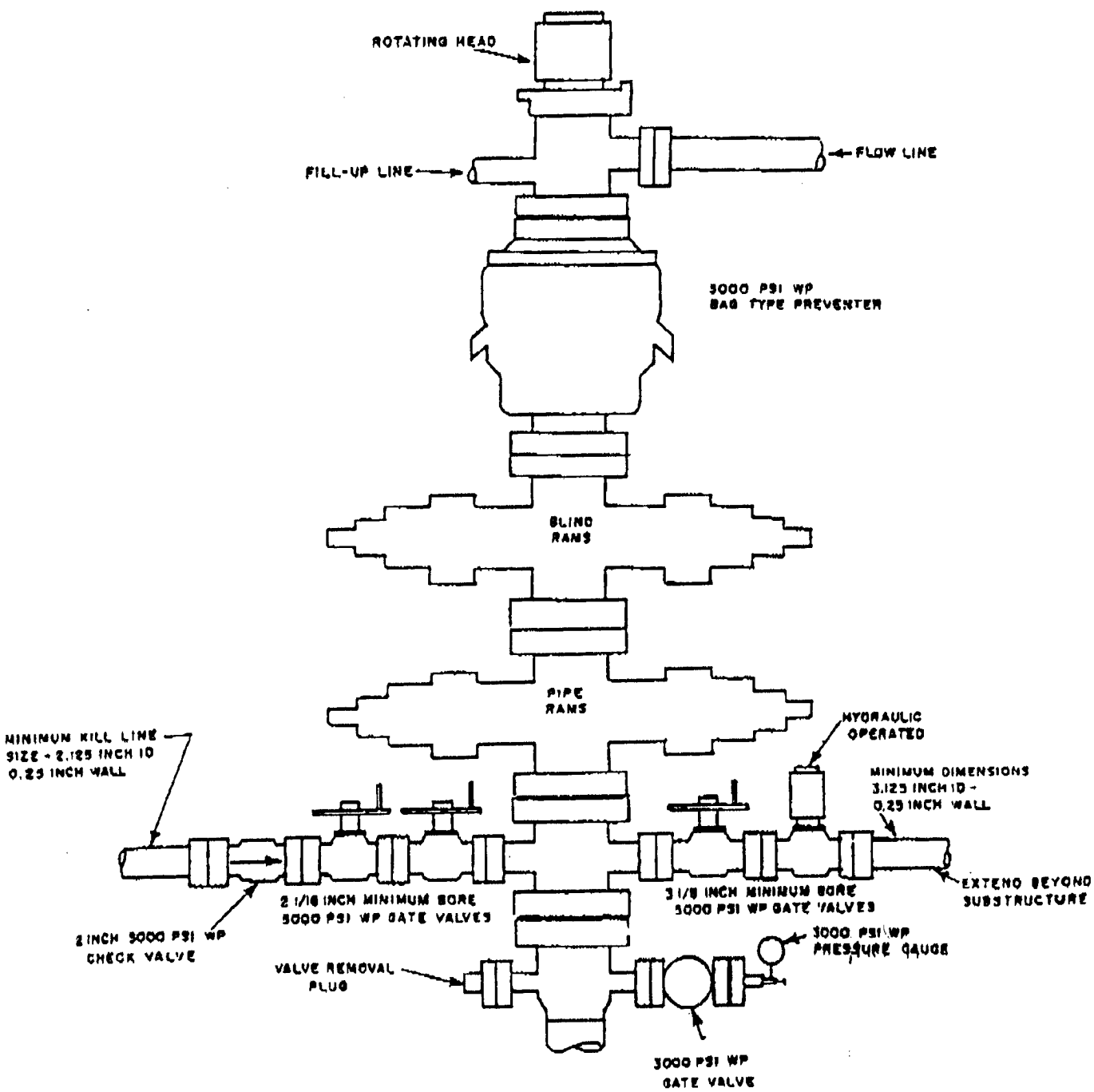


EXHIBIT "E"

BOP Scematic for
12 1/4" Hole

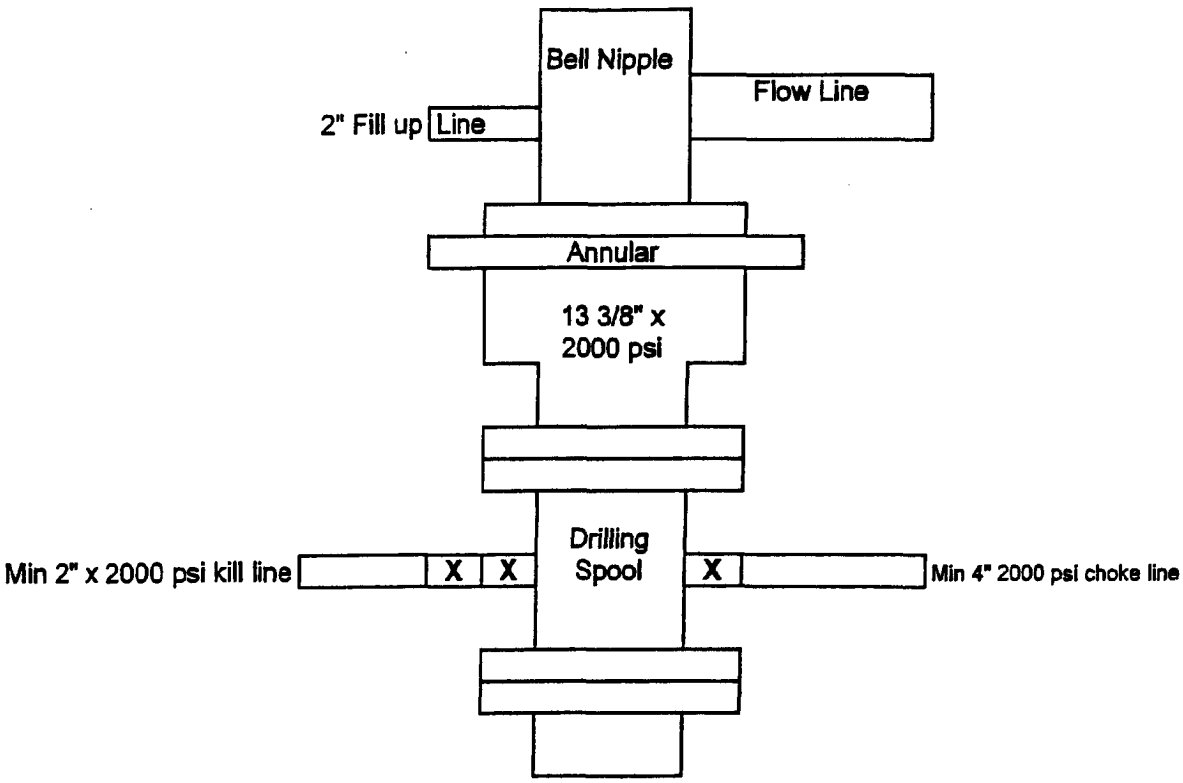


Exhibit #2

MULTI POINT SURFACE USE AND OPERATIONS PLAN

J. CLEO THOMPSON & JAMES CLEO THOMPSON, JR., L.P.
Mesa Federal, Well No. 2
660' FNL & 1850' FWL, Sec. 15-T22S-R26
Eddy County, New Mexico
Lease No.: LC-064490

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 location is approximately 1 mile 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 2.7 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 2.7 miles to a new road heading west. The start of the proposed access road and pipeline is on the south side of this road and runs west for 1800' to the northeast corner of the proposed well site.

2. PLANNED ACCESS ROAD

A. Length and Width: The proposed access road will be approximately 1800 feet long. The proposed existing roads are color coded on Exhibits "A".

B. Construction: The proposed and existing road will be constructed and repaired by grading and topping with compacted caliche. The surface will properly drained.

C. Turnouts: None

D. Culverts: None, but there will be two low water crossings.

E. Cuts and Fills: None required.

F. Gates, Cattle guards: None

G. Off lease right of way: None required.

3. LOCATION OF EXISTING WELLS:

A. Existing wells within a two-minute 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 1 well on this 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 3" steel gas pipeline with 2100 psi maximum pressure rating and operating pressure of 150 psi will be laid parallel to the proposed access road from the well pad back to the pipeline hookup at the Mesa 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 a commercial site. 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:

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

C. Drilling fluids will be allowed to evaporate in the reserve pits until the pits are dry.

D. All pits will be fenced with normal fencing materials to prevent livestock from entering the area.

E. 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.

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

G. Current laws and regulations pertaining to the disposal of human waste will be complied with.

H. 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

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, 600' X 600'.

B. Mat size: 285' X 192', plus 150' X 125' reserve pits on the North.

C. Cut and Fill: The location will require one foot cut on the west with fill to the east.

D. The surface will be topped with compacted caliche and the reserve pits will be plastic lined.

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 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 Gentle Slope 2 – 3% toward Hackberry Draw.

B. Soil: The topsoil as 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 beings 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 he canal south of the levee, which is approximately 600 feet east of the well.

E. Residences and Other Structures: None in the immediate vicinity, but a Carlsbad subdivision is 1.5 mile to the east.

F. Land use: Cattle grazing (but not at the present time).

G. Surface Ownership: The proposed well site and part of the access road is on fee surface with Federal minerals.

H. There is no evidence of archaeological, historical or cultural sites in the staked area.

12. OPERATOR'S REPRESENTATIVE

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

Jim Stevens 505
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

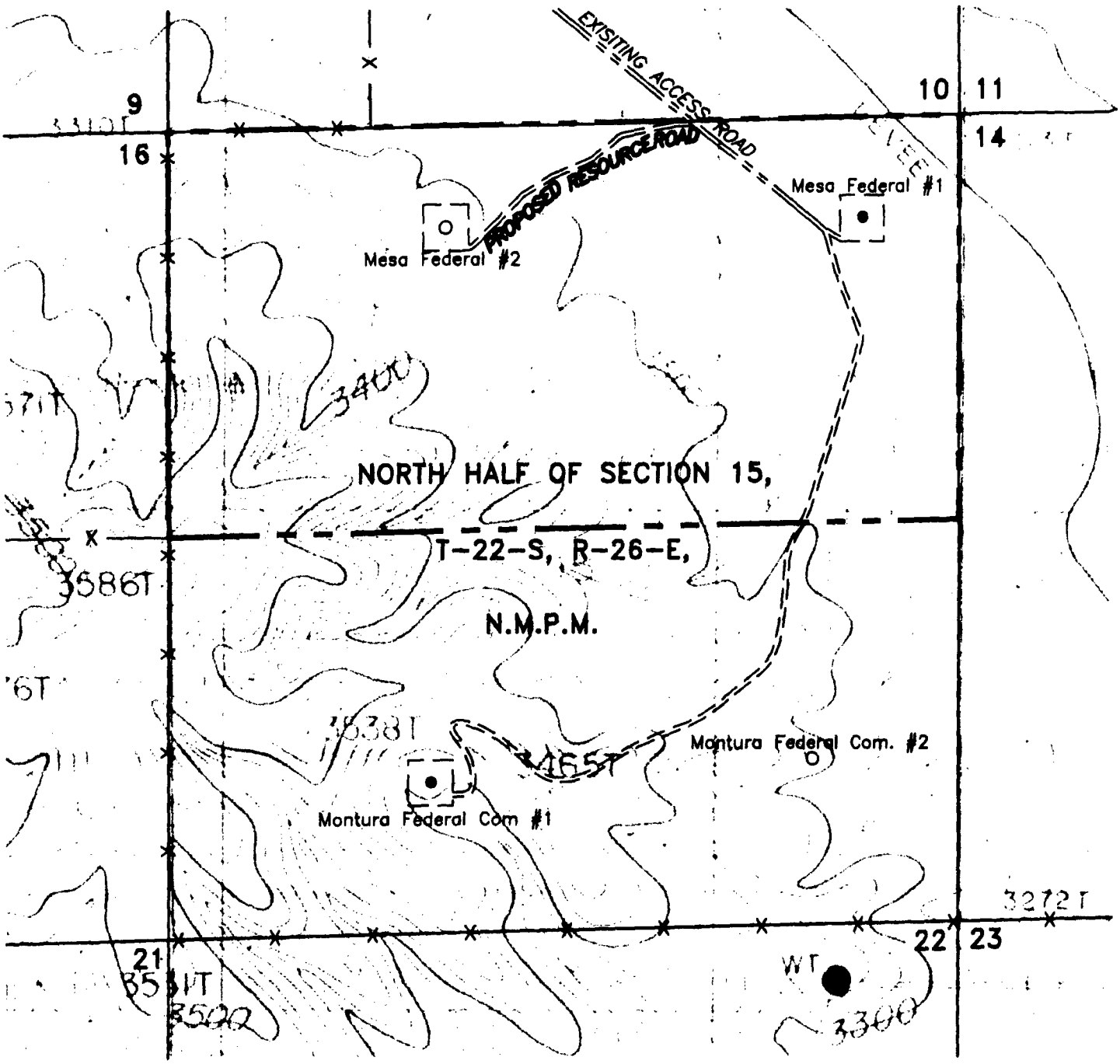
13. CERTIFICATION:

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 sub contractors 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.

Date: Oct. 9, 2006

J E Stevens

Jim Stevens, Operations Manager for J. Cleo Thompson



LEGEND OF SYMBOLS

- ═══ = Access Road
- ═══ = Resource Road on Lease
- ═══ = Resource Road on State Land
- ═══ = Resource Road on Private Land
- ═══ = Resource Road on Federal Land
- ═══ = Proposed Resource Road
- o = Staked Well Location
- o = Found 1" Iron Pipe with Brass Cap
- ⊙ = Found 2" or 3" Iron Pipe with Brass Cap
- - - - = Unit or Lease Boundary

N

EXHIBIT "A"
ACCESS ROAD MAP

J. Cleo Thompson & James Cleo Thompson, Jr., L.P.

MESA FEDERAL NO. 2
Located 660' FNL & 1850' FWL, Section 15,
T-22-S, R-26-E, NMPM, Eddy County, NM

Drawn by: Gene M. Rodriguez	Scale: 1" = 1000'
Date: March 15, 2006	Jim Stevens
Checked by: J.S. Piper	Sheet 1 of 1

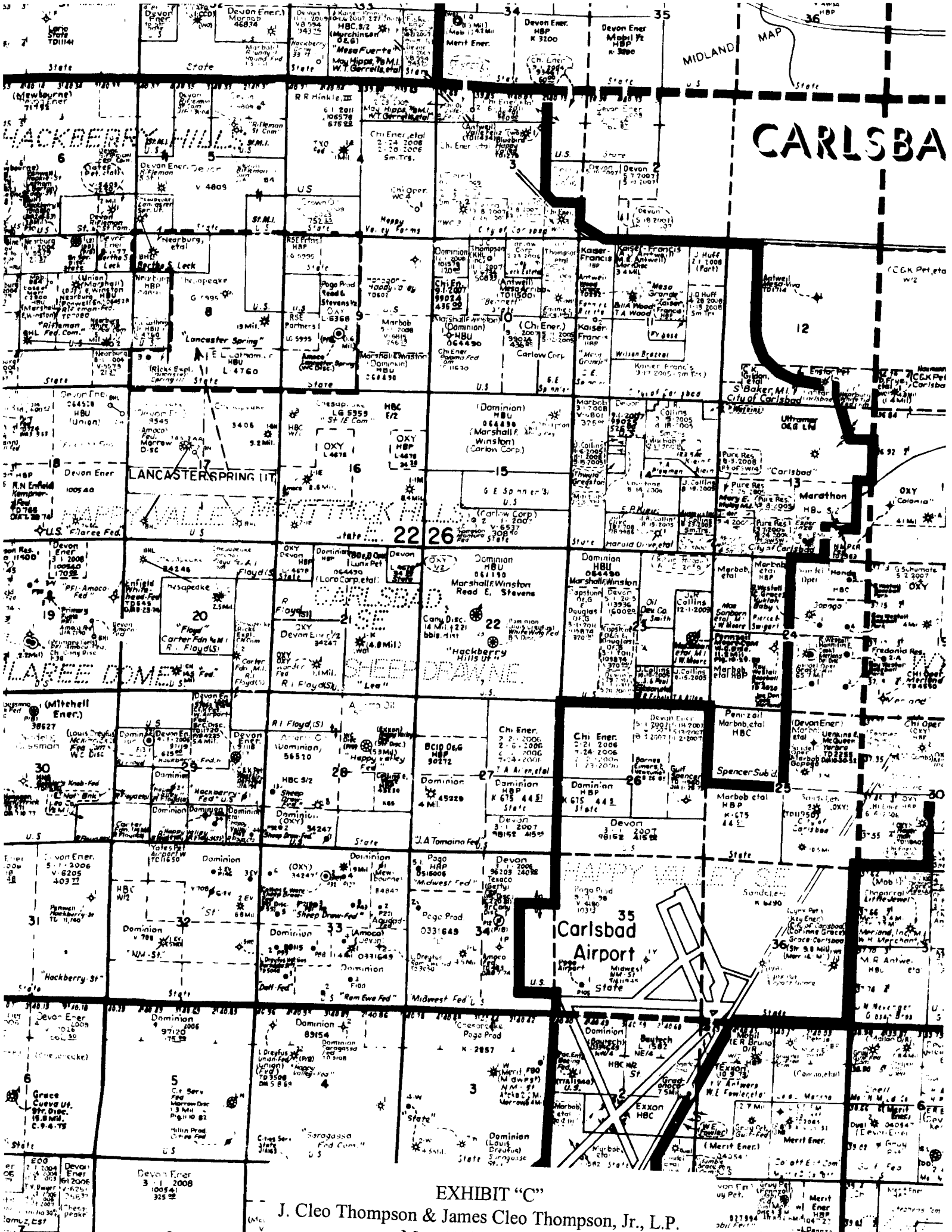


EXHIBIT "C"

J. Cleo Thompson & James Cleo Thompson, Jr., L.P.

Mesa Federal No. 2

SPECIAL DRILLING STIPULATIONS

THE FOLLOWING DATA IS REQUIRED ON THE WELL SIGN

Operator's Name: J. Cleo Thompson and James Cleo Thompson Jr., L.P. Well Name & #: Mesa Fed. #2
Location 660 F N L & 1850 F W L; Sec. 15, T. 22 S., R. 26 E.
Lease #: LC-064490 County: Eddy State: New Mexico

The Special stipulations check marked below are applicable to the above described well and approval of this application to drill is conditioned upon compliance with such stipulations in addition to the General Requirements. The permittee should be familiar with the General Requirements, a copy of which is available from a Bureau of Land Management office. EACH PERMITTEE HAS THE RIGHT OF ADMINISTRATIVE APPEAL TO THESE STIPULATIONS PURSUANT TO TITLE 43 CFR 3165.3 AND 3165.4.

This permit is valid for a period of one year from the date of approval or until lease expiration or termination whichever is shorter.

I. SPECIAL ENVIRONMENT REQUIREMENTS

( ) Lesser Prairie Chicken (stips attached)
( ) San Simon Swale (stips attached)
( ) Flood plain (stips attached)
(x) Other **See attached Cave/Karst and Visual Resource Management Conditions of Approval.**

II. ON LEASE - SURFACE REQUIREMENTS PRIOR TO DRILLING

(x) The BLM will monitor construction of this drill site. Notify the (x) Carlsbad Field Office at (505) 234-5972 ( ) Hobbs Office (505) 393-3612, at least 3 working days prior to commencing construction.

(x) Roads and the drill pad for this well must be surfaced with 4 inches of compacted caliche upon completion of well and it is determined to be a producer.

( ) All topsoil and vegetation encountered during the construction of the drill site area will be stockpiled and made available for resurfacing of the disturbed area after completion of the drilling operation. Topsoil on the subject location is approximately _____inches in depth. Approximately _____cubic yards of topsoil material will be stockpiled for reclamation.

(x) Other. **V-Door Northwest. Closed mud system (No earthen pits). A caliche berm will be constructed around the location to prevent runoff of unwanted materials into the drainage system.**

III. WELL COMPLETION REQUIREMENTS

( ) A Communitization Agreement covering the acreage dedicated to the well must be filed for approval with the BLM. The effective date of the agreement must be prior to any sales.

(x) Surface Restoration: If the well is a producer, the cut-and-fill slopes will be reduced to a slope of 3:1 or less. All areas of the pad not necessary for production must be re-contoured to resemble the original contours of the surrounding terrain, and topsoil must be re-distributed and re-seeded with a drill equipped with a depth indicator (set at depth of ½ inch) with the following seed mixture, in pounds of Pure Live Seed (PLS), per acre. If broadcasting, the seeding rate must be doubled.

( ) A. Seed Mixture 1 (Loamy Sites)
Side Oats Grama (*Bouteloua curtipendula*) 5.0
Sand Dropseed (*Sporobolus cryptandrus*) 1.0
Plains lovegrass (*Eragrostis intermedia*) 0.5

( ) B. Seed Mixture 2 (Sandy Sites)
Sand Dropseed (*Sporobolus crptandrus)* 1.0
Sand Lovegrass (*Eragostis trichodes*) 1.0
Plains Bristlegrass (*Setaria magrostachya*) 2.0

(x) C. Seed Mixture 3 (Shallow Sites)
Side oats Grama (*Bouteloua curtipendula)* 5.0
Green Spangletop (*Leptochloa dubia*) 2.0
Plains Bristlegrass (*Setaria magrostachya*) 1.0

( ) D. Seed Mixture 4 (Gypsum Sites)
Alkali Sacaton (*Sporobolus airoides*) 1.0
Four-Wing Saltbush (*Atriplex canescens*) 5.0

( ) OTHER SEE ATTACHED SEED MIXTURE

Seeding should be done either late in the fall (September 15 - November 15, before freeze up, or early as possible the following spring to take advantage of available ground moisture.

( ) Other

CULTURAL

Whether or not an archaeological survey has been completed and notwithstanding that operations are being conducted as approved, the lessee/operator/grantee shall notify the BLM immediately if previously unidentified cultural resources are observed during surface disturbing operations. From the time of the observation, the lessee/operator/grantee shall avoid operations that will result in disturbance to these cultural resources until directed to process by BLM.

TRASH PIT STIPS

All trash, junk, and other waste material shall be contained in trash cages or bins to prevent scattering and will be removed and deposited in an approved sanitary landfill. Burial on site is not permitted.

VISUAL RESOURCES STIPULATIONS

The proposed project is located within a Class Three Visual Resource Area. The project will be built in a manner to minimize visibility. The proposed project will be a linear feature for the life of the project, impacting visual resources.

Surface Mitigation

The following stipulations will apply to minimize impacts during construction, drilling and production.

1. The proposed construction will be limited to the approved pad size.
2. All above ground facilities, structures, appurtenances, and pipelines will be low profile (less than 10 feet in height).
3. All above ground facilities, structures, appurtenances, and pipelines will be painted with the non-reflective (flat) paint color Shale Green.
4. Any existing tanks will be replaced with a low profile tank and painted the same color as the proposed tanks.
5. Upon completion of the well and installation of the production facilities (if the well is a producer) the pad will be reclaimed back to a size necessary for production operations only. The edges will be recontoured and the extra caliche and pad material will be hauled off-site. After one year, the BLM may require reclamation.
6. The reclaimed area will be grid rolled and reseeded.

WELL NO. & NAME: Mesa #2

Seed Mixture 3, for Shallow Sites

The holder shall seed all disturbed areas with the seed mixture listed below. The seed mixture shall be planted in the amounts specified in pounds of pure live seed (PLS)* per acre. There shall be no primary or secondary noxious weeds in the seed mixture. Seed will be tested and the viability testing of seed will be done in accordance with State law(s) and within nine (9) months prior to purchase. Commercial seed will be either certified or registered seed. The seed container will be tagged in accordance with State law(s) and available for inspection by the authorised officer.

Seed will be planted using a drill equipped with a depth regulator to ensure proper depth of planting where drilling is possible. The seed mixture will be evenly and uniformly planted over the disturbed area (smaller/heavier seeds have a tendency to drop the bottom of the drill and are planted first). The holder shall take appropriate measures to ensure this does not occur. Where drilling is not possible, seed will be broadcast and the area shall be raked or chained to cover the seed. When broadcasting the seed, the pounds per acre are to be doubled. The seeding will be repeated until a satisfactory stand is established as determined by the authorized officer. Evaluation of growth will not be made before completion of at least one full growing season after seeding.

Species to be planted in pounds of pure live seed* per acre:

Species	lb/acre
Plains Bristlegrass (*Setaria magrostachya*)	1.0
Green Spangletop (*Leptochloa dubia*)	2.0
Side oats Grama (*Bouteloua curtipendula)*	5.0

*Pounds of pure live seed:

Pounds of seed **x** percent purity **x** percent germination = pounds pure live seed

Conditions of Approval
Cave and Karst

EA#: NM-080-06-1460
Lease #: LC-064490
J. Cleo Thompson & James Cleo Thompson, Jr., L.P.
Mesa Fed. #2

Cave/Karst Surface Mitigation

The following stipulations will be applied to minimize impacts during construction, drilling and production.

Berming:
Any tank batteries will be constructed and bermed large enough to contain any spills that may occur.

Bermed areas will be lined with rip-stop padding to prevent tears or punctures in liners and lined with a permanent 20 mil plastic liner.

Closed Mud System with Cuttings Pit and Cuttings Removed:
A closed mud system or steel tanks will be utilized to drill the well. All fluids and cuttings will be hauled off site for disposal.

Cave/Karst Subsurface Mitigation

The following stipulations will be applied to protect cave/karst and ground water concerns:

Rotary Drilling with Fresh Water:
Rotary drilling techniques in cave or karst areas will include the use of fresh water as a circulating medium in zones where caves or karst features are expected. See geologist report for depth.

Casing:
All casing will meet or exceed National Association of Corrosion Engineers specifications pertaining to the geology of the location and be run to American Petroleum Institute and BLM standards.

Cementing:
All casing strings will be cemented to the surface.

Lost Circulation:
ALL lost circulation zones from the surface to the base of the cave occurrence zone will be logged and reported.

Regardless of the type of drilling machinery used, if a bit drops of four feet or more and circulation losses greater then 75 percent occur simultaneously while drilling in any cave-bearing zone, drilling operations will immediately stop and the BLM will be notified by the operator. The BLM will assess the consequences of the situation and work with operator on corrective actions to resolve the problem.

Delayed Blasting:
Any blasting will be a phased and time delayed.

Abandonment Cementing:
Upon well abandonment the well bore will be cemented completely from 100 feet below the bottom of the cave bearing zone to the surface.

Pressure Tests:
Annual pressure tests will be performed by the Operator on all casing annuli. If the test results indicated a casing failure, remedial actions approved by the BLM will be undertaken to correct the problem.

Differential Shut-off Systems:
A leak detection system and differential shut off systems will be installed for pipelines and tanks used in production or drilling.

Record Keeping:
The Operator will track customary drilling activities, including the rate of penetration, pump pressure, weight on bit, bit drops, percent of mud returns, and presence of absence of cuttings returning to the surface. As part of customary record keeping, each detectable void or sudden increase in the rate of penetration not attributable to a change in the formation type should be documented and evaluated as it is encountered.

CONDITIONS OF APPROVAL - DRILLING

Operator's Name: **J Cleo Thompson**
Well Name & No. **Mesa Federal # 2**
Location: **660' FNL, 1850 FWL, SEC 15, T.22S, R. 26E., Eddy County, NM**
Lease: **LC-064490**

I. DRILLING OPERATIONS REQUIREMENTS:

1. The Bureau of Land Management (BLM) is to be notified at the Carlsbad Field Office, 620 East Greene St., Carlsbad, NM 88220, (505) 361-2822 - for wells in Eddy County; and the Hobbs Field Station, 414 West Taylor, Hobbs NM 88240, (505) 393-3612 for wells in Lea County, in sufficient time for a representative to witness:

A. Spudding

B. Cementing casing: **13 3/8** inch **9 5/8** inch **5 1/2** inch

C. BOP tests

2. A Hydrogen Sulfide (H2S) Drilling Plan should be activated prior to drilling into the **N/A** Formation. A copy of the plan shall be posted at the drilling site.

3 Unless the production casing has been run and cemented or the well has been properly plugged, the drilling rig shall not be removed from over the hole without prior approval.

4. Submit a Sundry Notice (Form 3160-5, one original and five copies) for each casing string, describing the casing and cementing operations. Include pertinent information such as; spud date, hole size, casing (size, weight, grade and thread type), cement (type, quantity and top), water zones and problems or hazards encountered. The Sundry shall be submitted within 15 days of completion of each casing string. The reports may be combined into the same Sundry if they fall within the same 15 day time frame.

5. The API No. assigned to the well by NMOCD shall be included on the subsequent report of setting the first casing string.

6. A Communitization Agreement covering the acreage dedicated to this well must be filed for approval with the BLM. The effective date of the agreement shall be prior to any sales.

7. Gamma-Ray/Neutron logs shall be run from the base of the Salado Formation to the surface; cable speed not to exceed 30 feet per minute.

II. CASING:

1. The **13 3/8** inch **48# H-40** surface casing shall be set at **approximately 500 feet**, with cement circulated to the surface. If cement does not circulate to the surface the appropriate BLM office shall be notified and a temperature survey or cement bond log shall be run to verify the top of the cement. Remedial cementing shall be completed prior to drilling out that string.

2. The minimum required fill of cement behind the **9 5/8** inch intermediate casing is **circulate cement to the surface.**

3. The minimum required fill of cement behind the **5-1/2** inch production casing is **cement shall extend upward a minimum of 200 feet above the base of the intermediate casing string.**

5. Whenever a casing string is cemented in the R-111-P Potash Area, cement shall be allowed to stand a minimum of twelve (12) hours under pressure and a total of twenty-four (24) hours before drilling the plug or initiating tests.

III. PRESSURE CONTROL:

III. PRESSURE CONTROL:

1. All BOP systems and related equipment shall comply with well control requirements as described in Onshore Oil and Gas Order No. 2. The BOP and related equipment shall be installed and operational before drilling below the **13 3/8** inch casing shoe and shall be tested as described in Onshore Order No. 2. Any equipment failing to test satisfactorily shall be repaired or replaced.

2. Minimum working pressure of the blowout preventer and related equipment (BOPE) required for drilling the surface and intermediate casing shall be 2000 psi. Minimum working pressure of the blowout preventer and related equipment (BOPE) required for drilling below the **9 5/8** inch casing shall be **3000** psi.

3. The appropriate BLM office shall be notified in sufficient time for a representative to witness the tests.
- A variance to test the_____ to the reduced pressure of ___psi with the rig pumps is approved.
- The tests shall be done by an independent service company.
- The results of the test shall be reported to the appropriate BLM office.
- Testing fluid must be water or an appropriate clear liquid suitable for sub-freezing temperatures. Use of drilling mud for testing is not permitted since it can mask small leaks.
- Testing must be done in a safe workman-like manner. Hard line connections shall be required.
- BOPE must be tested prior to drilling into the **Wolfcamp** Formation by an independent service company.

IV. DRILLING MUD:

Mud system monitoring equipment, with derrick floor indicators and visual and audio alarms, shall be operating before drilling into the **Wolfcamp** Formation, and shall be used until production casing is run and cemented. Monitoring equipment shall consist of the following:

1. Recording pit level indicator to indicate volume gains and losses.
2. Mud measuring device for accurately determining the mud volumes necessary to fill the hole during trips.
3. Flow-sensor on the flow line to warn of abnormal mud returns from the well.

Engineering may be contacted at 505-706-2779 for variances if necessary.

Fwright 10/24/06