

OCD-HOBBS

FORM APPROVED  
OMB No. 1004-0137  
Expires March 31, 2007UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

## APPLICATION FOR PERMIT TO DRILL OR REENTER

1a. Type of work: <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER		7 If Unit or CA Agreement, Name and No	
1b. Type of Well <input checked="" type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input type="checkbox"/> Other <input checked="" type="checkbox"/> Single Zone <input type="checkbox"/> Multiple Zone		8 Lease Name and Well No. <b>36746</b> JCT FEDERAL 24 1	
2. Name of Operator THOMPSON, J. CLEO		9 API Well No. 03-025- 38569	
3a. Address P.O. BOX 12577 ODESSA, TX 79768		3b. Phone No (include area code) (432)550-8887	
4 Location of Well (Report location clearly and in accordance with any State requirements. *) At surface 438' FNL & 860.4' FNL, UL: A At proposed prod zone <b>Lea County Controlled Water Basin</b>		10. Field and Pool, or Exploratory WILDCAT	
14 Distance in miles and direction from nearest town or post office* 23 MILES NE OF TATUM, NM		12 County or Parish LEA	
15 Distance from proposed* location to nearest property or lease line, ft. 438' (Also to nearest drig. unit line, if any)		13 State NM	
16 No. of acres in lease 80		17 Spacing Unit dedicated to this well 8040	
18 Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. NONE		19 Proposed Depth 12,000	
20. BLM/BIA Bond No. on file NM 0348		21 Elevations (Show whether DF, KDB, RT, GL, etc.) 3965'	
2.2 Approximate date work will start* 10/01/2007		23 Estimated duration 30 DAYS	

## 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 <b>J E Stevens</b>	Name (Printed/Typed) JIM STEVENS	Date 08/13/2007
Title OPERATIONS MANAGER		
Approved by (Signature) <b>/s/ James Stovall</b>	Name (Printed/Typed) <b>/s/ James Stovall</b>	Date SEP 20 2007
Title <b>FIELD MANAGER</b>		
Office <b>CARLSBAD FIELD OFFICE</b>		

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 TWO YEARS

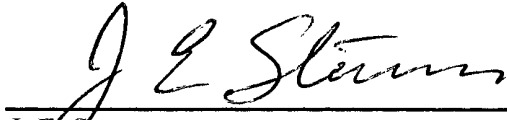
Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction

\*(Instructions on page 2)

SEE ATTACHED FOR  
CONDITIONS OF APPROVALAPPROVAL SUBJECT TO  
GENERAL REQUIREMENTS  
AND SPECIAL STIPULATIONS  
ATTACHED

LEASE RESPONSIBILITY STATEMENT: JCT FEDERAL 24#1

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.



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J. E. Stevens  
Operations Manager

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., Santa 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

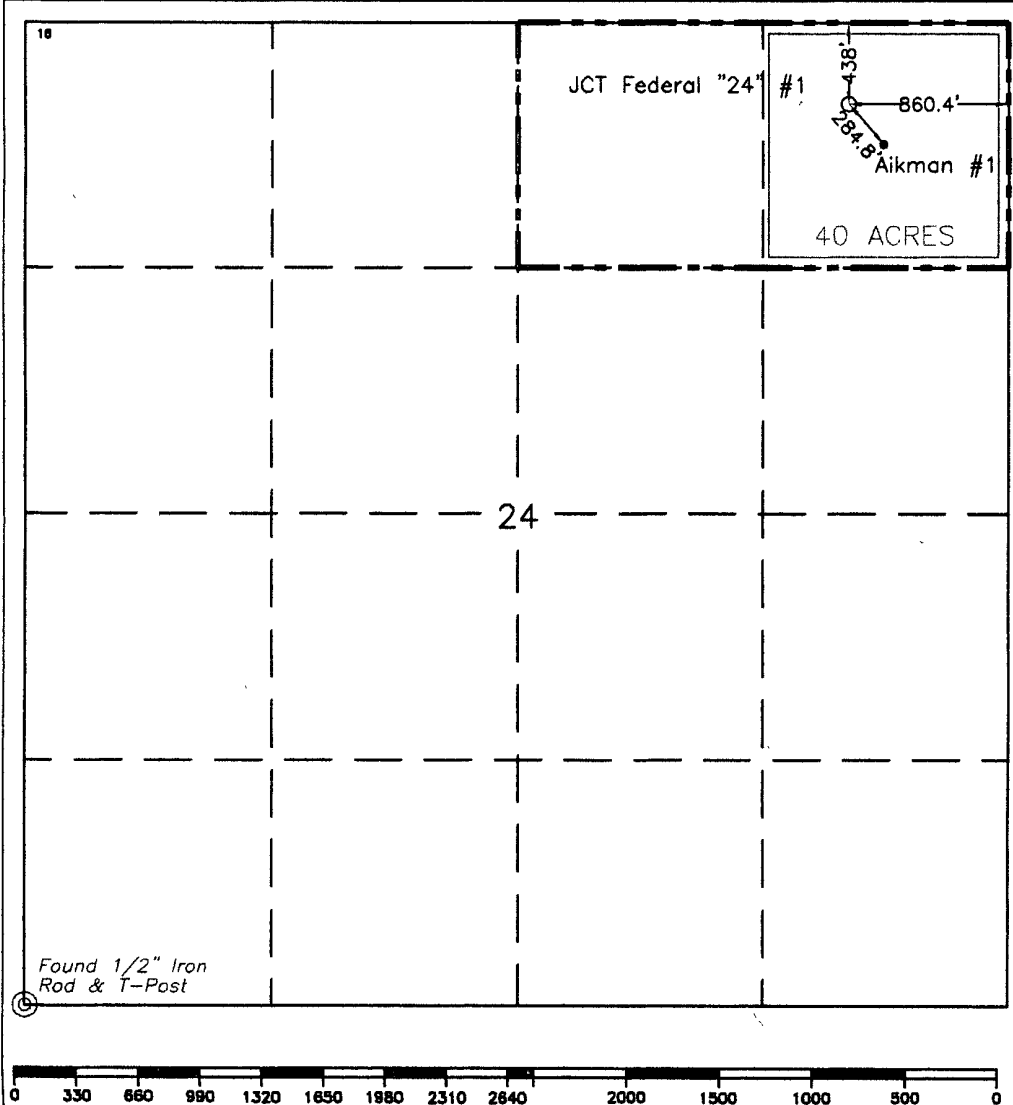

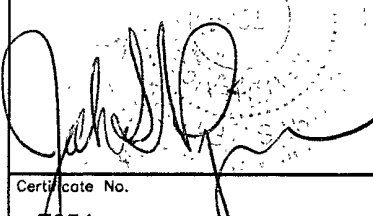
Submit to Appropriate District Office  
State Lease-4 copies  
Fee Lease-3 copies

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

<sup>1</sup> API Number 30-025-38569		<sup>2</sup> Pool Code ✓		<sup>3</sup> Pool Name Wildcat					
<sup>4</sup> Property Code 36746		<sup>5</sup> Property Name JCT FEDERAL "24"			<sup>6</sup> Well Number 1				
<sup>7</sup> OGRID No. 11181		<sup>8</sup> Operator Name J. CLEO THOMPSON & JAMES CLEO THOMPSON, JR.			<sup>9</sup> Elevation 3965'				
<sup>10</sup> Surface Location									
UL or lot no. A	Section 24	Township 9-S	Range 37-E	Lot Idn	Feet from the 438'	North/South line North	Feet from the 860.4'	East/West line East	<sup>7</sup> County Lea
<sup>11</sup> 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	<sup>7</sup> County
<sup>12</sup> Dedicated Acres 40		<sup>13</sup> Joint or Infill		<sup>14</sup> Consolidation Code		<sup>15</sup> 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.

 <p>Found 1/2" Iron Rod &amp; T-Post</p>				<p><sup>17</sup> OPERATOR CERTIFICATION</p> <p>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.</p> <p> 9/13/07</p> <p>Signature Date</p> <p>Jim Stevens</p> <p>Printed Name</p>	
				<p><sup>18</sup> SURVEYOR CERTIFICATION</p> <p>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.</p> <p>7/21/07</p> <p>Date of Survey</p> <p>Signature &amp; Seal of Professional Surveyor:</p> <p></p> <p>Certificate No. 7254</p>	

○ = Staked Location • = Producing Well ● = Injection Well ◇ = Water Supply Well ◆ = Plugged & Abandon Well  
⊙ = Found Section Corner, 2 or 3" Iron Pipe & GLO B.C. ○ = Found 1/4 Section Corner, 1" Iron Pipe & GLO B.C.

ADDITIONAL INFORMATION ON THE LOCATION

State Plane Coordinates			
Northing 921072.51		Easting 917140.67	
Latitude 33°31'32.825"		Longitude 103°06'00.717"	
Zone North American Datum		Combined Grid Factor	Coordinate File
East 1983/Cors		0.9998847	Bledsoe83E.crd
Drawing File	Field Book		
JCT-Federal.Dwg	N/A		

DRILLING PROGRAM  
J. Cleo Thompson & James Cleo Thompson, Jr., L.P.  
JCT Federal 24, Well #1  
438' FNL & 860.4, FEL, Sec. 24, T9S, R37E  
Lea County, New Mexico

1. Amended Casing Program:

<u>Hole Size</u>	<u>Setting Depth</u>	<u>Csg Size &amp; Wgt</u>	<u>Class</u>	<u>Grade/Jt</u>
17 1/2"	0' to 500'	13 3/8", 48 #/ft	New	H-40/ST&C
12 1/4"	0' to 3,700'	9 5/8", 40 #/ft	New	J-55/ST&C
12 1/4"	3,700' to 5,100'	9 5/8", 40 #/ft	New	HCK 55/ST&C
8 3/4"	0' to 1,000'	5 1/2", 17#/ft	New	P-110/ LTC
8 3/4"	1,000' to 10,000'	5 1/2", 17#/ft	New	N-80/LTC
8 3/4"	10,000' to 12000'	5 1/2", 17 #/ft	New	P-110/LTC

**Design Factors:** Collapse: 1.175 Burst:1.2 Tension: 1.8

2. Amended Pressure Control Equipment:

The pressure control equipment for the 12 1/4" hole will consist of a 13 3/8" x 2,000 psi annular preventer. A diagram is attached. For the 8 3/4" hole the blowout preventer equipment (BOP) will be a 12", 5,000 psi working pressure stack with both blind and pipe rams. In addition, an 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 3/4" hole and tested weekly.

3. Amended Cementing Program:

13 3/8" Surface: 180 sxs "H" + 10% A10 + 10# LCM + 1/4 # Celloflake + 1% CaCl  
Lead cement 228 sxs 35:65:6 "C" + 2% CaCl + 1/4 # 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 + 1/4 # CelloFlake  
Lead Cement 800 sxs 50:50:10 + 5% Salt + 5# LCM-1 + 1/4 # CelloFlake  
Tail Cement 200 sxs "C" + 2% CaCl. TOC at surface.

5 1/2" Prod: Two stage cement job w/ DV tool at +/- 7,000'.  
TOC: 4,000'

SEE COA → **1<sup>st</sup> stage** - Pump 725 sxs 15-61-11 "H" + 6% FL 52 +  
5% Salt + 3# LCM.  
Cement yield: 1.48 cu.ft./sack  
**2<sup>nd</sup> stage** - pump 800 sxs 35:65:6 + 3% FL-52 + 3% SMS + 2% KCL +  
1/4 # Cello Flake.  
Cement yield: 2.0 cu.ft./sack  
Tail Cement: pump 750 sxs C + 1% FL-62 + 3% CD-32 +  
.2% SMS.  
Cement yield: 1.31 cu.ft./sack

**DRILLING PROGRAM**  
**J. Cleo Thompson & James Cleo Thompson, Jr., L.P.**  
**JCT Federal 24, Well #1**  
**438' FNL & 860.4' FEL, Sec. 24, T9S, R37E**  
**Lea 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:

Rustler:	2,324'
Yates:	2,869'
Seven Rivers:	3,067'
Queen:	3,591'
San Andres:	4,149'
Glorieta	5,554'
Tubb:	6,889'
ABO:	7,624'
Wolfcamp:	8,812'
Base Three Brothers	9,321'
Cisco:	9,392'
Bough C:	9,466'
Canyon:	9,874'
Strawn:	10,424'
Atoka:	11,154'
Mississippi	11,362'
Woodford:	11,504'
Silurian:	11,606'
TD:	12,000'

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

Water: Surface water between 400' - 1400' *1400' typo per operator 9-14-07*  
Oil: Possible in the Delaware below 5000'  
Gas: Possible in the San Andres below 4,500' & the Wolfcamp, Strawn, Atoka and Morrow.

3. Proposed Casing Program:

<u>Hole Size</u>	<u>Setting Depth</u>	<u>Csg Size &amp; Weight</u>	<u>Grade/Joint</u>
17 1/2"	0' to 500'	13 3/8", 48# per foot	J-55/ ST&C
12 1/4"	0' to 5100'	9 5/8", 42# per foot	J-55/ ST&C
8 3/4"	0' to 1,000'	5 1/2", 17# per foot	P-110/ LTC
8 3/4"	1,000' to 10,000'	5 1/2", 17# per foot	N-80/ LTC
8 3/4"	10,000' to 12,000'	5 1/2", 17# per foot	P-110/ LTC

*Replaced  
9-14-07  
15/WWF*

**DRILLING PROGRAM**  
**J. Cleo Thompson & James Cleo Thompson, Jr., L.P.**  
**JCT Federal 24, Well #1**

*Replaced 9-14-07*

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 3/4" 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 2,100'	Fresh Wtr	8.4 to 8.5 ppg	28 to 29	NC
2,100' to 9,600'	Cut Brine	9.4 to 9.7 ppg	28 to 29	NC
9,600' to 12,000'	Brine	9.4 to 9.7 ppg	34 to 40	10 to 6 cc

6. Proposed Cementing Program:

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Lead cement 228 sxs 35:65:6 "C" + 2% CaCl + 1/4 # Cello + 5# LCM 1  
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5 1/2" Prod: Two stage cement job w/ DV tool at +/- 7,000'  
1<sup>st</sup> stage - Pump 725 sxs 15-61-11 "H" + 6% FL 52 + 5% Salt + 3# LCM.  
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Tail Cement pump 750 sxs C + 1% FL-62 + 3% CD-32 + .2% SMS.

*Replaced  
9-14-07  
ISLWWT*

7. Auxiliary Equipment:

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

**DRILLING PROGRAM**  
**J. Cleo Thompson & James Cleo Thompson, Jr., L.P.**  
**JCT Federal 24, Well #1**

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

Drill Stem Tests:	As deemed necessary in the Devonian
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 event abnormal 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.** H<sub>2</sub>S: None expected

- 11.** Anticipated Start Date: September 20, 2007  
Anticipated Drilling Time: Approximately 30 to 40 days



Pete West

Sheet 1 of 1



BOP Schematic for  
12 1/4" Hole

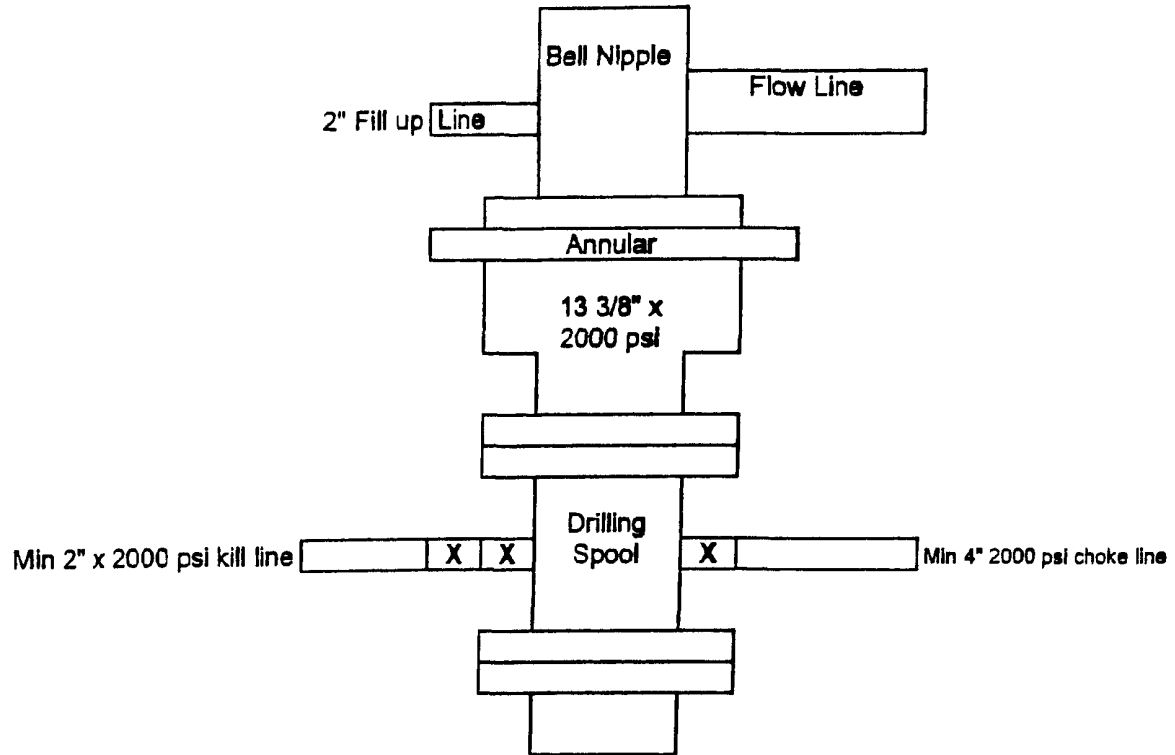
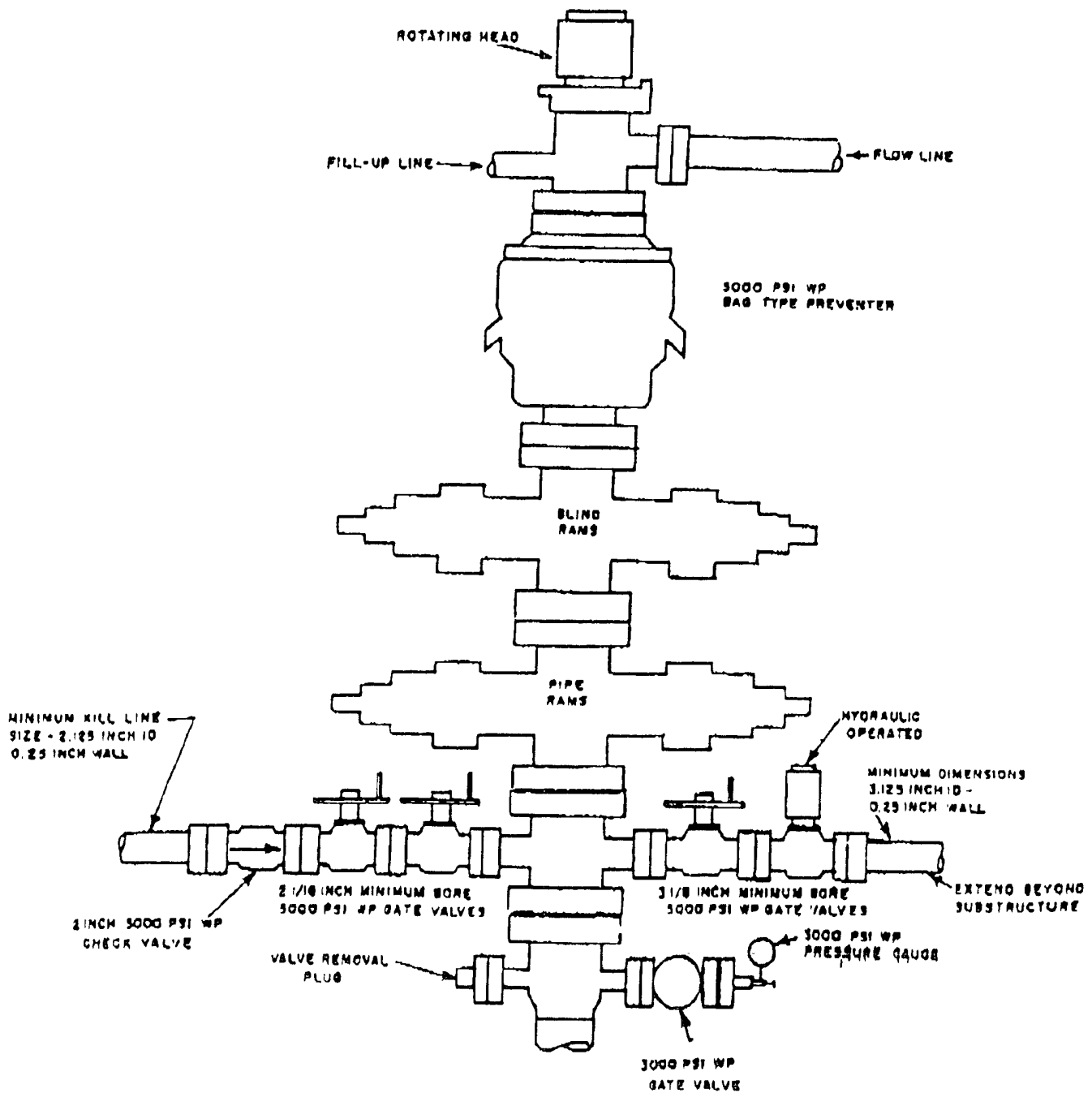
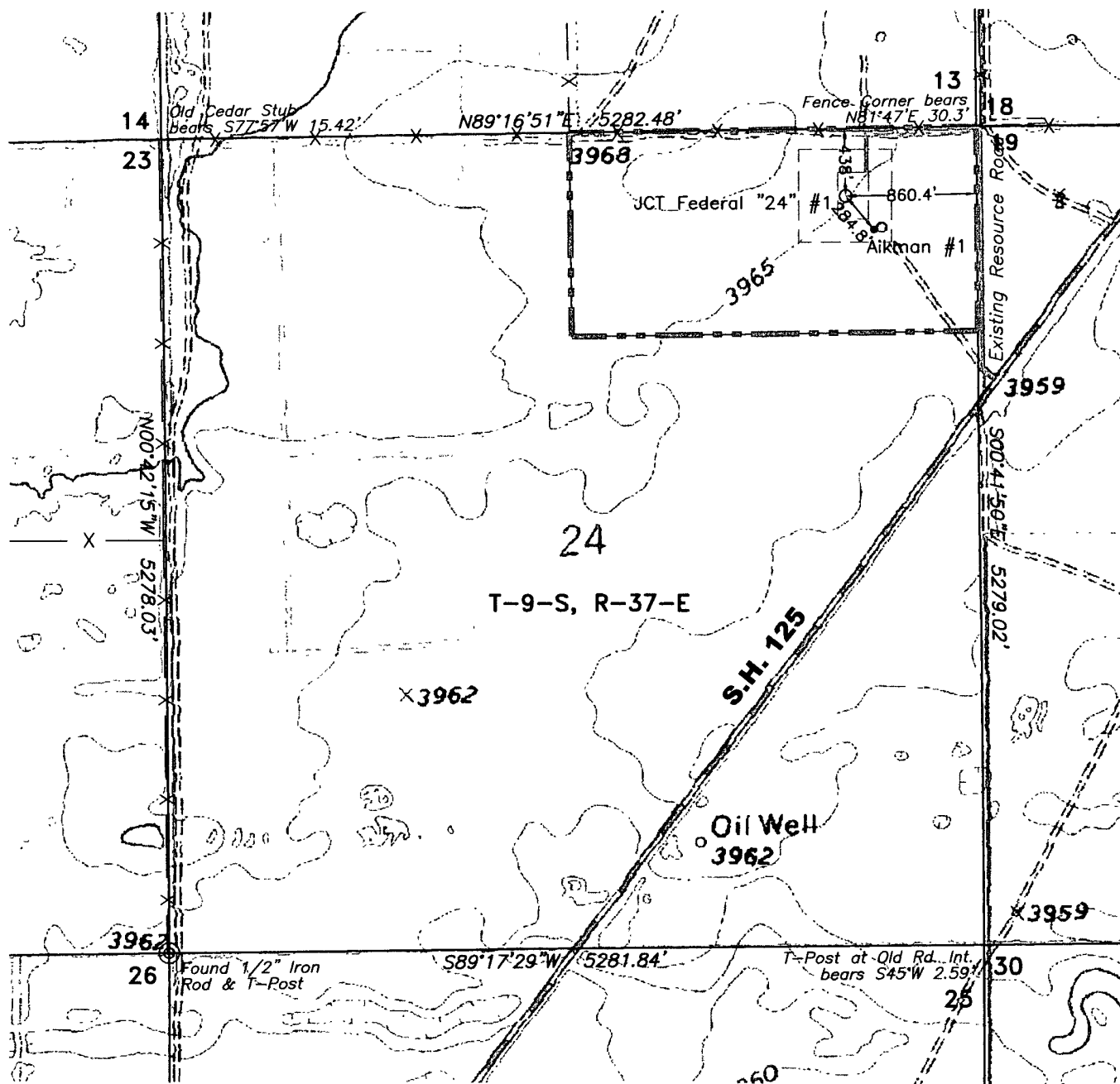


Exhibit #2

# 5000 PSI WORKING PRESSURE BLOWOUT PREVENTER STACK EXHIBIT C-1





# 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
- E- = Proposed Electric Line
- T- = Proposed Production Flow Line
- o = Staked Well Location
- = Producing Well Location
- ⊙ = Water Injection Well
- ⊙ = Found 1" Iron Pipe with Brass Cap
- ⊙ = Found 2" or 3" Iron Pipe with Brass Cap
- = Unit or Lease Boundary

## EXHIBIT "A" ACCESS ROAD AND FACILITIES MAP

J. CLEO THOMPSON

JCT FEDERAL "24" No. 1  
Located 438' FNL & 860.4' FEL, Section 24,  
T-9-S, R-37-E, NMPLM, Lea County, NM

Drawn by: Gene M. Rodriguez

Scale: 1" = 1000'

Date: August 2, 2007

Jim Stevens

Checked by: J.S. Piper

Sheet 1 of 1