

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

PM

Form 3160-3  
(April 2004)

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT  
APPLICATION FOR PERMIT TO DRILL OR REENTER



JUL 23 2009

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

1a. Type of Work. <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER		5. Lease Serial No. <b>NM-21494</b>
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 <b>Yates Petroleum Corporation</b>		7. If Unit or CA Agreement, Name and No
3a. Address <b>105 South 4th Street, Artesia, NM 88210-2118</b>		8. Lease Name and Well No. <b>Wanda ZT Federal Com. #2</b>
3b. Phone No. (include area code) <b>575-748-1471</b>		9. API Well No. <b>30-005-64116</b>
4. Location of well (Report location clearly and in accordance with any State requirements *) At surface <b>945' FNL and 1950' FEL, Unit B (NWNE)</b> At proposed prod. zone <b>Same as above</b>		10. Field and Pool, or Exploratory <b>Precambrian</b>
11. Sec., T, R, M., or Blk And Survey or Area <b>Section 28, T10S-R26E</b>		12. County or Parish <b>Chaves</b>
13. State <b>NM</b>		14. Distance in miles and direction from the nearest town or post office* <b>Approximately 12 miles, north/east of Roswell, New Mexico</b>
15. Distance from proposed* location to nearest property or lease line, ft (Also to nearest drlg unit line, if any) <b>1000'</b>	16. No. of acres in lease <b>1441.14</b>	17. Spacing Unit dedicated to this well <b>N2 - 320 acres</b>
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. <b>None</b>	19. Proposed Depth <b>6,060'</b>	20. BLM/ BIA Bond No on file <b>NATIONWIDE BOND #NMB000434</b>
21. Elevations (Show whether DF RT, GR, etc ) <b>3646' GR</b>	22. Approximate date work will start* <b>ASAP</b>	23. Estimated duration <b>45 days</b>
24. Attachments <b>ROSWELL CONTROLLED WATER BASIN</b>		

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

25. Signature 	Name (Printed/ Typed) <b>Debbie L. Caffall</b>	Date <b>10/14/2008</b>
Title <b>Regulatory Agent - debbiec@ypcnm.com</b>		
Approved By (Signature) 	Name (Printed/ Typed) <b>Angel Mayes</b>	Date <b>JUL 21 2009</b>
Title <b>Assistant Field Manager, Lands And Minerals</b>	Office <b>ROSWELL FIELD OFFICE</b>	<b>APPROVED FOR 2 YEARS</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 cc operations thereon

Conditions of approval, if any, are attached

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)

CEMENT BEHIND THE 113'  
CASING MUST BE CIRCULATED  
WITNESS

APPROVAL SUBJECT TO  
GENERAL REQUIREMENTS AND  
SPECIAL STIPULATIONS ATTACHED

DISTRICT I  
1625 N. FRENCH DR., HOBBS, NM 88240

State of New Mexico  
Energy, Minerals and Natural Resources Department

DISTRICT II  
1301 W. GRAND AVENUE, ARTESIA, NM 88210

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

DISTRICT IV  
1220 S. ST. FRANCIS DR., SANTA FE, NM 87505

OIL CONSERVATION DIVISION  
1220 SOUTH ST. FRANCIS DR.  
Santa Fe, New Mexico 87505

Form C-102  
Revised October 12, 2005  
Submit to Appropriate District Office  
State Lease - 4 Copies  
Fee Lease - 3 Copies

WELL LOCATION AND ACREAGE DEDICATION PLAT

☐ AMENDED REPORT

API Number 30-005-64116	Pool Code 76730	Pool Name Devonian Four Branch PrePermian
Property Code 37766	Property Name WANDA ZT FEDERAL COM	Well Number 2
OGRID No. 25575	Operator Name YATES PETROLEUM CORPORATION	Elevation 3646'

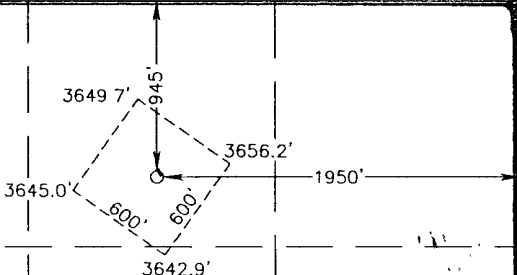
Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
B	28	10-S	26-E		945	NORTH	1950	EAST	CHAVES

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.						
320 N/2									

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>NM-110940</p> <p>GEODETIC COORDINATES NAD 27 NME</p> <p>Y=880753.0 N X=510122.4 E</p> <p>LAT.=33.421185° N LONG.=104.300158° W LAT.=33°25'16.27" N LONG.=104°18'00.57" W</p>	 <p>NM-21494</p>	<p>OPERATOR CERTIFICATION</p> <p>I hereby certify that the information herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unless 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 mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.</p> <p><i>Debbie L. Caffall</i> Signature Date 10/14/2008</p> <p>Debbie L. Caffall Printed Name</p>
		<p>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 belief.</p> <p>OCTOBER 11 2008 Date Surveyed JC Signature of Surveyor Professional Surveyor 3239 RONALD EIDSON Certificate No. GARY EIDSON 12641 RONALD EIDSON 3239</p>

**YATES PETROLEUM CORPORATION**  
**Wanda ZT Federal Com. #2**  
 945' FNL and 1950' FEL, Unit B (NWNE)  
 Section 28-T10S-R26E  
 Chaves County, New Mexico

1. The estimated tops of geologic markers are as follows:

Queen	385'	Wolfcamp	4985'
Penrose	470'	Wolfcamp B	5080'
Grayburg	660'	Spear	5320'
San Andres	900'	Cisco	5550'
Glorieta	2000'	Strawn	5655'
Yeso	2125'	Silurian-Devonian	5680'
Tubb	3550'	Precambrian	5960'
ABO	4265'	TD	6060'

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

Water: 50'

Oil or Gas: 385', 470', 660', 900', 4265', 4985', 5080', 5320', 5550', 5655', & 5680'.

3. Pressure Control Equipment: BOPE will be installed on the 11 3/4" casing and rated for 2000# BOP systems will be consistent with API RP 53. Pressure tests will be conducted before drilling out from under all casing strings, which are set and cemented in place. Blowout Preventor controls will be installed prior to drilling the surface plug and will remain in use until the well is completed or abandoned. Preventors will be inspected and operated at least daily to ensure good mechanical working order, and this inspection recorded on the daily drilling report. See Exhibit B.
4. Auxiliary Equipment: Kelly cock, pit level indicators, flow sensor equipment, and a sub with full opening valve to fit the drill pipe and collars will be available on the rig floor in the open position at all times for use when Kelly is not in use.
5. THE PROPOSED CASING AND CEMENTING PROGRAM:

A. Casing Program:

<u>Hole Size</u>	<u>Casing Size</u>	<u>Wt./Ft</u>	<u>Grade</u>	<u>Coupling</u>	<u>Interval</u>	<u>Length</u>
14 3/4"	11 3/4"	42.0#	H-40	ST&C	0-600'	600'
11"	8 5/8"	24.0#	J-55	ST&C	0-1600'	1600'
7 7/8"	5 1/2"	15.5#	J-55	LT&C	0-6060'	6060'

1. Minimum Casing Design Factors: Collapse 1.125, Burst 1.0, and Tensile Strength 1.8
2. Drill out from surface casing with 7 7/8" hole to 1600'. If lost circulation is encountered, make decision to set cement plug or ream hole to 11" and set 8 5/8" intermediate casing. If intermediate casing is not run, continue drilling 7 7/8" hole to TD where 5 1/2" casing will be set and cemented to surface.

B. CEMENTING PROGRAM:

Surface Casing: 400 sacks class "C" + 2% CaCl<sub>2</sub> (WT 14.80 YLD 1.32).  
 Cement to surface.

Intermediate Casing: 250 sacks "C" + 2% CaCl<sub>2</sub> (WT 14.80 YLD 1.32). Top of Cement 1000'

Production Casing: Lead in with 500 sacks LiteCrete (WT 9.93 YLD 2.66). Tail in with 550 sacks PecosVILt (WT 13.00 YLD 1.41). Cement to surface.

6. MUD PROGRAM AND AUXILIARY EQUIPMENT:

<u>Interval</u>	<u>Type</u>	<u>Weight</u>	<u>Viscosity</u>	<u>Fluid Loss</u>
0-600'	FW Gel	8.60-9.20	32-36	N/C
600' to 1600'	Fresh Water	8.40-8.40	28-28	N/C
1600' to 4200'	Brine Water	10.00-10.00	28-28	N/C
4200' to 6060'	SW Gel/Starch	9.60-10.00	45-55	4.0-6.0

Sufficient mud material(s) to maintain mud properties, control lost circulation and contain a blow out will be available at the well site during drilling operations. Rig personnel will check mud hourly.

7. EVALUATION PROGRAM:

Samples: 10' Samples from Surface casing to TD  
Logging: Platform Express; CNL-LDT/NGT TD-Surf Csg; CNL/GR TD-Surf; DLL/MSFL TD-Surf Csg; BCH Sonic TD-Surf Csg.  
Coring: None anticipated  
DST's: None  
Mudlogging: Yes

8. ABNORMAL CONDITIONS, BOTTOM HOLE PRESSURE, AND POTENTIAL HAZARDS:

Abnormal Pressures Anticipated: None

Lost Circulation Zones Anticipated: None.

H<sub>2</sub>S Zones Anticipated: None Anticipated

Maximum Bottom Hole Temperature: 120 F

9. ANTICIPATED STARTING DATE:

Plans are to drill this well as soon as possible after receiving approval. It should take approximately 45 days to drill the well with completion taking another 20 days.

**MULTI-POINT SURFACE USE AND OPERATIONS PLAN**  
**YATES PETROLEUM CORPORATION**  
**Wanda ZT Federal Com. #2**  
945' FNL and 1950' FEL, Unit B (NWNE)  
Section 28-T10S-R26E  
Chaves County, New Mexico

This plan is submitted with Form 3160-3, Application for Permit to Drill, covering the above described well. The purpose of this plan is to describe the location of the proposed well, the proposed construction activities and operations plan, the magnitude of the surface disturbance involved and the procedures to be followed in rehabilitating the surface after completion of the operations, so that a complete appraisal can be made of the environmental effect associated with the operations.

1. **EXISTING ROADS:**

Exhibit A – A-7 maps showing the well and roads in the vicinity of the proposed location. Some of the proposed access route is off lease which will require a Federal ROW Grant. A Form 299 will be submitted. The proposed well site is located approximately 12 miles north/east of Roswell, New Mexico and the access route to the location is indicated in red and green on Exhibit A-2.

**DIRECTIONS:**

FROM THE INTERSECTION OF HWY. #380 AND ALAMO RD., GO NORTH ON ALAMO RD. (CALICHE RD.) APPROXIMATELY 1.8 MILES. TURN RIGHT AT HACHITA ROAD AND GO NORTHEAST APPROXIMATELY 1.1 MILES; TURN RIGHT (BEFORE CATTLE GUARD) AND GO SOUTHEAST APPROXIMATELY 0.15 MILES. VEER LEFT AND GO EAST APPROXIMATELY 0.8 MILES; TURN RIGHT AT INTERSECTION AND GO SOUTHEAST APPROXIMATELY 0.2 MILES. VEER RIGHT AND GO SOUTH APPROXIMATELY 0.4 MILES; VEER RIGHT AND GO SOUTHWEST APPROX. 0.5 MILES; TURN LEFT AND GO SOUTHEAST APPROXIMATELY 0.1 MILE; VEER LEFT AND GO EAST APPROXIMATELY 0.1 MILE; VEER LEFT AND GO EAST-NORTHEAST APPROXIMATELY 0.5 MILES TO A PROPOSED ROAD SURVEY. FOLLOW ROAD SURVEY NORTH APPROXIMATELY 1200 FEET TO THIS LOCATION.

2. **PLANNED ACCESS ROAD:**

- A. The proposed new access will be approximately 1,247.7' in length from the point of origin to the northeast corner of the drilling pad.
- B. The new road will be 14 feet in width (driving surface) and will be adequately drained to control runoff and soil erosion.
- C. The new road will be bladed with drainage on both sides. One traffic turnout may be needed.
- D. The route of the road is visible.
- E. Existing roads will be maintained in the same or better condition.
- F. Turning East Prior to Corrals (2) cattle guards with gates at existing gate areas will be installed. (Located approximately in the SWNW in Section 28, T10S-R26E)

3. **LOCATION OF EXISTING WELL:**

- A. There is no drilling activity within a one-mile radius of the well site.
- B. Exhibit D shows existing wells within a one-mile radius of the proposed well site.

4. **LOCATION OF EXISTING AND/OR PROPOSED FACILITIES:**

- A. There are production facilities on this lease at the present time.
- B. If the well is productive oil, a gas or diesel self-contained unit will be used to provide the necessary power until an electric line can be built, if needed. Power should not be required if the well is productive of gas.
- C. Should a Pipeline Right-Of-Way be required it will be filed under a separate application and/or by 3<sup>rd</sup> party if applicable.

**Wanda ZT Federal Com. #2**  
**Page Two**

5. LOCATION AND TYPE OF WATER SUPPLY:

- A. It is planned to drill the proposed well with a fresh water system. The water will be obtained from commercial sources and will be hauled to the location by truck over the existing and proposed roads shown in Exhibit A – A-7.

6. SOURCE OF CONSTRUCTION MATERIALS:

The dirt contractor will be responsible for finding a source of material for construction of road and pad and will obtain any permits that may be required.

7. METHODS OF HANDLING WASTE DISPOSAL:

- A. Drill cuttings will be collected in tanks until hauled to an approved disposal system.
- B. A closed loop system will be constructed, maintained and closed in compliance with the State of New Mexico, Energy and Natural Resources Department, Oil Conservation Division—the “Pit Rule” 19.15.17 NMAC. Form C-144 attached – Exhibit E.
- C. Drilling fluids will be removed after drilling and completions are completed.
- D. Water produced during operations will be collected in tanks until hauled to an approved disposal system, or separate disposal application will be submitted.
- 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. All trash, junk, and other waste materials will 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 approved.

8. ANCILLARY FACILITIES: NONE

9. WELLSITE LAYOUT:

- A. Exhibit C shows the relative location and dimensions of the well pad, the closed loop design plan, the location of the drilling equipment, orientation and access road approach. (approximately 4.5 acres)
- B. The closed loop system will be constructed, maintained, and closed in compliance with the State of New Mexico, Energy and Natural Resources Department, Oil Conservation Division – the “Pit Rule” 19.15.17 NMAC. Form C-144 is attached – Exhibit E.
- C. A 600' x 600' area has been staked and flagged.

10. PLANS FOR RESTORATION:

- A. After finishing drilling and/or completion operations, all equipment and other material not needed for further operations will be removed. The location will be cleaned of all trash and junk to leave the well site in as aesthetically pleasing a condition as possible.
- B. If the proposed well is plugged and abandoned, all rehabilitation and/or vegetation requirements of the Bureau of Land Management will be complied with and will be accomplished as expeditiously as possible.

**Wanda ZT Federal Com. #2**  
**Page Three**

11. SURFACE OWNERSHIP: Fee Surface

Gents Cattle Company, Inc.  
#7 Berrendo Meadows Circle  
Roswell, NM 88201

A surface use and compensation agreement have been entered into between Gents Cattle Company, Alfonso Caballero and Yates Petroleum Corporation, executed on March 11<sup>th</sup>, 2008 referenced by recorded Memorandum of Surface Use Agreement, Chaves County, New Mexico; Book 0612 Page 0527.

Minerals: NM-21494  
Federal - Administered by Bureau of Land Management, Roswell Field Office,  
2909 W. Second Street, Roswell, NM 88201-2019  
Phone: 575-627-0272 FAX: 575-627-0276

12. OTHER INFORMATION:

- A. Topography: Refer to the existing archaeological report for a description of the topography, flora, fauna, soil characteristics, dwellings, and historical and cultural sites.
- B. The primary surface use is for grazing.

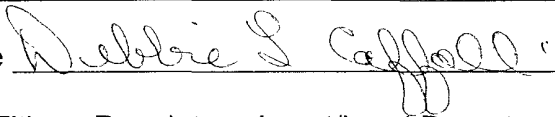
Exhibits Attached  
Exhibit A – A7 Topo/Vicinity Maps  
Exhibit B – Pressure System  
Exhibit C - C1 Location Layout  
Exhibit D –One Mile Radius  
Exhibit E - Form C-144

**CERTIFICATION**  
**YATES PETROLEUM CORPORATION**  
**Wanda ZT Federal Com. #2**  
945' FNL and 1950' FEL, Unit B (NWNE)  
Section 28-T10S-R26E  
Chaves County, New Mexico

I hereby certify that I, or someone under my direct supervision, have inspected the drill site and access route proposed herein; that I am familiar with the conditions which currently exist; that I or other company representatives have full knowledge of state and federal laws applicable to this operation; that the statements made in this APD package are, to the best of my knowledge, true and correct; and that the work associated with the operations proposed herein will be performed in conformity with this APD package and the terms and conditions under which it is approved. I also certify that I, or the company I represent, am responsible for the operations conducted under this application. These statements are subject to the provisions of 18 U.S.C. 1001 for the filing of false statements.

Executed this 14th day of October, 2008.

Name Debbie L. Caffall

Signature 

Position Title Regulatory Agent/Land Department

Address 105 South Fourth Street 88210

E-mail (optional) debbiec@ypcnm.com

Telephone 575-748-4376 or 365-5022

Field Representative (if not above signatory) Tim Bussell

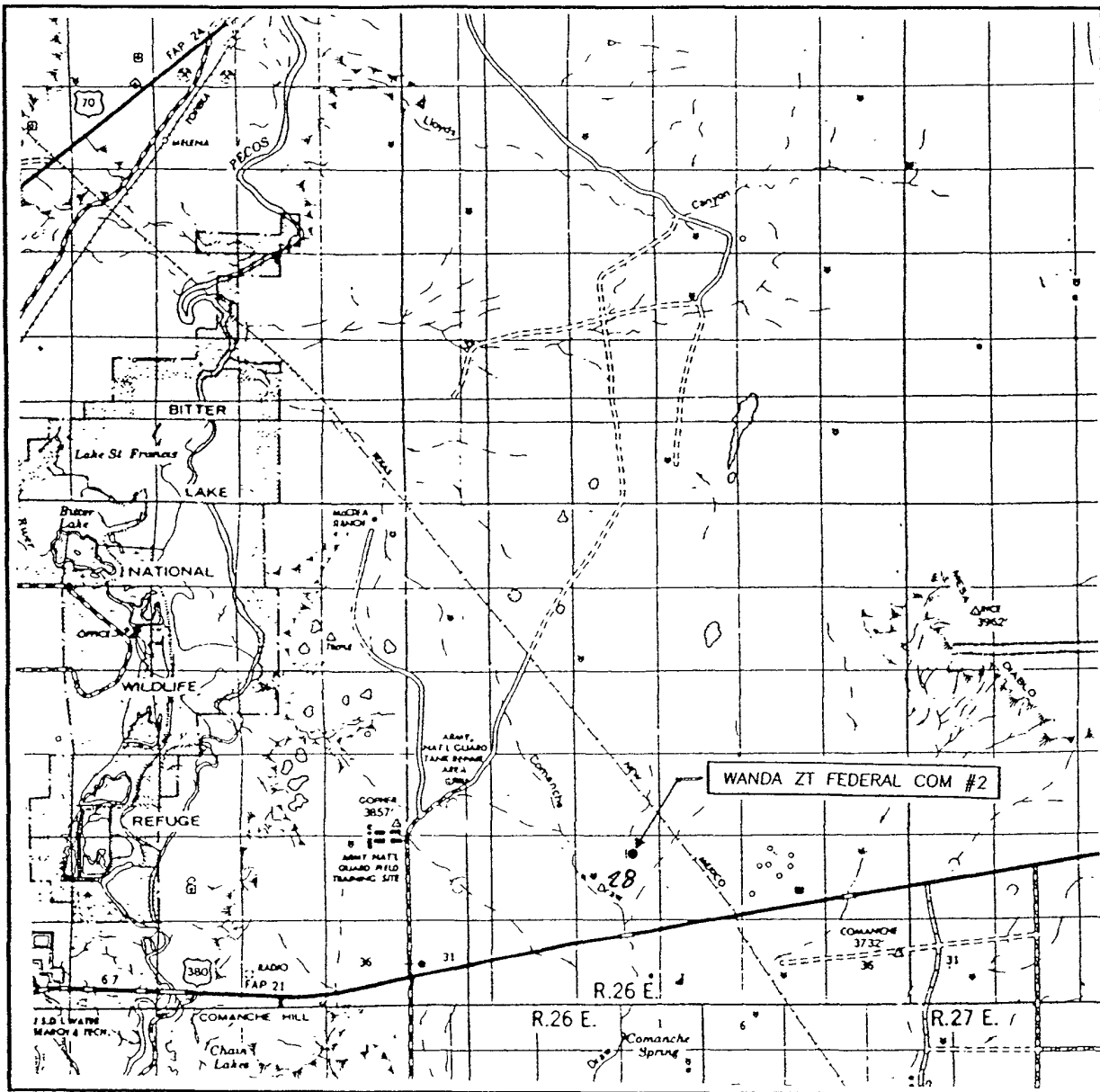
Address (if different from above) Same

Telephone (if different from above) 575-748-4221

E-mail (optional) \_\_\_\_\_

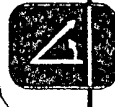


# VICINITY MAP



SCALE: 1" = 2 MILES

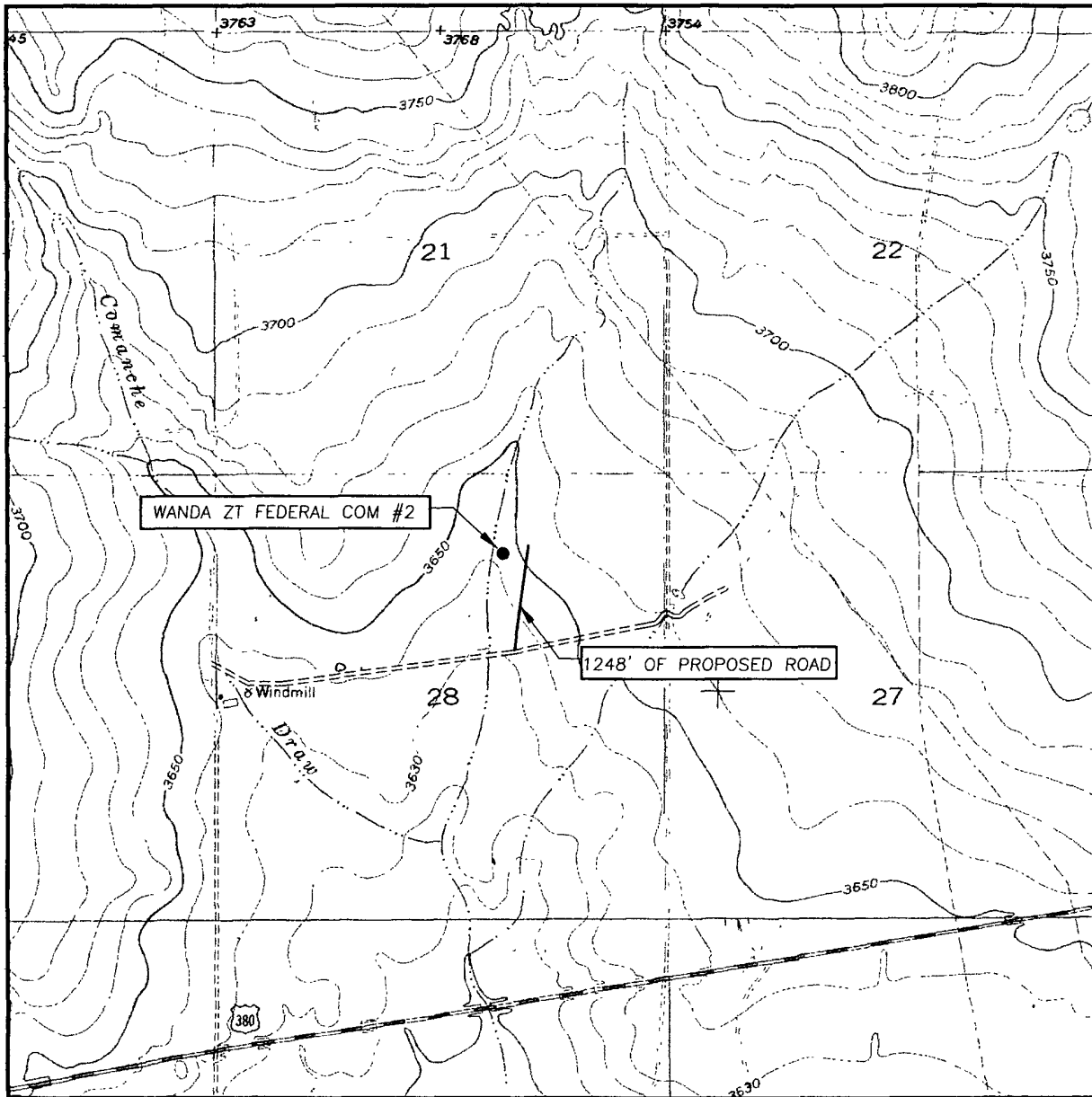
SEC. 28 TWP. 10-S RGE. 26-E  
 SURVEY N.M.P.M.  
 COUNTY CHAVES STATE NEW MEXICO  
 DESCRIPTION 945' FNL & 1950' FEL  
 ELEVATION 3646'  
 OPERATOR PETROLEUM CORPORATION  
 LEASE WANDA ZT FEDERAL COM



PROVIDING SURVEYING SERVICES  
 SINCE 1946  
**JOHN WEST SURVEYING COMPANY**  
 412 N. DAL PASO  
 HOBBS, N.M. 88240  
 (505) 393-3117

Wanda ZT Federal Com #2  
 Section 28, T10S-R26E  
 Chaves County, New Mexico  
 Exhibit "A"

# LOCATION VERIFICATION MAP



SCALE: 1" = 2000'

CONTOUR INTERVAL:  
COMANCHE SPRING, N.M. - 10'

SEC. 28 TWP. 10-S RGE. 26-E

SURVEY N.M.P.M.

COUNTY CHAVES STATE NEW MEXICO

DESCRIPTION 945' FNL & 1950' FEL

ELEVATION 3646'

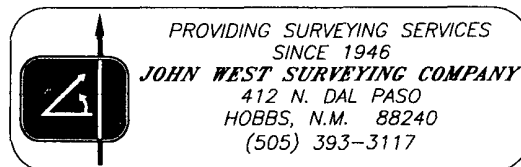
YATES

OPERATOR PETROLEUM CORPORATION

LEASE WANDA ZT FEDERAL COM

U.S.G.S. TOPOGRAPHIC MAP

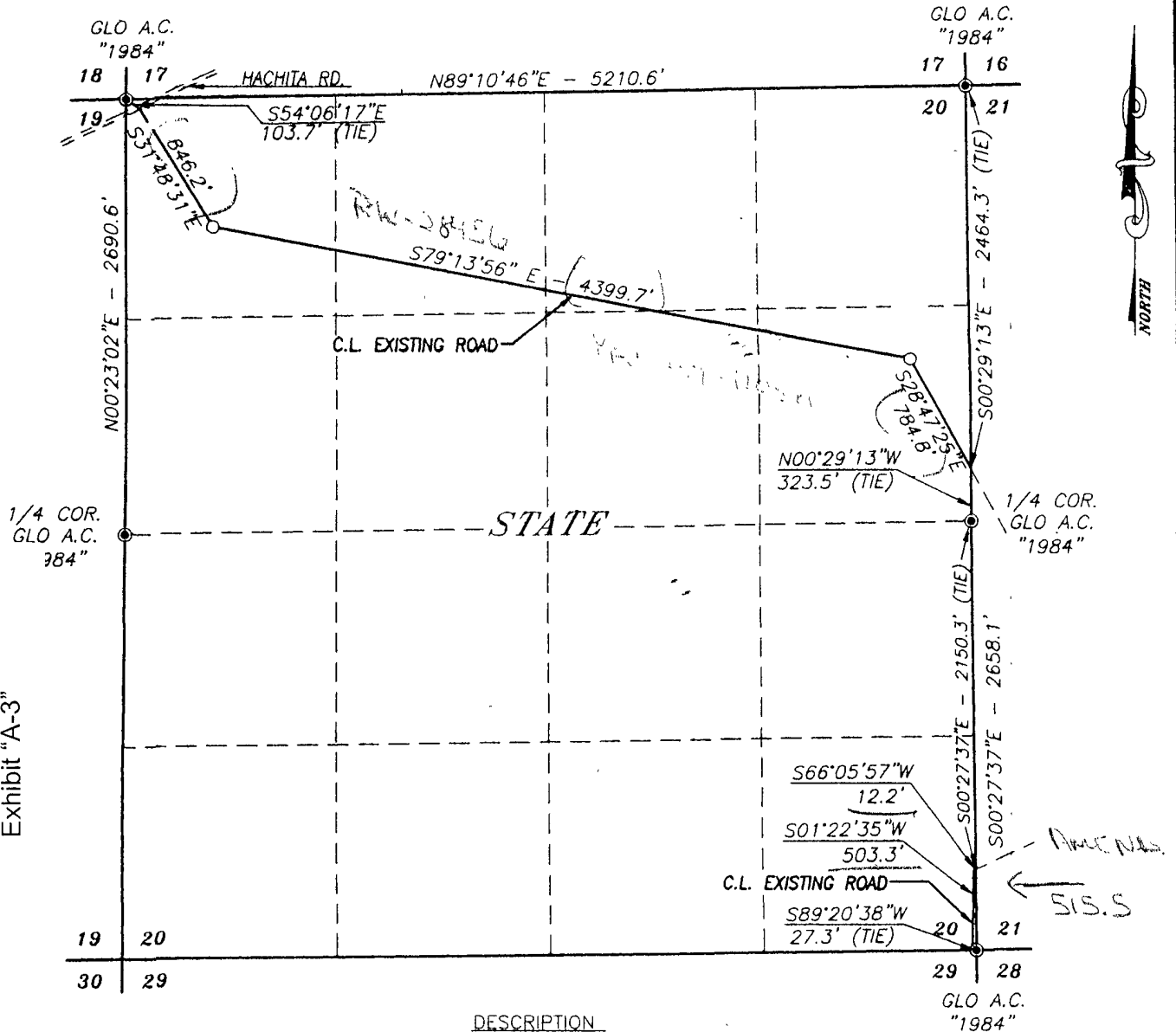
COMANCHE SPRING, N.M.



Wanda ZT Federal Com #2  
Section 28, T10S-R26E  
Chaves County, New Mexico  
Exhibit "A-1"



SECTION 20, TOWNSHIP 10 SOUTH, RANGE 26 EAST, N.M.P.M.  
CHAVES COUNTY NEW MEXICO



DESCRIPTION

A STRIP OF LAND 20.0 FEET WIDE CROSSING STATE OF NEW MEXICO LAND IN SECTION 20, TOWNSHIP 10 SOUTH, RANGE 26 EAST, NMPM, CHAVES COUNTY, NEW MEXICO AND BEING 10.0 FEET RIGHT AND 10.0 FEET LEFT OF THE FOLLOWING DESCRIBED CENTERLINE SURVEY:

BEGINNING AT A POINT IN THE NORTHWEST QUARTER OF THE NORTHWEST QUARTER OF SAID SECTION 20, WHICH LIES S54°06'17"E 103.7 FEET FROM THE NORTHWEST CORNER OF SAID SECTION 20; THEN S31°48'31"E 846.2 FEET; THEN S79°13'56"E 4399.7 FEET; THEN S28°47'25"E 784.8' TO A POINT ON THE EAST LINE OF SAID SECTION 20, WHICH LIES N00°29'13"W 323.5 FEET FROM THE EAST QUARTER CORNER OF SAID SECTION 20. AND ALSO, BEGINNING AT A POINT IN THE SOUTHEAST QUARTER OF THE SOUTHEAST QUARTER OF SAID SECTION 20, WHICH LIES S00°27'37"E 2150.3 FEET FROM THE EAST QUARTER CORNER OF SAID SECTION; THEN S66°05'57"W 12.2 FEET; THEN S01°22'35"W 503.3 FEET TO A POINT ON THE SOUTH LINE OF SAID SECTION 20, WHICH LIES S89°20'38"W 27.3 FEET FROM THE SOUTHEAST CORNER OF SAID SECTION 20

SAID STRIP OF LAND BEING 6546.2 FEET OR 396.74 RODS IN LENGTH, CONTAINING 3.006 ACRES MORE OR LESS AND BEING ALLOCATED BY FORTIES AS FOLLOWS:

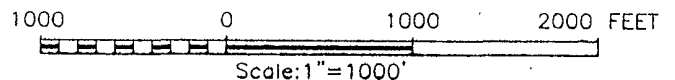
NW/4 NW/4 98.21 RODS OR 0.744 ACRES  
NE/4 NW/4 80.18 RODS OR 0.608 ACRES  
NW/4 NE/4 40.90 RODS OR 0.310 ACRES  
SW/4 NE/4 40.30 RODS OR 0.305 ACRES  
SE/4 NE/4 105.91 RODS OR 0.802 ACRES  
SE/4 SE/4 31.24 RODS OR 0.237 ACRES

NOTE

BEARINGS SHOWN HEREON ARE MERCATOR GRID AND CONFORM TO THE NEW MEXICO COORDINATE SYSTEM "NEW MEXICO EAST ZONE" NORTH AMERICAN DATUM 1983. DISTANCES ARE SURFACE VALUES.

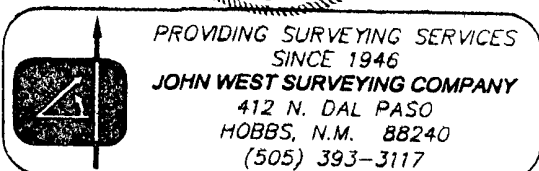
LEGEND

● DENOTES FOUND CORNER AS NOTED



I HEREBY CERTIFY THAT I DIRECTED AND AM RESPONSIBLE FOR THIS SURVEY. THAT THIS SURVEY IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF, AND THAT THIS SURVEY AND PLAT MEET THE MINIMUM STANDARDS FOR SURVEYING IN NEW MEXICO.

GARY G. EIDSON, N.M.P.S. No. 12641  
RONALD J. EIDSON, N.M.P.S. No. 3239



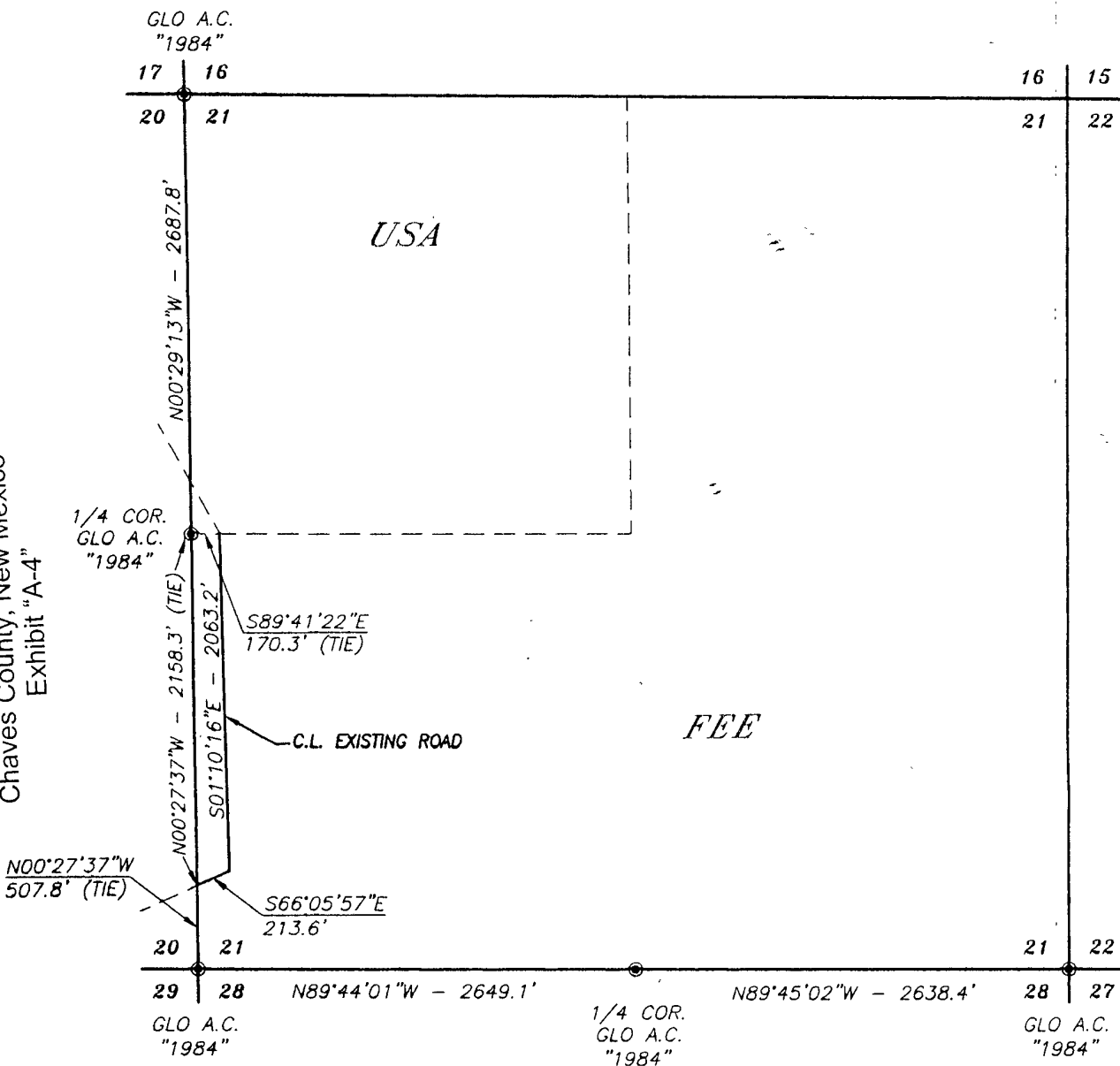
YATES PETROLEUM CORPORATION

CENTERLINE SURVEY OF AN EXISTING ROAD  
CROSSING SECTION 20,  
TOWNSHIP 10 SOUTH, RANGE 26 EAST, N.M.P.M.  
CHAVES COUNTY, NEW MEXICO

Survey Date: 10/1/08	Sheet 1 of 1 Sheets
W.O. Number: 08.11.1593	Drawn By: JC
Date: 10/3/08	08111593_road

SECTION 21, TOWNSHIP 10 SOUTH, RANGE 26 EAST, N.M.P.M.  
CHAVES COUNTY NEW MEXICO

Wanda ZT Federal Com #2  
Section 28, T10S-R26E  
Chaves County, New Mexico  
Exhibit "A-4"



DESCRIPTION

CENTERLINE SURVEY OF AN EXISTING ROAD CROSSING SECTION 21, TOWNSHIP 10 SOUTH, RANGE 26 EAST, NMPM, CHAVES COUNTY, NEW MEXICO AND BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEGINNING AT A POINT ON THE NORTH LINE OF THE SOUTHWEST QUARTER OF SAID SECTION 21 WHICH LIES S89°41'22"E 170.3 FEET FROM THE WEST QUARTER CORNER OF SAID SECTION; THEN S01°10'16"E 2063.2 FEET; THEN S66°05'57"E 213.6 FEET TO A POINT ON THE WEST LINE OF SAID SECTION 21 WHICH LIES N00°27'37"W 507.8 FEET FROM THE SOUTHWEST CORNER OF SAID SECTION.

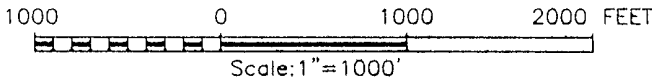
TOTAL LENGTH EQUALS 2276.8 FEET OR 137.99 RODS

NOTE

BEARINGS SHOWN HEREON ARE MERCATOR GRID AND CONFORM TO THE NEW MEXICO COORDINATE SYSTEM "NEW MEXICO EAST ZONE" NORTH AMERICAN DATUM 1983. DISTANCES ARE SURFACE VALUES.

LEGEND

● DENOTES FOUND CORNER AS NOTED



I HEREBY CERTIFY THAT I DIRECTED AND AM RESPONSIBLE FOR THIS SURVEY. THAT THIS SURVEY IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF, AND THAT THIS SURVEY AND PLAT MEET THE MINIMUM STANDARDS FOR SURVEYING IN NEW MEXICO

GARY G. EIDSON, N.M. P.S. No. 12641  
RONALD J. EIDSON, N.M. P.S. No. 3239

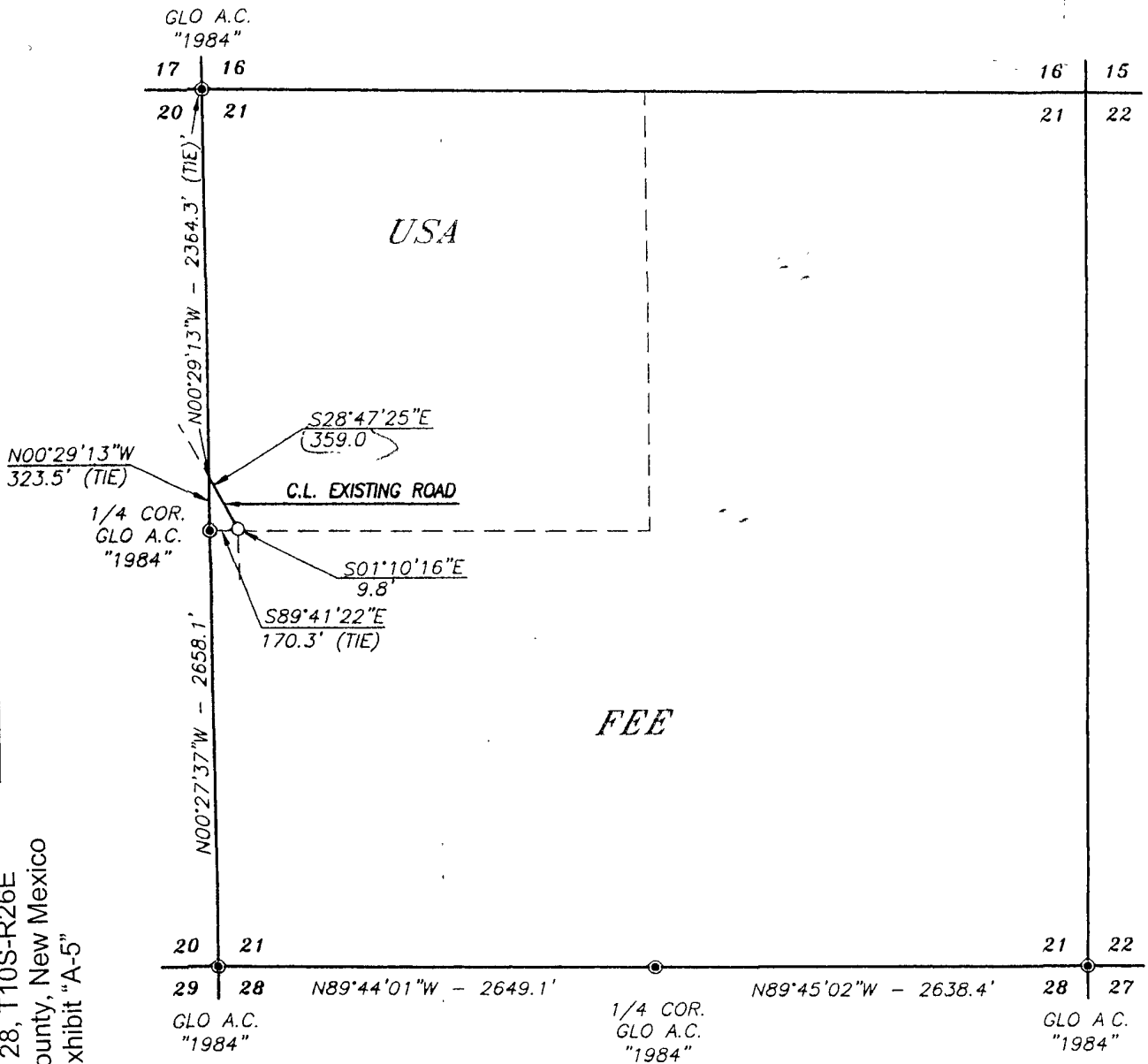
PROVIDING SURVEYING SERVICES SINCE 1946  
**JOHN WEST SURVEYING COMPANY**  
412 N. DAL PASO  
HOBBS, N.M. 88240  
(505) 393-3117

YATES PETROLEUM CORPORATION

CENTERLINE SURVEY OF AN EXISTING ROAD  
CROSSING SECTION 21,  
TOWNSHIP 10 SOUTH, RANGE 26 EAST, N.M.P.M.  
CHAVES COUNTY, NEW MEXICO

Survey Date: 10/1/08	Sheet 1 of 1 Sheets
W.O. Number: 08.11.1593	Drawn By: JC
Date: 10/3/08	08111593_road

SECTION 21, TOWNSHIP 10 SOUTH, RANGE 26 EAST, N.M.P.M.  
CHAVES COUNTY NEW MEXICO



DESCRIPTION

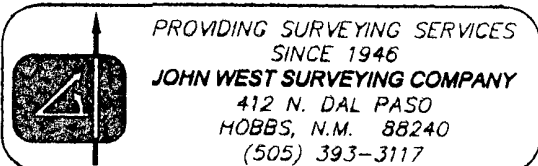
A STRIP OF LAND 50.0 FEET WIDE AND 368.8 FEET OR 0.070 MILES IN LENGTH CROSSING USA LAND IN SECTION 21, TOWNSHIP 10 SOUTH, RANGE 26 EAST, NMPM, CHAVES COUNTY, NEW MEXICO AND BEING 25.0 FEET LEFT AND 25.0 FEET RIGHT OF THE ABOVE PLATTED CENTERLINE SURVEY.

NOTE

BEARINGS SHOWN HEREON ARE MERCATOR GRID AND CONFORM TO THE NEW MEXICO COORDINATE SYSTEM "NEW MEXICO EAST ZONE" NORTH AMERICAN DATUM 1983. DISTANCES ARE SURFACE VALUES.

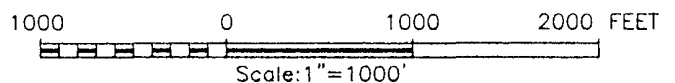
I HEREBY CERTIFY THAT I HAVE DIRECTED AND AM RESPONSIBLE FOR THIS SURVEY THAT THIS SURVEY IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF, AND THAT THIS SURVEY AND PLAT MEET THE MINIMUM STANDARDS FOR SURVEYING IN NEW MEXICO.

GARY G. EIDSON, D.E.S. No. 12641  
RONALD J. EIDSON, PROFESSIONAL SURVEYOR No. 3239



LEGEND

● DENOTES FOUND CORNER AS NOTED

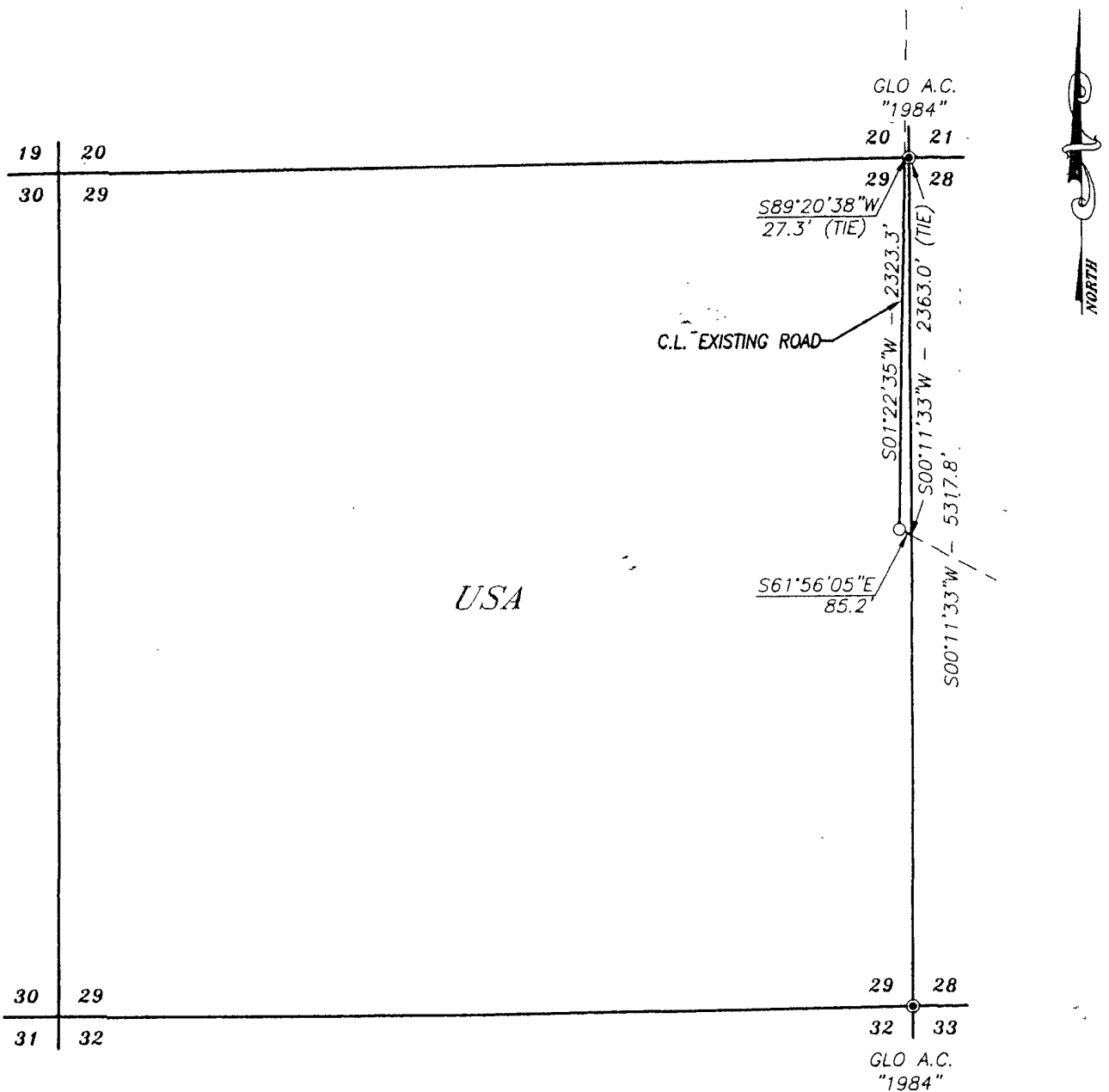


YATES PETROLEUM CORPORATION

CENTERLINE SURVEY OF AN EXISTING ROAD  
CROSSING SECTION 21,  
TOWNSHIP 10 SOUTH, RANGE 26 EAST, N.M.P.M.  
CHAVES COUNTY, NEW MEXICO

Survey Date: 10/1/08	Sheet 1 of 1 Sheets
W.O. Number: 08.11.1593	Drawn By: JC
Date: 10/3/08	08111593_road

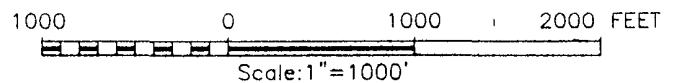
Wanda ZT Federal Com #2  
Section 28, T10S-R26E  
Chaves County, New Mexico  
Exhibit "A-6"



A STRIP OF LAND 50.0 FEET WIDE AND 2408.5 FEET OR 0.456 MILES IN LENGTH CROSSING USA LAND IN SECTION 29, TOWNSHIP 10 SOUTH, RANGE 26 EAST, NMPM, CHAVES COUNTY, NEW MEXICO AND BEING 25.0 FEET LEFT AND 25.0 FEET RIGHT OF THE ABOVE PLATTED CENTERLINE SURVEY.

BEARINGS SHOWN HEREON ARE MERCATOR GRID  
AND CONFORM TO THE NEW MEXICO COORDINATE  
SYSTEM "NEW MEXICO EAST ZONE" NORTH  
AMERICAN DATUM 1983. DISTANCES ARE SURFACE  
VALUES.

● DENOTES FOUND CORNER AS NOTED



I HEREBY CERTIFY THAT I DIRECTED AND AM RESPONSIBLE FOR THIS SURVEY. THAT THIS SURVEY IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF, AND THAT THIS SURVEY AND PLAT MEET THE MINIMUM STANDARDS FOR SURVEYING IN NEW MEXICO.

GARY G. EIDSON, N.M. P.S.	No. 12641
RONALD J. EIDSON, N.M. P.S.	No. 3239

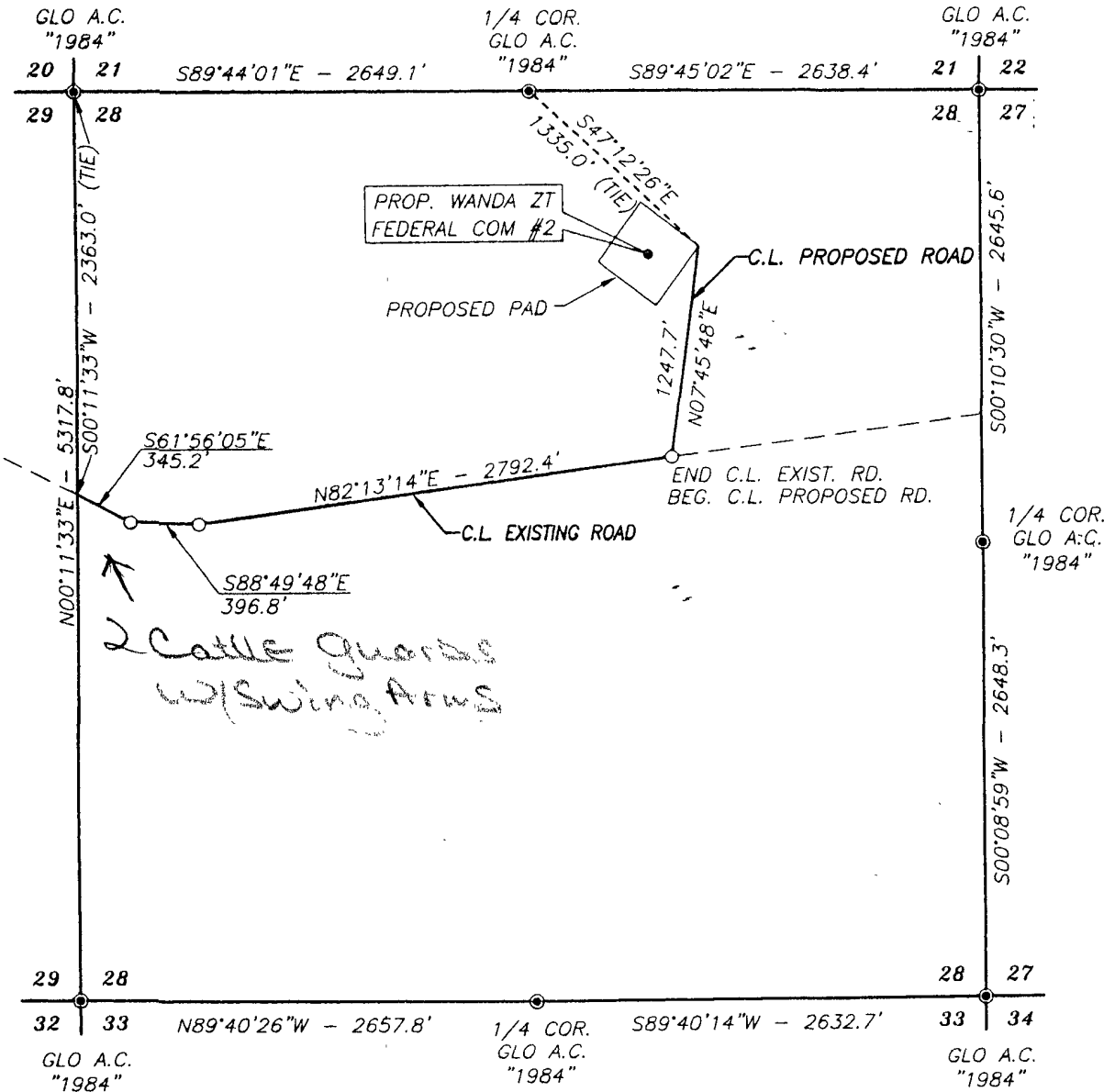


**PROVIDING SURVEYING SERVICES  
SINCE 1946  
JOHN WEST SURVEYING COMPANY  
412 N. DAL PASO  
HOBBS, N.M. 88240  
(505) 393-3117**

CENTERLINE SURVEY OF AN EXISTING ROAD  
CROSSING SECTION 29,  
TOWNSHIP 10 SOUTH, RANGE 26 EAST, N.M.P.M.  
CHAVES COUNTY, NEW MEXICO

Survey Date: 10/1/08	Sheet 1 of 1 Sheets
W.O. Number: 08.11.1593	Drawn By: JC
Date: 10/3/08	08111593_road

SECTION 28, TOWNSHIP 10 SOUTH, RANGE 26 EAST, N.M.P.M.  
CHAVES COUNTY NEW MEXICO



Wanda ZT Federal Com #2  
Section 28, T10S-R26E  
Chaves County, New Mexico  
Exhibit "A-7"

DESCRIPTION

CENTERLINE SURVEY OF AN EXISTING ROAD CROSSING SECTION 28, TOWNSHIP 10 SOUTH, RANGE 26 EAST, NMPM, CHAVES COUNTY, NEW MEXICO AND BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEGINNING AT A POINT ON THE WEST LINE OF THE NORTHWEST QUARTER OF SAID SECTION 28 WHICH LIES S00°11'33"W 2363.0 FEET FROM THE NORTHWEST CORNER OF SAID SECTION; THEN S61°56'05"E 345.2 FEET; THEN S88°59'48"E 396.8 FEET; THEN N82°13'14"E 2792.4 FEET TO THE BEGINNING OF A PROPOSED ROAD SURVEY; THEN N07°45'48"E 1247.7 FEET TO A POINT AT THE NORTHEAST CORNER OF PROPOSED WANDA ZT FEDERAL COM #2 WELL PAD, WHICH LIES S47°12'26"E 1335.0 FEET FROM THE NORTH QUARTER CORNER OF SAID SECTION.

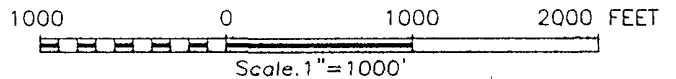
TOTAL LENGTH EQUALS 4782.1 FEET OR 289.82 RODS

NOTE

BEARINGS SHOWN HEREON ARE MERCATOR GRID AND CONFORM TO THE NEW MEXICO COORDINATE SYSTEM "NEW MEXICO EAST ZONE" NORTH AMERICAN DATUM 1983. DISTANCES ARE SURFACE VALUES.

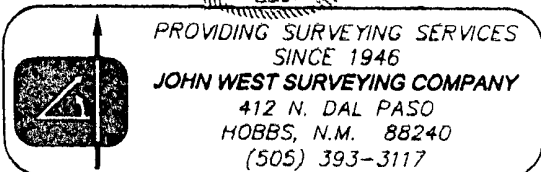
LEGEND

● DENOTES FOUND CORNER AS NOTED



I HEREBY CERTIFY THAT I DIRECTED AND AM RESPONSIBLE FOR THIS SURVEY. THAT THIS SURVEY IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF, AND THAT THIS SURVEY AND PLAT MEET THE MINIMUM STANDARDS FOR SURVEYING IN NEW MEXICO.

GARY G. EIDSON, N.M. P.S. No. 12641  
RONALD J. EIDSON, N.M. P.S. No. 3239

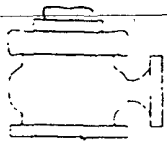


YATES PETROLEUM CORPORATION

CENTERLINE SURVEY OF AN EXISTING ROAD  
CROSSING SECTION 28,  
TOWNSHIP 10 SOUTH, RANGE 26 EAST, N.M.P.M.  
CHAVES COUNTY, NEW MEXICO

Survey Date: 10/1/08	Sheet 1 of 1 Sheets
W.O. Number: 08.11.1593	Drawn By: JC
Date: 10/3/08	08111593_road

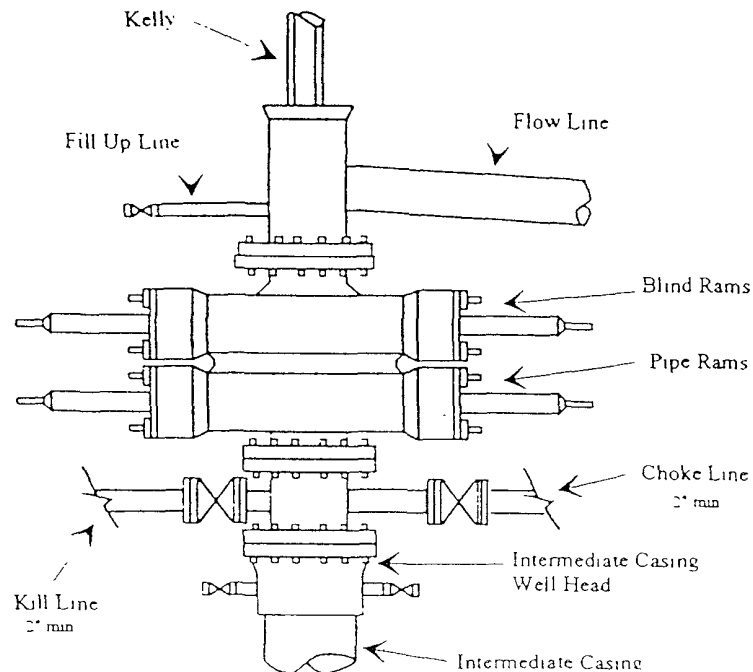




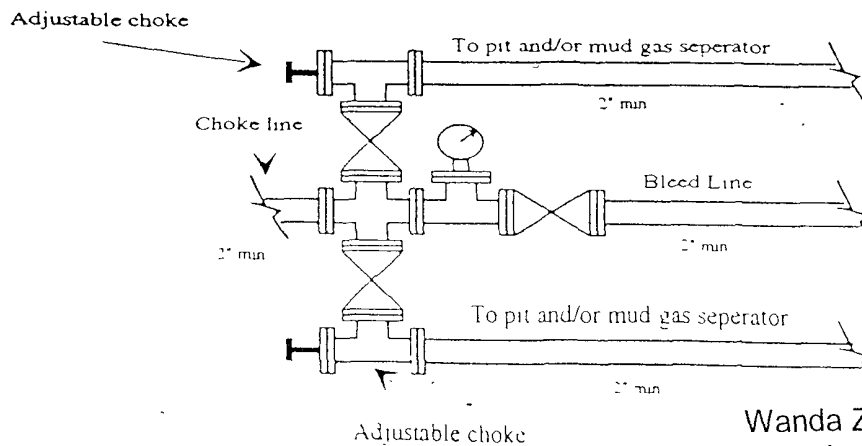
# Yates Petroleum Corporation

BOP-2

## Typical 2,000 psi Pressure System Schematic Double Ram Preventer Stack



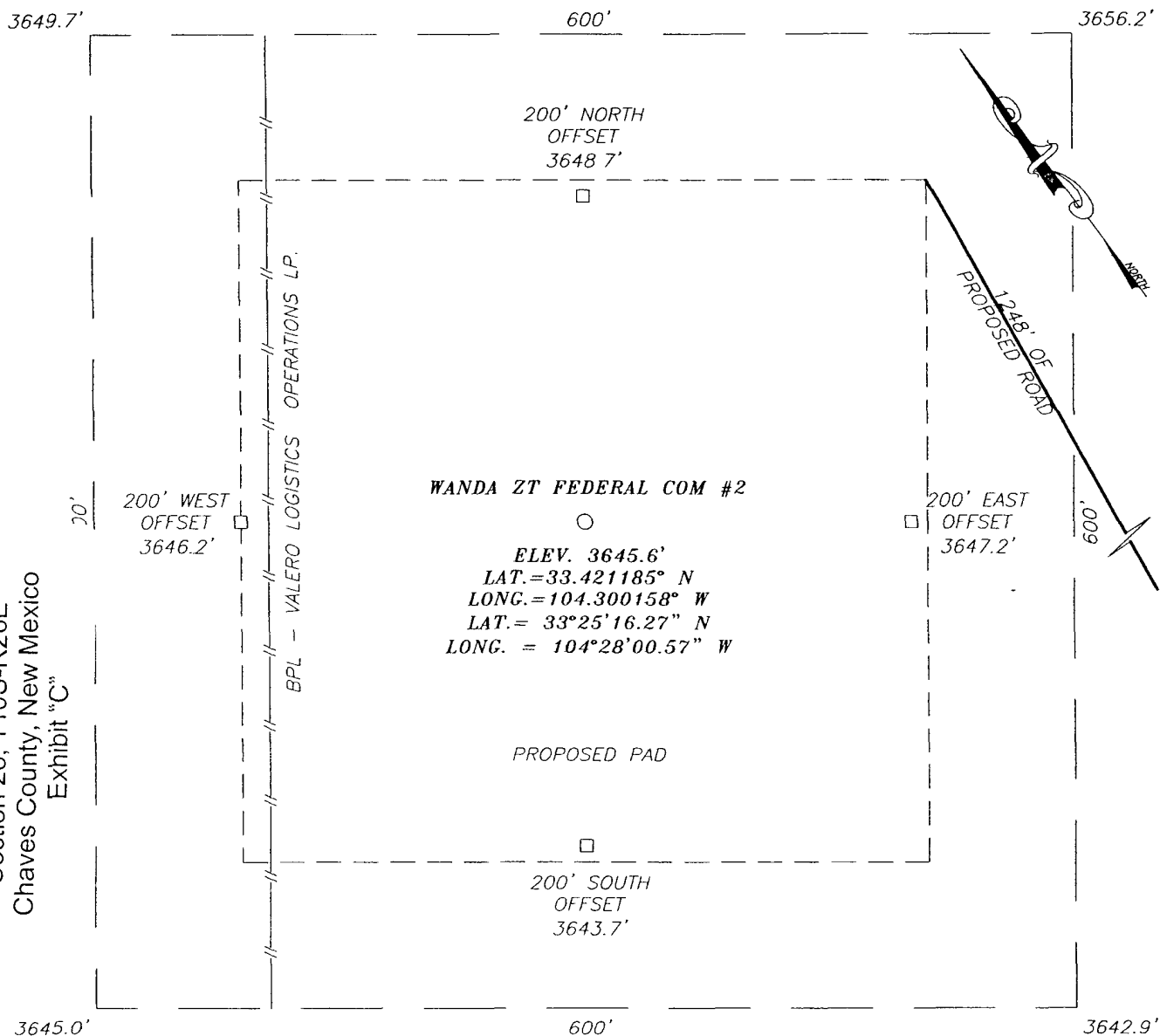
Typical 2,000 psi choke manifold assembly with at least these minimum features



Wanda ZT Federal Com #2  
Section 28, T10S-R26E  
Chaves County, New Mexico  
Exhibit "B"

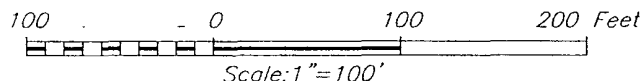
SECTION 28, TOWNSHIP 10 SOUTH, RANGE 26 EAST, N.M.P.M.,  
CHAVES COUNTY, NEW MEXICO

Wanda ZT Federal Com #2  
Section 28, T10S-R26E  
Chaves County, New Mexico  
Exhibit "C"



DIRECTIONS TO LOCATION

FROM THE INTERSECTION OF HWY #380 AND ALAMO RD.,  
GO NORTH ON ALAMO RD. (CALICHE RD) APPROX. 1.8  
MILES. TURN RIGHT AT HACHITA ROAD AND GO NORTHEAST  
APPROX 1.1 MILES, TURN RIGHT (BEFORE CATTLE GUARD)  
AND GO SOUTHEAST APPROX. 0.15 MILES. VEER LEFT AND  
GO EAST APPROX. 0.8 MILES, TURN RIGHT AT INTERSECTION  
AND GO SOUTHEAST APPROX. 0.2 MILES. VEER RIGHT AND  
GO SOUTH APPROX 0.4 MILES, VEER RIGHT AND GO  
SOUTHWEST APPROX 225 FEET; VEER LEFT AND GO SOUTH  
APPROX. 0.5 MILES, TURN LEFT AND GO SOUTHEAST  
APPROX 0.1 MILE, VEER LEFT AND GO EAST APPROX. 0.1  
MILE, VEER LEFT AND GO EAST-NORTHEAST APPROX. 0.5  
MILES TO A PROPOSED ROAD SURVEY FOLLOW ROAD  
SURVEY NORTH APPROX 1200 FEET TO THIS LOCATION



YATES PETROLEUM CORPORATION

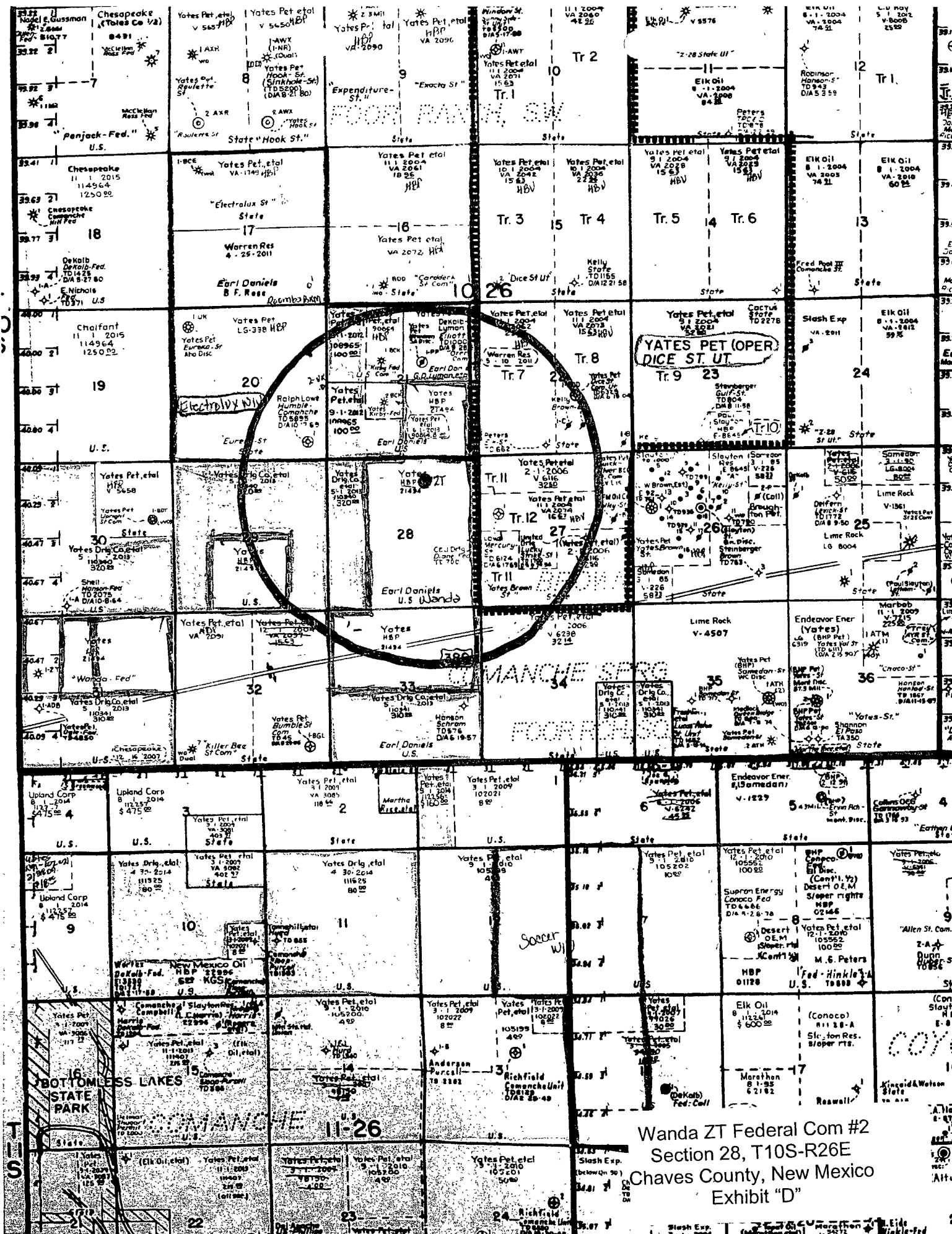
WANDA ZT FEDERAL COM #2 WELL  
LOCATED 945 FEET FROM THE NORTH LINE  
AND 1950 FEET FROM THE EAST LINE OF SECTION 28,  
TOWNSHIP 10 SOUTH, RANGE 26 EAST, N.M.P.M.,  
CHAVES COUNTY, NEW MEXICO.

Survey Date: 10/1/08	Sheet 1 of 1 Sheets
W.O. Number: 08.11.1593	Dr By: JC
Date: 10/6/08	08111593 Scale: 1"=100'



PROVIDING SURVEYING SERVICES  
SINCE 1946  
**JOHN WEST SURVEYING COMPANY**  
412 N DAL PASO  
HOBBS, N.M 88240  
(505) 393-3117





Wanda ZT Federal Com #2  
Section 28, T10S-R26E  
Chaves County, New Mexico  
Exhibit "D"

No. 155935

First National Bank  
ARTESIA, NEW MEXICO

95-43  
1122



YATES BUILDING • ARTESIA, N.M. 88210

OCT 14, 2008

PAY \*\*\*\*\*4000\*DOLLARS\*AND\*00\*CENTS

\$ \*\*\*\*\*4,000.00

134200 BUREAU OF LAND MANAGEMENT -  
ROSWELL  
TO THE 2909 WEST SECOND STREET  
ORDER OF ROSWELL, NM 88201-2019  
OF

*Kathy H. Porter*

⑈ 155935 ⑈

⑈ 112200439 ⑈

⑈ 69408810 ⑈

DETACH BEFORE DEPOSITING CHECK

YATES PETROLEUM CORPORATION  
105 SOUTH 4TH STREET ARTESIA, N.M. 88210

DLC/LEF

RECORDING/FILING FEES

FEDERAL FILING FEE FOR APPLICATION FOR PERMIT TO DRILL

WANDA ZI FEDERAL COM #2

SECTION 28, T10S-R26E

CHAVES COUNTY, NEW MEXICO

No. 155935

\$4,000.00

MARTIN YATES, III  
1912-1985

FRANK W. YATES  
1936-1986

S.P. YATES  
1914-2008



JOHN A. YATES  
CHAIRMAN OF THE BOARD  
PRESIDENT

DAVID LANNING  
CHIEF OPERATING OFFICER

105 SOUTH FOURTH STREET  
ARTESIA, NEW MEXICO 88210-2118  
TELEPHONE (575) 748-1471

As per BLM instructions, Yates Petroleum Corporation is tendering the \$4,000.00 APD Processing Fee for the Wanda ZT Federal Com #2 date submitted: October 14, 2008, Section 28, Township 10 South, Range 26 East, Chaves County, New Mexico.

Please be advised we are tendering this fee under protest as we believe it contradicts language in the Energy Policy Act of 2005 signed by President Bush.

RANDY G. PATTERSON  
SECRETARY

DENNIS G. KINSEY  
TREASURER

**PECOS DISTRICT - RFO  
CONDITIONS OF APPROVAL**

July 21, 2009

Yates Petroleum Corporation  
NM-21494  
Wanda "ZT" Federal Com. #2  
945' FNL and 1920' FEL, Section 28,  
T. 10 S., R. 26 E., NMPM  
Chaves County, New Mexico

**GENERAL PROVISIONS**

The approval of the Application For Permit To Drill (APD) is in compliance with all applicable laws and regulations: 43 Code of Federal Regulations 3160, the lease terms, Onshore Oil and Gas Orders, Notices To Lessees, New Mexico Oil Conservation Division (NMOCD) Rules, National Historical Preservation Act As Amended, and instructions and orders of the Authorized Officer. Any request for a variance shall be submitted to the Authorized Officer on Form 3160-5, Sundry Notices and Report on Wells.

**I. PERMIT EXPIRATION**

If the permit terminates prior to drilling and drilling cannot be commenced within 60 days after expiration, an operator is required to submit Form 3160-5, Sundry Notices and Reports on Wells, requesting surface reclamation requirements for any surface disturbance. However, if the operator will be able to initiate drilling within 60 days after the expiration of the permit, the operator must have set the conductor pipe in order to allow for an extension of 60 days beyond the expiration date of the APD (Filing of a Sundry Notice is required for this 60 day extension).

**II. ARCHAEOLOGICAL, PALEONTOLOGY & HISTORICAL SITES**

Any cultural and/or paleontological resource discovered by the operator or by any person working on the operator's behalf shall immediately report such findings to the Authorized Officer. The operator is fully accountable for the actions of their contractors and subcontractors. The operator shall suspend all operations in the immediate area of such discovery until written authorization to proceed is issued by the Authorized Officer. An evaluation of the discovery shall be made by the Authorized Officer to determine the appropriate actions that shall be required to prevent the loss of significant cultural or scientific values of the discovery. The operator shall be held responsible for the cost of the proper mitigation measures that the Authorized Officer assesses after consultation with the operator on the evaluation and decisions of the discovery. Any unauthorized collection or disturbance of cultural or paleontological resources may result in a shutdown order by the Authorized Officer.

### III. NOXIOUS WEEDS

The operator shall be held responsible if noxious weeds become established within the areas of operations (access road and/or well pad). Weed control shall be required on the disturbed land where noxious weeds exist, which includes the roads, pads, associated pipeline corridor, and adjacent land affected by the establishment of weeds due to this action. The operator shall consult with the Authorized Officer for acceptable weed control methods, which include following EPA and BLM requirements and policies.

### IV. CONSTRUCTION

#### A. NOTIFICATION:

The BLM shall administer compliance and monitor construction of the access road and well pad. Notify the Roswell Field Office at (505) 627-0247 at least 3 working days prior to commencing construction of the access road and/or well pad.

When construction operations are being conducted on this well, the operator shall have the approved Application for Permit to Drill and Conditions of Approval on the well site and they shall be made available upon request by the Authorized Officer.

#### B. TOPSOIL:

The topsoil will be stripped to approximately 6 inches in depth within the area designated for construction of the well pad. The operator shall stockpile the stripped topsoil adjacent to the constructed well pad. The topsoil will be used for interim and final reclamation of the surface disturbance created by the construction of the well pad. The topsoil will not be used to construct the containment structure or earthen dike that is constructed and maintained on the outside boundaries of the constructed well pad.

#### C. CLOSED SYSTEMS OR STEEL TANKS: No reserve pit will be used.

The operator shall use a **Closed Loop System** instead of a reserve pit. The operator shall properly dispose of drilling contents at an authorized disposal site.

A containment structure or earthen dike shall be constructed and maintained on the northeast, northwest, and southwest sides of the outside boundary of the constructed well pad in order to protect the ephemeral drainage located beneath and adjacent to the well pad. If the well pad is constructed into a cut on a slope then the uphill side of the well pad will not require the construction of the containment structure or earthen dike, but the construction of the containment structure or dike will be required on the remaining three sides of the well pad which will extend into the uphill portion of the well pad. The containment structure or earthen dike is required so that if oilfield waste contaminant or product contaminant were leaked, spilled, and or released upon the well pad the oilfield waste contaminant or product contaminant shall be contained on the well pad and not enter into the ephemeral drainage located beneath and adjacent to the well pad. The containment structure or earthen dike shall be constructed two (2) feet high (the



containment structure or earthen dike can be constructed higher than the two (2) feet high minimum). The containment structure or earthen dike shall be constructed and maintained during the drilling phase, the production phase and for the life of the well. During interim reclamation, if the surface area of the constructed well pad is reduced in size then the original constructed containment structure or earthen dike and a portion of the constructed well pad will be excavated and removed. During interim reclamation, the containment structure or earthen dike will then be re-constructed on the outside boundaries of the reduced in size constructed well pad.

#### **D. FEDERAL MINERAL MATERIALS PIT:**

If the operator elects to surface the access road and/or well pad using federal mineral materials, payment shall be made to the BLM prior to removal from any site. Call the Roswell Field Office at (575) 627-0236.

#### **E. WELL PAD SURFACING:**

Surfacing of the well location is required. The well pad will be constructed with a minimum of one foot of fill material for the construction of the portion of the well pad that is located in the ephemeral drainage which is the upstream portion or the northeast portion of the well pad. The minimum of one foot fill material for the construction of the northeast portion of the well pad is required in order to protect the integrity of the well pad and the containment dike from damage from storm flow events that flow through the ephemeral drainage where water flows may negatively impact the well pad and the containment dike constructed on the well pad.

The surfacing material will be required to be removed at the time of reclamation.

The well pad shall be constructed in a manner which creates the smallest possible surface disturbance, consistent with safety and operational need.

#### **F. ON LEASE ACCESS ROADS:**

##### **Road Egress and Ingress**

The on lease access road shall be constructed to access the corner of the well pad.

##### **Road Width**

The access road shall have a driving surface that creates the smallest possible surface disturbance and does not exceed fourteen (14) feet in width. The maximum width of surface disturbance, when constructing the access road, shall not exceed thirty (30) feet.

## Surfacing

Surfacing material is not required on the new access road driving surface. If the operator elects to surface the new access road, the surfacing material may be required to be removed at the time of reclamation.

Where possible, no improvements should be made on the unsurfaced access road other than to remove vegetation as necessary, road irregularities, safety issues, or to fill low areas that may sustain standing water.

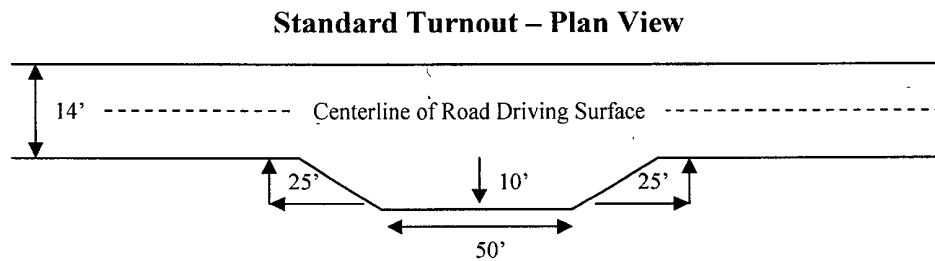
The Authorized Officer reserves the right to require surfacing of any portion of the access road at any time deemed necessary. Surfacing may be required in the event the road deteriorates, erodes, road traffic increases, or it is determined to be beneficial for future field development. The surfacing depth and type of material will be determined at the time of notification.

## Crowning

Crowning shall be done on the access road driving surface. The road crown shall have a grade of approximately 2% (i.e., a 1" crown on a 14' wide road). The road shall conform to Figure 1; cross section and plans for typical road construction.

## Turnouts

Vehicle turnouts shall be constructed on the road. Turnouts shall be intervisible with interval spacing distance less than 1000 feet. Turnouts shall be constructed on all blind curves. Turnouts shall conform to the following diagram:

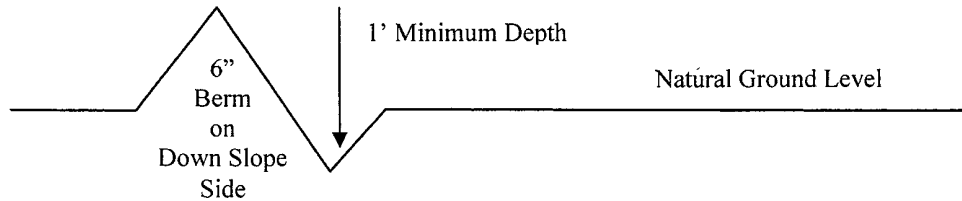


## Drainage

Drainage control systems shall be constructed on the entire length of road (e.g. ditches, sidehill outslowing and insloping, lead-off ditches, culvert installation, and low water crossings).

A typical lead-off ditch has a minimum depth of 1 foot below and a berm of 6 inches above natural ground level. The berm shall be on the down-slope side of the lead-off ditch.

### Cross Section Of Typical Lead-off Ditch



All lead-off ditches shall be graded to drain water with a 1 percent minimum to 3 percent maximum ditch slope. The spacing interval are variable for lead-off ditches and shall be determined according to the formula for spacing intervals of lead-off ditches, but may be amended depending upon existing soil types and centerline road slope (in %);

### Formula For Spacing Interval Of Lead-off Ditches

Example - On a 4% road slope that is 400 feet long, the water flow shall drain water into a lead-off ditch. Spacing interval shall be determined by the following formula:

$$400 \text{ foot road with } 4\% \text{ road slope: } \frac{400'}{4\%} + 100' = 200' \text{ lead-off ditch interval}$$

### Culvert Installations

Appropriately sized culvert(s) shall be installed at the deep waterway channel flow crossing.

### Cattleguards

An appropriately sized cattleguard(s) sufficient to carry out the project shall be installed and maintained at fence crossing(s).

Any existing cattleguard(s) on the access road shall be repaired or replaced if they are damaged or have deteriorated beyond practical use. The operator shall be responsible for the condition of the existing cattleguard(s) that are in place and are utilized during lease operations.

A gate shall be constructed and fastened securely to H-braces.

### Fence Requirement

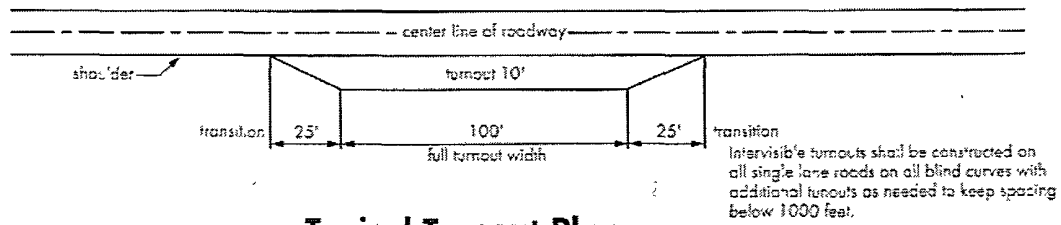
Where entry is required across a fence line, the fence shall be braced and tied off on both sides of the passageway prior to cutting.

The operator shall notify the private surface landowner or the grazing allotment holder prior to crossing any fence(s).

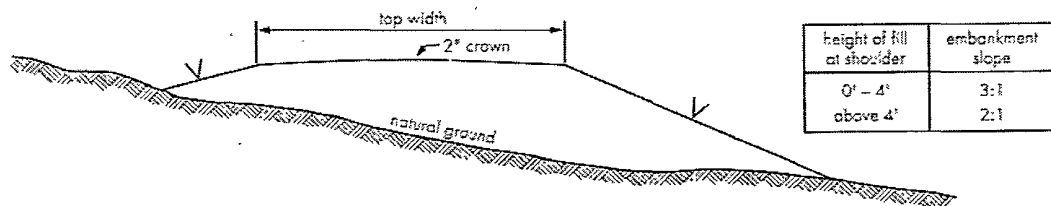
**Public Access**

Public access on this road shall not be restricted by the operator without specific written approval granted by the Authorized Officer.

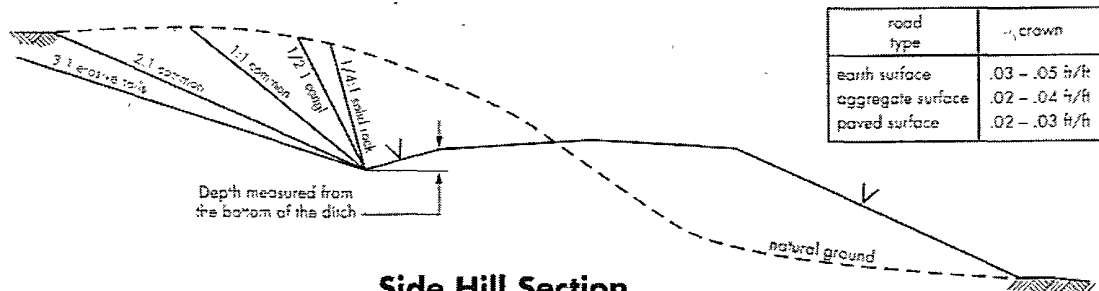
**Figure 1 – Cross Sections and Plans For Typical Road Sections**



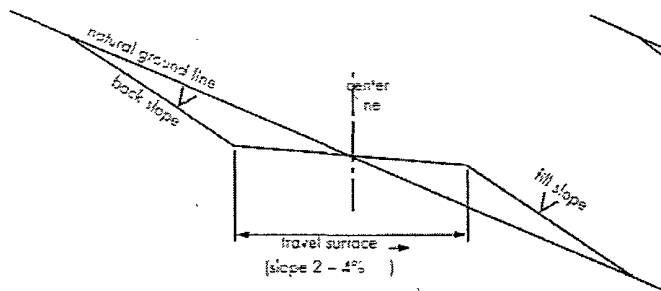
**Typical Turnout Plan**



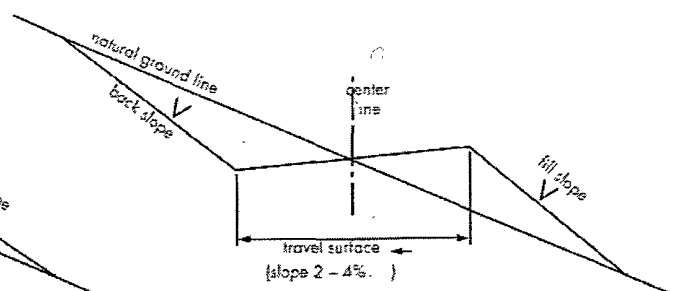
**Embankment Section**



**Side Hill Section**



**Typical Outslope Section**



**Typical Inslope Section**

## **V. DRILLING**

### **A. DRILLING OPERATIONS REQUIREMENTS:**

1. Call the Roswell Field Office, 2909 West Second St., Roswell, NM 88201. During office hours call (575) 627-0205 or after office hours call (575) 910-6024. Engineer on call during office hours call (575) 627-0275 or after office hours call (575) 626-5749.
2. The BLM is to be notified a minimum of 24 hours in advance for a representative to witness:
  - a. Spudding well
  - b. Setting and/or Cementing of all casing strings

The BLM is to be notified a minimum of 4 hours in advance for a representative to witness:

#### **BOPE Tests**

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. Include the API Number assigned to well by NMOCD on the subsequent report of setting the first casing string.
5. 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.
6. The operator will accurately measure the drilling rate in ft/min to set the base of the usable water protection casing string(s) opposite competent rock. The record of the drilling rate along with the caliper-gamma ray-neutron well log run to surface will be submitted to this office as well as all other logs run on the borehole 30 days from completion
7. Air, air-mist or fresh water and non toxic drilling mud shall be used to drill to the base of the usable water protection casing string(s). Any polymers used will be water based and non-toxic.

### **B. CASING:**

1. The **11-3/4** inch usable water protection casing string shall be set at approximately 600 ft. in competent bedrock.

If not the operator is required to set usable water protecting casing in the next thick competent bedding (i.e. 15 to 25 ft or greater) encountered and cemented to the surface.

- a. If cement does not circulate to the surface, the Roswell Field Office shall be notified and a temperature survey utilizing an electronic type temperature survey with a surface log readout will be used or a cement bond log shall be run to verify the top of the cement.
  - b. Wait on cement (WOC) time for a primary cement job will be a minimum 18 hours for a water basin or 500 pounds compression strength, whichever is greater. (This is to include the lead cement).
  - c. Wait on cement (WOC) time for a remedial job will be a minimum of 4 hours after bringing cement to surface or 500 pounds compression strength, whichever is greater.
  - d. If cement falls back, remedial action will be done prior to drilling out that string.
2. The minimum required fill of cement behind the 8-5/8 inch intermediate casing if set is **sufficient to circulate to the surface.** If cement does not circulate see B.1.a-d above.
  3. The minimum required fill of cement behind the 5-1/2 inch production casing is **sufficient to tie back 500 feet above the uppermost perforation in the pay zone.** If cement does not circulate, a temperature survey utilizing an electronic type temperature survey with a surface log readout will be used or a cement bond log shall be run to verify the top of the cement.
  4. If hardband drill pipe is rotated inside casing, returns will be monitored for metal. If metal is found in samples, drill pipe will be pulled and rubber protectors which have a larger diameter than the tool joints of the drill pipe will be installed prior to continuing drilling operations.
  5. All casing shall be new or reconditioned and tested casing and meet API standards for new casing. The use of reconditioned and tested casing shall be subject to approval by the authorized officer. Approval will be contingent upon the wall thickness of any casing being verified to be at least 87-1/2 per cent of the nominal wall thickness of new casing.

### **C. PRESSURE CONTROL:**

1. Before drilling below the 11-3/4 inch surface casing shoe, the blowout preventer assembly shall consist of a minimum of One Annular Preventer or Two Ram-Type Preventers and a Kelly Cock/Stabbing Valve.
  2. Before drilling below the 11-3/4 inch surface casing shoe, minimum working pressure of the blowout preventer and related equipment (BOPE) shall be **2000** psi.
  3. The BOPE shall be installed before drilling below the 11-3/4 inch surface casing and the 8-5/8 inch intermediate casing if set and shall be tested as described in Onshore Order No. 2. Any equipment failing to test satisfactorily shall be repaired or replaced.
- a. The BLM Roswell Field office shall be notified a minimum of 4 hours in advance for a representative to witness the tests.

- b. The tests shall be done by an independent service company.
- c. The BOP/BOPE test shall include a low pressure test from 250 to 300 psi. The test will be held for a minimum of 10 minutes if test is done with a test plug and 30 minutes without a test plug.
- d. All tests are required to be recorded on a calibrated test chart. A copy of the BOP/BOPE test chart and a copy of independent service company test will be submitted to the BLM Roswell Field Office at 2909 West Second Street, Roswell, New Mexico 88201.
- e. 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.
- f. Testing must be done in a safe workman like manner. Hard line connections shall be required.

## **VI. PRODUCTION**

### **Placement of Production Facilities**

Production facilities shall be placed 100 feet to the east of the constructed well pad to mitigate impacts the ephemeral drainage.

### **Containment Structures**

The containment structure shall be constructed to hold the capacity of the entire contents of the largest tank, plus 24 hour production, unless more stringent protective requirements are deemed necessary by the Authorized Officer.

### **Painting Requirement**

All above-ground structures including meter housing that are not subject to safety requirements shall be painted a flat non-reflective paint color, Juniper Green (Standard Environmental Color Chart June 2008).

### **VRM Facility Requirement**

Low-profile tanks not greater than eight-feet-high shall be used.

## **VII. INTERIM RECLAMATION**

During the life of the development, all disturbed areas not needed for active support of production operations should undergo "interim" reclamation in order to minimize the environmental impacts of development on other resources and uses. Earthwork for interim and final reclamation must be completed within 6 months of well completion or well plugging (weather permitting). The operator shall submit a Sundry Notices and Reports on Wells (Notice of Intent), Form 3160-5, prior to conducting interim reclamation.



During reclamation, the removal of caliche is important to increasing the success of revegetating the site. Removed caliche may be used in road repairs, fire walls or for building other roads and locations. In addition, in order to operate the well or complete workover operations, it may be necessary to drive, park and operate on restored interim vegetation within the previously disturbed area. Disturbing revegetated areas for production or workover operations will be allowed. If there is significant disturbance and loss of vegetation, the area will need to be revegetated. Communicate with the appropriate BLM office for any exceptions/exemptions if needed.

<b>Loamy, SD-3 Ecological Site; Loamy CP-2; Gyp Upland CP-2 (for Loamy HP-3)</b>		
<u>Common Name and Preferred Variety</u>	<u>Scientific Name</u>	<u>Pounds of Pure Live Seed Per Acre</u>
Blue grama,	<i>(Bouteloua gracilis)</i>	4.00 LBS.
Sideoats grama,	<i>(Bouteloua curtipendula)</i>	1.0 LB.
Sand dropseed	<i>(Sporobolus cryptandrus)</i>	0.5 LB.
Vine mesquite	<i>(Panicum obtusum)</i>	1.0 LB.
Plains bristlegrass	<i>(Setaria macrostachya)</i>	1.0 LB.
Indian blanketflower	<i>(Gaillardia aristata)</i>	0.5 LB.
Desert or Scarlet	<i>(Sphaeralcea ambigua)</i>	1.0 LB.
Globemallow or	<i>(S. coccinea)</i>	
Annual sunflower	<i>(Helianthus annuus)</i>	<u>0.75 LB.</u>
<b>TOTAL POUNDS PURE LIVE SEED (pls) PER ACRE</b>		<b>9.75 LBS.</b>

Certified Weed Free Seed. If one species is not available, increase ALL others proportionately. Use No Less than 4 species, including one forb. No less than 9.75 pounds lbs per acre shall be applied.

#### **VIII. FINAL ABANDONMENT & REHABILITATION REQUIREMENTS**

- a) Upon abandonment of the well and/or when the access road is no longer in service, a Notice of Intent for Final Abandonment with the proposed surface restoration procedure must be submitted for approval.
- b) Upon abandonment of the well, all casing shall be cut-off at the base of the cellar or 3-feet below final restored ground level (whichever is deeper). A 4-inch pipe, 10 feet in length, shall be installed 4 feet above ground and embedded in cement. The following information shall be permanently inscribed on the dry hole marker: Well name and number, the name of the operator, the lease serial number, the surveyed location (the quarter-quarter section, section, township and range or other authorized survey designation acceptable to the authorized officer; such as metes and bounds).

- c) Surface Reclamation must be completed within 6 months of well plugging. If the operator proposes to modify the plans for surface reclamation approved on the APD, the operator must attach these modifications to the Subsequent Report of Plug and Abandon using Sundry Notices and Reports on Wells, Form 3160-5.
- d) The surfacing material for the well pad will be required to be removed from the location at the time of reclamation. The surfacing material shall be removed from the location down to the original soil horizon. The removed surfacing material can be used on existing roads in need of maintenance, or hauled to a material pit for disposal. All cut areas on the location will be replaced with fill material. The location shall be returned to a natural landform. The ephemeral drainage bottom and adjacent banks will be contoured to mirror the contours of the surrounding terrain. If the surfacing material is to be used on a county road or hauled to a federal material pit, contact Jerry Dutchover at (575) 627-0236 to check for additional requirements.
- e) Once the surfacing material has been removed from the location and a seed bed has been prepared, the entire location shall be seeded with the prescribed mixture as described in the attached Seed Mixture when timing is appropriate.