

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

Form 3160-3
(September 2001)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

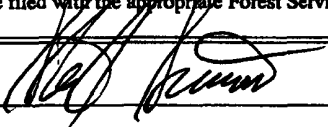
APPLICATION FOR PERMIT TO DRILL OR REENTER

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

1a. Type of Work: <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER		5. Lease Serial No. NM 92739
1b. Type of Well: <input type="checkbox"/> Oil Well <input checked="" type="checkbox"/> Gas Well <input type="checkbox"/> Other <input checked="" type="checkbox"/> Single Zone <input type="checkbox"/> Multiple Zone		6. If Indian, Allottee or Tribe Name N/A
2. Name of Operator Cimarex Energy Co.		7. If Unit or CA Agreement, Name and No. N/A
3a. Address 15 East 5th Street, Ste. 1000, Tulsa, OK 74103		8. Lease Name and Well No. LA Federal #1-A (re-entry)
3b. Phone No. (include area code) (918) 295-1710		9. API Well No. 30-015-22654
4. Location of Well (Report location clearly and in accordance with any State requirements. *) At surface 1976' from South Line and 665' from East Line At proposed prod. zone same		10. Field and Pool, or Exploratory
14. Distance in miles and direction from nearest town or post office* 31 miles West and 3 miles South of Carlsbad, New Mexico		11. Sec., T., R., M., or Blk. and Survey or Area Section 11-T22S-R22E NMPM
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) 1976'	16. No. of Acres in lease 2240.48 acres	12. County or Parish Eddy County
17. Spacing Unit dedicated to this well 640 acres	13. State NM	
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. 2000'	19. Proposed Depth 7,500'	
20. BLM/BIA Bond No. on file COB000011	21. Elevations (Show whether DF, KDB, RT, GL, etc.) 4183' GL	
22. Approximate date work will start* July 30, 2004	23. Estimated duration 45 days	
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:

- Well plat certified by a registered surveyor.
- A Drilling Plan.
- A Surface Use Plan (if the location is on National Forest System Lands, the SUPO shall be filed with the appropriate Forest Service Office).
- Bond to cover the operations unless covered by an existing bond on file (see Item 20 above).
- Operator certification.
- Such other site specific information and/or plans as may be required by the authorized officer.

25. Signature 	Name (Printed/Typed) Steve Simonton	Date 6-3-04
Title Cimarex Energy Co. Drilling Superintendent		
Approved by (Signature) /s/ Joe G. Lara	Name (Printed/Typed) /s/ Joe G. Lara	Date 22 JUL 2004
Title ACTING FIELD MANAGER	Office CARLSBAD FIELD OFFICE	

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

Conditions of approval, if any, are attached.

APPROVAL FOR 1 YEAR

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

*(Instructions on reverse)

APPROVAL SUBJECT TO
GENERAL REQUIREMENTS
AND SPECIAL STIPULATION
ATTACHED

C102
Held to
Produce
B40
WSP

RECEIVED
JUL 28 2004
OCD-ARTESIA

CIMAREX ENERGY CO.,
LA Federal #1-A (Re-entry)
Section 11-T22S-R22E,
Eddy County, New Mexico.
(Federal Lease No. NM 92739).

This plan is to accompany Application for "Permit to Drill" the subject well which is located approximately 31 miles West and 3 miles South of Carlsbad, New Mexico. The following is a discussion of pertinent information concerning the possible effect, which the proposed drilling well may have on the environment of the well and road sites and surrounding acreage. A copy will be posted on the derrick floor so that all contractors and sub-contractors will be aware of all items of this plan.

1. EXISTING ROADS

- A. **Directions to well:** From the intersection of Highway 285 and Highway 137 go Southwest on Highway 137 approximately 6.5 miles to the intersection of the Marathon Gas Plant (Indian Basin) road Thence: West on the Marathon road approximately 9 miles to a point one mile West of the Marathon Gas Plant. Thence: South on Lease Road and go 0.9 miles to a Y in the road. Thence: Turn right (southwesterly) and go 1.3 miles to a Y in the road. Thence: Turn right (westerly) and go 1.2 miles to a Y in the road. Thence: Turn left (southerly) and go 1.7 miles to miles to a T-intersection. Thence: Turn right (southwest) and go 0.9 miles to a T-intersection. Thence: Turn left and meander southerly 1.1 to a caliche road on the right. Thence: Turn on caliche and meander westerly 0.8 miles to a caliche road on the right. Thence: Turn on caliche road and go northwesterly approximately 1 mile. Thence: Northwesterly on new access road approximately 300' Thence: West continuing on new access road approximately 1100' Thence: North approximately 292' continuing on new access road. Thence: Northwesterly approximately 211' continuing on new access road. Thence: North approximately 400' continuing on new access road. Thence: Northeasterly 452' to the proposed location.
- B. **Pad Mitigation:** The topsoil will be stockpiled for surface restoration; will maintain a 3:1 slope ratio. The reserve pit will be lined. The pad will be drained above the cut on the south side of location draining north. Culverts will be placed along the new road construction as necessary to accommodate runoff. All surface equipment will be painted Fed Juniper Green. Upon completion of drilling the location and surrounding area will be cleared of debris and will be reseeded using the appropriate BLM Seed Mix. During the life of the well, there may be either a compressor or a pump-jack installed. No drilling or construction will take place during those restricted periods of time as determined by the BLM.

2. PLANNED ACCESS ROADS:

- A. **Length and Width:** 2755' of new access road is needed. The existing and new access road right-of-way will be approximately 20 feet wide, with the actual road surface being approximately 16 feet wide.
- B. **Construction:** The 2755' of new access road to the proposed LA Federal #1-A (Re-entry) well site will be new road construction and will provide all weather access to

this property. Native on-site material will be used for surfacing with gravel furnished from a private commercial source. The entire length of location road will be maintained in a prudent manner with a motor grader as an all weather road. Maintenance activity shall include but not be limited to rerocking, reshaping, compacting and crowning said location road as necessary. Any ruts, rills, and eroded areas will be filled, and blocked drainages and culverts will be cleared. Attached is a plat of the proposed location road and detailed section maps showing the location of existing roads.

- C. **Turnouts:** No turnouts are proposed
- D. **Culverts:** Culverts are proposed as necessary
- E. **Cuts and Fills:** An approximately 0.7' fill along the North side of the well site and no cut or fill along the East side of the well site will be required. An approximately 2.5' cut along the South side of the well site and an approximately 1.7' cut along the West side of the well site will be required. (see attached plat).
- F. **Gates, Cattleguards:** No Gates or Cattleguards are needed
- G. **Off Lease ROW:** None

3. LOCATION OF EXISTING WELLS —

- A. See Attachment II for location of wells within a 1 mile radius:

4. LOCATION OF EXSITING AND/OR PROPOSED FACILITIES:

A. Location of Tank Batteries, Production Facilities, Production Gathering and Service Lines:

- 1 In the event of production, production facilities will be located on the drill pad. The actual placement of this equipment will be determined when the well's production characteristics can be evaluated after completion (including compression). The condensate tank will be enclosed by a dike and all BLM standards regarding compressors will be met.
- 2 The flow-line from this well will have to be constructed. It will be buried gas pipeline that will be approx. 5435.5' in length (See attached pipeline plat) and tie into an existing gas transmission pipeline. The pipe diameter, wall thickness and pipe wall strength will be determined upon the establishment of production and will be in accordance to BLM standards and regulations. The line will be owned and operated by Cimarex Energy Co. and qualifies for APD/ROW process.
- 3 Produced water, if any, will be stored on the well site in a closed or netted water tank and on regular intervals will be hauled to an approved disposal site.

5. LOCATION AND TYPE OF WATER SUPPLY

- A. Water will be obtained from a non-federal private source.

6. SOURCE OF CONSTRUCTION MATERIALS:

- A. No additional construction materials will be required to build the proposed location. The topsoil will be stockpiled for restoration. The dirt from the reserve pit will be back-sloped and saved for use when the pit is rehabilitated.

7. METHODS FOR HANDLING WASTE DISPOSAL:

- A. A Conventional Drilling System will be used. The drill cuttings, fluids and completion fluids will be placed in the reserve pit. The reserve pit will be fenced with wire mesh on three sides away from the pad during drilling and the fourth side fenced as soon as the rig moves out. The reserve pit will be backfilled and leveled as soon as practical.
- B. All garbage and trash will be placed in specially constructed wire mesh containers. Upon cleanup, the refuse in the containers will be hauled to an approved landfill site.
 - 1 All produced water will be collected in tanks until transported to an approved disposal system.

8. ANCILLARY FACILITIES:

- A. None

9. WELL SITE LAYOUT:

- A. Attached sketch shows the relative location and dimensions of the well pad, and reserve pit. The well pad will be 300' X 300'. The reserve pit will be 150' X 150'. (see diagram).

10. PLANS FOR RESTORATION OF SURFACE:

- A. Pit will be filled and leveled as soon as practical. If well is productive, drilling pad will remain as well service pad. If dry hole, the pad will be ripped and re-seeded per regulations. See Pad Mitigation for details of the surface restoration and seeding details.

11. OTHER INFORMATION:


- A. **Terrain/Topography** – Gently sloping areas with ridges or mesa tops and Limestone out crops in places.
- B. **Soil:** Ector extremely rocky loam, 9 to 25 percent slopes-grayish brown stony loam to light colored limestone bedrock
- C. **Flora and Fauna:** scrubland community consisting mainly of black grama, blue grama, beargrass, tobosa, sotol, agave, ocotillo, snakeweed, tarbush, and yucca.
- D. **Ponds and Streams:** None. Playas in the area will be avoided.
- E. **Residence and Other Structures:** There are no occupied residences or buildings within one quarter of a mile of the proposed well location
- F. **Land Use:** grazing, wildlife, mineral development.
- G. **Water Wells:** No water wells are located in Section.
- H. **Arroyos, Canyons, etc.:** The LA Federal #1A is an existing development in the area. The existing LA Federal #1A well site is approximately 293 feet from the flood plains of the Rocky Arroyo. Based on an onsite inspection of the area, the existing LA Federal #1A well site and its operations have had no adverse impact to the riparian areas of the Rocky Arroyo or any erosion associated therewith. No significant impact or erosion is anticipated by the proposed action and its operations.
- I. **Well Sign;** Sign identifying and locating the well will be maintained at drill site with the spudding of the well.
- J. **Archaeological Resources:** Archaeological Survey is attached.
- K. **Surface Ownership:** Bureau of Land Management

12. Operator's Representatives: Field personnel who can be contacted concerning compliance of the Surface Use Plan are as follows:

Steve Simonton, Drilling Superintendent
Cimarex Energy Co.
15 East 5th Street, Suite 1000
Tulsa, OK 74103
918-295-1710

13. Certification:

I hereby certify that I, or persons under my direct supervision, have inspected the drill site and access route, that I am familiar with the conditions which presently exist; that the statements made in this plan are, to the best of my knowledge, true and correct, and that the work associated with the operations proposed herein will be performed by Cimarex Energy Co., and its contractors and sub-contractors in conformity with this plan and the terms and conditions under which it is approved.



BY: Steve Simonton, Drilling Superintendent

6/3/04

DATE

CIMAREX ENERGY CO.**WELL NAME:** LA Federal #1-A (re-entry)**DRILLING PROGNOSIS**

1. **Location of Proposed Well:** 1976' FSL & 665' FEL
Section 11, T22S, R22E
2. **Unprepared Ground Elevation:** 4200'
3. **The geological name of the surface formation:** Queen
3. **Type of drilling tools:** rotary
5. **Proposed drilling depth:** 7500'
4. **The estimated tops of important geologic markers are as follows:**

<u>ZONES</u>	<u>TOPS (MD)</u>
Queen	Surface
San Andres	317
Yeso	2041
Bone Spring	2943
Wolfcamp	5707
Cisco	7322

7. **The estimated depths at which anticipated water, oil, gas or other mineral bearing formations are expected to be encountered are as follows:**

<u>ZONES</u>	<u>DEPTH</u>	<u>FLUID</u>
Queen	0-317	Water
San Andres	317-2041	Water
Yeso	2041-2943	Water
Bone Spring	2943-5707	Water
Wolfcamp	5707-7322	Water/Gas
Cisco	7322-TD	Water

8. **The proposed casing program is as follows:**

Surface:

13-3/8", 48 ppf, Casing in place since 1978. Grade unknown. Csg set at 504'
Intermediate: 8 5/8", 24 ppf, Casing in place since 1978. Grade unknown. Csg. set at 2050'

Production Casing:

5 1/2", 17.0 ppg, N-80 LT&C 7740 psi, 6280 psi, 313,000 lbs, 397,000 lbs for new API Csg. Set at 7500'

9. **Cement Program:**

Surface Casing 13-3/8": Cemented in 1978

Surface Casing 8 5/8": Cemented in 1978.

Production Casing 5 1/2" Cemented with 290 sxs PREM + 10% Salt & 6/10 Halad-322 Mixed @ 15.8 ppg, water requirement 5.2 gps, Thickening Time = 1.5 hrs, WOC 1.5 hrs

Stage Collar Program:

Not anticipated at this time.

10. **Pressure Control Equipment:**

A schematic diagram of the final BOP stack showing sizes and pressure ratings is attached. A schematic diagram of the manifold showing sizes and pressure ratings is attached. The BOP will be set on casing head after drilling and setting surface casing. Pressure tests will be done as needed & after nipping up on the surface casing. Ram-Type preventors shall be actuated to test proper functioning at least once a day. The annular-type blowout preventer shall be actuated on the drill pipe at least once each week.

11 **Drilling Mud Prognosis:**

DEPTH INTERVAL	WEIGHT (ppg)	VISCOSITY (Sec/Qt)	FLUID LOSS (ml/30 min)	MUD TYPE
0-6250	9.0-9.2	34-40	NC-10	Loc Solids/Lite dispersed

12. **The testing, logging, and coring programs are as follows:**

No cores or DST are planned. Logging will consist of BHC Sonic from TD to intermediate casing.

13. Anticipated abnormal temperatures are not anticipated to be encountered or any other potential hazards such as Hydrogen Sulfide Gas. Low risk H₂S equipment will be used. The Kirtland Shale may be over pressured and the Dakota Ss may be under pressured.

Estimated Bottomhole pressures: Wolfcamp - +/- 3200psi

14. The anticipated starting date is within 2 weeks of APD approval.

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

DISTRICT II
P.O. Drawer DD, Artesia, NM 88211-0719

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

DISTRICT IV
P.O. BOX 2088, SANTA FE, N.M. 87504-2088

State of New Mexico
Energy, Minerals and Natural Resources Department

OIL CONSERVATION DIVISION
P.O. Box 2088
Santa Fe, New Mexico 87504-2088

Form C-102
Revised February 10, 1994
Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

WELL LOCATION AND ACREAGE DEDICATION PLAT

☐ AMENDED REPORT

API Number	Pool Code	Pool Name
Property Code	Property Name LA FEDERAL	Well Number 1A
OGRID No.	Operator Name CIMAREX ENERGY COMPANY	Elevation 4183'

Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
1	11	22-S	22-E		1976'	SOUTH	665'	EAST	EDDY

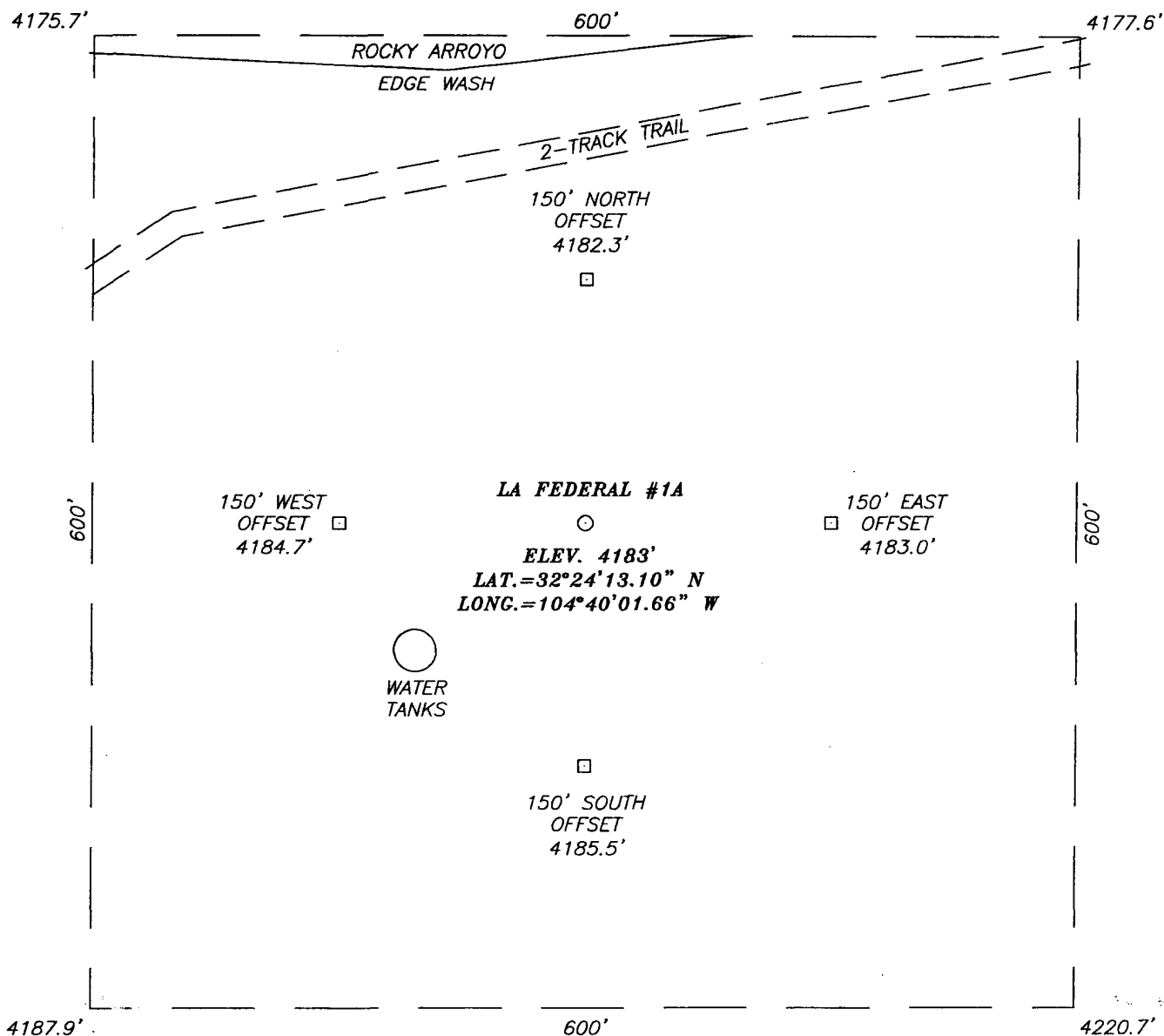
Bottom Hole Location If Different From Surface

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.						

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

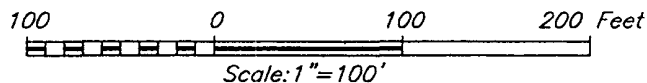
<p>GEODETIC COORDINATES NAD 27 NME</p> <p>Y=510719.0 N X=396981.2 E</p> <p>LAT.=32°24'13.10" N LONG.=104°40'01.66" W</p>				<p>4175.7' 4177.6'</p> <p>600'</p> <p>665'</p> <p>4187.9' 4220.7'</p> <p>1976'</p>	
<p>OPERATOR CERTIFICATION</p> <p>I hereby certify the the information contained herein is true and complete to the best of my knowledge and belief.</p> <p><i>[Signature]</i> Signature Steve J. Smarter Printed Name Drilling Syst. Title 6/3/04 Date</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>APRIL 27, 2004</p> <p>Date Surveyed Signature & Seal Professional Surveyor NEW MEXICO 5/6/04 04-11-0470 Certificate No. GARY EIDSON 12841</p>					

SECTION 11, TOWNSHIP 22 SOUTH, RANGE 22 EAST, N.M.P.M.,
EDDY COUNTY, NEW MEXICO



DIRECTIONS TO LOCATION

FROM THE MARATHON OIL COMPANY-INDIAN BASIN GAS PLANT GO WEST ON CO. RD. #401 (MARATHON RD.) 1.0 MILES AND TURN LEFT. FOLLOW MEANDERING CAWLEY ROAD SOUTHEASTERLY APPROX. 4.5 MILES. TURN RIGHT AND FOLLOW CALICHE ROAD APPROX. 0.8 MILES. TURN RIGHT AND FOLLOW ROAD NORTHWEST 0.8 MILES TO PROPOSED WELL LOCATION.



CIMAREX ENERGY COMPANY

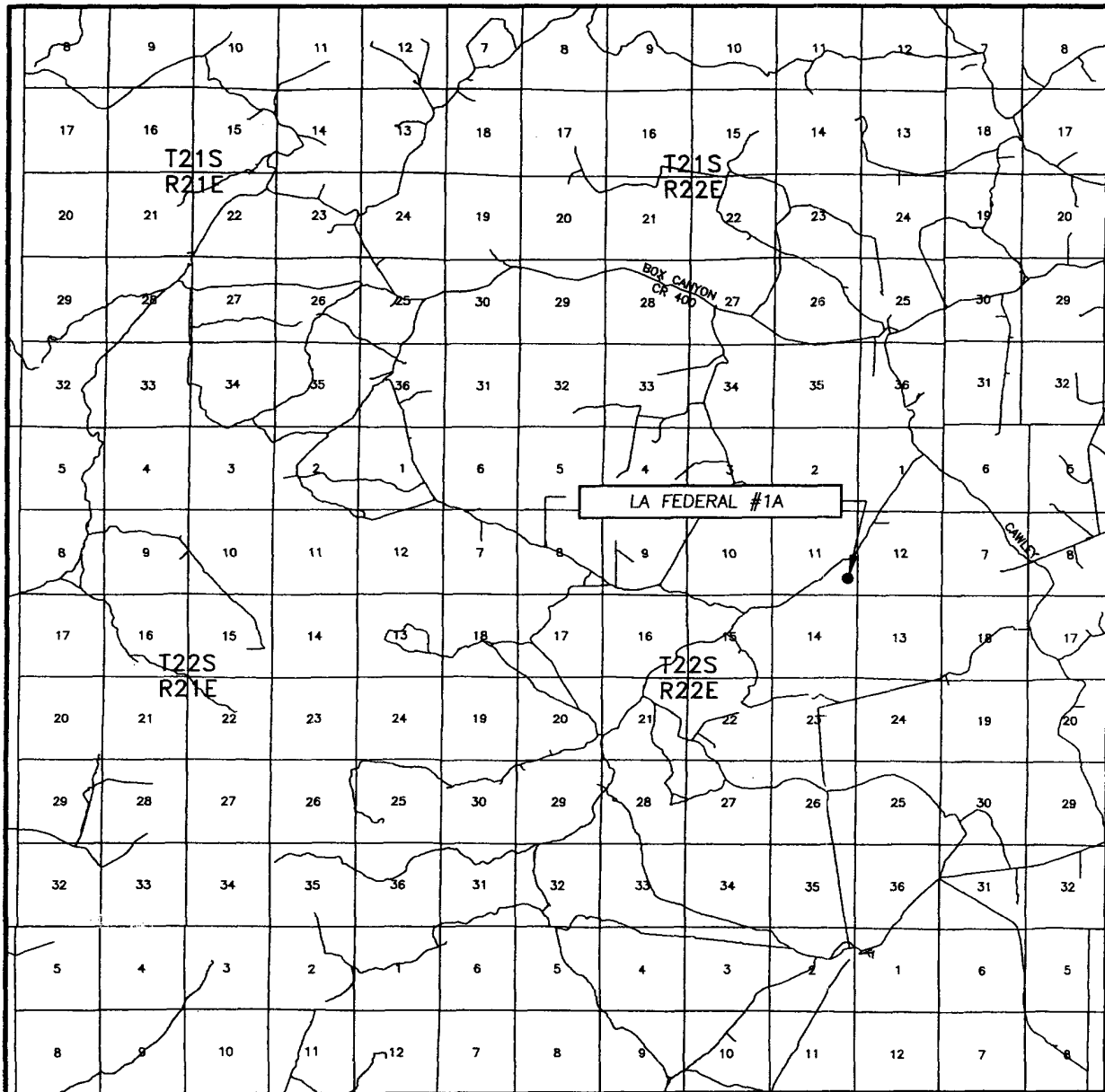
LA FEDERAL #1A WELL
 LOCATED 1976 FEET FROM THE SOUTH LINE
 AND 665 FEET FROM THE EAST LINE OF SECTION 11,
 TOWNSHIP 22 SOUTH, RANGE 22 EAST, N.M.P.M.,
 EDDY COUNTY, NEW MEXICO.



PROVIDING SURVEYING SERVICES
 SINCE 1948
JOHN WEST SURVEYING COMPANY
 412 N. DAL PASO
 HOBBS, N.M. 88240
 (505) 393-3117

Survey Date: 4/27/04	Sheet 1 of 1 Sheets
W.O. Number: 04.11.0470	Dr By: LA
Date: 05/03/04	Disk: CD#3
04110470	Scale: 1"=100'

VICINITY MAP



SCALE: 1" = 2 MILES

SEC. 11 TWP. 22-S RGE. 22-E

SURVEY N.M.P.M.

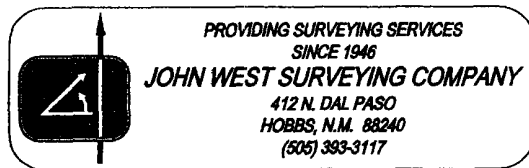
COUNTY EDDY

DESCRIPTION 1976' FSL & 665' FEL

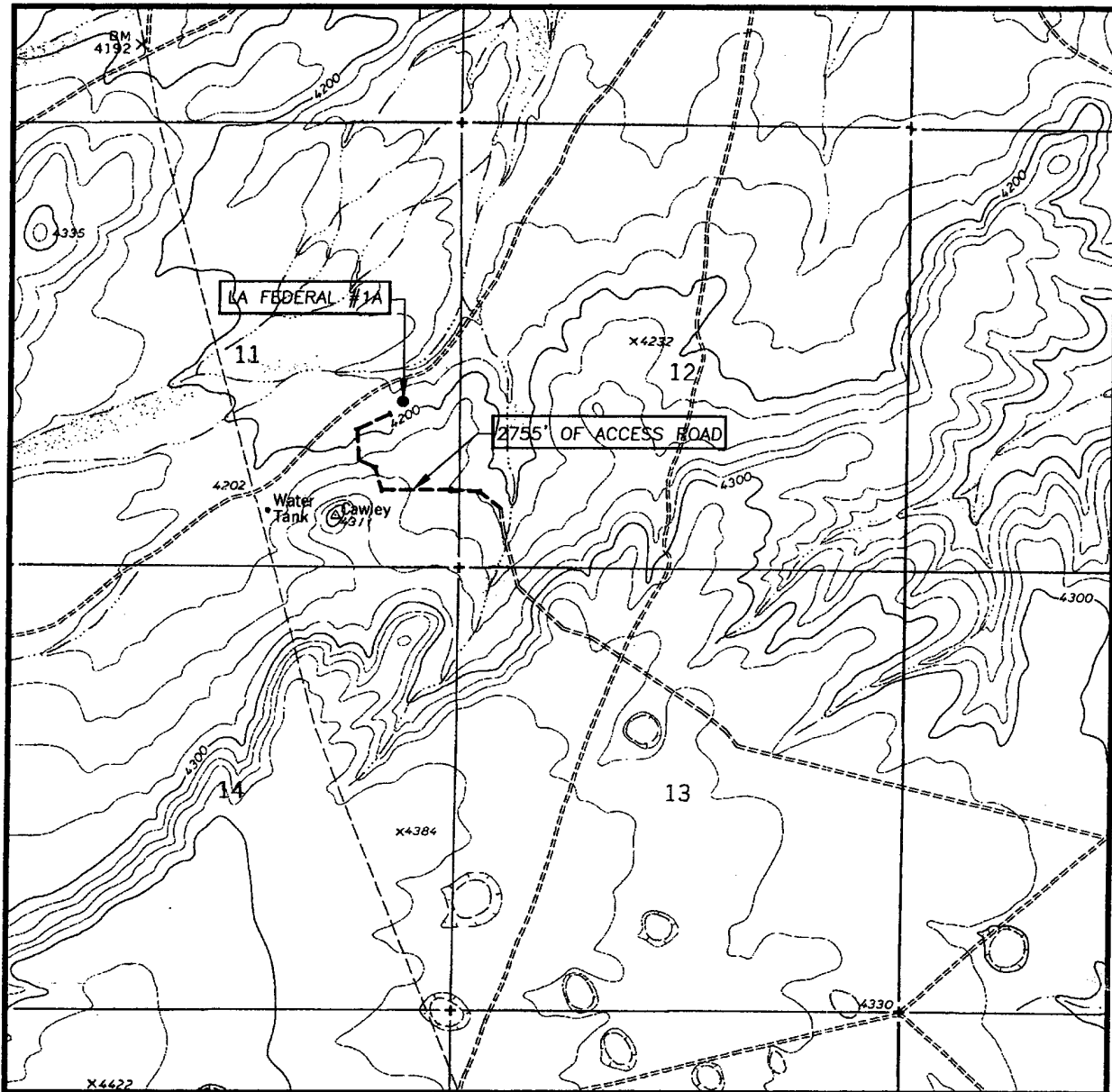
ELEVATION 4183'

OPERATOR CIMAREX ENERGY COMPANY

LEASE LA FEDERAL



LOCATION VERIFICATION MAP



SCALE: 1" = 2000'

CONTOUR INTERVAL: 20'
CAWLEY DRAW, N.M.

SEC. 11 TWP. 22-S RGE. 22-E

SURVEY N.M.P.M.

COUNTY EDDY

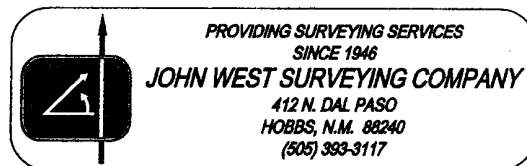
DESCRIPTION 1976' FSL & 665' FEL

ELEVATION 4183'

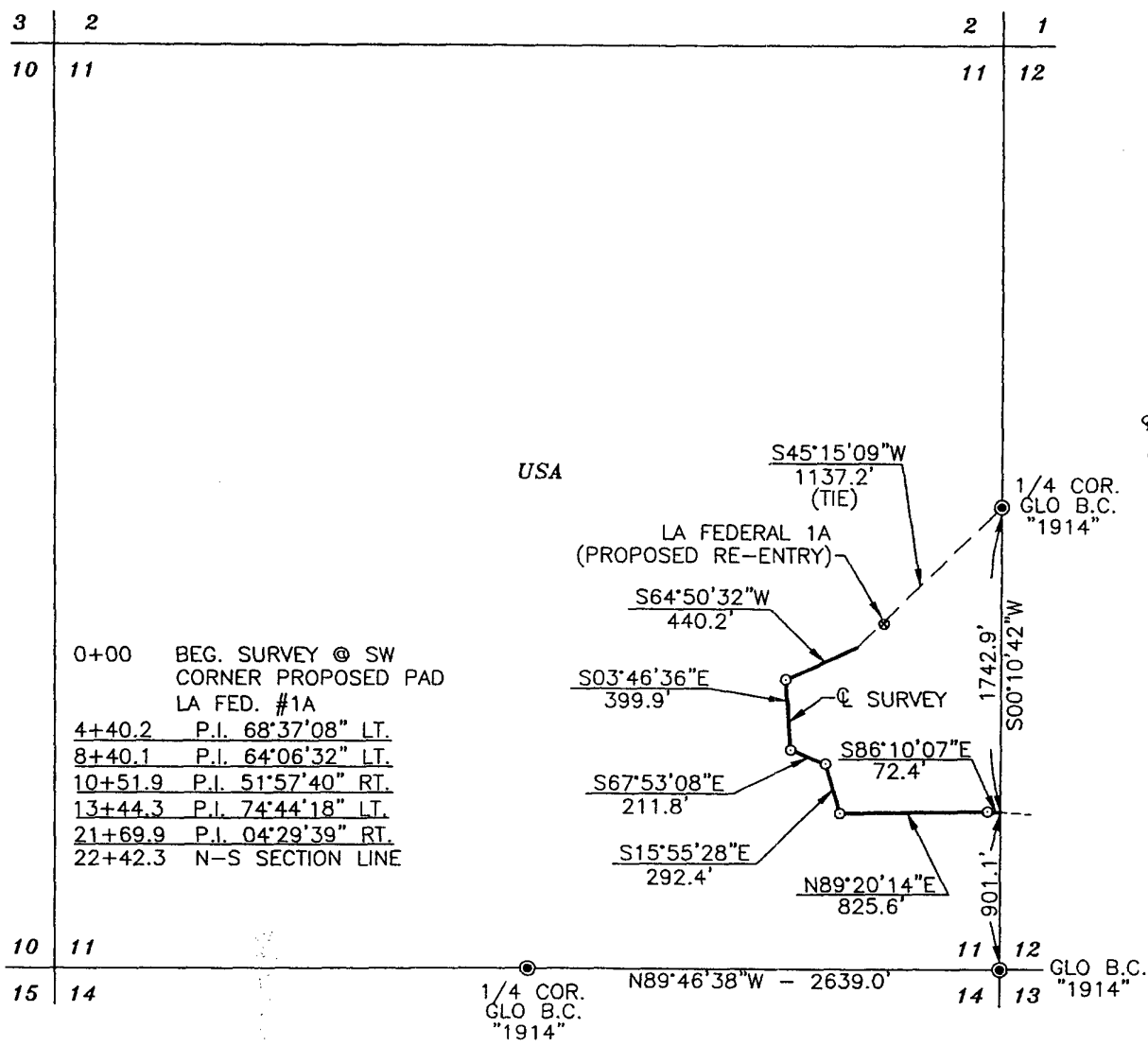
OPERATOR CIMAREX ENERGY COMPANY

LEASE LA FEDERAL

U.S.G.S. TOPOGRAPHIC MAP
CAWLEY DRAW, N.M.



SECTION 11, TOWNSHIP 22 SOUTH, RANGE 22 EAST, N.M.P.M.,
EDDY COUNTY, NEW MEXICO.

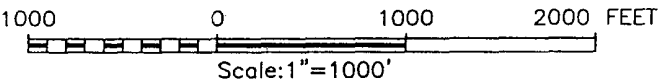


DESCRIPTION

A STRIP OF LAND 50.0 FEET WIDE AND 2242.3 FEET OR 0.425 MILES IN LENGTH CROSSING USA LAND IN SECTION 11, TOWNSHIP 22 SOUTH, RANGE 22 EAST, NMPM, EDDY COUNTY, NEW MEXICO AND BEING 25.0 FEET LEFT AND 25.0 FEET RIGHT OF THE ABOVE CENTERLINE.

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.

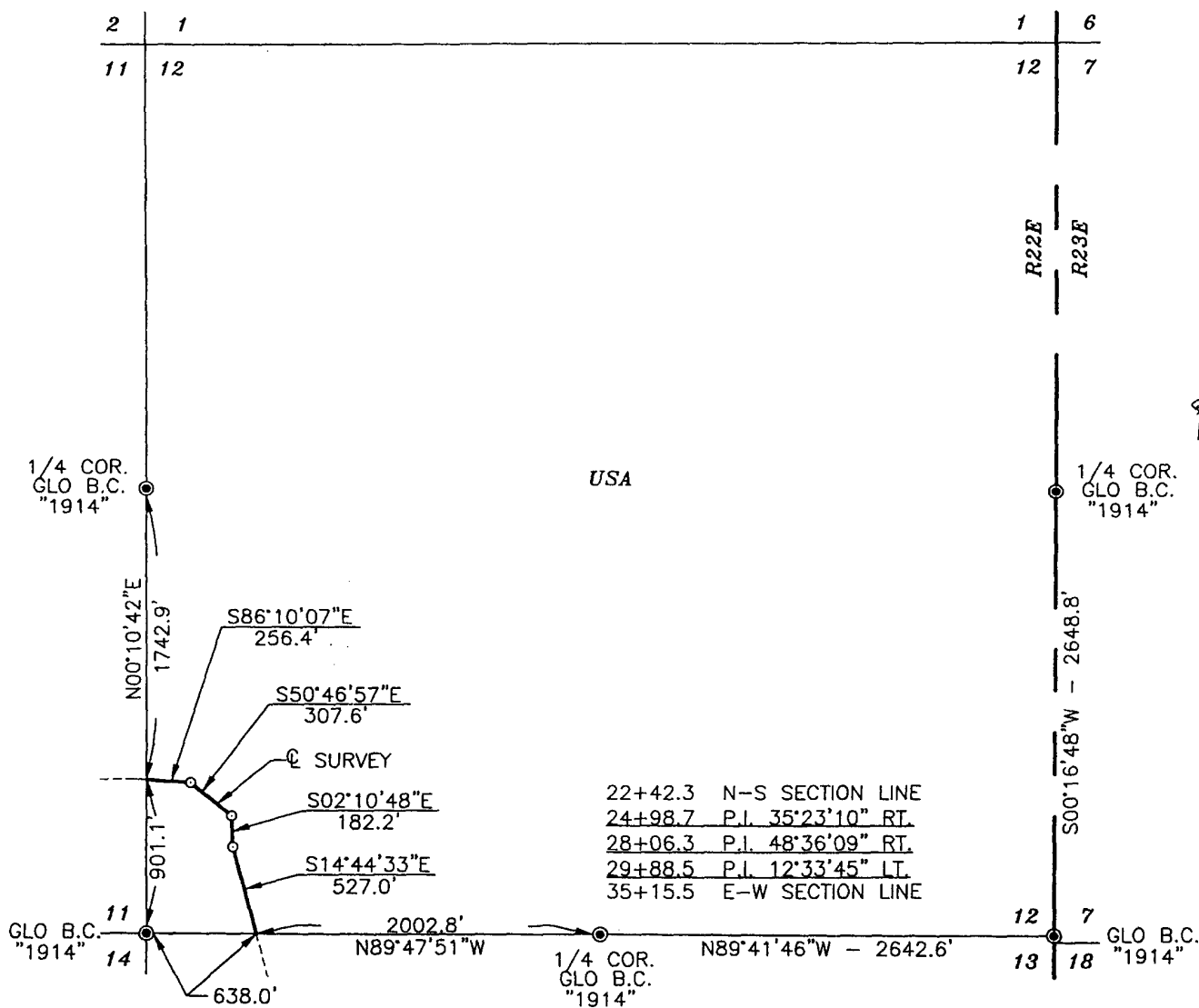
I HEREBY CERTIFY THAT I DIRECTED AND AM RESPONSIBLE FOR THIS SURVEY, THAT THIS SURVEY IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF, AND THAT THIS SURVEY AND PLAT MEET THE MINIMUM STANDARDS FOR SURVEYING IN NEW MEXICO.



GARY G. EIDSON N.M. P.C. No. 12641
12641
PROVIDING SURVEYING SERVICES SINCE 1946
JOHN WEST SURVEYING COMPANY
1121 DAL PASO
EDDY COUNTY, N.M. 88240
(505) 393-3117

CIMAREX ENERGY COMPANY			
SURVEY A PIPELINE CROSSING SECTION 11, TOWNSHIP 22 SOUTH, RANGE 22 EAST, N.M.P.M., EDDY COUNTY, NEW MEXICO			
Survey Date: 4/28/04	Sheet 1	of 1	Sheets
W.O. Number: 04.11.0470	Drawn By: L.A.		
Date: 5/04/04	DISK:CD#3	04110470	

SECTION 12, TOWNSHIP 22 SOUTH, RANGE 22 EAST, N.M.P.M.,
EDDY COUNTY, NEW MEXICO.

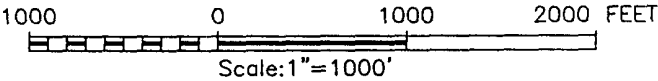
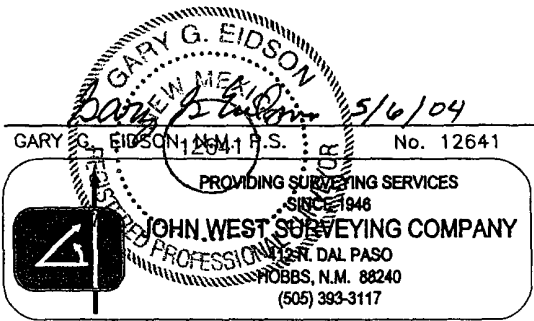


DESCRIPTION

A STRIP OF LAND 50.0 FEET WIDE AND 1273.2 FEET OR 0.241 MILES IN LENGTH CROSSING USA LAND IN SECTION 12, TOWNSHIP 22 SOUTH, RANGE 22 EAST, NMPM, EDDY COUNTY, NEW MEXICO AND BEING 25.0 FEET LEFT AND 25.0 FEET RIGHT OF THE ABOVE CENTERLINE.

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 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.

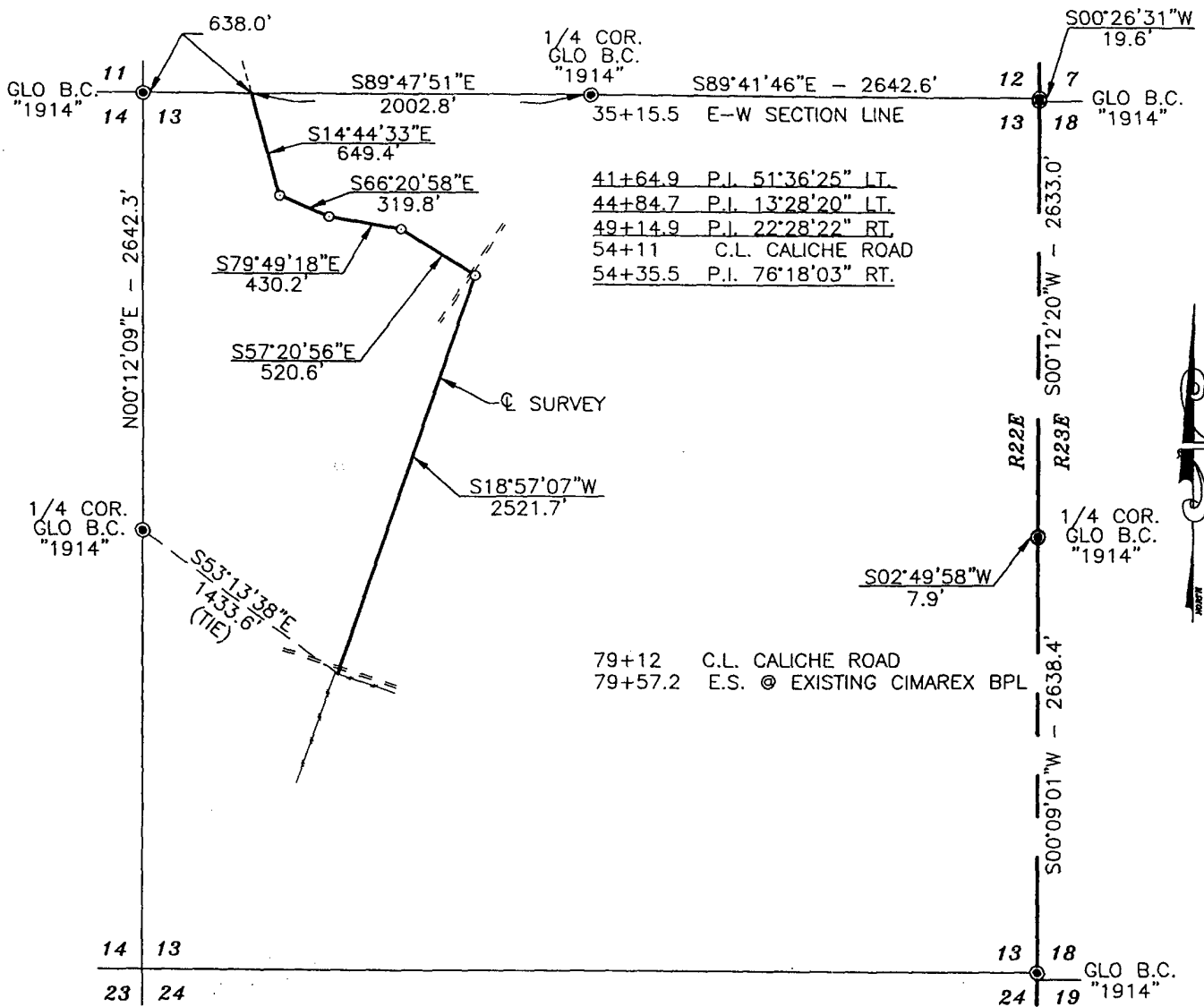


CIMAREX ENERGY COMPANY

SURVEY A PIPELINE CROSSING
SECTION 12, TOWNSHIP 22 SOUTH, RANGE 22 EAST,
N.M.P.M., EDDY COUNTY, NEW MEXICO

Survey Date: 4/28/04	Sheet 1 of 1 Sheets
W.O. Number: 04.11.0470	Drawn By: L.A.
Date: 5/04/04	DISK:CD#3
04110470	

SECTION 13, TOWNSHIP 22 SOUTH, RANGE 22 EAST, N.M.P.M.,
EDDY COUNTY, NEW MEXICO.



DESCRIPTION

A STRIP OF LAND 50.0 FEET WIDE AND 4441.7 FEET OR 0.841 MILES IN LENGTH CROSSING USA LAND IN SECTION 13, TOWNSHIP 22 SOUTH, RANGE 22 EAST, NMPM, EDDY COUNTY, NEW MEXICO AND BEING 25.0 FEET LEFT AND 25.0 FEET RIGHT OF THE ABOVE CENTERLINE.

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.

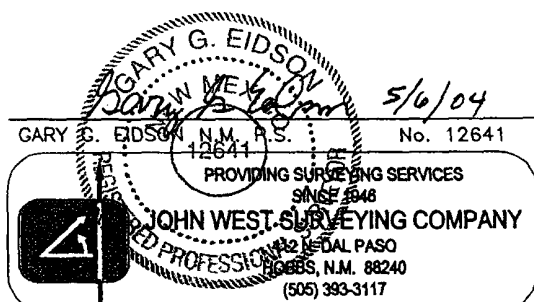
I HEREBY CERTIFY THAT I DIRECTED AND AM RESPONSIBLE FOR THIS SURVEY, THAT THIS SURVEY IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF, AND THAT THIS SURVEY AND PLAT MEET THE MINIMUM STANDARDS FOR SURVEYING IN NEW MEXICO.

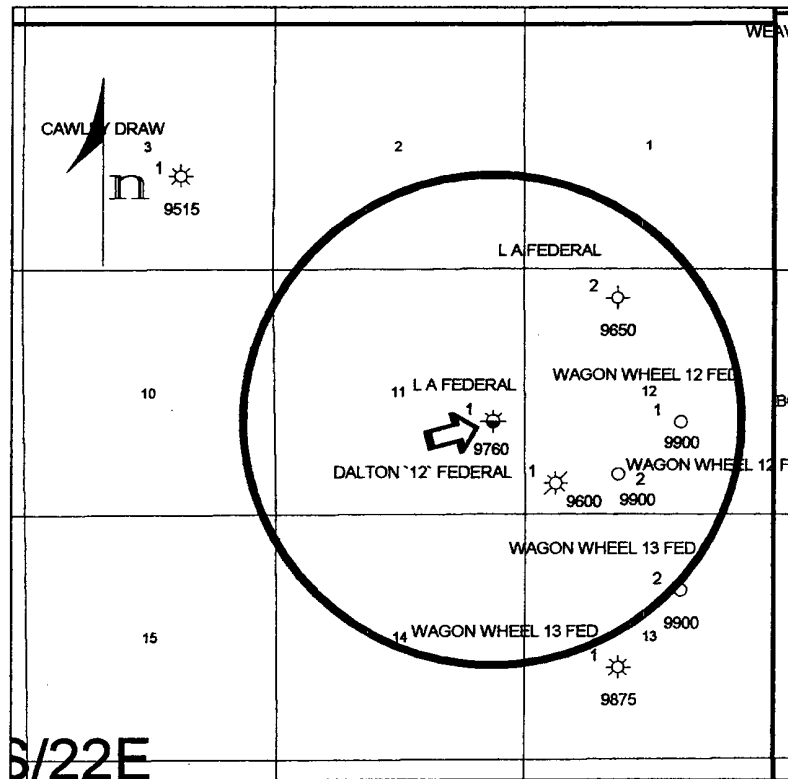
1000 0 1000 2000 FEET
Scale: 1"=1000'

CIMAREX ENERGY COMPANY

SURVEY A PIPELINE IN
SECTION 13, TOWNSHIP 22 SOUTH, RANGE 22 EAST,
N.M.P.M., EDDY COUNTY, NEW MEXICO

Survey Date: 4/28/04	Sheet 1 of 1 Sheets
W.O. Number: 04.11.0470	Drawn By: L.A.
Date: 5/04/04	DISK:CD#3
04110470	





1 inch = 4000 feet

<i>Cimarex Energy Co.</i>		
Location Plat Proposed LA Federal #1A Re-entry 1976' FSL 665' FEL Sec. 11-T22S-R22E Eddy Co, NM		
Author: Dave Rittersbacher	Scale: 1"=4000'	Date: 12 May, 2004

**TITLE PAGE/ABSTRACT/
NEGATIVE SITE REPORT
CFO/RFO**

1/03

1. BLM Report No.		2. Reviewer's Initials/Date ACCEPTED () REJECTED ()		3. NMCRIS No.: 88397	
4. Type of Report: Negative(X) Positive ()					
5. Title of Report: Class III archaeological survey of a pad, pipeline and access road for the LA Federal well No. 1A. Author(s): Ann Boone				6. Fieldwork Date(s) : from 19 May 2004 to	
8. Consultant Name & Address: Boone Archaeological Services 2030 North Canal Carlsbad, NM 88220 Direct Charge: Danny Boone Field Personnel Names: Danny Boone Phone: (505) 885-1352				7. Report Date: 21 May 2004	
				9. Cultural Resource Permit No.: 190-2920-03-E	
11. Customer Name: Cimarex Energy Company Responsible Individual: Cindy Croft Address: 15 East Street No. 1000 Tulsa, OK 74103 Phone: (918) 295-1621				10. Consultant Report No.: BAS 05-04-26	
				12. Customer Project No.:	
13. Land Status	BLM	STATE	PRIVATE	OTHER	TOTAL
a. Area Surveyed (acres)	19.24 (+/-)	0	0	0	19.24 (-/+
b. Area of Effect (acres)	12.8 (-/+)	0	0	0	12.8 (+/-)
14. a. Linear: Length: 7957.2' Width: [2,806.3' x 100' Shared pipeline/ access road] [5,150.9' x 50'] See 16 b. b. Block: 600' x 600' (See 16 b.)					
15. Location: (Maps Attached if Negative Survey) a. State: New Mexico b. County: Eddy c. BLM Office: Carlsbad d. Nearest City or Town: White's City, NM e. Legal Location: T 22S, R 22E, Sec. 11, Pad, NE, Access road/ pipeline, NE SE, SE SE; Sec. 12, SW SW; Pipeline, Sec. 13, NW NW, NE NW, SE NW, SE NW, NW SW. f. Well Pad Footages: 1976' FSL, 665' FEL g. USGS 7.5 Map Name(s) and Code Number(s): CAWLEY DRAW, New Mexico (1978) 32104-D6					

16. Project Data:

a. Records Search: Date(s) of BLM File Review: 17 May 2004

Name of Reviewer (s): Danny Boone

Date(s) of ARMS Data Review: 17 May 2004

Name of Reviewer (s): Ann Boone

Findings (see Field Office requirements to determine area to be reviewed during records search):

LA 130689 is within 500'

b. Description of Undertaking:

This is a re-entry of an older well. In the core area of the pad an area estimated to be 300' x 200' has been impacted by the older well pad and by a cattle watering / feeding station (in use) in the southwest portion. From the southwest portion of the pad survey area the access road / pipeline ROW trends west southwest then south and east to the west side of the impact area of BLM Project No. 01-710. In this shared corridor the pipeline is staked approximately 10' to the west and south of the staked access road and is a 100' wide survey for 2,755' to P.I. 28+06.3 for the pipeline. From P.I. 28+06.3 to station 54+35.5 the proposed pipeline is staked roughly 50' to the west and south side of BLM Project No. 01-1051, this area (2,629.2') was expanded 50' on the west and south side. P.I. 29+88.5 is the same point as P.I. 32+13.8 on the lateral pipeline serving the Wagon Wheel "12" Federal well No. 1 (BAS 05-04-24) and the Wagon Wheel "12" Federal well No. 2 (BAS 05-04-25). From here to EOL at Sta. 79+57.2 they are the same project. At P.I. 54+35.5 this project also junctions with the pipeline from the Wagon Wheel "13" Federal well No. 2 (BAS 05-04-23) and is the same point as P.I. 14+24.1 on that project. From P.I. 54+35.5 to the EOL at station 79+57.2 the proposed pipeline is staked parallel to and along the east side of BLM Project No. 02-36 and this survey was expanded 50' on the east side. Survey acres were estimated on this basis. Impact acres are unknown and are estimated. Mr. Brucke Boeke CFO archaeologist was consulted. Plats are attached to this report.

c. Environmental Setting (NRCS soil designation; vegetative community; etc.):

Topography: Varies from floodplain, rocky hills, ephemeral drainages to a rocky plain, Rocky Arroyo is at the extreme north end of the pad survey area.

Vegetation: Approximately 15% overall groundcover, creosotebush, yucca cactus, prickly pear cactus, cane cholla cactus, hackberry, feather dala, bear grass cactus, barberry, various grasses and other flora.

NRCS: Varies from Limestone rock land-Ector association: Rock land and very shallow, stony and rocky, loamy soils over limestone; on hills and mountains to Reagan-Upton association: Loamy, deep soils and soils that are shallow to caliche; from old alluvium

d. Field Methods: (transect intervals; crew size; time in field, ect.):

Transects: For the pad a grid of parallel transects spaced up to 15 meters apart and for the 100' wide portion of the linear one transect spaced up to 15 meters on each side of centerline and for the 50' wide portion one transect on the west, south and east side of centerline.

Crew Size: One

Time in Field: 5.0 hours.

e. Artifacts Collected (?): None

17. Cultural Resource Findings:

a. Identification and description: One Isolated Manifestation (IM)

b. Evaluation of significance of Each Resource: Data considered exhausted by recording.

18. Management Summary (Recommendations):

Archaeological clearance survey of a pad, pipeline and access road for the LA Federal well No. 1A for Cimarex Energy Company as presently staked is recommended. If cultural resources are encountered at any time all activity should cease and the BLM Archaeologist notified immediately.

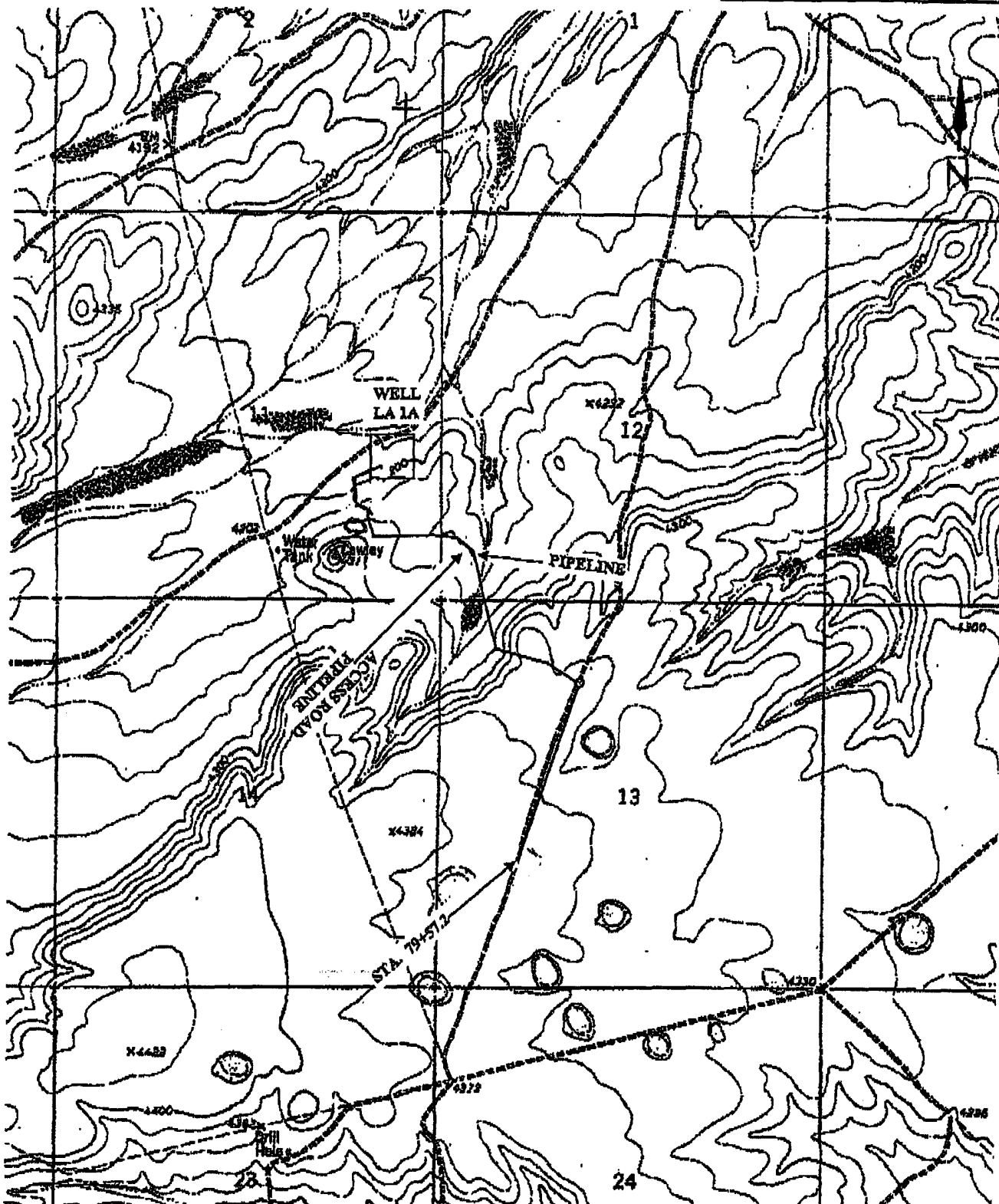
19. I certify that the information provided above is correct and accurate and meets all appreciable BLM standards.

Responsible Archaeologist

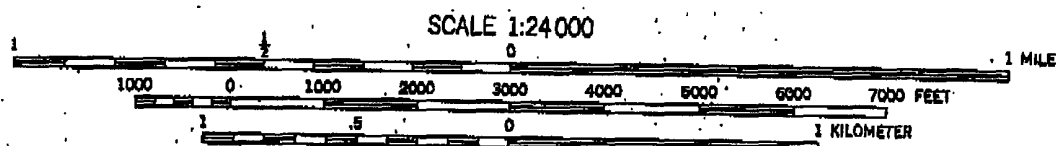
Danny Boone
Signature

Date

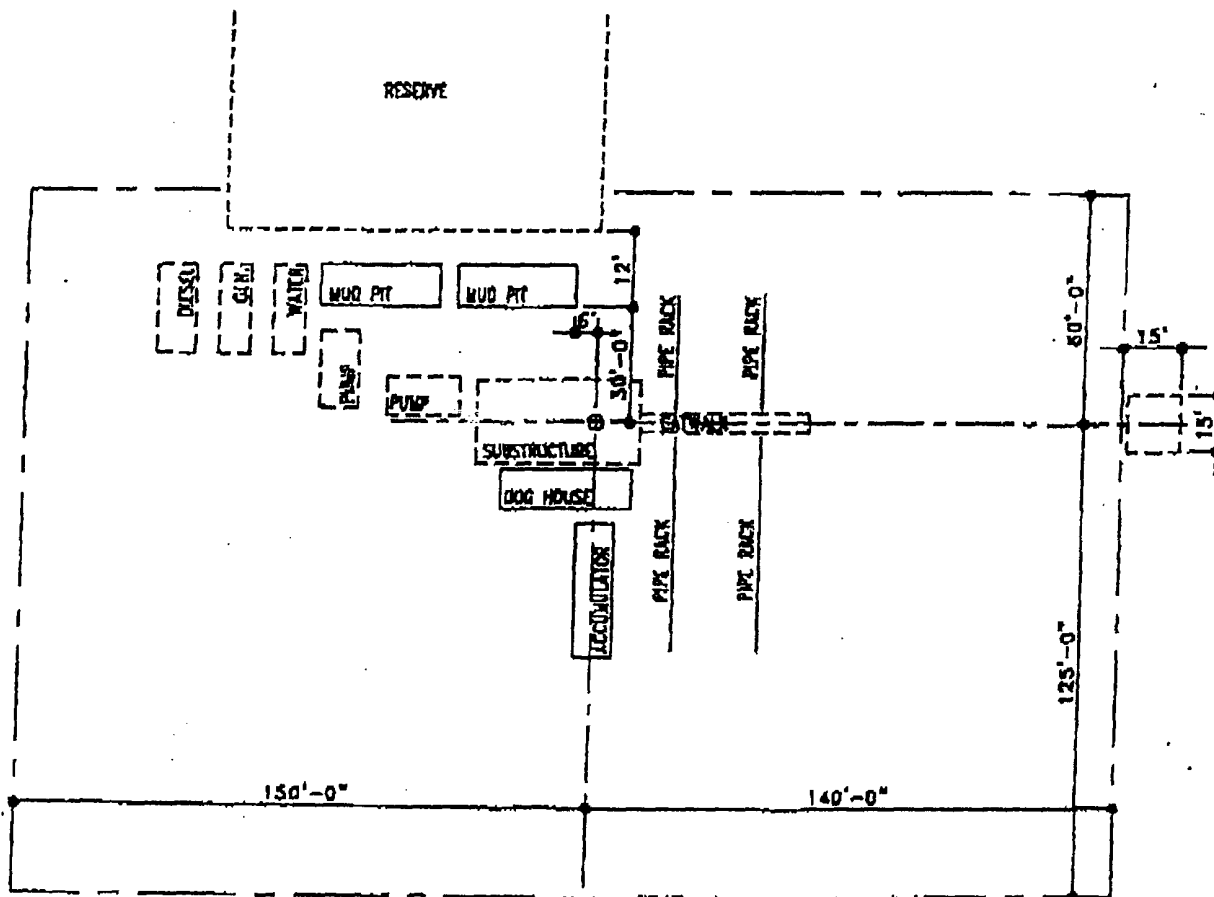
24 May 2004



Location Map of a pad, access road and pipeline for the LA Federal well No. 1A for Cimarex Energy Company in Sections 11, 12 and 13 T 22S, R22E, NMPM, EDDY County, New Mexico. Map Reference: USGS 7.5' Series; CAWLEY DRAW, New Mexico (1978) 32104-D6



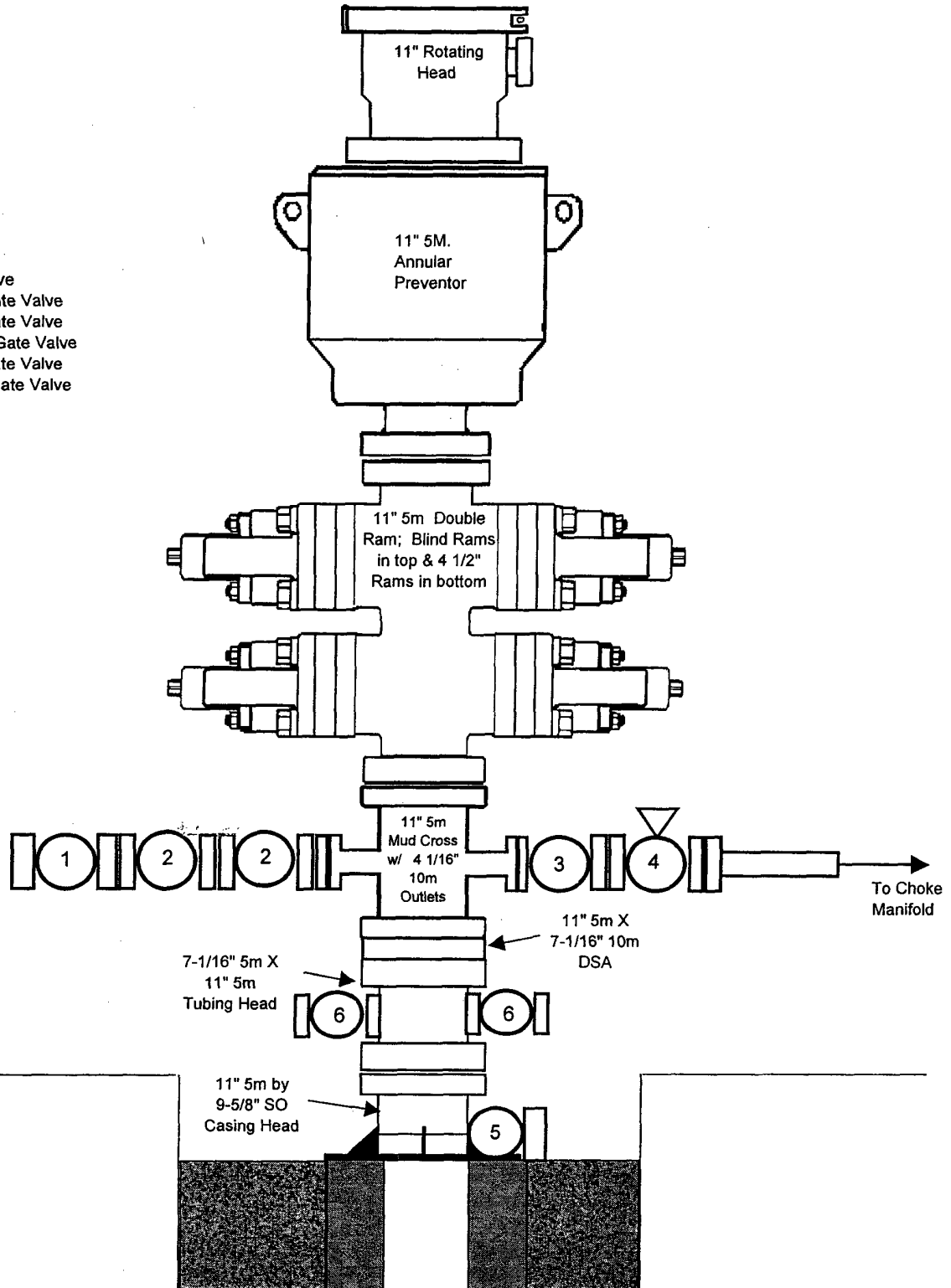
Eddy County, New Mexico.



CIMAREX ENERGY CO.
LA FEDERAL #1-A (re-entry)
Proposed Blowout Preventor Stack

Valve Nomenclature

- 1.) 2 1/16" 5m Check Valve
- 2.) 2 1/16" 5m Manual Gate Valve
- 3.) 4 1/16" 5m Manual Gate Valve
- 4.) 4 1/16" 5m Hydraulic Gate Valve
- 5.) 2 1/16" 5m Manual Gate Valve
- 6.) 1 13/16" 5m Manual Gate Valve



Cimarex Energy Co. - LA FEDERAL #1-A (re-entry)
Choke Manifold

