

15 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Submit to appropriate District Office

☐ AMENDED REPORT

APPLICATION FOR PERMIT TO DRILL, RE-ENTER, DEEPEN, PLUGBACK, OR ADD A ZONE

Operator Name and Address LCX ENERGY, LLC. 110 NORTH MARIENFELD SUITE 200 MIDLAND, TEXAS 79701		RECEIVED JUN - 8 2006 UUU-ARTESIA	OGRID Number 218885
Property Code 35786	Property Name 1824 STATE	API Number 30-015-34922	
Proposed Pool 1 UNDES RIO PENASCO-WOLFCAMP		Proposed Pool 2	

Surface Location

UL or lot no. P	Section 7	Township 18S	Range 24E	Lot Idn	Feet from the 760'	North/South line SOUTH	Feet from the 660'	East/West line EAST	County EDDY CO.
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Proposed Bottom Hole Location If Different From Surface

UL or lot no. M	Section 7	Township 18S	Range 24E	Lot Idn	Feet from the 760'	North/South line SOUTH	Feet from the 660'	East/West line WEST	County EDDY CO.
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Additional Well Information

Work Type Code N	Well Type Code G	Cable/Rotary ROTARY	Lease Type Code S	Ground Level Elevation 3848'
Multiple NO	Proposed Depth TVD-4960 MD-8728'	Formation WOLFCAMP	Contractor BIG DOG DRILLING	Spud Date WHEN APPROVED
Depth to Groundwater 100'+		Distance from nearest fresh water well 1 MI SOUTHWEST		Distance from nearest surface water Rio Penasco 1 MI SOUTHWEST
Pit: Liner: Synthetic ☒ 12 mils thick Clay ☐ Pit Volume: 18M bbls		Drilling Method: Fresh Water ☒ Brine ☒ Diesel/Oil-based ☐ Gas/Air ☐		
Closed-Loop System ☐				

Proposed Casing and Cement Program

Hole Size	Casing Size	Casing weight/foot	Setting Depth	Sacks of Cement	Estimated TOC
26"	20"	NA	40'	Redi-mix	Surface
17 1/2"	13 3/8"	48#	350'	400 Sx.	Surface
12 1/4"	9 5/8"	36#	1200'	475 Sx.	Surface
8 3/4 - 7 7/8"	5 1/2"	15.5#	MD-8728'	600 Sx.	Est. TOC 1000' FS
			TVD 4960'		

Describe the proposed program. If this application is to DEEPEN or PLUG BACK, give the data on the present productive zone and proposed new productive zone. Describe the blowout prevention program, if any. Use additional sheets if necessary.

NOTIFY OCD OF SPUD &
TIME TO WITNESS
CEMENTING OF SURFACE &
INTERMEDIATE CASING

SEE ATTACHED SHEET FOR DETAIL

Operator To verify tie-back by Temp. survey or CBL

I hereby certify that the information given above is true and complete to the best of my knowledge and belief. I further certify that the drilling pit will be constructed according to NMOCD guidelines ☒, a general permit ☐, or an (attached) alternative OCD-approved plan ☐.

OIL CONSERVATION DIVISION

Approved by:

BRYAN G. ARANT
DISTRICT II GEOLOGIST

Printed name: Joe T. Janica

Title:

Title: Agent

Approval Date: JUN 12 2006

Expiration Date: JUN 12 2007

E-mail Address: joejanica@valornet.com

Date: 06/07/06

Phone: 505-391-8503

Conditions of Approval Attached ☐

LCX ENERGY, LLC
110 N. Marienfeld St., Suite 200
Midland, TX 79701
April 26, 2006

**Horizontal Drilling Procedure
Abo Wildcat Horizontals
(Eddy Co., NM)**

1. Drill 26" hole to 40'. Set 40' of 20" conductor pipe and cement to surface with Redi-mix.
2. Drill 17-1/2" hole to 350'.
3. Drill 12-1/4" hole to 1200'. Run and set 1200' of 9-5/8" 36# J-55 ST&C casing. Cement with 375 sx of 35/65 Poz/C + 5% NaCl + 6% Bentonite, tail in with 100 sx. of Class "C" cement + 2% CaCl, circulate cement to surface.
4. Drill 7-7/8" or 8-3/4" hole to approx. 5000'. Set cement kick-off plug from TD to approx. 4400 ft with 150 sx H + 0.5% dispersant.
5. Dress cement top to desired kick-off point. Drill 7-7/8" curve and land lateral in pay zone (approx. 4900 ft TVD). Pickup lateral drilling assembly with an 8-3/4" or 7-7/8" bit and drill a +/-4000' lateral to 660' from lease line (approx. 4000 ft vertical section).
6. Run and set 5-1/2" 17# N80 or stronger production casing. Cement 5-1/2" with acid soluble cement through the lateral and 400 sx 50/50 Poz/C + 10% gel and tail in with 200 sx C + 200% CaCO₃ (acid soluble cement) + fluid loss additive + retarder (as required), attempting to bring top of cement to 1,000'.

Contingency Strings:

If lost circulation occurs in the surface hole:

- 2a. Run and set 350' of 13-3/8" 48# H-40 ST&C casing. Cement with 200 sx 35/65 Poz/C + 6% gel and tail in with 200 sx of Class "C" cement + 2% CaCl, circulate cement to surface.

If hole conditions dictate running a 7" contingency string in the 8-3/4" hole :

- 4a. Run approx. 5100 ft 7" 26# J55 or stronger casing to TD. Cement with 700 sx class 'C' cement + add's attempting bringing TOC to approx. 1,000 ft. This may be done in the vertical pilot hole or at the end of the 8-3/4" curve section.
- 4b. Run whipstock and cut a window in the 7" casing (or drill out with 6-1/8" BHA if 7" set at end of curve). Drill to TD.
- 5a. Step 5 will be omitted.
- 6a. Run and set approximately 4400 ft 4-1/2" 11.6# N/L80 liner from TD to approximately 200' above the window/7" casing shoe. Cement with approx. 110 sx C + 200% CaCO₃ (acid soluble cement) + add's attempting to bring TOC above liner top.

FRESH WATER WILL BE USED TO DRILL THE 350' HOLE AND THE 1200' HOLE.

THERE IS NO KNOWN PRESENCE OF ANY H₂S IN THIS AREA. OTHER WELLS DRILLED HAVE NOT ENCOUNTERED ANY HYDROGEN SULFIDE WHILE DRILLING.

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

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

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

DISTRICT IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy, Minerals & Natural Resources Department

OIL CONSERVATION DIVISION
1220 South St. Frances Dr.
Santa Fe, NM 87505

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

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number	Pool Code 97512	Pool Name UNDES RIO PENASCO-WOLFCAMP
Property Code	Property Name 1824 STATE	Well Number 71
OGRID No. 218885	Operator Name LCX ENERGY, LLC	Elevation 3848'

Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
P	7	18 S	24 E		660	EAST	760	SOUTH	EDDY

Bottom Hole Location If Different From Surface

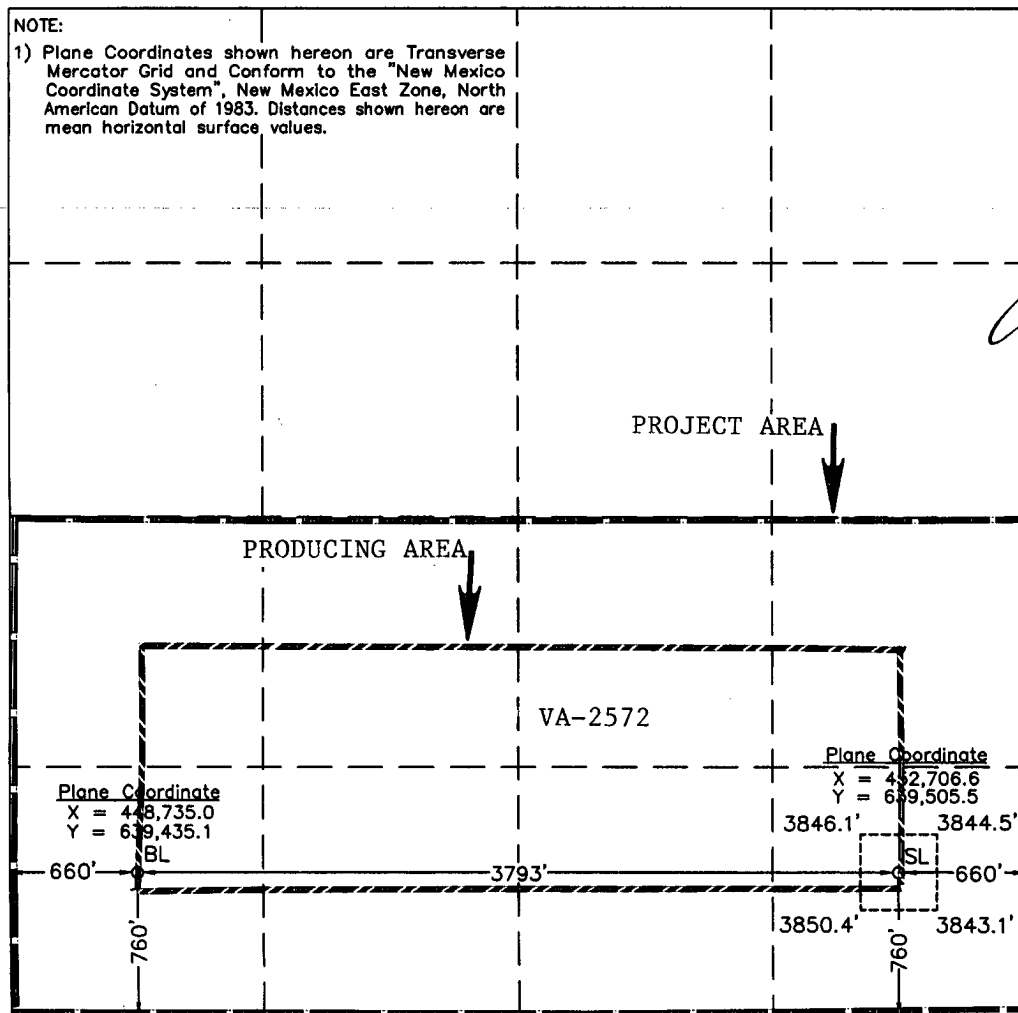
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
M	7	18 S	24 E		660	WEST	760	SOUTH	EDDY

Dedicated Acres 320	Joint or Infill	Consolidation Code	Order No.
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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

NOTE:

- 1) Plane Coordinates shown hereon are Transverse Mercator Grid and Conform to the "New Mexico Coordinate System", New Mexico East Zone, North American Datum of 1983. Distances shown hereon are mean horizontal surface values.



OPERATOR CERTIFICATION

I hereby certify the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or 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 a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.

Signature

Date 06/07/06

Joe T. Janica (Agent)

Printed Name

SURVEYOR CERTIFICATION

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

May 27, 2006

Date of Survey

Signature & Seal of Professional Surveyor

JSR
12185

W.O. Num 2006-0413

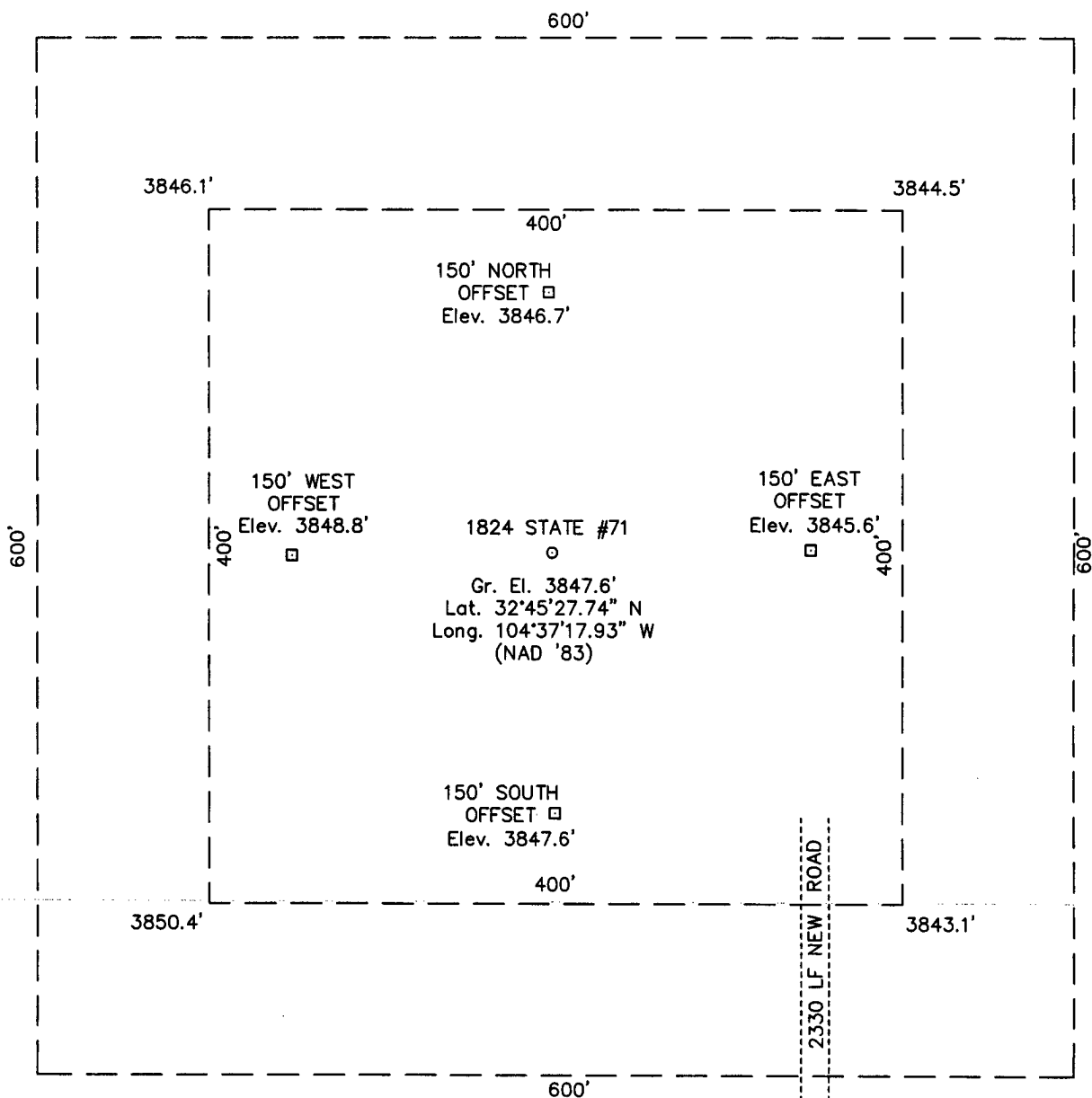
Certificate No. MACON McDONALD 12185

SECTION 7, TOWNSHIP 18 SOUTH, RANGE 24 EAST, N.M.P.M.

EDDY COUNTY

NEW MEXICO

L-2006-0413

DRIVING DIRECTIONS

Beginning at the intersection of State Highway 285 with US Highway 82 in Artesia, proceed South on State Highway 285 for approximately 6.0 miles; Thence West along paved County Road 39 approximately 8.2 miles, continuing in a Westerly direction along caliche lease road approximately 4.5 miles to a four-way intersection; Drive North approximately 0.4 miles to a two-track road to the West. Drive West along said two-track road for approximately 0.5 miles to a point from which the well location bears North 600 feet.



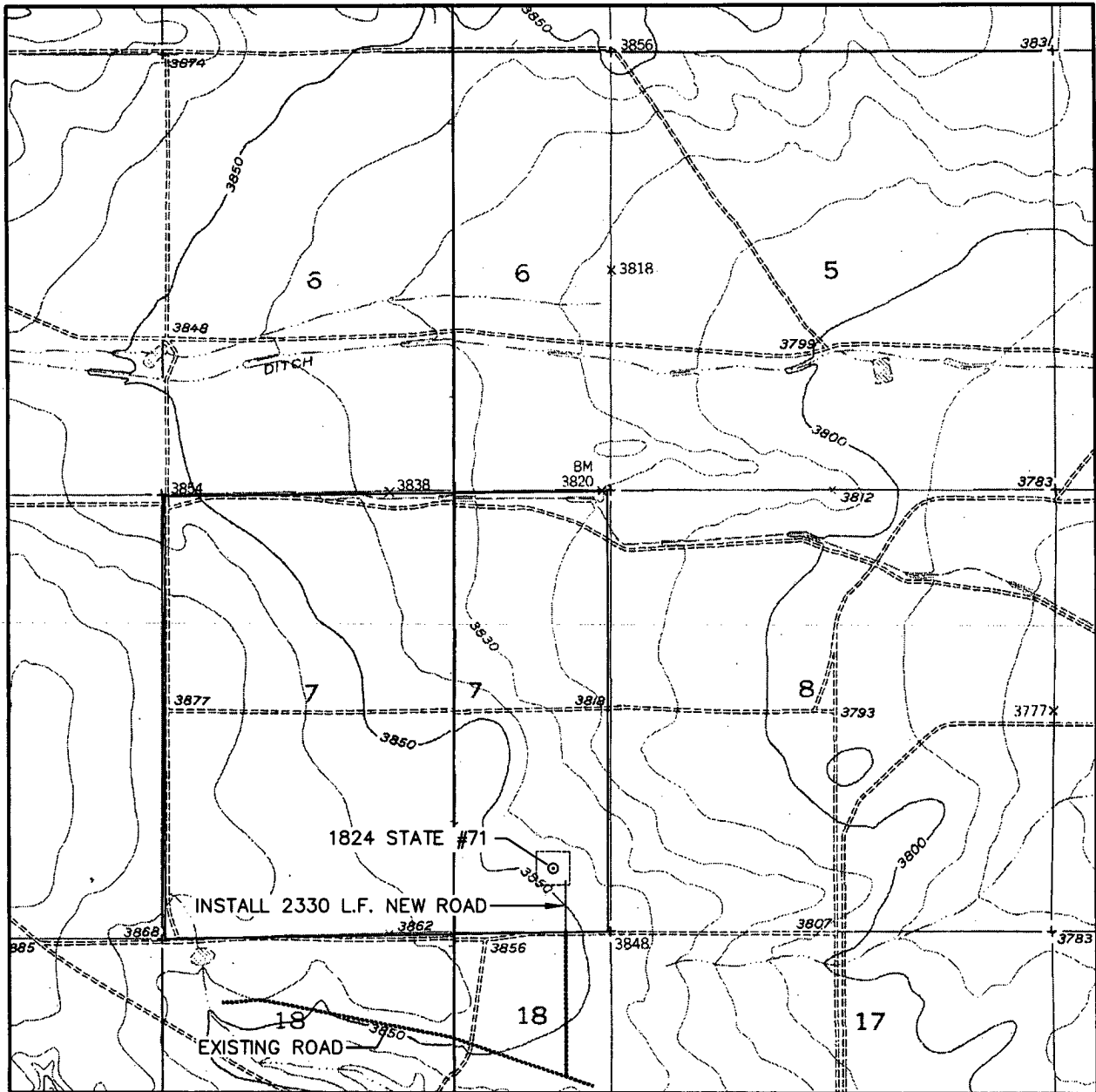
110 W. LOUISIANA, STE. 110
MIDLAND TEXAS, 79701
(432) 687-0865 - (432) 687-0868 FAX

LCX ENERGY, LLC**1824 STATE #71**

Located 760' FSL & 660' FEL, Section 7
Township 18 S, Range 24 E, N.M.P.M.
Eddy County, New Mexico

Drawn By: JSR	Date: June 1, 2006
Scale: 1"=100'	Field Book:
Revision Date:	Quadrangle: Hope SE, N.M.
W.O. No: 2006-0413	Dwg. No.: L-2006-0413

LOCATION VERIFICATION MAP



SCALE: 1" = 2000'

CONTOUR INTERVAL:
HOPE SE, NM - 10'

SEC. 7 TWP. 18-S RGE. 24-E

SURVEY N.M.P.M.

COUNTY EDDY

DESCRIPTION 660' FEL & 760' FSL

ELEVATION 3848'

OPERATOR LCX ENERGY, LLC

LEASE 1824 STATE 71

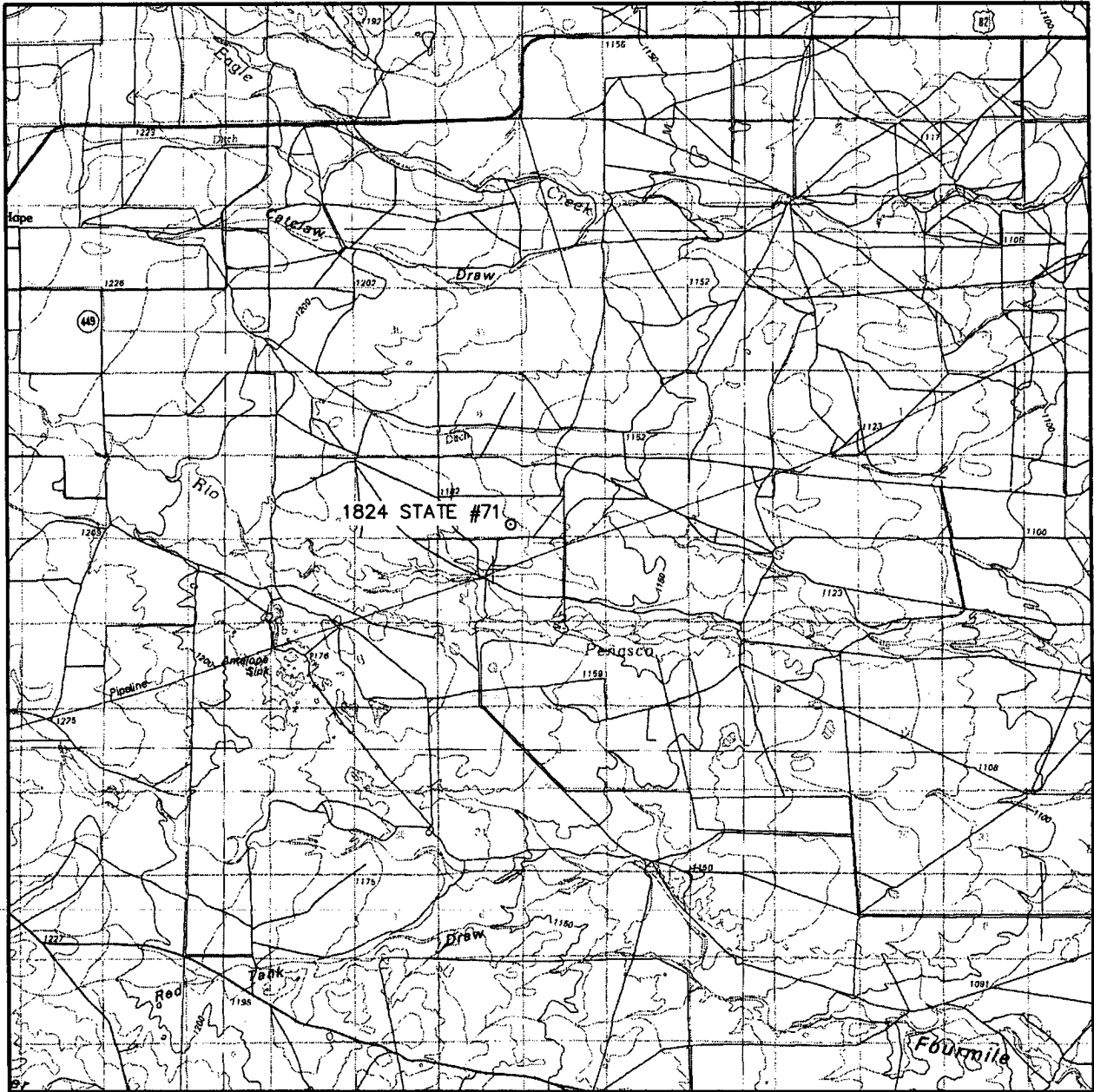
U.S.G.S. TOPOGRAPHIC MAP
HOPE SE N.M.



**WEST
COMPANY**
of Midland, Inc.

110 W. LOUISIANA, STE. 110
MIDLAND TEXAS, 79701
(432) 687-0865 - (432) 687-0868 FAX

VICINITY MAP



SCALE: 1" = 2 MILES

SEC. 7 TWP. 18-S RGE. 24-E

SURVEY N.M.P.M.

COUNTY EDDY

DESCRIPTION 660' FEL & 760' FSL

ELEVATION 3848'

OPERATOR LCX ENERGY, LLC

LEASE 1824 STATE #71



WEST
COMPANY
of Midland, Inc.

110 W. LOUISIANA, STE. 110
MIDLAND TEXAS, 79701
(432) 687-0865 - (432) 687-0868 FAX

Proposal

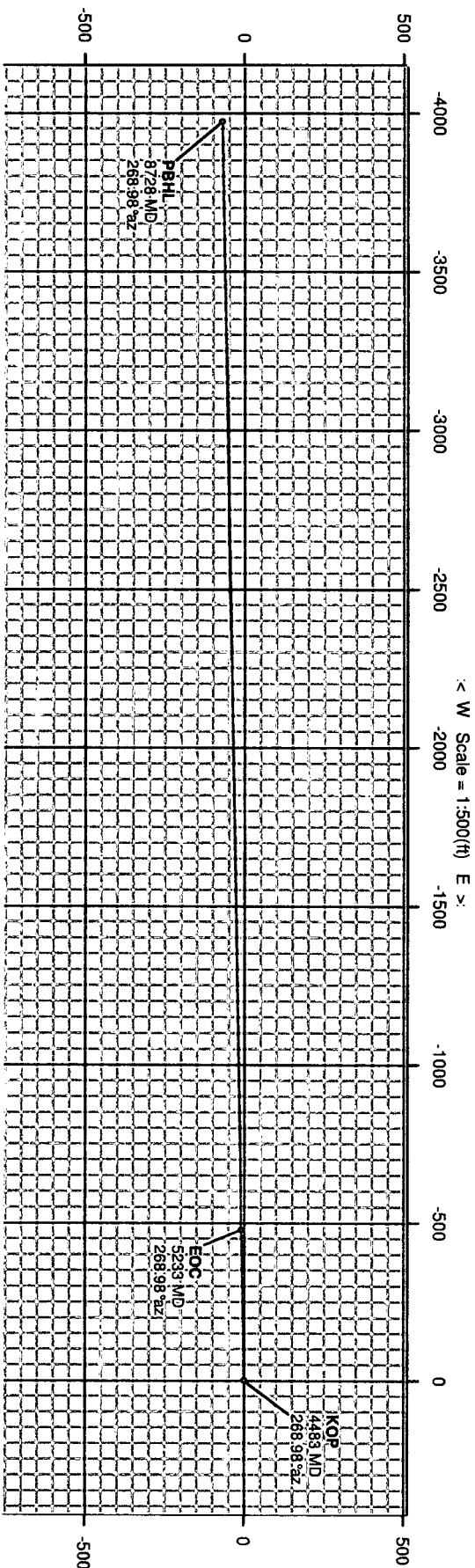
Report Date: June 2, 2006 Client: LCX Energy Field: Eddy County, NM Nad 83 Structure / Slot: 1824 State #71 / 1824 State #71 Well: 1824 State #71 Borehole: 1824 State #71 UWI/API#: Survey Name / Date: 1824 State #71_r1 / June 2, 2006 Tort / AHD / DDI / ERD ratio: 90.000° / 3972.56 ft / 5.799 / 0.801 Grid Coordinate System: NAD83 New Mexico State Planes, Eastern Zone, US Feet Location Lat/Long: N 32 45 27.737, W 104 37 17.926 Location Grid N/E Y/X: N 639505.500 rUS, E 452706.600 rUS Grid Convergence Angle: -0.15600341° Grid Scale Factor: 0.99991809	Survey / DLS Computation Method: Minimum Curvature / Lubinski Vertical Section Azimuth: 268.980° Vertical Section Origin: N 0.000 ft, E 0.000 ft TVD Reference Datum: RKB TVD Reference Elevation: 0.0 ft relative to Sea Bed / Ground Level Elevation: 0.000 ft relative to Magnetic Declination: 8.691° Total Field Strength: 49361.253 nT Magnetic Dip: 60.619° Declination Date: June 02, 2006 Magnetic Declination Model: IGRF 2005 North Reference: Grid North Total Corr Mag North -> Grid North: +8.847° Local Coordinates Referenced To: Well Head
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Comments	Measured Depth (ft)	Inclination (deg)	Azimuth (deg)	TVD (ft)	Vertical Section (ft)	NS (ft)	EW (ft)	Closure (ft)	Closure Azimuth (deg)	DLS (deg/100 ft)	Tool Face (deg)
Tie-In	0.00	0.00	268.98	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-91.02M
KOP	4482.53	0.00	268.98	4482.53	0.00	0.00	0.00	0.00	0.00	0.00	-91.02M
	4500.00	2.10	268.98	4500.00	0.32	-0.01	-0.32	0.32	268.98	12.00	-91.02M
	4600.00	14.10	268.98	4598.82	14.38	-0.25	-14.37	14.38	268.98	12.00	0.00G
	4700.00	26.10	268.98	4692.56	48.67	-0.86	-48.67	48.67	268.98	12.00	0.00G
	4800.00	38.10	268.98	4777.12	101.71	-1.80	-101.69	101.71	268.98	12.00	0.00G
	4900.00	50.10	268.98	4848.81	171.17	-3.03	-171.14	171.17	268.98	12.00	0.00G
	5000.00	62.10	268.98	4904.49	254.01	-4.50	-253.97	254.01	268.98	12.00	0.00G
	5100.00	74.10	268.98	4941.72	346.63	-6.14	-346.57	346.63	268.98	12.00	0.00G
	5200.00	86.10	268.98	4958.89	444.96	-7.89	-444.89	444.96	268.98	12.00	0.00G
EOC	5232.53	90.00	268.98	4960.00	477.46	-8.46	-477.39	477.46	268.98	12.00	180.00G
PBHL	8727.63	90.00	268.98	4960.00	3972.56	-70.41	-3971.93	3972.56	268.98	0.00	0.00G

1824 State #71

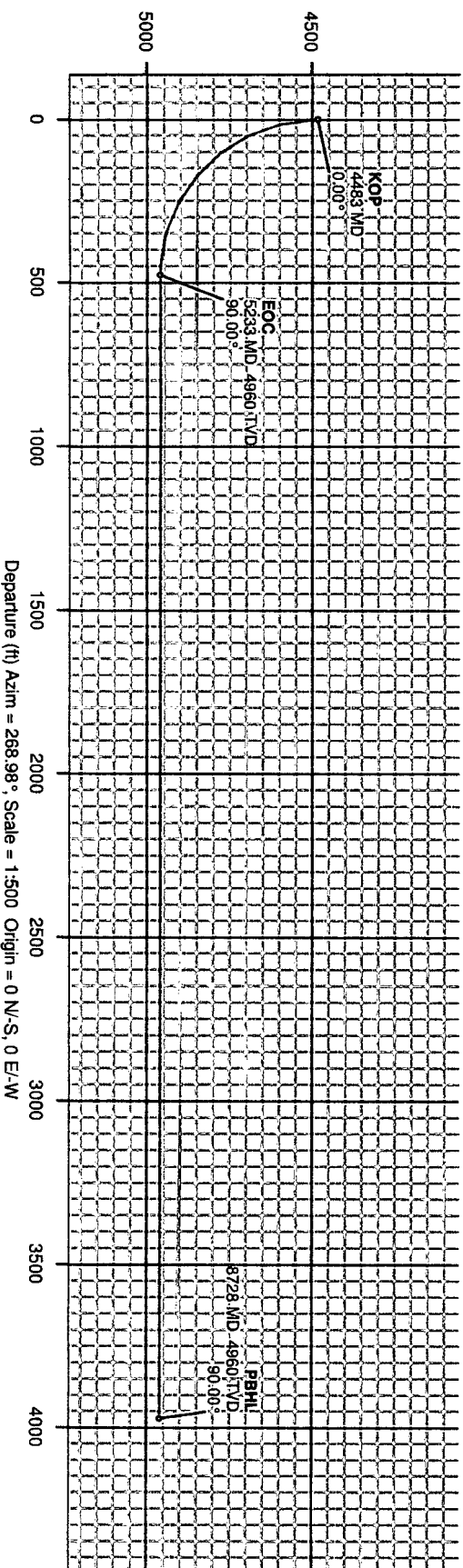
Eddy County, NM Nad 83

1824 State #71

[illegible]

Critical Point	Critical Points							
	MD	INCL	AZIM	TYD	YSEC	Ng+/Si	Eg+/Wg	DLS
Ti-in	0.00	0.00	268.98	0.00	0.00	0.00	0.00	0.00
KOP	4482.53	0.00	268.98	4482.53	0.00	0.00	0.00	0.00
BOC	5232.53	90.00	268.98	4960.00	477.46	-8.46	-477.39	12.00
PHHL	8727.53	90.00	268.98	4960.00	3972.56	-70.41	-3971.93	0.00

Directional Drilling Specialists



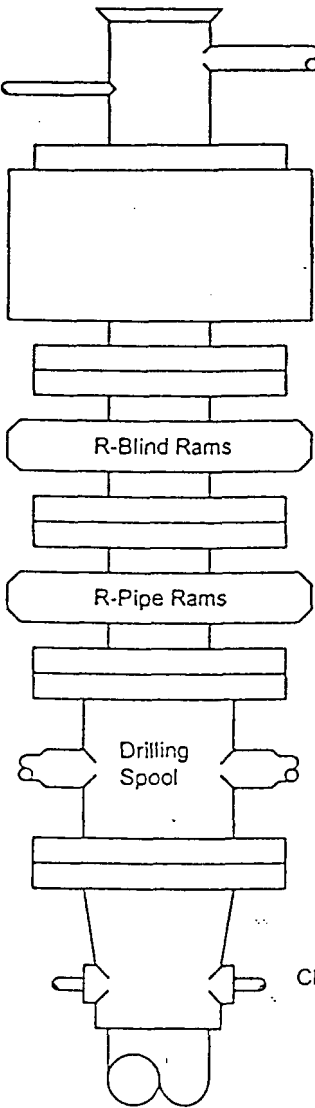
Departure (ft) Azim = 268.98°, Scale = 1:500 Origin = 0 N-S, 0 E-W

BLOWOUT PREVENTER SYSTEM

3000 PSI

Fill Line

Flow Line



900 SERIES
3000 PSI WP

Choke Manifold Assembly for 5M WP System

To Pit and/or
Mud/Gas Separator

Adjustable
Choke

Blowout Preveter
Stack Outlet

Choke Line

Bleed Line to Pit

To Pit

Adjustable Choke

