

District I
1625 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

State of New Mexico
Energy Minerals and Natural Resources

Form C-101
May 27, 2004

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 JUL 28 2005 OCD-MTICOM	² OGRID Number 218885
¹ Property Code 34965	³ Property Name 1724 OSBOURN	³ API Number 30 - 015-34247	
⁴ Proposed Pool 1 WOLFCAMP		⁴ Proposed Pool 2	

Under Eagle Creek

Surface Location									
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
0	10	17S	R24E		660'	SOUTH	1880'	EAST	EDDY CO.

⁸ Proposed 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
B	10	17S	R24E		660'	NORTH	1880'	EAST	EDDY CO.

Additional Well Information				
¹¹ Work Type Code N	¹² Well Type Code G	¹³ Cable/Rotary ROTARY	¹⁴ Lease Type Code P	¹⁵ Ground Level Elevation
¹⁶ Multiple NO	¹⁷ Proposed Depth TVD-4940' MD-8790'	¹⁸ Formation WOLFCAMP	¹⁹ Contractor BIG DOG	²⁰ Spud Date WHEN APPROVED
Depth to Groundwater 100' +		Distance from nearest fresh water well .5 Miles west		Distance from nearest surface water Cottonwood creek 2.5 Mi North
Bit: Liner: Synthetic ☒ 12 mils thick Clay ☐ Pit Volume: 18 Mbbls Drilling Method: Fresh Water ☒ Brine ☐ Diesel/Oil-based ☐ Gas/Air ☐				
Closed-Loop System ☐				

²¹ Proposed Casing and Cement Program					
Hole Size	Casing Size	Casing weight/foot	Setting Depth	Sacks of Cement	Estimated TOC
26"	20"	Conductor	40'	Redi-mix	Surface
17 1/2"	13 3/8"	48#	350'	450 Sx.	"
12 1/4"	9 5/8"	36#	1200'	475 Sx.	"
8 3/4"	7"	26#	5000'	670 Sx.	1000' From Sur.
6 1/8"	4 1/2"	11.6#	MD-8790' TVD4940'	425 Sx.	Top of liner

²² 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.

SEE ATTACHED SHEET.

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

²³ 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	
Printed name: Joe T. Janica		Approved by: <i>Jim W. Brem</i>	
Title: Agent		Title: District II Supervisor	
E-mail Address:		Approval Date: JUL 29 2005 Expiration Date: JUL 29 2008	
Date: 07/27/05	Phone: 505-391-8503	Conditions of Approval Attached ☐	

1. Drill 26" hole to 40'. Set 40' of 20" conductor pipe and cement to surface with Redi-mix.
2. Drill 17½" hole to 350'. Run and set 350' of 13 3/8" 48# H-40 ST&C casing. Cement with 400 Sx. of Class "C" cement + 2% CaCl, + ¼# Flocele/Sx. circulate cement to surface.
3. Drill 12¼" hole to 1250'. Run and set 1250' of 9 5/8" 40# J-55 ST&C casing. Cement with 500 Sx. of Class "C" cement + 2% CaCl, + 5% NaCl, + 6% Bentonite, + ¼# Flocele/Sx, tail in with 200 Sx. of Class "C" cement + 2% CaCl, + ¼# Flocele/Sx. Circulate cement to surface.
4. Drill 8 3/4" hole to 5000'. Run and set 5000' of 7" 26# L-80 LT&C casing. Cement with 500 Sx. of Class "C" cement + 6% Bentonite, + 5% Salt, + ¼# Flocele/Sx., tail in with 200 Sx. of Class "C" cement + 2% CaCl, estimate to- of cement 900' from surface.
5. Run in hole with CIBP on wireline and set at 4750'±. Run in hole with Whipstock set at 4690'± orient 360° North. Run in hole with mill and cut a window at 4690'±. Run in hole with 6 1/8" bit and bottom hole assembly to drill horizontal hole to TVD of 4940'±, MD of 8790±.
6. Run and set 4400' of 4½" 11.6# L-80 liner from 4390' to 8790'±. Cement with 425 Sx. of Class "C" Premium Plus cement + additives. Cement to top of liner.
7. Fresh water spud mud will be used to drill surface hole, Fresh water Gel and a Polymer system will be used to drill well to TD

There is no known presence of H₂S in this area, no H₂S has been encountered in any of the wells drilled in this area. The Bureau of Land Management does not have any record of H₂S being present here.

Joel Janice

DISTRICT I
1825 N. French Dr., Hobbs, NM 88240

State of New Mexico
Energy, Minerals & Natural Resources Department

Form C-102
Revised August 15, 2000
Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

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

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

DISTRICT IV
2040 South Pacheco, Santa Fe, NM 87505

OIL CONSERVATION DIVISION
2040 South Pacheco
Santa Fe, NM 87505

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number	Pool Code 96622	Pool Name -----WOLFCAMP
Property Code	Property Name 1724 OSBOURN	Well Number 101
OGRID No. 218885	Operator Name LCX ENERGY, LLC	Elevation 3731

Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
0	10	17 S	24 E		660	SOUTH	1880	EAST	EDDY

Bottom Hole Location If Different From Surface

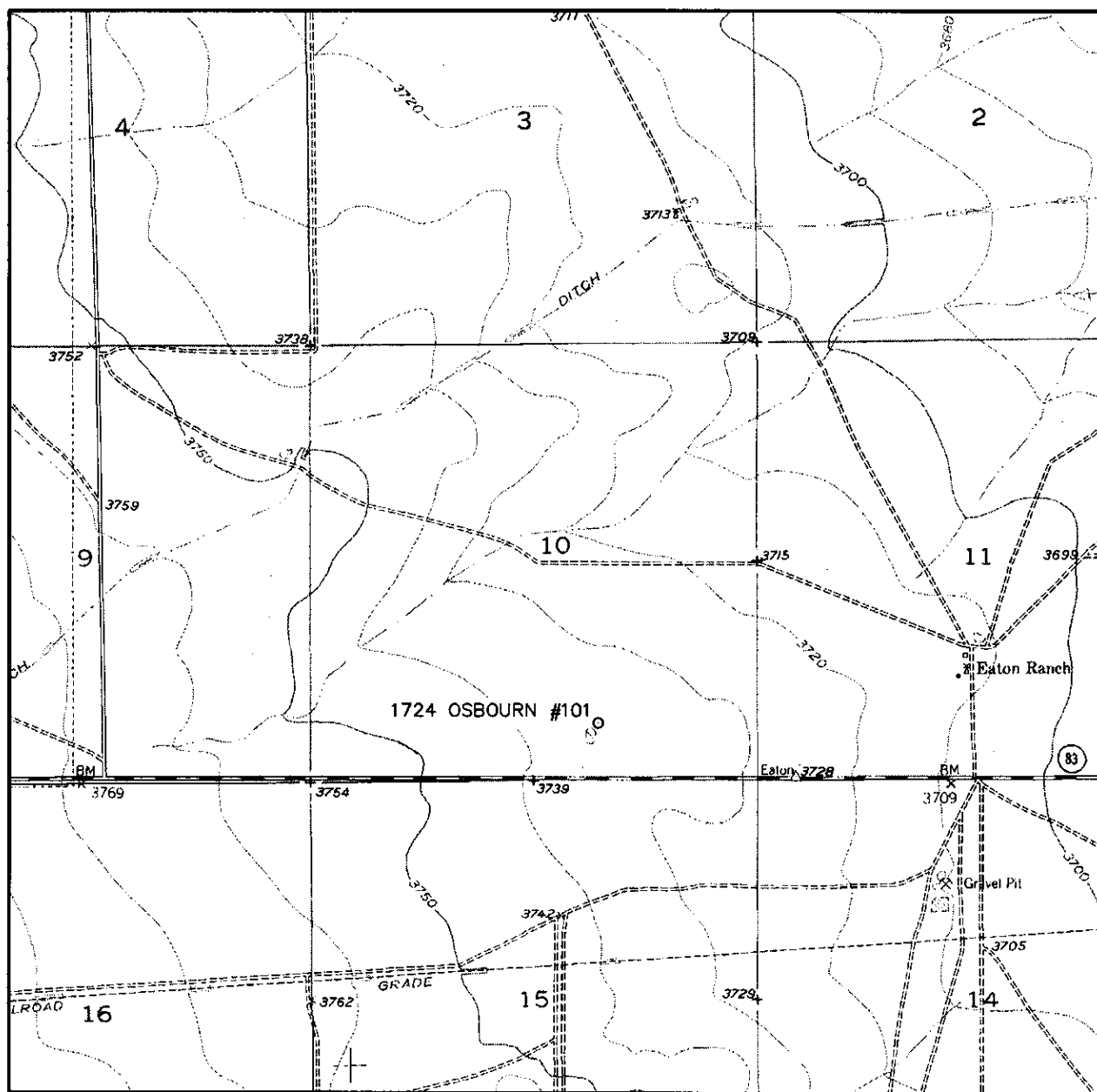
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
B	10	17 S	24 E		660	NORTH	1880	EAST	EDDY

Dedicated Acres	Joint or Infill	Consolidation Code	Order No.
320			

NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

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.	Plane Coordinate X = 47,374.1 Y = 67,102.2	OPERATOR CERTIFICATION I hereby certify the the information contained herein is true and complete to the best of my knowledge and belief. <i>Joe T. Janica</i> Signature Joe T. Janica Printed Name Agent Title 07/27/05 Date 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 upervision and that the same is true and correct to the best of my belief. July 8, 2005 Date Surveyed Signature & Seal of Professional Surveyor JSR W.O. Num. 2005-0649 Certificate No. MACON McDONALD 12185
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LOCATION VERIFICATION MAP



SCALE: 1" = 2000'

CONTOUR INTERVAL:
HOPE SE - 20'

SEC. 10 TWP. 17-S RGE. 24-E

SURVEY N.M.P.M.

COUNTY EDDY

DESCRIPTION 660' FSL & 1880' FEL

ELEVATION 3731'

OPERATOR LCX ENERGY, LLC

LEASE 1724 OSBOURN #101

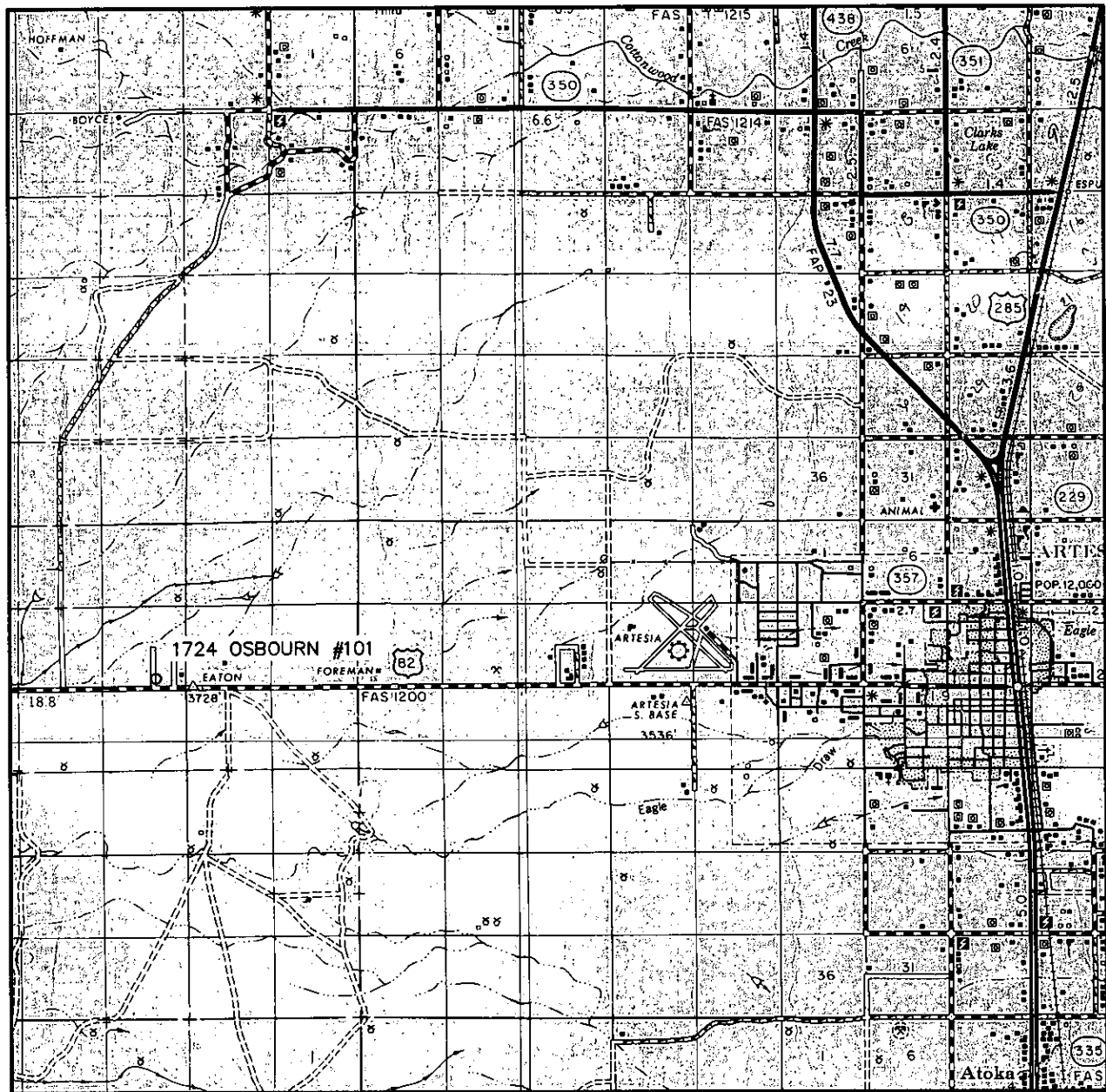
U.S.G.S. TOPOGRAPHIC MAP
HOPE SE, N.M.



**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. 10 TWP. 17-S RGE. 24-E

SURVEY N.M.P.M.

COUNTY EDDY

DESCRIPTION 660' FSL & 1880' FEL

ELEVATION 3731'

OPERATOR LCX ENERGY, LLC

LEASE 1724 OSBOURN #101



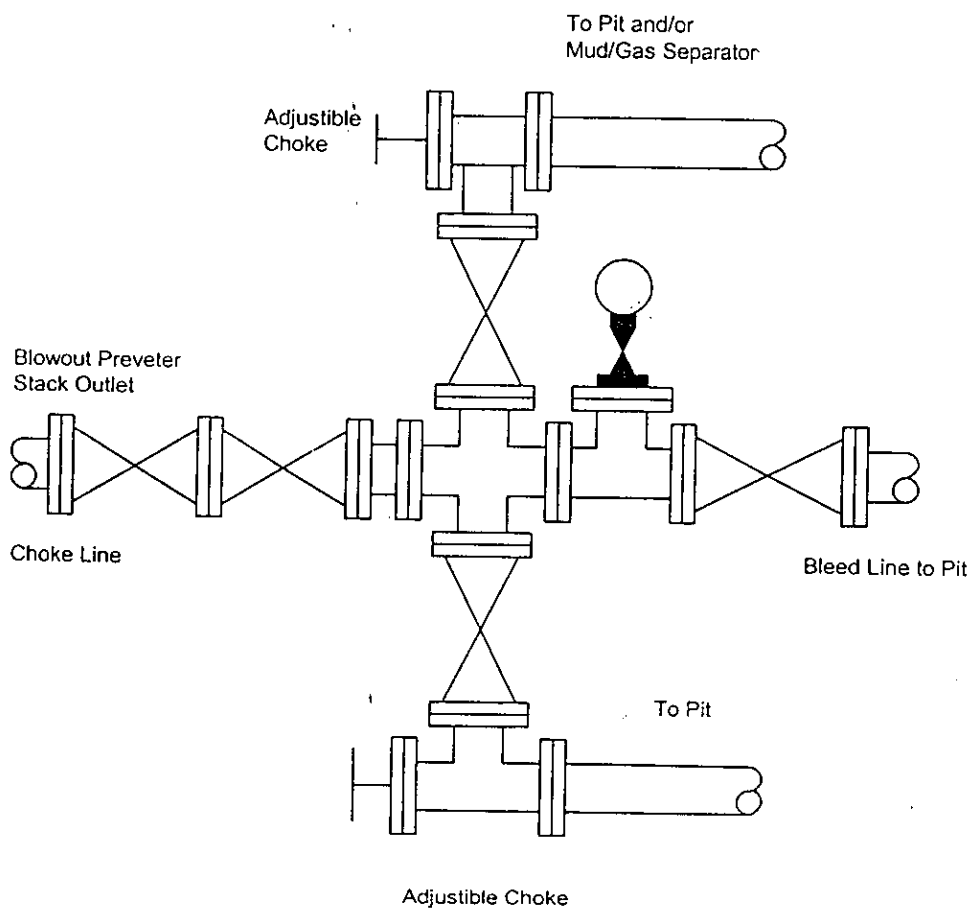
**WEST
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of Midland, Inc.

110 W. LOUISIANA, STE. 110
MIDLAND TEXAS, 79701
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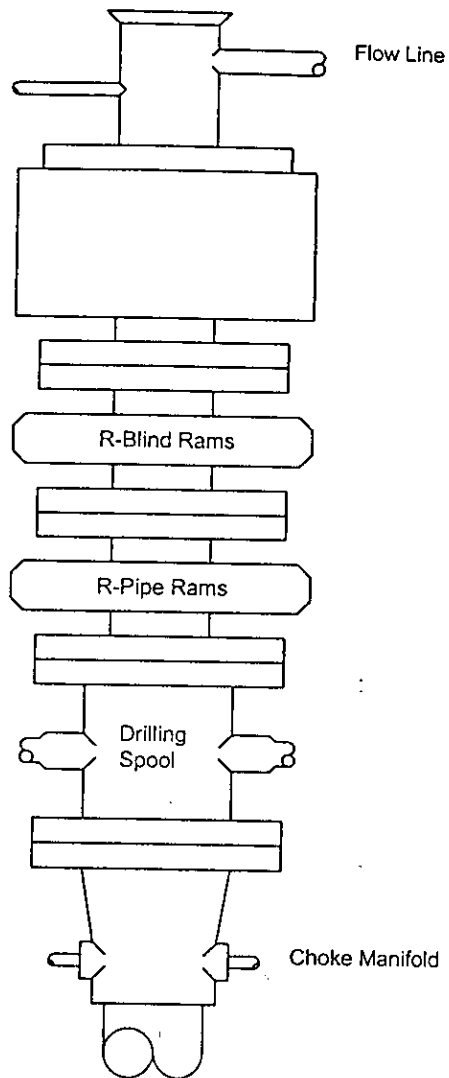
BLOWOUT PREVENTER SYSTEM

3000 PSI

Choke Manifold Assembly for 5M WP System



Fill Line



900 SERIES
3000 PSI WP

Proposal



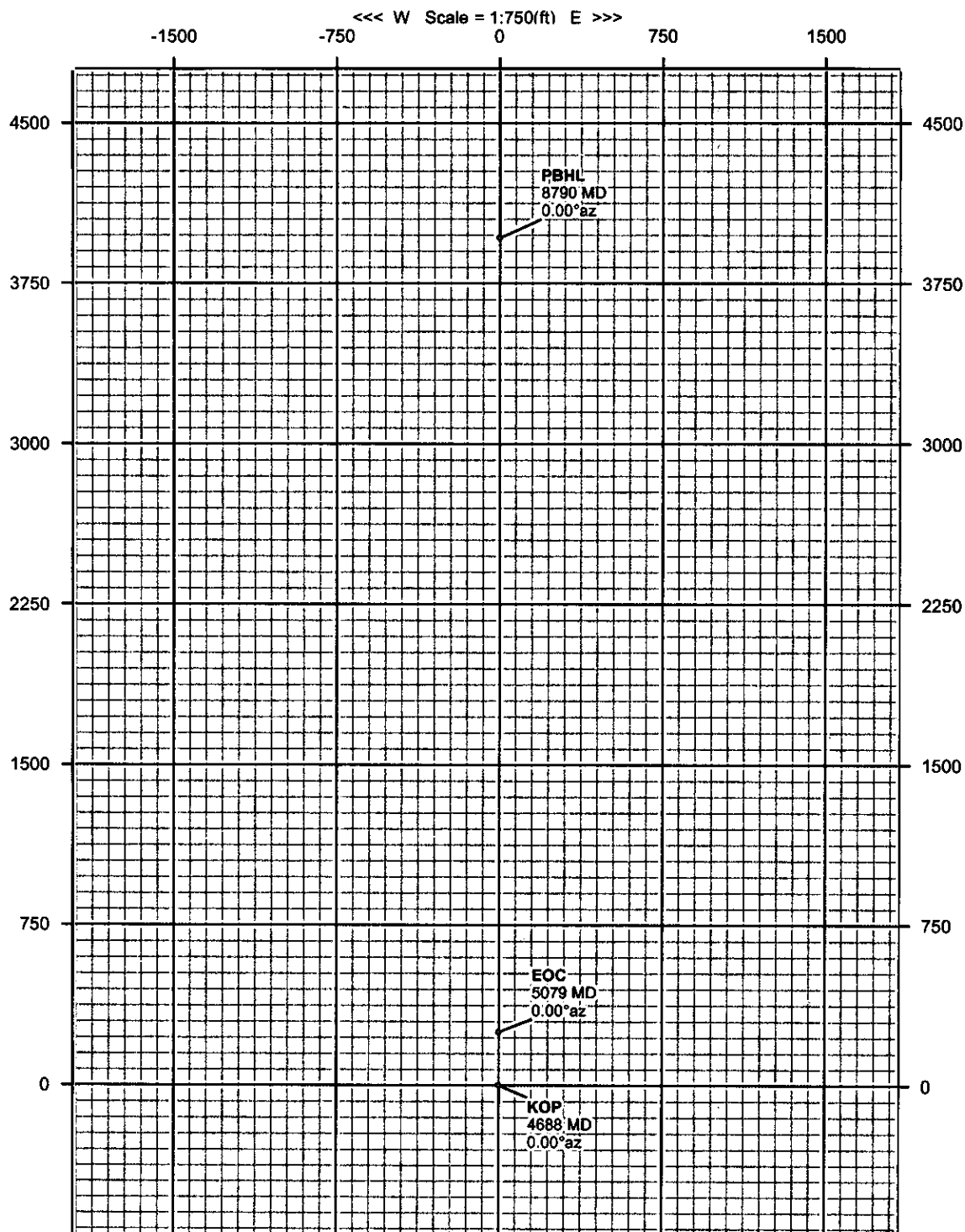
Report Date: July 26, 2005 Client: Endeavor Energy Field: Eddy County, NM Nad 83 Structure / Slot: 1724 Osbourn #101 / 1724 Osbourn #101 Well: 1724 Osbourn #101 Borehole: 1724 Osbourn #101 UWI/API#: Survey Name / Date: 1724 Osbourn #101_r1 / July 26, 2005 Tort / AHD / DDI / ERD ratio: 90.000° / 3960.00 ft / 5.802 / 0.802 Grid Coordinate System: NAD83 New Mexico State Planes, Eastern Zone, US Feet Location Lat/Long: N 32 27 58.536, W 104 17 54.240 Location Grid N/E Y/X: N 533358.051 ftUS, E 552111.259 ftUS Grid Convergence Angle: +0.01875232° Grid Scale Factor: 0.99990922	Survey / DLS Computation Method: Minimum Curvature / Lubinski Vertical Section Azimuth: 0.000° 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: 8.622° Total Field Strength: 49305.855 nT Magnetic Dip: 60.425° Declination Date: July 26, 2005 Magnetic Declination Model: IGRF 2005 North Reference: Grid North Total Corr Mag North -> Grid North: +8.603° 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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00M
KOP	4687.89	0.00	0.00	4687.89	0.00	0.00	0.00	0.00	0.00	0.00	0.00M
	4700.00	2.79	0.00	4700.00	0.29	0.29	0.00	0.29	0.00	23.00	0.00M
	4800.00	25.79	0.00	4796.25	24.80	24.80	0.00	24.80	0.00	23.00	0.00G
	4900.00	48.79	0.00	4875.28	84.98	84.98	0.00	84.98	0.00	23.00	0.00G
	5000.00	71.79	0.00	4924.52	171.25	171.25	0.00	171.25	0.00	23.00	0.00G
EOC	5079.19	90.00	0.00	4937.00	249.11	249.11	0.00	249.11	0.00	23.00	0.00G
PBHL	8790.08	90.00	0.00	4937.00	3960.00	3960.00	0.00	3960.00	0.00	0.00	0.00G

Endeavor Energy

WELL 1724 Osbourn #101 FIELD Eddy County, NM Nad 83 STRUCTURE 1724 Osbourn #101

Magnetic Parameters		Surface Location		NAD83 New Mexico State Plane, Eastern Zone, US Feet		Miscellaneous	
Model: KRF 2005	Dip: 80.425° Mag Dec: +8.622°	Date: July 26, 2006 FB: 49305.8 nT	Lat: N32 27 56.636 Lon: W104 17 54.240	Northing: 533358.05 NLS Easting: 552111.26 NLS	Grid Conv: +0.01875232° Scale Fact: 0.999992238	Shot: 1724 Osbourn #101 Plan: 1724 Osbourn #101_r1	TVD Ref: RKB (0.00 ft above) Srvy Date: Tue 11:07 AM July 26, 2006

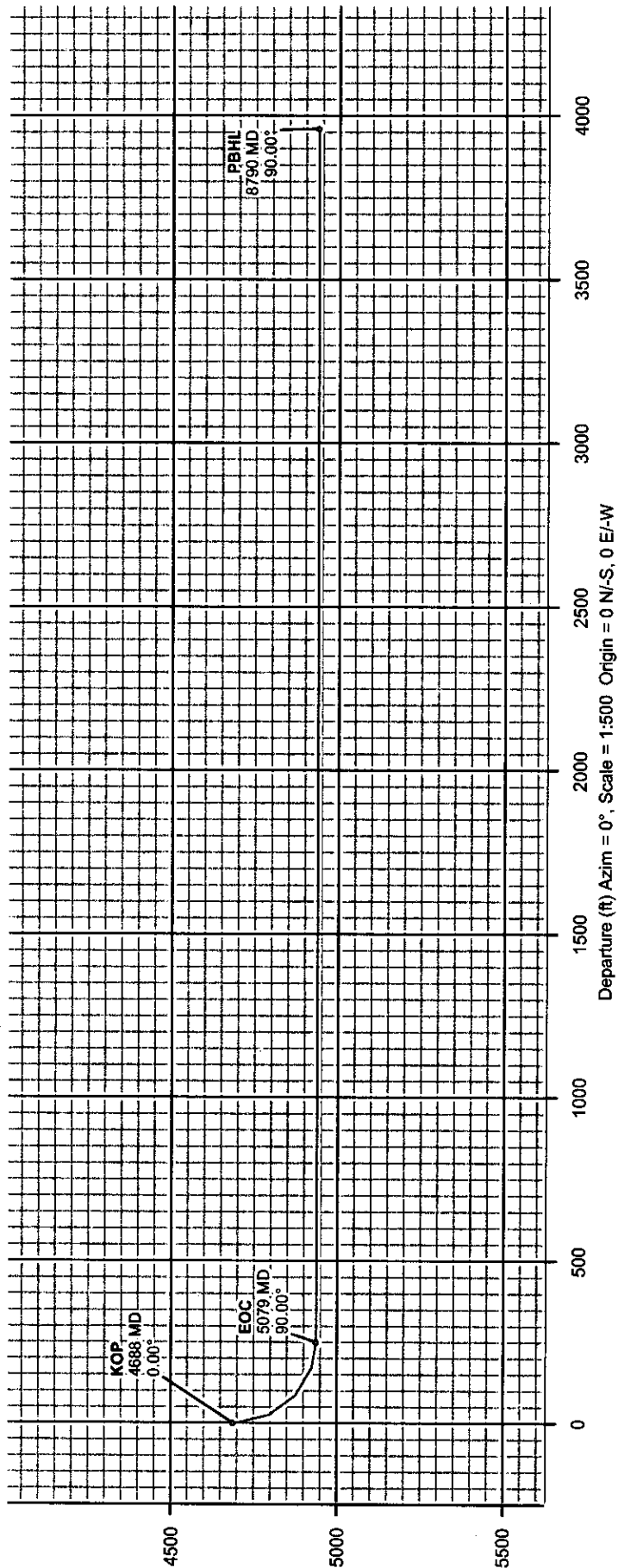


INTREPID
Directional Drilling Specialists



Endeavor Energy

WELL		1724 Osbourn #101		FIELD	Eddy County, NM Nad 83		STRUCTURE	1724 Osbourn #101	
Magnetic Parameters		Date: 01/25/2005		Over: 05/25/2005		Surface Location		MAGNETIC New Mexico State Plane, Eastern Zone, US Feet	
Model: IGRF-2005		Dip: 90.42°		Decl: +8.62°		Lat: N32 27 56.530		Chd Convr: +0.0175232"	
		Mag Dec: +8.62°		PS: 48805.9 m		Long: W104 17 54.240		Scale Feet: 0.000002238	
						Northing: 533358.05 NUS		Miscellaneous	
						Easting: 552117.26 NUS		Sht: 1724 Osbourn #101	
								Plan: 1724 Osbourn #101 -1	
								TVD Ref: RCB (0.00 ft above)	
								Srvy Date: Tue 11/07 AM July 26 2005	



INTREPID
Directional Drilling Specialists