

1623 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 87305

State of New Mexico
Energy Minerals and Natural Resources

Form C-101
May 27, 2004

Oil Conservation Division
1220 S. St. Francis Dr.
Santa Fe, NM 87305

Submit to appropriate District Office

☐ AMENDED REPORT

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

S	Operator Name and Address LCX ENERGY, LLC. 110 NORTH MARIENFELD SUITE 200 MIDLAND, TEXAS 79701		2 OGRID Number 218885
	2 API Number 30 - 015-35277		
Property Code 36201		Property Name COLLINS RANCH STATE UNIT	Well No. 4
Proposed Pool 1 UNDES. GOPHER		Proposed Pool 2	

Surface Location									
UL or lot no. C	Section 32	Township 17S	Range 24E	Lot idn	Feet from the 660'	North/South line NORTH	Feet from the 1880'	East/West line WEST	County EDDY

3 Proposed Bottom Hole Location If Different From Surface									
UL or lot no. N	Section 32	Township 17S	Range 24E	Lot idn	Feet from the 660'	North/South line SOUTH	Feet from the 1880'	East/West line WEST	County EDDY

Work Type Code N		Well Type Code G		Cable/Rotary ROTARY	Lease Type Code S VA-2567	Ground Level Elevation 3846'
Multiple NO		Proposed Depth MD-8666 TVD-4960'		Formation WOLFCAMP	Contractor BIG DOG DRILLING	Spud Date WHEN APPROVED
Depth to Groundwater 100'+		Distance from nearest fresh water well 2 MI SOUTHEAST		Distance from nearest surface water CAT CLAW DRAW .75 MI. North		
Liner: Synthetic ☒ 12 mils thick Clay ☐ Pit Volume: 18Mbbbls Drilling Method: Closed-Loop System ☐ Fresh Water ☒ Brine ☒ Diesel/Oil-based ☐ Gas/Air ☐						

21 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
17½"	13 3/8"	48#	350'	450 Sx.	Surface
12½"	9 5/8"	36#	1200'	475 Sx.	Surface
3 3/4"-7 7/8"	5½"	17#	MD-8666'	600 Sx.	* Est TOC 1000'
			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.

* Verify by CBL or Temp Survey

SEE ATTACHED SHEET

NOTIFY OCD OF SPUD & TIME
TO WITNESS CEMENTING OF
SURFACE CASING &
Intermediate casing

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: BRYAN G. ARANT	
Title: Agent		DISTRICT II GEOLOGIST	
E-mail Address: joejanica@valornet.com		Approval Date: DEC 15 2006 Expiration: DEC 15 2007	
Date: 12/11/06	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.

JS

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
811 South First, Artesia, NM 88210

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

DISTRICT IV
2040 South Pacheco, Santa Fe, NM 87505

State of New Mexico
Energy, Minerals and Natural Resources Department

Form C-102
Revised March 17, 1999

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

OIL CONSERVATION DIVISION

2040 South Pacheco
Santa Fe, New Mexico 87504-2088

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number	Pool Code 77660	Pool Name UNDES. GOPHER ; Wolfcamp
Property Code	Property Name COLLINS RANCH STATE UNIT	Well Number 4
OGRID No. 218885	Operator Name LCX ENERGY	Elevation 3846'

Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
C	32	17 S	24 E		660	NORTH	1880	WEST	EDDY

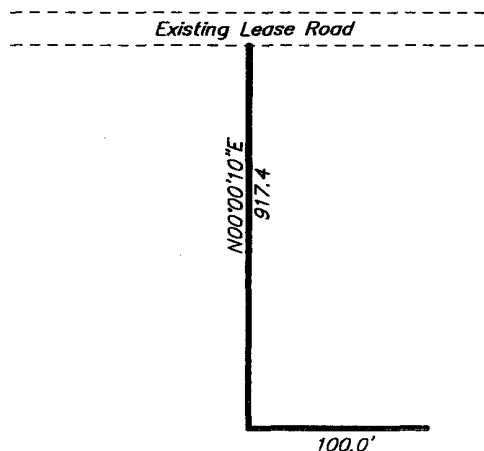
Bottom Hole Location If Different From Surface

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
N	32	17 S	24 E		660	SOUTH	1880	WEST	EDDY
Dedicated Acres 320	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

	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 12/11/06 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 supervision, and that the same is true and correct to the best of my belief. NOVEMBER 11, 2006 Date Surveyed Signature & Seal of Professional Surveyor 7977 Certificate No. Gary L. Jones 7977 JLP BASIN SURVEYS
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SECTION 32, TOWNSHIP 17 SOUTH, RANGE 24 EAST, N.M.P.M.,
EDDY COUNTY, NEW MEXICO.



150' NORTH
OFF SET
3845.2'

LCX ENERGY
COLLINS RANCH STATE UNIT #4
ELEV. - 3846'

150' WEST
OFF SET
3847.5'

Lat.-N 32°23'58.9"
Long-W 103°43'34.0"

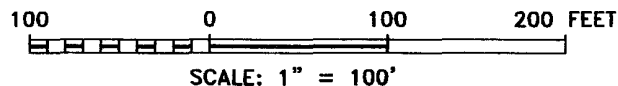
150' EAST
OFF SET
3844.4'

150' SOUTH
OFF SET
3846.0'



Directions to Location:

FROM THE INTERSECTION OF US 82 & US 285 GO WEST ON 82 TO MILE MARKER 97 GO 0.2 MILES WEST TO LEASE ROAD SOUTH, THEN SOUTH 1.9 MILES, THEN GO WEST 0.2 MILES TO A "T" THEN GO SOUTHERLY 0.9 MILES, TO A PAD THEN GO SOUTH 0.2 MILES TO A "T" GO WEST 0.6 MILES TO A 2-TRACT ROAD, GO WEST ON 2 TWO TRACT 0.2 MILES, TO A FENCE GO THRU FENCE, THENCE GO 0.6 MILES TO BEGIN ROAD TO SOUTH .



BASIN SURVEYS P.O. BOX 1786-HOBBS, NEW MEXICO

LCX ENERGY

REF: COLLINS RANCH STATE UNIT #4/ Well Pad Topo

THE COLLINS RANCH STATE UNIT #9 LOCATED 660' FROM THE NORTH LINE AND 1880' FROM THE WEST LINE OF SECTION 32, TOWNSHIP 17 SOUTH, RANGE 24 EAST, N.M.P.M., EDDY COUNTY, NEW MEXICO.

W.O. Number: 17395

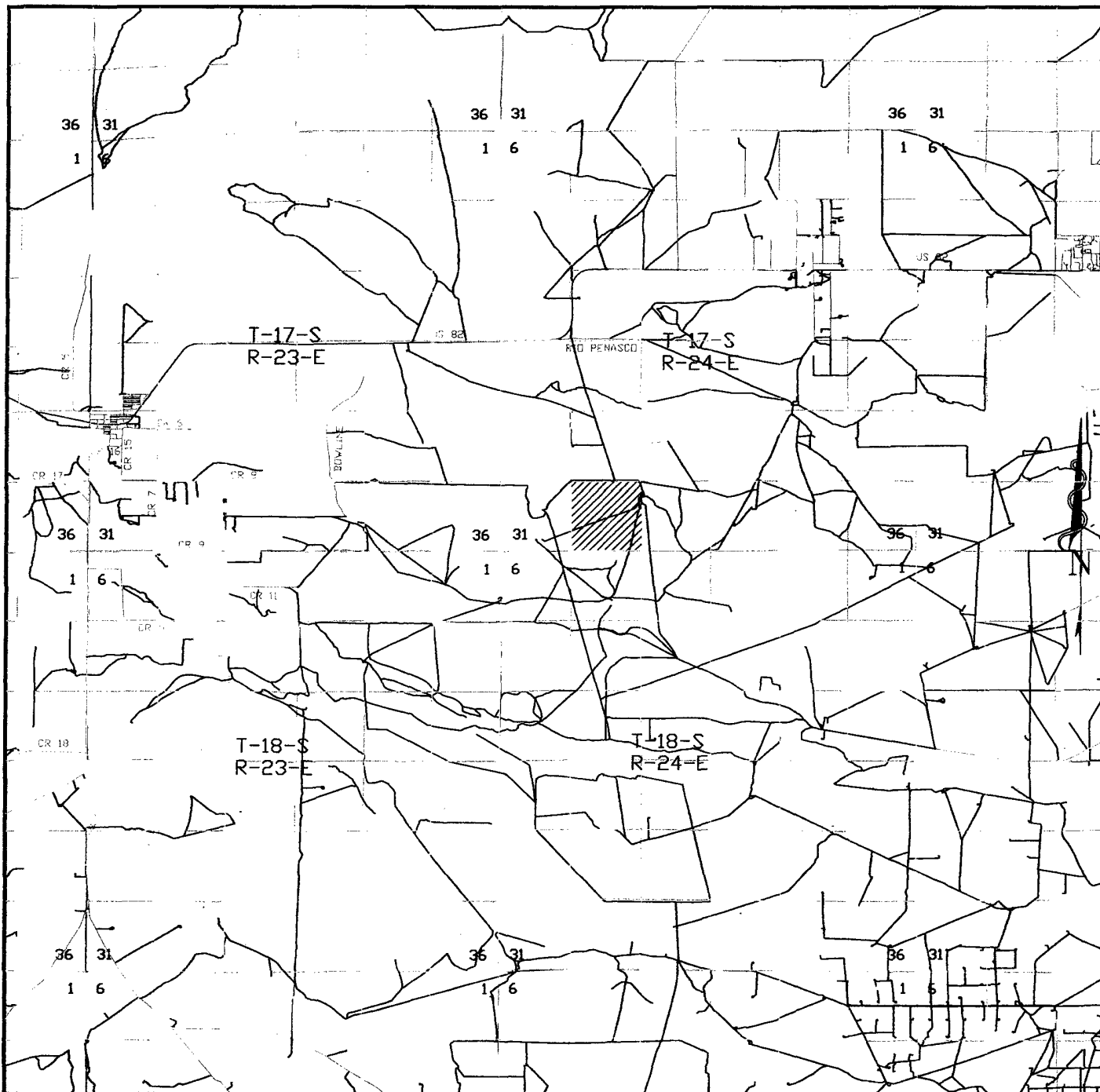
Drawn By: J. PRESLEY

Date: 11/13/06

Disk: JLP - 17395A.DWG

Survey Date: 11/10/06

Sheet 1 of 1 Sheets



COLLINS RANCH STATE UNIT #4
 Located at 660' FNL and 1880' FWL
 Section 32, Township 17 South, Range 24 East,
 N.M.P.M., Eddy County, New Mexico.

basin
surveys
 focused on excellence
 in the oilfield

P.O. Box 1786
 1120 N. West County Rd.
 Hobbs, New Mexico 88241
 (505) 393-7316 - Office
 (505) 392-3074 - Fax
 basinsurveys.com

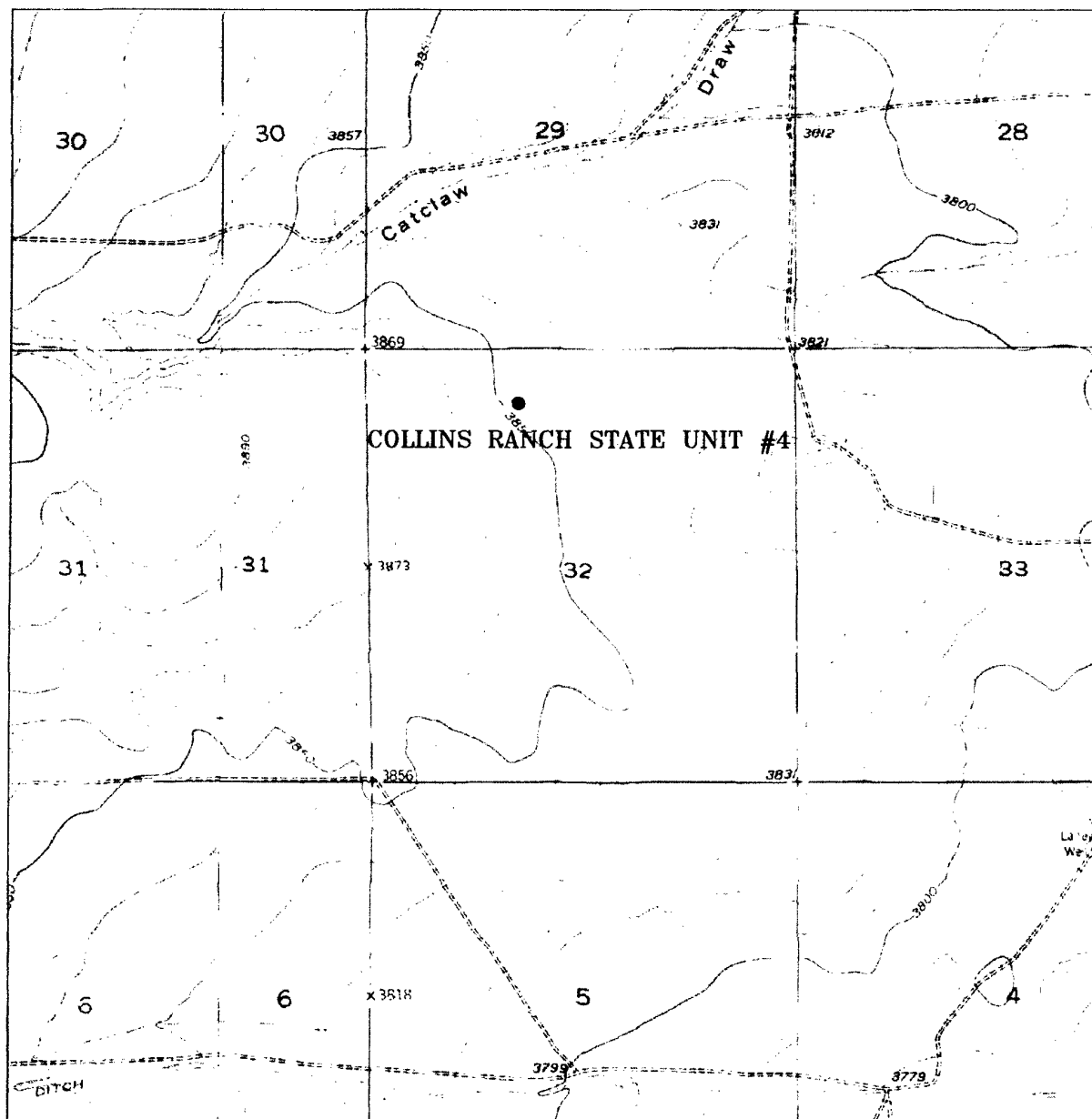
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Survey Date: 11/10/06

Scale: 1" = 2000'

Date: 11/13/06

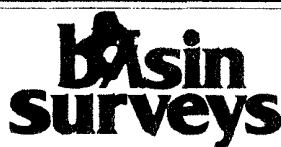
LCX
ENERGY



COLLINS RANCH STATE UNIT #4

Located at 660' FNL and 1880' FWL

Section 32, Township 17 South, Range 24 East,
N.M.P.M., Eddy County, New Mexico.



P.O. Box 1786
1120 N. West County Rd.
Hobbs, New Mexico 88241
(505) 393-7316 - Office
(505) 392-3074 - Fax
basinsurveys.com

W.O. Number: 17395AA - JLP CD#1

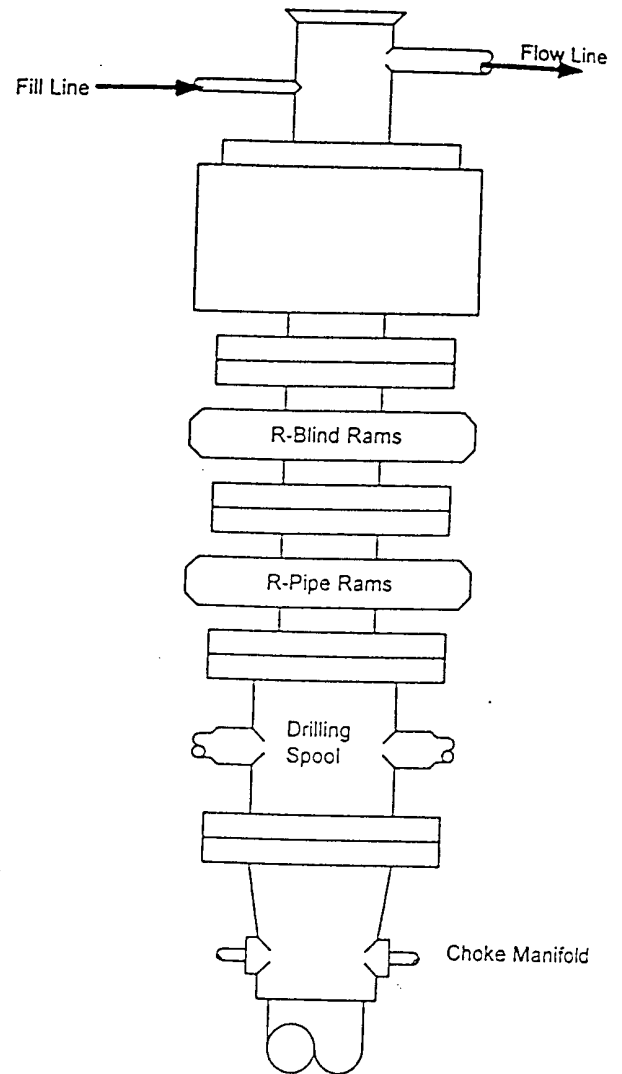
Survey Date: 11/10/06

Scale: 1" = 2000'

Date: 11/13/06

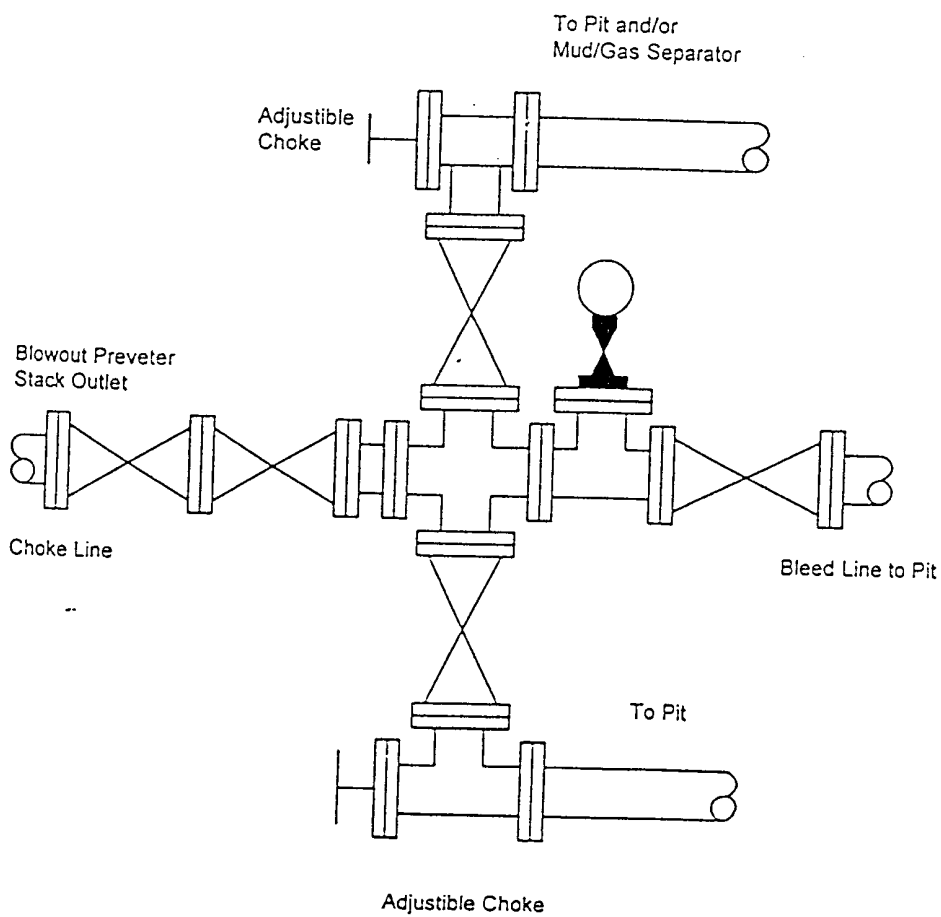
**LCX
ENERGY**

BLOWOUT PREVENTER SYSTEM



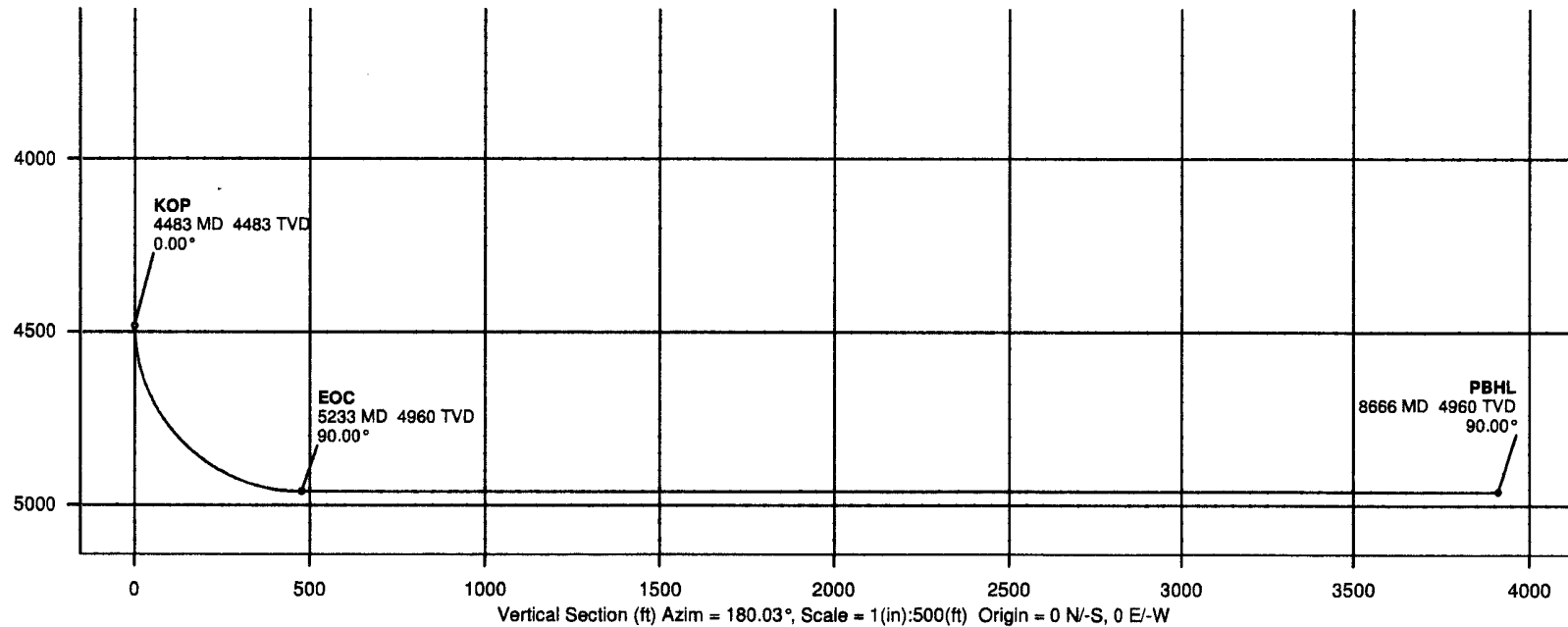
Type 900 Series
3000 psi WP

Choke Manifold Assembly for 3M WP System



LCX Energy

WELL Collins Ranch State Unit #4		FIELD Eddy County, NM Nad 83		STRUCTURE Collins Ranch State Unit #4	
Magnetic Parameters Model: IGRF 2005		Dip: 80.847° Mag Dec: +8.630°		Date: December 06, 2006 FS: 48336.7 nT	
Surface Location Lat: N32 47 50.200 Lon: W104 36 49.000		Northing: 853896.18 SLUS Easting: 455214.80 SLUS		NA83 New Mexico State Planes, Eastern Zone, US Feet Grid Conv: -0.151845" Scale Fact: 0.9999175846	
Miscellaneous Slot: Collins Ranch State Unit #4 Plan: Collins Ranch State Unit #4 .r1		TVD Ref: RKB (0.00 ft above) Srvy Date: December 06, 2006			

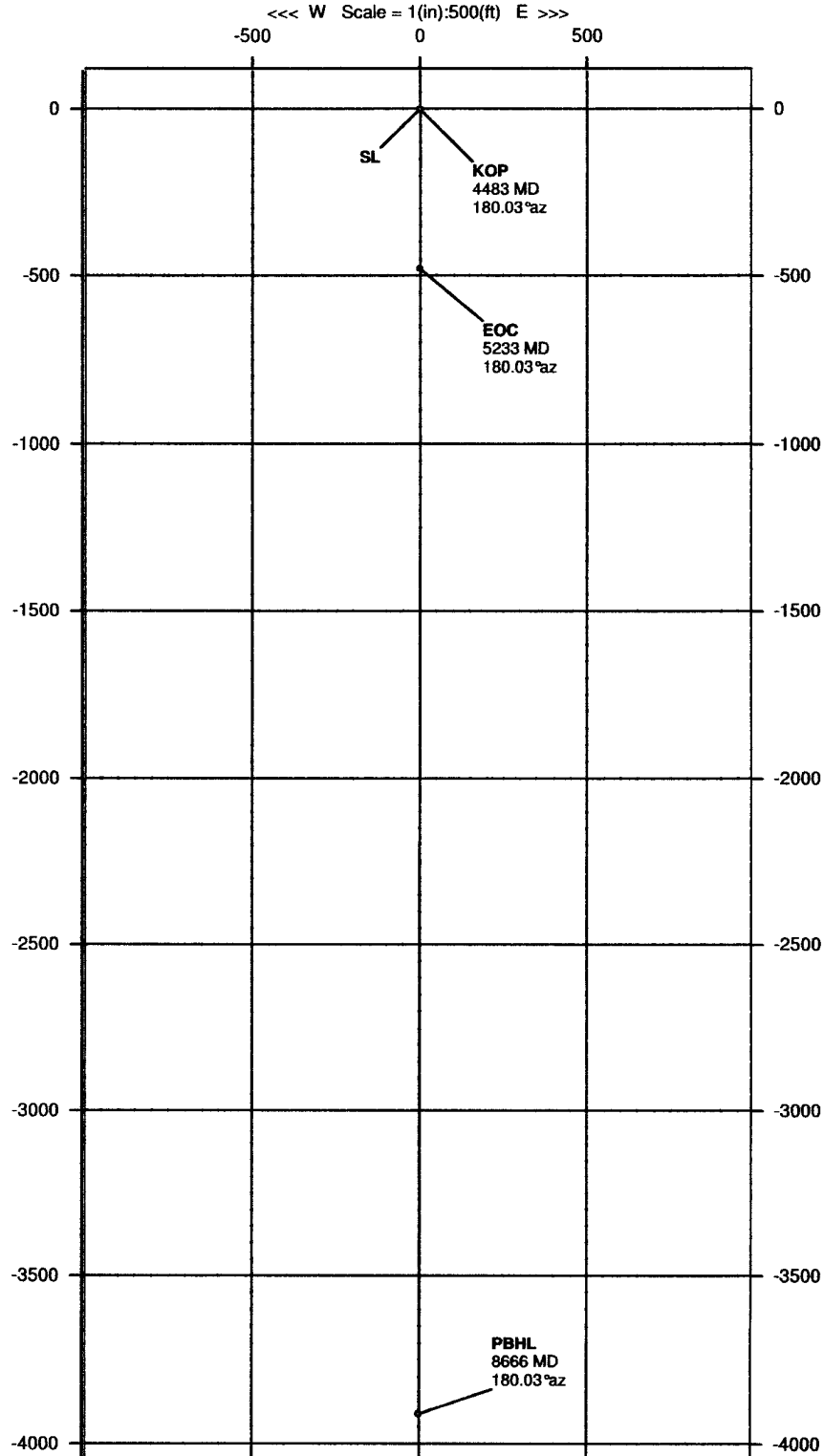


INTREPID
Directional Drilling Specialists



LCX Energy

WELL Collins Ranch State Unit #4	FIELD Eddy County, NM Nad 83	STRUCTURE Collins Ranch State Unit #4
Magnetic Parameters Model: KGRF 2005 Dip: 60.647° Mag Dec: +6.630°	Date: December 08, 2006 FS: 48336.7 mT	Surface Location Lat: N32 47 50.280 Lon: W104 36 48.800 NAD83 New Mexico State Plane, Eastern Zone, US Feet Northing: 653896.16 RJUS Easting: 456214.80 RJUS Grid Conv: -0.15181845° Scale Fact: 0.9999175946
Miscellaneous Slat: Collins Ranch State Unit #4 Plan: Collins Ranch State Unit #4, r/srvy Date: December 08, 2006 TVD Ref: FGR (0.00 ft above)		



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