

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

APR 11 2008 OCD-ARTESIA	Operator Name and Address LCX ENERGY, LLC. 101 NORTH MARIENFELD SUITE 200 MIDLAND, TEXAS 79701		2 OGRID Number 218885
			API Number 30-015-36275
Property Code 36200	Property Name 1625 STATE COM.		Well No. 164
Proposed Pool 1 COTTONWOOD CREEK-WOLFCAMP (75250)		Proposed Pool 2	

7 Surface Location

U/L or lot no.	Section	Township	Range	Lot idn.	Feet from the	North/South line	Feet from the	East/West line	County
B	16	16S	25E		660'	North	1880'	EAST	EDDY

8 Proposed Bottom Hole Location If Different From Surface

U/L or lot no.	Section	Township	Range	Lot idn.	Feet from the	North/South line	Feet from the	East/West line	County
0	16	16S	25E		660'	South	1880'	East	EDDY

Additional Well Information

11 Work Type Code N	12 Well Type Code G	13 Cable/Rotary ROTQRY	14 Lease Type Code S	15 Ground Level Elevation 3501
16 Multiple NO	17 Proposed Depth TVD-4887 MD-8621'	18 Formation WOLFCAMP	19 Contractor BIG DOG DRILLING	20 Spud Date WHEN APPROVED
Depth to Groundwater 50' +		Distance from nearest fresh water well 1000'		Distance from nearest surface water None - known
21 Drilling Method: Fresh Water ☒ Brine ☒ Diesel Oil-based ☐ Gas/Air ☐				
22 Drilling Method: 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±'	395 Sx.	Surface
12 1/4"	8 5/8"	24#	1200±'	450 Sx.	Surface
7 7/8"	5 1/2"	17#	MD-8921'	1100 Sx.	1000' FROM SUR.

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 FOR DETAIL

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. Green</i>	
Title: Agent		Signature: <i>Joe T. Janica</i>	
E-mail Address: joejanica@valornet.com		Approval Date: 4/22/04 Expiration Date: 4/22/10	
Date: 04/10/08	Phone: 505-391-8503	Conditions of Approval Attached ☐	

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

**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'.
4. Run and set 1200' of 8-5/8" 24# J55 casing. Cement to surface with Lead: 250 sx 35/65 Poz/C + 6% gel + 2% CaCl₂ (12.7 ppg, 1.94 cu ft/sk) and Tail: 200 sx. of Class "C" cement + 2% CaCl₂ (14.8 ppg, 1.34 cu ft/sk). Circulate cement to surface.
Note: if losses occur, additional light weight and thixotropic slurries may be added to increase the overall volume. These slurries are:
PVL + 12% gel + 3% BWOW salt + bridging agents (1.0 ppg, 2.75 cu ft/sk)
10-2 RFC (10% D53, 2% CaCl₂) + bridging agents (14.2 ppg, 1.62 cu ft/sk)
5. Drill 7-7/8" hole. Drill 7-7/8" curve and land lateral in pay zone (approx. 4700-4900 ft TVD). Pickup lateral drilling assembly with a 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 production casing. Cement 5-1/2" with Lead: 750 sx 50/50 Poz/C (11.9 ppg, 2.46 cu ft/sk) and Tail: 350 sx PVL + 100% CaCO₃ (acid soluble cement) + fluid loss additive + 1% CaCl₂ (13.0 ppg, 2.79 cu ft/sk) attempting to bring top of cement to 1,000'.

Contingency String:

If lost circulation occurs while drilling the 17-1/2" hole:

- 2a. Run and set 350' of 13-3/8" 48# H-40 ST&C casing. Cement with Lead: 195 sx 35/65 Poz/C + 6% gel + 2% CaCl₂ (12.7 ppg, 1.94 cu ft/sk) and Tail: 200 sx of Class "C" cement + 2% CaCl₂ (14.8 ppg, 1.34 cu ft/sk). Circulate cement to surface.

No known presence of any H₂S in this area none of the other wells drilled by LCX ENERGY, LLC. has encountered any H₂S.

Surface hole and intermediate hole will be drilled with fresh water and the cut brine will be used to drill to TD.

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State of New Mexico
Energy, Minerals and Natural Resources Department

Form C-102
Revised October 12, 2005

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

OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, New Mexico 87505

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number	Pool Code	Pool Name
	75250	COTTONWOOD CREEK-WOLFCAMP
Property Code	Property Name	Well Number
	1625 STATE COM	164
OGRID No.	Operator Name	Elevation
218885	LCX ENERGY	3501'

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	16	16 S	25 E		660	NORTH	1880	EAST	EDDY

Bottom Hole Location If Different From Surface

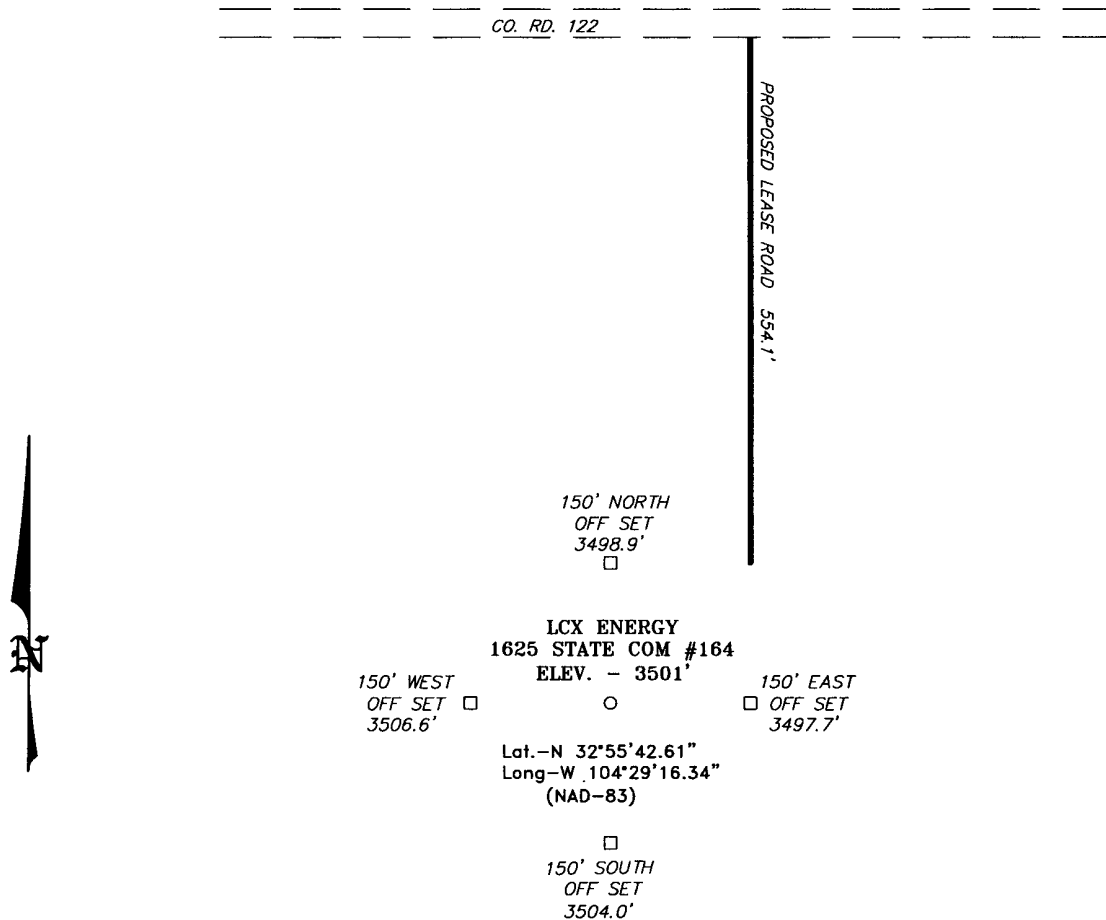
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
O	16	16 S	25 E		660	SOUTH	1880	EAST	EDDY

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

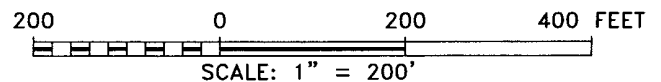
SURFACE LOCATION Lat - N32°55'42.61" Long - W104°29'16.34" SPC- N.: 701558.471 E.: 493920.939 (NAD-83) POINT OF PRODUCING FORMATION ENTRY 1135' FNL PRODUCING AREA PROJECT AREA BOTTOM HOLE LOCATION Lat - N32°55'03.42" Long - W104°29'16.31" SPC- N.: 697597.956 E.: 493917.680 (NAD-83)	OPERATOR CERTIFICATION I hereby certify that 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 unleased mineral interest in the land including the proposed bottom hole 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. <i>Joe T. Janica</i> Signature Date Joe T. Janica 04/10/08 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. DECEMBER 21, 2007 Date Surveyed Signature & Seal of Professional Surveyor Professional Surveyor P.W.O. No. 18854 Certificate No. Gary Jones 7977 BASIN SURVEYS
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SECTION 16, TOWNSHIP 16 SOUTH, RANGE 25 EAST, N.M.P.M.,
EDDY COUNTY, NEW MEXICO.



Directions to Location:

FROM THE JUNCTION OF U.S. HWY 285 AND CO. RD.
122 (COTTONWOOD), GO WEST ON CO. RD. 122 FOR
7.1 MILES TO PROPOSED LEASE ROAD.



LCX ENERGY

REF: 1625 STATE COM #164 / WELL PAD TOPO

THE 1625 STATE COM #164 LOCATED 660' FROM
THE NORTH LINE AND 1880' FROM THE EAST LINE OF
SECTION 16, TOWNSHIP 16 SOUTH, RANGE 25-EAST,

N.M.P.M., EDDY COUNTY, NEW MEXICO

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

W.O. Number: 18854

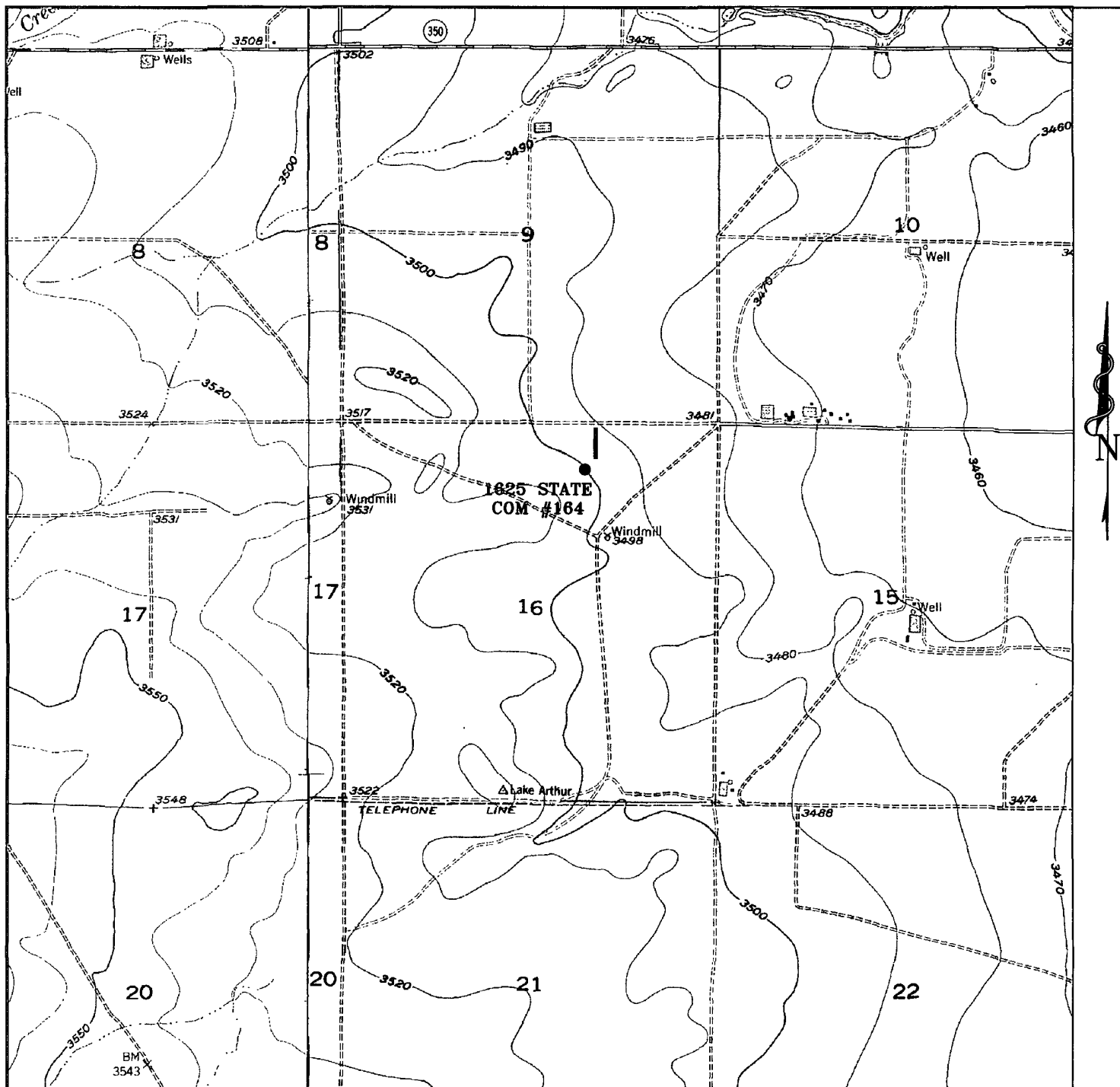
Drawn By: J. M. SMALL

Date: 12-24-2007

Disk: JMS 18854W

Survey Date: 12-21-2007

Sheet 1 of 1 Sheets



1625 STATE COM #164
 Located 660' FNL and 1880' FEL
 Section 16, Township 16 South, Range 25 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

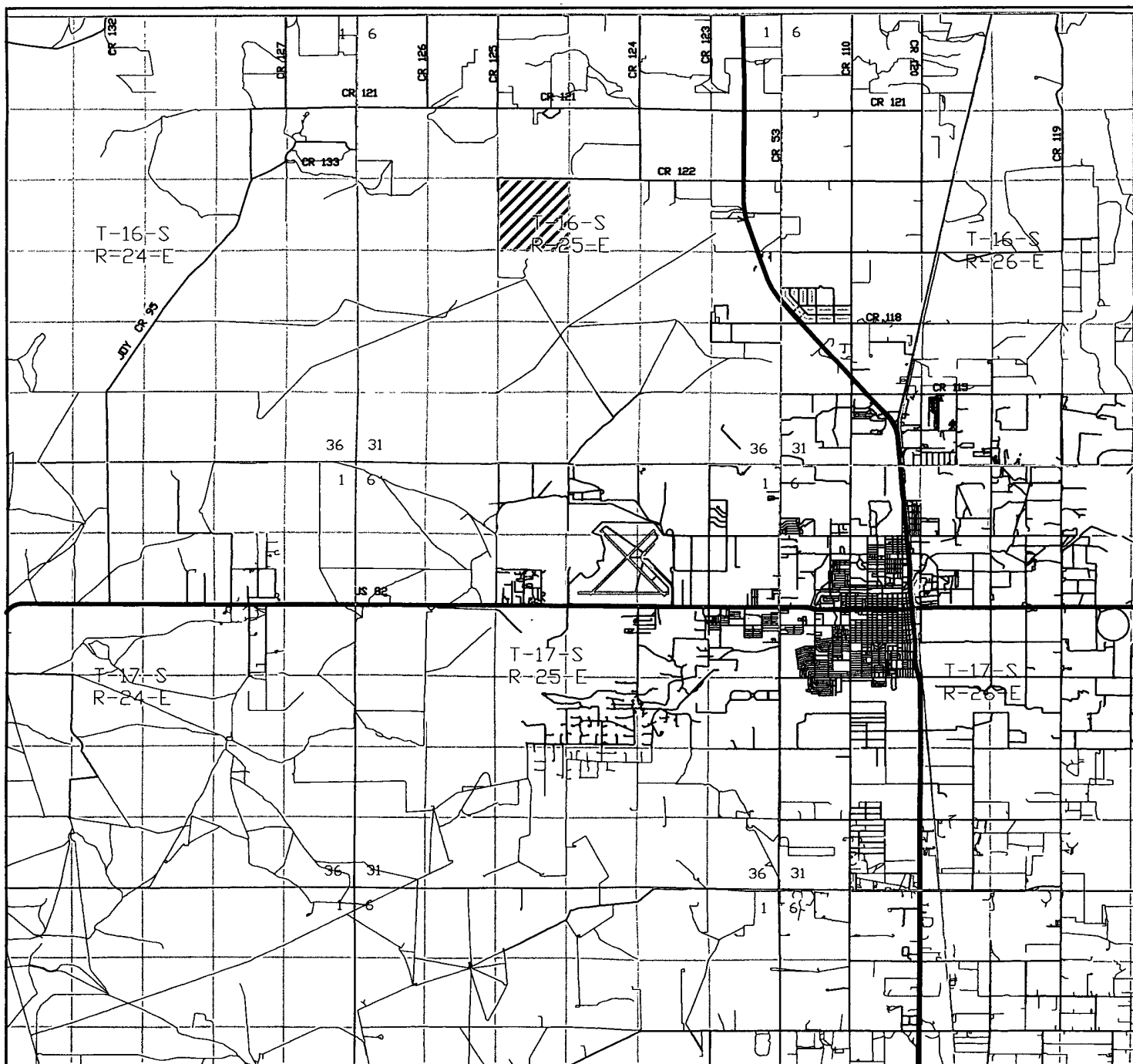
W.O. Number: JMS 18854T

Survey Date: 12-21-2007

Scale: 1" = 2000'

Date: 12-24-2007

**LCX
 ENERGY**



1625 STATE COM #164

Located at 660' FNL and 1880 FEL

Section 16, Township 16 South, Range 25 East,
N.M.P.M., Eddy County, New Mexico.

**basin
surveys**
focused on excellence
in the oilfield

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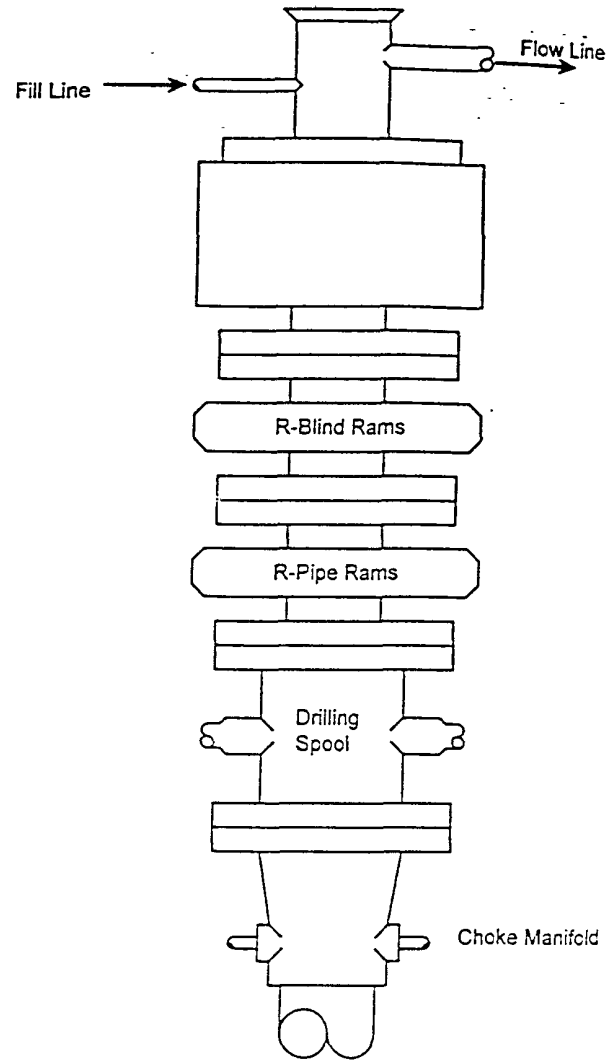
Scale: 1" = 2 MILES

Date: 12-24-2007

LCX
ENERGY

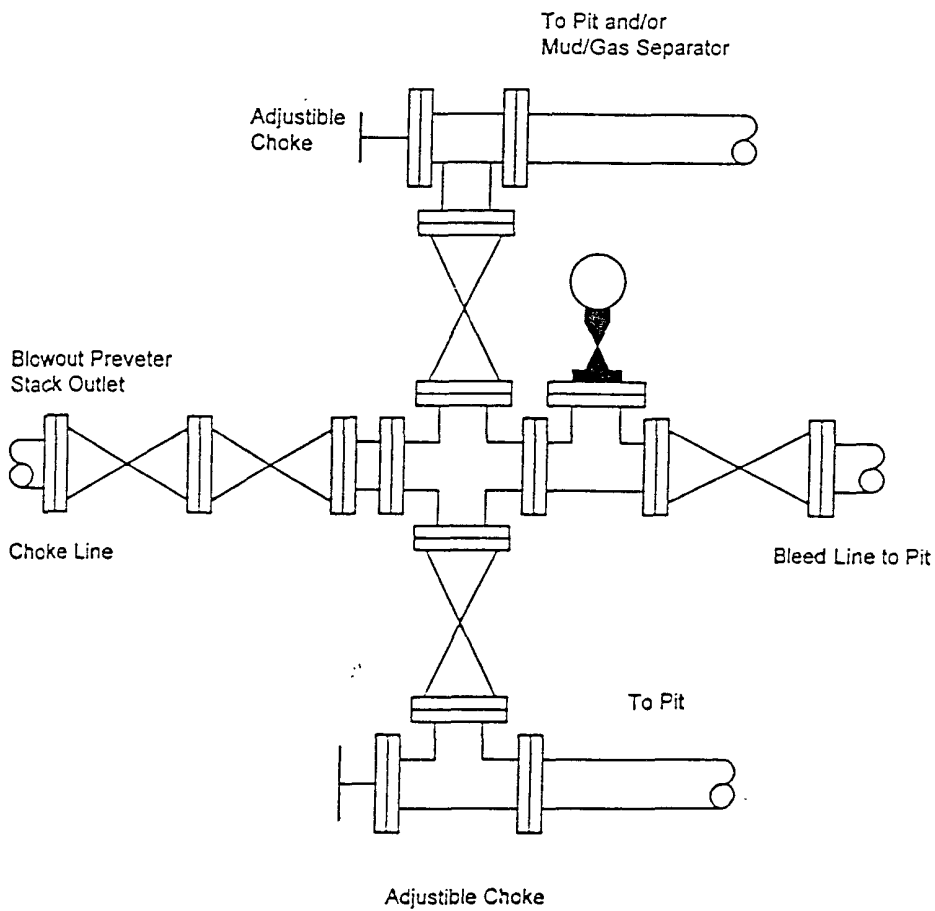
BLOWOUT PREVENTER SYSTEM

3000 PSI



Type 900 SERIES
3000 PSI WP

Choke Manifold Assembly for 5M WP System



Proposal

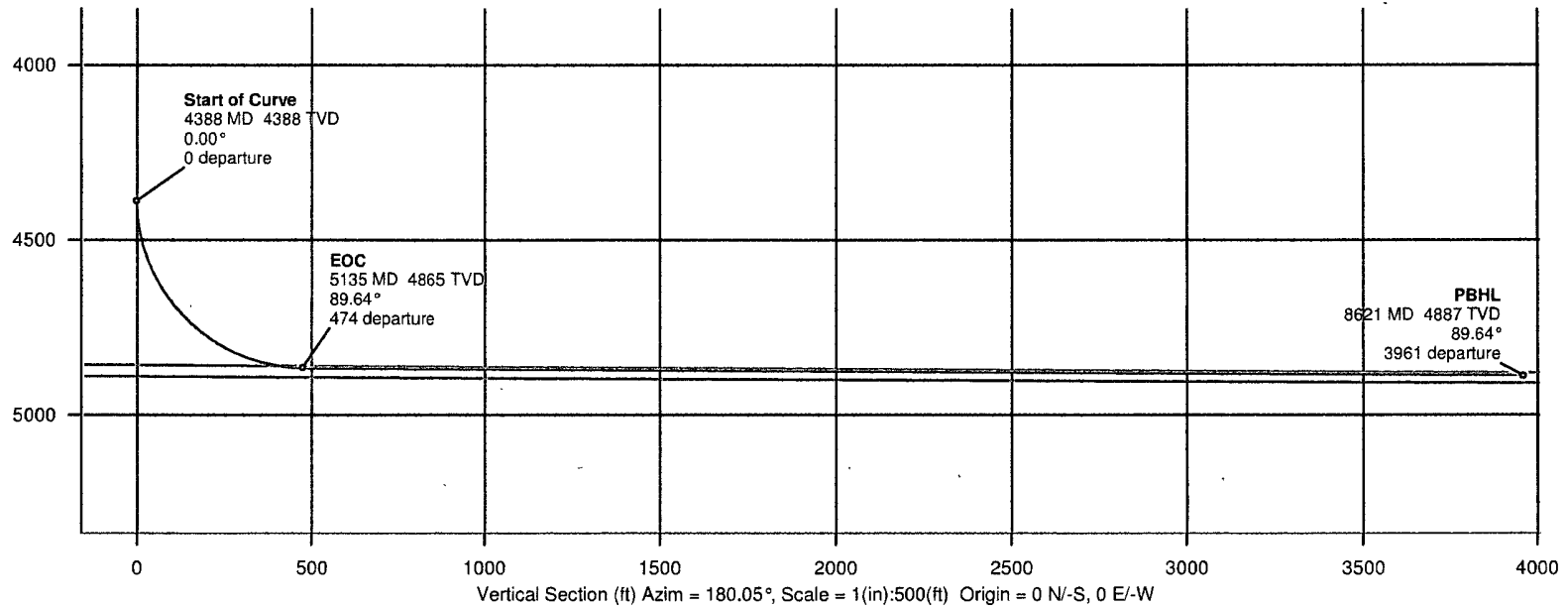
Report Date: March 7, 2008	Survey / DLS Computation Method: Minimum Curvature / Lubinski
Client: LCX Energy, LLC.	Vertical Section Azimuth: 180.050°
Field: Eddy County, NM NAD83	Vertical Section Origin: N 0.000 ft, E 0.000 ft
Structure / Slot: 1625 State Com #164 / 1625 State Com #164	TVD Reference Datum: RKB
Well: 1625 State Com #164	TVD Reference Elevation: 0.0 ft relative to
Borehole: 1625 State Com #164	Sea Bed / Ground Level Elevation: 0.000 ft relative to
UWI/API#:	Magnetic Declination: 8.439°
Survey Name / Date: 1625 State Com #164_r1 / March 7, 2008	Total Field Strength: 49312.325 nT
Tort / AHD / DDI / ERD ratio: 89.638° / 3960.87 ft / 5.797 / 0.810	Magnetic Dip: 60.767°
Grid Coordinate System: NAD83 New Mexico State Planes, Eastern Zone, US Feet	Declination Date: March 07, 2008
Location Lat/Long: N 32 55 42.606, W 104 29 16.344	Magnetic Declination Model: IGRF 2005
Location Grid N/E Y/X: N 701558.471 ftUS, E 493920.939 ftUS	North Reference: Grid North
Grid Convergence Angle: -0.08400690°	Total Corr Mag North -> Grid North: +8.523°
Grid Scale Factor: 0.99991167	Local Coordinates Referenced To: Well Head

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)	Mag / Grav Tool Face (deg)	Build Rate (deg/100 ft)	Walk Rate (deg/100 ft)
Tie-In	0.00	0.00	180.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	---	0.00	0.00
	100.00	0.00	180.05	100.00	0.00	0.00	0.00	0.00	0.00	0.00	---	0.00	0.00
	200.00	0.00	180.05	200.00	0.00	0.00	0.00	0.00	0.00	0.00	---	0.00	0.00
	300.00	0.00	180.05	300.00	0.00	0.00	0.00	0.00	0.00	0.00	---	0.00	0.00
	400.00	0.00	180.05	400.00	0.00	0.00	0.00	0.00	0.00	0.00	---	0.00	0.00
	500.00	0.00	180.05	500.00	0.00	0.00	0.00	0.00	0.00	0.00	---	0.00	0.00
	600.00	0.00	180.05	600.00	0.00	0.00	0.00	0.00	0.00	0.00	---	0.00	0.00
	700.00	0.00	180.05	700.00	0.00	0.00	0.00	0.00	0.00	0.00	---	0.00	0.00
	800.00	0.00	180.05	800.00	0.00	0.00	0.00	0.00	0.00	0.00	---	0.00	0.00
	900.00	0.00	180.05	900.00	0.00	0.00	0.00	0.00	0.00	0.00	---	0.00	0.00
	1000.00	0.00	180.05	1000.00	0.00	0.00	0.00	0.00	0.00	0.00	---	0.00	0.00
	1100.00	0.00	180.05	1100.00	0.00	0.00	0.00	0.00	0.00	0.00	---	0.00	0.00
	1200.00	0.00	180.05	1200.00	0.00	0.00	0.00	0.00	0.00	0.00	---	0.00	0.00
	1300.00	0.00	180.05	1300.00	0.00	0.00	0.00	0.00	0.00	0.00	---	0.00	0.00
	1400.00	0.00	180.05	1400.00	0.00	0.00	0.00	0.00	0.00	0.00	---	0.00	0.00
	1500.00	0.00	180.05	1500.00	0.00	0.00	0.00	0.00	0.00	0.00	---	0.00	0.00
	1600.00	0.00	180.05	1600.00	0.00	0.00	0.00	0.00	0.00	0.00	---	0.00	0.00
	1700.00	0.00	180.05	1700.00	0.00	0.00	0.00	0.00	0.00	0.00	---	0.00	0.00
	1800.00	0.00	180.05	1800.00	0.00	0.00	0.00	0.00	0.00	0.00	---	0.00	0.00
	1900.00	0.00	180.05	1900.00	0.00	0.00	0.00	0.00	0.00	0.00	---	0.00	0.00
	2000.00	0.00	180.05	2000.00	0.00	0.00	0.00	0.00	0.00	0.00	---	0.00	0.00
	2100.00	0.00	180.05	2100.00	0.00	0.00	0.00	0.00	0.00	0.00	---	0.00	0.00
	2200.00	0.00	180.05	2200.00	0.00	0.00	0.00	0.00	0.00	0.00	---	0.00	0.00
	2300.00	0.00	180.05	2300.00	0.00	0.00	0.00	0.00	0.00	0.00	---	0.00	0.00
	2400.00	0.00	180.05	2400.00	0.00	0.00	0.00	0.00	0.00	0.00	---	0.00	0.00
	2500.00	0.00	180.05	2500.00	0.00	0.00	0.00	0.00	0.00	0.00	---	0.00	0.00
	2600.00	0.00	180.05	2600.00	0.00	0.00	0.00	0.00	0.00	0.00	---	0.00	0.00
	2700.00	0.00	180.05	2700.00	0.00	0.00	0.00	0.00	0.00	0.00	---	0.00	0.00
	2800.00	0.00	180.05	2800.00	0.00	0.00	0.00	0.00	0.00	0.00	---	0.00	0.00
	2900.00	0.00	180.05	2900.00	0.00	0.00	0.00	0.00	0.00	0.00	---	0.00	0.00
	3000.00	0.00	180.05	3000.00	0.00	0.00	0.00	0.00	0.00	0.00	---	0.00	0.00
	3100.00	0.00	180.05	3100.00	0.00	0.00	0.00	0.00	0.00	0.00	---	0.00	0.00
	3200.00	0.00	180.05	3200.00	0.00	0.00	0.00	0.00	0.00	0.00	---	0.00	0.00
	3300.00	0.00	180.05	3300.00	0.00	0.00	0.00	0.00	0.00	0.00	---	0.00	0.00
	3400.00	0.00	180.05	3400.00	0.00	0.00	0.00	0.00	0.00	0.00	---	0.00	0.00
	3500.00	0.00	180.05	3500.00	0.00	0.00	0.00	0.00	0.00	0.00	---	0.00	0.00
	3600.00	0.00	180.05	3600.00	0.00	0.00	0.00	0.00	0.00	0.00	---	0.00	0.00
	3700.00	0.00	180.05	3700.00	0.00	0.00	0.00	0.00	0.00	0.00	---	0.00	0.00
	3800.00	0.00	180.05	3800.00	0.00	0.00	0.00	0.00	0.00	0.00	---	0.00	0.00
	3900.00	0.00	180.05	3900.00	0.00	0.00	0.00	0.00	0.00	0.00	---	0.00	0.00
	4000.00	0.00	180.05	4000.00	0.00	0.00	0.00	0.00	0.00	0.00	---	0.00	0.00

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)	Mag / Grav Tool Face (deg)	Build Rate (deg/100 ft)	Walk Rate (deg/100 ft)
Start of Curve	4100.00	0.00	180.05	4100.00	0.00	0.00	0.00	0.00	0.00	0.00	---	0.00	0.00
	4200.00	0.00	180.05	4200.00	0.00	0.00	0.00	0.00	0.00	0.00	---	0.00	0.00
	4300.00	0.00	180.05	4300.00	0.00	0.00	0.00	0.00	0.00	0.00	---	0.00	0.00
	4387.54	0.00	180.05	4387.54	0.00	0.00	0.00	0.00	0.00	0.00	180.05M	0.00	0.00
	4400.00	1.50	180.05	4400.00	0.16	-0.16	0.00	0.16	180.05	12.00	180.05M	12.00	0.00
	4500.00	13.50	180.05	4498.96	13.18	-13.18	-0.01	13.18	180.05	12.00	HS	12.00	0.00
	4600.00	25.50	180.05	4593.06	46.49	-46.49	-0.04	46.49	180.05	12.00	HS	12.00	0.00
	4700.00	37.50	180.05	4678.17	98.64	-98.64	-0.08	98.64	180.05	12.00	HS	12.00	0.00
EOC	4800.00	49.50	180.05	4750.58	167.35	-167.34	-0.14	167.35	180.05	12.00	HS	12.00	0.00
	4900.00	61.50	180.05	4807.13	249.60	-249.60	-0.21	249.60	180.05	12.00	HS	12.00	0.00
	5000.00	73.50	180.05	4845.33	341.82	-341.82	-0.28	341.82	180.05	12.00	HS	12.00	0.00
	5100.00	85.50	180.05	4863.53	439.96	-439.96	-0.36	439.96	180.05	12.00	HS	12.00	0.00
	5134.53	89.64	180.05	4865.00	474.45	-474.45	-0.39	474.45	180.05	12.00	---	12.00	0.00
	5200.00	89.64	180.05	4865.41	539.92	-539.92	-0.44	539.92	180.05	0.00	---	0.00	0.00
	5300.00	89.64	180.05	4866.04	639.92	-639.92	-0.53	639.92	180.05	0.00	---	0.00	0.00
	5400.00	89.64	180.05	4866.67	739.92	-739.92	-0.61	739.92	180.05	0.00	---	0.00	0.00
	5500.00	89.64	180.05	4867.30	839.92	-839.92	-0.69	839.92	180.05	0.00	---	0.00	0.00
	5600.00	89.64	180.05	4867.93	939.91	-939.91	-0.77	939.91	180.05	0.00	---	0.00	0.00
	5700.00	89.64	180.05	4868.57	1039.91	-1039.91	-0.86	1039.91	180.05	0.00	---	0.00	0.00
	5800.00	89.64	180.05	4869.20	1139.91	-1139.91	-0.94	1139.91	180.05	0.00	---	0.00	0.00
	5900.00	89.64	180.05	4869.83	1239.91	-1239.91	-1.02	1239.91	180.05	0.00	---	0.00	0.00
	6000.00	89.64	180.05	4870.46	1339.91	-1339.91	-1.10	1339.91	180.05	0.00	---	0.00	0.00
	6100.00	89.64	180.05	4871.09	1439.90	-1439.90	-1.18	1439.90	180.05	0.00	---	0.00	0.00
PBHL	6200.00	89.64	180.05	4871.72	1539.90	-1539.90	-1.27	1539.90	180.05	0.00	---	0.00	0.00
	6300.00	89.64	180.05	4872.35	1639.90	-1639.90	-1.35	1639.90	180.05	0.00	---	0.00	0.00
	6400.00	89.64	180.05	4872.98	1739.90	-1739.90	-1.43	1739.90	180.05	0.00	---	0.00	0.00
	6500.00	89.64	180.05	4873.61	1839.90	-1839.90	-1.51	1839.90	180.05	0.00	---	0.00	0.00
	6600.00	89.64	180.05	4874.25	1939.89	-1939.89	-1.60	1939.89	180.05	0.00	---	0.00	0.00
	6700.00	89.64	180.05	4874.88	2039.89	-2039.89	-1.68	2039.89	180.05	0.00	---	0.00	0.00
	6800.00	89.64	180.05	4875.51	2139.89	-2139.89	-1.76	2139.89	180.05	0.00	---	0.00	0.00
	6900.00	89.64	180.05	4876.14	2239.89	-2239.89	-1.84	2239.89	180.05	0.00	---	0.00	0.00
	7000.00	89.64	180.05	4876.77	2339.89	-2339.89	-1.93	2339.89	180.05	0.00	---	0.00	0.00
	7100.00	89.64	180.05	4877.40	2439.88	-2439.88	-2.01	2439.88	180.05	0.00	---	0.00	0.00
	7200.00	89.64	180.05	4878.03	2539.88	-2539.88	-2.09	2539.88	180.05	0.00	---	0.00	0.00
	7300.00	89.64	180.05	4878.66	2639.88	-2639.88	-2.17	2639.88	180.05	0.00	---	0.00	0.00
	7400.00	89.64	180.05	4879.29	2739.88	-2739.88	-2.25	2739.88	180.05	0.00	---	0.00	0.00
	7500.00	89.64	180.05	4879.93	2839.88	-2839.88	-2.34	2839.88	180.05	0.00	---	0.00	0.00
	7600.00	89.64	180.05	4880.56	2939.87	-2939.87	-2.42	2939.87	180.05	0.00	---	0.00	0.00
	7700.00	89.64	180.05	4881.19	3039.87	-3039.87	-2.50	3039.87	180.05	0.00	---	0.00	0.00
PBHL	7800.00	89.64	180.05	4881.82	3139.87	-3139.87	-2.58	3139.87	180.05	0.00	---	0.00	0.00
	7900.00	89.64	180.05	4882.45	3239.87	-3239.87	-2.67	3239.87	180.05	0.00	---	0.00	0.00
	8000.00	89.64	180.05	4883.08	3339.87	-3339.87	-2.75	3339.87	180.05	0.00	---	0.00	0.00
	8100.00	89.64	180.05	4883.71	3439.86	-3439.86	-2.83	3439.86	180.05	0.00	---	0.00	0.00
	8200.00	89.64	180.05	4884.34	3539.86	-3539.86	-2.91	3539.86	180.05	0.00	---	0.00	0.00
	8300.00	89.64	180.05	4884.97	3639.86	-3639.86	-3.00	3639.86	180.05	0.00	---	0.00	0.00
	8400.00	89.64	180.05	4885.61	3739.86	-3739.86	-3.08	3739.86	180.05	0.00	---	0.00	0.00
	8500.00	89.64	180.05	4886.24	3839.86	-3839.86	-3.16	3839.86	180.05	0.00	---	0.00	0.00
	8600.00	89.64	180.05	4886.87	3939.85	-3939.85	-3.24	3939.85	180.05	0.00	---	0.00	0.00
	8621.02	89.64	180.05	4887.00	3960.87	-3960.87	-3.26	3960.87	180.05	0.00	---	0.00	0.00

LCX Energy, LLC.

WELL		1625 State Com #164		FIELD		Eddy County, NM NAD83		STRUCTURE		1625 State Com #164	
Magnetic Parameters				Surface Location				Miscellaneous			
Model		IGRF 2005		Lat		N32 55 42.606		Northing		701558.47 #US	
Dip		60.767°		Date		March 07, 2008		NAD83 New Mexico State Planes		Eastern Zone US Feet	
Mag Dec		-8.439°		FS		49212.3 nT		Grid Conv		-0.08400690°	
				Lon		W104 29 16.344		Scale Fact		0.999911655	
				Easting		493920.94 #US		Sht		1625 State Com #164	
								Plan		1625 State Com #164_r1	
								TVD Ref		RKB (3.00 ft above)	
								Shy Date		March 07, 2008	



Proposal

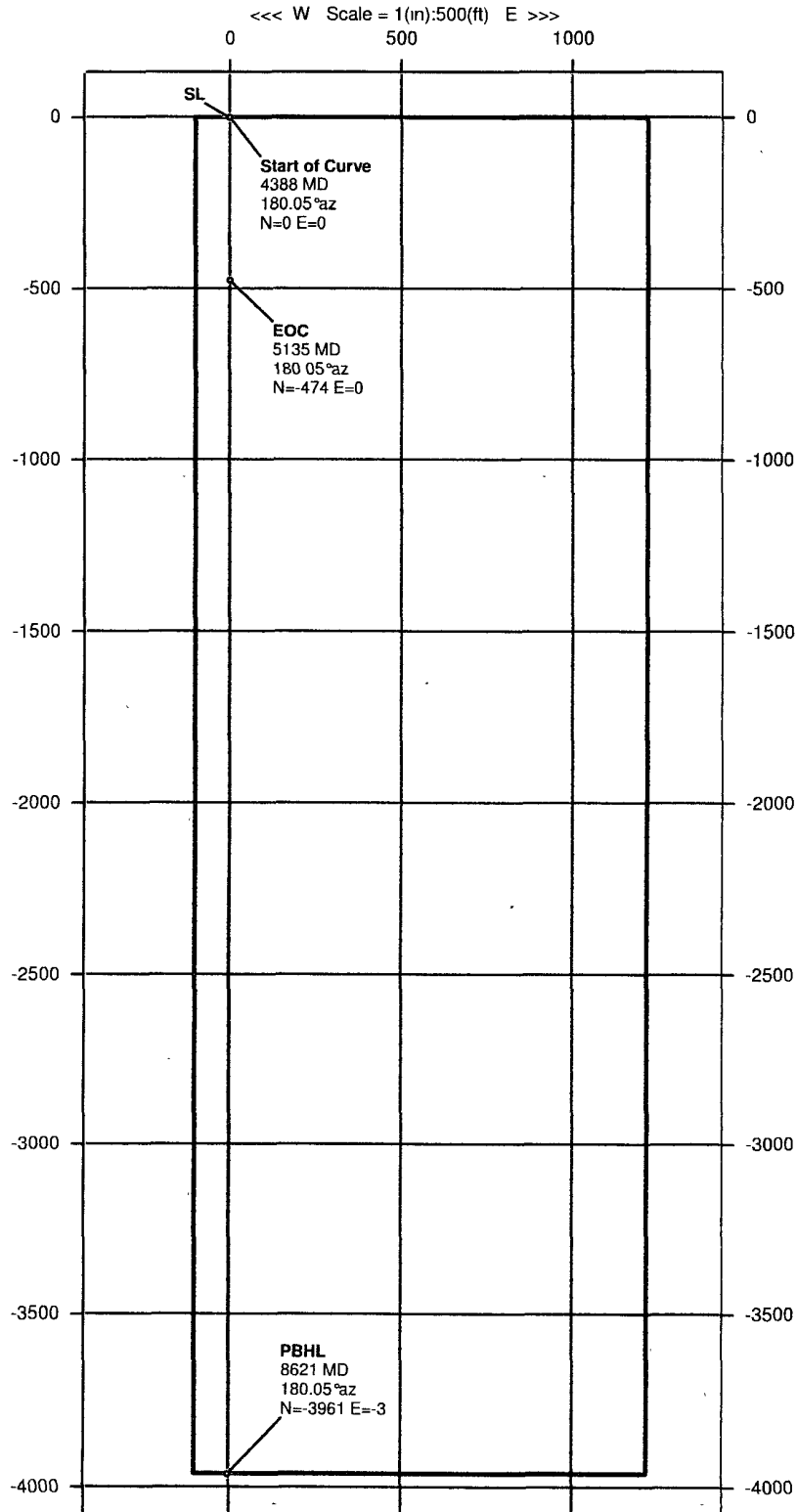
Report Date:	March 7, 2008	Survey / DLS Computation Method:	Minimum Curvature / Lubinski
Client:	LCX Energy, LLC	Vertical Section Azimuth:	180.050°
Field:	Eddy County, NM NAD83	Vertical Section Origin:	N 0.000 ft, E 0.000 ft
Structure / Slot:	1625 State Com #164 / 1625 State Com #164	TVD Reference Datum:	RKB
Well:	1625 State Com #164	TVD Reference Elevation:	0.0 ft relative to
Borehole:	1625 State Com #164	Sea Bed / Ground Level Elevation:	0.000 ft relative to
UWI/API#:		Magnetic Declination:	8.439°
Survey Name / Date:	1625 State Com #164_r1 / March 7, 2008	Total Field Strength:	49312.325 nT
Tort / AHD / DDI / ERD ratio:	89.638° / 3960.87 ft / 5.797 / 0.810	Magnetic Dip:	60.767°
Grid Coordinate System:	NAD83 New Mexico State Planes, Eastern Zone, US Feet	Declination Date:	March 07, 2008
Location Lat/Long:	N 32 55 42.606, W 104 29 16.344	Magnetic Declination Model:	IGRF 2005
Location Grid N/E Y/X:	N 701558.471 ftUS, E 493920.939 ftUS	North Reference:	Grid North
Grid Convergence Angle:	-0.08400690°	Total Corr Mag North -> Grid North:	+8.523°
Grid Scale Factor:	0.99991167	Local Coordinates Referenced To:	Well Head

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)	Mag / Grav Tool Face (deg)	Build Rate (deg/100 ft)	Walk Rate (deg/100 ft)
Tie-In	0.00	0.00	180.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	---	0.00	0.00
	100.00	0.00	180.05	100.00	0.00	0.00	0.00	0.00	0.00	0.00	---	0.00	0.00
	200.00	0.00	180.05	200.00	0.00	0.00	0.00	0.00	0.00	0.00	---	0.00	0.00
	300.00	0.00	180.05	300.00	0.00	0.00	0.00	0.00	0.00	0.00	---	0.00	0.00
	400.00	0.00	180.05	400.00	0.00	0.00	0.00	0.00	0.00	0.00	---	0.00	0.00
	500.00	0.00	180.05	500.00	0.00	0.00	0.00	0.00	0.00	0.00	---	0.00	0.00
	600.00	0.00	180.05	600.00	0.00	0.00	0.00	0.00	0.00	0.00	---	0.00	0.00
	700.00	0.00	180.05	700.00	0.00	0.00	0.00	0.00	0.00	0.00	---	0.00	0.00
	800.00	0.00	180.05	800.00	0.00	0.00	0.00	0.00	0.00	0.00	---	0.00	0.00
	900.00	0.00	180.05	900.00	0.00	0.00	0.00	0.00	0.00	0.00	---	0.00	0.00
	1000.00	0.00	180.05	1000.00	0.00	0.00	0.00	0.00	0.00	0.00	---	0.00	0.00
	1100.00	0.00	180.05	1100.00	0.00	0.00	0.00	0.00	0.00	0.00	---	0.00	0.00
	1200.00	0.00	180.05	1200.00	0.00	0.00	0.00	0.00	0.00	0.00	---	0.00	0.00
	1300.00	0.00	180.05	1300.00	0.00	0.00	0.00	0.00	0.00	0.00	---	0.00	0.00
	1400.00	0.00	180.05	1400.00	0.00	0.00	0.00	0.00	0.00	0.00	---	0.00	0.00
	1500.00	0.00	180.05	1500.00	0.00	0.00	0.00	0.00	0.00	0.00	---	0.00	0.00
	1600.00	0.00	180.05	1600.00	0.00	0.00	0.00	0.00	0.00	0.00	---	0.00	0.00
	1700.00	0.00	180.05	1700.00	0.00	0.00	0.00	0.00	0.00	0.00	---	0.00	0.00
	1800.00	0.00	180.05	1800.00	0.00	0.00	0.00	0.00	0.00	0.00	---	0.00	0.00
	1900.00	0.00	180.05	1900.00	0.00	0.00	0.00	0.00	0.00	0.00	---	0.00	0.00
	2000.00	0.00	180.05	2000.00	0.00	0.00	0.00	0.00	0.00	0.00	---	0.00	0.00
	2100.00	0.00	180.05	2100.00	0.00	0.00	0.00	0.00	0.00	0.00	---	0.00	0.00
	2200.00	0.00	180.05	2200.00	0.00	0.00	0.00	0.00	0.00	0.00	---	0.00	0.00
	2300.00	0.00	180.05	2300.00	0.00	0.00	0.00	0.00	0.00	0.00	---	0.00	0.00
	2400.00	0.00	180.05	2400.00	0.00	0.00	0.00	0.00	0.00	0.00	---	0.00	0.00
	2500.00	0.00	180.05	2500.00	0.00	0.00	0.00	0.00	0.00	0.00	---	0.00	0.00
	2600.00	0.00	180.05	2600.00	0.00	0.00	0.00	0.00	0.00	0.00	---	0.00	0.00
	2700.00	0.00	180.05	2700.00	0.00	0.00	0.00	0.00	0.00	0.00	---	0.00	0.00
	2800.00	0.00	180.05	2800.00	0.00	0.00	0.00	0.00	0.00	0.00	---	0.00	0.00
	2900.00	0.00	180.05	2900.00	0.00	0.00	0.00	0.00	0.00	0.00	---	0.00	0.00
	3000.00	0.00	180.05	3000.00	0.00	0.00	0.00	0.00	0.00	0.00	---	0.00	0.00
	3100.00	0.00	180.05	3100.00	0.00	0.00	0.00	0.00	0.00	0.00	---	0.00	0.00
	3200.00	0.00	180.05	3200.00	0.00	0.00	0.00	0.00	0.00	0.00	---	0.00	0.00
	3300.00	0.00	180.05	3300.00	0.00	0.00	0.00	0.00	0.00	0.00	---	0.00	0.00
	3400.00	0.00	180.05	3400.00	0.00	0.00	0.00	0.00	0.00	0.00	---	0.00	0.00
	3500.00	0.00	180.05	3500.00	0.00	0.00	0.00	0.00	0.00	0.00	---	0.00	0.00
	3600.00	0.00	180.05	3600.00	0.00	0.00	0.00	0.00	0.00	0.00	---	0.00	0.00
	3700.00	0.00	180.05	3700.00	0.00	0.00	0.00	0.00	0.00	0.00	---	0.00	0.00
	3800.00	0.00	180.05	3800.00	0.00	0.00	0.00	0.00	0.00	0.00	---	0.00	0.00
	3900.00	0.00	180.05	3900.00	0.00	0.00	0.00	0.00	0.00	0.00	---	0.00	0.00
4000.00	0.00	180.05	4000.00	0.00	0.00	0.00	0.00	0.00	0.00	---	0.00	0.00	
4100.00	0.00	180.05	4100.00	0.00	0.00	0.00	0.00	0.00	0.00	---	0.00	0.00	
4200.00	0.00	180.05	4200.00	0.00	0.00	0.00	0.00	0.00	0.00	---	0.00	0.00	
4300.00	0.00	180.05	4300.00	0.00	0.00	0.00	0.00	0.00	0.00	---	0.00	0.00	

Start of Curve	4387.54	0.00	180 05	4387 54	0.00	0.00	0.00	0.00	0.00	0.00	180.05M	0.00	0.00
	4400.00	1.50	180 05	4400.00	0.16	-0.16	0.00	0.16	180 05	12.00	180.05M	12 00	0.00
	4500.00	13.50	180.05	4498.96	13 18	-13.18	-0.01	13 18	180.05	12.00	HS	12.00	0.00
	4600.00	25.50	180.05	4593.06	46 49	-46.49	-0.04	46.49	180.05	12.00	HS	12.00	0.00
	4700.00	37.50	180.05	4678 17	98 64	-98.64	-0.08	98.64	180.05	12.00	HS	12 00	0.00
	4800 00	49.50	180.05	4750.58	167.35	-167.34	-0.14	167.35	180.05	12.00	HS	12.00	0.00
	4900.00	61.50	180.05	4807.13	249.60	-249.60	-0.21	249 60	180.05	12.00	HS	12.00	0.00
EOC	5000.00	73.50	180.05	4845.33	341.82	-341.82	-0.28	341 82	180.05	12.00	HS	12.00	0.00
	5100.00	85.50	180.05	4863.53	439.96	-439.96	-0.36	439.96	180.05	12.00	HS	12 00	0.00
	5134 53	89.64	180.05	4865.00	474.45	-474.45	-0.39	474.45	180.05	12.00	---	12.00	0.00
	5200 00	89.64	180.05	4865.41	539.92	-539 92	-0.44	539.92	180.05	0 00	---	0 00	0.00
	5300 00	89.64	180.05	4866.04	639.92	-639.92	-0.53	639 92	180.05	0.00	---	0 00	0.00
	5400 00	89.64	180.05	4866.67	739.92	-739.92	-0.61	739.92	180.05	0.00	---	0 00	0.00
	5500.00	89.64	180.05	4867.30	839.92	-839.92	-0.69	839.92	180.05	0.00	---	0 00	0 00
	5600.00	89.64	180.05	4867 93	939 91	-939.91	-0.77	939 91	180.05	0.00	---	0 00	0.00
	5700.00	89.64	180.05	4868.57	1039 91	-1039 91	-0.86	1039.91	180.05	0 00	---	0 00	0.00
	5800.00	89.64	180.05	4869.20	1139.91	-1139.91	-0.94	1139.91	180.05	0.00	---	0 00	0.00
	5900.00	89.64	180.05	4869.83	1239.91	-1239.91	-1.02	1239.91	180.05	0.00	---	0 00	0.00
	6000.00	89.64	180 05	4870.46	1339.91	-1339.91	-1 10	1339.91	180.05	0.00	---	0 00	0.00
	6100.00	89.64	180.05	4871 09	1439.90	-1439.90	-1 18	1439.90	180.05	0.00	---	0 00	0.00
	6200.00	89.64	180.05	4871.72	1539.90	-1539.90	-1.27	1539 90	180.05	0.00	---	0 00	0.00
	6300.00	89 64	180.05	4872.35	1639.90	-1639.90	-1.35	1639.90	180.05	0.00	---	0 00	0.00
	6400.00	89.64	180.05	4872.98	1739.90	-1739.90	-1.43	1739.90	180.05	0.00	---	0 00	0.00
	6500.00	89.64	180.05	4873 61	1839.90	-1839.90	-1 51	1839 90	180.05	0.00	---	0 00	0.00
	6600.00	89.64	180.05	4874.25	1939.89	-1939.89	-1.60	1939.89	180.05	0 00	---	0 00	0.00
	6700.00	89 64	180.05	4874.88	2039.89	-2039.89	-1.68	2039.89	180.05	0.00	---	0 00	0.00
	6800.00	89.64	180.05	4875.51	2139.89	-2139.89	-1.76	2139.89	180.05	0.00	---	0 00	0.00
	6900.00	89.64	180.05	4876.14	2239.89	-2239.89	-1.84	2239 89	180.05	0.00	---	0 00	0.00
	7000.00	89.64	180.05	4876.77	2339.89	-2339 89	-1.93	2339.89	180.05	0.00	---	0 00	0.00
	7100.00	89.64	180.05	4877.40	2439.88	-2439 88	-2.01	2439.88	180.05	0.00	---	0 00	0 00
	7200.00	89.64	180.05	4878.03	2539.88	-2539 88	-2.09	2539.88	180 05	0.00	---	0 00	0.00
	7300.00	89.64	180.05	4878.66	2639.88	-2639.88	-2.17	2639.88	180.05	0.00	---	0 00	0.00
	7400.00	89.64	180.05	4879.29	2739.88	-2739.88	-2.25	2739.88	180 05	0.00	---	0 00	0.00
	7500.00	89 64	180.05	4879.93	2839.88	-2839.88	-2 34	2839.88	180 05	0.00	---	0 00	0.00
	7600.00	89.64	180 05	4880.56	2939.87	-2939.87	-2.42	2939.87	180.05	0.00	---	0 00	0.00
	7700 00	89.64	180 05	4881.19	3039.87	-3039.87	-2.50	3039.87	180.05	0.00	---	0 00	0.00
	7800 00	89.64	180.05	4881.82	3139.87	-3139.87	-2.58	3139.87	180 05	0.00	---	0 00	0.00
	7900.00	89.64	180.05	4882.45	3239.87	-3239.87	-2.67	3239.87	180 05	0.00	---	0 00	0.00
	8000.00	89.64	180.05	4883.08	3339.87	-3339 87	-2.75	3339.87	180.05	0 00	---	0 00	0.00
	8100.00	89.64	180.05	4883.71	3439.86	-3439 86	-2.83	3439.86	180.05	0 00	---	0 00	0.00
	8200.00	89.64	180.05	4884.34	3539.86	-3539.86	-2.91	3539.86	180.05	0 00	---	0 00	0.00
	8300.00	89 64	180 05	4884.97	3639.86	-3639.86	-3.00	3639.86	180 05	0.00	---	0 00	0.00
	8400.00	89.64	180.05	4885 61	3739 86	-3739.86	-3.08	3739.86	180.05	0.00	---	0 00	0.00
	8500.00	89.64	180.05	4886.24	3839.86	-3839 86	-3.16	3839.86	180.05	0 00	---	0 00	0.00
	8600 00	89.64	180.05	4886.87	3939.85	-3939.85	-3.24	3939.85	180.05	0 00	---	0 00	0.00
	8621 02	89 64	180 05	4887 00	3960.87	-3960 87	-3.26	3960.87	180.05	0.00	---	0 00	0.00
	PBHL												

LCX Energy, LLC.

WELL		FIELD		STRUCTURE	
1625 State Com #164		Eddy County, NM NAD83		1625 State Com #164	
Magnetic Parameters		Surface Location		Miscellaneous	
Model	IGRF 2005	Lat	N32 55 42 606	NAD83 New Mexico State Planes, Eastern Zone US Feet	Site
		Lon	W104 29 16 344	Northing	1625 State Com #164
				Easting	1625 State Com #164.r1
Dip	60.767°			Grid Conv	-0.08400690°
Mag Dec	+9.438°			Scale Fact	0.9999116635
Date	March 07, 2008				TVD Ref
					PKB (0.00 ft above)
					Svty Date
					March 07, 2008



INTREPID
Directional Drilling Specialists

