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

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

RECEIVED
MAY 31 2006
OCD-ARTESIA

Form C-101
May 27, 2004

Submit to appropriate District Office

☐ AMENDED REPORT

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

[1] Operator Name and Address	[2] OGRID Number
LCX ENERGY, LLC. 110 NORTH MARIENFELD SUITE 200 MIDLAND, NEW MEXICO 79701	218885
	[3] API Number 30 - 015- 34908

[4] Property Code	[5] Property Name	[6] Well No.
35791	1921 STATE	21

[9] Proposed Pool 1	[10] Proposed Pool 2
WILDCAT-WOLFCAMP	

[7] Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
O	2	19S	21E		660'	SOUTH	1880'	EAST	EDDY

[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	2	19S	21E		660'	NORTH	1880'	EAST	EDDY

Additional Well Information

[11] Work Type Code	[12] Well Type Code	[13] Cable/Rotary	[14] Lease Type Code	[15] Ground Level Elevation
N	G	ROTARY	S	4191'
[16] Multiple	**[17] Proposed Depth**	**[18] Formation**	**[19] Contractor**	**[20] Spud Date**
NO	MD-8735 TVD-4960	WOLFCAMP	BIG DOG	WHEN APPROVED

Depth to Groundwater	Distance from nearest fresh water well	Distance from nearest surface water
100'+	1.5 Mi E	None known

Pit: Liner: Synthetic ☒ 12 mils thick Clay ☐ Pit Volume: 18 bbls
Closed-Loop System ☐

Drilling Method:
Fresh Water ☒ Brine ☒ Diesel/Oil-based ☐ Gas/Air ☐

OK JO.

[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
17½"	13 3/8"	48#	350'	400 Sx.	Surface
12¼"	9 5/8"	36#	1200'	475 Sx.	Surface
8 3/4 & 7 7/8"	5½"	15.5#	MD-8735' TVD-4960'	600 Sx.	Est TOC 1000'

[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

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

Operator To run CBL or Temperature Survey To verify Tie-back

[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 ☐.

Printed name: Joe T. Janica
Title: Agent
E-mail Address: joejanica@valornet.com
Date: 05/30/06 Phone: 505-391-8503

OIL CONSERVATION DIVISION

Approved by: BRYAN G. ARRANT
Title: DISTRICT II GEOLOGIST
Approval Date: JUN 07 2006 Expiration Date: JUN 07 2007
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% $CaCO_3$ (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% $CaCO_3$ (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 H_2S 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., Aztec, 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	Pool Name
	96086	WILDCAT-WOLFCAMP

Property Code	Property Name	Well Number
	1921 STATE	21

OGRID No.	Operator Name	Elevation
218885	LCX ENERGY, LLC	4191'

Surface Location

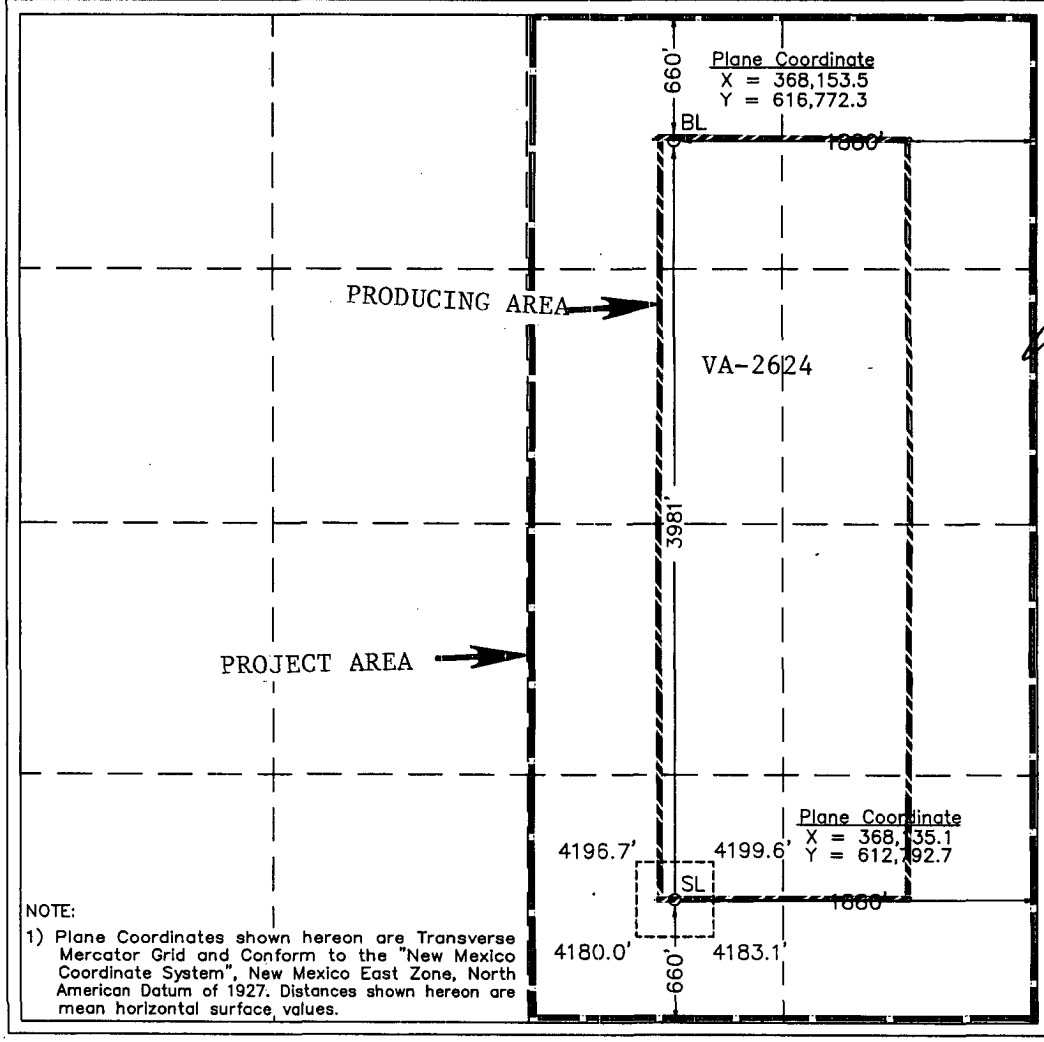
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
O	2	19 S	21 E		1880	EAST	660	SOUTH	EDDY

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
B	2	19 S	21 E		1880	EAST	660	NORTH	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 1927. Distances shown hereon are mean horizontal surface values.

OPERATOR CERTIFICATION

I hereby certify the 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 interestin 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.

Joe T. Janica
Signature

05/30/06
Date

Joe T. Janica
Printed Name

Agent

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 supervison and that the same is true and correct to the best of my belief.

May 12, 2006
Date of Survey

JSR
Signature & Seal of Professional Surveyor

MACON McDONALD NEW MEXICO 12185 PROFESSIONAL SURVEYOR

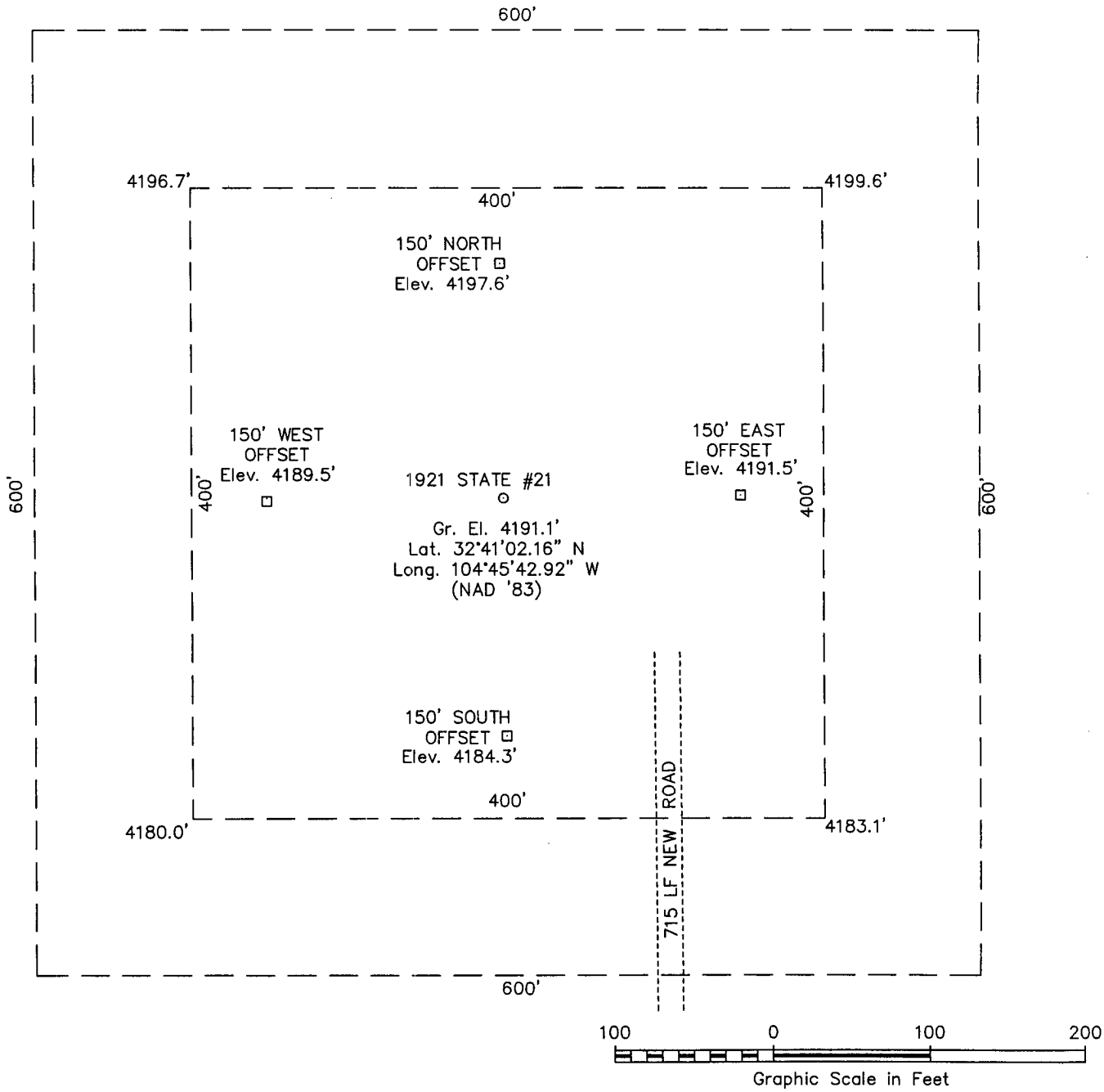
W.O. Num. 2006-0422

Certificate No. MACON McDONALD 12185

SECTION 2, TOWNSHIP 19 SOUTH, RANGE 21 EAST, N.M.P.M.

EDDY COUNTY NEW MEXICO

L-2006-0422



DRIVING DIRECTIONS

Beginning at the intersection of US Highway 82 with County Road 12 (Armstrong Road) located in the West side of the town of Hope, New Mexico, proceed South on County Road 12 (Armstrong Road) for approximately 7.0 miles to a fork intersection with County Road 20 (Broncho Road). Turn Right and proceed Southwesterly along County Road 20 (Broncho Road) approximetely 2.4 miles to a point form which the well location bears West 600 feet.

WEST COMPANY of Midland, Inc.

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

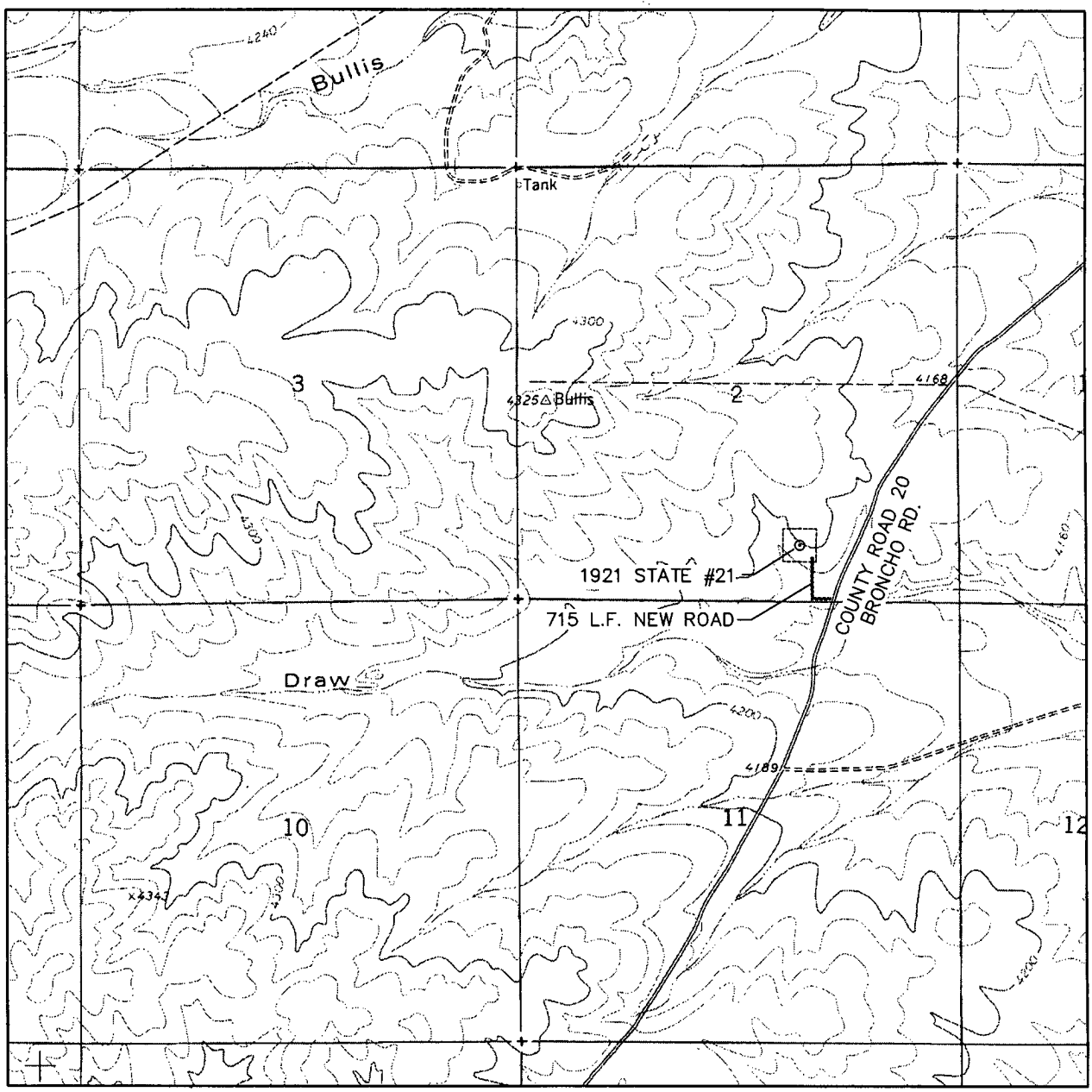
LCX ENERGY, LLC

1921 STATE #21

Located 660' FSL & 1880' FEL, Section 2
Township 19 S, Range 21 E, N.M.P.M.
Eddy County, New Mexico

Drawn By: JSR	Date: May 15, 2006
Scale: 1"=100'	Field Book:
Revision Date:	Quadrangle: Holt Tank, N.M.
W.O. No: 2006-0422	Dwg. No.: L-2006-0422

LOCATION VERIFICATION MAP



SCALE: 1" = 2000'

CONTOUR INTERVAL:
HOLT TANK, NM – 20'

SEC. 2 TWP. 19–S RGE. 21–E

SURVEY N.M.P.M.

COUNTY EDDY

DESCRIPTION 1880' FEL & 660' FSL

ELEVATION 4191'

OPERATOR LCX ENERGY, LLC

LEASE 1921 STATE 21

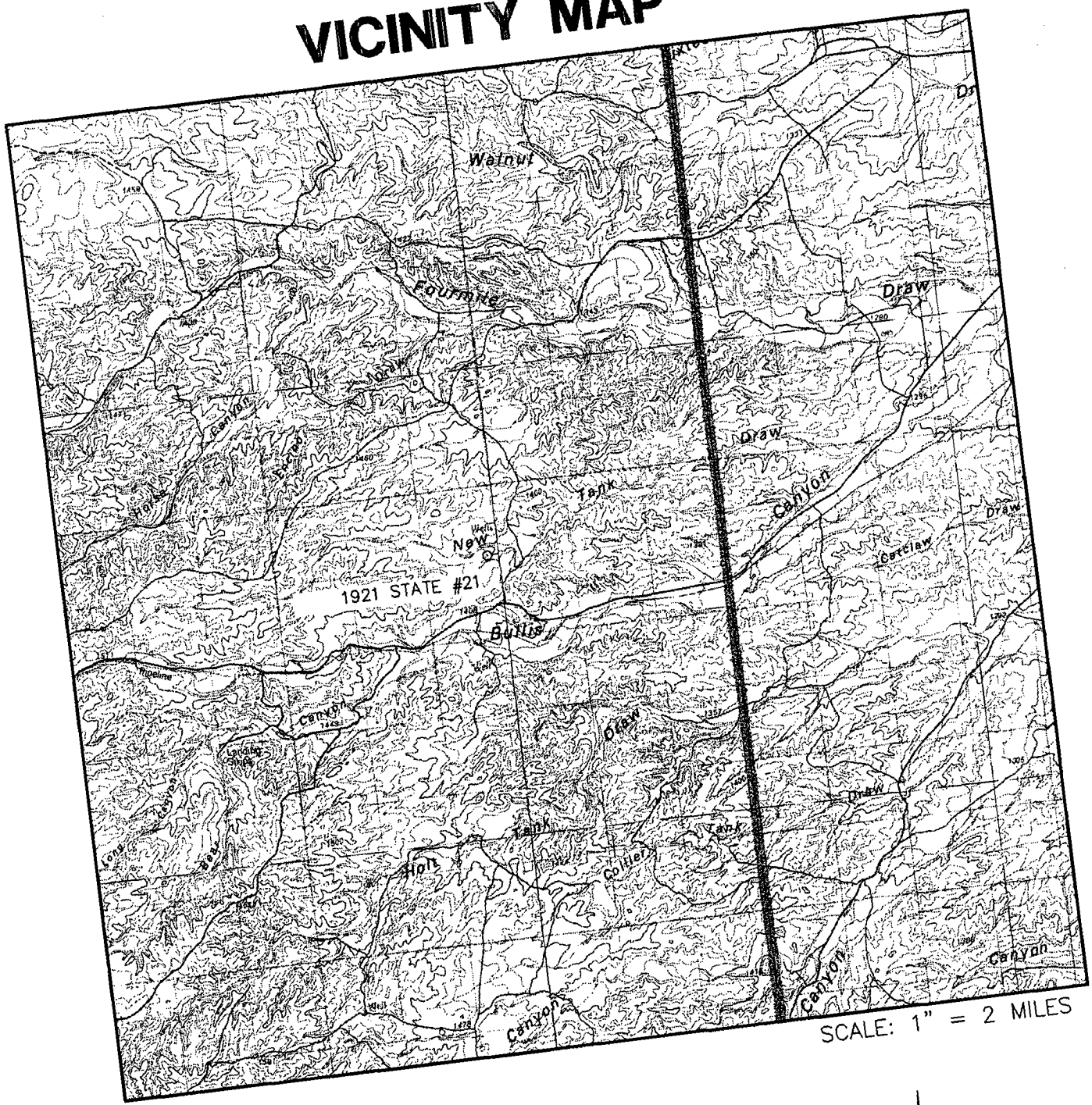
U.S.G.S. TOPOGRAPHIC MAP
HOLT TANK N.M.

NORTH

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. 2 TWP. 19-S RGE. 21-E

SURVEY N.M.P.M.

COUNTY EDDY

DESCRIPTION 1880' FEL & 660' FSL

ELEVATION 4191'

OPERATOR LCX ENERGY, LLC

LEASE 1921 STATE #21

WEST COMPANY of Midland, Inc.

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

Proposal

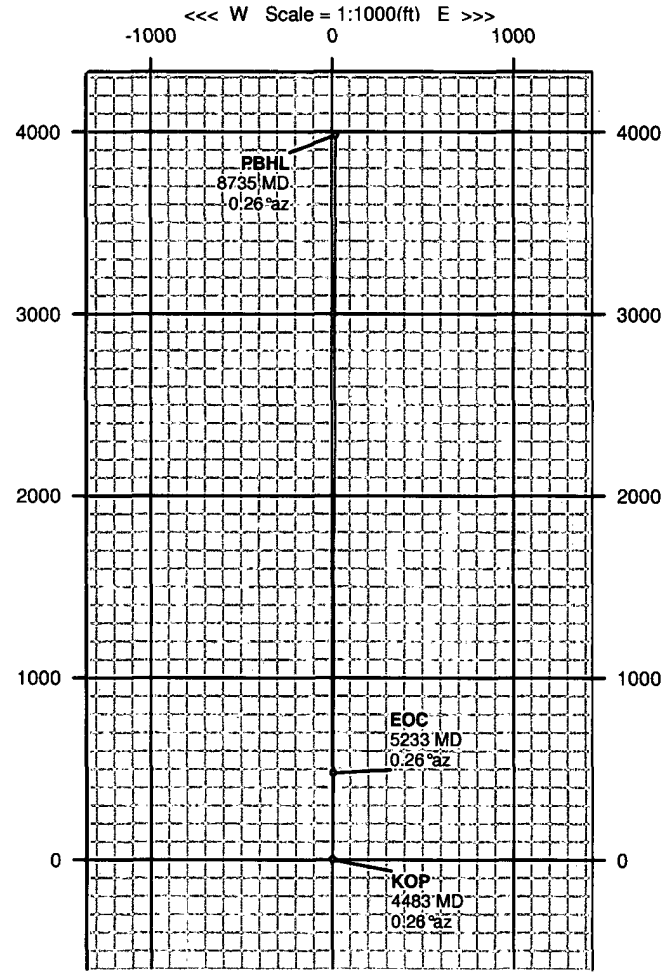
Report Date:	May 16, 2006	**Survey / DLS Computation Method:**	Minimum Curvature / Lubinski
Client:	LCX Energy	**Vertical Section Azimuth:**	0.260°
Field:	Eddy County, NM Nad 83	**Vertical Section Origin:**	N 0.000 ft, E 0.000 ft
Structure / Slot:	1921 State #21 / 1921 State #21	**TVD Reference Datum:**	RKB
Well:	1921 State #21	**TVD Reference Elevation:**	0.0 ft relative to
Borehole:	1921 State #21	**Sea Bed / Ground Level Elevation:**	0.000 ft relative to
UWI/API#:		**Magnetic Declination:**	8.808°
Survey Name / Date:	1921 State #21_r1 / May 16, 2006	**Total Field Strength:**	49285.734 nT
Tort / AHD / DDI / ERD ratio:	90.000° / 3979.88 ft / 5.800 / 0.802	**Magnetic Dip:**	60.498°
Grid Coordinate System:	NAD83 New Mexico State Planes, Eastern Zone, US Feet	**Declination Date:**	May 16, 2006
Location Lat/Long:	N 32 41 0.053, W 104 53 46.621	**Magnetic Declination Model:**	IGRF 2005
Location Grid N/E Y/X:	N 612792.700 ftUS, E 368135.100 ftUS	**North Reference:**	Grid North
Grid Convergence Angle:	-0.30399781°	**Total Corr Mag North -> Grid North:**	+9.112°
Grid Scale Factor:	0.99994345	**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)	Tool Face (deg)
Tie-In	0.00	0.00	0.26	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.26M
KOP	4482.54	0.00	0.26	4482.54	0.00	0.00	0.00	0.00	0.00	0.00	0.26M
	4500.00	2.10	0.26	4500.00	0.32	0.32	0.00	0.32	0.26	12.00	0.26M
	4600.00	14.10	0.26	4598.82	14.38	14.38	0.07	14.38	0.26	12.00	0.00G
	4700.00	26.10	0.26	4692.56	48.67	48.67	0.23	48.67	0.26	12.00	0.00G
	4800.00	38.10	0.26	4777.12	101.71	101.71	0.47	101.71	0.26	12.00	0.00G
	4900.00	50.10	0.26	4848.81	171.17	171.17	0.79	171.17	0.26	12.00	0.00G
	5000.00	62.10	0.26	4904.49	254.01	254.01	1.17	254.01	0.26	12.00	0.00G
	5100.00	74.10	0.26	4941.72	346.63	346.62	1.60	346.63	0.26	12.00	0.00G
	5200.00	86.10	0.26	4958.89	444.95	444.95	2.06	444.95	0.26	12.00	0.00G
EOC	5232.54	90.00	0.26	4960.00	477.46	477.46	2.21	477.46	0.26	12.00	180.00G
PBHL	8734.95	90.00	0.26	4960.00	3979.88	3979.83	18.40	3979.88	0.26	0.00	0.00G

LCX Energy

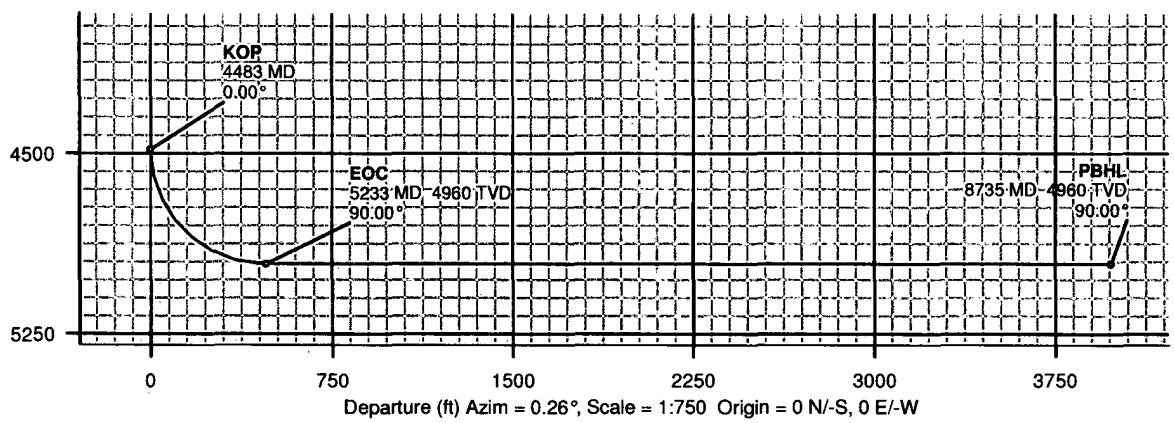
WELL	FIELD	STRUCTURE
1921 State #21	Eddy County, NM	1921 State #21

Magnetic Parameters					Surface Location					Miscellaneous			
Model: IGRF 2005	Dip: 60.486°	Date: May 16, 2006			Lat: N32 41 0.053	Northing: 612792.70 ftUS	NAD83 New Mexico State Planes, Eastern Zone, US Feet	Grid Conv: -0.30399781°		Slot: 1921 State #21	TVD Ref: RKB (0.00 ft above)		
	Mag Dec: +8.808°	FS: 49285.7 nT			Lon: W104 53 46.621	Easting: 368135.10 ftUS		Scale Fact: 0.9999434454		Plan: 1921 State #21_r1	Srvy Date: Tue 03:43 PM May 16, 2006		



INTREPID
Directional Drilling Specialists

Critical Points								
Critical Point	MD	INCL	AZIM	TVD	VSEC	N(+) / S(-)	E(+) / W(-)	DLS
Tie-In	0.00	0.00	0.26	0.00	0.00	0.00	0.00	0.00
KOP	4482.54	0.00	0.26	4482.54	0.00	0.00	0.00	0.00
EOC	5232.54	90.00	0.26	4960.00	477.46	477.46	2.21	12.00
PBHL	8734.95	90.00	0.26	4960.00	3979.88	3979.83	18.40	0.00



Departure (ft) Azim = 0.26°, Scale = 1:750 Origin = 0 N/-S, 0 E/-W

INTREPID
Directional Drilling Specialists

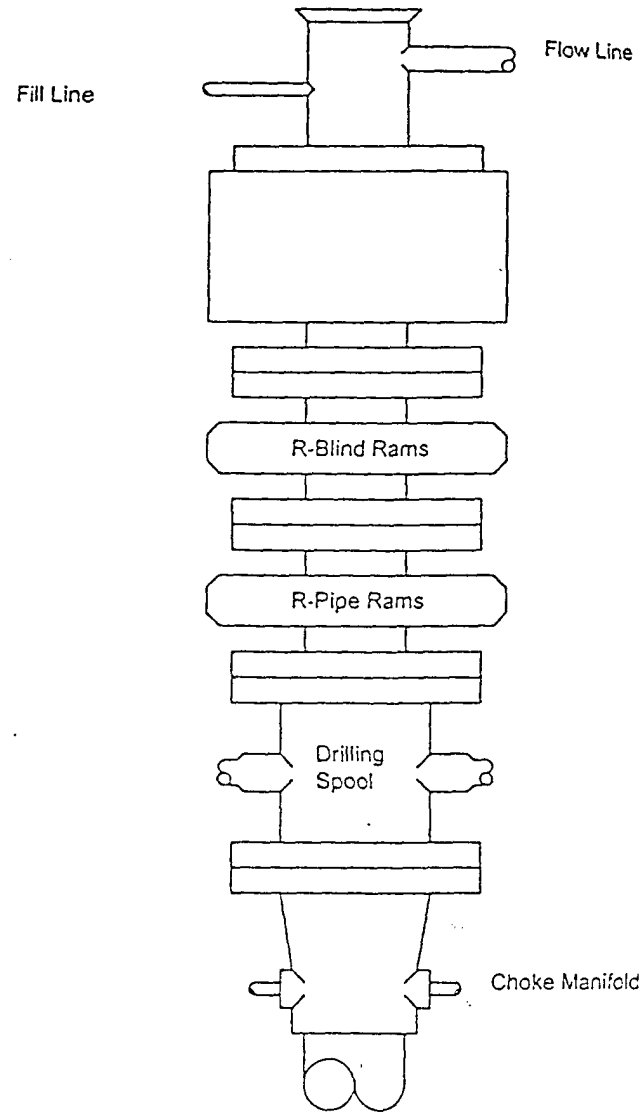
Proposal

Report Date:	May 16, 2006	**Survey / DLS Computation Method:**	Minimum Curvature / Lubinski
Client:	LCX Energy	**Vertical Section Azimuth:**	0.260°
Field:	Eddy County, NM Nad 83	**Vertical Section Origin:**	N 0.000 ft, E 0.000 ft
Structure / Slot:	1921 State #21 / 1921 State #21	**TVD Reference Datum:**	RKB
Well:	1921 State #21	**TVD Reference Elevation:**	0.0 ft relative to
Borehole:	1921 State #21	**Sea Bed / Ground Level Elevation:**	0.000 ft relative to
UWI/API#:		**Magnetic Declination:**	8.808°
Survey Name / Date:	1921 State #21_r1 / May 16, 2006	**Total Field Strength:**	49285.734 nT
Tort / AHD / DDI / ERD ratio:	90.000° / 3979.88 ft / 5.800 / 0.802	**Magnetic Dip:**	60.498°
Grid Coordinate System:	NAD83 New Mexico State Planes, Eastern Zone, US Feet	**Declination Date:**	May 16, 2006
Location Lat/Long:	N 32 41 0.053, W 104 53 46.621	**Magnetic Declination Model:**	IGRF 2005
Location Grid N/E Y/X:	N 612792.700 ftUS, E 368135.100 ftUS	**North Reference:**	Grid North
Grid Convergence Angle:	-0.30399781°	**Total Corr Mag North -> Grid North:**	+9.112°
Grid Scale Factor:	0.99994345	**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)	Tool Face (deg)
Tie-In	0.00	0.00	0.26	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.26M
KOP	4482.54	0.00	0.26	4482.54	0.00	0.00	0.00	0.00	0.00	0.00	0.26M
	4500.00	2.10	0.26	4500.00	0.32	0.32	0.00	0.32	0.26	12.00	0.26M
	4600.00	14.10	0.26	4598.82	14.38	14.38	0.07	14.38	0.26	12.00	0.00G
	4700.00	26.10	0.26	4692.56	48.67	48.67	0.23	48.67	0.26	12.00	0.00G
	4800.00	38.10	0.26	4777.12	101.71	101.71	0.47	101.71	0.26	12.00	0.00G
	4900.00	50.10	0.26	4848.81	171.17	171.17	0.79	171.17	0.26	12.00	0.00G
	5000.00	62.10	0.26	4904.49	254.01	254.01	1.17	254.01	0.26	12.00	0.00G
	5100.00	74.10	0.26	4941.72	346.63	346.62	1.60	346.63	0.26	12.00	0.00G
	5200.00	86.10	0.26	4958.89	444.95	444.95	2.06	444.95	0.26	12.00	0.00G
EOC	5232.54	90.00	0.26	4960.00	477.46	477.46	2.21	477.46	0.26	12.00	180.00G
PBHL	8734.95	90.00	0.26	4960.00	3979.88	3979.83	18.40	3979.88	0.26	0.00	0.00G

BLOWOUT PREVENTER SYSTEM

3000 PSI



900 SERIES
3000 PSI WP

Choke Manifold Assembly for 5M WP System