

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 APR 20 2006 OCD-ARTESIA	OGRID Number 218885
			API Number 30-015-20570
Property Code	Property Name 1724 CASS NORTH COM.		Well No. 291
Proposed Pool 1 COLLINS RANCH-WOLFCAMP (75010)		Proposed Pool 2	

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	29	17S	24E		660'	SOUTH	1980'	EAST	EDDY

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	29	17S	24E		660'	NORTH	1980'	EAST	EDDY

Work Type Code E	Well Type Code G	Cable/Rotary ROTARY	Lease Type Code P	Ground Level Elevation 3825'
Multiple NO	Proposed Depth TVD-4900'	Formation WOLFCAMP	Contractor BIG DOG	Spud Date WHEN APPROVED
Depth to Groundwater 100' +		Distance from nearest fresh water well 1 mile +		Distance from nearest surface water CAT CLAW DRAW .4 MI. NORTH
Pit: Liner: Synthetic ☒ 12 mils thick Clay ☐ Pit Volume: 18M bbls Drilling Method:				
Closed-Loop System ☐ Fresh Water ☒ Brine ☒ Diesel/Oil-based ☐ Gas/Air ☐				

Proposed Casing and Cement Program					
Hole Size	Casing Size	Casing weight/foot	Setting Depth	Sacks of Cement	Estimated TOC
17 1/2"	13 3/8"	72#	300'	320 Sx	Surface.
12 1/4"	8 5/8"	24#	1815'	1000 Sx.	Surface
7 7/8"	5 1/2"	15.5#	TVD-4960'	600 Sx.	1000' FS
			MD-8721'		

** 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 DETAILS

Verify TOC on 5 1/2" casing by CBL or Temp Survey

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 NMOC guidelines ☒ a general permit ☐ or an (attached) alternative OCD-approved plan ☐ .		OIL CONSERVATION DIVISION	
Printed name: Joe T. Janica		Approved by: BRYAN G. ARRANT	
Title: Agent		DISTRICT II GEOLOGIST	
E-mail Address: joe.janica@valornet.com		Approval Date: APR 26 2006 Expiration: APR 26 2007	
Date: 04/19/06	Phone: 505-391-8503	Conditions of Approval Attached ☐	

LCX ENERGY, LLC
110 N. Marienfeld St., Suite 200
Midland, TX 79701
Sept. 1, 2005

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

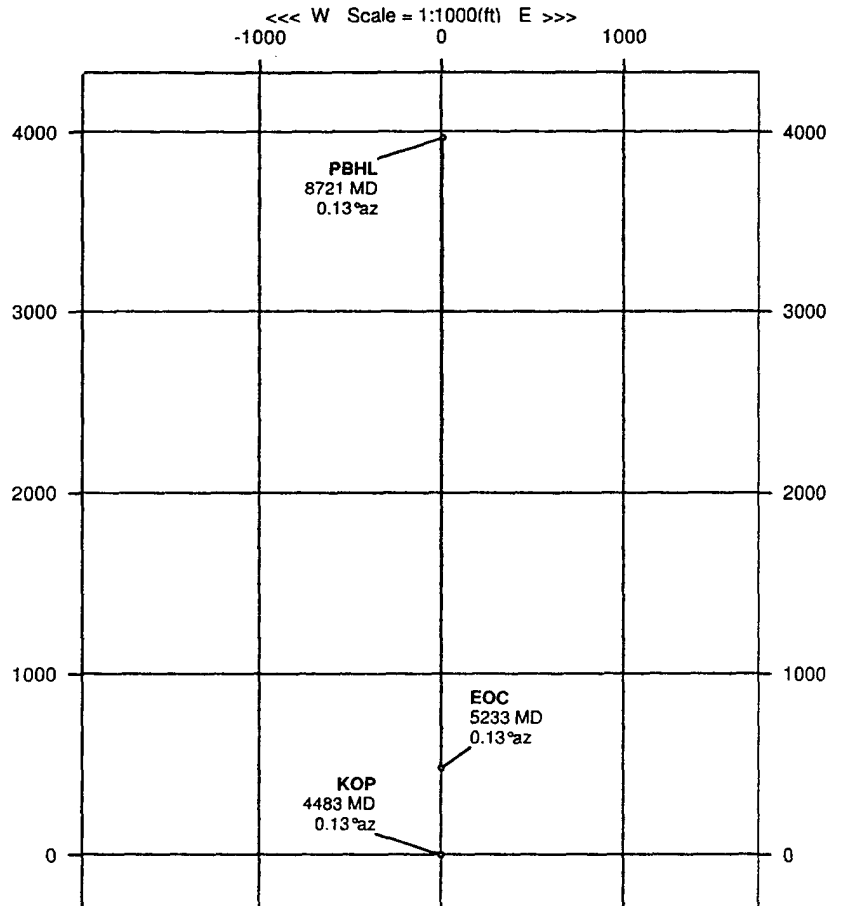
1. Weld on 13 3/8" casing head, nipple up BOPs. Drill out w/ 7 7/8" bit, drill first plug at surface. Continue in hole and drill out plugs at 700' and 1770'. Test 8 5/8" casing to 1000#. Continue drilling out plugs to 5100"±. Log well with Baker Triple Combo log.
2. Set cement kick-off plug from TD to approx. 4800 ft with 150 sx H + 0.7% dispersant.
3. 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 7-7/8" bit and drill a +/-4000' lateral to 660' from lease line (approx. 4000 ft vertical section).
4. Run and set 5-1/2" 15.5# 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'.

No known prescence of any H₂S in this area, wells drilled near to this well did not encounter any H₂S.

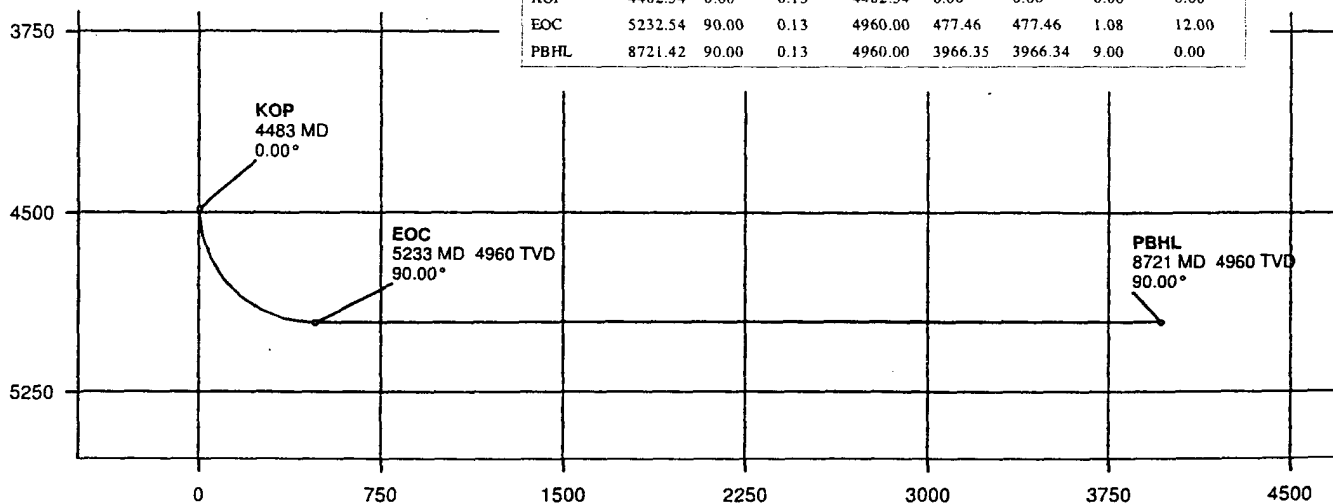
Jeet Jernica

LCX Energy

WELL	1724 Cass North Com	FIELD	Eddy County, NM	STRUCTURE	#291
Magnetic Parameters Model: KGRF 2005	Dip: 80.964° Mag Dec: +8.706°	Date: April 10, 2008 FS: 49433.9 mT	Surface Location Lat: N32 48 3.387 Lon: W104 39 32.074	NAD83 New Mexico State Plane, Eastern Zone, US Feet 655225.00 EUS Grid Convr: -0.1482845° Easting: 456563.00 EUS Scale Fact: 0.999973014	Miscellaneous Site: 1724 Cass North Com #291 Plan: 1724 #291 - 11 TVD Ref: RKB (0.00 ft above) Sour Curs: Mon 02:35 PM April 10, 2008



Critical Points								
Critical Point	MD	INCL	AZIM	TVD	YSEC	N(+) / S(-)	E(+) / W(-)	DLS
Tie-In	0.00	0.00	0.13	0.00	0.00	0.00	0.00	0.00
KOP	4482.54	0.00	0.13	4482.54	0.00	0.00	0.00	0.00
EOC	5232.54	90.00	0.13	4960.00	477.46	477.46	1.08	12.00
PBHL	8721.42	90.00	0.13	4960.00	3966.35	3966.34	9.00	0.00



Departure (ft) Azim = 0.13°, Scale = 1:750 Origin = 0 N/-S, 0 E/-W

Proposal

Report Date: April 10, 2006	Survey / DLS Computation Method: Minimum Curvature / Lubinski
Client: LCX Energy	Vertical Section Azimuth: 0.130°
Field: Eddy County, NM Nad 83	Vertical Section Origin: N 0.000 ft, E 0.000 ft
Structure / Slot: 1724 Cass North Com #291 / 1724 Cass North Com #291	TVD Reference Datum: RKB
Well: 1724 Cass North Com #291	TVD Reference Elevation: 0.0 ft relative to
Borehole: 1724 Cass North Com #291	Sea Bed / Ground Level Elevation: 0.000 ft relative to
UWI/API#:	Magnetic Declination: 8.706°
Survey Name / Date: 1724 #291_r1 / April 10, 2006	Total Field Strength: 49402.953 nT
Tort / AHD / DDI / ERD ratio: 90.000° / 3966.35 ft / 5.798 / 0.800	Magnetic Dip: 60.664°
Grid Coordinate System: NAD83 New Mexico State Planes, Eastern Zone, US Feet	Declination Date: April 10, 2006
Location Lat/Long: N 32 48 3.387, W 104 36 32.074	Magnetic Declination Model: IGRF 2005
Location Grid N/E Y/X: N 655225.000 ftUS, E 456663.000 ftUS	North Reference: Grid North
Grid Convergence Angle: -0.14928645°	Total Corr Mag North -> Grid North: +8.855°
Grid Scale Factor: 0.99991730	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	0.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.13M
KOP	4482.54	0.00	0.13	4482.54	0.00	0.00	0.00	0.00	0.00	0.00	0.13M
	4500.00	2.10	0.13	4500.00	0.32	0.32	0.00	0.32	0.13	12.00	0.13M
	4600.00	14.10	0.13	4598.82	14.38	14.38	0.03	14.38	0.13	12.00	0.00G
	4700.00	26.10	0.13	4692.56	48.67	48.67	0.11	48.67	0.13	12.00	0.00G
	4800.00	38.10	0.13	4777.12	101.71	101.71	0.23	101.71	0.13	12.00	0.00G
	4900.00	50.10	0.13	4848.81	171.17	171.17	0.39	171.17	0.13	12.00	0.00G
	5000.00	62.10	0.13	4904.49	254.01	254.01	0.58	254.01	0.13	12.00	0.00G
	5100.00	74.10	0.13	4941.72	346.63	346.62	0.79	346.63	0.13	12.00	0.00G
	5200.00	86.10	0.13	4958.89	444.95	444.95	1.01	444.95	0.13	12.00	0.00G
EOC	5232.54	90.00	0.13	4960.00	477.46	477.46	1.08	477.46	0.13	12.00	0.00G
PBHL	8721.42	90.00	0.13	4960.00	3966.35	3966.34	9.00	3966.35	0.13	0.00	0.00G

**MEXICO OIL CONSERVATION COMMISSION
WELL LOCATION AND ACREAGE DEDICATION PLAT**

Form C-101
Supersedes C-128
Effective 1-1-85

All distances must be from the outer boundaries of the Section.

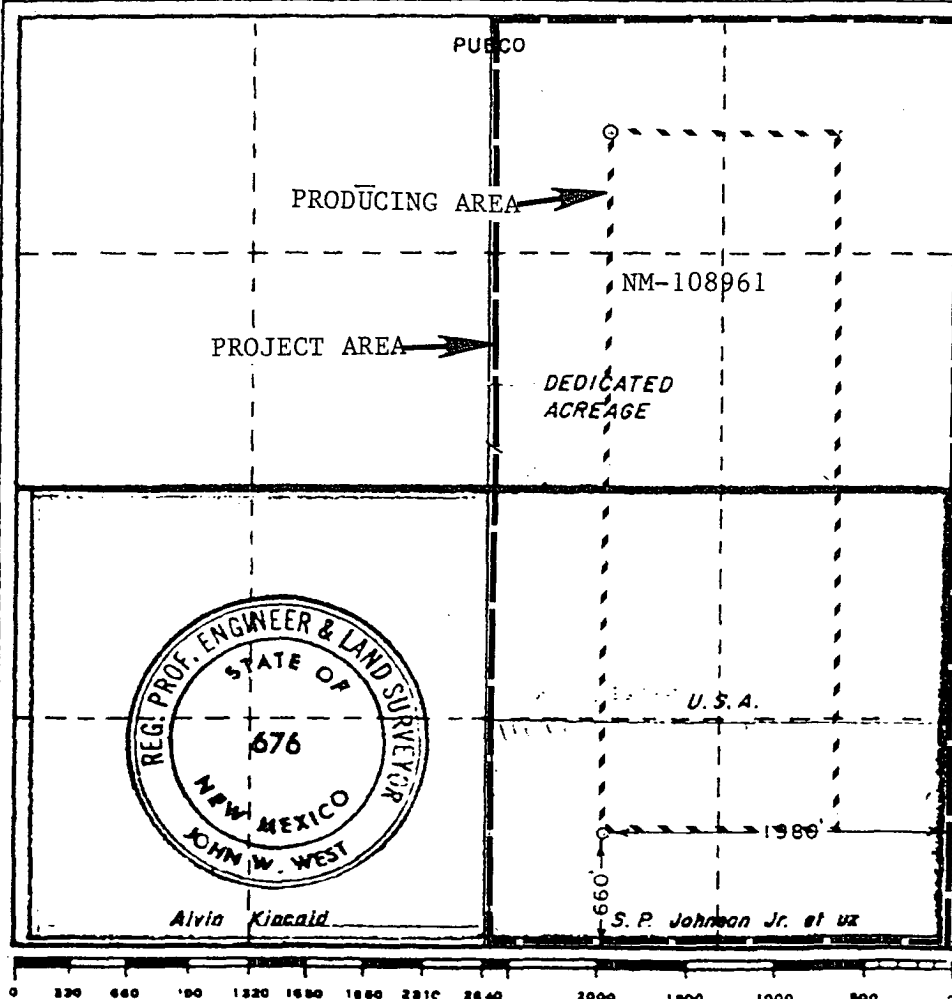
Operator PUBCO PETROLEUM CORP.			Lease Cass North 'Com'		Well No. 1
Unit Letter 0	Section 29	Township 17 SOUTH	Range 24 EAST	County EDDY	
Actual Footage Location of Well: 660 feet from the SOUTH line and 1980 feet from the EAST line					
Ground Level Elev. 3824.5	Producing Formation		Pool Wildcat	Dedicated Acreage: 320 Acres	

1. Outline the acreage dedicated to the subject well by colored pencil or hachure marks on the plat below.
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).
3. If more than one lease of different ownership is dedicated to the well, have the interests of all owners been consolidated by communitization, unitization, force-pooling, etc?

☒ Yes ☐ No If answer is "yes," type of consolidation Communitization

If answer is "no," list the owners and tract descriptions which have actually been consolidated. (Use reverse side of this form if necessary.) _____

No allowable will be assigned to the well until all interests have been consolidated (by communitization, unitization, forced-pooling, or otherwise) or until a non-standard unit, eliminating such interests, has been approved by the Commission.



CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.

J. C. Johnson
Name

J. C. Johnson

Position

Vice President Production

Company

Pubco Petroleum Corporation

Date

January 26, 1972

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 knowledge and belief.

Date Surveyed

JANUARY 5, 1972

Registered Professional Engineer and/or Land Surveyor

John W. West
Certificate No.

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