



If earthen pits are used in association with the drilling of this well, an OCD pit permit must be obtained prior to pit construction.

ATS-07-611
EA-07-1204

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

SEP 24 2007
OCD-ARTESIA

APPLICATION FOR PERMIT TO DRILL OR REENTER

FORM APPROVED
OMB No. 1004-0137
Expires March 31, 2007

1a. Type of work: <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER		5. Lease Serial No. NM-11460
1b. Type of Well: <input type="checkbox"/> Oil Well <input checked="" type="checkbox"/> Gas Well <input checked="" type="checkbox"/> Other <input checked="" type="checkbox"/> Single Zone <input type="checkbox"/> Multiple Zone		6. If Indian, Allottee or Tribe Name -----
2. Name of Operator LCX ENERGY, LLC. (432-262-4046) KELVIN FISHER		7. If Unit or CA Agreement, Name and No. -----
3a. Address 101 NORTH MARIENFELD SUITE 200 MIDALND, TEXAS 79701	3b. Phone No. (include area code) 432-687-1575 ex1046	8. Lease Name and Well No. 1625 FEDERAL COM. # 292
4. Location of Well (Report location clearly and in accordance with any State requirements.)* At surface 1880' FSL & 660' FEL SECTION 29 T16S-R25E EDDY CO NM At proposed prod. zone 1880' FSL & 660' FWL SEC. 29 T16S-R25E		9. API Well No. 30-015-35827
14. Distance in miles and direction from nearest town or post office* Approximately 5 miles Northwest of Artesia New Mexico		10. Field and Pool, or Exploratory COTTONWOOD CREEK- WOLFCAMP
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) 660'	16. No. of acres in lease 480	11. Sec., T. R. M. or Blk. and Survey or Area SECTION 29 T16S-R25E
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. 2640'	19. Proposed Depth TVD-4960' MD-8721'	12. County or Parish EDDY CO.
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 3564' GL	22. Approximate date work will start* WHEN APPROVED	13. State NM
23. Estimated duration 37 Days		
24. Attachments ROSWELL CONTROLLED WATER BASIN		

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No 1, shall be attached to this form:

- | | |
|---|--|
| 1. Well plat certified by a registered surveyor. | 4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above). |
| 2. A Drilling Plan. | 5. Operator certification |
| 3. A Surface Use Plan (if the location is on National Forest System Lands, the SUPO shall be filed with the appropriate Forest Service Office). | 6. Such other site specific information and/or plans as may be required by the authorized officer. |

25. Signature <i>Joe T. Janica</i>	Name (Printed/Typed) Joe T. Janica	Date 08/01/07
Title Agent		
Approved by (Signature) <i>/s/ James Stovall</i>	Name (Printed/Typed)	Date SEP 19 2007
Title FIELD MANAGER	Office CARLSBAD FIELD OFFICE	

Application approval does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Conditions of approval, if any, are attached.

APPROVAL FOR TWO YEARS

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

SEE ATTACHED FOR
CONDITIONS OF APPROVAL

APPROVAL SUBJECT TO
GENERAL REQUIREMENTS
AND SPECIAL STIPULATIONS
ATTACHED

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 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 75250	Pool Name COTTONWOOD CREEK-WOLFCAMP
Property Code 34279	Property Name 1625 FEDERAL COM	Well Number 292
OGRID No. 218885	Operator Name LCX ENERGY	Elevation 3564'

Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
I	29	16 S	25 E		1880	SOUTH	660	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
L	29	16 S	25 E		1880	SOUTH	660	WEST	EDDY

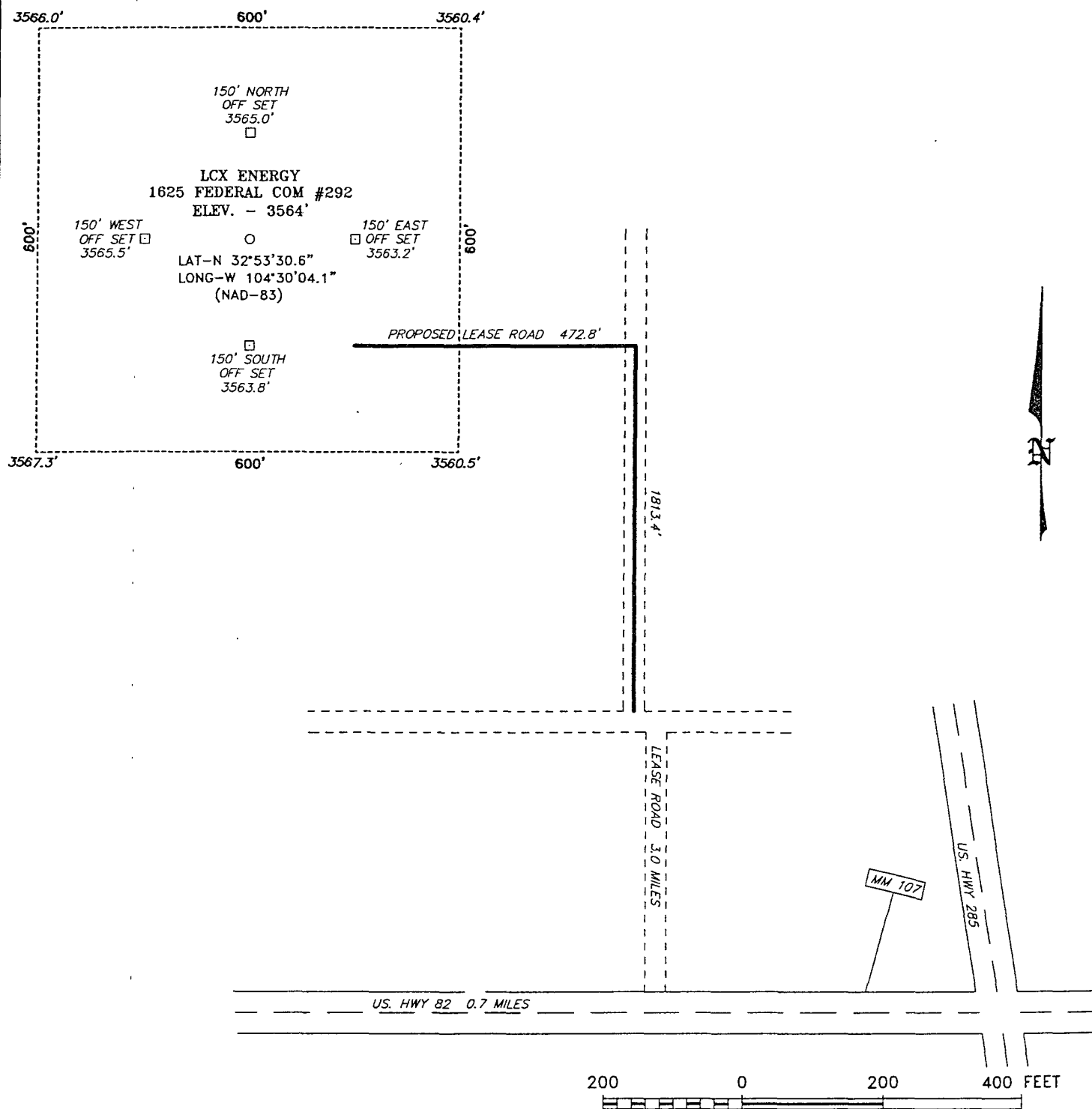
Dedicated Acres 320	Joint or Infill	Consolidation Code	Order No.
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NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED
OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

	<p>OPERATOR CERTIFICATION</p> <p>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.</p> <p><i>Joe T. Janica</i> Signature Date 08/01/07</p> <p>Joe T. Janica Printed Name Agent</p> <p>SURVEYOR CERTIFICATION</p> <p>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.</p> <p>APRIL 30, 2007</p> <p>Date Surveyed Signature, Seal Professional Surveyor NEW MEXICO 7977 W.Q. No. 17812 Certificate No. Gary L. Jones 7977 BASIN SURVEYS</p>
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EXHIBIT "A"

SECTION 29, TOWNSHIP 16 SOUTH, RANGE 25 EAST, N.M.P.M.,
EDDY COUNTY, NEW MEXICO.



DIRECTIONS TO LOCATION:

FROM THE JUNCTION OF US. HWY 285 AND US. HWY 82
IN ARTESIA, PROCEED WEST ON US. HWY 82 TO MILE
MARKER #107; FROM MILE MARKER #107 CONTINUE WEST
0.7 MILES TO LEASE ROAD, ON LEASE ROAD GO NORTH
3.0 MILES TO A "T" AND PROPOSED LEASE ROAD.



SCALE: 1" = 200'

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

W.O. Number: 17812 Drawn By: J. M. SMALL

Date: 05-08-2007 Disk: 17812W

LCX ENERGY

REF: 1625 FEDERAL COM #292 / Well Pad Topo

THE 1625 FEDERAL COM No. 292 LOCATED 1880' FROM
THE SOUTH LINE AND 660' FROM THE EAST LINE OF
SECTION 29, TOWNSHIP 16 SOUTH, RANGE 25 EAST,

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

Survey Date: 04-30-2007 Sheet 1 of 1 Sheets

LCX ENERGY, LLC
110 N. Marienfeld St., Suite 200
Midland, TX 79701
Aug. 15, 2007

**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.

APPLICATION TO DRILL

LCX ENERGY, LLC.
 1625 FEDERAL COM. #292
 UNIT "I" SECTION 29
 T16S-R25E EDDY CO. NM

In response to questions asked under Section II of Bulletin NTL-6 the following information on the above well is provided for your consideration.

1. Location of well: 1880' FSL & 660' FEL SECTION 29 T16S-R25E
2. Ground Elevation above Sea Level: 3564' GL
3. Geological age of surface formation: Quaternary Deposits:
4. Drilling tools and associated equipment: Conventional rotary drilling rig using drilling mud as a circulating medium to remove solids from hole.
5. Proposed drilling depth: MD-8721'± TVD-4960'±

6. Estimated tops of geological markers:

San Andres	575'	Abo	3875'
Glorietta	1715'	Wolfcamp	4700'
Tubb	3200'		

7. Possible mineral bearing formations:

Abo	Gas
Wolfcamp	Gas

8. Casing Program: (new) per operator 8/17/67

Hole Size	Interval	OD of Casing	Weight	Thread	Collar	Grade
26"	0-40'	20"	NA	NA	NA	Conductor
17½"	0-350'	13 3/8"	48#	8-R	ST&C	H-40
12½"	0-1200'	8 9/16" <i>per operator 8/17/67</i>	36#	8-R	ST&C	J-55
8 3/4" & 7 7/8"	0-8721'	5½"	17#	8-R Butt.	LT&C	N-80
SAFETY FACTORS: COLLAPSE 1.125 BURST 1.0 TENSION 1.8 BODY YIELD 1.5						

APPLICATION TO DRILL

LOX ENERGY, LLC.
1625 FEDERAL COM. #292
UNIT "I" SECTION 29
T16S-R25E EDDY CO. NM

9. CASING CEMENTING & SETTING DEPTH:

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'. Run and set 350' of 13 3/8" 48# H-40 ST&C casing. Cement with 195 Sx. of 35/65 Class "C" POZ + 6% D20, + 4 pps D24 + .125 pps D130. + 3% S1 WT 12.7 ppg, yield 1.94, tail in with 260 Sx. of Class "C" cement + 2% S1, + .125 ppg D130, + 2pps D24, WT 14.8 ppg, yield 1.34.
3. Drill 12 1/4" hole to 1200'. Run and set 1200' of 9 5/8" 36# J-55 ST&C casing. Cement with 280 Sx. of 35/65 Class "C" POZ cement + 6% D20, + 5 pps D24, + 3% S1, + .125 pps D130, WT 12.7ppg, yield 1.95, tail in with 245 Sx. of Class "C" cement + 2% S1 WT 14.8ppg, yield 1.34, circulate cement to surface. 8 5/8" 24# J-55 ST&C casing may be substituted for the 9 5/8" 36# J-55 ST&C casing depending on the hole conditions.
4. Drill 7 7/8" hole to a measured depth of 8750' + . Run and set 8750' of 5 1/2" 17# N-80 LT&C casing. Cement with 495 Sx. of Class "C" 50/50 POZ + 5% D44 (bwow), + 10% D20, + .125pps D130, + .3% D112 WT 11.9 ppg, yield 2.46., tail in with 370 Sx. of TWI Lightweight, + 100% D151, + 2% D174, + .6% D65, + 2% S1, + .2% D46. WT 13.0ppg, yield 2.79. Estimate top of cement 1000'.

10. PRESSURE CONTROL EQUIPMENT: Exhibit "E" shows a 900 series 3000 PSI working pressure B.O.P. consisting of an annular bag type preventor, middle blind rams, and bottom pipe rams. The B.O.P. will be nipped up on the 13 3/8" casing and tested to API specifications. The B.O.P. will be operated at least once each 24 Hr. period and the blind rams will be operated when the drill pipe is out of on trips. Full opening stabbing valve and upper kelly cock will be available in case if needed. Exhibit "E-1" shows a hydraulically operated closing unit and a 3" 3000 PSI choke manifold with adjustable chokes. No abnormal pressures or temperatures are expected while drilling this well. No problems in offset wells.

11. PROPOSED MUD CIRCULATING SYSTEM:

DEPTH	MUD WT.	VISC.	FLUID LOSS	TYPE MUD SYSTEM
40-350'	8.4-8.7	29-34	NC	Fresh water use paper to control seepage.
350-1200'	8.4-8.7	30-38	NC	Fresh water use paper to control seepage.
1200-5000'±	9.0-9.2	29-34	NC	Cut brine circulate outer reserve
5000-8721'±	9.0-9.3	29-38	* 15 cc or less	Cut brine use high viscosity sweeps to clean hole

* Water loss may have to be controlled to log well and run casing.

Sufficient mud materials will be kept on location at all times in order to combat lost circulation, or unexpected kicks. In order to run DST's, open hole logs, and casing, viscosity, and water loss may have to be adjusted to meet these needs.

APPLICATION TO DRILL

LCX ENERGY, LLC.
1625 FEDERAL COM. #292
UNIT "I" SECTION 29
T16S-R25E EDDY CO. NM

12. LOGGING, CORING, AND TESTING PROGRAM:

- A. Open hole logs: Log vertical hole with Dual Induction, SNP, MSFL, LDT, Gamma Ray, Caliper from TVD back to the 9 5/8" casing shoe.
- B. Cased hole log Gamma Ray, Neutron from 9 5/8" casing shoe back to surface.
- C. Rig up mud logger on hole at 3700'±.
- D. No cores or DST's are planned at this time.

13. POTENTIAL HAZARDS:

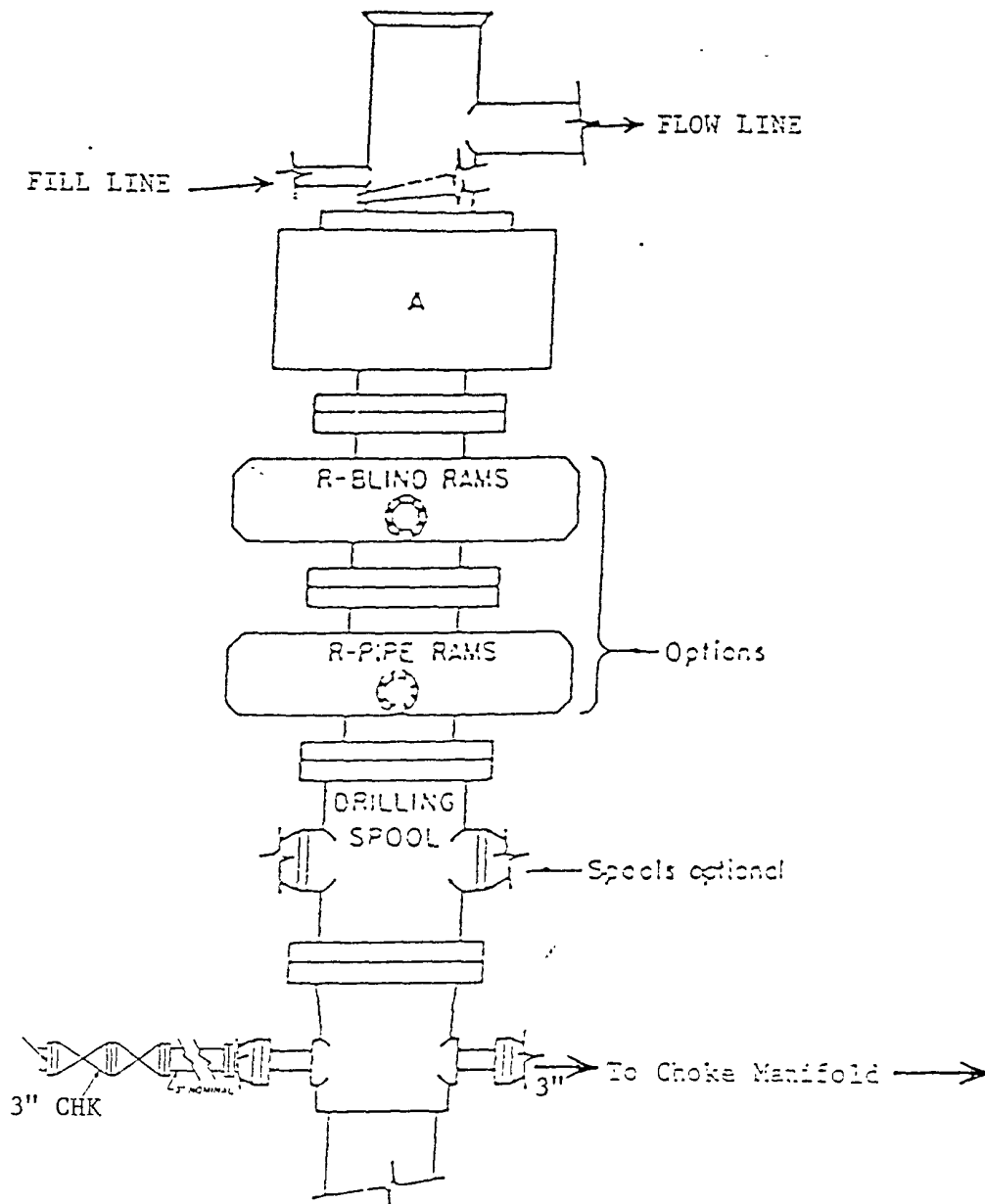
No abnormal pressures or temperatures are expected. There is no known presence of H²S in this area. If H²S is encountered the operator will comply with the provisions of Onshore Oil and Gas Order No. 6. No lost circulation is expected to occur. All personnel will be familiar with all aspects of safe operation of equipment being used to drill this well. Estimated BHP 3500 PSI, and Estimated BHT 165°.

14. ANTICIPATED STARTING DATE AND DURATION OF OPERATION:

Road and location construction will begin after the BLM has approved the APD. Anticipated spud date will be as soon after BLM approval and as soon as a rig will be available. Move in operation and drilling is expected to take 40 days. If production casing is run then an additional 30 days will be needed to complete well and construct surface facilities and/or lay flowlines in order to place well on production.

15. OTHER FACETS OF OPERATIONS:

After running casing, cased hole Gamma Ray, Neutron Collar logs will be run from TD back to all possible productive zones. The Wolfcamp formation will be perforated and stimulated in order to establish production. The well will be swab tested and potentialized as a gas well.

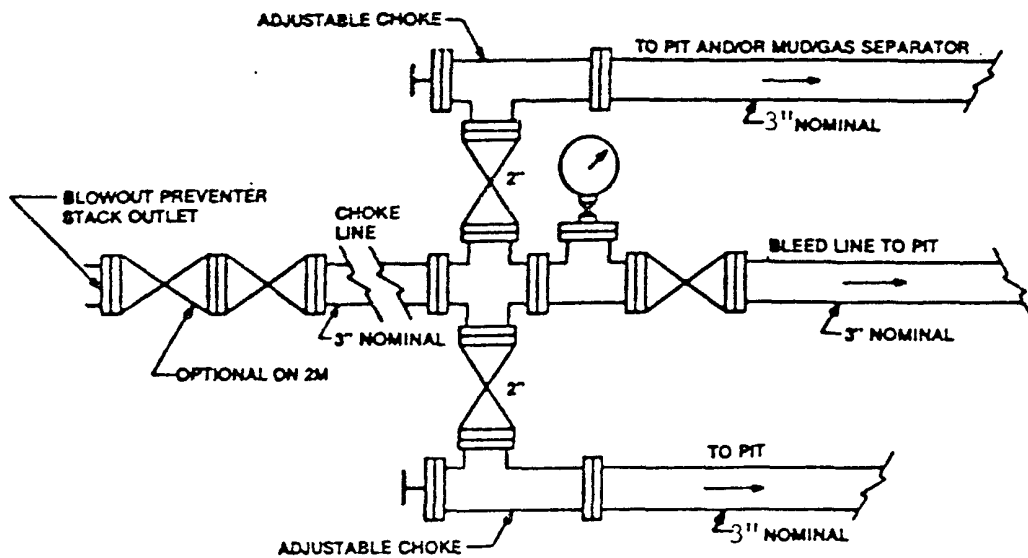


ARRANGEMENT SRRA

900 Series
3000 PSI WP

EXHIBIT "E"
SKETCH OF B.O.P. TO BE USED ON

LCX ENERGY, LLC.
1625 FEDERAL COM. #292
UNIT "I" SECTION 29
T16S-R25E EDDY CO. NM



Typical choke manifold assembly for 3M WP system

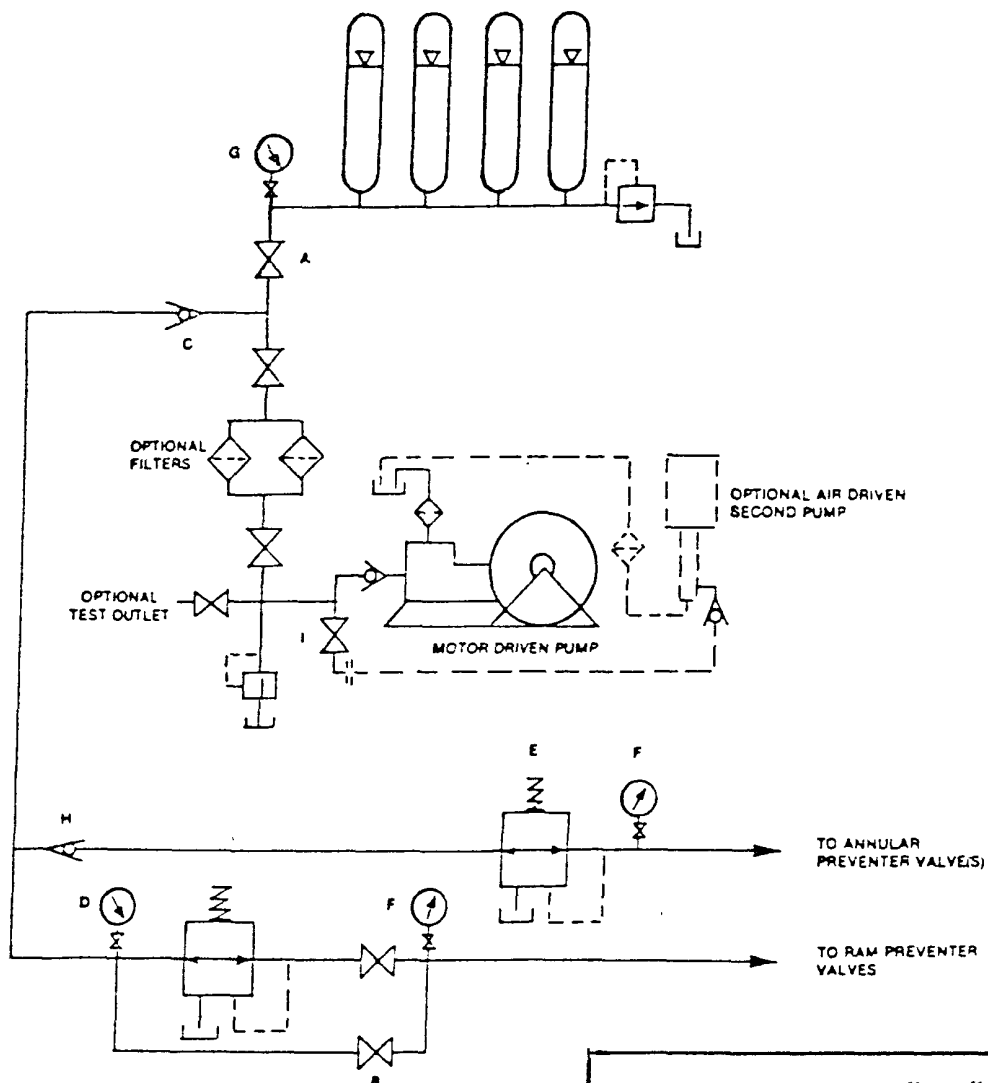


EXHIBIT "E-1"
CHOKE MANIFOLD & CLOSING UNIT

LCX ENERGY LLC.
1625 FEDERAL COM. #292
UNIT "I" SECTION 29
T16S-R25E EDDY CO. NM

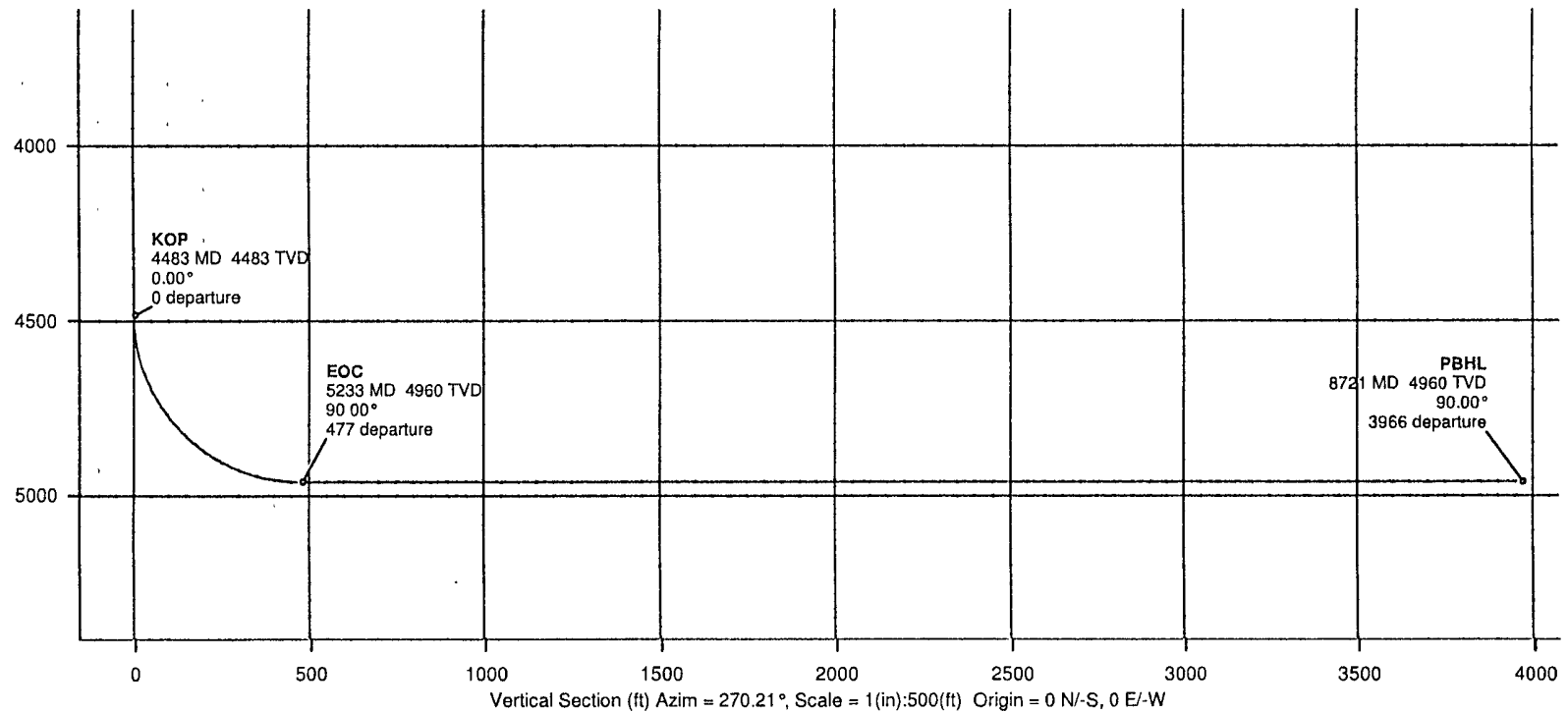
Proposal

Report Date: May 21, 2007	Survey / DLS Computation Method: Minimum Curvature / Lubinski
Client: LCX Energy	Vertical Section Azimuth: 270.210°
Field: Eddy County, NM Nad 83	Vertical Section Origin: N 0.000 ft, E 0.000 ft
Structure / Slot: 1625 Federal Com #292 / 1625 Federal Com #292	TVD Reference Datum: RKB
Well: 1625 Federal Com #292	TVD Reference Elevation: 0.0 ft relative to
Borehole: 1625 Federal Com #292	Sea Bed / Ground Level Elevation: 0.000 ft relative to
UWI/API#:	Magnetic Declination: 8.536°
Survey Name / Date: 1625 Federal Com #292_r1 / May 21, 2007	Total Field Strength: 49364.893 nT
Tort / AHD / DDI / ERD ratio: 90.000° / 3966.00 ft / 5.798 / 0.800	Magnetic Dip: 60.747°
Grid Coordinate System: NAD83 New Mexico State Planes, Eastern Zone, US Feet	Declination Date: May 21, 2007
Location Lat/Long: N 32 53 30.600, W 104 30 4.100	Magnetic Declination Model: IGRF 2005
Location Grid N/E Y/X: N 688223.927 ftUS, E 489829.539 ftUS	North Reference: Gnd North
Grid Convergence Angle: -0.09112779°	Total Corr Mag North -> Grid North: +8.627°
Grid Scale Factor: 0.99991213	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)
Tie-In	0.00	0.00	270.21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	---
	100.00	0.00	270.21	100.00	0.00	0.00	0.00	0.00	0.00	0.00	---
	200.00	0.00	270.21	200.00	0.00	0.00	0.00	0.00	0.00	0.00	---
	300.00	0.00	270.21	300.00	0.00	0.00	0.00	0.00	0.00	0.00	---
	400.00	0.00	270.21	400.00	0.00	0.00	0.00	0.00	0.00	0.00	---
	500.00	0.00	270.21	500.00	0.00	0.00	0.00	0.00	0.00	0.00	---
	600.00	0.00	270.21	600.00	0.00	0.00	0.00	0.00	0.00	0.00	---
	700.00	0.00	270.21	700.00	0.00	0.00	0.00	0.00	0.00	0.00	---
	800.00	0.00	270.21	800.00	0.00	0.00	0.00	0.00	0.00	0.00	---
	900.00	0.00	270.21	900.00	0.00	0.00	0.00	0.00	0.00	0.00	---
	1000.00	0.00	270.21	1000.00	0.00	0.00	0.00	0.00	0.00	0.00	---
	1100.00	0.00	270.21	1100.00	0.00	0.00	0.00	0.00	0.00	0.00	---
	1200.00	0.00	270.21	1200.00	0.00	0.00	0.00	0.00	0.00	0.00	---
	1300.00	0.00	270.21	1300.00	0.00	0.00	0.00	0.00	0.00	0.00	---
	1400.00	0.00	270.21	1400.00	0.00	0.00	0.00	0.00	0.00	0.00	---
	1500.00	0.00	270.21	1500.00	0.00	0.00	0.00	0.00	0.00	0.00	---
	1600.00	0.00	270.21	1600.00	0.00	0.00	0.00	0.00	0.00	0.00	---
	1700.00	0.00	270.21	1700.00	0.00	0.00	0.00	0.00	0.00	0.00	---
	1800.00	0.00	270.21	1800.00	0.00	0.00	0.00	0.00	0.00	0.00	---
	1900.00	0.00	270.21	1900.00	0.00	0.00	0.00	0.00	0.00	0.00	---
	2000.00	0.00	270.21	2000.00	0.00	0.00	0.00	0.00	0.00	0.00	---
	2100.00	0.00	270.21	2100.00	0.00	0.00	0.00	0.00	0.00	0.00	---
	2200.00	0.00	270.21	2200.00	0.00	0.00	0.00	0.00	0.00	0.00	---
	2300.00	0.00	270.21	2300.00	0.00	0.00	0.00	0.00	0.00	0.00	---
	2400.00	0.00	270.21	2400.00	0.00	0.00	0.00	0.00	0.00	0.00	---
	2500.00	0.00	270.21	2500.00	0.00	0.00	0.00	0.00	0.00	0.00	---
	2600.00	0.00	270.21	2600.00	0.00	0.00	0.00	0.00	0.00	0.00	---
	2700.00	0.00	270.21	2700.00	0.00	0.00	0.00	0.00	0.00	0.00	---
	2800.00	0.00	270.21	2800.00	0.00	0.00	0.00	0.00	0.00	0.00	---
	2900.00	0.00	270.21	2900.00	0.00	0.00	0.00	0.00	0.00	0.00	---
	3000.00	0.00	270.21	3000.00	0.00	0.00	0.00	0.00	0.00	0.00	---
	3100.00	0.00	270.21	3100.00	0.00	0.00	0.00	0.00	0.00	0.00	---
	3200.00	0.00	270.21	3200.00	0.00	0.00	0.00	0.00	0.00	0.00	---
	3300.00	0.00	270.21	3300.00	0.00	0.00	0.00	0.00	0.00	0.00	---
	3400.00	0.00	270.21	3400.00	0.00	0.00	0.00	0.00	0.00	0.00	---
	3500.00	0.00	270.21	3500.00	0.00	0.00	0.00	0.00	0.00	0.00	---
	3600.00	0.00	270.21	3600.00	0.00	0.00	0.00	0.00	0.00	0.00	---
	3700.00	0.00	270.21	3700.00	0.00	0.00	0.00	0.00	0.00	0.00	---

LCX Energy

WELL1625 Federal Com #292				FIELD Eddy County, NM Nad 83				STRUCTURE1625 Federal Com #292						
Magnetic Parameters				Surface Location				Miscellaneous						
Model	IGRF 2005	Dip	60.747°	Date	May 21, 2007	Lat	N32 53 30.690	NAD83 New Mexico State Planes, Eastern Zone, US Feet	Old Corv	0.09112779°	Slot	1625 Federal Com #292	TVD Ref	RKB (0.00 ft above)
		Mag Dec	-8.536°	FS	49364.8 nT	Lon	W104 30 4.100	888723.93 NUS	Scale Fact	0.999912129	Plan	1625 Federal Com #292.11	Srvy Date	May 21, 2007
								489820.54 NUS						

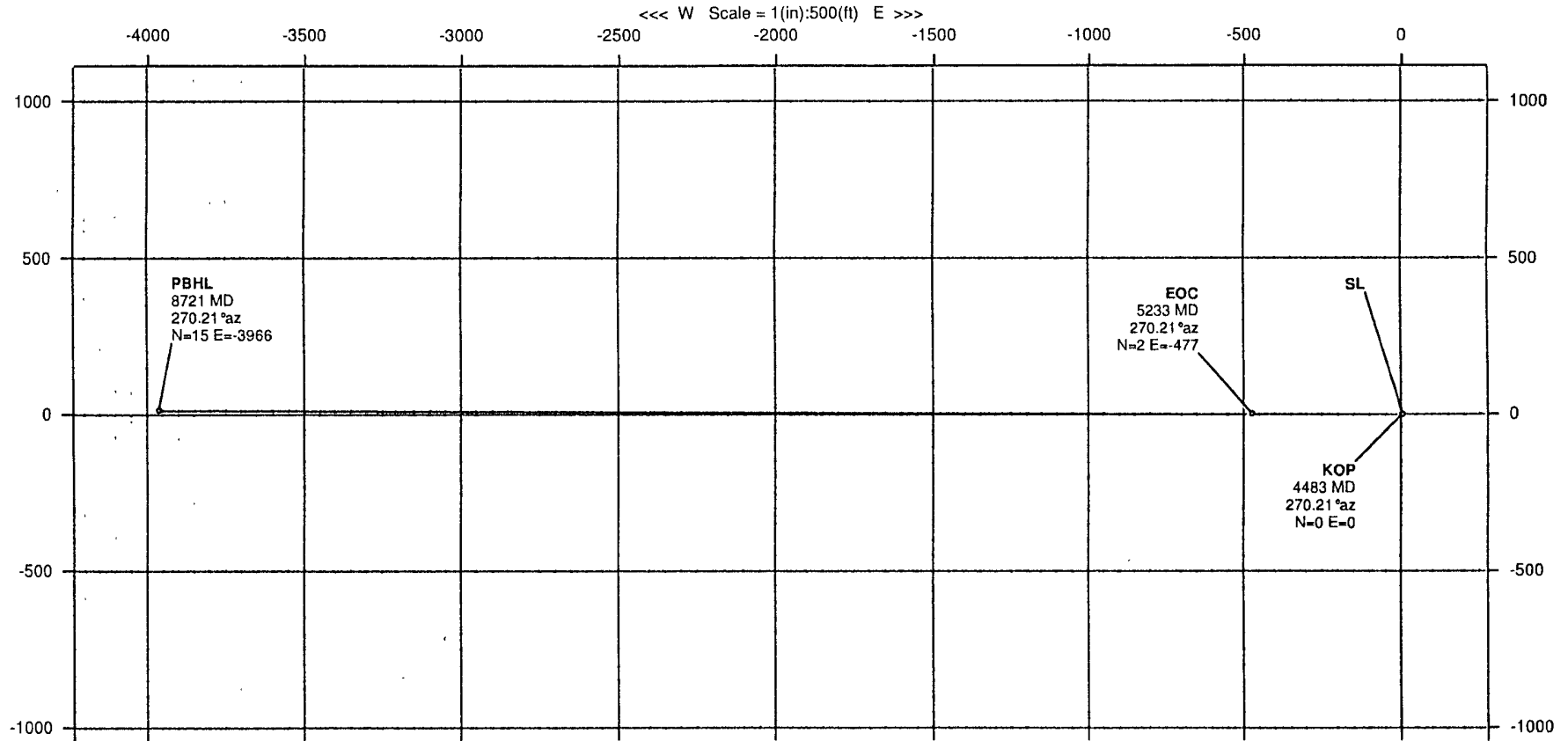


INTREPID
Directional Drilling Specialists



LCX Energy

WELL 1625 Federal Com #292	FIELD Eddy County, NM Nad 83	STRUCTURE 1625 Federal Com #292
Magnetic Parameters Model: IGRF 2005 Dip: 60.747° Mag Dec: +4.538° Date: May 21, 2007 FS: 49364.9 nT	Surface Location Lat: N32 53 30.600 Lon: W104 30 4.100 Northing: 688223.93 NUS Easting: 489629.54 NUS NA 83 New Mexico State Plane Eastern Zone US Feet Grid Conv: -0.09112779° Scale Fact: 0.999912128	Miscellaneous Slot: 1625 Federal Com #292 Plan: 1625 Federal Com #292 -1 TVD Ref: RK8 (0.00 ft above) Srvy Date: May 21, 2007



INTREPID
Directional Drilling Specialists



HYDROGEN SULFIDE DRILLING OPERATIONS PLAN

1. All Company and Contract personnel admitted on location must be trained by a qualified H₂S safety instructor to the following:
 - A. Characteristics of H₂S
 - B. Physical effects and hazards
 - C. Proper use of safety equipment and life support systems.
 - D. Principle and operation of H₂S detectors, warning system and briefing areas.
 - E. Evacuation procedure, routes and first aid.
 - F. Proper use of 30 minute pressure demand air pack.
2. H₂S Detection and Alarm Systems
 - A. H₂S detectors and audio alarm system to be located at bell nipple, end of blooie line (mud pit) and on derrick floor or doghouse.
3. Windsock and/or wind streamers
 - A. Windsock at mudpit area should be high enough to be visible.
 - B. Windsock at briefing area should be high enough to be visible.
 - C. There should be a windsock at entrance to location.
4. Condition Flags and Signs
 - A. Warning sign on access road to location.
 - B. Flags to be displayed on sign at entrance to location. Green flag, normal safe condition. Yellow flag indicates potential pressure and danger. Red flag, danger, H₂S present in dangerous concentration. Only emergency personnel admitted to location.
5. Well control equipment
 - A. See exhibit "E"
6. Communication
 - A. While working under masks chalkboards will be used for communication.
 - B. Hand signals will be used where chalk board is inappropriate.
 - C. Two way radio will be used to communicate off location in case of emergency help is required. In most cases cellular telephoned will be available at most drilling foreman's trailer or living quarters.
7. Drillstem Testing
 - A. Exhausts will be watered.
 - B. Flare line will be equipped with an electric ignitor or a propane pilot light in case gas reaches the surface.
 - C. If location is near any dwelling a closed D.S.T. will be performed.

HYDROGEN SULFIDE DRILLING OPERATIONS PLAN

8. Drilling contractor supervisor will be required to be familiar with the effects H_2S has on tubular goods and other mechanical equipment.
9. If H_2S is encountered, mud system will be altered if necessary to maintain control of formation. A mud gas separator will be brought into service along with H_2S scavengers if necessary.

SURFACE USE PLAN

LCX ENERGY, LLC.
1625 FEDERAL COM. #292
UNIT "I" SECTION 29
T16S-R25E EDDY CO. NM

1. EXISTING AND PROPOSED ROADS:

- A. Exhibit "B" is a reproduction of a County General Hi-way map showing existing roads. Exhibit "C" is a reproduction of a USGS topographic map showing existing roads and proposed roads. All existing roads will be maintained in a condition equal to or better than current conditions. All new roads will be constructed to BLM specifications.
- B. Exhibit "A" shows the proposed well site as staked.
- C. Directions to location: From the junction of U.S. Hi-way 82 and U.S. Hi-way 285 in Artesia New Mexico take U.S. Hi-way 82 West for 6 miles to Lonesome Trail Road, turn Right (North) follow lease road for 3.4± miles and location is on the West side of road.
- D. Exhibit "C" shows the existing roads and the proposed roads.

2. PLANNED ACCESS ROADS: Approximately ^{2300'}~~450'~~ of new road will be constructed.

- A. The access roads will be crowned and sitched to a 14' wide travel surface, within a 30' R-O-W.
- B. Gradient of all roads will be less than 5%.
- C. Turn-outs will be constructed where necessary.
- D. If require new access roads will be surface with a minimum of 4-6" of caliche. this material will be obtained from a local source.
- E. Center line for new roads will be flagged, road construction will be done as field conditions require.
- F. Culverts will be placed in the access road as drainage conditions require. Roads will be constructed to use low water crossings for drainage as required by the topographic conditions.

3. LOCATION OF EXISTING WELLS WITHIN A ONE MILE RADIUS: EXHIBIT "A-1"

- A. Water wells - Water well approximately 1.3 miles Southwest of location
- B. Disposal wells - None known
- C. Drilling wells - None known
- D. Producing wells - As shown on Exhibit "A-1"
- E. Abandoned wells - As shown on Exhibit "A-1"

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4. If on completion this well is a producer the operator will lay pipelines and construct powerlines along existing road R-O-W's or other existing R-O-W's. Exhibit "C" shows proposed routes of roads, flowlines and powerlines.

5. LOCATION AND TYPE OF WATER SUPPLY:

Water will be purchased locally from a commercial source and trucked over the access roads or piped to location in flexible lines laid on top of the ground.

6. SOURCE OF CONSTRUCTION MATERIAL:

If possible construction material will be obtained from the excavation of drill site, if additional material is needed it will be obtained from a local source and transported over the access roads as shown on Exhibit "C".

7. METHODS OF HANDLING WASTE MATERIAL:

- A. Drill cuttings will be disposed of in the reserve pits.
- B. All trash, junk and other waste material will be contained in trash cages or trash bins to prevent scattering. When the job is completed all contents will be removed and disposed of in a approved sanitary land fill.
- C. Salts remaining after completion of well will be picked up by the supplier, including broken sacks.
- D. Waste water from living quarters will be drained into holes with a minimum of 10'. These holes will be covered during drilling and will be back filled when the well is completed. A Porto-John will be provided for the rig crews. This equipment will be properly maintained during the drilling and completion operations and will be removed when all operations are complete.
- E. Remaining drilling fluids will be allowed to evaporate in the reserve pits until the pits are dry enough to be broken out for further drying. If the drilling fluids do not evaporate in a reasonable time they will be hauled off by transports to a state approve disposal site. Later pits will be broken out to speed drying. Water produced during completion will be put in reserve pits. Oil and condensate produced will be put in storage tanks and sold.

8. ANCILLARY FACILITIES:

- A. No camps or air strips will be constructed on location.

SURFACE USE PLAN

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9. WELL SITE LAYOUT:

- A. Exhibit "D" shows the proposed well site layout.
- B. This Exhibit shows the location of reserve pit, sump pits, and living facilities.
- C. Mud pits in the active circulating system will be steel pits and the reserve pits will be unlined unless subsurface conditions encountered during pit construction indicate that a plastic liner is required to contain lateral migration.
- D. If needed the reserve pits will be lined with polyethelene. The pit liner will be no less than 6 mils thick and the liner will be extended at least 3 feet over the top of the dikes and secured in place to keep edge of liner in place.
- E. The reserve pit will be fenced on three sides and fenced with four strands of barbed wire during drilling and completion phases. The 4th side will be fenced after drilling operations are complete and the drilling rig has moved out. If the well is a producer the mud pits will remain fenced in until the mud has dried up enough to break out the pits and reclaimed according to BLM requirements.

10. PLANS FOR RESTORATION OF SURFACE:

Rehabilitation of the location and reserve pits will be allowed to dry properly, fluids may be moved and disposed of in accordance with article 7-E as previously noted. The pit area will then be leveled and contoured to conform to the original and surrounding area. Drainage systems, if any will be reshaped to the original configuration with provisions made to alleviate future erosion. In case of the well completed as a producer the drilling pad will be necessary to construct production facilities. After the area has been shaped and contoured top soil from the spoil pile will be placed over the disturbed area to the extent possible so that revegetation procedures can be accomplished to comply with the BLM specifications.

If the well is a dry hole the pad and road area will be contoured to match the existing terrain. Top soil will be spread to the extent possible and revegetation will be carried out according to the BLM specifications.

Should the well be a producer the previously noted procedures will apply to those areas which are not required for production facilities.

SURFACE USE PLAN

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11. OTHER GENERAL INFORMATION:

- A. The topography is a relatively flat plain, with a slight dip to the Northeast. The soil is light tan in color and shallow sandy mixed with limestone lag gravels. Vegetation is very sparse and consists of native grasses, creosote, and various forbs.
- B. The surface location is located on ~~federal surface and federal minerals~~,
the bottom hole location is on ~~State of New Mexico surface and mineral~~.
*SE of NM CR
Federal CR 8/08/07*
- C. An archaeological survey has been done on the location and road, and is on file at the Carlsbad Field Office in Carlsbad New Mexico.
- D. There are no dwellings within 2 miles of this location.

SURFACE USE PLAN

LCX ENERGY, LLC.
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CERTIFICATION

I HEREBY CERTIFY THAT I OR PERSONS UNDER MY SUPERVISION HAVE INSPECTED THE PROPOSED DRILL SITE AND THE ACCESS ROAD ROUTES, THAT I AM FAMILIAR WITH THE CONDITIONS THAT CURRENTLY EXIST, AND THAT THE STATEMENTS MADE IN THIS PLAN ARE TO THE BEST OF MY KNOWLEDGE ARE TRUE AND CORRECT, AND THAT THE WORK ASSOCIATED WITH THE OPERATIONS PROPOSED HEREIN WILL BE PERFORMED BY LCX ENERGY, LLC. ITS CONTRACTORS OR ITS SUB-CONTRACTORS IS IN CONFORMANCE WITH THIS PLAN AND THE TERMS AND THE CONDITIONS UNDER WHICH IT IS APPROVED. THIS STATEMENT IS SUBJECT TO THE PROVISIONS OF U.S.C. 1001 FOR THE FILING OF A FALSE STATEMENT.

OPERATORS REPRESENTATIVES

BEFORE CONSTRUCTION

JOE T. JANICA
TIERRA EXPLORATION, INC
P.O. BOX 2188
HOBBS, NEW MEXICO 88241
OFFICE PH. 505-391-8503
CELL PH 505-390-1598

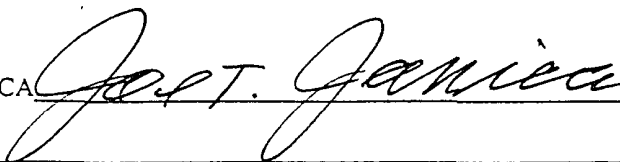
DURING AND AFTER CONSTRUCTION

KELVIN FISHER
LCX ENERGY, LLC.
110 NORTH MARIENFELD
SUITE 200
MIDLAND, TEXAS 79701
432-262-4046 432-634-5621

NAME: JOE T. JANICA

DATE: 08/01/07

TITLE: Agent



VII. DRILLING

A. DRILLING OPERATIONS REQUIREMENTS

The BLM is to be notified a minimum of 2 hours in advance for a representative to witness:

- a. Spudding well
- b. Setting and/or Cementing of all casing strings
- c. BOPE tests

☒ **Eddy County**

Call the Carlsbad Field Office, 620 East Greene St., Carlsbad, NM 88220,
(505) 361-2822

1. **Although no Hydrogen Sulfide has been reported in this section, it is always a potential hazard.**
2. Unless the production casing has been run and cemented or the well has been properly plugged, the drilling rig shall not be removed from over the hole without prior approval.
3. When floor controls are required, (3M or Greater) controls will be on the rig floor, unobstructed, readily accessible to the driller and will be operational at all times during drilling and/or completion activities. Rig floor is defined as the area immediately around the rotary table; the area immediately above the substructure on which the draw works are located, this does not include the dog house or stairway area.

B. CASING

-
1. **~~The 13-3/8 inch casing will be used as surface casing when lost circulation occurs prior to 350' and cemented to the surface. The BLM geologist has noted that the first competent (consolidated) bed is at approximately 570' with the material above that depth being unconsolidated gravel.~~**
 - a. If cement does not circulate to the surface, the appropriate BLM office shall be notified and a temperature survey utilizing an electronic type temperature survey with surface log readout will be used or a cement bond log shall be run to verify the top of the cement.
 - b. Wait on cement (WOC) time for a primary cement job will be a minimum 18 hours for a water basin, 24 hours in the potash area, or 500 pounds compressive strength, whichever is greater. (This is to include the lead cement).

-
- c. Wait on cement (WOC) time for a remedial job will be a minimum of 4 hours after bringing cement to surface or 500 pounds compressive strength, whichever is greater.
 - d. If cement falls back, remedial action will be done prior to drilling out that string.

**Possible lost circulation in the Grayburg and San Andres formations.
Possible bursts of high pressure gas in the Wolfcamp**

-
- 2. **If lost circulation does not occur in the surface hole, 8-5/8" casing shall be set as surface casing at approximately 1200 feet. Otherwise, the casing will be set as intermediate casing.**

☒ Cement to surface. If cement does not circulate see B.1.a-d above.

- 3. The minimum required fill of cement behind the **5-1/2** inch production casing is:

☒ Cement should tie-back at least 200 feet into previous casing string. Operator shall provide method of verification.

If 13-3/8" casing is not set, the cement on the production casing must come to surface.

- 4. If hardband drill pipe is rotated inside casing, returns will be monitored for metal. If metal is found in samples, drill pipe will be pulled and rubber protectors which have a larger diameter than the tool joints of the drill pipe will be installed prior to continuing drilling operations.

C. ~~PRESSURE CONTROL~~

- 1. All blowout preventer (BOP) and related equipment (BOPE) shall comply with well control requirements as described in Onshore Oil and Gas Order No. 2 and API RP 53 Sec. 17.
- 2. The appropriate BLM office shall be notified a minimum of 2 hours in advance for a representative to witness the tests.
 - a. The tests shall be done by an independent service company.
 - b. The results of the test shall be reported to the appropriate BLM office.
 - c. All tests are required to be recorded on a calibrated test chart. A copy of the

BOP/BOPE test chart and a copy of independent service company test will be submitted to the appropriate BLM office.

- d. The BOP/BOPE test shall include a low pressure test from 250 to 300 psi. The test will be held for a minimum of 10 minutes if test is done with a test plug and 30 minutes without a test plug.
 - e. BOP/BOPE must be tested by an independent service company within 500 feet of the top of the **Wolfcamp** if the time between the setting of the intermediate casing and reaching this depth exceeds 20 days. This test does not exclude the test prior to drilling out the casing shoe as per Onshore Order No. 2.
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D. DRILLING MUD

Mud system monitoring equipment, with derrick floor indicators and visual and audio alarms, shall be operating before drilling into the **Wolfcamp** formation, and shall be used until production casing is run and cemented.

Engineer on call phone (after hours): Carlsbad: (505) 706-2779

WWI 082407