

SEP - 8 2008

OCD-ARTESIA

OCD-ARTESIA

UNITED STATES

DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER

FORM APPROVED
OMB No. 1004-0137
Expires March 31, 20075. Lease Serial No.
NM-106954 1089546. If Indian, Allottee or Tribe Name
-----7. If Unit or CA Agreement, Name and No.
-----8. Lease Name and Well No.
1724 FEDERAL # 1-19. API Well No.
30-015-3665610. Field and Pool or Exploratory
Collins Ranch WOLFCAMP NE11. Sec., T. R. M. or Blk. and Survey or Area
SECTION 1 T17S-R24E12. County or Parish
EDDY CO.13. State
NM1a. Type of work: ☒ DRILL☐ REENTER1b. Type of Well: ☐ Oil Well ☒ Gas Well ☒ Other ☒ Single Zone ☐ Multiple Zone

2. Name of Operator

LCX ENERGY, LLC. (KELVIN FISHER 432-262-4046)

3a. Address 101 NORTH MARIENFELD
SUITE 200 MIDLAND, TEXAS 797013b. Phone No. (include area code)
432-262-4011

4. Location of Well (Report location clearly and in accordance with any State requirements.)

At surface 660' FNL & 1880' FEL SECTION 1 T17S-R24E EDDY CO. NM

At proposed prod. zone 660' FSL & 1880' FEL SECTION 1 T17S-R24E EDDY CO.

14. Distance in miles and direction from nearest town or post office*

Approximately 10 miles Northwest of Artesia New Mexico.

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
48017. Spacing Unit dedicated to this well
32018. Distance from proposed location*
to nearest well, drilling, completed,
applied for, on this lease, ft.

NA

19. Proposed Depth
MD-8622' TVD-4885'20. BLM/BIA Bond No. on file
NMB-00009421. Elevations (Show whether DF, KDB, RT, GL, etc.)
3651' GL.22. Approximate date work will start*
WHEN APPROVED23. Estimated duration
28 Days

24. Attachments

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.
2. A Drilling Plan.
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).

4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above).
5. Operator certification
6. Such other site specific information and/or plans as may be required by the authorized officer.

25. Signature

Name (Printed/Typed)

Joe T. Janica

Date

05/08/08

Title

Agent

Approved by (Signature)

/s/ James Stovall

Name (Printed/Typed)

/s/ James Stovall

Date

SEP 03 2008

Title

Office

CARLSBAD FIELD OFFICE

the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to

APPROVAL FOR TWO YEARS

1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any representations as to any matter within its jurisdiction.

SEE ATTACHED FOR
CONDITIONS OF APPROVAL

ROSWELL CONTROLLED WATER BASIN

APPROVAL SUBJECT TO
GENERAL REQUIREMENTS
AND SPECIAL STIPULATIONS
ATTACHED



3106 N. Big Spring St. Ste. 100
Midland, TX 79705
Tel: (432) 685-9158

August 14, 2008

Bureau of Land Management
620 E. Greene Street
Carlsbad, New Mexico 88220
Attn: Cheryl Ryan

Re: Chase Farms – Surface Owner
Surface Use Agreement executed
1724 Federal Com #1-1
Section 1, T17S, R24E
Eddy Co., NM

To Whom It May Concern,

Please note that an agreement has been reached in regards to the above referenced well and roadway with LCX Energy, LLC and the fee surface owner Chase Farms.

If you would please update the Application to Permit and Drill with this information as I believe this is all that is necessary in order to approve such permit.

Gray Surface Specialties is representing LCX Energy, LLC on this project therefore if you have any additional questions please feel free to contact me at 432-685-9158.

Sincerely,

A handwritten signature in black ink, appearing to read "Lee Ann Rollins", is written over the printed name and title.

Lee Ann Rollins
Gray Surface Specialties
Agent for LCX Energy, LLC

encls

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 30-D15-36654	Pool Code 96623	Pool Name Collins Ranch-WOLFCAMP NE
Property Code 37409	Property Name 1724 FEDERAL 1	Well Number 1
OGRID No. 218885	Operator Name LCX ENERGY	Elevation 3651'

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	1	17 S	24 E		660	NORTH	1880	EAST	EDDY

Bottom Hole Location If Different From Surface

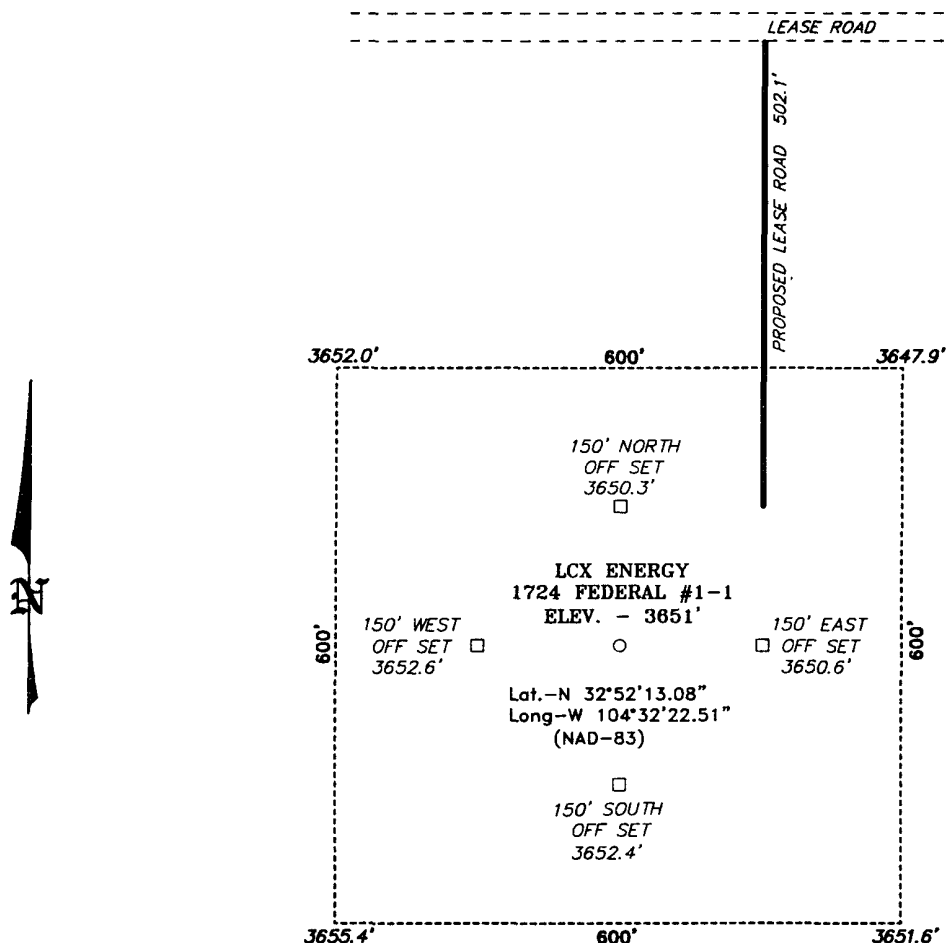
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
O	1	17 S	24 E		660	SOUTH	1880	EAST	EDDY

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

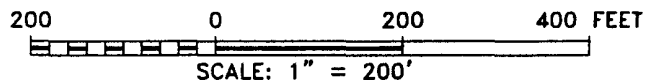
<p>SURFACE LOCATION Lat - N32°52'13.08" Long - W104°32'22.51" SPC- N.: 680410.812 E.: 478012.675 (NAD-83)</p> <p>PROJECT AREA →</p> <p>PRODUCING AREA →</p> <p>BOTTOM HOLE LOCATION Lat - N32°51'33.82" Long - W104°32'22.63" SPC- N.: 676442.885 E.: 477994.514 (NAD-83)</p>	<p>660'</p> <p>S-L</p> <p>1880'</p> <p>NM-106954</p> <p>3969.1'</p> <p>B-H</p> <p>660'</p>	<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 05/08/08 Joe T. Janica Printed Name</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>JANUARY 9, 2008</p> <p>Date Surveyed Signature & Seal of Professional Surveyor GARY L. JONES 7977 No. 18995 Certification No. 7977 BASIN SURVEYS</p>
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SECTION 1, TOWNSHIP 17 SOUTH, RANGE 24 EAST, N.M.P.M.,
EDDY COUNTY, NEW MEXICO.



Directions to Location:

FROM THE JUNCTION OF U.S. HWY 82 AND CO. RD.
91, GO NORTH APPROX 1.0 MILES TO LEASE ROAD,
ON LEASE ROAD GO WESTERLY 2.5 MILES TO
PROPOSED LEASE ROAD.



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

W.O. Number: 18995

Drawn By: J. M. SMALL

Date: 01-09-2008

Disk: JMS 18995W

REF: 1724 FEDERAL #1-1 / WELL PAD TOPO

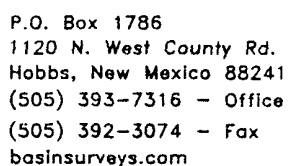
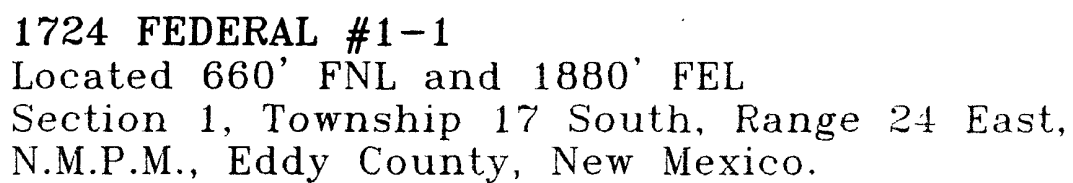
THE 1724 FEDERAL #1-1 LOCATED 660' FROM
THE NORTH LINE AND 1880' FROM THE EAST LINE OF
SECTION 1, TOWNSHIP 17 SOUTH, RANGE 24 EAST,

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

Survey Date: 01-09-2008

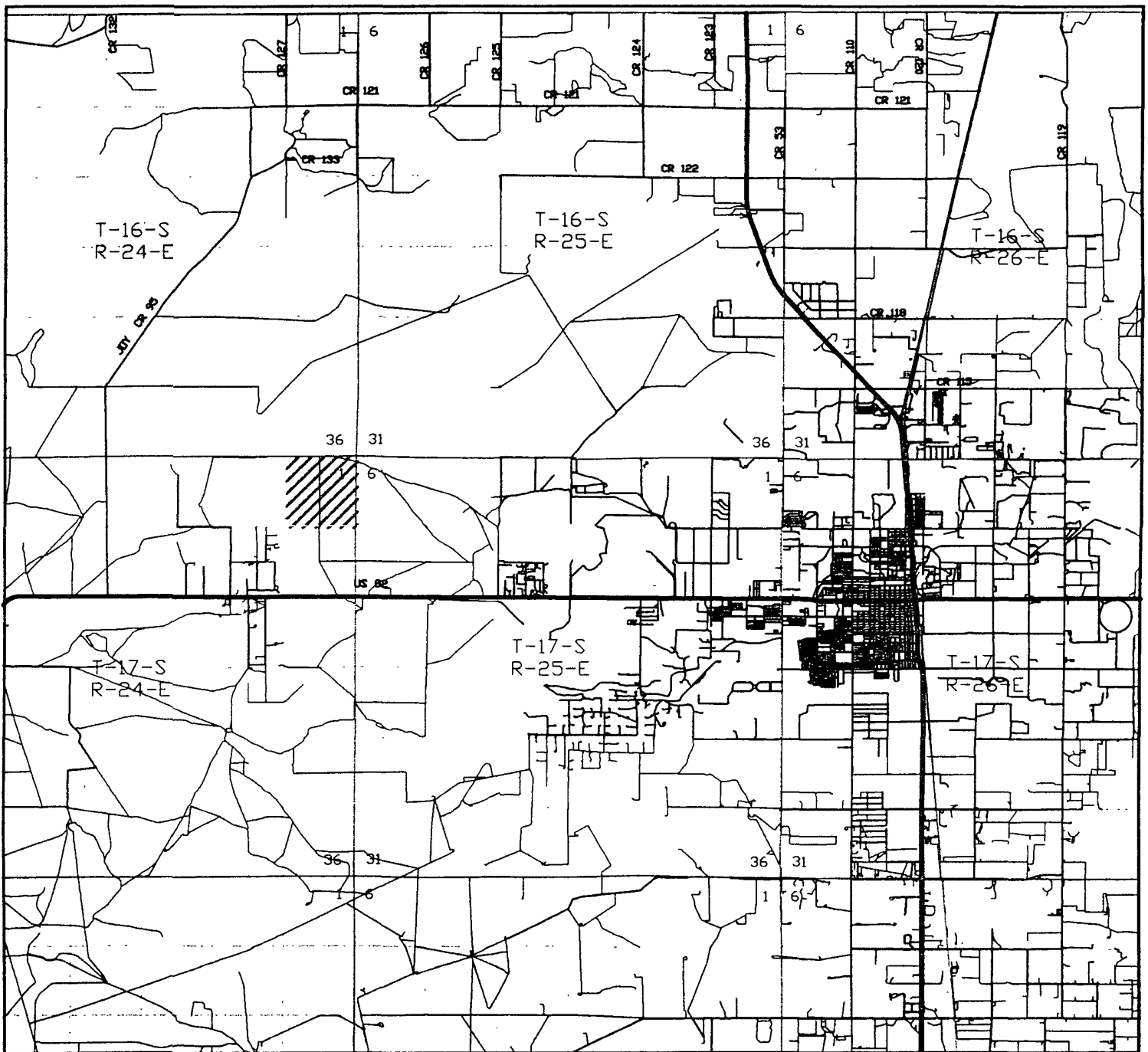
Sheet

1 of 1



Date: 01-09-2008

LCX
ENERGY



1724 FEDERAL #1-1
 Located at 660' FNL and 1880 FEL
 Section 1, 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

W.O. Number: JMS 18995TR

Survey Date: 01-09-2008

Scale: 1" = 2 MILES

Date: 01-09-2008

**LCX
ENERGY**

APPLICATION TO DRILL

LCX ENERGY, LLC.
1724 FEDERAL # 1-1
UNIT "B" SECTION 1
T17S-R24E EDDY CO. NM

In response to questions asked under Section II of Bulliten NTL-6, the following information on the above will be provided.

1. LOCATION: 660' FNL & 1880' FEL SECTION 1 T17S-R24E EDDY CO. NEW MEXICO
2. ELEVATION ABOVE SEA LEVEL: 3651' GL
3. GEOLOGICAL NAME OF SURFACE FORMATION: Quaternary Aeolian Deposits.
4. DRILLING TOOLS AND ASSOCIATED EQUIPMENT: Conventional rotary drilling rig using drilling mud as a circulating medium for solids removal from hole.
5. PROPOSED DRILLING DEPTH: TVD- 4885' MD-8622
6. ESTIMATED TOPS OF GEOLOGICAL FORMATIONS:

San Andres	585'	Abo	3880'
Glorietta	1725'	Wolfcamp	4580'
Tubb	3210'	TVD	4885'

7. POSSIBLE MINERAL BEARING FORMATIONS:

Abo	Gas
Wolfcamp	Gas

8. CASING PROGRAM:

HOLE SIZE	INTERVAL	OD OF CASING	WEIGHT	THREAD	COLLAR	GRADE	CONDITION
26"	0-40	20"	NA	NA	NA	Conductor	New
17½"	0-400'±	13 3/8"	48#	8-R	ST&C	H-40	New
12½"	0-1200'±	8 5/8"	24#	8-R	ST&C	J-55	New
7 7/8"	0-8622'±	5½"	17#	8-R	LT&C	J-55	New

Design factors: Collapse 1.125 Burst 1.0 Body Yield 1.5 Joint Strength

8-R	1.8
Buttress	1.6

APPLICATION TO DRILL

LCX ENERGY, LLC.
 1724 FEDERAL # 1-1
 UNIT "B" SECTION 1
 T17S-R24E EDDY CO. NM

9. CASING SETTING DEPTHS AND CEMENTING:

20"	Conductor	Set 40' of 20" conductor pipe and cement to surface with Redi-mix.
13 3/8"	Surface	Run and set 400'± of 13 3/8" 48# H-40 ST&C casing. Cement with 200 Sx. of Class "C" 35/65 POZ + 6% Gel. + 2% CaCl, yield 1.94, tail in with 200 Sx. of Class "C" cement + 2% CaCl yield 1.34, circulate cement to surface.
8 5/8"	Intermediate	Run and set 1200±' of 8 5/8" 24# J-55 ST&C casing. Cement with 250 Sx. of Class "C" 35/65 POZ + 6% Gel. + 2% CaCl, yields 1.94, tail in with 200 Sx. of Class "C" cement + 2% CaCl, yield 1.34. Circulate cement to surface.
5 1/2"	Production	Run and set 8622'± of 5 1/2" 17# N-80 ^{J-55 PER J. JAVICA 6/18/08 LB} LT&C casing. Cement with 750 Sx. of Class "C" 50/50 POZ + additives yield 2.46, tail in with 350 Sx. of PVL + 100% CaCo ₃ , + fluid loss additive, + 1% CaCl, yield 2.79 estimate top of cement 1000' from surface.

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. This B.O.P. will be nipped up on the 8 5/8" casing and tested to API specifications. The B.O.P. will be operated at least once in each each 24 hour period and the blind rams will be operated when the drill pipe is out of the hole on trips. Full opening stabbing valve and upper kelly cock will be utilized. Exhibit "E-1" shows a hydraulically operated closing unit and a 3" 5000 PSI choke manifold with dual adjustable chokes. No abnormal pressures or abnormal temperatures are expected while drilling this well.

11. PROPOSED MUD CIRCULATING SYSTEM:

DEPTH	MUD WT.	VISC.	FLUID LOSS	TYPE SYSTEM
40-350±'	8.4-9.0	28-32	NC	Fresh water Spud mud add paper to control seepage, use high viscosity sweeps to clean hole.
350-3700±'	8.4-8.8	28-32	NC	Same as above
3700-TD	9.4-9.7	28-45	10 cc or Less	Add brine water to system and use starch to control water loss. add XC polymer as required, use high viscosity sweeps to clean hole.

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

APPLICATION TO DRILL

LCX ENERGY. LLC.
1724 FEDERAL # 1-1
UNIT "B" SECTION 1
T17S-R24E 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 8 5/8" casing shoe.
- B. Cased hole log Gamma Ray, Neutron from 8 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.

Proposal



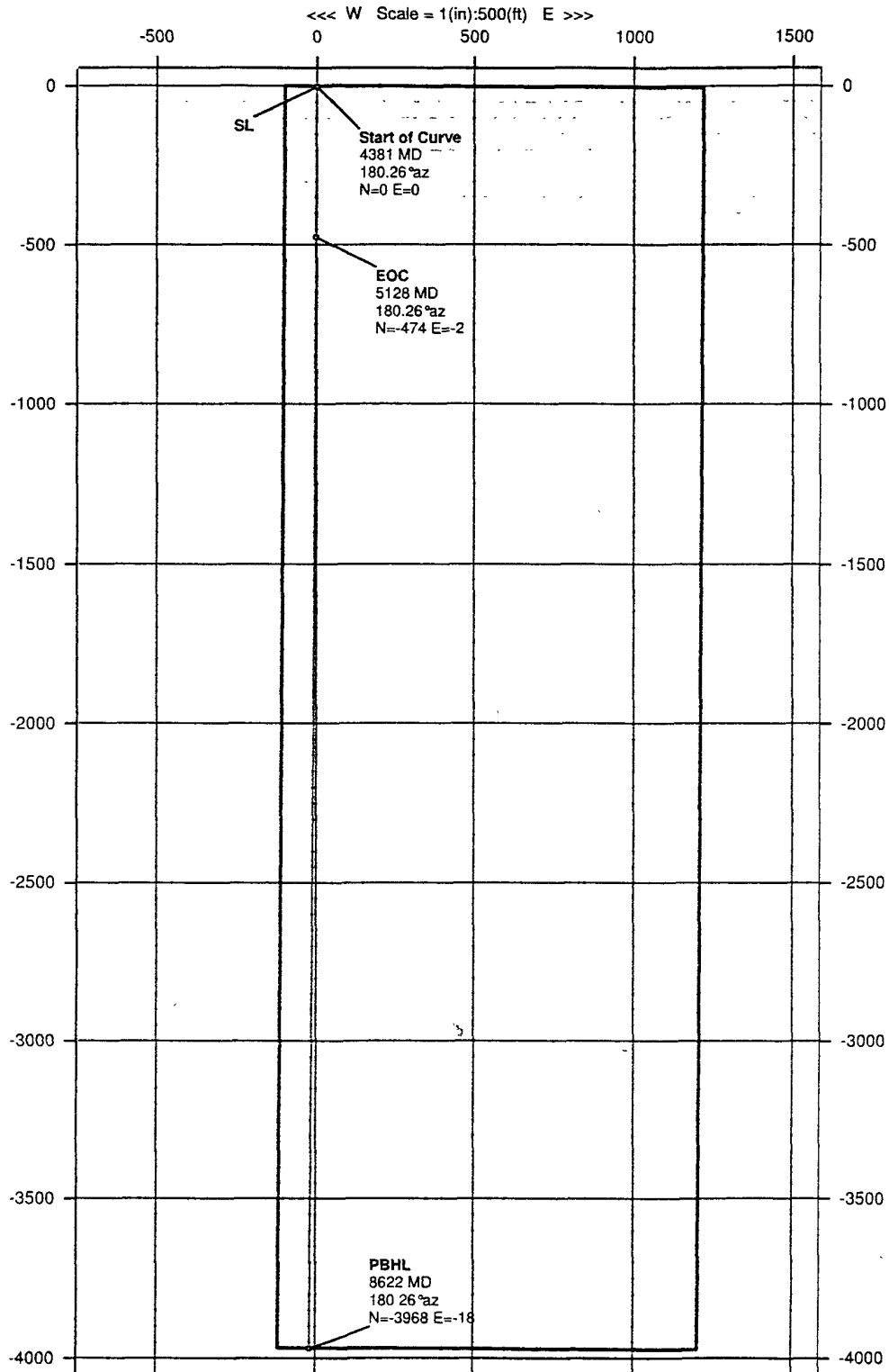
Report Date: March 7, 2008	Survey / DLS Computation Method: Minimum Curvature / Lubinski
Client: LCX Energy, LLC.	Vertical Section Azimuth: 180.262°
Field: Eddy County, NM NAD83	Vertical Section Origin: N 0.000 ft, E 0.000 ft
Structure / Slot: 1724 Federal 1 #1 / 1724 Federal 1 #1	TVD Reference Datum: RKB
Well: 1724 Federal 1 #1	TVD Reference Elevation: 0.0 ft relative to
Borehole: 1724 Federal 1 #1	Sea Bed / Ground Level Elevation: 0.000 ft relative to
UWI/API#:	Magnetic Declination: 8.457°
Survey Name / Date: 1724 Federal 1 #1_r1 / March 7, 2008	Total Field Strength: 49270.929 nT
Tort / AHD / DDI / ERD ratio: 89.567° / 3968.32 ft / 5.798 / 0.812	Magnetic Dip: 60.704°
Grid Coordinate System: NAD83 New Mexico State Planes, Eastern Zone, US Feet	Declination Date: March 07, 2008
Location Lat/Long: N 32 52 13.082, W 104 32 22.512	Magnetic Declination Model: IGRF 2005
Location Grid N/E Y/X: N 680410.812 ftUS, E 478012.675 ftUS	North Reference: Grid North
Grid Convergence Angle: -0.11194207°	Total Corr Mag North -> Grid North: +8.569°
Grid Scale Factor: 0.99991368	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	180.26	0.00	0.00	0.00	0.00	0.00	0.00	0.00	---	0.00	0.00
	100.00	0.00	180.26	100.00	0.00	0.00	0.00	0.00	0.00	0.00	---	0.00	0.00
	200.00	0.00	180.26	200.00	0.00	0.00	0.00	0.00	0.00	0.00	---	0.00	0.00
	300.00	0.00	180.26	300.00	0.00	0.00	0.00	0.00	0.00	0.00	---	0.00	0.00
	400.00	0.00	180.26	400.00	0.00	0.00	0.00	0.00	0.00	0.00	---	0.00	0.00
	500.00	0.00	180.26	500.00	0.00	0.00	0.00	0.00	0.00	0.00	---	0.00	0.00
	600.00	0.00	180.26	600.00	0.00	0.00	0.00	0.00	0.00	0.00	---	0.00	0.00
	700.00	0.00	180.26	700.00	0.00	0.00	0.00	0.00	0.00	0.00	---	0.00	0.00
	800.00	0.00	180.26	800.00	0.00	0.00	0.00	0.00	0.00	0.00	---	0.00	0.00
	900.00	0.00	180.26	900.00	0.00	0.00	0.00	0.00	0.00	0.00	---	0.00	0.00
	1000.00	0.00	180.26	1000.00	0.00	0.00	0.00	0.00	0.00	0.00	---	0.00	0.00
	1100.00	0.00	180.26	1100.00	0.00	0.00	0.00	0.00	0.00	0.00	---	0.00	0.00
	1200.00	0.00	180.26	1200.00	0.00	0.00	0.00	0.00	0.00	0.00	---	0.00	0.00
	1300.00	0.00	180.26	1300.00	0.00	0.00	0.00	0.00	0.00	0.00	---	0.00	0.00
	1400.00	0.00	180.26	1400.00	0.00	0.00	0.00	0.00	0.00	0.00	---	0.00	0.00
	1500.00	0.00	180.26	1500.00	0.00	0.00	0.00	0.00	0.00	0.00	---	0.00	0.00
	1600.00	0.00	180.26	1600.00	0.00	0.00	0.00	0.00	0.00	0.00	---	0.00	0.00
	1700.00	0.00	180.26	1700.00	0.00	0.00	0.00	0.00	0.00	0.00	---	0.00	0.00
	1800.00	0.00	180.26	1800.00	0.00	0.00	0.00	0.00	0.00	0.00	---	0.00	0.00
	1900.00	0.00	180.26	1900.00	0.00	0.00	0.00	0.00	0.00	0.00	---	0.00	0.00
	2000.00	0.00	180.26	2000.00	0.00	0.00	0.00	0.00	0.00	0.00	---	0.00	0.00
	2100.00	0.00	180.26	2100.00	0.00	0.00	0.00	0.00	0.00	0.00	---	0.00	0.00
	2200.00	0.00	180.26	2200.00	0.00	0.00	0.00	0.00	0.00	0.00	---	0.00	0.00
	2300.00	0.00	180.26	2300.00	0.00	0.00	0.00	0.00	0.00	0.00	---	0.00	0.00
	2400.00	0.00	180.26	2400.00	0.00	0.00	0.00	0.00	0.00	0.00	---	0.00	0.00
	2500.00	0.00	180.26	2500.00	0.00	0.00	0.00	0.00	0.00	0.00	---	0.00	0.00
	2600.00	0.00	180.26	2600.00	0.00	0.00	0.00	0.00	0.00	0.00	---	0.00	0.00
	2700.00	0.00	180.26	2700.00	0.00	0.00	0.00	0.00	0.00	0.00	---	0.00	0.00
	2800.00	0.00	180.26	2800.00	0.00	0.00	0.00	0.00	0.00	0.00	---	0.00	0.00
	2900.00	0.00	180.26	2900.00	0.00	0.00	0.00	0.00	0.00	0.00	---	0.00	0.00
	3000.00	0.00	180.26	3000.00	0.00	0.00	0.00	0.00	0.00	0.00	---	0.00	0.00
	3100.00	0.00	180.26	3100.00	0.00	0.00	0.00	0.00	0.00	0.00	---	0.00	0.00
	3200.00	0.00	180.26	3200.00	0.00	0.00	0.00	0.00	0.00	0.00	---	0.00	0.00
	3300.00	0.00	180.26	3300.00	0.00	0.00	0.00	0.00	0.00	0.00	---	0.00	0.00
	3400.00	0.00	180.26	3400.00	0.00	0.00	0.00	0.00	0.00	0.00	---	0.00	0.00
	3500.00	0.00	180.26	3500.00	0.00	0.00	0.00	0.00	0.00	0.00	---	0.00	0.00
	3600.00	0.00	180.26	3600.00	0.00	0.00	0.00	0.00	0.00	0.00	---	0.00	0.00
	3700.00	0.00	180.26	3700.00	0.00	0.00	0.00	0.00	0.00	0.00	---	0.00	0.00
	3800.00	0.00	180.26	3800.00	0.00	0.00	0.00	0.00	0.00	0.00	---	0.00	0.00
	3900.00	0.00	180.26	3900.00	0.00	0.00	0.00	0.00	0.00	0.00	---	0.00	0.00
	4000.00	0.00	180.26	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	180.26	4100.00	0.00	0.00	0.00	0.00	0.00	0.00	---	0.00	0.00
	4200.00	0.00	180.26	4200.00	0.00	0.00	0.00	0.00	0.00	0.00	---	0.00	0.00
	4300.00	0.00	180.26	4300.00	0.00	0.00	0.00	0.00	0.00	0.00	---	0.00	0.00
	4381.13	0.00	180.26	4381.13	0.00	0.00	0.00	0.00	0.00	0.00	180.26M	0.00	0.00
EOC	4400.00	2.26	180.26	4400.00	0.37	-0.37	0.00	0.37	180.26	12.00	180.26M	12.00	0.00
	4500.00	14.26	180.26	4498.78	14.72	-14.72	-0.07	14.72	180.26	12.00	HS	12.00	0.00
	4600.00	26.26	180.26	4592.42	49.29	-49.29	-0.23	49.29	180.26	12.00	HS	12.00	0.00
	4700.00	38.26	180.26	4676.82	102.58	-102.58	-0.47	102.58	180.26	12.00	HS	12.00	0.00
	4800.00	50.26	180.26	4748.30	172.25	-172.24	-0.79	172.25	180.26	12.00	HS	12.00	0.00
	4900.00	62.26	180.26	4803.74	255.26	-255.25	-1.17	255.26	180.26	12.00	HS	12.00	0.00
	5000.00	74.26	180.26	4840.70	347.98	-347.97	-1.59	347.98	180.26	12.00	HS	12.00	0.00
	5100.00	86.26	180.26	4857.58	446.36	-446.35	-2.04	446.36	180.26	12.00	HS	12.00	0.00
	5127.52	89.57	180.26	4858.58	473.86	-473.85	-2.17	473.86	180.26	12.00	---	12.00	0.00
	5200.00	89.57	180.26	4859.13	546.33	-546.33	-2.50	546.33	180.26	0.00	---	0.00	0.00
	5300.00	89.57	180.26	4859.89	646.33	-646.32	-2.96	646.33	180.26	0.00	---	0.00	0.00
	5400.00	89.57	180.26	4860.64	746.33	-746.32	-3.42	746.33	180.26	0.00	---	0.00	0.00
	5500.00	89.57	180.26	4861.40	846.32	-846.31	-3.87	846.32	180.26	0.00	---	0.00	0.00
	5600.00	89.57	180.26	4862.15	946.32	-946.31	-4.33	946.32	180.26	0.00	---	0.00	0.00
	5700.00	89.57	180.26	4862.91	1046.32	-1046.31	-4.79	1046.32	180.26	0.00	---	0.00	0.00
PBHL	5800.00	89.57	180.26	4863.67	1146.31	-1146.30	-5.25	1146.31	180.26	0.00	---	0.00	0.00
	5900.00	89.57	180.26	4864.42	1246.31	-1246.30	-5.70	1246.31	180.26	0.00	---	0.00	0.00
	6000.00	89.57	180.26	4865.18	1346.31	-1346.29	-6.16	1346.31	180.26	0.00	---	0.00	0.00
	6100.00	89.57	180.26	4865.93	1446.31	-1446.29	-6.62	1446.31	180.26	0.00	---	0.00	0.00
	6200.00	89.57	180.26	4866.69	1546.30	-1546.29	-7.08	1546.30	180.26	0.00	---	0.00	0.00
	6300.00	89.57	180.26	4867.45	1646.30	-1646.28	-7.53	1646.30	180.26	0.00	---	0.00	0.00
	6400.00	89.57	180.26	4868.20	1746.30	-1746.28	-7.99	1746.30	180.26	0.00	---	0.00	0.00
	6500.00	89.57	180.26	4868.96	1846.29	-1846.28	-8.45	1846.29	180.26	0.00	---	0.00	0.00
	6600.00	89.57	180.26	4869.71	1946.29	-1946.27	-8.91	1946.29	180.26	0.00	---	0.00	0.00
	6700.00	89.57	180.26	4870.47	2046.29	-2046.27	-9.37	2046.29	180.26	0.00	---	0.00	0.00
	6800.00	89.57	180.26	4871.23	2146.29	-2146.26	-9.82	2146.29	180.26	0.00	---	0.00	0.00
	6900.00	89.57	180.26	4871.98	2246.28	-2246.26	-10.28	2246.28	180.26	0.00	---	0.00	0.00
	7000.00	89.57	180.26	4872.74	2346.28	-2346.26	-10.74	2346.28	180.26	0.00	---	0.00	0.00
	7100.00	89.57	180.26	4873.49	2446.28	-2446.25	-11.20	2446.28	180.26	0.00	---	0.00	0.00
	7200.00	89.57	180.26	4874.25	2546.27	-2546.25	-11.65	2546.27	180.26	0.00	---	0.00	0.00
	7300.00	89.57	180.26	4875.01	2646.27	-2646.24	-12.11	2646.27	180.26	0.00	---	0.00	0.00
	7400.00	89.57	180.26	4875.76	2746.27	-2746.24	-12.57	2746.27	180.26	0.00	---	0.00	0.00
	7500.00	89.57	180.26	4876.52	2846.27	-2846.24	-13.03	2846.27	180.26	0.00	---	0.00	0.00
	7600.00	89.57	180.26	4877.27	2946.26	-2946.23	-13.48	2946.26	180.26	0.00	---	0.00	0.00
	7700.00	89.57	180.26	4878.03	3046.26	-3046.23	-13.94	3046.26	180.26	0.00	---	0.00	0.00
	7800.00	89.57	180.26	4878.79	3146.26	-3146.22	-14.40	3146.26	180.26	0.00	---	0.00	0.00
	7900.00	89.57	180.26	4879.54	3246.25	-3246.22	-14.86	3246.25	180.26	0.00	---	0.00	0.00
	8000.00	89.57	180.26	4880.30	3346.25	-3346.22	-15.32	3346.25	180.26	0.00	---	0.00	0.00
	8100.00	89.57	180.26	4881.05	3446.25	-3446.21	-15.77	3446.25	180.26	0.00	---	0.00	0.00
	8200.00	89.57	180.26	4881.81	3546.25	-3546.21	-16.23	3546.25	180.26	0.00	---	0.00	0.00
	8300.00	89.57	180.26	4882.57	3646.24	-3646.20	-16.69	3646.24	180.26	0.00	---	0.00	0.00
	8400.00	89.57	180.26	4883.32	3746.24	-3746.20	-17.15	3746.24	180.26	0.00	---	0.00	0.00
	8500.00	89.57	180.26	4884.08	3846.24	-3846.20	-17.60	3846.24	180.26	0.00	---	0.00	0.00
	8600.00	89.57	180.26	4884.83	3946.23	-3946.19	-18.06	3946.23	180.26	0.00	---	0.00	0.00
	8622.09	89.57	180.26	4885.00	3968.32	-3968.28	-18.16	3968.32	180.26	0.00	---	0.00	0.00

LCX Energy, LLC.

WELL	1724 Federal 1 #1	FIELD	Eddy County, NM NAD83	STRUCTURE	1724 Federal 1 #1
Magnetic Parameters Model: IGRF 2005 Dip: 60.704° Mag Dec: +8.457°		Surface Location Lat: N32 52 13.082 Lon: W104 32 22.512		Miscellaneous Site: 1724 Federal 1 #1 Plan: 1724 Federal 1 #1 .r1	
Date: March 07, 2008 FS: 49270 9 nT		NAD83 New Mexico State Plane, Eastern Zone, US Feet Northing: 680410 81 RJUS Easting: 478012 67 RJUS Grid Conv: -0.11194207° Scale Fact: 0.9999136829		TVD Ref: RKB (0.00 % above) Srvy Date: March 07, 2008	

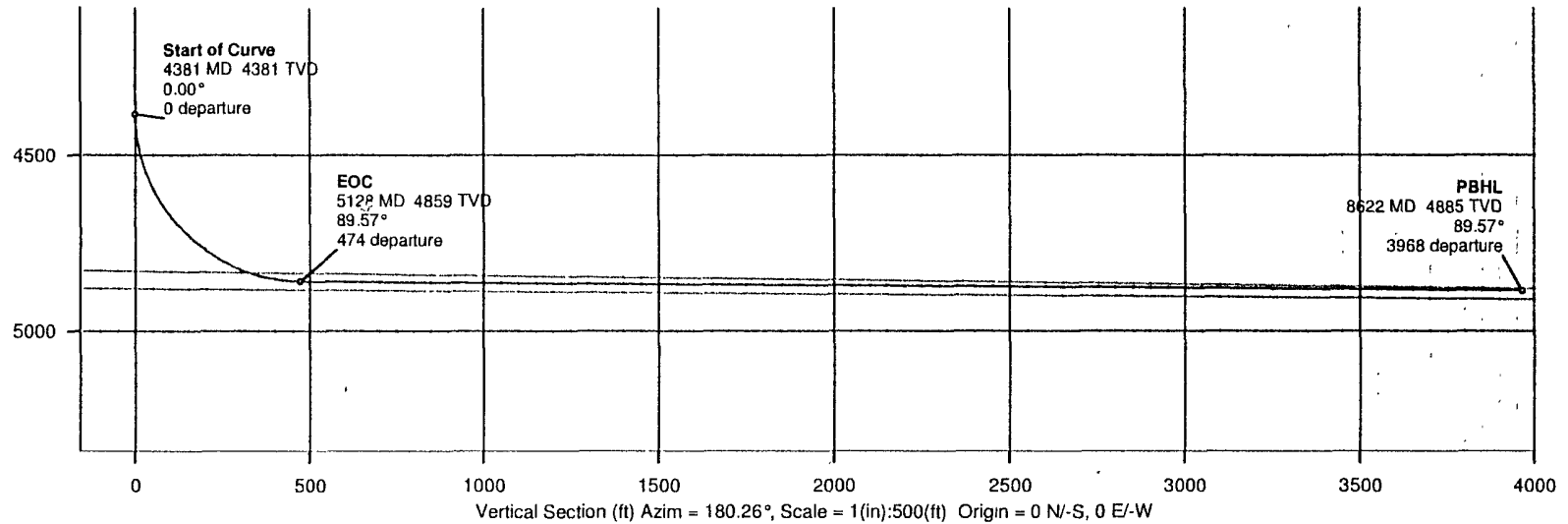


INTREPID
Directional Drilling Specialists



LCX Energy, LLC.

WELL 1724 Federal 1 #1				FIELD Eddy County, NM NAD83				STRUCTURE 1724 Federal 1 #1			
Magnetic Parameters Model IGRF 2005				Surface Location Lat N32 52 13.082 Lon W104 32 22.512				Miscellaneous Sid 1724 Federal 1 #1 Plan 1724 Federal 1 #1.r1			
Dip 80.704° Mag Dec +8.457°				NAD83 New Mexico State Plane, Eastern Zone, US Feet Northing 580410.81 RLUS Easting 478012.67 RLUS Grid Conv -0.11104207° Scale Fact 0.9999136828				TVD Ref RKB (0.00 ft above) Srvy Date March 07 2008			
Date March 07, 2008 FS 46270.9 m											



Big Dog Drilling

Rig #9 Rig Plan

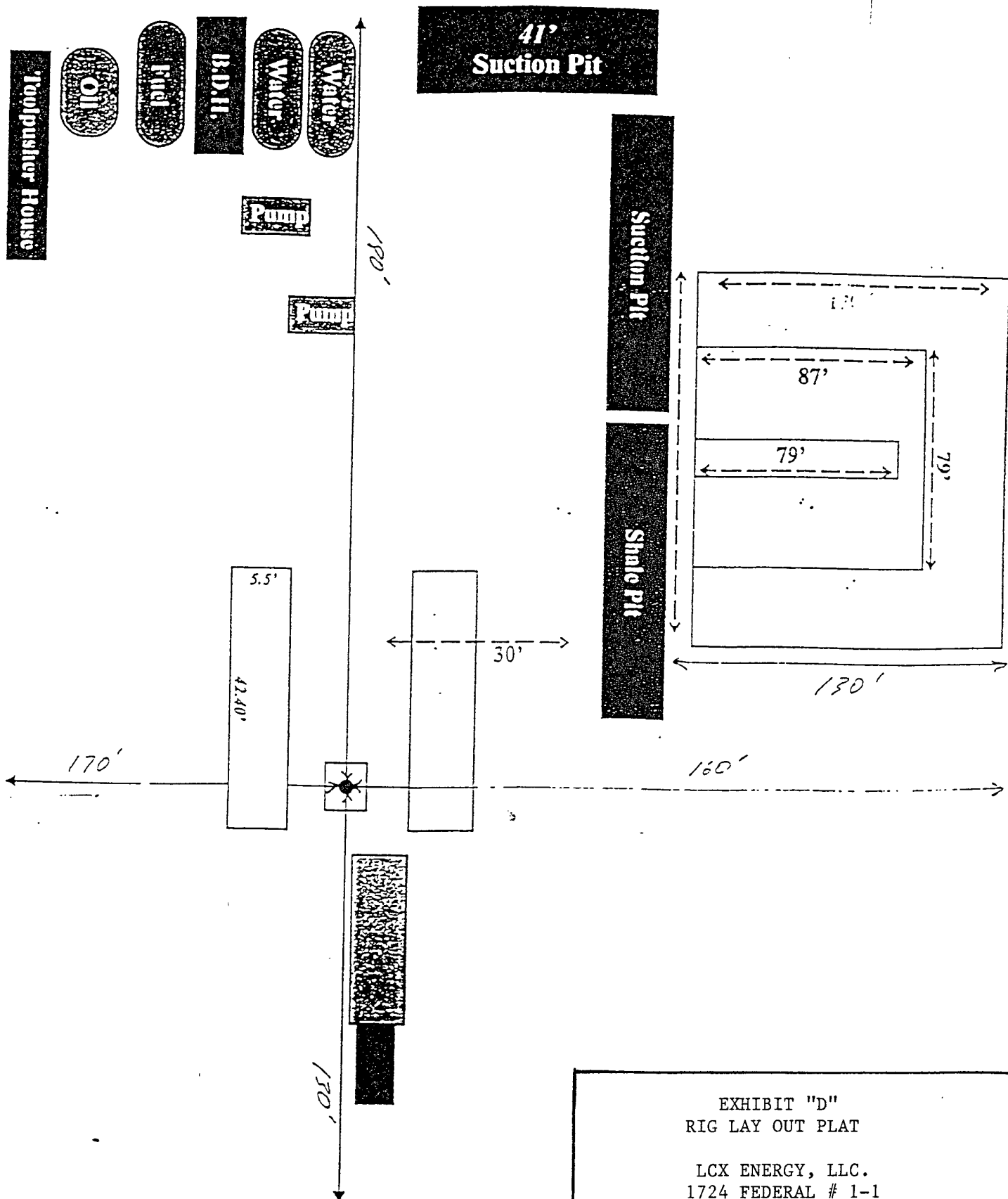
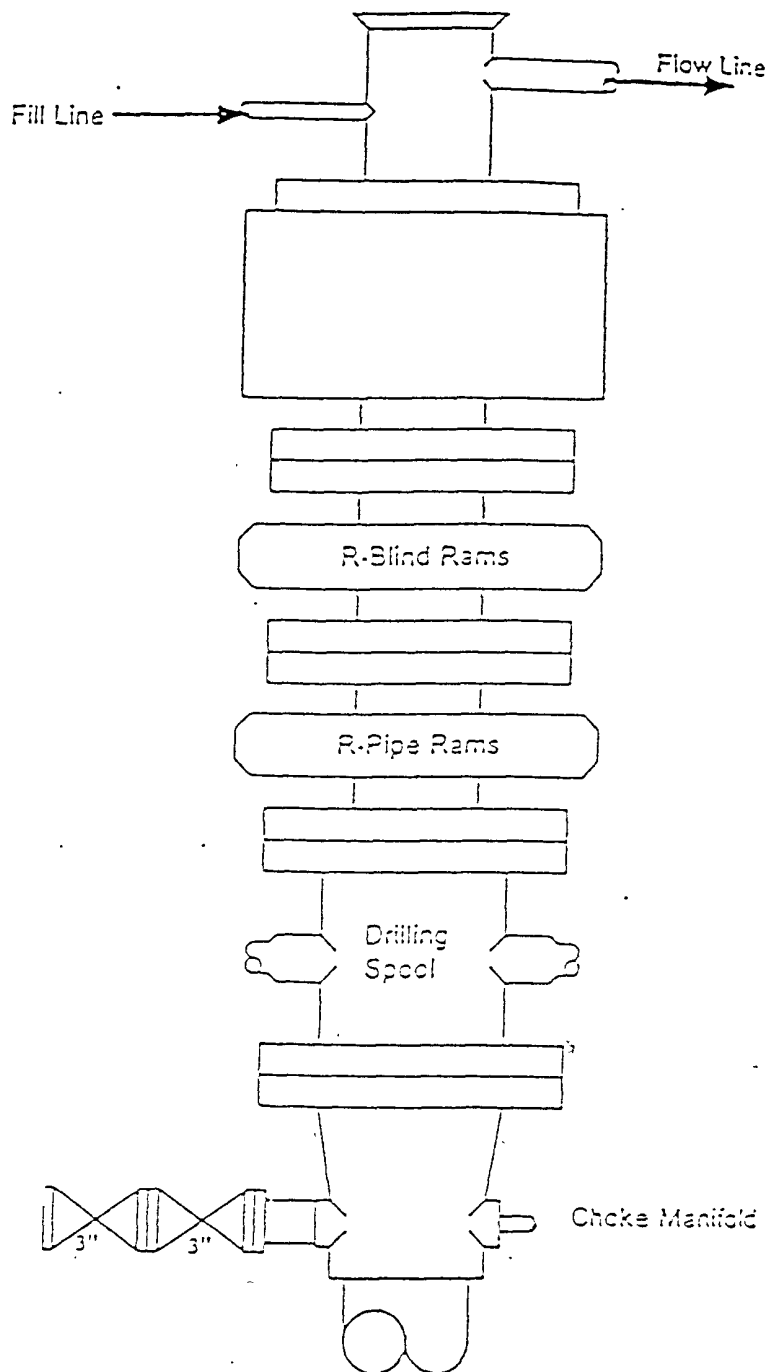


EXHIBIT "D"
RIG LAY OUT PLAT

LCX ENERGY, LLC.
1724 FEDERAL # 1-1
UNIT "B" SECTION 1
T17S-R24E EDDY CO. NM



Type 900 Series
3000 psi WP

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

LCX ENERGY, LLC.
1724 FEDERAL # 1-1
UNIT "B" SECTION 1
T17S-R24E EDDY CO. NM

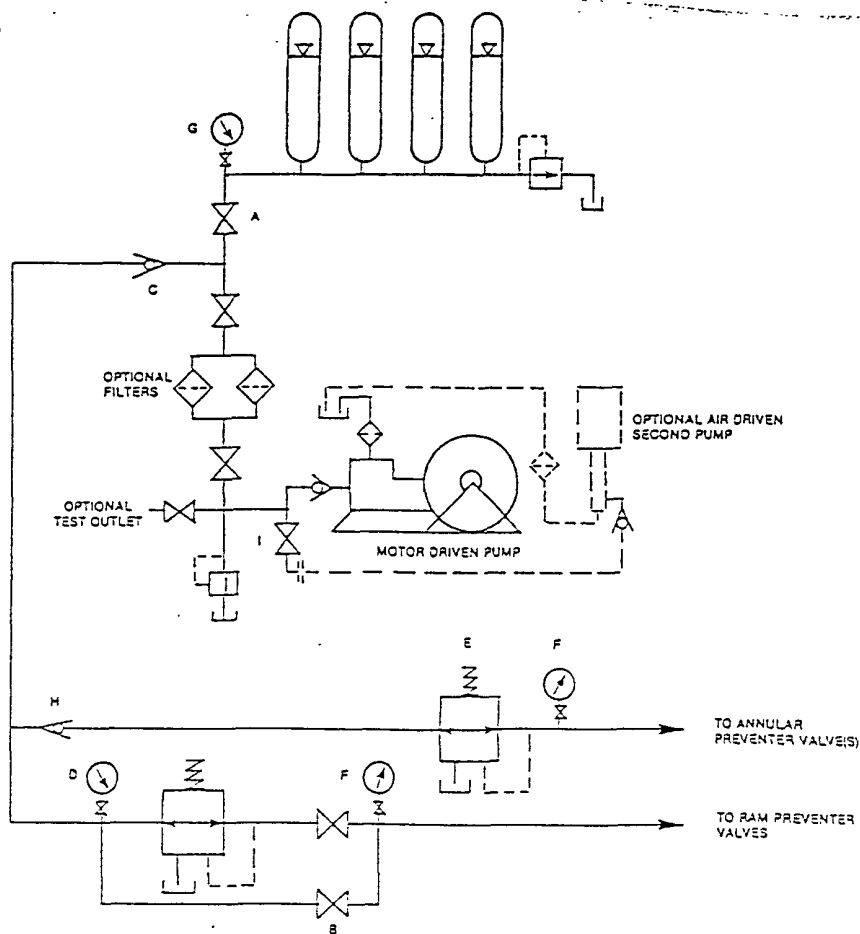


FIGURE K6-1. The schematic sketch of an accumulator system shows required and optional components.

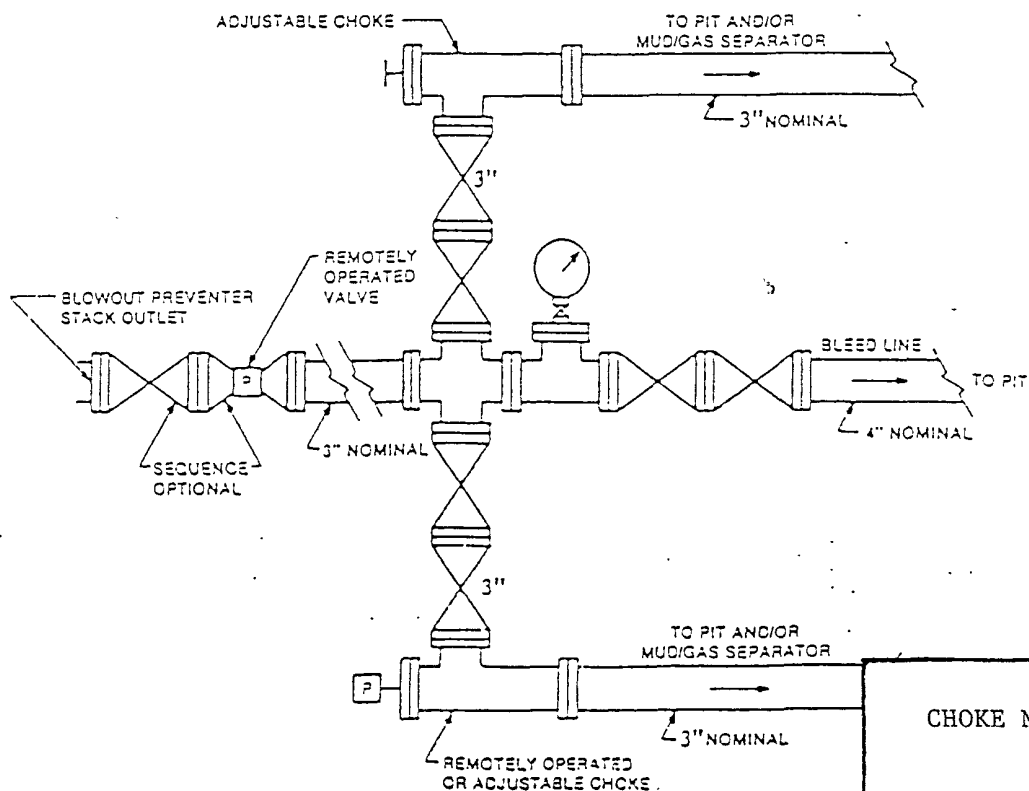


FIGURE K4-2. Typical choke manifold assembly for 5M rated working pressure service — surface installation.

EXHIBIT "E-1"
CHOKE MANIFOLD & CLOSING UNIT

LCX ENERGY, LLC.
1724 FEDERAL # 1-1
UNIT "B" SECTION 1
T17S-R24E EDDY CO. NM

This well and its anticipated production facility are not expected to have any Hydrogen Sulfide releases, as there not been any indication of any Hydrogen Sulfide in any of the other wells drilled in the immediate area. The nearest dwelling to this location is approximately .5 mile, however a Hydrogen Sulfide contingency plan will be submitted for this location. LCX ENERGY, LLC. Will have a company representative on location while drilling and completing of this well. An unmanned Hydrogen Sulfide safety trailer with monitoring equipment will also be stationed on the location during this operation below the surface casing setting depth of 350' plus or minus and remain there till MD-of 8750'+- is reached.

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General H2S Emergency Actions:

1. All personnel will immediately evacuate to an up-wind and if possible up-hill "safe area"
2. If for any reason a person must enter the hazardous area, they must wear a SCBA (Self Contained Breathing Apparatus)
3. Always use the "buddy system"
4. Isolate the well/problem if possible
5. Account for all personnel
6. Display the proper colors warning all unsuspecting personnel of the danger at hand.
7. Contact the Company personnel as soon as possible if not at the location. (use the enclosed call list as instructed

At this point the company representative will evaluate the situation and coordinate the necessary duties to bring the situation under control, and if necessary, the notification of the emergency response agencies and nearby residents.

EMERGENCY PROCEDURES FOR AN UNCONTROLLABLE RELEASE OF H2S

1. All personnel will don the self contained breathing apparatus.
2. Remove all personnel to the "safe area". (always use the buddy system).
3. Contact company personnel if not on location.
4. Set in motion the steps to protect and or remove the general public to an upwind "safe area".
Maintain strict security & safety procedures while dealing with the source.
5. No entry to any unauthorized personnel.
6. Notify the appropriate agencies: City Police-City Street (s)
State Police- State Rd
County Sheriff – County Rd.
7. Call the NMOCD

If at this time the supervising person determines the release of H2S cannot be contained to the site location and the general public is in harms way he will take the necessary steps to protect the workers and the public.

EMERGENCY CALL LIST: (Start and continue until ONE of these people has been contacted)

	OFFICE	MOBILE	HOME
LCX ENERGY, LLC.	432-262-4011		
KELVIN FISHER	432-262-4046	432-634-5621	432-694-1306
ROLAN LISLE	432-634-2632		DRILLING CONSULTANT WILL BE ON LOCATION AT ALL TIMES.

EMERGENCY RESPONSE NUMBERS:

State Police	Eddy County		505-748-9718
State Police	Lea County		505-392-5588
Sheriff	Eddy County		505-746-2701
Sheriff	Lea County		575-393-2515
Emergency Medical Service (Ambulance)	Eddy County		911 or 505-746-2701
	Lea County	Eunice	911 or 505-394-3258
Emergency Response	Eddy County SERC		505-476-9620
	Lea County		
Artesia Police Dept			505-746-5001
Artesia Fire Dept			505-746-5001
Carlsbad Police Dept			505-885-2111
Carlsbad Fire Dept			505-885-3125

EMERGENCY CALL LIST (CONT.)

Loco Hills Police Dept		505-677-2349
Jal Police Dept		505-395-2501
Jal Fire Dept		505-395-2221
Jal Ambulance		505-395-2221
Eunice Police Dept		505-394-0112
Eunice Fire Dept		505-394-3258
Eunice Ambulance		505-394-3258
Hobbs Police Dept		505-397-3315
Hobbs Fire Dept		505-397-9308
NMOCD	District 1 (Lea, Roosevelt, Curry)	505-393-6161
	District 2 (Eddy, Chavez)	505-748-1283
Lea County Information		505-393-8203
Callaway Safety	Eddy/Lea Counties	505-392-2973
BJ Services	Artesia	505-746-3140
	Hobbs	505-392-5556
Halliburton	Artesia	1-800-523-2482
	Hobbs	1-800-523-2482
Wild Well Control	Midland	432-550-6202
	Mobile	432-553-1166

PROTECTION OF THE GENERAL PUBLIC (ROE):

- 100 ppm at any public area (any place not associated with this site)
- 500 ppm at any public road (any road which the general public may travel)
- 100 ppm radius of ¼ mile in New Mexico will be assumed if there is insufficient data to do the calculations, and there is a reasonable expectation that H2S could be present in concentrations greater than 100 ppm in the gas mixture

CALCULATIONS FOR THE 100 PPM (ROE) "Pasquill-Gifford equation"

$X = [(1.589) (\text{mole fraction}) (Q - \text{volume in std cu ft})]$ to the power of (0.6258)

CALCULATION FOR THE 500 PPM ROE:

$X = [(.4546) (\text{mole fraction}) (Q - \text{volume in std cu ft})]$ to the power of (0.6258)

Example:

If a well/facility has been determined to have 150 / 500 ppm H2S in the gas mixture and the well/facility is producing at a gas rate of 100 MCFPD then:

150 ppm $X = [(1.589) (.00015) (100,000 \text{ cfd})]$ to the power of (.6258)
 $X = 7 \text{ ft}$

500 ppm $X = [(.4546) (.0005) (100,000 \text{ cfd})]$ to the power of (.6258)
 $X = 3.3 \text{ ft.}$

(These calculations will be forwarded to the appropriate District NMOCD office when Applicable)

PUBLIC EVACUATION PLAN:

- 1. Notification of the emergency response agencies of the hazardous condition and implement evacuation procedures.
- A trained person in H2S safety, shall monitor with detection equipment the H2S concentration, wind and area exposure (ROE). This person will determine the outer perimeter of the hazardous area. The extent of the evacuation area will be determined from the data being collected. Monitoring shall continue until the situation has been resolved. (All monitoring equipment shall be UL approved, for use in class 1

groups A,B,C &D, Division 1, hazardous locations. All monitor will have a minimum capability of measuring H₂S , oxygen, and flammable values).

- Law enforcement shall be notified to set up necessary barriers and maintain such for the duration of the situation as well as aid in the evacuation procedure.
- The company supervising personnel shall stay in communication with all agencies through out the duration of the situation and inform such agencies when the situation has been contained and the effected area(s) is safe to enter.

PROCEDURE FOR IGNITING AN UNCONTROLLABLE CONDITION:

- 1. Human life and/or property are in danger
- 2. There is no hope of bringing the situation under control with the prevailing conditions at the site.

INSTRUCTION FOR IGNITION:

- 1. Two people are required. They must be equipped with positive pressure, self contained breathing apparatus and a "D" ring style full body, OSHA approved safety harness. Non flammable rope will be attached.
- 2. One of the people will be qualified safety person who will test the atmosphere for H₂S, Oxygen & LFL. The other person will be the company supervisor; he is responsible for igniting the well.
- 3. Ignite up wind from a distance no closer than necessary. Make sure that where you ignite from has the maximum escape avenue available. A 25 mm flare gun shall be used. with a \pm 500 ft. range to ignite the gas.
- 4. Prior to ignition, make a final check for combustible gases.
- 5. Following ignition, continue with the emergency actions & procedures as before.

REQUIRED EMERGENCY EQUIPMENT:

- 1. Breathing apparatus:
 - Rescue Packs (SCBA) – 1 unit shall be placed at each breathing area, 2 shall be stored in the safety trailer.
 - Work/Escapes packs – 4 packs shall be stored on the rig floor with sufficient air hose not to restrict work activity.
 - Emergency Escape Packs – 4 packs shall be stored in the doghouse for emergency evacuation.
- 2. Signage & Flagging:
 - One color code condition sign will be placed at the entrance to the site reflecting the possible conditions at the site.
 - A colored condition flag will be on display, reflecting the condition at the site at the time.
- 3. Briefing Area: two perpendicular areas will be designated by signs and readily accessible.
- 4. Wind Socks: Two wind socks will be placed in strategic locations, visible from all angles.
- 5. H₂S detectors and alarms: The stationary detector with three sensors will be placed in the upper dog house if equipped, set to visually alarm @ 10 ppm and audible @ 14 ppm. Calibrate a minimum of every 30 days or as needed. The sensors will be placed in the following places: (Gas sample tubes will be stored in the safety trailer)
 - Rig Floor
 - Bell Nipple
 - End of Flow line or where well bore fluid are being discharged.
- 6. Auxiliary Rescue Equipment:
 - Stretcher
 - Two OSHA full body harness
 - 100 ft 5/8 inch OSHA approved rope

- 1-20# class ABC fire extinguisher
- Communication via cell phones on location and vehicles on location.

USING SELF CONTAINED BREATHING AIR EQUIPMENT (SCBA):

- (SCBA) SHOULD BE WORN WHEN ANY OF THE FOLLOWING ARE PERFORMED:
 - Working near the top or on top of a tank
 - Disconnecting any line where H₂S can reasonably be expected
 - Sampling air in the area to determine if toxic concentrations of H₂S exist.
 - Working in areas where over 10 ppm on H₂S has been detected.
 - At any time there is a doubt as to the level of H₂S in the area.
- All personnel shall be trained in the use of SCBA prior to working in a potentially hazardous location.
- Facial hair and standard eyeglasses are not allowed with SCBA.
- Contact lenses are never allowed with SCBA.
- Air quality shall be continuously be checked during the entire operation.
- After each use, the SCBA unit shall be cleaned, disinfected, serviced and inspected
- All SCBA shall be inspected monthly.

RESCUE AND FIRST AID FOR VICTIMS OF HYDROGEN SULFIDE (H₂S) POISONING:

- Do not panic
- Remain Calm & think
- Get on the breathing apparatus

- Remove the victim to the safe breathing area as quickly as possible. Up wind and uphill from source or cross wind to achieve upwind.
- Notify emergency response personnel.
- Provide artificial respiration and or CPR, as necessary
- Remove all contaminated clothing to avoid further exposure.
- A minimum of two personnel on location shall be trained in CPR and First Aid.

HYDROGEN SULFIDE TOXIC EFFECTS

H₂S is extremely toxic. The acceptable ceiling for eight hours of exposure is 10 ppm, which is .001% by volume. H₂S is approximately 20% heavier than air (Sp. Gr= 1.19)(Air = 1) and colorless. It forms an explosive mixture with air between 4.3% and 46%. By volume hydrogen sulfide is almost as toxic as hydrogen cyanide and is 5-6 times more toxic than carbon monoxide.

Various Gases

COMMON NAME	CHEMICAL ABBREV.	SPECIFIC GRVTY.	THRESHOLD LIMITS	HAZARDOUS LIMITS	LETHAL CONCENTRATIONS
Hydrogen Sulfide	H ₂ S	1.19	10ppm 15 ppm	100 ppm/hr	600 ppm
Hydrogen Cyanide	HCN	0.94	10 ppm	150 ppm/hr	300 ppm
Sulfur Dioxide	SO ₂	2.21	2 ppm	N/A	1000 ppm
Chlorine	CL ₂	2.45	1 ppm	4 ppm/hr	1000 ppm
Carbon Monoxide	CO	0.97	50 ppm	400 ppm/hr	1000 ppm
Carbon Dioxide	CO ₂	1.52	5000 ppm	5%	10%
Methane	CH ₄	0.55	90,000	Combustible @ 5%	N/A

Threshold limit: Concentrations at which it is believed that all workers may be repeatedly exposed, day after day without adverse effects.

Hazardous Limit: Concentrations that may cause death

Lethal

Concentrations: Concentrations that will cause death with short term exposure

Threshold limit -

10 ppm: NIOSH guide to chemical hazards

PHYSICAL EFFECTS OF HYDROGEN SULFIDE:

CONCENTRATION	PHYSICAL EFFECTS
.001% 10 PPM	Obvious and unpleasant odor. Safe for 8 hr exposure
.005% 50 ppm	Can cause some flu like symptoms and can cause pneumonia
.01% 100 ppm	Kills the sense of smell in 3-15 minutes. May irritate the eyes and throat.
.02% 200 ppm	Kills the sense of smell rapidly. Severely irritates the eyes and throat. Severe flu like symptoms after 4 or more hrs. May cause lung damage and or death.
.06% 600 ppm	Loss of consciousness quickly, death will result if not rescued promptly.

SURFACE USE PLAN

LCX ENERGY, LLC.
1724 FEDERAL # 1-1
UNIT "B" SECTION 1
T17S-R24E 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 go West on U. S. 82 for 6- miles to Lonesome Trail Road, turn North follow caliche road 1.3± miles bear (West) go 2.5 miles to the location on the South side of road.
- D. Exhibit "C" shows the directions to location from Hi-way 82.

2. PLANNED ACCESS ROADS: Approximately 500' of new road will be constructed.

- A. The access roads will be crowned and ditched 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 - One approximately .75 miles West 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"

SURFACE USE PLAN

LCX ENERGY, LLC.
1724 FEDERAL # 1-1
UNIT "B" SECTION 1
T17S-R24E EDDY CO. NM

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 roads , flowlines and powerlines.

5. LOCATION & TYPE OF WATER SUPPLY:

Water will be purchased locally from a commercial source and trucked over the location 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 the drill site, if additional material is required it will be obtained from a local source and transported over the location access roads as shown on Exhibit "C".

7. METHODS OF HANDLING WASTE:

- A. All trash, junk and other waste material will be contained in trash cages or trash bins in order to prevent scattering. When the job is completed all contents will be removed and disposed of in an approved sanitary land fill.
- B. Sewage from living quarters will be drained into holding tanks and will be cleaned out periodically. A Porta-John will be provided for the rig crews. This equipment will be properly maintained during the drilling operations and removed upon completion of well.
- C. 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 approved disposal site. Later the pits will be broken out to speed drying. Water produced during completion will be stored in tanks and disposed of in State approved disposal site. Oil and condensate produced during completion will be put in storage tanks and sold.
- D. Drill cuttings will be disposed of in reserve pits or if necessary will be taken to a State approved landfarm and disposed of properly.
- E. Any remaining salts or mud additives will be collected by the supplier and to stock, this includes all broken bags.

8. ANCILLARY FACILITIES:

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

SURFACE USE PLAN

LCX ENERGY, LLC.
1724 FEDERAL # 1-1
UNIT "B" SECTION 1
T17S-R24E EDDY CO. NM

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 12 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.



3106 N. Big Spring St. Ste. 100
Midland, TX 79705
Tel: (432) 685-9158

September 3, 2008

Bureau of Land Management
620 E. Greene Street
Carlsbad, New Mexico 88220
Attn: Betty Hill

Re: 1724 Federal #1-1
660' FNL & 1,880' FEL,
Section 1, T17S, R24E,
Eddy County, New Mexico

Dear Betty,

Please note that LCX Energy, LLC and Chase Farms (surface owner for the above referenced area) have reached an agreement for the location of the above referenced well.

Please note contact information:

Chase Farms
Ron Lanning- Vice President
P.O. Box 658
Artesia, New Mexico 88211
Phone: 505-748-1423

Sincerely,

A handwritten signature in black ink, appearing to read 'Lee Ann Rollins', is written over the typed name.

Lee Ann Rollins
Agent for LCX Energy, LLC
Gray Surface Specialties
leeann@gss04.com

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:

05/08/08

TITLE: PERMIT ENGINEER

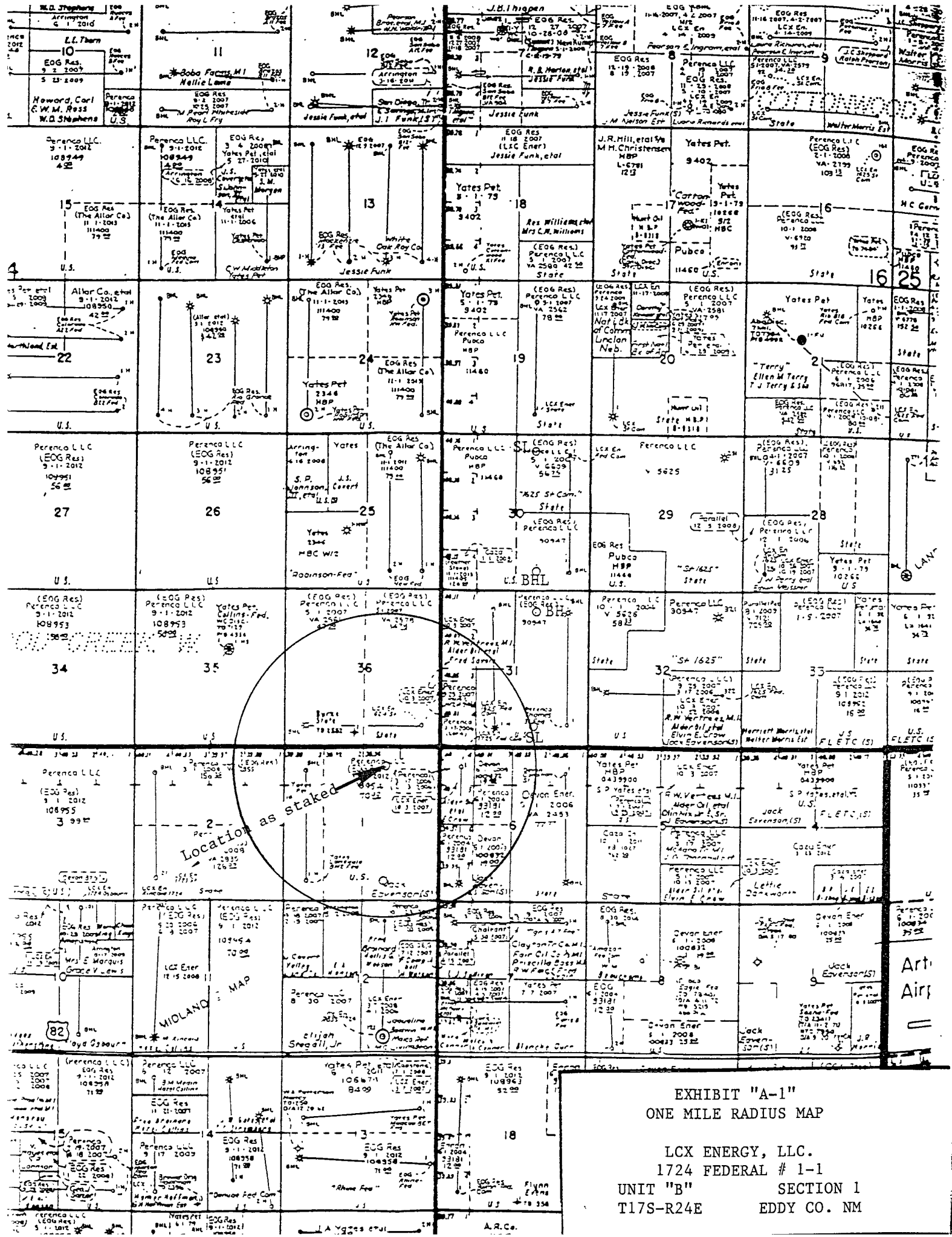


EXHIBIT "A-1"
ONE MILE RADIUS MAP

LCX ENERGY, LLC.
1724 FEDERAL # 1-1
UNIT "B" SECTION 1
T17S-R24E EDDY CO. NM

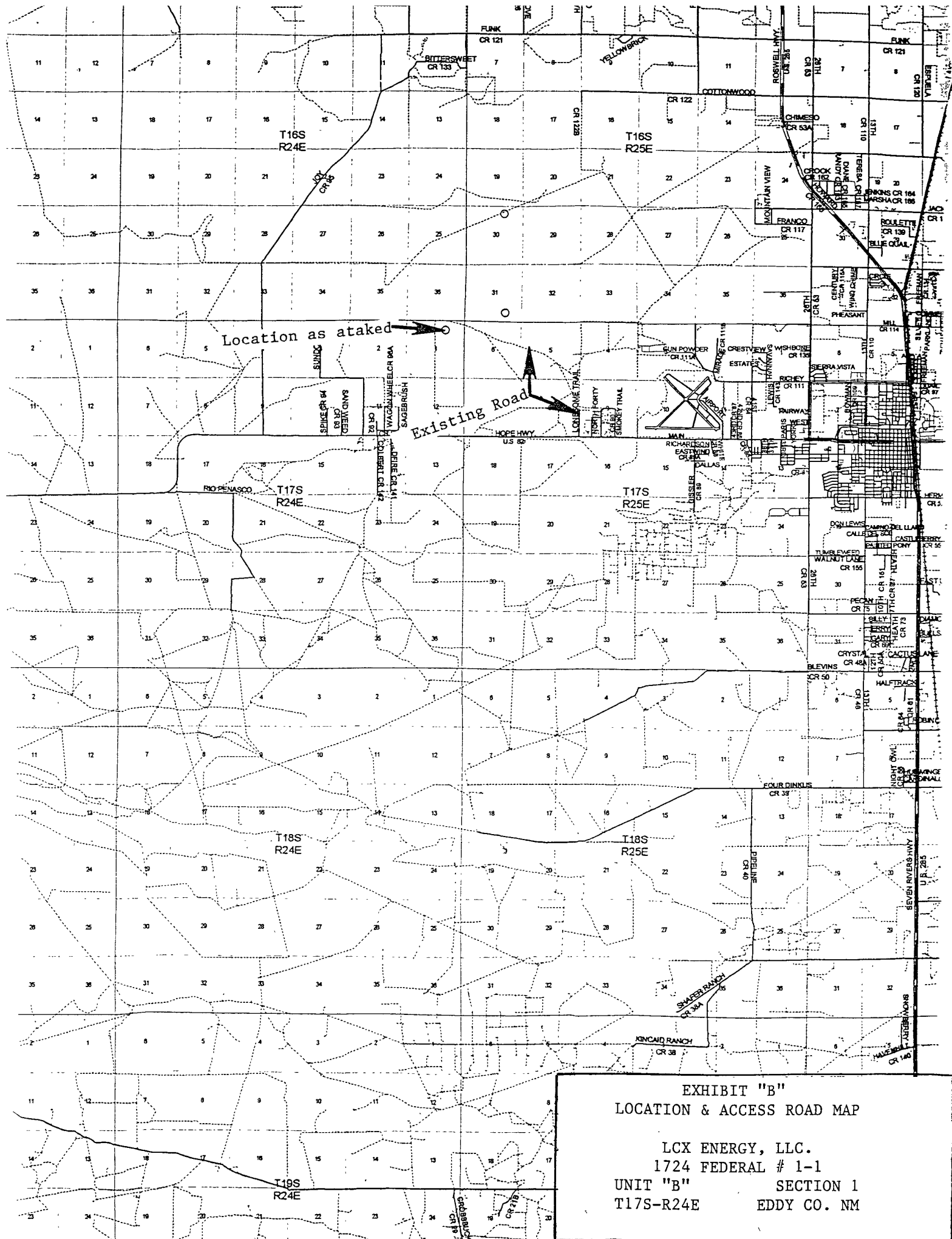


EXHIBIT "B"
LOCATION & ACCESS ROAD MAP

LCX ENERGY, LLC.
1724 FEDERAL # 1-1
UNIT "B" SECTION 1
T17S-R24E EDDY CO. NM

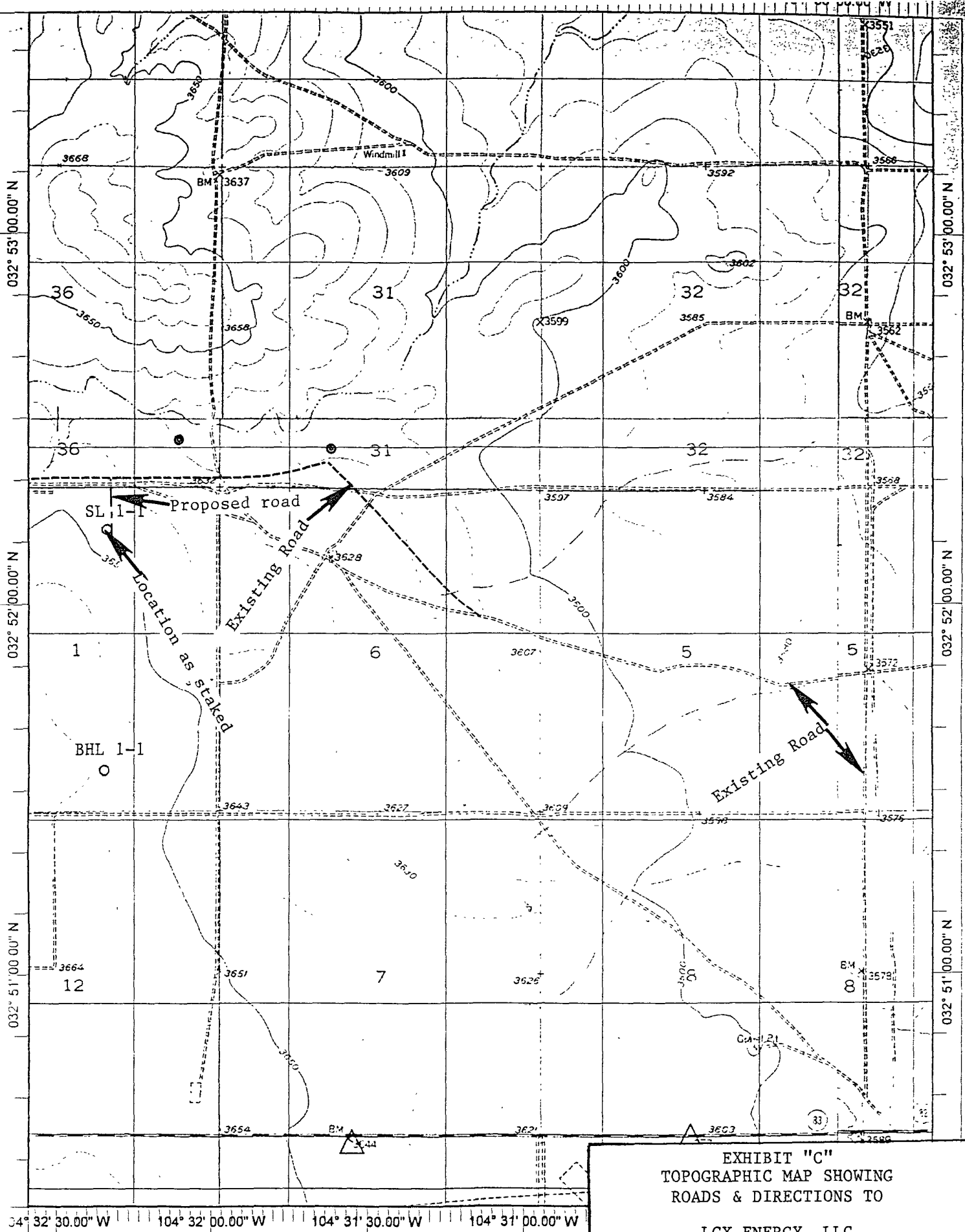


EXHIBIT "C"
TOPOGRAPHIC MAP SHOWING
ROADS & DIRECTIONS TO

LCX ENERGY, LLC.
1724 FEDERAL # 1-1
UNIT "B" SECTION 1
T17S-R24E EDDY CO. NM

PECOS DISTRICT CONDITIONS OF APPROVAL

OPERATOR'S NAME:	LCX Energy
LEASE NO.:	NMNM108954
WELL NAME & NO.:	1724 Federal 1 No 1
SURFACE HOLE FOOTAGE:	660' FNL & 1880' FEL
BOTTOM HOLE FOOTAGE:	660' FSL & 1880' FEL
LOCATION:	Section 1, T. 17 S., R 24 E., NMPM
COUNTY:	Eddy County, New Mexico

TABLE OF CONTENTS

Standard Conditions of Approval (COA) apply to this APD. If any deviations to these standards exist or special COAs are required, the section with the deviation or requirement will be checked below.

- ☐ **General Provisions**
- ☐ **Permit Expiration**
- ☐ **Archaeology, Paleontology, and Historical Sites**
- ☐ **Noxious Weeds**
- ☒ **Special Requirements**
 - Aplomado Falcon
- ☐ **Construction**
 - Notification
 - Topsoil
 - Reserve Pit
 - Federal Mineral Material Pits
 - Well Pads
 - Roads
- ☐ **Road Section Diagram**
- ☒ **Drilling**
- ☐ **Production (Post Drilling)**
 - Well Structures & Facilities
 - Pipelines
 - Electric Lines
- ☐ **Reserve Pit Closure/Interim Reclamation**
- ☐ **Final Abandonment/Reclamation**

I. GENERAL PROVISIONS

The approval of the Application For Permit To Drill (APD) is in compliance with all applicable laws and regulations: 43 Code of Federal Regulations 3160, the lease terms, Onshore Oil and Gas Orders, Notices To Lessees, New Mexico Oil Conservation Division (NMOCD) Rules, National Historical Preservation Act As Amended, and instructions and orders of the Authorized Officer. Any request for a variance shall be submitted to the Authorized Officer on Form 3160-5, Sundry Notices and Report on Wells.

II. PERMIT EXPIRATION

If the permit terminates prior to drilling and drilling cannot be commenced within 60 days after expiration, an operator is required to submit Form 3160-5, Sundry Notices and Reports on Wells, requesting surface reclamation requirements for any surface disturbance. However, if the operator will be able to initiate drilling within 60 days after the expiration of the permit, the operator must have set the conductor pipe in order to allow for an extension of 60 days beyond the expiration date of the APD. (Filing of a Sundry Notice is required for this 60 day extension.)

III. ARCHAEOLOGICAL, PALEONTOLOGY & HISTORICAL SITES

Any cultural and/or paleontological resource discovered by the operator or by any person working on the operator's behalf shall immediately report such findings to the Authorized Officer. The operator is fully accountable for the actions of their contractors and subcontractors. The operator shall suspend all operations in the immediate area of such discovery until written authorization to proceed is issued by the Authorized Officer. An evaluation of the discovery shall be made by the Authorized Officer to determine the appropriate actions that shall be required to prevent the loss of significant cultural or scientific values of the discovery. The operator shall be held responsible for the cost of the proper mitigation measures that the Authorized Officer assesses after consultation with the operator on the evaluation and decisions of the discovery. Any unauthorized collection or disturbance of cultural or paleontological resources may result in a shutdown order by the Authorized Officer.

IV. NOXIOUS WEEDS

The operator shall be held responsible if noxious weeds become established within the areas of operations. Weed control shall be required on the disturbed land where noxious weeds exist, which includes the roads, pads, associated pipeline corridor, and adjacent land affected by the establishment of weeds due to this action. The operator shall consult with the Authorized Officer for acceptable weed control methods, which include following EPA and BLM requirements and policies.

V. SPECIAL REQUIREMENT(S)

Stipulations for Drilling in Aplomado Falcon Habitat

The following well pad construction and reclamation measures will be implemented to provide for minimal long-term disturbance:

No Yuccas over 5 feet in height will be damaged by vehicular use or any other activity associated with this project.

Remove all caliche from well pads and roads that are plugged and abandoned. Reclamation will consist of disking, mulching, seeding with a drill (See seed mixture below), and application of water to encourage seed germination.

Well pad size will not exceed 300 ft. x 390 ft. (unless multiple wells are drilled from the same well pad). All unused portions of the well pad associated with producing wells will be reclaimed using the seed mixture below:

Buffalograss (<i>Buchloe dactyloides</i>)	4 lbs/acre
Blue grama (<i>Bouteloua gracilis</i>)	1 lbs/acre
Cane bluestem (<i>Bothriochloa barbinodis</i>)	5 lbs/acre
Sideoats grama (<i>Bouteloua curtipendula</i>)	5 lbs/acre
Plains bristlegrass (<i>Setaria macrostachya</i>)	6 lbs/acre

Reserve pits for drilling and disposal are not allowed unless the pit can be effectively netted to the satisfaction of the BLM. Steel tank circulation system must be used if the reserve pit is not netted.

All active raptor nests will be avoided by a minimum of 400 meters by all activities or curtail activities until fledging is complete.

All inactive raptor nests will be avoided by a minimum of 200 meters by all activities.

All roads associated with well development will not exceed 30 ft in width

VI. CONSTRUCTION

A. NOTIFICATION

The BLM shall administer compliance and monitor construction of the access road and well pad. Notify the Carlsbad Field Office at (505) 234-5972 at least 3 working days prior to commencing construction of the access road and/or well pad.

When construction operations are being conducted on this well, the operator shall have the approved APD and Conditions of Approval (COA) on the well site and they shall be made available upon request by the Authorized Officer.

B. TOPSOIL

The operator shall stockpile the topsoil of the well pad. The topsoil to be stripped is approximately 6 inches in depth. The topsoil shall not be used to backfill the reserve pit and will be used for interim and final reclamation.

C. RESERVE PITS

The reserve pit shall be constructed and closed in accordance with the NMOCD rules.

The reserve pit shall be constructed 130' X 130' on the East side of the well pad.

The reserve pit shall be constructed, so that upon completion of drilling operations, the dried pit contents shall be buried a minimum depth of three feet below ground level. Should the pit content level not meet the three foot minimum depth requirement, the excess contents shall be removed until the required minimum depth of three feet below ground level has been met. The operator shall properly dispose of the excess contents at an authorized disposal site.

The reserve pit shall be constructed and maintained so that runoff water from outside the location is not allowed to enter the pit. The berms surrounding the entire perimeter of the pit shall extend a minimum of two (2) feet above ground level. At no time will standing fluids in the pit be allowed to rise above ground level.

The reserve pit shall be fenced on three (3) sides during drilling operations. The fourth side shall be fenced immediately upon rig release.

D. FEDERAL MINERAL MATERIALS PIT

If the operator elects to surface the access road and/or well pad, mineral materials extracted during construction of the reserve pit may be used for surfacing the well pad and access road and other facilities on the lease.

Payment shall be made to the BLM prior to removal of any additional federal mineral materials from any site other than the reserve pit. Call the Carlsbad Field Office at (505) 234-5972.

E. WELL PAD SURFACING

Surfacing of the well pad is not required.

If the operator elects to surface the well pad, the surfacing material may be required to be removed at the time of reclamation.

The well pad shall be constructed in a manner which creates the smallest possible surface disturbance, consistent with safety and operational needs.

F. ON LEASE ACCESS ROADS

Road Width

The access road shall have a driving surface that creates the smallest possible surface disturbance and does not exceed fourteen (14) feet in width. The maximum width of surface disturbance, when constructing the access road, shall not exceed thirty (30) feet.

Surfacing

Surfacing material is not required on the new access road driving surface. If the operator elects to surface the new access road or pad, the surfacing material may be required to be removed at the time of reclamation.

Where possible, no improvements should be made on the unsurfaced access road other than to remove vegetation as necessary, road irregularities, safety issues, or to fill low areas that may sustain standing water.

The Authorized Officer reserves the right to require surfacing of any portion of the access road at any time deemed necessary. Surfacing may be required in the event the road deteriorates, erodes, road traffic increases, or it is determined to be beneficial for future field development. The surfacing depth and type of material will be determined at the time of notification.

Crowning

Crowning shall be done on the access road driving surface. The road crown shall have a grade of approximately 2% (i.e., a 1" crown on a 14' wide road). The road shall conform to Figure 1; cross section and plans for typical road construction.

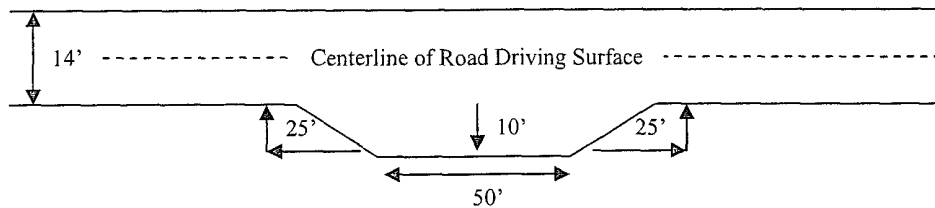
Ditching

Ditching shall be required on both sides of the road.

Turnouts

Vehicle turnouts shall be constructed on the road. Turnouts shall be intervisible with interval spacing distance less than 1000 feet. Turnouts shall be constructed on all blind curves. Turnouts shall conform to the following diagram:

Standard Turnout – Plan View

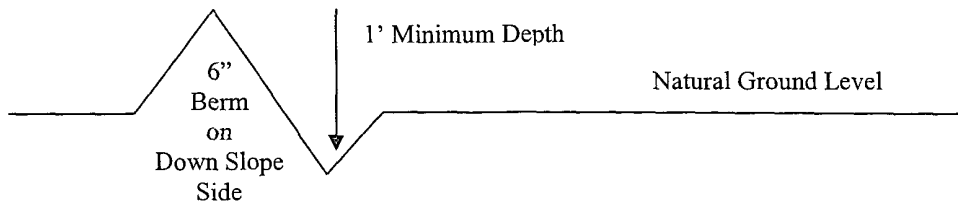


Drainage

Drainage control systems shall be constructed on the entire length of road (e.g. ditches, sidehill outslowing and insloping, lead-off ditches, culvert installation, and low water crossings).

A typical lead-off ditch has a minimum depth of 1 foot below and a berm of 6 inches above natural ground level. The berm shall be on the down-slope side of the lead-off ditch.

Cross Section of a Typical Lead-off Ditch



All lead-off ditches shall be graded to drain water with a 1 percent minimum to 3 percent maximum ditch slope. The spacing interval are variable for lead-off ditches and shall be determined according to the formula for spacing intervals of lead-off ditches, but may be amended depending upon existing soil types and centerline road slope (in %);

Formula for Spacing Interval of Lead-off Ditches

Example - On a 4% road slope that is 400 feet long, the water flow shall drain water into a lead-off ditch. Spacing interval shall be determined by the following formula:

$$400 \text{ foot road with } 4\% \text{ road slope: } \frac{400'}{4\%} + 100' = 200' \text{ lead-off ditch interval}$$

Culvert Installations

Appropriately sized culvert(s) shall be installed at the deep waterway channel flow crossing.

Cattleguards

An appropriately sized cattleguard(s) sufficient to carry out the project shall be installed and maintained at fence crossing(s).

Any existing cattleguard(s) on the access road shall be repaired or replaced if they are damaged or have deteriorated beyond practical use. The operator shall be responsible for the condition of the existing cattleguard(s) that are in place and are utilized during lease operations.

A gate shall be constructed and fastened securely to H-braces.

Fence Requirement

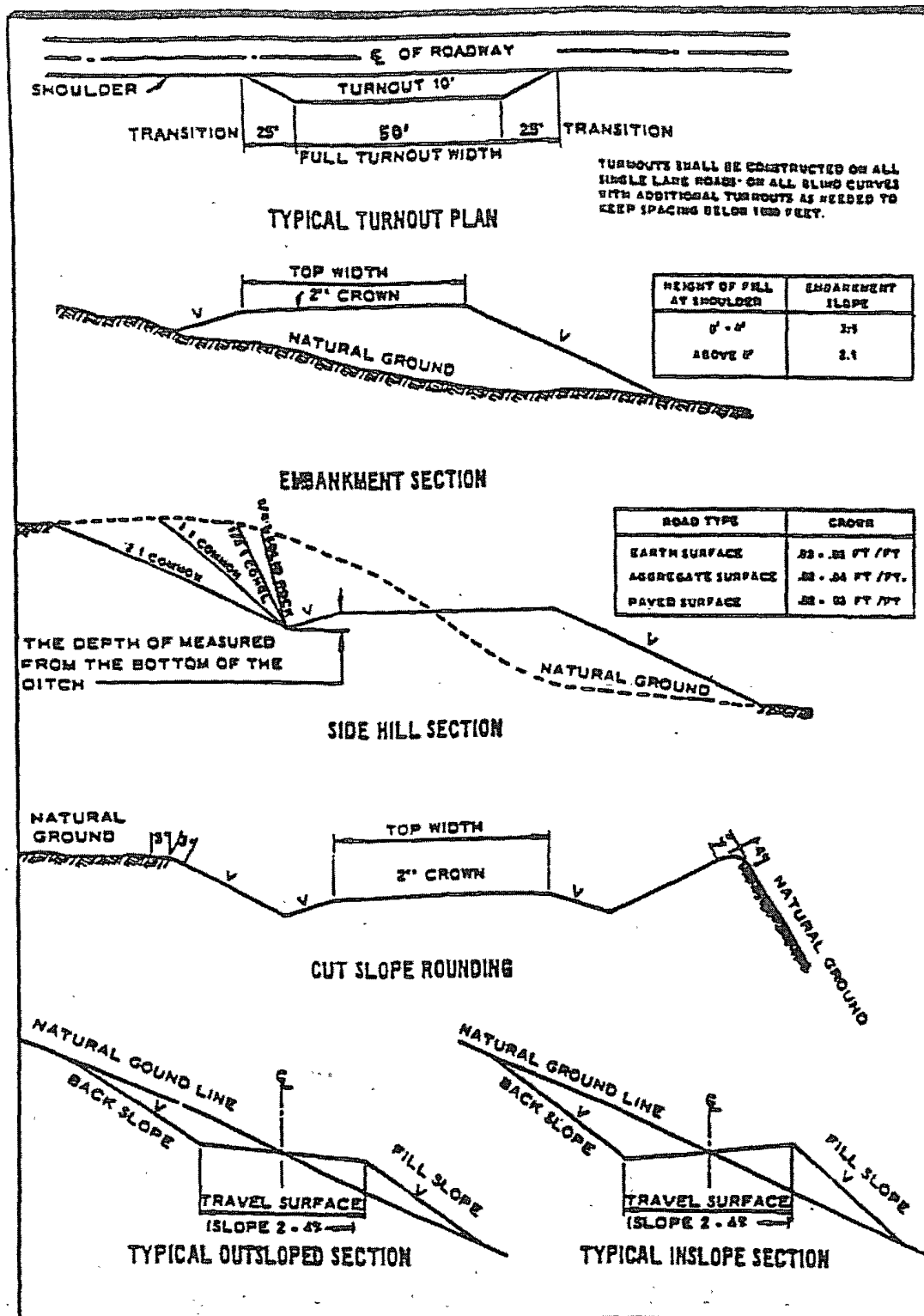
Where entry is required across a fence line, the fence shall be braced and tied off on both sides of the passageway prior to cutting.

The operator shall notify the private surface landowner or the grazing allotment holder prior to crossing any fence(s).

Public Access

Public access on this road shall not be restricted by the operator without specific written approval granted by the Authorized Officer.

Figure 1 – Cross Sections and Plans For Typical Road Sections



VII. DRILLING

A. DRILLING OPERATIONS REQUIREMENTS

The BLM is to be notified a minimum of **4 hours** in advance for a representative to witness:

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

☒ **Eddy County**

Call the Carlsbad Field Office, 620 East Greene St., Carlsbad, NM 88220,
(575) 361-2822

1. **Although Hydrogen Sulfide has not been reported in the area, it is always a potential hazard. If Hydrogen Sulfide is encountered, please report measured amounts and formations to the BLM.**
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. Floor controls are required for 3M or Greater systems. These 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

Changes to the approved APD casing and cement program require submitting a sundry and receiving approval prior to work. Failure to obtain approval prior to work will result in an Incident of Non-Compliance being issued.

Centralizers required on surface casing as per Onshore Order 2.III.B.1.f

Provide compressive strengths including hours to reach required 500 pounds compressive strength prior to cementing each casing string.

No pea gravel permitted for remedial or fall back remedial without prior authorization from the BLM engineer

Possible lost circulation in Grayburg & San Andres
Possible high pressure gas bursts within the Wolfcamp

1. The 13-3/8 inch surface casing shall be set at approximately 400 feet and cemented to the surface.
 - 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 cementing will be done prior to drilling out that string.
2. The minimum required fill of cement behind the 8-5/8 inch intermediate casing is:
☒ Cement to surface. If cement does not circulate see B.1.a-d above.

Centralizers required on horizontal leg, must be type for horizontal service and minimum of one every other joint.

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.**
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 4 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 formation 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.

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.

E. DRILL STEM TEST

If drill stem tests are performed, Onshore Order 2.III.D shall be followed.

LB 6/18/08

VIII. PRODUCTION (POST DRILLING)

A. WELL STRUCTURES & FACILITIES

Placement of Production Facilities

Production facilities should be placed on the well pad to allow for maximum interim recontouring and revegetation of the well location.

Containment Structures

The containment structure shall be constructed to hold the capacity of the entire contents of the largest tank, plus 24 hour production, unless more stringent protective requirements are deemed necessary by the Authorized Officer.

Painting Requirement

All above-ground structures including meter housing that are not subject to safety requirements shall be painted a flat non-reflective paint color
Shale Green, Munsell Soil Color Chart # 5Y 4/2

IX. INTERIM RECLAMATION & RESERVE PIT CLOSURE

A. INTERIM RECLAMATION

If the well is a producer, interim reclamation shall be conducted on the well site in accordance with the orders of the Authorized Officer. The operator shall submit a Sundry Notices and Reports on Wells (Notice of Intent), Form 3160-5, prior to conducting interim reclamation.

During the life of the development, all disturbed areas not needed for active support of production operations should undergo interim reclamation in order to minimize the environmental impacts of development on other resources and uses.

At the time reserve pits are to be reclaimed, operators should work with BLM surface management specialists to devise the best strategies to reduce the size of the location. Any reductions should allow for remedial well operations, as well as safe and efficient removal of oil and gas.

During reclamation, the removal of caliche is important to increasing the success of revegetating the site. Removed caliche may be used for road repairs, fire walls or for building other roads and locations. In order to operate the well or complete workover operations, it may be necessary to drive, park and operate on restored interim vegetation within the previously disturbed area. Disturbing revegetated areas for production or workover operations will be allowed. If there is significant disturbance and loss of vegetation, the area will need to be revegetated. Communicate with the appropriate BLM office for any exceptions/exemptions if needed.

B. RESERVE PIT CLOSURE

The reserve pit, when dried and closed, shall be recontoured, all trash removed, and reseeded as follows:

- Buffalograss (*Buchloe dactyloides*) 4 lbs/acre
- Blue grama (*Bouteloua gracilis*) 1 lbs/acre
- Cane bluestem (*Bothriochloa barbinodis*) 5 lbs/acre
- Sideoats grama (*Boutelou curtipendula*) 5 lbs/acre
- Plains bristlegrass (*Setaria macrostachya*) 6 lbs/acre

X. FINAL ABANDONMENT & REHABILITATION REQUIREMENTS

Upon abandonment of the well and/or when the access road is no longer in service the Authorized Officer shall issue instructions and/or orders for surface reclamation and restoration of all disturbed areas.

On private surface/federal mineral estate land the reclamation procedures on the road and well pad shall be accomplished in accordance with the private surface land owner agreement.