EA 789

452

Form 3160-3
(April 2004)

OCD-ARTESIA

JUN 15 2007

OCD-ARTESIA

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

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER

5. Lease Serial No. ~~NM 108558~~ NM108958

6. If Indian, Allotee or Tribe Name

7. If Unit or CA Agreement, Name and No.

1a. Type of work: [X] DRILL [ ] REENTER

1b. Type of Well: [ ] Oil Well [X] Gas Well [ ] Other [X] Single Zone [ ] Multiple Zone

8. Lease Name and Well No. 36414
1724 FEDERAL COM. # 151

2. Name of Operator 218885
LCX ENERGY, LLC. (LARRY GILLETTE 432-262-4011)

9. API Well No.
30-015-35665

3a. Address 110 NORTH MARIENFELD
SUITE 200 MIDLAND, TEXAS 79701

3b. Phone No. *(include area code)*
432-262-4011

10. Field and Pool, or Exploratory
COLLINS RANCH-WOLFCAMP

4. Location of Well *(Report location clearly and in accordance with any State requirements.*)*
At surface 1880' FNL & 660' FWL SECTION 15 T17S-R24E EDDY CO. NM
At proposed prod. zone EOH 1880' FNL & 660' FEL SEC. 15 T17S-R24E

11. Sec., T. R. M. or Blk. and Survey or Area
SECTION 15 T17S-R24E

14. Distance in miles and direction from nearest town or post office*
Approximately 12 miles West of Artesia New Mexico

12. County or Parish
EDDY CO.

13. State
NM

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
320

17. Spacing Unit dedicated to this well
320

18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. NA

19. Proposed Depth
MD-8755'
TVD-4960'

20. BLM/BIA Bond No. on file NMB000094
~~RLB-0008129~~

21. Elevations (Show whether DF, KDB, RT, GL, etc.)
3756' GL.

22. Approximate date work will start*
WHEN APPROVED

23. Estimated duration
38-45 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 Joe T. Janica — Name *(Printed/Typed)* Joe T. Janica — Date 05/14/07

Title Agent

Approved by *(Signature)* /s/ James Stovall — Name *(Printed/Typed)* — Date

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.

APPROVAL SUBJECT TO GENERAL REQUIREMENTS AND SPECIAL STIPULATIONS ATTACHED

SEE ATTACHED FOR CONDITIONS OF APPROVAL

Roswell Controlled Water Basin

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

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

Form C-102
Revised October 12, 2005

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

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number	Pool Code	Pool Name
	75010	COLLINS RANCH-WOLFCAMP

Property Code	Property Name	Well Number
	1724 FEDERAL COM	151

OGRID No.	Operator Name	Elevation
218885	LCX ENERGY	3756'

Surface Location

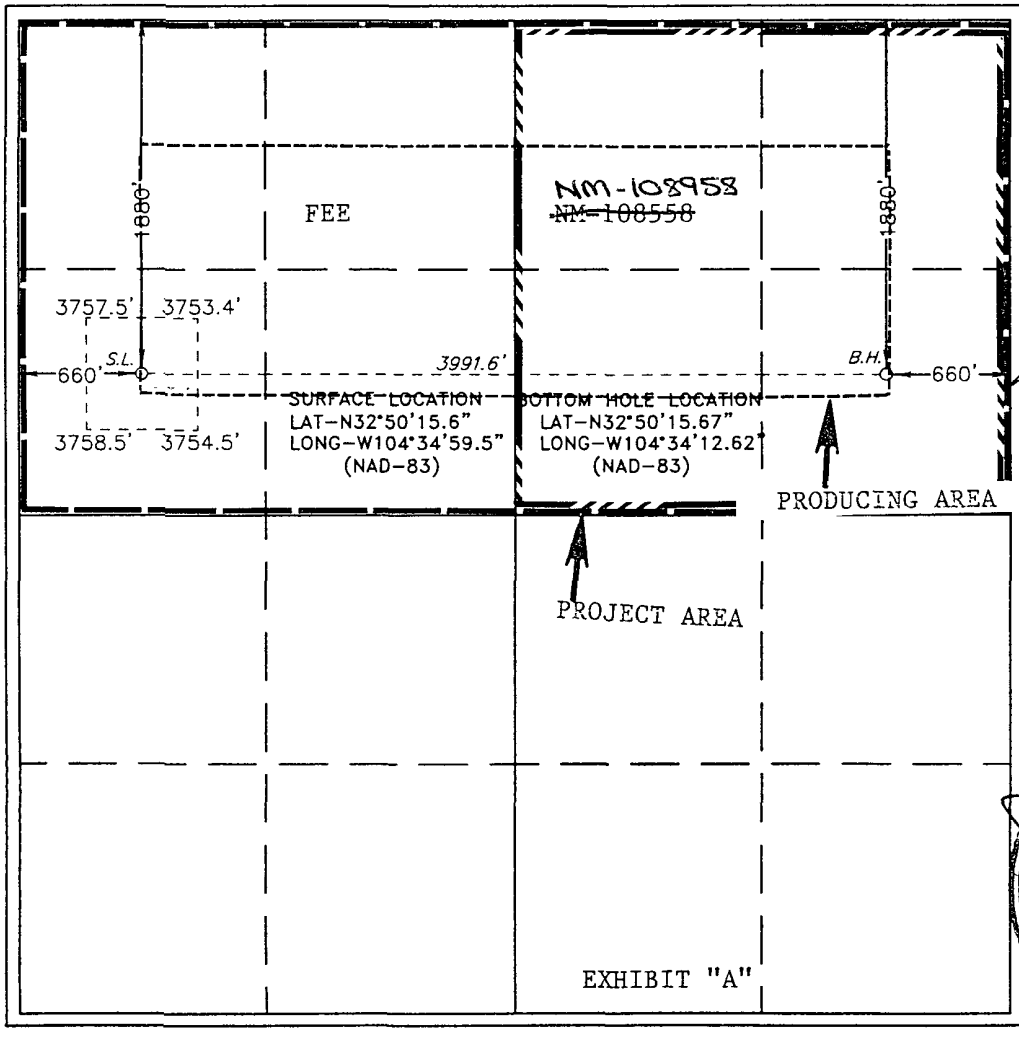
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
E	15	17 S	24 E		1880	NORTH	660	WEST	EDDY

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
H	15	17 S	24 E		1880	NORTH	660	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



OPERATOR CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.

Joe T. Janica
Signature

05/14/07
Date

Joe T. Janica
Printed Name

Agent

SURVEYOR CERTIFICATION

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervison, and that the same is true and correct to the best of my belief.

MARCH 01, 2007
Date Surveyed

Signature & Seal of Professional Surveyor

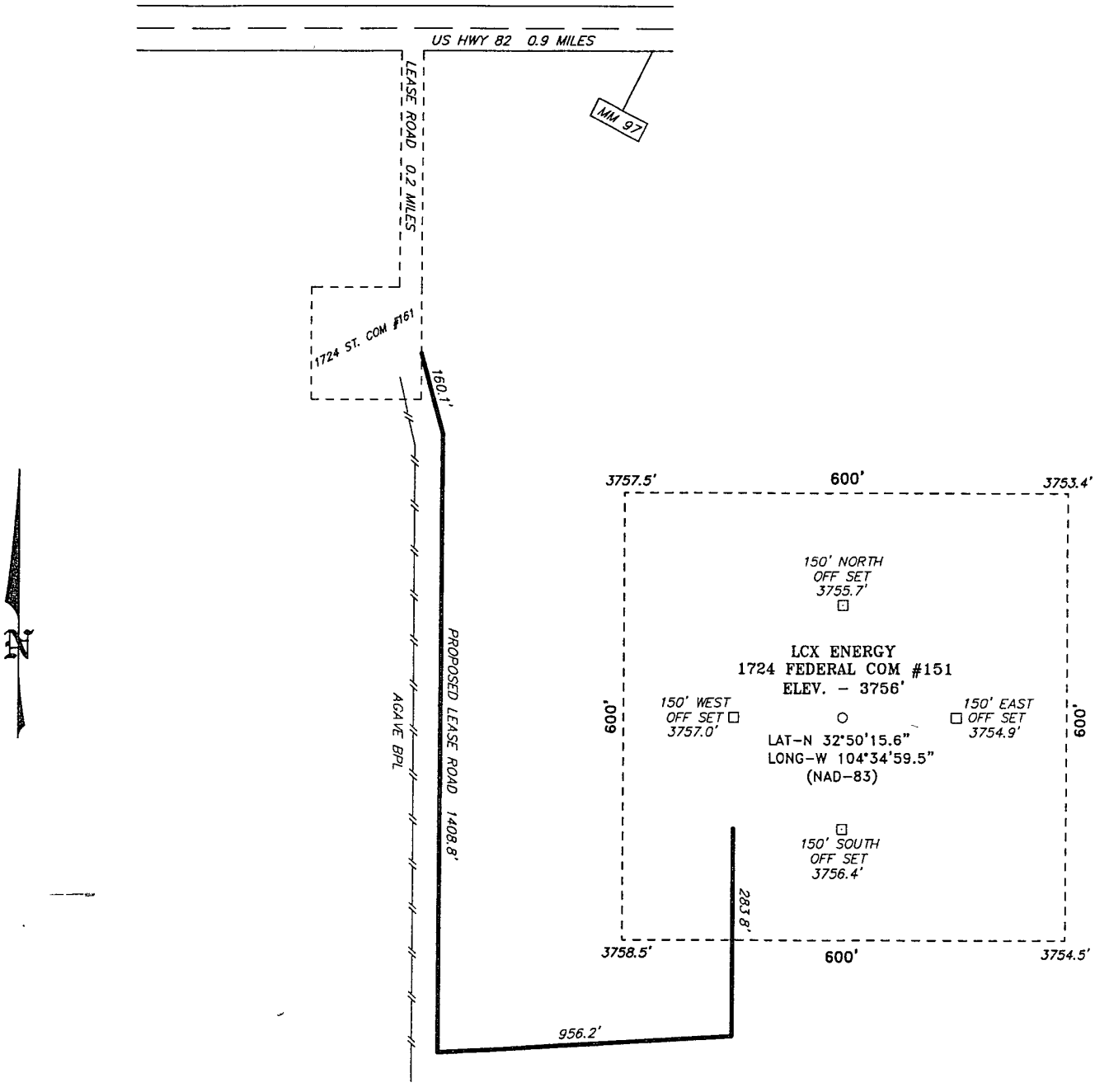
NEW MEXICO
REGISTERED PROFESSIONAL LAND SURVEYOR
7977

W.O. No. 18034

Certificate No. Gary L. Jones 7977

BASIN SURVEYS

SECTION 15, TOWNSHIP 17 SOUTH, RANGE 24 EAST, N.M.P.M.,
EDDY COUNTY, NEW MEXICO.



DIRECTIONS TO LOCATION:

FROM THE HWY MARKER 97 OF US HWY 82, PROCEED WEST 0.9 MILES TO A LEASE ROAD, ON LEASE ROAD PROCEED SOUTH 0.2 MILES TO THE 1724 STATE COM #161 WELL LOCATION AND PROPOSED LEASE ROAD.

LCX ENERGY

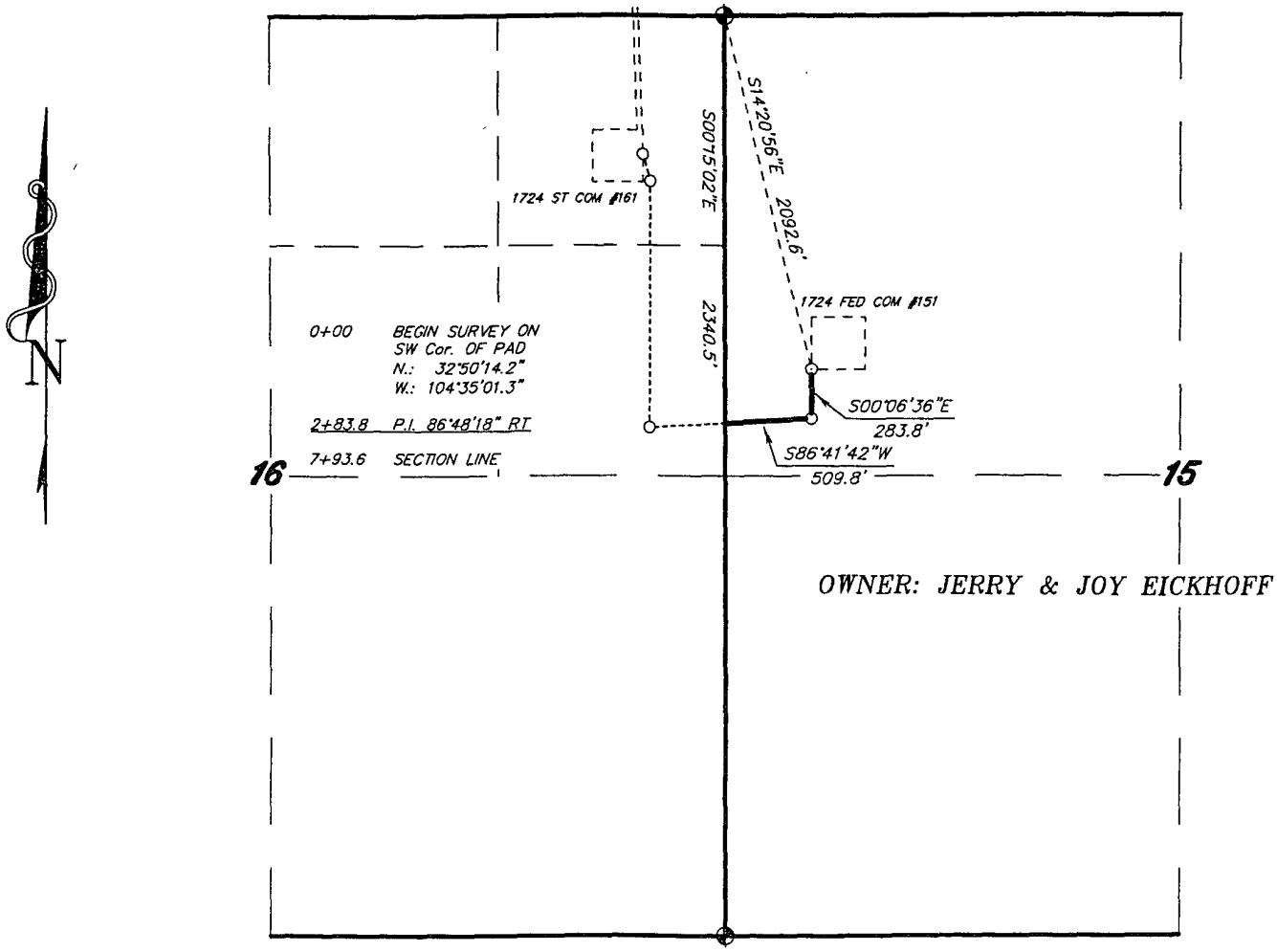
REF: 1724 FEDERAL COM # 151 / Well Pad Topo

THE 1724 FEDERAL COM No. 151 LOCATED 1880' FROM THE NORTH LINE AND 660' FROM THE WEST LINE OF SECTION 15, TOWNSHIP 18 SOUTH, RANGE 24 EAST, N.M.P.M., EDDY COUNTY, NEW MEXICO.

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

W.O. Number: 17766	Drawn By: J. M. SMALL		
Date: 03-03-2007	Disk: 17766W	Survey Date: 03-01-2007	Sheet 1 of 1 Sheets

SECTION 15, TOWNSHIP 17 SOUTH, RANGE 24 EAST, N.M.P.M.,
EDDY COUNTY, **NEW MEXICO.**



LEGAL DESCRIPTION

A STRIP OF LAND 20.0 FEET WIDE, LOCATED IN SECTION 15, TOWNSHIP 17 SOUTH, RANGE 24 EAST, N.M.P.M., EDDY COUNTY, NEW MEXICO AND BEING 10.0 FEET LEFT AND RIGHT OF THE FOLLOWING DESCRIBED CENTERLINE SURVEY.

BEGINNING AT A POINT WHICH LIES S.14°20'56"E., 2092.6 FEET FROM THE NORTHWEST CORNER OF SAID SECTION 15; THENCE S.00°06'36"E., 283.8 FEET; THENCE S.86°41'42"W., 509.8 FEET TO A POINT ON THE WEST SECTION LINE WHICH LIES S.00°15'02"E., 2340.5 FEET FROM THE NORTHWEST CORNER OF SAID SECTION 15. SAID STRIP OF LAND BEING 793.6 FEET OR 48.10 RODS IN LENGTH.

I HEREBY CERTIFY THAT THIS PLAT WAS PREPARED FROM FIELD NOTES OF ACTUAL SURVEY AND MEETS OR EXCEEDS ALL REQUIREMENTS FOR LAND SURVEYS AS SPECIFIED BY THIS STATE.

GARY L. JONES N.M.P.S. No. 7977
TEXAS P.L.S. No. 5074

1000 0 1000 2000 FEET

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

LCX ENERGY

REF: PROPOSED ROAD TO THE LCX – 1724 FEDERAL COM #151

A ROAD CROSSING FEE LAND IN
SECTION 15, TOWNSHIP 17 SOUTH, RANGE 24 EAST,
N.M.P.M., EDDY COUNTY, NEW MEXICO.

W.O. Number: 17766	Drawn By: J. M. SMALL		
Date: 03-03-2007	Disk: JMS 17766R	Survey Date: 03-01-2007	Sheet 1 of 2 Sheets

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

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

1. Drill 26" hole to 40'. Set 40' of 20" conductor pipe and cement to surface with Redi-mix.

2. Drill 17-1/2" hole to 350'.

3. Drill 12-1/4 hole to 1200'. Run and set 1200' of 9-5/8" 36# J-55 ST&C or 8-5/8" 24# J55 casing. Cement to surface with 35/65 Poz/C + 5% NaCl + 6% Bentonite lead cement, tail in with 100 sx. of Class "C" cement + 2% $CaCl_2$.

   Lead cement yield 1.52 Tail cament yield 1.32

   CASING SAFETY FACTORS: Collapse 1.3, Burst 1.3, Tension 1.8

4. Drill 7-7/8" or 8-3/4" hole. Drill 7-7/8" curve and land lateral in pay zone (approx. 4900 ft TVD). Pickup lateral drilling assembly with an 8-3/4" or 7-7/8" bit and drill a +/-4000' lateral to 660' from lease line (approx. 4000 ft vertical section).

5. Run and set 5-1/2" 17# N80 LTC or stronger production casing. Cement 5-1/2" with acid soluble cement through the lateral and 400 sx 50/50 Poz/C + 10% gel and tail in with 200 sx C + 200% CaCO3 (acid soluble cement) + fluid loss additive + retarder (as required), attempting to bring top of cement to 1,000'.

   Lead cement yield 1.58 Tail cement yield 1.32

   CASING SAFETY FACTORS: Collapse 1.3 Burst 1.3 Tension 1.8

see COA

Contingency Strings:

If lost circulation occurs in the surface hole:

2a. Run and set 350' of 13-3/8" 48# H-40 ST&C casing. Cement with 200 sx 35/65 Poz/C + 6% gel and tail in with 200 sx of Class "C" cement + 2% CaCl, circulate cement to surface.

If hole conditions dictate running a 7" contingency string in the 8-3/4" hole :

4a. Run approx. 5100 ft 7" 26# J55 or stronger casing to TD. Cement with 700 sx class 'C' cement + add's attempting bringing TOC to approx. 1,000 ft. This may be done in the vertical pilot hole or at the end of the 8-3/4" curve section.

4b. Run whipstock and cut a window in the 7" casing (or drill out with 6-1/8" BHA if 7" set at end of curve). Drill to TD.

5a. Step 5 will be omitted.

6a. Run and set approximately 4400 ft 4-1/2" 11.6# N/L80 liner from TD to approximately 200' above the window/7" casing shoe. Cement with approx. 110 sx C + 200% CaCO3 (acid soluble cement) + add's attempting to bring TOC above liner top.

see COA

APPLICATION TO DRILL

LCX ENERGY. LLC.
1724 FEDERAL COM. #151
UNIT "E" SECTION 15
T17S-R24E EDDY CO. NM

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

1. Location of well: 1880' FNL & 660' FWL SECTION 15 T17S-R24E EDDY CO. NM.

2. Ground Elevation above Sea Level: 3756' 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-8755' TVD-4960'

6. Estimated tops of geological markers:

San Andres	577'	Abo	3872'
Glorieta	1712'	Wolfcamp	4700'
Tubb	3197'		

7. Possible mineral bearing formations:

Abo	Gas
Wolfcamp	Gas

8. Casing Program:

Hole Size	Interval	OD of Casing	Weight	Thread	Collar	Grade
26"	0-40'	20"	NA	NA	NA	Conductor
17½" WITNESS	0-350'	13 3/8"	48#	8-R	ST&C	H-40
12¼" WITNESS	0-1250' 1200'	9 5/8"	36# 40#	8-R	ST&C	~~N-80~~ J-55
8 3/4" WITNESS	0-5000' 5100'	7"	26#	8-R	LT&C	J-55
6 1/8"	4483-8755'	4½"	11.6	BUTT.	BTC	N-80

per Joe Janica
5/29/07

APPLICATION TO DRILL

LCX ENERGY. LLC.
1724 FEDERAL COM. #151
UNIT "E" SECTION 15
T17S-R24E EDDY CO. NM

9. CEMENTING & SETTING DEPTH:

20"	Conductor	Set 40' of 20" conductor pipe and cement to surface with Redi-mix.
13 3/8"	Surface	Set 350' of 13 3/8" 48# H-40 ST&C casing. Cement with 400 Sx. of Class "C" cement + additives, circulate cement.
9 5/8"	Intermediate	Set 1250' of 9 5/8" 40# N-80 ST&C casing. Cement with 700 Sx. of Class "C" cement + additives. Circulate cement to surface.
7"	2nd Intermediate	Set 5000' of 7" 26# L-80 LT&C casing. Cement with 700 Sx. of Class "C" cement + additives estimate TOC 900' FS.
4½"	Production Liner	Set a 4400' 4½" 11.6# L-80 HDL liner from TD back to 4390'. Cement with 425 Sx. of Class "C" cement + additives, cement back to liner hanger.

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 nippled up on the 9 5/8" casing and tested to API specifications. The B.O.P. will be operated at least once in each 24 hour period and the blind rams will be operated when the drill pipe is out of hole on trips. Full opening stabbing valve and upper kelly cock will will be utilized. Exhibit "E-1" shows a hydraulically operated closing unit and a 2" 3000 PSI choke manifold with dual adjustable chokes. No abnormal pressures or temperatures are expected in this well.

11. PROPOSED MUD CIRCULATING SYSTEM:

DEPTH	MUD WT.	VISC.	FLUID LOSS	TYPE SYSTEM
40-350'	8.4-8.7	29-34	NC	Fresh water Spud Mud add paper to control seepage.
350-1250'	8.4-8.7	29-38	NC	Fresh water use Gel for viscosity control and paper for seepage control.
1250-5000'	8.4-8.7	29-40	NC	Same as above using high viscosity sweeps to clean hole.
5000-8790' MD	8.4-8.8	29-36	NC	Fresh water use high viscosity Polymer 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 DST's, open hole logs, & casing the viscosity and/or water loss may have to be adjusted to meet these needs.

12. LOGGING, CORING, AND TESTING PROGRAM:

A. Open hole logs: Dual Laterolog, SNP. LDT, MSFL, Gamma Ray, Caliper from TD back to 9 5/8" casing shoe.
B. Cased hole logs: Gamma Ray, Neutron from 9 5/8" casing shoe back to surface.
C. No cores are planned at this time
D. Mud logger may be used at the request of the Staff Geologist.
E. No DST's are planned at this time.

13. POTENTIAL HAZARDS:

No abnormal pressures or temperatures are expected. There is no known presence of H^2S in this area. If H^2S 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 2500 PSI, and Estimated BHT 110°.

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 28 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 potentialed as a Gas well.

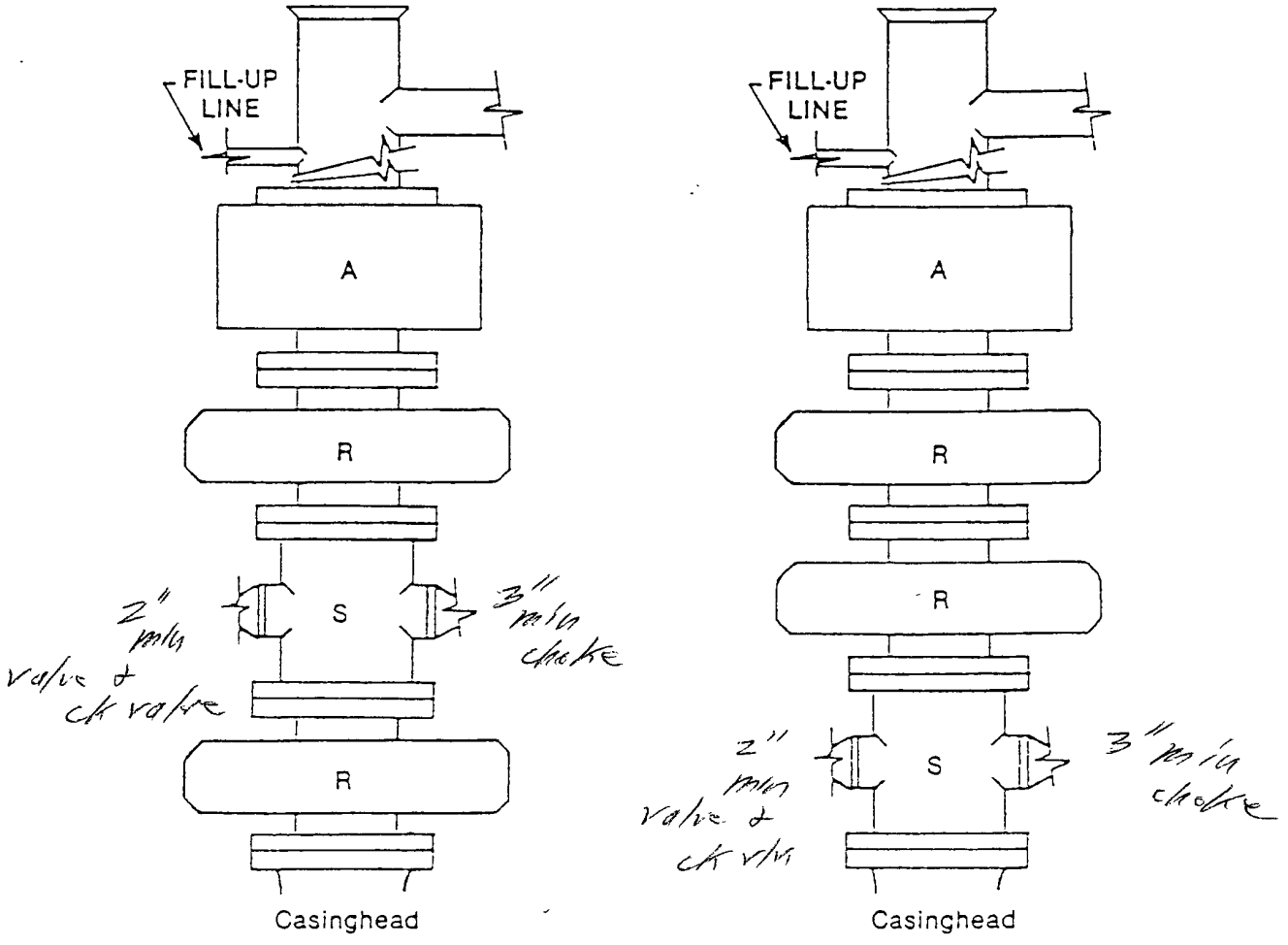
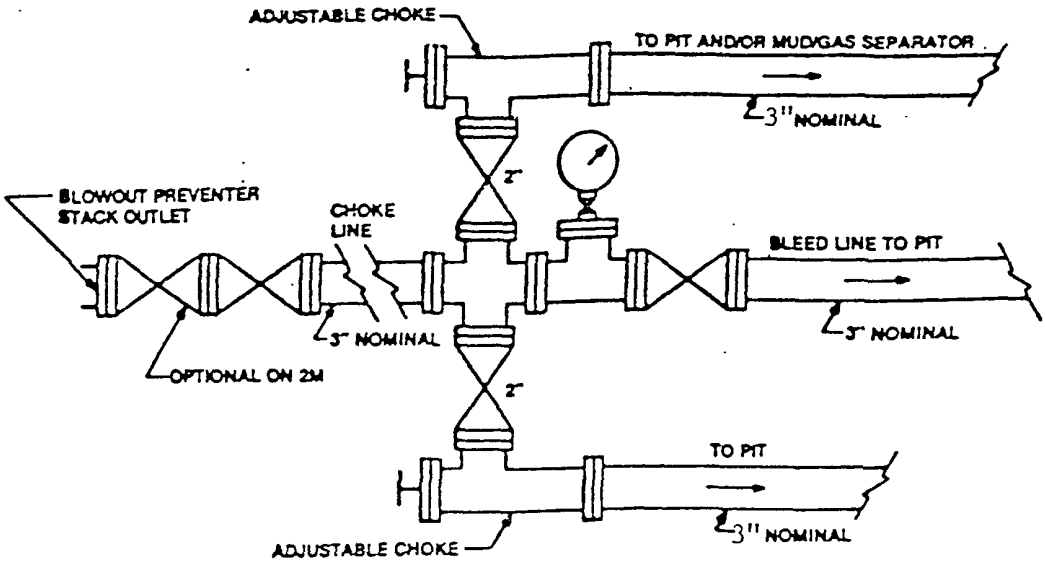


FIGURE K1-2. Recommended IADC Class 3(3000 psi WP) and 5(5000 psi WP) stacks. Either RSRA (left) or SRRA (right) is acceptable and drilling spool is optional if side outlets on rams are utilized.

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

LCX ENERGY, LLC.
1724 FEDERAL COM. #151
UNIT "E" SECTION 15
T17S-R24E EDDY CO. NM



Typical choke manifold assembly for 3M WP system

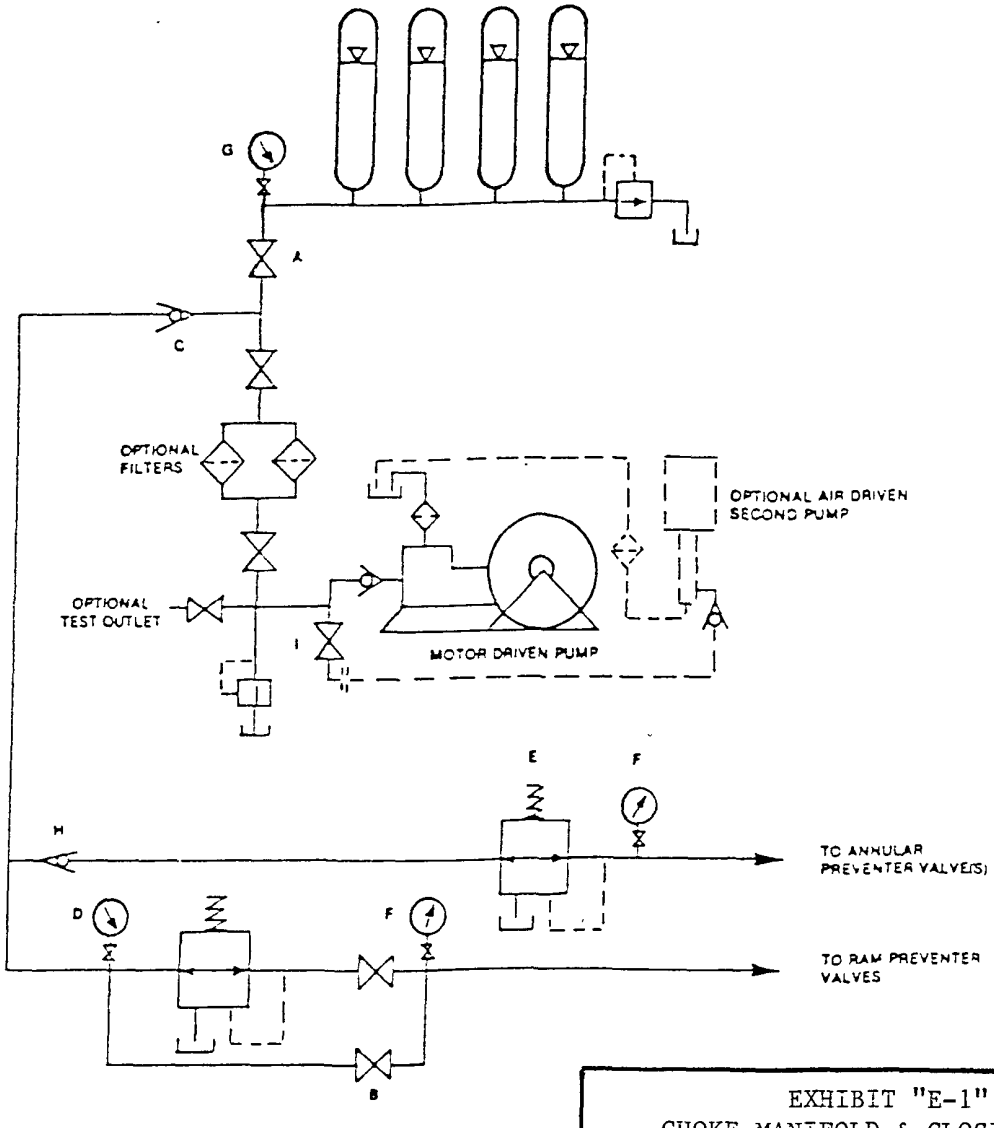


EXHIBIT "E-1"
CHOKE MANIFOLD & CLOSING UNIT

LCX ENERGY, LLC.
1724 FEDERAL COM. #151
UNIT "E" SECTION 15
T17S-R24E EDDY CO. NM

HYDROGEN SULFIDE DRILLING OPERATIONS PLAN

1. All Company and Contract personnel admitted on location must be trained by a qualified H_2S safety instructor to the following:

   A. Characteristics of H_2S
   B. Physical effects and hazzards
   C. Proper use of safety equipment and life support systems.
   D. Principle and operation of H_2S detectors, warning system and briefing areas.
   E. Evacuation procedure, routes and first aid.
   F. Proper use of 30 minute pressure demand air pack.

2. H_2S Detection and Alarm Systems

   A. H_2S 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, H_2S 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.

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 seperator will be brought into service along with H_2S scavengers if necessary.

Proposal

Report Date:	May 11, 2007	**Survey / DLS Computation Method:**	Minimum Curvature / Lubinski
Client:	LCX Energy	**Vertical Section Azimuth:**	90.030°
Field:	Eddy County, NM Nad 83	**Vertical Section Origin:**	N 0.000 ft, E 0.000 ft
Structure / Slot:	1724 Federal Com #151 / 1724 Federal Com #151	**TVD Reference Datum:**	RKB
Well:	1724 Federal Com #151	**TVD Reference Elevation:**	0.0 ft relative to
Borehole:	1724 Federal Com #151	**Sea Bed / Ground Level Elevation:**	0.000 ft relative to
UWI/API#:		**Magnetic Declination:**	8.571°
Survey Name / Date:	1724 Federal Com #151_r1 / May 11, 2007	**Total Field Strength:**	49324.642 nT
Tort / AHD / DDI / ERD ratio:	90.000° / 3999.98 ft / 5.803 / 0.806	**Magnetic Dip:**	60.682°
Grid Coordinate System:	NAD83 New Mexico State Planes, Eastern Zone, US Feet	**Declination Date:**	May 11, 2007
Location Lat/Long:	N 32 50 15.600, W 104 34 59.500	**Magnetic Declination Model:**	IGRF 2005
Location Grid N/E Y/X:	N 668566.891 ftUS, E 464595.873 ftUS	**North Reference:**	Grid North
Grid Convergence Angle:	-0.13549047°	**Total Corr Mag North -> Grid North:**	+8.706°
Grid Scale Factor:	0.99991583	**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	90.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	---
	100.00	0.00	90.03	100.00	0.00	0.00	0.00	0.00	0.00	0.00	---
	200.00	0.00	90.03	200.00	0.00	0.00	0.00	0.00	0.00	0.00	---
	300.00	0.00	90.03	300.00	0.00	0.00	0.00	0.00	0.00	0.00	---
	400.00	0.00	90.03	400.00	0.00	0.00	0.00	0.00	0.00	0.00	---
	500.00	0.00	90.03	500.00	0.00	0.00	0.00	0.00	0.00	0.00	---
	600.00	0.00	90.03	600.00	0.00	0.00	0.00	0.00	0.00	0.00	---
	700.00	0.00	90.03	700.00	0.00	0.00	0.00	0.00	0.00	0.00	---
	800.00	0.00	90.03	800.00	0.00	0.00	0.00	0.00	0.00	0.00	---
	900.00	0.00	90.03	900.00	0.00	0.00	0.00	0.00	0.00	0.00	---
	1000.00	0.00	90.03	1000.00	0.00	0.00	0.00	0.00	0.00	0.00	---
	1100.00	0.00	90.03	1100.00	0.00	0.00	0.00	0.00	0.00	0.00	---
	1200.00	0.00	90.03	1200.00	0.00	0.00	0.00	0.00	0.00	0.00	---
	1300.00	0.00	90.03	1300.00	0.00	0.00	0.00	0.00	0.00	0.00	---
	1400.00	0.00	90.03	1400.00	0.00	0.00	0.00	0.00	0.00	0.00	---
	1500.00	0.00	90.03	1500.00	0.00	0.00	0.00	0.00	0.00	0.00	---
	1600.00	0.00	90.03	1600.00	0.00	0.00	0.00	0.00	0.00	0.00	---
	1700.00	0.00	90.03	1700.00	0.00	0.00	0.00	0.00	0.00	0.00	---
	1800.00	0.00	90.03	1800.00	0.00	0.00	0.00	0.00	0.00	0.00	---
	1900.00	0.00	90.03	1900.00	0.00	0.00	0.00	0.00	0.00	0.00	---
	2000.00	0.00	90.03	2000.00	0.00	0.00	0.00	0.00	0.00	0.00	---
	2100.00	0.00	90.03	2100.00	0.00	0.00	0.00	0.00	0.00	0.00	---
	2200.00	0.00	90.03	2200.00	0.00	0.00	0.00	0.00	0.00	0.00	---
	2300.00	0.00	90.03	2300.00	0.00	0.00	0.00	0.00	0.00	0.00	---
	2400.00	0.00	90.03	2400.00	0.00	0.00	0.00	0.00	0.00	0.00	---
	2500.00	0.00	90.03	2500.00	0.00	0.00	0.00	0.00	0.00	0.00	---
	2600.00	0.00	90.03	2600.00	0.00	0.00	0.00	0.00	0.00	0.00	---
	2700.00	0.00	90.03	2700.00	0.00	0.00	0.00	0.00	0.00	0.00	---
	2800.00	0.00	90.03	2800.00	0.00	0.00	0.00	0.00	0.00	0.00	---
	2900.00	0.00	90.03	2900.00	0.00	0.00	0.00	0.00	0.00	0.00	---
	3000.00	0.00	90.03	3000.00	0.00	0.00	0.00	0.00	0.00	0.00	---
	3100.00	0.00	90.03	3100.00	0.00	0.00	0.00	0.00	0.00	0.00	---
	3200.00	0.00	90.03	3200.00	0.00	0.00	0.00	0.00	0.00	0.00	---
	3300.00	0.00	90.03	3300.00	0.00	0.00	0.00	0.00	0.00	0.00	---
	3400.00	0.00	90.03	3400.00	0.00	0.00	0.00	0.00	0.00	0.00	---
	3500.00	0.00	90.03	3500.00	0.00	0.00	0.00	0.00	0.00	0.00	---
	3600.00	0.00	90.03	3600.00	0.00	0.00	0.00	0.00	0.00	0.00	---
	3700.00	0.00	90.03	3700.00	0.00	0.00	0.00	0.00	0.00	0.00	---

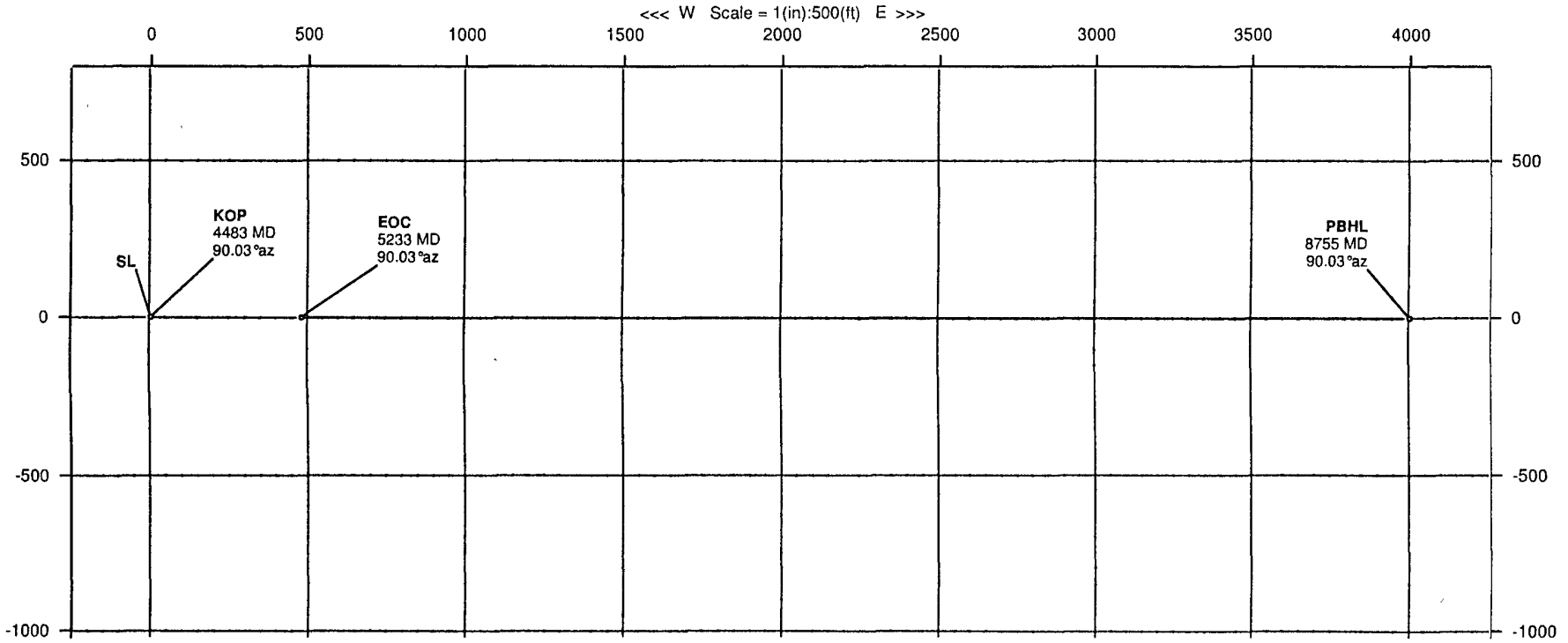
Comments	Measured Depth (ft)	Inclination (deg)	Azimuth (deg)	TVD (ft)	Vertical Section (ft)	NS (ft)	EW (ft)	Closure (ft)	Closure Azimuth (deg)	DLS (deg/100 ft)	Mag / Grav Tool Face (deg)
	3800.00	0.00	90.03	3800.00	0.00	0.00	0.00	0.00	0.00	0.00	---
	3900.00	0.00	90.03	3900.00	0.00	0.00	0.00	0.00	0.00	0.00	---
	4000.00	0.00	90.03	4000.00	0.00	0.00	0.00	0.00	0.00	0.00	---
	4100.00	0.00	90.03	4100.00	0.00	0.00	0.00	0.00	0.00	0.00	---
	4200.00	0.00	90.03	4200.00	0.00	0.00	0.00	0.00	0.00	0.00	---
	4300.00	0.00	90.03	4300.00	0.00	0.00	0.00	0.00	0.00	0.00	---
	4400.00	0.00	90.03	4400.00	0.00	0.00	0.00	0.00	0.00	0.00	---
KOP	4482.54	0.00	90.03	4482.54	0.00	0.00	0.00	0.00	0.00	0.00	90.03M
	4500.00	2.10	90.03	4500.00	0.32	0.00	0.32	0.32	90.03	12.00	90.03M
	4600.00	14.10	90.03	4598.82	14.38	-0.01	14.38	14.38	90.03	12.00	HS
	4700.00	26.10	90.03	4692.56	48.67	-0.03	48.67	48.67	90.03	12.00	HS
	4800.00	38.10	90.03	4777.12	101.71	-0.05	101.71	101.71	90.03	12.00	HS
	4900.00	50.10	90.03	4848.81	171.17	-0.09	171.17	171.17	90.03	12.00	HS
	5000.00	62.10	90.03	4904.49	254.01	-0.14	254.01	254.01	90.03	12.00	HS
	5100.00	74.10	90.03	4941.72	346.63	-0.19	346.63	346.63	90.03	12.00	HS
	5200.00	86.10	90.03	4958.89	444.95	-0.24	444.95	444.95	90.03	12.00	HS
EOC	5232.54	90.00	90.03	4960.00	477.46	-0.26	477.46	477.46	90.03	12.00	---
	5300.00	90.00	90.03	4960.00	544.93	-0.29	544.93	544.93	90.03	0.00	---
	5400.00	90.00	90.03	4960.00	644.93	-0.34	644.93	644.93	90.03	0.00	---
	5500.00	90.00	90.03	4960.00	744.93	-0.40	744.93	744.93	90.03	0.00	---
	5600.00	90.00	90.03	4960.00	844.93	-0.45	844.93	844.93	90.03	0.00	---
	5700.00	90.00	90.03	4960.00	944.93	-0.50	944.93	944.93	90.03	0.00	---
	5800.00	90.00	90.03	4960.00	1044.93	-0.56	1044.93	1044.93	90.03	0.00	---
	5900.00	90.00	90.03	4960.00	1144.93	-0.61	1144.93	1144.93	90.03	0.00	---
	6000.00	90.00	90.03	4960.00	1244.93	-0.67	1244.93	1244.93	90.03	0.00	---
	6100.00	90.00	90.03	4960.00	1344.93	-0.72	1344.93	1344.93	90.03	0.00	---
	6200.00	90.00	90.03	4960.00	1444.93	-0.77	1444.93	1444.93	90.03	0.00	---
	6300.00	90.00	90.03	4960.00	1544.93	-0.83	1544.93	1544.93	90.03	0.00	---
	6400.00	90.00	90.03	4960.00	1644.93	-0.88	1644.93	1644.93	90.03	0.00	---
	6500.00	90.00	90.03	4960.00	1744.93	-0.93	1744.93	1744.93	90.03	0.00	---
	6600.00	90.00	90.03	4960.00	1844.93	-0.99	1844.93	1844.93	90.03	0.00	---
	6700.00	90.00	90.03	4960.00	1944.93	-1.04	1944.93	1944.93	90.03	0.00	---
	6800.00	90.00	90.03	4960.00	2044.93	-1.09	2044.93	2044.93	90.03	0.00	---
	6900.00	90.00	90.03	4960.00	2144.93	-1.15	2144.93	2144.93	90.03	0.00	---
	7000.00	90.00	90.03	4960.00	2244.93	-1.20	2244.93	2244.93	90.03	0.00	---
	7100.00	90.00	90.03	4960.00	2344.93	-1.25	2344.93	2344.93	90.03	0.00	---
	7200.00	90.00	90.03	4960.00	2444.93	-1.31	2444.93	2444.93	90.03	0.00	---
	7300.00	90.00	90.03	4960.00	2544.93	-1.36	2544.93	2544.93	90.03	0.00	---
	7400.00	90.00	90.03	4960.00	2644.93	-1.41	2644.93	2644.93	90.03	0.00	---
	7500.00	90.00	90.03	4960.00	2744.93	-1.47	2744.93	2744.93	90.03	0.00	---
	7600.00	90.00	90.03	4960.00	2844.93	-1.52	2844.93	2844.93	90.03	0.00	---
	7700.00	90.00	90.03	4960.00	2944.93	-1.57	2944.93	2944.93	90.03	0.00	---
	7800.00	90.00	90.03	4960.00	3044.93	-1.63	3044.93	3044.93	90.03	0.00	---
	7900.00	90.00	90.03	4960.00	3144.93	-1.68	3144.93	3144.93	90.03	0.00	---
	8000.00	90.00	90.03	4960.00	3244.93	-1.73	3244.93	3244.93	90.03	0.00	---
	8100.00	90.00	90.03	4960.00	3344.93	-1.79	3344.93	3344.93	90.03	0.00	---
	8200.00	90.00	90.03	4960.00	3444.93	-1.84	3444.93	3444.93	90.03	0.00	---
	8300.00	90.00	90.03	4960.00	3544.93	-1.89	3544.93	3544.93	90.03	0.00	---
	8400.00	90.00	90.03	4960.00	3644.93	-1.95	3644.93	3644.93	90.03	0.00	---
	8500.00	90.00	90.03	4960.00	3744.93	-2.00	3744.93	3744.93	90.03	0.00	---
	8600.00	90.00	90.03	4960.00	3844.93	-2.05	3844.93	3844.93	90.03	0.00	---
	8700.00	90.00	90.03	4960.00	3944.93	-2.11	3944.93	3944.93	90.03	0.00	---
PBHL	8755.05	90.00	90.03	4960.00	3999.98	-2.14	3999.98	3999.98	90.03	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)

LCX Energy

WELL	FIELD	STRUCTURE
1724 Federal Com #151	Eddy County, NM Nad 83	1724 Federal Com #151

Magnetic Parameters				Surface Location				Miscellaneous			
Model	IGRF 2005	Dip	60.882°	Lat	N32 50 15.600	Northing	668588.69 sUS	Slot	1724 Federal Com #151	TVD Ref	RKB (0.00 ft above)
		Mag Dec	+8.571°	Lon	W104 34 59.500	Easting	464595.87 sUS	Plan	1724 Federal Com #151 r1	Srvy Date	May 11, 2007
		Date	May 11, 2007				NAD83 New Mexico State Planes, Eastern Zone, US Feet				
		FS	49124.6 nT				Grid Conv 0.13549047°				
							Scale Fact 0.999915835				

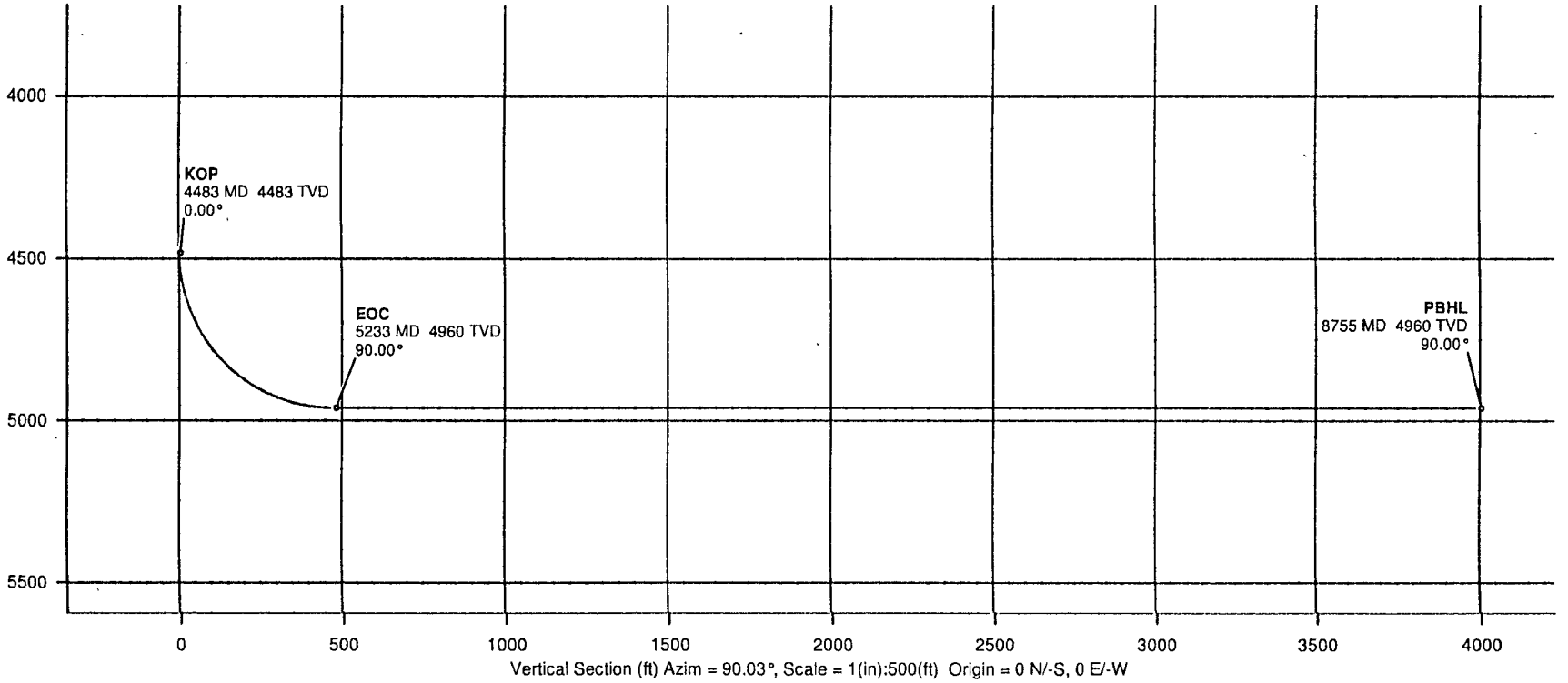


INTREPID
Directional Drilling Specialists

LCX Energy

WELL	FIELD	STRUCTURE
1724 Federal Com #151	Eddy County, NM Nad 83	1724 Federal Com #151

Magnetic Parameters				Surface Location				Miscellaneous			
Model	IGRF 2005	Dip	60.682°	Lat	N32 50 15.606	Northing	668566.89 ftUS	Slot	1724 Federal Com #151	TVD Ref	RKB (0.00 ft above)
		Mag Dec	8.571°	Lon	W104 34 59.309	Easting	464595.87 ftUS	Plan	1724 Federal Com #151 r1	Srvy Date	May 11, 2007
		Date	May 11, 2007				NAD83 New Mexico State Planes, Eastern Zone, US Feet				
		FS	49124.6 nT				Grid Conv 0.13549047°				
							Scale Fact 0.999915835				



Directional Drilling Specialists

SURFACE USE PLAN

LCX ENERGY, LLC.
1724 FEDERAL COM. #151
UNIT "E" SECTION 15
T17S-R24E EDDY CO. NM

1. EXISTING ROADS & PROPOSED ROADS: Area maps; Exhibit "B" is a reproduction of a County General Hi-way Map. Exhibit "C" is a reproduction of a USGS Topographic Map, showing existing and proposed roads. All existing roads will be maintained in a condition equal to or better than current conditions. Any new roads will be constructed to BLM specifications.

   A. Exhibit "A" shows the proposed well site as staked.

   B. From Artesia New Mexico take U.S. Hi-way 82 West toward Hope New Mexico go 10± miles to Mile post 97, continue .9 miles to lease road on the South side of road, turn Left (South) continue past well # 161 go .3 miles , turn Left (East) go 1000' to location on the North side of road.

   C. Exhibit "C" is a topographic map showing existing roads and proposed roads.

2. PLANNED ACCESS ROADS: Approximately ½ mile of new road will be constructed.

   A. The access roads will be crowned and ditched to a 12' wide travel surface with a 40' Right-of-Way.

   B, Gradient of all roads will be less than 5.00%.

   C. If turn-outs are necessary they will be constructed.

   D. If needed roads will be surfaced with a mimimum of 4" of caliche. This material will be obtained from a local source.

   E. Center-line for new roads will be flagged. Earth-work will be will be done as field conditions require.

   F. Culverts will be placed in the access road if they are necessary. The roads will be constructed to utilaze low water crossings for drainage as required by topography.

3. LOCATIONS OF EXISTING WELLS IN A ONE MILE RADIUS. EXHIBIT "A-1"

   A. Water wells - One approximately 1800' North 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"

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 quaters will be drained into holes with a minium 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 furthed 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 pips 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.

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 encontered 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 completionphases. 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 furture 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

LCX ENERGY, LLC.
1724 FEDERAL COM. #151
UNIT "E" SECTION 15
T17S-R24E EDDY CO. NM

11. OTHER INFORMATION:

A. The surface of land in this area consists of rolling plains relatively flat with Northeast exposure and drainage. Soils are tan/brown/grey loamy sandy silte with minor ampunts of caliche. The vegetation consists of Heron bill, blatter pod, loco weed, broomweed, snakeweed, prickley pear, cholla and various native grasses.

B. The surface of the land is owned by Jerry & Joy Eickhoff and is used for ranching An agreement has been reached on the use of the land to drill this well.

C. An archealogical survey will be conducted on the well location and the access roads, and the report will be filed with The Bureau of Land Management Carlsbad Field Office.

D. A dwelling is located approximately 1800' North of location.

12. OPERATORS REPRESENTIVE:

BEFORE CONSTRUCTION

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

DURING AND AFTER CONSTRUCTION

LCX ENERGY, LLC.
110 NORTH MARIENFELD
SUITE 200
MIDLAND, TEXAS 79701
OFFICE PHONE 432-262-4011
LARRY GILLETTE.

13. CERTIFICATION: I hereby certify that I or persons under my direct supervision have inspected the proposed drill site and access routes, that I am fimiliar with the conditions which currently exist, 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 LXC ENERGY, LLC. it's contractors/subcontractors is in the confirmity with this plan and the terms and conditions under which it is approved. This statement is subject to the provision of the U.S.C. 1001 for the filing of a false statement.

NAME : Joe T. Janica Joe T Janica

DATE : 05/14/07

TITLE : Agent

CONDITIONS OF APPROVAL - DRILLING

Operator's Name:	**LCX Energy, LLC**
Well Name & No.	**151-1724 Federal Com**
Location SHL:	**1880' FNL, 0660' FWL, Sec. 15, T-17-S, R-24-E, Eddy County, NM**
Location BHL:	**1880' FNL, 0660' FEL, Sec. 15, T-17-S, R-24-E, Eddy County, NM**
Lease:	**NM-108958**

I. DRILLING OPERATIONS REQUIREMENTS:

A. The Bureau of Land Management (BLM) is to be notified a minimum of 4 hours in advance for a representative to witness:

1. Spudding well
2. Setting and/or Cementing of all casing strings
3. BOPE tests

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

B. Although no Hydrogen Sulfide has been reported, it is always a potential hazard.

C. 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.

D. If 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.

II. CASING:

A. The **13-3/8** inch **casing will be used as surface casing if lost circulation occurs in the surface hole and** shall be set at **approximately 350 feet** and cemented to the surface.

1. 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 a surface log readout will be used or a cement bond log shall be run to verify the top of the cement.
2. Wait on cement (WOC) time for a primary cement job will be a minimum of **18 hours for a water basin** or 500 pounds compression strength, whichever is greater. (This is to include the lead cement)
3. Wait on cement (WOC) time for a remedial job will be a minimum of 4 hours after bringing cement to surface or 500 pounds compression strength, whichever is greater.
4. If cement falls back, remedial action will be done prior to drilling out that string.

Possible lost circulation in the San Andres.
Possible bursts of high pressure gas in the Wolfcamp

B. **If lost circulation does not occur in the surface hole, 9-5/8" or 8-5/8" casing** shall be set at **approximately 1200 feet** and cemented to the surface. If cement does not circulate see A.1 thru 4.

C. The minimum required fill of cement behind the **5-1/2** inch production casing is **cement to extend a minimum of 200' inside the intermediate casing.**

Running 7" contingency casing string will be dictated by hole conditions and cemented a minimum of 200 feet into next larger casing string. If liner is used, cement to circulate to top of liner.

If contingency string is not used, the cement volume for the 5-1/2" casing may need to be increased to get the required height of cement.

D. 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 I joints of the drill pipe will be installed prior to continuing drilling operations.

III. PRESSURE CONTROL:

A. 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.

B. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the surface casing shoe shall be **2000 (2M)** PSI.

C. The appropriate BLM office shall be notified a minimum of 4 hours in advance for a representative to witness the tests.
   1. The tests shall be done by an independent service company.
   2. The results of the test shall be reported to the appropriate BLM office.
   3. 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.
   4. The BOP/BOPE test shall include a low pressure test from 250 to 300 psi in accordance with API RP 53. 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.

IV. 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.

1. Recording pit level indicator to indicate volume gains and losses.
2. Mud measuring device for accurately determining the mud volumes necessary to fill the hole during trips.
3. Flow-sensor on the flow line to warn of abnormal mud returns from the well

Engineer on call phone (after hours): 505-706-2779
WWI 060407