

2005 OCT 18

11 3

FORM APPROVED
OMB No. 1004-0136
Expires January 31, 2004

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

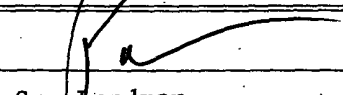
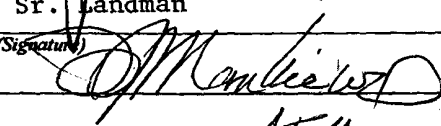
APPLICATION FOR PERMIT TO DRILL OR REENTER

1a. Type of Work: <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER		5. Lease Serial No. 14-20-603-2199
1b. Type of Well: <input type="checkbox"/> Oil Well <input checked="" type="checkbox"/> Gas Well <input type="checkbox"/> Other <input type="checkbox"/> Single Zone <input checked="" type="checkbox"/> Multiple Zone		6. If Indian, Allottee or Tribe Name Navajo
2. Name of Operator Lance Oil & Gas Company, Inc.		7. If Unit or CA Agreement, Name and No. N/A
3a. Address Box 70, Kirtland, NM 87417	3b. Phone No. (include area code) 598-5601	8. Lease Name and Well No. NV Navajo 21 #1
4. Location of Well (Report location clearly and in accordance with any State requirements. *) At surface 1525' FNL & 1590' FEL At proposed prod. zone Same		9. API Well No. 30-045-33380
10. Field and Pool, or Exploration Fr. Coal. Kutz WPC		11. Sec., T., R., M., or Blk. and Survey or ... G Section 21-T29N-R14W, NMPM
14. Distance in miles and direction from nearest town or post office* 5 Miles SW of Farmington, NM		12. County or Parish San Juan
13. State NM		
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) 1800'	16. No. of Acres in lease 1,632.00	17. Spacing Unit dedicated to this well E/2-Fr. Coal 320 NE/4-W. Kutz PC 160
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. 600'	19. Proposed Depth 1000'	20. BLM/BIA Bond No. on file BLM Nationwide #965004351
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 5237 GL	22. Approximate date work will start* Upon approval	23. Estimated duration 2 weeks

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) Paul Lehrman	Date 10-17-05
Title Sr. Landman		
Approved by (Signature) 	Name (Printed/Typed) AFM	Date 7/10/06
Title AFM	Office FFO	

Application approval does not warrant or certify the 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.

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.

*(Instructions on reverse)



State of New Mexico
Energy, Minerals & Mining Resources Department
OL CONSERVATION DIVISION
2040 South Pacheco
Santa Fe, NM 87505

Form C - 102

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

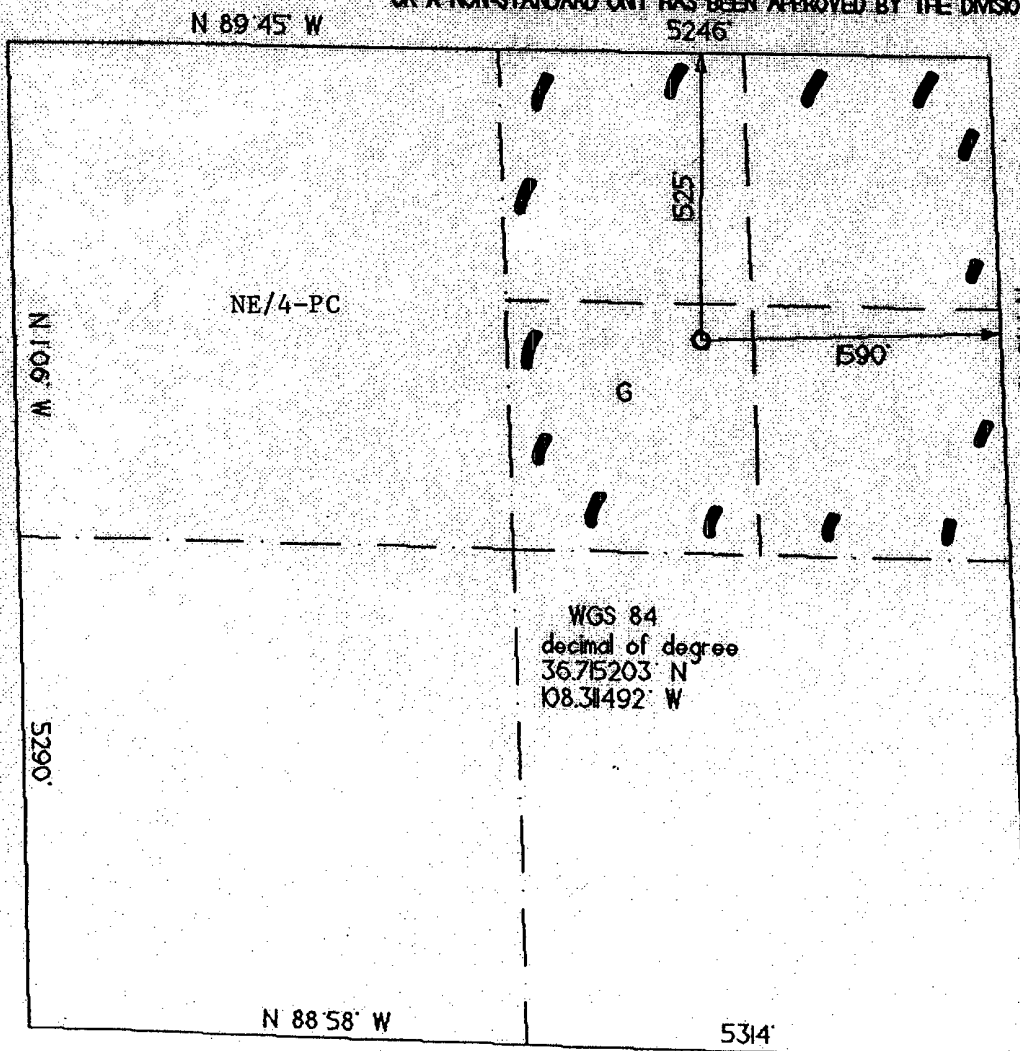
APA Number 30-045- 33380	Pool Code 74680	Pool Name Kutz W PC
Property Code 300838	Property Name NV NAVAJO 21	Well Number 1
OGPD No. 229938	Operator Name Lance Oil & Gas Company, Inc.	Elevation 5237

Surface Location									
UL or Lot	Sec.	Twp.	Rgn.	Lot Id.	Feet from	North/South	Feet from	East/West	County
G	21	29 N.	14 W.		1525'	NORTH	1590'	EAST	SAN JUAN

Bottom Hole Location if Different from Surface									
UL or Lot	Sec.	Twp.	Rgn.	Lot Id.	Feet from	North/South	Feet from	East/West	County

Dedication NE 160	Joint ?	Consolidation	Order No.
----------------------	---------	---------------	-----------

NO ALLOWABLE WILL 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.

Signature

Printed Name
Paul Lehrman

Title
Sr. Landman

Date
10-17-05

SURVEYOR CERTIFICATION

I hereby certify that the well location 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.

Date of Survey

13 April 2005

Signature and Seal of Professional Surveyor



Gerald D. Huddleston
REGISTERED LAND SURVEYOR

State of New Mexico
Energy, Minerals & Mining Resources Department
OIL CONSERVATION DIVISION
2040 South Pacheco
Santa Fe, NM 87505

Form C - 102

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

APA Number 30-045- 33380	Pool Code 71629	Pool Name Basin Fruitland Coal
Property Code 300838	Property Name NV NAVAJO 21	Well Number 1
OGRIID No. 229938	Operator Name Lance Oil & Gas Company, Inc.	Elevation 5237

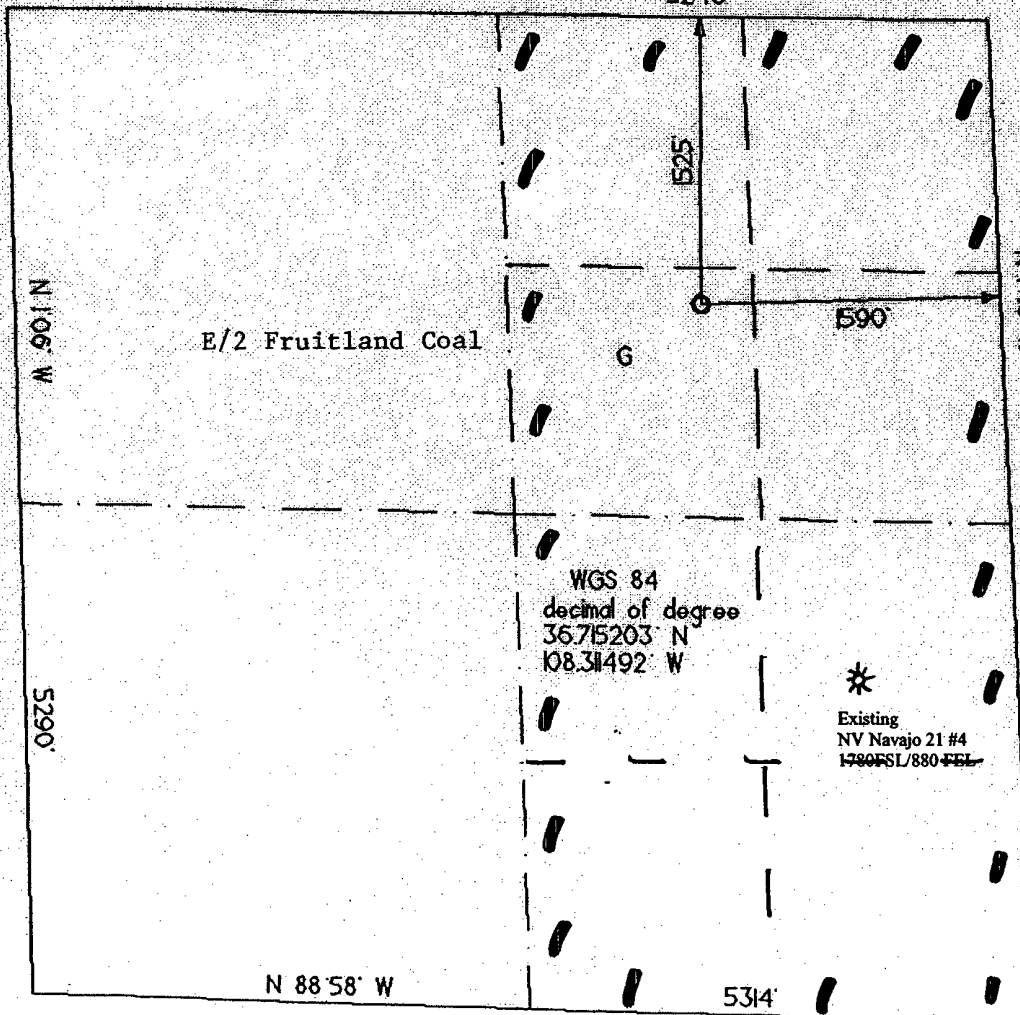
Surface Location									
U. or Lot G	Sec. 21	Twp. 29 N.	Rge. 14 W.	Lot Lk.	Feet From 1525'	North/South NORTH	Feet From 1590'	East/West EAST	County SAN JUAN

Bottom Hole Location if Different From Surface									
U. or Lot	Sec.	Twp.	Rge.	Lot Lk.	Feet From	North/South	Feet From	East/West	County
Dedication E/2 320	Joint ?	Consolidation	Order No.						

NO ALLOWABLE WILL ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED
OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

N 89°45' W

5246'



OPERATOR CERTIFICATION

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

Signature

Printed Name
Paul Lehrman

Title
Sr. Landman

Date
10-17-05

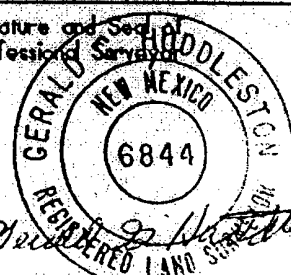
SURVEYOR CERTIFICATION

I hereby certify that the well location 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.

Date of Survey

13 April 2005

Signature and Seal of Professional Surveyor



Submit 3 Copies To Appropriate District
Office
District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Ave., 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

Form C-103
May 27, 2004

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

WELL API NO. 30-045- <u>33380</u>	5. Indicate Type of Lease Nava jo 14-20-603- STATE <input type="checkbox"/> FEE <input type="checkbox"/> 2199
6. State Oil & Gas Lease No.	
7. Lease Name or Unit Agreement Name NV Nava jo 21	
8. Well Number #1	
9. OGRID Number 229938	
10. Pool name or Wildcat Basin Fr. Coal/West Kutz PC	
11. Elevation (Show whether DR, RKB, RT, GR, etc.) 5237 GR	
Pit or Below-grade Tank Application <input checked="" type="checkbox"/> or Closure <input type="checkbox"/>	
Pit type <u>Drilling</u> Depth to Groundwater <u>> 50'</u> Distance from nearest fresh water well <u>> 500'</u> Distance from nearest surface water <u>< 1000'</u>	
Pit Liner Thickness: <u>12</u> mil Below-Grade Tank: Volume _____ bbls; Construction Material <u>Impervious Plastic</u>	

12. Check Appropriate Box to Indicate Nature of Notice, Report or Other Data

NOTICE OF INTENTION TO:

PERFORM REMEDIAL WORK ☐ PLUG AND ABANDON ☐
TEMPORARILY ABANDON ☐ CHANGE PLANS ☐
PULL OR ALTER CASING ☐ MULTIPLE COMPL ☐

OTHER: ☐

SUBSEQUENT REPORT OF:

REMEDIAL WORK ☐ ALTERING CASING ☐
COMMENCE DRILLING OPNS. ☐ P AND A ☐
CASING/CEMENT JOB ☐

OTHER: Pit Permit ☒

13. Describe proposed or completed operations. (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work). SEE RULE 1103. For Multiple Completions: Attach wellbore diagram of proposed completion or recompletion.

Pit will be built and closed according to NMOCD guidelines.

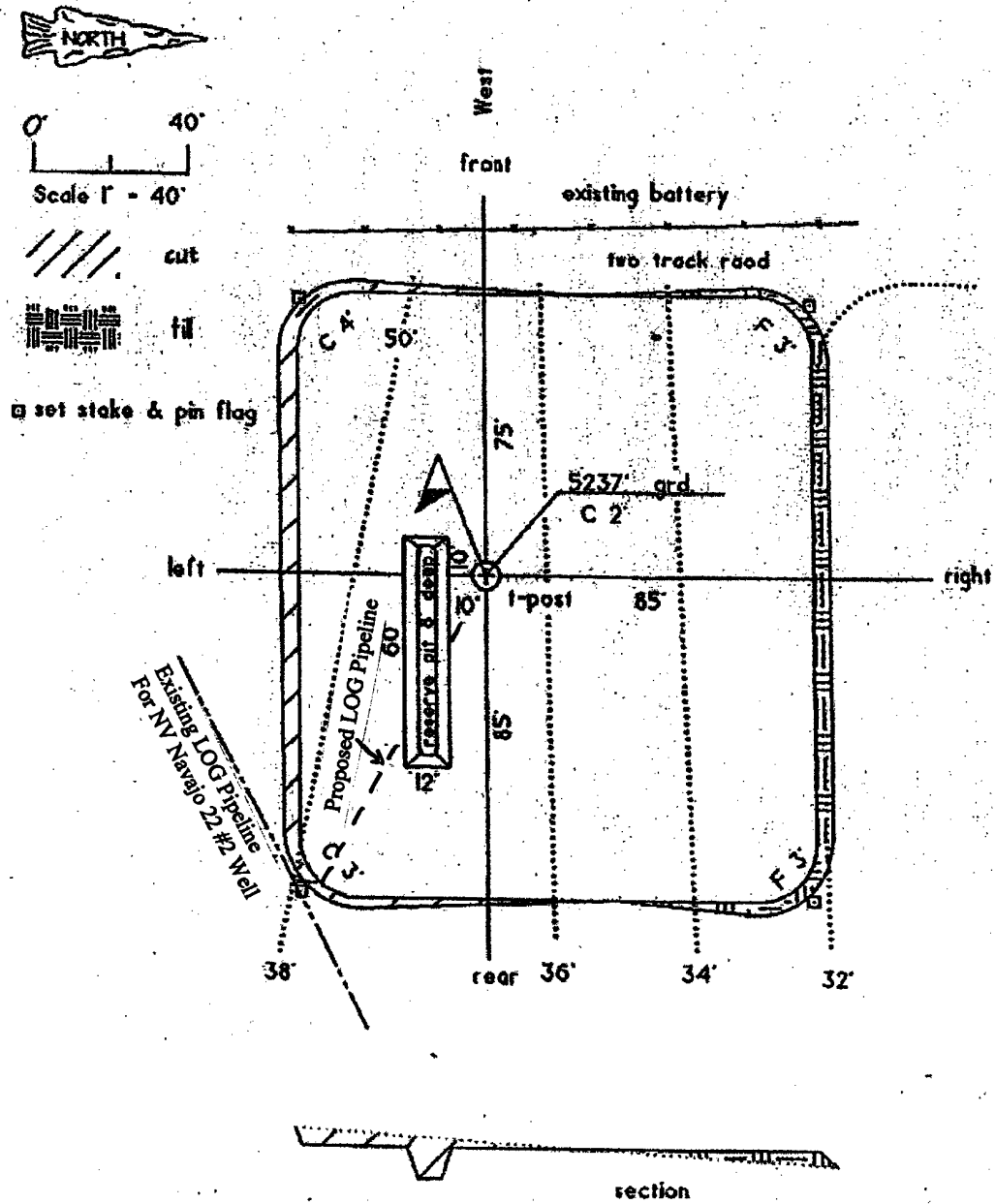
I hereby certify that the information above is true and complete to the best of my knowledge and belief. I further certify that any pit or below-grade tank has been/will be constructed or closed according to NMOCD guidelines ☒, a general permit ☐ or an (attached) alternative OCD-approved plan ☐.

SIGNATURE Paul Lehrman TITLE Sr. Landman DATE 10-17-05

Type or print name Paul Lehrman E-mail address: plehrman@westerngas.com Telephone No. 598-5601
For State Use Only

APPROVED BY: [Signature] TITLE DEPUTY OIL & GAS INSPECTOR, DIST. IV DATE JUL 11 2006
Conditions of Approval (if any):

NV Navajo 21 # 1
well pad and section



Lance Oil and Gas Co.
NV Navajo #21-1
Well Pad

Lance Oil & Gas Company, Inc.
NV Navajo 21 #1
1525' FNL & 1590' FEL
Section 21, T29N, R14W, NMPM
San Juan County, New Mexico

DRILLING PROGRAM

1. ESTIMATED FORMATION TOPS:

<u>Formation</u>	<u>GL Depth</u>	<u>KB Depth</u>	<u>Subsea Elevation</u>
Kirtland Shale	000'	005'	+5,237'
Basal Fruitland Coal S8	700'	705'	+4,537'
Pictured Cliffs Ss	725'	730'	+4,512'
Total Depth (TD)*	1000'	1005'	+4,237'

*All elevations reflect the ungraded ground level of 5,237'

2. NOTABLE ZONES:

<u>Gas Zones</u>	<u>Water Zones</u>	<u>Coal Zones</u>
Fruitland	Fruitland Coal	Fruitland Coal
Pictured Cliffs		

Water zones will be protected with casing, cement, and weighted mud. Fresh water encountered during drilling will be recorded by depth, cased, and cemented. Centralizers will be run through usable water zones to ensure that the casing is centralized through these zones. Number of centralizers will be based on API standards. A turbulizing centralizer will be run to ensure an adequate cement procedure just below the base of the lowest usable water zone. Oil and gas shows will be tested for commercial potential based on the well site representatives recommendations.

3. PRESSURE CONTROL:

The drilling contract has not yet been awarded, thus the exact BOP model to be used is unknown. (A typical 2,000 psi model has been attached to the end of the drilling program.) Double ram or annular system with a rotating head will be used. All ram preventers and related equipment will be hydraulically tested at nipple up and after any use under pressure to 1000 psi.

Blind rams will be hydraulically activated and checked for operational readiness each time pipe is pulled out of the hole. All checks of the BOP stack and equipment will be noted on the daily drilling report. BOP equipment will include a floor safety valve, choke manifold rated to 2000 psi. Maximum expected pressure is less than 500 psi.

Drilling Program
Lance Oil & Gas Company, Inc.

Page Two

4. CASING AND CEMENTING PROGRAM:

<u>Hole Size</u>	<u>O.D.</u>	<u>Weight (lb/ft)</u>	<u>Grade</u>	<u>Age</u>	<u>GL Setting Depth</u>
12 1/4"	8 5/8"	24	J-55	New	120'
7 7/8"	5 1/2"	15.5	J-55	New	1000'

Surface casing will be cemented to surface with ≈ 100 cu.ft. (^{825 ft}~~39~~ sx) Howco Type II. Volume is based on 100% excess, yield of 1.20 cu.ft./sk, and slurry weight of 15.6 ppg. WOC = 12 hours. Pressure test surface casing to 600 psi for 30 minutes.

Production casing hole will first be cleaned of rock chips by circulating at least 150% of hole volume with drilling fluid to surface. Thirty barrels of fresh water will then be circulated. Lead with ≈ 178 cu.ft. (≈ 70 sx) Howco PRB-2 Type 3 (yield = 2.55 cu.ft./sk, slurry weight = 12.0 ppg). Tail in with ≈ 84 cu.ft. (≈ 49 sx) Howco PRB-2 Type 3 (yield = 2.0 cu.ft./sk, weight = 13.0 ppg). Total cement volume is ≈ 262 cu.ft. based on 50% excess and circulating to surface. If hold conditions and experience in the area allow, the excess may be reduced. WOC time will be as recommended by cementing company specifications but will not be less than 6 hours.

Production casing will have 5 1/2" cement guide shoe and self fill float collar. Float will be placed one joint above the shoe. Six centralizers will be spaced every other joint starting above the shoe. Additional centralizers will be run, one every fourth joint with one centralizer in the shoe joint of the 8-5/8" surface casing.

5. MUD PROGRAM:

Surface casing hole will be drilled with fresh water. Production casing hole will be drilled with a fresh water polymer mud. Weighting material will be drill solids or, if needed, barite. Maximum expected mud weight will be 8.7 ppg. Sufficient material to maintain mud properties, control lost circulation, and contain a blowout will be available at the well while drilling.

6. CORING, TESTING, & LOGGING:

Open hole logs will be run. Proposed Logs will include DIL/GR/CNL, and will be run from TD to surface.

7. DOWNHOLE CONDITIONS:

No abnormal pressures, temperatures, nor hydrogen sulfide are expected. Maximum pressure will be approximately ≈ 250 psi.

**Drilling Program
Lance Oil & Gas Company, Inc.**

Page Three

8. OTHER INFORMATION:

The anticipated spud date is February 15, 2005. It should take 5 days to drill and one (1) week to complete the well.

The diagram illustrates a wellhead assembly with the following components and connections:

- Wellhead Body:** The central structure with a **BELL NECK** at the top.
- Flow Lines:**
 - FLOW LINE TO PIT** on the left side.
 - RIG FILL LINE** on the right side.
- Pressure Indicators:**
 - B.O.P. 2000 psi** (Back Pressure Valve) on the left side.
 - 2000 psi VAVLE** (Valve) on the right side.
- Internal Components:**
 - CROSS** (Crosshead) in the center.
 - MUD** (Mud) in the center.
 - 2" BYPASS LINE OR RESERVE PT** (2-inch Bypass Line or Reserve Point) at the bottom.
 - 2" LINE TO MUD TANK OR MUD PT** (2-inch Line to Mud Tank or Mud Point) at the bottom.
- Valves:**
 - 2000 psi VAVLE** (Valve) on the left side.
 - 2000 psi VAVLE** (Valve) on the right side.
 - 2000 psi VAVLE** (Valve) at the bottom.
 - 2000 psi VAVLE** (Valve) at the bottom.
- Other Labels:**
 - ADJUSTABLE CHOKE 2" LINE** (Adjustable Choke 2-inch Line) on the left side.
 - ADJUSTABLE CHOKE** (Adjustable Choke) on the right side.
 - TO MANFOLD** (To Manifold) at the bottom.
 - SCREW ON HEAD** (Screw On Head) at the bottom.
 - CASING HEAD WP 2000 psi WP** (Casing Head Working Pressure 2000 psi WP) at the bottom.
 - CASING** (Casing) at the bottom.

