Form 3160-3 FORM APPROVED OMB No. 1004-0136 Expires January 31, 2004 (September 2001) **UNITED STATES** 5. Lease Serial No. DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT NMSF-078110 6. If Indian, Allottee or Tribe Name APPLICATION FOR PERMIT TO DRILL OR REENTER N/A7. If Unit or CA Agreement, Name and No. M DRILL la. Type of Work: REENTER 8. Lease Name and Well No. Oil Well S Gas Well Other 1b. Type of Well: Multiple Zone FRPC 15 #1 Name of Operator Lance Oil & Gas Company, Inc. 3a. Address 3b. Phone No. (include area code) 10. Field and Pool, or Exploratory Box 70, Kirtland, NM 87417 Basin Fr. Coal/Twin Mounds PC 598-5601 11. Sec., T., R., M., or Blk. and Survey or Area Location of Well (Report location clearly and in accordance with any State requirements.*) 1080' FNL & 1830' FEL Sec. 15-T29N-R14W, NMPM At proposed prod. zone Same 12. County or Parish 13. State 14. Distance in miles and direction from nearest town or post office* 2 miles East of Kirtland, NM NM San Juan 15. Distance from proposed* 16. No. of Acres in lease 17. Spacing Unit dedicated to this well location to nearest E/2-FC 320 Ac. NE/4-PC 160 Ac. property or lease line, ft. (Also to nearest drig, unit line, if any) 2401 2,492.10 19. Proposed Depth 20. BLM/BIA Bond No. on file Distance from proposed location* to nearest well, drilling, completed, 2950' 1000' applied for, on this lease, ft. BLM Nationwide # 965004351 22. Approximate date work will start* 23. Estimated duration 21. Elevations (Show whether DF, KDB, RT, GL, etc.) 5295' GL 3 weeks Upon approval 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. 4. Bond to cover the operations unless covered by an existing bond on file (see 2. A Drilling Plan. Item 20 above) Operator certification. A Surface Use Plan (if the location is on National Forest System Lands, the SUPO shall be filed with the appropriate Forest Service Office). Such other site specific information and/or plans as may be required by the authorized officer. 25. Signature Name (Printed/Typed) Paul Lehrman Title Sr. Landman Approved by (Signature) Name (Printed/Typed) Title Office 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 TRMELING OPERATIONS AUTHORIZED ARE This action is subject to technical and procedural review pursuant to 43 CFR 31 SUBJECT TO COMPLIANCE WITH ATTACHED and appeal pursuant to 43 CFR 3165.4 "GENERAL REQUIREMENTS" Negative Arch report from Western Arch forthcoming.

GOOMN

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

MENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT Pool Code APA Number Twin Mounds Fruitland Sand PC (Gas) 88620 30-045 3301 Well Number Property Code Property Name FRPC 15 **Bevation** OGRID No. Operator Name 229938 5295 LANCE OIL & GAS COMPANY. INC Surface Location County Feet from> North/South |Feet from> East/West UL or Lot Sec Tup. Rga. Lot lan В 15 29 N 14 W. 1080 NORTH 1830 **EAST** SAN JUAN Bottom Hole Location & Different From Surface Feet from> North/South Feet from> County UL or Lot Lot lan East/West Rqe. Dedication Order No. Joint ? Convolidation 160 NE/4 NO ALLOWABLE WILL ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLDATED OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION N 87 22 W N 86.42. M 2629 2639 OPERATOR CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and 080 belief. /// NE/4-PC Signolure 5363 1830 Printed None **WGS 84** Paul/Lehrman decimal of degree Tite Sr. Landman 36.730688 N 108.294278 4-18-05 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 some is true and correct to the best of my belief. Date of Survey N 720. NN HOTONIMAAA OTO 02/22'05 RECEIVED Signature and Sed of DO Professional Subreval DO NEXICO 7 II H WU 8I HAU SOOZ 6844 N 89'23' W 5246

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

MENDED REPORT

			WELL	LOCATE	A DNA NO	CREAGE D	EDICATION	PLAT		
APA Number				Pool Code Pool Name						
30-045-33019		71	.629		Basin	Fruitland	d Coa	<u> </u>		
Property (Code				Property No	mę.				Well Number
34455					FRPC 15					
OGRID No.					Operator No	OTTO OTTO				Beration
229938		L	LANCE OIL & GAS COMPANY. INC						5295	
	·					e Location				
UL or Lot	Sec	Tup.	Rge.	Lot lon.	Feet from>	North/South	Feet Iron>	East/W	qef	County
В	15	29 N.	14 W.		1080	NORTH	1830	E/	ST	SAN JUAN
			<u> </u>	Botton	Hole Locatio					•
UL or Lot	Sec.	Tup.	Rge.	Lot lds.	Feet from>	North/South	Feet from>	East/N	eti	County
			į į]			1		
Dedication	1	int?	Consolido	fion			Qrg	let No.		
E/2		ļ		ļ:		•				
320	1	NO ALLOWAR	LE WILL AS	SIGNED TO 1	HIS COMPLET	ION UNTIL AL	T MIEKERIA	HAVE BE	EN CONSC	XLDATED .
4			OR A NO	n-stavdari) unt has b	EEN APPROVE	D BY THE DA	MOISIN		
N 86 4	12' W		2639		N 87 22	W	2629			
			2009		- †		1		OPERA	TOR CERTIFICATION
1			*	` *	. }	• 1			I hereby	certify that the information herein is true and complete
					080) () (contained	herein in true and complete and
1			۶ م			p ro me belief.			belief.	or my importage and
				: [·1 .	•			
150				1	6 —	7			Signature	V/1_
5363		- · .		WGS]	~
ارب									Printed	lone . Lehrman
	,,,,	E/2-EC	/2-FC decimal of 36.73068			degree 2				
		320 Acr						R	"Sr.	Landman
}	,	J20 11C1		"	12 7 12 O 11				N	4-19-05
										
L	_). "	•)			SURV	EYOR CERTIFICATION
	_			-	· · -	!			I hereby	certify that the well location
İ		•				Í		- 1	on this	plat was plotted from field actual surveys made by me
1				ı					l or unde	r my supervision, and that the
) .				1		1	•	•	M ONDE	true and correct to the bea
m H					· .		Ì	of my b	poliet. Survey	
N 1.20		•				1				0.0 /00:05
z				1_				ш	80	and set of
				. —		_ _		N I S	Professi	e and sed of DOLL SERVEY NETTER SE
{				10		,		Z		A STA MENCO CO.
]						1			1 1	
				1	•	•		◀	1 (₩ (6844) Z
1						1		-	\	a land
}				. •				1	1 00	Som A Sola
l	N 8	39:23: W		l	<i>T</i> A	5246		Į	1 36	NA PRETUZICANO C

Submit 3 Copies To Appropriate District Office	State of New Me		Form C-103		
<u>District I</u> 1625 N. French Dr., Hobbs, NM 88240 District II	Energy, Minerals and Natu		WELL API NO. 30-045-	May 27, 2004	
1301 W. Grand Ave., Artesia, NM 88210 District III	OIL CONSERVATION 1220 South St. Fran	· · · · · · · · · · · · · · · · · · ·	5. Indicate Type of STATE		
1000 Rio Brazos Rd., Aztec, NM 87410 District IV	Brazos Rd., Aztec, NM 87410 Santa Fe, NM 87505			FEE 778110	
1220 S. St. Francis Dr., Santa Fe, NM 87505	and the name of the same				
(DO NOT USE THIS FORM FOR PROPO	CES AND REPORTS ON WELLS SALS TO DRILL OR TO DEEPEN OR PLI CATION FOR PERMIT" (FORM C-101) FO	JG BACK TO A	FRPC 15	Unit Agreement Name	
1. Type of Well: Oil Well	Gas Well K Other		8. Well Number	<u>"</u>	
2. Name of Operator Lance 0il & Gas Com	pany, Inc.		9. OGRID Number 229938		
3. Address of Operator Box 70, Kirtland, N	M 87417		10. Pool name or	Wildcat	
4. Well Location Unit Letter B:	1080 foot from the North	183	30 feet from	East	
Section 15	leet from the	line and 100	NMPM San Ju		
	11. Elevation (Show whether DR 5295 G	, RKB, RT, GR, etc.)			
Pit or Below-grade Tank Application X	r Closure				
Pit type DrillingDepth to Groundw			7	ce water > 1000 Impervious Plastic	
Pit Liner Thickness: 12 mil	Below-Grade Tank: Volume		isti uction Material		
	Appropriate Box to Indicate N		•		
NOTICE OF IN	ITENTION TO: PLUG AND ABANDON ☐	SUBS	SEQUENT REF	PORT OF: ALTERING CASING □	
TEMPORARILY ABANDON	CHANGE PLANS	COMMENCE DRIL	=	P AND A	
PULL OR ALTER CASING	MULTIPLE COMPL	CASING/CEMENT	JOB 🔲		
OTHER:		OTHER:	Pit Permit	KX	
	oleted operations. (Clearly state all ork). SEE RULE 1103. For Multip				
or recompletion.	ork). SEE ROLE 1105. For winding	ne Completions. Au	acii welloole ulagia	an or proposed completion	
Pit Permit pursu	ant to NMOCD Rule 50				
			:		
I hereby certify that the information grade tank has been/will be constructed to	Tabove is true and complete to the best closed according to NMOCD guidelines	est of my knowledge 🗓, a general permit 🗌 (e and belief. I furthe or an (attached) altern	ative OCD-approved plan 🔲.	
SIGNATURE	TITLE	Sr. Landman		DATE_ 4-18-05	
Type or print name Paul Le	hrman E-mail a	ddress: plehrman	@westerngas _{Te}		
For State Use Only			com		
	/	MITY OH & CAC IN		MAY 3 1 2000	
APPROVED BY: Conditions of Approval (if any):	My THILE	PUTY OIL & GAS INS		MAY 3 1 2005	

Lance Oil & Gas Company, Inc. FRPC 15 #1 1080' FNL & 1830' FEL Section 15, T29N, R14W, NMPM San Juan County, New Mexico

DRILLING PROGRAM

1. ESTIMATED FORMATION TOPS:

Formation .	GL Depth	KB Depth	Subsea Elevation
Kirtland Shale	000,	005'	+5,295'
Fruitland Fm	720'	725'	+4,575'
Fruitland Coal	810'	815'	+4,485'
Pictured Cliffs Ss	825'	830'	+4,470'
Total Depth (TD)*	1000'	1005'	+4,295'
- A 11 1 (1	1 1 11 1 05	30.53	

^{*}All elevations reflect the ungraded ground level of 5,295'

2. NOTABLE ZONES:

Gas Zones	Water Zones	Coal Zones
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 1000 psi.

Drilling Program Lance Oil & Gas Company, Inc.

Page Two

4. CASING AND CEMENTING PROGRAM:

Hole Size	<u>O.D.</u> <u>V</u>	Veight (lb/ft)	Grade	<u>Age</u>	GL Setting Depth
12 1/4"	8 5/8"	24	J-55	New	120'
7 7/8"	5 ½"	15.5	J-55	New	1000'

Surface casing will be cemented to surface with \approx 120 cu.ft. (\approx 100 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 ≈ 203 cu.ft. (≈ 112 sx) Howco TX1 Lightweight (yield = 1.82 cu.ft./sk, slurry weight = 12.0 ppg). Tail in with ≈ 88 cu.ft. (≈ 70 sx) Howco TX 1 Lightweight (yield = 1.29 cu.ft./sk, weight = 13.5 ppg). Total cement volume is ≈ 291 cu.ft. based on 50% excess and circulating to surface. If hold conditions and experience in the area allow, the excees 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 ½" 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:

No cores or DSTs are planned. 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 ≈520 psi.

BLOW OUT PREVENTER (B.O.P.

