

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR DEEPEN

1a. TYPE OF WORK

DRILL ☒

DEEPEN ☐

b. TYPE OF WELL

OIL
WELL ☐

GAS
WELL ☒

OTHER

SINGLE
ZONE ☐

MULTIPLE
ZONE ☒

2. NAME OF OPERATOR

Dominion OK TX exp. & Prod
~~Louis Dreyfus Natural Gas Corp.~~ (405) 749-1300

3. ADDRESS AND TELEPHONE NO.

14000 Quail Springs Pkwy., #600, OK City, Ok. 73134

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)*

At surface

880' FNL & 705' FEL

At proposed prod. zone

Same

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*

St 14 air miles S of Bloomfield

15. DISTANCE FROM PROPOSED*

LOCATION TO NEAREST

PROPERTY OR LEASE LINE, FT.

(Also to nearest drlg. unit line, if any)

705'

18. DISTANCE FROM PROPOSED LOCATION*
TO NEAREST WELL, DRILLING, COMPLETED,
OR APPLIED FOR, ON THIS LEASE, FT.

>1 mi.

16. NO. OF ACRES IN LEASE

401.08

19. PROPOSED DEPTH

2,000'

17. NO. OF ACRES ASSIGNED
TO THIS WELL

NE 160.61 & 321.08 *N/2*

20. ROTARY OR CABLE TOOLS

Rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.)

6,242' ungraded

22. APPROX. DATE WORK WILL START*

July 12, 2001

23.

PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	GRADE SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
11"	J-55 8-5/8"	24	250'	~185 sx & to surface
7-7/8"	J-55 5-1/2"	15.5	2,000'	~300 sx & to surface

This permit is valid for 12 months and
providing proper completion to 43 CFR 3165.3
and annual payment to 43 CFR 3165.4.

DRILLING AND CEMENTING AUTHORIZED ARE
SUBJECT TO COMPLIANCE WITH ATTACHED
"TECHNICAL REQUIREMENTS"

cc: BIA, BLM, Gabbard, NAPI, OCD (via BLM), Tribe

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen, give data on present productive zone and proposed new productive zone. If proposal is to drill or deepen directionally, give pertinent data on subsurface locations and measured and true vertical depths. Give blowout preventer program, if any.

24.

SIGNED

B. Wool

TITLE

Consultant (505) 466-8120

DATE

1-6-01

(This space for Federal or State office use)

PERMIT NO.

APPROVAL DATE

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:

APPROVED BY

/s/ Charlie Beecham

TITLE

DATE

JUL 12 2001

*See Instructions On Reverse Side

District I
PO Box 1980, Hobbs, NM 88241-1980
District II
811 South First, Artesia, NM 88210
District III
1000 Rio Brazos Rd., Aztec, NM 87410
District IV
2040 South Pacheco, Santa Fe, NM 87505

State of New Mexico
Energy, Minerals & Natural Resources Department

OIL CONSERVATION DIVISION
2040 South Pacheco
Santa Fe, NM 87505

Form C-102
Revised October 18, 1994
Instructions on back
Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

☐ AMENDED REPORT

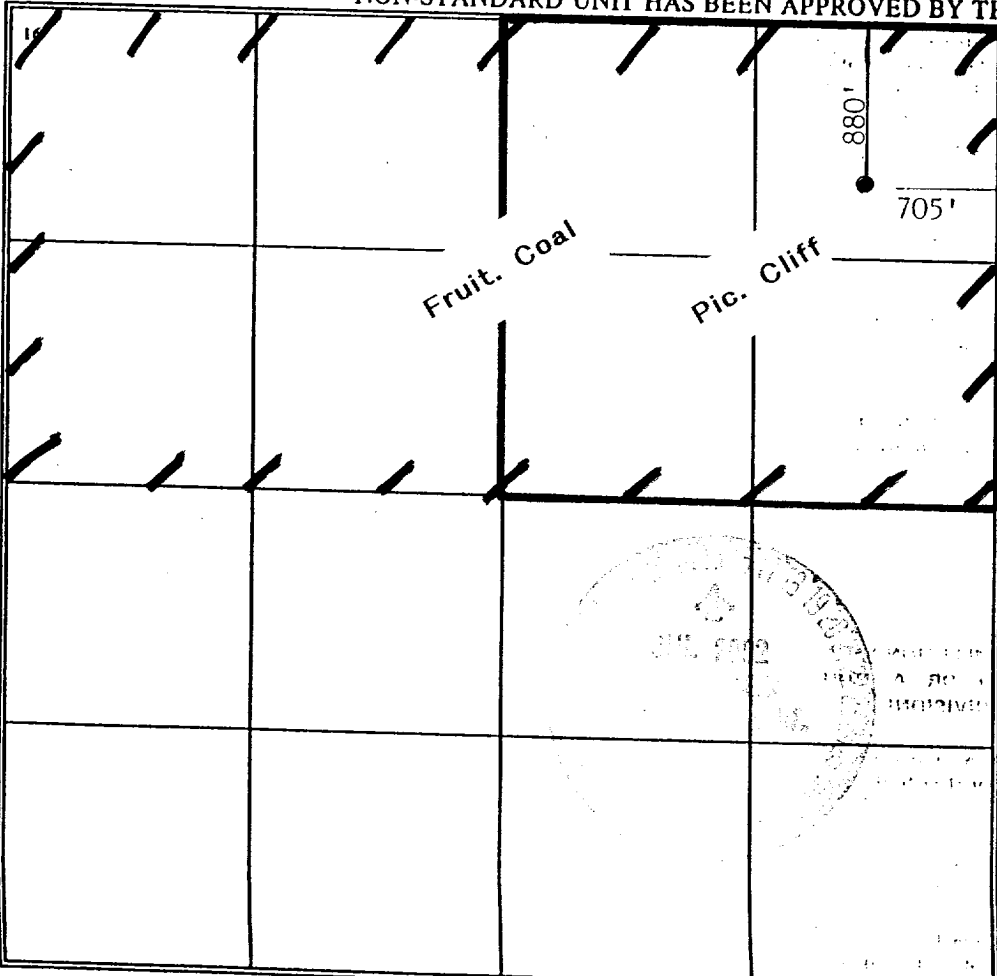
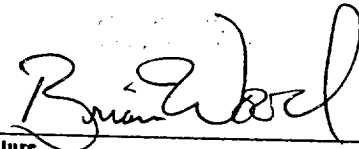
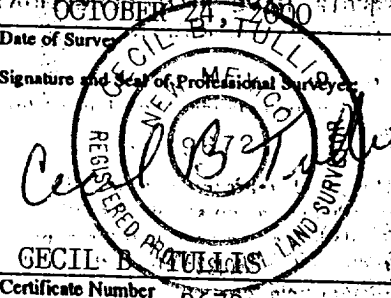
WELL LOCATION AND ACREAGE DEDICATION PLAT

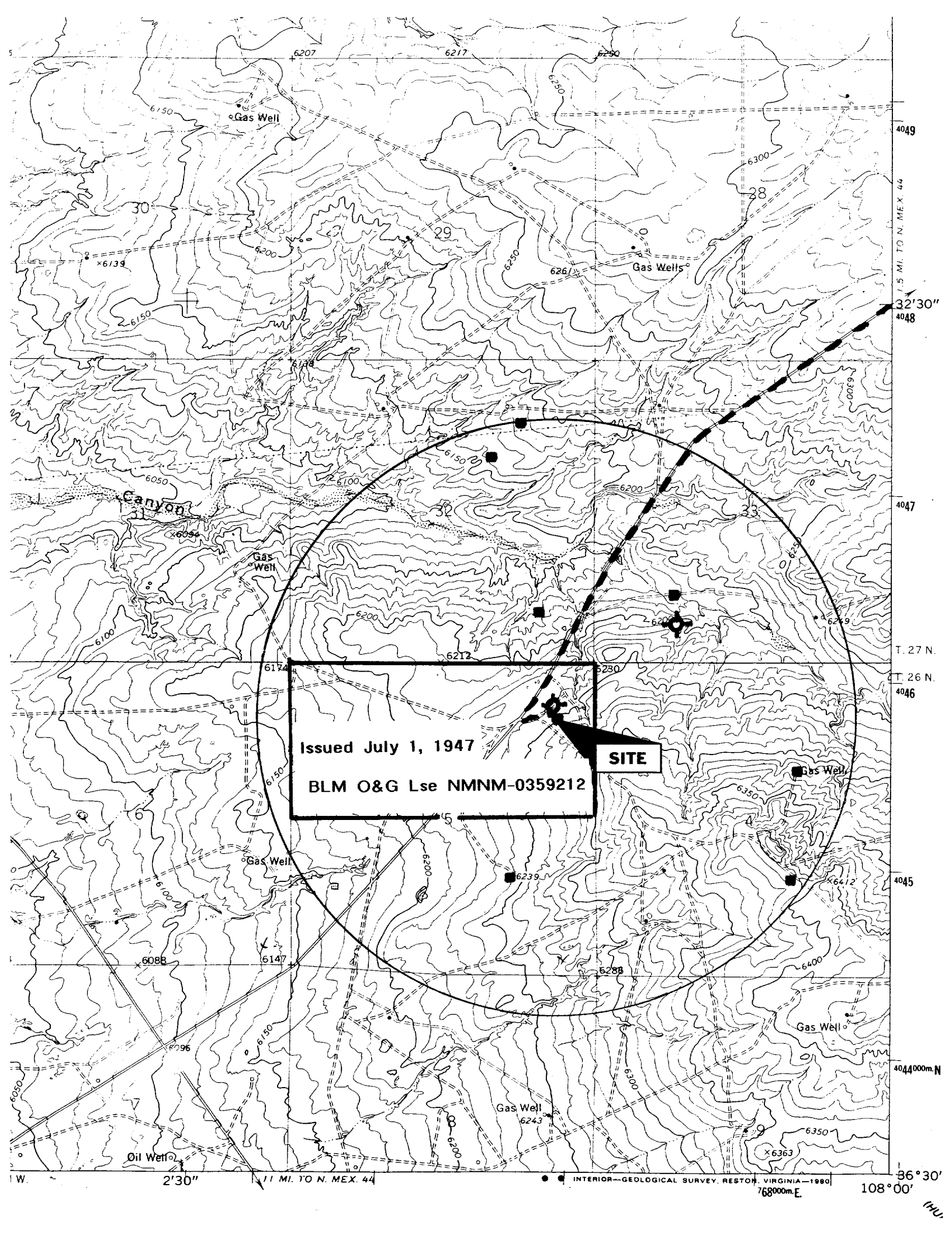
1. Well Number 30-045-30534		2. Pool Code 71629 & 79680		3. Pool Name BAS. FRUIT. COAL & WEST KUTZ PC EX	
4. Property Code 30306		5. Property Name HENDERSON			
6. OGRID No. 025773		7. Operator Name Dominion			
8. LOUIS DREYFUS NATURAL GAS				9. Well Number 5	
				10. Elevation 6242'	

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
A	5	T26N	11W		880	NORTH	705'	EAST	SAN JUAN

11 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
12 Dedicated Acres		13 Joint or Infill		14 Consolidation Code		15 Order No.			

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

	17 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: BRIAN WOOD Title: CONSULTANT Date: JAN. 7, 2001
	18 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 supervision, and that the same is true and correct to the best of my belief. Date of Survey: OCTOBER 24, 2000 Signature and Seal of Professional Surveyor:  Certificate Number: 9672



Issued July 1, 1947
BLM O&G Lse NMNM-0359212

SITE

Louis Dreyfus Natural Gas Corp.
Henderson 5 1
880' FNL & 705' FEL
Sec. 5, T. 26 N., R. 11 W.
San Juan County, New Mexico

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Drilling Program

1. ESTIMATED FORMATION TOPS

<u>Formation Name</u>	<u>GL Depth</u>	<u>KB Depth</u>	<u>Subsea Elevation</u>
Nacimiento Fm	000'	14'	+6,242'
Ojo Alamo Ss	350'	364'	+5,892'
Kirtland Sh	751'	765'	+5,481'
Fruitland Fm	1,166'	1,180'	+5,076'
Base Fruitland Coal	1,676'	1,690'	+4,566'
Pictured Cliffs Ss	1,696'	1,710'	+4,546'
Base of Pictured Cliffs	1,847'	1,861'	+4,395'
Total Depth (TD)*	2,000'	2,014'	+4,242'

* all elevations reflect the ungraded ground level of 6,242'

2. NOTABLE ZONES

<u>Gas Zones</u>	<u>Water Zones</u>	<u>Coal Zones</u>
Ojo Alamo Ss (350')	Nacimiento Fm (000')	Kirtland Sh (751')
Fruitland Fm (1,166')	Ojo Alamo Ss (350')	Fruitland Coal (1,166')
Pictured Cliffs (1,847')	Fruitland Fm (1,166')	

Water zones will be protected with casing, cement, and weighted mud. Fresh water encountered during drilling will be recorded by depth, cased, and cemented. Oil and gas shows will be tested for commercial potential based on the well site geologist's recommendations.

3. PRESSURE CONTROL

The drilling contract has not yet been awarded, thus the exact BOP model to be used is not yet known. A typical 3,000 psi model is on PAGE 3. It will be

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installed once the surface casing is cemented.

Onshore Order 2 standards will be followed for BOP, choke manifold, accumulator system, closing unit power, and locking devices installation, operation, maintenance, and tests. Hydraulic controls will be located on the rig floor. Manual controls will be hand wheels. Remote control for the accumulator will be 100' - 120' from the drill hole. Kill line will not be used as a fill line.

Ram type preventers and associated equipment (choke manifold, kelly cocks, etc.) will be tested to 100% of their rated working pressure (BOP stack isolated from casing by a test plug) for 10 minutes. Annular preventers will be tested to 50% of rated working pressure for 10 minutes. Tests will be run after initial installation, before drilling out of each casing shoe, and after any use under pressure; or a minimum of once every 14 days. Pipe rams will be operationally checked each 24 hour period, as will blind rams and annular preventer each time pipe is pulled out of the hole. Annular preventers will be functionally operated at least weekly. Such checks of BOP equipment will be noted on daily drilling reports.

4. CASING & CEMENT

<u>Hole Size</u>	<u>O.D.</u>	<u>Weight (lb/ft)</u>	<u>Grade</u>	<u>Age</u>	<u>GL Setting Depth</u>
11"	8-5/8"	24	J-55	New	250'
7-7/8"	5-1/2"	15.5	J-55	New	2,000'

Surface casing will be cemented to surface with ≈ 185 sx Class H + 3% CaCl_2 + 1/4 pound per sack Cello-Seal. If cement does not circulate, a temperature survey will be run to find the TOC and then finish cementing to the surface through 1" pipe using Class H + 3% CaCl_2 .

Production casing will be cemented to the surface with ≈ 200 sx Halco Lite + 5 pounds per sack Gilsonite + 1/4 pound per sack Flocele® followed by ≈ 100 sx 50/50 Poz A + 2% gel + 0.5% Halad 322. Volumes to be determined by caliper.