

PINON UNIT  
PELTO OIL COMPANY  
OCTOBER 22, 1984

Prepared by: B.A. Black, Ph.D.  
BLACK OIL, INC.  
AIPG # 2392  
AAPG # 1743

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PINON UNIT  
PELTO OIL COMPANY  
OCTOBER 22nd, 1984

INTRODUCTION

Pelto Oil Company proposes to drill a 4000' wildcat well in projected Section 31 of T.14N., R.8E., and a 5000' wildcat well in Section 21 of T.14N., R.9E. to test objectives in the Cretaceous section. Accordingly, the purpose of this report is to summarize the geological reasons for forming an approximate 69 section federal unit.

PROPOSED UNIT LOCATION AND DESCRIPTION:

The proposed Pinon Unit (Figure 1) is located in central Santa Fe County, approximately twelve (12) miles south of Santa Fe, New Mexico. The unit is situated in a region of semi arid, low relief grass, pinon, and juniper covered range land. The surface is outcropping Cretaceous and Tertiary formations which are locally covered by a thin veneer of Quaternary terrace gravels, sands, and soil.

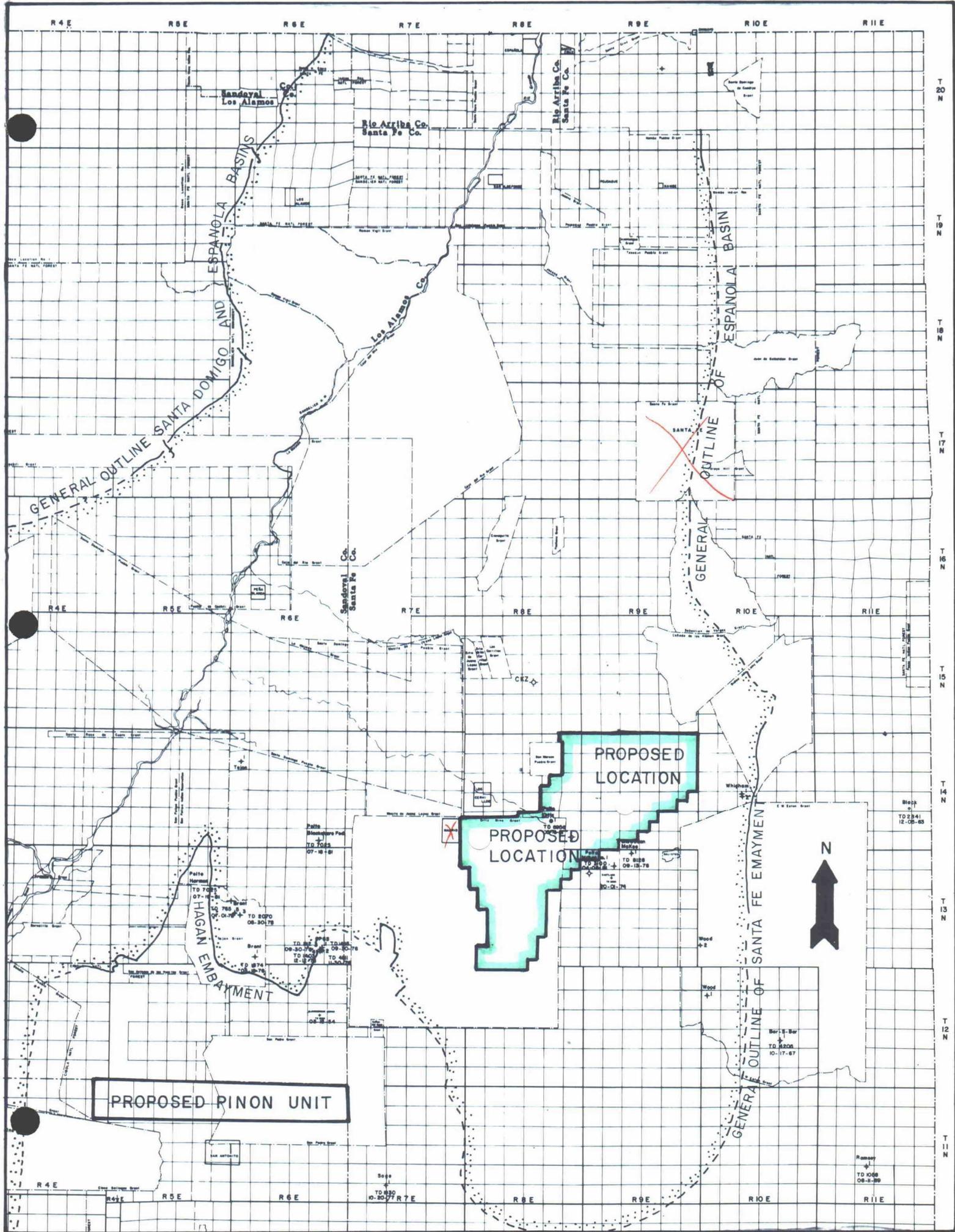


Figure 1 Regional Index Map.

Surface drainage is provided by Galisteo Creek which bisects the area and by intermittent streams and arroyos which drain into Galisteo Creek. Galisteo Creek eventually drains west into the Rio Grande. Topographically, the area is flat to hilly and elevations range from 5735' in the west central unit area to as high as 7172' along the south side of the unit.

Primary access to the unit area will be provided by State road 41 on the east, and State road 10 on the west and by existing dirt roads which serve ranches in the area. Secondary access will be feasible from a loose network of smaller dirt roads serving windmills and wood gathering areas, as well as smaller ranches. New road construction for the proposed tests will be minimal.

The proposed unit area comprises approximately 69 sections. The unit is geographically bounded on the west by the Ortiz and Cerrillos mountains; on the southeast by the hill country of the Cerro Pelon; to the east and north by the high plains south of Santa Fe, New Mexico.

## GEOLOGIC DISCUSSION

The Pinon Unit is located on the southeast flank of the Espanola Basin. Within the unit, approximately 9,000' of sedimentary rocks of Mississippian, Pennsylvanian, Permian, Triassic, Jurassic and Cretaceous rock are believed to exist. An additional 2,000 to 3,000 feet of Tertiary rocks are believed to overlie the Mesozoic and Paleozoic section.

To date, two (2) exploration oil or gas wells have been drilled within the unit outline. The Pelto Ortiz was drilled to 7,450' and the Pelto State was drilled to 5,520'. Five additional wells were drilled southeast of the unit outline in the complex thrust zone and ranged in depth from 8,128' to 1,569'. Near surface water wells have also penetrated the Tertiary section. To date, no commercial oil or gas wells exist, however, significant shows have been encountered in most of the wells in the area. Reflection seismic lines are available which can be correlated to well control in the area. These seismic lines show that a more or less complete geologic section does exist beneath the unit area, particularly in those areas where the Tertiary erosion has not been extensive.

The unit is located in the deeper structural portion of the Santa Fe Embayment of the Espanola Basin. Within this area (Figure 3), the Cretaceous section is analogous to the structurally low portions of the San Juan Basin where extensive stratigraphic oil and gas fields exist in synclinal areas. In these fields, the Cretaceous produces from lenticular bar sands, non-marine channel sands and fractured shale across plunging structural noses and synclines which are similar to our proposed unit.

The Cretaceous rocks in this area are our objectives. Figure 4 is a stratigraphic log section which shows the expected portion of the Cretaceous section to be drilled and illustrates the Cretaceous lithologies which are identical to and produce on depositional strike in the San Juan Basin.

The objective Cretaceous section plunges into the deeper axial portions of the basin from all sides of the unit. The north, northeast, west, and south sides of the unit are defined geologically by our best estimate of the 2000' drill depth contours to the base of the Cretaceous Niobrara section. The western boundary is also influenced by our desire to stay away from the thermal effects of the Ortiz and Cerrillos laccoliths and the potential complications caused by these intrusives.

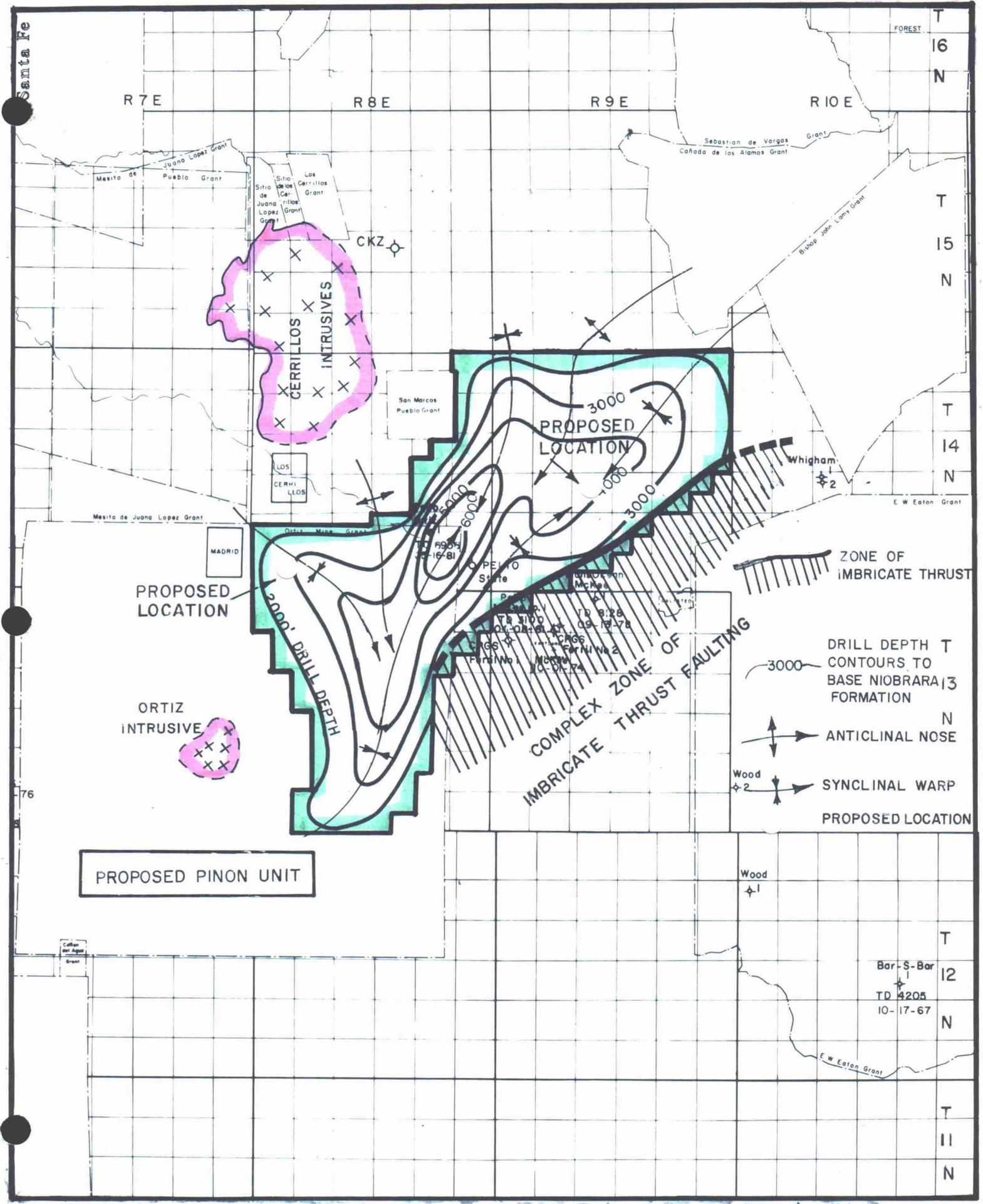


FIGURE 3 Drill Depth contours to Base Cretaceous Niobrara.

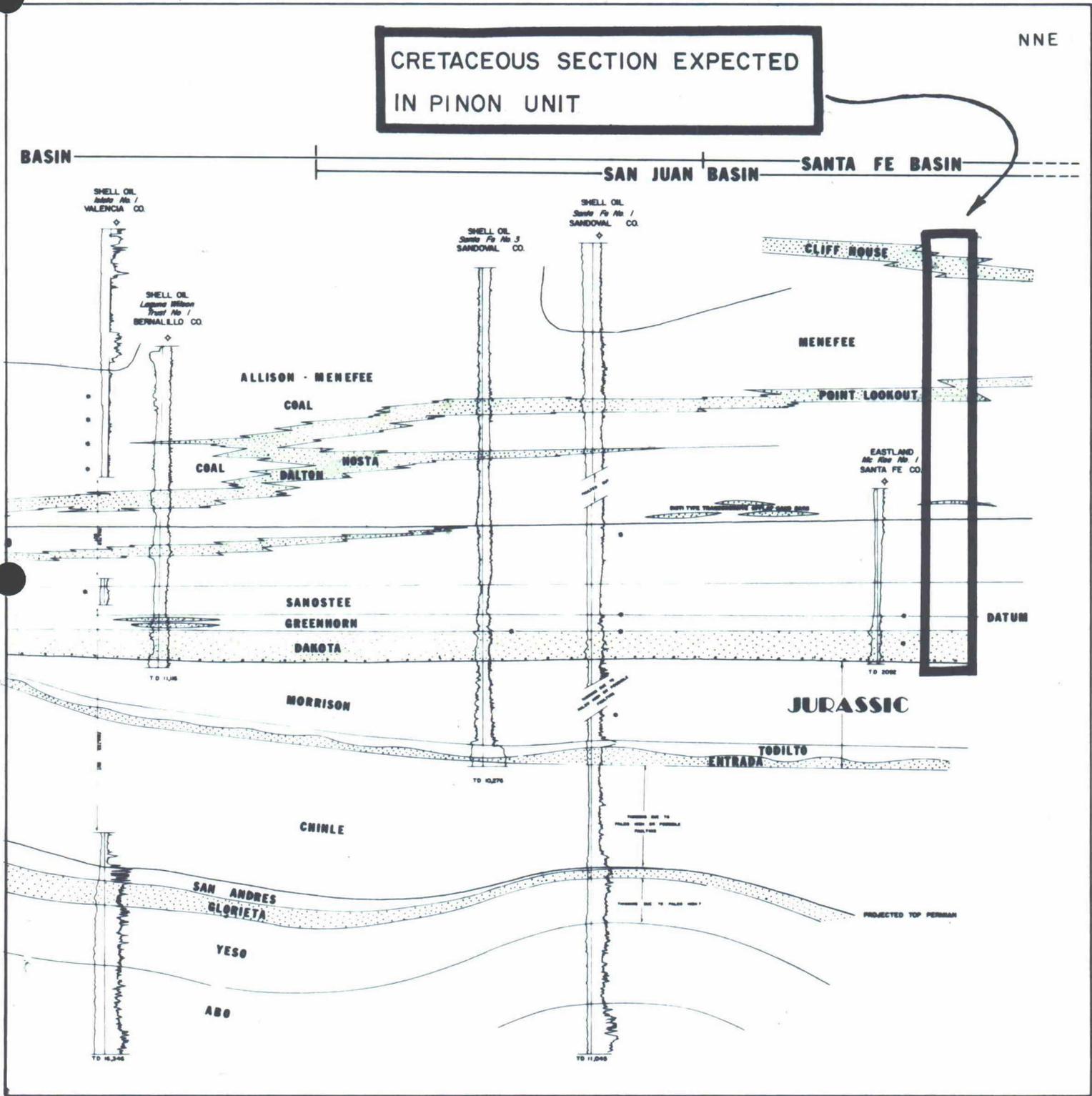


Figure 4, Stratigraphic Log Section.

The southeastern boundary is defined by the complexities of an imbricate thrust fault belt in the Cretaceous rocks from about Sec. 24, T.14N., R.9E., southwest to about Sec. 12, T.13N., R.8E. This boundary is also defined in part by the approximate 2000' drill depth line to the base of the Niobrara which semi-parallel the northwest edge of this thrust belt. In this zone, the Cretaceous rocks have been complexly and repeatedly thrust to the southeast. Our drill depth contour map shows our best estimate to the base of the Niobrara in the relatively undisturbed lower rooted plate. The unit boundary is additionally controlled by limited well control, minor outcrops, and some seismic data and encompasses the major synclinal folds and intervening anticlinal folds in this area.

There are several objectives in our unit outline. The Cretaceous has Mesa Verde, fractured Niobrara, Greenhorn and Dakota potential. In the future, the Jurassic Entrada 800 feet below the Dakota is also one of our objectives, as well as the Permian San Andres - Glorieta and the deeper Pennsylvanian Madera limestones and Sandia formation which also have potential; however, subsurface control is extremely limited for these formations.

The initial well in projected Section 31 of T.14N., R.8E., will be designed to test the preserved Cretaceous section to the Dakota at this location or 4000', whichever is shallower including:

	Drill Depth
Mancos Shale	1550'
Fractured Niobrara siltstones	2350'
Possible lower Niobrara bar sands	2850'
Lower Mancos shale	2900'
Possible Codell equivalent sands	3300'
Greenhorn limestone	3500'
Dakota bar sands	3700'
T.D.	<u>±</u> 4000'

Our primary objectives for expected production are the fractured Niobrara shale, and basal Niobrara bar sands.

Using the San Juan Basin as an analog and fields like the West Puerto Chiquita for examples, the Niobrara in the area could contain in excess of 10 million barrels of oil. Likewise, from possible bar sands in the Dakota (using the Chacon Dakota analog), and the lower Niobrara (Bisti type), there is a potential of 20 million barrels of oil. From the expected Mesa Verde, there is a potential for significant gas production.

Our second well in Section 21 of T.14N., R.9E., will also test the Dakota section or to 5000', whichever is shallower

including:

	Drill Depth
Mesa Verde	2500'
Mancos shale	2550'
Fractured Niobrara siltstones	3450'
Possible lower Niobrara bar sands	3950'
Lower Mancos shale	4000'
Possible Codell equivalent sands	4400'
Greenhorn limestone	4600'
Dakota bar sands	4800'
T.D.	<u>±</u> 5000'

Our primary objectives for expected production are the Mesa Verde, the fractured Niobrara shale, and the basal Niobrara bar sands.

Secondary objectives would include other units in the Cretaceous section such as the possible Codell equivalent sands, fractured Greenhorn limestones and the Dakota sandstone, as well as sand units in the overlying Tertiary section.

Should the unit wells prove to be non-commercial, the applications may be amended to permit testing the Jurassic Entrada (which is approximately 800 feet below the Dakota throughout the unit area) or deeper into the Paleozoics. Such a contingency would require drilling to at least 5000' at the first proposed location, and to at least 6000' at the second location.

The two locations were chosen to test different portions of the unit and will be drilled on different structural and stratigraphic anomalies. The locations are in plunging synclines where fracturing can be expected and where bars may be pinching out and stratigraphically entrapping oil updip.

### SUMMARY AND CONCLUSIONS

The approximate drill depth map on the base of the Cretaceous Niobrara (Figure 3) provides the most compelling evidence for the unit as proposed. Deep tectonically fractured, plunging synclines and anticlinal noses in the Cretaceous section form a small but potentially important sub basin on the southeast flank of the Espanola Basin in this area. This sub basin is known as the Santa Fe embayment and is analogous to and on direct stratigraphic trend with the larger oil fields productive from Niobrara and stratigraphically entrapped Dakota in the synclinal areas of the San Juan Basin. Stratigraphically, this area should be almost identical to the San Juan Basin and the present oil and gas fields, with the major objective sections in the same general depth range.

In conclusion, the outline of the approximate 69 section Pinon Unit includes all prospective drillable locations which we can presently see. All the geological parameters appear to justify the formation of the unit as proposed. The Dakota bar trends as well as the fractured reservoirs may need large spacing for both geologic and economic reasons and for best drainage and maximum conservation.



May 9, 1985

Mr. Robert Kent  
Bureau of Land Management  
505 Marquett NW, Room 815  
Albuquerque, New Mexico 87125

Mr. Michael Stogner  
Energy & Minerals Dept.  
Oil Conservation Division  
310 Old Santa Fe Trail  
Santa Fe, New Mexico 87501

Mr. Jim Baca  
Commissioner of Public Lands  
c/o Mr. Ray D. Graham  
Director Oil & Gas Division  
Room 138  
310 Old Santa Fe Trail  
Santa Fe, New Mexico 87501

Re: Ratification and Joinder  
Amendment to Pinon Unit Agmt.  
dated 11-2-84  
Santa Fe County, New Mexico

Gentlemen:

Enclosed for your files are the appropriate number of copies of Ratification and Joinder for our amendment to the captioned Unit Agreement from Mary Regina Romero (Tract 25).

Yours very truly,

PELTO OIL COMPANY

Bruce L. Taylor

BLT:mb

RATIFICATION AND JOINDER OF UNIT AGREEMENT (AS AMENDED)

In consideration of the execution of the Unit Agreement for the Development and Operation of the PINON Unit Area, County of SANTA FE, State of New Mexico, dated NOVEMBER 2, 19 84, in form approved on behalf of the Secretary of the Interior, the undersigned (whether one or more) hereby expressly joins said Unit Agreement and ratifies, approves, adopts and confirms said Unit Agreement as fully as though the undersigned has executed the original agreement.

This Ratification and Joinder shall acknowledge the undersigned's acceptance of the amendment and modification of Section 9 of the Pinon Unit Agreement dated November 2, 1984, to the extent that said Section 9 shall now provide for the Pinon Unit to be a three-well program.

This Ratification and Joinder shall be effective as to the undersigned's interests in any lands and leases, or interests therein, and royalties presently held or which may arise under existing option agreements or other interests in unitized substances, covering the lands within the Unit Area in which the undersigned may be found to have an oil or gas interest.

This Ratification and Joinder of Unit Agreement shall be binding upon the undersigned, his, her or its heirs, devisees, executors, assigns or successors in interest.

EXECUTED this 29 day of April, 19 85.

DEL ROMERO

Del Romero

TRACT(S) T14N-R8E NMPM

Address: 2027 CALLE LORCA, #4

SECTION 1, B1

SANTA FE

NEW MEXICO 87501

STATE OF New Mexico )  
COUNTY OF Santa Fe ) ss.

On this 29 day of April, 19 85, before me personally appeared Del Romero, to me known to be the person described in and who executed the foregoing instrument, and acknowledged that he executed the same as his free act and deed.

My Commission Expires:

April 30, 1987

Melissa Aubrey  
Notary Public

STATE OF \_\_\_\_\_ )  
COUNTY OF \_\_\_\_\_ ) ss.

On this \_\_\_\_\_ day of \_\_\_\_\_, 19 \_\_\_\_\_, before me appeared \_\_\_\_\_, to me personally known, who, being by me duly sworn, did say that he is the \_\_\_\_\_ President of \_\_\_\_\_, and that the seal affixed to said instrument is the corporate seal of said corporation, and that said instrument was signed and sealed in behalf of said corporation by authority of its board of directors, and said \_\_\_\_\_ acknowledged said instrument to be the free act and deed of said corporation.

My Commission Expires:

\_\_\_\_\_

Notary Public

RATIFICATION AND JOINDER OF UNIT AGREEMENT (AS AMENDED)

In consideration of the execution of the Unit Agreement for the Development and Operation of the PINON Unit Area, County of SANTA FE, State of New Mexico, dated NOVEMBER 2, 19 84, in form approved on behalf of the Secretary of the Interior, the undersigned (whether one or more) hereby expressly joins said Unit Agreement and ratifies, approves, adopts and confirms said Unit Agreement as fully as though the undersigned has executed the original agreement.

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EXECUTED this 29 day of April, 19 85.

DEL ROMERO

Del Romero

TRACT(S) T14N-R8ENMPM  
SECTION 1, B1

Address: 2027 CALLE LORCA, #4  
SANTA FE  
NEW MEXICO 87501

STATE OF New Mexico )  
COUNTY OF Santa Fe ) ss.

On this 29 day of April, 19 85, before me personally appeared Del Romero, to me known to be the person described in and who executed the foregoing instrument, and acknowledged that he executed the same as his free act and deed.

My Commission Expires:

April 30, 1987

Melissa Tulberg  
Notary Public

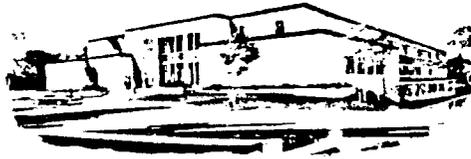
STATE OF \_\_\_\_\_ )  
COUNTY OF \_\_\_\_\_ ) ss.

On this \_\_\_\_\_ day of \_\_\_\_\_, 19 \_\_\_\_\_, before me appeared \_\_\_\_\_, to me personally known, who, being by me duly sworn, did say that he is the \_\_\_\_\_ President of \_\_\_\_\_, and that the seal affixed to said instrument is the corporate seal of said corporation, and that said instrument was signed and sealed in behalf of said corporation by authority of its board of directors, and said \_\_\_\_\_ acknowledged said instrument to be the free act and deed of said corporation.

My Commission Expires:

\_\_\_\_\_  
Notary Public

State of New Mexico



Commissioner of Public Lands

JIM BACA  
COMMISSIONER

May 16, 1985

Pelto Oil Company  
One Allen Center, Suite 1800  
500 Dallas Street  
Houston, Texas 77002

P.O. BOX 1148  
SANTA FE, NEW MEXICO 87504-1148  
Express Mail Delivery Used  
310 Old Santa Fe Trail  
Santa Fe, New Mexico 87501

*Handwritten scribbles and numbers, possibly "8326" and "#8326"*

Re: Ratification and Joinder  
Amendment to Pinon Unit Agreement  
Santa Fe County, New Mexico

ATTENTION: Mr. Bruce Taylor

Gentlemen:

This office is in receipt of your letter dated May 9, 1985, together with one copy of a Ratification and Joinder for your amendment to the Pinon Unit Agreement executed by Del Romero.

This instrument has this date been accepted and filed in our unit file.

Very truly yours,

JIM BACA  
COMMISSIONER OF PUBLIC LANDS

*Handwritten signature of Ray D. Graham*  
BY. RAY D. GRAHAM, Director  
Oil and Gas Division  
AC 505/827-5744

JB/RDG/pm  
encls.

cc:           OCD-Santa Fe, New Mexico  
              BLM-Albuquerque, New Mexico    Attn: Fluids Branch  
              BLM-Roswell, New Mexico    Attn: Mr. Armando Lopez

OCD

Unit Name Pinon Unit  
 Operator Pelto Oil Co.  
 County Santa Fe County, New Mexico

DATE APPROVED	OCC CASE NO. 8386	OCC ORDER NO. R-7743	EFFECTIVE DATE	TOTAL ACREAGE	STATE	FEDERAL	INDIAN-FEE	SEGREGATION CLAUSE	TERM
CPL 11/26/84 BLM: 11/28/84 OCD: 11/28/84			November 28, 1984	44,349.63	3,305.02	13,790.92	27,253.64	MODIFIED	5 years & so long as

NOTE: The projected tracts listed below are those lands projected by the operator, Pelto Oil Co., that are located either entirely or in part within the unsurveyed Ortiz Mine Grant.

UNIT AREA

TOWNSHIP 13 NORTH, RANGE 8 EAST, N.M.P.M.

- Sec. 1: Lots 1,2,3,4,5,6,7,8, E $\frac{1}{2}$ , E $\frac{1}{2}$ W $\frac{1}{2}$
- Sec. 1: W $\frac{1}{2}$ W $\frac{1}{2}$  (projected)
- Sec. 2: All (projected)
- Sec. 3: All (projected)
- Sec. 4: All (projected)
- Sec. 5: All (projected)
- Sec. 6: All (projected)
- Sec. 7: E $\frac{1}{2}$  (projected)
- Sec. 8: All (projected)
- Sec. 9: All (projected)
- Sec. 10: All (projected)
- Sec. 11: All (projected)
- Sec. 12: Lots 1,2,5,6, E $\frac{1}{2}$ NW $\frac{1}{4}$
- Sec. 12: W $\frac{1}{2}$ W $\frac{1}{2}$ W $\frac{1}{2}$  (projected)
- Sec. 14: W $\frac{1}{2}$  (projected)
- Sec. 15: All (projected)
- Sec. 16: All (projected)
- Sec. 17: All (projected)
- Sec. 20: E $\frac{1}{2}$  (projected)
- Sec. 21: All (projected)
- Sec. 22: All (projected)
- Sec. 23: W $\frac{1}{2}$  (Projected)
- Sec. 26: NW $\frac{1}{4}$  (projected)
- Sec. 27: All (projected)
- Sec. 28: All (projected)
- Sec. 29: E $\frac{1}{2}$  (projected)
- Sec. 32: All (projected)
- Sec. 33: All (projected)
- Sec. 34: NE $\frac{1}{4}$ , SW $\frac{1}{4}$  (projected)

TOWNSHIP 13 NORTH, RANGE 9 EAST, N.M.P.M.

- Sec. 6: Lots 1,2,3,4, NE $\frac{1}{4}$ , SE $\frac{1}{2}$ NW $\frac{1}{4}$

TOWNSHIP 14 NORTH, RANGE 8 EAST, N.M.P.M.

- Sec. 1: Lots 1,2,3, E $\frac{1}{2}$ , E $\frac{1}{2}$ W $\frac{1}{2}$ , NW $\frac{1}{2}$ NW $\frac{1}{4}$
- Sec. 12: Lots 1,2,3,4, E $\frac{1}{2}$ , E $\frac{1}{2}$ W $\frac{1}{2}$
- Sec. 13: Lot 1, E $\frac{1}{2}$ , E $\frac{1}{2}$ W $\frac{1}{2}$ , SW $\frac{1}{2}$ NW $\frac{1}{4}$ , W $\frac{1}{2}$ SW $\frac{1}{4}$
- Sec. 14: Lots 1,2, S $\frac{1}{2}$ NE $\frac{1}{4}$ , S $\frac{1}{2}$
- Sec. 23: All
- Sec. 24: All
- Sec. 25: Lots 4,5,6,7,8,9,10,11,12,13,14,15,16,17
- Sec. 26: Lots 6,7,8,9,10
- Sec. 26: S $\frac{1}{2}$ N $\frac{1}{2}$ , S $\frac{1}{2}$  (projected)
- Sec. 27: Lots 1,2,3,4,5,6,7
- Sec. 27: S $\frac{1}{2}$ N $\frac{1}{2}$ , S $\frac{1}{2}$  (projected)
- Sec. 28: S $\frac{1}{2}$ N $\frac{1}{2}$ , S $\frac{1}{2}$  (projected)
- Sec. 29: S $\frac{1}{2}$ N $\frac{1}{2}$ , S $\frac{1}{2}$  (projected)
- Sec. 30: SpN $\frac{1}{2}$ , S $\frac{1}{2}$  (projected)
- Sec. 31: All (projected)
- Sec. 32: All (projected)
- Sec. 33: All (projected)
- Sec. 34: All (projected)
- Sec. 35: All (projected)
- Sec. 36: Lots 1,2,4,5,6,7,8,9,10,11,12,13, N $\frac{1}{2}$ SE $\frac{1}{4}$
- Sec. 36: W $\frac{1}{2}$ W $\frac{1}{2}$  (projected)

TOWNSHIP 14 NORTH, RANGE 9 EAST, N.M.P.M.

- Sec. 1: Lots 1,2,3,4, S $\frac{1}{2}$ N $\frac{1}{2}$ , S $\frac{1}{2}$
- Sec. 2: Lots 1,2,3,4, S $\frac{1}{2}$ N $\frac{1}{2}$ , S $\frac{1}{2}$
- Sec. 3: Lots 1,2,3,4, S $\frac{1}{2}$ N $\frac{1}{2}$ , S $\frac{1}{2}$

## PINON UNIT AREA CONTINUED

## TOWNSHIP 14 NORTH, RANGE 9 EAST, CONTINUED.....

Sec. 4: Lots 1,2,3,4, S $\frac{1}{2}$ N $\frac{1}{2}$ , S $\frac{1}{2}$   
 Sec. 5: Lots 1,2,3,4, S $\frac{1}{2}$ N $\frac{1}{2}$ , S $\frac{1}{2}$   
 Sec. 6: Lots 1,2,3,4, S $\frac{1}{2}$ N $\frac{1}{2}$ , S $\frac{1}{2}$   
 Sec. 7: Lots 1,2,3,4, E $\frac{1}{2}$ , E $\frac{1}{2}$ W $\frac{1}{2}$   
 Sec. 8: All  
 Sec. 9: All  
 Sec. 10: All  
 Sec. 11: All  
 Sec. 12: All  
 Sec. 13: All  
 Sec. 14: All  
 Sec. 15: All  
 Sec. 16: All  
 Sec. 17: All  
 Sec. 18: Lots 1,2,3,4, E $\frac{1}{2}$ , E $\frac{1}{2}$ W $\frac{1}{2}$   
 Sec. 19: Lots 1,2,3,4, E $\frac{1}{2}$ , E $\frac{1}{2}$ W $\frac{1}{2}$   
 Sec. 20: All  
 Sec. 21: All  
 Sec. 22: All  
 Sec. 23: All  
 Sec. 24: NW $\frac{1}{4}$   
 Sec. 27: N $\frac{1}{2}$ , SW $\frac{1}{4}$   
 Sec. 28: All  
 Sec. 29: All  
 Sec. 30: Lots 1,2,3,4, E $\frac{1}{2}$ , E $\frac{1}{2}$ W $\frac{1}{2}$   
 Sec. 31: Lots 1,2,3,4,6, NE $\frac{1}{4}$ , R $\frac{1}{2}$ NW $\frac{1}{4}$ , E $\frac{1}{2}$ SW $\frac{1}{4}$ , S $\frac{1}{2}$ SE $\frac{1}{4}$ , SE $\frac{1}{4}$ SE $\frac{1}{4}$   
 Sec. 32: All  
 Sec. 33: N $\frac{1}{2}$

Containing 44,349.63 acres, more or less

Unit Name Pinon Unit  
 Operator Pelto Oil Co.  
 County Santa Fe County, New Mexico

INSTI-TUTION	SEC.	TWP.	RGE.	SUBSECTION	DATE	ACREAGE		LESSEE
						RATIFIED	NOT RATIFIED	
C. S.	1	14N	8E	Lots 1, 2, 3, SE $\frac{1}{4}$ SW $\frac{1}{4}$ , S $\frac{1}{2}$ SE $\frac{1}{4}$				
C. S.	12	14N	8E	Lots 1, 2, NE $\frac{1}{4}$ , E $\frac{1}{2}$ NW $\frac{1}{4}$ , NE $\frac{1}{4}$ SW $\frac{1}{4}$ , N $\frac{1}{2}$ SE $\frac{1}{4}$	11/7/84	641.87		Mobil Prod. Tx. & NM Inc.
C. S.	14	14N	8E	SE $\frac{1}{4}$ SW $\frac{1}{4}$				
C. S.	36	14N	8E	Lots 1, 2, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, N $\frac{1}{2}$ SE $\frac{1}{4}$ 11/7/84		523.27		Mobil Prod. Tx. & NM Inc.
C. S.	2	14N	9E	Lots 1, 2, 3, 4, S $\frac{1}{2}$ N $\frac{1}{2}$ , S $\frac{1}{2}$				
C. S.	6	14N	9E	Lot 7, SE $\frac{1}{4}$ SW $\frac{1}{4}$				
C. S.	7	14N	9E	Lots 1, 2, 3, SW $\frac{1}{4}$ NE $\frac{1}{4}$ , E $\frac{1}{2}$ NW $\frac{1}{4}$ , NE $\frac{1}{4}$ SW $\frac{1}{4}$ , NW $\frac{1}{4}$ SE $\frac{1}{4}$ 11/7/84		1,059.88		Mobil Prod. Tx. & NM Inc.
C. S.	16	14N	9E	All				
C. S.	32	14N	9E	NE $\frac{1}{4}$ , E $\frac{1}{2}$ NW $\frac{1}{4}$ , SW $\frac{1}{4}$ NW $\frac{1}{4}$ , W $\frac{1}{2}$ SW $\frac{1}{4}$ , SE $\frac{1}{4}$ SW $\frac{1}{4}$ , SW $\frac{1}{4}$ SE $\frac{1}{4}$ 11/7/84		1,080.00		Mobil Prod. Tx. & NM Inc.

OCD

Unit Name Pinon Unit  
 Operator Pelto Oil Co.  
 County Santa Fe County, New Mexico

DATE APPROVED	OCC CASE NO. 8386	EFFECTIVE DATE	TOTAL ACREAGE	STATE	FEDERAL	INDIAN-FEE	SEGREGATION CLAUSE	TERM
CPL 11/26/84 BLM: 11/28/84 OCD: 11/28/84	OCC ORDER NO. R-7743	November 28, 1984	44,349.63	3,305.02	13,790.92	27,253.64	MODIFIED	5 years & so long as

NOTE: The projected tracts listed below are those lands projected by the operator, Pelto Oil Co., that are located either entirely or in part within the unsurveyed Ortiz Mine Grant.

UNIT AREA

TOWNSHIP 13 NORTH, RANGE 8 EAST, N.M.P.M.

Sec. 1: Lots 1,2,3,4,5,6,7,8, E $\frac{1}{2}$ , E $\frac{1}{4}$ , W $\frac{1}{2}$   
 Sec. 1: W $\frac{1}{2}$ W $\frac{1}{2}$  (projected)

Sec. 2: All (projected)

Sec. 3: All (projected)

Sec. 4: All (projected)

Sec. 5: All (projected)

Sec. 6: All (projected)

Sec. 7: E $\frac{1}{2}$  (projected)

Sec. 8: All (projected)

Sec. 9: All (projected)

Sec. 10: All (projected)

Sec. 11: All (projected)

Sec. 12: Lots 1,2,5,6, E $\frac{1}{2}$ NW $\frac{1}{4}$

Sec. 12: W $\frac{1}{2}$ W $\frac{1}{2}$ W $\frac{1}{2}$  (projected)

Sec. 14: W $\frac{1}{2}$  (projected)

Sec. 15: All (projected)

Sec. 16: All (projected)

Sec. 17: All (projected)

Sec. 20: E $\frac{1}{2}$  (projected)

Sec. 21: All (projected)

Sec. 22: All (projected)

Sec. 23: W $\frac{1}{2}$  (Projected)

Sec. 26: NW $\frac{1}{4}$  (projected)

Sec. 27: All (projected)

Sec. 28: All (projected)

Sec. 29: E $\frac{1}{2}$  (projected)

Sec. 32: All (projected)

Sec. 33: All (projected)

Sec. 34: NE $\frac{1}{4}$ , SW $\frac{1}{4}$  (projected)

**TERMINATED**

**EFFECTIVE DATE 4.28.86**

**APPROVAL DATE 5.21.86**

*3RD WELL ON UNIT WAS*

*NOT TIMELY DRILLED*

TOWNSHIP 13 NORTH, RANGE 9 EAST, N.M.P.M.

Sec. 6: Lots 1,2,3,4, NE $\frac{1}{4}$ , SE $\frac{1}{4}$ NW $\frac{1}{4}$

TOWNSHIP 14 NORTH, RANGE 8 EAST, N.M.P.M.

Sec. 1: Lots 1,2,3, E $\frac{1}{2}$ , E $\frac{1}{4}$ W $\frac{1}{2}$ , NW $\frac{1}{4}$ NW $\frac{1}{4}$

Sec. 12: Lots 1,2,3,4, E $\frac{1}{2}$ , E $\frac{1}{4}$ W $\frac{1}{2}$

Sec. 13: Lot 1, E $\frac{1}{2}$ , E $\frac{1}{4}$ W $\frac{1}{2}$ , SW $\frac{1}{4}$ NW $\frac{1}{4}$ , W $\frac{1}{2}$ SW $\frac{1}{4}$

Sec. 14: Lots 1,2, S $\frac{1}{2}$ NE $\frac{1}{4}$ , S $\frac{1}{2}$

Sec. 23: All

Sec. 24: All

Sec. 25: Lots 4,5,6,7,8,9,10,11,12,13,14,15,16,17

Sec. 26: Lots 6,7,8,9,10

Sec. 26: S $\frac{1}{2}$ N $\frac{1}{2}$ , S $\frac{1}{2}$  (projected)

Sec. 27: Lots 1,2,3,4,5,6,7

Sec. 27: S $\frac{1}{2}$ N $\frac{1}{2}$ , S $\frac{1}{2}$  (projected)

Sec. 28: S $\frac{1}{2}$ N $\frac{1}{2}$ , S $\frac{1}{2}$  (projected)

Sec. 29: S $\frac{1}{2}$ N $\frac{1}{2}$ , S $\frac{1}{2}$  (projected)

Sec. 30: SpN $\frac{1}{2}$ , S $\frac{1}{2}$  (projected)

Sec. 31: All (projected)

Sec. 32: All (projected)

Sec. 33: All (projected)

Sec. 34: All (projected)

Sec. 35: All (projected)

Sec. 36: Lots 1,2,4,5,6,7,8,9,10,11,12,13, N $\frac{1}{2}$ SE $\frac{1}{4}$

Sec. 36: W $\frac{1}{2}$ W $\frac{1}{2}$  (projected)

TOWNSHIP 14 NORTH, RANGE 9 EAST, N.M.P.M.

Sec. 1: Lots 1,2,3,4, S $\frac{1}{2}$ N $\frac{1}{2}$ , S $\frac{1}{2}$

Sec. 2: Lots 1,2,3,4, S $\frac{1}{2}$ N $\frac{1}{2}$ , S $\frac{1}{2}$

Sec. 3: Lots 1,2,3,4, S $\frac{1}{2}$ N $\frac{1}{2}$ , S $\frac{1}{2}$

PINON UNIT AREA CONTINUED

TOWNSHIP 14 NORTH, RANGE 9 EAST, CONTINUED.....

- Sec. 4: Lots 1,2,3,4, S $\frac{1}{2}$ N $\frac{1}{2}$ , S $\frac{1}{2}$
- Sec. 5: Lots 1,2,3,4, S $\frac{1}{2}$ N $\frac{1}{2}$ , S $\frac{1}{2}$
- Sec. 6: Lots 1,2,3,4, S $\frac{1}{2}$ N $\frac{1}{2}$ , S $\frac{1}{2}$
- Sec. 7: Lots 1,2,3,4, E $\frac{1}{2}$ , E $\frac{1}{2}$ N $\frac{1}{2}$
- Sec. 8: All
- Sec. 9: All
- Sec. 10: All
- Sec. 11: All
- Sec. 12: All
- Sec. 13: All
- Sec. 14: All
- Sec. 15: All
- Sec. 16: All
- Sec. 17: All
- Sec. 18: Lots 1,2,3,4, E $\frac{1}{2}$ , E $\frac{1}{2}$ W $\frac{1}{2}$
- Sec. 19: Lots 1,2,3,4, E $\frac{1}{2}$ , E $\frac{1}{2}$ W $\frac{1}{2}$
- Sec. 20: All
- Sec. 21: All
- Sec. 22: All
- Sec. 23: All
- Sec. 24: NW $\frac{1}{4}$
- Sec. 27: N $\frac{1}{2}$ , SW $\frac{1}{4}$
- Sec. 28: All
- Sec. 29: All
- Sec. 30: Lots 1,2,3,4, E $\frac{1}{2}$ , E $\frac{1}{2}$ W $\frac{1}{2}$
- Sec. 31: Lots 1,2,3,4,6, NE $\frac{1}{4}$ , R $\frac{1}{2}$ NW $\frac{1}{4}$ , E $\frac{1}{2}$ SW $\frac{1}{4}$ , S $\frac{1}{2}$ SE $\frac{1}{4}$ , SE $\frac{1}{4}$ SE $\frac{1}{4}$
- Sec. 32: All
- Sec. 33: N $\frac{1}{2}$

TERMINATED  
 EFFECTIVE DATE 4-29-80  
 APPROVAL DATE 5-21-86  
 BRD WELL ON UNIT  
 WAS NOT TIMELY DRILLED

Containing 44,349.63 acres, more or less

Unit Name Pinon Unit  
 Operator Pelto Oil Co.  
 County Santa Fe County, New Mexico

STATE TRACT NO.	LEASE NO.	INSTI-TUTION	SEC.	TWP.	RGE.	SUBSECTION	DATE	ACREAGE	
								RATIFIED ACRES	NOT RATIFIED
8	LG-2449-4	C. S.	1	14N	8E	Lots 1, 2, 3, SE $\frac{1}{4}$ SW $\frac{1}{4}$ , S $\frac{1}{2}$ SE $\frac{1}{4}$			
		C. S.	12	14N	8E	Lots 1, 2, NE $\frac{1}{4}$ , E $\frac{1}{2}$ NW $\frac{1}{4}$ , NE $\frac{1}{4}$ SW $\frac{1}{4}$ , N $\frac{1}{2}$ SE $\frac{1}{4}$	11/7/84	641.87	Mobil Prod. Tx. & NM Inc.
		C. S.	14	14N	8E	SE $\frac{1}{4}$ SW $\frac{1}{4}$		523.27	Mobil Prod. Tx. & NM Inc.
9.	LG-2450-4	C. S.	36	14N	8E	Lots 1, 2, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, N $\frac{1}{2}$ SE $\frac{1}{4}$	11/7/84		
		C. S.	2	14N	9E	Lots 1, 2, 3, 4, S $\frac{1}{2}$ N $\frac{1}{2}$ , S $\frac{1}{2}$			
10.	LG-2451-4	C. S.	6	14N	9E	Lot 7, SE $\frac{1}{4}$ SW $\frac{1}{4}$			
		C. S.	7	14N	9E	Lots 1, 2, 3, SW $\frac{1}{4}$ NE $\frac{1}{4}$ , E $\frac{1}{2}$ NW $\frac{1}{4}$ , NE $\frac{1}{4}$ SW $\frac{1}{4}$ , NW $\frac{1}{4}$ SE $\frac{1}{4}$	11/7/84	1,059.88	Mobil Prod. Tx. & NM Inc.
11	LG-2452-4	C. S.	16	14N	9E	All			
		C. S.	32	14N	9E	NE $\frac{1}{4}$ , E $\frac{1}{2}$ NW $\frac{1}{4}$ , SW $\frac{1}{4}$ NW $\frac{1}{4}$ , W $\frac{1}{2}$ SW $\frac{1}{4}$ , SE $\frac{1}{4}$ SW $\frac{1}{4}$ , SW $\frac{1}{4}$ SE $\frac{1}{4}$	11/7/84	1,080.00	Mobil Prod. Tx. & NM Inc.

**TERMINATED**  
 EFFECTIVE DATE 8-28-86  
 APPROVAL DATE 8-21-86

*3RD WELL ON UNIT  
 WAS NOT TIMELY DRILLED*



TONEY ANAYA  
GOVERNOR

STATE OF NEW MEXICO  
ENERGY AND MINERALS DEPARTMENT  
OIL CONSERVATION DIVISION

50 YEARS



1935 - 1985

POST OFFICE BOX 2088  
STATE LAND OFFICE BUILDING  
SANTA FE, NEW MEXICO 87501  
(505) 827-5800

April 15, 1985

#8386

Pelto Oil Company  
One Allen Center  
Suite 1800  
500 Dallas Street  
Houston, Texas 77002

Attention: Bruce L. Taylor

Re: Amendment to Pinon Unit  
Agreement dated November  
2, 1984, Santa Fe County,  
New Mexico

Dear Mr. Taylor:

The above referenced submittal has been approved by the New Mexico Oil Conservation Division effective this date. Such approval is contingent upon like approval by the New Mexico Commissioner of Public Lands and the Bureau of Land Management.

Sincerely,

ROY E. JOHNSON  
Senior Petroleum Geologist

REJ/dp

cc: Commissioner of Public Lands - Santa Fe  
Bureau of Land Management - Albuquerque  
OCD District Office - Santa Fe

# State of New Mexico



JIM BACA  
COMMISSIONER

## Commissioner of Public Lands

April 25, 1985

P.O. BOX 1148  
SANTA FE, NEW MEXICO 87504-1148  
Express Mail Delivery Uses  
310 Old Santa Fe Trail  
Santa Fe, New Mexico 87501

Northwest Pipeline Corporation  
P. O. Box 1526  
Salt Lake City, Utah 84110-1526

Re: Cox Canyon Unit  
San Juan County, New Mexico  
1985 Drilling Program

ATTENTION: Mr. Darrell L. Gillen

Gentlemen:

The Commissioner of Public Lands has this date approved your 1985 Drilling Program for the Cox Canyon Unit Area, San Juan County, New Mexico. Such program provides for the drilling of no additional wells during the calendar year 1985. Our approval is subject to like approval by the New Mexico Oil Conservation Division and the Bureau of Land Management.

Enclosed is an approved copy for your files.

Very truly yours,

JIM BACA  
COMMISSIONER OF PUBLIC LANDS

BY: *Ray D. Graham*  
RAY D. GRAHAM, Director  
Oil and Gas Division  
AC 505/827-5744

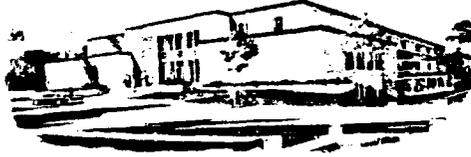
JB/RDG/pm  
encls.

cc: OCD-Santa Fe, New Mexico  
BLM-Albuquerque, New Mexico Attn: Fluids Branch  
BLM-Roswell, New Mexico Attn: Mr. Armando Lopez

State of New Mexico



JIM BACA  
COMMISSIONER



Commissioner of Public Lands

April 25, 1985

P.O. BOX 1148  
SANTA FE, NEW MEXICO 87504-1148  
Express Mail Delivery Uses  
310 Old Santa Fe Trail  
Santa Fe, New Mexico 87501

Northwest Pipeline Corporation  
P. O. Box 1526  
Salt Lake City, Utah 84110-1526

Re: San Juan 30-5 Unit  
Rio Arriba County, New Mexico  
1985 Drilling Program

ATTENTION: Mr. Darrell L. Gillen

Gentlemen:

The Commissioner of Public Lands has this date approved your 1985 Drilling Program for the San Juan 30-5 Unit Area, Rio Arriba County, New Mexico. Such program provides for the drilling of the Unit Well No. 61, on the E/2 of Section 15, Township 30 North, Range 5 West to test the Mesaverde Formation. Our approval is subject to like approval by the New Mexico Oil Conservation Division and the Bureau of Land Management.

Enclosed is an approved copy for your files.

Very truly yours,

JIM BACA  
COMMISSIONER OF PUBLIC LANDS

BY: *Ray D. Graham*  
RAY D. GRAHAM, Director  
Oil and Gas Division  
AC 505/827-5744

JB/RDG/pm  
encls.

cc: OCD-Santa Fe, New Mexico  
BLM-Albuquerque, New Mexico Attn: Fluids Branch  
BLM-Roswell, New Mexico Attn: Mr. Armando Lopez

# State of New Mexico



JIM BACA  
COMMISSIONER

## Commissioner of Public Lands

April 25, 1985

P.O. BOX 1148  
SANTA FE, NEW MEXICO 87504-1148  
Express Mail Delivery Use:  
310 Old Santa Fe Trail  
Santa Fe, New Mexico 87501

Northwest Pipeline Corporation  
P. O. Box 1526  
Salt Lake City, Utah 84110-1526

Re: San Juan 32-7 Unit  
San Juan County, New Mexico  
1985 Drilling Program

ATTENTION: Mr. Darrell L. Gillen

Gentlemen:

The Commissioner of Public Lands has this date approved your 1985 Drilling Program for the San Juan 32-7 Unit Area, San Juan County, New Mexico. Such program proposes to drill the Unit Well No. 83, in the W/2 of Section 28, Township 32 North, Range 7 West, to test the Pictured Cliffs/Mesaverde Formations. Our approval is subject to like approval by the New Mexico Oil Conservation Division and the Bureau of Land Management.

Enclosed is an approved copy for your files.

Very truly yours,

JIM BACA  
COMMISSIONER OF PUBLIC LANDS

BY: *Ray D. Graham*  
RAY D. GRAHAM, Director  
Oil and Gas Division  
AC 505/827-5744

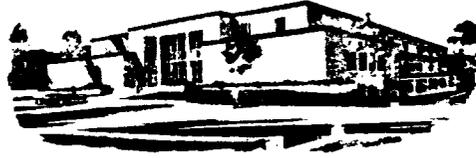
JB/RDG/pm  
encls.

cc: OCD-Santa Fe, New Mexico  
BLM-Albuquerque, New Mexico Attn: Fluids Branch  
BLM-Roswell, New Mexico Attn: Mr. Armando Lopez

State of New Mexico



JIM BACA  
COMMISSIONER



Commissioner of Public Lands

April 25, 1985

P.O. BOX 1148  
SANTA FE, NEW MEXICO 87504-1148  
Express Mail Delivery Uses  
310 Old Santa Fe Trail  
Santa Fe, New Mexico 87501

Northwest Pipeline Corporation  
P. O. Box 1526  
Salt Lake City, Utah 84110-1526

Re: San Juan 29-5 Unit  
Rio Arriba County, New Mexico  
1985 Drilling Program

ATTENTION: Mr. Darrell L. Gillen

Gentlemen:

The Commissioner of Public Lands has this date approved your 1985 Drilling Program for the San Juan 29-5 Unit Area, Rio Arriba County, New Mexico. Such program proposes to drill the Unit Well No. 107 in the W/2 of Section 2, Township 29 North, Range 5 West to test the Pictured Cliffs/Mesaverde Formation. Our approval is subject to like approval by the New Mexico Oil Conservation Division and the Bureau of Land Management.

Enclosed is an approved copy for your files.

Very truly yours,

JIM BACA  
COMMISSIONER OF PUBLIC LANDS

BY: *Ray D. Graham*  
RAY D. GRAHAM, Director  
Oil and Gas Division  
AC 505/827-5744

JB/RDG/pm  
encls.

cc: OCD-Santa Fe, New Mexico  
BLM-Albuquerque, New Mexico Attn: Fluids Branch  
BLM-Roswell, New Mexico Attn: Mr. Armando Lopez

State of New Mexico



JIM BACA  
COMMISSIONER

Commissioner of Public Lands

April 25, 1985

Northwest Pipeline Corporation  
P. O. Box 1526  
Salt Lake City, Utah 84110-1526

P.O. BOX 1148  
SANTA FE, NEW MEXICO 87504-1148  
Express Mail Delivery User  
310 Old Santa Fe Trail  
Santa Fe, New Mexico 87501

Re: Rosa Unit  
San Juan and Rio Arriba  
Counties, New Mexico  
1985 Drilling Program

ATTENTION: Mr. Darrell L. Gillen

Gentlemen:

The Commissioner of Public Lands has this date approved your 1985 Drilling Program for the Rosa Unit Area, San Juan and Rio Arriba Counties, New Mexico. Such program provides for the drilling of the Unit Well Nos. 119, 120, 121, 122, 123, 124, 125, 126, 127 and 128 to test the Gallup/Dakota formations. Our approval is subject to like approval by the New Mexico Oil Conservation Division and the Bureau of Land Management.

Enclosed is an approved copy for your files.

Very truly yours,

JIM BACA  
COMMISSIONER OF PUBLIC LANDS

BY: *Ray D. Graham*  
RAY D. GRAHAM, Director  
Oil and Gas Division  
AC 505/827-5744

JB/RDG/pm  
encls.

cc: OCD-Santa Fe, New Mexico  
BLM-Albuquerque, New Mexico Attn: Fluids Branch  
BLM-Roswell, New Mexico Attn: Mr. Armando Lopez

State of New Mexico



JIM BACA  
COMMISSIONER

Commissioner of Public Lands

April 25, 1985

P.O. BOX 1148  
SANTA FE, NEW MEXICO 87504-1148  
Express Mail Delivery User  
310 Old Santa Fe Trail  
Santa Fe, New Mexico 87501

Northwest Pipeline Corporation  
P. O. Box 1526  
Salt Lake City, Utah 84110-1526

Re: San Juan 32-8 Unit  
San Juan County, New Mexico  
1985 Drilling Program

ATTENTION: Darrell L. Gillen

Gentlemen:

The Commissioner of Public Lands has this date approved your 1985 Drilling Program for the San Juan 32-8 Unit, San Juan County, New Mexico. Such program proposes to drill the Unit Well No. 50, on The W/2 of Section 28, Township 32 North, Range 8 West, to test the Mesaverde Formation. Our approval is subject to like approval by the New Mexico Oil Conservation Division and the Bureau of Land Management.

Enclosed is an approved copy for your files.

Very truly yours,

JIM BACA  
COMMISSIONER OF PUBLIC LANDS

BY: *Ray D. Graham*  
RAY D. GRAHAM, Director  
Oil and Gas Division  
AC 505/827-5744

JB/RDG/pm  
encls.

cc: OCD-Santa Fe, New Mexico  
BLM-Albuquerque, New Mexico Attn: Fluids Branch  
BLM-Roswell, New Mexico Attn: Mr. Armando Lopez



OK - 4-15-85

April 11, 1985

REJ

Mr. Robert Kent  
Bureau of Land Management  
505 Marquett NW, Room 815  
Albuquerque, New Mexico

Mr. Michael Stogner  
Energy & Minerals Dept.  
Oil Conservation Division  
310 Old Santa Fe Trail  
Santa Fe, New Mexico 87501

Mr. Jim Baca  
Commissioner of Public Lands  
c/o Mr. Ray D. Graham  
Director Oil & Gas Division  
Room 138  
310 Old Santa Fe Trail  
Santa Fe, New Mexico 87501

Re: Amendment to Pinon Unit Agreement  
dated November 2, 1984  
Santa Fe County, New Mexico

Gentlemen:

Pelto has previously sought approval of a location in Section 26, T14N-R8E, to be our Pinon Unit #2 Well. The BLM responded that said location was not acceptable, however would be granted if Pelto would agree to changing the Unit from a two well to a three well commitment (copy enclosed for your reference).

With the above in mind, Pelto Oil Company hereby requests your approval of our amending Section 9 of the existing Unit Agreement to provide for a three well commitment. Enclosed are substitution pages reflecting this change along with the required number of Ratifications from all of the original signatory parties to said Unit Agreement signifying their respective acceptance of this amendment.

In the interest of time, we also request your approval of the location for the remaining two commitment wells. The current location planned for these wells are:

1. Pinon Unit #2 well - T14N-R9E, Section 21:  
SE/4 NW/4, to a depth of 5000' or a depth sufficient to penetrate and evaluate the Dakota formation whichever is the lesser.
2. Pinon Unit #3 well - T14N-R8E, Protracted Section 26:  
2583' FSL, 1528' FEL, to a depth of 7500' or to a depth sufficient to penetrate and evaluate the Dakota formation whichever is the lesser.

April 11, 1985  
Page Two

With regard to sequence, we will prefer to drill the Pinon Unit #3 location first, followed by the Pinon Unit #2 location last.

As time is of the essence, we respectfully request your response to the above at your earliest convenience.

Yours very truly,

PELTO OIL COMPANY

A handwritten signature in black ink that reads "Bruce L. Taylor". The signature is written in a cursive style with a large, prominent "B" and "T".

Bruce L. Taylor

BLT:mb



## United States Department of the Interior

Pinon Unit (015)

BUREAU OF LAND MANAGEMENT  
ALBUQUERQUE DISTRICT OFFICE505 Marquette, N. W.  
P.O. Box 6770  
Albuquerque, New Mexico 87197-6770

Pelto Oil Company  
Attention: Bruce L. Taylor  
One Allen Center, Suite 1800  
500 Dallas Street  
Houston, Texas 77002

Gentlemen:

In a letter dated March 4, 1985, Pelto Oil Company requested approval to change the location of the second unit test well from section 21, T. 14 N., R. 9 W. to section 26, T. 14 N., R. 8 E., Santa Fe County, New Mexico.

Two wells have been drilled in the center part of the unit. They are the State No. 1 and Ortiz No. 1. The State No. 1 was drilling in section 36, T. 14 N., R. 8 W., and the Ortiz No. 1 was drilled in section 26, T. 14 N., R. 8 E. Pelto requests approval to drill their second unit obligation well in section 26 which would make it an offset to the Ortiz No. 1 well.

After a meeting with representatives from Chace Oil Company, Inc., Chace submitted additional data to show why they feel that a well drilled at the requested location would have a good chance of encountering oil and gas. Chace Oil bases most of their supporting data on the fact that the Ortiz No. 1 Well had several good oil and gas shows but had to be abandoned due to problems that were encountered in completing the well. Chace Oil feels that they can avoid these problems and establish a producing well if they are allowed to drill an offset to the Ortiz No. 1.

After reviewing the additional information submitted by Chace Oil we feel that the center part of the unit is already adequately tested. If this information had been available at the unit meeting we would have required a three well drilling commitment with the additional well located in the center of the unit.

We cannot approve the requested location as the second unit well. We would approve an amendment to the unit agreement changing from a two well to a three well drilling commitment with the third well being drilled at your proposed location in section 26. The two remaining obligations wells could then be drilled in the sequence selected by the unit operator.

The agreement may be modified by submitting a formal request along with an amended section 9 and obtaining consent and ratification from all parties who ratified the original agreement. We would also advise checking with the state to see if they have any additional requirements.

Sincerely yours,

A handwritten signature in cursive script that reads "Guy C. Stephens". The signature is written in dark ink and is positioned above the typed name.

For District Manager







RATIFICATION AND JOINDER OF UNIT AGREEMENT (AS AMENDED)

In consideration of the execution of the Unit Agreement for the Development and Operation of the Pinon Unit Area, County of Santa Fe, State of New Mexico, dated November 2, 1984, in form approved on behalf of the Secretary of the Interior, the undersigned (whether one or more) hereby expressly joins said Unit Agreement and ratifies, approves, adopts and confirms said Unit Agreement as fully as though the undersigned has executed the original agreement.

This Ratification and Joinder shall acknowledge the undersigned's acceptance of the amendment and modification of Section 9 of the Pinon Unit Agreement dated November 2, 1984, to the extent that said Section 9 shall now provide for the Pinon Unit to be a three-well program.

This Ratification and Joinder shall be effective as to the undersigned's interests in any lands and leases, or interests therein, and royalties presently held or which may arise under existing option agreements or other interests in unitized substances, covering the lands within the Unit Area in which the undersigned may be found to have an oil or gas interest.

This Ratification and Joinder of Unit Agreement shall be binding upon the undersigned, his, her or its heirs, devisees, executors, assigns or successors in interest.

EXECUTED this 1st day of April, 1985.

MOBIL PRODUCING TEXAS & NEW MEXICO INC. *2/22*

*J. B. Huckabay*  
J. B. Huckabay, Attorney-in-Fact

TRACT(S) \_\_\_\_\_  
\_\_\_\_\_

Address: \_\_\_\_\_  
P. O. Box 633  
Midland, Texas 79702

STATE OF TEXAS )  
COUNTY OF MIDLAND ) ss.

This instrument was acknowledged before me on April 1, 1985, by J. B. Huckabay as Attorney-in-Fact on behalf of Mobil Producing Texas & New Mexico Inc.

*Krista Allmond*  
Notary Public

My Commission Expires: 9-17-87



agreement or agreements entered into by and between the Unit Operator and the owners of working interests, whether one or more, separately or collectively. Any agreement or agreements entered into between the working interest owners and the Unit Operator as provided in this section, whether one or more, are herein referred to as the "unit operating agreement." Such unit operating agreement shall also provide the manner in which the working interest owners shall be entitled to receive their respective proportionate and allocated share of the benefits accruing hereto in conformity with their underlying operating agreements, leases, or other independent contracts, and such other rights and obligations as between Unit Operator and the working interest owners as may be agreed upon by Unit Operator and the working interest owners; however, no such unit operating agreement shall be deemed either to modify any of the terms and conditions of this unit agreement or to relieve the Unit Operator of any right or obligation established under this unit agreement, and in case of any inconsistency or conflict between this agreement and the unit operating agreement, this agreement shall govern. Two copies of any unit operating agreement executed pursuant to this section shall be filed in the proper Bureau of Land Management office and one true copy with the Land Commissioner, and one true copy with the Division prior to approval of this unit agreement.

8. RIGHTS AND OBLIGATIONS OF UNIT OPERATOR. Except as otherwise specifically provided herein, the exclusive right, privilege, and duty of exercising any and all rights of the parties hereto which are necessary or convenient for prospecting for, producing, storing, allocating, and distributing the unitized substances are hereby delegated to and shall be exercised by the Unit Operator as herein provided. Acceptable evidence of title to said rights shall be deposited with Unit Operator and, together with this agreement, shall constitute and define the rights, privileges, and obligations of Unit Operator. Nothing herein, however, shall be construed to transfer title to any land or to any lease or operating agreement, it being understood that under this agreement the Unit Operator, in its capacity as Unit Operator, shall exercise the rights of possession and use vested in the parties hereto only for the purposes herein specified.

9. DRILLING TO DISCOVERY. Within 6 months after the effective date hereof, the Unit Operator shall commence to drill an adequate test well at a location approved by the AO, if on Federal land, or by the Land Commissioner, if on State land, and by the Division if on Fee land, unless on such effective date a well is being drilled in conformity with the terms hereof, and thereafter continue such drilling diligently until

100 feet of the Dakota formation  
has been tested or until at a lesser depth unitized substances shall be discovered which can be produced in paying quantities (to-wit: quantities sufficient to repay the costs of drilling, completing, and producing operations, with a reasonable profit) or the Unit Operator shall at any time establish to the satisfaction of the AO if on Federal land, or the Land Commissioner if on State land, or the Division if located on Fee land, that further drilling of said well would be unwarranted or impracticable, provided, however, that Unit Operator shall not in any event be required to drill said well to a depth in excess of 4,000 feet. Until the discovery of unitized substances capable of being produced in paying quantities, the Unit Operator shall continue drilling one well at a time, allowing not more than 6 months between the completion of one well and the commencement of drilling operations for the next well, until a well capable of producing unitized substances in paying quantities is completed to the satisfaction of the AO if it be on Federal land or of the Land Commissioner if on State land, or the Division if on Fee land, or until it is reasonably proved that the unitized land is incapable of producing unitized substances in paying quantities in the formation drilled hereunder. Nothing in this section shall be deemed to limit the right of the Unit Operator to resign as provided in Section 5, hereof, or as requiring Unit Operator to commence or continue any drilling during the period pending such resignation becoming effective in order to comply with the requirements of this section.

Notwithstanding anything in this unit agreement to the contrary, except Section 25, "Unavoidable Delay", three (3) wells shall be drilled with not more than six (6) months time elapsing between the completion of the first well and commencement of drilling operations for the second well

and with not more than 6-months time elapsing between completion of the second well and the commencement of drilling operation for the third well; regardless of whether a discovery has been made in any well under this provision. Both the initial well and the second well must be drilled in compliance with the above specified formation or depth requirements in order to meet the dictates of this section; and the second well must be located a minimum of 2½ miles from the initial well in order to be accepted by the AO and the Land Commissioner as the second unit test well, within the meaning of this section. The third test well shall be diligently drilled, at a location approved by the AO and the Land Commissioner, to test the upper 100 feet of the Dakota Formation or to a depth of 5,000 feet, whichever is the lesser, and must be a minimum of 2½ miles from both the initial and the second test wells. Nevertheless, in the event of the discovery of unitized substances in paying quantities by any well, this unit agreement shall not terminate for failure to complete the three well program, but the unit area shall be contracted automatically, effective the first day of the month following the default, to eliminate by subdivisions (as defined in Section 2(e) hereof) all lands not then entitled to be in a participating area.

The AO and Land Commissioner may modify any of the drilling requirements of this section by granting reasonable extensions of time when, in their opinion, such action is warranted.

Upon failure to commence any well as provided for in this section within the time allowed, prior to the establishment of a participating area, including any extension of time granted by the AO and the Land Commissioner, this agreement will automatically terminate. Upon failure to continue drilling diligently any well commenced hereunder, the AO and the Land Commissioner may, after 15 days notice to the Unit Operator, declare this unit agreement terminated. The parties to this agreement may not initiate a request to voluntarily terminate this agreement during the first 6 months of its term unless at least one obligation well has been drilled in accordance with the provisions of this section.

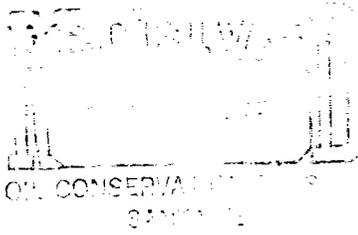
10. PLAN OF FURTHER DEVELOPMENT AND OPERATION. Within 6 months after completion of a well capable of producing unitized substances in paying quantities, the Unit Operator shall submit for the approval of the AO, the Land Commissioner and Division, an acceptable plan of development and operation for the unitized land which, when approved by the AO, the Land Commissioner and division, shall constitute the further drilling and development obligations of the Unit Operator under this agreement for the period specified therein. Thereafter, from time to time before the expiration of any existing plan, the Unit Operator shall submit for the approval of the AO, the Land Commissioner and Division a plan for an additional specified period for the development and operation of the unitized land. Subsequent plans should normally be filed on a calendar year basis not later than March 1 each year. Any proposed modification or addition to the existing plan should be filed as a supplement to the plan.

Any plan submitted pursuant to this section shall provide for the timely exploration of the unitized area, and for the diligent drilling necessary for determination of the area or areas capable of producing unitized substances in paying quantities in each and every productive formation. This plan shall be as complete and adequate as the AO, the Land Commissioner and Division may determine to be necessary for timely development and proper conservation of the oil and gas resources of the unitized area and shall:

(a) specify the number and locations of any wells to be drilled and the proposed order and time for such drilling; and

(b) Provide a summary of operations and production for the previous year.

Plans shall be modified or supplemented when necessary to meet changed conditions or to protect the interest of all parties to this agreement. Reasonable diligence shall be exercised in complying with the obligations of the approved plan of development and operation. The AO and the Land Commissioner are authorized to grant a reasonable extension of the 6 month period herein prescribed for submission of an initial plan of development and on operation where such action is justified because of unusual conditions or circumstances.



Bureau of Land Management  
Albuquerque District Office  
Minerals Division  
P.O. Box 6770  
Albuquerque, NM 87197-6770

Pinon Unit (015)

APR 19 1985

Pelto Oil Company  
Attention: Mr. Bruce L. Taylor  
One Allen Center, Suite 1800  
500 Dallas Street  
Houston, Texas 77002

Gentlemen:

An approved copy of the amendment to Section 9 of the Pinon Unit Agreement, Santa Fe County, New Mexico is enclosed. The amendment changes the drilling commitment from a two well to a three well drilling program. The amendment has been agreed to and ratified by all of the current interests committed to the unit. The location of the third unit test well in section 26, T. 14 N., R. 8 E., to a depth of 7,500 feet or to a depth sufficient to penetrate and evaluate the Dakota Formation is also approved.

You are requested to furnish all interested principals with appropriate evidence of this approval.

Sincerely yours,

[Orig. Signed] - Sid Vogelwohl

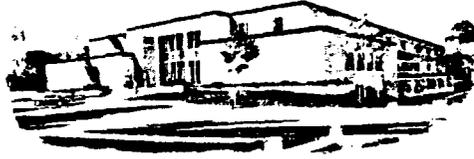
For District Manager

Enclosure

cc:  
AMOC  
Comm. of Public Lands  
Micrographics (w/enc)  
FRAH Fluids Section (w/enc)  
File: Pinon Unit  
O&G Chron

015:RKent:tt:4/17/85:0624M

# State of New Mexico



JIM BACA  
COMMISSIONER

## Commissioner of Public Lands

April 23, 1985

P.O. BOX 1148  
SANTA FE, NEW MEXICO 87504-1148  
Express Mail Delivery Uses  
210 Old Santa Fe Trail  
Santa Fe, New Mexico 87501

Pelto Oil Company  
One Allen Center, Suite 1800  
500 Dallas Street  
Houston, Texas 77002

Re : Amendment to Pinon Unit Agreement  
Santa Fe County, New Mexico

ATTENTION: Mr. Bruce L. Taylor

Gentlemen:

This office is in receipt of your Application dated April 11, 1985, wherein Pelto Oil Company as operator of the Pinon Unit Area, has requested our approval to amend Section 9 of the existing Unit agreement to provide for a three well commitment. The Pinon Unit Well No. 2 will be drilled in the SE/4NW/4 of Section 21-14N-9E to a depth of 5000' or a depth sufficient to penetrate and evaluate the Dakota formation whichever is lesser. The Pinon Unit Well No. 3 will be drilled 2583' FSL, 1528' FEL, of protracted Section 26-14N-8E, to a depth of 7500' or a depth sufficient to penetrate and evaluate the Dakota formation whichever is the lesser.

The Commissioner of Public Lands has this date approved your proposed Amendment of the Pinon Unit Agreement. Our approval is subject to like approval by the New Mexico Oil Conservation Division and the Bureau of Land Management. Please disregard our approval letter of March 6, 1985.

Enclosed is an approved copy for your files.

Very truly yours,

JIM BACA  
COMMISSIONER OF PUBLIC LANDS

BY: *Ray D. Graham*  
RAY D. GRAHAM, Director  
Oil and Gas Division  
AC 505/827-5744

JB/RDG/pm  
encls.

cc: OCD-Santa Fe, New Mexico  
BLM-Albuquerque, New Mexico Attn: Mr. Robert Kent  
BLM-Roswell, New Mexico Attn: Mr. Armando Lopez



April 29, 1985

*MS.*

Mr. Jim Baca  
Commissioner of Public Lands  
c/o Mr. Ray D. Graham  
Director Oil & Gas Division  
Room 138  
310 Old Santa Fe Trail  
Santa Fe, New Mexico 87501

Mr. Michael Stogner  
Energy & Minerals Dept.  
Oil Conservation Division  
310 Old Santa Fe Trail  
Santa Fe County, New Mexico 87501

Re: Amendment to Pinon Unit Agmt.  
dtd. November 2, 1984  
Santa Fe County, New Mexico

Gentlemen:

Enclosed for your records is a copy of BLM approval of our amending the above captioned Unit Agreement from a two to a three well unit.

Yours very truly,

PELTO OIL COMPANY

*Bruce L. Taylor*  
Bruce L. Taylor

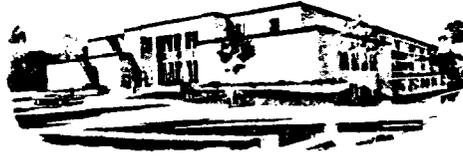
BLT:mb

Enclosure



JIM BACA  
COMMISSIONER

# State of New Mexico



## Commissioner of Public Lands

April 23, 1985



P.O. BOX 1148  
SANTA FE, NEW MEXICO 87504-1148  
Express Mail Delivery Used  
210 Old Santa Fe Trail  
Santa Fe, New Mexico 81501

Pelto Oil Company  
One Allen Center, Suite 1800  
500 Dallas Street  
Houston, Texas 77002

Re : Amendment to Pinon Unit Agreement  
Santa Fe County, New Mexico

ATTENTION: Mr. Bruce L. Taylor

Gentlemen:

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The Commissioner of Public Lands has this date approved your proposed Amendment of the Pinon Unit Agreement. Our approval is subject to like approval by the New Mexico Oil Conservation Division and the Bureau of Land Management. Please disregard our approval letter of March 6, 1985.

Enclosed is an approved copy for your files.

Very truly yours,

JIM BACA  
COMMISSIONER OF PUBLIC LANDS

BY: *Ray D. Graham*  
RAY D. GRAHAM, Director  
Oil and Gas Division  
AC 505/827-5744

JB/RDG/pm  
encls.

cc: OCD-Santa Fe, New Mexico  
BLM-Albuquerque, New Mexico Attn: Mr. Robert Kent  
BLM-Roswell, New Mexico Attn: Mr. Armando Lopez



TONEY ANAYA  
GOVERNOR

STATE OF NEW MEXICO  
ENERGY AND MINERALS DEPARTMENT  
OIL CONSERVATION DIVISION



April 15, 1985

Pelto Oil Company  
One Allen Center  
Suite 1800  
500 Dallas Street  
Houston, Texas 77002

Attention: Bruce L. Taylor

Re: Amendment to Pinon Unit  
Agreement dated November  
2, 1984, Santa Fe County,  
New Mexico

Dear Mr. Taylor:

The above referenced submittal has been approved by the New Mexico Oil Conservation Division effective this date. Such approval is contingent upon like approval by the New Mexico Commissioner of Public Lands and the Bureau of Land Management.

Sincerely,

ROY E. JOHNSON  
Senior Petroleum Geologist

REJ/dp

cc: Commissioner of Public Lands - Santa Fe  
Bureau of Land Management - Albuquerque  
OCD District Office - Santa Fe



# United States Department of the Interior

Pinon Unit (015)

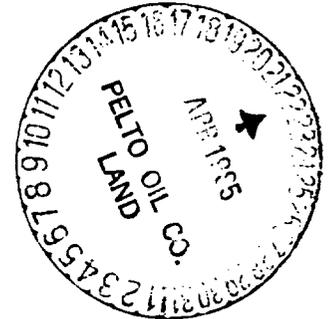
## BUREAU OF LAND MANAGEMENT ALBUQUERQUE DISTRICT OFFICE

505 Marquette, N.W.

P.O. Box 6770

Albuquerque, New Mexico 87197-6770

APR 19 1985



Pelto Oil Company  
Attention: Mr. Bruce L. Taylor  
One Allen Center, Suite 1800  
500 Dallas Street  
Houston, Texas 77002

Gentlemen:

An approved copy of the amendment to Section 9 of the Pinon Unit Agreement, Santa Fe County, New Mexico is enclosed. The amendment changes the drilling commitment from a two well to a three well drilling program. The amendment has been agreed to and ratified by all of the current interests committed to the unit. The location of the third unit test well in section 26, T. 14 N., R. 8 E., to a depth of 7,500 feet or to a depth sufficient to penetrate and evaluate the Dakota Formation is also approved.

You are requested to furnish all interested principals with appropriate evidence of this approval.

Sincerely yours,

For District Manager

Enclosure

agreement or agreements entered into by and between the Unit Operator and the owners of working interests, whether one or more, separately or collectively. Any agreement or agreements entered into between the working interest owners and the Unit Operator as provided in this section, whether one or more, are herein referred to as the "unit operating agreement." Such unit operating agreement shall also provide the manner in which the working interest owners shall be entitled to receive their respective proportionate and allocated share of the benefits accruing hereto in conformity with their underlying operating agreements, leases, or other independent contracts, and such other rights and obligations as between Unit Operator and the working interest owners as may be agreed upon by Unit Operator and the working interest owners; however, no such unit operating agreement shall be deemed either to modify any of the terms and conditions of this unit agreement or to relieve the Unit Operator of any right or obligation established under this unit agreement, and in case of any inconsistency or conflict between this agreement and the unit operating agreement, this agreement shall govern. Two copies of any unit operating agreement executed pursuant to this section shall be filed in the proper Bureau of Land Management office and one true copy with the Land Commissioner, and one true copy with the Division prior to approval of this unit agreement.

8. RIGHTS AND OBLIGATIONS OF UNIT OPERATOR. Except as otherwise specifically provided herein, the exclusive right, privilege, and duty of exercising any and all rights of the parties hereto which are necessary or convenient for prospecting for, producing, storing, allocating, and distributing the unitized substances are hereby delegated to and shall be exercised by the Unit Operator as herein provided. Acceptable evidence of title to said rights shall be deposited with Unit Operator and, together with this agreement, shall constitute and define the rights, privileges, and obligations of Unit Operator. Nothing herein, however, shall be construed to transfer title to any land or to any lease or operating agreement, it being understood that under this agreement the Unit Operator, in its capacity as Unit Operator, shall exercise the rights of possession and use vested in the parties hereto only for the purposes herein specified.

9. DRILLING TO DISCOVERY. Within 6 months after the effective date hereof, the Unit Operator shall commence to drill an adequate test well at a location approved by the AO, if on Federal land, or by the Land Commissioner, if on State land, and by the Division if on Fee land, unless on such effective date a well is being drilled in conformity with the terms hereof, and thereafter continue such drilling diligently until 100 feet of the Dakota formation has been tested or until at a lesser depth unitized substances shall be discovered which can be produced in paying quantities (to-wit: quantities sufficient to repay the costs of drilling, completing, and producing operations, with a reasonable profit) or the Unit Operator shall at any time establish to the satisfaction of the AO if on Federal land, or the Land Commissioner if on State land, or the Division if located on Fee land, that further drilling of said well would be unwarranted or impracticable, provided, however, that Unit Operator shall not in any event be required to drill said well to a depth in excess of 4,000 feet. Until the discovery of unitized substances capable of being produced in paying quantities, the Unit Operator shall continue drilling one well at a time, allowing not more than 6 months between the completion of one well and the commencement of drilling operations for the next well, until a well capable of producing unitized substances in paying quantities is completed to the satisfaction of the AO if it be on Federal land or of the Land Commissioner if on State land, or the Division if on Fee land, or until it is reasonably proved that the unitized land is incapable of producing unitized substances in paying quantities in the formation drilled hereunder. Nothing in this section shall be deemed to limit the right of the Unit Operator to resign as provided in Section 5, hereof, or as requiring Unit Operator to commence or continue any drilling during the period pending such resignation becoming effective in order to comply with the requirements of this section.

Notwithstanding anything in this unit agreement to the contrary, except Section 25, "Unavoidable Delay", three (3) wells shall be drilled with not more than six (6) months time elapsing between the completion of the first well and commencement of drilling operations for the second well

Approved APR 10 1935

-6-  
(Amended)

S. W. Engelroll  
Assistant District Manager  
for Minerals  
Albuquerque District

and with not more than 6-months time elapsing between completion of the second well and the commencement of drilling operation for the third well; regardless of whether a discovery has been made in any well under this provision. Both the initial well and the second well must be drilled in compliance with the above specified formation or depth requirements in order to meet the dictates of this section; and the second well must be located a minimum of 2½ miles from the initial well in order to be accepted by the AO and the Land Commissioner as the second unit test well, within the meaning of this section. The third test well shall be diligently drilled, at a location approved by the AO and the Land Commissioner, to test the upper 100 feet of the Dakota Formation or to a depth of 5,000 feet, whichever is the lesser, and must be a minimum of 2½ miles from both the initial and the second test wells. Nevertheless, in the event of the discovery of unitized substances in paying quantities by any well, this unit agreement shall not terminate for failure to complete the three well program, but the unit area shall be contracted automatically, effective the first day of the month following the default, to eliminate by subdivisions (as defined in Section 2(e) hereof) all lands not then entitled to be in a participating area.

The AO and Land Commissioner may modify any of the drilling requirements of this section by granting reasonable extensions of time when, in their opinion, such action is warranted.

Upon failure to commence any well as provided for in this section within the time allowed, prior to the establishment of a participating area, including any extension of time granted by the AO and the Land Commissioner, this agreement will automatically terminate. Upon failure to continue drilling diligently any well commenced hereunder, the AO and the Land Commissioner may, after 15 days notice to the Unit Operator, declare this unit agreement terminated. The parties to this agreement may not initiate a request to voluntarily terminate this agreement during the first 6 months of its term unless at least one obligation well has been drilled in accordance with the provisions of this section.

10. PLAN OF FURTHER DEVELOPMENT AND OPERATION. Within 6 months after completion of a well capable of producing unitized substances in paying quantities, the Unit Operator shall submit for the approval of the AO, the Land Commissioner and Division, an acceptable plan of development and operation for the unitized land which, when approved by the AO, the Land Commissioner and division, shall constitute the further drilling and development obligations of the Unit Operator under this agreement for the period specified therein. Thereafter, from time to time before the expiration of any existing plan, the Unit Operator shall submit for the approval of the AO, the Land Commissioner and Division a plan for an additional specified period for the development and operation of the unitized land. Subsequent plans should normally be filed on a calendar year basis not later than March 1 each year. Any proposed modification or addition to the existing plan should be filed as a supplement to the plan.

Any plan submitted pursuant to this section shall provide for the timely exploration of the unitized area, and for the diligent drilling necessary for determination of the area or areas capable of producing unitized substances in paying quantities in each and every productive formation. This plan shall be as complete and adequate as the AO, the Land Commissioner and Division may determine to be necessary for timely development and proper conservation of the oil and gas resources of the unitized area and shall:

(a) specify the number and locations of any wells to be drilled and the proposed order and time for such drilling; and

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