EXHIBIT "E" ENGINEERING & GEOLOGICAL REPORT MORROW PENNSYLVANIAN RESERVOIR OF BELL LAKE UNIT AREA

Set forth below is a summary of geological and engineering information pertinent to the first expansion of the initial participating area for the Morrow Formation of Pennsylvanian age in the Bell Lake Unit area.

<u>General</u>

In the Bell Lake Unit area the Morrow sands of Pennsylvanian age are found at depths from 13,500' to 14,500'. The Morrow section is present over the entire area, but the gas reservoirs occur as sand stringers and lenses in five major sands. The sands appear to be better developed on the flanks of the structure than on the crest.

The first gas production in the Morrow was found in Bell Lake State 3 No. 5 (non-commercial), approximately 4,200' south of Bell Lake Unit No. 18. The No. 5 well was drilled to a total depth of 16,100' in October 1958, and the Devonian Formation was found to be water productive. This well was plugged back and completed in the 1st and 4th Morrow sands with an initial calculated open flow potential of 7625 MCF gas per day. The well, now P&A, produced 2.7 MMMCF gas.

The second well completed in the Morrow sand was Bell Lake State No. 1-A (non-commercial), approximately 3,500' southeast of Bell Lake Unit No. 18. This well produced 3.6 MMMCF gas from the Devonian prior to being recompleted to the 1st and 2nd Morrow sands in July 1968. The Morrow in this well had a calculated absolute open flow potential of 1989 MCF gas per day. To September 1, 1977, Bell Lake State No. 1-A has produced 2.2 MMMCF gas.

Bell Lake Unit No. 14 was the well which caused the initial Morrow Participating Area.

Geology

The Bell Lake Unit area is described as a series of north-south trending anticlinal closures. (See Exhibit "C") The Morrow sands are present over the entire area, occurring in five generalized zones. Reservoir quality, thickness, and areal distribution vary widely in each of the zones. The 3rd and 4th Morrow sands (See Exhibit "D") are the productive zones in the Bell Lake Unit No. 18. The reservoir lithology, based on sample cutting descriptions taken from the Bell Lake Unit No. 18, located in NE/4 Section 36, T-23-S, R-33-E, is as follows:

Sandstone, white, tan, fine grained, some coarse grained, well-cemented to slightly friable, sub-angular quartz grains. Trace of glauconite grains at the top.

Bell Lake Unit No. 18

Bell Lake Unit No. 18, located 1980' FSL, 660' FEL, Sec. 36, T-23-S, R-33-E, was spudded September 18, 1976. Total depth 13,960' was reached January 9, 1977. The well was perforated and tested without stimulation on February 10 at a rate of 3 MMCFGPD. After connection to the pipeline the well was officially completed March 29, 1977 for a CAOF potential of 76.6 MMCFGPD from perforations in the 4th Morrow sand, 13,822-28, and 3rd Morrow, 13,762-76. From completion through August 31, 1977 the well has produced 2,882,927 MCF gas, 13,360 barrels condensate. During August 1977 it averaged 17,307 MCF gas per day, 79 barrels condensate. The high rate of production and current price of gas has already generated revenue sufficient to repay the cost of drilling, completing, and equipping. Monthly production is tabulated below:

	<u>MCF</u>	Barrels
March	105,093	459
April	570,839	2,647
May	580,127	2,678
June	547,461	2,563
July	542,878	2,557
August	536,529	2,456
	2,882,927	13,360

Bell Lake Unit No. 18 has encountered excellent reservoir conditions in the 3rd and 4th Morrow sands. Two BHP data points have been taken with the results shown below:

<u>Date</u>	BHP psig	P/Z	Cum. Prod.
April '77	6600	5882	0
July '77	5052	5017	1.8 MMMCF

Extrapolation of this data indicates recoverable reserves of 9.3 MMMCF gas.

Morrow productivity appears to be relatively insensitive to structural position. Depositional conditions not necessarily related to structure appear to be more influential on presence of gas and the deliverability of a well. These conditions are not well understood and are under intensive study in the Delaware Basin.

Other wells in this area have been completed in the 1st, 2nd and/or 4th Morrow sands. While each of these zones is present and identifiable in every well, suitable reservoir characteristics change from location to location as sand lenses open and close. Well No. 18 has encountered good development in the 3rd sand, whereas No. 1-A encountered only fair to poor development in the 1st and 4th sands. The latter well is located higher on the structure where reservoir-type sand development appears to deteriorate. The cross-section, Exhibit "D", depicts the change in producing interval and sand development, despite the fact that the well log for Well No. 1-A is of a type no longer in general use. Well Nos. 5 and 16 are interpreted to be separated by faulting from the reservoir in the participating area. Well No. 17 failed to find reservoir quality sand in the Morrow.

Statewide rules provide for 320-acre spacing for Morrow wells in pools not having special rules. Nevertheless, it is our present intention to develop Morrow gas on well spacing of 640 acres per well. The performance of Bell Lake Unit No. 18 would indicate the ability to drain this area provided there is continuity of pay section.

REVISED PLAN OF OPERATION/DEVELOPMENT FOR CALENDAR YEAR 1977 BELL LAKE UNIT (NO. 14-08-001-1066)

LEA COUNTY, NEW MEXICO

OCT 07 1977

TO THE OIL AND GAS SUPERVISOR (6) UNITED STATES GEOLOGICAL SURVEY P.O. BOX 1857 ROSWELL, NEW MEXICO 88201

COMMISSIONER OF PUBLIC LANDS (3) STATE OF NEW MEXICO P.O. BOX 1148 SANTA FE, NEW MEXICO 87501

OIL CONSERVATION COMMISSION (2) STATE OF NEW MEXICO P.O. BOX 2088 SANTA FE, NEW MEXICO 87501

Commission

Gentlemen:

Under date December 27, 1976, in compliance with Section 10 of the Bell Lake Unit Agreement dated May 12, 1953, Continental Oil Company, as Unit Operator, submitted for your approval a Plan of Operation/Development for the year 1977. It has become necessary to revise this plan as outlined below.

During the first six months of 1977, (1) Bell Lake Unit No. 15 has been plugged and abandoned, (2) Bell Lake Unit No. 16 has been re-entered for recompletion to a higher formation, (3) Bell Lake Unit No. 17 was found non-commercial in Morrow and Atoka formations and is being reviewed for completion up the hole, and (4) Bell Lake Unit No. 18 has been completed as an excellent producer from the Morrow sands and participating area application is being prepared.

Our proposed development during 1977 included plans to drill Bell Lake Unit No. 19 in Section 31, T-22-S, R-34-E, to test Pennsylvanian formations. Authorization to drill this well was not given by the Working Interest Owners, and it is now necessary to cancel plans for the drilling of this well.

It is respectfully requested that this Revised Plan of Operation/Development calling for no wells to be drilled during 1977 be approved.

CONTINENTAL OIL COMPANY

UNIT OPERATOR

APPROVED DATE

Commissioner of Public Lands

APPROVED DATE

Commissioner of Public Lands

APPROVED DATE

L. P. Thompson, Division Manager

DATE

DATE

DATE

DATE

DATE

10/18/77



L. P. Thompson Division Manager Production Department Hobbs Division Continental Oil Company P.O. Box 460 1001 North Turner Hobbs, New Mexico 88240 (505) 393-4141

7 0 3 1977

TI

September 28, 1977

Director, U.S. Geological Survey c/o Regional Oil & Gas Supervisor P.O. Drawer 1857 Roswell, New Mexico 88201

Commissioner of Public Lands State of New Mexico P.O. Box 1148 Santa Fe, New Mexico 87501

New Mexico Oil Conservation Commission P.O. Box 2088
Santa Fe, New Mexico 87501

Gentlemen:

Application for First Expansion of Morrow Participating Area - Bell Lake Unit, Lea County, New Mexico

Enclosed for your further handling is our application for the First Expansion of the Morrow Participating Area for the Bell Lake Unit as result of the completion of Well No. 18. Your early review and approval of this application will be sincerely appreciated.

Yours very truly,

L. P. Thompson

VTL/jj Enc



United States Department of the Interior

GEOLOGICAL SURVEY Conservation Division P. O. Box 26124 Albuquerque, New Mexico 87125

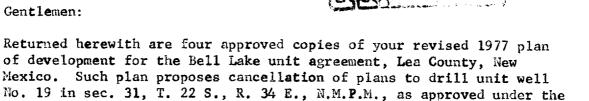
AUG 1 0 1977

of chase CIT CONSEBANTION COMM

Continental Oil Company Attention: Mr. L. P. Thompson P. O. Box 460 Hobbs, New Mexico 88240

original 1977 plan of development.

Gentlemen:



Approval of the revised 1977 plan of development will afford Continental Oil Company, unit operator, additional time in which to further evaluate recent drilling activity in and around the unit, and to formulate better plans for future development.

Sincerely yours,

(ORIG. SGD.) GENE F. DANIEL

ACTING Area Oil and Gas Supervisor

Enclosure

NMOGC, Santa Fe (ltr. only) This Copy for Com. Pub Tonda Com. Pub. Lands, Santa Fe (1tr. only)

State of New Mexico



PHIL R. LUCERO COMMISSIONER



Commissioner of Public Lands

July 29, 1977



P. O. BOX 1148
SANTA FE, NEW MEXICO 87501

Continental Oil Company P. U. Box 460 Hobbs, New Mexico 88240

> Re: REVISED PLAN OF OPERATION AND DEVELOPMENT FOR 1977 BELL LAKE UNIT LEA COUNTY, NEW MEXICO

ATTENTION: Mr. L. F. Thompson

Gentlemen:

The Commissioner of Public Lands has this date approved your revised Flan of Operation and Development for the calendar year 1977, for the Bell Lake Unit. Lea County, New Mexico. Your revised plan calls for the drilling of no wells during 1977. Our approval is subject to like approval by the United States Geological Survey and the New Mexico Oil Conservation Commission.

Enclosed is one approved copy for your files.

Please remit a three (\$3.00) Dollar filing fee.

Very truly yours,

PHIL R. LUCERO COMMISSIONER OF PUBLIC LANDS

BY:

RAY D. GRAHAM, Director Oil and Gas Division

PRL/RDG/s enc1.

cc:

USGS-Roswell, New Mexico
USGS-Albuquerque, New Mexico
OCC- Santa Fe, New Mexico

REVISED
PLAN OF OPERATION/DEVELOPMENT
FOR CALENDAR YEAR 1977
BELL LAKE UNIT (NO. 14-08-001-1066)

LEA COUNTY, NEW MEXICO

TO THE OIL AND GAS SUPERVISOR (6) UNITED STATES GEOLOGICAL SURVEY P.O. BOX 1857 ROSWELL, NEW MEXICO 88201

no. 563

COMMISSIONER OF PUBLIC LANDS (3) STATE OF NEW MEXICO P.O. BOX 1148 SANTA FE, NEW MEXICO 87501

OIL CONSERVATION COMMISSION (2) STATE OF NEW MEXICO P.O. BOX 2088 SANTA FE, NEW MEXICO 87501

Commission

Gentlemen:

Under date December 27, 1976, in compliance with Section 10 of the Bell Lake Unit Agreement dated May 12, 1953, Continental Oil Company, as Unit Operator, submitted for your approval a Plan of Operation/Development for the year 1977. It has become necessary to revise this plan as outlined below.

During the first six months of 1977, (1) Bell Lake Unit No. 15 has been plugged and abandoned, (2) Bell Lake Unit No. 16 has been re-entered for recompletion to a higher formation, (3) Bell Lake Unit No. 17 was found non-commercial in Morrow and Atoka formations and is being reviewed for completion up the hole, and (4) Bell Lake Unit No. 18 has been completed as an excellent producer from the Morrow sands and participating area application is being prepared.

Our proposed development during 1977 included plans to drill Bell Lake Unit No. 19 in Section 31, T-22-S, R-34-E, to test Pennsylvanian formations. Authorization to drill this well was not given by the Working Interest Owners, and it is now necessary to cancel plans for the drilling of this well.

It is respectfully requested that this Revised Plan of Operation/Development calling for no wells to be drilled during 1977 be approved.

CONTINENTAL OIL COMPANY

	UNIT OPERATOR
	BY Mennain
	L. P. Thompson, Division Manager
APPROVED	DATE
Department of the Interior	
APPROVED	DATE
Commissioner of Public Lands	
APPROVED	DATE
New Mexico Oil Conservation	

REVISED

PLAN OF OPERATION/DEVELOPMENT FOR CALENDAR YEAR 1977 BELL LAKE UNIT (NO. 14-08-001-1066)

LEA COUNTY, NEW MEXICO

TO THE OIL AND GAS SUPERVISOR (6) UNITED STATES GEOLOGICAL SURVEY P.O. BOX 1857 ROSWELL, NEW MEXICO 88201

COMMISSIONER OF PUBLIC LANDS (3) STATE OF NEW MEXICO P.O. BOX 1148 SANTA FE, NEW MEXICO 87501

OIL CONSERVATION COMMISSION (2) STATE OF NEW MEXICO P.O. BOX 2088 SANTA FE, NEW MEXICO 87501

Gentlemen:

Under date December 27, 1976, in compliance with Section 10 of the Bell Lake Unit Agreement dated May 12, 1953, Continental Oil Company, as Unit Operator, submitted for your approval a Plan of Operation/Development for the year 1977. It has become necessary to revise this plan as outlined below.

During the first six months of 1977, (1) Bell Lake Unit No. 15 has been plugged and abandoned, (2) Bell Lake Unit No. 16 has been re-entered for recompletion to a higher formation, (3) Bell Lake Unit No. 17 was found non-commercial in Morrow and Atoka formations and is being reviewed for completion up the hole, and (4) Bell Lake Unit No. 18 has been completed as an excellent producer from the Morrow sands and participating area application is being prepared.

Our proposed development during 1977 included plans to drill Bell Lake Unit No. 19 in Section 31, T-22-S, R-34-E, to test Pennsylvanian formations. Authorization to drill this well was not given by the Working Interest Owners, and it is now necessary to cancel plans for the drilling of this well.

It is respectfully requested that this Revised Plan of Operation/Development calling for no wells to be drilled during 1977 be approved.

CONTINENTAL OIL COMPANY

UNIT OPERATOR MUKRON Thompson, Division Manager APPROVED DATE Department of the Interior APPROVED DATE Commissioner of Public Lands APPROVED DATE New Mexico Oil Conservation

Commission



United States Department of the Interior

GEOLOGICAL SURVEY

Western Bank Building Conservation Division 505 Marquette, NW, Room 815 Albuquerque, New Mexico 87102

11 1 2 1577

Continental Oil Company Attention: Mr. L. P. Thompson P. O. Box 460 Hobbs, New Mexico 88240

Gentlemen:

Returned herewith are four approved copies of your 1977 plan of development for the Bell Lake unit agreement, Lea County, New Mexico. Such plan proposing the drilling of unit well No. 19 to test Pennsylvanian formations was approved on this date subject to similar approval by the appropriate State officials.

Sincerely yours,

Area Oil and Gas Supervisor

James W. Sufficial in

Enclosure

cc:
NMOCC, Santa Fe (ltr. only)
Com. Pub. Lands, Santa Fe (ltr. only)

OIL CONSERVATION COMMISSION P. O. BOX 2088 SANTA FE, NEW MEXICO 87501

January 4, 1977

Continental Oil Company P. O. Box 460 Hobbs, New Mexico 88240

Attention: Mr. L. P. Thompson

Re: 1977 Plan of Operation/Development
Bell Lake Unit, Lea County,
New Mexico

Gentlemen:

This is to advise that the New Mexico Oil Conservation Commission has this date approved the Plan of Operation/Development for the calendar year 1977 for the Bell Lake Unit, Lea County, New Mexico, subject to like approval by the United States Geological Survey and the Commissioner of Public Lands of the State of New Mexico.

One approved copy of the plan is returned herewith.

Very truly yours,

JOE D. RAMEY Secretary-Director

JDR/JEK/og

cc: Commissioner of Public Lands Santa Fe, New Mexico

United States Geological Survey Roswell, New Mexico

PLAN OF OPERATION/DEVELOPMENT FOR CALENDAR YEAR 1977 BELL LAKE UNIT (NO. 14-08-001-1066) LEA COUNTY, NEW MEXICO

TO THE OIL AND GAS SUPERVISOR (6) UNITED STATES GEOLOGICAL SURVEY P.O. BOX 1857
ROSWELL, NEW MEXICO 88201

COMMISSIONER OF PUBLIC LANDS (3) STATE OF NEW MEXICO P.O. BOX 1148 SANTA FE, NEW MEXICO 87501

OIL CONSERVATION COMMISSION (2) STATE OF NEW MEXICO P.O. BOX 2088 SANTA FE, NEW MEXICO 87501

Gentlemen:

In compliance with Section 10 of the Bell Lake Unit Agreement dated May 12, 1953, Continental Oil Company, as Unit Operator, hereby submits for your approval a Plan of Operation/Development for the year 1977. Under date of December 15, 1975, the Plan of Operation/Development covering calendar year 1976 was submitted and subsequent approval was received from your offices.

SUMMARY OF 1976 OPERATIONS

The four participating areas produced gas and liquids during the first ten months of 1976 as shown below:

Participating Area	For Year Thro	ough 10-31	Daily Av	verage
Area "A"	MCF	<u>Bb1s</u>	MCF	Bb1s
Atoka Bone Spring Morrow	3,270,697 31,513 5,510,431	28,044 16,159 2,353	10,724 103 18,067	92 53 8
Area "B"				
Devonian	637,615	1,130	2,090	4

Bell Lake Unit Well No. 5 has been plugged and abandoned.

Bell Lake Unit No. 15 is shut-in and is being reserved for possible SWD or other use.

Bell Lake Unit No. 16 averaged 701 MCF per day production from the Morrow Formation during the first ten months of 1976. During this period producing rate declined from 1,882 to 267 MCF/D.

Bell Lake Unit No. 17 was spudded September 5, 1976, at a location 1980' from south line, 1650' from west line of Section 32, Township 23 South, Range 34 East. It is at total depth of 14,024' and is in process of completion.

Bell Lake Unit No. 18 was spudded September 18, 1976, at a location 1980' from south and 660' from east line of Section 36, Township 23 South, Range 33 East. It is drilling to the Morrow Formation and should be near total depth at the end of the year 1976.

Other Items Affecting Unit Operations

Texas West Oil and Gas Corporation completed their Madera Well No. 1 on Tract 72 of the unit (Tract No. 7 of the Morrow Participating Area) under NMOCC Order 5039-B and placed the well on production approximately April 28. Through September 30, Operator has reported production of 1,798,567 MCFG (an average rate of 11,529 MCF/D), 523 barrels condensate on statements submitted to Continental Oil Company. As a result of the drilling of the well by a non-unit owner within the Morrow Participating Area, the ownership of both Devonian Participating Area "A" and the Morrow Participating Area were changed from a gross acreage basis to a net acreage basis, effective October 1, 1975. Monies suspensed for the uncommitted royalty interests will be disbursed to the committed royalty interests in both participating areas in the near future.

PROPOSED DEVELOPMENT DURING 1977

Present plans are to drill the following well during 1977:

Bell Lake Unit No. 19, Section 31, T-22S, R-34E -- to test Pennsylvanian formations.

OFFSET OBLIGATIONS

Appropriate measures will be taken to prevent, by means within the control of unit owners, drainage of unitized substances from lands subject to the Bell Lake Unit Agreement or, pursuant to applicable regulations, fair and reasonable compensatory royalty will be paid as provided in Section 18 of said Agreement.

Plan of Operation/Development Page 3

MODIFICATION

It is understood that portions of this Plan of Operation/Development outlined above are dependent upon certain information to be obtained prior and subsequent to the proposed work as well as other contingencies, and for these reasons, this Plan of Operation/Development may be modified from time to time, with like approval to meet changing conditions.

EFFECTIVE DATE

This Plan of Operation/Development shall be effective upon approval by the Supervisor, Commissioner, and Commission.

Date: December 27, 1976.

Commission

TERM

This Plan of Operation/Development is submitted for the period ending December 31, 1977. Prior to that date, another Plan of Operation/
Development will be submitted for approval.

Approved

Department of the Interior

Approved

Commissioner of Public Lands

DATE

DATE

DATE

DATE

DATE

DATE

DATE

Tanuary

DATE

DAT

CONTINENTAL OIL COMPANY

UNIT OPERATOR



L. France

L. P. Thompson
Division Manager
Production Department
Hobbs Division
Western Hemisphere Petroleum Division

Continental Oil Company P.O. Box 460 1001 North Turner Hobbs, New Mexico 88240 (505) 393-4141

P. DONSERVATION COMM.

Santa Fo

June 4, 1976

Oil and Gas Supervisor
U. S. Geological Survey
Drawer 1857
Roswell, NM 88201 (3)

Commissioner of Public Lands State of New Mexico P. O. Box 1148 Santa Fe, NM 87501 (2)

New Mexico Oil Conservation Commission P. O. Box 2088 Santa Fe, NM 87501 (1)

Gentlemen:

Revisions to Exhibit "B" Bell Lake Unit Initial Devonian Participating Area

Corrected exhibits are forwarded for your file. Corrections in the land description have been made for Tracts 59 and 68. Acreage owned by Continental Oil Company has been corrected in the summary. The corrected pages are indicated by "Rev. 6-1-76". Please substitute this exhibit for that presently in your file.

Yours very truly,

VTL:reh

CC:

Working Interest Owners

Bell Lake Unit

CFE: GED: JWM: BRM: RMC

EXHIBIT "B" (REVISED) INITIAL PARTICIPATING AREA FOR THE DEVONIAN FORMATION BELL LAKE UNIT, LEA COUNTY, NEW MEXICO TWPS. 23 AND 24S, RGS. 33 AND 34E

SCHEDULE SHOWING THE PERCENTAGE AND KIND OF OWNERSHIP OF OIL AND GAS INTERESTS IN ALL LANDS IN THE PARTICIPATING AREA

ert e 19	Ċω		ract
T24S-R33E Sec 12: NE/4, S/2	T24S-R34E Sec 5: S/2NW/4, SW/4 Sec 7: N/2NE/4 Sec 8: NW/4 NE/4, N/2 NW/4	T24S-R34E Sec 5: Lots 3, 4	Description of Land
480	440	79.92	No. of Acres (Net)
LC-063798 2-1-51	LC-061374-A 9-1-49	NM-02335-B 11-1-50	Serial No. and Effective Date
USA-All	USA-ATT	USA-A11	Basic Royalty & Percentage
Perry R. Bass Bass Enterprises Prod. Company	Continental Oil Co.	Tripor Resources 011 and Gas Fund	Lessee of Record
Panther City Inv. Co. 5.375% Howard W. Jennings 0.375% Edward M. Muse 0.5% O. H. Randel 1.5% Ft. Worth Natl. Bank, Tr U/L/W Roy S. McGruder 0.75%	Channing Brown 0.5% J. G. Thornhill 0.75% Lawrence C. Harris 0.21875% Donald T. Desmond 0.17045% Autrey & Collins Construction Co.0.14205% SBA, Rcvr for Roswell SBIC 0.21875% R. H. Hannifin 0.25% D. L. Hannifin 0.25% Ralph Nix 0.25% Ralph Nix, Jr. 0.25%	P. O. Pipkin, obligation \$1,000 p.a. out of 5% production	Overriding Royalty and Percentage
P. R. Bass 25% Bass Ent. Prod. Co. 75%	Continental Oil Company	Tripor Resources Oil and Gas Fund	Per Working Int. of Owner cip
8.49897	7.79072	1.41508	Percentage of Parti-

		0.9375%	SBIC						
		4 .625% pswell	Joanne Harris Dietrich Trust A .625% SBA, Rovr for Roswell				•		·
	011 & Gas Fund	0.9375% 1.875% 0.625%	Harris J.G. Thornhill John S. Harris, Trust A	011 & Gas Fund		7-1-49		Sec 8: SW/4	
2.83299	Tripor Rescurces		Lawrence C.	Tripor Resources	USA-A11	LC-069109	160	T24S-R34E	
	Company					4-1-51	NW/4	7:	25
7:76876	Continental Oil	% % 74 %	Muse Elliott Oil Co.	Continental Oil Co.	USA-A11	LC-066653	438.76	T24S-R34E	ri ri
	Bass Ent. Prod. Co. 75%		Edith A. Hover E.M. & Lucy R.	Bass Ent. Prod. Co.		9-1-51		Sec 12: NW/4	
2.83299	P.R. Bass 25%		Panther City	Perry R. Bass and	USA-A11	LC-063993	160	T24S-R33E	į
cipation		ge	and Percentage	Lessee of Record	& Percentage	Effective Date	(Net)	Description of Land	•
of Parti-	Working Int. o	lty	Overriding Royalty		Royalty	Serial No. and	Acres		iact
Percentage					Basic		No. of		

6 Federal Tracts containing 1,758.68 acres, or 30.59872% of participating area; 31.13951% of committed acreage.

ract	Description of Land	No. of Acres (Net)	Serial No. and Effective Date	Basic Royalty & Percentage	Lessee of Record	Overriding Royalty and Percentage	Working Int.	Percentage of Parti-cipation
	STATE LAND							
7	T24S-R33E Sec 1: SW/4	160	E-490 8-10-55	State of NM All	Continental Oil Co.	None	Continental Oil Co.	2.83299
12	T23S-R34E Sec 32: E/2	320	E-1937 6-10-58	State of NM All	Phillips Petroleum Co.	None	Phillips Pet. Co.	5.66598
J.	T23S-R33E Sec 36: A11	640	E-5076 3-10-61	State of NM All	Exxon Corporation	None	Exxon Corp.	11.33196
.	T24S-R34E Sec 6: SE/4	160	E-5829 12-10-61	State of NM All	Continental Oil Co.	None	Continental Oil Co.	2.83299
Ju	T23S-R34E Sec 31: A11 Sec 32: W/2	954.80	E-5896 1-10-62	State of NM All	Continental Oil Co.	None	Continental Oil Co.	. 16.90586
٤	T24S-R33E Sec 1: N/2, SE/4	955.32	E-5898 1-10-62	State of NM All	Continental 011 Co.	None	Continental Oil Co.	. 16.91507
	T24S-R34E Sec 6: N/2, SW/4							

6 State Tracts, containing 3,190.12 acres or 55.50390% of Participating Area; 56.48484% of committed acreage.

ract	Description of Land	No. of Acres	Exp. Date of Lease	Basic Royalty & Percentage		Lessee of Record	Overriding Royalty & Percentage	Working Int.	Percentage of Participation
В-0-B	Sec 8: NE/4 SE/4	40	2-18-59	Ada Oil Company Phillips Pet. Co.	50% 50%	Brady Lowe	H. L. Lowe 16.40625%	Brady Lowe	.70825
0-0	Sec 8: SE/4 SE/4	40 (30)	2-18-59	R. F. Madera, et al J.G. Thornhill Lawrence C. Harris Ada Oil Company Phillips Pet. Co. SBA, Rcvr for Roswell SBIC	25% 25% 12.5% 12.5% 12.5%	Not Committed Brady Lowe	H. L. Lowe 21.875%	Brady Lowe	0.00000
1 >	<u>124S-R34</u> Σ Sec 5: E/2	319.76 (249.8125)	2-1-62	Rubert Madera Ruford Madera Ruford Madera Mildred A. Broman Mary E. Thompson, Ind Ex. Est of Dale M. Thompson Buckeye Oil Company Leo J. Klise John J. Klise, Jr. Fredrick L. Stead John Grappe J. G. Thornhill J. Penrod Tales SBA, Rcvr for Roswell SBIC Lawrence C. Harris Walter Locker, Jr. George R. Locker William I. Lee L. C. Jones Erwin Levers and Laverne C. Levers G. B. Hallman	9.375% 6.25% 6.25% 0.781% 31.25% 11.875% 11.875% 1.562% 2.344% 6.255% 1.25% 2.502% 0.625% 0.625% 0.784% 0.005% 3.109%	Texas West O&G Co.	Not Committed	Continental 0i1 Company	0.00000

7 Fee Tracts, containing 798.76 acres or 13.89738% of participating area; 698.945 acres committed to unit, or 12.37565% of committed acreage.

Total 19 Tracts, containing 5,747.56 acres in participating area; 5,647.745 acres committed to unit.

WORKING INTEREST OWNERS INITIAL PARTICIPATING AREA FOR THE DEVONIAN FORMATION BELL LAKE UNIT

COMPANY OR INDIVIDUAL NO.	OF TRACTS	ACRES	PARTICIPATION PERCENTAGE
Perry R. Bass	-	160	2.832989
Bass Enterprises Prod Co.	2	480	8.498967
Continental Oil Company	9	3,458.295	61.233200
Exxon Corporation	1	640.00	11.331957
Tripor Resources Oil & Gas Fund	. 3	479.45	8.489229
Phillips Petroleum Co.	1	320.00	5.665978
Brady Lowe	3	110.00	1.947680
Subtotal (Committed Acreage)	17	5,647.745	100.00000
	•		
Phillips, et al	-	10.00	0.00000
Superior Oil Company	-	19.8675	0.00000
Texas West Oil & Gas Company		69.9475	0.00000
Subtotal (Uncommitted Acreage)		99.815	0.00000
Total Acreage in Participating Area	17	5,747.56	100.00000



United States Department of the Interior

GEOLOGICAL SURVEY
P. 0. Drawer 1857
Roswell, New Mexico 88201

April 28, 1976

Continental Oil Company Attention: Mr. R. K. Hammond P. O. Box 460 Hobbs. New Mexico 88240

Gentlemen:

Your letter of March 5, 1976, transmitted four copies each of applications to adjust participation in production from the Devenian and Morrow formations of the Bell Lake unit agreement, Lea County, New Mexico. Such applications provide for the exclusion from participation of certain uncommitted interests in partially committed tracts within the unit, as described in the applications. As lessee of these lands on the effective date of the unit agreement, Continental Oil Company assumed responsibility for the uncommitted interests, and the opportunity has since been open for these interests to join in the unit agreement. However, due to recent events which are specified in the applications, Continental Oil Company has concluded that committment of these interests will not be forthcoming, and as unit operator seeks to revise the Morrow and Devonian participation schedules to include only committed interests. Such applications are hereby approved by the Acting Area Oil and Gas Supervisor, U. S. Geological Survey. Like approval was granted by the New Mexico Oil Conservation Commission and the Commissioner of Public Lands on March 11, 1976, and March 15, 1976, respectively. This approval effects no change in gross acreage within the participating areas.

Copies of the approved applications are being distributed to the appropriate Federal offices and one copy of each is returned herewith. You are requested to furnish the State of New Mexico and all interested parties with evidence of this approval.

Sincerely yours,

(ORIG. SGD.) CARL C. TRAYWICK

CARL C. TRAYWICK
Acting Area Oil and Gas Supervisor

cc:
BLM, Santa Fe (w/cv appln.)
NMOCC (ltr. only)
Com. Pub. Lands, Santa Fe (ltr. only)
Hobbs (w/cy appln.)

ARStall:dlk



L. P. Thompson
Division Manager
Production Department
Hobbs Division
Western Hemisphere Petroleum Division

Continental Oil Company
P.O. Box 460
1001 North Turner
Hobbs, New Mexico
(505) 393-4141

COM

IN CONSERVATION COMM

April 8, 1976

Oil and Gas Supervisor U. S. Geological Survey P. O. Box 1857 Roswell, NM 88201

Commissioner of Public Lands State of New Mexico P. O. Box 1148 Santa Fe, NM 87501

New Mexico Oil Conservation Commission P. O. Box 2088 Santa Fe, NM $\,$ 87501

Gentlemen:

Proposed Revision of Initial Devonian and Morrow Participating Areas - Bell Lake Unit, Lea County, New Mexico

It has been called to my attention that the Application for Revised Initial Participating Area, Devonian Formation, forwarded by my letter March 5, 1976 contained a clerical error. The second paragraph of that application failed to include a complete description of that participating area. A corrected page is attached. Please substitute this page for the one previously furnished you.

Yours very truly,

VTL:reh

Enc CC:

Working Interest Owners

Bell Lake Unit

CFE: GED: REL: BRM: RMC

APPLICATION FOR APPROVAL OF REVISION OF THE INITIAL PARTICIPATING AREA FOR THE DEVONIAN FORMATION, BELL LAKE UNIT (NO. 14-08-001-1066)

LEA COUNTY, NEW MEXICO

Oil and Gas Supervisor (4) United States Geological Survey P. O. Box 1857 Roswell, NM 88201

Commissioner of Public Lands (3) State of New Mexico P. O. Box 1148 Santa Fe, New Mexico 87501

New Mexico Oil Conservation Commission (2) P. O. Box 2088 Santa Fe, New Mexico 87501

Continental Oil Company, Unit Operator, hereby submits for your approval a revised schedule of acreage which, upon your respective approvals, will constitute the revised initial participating area for the Devonian Formation.

The initial Devonian participating area became effective April 26, 1955, consisting of nine sections described as Section 36, T-23S, R-33E; Sections 31 and 32, T-23S, R-34E; Sections 1 and 12, T-24S, R-33E; and Sections 5, 6, 7 & 8 T-24S, R-34E, Lea County, New Mexico. Within the participating area there were three tracts which contained uncommitted lands. These tracts and interests were as follows:

Tract 68: Lot 3 and SE/4 SE/4 Section 7, T-24S, R-34E --Twenty-five percent interest owned by Rubert Madera and leased to Continental Oil Company.

Tract 70-C: SE/4 SE/4 Section 8, T-24S, R-34E--
Twenty-five percent interest owned by W. E. Baird Jr., Rubert

Madera, Ruford Madera, Mildred A. Broman, Malcom R. Madera Jr., and

R. F. Madera Jr., leased to Kelly Bell.

<u>Tract 72:</u> E/2 Section 5, T-24S, R-34E---

Twenty-five percent interest owned by Rubert Madera, Ruford Madera, Mildred A. Broman, Buckeye Oil Company, and Capital Oil Company, leased to Continental Oil Company.

The uncommitted interest in Tract 70-C was not tendered to the unit for qualification and this interest has never participated in unit operations.

Tracts 68 and 72 were tendered to the unit and accepted as qualified on a

State of New Mexico









Commissioner of Public Lands March 15, 1976

P. O. BOX 1148 SANTA FE, NEW MEXICO 87501

Continental 011 Company P. O. Box 460 1001 North Turner Hobbs, New Mexico 88240

> Re: Proposed Revision of Initial Devonian and Morrow Participating Areas Bell Lake Unit, Lea County, New Mexico

ATTENTION: Mr. R. K. Hammond

Gentlemen:

The Commissioner of Public Lands has this date approved the revision of Initial Devonian and Morrow Participating Areas for the Bell Lake Unit, Lea County, New Mexico. This approval is subject to like approval by the United States Geological Survey and the New Mexico Oil Conservation Commission.

Enclosed is one approved copy of each for your files.

Very truly yours,

PHIL R. LUCERO COMMISSIONER OF PUBLIC LANDS

BY: RAY D. GRAHAM, Director Oil and Gas Division

PRL/RDG/s encls.

cc:

USGS-Roswell, New Mexico
OCC-Santa Fe. New Mexico

OIL CONSERVATION COMMISSION P. O. BOX 2088 SANTA FE, NEW MEXICO 87501

March 11, 1976

Continental Oil Company P. O. Box 460 Hobbs, New Mexico 88240

Re: Revised Initial Morrow

Participating Area, Bell Lake Unit, Lea County, New Mexico.

Gentlemen:

This is to advise that the New Mexico Oil Conservation Commission has this date approved the schedule of acreage constituting the revised initial Morrow participating area as presented with the application dated March 5, 1976, for the Bell Lake Unit, Lea County, New Mexico, subject to like approval by the United States Geological Survey and the Commissioner of Public Lands of the State of New Mexico.

One approved copy of the application is returned herewith.

Very truly yours,

JOE D. RAMEY Secretary-Director

JDR/JEK/og

cc: Commissioner of Public Lands Santa Fe, New Mexico

United States Geological Survey Roswell, New Mexico

Oil and Gas Supervisor (4) United States Geological Survey P. O. Box 1857 Roswell, NM 88201

Commissioner of Public Lands (3) State of New Mexico P. O. Box 1148 Santa Fe, NM 87501

New Mexico Oil Conservation Commission (2) P. O. Box 2088 Santa Fe, NM 87501

Continental Oil Company, Unit Operator, hereby submits for your approval a revised schedule of acreage which, upon your respective approvals, will constitute the revised initial participating area for the Morrow Formation of Pennsylvanian age.

The initial Morrow participating area became effective May 2, 1974, consisting of nine quarter-sections described as Southeast quarter, Section 31 and South half Section 32, T-23S, R-34E, all of Section 5 and East half Section 6, T-24S, R-34E, Lea County, New Mexico. Within the participating area there was one tract which contained uncommitted lands. This tract and interest is as follows:

TRACT 7 (tract 72 of Bell Lake Unit) E/2 Section 5, T-24S, R-34E --Seven-thirty seconds (7/32) interest owned by Rubert Madera, Ruford
Madera, and Mildred A. Broman.

Tract 72 was tendered to the unit for both the Initial Devonian Participating area and the Initial Morrow Participating area and accepted as qualified on a gross acreage basis. Continental Oil Company as lessee of this tract at the effective date of the unit assumed responsibility for the investments and expenses of the uncommitted interests and received revenue for the interests, applying 7/8 against investments and operating expenses and suspensing 1/8 for distribution to qualified parties at such time as the interests may become committed to the unit.

Early in 1975, Texas West Oil and Gas Corporation leased the uncommitted interest in East half Section 5, T-24S, R-34E, and offered to join in the

drilling of a well on that tract. Unit operator, on behalf of the unit, declined to join in the drilling of the well, but extended an invitation for Texas West to commit its interest to the unit. Force-pooling proceedings were instituted and, over the opposition of the unit, the tract was force-pooled and the well was permitted. Drilling commenced on October 17, and continued to completion in the Morrow Formation. This action must be considered as irrevocable evidence that the uncommitted interests will not be committed to the unit agreement.

Since the uncommitted interests will not join the unit, and have elected to develop their minerals by drilling, it is necessary that the ownership of the participating area be revised to reflect only the committed interests in order that the suspensed royalties may be disbursed.

Attached hereto is a revised Exhibit "B" showing ownership and participation of tracts as to those interests which are committed to the unit. Unit operator respectfully requests that the Oil and Gas Supervisor of the United States Geological Survey, the Commissioner of Public Lands, State of New Mexico and the Oil Conservation Commission, State of New Mexico approve this schedule of acreage to constitute the revised initial Morrow participating area to be effective from inception as to basic royalty interests and as of October 1, 1975, the first day of the month in which actual drilling operations commenced on the uncommitted lands, as to other interests.

Respectfully Submitted,

CONTINENTAL OIL COMPANY

L. P. Thompson Division Manager

reh

APPROVED:

United States Geological Survey	Date
Commissioner of Public Lands	Date
Joe Homes	march 11, 1976
New/Mexico Oil Conservation Commission	Date

EXHIBIT "B"

BELL LAKE UNIT - LEA COUNTY, NEW MEXICO INITIAL MORROW PARTICIPATING AREA

TRACT 1 (tract 8)

Serial Number:

NM-02335-B

Acreage:

79.92 Acres

Description:

Lots 3, 4, Section 5, T-24S,

R-34E

Working Interest Owner:

Tripor Resources, 011 and

Gas Fund#

Royalty Interest Owner:

U.S.A. - All

Overriding Royalty Owner:

Pearl O. Pipkin

5.000%*

TRACT 2

(part of tract 18)

Serial Number:

LC-061374-A

Acreage:

240.00 Acres

Description:

SW/4, S/2 NW/4, Section 5,

T-24S, R-34E

Working Interest Owner:

Continental Oil Company#

Royalty Interest Owner:

U.S.A. - All

Overriding Royalty Owner:

Channing Brown 0.5% J. G. Thornhill .75%

Lawrence C. Harris .21875% Donald T. Desmond .17045%

Autrey & Collins Constr. Company, a

partnership .14205%

Small Business Admin.

Rcvr. for Roswell

SBIC .21875%

R. H. Hannifin .25%

D. L. Hannifin .25%

Ralph Nix .25%

Ralph Nix, Jr. .25%

TRACT 3

(part of tract 52)

Serial Number:

E-1937

Acreage:

160.00 Acres

Description:

SE/4 Section 32, T-23S, R-34E

Working Interest Owner:

Phillips Petroleum Co.#

Royalty Owner:

State of New Mexico - All

Overriding Royalty Owner:

None

TRACT 4 (tract 56)

Serial Number:

E-5829

Acreage:

160.00 Acres

Description:

SE/4, Section 6, T-24S, R-34E

Working Interest Owner:

Continental Oil Company#

Royalty Owner:

State of New Mexico - All

Overriding Royalty Owner:

None

*Production Payment Revised 2-23-76

TRACT	5		
(part	of	tract	58)

Serial Number:

E-5896

Acreage:

320.00 Acres

Description:

SE/4 Section 31, SW/4 Section 32, T-23S, R-34E

Working Interest Owner:

Continental Oil Company#

Royalty Owner:

State of New Mexico - All

Overriding Royalty Owner:

None

TRACT 6 (part of tract 59)

Serial Number:

E-5898

Acreage:

160.00 Acres

Description:

NE/4, Section 6, T-24S, R-34E

Working Interest Owner:

Continental Oil Company#

Royalty Owner:

State of New Mexico - All

Overriding Royalty Owner:

None

TRACT 7 (tract 72)

Serial Number:

Patented

Acreage:

319.76 (249.8125 committed)

Description:

Lots 1, 2, S/2 NE/4,

SE/4, Section 5, T-24S, R-34E

Working Interest Owner:

Continental Oil Company#

Royalty Owners:

Mary E. Thompson, ind. ex	kec. of Estate	
of Dale M. Thompson		0.781
Buckeye Oil Company		31.234
Leo J. Klise		11.875
John J. Klise, Jr.		11.875
Fredrick L. Stead		1.562
John Grappe		2.344
J. G. Thornhill		6.255
J. Penrod Toles		1.250
Small Business Adm. Rcvr.	. for Roswell	
Small Business Investment	Company	2.502
Lawrence C. Harris		2.502
Walter Locker, Sr.		.625
George R. Locker	•	.625
William I. Lee		.784
L. C. Jones		.005
Buckeye Oil Company		.016
Erwin Levers and LaVerne	C. Levers	3.109
G. B. Hallman		0.781
Rubert Madera*	Uncommitted	9.375
Ruford Madera*	Uncommitted	6.250
Mildred A. Broman*	Uncommitted	6.250
	•	

^{*}Leased to Texas West O&G Corp. (Uncommitted)

#By virtue of the terms of operating agreement dated 10-27-67 the working interest ownership within the Initial Devonian Participating area is made common to all depths below 9000'.

Tract Participation

Tract Number	Gross Acres	Committed Acres	<u>Participation</u>
1	79.92	79.92	5.83472
2	240.00	240.00	17.52167
3	160.00	160.00	11.68111
4	160.00	160.00	11.68111
5	320.00	320.00	23.36223
6	160.00	160.00	11.68111
7	319.76	249.8125	18.23805
	1,439.68	1,369.7325	100.00000

P. O. BOX 2088 SANTA FE, NEW MEXICO 87501

March 11, 1976

Continental Oil Company P. O. Box 460 Hobbs, New Mexico 88240

Attention: Mr. L. P. Thompson

Re: Revised Initial Participating Area, Devonian Formation, Bell Lake Unit, Lea County, New Mexico.

Gentlemen:

This is to advise that the New Mexico Oil Conservation Commission has this date approved the schedule of agreege constituting the revised initial Devonian participating area as presented with the application dated March 5, 1976, for the Bell Lake Unit, Lea County, New Mexico, subject to like approval by the United States Geological Survey and the Commissioner of Public Lands of the State of New Mexico.

One approved copy of the application is returned herewith.

Very truly yours,

JOE D. RAMEY Secretary-Director

JDR/JEK/og

cc: Commissioner of Public Lands Santa Fe, New Mexico

> U. S. Geological Survey Roswell, New Mexico

Conoco

L. P. Thompson
Division Manager
Production Department
Hobbs Division
Western Hemisphere Petroleum Division

Continental Oil Company MAR 1 () 1076
P.O. Box 460
1001 North Turner
Hobbs, New Mexico 88240 ON SERVATION COMM
(505) 393-4141
Santa Fo

March 5, 1976

Oil and Gas Supervisor W. S. Geological Survey F. O. Box 1857 Roswell, NM 88201

Commissioner of Public Lands State of New Mexico P. O. Box 1148 Santa Fe, NM 87501

New Mexico Oil Conservation Commission P. C. Box 2088 Santa Fe, NM 87501

Gentlemen:

Proposed Revision of Initial Devonian and Morrow Participating Areas Bell Lake Unit, Lea County, New Mexico

Enclosed are copies in appropriate number of applications to revise the initial participating areas for the Devonian and Morrow formations in the Bell Lake Unit. As described in the applications the revision is made necessary by the drilling of a well on partially uncommitted lands in the two participating areas. Since the two partially committed tracts have been participating on a gross acreage basis, royalties have been suspensed for the uncommitted interests under the two tracts. In order to permit the disbursement of suspensed royalties to the committed royalty interests under the participating areas, it is necessary to revise the participation in them to a net committed interest basis. will be necessary to make the change in ownership effective from inception as to basic royalty in order to clear these accounts. As to working interests and carved out interests, it has been agreed that the change in ownership will be effective October 1, 1975, which was the first day of the month in which the well commenced drilling on the uncommitted lands.

Upon receiving approval from each of you, we will proceed to make disbursement of the suspensed monies to the owners of basic royalties committed to the unit.

Yours very truly,

VTL:reh CC + enc:

Working Interest Owners

Bell Lake Unit

CFE: GED: REL: BRM: RMC

gross acreage basis. Continental Oil Company as lessee of 100% interest in these tracts assumed responsibility for the investments and expenses of the uncommitted interests and received revenue for the interest, applying 7/8 against investments and operating expenses and suspensing 1/8 for distribution to qualified parties at such time as the interest may have become committed to the unit. Subsequent to the formation of the participating area the 1/32 interest owned by Buckeye Oil Company and Capital Oil Company in Tract 72 were committed to the unit leaving uncommitted 7/32 interest owned by the other parties named.

Early in 1975, Texas West 0il and Gas Corporation leased the uncommitted interest in Tract 72 and offered to join in the drilling of a well on that Tract. Unit operator, on behalf of the unit, declined to join in the drilling of the well, but extended an invitation for Texas West to commit its interest to the unit. Force-pooling proceedings were instituted and, over the opposition of the unit, tract 72 was force-pooled and the well was permitted. Drilling commenced on October 17, 1975, and continued to completion in the Morrow Formation. This action must be considered as irrevocable evidence that the uncommitted interests will not be committed to the unit agreement.

Since the uncommitted interests will not join the unit and have elected to develop their minerals by drilling, it is necessary that the ownership of the participating area (even though it is currently inactive) be revised to reflect only the committed interests, in order that the suspensed royalties may be disbursed.

Attached hereto is a revised Exhibit "B" showing ownership of the unit and participation of tracts as to those interests which are committed to the unit. Unit operator respectfully requests that the Oil and Gas Supervisor of the United States Geological Survey, the Commissioner of Public Lands, State of New Mexico and the Oil Conservation Commission, State of New Mexico approve this schedule of acreage to constitute the revised initial Devonian participating area to be effective from inception as to basic royalty interests and as of October 1, 1975, the first day of the month in which actual drilling operations commenced on the uncommitted lands,

APPROVED:

United States Geological Survey

Date

Commissioner of Public Lands

New Mexico Oil Conservation Commission

Date

EXHIBIT "B" (REVISED) INITIAL PARTICIPATING AREA FOR THE DEVONIAN FORMATION BELL LAKE UNIT, LEA COUNTY, NEW MEXICO TWPS. 23 AND 24S, RGS. 33 AND 34E

SCHEDULE SHOWING THE PERCENTAGE AND KIND OF OWNERSHIP OF OIL AND GAS INTERESTS IN ALL LANDS IN THE PARTICIPATING AREA

19			act.
T24S-R33E Sec 12: NE/4, S/2	T24S-R34E Sec 5: S/2NW/4, SW/4 Sec 7: N/2NE/4 Sec 8: NW/4 NE/4, N/2 NW/4	T24S-R34E Sec 5: Lots 3, 4	Description of Land
480	440	79.92	No. of Acres (Net)
LC-063798 2-1-51	LC-061374-A 9-1-49	NM-02335-B 11-1-50	Serial No. and Effective Date
USA-A11	USA-A11	USA-All	Basic Royalty & Percentage
Perry R. Bass Bass Enterprises Prod. Company	Continental Oil Co.	Tripor Resources Oil and Gas Fund	Lessee of Record
Panther City Inv. Co. 5.375% Howard W. Jennings 0.375% Edward M. Muse 0.5% O. H. Randel 1.5% Ft. Worth Natl. Bank, Tr U/L/W Roy S. McGruder 0.75%	Channing Brown 0.5% J. G. Thornhill 0.75% Lawrence C. Harris 0.21875% Donald T. Desmond 0.17045% Autrey & Collins Construction Co.0.14205% SBA, Rcvr for Roswell SBIC 0.21875% R. H. Hannifin 0.25% D. L. Hannifin 0.25% Ralph Nix 0.25% Ralph Nix, Jr. 0.25%	P. O. Pipkin, obligation \$1,000 p.a. out of 5% production	Overriding Royalty and Percentage
P. R. Bass 25% 8.4 Bass Ent. Prod. Co. 75%	Continental 0i1 7.7 Company	Tripor Resources 1.4 Oil and Gas Fund	Percenta Working Int. of Parti Owner cipation

2.83299	Tripor Resources Oil & Gas Fund	0.9375% 1.875% 0.625% 0.625% swell 0.9375%	Lawrence C. Harris J.G. Thornhill 1.875% John S. Harris, Trust A Joanne Harris Dietrich Trust A .625% SBA, Rcvr for Roswell SBIC 0.9375	Tripor Resources Oil & Gas Fund	USA-A11	LC-069109 7-1-49	160	T24S-R34E Sec 8: SW/4	7
7.76876	Continental 011 Company	5%	Elliott Oil Co.	Continental Oil Co.	USA-A11	LC-066653 4-1-51	438.76 E/2NW/4	T24S-R34E Sec 7: Lots 1, 2, E/2NW/4 S/2 NE/4 Sec 8: S/2N/2, NE/4NE/4	1rt = 25
2.83299	P.R. Bass 25% Bass Ent. Prod. Co. 75%	5 3 5 % %%	Panther City Edith A. Hover E.M. & Lucy R. Muse	Perry R. Bass and Bass Ent. Prod. Co.	USA-All	LC-063993 9-1-51	160	T24S-R33E Sec 12: NW/4	p
Percentage of Parti-cipation	Working Int. Owner	ty	Overriding Royalty and Percentage	Lessee of Record	Royalty & Percentage	Serial No. and Effective Date	Acres (Net)	Description of Land	ract).

6 Federal Tracts containing 1,758.68 acres, or 30.59872% of participating area; 31.13951% of committed acreage.

Tract	Description of Land	No. of Acres	Date of Lease	Basic Royalty & Percentage		Lessee of Record	Royalty & Percentage	Working Int. Owner
EE OR	OR PRIVATELY OWNED LAND							
ert e 68	T24S-R34E Sec 7: Lot 2, SE/4SE/4	79.47 (59.6025)	2-12-62	Rubert Madera Ervin J. Levers &	25%	Not Committed Continental Oil Co.	o. None	Continental Oil
,					25% 16.667% 16.667% 16.666%	Company		Company
art)f 69	T24S-R34E Sec 7: N/2 SE/4, SW/4 SE/4	239.53	3-18-62	Howell Spear G.T. Hanners Est. Leo V. Sims	0.714% 0.714% 1.607%	Tripor Resources Oil and Gas	None	Tripor Resources 011 and Gas Fund
	Lot 4, E/2 SW/4,			Bertha E. Sims	1.607%			
	N/2 SE/4, SW/4 SE/4	E/4		Ellie Sims Spear G. P. Sims	1.607% 6.429%			
				Dan Brannin	0.204%			
				George R. Locker Buckeve Oil Co.	3.699% 14.413%			
				W. A. Locker, Sr.	1.02%			
				Ada Oil Company	25%	3.		
				rollips ret. co.	1 727%			
				Leo J. Klise	7.271%			
				VIII	7 270%			
				John J. Klise, Jr. Unknown	7.270% 0.101%			
0-A	T24S-R34E Sec 8: SW/4 SE/4	40	2-18-59	Ada Oil Company Phillips Pet. Co.	25% 25%	Brady Lowe	H. L. Lowe 16.40625%	Brady Lowe
÷				Trust	50%			

T24S-R33E 160 E-490 State of NM Continental Oil Co.	:act	Description of Land	No. of Acres (Net)	Serial No. and Effective Date	Basic Royalty & Percentage	Lessee of Record	Overriding Royalty and Percentage		Percentage Working Int. of Parti- Owner cipation
320 E-1937 State of NM 640 E-5076 State of NM 11 160 E-5829 State of NM 12-10-61 All 954.80 E-5896 State of NM 1-10-62 All SE/4 955.32 E-5898 State of NM All		T24S-R33E Sec 1: SW/4	160	E-490 8-10-55	State of NM All	Continental Oil Co.		None	None Continental Oil Co.
1 640 E-5076 State of NM 3-10-61 All 160 E-5829 State of NM 12-10-61 All 954.80 E-5896 State of NM 1-10-62 All SE/4 955.32 E-5898 State of NM All	• -	T23S-R34E Sec 32: E/2	320	E-1937 6-10-58	State of NM All	Phillips Petroleum Co.	·	None	None Phillips Pet. Co.
160 E-5829 State of NM 12-10-61 All 954.80 E-5896 State of NM 1-10-62 All SE/4 955.32 E-5898 State of NM SE/4 All		T23S-R33E Sec 36: All	640	E-5076 3-10-61	State of NM All	Exxon Corporation		None	None Exxon Corp.
954.80 E-5896 State of NM 1-10-62 All 955.32 E-5898 State of NM SE/4 955.32 1-10-62 All	-	T24S-R34E Sec 6: SE/4	160	E-5829 12-10-61	State of NM All	Continental Oil Co.		None	None Continental Oil Co.
2, SE/4 955.32 E-5898 State of NM 1-10-62 All		T23S-R34E Sec 31: A11 Sec 32: W/2	954.80	E-5896 1-10-62	State of NM All	Continental 011 Co.		None	None Continental 011 Co. 16.90586
Sec 6: N/2, SE/4		T24S-R33E Sec 1: N/2, SE/4 T24S-R34E Sec 6: N/2, SE/4	955.32	E-5898 1-10-62	State of NM All	Continental Oil Co.		None	None Continental Oil Co. 16.91507

6 State Tracts, containing 3,190.12 acres or 55.50390% of Participating Area; 56.48484% of committed acreage.

fract	Description of Land	No. of Acres	Exp. Date of Lease	Basic Royalty & Percentage	-	Lessee of Record	Overriding Royalty & Percentage	Working Int.	Percentage of Participation
70-B	Sec 8: NE/4 SE/4	40	2-18-59	Ada Oil Company Phillips Pet. Co.	50% 50%	Brady Lowe	H. L. Lowe 16.40625%	Brady Lowe	.70825
70 -с	Sec 8: SE/4 SE/4	40 (30)	2-18-59	R. F. Madera, et al J.G. Thornhill Lawrence C. Harris Ada Oil Company Phillips Pet. Co. SBA, Rcvr for Roswell SBIC	25% 25% 12.5% 12.5% 12.5% 12.5%	Not Committed Brady Lowe	H. L. Lowe 21.875%	Brady Lowe	0.00000
2	T24S-R34E Sec 5: E/2	319.76 (249.8125)	2-1-62		9.375% 6.25% 6.25%	Texas West O&G Co.	Not Committed		0.00000
		,		• ny	0.781% 31.25% 11.875% 11.875% 1.562% 2.344% 6.255% 1.25% 2.502% 0.625% 0.625% 0.784% 0.005% 3.109%	Continental 011 Co.	None	Company Company	4.42322

t, ,

W	ract
T24S-R34E Sec 8: NW/4 SE/4	Description of Land
40	No. of Acres
	Exp. Date of Lease
Powhatan Carter, Jr. Anderson Carter	Basic Royalty & Percentage
50% 50%	
Continental Oil Co. None	Lessee of Record
None	Overriding Royalty & Percentage
Continental 011 Company	Working Int. Owner
0.70825	Percentage of Participation

7 Fee Tracts, containing 798.76 acres or 13.89738% of participating area; 698.945 acres committed to unit, or 12.37565% of committed acreage.

Total 19 Tracts, containing 5,747.56 acres in participating area; 5,647.745 acres committed to unit.

WORKING INTEREST OWNERS INITIAL PARTICIPATING AREA FOR THE DEVONIAN FORMATION BELL LAKE UNIT

COMPANY OR INDIVIDUAL	NO. OF TRACTS	ACRES	PARTICIPATION PERCENTAGE
Perry R. Bass	-	160	2.83299
Bass Enterprises Prod Co.	2	480	8.49897
Continental Oil Company	9	3,418.215	61.23319
Exxon Corporation	1	640.00	11.33196
Tripor Resources Oil & Gas F	und 3	479.45	8.48923
Phillips Petroleum Co.	1	320.00	5.66598
Brady Lowe	3	110.00	1.94768
Subtotal (Committed Acreage)	17	5,647.745	100.00000
Phillips, et al	-	10.00	0.00000
Superior Oil Company	-	19.8675	0.00000
Texas West Oil & Gas Company	_	69.9475	0.00000
Subtotal (Uncommitted Acreag	e)	99.815	0.00000
Total Acreage in			
Participating Area	17	5,747.56	100.00000

APPLICATION FOR APPROVAL OF REVISION OF THE INITIAL PARTICIPATING AREA FOR THE DEVONIAN FORMATION, BELL LAKE UNIT (NO. 14-08-001-1066)

LEA COUNTY, NEW MEXICO

Oil and Gas Supervisor (4) United States Geological Survey P. O. Box 1857 Roswell, NM 88201

Commissioner of Public Lands (3) State of New Mexico P. O. Box 1148 Santa Fe, New Mexico 87501

New Mexico 011 Conservation Commission (2) P. O. Box 2088 Santa Fe, New Mexico 87501

Continental Oil Company, Unit Operator, hereby submits for your approval a revised schedule of acreage which, upon your respective approvals, will constitute the revised initial participating area for the Devonian Formation.

The initial Devonian participating area became effective April 26, 1955, consisting of nine sections described as Section 36, T-23S, R-33E; Sections 31 and 32, T-23S, R-34E; Section 1, T-24S, R-33E; and Sections 5 and 6, T-24S, R-34E, Lea County, New Mexico. Within the participating area there were three tracts which contained uncommitted lands. These tracts and interests were as follows:

Tract 68: Lot 3 and SE/4 SE/4 Section 7, T-24S, R-34E --Twenty-five percent interest owned by Rubert Madera and leased to Continental Oil Company.

Tract 70-C: SE/4 SE/4 Section 8, T-24S, R-34E---

Twenty-five percent interest owned by W. E. Baird Jr., Rubert
Madera, Ruford Madera, Mildred A. Broman, Malcom R. Madera Jr., and
R. F. Madera Jr., leased to Kelly Bell.

Tract 72: E/2 Section 5, T-24S, R-34E---

Twenty-five percent interest owned by Rubert Madera, Ruford Madera, Mildred A. Broman, Buckeye Oil Company, and Capital Oil Company, leased to Continental Oil Company.

The uncommitted interest in Tract 70-C was not tendered to the unit for qualification and this interest has never participated in unit operations.

Tracts 68 and 72 were tendered to the unit and accepted as qualified on a

50

P. 0. Drawer 1857 Roswell, New Mexico 88201

March 4, 1976

Continental Oil Company Attention: Mr. L. P. Thompson P. O. Box 460 Hobbs. New Mexico 88240

Gentlemen:

On this date, your 1976 plan of development for the Bell Lake unit area, Lea County, New Mexico, wherein you propose the drilling of unit well No. 17 to test the Morrow and Atoka, was approved. Such approval is subject to like approval by the appropriate State officials.

Four approved copies are enclosed.

Sincerely yours,

ORIG. SED. CARL C. TRAYMICK

CARL C. TRAYWICK Acting Area Oil and Gas Supervisor

cc:
Hobbs (w/cy plan)
NMOCC, Santa Fe (ltr. only)
Com. Pub. Lands, Santa Fe (ltr. only)

JAGillham:dlk

MAR 8 - 1976 JUJ MAR 9 - 1976 JUJ MAR 9

563

OIL CONSERVATION COMMISSION P. O. BOX 2088 SANTA FE NEW MEXICO 87501

January 6, 1976

Continental Oil Company
P. O. Box 460
Hobbs, New Mexico 88240

Attention: Mr. L. P. Thompson

Re: 1976 Plan of Operation/Development

Bell Lake Unit, Lea County,

New Mexico

Gentlemen:

This is to advise that the New Mexico Oil Conservation

Commission has this date approved the Plan of Operation/Development for the calendar year 1976 for the Bell Lake Unit, Lea

County, New Mexico, subject to like approval by the United States Geological Survey and the Commissioner of Public Lands of the State of New Mexico.

One approved copy of the plan is returned herewith.

Very truly yours,

JOE D. RAMEY
Secretary-Director

JDR/JEK

cc: U. S. Geological Survey - Roswell Commissioner of Public Lands - Santa Fe

PLAN OF OPERATION/DEVELOPMENT FOR CALENDAR YEAR 1976 BELL LAKE UNIT (NO. 14-08-001-1066) LEA COUNTY, NEW MEXICO

TO THE OIL AND GAS SUPERVISOR (6) UNITED STATES GEOLOGICAL SURVEY P. O. BOX 1857 ROSWELL, NEW MEXICO 88201

COMMISSIONER OF PUBLIC LANDS (3) STATE OF NEW MEXICO P. O. BOX 1148 SANTA FE, NEW MEXICO 87501

OIL CONSERVATION COMMISSION (2) STATE OF NEW MEXICO P. O. BOX 2088 SANTA FE, NEW MEXICO 87501

Gentlemen:

In compliance with Section 10 of the Bell Lake Unit Agreement dated May 12, 1953, Continental Oil Company, as Unit Operator, hereby submits for your approval a Plan of Operation/Development for the year 1976. Under date of December 15, 1974, the Plan of Operation/Development covering calendar year 1975 was submitted and subsequent approval was received from your offices.

SUMMARY OF 1975 OPERATIONS

The four participating areas produced gas and liquids during 1975 as shown below:

Participating Area	For Year Thre	ough 10-31	Daily A	verage
Area "A"	MCF	<u>Bbls</u>	MCF	Bbls
Atoka Bone Spring Morrow	2,613,263 52,302 3,705,727	15,542 23,778 1,152	8,596 172 12,190	51 78 4
Area "B"				
Devonian	781, 153	1,487	2,570	5

Bell Lake Unit Well No. 5 was re-entered to abandon the Morrow (non-commercial) and recomplete in the Atoka. The Atoka was tested in the interval 13,141-13,190' without success. Additional testing is planned.

SUMMARY OF 1975 DEVELOPMENT

Bell Lake Unit No. 15 was drilled at a location 1980' FSL and 1980' FWL, Section 8, Township 23 South, Range 34 East and was completed March 6, 1975 for a calculated open flow potential of 4,708 MCF/D from the Morrow Formation. The well was placed on production in May and produced - 20,529 MCF, 59 bbls. liquids, through October 31. The well is obviously non-commercial in the Morrow Formation.

Bell Lake Unit No. 16 was spudded January 31, 1975 at a location 660' from north and east lines of Section 7, Township 24 South, Range 34 East. It was drilled to the Morrow and after considerable testing was completed in the Morrow 13,802'-30'. It has been producing at rates slightly above 4,000 MCF/D since mid-November. Evaluation of the well is underway.

Other Items Affecting Unit Operations

Application for initial participating area for the Morrow Formation, based on performance of Well No. 14 was approved, effective May 2, 1974.

Early in 1975 certain uncommitted interests amounting to 7/32 under

Tract 72 (East half Section 5, T-24S, R-34E) were leased to Texas West

Oil and Gas Corporation who invited the unit to join in the drilling of a well on Tract 72, 1683' from Well No. 14. The operator, on behalf of the unit declined to join in drilling the well on the following grounds:

- (1) The correlative rights of interest owners in the Morrow Participating Area would be impaired.
- (2) The well is not needed to drain the Morrow reservoir producing from Well No. 14.
- (3) The near proximity of the proposed Well to No. 14 presented little exploratory value for the unit.
- (4) The E/2 of Section 5 is within the Morrow Participating Area, is clearly being drained by Well No. 14 and the uncommitted interests have had and continue to have the opportunity to join the unit.

Texas West filed application for forced-pooling of E/2 Section 5 and hearing was held on May 28, before a hearing examiner. Order R-5039, was entered over Continental's objection on behalf of the unit, granting the forced-pooling. Hearing de novo and re-hearing were held before the Oil Conservation Commission July 25 and October 23, respectively, resulting in orders R-5039-A and R-5039-B, essentially affirming the earlier order. Texas West spudded their well on October 17, and drilling is continuing at this writing.

The forced-pooling order assessed an extreme penalty against the unit owners who do not choose to advance their prorata share of estimated drilling costs; a penalty far higher than that provided under the unit operating agreement.

A well of equal quality to No. 14 would be in a position to produce several times more gas for the uncommitted interests than the unit owners will receive, on a per-acre basis. In order to protect correlative rights of the unit interest owners, additional wells must be drilled to the Fourth Morrow reservoir from which Well No. 14 produces. Yet, because of the extremely large penalty assessed by the forced-pooling order and the low penalty provided by the Unit Operating Agreement, and given a limited supply of capital available for unit development, the unit is faced with a dilemma. On the one hand the order virtually compels participation in drilling a well which may cause drainage from the unit; and on the other hand capital may not be available for drilling additional unit wells to protect the unit from drainage by the non-unit well which was permitted inside the participating area by the order.

Thus, through forces beyond the control of the unit owners, the unit is placed in a position to suffer possible drainage from which it cannot protect itself.

The drilling of the well is also forcing a change in unit ownership.

Continental has been furnishing funds for the full participation of Tracts

72 and 68 (which also has uncommitted interests) and suspensing revenue

which would be payable to the royalty owners of the uncommitted interest.

Since these parties will now participate in the force-pooled well rather

than the unit wells, the unit ownership is being changed to eliminate

the uncommitted acreage from unit participation. Suspensed royalty will

be distributed to committed royalty interests.

PROPOSED DEVELOPMENT DURING 1976

Present plans are to drill the following well during 1976:

Bell Lake Unit No. 17, 1980' FS and WL Section 32, T-23S, R-34E -- to protect

Plan of Operation/Development

Page 4

the Morrow Participating Area from drainage by the non-unit well and to

test the Morrow and Atoka formations.

OFFSET OBLIGATIONS

Appropriate measures will be taken to prevent, by means within the control

of unit owners, drainage of unitized substances from lands subject to

the Bell Lake Unit Agreement or, pursuant to applicable regulations, fair

and reasonable compensatory royalty will be paid as provided in Section 18

of said Agreement.

MODIFICATION

It is understood that portions of this Plan of Operation/Development

outlined above are dependent upon certain information to be obtained

prior and subsequent to the proposed work as well as other contingencies,

and for these reasons, this Plan of Operation/Development may be modified

from time to time, with like approval to meet changing conditions.

EFFECTIVE DATE

This Plan of Operation/Development shall be effective upon approval by

the Supervisor, Commissioner, and Commission.

Date: December 15, 1975.

TERM

This Plan of Operation/Development is submitted for the period ending

December 31, 1976. Prior to that date, another Plan of Operation/Development

will be submitted for approval.

CONTINENTAL OIL COMPANY UNIT OPERATOR

L. P. Thompson

Approved Department of the Interior

DATE

Approved

Commissioner of Public Lands

DATE

Approved

ew Mexico 011 Conservation

Commission

DATE COLLEGE

reh



L. P. Thompson
Division Manager
Production Department
Hobbs Division
Western Hemisphere Petroleum Division

Continental Oil Company P.O. Box 460 1001 North Turner Hobbs, New Mexico 88240 (505) 393-4141

December 22, 1975

Area Oil and Gas Supervisor U. S. Geological Survey Drawer 1857 Roswell, New Mexico 88201

Gentlemen:

Bell Lake Unit Wells Nos. 15 and 16, Lea County, New Mexico

Your letter dated November 13, 1975 requested that we make a determination as to the commercial nature of Bell Lake Unit Well No. 15 in NE $\frac{1}{4}$ SW $\frac{1}{4}$, Section 8, T-23S, R-34E, and No. 16 in NE $\frac{1}{4}$ NE $\frac{1}{4}$ Section 7, T-24S, R-34E, Lea County, New Mexico.

Well No. 15 was completed March 6, 1975 for a calculated open flow potential of 4,708 MCF per day gas from the Morrow Formation. The well was placed on production in May and has produced only 20,529 MCF, 59 barrels liquids and is no longer capable of producing against the pressure of the gathering system. The well is obviously non-commercial in the Morrow Formation. Further evaluation is being made on other formations penetrated by this well.

Well No. 16 was completed August 28, 1975 but has had considerable downtime due to mechanical difficulties. The well was finally placed on production in mid-November. After experiencing declining producing rates and tubing pressures, additional Morrow intervals were perforated on December 18. The results of this work still need to be evaluated before a decision can be made as to the commercial nature of the well.

Oil and Gas Supervisor December 22, 1975 Page 2

It is respectfully requested that determination of commercial nature of Well No. 16 be deferred until additional information can be obtained on the additional intervals opened to production and evaluated. A period of three to four months should suffice for this evaluation.

Yours very truly,

VTL:reh

CC:

Commissioner of Public Lands

P. O. Box 1148

Santa Fe, New Mexico 87501

Attention Mr. Ray Graham

New Mexico Oil Conservation Commission Box 2088

Santa Fe, New Mexico 87501

Working Interest Owners Bell Lake Unit (Address List Attached)

JCC: FOH: GED: JWM: BRM

BELL LAKE UNIT WORKING INTEREST OWNERS

Atlantic Richfield Company P. O. Box 1710 Hobbs, NM 88240

Bass Enterprises Production Company 3100 Fort Worth National Bank Building Mr. Joe Stasney Fort Worth, TX 76100

Perry R. Bass 3100 Fort Worth National Bank Building Fort Worth, TX 76100

Exxon Company, U.S.A.
Joint Interest Manager
P. O. Box 1600
Midland, TX 79701

Edward R. Hudson 1000 First National Bank Building Fort Worth, TX 76100

W. A. Hudson 1000 First National Bank Building Fort Worth, TX 76100

Brady M. Lowe 1500 Broadway, Suite 1230 Lubbock, TX 79400

Phillips Petroleum Company Phillips Building Odessa, TX 79760

Skelly Oil Company P. O. Box 1351 Midland, TX 79701

Burmah Oil and Gas Company 600 Western United Life Building Midland, TX 79701

Superior Oil Company P. O. Box 1521 Houston, TX 77000

Tripor Resources Oil and Gas Fund 305 United Gas Building Houston, TX 77002

Union Oil of California P. O. Box 671 Midland, TX 79701

9-22-75

reh

OIL CONSERVATION COMMISSION

P. O. BOX 2088

SANTA FE NEW MEXICO 87501

March 25, 1975

563

Continental Oil Company P. O. Box 460 Hobbs, New Mexico 88240

Attention: Mr. L. P. Thompson

Re: Revised Page 2, Initial Participating Area, Morrow Formation - Bell Lake Unit, Lea County, New Mexico

Gentlemen:

This is to advise that the New Mexico Oil Conservation Commission has this date approved the revised page 2 of the application for the Initial Participating Area, Morrow Formation approved February 17, 1975, for the Bell Bake Unit, Lea County, New Mexico, subject to like approval by the United States Geological Survey and the Commissioner of Public Lands of the State of New Mexico.

One approved copy of revised page 2 is returned herewith.

Very truly yours,

A. L. PORTER, Jr. Secretary-Director

ALP/JEK/og

cc: United States Geological Survey Box 1857 Roswell, New Mexico

> Commissioner of Public Lands Santa Fe, New Mexico

United States Department of the Interior GEOLOGICAL SURVEY

Drawer 1857 Roswell, New Mexico 88201

March 26, 1975

Continental Oil Company
Attention: Mr. L. P. Thompson
P. O. Box 460
Hobbs, New Mexico 88240

Gentlemen:

Your application of February 10, 1975, requesting approval of the initial Morrow participating area of the Bell Lake unit agreement, Lea County, New Mexico, was approved on March 26, 1975, by the Acting Area 011 and Gas Supervisor, U. S. Geological Survey, effective as of May 2, 1974.

The initial Morrow participating area embraces 1,439.68 acres described as the SEk of sec. 31 and the Sk of sec. 32, T. 23 S., R. 34 E., all of sec. 5, and lots 1 and 2, SkNEk, SEk of sec. 6, T. 24 S., R. 34 E., N.M.P.M. Such revision is based on the completion of unit well No. 14 located in the SEkNWk of sec. 5, T. 24 S., R. 34 E., as a commercial well. Unit well No. 14 was completed on May 2, 1974, for a calculated absolute open flow potential of 82,000 MCFGPD from the Morrow interval 13,854 to 13,923 feet.

Copies of the approved application are being distributed to the appropriate Federal offices and four copies are returned herewith. You are requested to furnish the State of New Mexico and all interested parties with appropriate evidence of this approval.

Sincerely yours,

88 70 July 188

CARL C. TRAYWICK
Acting Area Oil and Gas Supervisor

cc:
BLM-Santa Fe (ltr. only)
Hobbs (w/cy appln.)
NMOCC, Santa Fe (ltr. only)
Com. Pub. Lands, Santa Fe (ltr. only)

ARStall: 1h







Commissioner of Public Lands

March 6, 1975

PHIL R. LUCERO COMMISSIONER

P. O. BOX 1148 SANTA FE, NEW MEXICO 87501

Continental Oil Company P. O. Box 460 Hobbs, New Mexico 88240

Re: Application for Approval of the Initial Participating Area for the Morrow Formation-Bell Lake Unit
Les County, New Mexico

ATTENTION: Mr. L. P. Thompson

Gantlemen:

We are in receipt of your letter dated March 3, 1975, together with revised page 2 to the Initial Participating Area, Morrow Formation, for the Bell Lake Unit, Lea County, New Mexico.

The Commissioner of Public Lands has approved this revision and the effective date for the Initial Participating Area is May 2, 1974 instead of July 3, 1974.

This approval is subject to like approval by the United States Geological Survey and the Oil Conservation Commission.

Very truly yours,

PHIL R. LUCERO COMMISSIONER OF PUBLIC LANDS

BY: RAY D. GRAHAM, Director Oil and Gas Division

FRL/RDG/s onel.

ce :

USGS-Roswell, How Memico OCC- Santa Fa, How Memico_

(conoco)

Continental Oil Company

Hobbs, New Mexico 88240

P.O. Box 460

(505) 393-4141

1001 North Turner

L. P. Thompson
Division Manager
Production Department
Hobbs Division
Western Hemisphere Petroleum Division

March 3, 1975

United States Geological Survey C/O Oil and Gas Supervisor P. O. Drawer 1857 Roswell, New Mexico 88201

Commissioner of Public Lands State of New Mexico P. O. Box 1148 Santa Fe, New Mexico 87501

New Mexico Oil Conservation Commission P. O. Box 2088 Santa Fe, New Mexico 87501

Gentlemen:

Application For Approval of the Initial Participating Area for the Morrow Formation - Bell Lake Unit - Lea County, New Mexico

My letter dated February 10, 1975 forwarded the subject application for your approval. The New Mexico Oil Conservation Commission's approval was given on February 17, 1975 and the Commissioner of Public Lands' approval was given on February 20.

It has been brought to our attention by the United States Geological Survey that there is an inconsistency in the reported completion dates for Well No. 14. The completion report to the Oil Conservation Commission recited the date of completion of the well as being the date that the well was connected to the pipeline and ready to produce, being July 3, 1975. A report to the United States Geological Survey indicated the completion date as of the test to atmosphere on May 2, 1974. The Geological Survey has requested that the effective date of this participating area be set as of the date of the earlier test. In compliance with this request, we furnish herewith a revised page 2 of our application showing the effective date to be May 2, 1974 rather than July 3, 1974. Either date should be acceptable since there was no mas produced for sale prior to either date.

Your approval of this revised application is respectfully requested.

Yours very truly,

VII:reh

Enc

CC:

Working Interest Owners

JCC: CES: JWM: REL: LKT

- 4. A log marked Exhibit "D" of Bell Lake Unit 3 Well No. 14 showing the Morrow Formation penetrated, perforated, and tested.
- 5. Engineering and Geological report marked Exhibit "E" describing pertinent information and the reservoir data in regard to the Morrow reservoir as found in Well No. 14.

Unit Operator respectfully requests that the Director of the United States Geological Survey, the Commissioner of Public Lands, State of New Mexico, and the Oil Conservation Commission, State of New Mexico, approve this schedule of acreage to constitute the initial Morrow participating area, to be effective as of May 2, 1974, the date of completion of said Well No. 14.

Respectfully submitted,

CONTINENTAL OIL COMPANY

Division Manager

reh

APPROVED:

United States Geological Survey	Date
Commissioner of Public Lands	Date

New Mexico Oil Conservation Commission

Dares 24, 1975





TELEPHONE 505-827-2748



Commissioner of Public Lands

February 20, 1975

P. O. BOX 1148
SANTA FE, NEW MEXICO 87501

Continental Oil Company P. O. Box 460 1001 North Turner Hobbs, New Mexico 88240

> Re: Application for Approval of the Initial Participating Area for the Morrow Formation-Bell Lake Unit, Lea County, New Mexico

ATTENTION: Mr. L. P. Thompson

Gentlemen:

PHIL R. LUCERO

COMMISSIONER

The Commissioner of Public Lands has this date given approval to the Initial Participating Area for the Morrow Formation, Bell Lake Unit, Lea County, New Mexico. This approval is subject to like approval by the United States Geological Survey and the Oil Conservation Commission.

One approved copy of the application is enclosed.

Very truly yours,

PHIL R. LUCERO
COMMISSIONER OF PUBLIC LANDS

ţ.

BY: RAY D. GRAHAM, Director Oil and Gas Division

PRL/RDG/s encl.

cc:

USGS-Roswell, New Mexico OCC- Santa Fe, New Mexico

OIL CONSERVATION COMMISSION P. O. BOX 2088

SANTA FE NEW MEXICO 87501

663

February 17, 1975

Continental Oil Company P. O. Box 460 Hobbs, New Mexico 88240

Attention: Mr. L. P. Thompson

Re: Initial Participating Area, Morrow Formation, Bell Lake Unit, Lea County, New Mexico

Gentlemen:

This is to advise that the New Mexico Oil Conservation Commission has this date approved the Initial Morrow Participating Area consisting of 1439.68 acres, to be effective as of July 3, 1974, for the Bell Lake Unit, Lea County, New Mexico, subject to like approval by the United States Geological Survey and the Commissioner of Public Lands of the State of New Mexico.

One approved copy of the application is returned herewith.

Very truly yours,

A. L. PORTER, Jr. Secretary-Director

ALP/JEK/og

cc: United States Geological Survey Roswell, New Mexico

Commissioner of Public Lands Santa Fe, New Mexico

APPLICATION FOR APPROVAL OF THE INITIAL PARTICIPATING AREA FOR THE MORROW FORMATION, BELL LAKE UNIT (NO. 14-08-001-1066) LEA COUNTY, NEW MEXICO

Director, United States Geological Survey (6) C/O Regional Oil and Gas Supervisor P. O. Box 1857 Roswell, New Mexico 88201

Commissioner of Public Lands (3) State of New Mexico P. O. Box 1148 Santa Fe, New Mexico 87501

New Mexico Oil Conservation Commission (2) P. O. Box 2088 Santa Fe, New Mexico 87501

In conformance with the provisions of Section 11, of the Unit Agreement dated May 12, 1953, affecting lands in the Bell Lake Unit, Lea County, New Mexico, Continental Oil Company, Unit Operator, hereby submits for your approval a schedule of acreage which, upon your respective approvals, will constitute the initial participating area for the Morrow Formation of Pennsylvanian age. Completion of Bell Lake Unit 3 Well No. 14 has shown the Morrow Formation to be commercially productive of gas. Proven area is considered to include Southeast quarter Section 31, and south half Section 32, T-23S, R-34E; Section 5, and east half Section 6, T-24S, R-34E.

In support of this application, operator attaches hereto and hereby makes a part of this application the following:

- A map marked Exhibit "A" showing thereon the Bell Lake Unit South
 Area, and the area of the proposed initial Morrow Participating Area.
- 2. A schedule marked Exhibit "B" showing the participating percentage of each lease included or partially included in the proposed initial participating area.
- 3. A structure map marked Exhibit "C" contoured on top of the Fourth

 Morrow Zone based on well data and seismic interpretation.

- 4. A log marked Exhibit "D" of Bell Lake Unit 3 Well No. 14 showing the Morrow Formation penetrated, perforated, and tested.
- 5. Engineering and Geological report marked Exhibit "E" describing pertinent information and the reservoir data in regard to the Morrow reservoir as found in Well No. 14.

Unit Operator respectfully requests that the Director of the United States Geological Survey, the Commissioner of Public Lands, State of New Mexico, and the Oil Conservation Commission, State of New Mexico, approve this schedule of acreage to constitute the initial Morrow participating area, to be effective as of July 3, 1974, the date of completion of said Well No. 14.

Respecti	ully	submi	tted	,
----------	------	-------	------	---

CONTINENTAL OIL COMPANY

L. P. Thompson
Division Manager

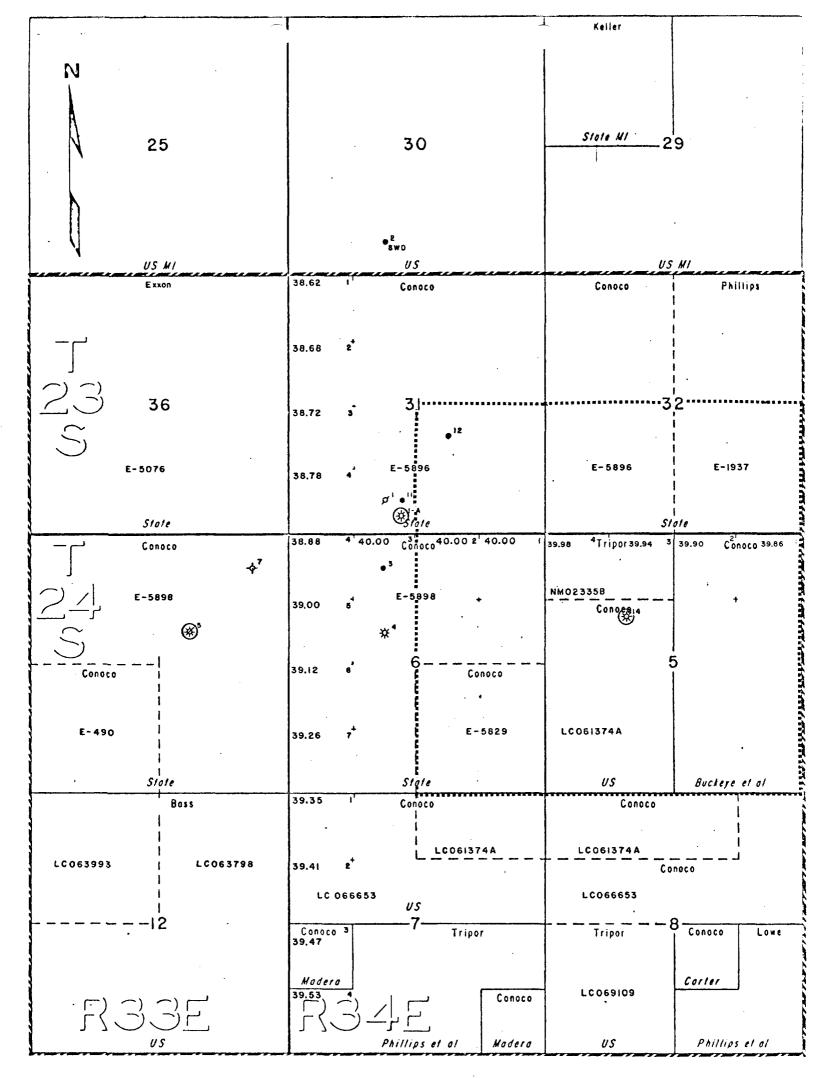
reh

APPROVED:

United States Geological Survey	Date	.,
Commissioner of Public Lands	Date	

New Mexico Oil Conservation Commission

February 17, 1975-



BOUNDARY BELL LAKE UNIT
DEVONIAN PARTICIPATING AREA "A"

PARTICIPATING AREA

* MORROW COMPLETION



EXHIBIT "B"

BELL LAKE UNIT - LEA COUNTY, NEW MEXICO INITIAL MORROW PARTICIPATING AREA

TRACT 1 (tract 8)

Serial Number:

NM0235-B

Acreage:

79.92 Acres

Description:

Lots 3, 4, Section 5, T-24S,

R-34E

Working Interest Owner:

Tripor Resources, Inc.

Royalty Interest Owner:

U.S.A. - All

Overriding Royalty Owner:

Pearl O. Pipkin 5.000%*

TRACT 2

(part of tract 18)

Serial Number:

L.C. 061374-A

Acreage:

240.00 Acres

Description:

SW/4, S/2 NW/4, Section 5,

T-24S, R-34E

Working Interest Owner:

Continental Oil Company

Royalty Interest Owner:

U.S.A. - All

Overriding Royalty Owner:

Channing & Agnes M. Brown 1.50%

J. G. Thornhill .75% Lawrence C. Harris .21875% Donald T. Desmond .17045%

Autrey & Collins Constr. Company, a

partnership

.14205%

Small Business Admin.

Rcvr. for Roswell

SBIC

.21875%

TRACT 3

(part of tract 52)

Serial Number:

E-1937

Acreage:

160.00 Acres

Description:

SE/4 Section 32, T-23S, R-34E

Working Interest Owner:

Phillips Petroleum Co. 100%

Royalty Owner:

State of New Mexico - All

TRACT 4 (tract 56)

Serial Number:

E-5829

Acreage:

160.00 Acres

Description:

SE/4, Section 6, T-24S, R-34E

Working Interest Owner:

Continental Oil Company

Royalty Owner:

State of New Mexico - All

TRACT	5	

(part of tract 58)

Serial Number:

E-5896

Acreage:

320.00 Acres

Description:

SE/4 Section 31, SW/4 Section 32, T-23S, R-34E

Working Interest Owner:

Continental Oil Company

Royalty Owner:

State of New Mexico - All

TRACT 6

(part of tract 59)

Serial Number:

E-5898

Acreage:

160.00 Acres

Description:

Lots 1, 2, S/2 NE/4, Section 6, T-24S, R-34E

Working Interest Owner:

Continental Oil Company

Royalty Owner:

State of New Mexico - All

TRACT 7 (tract 72)

Serial Number:

Patented

Acreage:

319.76

Description:

Lots 1, 2, S/2 NE/4,

SE/4, Section 5, T-24S, R-34E

Working Interest Owner:

Continental Oil Company (a)

Royalty Owners:

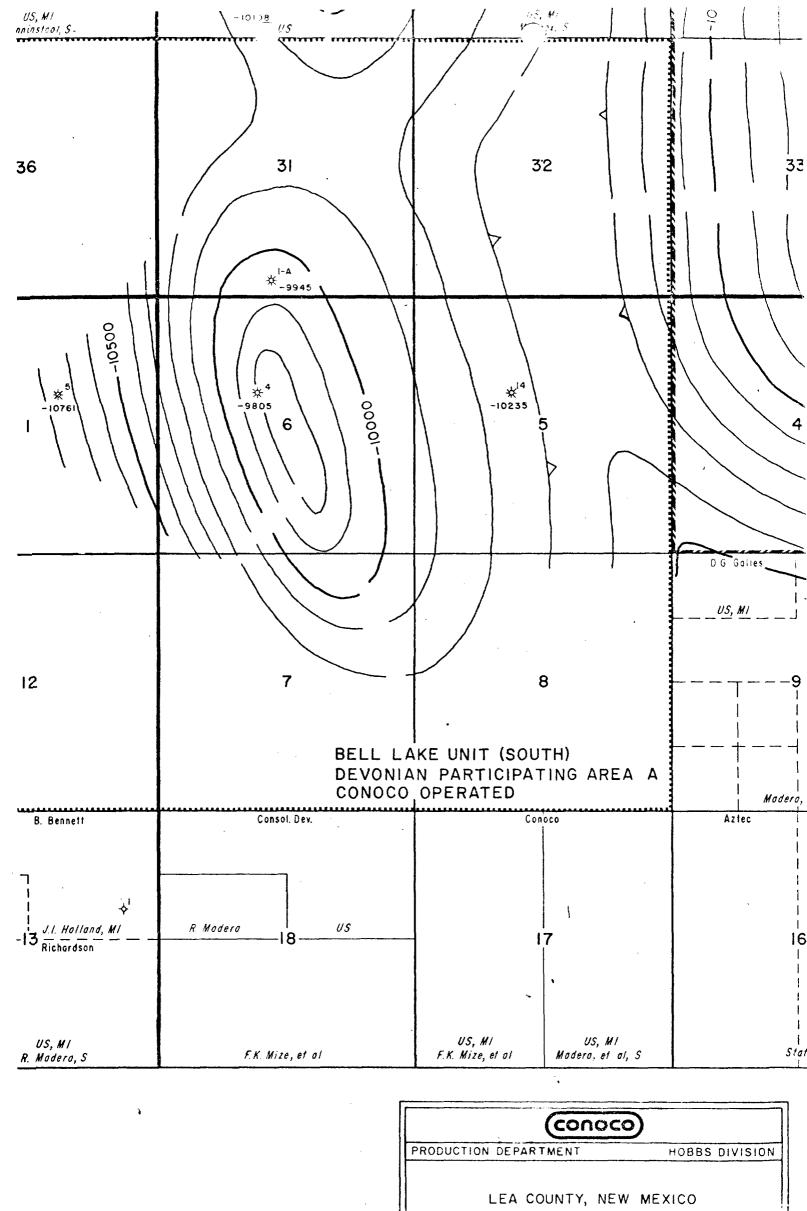
Mary E. Thompson, ind. exec. of Estate	
of Dale M. Thompson	0.781
Buckeye Oil Company	31.234
Leo J. Klise	11.875
John J. Klise, Jr.	11.875
Fredrick L. Stead	1.562
John Grappe	2.344
J. G. Thornhill	6.255
J. Penrod Toles	1.250
Small Business Adm. Rcvr. for Roswell	
Small Business Investment Company	2.502
Lawrence C. Harris	2.502
Walter Locker, Sr.	.625
George R. Locker	.625
William I. Lee	. 784
L. C. Jones	.005
Rubert Madera*	9.375
Ruford Madera*	6.250
Mildred A. Broman*	6.250
Buckeye Oil Company	.016
Erwin Levers and LaVerne C. Levers	3.109
J. M. Clark	0.781

^{*}Unleased and Uncommitted

⁽a) Continental Oil Company has assumed financial obligation of uncommitted working interests so far as Bell Lake Unit operations are concerned.

Tract Participation

Tract Number	Acres	<u>Participation</u>
1	79.92	5.55124
2	240.00	16.67037
3	160.00	11.11358
4	160.00	11.11358
5	320.00	22.22716
6	160.00	11.11358
7	319.76	22.21049
	1439.68	100.00000



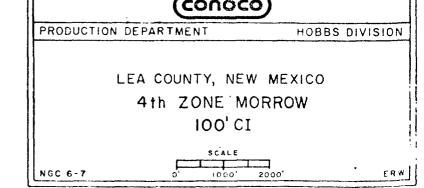
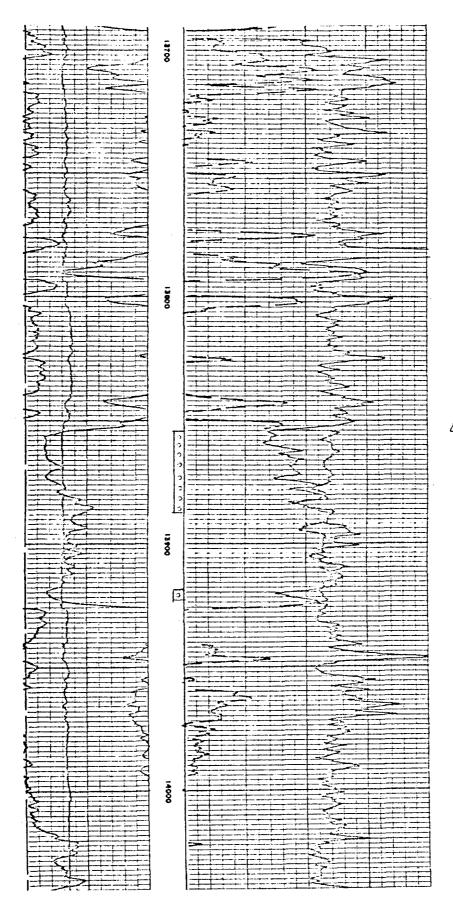


Exhibit "C"

CONTINENTAL OIT CO BELL LAKE UNIT NO. 14 1650 FN & WI Sec. 5-T24S-R34E Elev., KB 3618



4th Morrow Sand

EXHIBIT "E" ENGINEERING AND GEOLOGICAL REPORT MORROW PENNSYLVANIAN RESERVOIR OF BELL LAKE UNIT AREA

Set forth below is a summary of geological and engineering information pertinent to the establishment of a participating area for the Morrow Formation of Pennsylvanian age in the Bell Lake Unit area.

General

In the Bell Lake Unit area the Morrow sands of Pennsylvanian age are found at depths from 13,500' to 14,500'. The Morrow section is present over the entire area, but the gas reservoirs occur as sand stringers and lenses in five major sands. The sands appear to be better developed on the flanks of the structure than on the crest.

The first gas production in the Morrow was found in Bell Lake State 3 No. 5, approximately 9000' west of Bell Lake Unit 3 No. 14. The No. 5 Well was drilled to a total depth of 16,100' in October 1958, and the Devonian Formation was found to be water productive. This well was plugged back and completed in the 1st and 4th Morrow sands with an initial calculated open flow potential of 7625 MCF gas per day. Since completion, the well has produced 2.7 MMMCF gas. Recompletion is now being attempted in the Atoka, having plugged back from the Morrow.

The second well completed in the Morrow sand was Bell Lake State 1 No. 1, approximately 5,000' northwest of Bell Lake Unit 3 No. 14. This well produced 3.6 MMMCF gas from the Devonian prior to being recompleted to the 1st Morrow sand in July 1968. The Morrow in this well had a calculated absolute open flow potential of 1989 MCF gas per day. To December 1, 1974, Bell Lake State 1 No. 1 has produced 2.1 MMMCF gas. Both Bell Lake State 1 No. 1 and Bell Lake State 3 No. 5 were designated as noncommercial producers from the Morrow.

Geology

The Bell Lake Unit area is described as a series of north-south trending anticlinal closures. (See Exhibit "C") The Morrow sands are present over the entire area, occurring in five generalized zones. Reservoir quality, thickness, and areal distribution vary widely in each of the zones. The 4th Morrow sand, 13,850'-13,925' (See Exhibit "D") is the productive zone in the Bell Lake Unit 3 No. 14. The reservoir lithology, based on sample cutting descriptions of the interval 13,860-13,950, taken from the Bell Lake Unit 3 No. 14, located in SE/4 NW/4 Section 5, T-24S, R-34E, is as follows:

Sandstone, light to medium gray-brown, very fine to fine-grained, hard, well-cemented to slightly friable with varying amounts of:

Sand, coarse to very coarse, clear to buff, angular to subangular, loose grains to moderately friable, slightly limy.

Bell Lake Unit 3 No. 14

Bell Lake Unit 3 No. 14, was spudded December 12, 1973. Total depth of 14,228' was reached on March 26, 1974. The well was completed natural on July 3, 1974, for a calculated absolute open flow potential of 82 MMCF gas per day from the 4th Morrow sand at a depth of 13,854' to 13,923'. Gas sales commenced August 1, 1974 and to December 1, 1974, Bell Lake Unit 3 No. 14 has produced 1,112 MMCF gas. In November 1974, this well

Engineering and Geological Report Page 2

averaged 9,649 MCF gas per day, no liquids. At the present rate of production and current price of gas, the well is expected to generate revenue sufficient to repay the cost of drilling, completing and equipping by March 1, 1975.

Bell Lake Unit 3 No. 14 has encountered a vastly improved area of the Morrow. Though both Bell Lake Unit 3 No. 14 and Bell Lake State 3 No. 5 produce from the 4th sand, they exhibit considerable differences, both in deliverability and reserves. Furthermore, Bell Lake Unit 3 No. 14 qualifies for "new gas" price under FPC orders. The character of the 4th sand changes from thin (10') and tight in Bell Lake Unit 1 No. 4, near the structural crest, to thick (55') with good permeability in Bell Lake Unit 3 No. 14.

Pressure data on Morrow wells in the area indicate limited communication between wells, as shown in the table below:

Well and Location	<u>Initial BHP</u>	Latest BHP	Date
BLU State 3 No. 5 SW/4 NE/4 Section 1, T-24S, R-33E	8921	1482	7-23-70
BLU State 1 No. 1-A SE/4 SW/4 Section 31, T-23S, R-34E	7408	3404	5-28-71
BLU 3 No. 14 SE/4 NW/4 Section 5, T-24S, R-34E	8622	:	4-30-74
Antelope Ridge Unit No. 2 NW/4 NE/4 Section 4, T-24S, R-34E	8731	5827	11-10-65

Furthermore, Morrow productivity appears to be relatively insensitive to structural position. Depositional conditions not necessarily related to structure appear to be more influential on presence of gas and the deliverability of a well. These conditions are not well understood and are under intensive study in the Delaware Basin.

Statewide rules provide for 320-acre spacing for Morrow wells in pools not having special rules. Nevertheless, it is our present intention to develop Morrow gas on well spacing of 640 acres per well. The performance of Bell Lake Unit No. 14 would indicate the ability to drain this area provided there is continuity of pay section.



Production Department
Hobbs Division
Western Hemisphere Petroleum Division

Continental Oil Company P.O. Box 460 1001 North Turner Hobbs, New Mexico 88240 (505) 393-4141

56

February 10, 1975

Oil and Gas Supervisor United States Geological Survey P. O. Box 1857 Roswell, New Mexico 88201

Commissioner of Public Lands State of New Mexico P. O. Box 1148 Santa Fe, New Mexico 87501

New Mexico Oil Conservation Commission P. O. Box 2088
Santa Fe, New Mexico 87501

Gentlemen:

Application for Approval of the Initial Participating Area for the Morrow Formation - Bell Lake Unit, Lea County, New Mexico

Attached are required number of copies of the application for approval of the Initial Morrow Participating Area for the Bell Lake Unit. Your further handling and approval of this application will be sincerely appreciated.

Yours very truly,

L. P. Thompson Division Manager

VTL:reh Enc



United States Department of the Interior

GEOLOGICAL SURVEY Drawer 1857

Roswell, New Mexico 88201

January 15, 1975

563

Continental Oil Company Attention: Mr. L. P. Thompson P.O. Box 460 Hobbs, New Mexico 88240

Gentlemen:

The 1975 plan of development submitted for the Bell Lake unit area, Lea County, New Mexico, was approved on this date subject to like approval by the appropriate State officials.

Such plan proposes the completion of unit well No. 15 which is currently drilling and the drilling of a confirmation Atoka-Pennsylvanian well in the NE2 sec. 7, T. 24 S., R. 34 E., N.M.P.M.

Four approved copies are enclosed.

Sincerely yours,

N. O. FREDERICK Area Oil and Gas Supervisor

The second secon

NMOCC, Santa Fe (1tr only)
Com. Pub. Lands, Santa Fe (1tr only)
Hobbs (w/cy plan)

JAGillham:ds

OIL CONSERVATION COMMISSION P. O. BOX 2088 SANTA FE NEW MEXICO 87501

563

January 8, 1975

Continental Oil Company P. O. Box 460 Hobbs, New Mexico 88240

Attention: Mr. L. P. Thompson

Re: 1975 Plan of Development Bell Lake Unit, Lea

County, New Mexico.

Gentlemen:

This is to advise that the New Mexico Oil Conservation Commission has this date approved the Plan of Development for the calendar year 1975 for the Bell Lake Unit, Lea County, New Mexico, subject to like approval by the United States Geological Survey and the Commissioner of Public Lands of the State of New Mexico.

One approved copy of the plan is returned harewith.

Very truly yours,

A. L. PORTER, Jr. Secretary-Director

ALP/JEK/og

cc: Commissioner of Public Lands - Santa Fe United States Geological Survey - Roswell

PLAN OF OPERATION/DEVELOPMENT FOR CALENDAR YEAR 1975 BELL LAKE UNIT (NO. 14-08-001-1066) LEA COUNTY, NEW MEXICO

TO THE OIL AND GAS SUPERVISOR (6) UNITED STATES GEOLOGICAL SURVEY P. O. BUX 1857 ROSWELL, NEW MEXICO 88201

COMMISSIONER OF PUBLIC LANDS (3) STATE OF NEW MEXICO P. O. BOX 1148 SANTA FE, NEW MEXICO 87501

OIL CONSERVATION COMMISSION (2) STATE OF NEW MEXICO P. O. BOX 2088 SANTA FE, NEW MEXICO 87501

Gentlemen:

In compliance with Section 10 of the Bell Lake Unit Agreement dated May 12, 1953, Continental Oil Company, as Unit Operator, hereby submits for your approval a Plan of Operation/Development for the year 1975. Under date of December 15, 1973, the Plan of Operation/Development covering calendar year 1974 was submitted and subsequent approval was received from your offices.

SUMMARY OF 1974 OPERATIONS

The three participating areas produced gas and liquids during 1974 as shown below:

Participating Area	For Year Through 10-31		<u>Daily Average</u>	
Area "A"	MCF	Bbls	MCF	Bbls
Atoka Bone Spring	2,469,553 68,134	13,419 46,501	8,124 224	44 153
Area B				
Devonian	858,407	1,120	2,824	4

Bell Lake Unit Well No. 5 has been re-entered and work is in progress to abandon the Morrow (non-commercial) and recomplete in the Atoka. If the Atoka is found to be commercially productive at this location the participating area will be enlarged.

SUMMARY OF 1974 DEVELOPMENT

Bell Lake Unit No. 14 was drilled at a location 1650' FNL and 1650' FWL, Section 5, Township 24 South, Range 34 East and was completed May 4, 1974 for a calculated open flow potential of 82,000 MCF/D from the Morrow Formation. The well was placed on production in August and has produced 818,083 MCF, no liquids, through October 31, an average of 8,892 MCF per day. Application for initial Morrow participating area will be filed in the near future.

Bell Lake Unit No. 15 was spudded October 9, at a location 1980' from south and west lines of Section 8, Township 23 South, Range 34 East. The well is projected to a depth of 13,700' to test Atoka and Morrow sections of the Pennsylvanian.

PROPOSED DEVELOPMENT DURING 1975

A confirmation Atoka-Pennsylvanian well is proposed to be drilled during 1975 in NE/4 NE/4, Section 7, Township 24 South, Range 34 East.

OFFSET OBLIGATIONS

Appropriate and adequate measures will be taken to prevent drainage of unitized substances from lands subject to the Bell Lake Unit Agreement, or pursuant to applicable regulations, fair and reasonable compensatory royalty will be paid as provided in Section 18 of said Agreement.

MODIFICATION

It is understood that portions of this Plan of Operation/Development outlined above are dependent upon certain information to be obtained prior and subsequent to the proposed work as well as other contingencies, and for these reasons, this Plan of Operation/Development may be modified from time to time, with like approval to meet changing conditions.

EFFECTIVE DATE

This Plan of Operation/Development shall be effective upon approval by the Supervisor, Commissioner, and Commission.

Date: December 15, 1974.

TERM

This Plan of Operation/Development is submitted for the period ending

December 31, 1975. Prior to that date, another Plan of Operation/Development
will be submitted for approval.

Plan of Operation/Development Page 3

•	UNIT OPERATOR
	BY
	L. P. Thompson
Approved Department of the Interior	DATE
Approved Compressioner of Public Lands	DATE
Approved	DATE January 18,1975

State of New Mexico

TELEPHONE 505-827-2748







Commissioner of Public Lands
December 19, 1974

563

P. O. BOX 1148 SANTA FE, NEW MEXICO

Continental Oil Company P. O. Box 460 Hobbs, New Mexico 88240

Re: 1975 Plan of Operation and

Development
BELL LAKE UNIT
Lea County, New Mexico

ATTENTION: Mr. L. P. Thompson

Gentlemen:

The Commissioner of Public Lands has this date approved your 1975 Plan of Operation and Development for the Bell Lake Unit, whereby you propose the drilling of an Atoka-Pennsylvanian confirmation well in the NE/4NE/4 of Section 7, Township 24 South, Range 34 East. This approval is subject to like approval by the United States Geological Survey.

Enclosed is one approved copy of the plan.

Please remit a Three (\$3.00) Dollar filing fee.

Very truly yours,

RAY D. GRAHAM, Director Oil and Gas Department

AJA/RDG/s Enclosure

CE:

USGS-Roswell, New Maxico OCC- Santa Fe, New Mexico



L. P. Thompson Division Manager Production Department Hobbs Division

Western Hemisphere Petroleum Division Continental Oil Company P. 0. 460 1001 North Turner Hobbs, New Mexico 88240 (505) 393-4141

August 2, 1974

ON CONSERVATION C

Commissioner of Public Lands State of New Mexico P. O. Box 1148 Santa Fe, New Mexico 87501

New Mexico Oil Conservation Commission P. O. Box 2088 Santa Fe, New Mexico 87501

Gentlemen:

Bell Lake Unit - Initial Participating Area for Atoka Formation

Attached for your information is a copy of the approval of the subject application by the U. S. Geological Survey.

Yours very truly,

Memphon

VTL:reh Enc



United States Department the Interior

GEOLOGICAL SURV

Drawer 1857

Roswell, New Mexico

AUG - 8 1974

Santa Fo July 31, Aüd 1 - '74

RECEIVED

Div. Manager

9-7af Supt.

Div. Engr.

Div. Off. Mar.s Cons'v. Coord.

M. S. SUPV.

Continental Oil Company Attention: Mr. V. T. Lyon P.O. Box 460 Hobbs, New Mexico 88240

Gentlemen:

Your application of July 15, 1974, requesting approval of the initial Atoka participating area of the Bell Lake unit agreement, Lea County, New Mexico, was approved on July 31, 1974, by the Area Oil and Gas Supervisor, U. S. Geological Survey, effective as of July 6, 1973.

The initial Atoka participating area embraces 953.74 acres described as the S½ of sec. 31, T. 23 S., R. 34 E., and all of sec. 6, T. 24 S., R. 34 E., N.M.P.M. Such revision is based on the recompletion of unit well No. 4 located in the SE½NW½ of sec. 6, T. 24 S., R. 34 E., as a commercial Atoka well. Unit well No. 4 was recompleted on May 22, 1973, for a calculated absolute open flow potential of 69,000 MCFGPD from the Atoka interval 12,450 to 12,486 feet.

Copies of the approved application are being distributed to the appropriate Federal offices and two copies are returned herewith. You are requested to furnish the State of New Mexico and all interested parties with appropriate evidence of this approval.

Sincerely yours,

N. O. FREDERICK

Area Oil and Gas Supervisor

- A schedule marked Exhibit "B" showing the participating percentage
 of each lease included or partially included in the proposed initial
 Participating Area.
- 3. A structure map marked Exhibit "C" contoured on top of the Atoka Formation based on well data and seismic interpretation.
- 4. A log marked Exhibit "D" of Bell Lake Unit Well No. 4 showing the Atoka Formation penetrated, perforated, and tested.
- 5. Engineering and Geological report marked Exhibit "E" describing pertinent information and the reservoir data in regard to the Atoka reservoir as found in Well No. 4.

Respectfully submitted,

CONTINENTAL OIL COMPANY

L. F. Thompson
Division Manager

reh

APPROVED:

United States Geological Survey

Date

New Mexico Oil Conservation Commission

Date

- 2. A schedule marked Exhibit "B" showing the participating percentage of each lease included or partially included in the proposed initial Participating Area.
- 3. A structure map marked Exhibit "C" contoured on top of the Atoka Formation based on well data and seismic interpretation.
- 4. A log marked Exhibit "D" of Bell Lake Unit Well No. 4 showing the Atoka Formation penetrated, perforated, and tested.
- 5. Engineering and Geological report marked Exhibit "E" describing pertinent information and the reservoir data in regard to the Atoka reservoir as found in Well No. 4.

Respectfully submitted,

CONTINENTAL OIL COMPANY

L. P. Thompson Division Manager

reh

APPROVED:

United States Geological Survey

Commissioner of Public Lands

Date

July 23, 1974

New Mexico Oil Conservation Commission

Date

- 2. A schedule marked Exhibit "B" showing the participating percentage of each lease included or partially included in the proposed initial Participating Area.
- 3. A structure map marked Exhibit "C" contoured on top of the Atoka Formation based on well data and seismic interpretation.
- 4. A log marked Exhibit "D" of Bell Lake Unit Well No. 4 showing the Atoka Formation penetrated, perforated, and tested.
- 5. Engineering and Geological report marked Exhibit "E" describing pertinent information and the reservoir data in regard to the Atoka reservoir as found in Well No. 4.

Respectfully submitted,

CONTINENTAL OIL COMPANY

L. P. Thompson Division Manager

reh

APPROVED:

United States Geological Survey

Oil Conservation Commission

Date

Commissioner of Public Lands

Willer

Date

Date

State of New Mexico

121112110**112** 505-887-2**748**



ALEX J. ARMIJO

COMMISSIONER



Commissioner of Public Lands

July 23, 1974

P. O. BOX 1148 SANTA FE, NEW MEXICO

P. C. Box 460 1001 North Turner Bobs, New Mexico 88240

Re: Application for approval of the Initial Participating Area-Atoka Formation for the Bell Lake Unit

ATTENTION: Mr. L. P. Thompson

Centlemen:

The Commissioner of Public Lands has this date given approval to the Initial Participating Area for the Atoka Formation, Ball Lake Unit, Lea County, New Mexico. This approval is subject to like approval by the United States Geological Survey and the Oil Conservation Commission.

One approved copy of the application is enclosed.

In the future please submit three (3) copies to this office. We only received one copy with your letter.

Very truly yours,

RAY D. GRAHAM, Director Oil and Gas Department

AJA/RDG/s

ec:

USGS-Roswell, New Mexico CCC- Santa Fe, New Mexico

OIL CONSERVATION COMMISSION

P. O. BOX 2088 SANTA FE, NEW MEXICO 87501

563

July 22, 1974

Continental Oil Company P. O. Box 460 Hobbs, New Mexico 88240

Attention: Mr. L. P. Thompson

Re: Initial Participating Arm, Atoka Formation - Bell Lake Unit, Lea County, New Mexico

Gentlemen:

This is to advise that the New Mexico Oil Conservation Commission has this date approved the Initial Participating Area for the Atoka Formation for the Bell Lake Unit, Lea County, New Mexico, subject to like approval by the United States Geological Survey and the Commissioner of Public Lands of the State of New Mexico.

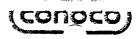
One approved copy of the application as returned herewith.

Very truly yours,

A. L. PORTER, Jr. Secretary-Director

ALP/JEK/og

cc: Commissioner of Public Lands - Santa Fe United States Geological Survey - Roswell



L. P. Thompson
Division Manager
Production Department
Hobbs Division
Western Hemisphere Petroleum Division

Continental Oil Company P.O. Box 460 1001 North Turner Hobbs, New Mexico 88240 (505) 393-4141

July 15, 1974

United States Geological Survey C/O Regional Oil and Gas Supervisor P. O. Box 1857 Roswell, New Mexico 88201

Commissioner of Public Lands State of New Mexico P. O. Box 1148 Santa Fe, New Mexico 87501

New Mexico Oil Conservation Commission P. C. Box 2088 Santa Fe, New Mexico 87501

Gentlamen:

Attached for your consideration and action is our application for the initial participating area for the Atoka member of the Pennsylvanian formation in the Bell Lake Unit area.

Your's very truly,

VTL:reh

Enc

APPLICATION FOR APPROVAL OF THE INITIAL PARTICIPATING AREA FOR THE ATOKA FORMATION, BELL LAKE UNIT (NO. 14-08-001-1066) LEA COUNTY, NEW MEXICO

Director, United States Geological Survey (6) C/O Regional Oil and Gas Supervisor P. O. Box 1857 Roswell, New Mexico 88201

Commissioner of Public Lands (3) State of New Mexico P. O. Box 1148 Santa Fe, New Mexico 87501

New Mexico Oil Conservation Commission (2)
P. O. Box 2088
Santa Fe, New Mexico 87501

In conformance with the provisions of Section 11, of the Unit Agreement dated May 12, 1953, affecting lands in the Bell Lake Unit, Lea County, New Mexico, Continental Oil Company, Unit Operator, hereby submits for your approval a schedule of acreage which, upon your respective approvals, will constitute the initial Participating Area for the Atoka Formation of Pennsylvanian age. Completion of Bell Lake Unit Well No. 4 has shown the Atoka formation to be commercially productive of gas. Proven area is considered to include south half Section 31, T-23S, R-34E and Section 6, T-24S, R-34E.

In support of this application, operator attaches hereto and hereby makes a part of this application the following:

1. A map marked Exhibit "A" showing thereon the Bell Lake Unit Devonian,
Participating Area "A", and the area of the proposed initial Atoka
Participating Area.

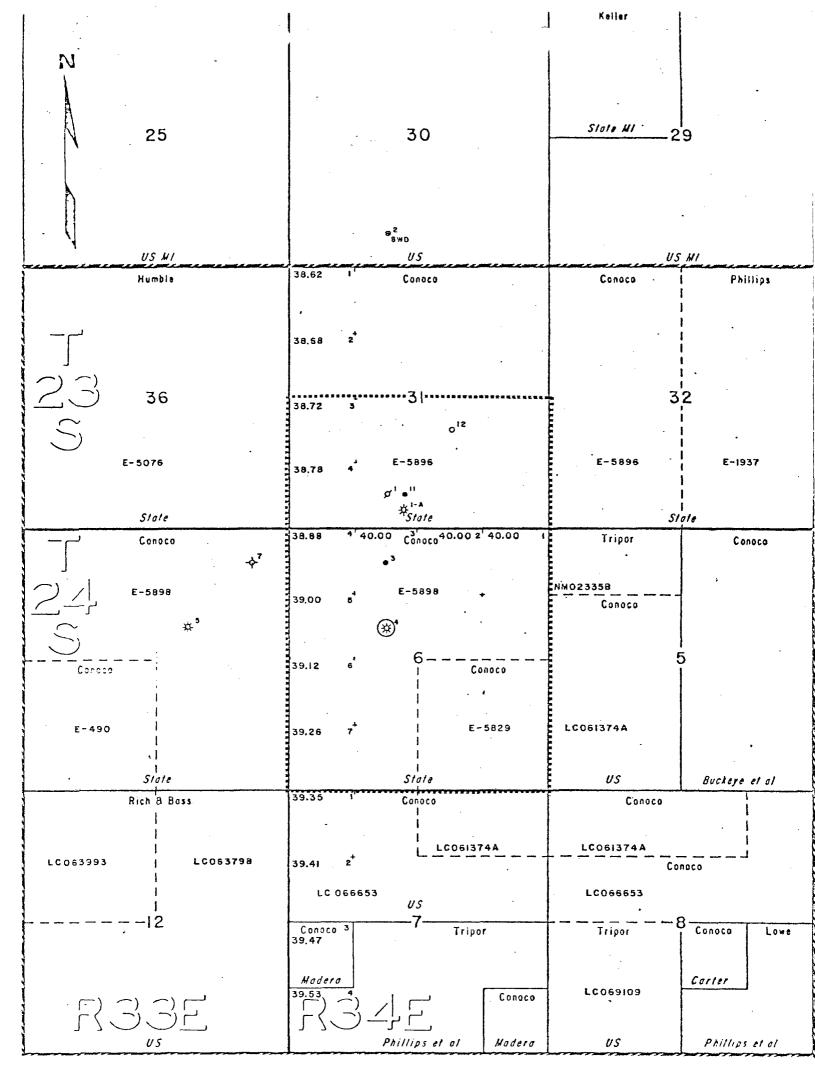
- A schedule marked Exhibit "B" showing the participating percentage
 of each lease included or partially included in the proposed initial
 Participating Area.
- 3. A structure map marked Exhibit "C" contoured on top of the Atoka Formation based on well data and seismic interpretation.
- 4. A log marked Exhibit "D" of Bell Lake Unit Well No. 4 showing the Atoka Formation penetrated, perforated, and tested.
- 5. Engineering and Geological report marked Exhibit "E" describing pertinent information and the reservoir data in regard to the Atoka reservoir as found in Well No. 4.

Respectfully submitted,

CONTINENTAL OIL COMPANY

L. P. Thompson
Division Manager

reh	
APPROVED:	
United States Geological Survey	Date
Commissioner of Public Lands	Date
New Mexico Oil Conservation Commission	July 22, 1974



DEVONIAN PARTICIPATING AREA "A"

PROPOSED INITIAL ATOKA
PARTICIPATING AREA

ATOKA COMPLETION



EXHIBIT "B"

BELL LAKE UNIT - LEA COUNTY, NEW MEXICO INITIAL PARTICIPATING AREA FOR ATOKA FORMATION

TRACT 1 Serial Number: E-5829

> Acreage: 160.00 Acres

Description: SE/4 Section 6, Township 24

South, Range 34 East

Working Interest Owner: Continental Oil Company

Royalty Interest Owner: State of New Mexico

TRACT 2 Serial Number: E-5896

> Acreage: 317.50 Acres

Description: Lots 3 and 4, E/2 SW/4

> and SE/4 Section 31, Township 23 South,

Range 34 East

Working Interest Owner: Continental Oil Company

State of New Mexico Royalty Interest Owner:

TRACT 3 Serial Number: E-5898

> 476.24 Acres Acreage:

Lots 1 thru 7, S/2 NE/4, Description:

> SE/4 NW/4 and E/2 SW/4. Section 6, Township 24 South, Range 34 East

Working Interest Owner:

Continental Oil Company

Royalty Interest Owner:

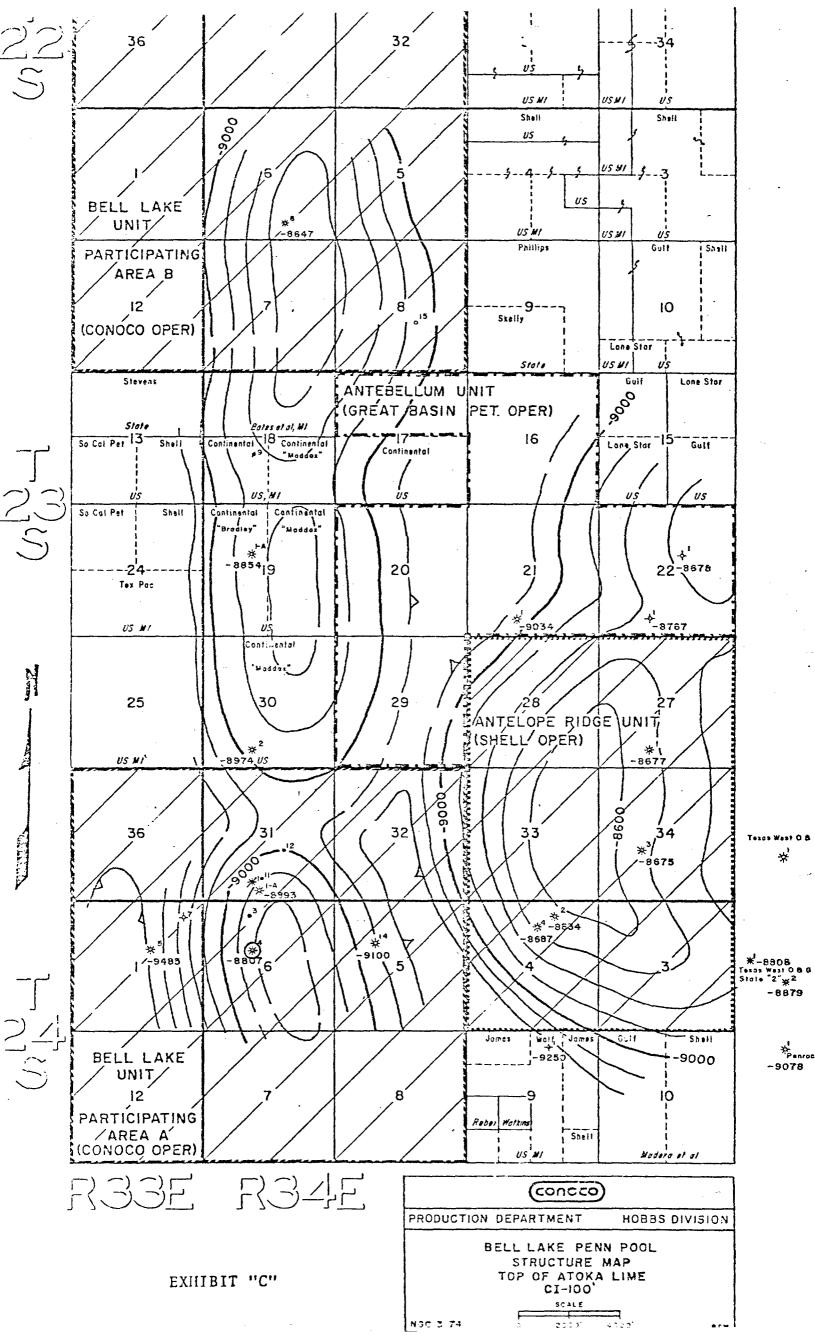
State of New Mexico

PARTICIPATION

TRACT 1 16.77606%

TRACT 2 33.29000%

TRACT 3 49.93394%



CONTINENTAL OIL CO.
BELL LAKE UNIT 1 NO. 4
1980 FN & WL
Sec. 6-T24S-R34E
Elev., KB 3627

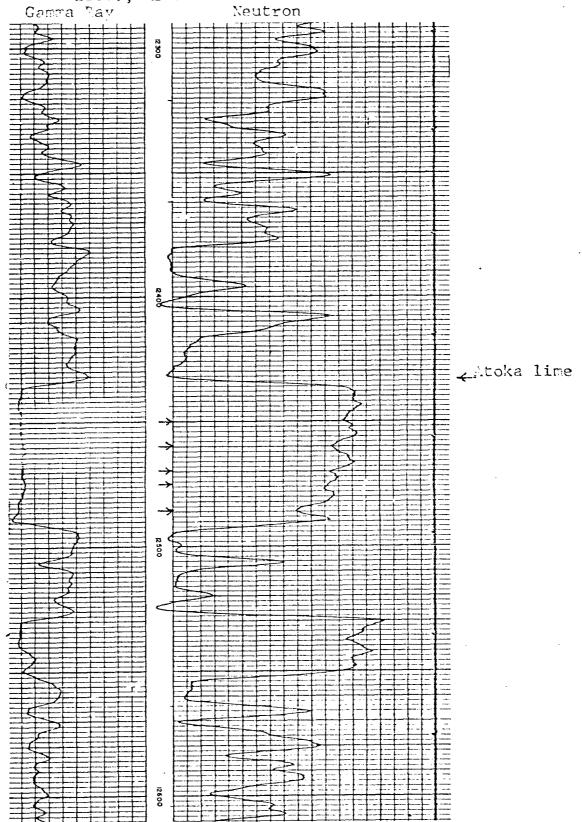


Exhibit "E" Engineering and Geological Report Atoka Pennsylvanian Reservoir of Bell Lake Unit Area

Set forth below is a summary of geological and engineering information pertinent to the establishment of a participating area for the Atoka member of the Pennsylvanian formation in the Bell Lake Unit Area.

General

The first indication of gas production possibilities in the Atoka member of the Pennsylvanian was found in Bell Lake Unit Well No. 1 when it blew out and burned at a total depth of 12,616'. The well was P&A at that TD. Well No. 2 was drilled one mile north of Well No. 1 and completed in the Atoka member of the Pennsylvanian formation for an openflow potential of 13,100 MCFPD. This well was used to provide drilling rig fuel during the drilling of Bell Lake Unit Wells Nos. 3, 4, 5 and 6. Well No. 2 went to 100% water production before a gas connection was available to any of the wells in the unit. It has now been recompleted as a salt water disposal well for other wells in the Bell Lake Unit area. This was the only Atoka production in the Bell Lake Unit until the recompletion of Bell Lake Unit No. 4 on July 6, 1973.

Geology

The Bell Lake Atoka reservoir is described as a north-south trending series of anticlinal closures. (See Exhibit "C"). The Atoka Lime thins to the north pinching out by the time it reaches the Bell Lake Unit No. 6, Section 6, T-23S, R-34E. The reservoir lithology, based on a description of a core (12,551-12,699) taken from the Bell Lake Unit No. 1-A, located in SE/4 SW/4, Section 31, T-23S, R-34E, is as follows:

Limestone, gray tan to dark brown-black at base with some shale partings; cryptocrystalline to finely crystalline; slight to moderately fossiliferous; trace to very vuggy porosity with some vugs to one inch diameter; trace of glauconite and white or brown calcite as fossil casts. Some fracturing evident and some dark gray-black micaceous shale breaks and trace of limey sand, very fine-grained and glauconitic. Porosity generally increases downward from pin-point and small vugs to good large vuggy porosity. Strong gas odor in core. Basal limestone is dark brown to black, fine to cryptocrystalline, shaly, tight and pyritic.

Bell Lake Unit No. 4

Bell Lake Unit No. 4 was spudded January 29, 1956. At a depth of 12,773' the well began to experience gas-cutting of the mud so that mud weight had to be increased. On July 22, 1956 the well blew out at a total depth of 13,393' and flowed out of control until August 23, 1956. After control of the well was regained, drilling resumed and continued to a total depth of 15,566'. The well was completed May 10, 1957 for a calculated openflow potential of 32.9 MMCFPD in the interval 14,736 to 14,938' of the Devonian formation.

Despite several attempts to stimulate production and/or reduce water production, the well became increasingly marginal to operate and, just prior to being plugged back, produced 790 MCF and 1,380 barrels water per day. On May 22, 1973, Well No. 4 was entered and a cast iron bridge plug was set at 14,000°. The well was perforated with two shots at each of 5 points within the interval 12,450° to 12,486° and completed natural for a calculated absolute openflow of 69,000 MCFPD. Since recompletion Well No. 4 has produced 2,004,921 MCF and 9,864 barrels condensate from the atoka through April 30, 1974. During April it produced at an average rate of 8,280 MCF with 48 barrels condensate per day. At the present rate of production and current prices of gas and oil the well is expected to generate revenue sufficient to repay the cost of drilling, completing and equipping a well to this depth by September 1, 1974.

Bell Lake Unit No. 4 is considered to have discovered an entirely new reservoir of gas from the Atoka formation. The nearest wells which have been drilled and completed to this formation have exhibited considerably lower initial bottomhole pressures than did Bell Lake Unit NO. 4 as shown by the tabulation below:

<u>Well</u>	Initial BHP	Latest BHP	Remarks
Bell Lake Unit No. 2	6,120		Recompleted for SWD
Antelope Ridge Unit #4	5,914	5,162	March 8, 1966
Bell Lake Unit No. 4	8,602		No subsequent pressure

State-wide rules for wells at this depth call for 320-acre spacing in the

absence of special pool rules. At this time there appears to be no reason to request special pool rules; however, further development of the Atoka is expected to be conducted on the basis of 640-acres per well. Based on the attached structure map and the well's performance it is estimated that the area reasonably proven to be commercially productive of gas in the Atoka member of the Pennsylvanian formation is the area shown on Exhibit "A".

OIL CONSERVATION COMMISSION P. O. BOX 2088

SANTA FE, NEW MEXICO 87501

January 18, 1974

563

Continental Oil Company P. O. Box 460 Hobbs, New Mexico 88240

Attention: Mr. L. P. Thompson

Re: 1974 Plan of Operation/Development
Bell Lake Unit, Lea County, New Mexico

Gentlemen:

This is to advise that the New Mexico Oil Conservation Commission has this date approved the 1974 Plan of Operation/Development dated December 15, 1973, for the Bell Lake Unit, Lea County, New Mexico, subject to like approval by the United States Geological Survey and the Commissioner of Public Lands of the State of New Mexico.

One approved copy of the plan is returned herewith.

Very truly yours,

A. L. PORTER, Jr. Secretary-Director

ALP/JEK/og

cc: Commissioner of Public Lands Santa Fe, New Mexico

> U. S. G. S Box 1857 Roswell, New Mexico



United States Department of the Interior

GEOLOGICAL SURVEY

Drawer 1857 Roswell, New Mexico 88201

January 17, 1974

Continental Oil Company Attention: Mr. L. P. Thompson P.O. Box 460 Hobbs, New Mexico 88240

Gentlemen:

Four approved copies of your 1974 plan of development for the Bell Lake unit area, Lea County, New Mexico, proposing the submittal of an application for the establishment of an initial Atoka participating area based on the commercial completion of unit well No. 4 and the drilling of a confirmation Atoka well in the NW% sec. 5, T. 24 S., R. 34 E., are enclosed. Such plan was approved on this date subject to like approval by the appropriate officials of the State of New Mexico.

Sincerely yours,

(ORIG. 1777)

CARL C. TRAYWICK
Acting Area Oil and Gas Supervisor

cc:
Hobbs (w/cy plan)

NMOCC, Santa Fe (1tr only)
Com. Pub. Lands, Santa Fe (1tr only)

JAGillham:ds

State of New Mexico



ALEX J. ARMIJO COMMISSIONER



Commissioner of Public Lands

December 26, 1973

TELEPHONE 505-827-2748

P. O. BOX 1148 SANTA FE, NEW MEXICO

Continental Oil Company P. G. Box 460 Hobbs, New Mexico 88240

Re: 1974 Pien of Development

Bell Lake Unit

Lee County, New Mexico

ATTENTION: Mr. L. P. Thompson

Contiemen:

The Commissioner of Public Lands has this date approved your 1974 Plan of Development for the Bell Lake Unit, whereby you propose the drilling of an Atoka-Pennsylvanian confirmation well. This approval is subject to like approval by the United States Geological Survey.

Enclosed is one approved copy of the plan.

Please remit a Three (\$3.00) Dollar filing fee.

dery truly yours,

MAY D. GRAHAM, Director Dil and Ges Department

AJA/RDG/rz

Enclosure cc:

OCC-Sente Fe, New Mexico USGS-Roswell, New Mexico



L. P. Thompson
Division Manager
Production Department
Hobbs Division

Western Hemisphere Petroleum Division Continental Oil Company P. O. 460 1001 North Turner Hobbs, New Mexico 88240 (505) 393-4141

Santa Fe

December 17, 1973

011 & Gas Supervisor United States Geological Survey Box 1657 Roswell, New Mexico 88201

Commissioner of Public Lands State of New Mexico Box 1148 Santa Fe, New Mexico 87501

New Mexico 011 Conservation Commissioner P. O. Box 2088
Santa Fe, New Mexico 87501

Gentlemen:

1974 Flan of Operation/Development - Bell Lake Unit

Enclosed for your consideration and approval is our proposed Plan of Operation/Development for the Bell Lake Unit for the calendar year 1974.

Yours very truly. .

Mompson

rah Enc CC:

RLA: CES: HAM

PLAN OF OPERATION/DEVELOPMENT FOR CALENDAR YEAR 1974 BELL LAKE UNIT (NO. 14-08-001-1066) LEA COUNTY, NEW MEXICO

TO THE OIL AND GAS SUPERVISOR (6) UNITED STATES GEOLOGICAL SURVEY P. O. BOX 1857 ROSWELL, NEW MEXICO 88201

COMMISSIONER OF PUBLIC LANDS (3) STATE OF NEW MEXICO P. O. BOX 1148 SANTA FE, NEW MEXICO 87501

OIL CONSERVATION COMMISSION (2) STATE OF NEW MEXICO P. O. BOX 2088 SANTA FE, NEW MEXICO 87501

Gentlemen:

In compliance with Section 10 of the Bell Lake Unit Agreement dated May 12, 1953, Continental Oil Company, as Unit Operator, hereby submits for your approval a Plan of Operation/Development for the year 1974. Under date of December 15, 1972, the Plan of Operation/Development covering calendar year 1973 was submitted and subsequent approval was received from your offices.

SUMMARY OF 1973 DEVELOPMENT

Bone Spring Lime Participating Area

Well No. 12 was drilled and completed January 28, 1973, for IP 240 BOPD. Wells Nos. 13 and 13Y were drilled to the Bone Spring Lime but failed to find commercial production.

Devonian Participating Area

Well No. 4 was plugged back from the Devonian formation for recompletion. Devonian Participating Area $^{11}A^{11}$ no longer has production.

Atoka (Pennsylvanian)

Well No. 4 was re-completed in the Atoka section of the Pennsylvanian for initial flow rate of 5,500 MCF/day with tubing pressure of 6720 psi. It is anticipated that a participating area will be established for this formation.

OTHER OPERATIONS DURING 1973

Development of the Bone Spring formation has given justification for sale of casinghead gas. Compression facilities were installed for boosting the low pressure gas into Transwestern Gas Pipeline Company's gathering line.

DEVELOPMENT

A confirmation Atoka-Pennsylvanian well is proposed to be drilled during 1974 in SE/4 NW/4, Section 5, Township 24 South, Range 34 East. Additional development of Bone Spring formation is being evaluated.

OFFSET OBLIGATIONS

Appropriate and adequate measures will be taken to prevent drainage of unitized substances from lands subject to the Bell Lake Unit Agreement, or pursuant to applicable regulations, fair and reasonable compensatory royalty will be paid as provided in Section 18 of said Agreement.

MODIFICATION

It is understood that portions of this Plan of Operation/Development outlined above are dependent upon certain information to be obtained prior and subsequent to the proposed work as well as other contingencies, and for these reasons, this Plan of Operation/Development may be modified from time to time, with like approval to meet changing conditions.

EFFECTIVE DATE

This Plan of Operation/Development shall be effective upon approval by the Supervisor, Commissioner, and Commission.

Date: December 15, 1973.

Commission

TERM

This Plan of Operation/Development is submitted for the period ending December 31, 1974. Prior to that date, another Plan of Operation/Development will be submitted for approval.

Approved

Commissioner of Public Lands

Approved

New Mexico Oil Conservation

DATE

Rew Mexico Oil Conservation

CONTINENTAL OIL COMPANY



United States Department of the Interior

GEOLOGICAL SURVEY

Drawer 1857 Roswell, New Mexico 88201

August 2, 1973

Continental Oil Company P.O. Box 460 1001 North Turner Hobbs, New Mexico 88240 OIL CONSERVATION COMM

Gentlemen:

Our letter of July 31, 1973, transmitted approved copies of your application for the first revision of the Bone Spring Lime participating area for the Bell Lake unit agreement. Such letter incorrectly advised that the participating area revision was effective as of January 28, 1973. Inasmuch as unit well No. 12, the control well upon which the revision is based, was completed on January 28, 1973, the first revision must be effective as of January 1, 1973, pursuent to section 11 of the Bell Lake unit agreement.

Accordingly, our letter of July 31 is hereby corrected to the extent necessary to establish the effective date of the above described first participating area revision as January 1, 1973.

Sincerely yours,

ORIG

CARL C. TRAYWICK Acting Area Oil and Gas Supervisor

cc:
Hobbs
BLM, Santa Fe
Com. Pub. Lands, Santa Fe
NMOCC, Santa Fe
Accounts

JAMonro:CCTraywick:ds



United States Department of the Interior

GEOLOGICAL SURVEY

Drawer 1857 Roswell, New Mexico 88201

July 31, 1973

OIL COMMERVATION OFFI

Continental Oil Company P.O. Box 460 1001 North Turner Hobbs, New Mexico 88240

Gentlemen:

The first revision of the Bone Spring Lime participating area for the Bell Lake unit agreement, Lea County, New Mexico, was approved on July 31, 1973, by the Acting Area Oil and Gas Supervisor, U. S. Geological Survey, effective as of January 28, 1973.

The first revision participating area embraces 475.36 acres, as described on page one of the attached application, and is based on the information contributed by the completion of unit well No. 12 in the NWISEL sec. 31, T. 23 S., R. 34 E., N.M.P.M. Such well was completed January 28, 1973, for an initial production rate of 240 BOPD from the Bone Spring Lime interval 8,697 to 8,794 feet.

Copies of the approved applications are being distributed to the appropriate Federal offices and three approved copies are returned herewith. You are requested to furnish all interested parties with appropriate evidence of this approval.

Sincerely yours,

(ORIG CARL C. TRAYWICK Acting Area Oll & Gas Supervisor

cc:
Hobbs (w/cy appln)
BLM, Santa Fe (ltr only)
Com. Pub. Lands, Santa Fe (ltr only)
// NMOCC, Santa Fe (ltr only)

JAMonro:ds

OIL CONSERVATION COMMISSION

P. O. BOX 2088

SANTA FE, NEW MEXICO 87501

June 27, 1973

Continental Oil Company P. O. Box 460 Hobbs, New Mexico 88240

Re: First Enlargement of the Bone

Spring Participating Area, Bell Lake Unit, Lea County,

New Mexico

Gentlemen:

This is to advise that the New Mexico Oil Conservation Commission has this date approved the First Enlargement of the Bone Spring Participating Area for the Bell Lake Unit, Lea County, New Mexico, subject to like approval by the United States Geological Survey and the Commissioner of Public Lands of the State of New Mexico.

One approved copy of the application is returned herewith.

Very truly yours,

A. L. PORTER, Jr. Secretary-Director

ALP/JEK/og

cc: Commissioner of Public Lands - Santa Fe U. S. Geological Survey - Roswell

State of New Mexico

TELEPHONE 505-827-2748



ALEX J. ARMIJO COMMISSIONER

TANK TO THE PARTY OF THE PARTY

Commissioner of Public Lands
June 15, 1973

P. O. BOX 1148 SANTA FE, NEW MEXICO

Continental Oil Company P. O. Box 460 1001 North Turner Robbs, New Mexico 38240

> Ra: Application for First Enlargement of the Bone Spring Participating Area, Bell Lake Unit Les County, New Mexico

ATTENTION: Mr. L. P. Thompson

Gentlemen:

The Commissioner of Public Lands has this date given approval to the First Enlargement of the Bone Spring Participating Area, for the Bell Lake Unit, Lee County, New Maxico. This approval is subject to like approval by the United States Geological Survey and the Oil Conservation Commission.

The effective date of this enlargement to be as of January 28, 1973.

One approved copy of the application is enclosed.

Very truly yours,

RAY D. GRAHAM, Director Oil and Gas Department

AJA/RDG/s encl.

ec:

USGS-Roswell, New Mexico OCC- Santa Fe, New Mexico

(CO1-7CO

L. P. Thompson Division Manager **Production Department** Hobbs Division

Western Hemisphere Petroleum Division Continental Oil Company P.O. Box 460 1001 North Turner Hobbs, New Mexico 88240 (505) 393-4141

June 13, 1973

Regional and Gas Supervisor United States Geological Survey P. O. Box 1857 Roswell, New Mexico 88201

Commissioner of Public Lands State of New Mexico P. O. Box 1148 Santa Fe, New Mexico 87501

New Mexico 0il Conservation Commission \checkmark P. O. Box 2088 Santa Fe, New Mexico 87501

Gentlemen:

Application for First Enlargement of the Bone Spring Participating Area -Bell Lake Unit

We attach for your review, consideration and approval the subject application. We should appreciate your early favorable consideration of the application.

Yours very truly,

Mampaon

br Enc

Copy + Enc; RLA: HMN: CES: JWM

APPLICATION FOR APPROVAL OF THE FIRST ENLARGEMENT OF THE PARTICIPATING AREA FOR THE BONE SPRING LIME FORMATION BELL LAKE UNIT (NO. 14-08-001-1066) LEA COUNTY, NEW MEXICO

Director, United States Geological Survey (6) C/O Regional Oil and Gas Supervisor P. O. Box 1857 Roswell, New Mexico 88201

Commissioner of Public Lands (3) State of New Mexico P. O. Box 1148 Santa Fe, New Mexico 87501

New Mexico Oil Conservation Commission (2) P. O. Box 2088
Santa Fe, New Mexico 87501

In conformance with the provisions of Section II, of the Unit Agreement dated May 12, 1953, affecting lands in the Bell Lake Unit, Lea County, New Mexico, Continental Oil Company, Unit Operator, hereby submits for your approval a schedule of acreage which, upon your respective approvals, will constitute the first enlargement of the Participating Area for the Bone Spring Lime Formation. Completion of Bell Lake Unit Well No. 12 has extended the commercially proven area of the Bell Lake Bone Spring Lime reservoir to include SE/4 Section 31, Township 23 South, Range 34 East.

The schedule of lands regarded as reasonably proven to be productive of unitized substances and so to constitute the first enlarged Participating Area for said Bone Spring Lime Formation is as follows:

Township 23 South, Range 34 East: Lots 3 and 4, E/2 SW/4 and SE/4 Section 31;

Township 24 South, Range 34 East: Lots 3, 4, and 5, and SE/4 NW/4 Section 6, Lea County, New Mexico.

In support of this application, operator attaches hereto and hereby makes a part of this application the following:

A map marked Exhibit "A" showing thereon the Bell Lake Unit Devonian,
 Participating Area "A", the Initial Participating Area for the Bone
 Spring Lime Formation, and the area of the proposed first enlargement.

 A schedule marked Exhibit "B" showing the participating percentage of each lease included or partially included in the proposed enlarged Participating Area.

3. A structure map marked Exhibit "C" contoured on top of the Bone Spring
Lime Formation based on well data and seismic interpretation.

4. A log marked Exhibit "D" of Bell Lake Unit Well No. 12 showing the Bone Spring Lime Formation penetrated, perforated, and tested.

5. Engineering and geological report marked Exhibit "E" describing pertinent information and the reservoir data in regard to the Bone Spring Lime reservoir as found in Well No. 12.

Unit Operator respectfully requests that the Director of the United States Geological Survey, the Commissioner of Public Lands, State of New Mexico, and the Oil Conservation Commission, State of New Mexico, approve this schedule of acreage to constitute the first enlargement of the Participating Area, to be effective as of January 28, 1973, the date of completion of said Well No. 12.

Respectfully submitted, CONTINENTAL OIL COMPANY

L. P. Thompson Division Manager

br

APPROVED:

United States Geological Survey

Date

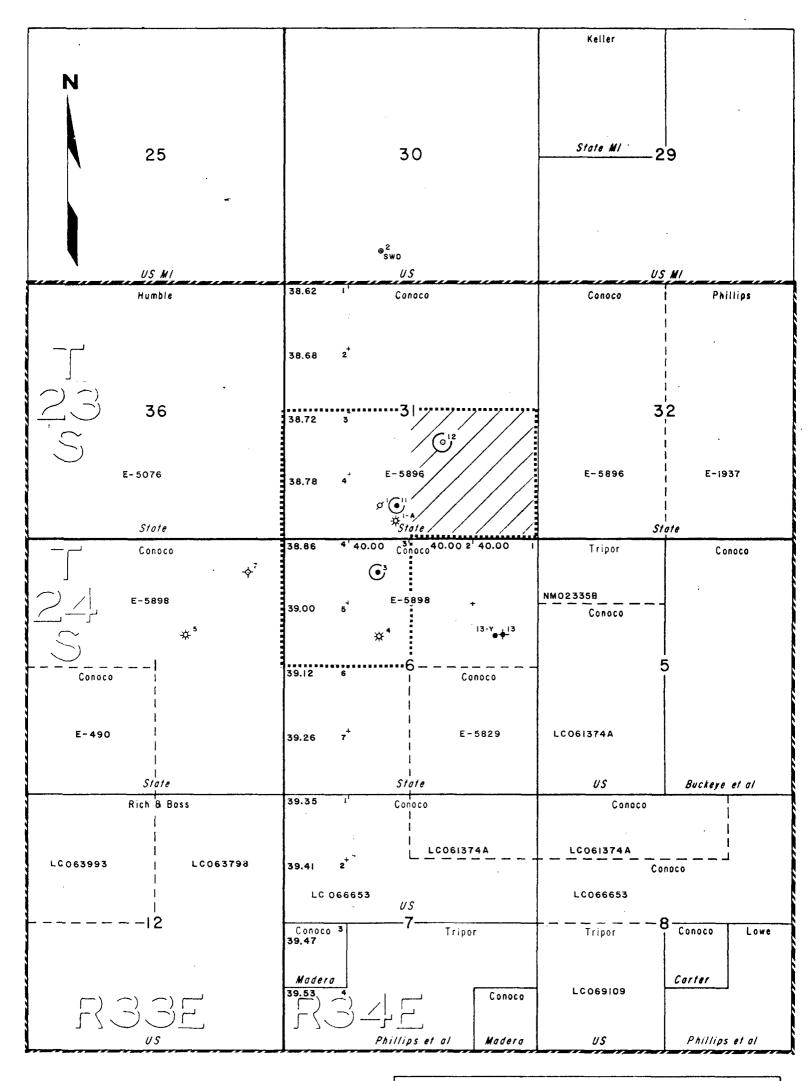
ompissioner of Public Lands

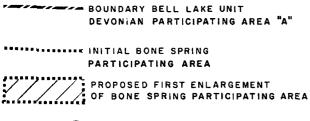
T Carry

Date

June 21,17

Date





BONE SPRING COMPLETION



EXHIBIT "B"

BELL LAKE UNIT - LEA COUNTY, NEW MEXICO PARTICIPATING AREA FOR BONE SPRING LIME FORMATION AS FIRST ENLARGED

TRACT 1.

Serial Number:

E-5896

Acreage:

317.50 Acres

Description:

Lots 3 and 4, E/2 SW/4 and SE/4 Section 31, Township 23 South, Range 34 East

Working Interest Owner:

Continental Oil Company

Royalty Interest Owner:

State of New Mexico

TRACT 2.

Serial Number:

E-5898

Acreage:

157.86 Acres

Description:

Lots 3, 4, and 5, SE/4 NW/4 Section 6, Township 24 South, Range 34 East

Working Interest Owner:

Continental Oil Company

Royalty Interest Owner:

State of New Mexico

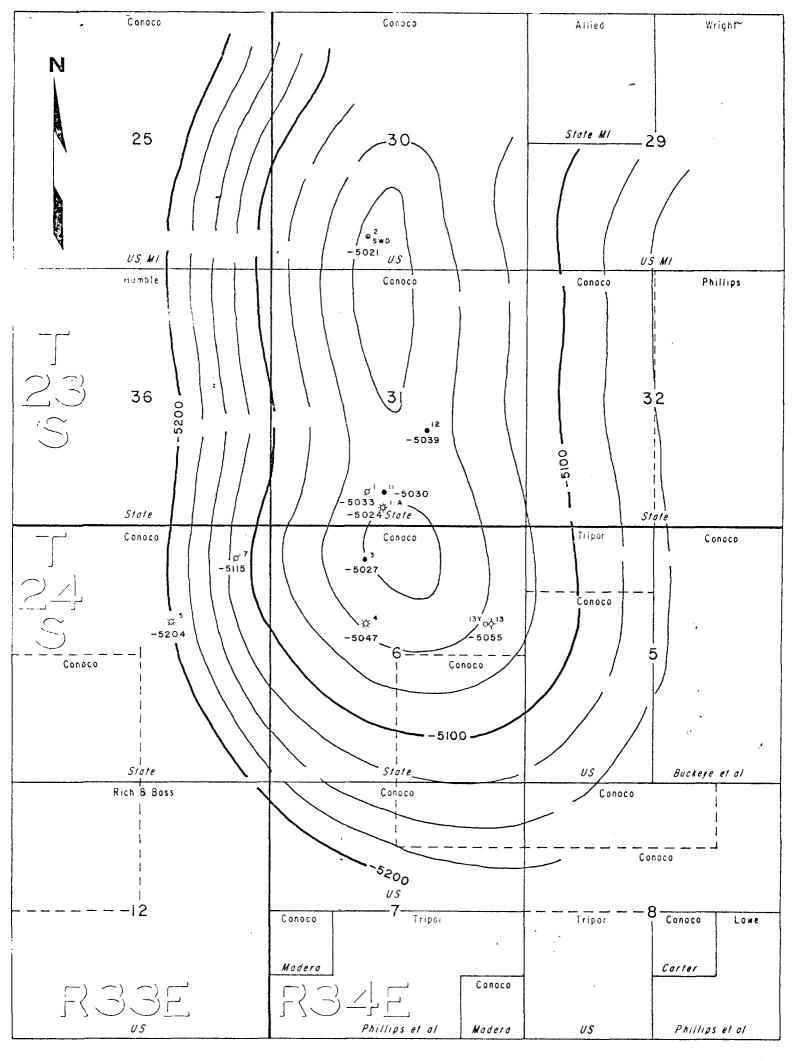
PARTICIPATION

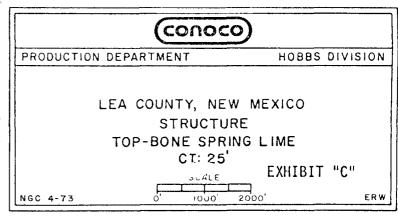
TRACT 1.

66.79148

TRACT 2.

33.20852





CONTINENTAL OIL COMPANY BELL LARD UNIT NO. 12 1980 FS & EL Sec. 31-T23S-R34E Elev., KB 3622

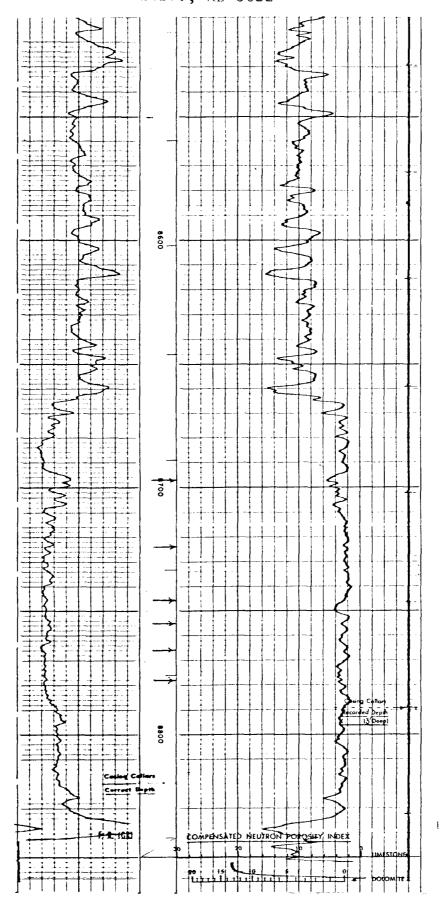


EXHIBIT "E"

ENGINEERING AND GEOLOGICAL REPORT BONE SPRING LIME RESERVOIR OF BELL LAKE UNIT AREA

Set forth below is a summary of geological and engineering information relative to Bell Lake Unit Well No. 12, justifying the first enlargement of the Participating Area for the Bone Spring Lime formation of the Bell Lake Unit Area.

Well Completion Data

Bell Lake Unit Well No. 12 is located 1980' from the South and East lines of Section 31, T-23S, R-34E, Lea County, New Mexico. The well was spudded on December 30, 1972 and was completed with first oil to the tanks on January 28, 1973. Perforations 8697, 8724, 8746, 8755, 8766 and 8778 (1 jet each) were treated with 7200 gallons 28% acid and 4000 gallons of gelled water. Initial Potential taken February 1, 1973 was 240 barrels oil, 3 barrels water, 598 MCF gas per day on a 14/64" choke, tubing pressure 1,025 lbs. The well has since produced at approximately its allowable rate of 230 barrels per day. Cumulative production through March 31, 1973 was 11,790 barrels oil. The well has been tested at various rates since the promulgation of 160 acre spacing units and consequent increased allowable to 470 barrels oil per day, effective June 1, 1973. On June 6, 1973 the well flowed 501 barrels oil, 33 barrels water, and 807 MCF gas in 24 hours on a 24/64" choke, tubing pressure 910 psi.

Estimated Reserves for Bell Lake Unit No. 12

A comparison of the potential rates of Well No. 12 and the indicated porosity shown on the log would indicate that the well is producing from a well developed fracture system. Estimated ultimate recovery of the well is 207,700 barrels based on the data shown below:

Net Effective Pay	97'
Average Porosity	2.3%
Interstitial Water Saturation	25%
Reservoir Volume Factor	1.5
Estimated Recovery Efficiency	15%

State of New Mexico



Commissioner of Public Lands

April 25, 1973



P. O. BOX 1148 SANTA FE, NEW MEXICO

Re: Application for Approval of Initial
Participating Area for the Bone Spring
Lime Formation, Bell Lake Unit,
Les County, New Mexico

ATTENTION: Mr. L. P. Thompson

Centlemen:

ALEX J. ARMIJO

COMMISSIONER

We are in receipt of your letter dated April 23, 1973, whereby you submitted the corrected effective date of the Participating Area to be November 39, 1973, instead of November 1, 1973, also corrected Exhibits "A" and "B" correcting a slight error on the original Exhibits.

The Commissioner of Public Lands has this date approved your corrected Exhibits and effective date, subject to like approval by the United States Coolegical Survey and the Oil Conservation Commission.

Inclosed is one approved copy for your records.

Very truly yours,

RAY D. GRAHAM, Director Oil and Gas Pepartment

AJA/RDG/e encls.

ec:

USGS-Roswell, New Mexico OCC-Santa Fe, New Mexico



United States Department of the Inter

GEOLOGICAL SURVEY

Drawer 1857 Roswell, New Mexico 88201 OIL CONSERVATION COMM

April 26, 1973

500

Continental Oil Company P.O. How 460 1001 North Turner Hobbs, New Mexico 88240

Gentlemen:

The initial Bone Spring Lime participating area for the Bell Lake unit agreement, Les County, New Mexico, was approved on April 26, 1973, by the Acting Area Oil and Gas Supervisor, U. S. Geological Survey, effective as of November 30, 1972.

The initial participating area embraces 315.36 acres, as described on page one of the attached application, and is based on the information contributed by the completion of unit well No. 11 in the SEASWE sec. 31, T. 23 S., R. 34 E., N.M.P.M. Such well was completed November 30, 1972, for an initial production rate of 123 BOPD from the Bone Spring Lime interval 8,658 to 8,825 feet.

Copies of the approved applications are being distributed to the appropriate Federal offices and two approved copies are returned herewith. You are requested to furnish all interested parties with appropriate evidence of this approval.

Sincerely yours,

(ORIG. SGD.) CARL OF THE

CARL C. TRAYWICK Acting Area Oil & Gas Supervisor

cc:

Washington (thru Denver) (w/cy appln)
Hobbs (w/cy appln)
BLM, Santa Fe (ltr only)
Com. Pub. Lands, Santa Fe (ltr only)
NMOCC, Santa Fe (ltr only)

JMonro:ds

s a jadot .

OIL CONSERVATION COMMISSION

P. O. BOX 2088

SANTA FE, NEW MEXICO 87501

4

April 26, 1973



Continental Oil Company P. O. Box 460 Hobbs, New Mexico

Attention: Mr. L. P. Thompson

Re: Bell Lake Unit

Initial Participating Area Bone Spring Formation

Gentlemen:

The New Mexico Oil Conservation Commission approved the Initial Participating Area for the Bone Spring Lime Formation for the Bell Lake Unit, Lea County, New Mexico, on March 26, 1973. The effective date of the Initial Participating Area was approved as of November 1, 1972; inasmuch as the effective date is in error, the Commission hereby approves the application to amend the effective date to November 30, 1972. This approval is granted subject to like approval by the United States Geological Survey and the Commissioner of Public Lands of the State of New Mexico.

Very truly yours,

A. L. PORTER, Jr. Secretary-Director

ALP/JEK/og

cc: U. S. Geological Survey - Roswell Commissioner of Public Lands - Santa Fe L. P. Thompson Division Manager **Production Department Hobbs Division**

Western Hemisphere Petroleum Division Continental Oil Company P.O. Box 460 1001 North Turner Hobbs, New Mexico 88240 (505) 393-4141

CONSERVATION COMM

Santa Fe

April 23, 1973

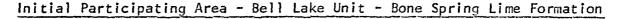
United States Geological Survey P. 0. Box 1857 Roswell, New Mexico 88201

Commissioner of Public Lands

P. O. Box 1148 Santa Fe, New Mexico 87501

New Mexico Oil Conservation Commission P. O. Box 2088 Santa Fe, New Mexico 87501

Gentlemen:



It has been called to our attention that the unit agreement provides that participating areas shall be formed effective the date on which the production began. Consequently, the proposed Initial Participating Area should be effective on the date of completion of Well No. 11, November 30, 1972, rather than on November 1, as provided in our application. We enclose corrected copies of the signature page showing the effective date of November 30, 1972. We also enclose corrected copies of Exhibits "A" and "B" to correct a slight error which has been called to our attention. Both exhibits showed Lot 4, Section 6, Township 24 South, Range 34 East, to contain 38.88 acres when in actuality the lot contains 38.86 acres. Please substitute these exhibits for those which were previously furnished you.

It is respectfully requested that you approve the amended application forwarded herewith.

Yours very truly,

ľW Enc

Copy + enc:

RLA: HMN: CES: JWM:

- 2. A schedule marked Exhibit "B" showing the participating percentage of each lease included or partially included in the proposed Participating Area.
- 3. A structure map marked Exhibit "C" contoured on top of the Bone Spring Lime Formation based on well data and seismic interpretation.
- 4. A log comparison marked Exhibit "D" of Bell Lake Unit Wells Nos. 3 and 11 showing the Bone Spring Lime Formation penetrated, perforated, and tested.
- 5. Engineering and geological report marked Exhibit "E" describing pertinent information and the reservoir data in regard to the Bone Spring Lime Reservoir.

Unit Operator respectfully requests that the Director of the United States Geological Survey, the Commissioner of Public Lands, State of New Mexico, and the Oil Conservation Commission, State of New Mexico, approve this schedule of acreage to constitute the Initial Participating Area, to be effective as of November 30, 1972, thereby including all of the month in which occurred the date of completion of the first confirmatory well, and requesting further that this application be acted upon as promptly as possible since storage equipment must be installed adequately to handle production from the Bone Spring wells.

Respectfully submitted,
CONTINENTAL OIL COMPANY

Thompson

L. P. Thompson Division Manager

Date

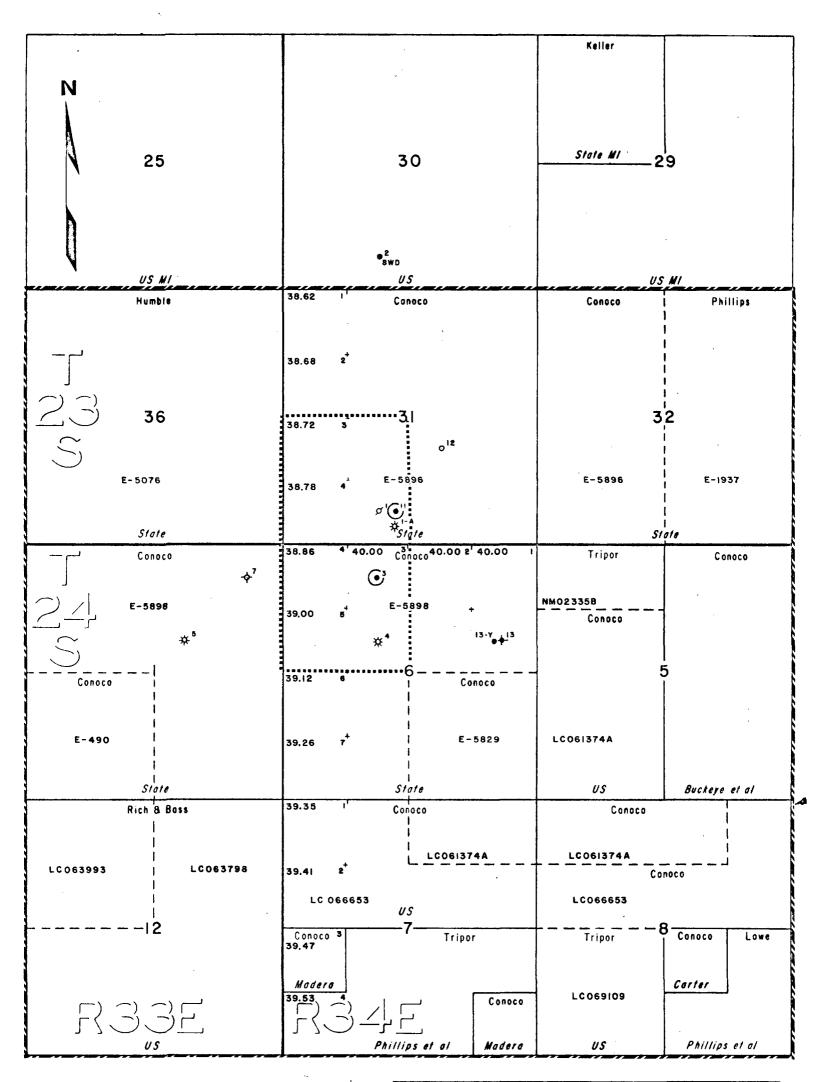
j11

APPROVED:

Commissioner of Public Lands Date

New Mexico Oil Conservation Commission

United States Geological Survey



BOUNDARY BELL LAKE UNIT
DEVONIAN PARTICIPATING AREA "A"

PROPOSED INITIAL BONE SPRING
PARTICIPATING AREA

BONE SPRING COMPLETION



EXHIBIT "B"

BELL LAKE UNIT - LEA COUNTY, NEW MEXICO INITIAL PARTICIPATING AREA FOR BONE SPRING LIME FORMATION

TRACT 1.

Serial Number:

E-5896

Acreage:

157.50 Acres

Description:

Lots 3 and 4, E/2 SW/4 Section 31, Township 23 South, Range 34 East

Working Interest Owner:

Continental Oil Company

Royalty Interest Owner:

State of New Mexico

TRACT 2.

Serial Number:

E-5898

Acreage:

157.86 Acres

Description:

Lots 3, 4, and 5, SE/4 NW/4 Section 6, Township 24 South, Range 34 East

Working Interest Owner:

Continental Oil Company

Royalty Interest Owner:

State of New Mexico

PARTICIPATION

TRACT 1.

49.94292%

TRACT 2.

50.05708%

OIL CONSERVATION COMMISSION P. O. BOX 2088 SANTA FE, NEW MEXICO 87501

March 26, 1973

Continental Oil Company P. O. Box 460 Hobbs, New Mexico

Attention: Mr. L. P. Thompson

Re: Initial Bond Spring Participating

565

Area, Bell Lake Unit, Lea County,

New Mexico.

Gentlemen:

This is to advise that the New Mexico Oil Conservation Commission has this date approved the Initial Participating Area for the Bone Spring Lime Formation for the Bell Lake Unit, Lea County, New Mexico, subject to like approval by the United States Geological Survey and the Commissioner of Public Lands for the State of New Mexico.

One approved copy of the application is returned herewith.

Very truly yours,

A. L. PORTER, Jr. Secretary-Director

ALP/JEK/og

ca: United States Geological Survey - Roswell State Land Office - Santak

State of New Mexico

505-327-2743



ALEX J. ARMIJO



Commissioner of Public Lands

March 22, 1973

P. O. BOX 1148 SANTA FE, NEW MEXICO

Continental Oil Company P. O. Box 460 1001 North Turner Hobbs, New Mexico 88240

> Re: Application for Approval of Initial Participating Area for the Bone Spring Lime Formation, Bell Lake Unit, Les County, New Mexico

ATTENTION: Mr. L. P. Thompson

Gentlemen:

This is to advise that the Commissioner of Public Lands has this date approved the Initial Participating Area for the Bone Spring Line Formation, Bell Lake Unit, Les County, New Mexico. This approval is subject to like approval by the United States Geological Survey and the Oil Conservation Commission.

One approved copy of the application is returned herewith.

Very truly yours,

RAY D. GRAHAM, Director Oil and Gas Department

AJA/RDG/s encl.

ccı

USGS-Roswell, New Mexico OCC-Sants Fe, New Mexico



L. P. Thompson Division Manager Production Department Hobbs Division

Western Hemisphere Petroleum Division Continental Oil Company P.O. Box 460 1001 North Turner Hobbs, New Mexico 88240 (505) 393-4141

OIL CONSERVATION COMM

Santa Fe

March 20, 1973

Regional Oil and Gas Supervisor P. 0. Box 1857 Roswell, New Mexico 88201

Commissioner of Public Lands State of New Mexico P. O. Box 1148 Santa Fe, New Mexico 87501

New Mexico Oil Conservation Commission P. O. Box 2088
Santa Fe, New Mexico 87501

Gentlemen:

Application for Approval of Initial Participating Area for the Bone Spring Lime Formation, Bell Lake Unit, Lea County, New Mexico

Attached are copies of the subject application for your review and appropriate action. We have filed with the New Mexico Oil Conservation Commission, an application for Special Pool Rules for the Bell Lake Bone Spring Oil Pool including provisions for 160 acre spacing. The hearing on this matter is expected to be held on April 11, 1973.

Wells Nos. 12 and 13 have been located on a spacing which is consistent with the proposed Special Pool Rules. We expect to file an application for first enlargement of the Bone Spring Lime Participating Area for Well No. 12 at an early date. Your early approval of this application for Initial Participating Area will be of assistance in proceeding with the development and consequent enlargements of the Participating Area.

Yours very truly,

rw

Copy + enc:

RLA: HMN: CES: JWM:

APPLICATION FOR APPROVAL OF THE INITIAL PARTICIPATING AREA FOR THE BONE SPRING LIME FORMATION BELL LAKE UNIT (NO. 14-08-001-1066) LEA COUNTY, NEW MEXICO

Director, United States Geological Survey (6) C/O Regional Oil and Gas Supervisor P. O. Box 1857 Roswell, New Mexico 88201

Commissioner of Public Lands (3) State of New Mexico P. O. Box 1148 Santa Fe, New Mexico 87501

New Mexico Oil Conservation Commission (2) P. O. Box 2088 Santa Fe, New Mexico 87501

In conformance with the provisions of Section 11, of the Unit Agreement dated May 12, 1953, affecting lands in the Bell Lake Unit, Lea County, New Mexico, Continental Oil Company, Unit Operator, hereby submits for your approval, a schedule of acreage which, upon your respective approvals, will constitute the Initial Participating Area for the Bone Spring Lime Formation. The Bone Spring Lime Formation is defined as that section found between the depths of 8658' and 8825' on the Bore-Hole Compensated Gamma Ray-Sonic Log run on October 7, 1972, in the Bell Lake Unit Well No. 11 located 790' FSL and 2265' FWL Section 31, Township 23 South, Range 34 East, Lea County, New Mexico.

The schedule of lands regarded as reasonably proven to be productive of unitized substances and so to constitute the Initial Participating Area for said Bone Spring Lime Formation is as follows:

Township 23 South, Range 34 East: Lots 3 and 4, and E/2 SW/4 Section 31;
Township 24 South, Range 34 East: Lots 3, 4, and 5, and SE/4 NW/4 Section 6,
Lea County, New Mexico

In support of this application, operator attaches hereto and hereby makes a part of this application the following:

 A map marked Exhibit "A" showing thereon the Bell Lake Unit, Participating Area "A", and the proposed Initial Participating Area for the Bone Spring Lime Formation.

- 2. A schedule marked Exhibit "B" showing the participating percentage of each lease included or partially included in the proposed Participating Area.
- 3. A structure map marked Exhibit "C" contoured on top of the Bone Spring

 Lime Formation based on well data and seismic interpretation.
- 4. A log comparison marked Exhibit "D" of Bell Lake Unit Wells Nos. 3 and ll showing the Bone Spring Lime Formation penetrated, perforated, and tested.
- 5. Engineering and geological report marked Exhibit "E" describing pertinent information and the reservoir data in regard to the Bone Spring Lime Reservoir.

Unit Operator respectfully requests that the Director of the United States Geological Survey, the Commissioner of Public Lands, State of New Mexico, and the Oil Conservation Commission, State of New Mexico, approve this schedule of acreage to constitute the Initial Participating Area, to be effective as of November 1, 1972, thereby including all of the month in which occurred the date of completion of the first confirmatory well, and requesting further that this application be acted upon as promptly as possible since storage equipment must be installed adequately to handle production from the Bone Spring wells.

Respectfully submitted,
CONTINENTAL OIL COMPANY

L. P. Thompson
Division Manager

rw

APPROVED:

United States Geological Survey

Date

Date

10

ommiss pher of Rubiic Lands

New Mexico Oil Conserv

vation Compassion

OIL CONSERVATION COMMISSION P. O. BOX 2088 SANTA FE, NEW MEXICO 87501

January 11, 1973

563

Continental 011 Company P. O. Box 460 Hobbs, New Mexico 88240

Attention: Mr. L. P. Thompson

Re: 1973 Plan of Development Ball Lake Unit, Lea County, New Mexico

Gentlemen:

This is to advise that the New Mexico Oil Conservation Commission has this date approved the Plan of Development for the calendar year 1973 for the Bell Lake Unit, Lea County, New Mexico, subject to like approval by the United States Geological Survey and the Commissioner of Public Lands of the State of New Mexico.

One approved copy of the plan is returned herewith.

Very truly yours,

A. L. PORTER, Jr. Secretary-Director

ALP/JEK/og

cc: United States Geological Survey - Roswell Commissioner of Public Lands - Santa Fe

State of New Mexico



ALEX J. ARMIJO COMMISSIONER



Commissioner of Public Lands

December 27, 1972

P. O. BOX 1148 SANTA FE, NEW MEXICO

Continental Oil Company F. O. Box 460 Hobbs, New Mexico 88240

> Re: Bell Lake Unit 1973 PLAN OF DEVELOPMENT Les County, New Mexico

ATTENTION: Mr. L. P. Thompson

Gentlemen:

The Commissioner of Public Lands has this date approved your 1973 Plan of Development for the Bell Lake Unit, whereby you propose the drilling of a Bone Spring confirmation well and finalization of Bone Spring commercial determination of unit well No. 11. This approval is subject to like approval by the United States Geological Survey.

Enclosed is one approved copy of the plan surplus to our need.

Please remit a Three (\$3.00) Dollar filing fee.

Very truly yours,

RAY D. GRAHAM, Director Oil and Gas Department

AJA/RDG/s encls.

cc:

OCC-Santa Fe, New Mexico USGS-Roswell, New Mexico



United States Department of the Inte

GEOLOGICAL SURVEY

Drawer 1857 Roswell, New Mexico 88201



December 26, 1972

Continents 1 0il Company P.O. Box 460 Hobbs, New Mexico 88240

Attention: Mr. L. P. Thompson

Gentlemen:

On this date, your 1973 plan of development for the Bell Lake unit area, Lea County, New Mexico, wherein you propose the drilling of a Bone Spring confirmation well and finalization of Bone Spring commercial determination of unit well No. 11, was approved. Such approval is subject to like approval by the appropriate officials of the State of New Mexico.

Three approved copies of the plan are enclosed.

Sincerely yours,

(ORIG. SGD.) CARL C. TRAYWICK

CARL C. TRAYWICK Acting Area Oil and Gas Supervisor

cc:

Washington (w/cy plan)
Hobbs, (w/cy plan)
-NMOCC, Santa Fe (ltr only)
Com. Pub. Lands, Santa Fe (ltr only)

JAGillham:ds



L. P. Thompson Division Manager Production Department Hobbs Division

Western Hemisphere Petroleum Division Continental Oil Company P. 0. 460 1001 North Turner Hobbs, New Mexico 88240 (505) 393-4141

CONSERVATION CON

Sauta Fo

December 15, 1972

Regional Oil & Gas Supervisor United States Geological Survey P. O. Box 1857 Roswell, New Mexico 88201

Commissioner of Public Lands State of New Mexico P. 0. Box 1148 Santa Fe, New Mexico 87501

New Mexico 0il Conservation Commission Mr. A. L. Porter, Jr. P. 0. Box 2088 Santa Fe, New Mexico 87501

Gentlemen:

Plan of Development/Operation, Bell Lake Unit, Lea County, New Mexico

Forwarded herewith for your approval are copies of the Plan of Development/Operation for the Bell Lake Unit for the year 1973.

Yours very truly,

rw Enc

Copies to: RLA: HMN: CES:

GAD: JWM:

PLAN OF OPERATION/DEVELOPMENT FOR CALENDAR YEAR 1973 BELL LAKE UNIT (NO. 14-08-001-1066) LEA COUNTY, NEW MEXICO

TO THE OIL AND GAS SUPERVISOR (6) UNITED STATES GEOLOGICAL SURVEY P. O. BOX 1857 ROSWELL, NEW MEXICO 88201

COMMISSIONER OF PUBLIC LANDS (3) STATE OF NEW MEXICO P. O. BOX 1148 SANTA FE, NEW MEXICO 87501

OIL CONSERVATION COMMISSION (2) STATE OF NEW MEXICO P. O. BOX 2088 SANTA FE, NEW MEXICO 87501

Gentlemen:

In compliance with Section 10 of the Bell Lake Unit Agreement dated May 12, 1953, Continental Oil Company, as Unit Operator, hereby submits for your approval a Plan of Operation/Development for the year 1973. Under date of December 15, 1971, the Plan of Operation/Development covering calendar year 1972 was submitted and subsequent approval was received from your offices.

HISTORY OF PAST DEVELOPMENT

Since the formation of the Unit, Operator has drilled the following wells within the original Unit Area:

Well and Location	Objective Formation	Status
Bell Lake State 1 No. 1 SE/4 SE/4 Section 31 T-23S, R-34E	Devonian	Abandoned Devonian Producer, Partici- pating Area "A", recompleted in Morrow.
Bell Lake Unit No. 2 SE/4 SW/4 Section 30 T-23S, R-34E	Pennsylvanian (Atoka)	Atoka Depleted. Deepened to Morrow (Non-productive). Plugged back for SWD use.
Bell Lake State 2 No. 3 NE/4 SW/4 Section 6 T-24S, R-34E	Bone Spring	Producing from Bone Spring (Non-commercial).
Bell Lake Unit 1 No. 4 SE/4 NW/4 Section 6 T-24S, R-34E	Devonian	Producing from Devonian Participating Area "A".
Bell Lake State 3 No. 5 SW/4 NE/4 Section 1 T-24S, R-33E	Devonian	Devonian Non-Productive. Completed in Morrow. Shut-in, pending lower sales line pressure.

Well and Location	Objective Formation	Status
Bell Lake Unit 2 No. 6 SW/4 SE/4 Section 6 T-23S, R-34E	Ellenburger	Producing from Devonian Participating Area 'B'.
Bell Lake Unit No. 7 NE/4 NE/4 Section 1 T-24S R-33E	Bone Spring	Water Disposal Well.
Bell Lake Unit No. 8 SW/4 SW/4 Section 7 T-22S, R-34E	Cherry Canyon (Delaware)	Plugged and Abandoned.
Bell Lake Unit No. 9 NE/4 SW/4 Section 18 T-23S, R-34E	Bone Spring	Plugged and Abandoned.
Bradley "A" No. 1 (Bell Lake Unit No. 10) SE/4 NW/4 Section 19 T-23S. R-34E	Devon i an	Temporarily shut-in, pending lower line pressure.

On September 30, 1968, the Unit Area was contracted to the then existing participating areas, Devonian Participating Area "A", and Devonian Participating Area "B". Transwestern Pipeline Company has been connected to the Bell Lake Unit gas wells and purchasing gas since August 1961.

OPERATIONS DURING 1972

Bell Lake Unit No. 11, located 790' FSL, 2265' FWL, Section 31, Township 23

South, Range 34 East, was drilled and completed October 24, 1972 in the Bone

Spring formation for an IP of 86 BO, 151 BWPD, GOR nil. The well was drilled to a total depth of 8900', perforated 8739-72' and stimulated with 1,000 gallons acid, followed by 4,000 gallons treated water and 5,000 gallons 28% acid.

Production history is being gathered to evaluate whether the well can be classified as a valuable discovery of unitized hydrocarbons.

DEVELOPMENT

A confirmation Bone Spring well is proposed to be drilled during 1973 in NW/4 SE/4 of Section 31, Township 23 South, Range 34 East.

OFFSET OBLIGATIONS

Appropriate and adequate measures will be taken to prevent drainage of unitized substances from lands subject to the Bell Lake Unit Agreement, or pursuant to applicable regulations, fair and reasonble compensatory royalty will be paid as provided in Section 18 of said Agreement.

Plan of Operation/Development Page 3

MODIFICATION

It is understood that portions of this Plan of Operation/Development outlined above are dependent upon certain information to be obtained prior and subsequent to the proposed work as well as other contingencies, and for these reasons, this Plan of Operation/Development may be modified from time to time, with like approval to meet changing conditions.

EFFECTIVE DATE

This Plan of Operation/Development shall be effective upon approval by the Supervisor, Commissioner, and Commission.

Date: December 15, 1972.

TERM

This Plan of Operation/Development is submitted for the period ending

December 31, 1973. Prior to that date, another Plan of Operation/Development will be submitted for approval.

Approved

Department of the Interior

Approved

Commissioner of Public Lands

Approved

New Mexico 0il Conservation Commission

DATE

OF Public Lands

CONTINENTAL OIL COMPANY

UNIT OPERATOR

MELLIVED

Tetra 7 1972

PHONE 827-2748

March 6, 1972

563

Continental Oil Company P. O. 460 1001 North Turner Hobbs, New Mexico 88240

> Re: Bell Lake Unit Well No. 1 A (Morrow) Lea County, New Mexico

ATTENTION: Mr. L. P. Thompson

Gentlemen:

Your notice of February 25, 1972 advises that Continental Oil Company as unit operator of the Bell Lake Unit agreement, Lea County, New Mexico, has determined unit well No. 1 A in the SE/4SW/4, Section 31, Township 23 South, Range 34 East, to be incapable of producing unitized substances in paying quantities from the Morrow formation. The well was completed on July 30, 1968, in the Morrow Formation for an initial potential of 1,700 MCFGPD. A four-point back pressure test, conducted May 14, 1969, indicated a calculated open flow potential of 1,989 MCFGPD.

This office concurs with your determination that unit well No. 1 A is incapable of producing unitized substances in paying quantities under existing conditions.

Very truly yours,

RAY D. GRAHAM, Director Oil and Gas Department

AJA/RDG/s

cc: USG

USGS-Roswell, New Mexico OCC- Santa Fe, New Mexico



L. P. Thompson Division Manager Production Department Hobbs Division Western Hemisphere Petroleum Division Continental Oil Company P. O. 460 1001 North Turner Hobbs, New Mexico 88240 (505) 393-4141



February 25, 1972

Commissioner of Public Lands State of New Mexico P. O. Box 1148 Santa Fe, New Mexico 87501

Gentlemen:

Commercial/Non-Commercial Determination, Bell Lake Unit No. 1 A (Morrow), Lea County, New Mexico

The Regional Supervisor of the United States Geological Survey in Roswell has requested that we make a determination as to the commercial nature of the subject well. This well is located on state land and therefore this determination is directed to your office.

Bell Lake Unit Well No. 1 A is located in the SE/4 SW/4, Section 31, Township 23 South, Range 34 East, Lea County, New Mexico. It was completed April 26, 1955, in the Devonian Formation. The well was recompleted on July 30, 1968, in the Morrow Formation for an initial potential of 1,700 MCFGPD. A four-point back pressure test, conducted May 14, 1969, Indicated a calculated open flow potential of 1,989 MCFGPD.

There is no indication of water influx and consequently, this reservoir gives every indication of being a depletion-type reservoir. Thus, the reservoir lends itself to evaluation by a P/Z versus cumulative production analysis. The attached graff shows the data obtained by three bottom hole pressure surveys versus cumulative production. Imperfect point alignment permits at least two interpretations ranging from 2.19 to 2.315 MMMCF ultimate recovery. Applying current gas prices, which are still subject to FPC approval, to the most optimistic estimated recovery will not provide sufficient revenue to pay the estimated costs of drilling and completing a well to this depth which is in the order of \$500,000. The above calculation does not deduct royalty and operating expenses.

It is quite obvious that, based on today's gas prices, estimated reserves will not justify the drilling of additional wells. Consequently, it is recommended that the Morrow completion in Bell Lake Unit Well No. 1 A (currently designated State MM No. 1) be designated as a non-commercial producer.

Commissioner of Public Lands Page 2 February 25, 1972

Yours very truly,

rw

Enc

Copies to:

United States Geological Survey

Drawer 1857

Roswell, New Mexico 88201

New Mexico 0il Conservation Commission P. 0. Box 2088 Santa Fe, New Mexico 87501

Working Interest Owners (Devonian Participating Area "A")

RLA: JJB: CES: NEL: HMN:

						-											24	PENN. PRODUCTION	PROD	DUCTIC	ON (M	(MORROW)	•			
												1					<u> </u>	(STATE	- W	"PER" NO.	.					
															DA	DATE	S.	Surf	CH 134	PForm	2/2	2		<u>က</u>		
	= :-								· · · · ·					-0	3-16-68	-68	7	7143.	8736	. 9	6710	0	0.0	0		
3	7-26					1::::								3 %	7-26-68	-68	54 25	5492.	3404	\$\frac{1}{2}	3693	3.0	o -	0.180		1::::
						litte Hitt					†		11.11	1	11-1-71	-1)	1	})	• • • <u>• • • • • • • • • • • • • • • • </u>	1.376		
								- 1				1		₩	Abandoned	700		000	1329	6	1438	8	2	190-2	315	T.R.
	/																<u> </u>									
	/										, , , ,		1::		7 19n	٧	C		215	NA TAKE	- Ex				1 : :	111
		//													1,376	1 11	။ တီမှ တီ	-1.376	376	2						
		//													0,814	VI	GR	0	0.939	MIMIMOR	સ્ય					7
			//	17.1		1::::	 								-	147 Pr	7	Filling	1 '	Processing	1 a					
200			//														S	tubing	18 pr	pressure	r e					[::::
				//		+1										72 hr	ST	tubing	rd Su	pressure	r e					
						(/- 8														-						
			1:		/	37=9													.							
200						/														-						
		· . · . · .		i stili																	1			 		
		\ <u></u>	1.																							
000			1				//	//													 				<u> </u>	
								/									27.									
1::	1905		11.					/ :	//		: : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :					1	1 : : : :			1						
			-							/				-												
9	1-:					: : : :			<u>-</u>							1:.:		ļ · · · ·			<u>! : </u>					
<u> </u>					÷												1			-						
<u> </u>	!		:						<u>!</u> 				2,315			1 ::::	<u>:</u> :	- : :		1						<u> </u>
	-										190							e,	surf	 10 11	1000 ps	Z/d) Bisd	= 2/	1438	ps1g)	8
000								 	<u>,</u>	•		/	/			<u> </u>			•							
														- /										-		
				1								· ·								· .				· · · · · · · · · · · · · · · · · · ·		
				-	c			1		0		(١.]		1	[



Drawer 1857 Roswell, New Mexico 88201

January 28, 1972

Continental Oil Company P. O. Box 460 Hobbs, Hew Mexico 88240

Attention: Mr. G. C. Jamieson

Centlemen:

Your plan of development dated December 15, 1971, for Calendar Year 1972, for the Bell Lake unit area, Les County, New Mexico, has been approved on this date subject to like approval by the appropriate State officials.

Three approved copies of the plan are enclosed.

Sincerely yours,

(ORIG. SGD.) N. O. FREDERICK

N. O. FREDERICK Regional Oil and Gas Supervisor

cc:

Washington (w/cy plan)
Hobbs (w/cy plan)
MMOCC, Santa Fe (ltr. only)
Com. of Pub. Lands, Santa Fe (ltr. only)

OIL CONSERVATION COMMISSION P. O. BOX 2088 SANTA FE, NEW MEXICO 87501

January 10, 1972

563

Continental Oil Company P. O. Box 460 Hobbs, New Mexico 88240

Attention: Mr. G. C. Jamieson

Re: 1972 Plan of Operation and Development, Bell Lake Unit, Lea County, New Mexico

Gentlemen:

This is to advise that the New Mexico Oil Conservation Commission has this date approved the Plan of Operation and Development for the calendar year 1972 for the Bell Lake Unit, Lea County, New Mexico, subject to like approval by the United States Geological Survey and the Commissioner of Public Lands of the State of New Mexico.

One approved copy of the plan is returned herewith.

Very truly yours,

A. L. PORTER, Jr. Secretary-Director

ALP/JEK/og cc: U. S. G. S., Roswell, New Mexico Commissioner of Public Lands - Santa Fe, New Mexico

State of New Mexico



RECEIVED

JAN-7 1972

CONSERVATION COMM.

ALEX J. ARMIJO

Commissioner of Public Lands January 6, 1972

P. O. BOX 1148 SANTA FE, NEW MEXICO

Continental Oil Company P. O. Box 460 Mobbs, New Mexico 88240

Re: Bell Lake Unit
Plan of Operation for the
year 1972

ATTENTION: Mr. L. P. Thompson

Gentlemen:

The Commissioner of Public Lands has this date approved your Plan of Operation for the year 1972, for the Bell Lake Unit, Lea County, New Mexico, subject to like approval by the United States Geological Survey and the Oil Conservation Commission.

Enclosed is one approved copy of the plan surplus to our need.

Please remit a three (\$3.00) Dollar filing fee.

Very truly yours.

RAY D. GRAHAM, Director Oil and Gas Department

AJA/RDG/s

CCI

USGS-Roswell, New Mexico OCC-Santa Fe, New Mexico

PLAN OF OPERATION/DEVELOPMENT FOR CALENDAR YEAR 1972 BELL LAKE UNIT (NO. 14-08-001-1066) LEA COUNTY, NEW MEXICO

TO THE OIL AND GAS SUPERVISOR (6) UNITED STATES GEOLOGICAL SURVEY P. O. BOX 1857 ROSWELL, NEW MEXICO

RECEIVED
DECI 7 1971

COMMISSIONER OF PUBLIC LANDS (3) STATE OF NEW MEXICO P. O. BOX 791 SANTA FE, NEW MEXICO

C' COMSERVATION COMM.

OIL CONSERVATION COMMISSION STATE OF NEW MEXICO P. O. BOX 2088 SANTA FE, NEW MEXICO

Gentlemen:

In compliance with Section 10 of the Bell Lake Unit Agreement dated May 12, 1953, Continental Oil Company, as Unit Operator, hereby submits for your approval a Plan of Operation/Development for the year 1972. Under date of April 30, 1971, the Plan of Operation/Development covering the remainder of calendar year 1971 was submitted and subsequent approval was received from your offices.

HISTORY OF PAST DEVELOPMENT

Since the formation of the Unit, Operator has drilled the following wells within the original Unit Area:

Well and Location	Objective Formation	Status
State LL (Formerly BLU #1) Acct. 2, No. 3 SE/4 SE/4 Sec. 31 T-23S, R-34E	Devonian	Abandoned Devonian Producer, Partici- pating Area "A", recompleted in Morrow
Bell Lake Unit No. 2 SE/4 SW/4 Sec. 30 T-23S, R-34E	Pennsylvanian (Atoka)	Atoka Depleted. Deepened to Morrow (Non-productive) Plugged back for SWD use.
State LL Acct. 1, No. 1 (Bell Lake Unit No. 3) NE/4 SW/4 Sec. 6 T-24S, R-34E	Bone Spring	Producing from Bone Spring (Non-Commercial)
Bell Lake Unit No. 4 SE/4 NW/4 Sec. 6 T-24S, R-34E	Devonian	Producing from Devontan Part. Area "A"
State LL Acct. 2, No. 2 (Bell Lake Unit No. 5) SW/4 NE/4 Sec. 1 T-24S, R-33E	Devonian	Devonian non-pro- ductive. Completed in Morrow. Shut-in pending lower sales line pressure

Plan of Operation/Development Page 2

1 - 1 - 2

Well and Location	Objective Formation	Status
Bell Lake Unit No. 6 SW/4 SE/4 Sec. 6 T-23S, R-34E	Ellenburger	Producing from Devontan Part. Area "B"
Bell Lake Unit No. 7 NE/4 NE/4 Sec. 1 T-24S, R-33E	Bone Spring	Water disposal well
Bell Lake Unit No. 8 SW/4 SW/4 Sec. 7 T-22S, R-34E	Cherry Canyon	Plugged and Abandoned
Bell Lake Unit No. 9 NE/4 SW/4 Sec. 18 T-23S, R-34E	Bone Spring	Plugged and Abandoned
Bradley "A" No. 1 (Bell Lake Unit No. 10) SE/4 NW/4 Sec. 19 T-23S, R-34E.	Devonian	Producing from Devonian

On September 30, 1968, the Unit Area was contracted to the then existing participating areas, Devonian Participating Area "A", and Devonian Participating Area "B". Transwestern Pipeline Company has been connected to the Bell Lake Unit gas wells and purchasing gas since August 1961.

OPERATIONS DURING 1971

Bell Lake Unit No. 6, in Devonian Participating Area "B" had encountered increasing water production. In September 1971, the well was entered and a through-tubing bridge plug was set at 14,750° and cement dumped above to 14,743°, plugging off the lower two sets of perforations. Water production was reduced slightly. The well was placed back on production as before and it is planned to continue Devonian production as long as it remains profitable.

DEVELOPMENT

It is planned to continue producing operations in all Unit Wells, Nos. 4 (Dev. Part. Area "A") and No. 6 (Dev. Part. Area "B") as at present.

During 1968, Bell Lake Unit No. I was entered in an attempt to shut-off water. The Devonian section was lost during this operation and the well was recompleted in the Morrow section July 30, 1968, for an IP of 1,700 MCFG/day, FTP 3428 psi. On May 14, 1969, a four-point back pressure test showed a calculated open flow potential of 1989 MCF/day. Data to date indicates that Morrow reserves do not justify drilling to this formation for

Plan of Operation/Development Page 3

further development. It is planned, however, to use the well bore of Bell Lake Unit No. 4 to further develop the Morrow section. Data from this recompletion may provide justification for further development and establishment of a Morrow Participating Area.

Within 90 days after cessation of Devonian production from Well No. 4, Operator will begin actual work to recomplete the well in the Morrow formation and diligently evaluate reserves in that formation for further development and establishment of a participating area.

OFFSET OBLIGATIONS

Appropriate and adequate measures will be taken to prevent drainage of unitized substances from lands subject to the Bell Lake Unit Agreement, or pursuant to applicable regulations, fair and reasonable compensatory royalty will be paid as provided in Section 18 of said agreement.

MODIFICATION

It is understood that portions of this Plan of Operation/Development outlined above are dependent upon certain information to be obtained prior and subsequent to the proposed work as well as other contingencies, and for these reasons, this Plan of Operation/Development may be modified from time to time, with like approval to meet changing conditions.

EFFECTIVE DATE

This Plan of Operation/Development shall be effective upon approval by the Supervisor, Commissioner and Commission.

Date: December 15, 1971

TERM

This Plan of Operation/Development is submitted for the period ending December 31, 1972. Prior to that date, another Plan of Operation/Development will be submitted for approval.

Approved

Department of the Interior

Approved

Commissioner of Public Lands

Approved

Approved

Oil Conservation Commission

Date

CONTINENTAL OIL COMPANY

UNIT OPERATOR

Drawer 1857 Roswell, New Mexico 88201

ZJuly 16, 1971

Continental Oil Company P. O. Box 460 Hobbs, New Mexico 88240

Attention: Mr. L. P. Thompson

Gentlemen:

Your plan of development dated April 30, 1971, for the period from April 30, 1971, to January 1, 1972, for the Bell Lake unit area, Lee County, New Mexico, has been approved on this date subject to like approval by the appropriate State officials.

Three approved copies of the plan are enclosed.

Sincerely yours,

(CRIG. SELLA III. O FOR WOLCK N. O. PREDERICK Regional Oil and Gas Supervisor

Washington (w/cy plan) Hobbs (w/cy plan) NMOCC, Santa Fe (ltr. only) Com. of Pub. Lands, Santa Fe (ltr. only)

OIL CONSERVATION COMMISSION

P. O. BOX 2088

SANTA FE. NEW MEXICO 87501

May 28, 1971

563

Continental Oil Company P. O. Box 460 Hobbs, New Mexico

Attention: Mr. L. P. Thompson

Re: Plan of Operation Bell Lake Unit, Lea County, New Mexico

Gentlemen:

This is to advise that the New Mexico Oil Conservation Commission has this date approved the Plan of Operation/Development dated April 30, 1971, for the Bell Lake Unit, Lea County, New Mexico, subject to like approval by the United States Geological Survey and the Commissioner of Public Lands of the State of New Mexico.

Very truly yours,

A. L. PORTER, Jr. Secretary-Director

ALP/JEK/og

cc: United States Geological Survey Roswell, New Mexico

Commissioner of Public Lands Santa Pe, New Mexico

PLAN OF OPERATION/DEVELOPMENT FOR THE REMAINDER OF CALENDAR YEAR 1971 BELL LAKE UNIT (NO. 14-08-001-1066) LEA COUNTY, NEW MEXICO

TO THE OIL AND GAS SUPERVISOR (6) UNITED STATES GEOLOGICAL SURVEY P. O. BOX 1857 ROSWELL, NEW MEXICO

COMMISSIONER OF PUBLIC LANDS (3) STATE OF NEW MEXICO P. O. BOX 791 SANTA FE, NEW MEXICO

OIL CONSERVATION COMMISSION STATE OF NEW MEXICO P. O. BOX 2088 SANTA FE, NEW MEXICO

Gentlemen:

In compliance with Section 10 of the Bell Lake Unit Agreement dated May 12, 1953, Continental Oil Company, as Unit Operator, hereby submits for your approval a Plan of Operation/Development for the remainder of the year 1971. Under date of July 15, 1970, the Plan of Operation covering the remainder of calendar year 1970 was submitted and subsequent approval was received from your offices.

HISTORY OF PAST DEVELOPMENT

Since the formation of the Unit, Operator has drilled the following wells within the original Unit Area:

Well and Location	Objective Formation	Status
State LL (Formerly BLU #1) Acct. 2, No. 3 SE/4 SE/4 Sec. 31 T-23S, R-34E	De von i an	Abandoned Devonian Producer, Partici- Recompleted in Morrow
Bell Lake Unit No. 2 SE/4 SW/4 Sec. 30 T-23S, R-34E	Pennsylvanian (Atoka)	Atoka Depleted. Deepened to Morrow (Non-productive)
State LL Acct. 1, No. 1 (Bell Lake Unit No. 3) NE/4 NW/4 Sec. 6 T-24S, R-34E	Bone Spring	Producing from Bone Spring (Non- Commercial)
Bell Lake Unit No. 4 SE/4 NW/4 Sec. 6 T-24S, R-34E	Devonian	Producing from Devonian Part. Area "A"
State LL Acct. 2, No. 2 (Bell Lake Unit No. 5) SW/4 NE/4 Sec. 1 T-24S, R-33E	Devonian	Devonian non-pro- ductive. Completed in Morrow. Shut-in pending lower sales line pressure

Well and Location	Objective Formation	Status
Bell Lake Unit No. 6 SW/4 SE/4 Sec. 6 T-23S, R-34E	Ellenburger	Producing from Devonian Part, Area "B"
Bell Lake Unit No. 7 NE/4 NE/4 Sec. I T-24S, R-33E	Bone Spring	Water disposal well
Bell Lake Unit No. 8 SW/4 SW/4 Sec. 7 T-22S, R-34E	Cherry Canyon	Plugged and Abandoned
Bell Lake Unit No. 9 NE/4 SW/4 Sec. 18 T-23S, R-34E	Bone Spring	Plugged and Abandoned
Bradley "A" No. 8 (Bell Lake Unit No. 10) SE/4 NW/4 Sec. 19 T-23S, R-34E	De von i an	Producing from Devonian

On September 30, 1968, the Unit area was contracted to the then existing participating areas, Devonian Participating Area "A", and Devonian Participating Area "B". Transwestern Pipeline Company has been connected to the Bell Lake Unit gas wells and purchasing gas since August. 1961.

OPERATIONS DURING 1970

Bell Lake Unit No. 4, in Devonian Participating Area "A" has encountered increasingly serious water production. Late in 1970, the well was entered, tubing pulled and extensive testing was done attempting to locate water entry. These tests indicated all perforated intervals were contributing water. The well was placed back on production as before and it is planned to continue Devonian production as long as it remains profitable.

It is planned to continue producing operations in all Unit Wells, Nos. 4 (Dev. Part. Area "A") and No. 6 (Dev. Part. Area "B") as at present.

During 1968, Bell Lake Unit No. 1 was entered in an attempt to shut-off water. The Devonian section was lost during this operation and the well was recompleted in the Morrow section July 30, 1968 for an IP of 1,700 MCFG/day, FTP 3428 psi. On May 14, 1969, a four-point back pressure test showed a calculated open flow potential of 1989 MCF/day. Data to date indicate that Morrow reserves do not justify darining to this formation for further development. It is planned, however, to use the well bore of Bell Lake Unit No. 4 to further develop the Morrow section. Data from this recompletion may provide justification for further development and es-

tablishment of a Morrow Participating Area.

Within 90 days after cessation of Devonian production from Well No. 4, Operator will begin actual work to recomplete the well in the Morrow formation and diligently evaluate reserves in that formation for further development and establishment of a participating area.

OFFSET OBLIGATIONS

Appropriate and adequate measures will be taken to prevent drainage of unitized substances from lands subject to the Bell Lake Unit Agreement, or pursuant to applicable regulations, fair and reasonable compensatory royalty will be paid as provided in Section 18 of said agreement.

MODIFICATION

It is understood that portions of this Plan of Operation/Development outlined are dependent upon certain information to be obtained prior and subsequent to the proposed work as well as other contingencies, and for these reasons, this Plan of Operation/Development may be modified from time to time, with like approval to meet changing conditions.

EFFECTIVE DATE

This Plan of Operation/Development shall be effective upon approval by the Supervisor, Commissioner and Commission.

Date: April 30, 1971

TERM

This plan of Operation/Development is submitted for the period ending December 31, 1971. Prior to that date, another Plan of Operation/Development will be submitted for approval.

Approved

Department of the Interior

Approved

Commissioner of Public Lands

Approved

Approved

Oil Conservation Commission

CONTINENTAL OIL COMPANY

UNIT OPERATOR

May 19, 1971

Continental Oil Company P. O. Box 460 Hobbs. New Mexico 88240

> Re: Bell Lake Unit Plan of Operation for the remainder of 1971

ATTENTION: Mr. L. P. Thompson

Gentlemen:

The Commissioner of Public Lands has this date approved your Plan of Operation for the remainder of year 1971, for the Bell Lake Unit, Les County, New Mexico, subject to like approval by the United States Geological Survey and the Oil Conservation Commission.

Enclosed is one approved copy of the plan surplus to our need.

Please remit a three (\$3.00) Dollar filing fee.

Sincarely yours.

GORDON G. MARCUM, II, Director Oil and Gas Department

NJA/GGM/s encls.

cc: USGS-Roswell, New Mexico OCC- Santa Fe, New Mexico



UNITED STATES DEPARTMENT OF THE INTERIOR GEOLOGICAL SURVEY

Drawer 1857 @ Roswell, New Mexico 88201

563

July 30, 1970

Continental Oil Company P. O. Box 460 Hobbs, New Mexico 88240

Attention: Mr. L. P. Thompson

Centlemen:

Your plan of development, dated July 15, 1970, for the period from July 15, 1970, to January 1. 1971, for the Bell Lake unit area. Les County, New Mexico, has been approved on this date subject to like approval by the appropriate State officials.

Three approved copies of the plan are enclosed.

Sincerely yours,

(ORIG. SGD.) CARL C. TRAYWICK

CARL C. TRAYWICK Acting Oil and Gas Supervisor

cc:

Washington (w/cy plan)
Hobbs (w/cy plan)
NMOCC, Santa Fe (ltr. only)
Com. of Pub. Lands, Santa Fe (ltr. only)

OIL CONSERVATION COMMISSION

P. O. BOX 2088

SANTA FE, NEW MEXICO 87501

July 23, 1970

565

Continental Oil Company P. O. Box 460 Hobbs, New Mexico

Attention: Mr. L. P. Thompson

Re: Plan of Operation Bell Lake Unit, Lea County, New Mexico

Gentlemen:

This is to advise that the New Mexico Oil Conservation Commission has this date approved the Plan of Operation dated July 15, 1970, for the Bell Lake Unit, Lea County, Mew Mexico, subject to like approval by the United States Geological Survey and the Commissioner of Public Lands of the State of New Mexico.

An approved copy of page 3 of the application is returned herewith.

Very truly yours,

A. L. PORTER, Jr. Secretary-Director

ALP/JEK/og

cc: United States Geological Survey - Roswell Commissioner of Public Lands - Santa Fe

10 Jul. 22 AH 8

July 20, 1970

Continental Oil Company P. O. Box 460 Hobbs, New Mexico 88240

> Re: Bell Lake Unit Agreement Plan of Operation for the remainder of 1970.

ATTENTION: Mr. L. P. Thompson

Gentlemen:

The Commissioner of Public Lands has this date approved your Plan of Operation for the remainder of the year 1970, for the Bell Lake Unit, Lea County, New Mexico.

We are returning two approved copies for your files and retaining two copies for us.

Very truly yours,

GORDON G. MARCUM II. Director oil and Gas Department

GOM/MI/a

CC: USGS-Regwell, New Mexico
CC- Santa Fe, New Mexico



CONTINENTAL OIL

P. O. Box 460

Hobbs, New Mexico 88240

PRODUCTION DEPARTMENT HOBBS DIVISION L. P. THOMPSON

Division Manager

G. C. Jamieson Assistant Division Manager July 15, 1970

1001 NORTH TURNER **TELEPHONE 393-4141**

Oil and Gas Supervisor United Stated Geological Survey P. D. Box 1857 Roswell, New Mexico

Commissioner of Public Lands State of New Mexico P. 0. Box 791 Santa Fe, New Mexico

∠0il Conservation Commission State of New Mexico P. 0. Box 2988 Santa Fe, New Mexico

Gentlemen:

We forward herewith the Plan of Operation for the Bell Lake Unit for the remainder of 1970. Your further handling and approval will be sincerely appreciated.

Yours very truly,

LPT: JM

PLAN OF OPERATION FOR THE REMAINDER OF CALENDAR YEAR 1970 BELL LAKE UNIT (NO. 14-08-001-1066) LEA COUNTY, NEW MEXICO

TO THE OIL AND GAS SUPERVISOR (6) UNITED STATES GEOLOGICAL SURVEY P. O. BOX 1857 ROSWELL, NEW MEXICO

COMMISSIONER OF PUBLIC LANDS (3) STATE OF NEW MEXICO P. O. BOX 791 SANTA FE, NEW MEXICO

OIL CONSERVATION COMMISSION STATE OF NEW MEXICO P. O. BOX 2088 SANTA FE, NEW MEXICO

Gentlemen:

In compliance with Section 10 of the Bell Lake Unit Agreement dated May 12, 1953, Continental Oil Company, as Unit Operator, hereby submits for your approval a Plan of Operation for the remainder of the year 1970. Under date of December 15, 1967, the final Plan of Development covering the calendar year 1968 was submitted and subsequent approval was received from your offices.

HISTORY OF PAST DEVELOPMENT

Since formation of the Unit, Operator has drilled the following wells within the original Unit Area:

Objective Formation	Status
Devonian	Abandoned Devonian Producer, Partici- pating Area "A". Recompleted in Morrow
Pennsylvanian (Atoka)	Atoka Depleted. Deepened to Morrow (Non-productive)
Bone Spring	Producing from Bone Spring (Non- Commercial)
Devonian	Producing from Devonian Part. Area "A"
Devonian	Devonian non-pro- ductive. Completed in Morrow. Shut in pending lower sales line pressure
	Pennsylvanian (Atoka) Bone Spring Devonian

Well and Location	Objective Formation	Status
Bell Lake Unit No. 6 SW/4 SE/4 Sec. 6 T-23S, R-34E	De von i an	Producing from Devonian Part. Area "B"
Bell Lake Unit No. 7 NE/4 NE/4 Sec. 1 T-24S, R-33E	Bone Spring	Plugged and Abandoned
Bell Lake Unit No. 8 SW/4 SW/4 Sec. 7 T-22S, R-34E	Cherry Canyon	Plugged and Abandoned
Bell Lake Unit No. 9 NE/4 SW/4 Sec. 18 T-23S, R-34E	Bone Spring	Plugged and Abandoned
Bradley "A" No. 1 (Bell Lake Unit No. 10) SE/4 NW/4 Sec. 19 T-23S, R-34E	Devonian	Producing from Devonian

On September 30, 1968 the Unit area was contracted to the then existing participating areas, Devonian Participating Area "A", and Devonian Participating Area "B". Transwestern Pipeline Company has been connected to the Bell Lake Unit gas wells and purchasing gas since August, 1961.

OPERATIONS DURING 1970

Bell Lake Unit No. 4, in Devonian Participating Area "A" has encountered increasingly serious water production, such that its ability to produce into the sales line is threatened. On May 19, 1970 the well tested 1.7 MMcf gas and 1782 bbls water in 24 hours. In the near future, operator plans to enter the well and attempt to shut off the water. A successful operation should extend the producing life indefinitely.

Due to complex mechanical problems it is entirely possible that our objective cannot be accomplished in the intended manner. It is also possible that the Devonian section of the well bore will be lost as it was in Well No. 1. In the event of either of these situations it will be necessary to study all data available and determine the practicability of restoring production by additional work in this well or by drilling another well to the Devonian formation. The study, preparation of recommendation and securing of approval by working interest owners is likely to require 90 days, or more. Rig availability may cause some further delay.

Within six months after cessation of operations on Well No. 4. if unsuccessful in restoring production from the Devonian, Operator will begin actual work to restore Devonian production within Devonian Participating Area "A" either by additional work in an existing well or by the drilling of a new well to the Devonian formation.

OFFSET OBLIGATIONS

Appropriate and adequate measures will be taken to prevent drainage of unitized substances from lands subject to the Bell Lake Unit Agreement, or pursuant to applicable regulations, fair and reasonable compensatory royalty will be paid as provided in Section 18 of said agreement.

MODIFICATION

It is understood that portions of the Plan of Operation outlined are dependent upon certain information to be obtained prior and
subsequent to the proposed work as well as other contigencies, and for
these reasons, this Plan of Operation may be modified from time to time,
with like approval, to meet changing conditions.

EFFECTIVE DATE

This Plan of Operation shall be effective upon approval by the Director, Commissioner and Commission.

Date: July 15, 1970

	L. P. Thompson
Approved Department of the Interior	Date
Approved Commissioner of Public Lands	Date
Approved 011 Conservation Commission	Date July 23, 1970

CONTINENTAL OIL COMPANY

UNIT OPERATOR



UNITED STATES DEPARTMENT OF THE INTERIOR

GEOLOGICAL SURVEY

Drawer 1857 Roswell, New Mexico 88201 563

April 9, 1968

Continental Oil Company P. O. Sex 460 Hobbs, New Mexico 88240

Attention: Nr. L. P. Thompson

Centlemen:

Your letter of April 2 advises that as operator of the Bell Lake unit, Eddy County, New Mexico, you have determined that unit well No. 10 in the SEkhalt sec. 19, T. 23 S., R. 34 E., N.M.P.M., lease Las Cruces 065194, is not capable of producing unitized substances in paying quantities from the Devenien formation.

Unit well No. 10 was completed on March 6, 1965, for an initial potential of 3,200 MCF per day from the Devonian 14,747 to 14,811 feet. Subsequent workovers have failed to increase the gas productive capacity or decrease the water production. The well has produced a total of 578,437 NCF of gas through January 1968.

This office concurs with your determination that unit well No. 10 is not capable of producing unitized substances in paying quantities from the Devonian under existing conditions.

Sincerely yours,

(ORIG. SGD.) JOHN A. ANDERSON

JOHN A. ANDERSON Regional Oil & Cas Supervisor

Vashington (w/cy. ltr.)
Artesia (w/cy. ltr.)
Com. of Pub. Lands (ltr. only)
NMOCC - Santa Fe (ltr. only)

Accounts

MAIN OFF DEL

°68 APR 11 PM 1 11

OIL CONSERVATION COMMISSION P. O. BOX 2088

SANTA FE, NEW MEXICO 87501

263

January 12, 1968

Continental Oil Company P. O. Box 460 Hobbs, New Mexico 88240

Attention: Mr. G. C. Jamieson

Ret

1968 Plan of Development Bell Lake Unit, Lea County,

New Mexico

Gentlemen:

This is to advise that the New Mexico Oil Conservation Commission has this date approved the 1968 Plan of Development dated December 28, 1967, for the Bell Lake Unit, Lea County, New Mexico, subject to like approval by the United States Geological Survey and the Commissioner of Public Lands of the State of New Mexico.

Only one copy of plan of development was received by the Commission, therfor, a Xerox copy of the signature page is returned herewith.

Very truly yours,

A. L. PORTER, Jr. Secretary-Director

ALP/JEK/og

cc: Commissioner of Public Lands - Santa Fe

U. S. Geological Survey - Roswell



UNITED STATES DEPARTMENT OF THE INTERIOR

GEOLOGICAL SERVEY

Brawer 1857 Roswell, New Mexico 88201

January 11, 1968

Continental Oil Company P. O. Nox 460 Hobbs, New Mexico 88240

Attention: Mr. G. C. Jamieson

Centlemen:

Your plan of development for the period January 1, 1968, to September 30, 1968, for the Bell Lake unit area, Les County, New Mexico, has been approved on this date subject to like approval by the appropriate State officials. The plan proposes the testing of the Horrow formation in unit well No. 1. The effective date of automatic elimination is September 30, 1968, for the Bell Lake unit.

Three approved copies of the plan are enclosed.

Sincerely yours,

(ORIG. SGD.) CARL C. TRAYWICK

CARL C. TRAYWICK Acting Oil & Gas Supervisor

cc:

Washington (w/cy plan)
Hobbs (w/cy plan)
NMOCC - Santa Fe (ltr. only)
Com. of Pub. Lands - Santa Fe (ltr. only)

State of New Mexico



Commissioner of Public Lands

GUYTON B. HAYS COMMISSIONER

January 11, 1968

P. O. BOX 1148 SANTA FE, NEW MEXICO

Continental Oil Company P. O. Box 460 Hobbs, New Mexico 88240

> Re: Bell Lake Unit 1968 Plan of Development Lea County, New Mexico

ATTENTION: Mr. G. C. Jamieson

Gentlemen:

The Commissioner of Public Lands approves your 1968
Plan of Development for the Bell Lake Unit, Lea County, New
Mexico. Approval is subject to like approval by the United
States Geological Survey and the Oil Conservation Commission.

One approved copy of the plan is enclosed herewith.

Very truly yours,

GUYTON B. HAYS COMMISSIONER OF PUBLIC LANDS

BY:

Eddy Lopez, supervisor Unit Division

GBH/TB/EL/s encl.

cc: USGS-Roswell, New Mexico OCC-Santa Fe, New Mexico

%68 JAH 12 AH U 39

Mr. Commence



CONTINENTAL OIL COMPANY

P. O. Box 460

Hobbs, New Mexico 88240

PRODUCTION DEPARTMENT HOBBS DIVISION L. P. THOMPSON Division Manager G. C. Jamieson Assistant Division Manager

December 28, 1967

1001 NORTH TURNER TELEPHONE 393-4141

Oil and Gas Supervisor United States Geological Survey P. O. Box 1857 Roswell, New Mexico

HARR OFFICE TO

768 JAH 2 AM 8 10

Commissioner of Public Lands (3) State of New Mexico P. O. Box 791 Santa Fe, New Mexico

Oil Conservation Commission State of New Mexico P. O. Box 2088 Santa Fe, New Mexico

1968 Plan of Development Re:

Bell Lake Unit - Lea County,

New Mexico

Gentlemen:

Forwarded herewith is our proposed Plan of Development for the Bell Lake Unit, Lea County, New Mexico, for the calendar year 1968.

GCJ-JS

cc: RLA CES **HMN**

PLAN OF DEVELOPMENT FOR THE CALENDAR YEAR 1968 BELL LAKE UNIT (No. 14-08-001-1066) LEA COUNTY, NEW MEXICO

MAIN SEPTIMENT

%8 JAH 2 AH 8 10

TO THE OIL AND GAS SUPERVISOR (6) UNITED STATES GEOLOGICAL SURVEY P. O. Box 1857 ROSWELL, NEW MEXICO

COMMISSIONER OF PUBLIC LANDS (3) STATE OF NEW MEXICO P. O. BOX 791 SANTA FE, NEW MEXICO

OIL CONSERVATION COMMISSION STATE OF NEW MEXICO P. O. BOX 2088 SANTA FE, NEW MEXICO

Gentlemen:

In compliance with Section 10 of the Bell Take Agreement dated May 12, 1953, Continental Oil Company, as Unit Operator, hereby submits for your approval a Plan of Development for the year 1968. Under date of December 15, 1966, a Plan of Development covering the calendar year 1967 was submitted and subsequent approval was received from your offices.

HISTORY OF PAST DEVELOPMENT

Since formation of the Unit, Operator has drilled the following wells within the Unit Area:

Well and Location		Objective Formation	Status
Bell Lake Unit No. SE/4 SW/4 Sec. 31 T-23S, R-34E	1	Devonian	Abandoned Devonian Producer, Partici- pating Area "A"
Bell Lake Unit No. SE/4 SW/4 Sec. 30 T-23S, R-34E	2	Pennsylvanian (Atoka)	Atoka Depleted. Deepened to Morrow (Non-productive)
Bell Lake Unit No. NE/4 NW/4 Sec. 6 T-24S, R-34E	3	Bone Spring	Producing from Bone Spring (Non-Commercial)
Bell Lake Unit No. SE/4 NW/4 Sec. 6 T-24S, R-34E	4	Devonian	Producing from Devonian Part. Area "A"
Bell Lake Unit No. SW/4 NE/4 Sec. 1 T-24S, R-33E	5	Devonian	Devonian non-productive. Producing from Morrow (Non-Commercial)

Plan of Development Page 2

Bell Lake SW/4 SE/4 T-23S, R-3	Sec.	6	Devonian	Producing from Devonian Part. Area "B"
Bell Lake NE/4 NE/4 T-24S, R-3	Sec.	7	Bone Spring	Plugged and Abandoned
Bell Lake SW/4 SW/4 T-22S, R-3	Sec.	8	Cherry Canyon	Plugged and Abandoned
Bell Lake NE/4 SW/4 T-23S, R-3	Sec.	9	Bone Spring	Plugged and Abandoned

Bell Lake Unit No. 10 Devonian Producing from Devonian SE/4 NW/4 Sec. 19 T-23S, R-34E

DEVELOPMENT

Transwestern Pipeline Company connected to the Bell Lake Unit gas wells and limited gas sales began in August, 1961. During the sixth contract year, August 1, 1966, through July 31, 1967, the gas sales from the Bell Lake Unit were 6,838,044 MCF. Cumulative production to August 1, 1967, is 21,225,616 MCF.

The Plan of Development for 1967 called for the testing of the Pennsylvanian in Well No. 4 and the drilling of a Devonian test on the North structure. Neither test was accomplished. After further seismic evaluation, no prospective location that was not being drained by existing Devonian wells could be determined.

Before well No. 4 could be entered to test the Morrow, Well No. 1 began making excessive water. Due to impending reserve determinations in connection with the gas sales contract, it was determined that first priority should be given to returning No. 1 to commercial production. No. 1 was entered to accomplish this end but the project was found to be impracticable due to mechanical trouble. The well was cleaned out to sufficient depth to test the Morrow and this test will be conducted during the remainder of 1967 or early 1968. This project is waiting only on approval by working interest owners.

OFFSET OBLIGATIONS

Appropriate and adequate measures will be taken to prevent drainage of unitized substances from lands subject to the Bell Lake Unit Agreement, or pursuant to applicable regulations, fair and reasonable compensatory royalty will be paid as provided in Section 18 of said agreement.

FURTHER DEVELOPMENT

This Plan of Development shall constitute the drilling obligations of the Unit Operator under the terms of the Bell Lake Unit Agreement for the period ending September 30, 1968, which is the date of automatic contraction to the Participating Areas provided in the Unit Agreement, as amended.

MODIFICATION

It is understood that portions of the Plan of Development outlined are dependent upon certain information to be
obtained prior and subsequent to drilling as well as other
contingencies, and for these reasons, this Plan of Development may be modified from time to time, with like approval,
to meet changing conditions.

CONTINENTAL OIL COMPANY

EFFECTIVE DATE

This Plan of Development shall be effective January 1, 1968.

Date: December 15, 1967

Commission

	UNIT OPERATOR
GCJ-JS	BY G. C. Jamieson
Approved	Date
Approved Commissioner of Public Lands	Date
Approved John Conservation	Date Van. 12, 1968



UNITED STATES DEPARTMENT OF THE INTERIOR

GEOLOGICAL SURVEY

Drawer 1857 Roswell, New Mexico 88201

February 1, 1967

Continental Oil Company P. O. Box 460 Hobbs, New Mexico 38240

Attention: Mr. L. P. Thompson

Gentlemen:

Your 1967 plan of development dated December 15, 1966, for the Bell Lake unit area, Lea County, New Mexico, has been approved on this date subject to like approval by the appropriate State officials. The plan proposes the testing of the Pennsylvanian formation in unit well No. 4 and the drilling of a Devonian well.

Three approved copies of the plan are enclosed.

Sincerely yours,

(ORIG. SGD.) JOHN A. ANDERSON

JOHN A. AMDERSON Regional Oil and Gas Supervisor

cc:
Washington (w/cy plan)
Hobbs (w/cy plan)
NMOCC - Santa Fe (ltr. only)
Com. of Pub. Lands - Santa Fe (ltr. only)

OIL CONSERVATION COMMISSIO:

P. O. BOX 2088

SANTA FE, NEW MEXICO

563

January 24, 1967

Continental Oil Company P. O. Box 460 Hobbs, New Mexico

Re: 1967 Plan of Development

Bell Lake Unit, Lea County

New Mexico

Gentlemen:

This is to advise that the New Mexico Oil Conservation Commission has this date approved the 1967 Plan of Development dated December 15, 1966, for the Bell Lake Unit, Lea County, New Mexico, subject to like approval by the United States Geological Survey and the Commissioner of Public Lands of the State of New Mexico.

Very truly yours,

A. L. PORTER, Jr. Secretary-Director

ALP/JEX/og

cc: Commissioner of Public Lands Santa Fe, New Mexico

United States Geological Survey Roswell, New Mexico

January 9, 1967

Continental Oil Company Production Department P. O. Box 460 Hobbs, New Mexico, 88240

> Re: Bell Lake Unit Lea County, New Mexico

ATTENTION: Mr. L. P. Thompson

Gentlemen:

We have received your Plan of Development, dated December 15, 1966, for the 1967 Plan of Development, Bell Lake Unit.

Your 1966 Plan of Development provided for the reworking of the Nos 4 and 10 Wells, however, there was no work done on the No 4 well during this period.

The 1967 Plan of Development provides for the working of Well No 4 and in addition it is proposed to drill a well to the Devonian Formation during 1967.

The Commissioner of Public Lands approves the 1967 Plan of Development, subject to like approval by the United States Geological Survey and the Oil Conservation Commission.

We are returing one approved copy.

Continental Oil Company Mr. L. P. Thompson January 9, 1967 Page -2-

Very truly yours,

GUYTON B. HAYS COMMISSIONER OF PUBLIC LANDS

BY: Ted Bilberry, Director Oil and Gas Department

GBH/MMR/s encl. 1.

cc: United States Geological Survey
P. O. Drawer 1857
Roswell, New Mexico

New Mexico Oil Conservation Commission P. O. Box 2088 Santa Fe, New Mexico

PLAN OF DEVELOPMENT FOR THE CALENDAR YEAR 1967 BELL LAKE UNIT (NO. 14-08-001-1066) LEA COUNTY, NEW MEXICO

 \sim

TO THE OIL AND GAS SUPERVISOR (6) UNITED STATES GEOLOGICAL SURVEY P. O. BOX 1857 ROSWELL, NEW MEXICO

COMMISSIONER OF PUBLIC LANDS (3) STATE OF NEW MEXICO P. O. BOX 791 SANTA FE, NEW MEXICO

STATE OF NEW MEXICO
P. O. BOX 2088
SANTA FE, NEW MEXICO

Gentlemen:

In compliance with Section 10 of the Bell Lake Unit Agreement dated May 12, 1953, Continental Oil Company, as Unit Operator, hereby submits for your approval a Plan of Development for the year 1967. Under date of May 15, 1966, a Plan of Development covering the calendar year 1966 was submitted and subsequent approval was received from your offices.

HISTORY OF PAST DEVELOPMENT

Since formation of the Unit, Operator has drilled the following wells within the Unit Area:

Well and Location	Objective Formation	Status
Bell Lake Unit No. 1 SE/4 SW/4 Sec. 31 T-23S, R-34E	Devonian	Producing from Dev- onian Part. Area "A"
Bell Lake Unit No. 2 SE/4 SW/4 Sec. 30 T-23S, R-34E	Pennsylvanian (Atoka)	Atoka Depleted. Deepened to Morrow (Non-Productive)
Bell Lake Unit No. 3 NE/4 NW/4 Sec. 6 T-24S, R-34E	Bone Spring	Producing from Bone Spring (Non-Commercial)
Bell Lake Unit No. 4 SE/4 NW/4 Sec. 6 T-24S, R-34E	Devonian	Producing from Devonian Part. Area "A"
Bell Lake Unit No. 5 SW/4 NE/4 Sec. 1 T-24S, R-33E	Devonian	Devonian non-produc- tive. Producing from Morrow (Non-Commercial)
Rell Lake Unit No. 6 SW/4 SE/4 Sec. 6 T-23S, R-34E	Devonian	Producing from Devonian Part. Area "B"

3.	Serial Number: Acreage: Acreage Description: Per Cent Participation: Working Interest Owner: Royalty Interest Owner:	IC-066438 479.85 acres Lots 3 & 4, $S_{2}^{\frac{1}{2}}NW_{4}^{\frac{1}{4}}$, & $S_{2}^{\frac{1}{2}}$ Sec. 1, T23S-R33E 8.37788% Hudson & Hudson, Inc. United States of America
9.	Serial Number: Acreage: Acreage Description: Per cent Participation: Working Interest Owner: Royalty Interest Owner: O.R.R.I. Owner:	NM-01244-A 634.35 acres Lots 3 & 4, S½NW¼, & SE¼ Sec. 5 & Lots 3,4, & 5, SE½NW¼, & SE¼ Sec. 6, T23S-R34E 11.07535% Continental Oil Company United States of America Esther L. Kelly & husband, John M. Kelly (\$1,000 p.a. out of 4%)
10.	Serial Number: Acreage: Acreage Description: Per Cent Participation: Working Interest Owner: Royalty Interest Owner: O.R.R.I. Owner:	NM-0587 634.55 acres Lots 1 & 2, S½NE¼, & SW¼ Sec. 5, & Lots 1,2, 6 & 7, S½NE¼, & E½SW¼ Sec. 6, T23S-R3¼E 11.07885% Signal Oil and Gas Company United States of America Allan McLellan
11.	Serial Number: Acreage: Acreage Description: Per Cent Participation: Working Interest Owner: Royalty Interest Owner:	E-5999 320 acres W12 Sec. 12, T23S-R33E 5.58700% Union Oil Company of California State of New Mexico
12.	Serial Number: Acreage: Acreage Description: Per Cent Participation: Working Interest Owner: Royalty Interest Owner:	E-1935 320 acres E=2 Sec. 12, T23S-R33E 5.58700% Phillips Petroleum Company State of New Mexico
13.	Serial Number: Acreage: Acreage Description: Per Cent Participation: Working Interest Owner: Royalty Interest Owner: O.R.R.I. Owner:	IC-065194 274.57 acres Lots 1 & 2, $E_2^1NW_4^1$, & $S_2^1NE_4^1$, & $NW_4^1NE_4^1$ Sec. 7, T23S-R34E 4.79383% Continental Oil Company United States of America R. S. Magruder Est
14.	Serial Number: Acreage: Acreage Description: Per Cent Participation: Working Interest Owner: Royalty Interest Owner: O.R.R.I. Owner:	LC-064881 200 acres NE\frac{1}{2}NE\frac{1}{4} Sec. 7, & NW\frac{1}{4} Sec. 8, T23S-R34E 3.49187% Continental Oil Company United States of America Bonnie H. Matlock (\$750 p.a. out of 3%)
15.	Serial Number: Acreage: Acreage Description: Per Cent Participation: Working Interest Owner: Royalty Interest Owner:	E-1933 314.99 acres Lots 3 & 4, $E_2^1SW_4^1$, & SE_4^1 Sec. 7, T23S-R34E 5.49954% Phillips Petroleum Company State of New Mexico

Page -3-

Acreage: Acreage Description: Per Cent Participation: Working Interest Owner: Royalty Interest Owner: O.R.R.I. Owner:	NM-039 80 acres E\frac{1}{2}NE\frac{1}{4} \text{ Sec. 8, T23S-R3\hE} 1.39675\text{%} Hondo Oil & Gas Company United States of America John S. Harris
17. Serial Number: Acreage: Acreage Description: Per Cent Participation: Working Interest Owner: Royalty Interest Owner: O.R.R.I. Owner:	NM-0279 80 acres $W_{\overline{2}}^{1}NE_{\overline{4}}^{1}$ Sec. 8, T23S-R34E 1.39675% Shell Oil Company United States of America John S. Harris
18. Serial Number: Acreage: Acreage Description: Per Cent Participation: Working Interest Owner: Royalty Interest Owner:	E-9458 320 acres S½ Sec. 8, T23S-R34E 5.58700% Skelly Oil Company State of New Mexico
19. Serial Number: Acreage: Acreage Description: Per Cent Participation: Working Interest Owner: Royalty Interest Owner:	B-10752 200 acres NE $\frac{1}{4}$ & NW $\frac{1}{4}$ NW $\frac{1}{4}$ Sec. 36, T22S-R33E 3.49189% Superior Oil Company State of New Mexico

The Working Interest Ownership is as follows:

	ACRES PERCENTAGE
Total Federal Lands	3,172.59 55.39145%
Total State Lands	2,554.99 44.60855%
	5,727.58 100.00000%

As to each tract the lessee of record is the same as the working interest $\mathsf{owner}_{\,\bullet}$

BELL LAKE NO. 6

14,564'(-11,079) - 14,825'(-11,340)	Pay Interval
14,825: (-11,340) - 14,859: (-11,374)	No test
14,859 (-11,374) - 14,935 (-11,450)	Packer failure. Tested 372' salty sulphur water
14,935 (-11,450) - 14,941 (-11,456)	No test
14,941: (-11,456) - 15,056: (-11,571)	Tested 13,750' salty sulphur water

Electric log calculations indicate high percentages of water at 14,954 (-11,469).

Control in the area is limited. As is mentioned above, the closest Devonian well, Bell Lake Unit No. 1-A is located five miles south. It is believed that every developable sub-division of the nine-section area proposed for the Second participating Area for the Devonian Formation has reasonably been proved to be productive of gas.

Seismic and subsurface information indicates two "highs" located as shown on Exhibit "C". These "highs" may be separated by an apparent restriction of the Bell Lake Unit structure. The structural high area to the south has been designated as the Initial Participating Area for the Devonian formation, Bell Lake Unit. This area encompasses nine sections, (Exhibit "A"). The acreage proposed for the Second Participating Area for the Devonian formation, Bell Lake Unit, comprises nine sections located on a similar structural high to that approved for the Initial Participating Area and located to the north of this restriction.

Additional acreage at this time cannot be included within the bounds of the Second Participating Area. However, at such time as additional development proves adjoining properties, applications will be submitted for the enlargement of these Participating Area.

OIL CONSERVATION COMMISSION

P. O. BOX 871 SANTA FE, NEW MEXICO

163

July 20, 1966

Continental Oil Company P. O. Box 460 Hobbs, New Mexico

Attention: Mr. L. P. Thompson

Re: 1966 Plan of Development, Bell Lake Unit, Lea County,

New Mexico

Gentlemen:

This is to advise that the New Mexico Oil Conservation Commission has this date approved the 1966 Plan of Development for the Bell Lake Unit, Lea County, New Mexico, subject to like approval by the United States Geological Survey and the Commissioner of Public Lands of the State of New Mexico.

One approved copy of the plan is returned herewith.

Very truly yours,

A. L. PORTER, Jr., Secretary-Director

ALP/JEK/og

cc: Commissioner of Public Lands Santa Fe, New Mexico

United States Geological Survey Roswell, New Mexico



UNITED STATES DEPARTMENT OF THE INTERIOR GEOLOGICAL SURVEY

MALL CEFIC S6 Jun 22 P

OIN REPLY REFER TO:

Drawe: 1857 Roswell, New Mexico

June 20, 1966

Continental Oil Company P. O. Box 460 Hobbs, New Mexico 88240

Attention: Ma. L. P. Thompson

Gentlemen:

Your 1966 plan of development Jaced May 15, 1966, for the Bell Lake unitaries, Lea County, New Mexico, proposing the testing of the Pennsylvanian formation in unit wells No. 4 and 10, has been approved on this face subject to like approval by the appropriate State officials.

Three approved copies of he plan are enclosed.

Sincerely yours, (Org.Sad) CAEL C. TRAYWICK

CARL C. TRAYWICK
Acting Oil and Gas Supervisor

cc:

Washington (w/cy plan)
Hobbs (w/cy plan)
NMOCC - Santa Fe (ltr. only)
Com. of Pub. Lands - Santa Fe (ltr. only)

24 / MA 31 ml 33*

June 15, 1966

Continental Oil Company P. O. Box 460 Hobbs, New Mexico

Re: Bell Lake Unit
Lea County, New Mexico

ATTENTION: Mr. L.P. Thompson

Gentlemen:

The Commissioner of Public Lands approves the Plan of Development for the Calendar Year 1966, for the Bell Lake Unit, Lea County, New Mexico, subject to like approval by the United States Geological Survey and the Oil Conservation Commission.

This Plan provides for testing the Pennsylvanian Formation in Wells No. 4 and 10 during 1966.

We are returning one approved copy of this Plan of Development.

Very truly yours,

GUYTON B. HAYS
COMMISSIONER OF PUBLIC LANDS
BY:
Ted Bilberry, Director
Oil and Gas Department

GBH/MMR/s cc: United States Geological Survey

Roswell, New Mexico

Oil Conservation Commission > Santa Fe, New Mexico

26 Jun 6 Bu 7 LD

CONTINENTAL OIL COMPANY

P. O. BOX 460 HOBBS, NEW MEXICO

PRODUCTION DEPARTMENT
HOBBS DISTRICT
L. P. THOMPSON
DISTRICT MANAGER
G. C. JAMIESON
ASSISTANT DISTRICT MANAGER

June 2, 1966

1001 NORTH TURNER TELEPHONE: EX 3-4141

Oil and Gas Supervisor United States Geological Survey P. O. Box 1857 Roswell, New Mexico

Commissioner of Public Lands P. O. Box 791 Santa Fe, New Mexico

Oil Conservation Commission P. O. Box 2088 Santa Fr. New Mexico

Gentlemen:

Attached for your consideration and approval is our proposed Plan of Development for the calendar year 1966 for the Bell Lake Unit, Lea County, New Mexico.

Yours very truly,

Mhon som

LPT-JS Attach

JUN 6 AM

99

TO THE OIL AND GAS SUPERVISOR (6) UNITED STATES GEOLOGICAL SURVEY 2. O. BOX 1857 ROSWELL, NEW MEXICO

COMMISSIONER OF PUBLIC LANDS (3) STATE OF NEW MEXICO P. O. BOX 791 SANTA FE, NEW MEXICO

OIL CONSERVATION COMMISSION STATE OF NEW MEXICO P. O. BOX 2088 SANTA FE, NEW MEXICO

Gentlemen:

In compliance with Section 10 of the Bell Lake Unit Agreement dated May 12, 1953, Continental Oil Company, as Unit Operator, hereby submits for your approval a Plan of Development for the year 1966. Under date of January 19, 1965, a Plan of Development covering the calendar year 1965 was submitted and subsequent approval was received from your offices.

HISTORY OF PAST DEVELOPMENT

Since formation of the Unit, Operator has drilled the following wells within the Unit Area:

Well and Location	Objective Formation	Status
Bell Lake Unit No. 1 SE/4 SW/4 Sec. 31 T-23S, R-34E	Devonian	Producing from Devon- ian Part. Area "A"
Bell Lake Unit No. 2 SE/4 SW/4 Sec. 30 T-23S, R-34E	Pennsylvanian (Atoka)	Atoka Depleted. Deepened to Morrow (Non-Productive)
Bell Lake Unit No. 3 NE/4 NW/4 Sec. 6 T-24S, R-34E	Bone Spring	Producing from Bone Spring (Non-Commercial)
Bell Lake Unit No. 4 SE/4 NW/4 Sec. 6 T-24S, R-34E	Devonian	Producing from Devon- ian Part, Area "A"
Bell Lake Unit No. 5 SW/4 NE/4 Sec. 1 T-24S, R-33E	Devonian	Devonian non-productive. Producing from Morrow (Non-Commercial)
Bell Lake Unit No. 6 SW/4 SE/4 Sec. 6 T-23S, R-34E	Devonian	Producing from Devonian Part. Area "B"
Bell Lake Unit No. 7 NE/4 NE/4 Sec. 1 T-24S, R-33E	Bone Spring	Plugged and Abandoned

Plan of Development - Bell Lake Unit Page 2

Well and Location	Objective Formation	Status
Bell Lake Unit No. 8 SW/4 SW/4 Sec. 7 T-22S, R-34E	Cherry Canyon	Plugged and Abandoned
Bell Lake Unit No. 9 NE/4 SW/4 Sec. 18 T-23S, R-34E	Bone Spring	Plugged and Abandoned
Bell Lake Unit No. 10 SE/4 NW/4 Sec. 19 T-23S, R-34E	Devonian	Producing from Devonian (No determination of commercial status made)

DEVELOPMENT

Transwestern Pipeline Company connected to the Bell Lake Unit gas wells and limited gas sales began in August, 1961. During the fourth contract year, August 1, 1964, through July 31, 1965, the gas sales from the Bell Lake Unit were 2,772,587 MCF. Cumulative production to August 1, 1965, is 8,869,265 MCF. Gas sales from August 1, 1965 to January 1, 1966, totalled 1,772,296 MCF bringing the cumulative gas sales to that date to 10,641,561 MCF. The fact that additional Devonian wells would not increase gas sales from the Unit makes the drilling of additional Devonian wells in the Unit Area economically unattractive at this time. Reserves from other horizons, however, would enhance our marketing position. In response to this situation, it is planned to test the Pennsylvanian formation in wells Nos. 4 and 10 during 1966. This procedure will involve plugging off the Devonian formation during the process of testing. The advisability of dual completions will be determined from the results of the testing. Complementing this production testing, it is proposed to conduct a seismic survey covering a majority of the Unit Area which will provide information for our drilling program for 1967.

OFFSET OBLIGATIONS

Appropriate and adequate measures will be taken to prevent drainage of unitized substances from lands subject to the Bell Lake Unit Agreement, or pursuant to applicable regulations, fair and reasonable compensatory royalty will be paid as provided in Section 18 of said agreement.

FURTHER DEVELOPMENT

This Plan of Development shall constitute the drilling obligations of the Unit Operator under the terms of the Bell Lake Unit Agreement for the period ending December 31, 1966. Before this plan expires, another plan for further development of the Unit Area will be submitted.

MODIFICATION

It is understood that portions of the Plan of Development outlined are dependent upon certain information to be obtained
prior and subsequent to drilling, as well as other contingencies,
and for these reasons, this Plan of Development may be modified from
time to time, with like approval, to meet changing conditions.

EFFECTIVE DATE

LPT-JS

This Plan of Development shall be effective January 1, 1966.

Dated May 15, 1966.

M

CONTINENTAL OIL COMPANY

UNIT OPERATOR

Approved

Supervisor, United States
Geological Survey

Approved

Commissioner of Public Lands

Approved

Approved

Approved

Approved

Oil Conservation Commission

DATE





CONTINENTAL OIL COMPANY: 03

P. O. Box 431 Midland, Texas March 22, 1966

New Mexico Oil Conservation Commission P. O. Box 871 Santa Fe, New Mexico

Re: Contract 7881 - Bell Lake Unit,

Lea County, New Mexico

Gentlemen:

Pages 17 and 19 of Exhibit "B" to the Bell Lake Unit show Capitol Oil Company owning basic royalty under Tracts 68 and 72 in the unit. All of this interest in Tract 72 and a part in Tract 68 is now owned by Ervin J. Levers, Laverne C. Levers and Forest E. Levers dba The Levers Oil Company, and we are attaching one copy of revised pages 17 and 19 for Exhibit "B".

The Levers would like to ratify the unit and we are enclosing one copy of their Consent and Ratification and one copy of Commitment of Oil and Gas Leasehold Interest signed by Continental Oil Company. Please process these new instruments in the usual manner.

Today we are also submitting copies of each of these enclosures to the United States Geological Survey and the Commissioner of Public Lands.

Yours very truly

B. R. Marshall '/ General Landman Midland Division

BRM:MB Enclosures

MAR 24 PM 1 05

CONSENT TO AND RATIFICATION OF
THE UNIT AGREEMENT
FOR THE DEVELOPMENT AND OPERATION
OF THE
BELL LAKE UNIT AREA
LEA COUNTY, NEW MEXICO

KNOW ALL MEN BY THESE PRESENTS:

WHEREAS, on May 12, 1953, an agreement was entered into by the owners of certain oil and gas leases for the development and operation of the Bell Lake Unit Area, embracing 37,177.86 acres, more or less, in Townships 22, 23 and 24 South, Ranges 33 and 34 East, N.M.P.M., Lea County, New Mexico, which said agreement was approved by the New Mexico Oil Conservation Commission on August 28, 1953, by the Commissioner of Public Lands of the State of New Mexico on September 9, 1953, and by the Director of the United States Geological Survey on September 30, 1953, which said agreement is hereinafter referred to as "Unit Agreement"; and,

WHEREAS, the Continental Oil Company, a corporation with offices at Fort Worth, Texas, is designated as the Unit Operator in said Unit Agreement and the same is in full force and effect; and,

WHEREAS, the undersigned are the owners of an undivided one-thirty second (1/32) interest in and to all of the oil, gas and other minerals in and under and that may be produced from Tract 72 and an undivided one-fourth (1/4) interest in and to all of the oil, gas and other minerals in and under and that may be produced from Tract 68 shown on Supplemental Exhibit "B" filed in connection with said Unit Agreement, above referred, being Lots 1 & 2, S/2 NE/4 and SE/4 of Section 5 (Tract 72) and Lot 3, the SE/4 SE/4 of Section 7, T24S-R34E, NMPM, containing 399.23 acres, more or less, subject to a certain oil and gas lease held by Continental Oil Company and the undersigned are desirous of committing their mineral interests to said Unit Agreement as provided by Section 30 thereof with the consent of the said Continental Oil Company as working interest owner and unit operator.

NOW, THEREFORE, the undersigned, in consideration of the premises and the benefits to be derived therefrom, does hereby commit its mineral interest above described to said Unit Agreement and does hereby consent thereto and ratify all of the terms and provisions thereof exactly the same as if it had executed the original of said Unit Agreement or conterpart thereof.

IN WITNESS WHEREOF, this consent and ratification is executed this the affic day of February, 1966.

Ervin J. Levers

Laverne C. Levers

Forest E. Levers / dba The Levers Oil Company

orlie

ne (

STATE OF NEW MEXICO

COUNTY OF CHAVES

I

On this Add day of February, 1966, before me personally appeared Ervin J. Levers and Laverne C. Levers, his wife; Forest E. Levers dba The Levers Oil Company, to me known to be the persons described in and who executed the foregoing instrument, and acknowledged that they executed the same as their free act and deed.

Witness my hand and official seal the day and year last above yieltten.

espere 4/10/69

Notary Public in and for Chaves County, New Mexico

ACCEPTANCE AND APPROVAL OF COMMITMENT BY UNIT OPERATOR

KNOW ALL MEN BY THESE PRESENTS:

That the undersigned, Continental Oil Company, being the owner of oil and gas leasehold interests covering the mineral interest of Ervin J. Levers and wife, Laverne C. Levers and Forest E. Levers dba The Levers Oil Company, in and to Lots 1, 2 S/2 NE/4, SE/4 of Section 5; Lot 3, SE/4 SE/4 of Section 7, T24S-R34E, N.M.P.M., Lea County, New Mexico, and also as Unit Operator under the terms of said Unit Agreement, does hereby acknowledge and approve the above and foregoing consent and ratification of Ervin J. Levers and wife, Laverne C. Levers, Forest E. Levers dba The Levers Oil Company, for the purpose of fully committing all of the right, title and interestof Ervin J. Levers and wife, Laverne C. Levers and Forest E. Levers dba The Levers Oil Company in and to the above described property to said Unit Agreement.

DATED this the Andday of Much, 1966.

CONTINENTAL OIL COMPANY

WORM APPROVED

Attorney-in-Fact

MR ... NI 1 05

COMMITMENT OF OIL AND GAS LEASEHOLD INTEREST BY CONTINENTAL OIL COMPANY TO BELL LAKE UNIT AGREEMENT LEA COUNTY, NEW MEXICO

KNOW ALL MEN BY THESE PRESENTS:

WHEREAS, on May 12, 1953, an agreement was entered into by the owners of certain oil and gas leases for the development and operation of the Bell Lake Unit Area, embracing 37,177.86 acres, more or less, in Townships 22, 23 and 24 South, Ranges 33 and 34. East, N.M.P.M., Lea County, New Mexico, which said agreement was approved by the New Mexico Oil Conservation Commission on August 28, 1953, by the Commissioner of Public Lands of the State of New Mexico on September 9, 1953, and by the Director of the United States Geological Survey on September 30, 1953, which said agreement is hereinafter referred to as "Unit Agreement"; and,

WHEREAS, the Continental Oil Company, a corporation with offices at Fort Worth, Texas, is designated as the Unit Operator in said Unit Agreement and the same is in full force and effect; and,

WHEREAS, the undersigned are the owners of an undivided one-thirty second (1/32) interest in and to all of the oil, gas and other minerals in and under and that may be produced from Tract 72 and an undivided one-fourth (1/4) interest in and to all of the oil, gas and other minerals in and under and that may be produced from Tract 68 shown on Supplemental Exhibit "B" filed in connection with said Unit Agreement, above referred, being Lots 1 & 2, S/2 NE/4 and SE/4 of Section 5 (Tract 72) and Lot 3, the SE/4 SE/4 of Section 7, T24S-R34E, NMPM, containing 399.23 acres, more or less, and is desirous of committing said leasehold interest to the Bell Lake Unit Agreement in accordance with the provisions thereof,

NOW, THEREFORE, the undersigned, on consideration of the premises and the benefits to be derived therefrom, does hereby commit all of its right, title and interest in and to the oil and gas lease-hold interest hereinabove described to said Unit Agreement and does hereby consent thereto and ratify all of the terms and provisions thereof, and does hereby also consent to and ratify the Unit Operating Agreement executed in connection with said Unit Agreement insofar as the commitment of said leasehold interest is concerned, it being the intention hereof that said leasehold interest shall be subject to all of the terms and provisions of said Unit Agreement and the Unit Operating Agreement executed in connection therewith, the same as if said leasehold interest had been owned by the undersigned at the time said Unit Agreement and Unit Operating Agreement were originally executed by the undersigned.

IN WITNESS WHEREOF, this instrument is executed this the

CONTINENTAL OIL COMPANY

FORM APPROVED

By Attorney-in-Fact

STATE OF TEXAS)) ss.
COUNTY OF MIDLAND)
The forego	oing instrument was acknowledged before me this
Attorney-in-Fact, Co on behalf of said co	ontinental Oil Company, a Delaware corporation, orporation.
	Malin Riscon
	Notary Public Midland County, Texas
My Commission Expire	es:
June 1, 1967	

.

-

69	68	67
T248-R33E Sec. 24: E2SE4, NW4SE4, SEANE4 Sec. 24: E2SE4, SEANE4 W2ME4, SEANE4 Sec. 7: N2SE4, SW4SE4, Lot 4, E2SW4	1248-R35E Sec. 13: SEŁNWA Sec. 24: NEANEA SwaseA T248-P34E Sec. 7: Lot 3, SEASEA Sec. 18: Lot 2	1245-R33E Sec. 13: VžVž Sec. 14: EžEŽ
479 . 53	239.06	320
3-18-62	2-12-62	4-11-56
Howell Spear G. T. Hanners Est. Leo V. Sims Winnie Sims Bertha E. Sims Ellie Sims Spear G. P. Sims Dan Brannin Geo. R. Locker Buckeye Oil Co. Red Head Oil Prod. Co. Remrow Co. Walter A. Locker, Sr. Ada Oil Co. Phillips Patr.	Ervin J. Levers, Laverne C. Levers Forest E. Levers dba The Levers 0il Co. *Rubert Madera Fowler Hair (Sec. 7: Lot 3,SE4 SE4 only) *Rubert Madera *Capitol Oil Co. (Remainder of Tr.	Jesse Beck Lettie Beck Mrs. Cla Cooper
1.607% 1.607% 1.607% 1.607% 1.607% 1.607% 1.607% 6.429% 2.041% 3.699% 10.331% 14.541% 1.020% 25.000%	25.000% 25.000% 50.000% 50.000% 75.000% 68)	34,375% 15,625% 5 0,000%
Shell Oil Company	Continertal Oil Co. (Fowler Hair int, only)	Convirental Oil Co.
None	None	Note
Shell Oil Co.	Continental Gil Co.	Continental Oil Co.

16.667%

2-1-62

319,76

72

Sec. 5: E T248-RS4E

Clark Dale Drilling Buckeye Oil Co. 1.562% 31.234% 23.750% Continental Gil Co.

None

Continental

Fredrick L. Kenmow Co.

Stead

John Grappe 1.562% 2.344%

J. G. Thornhill 6.255%
J. Penrod Toles 1.250%
Robert Hopkins Jr. 2.502%
Lawrence C. Harris 2.502%

Geo. R. Locker Walter Locker, Sr. .625% .625%

L. C. Jones Wm. I. Lee 9.375% .005% · 78以

*Ruford Madera *Rubert Madera Mildred A. 6.250%

*Buckeye Oil Co. *Broman 6.250% .016%

Ervin J. Levers,

Forest E. Levers &

The Levers Oil Co. 3.109%

Anderson Carter 50.000% 73 **

Sec. 8: NWASEA

£

2-12-63

Powhatan Carter

50.000%

Vendetta, Inc.

*Uninased

None

Vendetta, Inc.

10 FEE TRACTS, CONTAINING 2,712.93 ACRES, OR 7.30% of UNIT AREA

TOTAL 73 TRACTS, CONTAINING 37,177.86 ACRES, BELL LAKE UNIT AREA

**That 73 is additional Tract out of original Tract No. 70.

REVISED 3-10-66

OIL CONSERVATION COMMISSION

P. O. BOX 2088

SANTA FE, NEW MEXICO

563

February 24, 1966

Continental Oil Company P. O. Box 460 Hobbs, New Mexico

Attention: Mr. L. P. Thompson

Re: 1966 Plan of Development Time Extension, Bell Lake Unit, Lea County, New Mexico

Gentlemen:

This is to advise that the New Mexico Oil Conservation Commission has this date approved the requested extension of time to July 1, 1966 in which to file a plan of development covering the calendar year 1966 for the Bell Lake Unit, Lea County, New Mexico, subject to like approval by the United States Geological Survey and the Commissioner of Public Lands of the State of New Mexico.

Very truly yours,

A. L. PORTER, Jr., Secretary-Director

ALP/JEK/og

cc: Commissioner of Public Lands Santa Fe, New Mexico

> U. S. Geological Survey Roswell, New Mexico

State of New Mexico



Commissioner of Public Lands

GUYTON B. HAYS COMMISSIONER



P. O. BOX 1148 SANTA FE, NEW MEXICO

Continental Oil Company P. O. Box 460 Hobbs, New Mexico

> Re: Bell Lake Unit Les County, New Mexico

ATTENTION: Mr. L. P. Thompson

Gentlemen:

Reference is made to your letter of Pebruary 15, 1966, regarding a six month extension of time in which to file a Plan of Development for the year 1966, the Commissioner of Public Lands has this date approved your request, subject to like approval by the United States Geological Survey.

The Plan of Development for the last six months of 1966 should provide for further development within the Unit Area.

We are returning one approved copy of your application for extension of time.

Very truly yours,

GUYTON B. HAYS CONSISSIONER OF PUBLIC LANDS

BY: Ted Bilberry, Director Oil and Gas Department

GBH/TB/MMR/s

State of New Mexico



Commissioner of Public Lands

GUYTON B. HAYS COMMISSIONER



P. O. BOX 1148 SANTA FE, NEW MEXICO

Continental Oil Company P. O. Box 460 Hobbs, New Mexico

February 21, 1966 Page 2.

P. O. Box 2088
Santa Fe, New Mexico

United States Geological Survey P. O. Box 1857 Roswell, New Mexico



CONTINENTAL QIL COMPANY

Oil and Gas Supervisor United States Geological Survey P. O. Box 1857 Roswell, New Mexico

Commissioner of Public Lands P. O. Box 791 Santa Fe, New Mexico

New Mexico Oil Conservation Commission P. O. Box 2088 Santa Fe, New Mexico

Re: Bell Lake Unit

Lea County, New Mexico

Gentlemen:

By letter dated December 13, 1965, a proposed Plan of Development was forwarded for your consideration. By letter dated January 28, 1966, the Commissionor of Public Lands has advised that they cannot accept this plan.

At the present time there has not been agreement among the working interest owners in regard to additional development in this unit. Studies are being conducted at this time which will enable us to better evaluate the prospect of conducting additional development. Upon completion of the studies it should be possible for the working interest owners to present a concrete Plan of Development.

In view of this situation, it is respectfully requested that an extension of time, until July 1, 1966, be granted for the filing of a Plan of Development for this calendar year,

Yours very truly,

LPT-JS

cc: Working Interest Owners
 (Addressee List Attached)

263

CONTINENTAL OIL COMPANY

P. O. BOX 460

HOBBS, NEW MEXICO

December 13, 1965

1001 NORTH TURNER TELEPHONE: EX 3-4141

PRODUCTION DEPARTMENT
HOBBS DISTRICT
L. P. THOMPSON
DISTRICT MANAGER
G. C. JAMIESON
ASSISTANT DISTRICT MANAGER

Oil and Gas Supervisor United States Geological Survey P. O. Box 1857 Roswell, New Mexico

Commissioner of Public Lands P. O. Box 791 Santa Fe, New Mexico

Oil Conservation Commission P. O. Box 2088 Santa Fe, New Mexico

Gentlemen:

Attached for your consideration and approval is our proposed Plan of Development for the calendar year 1966 for the Bell Lake Unit, Lea County, New Mexico.

Yours very truly,

hampson

LPT-DFW

Enc.

The specific to the start of time to play 1, 406 or

PLAN OF DEVELOPMENT FOR THE CALENDAR YEAR 1966 BELL LAKE UNIT (NO. 14-08-001-1066) LEA COUNTY, NEW MEXICO

TO THE OIL AND GAS SUPERVISOR (6) UNITED STATES GEOLOGICAL SURVEY P. O. BOX 1857 ROSWELL, NEW MEXICO

COMMISSIONER OF PUBLIC LANDS (3) STATE OF NEW MEXICO P. O. BOX 791 SANTA FE, NEW MEXICO

OIL CONSERVATION COMMISSION STATE OF NEW MEXICO P. O. BOX 2088 SANTA FE, NEW MEXICO

Gentlemen:

In compliance with Section 10 of the Bell Lake Unit Agreement dated May 12, 1953, Continental Oil Company, as Unit Operator, hereby submits for your approval a Plan of Development for the year 1966. Under date of January 19, 1965, a Plan of Development covering the calendar year 1965 was submitted and subsequent approval was received from your offices.

HISTORY OF PAST DEVELOPMENT

Since formation of the Unit, Operator has drilled the following wells within the Unit Area:

Well and Location	Objective Formation	Status
Bell Lake Unit No. 1 SE/4 SW/4 Sec. 31 T-23S, R-34E	Devonian	Producing from Devon- ian Part. Area "A"
Bell Lake Unit No. 2 SE/4 SW/4 Sec. 30 T-23S, R-34E	Pennsylvanian (Atoka)	Atoka Depleted. Deepened to Morrow (Non-Productive)
Bell Lake Unit No. 3 NE/4 NW/4 Sec. 6 T-24S, R-34E	Bone Spring	Producing from Bone Spring (Non-Commercial)
Bell Lake Unit No. 4 SE/4 NW/4 Sec. 6 T-24S, R-34E	Devonian	Producing from Devonian Part. Area "A"
Bell Lake Unit No. 5 SW/4 NE/4 Sec. 1 T-24S, R-33E	Devonian	Devonian non-productive. Producing from Morrow (Non-Commercial)
Bell Lake Unit No. 6 SW/4 SE/4 Sec. 6 T-23S, R-34E	Devonian	Producing from Devonian Part. Area "B"
Bell Lake Unit No. 7 NE/4 NE/4 Sec. 1 T-24S, R-33E	Bone Spring	Plugged and Abandoned

Plan of Development - Bell Lake Unit Page 2

Well and Location	Objective Formation	Status
Bell Lake Unit No. 8 SW/4 SW/4 Sec. 7 T-22S, R-34E	Cherry Canyon	Plugged and Abandoned
Bell Lake Unit No. 9 NE/4 SW/4 Sec. 18 T-23S, R-34E	Bone Spring	Plugged and Abandoned
Bell Lake Unit No. 10 SE/4 NW/4 Sec. 19 T-23S, R-34E	Devonian	Producing from Devonian (No determination of commercial status made)

DEVELOPMENT

Transwestern Pipeline Company connected to the Bell Lake Unit gas wells and limited gas sales began in August, 1961. During the fourth contract year, August 1, 1964, through July 31, 1965, the gas sales from the Bell Lake Unit were 2,772,587 MCF. Cumulative production to August 1, 1965, is 8,869,265 MCF. The uncertainties of the present market situation, and the limited production from the present producing wells in the Unit, make the drilling of additional wells in the Unit Area economically unattractive at this time; therefore, no further development wells are proposed for drilling during 1966.

OFFSET OBLIGATIONS

Appropriate and adequate measures will be taken to prevent drainage of unitized substances from lands subject to the Bell Lake Unit Agreement, or pursuant to applicable regulations, fair and reasonable compensatory royalty will be paid as provided in Section 18 of said agreement.

FURTHER DEVELOPMENT

This Plan of Development shall constitute the drilling obligations of the Unit Operator under the terms of the Bell Lake Unit Agreement for the period ending December 31, 1966. Before this plan expires, another plan for further development of the Unit Area will be submitted.

Plan of Development - Bell Lake Unit Page 3

MODIFICATION

It is understood that portions of the Plan of Development herein outlined are dependent upon certain information to be obtained prior and subsequent to drilling, as well as other contingencies, and for these reasons, this Plan of Development may be modified from time to time, with like approval, to meet changing conditions.

EFFECTIVE DATE

This Plan of Development shall be effective January 1, 1966. Dated November 4, 1965.

CONTINENTAL OIL COMPANY UNIT OPERATOR

By Mongson

L. P. THOMPSON

LPT-DFW

Approved Supervisor, United States Geological Survey	DATE
Approved Commissioner of Public Lands	DATE
Approved Oil Conservation Commission	DATE

PLAN OF DEVELOPMENT FOR THE CALENDAR YEAR 1966 BELL LAKE UNIT (NO. 14-08-001-1066) LEA COUNTY, NEW MEXICO

TO THE OIL AND GAS SUPERVISOR (6) UNITED STATES GEOLOGICAL SURVEY P. O. BOX 1857 ROSWELL, NEW MEXICO

COMMISSIONER OF PUBLIC LANDS (3) STATE OF NEW MEXICO P. O. BOX 791 SANTA FE, NEW MEXICO

OIL CONSERVATION COMMISSION STATE OF NEW MEXICO P. O. BOX 2088 SANTA FE, NEW MEXICO

Gentlemen:

T-24S, R-33E

In compliance with Section 10 of the Bell Lake Unit Agreement dated May 12, 1953, Continental Oil Company, as Unit Operator, hereby submits for your approval a Plan of Development for the year 1966. Under date of January 19, 1965, a Plan of Development covering the calendar year 1965 was submitted and subsequent approval was received from your offices.

HISTORY OF PAST DEVELOPMENT

Since formation of the Unit, Operator has drilled the following wells within the Unit Area:

Well and Location	Objective Formation	Status
Bell Lake Unit No. 1 SE/4 SW/4 Sec. 31 T-23S, R-34E	Devonian	Producing from Devon- ian Part. Area "A"
Bell Lake Unit No. 2 SE/4 SW/4 Sec. 30 T-23S, R-34E	Pennsylvanian (Atoka)	Atoka Depleted. Deepened to Morrow (Non-Productive)
Bell Lake Unit No. 3 NE/4 NW/4 Sec. 6 T-24S, R-34E	Bone Spring	Producing from Bone Spring (Non-Commercial)
Bell Lake Unit No. 4 SE/4 NW/4 Sec. 6 T-24S, R-34E	Devonian	Producing from Devonian Part. Area "A"
Bell Lake Unit No. 5 SW/4 NE/4 Sec. 1 T-24S, R-33E	Devonian	Devonian non-productive. Producing from Morrow (Non-Commercial)
Bell Lake Unit No. 6 SW/4 SE/4 Sec. 6 T-23S, R-34E	Devonian	Producing from Devonian Part. Area "B"
Bell Lake Unit No. 7 NE/4 NE/4 Sec. 1	Bone Spring	Plugged and Abandoned

Plan of Development - Bell Lake Unit Page 2

Well and Location	Objective Formation	Status
Bell Lake Unit No. 8 SW/4 SW/4 Sec. 7 T-22S, R-34E	Cherry Canyon	Plugged and Abandoned
Bell Lake Unit No. 9 NE/4 SW/4 Sec. 18 T-23S, R-34E	Bone Spring	Plugged and Abandoned
Bell Lake Unit No. 10 SE/4 NW/4 Sec. 19 T-23S, R-34E	Devonian	Producing from Devonian (No determination of commercial status made)

DEVELOPMENT

Transwestern Pipeline Company connected to the Bell Lake Unit gas wells and limited gas sales began in August, 1961. During the fourth contract year, August 1, 1964, through July 31, 1965, the gas sales from the Bell Lake Unit were 2,772,587 MCF. Cumulative production to August 1, 1965, is 8,869,265 MCF. The uncertainties of the present market situation, and the limited production from the present producing wells in the Unit, make the drilling of additional wells in the Unit Area economically unattractive at this time; therefore, no further development wells are proposed for drilling during 1966.

OFFSET OBLIGATIONS

Appropriate and adequate measures will be taken to prevent drainage of unitized substances from lands subject to the Bell Lake Unit Agreement, or pursuant to applicable regulations, fair and reasonable compensatory royalty will be paid as provided in Section 18 of said agreement.

FURTHER DEVELOPMENT

This Plan of Development shall constitute the drilling obligations of the Unit Operator under the terms of the Bell Lake Unit Agreement for the period ending December 31, 1966. Before this plan expires, another plan for further development of the Unit Area will be submitted.

Plan of Development - Bell Lake Unit Page 3

MODIFICATION

It is understood that portions of the Plan of Development herein outlined are dependent upon certain information to be obtained prior and subsequent to drilling, as well as other contingencies, and for these reasons, this Plan of Development may be modified from time to time, with like approval, to meet changing conditions.

EFFECTIVE DATE

This Plan of Development shall be effective January 1, 1966. Dated November 4, 1965.

CONTINENTAL OIL COMPANY UNIT OPERATOR

By Mempson

L. P. THOMPSON

LPT-DFW

Approved Supervisor, United States Geological Survey	DATE
Approved Commissioner of Public Lands	D ATE
Approved Oil Conservation Commission	DATE

PLAN OF DEVELOPMENT FOR THE CALENDAR YEAR 1966 BELL LAKE UNIT (NO. 14-08-001-1066) LEA COUNTY, NEW MEXICO

TO THE OIL AND GAS SUPERVISOR (6) UNITED STATES GEOLOGICAL SURVEY P. O. BOX 1857 ROSWELL, NEW MEXICO

COMMISSIONER OF PUBLIC LANDS (3) STATE OF NEW MEXICO P. O. BOX 791 SANTA FE, NEW MEXICO

OIL CONSERVATION COMMISSION STATE OF NEW MEXICO P. O. BOX 2088 SANTA FE, NEW MEXICO

Gentlemen:

In compliance with Section 10 of the Bell Lake Unit Agreement dated May 12, 1953, Continental Oil Company, as Unit Operator, hereby submits for your approval a Plan of Development for the year 1966. Under date of January 19, 1965, a Plan of Development covering the calendar year 1965 was submitted and subsequent approval was received from your offices.

HISTORY OF PAST DEVELOPMENT

Since formation of the Unit, Operator has drilled the following wells within the Unit Area:

Well and Location	Objective Formation	Status
Bell Lake Unit No. 1 SE/4 SW/4 Sec. 31 T-23S, R-34E	Devonian	Producing from Devonian Part. Area "A"
Bell Lake Unit No. 2 SE/4 SW/4 Sec. 30 T-23S, R-34E	Pennsylvanian (Atoka)	Atoka Depleted. Deepened to Morrow (Non-Productive)
Bell Lake Unit No. 3 NE/4 NW/4 Sec. 6 T-24S, R-34E	Bone Spring	Producing from Bone Spring (Non-Commercial)
Bell Lake Unit No. 4 SE/4 NW/4 Sec. 6 T-24S, R-34E	Devonian	Producing from Devon- ian Part. Area "A"
Bell Lake Unit No. 5 SW/4 NE/4 Sec. 1 T-24S, R-33E	Devonian	Devonian non-productive. Producing from Morrow (Non-Commercial)
Bell Lake Unit No. 6 SW/4 SE/4 Sec. 6 T-23S, R-34E	Devonian	Producing from Devonian Part. Area "B"
Bell Lake Unit No. 7 NE/4 NE/4 Sec. 1 T-24S, R-33E	Bone Spring	Plugged and Abandoned

Plan of Development - Bell Lake Unit Page 2

Well and Location	Objective Formation	Status
Bell Lake Unit No. 8 SW/4 SW/4 Sec. 7 T-22S, R-34E	Cherry Canyon	Plugged and Abandoned
Bell Lake Unit No. 9 NE/4 SW/4 Sec. 18 T-23S, R-34E	Bone Spring	Plugged and Abandoned
Bell Lake Unit No. 10 SE/4 NW/4 Sec. 19 T-23S, R-34E	Devonian	Producing from Devonian (No determination of commercial status made)

DEVELOPMENT

Transwestern Pipeline Company connected to the Bell Lake Unit gas wells and limited gas sales began in August, 1961. During the fourth contract year, August 1, 1964, through July 31, 1965, the gas sales from the Bell Lake Unit were 2,772,587 MCF. Cumulative production to August 1, 1965, is 8,869,265 MCF. The uncertainties of the present market situation, and the limited production from the present producing wells in the Unit, make the drilling of additional wells in the Unit Area economically unattractive at this time; therefore, no further development wells are proposed for drilling during 1966.

OFFSET OBLIGATIONS

Appropriate and adequate measures will be taken to prevent drainage of unitized substances from lands subject to the Bell Lake Unit Agreement, or pursuant to applicable regulations, fair and reasonable compensatory royalty will be paid as provided in Section 18 of said agreement.

FURTHER DEVELOPMENT

This Plan of Development shall constitute the drilling obligations of the Unit Operator under the terms of the Bell Lake Unit Agreement for the period ending December 31, 1966. Before this plan expires, another plan for further development of the Unit Area will be submitted.

Plan of Development - Bell Lake Unit Page 3

MODIFICATION

It is understood that portions of the Plan of Development herein outlined are dependent upon certain information to be obtained prior and subsequent to drilling, as well as other contingencies, and for these reasons, this Plan of Development may be modified from time to time, with like approval, to meet changing conditions.

EFFECTIVE DATE

This Plan of Development shall be effective January 1, 1966. Dated November 4, 1965.

CONTINENTAL OIL COMPANY UNIT OPERATOR

By Mompson

L. P. THOMPSON

LPT-DFW

Approved Supervisor, United States Geological Survey	DATE
Approved Commissioner of Public Lands	DATE
Approved Oil Conservation Commission	DATE



CONTINENTAL OIL COMPANY

P. O. BOX 460 HOBBS, NEW MEXICO

PRODUCTION DEPARTMENT
HOBBS DISTRICT
L. P. THOMPSON
DISTRICT MANAGER
G. C. JAMIESON
ASSISTANT DISTRICT MANAGER

December 28, 1965

1001 NORTH TURNER TELEPHONE: EX 3-4141

Oil & Gas Supervisor U. S. Geological Survey P. O. Box 1857 Roswell, New Mexico

Commissioner of Public Lands State of New Mexico P. O. Box 1148 Santa Fe, New Mexico

New Mexico Oil Conservation Commission A O. Box 2088 Santa Fe, New Mexico

Gentlemen:

Pursuant to the provisions of the Unit Agreement dated May 12, 1953, affecting lands in the Bell Lake Unit, Lea County, New Mexico, Continental Oil Company, as Operator, has consulted the Working Interest Owners in regard to the proper classification of Bell Lake Unit No. 10. The Working Interest Owners are unable to agree on this point at this time. The facts relating to the well are summarized as follows:

Bell Lake Unit No. 10 is located 1980' from the north line and 1650' from the west line of Section 19, T-23S, R-34E, Lea County, New Mexico. It was drilled to a total depth of 14,930' and completed as a gas well in the Devonian formation between the depths of 14,747' and 14,811'. Initial test on the well was 3,200 MCF gas per day.

The attached well data sheet shows a portion of the gamma-ray neutron log and the data in regard to the well's completion and subsequent remedial work to date. As indicated on this data sheet, efforts to place the well in a condition so that it

Joint Letter Page 2

is clearly capable of producing gas in commercial quantities have been unsuccessful.

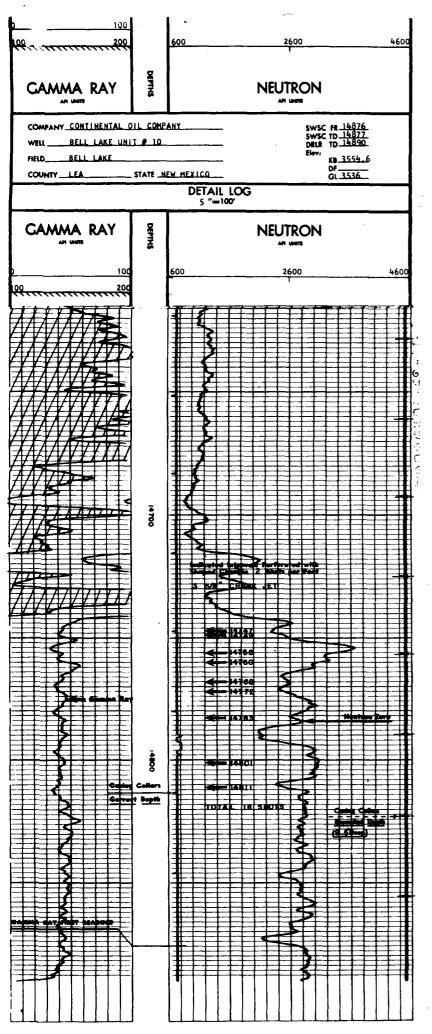
Efforts to secure concurrence of the Working Interest Owners in regard to an enlargement of the Second Participating Area for the Devonian formation, likewise, have been unsuccessful. Continental Oil Company, as Operator, believes that the well has clearly shown that the north structure is productive of gas in the Devonian formation at this location. In view of this fact, together with the fact that the well is of doubtful economic quality, it is respectfully requested that an additional extension of time be granted for the classification of Bell Lake Unit Well No. 10 until January 1, 1967, at which time additional producing history and other data should permit a better evaluation of the well.

Yours very truly,

LPT-DFW

cc: Working Interest Owners (Address List Attached)

RGP



WELL DATA PLAT

WELL NAME & LOCATION

Continental Oil Company Bell Lake Unit No. 10 1980'FNL & 1650'FWL Sec. 19-23-34 Lea County New Mexico TD - 14,930 ELEV. 3554'(DF)

IP DATE 3-15-65 LATEST TEST Gas 3200 MCFGPD Date 10-19-65 Gas 934 MCFGPD 160 BPD Water Water 240 BPD

18/64" CHK. TP 2600

CP Pkr. Allowable Chk. Adjustable

TP 1800 psi

CASING RECORD CP Pkr. Size/Depth/No. Sx./C'mt. Top 9 5/8"/12,172'/2664 sx/4200' 5 1/2"/11,918-14,930'/280 sx.

CUMULATIVE PRODUCTION 11-1-65 143,719 MCFG (15.025 psia) 27,900 bbls. wtr. COMPLETION INTERVAL

Perf. 14,747;14,749;14,754;14,758; 14,768;14,772;14783;14,801; & 14,811 w/2 JSPF. INITIAL TREATMENT

Acidized perfs. w/15,000 gals.

PAST REMEDIAL WORK

7-10-65 Sqd perfs 14,747-14,811 Reperf. 14,747;14,749;14,756;14,760; 14,768;14,772;14,783 w/4 JSPF Acidized perfs. w/1000 gal.. Before: Flwd 1400 MCFGPD w/310 BWPD. After: Flwd 500 MCFGPD w/39 BWPD.9-30-65 Reacidize perfs. 14,747-14,783

w/5000 gals. After: Flwd 934 MCFGPD w/240 BWPD.

BHP Data

3-9-65(Initial)6296 psig @-11,200', 72 hrs. SI.

10-11-65 6397 psig @-11,200', 72 hrs.

Drill Stem Test Data

No. 1 14,820-14,890, Open 1 hr. 30 min Rec. 990' GCDM 2540' GCSW, FSIP: 6291 psi.

No. 2 14,729-14,890, Open 4 hrs. 25 mi GTS 2 hrs. 15 min. @ 211 MCFGPD, Rec. 2220' GCSW, FSIP: 6336/1 hr.

BELL LAKE UNIT MAILING ADDRESS LIST

L. P. Thompson Continental Oil Company P. O. Box 460 Hobbs, New Mexico

Howard W. Jennings Perry R. Bass 1117 Fort Worth Nat'l Bank Bldg. Fort Worth 2, Texas

A. D. Kloxin The Atlantic Refining Company P. O. Box 1978 Roswell, New Mexico

Edward R. Hudson Hudson & Hudson 1510 First Nat'l Bldg. Fort Worth, Texas

William A. Hudson Hudson & Hudson 1510 First Nat'l Bldg. Fort Worth, Texas

J. S. Bottler, Jr. Humble Oil & Refining Co. P. O. Box 1600 Midland, Texas

C. F. Miller Kerr-McGee Oil Industries Kerr McGee Bldg. Oklahoma City, Oklahoma

M. H. McConnell Phillips Petroleum Company Phillips Bldg. Odessa, Texas

J. E. R. Sheeler Shell Oil Company P. O. Box 1509 Midland, Texas

A. C. Ambler Signal Oil & Gas Company 509 West Texas Ave. Midland, Texas

B. W. Plock Skelly 0il Company P. O. Box 1650 Tulsa, Oklahoma Mr. R. G. Hiltz Skelly Oil Company P. O. Box 1650 Tulsa, Oklahoma

Leon S. Ditzell Skelly Oil Company P. O. Box 993 Midland, Texas

William H. Mannon Scope Industries 4250 Wilshire Blvd. Los Angeles 5, California

W. T. Wells, Jr. Tenneco Oil Company P. O. Box 1031 Midland, Texas

L. J. Willis
The Superior Oil Company
P. O. Box 1521
Houston 11, Texas

J. H. Doughman Texas Pacific Oil Company P. O. Box 747 Dallas, Texas

C. W. Browning Union Oil Company of California 619 West Texas Avenue Midland, Texas

Anderson Carter Vendetta, Inc. P. O. Box 725 Lovington, New Mexico

Allan Hargrave Harper Star Route Kerrville, Texas

Brady M. Lowe 1512 Great Plains Bldg. Lubbock, Texas

H. S. Montgomery P. O. Box 296 Ruidoso, New Mexico

Ralph L. Gray 302 Carper Bldg. Artesia, New Mexico

OIL CONSERVATION COMMISSION

1

P. O. BOX 2088 SANTA FE, NEW MEXICO 563

March 23, 1965

Continental Oil Company P. O. Box 460 Hobbs, New Mexico

Attention: Mr. Jack Marshall

Re: 1965 Plan of Development.
Bell Lake Unit, Lea County,
New Mexico

Gentlemen:

This is to advise that the New Mexico Oil Conservation Commission has this date approved the 1965 Plan of Development for the Bell Lake Unit, Lea County, New Mexico, subject to like approval by the United States Geological Survey and the Commissioner of Public Lands of the State of New Mexico.

Very truly yours,

A. L. PORTER, Jr., Secretary-Director

ALP/JEK/og

cc: Commissioner of Public Lands Santa Fe, New Mexico

United States Geological Survey Roswell, New Mexico



UNITED STATES DEPARTMENT OF THE INTERIOR GEOLOGICAL SURVEY

Drawer 1857 Roswell, New Mexico 88201

February 23, 1965

Continental Oil Company P. O. Box 460 Hobbs, New Mexico

65 F

Attention: Mr. Jack Marshall

Gentlemen:

Your 1965 plan of development for the Bell Lake unit area, Lea County, New Mexico, proposing the completion of unit well No. 10 in the SENW& sec. 19, T. 23 S., R. 34 E., N.M.F.M., has been approved on this date subject to like approval by the appropriate State officials.

Three approved copies of the plan are enclosed.

Sincerely yours,

(ORIG. SGD.) JOHN A. ANDERSON

JOHN A. ANDRESON Regional Oil and Gas Supervisor

Enclosures 3

cc:

Washington (w/cy of plan)
Hobbs (w/cy of plan)
NMOCC, Santa Fe (ltr only)
Com. of Pub. Lands, Santa Fe (ltr only)

February 3, 1965

Continental Oil Company P. O. Eox 460 Hobbs, New Mexico

Attention: Mr. Jack Marshall

Re: Bell Lake Unit
Los County, New Hexdon
Plan of Development

Centleman:

The Commissioner of Public Lands approves, as of February 3, 1965, your 1965 Plan of Development, subject to like approval by the United States Geological Survey. This plan covers the drilling of Bell Lake Unit, Well Fo. 10, which was commonced on October 30, 1964, and is to be drilled approximately 15,000 feet to the Devonian formation.

We are returning one approved copy of this plan.

Very truly yours,

Guyton B. Mays Commissioner of Public Lauds

BY:

(Mr.) Ted Bilberry, Director Oil and Gas Department

GBH/tb/max/d

Enclosure

cc: United States Geological Survey

P. O. Box 1857

Roswell, New Mexico

Attention: Mr. John Anderson



GONTINENTAL OIL COMPANY

P. O. BOX 460 HOBBS, NEW MEXICO

PRODUCTION DEPARTMENT
HOBBS DISTRICT
JACK MARSHALL
DISTRICT MANAGER
G. C. JAMIESON
ASSISTANT DISTRICT MANAGER

January 19, 1965

1001 NORTH TURNER TELEPHONE: EX 3-4141

OIL AND GAS SUPERVISOR (6) UNITED STATES GEOLOGICAL SURVEY P. O. BOX 1857 ROSWELL, NEW MEXICO

COMMISSIONER OF PUBLIC LANDS (3) P. O. BOX 791 SANTA FE, NEW MEXICO

P. O. BOX 2088
SANTA FE, NEW MEXICO

Gentlemen:

Attached for your consideration and approval is our proposed Plan of Development for the calendar year 1965 for the Bell Lake Unit, Lea County, New Mexico.

Yours very truly,

JM-DFW

cc: Mr. R. G. Parker
Bell Lake Unit Working Interest Owners

53

. :)

PLAN OF DEVELOPMENT FOR THE CALENDAR YEAR 1965 BELL LAKE UNIT (NO. 14-08-001-1066) LEA COUNTY, NEW MEXICO

TO THE OIL AND GAS SUPERVISOR (6) UNITED STATES GEOLOGICAL SURVEY P. O. BOX 1857 ROSWELL, NEW MEXICO

COMMISSIONER OF PUBLIC LANDS (3) STATE OF NEW MEXICO P. O. BOX 791 SANTA FE, NEW MEXICO

OIL CONSERVATION COMMISSION STATE OF NEW MEXICO P. O. BOX 2088 SANTA FE, NEW MEXICO

Gentlemen:

In compliance with Section 10 of the Bell Lake Unit Agreement dated May 12, 1953, Continental Oil Company, as Unit Operator, hereby submits for your approval a Plan of Development for the year 1965. Under date of December 27, 1963, a Plan of Development covering the calendar year 1964 was submitted and subsequent approval was received from your offices.

HISTORY OF PAST DEVELOPMENT

Since formation of the Unit, Operator has drilled the following wells within the Unit Area:

Well and Location	Objective Formation	Status
Bell Lake Unit No. 1 SE/4 SW/4 Sec. 31 T-23S, R-34E	Devonian	Producing from Devonian Part. Area "A"
Bell Lake Unit No. 2 SE/4 SW/4 Sec. 30 T-23S, R-34E	Pennsylvanian (Atoka)	Atoka Depleted. Deepened to Morrow (Non-Productive)
Bell Lake Unit No. 3 NE/4 NW/4 Sec. 6 T-24S, R-34E	Bone Spring	Producing from Bone Spring (Non-Commercial)
Bell Lake Unit No. 4 SE/4 NW/4 Sec. 6 T-24S, R-34E	Devonian	Producing from Devon- ian Part. Area "A"
Bell Lake Unit No. 5 SW/4 NE/4 Sec. 1 T-24S, R-33E	Devonian	Devonian non-productive. Producing from Morrow (Non-Commercial)
Bell Lake Unit No. 6 SW/4 SE/4 Sec. 6 T-23S, R-34E	Devonian	Producing from Devonian Part. Area "B"
Bell Lake Unit No. 7 NE/4 NE/4 Sec. 1 T-24S, R-33E	Bone Spring	Plugged and Abandoned

Plan of Development - Bell Lake Unit Page 2

Well and Location	Objective Formation	Status		
Bell Lake Unit No. 8 SW/4 SW/4 Sec. 7 T-22S, R-34E	Cherry Canyon	Plugged and Abandoned		
Bell Lake Unit No. 9 NE/4 SW/4 Sec. 18 T-23S, R-34E	Bone Spring	Abandoned, but not plugged		

On October 30, 1964, the Bell Lake Unit No. 10, located in the SE/4 of NW/4 Section 19, T-23S, R-34E, commenced drilling to the Devonian formation. This well is expected to reach the objective formation and test same by June 1, 1965.

DEVELOPMENT

Transwestern Pipeline Company connected to the Bell Lake Unit gas wells and limited gas sales began in August, 1961. During the third contract year, August 1, 1963, through July 31, 1964, the gas sales from the Bell Lake Unit was 2,784,222 MCF. Cumulative production to August 1, 1964, is 6,096,678 MCF. Because of the lack of sales markets, Transwestern has curtailed the gas purchases from the Bell Lake Unit wells. This situation will prevail for an indefinite period. The uncertainties of the present market situation, and the limited production from the present producing wells in the Unit, make the drilling of additional wells in the Unit area economically unattractive at this time; therefore, no further development wells are proposed for drilling during 1965.

OFFSET OBLIGATIONS

Appropriate and adequate measures will be taken to prevent drainage of unitized substances from lands subject to the Bell Lake Unit Agreement, or pursuant to applicable regulations, fair and reasonable compensatory royalty will be paid as provided in Section 18 of said agreement.

FURTHER DEVELOPMENT

This Plan of Development shall constitute the drilling obligations of the Unit Operator under the terms of the Bell Lake Unit

Plan of Development - Bell Lake Unit Page 3

Agreement for the period ending December 31, 1965. Before this plan expires, another plan for further development of the Unit Area will be submitted.

MODIFICATION

It is understood that portions of the Plan of Development herein outlined are dependent upon certain information to be obtained prior and subsequent to drilling, as well as other contingencies, and for these reasons, this Plan of Development may be modified from time to time, with like approval, to meet changing conditions.

EFFECTIVE DATE

This Plan of Development shall be effective January 1, 1965. Dated January 12, 1965.

CONTINENTAL OIL COMPANY

UNIT OPERATOR

Approved

Approved

Approved

Commissioner of Public Lands

Approved

Approved

Approved

Approved

Approved

Oil Conservation Commission

DATE

DATE

DATE

DATE

BELL LAKE UNIT OPERATING COMMITTEE ADDRESSEE LIST

Mr. Jack Marshall Continental Oil Company P. O. Box 460 Hobbs, New Mexico

Mr. Howard W. Jennings (2)
Perry R. Bass
1117 Ft. Worth Nat'l Bank Bldg.
Fort Worth 2, Texas

Mr. A. D. Kloxin (3) Hondo Oil & Gas Company P. O. Box 1978 Roswell, New Mexico

Mr. Edward R. Hudson (2) Hudson & Hudson 1510 First National Bldg. Fort Worth, Texas

Mr. William A. Hudson (2) Hudson & Hudson 1510 First National Bldg. Fort Worth, Texas

Mr. R. R. McCarty (6) Humble Oil & Refining Company P. O. Box 1600 Midland, Texas

Mr. C. F. Miller
Kerr-McGee Oil Industries, Inc.
Kerr-McGee Building
Oklahoma City, Oklahoma

Mr. R. H. Jukes Phillips Petroleum Company Exploration & Production Dept. Bartlesville, Oklahoma

Mr. T. H. Dwyer (2) Shell Oil Company P. O. Box 1858 Roswell, New Mexico

Mr. J. V. Pollock (3) Signal Oil & Gas Company 509 West Texas Avenue Midland, Texas Mr. Leon S. Ditzell (3) Skelly Oil Company 312-14 North Big Spring Midland, Texas

Mr. William H. Mannon (2) Southern Calif. Petr. Corp. 4250 Wilshire Blvd. Los Angeles 5, California

Mr. W. T. Wells, Jr. (3) Tenneco Oil Company P. O. Box 1031 Midland, Texas

Mr. L. J. Willis (5) The Superior Oil Company P. O. Box 1521 Houston 1, Texas

Mr. M. M. Slagle, Jr. Texas Pacific Oil Company P. O. Box 2110 Fort Worth 1, Texas

Mr. G. W. Coombes (2) Union Oil Company of Calif. 619 W. Texas Avenue Midland, Texas

Mr. Anderson Carter Vendetta, Inc. P. O. Box 725 Lovington, New Mexico

Mr. Allan Hargrave Harper Star Route Kerrville, Texas

Mr. Brady M. Lowe 1512 Great Plains Bldg. Lubbock, Texas

Mr. H. S. Montgomery P. O. Box 1351 San Angelo, Texas

1-12-65

INDIVIDUAL ACKNOWLEDGMENT

STATE OF NEW MESS County of ECTOR		ss.					
The foregoing ins	trument was ac	knowledged bef	ore me this 4th	day of	March	,	
19 6l by Rufu	s E. Mize a	nd wife, Ma	thilda Mize; Hoyt	T. Mize	and wife, Rut	h Mize; M	lary
Violet McKandles	and husban	d, William	A. McKandles; and	. Vera Mae	Timmons and	husband,	
Sam Timmons.			- Q 1	1	aso.		
My Commission expire	_s 5 - 3	0- 196	1 - Lland	Notary N	Public . Ector	County. I	[exas

ACCEPTANCE AND APPROVAL BY WORKING INTEREST OWNER AND UNIT OPERATOR

The undersigned, Humble Oil & Refining Company, Working Interest Owner with respect to the above committed interest insofar as it covers Tract 71, and Continental Oil Company as Unit Operator, do hereby accept and approve the above and foregoing Consent and Ratification.

Unit Operator:
CONTINENTAL OIL COMPANY

Working Interest Owner Tract 71:

HUMBLE OIL & REFINING COMPANY

By John L. Hell

To alex

O. Pmck. Sy



543 1100 11 100

CONTINENTAL OIL COMPANY

PM 1 09

P. O. Box 1377 Roswell, New Mexico August 11, 1964

New Mexico Oil Conservation Commission P. O. Box 2088
Santa Fe, New Mexico

Gentlemen:

Re: C-7881, Bell Lake Unit, Lea County, New Mexico

We are returning the enclosed Consent and Ratification Agreement of the offered Alfred S. Blauw interest, with Continental's acceptance and approval attached. Mr. Blauw is the owner of a .1250% overriding royalty in Tract 23 of the Bell Lake Unit. He now elects to commit his interest and one copy of the Ratification signed by him and his wife is attached.

We are today furnishing copies to the United States Geological Survey and the Commissioner of Public Lands.

Very truly yours,

Associate Landman Roswell Division

SG/jr Encls: cc - WRH

CONSENT AND RATIFICATION OF BELL LAKE UNIT AGREEMENT

1834 AUS 11 PM 1 . 09

1. 7881

KNOW ALL MEN BY THESE PRESENTS:

The undersigned (whether one or more) hereby acknowledge receipt of an identical copy of the Unit Agreement for the development and operation of the Bell Lake Unit Area dated the 12th day of May, 1953, embracing lands situated in Lea County, New Mexico, and acknowledge that they have read the same and are familiar with the terms and conditions thereof. The undersigned also being the owners of the leasehold, royalty or other interests in the lands or minerals as indicated on the schedule attached to said Unit Agreement as Exhibit "B" do hereby commit all of their said interests to the Bell Lake Unit Agreement and do hereby consent thereto and ratify all of the terms and provisions thereof exactly the same as if the undersigned had executed the original of said Unit Agreement, or a counterpart thereof.

of the date of the first r	uns from Devonian Participating Area "B".
	ALFRED S. BLAUW
	JUNE BLAUW VACUTE Blauco
STATE OF NEW MEXICO	}
COUNTY OF CHAVES	5
The foregoing i	nstrument was acknowledged before me this 30 th
•	, 19 64 by ALFRED S. BLAUW AND
JUNE BLAUW, HUSBAND AND W	
	Notary Public, Physics county,
My Commission Expires:	new mexico
5-11-68	
	** *
ማስመ መጥለጥር	\

ACCEPTANCE AND APPROVAL BY WORKING INTEREST OWNER

The undersigned, Continental Oil Company, working interest owner of the above committed interest, does hereby accept and approve the above and foregoing consent and ratification.

DATED this day of August, 1964.

CONTINENTAL OIL COMPANY

Attorney-in-Fact ge





MAIN OFFICE OCC

CONTINENTAL OIL COMPANY

P. O. Box 1377 Roswell, New Mexico July 16, 1964

New Mexico Oil Conservation Commission P. O. Box 2088 Santa Fe, New Mexico

Gentlemen:

Re: Contract 7881 - Bell Lake
Unit - Lea County, New Mexico

Alfred S. Blauw and wife, June Blauw, are the owners of a .1250% overriding royalty interest in Tract 23 of the Bell Lake Unit. They now elect to commit this interest and one copy of a ratification signed by him and his wife is attached.

We are also furnishing copies to the United States Geological Survey and the Commissioner of Public Lands.

Yours very truly,

SAM GARDINER

Associate Landman Roswell Division

SG-sw

Attach

cc - WRH

CONSENT AND RATIFICATION OF BELL LAKE UNIT AGREEMENT

KNOW ALL MEN BY THESE PRESENTS:

The undersigned (whether one or more) hereby acknowledge receipt of an identical copy of the Unit Agreement for the development and operation of the Bell Lake Unit Area dated the 12th day of May, 1953, embracing lands situated in Lea County, New Mexico, and acknowledge that they have read the same and are familiar with the terms and conditions thereof. The undersigned also being the owners of the leasehold, royalty or other interests in the lands or minerals as indicated on the schedule attached to said Unit Agreement as Exhibit "B" do hereby commit all of their said interests to the Bell Lake Unit Agreement and do hereby consent thereto and ratify all of the terms and provisions thereof exactly the same as if the undersigned had executed the original of said Unit Agreement, or a counterpart thereof.

IN WITNESS WHEREOF, t	this instrument is executed by the undersigned
of the date of the first runs fr	eir respective acknowledgments, but effective as rom Devonian Participating Area "B".
	ALFRED F. MAIN
	Train Dy Aves
	JUNE BLAUW
	- Hans Dane al
STATE OF NEW MEXICO	
COUNTY OF CHAVES)	
The foregoing instrum	ment was acknowledged before me this 3016
day of	, 19 64 , by AIFRED S. BLAUN AND
JUNE BLAUW, HUNEAND AND WIFE	
	(di w ll)
Mrs. Cound and on Francisco	Notary Public, Thank county
My Commission Expires:	Mew Messic
5-//- 68	
	* **
STATE OF)	
COUNTY OF)	
The foregoing instrum	ment was acknowledged before me this
day of	19, by
My Commission Expires:	Notary Public,County,
-	

OIL CONSERVATION COMMISSION P. O. BOX 871 SANTA FE, NEW MEXICO

563

June 2, 1964

Continental Oil Company P. O. Best 460 Hobbs, New Mexico

Attention: Mr. A. B. Slaybaugh

Re: Bell Lake Unit Well No. 5, Non-Commercial Determination

Gentlemen:

This is to advise that the New Mexico Oil Conservation Commission concurs with the determination that Bell Lake Unit Well No. 5 located in Unit G of Section 1, Township 24 South, Range 33 East, NMPM, Lea County, New Mexico, is a non-commercial well.

Two approved copies of request of the determination are returned.

Very truly yours,

A. L. PORTER, Jr., Secretary-Director

ALP/JEK/og

cc: United States Geological Survey Roswell, New Mexico

> Commissioner of Public Lands Santa Fe, New Mexico

The state of the s

1954 AVR 6 1 18 9 10

April 22, 1964

Continental Oil Company P. O. Box 460 Hobbs, New Mexico

> Re: Bell Lake Unit Lea County, New Mexico Well No. 5

Attention: Mr. A. B. Slaybaugh

Gentlemen:

The Commissioner of Public Lands concurs with your determination that the Bell Lake Unit Well No. 5 is a non-commercial well under the terms of the Unit Agreement.

We are returning one approved copy of this request.

Very truly yours,

E. S. JOHNNY WALKER COMMISSIONER OF PUBLIC LANDS

BY:

(Mrs.) Marian M. Rhea, Supervisor Unit Division

ESW/mmr/v

cc: United States Geological Survey Roswell, New Mexico

> Oil Conservation Commission Santa Pe, New Mexico

OIL CONSERVATION COMMISSION

P. O. BOX 871

SANTA FE, NEW MEXICO

263

1

April 8, 1964

Continental Oil Company F.O. Box 460 Hobbs, New Mexico

> Re: 1964 Plan of Development Bell Lake Unit

> > Les County, New Mexico

Gentlemen:

This is to advise that the New Mexico Oil Conservation Commission has this date approved the 1964 Fian of Development for the Bell Lake Unit, Lea County, New Mexico, subject to like approval by the United States Gaological Survey and the Commissioner of Public Lands of the State of New Mexico.

If approved copy of the plan of development is desired, please supply additional copy.

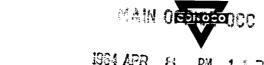
Very truly yours,

A. L. Porter, Jr. Secretary-Director

ALF: JEX: eg

cc: Commissioner of Public Lands - Santa Fe United States Geological Survey - Roswell

5/63



CONTINENTAL OIL COMPANY

P. O. Box 1377
Roswell, New Mexico
April 7, 1964

New Mexico Oil Conservation Commission P. O. Box 2088 Santa Fe, New Mexico

Gentlemen:

Re: Contract 7881 - Bell Lake
Unit - Lea County, New Mexico

Charles E. Montgomery and wife, Dorilynn, is the owner of a .0625% overriding royalty interest in Tract 23 of the Bell Lake Unit. He now has elected to commit his interest and one copy of the ratification, signed by him and his wife, is attached.

We are also today furnishing copies to the U.S. Geological Survey and the Commissioner of Public Lands.

Yours very truly,

SAM D. GARDINER Scout & Leaseman

Roswell Division

SDG-SR

Attach.

cc - WRH

CONSENT AND RATIFICATION OF BELL LAKE UNIT AGREEMENT

KNOW ALL MEN BY THESE PRESENTS:

The undersigned (whether one or more) hereby acknowledge receipt of an identical copy of the Unit Agreement for the development and operation of the Bell Lake Unit Area dated the 12th day of May, 1953, embracing lands situated in Lea County, New Mexico, and acknowledge that they have read the same and are familiar with the terms and conditions thereof. The undersigned also being the owners of the leasehold, royalty or other interests in the lands or minerals as indicated on the schedule attached to said Unit Agreement as Exhibit "B" do hereby commit all of their said interests to the Bell Lake Unit Agreement and do hereby consent thereto and ratify all of the terms and provisions thereof exactly the same as if the undersigned had executed the original of said Unit Agreement, or a counterpart thereof.

IN WITNESS WHEREOF, this instrument is executed by the undersigned

as of the	date set forth i	n their respe	ctive acknowle	edgments.	J
			(Kesle)	E Montgome	ely
			CHARLES E.	V . 21	ntgomery
			Dorilynn	MONTOOMER	
			-		
STATE OF	NEW MEXICO)				
	The foregoing in:	strument was	acknowledged b	efore me thi	23 RD
day of _	MARCH	, 19	64, by	Charles E. M	ontgomery
and wife	Dorilynn	MONTOOMERY			
		-		anda o	I flence
My Commis	ssion Expires:		Notary F		county,
_	-		New 1-40.		
	29-67				

ACCEPTANCE AND APPROVAL BY WORKING INTEREST OWNER

363636

The undersigned, Continental Oil Company, working interest owner of the above committed interest, does hereby accept and approve the above and foregoing consent and ratification.

DATED this 7th day of April, 1964.

CONTINENTAL OIL COMPANY

By WAR Hall



CONTINENTAL OIL COMPANY

P. O. BOX 460 HOBBS, NEW MEXICO

PRODUCTION DEPARTMENT HOBBS DISTRICT A. B. SLAYBAUGH DISTRICT MANAGER G. C. JAMIESON ASSISTANT DISTRICT MANAGER

1001 NORTH TURNER TELEPHONE: EX 3-4141

March 30, 1964

Commissioner of Public Lands (3) State of New Mexico Santa Fe, New Mexico

Dear Sir:

Bell Lake Unit No. 5 was drilled as a Devonian test in the Bell Lake Unit in the SW/4 NE/4 of Section 1, T-245, R-33E, Les County, New Mexico, and found the Devonian production non-commercial. Subsequent to this date, this well was plugged back and completed in the fourth Morrow Sand (Pennsylvanian) with an initial calculated open flow potential of 7,625 MCFG per day. Subsequently, production and pressure history of the well indicate the well to be non-commercial.

To support this conslusion we submit the following information:

Initial Drilling Cost to Devonian \$1,013,059
Estimated Cost - Morrow Only 840,000
Cumulative Production to 12-1-63 764,341 MCF
Estimated Ultimate Recovery 2,890,000 MCF

As justification for the ultimate recovery, we have attached a p/z versus cumulative production curve as Exhibit 1. Based on this ultimate recovery and the current gas price of \$.16 per MCF, a total estimated ultimate revenue to the working interest owners of \$404,600 is obtained.

Continental Oil Company, as operator of the Bell Lake Unit, respectfully requests your concurrence and determination of this well as non-commercial.

Approved Jone 2 1969

Yours very truly

SIGNED: A. B. SLAYBAUGH

NEW MEXICO OIL CONSERVATION COMMISSION CC: USGS (6) NMOCC (3)

All Working Interest Owners

Secretary - Director

PIONEERING IN PETROLEUM PROGRESS SINCE 1875

