6733 South Yale Ave. (918) 494-0000

I.

February 22, 1989

Bureau of Land Management Roswell District Office P.O. Box 1397 Roswell, NM 88201 Attn: Francis R. Cherry, Jr. District Management

#5401

State of New Mexico Oil Conservation Division P.O. Box 2088 Santa Fe, NM 87504

Commissioner of Public Lands State of New Mexico P.O. Box 1148 Santa Fe, NM 87504-1148 Attn: Mr. Floyd O. Prando, Director, Oil & Gas Division

> Re: Plan of Operation Willow Lake Unit Eddy County, New Mexico

Gentlemen:

In compliance with the Bureau of Land Management requirements, Kaiser-Francis Oil Company, as successor operator to that of Aminoil, USA, of the Willow Lake Unit, hereby submits this 1989-1990 Plan of Operations.

As of the date of this correspondence, there remains one producing well on the unit area located int he N/2 of Section 22, T24S-R28E.

No new wells were drilled in 1988, and no additional wells are planned to be drilled in 1989.

All working interest owners under the Willow Lake Unit have been provided with a copy of this Plan of Operations with attachments. Kaiser-Francis Oil Company, as unit operator, believes that all current unit obligations and requirements are being met. Bureau of Land Management State of New Mexico Commissioner of Public Lands February 22, 1989 Page Two

If this Plan of Operation meets with your approval, then we request that you signify your approval by singing in the space provided below and returning one copy of this Plan to Kaiser-Francis Oil Company.

Sincerely,

ame & Frelds

Wayne A. Fields Landman

APPROVED this _____day of _____, 1989.

BUREAU OF LAND MANAGEMENT

COMMISSIONER OF PUBLIC LANDS STATE OF NEW MEXICO

By:_____ Title:_____ By:_____ Title:_____

STATE OF NEW MEXICO
OIL CONSERVATION DAVISION
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SLO REF. NO. 0G-430

W.R. HUMPHRIES

Company SEP 1 1 1987

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P.O. BOX 1148 SANTA FE, NEW MEXICO 87504-1148

5401

Ka:ser Francis Oil Company Attention: Gaylynn Gorman P. O. Box 21468 Tulsa, Oklhoma 74121-1468

> Re: Willow Lake Unit 1987 Plan of Development Eddy County, New Mexico

Gentlemen:

The Commissioner of Public Lands has this date approved the above captioned Plan of Development. Our approval is subject to like approval by all appropriate agencies.

If we may be of further help, please do not hesitate to call on us.

Very truly yours,

W. R. HUMPHRIES COMMISSIONER OF PUBLIC LANDS

4 Double Mark BY:

FLOYD O. PRANDO, Director Oil & Gas Division (505) 827-5744

WRH/FOP/ams enclosure cc:Bureau of Land Management Oii Conservation Division

KAISER-FRANCIS OIL COMPANY	P.O. BOX 21468	TULSA, OKLAHOMA 74121-1468
FEB 2 9 1983		6733 South Yale Ave. (918) 494-2022

February 26, 1988

Bureau of Land Management Rosewell District Office Post Office Box 1397 Roswell, New Mexico 88201 Attn: Francis R. Cherry, Jr., District Manager

State of New Mexico Oil Conservation Division Post Office Box 2088 Sante Fe, New Mexico 87504

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Sincerely,

KAISER-FRANCIS OIL COMPANY

)ape a Jula

Wayne A. Fields, Landman

APPROVED this _____ day of _____, 1988.

BUREAU OF LAND MANAGEMENT

COMMISSIONER OF PUBLIC LANDS STATE OF NEW MEXICO

By:_____

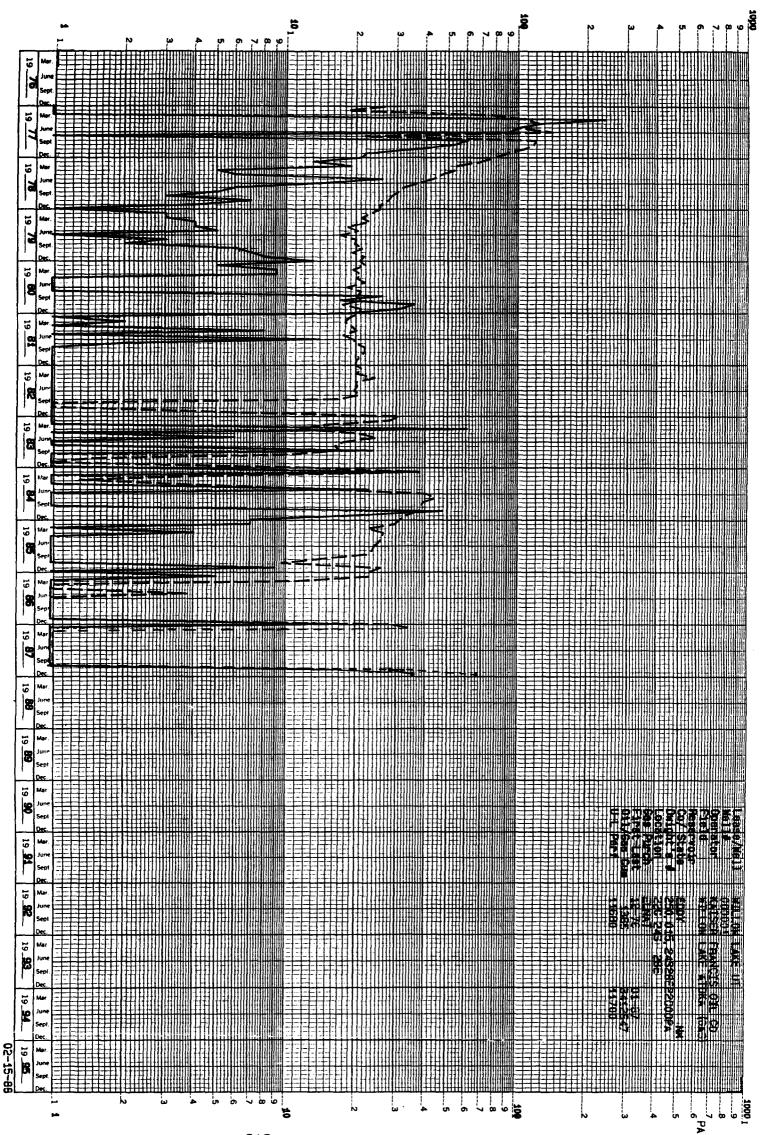
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February 26, 1987

Citicorp Building 6733 South Yale Ave. (918) 494-0000

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SENT FEDERAL EXPRESS

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State of New Mexico Oil Conservation Division P. O. Box 2088 Santa Fe, New Mexico 87504

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Sincerely,

Wayne he Fields

Wayne A. Fields, Landman

WAF: jac

Approved this 27 day of February, 1987.

BUREAU OF LAND MANAGEMENT

COMMISSIONER OF PUBLIC LANDS STATE OF NEW MEXICO

Ву:	By :
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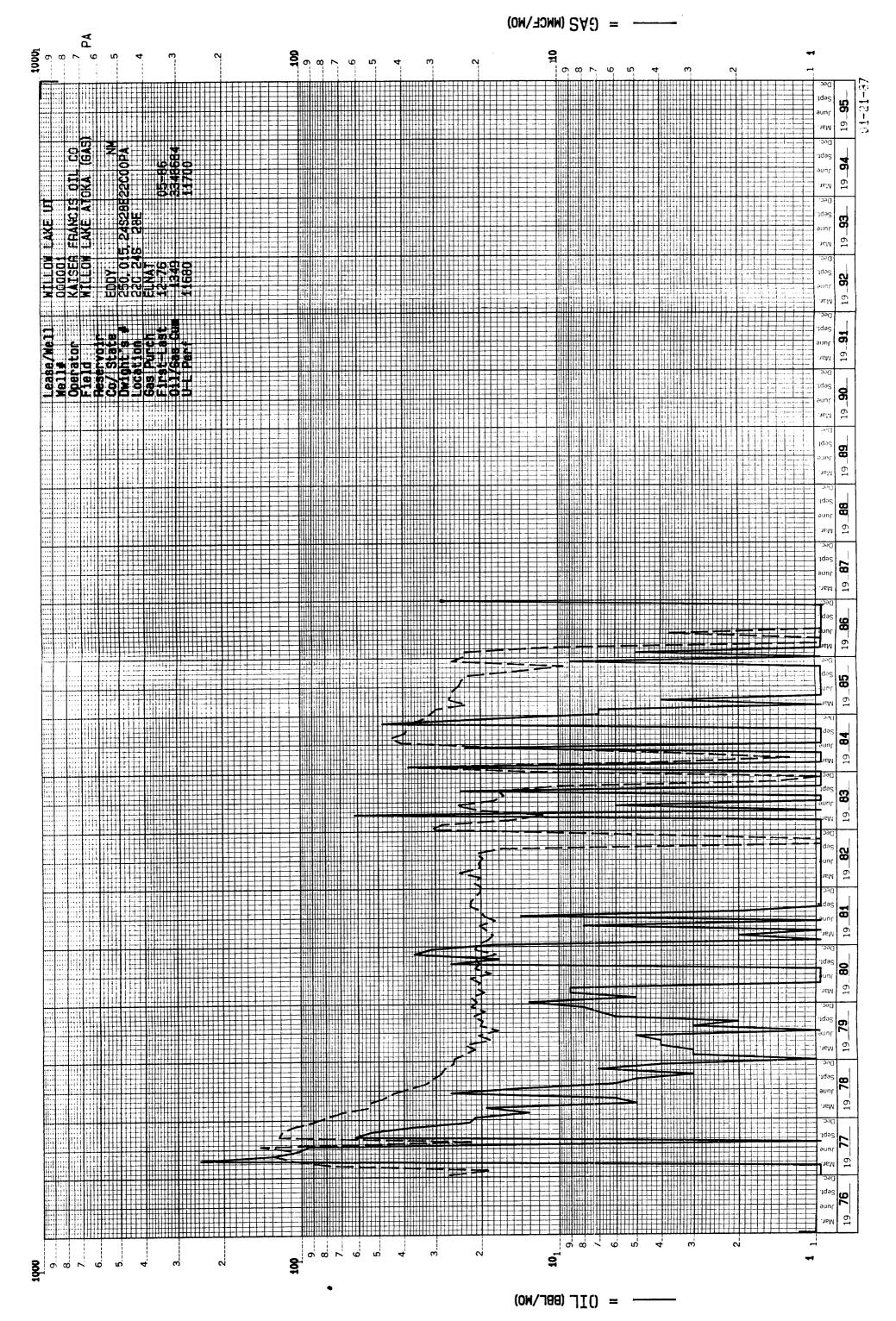
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STATE OF NEW MEXICO OIL CONSERVATION DIVISION

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1 J G	11.10 2 HAG		1013	1	HNGOI (31 - 2017) HNGOI (31 - 2017) LG 6175		411-88 4100 634 -45 Ammoni 5106 65 Ammoni 102582 Minioulus 102582 Minioulus 102	Torque of the second of the se	Aminoity Sorrenson, Por de la service de la			B AMINOIL (OPER)	WILL Fedre	PAID-22-73	5 0	(Union) HCW Expl. 25554 (Maddare	HNG Dil So. Roy 101 8-1-87 8-1-91 30630 44527 5	U.S. Union	HBP 25954 U.S. Pardue Farms	Santa Fe Ener. Marshall 9. 1.90 [a Winstanll V. 1579 J. 7.1.88 [Seven	4	
Freed	H Z H	Mader Mark Minchey & C. Seen Min	Denot Jone Denohe Croft	Jones R Craft Amoco	12 . 7 . 77		20359 Emfred Addax Emfred Frod. Per Disc. Per Disc. 2.95 1 10.15.85	Allow HNG	4.24.89 FWT (5:24.05) (4:24.06)	20 	Smell Tracts 3.5	Bar ton Bar ton	Lor Do	HNG 1.8	0.14 Pogo 8-1-87 6-15-89 8-1-87 Pordue 30630 1.1.5. Forme	Dinero Corp. Huberst Qi Deve 6 -15-89 Devid Biser	11.1.91 - Union V.2060 5 - 1 - 81 152 79 25954 Forme	2.7	State	1 1036 110 15 110 10 110 10 5 5 110 15 10 10 12 11 91 18 0 5 1	1	
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DWIGHT'S ENERGYDATA -- Production Data from file: DWDATA.DMP -- 01-21-87

t	identifying Information	
l	report code: 250 county code: 015 identifier	: 24S28E22C00PA
l	lease name: WILLOW LAKE UT	well: 000001
ł	state: NM (30) district: 002 county: EDDY	1
I	api number: 30-015-21499 location: 22C 24S	28E I
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+dates+	• +	cumulativ	/es		+
<pre>! first production date:7512 complete date:76011</pre>	}	gas cum	3348684		J
<pre>! last production date: 8605 status: ACT </pre>	l	ças sira	e date:	0	ł
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	ł	liq cum	1349		1
+operator & gatherers+	•]	liq sin	ce date:	0	1
operator: (379493) KAISER FRANCIS OIL CO	1				ł
l gas gatherer: ELNAT liquid gatherer: 1	I				1
+	• •				+

+field & reservoir	r		
l field: (8081461) WILLOW LAKE ATOKA	(GAS) reservoi	ir: I
l upper perf:1168	0 lower perf:11700	total depth:13205	temp gradient:0.9471
l gas grav:0.60	liq grav:0.0 m-fa	ctor:1.000 gor:0	1
+			+

GAS TEST DATA

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Test	Cum at					Туре	bd	bd			init	
Date	Test	WHSIP	BHP	ehpz	M/C	Pot	water	cond	whflow	poten	test	
						~~		~~~~				
760223	0	7250	8575	6678	С	1	0	0	0	34997	0	
770509	384534	4444	5584	5308	С	0	0	0	0	0	0	
810119	2107362	589	748	787	C	0	0	0	0	0	0	
820119	2346903	602	765	805	С	0	0	0	0	0	0	
830112	2544112	1010	1297	1404	C	0	0	0	0	0		
840823	2885884	856	1095	1175	C	0	0	0	0	0	0	
850810	3222445	611	777	819	С	0	0	0	0	0	0	

PRODUCTION DATA Dwight's ID:250,015,24528E22C00PA/WILLOW LAKE UT

Morith	Oil bbls	Cum Oil bbls	Gas wcf	Cum Gas Mcf	Water bbls	No.of Wells
January	0	0	0	0	0	0
February	Û	0	0	0	0	0
March	0	0	0	0	0	0
April	0	0	0	0	0	0
May	0	0	0	0	0	0
June	0	0	0	0	0	0
July	0	0	0	0	0	0
August	0	0	0	0	0	Û
September	0	0	0	Û	0	0
October	0	0	0	0	0	0
November	0	0	0	0	0	0
December	0	0	26297	26297	0	1
Total 1975	0		26297		0	

PRODUCTION DATA Dwight'

t's	10:250,015	,24528E22C00PA/WILLUW	LHKE	UI

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Neuth	Dil	Cum Bil bbls	6as	Cum Gas	Water	No.of
Month 	bbls	0015	ncf	mcf	bbls	Wells
January	0	0	18276	44573	0	1
February	0	0	76577	121250	0	1
March	241	241	107293	228543	79	i
April	127	368	125676	354219	35	i
Мау	101	469	101050	455269	0	1
June	92	561	141920	597189	42	1
July	0	561	21337	618526	890	1
August	61	622	120214	738740	26	i
September	53	675	117709	856449	47	1
October	37	712	107337	963786	88	1
November	22	734	89390	1053176	42	1
December	21	755	79416	1132592	42	· 1
Total 1977	755		1106295		1291	
January	13	768	69311	1201903	38	1
February	19	787	54377	1256280	44	1
March	5	792	53353	1309633	29	i
April	6	798	46998	1356631	41	1
May	26	824	43171	1399802	21	1
June	14	838	37053	1436855	27	1
July	6	844	32245	1469100	28	1
August	5	849	30398	1499498	35	1
September	3	852	28387	1527885	31	i
October	7	859	27542	1555427	34	1
November	4	863	25475	1580902	26	1
December	1	854	25313	1606215	29	1
Total 1978	109		473623		383	
January	3	867	23049	1629264	16	1
February	3	870	21048	1650312	21	1
March	4	874	22890	1673202	31	1
April	4	878	18263	1691465	12	i
May	5	853	20382	1711847	29	1
June	0	883	17133	1728980	22	1
July	3	886	20027	1749007	9	1
August	2	888	19663	1768670	24	1
September	6	894	21383	1790053	23	i
October	7	901	19281	1809334	25	1
November	8	909	21686	1831020	23	1
December	13	922	20776	1851796	7	1
Total 1979	58		245581		242	
January	5	927	21830	1873626	4	1
February	9	936	19383	1893009	0	1
March	9	945	20868	1913877	0	1
April	0	945	20189	1934066	19	1
May	0	945	21869	1955935	20	1
June	0	945	18292	1974227	21	1
July	0	945	21019	1995246	4	1
August	26	971	20238	2015484	0	1
September	17	988	20876	2036360	1	1
October	36	1024	17508	2053868	1	1
November	31	1055	21033	2074901	0	1
December	18	1073	20664	2095565	15	1
Total 1980	151		243769		85	

PRODUCTION DATA Dwight's ID:250,015,24528E22C00PA/WILLOW LAKE UT

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Month	Oil bbls	Cum Dil bbls	6as mcf	Cum Gas Mcf	Water bbls	No.of Wells
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January	0	1073	18725	2114290	1	1
February	2	1075	17937	2132227	12	1
March	0	1075	19057	2151284	0	1
April	8	1083	20187	2171471	8	i
May	0	1083	17660	2189131	2	1
June	14	1097	19483	2208614	0	i
July	2	1099	19987	2228601	0	1
August	0	1099	21933	2250534	0	1
September	0	1099	21839	2272373	0	1
October	0	1099	20991	2293364	0	1
November	0	1099	20107	2313471	0	1
December	0	1099	19990	2333461	0	1
Total 1981	26		237896		23	
January	0	1099	21337	2354798	0	1
February	0	1099	20025	2374823	0	1
March	0	1099	24153	2398976	0	1
April	0	1099	20140	2419116	0	1
May	0	1099	20354	2439470	0	1
June	0	1099	19718	2459188	0	1
July	0	1099	20828	2480016	0	1
August	0	1099	16780	2496796	0	1
September	0	1099	0	2496796	0	0
October	0	1099	0	2496796	0	0
November	0	1099	4926	2501722	0	1
December	0	1099	31064	2532786	0	1
Total 1982	U		199325		Ū	
January	. 0	1099	28316	2561102	0	1
February	0	1099	14973	2576075	0	1
March	61	1160	11410	2587485	0	'1
April	0	1160	20452	2607937	0	1
May	6	1166	24904	2632841	0	1
June	0	1166	17760	2650601	0	1
July	0	1166	16356	2666957	0	1
August	24	1190	17095	2684052	0	i
September	0	1190	10018	2694070	0	1
October	0	1190	1431	2695501	0	1
November	0	1190	0	2695501	0	0
December	0	1190	12059	2707560	0	1
Total 1983	91		174774		0	
January	37	1227	38074	2745634	0	i
February	0	1227	4151	2749785	0	1
March	0	1227	1281	2751066	0	1
April	0	1227	3817	2754883	0	1
Мау	23	1250	15484	2770367	0	1
June	0	1250	40787	2811154	0	1
July	0	1250	44457	2855611	0	1
August	0	1250	39316	2894927	0	1
September	0	1250	38563	2933490	0	1
October	48	1298	37833	2971323	12	1
November	19	1317	33391	3004714	34	1
December	7	1324	31313	3036027	32	1
Total 1984	134		328467		78	

• •	0i1	Cum Dil	Gas	Cum Gas	Water	No.of
Month	bbls	bbls	ncf	mcf	bbls	Wells

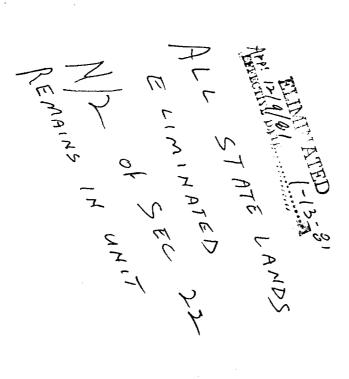
January	7	1331	29815	3065842	2	1
February	0	1331	22743	3088585	32	i
March	4	1335	26533	3115118	10	1
April	0	1335	26285	3141403	2	1
May	0	1335	25535	3166938	0	1
June	0	1335	24287	3191225	0	1
July	0	1335	23784	3215009	20	1
August	0	1335	22534	3237543	0	1
September	0	1335	14229	3251772	9	1
October	0	1335	9626	3261398	23	1
November	9	1344	25839	3287237	24	1
December	0	1344	23140	3310377	30	1
Total 1985	20		274350		152	
_	_					
January	5	1349	23082	3333459	0	1
February	0	1349	11451	3344910	0	1
March	0	1349	0	3344910	0	1
April	0	1349	0	3344910	0	1
Мау	0	1349	3774	3348684	0	1
June	0	1349	0	3348684	0	1
July	0	1349	0	3348684	0	1
August	0	1349	Û	3348684	0	1
September	0	1349	0	3348684	0	1
. October	0	Û	0	0	0	0
November	0	0	0	0	0	0
December	0	0	28920	0	0	0
Total 1986	5		_38307 67229	331760%	0	

Commissioner 3-26-75	DATE APPROVED	
Commission 1-28-75	OCC CASE NOS 5401 OCC ORDER NO. R-4954	
3-27-75	EFFECTIVE DATE	Operator County
4,800.00	TOTAL ACREAGE	BURMAH OIL AND GAS COMPANY EDDY
1,160.00	STATE	GAS COMPANY
1,680.00	FEDERAL	
1,960.00	THOMAS - FEE	
Yes	SEGREGATION CLAUSE	
5 yrs.	TERM	

Unit Name WILLOW LAKE UNIT (EXPLORATORY)

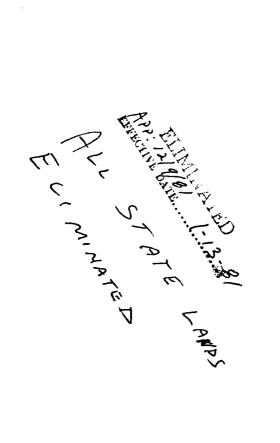
UNIT AREA

Sections 26	Sections 21	Section 16:	Section 15:	Section 14:	TOWNSHIP 24
through 28:	through 23:	s/2	S/2	S/2	SOUTH, RANGE
A11	A11				28
11	I				EAST,
					NMPM



Unit Name	WILLOW LAKE UNIT (EXPLORATORY)
Operator	BURLIAH 011 and Gas Company
Countv	Eddy

11	10	9	رب 8	STATE TRACT NO.
L-6790	L-6525	K-6010	K-5347-1	LEASE NO.
C.S.	C.S.	C.S.	C.S.	INSTI- TUTION
· 22	- 27	16	~ 26	SEC.
24S 24S	24S	24S	24S	
28E 28E	28E	2 8E	28E	TWP. RGE.
SE/4SW/4, S/2SE/4 SW/4SW/4	E/2W/2, E/2	S/2	NW/4NW/4, S/2N/2	SUBSECTION
3-13-75	4-12-75	3-13-75	3-13-75	RATIFIED DATE
160.00	480.00	320.00	200.00	LED ACRES
Burm	Azte	Атос	Amoc	ACREAGE NOT RATIFIED
Burmah Oil and Gas Co.	Aztec Oil & Gas Co.	Amoco Production Co.	Amoco Production Co.	LESSEE



South Central Region P. O. Box 20124 Albuquerque, New Mexico 87125 OIL CONSERVATION DIVISION SANTA TO SANTA FE

177 C C 1381

Aminoil USA, Inc. Attention: Michael R. Childers 601 N. Loraine Street Midland, Texas 79701

5401

Gentlemen:

سر ا

Your letter of November 25, 1981, and the accompanying revised Exhibits "A" and "B", describe the lands automatically eliminated from the Willow Lake Unit Agreement, Eddy County, New Mexico, pursuant to Section 2(e) of the agreement. The lands so eliminated contain 4,480.00 acres, which constitute all legal subdivisions, no part of which is included in the 320.00 acre Atoka Participating Area, the resultant unit area.

Of the lands remaining in the unit, 160.00 acres are contained in lease NM-20360 and 160.00 acres are patented lands. Lease NM-20360 covers lands inside the unit area, as well as land eliminated from the unit area.

The initial Atoka Participating Area was effective January 13, 1976. Since the Willow Lake Unit No. 4 Well never reached the Atoka and was plugged and abandoned November 10, 1981, the automatic elimination provision of Section 2(e) operated effective as of January 13, 1981.

We hereby concur with your description of the lands remaining in the unit after January 13, 1961. You are hereby requested to notify all interested parties of this action. Returned herewith is an approved copy.

Sincerely yours,

(ORIG. SGD.) JOE G. LARA

FORGene F. Daniel Deputy Conservation Manager Oil and Gas

Enclosure

cc: BLM, Santa Fe (w/encl) <u>NMOCD, Santa Fe (ltr only)</u> Comm. of Public Lands, Santa Fe DS, Roswell (w/encl) Accounting, Roswell (ltr only) DC1 - RE (w/encl)



STATE OF NEW MEXICO ENERGY AND MINERALS DEPARTMENT OIL CONSERVATION DIVISION

December 29, 1981

POST OFFICE BOX 2088 STATE LAND OFFICE BUILDING SANTA FE, NEW MEXICO 87501 (505) 827-2434

Aminoil USA, Inc. 601 North Loraine Street

Midland, Texas 79701

Attention: Michael R. Childers

Re: Contraction of Willow Lake Unit, Eddy County, New Mexico

Dear Mr. Childers:

The New Mexico Oil Conservation Division has approved the automatic elimination of certain lands from the Willow Lake Unit Agreement as set forth in your letter of November 25, 1981. This approval is contingent upon like approval being received from the U. S. Geological Survey and the Commissioner of Public Lands.

Sincerely,

W. PERRY PEARCE General Counsel

WPP/dr

cc: U. S. Geological Survey - Albuquerque Commissioner of Public Lands

BRUCE KING GOVERNOR LARRY KEHOE SECRETARY



OIL CONSERVATION DIVISION SANTA FE

5401

November 25, 1981

ADDRESSEE LIST ATTACHED

RE: Revised Exhibits for Willow Lake Unit Agreement Willow Lake Unit Area - T24S, R28E, Eddy County, New Mexico - AUSA File Series 2841

Gentlemen:

Enclosed please find three (3) copies of the revised Exhibits "A" and "B" for the above captioned Unit Agreement. We submit the enclosed for the approval of the Supervisor and the Commissioner. Please note that the exhibits reflect the Willow Lake Unit after all non-participating lands were automatically eliminated due to the cessation of diligent drilling operations. As I indicated in my letter of October 30, 1981, drilling rig on the Willow Lake Unit No. 4 Well located in the S/2 of Section 14. The Willow Lake Unit No. 4 Well was officially plugged and abandoned on November 10, 1981. We have also eliminated the participating area for the Willow Lake Unit No. 3 Well, which is located in the S/2 of Section 15, by plugging and abandoning said well on November 25, 1981. Thus, with the plugging of the Willow Lake Unit No. 4 Well, the Unit automatically contracted to the one remaining participating area, that being the proval of the drilling rig form the Willow Lake Unit No. 1 Well, located in the N/2 of Section 22.

If you have any additional questions, please advise. Also, please your approval of the enclosed exhibits at the earliest date possible.

Yours very truly,

Childers

Michael R. Childers Landman

MRC/jb Enclosures cc: Willow Lake Working Interest Owners ADDRESSEE LIST

.

Deputy Conservation Manager - Oil and Gas P. O. Box 26124 Albuquerque, New Mexico 87125-6124 Attention: Joe Laura

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

The 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

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-		Aminoil 2	
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	7	 //////N	5
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C. 5		<u>.</u>	
EXHIBIT "A" WILLOW LAKE UNIT EDDY COUNTY, NEW MEXICO Aminoil USA, Inc., OPERATOR FEDERAL LAND 160 Ac. 50% PATENTED LAND 160 Ac. 50%			
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EDDY COUNTY, NEW MEXICO

N		TRACT NO.
Section 22: NE/4 16 One Patented Tract/160 ac.	Section 22: NW/4 1 One Federal Tract/160 ac.	DESCRIPTION OF LAND
160 1c.	160 2.	
8/23/77	NM-20360 3/31/84	SERIAL NO. & EXP. DATE (N.M. Serials)
Boy Scout Fund	USA	BASIC ROYALTY OWNERSHIP
Boy Scout Trust Fund All 18.75%	A11-12.5%	%
Aminoil	Union Oil Company of California	LESSEE OF RECORD
None	Central Southwest Oil Corp.:	ORR OWNER
	vest 5%	%9
Aminoil: Al	Aminoil: 70. So. Roy.: 29.	W.I. OWNER
A11	70.28% 29.72%	<i>9</i> 2

Revised November, 1981

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EXHIBIT ", W LAKE UNTY, NEW USA, Inc., OP IGO AC. 50% IGO AC. 50% IGO AC. 50%			.	
EXHIBIT "A" WILLOW LAKE UNIT EDDY COUNTY, NEW MEXICO Aminoil USA, Inc., OPERATOR FEDERAL LAND 160 Ac. 50% PATENTED LAND 160 Ac. 50%				
			بيم	
	26		23	4

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-	2		TRACT NO.	
	Section 22: NE/4 160 One Patented Tract/160 ac.	Section 22: NW/4 160 One Federal Tract/160 ac.	DESCRIPTION OF LAND	
·	8/23/77	NM-20360 3/31/84	SERIAL NO. & EXP. DATE (N.M. Serials)	
	Boy Scout Trust Fund All 18.75%	USA A11-12.5%	BASIC ROYALTY OWNERSHIP %	WILLOW LAKE UNIT AREA T-24-S, R-28-E, N. M. P. M. EDDY COUNTY, NEW MEXICO
	Aminoil	Union Oil Company of California	LESSEE OF RECORD	T AREA . M. P. M. MEXICO
	None	Central Southwest Oil Corp.: 5%	ORR OWNER %	
Revised November, 1981	Aminoil: All	Aminoil: 70.28% So. Roy.: 29.72%	W.I. OWNER %	

EXHIBIT "B"

FEDERAL LAND 160 Ac. 50% PATENTED LAND 160 Ac. 50%		
EXHIBIT "A" WILLOW LAKE UNIT EDDY COUNTY, NEW MEXICO Aminoil USA, Inc., OPERATOR		
	27	28
	Union Aminoil 22	2
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, · · ·	N		TRACT NO.		
	Section 22: NE/4 160 One Patented Tract/160 ac.	Section 22: NW/4 160 One Federal Tract/160 ac.	DESCRIPTION OF LAND	•	
·	8/23/77	NM-20360 3/31/84	SERIAL NO. & EXP. DATE (N.M. Serials)		
	Boy Scout Trust Aminoil Fund All 18.75%	USA All-12.5% Union Oil Company of California	BASIC ROYALTY OWNERSHIP % LESSEE OF RECORD	EDDY COUNTY, NEW MEXICO	WILLOW LAKE UNIT AREA T-24-S, R-28-E, N. M. P. M.
	None	Central Southwest Oil Corp.: 5%	ORR OWNER %		
Revised November, 1981	Aminoil: All	Aminoil: 70.28% So. Roy.: 29.72%	W.I. OWNER %		

EXHIBIT "B"





October 30, 1981

Deputy Conservation Manager - Oil and Gas P. O. Box 26124 Alburquerque, New Mexico 87125-6124

Attention: Joe Laura

RE: WILLOW LAKE #4 WELL S/2 OF SECTION 14, T-24-S, R-28-E, EDDY COUNTY, NEW MEXICO WILLOW LAKE UNIT AUSA FILE NO. 2841

5401

Gentlemen:

This letter is to inform you that on September 25, 1981, Aminoil removed the drilling unit off the hole of the Willow Lake Unit #4 well. This was brought about by the unanimous vote of all attending Willow Lake participants at a meeting held on September 24, 1981. With the removal of the rig from this location, all diligent drilling operations have ceased causing an automatic contraction of the unit to participating areas only. Plans are being made to plug and abandon the #4 well in the very near future. Once the plugging has occurred, revised exhibits will be mailed to the Supervisor and the Commissioner for approval.

By unanimous decision of the Willow Lake Unit participants, we are also planning on plugging the Willow Lake Unit #3 well located in the S/2 of Section 15, T-24-S, R-28-E, Eddy County, New Mexico. This plugging will occur in the very near future and will be reflected in the revised exhibits. Once both wells have been plugged and abandoned, the Willow Lake Unit will be contracted to the one remaining participating area, that being the N/2 of Section 22, T-24-S, R-28-E, being the proration unit for the Willow Lake Unit #1 well. Also, as a point of information, the Willow Lake Unit participants do have an interest in the Maddox Guitar #1 well located in the N/2 of Section 23, T-24-S, R-28-E.

If you have any questions regarding the above, please advise.

Yours very truly,

ichael R. Childers

Michael R. Childers Landman

MRC/kk

October 30, 1981 Deputy Conservation Manager - Oil and Gas Page Two

cc: Oil Conservation Commission
State of New Mexico
P. O. Box 2088
Santa Fe, New Mexico 87501

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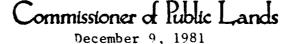
The Oil and Gas Supervisor United States Geological Survey P. O. Box 1857 Roswell, New Mexico 88201

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

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ALEX J. ARMIJO COMMISSIONER

> Aminoil USA, Inc., Loraine Center 601 N. Loraine St., Midland, Texas 79701

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

5401

Re: Willow Lake Unit Agreement Automatic Elimination Eddy County, New Mexico

ATTENTION: Mr. Michael R. Childers

Gentlemen:

We are in receipt of your letter dated November 25, 1981, along with revised Exhibits "A" and "B" reflecting the Willow Lake Unit after all non-participating lands were automatically eliminated.

The Commissioner of Public Lands has this date approved the automatic elimination of all non-participating lands thus contracting the unit to one remaining participating area, that being the proration unit for the Willow Lake Unit Well No. 1, located in the N/2 of Section 22, Township 24 South, Range 28 East. Our approval is subject to like approval by the United States Geological Survey and the New Mexico Oil Conservation Division.

This office has also accepted your revised Exhibits "A" and "B" which have been filed in our unit agreement.

By virtue of the above action all state lands are considered to have been eliminated from this unit.

Enclosed is one approved copy for your files.

Very truly yours,

ALEX J. ARMIJO COMMISSIONER OF PUBLIC LANDS

BY: RAY D. GRAHAM, Director, Oil and Gas Division AC 505/827-2748

AJA/RDG/pm encls. cc:

OCD-Santa Fe, New Mexico^{*} USGS-Albuquerque, New Mexico





November 25, 1981

ADDRESSEE LIST ATTACHED

RE: Revised Exhibits for Willow Lake Unit Agreement Willow Lake Unit Area - T24S, R28E, Eddy County, New Mexico - AUSA File Series 2841

Gentlemen:

Enclosed please find three (3) copies of the revised Exhibits "A" and "B" for the above captioned Unit Agreement. We submit the enclosed for the approval of the Supervisor and the Commissioner. Please note that the exhibits reflect the Willow Lake Unit after all non-participating lands were automatically eliminated due to the cessation of diligent drilling operations. As I indicated in my letter of October 30, 1981, drilling operations ceased on September 25, 1981 by the removal of the drilling rig on the Willow Lake Unit No. 4 Well located in the S/2 of Section 14. The Willow Lake Unit No. 4 Well was officially plugged and abandoned on November 10, 1981. We have also eliminated the participating area for the Willow Lake Unit No. 3 Well, which is located in the S/2 of Section 15, by plugging and abandoning said well on November 25, 1981. Thus, with the plugging of the Willow Lake Unit No. 4 Well, the Unit automatically contracted to the one remaining participating area, that being the provation unit for the Willow Lake Unit No. 1 Well, located in the N/2 of Section 22.

If you have any additional questions, please advise. Also, please your approval of the enclosed exhibits at the earliest date possible.

Yours very truly,

hilders Michael R. Childers

Landman

MRC/jb Enclosures cc: Willow Lake Working Interest Owners

Approved A COMMISSIONER OF PUBLIC LANDS

Aminoil USA, Inc., Loraine Center, 601 N. Loraine St., Midland, Texas 79701 (915) 682-8231

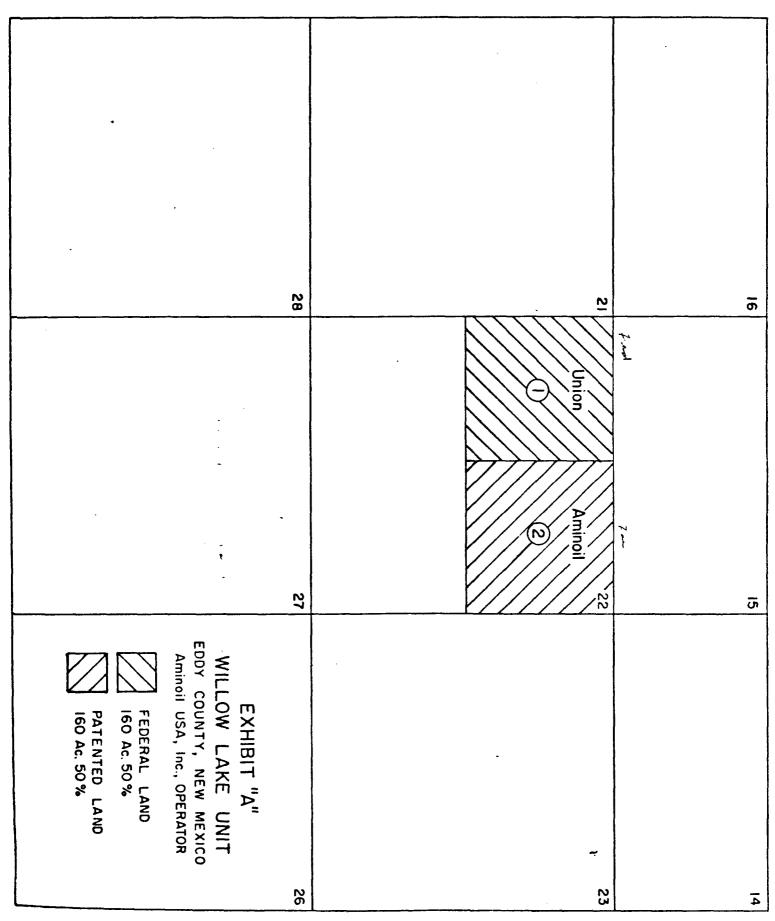
ADDRESSEE LIST

Deputy Conservation Manager - Oil and Gas P. O. Box 26124 Albuquerque, New Mexico 87125-6124 Attention: Joe Laura

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

The 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



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Revised November, 1981

2		TRACT NO.			
Section 22: NE/4 160 One Patented Tract/160 ac.	Section 22: NW/4 160 One Federal Tract/160 ac.	DESCRIPTION OF LAND			
8/23/77	NM-20360 3/31/84	SERIAL NO. & EXP. DATE (N.M. Serials)			
Boy Scout Trust Aminoil Fund All 18.75%	USA All-12.5% Union of Ca	BASIC ROYALTY OWNERSHIP % LESSEE	EDDY COUNTY, NEW MEXICO	WILLOW LAKE UNIT AREA	EXHIBIT "B"
i] None	Union Oil Company Cent of California Oil	e of record			
-	Central Southwest Am Oil Corp.: 5% So	ORR W. OWNER % OW			
Aminoil: All	Aminoil: 70.28% So. Roy.: 29.72%	W.I. OWNER %			

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Revised November, 1981

State of New Mexico





ALEX J. ARMIJO COMMISSIONER Commissioner of Public Lands December 3, 1980

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

Aminoil USA, Inc. P. O. Box 10525 Midland, Texas 79702

> Re: AMENDED PLAN OF OPERATION/DEVELOPMENT FOR CALENDAR YEAR 1980 WILLOW LAKE UNIT, EDDY COUNTY, NEW MEXICO

ATTENTION: Mr. J. G. Thagard

Gentlemen:

The Commissioner of Public Lands has this date approved your Amended Plan of Operation/Development for the Calendar Year 1980, for the Willow Lake Unit, Eddy County, New Mexico. This Amended Plan of Operation/Development was submitted with your letter of October 16, 1980. Our approval is subject to like approval by the United States Geological Survey. The New Mexico Oil Conservation Division gave their approval on November 25, 1980.

Enclosed is one approved copy for your files.

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

Very truly yours,

ALEX J. ARMIJO COMMISSIONER OF PUBLIC LANDS

BY: FLOYD O. PRANDO, Assistant Director- Oil & Gas Division AC 505-827-2748

AJA/FOP/s encls. cc:

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

State of New Mexico



Commissioner of Public Lands January 12, 1981

P. O. BOX 1146 SANTA FE, NEW MEXICO

ALEX J. ARMIJO COMMISSIONER

> Aminoil USA, Inc. P. O. Box 10525 Midland, Texas 79702

Re: Second Amended Plan of Operation/Development Willow Lake Federal Unit Eddy County, New Mexico

ATTENTION: Mr. James L. Whalon

Gentlemen:

The Commissioner of Public Lands has this date approved your Second Amended Plan of Operation/Development for the Willow Lake Unit, Eddy County, New Mexico. Such plan proposes the drilling of the Willow Lake Unit Well No. 4, located 1980 feet from the south line and 1980 feet from the West line of Section 14, Township 24 South, Range 28East, N.M.P.M. Our approval is subject to like approval by the United States Geological Survey and the New Mexico Oil Conservation Division.

Enclosed is one approved copy for your files.

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

Very truly yours,

ALEX J. ARMIJO COMMISSIONER OF PUBLIC LANDS

BY: FLOYD O. PRANDO, Assistant Director Oil and GAS Division AC 505-827-2748

AJA/FOP/s encls. cc:

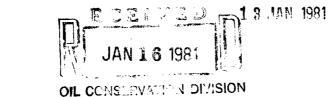
OCD-Santa Fe, New Mexico USGS-Roswell, New Mexico USGS-Albuquerque, New Mexico





United States Department of the Interior

GEOLOGICAL SURVEY South Central Region P. O. Box 26124 Albuquerque, New Mexico 87125



Aminoil USA SANTA FE Attention: James L. Whalon P. O. Box 10525 Midland, Texas 79702

Gentlemen:

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Three approved copies of your second amended plan of development for the Willow Lake unit area, Eddy County, New Mexico, are enclosed. Such plan, proposing to drill well No. 4 in the NE $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 14, T. 24 S., R. 28 E., N.M.P.M., to test the Morrow, Strawn and Atoka formations, was approved on this date subject to like approval by the appropriate officials of the State of New Mexico.

Sincerely yours,

ORIGINAL SIGNAL LT:

Gene F. Daniel Deputy Conservation Manager

Enclosures

cc: NMOCD, Santa Fe

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

November 25, 1980

Aminoil USA, Inc. P. O. Box 10525 Midland, Texas 79702

Attention: J. G. Thagard

Re: Case No. 5401 Willow Lake Unit 1980 Amended Plan of Operation/ Development

Gentlemen:

We hereby approve the 1980 Amended Plan of Operation/ Development for the Willow Lake Unit, Eddy County, New Mexico, subject to like approval by the United States Geological Survey and the Commissioner of Public Lands.

Two approved copies of the Amended Plan are returned herewith.

Yours very truly,

JOE D. RAMEY Director

JDR/EP/fd enc.

cc: U.S.G.S. - Roswell Commissioner of Public Lands

Aminoil USA, Inc. F O. Box 10525 Midiand, Texas 79702 (915) 682-8231



October 16, 1980

Oil Conservation Division State of New Mexico P. O. Box 2088 Santa Fe, New Mexico 87501

Re: AMENDED PLAN OF OPERATION/DEVELOPMENT FOR CALENDAR YEAR 1980 WILLOW LAKE FEDERAL UNIT (NO. 14-08-0001-14-260) EDDY COUNTY, NEW MEXICO

Gentlemen:

Please find attached with this cover letter two (2) copies of the Amended Plan of Operation/Development for Calendar Year 1980, recently prepared by Aminoil USA, Inc., in compliance with Examiner Nutter's suggestion of August 6, 1980, at the hearing before the New Mexico Oil Conservation Division in Santa Fe, New Mexico. The amended Plan will explain the proposed strategy for the Willow Lake Unit during the remainder of the 1980 calendar year.

If this office may be of any service to you, please do not hesitate to contact me at the address in the letterhead.

Your consideration in this regard is greatly appreciated.

Yours very truly,

). G. Thagard Landman

JGT/sls

Attachments

AMENDED PLAN OF OPERATION/DEVELOPMENT FOR CALENDAR YEAR 1980 WILLOW LAKE FEDERAL UNIT (No. 14-08-0001-14-260) EDDY 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 DIVISION (2) STATE OF NEW MEXICO P. O. BOX 2088 SANTA FE, NEW MEXICO 87501

Gentlemen:

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In compliance with Section 10 of the Willow Lake Unit Agreement dated February 10, 1975, Aminoil USA, Inc. (formerly Burmah Oil and Gas Company), as Unit Operator, previously submitted to you for approval a Summary of Operations and Development for the Year 1979 and a Plan of Operation/Development for 1980. Now, in further compliance with Section 10 of the Willow Lake Unit Agreement dated February 10, 1975 and in line with authority to offer to you modifications of said plan to meet changing conditions, Aminoil USA, Inc., as Unit Operator, hereby submits for your approval a Summary of Operations and Development for the Year 1979 and an amended or modified Plan of Operation/Development for 1980.

SUMMARY OF 1979 OPERATIONS:

During the year 1979 an Application for approval of the initial participating area for the Willow Lake No. 3 Well was filed and approved by the United States Geological Survey and was submitted to the Commissioner of Public Lands and Oil Conservation Commission on April 23, 1980.

No new wells were drilled during the year.

The Willow Lake Unit No. 1 (Atoka) produced 245,581 MCFG plus 58 BC during 1979 and has accumulated 1,999,520 MCFG plus 968 BC to January 1, 1980.

The Willow Lake Unit No. 3 (Morrow) produced 243,823 MCFG during 1979 and has accumulated 622,346 MCFG, no condensate to January 1, 1980.

OTHER ITEMS AFFECTING UNIT OPERATIONS:

On or about April 10, 1980, a lawsuit was filed in the District Court for the Fifth Judicial District, State Of New Mexico, Cause No. CV-80-121 styled "FELTON W. COURTNEY, a single man, Plaintiff, vs. AMINOIL U.S.A., INC., a Corporation, Defendant." This lawsuit was, subsequent to filing, removed on May 15, 1980 to the Federal District Court for the District of New Mexico, being Cause No. CV-80-358-JB. Basically, the Plaintiff in this case, who is a lessor and royalty interest owner whose interest is committed to the Unit, seeks the release of an oil and gas lease committed to the Willow Lake Unit.

On or about June 2, 1980, Mr. Ned Maddox proposed the drilling of a well sometimes referred to as the "Maddox Well" to be commenced prior to the end of the calendar year 1980 with such well to have dedicated to it N1/2 Section 23, Township 24 South, Range 28 East, N.M.P.M., and the well is to be located 1980 feet from the North Line and 1980 feet from the East line of said Section 23. Within the proration spacing area which is to be dedicated to the Maddox Well are certain interests which are not committed to the Willow Lake Unit. However, of the total interests which are within the area proposed to be dedicated to the Maddox Well, 40.625% are committed to the Unit. Ned Maddox has proposed that the interest owners within the unit participate with him and other interest owners in the drilling of the Maddox Well.

Upon consideration by each of the Unit Participants, the Willow Lake Unit has decided to commit its entire interest in said proration unit to the drilling of the Maddox Well.

On August 6, 1980, a hearing was held before the New Mexico Oil Conservation Division in Santa Fe, New Mexico, on the matter of the approval or disapproval by that administrative agency of the Unit Operator's Plan of Operation and Development for 1980 as previously submitted to the addressees hereof under date of March 21, 1980. Said hearing was held upon the motion of the Oil Conservation Division. Mr. Courtney appeared as a witness at said hearing and, among other things, Mr. Courtney indicated a strong desire to have a well drilled within the Unit Area at a location such that his 40-acre tract would be included within the proration unit for said well. Aminoil USA indicated at the same hearing that it is willing to propose as an amendment to the original Plan of Operation/Development for 1980 a Plan of Development and Operations which would include as an alternative to the previously submitted 1980 Plan of Development and Operation, participation in the Maddox Well. No order has, as yet, resulted from the August 6, 1980 hearing. At said hearing Aminoil verbally agreed to submit an amended Plan of Development for 1980 which would include the Maddox Well as an alternative.

Accordingly, in view of the belief by Aminoil USA, Inc. that participation in the drilling of the Maddox Well would be an acceptable alternative to the drilling of the Willow Lake Unit Well No. 4 as proposed in the original Plan of Operation/Development for 1980 as specified in Aminoil's letter under date of March 21, 1980, the proposed development during 1980 as specified below includes the Maddox Well.

PROPOSED DEVELOPMENT DURING 1980:

It is our plan for Aminoil and the remaining Willow Lake Unit Participants to participate with Ned Maddox et al in the drilling of the Maddox Well at the location specified above. Since the Maddox Well will be drilled with participation mutually acceptable to the working interest owners of the Willow Lake Federal Unit, we propose that said well be deemed a Unit Well to the extent unit ownership of acreage within the proration spacing area attributable to the well permits unit participation therein.

Aminoil feels that information from the Maddox Well in the N1/2 of Section 23 could possibly assist Aminoil in determining subsequent locations of development wells.

If the Maddox Well is not drilled, it is our plan to drill an additional development well which we designate as the Willow Lake Unit Well No. 4 to be located in the SW 1/4 of Section 14, Township 24 South, Range 28 East, N.M.P.M. We are now clearing title in preparation to submit this proposal to the working interest owners in the Unit in order to secure their acceptance of the title involved.

If the Maddox Well is drilled, but is plugged and abandoned as a dry hole or if the Maddox Well is drilled and completed as a producer, but with results which Aminoil deems to be unsatisfactory or undesirable relative to the reasonable development of the Unit Area, then Aminoil, as Operator, shall file a new Plan of Development. The Maddox Well or the No. 4 Well and any subsequent development wells will be drilled to a depth sufficient to test the Morrow, Strawn and Atoka formations and to protect these formations from drainage by any non-unit well which might be drilled.

We will continue watching production and pressures from the Amoco No. 1 Pecos Com. which is a South offset to Willow Lake Unit's Section 26 and Amoco's No. 1 AI located in SE 1/4 of Section 34, currently being drilled below 11,000 feet. If the latter well proves commercial, one other development location will be recommended for the 1981 Plan of Development.

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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: _____, 1980

TERM:

This Plan of Operation/Development is submitted for the period ending December 31, 1980. Prior to that date another Plan of Operation/Development for the 1981 calendar year will be submitted for approval.

AMINOIL USA, INC. UNIT OPERATOR

Light By: uu Date:

APPROVED: Department of the Interior

APPROVED:
Commissioner of Public Lands
APPROVED: Manuel
New Mexico Oil Conservation Division

Date:

Date:

Date: 11/25/80



STATE OF NEW MEXICO ENERGY AND MINERALS DEPARTMENT OIL CONSERVATION DIVISION

BRUCE KING GOVERNOR LARRY KEHOE SECRETARY July 9, 1980

POST OFFICE BOX 2088 STATE LAND OFFICE BUILDING SANTA FE, NEW MEXICO 87501 (505) 827-2434

Aminoil USA, Inc. 600 Western United Life Bldg. Midland, Texas 79701

Attention: Mr. G. E. Delong

McCormick & Forbes Attorneys at Law P. O. Box 1718 Carlsbad, New Mexico 88220

Attention: Mr. John M. Caraway

Re: Willow Lake Unit: T-24-S, R-28-E, NMPM, Eddy County, New Mexico; 1980 Plan of Operations

Gentlemen:

An objection has been filed by Felton W. Courtney, through his attorney, with the Division relative to Aminoil's 1980 plan of operations and the nature of the objection has apparently not been cured to Mr. Courtney's satisfaction.

Accordingly, the Division, on its own motion, has scheduled a hearing July 23, 1980, for the parties to appear and show cause why Aminoil's 1980 plan of operations for the Willow Lake Unit should not be disapproved.

Please let me know if you have any questions.

Very truly yours,

ERNEST L. PADILLA General Counsel

ELP/dr



United States Department of the Interior

GEOLOGICAL SURVEY South Central Region P. O. Box 26124 Albuquerque, New Mexico 87125

JUN 0 5 1980

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Aminoil USA, Inc. Attention: G. E. DeLong 600 Western United Life Building Midland, Texas 79701

Gentlemen:

Three approved copies of your 1980 plan of development for the Willow Lake unit area, as amended, Eddy County, New Mexico, are enclosed. Such plan, proposing to drill a development well (Willow Lake Unit Well #4) in the SW¹/₄ section 14, T. 24 S., R. 28 E., and monitoring the Amoco #1 Pecos Comm well, was approved on this date subject to like approval by the appropriate officials of the State of New Mexico.

Sincerely yours,

(ORIG. SGD.) JACK WILLOCK

Jack Willock FOR Acting Deputy Conservation Manager, Oil and Gas

Enclosures

cc: NMOCD, Santa Fe

VEND °R 2 8 1980 OIL CONS RVATION DIVISION SANTA FE

DON G. M9CORMICK JAY W. FORBES THOMAS L. MAREK. ROGER E. YARBRC JOHN M. CARAWAY JAMES W. KLIPSTINE, JR. PERRY C. ABERNETHY CAS TABOR MCCORMICK AND FORBES ATTORNEYS AT LAW BUJAC BUILDING P. O. BOX 1718 CARLSBAD, NEW MEXICO 88220

25 April 1980

TELEPHONE 885-4171 AREA CODE 505

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

Attention: Mr. Ray Graham

Oil Conservation Division State of New Mexico P. O. Box 2088 Santa Fe, New Mexico 87051

Attention: Mr. Ernie Padilla

Re: OBJECTIONS TO Plan of Operations Development for Calendar Year 1980 -Willow Lake Federal Unit (No. 14-08-0001-14-260) Eddy County, New Mexico AMINOIL USA, INC., Operator

Gentlemen:

This office is in receipt of a copy of the above Plan of Operations and Development filed by Aminoil for the year 1980.

We represent Mr. Felton W. Courtney of Carlsbad who owns forty acres of mineral rights under the NE¼NW¼ of Section 23, Township 24 South, Range 28 East, which is included in the unit area. The primary term of his oil and gas lease expired on 25 February 1980. However, despite the fact that Mr. Courtney's lands have never been included within a "participating area" his lands continue to be held by the Willow Lake Unit Agreement.

On 1C April 1980, we filed a Complaint with the District Court of Eddy County to have this Unit Agreement cancelled as to our client and his land eliminated from the unit area. I enclose a copy of our Complaint for your reference. Oil and Gas Supervisor Commissioner of Public Lands Oil Conservation Division 25 April 1980 Page Two



As alleged in Count III of the Complaint, we feel that Aminoil has not diligently developed the unit area as a prudent operator, although there is a vast amount of acreage which is held by the unit agreement. This is very unfair to all landowners in the unit area with bare exception only to those landowners who share in the two existent wells, each of which includes a 320 acre "participating area". Approximately 4,800 acres of state, federal and fee lands are committed to this unit.

We also mention that Aminoil has not complied with their plan of development for 1979 by drilling a well in the SW_4 of Section 14. This violates their obligation under Paragraph 10 of the Willow Lake Unit Agreement.

As it appears that a vast amount of acreage is being held by this unit agreement, notwithstanding failure of the operator to diligently develop in accordance with its plans of development, and in further view of the litigation which has been filed by this office seeking the cancellation of the agreement, we request that your agency not approve the proposed plan of development for 1980, and that appropriate steps be taken by you to eliminate your lands from this unit.

Very truly yours,

ha M. Comming

John M. Caraway

JMC:cy Enclosure

cc: Aminoil USA, Inc. 600 Western United Life Building Midland, Texas 79701

Attention: Mr. Gene DeLong

	APERAD
	011 000 128 1980
	OIL CONS RUATION DIVISION
1	STATE OF NEW MEXICO
2	FELTON W. COURTNEY, a single man,
3	Plaintiff,
4	vs. No. CV-80-121
5	AMINOIL, U.S.A., INC., a
6	Corporation,) FIFTH JUDICIAL DISTRICT) STATE OF NEW MEXICO
7	Defendant.) COUNTY OF EDDY
8	COMPLAINT TO CANCEL CONTRACT AND FOR DAMAGES APR 1 0 1980 OFFICE
9 10	Plaintiff, for his claim for relief, states: FRANCES M. WILCOX
10	<u>COUNT 1</u> Clerk of the District Court
12	1. On 25 February 1975, Plaintiff executed and delivered an Oil and
12	Gas Lease to Burmah Oil and Gas Company (now AMINOIL, U.S.A., INC.), which
14	covered the following described land in Eddy County, New Mexico:
15	Township 24 South, Range 28 East, N.M.P.M. Section 23 : NE¼NW¼
16	Section 6 : E½SE¼NE¼SW¼ Section 14 : Lot 7, Block 39, City of Malaga
17	A total of 45.3719 acres
18	This Lease called for a primary term of five (5) years, and was recorded in
19	Book 125, Page 156, Miscellaneous Records of Eddy County. A copy of said
20	Lease is attached hereto as Exhibit "A" and incorporated by reference.
21	2. By fraud, misrepresentation and deceit of Defendant, made through
22	its employee, agent and representative, Mr. Phil Whitsitt, Plaintiff was in-
23	duced to ratify the Willow Lake Unit Agreement by instrument dated 8 July 1975.
24	The fraud, misrepresentation and deceit of Defendant, made through Phil Whit-
25	sitt, consisted of the following:
26	A. Stating or implying that upon completion of the
27	Unit No. 1 Well as a producer, Defendant would
28	immediately commence drilling operations for
29	the next well on Plaintiff's lands or lands in
30	which Plaintiff's lands would be included within
31	a "participating area".
32	B. Statingor implying that Plaintiff would greatly

benefit from and be advantaged by his ratification of the Unit Agreement.

C. Stating or implying that the progress of Defendant in getting the Unit Agreement fully approved by governmental authorities and/or in developing and operating the unit area would be frustrated by Plaintiff's non-ratification of the Unit Agreement.

The fraud, misrepresentation and deceit of Defendant made through its employee, agent and representative were of material facts upon which Plaintiff relied to his detriment, and which entitles Plaintiff to rescission and cancellation of the Unit Agreement. Further, Plaintiff is entitled to a Release of his Oil and Gas Lease mentioned above, which was held by Defendant.

Copies of the Unit Agreement and Ratification are attached hereto as Exhibits "B" and "C", respectively, and incorporated by reference.

3. The fraudulent acts of Defendant's agent, representative and employee were wanton, malicious and intentional, and said acts were participated in, authorized, or ratified by Defendant, and Defendant should be required to pay Plaintiff punitive damages.

4. Plaintiff has suffered compensatory damages in the sum of one dollar (\$1.00).

WHEREFORE, Plaintiff prays:

1. For rescission and cancellation of his Ratification of the Unit Agreement for the Willow Lake Unit area, Eddy County, New Mexico, and that said Unit Agreement be declared null and void as to Plaintiff;

2. Defendant be ordered to execute a Release of the Oil and Gas Lease held by Defendant;

3. For one dollar (\$1.00) compensatory damages, and ten thousand dollars (\$10,000.00) punitive damages.

COUNT 2

In the alternative, Plaintiff states:

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1. Plaintiff incorporates by reference Paragraphs 1 and 2 of Count 1.

2. That the misrepresentations of Defendant, by and through its agent, employee and representative, were made honestly, with no intent to deceive Plaintiff; nevertheless, Plaintiff is entitled to rescission and cancellation of his Ratification of the Willow Lake Unit Agreement.

WHEREFORE, Plaintiff prays:

1. For rescission and cancellation of his Ratification of the Unit Agreement for the Willow Lake Unit area, Eddy County, New Mexico, and that said Unit Agreement be declared null and void as to Plaintiff;

 Defendant be ordered to execute a Release of the Oil and Gas Lease held by Defendant;

COUNT 3

In the alternative, Plaintiff states:

1. Plaintiff incorporates Paragraph 1, Count 1. Plaintiff ratified the Willow Lake Unit Area Agreement. Under the Agreement, Defendant is the Unit Operator of the Willow Lake Unit area.

2. Defendant has not developed the unit area as a prudent operator, nor has Defendant satisfied its drilling and operating obligations as required by the Unit Agreement. Said acts or omissions by Defendant are a material breach of the Unit Agreement.

WHEREFORE, Plaintiff prays:

 For rescission and cancellation of his Ratification of the Unit Agreement, and that said Unit Agreement be declared null and void as to Plaintiff;

 Defendant be ordered to execute a Release of the Oil and Gas Lease held by Defendant.

COUNT 4

Plaintiff incorporates Paragraph 1 of Count 3.

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2. The Unit Agreement (Exhibit "B") is unconscionable, unfair and unjust, and the enforcement of same would result in a manifest injustice

and inequity to the Plaintiff.

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3. Plaintiff further states the parties were not at arm's length,

- - - -- - - - - not in equal bargaining positions, and Defendant "overreached" Plaintiff in the bargaining and consummation of the Agreement.

WHEREFORE, Plaintiff prays:

 For rescission and cancellation of his Ratification of the Unit Agreement and that said Unit Agreement be declared null and void as to Plaintiff;

2. Defendant be ordered to execute a Release of the Oil and Gas Lease held by Defendant mentioned above.

COUNT 5

Plaintiff, in the alternative, states:

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1. Plaintiff incorporates by reference Paragraph 1 of Count 3.

2. The Ratification of the Unit Area Agreement by Plaintiff should be rescinded and cancelled on the grounds of want of consideration, either given or received, in exchange for Plaintiff's execution of said instrument.

WHEREFORE, Plaintiff prays:

 For rescission and cancellation of his Ratification of the Unit Agreement and that said Unit Agreement be declared null and void as to Plaintiff;

 Déféndant be ordered to execute a Release of the Oil and Gas Lease held by Defendant mentioned above.

COUNT 6

22

1. Plaintiff incorporates by reference Paragraph 1 of Count 3.

Flaintiff, in the alternative, states:

2. As a result of certain representations of Defendant, as referenced in Paragraph 2 of Count 1, Plaintiff was under duress to execute said Ratification. The Agreement is, therefore, void and the Court should enter a judgment cancelling and rescinding said Agreement.

WHEREFORE, Plaintiff prays:

 For rescission and cancellation of his Ratification of the Unit Agreement, and that said Unit Agreement be declared null and void as to Plaintiff;

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2. Defendant be ordered to execute a Release of the Oil and Gas

1	Lease held by Defendant mentioned above.
2	
3	McCORMICK and FORBES
4	By Con to The Coming
5	Don G. McCormick
6	and '
7	By John M. Caraway John M. Caraway P.O. Box 1718
8	Carlsbad, New Mexico 88220
9	Attorneys for Plaintiff
10	
11	
12	JURY DEMAND
13 14	Plaintiff demands a trial by jury of six persons.
	McCORMICK and FORBES
15 16	By John M. Caraway
10	John M. Caraway P.O. Box 1718
18	Carlsbad, New Mexico 88220 Attorneys for Plaintiff
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Aminoil USA, Inc. 600 Western United Life Building Midland, Texas 79701 (915) 682-8231

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

AMINOIL USA

March 21, 1980

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

Oil Conservation Commission State of New Mexico P. O. Box 2088 Santa Fe, New Mexico 87051

> Re: Plan of Operations/Development for Calendar Year 1980 - Willow Lake Federal Unit (No. 14-08-0001-14-260) Eddy County, New Mexico

Gentlemen:

In compliance with Section 10 of the Willow Lake Unit Agreement dated February 15, 1975, Aminoil USA, Inc., as unit operator, hereby submits for your approval a Summary of Operations and Development for the year 1979, and a Plan of Operation/Development for 1980.

Summary of 1979 Operations:

An application for approval of the initial participating area for the Willow Lake Unit Well No. 3 was filed and approved mid February, 1979.

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No new wells were drilled during the year.

The Willow Lake Unit No. 1 (Atoka) produced 245,581 mcfg plus 58 bc during 1979 and has accumulated 1,999,520 mcfg plus 968 bc to 1-1-80.

The Willow Lake Unit No. 3 (Morrow) produced 243,823 mcfg during 1979 and has accumulated 622,346 mcfg, no condensate to 1-1-80.

Proposed Development During 1980:

We currently have plans to drill an additional development well, the Willow Lake Unit Well No. 4, to be located in the southwest quarter of Section 14, T24S, R28E. We are now clearing title in preparation to submit the proposal to the working interest owners. Present plans are to continue watching production and pressures from the Amoco No. 1 Pecos Comm. which is a south offset to the Willow Lake Unit's Section 26. If proved commercial, one other development location will be recommended during the last quarter of 1980.

Modification

It is understood that portions of this Plan of Operations/ 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 Operations/Development may be modified from time to time with like approval to meet changing conditions.

AMINOIL USA, INC.

UNIT OPERATOR

BY: Gene DeLong

Sr. Development Geologist

APPROVED DATE Department of the Interior

DATE

APPROVED

Commissioner of Public Lands

APPROVED

New Mexico Oil Conservation Commission

DATE

WILLOW LAKE FEDERAL UNIT

Working Interest Owners Address List

Amoco Production Company P. O. Box 3092 Houston, Texas 77001 Attn: Mr. Joe W. Durkee

Roy G. Earton, Jr. P. O. Box 978 Hobbs, New Mexico 88240

Mr. M. Brad Bennett P. O. Bcx 2062 Midland, Texas 79702

Cities Service Company P. O. Box 1919 Midland, Texas 79702 Attn: Mr. B. L. Emerson Manager-Administration Southwest Region E & P Div.

Mrs. Kathleen Cone P. O. Box 1148 Lovington, New Mexico 88260

HNG Oil Company P. O. Box 767 Midland, Texas 79702 Attn: Mr. Bob Crawford Phillips Petroleum Company 4001 Pembrook Odessa, Texas 79767 Attn: Mr. Paul E. Hanna

Southland Royalty Company 1100 Wall Towers West Midland, Texas 79701 Attn: Mr. Richard Petrie

Union Oil Company of California P. O. Box 2079 Midland, Texas 79702 Attn: Mr. Robert V. Lockhart The Cil and Gas Supervisor

Aminoil USA, Inc. 600 Western United Life Building Midland, Texas 79701 (915) 682-8231

AMINOIL USA

March 21, 1980

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AMINOIL USA, INC.

UNIT OPERATOR BY: Gene DeLong

Sr. Development Geologist

APPROVED

Department of the Interior

DATE

APPROVED

Commissioner of Public Lands

APPROVED

New Mexico Oil Conservation Commission DATE

DATE

WILLOW LAKE FEDERAL UNIT

Working Interest Owners Address List

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Roy G. Barton, Jr. P. O. Box 978 Hobbs, New Mexico 88240

Mr. M. Brad Bennett P. O. Box 2062 Midland, Texas 79702

Cities Service Company P. O. Box 1919 Midland, Texas 79702 Attn: Mr. B. L. Emerson Manager-Administration Southwest Region E & P Div.

Mrs. Kathleen Cone P. O. Box 1148 Lovington, New Mexico 88260

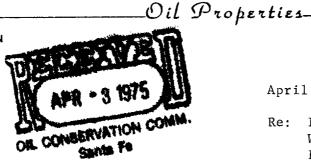
HNG Oil Company P. O. Box 767 Midland, Texas 79702 Attn: Mr. Bob Crawford Phillips Petroleum Company 4001 Pembrook Odessa, Texas 79767 Attn: Mr. Paul E. Hanna

Southland Royalty Company 1100 Wall Towers West Midland, Texas 79701 Attn: Mr. Richard Petrie

Union Oil Company of California P. O. Box 2079 Midland, Texas 79702 Attn: Mr. Robert V. Lockhart

GRIFFIN & BURNETT, INC.

KENNETH H. GRIFFIN GARY G. BURNETT



OIL CONSERVATION COMMISSION State Land Office Building Santa Fe, New Mexico

Gentlemen:

501 PETROLEUM BUILDING MIDLAND, TEXAS 79701 915 683-2705

April 1, 1975

Re: File #3045 WILLOW LAKE UNIT Eddy County, New Mexico

In accordance with Order No. R-4954, Case No. 5401, we enclose herewith a copy of the Unit Agreement which has been executed by Burmah Oil and Gas Company, as operator, together with ratifications by the following named parties:

Amoco Production Company Robert N. Enfield Aztec Oil & Gas Company HNG Oil Company Union Oil Company of California Phillips Petroleum Company Cities Service Oil Company Roy G. Barton, Jr. Kathleen Cone

If any further information is needed, please let us know.

Yours very traly Kenneth H. Griffir

KHG/jj Enclosures

cc: BURMAH OIL & GAS Western United Life Bldg. Midland, Texas 79701

UNIT AGREEMENT WILLOW LAKE UNIT AREA EDDY COUNTY, NEW MEXICO

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1	UNIT AGREEMENT
2	FOR THE DEVELOPMENT AND OPERATION
3	OF THE
4	WILLOW LAKE UNIT AREA
5	COUNTY OF EDDY
6	STATE OF NEW MEXICO
7	NO.
8	THIS AGREEMENT entered into as of the day of,
9	1975, by and between the parties subscribing, ratifying or consenting hereto,
10	and herein referred to as the 'parties hereto'.
11	WITNESSETH:
12	WHEREAS, the parties hereto are the owners of working, royalty, or
13	other oil and gas interests in the unit area subject to this agreement; and
14	WHEREAS, the Mineral Leasing Act of February 25, 1920, 41 Stat. 437, as
15	amended, 30 U.S.C. Secs. 181 et seq., authorizes Federal lessees and their
16	representatives to unite with each other, or jointly or separately with
17	others, in collectively adopting and operating a cooperative or unit plan
18	of development or operations of any oil or gas pool, field, or like area, or
19	any part thereof for the purpose of more properly conserving the natural
20	resources thereof whenever determined and certified by the Secretary of
21	the Interior to be necessary or advisable in the public interest; and
22	WHEREAS, the Commissioner of Public Lands of the State of New Mexico
23	is authorized by an Act of the Legislature (Sec. 7-11-39 N.M. Statutes 1953
24	Annotated) to consent to or approve this agreement on behalf of the State
25	of New Mexico, insofar as it covers and includes lands and mineral interests
26	of the State of New Mexico; and
27	WHEREAS, the Oil Conservation Commission of the State of New Mexico is
28	authorized by an Act of the Legislature (Article 3, Chapter 65, Vol. 9,
29	Part 2, 1953 Statutes) to approve this agreement and the conservation provisions
30	hereof; and
31	WHEREAS, the parties hereto hold sufficient interests in the Willow

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Lake Unit Area covering the land hereinafter described to give reasonablyeffective control of operations therein; and

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WHEREAS, it is the purpose of the parties hereto to conserve natural
 resources, prevent waste, and secure other benefits obtainable through
 development and operation of the area subject to this agreement under the
 terms, conditions and limitations herein set forth;

5 NOW, THEREFORE, in consideration of the premises and the promises herein 6 contained, the parties hereto commit to this agreement their respective 7 interests in the below-defined unit area, and agree severally among them-8 selves as follows:

9 1. ENABLING ACT AND REGULATIONS. The Mineral Leasing Act of February 25, 1920, as amended, supra, and all valid pertinent regulations, including 10 operating and unit plan regulations, heretofore issued thereunder or valid, 11 pertinent and reasonable regulations hereafter issued thereunder are accepted 12 and made a part of this agreement as to Federal lands, provided such regula-13 tions are not inconsistent with the terms of this agreement; and as to non-14 Federal lands, the oil and gas operating regulations in effect as of the 15 effective date hereof governing drilling and producing operations, not in-16 consistent with the terms hereof or the laws of the State of which the non-17 Federal land is located, are hereby accepted and made a part of this agreement. 18

UNIT AREA. The area specified on the map attached hereto marked
 Exhibit "A" is hereby designated and recognized as constituting the unit area,
 containing 4,800.00 acres, more or less.

22 Exhibit "A" shows, in addition to the boundary of the unit area, the boundaries and identity of tracts and leases in said area to the extent known 23 to the Unit Operator. Exhibit "B" attached hereto is a schedule showing to 24 25 the extent known to the Unit Operator the acreage, percentage, and kind of ownership of oil and gas interests in all land in the unit area. However, 26 nothing herein or in said schedule or map shall be construed as a representa-27 tion by any party hereto as to the ownership of any interest other than such 28 interest or interests as are shown in said map or schedule as owned by such 29 party. Exhibits "A" and "B" shall be revised by the Unit Operator whenever 30 changes in the unit area render such revision necessary, or when requested 31 by the Oil and Gas Supervisor, hereinafter referred to as "Supervisor", or 32 when requested by the Commissioner of Public Lands of the State of New Mexico, 33

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hereinafter referred to as "Commissioner", and not less than five copies of the revised exhibits shall be filed with the Supervisor, and two copies thereof shall be filed with the Commissioner, and one copy with the New Mexico Oil Conservation Commission, hereinafter referred to as "Commission".

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5 The above-described unit area shall when practicable be expanded to 6 include therein any additional lands or shall be contracted to exclude lands 7 whenever such expansion or contraction is deemed to be necessary or advis-8 able to conform with the purposes of this agreement. Such expansion or 9 contraction shall be effected in the following manner:

(a) Unit Operator, on its own motion or on demand of the Director
of the Geological Survey, hereinafter referred to as "Director", or on demand of the Commissioner, after preliminary concurrence by the Director
and the Commissioner, shall prepare a notice of proposed expansion or contraction describing the contemplated changes in the boundaries of the unit
area, the reasons therefor, and the proposed effective date thereof, preferably the first day of a month subsequent to the date of notice.

(b) Said notice shall be delivered to the Supervisor, the Commissioner
and the Commission and copies thereof mailed to the last known address of
each working interest owner, lessee, and lessor whose interests are affected,
advising that 30 days will be allowed for submission to the Unit Operator of
any objections.

(c) Upon expiration of the 30-day period provided in the preceding
item (b) hereof, Unit Operator shall file with the Supervisor, the Commissioner and the Commission evidence of mailing of the notice of expansion
or contraction and a copy of any objections thereto which have been filed
with the Unit Operator, together with an application in sufficient number,
for approval of such expansion or contraction and with appropriate joinders.

(d) After due consideration of all pertinent information, the expansion
or contraction shall, upon approval by the Supervisor, the Commissioner and
the Commission, become effective as of the date prescribed in the notice
thereof.

32 (e) All legal subdivisions of lands (i.e., 40 acres by Government 33 survey or its nearest lot or tract equivalent; in instances of irregular

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surveys unusually large lots or tracts shall be considered in multiples 1 of 40 acres or the nearest aliquot equivalent thereof), no parts of which 2 3 are entitled to be in a participating area on or before the fifth anniversary of the effective date of the first initial participating area estab-4 lished under this unit agreement, shall be eliminated automatically from 5 this agreement, effective as of said fifth anniversary, and such lands shall 6 no longer be a part of the unit area and shall no longer be subject to this 7 agreement, unless diligent drilling operations are in progress on unitized 8 lands not entitled to participation on said fifth anniversary, in which event 9 all such lands shall remain subject hereto so long as such drilling opera-10 tions are continued diligently with not more than 90 days' time elapsing 11 between the completion of one well and the commencemnt of the next well. 12 All legal subdivisions of lands not entitled to be in a participating area 13 within 10 years after the effective date of the first initial participating 14 area approved under this agreement shall be automatically eliminated from 15 this agreement as of said tenth anniversary. All lands proved productive 16 by diligent drilling operations after the aforesaid 5-year period shall 17 become participating in the same manner as during said 5-year period. How-18 ever, when such diligent drilling operations cease, all nonparticipating 19 lands shall be automatically eliminated effective as of the 91st day there-20 after. The Unit Operator shall, within 90 days after the effective date of 21 any elimination hereunder, describe the area so eliminated to the satisfac-22 tion of the Supervisor and the Commissioner, and promptly notify all parties 23 in interest. 24

If conditions warrant extension of the IO-year period specified in 25 this subsection 2(e), a single extension of not to exceed 2 years may be 26 accomplished by consent of the owners of 90% of the working interests in the 27 current nonparticipating unitized lands and the owners of 60% of the basic 28 royalty interests (exclusive of the basic royalty interests of the United 29 States) in nonparticipating unitized lands with approval of the Director and 30 Commissioner, provided such extension application is submitted to the Director 31 and Commissioner not later than 60 days prior to the expiration of said ten-year 32 period. 33

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Any expansion of the unit area pursuant to this section which embraces lands theretofore eliminated pursuant to this subsection 2(e) shall not be considered automatic commitment or recommitment of such lands.

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3. UNITIZED LAND AND UNITIZED SUBSTANCES. All land committed to this agreement shall constitute land referred to herein as "unitized land" or "land subject to this agreement". All oil and gas in any and all formations of the unitized land are unitized under the terms of this agreement and herein are called "unitized substances".

4. UNIT OPERATOR. BURMAH OIL AND GAS COMPANY is hereby designated as Unit 9 10 Operator and by signature hereto as Unit Operator agrees and consents to accept the duties and obligations of Unit Operator for the discovery, 11 12 development and production of unitized substances as herein provided. Whenever reference is made herein to the Unit Operator, such reference means 13 14 the Unit Operator acting in that capacity and not as an owner of interest 15 in unitized substances, and the term "working interest owner" when used 16 herein shall include or refer to Unit Operator as the owner of a working 17 interest when such an interest is owned by it.

5. RESIGNATION OR REMOVAL OF UNIT OPERATOR. Unit Operator shall 18 19 have the right to resign at any time prior to the establishment of a participating area or areas hereunder, but such resignation shall not 20 21 become effective so as to release Unit Operator from the duties and obliga-22 tions of Unit Operator and terminate Unit Operator's rights as such for a 23 period of 6 months after notice of intention to resign has been served by 24 Unit Operator on all working interest owners and the Supervisor, the 25 Commissioner and the Commission, and until all wells then drilled here-26 under are placed in a satisfactory condition for suspension or abandonment whichever is required by the Supervisor as to Federal lands and by the Com-27 missioner as to State and privately owned lands, unless a new Unit Operator 28 shall have been selected and approved and shall have taken over and assumed 29 the duties and obligations of Unit Operator prior to the expiration of said 30 period. 31

32 Unit Operator shall have the right to resign in like manner and subject 33 to like limitations as above provided at any time a participating area

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estab ished hereunder is in existence, but, in all instances of resignation
or renoval, until a successor Unit Operator is selected and approved as
hereinafter provided, the working interest owners shall be jointly responsible for performance of the duties of Unit Operator, and shall, not later
than 30 days before such resignation or removal becomes effective, appoint
a common agent to represent them in any action to be taken hereunder.

7 The resignation of Unit Operator shall not release Unit Operator from
8 any liability for any default by it hereunder occurring prior to the effec9 tive date of its resignation.

10 The Unit Operator may, upon default or failure in the performance of 11 its duties or obligations hereunder, be subject to removal by the same 12 percentage vote of the owners of working interests as herein provided for 13 the selection of a new Unit Operator. Such removal shall be effective 14 upon notice thereof to the Supervisor and the Commissioner.

The resignation or removal of Unit Operator under this agreement shall 15 not terminate its right, title or interest as the owner of a working inter-16 est or other interest in unitized substances, but upon the resignation or 17 removal of Unit Operator becoming effective, such Unit Operator shall 18 deliver possession of all wells, equipment, materials and appurtenances used 19 in conducting the unit operations to the new duly qualified successor Unit 20 Operator or to the common agent, if no such new Unit Operator is elected, 21 to be used for the purpose of conducting unit operations hereunder. Nothing 22 herein shall be construed as authorizing removal of any material, equipment 23 24 and appurtenances needed for the preservation of any wells.

SUCCESSOR UNIT OPERATOR. Whenever the Unit Operator shall tender 25 6. his or its resignation as Unit Operator or shall be removed as hereinabove 26 provided, or a change of Unit Operator is negotiated by working interest 27 owners, the owners of the working interests in the participating area or 28 areas according to their respective acreage interests in such participating 29 area or areas, or, until a participating area shall have been established, 30 the owners of the working interests according to their respective acreage 31 interests in all unitized land, shall by majority vote select a successor 32 Unit Operator: Provided, That, if a majority but less than 75 per cent of 33

- 6 -

1 the working interests qualified to vote are owned by one party to this 2 agreement, a concurring vote of one or more additional working interest 3 owners shall be required to select a new operator. Such selection shall 4 not become effective until

5 (a) a Unit Operator so selected shall accept in writing the duties
6 and responsibilities of Unit Operator, and

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(b) the selection shall have been approved by the Supervisor and the Commissioner.

9 If no successor Unit Operator is selected and qualified as herein
10 provided, the Director and Commissioner at their election may declare
11 this unit agreement terminated.

7. ACCOUNTING PROVISIONS AND UNIT OPERATING AGREEMENT. If the 12 Unit Operator is not the sole owner of working interest, costs and expenses 13 incurred by Unit Operator in conducting unit operations hereunder shall be 14 paid and apportioned among and borne by the owners of working interests, 15 16 all in accordance with the agreement or agreements entered into by and .17 between the Unit Operator and the owners of working interests, whether one 18 or more, separately or collectively. Any agreement or agreements entered 19 into between the working interest owners and the Unit Operator as provided in this section, whether one or more, are herein referred to as the "unit 20 21 operating agreement". Such unit operating agreement shall also provide the manner in which the working interest owners shall be entitled to receive 22 23 their respective proportionate and allocated share of the benefits accruing 24 hereto in conformity with their underlying operating agreements, leases or 25 other independent contracts, and such other rights and obligations as between Unit Operator and the working interest owners as may be agreed upon 26 by Unit Operator and the working interest owners; however, no such unit 27 operating agreement shall be deemed either to modify any of the terms and 28 29 conditions of this unit agreement or to relieve the Unit Operator of any right or obligation established under this unit agreement, and in case of any 30 31 inconsistency or conflict between this unit agreement and the unit operating agreement, this unit agreement shall govern. Three true copies of any unit 32 operating agreement executed pursuant to this section should be filed with 33

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the Supervisor and two truecopies with the Commissioner and one true copy with the Commission, prior to approval of this unit agreement.

3 8. RIGHTS AND OBLIGATIONS OF UNIT OPERATOR. Except as otherwise 4 specifically provided herein, the exclusive right, privilege, and duty of 5 exercising any and all rights of the parties hereto which are necessary 6 or convenient for prospecting for, producing, storing, allocating, and distributing the unitized substances are hereby delegated to and shall be 7 exercised by the Unit Operator as herein provided. Acceptable evidence of 8 title to said rights shall be deposited with said Unit Operator and, together 9 with this agreement, shall constitute and define the rights, privileges, and 10 obligations of Unit Operator. Nothing herein, however, shall be construed 11 12 to transfer title to any land or to any lease or operating agreement, it 13 being understood that under this agreement the Unit Operator, in its capacity 14 as Unit Operator, shall exercise the rights of possession and use vested in 15 the parties hereto only for the purposes herein specified.

16 9. DRILLING TO DISCOVERY. Within 6 months after the effective date hereof, the Unit Operator shall begin to drill an adequate test well at a 17 18 location approved by the Supervisor, if on Federal land, or by the Commissioner 19 if on State land, or by the Commission if on fee land, unless on such effective date a well is being drilled conformably with the terms hereof, and thereafter 20 continue such drilling diligently until the Morrow 21 formation has been tested 22 or until at a lesser depth unitized substances shall be discovered which can 23 be produced in paying quantities (to-wit: quantities sufficient to repay the 24 costs of drilling, completing, and producing operations, with a reasonable 25 profit) or the Unit Operator shall at any time establish to the satisfaction 26 of the Supervisor if located on Federal lands, or the Commissioner if located 27 on State lands, or the Commission if located on fee lands, that further drill-28 ing of said well would be unwarranted or impracticable, provided, however, 29 that Unit Operator shall not in any event be required to drill said well to 30 a depth in excess of 13,600 feet. Until the discovery of a deposit of unitized 31 substances capable of being produced in paying quantities, the Unit Operator 32 shall continue drilling one well at a time, allowing not more than 6 months 33 between the completion of one well and the beginning of the next well, until

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a well capable of producing unitized substances in paying quantities L is completed to the satisfaction of said Supervisor if on Federal land, 2 or the Commissioner if on State land, or the Commission if on fee land, 3 or until it is reasonable proved that the unitized land is incapable of 4 producing unitized substances in paying quantities in the formations drilled 5 hereunder. Nothing in this section shall be deemed to limit the right of 6 the Unit Operator to resign as provided in Section 5 hereof, or as requir-7 ing Unit Operator to commence or continue any drilling during the period 8 pending such resignation becoming effective in order to comply with the 9 requirements of this section. The Supervisor and Commissioner may modify 10 the drilling requirements of this section by granting reasonable extensions 11 of time when, in their opinion, such action is warranted. Upon failure 12 to commence any well provided for in this section within the time allowed, 13 including any extension of time granted by the Supervisor and the Com-14 missioner, this agreement will automatically terminate; upon failure to 15 continue drilling diligently any well commenced hereunder, the Supervisor 16 and Commissioner may, after 15 days notice to the Unit Operator, declare 17 18 this unit agreement terminated.

0. PLAN OF FURTHER DEVELOPMENT AND OPERATION. Within 6 months after 19 completion of a well capable of producing unitized substances in paying 20 quantities, the Unit Operator shall submit for the approval of the Supervisor 21 and the Commissioner an acceptable plan of development and operation for the 22 unitized land which, when approved by the Supervisor and the Commissioner, 23 shall constitute the further drilling and operating obligations of the Unit 24 Operator under this agreement for the period specified therein. Thereafter, 25 from time to time before the expiration of any existing plan, the Unit Operator 26 shall submit for the approval of the Supervisor and the Commissioner a plan 27 for an additional specified period for the development and operation of the 28 unitized land. 29

Any plan submitted pursuant to this section shall provide for the exploration of the unitized area and for the diligent drilling necessary for determination of the area or areas thereof capable of producing unitized substances in paying quantities in each and every productive formation and

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shall be as complete and adequate as the Supervisor, the Commissioner and Commission may determine to be necessary for timely development and proper conservation of the oil and gas resources of the unitized area and shall:

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

(b) to the extent practicable, specify the operating practices regarded as necessary and advisable for proper conservation of natural resources.

Separate plans may be submitted for separate productive zones, subject to the approval of the Supervisor, the Commissioner and the Commission.

12 Plans shall be modified or supplemented when necessary to meet changed 13 conditions or to protect the interests of all parties to this agreement. 14 Reasonable diligence shall be exercised in complying with the obligations 15 of the approved plan of development. The Supervisor and Commissioner are 16 authorized to grant a reasonable extension of the 6-month period herein 17 prescribed for submission of an initial plan of development where such 18 action is justified because of unusual conditions or circumstances. After 19 completion hereunder of a well capable of producing any unitized substances 20 in paying quantities, no further wells, except such as may be necessary to 21 afford protection against operations not under this agreement and such as may 22 be specifically approved by the Supervisor and the Commissioner, shall be 23 drilled except in accordance with a plan of development approved as herein 24 provided.

11. PARTICIPATION AFTER DISCOVERY. Upon completion of a well capable 25 26 of producing unitized substances in paying quantities or as soon thereafter 27 as required by the Supervisor and Commissioner, the Unit Operator shall submit for approval by the Supervisor and Commissioner a schedule, based on 28 29 subdivisions of the public land survey or aliquot parts thereof, of all land 30 then regarded as reasonably proved to be productive in paying quantities; 31 al: lands in said schedule on approval of the Supervisor and Commissioner to constitute a participating area, effective as of the date of completion of 32 33 such well or the effective date of this unit agreement, whichever is later.

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The acreages of both Federal and non-Federal lands shall be based upon 1 appropriate computations from the courses and distances shown on the 2 last approved public land survey as of the effective date of each initial 3 participating area. Said schedule shall also set forth the percentage of 4 unitized substances to be allocated as herein provided to each tract in 5 the participating area so established, and shall govern the allocation 6 'of production commencing with the effective date of the participating area. 7 A separate participating area shall be established for each separate pool 8 9 or deposit of unitized substances or for any group thereof which is produced as a single pool or zone, and any two or more participating areas . 10 11 so established may be combined into one, on approval of the Supervisor and Commissioner. When production from two or more participating areas, 12 so established, is subsequently found to be from a common pool or deposit 13 14 said participating areas shall be combined into one effective as of such appropriate date as may be approved or prescribed by the Supervisor and 15 Commissioner. The participating area or areas so established shall be revised 16 17 from time to time, subject to like approval, to include additional land then 18 regarded as reasonably proved to be productive in paying quantities or neces-19 sary for unit operations, or to exclude land then regarded as reasonably 20 proved not to be productive in paying quantities and the schedule of allocation percentages shall be revised accordingly. The effective data of any 21 22 revision shall be the first day of the month in which is obtained the know-23 ledge or information on which such revision is predicated, provided, however, 24 that a more appropriate effective date may be used if justified by the Unit 25 Operator and approved by the Supervisor and Commissioner. No land shall be 26 excluded from a participating area on account of depletion of the unitized 27 substances, except that any participating area established under the provisions 28 of this unit agreement shall terminate automatically whenever all completions 29 in the formation on which the participating area is based are abandoned.

It is the intent of this section that a participating area shall represent the area known or reasonably estimated to be productive in paying quantities, but, regardless of any revision of the participating area, nothing herein contained shall be construed as requiring any retroactive adjustment for

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production obtained prior to the effective date of the revision of the participating area.

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3 In the absence of agreement at any time between the Unit Operator and the Supervisor and Commissioner as to the proper definition or rede-4 finition of a participating area, or until a participating area has, or 5 areas have, been established as provided herein, the portion of all pay-6 ments affected thereby shall be impounded in a manner mutually acceptable 7 to the owners of working interests and the Supervisor and Commissioner. 8 Royalties due the United States and the State of New Mexico, which shall 9 be determined by the Supervisor for Federal land and the Commissioner for 10 State land and the amount thereof shall be deposited, as directed by the 11 Supervisor and Commissioner respectively, to be held as unearned money 12 until a participating area is finally approved and then applied as earned 13 or returned in accordance with a determination of the sum due as Federal 14 and State royalty on the basis of such approved participating area. 15

Whenever it is determined, subject to the approval of the Supervisor 16 as to wells drilled on Federal land and of the Commissioner as to wells 17 drilled on State land, that a well drilled under this agreement is not 18 capable of production in paying quantities and inclusion of the land on 19 which it is situated in a participating area is unwarranted, production 20 from such well shall, for the purposes of settlement among all parties 21 other than working interest owners, be allocated to the land on which the 22 23 well is located unless such land is already within the participating area 24 established for the pool or deposit from which such production is obtained. Settlement for working interest benefits from such a well shall be made as 25 26 provided in the unit operating agreement.

12. ALLOCATION OF PRODUCTION. All unitized substances produced from each participating area established under this agreement, except any part thereof used in conformity with good operating practices within the unitized area for drilling, operating, camp and other production or development purposes, for repressuring or recycling in accordance with a plan of development approved by the Supervisor and Commissioner, or unavoidably lost, shall be deemed to be produced equally on an acreage basis from the several tracts

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I of unitized land of the participating area established for such production 2 and, for the purpose of determining any benefits accruing under this agree-3 ment, each such tract of unitized land shall have allocated to it such percentage of said production as the number of acres of such tract included 4 5 in said participating area bears to the total acres of unitized land in 6 said participating area, except that allocation of production hereunder for purposes other than for settlement of the royalty, overriding royalty, or 7 8 payment out of production obligations of the respective working interest owners, shall be on the basis prescribed in the unit operating agreement 9 10 whether in conformity with the basis of allocation herein set forth or other-11 It is hereby agreed that production of unitizied substances from a wise. 12 participating area shall be allocated as provided herein regardless of whether any wells are drilled on any particular part or tract of said part-13 14 icipating area. If any gas produced from one participating area is used for 15 repressuring or recycling purposes in another participating area, the first 16 gas withdrawn from such last mentioned participating area for sale during 17 the life of this agreement shall be considered to be the gas so transferred 18 until an amount equal to that transferred shall be so produced for sale and such gas shall be allocated to the participating area from which initially 19 20 produced as such area was last defined at the time of such final production.

13. DEVELOPMENT OR OPERATION OF NON-PARTICIPATING LAND OR FORMATIONS. 21 22 Any party hereto owning or controlling the working interest in any unitized land having thereon a regular well location may with the approval of the 23 24 Supervisor as to Federal land, the Commissioner as to State land and the 25 Commission as to privately owned land, at such party's sole risk, cost and 26 expense, drill a well to test any formation for which a participating area 27 has not been established or to test any formation for which a participating 28 area has been established if such location is not within said participating 29 area, unless within 90 days of receipt of notice from said party of his in-30 tention to drill the well the Unit Operator elects and commences to drill such 31 a well in like manner as other wells are drilled by the Unit Operator under this agreement. 32

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If any well drilled as aforesaid by a working interest owner results

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I in production such that the land upon which it is situated may properly be included in a participating area, such participating area shall be established or enlarged as provided in this agreement and the well shall thereafter be operated by the Unit Operator in accordance with the terms of this agreement and the unit operating agreement.

6 If any well drilled as aforesaid by a working interest owner obtains 7 production in quantities insufficient to justify the inclusion of the land 8 upon which such well is situated in a participating area, such well may be 9 operated and produced by the party drilling the same subject to the conserva-10 tion requirements of this agreement. The royalties in amount or value of 11 production from any such well shall be paid as specified in the underlying 12 lease and agreements affected.

ROYALTY SETTLEMENT. The United States and any State and any 14. 13 14 royalty owner who is entitled to take in kind a share of the substances now unitized hereunder shall hereafter be entitled to the right to 'take in 15 kind its share of the unitized substances, and the Unit Operator, or the 16 working interest owner in case of the operation of a well by a working inter-17 est owner as herein provided for in special cases, shall make deliveries of 18 such royalty share taken in kind in conformity with the applicable contracts, 19 laws and regulations. Settlement for royalty interest not taken in kind shall 20 be made by working interest owners responsible therefor under existing con-21 tracts, laws and regulations, or by the Unit Operator, on or before the last 22 day of each month for unitized substances produced during the preceding cal-23 endar month; provided, however, that nothing herein contained shall operate 24 to relieve the lessees of any land from their respective lease obligations 25 26 for the payment of any royalties due under their leases.

If gas obtained from lands not subject to this agreement is introduced into any participating area hereunder, for use in repressuring, stimulation of production, or increasing ultimate recovery, in conformity with a plan of operations approved by the Supervisor, the Commissioner, and Commission, a like amount of gas, after settlement as herein provided for any gas transferred from any other participating area and with appropriate deduction for loss from any cause, may be withdrawn from the formation in which the gas is introduced,

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royalty free as to dry gas, but not as to any products which may be extracted
therefrom; provided that such withdrawal shall be at such time as may be
provided in the approved plan of operations or as may otherwise be consented
to by the Supervisor, the Commissioner and Commission as conforming to good
petroleum engineering practice; and provided further, that such right of
withdrawal shall terminate on the termination of this unit agreement.

7 Royalty due the United States shall be computed as provided in the 8 operating regulations and paid in value or delivered in kind as to all unitized 9 substances on the basis of the amounts thereof allocated to unitized Federal 10 land as provided herein at the rate specified in the respective Federal leases, 11 or at such lower rate or rates as may be authorized by law or regulation; 12 provided, that for leases on which the royalty rate depends on the daily aver-13 age production per well, said average production shall be determined in accor-14 dance with the operating regulations as though each participating area were a 15 single consolidated lease.

Royalty due on account of State lands shall be computed and paid on the
 basis of all unitized substances allocated to such lands.

18 15. RENTAL SETTLEMENT. Rental or minimum royalties due on leases com-19 mitted hereto shall be paid by working interest owners responsible therefor under existing contracts, laws and regulations, provided that nothing herein 20 contained shall operate to relieve the lessees of any land from their respec-21 22 tive lease obligations for the payment of any rental or minimum royalty due 23 under their leases. Rental or minimum royalty for lands of the United States 24 subject to this agreement shall be paid at the rate specified in the respective 25 leases from the United States unless such rental or minimum royalty is waived, 26 suspended or reduced by law or by approval of the Secretary or his duly auth-27 orized representative.

28 Rentals on State of New Mexico lands subject to this agreement shall be
29 paid at the rates specified in the respective leases.

With respect to any lease on non-Federal land containing provisions which would terminate such lease unless drilling operations are commenced upon the land covered thereby within the time therein specified or rentals are paid for the privilege of deferring such drilling operations, the rentals required

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thereby shall, notwithstanding any other provisions of this agreement, be
deemed to accrue and become payable during the term thereof as extended by
this agreement and until the required drilling operations are commenced
upon the land covered thereby or until some portion of such land is included
within a participating area.

6 16. CONSERVATION. Operations hereunder and production of unitized 7 substances shall be conducted to provide for the most economical and effi-8 cient recovery of said substances without waste, as defined by or pursuant 9 to State or Federal laws or regulations.

17. DRAINAGE. The Unit Operator shall take such measures as the
 Supervisor and Commissioner deem appropriate and adequate to prevent drain age of unitized substances from unitized land by wells on land not subject
 to this agreement.

18. LEASES AND CONTRACTS CONFORMED AND EXTENDED. The terms, conditions 14 and provisions of all leases, subleases and other contracts relating to ex-15 ploration, drilling, development or operations for oil or gas on lands com-16 mitted to this agreement are hereby expressly modified and amended to the 17 extert necessary to make the same conform to the provisions hereof, but 18 otherwise to remain in full force and effect; and the parties hereto hereby 19 consent that the Secretary as to Federal leases and the Commissioner as to 20 State leases shall and each by his approval hereof, or by the approval hereof 21 22 by their duly authorized representatives, do hereby establish, alter, change 23 or revoke the drilling, producing, rental, minimum royalty and royalty re-24 quirements of Federal and State leases committed hereto and the regulations 25 in respect thereto to conform said requirements to the provisions of this agreement, and, without limiting the generality of the foregoing, all leases, 26 subleases, and contracts are particularly modified in accordance with the 27 following: 28

(a) The development and operation of lands subject to this agreement
under the terms hereof shall be deemed full performance of all obligations
for development and operation with respect to each and every separately
owned tract subject to this agreement, regardless of whether there is
any development of any particular tract of the unit area.

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(b) Drilling and producing operations performed hereunder upon any tract of unitized land will be accepted and deemed to be performed upon and for the benefit of each and every tract of unitized land, and no lease shall be deemed to expire by reason of failure to drill or produce wells situated on the land therein embraced.

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(c) Suspension of drilling or producing operations on all unitized lands pursuant to direction or consent of the Secretary and Commissioner or their duly authorized representatives shall be deemed to constitute such suspension pursuant to such direction or consent as to each and every tract of unitized land. A suspension of drilling or producing operations limited to specified lands shall be applicable only to such lands.
(d) Each lease, sublease or contract relating to the exploration, drilling, development or operation for oil or gas of lands other than those of the United States or State of New Mexico committed to this agreement, which, by its terms might expire prior to the termination of this agreement, is hereby extended beyond any such term so provided therein so that it shall be continued in full force and effect for and during the term of this agreement.

(e) Any Federal lease for a fixed term of twenty (20) years or any 19 renewal thereof or any part of such lease which is made subject to 20 this agreement shall continue in force beyond the term provided therein 21 until the termination hereof. Any other Federal lease committed hereto 22 23 shall continue in force beyond the term so provided therein or by law as to the land committed so long as such lease remains subject hereto, 24 provided that production is had in paying quantities under this unit 25 26 agreement prior to the expiration date of the term of such lease, or in 27 the event actual drilling operations are commenced on unitized lands, in accordance with the provisions of this agreement, prior to the end 28 of the primary term of such lease and are being diligently prosecuted 29 at that time, such lease shall be extended for two years and so long 30 31 thereafter as oil or gas is produced in paying quantities in accordance with the provisions of the Mineral Leasing Act Revision of 1960. 32 (f) Each sublease or contract relating to the operation and development 33

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of unitized substances from lands of the United States committed to this agreement, which by its terms would expire prior to the time at which the underlying lease, as extended by the immediately proceeding paragraph, will expire, is hereby extended beyond any such term so provided therein so that it shall be continued in full force and effect for and during the term of the underlying lease as such term is herein extended.

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8 (g) Any lease embracing lands of the State of New Mexico which is 9 made subject to this agreement, shall continue in force beyond the 10 term provided therein as to the lands committed hereto until the 11 termination hereof, subject to the provisions of subsection (e) of 12 Section 2 and subsection (i) of this Section 18.

(h) The segregation of any Federal lease committed to this agree-13 ment is governed by the following provisions in the fourth paragraph 14 of Sec. 17(j) of the Mineral Leasing Act, as amended by the Act of 15 September 2, 1960 (74 Stat. 781-784): "Any (Federal) lease heretofore 16 or hereafter committed to any such (unit) plan embracing lands that 17 are in part within and in part outside of the area covered by any such 18 19 plan shall be segregated into separate leases as to the lands committed and the lands not committed as of the effective date of unitization: 20 Provided, however, That any such lease as to the nonunitized portion 21 22 shall continue in force and effect for the term thereof but for not less than two years from the date of such segregation and so long 23 24 thereafter as oil or gas is produced in paying quantities."

25 (i) Any lease embracing lands of the State of New Mexico having only 26 a portion of its lands committed hereto, shall be segregated as to the 27 portion committed and the portion not committed, and the provisions of such lease shall apply separately to such segregated portions commencing 28 as of the effective date hereof; provided, however, notwithstanding any 29 of the provisions of this agreement to the contrary any lease embracing 30 31 lands of the State of New Mexico having only a portion of its lands committed hereto shall continue in full force and effect beyond the term 32 provided therein as to all lands embraced in such lease, if oil or gas 33

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is discovered and is capable of being produced in paying quantities from some part of the lands embraced in such lease at the expiration of the secondary term of such lease; or if, at the expiration of the secondary term, the lessee or Unit Operator is then engaged in bona fide drilling or reworking operations on some part of the lands embraced in such lease, the same, as to all lands embraced therein, shall remain in full force and effect so long as such operations are being diligently prosecuted, and if they result in the production of oil or gas, said lease shall continue in full force and effect as to all of the lands embraced therein, so long thereafter as oil or gas in paying quantities is being produced from any portion of said lands.

(j) Any lease, other than a Federal lease, having only a portion of its
lands committed hereto shall be segregated as to the portion committed
and the portion not committed, and the provisions of such lease shall
apply separately to such segregated portions commencing as of the effective date hereof. In the event any such lease provides for a lump sum
rental payment, such payment shall be prorated between the portions so
segregated in proportion to the acreage of the respective tracts.

19. COVENANTS RUN WITH LAND. The covenants herein shall be construed 19 to be covenants running with the land with respect to the interest of the 20 parties hereto and their successors in interest until this agreement terminates, 21 22 and any grant, transfer, or conveyance of interest in land or leases subject 23 hereto shall be and hereby is conditioned upon the assumption of all privileges 24 and obligations hereunder by the grantee, transferee or other successor in 25 interest. No assignment or transfer of any working interest, royalty, or other interest subject hereto shall be binding upon Unit Operator until the 26 27 first day of the calendar month after Unit Operator is furnished with the 28 original, photostatic, or certified copy of the instrument of transfer.

29 20. EFFECTIVE DATE AND TERM. This agreement shall become effective 30 upon approval by the Secretary and Commissioner, or their duly authorized 31 representatives and shall terminate five (5) years from said effective date 32 unless:

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(a) such date of expiration is extended by the Director and Commissioner, or

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(b) it is reasonably determined prior to the expiration of the fixed
term or any extension thereof that the unitized land is incapable of
production of unitized substances in paying quantities in the formations
tested hereunder and after notice of intention to terminate the agreement
on such ground is given by the Unit Operator to all parties in interest
at their last known addresses, the agreement is terminated with the approval of the Supervisor and the Commissioner, or

(c) a valuable discovery of unitized substances has been made or 8 accepted on unitized land during said initial term or any extension 9 thereof, in which event the agreement shall remain in effect for such 10 term and so long as unitized substances can be produced in quantities 11 sufficient to pay for the cost of producing same from wells on unitized 12 land within any participating area established hereunder and, should 13 production cease, so long thereafter as diligent operations are in pro-; 4 gress for the restoration of production or discovery of new production 15 and so long thereafter as unitized substances so discovered can be pro-16 duced as aforesaid, or 17

(d) it is terminated as heretofore provided in this agreement. This
agreement may be terminated at any time by not less than 75 per centum,
on an acreage basis, of the working interest owners signatory hereto,
with the approval of the Supervisor and Commissioner; notice of any such
approval to be given by the Unit Operator to all parties hereto.

21. RATE OF PROSPECTING, DEVELOPMENT AND PRODUCTION. The Director is 23 hereby vested with authority to alter or modify from time to time in his dis-24 cretion the quantity and rate of production under this agreement when such 25 quantity and rate is not fixed pursuant to Federal or State law or does not 26 conform to any statewide voluntary conservation or allocation program, which 27 is established, recognized and generally adhered to by the majority of oper-28 ators in such State, such authority being hereby limited to alteration or mod-29 ification in the public interest, the purpose thereof and the public interest 30 to be served thereby to be stated in the order of alteration or modification. 31 Without regard to the foregoing, the Director is also hereby vested with 32 authority to alter or modify from time to time in his discretion the rate of 33

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prospecting and development and the quantity and rate of production under L 2 this agreement when such alteration or modification is in the interest of attaining the conservation objectives stated in this agreement and is not 3 in violation of any applicable Federal or State law; provided, further, that 4 no such alteration or modification shall be effective as to any land of the 5 State of New Mexico, as to the rate of prospecting and developing in the 6 absence of the specific written approval thereof by the Commissioner and 7 as to any lands of the State of New Mexico or privately owned lands subject 8 9 to this agreement as to the quantity and rate of production in the absence of specific written approval thereof by the Commission. 10

Powers in this section vested in the Director shall only be exercised
after notice to Unit Operator and opportunity for hearing to be held not
less than 15 days from notice.

22. CONFLICT OF SUPERVISION. Neither the Unit Operator nor the work-14 ing interest owners nor any of them shall be subject to any forfeiture, termin-15 16 ation or expiration of any rights hereunder or under any leases or contracts 17 subject hereto, or to any penalty or liability on account of delay or failure in whole or in part to comply with any applicable provision thereof to the 18 19 extent that the Unit Operator, working interest owners or any of them are 20 hindered, delayed or prevented from complying therewith by reason of failure of the Unit Operator to obtain in the exercise of due diligence, the concur-21 22 rence of proper representatives of the United States and proper representatives 23 of the State of New Mexico in and about any matters or things concerning which it is required herein that such concurrence be obtained. The parties hereto, 24 25 including the Commission, agree that all powers and authority vested in the 26 Commission in and by any provisions of this agreement are vested in the Commission and shall be exercised by it pursuant to the provisions of the laws 27 28 of the State of New Mexico and subject in any case to appeal or judicial re-29 view as may now or hereafter be provided by the laws of the State of New Mexico.

APPEARANCES. Unit Operator shall, after notice to other parties
 affected, have the right to appear for and on behalf of any and all interests
 affected hereby before the Department of the Interior, the Commissioner of
 Public Lands of the State of New Mexico and the New Mexico Oil Conservation

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1 Commission and to appeal from orders issued under the regulations of said
2 Department, the Commission or Commissioner or to apply for relief from any
3 of said regulations or in any proceedings relative to operations before the
4 Department of the Interior, the Commissioner, or Commission, or any other
5 legally constituted authority; provided, however, that any other interested
6 party shall also have the right at his own expense to be heard in any such
7 proceeding.

24. NOTICES. All notices, demands or statements required hereunder 8 to be given or rendered to the parties hereto shall be deemed fully given if 9 10 given in writing and personally delivered to the party or sent by postpaid 11 registered or certified mail, addressed to such party or parties at their 12 respective addresses set forth in connection with the signatures hereto or 13 to the ratification or consent hereof or to such other address as any such 14 party may have furnished in writing to party sending the notice, demand or 15 statement.

16 25. NO WAIVER OF CERTAIN RIGHTS. Nothing in this agreement contained 17 shall be construed as a waiver by any party hereto of the right to assert 18 any legal or constitutional right or defense as to the validity or invalidity 19 of any law of the State wherein said unitized lands are located, or of the 20 United States, or regulations issued thereunder in any way affecting such 21 party, or as a waiver by any such party of any right beyond his or its 22 authority to waive.

23 26. UNAVOIDABLE DELAY. All obligations under this agreement requiring 24 the Unit Operator to commence or continue drilling or to operate on or produce unitized substances from any of the lands covered by this agreement shall 25 26 be suspended while the Unit Operator, despite the exercise of due care and 27 diligence, is prevented from complying with such obligations, in whole or in 28 part, by strikes, acts of God, Federal, State or municipal law or agencies, 29 unavoidable accidents, uncontrollable delays in transportation, inability to obtain necessary materials in open market, or other matters beyond the 30 reasonable control of the Unit Operator whether similar to matters herein 31 32 enumerated or not. No unit obligation which is suspended under this section shall become due less than thirty (30) days after it has been determined that 33

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the suspension is no longer applicable. Determination of creditable
 "Unavoidable Delay" time shall be made by the Unit Operator subject to
 approval of the Supervisor and Commissioner.

27. NONDISCRIMINATION. In connection with the performance of work
under this agreement, the operator agrees to comply with all of the provisions of section 202 (1) to (7) inclusive of Executive Order 11246 (30 F.R.
12319), as amended, which are hereby incorporated by reference in this agreement.

8 23. LOSS OF TITLE. In the event title to any tract of unitized land 9 shall fail and the true owner cannot be induced to join in this unit agree-10 ment, such tract shall be automatically regarded as not committed hereto and there shall be such readjustment of future costs and benefits as may be required on account of the loss of such title. In the event of a dis-12 13 pute as to title to any royalty, working interest or other interests subject 14 thereto, payment or delivery on account thereof may be withheld without liability for interest until the dispute is finally settled; provided, that, 15 16 as to Federal and State land or leases, no payments of funds due the United 17 States or State of New Mexico should be withheld, but such funds of the United States shall be deposited as directed by the Supervisor and such 18 19 funds of the State of New Mexico shall be deposited as directed by the 20 Commissioner to be held as unearned money pending final settlement of the 21 title dispute, and then applied as earned or returned in accordance with 22 such final settlement.

23 Unit Operator as such is relieved from any responsibility for any
24 defect or failure of any title hereunder.

25 29. NON-JOINDER AND SUBSEQUENT JOINDER. If the owner of any substantial interest in a tract within the unit area fails or refuses to sub-26 27 scribe or consent to this agreement, the owner of the working interest in 28 that tract may withdraw said tract from this agreement by written notice 29 delivered to the Supervisor and the Commissioner and the Unit Operator 30 prior to the approval of this agreement by the Supervisor and Commissioner. 31 Any oil or gas interests in lands within the unit area not committed hereto prior to submission of this agreement for final approval may thereafter be 32 33 committed hereto by the owner or owners thereof subscribing or consenting

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to this agreement, and, if the interest is a working interest, by the owner 1 2 of such interest also subscribing to the unit operating agreement. After operations are commenced hereunder, the right of subsequent joinder, as 3 provided in this section, by a working interest owner is subject to such 4 requirements or approvals, if any, pertaining to such joinder, as may be 5 provided for in the unit operating agreement. After final approval hereof, 6 joinder by a non-working interest owner must be consented to in writing by 7 the working interest owner committed hereto and responsible for the payment 8 9 of any benefits that may accrue hereunder in behalf of such non-working interest. A non-working interest may not be committed to this unit agree-10 ment unless the corresponding working interest is committed hereto. Joinder 11 to the unit agreement by a working interest owner, at any time, must be 12 accompanied by appropriate joinder to the unit operating agreement, if more 13 than one committed working interest owner is involved, in order for the 14 interest to be regarded as committed to this unit agreement. Except as 15 may otherwise herein be provided, subsequent joinders to this agreement shall 16 be effective as of the first day of the month following the filing with the 17 Su ervisor and the Commissioner of duly executed counterparts of all or any 18 papers necessary to establish effective commitment of any tract to this 19 agreement unless objection to such joinder is duly made within 60 days by 20 the Supervisor, provided, however, that as to State lands all subsequent 21 joinders must be approved by the Commissioner. 22

30. COUNTERPARTS. This agreement may be executed in any number of 23 counterparts no one of which needs to be executed by all parties or may 24 be ratified or consented to by separate instrument in writing sepcifically 25 referring hereto and shall be binding upon all those parties who have exe-26 cuted such a counterpart, ratification, or consent hereto with the same 27 force and effect as if all such parties had signed the same document and 28 regardless of whether or not it is executed by all other parties owning 29 or claiming an interest in the lands within the above described unit area. 30

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1 31. NO PARTNERSHIP. It is expressly agreed that the relation of 2 the parties hereto is that of independent contractors and nothing in this 3 agreement contained, expressed or implied, nor any operations conducted 4 hereunder, shall create or be deemed to have created a partnership or 5 association between the parties hereto or any of them.

IN WITNESS WHEREOF, the parties hereto have caused this agreement to be executed and have set opposite their respective names the date of execution.

UNIT OPERATOR AND WORKING INTEREST OWNER

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BURMAH OIL AND GAS COMPANY

BY: WMW/Mull

DATE: March 13, 1975

ADDRESS: 600 Western United Life Building Midland, Texas 79701

WORKING INTEREST OWNERS

-APPEST: BY: DATE: ADDRESS: THE STATE OF TEXAS I COUNTY OF MIDLAND Ĭ The foregoing instrument was acknowledged before me this 13th day of March , 1975, by P. M. WHITSITT. CONTRACT AGENT of BURMAH OIL AND GAS COMPANY, on behalf of said corporation. Notary Public for County, Texas Leah Atchley

My Commission Expires:

June 1, 1975

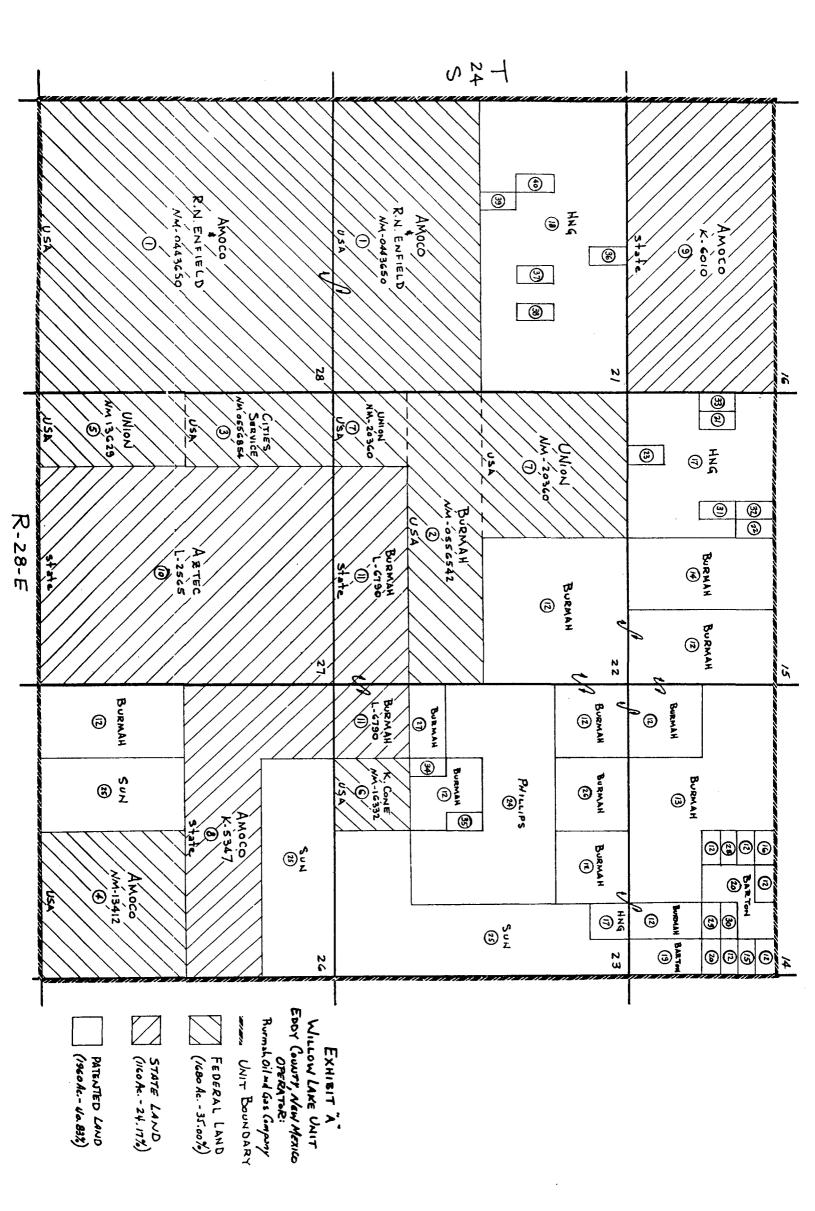


EXHIBIT "B"

WILLOW LAKE UNIT AREA T-24-S, R-28-E, N.M.P.M.

EDDY COUNTY, NEW MEXICO

TRACT NO.	DE	SCRIPTION OF LAND	NUMBER OF ACRES	SERIAL NO. & EXP. DATE OF LEASES (New Mexico Serials)	BASIC OWNERSHI	BASIC ROYALTY OWNERSHIP PERCENTAGE	LESSEE OR RECORD	OVERRIDING ROYALTY AND PERCENTAGE	WORKING INTEREST AND PERCENTAGE	NTEREST ENTAGE
TOWNSHIP 24		SOUTH, RANGE 28 EAST	ST							
Ţ	Sec. 21: Sec. 28:	21: S/2 28: All	960	NM-0443650 9-30-75	USA	A11-12.5	Amoco Production Company and Robert N. Enfield	M. K. Whitehead: 5%	Amoco: 75 R.N.Enfield: 25	75 1d: 25
2	Sec. 22:	22: N/2 S/2	160	NM-0556542 3-31-75	USA	A11-12.5	Burmah Oil and Gas Company	Est. of Richard P. DeSmet: 5%	Burmah:	11V
3	Sec. 2	27: W/2 NW/4	. 08	NM-0556854 4-30-75	USA	A11-12.5	Cities Service Oil Company	None	Cities Service:	ALL
4	Sec. 26:	26: SE/4	160	NM-13412 3-31-81	USA	A11-12.5	Amoco Production Company	Shirley Starman: 3% Bell Petroleum Co.: 6.25%	Amoco:	IIA
ы	Sec. 2	27: W/2 SW/4	80	NM-13629 4-30-81	USA	A11-12.5	Union Oil Company of California	Jack J.Grynberg: 2.5% Richard B.Gavend: 2.5%	Union:	1.LA
9	Sec. 2	23: SE/4 SW/4	40	NM-16332 7-31-82	USA	A11-12.5	Kathleen Cone	J.U.Cone, 6.25% Trustee:	Cone:	A11
2	Sec. 22:	22: NW/4 & SW/4 SW/4	200	NM-20360 3-31-84	USA	A11-12.5	Union Oil Company of California	Central Southwest Oil Corporation: 5%	Union:	IIA

7 Federal Tracts 1,680 acres, or 35.0000% of Unit Area.

TRACT NO.	DESCI	DESCRIPTION OF LAND	N OF	NUMBER OF ACRES	SERIAL NO. & EXP. DATE OF LEASES (New Mexico Serials)	BASIC	BASIC ROYALTY OWNERSHIP PERCENTAGE	LESSEE OR RECORD	OVERRIDING ROYALTY AND PERCENTAGE	WORKING INTEREST AND PERCENTAGE	TEREST NTAGE
œ	Sec.	26:	NW/4 NW/4, S/2 N/2	200	K-5347-1 10-19-75	State	All-12.5	Amoco Production Company	None	Amoco:	A11
6	Sec.	16:	S/2	320	K-6010 5-17-76	State	Á11-12.5	Amoco Production Company	None	Amoco:	IIA
10	Sec.	27:	E/2 W/2, E/2	480	L-6525 9-1-81	State	All-12.5	Aztec Oil & Gas Company	None	Aztec:	ALI
11	Sec. Sec.	22: 23:	SE/4 SW/4, S/2 SE/4 SW/4 SW/4	160	L-6790 12-1-81	State	A11-12.5	Burmah Oil and Gas Company	None	Burmah:	All
	4 St;	State Tracts	acts 1,160 acres,	or	24.1667% of Unit Area						
12	Sec. Sec.	14: 15: 23: 23:	EF/4 NE/4 SE/4 NE/4 NE/4 NW/4 W/4 NW/4 SW/4 NW/4 SW/4, W/2 SE/4 NW/4, NW/ NE/4 SW/4 NE/4 SW/4	t SE/4, t SE/4, t SE/4, t SE/4, t SE/4, t SE/4, t SE/4, t SE/4, t W/2 M/2 t SE/4							
	Sec.	26:	NE/4 SW/4 W/2 SW/4	515	8-23-77	Boy Scout Trust Fun	Boy Scout Trust Fund-All-18.75	Burmah Oil and Gas Company	None	Burmah:	I I V
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TotalDescription of LMONumber of ARESGenALIV (Now FeetSerFraceSet of ALIV LESSE 00, RECORDOFFERENTAGEOFFERENTAGEOFFERENTAGE13Set 14 ;W/2 SW/4,1008 - 20 - 790.6.5.6aaallBurmah 031 and GasMone14Set 13 ;W/2 SW/4,1008 - 20 - 790.6.5.6aaallBurmah 031 and GasMone15Set 13 ;W/2 SW/4,1008 - 20 - 790.6.5.6aaallBurmah 031 and GasMone16Set 13 ;W/2 SW/4,5 $1-4+79$ 0.6.5.6aaallMiller,SomMone16Set 14 ;W/2 SW/4,5 $1-4+79$ Jack Miller,MoneMoneMone16Set 14 ;W/2 SW/4,5 $1-4+79$ Jack Miller,MoneMone17Set 14 ;W/2 SW/4,5 $1-4+79$ Jack Miller,MoneMone17Set 15 ;W/2 SW/4,5 $5-11-78$ Joseph C, CiMoneMone18Set 15 ;W/4 SW/4,14010-20-77PardueMiller,Mone18Set 21 ;W/2 SW/4,M/4 SW/4,14010-20-77PardueMiller,Mone18Set 21 ;W/2 SW/4,M/4 SW/4,10-20-77PardueMiller,MoneMone18Set 21 ;W/2 SW/4,M/4 SW/4,10-20-77PardueMiller,MoneMone19Set 21 ;W/4 SW/4,M/4 SW/4,10-20-77PardueMiller, <t< th=""><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th></t<>											
Sec. 14: N/2 SW/4 160 $8-20-79$ 0.6.5.searell Burmah 0il and Gas Sec. 15: W/2 SE/4 80 $9-20-79$ $9-20-79$ $9-11-12.5$ $Company$ Sec. 14: N/2 SK/4 S0 $9-20-79$ $Jack$ Miller, $Company$ Sec. 14: S/2 NK S $J.L.Craft,$ $Mmah 0il$ and Gas Sec. 14: S/2 NK/4 S $J.L.Craft,$ $Mmah 0il$ and Gas Sec. 14: S/2 NK/4 S $J.L.Craft,$ $Mmeh 0il$ and Gas Sec. 14: N/2 NK/4 S $J.L.Craft,$ $Mmeh 0il$ and Gas Sec. 14: N/2 NK/4 S $J.L.1675$ $Mmeh 0il$ and Gas Sec. 15: NK4 SK/4 S $J.L.1875$ $Mmeh 0il$ and Gas Sec. 15: SW/4 SV $J.L.1875$ $Mmeh 0il$ and Gas Sec. 14: N/2	TRACT NO.		R I PT I (LAND	DN OF	NUMBER OF ACRES	SERIAL NO. & EXP. DATE OF LEASES (New Mexico Serials)	BASIC ROYALTY OWNERSHIP PERCENTAGE	LESSEE OR RECORD	OVERRIDING ROYALTY AND PERCENTAGE	WORKING INTEREST AND PERCENTAGE	NG INTEREST PERCENTAGE
Sec.15.W2 SE/4809-20-79Jack Miller,Bumain 0:1 and GasSec.14.S/2 NE/451-14-79J.R.Craft,Moco ProductionSec.14.S/2 NW/451-14-79J.R.Craft,Moco ProductionSec.14.N/2 NW/455-11-78Joseph C.Doseph C.CompanySec.15.SW/4 SE/455-11-78Joseph C.Doseph C.CompanySec.15.SW/4 SE/455-11-78Joseph C.Doseph C.CompanySec.15.SW/4 SE/414010-20-77PardueAl1-15.625HNG OIL CompanySec.23.W/4 SE/414010-20-77PardueAl1-15.625HNG OIL CompanySec.21.N/2 SE/4 NE/4SCSec.21.N/2 SE/4SecMoco SecSec.21.N/2 SE/4 NE/4Sec210-20-77PardueAl1-15.625HNG OIL CompanySec.21.N/2 SE/4 NE/4Sec210-20-77PardueAl1-15.625HNG OIL CompanySec.21.N/2 SE/4 NE/4Sec210-20-77PardueAl1-15.625HNG OIL CompanySec.21.N/2 SE/4 NE/4Sec210-20-77PardueAl1-15.625HNG OIL CompanySec.21.N/2 SE/4 NE/4Sec210-20-77PardueAl1-15.625HNG OIL CompanySec.21.Sec21.Sec210-20-77PardueAl1-15.625HNG OIL Company <tr< td=""><td>13</td><td>Sec.</td><td>14:</td><td></td><td>160</td><td>8-20-79</td><td>awa</td><td></td><td>None</td><td>Burmah:</td><td>AII</td></tr<>	13	Sec.	14:		160	8-20-79	awa		None	Burmah:	AII
Sec.14:5/2NE.Graft, at uxAll-18.75Anoco Production companySec.14:W/2Serpin C.Josepin C.Anoco ProductionSec.14:W/2Serpin C.Josepin C.Anoco ProductionSec.15:SW4, exceptSerpin C.Josepin C.Anoco ProductionSec.15:SW4, exceptSerpin C.Byers, All-18.75Anoco ProductionSec.15:SW4, exceptSerpin C.Anoco ProductionSec.23:SW4, SW4, AndSerpin C.PardueAll-15.625Sec.21:N/2Serpin C.PardueAll-15.625Sec.21:N/2Serpin C.Serpin C.Serpin C.Sec.21:N/2Serpin C.Serpin C.Serpin Serpin Serpi	14	Sec.			80	9-20-79	Jack Miller, et al All-12.5	Burmah Oil and Gas Company	None	Burmah:	A11
Sec. 14: N/2 NW/4 5 5-11-78 Joseph C. Macco Production Sec. 15: SW/4, SW4 Sec. 13: SW/4, SW4 Company Sec. 15: SW/4, SW4 Description Ect al. All-18.75 Amoco Production Sec. 15: SW/4, SW4 Ect al. Description Ect al. Ender Sec. 23: NW/4 SW4 140 10-20-77 Pardue All-15.625 HNG OIL Company Sec. 23: NV4 NE/4 NI/4 140 10-20-77 Pardue All-15.625 HNG OIL Company Sec. 21: N/2, Secept N/4 NE/4 N/4 Sec M/4 SW4 N/4 N/4 Sec. 21: N/2, Secept N/4 SW4 N/4 N/4 Sec Sec Sec M/4 Sec M/4 Sec M/4 Sec	15	Sec.			Ŋ	1-14-79	J.R.Craft, et ux All-18.75	Amoco Production Company	None	Amoco:	A11
Sec. 15: SW/4, except NZ, SE/A NE/A SW/4, W/2 SE/A NE/A SW/4, SW/4, E/2 SE/A SW/4, E/2 SE/A SW/4, E/2 SE/A AII-15.625 HNG OIL Company Sec. 23: NW/4 NE/A NE/A NE/A 10-20-77 Pardue AII-15.625 HNG OIL Company Sec. 21: N/2, except NZ, 2 NV/4 NE/A 140 10-20-77 Pardue AII-15.625 HNG OIL Company Sec. 21: N/2, except NZ, 2 NV/4 NE/4, NV/4 NE/4, E/2 NV/4 SV/4 NE/4, E/2 SV/4 10-20-77 Pardue AII-15.625 HNG OIL Company Sec. 21: N/2, except NV/4, E/2 NV/4 SV/4 NE/4, E/2 NV/4 SV/4 NE/4, E/2 NV/4 SV/4 NE/4, E/2 NV/4 SV/4 NE/4, E/2 SV/4 10-20-77 Pardue AII-15.625 HNG OIL Company	16	Sec.			υ.	5-11-78	Joseph C. Byers, All-18.75 et al	Amoco Production Company	None	Amoco:	A11
Sec. 23: NW/4 NE/4 NE/4 140 10-20-77 Pardue Al1-15.625 HNG OIL Company Sec. 21: N/2, except W/2 NW/4 NW/4 Farms Farms Sec. 21: N/2, except W/2 NW/4 NW/4 M/2 NW/4 N/2 NW/4 NE/4, E/2 NW/4 SW/4 NE/4, W/2 NW/4 SE/4 M/2 SW/4 NE/4, W/2 NW/4 SE/4 Pardue Al1-15.625 HNG OIL Company Sec. 21: N/2, except N/4 NE/4, E/2 SW/4 SE/4 Pardue Al1-15.625 HNG OIL Company	17	Sec.		SW/4, except NE/4 NE/4 SW/4 W/2 SE/4 NE/4 SW/4, SW/4 NW/ SW/4, E/2 SE/4 SW/4 SW/4	. 4						
Sec. 21: N/2, except W/2 NW/4 NW/4 NE/4, E/2 NW/4 SW/4 NE/4, E/2 NE/4 SW/4 NE/4, W/2 NW/4 E/2 SW/4 SE/4 NW/4, E/2 SW/4 SE/4 NW/4 295 10-20-77 Pardue Farms All-15.625 HNG Oil Company		Sec.		NW/4 NE/4 NE/4		10-20-77	4)	HNG OIL Company	None	: DNH	AII
295 10-20-77 Farms All-15.625 HNG Oil Company	18	Sec.		N/2, except W/2 NW/4 NW/4 NE/4, E/2 NW/4 SW/4 NE/4, E/2 NE/4 SW/4 NE/4 W/2 NW/4 SE/4	•						
				SE/4 NW/4		10-20-77		HNG Oil Company	None	HNG:	ALI

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Page 3

NUMBER OF NUMBER OF New Mexico SE/4 20 1-4-78 4 NE/4 30 1-4-78 4 NE/4 SE/4 30 8-30-83 1 NE/4 SE/4 30 1-4-78 1 NE/4 SE/4 20 1-4-78 1 NE/4 SE/4 20 1-4-78 1 NW/4 SE/4 SE/4 SE/4 1 NW/4 SE/4 SE/4 SE/4 1 NW/4 SE/4 SE/4 SE/4 1 SE/4 NW/4 SE/4 SE/4 1 SE/4 SE/4 SE/4 SE/4 1 SE/4 SE/4 SE/4 SE/4 NE/4 NW/4 S 12-22-82 SE/4 NE/4 S 12-21-82 SE/4 NW/4 S 12-21-82 NE/4 NW/4 S 12-18-82 NM/4 SW/4					SERIAI NO E EVD					I
	DESCRIPTION OF TRACT NO. LAND	N OF		NUMBER OF ACRES	DATE OF LEASES (New Mexico Serials)	BASIC ROYALTY OWNERSHIP PERCENTAGE	К	OVERRIDING ROYALTY AND PERCENTAGE	WORKING INTERES AND PERCENTAGE	
30 $8-30-83$ Barton Bros. Roy G. Barton, Jr. None Barton: Al. $1/4$ $2-1-80$ 5 $1/4-25.0$ $1/4-18.75$ 5 $1/4-18.75$ 5 5 $2-1-80$ 5 5 $1/4-18.75$ 5 5 $1/4-18.75$ 5 5 $1/4-18.75$ 5 5 $1/4-18.75$ 5 5 $1/4-18.75$ 6 6 $1/4-18.75$ 6 6 $1/4-18.75$ 6 6 $1/4-18.75$ 6 6 $1/4-18.75$ 6 6 $1/4-18.75$ 6 6 $1/4-18.75$ 8 6 6 $1/4-18.75$ 8 8 6 8 $1/4$	14: E/2 SE/4 SE/4	E/2 SE/ SE/4	4	20	1-4-78	nce All-12	Roy G. Barton, Jr.	None		
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	14: NW/4 N S/2 NE,	NW/4 N S/2 NE,	E/4 SE/ /4 NW/4	'4, 30 . ! SE/4,	8-30-83	Barton Bros. Land6Rov.	Roy G. Barton, Jr.	None		
5 12-22-82 David L. All-12.5 Roy G. Barton, Jr. None Barton: All 5 12-22-82 David L. All-12.5 Roy G. Barton, Jr. None Barton: All 5 12-21-82 David L. All-12.5 Roy G. Barton, Jr. None Barton: All 5 12-21-82 Joseph C. Roy G. Barton, Jr. None Barton: All 6 12-21-82 Joseph C. Roy G. Barton, Jr. None Barton: All 180 11-15-77 Roberts Roy G. Barton, Jr. None Barton: All 180 11-15-77 Pardue Farms Company None Phillips Petroleum None 180 11-15-77 Rod Gitar All-12.5 Roy G. Barton, Jr. None Phillips: All 180 11-15-77 Pardue Farms Company None Phillips: All 11-30-77 Rod MII-18.75 Roy G. Barton, Jr. None Phillips: All 11-30-77 Rotust All None Phillips: Petroleum None 11-15-77 Rotust All Phillips Petroleum None Phillips: All 113-15-77 Rotust All Phillips Petroleum None Phillips: All 11-15-77 Rotust All Phillips Petroleum </td <td>SE/4 NW S/2 SE/</td> <td>SE/4 NW S/2 SE/</td> <td>/4 SE/ 4 NE/4</td> <td>'4, SE/4</td> <td>2-1-80</td> <td>رً 1/4-25 Bros. §</td> <td></td> <td></td> <td></td> <td></td>	SE/4 NW S/2 SE/	SE/4 NW S/2 SE/	/4 SE/ 4 NE/4	'4 , SE/4	2-1-80	رً 1/4-25 Bros. §				
512-22-82David L. All-12.5Roy G. Barton, Jr.NoneBarton:All512-21-82Joseph C. Wilson All-12.5Roy G. Barton, Jr.NoneBarton: All512-21-82Joseph C. Wilson All-12.5Roy G. Barton, Jr.NoneBarton: All18011-15-77RobertsRoy G. Barton, Jr.NoneBarton: All18011-15-77RobertsRoy G. Barton, Jr.NoneBarton: All18011-15-77RobertsRoy G. Barton, Jr.NonePhillips: All18011-15-77GuitarAll-12.5Roy G. Barton, Jr.NonePhillips: All18011-15-77RobertsCompanyPhillips PetroleumNonePhillips: All1102,750': Trust All-18.75To 2,750': Sun Oll CompanyNoneMoneV.H.Westbrook: Sun Oll Company300(6-24-71)Guy A. Below 2,750': Sun Oll CompanyNoneMoneMone300(6-24-71)Guy A. Below 2,750': Sun Oll CompanyNoneMoneMone					3-4-80	1/4-18 t James on 1/2-18				
	15: E/2 SW SW/4	E/2 SW SW/4	/4 NW/4		12-22-82	L. All-12 5,	Roy G. Barton, Jr.	None		
5 $12-18-82$ be ux All-12.5 Roy G. Barton, Jr. None Barton: All 180 $11-15-77$ Pardue Farms Phillips Petroleum None Phillips: All 50 $11-30-77$ Pardue Farms Company None Phillips: All 50 $(6-24-71)$ $(7-24-71)$ $(7-24-$	15: E/2 NE SW/4	E/2 NE SW/4	:/4 NE/4		12-21-82	C. All-12.	Roy G. Barton, Jr.	None		
 ¹¹⁻¹⁵⁻⁷⁷ Pardue Farms Phillips Petroleum None Phillips: All f. Gompany Trust All-18.75 ¹¹⁻³⁰⁻⁷⁷ Frust All-12.5 ¹¹⁻³⁰⁻⁷⁷ Frust All-12.5 ^{11-30-750¹} Frust All-12.5 	15: E/2 SE SW/4	E/2 SE SW/4	:/4 SW/4		12-18-82	Roberts All-12	Roy G. Barton, Jr.	None		
$ \begin{array}{cccc} & & & & & & & & & & & & & & & & & $	23: S/2 M NW/4 9 NE/4,	S/2 M NW/4 9 NE/4,	V/4, N/2 SW/4, SW NW/4 SE	· 180 /4 /4	11-15-77 11-30-77	Pardue Farms & Guitar Trust All-18.75	Phillips Petroleum Company	None		
(6-24-71)Guy A. Below 2,750':V.H.Westbrook Below 2,750':V.H.Westbrook: Below 2,750':390HBPReedA11-12.5Sun Oil CompanyNoneBelow 2,750':	23: NE/4 1 S/2 N SE/4 1	NE/4 N S/2 N SE/4 1	VE/4 NE/ 3/4 NE/4 VE/4, E/	, 4			To 2.750':		To 2 7501.	
	26: NE/4, SI 26: NE/4 M NE/4, 1	SE/4,SI NE/4 N NE/4, 1	N/4 SE/ N/4, N/ E/2 SW/		(6-24-71) HBP	<u>،</u>	.West ow 2,	None	Westbrook: Dw 2,750':	

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TRACT NO.		SCRIPTION OF LAND	ON OF	NUMBER OF Acres	SERIAL NO. 5 EXP. DATE OF LEASES (New Mexico Serials)	BASIC ROYALTY OWNERSHIP PERCENTAGE	LESSEE OR RECORD	OVERRIDING ROYALTY AND PERCENTAGE	WORKING INTEREST AND PERCENTAGE
26	Sec.	23:	NE/4 NW/4	40	2-25-80	F. W. Courtney All-18.75	Burmah Oil and Gas Company	None	Burmah: All
27	Sec.	23:	S/2 NW/4 SW/4	20	2-25-80	Pardue Farms § Guitar Trust All-18.75	Burmah Oil and Gas Company	None	Burmah: All
28	Sec.	14:	N/2 SW/4 NW/4 SE/4	ы	OPEN	;	:	;	Jess L. Bennett: All
29	Sec.	14:	S/2 SW/4 NE/4 SE/4	ы	OPEN		1 . 1 .		D. M. Crawmer: All
30	Sec.	14:	N/2 SW/4 NE/4 SE/4		OPEN	•	;	1	L. M. Davis: All
31	Sec.	15:	W/2 SE/4 NE/4 SW/4	ى ب	OPEN		1	. 1	Elsie Warrent All
32	Sec.	15:	W/2 NE/4 NE/4 SW/4	Ŋ	OPEN			-	W. F. Czeskleba:All
33	Sec.	15:	W/2 SW/4 NW/4 SW/4	D	OPEN	-	-		H. Mcnana Estate: All
34	Sec.	23:	W/2 SW/4 NE/4 SW/4	Ŋ	OPEN	;		1	L. L. Life Estate All
35	Sec.	23:	E/2 NE/4 NE/4 SW/4	ы	OPEN	;		1	Isadore Samuels: All
36	Sec.	21:	W/2 NW/4 NW/4 NE/4	Ŋ	OPEN		ł	1	D.V. & M.K. Smith: All

Page 5

•	, NTEREST ENTAGE	AII	IIA	: A11	:A11									
Page 6	, WORKING INTEREST AND PERCENTAGE	J. B. McCoid:	D. W. Lyon:	G.Severin: All	W. J. Kalinowski:All									
	OVERRIDING ROYALTY AND PERCENTAGE		:	1	1 1			·						
	LESSEE OR RECORD	1 1	1		1					-				
	BASIC ROYALTY OWNERSHIP PERCENTAGE	;	:			-	•						·	-
	SERIAL NO. & EXP. DATE OF LEASES (New Mexico Serials)	OPEN	OPEN	OPEN	OPEN		8333% of Unit Area.	Area.						
	NUMBER OF ACRES	Ŋ	5 L	S	S		0 acres of 40.	n entire Unit					·	
	DESCRIPTION OF TRACT NO. LAND	Sec. 21: E/2 NW/4 SW/4 NE/4	Sec. 21: E/2 NE/4 SW/4 NE/4	Sec. 21: E/2 SW/4 SE/4 NW/4	Sec. 21: W/2 NW/4 SE/4 NW/4		29 Patented Tracts 1,960 acres of 40.8333% of Unit Area.	40 Tracts 4,800 acres in entire Unit Area.						
	TRACT NO.	37	38	39	40			TOTAL :						

DON G. MSCORMICK JAY W. FORBES THOMAS L. MAREK ROGER E. YARBRO JOHN M. CARAWAY JAMES W. KLIPSTINE, JR. PERRY C. ABERNETHY CAS TABOR MCCORMICK AND FORBES ATTORNEYS AT LAW BUJAC BUILDING P. O. BOX 1718 CARLSBAD, NEW MEXICO 88220 10 March 1980

TELEPHONE 885-4171 AREA CODE 505

JOINT LETTER TO:

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

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

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

> Re: Willow Lake Unit: Township 24 South, Range 28 East, N.M.P.M. Eddy County, New Mexico; Operator: Aminoil USA, Inc. Plan of Development to be submitted by Operator for 1980.

Gentlemen:

This firm represents Mr. Felton W. Courtney of Carlsbad, New Mexico, who owns forty acres of mineral rights under the NE%NW% of Section 23, Township 24 South, Range 28 East, being a part of the lands included in the Willow Lake Unit.

It is our understanding that Aminoil has not yet filed their Plan of Operation/Development for calendar year 1980. We would request a notification when said plan is filed, along with a copy thereof, so that we may have an opportunity to present our objections to said plan.

We are currently involved in a dispute with Aminoil relative to the development of our client's land within the unit, and if we are unable to satisfactorily conclude our dispute, then we shall send you all data relative to same at the time of filing of our objections to the Plan of Development for 1980.

Thanking you in advance for your cooperation in this regard, I remain,

Very truly yours,

John M. Cananan John M. Caraway

JMC:cy

cc: Mr. Felton W. Courtney

TRANSMITTAL SLIP	IAT .	1. Jos Rem. il Conservation	ey in Commission - Santa
ATE	FROM	Gene Do Lo	un a
4-21-80	AT	Annioil US	AIUe
For your information	on		N This has my approval
Please handle			Per your request
For your approval		RUSH	Per our conversation
For your signature			See me personally
Please advise		FOR YOUR FILE	Forward to Gen. Files
		l	

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Aminoil USA, Inc. 600 Western United Life Building Midland, Texas 79701 (915) 682-8231

AMINOIL USA

RE: Amendment of Plan of

March 21, 1980

Operations/Development

for Calendar Year 1980

Submitted for Approval

Oil Conservation Commission State of New Mexico P. O. Box 2088 Santa Fe, New Mexico 87051

The 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

REULIVED

CH Songervetitet

1.07. 3 1300 Hand delivered

April 21, 1980

Gentlemen:

It has been brought to my attention by Mr. Ray Graham, Commissioner of Public Lands of the State of New Mexico, that an Application for Approval of the Initial Participating Area for the Willow Lake Unit Well No. 3 (S/2 Section 15, T24S, R28E) was never approved. This was so stated in Paragraph One under Summary of Operations. Mr. Graham is correct because the approval request was sent only to the Regional Oil and Gas Supervisor, United States Geological Survey in Roswell, New Mexico. (See attached approval request dated February 7, 1979.) I was informed that the USGS was the only regulatory agency whose approval was needed and since I had received no correspondence to the contrary, I believed the application was approved. Please accept my apology for I was in complete ignorance as to who was to receive and approve the application. To rectify this error a representative for Aminoil USA, Inc., a Mr. Coffield, will hand deliver this letter and three copies of the Application for Approval of the Initial Participating Area for the Willow Lake Unit Well No. 3 to the Commissioner of Public Lands and two copies to the Oil Conservation Commission on Wednesday, April 23, 1980.

Mr. Graham also noted that the Plan of Operations/Development for the Willow Lake Unit, year 1980, omitted the reason why the Willow Lake Unit Well No. 4 was not drilled. It was our desire, during the last quarter of 1979, to form a unit consisting of the west half of Section 14, T24S, R28E and drill the Willow Lake Unit Well No. 4, 1980' FSL and 660' FWL. This would involve the southwest quarter being contributed by the Willow Lake Unit and the northwest quarter by Adams Exploration. A location along the west line was most desired at the time due to the interpretation of where the Atoka Sand would be developed. A special trip was made in November 1979 to the United States Geological Survey office in Albuquerque, Commissioner of Public Lands and the Oil Conservation Commission in Santa Fe to ascertain if any of these agencies had any objection to forming a 320 acre unit half in and half out of an

established unit. None were found and we proceeded ahead with what we assumed was a valid effort. Adams Exploration has yet to return an answer to our request, so we are currently clearing title to form a drilling unit consisting of the south half of Section 14, T24S, R28E which will be totally within the Willow Lake Unit boundary. Loffland Brothers Rig #331, which will be drilling a nearby location, will be used to drill the Willow Lake Unit Well No. 4 to a total depth of 12,900' to test the potential of the Strawn, Atoka and Morrow Sands. Drilling will commence no later than September 1, 1980, and the well should be completed prior to December 15, 1980. In summary, we waited too long to form the unit. We were dependent upon outside interest owners over whom we had no control. We had good intentions and hope to make up for it by completing the Willow Lake Unit Well No. 4 on schedule.

Respectfully submitted,

AMINOIL USA, INC.

G. E. DeLong Sr. Development Geologist

GED/hf

Enclosures

AMINOIL

February 7, 1979

United State Department of the Interior Regional Oil & Gas Supervisor United State Geological Survey

Re: Application for Approval of the Initial Participating Area for the Morrow Sand Formation, South Half of Section 15, T24S, R28E, Under the Willow Lake Agreement, Eddy County, New Mexico

Geological and Engineering Data

The following geological and engineering data are submitted in support for the subject initial participating area application. The attached Exhibit "A" is an area plat outlining the Willow Lake Unit and the proposed participating area. Exhibit "B" is a Morrow Sand zone structure and Isopach map.

The Morrow Sands in the Willow Lake Unit area are deltaic and distributary channel fill sands and are intermittently developed. Porosity and permeability are affected by compaction, lithologic change to shaley sands or shale and the lack of swelling clays within the developed sands. This is evident in the three wells that surround the Aminoil No. 3 Willow Lake Unit, S/2 of Section 15, T24S, R28E. Thicker sands were developed in the Aminoil No. 2 Willow Lake Unit, a dry hole which is the west offset, and the Aminoil No. 1 CNB, a noncommercial Morrow Sand test one mile NE of the proposed participating area. The total sand thickness in both of these wells exceed 40', however, the No. 2 Willow Lake yielded only gas to surface too small to measure when drill stem tested and the No. 1 CNB produced less than 200 MMCFG before plugging back and testing the Atoka formation. The Burmah Oil No. 1 Willow Lake (south offset) perforated and tested two thinly developed sand stringers which flowed only 725 MCFGPD and is currently plugged back to the Atoka formation.

The poor structural position, as shown by the structural plat, tight and shaley sand development and poor offset production tests limits the proposed participating area to the south half of Section 15, T24S, R28E.

Please consider the above information justification for the proposed initial Morrow Sand formation participating area, the south 320 acres of Section 15, T24S, R28E, Eddy County, Willow Lake Unit.

Respectfully Submitted for Your Approval,

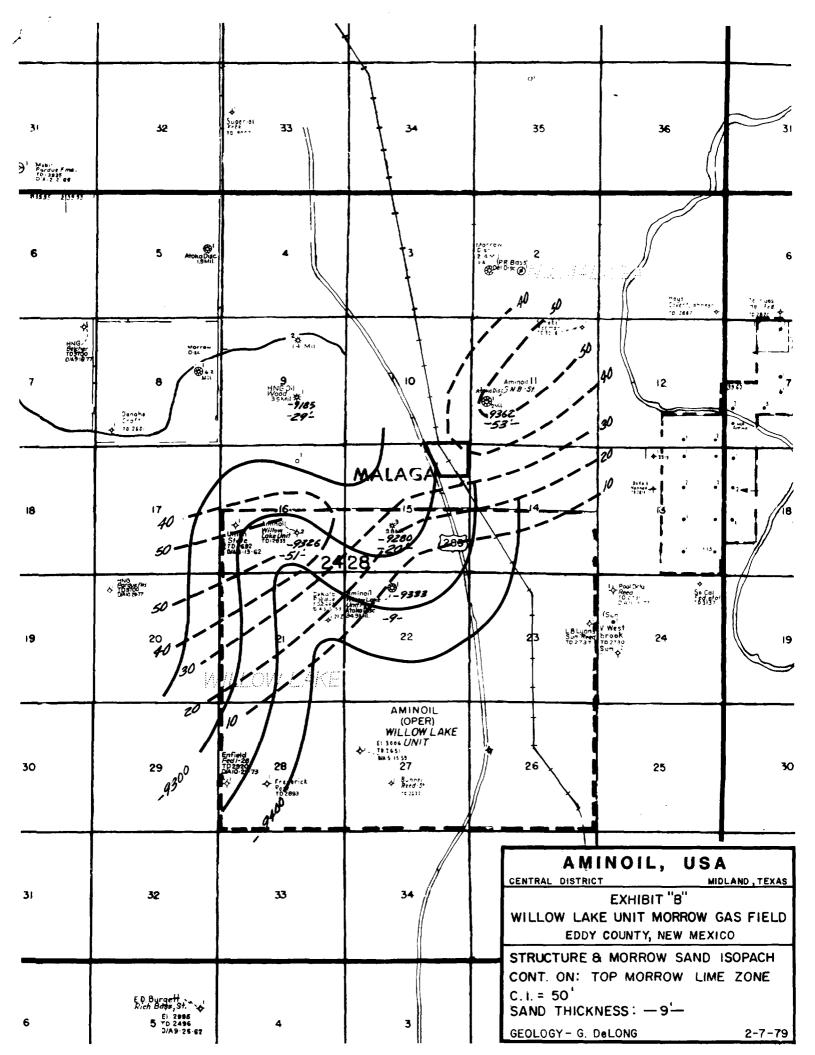
Gene DeLong

Sr. Development Geologist

Steve Wright K

Sr. Reservoir Engineer

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Aminoil USA, Inc. 600 Western United Life Building Midland. Texas 79701 (915) 682-8231

Oil Conservation Commission State of New Mexico P. O. Box 2088 Santa Fe, New Mexico 87051

The 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

AMINOIL USA

April 21, 1980

RE: Amendment of Plan of Operations/Development for Calendar Year 1980 Submitted for Approval March 21, 1980

Gentlemen:

It has been brought to my attention by Mr. Ray Graham, Commissioner of Public Lands of the State of New Mexico, that an Application for Approval of the Initial Participating Area for the Willow Lake Unit Well No. 3 (S/2 Section 15, T24S, R28E) was never approved. This was so stated in Paragraph One under Summary of Operations. Mr. Graham is correct because the approval request was sent only to the Regional Oil and Gas Supervisor, United States Geological Survey in Roswell, New Mexico. (See attached approval request dated February 7, 1979.) I was informed that the USGS was the only regulatory agency whose approval was needed and since I had received no correspondence to the contrary, I believed the application was approved. Please accept my apology for I was in complete ignorance as to who was to receive and approve the application. To rectify this error a representative for Aminoil USA, Inc., a Mr. Coffield, will hand deliver this letter and three copies of the Application for Approval of the Initial Participating Area for the Willow Lake Unit Well No. 3 to the Commissioner of Public Lands and two copies to the Oil Conservation Commission on Wednesday, April 23, 1980.

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Respectfully submitted,

AMINOIL USA, INC.

G. E. DeLong Sr. Development Geologist

GED/hf

Enclosures

AMINOIL

February 7, 1979

United State Department of the Interior Regional Oil & Gas Supervisor United State Geological Survey

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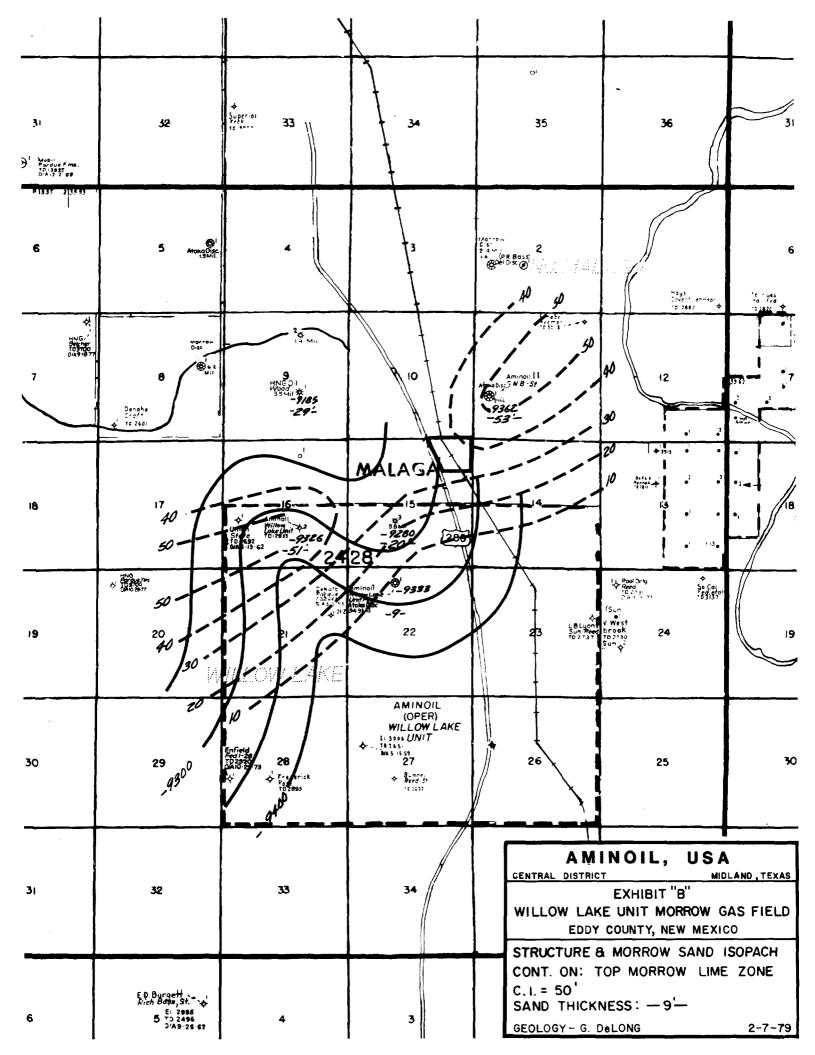
Respectfully Submitted for Your Approval,

Sr. Development Geologist

Steve Wright K

Sr. Reservoir Engineer

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

February 2, 1979

Aminoil USA, Inc. 600 Western United Life Building Midland, Texas 79701

Attention: James S. Welin

Re: Case No. 5401 Willow Lake Unit 1979 Plan of Operation and Development

Gentlemen:

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We hereby approve the 1979 Plan of Operation and Development for the Willow Lake Unit, Eddy County, New Mexico, subject to like approval by the United States Geological Survey and the Commissioner of Public Lands.

One approved copy of the Plan is returned herewith.

Yours very truly,

JOE D. RAMEY Director

JDR/LT/fd enc.

cc: U.S.G.S. - Roswell Commissioner of Public Lands

AMINOIL

January 29, 1979

no. 5401 approve

State of New Mexico P. O. Box 2088 Santa Fe, New Mexico 87501

Oil Conservation Commission

RE: Plan of Operation/Development (Calendar Year 1979) Willow Lake Federal Unit Eddy County, New Mexico

Gentlemen:

Attached for your approval are two (2) copies of our Plan of Operation/ Development for the calendar year 1979, covering the Willow Lake Federal Unit (No. 14-08-0001-14,260) Eddy County, New Mexico.

Should you require anything further, please advise.

Yours very truly,

AMINOIL USA, INC.

Telin

James S. Welin

Attachments (2)

PLAN OF OPERATION/DEVELOPMENT FOR CALENDAR YEAR 1979 WILLOW LAKE FEDERAL UNIT (No. 14-08-0001-14,260) EDDY 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:

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> In compliance with Section 10 of the Willow Lake Unit Agreement, dated February 15, 1975, Aminoil USA, Inc., (formerly Burmah Oil and Gas Company), as Unit Operator, hereby submits for your approval a Summary of Operations and Development for the year 1978 and a Plan of Operation/Development for 1979.

SUMMARY OF 1978 OPERATIONS:

Plans were made in mid-1977 to drill the Willow Lake Unit No. 3 well and on December 28, 1977, a 12,800' Morrow test was commenced at a location 1940' FWL and 1940' FSL of Section 15, T-24-S, R-28-E, N.M.P.M. On March 10, 1978, said well reached a total depth of 12,807', plugged back to 12,740' and was completed in the Morrow Sand. The Calculated Absolute Open Flow for the Willow Lake No. 3 well was 9808 MCFD. Cumulative production for the No. 3 well through November 30, 1978, totaled 318 MMCF, producing 657 bbls of condensate. A Designation of Pooled or Unitized Acreage was executed by all working interest owners and filed of record in Eddy County, New Mexico, covering the entire South half of Section 15, T-24-S, R-28-E, N.M.P.M. This pooled area coincides with the initial participating area established in May 1978, covering acreage around the Willow Lake No. 3 well.

Production from the Willow Lake No. 1 well through November 30, 1978, has been approximately 1.73 BCF of gas and 910 bbls of condensate from the Atoka formation, bringing the total cumulative production from these two wells to a total of 2.048 BCF and 1,567 bbls of condensate.

Aminoil negotiated and signed a gas sales contract with El Paso Natural Gas Company fcr sale of Aminoil's share of the gas from the No. 1 and No. 3 wells. Gas is still being produced and sold by other participating working interest owners under the terms of a gas balancing agreement dated February 15, 1975.

PROPOSED DEVELOPMENT DURING 1979:

Present plans are to continue watching production and pressures from the Nos. 1 and 3 wells. It is our present plan to drill one (1) additional development well at a legal location in the Southwest Quarter of Section 14, T-24-S, R-28-E, which is mutually acceptable to the working interest owners of the Willow Lake Unit.

In the event the Nos. 1 and 3 wells do not hold up or either is plugged and abandoned, Aminoil as Operator, shall file a new Plan of Development. The No. 4 well which is proposed and/or any subsequent development wells will be drilled to a depth sufficient to test the Morrow, Strawn and Atoka formations and to protect these formations from drainage by any non-unit well that might be drilled. PLAN OF OPERATION/DEVELOPMENT WILLOW LAKE FEDERAL UNIT (No. 14-08-0001-14,260) EDDY COUNTY, NEW MEXICO

MODIFICATION:

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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 31, 1978

TERM:

This Plan of Operation/Development is submitted for the period ending December 31, 1979. Prior to that date, another Plan of Operation/Development will be submitted for approval.

AMINOIL USA, INC.

	UNIT OPE	RATOR	
	BY:	amer N. Felin	0119
	DATE:		
APPROVED: Department of the Interior	DATE:	2/1-/79	
APPROVED:	DATE:	2/1/:1	
APPROVED: New Mexico Oil Conservation	DATE:	212179	
Commission THEORETING CONSTRUCTION AND ADDRESS BUILT AND ADDRESS ADDRE			







ommissioner of Lublic Lands February 1, 1979

ALEX J. ARMIJO COMMISSIONER

> Aminoil USA, Inc. 600 Western United Life Building Midland, Texas 79701

> > Re: Plan of Operation/Development (Calendar Year 1979) Willow Lake Federal & State Unit Eddy County, New Mexico

> > > no 5401

P. O. BOX 1148

SANTA FE, NEW MEXICO

ATTENTION: Mr. James S. Welin

Gentlemen:

The Commissioner of Public Lands has this date approved your 1979 Plan of Development and Operation for the Willow Lake Federal and State Unit, Eddy County, New Mexico. You will continue watching production and pressures from the Nos. 1 and 3 wells, and plan to drill one additional development well in the SW/4 of Section 14, Township 24 South, Range 28 East. Our approval is subject to like approval by the United States Geological Survey and the New Mexico Oil Conservation Division.

Enclosed is one approved copy for your files.

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

Very truly yours,

ALEX J. ARMIJO COMMISSIONER OF PUBLIC LANDS

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

AJA/RDG/s enc1. cc:

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



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United States Department of the Interior

GEOLOGICAL SURVEY P. 0. Box 26124 Albuquerque, New Mexico 87125

FEB 12 1979

Aminoil USA Attention: Mr. Thomas W. Jacobs 600 Western United Life Building Midland, Texas 79701

no. 5401

Gentlemen:

Four approved copies of your 1979 plan of development for the Willow Lake unit area, Eddy County, New Mexico, are enclosed. Such plan, proposing the drilling of one additional well to test the Morrow, Strawn, and Atoka formations, was approved on this date subject to like approval by the appropriate officials of the State of New Mexico.

Sincerely yours,

(ORIG. SGD.) MAKES W. SUTHERLAND

Oil and Gas Supervisor, SRMA

Enclosures (4)

cc: Com. Pub. Lands, Santa Fe (ltr. only) NMOCD, Santa Fe (ltr. only) State of New Mexico





Commissioner of Public Lands

PHIL R. LUCERO COMMISSIONER

February 13, 1978

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

Amanoil USA 600 Western United Life Building Midland, Texas 79701

n. 5401

Re: Willow Lake Unit Eddy County, New Mexico 1978 PLAN OF DEVELOPMENT AND OPERATION

ATTENTION: Mr. Thomas W. Jacobs

Gentlemen:

The Commissioner of Public Lands has this date approved your 1973 Plan of Development and Operation for the Willow Lake Unit, Eddy County, New Mexico. Such plan proposes continuation of current drilling operations on well No. 3 and the drilling of one additional well pending evaluation of the data obtained from wells No. 1 and 3.

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 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 encl. cc:

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

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United States Department of the Interior

GEOLOGICAL SURVEY

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

Aminoil USA, Inc. Attention: Mr. Ronnie Ward 600 Western United Life Building Midland, Texas 79701

Gentlemen:

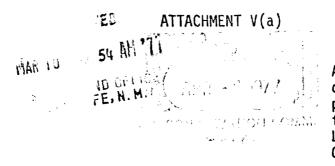
One approved copy of your 1977 plan of development for the Willow Lake unit agreement, Eddy County, New Mexico is returned herewith. Such plan proposing the drilling of a third unit well, following three or four months observation of the production performance of unit well No. 1, was approved on this date subject to like approval by appropriate State officials.

It is understood that such plan may be revised as additional data becomes available.

Sincerely yours,

Area Oil and Gas Supervisor

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



Application for approval of the initial participating area for the Atoka formation under the Willow Lake unit agreement Eddy County, New Mexico.

Regional Oil and Gas Supervisor United States Geological Survey

~'

Aminoil USA, Inc. (formerly Burmah Oil and Gas Company), as unit operator for the Willow Lake unit agreement respectfully requests your approval, pursuant to section 11 of the unit agreement, of the selection of the lands indicated on the land ownership map, attached hereto as Exhibit "A", to constitute the initial participating area for the Atoka formation. As defined the initial Atoka participating area embraces 320.00 acres.

The schedule of lands attached hereto as Exhibit "B" describes the lands within the initial participating area for the Atoka formation and indicates the percentage of participation of each lease and tract within said area.

A geologic and engineering report including appropriate geological maps and other pertinent data is being submitted separately in triplicate as justification for the proposed definition of the Atoka participating area.

The initial Atoka participating area is predicated upon the information obtained by the completion of the Willow Lake No. 1 well, in the NW/4, Sec. 22, T24S, R28E. Initial production from well No. 1 was 2,500 MCF of gas per day from the Atoka formation at a depth of 11,680 to 11,700 feet. Pursuant to section 11 of the unit agreement the effective date of the

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

5401

April 12, 1977

Aminoil USA, Inc. 600 Western United Life Building Midland, Texas 79701

Attention: Mr. David N. Leaverton

Re: 1977 Plan of Development Willow Lake Unit, Eddy County, New Mexico

Gentlemen:

This is to advise that the New Mexico Oil Conservation Commission has this date approved the 1977 Plan of Development for the Willow Lake Unit, Eddy 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: United States Geological Survey Roswell, New Mexico

> Commissioner of Public Lands Santa Fe, New Mexico

PLAN OF OPERATION/DEVELOPMENT FOR CALENDAR YEARS 1975-77 WILLOW LAKE UNIT (NO. 14-08-0001-14,260) EDDY 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

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GENTLEMEN:

In compliance with Section 10 of the Willow Lake Unit Agreement dated February 15, 1975, Aminoil USA, Inc. (formerly Burmah Oil and Gas Company), as Unit Operator, hereby submits for your approval a Plan of Operation/Development for the Years 1975 and 1976 and proposed development for the Year 1977.

SUMMARY OF 1975 OPERATIONS:

The Willow Lake Unit No. 1 well was drilled at a location 660 feet from the North line and 1,980 feet from the West line of Section 22, Township 24 South, Range 28 East, Eddy County, New Mexico. The well was drilled to a total depth of 13,205 feet and tested in the Morrow (non-commercial) and completed in the Atoka formation between the intervals of 11,680 - 11,700 feet with a Calculated Absolute Open Flow of 34,997 MCF. Several drilling breaks were encountered in the Strawn formation and a Drill-stem test produced gas at a rate of 480 MCF; but, due to the "high presssure" of both horizons, the Strawn was not completed.

SUMMARY OF 1975 DEVELOPMENT:

None.

SUMMARY OF 1976 DEVELOPMENT:

The Willow Lake Unit No. 2 well was drilled at a location 1,650 feet from the South line and 1,980 feet from the East line of Section 16, Township 24 South, Range 28 East, Eddy County, New Mexico. The well was drilled to a total depth of 12,833 feet and was tested in the Strawn and Morrow formations without success. A Drill-stem test in the Strawn formation recovered 11,400 feet of salt water, the Atoka formation was shaled-out, and we were unable to test the Morrow formation due to Packer failures. Thus, the Willow Lake Unit No. 2 well was plugged and abandoned on September 2, 1976. PLAN OF OPERATION/DEVELOPMENT WILLOW LAKE UNIT (NO. 14-08-0001-14,260) EDDY COUNTY, NEW MEXICO Page two

OTHER ITEMS AFFECTING UNIT OPERATIONS:

In October, 1975, the Bureau of Land Management notified Robert N. Enfield that New Mexico Lease No. NM-0443650 had expired. The lease covers acreage outside the Unit and the South One-Half (S/2) of Section 21 and all of Section 28 which constitutes 960 acres of the Willow Lake Unit. The case was tried in U. S. District Court for the District of New Mexico where the decision was in favor of Mr. Enfield. The BLM has appealed the decision to the U.S. Court of Appeals for the 10th Circuit Court and Mr. Enfield is presently awaiting a Circuit Court decision. Aminoil, as Unit Operator, was notified by the U.S.G.S. on May 7, 1976, that our request to have the Willow Lake Unit classified as "Capable of producing in paying

quantities" had been approved.

Negotiations have been completed and contracts let to El Paso Natural Gas Company for the sale of gas from the No. 1 well and it went on stream December 2, 1976. PROPOSED DEVELOPMENT DURING 1977:

Present plans are to observe production and pressures from the No. 1 well for three (3) to four (4) months. In the event the well warrants, it is our plan to drill one (1) development well at a legal location which is mutually acceptable to the working interest owners of the Willow Lake Unit. In the event the No. 1 well does not hold up, Aminoil, as operator, shall file a new Plan of Development. The well would be drilled to a depth sufficient to test the Strawn and Atoka formations and to protect these formations from drainage by any non-unit well that might be drilled.

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: November, 1976

PLAN OF OPERATION/DEVELOPMENT WILLOW LAKE UNIT (NO. 14-08-0001-14,260) EDDY COUNTY, NEW MEXICO Page three

TERM:

Ths 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.

> AMINOIL USA, INC. UNIT OPERATOR

BY:

DEU 3 9 1976

DATE:

DATE: **APPROVED:** the Interior Department of OIL & GAS SUPERINSON Subtact fo like approval by the Ŵ DATE: March 24,1977 **APPROVED:** Public Lands Commi ssioner of awer **APPROVED:** New/Mexico Oil Commission Conservation

e 17, 1977 DATE: Le

initial Atoka participating area should be January 13, 1976.

Your approval is, therefore, requested for the selection of the lands indicated on attached Exhibit "A" as the initial Atoka participating area effective as of January 13, 1976.

Dated this 7th day of January, 1977.

AMINOIL USA, INC. Ronnie Ward

Senior Landman

MAR 1 0 1977 hermed JAN 13 1976 Auccrive nh Area Oil & Supervisor U. S. Contagenet Same

Approved March 18, 1977 COMMISSIONER OF PUBLIC LANDS

1977 Approv Scretary Director MEXICO OIL CONSERVATION COMMISSION E

5401

14N - 6 1977

1971 Conservation Division Western Bank Building 100 COM¹⁵05 Marquette, NW, Room 815 Albuquerque, New Mexico 87102

JAN 0 4 1977

Aminoil USA, Inc. Attention: Mr. Ronnie Ward 600 Western United Life Building Midland, Texas 79701

Gentlemen:

Your letter of December 9, 1976, transmitted two copies each of a plan of development and a combined structure and isopach map of the Atoka for the Willow Lake unit agreement, Eddy County, New Mexico, requesting consideration for approval by this office for both the plan of development and a participating area.

The plan of development was submitted in appropriate form and is being considered for approval. However, the request for approval of a participating area does not contain sufficient information. Please resubmit an application for the initial Atoka participating area which contains a description of those lands proposed for participation along with geological and engineering data supporting such lands. A map of the type submitted by your letter of December 9, 1976, will be helpful, provided the proposed participating area is clearly indicated thereon and a brief geologic and engineering summary is also submitted with the map. Additionally, a schedule of those lands entitled to participate should be submitted with the application. Such a schedule is required even if all participating lands are embraced by a single lease. The participating area application should provide for an effective date of January 13, 1976, the date unit well No. 1 was tested as a commercial unit well.

Insemuch as unit production has only recently commenced, your application may be deferred for two or three months if desired to obtain production data which may aid in determining those lands which should be entitled to participate. If any assistance should be required in preparing the application please feel free to contact this office.

Sincerely yours,

(ORIG. SGD.) JAMES W. SUTHERLAND

Ares Oil and Gas Supervisor

cc: Com. Pub. Lands, Santa Fe NMOCC, Santa Fe

County _	Operator _	Unit Name
EDDY	BURMAH OIL AND GAS COMPANY	WILLOW LAKE UNIT (EXPLORATORY)

0000

Commissioner 3-26-75	DATE APPROVED
Commission 1-28-75	OCC CASE NO. 5401 OCC ORDER NO. R-4954
	5401 R-4954
3-27-75	EFFECTIVE DATE
4,800.00	TOTAL ACREAGE
1,160.00	STATE
1,680.00	FEDERAL
1,960.00	XHXXXXXX-FEE
Yes	SEGREGATION CLAUSE
5 угв.	TERM

UNIT AREA

TOWNSHIP 24 SOUTH, RANGE 28 EAST, NMPM Section 14: S/2 Section 15: S/2 Section 16: S/2 Sections 21 through 23: All Sections 26 through 28: All

County Eddy	Operator BUR	Unit Name WIL
y	BURHAH Oil and Gas Company	WILLOW LAKE UNIT (EXPLORATORY)

			SW/4SW/4	28E	24S	· 23		-	
Burmah 011 and Gas Co.	160.00	3-13-75	SE/4SW/4, S/2SE/4	28E	24S	• 22	C.S.	L-6790	11
Aztec Oil & Gas Co.	480.00	4-12-75	E/2W/2, E/2	28E	2 4S	~ 27	, C.S.	L-6525	10
Amoco Production Co.	320.00	3-13-75	S/2	2 8E	2 4S	16	C.S.	K-6010	9
Amoco Production Co.	200.00	3-13-75	NW/4NW/4, S/2N/2	2 8E	24S	~ 26	C.S.	K-5347-1	8
ACREAGE NOT RATIFIED LESSEE	IED ACRES	RATIFIED DATE	,	RGE.	SEC. TWP. RGE.	SEC.	INSTI- TUTION	LEASE NO.	STATE TRACT NO.

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United States Department of the Interior

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

May 7, 1976

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Burmah Oil and Gas Company Attention: Mr. Ronnie Ward 500 Western United Life Building Midland, Texas 79701

Gentlemen:

Your letters of April 8, 1976, and April 29, 1976, indicate that as unit operator of the Willow Lake unit agreement, Eddy County, New Mexico, your have determined that unit well No. 1 in the NEWNW sec. 22, T. 24 S., R. 28 E., N.M.P.M., is capable of producing unitized substances in paying quantities.

Unit well No. 1 was tested on January 13, 1976, for an initial flow potential of 3,000 MCF of gas per day from the Atoka interval 11,680 to 11,700 feet.

This office concurs with your determination that such well is capable of producing unitized substance in paying quantities from the Atoka pursuant to Section 91of the unit agreement. You are also requested, relative to Section 11 of the unit agreement, upon securing two or three months production, to submit an application for an initial Atoka participating area based on geological data obtained by the completion of the subject well. If assistance is required in this matter, please feel free to contact this office.

Sincerely yours.

(ORGE GEL) CRIER CLARKER IN

CARL C. TRAYWICK Acting Area 011 and Gas Supervisor

cc: BLM, Santa Fe Com. Pub. Lands, Santa Fe NMOCC, Santa Fe Artesia (w/cy notice) Area Geologist Accounts Leasing

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United States Department of the Interior

GEOLOGICAL SURVEY **Drawer 1857** Roswell, New Mexico 88201

April 15, 1976 547/

Burmah Cil and Gas Company Attention: Mr. Ronnie Ward 600 Western United Life Building Midland, Texas 79701

Gentlemen:

Your letter of April 8, 1976, indicates that as unit operator of the Willow Lake unit agreement, Eddy County, New Mexico, you have determined unit well No. 1 in the NE $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 22, T. 24S., R. 28E., N. M. P. M., to be capable of production in commercial quantities. Your determination is supported by copies of the results of a "four point test" and a drill stem test.

Based on this information alone, we are presently unable to concur that unit well No. 1 is capable of producing in quantities sufficient to repay the cost of drilling, completing, and operating such an Atoka well, plus returning a profit, as required by Section 9 of the unit agreement. For further consideration of this determination, please submit the following additional information:

- 1. A calculation of recoverable reserves,
- 2. An estimated production schedule or well life, if feasible,
- 3. The expected date of pipeline connection,
- 4. The results of any tests which may have been conducted to determine the extent of the reservoir,

5. An economic analysis including costs and anticipated revenues associated with the well as an Atoka completion.

Upon receipt of the information requested above, your determination will receive our prompt consideration.

Sincerely yours,

ORIG. SGD. CARL C. TRAYWICK

CARL, C. TRAYWICK Acting Area Oil and Gas Supervisor

cc:

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PHIL R. LUCERO COMMISSIONER State of New Mexico





TELEPHONE 505-827-2748

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

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

> Re: Willow Lake Unit Eddy County, New Mexico

ATTENTION: Mr. Ronnie G. Ward

Gentlemen:

This will acknowledge receipt or your letters of August 26, 1975, and September 29, 1975, together with the proper instruments committing Tracts 28, 29, 30, 35, 36, 37, 39, and 40 to the Willow Lake Unit Agreement and Operating Agreement.

The Commissioner of Public Lands has approved these subsequent joinders as of this date. Our approval is subject to like approval by the United States Geological Survey.

We would appreciate you sending us a certified copy after they have been recorded in the county which will serve as originals for our files.

Very truly yours,

PHIL R. LUCERO COMMISSIONER OF PUBLIC LANDS

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

PRL/RDG/s

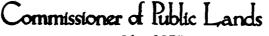
cc:

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

State of New Mexico







March 26, 1975

PHIL R. LUCERO COMMISSIONER

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

Griffin & Burnett, Inc. 501 Petroleum Building Midland, Texas 79701

> Re: Burmah Oil and Gas Company-WILLOW LAKE UNIT Eddy County, New Maxico

ATTENTION: Mr. Kenneth H. Griffin

Gentlemen:

The Commissioner of Public Lands has this date approved the Willow Lake Unit, Eddy County, New Mexico, which you submitted on behalf of Burmah Oil and Gas Company. This approval is subject to like approval by the United States Geological Survey.

Our approval is with the understanding that Tract 25 and Tracts 28 through 40 are not being committed to the Unit and Operating Agreements.

Enclosed are Ten (10) Certificates of approval. We are furnishing the USGS with a copy of our letter of approval.

Please advise this office when the USGS approves the agreement so that we may finish processing same. Also, submit Cities Service Oil Company's Ratification as soon as it is available.

Very truly yours,

PHIL R. LUCERO COMMISSIONER OF PUBLIC LANDS

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

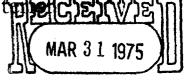
PRL/RDG/s encls. cc: USGS-Roswell, New Mexico OCC- Santa Fe, New Mexico



TELEPHONE 505-827-2748 United States Department of the Intriple CENT

GEOLOGICAL SURVEY

Drawer 1857 Roswell, New Sexico 88201



OIL CONSERVATION COMM. Santa Fe

March 27, 1975

Griffin and Surnett, Inc. Attention: Mr. Kenneth H. Griffin 501 Petroleum Building Midland, Texas 79701

Gentlemen:

One approved copy of the Willow Lake unit agreement, Eddy County, New Mexico, with Hurmanh Oil and Gas Company as unit operator is returned herewith. Such agreement has been assigned No. 14-03-0001-14260, and is effective as of March 27, 1975, the date of approval.

You are requested to furnish the New Maxico Oil Conservation Councission and all other incerested principals with evidence of this approval.

Sincerely yours,

IDRIC, SCD.J N. D. FREDERICK

S. O. FREDERICK Area Oil aud Gas Supervisor

cc: N.H.O.C.C., Santa Fe (ltr only) Commissioner of Public Lands, Santa Fe (ltr only) Area Geologist, Roswell (ltr. only) Artesia (w/cpy agr.)

ARStall/hr



OIL CONSERVATION COMMISSION

STATE OF NEW MEXICO P. O. BOX 2088 - SANTA FE 87501

I. R. TRUJILLO CHAIRMAN

LAND COMMISSIONER PHIL R. LUCERO MEMBER

STATE GEOLOGIST A. L. PORTER, JR. SECRETARY - DIRECTOR

January 28, 1975

Mr. Jason Kellahin Kellahin & Fox Attorneys at Law Post Office Box 1769 Santa Fe, New Mexico Re: CASE NO. 5401 ORDER NO. R-4954

Applicant:

Burmah Oil & Gas

Dear Sir:

Enclosed herewith are two copies of the above-referenced Commission order recently entered in the subject case.

Ve<u>r</u>y truly yours,

A. L. PORTER, Jr. Secretary-Director

ALP/ir

Copy of order also sent to:

Hobbs OCC х X Artesia OCC _____ Aztec OCC

Other_____ Unit Division - State Land Office

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

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April 12, 1977

Aminoil USA, Inc. 600 Western United Life Building Midland, Texas 79701

Attention: Mr. David N. Leaverton

.

Re: Initial Atoka Participating Area, Willow Lake Unit, Eddy 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 Willow Lake Unit, Eddy 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,

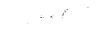
JOE D. RAMEY Secretary-Director

JDR/JEK/0g

cc: United States Geological Survey Roswell, New Mexico

> Commissioner of Public Lands Santa Fe, New Mexico

State of New Mexico



P. O. BOX 1148

SANTA FE, NEW MEXICO 87501





Commissioner of Public Lands

March 18, 1977

PHIL R. LUCERO COMMISSIONER

> Aminoil USA, Inc. 600 Western United Life Building Midland, Texas 79701

> > Re: Application for approval of Initial Atoka Participating area Willow Lake Unit Section 22, T245, R26E Eddy County, New Maxico

ATTENTION: Mr. Ronnie Ward

Gentlemen:

The Commissioner of Public Lands has this date approved the initial Atoks participating area of the Willow Lake unit agreement, Eddy County, New Mexico. The effective date to be as of January 13, 1976.

Inclosed is one approved copy for your files.

The United States Geological Survey gave their approval March 10, 1977.

Very truly yours,

PHIL R. LUCERO CONMISSIONER OF PUBLIC LANDS

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

PRL/RDG/s encl. cc: USGE-Reswell, New Maxico USGE-Albuquerque, New Mexico OCC- Santa Fe, New Mexico

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United States Department of the Interior

GEOLOGICAL SURVEY Connervation Division Western Bank Building 505 Marquette, NM, Room 815 Albuquerque, New Mexico 87102

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Aminoil USA, Inc. Attention: Mr. Ronnie Ward 600 Western United Life Building Midland, Texas

Gentlemen:

Your application dated January 7, 1977, requesting approval of the initial Atoka participating area of the Willow Lake unit agreement, Eddy County, New Mexico was approved on this date, subject to like approval by the appropriate State officials. The effective date is January 13, 1976.

The initial Atoka participating area embraces 320 acres described as the N¹/₂ sec. 22, T.245., R.28E., N.M.P.M., and is based on the completion of unit well No. 1 in the NEXM% sec. 22 as a commercial unit well. Unit well No. 1 was tested on January 13, 1976 for an initial potential of 3,000 MCF of gas per day from the Atoka interval 11,680 to 11,700 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,

(ORIG. SOD) JAMES W SUTHERLAND

Area Oil and Gas Supervisor

Enclosures

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

Aminoil USA, Inc. 600 Western United Life Building Midland, Texas 79701 (915) 682-8231

AMINOILUSA

April 2, 1977

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

Attention: Mr. Jim Kapteina

RE: Application for approval of initial participating area for the Atoka formation under the Willow Lake Unit Agreement, Eddy County, New Mexico

Plan of Operation/Development Calendar years 1975-77 Willow Lake Unit Eddy County, New Mexico

Gentlemen:

Attached for your approval are an original and one copy of the above referenced Application for approval of initial participating area for the Atoka formation along with an original and one copy of the Plan of Operation/Development both of which have been approved by the United States Geological Survey and the Commissioner of Public Lands.

Should you require anything further, please advise.

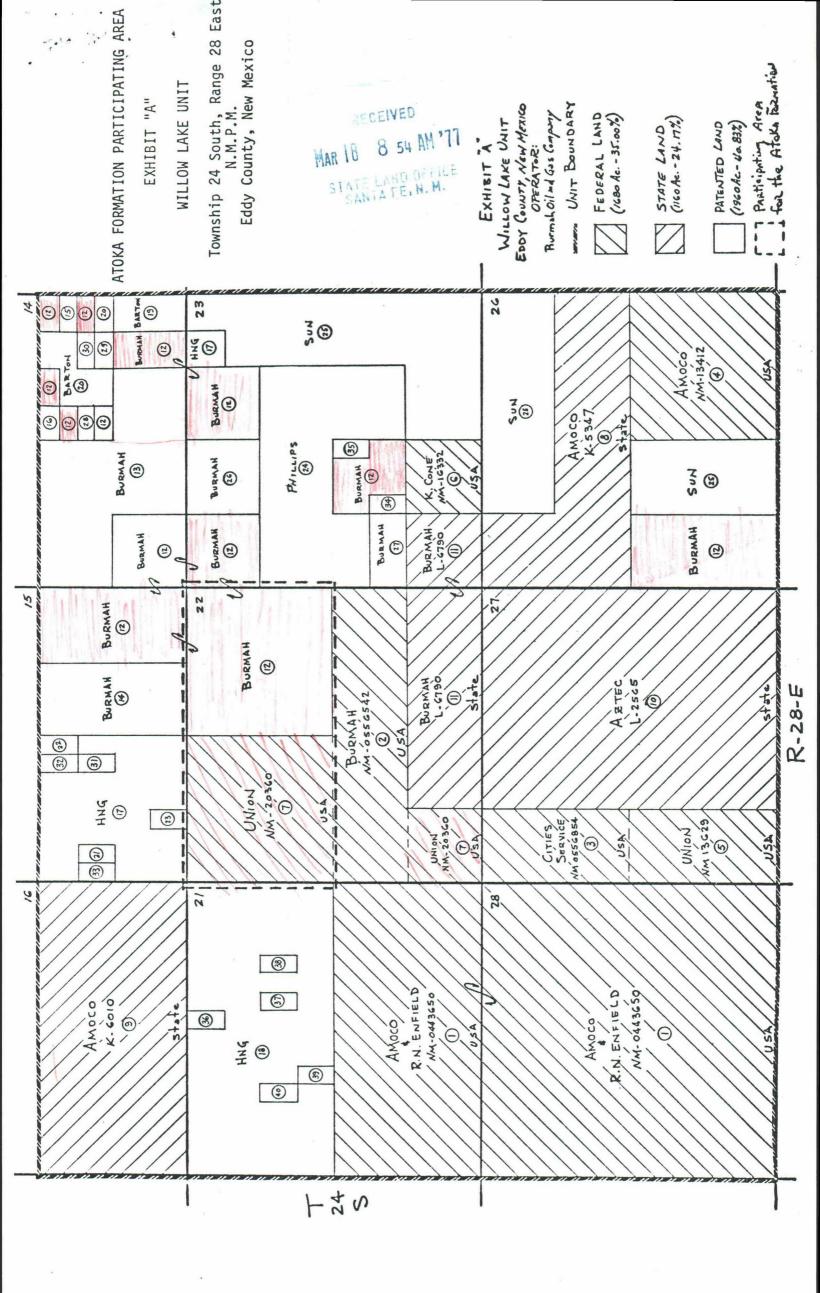
Very truly yours,

Gentertilley for David M. Leaverlow

David N. Leaverton District Land Manager

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Attachments (4)



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INITIAL ATOKA FORMATION PARTICIPATING AREA WILLOW LAKE UNIT AGREEMENT EDDY COUNTY, NEW MEXICO

7 MH-20360 Section 22: Wi/4, and SW/4 SW/4 160 Acres 50% Union (11 of California, Inc. (formerly burnah 011 and Gas Company) 12 Patented Section 14: W2 K/4 W/4 SK/4 160 Acres 50% Union (11 of California, Inc. (formerly burnah 011 and Gas Company) 12 Patented Section 14: W2 K/4 SK/4 160 Acres 50% Minoil USA, Inc. (formerly burnah 011 and Gas Company) 12 Patented Section 15: E/2 SK/4 160 Acres 50% Minoil USA, Inc. (formerly burnah 011 and Gas Company) 13 W2 SK14 SK/4 SK/4 SK/4 160 Acres 50% Minoil USA, Inc. (formerly burnah 011 and Gas Company) 14 W2 SK14 SK/4 SK/4 SK/4 SK/4 SK/4 50% Minoil USA, Inc. (formerly burnah 011 and Gas Company) 12 Section 22: W4 SK/4 SK4 SK/4 SK4 SK/4 SK Scotion 22: WE/4 13 Section 22: W2 SK/4 SK4 SK/4 SK Scotion 22: W2/4 Scotion 22: W2/4 14 W2 SK4 SK4 SK/4 SK4 SK/4 Scotion 22: W2/4 Scotion 22: W2/4 Scotion 22: W2/4 15 Scotion 22: W2/4 Scotion 22: W2/4 Scotion 22: W2/4 Scotion 22: W2/4 Scotion 22: W2/4 <th>Tract No.</th> <th>Lease No. or Type of Land</th> <th>Description</th> <th>Participating Areas</th> <th>Percent of Participation</th> <th>Working Interest Owner</th>	Tract No.	Lease No. or Type of Land	Description	Participating Areas	Percent of Participation	Working Interest Owner
Patented Section 14: N/2 N/2 N/4 SE/4 N/6 Aminoil USA, Inc. 7/2 NUA SE/4 SE M/4 SE Aminoil USA, Inc. N/2 SE/4 SE M/4 SE Aminoil USA, Inc. N/2 SE/4 SE/4 SE Aminoil USA, Inc. (formerly Burmah Oil and Gas Company N/2 N/2 SE/4 SE SE Aminoil USA, Inc. (formerly Burmah Oil and Gas Company N/2 Section 15: E/2 SE/4 SE SE Aminoil USA, Inc. Section 22: (m/2 SE/4 SE Aminoil USA, Inc. (formerly Burmah Oil and Gas Company USA) Section 23: N/4 Section 22: (m/4 Section 23: M/4 M/4 Section 23: N/4 Section 23: N/4 M/4 Section 23:	7	NM-20360	Section 22: NW/4, and SW/4 SW/4	160 Acres	50%	Union Oil of California Farmed-out to Aminoil USA, Inc. (formerly Burmah Oil and Gas Company)
00 15: E/2 SE/4 00 22: (NE/4) 00 23: NW/4 NW/4 00 23: NW/4 NW/4 00 23: NW/4 NW/4 NW/4 NW/4 NW/6 NE/4 SW/4 SE/4	8	Patented	N/2 NE/4 NW/4 SE/ S/2 NW/4 NW/4 SE/ N/2 NE/4 NE/4 SE/ N/2 SE/4 NE/4 SE/ W/2 SE/4 SE/4 SW/4 SW/4	160 Acres	50%	Aminoil USA, Inc. (formerly Burmah Oil and Gas Company)
01 23: NW/4 NW/4 NW/4 NE/4 NW/4 NE/4 NW/4 NE/4 NW/4 NE/4 SW/4 E/2 SW/4 NE/4 SW/4 SE/4 NE/4 SW/4 on 26: W/2 SW/4 Federal Lands * 160 Acres 50% State Lands * 160 Acres 50% are Lands * 160 Acres 50% 320 Acres 100%						
on 26: W/2 SW/4 Federal Lands * 160 Acres 50% State Lands * 160 Acres 50% 320 Acres 100%						
Federal Lands# 160 Acres50%State LandsPatented Lands* 160 Acres50%320 Acres100%						ar 18
320 Acres 100%				# 160 Acres * 160 Acres	50% 50%	
			TOTAL	320 Acres	100%	

Aminoil USA, Inc. 600 Western United Life Building Midland, Texas 79701 (915) 682-8231

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January 10, 1977

Application for approval of the initial participating area for the Atoka formation under the Willow Lake Unit agreement, Eddy County, New Mexico.

Geologic and Engineering Data

Regional Oil and Gas Supervisor United States Geological Survey

The following geologic and engineering data is submitted in support of the subject initial participating area application. The attached Exhibit "A"_B is a schedule of lands within the proposed participating area which is also outlined on the enclosed Atoka structure and isopach map.

The Atoka clastics in the area of the Willow Lake Unit are concentrated in channels along the shelf edge. The Atoka sand pay in the Willow Lake Unit No. 1 is interpreted as being a segment of such a channel crossing a structural nose with an estimated gas-water contact as the down dip limit of production.

The channel sand interpretation is substantiated by the complete absence of an equivalent sand in the Willow Lake Unit No. 2 (one mile NW), thus indicating that the pay is not a blanket sand deposit. The Atoka sand structure is based on seismic data on the Strawn lime which is the nearest seismic reflector in the stratigraphic section. The gas-water contact at -8665' was estimated as being near the base of the perforations in the Willow Lake Unit No. 1 since the well produces only a very slight amount of water.

Consideration of the above information is requested as justification for the proposed initial Atoka formation participating area.

AMINOIL USA, INC.

J.D. Kullman Senior Development Geologist