



R. E. Irelan
Division Manager
Production Department
Hobbs Division
North American Production

Conoco Inc.
P.O. Box 460
726 East Michigan
Hobbs, NM 88240
(505) 393-4141

November 16, 1987

Mr. Jerry Sexton
New Mexico Oil Conservation Division
P.O. Box 1980
Hobbs, NM 88240

Dear Mr. Sexton:

The MCA Unit Agreement requires approval by the Bureau of Land Management and the Commissioner of Public Lands in order to amend the Plan of Operation to permit the employment of Enhanced Oil Recovery techniques in the MCA Unit area. Conoco Inc. submitted a revised Plan of Operation to the above named agencies to allow a proposed CO₂ project to be initiated.

We received notice from the Commissioner of Public Lands on November 6, 1987 that the Commissioner is approving the revised Plan of Operation contingent to like approval of the Bureau of Land Management and also the New Mexico Oil Conservation Division.

Consequently, we request your review and concurrence on the attached Plan of Operation.

Yours very truly,


R. E. Irelan

CLT/dh
Attachment

SUPPLEMENTAL AND AMENDATORY AGREEMENT TO
MALJAMAR COOPERATIVE AGREEMENT
(Supplement No. 5)
I Sec. No. 341

PLAN OF OPERATION

Mr. F. Cherry
Bureau of Land Management
1717 W. 2nd st.
P.O. Box 1397
Roswell, NM 88201

Mr. Floyd Prando
Commissioner of Public Lands
P.O. Box 1148
Santa Fe, NM 87501

Gentlemen:

Conoco Inc., Operator for the MCA Unit, submits herein a revised Plan of Operation in accordance with Section X of the captioned agreement. This revised Plan of Operation calls for the addition of Enhanced Oil Recovery (EOR) techniques to the currently approved waterflood operations.

The Maljamar Cooperative Agreement (Supplement No. 5) contemplates that any one or more various EOR techniques may be undertaken with the objective of maintaining a desired rate of Participating Area production, utilizing the most efficient injection rates, pressures and well injection patterns calculated to most effectively recover the fully unitized substances within the fully unitized formations.

The Operator believes that the accomplishment of the foregoing objective will best be obtained by implementing EOR operations within the MCA Unit. The initial step in this program will consist of a CO₂ flood operation on less than all of the Participating Area which can be systematically extended to additional portions of the Unit in order to maintain the desired rate of production. The waterflood program will continue in those areas not affected by CO₂ operations.

In order to determine the most efficient injection rates, pressure and injection pattern for the recovery of the fully unitized substances, Operator conducted a 5-acre inverted 5-spot CO₂ Injection Pilot Test between 1981 and 1986. Actual CO₂ injection occurred between May and December 1983. Information obtained from the pilot provided a calibration basis for the miscible-flood simulator used for expansion predictions to develop field scale projections. These reservoir evaluations and predictions form the basis of the current proposal to progressively extend

CO₂ flooding into 3920 acres of the 8040 acre MCA Unit. The CO₂ project is to be implemented in successive stages such that the sections with the longest operational life are started early, so that total project life is not uneconomically lengthened.

It is proposed that the initial stage of operation proceed as follows:

Drilling and Conversion of Wells for Injection

Initially, each affected well in the CO₂ flood area is to be worked over prior to CO₂ injection. The primary objectives of the well work are to complete all floodable CO₂ pay horizons, repair damaged well bores, and to install downhole equipment suitable for CO₂ injection and production. Pattern conversions from the current 80 acre inverted nine spot waterflood are envisioned. Pattern changes, and drilling and/or conversion of producers and injectors, will be implemented as conditions warrant in keeping with sound engineering principles.

First stage CO₂ injection will commence in early 1989 as the well work program progresses and the CO₂ facilities become operational. The MCA CO₂ Project is designed for continuous injection of CO₂ followed by a post flush water slug rather than alternating cycles of CO₂ and water injection.

Construct CO₂ Supply Line

A third-party constructed and owned CO₂ supply line to be extended to MCA in 1988 will traverse some 45 miles from the source point near Tatum in Lea County, NM to the MCA Unit. The line will be sized to adequately deliver a contract quantity of 50 MMCFD plus any reasonable additional demand requirements. Estimated purchased CO₂ requirements (180 BCF) for the project have been secured over a 10-15 year period.

Install Injection System

A new injection piping system will be installed to handle both CO₂ injection and subsequent post brine injection. The piping metallurgy initially can be bare carbon steel in long duration (17 years) CO₂ injection stages to be replaced with internally coated carbon steel for post brine injection. In short duration (4 years) CO₂ injection stages, internally coated carbon steel or cement lined piping will be used. The piping system is designed to handle maximum surface injection pressures of 2500 psi. Normal average surface injection pressure will be under 2200 psi.

As the CO₂ flood progresses, significant quantities of CO₂ appear in the produced gas. CO₂ recycle facilities will gather the high CO₂ content produced gas from the production batteries, and compress and dehydrate the gas for reinjection into the reservoir. The design of the CO₂ recycle

facility is based on complete recycle of all produced gas from the CO₂ flood areas. However, this system will be designed to allow future addition of hydrocarbon-CO₂ separation if this appears worthwhile.

The capability of installing additional compressors, should CO₂ injection exceed the current 50 MMCSFD design will be provided.

The CO₂ laden produced gas will be segregated from the waterflood produced gas at the MCA batteries and directed through a low pressure gas gathering system to the CO₂ recycle facility. The dehydrated, compressed (2200 psig) gas will be commingled with the purchased CO₂ and directed to the CO₂ injection system.

In order to monitor and control the progress of the CO₂ flood, both flow measurement and control of the CO₂ injection rates is provided at each satellite header.

Revised Production System

The current MCA production batteries in the CO₂ flood area will be modified to process the increased CO₂ flood production rates. As redesigned, the produced fluid from each production header flows to a dedicated processing train. After metering, each battery's water streams combine and flow to the associated water injection station and each battery's oil streams combine and flow to oil storage. The existing oil storage tanks and LACT unit at each battery are adequate for the CO₂ flood production rates. After metering, the vapor streams from each battery's tertiary production train(s) combine and flow to the CO₂ compression/dehydration facilities. The secondary vapor production flows to the Maljamar Gas Plant. The vapor recovery unit discharge can be directed to either the Maljamar Gas Plant or the CO₂ compression/dehydration facilities. Because of increased capacity and discharge pressure requirements, new vapor recovery units (VRU) will be planned for at each battery.

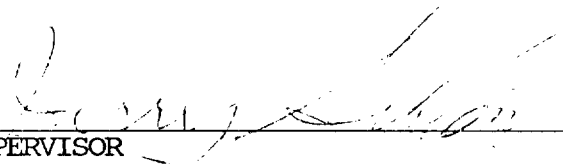
Future EOR Operations

This Plan of Operation is published to provide approval not only to do all things and perform all tasks necessary for CO₂ injection in particular, but also for all EOR techniques/projects in general which may be deemed advisable in the future. As spoken to in Article X of Supplement No. 5, the Commissioner and the Supervisor have authorized the Operator to "inject into the unitized formation, through any well or wells completed therein, brine, water, air, gas, oil or other liquid hydrocarbons, and any one or more other substances, whether produced from the Participating Area or not, and that the location of input wells and the rates of injection therein and the rate of production shall be governed by standards of good geologic and petroleum engineering practices and conservation methods."

Plan of Operation
Page 4

Conoco Inc., as Operator for the MCA Unit, commits the current on-going waterflood, proposed CO₂ flood, and future EOR projects to this Plan of Operation in keeping with sound engineering principles, regulatory requirements, environmental considerations, and conservation practices.

APPROVED:

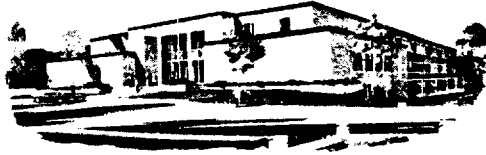


SUPERVISOR
NEW MEXICO OIL CONSERVATION DIVISION

11-20-87
DATE

State of New Mexico

#2718



W.R. HUMPHRIES
COMMISSIONER

Commissioner of Public Lands

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

November 1, 1990

Conoco Inc.,
10 Desta Drive West
Midland, TX 79705-9982

Attn: Land Department

Re: Maljamar Cooperative Agreement
Lea County, New Mexico
1990 Plan of Development

Gentlemen:

The Commissioner of Public Lands this date approved the 1990 Plan of Development for the Maljamar Cooperative Unit. Our approval is subject to like approval by all other appropriate agencies. Please forward to this office current copies of both Exhibits A & B.

The possibility of drainage by wells outside of the Unit Area and the need for further development may exist. You will be contacted at a later date regarding these possibilities.

If we may be of further help, please do not hesitate to contact Clyde Langdale at (505) 827-5791.

Sincerely,

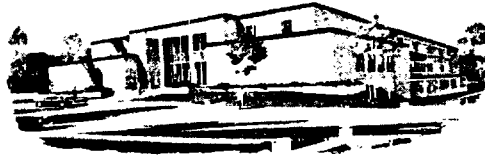
W. R. HUMPHRIES

BY: *Floyd O. Prando*

Floyd O. Prando, Director
Oil, Gas & Minerals Division

cc: OCD
Unit Corresp.
Unit POD

State of New Mexico



W.R. HUMPHRIES
COMMISSIONER

Commissioner of Public Lands

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

October 5, 1990

Conoco Inc.,
726 East Michigan
P.O. Box 460
Hobbs, NM 88241

Attn: David C. Strople, Land Supervisor

Re: Maljamar Cooperative Agreement
Lea County, New Mexico
1990 Plan of Development

Dear Mr. Strople:

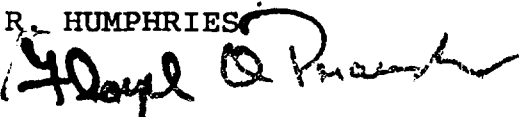
The Commissioner of Public Lands this date approved the 1990 Plan of Development for the Maljamar Cooperative Unit. Our approval is subject to like approval by all other appropriate agencies. Please forward to this office current copies of both Exhibits A & B.

The possibility of drainage by wells outside of the Unit Area and the need for further development may exist. You will be contacted at a later date regarding these possibilities.

If we may be of further help, please do not hesitate to contact Clyde Langdale at (505) 827-5791.

Sincerely,

W. R. HUMPHRIES

BY: 
Floyd O. Prando, Director
Oil, Gas & Minerals Division

cc: OCD
Unit Corresp.
Unit POD

GOVERNOR
EDWIN L. MECHEM
CHAIRMAN

State of New Mexico
Oil Conservation Commission

LAND COMMISSIONER
E. S. JOHNNY WALKER
MEMBER



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

P. O. BOX 871
SANTA FE

December 31, 1962

Mr. Jason Kellahin
Kellahin & Fox
Attorneys at Law
Post Office Box 1713
Santa Fe, New Mexico

Re: Case No. 2718
Order No. R-2403
Applicant:
Continental Oil Company

Dear Sir:

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

Very truly yours,

A. L. PORTER, Jr.
Secretary-Director

ir/

Carbon copy of order also sent to:

Hobbs OCC x

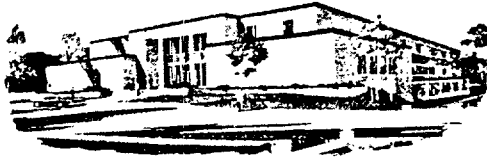
Artesia OCC

Aztec OCC

OTHER



W.R. HUMPHRIES
COMMISSIONER



Commissioner of Public Lands

SLO REF NO. OG-558

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

November 6, 1987

Conoco, Inc.
ATTENTION: Mr. R. E. Ireland
P. O. Box 460
Hobbs, New Mexico 88240

Re: Revised Plan of Operation
Maljamar Cooperative Agreement
Lea County, New Mexico

Gentlemen:

The Commissioner of Public Lands has this date approved your Revised Plan of Operator for the Maljamar Cooperative Repressuring Agreement, Lea County, New Mexico. Your revised Plan of Operation calls for the addition of Enhanced Oil Recovery (EOR) techniques to the currently approved waterflood operations.

Our approval is subject to like approval by the New Mexico Oil Conservation Division and the Bureau of Land Management.

Enclosed is an approved copy for your files.

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

BY: *Floyd O. Prando*
FLOYD O. PRANDO, Director
Oil and Gas Division
(505) 827-5744

WRH/FOP/pm
encls.

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

Handwritten notes and signature:

Handwritten signature: *[Signature]*

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MALJAMAR FIELD CUMULATIVE OIL, WATER & GAS PRODUCTION

LAST DATE, 1964

Company, Lease & Well No.	I T	S. P. & R.	Oil Production										G Mo. Total		Cumulative Prod. to 1-1-65		Water Production	
			July	Aug.	Sept.	Oct.	Nov.	Dec.	G Mo.	Prod.	Avg. Mo.	Prod.	G Mo.	Prod.	to 1-1-65	Prod.	to 1-1-65	Prod.

CONTINENTAL OIL COMPANY

MCA Unit	1	B	17-17-32	21,841	84	76	97	39	44	69	409	22,253	-	-	5	-	-
MCA Unit	2	A	17-17-32	50,324	62	56	-	-	-	-	118	60,442	-	-	-	-	-
MCA Unit	3	D	16-17-32	36,841	-	-	-	-	-	-	-	36,841	-	-	8	-	-
MCA Unit	4	G	16-17-32	13,513	78	78	79	73	90	100	498	14,011	349	.701	1,4	-	-
MCA Unit	5	E	16-17-32	91,175	105	106	106	98	120	100	635	91,810	-	-	-	-	-
MCA Unit	6	H	17-17-32	30,468	-	-	-	-	-	-	-	30,468	-	-	-	-	-
MCA Unit	7	F	17-17-32	24,064	63	56	72	30	33	-	254	24,318	-	-	7	-	-
MCA Unit	8	I	17-17-32	16,335	-	-	-	-	-	-	-	16,335	-	-	-	-	-
MCA Unit	9	M	15-17-32	103,153	126	133	151	127	109	71	717	103,870	-	-	-	-	-
MCA Unit	10	P	16-17-32	258,626	326	473	450	431	431	418	2,529	261,155	242	.096	1,9	-	-
MCA Unit	11	O	16-17-32	140,675	251	278	265	253	253	246	1,546	142,221	484	.313	1,8	-	-
MCA Unit	12	N	16-17-32	60,671	78	78	79	73	90	100	498	61,169	30	.060	-	-	-
MCA Unit	13	M	16-17-32	51,563	-	-	-	-	-	-	-	51,563	-	-	-	-	-
MCA Unit	14	P	17-17-32	-	187	-	-	-	-	-	187	187	-	-	-	-	-
MCA Unit	15	N	17-17-32	143,742	490	460	474	450	446	453	2,773	146,515	-	-	3	-	-
MCA Unit	16	W	17-17-32	61,765	-	-	-	-	-	-	-	61,765	-	-	4	-	-
MCA Unit	17	M	18-17-32	83,970	187	119	139	168	136	120	869	84,839	-	-	-	-	-
MCA Unit	18	D	19-17-32	134,425	74	78	84	82	92	102	512	134,937	-	-	9	-	-
MCA Unit	19	C	19-17-32	53,042	130	136	147	143	162	228	946	53,988	-	-	-	-	-

Company, Lease & Well No.	I T	S. T. & R.	Oil Production												6 Mo. Cum.		
			Cumulative to 7-1-64	July	Aug.	Sept.	Oct.	Nov.	Dec.	6 Mo. Total	Cumulative to 1-1-65	6 Mo. Prod. Bbls.	6 Mo. Avg. Wor	To 7-1-66			

CONTINENTAL OIL COMPANY (CON'T.)

MCA Unit	23	C	20-17-32	270,286	1,153	1,083	1,116	1,058	1,049	1,133	6,592	276,878	-	-			
MCA Unit	24	B	20-17-32	302,814	1,225	1,166	1,112	972	1,082	1,116	6,673	309,487	-	-			
MCA Unit	25	A	20-17-32	231,072	398	378	361	761	848	998	3,744	234,816	-	-			
MCA Unit	26	D	21-17-32	174,647	236	372	352	421	413	409	2,203	176,850	-	-			
MCA Unit	27	C	21-17-32	575,298	1,277	1,255	1,276	1,527	1,499	1,610	8,444	583,742	394	.047	9	1,7	2
MCA Unit	28	B	21-17-32	574,595	1,230	1,364	1,297	1,239	1,239	1,179	7,548	582,143	-	-			
MCA Unit	29	A	21-17-32	372,973	-	-	-	-	-	-	-	372,973	-	-			
MCA Unit	30	D	22-17-32	308,560	226	251	238	227	227	319	1,488	310,048	75	.050	11,7	58,0	1,6
MCA Unit	31	D	23-17-32	66,057	112	105	87	101	103	127	635	66,692	-	-			
MCA Unit	32	C	23-17-32	36,209	56	53	44	50	52	95	350	36,559	-	-			
MCA Unit	33	G	23-17-32	45,485	-	-	-	-	-	-	-	45,485	-	-			
MCA Unit	34	F	23-17-32	54,132	-	-	-	-	-	-	-	54,132	-	-			
MCA Unit	35	E	23-17-32	132,992	168	158	131	152	155	127	891	133,883	-	-			
MCA Unit	36	H	22-17-32	90,305	132	119	150	124	125	206	856	91,161	-	-			
MCA Unit	37	G	22-17-32	92,960	105	95	120	99	100	137	656	93,616	-	-			
MCA Unit	39	F	22-17-32	101,764	158	143	180	149	150	138	918	102,682	-	-			
MCA Unit	40	E	22-17-32	87,054	402	446	424	405	405	491	2,573	89,627	15	.006	1,8	1,8	5
MCA Unit	42	H	21-17-32	462,668	1,180	1,309	1,244	1,189	1,188	1,253	7,363	470,031	1,849	.251	8,4	8,4	2,1
MCA Unit	43	G	21-17-32	140,674	226	251	238	227	227	270	1,439	142,113	290	.202	5,7	5,7	2,1
MCA Unit	45	F	21-17-32	189,093	1,371	1,348	1,276	1,527	1,499	1,507	8,528	197,621	728	.085	4,3	4,3	2,1
MCA Unit	46	E	21-17-32	151,887	497	603	615	739	723	664	3,841	155,728	-	-			

PARALIZING WELLS

CONTINENTAL OIL COMPANY (CON'T.)

Company, Lease & Well No.	I T	S. T. & R.	to	Cumulative		Oil Production					O Mo.		Cumulative Pro	
				to	7-1-64	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total	to 1-1-65	Rbl
MCA Unit	72	I	22-17-32		148,541	149	155	150	140	150	150	904	149,545	
MCA Unit	73	K	22-17-32		126,778	289	262	331	273	275	240	1,670	128,448	
MCA Unit	74	J	22-17-32		221,081	447	405	511	422	424	412	2,621	223,702	
MCA Unit	75	P	21-17-32		178,698	241	280	259	328	329	419	1,826	180,464	
MCA Unit	76	K	23-17-32		159,129	257	254	244	229	247	254	1,405	170,614	
MCA Unit	77	K	23-17-32		37,220	73	70	70				212	37,508	
MCA Unit	78	J	23-17-32		45,395	-	-	-	-	-	-	-	45,395	
MCA Unit	79	I	23-17-32		126,135	78	282	282	403	394	-	1,424	127,420	
MCA Unit	80	P	23-17-32		49,336	-	-	-	-	-	-	-	49,336	
MCA Unit	81	O	23-17-32		101,906	300	262	277	260	261	294	1,709	103,625	
MCA Unit	82	N	23-17-32		88,200	-	-	-	-	-	-	-	88,200	
MCA Unit	83	M	23-17-32		45,503	417	375	374	488	444	-	2,098	47,601	
MCA Unit	84	P	22-17-32		220,096	362	420	389	492	448	670	2,781	222,877	
MCA Unit	85	M	22-17-32		162,479	190	221	204	259	235	-	1,109	163,588	
MCA Unit	87	N	22-17-32		255,805	478	498	481	449	480	508	2,894	258,699	
MCA Unit	88	M	22-17-32		290,287	1,312	1,370	1,322	1,235	1,322	1,394	7,955	298,242	
MCA Unit	89	P	21-17-32		259,320	1,013	1,053	1,022	979	1,021	1,045	5,125	264,395	
MCA Unit	91	O	21-17-32		151,247	562	556	522	276	547	195	2,658	153,905	
MCA Unit	92	N	21-17-32		269,216	405	804	755	1,061	1,002	920	4,947	274,163	
MCA Unit	93	M	21-17-32		240,479	156	-	-	450	425	1,031	2,062	242,541	
MCA Unit	94	P	20-17-32		292,920	999	989	929	1,029	972	864	5,782	298,702	

Company, Lease & Well No.	I T	S.T.&R.	Cumulative to 7-1-64	Oil Production												O No. Prod, Bbls.	O No. Avg. WOR	O No. Cum. To 7-1-64
				July	Aug.	Sept.	Oct.	Nov.	Dec.	O No. Total	Cumulative to 1-1-65							

CONTINENTAL OIL COMPANY (CON'T.)

MCA Unit	123	D	26-17-32	131,137	182	147	104	247	288	238	1,206	132,343	-	-	-
MCA Unit	124	C	26-17-32	79,307	181	144	103	248	287	268	1,231	80,538	-	-	-
MCA Unit	125	B	26-17-32	143,326	160	166	165	159	161	225	1,036	144,362	-	-	-
MCA Unit	126	A	26-17-32	82,797	214	141	125	131	128	-	739	83,536	-	-	274
MCA Unit	127	D	25-17-32	139,116	110	105	103	108	106	162	694	139,810	-	-	3
MCA Unit	128	F	25-17-32	28,279	-	-	-	-	-	-	-	28,279	-	-	-
MCA Unit	129	G	25-17-32	139,846	192	184	180	189	186	194	1,125	140,971	-	-	-
MCA Unit	130	G	25-17-32	28,140	-	-	-	-	-	-	-	28,140	-	-	-
MCA Unit	131	B	25-17-32	118,539	137	131	129	135	133	-	665	119,204	-	-	24
MCA Unit	132	A	25-17-32	120,287	165	157	154	162	160	130	928	121,215	270	.291	1,416
MCA Unit	133	D	30-17-32	120,281	819	866	849	567	559	680	4,340	132,621	-	-	4
MCA Unit	134	C	30-17-32	61,549	-	-	-	-	-	-	-	61,549	-	-	309
MCA Unit	135	F	30-17-32	66,369	-	-	-	-	-	-	-	66,369	-	-	1,236
MCA Unit	136	E	30-17-32	137,602	247	236	232	108	106	130	1,059	138,661	483	.456	15,479
MCA Unit	137	H	25-17-32	170,554	521	577	746	783	772	939	4,338	174,892	666	.154	4,988
MCA Unit	138	G	25-17-32	204,444	240	656	643	675	666	615	3,495	207,939	-	-	-
MCA Unit	139	F	25-17-32	220,057	631	603	592	621	612	518	3,577	223,634	54	.015	-
MCA Unit	140	E	25-17-32	190,885	274	262	257	270	266	356	1,685	192,570	-	-	-
MCA Unit	141	H	26-17-32	156,796	783	749	666	696	680	860	4,434	161,230	-	-	-
MCA Unit	142	G	26-17-32	101,432	668	693	689	664	671	618	4,003	105,435	-	-	1,654
MCA Unit	143	F	26-17-32	169,369	313	282	281	308	334	1,011	2,529	171,898	-	-	-
MCA Unit	144	E	26-17-32	46,640	-	-	-	-	-	-	-	46,640	-	-	-

Company, Lease & Well No.	I T	S. T. & R.	Oil Production										6 Mo. Total	Cumulative to 1-1-65	6 Mo. Prod. Bbls.	6 Mo. Avg. WOR	Cum. To 7-1-64
			Cumulative to 7-1-64	July	Aug.	Sept.	Oct.	Nov.	Dec.								

PARTICIPATING WELLS

CONTINENTAL OIL COMPANY (CONT.)															
MCA Unit	145	H	22-17-32	175,541	388	383	315	346	464	574	2,470	178,011	-	-	-
MCA Unit	146	G	27-17-32	344,707	930	917	914	858	859	1,448	5,926	350,633	-	-	-
MCA Unit	147	F	27-17-32	273,941	771	760	758	711	712	569	4,281	278,222	-	-	5,744
MCA Unit	148	E	27-17-32	31,225	-	-	-	-	-	-	-	31,225	-	-	-
MCA Unit	149	E	27-17-32	195,890	1,063	1,048	1,045	980	981	1,034	6,151	202,041	-	-	-
MCA Unit	150	H	28-17-32	288,588	802	719	674	773	749	705	4,422	293,010	-	-	-
MCA Unit	151	G	28-17-32	317,459	1,560	1,545	1,451	1,276	1,518	1,366	8,716	326,175	-	-	-
MCA Unit	152	F	28-17-32	293,236	1,925	1,916	1,799	1,777	1,882	2,592	11,901	305,137	-	-	-
MCA Unit	153	E	28-17-32	196,758	1,030	1,056	958	1,287	1,002	1,004	6,337	203,095	-	-	248
MCA Unit	154	H	29-17-32	298,779	624	618	580	551	607	530	3,510	302,289	-	-	188
MCA Unit	155	G	29-17-32	274,543	463	590	570	543	573	468	3,207	277,750	-	-	-
MCA Unit	157	F	29-17-32	284,067	229	231	219	206	227	303	1,415	285,482	-	-	-
MCA Unit	158	E	29-17-32	183,728	622	628	593	561	616	760	3,780	187,508	-	-	-
MCA Unit	159	H	30-17-32	243,959	484	498	457	497	357	515	2,808	246,767	-	-	-
MCA Unit	160	G	30-17-32	284,970	404	405	393	370	368	387	2,327	287,297	-	-	356
MCA Unit	162	F	30-17-32	196,751	508	435	373	349	346	438	2,449	199,200	-	-	456
MCA Unit	163	E	30-17-32	208,164	412	354	628	591	584	739	3,308	211,472	-	-	1,096
MCA Unit	164	L	30-17-32	166,959	533	521	444	426	497	564	2,985	169,944	576	.193	3,253
MCA Unit	165	K	30-17-32	128,866	127	124	106	102	118	232	809	129,675	216	.267	157
MCA Unit	166	J	30-17-32	176,473	291	289	273	305	303	388	1,849	178,322	792	.428	2,921
MCA Unit	167	I	30-17-32	162,095	125	124	117	131	130	156	783	162,878	367	.469	2,533
MCA Unit	169	L	29-17-32	213,215	606	565	284	276	267	258	2,256	215,471	243	.108	3,777

Company, Lease & Well No.	N I T	S.T.&R.	Oil Production					6 Mo.		Cumulative to 1-1-65	Prod. Bbls.	6 Mo. Cum.	
			July	Aug.	Sept.	Oct.	Nov.	Dec.	Total			Avg. WOR	To 7-1-64

CONTINENTAL OIL COMPANY (CON'T.)

MCA Unit	170	F	29-17-32	246,030	957	892	851	830	803	807	5,140	251,170	276	.054	770
MCA Unit	171	J	29-17-32	267,440	707	639	618	589	621	728	3,902	271,342	-	-	246
MCA Unit	172	O	29-17-32	125,110	408	368	356	340	358	312	2,142	127,252	-	-	453
MCA Unit	173	I	29-17-32	172,238	218	197	190	180	192	130	1,107	173,345	-	-	274
MCA Unit	175	L	28-17-32	299,694	647	579	543	623	604	634	3,630	303,324	728	.201	9,444
MCA Unit	176	K	28-17-32	255,494	647	579	543	623	604	493	3,489	258,983	-	-	-
MCA Unit	178	J	28-17-32	296,275	1,372	1,229	1,413	1,620	1,570	1,527	8,731	305,006	-	-	921
MCA Unit	179	I	28-17-32	320,506	1,552	1,670	1,565	1,271	1,232	1,198	8,488	328,994	-	-	4,796
MCA Unit	180	L	27-17-32	256,219	1,488	1,467	1,463	1,372	1,374	1,319	8,483	264,702	-	-	-
MCA Unit	181	K	27-17-32	295,625	957	943	941	882	883	957	5,563	301,188	-	-	-
MCA Unit	183	O	27-17-32	162,779	1,116	1,100	1,097	1,029	1,030	1,138	6,510	169,289	-	-	-
MCA Unit	184	J	27-17-32	280,473	2,790	2,751	2,743	2,572	2,576	2,689	16,121	296,594	-	-	-
MCA Unit	185	J	27-17-32	61,235	-	-	-	-	-	-	-	61,235	-	-	-
MCA Unit	186	I	27-17-32	301,176	1,488	1,467	1,463	1,372	1,374	1,525	8,689	309,865	-	-	-
MCA Unit	187	L	26-17-32	267,180	327	319	355	373	483	659	2,516	269,696	-	-	-
MCA Unit	188	K	26-17-32	155,007	254	248	276	289	375	208	1,650	156,657	-	-	2,349
MCA Unit	189	J	26-17-32	189,939	417	407	454	474	618	486	2,856	192,795	724	.254	11,185
MCA Unit	190	L	25-17-32	201,012	960	918	901	946	932	971	5,628	206,640	1,551	.276	38,180
MCA Unit	191	K	25-17-32	59,927	494	472	463	486	479	421	2,815	62,742	450	.160	-
MCA Unit	192	K	25-17-32	195,798	319	211	206	216	212	65	1,229	197,027	693	.564	20,269
MCA Unit	193	J	25-17-32	32,039	-	-	-	-	-	-	-	32,039	-	-	-
MCA Unit	194	J	25-17-32	211,854	408	472	463	486	479	518	2,826	214,680	990	.350	13,557

Company, Lease & Well No.	I	T	S.T.&R	Cumulative to 7-1-64	July	Aug.	Sept.	Oct.	Nov.	Dec.	6 Mo. Total	Cumulative to 1-1-65	6 Mo. Prod. Bbls.	6 Mo. Avg. WOR	6 Mo. Cum. To 7-1-64
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CONTINENTAL OIL COMPANY (CON'T.)

MCA Unit	195	I	25-17-32	48,180	-	-	-	-	-	-	-	48,180	-	-	891
MCA Unit	196	I	25-17-32	270,057	1,454	1,758	1,802	1,850	1,867	2,226	10,997	281,054	793	.072	15,618
MCA Unit	197	E	30-17-32	24,315	-	-	-	-	-	-	-	24,315	-	-	-
MCA Unit	198	E	30-17-32	243,946	783	814	798	837	823	648	4,705	248,651	1,309	.278	21,530
MCA Unit	199	K	30-17-32	194,961	521	499	489	513	506	291	2,819	197,780	720	.255	2,812
MCA Unit	200	P	25-17-32	37,309	-	-	-	-	-	-	-	37,309	-	-	-
MCA Unit	201	N	23-17-32	153,505	200	266	296	310	403	659	2,134	155,639	-	-	-
MCA Unit	202	M	26-17-32	280,220	290	283	316	330	430	555	2,205	282,425	300	.136	120
MCA Unit	203	P	27-17-32	242,300	372	576	575	539	540	284	2,886	245,186	-	-	-
MCA Unit	204	O	27-17-32	27,901	-	-	-	-	-	-	-	27,901	-	-	-
MCA Unit	205	N	27-17-32	309,958	955	945	941	564	564	595	4,564	314,522	-	-	-
MCA Unit	206	M	27-17-32	300,040	983	969	967	907	909	904	5,639	305,679	-	-	-
MCA Unit	207	P	28-17-32	309,717	905	812	761	872	846	635	4,831	314,548	-	-	-
MCA Unit	208	O	28-17-32	142,491	543	487	456	847	821	799	3,953	146,444	-	-	-
MCA Unit	209	N	28-17-32	260,712	543	487	456	523	508	287	2,804	263,516	-	-	-
MCA Unit	210	M	28-17-32	254,307	1,604	1,438	1,348	1,098	1,063	1,317	7,868	262,175	-	-	-
MCA Unit	211	P	29-17-32	264,777	1,170	1,056	1,022	974	1,027	1,273	6,522	271,299	-	-	423
MCA Unit	213	N	29-17-32	175,907	447	416	397	387	375	344	2,366	177,873	559	.236	3,185
MCA Unit	214	M	29-17-32	142,044	255	236	511	498	482	326	2,310	144,354	475	.206	3,405
MCA Unit	215	P	30-17-32	59,408	83	82	78	87	87	130	547	59,955	734	1.342	4,254
MCA Unit	216	O	30-17-32	86,960	375	372	350	393	391	182	2,063	89,023	408	.198	3,692
MCA Unit	217	N	30-17-32	153,426	305	297	254	244	284	332	1,716	155,142	216	.126	1,340

Company, Lease & Well No.	I T	S.T.&R.	Oil Production												6 Mo. Total	Cumulative Prod. Bbls.	6 Mo. Avg. WOR	6 Mo. Cum. To 7-1-64
			Cumulative to 7-1-64	July	Aug.	Sept.	Oct.	Nov.	Dec.									
PARTICIPATING WELLS																		

CONTINENTAL OIL COMPANY (CON'T.)

MCA Unit	218	M	30-17-32	86,008	279	273	233	223	260	199	1,467	87,475	308	.210	673
MCA Unit	219	C	31-17-32	23,040	76	74	63	61	71	100	445	23,485	952	2.139	10,585
MCA Unit	220	D	33-17-32	152,519	86	84	70	68	68	-	376	152,895	-	-	-
MCA Unit	221	C	33-17-32	153,995	229	225	187	182	183	172	1,178	155,173	-	-	3,177
MCA Unit	223	B	33-17-32	174,387	315	309	257	409	411	515	2,216	176,603	-	-	3,751
MCA Unit	224	A	33-17-32	176,808	172	169	140	136	137	173	927	177,735	-	-	1,504
MCA Unit	226	D	34-17-32	168,686	173	159	165	171	182	-	850	169,536	-	-	3,393
MCA Unit	227	C	34-17-32	130,574	223	209	205	191	242	218	1,288	131,862	93	.072	4,694
MCA Unit	228	B	34-17-32	89,424	192	180	175	163	208	218	1,136	90,560	453	.399	22,218
MCA Unit	229	E	34-17-32	183,688	87	79	83	86	92	197	624	184,312	1,092	1.750	52,421
MCA Unit	230	A	33-17-32	195,742	487	478	397	385	388	429	2,564	198,306	546	.213	3,616
MCA Unit	231	G	33-17-32	32,393	-	-	-	-	-	-	-	32,393	-	-	-
MCA Unit	232	F	33-17-32	158,131	516	507	420	409	411	429	2,692	160,823	-	-	3,949
MCA Unit	233	E	33-17-32	137,205	-	-	-	-	-	-	-	137,205	-	-	-
MCA Unit	234	N	21-17-32	12,481	1,218	1,732	1,625	1,838	1,702	2,677	10,792	23,273	-	-	-
MCA Unit	235	F	28-17-32	3,495	-	-	-	-	-	-	-	3,495	-	-	-
TOTAL PARTICIPATING				39,444,077	107,992	110,040	106,819	106,377	107,624	113,045	651,897	40,095,974	26,208	.040	515,653

Company, Lease & Well No.	I T	S.T.&R.	Cumulative to 7-1-64	July	Aug.	Sept.	Oct.	Nov.	Dec.	6 Mo. Total	Cumulative 1-1-65	6 Mo. Prod. Bbls.	6 Mo. Avg. WOR	To 7-1-64
NON-PARTICIPATING WELLS														
CARPER DRILLING COMPANY														
Simon N	IP3	O	29-17-32	9,057	-	-	-	-	-	-	9,057	-	-	-
CONTINENTAL OIL COMPANY														
Balish "A"	2	E	22-19-32	107,368	-	-	-	-	-	-	107,368	-	-	-
Balish "B"	3	B	22-17-32	27,792	281	296	331	324	266	282	1,780	29,572	-	-
	4	A	22-17-32	6,396	47	49	55	54	44	-	249	6,645	-	-
LEASE TOTAL				34,188	328	345	386	378	310	282	2,029	36,217	-	-
King B	1	D	17-17-32	15,455	-	-	-	-	-	-	-	15,455	-	-
Miller A	7	M	23-17-32	84,248	-	-	-	-	-	-	-	84,248	-	-
Miller B	1	A	23-17-32	17,172	167	173	164	162	164	184	1,014	18,186	-	-
	5	H	23-17-32	51,813	-	-	-	-	-	-	-	51,813	-	-
LEASE TOTAL				68,985	167	173	164	162	164	184	1,014	69,999	-	-
Miller BX	1	F	14-17-32	22,656	111	115	109	108	110	48	601	23,257	-	-
	2	I	14-17-32	27,662	333	345	328	323	328	261	1,918	29,580	-	-
	3	H	14-17-32	19,945	84	87	82	81	82	190	606	20,551	-	-
	4	A	14-17-32	6,512	84	87	82	81	82	48	464	6,976	-	-
	5	O	14-17-32	14,873	251	260	246	243	247	237	1,484	16,357	-	-
	6	J	14-17-32	3,171	-	-	-	-	-	-	-	3,171	-	-
	7	G	14-17-32	9,993	251	260	246	243	247	190	1,437	11,430	129	.020
LEASE TOTAL				104,812	1,114	1,154	1,093	1,079	1,096	974	6,510	111,322	129	.020

Company, Lease & Well No.	I T	S. Y. & R.	Cumulative to 7-1-64	July	Aug.	Sept.	Oct.	Nov.	Dec.	O Mo. Total	Cumulative to 1-1-65	O Mo. Prod. Bbls.	O Mo. Ave. Wor	O Mo. Cum. To 7-1-64
NON-PARTICIPATING WELLS														

CONTINENTAL OIL COMPANY (CONT.)

Mitchell B	1	B	18-17-32	9,976	74	79	72	84	76	181	568	10,544	1,700	2.993	23,383
	3	G	17-17-32	12,681	72	78	72	84	78	90	474	13,155	-	-	232
	4	H	18-17-32	10,415	72	78	72	84	78	68	452	10,867	1,110	2.456	11,523
	5	J	18-17-32	9,266	145	156	144	168	158	113	884	10,150	1,663	1.881	11,707
	6	I	18-17-32	339	-	-	-	-	-	-	-	339	-	-	-
	7	L	17-17-32	28,699	169	182	169	196	183	135	1,034	29,733	1,124	1.087	12,904
	8	J	17-17-32	10,041	72	78	72	84	78	-	384	10,425	-	-	320
	9	O	17-17-32	18,616	193	209	193	224	210	181	1,210	19,826	8,318	6.874	82,893
	10	O	17-17-32	5,110	-	-	-	-	-	-	-	5,110	-	-	-
	12	P	18-17-32	4,754	72	78	72	84	78	45	429	5,183	-	-	-
	13	N	18-17-32	6,978	72	78	72	84	78	90	474	7,452	-	-	3,296
	19	K	17-17-32	970	193	209	193	226	210	113	1,144	2,114	1,665	1.455	1,140

LEASE TOTAL 117,845 1,134 1,225 1,131 1,318 1,229 1,016 7,053 124,898 15,580 2.209 147,398

Pearsall A 7 G 33-17-32 22,712 - - - - - - - 22,712 - - - - -

Pearsall BK 1 A 34-17-32 11,504 - - - - - - - - 11,504 - - - 3,983

State B 3 J 16-17-32 28,600 210 202 198 190 184 197 1,181 29,781 - - - - -

4 G 16-17-32 12,232 47 45 44 42 41 - 219 12,451 - - - - -

5 I 16-17-32 19,685 140 135 132 126 123 123 779 20,464 - - - - -

6 B 16-17-32 17,020 164 157 154 147 143 147 912 17,932 - - - - -

7 H 16-17-32 35,344 281 270 263 253 246 172 1,485 36,829 - - - - -

8 A 16-17-32 7,734 140 136 131 127 123 123 780 8,514 - - - - -

LEASE TOTAL 120,615 982 945 922 885 860 762 5,356 125,971 - - - - -

Company, Lease & Well No.	I T	S.T.&R.	Cumulative to 7-1-64	July	Aug.	Sept.	Oct.	Nov.	Dec.	6 Mo. Total	Cumulative to 1-1-65	6 Mo. Prod. q Bbls.	6 Mo. Avg. WOR	6 Mo. Cum. To 7-1-64
NON-PARTICIPATING WELLS														

CONTINENTAL OIL COMPANY (CON'T.)

Taylor	1	M	14-17-32	17,169	295	291	261	283	299	262	1,691	18,860	-	-
	2	L	14-17-32	18,596	295	291	261	283	298	174	1,602	20,198	-	-
	3	N	14-17-32	22,333	221	218	196	213	224	174	1,246	23,579	-	-
	4	K	14-17-32	20,968	221	218	196	213	224	233	1,305	22,273	-	-
	LEASE TOTAL			79,066	1,032	1,018	914	992	1,045	843	5,844	84,910	-	-

COMPANY TOTAL

766,798 4,757 4,860 4,610 4,814 4,704 4,061 27,806 794,604 15,709 .565 151,381

HUDSON & HUDSON

Hudson	1X	L	15-17-32	19,174	99	90	89	85	82	66	511	19,685	-	-
	2	J	15-17-32	4,798	99	89	89	84	81	67	509	5,307	-	-

COMPANY & LEASE TOTAL

23,972 198 179 178 169 163 133 1,020 24,992 - - -

KERSEY COMPANY

State A	1	A	32-17-32	70,917	46	32	32	33	63	65	271	71,188	-	-
	2	B	32-17-32	68,012	45	31	31	33	62	64	266	68,278	-	-
	3	D	32-17-32	7,904	-	-	-	-	-	-	-	7,904	-	835
	4	G	32-17-32	41,250	-	-	-	-	-	-	-	41,250	-	2,647
	5	H	32-17-32	80,338	105	97	95	81	78	89	545	80,883	-	68

COMPANY & LEASE TOTAL

268,421 196 160 158 147 203 218 1,082 269,503 - - 3,550

W. A. MONCRIEF

Johns B	2	A	35-17-32	15,563	-	-	-	-	-	-	-	15,563	-	-
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SEARS ET AL

Miller A	3	N	26-17-32	12,570	-	-	-	-	-	-	-	12,570	-	-
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DONOHUE, EDWARD G.

Company, Lease & Well No.	N I T	S.T.&R.	Oil Production												6 Mo. Total	6 Mo. Cumulative Prod. to 1-1-65	6 Mo. Avg. To WOR	Cum. To 7-1-64
			Cumulative to 7-1-64	July	Aug.	Sept.	Oct.	Nov.	Dec.									
NON-PARTICIPATING WELLS																		

TEXACO, INC.

Federal C	1	P	15-17-32	34,734	484	389	434	456	498	430	2,631	37,365	515	.196	1,345					
	2	I	15-17-32	27,302	248	289	216	243	231	219	1,446	28,748	541	.374	1,388					
COMPANY & LEASE TOTAL				62,036	732	678	650	699	669	649	4,077	66,113	1,057	.259	2,733					

WALLINGFORD & SMITH

State A	1	A	35-17-32	15,201	"	"	"	"	"	"	"	15,201	"	"	1,297					
TOTAL NON-PARTICIPATING				1,206,205	6,134	6,131	5,866	6,094	5,995	5,328	35,548	1,241,753	16,766	.472	158,986					
GRAND TOTAL				40,650,282	114,126	116,171	112,685	112,471	113,619	118,373	687,445	41,337,727	42,974	.063	674,639					

Company and Well	181 Days Injected	184 Days Injected	Daily Avg. 181 Days	Daily Avg. 184 Days	Pressures	Total Injected to
CONTINENTAL OIL COMPANY						
MCA Unit						
16	53,828	297	62,584	340	1090	1,147,667
38	41,374	229	27,693	151	1100	1,222,154
41	20,321	112	7,615	42	1003	688,053
41C	62,912	348	53,126	289	896	862,038
44	22,264	123	15,353	83	765	1,134,531
47	73,068	404	75,734	412	872	1,548,363
58	19,518	108	28,589	155	1171	781,901
58C	34,634	191	40,610	221	-	660,885
61	66,673	368	67,287	366	761	994,038
61C	51,897	287	61,948	337	666	999,988
64	168,272	930	78,381	426	784	1,251,766
64C	41,066	227	59,024	321	745	885,286
78	37,882	209	41,893	228	848	731,162
82	74,784	413	66,766	363	920	852,585
86	53,685	297	53,559	291	687	757,436
86C	54,378	300	59,668	324	1042	790,260
89	46,894	259	30,245	164	619	920,226
89C	72,771	402	40,986	223	727	1,160,434
96	7,360	41	1,092	6	881	816,618
96C	48,530	268	38,763	211	671	990,989
99	50,489	280	39,930	217	676	1,361,847
106	43,614	241	46,267	251	958	868,448
106C	62,860	347	62,248	338	860	1,153,281

Company and Well

	Total Injected	Daily Avg. 181 Days	Total Injected	Daily Avg. 184 Days	Pressures Datum	Total Injected to
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CONTINENTAL OIL COMPANY (CON'T.)

MCA Unit	113	-	-	-	-	1,002,915
	113C	-	-	-	-	983,093
	116	-	-	-	-	917,522
	116C	-	-	-	-	845,556
	128	48,735	269	12,474	68	930
	130	52,764	292	40,304	219	1096
	144	52,442	290	19,516	106	915
	148	24,020	133	20,494	111	862
	156	35,990	199	29,130	158	1186
	161	29,464	163	59,645	324	1061
	168	39,529	218	29,880	162	943
	174	43,504	240	48,795	265	910
	174C	54,446	301	59,093	321	861
	177	59,946	331	54,222	295	783
	182	58,013	321	48,998	266	900
	193	23,553	130	37,800	205	842
	204	71,593	396	60,019	326	759
	212	13,492	75	14,508	79	1239
	222	427	2	1,990	11	1070
	225	37,435	207	51,471	280	832
		1,854,427		1,647,700		45,671,816

Volumes Injected into Wells Converted to Producers
Volumes Injected into Yates Sand Horizon

Company and Well	January and June, 1903		July and December, 1904		November, 1904	Total Injected to
	Total	Daily Avg.	Total	Daily Avg.	Datum	
	Injected	181 Days	Injected	184 Days	Pressures	
<u>WATER INJECTION</u>						
<u>CONTINENTAL OIL COMPANY</u>						
MCA Unit	68	142,830	789	200,354	1089	369,309
	113	141,068	779	212,095	1153	380,651
	116	119,038	657	192,091	1044	334,543
	195	134,268	741	122,171	664	323,462
	197	40,994	226	66,493	361	989,714
	235	<u>143,390</u>	792	<u>207,583</u>	1128	<u>380,030</u>
		721,588		1,000,787		2,777,709

Datum Plane Pressure			Production			Injection Data			% Gas Retd. to Prod.		Net Gas Produced (M.C.F.)	
From	To	From Wells	To Wells	Loss/Gain	No. Wells	Oil (Barrels)	Gas (M.C.F.)	CF/B Ratio	No. Wells	Datum Plane Pressure	Gas Retd. (M.C.F.)	
M. C. A. AREA												
1-1-63	7-1-63	514	163	+ 26	260	718,849	3,369,293	4,687	32	991	1,615,955	48.0
7-1-63	1-1-64	540	163	- 10	235	705,706	3,448,186	4,886	32	948	1,678,860	48.7
1-1-64	7-1-64	540	163	+ 57	235	664,037	3,510,662	5,287	32	991	1,854,427	52.8
7-1-64	1-1-65	540	163	- 67	235	687,445	3,288,527	4,784	32	948	1,647,700	50.1
Discoveery	7-1-64	1350	163	-779	235	40,650,312	85,016,007	2,091	32	991	46,893,581	55.2
Discoveery	1-1-65	1350	163	-836	235	41,337,757	88,304,534	2,136	32	948	48,541,281	55.0
INJECTION AREA												
1-1-63	7-1-63	601	130	- 2	130	677,392	3,218,415	4,751	32	991	1,615,955	50.2
7-1-63	1-1-64	599	128	- 19	130	663,860	3,327,160	5,012	32	948	1,678,860	50.5
1-1-64	7-1-64	599	128	- 16	128	625,283	3,384,283	5,412	32	991	1,854,427	54.8
7-1-64	1-1-65	599	128	- 23	128	651,897	3,159,427	4,847	32	991	1,647,700	47.8
Discoveery	7-1-64	1350	128	-765	128	39,444,107	66,135,063	1,677	32	991	46,893,581	70.9
Discoveery	1-1-65	1350	128	-749	128	40,096,004	69,294,490	1,728	32	576	48,541,281	20.1
NON-INJECTION AREA												
1-1-63	7-1-63	409	97	+ 71	107	41,457	150,878	3,639	-	-	-	-
7-1-63	1-1-64	409	97	+ 70	107	41,846	121,026	2,892	-	-	-	-
1-1-64	7-1-64	480	97	-130	107	38,754	126,379	3,261	-	-	-	-
7-1-64	1-1-65	480	97	- 25	107	35,548	129,100	3,632	-	-	-	-
Discoveery	7-1-64	1350	97	-1071	107	1,206,205	18,880,944	15,653	-	-	-	-
Discoveery	1-1-65	1350	97	-941	107	1,241,753	19,010,044	15,309	-	-	-	-
MCA UNIT NO. 212												
1-1-63	7-1-63	561	4	- 60	6	15,309	66,671	4,355	11	1,146	7,654	1.1
7-1-63	1-1-64	501	4	- 59	6	20,349	110,722	5,441	11	1,006	21,268	1.9
1-1-64	7-1-64	501	4	- 88	6	14,898	96,454	6,474	11	1,195	13,492	14.0
7-1-64	1-1-65	413	4	- 14	6	15,198	108,397	7,132	11	1,239	14,508	13.3
Discoveery	7-1-64	1350	4	-1025	6	897,218	1,720,968	1,918	11	1,195	830,617	48.3
Discoveery	1-1-65	1350	4	-789	6	912,416	1,829,365	2,005	11	1,006	845,125	46.2
MCA UNIT NO. 156												
1-1-63	7-1-63	502	4	-	4	17,079	82,461	4,828	-	1,222	17,766	21.3
7-1-63	1-1-64	502	4	+127	4	14,390	109,451	7,606	-	1,118	25,066	22.9
1-1-64	7-1-64	502	4	- 41	4	12,148	99,250	8,170	-	1,222	35,990	36.2
7-1-64	1-1-65	461	4	+ 4	4	13,664	105,936	7,753	-	1,186	29,130	27.5
Discoveery	7-1-64	1350	4	-894	4	1,071,679	1,981,567	1,849	-	1,222	1,149,429	58.0
Discoveery	1-1-65	1350	4	-848	4	1,085,343	2,087,503	1,923	-	1,118	1,178,559	56.5
MCA UNIT NO. 908												
1-1-63	7-1-63	502	4	-	4	17,079	82,461	4,828	-	1,222	17,766	21.3
7-1-63	1-1-64	502	4	+127	4	14,390	109,451	7,606	-	1,118	25,066	22.9
1-1-64	7-1-64	502	4	- 41	4	12,148	99,250	8,170	-	1,222	35,990	36.2
7-1-64	1-1-65	461	4	+ 4	4	13,664	105,936	7,753	-	1,186	29,130	27.5
Discoveery	7-1-64	1350	4	-894	4	1,071,679	1,981,567	1,849	-	1,222	1,149,429	58.0
Discoveery	1-1-65	1350	4	-848	4	1,085,343	2,087,503	1,923	-	1,118	1,178,559	56.5

From	To	No. Wells	To	Loss/ Gain	No. Wells	Oil (Barrels)	Gas (M.C.F.)	CF/B Ratio	No. Wells	Datum Plane	Gas Retd. (M.C.F.)	Refd. to Prod.	Net Gas Produced (M.C.F.)
MCA UNIT NO. 161													
1-1-63	7-1-63	4	448	- 76	4	9,553	48,005	5,025	1	936	26,947	56.1	21,011
7-1-63	1-1-64	4	403	- 45	4	9,968	74,387	7,463	-	1,028	43,217	58.1	31,177
1-1-64	7-1-64	4	448	- 45	4	8,644	79,076	9,148	1	936	29,464	37.3	49,611
7-1-64	1-1-65	4	416	+ 13	4	7,434	72,594	9,765	1	1,061	59,645	82.2	12,946
Discovery	7-1-64	4	569	- 781	4	786,975	1,591,438	2,022	1	936	1,042,955	65.5	548,446
Discovery	1-1-65	4	524	- 826	4	794,409	1,664,032	2,095	1	1,028	1,102,600	66.3	561,441
MCA UNIT NO. 168													
1-1-63	7-1-63	4	382	- 141	4	13,845	57,540	4,156	-	966	25,552	44.4	31,988
7-1-63	1-1-64	4	387	+ 5	4	12,899	86,925	6,739	-	929	21,995	25.3	64,931
1-1-64	7-1-64	4	350	- 32	4	9,411	86,524	9,194	-	966	39,529	45.7	46,990
7-1-64	1-1-65	4	449	+ 99	4	9,627	93,587	9,721	-	943	29,880	31.9	63,706
Discovery	7-1-64	4	491	- 859	4	801,247	1,834,152	2,289	-	966	1,204,922	65.7	629,227
Discovery	1-1-64	4	523	- 827	4	810,874	1,927,739	2,377	-	929	1,234,802	64.1	692,931
MCA UNIT NO. 106													
1-1-63	7-1-63	4	609	- 60	4	17,962	144,493	8,044	-	916	50,665	35.1	93,826
7-1-63	1-1-64	4	614	+ 5	4	16,120	116,019	7,197	-	908	110,366	95.1	5,651
1-1-64	7-1-64	4	577	- 32	4	14,953	137,057	9,166	-	916	106,474	77.7	30,583
7-1-64	1-1-65	4	603	+ 26	4	14,512	119,195	8,214	-	909	108,515	91.0	10,688
Discovery	7-1-64	4	577	- 773	4	987,848	2,326,065	2,355	-	916	2,109,834	90.7	216,231
Discovery	1-1-65	4	609	- 741	4	1,002,360	2,445,260	2,440	-	908	2,218,349	90.7	226,911
MCA UNIT NO. 58													
1-1-63	7-1-63	4	529	- 48	4	17,737	86,859	4,897	-	-	52,018	59.9	34,841
7-1-63	1-1-64	4	564	+ 35	4	19,509	71,472	3,664	-	-	63,353	88.6	8,111
1-1-64	7-1-64	4	535	+ 6	4	17,749	85,190	4,800	-	-	54,152	63.6	31,030
7-1-64	1-1-65	4	506	- 29	4	15,948	70,793	4,439	-	-	69,199	97.7	1,559
Discovery	7-1-64	4	583	- 767	4	901,324	1,836,435	2,037	-	-	1,373,587	74.8	462,841
Discovery	1-1-65	4	577	- 773	4	917,272	1,907,228	2,079	-	-	1,442,786	75.6	464,441
MCA UNIT NO. 64													
1-1-63	7-1-63	4	704	+ 10	4	20,572	144,841	7,041	1	795	55,088	38.0	89,754
7-1-63	1-1-64	4	714	+ 9	4	20,236	92,986	4,595	1	826	106,771	114.8	13,789
1-1-64	7-1-64	4	714	+ 10	4	18,248	99,489	5,452	1	795	209,338	210.4	109,841
7-1-64	1-1-65	4	724	- 31	4	10,577	104,796	6,322	1	765	137,405	131.1	32,666
Discovery	7-1-64	4	750	- 600	4	1,167,713	2,371,571	2,031	1	795	1,999,647	84.3	371,923
Discovery	1-1-65	4	740	- 610	4	1,184,290	2,476,367	2,091	1	806	2,137,052	86.2	339,315

From	To	Datum Plane Pressure			Production			Datum Plane Pressure	Gas Retd. (M.C.F.)	Retd. to Prod. (M.C.F.)	Net Gas Produced (M.C.F.)			
		No.	From Wells	To Wells	Loss/ Gain	No.	Oil (Barrels)					Gas (M.C.F.)	CF/B Ratio	
MCA UNIT NO. 89														
1-1-63	7-1-63	623	4	634	+ 11	4	24,597	124,645	5,067	1	756	84,454	67.8	40,15
7-1-63	1-1-64	634	4	613	- 21	4	25,288	115,656	4,574	1	734	75,636	65.4	40,02
1-1-64	7-1-64	634	4	574	- 60	4	26,157	167,545	6,405	1	756	119,665	71.4	47,88
7-1-64	1-1-65	574	4	544	- 30	4	27,558	175,395	6,365	1	730	71,231	40.6	104,16
Discovery	7-1-64	1350	4	563	-787	4	1,108,381	2,530,321	2,283	1	756	2,009,438	79.4	520,88
Discovery	1-1-65	1350	4	623	-727	4	1,135,939	2,705,716	2,382	1	734	2,080,669	76.9	625,04
MCA UNIT NO. 99														
1-1-63	7-1-63	665	4	619	- 46	4	25,216	149,109	5,913	1	750	31,022	20.8	118,08
7-1-63	1-1-64	619	4	607	- 12	4	22,844	108,678	4,757	1	619	33,715	31.0	74,96
1-1-64	7-1-64	619	4	600	- 19	4	21,211	146,525	6,908	1	750	50,489	34.5	96,03
7-1-64	1-1-65	600	4	601	+ 1	4	20,595	160,889	7,812	1	676	39,930	24.8	120,95
Discovery	7-1-64	1350	4	646	-704	4	1,172,035	2,277,023	1,943	1	750	1,325,590	58.2	951,43
Discovery	1-1-65	1350	4	665	-685	4	1,192,630	2,437,912	2,044	1	619	1,365,520	56.0	1,072,39
MCA UNIT NO. 61														
1-1-63	7-1-63	783	4	713	- 70	4	26,308	168,942	5,968	1	859	59,022	34.9	109,92
7-1-63	1-1-64	713	4	726	+ 13	4	28,528	130,279	4,567	1	759	94,939	72.9	35,34
1-1-64	7-1-64	713	4	737	+ 24	4	32,060	138,622	4,324	1	859	118,570	85.5	20,05
7-1-64	1-1-65	737	4	740	+ 3	4	36,452	237,201	6,507	1	714	129,235	54.5	107,96
Discovery	7-1-64	1350	4	807	-543	4	1,178,108	2,303,886	1,956	1	859	1,817,073	78.9	486,81
Discovery	1-1-65	1350	4	783	-567	4	1,214,560	2,541,087	2,092	1	759	1,946,308	76.6	594,77
MCA UNIT NO. 41														
1-1-63	7-1-63	634	4	649	+ 15	4	11,936	80,009	6,703	1	952	52,664	65.8	27,34
7-1-63	1-1-64	634	4	626	- 8	4	11,998	76,909	6,410	1	943	50,148	65.2	26,76
1-1-64	7-1-64	649	4	634	- 15	4	12,457	97,365	7,816	1	952	83,233	85.5	14,13
7-1-64	1-1-65	634	4	610	- 20	4	12,718	67,672	5,320	1	950	60,741	89.8	6,93
Discovery	7-1-64	1350	4	619	-731	4	1,009,438	1,925,469	1,907	1	952	1,489,350	77.3	436,11
Discovery	1-1-65	1350	4	634	-716	4	1,022,156	1,993,141	1,950	1	943	1,550,091	77.8	443,05
MCA UNIT NO. 38														
1-1-63	7-1-63	438	4	390	- 48	4	6,767	62,972	9,306	1	1,030	30,022	47.7	32,95
7-1-63	1-1-64	390	4	441	+ 51	4	5,493	63,120	11,491	1	1,053	39,087	61.9	24,03
1-1-64	7-1-64	390	4	555	+165	4	6,969	63,197	9,068	1	1,030	41,374	65.5	21,82
7-1-64	1-1-65	555	4	399	-156	4	5,865	47,594	8,115	1	1,100	27,693	58.2	19,90
Discovery	7-1-64	1350	4	603	-747	4	532,297	1,688,162	3,171	1	1,030	1,200,189	71.1	487,97
Discovery	1-1-65	1350	4	438	-912	4	538,162	1,735,756	3,225	1	1,053	1,227,882	70.7	507,87

From	To	No. Wells	To	Loss/ Gain	No. Wells	Oil (Barrels)	Gas (M.C.F.)	CF/B Ratio	No. Wells	Datum Plane Pressure	Gas Retd. (M.C.F.)	Retd. to Prod. (M.C.F.)	Net Gas Produced (M.C.F.)
1-1-63 7-1-63 1-1-64 7-1-64 Discovery	7-1-63 1-1-64 7-1-64 1-1-65 7-1-64 1-1-65	622 667 667 622 1350 1350	5 5 5 5 5 5	667 497 609 575 564 622	6 5 5 5 5 5	18,393 25,042 23,310 25,332 1,124,192 1,149,524	75,342 50,503 67,483 79,000 2,326,469 2,405,469	4,096 2,016 2,895 3,119 2,069 2,093	1 1 1 1 1 1	938 1,048 938 872 938 1,048	46,114 77,970 73,068 75,734 1,472,629 1,548,363	61.2 154.3 108.3 96.9 63.3 64.4	29,22 27,46 5,58 3,26 853,84 857,10
MCA UNIT NO. 47													
1-1-63 7-1-63 1-1-64 7-1-64 Discovery	7-1-63 1-1-64 7-1-64 1-1-65 7-1-64 1-1-65	616 609 609 645 1350 1350	5 5 5 5 5 5	609 558 645 615 652 616	5 5 5 5 5 5	14,486 16,571 13,608 14,189 793,273 807,462	113,747 71,920 51,014 42,386 2,060,083 2,102,469	7,852 4,340 3,749 2,987 2,597 2,604	1 1 1 1 1 1	811 800 811 765 811 800	26,348 19,962 22,264 15,353 1,125,773 1,141,126	23.1 27.8 43.6 36.2 54.6 54.3	87,35 51,95 28,75 27,03 934,31 961,37
MCA UNIT NO. 85													
1-1-63 7-1-63 1-1-64 7-1-64 Discovery	7-1-63 1-1-64 7-1-64 1-1-65 7-1-64 1-1-65	639 577 577 525 1350 1350	4 4 4 4 4 4	577 552 565 492 627 639	4 4 4 4 4 4	16,194 16,149 13,027 13,210 854,851 868,061	91,146 149,207 118,948 107,526 1,950,658 2,058,184	5,628 9,239 9,131 8,140 2,282 2,371	1 1 1 1 1 1	882 872 882 865 882 872	99,150 93,286 108,063 113,227 1,691,353 1,804,580	108.8 62.5 90.8 105.3 86.7 87.7	8,00 55,92 10,88 5,70 259,30 253,60
MCA UNIT NO. 16													
1-1-63 7-1-63 1-1-64 7-1-64 Discovery	7-1-63 1-1-64 7-1-64 1-1-65 7-1-64 1-1-65	518 443 443 445 553 1350	4 5 5 5 5 5	443 494 553 513 628 518	5 5 5 5 5 5	7,856 7,553 6,858 7,530 529,001 536,531	38,380 23,009 28,195 33,615 902,516 936,131	4,885 3,046 4,111 4,464 1,706 1,745	1 1 1 1 1 1	1,050 1,077 1,050 1,050 1,050 1,077	39,427 44,950 53,828 62,584 1,085,083 1,147,667	102.7 195.4 190.9 186.2 120.2 122.6	1,04 21,94 25,63 28,96 182,56 211,53
MCA UNIT NO. 96													
1-1-63 7-1-63 1-1-64 7-1-64 Discovery	7-1-63 1-1-64 7-1-64 1-1-65 7-1-64 1-1-65	603 610 610 549 1350 1350	4 4 4 4 4 4	610 577 549 577 542 603	4 4 4 4 4 4	17,686 15,919 12,572 11,843 1,052,011 1,063,854	84,837 113,545 82,190 79,254 2,235,196 2,314,450	4,797 7,133 6,538 6,692 2,125 2,176	1 1 1 1 1 1	723 679 723 776 723 679	77,553 46,667 55,890 39,855 2,078,186 2,118,041	91.4 41.1 68.0 50.3 93.0 91.5	7,28 66,87 26,30 39,39 157,01 190,40

From	To	No. Wells	To	Loss/ Gain	No. Wells	Oil (Barrels)	Gas (M.C.F.)	CF/B Ratio	No. Wells	Datum Plane Pressure	Gas Retd. (M.C.F.)	Retd. to Prod.	Net Gas Produced (M.C.F.)
MCA UNIT NO. 78													
1-1-63 7-1-63 1-1-64 7-1-64 Discovery	7-1-63 1-1-64 7-1-64 1-1-65 1-1-65	4 4 4 4 5	624 625 576 288 267	+309 + 1 - 48 -288 -1083	5 5 5 5 5	5,100 4,761 4,436 3,221 353,208	51,261 55,536 60,949 44,238 1,618,609	10,051 11,665 13,740 13,734 4,583	1 1 1 1 1	- 896 - 848 -	62,207 37,622 37,882 41,893 689,269	121.4 67.7 62.2 94.7 42.6	10,94 17,91 23,06 2,34 929,32
1-1-63 7-1-63 1-1-64 7-1-64 Discovery	7-1-63 1-1-64 7-1-64 1-1-65 1-1-65	4 4 4 4 5	315 624 624 576 1350	-1035	5	356,429	1,662,847	4,665	1	896	731,162	44.0	931,66
MCA UNIT NO. 82													
1-1-63 7-1-63 1-1-64 7-1-64 Discovery	7-1-63 1-1-64 7-1-64 1-1-65 1-1-65	4 4 4 4 4	339 322 419 362 426	- 7 - 17 + 80 - 57 -924	5 5 5 5 5	7,351 6,873 6,364 5,266 431,880	65,895 73,992 62,939 58,844 1,719,772	8,964 10,766 9,890 11,174 3,982	1 1 1 1 1	894 921 894 920 894	56,743 73,206 74,784 66,766 785,819	86.1 98.9 118.8 113.5 45.7	9,14 7,78 11,84 7,92 933,92
1-1-63 7-1-63 1-1-64 7-1-64 Discovery	7-1-63 1-1-64 7-1-64 1-1-65 1-1-65	4 4 4 4 4	570 541 541 501 1350	- 29 - 21 - 40 - 50 -820	4 4 4 4 4	18,453 48,444 14,781 18,696 1,252,967	156,192 157,905 88,621 109,575 2,512,345	8,464 3,260 5,996 5,861 2,005	1 1 1 1 1	715 715 715 715 715	97,138 55,490 - - 1,986,008	62.2 35.1 0.0 - 79.0	59,05 102,41 88,62 109,57 526,33
MCA UNIT NO. 177													
1-1-63 7-1-63 1-1-64 7-1-64 Discovery	7-1-63 1-1-64 7-1-64 1-1-65 1-1-65	4 4 4 4 4	703 501 597 789 852	-255 -202 -106 +192 -498	4 4 4 4 4	29,723 33,056 27,925 32,837 1,162,982	101,104 101,926 62,842 71,224 2,181,041	3,402 3,083 2,250 2,169 1,875	1 1 1 1 1	809 915 809 783 809	45,874 59,223 59,946 54,222 1,474,378	45.4 58.1 95.4 76.1 67.6	55,23 42,70 2,89 17,00 706,66
1-1-63 7-1-63 1-1-64 7-1-64 Discovery	7-1-63 1-1-64 7-1-64 1-1-65 1-1-65	4 4 4 4 4	757 721 721 731 731	- 36 - 10 - 10 + 10 - 63	4 4 4 4 4	22,674 24,764 29,469 31,891 1,202,790	92,680 90,266 105,280 114,762 2,063,383	4,088 3,645 3,573 3,599 1,715	1 1 1 1 1	1,027 1,061 1,027 1,041 1,027	45,989 46,201 58,013 48,998 1,430,786	49.6 51.2 55.1 42.7 69.3	46,69 44,06 47,26 65,76 632,59
MCA UNIT NO. 182													
1-1-63 7-1-63 1-1-64 7-1-64 Discovery	7-1-63 1-1-64 7-1-64 1-1-65 1-1-65	4 4 4 4 4	757 721 721 731 767	-593	4	1,234,681	2,178,145	1,764	1	1,061	1,479,784	67.9	698,36

From	To	From	No. Wells	To	Loss/ Gain	No. Wells	Oil (Barrels)	Gas (M.C.F.)	CF/B Ratio	No. Wells	Datum Plane Pressure	Gas Retd. (M.C.F.)	Retd. to Prod.	Net Gas Produced (M.C.F.)
1-1-63 7-1-63 1-1-64 7-1-64 Discovery	7-1-63 1-1-64 7-1-64 1-1-65 7-1-64 1-1-65	752 716 716 736 1350 1350	6 7 7 7 7 7	716 685 736 516 772 752	- 36 - 31 + 20 - 220 - 578 - 598	7 7 7 7 7 7	26,821 26,871 27,317 31,217 1,168,397 1,199,614	110,690 87,465 127,567 147,510 2,302,193 2,449,703	4,127 3,255 4,670 4,725 1,970 2,042	1 1 1 1 1 1	745 652 745 759 745 852	55,100 48,813 71,593 60,019 1,717,731 1,777,750	49.8 55.8 56.1 40.7 74.6 72.6	55,599 38,655 55,977 87,499 584,466 671,955
MCA UNIT NO. 204														
1-1-63 7-1-63 1-1-64 7-1-64 Discovery	7-1-63 1-1-64 7-1-64 1-1-64 7-1-64 1-1-65	486 465 465 434 1350 1350	4 4 4 4 4 4	465 502 434 476 455 486	- 21 + 37 - 31 + 42 - 895 - 864	4 4 4 4 4 4	16,509 15,252 13,296 12,247 954,445 966,692	67,667 67,295 60,905 65,676 2,068,221 2,133,897	4,099 4,412 4,581 5,363 2,167 2,207	1 1 1 1 1 1	824 885 824 832 824 885	33,896 37,160 37,435 51,471 1,280,614 1,392,085	50.1 55.2 61.4 78.4 61.9 62.4	33,777 30,133 23,477 14,200 787,600 801,811
MCA UNIT NO. 222														
1-1-63 7-1-63 1-1-64 7-1-64 Discovery	7-1-63 1-1-64 7-1-64 1-1-65 7-1-64 1-1-65	357 342 342 317 1350 1350	5 5 5 5 5 5	342 332 317 361 340 357	- 15 - 10 - 17 + 44 - 1010 - 993	5 5 5 5 5 5	11,615 11,075 9,067 10,151 761,794 771,945	32,964 39,000 42,635 27,905 1,733,379 1,761,284	2,838 3,521 4,592 2,749 2,275 2,282	1 1 1 1 1 1	1,187 991 1,187 1,070 1,187 991	3,974 1,875 1,427 1,990 1,178,352 1,180,342	12.1 4.8 1.0 7.1 68.0 67.0	28,999 37,122 41,200 25,911 555,022 580,944
MCA UNIT NO. 174														
1-1-63 7-1-63 1-1-64 7-1-64 Discovery	7-1-63 1-1-64 7-1-64 1-1-65 7-1-64 1-1-65	666 652 652 600 1350 1350	4 4 4 4 4 4	652 601 600 652 614 666	- 14 - 51 - 52 + 52 - 736 - 684	4 4 4 4 4 4	17,882 15,789 12,635 14,584 968,662 983,246	102,649 110,611 79,059 79,015 2,172,835 2,251,850	5,740 7,006 6,257 5,418 2,243 2,290	1 1 1 1 1 1	911 925 911 886 911 925	86,265 102,634 97,950 107,888 2,295,116 2,403,004	84.0 92.8 123.8 136.5 105.6 106.7	16,388 7,977 18,889 28,877 122,239 151,115
MCA UNIT NO. 148														
1-1-63 7-1-63 1-1-64 7-1-64 Discovery	7-1-63 1-1-64 7-1-64 1-1-65 7-1-64 1-1-65	689 669 669 648 1350 1350	5 5 5 5 5 5	669 494 648 589 768 789	- 20 - 175 - 21 - 60 - 582 - 561	6 6 6 6 6 6	34,530 34,993 34,593 33,383 1,307,619 1,341,002	161,948 160,943 152,987 150,408 2,897,311 3,047,719	4,690 4,599 4,422 4,506 2,216 2,273	1 1 1 1 1 1	1,060 932 1,060 862 1,060 932	40,648 50,771 24,020 20,494 1,604,097 1,624,591	25.1 31.5 15.7 13.6 55.3 53.3	121,330 110,177 128,966 129,911 1,292,944 1,423,112

From	To	No. Wells	From	To	Loss/ Gain	No. Wells	Oil (Barrels)	Gas (M.C.F.)	CF/B Ratio	No. Wells	Datum Plane Pressure	Gas Retd. (M.C.F.)	Retd. to Prod.	Net Gas Produced (M.C.F.)
MCA UNIT NO. 144														
1-1-63	7-1-63	4	569	600	+ 31	5	9,903	28,890	2,917	1	952	24,897	86.2	3,90
7-1-63	1-1-64	4	600	561	- 39	5	9,523	126,732	13,308	1	934	27,031	21.3	99,70
1-1-64	7-1-64	4	617	539	- 78	5	8,390	144,647	17,240	1	952	52,442	36.2	92,22
7-1-64	1-1-64	4	539	518	- 21	5	8,721	56,257	6,451	1	934	19,516	34.7	36,77
Discovery	7-1-64	4	1350	491	-859	5	788,160	1,739,840	2,207	1	952	1,281,499	73.6	458,33
Discovery	1-1-65	4	1350	569	-781	5	796,881	1,796,097	2,254	1	952	1,301,015	72.4	495,00
MCA UNIT NO. 116														
1-1-63	7-1-63	4	660	667	+ 7	4	19,170	166,095	8,664	1	808	86,548	52.1	79,54
7-1-63	1-1-64	4	667	598	- 69	4	18,548	158,037	8,520	1	769	45,977	29.1	112,00
1-1-64	7-1-64	4	667	508	-159	4	18,548	122,963	6,629	1	808	-	-	122,90
7-1-64	1-1-65	4	508	538	+ 30	4	22,821	119,360	5,230	1	769	-	-	119,36
Discovery	7-1-64	4	1350	501	-849	4	992,294	2,627,847	2,648	1	808	2,056,366	78.2	571,48
Discovery	1-1-65	4	1350	660	-690	4	1,015,115	2,747,207	2,706	1	769	2,056,366	74.9	810,20
MCA UNIT NO. 193														
1-1-63	7-1-63	6	625	642	+ 17	7	12,439	57,538	4,626	1	779	56,726	98.6	81
7-1-63	1-1-64	6	642	523	-119	7	9,021	78,454	8,707	1	598	36,214	46.2	42,24
1-1-64	7-1-64	6	642	729	+ 87	7	12,839	76,039	5,923	1	779	23,553	30.9	52,48
7-1-64	1-1-65	6	729	732	+ 3	7	13,942	36,022	2,584	1	598	37,800	104.9	1,77
Discovery	7-1-64	6	1350	712	-638	7	923,851	1,897,886	2,054	1	779	1,089,407	57.4	808,47
Discovery	1-1-65	6	1350	625	-725	7	937,793	1,933,908	2,062	1	598	1,127,207	58.3	806,70
MCA UNIT NO. 128														
1-1-63	7-1-63	5	605	474	-131	6	9,294	60,692	6,530	1	973	41,977	69.2	18,77
7-1-63	1-1-64	5	474	503	+ 29	6	7,274	28,357	3,898	1	949	50,123	176.8	21,70
1-1-64	7-1-64	5	474	574	+100	6	9,771	33,086	3,386	1	973	48,735	147.2	15,61
7-1-64	1-1-64	5	574	616	+ 42	6	9,896	36,421	3,680	1	949	12,474	34.2	23,94
Discovery	7-1-64	5	1350	705	-645	6	817,382	1,663,312	2,035	1	973	1,141,141	68.6	522,17
Discovery	1-1-65	5	1350	605	-745	6	827,278	1,699,733	2,055	1	949	1,153,615	67.9	546,11
MCA UNIT NO. 130														
1-1-63	7-1-63	4	432	422	- 10	5	6,558	20,152	3,073	1	1,010	23,654	117.4	3,50
7-1-63	1-1-64	4	422	465	+ 43	5	5,543	20,755	3,744	1	1,008	38,124	183.7	17,34
1-1-64	7-1-64	4	422	536	+114	5	7,967	25,688	3,224	1	1,010	52,764	205.4	27,07
7-1-64	1-1-65	4	536	591	+ 55	5	8,862	32,399	3,656	1	1,008	40,304	124.4	7,90
Discovery	7-1-64	4	1350	546	-804	5	658,485	1,423,420	2,162	1	1,010	844,329	59.3	579,09
Discovery	1-1-65	4	1350	432	-918	5	667,347	1,455,819	2,182	1	1,008	884,633	60.8	571,18

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FEB 23 1975
U.S. DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
SANTA FE

MALJAMAR COOPERATIVE AGREEMENT

HOBBS, NEW MEXICO

ANNUAL REPORT

YEAR 1975

**Copies to: NMCC (2); USGS (2); COMMISSIONER OF PUBLIC LANDS;
FEE, MCA PARTNERS (16); JNB; LBD; FILE**

MCA UNIT
CUMULATIVE OIL, WATER & GAS PRODUCTION
YEAR, 1975

COMPANY, LEASE & WELL NO.	CUM. TO 1-1-75	JAN/ JULY	FEB/ AUG.	OIL PRODUCTION					JUNE /DEC	12 MO. TOTAL	CUM TO 1-1-76	WATER PRODUCTION		GAS PRODUCTION - MCF			
				MAR/ SEPT	APR/ OCT.	MAY/ NOV.	12 MO. PROD BBLs	% WTR PROD				CUM TO 1-1-76 VOLUME	CUM TO 1-1-76	12 MO AVG RATIO			
CONTINENTAL OIL COMPANY																	
MCA UNIT																	
1 1	27313.									0.	27313.		520.		207035.		
1 2	118412.	34	79	35	36	29	35	29	35	475.	118887.	7319.93.90	69632.	0.	248815.	0.	
1 3	36841.	42	27	79	79	0	0	0	0	0.	36841.		843.		60240.		
1 4	39870.	69	35	35	37	29	69	29	69	602.	40472.	2503.80.61	41515.	0.	27802.	0.	
1 5	135966.	447	297	522	509	409	453	409	453	4576.	140542.	20783.81.95	79215.	0.	268604.	0.	
1 6	30468.	460	286	236	239	378	340	378	340	0.	30468.		0.		53906.		
1 7	24318.									0.	24318.		766.		23449.		
1 8	35974.	69	42	69	73	59	35	59	35	942.	36916.	7529.88.87	52561.	0.	45175.	0.	
1 9	121222.	0	0	0	0	0	0	0	0	0.	121222.	0. 0.00	61714.	0.	329736.	0.	
1 10	263142.	0	0	0	0	0	0	0	0	0.	263142.		2278.		584724.		
1 11	252241.	1530	1673	1846	1986	1980	2192	1980	2192	25753.	277994.	1876. 6.78	12673.	1515.	384821.	58.	
1 12	61882.	2241	2258	2508	2674	2283	2582	2283	2582	0.	61882.		81.		198376.		
1 13	75645.	0	911	454	331	220	512	220	512	3953.	79598.	12151.75.45	76758.	1718.	47153.	434.	
1 14	814.	488	247	248	249	103	190	103	190	0.	814.	0. 0.00	4060.	0.	729.	0.	

MCA UNIT
CUMULATIVE OIL, WATER & GAS PRODUCTION
YEAR, 1975

COMPANY, LEASE & WELL NO.	CUM. TO 1-1-75	JAN/ JULY	FEB/ AUG.	OIL PRODUCTION					JUNE /DEC	12 MO. TOTAL	CUM TO 1-1-76	WATER PRODUCTION		GAS PRODUCTION - MCF		
				MAR/ SEPT	APR/ OCT.	MAY/ NOV.	12 MO. PROD BBLs	WTR PROD 1-1-76				12 MO. CUM TO 1-1-76	12 MO. VOLUME	12 MO AVG RATIO		
1 15	165075.								0.	165075.	3172.	207252.				
1 16	84206.	127 0	116 0	130 0	0 0	0 0	0 0	0 0	373.	84579.	2052.84.61	29161.	1960.	413399.	5254.	
1 17	134121.	315 1018	289 526	423 537	537 525	339 524	741 717		6491.	140612.	8748.57.40	35240.	1429.	199177.	220.	
1 18	138341.								0.	138341.	1246.	224025.				
1 19	118592.	1042 535	1070 527	1204 537	626 1677	585 623	537 742		9705.	128297.	3711.27.66	12429.	1437.	224209.	148.	
1 20	98805.								0.	98805.	922.	334536.				
1 21	114552.	0 2663	0 3159	0 2405	0 1804	0 1548	0 1817	0	13396.	127948.	10350.43.58	60190.	1003.	828180.	74.	
1 22	307120.								0.	307120.	236.	344236.				
1 23	808295.	2745 1808	2400 1666	2798 1218	2444 2053	2283 1147	1713 1383		23658.	831953.	33462.58.58	116275.	1452.	516643.	61.	
1 24	338859.								0.	338859.	214.	419111.				
1 25	377507.	164 254	173 251	453 179	477 150	445 249	239 256		3290.	380797.	20384.86.10	143070.	21162.	541368.	6432.	
1 26	178786.								0.	178786.	1776.	244439.				
1 27	920984.	648 1178	687 1052	1079 1176	1076 902	1018 1049	946 853		11664.	932648.	65671.84.91	404550.	2200.	727583.	183.	
1 28	587620.								0.	587620.	490.	758497.				
1 29	388168.	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0.	388168.	0. 0.00	132735.	0.	558657.	0.	
1 30	361310.								0.	361310.	40075.	325670.				

MCA UNIT
CUMULATIVE OIL, WATER & GAS PRODUCTION
YEAR, 1975

COMPANY, LEASE & WELL NO.	CUM. TO 1-1-75	OIL PRODUCTION					JUNE /DEC	12 MO. TOTAL	CUM TO 1-1-76	WATER PRODUCTION		GAS PRODUCTION - MCF	
		JAN/ JULY	FEB/ AUG.	MAR/ SEPT	APR/ OCT.	MAY/ NOV.				12 MO. PROD BBLs	% WTR PROD	CUM TO 1-1-76 VOLUME	12 MO AVG RATIO
1 31	68782.						0.	0.	68782.	1601.		180694.	
1 32	62347.	106 512	698 532	1080 535	857 563	906 431	560 500	7280.	69627.	19837.73.15	30281.	16865.	2316.
1 33	74185.	107 205	155 236	158 238	107 141	166 96	168 100	1877.	76062.	10107.84.33	29644.	3224.	217873. 1717.
1 34	54132.						0.	0.	54132.	0.		131423.	
1 35	253567.	571 558	363 650	395 653	375 536	388 430	476 450	5845.	259412.	142697.96.06	369068.	246.	483675. 42.
1 36	96225.						0.	0.	96225.	0.		471387.	
1 37	160020.	860 1077	854 1074	880 1014	869 1020	951 976	966 1084	11625.	171645.	155. 1.31	7662.	4976.	176027. 423.
1 38	10789.	642 138	577 138	52 110	51 83	109 79	107 81	2167.	12956.	69680.96.98	432100.	4973.	11791. 2294.
1 39	106678.						0.	0.	106678.	60.		615343.	
1 40	224583.	866 632	639 804	739 433	717 435	605 432	548 374	7224.	231807.	43592.85.78	347576.	1302.	421624. 180.
1 41	4348.	0 0	0 0	0 0	0 0	0 0	0 0	0.	4348.	0. 0.00	15147.	0.	10147. 0.
1 42	476046.						0.	0.	476046.		11823.	622710.	
1 43	267145.	808 746	492 805	568 866	634 870	715 771	712 778	8765.	275910.	1879.17.65	71355.	1442.	213603. 164.
1 44	131783.	2453 2843	2387 3155	2470 3405	2455 3763	2255 3085	2630 3203	34104.	165887.	8018.19.03	29337.	1706.	38751. 50.
1 45	205799.						0.	0.	205799.	5333.		692591.	

MCA UNIT
CUMULATIVE OIL, WATER & GAS PRODUCTION
YEAR, 1975

COMPANY, LEASE & WELL NO.	CUM. TO 1-1-75	OIL PRODUCTION					JUNE /DEC	12 MO. TOTAL	CUM TO 1-1-76	WATER PRODUCTION			GAS PRODUCTION - MCF		
		JAN/ JULY	FEB/ AUG.	MAR/ SEPT	APR/ OCT.	MAY/ NOV.				12 MO. PROD BBLs	WTR PROD	CUM TO 1-1-76	12 MO. VOLUME	CUM TO 1-1-76	12 MO AVG RATIO
1 46	381472.	1212 431	936 464	1079 403	855 622	743 617	493 591	8446.	389918.	105852.92.61	298024.	13767.	673326.	1630.	
1 47	164720.	635 574	443 619	511 805	497 622	495 617	329 466	6613.	171333.	102753.93.95	322287.	32924.	280070.	4978.	
1 48	332105.							0.	332105.		2285.		616939.		
1 49	1067802.	3345 1146	2024 1129	2179 1024	1997 843	1336 873	1228 896	18020.	1085822.	63473.77.88	243161.	1524.	899224.	84.	
1 50	273633.							0.	273633.		304.		320603.		
1 51	715052.	726 840	752 827	781 461	1103 451	640 300	486 307	7674.	722726.	18913.71.13	158679.	1437.	1029331.	187.	
1 52	295648.							0.	295648.		65.		575391.		
1 53	317861.	18 433	387 251	481 281	119 300	101 299	434 307	3411.	321272.	17620.83.78	180441.	51685.	702520.	15152.	
1 54	143306.							0.	143306.		749.		601765.		
1 55	358534.	1041 713	665 702	748 1484	775 1453	724 1272	665 1305	11547.	370081.	9657.45.54	66533.	1469.	280086.	127.	
1 56	282217.	0 0	0 0	0 0	0 0	0 0	0 0	0.	282217.	0. 0.00	26517.	0.	768263.	0.	
1 57	552198.	2492 1706	1966 2106	2212 2559	1908 2378	1782 1721	1637 1766	24233.	576431.	23244.48.95	87073.	71747.	648527.	2960.	
1 58	203931.	1325 1095	925 1730	2114 1126	1937 1102	1197 1421	1100 1459	16531.	220462.	109775.86.91	372227.	1464.	179479.	88.	
1 59	298297.							0.	298297.		3840.		620767.		
1 60	971801.	1801 2692	1638 2834	1856 2892	1818 2556	417 1923	2769 2431	25627.	997428.	60477.70.23	310799.	1344.	1351910.	52.	

MCA UNIT
CUMULATIVE OIL, WATER & GAS PRODUCTION
YEAR, 1975

COMPANY, LEASE & WELL NO.	CUM. TO 1-1-75	JAN/ JULY	FEB/ AUG.	OIL PRODUCTION					JUNE /DEC	12 MO. TOTAL	CUM TO 1-1-76	WATER PRODUCTION		GAS PRODUCTION - MCF		
				MAR/ SEPT	APR/ OCT.	MAY/ NOV.	12 MO. PROD BBLs	% WTR				CUM TO 1-1-76 VOLUME	12 MO. CUM TO 1-1-76 VOLUME	12 MO AVG RATIO		
1 76	177644.									0.	177644.	221.		537872.		
1 77	50619.	171 176	310 294	211 296	134 225	221 382	336 400			3156.	53775.	1588.33.47	11659.	2008.	309602.	636.
1 78	45395.									0.	45395.	0.			456631.	
1 79	171996.	107 59	104 59	119 59	54 56	55 43	56 50			821.	172817.	125.13.21	45713.	83225.	830659.101370.	
1 80	49336.									0.	49336.	0.			210638.	
1 81	148887.	428 500	855 503	711 623	519 507	719 474	531 550			6920.	155807.	10646.60.60	37463.	2203.	632835.	318.
1 82	88200.									0.	88200.	0.			206640.	
1 83	120988.	1141 1934	1450 2011	1291 1424	1636 1352	1522 560	1288 651			16260.	137248.	553. 3.28	3177.	2104.	724128.	129.
1 84	249241.									0.	249241.	0.			225340.	
1 85	281848.	1833 2072	1794 1680	1786 1588	1841 1434	1894 1140	1797 1069			19928.	301776.	120850.85.84	316537.	4796.	588862.	240.
1 86	84532.	833 718	865 1074	1041 1096	971 966	1088 713	698 841			10904.	95436.	90942.89.29	259960.	4866.	64264.	446.
1 87	271356.									0.	271356.	101.			764821.	
1 88	522927.	1143 1242	897 1350	1087 1287	1201 1296	1250 1003	1234 1166			14156.	537083.	38541.73.13	179713.	4969.	863099.	351.
1 89	98941.	980 1016	1071 1073	1061 822	1381 689	1184 580	1127 524			11508.	110449.	97594.89.45	292689.	4854.	111629.	421.
1 90	269843.									0.	269843.	0.			692841.	
1 91	332136.	0 0	0 0	0 0	0 0	0 0	0 0			0.	332136.	0. 0.00	42450.	0.	966424.	0.

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COMPANY, LEASE & WELL NO.	CUM. TO 1-1-75	OIL PRODUCTION					JUNE /DEC	12 MO. TOTAL	CUM TO 1-1-76	WATER PRODUCTION		GAS PRODUCTION - MCF		
		JAN/ JULY	FEB/ AUG.	MAR/ SEPT	APR/ OCT.	MAY/ NOV.				12 MO. PROD BBLs	% WTR PROD	CUM TO 1-1-76 VOLUME	12 MO AVG RATIO	
1 92	566496.	837 574	763 866	965 743	855 746	797 834	602 591	9173.	575669.	27001.74.64	130932.	4400.	840014.	479.
1 93	417134.	328 574	394 619	455 403	397 591	715 524	603 746	6349.	423483.	9012.58.66	125082.	8032.	652861.	1265.
1 94	321371.							0.	321371.		10166.		828652.	
1 95	507621.	253 433	231 426	304 435	298 351	396 90	204 287	3708.	511329.	54906.93.67	364494.	24604.	800640.	6635.
1 96	233506.	4418 3335	4048 3285	4470 3352	4232 3080	3814 2760	3351 3283	43428.	276934.	10959.20.15	63365.	1326.	63599.	30.
1 97	286699.							0.	286699.		90.		465260.	
1 98	584731.	3597 2190	3354 2157	3611 2127	3368 2153	2979 1644	2353 1305	30838.	615569.	55782.64.39	272195.	15073.	712411.	488.
1 99	34173.	0 0	0 0	0 0	0 0	0 0	0 0	0.	34173.	0. 0.00	68948.	0.	58323.	0.
1 100	335823.							0.	335823.		2656.		726824.	
1 101	501659.	1966 2953	1996 2909	1968 2968	2653 3381	2533 2769	3222 3046	32364.	534023.	29273.47.49	135557.	1334.	924842.	41.
1 102	257201.							0.	257201.		389.		1073223.	
1 103	524309.	2367 3488	2168 3611	2439 3685	2235 3606	2088 4413	3632 4530	38262.	562571.	55265.59.08	144085.	1489.	562052.	38.
1 104	278526.							0.	278526.		483.		295991.	
1 105	634722.	6879 4481	6304 4413	4382 4504	3863 6585	4900 6558	4501 3225	60595.	695317.	91985.60.28	231067.	1487.	340039.	24.
1 106	143424.	0 0	0 0	0 0	0 0	0 0	0 0	0.	143424.	0. 0.00	294821.	0.	139402.	0.

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COMPANY, LEASE & WELL NO.	CUM. TO 1-1-75	OIL PRODUCTION					JUNE /DEC	12 MO. TOTAL	CUM TO 1-1-76	WATER PRODUCTION		GAS PRODUCTION - MCF	
		JAN/ JULY	FEB/ AUG.	MAR/ SEPT	APR/ OCT.	MAY/ NOV.				12 MO. PROD BBLs	% WTR PROD	CUM TO 1-1-76 VOLUME	12 MO AVG RATIO
1 107	337305.							0.	337305.			62.	299562.
1 108	502637.	1350 1834	1475 1931	2114 2073	1937 1502	2144 1446	1641 1203	20650.	523287.	34539.	62.58	150323.	1411. 354085.
1 109	336198.							0.	336198.			62.	329443.
1 110	439339.	1443 650	1231 1609	1647 1425	1544 1586	1347 1635	1342 1399	16858.	456197.	78612.	82.34	345330.	3824. 335593. 226.
1 111	260384.							0.	260384.			0.	249711.
1 112	650619.	865 804	738 556	880 558	689 560	743 863	740 870	8866.	659485.	29045.	76.61	440033.	10494. 580780. 1183.
1 113	0.							0.	0.			0.	0.
1 114	521101.	1177 1034	1230 866	1079 991	1020 840	880 926	822 746	11611.	532712.	11824.	50.45	149207.	2440. 718549. 210.
1 115	501416.	433 345	344 279	454 495	386 559	550 432	329 560	5166.	506582.	6616.	56.15	57694.	5924. 737363. 1146.
1 116	0.							0.	0.			0.	0.
1 117	600649.	3896 5371	3395 2853	2725 3777	2649 3794	4675 3764	4713 3794	45406.	646055.	11942.	20.82	69175.	9458. 924341. 203.
1 118	518880.	2714 2913	2135 2974	2276 2849	2581 2730	2582 3008	2657 2982	32401.	551281.	13716.	29.74	70270.	5158. 1198942. 159.
1 119	474025.							0.	474025.			737.	1170078.
1 120	444359.	2309 2458	1964 2478	2639 2356	2710 2372	3017 1557	3006 624	27490.	471849.	50960.	64.95	184341.	4998. 543390. 181.
1 121	168987.							0.	168987.			60.	329395.
1 122	403780.	905 718	769 496	957 439	741 414	734 264	698 271	7406.	411186.	28589.	79.42	164115.	4973. 624012. 671.

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COMPANY, LEASE & WELL NO.	CUM. TO 1-1-75	OIL PRODUCTION					JUNE /DEC	12 MO. TOTAL	CUM TO 1-1-76	WATER PRODUCTION			GAS PRODUCTION - MCF		
		JAN/ JULY	FEB/ AUG.	MAR/ SEPT	APR/ OCT.	MAY/ NOV.				12 MO. % PROD WTR	BBLs PROD	CUM TO 1-1-76	12 MO. VOLUME	CUM TO 1-1-76	12 MO AVG RATIO
1 123	137911.							0.	137911.			168.		607980.	
1 124	105120.	373 558	208 739	383 742	402 704	139 598	140 125	5111.	110231.	747.12.75	1347.	731.	269418.	143.	
1 125	150805.							0.	150805.		0.			167048.	
1 126	102636.	641 706	337 562	342 623	482 553	609 468	392 252	5967.	108603.	384. 6.04	1188.	4077.	32618.	683.	
1 127	143826.							0.	143826.		109.		532543.		
1 128	53617.	285 284	544 296	553 213	563 507	277 358	280 335	4495.	58112.	7309.61.91	25658.	3417.	49565.	760.	
1 129	165490.	0 0	0 0	0 0	0 0	0 0	0 0	0.	165490.	0. 0.00	34917.	0.	429381.	0.	
1 130	34405.	2225 910	1140 946	1306 950	1420 901	1467 765	895 671	13596.	48001.	8927.39.63	15110.	28719.	223188.	2112.	
1 131	119332.							0.	119332.		24.		630729.		
1 132	220751.	285 353	259 355	214 356	311 338	332 215	335 301	3654.	224405.	18336.83.38	72036.	1752.	234983.	479.	
1 133	150246.							0.	150246.		170.		628079.		
1 134	62837.	0 500	0 296	421 297	441 281	471 239	475 272	3693.	66530.	11565.75.79	17614.	370.	394497.	100.	
1 135	66774.							0.	66774.		1684.		248590.		
1 136	209889.	1569 646	1319 1212	1633 891	1233 709	1328 746	615 975	12876.	222765.	11608.47.41	157664.	4193.	382249.	325.	
1 137	202926.							0.	202926.		7644.		305890.		
1 138	359789.	1626 1235	1528 1124	1765 1038	1287 927	1163 574	1175 504	13946.	373735.	4833.25.73	16825.	3492.	453996.	250.	

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COMPANY, LEASE & WELL NO.	CUM. TO 1-1-75	OIL PRODUCTION					JUNE /DEC	12 MO. TOTAL	CUM TO 1-1-76	WATER PRODUCTION		GAS PRODUCTION - MCF			
		JAN/ JULY	FEB/ AUG.	MAR/ SEPT	APR/ OCT.	MAY/ NOV.				12 MO. % PROD BLS	WTR PROD	CUM TO 1-1-76 VOLUME	12 MO AVG RATIO		
1 139	233002.							0.	233002.	330.		299287.			
1 140	224414.	513 706	570 592	501 593	643 676	664 430	672 450	7010.	231424.	3264.	31.76	19438.	2564.	535075.	365.
1 141	188546.							0.	188546.	206.		233535.			
1 142	147213.	343 499	155 502	158 504	402 760	289 645	336 500	5093.	152306.	133.	2.54	24094.	7920.	218033.	1555.
1 143	183571.							0.	183571.	0.		0.		156906.	
1 144	46680.							0.	46680.	0.		0.		81129.	
1 145	200885.							0.	200885.	703.		285824.			
1 146	576390.	2785 3967	3395 4378	4115 4355	4063 4054	4322 4063	4267 4474	48238.	624628.	27670.	36.45	150329.	4865.	672977.	100.
1 147	309010.							0.	309010.	12362.		674076.			
1 148	247372.	1559 1343	1196 1432	1450 1425	1329 1572	1413 1504	1395 1545	17163.	264535.	20367.	54.26	52095.	4993.	128205.	290.
1 149	398842.	1381 1471	897 1514	1113 1506	895 1517	1495 1636	1476 1681	16582.	415424.	42743.	72.04	82663.	173306.	979227.	10451.
1 150	297840.							0.	297840.	0.		610391.			
1 151	723326.	2078 3073	1969 3371	2471 3096	2593 3887	2612 3764	2192 3981	35087.	758413.	9723.	21.69	36240.	15431.	935553.	439.
1 152	672709.	283 0	0 0	0 0	0 0	0 0	0 0	283.	672992.	354.	55.57	48104.	650.	1005057.	2296.
1 153	393406.	923 862	910 927	851 836	718 933	825 864	795 840	10284.	403690.	22584.	68.71	98284.	5614.	778859.	545.
1 154	310072.							0.	310072.	186.		321134.			

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COMPANY, LEASE & WELL NO.	CUM. TO 1-1-75	OIL PRODUCTION					JUNE /DEC	12 MO. TOTAL	CUM TO 1-1-76	WATER PRODUCTION		GAS PRODUCTION - MCF	
		JAN/ JULY	FEB/ AUG.	MAR/ SEPT	APR/ OCT.	MAY/ NOV.				PROD BBLs	WTR %	CUM TO 1-1-76 VOLUME	12 MO AVG RATIO
1 155	437116.	0	0	0	0	0	0	0.	437116.	0. 0.00	41092.	0.	242019. 0.
1 156	43103.	0	0	0	0	0	0	0.	43103.	0. 0.00	166415.	0.	14969. 0.
1 157	289799.							0.	289799.		0.		187136. 0.
1 158	395367.	1285 919	606 804	909 1146	911 1026	825 1388	877 1275	11971.	407338.	40680.77.26	127532.	1813.	509449. 151.
1 159	255103.							0.	255103.		163.		294477. 0.
1 160	501959.	3029 4405	2776 4338	5627 2508	5156 2204	4351 1870	4424 1459	42147.	544106.	79530.65.36	208502.	1434.	412307. 34.
1 161	55202.	0	0	0	0	0	0	0.	55202.	0. 0.00	124117.	0.	59541. 0.
1 162	212215.							0.	212215.		522.		303342. 0.
1 163	318076.	1483 1604	1330 1781	1463 1612	1342 1302	1754 1172	1611 1203	17657.	335733.	5194.23.73	33973.	1437.	270876. 81.
1 164	189569.							0.	189569.		4216.		155697. 0.
1 165	242032.	2240 2012	1966 1780	1919 1715	1524 1402	1448 1246	1432 1407	20091.	262123.	19062.48.68	42209.	1437.	287109. 71.
1 166	192908.							0.	192908.		7956.		275394. 0.
1 167	323125.	3092 2266	2458 2232	2212 1765	2266 1728	2311 2019	2225 1996	26570.	349695.	14283.34.96	78373.	1422.	285723. 53.
1 168	124551.	1703 1171	1591 1153	1464 998	1252 752	1531 698	1176 717	14206.	138757.	34010.70.53	197485.	1442.	57636. 101.
1 169	228183.							0.	228183.		4114.		226815. 0.

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COMPANY, LEASE & WELL NO.	CUM. TO 1-1-75	JAN/ JULY	FEB/ AUG.	OIL PRODUCTION				JUNE /DEC	12 MO. TOTAL	CUM TO 1-1-76	12 MO. %		GAS PRODUCTION - MCF		
				MAR/ SEPT	APR/ OCT.	MAY/ NOV.	PROD BBLs				WTR PROD	CUM TO 1-1-76	VOLUME	CUM TO 1-1-76	AVG RATIO
1 170	569708.	4300 3705	3273 3804	3411 3127	3889 2955	3273 2684	3261 2647		40329.	610037.	43915.52.12	146634.	3863.	603810.	95.
1 171	285913.								0.	285913.		321.		319696.	
1 172	291735.	2453 1752	1969 1856	2186 1578	1820 1773	1898 1759	1809 1835		22688.	314423.	8851.28.06	74250.	2672.	190955.	117.
1 173	348714.	1587 1222	1329 1361	1477 1331	1242 1337	1238 1172	1206 1492		15994.	364708.	6372.28.48	45593.	2513.	256881.	157.
1 174	131286.	1934 1780	1649 1918	1704 1919	965 2115	1595 1851	1644 1835		20909.	152195.	12713.37.81	90502.	13921.	57728.	665.
1 175	307672.								0.	307672.		10720.		610576.	
1 176	489082.	2805 2379	2691 2111	3261 1643	3221 1848	1957 1532	1932 1844		27224.	516306.	3039.10.04	11223.	8850.	620257.	325.
1 177	103427.	2904 2706	2605 2698	3157 2821	2402 3034	2610 2903	2469 3200		33509.	136936.	27495.45.07	185427.	17615.	58246.	525.
1 178	315721.								0.	315721.		921.		584180.	
1 179	578208.	3028 4253	2904 1247	3520 1205	3501 1490	4186 1425	4911 1736		33406.	611614.	10085.23.18	25162.	6872.	427064.	205.
1 180	367465.								0.	367465.		320.		1133479.	
1 181	490822.	5055 5136	4591 4874	5564 4040	5495 5735	5491 4935	4991 4253		60160.	550982.	476. 0.78	5327.	4861.	932498.	80.
1 182	31064.	143 139	128 137	155 137	205 149	163 158	108 137		1759.	32823.	13630.88.56	67133.	4838.	87624.	2750.
1 183	336126.	1738 1795	1495 1790	1578 1780	1661 1461	1767 1398	1744 1437		19644.	355770.	8184.29.40	20484.	4875.	1262477.	248.
1 184	340506.								0.	340506.		0.		768133.	

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		JAN/ JULY	FEB/ AUG.	MAR/ SEPT	APR/ OCT.	MAY/ NOV.				12 MO. % PROD WTR BBLs	PROD	CUM TO 1-1-76 VOLUME	CUM TO 1-1-76 VOLUME	12 MO AVG RATIO
1 185	309613.	3523 3424	3096 3414	3287 3040	3195 2786	3371 2665	3328 2738	37867.	347480.	15828.29.47	26431.	4982.	620379.	131.
1 186	543237.	4213 3866	3288 3937	3313 3725	2403 2864	3180 3034	3515 4583	41921.	585158.	711. 1.66	4584.	5000.	1545709.	119.
1 187	282064.							0.	282064.		0.		258551.	
1 188	193426.	599 455	544 591	595 505	402 704	553 598	756 400	6702.	200128.	134. 1.96	5918.	313.	70001.	46.
1 189	211325.							0.	211325.		14357.		271228.	
1 190	245537.							0.	245537.		54309.		363539.	
1 191	131385.	1227 1081	875 1005	1370 1069	1394 1070	1301 694	1063 775	12924.	144309.	1677.11.48	5114.	2210.	301303.	170.
1 192	276058.	1512 1821	980 1508	1307 1306	1231 1690	1771 1205	1791 1133	17255.	293313.	2355.12.00	30969.	6729.	485042.	389.
1 193	32039.	0 4291	0 6446	770 3988	5227 4197	5397 5189	5457 3314	44276.	76315.	29098.39.65	29098.	283.	43426.	6.
1 194	255291.							0.	255291.		16960.		514250.	
1 195	48384.	0 0	0 0	0 0	0 0	0 0	0 0	0.	48384.	0. 0.00	36542.	0.	181417.	0.
1 196	433857.	400 823	673 858	685 771	386 760	554 645	671 675	7901.	441758.	12089.60.47	137841.	1525.	424913.	193.
1 197	24315.							0.	24315.		0.		33397.	
1 198	264242.							0.	264242.		35125.		226633.	
1 199	321770.	656 412	570 46	580 60	750 57	665 502	560 525	5383.	327153.	19624.78.47	89370.	3031.	305687.	563.

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COMPANY, LEASE & WELL NO.	CUM. TO 1-1-75	OIL PRODUCTION					JUNE /DEC	12 MO. TOTAL	CUM TO 1-1-76	12 MO. %		GAS PRODUCTION - MCF			
		JAN/ JULY	FEB/ AUG.	MAR/ SEPT	APR/ OCT.	MAY/ NOV.				PROD BBLs	WTR PROD	CUM TO 1-1-76	VOLUME	CUM TO 1-1-76	AVG RATIO
1 200	37309.							0.	37309.	0.				32043.	
1 201	223776.	1361 1234	1321 1242	2661 1246	1340 1183	1439 1442	1091 826	16386.	240162.	15889.49.23	64293.	3784.	191742.	230.	
1 202	315197.	215 705	699 739	1370 742	509 367	0 598	700 625	7269.	322466.	16845.69.85	24989.	1957.	106169.	269.	
1 203	248657.							0.	248657.	0.			385320.		
1 204	58880.	802 524	726 523	854 547	715 717	435 686	510 488	7527.	66407.	6883.47.76	25624.	27945.	144233.	3712.	
1 205	331217.							0.	331217.	614.			478054.		
1 206	497932.	3428 2982	2861 3277	3468 2876	3041 2896	3397 3800	3166 3308	38500.	536432.	1186. 2.98	2868.	4925.	729512.	127.	
1 207	318597.							0.	318597.	0.			405560.		
1 208	213732.							0.	213732.	321.			541936.		
1 209	265253.							0.	265253.	0.			271734.		
1 210	687742.	4047 2432	3630 2182	4762 2410	4192 2123	5083. 2032	4106 2047	39046.	726783.	7669.16.41	175044.	4852.	512983.	124.	
1 211	295071.							0.	295071.	452.			369295.		
1 212	101222.	2771 1407	2363 1515	1391 1517	1379 1523	1485 1296	1397 1306	19350.	120572.	2317.10.69	55815.	32764.	74811.	1693.	
1 213	184363.							0.	184363.	5020.			270304.		
1 214	221799.	924 1149	754 1175	937 929	910 1151	907 1265	1534 1275	12910.	234709.	14762.53.34	101951.	1468.	132117.	113.	
1 215	66137.							0.	66137.	6168.			69075.		

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CUMULATIVE OIL, WATER & GAS PRODUCTION
YEAR, 1975

COMPANY, LEASE & WELL NO.	CUM. TO 1-1-75	OIL PRODUCTION					JUNE /DEC	12 MO. TOTAL	CUM TO 1-1-76	WATER PRODUCTION		GAS PRODUCTION - MCF	
		JAN/ JULY	FEB/ AUG.	MAR/ SEPT	APR/ OCT.	MAY/ NOV.				12 MO. % PROD WTR	CUM TO 1-1-76 VOLUME	12 MO AVG 1-1-76 RATIO	
1 216	174265.	1610 1909	1764 1730	1821 1433	1878 1427	2255 997	2174 958	19956.	194221.	800. 3.85	22461. 63774.	361369. 3195.	
1 217	161135.							0.	161135.		2085.	146073.	
1 218	146661.	1226 1425	1186 1028	878 1331	1162 1001	1169 756	1125 896	13183.	159844.	167. 1.25	7089. 1369.	138022. 103.	
1 219	39733.	441 433	492 200	488 205	507 150	473 798	435 819	5441.	45174.	2574.32.11	22842. 1437.	60572. 264.	
1 220	152895.							0.	152895.		0.	180608.	
1 221	243545.							0.	243545.		14133.	486664.	
1 222	195044.	3118 2920	2398 2836	2688 2054	2760 1572	3398 1504	2334 1546	29128.	224172.	4706.13.90	8922. 8604.	132229. 295.	
1 223	193945.							0.	193945.		3751.	480598.	
1 224	241689.	572 524	1410 495	570 493	562 441	353 423	349 434	6626.	248315.	8241.55.43	57133. 4973.	520904. 750.	
1 225	71751.	404 988	341 1019	414 1013	997 1020	1006 818	993 614	9627.	8378.	16601.63.29	94650. 4891.	56278. 508.	
1 226	240743.	214 0	192 0	233 0	153 0	0 0	0 0	792.	241535.	11240.93.41	120479. 2007.	1042982. 2534.	
1 227	189957.	935 387	257 349	388 383	383 248	381 238	375 244	4568.	194525.	14357.75.86	100455. 4944.	400581. 1082.	
1 228	97030.							0.	97030.		23234.	191468.	
1 229	188291.							0.	188291.		56607.	214766.	
1 230	206612.							0.	206612.		4890.	363811.	
1 231	142367.	1928 890	3651 1019	1242 1040	1329 1131	1141 1082	1127 1112	16692.	159059.	30037.64.27	218919. 19569.	355586. 1172.	

CUMULATIVE OIL, WATER & GAS PRODUCTION
YEAR, 1975

COMPANY, LEASE & WELL NO.	CUM. TO 1-1-75	OIL PRODUCTION					JUNE /DEC	12 MO. TOTAL	CUM TO 1-1-76	WATER PRODUCTION		GAS PRODUCTION - MCF	
		JAN/ JULY	FEB/ AUG.	MAR/ SEPT	APR/ OCT.	MAY/ NOV.				12 MO. PROD BLS	% WTR PROD	12 MO. VOLUME	12 MO AVG RATIO
1 232	172551.							0.	172551.	3979.		439985.	
1 233	364919.	5367 2071	5146 1741	3002 1644	2914 2978	2826 3273	2603 3363	36928.	401847.	7598.17.06	37148.	7646.	399170. 207.
1 234	350417.	1183 862	640 649	852 805	800 684	853 679	658 808	9473.	359890.	3436.26.61	104526.	6556.	484382. 692.
1 235	3495.							0.	3495.	0.			525406.
1 242	0.							0.	0.	0.		0.	
1 245	99006.	1011 747	861 618	1022 743	662 995	660 833	767 871	9790.	108796.	36791.78.98	177327.	1411.	33974. 144.
1 246	0.							0.	0.	0.			0.
1 247	5453.							0.	5453.	0.			1623.
1 249	0.							0.	0.	0.			0.
1 251	193601.	4357 3963	3544 4145	4117 3808	3917 3608	3547 3518	3397 3576	45497.	239098.	12825.21.98	59879.	2010.	52462. 44.
1 252	150058.	2424 1981	2067 1855	1874 1889	2069 2208	1842 2129	1913 1928	24184.	174242.	5478.18.46	54130.	10655.	199432. 440.
1 253	298440.	974 840	920 828	163 845	119 826	1536 418	844 77	8390.	306830.	49252.85.44	228068.	13319.	83427. 1587.
1 254	295472.	3332 3369	2989 3222	4141 3643	3553 3832	3643 3668	3274 3769	42435.	337907.	15440.26.67	81633.	11047.	114190. 260.
1 255	80346.	0 0	0 0	0 0	0 0	0 0	0 0	0.	80346.	0. 0.00	119945.	0.	42243. 0.
1 256	419945.	2942 1367	2337 1763	2385 2043	2317 1741	2090 1666	1918 1484	24553.	444498.	119851.82.99	290971.	48312.	420767. 1967.

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CUMULATIVE OIL, WATER & GAS PRODUCTION
YEAR, 1975

COMPANY, LEASE & WELL NO.	CUM. TO 1-1-75	OIL PRODUCTION					JUNE /DEC	12 MO. TOTAL	CUM TO 1-1-76	WATER PRODUCTION		GAS PRODUCTION - MCF		
		JAN/ JULY	FEB/ AUG.	MAR/ SEPT	APR/ OCT.	MAY/ NOV.				12 MO. % PROD WTR	CUM TO 1-1-76	12 MO. VOLUME	CUM TO 1-1-76	12 MO AVG RATIO
1 270	170026.	2424 1867	1993 2196	2214 1610	1876 1555	1843 1543	2000 1493	22614.	192640.	35940.61.37	140725.	1581.	14553.	69.
1 271	35432.	1096 1235	836 990	937 1083	966 933	1210 1049	904 964	12203.	47635.	93. 0.75	699.	1434.	9942.	117.
1 272	0.	0 0	0 0	0 0	0 0	0 0	0 0	0.	0.	0. 0.00	0.	0.	0.	0.
1 273	40447.	0 0	0 0	0 0	0 0	0 0	0 0	0.	40447.	0. 0.00	4472.	0.	138428.	0.
1 274	197060.	3809 4031	3417 4021	4477 3917	4422 3915	4186 3747	3918 3850	47710.	244770.	8591.15.25	41327.	28352.	125922.	594.
1 275	127375.	2571 1879	2990 1928	3623 1972	1814 1903	1848 1821	1798 1871	26018.	153393.	13251.33.74	56801.	9387.	79674.	360.
1 276	50819.	411 637	318 301	391 461	328 201	306 225	384 308	4271.	55090.	17322.80.22	76858.	1476.	76569.	345.
1 277	110292.	2482 1723	2067 2041	2385 1857	1903 1617	2117 1975	1836 2176	24179.	134471.	7057.22.59	99143.	1636.	7003.	67.
1 278	120836.	2525 2265	2024 2508	3643 2303	3398 2254	3174 1646	2890 1562	30192.	151028.	59496.66.33	226575.	1686.	84106.	55.
1 279	167066.	1294 1044	1185 1028	1334 1015	1222 1026	1142 2045	979 2099	15413.	182479.	52880.77.43	327741.	1435.	63761.	93.
1 280	75108.	286 1077	854 1019	1242 1041	1099 1076	839 1029	912 1058	11532.	86640.	26259.69.48	308208.	6547.	86258.	567.
1 281	137235.	2587 2648	2169 2524	2245 2150	1967 2228	2339 2444	1943 2278	27522.	164757.	66039.70.58	261509.	1397.	62147.	50.
1 282	77283.	1571 2016	1409 2010	1631 1507	1610 1032	1985 791	1959 596	18117.	95400.	68189.79.00	311741.	4963.	75833.	273.

CUMULATIVE OIL, WATER & GAS PRODUCTION
 YEAR, 1975

COMPANY, LEASE & WELL NO.	CUM. TO 1-1-75	OIL PRODUCTION					JUNE /DEC	12 MO. TOTAL	CUM TO 1-1-76	WATER PRODUCTION		GAS PRODUCTION - MCF		
		JAN/ JULY	FEB/ AUG.	MAR/ SEPT	APR/ OCT.	MAY/ NOV.				12 MO. % PROD WTR	CUM TO 1-1-76	CUM TO 1-1-76	12 MO AVG RATIO	
1 283	264328.	2966 3971	1652 2532	3740 3813	3487 3490	3257 2219	2793 2380	36300.	300628.	97367.72.84	302660.	1445.	126844.	39.
1 284	109459.	2428 1740	1879 1983	2019 2000	1993 2014	2501 1926	1825 1660	23968.	133427.	35827.59.91	178263.	4952.	108986.	206.
1 285	238771.	2745 2143	2256 2558	2537 2995	2891 2930	2701 3491	2379 1946	31572.	270343.	80960.71.94	320330.	14809.	108891.	469.
1 286	42805.	1009 1171	1532 1003	1724 1023	1222 1027	1141 1048	1177 768	13845.	56650.	38513.73.55	186835.	1437.	36180.	103.
1 287	124941.	3146 2699	2929 2814	3378 2257	2648 2124	3025 1913	2548 2239	31720.	156661.	102622.76.38	325522.	14898.	56931.	469.
1 288	82417.	461 258	271 278	454 278	311 280	275 278	247 280	3671.	86088.	10778.74.59	253154.	34212.	47471.	9319.
1 289	143190.	3218 4608	2892 4388	3318 3839	3040 3029	3731 3117	4475 3097	42752.	185942.	19209.31.00	77089.	1425.	67087.	33.
1 290	101687.	1107 1149	1033 1237	1277 805	1241 1244	1127 1203	1123 1089	13635.	115322.	9759.41.71	77191.	4488.	14415.	329.
1 291	149561.	0 0	0 0	0 0	0 0	0 0	0 0	0.	149561.	0. 0.00	217860.	0.	88095.	0.
1 292	117534.	1915 1188	1586 1184	2381 1178	2352 2206	1169 2269	1154 2305	20887.	138421.	31419.60.06	54065.	4995.	25576.	239.
1 293	131804.	0 0	0 0	0 0	0 0	0 0	0 0	0.	131804.	0. 0.00	184915.	0.	9846.	0.
1 294	165505.	2280 1953	1944 2103	2527 2105	1959 1978	1897 2098	1863 2115	24822.	190327.	14193.36.37	69706.	1882.	40602.	75.
1 295	139409.	981 747	837 599	1051 619	1214 529	1760 895	548 715	10495.	149904.	30538.74.42	150455.	5203.	10782.	495.

CUMULATIVE OIL, WATER & GAS PRODUCTION
YEAR, 1975

COMPANY, LEASE & WELL NO.	CUM. TO 1-1-75	OIL PRODUCTION					JUNE /DEC	12 MO. TOTAL	CUM TO 1-1-76	WATER PRODUCTION		GAS PRODUCTION - MCF	
		JAN/ JULY	FEB/ AUG.	MAR/ SEPT	APR/ OCT.	MAY/ NOV.				12 MO. PROD BBLs	% WTR PROD	12 MO. VOLUME	12 MO AVG RATIO
1 296	85889.	1202 1519	1070 1294	1398 1069	1380 1158	407 1108	1235 1139	13979.	99868.	13302.48.75	86945.	12909.	107455. 923.
1 297	58464.	947 1120	897 978	1008 895	864 751	1281 649	1125 870	11385.	69849.	3349.22.72	87787.	1437.	54369. 126.
1 298	220100.	4133 2546	3788 2507	3436 1198	3905 1265	3647 1503	2472 2483	32883.	252983.	98138.74.90	314004.	115489.	213130. 3512.
1 299	226656.	4308 4115	3267 3553	3831 3670	3604 3612	3860 3615	3810 3579	44824.	271480.	66459.59.72	119762.	5056.	81380. 112.
1 300	97811.	1571 1657	1258 1652	1708 1753	1687 1734	1763 1716	1610 1681	19790.	117601.	3832.16.22	34321.	49134.	70752. 2482.
1 301	0.							0.	0.	0.			0.
1 302	0.							0.	0.	0.			0.
1 304	113221.	2714 2623	2371 2307	2667 2175	2414 1678	2701 1696	2481 1126	26953.	140174.	3811.12.38	12088.	1453.	98381. 53.
1 305	61258.	1357 1833	1301 1805	1659 3966	1520 3656	2311 3316	1842 4915	29481.	90739.	11307.27.72	56022.	1445.	34144. 49.
1 306	74295.	1577 1324	1475 1554	1464 1689	1341 1027	1698 1272	1355 1229	17005.	91300.	35163.67.40	113951.	1452.	31444. 85.
1 307	84499.	1157 801	1068 798	1139 794	1125 717	788 422	778 515	10102.	94601.	45727.81.90	96817.	4955.	16343. 490.
1 308	138716.	2684 2815	2411 3031	2840 3034	2510 3047	2558 3024	2548 3172	33674.	172390.	28697.46.01	100810.	7859.	41949. 233.
1 309	1852.	0 0	0 0	0 0	0 0	0 0	0 0	0.	1852.	0. 0.00	6886.	0.	540. 0.
1 310	124504.	1925 2215	1938 2281	2244 2355	2057 2304	2255 947	2225 1024	23770.	148274.	73814.75.64	199999.	1427.	38477. 60.

CUMULATIVE OIL, WATER & GAS PRODUCTION
YEAR, 1975

COMPANY, LEASE & WELL NO.	CUM. TO 1-1-75	OIL PRODUCTION					JUNE /DEC	12 MO. TOTAL	CUM TO 1-1-76	WATER PRODUCTION		GAS PRODUCTION - MCF	
		JAN/ JULY	FEB/ AUG.	MAR/ SEPT	APR/ OCT.	MAY/ NOV.				12 MO. PROD BBLs	% WTR PROD	CUM TO 1-1-76 VOLUME	12 MO AVG RATIO
1 311	21723.	599 500	362 562	369 445	1957 478	415 406	476 575	7144.	28867.	604.	7.79	2663.	805. 32907. 112.
1 312	83609.	1191 1573	1196 1763	1449 1534	1431 1489	1522 1557	1530 1627	17862.	101471.	8693.	32.73	61179.	5011. 91731. 280.
1 313	37743.	627 739	754 710	895 653	697 676	664 598	728 420	8161.	45904.	17712.	68.45	123070.	3176. 13752. 389.
1 314	88139.	1738 1629	1174 1625	1501 1616	1482 937	1500 898	1583 750	16433.	104572.	86918.	84.09	269697.	4858. 16322. 295.
1 315	209591.	5165 4833	3929 4042	4762 4793	4703 4963	4865 5172	4696 4298	56221.	265812.	18085.	24.33	35795.	4873. 115638. 86.
1 316	122225.	1618 1737	1447 1803	1728 1835	1764 1848	1729 1715	1825 2115	21164.	143389.	141619.	86.99	417092.	5551. 87975. 262.
1 317	131887.	3975 3508	3331 3497	3571 3479	3502 2619	3452 2850	3408 2929	40121.	172008.	46391.	53.62	119805.	4882. 59386. 121.
1 318	38904.	692 747	591 835	681 774	596 728	742 481	767 684	8318.	47222.	97554.	92.14	296721.	10462. 59717. 1257.
1 319	63341.	1847 1408	1575 1639	1590 1641	1545 1649	1623 1635	1398 1649	19199.	82540.	42159.	68.70	181824.	9408. 63494. 490.
1 320	34312.	1230 636	1128 727	1268 742	506 626	473 673	640 486	9135.	43447.	11242.	55.17	40285.	1437. 15231. 157.
1 321	85240.	2142 2155	1602 2148	2096 2137	1994 2151	2120 1820	2094 2277	24736.	109976.	21008.	45.92	160500.	4919. 32378. 198.
1 322	38407.	1369 911	907 917	922 919	1233 873	1052 990	1064 1150	12307.	50714.	6480.	34.49	11337.	9477. 43468. 770.
1 323	70090.	2429 2622	2227 2307	2570 2098	2354 2129	1448 1720	2634 2253	26791.	96881.	3322.	11.03	21263.	1407. 30724. 52.

CUMULATIVE OIL, WATER & GAS PRODUCTION
YEAR, 1975

COMPANY, LEASE & WELL NO.	JAN/ JULY	FEB/ AUG.	MAR/ SEPT	OIL PRODUCTION			JUNE /DEC	12 MO. TOTAL	CUM TO 1-1-76	WATER PRODUCTION		GAS PRODUCTION - MCF	
				APR/ OCT.	MAY/ NOV.					12 MO. PROD BBLs	% WTR PROD	12 MO. VOLUME	12 MO AVG RATIO
1 324	2251 1580	2043 1794	1217 1548	1655 1032	1403 1349		1288 1679	18839.	97833.	8089.30.03	43117.	51093.	175924. 2712.
1 325	1714 1524	1303 1515	1496 1479	1534 1462	1686 1293		1610 1410	18026.	104196.	44652.71.24	116502.	5171.	25178. 286.
1 326	1500 1436	1427 1701	1646 1610	1490 1493	1567 1419		1452 1710	18451.	75612.	27985.60.26	116185.	1473.	10025. 79.
1 327	1047 994	1025 964	1122 844	1099 883	1033 818		1020 840	11689.	92338.	61039.83.92	171197.	4878.	36635. 417.
1 328	1212 1177	861 1577	1135 1610	1628 1213	1650 1543		1069 933	15608.	83756.	8434.35.08	38369.	2283.	11433. 146.
1 329	2356 1105	2029 1102	2459 1095	2428 1103	1087 2507		1073 2441	20785.	94621.	17216.45.30	48172.	5047.	17003. 242.
1 330	970 1440	959 1715	936 1632	1018 1662	1107 1483		1175 1550	15647.	62084.	35652.69.49	73643.	6831.	31336. 436.
1 331	0 0	0 0	0 0	0 0	0 0		0 0	0.	1514.	0. 0.00	2241.	0.	10. 0.
1 332	1737 1657	2776 1707	3364 2191	1738 2427	1903 2322		1611 2251	25684.	91102.	12012.31.86	35793.	20220.	37465. 787.
1 333	1904 1823	2370 1900	2502 1917	1815 2152	1739 2058		1772 1615	23567.	91549.	16566.41.27	87667.	4821.	22987. 204.
1 334	1198 1081	699 1123	1081 831	1260 789	1301 765		1147 875	12150.	48228.	2296.15.89	4971.	2591.	30250. 213.
1 335	2857 2291	2562 2286	1811 2273	1789 2289	2256 739		2227 760	24140.	113302.	37701.60.96	111012.	4905.	34204. 203.
1 336	1055 1308	932 1431	1239 1395	1153 1268	1273 1124		1371 1175	14724.	50308.	32422.68.76	52213.	4562.	41215. 309.

CUMULATIVE OIL, WATER & GAS PRODUCTION
YEAR, 1975

MCA UNIT

COMPANY, LEASE & WELL NO.	CUM. TO 1-1-75	JAN/ JULY	FEB/ AUG.	OIL PRODUCTION				JUNE /DEC	12 MO. TOTAL	CUM TO 1-1-76	WATER PRODUCTION		GAS PRODUCTION - MCF	
				MAR/ SEPT	APR/ OCT.	MAY/ NOV.					12 MO. PROD BBL	% WTR PROD	CUM TO 1-1-76 VOLUME	12 MO AVG RATIO
1 337	82714.	5049 2675	4325 2514	4452 2523	4369 2028	4512 1482	4197 1550		39676.	122390.	14964.27.38	15138.	5686.	94934. 143.
1 338	69929.	1452 1878	1345 1845	1346 1534	1508 1324	1604 976	1610 1356		17778.	87707.	17765.49.98	109193.	4966.	43279. 279.
1 339	8330.	172 0	285 0	47 0	0 0	0 0	0 0		504.	8834.	2988.85.56	19266.	122.	3129. 242.
1 340	13656.	462 517	443 557	398 434	386 373	275 370	328 311		4854.	18510.	4166.46.18	10999.	1629.	1795. 335.
1 341	60003.	2095 2817	1772 2589	1863 2465	2556 2427	2855 2428	2683 2359		28909.	88912.	33790.53.89	56767.	6235.	36044. 215.
1 342	27565.	1711 1234	1269 1154	1185 1187	1340 1118	1384 980	1120 1025		14707.	42272.	174. 1.16	756.	8930.	33060. 607.
1 343	27059.	1512 1147	1218 1124	1264 1127	1233 1126	1412 956	1371 1001		14491.	41550.	1849.11.31	4613.	14896.	36998. 1027.
1 344	27113.	970 910	958 976	922 979	938 986	886 838	895 875		11133.	38246.	3149.22.04	9611.	4352.	27506. 390.
1 345	19734.	714 646	534 689	647 548	563 524	680 343	671 406		6965.	26699.	82838.92.24	207621.	4971.	12784. 713.
1 346	32938.	1425 1684	1473 1679	1579 1671	1559 2041	1658 1188	1636 1220		18813.	51751.	17371.48.00	34714.	4874.	9794. 259.
1 347	47354.	2588 1235	2072 2188	2318 2344	2332 2084	1578 1770	1595 1426		23530.	70884.	15331.39.45	34043.	6820.	34706. 289.
1 348	60161.	2696 3351	2616 3312	3188 3086	3243 3183	3543 2702	3190 2626		36736.	96897.	219. 0.59	10829.	2061.	19369. 56.
1 349	17263.	884 618	1010 1035	791 1128	778 845	803 731	755 1075		10453.	27716.	7013.40.16	12831.	23777.	36476. 2274.

CUMULATIVE OIL, WATER & GAS PRODUCTION
YEAR, 1975

COMPANY, LEASE & WELL NO.	CUM. TO 1-1-75	OIL PRODUCTION					JUNE /DEC	12 MO. TOTAL	CUM TO 1-1-76	WATER PRODUCTION		GAS PRODUCTION - MCF	
		JAN/ JULY	FEB/ AUG.	MAR/ SEPT	APR/ OCT.	MAY/ NOV.				12 MO. PROD BBLs	% WTR PROD	12 MO. CUM TO 1-1-76 VOLUME	12 MO AVG RATIO
1 350	43731.	1855 1117	1684 1746	1713 1692	1849 1521	1495 1291	1511 1350	18824.	62555.	31157.62.33	43999.	4643.	28168. 246.
1 351	62540.	3629 2293	3290 1974	4295 1780	2439 1971	2813 1673	2406 1276	29839.	92379.	67364.69.30	112747.	1961.	13963. 65.
1 352	12023.	827 853	829 828	553 712	965 592	830 766	811 800	9366.	21389.	1334.12.46	2464.	4342.	31352. 463.
1 353	39137.	3594 2900	2071 2892	2407 2876	2377 2731	2528 1768	2818 1816	30778.	69915.	11657.27.47	18769.	5085.	11777. 165.
1 354	14888.	999 970	726 946	923 950	885 761	803 599	840 500	9902.	24790.	987. 9.06	1611.	1494.	7684. 150.
1 355	0.							0.	0.		0.		0.
LEASE TOTAL	72406723.	361930. 335454.	324054. 333186.	355126. 320123.	341248. 318135.	341034. 298378.	326002. 296730.	500.	76358123.	6615518.62.60	30029348.	1932622.	105754042. 489
BAISH A 2	106933.							0.	106933.		0.		130025.
MITCH. B 3	14942.							0.	14942.		0.		0.
MILLER A 4	12570.							0.	12570.		0.		0.
4	84248.							0.	84248.		0.		0.
LEASE TOTAL	96818.	0. 0.	0. 0.	0. 0.	0. 0.	0. 0.	0. 0.	0.	96818.	0. 0.00	0.	0.	0.
MILLER B 5	51813.							0.	51813.		0.		0.

MCA UNIT
CUMULATIVE OIL, WATER & GAS PRODUCTION
YEAR, 1975

COMPANY, LEASE & WELL NO.	CUM. TO 1-1-75	OIL PRODUCTION					JUNE /DEC	12 MO. TOTAL	CUM TO 1-1-76	WATER PRODUCTION			GAS PRODUCTION - MCF		
		FEB/ AUG.	MAR/ SEPT	APR/ OCT.	MAY/ NOV.	12 MO. PROD BBLs				% WTR PROD	CUM TO 1-1-76 VOLUME	12 MO. AVG RATIO			
PEARS. A															
6	7	22715.						0.	22715.		0.				0.
PART															
TOTAL		72699944.	361930.	324054.	355126.	341248.	341034.	326002.							
			335454.	333186.	320123.	318135.	298378.	296730.	3951400.	76651344.	6615518.62.60	30029348.1932622.	105884067.		489
BAISH B															
7	4	37193.	187	226	239	196	264	302							
			240	187	198	82	133	203	2457.	39650.	3557.59.14	61897.	21315.	81506.	8675.
7	3	42849.							0.	42849.		0.		59546.	
LEASE		80042.	187.	226.	239.	196.	264.	302.							
TOTAL			240.	187.	198.	82.	133.	203.	2457.	82499.	3557.59.14	61897.	21315.	141052.	8675
MILLER B															
8	1	73101.	534	632	502	363	320	417							
			481	456	491	519	707	701	6123.	79224.	1150.15.81	19127.	2466.	69696.	402.
MILL. BX		27545.							0.	27545.		3768.		94939.	
9	2	81436.	413	247	363	293	381	338							
			300	340	295	427	348	336	4081.	85517.	121. 2.87	13684.	2407.	126336.	589.
9	3	28208.							0.	28208.		5490.		58916.	
9	4	23233.	275	206	268	233	254	233							
			215	243	244	267	240	233	2911.	26144.	97. 3.22	1818.	2001.	99616.	687.
9	5	22681.							0.	22681.		5298.		30794.	
9	6	3171.							0.	3171.		0.		10011.	
9	7	42398.	220	165	215	186	203	208							
			178	195	195	213	214	229	2421.	44819.	10593.81.39	33811.	2485.	70240.	1026.

MCA UNIT
CUMULATIVE OIL, WATER & GAS PRODUCTION
YEAR, 1975

COMPANY, LEASE & WELL NO.	CUM. TO 1-1-75	OIL PRODUCTION					JUNE /DEC	12 MO. TOTAL	CUM TO 1-1-76	WATER PRODUCTION		GAS PRODUCTION - MCF	
		JAN/ JULY	FEB/ AUG.	MAR/ SEPT	APR/ OCT.	MAY/ NOV.				12 MO. PROD BBL	% WTR PROD	12 MO. CUM TO 1-1-76 VOLUME	12 MO AVG RATIO
LEASE TOTAL	228672.	908. 693.	618. 778.	846. 734.	712. 907.	838. 802.	779. 798.	9413.	238085.	10811.53.45		63869.	490902.
MITCH. B													
10 1	23836.	0	0	0	0	0	0	0.	23836.	0. 0.00	55039.	0.	43765.
10 3	81014.	675 368	516 462	478 341	407 402	468 458	582 408	5565.	86579.	20696.78.80	107793.	1361.	93969.
10 4	29636.	0	0	0	0	0	0	0.	29636.	0. 0.00	28498.	0.	68557.
10 5	11382.							0.	11382.		15394.		41376.
10 6	2311.	0	0	0	0	0	0	0.	2311.	0. 0.00	429.	0.	835.
10 7	36117.							0.	36117.		18792.		98720.
10 8	10425.							0.	10425.		320.		30412.
10 9	79152.	994 781	911 805	846 590	895 782	443 529	699 817	9092.	88244.	127572.93.34	504868.	1847.	110349.
10 10	5110.							0.	5110.		0.		0.
10 12	7316.							0.	7316.		0.		245875.
10 13	10824.							0.	10824.		3509.		25560.
10 19	14654.	355 207	273 184	226 236	203 279	222 211	374 149	2919.	17573.	15583.84.22	43061.	1360.	21522.
LEASE TOTAL	311777.	2024. 1356.	1700. 1451.	1550. 1167.	1505. 1463.	1133. 1198.	1655. 1374.	17576.	329353.	163856.90.31	777703.	4568.	780940.

YEAR, 1975

COMPANY, LEASE & WELL NO.	CUM. TO 1-1-75	OIL PRODUCTION					JUNE /DEC	12 MO. TOTAL	CUM TO 1-1-76	WATER PRODUCTION		GAS PRODUCTION - MCF	
		FEB/ AUG.	MAR/ SEPT	APR/ OCT.	MAY/ NOV.	12 MO. PROD BBLs				% WTR PROD	CUM TO 1-1-76	12 MO. VOLUME	CUM TO 1-1-76
PEARS.BX													
11 1	10979.						0.	10979.	3983.		0.		
STATE B													
12 3	37109.	0	0	0	0	0	0.	37109.	0. 0.00	29.	0.	184755.	0.
12 4	47614.	476 177	283 315	254 263	245 0	388 0	3019.	50633.	5747.65.56	17357.	212.	39745.	70.
12 5	60040.	0 44	71 105	85 0	61 0	65 0	478.	60518.	139.22.52	81114.	2424.	77371.	5071.
12 6	21648.						0.	21648.	0.			61446.	
12 7	41691.						0.	41691.	205.			99623.	
12 8	51921.	713 651	532 683	509 489	642 567	680 179	6960.	58881.	10436.59.99	39564.	2830.	61634.	406.
LEASE TOTAL	260023.	1189. 872.	886. 1103.	1060. 958.	948. 567.	1133. 179.	10457.	270480.	16322.60.95	138269.	5466.	524574.	522
TAYLOR													
13 1	49115.	29 207	237 341	280 280	232 299	228 149	2949.	52064.	22316.88.32	156673.	9.	89515.	3.
13 2	27446.	0 0	0 0	0 0	0 0	0 0	0.	27446.	0. 0.00	31.	0.	54218.	0.
13 3	32505.	0 0	0 0	0 0	0 0	0 0	0.	32505.	0. 0.00	0.	0.	50276.	0.
LEASE TOTAL	109066.	29. 207.	237. 341.	280. 280.	232. 299.	228. 149.	2949.	112015.	22316.88.32	156704.	9.	194009.	3
NON-PART TOTAL	1073660.	4871. 3849.	4299. 4316.	3866. 4003.	3735. 3706.	4514. 3404.	48975.	1122635.	218012.81.65	1221552.	40717.	2201173.	831

MAIL OFFICE 000



Case 2718

1963 MAY 31 AM 8:14

CONTINENTAL OIL COMPANY

P. O. Box 1377
Roswell, New Mexico
May 29, 1963

New Mexico Oil Conservation Commission
Post Office Box 871
Santa Fe, New Mexico

Attention: Mr. A. L. Porter, Jr., Secretary-Director

Gentlemen:

Re: SUPPLEMENT NUMBER 5 TO
MALJAMAR COOPERATIVE
AGREEMENT, LEA COUNTY,
NEW MEXICO

As directed in Order No. 2403 (Case No. 2718) dated December 31, 1962, executed counterparts are attached of the Supplemental and Amendatory Agreement to Maljamar Cooperative Agreement (Supplement No. 5) which became effective under its terms on May 1, 1963. This agreement is now being recorded in Lea County.

Yours very truly,

A. B. Slaybaugh
A. B. SLAYBAUGH
Division Superintendent
of Production
New Mexico Division

CRA-pr
Enc.

MALJAMAR COOPERATIVE AGREEMENT

Box 460
Hobbs, New Mexico

December 30, 1964

New Mexico Oil Conservation Commission
P. O. Box 1980
Hobbs, New Mexico

2718
MAIL OFFICE

'64 DEC 31 AM 8 00

Attention of Mr. Joe D. Ramey, Proration Manager

Re: Commission Order R-2403, Case 2718

Dear Sir:

For the month of December, 1964, we are requesting a supplemental increase in the field nomination of 67 BOPD due to more favorable reservoir voidage and having well test data to justify these supplemental increases.

MCA Unit No. 67	Unit L, 21-17-32	Increase from 25 to 33 bbls.
Retested 12-13-64		
MCA Unit No. 94	Unit P, 20-17-32	Increase from 29 to 31 bbls.
Retested 12-21-64		
MCA Unit No. 112	Unit A, 29-17-32	Increase from 23 to 26 bbls.
Retested 12-16-64		
MCA Unit No. 114	Unit D, 28-17-32	Increase from 35 to 38 bbls.
Retested 12-24-64		
MCA Unit No. 115	Unit C, 28-17-32	Increase from 40 to 43 bbls.
Retested 12-9-64		
MCA Unit No. 152	Unit F, 28-17-32	Increase from 63 to 93 bbls.
Retested 12-22-64		
MCA Unit No. 153	Unit E, 28-17-32	Increase from 33 to 36 bbls.
Retested 12-23-64		
MCA Unit No. 234	Unit N, 21-17-32	Increase from 81 to 96 bbls.
Retested 12-18-64		

Yours very truly,


J. A. QUEEN

Chairman
Engineering Sub-Committee

JAQ-CL

CC: JRC DEJ JER FILE
Attached Mailing List

MALJAMAR COOPERATIVE AGREEMENT

ENGINEERING COMMITTEE

MAILING LIST

Carper Drilling Company, Inc.
Mr. Marshall Rowley
200 Carper Building
Artesia, New Mexico

Mr. R. E. Powers
Sinclair Oil & Gas Company
P. O. Box 1470
Midland, Texas

Mr. R. A. Wright
Sinclair Oil & Gas Company
P. O. Box 521
Tulsa, Oklahoma

Mr. W. F. Burns
Sinclair Oil & Gas Company
520 East Broadway
Hobbs, New Mexico

Fair Oil Company
Mr. Richard L. Ray
P. O. Box 689
Tyler, Texas

Virginia Sears & Mary Jo
Vandiver, Co-Executrices
700 Hermosa Drive
Artesia, New Mexico

Charlotte W. Runyan
Hope, New Mexico

Mr. J. P. Pierce
3621 Westcliff Road South
Fort Worth 9, Texas

Cockburn Trusts
P. O. Box 241
Dallas, Texas

Mr. Leon C. Smith
2506 Bridwell Street
Wichita Falls, Texas

Mrs. Jewell Smith
2756 Mimosa Park Drive
Fort Worth 18, Texas

Mr. Jack B. Shaw
P. O. Box 517
Artesia, New Mexico

Mary Katherine Fowles
905 Saverin Drive
Sacramento 25, California

Emily Katherine Flint Boyd
and Rosemary Flint
% Mrs. George Ray
2806 South Hayden
Amarillo, Texas

9-9-64



IN REPLY REFER TO:

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

Brewer 1837
Roswell, New Mexico 88201

April 28, 1965

2718

Continental Oil Company
P. O. Box 466
Hobbs, New Mexico

Attention: Mr. Jack Marshall

Gentlemen:

Your supplemental plan of operation dated March 20, 1965, for the Heljander Cooperative agreement secondary recovery project, Las Alamos County, New Mexico, proposing the conversion of 13 wells to water injection status, has been approved on this date subject to like approval by the appropriate State officials.

One approved copy of the plan is enclosed.

Sincerely yours,

(ONE, SGD) BILLY J. SHOGER

BILLY J. SHOGER
Acting Oil and Gas Supervisor

cc:
Washington (w/cy of plan)
Hobbs (w/cy of plan)
Com. of Pub. Lands, Santa Fe (ltr. only)
BHECC, Santa Fe (ltr. only)✓

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

THE

WORLD OF THE FUTURE

IS NOW

Figure 1. The effect of the concentration of the *Agrobacterium* suspension on the transformation efficiency of *Agrobacterium* strains. The concentration of the *Agrobacterium* suspension was 10⁶ cells/ml (A), 10⁷ cells/ml (B), 10⁸ cells/ml (C), and 10⁹ cells/ml (D). The concentration of the *Agrobacterium* suspension was 10⁶ cells/ml (A), 10⁷ cells/ml (B), 10⁸ cells/ml (C), and 10⁹ cells/ml (D). The concentration of the *Agrobacterium* suspension was 10⁶ cells/ml (A), 10⁷ cells/ml (B), 10⁸ cells/ml (C), and 10⁹ cells/ml (D).

100-443887-100
F. B. I.
JAN 10 1964

CONFIDENTIAL

1997, 1998, 1999, 2000, 2001, 2002, 2003, 2004, 2005, 2006, 2007, 2008, 2009, 2010, 2011, 2012, 2013, 2014, 2015, 2016, 2017, 2018, 2019, 2020, 2021, 2022, 2023, 2024, 2025, 2026, 2027, 2028, 2029, 2030, 2031, 2032, 2033, 2034, 2035, 2036, 2037, 2038, 2039, 2040, 2041, 2042, 2043, 2044, 2045, 2046, 2047, 2048, 2049, 2050, 2051, 2052, 2053, 2054, 2055, 2056, 2057, 2058, 2059, 2060, 2061, 2062, 2063, 2064, 2065, 2066, 2067, 2068, 2069, 2070, 2071, 2072, 2073, 2074, 2075, 2076, 2077, 2078, 2079, 2080, 2081, 2082, 2083, 2084, 2085, 2086, 2087, 2088, 2089, 2090, 2091, 2092, 2093, 2094, 2095, 2096, 2097, 2098, 2099, 2100, 2101, 2102, 2103, 2104, 2105, 2106, 2107, 2108, 2109, 2110, 2111, 2112, 2113, 2114, 2115, 2116, 2117, 2118, 2119, 2120, 2121, 2122, 2123, 2124, 2125, 2126, 2127, 2128, 2129, 2130, 2131, 2132, 2133, 2134, 2135, 2136, 2137, 2138, 2139, 2140, 2141, 2142, 2143, 2144, 2145, 2146, 2147, 2148, 2149, 2150, 2151, 2152, 2153, 2154, 2155, 2156, 2157, 2158, 2159, 2160, 2161, 2162, 2163, 2164, 2165, 2166, 2167, 2168, 2169, 2170, 2171, 2172, 2173, 2174, 2175, 2176, 2177, 2178, 2179, 2180, 2181, 2182, 2183, 2184, 2185, 2186, 2187, 2188, 2189, 2190, 2191, 2192, 2193, 2194, 2195, 2196, 2197, 2198, 2199, 2200, 2201, 2202, 2203, 2204, 2205, 2206, 2207, 2208, 2209, 2210, 2211, 2212, 2213, 2214, 2215, 2216, 2217, 2218, 2219, 2220, 2221, 2222, 2223, 2224, 2225, 2226, 2227, 2228, 2229, 2230, 2231, 2232, 2233, 2234, 2235, 2236, 2237, 2238, 2239, 2240, 2241, 2242, 2243, 2244, 2245, 2246, 2247, 2248, 2249, 2250, 2251, 2252, 2253, 2254, 2255, 2256, 2257, 2258, 2259, 2260, 2261, 2262, 2263, 2264, 2265, 2266, 2267, 2268, 2269, 2270, 2271, 2272, 2273, 2274, 2275, 2276, 2277, 2278, 2279, 2280, 2281, 2282, 2283, 2284, 2285, 2286, 2287, 2288, 2289, 2290, 2291, 2292, 2293, 2294, 2295, 2296, 2297, 2298, 2299, 2300, 2301, 2302, 2303, 2304, 2305, 2306, 2307, 2308, 2309, 2310, 2311, 2312, 2313, 2314, 2315, 2316, 2317, 2318, 2319, 2320, 2321, 2322, 2323, 2324, 2325, 2326, 2327, 2328, 2329, 2330, 2331, 2332, 2333, 2334, 2335, 2336, 2337, 2338, 2339, 2340, 2341, 2342, 2343, 2344, 2345, 2346, 2347, 2348, 2349, 2350, 2351, 2352, 2353, 2354, 2355, 2356, 2357, 2358, 2359, 2360, 2361, 2362, 2363, 2364, 2365, 2366, 2367, 2368, 2369, 2370, 2371, 2372, 2373, 2374, 2375, 2376, 2377, 2378, 2379, 2380, 2381, 2382, 2383, 2384, 2385, 2386, 2387, 2388, 2389, 2390, 2391, 2392, 2393, 2394, 2395, 2396, 2397, 2398, 2399, 2400, 2401, 2402, 2403, 2404, 2405, 2406, 2407, 2408, 2409, 2410, 2411, 2412, 2413, 2414, 2415, 2416, 2417, 2418, 2419, 2420, 2421, 2422, 2423, 2424, 2425, 2426, 2427, 2428, 2429, 2430, 2431, 2432, 2433, 2434, 2435, 2436, 2437, 2438, 2439, 2440, 2441, 2442, 2443, 2444, 2445, 2446, 2447, 2448, 2449, 2450, 2451, 2452, 2453, 2454, 2455, 2456, 2457, 2458, 2459, 2460, 2461, 2462, 2463, 2464, 2465, 2466, 2467, 2468, 2469, 2470, 2471, 2472, 2473, 2474, 2475, 2476, 2477, 2478, 2479, 2480, 2481, 2482, 2483, 2484, 2485, 2486, 2487, 2488, 2489, 2490, 2491, 2492, 2493, 2494, 2495, 2496, 2497, 2498, 2499, 2500, 2501, 2502, 2503, 2504, 2505, 2506, 2507, 2508, 2509, 2510, 2511, 2512, 2513, 2514, 2515, 2516, 2517, 2518, 2519, 2520, 2521, 2522, 2523, 2524, 2525, 2526, 2527, 2528, 2529, 2530, 2531, 2532, 2533, 2534, 2535, 2536, 2537, 2538, 2539, 2540, 2541, 2542, 2543, 2544, 2545, 2546, 2547, 2548, 2549, 2550, 2551, 2552, 2553, 2554, 2555, 2556, 2557, 2558, 2559, 2560, 2561, 2562, 2563, 2564, 2565, 2566, 2567, 2568, 2569, 2570, 2571, 2572, 2573, 2574, 2575, 2576, 2577, 2578, 2579, 2580, 2581, 2582, 2583, 2584, 2585, 2586, 2587, 2588, 2589, 2590, 2591, 2592, 2593, 2594, 2595, 2596, 2597, 2598, 2599, 2600, 2601, 2602, 2603, 2604, 2605, 2606, 2607, 2608, 2609, 2610, 2611, 2612, 2613, 2614, 2615, 2616, 2617, 2618, 2619, 2620, 2621, 2622, 2623, 2624, 2625, 2626, 2627, 2628, 2629, 2630, 2631, 2632, 2633, 2634, 2635, 2636, 2637, 2638, 2639, 2640, 2641, 2642, 2643, 2644, 2645, 2646, 2647, 2648, 2649, 2650, 2651, 2652, 2653, 2654, 2655, 2656, 2657, 2658, 2659, 2660, 2661, 2662, 2663, 2664, 2665, 2666, 2667, 2668, 2669, 2670, 2671, 2672, 2673, 2674, 2675, 2676, 2677, 2678, 26

[illegible]

...continued on inside back cover

Army Plans:

(ORIG. 207) BUTY. 1. SHOGER

[illegible]

100
 W. Livingston (w/cy of plan)
 Hobbs (w/cy of plan)
 Com. of Fed. Lands, Santa Fe (lrr. only)
 HROCO, Santa Fe (lrr. only) ✓

OIL CONSERVATION COMMISSION

P. O. BOX 871

SANTA FE, NEW MEXICO

April 6, 1965

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

Attention: Mr. Jack Marshall

Gentlemen:

Reference is made to your letter of March 26, 1965, wherein you request authority to conduct bottomhole pressure tests in your Maljamar Cooperative Agreement Area, Maljamar Pool, Lea County, New Mexico, on an annual basis rather than semi-annually as you are presently doing. You further request exemption from bottomhole pressure tests for those wells which produce less than the ten-barrel average allowable, those wells which have been stimulated by water injection, and all gas and water injection wells.

Section 3 (g) on Page 8 of Order No. R-2403 provided that bottomhole pressure surveys and gas-oil ratio tests shall be taken and filed with the Commission in accordance with the Commission Rules and Regulations every six (6) months or at such periods as the Commission may prescribe.

We concur with your conclusion that semi-annual pressures are probably no longer necessary for proper application of the void-space allocation formula in the Maljamar Cooperative Agreement Unit. Further that pressures are not necessary on the injection wells and the producing wells which have received a substantial response to water injection.

Continental Oil Company is, therefore, hereby authorized to conduct the bottomhole pressure survey in the Maljamar Cooperative Agreement Unit in April only of each year, exempting certain wells from testing as outlined above.

OIL CONSERVATION COMMISSION
P. O. BOX 871
SANTA FE, NEW MEXICO

April 6, 1962

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

Attention: Mr. Jack Marshall

Gentlemen:

Reference is made to your letter of March 26, 1962, wherein you request authority to conduct bottomhole pressure tests in your Maltaner Cooperative Agreement Area, Maltaner Pool, Lea County, New Mexico, on an annual basis rather than semi-annually as you are presently doing. You further request exemption from bottomhole pressure tests for those wells which produce less than the ten-barrel acreage allowable, those wells which have been stimulated by water injection, and all gas and water injection wells.

Section 3 (g) on Page 8 of Order No. R-2403 provides that bottomhole pressure surveys and gas-oil ratio tests shall be taken and filed with the Commission in accordance with the Commission Rules and Regulations every six (6) months or at such periods as the Commission may prescribe.

We concur with your conclusion that semi-annual pressures are probably no longer necessary for proper application of the void-space allocation formula in the Maltaner Cooperative Agreement Unit. Further that pressures are not necessary on the injection wells and the producing wells which have received a substantial response to water injection.

Continental Oil Company is, therefore, hereby authorized to conduct the bottomhole pressure survey in the Maltaner Cooperative Agreement Unit in April only of each year, exempting certain wells from testing as outlined above.

Continental Oil Company
Page -2-

It is requested that prior to the testing period each year, a schedule for testing be worked out with the Hobbs District Office of the Commission in order to determine which wells have had substantial response to water injection and should be exempt from tests.

Gas-oil ratios shall continue to be taken on all producing wells semi-annually and reported to the Commission.

Very truly yours,

A. L. Porter, Jr.
Secretary-Director

ALP:DSN:sg

cc: Oil Conservation Commission - Hobbs
Oil & Gas Engineering Committee - Hobbs
Case File #2718

Continental Oil Company

Page - 2 -

It is requested that prior to the testing period each year, a schedule for testing be worked out with the Hobbs District Office of the Commission in order to determine which wells have had substantial response to water injection and should be exempt from tests.

Gas-oil ratios shall continue to be taken on all producing wells semi-annually and reported to the Commission.

Very truly yours,

A. L. Porter, Jr.
Secretary-Director

ALP:BN:ag

cc: Oil Conservation Commission - Hobbs
Oil & Gas Engineering Committee - Hobbs
Case File 42718



CONTINENTAL OIL COMPANY

P. O. BOX 460

HOBBS, NEW MEXICO

PRODUCTION DEPARTMENT
HOBBS DISTRICT
JACK MARSHALL
DISTRICT MANAGER
G. C. JAMIESON
ASSISTANT DISTRICT MANAGER

March 26, 1965

1001 NORTH TURNER
TELEPHONE: EX 3-4141

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

Attention of Mr. A. L. Porter, Jr., Secretary-Director

Gentlemen:

Re: Bottom Hole Pressures - Maljamar
Pool - Order No. R-2403

This letter is for the purpose of clarifying and amplifying the conversation regarding the MCA Unit between Mr. D. S. Nutter and Mr. V. T. Lyon on March 17, 1965. Order No. R-2403, in the third section, contains a provision 3 (G) requiring bottom hole pressure surveys and gas-oil ratio tests to be taken every six months or at such periods as the Commission may prescribe. At the time of the hearing which resulted in Order No. R-2403, Continental contemplated supplementing the pressure maintenance project by the institution of water injection operations. The acreage void-space allocation is, of course, applicable to both gas and water injection; however, due to the increasing cost of obtaining the bottom hole pressure surveys, certain changes are recommended.

Under the void-space formula, it is possible to transfer allowables only between wells on each lease, which serves to

protect correlative rights. Upon unitization, the protection of correlative rights from one lease to another within the participating area became unnecessary since that area now operates as a single lease. In order to afford the maximum protection of correlative rights, bottom hole pressure surveys were conducted on a six-months basis. In the early stages of the pressure maintenance program, this presented no great expense to the operator inasmuch as the wells flowed readily after being shut in for bottom hole pressure tests.

Since taking over the unit operation, Continental has measured the bottom hole pressure each six months, either with a bottom hole pressure gauge or, in pumping wells, with a device to measure the fluid level. As the pressure in the reservoir gradually declines, an increasing number of wells requires swabbing when the pool is placed back on production after being shut in for bottom hole pressure survey. In April and October, 1964, it was necessary to swab wells on 31 and 45 different occasions, respectively, as a direct result of being shut-in for the survey. The average cost of each swabbing job was approximately \$110. It is estimated that if the test to be conducted in April, 1965 is taken on a comparable basis to those in the past, at least 50 swabbing jobs will be required to return wells to production, an expenditure of \$5,500. These costs, together with the cost of the actual survey (approximately \$10 per well), make a bottom hole survey

quite an expensive undertaking.

It is Continental's opinion that the purposes of conservation would be virtually as well served with an annual bottom hole pressure survey. Field average bottom hole pressures and gas-oil ratios do not vary greatly from one survey to the next. The average bottom hole pressure for October, 1963, April, 1964, and October, 1964, were 594.9, 583 and 576, respectively. Average gas-oil ratios from C-115 reports for the first two such periods were 5012 and 5412 respectively with the third period not yet compiled. The void-space allowable varies to a larger degree with changes in gas-oil ratio than with changes of bottom hole pressure. Furthermore, there are a large number of limited capacity wells for which the bottom hole pressure, or the gas-oil ratio, have no significance inasmuch as they do not enter into the void-space calculation. Their allowable is based solely on the acreage factor of 10 barrels per day.

It is further our opinion that wells under stimulus by water injection should not be shut in for bottom hole pressure measurements. This, we believe, is in line with waterflooding operations over the state.

It is therefore Continental's proposal that bottom hole pressure testing be conducted in the following manner:

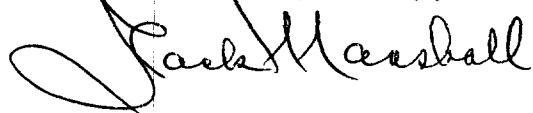
1. Bottom hole pressure tests will be conducted on an annual basis during April of each year.

2. Wells having insufficient producing capacity to produce more than the ten barrel per day acreage allowable will not be included in the survey.
3. Gas or water injection wells and wells which have been stimulated by the injection of water will not be included in the survey.

Based on information from the October, 1964 surveys, there are 77 wells in the MCA Participating Area which have insufficient producing capacity to be affected by the void-space formula, 36 injection wells (30 gas, 6 water) and 15 wells which have been stimulated by water injection. This will leave 106 wells within the participating area which will be surveyed in April, 1965. One well bearing an MCA number is a water supply well. Four wells outside the participating area, but within the repressuring area, will be surveyed on the same basis of selection.

Considering the information contained above, it is respectfully requested that the Commission concur in the proposal for an annual bottom hole pressure testing schedule and the selection of wells to be tested, commencing in April, 1965.

Yours very truly,

A handwritten signature in cursive script, reading "Jack Marshall". The signature is written in dark ink and is positioned below the typed name "Jack Marshall".

RSF VS A
~~RSF~~

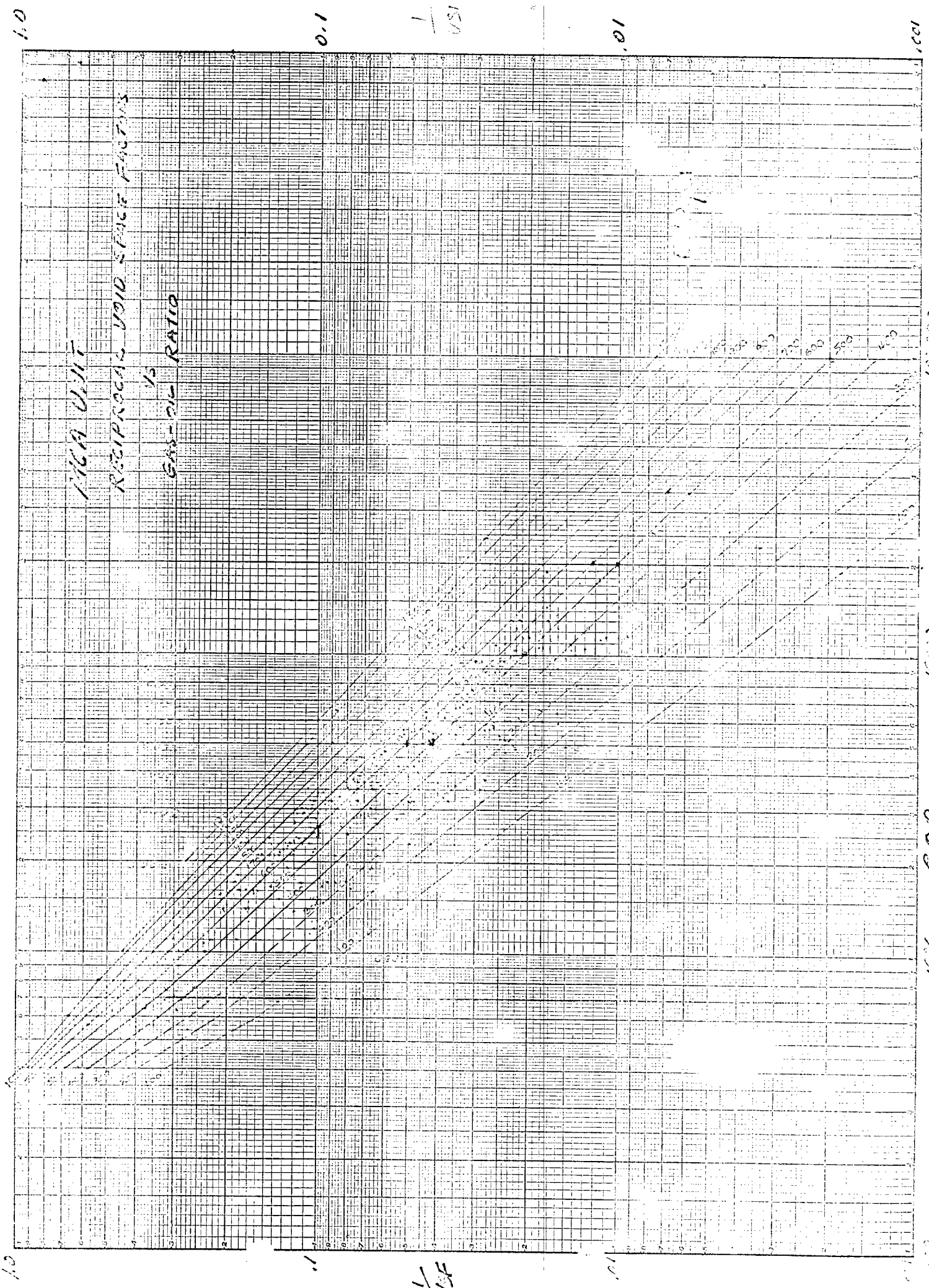
DECEMBER 1964

RSF max. Nomination 10,256
Average command assigned 1729
Max. total game allocation 8527

$$\sum \frac{1}{VSF} = \frac{9.712}{8527} = 0.001139$$

(.018 / 8527)
9.712

<u>RVSF</u>	<u>VSA</u>	<u>RVSF</u>	<u>VSA</u>	<u>RVSF</u>	<u>VSA</u>
.001	1	.023	20	.078	70
.002	2	.024	21	.091	80
.003	3	.025	22	.102	90
.004	4	.026	23	.114	100
.006	5	.027	24	.125	110
.007	6	.028	25	.137	120
.008	7	.030	26	.159	140
.009	8	.031	27	.182	160
.010	9	.032	28	.205	180
.011	10 ✓	.033	29	.228	200
.013	11	.034	30	.250	220
.014	12	.035	31	.308	270
.015	13	.036	32	.364	320
.016	14	.040	35	.471	370
.017	15	.042			
.017	15	.046	40	.478	420
.018	16	.051	45	.535	470
.019	17	.057	50	.592	520
.021	18	.063	55		
.022	19	.068	60		



CONTINENTAL OIL COMPANY

P. O. BOX 460
HOBBS, NEW MEXICO

PRODUCTION DEPARTMENT
HOBBS DISTRICT
JACK MARSHALL
DISTRICT MANAGER
G. C. JAMIESON
ASSISTANT DISTRICT MANAGER

March 26, 1965

1001 NORTH TURNER
TELEPHONE: EX 3-4141

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

Attention of Mr. A. L. Porter, Jr., Secretary-Director

Gentlemen:

Re: Bottom Hole Pressures - Maljamar
Pool - Order No. R-2403

This letter is for the purpose of clarifying and amplifying the conversation regarding the MCA Unit between Mr. D. S. Nutter and Mr. V. T. Lyon on March 17, 1965. Order No. R-2403, in the third section, contains a provision 3 (G) requiring bottom hole pressure surveys and gas-oil ratio tests to be taken every six months or at such periods as the Commission may prescribe. At the time of the hearing which resulted in Order No. R-2403, Continental contemplated supplementing the pressure maintenance project by the institution of water injection operations. The acreage void-space allocation is, of course, applicable to both gas and water injection; however, due to the increasing cost of obtaining the bottom hole pressure surveys, certain changes are recommended.

Under the void-space formula, it is possible to transfer allowables only between wells on each lease, which serves to

1001 NORTH TURNER
TELEPHONE: EX 3-4141

ASSISTANT DISTRICT MANAGER
G. C. JAMIESON
DISTRICT MANAGER
JACK MARSHALL
HOBBS DISTRICT
PRODUCTION DEPARTMENT

[illegible]

0.0011-0.00002 at 1000 ft. A. 1000 ft. north of 1000 ft.

100-441100-1000
 100-441100-1000

[illegible]

protect correlative rights. Upon unitization, the protection of correlative rights from one lease to another within the participating area became unnecessary since that area now operates as a single lease. In order to afford the maximum protection of correlative rights, bottom hole pressure surveys were conducted on a six-months basis. In the early stages of the pressure maintenance program, this presented no great expense to the operator inasmuch as the wells flowed readily after being shut in for bottom hole pressure tests.

Since taking over the unit operation, Continental has measured the bottom hole pressure each six months, either with a bottom hole pressure gauge or, in pumping wells, with a device to measure the fluid level. As the pressure in the reservoir gradually declines, an increasing number of wells requires swabbing when the pool is placed back on production after being shut in for bottom hole pressure survey. In April and October, 1964, it was necessary to swab wells on 31 and 45 different occasions, respectively, as a direct result of being shut-in for the survey. The average cost of each swabbing job was approximately \$110. It is estimated that if the test to be conducted in April, 1965 is taken on a comparable basis to those in the past, at least 50 swabbing jobs will be required to return wells to production, an expenditure of \$5,500. These costs, together with the cost of the actual survey (approximately \$10 per well), make a bottom hole survey

protect conservative rights. Upon realization, the protection of conservative rights from one lease to another within the general pattern area became unnecessary since that area had operated as a single lease. In order to afford the maximum protection of conservative rights, bottom hole pressure surveys were conducted on a six-month basis. In the early stages of the pressure maintenance program, this presented no great expense to the operator inasmuch as the wells flowed readily after being shut in. Bottom hole pressure tests.

Since taking over the unit operation, Conservation has recorded the bottom hole pressure each six months, either with a bottom hole pressure gauge or, in pumping wells, with a venturi to measure the fluid level. As the pressure in the reservoir gradually declines, an increasing number of wells requires shut-in when the tool is placed back on production after being shut in for bottom hole pressure survey. In April and October, 1961, it was necessary to shut wells on #1 and #5 different occasions, respectively, as a direct result of being shut-in for the survey. The average cost of each shut-in job was approximately \$110. It is estimated that if the test to be conducted in April, 1962, is taken on a comparable basis to those in the past, at least 10 shut-in jobs will be required to return wells to production, an expenditure of \$5,500. These costs, together with the cost of the actual survey (approximately \$10 per well), make a bottom hole survey

quite an expensive undertaking.

It is Continental's opinion that the purposes of conservation would be virtually as well served with an annual bottom hole pressure survey. Field average bottom hole pressures and gas-oil ratios do not vary greatly from one survey to the next. The average bottom hole pressure for October, 1963, April, 1964, and October, 1964, were 594.9, 583 and 576, respectively. Average gas-oil ratios from C-115 reports for the first two such periods were 5012 and 5412 respectively with the third period not yet compiled. The void-space allowable varies to a larger degree with changes in gas-oil ratio than with changes of bottom hole pressure. Furthermore, there are a large number of limited capacity wells for which the bottom hole pressure, or the gas-oil ratio, have no significance inasmuch as they do not enter into the void-space calculation. Their allowable is based solely on the acreage factor of 10 barrels per day.

It is further our opinion that wells under stimulus by water injection should not be shut in for bottom hole pressure measurements. This, we believe, is in line with waterflooding operations over the state.

It is therefore Continental's proposal that bottom hole pressure testing be conducted in the following manner:

1. Bottom hole pressure tests will be conducted on an annual basis during April of each year.

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servation would be virtually as well served with an annual
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periods were 5012 and 5412 respectively with the third period

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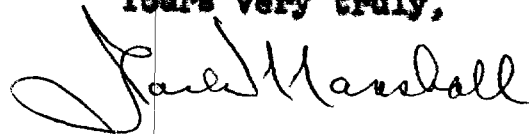
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ducted on an annual basis during April
of each year.

2. Wells having insufficient producing capacity to produce more than the ten barrel per day acreage allowable will not be included in the survey.
3. Gas or water injection wells and wells which have been stimulated by the injection of water will not be included in the survey.

Based on information from the October, 1964 surveys, there are 77 wells in the NEA Participating Area which have insufficient producing capacity to be affected by the void-space formula, 36 injection wells (30 gas, 6 water) and 15 wells which have been stimulated by water injection. This will leave 106 wells within the participating area which will be surveyed in April, 1965. One well bearing an NEA number is a water supply well. Four wells outside the participating area, but within the repressuring area, will be surveyed on the same basis of selection.

Considering the information contained above, it is respectfully requested that the Commission concur in the proposal for an annual bottom hole pressure testing schedule and the selection of wells to be tested, commencing in April, 1965.

Yours very truly,



JM-DFW

2. Wells having insufficient production capacity to produce more than the ten barrel per day storage allowance will not be included in the survey.

3. Gas or water injection wells and wells which have been stimulated by the injection of water will not be included in the survey.

Based on information from the October, 1964 survey,

there are 77 wells in the NCA Participating Area which have insufficient producing capacity to be affected by the volume formula. 56 injection wells (30 gas, 6 water) and 19 wells which have been stimulated by water injection. This will leave 100 wells within the participating area which will be surveyed in April, 1965. One well bearing an NCA number is a water supply well. This well is outside the participating area, but within the surrounding area, and will be surveyed on the same basis of selection.

Considering the information contained above, it is recommended

respectfully requested that the Commission consent in the proposed for an annual bottom hole pressure testing schedule and the selection of wells to be tested, commencing in April, 1965.

Yours very truly,



RM-DM

OIL CONSERVATION COMMISSION

P. O. BOX 2088

SANTA FE, NEW MEXICO

217

December 7, 1967

**Continental Oil Company
P. O. Box 400
Hobbs, New Mexico 88240**

Attention: Mr. L. P. Thompson

**Re: Supplemental Plan of Operation,
MCA Unit, Lea County, New Mexico**

Gentlemen:

This is to advise that the New Mexico Oil Conservation Commission has this date approved the Supplemental Plan of Operation dated November 3, 1967, and received by this office November 27, 1967, for the MCA Unit, Lea County, New Mexico, subject to like approval by the United States Geological Survey and the Commissioner of Public Lands of the State of New Mexico.

One approved copy of the Plan of Operation is returned herewith.

Very truly yours,

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

ALP/JMK/eg

**cc: Commissioner of Public Lands
Santa Fe, New Mexico**

**United States Geological Survey
Roswell, New Mexico**

C
O
P
Y

OIL CONSERVATION COMMISSION

P. O. BOX 2088

SANTA FE, NEW MEXICO

December 7, 1967

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

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Very truly yours,

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

ALP/JEX/og
cc: Commissioner of Public Lands
Santa Fe, New Mexico
United States Geological Survey
Roswell, New Mexico

COPY



CONTINENTAL OIL COMPANY

P. O. Box 460

HOBBS, NEW MEXICO 88240

1001 NORTH TURNER
TELEPHONE 393-4141

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

November 20, 1967

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

The Honorable Guyton B. Hays (2)
Commissioner of Public Lands
P. O. Box
Santa Fe, New Mexico

✓ New Mexico Oil Conservation Commission (2)
P. O. Box 2088
Santa Fe, New Mexico
Attn: Mr. A. L. Porter, Jr.

Re: Supplemental Plan of
Operation - MCA Unit -
Lea County, New Mexico

Gentlemen:

Forwarded herewith for your approval is the Supplemental Plan of Operation for the MCA Unit showing our plans to expand the waterflood project to full scale. Your favorable consideration of this plan will be sincerely appreciated.

Yours very truly,

A handwritten signature in cursive script, appearing to read "L. P. Thompson".

LPT-JS
Attach

SUPPLEMENTAL AND AMENDATORY AGREEMENT TO
MALJAMAR COOPERATIVE AGREEMENT
(Supplement No. 5)
1 Sec. No. 341

SUPPLEMENTAL PLAN OF OPERATION

Continental Oil Company, operator under Supplemental and Amendatory Agreement, Maljamar Cooperative Agreement (Supplement No. 5) proposes the following supplement to the Initial Plan of Operation dated September 24, 1962.

I. REVIEW OF OPERATIONS TO DATE

A. Pilot Waterfloods

1. Pearl Area Pilot

The Pearl Pilot Waterflood was initiated in 1954 by injection of water into MCA Unit No. 197, located in Section 30, T-17S, R-33E, and was enlarged in 1963 by the addition, as an injector, of Well No. 195, located in Section 25, T-17S, R-32E. The pilot was further enlarged by the addition of Well No. 200 in 1965 and Well No. 135 in 1967. Administrative Order No. WFX No. 267 of the New Mexico Oil Conservation Commission authorized this project to be expanded on an 80-acre five-spot pattern covering all of the unit area in Section 25, T-17S, R-32E, and Section 30, T-17S, R-33E.

2. Central Pilot Waterflood

The Central Pilot Waterflood was instituted by converting one oil producer, MCA No. 68, and two gas injection wells, MCA Nos. 113 and 116, to water injection and drilling a new well, MCA No. 235, for water injection. A new well, MCA No. 234, was drilled as a producer inside the injection pattern. The purposes of this pilot waterflood were to determine (1) the feasibility of waterflood operations, and (2) the most efficient pattern to be employed; and to gain experience for the design of equipment to be used in an expanded waterflood. In 1965, a supplemental plan of operation and application to the New Mexico Oil Conservation Commission requested authority to expand this pilot into the area described as the S/2 S/2, Section 16, and all of Sections 21 and 28, adding 13 injection wells to the waterflood project on an 80-acre

five-spot pattern. This application was approved by Administrative Order WFX 197 dated April 15, 1965. Administrative Order WFX 234 authorized a further expansion to all Section 20 and 29 adding sixteen injection wells. Administrative Order WFX 253 authorized the further expansion of this flood to add 16 injection wells in Sections 19 and 30.

Based on the experience gained in the pilot waterflood, it has been determined that the reservoir can be flooded efficiently and economically on an 80-acre five-spot pattern. A uniform pattern has been employed in that the wells in the NW/4 and SE/4 of each quarter section are used as injection wells and the wells in the NE/4 and SW/4 of each quarter section are producers.

B. Unit Performance to Date

It has been the desire of the working interest owners to expand waterflood operations in such a manner that the conversion of wells for water injection would not seriously depress current unit oil production rates, and also, to avoid producing capacity above that which would be authorized by the New Mexico Oil Conservation Commission. Recent market conditions which resulted in considerable increases in allowable have permitted us to accelerate our plans for expansion. The attached graphs show the performance of the unit area to date. As shown on Exhibit 2, the oil producing rate has remained reasonably constant since unitization. As would be expected, gas oil ratios have begun to decline. Water production to date has been quite nominal, inasmuch as there has been no water-breakthrough experience. Injection gas volumes have declined as the waterflood project has been expanded. To date, the waterflood has performed very closely to the predictions of the engineering committee.

II. PROPOSED EXPANSION

Exhibit No. 1 attached hereto is a map showing the areas of the MCA Unit. Acreage presently under waterflood is outlined in green. Operator now desires to expand the waterflood project to the entire unit area in two stages. Outlined in red are the areas in which operator proposes to expand the waterflood during the remainder of 1967. As shown, this area includes parts of Sections 16, 17, 18, and 33, T17S, R32E. During 1968, the remainder of the

unit, namely, Sections 14, 22, 23, 26, 27, and 34 are proposed to be placed under waterflood operations.

The unit owns water rights to 4200 acre-feet per annum in the Ogallala formation of the Lea County Water Basin, which authorizes 89,270 barrels per day. The full-scale water flood will utilize virtually this entire allocation of water.

At the present time produced water is being disposed of in surface pits. Prior to January 1, 1968, this produced water will be collected and injected into the unitized formation, eliminating surface disposal, and supplementing the fresh water sources.

III. COOPERATIVE AGREEMENTS

Since the waterflood operation has been expanded to the boundaries of the participating area, it is necessary to enter into agreements with offset operators in order that the waterflood may be carried on across the boundary lines in an equitable and efficient manner. The following agreements have been consummated at this time:

1. Hudson and Hudson

An agreement has been entered into between MCA Unit and Hudson and Hudson for the cooperative waterflooding across the common boundary of Sections 19 and 30, R-32E, and Sections 24 and 25, Range 31 East. It was necessary in this agreement to reconcile the differences between the 40-acre five-spot waterflood used by Hudson and Hudson and the 80-acre five-spot pattern used by the MCA Unit.

2. Cities Service Oil Company

An agreement has been entered into between the MCA Unit and Cities Service Oil Company for the cooperative waterflooding across the common boundary of the MCA Unit and SEM Unit adjoining in Section 30, T-17S, R-33E.

3. Kersey and Company

An agreement has been entered into between MCA Unit and Kersey and Company for cooperative waterflooding

across the common boundary of the MCA Unit and Kersey's Hoover Lease, located in Section 32, T-17S, R-32E.

The following agreements are in the process of being negotiated:

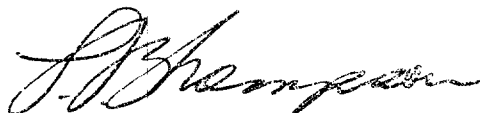
1. E. C. Donohue - Continental Oil Company - MCA Unit
The area of expansion during 1967 comprises (1) acreage which is within the participating area; (2) leases operated by Continental Oil Company, which are outside the participating area, and (3) one lease which is operated by E. C. Donohue. We are negotiating with all of these parties to achieve agreement for the waterflood operations to be conducted on a cooperative basis utilizing the same pattern as is being used in the remainder of the waterflood project.
2. Standard Oil Company of Texas
An agreement has been completed pending final signature for cooperative waterflooding across the common boundaries of Sections 8-17 and 9-16 where properties north of this line are operated by Standard Oil Company of Texas.

It is anticipated that lease line agreements will be negotiated along the perimeter of the participating area as follows:

1. Malmar Unit (Great Western, operator) Section 13, T-17S, R-32E.
2. Sinclair Oil and Gas Company, Section 24, T-17S, R-32E.
3. Standard Oil Company of Texas - Continental Oil Company - MCA Unit, Sections 14, 15, 22, and 23, T-17S, R-32E.

As the waterflood project has been expanded, the gas injection program has been curtailed. It is anticipated that the gas injection program will be discontinued when the waterflood is expanded to incorporate the entire participating area.

Operator believes that developments to date and our proposed method of expansion constitute a logical plan of further operation. It is respectfully requested that the proposed plan be approved.



L. P. THOMPSON, Chairman
Operators Committee
Maljamar Cooperative Agreement

LPT-JS

Approved Dec. 7 1967



Secretary - Director

NEW MEXICO OIL CONSERVATION COMMISSION

11-3-67