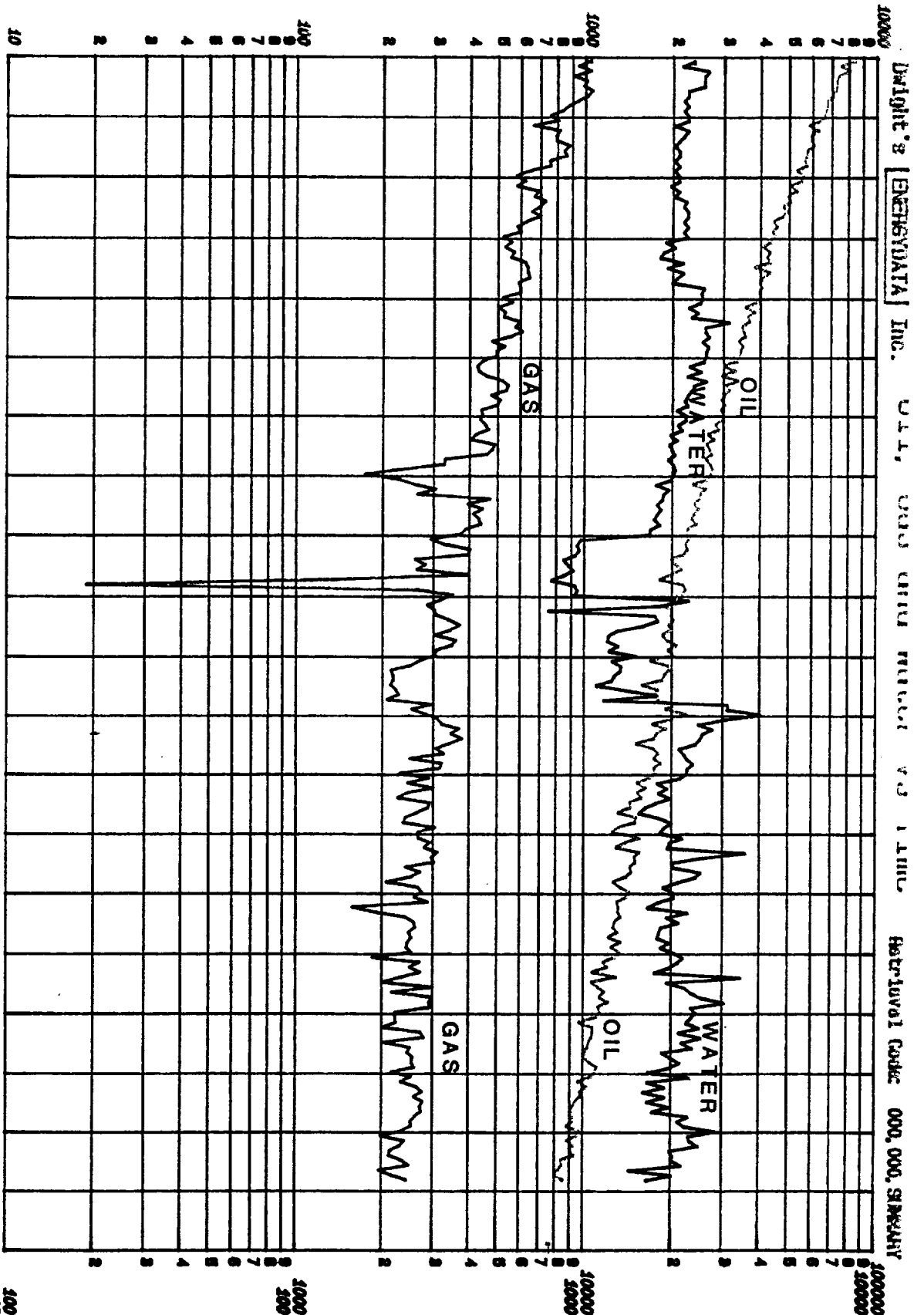


MONTHLY OIL PRODUCTION (BBL/MO)



Dwight's ENERGY DATA, INC.

U.S. GEOLOGICAL SURVEY

Production Code: 000,000, SINGULAR

MONTHLY GAS PRODUCTION (MCF/MO)

WATER (BBL/MO)

LEGEND

BEFORE EXAMINER STOGNER
OIL CONSERVATION DIVISION

LEASE: STATE OF LEASE

EXHIBIT 12
TRACT 1

Well #

Operator:

Field:

Reservoir:

County:

Location:

GAS

WATER

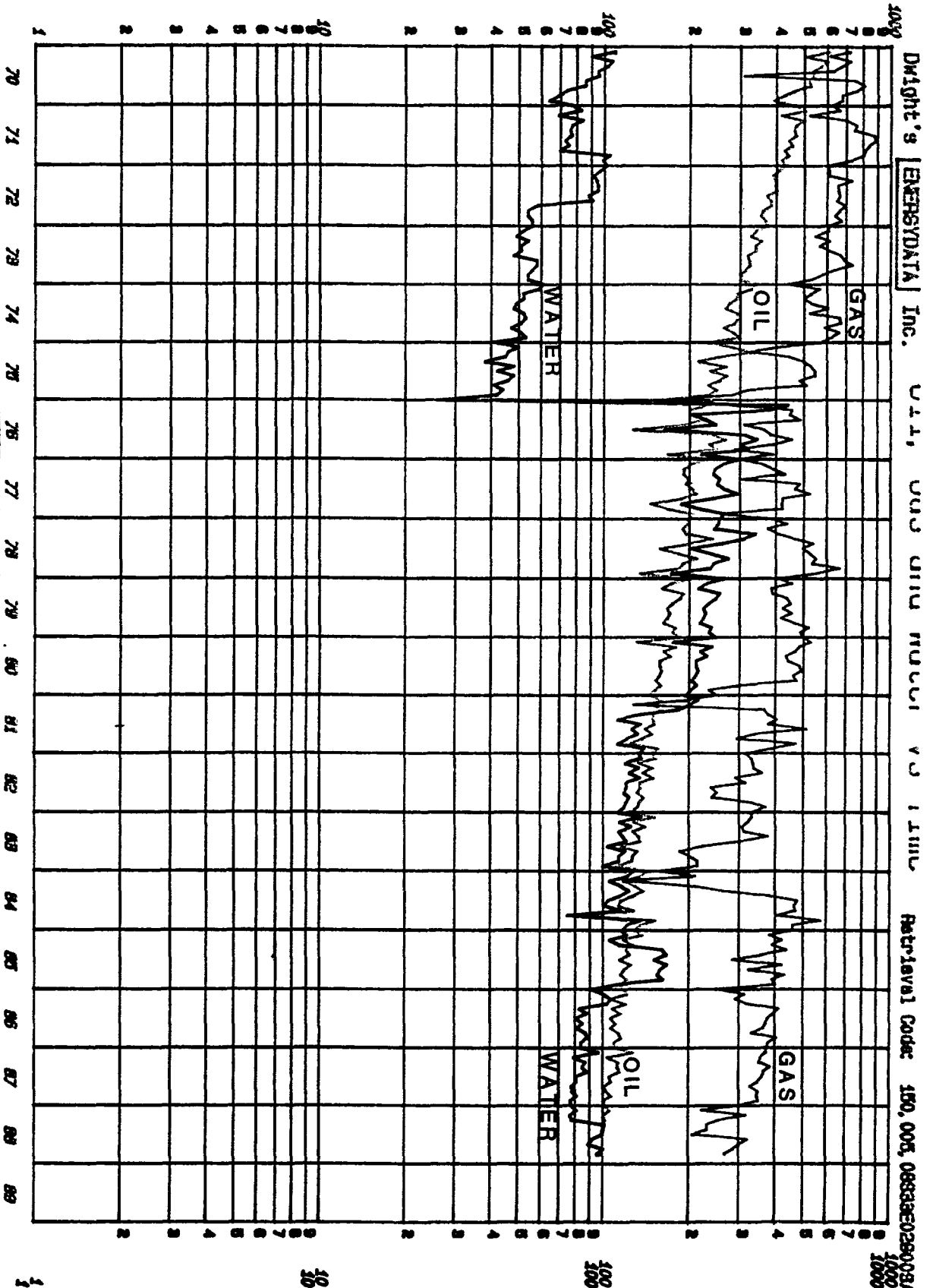
CASE NO. 9682 + 9683

EXHIBIT NO. 7

Date: 02-20-89

MONTHLY OIL PRODUCTION (BBL/MO)

LEGEND	
OIL	—
GAS	—
WATER	—



DWIGHT'S ENERGY DATA INC.

U.I.I. U.S. UNIT NUMBER V.I. I.I.I.I.

Reference Code: 150,005,06833E029003A

Lease: LEVICK STATE 2
 Well # 000001
 Operator: UNION PACIFIC RESOURCES
 Field: CHAVEZ SAN ANDRES
 Reservoir: CHAVEZ
 County: CHAVEZ
 Location: 28 85 39E NW

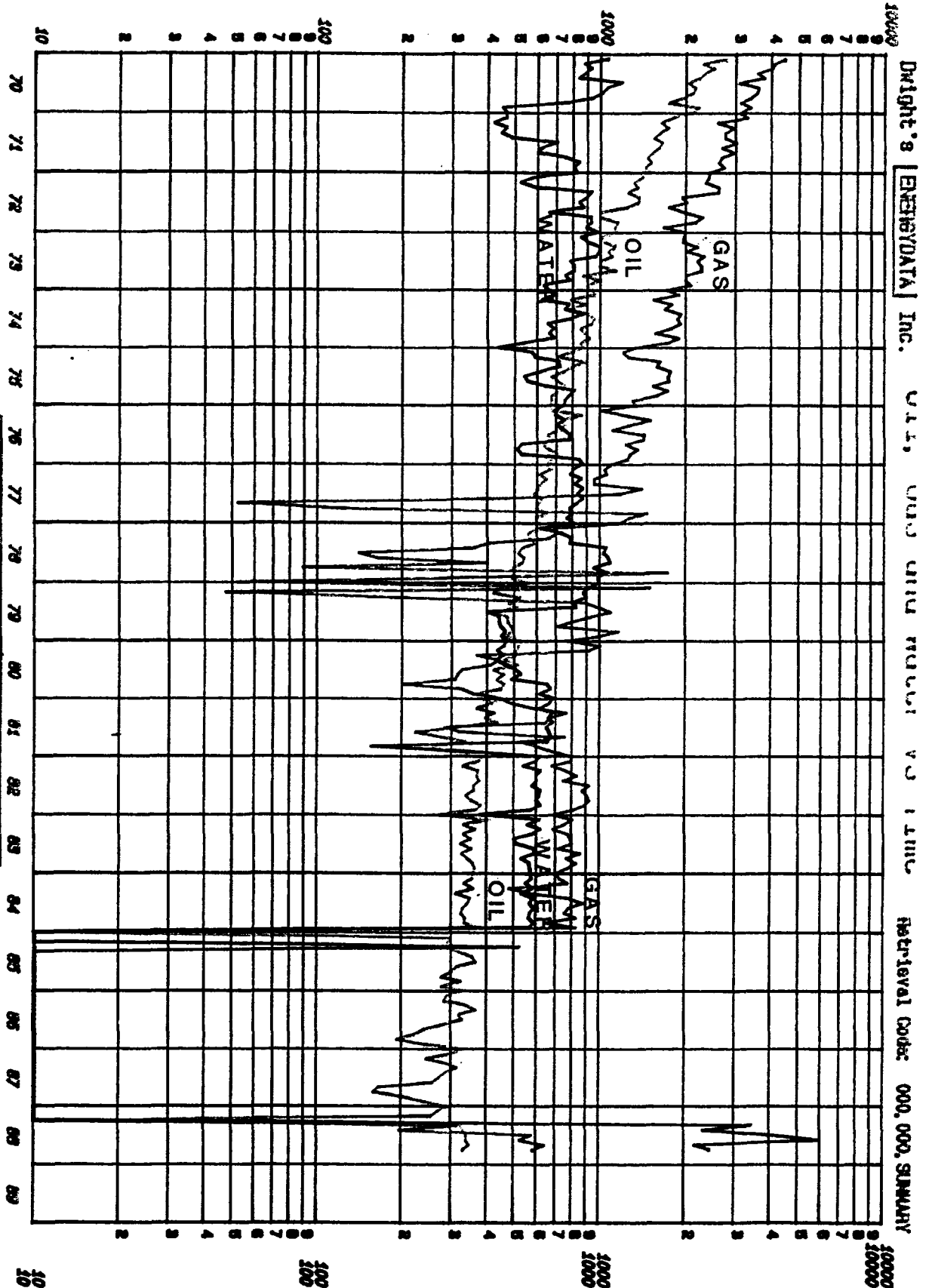
EXHIBIT 12
 TRACT 2
 SA

Date: 02-20-89

WATER (BBL/MO) MONTHLY GAS PRODUCTION (MCF/MO)

MONTHLY OIL PRODUCTION (BBL/MO)

LEGEND	
OIL	—
GAS	—
WATER	—



WATER (BBL/MO)

MONTHLY GAS PRODUCTION

(MCF/MO)

Lease: STATE 'C' LEASE

Well #

Operator:

Field:

Reservoir:

County:

Location:

EXHIBIT 12
TRACH 3

Date: 02-20-89

(BBL/MO)

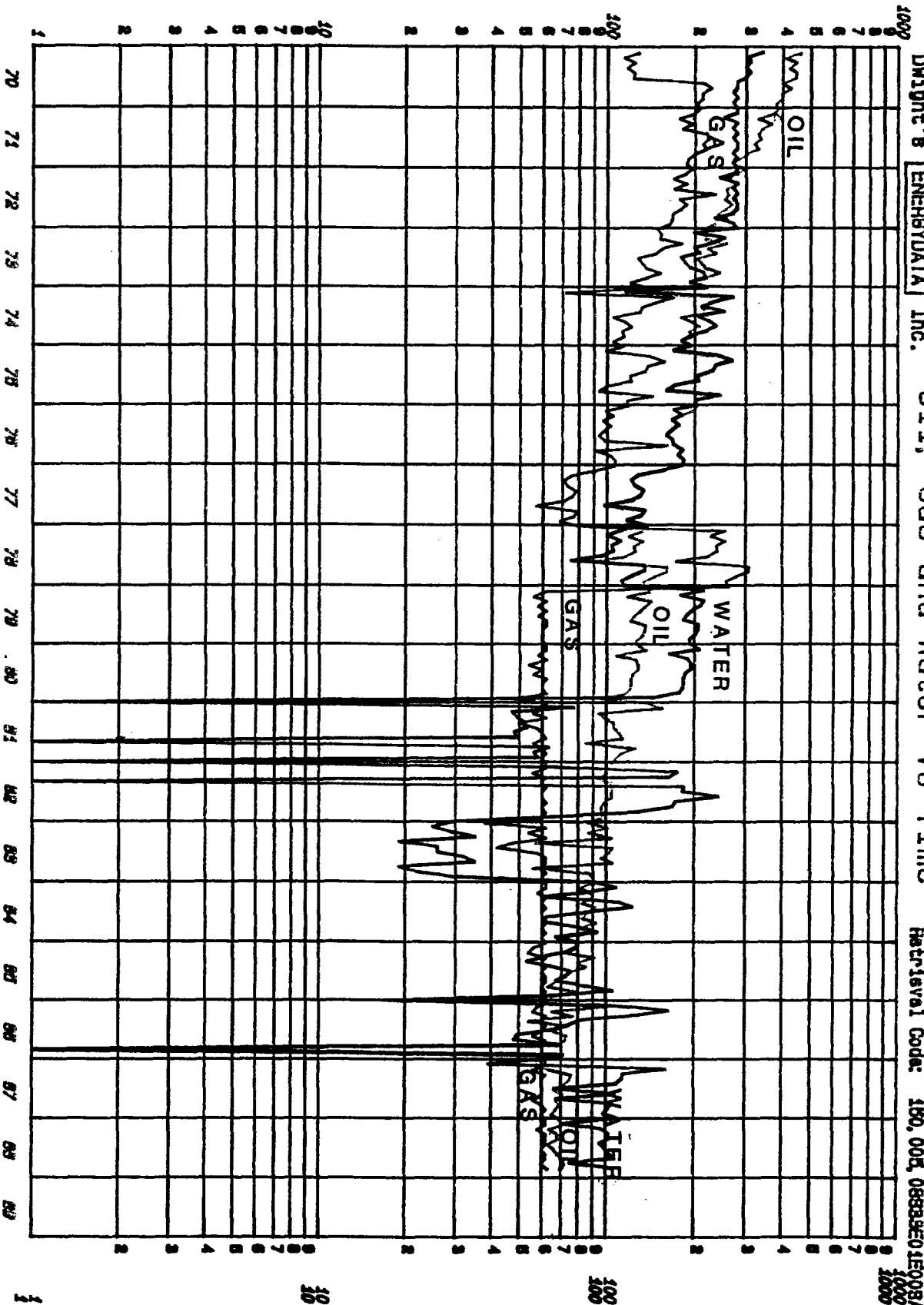
OTL

BAS _____

WATER

THE UNIVERSITY OF CHICAGO

State/eval Conf: 160 005 0888 9E01E008A



OTL

BAS _____

WATER

LABOR: STATE FU

Mail # 000009

Operator: KERN MOBILE CORP

F101d: CHAVERO SAN ANDRES

Результаты:

County: CHAVES

Location: 1E 8S 33E

EXHIBIT 12

SA TRACT 4

Date: 02-20-89

WATER (BBL/MO) MONTHLY GAS PRODUCTION (MCF/MO)

(MCF/MO)

Tom Geddie



KERR-McGEE CORPORATION

KERR-McGEE CENTER • OKLAHOMA CITY, OKLAHOMA 73125

PLEASE REPLY TO:

EXPLORATION AND PRODUCTION DIVISION
U. S. ONSHORE REGION
P. O. BOX 25861
OKLAHOMA CITY, OKLAHOMA 73125

APR 1 1989

PHONE

405 848-9750

April 6, 1989

Working Interest Owners
Proposed K-M Chaveroo San Andres Unit
(see attached list)

Re: Minutes of Working Interest Owner's Meeting
K-M Chaveroo San Andres Unit
Sections 1 & 2-T8S-R33E
Chaveroo Field
Chaves County, NM

Gentlemen:

A meeting of the working interest owners in the proposed K-M Chaveroo San Andres Unit was held at 10:00 a.m. on April 4, 1989 in Kerr-McGee's U. S. Onshore Region office in Oklahoma City, OK. Attachment 1 is a list of those in attendance. The meeting was requested by Kerr-McGee and was chaired by Kerr-McGee. The purpose of the meeting was to obtain agreement on Kerr-McGee's waterflood plans and on unit participation for the proposed unit.

Information was presented on the current status of wells in the project area and on analogous San Andres waterfloods in this vicinity of New Mexico. Anticipated secondary oil recovery and estimated operating costs and capital investments were presented by Kerr-McGee. Attachment 2 is a copy of data provided to the participants at the meeting. There were no objections to Kerr-McGee's waterflood plans or estimated costs. The Unit Agreement and Unit Operating Agreement were not discussed in any detail. However, it was noted that the draft agreements previously submitted to the working interest owners would be finalized after approval of the Unit Agreement is received from the New Mexico Department of Public Lands.

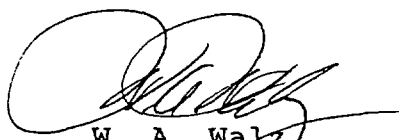
Possible parameters for unit participation were presented by Kerr-McGee, with the conclusion that cumulative primary oil production was a fair and equitable parameter for determining participation. Kerr-McGee made a motion that the unit participation formula be based 100% on cumulative oil production through 12-31-88. Warren American seconded the motion and it carried unanimously. Kerr-McGee stated that their target date for submission of a secondary recovery unit application to the New Mexico Commission was May 1, 1989. Bristol and Warren American

Kerr-McGee 8
CASE NO. 9682 + 9683

were in full support of getting the unit formed and initiating secondary operations as soon as possible.

Bristol and Warren American both agreed to place a value on their interest in the Levick State "2" No. 1 and make a counter-proposal to Kerr-McGee on the purchase offer Kerr-McGee made previously. Bristol and Warren American stated they should be able to do this within two weeks.

There being no further business, the meeting was adjourned at 11:30 a.m.

A handwritten signature in dark ink, appearing to read 'W. A. Walz', with a large, loopy initial 'W'.

W. A. Walz
Engineering Manager

FBC/cew

WORKING INTEREST OWNERS
PROPOSED K-M CHAVEROO SAN ANDRES UNIT

Bristol Resources Corp.
Attention: Mr. Bob Key
3601 East 51st St., Suites B & C
Tulsa, Oklahoma 74136

Warren American Oil Co.
Attention: Mr. Paul Woodul
P. O. Box 470372
Tulsa, Oklahoma 74147-0372

Kerr-McGee Corporation
Attention: Mr. Wayne Walz
4005 N. W. Expressway
Oklahoma City, Oklahoma 73116

ATTACHMENT 1

PROPOSED K-M CHAVEROO SAN ANDRES UNIT
MEETING OF WORKING INTEREST OWNERS

April 4, 1989
10:00 a.m.

NAME	TELEPHONE	COMPANY REPRESENTING	LOCATION
Bob Quance	(405) 848-9750	Kerr-McGee	Oklahoma City
Ivan D. Geddie	(405) 848-9750	Kerr-McGee	Oklahoma City
Floyd (Beef) Chambers	(405) 848-9750	Kerr-McGee	Oklahoma City
Dave Christian	(405) 270-3869	Kerr-McGee	Oklahoma City
Bob Key	(918) 747-9817	Bristol Resources	Tulsa
Paul J. Woodul	(918) 492-8100	Warren American	Tulsa
Tom Jewell	(918) 492-8100	Warren American	Tulsa

ATTACHMENT 2

AGENDA
PROPOSED K-M CHAVEROO SAN ANDRES UNIT

Kerr-McGee Regional Office
10:00 a.m. - April 4, 1989

1. Introductory Remarks
2. Highlights of Kerr-McGee's waterflood feasibility study dated 7/15/88 and map of waterflood area showing current well status.
3. Current status of project area:
 - Exhibit 1 - 1988 Oil, Gas & Water Production
 - Exhibit 2 - Proposed Unit Participation
 - Exhibit 3 - Summary of Oil Recovery Performance- Analogous Waterfloods
 - Exhibit 4 - Water Supply Agreement
4. Discuss information provided to Bristol & Warren American in Kerr-McGee's letter dated 3/20/89.
5. Agreement on Unit Participation.
6. Review of Unit Agreement and Unit Operating Agreement.
7. Adjustment of Investment.
8. Timetable for Concluding Unit Negotiations on or before 5/1/89.
9. Any other item concerning Secondary Recovery and Unitization.

Attachment: letter to Bristol Resources Corp. dated 3/30/89

RJQ20:lrg02

EXHIBIT 1

K-M CHAVEROO SAN ANDRES UNIT
PRODUCTION FOR 1988
CHAVES COUNTY, NEW MEXICO

LEASE NAME, WELL			1988		CUMULATIVE THRU 12/31/87												1988		CUM. TOTAL THRU 12/31/88											
S T R			STATUS		FEB.		MAR.		APR.		MAY		JUNE		JULY		AUG.		SEP.		OCT.		NOV.		DEC.		TOTAL			
STATE F	#1D	2 T8S R33E	S	OIL	68269	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	68269
				GAS	74842	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	74842
				WTR	8539	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8539
#2C	2 T8S R33E	P	OIL	67368	28	30	49	51	25	52	22	68	47	45	53	500	67868													67868
			GAS	99777	214	258	240	237	274	301	237	261	294	134	245	2944	102721													102721
			WTR	11420	56	60	49	51	50	26	44	30	24	57	61	598	12018													12018
#3E	2 T8S R33E	P	OIL	82667	56	60	49	51	51	52	65	45	70	67	53	678	83345													83345
			GAS	97009	89	107	100	99	114	125	99	109	122	56	102	1226	98235													98235
			WTR	35318	84	90	74	77	77	104	43	89	47	86	61	950	36268													36268
#4F	2 T8S R33E	P	OIL	114502	56	60	49	51	51	52	65	68	70	45	53	709	115211													115211
			GAS	176935	214	258	240	237	274	301	237	261	293	134	245	2943	179878													179878
			WTR	22450	112	120	98	77	102	104	65	89	93	114	122	1244	23694													23694
#5L	2 T8S R33E	P	OIL	181889	250	181	178	206	177	158	172	136	164	134	157	2206	184095													184095
			GAS	214006	232	279	180	178	91	225	177	196	221	100	184	2333	216339													216339
			WTR	11389	0	0	24	0	0	0	22	30	0	29	0	105	11494													11494
#6K	2 T8S R33E	P	OIL	129527	84	60	49	51	51	53	43	45	47	45	53	640	130167													130167
			GAS	106694	107	129	120	119	137	150	118	130	147	67	122	1471	108165													108165
			WTR	16151	112	90	74	77	77	80	65	59	47	57	91	947	17098													17098
#7J	2 T8S R33E	P	OIL	85801	56	60	49	77	51	79	86	68	47	67	53	752	86553													86553
			GAS	73970	89	107	100	99	114	125	99	109	122	56	102	1226	75196													75196
			WTR	37352	168	150	98	103	77	105	65	149	118	172	182	1505	38857													38857
#8I	2 T8S R33E	P	OIL	91609	84	90	73	77	76	79	86	91	94	67	79	985	92594													92594
			GAS	94187	161	193	180	178	207	225	177	196	221	100	184	2209	96396													96396
			WTR	20414	84	90	73	77	76	79	65	120	94	143	122	1112	21526													21526
#10N	2 T8S R33E	S	OIL	99965	28	30	24	26	51	0	0	0	0	0	0	189	100154													100154
			GAS	105334	143	172	160	158	183	0	0	0	0	0	0	982	106316													106316
			WTR	53609	28	30	48	26	77	0	0	0	0	0	0	269	53878													53878
#11H	2 T8S R33E	P	OIL	84212	28	30	24	77	51	53	43	45	47	45	79	552	84764													84764
			GAS	127904	161	193	180	178	206	225	177	196	221	100	184	2210	130114													130114
			WTR	6026	28	0	0	77	26	53	22	0	24	29	61	320	6346													6346
#12O	2 T8S R33E	P	OIL	83292	111	121	97	77	76	79	86	68	70	67	79	1020	84312													84312
			GAS	78901	54	64	59	59	69	76	59	64	73	33	61	733	79634													79634
#13P	2 T8S R33E	P	WTR	132547	666	635	534	513	532	606	366	535	420	515	669	6673	139220													139220
			OIL	61743	56	60	49	77	76	79	65	68	70	67	79	805	62548													62548
			GAS	70456	107	130	120	119	137	150	118	130	147	67	122	1471	71927													71927
			WTR	69004	224	240	221	231	228	211	173	178	163	200	213	2548	71552													71552
#14C	2 T8S R33E	P	OIL	15610	111	90	97	104	100	105	86	91	118	90	104	1246	16856													16856
			GAS	34051	410	495	459	454	526	577	454	499	564	255	470	5639	39690													39690
			WTR	54729	749	840	703	728	700	814	516	743	632	858	912	9005	63734													63734

EXHIBIT 1

K-M CHAVEROO SAN ANDRES UNIT
PRODUCTION FOR 1988
CHAVES COUNTY, NEW MEXICO

LEASE NAME, WELL		STATUS	CUMULATIVE THRU 12/31/87		1988 JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.	1988 TOTAL	CUM. TOTAL THRU 12/31/88
STATE	FU																	
STATE C	#9E	1 T8S R33E	P	OIL	63253	71	64	68	68	66	68	71	72	70	60	58	799	64052
				GAS	35041	62	58	62	62	60	62	62	60	63	60	62	735	35776
				WTR	40053	71	96	102	102	99	102	107	75	105	87	103	1144	41197
STATE C	#1B	2 T8S R33E	P	OIL	94111	267	253	0	0	84	98	76	62	119	84	88	1226	95337
				GAS	129906	0	0	0	0	143	130	159	145	141	102	128	1005	130911
				WTR	34689	0	0	0	0	735	1905	564	714	359	267	375	5268	39957
STATE C	#2A	2 T8S R33E	P	OIL	84589	0	0	0	0	77	70	89	88	59	56	59	567	85156
				GAS	98633	0	0	0	0	131	120	147	133	130	95	120	917	99550
				WTR	24428	0	0	0	0	813	2024	499	590	421	297	268	5586	30014
STATE C	#3H	2 T8S R33E	P	OIL	109475	0	0	227	95	90	97	120	118	89	84	88	1008	110483
				GAS	106339	0	0	178	57	154	141	172	157	152	110	139	1260	107599
				WTR	51232	0	0	1978	953	1277	1190	738	787	546	355	375	8199	59431
STATE C	#4D	1 T8S R33E	P	OIL	34045	0	0	97	69	84	70	58	59	63	56	59	615	34660
				GAS	48012	0	0	134	40	143	131	159	145	141	102	128	1123	49135
				WTR	59866	0	0	1492	349	1045	833	369	369	234	176	187	5054	64920
LEVICK STATE	#1G	2 T8S R33E	P	OIL	93029	107	102	102	101	100	92	90	100	98	87	92	1174	94203
				GAS	140197	225	321	235	234	209	325	305	290	279	306	301	3290	143487
				WTR	36562	81	77	102	101	100	92	90	101	0	120	155	1097	37659
LEVICK STATE	TOTAL			OIL	1644956	1393	1291	1396	1417	1337	1336	1323	1292	1342	1166	1286	15671	1660627
				GAS	1912194	2268	2764	2747	2606	3172	3389	2956	3081	3331	1877	2899	33717	1945911
				WTR	725778	2463	2518	5670	4558	6091	8328	3813	4658	3327	3562	3957	51624	777402

EXHIBIT 2

PROPOSED K-M CHAVEROO SAN ANDRES UNIT
 DERIVATION OF TRACT PARTICIPATION FACTORS
 CHAVEROO SAN ANDRES POOL
 PARTICIPATION

TRACT	OPERATOR LEASE	ORIGINAL WELL #	WELL LOCATION	STATUS	NEW UNIT WELL #	TOTAL PRIMARY RECOVERY TO 31 DECEMBER 1988 BBLs	TRACT PARTICIPATION FACTOR
1	Kerr-McGee State F	1D	2 8S 33E	P	02-04	68,269	
		2C	2 8S 33E	P	02-03	67,868	
		3E	2 8S 33E	P	02-05	83,345	
		4F	2 8S 33E	P	02-06	115,211	
		5L	2 8S 33E	P	02-12	184,095	
		6K	2 8S 33E	P	02-11	130,167	
		7J	2 8S 33E	P	02-10	86,553	
		8I	2 8S 33E	P	02-09	92,594	
		10N	2 8S 33E	P	02-14	100,154	
		11M	2 8S 33E	P	02-13	84,764	
		12O	2 8S 33E	P	02-15	84,312	
		13P	2 8S 33E	P	02-16	62,548	
		14C	2 8S 33E	P	02-03	16,856	
						=====	
						1,176,736	70.860945
2	Bristol Levick State "2"	1G	2 8S 33E	P	02-07	94,203	
						=====	
						94,203	5.672738
3	Kerr-McGee State C	1B	2 8S 33E	P	02-02	95,337	
		2A	2 8S 33E	P	02-01	85,156	
		3H	2 8S 33E	P	02-08	110,483	
		4D	1 8S 33E	P	01-04	34,660	
		5C	1 8S 33E	SWD	01-03	0	
						=====	
						325,636	19.609220
4	Kerr-McGee State FU	9E	1 8S 33E	P	01-05	64,052	
						=====	
						64,052	3.857097
	TOTALS					1,660,627	100.000000

EXHIBIT 3

SUMMARY OF OIL RECOVERY PERFORMANCE - ANALOGOUS WATERFLOODS

OPERATOR/PROJECT	# OF PROD WELLS	PROD AREA (ACRES)	-----ULTIMATE PRIMARY----- MBO BO/WELL BO/ACRE	-----ULTIMATE SECONDARY----- MBO BO/WELL BO/ACRE	SPF BO/I
FINA HORTON FEDERAL UNIT	30	1200	1,940 65,000 1,620	2,367 79,000 1,970	1.22
COASTAL STATES FLYING "M" UNIT	43	3440	3,000 70,000 870	2,654 61,700 770	0.88
CHAMPLIN LAUCK-FEDERAL #29M	2	80	51 25,500 640	44 22,000 550	0.86
AVERAGE:			53,500 1,040	54,200 1,100	1.06
ERR-MCGEE STATE "C" LEASE	4	160	325 81,250 2,030		
ERR-MCGEE STATE "F" LEASE	13	480	1,177 90,500 2,450		
ERR-MCGEE STATE "FU" LEASE	1	40	64 64,000 1,600		
	18	680	1,566 87,000 2,300		
RISTOL LEVICK STATE "2" LEASE	1	40	94 94,000 2,350		
SPR - 0.70 AS OF 1/1/88	19	720	1,660 87,400 2,305		



KERR-McGEE CORPORATION

KERR-McGEE CENTER • OKLAHOMA CITY, OKLAHOMA 73125

PLEASE REPLY TO:

March 20, 1989

EXPLORATION AND PRODUCTION DIVISION
U. S. ONSHORE REGION
P. O. BOX 25861
OKLAHOMA CITY, OKLAHOMA 73125

PHONE

405 848-9750

Bristol Resources Corporation
Suites B and C
3601 East 51st Street
Tulsa, OK 74135

RE: K-M CHAVEROO SAN ANDRES UNIT (PROPOSED)
SECTION 1 & 2-8S-33E
CHAVES COUNTY, NEW MEXICO

Gentlemen:

Reference is made to your letters of January 31, 1989 and February 2, 1989, subject as above, wherein you requested investment costs, reserves, operating costs and water supply costs for the proposed waterflood unit.

As the result of our analysis of this proposed secondary recovery project we anticipate an initial investment of \$719,000 gross, including \$187,000 for a water supply system. After waterflood response, a future investment of \$186,000 gross, is anticipated to acquire larger lift equipment. Operating costs are expected to be \$532,000 during the first year of the waterflood and total \$9,214,000 over a project life of 20 years on a non-escalated or constant dollar basis. See attachments.

The participation formula proposed for the K-M Chaveroo San Andres Unit is a simple unit formula which credits cumulative oil production (essentially ultimate primary recovery) to December 31, 1988 as 100%. On this basis, the Working Interest Owners in the SW/4 NE/4 of Section 2, located within the proposed unit area, would have a total tract participation of 5.672738%. This was based on a primary recovery for Bristol's Levick State "2" lease of 94,203 barrels of oil and a total unit primary recovery of 1,660,627 barrels of oil as of December 31, 1988. This formula is considered by Kerr-McGee to be fair, reasonable and equitable since it represents the relative contribution and quality of each tract in the proposed K-M Chaveroo San Andres Unit.

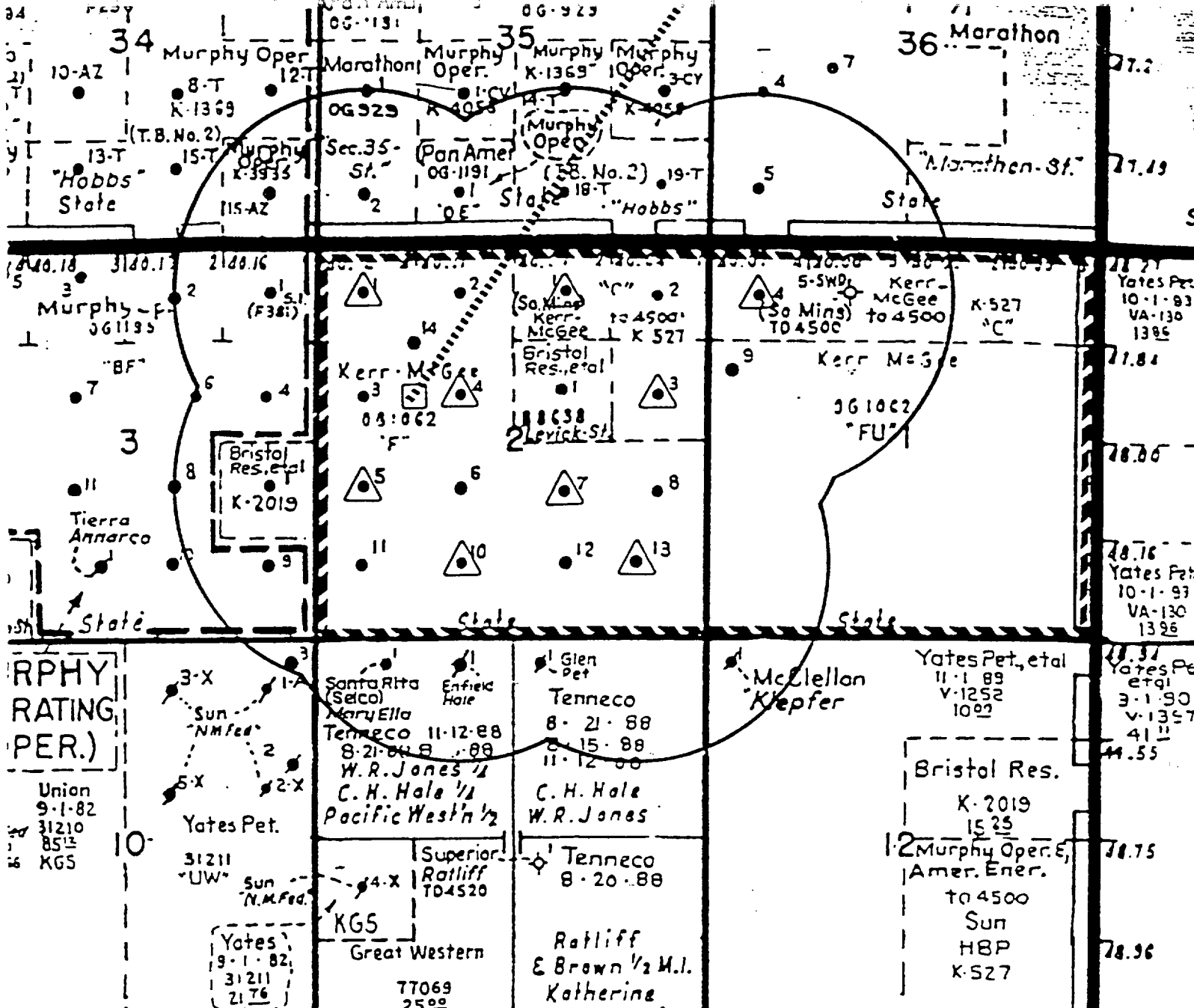
You will find attached a copy of the proposed unit agreement and unit operating agreement. Please give Floyd Chambers or Wayne Walz a telephone call at 405/848-9750 if additional information is needed. A meeting of the Unit working interest owners will be held at 10:00 a.m. on April 4, 1989, in Kerr-McGee's Regional Office, 4005 N.W. Expressway, Oklahoma City. Please so notify Chambers or Walz if you will not be able to attend this meeting.


M. H. Vaughn
Vice President
U. S. Onshore

MHV:IDG:lrg

cc: Warren American Oil Company
P. O. Box 470372
Tulsa, OK 74147-0372
Attn: Mr. Stephen K. Warren

Warren American Oil Company
P. O. Box 971
Midland, Texas 79702
Attn: Mr. James O'Neill



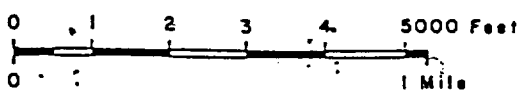
KERR-MCGEE CORPORATION

CHAUVEROO

CHAVES & ROOSEVELT CO.'s, NEW MEXICO

PROPOSED K-M CHAUVEROO SAN ANDRES UNIT

Scale: 1" = 2000'
Date: 2/89
By: R. Quance



- PROPOSED INJECTION WELLS
- PROPOSED INJECTION FACILITY
- PROPOSED UNIT OUTLINE
- PROPOSED WATER SUPPLY LINE

TABLE 1

ESTIMATED COSTS AT 1989 PRICES
PROPOSED K-M CHAVEROO SAN ANDRES UNIT

THOUSANDS OF DOLLARS										
PROJ YEAR	WELLS PROD	WELLS INJ	WI MB/YR	% WATER PURCHASED	WATER PURCHASED MB/YR	PURCHASED WATER AT \$.10/B	PROD WELL AT \$19M*	INJ WELL AT \$10M*	INJ COST*	TOTAL
1	10	9	1150	100	1150	115	190	90	137	532
2	10	9	1150	100	1150	115	190	90	137	532
3	10	9	1150	100	1150	115	190	90	137	532
4	10	9	1150	67	771	77	190	90	137	494
5	10	9	1150	67	771	77	190	90	137	494
6	10	9	1150	50	575	58	190	90	137	475
7	10	9	1150	50	575	58	190	90	137	475
8	10	9	1150	50	575	58	190	90	137	475
9	10	9	1150	50	575	58	190	90	137	475
10	10	9	1150	50	575	58	190	90	137	475
11	10	9	1150	50	575	58	190	90	137	475
12	10	9	1150	50	575	58	190	90	137	475
12	10	9	1150	50	575	58	190	90	137	475
14	10	9	1150	50	575	58	190	90	137	475
15	10	9	1150	50	575	58	190	90	137	475
16	10	9	805	0	0	0	190	90	96	376
17	10	9	805	0	0	0	190	90	96	376
18	10	9	805	0	0	0	190	90	96	376
19	10	9	805	0	0	0	190	90	96	376
20	10	9	805	0	0	0	190	90	96	376
						1079	3800	1800	2535	9214

RJQ05S1:1rg01

* TABLE 2

TABLE 2

PROPOSED K-M CHAVEROO SAN ANDRES UNIT
ESTIMATED OPERATING EXPENSE AT 1989 PRICES

Current Operating Cost	\$18,600/month
Base Cost for Injector and Producers in waterflood	\$18,600/month
Less: Saltwater Disposal	350
Electricity	2,250
	\$16,000/month = \$840/well/month
	19 wells (10 prod + 9 inj)

Injectors

Operating Cost	\$840/well/month (\$10,000/well/year)
<u>Cost for Producers</u>	\$840/month/well
Plus: Pump change/year	200
Electricity at \$.10/kw-hour (HP = 12)	550
	\$1590/month/well (\$19,000/well/yr)

Injection Cost

$$\text{HP} = 3150 \text{ BPD} \times 2000 \text{ psi} \times .000017 = 107 \text{ hp}$$

$$\text{BHP} = 107 \text{ hp} / 0.75 (\text{Pump Efficiency}) = 150 \text{ hp at } \$.10/\text{kw-hr}$$

Electrical Cost = \$9,000/month

Costs for Water Injection = \$2,400/month

Injection Cost = \$11,400/month or \$137,000/year

RJQ15:lrg01

TABLE 3

COST OF WATER SUPPLY TO KERR-MCGEE

	Date	Cost	Result
Test Dale Brown's Wells	1/24-26/89	\$2,197	44,000 BWPO
Drill WSW "F" #1	11/15-16/89	\$5,212	P & A
Drill WSW "FU" #1	11/16-17/88	\$10,819	Test @ 86.6 GPM
Drill WSW "F" #2	11/22-23/88	\$11,106	P & A
Drill WSW 2	1/24-2/1/89	\$12,353	Test @ 13 GPM
Drill WSW 3	1/25-2/1/89	\$10,294	Test @ 4 GPM
	TOTAL	\$51,981	

RJQ:lrg01

TABLE 4

PROPOSED K-M CHAVEROO SAN ANDRES UNIT
ESTIMATED COSTS

Initial Investment

150 hp triplex pump with mounting & motor pump house	\$ 56,000
Treaters & free water knockout	
4' x 20' treater & 6' x 15' FWKO	21,000
18,000' 2½" (2000#WP) fiberglass pip at \$3.80/ft	68,000
9 injection packers (lok set) at \$2,500/each	23,000
Plastic coating for 9 WIW's - 4200' at \$2.00/ft	76,000
2-1000 bbl fiberglass water tanks	30,000
10,000' 3" SDR trunk lines at \$3.10/ft	31,000
Transfer pumps from tank batteries to WI station	32,000
44,500' of 4" PVC ditched & buried at \$3.50/ft	156,000
Water storage tanks	31,000
Water supply costs to drill 5 water supply wells	52,000
350 KWA transfer capacity	10,000
Miscellaneous valves, connections, chokes, etc.	12,000
Tubing inspection	14,000
Rig work - 30 days at \$1,200/day	36,000
Location work & roads	13,000
Transportation	10,000
Labor	25,000
Supervision	10,000
District overhead	6,000
Miscellaneous	7,000
	\$719,000

Future Investment After Waterflood Response

5-228 D pumping units with 40 hp motors	\$125,000
7/8" & 3/4" rods - 16,000' at \$1.50/ft	24,000
9000' of 2 3/8" tubing at \$2.80/ft	25,000
Rig work - 10 days at \$1,200/day	12,000
	\$186,000

Total Investment	\$905,000
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RJQ16:lrg01



KERR-McGEE CORPORATION

KERR-McGEE CENTER • OKLAHOMA CITY, OKLAHOMA 73125

U. S. Onshore Oper.

OCT 14 1988

E & P DIV.

EXPLORATION AND PRODUCTION DIVISION

October 13, 1988

Mr. Dale W. Brown
South Star Route
Box 40
Elida, New Mexico 88116

WATER AGREEMENT
DATED SEPTEMBER 22, 1988

You will find attached a copy of the subject agreement which evidences execution by Kerr-McGee Corporation.

IDG:rgb

for Kelly Kisenberg
Ivan D. Geddie
T-25C McGee Tower
P. O. Box 25861
Oklahoma City, OK 73125
Tel: (405) 270-2124

bcc: Phillips-Namken-CFR (Chaveroo W. F. Project)
M. H. Vaughn (information)
F. Chambers (information)
Lease Records (Original-please place of record in Roosevelt County, N.M.)
E-Br-B
Hold

WATER AGREEMENT

THIS AGREEMENT entered into effective as of the 22nd day of September, 1983, by and between KERR-MCGEE CORPORATION ("Kerr-McGee"), a Delaware corporation, and DALE W. BROWN and Myrna L. Brown ~~XX~~ ~~XXXXXX~~ husband and wife (hereinafter referred to as "Owner").

WHEREAS, Owner is the owner of a right to appropriate water pursuant to Permit n/a, Certificate n/a, issued by the State Engineer of New Mexico from Section(s) 8 & 9 Township 7S, Range 34E, Roosevelt County, New Mexico; and

WHEREAS, Kerr-McGee owns oil producing acreage in all or parts of Sections 1 & 2, Township 8 South (T8S), Range 33 East (R33E), Chaves County, New Mexico, together with additional acreage located in the vicinity thereof, and requires a reliable and adequate supply of water for waterflooding operations of the acreage; and

WHEREAS, Owner has excess water available for sale to Kerr-McGee; and

WHEREAS, Kerr-McGee is agreeable to be bound by the terms and conditions of Owner's Permit n/a, Certificate n/a.

NOW, THEREFORE, in consideration of the premises and other good and valuable consideration and the covenants herein contained, the parties agree as follows:

1. Owner hereby grants to Kerr-McGee, commencing on the effective date hereof, the exclusive right and option to purchase excess water from Owner, as necessary to meet Kerr-McGee's requirements for water for such waterflood operations, expected to be two thousand barrels of water per day (2000 BWPD), or more, to the extent that those requirements can be supplied out of water that can be pumped from the existing well(s) or future wells from which Owner has the right to appropriate water. For the purpose of this agreement "excess water" means water which Owner has the right to appropriate which is not required for use by Owner for Owner's domestic, agricultural and animal husbandry needs.

2. Unless terminated earlier, this Agreement shall be for a term of one (1) year from the effective date hereof, together with the right and option by Kerr-McGee to renew the Agreement for periods of one (1) year each upon the same terms and conditions for so long as such water is needed by Kerr-McGee for the waterflood operations described above. Upon execution of this

Agreement by Owner, Kerr-McGee shall pay Owner the sum of one-thousand Dollars (\$1,000.00) for the first year of this Agreement. If Kerr-McGee elects to extend the Agreement for additional periods, it shall deliver a notice of exercise of its option to renew to Owner and its payment of One Thousand Dollars (\$1,000.00) in consideration for the renewal period not later than the end of the initial term of this Agreement. Subsequent renewals may be made by payment to Owner of such amount on or before the expiration of the then current one (1) year period or any renewal period thereof.

3. Kerr-McGee agrees to pay Owner for water received pursuant to the terms hereof at the rate of \$.10 per barrel, provided, it is understood that Kerr-McGee may deduct amounts paid to Owner for any renewals of this Agreement from sums due for water delivered hereunder. It is agreed that if Owner's rates for electrical service are increased during the term of this Agreement, then the rate to be paid for water specified above shall be adjusted accordingly by mutual agreement of the parties, effective the next succeeding renewal period, so as to keep Owner whole with respect to such increased electrical costs for deliveries of water during such renewal period.

4. Owner agrees to install a meter to measure the water sold to Kerr-McGee to provide for ±1% accuracy. Kerr-McGee shall have the right to periodically check the accuracy of metering and to require adjustments of invoice amounts. Owner agrees to submit a monthly invoice to Kerr-McGee not later than the 15th day of each month for water delivered in the preceding month and Kerr-McGee agrees to make settlement with Owner by the 15th day of the following month. Owner agrees to allow Kerr-McGee to install and service such pipeline and appurtenances as are necessary to connect and transport water across Owner's property.

5. Any notice required or permitted to be given hereunder shall be considered as having been properly given when and at the time the same shall have been deposited in the United States mail with postage thereon prepaid and addressed to whom the notice is given at the following specified addresses:

Kerr-McGee Corporation
Kerr-McGee Center
P. O. Box 25861
Oklahoma City, OK 73125
Attn: U. S. Onshore Region Office

Dale Brown
South Star Route
Box 40
Elida, New Mexico 88116

Either party may change its address for the purpose of this Paragraph by giving written notice to the other.

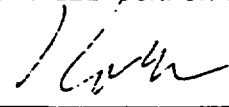
6. Owner hereby covenants to do all such further acts necessary for perfecting his title in and rights to the water produced from the well(s) used to provide the water purchased by Kerr-McGee. Owner and Kerr-McGee agree to execute and deliver such other additional instruments and agreements necessary to carry out this agreement between the parties.

7. Kerr-McGee shall have the right to terminate this Agreement at any time on written notice to Owner. Following such notice, Kerr-McGee shall have no further rights or obligations hereunder except to pay Owner for any water received by Kerr-McGee prior to such date of termination and for which payment has not been made.

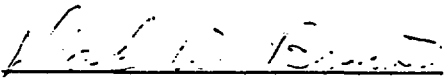
8. This Agreement shall bind and inure to the benefit of the successors, assigns, heirs and legal representatives of the parties.

IN WITNESS WHEREOF, the parties have caused this Agreement to be executed and effective as of the day and year first above written.

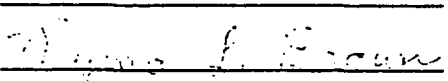
KERR-MCGEE CORPORATION

BY  

DALE BROWN



Myrna L. Brown



ACKNOWLEDGEMENTS

STATE OF NEW MEXICO)
COUNTY OF Roosevelt) ss.

The foregoing instrument was acknowledged before me this 23rd day of September, 1988, by Dale W. Brown and Myrna L. Brown, husband and wife.

Witness my hand and official seal.

Lola Brethauer
Notary Public

My Commission Expires:
June 23, 1990

STATE OF OKLAHOMA)
COUNTY OF OKLAHOMA) ss.

The foregoing instrument was acknowledged before me this 11th day of October, 1988, by Robert Henderson as Vice President of Kerr-McGee Corporation, a Delaware corporation, on behalf of the corporation.

Witness my hand and official seal.

Theresa D. Blanton
Notary Public

My Commission Expires:
4-27-92

~~EXHIBIT IS~~

PROPOSED K-M CHAVEROO SAN ANDRES UNIT
DERIVATION OF TRACT PARTICIPATION FACTORS
CHAVEROO SAN ANDRES POOL
PARTICIPATION

TRACT	OPERATOR LEASE	ORIGINAL WELL #	WELL LOCATION	STATUS	NEW UNIT WELL #	TOTAL PRIMARY RECOVERY	TRACT	
						TO 31 DECEMBER 1988 BBLS	PARTICIPATION FACTOR	
1	Kerr-McGee State F	1D	2 8S 33E	P	02-04	68,269	70.860945	
		2C	2 8S 33E	P	02-03	67,868		
		3E	2 8S 33E	P	02-05	83,345		
		4F	2 8S 33E	P	02-06	115,211		
		5L	2 8S 33E	P	02-12	184,095		
		6K	2 8S 33E	P	02-11	130,167		
		7J	2 8S 33E	P	02-10	86,553		
		8I	2 8S 33E	P	02-09	92,594		
		10N	2 8S 33E	P	02-14	100,154		
		11M	2 8S 33E	P	02-13	84,764		
		12O	2 8S 33E	P	02-15	84,312		
		13P	2 8S 33E	P	02-16	62,548		
		14C	2 8S 33E	P	02-03	16,856		
								=====
					1,176,736			
2	Bristol Levick State "2"	1G	2 8S 33E	P	02-07	94,203	5.672738	
						=====		
					94,203			
3	Kerr-McGee State C	1B	2 8S 33E	P	02-02	95,337	19.609220	
		2A	2 8S 33E	P	02-01	85,156		
		3H	2 8S 33E	P	02-08	110,483		
		4D	1 8S 33E	P	01-04	34,660		
		5C	1 8S 33E	SWD	01-03	0		
								=====
					325,636			
4	Kerr-McGee State FU	9E	1 8S 33E	P	01-05	64,052	3.857097	
						=====		
						64,052		
TOTALS						1,660,627	100.000000	

RJQ:lrg01a1

DATE OF LAST OIL CHG. 11/1/54
OIL CHG. BY 11/1/54
Larr. McGee 9
CASE NO. 9682 + 9683

EXHIBIT 11
K-M CHAVEROO SAN ANDRES UNIT
PRODUCTION FOR 1988
CHAVES COUNTY, NEW MEXICO

LEASE NAME, WELL	S T R	STATUS	CUMULATIVE THRU 12/31/87	1988												1988 TOTAL	CUM. TOTAL THRU 12/31/88
				JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.		
STATE F																	
#1D	2 T8S R33E	S	68269 74842 8539	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0	68269 74842 8539
#2C	2 T8S R33E	P	67368 99777	28 214	30 258	30 249	49 240	51 237	25 274	52 301	22 237	68 261	47 294	45 134	53 245	500 2944	67868 102721
#3E	2 T8S R33E	P	11420 82667	56 56	60 60	90 59	49 49	51 51	50 51	26 52	44 65	30 45	24 70	57 67	61 53	598 678	12018 83345
#4F	2 T8S R33E	P	97009 35318	89 84	107 90	104 118	100 74	99 77	114 77	125 104	99 43	109 89	122 47	56 86	102 61	1226 950	98235 36268
#5L	2 T8S R33E	P	114502 176935	56 214	60 258	89 249	49 240	51 237	51 274	52 301	65 237	68 261	70 293	45 134	53 245	709 2943	115211 179878
#6K	2 T8S R33E	P	12450 181889	112 250	120 181	148 178	98 293	77 206	102 177	104 158	65 172	89 136	93 164	114 134	122 157	1244 2206	23694 184095
#7J	2 T8S R33E	P	214006 11389	232 0	279 0	270 0	180 24	178 0	91 0	225 0	177 22	196 30	221 0	100 29	184 0	2333 105	216339 11494
#8I	2 T8S R33E	P	129527 106694	84 107	60 129	59 125	49 120	51 119	51 137	53 150	43 118	45 130	47 147	45 67	53 122	640 1471	130167 108165
#10N	2 T8S R33E	S	16151 85801	112 56	90 60	118 59	74 49	77 77	77 51	80 79	65 86	59 68	47 47	57 67	91 53	947 752	17098 86553
#11M	2 T8S R33E	P	73970 37352	89 168	107 150	104 118	100 98	99 103	114 77	125 105	99 65	109 149	122 118	56 172	102 182	1226 1505	75196 38857
#12O	2 T8S R33E	P	91609 94187	84 161	90 193	89 187	73 180	77 178	76 207	79 225	86 177	91 196	94 221	67 100	79 184	985 2209	92594 96396
#13P	2 T8S R33E	P	20414 99965	84 28	90 30	89 30	73 24	77 26	76 51	79 0	65 0	120 0	94 0	143 0	122 0	1112 189	21526 100154
#14C	2 T8S R33E	P	105334 84212	143 28	172 30	166 60	160 48	158 26	183 77	0 53	0 43	0 45	0 47	0 45	0 79	982 552	106316 84764
			127904	161	193	189	180	178	206	225	177	196	221	100	184	2210	130114
			6026	28	0	0	0	77	26	53	22	0	24	29	61	320	6346
			83292	111	121	89	97	77	76	76	86	68	70	67	79	1020	84312
			78901	54	64	62	59	59	69	76	59	64	73	33	61	733	79634
			132547	666	635	682	534	513	532	606	366	535	420	515	669	6673	139220
			61743	56	60	59	49	77	76	79	65	68	70	67	79	805	62548
			70456	107	130	124	120	119	137	150	118	130	147	67	122	1471	71927
			69004	224	240	266	221	231	228	211	173	178	163	200	213	2548	71552
			15610	111	90	150	97	104	100	105	86	91	118	90	104	1246	16856
			34051	410	495	476	459	454	526	577	454	499	564	255	470	5639	39690
			54729	749	840	810	703	728	700	814	516	743	632	858	912	9005	63734

EXHIBIT 11
K-M CHAVEROO SAN ANDRES UNIT
PRODUCTION FOR 1988
CHAVES COUNTY, NEW MEXICO

LEASE NAME, WELL		S	T	R	STATUS	CUMULATIVE THRU 12/31/87		1988												DEC.	NOV.	OCT.	SEP.	AUG.	JULY	JUNE	MAY	APR.	MAR.	FEB.	JAN.	1988 TOTAL	CUM. TOTAL THRU 12/31/88
STATE FU #9E	1 T8S R33E	P				63253	71	64	68	68	66	68	71	72	70	60	58	799	64052									799	64052				
						35041	62	58	62	62	60	62	60	62	60	63	60	62	735	35776									735	35776			
						40053	71	96	102	102	99	102	107	75	105	87	103	1144	41197											1144	41197		
STATE C #18	2 T8S R33E	P				94111	267	253	0	0	84	98	76	62	119	84	88	1226	95337									1226	95337				
						129906	0	0	0	57	143	130	159	145	141	102	128	1005	130911									1005	130911				
						34689	0	0	0	349	735	1905	564	714	359	267	375	5268	39957									5268	39957				
						84589	0	0	0	69	77	70	89	88	59	56	59	567	85156									567	85156				
						98633	0	0	0	41	131	120	147	133	130	95	120	917	99550									917	99550				
#3H	2 T8S R33E	P				24428	0	0	0	0	813	2024	499	590	421	297	268	5586	30014									5586	30014				
						109475	0	0	0	95	90	97	120	118	89	84	88	1008	110483									1008	110483				
						106339	0	0	0	178	154	141	172	157	152	110	139	1260	107599									1260	107599				
#4D	1 T8S R33E	P				51232	0	0	0	953	1277	738	787	546	355	375	8199	59431									8199	59431					
						34045	0	0	0	69	84	70	58	59	63	56	59	615	34660									615	34660				
						48012	0	0	0	40	143	131	159	145	141	102	128	1123	49135									1123	49135				
LEVICK STATE #1G	2 T8S R33E	P				59866	0	0	0	349	1045	833	369	369	234	176	187	5054	64920									5054	64920				
						93029	107	102	103	102	101	100	92	90	100	98	87	92	1174	94203									1174	94203			
						140197	225	321	260	235	209	325	305	290	279	306	301	3290	143487									3290	143487				
TOTAL						36562	81	77	78	101	100	92	90	101	0	120	155	1097	37659									1097	37659				
						1644956	1393	1291	1092	1396	1417	1337	1336	1323	1292	1342	1166	1286	15671	1660627									15671	1660627			
						1912194	2268	2764	2627	2747	2606	3172	3389	2956	3081	3331	1877	2899	33717	1945911									33717	1945911			
						725778	2463	2518	2679	4558	6091	8328	3813	4658	3327	3562	3957	51624	777402									51624	777402				

Ken McGee 10

APPLICATION FOR AUTHORIZATION TO INJECT

9682 + 9683
Disposal ☒ Storage ☐
Application qualifies for administrative approval? ☐ yes ☒ no

I. Purpose: ☒ Secondary Recovery ☐ Pressure Maintenance ☐ Disposal ☐ Storage
Application qualifies for administrative approval? ☐ yes ☒ no

II. Operator: KERR-MCGEE CORPORATION

Address: P. O. BOX 25861, OKLAHOMA CITY, OKLAHOMA 73125

Contact party: R. J. QUANCE Phone: (405) 848-9750

III. Well data: Complete the data required on the reverse side of this form for each well proposed for injection. Additional sheets may be attached if necessary.

IV. Is this an expansion of an existing project? ☐ yes ☒ no
If yes, give the Division order number authorizing the project _____.

V. Attach a map that identifies all wells and leases within two miles of any proposed injection well with a one-half mile radius circle drawn around each proposed injection well. This circle identifies the well's area of review.

* VI. Attach a tabulation of data on all wells of public record within the area of review which penetrate the proposed injection zone. Such data shall include a description of each well's type, construction, date drilled, location, depth, record of completion, and a schematic of any plugged well illustrating all plugging detail.

VII. Attach data on the proposed operation, including:

1. Proposed average and maximum daily rate and volume of fluids to be injected;
2. Whether the system is open or closed;
3. Proposed average and maximum injection pressure;
4. Sources and an appropriate analysis of injection fluid and compatibility with the receiving formation if other than reinjected produced water; and
5. If injection is for disposal purposes into a zone not productive of oil or gas at or within one mile of the proposed well, attach a chemical analysis of the disposal zone formation water (may be measured or inferred from existing literature, studies, nearby wells, etc.).

* VIII. Attach appropriate geological data on the injection zone including appropriate lithologic detail, geological name, thickness, and depth. Give the geologic name, and depth to bottom of all underground sources of drinking water (aquifers containing waters with total dissolved solids concentrations of 10,000 mg/l or less) overlying the proposed injection zone as well as any such source known to be immediately underlying the injection interval.

IX. Describe the proposed stimulation program, if any.

* X. Attach appropriate logging and test data on the well. (If well logs have been filed with the Division they need not be resubmitted.)

* XI. Attach a chemical analysis of fresh water from two or more fresh water wells (if available and producing) within one mile of any injection or disposal well showing location of wells and dates samples were taken.

XII. Applicants for disposal wells must make an affirmative statement that they have examined available geologic and engineering data and find no evidence of open faults or any other hydrologic connection between the disposal zone and any underground source of drinking water.

XIII. Applicants must complete the "Proof of Notice" section on the reverse side of this form.

XIV. Certification

I hereby certify that the information submitted with this application is true and correct to the best of my knowledge and belief.

Name: R. J. QUANCE

Title: SENIOR STAFF ENGINEER

Signature: _____ Date: APRIL 1989

* If the information required under Sections VI, VIII, X, and XI above has been previously submitted, it need not be duplicated and resubmitted. Please show the date and circumstance of the earlier submittal.

III. WELL DATA

A. The following well data must be submitted for each injection well covered by this application. The data must be both in tabular and schematic form and shall include:

- (1) Lease name; Well No.; location by Section, Township, and Range; and footage location within the section.
- (2) Each casing string used with its size, setting depth, sacks of cement used, hole size, top of cement, and how such top was determined.
- (3) A description of the tubing to be used including its size, lining material, and setting depth.
- (4) The name, model, and setting depth of the packer used or a description of any other seal system or assembly used.

Division District offices have supplies of Well Data Sheets which may be used or which may be used as models for this purpose. Applicants for several identical wells may submit a "typical data sheet" rather than submitting the data for each well.

B. The following must be submitted for each injection well covered by this application. All items must be addressed for the initial well. Responses for additional wells need be shown only when different. Information shown on schematics need not be repeated.

- (1) The name of the injection formation and, if applicable, the field or pool name.
- (2) The injection interval and whether it is perforated or open-hole.
- (3) State if the well was drilled for injection or, if not, the original purpose of the well.
- (4) Give the depths of any other perforated intervals and detail on the sacks of cement or bridge plugs used to seal off such perforations.
- (5) Give the depth to and name of the next higher and next lower oil or gas zone in the area of the well, if any.

XIV. PROOF OF NOTICE

All applicants must furnish proof that a copy of the application has been furnished, by certified or registered mail, to the owner of the surface of the land on which the well is to be located and to each leasehold operator within one-half mile of the well location.

Where an application is subject to administrative approval, a proof of publication must be submitted. Such proof shall consist of a copy of the legal advertisement which was published in the county in which the well is located. The contents of such advertisement must include:

- (1) The name, address, phone number, and contact party for the applicant;
- (2) the intended purpose of the injection well; with the exact location of single wells or the section, township, and range location of multiple wells;
- (3) the formation name and depth with expected maximum injection rates and pressures; and
- (4) a notation that interested parties must file objections or requests for hearing with the Oil Conservation Division, P. O. Box 2088, Santa Fe, New Mexico 87501 within 15 days.

NO ACTION WILL BE TAKEN ON THE APPLICATION UNTIL PROPER PROOF OF NOTICE HAS BEEN SUBMITTED.

NOTICE: Surface owners or offset operators must file any objections or requests for hearing of administrative applications within 15 days from the date this application was mailed to them.



KERR-McGEE CORPORATION

KERR-McGEE CENTER • OKLAHOMA CITY, OKLAHOMA 73125

PLEASE REPLY TO:

EXPLORATION AND PRODUCTION DIVISION
U.S. ONSHORE REGION
P. O. BOX 25861
OKLAHOMA CITY, OKLAHOMA 73125

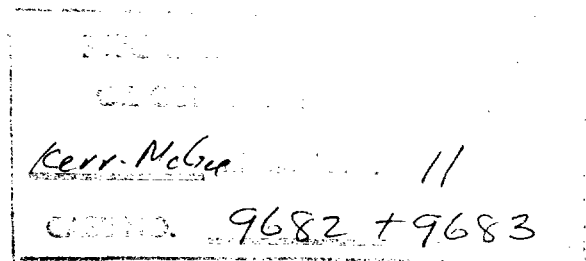
April 1, 1989

PHONE

405-845-9700

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

Mr. William J. LeMay, Director
State of New Mexico
Energy and Mineral Department
Oil Conservation Division
P. O. Box 2088
Santa Fe, New Mexico 87504-2088



Re: PLAN OF OPERATION 1989
Proposed K-M Chaveroo
San Andres Unit
Chaveroo San Andres Field
Chaves, New Mexico

Gentlemen:

Pursuant to the provisions of Section 11A. of the Unit Agreement, Kerr-McGee Corporation, designated Unit Operator of the proposed K-M Chaveroo San Andres Unit, Chaves County, New Mexico, respectfully submits for your consideration and approval, this Plan of Operation for the secondary recovery of oil by waterflood on the subject unitized land.

- I. Proposed Plan of Operation 1989: Kerr-McGee hereby proposes that the K-M Chaveroo San Andres Unit ("the Unit"), consisting of 1,280.37 acres, as more particularly delineated on the map contained in Exhibit 1 attached hereto, be formed for the purpose of secondary recovery by the waterflood method. This proposed Unit currently consists of a total of nineteen (19) producing wells and one (1) salt water disposal well. Ultimately, it is planned that the Unit will consist of nine (9) injection wells, ten (10) producing wells, and one (1) salt water disposal well.

As presented on Exhibit 1 attached, Kerr-McGee plans to construct a water injection plant in the NW/4 of Section 2, Township 8 South, Range 33 East, to service the Unit area. This plant will be constructed in such a manner to provide approximately 3,150 barrels of water per day for ample injection capability. The planned location was chosen because of its proximity to existing roads and electrical service and its central location to the proposed injection wells. A series of individual and trunk injection lines will radiate to provide injection service to the individual injection wells.

Supplemental water will be purchased from the most economical source which is available in this area. The fresh water will be supplied from the Ogallala formation which is present at an approximate depth of 185 to 240 feet below the surface. This water, combined with the San Andres produced water, has been deemed compatible by chemical analysis and previous experience in this area of New Mexico. A water supply line will be constructed from a source in Sections 8 and 9, Township 7 South, Range 34 East to the K-M Chaveroo San Andres Unit.

- II. Operating Guidelines: Kerr-McGee plans to monitor all injection wells through injection rate and pressure checks. Approximately 90 to 120 days after the initiation of injection into any given well, a tracer survey will be run in order to measure injection profiles and to determine if water channeling is occurring. If water channeling or unacceptable injection profiles are observed, appropriate remedial work will be performed. As wells are converted to injection status, the annuli of each well will be filled with packer fluid containing corrosion inhibiting chemicals. The downhole integrity of each injection well will be determined by "pressuring up" the annulus of each well and maintaining a positive pressure of 300 psig for at least thirty (30) minutes. The procedure for conversion to injection status and all remedial and drilling operations will be performed in strict adherence to the Rules and Regulations of the Oil Conservation Division and other regulatory agencies.
- III. Modification: Subject to approval, this Plan of Operation may be modified or supplemented during the year to meet changed conditions and to protect the interests of all parties to the Unit Agreement.

IV. State Lands: Exhibit 1a is a letter from Floyd O. Prando dated May 3, 1988 which reflects the State of New Mexico has ownership of the royalty in Section 1 and 2, T-8S, R-33E, Chaves County, New Mexico. This is the area that Kerr-McGee Corporation is proposing to implement a waterflood project for the secondary recovery of oil and gas.

Should you have any questions or comments, please contact the undersigned.

Respectfully submitted,

KERR-MCGEE CORPORATION

RJQ:lrg01

Exhibit 1: Map of proposed K-M Chaveroo San Andres Unit.

cc: Mr. Jerry E. Sexton
State of New Mexico
Energy and Minerals Department
Oil Conservation Division
P. O. Box 1980
Hobbs, New Mexico 88240-1980

INJECTION WELL DATA SHEET

SIDE 1

OPERATOR		LEASE	
KERR-MCGEE CORPORATION		STATE "F"	
WELL NO.	FOOTAGE LOCATION	SECTION	TOWNSHIP
1	660' FNL & 660' FWL	2	8S
			RANGE
			33E

Schematic

Attached

Tubular Data

Surface Casing

Size 8-5/8" Cemented with 275' ex.

TOC surface feet determined by circ out 20 sxs

Hole size 12 1/4"

Intermediate Casing

Size " Cemented with ex.

TOC feet determined by

Hole size

Long string

Size 5 1/2" Cemented with 300' ex.

TOC 3200 feet determined by temperature survey

Hole size 7-7/8"

Total depth 4380'

Injection Interval

4211 feet to 4345 feet

(perforated ~~XXXXXXXXXXXX~~, indicate which)

BEFORE EXAMINER'S SIGNATURE

OIL CONVEYANCE

Kerr-McGee EXHIBIT NO. 12

CASE NO. 9682+9683

INJECTION WELL DATA SHEET -- SIDE 2

Tubing size 2-3/8" lined with Baker plastic cap 505 (modified epoxy w/phenolic seal in "
(material)
 Baker Loc Set (brand and model) packer at 4111± feet
(primer)
 (or describe any other casing-tubing seal).
Other Data

1. Name of the Injection formation San Andres

2. Name of Field or Pool (if applicable) Chaveroo Field

3. Is this a new well drilled for injection? ☐ Yes ☒ No
 If no, for what purpose was the well originally drilled? oil well

4. Has the well ever been perforated in any other zone(s)? List all such perforated intervals
 and give plugging detail (sacks of cement or bridge plug(s) used) No

5. Give the depth to and name of any overlying and/or underlying oil or gas zones (pools) in
 this area. None

STATE "F" #1
Chaveroo Field
Chaves County, New Mexico

WELL SCHEMATIC		CASING	Size 8-5/8"	Weight 24	Grade J-55	Thread ST&C	Depth 405'	
		CASING	5-1/2"	14	J-55	8rd	4,380'	
		TUBING	2-3/8"	4.7	J-55	EUE	4,111'	
		TUBING						
		DESCRIPTION OF EQUIPMENT						DEPTH
		8-5/8" csg cemented to surface w/275 sxs						405'
		TOC (temp survey)						3,200'
		2-3/8" tubing						4,111'
		Baker Loc Set packer						4,111'
		San Andres perms: 1 shot/ft @ 4211', 4218', 4228',						
		4238', 4260', 4288', 4292', 4299', 4305', 4310', 4313',						
		4322', 4327', 4339' & 4341' (15 holes). Perf w/4JSPF						
		4200-40', 4255-75' & 4285-4345 (480 holes)						
		PBTD						4,352'
		5 1/2" casing cemented w/300 sxs						4,380'
		TD						4,380'
		Prepared By					Date	
		C. Bustos					11/1/02	

INJECTION WELL DATA SHEET

SIDE 1

OPERATOR		LEASE	
KERR-MCGEE CORPORATION		STATE "F"	
WELL NO.	FOOTAGE LOCATION	SECTION	TOWNSHIP
4	1980' FNL & 1980' FWL	2	8S
			33E

Schematic

Attached

Tubular Data

<u>Surface Casing</u>	
Size	8-5/8" Cemented with 275 gx.
TOC	surface feet determined by circulated out 35 sxs
Hole size	12 1/4"
<u>Intermediate Casing</u>	
Size	" Cemented with gx.
TOC	feet determined by
Hole size	
<u>Long string</u>	
Size	5 1/2" Cemented with 350 gx.
TOC	3050 feet determined by calculation
Hole size	7-7/8"
Total depth	4430'

Injection Interval

4200 feet to 4328 feet
 (perforated or xxxxxxxx, indicate which)

STATE "F" #4
CHAUVEROO FIELD
CHAVES COUNTY, NEW MEXICO

WELL SCHEMATIC										CASING	Size	8-5/8"	Weight	24	Grade	J-55	Type	ST&C	Depth	433'				
										CASING		5-1/2"		14		J-55		8rd		4,430'				
										TUBING		2-3/8"		4.7		J-55		EUE		4,100'				
										TUBING														
										DESCRIPTION OF EQUIPMENT													DEPTH	
										8-5/8" csg cemented to surface w/275 sxs													433'	
										TOC (calc)													3,050'	
										2-3/8" tubing													4,100'	
										Baker Lok Set Packer													4,100'	
										San Andres perms: 1 SPF @ 4200', 4210', 4215', 4218',														
										4224', 4231', 4235', 4267', 4280', 4294', 4297', 4301',														
										4305', 4309', 4318', 4321' & 4328' (17 holes)														
										PBSD													4,398'	
										5 1/2" csg cemented w/350 sxs													4,430'	
										TD													4,430'	
										Prepared By										Date				
										G. Bunas										1-12-80				

INJECTION WELL DATA SHEET

SIDE 1

OPERATOR		LEASE	
KERR-MCGEE CORPORATION		STATE "F"	
WELL NO.	FOOTAGE LOCATION	SECTION	TOWNSHIP
5	1980' FSL & 660' FWL	2	8S
			33E

Schematic

Attached

Tubular Data

<u>Surface Casing</u>	
Size	8-5/8" Cemented with 275 sx.
TOC	surface feet determined by circulated out 10 sxs
Hole size	12 1/4"
<u>Intermediate Casing</u>	
Size	" Cemented with nx.
TOC	feet determined by
Hole size	
<u>Long string</u>	
Size	5 1/2" Cemented with 350 ux.
TOC	2970 feet determined by calculation
Hole size	7-7/8"
Total depth	4346'
Injection Interval	
4208 feet to 4331 feet	
(perforated or xxxxxx xxxxxx , indicate which)	

INJECTION WELL DATA SHEET -- SIDE 2

Tubing size 2-3/8" Baker plastic cap 505 lined with (modified epoxy w/phenolic primer) set in a
(material)

Baker Lok Set packer ut 4108± feet
(brand and model)

(or describe any other casing-tubing seal).

Other Data

1. Name of the injection formation San Andres

2. Name of Field or Pool (if applicable) Chaveroo Field

3. Is this a new well drilled for injection? ☐ Yes ☒ No
If no, for what purpose was the well originally drilled? oil well

4. Has the well ever been perforated in any other zone(s)? List all such perforated intervals
and give plugging detail (sacks of cement or bridge plug(s) used) No

5. Give the depth to and name of any overlying and/or underlying oil or gas zones (pools) in
this area. None

STATE "F" #5
Chaveroo Field
Chaves County, New Mexico

WELL SCHEMATIC										CASING	Size	8-5/8"	Weight	24	Grade	J-55	Thread	8rd	Depth	429'
										CASING	Size	5-1/2"	Weight	14	Grade	J-55	Thread	8rd	Depth	4,346'
										TUBING	Size	2-3/8"	Weight	4.7	Grade	J-55	Thread	EUE	Depth	4,108'
										TUBING	Size		Weight		Grade		Thread		Depth	
										DESCRIPTION OF EQUIPMENT									DEPTH	
										8-5/8" csg cemented to surface w/275 sxs									429'	
										TOC (Calc)									2,970'	
										2-3/8" tubing									4,108'	
										Baker Lok Set packer									4,108'	
										San Andres perfs: 1 SPF @ 4208', 4225', 4234', 4240',										
										4247', 4252', 4261', 4295', 4306', 4310', 4315', 4317',										
										4320', 4325', 4327', 4329' & 4331' (17 holes)										
										PBD									4,343'	
										5 1/2" casing cemented w/350 sxs									4,346'	
										TD									4,346'	
										Prepared By					Date					
										G. Bunas					1/12/00					

INJECTION WELL DATA SHEET

SIDE 1

OPERATOR		LEASE	
KERR-MCGEE CORPORATION		STATE "F"	
WELL NO.	FOUTAGE LOCATION	SECTION	TOWNSHIP
7	1980' FSL & 1980' FEL	2	8S
			RANGE
			33E

Schematic

Attached

Inbular Data

Surface Casing

Size 8-5/8 " Cemented with 275 nx.

TOC surface feet determined by circulated out 15 sxs

Hole size 12 1/4"

Intermediate Casing

Size " Cemented with nx.

TOC feet determined by

Hole size "

Long string

Size 5 1/2 " Cemented with 350 nx.

TOC 2960 feet determined by calculation

Hole size 7-7/8"

Total depth 4337'

Injection Interval

4219 feet to 4328 feet
(perforated or ~~open~~, indicate which)

INJECTION WELL DATA SHEET -- SIDE 2

Tubing size 2-3/8" lined with Baker plastic cap 505 set in a
(modified epoxy w/Phenolic primer)
(material)

Baker Loc Set 4119 ± packer at feet
(brand and model)

(or describe any other casing-tubing seal).

Other Data

1. Name of the injection formation San Andres

2. Name of Field or Pool (if applicable) Chaveroo Field

3. Is this a new well drilled for injection? ☐ Yes ☒ No

If no, for what purpose was the well originally drilled? oil well

4. Has the well ever been perforated in any other zone(s)? List all such perforated intervals and give plugging detail (sacks of cement or bridge plug(s) used) No

5. Give the depth to and name of any overlying and/or underlying oil or gas zones (pools) in this area. None

STATE "F" #7
Cháveroo Field
Chaves County, New Mexico

WELL SCHEMATIC						CASING	Size	8-5/8"	Weight	24	Grade	J-55	Thread	8rd	Depth	404'
						CASING		5-1/2"		14		J-55		8rd		4,337'
						TUBING		2-3/8"		4.7		J-55		FUE		4,119'
						TUBING										
						DESCRIPTION OF EQUIPMENT										DEPTH
						8-5/8" csg cemented to surface w/275 sxs										404'
						TOC (Calc)										2,960'
						2-3/8" tubing										4,119'
						Baker Loc Set Packer										4,119'
						San Andres perfs: 1 SPF @ 4219', 4227', 4229', 4235', 4241', 4247', 4253', 4258', 4264', 4303', 4312', 4317', 4319', 4321', 4324' & 4328' (16 shots)										
						PBTD										4,330'
						5 1/2" csg cemented w/350 sxs										4,337'
						TD										4,337'
						Prepared By										Date
						G. Brown										

INJECTION WELL DATA SHEET

SIDE 1

OPERATOR		LEASE	
KERR-MCGEE CORPORATION		STATE "F"	
WELL NO.	FOUTAGE LOCATION	SECTION	TOWNSHIP
10	990' FSL & 1980' FWL	2	8S
			RANGE
			33E

Schematic

Attached

Tabular Data

<u>Surface Casing</u>	
Size 8-5/8"	Cemented with 275 gx.
TOC surface	foot determined by circulated out 15 sxs
Hole size 12 1/4"	
<u>Intermediate Casing</u>	
Size "	Cemented with gx.
TOC	foot determined by
Hole size	
<u>Long string</u>	
Size 5 1/2"	Cemented with 350 gx.
TOC 2960	foot determined by calculation.
Hole size 7-7/8"	
Total depth 4336'	
Injection Interval	
4238	foot to 4331 feet
(perforated or perforated indicate which)	

INJECTION WELL DATA SHEET -- SIDE 2

Tubing size 2-3/8" lined with Baker plastic cap 505 set in a
(modified epoxy w/Phenolic primer)
(material)

Baker Lok Set packer at 4138 ± feet
(brand and model)

(or describe any other casing-tubing seal).

Other Data

1. Name of the injection formation San Andres

2. Name of Field or Pool (if applicable) Chaveroo Field

3. Is this a new well drilled for injection? ☐ Yes ☒ No
If no, for what purpose was the well originally drilled? oil well

4. Has the well ever been perforated in any other zone(s)? List all such perforated intervals and give plugging detail (sacks of cement or bridge plug(s) used) No

5. Give the depth to and name of any overlying and/or underlying oil or gas zones (pools) in this area. None

STATE "F" #10
Chaveroo Field
Chaves County, New Mexico

WELL SCHEMATIC		CASING	Size	8-5/8"	Weight	24	Grade	J-55	Thickness	8rd	Depth	407'	
		CASING		5-1/2"		14		J-55		8rd		4,336'	
		TUBING		2-3/8"		4.7		J-55		8rd		4,138'	
		TUBING											
		DESCRIPTION OF EQUIPMENT										DEPTH	
		8-5/8" casing cemented to surface w/275 sxs										407'	
		TOC (Calc)										2,960'	
		2-3/8" Tubing										4,138'	
		Baker Loc Set Packer										4,138'	
		San Andres perms: 1 SPF @ 4238', 4239', 4245, 4248',											
		4250, 4263', 4264', 4265', 4282', 4283', 4306', 4310',											
		4319', 4322', 4325', 4327', 4329' & 4331' (18 holes)											
		PRTD										4,334'	
		5 1/2" casing cemented w/350 sxs										4,336'	
		TD										4,336'	
		Prepared By						Cala					

INJECTION WELL DATA SHEET

SIDE 1

OPERATOR		LEASE	
KERR-MCGEE CORPORATION		STATE "F"	
WELL NO.	FOOTAGE LOCATION	SECTION	TOWNSHIP
13	990' FSL & 1980' FEL	2	8S
			33E

Schematic

Attached

Tubular Data

<u>Surface Casing</u>	
Size	8-5/8" Cemented with 275 px.
TOC	surface feet determined by circulated out 10 sxs
Hole size	12 1/4"
<u>Intermediate Casing</u>	
Size	" Cemented with px.
TOC	feet determined by
Hole size	
<u>Long string</u>	
Size	5 1/2" Cemented with 350 px.
TOC	2965 feet determined by calculation
Hole size	7-7/8"
Total depth	4340'

Injection Interval

4241' feet to 4336 feet
(perforated or spaced out, indicate which)

INJECTION WELL DATA SHEET -- SIDE 2

Tubing size 2-3/8" lined with Baker plastic cap 505 set in a
(modified epoxy w/Phenolic primer)
(material)

Baker Lok Set packer at 4141 ± feet
(brand and model)

(or describe any other casing-tubing seal).

Other Data

1. Name of the Injection formation San Andres

2. Name of Field or Pool (if applicable) Chaveroo Field

3. Is this a new well drilled for injection? ☐ Yes ☒ No
If no, for what purpose was the well originally drilled? oil well

4. Has the well ever been perforated in any other zone(s)? List all such perforated intervals and give plugging detail (sacks of cement or bridge plug(s) used) No

5. Give the depth to and name of any overlying and/or underlying oil or gas zones (pools) in this area. None

Grade	Thread	Depth
J-55	8rd	401'
J-55	8rd	4,340'
J-55	EUE	4,141'
F EQUIPMENT		DEPTH
Surface w/275 sxs		401'
		2,965'
		4,141'
		4,141'
4241', 4243', 4244', 4246',		
4271', 4273', 4275', 4292',		
4332', 4334', 4335',		
		4,338'
S		4,340'
		4,340'

Date

1/10/00

WELL SCHEMATIC										Casing Size	8-5/8"	Weight	24	Grade	J-55 <th>Threads</th> <td>8rd</td> <th>Depth</th> <td>401'</td>	Threads	8rd	Depth	401'			
										Casing	5-1/2"		14		J-55		8rd		4,340'			
										Tubing	2-3/8"		4.7		J-55		EUE		4,141'			
										Tubing												
										DESCRIPTION OF EQUIPMENT												DEPTH
										8-5/8" casing cemented to surface w/275 sxs												401'
										TOC (Calc)												2,965'
										2-3/8" tubing												4,141'
										Baker Lok Set Packer												4,141'
										San Andres perms: 1 SPF @ 4241', 4243', 4244', 4246',												
										4247', 4256', 4266', 4268', 4271', 4273', 4275', 4292',												
										4306', 4319', 4321', 4326', 4332', 4334', 4335',												
										4336' (20 holes)												
										PBTD												4,338'
										5 1/2" casing cemented w/350 sxs												4,340'
										TD												4,340'
										Prepared By					Date							
										G. Bunag					1/12/00							

INJECTION WELL DATA SHEET

SIDE 1

OPERATOR		LEASE	
Kerr-McGee Corporation		State Tract "C"	
WELL NO.	FOOTAGE LOCATION	SECTION	TOWNSHIP
1	660' FNL & 1980' FEL	2	8S
			RANGE
			33E

Schematic

Attached

Tubular Data

Surface Casing

Size 8-5/8 " Cemented with 250 px.

TOC surface feet determined by circulation

Hole size 11"

Intermediate Casing

Size " Cemented with px.

TOC feet determined by

Hole size

Long string

Size 4 1/2 " Cemented with 375 px.

TOC 2557 feet determined by calculation

Hole size 7-7/8"

Total depth 4500'

Injection Interval

4204 feet to 4347 feet
(perforated or ~~xxxxxx~~ xxxxxx, indicate which)

INJECTION WELL DATA SHEET -- SIDE 2

Tubing size 2-3/8" lined with Baker plastic cap 505 set in a
(modified epoxy w/phenolic primer)
(material)
Baker Lok Set packer at 4104 ± feet
(brand and model)

(or describe any other casing-tubing seal).

Other Data

1. Name of the injection formation San Andres
2. Name of Field or Pool (if applicable) Chaveroo Field
3. Is this a new well drilled for injection? ☐ Yes ☒ No
If no, for what purpose was the well originally drilled? oil well
4. Has the well ever been perforated in any other zone(s)? List all such perforated intervals and give plugging detail (sacks of cement or bridge plug(s) used) No
5. Give the depth to and name of any overlying and/or underlying oil or gas zones (pools) in this area. None

STATE TRACT "C" #1
Chaveroo Field
Chaves County, New Mexico

WELL SCHEMATIC						CASING	Size	8-5/8"	Weight	24	Grade	J-55	Thread	8rd	Depth	378'
						CASING		4-1/2"		10.5		J-55		8rd		4,500'
						TUBING		2-3/8"		4.7		J-55		EUE		4,104'
						TUBING										
						DESCRIPTION OF EQUIPMENT										
						8-5/8" casing cemented to surface w/250 sx's										372'
						TOC (Calc)										2,557'
						2-3/8" tubing										4,104'
						Baker Loc Set Packer										4,104'
						San Andres perfs: 1 SPF @ 4204', 4224', 4235', 4265', 4280', 4294', 4298', 4308' 4316', 4333', 4347'										
						(11 holes)										

INJECTION WELL DATA SHEET

SIDE 1

OPERATOR		LEASE	
KERR-MCGEE CORPORATION		STATE TRACT "C"	
WELL NO.	FOOTAGE LOCATION	SECTION	TOWNSHIP
3	1980' FNL & 660' FEL	2	8S
			RANGE
			33E

Schematic

Attached

Tubular Data

<u>Surface Casing</u>	
Size 8-5/8"	Cemented with 250 gx.
TOC surface	feet determined by circulation
Hole size 11"	
<u>Intermediate Casing</u>	
Size "	Cemented with nx.
TOC	feet determined by
Hole size	
<u>Long string</u>	
Size 4 1/2"	Cemented with 375 gx.
TOC 2418	feet determined by calculation
Hole size 7-7/8"	
Total depth 4500'	
Injection Interval	
4236 feet to 4380 feet	(perforated or unperforated , indicate which)

INJECTION WELL DATA SHEET -- SIDE 2

Tubing size 2-3/8" lined with Baker plastic cap 505 set in a
 (modified epoxy w/phenolic primer)
 (material) _____
 Baker Lok Set _____ packer at 4136 ± feet
 (brand and model)

(or describe any other casing-tubing seal).

Other Data

1. Name of the injection formation San Andres
2. Name of Field or Pool (if applicable) Chaveroo Field
3. Is this a new well drilled for injection? ☐ Yes ☒ No
 If no, for what purpose was the well originally drilled? oil well
4. Has the well ever been perforated in any other zone(s)? List all such perforated intervals
 and give plugging detail (sacks of cement or bridge plug(s) used) No
5. Give the depth to and name of any overlying and/or underlying oil or gas zones (pools) in
 this area. None

STATE TRACT "C" #3
Chaveroo Field
Chaves County, New Mexico

WELL SCHEMATIC										
CASING	Size	8-5/8"	Weight	24	Grade	J-55	Thread	8rd	Depth	360'
CASING		4-1/2"		10.5		J-55		8rd		4,500'
TUBING		2-3/8"		4.7		J-55		EUE		4,136'
TUBING										
DESCRIPTION OF EQUIPMENT										DEPTH
8-5/8" casing cemented to surface w/250 sxs										360'

INJECTION WELL DATA SHEET

SIDE 1

OPERATOR		LEASE	
Kerr-McGee Corporation		State Tract "C"	
WELL NO.	FOOTAGE LOCATION	SECTION	TOWNSHIP
4	660' FNL & 660' FWL	1	8S
			33E

Schematic

Attached

Intubator Data

<u>Surface Casing</u>	
Size	8-5/8" Cemented with 250 ex.
TOC	surface feet determined by circulation
Hole size	11"
<u>Intermediate Casing</u>	
Size	" Cemented with nx.
TOC	feet determined by
Hole size	
<u>Long string</u>	
Size	4 1/2" Cemented with 375 ex.
TOC	2418 feet determined by calculation
Hole size	7-7/8"
Total depth	4500'

Injection Interval

4244 feet to 4338 feet
(perforated or xxxxxxxx, indicate which)

INJECTION WELL DATA SHEET -- SIDE 2

Tubing size 2-3/8" lined with Baker plastic cap 505 set in a
(modified epoxy w/Phenolic primer)
(material)

Baker Lok Set packer at 4144 ± feet
(brand and model)

(or describe any other casing-tubing seal).

Other Data

1. Name of the injection formation San Andres

2. Name of field or pool (if applicable) Chaveroo Field

3. Is this a new well drilled for injection? ☐ Yes ☒ No
If no, for what purpose was the well originally drilled? oil well

4. Has the well ever been perforated in any other zone(s)? List all such perforated intervals
and give plugging detail (bags of cement or bridge plug(s) used) No

5. Give the depth to and name of any overlying and/or underlying oil or gas zones (pools) in
this area. None

STATE TRACT "C" #4
Chávero Field
Chaves County, New Mexico

[illegible]

REPORT FOR PRODUCTION
OIL COMPANY: KERR-MCGEE

Kerr-McGee EXHIBIT NO. 13

CASE NO. 9682 + 9683

TABULATION OF WELL DATA FOR WELLS WITHIN THE PROPOSED UNIT AREA
PROPOSED K-M CHAVEROO SAN ANDRES UNIT
CHAVES COUNTY, NEW MEXICO

EXHIBIT 2

TRACT OPERATOR LEASE	WELL #	UNIT	NEW UNIT WELL #	WELL STATUS	COMPLETION DATE	DATUM ELEVATION FEET	TD or PBTD FEET	CSG RECORD SIZE INCHES	DEPTH FEET	COMPLETION INTERVAL FEET	INITIAL ACID GAL	TREATMENT FRAC # SAND	INITIAL POTENTIAL			REMARKS	CUMULATIVE PROD TO 12/31/88	USEABLE WELLS				
													BOPD	MCFD	BWPD							
1	Section 2, T8S, R33E Kerr-McGee Corporation State "f"	1	D	006	S	06-07-66	4381	4380	4380	5-1/2	300	4380	4211-4345	2000	45,000	F	346	96	0	Last Prod. Date 04/87	68,269	1
		2	C	005	P	06-19-66	4366	4406	4406	5-1/2	350	4406	4199-4347	2500	45,000	F	261	150	0		67,868	1
		3	E	008	P	07-15-66	4367	4420	4420	5-1/2	350	4420	4203-4339	4500	---	P	129	100 est	16		83,345	1
		4	F	009	P	07-17-66	4362	4430	4430	5-1/2	350	4430	4200-4328	2500	37,500	F	200	175	0		115,211	1
		5	L	016	P	09-08-66	4377	4346	4346	5-1/2	350	4346	4208-4331	2500	45,000	F	266	210 est	0		184,095	1
		6	K	015	P	09-03-66	4367	4342	4342	5-1/2	350	4342	4211-4322	4500	---	P	77	15 est	0		130,167	1
		7	J	014	P	09-17-66	4357	4337	4337	5-1/2	350	4337	4219-4328	2500	45,000	F	436	328 est	0		86,553	1
		8	I	013	P	09-25-66	4346	4334	4334	5-1/2	350	4334	4210-4329	2500	45,000	F	390	234 est	0		92,594	1
		10	N	018	P	10-11-66	4365	4336	4336	5-1/2	350	4336	4238-4331	2500	45,000	F	473	284 est	0	Last Prod. Date 06/88	100,154	1
		11	M	017	P	10-26-66	4376	4344	4344	5-1/2	350	4344	4210-4332	2500	45,000	F	395	217 est	0		84,764	1
		12	O	019	P	11-05-66	4357	4344	4344	5-1/2	350	4344	4233-4337	2500	45,000	F	312	187	0		84,312	1
		13	P	020	P	11-27-66	4347	4340	4340	5-1/2	350	4340	4241-4336	2000	30,000	P	217	76 est	0		62,548	1
		14	C	007	P	10-03-80	4366	4500	4500	4-1/2	730	4499	4185-4253	5500	111,000	P	14	9	81		16,856	1
		2	Bristol Levick State "2"	1	G	010	P	08-23-66 01-14-76	4360	4450	4450	4-1/2	325	4450	4216-4353 4412-4426	2000 2000	45,000 40,000	F	124	209	--	
3	Kerr-McGee Corporation State Tract "C"	1	B	004	P	06-20-66	4352	4500	4500	4-1/2	375	4500	4204-4347	2500	40,000	F	308	171	--		95,337	1
		2	A	003	P	07-14-66	4356	4479	4479	4-1/2	375	4479	4221-4358	2500	40,000	F	280	99	--		85,156	1
		3	H	011	P	07-20-66	4355	4500	4500	4-1/2	375	4500	4236-4380	2250	39,000	F	280	115	--		110,483	1
3	Section 1, T8S, R33E Kerr-McGee Corporation State Tract "C"	4	D	002	P	08-10-66	4351	4500	4500	4-1/2	375	4492	4244-4338	2100	40,000		75	15	32		34,660	1
		5	C	001	I	08-05-66	4347	4500	4500	4-1/2	375	4500	4239-4416	2000	--	P	TA			SMD well approved 12-9-68	0	0
4	Kerr-McGee Corporation State "fU"	9	E	012	P	09-29-66 01-25-68	4340	4334	4334	5-1/2	350	4334	4306-4330 4238-4266	2500 2500	-- 45,000	F	144	86 est	0		64,052	1
																					1,660,627	19

~~EXHIBIT A~~

TABULATION OF WELL DATA FOR WELLS WITHIN THE PROPOSED UNIT AREA
PROPOSED K-M CHAVEROO SAN ANDRES UNIT
CHAVES COUNTY, NEW MEXICO

TRACT OPERATOR # LEASE	WELL # UNIT	TYPE OF LOG	HOLE SIZE INCHES	CASING RECORD SIZE INCHES	SAX	DEPTH FEET	TOC DETERMINED BY
1	Section 2, T8S, R33E Kerr-McGee Corporation State "F"	1 D Schlumberger Gamma Ray - Density	12 1/4	8 5/8	275	405	Surface Circ out 20 sxs.
		2 C Lane Wells Gamma Ray - Neutron	12 1/4	8 5/8	275	399	Surface Circ out 50 sxs.
		3 E Lane Wells Gamma Ray - Neutron	12 1/4	8 5/8	275	425	Surface Circ out 15 sxs.
		4 F Lane Wells Gamma Ray - Neutron	12 1/4	8 5/8	275	433	Surface Circ out 35 sxs.
		5 L Lane Wells Gamma Ray - Neutron	12 1/4	8 5/8	275	429	Surface Circ out 10 sxs.
		6 K Lane Wells Gamma Ray - Neutron	12 1/4	8 5/8	275	405	Surface Circ out 15 sxs.
		7 J Lane Wells Gamma Ray - Neutron	12 1/4	8 5/8	275	404	Surface Circ out 15 sxs.
		8 I Lane Wells Gamma Ray - Neutron	12 1/4	8 5/8	275	405	Surface Circ out 10 sxs.
		10 N Lane Wells Gamma Ray - Neutron	12 1/4	8 5/8	275	407	Surface Circ out 15 sxs.
		11 M Lane Wells Gamma Ray - Neutron	12 1/4	8 5/8	275	406	Surface Circ out 15 sxs.
		12 O Lane Wells Gamma Ray - Neutron	12 1/4	8 5/8	275	408	Surface Circ out 15 sxs.
		13 P Lane Wells Gamma Ray - Neutron	12 1/4	8 5/8	275	401	Surface Calc.
		14 C Schlumberger Neutron - Density	12 1/4	8 5/8	400	410	Surface Calc.
2	Bristol Levick State "2"	1 G Lane Wells Gamma Ray - Neutron	12 1/4	8 5/8	250	375	Surface Circ out cmt
3	Kerr-McGee Corporation State Tract "C"	1 B Schlumberger Gamma Ray - Density	11	8 5/8	250	375	Surface Circ
		2 A Schlumberger Gamma Ray - Density	11	8 5/8	275	389	Surface Calc.
		3 H Schlumberger Gamma Ray - Density	11	8 5/8	250	360	Surface Good Returns
3	Section 1, T8S, R33E Kerr-McGee Corporation State Tract "C"	4 D Schlumberger Sonic - Gamma Ray	11	8 5/8	250	374	Surface Calc.
		5 C Schlumberger Gamma Ray - Density	11	8 5/8	250	378	Surface Good Returns
4	Kerr-McGee Corporation State "FU"	9 E Lane Wells Gamma Ray - Neutron	12 1/4	8 5/8	275	401	Surface Calc.

Kerr-McGee
9682 + 9683
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EXHIBIT A

TABULATION OF WELL DATA FOR WELLS OUTSIDE PROPOSED UNIT AREA BUT WITHIN ONE-HALF MILE OF EACH PROPOSED INJECTION WELL
PROPOSED K-M CHAVEROO SAN ANDRES UNIT
ROOSEVELT & CHAVES COUNTIES, NEW MEXICO

OPERATOR LEASE	WELL #	UNIT	CASING RECORD SIZE INCHES	SAX	DEPTH FEET	TOC DETERMINED BY
Section 36, T7S, R33E Murphy Operating Corp	4	L	8 5/8	250	372	Surface Calc
State "K"	5	M	8 5/8	250	376	Surface Calc
Section 35, T7S, R33E Murphy Operating Corp	19	P	8 5/8	250	378	Surface Calc
Hobbs "T"	18	O	8 5/8	350	373	Surface Calc
	14	J	8 5/8	250	400	Surface Calc
State "DE"	1	N	8 5/8	250	363	Surface Calc
State Section 35	1	L	8 5/8	250	371	Surface Calc
	2	M	8 5/8	225	368	Surface Calc
Section 34, T7S, R33E Murphy Operating Corp	15	P	8 5/8	256	375	Surface Calc
New Mexico "AZ" State	4	H	4 1/2	250	377	Surface Calc
Section 3, T8S, R33E	6	G	8 5/8	150	276	Surface Calc
Murphy Operating Corp	8	J	10 3/4	250	347	Surface Calc
State "BF"	9	P	8 5/8	200	390	Surface Calc
	1	I	8 5/8	411	225	Surface Calc
Bristol State "3"	3	A	8 5/8	404	225	Surface Calc
Section 10, T8S, R33E Yates Petroleum Corp	1	D	8 5/8	402	210	Surface Circ
Sun "UW" Federal	1	C				
Section 11, T8S, R33E Collier Energy, Inc.						
Mary Ella II						
Section 11, T8S, R33E Robert N. Enfield						
C. H. Hale						
Section 11, T8S, R33E American Trading & Production Corp. (Glenn Petro. Corp)						
C. H. Hale						
Section 12, T8S, R33E (McClellan, Jack L.)						
Klepfer State 1						

EXHIBIT 4

TABULATION OF WELL DATA FOR WELLS OUTSIDE PROPOSED UNIT AREA BUT WITHIN ONE-HALF MILE OF EACH PROPOSED INJECTION WELL
PROPOSED K-M CHAVEROO SAN ANDRES UNIT
ROOSEVELT & CHAVES COUNTIES, NEW MEXICO

OPERATOR LEASE	WELL #	UNIT	WELL STATUS	COMPLETION DATE	DATUM ELEVATION FEET	TD OR PBD FEET	CASING SIZE INCHES	RECORD SAX FEET	DEPTH FEET	COMPLETION INTERVAL FEET	INITIAL TREATMENT ACID GAL	INITIAL TREATMENT # SAND	BOPD	MCFD	POTENTIAL----- BOPD	REMARKS
Section 36, T7S, R33E Murphy Operating Corp State "K"	4	L	P	09-30-66	4345	4490	4-1/2	350	4481	4244-4345	2000	25000	F 240	288		
	5	M	P	10-04-66	4349	4480	4-1/2	350	4466	4240-4342	2000	25000	P 240	168	--	
	19	P	P	05-15-66	4353	4500	4-1/2	350	4500	4187-4358	2500	--	P 120	N/A	--	
	18	O	P	05-04-66	4361	4500	4-1/2	350	4500	4216-4325	2500	--	F 302	N/A	--	
	14	J	P	03-15-66	4357	4500	4-1/2	350	4500	4207-4329	2500	--	F 496	521	--	
State "DG" State Section 35	1	N	S	04-17-66	4368	4442	4-1/2	800	4476	4207-4336	2000	--	F 136	121	--	Last prod date 4/86
	1	L	P	01-12-66	4405	4405	5-1/2	350	4442	4244-4334	4000	40000	F 294	123	29	
	2	M	P	03-17-66	4373	4360	4-1/2	350	4372	4182-4333	2500	40000	P 82	60	9	
Section 34, T7S, R33E Murphy Operating Corp New Mexico "AZ" State Section 3, T8S, R33E	15	P	TA	12-31-65	4385	--	4-1/2	200	4480	4201-4347	1000	24000	182	138	N/A	TA approved 02/83
	1	A	S	04-13-66	4386	4447	4-1/2	250	4480	4187-4344	1000	22200	F 381	N/A	12	Last prod date 01/86
	2	B	SI	05-25-66	4392	4453	4-1/2	250	4491	4200-4361	500	20000	S 85	N/A	46	Last prod date 06/88
				05-08-69						4217-4268	10250		P 27	N/A	5	
	4	H	S	07-13-66	4387	4452	4-1/2	300	4489	4198-4344	2000	30000	F 171	80	N/A	Last prod date 07/88
Bristol State "3" Section 10, T8S, R33E Yates Petroleum Corp Sun "UM" Federal Section 11, T8S, R33E Collier Energy, Inc. Mary Ella II Section 11, T8S, R33E Robert N. Enfield C. H. Hale Section 11, T8S, R33E American Trading & Production Corp. (Glenn Petro. Corp) C. H. Hale Section 12, T8S, R33E (McClellan, Jack L.) Klepfer State 1	6	G	P	08-04-66	4397	--	4-1/2	300	4455	4208-4356	2000	30000	F 151	N/A	12	
	8	J	P	11-22-66	4401	4438	4-1/2	300	4775	4240-4366	2000	40000	S&F 306	N/A	66	
	9	P	S	12-16-66	N/A	4447	4-1/2	300	4482	4253-4351	1000	40000	P 52	N/A	10	Last prod date 07/88
	1	I	P	04-21-67	4392	--	4-1/2	350	4410	4235-4352	1500	52500	P 142	60	N/A	
	3	A	P	03-12-84	4374	4440	4-1/2	250	4440	4193-4334	3000	--	P 44	12	60	
C. H. Hale Section 11, T8S, R33E American Trading & Production Corp. (Glenn Petro. Corp) C. H. Hale Section 12, T8S, R33E (McClellan, Jack L.) Klepfer State 1	1	D	T	07-19-81	4372	4425	4-1/2	1050	4460	4197-4276	3000	--	P 14	5	40	Last prod date 7/83
	1	C	P&A	05-28-67	4378	4365	4-1/2	350	4365	4242-4348	2500	32000	P 33	TSTM	86	Plugged & abandoned 04/15/75
	1	B	P&A	03-17-67	4373	4400	4-1/2	450	4400	4261-4354	2000	30000	P 230	113	30	Plugged & abandoned 05/15/71
	1	D	P&A	04-02-67	4355	4410	4-1/2	225	4408	4292-4390	7500	30000	P 84	TSTM	40	Plugged & abandoned 02/27/69

EXHIBIT 4
OF COURTESY OF
Ken-m Greenfield NO. 16
CASE NO. 9682 + 9683

Kem-mye

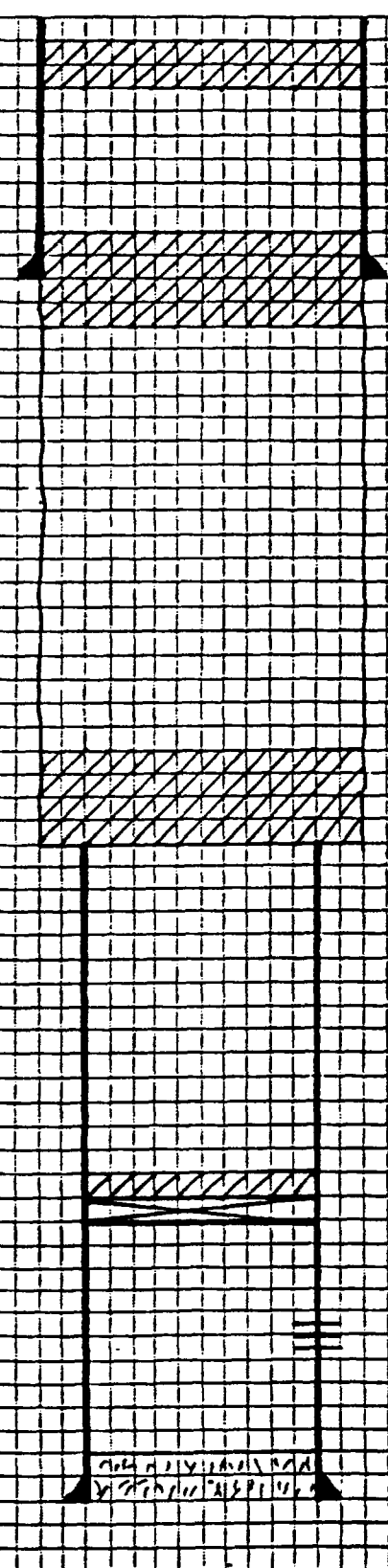
17

9682 + 9683

ROBERT N. ENFIELD
NE, NW, Sec. 11, T8S, R33E
Chaveroo Field
Chaves County, New Mexico
330' FNL & 1980' FWL
Well Name: C. H. Hale No. 1

EXHIBIT 3

Well plugged & abandoned 4-15-75

WELL SCHEMATIC	CASING	Size	8-5/8"	Weight	N/A	Grade	N/A	Thread	N/A	Depth	411'
	CASING		4-1/2"		N/A		N/A		N/A		4,365'
	TUBING										
	TUBING										
	DESCRIPTION OF EQUIPMENT										DEPTH
	10 sxs plug at surface										
	8-5/8" csg cemented to surface w/225 sxs										411'
	100' plug at 457'										
	NOTE: Well filled w/mud from stub of 4 1/2" csg to surface.										
	100' plug at 987'										
	Stub of 4 1/2" casing										987'
	CIBP w/3 sxs on top of plug.										4,200'
	San Andres perms: 4242-4348'										
PBD										4,353'	
4 1/2" casing cemented w/350 sxs										4,365'	
TD										4,365'	
Prepared By						Date					
G. Bunas						2-8-89					

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LAND OFFICE	
OPERATOR	

NEW MEXICO OIL CONSERVATION COMMISSION

Form C-103
Supersedes Old
C-102 and C-103
Effective 1-1-65

5a. Indicate Type of Lease	
State ☐	Fee ☒
5. State Oil & Gas Lease No.	

SUNDRY NOTICES AND REPORTS ON WELLS

(DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR.
USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH PROPOSALS.)

OIL WELL ☒	GAS WELL ☐	OTHER ☐
Name of Operator ROBERT N. ENFIELD		
Address of Operator P. O. BOX 2431, SANTA FE, NEW MEXICO 87501		
Location of Well UNIT LETTER C 330 FEET FROM THE North LINE AND 1980 FEET FROM THE West LINE, SECTION 11 TOWNSHIP 8S RANGE 33E NMPM.		

7. Unit Agreement Name
8. Farm or Lease Name C. H. HALE
9. Well No. 1
10. Field and Pool, or Wildcat Chavaroo
11. Elevation (Show whether DF, RT, GR, etc.) 4384 DF
12. County Chaves

Check Appropriate Box To Indicate Nature of Notice, Report or Other Data

NOTICE OF INTENTION TO:

PERFORM REMEDIAL WORK ☐	PLUG AND ABANDON ☐
TEMPORARILY ABANDON ☐	CHANGE PLANS ☐
PULL OR ALTER CASING ☐	OTHER ☐

SUBSEQUENT REPORT OF:

REMEDIAL WORK ☐	ALTERING CASING ☐
COMMENCE DRILLING OPS. ☐	PLUG AND ABANDONMENT ☒
CASING TEST AND CEMENT JOB ☐	OTHER ☐

7. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work) SEE RULE 1103.

1. Cast iron bridge plug set at 4,200'. 3 sx. cement set on top of plug
2. Cut and pulled 4-1/2" at 987'.
3. 100' cement plug at stub of 4-1/2" at 987'
4. Mud from stub of 4-1/2' to surface
5. 100' cement plug at surface pipe shoe 457'
6. 10 sx. plug at surface
7. Surface marker
8. Pad, pit and roads filled and ripped.

Work finished as of 4/15/75

18. I hereby certify that the information above is true and complete to the best of my knowledge and belief.

SIGNED <u>Robert N. Enfield</u>	TITLE OPERATOR	DATE 5/6/75
APPROVED BY <u>John W. Runyon</u>	TITLE Geologist	DATE 5/11/75

JACK L. MCCLELLAN
 NW, NW, Sec. 12, T8S, R33E
 CHAVEROO FIELD
 CHAVES COUNTY, NEW MEXICO
 330' FNL & 330' FWL

Well Name: Klepfer State No. 1
 Well plugged & abandoned 2-27-69

WELL SCHEMATIC	CASING	Size	Weight	Grade	Threads	Depth
	CASING	8-5/8"	20	N/A	N/A	402'
	CASING	4-1/2"	9.5	N/A	N/A	4,408'
	TUBING					
	TUBING					
	DESCRIPTION OF EQUIPMENT					DEPTH
	10 sxs plug @ surface					
	8-5/8" csg cemented to surface w/210 sxs					402'
	25 sxs plug @ 402'					
	NOTE: Heavy mud was placed between all plugs.					
	25 sxs plug @ 1950'					
	25 sxs plug @ 2350'					
	25 sxs plug @ 2500'					
	Stub of 4 1/2" casing					2,500'
	San Andres perms: 4292', 4294', 4300', 4303', 4308',					
	4314', 4316', 4319', 4324', 4373', 4378', 4382', 4384'					
	& 4390'					
	25 sx plug @ 4382'					
	PBD					4,393'
	4 1/2" casing cemented w/225 sxs					4,408'
	TD					4,410'
Prepared By				Date		
G. Bunas				2-8-89		

1. Name of Person or Organization JOHN C. McCLELLAN		2. Address Box 518, Roswell, New Mexico, 88201	
3. City, State, and Zip DF 330 North 330		4. Country U.S.A.	
5. Date 12-8-68		6. Name of Person or Organization McKeefer State	
7. Name of Person or Organization McKeefer State		8. Name of Person or Organization McKeefer State	
9. Name of Person or Organization McKeefer State		10. Name of Person or Organization McKeefer State	
11. Name of Person or Organization McKeefer State		12. Name of Person or Organization McKeefer State	

Check Appropriate Box to Indicate Nature of Notice, Request or Other Disposition

NOTICE OF INTENTION FOR		SUBSEQUENT REPORT ON	
☐ DOMESTIC WORK ☐ FOREIGN WORK ☐ OTHER	☐ DOMESTIC WORK ☐ FOREIGN WORK ☐ OTHER	☐ DOMESTIC WORK ☐ FOREIGN WORK ☐ OTHER	☐ DOMESTIC WORK ☐ FOREIGN WORK ☐ OTHER

13. Describe in detail the operations, including general purpose details, and give pertinent data, including estimated date of completion, if applicable.

TRAP WELL WAS PLUGGED AND ABANDONED FEBRUARY 27, 1969, AS FOLLOWS:

- 25 SACK PLUG AT 4382' (T. D.)
- 25 SACK PLUG AT 2500' (STUB OF 4 1/2" CASING)
- 25 SACK PLUG AT 2350' (BASE OF SALT)
- 25 SACK PLUG AT 1950' (TOP OF SALT)
- 25 SACK PLUG AT 402' (8-5/8" CASING)
- 10 SACK PLUG AT SURFACE.

HEAVY MUD WAS PLACED BETWEEN ALL PLUGS, THE LOCATION CLEANED AND A MARK SET.

14. I hereby certify that the information above is true and correct to the best of my knowledge and belief.

_____ TITLE SECRETARY DATE 1/24/69

ILLEGIBLE

INDEXED OFFICE U.C.T. E.O.C.C.

NEW MEXICO CONSERVATION DEPARTMENT
WELL COMPLETION OR RECOMPLETION REPORT AND LOG

OG 1063

KLEPPER STATE

CHAVERO

CHAVES

NAME: JACK E. MCGLELLAN
ADDRESS: P.O. Box 848, ROSWELL, NEW MEXICO 88201
LOCATION: D 330 NORTH 330
NEST: 12 8-S 33-E

16. Date Started: 2/22/67
17. Date Compl. (Ready to Prod.): 3/3/67
18. Elevations (DP, R&B, RT, GR, etc.): 4346 GL 4355 DF
19. Elev. Completion: 4347
20. Plug Back T.D.: 4410
21. Plug Back T.D.: 4393
22. If Multiple Compl., How Many: 1
23. Intervals Drilled By: 0 - 4410
24. Intervals Drilled By: 0 - 4410
25. Was Drilling Done: YES

26. Production Method (Flowing, gas lift, pumping - 5 lbs and type pump): GANNA RAY-NEUTRON (IN CASING)
27. Was Well Cased: No

CASING RECORD (Report all strings set in well)					
CASING SIZE	WEIGHT LB./FT.	DEPTH SET	HOLE SIZE	CEMENTING RECORD	AMOUNT PULLED
8-5/8	20 LB.	402	12-3/4"	210 SX (CIRC)	0
4-1/2	9 1/2 LB.	4408	7-7/8"	225 SX	0

LINER RECORD				TUBING RECORD		
SIZE	TOP	BOTTOM	BACKS CEMENT	SCREEN	SIZE	DEPTH SET
					2-3/8"	4348

31. Production Record (Interval, also and number)		32. ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC.	
1 SHOT PER FOOT 4292, 94, 4300, 03, 08, 14, 16, 19, 24, 73, 78, 82, 84 AND 90		DEPTH INTERVAL	AMOUNT AND KIND MATERIAL
		4373-4390	1500 ACID & 3000 ACID
		4292-4326	3000 ACID
		4292-4326	30,000 LBE OIL, 30,000

PRODUCTION							
Date of Production: 4/08/67		Production Method (Flowing, gas lift, pumping - 5 lbs and type pump): PUMPING				Well Status (Flowing, Shut-in, etc.): PRODUCING	
Date of Test: 4/08/67	Hours Tested: 24	Choke Size: 2" OPE	Pressure For Test Period: 84	Oil - Bbl.: 84	Gas - MCF: TSTM	Water - Bbl.: 40	Gas - Oil Ratio: 26
Flowing Pressure: 0	Casing Pressure: 150	Calculated 24-Hour Rate: 84	Oil - Bbl.: 84	Gas - MCF: TSTM	Water - Bbl.: 40	Oil Gravity - API (Check): 26	

33. Estimated Gas (bbl., used for fuel, vented, etc.):
Test Witnessed By:

34. Name of Operator:
DEVELOPER SURVEY

35. I hereby certify that the information shown on both sides of this form is true and complete to the best of my knowledge and belief.

ILLEGIBLE

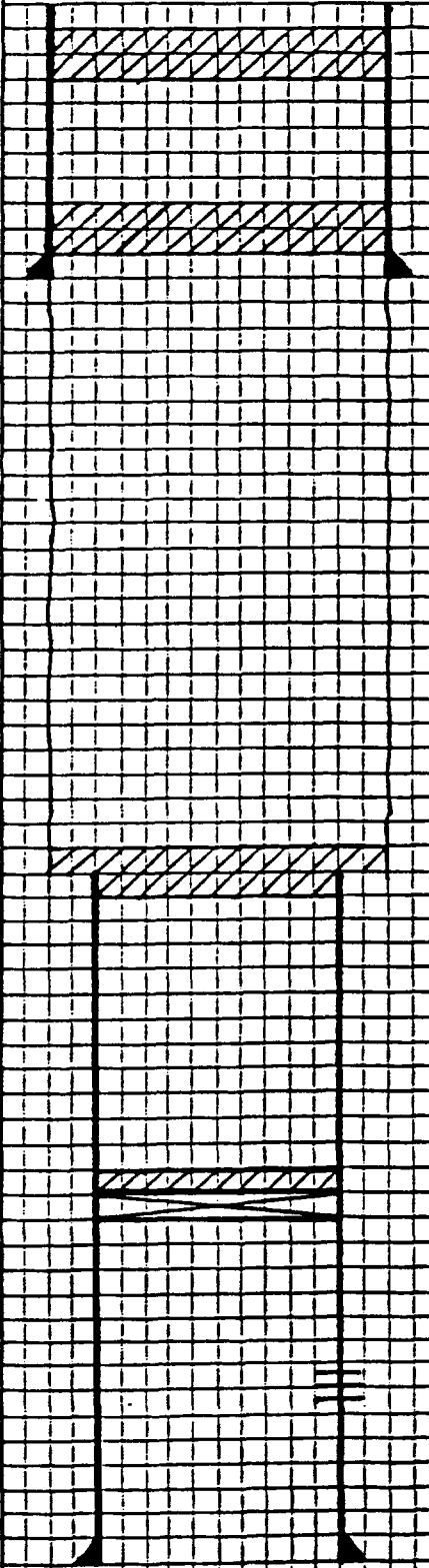
FORMATION RECORD (Attach additional sheets if necessary)

From	To	Thickness in Feet	Description	From	To	Thickness in Feet	Description
1942	1942		RED SAND AND SHALE				
1942	2508	447	SALT AND ANHYDRITE				
2301	3563	1180	RED SAND, RED SHALE AND ANHYDRITE				
3563	4410	1047	ANHYDRITE AND DOLOMITE				

ILLEGIBLE

GLENN PETROLEUM CORP.
 NW, NE, Sec. 11, T8S, R33E
 Chaveroo Field
 Chaves County, New Mexico

2310' FEL & 330' FNL
 Well Name : C. H. Hale No. 1
 Well was plugged & abandoned 5-15-71

WELL SCHEMATIC	CASING	Size	8-5/8"	Weight	N/A	Grade	N/A	Thiack	N/A	Depth	404'
	CASING		4-1/2"		N/A		N/A		N/A		4,400'
	TUBING										
	TUBING										
	DESCRIPTION OF EQUIPMENT										DEPTH
	10 sxs plug at surface										
	20 sx plug @ 375'										
	8-5/8" casing cemented to surface w/225 sx										404'

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NEW MEXICO OIL CONSERVATION COMMISSION

Form C-103
Supersedes Old
C-102 and C-103
Effective 1-1-65

5d. Indicate Type of Lease	
State ☐	Fee ☒
5. State Oil & Gas Lease No.	

SUNDRY NOTICES AND REPORTS ON WELLS

(DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH PROPOSALS.)

OIL WELL ☒	GAS WELL ☐	OTHER ☐
Name of Operator Glenn Petroleum Corp.		
Address of Operator 2906 Maple Ave., Dallas, Texas 75201		
Location of Well UNIT LETTER <u>B³</u> <u>2310</u> FEET FROM THE <u>East</u> LINE AND <u>330</u> FEET FROM THE <u>North</u> LINE, SECTION <u>11</u> TOWNSHIP <u>8S</u> RANGE <u>33E</u> N.M.P.M.		

7. Unit Agreement Name none
8. Farm or Lease Name C.H. Hale
9. Well No. 1
10. Field and Pool, or Wildcat Chaveroo San And.
11. County Chaves

15. Elevation (Show whether DF, RT, CR, etc.)
4361 Gr.

Check Appropriate Box To Indicate Nature of Notice, Report or Other Data

NOTICE OF INTENTION TO:

SUBSEQUENT REPORT OF:

DRILL REMEDIAL WORK ☐	PLUG AND ABANDON ☐	REMEDIAL WORK ☐	ALTERING CASING ☐
TEMPORARILY ABANDON ☐	CHANGE PLANS ☐	COMMENCE DRILLING OPNS. ☐	PLUG AND ABANDONMENT ☒
OR ALTER CASING ☐	OTHER ☐	CASING TEST AND CEMENT JOBS ☐	
OTHER ☐			

Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work) SEE RULE 1103.

5-15-71: Set cast iron wire line bridge plug at 3620'. Put 2 sack cement cap on CIBP with dump bailer. Cut off 4 1/2" casing at 525'. Pull casing. Set 20 sack cement plug 550'-500'. Set 20 sack plug at 375". Set 10 sack plug at surface. Welded on cap on surface and set up 4" pipe monument marker. Removed surface equipment.

5-19-71: Covered all pits.

hereby certify that the information above is true and complete to the best of my knowledge and belief.

SIGNED BY President TITLE President DATE 8-14-71

SIGNED BY John H. Bary TITLE COMMISSIONER DISTRICT DATE AUG 23 1971

ADDITIONAL APPROVAL, IF ANY:

~~EXHIBIT 6~~

K-M CHAVEROO SAN ANDRES UNIT

Injection Water

On September 15, 1988 water samples were obtained from Dale Brown, the proposed water source for the K-M Chaveroo San Andres Unit, and the tank battery on the Kerr-McGee State's "F" Lease in the Chaveroo Field. The Ogallala water from Brown (Section 8, TWP7S, Rge 34E) was mixed with State "F" Lease produced formation brine and no precipitates were formed and as such the two appear compatible. Refer to laboratory report No. 49865, conducted by Oilab, Inc. of Oklahoma City and dated September 22, 1988.

On February 2, 1989 water samples were received by Mobile Analytical Laboratories from the State F #2 and State F #3 WSW. This is fresh water obtained from two water supply wells drilled to a depth of 500 feet on the Kerr-McGee State "FU" Lease. These waters are of comparable quality to the Ogallala water produced from the water source of Dale Brown. The water produced from Dale Brown's supply and the water from Kerr-McGee's water supply wells are considered compatible with each other and with produced formation water and are suitable for use in the secondary recovery project.

RJQ:lrg01

FILED
OIL COMPANY
<i>Kerr-McGee</i> 18
CASE NO. <u>9682 + 9683</u>

CHAUVEROO FIELD

	Sec 1, T8S, R33E		Sec 8, T7S, R34E
Source	WSW F#2	WSW F#3	Windmill Dale Brown
Date	2-2-89	2-2-89	9-15-88
	MG/L	MG/L	MG/L
Calcium	6	7	112
Magnesium	2	1	42
Sodium	304	293	134
Potassium			3
Barium			Trace
Iron	1.0	1.0	0.1
Silica			14
Bicarbonate*	166	161	165
Carbonate**	19	17	0
Hydroxide			0
Sulfate (SO ₄)	232	248	350
Chloride	195	173	170
	=====	=====	=====
Total Dissolved Solids	924	900	990
*(As CaCO ₃)			136
** (As CaCO ₃)			0
Total Hardness (As CaCO ₃)			456
P Alkalinity (As CaCO ₃)	16	14	
M Alkalinity (As CaCO ₃)	168	160	136
Specific Gravity (Temp °F)	1.0001		1.0021 74
Resistivity (Temp °F)	1.0101	.9901	6.58 77
pH	8.4	8.3	7.78
Calcium Hardness	14	18	
Magnesium Hardness	10	6	
	=====	=====	
Total Hardness	24	24	
Color (Before Filtration)	Colorless	Colorless	Colorless
Color (After Filtration)	Colorless	Colorless	Colorless

RJQ:lrg01

LABORATORY REPORT NO. 49865

SEPTEMBER 22, 1988

KERR-MCGEE CORPORATION

SAMPLED SEPTEMBER 1988 (BY KERR-MCGEE)

ANALYSES OF 3 WATER SAMPLES:

TUCKER RANCH (FRESH WATER)
DALE BROWN (WINDMILL - OGALLALA FORMATION)
STATE "F" LEASE (CHAVEROO FIELD)

OILAB, INC.



PETROLEUM LABORATORY
AND GAS ENGINEERING
FLOW MEASUREMENT SERVICE

SURESH JOSHI

Area Code 405
Telephone 528-8255

401 N.E. 46
Oklahoma City, Oklahoma
73105

1 - ROBERT J. QUANCE, OKLAHOMA CITY

U. S. Onshore Oper.
SEP 23 1988
E & P DIV.

LABORATORY REPORT NO. 49865

WATER ANALYSIS

KERR MCGEE CORPORATION
DALE BROWN
WINDMILL

DATE SAMPLED: 09-15-88
DATE RUN: 09-17-88
ZONE:

FORMATION: OGALLALA
200' NORTH OF HOUSE

SAMPLED BY: KERR MCGEE

COLOR(BEFORE FILTRATION): COLORLESS
COLOR(AFTER FILTRATION): COLORLESS

*****CHEMICAL CHARACTERISTICS*****

	mg/l
CALCIUM	112
MAGNESIUM	42
SODIUM	134
POTASSIUM	3
BARIUM	TRACE
IRON	0.10
SILICA	14
BICARBONATE*	165
CARBONATE**	0
HYDROXIDE	0
SULFATE	350
CHLORIDE	170
*(AS CaCO3)	136
** (AS CaCO3)	0

TOTAL HARDNESS (AS CaCO3)	456	RESISTIVITY (AT 77 DEG F)	6.58
P ALKALINITY (AS CaCO3)	0	TOTAL DISSOLVED SOLIDS	980
M ALKALINITY (AS CaCO3)	136	pH VALUE	7.73
SPECIFIC GRAVITY (@ 74 DEG F)	1.0021		

LABORATORY REPORT NO. 49865

WATER ANALYSIS

KERR MCGEE CORPORATION
STATE "F" LEASEE
FIELD: CHAVEROO
CHAUVERS CO/NEW MEXICO

DATE SAMPLED: 09-15-88
DATE RUN: 09-17-88
ZONE:

SAMPLED BY: KERR MCGEE

COLOR(BEFORE FILTRATION): COLORLESS ODOR OF SULFIDES
COLOR(AFTER FILTRATION): COLORLESS

*****CHEMICAL CHARACTERISTICS*****

	mg/l
CALCIUM	28400
MAGNESIUM	4440
SODIUM	66500
POTASSIUM	6675
BARIUM	TRACE
IRON	15
SILICA	45
BICARBONATE*	325
CARBONATE**	0
HYDROXIDE	0
SULFATE	350
CHLORIDE	171580
*(AS CaCO3)	266
** (AS CaCO3)	0

TOTAL HARDNESS (AS CaCO3)	97800	RESISTIVITY (AT 77 DEG F)	0.035
P ALKALINITY (AS CaCO3)	0	TOTAL DISSOLVED SOLIDS	278285
M ALKALINITY (AS CaCO3)	266	pH VALUE	6.01
SPECIFIC GRAVITY (@ 74 DEG F)	1.1775		

SOLUBLE SULFIDES 17.6
NO PRECIPITATES WERE FORMED WHEN
THIS WATER WAS MIXED WITH FRESH
WATER FROM DALE BROWN WINDMILL
& AS SUCH THE TWO APPEAR TO BE
COMPATIBLE

LABORATORY REPORT NO. 49865

WATER ANALYSIS

KERR MCGEE
TUCKER RANCH
FRESH WATER

DATE SAMPLED 09-15-88
DATE RUN: 09-17-88
ZONE:

SAMPLED BY: KERR MCGEE

COLOR(BEFORE FILTRATION): COLORLESS
COLOR(AFTER FILTRATION): COLORLESS

*****CHEMICAL CHARACTERISTICS*****

	mg/l
CALCIUM	138
MAGNESIUM	38
SODIUM	20
POTASSIUM	4
BARIUM	TRACE
IRON	0.08
SILICA	12
BICARBONATE*	135
CARBONATE**	0
HYDROXIDE	0
SULFATE	180
CHLORIDE	130
*(AS CaCO3)	110
** (AS CaCO3)	0

TOTAL HARDNESS (AS CaCO3)	504	RESISTIVITY (AT 77 DEG F)	9.52
P ALKALINITY (AS CaCO3)	0	TOTAL DISSOLVED SOLIDS	645
M ALKALINITY (AS CaCO3)	110	pH VALUE	7.90
SPECIFIC GRAVITY (@ 74 DEG F)	1.0014		

orig: WRF 2/20/89 Bob - Has done
cc: FBC
BQ
this water compared with Brown
water with analysis on WS
FU#18 Is this water
compatible with San Antonio
water?
Leef

MOBILE ANALYTICAL LABORATORIES
P.O. BOX 69210
ODESSA, TEXAS 79769-9210
PHONE: 915-337-4744

FEBRUARY 9, 1989

SAMPLE RECEIVED: 02/02/89

KERR-McGEE CORP.
4602 W. CO. RD.
ODESSA, TEXAS 79764

WATER ANALYSIS: STATE F#2 WSW 500FT. MILENSAND N.M., LAB 224:

DISSOLVED SOLIDS

<u>CATIONS:</u>	MEQ/L	IONIC MG/L
SODIUM, Na	13.20	304
CALCIUM, Ca	0.28	6
MAGNESIUM, Mg	0.20	2
<u>ANIONS:</u>		
CHLORIDE, Cl	5.49	195
SULFATE, SO ₄	4.83	232
CARBONATE, CO ₃	0.64	19
BICARBONATE, HCO ₃	2.72	166
<u>TOTAL DISSOLVED SOLIDS:</u>		924

OTHER PROPERTIES:

pH	8.4	P-ALKALINITY AS CaCO ₃	16 MG/L
IRON	1.0 MG/L	M-ALKALINITY AS CaCO ₃	168 MG/L
H ₂ S	0.00	CONDUCTIVITY	990 MICROMOHS/CM
CO ₂	0.00	CALCIUM HARDNESS	14 MG/L
SPECIFIC GRAVITY	1.000	MAGNESIUM HARDNESS	10 MG/L
		TOTAL HARDNESS	24 MG/L

NOTE: SAMPLES CONTAINING HAZARDOUS AND TOXIC SUBSTANCES WILL BE RETURNED TO POINT OF ORIGIN FOR DISPOSAL. IF THIS IS NOT POSSIBLE AND MOBILE ANALYTICAL LABORATORIES HAS TO DISPOSE OF THE SAMPLE IN ACCORDANCE WITH EPA REGULATIONS, THEN ADDITIONAL CHARGES WILL BE BILLED TO COVER THE COST OF DISPOSAL OF THIS SAMPLE.

RECEIVED

FEB 17 1989

OIL & GAS DIVISION
JOINT VENTURE

MOBILE ANALYTICAL LABORATORIES

P.O. BOX 69210

ODESSA, TEXAS 79769-9210

PHONE: 915-337-4744

FEBRUARY 9, 1989

SAMPLE RECEIVED: 02/02/89

KERR-McGEE CORP.
4602 W. CO. RD.
ODESSA, TEXAS 79764

WATER ANALYSIS: STATE F#3 WSW 500FT. MILENSAND N.M., LAB 225:

DISSOLVED SOLIDS

<u>CATIONS:</u>	MEQ/L	IONIC MG/L
SODIUM, Na	___12.75___	___293___
CALCIUM, Ca	___0.36___	___7___
MAGNESIUM, Mg	___0.12___	___1___
<u>ANIONS:</u>		
CHLORIDE, Cl	___4.86___	___173___
SULFATE, SO ₄	___5.17___	___248___
CARBONATE, CO ₃	___0.56___	___17___
BICARBONATE, HCO ₃	___2.64___	___161___
<u>TOTAL DISSOLVED SOLIDS:</u>		___900___

OTHER PROPERTIES:

pH	___8.3___	P-ALKALINITY AS CaCO ₃	___14 MG/L___
IRON	___1.0 MG/L___	M-ALKALINITY AS CaCO ₃	___160 MG/L___
H ₂ S	___0.00___	CONDUCTIVITY	1,010 MICROMOHS/CM
CO ₂	___0.00___	CALCIUM HARDNESS	___18 MG/L___
SPECIFIC GRAVITY	___1.000___	MAGNESIUM HARDNESS	___6 MG/L___
		TOTAL HARDNESS	___24 MG/L___

NOTE: SAMPLES CONTAINING HAZARDOUS AND TOXIC SUBSTANCES WILL BE RETURNED TO POINT OF ORIGIN FOR DISPOSAL. IF THIS IS NOT POSSIBLE AND MOBILE ANALYTICAL LABORATORIES HAS TO DISPOSE OF THE SAMPLE IN ACCORDANCE WITH EPA REGULATIONS, THEN ADDITIONAL CHARGES WILL BE BILLED TO COVER THE COST OF DISPOSAL OF THIS SAMPLE.

REC'D

FEB 15 1989

SWD