

CABIN LAKE-DELAWARE POOL
(James "A" State Pressure Maintenance Project)
Eddy County, New Mexico

Order No. R-9500, Authorizing Phillips Petroleum Company to Institute a Pressure Maintenance Project in the Delaware Formation of the Cabin Lake-Delaware Pool, Eddy County, New Mexico, May 6, 1991.

Application of Phillips Petroleum Company
for a Pressure Maintenance Project, Eddy
County, New Mexico.

CASE 10288
Order No. R-9500

ORDER OF THE DIVISION

BY THE DIVISION: This cause came on for hearing at 8:15 a.m. on April 18, 1991, at Santa Fe, New Mexico, before Examiner Jim Morrow.

NOW, on this 6th day of May, 1991, the Division Director, having considered the testimony, the record, and the recommendations of the Examiner, and being fully advised in the premises,

FINDS THAT:

(1) Due public notice having been given as required by law, the Division has jurisdiction of this cause and the subject matter thereof.

(2) The applicant, Phillips Petroleum Company (Phillips), seeks authority to institute a pressure maintenance project on its James "A" State Lease underlying Lots 1 through 4, S/2 N/2, N/2 SW/4, SE/4 SW/4 and SE/4 of Section 2, Township 22 South, Range 30 East, NMPM, Eddy County, New Mexico, by the injection of water into the Cabin Lake-Delaware Pool, through a perforated interval from approximately 5600 feet to 7400 feet in a well to be drilled 1250 feet from the South line and 1150 feet from the East line (Unit P) of said Section 2. Applicant further seeks a special oil producing allowable whereby any well in the project area could produce its ability and would not be subject to the depth bracket allowable for said pool.

(3) Phillips is the current operator of the James "A" State Lease. It contains approximately 600 acres and is developed with 10 Delaware oil producing wells. Development began in 1986. Reservoir pressure has not reached the advanced or "stripper" stage of depletion.

(4) Phillips is requesting pressure maintenance status for the entire lease. Initially they plan a pilot project in the SE/4 of Section 2 using an inverted 40-acre five-spot pattern with a single injection well at the location set out in Finding No. (2) above. They are requesting approval to expand the project administratively.

(5) The proposed injection well would be used to inject up to 2000 barrels of water per day into the oil productive portions of the Cherry Canyon and Brushy Canyon intervals of the Delaware formation from approximately 5600 feet to 7400 feet. An average injection pressure of 500 psi is expected. Maximum injection pressure of 0.2 psi per foot (1120 psi) is being requested. Form C-108 submitted by Phillips indicates that all OCD requirements would be met.

(6) Produced water from Phillips' producing leases in the area would be the initial source of injection water.

(7) To maintain reservoir pressure, approximately 1.2 barrels of water would be injected for each barrel of fluid withdrawn from the reservoirs.

(8) Phillips' witness testified that the pilot project is expected to recover 124,000 barrels more oil than would be recovered by primary depletion.

(9) At the hearing, a project allowable for the pilot area equal to top allowable for the four wells to be affected (Wells Nos. 2, 5, 6 and 7) was requested.

(10) The project should be approved and should be designated the James "A" State Pressure Maintenance Project.

IT IS THEREFORE ORDERED THAT:

(1) The applicant, Phillips Petroleum Company, is hereby authorized to institute a pressure maintenance project on its James "A" State Lease, underlying Lots 1 through 4, S/2 N/2, N/2 SW/4, SE/4 SW/4 and the SE/4 of Section 2, Township 22 South, Range 30 East, NMPM, Eddy County, New Mexico, by the injection of water into the Delaware formation, Cabin Lake-Delaware Pool, through a perforated interval from approximately 5600 feet to 7400 feet in a well to be drilled 1250 feet from the South line and 1150 feet from the East line (Unit P) of said Section 2.

(2) The project is hereby designated the James "A" State Pressure Maintenance Project.

(3) The project allowable for the pilot project in the SE/4 of Section 2 shall be 4 x 107 or 428 barrels per day which is equal to top allowable for the four producing wells (Nos. 2, 5, 6 and 7) and may be produced by any well or combination of wells within the pilot project area.

(4) As the project is expanded, administrative approval for additional allowable may be granted by the Division Director upon receipt of an application explaining the reasons additional allowable should be assigned. Notice of an application to increase allowable shall be provided to each leasehold operator within one-half mile of the project.

(5) The operator shall take all steps necessary to ensure that the injected water enters only the proposed injection interval and is not permitted to escape to other formations or onto the surface.

(6) Injection into the proposed injection well shall be accomplished through 2 7/8-inch internally plastic-lined tubing installed in a packer set approximately within 100 feet of the uppermost injection perforation; the casing-tubing annulus shall be filled with an inert fluid and a gauge or approved leak detection device shall be attached to the annulus in order to determine leakage in the casing, tubing or packer.

(7) The injection well or system shall be equipped to limit the surface injection pressure to no more than 1120 psi.

(8) The Division Director shall have the authority to administratively authorize a pressure limitation in excess of the above upon a showing by the operator that such higher pressure will not result in migration of waters from the Cabin-Lake Delaware Pool.

(9) Prior to commencing injection operations into the injection well, the casing shall be pressure tested throughout the interval from the surface down to the proposed packer setting depth, to assure the integrity of the casing.

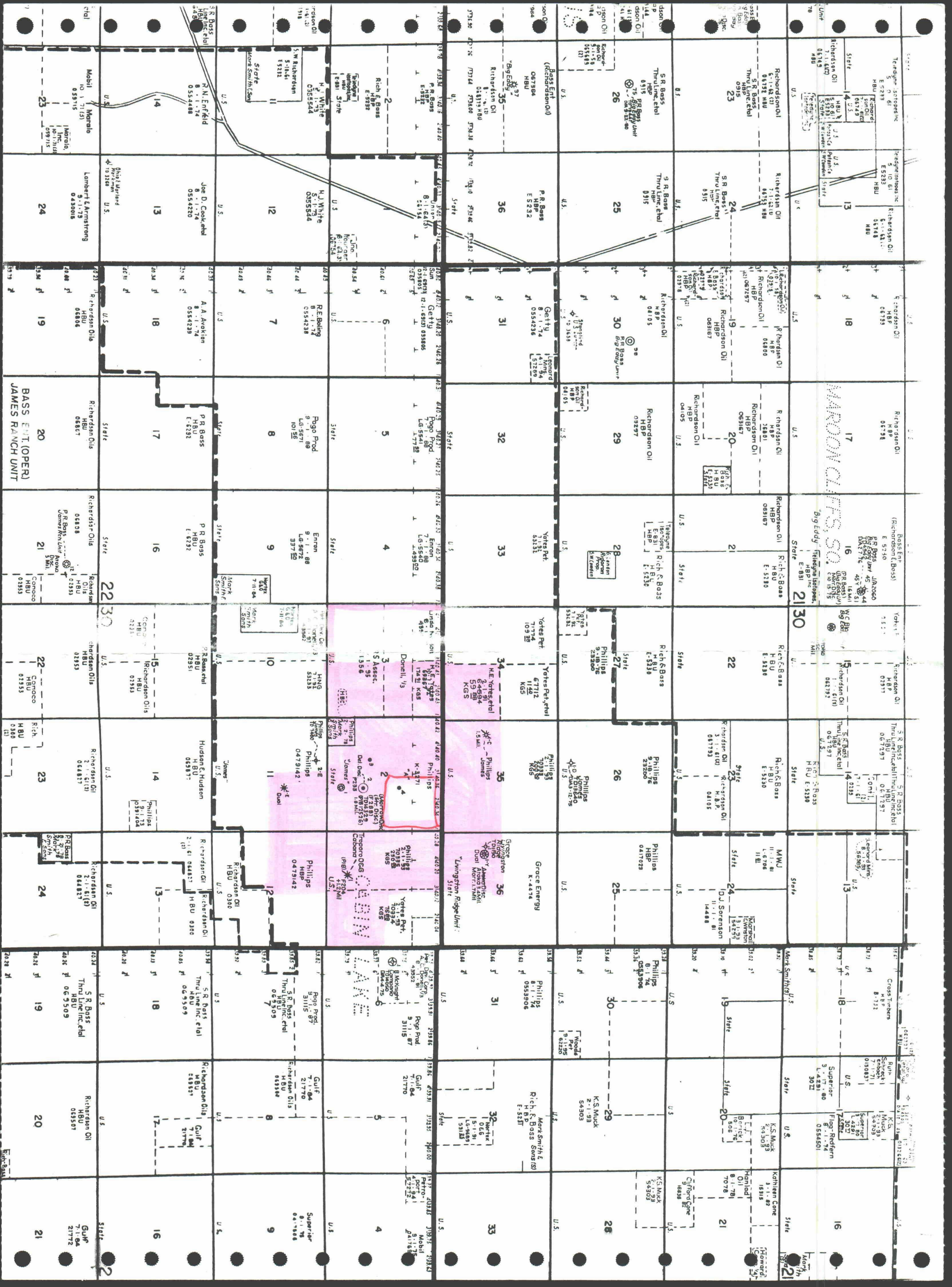
(10) The operator shall give advance notification to the supervisor of the Artesia district office of the Division of the date and time of the installation of injection equipment, of the mechanical integrity pressure test, and of any injection well remedial work so that these operations may be witnessed.

(11) The operator shall immediately notify the supervisor of the Division's Artesia district office of the failure of the tubing, casing, or packer in the injection well, the leakage of water or oil from or around any producing well, or the leakage of water or oil from or around any plugged and abandoned well within the project area and shall take such steps as may be timely and necessary to correct such failure or leakage.

(12) The applicant shall conduct injection operations in accordance with Division Rule Nos. 701 and 708 and shall submit monthly progress reports in accordance with Division Rule Nos. 706 and 1115.

(13) Jurisdiction of this cause is retained for the entry of such further orders as the Division may deem necessary.

DONE at Santa Fe, New Mexico, on the day and year hereinabove designated.



A.C. WILLIAMSON, continued:

WATER A Federal	3 E	26-26-29	M 1555
" (9)	4 D	"	M 1777
" (9)	6 B	"	M 944
Acreege Factor .750	1 A	35-26-29	M 800
MJ Fed. (10)	2 B	"	M 818
Acreege Factor .900	3 G	"	M 818
MJ Fed. (11)	5 H	35-26-29	M 750
Acreege Factor .750	1 M	25-26-29	M 889
MJ Fed. (12)	2 L	"	M 889
Acreege Factor .750	9 I	"	M 818
Utah Federal	3 M	"	M 1025
" (9)	4 K	"	M 889
" (9)	10 K	"	M 818
Utah Federal	5 E	25-26-29	M 889
" (9)	6 F	"	M 800
" (8)	7 C	"	M 857
" (7)			

DAVE E. WILLIAMSON

State line fed.	1 D	35-26-29	M 888
Acreege Factor .900	2 E	35-26-29	M 750
State line fed.	1 H	34-26-29	M 666
Acreege Factor .525			
Taxes Fed. (6)			
Acreege Factor .550			

WATER PET. CORP.

Sosa Federal (11)	1 O	15-26-29	M 4404
" (26)	2 P	12-26-27	M 2569

BRUSH BRAD-DELAWARE, EAST

Top Allowable 107	GOR Limit 2,000
Top Castinthead Gas Limit 214 MCF	No Test Required
WATER PET. CORP.	
WATER 25 Fed.	1 P 8-26-30 M

WATER TANK-DELAWARE

Top Allowable 80	GOR Limit 2,000
Top Castinthead Gas Limit 160 MCF	No Test Required
EXXON CORP.	
WATER (2)	1 0 7-23-36 M

DAVIS EYE-SAN ANDRES

Top Allowable 80	No Test Required	
Top Castinthead Gas Limit 160 MCF		
ELIZABETH OIL & GAS CORP.		
Elizabeth	1 D	7-8-29
Acreege Factor 0.975	5 D	"
Elizabeth C		

PROSTMAN OIL CORP.

Elizabeth (3)	2 E	7-8-29	M
Elizabeth (4)	4 F	7-8-29	M
Nancy (3)	1 P	1-8-28	M
Seanna (1)	1 A	12-8-28	M
" (3)	2 H	"	M
" (1)	3 A	"	M
Union Happy (1)	1 O	1-8-28	M
" (1)	2 J	"	M
M. DALE MICHOLES			
J. O'Brien	1 L	25-7-28	GD
Brian Lowe	1 G	26-7-28	GD
Skip	1 P	"	GD

STEVENS GR. CORP.

O'Brien DO	2 M	30-7-29	M
THE MARLOW CORP.			
Barnhart (1)	1 I	12-8-28	SI
McDonnell (1)	1 K	"	SI
O'Brien Dealing 6	1 M	6-8-29	M
Acreege Factor 0.975			
O'Brien Dealing	2 M	6-8-29	M
" (3)			
O'Brien Lightcap 7	1 L	7-8-29	M
Acreege Factor 0.975			
O'Brien Lightcap 7	2 K	"	SI
" (1)			

BANKER HILL ASSOC.

Top Allowable 80	GOR Limit 2,000
Top Castinthead gas limit 160 MCF	
C.E. LARKE & B.M. MAMCT, JR.	
Amoco Fed.	1 P 23-16-31 M
Amoco Fed.	2 O " M

READ & STEVENS, INC.

Bunker Hill Pentrose Pilot Waterflood			
Maximum Allowable Formula:			
21 X 80 = 1680			
Bunker Hills Waterflood Unit	1 C	13-16-31	"
"	2 D	"	"
"	3 D	13-16-31	"
"	4 M	14-16-31	"
"	5 E	13-16-31	"
"	6 F	"	"
"	7 G	"	"
"	8 K	"	"
"	10 I	14-16-31	"
"	11 J	"	"
"	12 M	"	"
"	13 N	"	"
"	14 D	"	"
"	16 M	13-16-31	"
"	18 C	24-16-31	"
"	20 A	23-16-31	"
"	21 B	23-16-31	"

READ & STEVENS, INC. continued:

Bunker Hill Waterflood Unit	22 C	23-16-31	"
"	23 E	"	"
"	24 F	24-16-31	"
"	25 G	23-16-31	"
"	26 N	"	"
"	27 E	24-16-31	"
"	28 K	23-16-31	"
"	9 L	13-16-31	"
"	15 P	14-16-31	"
"	17 M	24-16-31	"
"	19 D	"	"
INPUT			

BRITTON DELAWARE

Top Eastinghead Gas Limit 160			
WATER OIL CO.			
Yates Fed. (15)	3 E	17-20-29	M 5000
" (35)	10 H	18-20-29	M 600
" (40)	16 I	"	M 375

BRITTON DELAWARE, EAST

Top Allowable 107	GOR Limit 2,000
Top Castinthead Gas Limit 214 MCF	
STATE OIL & GAS CORP.	
Gila Federal (4)	1 M 10-20-29 M 2000
I.O.G. Fed. (18)	5 G 16-20-29 M 1222

DAY WESTALL

Huron Federal ()	1 L	15-20-29	M
J.C. WILLIAMSON			
I.O.G. Federal (35)	2 I	16-20-29	M 1971
" (127)	3 J	"	M 107 1930
" (61)	4 E	"	M 530

BRITTON FLAT UPPER-STEAM

Top Allowable 560	GOR Limit 3,000
Top Castinthead Gas Limit 1600 MCF	
PRESIDIO EXPL. INC.	
Superior Fed.	4 I 5-20-29 M 26600
(30)	

BRITTON FLAT-UPPER-STEAM, EAST

Top Castinthead Gas Limit 160 MCF	
WATER OIL CO.	
Yates Fed. ()	5 M 17-20-29 M

CARLIN LARKE - DELAWARE

Top Castinthead Gas Limit 214 MCF	No Test Required
CONLINE B. BRIDGE	
Salomah	1 M 36-21-30

B-9500

James A State Pressure Maintenance Pilot Project			
Maximum Allowable Formula:			
4 x 107 = 428			
PHILLIPS PET. CO.			
James A	2 J	2-22-30	M107
"	4 G	"	M
"	5 O	"	M107
"	6 I	"	M
"	7 P	"	M
"	8 H	2-22-30	M
"	9 A	"	M
"	10 M	"	M
"	11 B	2-22-30	M
"	12 P	2-22-30	M
James A	3 B	11-22-30	M107
James E	4 A	11-22-30	M
"	5 H	"	M107
"	6 J	11-22-30	M
"	11 D	12-22-30	M
"	12 C	12-22-30	M
"	13 E	"	M
"	14 F	"	M
Livingston Ridge	1 M	1-22-30	M107
Livingston Ridge Fed.	2 L	"	M107
"	3 E	1-22-30	M
"	9 M	"	M
Peak View	1 P	35-21-30	M

MARNEY E. VATES CO.

Donell 3 Federal	1 G	3-22-30	M
VATES PET. CORP.			
Julia AIL Federal	4 G	34-21-30	M
Kalidocscope AIO Federal	1 H	33-21-30	M

CARLIN LARKE-STEAM

"	2	1	"	M 10
Livingston Ridge Fed.	3	E	1-23-30	M 10
"	9	M	"	
Peak View	1	P	35-21-30	

CAULWELL-SAN ANDRES

Kalaidoscope AKO Federal	1	N	33-21-30
CARIN LANE-STRAHM			

JULY thru DECEMBER 1993

MARKET DEMAND

PERCENTAGE FACTOR: 100%

STATE OF NEW MEXICO

ENERGY, MINERALS & NATURAL RESOURCES DEPARTMENT

ORDER NO. A-261

SCHEDULE NO. 59

OIL CONSERVATION DIVISION

OIL PRORATION SCHEDULE

VOLUME 11

ARTESIA DISTRICT

THE DISTRICT SUPERVISOR SHOULD BE NOTIFIED
OF ANY ERROR IMMEDIATELY
P.O. DRAWER DD, ARTESIA, NEW MEXICO 88210
TELEPHONE (505) 748-1283

PRORATION ORDER
EXPLANATION OF SYMBOLS
TRANSPORTER ABBREVIATION CODES
GOR TEST SCHEDULE-
SUPPLEMENT LISTING
PRORATION SCHEDULE

INDEX

County Eddy Pool Cabin Lake-Idaho

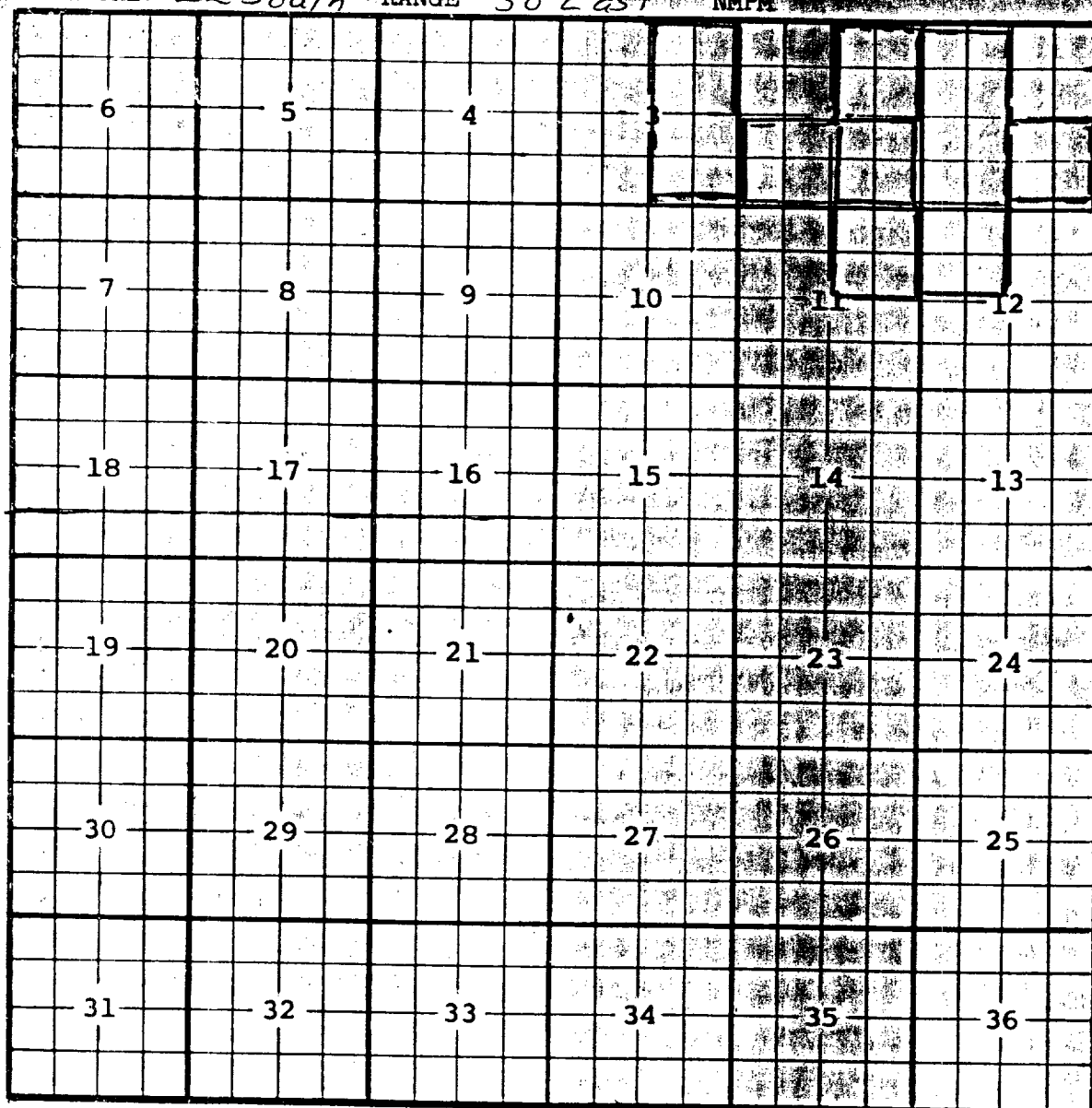
TOWNSHIP 21 South Range 30 East NMPM

A 6x6 grid with numbers 1 through 36. The numbers are arranged in a boustrophedon pattern, starting from the top right (1) and ending at the bottom left (36). A 2x2 box is drawn around the cells containing the numbers 34, 35, 36, and 37 (which is not visible).

Extr: ^{SE}4 Sec. 34, ^S2 Sec. 35, ^{SW}4 Sec. 36 (R-9545, 7-1-91)

COUNTY Eddy POOL Cabin Lake Nebraska

TOWNSHIP 22 South RANGE 30 East NMPM



Description: $\frac{SE}{4}$ Sec. 2 (R-8455, 6-15-87); $\frac{SW}{4}$ Sec. 2 (R-8627, 4/1/88)
Ext: $\frac{NE}{4}$ Sec. 11 (R-9241, 7-31-90) EXT: $\frac{NE}{4}$ Sec. 2 (R-9473, 4-1-91)
Ext: $\frac{W}{2}$ Sec. 1 (R-9545, 7-1-91) Ext: $\frac{NW}{4}$ Sec. 12 (R-9578, 9-10-91)
Ext: $\frac{E}{2}$ Sec. 3 (R-9668, 5-6-92) Ext: $\frac{SE}{4}$ Sec. 1 (R-9938, 8-17-93)

[illegible]

WELL S T R	JAN	FEB	MAR	APRIL	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC 1972	PROD	PP	ACC	JM
BURTON YATES (ABANDONED) YT OM TO 5M																
WILSON OIL COMPANY																
GETTY																
2E 820529E OIL	PLUGGING APPROVED 1957															
YATES PETROLEUM CORPORATION																
WILLIAMSON BC																
2P 720529E OIL	PLUGGING APPROVED 1976															
WAT																
BUTTON MESA PENN. SOUTH PN OM TO 9M																
YATES PETROLEUM CORPORATION																
PATTON AAR STATE																
11 S 9532E OIL	LAST PROD. DATE 02/87															
WAT																
BUTTON MESA SAN ANDRES (ABANDONED) SA OM TO 5M																
RUTTER AND WILBANKS																
AMERADA STATE																
1B20 8532E OIL	PLUGGING APPROVED 1960															
BUTTON MESA SAN ANDRES, SOUTH SA OM TO 5M																
HELL PETROLEUM COMPANY																
STATE S																
3J S 9532E OIL	CONVERTED TO SWD															
GAS																
WAT																
YATES PETROLEUM CORPORATION																
PATTON AAR STATE																
11 S 9532E OIL	ZONE ABANDONED															
WAT																
20 S 9532E OIL	10	30	22	16	16	16	20	22	21	22	22	21	238F	402129	58423	2314
GAS																
WAT	293	703	655	319	42	268	662	566	532	761	680	546	6027	740312	108536	1543
LEASE TOTAL	10	30	22	16	16	16	20	22	21	22	22	21	238	12713	12713	1972
GAS																
WAT	293	703	655	319	42	268	662	566	532	761	680	546	6027	1142141	343	
PINNACLE U2 STATE	PLUGGING APPROVED 1989															
1B S 9532E OIL																
WAT																
COMPANY TOTAL	10	30	22	16	16	16	20	22	21	22	22	21	238	108779	12913	
GAS																
WAT	293	703	655	319	42	268	662	566	532	761	680	546	6027	1157125	12913	
SYRNES TANK DELAWARE DL OM TO 5M																
EXXON CORPORATION																
NEWMAN																
10 723526E OIL	PLUGGING APPROVED 1984															
GAS																
WAT																
HILLIN PRODUCTION COMPANY																
CITIES & FEDERAL																
1P 523526E OIL	LAST PROD. DATE 06/84															
SAS																
CABIN LAKE DELAWARE DL OM TO 6M																
CORINE GRACE																
SALAMEN																
1M3621530E OIL	531	455	552	378	361	320	234	136	1412	801	715	679	6574P	10083	435	
GAS																
WAT	5223	3210	1122	1114	1335	969	715	78	8931	7808	6293	4784	41482	70752	435	
PHILLIPS PETROLEUM COMPANY																
JAMES A																
2J 222530E OIL	495	586	2896	4649	2733	3827	3662	3660	2018	3194	3926	4420	36166P	179105	42698	
GAS																
WAT	490	777	587	1373	2105	2623	2313	1820	934	122	1913	2322	12379	126938	3603	
3K 222530E OIL	4287	4011	3120	2834	1856	2370	2274	2350	1213	2123	2274	2350	31062	65238	9529	
GAS																
WAT																
4G 222530E OIL																
GAS																
WAT																
50 222530E OIL	2376	1519	2261	2818	2160	2501	2762	2785	10087	10087	9762	6508	70733P	150778	10284	
GAS																
WAT	657	631	1130	1412	1998	1800	1431	1120	1078	788	1020	1308	14373	113377	66889	
61 222530E OIL	445	726	747	1110	1187	1240	1342	1342	1289	1342	1126	563	12469	66889	42811	
GAS																
WAT	426	242	463	622	1193	1180	950	919	450	801	986	755	9537P	66889	42811	
7P 222530E OIL	2217	1447	1716	2484	7866	7012	5506	5506	4328	4973	5328	6647	56032	179317	66889	
GAS																
WAT	938	334	623	1233	1474	1716	2438	2007	1933	238	238	2032	7673P	29556	66889	
8M 222530E OIL	2272	1374	1794	1233	1474	1716	2438	2007	1933	238	238	2032	7673P	29556	66889	
GAS																
WAT	2406	1895	2395	369	1615	1931	2211	2138	2210	2065	2294	2582	2411P	5784	66889	
9A 222530E OIL	1115	1472	2358	958	3366	2753	3529	2494	2403	2152	2625	3186	28913	168747	66889	
GAS																
WAT	6321	3720	5014	3153	6047	5748	5049	5757	5049	5757	5049	65313	136377	66889		
10N 222530E OIL	1024	1533	1780	1642	1976	2215	3629	2637	2538	2075	2471	2496	26316	44535	66889	
GAS																
WAT	3517	3439	3277	2721	2370	3661	4428	4428	4133	4428	3395	44573	77547	66889		
11B 222530E OIL																
GAS																
WAT																
12P 222530E OIL																
12P 222530E OIL																
LEASE TOTAL	19059	14024	25379	33838	56260	54132	57907	57964	50508							
JAMES E																
161122530E OIL	443	578	490	408	270	249	322	467	705	507	439	622	5493P	6142	3603	
GAS																
WAT	614	729	588	386	575	433	259	184	619	192	33	2	3366	6142	3603	
381122530E OIL																
GAS																
WAT																
4A1122530E OIL	1210	1563	1335	1654	1371	1140	1635	2372	3578	2575	2004	2597	23036P	43521	19318	
GAS																
WAT	447	392	2145	1484	2399	1628	1082	767	1748	803	123	216	13236	27927	43521	
5M1122530E OIL	2975	2383	3350	3552	3588	3229	3705	3705	3588	3700	3229	3175	40193	92327	43521	
GAS																
WAT	767	1197	1191	1079	1030	952	1189	1782	2690	1934	1675	2011	17695P	38281	43521	
611122530E OIL	338	335	1901	1079	1673	1265	732	536	1220	561	1197	1167	12204	57227	43521	
GAS																
WAT	1889	1825	243	521	154	143	42						1153P	1153	43521	
6J1122530E OIL																
GAS																
WAT																
1101222530E OIL	486	597	475	477	422	320	348	5859	5470	6219	6448	4193	10420P	10420	43521	
GAS																
WAT	105	92	464	404	746	463	232	255	582	267	23	1193	7696P	14340	43521	
12C1222530E OIL	5145	3439	5597	575	5407	4461	3862	5986	5793	5986	2098	5986	9108P	9108	43521	
GAS																
WAT	103															
12D1222530E OIL	5145															
GAS																
WAT																
13E1222530E OIL	8700	7500	438	2777	2958	5022	4854	1249	774	7892	9787	11304	15884	47490P	47490	
GAS																
WAT	6369	5394	5361	3815	3720	667	833						1200	16537	16537	
14F1222530E OIL	1001	2053	1777	1407	754											
GAS																
WAT	578	3029	4269	1367	1197	9720	9720	10044	1841	3472	3360	3472	65456	65456	43521	
LEASE TOTAL	363	1472	704	650	1865	4266	5320	9318	9492	22050	19082	30063	133506	20215	43521	
GAS																
WAT																
LIVINGSTON RIG FEDERAL																
1M 122530E OIL	2726	3115	3295	2394	2282	2156	2378	2084	1850	1059	2397	27604P	6075	6075		
GAS																
WAT	2052	4794	9434	7281	8429	7868	5550	3125	4716	3505	2402	4433	63541	10572	10572	
LEASE TOTAL	3695	5167	5630	5230	5273	5873	6072	6274	6072	6274	3846	6274	56580	13098	13098	

[illegible]

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(James "A" State Pressure Maintenance Project)
Eddy County, New Mexico

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CASE 10288
Order No. R-9500

ORDER OF THE DIVISION

BY THE DIVISION: This cause came on for hearing at 8:15 a.m. on April 18, 1991, at Santa Fe, New Mexico, before Examiner Jim Morrow.

NOW, on this 6th day of May, 1991, the Division Director, having considered the testimony, the record, and the recommendations of the Examiner, and being fully advised in the premises,

FINDS THAT:

(1) Due public notice having been given as required by law, the Division has jurisdiction of this cause and the subject matter thereof.

(2) The applicant, Phillips Petroleum Company (Phillips), seeks authority to institute a pressure maintenance project on its James "A" State Lease underlying Lots 1 through 4, S/2 N/2, N/2 SW/4, SE/4 SW/4 and SE/4 of Section 2, Township 22 South, Range 30 East, NMPM, Eddy County, New Mexico, by the injection of water into the Cabin Lake-Delaware Pool, through a perforated interval from approximately 5600 feet to 7400 feet in a well to be drilled 1250 feet from the South line and 1150 feet from the East line (Unit P) of said Section 2. Applicant further seeks a special oil producing allowable whereby any well in the project area could produce its ability and would not be subject to the depth bracket allowable for said pool.

(3) Phillips is the current operator of the James "A" State Lease. It contains approximately 600 acres and is developed with 10 Delaware oil producing wells. Development began in 1986. Reservoir pressure has not reached the advanced or "stripper" stage of depletion.

(4) Phillips is requesting pressure maintenance status for the entire lease. Initially they plan a pilot project in the SE/4 of Section 2 using an inverted 40-acre five-spot pattern with a single injection well at the location set out in Finding No. (2) above. They are requesting approval to expand the project administratively.

(5) The proposed injection well would be used to inject up to 2000 barrels of water per day into the oil productive portions of the Cherry Canyon and Brushy Canyon intervals of the Delaware formation from approximately 5600 feet to 7400 feet. An average injection pressure of 500 psi is expected. Maximum injection pressure of 0.2 psi per foot (1120 psi) is being requested. Form C-108 submitted by Phillips indicates that all OCD requirements would be met.

(6) Produced water from Phillips' producing leases in the area would be the initial source of injection water.

(7) To maintain reservoir pressure, approximately 1.2 barrels of water would be injected for each barrel of fluid withdrawn from the reservoirs.

(8) Phillips' witness testified that the pilot project is expected to recover 124,000 barrels more oil than would be recovered by primary depletion.

(9) At the hearing, a project allowable for the pilot area equal to top allowable for the four wells to be affected (Wells Nos. 2, 5, 6 and 7) was requested.

(10) The project should be approved and should be designated the James "A" State Pressure Maintenance Project.

IT IS THEREFORE ORDERED THAT:

(1) The applicant, Phillips Petroleum Company, is hereby authorized to institute a pressure maintenance project on its James "A" State Lease, underlying Lots 1 through 4, S/2 N/2, N/2 SW/4, SE/4 SW/4 and the SE/4 of Section 2, Township 22 South, Range 30 East, NMPM, Eddy County, New Mexico, by the injection of water into the Delaware formation, Cabin Lake-Delaware Pool, through a perforated interval from approximately 5600 feet to 7400 feet in a well to be drilled 1250 feet from the South line and 1150 feet from the East line (Unit P) of said Section 2.

(2) The project is hereby designated the James "A" State Pressure Maintenance Project.

(3) The project allowable for the pilot project in the SE/4 of Section 2 shall be 4 x 107 or 428 barrels per day which is equal to top allowable for the four producing wells (Nos. 2, 5, 6 and 7) and may be produced by any well or combination of wells within the pilot project area.

(4) As the project is expanded, administrative approval for additional allowable may be granted by the Division Director upon receipt of an application explaining the reasons additional allowable should be assigned. Notice of an application to increase allowable shall be provided to each leasehold operator within one-half mile of the project.

(5) The operator shall take all steps necessary to ensure that the injected water enters only the proposed injection interval and is not permitted to escape to other formations or onto the surface.

(6) Injection into the proposed injection well shall be accomplished through 2 7/8-inch internally plastic-lined tubing installed in a packer set approximately within 100 feet of the uppermost injection perforation; the casing-tubing annulus shall be filled with an inert fluid and a gauge or approved leak detection device shall be attached to the annulus in order to determine leakage in the casing, tubing or packer.

(7) The injection well or system shall be equipped to limit the surface injection pressure to no more than 1120 psi.

(8) The Division Director shall have the authority to administratively authorize a pressure limitation in excess of the above upon a showing by the operator that such higher pressure will not result in migration of waters from the Cabin-Lake Delaware Pool.

(9) Prior to commencing injection operations into the injection well, the casing shall be pressure tested throughout the interval from the surface down to the proposed packer setting depth, to assure the integrity of the casing.

(10) The operator shall give advance notification to the supervisor of the Artesia district office of the Division of the date and time of the installation of injection equipment, of the mechanical integrity pressure test, and of any injection well remedial work so that these operations may be witnessed.

(11) The operator shall immediately notify the supervisor of the Division's Artesia district office of the failure of the tubing, casing, or packer in the injection well, the leakage of water or oil from or around any producing well, or the leakage of water or oil from or around any plugged and abandoned well within the project area and shall take such steps as may be timely and necessary to correct such failure or leakage.

(12) The applicant shall conduct injection operations in accordance with Division Rule Nos. 701 and 708 and shall submit monthly progress reports in accordance with Division Rule Nos. 706 and 1115.

(13) Jurisdiction of this cause is retained for the entry of such further orders as the Division may deem necessary.

DONE at Santa Fe, New Mexico, on the day and year hereinabove designated.

2004/04/04

AIRSTRIIP-SAN ANDRES POOL
Lea County, New Mexico

Order No. R-8461, July 1, 1987, Establishing Pool.

T-18-S, R-34-E SW/4 Sec. 26.

BAUM-ABO POOL
Lea County, New Mexico

Order No. R-8461, July 1, 1987, Establishing Pool.

T-13-S, R-33-E SW/4 Sec. 20.

BEAR GRASS DRAW-CISCO POOL
Eddy County, New Mexico

Order No. R-8455, July 1, 1987, Establishing Pool.

T-17-S, R-29-E SE/4 Sec. 18.

CABIN LAKE-DELAWARE POOL
Eddy County, New Mexico

Order No. R-8455, July 1, 1987, Establishing Pool, as Amended by Order No. R-8627, April 1, 1988; Order No. R-9241, August 1, 1990; Order No. R-9473, April 1, 1991; Order No. R-9545, July 1, 1991; Order No. R-9578, October 1, 1991; Order No. R-9668, May 1, 1992; Order No. R-9938, August 1, 1993.

T-21-S, R-30-E SE/4 Sec. 34; S/2 Sec. 35; SW/4 Sec. 36.
T-22-S, R-30-E W/2, SE/4 Sec. 1; S/2, NE/4 Sec. 2; E/2 Sec. 3; NE/4 Sec. 11; NW/4 Sec. 12.

KAISER RANCH-STRAWN GAS POOL
Eddy County, New Mexico

Order No. R-8455, July 1, 1987, Establishing Pool.

T-18-S, R-27-E E/2 Sec. 30.

EAST LUSK-DELAWARE POOL
Lea County, New Mexico

Order No. R-8461, July 1, 1987, Establishing Pool, as Amended by Order No. R-9544, July 1, 1991.

T-19-S, R-32-E NW/4 Sec. 26; NE/4 Sec. 35.

WEST LUSK-DELAWARE POOL
Lea County, New Mexico

Order No. R-8461, July 1, 1987, Establishing Pool, as Amended by Order No. R-8480, July 23, 1987; Order No. R-8561, January 1, 1988; Order No. R-8584, February 1, 1988; Order No. R-8667, June 1, 1988; Order No. R-8696, August 1, 1988; Order No. R-8772, November 1, 1988; Order No. R-8946, July 1, 1989; Order No. R-8981, September 1, 1989; Order No. R-9038, December 1, 1989; Order No. R-9345, November 1, 1990; Order No. R-9447, March 1, 1991; Order No. R-9685, July 1, 1992.

T-19-S, R-32-E SW/4 Sec. 16; SE/4 Sec. 17; E/2 Sec. 20; W/2 Sec. 21; S/2 Sec. 26; Sec. 29; S/2 Sec. 30; NW/4 Sec. 31; E/2, NW/4 Sec. 32; SE/4 Sec. 35.

T-20-S, R-32-E N/2 Sec. 6.

PARKWAY-DELAWARE POOL
Eddy County, New Mexico

Order No. R-8455, July 1, 1987, Establishing Pool, as Amended by Order No. R-8827, January 1, 1989; Order No. R-8847, February 1, 1989; Order No. R-8945, June 1, 1989; Order No. R-8969, August 1, 1989; Order No. R-9096, January 1, 1990; Order No. R-9171, June 1, 1990; Order No. R-9473, April 1, 1991; Order No. R-9625, February 1, 1992.

T-19-S, R-29-E NE/4 Sec. 2; S/2 Sec. 26; Secs. 35, 36.
T-19-S, R-30-E NW/4 Sec. 6; SW/4 Sec. 31.

TULK-ABO POOL
Lea County, New Mexico

Order No. R-8461, July 1, 1987, Establishing Pool.

T-14-S, R-32-E NE/4 Sec. 27.

WEST ANDERSON RANCH-WOLFCAMP POOL
Lea County, New Mexico

Order No. R-8470, August 1, 1987, Establishing Pool.

T-16-S, R-32-E W/2 NW/4 Sec. 9.

TULE-PENNSYLVANIAN GAS POOL
Roosevelt County, New Mexico

Order No. R-8483, August 1, 1987, Establishing Pool, as Amended by Order No. R-8626, April 1, 1988; Order No. R-8826, January 1, 1989; Order No. R-9120, March 1, 1990.

T-2-S, R-29-E S/2, NE/4 Sec. 22; S/2 Sec. 23; N/2, SW/4 Sec. 27; N/2 Sec. 34.

SOUTH SHOE BAR-UPPER PENNSYLVANIAN POOL
Lea County, New Mexico

Order No. R-8518, September 28, 1987, Establishing Pool, as Amended by Order No. R-8584, February 1, 1988; Order No. R-9544, July 1, 1991.

T-16-S, R-35-E SE/4 Sec. 36.
T-17-S, R-35-E E/2 Sec. 1.
T-17-S, R-36-E NW/4 Sec. 6.