

KINCAID & WATSON DRILLING COMPANY
WATERFLOOD UNIT
RED LAKE (QUEEN, GRAYBURG), EAST FIELD
EDDY COUNTY, NEW MEXICO

ENTIRE RESERVOIR

Name of Field: Red Lake (Queen, Grayburg), East Field

Location: Townships 16-South and 17-South, Ranges 28-East and
29-East, Eddy County, New Mexico

Name of Formation: Queen Sand

Composition of Pay: Fine-grained tan-to-gray sand innerbedded
with red silt and shale

Type of Structure: Monoclinial - Stratigraphic Trap

Type of Drive: Solution Gas

Original Bottom Hole Pressure: 800 psi (Estimated)

Current Bottom Hole Pressure: 50 psi (Estimated)

Depletion Status of Reservoir: At or near total primary oil depletion

PROJECT AREA

Leases: General Western Petroleum Corporation - State Lease
SW/4 Section 36, Township 16-South, Range 28-East
(160 Acres)

Kincaid & Watson Drilling Company - Kincaid State Lease
SE/4 of SE/4 of Section 35, Township 16-South, Range
28-East (40 Acres)

Kincaid & Watson Drilling Company - Atlantic State "A" Lease
Lots 1 & 2 (N/2 of NW/4) of Section 1, Township 17-South,
Range 28-East (79.04 Acres)

Kincaid & Watson Drilling Company - Resler & Sheldon
State Lease
Lots 1 & 2 (N/2 of NE/4), S/2 of NE/4 of Section 2,
Township 17-South, Range 28-East (158.64 Acres)

McCoy & Stevens - Atlantic State Lease

S/2 of NW/4 of Section 1, Township 17-South, Range
28-East (80 Acres)

Total Acres - 517.68

Local Structure: See Map

Average Depth to Top of Pay: 1600'

Net Effective Pay Thickness: 12' to 18'

Estimated Average Porosity: 14.28%

Estimated Average Permeability: 11.45 md.

Average Water Saturation: 35.16%

Gravity of Crude: 30°

Primary Production History:

1. Date First Well Completed & Number of Present Wells

General Western-State - October 1959	4 Wells
Kincaid & Watson-Kincaid State - October 1959	1 Well
Kincaid & Watson-Atlantic State "A" - July 1959	2 Wells
Kincaid & Watson-Resler & Sheldon State - March 1959	4 Wells
McCoy & Stevens-Atlantic State - September 1960	<u>2 Wells</u>
	13 Wells

2. See tabulation of Production History and Production Performance Graph

3. Average Current Daily Per Well Production

Oil: 1.32 barrels
Water: Nil
Gas: Too small to measure
Monthly Average Gas-Oil Ratio: Unknown

4. Stage of Primary Depletion of Project Area: 99 Per Cent

Planned Injection:

1. Type of Injection Fluid: Water

2. Source of Injected Water: Santa Rosa Water Wells located in the NE/4 of Section 2, Township 17-South, Range 28-East
3. Probably a 5-Spot Pattern, depending on Pilot Waterflood results
4. Maximum Injection Pressure: 2000 psi
5. Estimated Maximum Per Well Rate of Injection: 400 barrels
6. The producing wells converted to injection service will be cleaned out, circulated with hot water, equipped with plastic coated injection tubing and packer (see Diagrammatic Sketch)

Results Expected:

1. Estimated Original Oil in Place: 890,000 barrels
2. Estimated Primary Oil Recovery: 222,500 barrels
3. Estimated Additional Oil Recovery by Secondary Oil Recovery means: 222,500 barrels

WATERFLOOD UNIT
EAST RED LAKE (QUEEN) FIELD
EDDY COUNTY, NEW MEXICO

The purpose of this report is to present the results of a geological and engineering study made with the objective of developing a secondary oil recovery program for the North Part of the East Red Lake (Queen) Field, Eddy County, New Mexico. The following is a discussion of the area and of the Secondary Oil Recovery Program.

FIELD DISCUSSION

The North Part of the East Red Lake (Queen) Field, located in North Central Eddy County, Sections 35 and 36, Township 16-South and Sections 1 and 2, Township 17-South, all in Range 28-East, has been developed with 16 producing oil wells, 1 shut-in gas well, and 5 dry holes. The waterflood area wells have a cumulative oil and ultimate primary recovery to July 1, 1969 of 223,439 barrels. All wells are currently considered producing at or below the economic producing limits. The estimated maximum secondary oil recovery producible by a complete alternate injection to producing well water injection pattern is 222,500 barrels.

Reservoir Characteristics

The oil pay occurs within the Penrose Sand interval of the Seven Rivers-Queen section and is composed of a fine-grained tan-to-gray sand innerbedded with red silt and shale. The accumulation is a stratigraphic-type trap, occurring on the flank of an easterly dipping monocline. The

eastern producing limits of the oil reservoir occur when the sand, through a facies change, grades into shale or siltstone and the limits of the reservoir are considered to have been completely defined. Average core data from the one well cored in the Unit Area is as follows:

Cored Interval: 1543-79(36')	Average Porosity: 14.28%
Feet of Core Recovered: 33.5'	Average Permeability: 11.45 md.
Feet of Sand Analyzed: 12.5'	Average Oil Saturation: 22.61%
Feet of Net Sand: 10.5'	Average Water Saturation: 35.16%

The primary producing energy of the reservoir is considered solution gas drive.

A study has been made of available sample and electric logs from producing wells and dry holes in the general area. This investigation was conducted in an attempt to prepare net and gross isopachous maps of the Unit Area. These efforts proved non-productive as the gross pay interval, although from 12' to 18' in thickness, lacks sufficient character to differentiate between producing wells and dry holes and net pay determinations cannot be readily confirmed from the radioactive well survey logs. An analysis of the per well cumulative oil recoveries in relation to the probable net pay thickness was made but this evidence was considered non-uniform and inconclusive. The conclusion was made that gross acre-feet of pay as a unitization parameter could not be reasonably used. All parameters must, therefore, be based on producing performance, acreage and cumulative oil recovery (see attached tabulation).

Production History

The area discovery was the Kincaid & Watson Drilling Company, Resler & Sheldon State #1 completed in March 1959 and the last producing

well was drilled in March 1964. The per well cumulative oil production to January 1, 1967 ranges from a low for the last well drilled of 551 barrels to a high of 30,640 barrels (see attached plat of Unit Area). The reservoir is in the last stage of primary energy depletion with only three of the leases in January of 1967 producing in excess of 40 barrels of oil per well per month (see attached lease production history).

SECONDARY RECOVERY OPERATIONS

It is apparent that before secondary oil recovery operations can be commenced, a Unit must be created of the North Part of the East Red Lake Field. In view of the minimum recoveries anticipated by secondary oil recovery waterflood operations, the following plan of operation is considered the best method to effect the greatest recovery of secondary oil per investment dollar. The size of the program will be kept at a minimum until the degree of floodability of the reservoir is known.

Injection Pattern

Four wells have been selected for the initial water injection (see attached plat). These wells should provide the maximum amount of oil stimulation with a limited number of input wells. The injectors divide the Unit Area and should permit expansion to a full-scale five-spot injection pattern when the degree of stimulation dictates. The recommended pattern places injection wells within 1900' of every producing well and the resultant flood efficiency is assumed at 55 per cent of that attainable with a complete five-spot pattern. The injection water required for the initial four wells is approximately 780,000 barrels

with 1,365,000 barrels for the total input wells on expansion.

Water Injection System

The proposed water injection station is equipped with a single Triplex injection pump, tank and building. The injection lines are planned as 2" Line Pipe, cement lined, coated and wrapped. The producing wells converted to injection service will be cleaned out, circulated with hot water, and equipped with plastic coated injection tubing and packer. All produced water will be re-injected and all flow lines will be cement or plastic lined. The designed injection plant operating pressure is 2000 psi with a probable wellhead injection pressure of an average of 1100 psi at an input rate of 300 to 400 barrels of water per day.

Water Supply System

The injection water supply will be obtained from present water wells located in the NE/4 of Section 2, Township 17-South, Range 28-East. It is anticipated the Unit owners will purchase three of the present Santa Rosa water wells from the Double Eagle Water Company and all of the present surface equipment necessary to produce the wells will be included in the sale.

Enclosed is a copy of the basic and final tabulation of the unitization parameters used by the Operators to develop a participation formula for this Unit.

SUMMARY
EAST RED LAKE (QUEEN) FIELD UNIT
EDDY COUNTY, NEW MEXICO

PERCENTAGE PARTICIPATION PARAMETERS

Unit Tract No.	Operator & Lease	No. Wells Per Cent	Estimated Oil Recovery, Per Cent	Cumulative Oil Recovery, Per Cent	Estimated Future Oil Recovery, Per Cent	Unit Acres, Per Cent	Producing Rate, Per Cent
1	<u>General Western Petroleum Corp.</u> State	30.770	29.57	29.184637	36.52	30.907124	33.96
2	<u>Kincaid & Watson Drilling Co.</u> Kincaid State	7.690	4.42	4.602858	1.12	7.726781	5.03
4	<u>Kincaid & Watson Drilling Co. & Pearson-Sibert Oil Co. of Texas</u> Atlantic State "A"	15.385	20.40	20.653877	15.85	15.268119	17.60
3	<u>Resler & Sheldon State</u>	30.770	26.23	27.260332	7.92	30.644414	18.54
5	<u>McCoy & Stevens</u> Atlantic State	15.385	19.38	18.298296	38.59	15.453562	24.87

PARTICIPATION FORMULA

Unit Tract No.	Operator and Lease	75% Cumulative Recovery 25% Unit Acres or Wells
1	<u>General Western Petroleum Corp.</u> State	29.615259
2	<u>Kincaid & Watson Drilling Co.</u> Kincaid State	5.383838
4	<u>Kincaid & Watson Drilling Co. & Pearson-Sibert Oil Co. of Texas</u> Atlantic State "A"	19.307438
3	<u>Resler & Sheldon State</u>	28.106353
5	<u>McCoy & Stevens</u> Atlantic State	17.587112

PARTICIPATION PARAMETERS
EAST RED LAKE (QUEEN) FIELD UNIT
EDDY COUNTY, NEW MEXICO

Unit Tract No.	Operator & Lease	Wells		Estimated Ultimate Oil Recovery		Cumulative Oil Recovery to 12-1-66		Estimated Future Oil Recovery From 12-1-66		Current Producing Rate 6-1-66 to 12-1-66			
		No.	Per Cent	Bbls.	Per Cent	Bbls.	Per Cent	Bbls.	Per Cent	Bbls.	Per Cent		
1	General Western Petroleum Corp. State	4	30.770	64,602	29.57	60,362	29.184637	4,240	36.52	160.00	30.907124	1,689	33.96
2	Kincaid & Watson Drilling Co. Kincaid State	1	7.690	9,650	4.42	9,520	4.602858	130	1.12	40.00	7.726781	250	5.03
4	Kincaid & Watson Drilling Co. & Pearson-Sibert Oil Co. of Texas Atlantic State "A"	2	15.385	44,558	20.40	42,718	20.653877	1,840	15.85	79.04	15.268119	875	17.60
3	Resler & Sheldon St.	4	30.770	57,302	26.23	56,382	27.260332	920	7.92	158.64	30.644414	922	18.54
5	McCoy & Stevens Atlantic State	2	15.385	42,326	19.38	37,846	18.298296	4,480	38.59	80.00	15.453562	1,237	24.87
TOTAL -		13	100.000	218,438	100.00	206,828	100.000000	11,610	100.00	517.68	100.000000	4,973	100.00

OIL PRODUCTION

Operator: Kincaid & Watson Drlg. Co. Field: Red Lake (Queen, Grayburg)
East
Lease: East Red Lake Unit County: Eddy, New Mexico

	<u>No.</u>	<u>Bbl.</u>	<u>Per</u>		<u>No.</u>	<u>Bbl.</u>	<u>Per</u>
	<u>Wells</u>	<u>Prod.</u>	<u>Well</u>		<u>Wells</u>	<u>Prod.</u>	<u>Well</u>
			<u>Prod.</u>				<u>Prod.</u>
Year: <u>1963</u>				Year: <u>1964</u>			
Jan.	12	2411	201	Jan.	12	1560	130
Feb.	12	1925	160	Feb.	12	1380	115
Mar.	12	2638	220	Mar.	12	1109	92
Apr.	12	2081	173	Apr.	12	1397	116
May	12	2046	170	May	13	1572	121
June	12	2088	174	June	13	1361	105
July	12	1534	128	July	13	1279	98
Aug.	12	1655	138	Aug.	13	1005	77
Sept.	12	1601	133	Sept.	13	1171	90
Oct.	12	1227	102	Oct.	13	1178	91
Nov.	12	1413	118	Nov.	13	1012	78
Dec.	12	1267	106	Dec.	13	1101	85
Year Total:		21,886		Year Total:		15,125	
Cum. Total:		170,727		Cum. Total:		185,852	

Year: <u>1965</u>				Year: <u>1966</u>			
Jan.	13	1003	77	Jan.	13	962	74
Feb.	13	901	69	Feb.	13	916	70
Mar.	13	1014	78	Mar.	13	997	77
Apr.	13	884	68	Apr.	13	867	67
May	13	854	66	May	13	819	63
June	13	979	75	June	13	756	58
July	13	1068	82	July	13	875	67
Aug.	13	1095	84	Aug.	13	942	72
Sept.	13	951	73	Sept.	13	807	62
Oct.	13	981	75	Oct.	13	855	66
Nov.	13	971	75	Nov.	13	738	57
Dec.	13	951	73	Dec.	13	799	61
Year Total:		11,652		Year Total:		10,333	
Cum. Total:		197,504		Cum. Total:		207,837	

OIL PRODUCTION

Operator: General Western Petr. Corp. Field: East Red Lake (Queen)

Lease: State County: Eddy, New Mexico

	<u>No.</u>	<u>Bbl.</u>	<u>Per</u>		<u>No.</u>	<u>Bbl.</u>	<u>Per</u>
	<u>Wells</u>	<u>Prod.</u>	<u>Well</u>		<u>Wells</u>	<u>Prod.</u>	<u>Well</u>
			<u>Prod.</u>				<u>Prod.</u>
Year: <u>1959</u>				Year: <u>1960</u>			
Jan.				Jan.	3	2068	689
Feb.				Feb.	4	2698	675
Mar.				Mar.	4	2366	592
April				April	4	1532	383
May				May	4	1399	350
June				June	4	1643	411
July				July	4	1520	380
Aug.				Aug.	4	1291	323
Sept.				Sept.	4	1181	295
Oct.	1	285	285	Oct.	4	1443	361
Nov.	2	2157	1079	Nov.	4	772	193
Dec.	2	2083	1042	Dec.	4	831	208
Year Total:		4,525		Year Total:		18,744	
Cum. Total:		4,525		Cum. Total:		23,269	
Year: <u>1961</u>				Year: <u>1962</u>			
Jan.	4	840	210	Jan.	4	861	215
Feb.	4	784	196	Feb.	4	842	211
Mar.	4	1188	297	Mar.	4	912	228
April	4	1010	253	April	4	572	143
May	4	904	226	May	4	883	221
June	4	936	234	June	4	882	221
July	4	781	195	July	4	710	178
Aug.	4	699	175	Aug.	4	663	166
Sept.	4	710	178	Sept.	4	555	139
Oct.	4	826	207	Oct.	4	796	199
Nov.	4	725	181	Nov.	4	650	163
Dec.	4	702	176	Dec.	4	540	137
Year Total:		10,105		Year Total:		8,866	
Cum. Total		33,374		Cum. Total:		42,240	

OIL PRODUCTION

Operator: General Western Petr. Corp. Field: East Red Lake (Queen)

Lease: State County: Eddy, New Mexico

	<u>No.</u>	<u>Bbls.</u>	<u>Per</u>		<u>No.</u>	<u>Bbls.</u>	<u>Per</u>
	<u>Wells</u>	<u>Prod.</u>	<u>Well</u>		<u>Wells</u>	<u>Prod.</u>	<u>Well</u>
			<u>Prod.</u>				<u>Prod.</u>
Year: <u>1963</u>				Year: <u>1964</u>			
Jan.	4	707	177	Jan.	4	405	101
Feb.	4	561	140	Feb.	4	403	101
Mar.	4	676	169	Mar.	4	393	98
April	4	612	153	April	4	371	93
May	4	574	144	May	4	366	92
June	4	563	141	June	4	339	85
July	4	527	132	July	4	318	80
Aug.	4	509	127	Aug.	4	294	74
Sept.	4	453	113	Sept.	4	304	76
Oct.	4	504	126	Oct.	4	266	67
Nov.	4	440	110	Nov.	4	211	53
Dec.	4	454	114	Dec.	4	250	63
Year Total:		6,580		Year Total:		3,920	
Cum. Total		48,820		Cum. Total:		52,740	

	<u>No.</u>	<u>Bbls.</u>	<u>Per</u>		<u>No.</u>	<u>Bbls.</u>	<u>Per</u>
	<u>Wells</u>	<u>Prod.</u>	<u>Well</u>		<u>Wells</u>	<u>Prod.</u>	<u>Well</u>
			<u>Prod.</u>				<u>Prod.</u>
Year: <u>1965</u>				Year: <u>1966</u>			
Jan.	4	202	51	Jan.	4	374	94
Feb.	4	218	54	Feb.	4	366	92
Mar.	4	228	57	Mar.	4	366	92
April	4	221	55	April	4	336	84
May	4	192	48	May	4	341	85
June	4	380	95	June	4	324	81
July	4	547	137	July	4	292	73
Aug.	4	514	129	Aug.	4	300	75
Sept.	4	443	111	Sept.	4	276	69
Oct.	4	432	108	Oct.	4	279	70
Nov.	4	399	100	Nov.	4	218	55
Dec.	4	374	94	Dec.	4	261	65
Year Total:		4,150		Year Total:		3,733	
Cum. Total:		56,890		Cum. Total:		60,623	

OIL PRODUCTION

Operator: Kincaid & Watson Drlg. Co. Field: East Red Lake (Queen)

Lease: Atlantic State "A" County: Eddy, New Mexico

	<u>No.</u>	<u>Bbl.</u>	<u>Per</u>		<u>No.</u>	<u>Bbl.</u>	<u>Per</u>
	<u>Wells</u>	<u>Prod.</u>	<u>Well</u>		<u>Wells</u>	<u>Prod.</u>	<u>Well</u>
			<u>Prod.</u>				<u>Prod.</u>
Year: <u>1959</u>				Year: <u>1960</u>			
Jan.				Jan.	2	1537	768
Feb.				Feb.	2	1184	592
Mar.				Mar.	2	1010	505
April				April	2	1257	628
May				May	2	1264	632
June				June	2	1184	592
July	1	912	912	July	2	1098	549
Aug.	1	1052	1052	Aug.	2	1155	577
Sept.	1	1165	1165	Sept.	2	925	462
Oct.	1	1084	1084	Oct.	2	575	287
Nov.	1	1019	1019	Nov.	2	406	203
Dec.	2	1479	739	Dec.	2	702	351
Year Total:		6,711		Year Total:		12,297	
Cum. Total		6,711		Cum. Total:		19,008	
Year: <u>1961</u>				Year: <u>1962</u>			
Jan.	2	684	342	Jan.	2	536	268
Feb.	2	596	298	Feb.	2	423	211
Mar.	2	613	306	Mar.	2	516	258
April	2	595	297	April	2	328	164
May	2	494	247	May	2	362	181
June	2	591	295	June	2	417	208
July	2	533	266	July	2	643	321
Aug.	2	473	236	Aug.	2	330	165
Sept.	2	378	189	Sept.	2	394	197
Oct.	2	310	155	Oct.	2	822	411
Nov.	2	671	335	Nov.	2	628	314
Dec.	2	609	304	Dec.	2	655	328
Year Total		6,547		Year Total:		6,054	
Cum. Total		25,555		Cum. Total		31,609	

OIL PRODUCTION

Operator: Kincaid & Watson Drlg. Co. Field: East Red Lake (Queen)

Lease: Atlantic State "A" County: Eddy, New Mexico

	<u>No.</u>	<u>Bbl.</u>	<u>Per</u>		<u>No.</u>	<u>Bbl.</u>	<u>Per</u>
	<u>Wells</u>	<u>Prod.</u>	<u>Well</u>		<u>Wells</u>	<u>Prod.</u>	<u>Well</u>
			<u>Prod.</u>				<u>Prod.</u>
Year: <u>1963</u>				Year: <u>1964</u>			
Jan.	2	648	324	Jan.	2	376	188
Feb.	2	480	240	Feb.	2	254	127
Mar.	2	620	310	Mar.	2	235	118
April	2	412	206	April	2	396	198
May	2	521	261	May	2	440	220
June	2	498	249	June	2	277	139
July	2	256	128	July	2	233	117
Aug.	2	315	158	Aug.	2	250	125
Sept.	2	189	95	Sept.	2	209	105
Oct.	2	354	177	Oct.	2	188	94
Nov.	2	470	235	Nov.	2	187	94
Dec.	2	249	125	Dec.	2	182	91
Year Total:		5,012		Year Total:		3,227	
Cum. Total		36,621		Cum. Total		39,848	

	<u>No.</u>	<u>Bbl.</u>	<u>Per</u>		<u>No.</u>	<u>Bbl.</u>	<u>Per</u>
	<u>Wells</u>	<u>Prod.</u>	<u>Well</u>		<u>Wells</u>	<u>Prod.</u>	<u>Well</u>
			<u>Prod.</u>				<u>Prod.</u>
Year: <u>1965</u>				Year: <u>1966</u>			
Jan.	2	200	100	Jan.	2	135	68
Feb.	2	132	66	Feb.	2	134	67
Mar.	2	168	84	Mar.	2	78	39
April	2	130	65	April	2	107	54
May	2	142	71	May	2	40	20
June	2	157	79	June	2	67	34
July	2	115	58	July	2	140	70
Aug.	2	135	68	Aug.	2	192	96
Sept.	2	151	76	Sept.	2	154	77
Oct.	2	111	56	Oct.	2	165	82
Nov.	2	137	69	Nov.	2	157	79
Dec.	2	133	66	Dec.	2	164	82
Year Total:		1,711		Year Total:		1,533	
Cum. Total		41,559		Cum. Total		43,092	

OIL PRODUCTION

Operator: Kincaid & Watson Drlg. Co. Field: East Red Lake (Queen)

Lease: Atlantic State "A" County: Eddy, New Mexico

	<u>No.</u>	<u>Bbl.</u>	<u>Per</u>		<u>No.</u>	<u>Bbl.</u>	<u>Per</u>
	<u>Wells</u>	<u>Prod.</u>	<u>Well</u>		<u>Wells</u>	<u>Prod.</u>	<u>Well</u>
Year: <u>1967</u>			<u>Prod.</u>	Year: <u>1968</u>			<u>Prod.</u>
Jan.	2	157	79	Jan.	2	102	51
Feb.	2	158	79	Feb.	2	121	61
Mar.	2	114	57	Mar.	2	90	45
April	2	146	73	April	2	104	52
May	2	94	47	May	2	121	61
June	2	124	62	June	2	40	20
July	2	112	56	July	2	49	25
Aug.	2	62	31	Aug.	2	91	46
Sept.	2	70	35	Sept.	2	77	39
Oct.	2	28	14	Oct.	2	59	30
Nov.	2	76	38	Nov.	2	118	59
Dec.	2	129	64	Dec.	2	96	48
Year Total:		1,270		Year Total:		1,068	
Cum. Total		44,362		Cum. Total		45,430	

Year: 1969

Jan.	2	100	50
Feb.	2	73	37
Mar.	2	85	43
Apr.	2	68	34
May	2	62	31
June	2	67	33
July			
Aug.			
Sept.			
Oct.			
Nov.			
Dec.			

Year Total
to 7-1-69 455

Cum Total
to 7-1-69 45,885

OIL PRODUCTION

Operator: Kincaid & Watson Drlg. Co. Field: East Red Lake (Queen)

Lease: Kincaid State County: Eddy, New Mexico

	<u>No.</u>	<u>Bbl.</u>	<u>Per</u>		<u>No.</u>	<u>Bbl.</u>	<u>Per</u>
	<u>Wells</u>	<u>Prod.</u>	<u>Well</u>		<u>Wells</u>	<u>Prod.</u>	<u>Well</u>
			<u>Prod.</u>				<u>Prod.</u>
Year: <u>1959</u>				Year: <u>1960</u>			
Jan.				Jan.	1	403	403
Feb.				Feb.	1	532	532
Mar.				Mar.	1	409	409
April				April	1	358	358
May				May	1	322	322
June				June	1	264	264
July				July	1	210	210
Aug.				Aug.	1	231	231
Sept.				Sept.	1	358	358
Oct.	1	200	200	Oct.	1	241	241
Nov.	1	1028	1028	Nov.	1	226	226
Dec.	1	824	824	Dec.	1	227	227
Year Total:		2,052		Year Total:		3,781	
Cum. Total		2,052		Cum. Total		5,833	
Year: <u>1961</u>				Year: <u>1962</u>			
Jan.	1	187	187	Jan.	1	178	178
Feb.	1	162	162	Feb.	1	74	74
Mar.	1	153	153	Mar.	1	122	122
April	1	138	138	April	1	71	71
May	1	154	154	May	1	66	66
June	1	154	154	June	1	5	5
July	1	106	106	July	1	0	0
Aug.	1	16	16	Aug.	1	5	5
Sept.	1	99	99	Sept.	1	89	89
Oct.	1	41	41	Oct.	1	99	99
Nov.	1	6	6	Nov.	1	78	78
Dec.	1	76	76	Dec.	1	97	97
Year Total:		1,292		Year Total:		884	
Cum. Total		7,125		Cum. Total:		8,009	

OIL PRODUCTION

Operator: Kincaid & Watson Drlg Co.

Field: East Red Lake (Queen)

Lease: Kincaid State

County: Eddy, New Mexico

	<u>No.</u> <u>Wells</u>	<u>Bbl.</u> <u>Prod.</u>	<u>Per</u> <u>Well</u> <u>Prod.</u>		<u>No.</u> <u>Wells</u>	<u>Bbl.</u> <u>Prod.</u>	<u>Per</u> <u>Well</u> <u>Prod.</u>
Year: <u>1963</u>				Year: <u>1964</u>			
Jan.	1	97	97	Jan.	1	25	25
Feb.	1	100	100	Feb.	1	35	35
Mar.	1	95	95	Mar.	1	28	28
April	1	97	97	April	1	21	21
May	1	90	90	May	1	22	22
June	1	90	90	June	1	19	19
July	1	5	5	July	1	11	11
Aug.	1	5	5	Aug.	1	16	16
Sept.	1	5	5	Sept.	1	14	14
Oct.	1	8	8	Oct.	1	22	22
Nov.	1	70	70	Nov.	1	34	34
Dec.	1	38	38	Dec.	1	36	36
Year Total:		700		Year Total:		283	
Cum. Total:		3,709		Cum. Total:		8,992	

	<u>No.</u> <u>Wells</u>	<u>Bbl.</u> <u>Prod.</u>	<u>Per</u> <u>Well</u> <u>Prod.</u>		<u>No.</u> <u>Wells</u>	<u>Bbl.</u> <u>Prod.</u>	<u>Per</u> <u>Well</u> <u>Prod.</u>
Year: <u>1965</u>				Year: <u>1966</u>			
Jan.	1	30	30	Jan.	1	13	13
Feb.	1	31	31	Feb.	1	25	25
Mar.	1	33	33	Mar.	1	8	8
April	1	25	25	April	1	17	17
May	1	19	19	May	1	18	18
June	1	9	9	June	1	14	14
July	1	4	4	July	1	58	58
Aug.	1	17	17	Aug.	1	59	59
Sept.	1	15	15	Sept.	1	43	43
Oct.	1	-	-	Oct.	1	41	41
Nov.	1	-	-	Nov.	1	35	35
Dec.	1	14	14	Dec.	1	37	37
Year Total:		197		Year Total:		368	
Cum. Total:		9,189		Cum. Total:		9,557	

OIL PRODUCTION

Operator: Kincaid Watson Drlg. Co.

Field: East Red Lake (Queen)

Lease: Kincaid State

County: Eddy, New Mexico

	<u>No.</u> <u>Wells</u>	<u>Bbl.</u> <u>Prod.</u>	<u>Per</u> <u>Well</u> <u>Prod.</u>		<u>No.</u> <u>Wells</u>	<u>Bbl.</u> <u>Prod.</u>	<u>Per</u> <u>Well</u> <u>Prod.</u>
Year: <u>1967</u>				Year: <u>1968</u>			
Jan.	1	29	29	Jan.	1	25	25
Feb.	1	35	35	Feb.	1	18	18
Mar.	1	43	43	Mar.	1	21	21
April	1	12	12	April	1	6	6
May	1	10	10	May	1	7	7
June	1	12	12	June	1	5	5
July	1	10	10	July	1	13	13
Aug.	1	11	11	Aug.	1	8	8
Sept.	1	5	5	Sept.	1	17	17
Oct.	1	18	18	Oct.	1	17	17
Nov.	1	11	11	Nov.	1	21	21
Dec.	1	20	20	Dec.	1	19	19
Year Total:		216		Year Total:		177	
Cum. Total:		9,773		Cum. Total		9,950	

Year: 1969

Jan.	1	23	23
Feb.	1	18	18
Mar.	1	23	23
Apr.	1	14	14
May	1	18	18
June	1	16	16
July			
Aug.			
Sept.			
Oct.			
Nov.			
Dec.			

Year Total
to 7-1-69 112

Cum. Total
to 7-1-69 10,062

OIL PRODUCTION

Operator: Kincaid & Watson Drlg. Co. Field: East Red Lake (Queen)

Lease: Resler & Sheldon State County: Eddy, New Mexico

	<u>No.</u>	<u>Bbl.</u>	<u>Per</u>		<u>No.</u>	<u>Bbl.</u>	<u>Per</u>
	<u>Wells</u>	<u>Prod.</u>	<u>Well</u>		<u>Wells</u>	<u>Prod.</u>	<u>Well</u>
Year: <u>1959</u>			<u>Prod.</u>	Year: <u>1960</u>			<u>Prod.</u>
Jan.				Jan.	2	1539	769
Feb.				Feb.	3	2217	739
Mar.	1	182	182	Mar.	3	2265	755
April	1	196	196	April	3	2031	677
May	1	155	155	May	3	2062	687
June	1	190	190	June	3	1141	380
July	1	57	57	July	3	2094	698
Aug.	1	425	425	Aug.	3	1919	640
Sept.	2	1276	638	Sept.	3	1210	403
Oct.	2	1775	887	Oct.	3	1066	355
Nov.	2	1653	826	Nov.	3	657	219
Dec.	2	1731	865	Dec.	3	1010	337
Year Total:		7,640		Year Total:		19,211	
Cum. Total:		7,640		Cum. Total:		26,851	
Year: <u>1961</u>				Year: <u>1962</u>			
Jan.	3	1108	369	Jan.	3	574	191
Feb.	3	960	320	Feb.	3	530	177
Mar.	3	846	282	Mar.	3	541	180
April	3	805	268	April	3	537	179
May	3	412	137	May	3	535	178
June	3	779	260	June	3	483	161
July	3	980	327	July	3	764	255
Aug.	3	666	222	Aug.	3	669	223
Sept.	3	663	221	Sept.	3	572	191
Oct.	3	743	248	Oct.	3	778	259
Nov.	3	590	197	Nov.	3	649	216
Dec.	3	663	221	Dec.	3	510	170
Year Total:		9,215		Year Total:		7,142	
Cum. Total:		36,066		Cum. Total:		43,208	

OIL PRODUCTION

Operator: Kincaid & Watson Drlg. Co. Field: East Red Lake (Queen)

Lease: Resler & Sheldon State County: Eddy, New Mexico

	<u>No.</u>	<u>Bbl.</u>	<u>Per</u>		<u>No.</u>	<u>Bbl.</u>	<u>Per</u>
	<u>Wells</u>	<u>Prod.</u>	<u>Well</u>		<u>Wells</u>	<u>Prod.</u>	<u>Well</u>
			<u>Prod.</u>				<u>Prod.</u>
Year: <u>1963</u>				Year: <u>1964</u>			
Jan.	3	439	146	Jan.	3	437	146
Feb.	3	381	127	Feb.	3	334	111
Mar.	3	699	233	Mar.	3	237	79
April	3	523	174	April	3	271	90
May	3	405	135	May	4	404	101
June	3	499	166	June	4	403	101
July	3	641	214	July	4	366	92
Aug.	3	573	191	Aug.	4	127	32
Sept.	3	413	138	Sept.	4	310	76
Oct.	3	92	30	Oct.	4	354	89
Nov.	3	73	24	Nov.	4	251	63
Dec.	3	133	41	Dec.	4	315	79
Year Total:		4,871		Year Total:		3,809	
Cum. Total:		48,079		Cum. Total:		51,888	
Year: <u>1965</u>				Year: <u>1966</u>			
Jan.	4	266	67	Jan.	4	178	45
Feb.	4	254	63	Feb.	4	187	47
Mar.	4	278	64	Mar.	4	299	75
April	4	237	59	April	4	161	40
May	4	234	59	May	4	195	49
June	4	183	46	June	4	134	36
July	4	191	48	July	4	160	40
Aug.	4	196	49	Aug.	4	182	45
Sept.	4	132	33	Sept.	4	148	37
Oct.	4	201	50	Oct.	4	162	40
Nov.	4	201	50	Nov.	4	136	34
Dec.	4	179	44	Dec.	4	147	37
Year Total:		2,552		Year Total:		2,089	
Cum. Total:		54,440		Cum. Total:		56,529	

OIL PRODUCTION

Operator: Kincaid & Watson Drlg. Co. Field: East Red Lake (Queen)

Lease: Resler & Sheldon State County: Eddy, New Mexico

	<u>No.</u>	<u>Bbl.</u>	<u>Per</u>		<u>No.</u>	<u>Bbl.</u>	<u>Per</u>
	<u>Wells</u>	<u>Prod.</u>	<u>Well</u>		<u>Wells</u>	<u>Prod.</u>	<u>Well</u>
			<u>Prod.</u>				<u>Prod.</u>
Year: <u>1967</u>				Year: <u>1968</u>			
Jan.	4	120	30	Jan.	4	15	4
Feb.	4	98	25	Feb.	4	52	13
Mar.	4	87	22	Mar.	4	80	20
April	4	143	36	April	4	54	14
May	4	143	36	May	4	40	10
June	4	111	28	June	4	81	20
July	4	62	16	July	4	40	10
Aug.	4	145	36	Aug.	4	93	23
Sept.	4	146	37	Sept.	4	51	13
Oct.	4	69	17	Oct.	4	37	9
Nov.	4	20	5	Nov.	4	20	5
Dec.	4	55	14	Dec.	4	82	21
Year Total:		1,199		Year Total:		645	
Cum. Total:		57,728		Cum. Total:		58,373	

Year: 1969

Jan.	4	50	12
Feb.	4	27	7
Mar.	4	32	8
April	4	13	3
May	4	53	13
June	4	32	8
July			
Aug.			
Sept.			
Oct.			
Nov.			
Dec.			

Year Total: 207
to 7-1-69

Cum. Total: 58,580
to 7-1-69

OIL PRODUCTION

Operator: McCoy & Stevens

Field: East Red Lake (Queen)

Lease: Atlantic State

County: Eddy

Year: <u>1960</u>				Year: <u>1961</u>			
	<u>No.</u>	<u>Bbl.</u>	<u>Per</u>		<u>No.</u>	<u>Bbl.</u>	<u>Per</u>
	<u>Wells</u>	<u>Prod.</u>	<u>Well</u>		<u>Wells</u>	<u>Prod.</u>	<u>Well</u>
			<u>Prod.</u>				<u>Prod.</u>
Jan.				Jan.	2	2153	1077
Feb.				Feb.	2	1712	856
Mar.				Mar.	2	1475	738
April				April	2	1418	709
May				May	2	1279	640
June				June	2	1047	524
July				July	2	854	427
Aug.				Aug.	2	680	340
Sept.	1	754	754	Sept.	2	541	270
Oct.	1	1024	1024	Oct.	2	398	199
Nov.	2	1481	741	Nov.	2	411	206
Dec.	2	1317	659	Dec.	2	486	243
Year Total:		4,576		Year Total:		12,454	
Cum. Total:		4,576		Cum. Total:		17,030	

Year: <u>1962</u>				Year: <u>1963</u>			
	<u>No.</u>	<u>Bbl.</u>	<u>Per</u>		<u>No.</u>	<u>Bbl.</u>	<u>Per</u>
	<u>Wells</u>	<u>Prod.</u>	<u>Well</u>		<u>Wells</u>	<u>Prod.</u>	<u>Well</u>
			<u>Prod.</u>				<u>Prod.</u>
Jan.	2	369	185	Jan.	2	520	260
Feb.	2	365	183	Feb.	2	403	202
Mar.	2	387	194	Mar.	2	548	274
April	2	391	196	April	2	437	219
May	2	706	353	May	2	456	228
June	2	817	409	June	2	438	219
July	2	848	424	July	2	105	53
Aug.	2	532	266	Aug.	2	253	127
Sept.	2	332	166	Sept.	2	376	188
Oct.	2	796	398	Oct.	2	434	217
Nov.	2	533	267	Nov.	2	360	180
Dec.	2	669	335	Dec.	2	393	197
Year Total:		5,745		Year Total:		4,723	
Cum. Total:		23,775		Cum. Total:		28,498	

OIL PRODUCTION

Operator: McCoy & Stevens

Field: East Red Lake (Queen)

Lease: Atlantic-State

County: Eddy, New Mexico

	<u>No.</u>	<u>Bbl.</u>	<u>Per</u>		<u>No.</u>	<u>Bbl.</u>	<u>Per</u>
	<u>Wells</u>	<u>Prod.</u>	<u>Well</u>		<u>Wells</u>	<u>Prod.</u>	<u>Well</u>
			<u>Prod.</u>				<u>Prod.</u>
Year: <u>1964</u>				Year: <u>1965</u>			
Jan.	2	317	159	Jan.	2	305	152
Feb.	2	354	177	Feb.	2	266	133
Mar.	2	216	108	Mar.	2	307	154
April	2	338	169	April	2	271	136
May	2	340	170	May	2	267	134
June	2	323	162	June	2	250	125
July	2	351	176	July	2	211	106
Aug.	2	318	159	Aug.	2	233	117
Sept.	2	334	167	Sept.	2	210	105
Oct.	2	348	174	Oct.	2	237	119
Nov.	2	329	165	Nov.	2	234	117
Dec.	2	318	159	Dec.	2	251	126
Year Total:		3,886		Year Total		3,042	
Cum. Total:		32,384		Cum. Total		35,426	
Year: <u>1966</u>				Year: <u>1967</u>			
Jan.	2	262	131	Jan.	2	195	98
Feb.	2	204	102	Feb.	2	168	84
Mar.	2	246	123	Mar.	2	235	118
April	2	246	123	April	2	219	110
May	2	225	113	May	2	188	94
June	2	217	109	June	2	179	90
July	2	225	113	July	2	153	77
Aug.	2	209	105	Aug.	2	179	90
Sept.	2	186	93	Sept.	2	161	81
Oct.	2	208	104	Oct.	2	172	86
Nov.	2	192	96	Nov.	2	151	76
Dec.	2	190	95	Dec.	2	206	103
Year Total:		2,610		Year Total:		2,206	
Cum. Total:		38,036		Cum. Total:		40,242	

OIL PRODUCTION

Operator: McCoy & Stevens

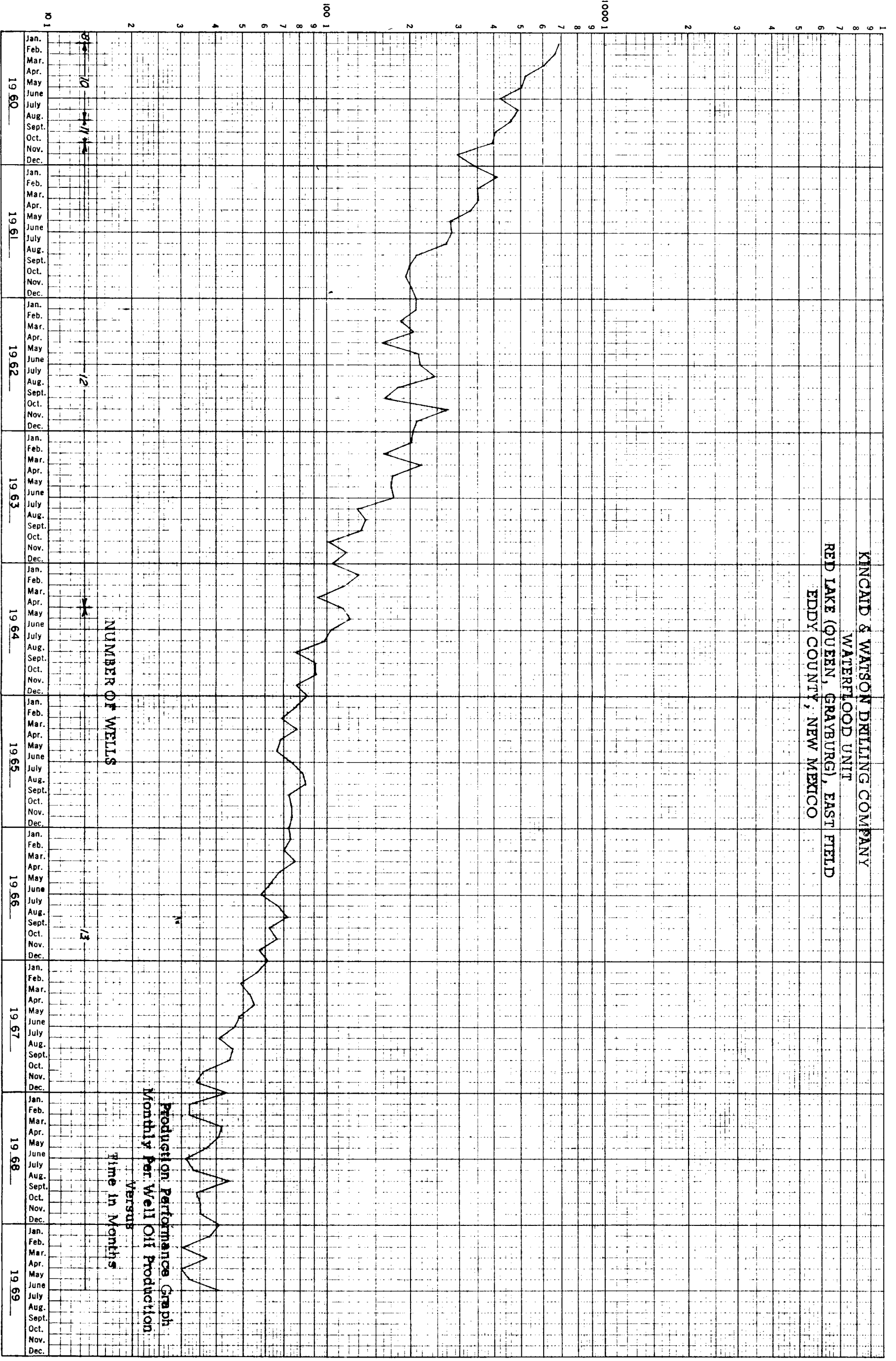
Field: East Red Lake (Queen)

Lease: Atlantic State

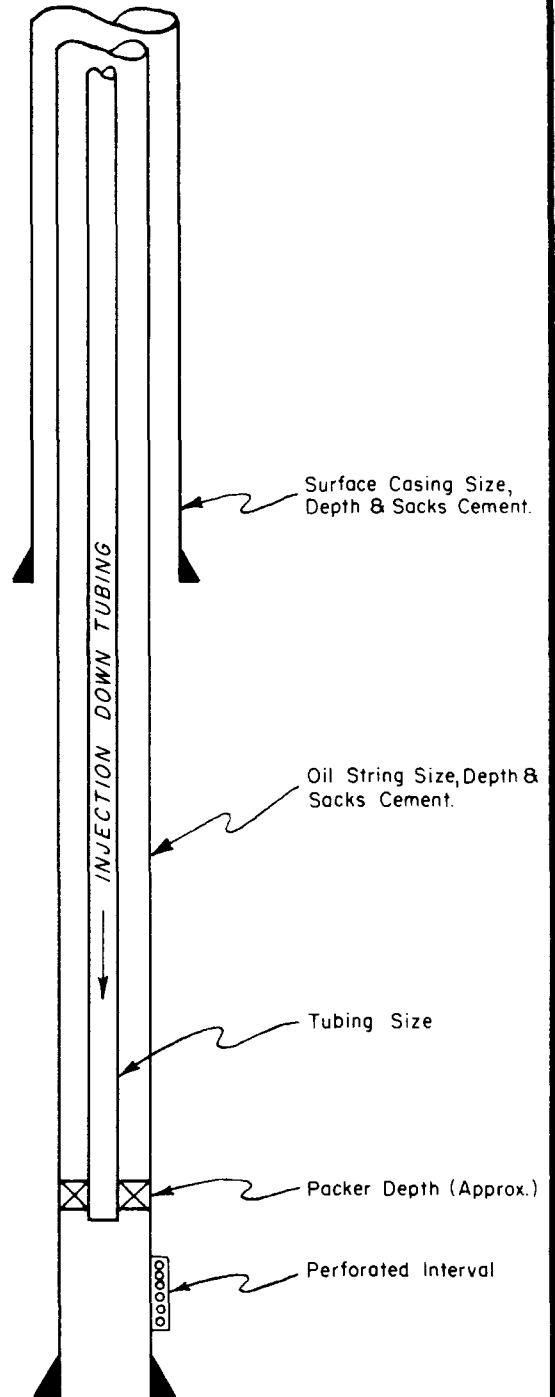
County: Eddy, New Mexico

	<u>No.</u>	<u>Bbl.</u>	<u>Per</u>		<u>No.</u>	<u>Bbl.</u>	<u>Per</u>
	<u>Wells</u>	<u>Prod.</u>	<u>Well</u>		<u>Wells</u>	<u>Prod.</u>	<u>Well</u>
			<u>Prod.</u>				<u>Prod.</u>
Year: <u>1968</u>				Year: <u>1969</u>			
Jan.	2	120	60	Jan.	2	183	92
Feb.	2	103	52	Feb.	2	162	81
Mar.	2	180	90	Mar.	2	204	102
April	2	176	88	April	2	182	91
May	2	131	66	May	2	178	89
June	2	110	55	June	2	179	90
July	2	201	101	July			
Aug.	2	210	105	Aug.			
Sept.	2	154	77	Sept.			
Oct.	2	198	99	Oct.			
Nov.	2	156	78	Nov.			
Dec.	2	195	98	Dec.			
Year Total:		1,934		Year Total		1,088	
Cum. Total:		42,176		to 7-1-69			
				Cum. Total			
				to 7-1-69		43,264	

OIL, BARRELS PER WELL PER MONTH

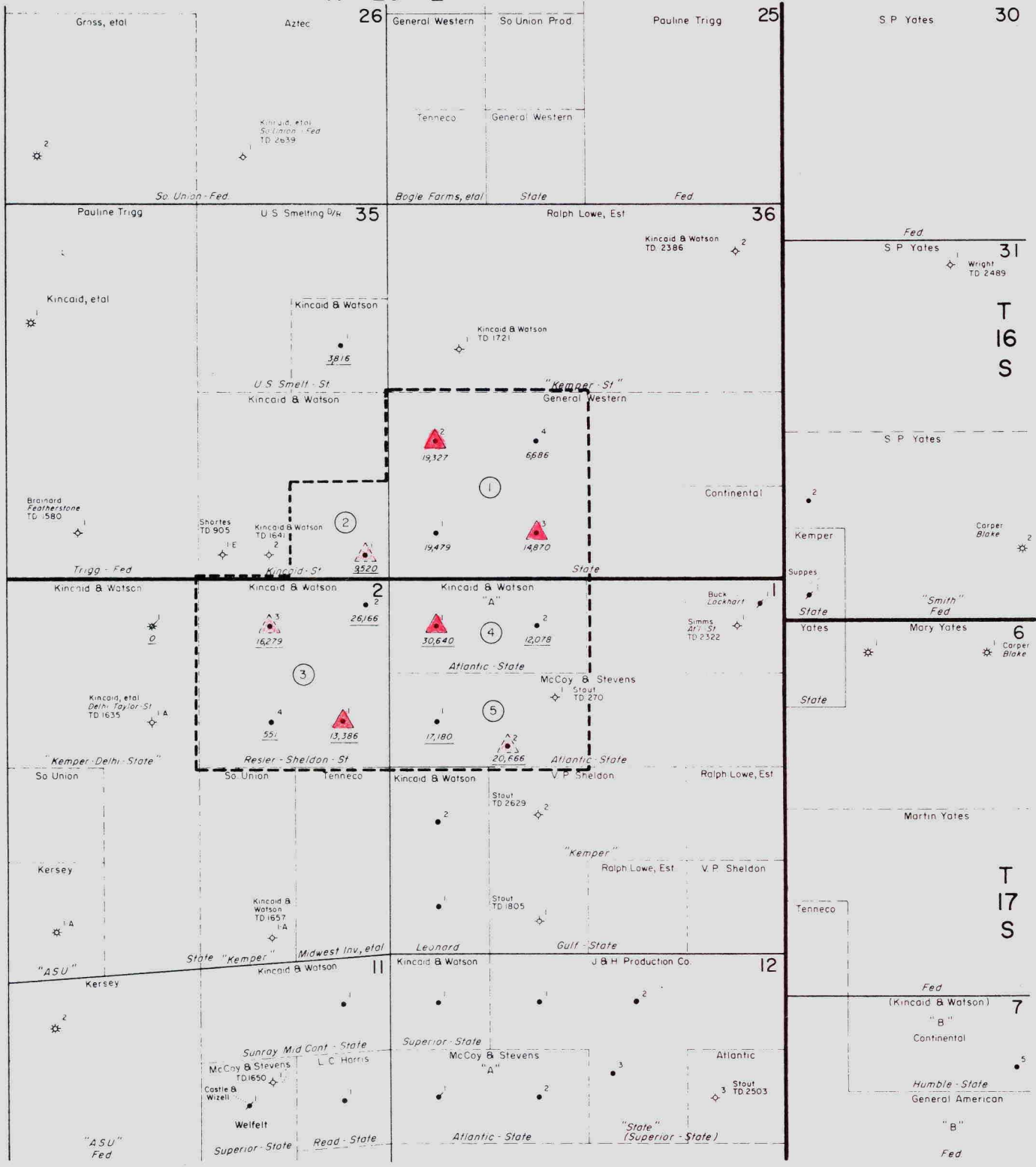


TRACT & WELL NO.			
TRACT 1-2	TRACT 1-3	TRACT 3-1	TRACT 4-1
8 5/8" - 255'	8 5/8" - 349'	3 5/8" - 501'	8 5/8" - 493'
150 Sx.	100 Sx.	50 Sx.	50 Sx.
4 1/2" - 1679'	4 1/2" - 1700'	4 1/2" - 1640'	5 1/2" - 1680'
150 Sx.	100 Sx.	100 Sx.	100 Sx.
2"	2"	2"	2"
1630'	1650'	1560'	1610'
1631 - 1643'	1650 - 1658'	1564 - 1572'	1612 - 1626'



DIAGRAMMATIC SKETCH
INJECTION WELL COMPLETION DATA

EAST RED LAKE (Queen) UNIT
Eddy County, New Mexico



RED LAKE EAST FIELD AREA
EDDY COUNTY, NEW MEXICO

- LEGEND -

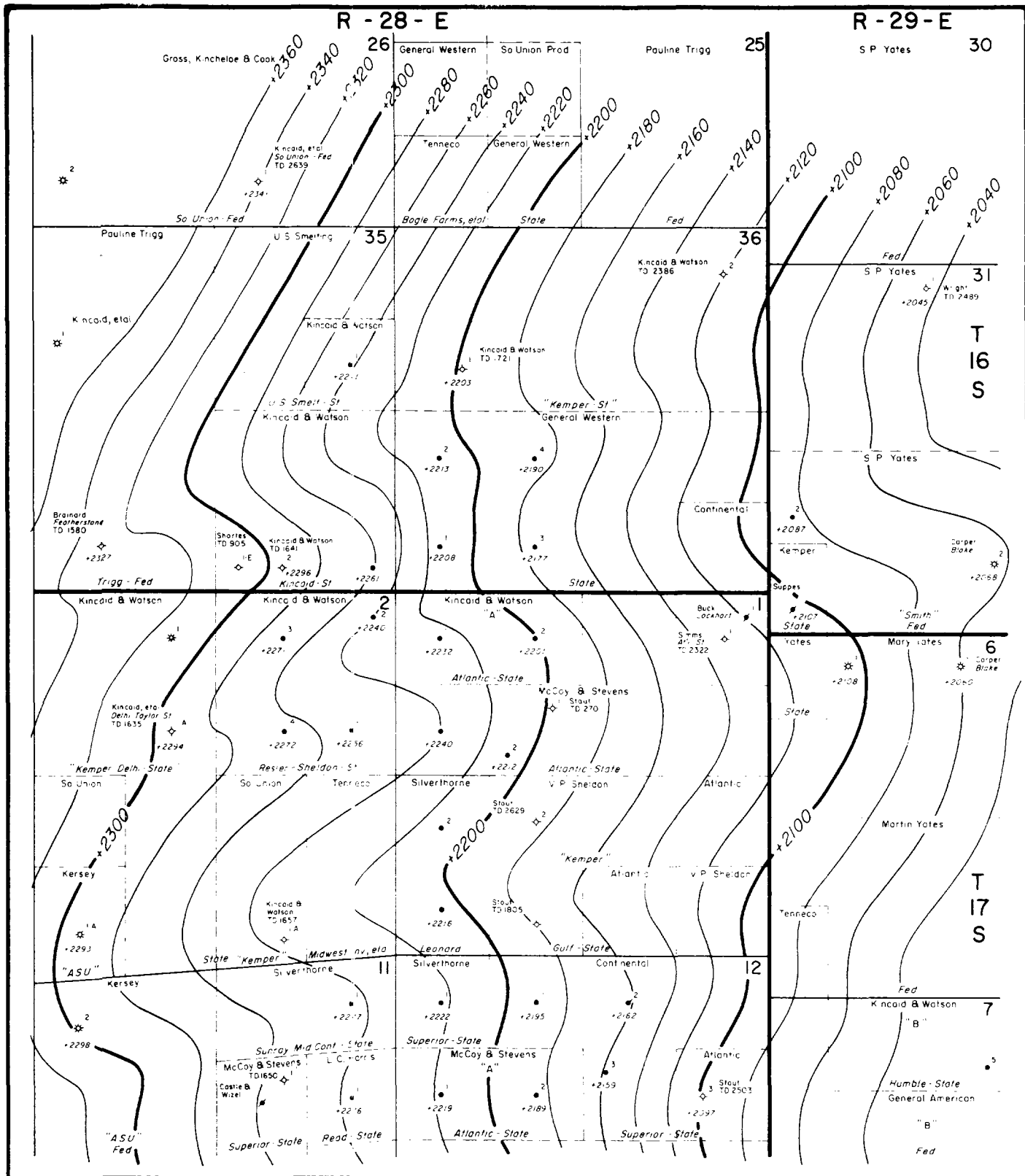
- - Producing Oil Well
- ⊛ - Producing Gas Well
- ⊛ - Abandoned Producer
- ⊛ - Dry Hole
- ⊛ - Temporarily Abandoned
- ▲ - Injection Well Location
- ▲ - Possible Injection Well Location
- - Proposed Unit Boundary
- 3816 - Est. Cum. Oil Recovery @ 1-1-67
- ② - Unit Tract Number

PROPOSED UNIT AREA



DATE: 5-1-69

PREPARED BY ROBERT D. FITTING & ASSOCIATES



**RED LAKE EAST FIELD AREA
EDDY COUNTY, NEW MEXICO**

- LEGEND -

- - Producing Oil Well
- ⊛ - Producing Gas Well
- - Abandoned Producer
- ◇ - Dry Hole
- ⊠ - Temporarily Abandoned

QUEEN STRUCTURE MAP
CONTOUR INTERVAL = 20'



DATE: 5 - 69

PREPARED BY ROBERT D FITTING
& ASSOCIATES