STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT

OIL CONSERVATION DIVISION
POST OFFICE BOX 2088
STATE LAND OFFICE BUILDING
SANTA FE, NEW MEXICO 87501

FORM C-108
Revised 7-1-81

APPLICATION FOR AUTHORIZATION TO INJECT

I. Purpose: [X] Secondary Recovery [ ] Pressure Maintenance [ ] Disposal [ ] Storage
Application qualifies for administrative approval? [ ] yes [X] no

II. Operator: Amoco Production Company

Address: P. O. Box 3092, Houston, TX 77253

Contact party: Billy Abbott Phone: 505/397-8219

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 [X] 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: Kim A. Colvin Title Asst. Admin. Analyst

Signature: Kim A. Colvin Date: 10/15/91

* 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. _____

DISTRIBUTION: Original and one copy to Santa Fe with one copy to the appropriate Division

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.

SOUTH MATTIX UNIT - Proposed Waterflood Project
Application for Injection (Form C-108)

V. See attached map of the South Mattix area

VI. See attached tabulation of the wells in the area of review

VII.

1. Estimated Average Daily Injection Rate = **400** BWIPD/Well

   Estimated Maximum Daily Injection Rate = **800** BWIPD/Well

2. The proposed injection system will be **closed**.

3. Estimated Average Injection Pressure = **200** psig

   Estimated Maximum Injection Pressure = **800** psig

4. Sources of injected water include: *Upper Yeso Produced Wtr*
   Ellenburger Produced Wtr
   Texaco Jal Water System

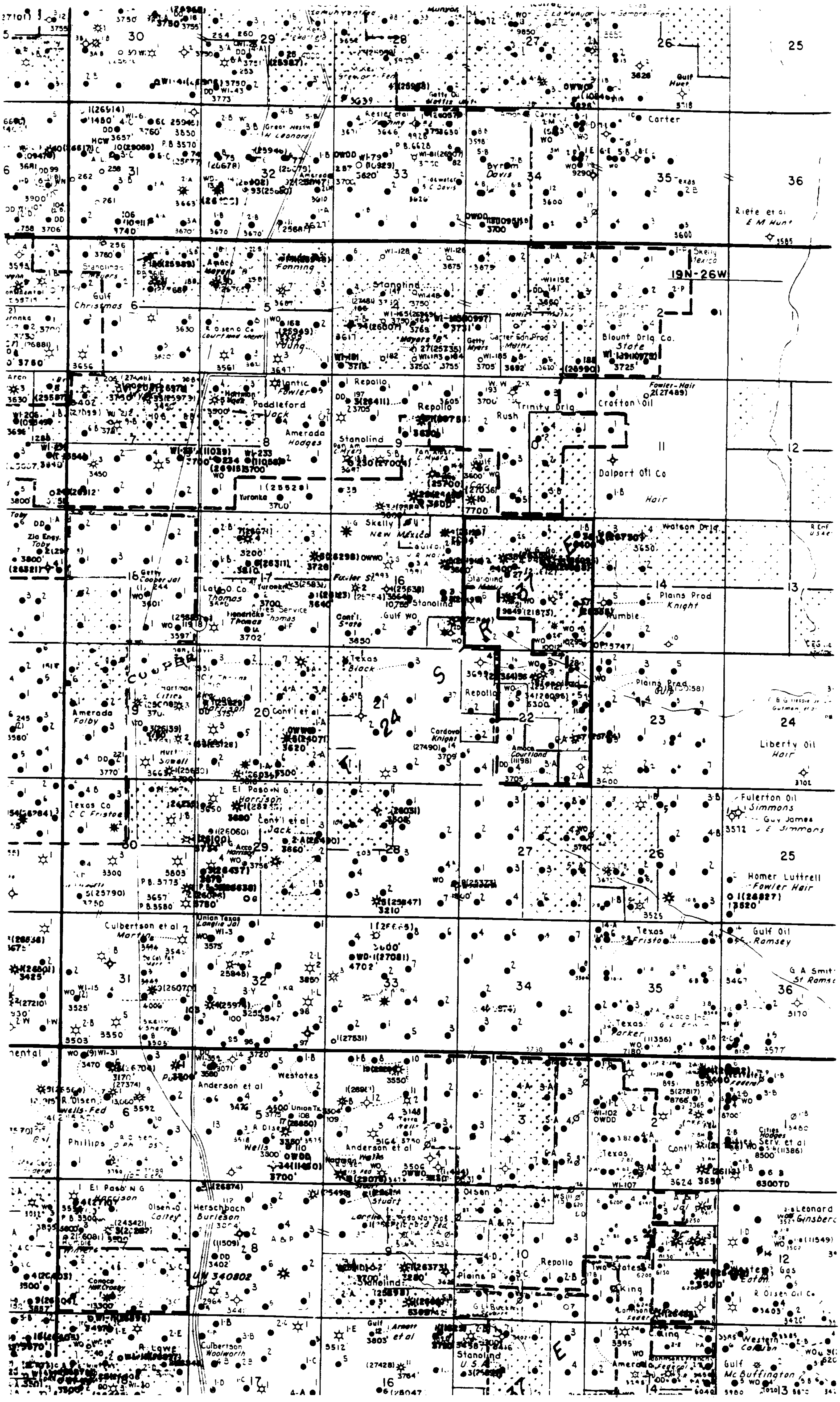
   with attached Chemical & Compatibility Analyses.

VIII. See attached Geological Data

IX. Proposed Stimulation Program-
Fracture stimulate the Upper Yeso Formation using approx. 32,500 gallons of gelled brine water containing a total of 80,000 pounds of 12/20 mesh sand to be pumped as follows:

15,000 gallons gelled water PAD
5,000 gallons @ 2 ppg sand
5,000 gallons @ 4 ppg sand
5,000 gallons @ 6 ppg sand
2,500 gallons @ 8 ppg sand
Follow with FLUSH of 30 BBL gelled brine

X. Existing logs previously filed with the Division.



19N-26W
Carter
Byrom
Davis
Riefe et al
E M Hunt
Skelly
Mexico
Stanolind
C Myers
Gulf
Christmas
Fanning
Meyers "B"
Carter Edn Prod
Blount Drlg Co.
State
Repollo
Trinity Drlg
Rush
Crafton Oil
Fowler-Hair
Paddleford
Jack
Amerada
Hodges
Dalport Oil Co
Hair
Yuronka
Skelly
New Mexico
Watson Drlg
Plains Prod
Knight
Humble
Cities Service
Thomas
Gulf
Cont'l
State
Texas
Black
Amerada
Folby
Cardova
Knight
Amoco
Courtland
Liberty Oil
Hair
Texas Co
C C Fristoe
El Paso N G
Harrison
Cont'l et al
Jack
Fulerton Oil
Simmons
Guy James
Homer Luttrell
Fowler Hair
Culbertson et al
Texas
Fristoe
Gulf Oil
Ramsey
Parker
Westates
Anderson et al
R. Olsen
Wells-Fed
Phillips
Wells
Cont'l
Texas
Cities
Serv et al
El Paso N G
Harrison
Herschbach
Burleson
Olsen
Repollo
Two States
King
Conoco
Plains
Stanolind
Culbertson
Woolworth
Stanolind
U.S.A.
Amerada
Gulf
McBuffington
Western
Leonard
Ginsberg
R. Olsen Oil Co
Stuart
A & P

Tabulation of wells (Within 1/2 mile Radius)

Well No.	Type	Date Drilled	Location	Total Depth	Record of Completion
S. Mattix Sec. 15					
7 (D)	P	4/52	660 FN x 660 FW	10,761'	Y 5174-5697
22 (C)	P	11/66	710 FN x 1930 FW	5,750'	Y 5430-5662
25 (C)	P	10/68	910 FN x 1980 FW	9,980'	E 9925-9942
9 (B)	P	3/53	660 FN x 1980 FE	10,438'	Y 5293-5683
38 Y	P(A)	2/80	750 FN x 700 FE	6,400'	Y 5068-5362
20 (E)	P	3/66	1980 FN x 660 FW	5,750'	Y 5430-5688
35 (F)	P	7/79	1650 FN x 1650 FW	6,400'	Dr6246-6318
27 (F)	P	9/77	2030 FN x 1880 FW	5,764'	Y 5144-5658
4 (F)	P	12/50	1980 FN x 1980 FW	10,270'	E 10142-10270
39 (G)	P	12/79	1890 FN x 2070 FE	6,400'	Y 5117-5638
17 (G)	P	10/63	1980 FN x 1980 FE	10,040'	E 9883-9921
33 (G)	P	1/79	1650 FN x 1650 FE	6,100'	P 4857-4939
10 (H)	P	5/53	1980 FN x 810 FE	10,525'	E 10350-10414
37 (I)	P	6/79	1840 FS x 660 FE	6,400'	Dr6091-6297
1 (J)	P	11/48	1980 FS x 1980 FE	9,705'	E 9487-9705
21 (K)	P	9/66	1873 FS x 2086 FW	9,849'	E 9790-9830
14 (K)*	P	6/62	1980 FS x 1980 FW	6,403'	Y 4849-6115
6 (L)	P	12/51	1980 FS x 660 FW	10,544'	E 10320-10360
26 (M)	P	9/73	660 FS x 660 FW	5,803'	Y 5202-5552
2 (N)	P	11/49	660 FS x 1980 FW	10,305'	E 10250-10305
16 (O)	P	9/63	990 FS x 1648 FE	6,150'	P,T 4833-5940
23 (O)	P	7/67	660 FS x 1830 FE	5,701'	BL 5406-5645
24 (O)	P	4/68	510 FS x 1830 FE	10,012'	E 9554-9588
8 (P)	P	9/52	660 FS x 660 FE	10,295'	E 10001-10295
30 (P)	P	11/77	330 FS x 330 FE	6,000'	Y 5106-5702
NM AB State (Exxon) Sec. 16					
1 (H)	P	5/52	1980 FN x 660 FE	10,762'	E 10610-10640
2 (H)	P	7/64	1400 FN x 510 FE	10,310'	E 10285-10289
3 (I)	P	1/74	2080 FS x 560 FE	5,800'	Y 5279-5716
4 (A)	P	4/79	660 FN x 660 FE	5,804'	Y 5234-5691
ST. D Tr. 14 (Amoco) Sec. 16					
1 (P)	P	9/37	660 FS x 660 FE	5,807'	
Fowler Hair (Crown Central) Sec. 14					
1 }	Shallow				
3 }	Wells (7-Rivers/Queen)				
5 }					

Well No.	Type	Date Drilled	Location	Total Depth	Record of Completion
J. A. Knight (Exxon) Sec. 14					
2 M	P	7/64	330 FS x 330 FWL	10,147'	E 9875-9879
1 (L)	P	2/53	1980 FS x 550 FW	11,198'	DXA
Jamison (Arco) Sec. 22					
1 D	P	1/53	554 FN X 766 FW	10,800'	None
S. J. Carr (Gulf) Sec. 10					
8 (M)	P	1/72	555 FS x 555 FW	5,700'	Y 5214-5655
5 (N)	P	11/52	555 FS x 2085 FW	10,570	E 10300-10450
1 (O)	P	10/72	660 FS x 1830 FE	5,800'	Y 5232-5739

SOUTH MATTIX UNIT FEDERAL

Waterflood Project Application for Injection (Form C-108)

Geological Data

The Fowler Upper Yeso Pool is located in southeastern Lea County, New Mexico, about 35 miles south of the city of Hobbs. This pool is a combination of the former Fowler Blinebry and Fowler Paddock Pools; composed of four zones characterized by the alternation of subtidal and intertidal depositional environments. The approximate depth is 5300', with an average gross thickness of 750' and an average permeability of 3.4 millidarcies.

The Upper Yeso is a north-south anticlinal structure approximately 2.5 miles long and 1.5 miles wide. It is located alongside the western edge of the Central Basin Platform, bordering theDelaware Basin. This structure is considered a northern extension of the Justis Blinebry Pool which extends to the south. Yeso production is from the porous and permeable Blinebry and Lower Paddock intervals of Permian Age, which are carbonate formations deposited in a shallow water marine shelf environment. The Blinebry is a massive dolomite which averages 580' in gross thickness, and the overlying Lower Paddock formation has an average thickness of about 150'.

A binocular microscope and thin-section analysis was used for all lithological descriptions. Detailed lithologic and textural descriptions of core thin-sections were made on samples selected to reflect each depositional environment associated with the Fowler Upper Yeso pay. The Upper Yeso pay is a shallowing upward geological sequence with numerous cycles. It was deposited on a wide shelf of structural relief on which organic, chemical and detrital sediments were deposited. The weight of the deposits caused the shelf to sink intermittently, creating a cycling effect. The shelf would build up from subtidal to intertidal deposition and then sink, returning to subtidal deposition again. The Upper Yeso can be subdivided into four zones, based on these cycles.

The sonic log from the South Mattix Unit No. 16 (located in the SW/4 of the SE/4, Section 15, T-24-S, R-37E) as shown in the attached Figure, was designated as the type log for the area. The subdivisions of Lower Paddock and Blinebry are shown, as well as the subdivisions by zone. Each zone shows an arithmetic average porosity and a geometric average permeability based the native-state core of South

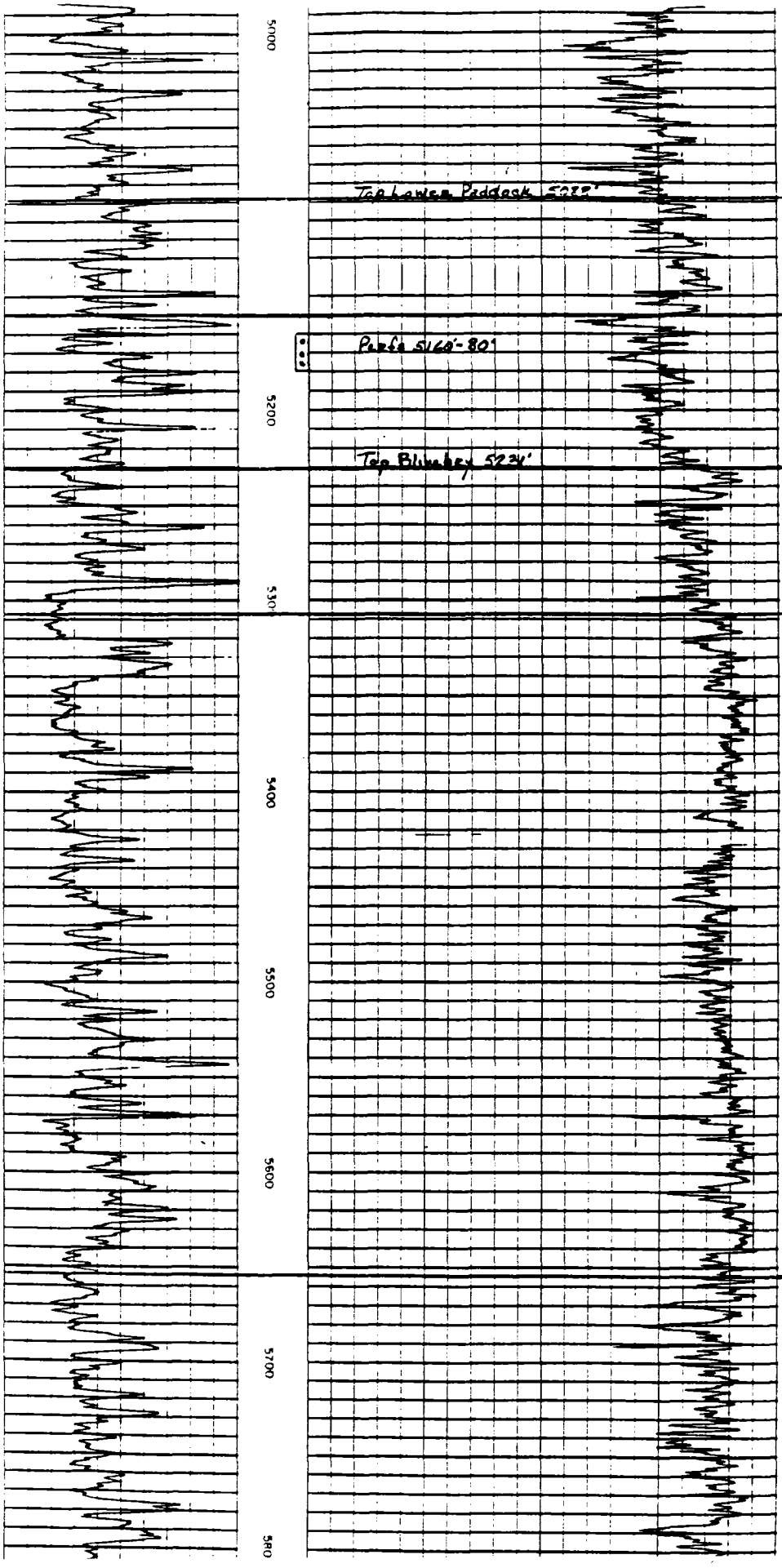
Mattix Unit No. 27. These parameters do not represent fieldwide averages, but were included to illustrate typical differences in reservoir quality of the zones. The recommended injection interval for the project includes all the Upper Yeso formation from the top of the Lower Paddock to the top of the Tubb.

Zones I and II comprise the Lower Paddock formation. The average thickness is about 150'. The type log (see Figure) shows average matrix permeabilities of 1.55 md. and 1.14 md. for Zone I and Zone II, respectively. These zones consist of both packstones and mudstones with the grains being mainly pellets and spines. These small grains have been leached out. The packstones generally develop 5 to 9% porosities, but the pay quality depends on the development of intercrystalline porosity to interconnect the moldic pores. This pattern of Lower Paddock pay development is similar throughout the field.

The Blinebry interval is composed of Zones III and IV. Zone III is a massive dolomite which is approximately 400' thick. For convenience, Zone III is subdivided into Zones IIIa and IIIb. The average arithmetic porosities for the zonal subdivisions from the South Mattix Unit No. 27 core data are 6.4% and 8.1% for Zones IIIa and IIIb, respectively. The respective geometric average permeabilities are 0.64 md. and 1.10 md. Zone IIIa is approximately 70' thick and consists of a series of short geologic cycles with relative poor pay development. Zone IIIb is a major subtidal depositional environment. While pay quality in the Lower Paddock and Zone IIIa depended on diagenesis, pay quality in Zone IIIb depended more heavily on the location of high energy environments, shoals and channels. These areas are typified by deposits of large-grained grainstones and packstones. Thus, while pay in the Lower Paddock and Zone IIIa is similarly developed over the field, the pay of Zone IIIb varies considerably over the area. In the high energy environment areas, the porosity and permeability are the most favorable found in the Upper Yeso formation.

Zone IV comprises the bottom 180' of the Upper Yeso formation. Core data shows little pay-quality rock through this zone, which is comprised of dense mudstones and packstones. Log evaluations of Well #'s 27 and 38Y indicate some possible pay; however, the water saturations appear somewhat higher than typical pay in Zone IIIb.

For this project, it is desireable to inject into the entire Upper Yeso interval, since most existing producers were fracture stimulated in the Lower Paddock. A significant amount of secondary oil could be lost to the "gas cap" unless the gas is repressured along with the oil zone. Since Chevron's Central Drinkard waterflood was successful in collapsing a high GOR that existed prior to waterflooding, it appears the South Mattix "gas cap" does not represent a significant problem. The lower boundary designated as the "Top of Tubb" will utilize the permeability barrier between the Tubb (gas) zone and the Upper Yeso oil to separate the waterflood from the underlying formation.



TYPE LOG

PAN AMERICAN PET. CORP.
SOUTH MATTIX UNIT NO. 16
990' FSL x 990' FWL, SE/4
SECTION 15,T24S-R37E
LEA CO., NM

ZONE I ϕ_{AVG} = 8.02%
K_{AVG} = 1.55 MD.

ZONE II ϕ_{AVG} = 8.16%
K_{AVG} = 1.135 MD.

ZONE IIA ϕ_{AVG} = 6.4%
K_{AVG} = 0.64 MD.

ZONE IIB ϕ_{AVG} = 8.14%
K_{AVG} = 1.1 MD.

ZONE IV ϕ_{AVG} = NA
K_{AVG} = NA

Figure

WELCHEM®
WELCHEM, INC.
706 N. Main
P.O. Box 179
Seminole, Texas 79360-0179
915-758-5867

LATS NO. 44848

ANALYTICAL SERVICES REPORT
WATER ANALYSIS

Date Received: 08/26/91 By: LS Date Out: 09/03/91

Company: AMOCO PRODUCTION COMPANY
Salesman: WHITE
Lease: S. MATTIX UNIT
Source: WELLHEAD

Date Sampled: 08/21/91
County: LEA
State: NM
Well: 37 (UPPER YESO)

DISSOLVED SOLIDS
CATIONS

	mg/l	me/l
Sodium, Na(calc)	50198.0	2182.55
Calcium, Ca	12000	598.8
Magnesium, Mg	5000	409.84
Potassium, K	3000	76.73
Iron, Fe	0.8	0.03
Manganese, Mn	0.1	0.0

OTHER PROPERTIES

pH	6.51
Specific Gravity, 60/60 F	1.127
Nomograph Sp. Gr.	1.120- 1.131
Specific Gravity, Uncorr	1.125
Temperature (F)	71.2
Resistivity, OHMS-CM	11 @ 71.2F

ANIONS

	mg/l	me/l
Chloride, Cl	115600	3256.34
Sulfate, SO4	400	8.33
Carbonate, CO3	0	0.0
Bicarbonate,HCO3	200	3.28

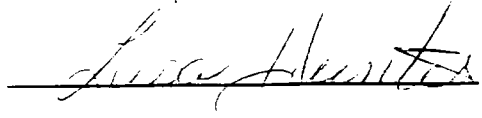
Total Dissolved Solids (calc.) 186,399 ppm

SCALING TENDENCIES(MG/L):

				SCALE INDEX(MG/L)			
TEMP(F)	P(PSI)	CO2(PSI)	PH	CASO4	BASO4	SRSO4	CACO3
50	20.0	20.000	6.6	-826	-0	-476	-1383
50	50.0	20.000	6.6	-819	-0	-487	-1389
50	100.0	20.000	6.6	-826	-0	-489	-1399
50	500.0	20.000	6.6	-887	-0	-502	-1482
50	1000.0	20.000	6.6	-965	-0	-520	-1591
50	2000.0	20.000	6.6	-1131	-0	-555	-1829
50	2800.0	20.000	6.6	-1274	-0	-584	-2038
70	20.0	20.000	6.6	-565	-1	-608	-1153
70	50.0	20.000	6.6	-568	-1	-609	-1158

Remarks & Recommendations:

Calculations based upon entered pH.

WELCHEM Representative 

WELCHEM, INC.
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LATS NO. 44848

ANALYTICAL SERVICES REPORT
WATER ANALYSIS

Date Received: 08/26/91 By: LS Date Out: 09/03/91

Company: AMOCO PRODUCTION COMPANY
Salesman: WHITE
Lease: S. MATTIX UNIT
Source: WELLHEAD

Date Sampled: 08/21/91
County: LEA
State: NM
Well: 37

SCALING TENDENCIES(MG/L):

				SCALE INDEX(MG/L)			
TEMP(F)	P(PSI)	CO2(PSI)	PH	CASO4	BASO4	SRSO4	CACO3
70	100.0	20.000	6.6	-574	-1	-611	-1166
70	500.0	20.000	6.6	-619	-1	-627	-1233
70	1000.0	20.000	6.6	-678	-1	-647	-1319
70	2000.0	20.000	6.6	-802	-1	-688	-1507
70	2800.0	20.000	6.6	-908	-1	-721	-1671
90	20.0	20.000	6.6	-364	-1	-595	-935
90	50.0	20.000	6.6	-367	-1	-596	-939
90	100.0	20.000	6.6	-371	-1	-598	-945
90	500.0	20.000	6.6	-406	-1	-613	-998
90	1000.0	20.000	6.6	-452	-1	-632	-1066
90	2000.0	20.000	6.6	-547	-1	-671	-1212
90	2800.0	20.000	6.6	-627	-1	-702	-1340
110	20.0	20.000	6.6	-225	-2	-531	-753
110	50.0	20.000	6.6	-227	-2	-532	-756
110	100.0	20.000	6.6	-230	-2	-534	-761
110	500.0	20.000	6.6	-258	-2	-547	-803
110	1000.0	20.000	6.6	-295	-2	-563	-857
110	2000.0	20.000	6.6	-372	-2	-597	-973
110	2800.0	20.000	6.6	-436	-2	-625	-1074
130	20.0	20.000	6.6	-135	-2	-487	-601
130	50.0	20.000	6.6	-137	-2	-488	-603
130	100.0	20.000	6.6	-140	-2	-489	-607
130	500.0	20.000	6.6	-164	-2	-501	-641
130	1000.0	20.000	6.6	-195	-3	-516	-684
130	2000.0	20.000	6.6	-261	-3	-546	-777
130	2800.0	20.000	6.6	-316	-3	-571	-858
150	20.0	20.000	6.6	-65	-3	-505	-461
150	50.0	20.000	6.6	-66	-3	-506	-463
150	100.0	20.000	6.6	-69	-3	-507	-466
150	500.0	20.000	6.6	-90	-3	-519	-493
150	1000.0	20.000	6.6	-118	-3	-534	-528
150	2000.0	20.000	6.6	-176	-4	-564	-602
150	2800.0	20.000	6.6	-225	-4	-589	-665
170	20.0	20.000	6.6	-8	-4	-572	-357

Remarks & Recommendations:

Calculations based upon entered pH.

WELCHEM Representative Lucas Herrera

WELCHEM, INC.
706 N. Main
P.O. Box 179
Seminole, Texas 79360-0179
915-758-5867

LATS NO. 44848

ANALYTICAL SERVICES REPORT
WATER ANALYSIS

Date Received: 08/26/91 By: LS Date Out: 09/03/91

Company: AMOCO PRODUCTION COMPANY
Salesman: WHITE
Lease: S. MATTIX UNIT
Source: WELLHEAD

Date Sampled: 08/21/91
County: LEA
State: NM
Well: 37

SCALING TENDENCIES(MG/L):

				SCALE INDEX(MG/L)			
TEMP(F)	P(PSI)	CO2(PSI)	PH	CASO4	BASO4	SRSO4	CACO3
170	50.0	20.000	6.6	-9	-4	-573	-359
170	100.0	20.000	6.6	-11	-4	-574	-361
170	500.0	20.000	6.6	-31	-4	-587	-383
170	1000.0	20.000	6.6	-56	-4	-603	-412
170	2000.0	20.000	6.6	-109	-5	-635	-472
170	2800.0	20.000	6.6	-153	-5	-661	-525

Remarks & Recommendations:

Calculations based upon entered pH.

WELCHEM Representative

WELCHEM, INC.
706 N. Main
P.O. Box 179
Seminole, Texas 79360-0179
915-758-5867

LATS NO. 44846

ANALYTICAL SERVICES REPORT
WATER ANALYSIS

Date Received: 08/26/91 By: LS Date Out: 09/03/91

Company: AMOCO PRODUCTION COMPANY
Salesman: WHITE
Lease: S. MATTIX UNIT
Source: WELLHEAD

Date Sampled: 08/21/91
County: LEA
State: NM
Well: 7 (ELLENBURGER)

DISSOLVED SOLIDS
CATIONS

	mg/l	me/l
Sodium, Na(calc)	25872.0	1124.88
Calcium, Ca	5000	249.5
Magnesium, Mg	2000	163.93
Potassium, K	1000	25.58
Iron, Fe	0.9	0.03
Manganese, Mn	0.0	0.0

OTHER PROPERTIES

pH	7.01
Specific Gravity, 60/60 F	1.063
Nomograph Sp. Gr.	1.057- 1.067
Specific Gravity, Uncorr	1.061
Temperature (F)	71.2
Resistivity, OHMS-CM	20 @ 71.2F

ANIONS

	mg/l	me/l
Chloride, Cl	53600	1509.86
Sulfate, SO4	1300	27.08
Carbonate, CO3	0	0.0
Bicarbonate,HCO3	1646	26.98

Total Dissolved Solids (calc.) 90,419 ppm

SCALING TENDENCIES(MG/L):

				SCALE INDEX(MG/L)		
TEMP(F)	P(PSI)	CO2(PSI)	PH	CASO4	BASO4	SRSO4	CACO3
50	20.0	1.250	7.0	-1608	-0	-207	569
50	50.0	1.250	7.0	-1603	-0	-210	566
50	100.0	1.250	7.0	-1621	-0	-211	560
50	500.0	1.250	7.0	-1770	-0	-220	513
50	1000.0	1.250	7.0	-1962	-0	-231	450
50	2000.0	1.250	7.0	-2366	-0	-256	313
50	2800.0	1.250	7.0	-2710	-0	-276	190
70	20.0	1.250	7.0	-972	-0	-255	695
70	50.0	1.250	7.0	-981	-0	-255	692

Remarks & Recommendations:

Calculations based upon entered pH.

WELCHEM Representative Lisa Hunter

WELCHEM, INC.
706 N. Main
P.O. Box 179
Seminole, Texas 79360-0179
915-758-5867

LATS NO. 44846

ANALYTICAL SERVICES REPORT
WATER ANALYSIS

Date Received: 08/26/91 By: LS Date Out: 09/03/91

Company: AMOCO PRODUCTION COMPANY
Salesman: WHITE
Lease: S. MATTIX UNIT
Source: WELLHEAD

Date Sampled: 08/21/91
County: LEA
State: NM
Well: 7

SCALING TENDENCIES(MG/L):

				SCALE INDEX(MG/L)			
TEMP(F)	P(PSI)	CO2(PSI)	PH	CASO4	BASO4	SRSO4	CACO3
70	100.0	1.250	7.0	-995	-0	-257	687
70	500.0	1.250	7.0	-1109	-0	-267	650
70	1000.0	1.250	7.0	-1256	-0	-280	602
70	2000.0	1.250	7.0	-1565	-0	-308	495
70	2800.0	1.250	7.0	-1827	-0	-332	401
90	20.0	1.250	7.0	-505	-0	-270	800
90	50.0	1.250	7.0	-512	-0	-270	798
90	100.0	1.250	7.0	-523	-0	-272	795
90	500.0	1.250	7.0	-614	-0	-282	765
90	1000.0	1.250	7.0	-730	-0	-295	727
90	2000.0	1.250	7.0	-975	-0	-324	644
90	2800.0	1.250	7.0	-1182	-0	-347	570
110	20.0	1.250	7.0	-162	-0	-264	889
110	50.0	1.250	7.0	-167	-0	-264	888
110	100.0	1.250	7.0	-176	-0	-266	885
110	500.0	1.250	7.0	-251	-0	-276	861
110	1000.0	1.250	7.0	-347	-0	-288	831
110	2000.0	1.250	7.0	-548	-0	-315	765
110	2800.0	1.250	7.0	-718	-0	-337	707
130	20.0	1.250	7.0	94	-0	-243	972
130	50.0	1.250	7.0	89	-0	-243	970
130	100.0	1.250	7.0	81	-0	-244	968
130	500.0	1.250	7.0	17	-0	-253	949
130	1000.0	1.250	7.0	-64	-0	-264	925
130	2000.0	1.250	7.0	-236	-0	-288	873
130	2800.0	1.250	7.0	-380	-1	-308	828
150	20.0	1.250	7.0	302	-1	-213	1033
150	50.0	1.250	7.0	298	-1	-213	1032
150	100.0	1.250	7.0	291	-1	-214	1030
150	500.0	1.250	7.0	235	-1	-222	1015
150	1000.0	1.250	7.0	164	-1	-232	995
150	2000.0	1.250	7.0	14	-1	-252	953
150	2800.0	1.250	7.0	-112	-1	-269	916
170	20.0	1.250	7.0	479	-1	-186	1090

Remarks & Recommendations:

Calculations based upon entered pH.

WELCHEM Representative Susan Hunter

WELCHEM, INC.
706 N. Main
P.O. Box 179
Seminole, Texas 79360-0179
915-758-5867

LATS NO. 44846

ANALYTICAL SERVICES REPORT
WATER ANALYSIS

Date Received: 08/26/91 By: LS Date Out: 09/03/91

Company: AMOCO PRODUCTION COMPANY
Salesman: WHITE
Lease: S. MATTIX UNIT
Source: WELLHEAD

Date Sampled: 08/21/91
County: LEA
State: NM
Well: 7

SCALING TENDENCIES(MG/L):

				SCALE INDEX(MG/L)		
TEMP(F)	P(PSI)	CO2(PSI)	PH	CASO4	BASO4	SRSO4	CACO3
170	50.0	1.250	7.0	475	-1	-186	1089
170	100.0	1.250	7.0	469	-1	-187	1087
170	500.0	1.250	7.0	420	-1	-193	1075
170	1000.0	1.250	7.0	356	-1	-202	1059
170	2000.0	1.250	7.0	223	-1	-219	1025
170	2800.0	1.250	7.0	110	-1	-233	995

Remarks & Recommendations:

Calculations based upon entered pH.

WELCHEM Representative 

WELCHEM, INC.
706 N. Main
P.O. Box 179
Seminole, Texas 79360-0179
915-758-5867

LATS NO. 44844

ANALYTICAL SERVICES REPORT
WATER ANALYSIS

Date Received: 08/26/91 By: LS Date Out: 09/03/91

Company: AMOCO PRODUCTION COMPANY
Salesman: WHITE
Lease: TEXACO JAL WATER SYSTEM
Source: WELLHEAD

Date Sampled: 08/23/91
County: LEA
State: NM
Well:

DISSOLVED SOLIDS

CATIONS

	mg/l	me/l
Sodium, Na(calc)	5039.0	219.09
Calcium, Ca	800	39.92
Magnesium, Mg	700	57.38
Potassium, K	170	4.35
Iron, Fe	1.0	0.04
Manganese, Mn	0.1	0.0

ANIONS

	mg/l	me/l
Chloride, Cl	10200	287.32
Sulfate, SO4	900	18.75
Carbonate, CO3	0	0.0
Bicarbonate,HCO3	897	14.7

Total Dissolved Solids (calc.) 18,707 ppm

OTHER PROPERTIES

pH	6.48
Specific Gravity, 60/60 F	1.012
Nomograph Sp. Gr.	1.010- 1.019
Specific Gravity, Uncorr	1.010
Temperature (F)	71.2
Resistivity, OHMS-CM	54 @ 71.2F

SCALING TENDENCIES(MG/L):

				SCALE INDEX(MG/L)			
TEMP(F)	P(PSI)	CO2(PSI)	PH	CASO4	BASO4	SRSO4	CACO3
50	20.0	2.500	6.5	-3834	-0	-95	-145
50	50.0	2.500	6.5	-3843	-0	-96	-149
50	100.0	2.500	6.5	-3864	-0	-96	-156
50	500.0	2.500	6.5	-4032	-0	-101	-218
50	1000.0	2.500	6.5	-4247	-0	-107	-300
50	2000.0	2.500	6.5	-4694	-0	-121	-483
50	2800.0	2.500	6.5	-5069	-0	-133	-651
70	20.0	2.500	6.5	-2970	-0	-124	-16
70	50.0	2.500	6.5	-2980	-0	-124	-19

Remarks & Recommendations:

Calculations based upon entered pH.

WELCHEM Representative Lucas Hamilton

LATS NO. 44844

ANALYTICAL SERVICES REPORT
WATER ANALYSIS

Date Received: 08/26/91 By: LS Date Out: 09/03/91

Company: AMOCO PRODUCTION COMPANY
Salesman: WHITE
Lease: TEXACO JAL WATER SYSTEM
Source: WELLHEAD

Date Sampled: 08/23/91
County: LEA
State: NM
Well:

SCALING TENDENCIES(MG/L):

				SCALE INDEX(MG/L)			
TEMP(F)	P(PSI)	CO2(PSI)	PH	CASO4	BASO4	SRSO4	CACO3
70	100.0	2.500	6.5	-2996	-0	-125	-25
70	500.0	2.500	6.5	-3126	-0	-131	-74
70	1000.0	2.500	6.5	-3293	-0	-139	-139
70	2000.0	2.500	6.5	-3637	-0	-155	-284
70	2800.0	2.500	6.5	-3925	-0	-169	-414
90	20.0	2.500	6.5	-2318	-0	-139	120
90	50.0	2.500	6.5	-2326	-0	-140	117
90	100.0	2.500	6.5	-2339	-0	-140	113
90	500.0	2.500	6.5	-2444	-0	-147	75
90	1000.0	2.500	6.5	-2577	-0	-155	24
90	2000.0	2.500	6.5	-2854	-0	-173	-87
90	2800.0	2.500	6.5	-3084	-0	-188	-186
110	20.0	2.500	6.5	-1811	-0	-140	221
110	50.0	2.500	6.5	-1818	-0	-140	219
110	100.0	2.500	6.5	-1829	-0	-141	215
110	500.0	2.500	6.5	-1916	-0	-147	185
110	1000.0	2.500	6.5	-2027	-0	-156	145
110	2000.0	2.500	6.5	-2257	-0	-173	57
110	2800.0	2.500	6.5	-2447	-0	-188	-21
130	20.0	2.500	6.5	-1404	-0	-125	306
130	50.0	2.500	6.5	-1409	-0	-125	304
130	100.0	2.500	6.5	-1418	-0	-126	301
130	500.0	2.500	6.5	-1493	-0	-131	277
130	1000.0	2.500	6.5	-1588	-0	-139	245
130	2000.0	2.500	6.5	-1784	-0	-153	174
130	2800.0	2.500	6.5	-1946	-0	-166	112
150	20.0	2.500	6.5	-1067	-0	-90	384
150	50.0	2.500	6.5	-1072	-0	-90	383
150	100.0	2.500	6.5	-1080	-0	-91	380
150	500.0	2.500	6.5	-1145	-0	-95	361
150	1000.0	2.500	6.5	-1228	-0	-100	335
150	2000.0	2.500	6.5	-1399	-0	-110	279
150	2800.0	2.500	6.5	-1541	-0	-119	230
170	20.0	2.500	6.5	-780	-0	-45	448

Remarks & Recommendations:

Calculations based upon entered pH.

WELCHEM Representative Lisa Hunter

WELCHEM, INC.
706 N. Main
P.O. Box 179
Seminole, Texas 79360-0179
915-758-5867

LATS NO. 44844

ANALYTICAL SERVICES REPORT
WATER ANALYSIS

Date Received: 08/26/91 By: LS Date Out: 09/03/91

Company: AMOCO PRODUCTION COMPANY
Salesman: WHITE
Lease: TEXACO JAL WATER SYSTEM
Source: WELLHEAD

Date Sampled: 08/23/91
County: LEA
State: NM
Well:

SCALING TENDENCIES(MG/L):

				SCALE INDEX(MG/L)			
TEMP(F)	P(PSI)	CO2(PSI)	PH	CASO4	BASO4	SRSO4	CACO3
170	50.0	2.500	6.5	-784	-0	-46	447
170	100.0	2.500	6.5	-792	-0	-46	445
170	500.0	2.500	6.5	-850	-0	-48	429
170	1000.0	2.500	6.5	-924	-0	-50	409
170	2000.0	2.500	6.5	-1076	-0	-56	364
170	2800.0	2.500	6.5	-1203	-0	-60	324

Remarks & Recommendations:

Calculations based upon entered pH.

WELCHEM Representative

SCALE PREDICTION. MIXTURE NO. 1: 5.0 PERCENT SMU UPPER YESO-HEATER TREATER
11.0 PERCENT SMU ELLENBERGER-HEATER TREATER
84.0 PERCENT TEXACO-JAL WATER SYSTEM

CALCULATED COMPOSITION OF MIXTURE NO. 1 IN MG/L:

(NA)=	3668.	(CL)=	17659.
(CA)=	2257.	(SO4)=	1394.
(MG)=	474.	(HCO3)=	1060.
(BA)=	0.	(CO3)=	0.
(SR)=	14.	PH=	6.7

MOLAL IONIC STRENGTH= 0.650
SPECIFIC GRAVITY= 1.027

SCALING TENDENCIES(MG/L):

TEMP(F)	P(PSI)	CO2(PSI)	CASO4	SCALE INDEX(MG/L) BASO4	SRSO4	CACO3
60.	14.7	0.000	-1838.	0.	-75.	831.
80.	14.7	0.000	-1222.	0.	-97.	835.
120.	14.7	0.000	-371.	0.	-105.	841.
140.	14.7	0.000	-72.	0.	-95.	845.

SCALE INDEX = ANALYZED CONCENTRATION - EQUILIBRIUM SOLUBILITY
A POSITIVE SCALE INDEX INDICATES SCALE PRECIPITATION CAN OCCUR WITH THE MAGNITUDE OF THE SCALE INDEX INDICATING THE MAXIMUM AMOUNT WHICH COULD PRECIPITATE. A NEGATIVE SCALE INDEX INDICATES THE WATER IS UNSATURATED AND NO SCALE PRECIPITATION WILL OCCUR.

LLEGIBLE

SMUF C-108

III. **WELL DATA**

New Drills

A. (1) South Mattix Unit #40: 2200 FWL X 2373 FSL of Sec. 15, T-24-S, R-37-E, NMPM, Lea County, NM

South Mattix Unit #41: 2524 FEL X 1650 FNL of Sec. 15, T-24-S, R-37-E, NMPM, Lea County, NM

South Mattix Unit #42: 2450 FNL X 1600 FWL of Sec. 15, T-24-S, R-37-E, NMPM, Lea County, NM

South Mattix Unit #43: 2524 FEL X 2500 FNL of Sec. 15, T-24-S, R-37-E, NMPM, Lea County, NM

South Mattix Unit #44: 2500 FNL X 1650 FEL of Sec. 15, T-24-S, R-37-E, NMPM, Lea County, NM

Conversions

South Mattix Unit #21: 1873.3 FSL X 2086.7 FWL of Sec. 15, T-24-S, R-37-E, NMPM, Lea County, NM

South Mattix Unit #33: 1650 FNL X 1650 FEL of Sec. 15, T-24-S, R-37-E, NMPM, Lea County, NM

South Mattix Unit #35: 1650 FNL X 1650 FWL of Sec. 15, T-24-S, R-37-E, NMPM, Lea County, NM

(2) Proposed Casing & Cementing Program of New Drills

Size of Hole	Size of Casing	Setting Depth	Sacks of Cement	Top of Cement
12-1/4"	8-5/8"	1200'	900 Class "C"	Surface (Circ.)
7-7/8"	5-1/2"	5600'	1350 Class "C"/Poz	Surface (Circ.)

Conversion Wells: Casing and cementing record will remain the same.

III. **WELL DATA**

A. (3) Tubing size 2-3/8" lined with plastic coating and set at 5300'.

(4) Guiberson Uni VI packer set at 5200'.

B. (1) Injection Formations: Lower Paddock and Blinebry.
Pool: Fowler (Upper Yeso).

(2) Injection interval 5100'-5600' will be perforated.

(3) New drills will be drilled for injection. The wells being converted to injectors were previously drilled for production.

(4) Not applicable.

(5) Next higher zone: Upper Paddock (5000')
Next lower zone: Tubb Gas (5800')

BEFORE THE

OIL CONSERVATION DIVISION

NEW MEXICO DEPARTMENT OF ENERGY, MINERALS AND NATURAL RESOURCES

RECEIVED

OCT 21 1991

OIL CONSERVATION DIVISION

IN THE MATTER OF THE APPLICATION OF AMOCO PRODUCTION COMPANY FOR A SECONDARY RECOVERY PROJECT, LEA COUNTY, NEW MEXICO.

CASE NO. 10406

ENTRY OF APPEARANCE

COMES NOW CAMPBELL, CARR, BERGE & SHERIDAN, P.A., and hereby enters its appearance in the above referenced case on behalf of Amoco Production Company.

Respectfully submitted,

CAMPBELL, CARR, BERGE & SHERIDAN, P.A.

By: _____

WILLIAM F. CARR
Post Office Box 2208
Santa Fe, New Mexico 87504
Telephone: (505) 988-4421

ATTORNEYS FOR AMOCO PRODUCTION COMPANY

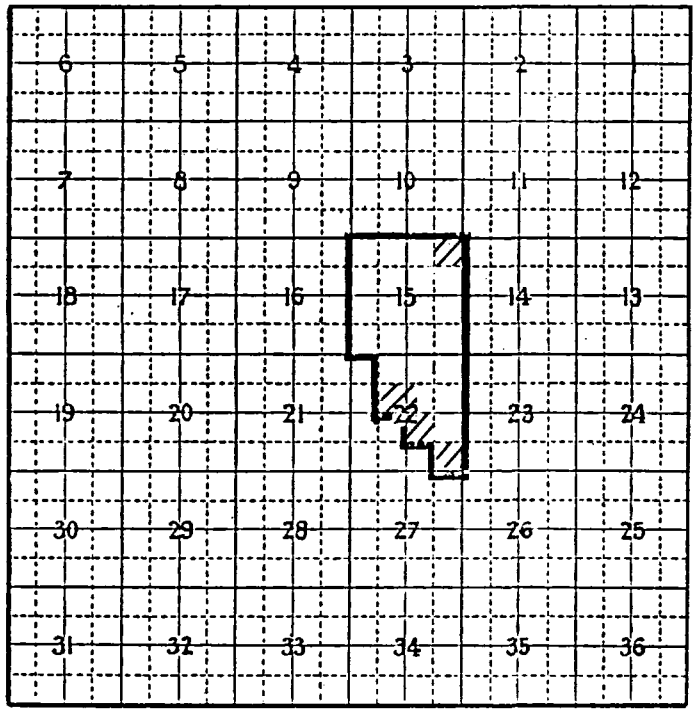
SOUTH MATTIX UNIT AREA

No. I-Sec. No. 578

APPROVED: June 1, 1948 EFFECTIVE: June 1, 1948

EXPLORATORY

Lea County, New Mexico



Original Unit Area 840.00 acres

////- Enlargement of 160 acres - Approved: January 4, 1954
Effective: October 1, 1952

Total Unit Lands - Federal 1,000.00 acres

Unit Name: South Mattix

Contract Number: I-Sec. No. 578

Automatic Elimination Date: None

Operator: Amoco Production Company

PARTICIPATING AREAS (PA)

Name: Initial Ellenburger

Well Name: South Mattix Unit No. 1

Location: NE¼SW¼ Sec. 15, T. 24 S., R. 37 E.

Legal PA Description: S½NE¼, SE¼, E½SW¼, SE¼NW¼ Sec. 15, N½NE¼ Sec. 22 T. 24 S., R. 37 E.

Effective Date: May 6, 1949

PA Total Acres: 440.00

Name: 1st Revision Ellenburger

Well Name: South Mattix Unit No. 2

Location: SE¼SW¼ Sec. 15,T. 24 S., R. 37 E.

Legal PA Description: NE¼NW¼ Sec. 22, T. 24 S., R. 37 E. - 40.00 acres

Effective Date: April 1, 1950

PA Total Acres: 480.00

Name: 2nd Revision Ellenburger

Well Name: South Mattix Unit No. 3

Location: NW¼NE¼ Sec. 22, T. 24 S., R. 37 E.

Legal PA Description: S½NE¼ Sec. 22, T. 24 S., R. 37 E. - 80.00 acres

Effective Date: May 1, 1951

PA Total Acres: 560.00

Name: 3rd Revision Ellenburger

Well Name: South Mattix Unit No. 5

Location: SE¼NE¼ Sec. 22, T. 24 S., R. 37 E.

Legal PA Description: NE¼SE¼ Sec. 22, T. 24 S., R. 37 E. - 40.00 acres

Effective Date: May 1, 1952

PA Total Acres: 600.00

(Continued)

Unit Name: South Mattix

PARTICIPATING AREAS (PA)

Name: 4th Revision Ellenburger

Well Name: South Mattix Unit No. 6

Location: NW¼SW¼ Sec. 15, T. 24 S., R. 37 E.

Legal PA Description: W½SW¼ Sec. 15, T. 24 S., R. 37 E. - 80.00 acres

Effective Date: May 1, 1952

PA Total Acres: 680.00

Name: 5th Revision Ellenburger

Well Name: South Mattix Unit No. 7

Location: NW¼NW¼ Sec. 15,T. 24 S., R. 37 E.

Legal PA Description: NW¼NE¼, NE¼NW¼, W½NW¼ Sec. 15,T. 24 S., R. 37 E. - 160.00 acres

Effective Date: October 1, 1952

PA Total Acres: 840.00

Unit Name: South Mattix

Contract Number: I-Sec. No. 578

Automatic Elimination Date: None

Operator: Amoco Production Company

PARTICIPATING AREAS (PA)

Name: Initial Paddock

Well Name: South Mattix Unit No. 11

Location: SE¼NE¼ Sec. 22, T. 24 S., R. 37 E.

Legal PA Description: NE¼, E½NW¼, N½SE¼ Sec. 22, T. 24 S., R. 37 E.

Effective Date: November 21, 1960

PA Total Acres: 320.00

Name: 1st Revision Paddock

Well Name: South Mattix Unit No. 14

Location: NE¼SW¼ Sec. 15, T. 24 S., R. 37 E.

Legal PA Description: W½ Sec. 15, T. 24 S., R. 37 E. - 320.00 acres

Effective Date: October 1, 1962

PA Total Acres: 640.00

Name: 2nd Revision Paddock

Well Name: South Mattix Unit No. 10

Location: SE¼NE¼ Sec. 15, T. 24 S., R. 37 E.

Legal PA Description: E½ Sec. 15, T. 24 S., R. 37 E. - 320.00 acres

Effective Date: September 1, 1963

PA Total Acres: 960.00

Unit Name: South Mattix

Contract Number: I-Sec. No. 578

Automatic Elimination Date: None

Operator: Amoco Production Company

PARTICIPATING AREAS (PA)

Name: Initial Lower Paddock

Well Name: South Mattix Unit No. 16

Location: SW¼SE¼ Sec. 15, T. 24 S., R. 37 E.

Legal PA Description: S½ Sec. 15, T. 24 S., R. 37 E.

Effective Date: December 3, 1963

PA Total Acres: 320.00

Name: 1st Revision Lower Paddock

Well Name: South Mattix Unit No. 9

Location: NW¼NE¼ Sec. 15, T. 24 S., R. 37 E.

Legal PA Description: N½ Sec. 15, T. 24 S., R. 37 E. - 320.00 acres

Effective Date: June 1, 1965

PA Total Acres: 640.00

Name: 2nd Revision Lower Paddock

Well Name: South Mattix Unit No. 18

Location: SW¼NE¼ Sec. 22, T. 24 S., R. 37 E.

Legal PA Description: NE¼, E½NW¼, N½SE¼, SE¼SE¼ Sec. 24 S., R. 37 E. - 360.00 acres

Effective Date: August 1, 1965

PA Total Acres: 1,000.00

Unit Name: South Mattix

Contract Number: I-Sec. No. 578

Automatic Elimination Date: None

Operator: Amoco Production Company

PARTICIPATING AREAS (PA)

Name: Initial Tubb

Well Name: South Mattix Unit No. 14

Location: NE¼SW¼ Sec. 15, T. 24 S., R. 37 E.

Legal PA Description: W½ Sec. 15, T. 24 S., R. 37 E.

Effective Date: August 31, 1962

PA Total Acres: 320.00

Name: 1st Revision Tubb

Well Name: South Mattix Unit No. 3

Location: NW¼NE¼ Sec. 22, T. 24 S., R. 37 E.

Legal PA Description: NE¼, E½NW¼, N½SE¼ Sec. 22, T. 24 S., R. 37 E. - 320.00 acres

Effective Date: September 1, 1963

PA Total Acres: 640.00

Name: 2nd Revision Tubb

Well Name: South Mattix Unit No. 16

Location: SW¼SE¼ Sec. 15, T. 24 S., R. 37 E.

Legal PA Description: E½ Sec. 15,T. 24 S., R. 37 E. - 320.00 acres

Effective Date: November 1, 1963

PA Total Acres: 960.00

Unit Name: South Mattix

Contract Number: I-Sec. No. 578

Automatic Elimination Date: None

Operator: Amoco Production Company

PARTICIPATING AREAS (PA)

Name: Initial Drinkard

Well Name: South Mattix Unit No. 37

Location: NE¼SE¼ Sec. 15, T. 24 S., R. 37 E.

Legal PA Description: NE¼SE¼ Sec. 15, T. 24 S., R. 37 E.

Effective Date: August 5, 1979

PA Total Acres: 40.00

Name: 1st Revision Drinkard

Well Name: South Mattix Unit No. 38

Location: SW¼NE¼ Sec. 15, T. 24 S., R. 37 E.

Legal PA Description: SW¼NE¼ Sec. 15, T. 24 S., R. 37 E. - 40.00 acres

Effective Date: August 8, 1980

PA Total Acres: 80.00

Amoco Production Company
Southeast Business Unit
501 WestLake Park Boulevard
Post Office Box 3092
Houston, Texas 77253-3092

James F. Trickett
Manager, Environmental Safety & Regulatory Affairs

November 5, 1991

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

Attn: Mr. Michael Stogner and Mr. Robert Stovall

NMOCD Case No. 10406
South Mattix Unit Waterflood Project
Fowler-Upper Yeso Pool - Lea County, New Mexico

Attached is the affidavit of certified mailing and the additional wellbore information you requested at the October 31, 1991 hearing for the proposed South Mattix Unit waterflood project. Also enclosed are the return receipts for the certified mailing.

If you require any additional information, please call Dan Janik at (713) 556-3930. Thank you.

Yours very truly,

James F. Trickett

DAJ/kf

Enclosures

Amoco Production Company
Southeast Business Unit
501 WestLake Park Boulevard
Post Office Box 3092
Houston, Texas 77253-3092

James F. Trickett
Manager, Environmental Safety & Regulatory Affairs

October 9, 1991

CERTIFIED MAIL

(See Attached Addressee List)

Notice of Hearing - South Mattix Unit Waterflood Project
Fowler-Upper Yeso Pool - Lea County, New Mexico

This letter is to advise you that Amoco Production Company, operator, has made application to the New Mexico Oil Conservation Division for the initiation of a waterflood project in the Fowler-Upper Yeso Pool, South Mattix Unit, Lea County, New Mexico.

This application has been set for a hearing at the offices of the New Mexico Oil Conservation Division in Santa Fe, New Mexico, on October 31, 1991.

Amoco seeks an order to waterflood the Fowler-Upper Yeso Pool in the South Mattix Unit for secondary recovery. The South Mattix Unit consists of all of Section 15 and the E/2 NW/4, NE/4, N/2 SE/4, and the SE/4 SE/4 of Section 22, T24S, R37E, Lea County, New Mexico. Upon receiving an order approving this waterflood project, Amoco will drill 1 producing well and 4 water injection wells, and convert 3 existing oil producing wells to water injection. All secondary recovery wells will be located in Section 15, T24S, R37E.

You are not required to attend this hearing, but as one who may be affected and in accordance with New Mexico Oil Conservation District Rules 701 and 1207, we are sending you this notice so that you may appear and present testimony at the hearing if you so desire. Failure to appear at that time and become a party of record will preclude you from challenging the matter at a later date.

Yours very truly,

James F. Trickett jm

DAJ/kf

CERTIFICATE OF MAILING

I hereby certify that on the 10th day of October, 1991, a true and correct copy of the attached letter of notification of hearing was mailed by first class certified mail, postage prepaid, to persons interested in the properties affected by NMOCD Case No. 10406, as follows:

Working Interest Owners

Charles W. Kemp
1701 Highland
Hobbs, NM 88240

John H. Hendrix Corporation
Attn: Daniel Weirs
223 West Wall St., Suite 525
Midland, TX 79701

Chevron Company USA, Inc.
Attn: M. F. Cohlmia
P.O. Box 1150
Midland, TX 79702

Conoco, Inc.
Attn: David Twomey
10 Desta Drive West
Midland, TX 79705

Myers Partners, Inc.
P.O. Box 3531
Midland, TX 79702

Sirgo Brothers, Inc.
P.O. Box 3531
Midland, TX 79702

Amerada Hess Corporation
Attn: J.S. Hughart
1201 Louisiana, #700
Houston, TX 77002

Citation Oil and Gas
8223 Willow Place South,
Suite 250
Houston, TX 77070-5623

Exxon Company USA
P.O. Box 1600
Midland, TX 79702

Lamar Hunt
700 Mercantile Bank Building
Dallas, TX 75201

Arco Oil & Gas Inc.
P.O. Box 1610
Midland, TX 79702

Surface Owner

Becky Jo Doom
Star Route
Jal, NM 88252

Daniel A. Janik, Jr.

11/5/91
Date

State of Texas
County of Harris

This instrument was acknowledged before me on November 5, 1991, by Daniel A. Janik, Jr.

KAY C. FONTENOT
Notary Public
STATE OF TEXAS
My Comm. Exp. 08-30-'92

Kay C. Fontenot
Notary Public, State of Texas

SHEET NO. OF

FILE

APPN

DATE 8-25-84

BY [illegible signature]

Amoco Production Company

ENGINEERING CHART

SUBJECT South Mattix Unit #9

API NO. 30-025-11117

FLAC 924833031

[illegible] - Upper [illegible]

660' FNL & 1980' FEL Sec. 15, T24S, R37E

LEA County, New Mexico

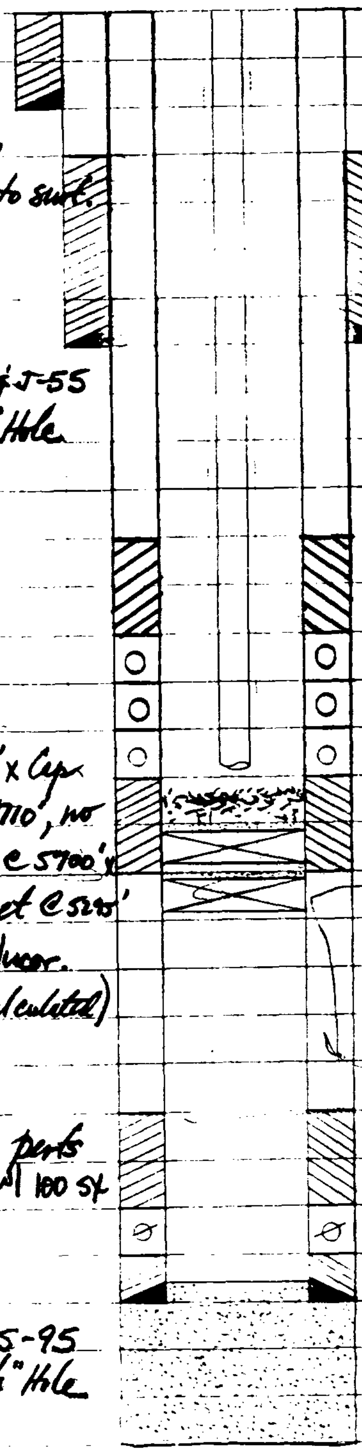
Completed: 3-[illegible]-53

Elev: 3267 R.D.B.

3257 G.L.

[illegible]

CBL



13 3/8" CSA 318'
36# SJ Armco casing
Cmt w/400 sxs. Circ to surf.
17 1/2" Hole

TCMT @ SURFACE (CIRC)

9 5/8" CSA 3814'
32.3# H-40 & 36# H-40 & J-55
Cmt w/625 sxs. 12 1/4" Hole
TCMT @ 590'

TCMT @ 590' (TEMP SURVEY)

2 3/8 Tubing Landed w/ Seating Nipple at 5635 w/ Mother Hubbard on Bottom.

Perfs: 5176-85, 5189-97, 5200-06, 5212-20, 5228-44 w/ 2SPF

Perfs: 5258-5683 w/ 2JSPF (non-continuous).

3/65: Set CIBP @ 5800' x Cap w/ 10' Cmt. Perf 5710', no circulation. Set CIBP @ 5700' x Perf 5300'. Set cmt ret @ 5285' x SQZ w/ 350 sx lucor. T/CMT @ 4190' (calculated)

Bridge Plug at 5700 w/ 10' cement cap.

Bridge Plug at 5800 w/ [illegible] cement cap.

Baker Model D Packer at 5664' w/ Junk.

3/65: Abandon Ellbgr perfs SQZ w/ 100 sx

TCMT @ 9700' (TEMP SURVEY)

Perfs: 10058-10230 w/ 2 JSPF (non-continuous).

7" CSA 10276'
31-26# N-80 & 29# S-95
Cmt w/100 sxs 8 3/4" Hole
TCMT @ 9700'

TD 10,438'

PBTD 5190'

South Mattix Unit #9
owler Upper Yeso

Cementing Record:

3-31-53: Set 13 3/8"-36# SJ Armco casing at 318' in a 17 1/2" hole. cemented w/400 sacks Neat cement. Circulated.

4-16-53: Set 9 5/8"-32.3# H-40 and 36#, H-40 & J-55 casing at 3814' in a 12 1/4" hole. Cemented in two stages with DV tool set at 1005'. First stage w/375 sacks 8% Gel plus 100 sacks Neat. Second stage w/150 sacks Neat cement. TCMT-590'

7-8-53: Set 7"-23# to 26# N-80 and 29# S-95 casing at 10276' in a 8 3/4"hole. Cemented w/100 sacks Slo=set cement. TCMT-9700'.

TD-10,438'
PBD-10,240'

Well History:

Initial Completion:

7-13-53: Prior to running 7" casing spotted 125 sacks cement plug 10150'-10438'. Drilled cement to 10224 and tested. Drilled additional cement to 10280' and ran 7" casing. Drilled cement to 10240' (PBD). Perforated interval 10058-10082', 10152-10188', & 10216'-10220' w/4 SPF and washed perfs w/500 gallons 15% acid. Acid fracked w/5000 gallons mixed w/21# sand per gallon. On 8-4-53, acidized perfs 10,216-10,220 w/500 gallons regular acid and tested. On 8-6-53, acidized all perfs w/10,000 gallons 15% acid. On PT-flowed 153 BOPD x no water x 165 MCFPD on 48/64" choke.

Workovers:

8-18-61: Perforated additional intervals 10114-10148 w/2 JSPF and acidized all perfs 10058-10222 w/10,000 gallons Gelled acid. in four stages.
PPWO-pumped 25 BOPDx 7 BWPD
PAWO-Pumped 36 BOPD x 6 BWPD

3-30-65: Abandoned Ellenburger zone by spotting 100 sacks cement across perfs 10058'-10222'. Set cast iron bridge plug at 5800 w/10' cement cap. Perforated interval 5710' but was unable to obtain circulation. Set cast iron bridge plug at 5700' and perforated interval 5300'. Set retainer at 5295' and squeezed perf 5300' w/350 sacks. Set retainer at 5230' and perforated interval 5240' and squeezed w/150 sacks Incor. Drilled retainer at 5230 and cleaned out to 5290'. Perforated interval 5258'-5276' w/2 JSPF and acidized w/2000 gallons LSTNE acid. Drilled cement retainer and cleaned out to bridge plug at 5700'. Placed well on test. On PT-flowed 69 BOPD x no water.

3-21-67: Workover to dual complete in Blinebry and Paddock zones. Perforated Blinebry intervals 5440-42, 5463-66, 5479-81, 5508-10, 5513-16, 5548-50, 5567-70, 5608-10, 5646-48, 5657-59, 5661-63, 5674-76, 5680-83'. Acidized perfs 5440-5683 w/2000 gallons 15% LSTNE acid and fracked w/6000 gallons Gelled Brine pad and 40,000 gallons Gelled Brine. Put well on Test. On PT-Blinebry flowed 182 BO x 110 BLW in 31 hours on 28/64"choke. Set BAker packer at 5370'.

South Mattix Unit No. 9

04-03-67: Acidized Paddock perfs 5258-76 with 5000 gallons 28% acid and 5000 gallons treated water.
PPWO - pumped 16 BOPD x 2 BWPD
PAWO - pumped 21 BOPD x 3 BWPD

06-22-71: Pulled tubing and pushed packer to bottom. Perforated additional intervals 5293-96, 5309, 5313, 5321, 5336-38, 5341-45, 5354, 5371, 5386-88, 5393, 5404-06, 5410, 5417, 5421-23, 5433, & 5484-88 w/2 JSPF. Acidized and fraced with 1750 gallons 15% NE acid, 45000 gallons gelled brine and 54000# sand in 3 stages. Ran tubing and rods.
PPWO - pumped 14 BOPD x no water
PAWO - pumped 133 BOPD x 55 BLWPD

03-06-75: Acidized perfs 5293'-5588' w/500 gallons 15% NE acid and 50 gallons Wellaid 833.
PPWO - pumped 15 BOPD x 8 BWPD
PAWO - pumped 21 BOPD x 11 BWPD

06-11-79: Acidize perfs: 5258-5683 w/2500 gallons D-S30 acid reacidized in October, 1979, w/6000 gallons 15% acid in 3 stages.
PPWO: 6 BOPD x 2 BWPD x 14 MCFD
PAWO: 33 BOPD x 20 BWPD x 235 MCFD

08-25-84: WO to perf additional pay x acd stimulate. MISU 7-17-84. Pu R x P x tbg. Perf 5176'-85' x 5189'-97' x 5200'-06' x 5212'-20' x 5228'-44' x 2 JSPF x 180 deg. RIH x RBP x pkr x acd x 11000 gal of 15% NE HCl x 3VS-952 additive in 4 stages. Max prs 2080. AIR 5 BPM. Final stage 3.5 BPM on vac. Rel pkr x RBP x POH. RIH x Mother Hubbard x seating nipple x 2-3/8 TLA 5635'. MOSU 7-21-84.
PPWO: 6 BOPD x 6 BWPD x 101 MCFD
PAWO: 33 BOPD x 52 BWPD x 75 MCFD

Amoco Production Company

ENGINEERING CHART

SHEET NO. OF

FILE

APPN

DATE 9-13-85

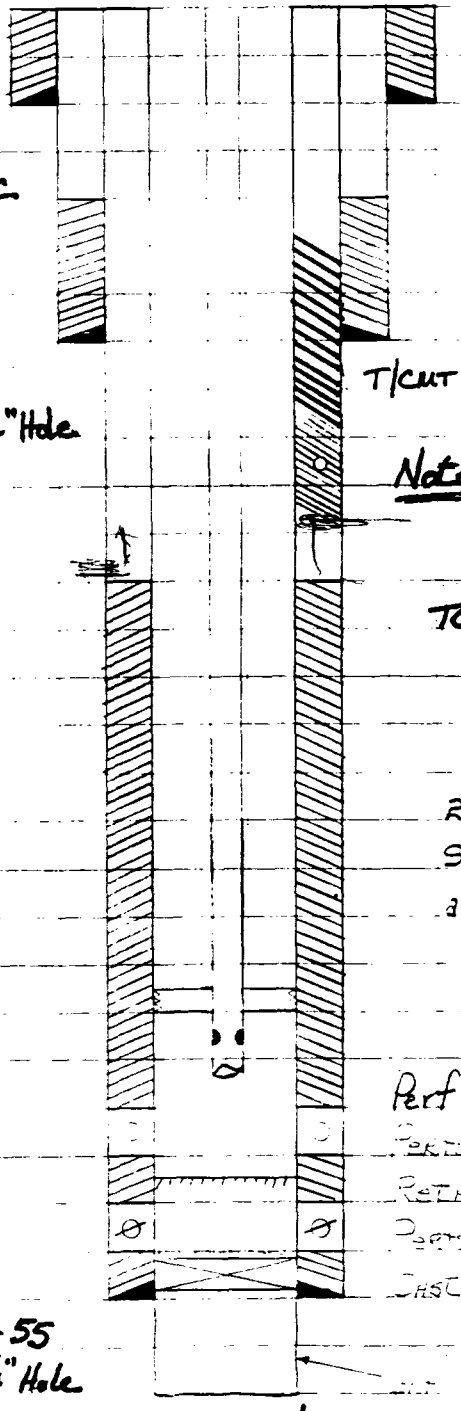
BY RKL

SUBJECT South Mattix Unit #4

Fowler Ellenburger

PEY 1/26/88

Cemented



13 3/8" CSA 318'
36# Armco casing
Cmt w/450 sks Circ.
17 1/2" Hole

9 5/8" CSA 3804'
32.3# & 36#
Cmt w/525 sks. 12 1/4" Hole
TCMT @ 975'

TCMT - 975'

T/CUT @ 1735' (est.)

Note: Found Hole in 7" casing at 4330'.
Squeezed w/300 sacks TCMT @ 1735' (calculated)

TCMT @ 5287' (TEMP)

2 7/8" 6.5# N-80 tubing landed at 9057'.
Seating Nipple @ 9029' and tubing anchor @ 8997'.

Perf: 9800-10' w/4 JSPF.

7" CSA 10,142
23#, 26# N-80 & J-55
Cmt w/700 sks 8 3/4" Hole
TCMT 5287'

TD-10270'

South Mattix Unit No. 4
Fowler-Ellenburger

Cementing Record:

12-17-50: Set 13 3/4"-36# Armco casing at 318' in a 17 1/2" hole. Cemented w/350 sacks Comm. cement. Pumped 100 sacks down 1" pipe outside casing and circulated.

01-02-51: Set 9 5/8"-32.3#, H-40 and 36# J-55 casing at 3804' in a 12 1/4" hole. Cemented in two stages with DV tool at 1118'. First stage w/375 sacks Comm. cement 8% Gel followed w/100 sacks Neat cement. Second stage w/150 sacks Neat. TCMT-975'.

04-13-51: Set 7"-23#, 26#, & 29#, N-80 and J-55 casing at 10142' in an 8- 3/4" hole. Cemented in two stages with DN tool at 7736'. First stage w/250 sacks 8% Gel and 100 sacks Neat. Second stage w/300 sacks 8% Gel and 50 sacks Neat. TCMT-5287'.

TD - 10,270'
PBD- 10,270'

Well History:
Initial Completion:

04-18-51: Well completed in open hole 10142'-10270' and acidized w/5000 gallons 15% regular acid. Swabbed and well kicked off. On PT-flowed 456 BOPD x no water on 12/64" choke.

Workovers:

10-19-59: Tested 7" casing for leaks-found no leaks. Set cast-iron bridge plug at 10,130' w/10' cement cap. Perforated interval 9850-9910' w/2 JSPF and put well back on production.
PPWO-well dead.
PAWO-flowed 246 BOPD x no water on 29/64" choke.

09-15-74: Well was shut in due to high water-oil ratio.

12-17-75: Set retainer at 9830' and squeezed perfs 9850-9911 with 250 sacks Class "H" cement. Perforated interval 9811-21 w/2 JSPF and acidized w/250 gallons 15% NE acid.
PPWO-dead
PAWO-pumped 50 BOPD x 4 BWPD

02-18-78: Located hole in 7" casing at 4330'. Squeezed with 300 sacks Class "H" cement. Clenaed out but unable to run tubing below 9816'. Returned well to production.

04-25-78: Lowered tubing to 9782 and tagged bridge in casing. Acidized perfs 9811-21 w/1000 gallons 7 1/2% Dolowash.
PPWO-pumped no oil x no water
PAWO-pumped 132 BOPD x 46 BWPD

02-19-82: Acd perfs 9811'-9821' w/500 gals 10% HCl acid.
PPWO-10 BOPD x 65 BWPD x 10 MCFD
PAWO-22 BOPD x 76 BWPD x 0 MCFD

08-14-84: WO to acd stimulate. Acd x 1500 gal 15% NE HCl acd x additives. AIR 3.4 BPM x 0 psi. Flush x 56 bbl 2% KCl. ISIP 1 BPM Vac. Rel pkr x POH. RIH x 2-7/8 Seating Nipple x 1 jt 2-7/8 tbg x tbg Anchor x 2-7/8 tbg. SN landed at 9779'. Return to prod.
PPWO-6 BOPD x 186 BWPD x 5 MCFD
PAWO-24 BOPD x 152 BWPD x 1 MCFD

08-31-85: WO to perf additional pay x acd stimulate.
MISU 8-29-85. PTG. RIH x perf 9800-10 x 4 JSPF. RIH x PKR x TBG x PSA 9779 x acd x 3000 gals of 15% NEFE HCl acd x additives. Max prs 0 psi x AIR 3 BPM x ISIP Vac. Rel PKR x POH. RIH x seating nipple x TBG Anchor x TBG. Seating nipple LA 9771. Anchor SA 9737. RPxR. MOSU 8-31-85.
PPWO: 1 BOPD x 10 BWPD x 0 MCFD.
PAWO: 11 BOPD x 183 BWPD x 2 MCFD.

Amoco Production Company

ENGINEERING CHART

SHEET NO. OF

FILE

APPN

DATE 11-10-83

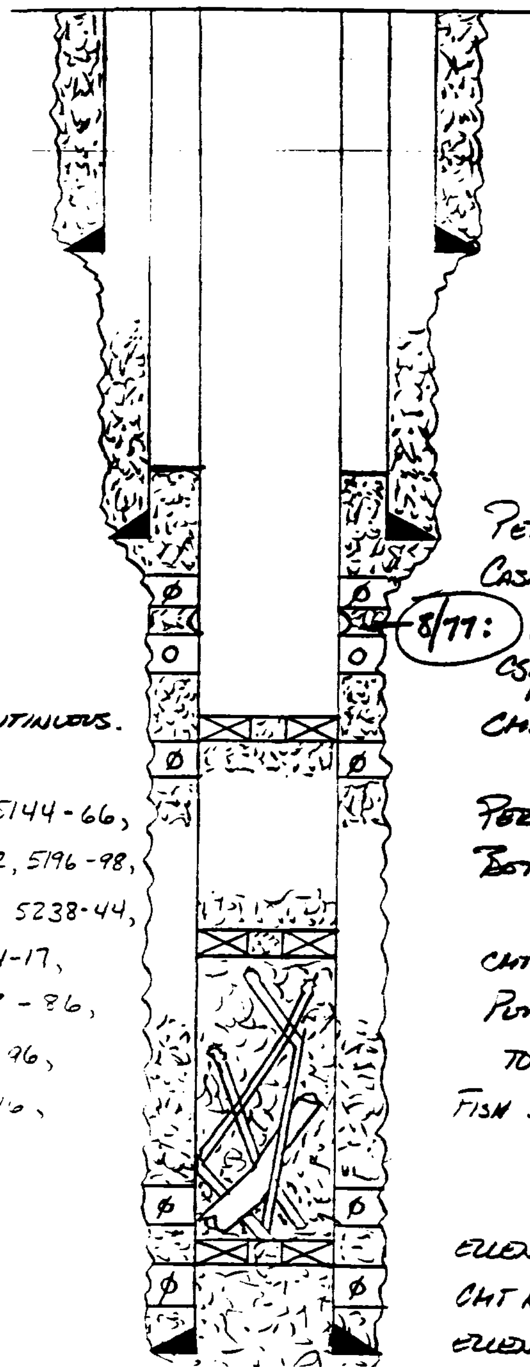
BY [illegible signature]

SUBJECT South Mattix Unit No. 21
Fowlex Field

Location: 1973' FSL & 2087 FWL Sec 15 T-24-S R-37-E

ELEV: 3266' KB
3254' GL

Completed: 12-13-66



13 3/8" CSA 312'
48#, S-40
Cmt w/ 350 Sx Circ
17 1/2" Hole.

CBL
Performed
[illegible]

8 5/8" CSA 4398'
24-32# H-40, J-55
Cmt w/ 600 Sx
12 1/4" Hole
Tcmt est 2230'

Perf 4600' x Sq w/ 200 Sx Class C.
Casing Bowl @ 4963'

8/77: Cut x Pull 5 1/2" Csg @ 4963'. Ran new Csg x cmt w/ 450 Sx cmt. Did not circ. (Tcmt @ 3110' cal)

Perf Upper Yeso
5105'-5642' Noncontinuous.

Cmt Ret at 5750'.

Perf: 5105-22, 5132-36, 5144-66,
5174-76 5179-83, 5186-92, 5196-98,
5202-[illegible] 5219-21, 5227-31, 5238-44,
5250-[illegible] 5296-5305, 5314-17,
5330-[illegible] 5354-66, 5377-86,
5410-[illegible] 5438-45, 5490-96,
5544-[illegible] 5593-94, 5613-16,
[illegible]

Perf 5830' x Squeezed. (200 Sx Class C)
Bottom of Cmt Unknown

Cmt Ret SA 7400' capped w/ 10 Sacks Class
Pumped 300 Sx Class C.

Top of Fish 7466'

Fish 3200 Bodies Looking up. 2400' 7/8" Rods
31' 2 7/8" Tubing. 4' 2 7/8" Sub.

5 1/2" CSA 9849'
14-17# J-55 & N-80
Cmt w/ 300 Sx
7 7/8" Hole
Tcmt est 8089'

Ellenburger Perfs: 9740-62 w/ 1 JSPF (Sq)
Cmt Ret Set at 9784
Ellenburger Perfs: 9790'-9830' w/ 2 JSPF (Sq)

TD: 9849'
PBTD: 5750'

South Mattix Unit #21
Fowler - Ellenburger

Cementing Record:

9-29-66: Set 13 3/8" - 48#, S-40 casing at 312' in a 17 1/2" hole. Cemented w/350 sacks Incor Neat. Circulated

10-13-66: Set 8 5/8" 24# to 32#, H-40 & J-55 casing at 4378' in a 12 1/4" hole. Cemented with 500 sacks Incor Neat with 12 % Gel and 100 sacks Neat. TCMT - Estimated 2230'.

11-18-66: Set 5 1/2" -14# to 17#, J-55 & N-80 casing at 9849' in a 7 7/8" hole. Cemented with 300 sackd Trinity Inferno cement. TCMT-Calculated 8089'.

TD-9849'
PBD-9848'

Well History:
Initial Completion

11-22-66: Drilled cement to 9848' and perforated interval 9790-9830' w/2 JSPF. Acidized w/3000 gallons LSTNE acid. Swabbed 66 BO X 6 BLW in 8 hours. Re-acidized w/10,000 gallons 28% acid and overflushed w/5000 gallons Treated water. Swabbed 239 BO X 117 BLW in 50 hours. Installed pumping equipment. On PT-Pumped 261 BOPD X 22 BLW X 97 MCFGPD.

Workovers:

4-20-74: Found leak in 5 1/2" casing @4792'. Cut and pulled from 4831'. Ran new 5 1/2" casing and bowled on stub at 4831'. Acidized perfs 9790-9830 w/1000 gallons 15% NE acid.
PPWO-Pumped No Oil X 155 BWPD
PAWO- " 161 BOPD X 9 BWPD

8-13-77: Found leak in 5 1/2" casing between 3310' and 3316'. Cut 5 1/2" casing at 4963' and pulled. Ran new 5 1/2" casing with casing bowl and DV Tool to 4963'. Cemented 5 1/2" casing w/350 sacks Econolite and 100 sacks Class "C" cement. Did not circulate.
PPWO-NO oil X 140 BWPD
PAWO-Pumped 41 BOPD X 106 BW X 16 MCFPD.

6-25-80: Pumped 100 sx Class H cmt. with .6% Halad 9 and 50 sx Class H cmt. w/.5% CFR2. Max sq. psi 0#. Over displaced 2 bbls with well on vac. Pumped 100 sx class H cmt. w/.6% Halad-9 and 50 sx Class H w/ ¼# Tuf plug. Max psi 2000#. Circ. out 60 sx cmt. Perforated interval 9740'-9776' w/4 JSPF. Spotted 70 gals 15% NEFE HCL. Acidized w/6000 gals 15% NEFE HCL in 2 stages w/300# of block. First stage 3000 gals acd. w/130# rock salt and 150# paraformaldehyde. Max psi 1000#, min. vac. Second stage 3000 gals acd. & 50 bbls. fresh water flush. Max psi vac. Approx. inj. rate 3 BPM.
PPWO-9 BOPD x 141 BWPD x 3 MCFPD
PAWO-0 BOPD x 123 BWPD x 0 MCFPD

05-28-81: Run cmt ret to 9643'. Pmp 350 sx class H w/additives x 100 sx class A w/additives x 100 sx thickset. Drill out to 9784'. Perf 88 holes 9740'-9762' w/4 spf. Run 2-3/8" tbg w/psa 9673'. Spot 70 gal 15% then pmp 1000 gal gel brine then pmp 1000 gal 15% NE HCL x flush w/2% KCl brine. Max prs 1000. Air .4 bpm. Isip vac. ptg x pkr then run 136 jts 2-3/8" tbg x 173 jts 2-7/8" tbg w/seating nipple @ 9664'. Inpe. On 24 hr test. Well pmp 17 BO x 105 BLW x 5 MCF.

04-02-82: Fiberglass rods parted, unable to fish all steel rods. Top of fish at 7466', three rod body ends looking up. Left in hole: 2400' 7/8" steel rods w/SH couplings, 31' 2-7/8" tubing joint, and 4' 2-7/8" tubing sub.

05-31-84: Recompletion from the Ellenburger to the Upper Yeso. Set cmt ret at 7404' x sq below x 300 sx. Perf 7300'-01' x 5200'-01' x circ cmt behind production csg. Do cmt. Spot 750 gal 15% NE HCl across 5700'-5000' x perf 5105'-5642'/gross/x 2 JSPF. Acd x 12000 gal 15% NE HCl in 4 stages. Swb to rec load. R btm prs bomb. Pmp tst well. MISU x POH x r x p x tbg. RIH x tbg x pkr x RBP x frac perfs 5490'-5642' x 12950 gal 30# Gelled Brine x 5550 gal CO_2 x 25000# 20/40 sn. Flw back to rec load. Kill well x move pkr x RBP x frac perfs 5105'-5317' x 9800 gal 30# Gelled Brine x 4200 gal CO_2 x 15750# 20/40 sn. Flw back to rec load. INPE. Scale sq x 2 drums inhibitor x flush x 200 bbl. Pmp back load. TD 9849, PBTD 5750. Rtg x Seating Nipple LA 5692'. Tbg anchor SA 4986'.
PPWO: SI Ellenburger
PAWO: 45 BOPD x 49 BWPD x 591 MCFD

06-04-85: Successful WO to Perf additional pay x Acd Stimulate. MISU 5-29-85 x PR x P. RIH x BIT x CO to 5711 x POH. RIH x Perf 5330-38' x 5354-66' x 5378-86' x 5410-24' x 5438-45' x 4 JSPF. RIH x RBP x PKR x Acd well in 3 stages x a total of 9000 gals 15% NEFE HCl Acd. Max Prs. Vac. AIR 2 BPM. Rel PKR x RBP x POH. RIH x Seating Nipple x 2-3/8 TBG. Seating Nipple LA 5672. MOSU 6-4-85.
PPWO: 12 BOPD x 9 BWPD x 532 MCFD
PAWO: 19 BOPD x 9 BWPD X 293 MCFD

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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

MAR 15 1973

BMB ___ SLB ___ CDS ___ RLI ___ HCP ___ AMJ ___ CRL ___ Circulate ___ File ___

5a. Indicate Type of Lease
State [X] Fee [ ]

5. State Oil & Gas Lease No.
B-934

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.)

1. OIL WELL [X] GAS WELL [ ] OTHER-

7. Unit Agreement Name
—

2. Name of Operator
EXXON CORPORATION

8. Farm or Lease Name
NEW MEXICO AB STATE

3. Address of Operator
P.O. BOX 1600, MIDLAND, TEXAS 79701

9. Well No.
2

4. Location of Well
UNIT LETTER H, 1400 FEET FROM THE NORTH LINE AND 510 FEET FROM THE EAST LINE, SECTION 16 TOWNSHIP 24-S RANGE 37-E NMPM.

10. Field and Pool, or Wildcat
FOWLER UPPER YESO

15. Elevation (Show whether DF, RT, GR, etc.)
3284 DF

12. County
LEA

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

NOTICE OF INTENTION TO:		SUBSEQUENT REPORT OF:	
PERFORM REMEDIAL WORK [ ]	PLUG AND ABANDON [ ]	REMEDIAL WORK [ ]	ALTERING CASING [ ]
TEMPORARILY ABANDON [ ]		COMMENCE DRILLING OPNS. [ ]	PLUG AND ABANDONMENT [ ]
PULL OR ALTER CASING [ ]	CHANGE PLANS [ ]	CASING TEST AND CEMENT JOB [ ]	
OTHER ___ [ ]		OTHER RE PERFORATE [X]	

17. 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.

MIRU BABER WELL SERVICE 2-19-73, PULLED RODS + TBG, SET PLUG AT 6340; LOADED HOLE W/WATER + TESTED PLUG TO 1000 PSI, HELD OK. SPOTTED 3 SKS SAND ON PLUG. 2-20-73 PERF'D 4 HOLES AT 5260. PUMPED IN 250 SX CLASS "C" CEMENT, TAILED W/250 SX CLASS C CEMENT. TOP OF CEMENT 3800'. * 2-21-73, DRLD. RETNR. AT 5220 AND CEMENT TO 5260. TESTED PERFS. AT 5260 TO 1000 PSI, HELD OK. 2-23-73, MOVED RETR. BP TO 5468, PERF'D 4 1/2" CSG FROM 5206-5436 (80-SHOTS). 2-24-73, SET PKR AT 5375, TREATED PERFS 5382-5436. RESET PKR AT 5265 AND TREATED PERFS. 6000 GALS GELLED BRINE W/12000 LBS 20/40 SAND, 1000 GALS 15% NE ACID. PUMPED 3000 GALS BRINE AND 23000 LBS 20/40 SAND; MAX PRESS 4800 PSI, AVG. PRESS 3500 PSI, MIN PRESS 3000 PSI. ISIP 800 PSI, AFTER 5 MIN 400 PSI, AIR 20 BPM. RESET B.P AT 5255 AND PKR AT 5175 AND FRAC PERFS 5206-5234, PUMPED 500 GALS 15% NE HCL ACID, 10,000 GALS GELLED BRINE W/17500 LBS 20/40 SAND. AIR 19 BPM, MAX PRESS 4500 PSI MIN. 3800 PSI, AVG 4000 PSI, ISIP 1000 PSI, AFTER 12 MIN. 500 PSI. SWABBED WELL. 3-1-73 ON TEST, ON PUMP. FRW 3-10-73

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

SIGNED [signature] TITLE UNIT HEAD DATE 3-13-73

* As per Exxon during my telephone conversation with them: Top of cement @ 3800' based on temperature survey.

APPROVED BY ___ TITLE ___ DATE ___

CONDITIONS OF APPROVAL, IF ANY:

[initials] 11/5/91

State of New Mexico
ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT
Santa Fe, New Mexico 87505

BRUCE KING
GOVERNOR

January 27, 1992

ANITA LOCKWOOD
CABINET SECRETARY

MATTHEW BACA
DEPUTY SECRETARY

CAMBELL & BLACK
Attorneys at Law
P. O. Box 2208
Santa Fe, New Mexico 87504

RE: CASE NO. 10406
ORDER NO. R-9623-A

Dear Sir:

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

Sincerely,

Florene Davidson
OC Staff Specialist

FD/sl

cc: BLM Carlsbad Office
Ernest L. Padilla
Dan Currens

VILLAGRA BUILDING - 408 Galisteo
Forestry and Resources Conservation Division
P.O. Box 1948 87504-1948
827-5830

Park and Recreation Division
P.O. Box 1147 87504-1147
827-7465

2040 South Pacheco
Office of the Secretary
827-5950

Administrative Services
827-5925

Energy Conservation & Management
827-5900

Mining and Minerals
827-5970

LAND OFFICE BUILDING - 310 Old Santa Fe Trail
Oil Conservation Division
P.O. Box 2088 87504-2088
827-5800

STATE OF NEW MEXICO

ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION
HOBBS DISTRICT OFFICE

'92 MAR 10 AM 10 19

March 9, 1992

BRUCE KING
GOVERNOR

POST OFFICE BOX 1980
HOBBS, NEW MEXICO 88241-1980
(505) 393-6161

Amoco Production Company
P. O. Box 68
Hobbs, New Mexico 88241-0068

Re: South Mattix Unit Federal #17-G, Sec 15, T24S, R37E

Gentlemen:

We have received the cement bond log on your South Mattix Unit Federal Well No. 17 located in Unit G of Section 15, Township 24 South, Range 37 East.

An evaluation of the log confirms the top of the cement at approximately 4150 feet and is sufficient to meet the requirements of Division Order R-9623.

Very truly yours

OIL CONSERVATION DIVISION

Jerry Sexton
Supervisor, District I

JS:bp

cc: David Catanach
File

State of New Mexico
ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT
Santa Fe, New Mexico 87505

New Mexico DRUG FREE It's a State of Mind!

BRUCE KING
GOVERNOR

ANITA LOCKWOOD
CABINET SECRETARY

MATTHEW BACA
DEPUTY SECRETARY

January 9, 1992

CAMBELL & BLACK
Attorneys at Law
P. O. Box 2208
Santa Fe, New Mexico 87504

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OC Staff Specialist

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cc: BLM Carlsbad Office
E. Padilla
D. Currens

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