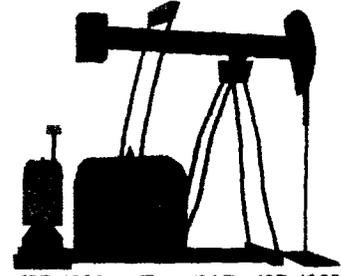


QUAY VALLEY, INC.

1608 N. BIG SPRING STREET
P.O. BOX 10280
MIDLAND, TEXAS 79702



(915) 687-4220 FAX (915) 687-4288

May 3, 2000

Ms. Lori Wrotenbery
Oil Conservation Division
New Mexico Department of Energy
Minerals and Natural Resources
2040 South Pacheco Street
Santa Fe, NM 87505

Re: Application of Quay Valley, Inc. for Qualification for Enhanced Oil Recovery Project Qualification for the Recovered Oil Tax Rate at the North El Mar Unit, Lea County, New Mexico.

Dear Ms. Wrotenbery:

Quay Valley, Inc. (QVI) hereby makes application to qualify the North El Mar Unit for the Recovered Oil Tax Rate as authorized by the Enhanced Oil Recovery Act.

In accordance with this Order, QVI provides the following information:

a. Operator's name and address:

Quay Valley, Inc.
1608 N. Big Spring
Midland, TX 79702

b. Description of Project Area:

1. Provide a plat outlining the project area:

See Exhibit "A" for a plat of the NEMU and Exhibit "B" for a plat of the micro emulsion project area.

2. Describe the project area by section, township and range:

The following table identifies the acreage within the boundaries of the NEMU:

| <u>Township and Range</u> | <u>Section</u> | <u>Description</u> |
|---------------------------|-----------------------|--|
| T-26-S, R-32-E | 24 | SE/4 SE/4, SW/4 SE/4 |
| | 25 | S/2, S/2 N/2, N/2 NW/4, NW/4 NE/4, NE/4 NE/4 |
| | 26 | S/2, S/2 NE/4, NE/4 NE/4, SE/4 NW/4 |
| | 27 | SE/4 SE/4 |
| | 34 | Lots 3, 4, N/2 NE/4 |
| | 35 | Lots 1, 2, 3 & 4, N/2 N/2 |
| | 36 | Lots 1, 2, 3, 4, N/2 N/2 |
| | T-26-S, R-33-E | 19 |
| 30 | | Lots 1, 2, 3, 4, E/2 SW/4, SE/4 NW/4 |
| 31 | | Lots 1, 2, 3, NE/4 NW/4 |

The proposed micro emulsion project will impact the entire NEMU acreage as is shown on Exhibit “B” which includes those wells listed in Exhibit “C”.

3. Total acres:

The NEMU contains a total of 2361.16 acres.

4. Provide the name of the subject pool and formation:

The NEMU is within the North El Mar Field.

The NEMU is a unitized portion of the Bell Canyon Formation. The type-log identified in the unitization hearing is reproduced as Exhibit “D”.

c. Status of operation in the project area:

1. Provide the name of the unit and the date and number of the Division Order approving the unit plan of operation:

The proposed Micro Emulsion project is at the OVI operated North

El Mar Unit. The Division approved this Unit on September 13, 1973 with Order No. R-4629. The waterflood project for this Unit was approved by Order No. R-3486 (Case 3841) on August 21, 1968 and Order No. R-3540 (Case No. 3903) on October 31, 1968, which was subsequently expanded by Order No. R-4629 (Case 5060) dated September 13, 1973. A CO2 project was approved in this unit on November 5, 1997 by Order No. R-4629-A. The CO2 project was never implemented.

d. Method of recovery to be used:

1. Identify fluids to be injected; and

Recovery is to be enhanced with the introduction of micro emulsion.

2. If the Division has not approved the project, provide the date the application for approval was filed with the Division on Form C-108.

A supplemental C-108 is provided with this Application dated May 3, 2000. This is an Amended Application based on the data contained in the July 15, 1997 C-108.

e. Description of the project:

1. See Exhibit "C" for a list of the 27 existing wells that will be used as producing wells within the project target area. There are no plans to drill additional producing wells.
2. See Exhibit "C" for a list of the 24 existing wells within this project target area that will be used as injection wells. There are no plans to drill additional direction wells.
3. The capital costs of additional facilities will be approximately \$3.5 Million.

4. Total project cost:

The project will cost a total of \$4.5 Million inclusive of associated injectant expenses. Of this total, approximately \$3.5 Million will go toward facilities and work on the NEMU.

5. Provide the estimated total value of the additional production that will be recovered as a result of this project:

An additional \$3.7 Million STB of oil are anticipated to be recovered as a result of this project. No additional hydrocarbon gas is expected to be recovered since the produced gas will be recycled. Based on an average oil price for the NEMU of \$20.00/STB, the estimated value of the oil recovered from the proposed project is \$74 Million.

6. Provide anticipated date for commencement of injection:

The anticipated initial microemulsion injection is August, 2000.

7. What type of fluid will be injected and what are the anticipated volumes:

Slugs of naturally occurring micro organisms will be injected into the Delaware formation with water from the Rustler formation and produced water from the NEMU. The average daily injection rate will be 2,500 barrels of water per day and the maximum injection rate will be 3,500 barrels of water per day.

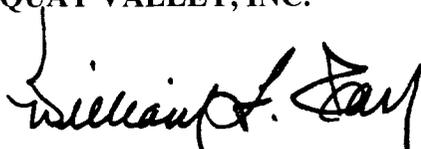
f. Production data: provide graphs, charts and other supporting data to show production history and production forecast of oil, gas, casinghead gas and water from the project area.

Exhibit "E" provides the NEMU production and injection history along with the forecast of enhanced oil recovery due to the injection of microemulsion.

It is requested that this application be set for hearing and with no objections, be accepted.

Sincerely,

QUAY VALLEY, INC.



William F. Carr
Attorney for Quay Valley, Inc.

WFC/md

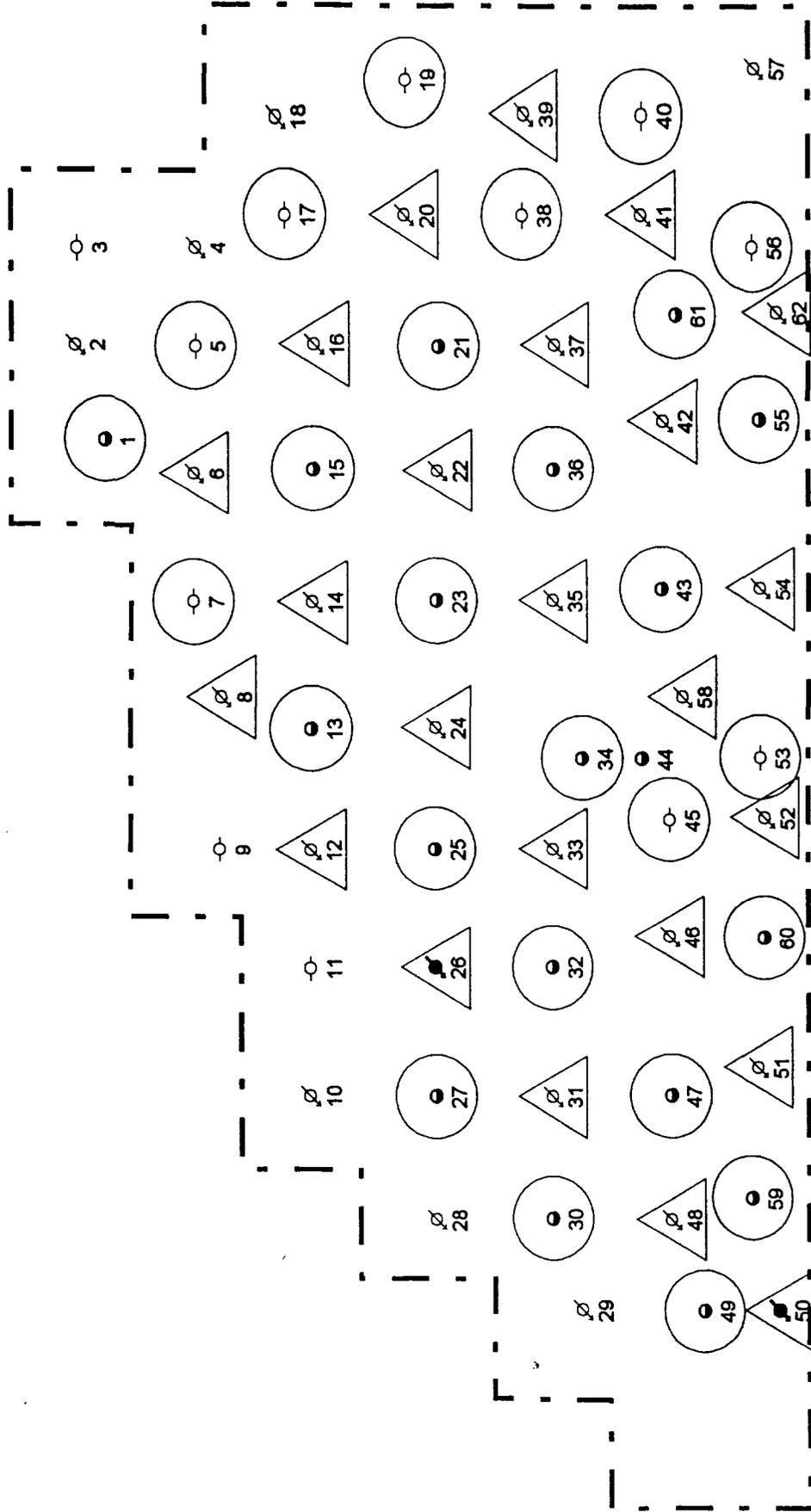
Attachments

Insert

Color Page/Photo

Here

North EI Mar Unit Well Status 6/97



 Water Injection
  SI Water Injection
  Production
  Shut-in Producer
  Planned EOR Injection
  Planned EOR Production

NORTH EL MAR UNIT

Exhibit "C"

North El Mar Unit

Wells within Proposed CO₂ Target Area

| Producers | | Count | Injectors | |
|---------------|--------------|-------|---------------|--------------|
| NEMU Well No. | API Well No. | | NEMU Well No. | API Well No. |
| 1 | 30-025-08268 | 1 | 6 | 30-025-08280 |
| 5 | 30-025-08272 | 2 | 8 | 30-025-08287 |
| 7 | 30-025-08286 | 3 | 12 | 30-025-08294 |
| 13 | 30-025-08285 | 4 | 14 | 30-025-08277 |
| 15 | 30-025-08279 | 5 | 16 | 30-025-08281 |
| 17 | 30-025-08430 | 6 | 20 | 30-025-08431 |
| 19 | 30-025-08432 | 7 | 22 | 30-025-08278 |
| 21 | 30-025-08284 | 8 | 24 | 30-025-08275 |
| 23 | 30-025-08276 | 9 | 26 | 30-025-08293 |
| 25 | 30-025-08290 | 10 | 31 | 30-025-08292 |
| 27 | 30-025-08295 | 11 | 33 | 30-025-08288 |
| 30 | 30-025-08289 | 12 | 35 | 30-025-08274 |
| 32 | 30-025-08291 | 13 | 37 | 30-025-08283 |
| 34 | 30-025-08273 | 14 | 39 | 30-025-08435 |
| 36 | 30-025-08282 | 15 | 41 | 30-025-08437 |
| 38 | 30-025-08433 | 16 | 42 | 30-025-08316 |
| 40 | 30-025-08439 | 17 | 46 | 30-025-08311 |
| 43 | 30-025-08315 | 18 | 48 | 30-025-08309 |
| 45 | 30-025-08308 | 19 | 50 | 30-025-08305 |
| 47 | 30-025-08310 | 20 | 51 | 30-025-08312 |
| 49 | 30-025-08306 | 21 | 52 | 30-025-08313 |
| 53 | 30-025-08317 | 22 | 54 | 30-025-08318 |
| 55 | 30-025-08319 | 23 | 58 | 30-025-24908 |
| 56 | 30-025-08438 | 24 | 62 | 30-025-25422 |
| 59 | 30-025-25389 | 25 | | |
| 60 | 30-025-25390 | 26 | | |
| 61 | 30-025-25382 | 27 | | |

Quay Valley, Inc.

#39 NEMU

QUAY VALLEY, INC.

(Conoco # 11 Payne Federal)

Section 30N, T26S, R33E

KB 3113'

EXHIBIT D

Gamma Ray - Sonic Log

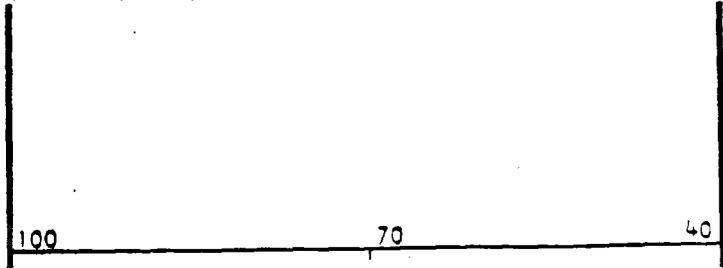
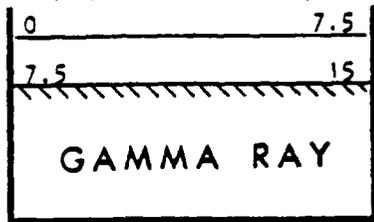
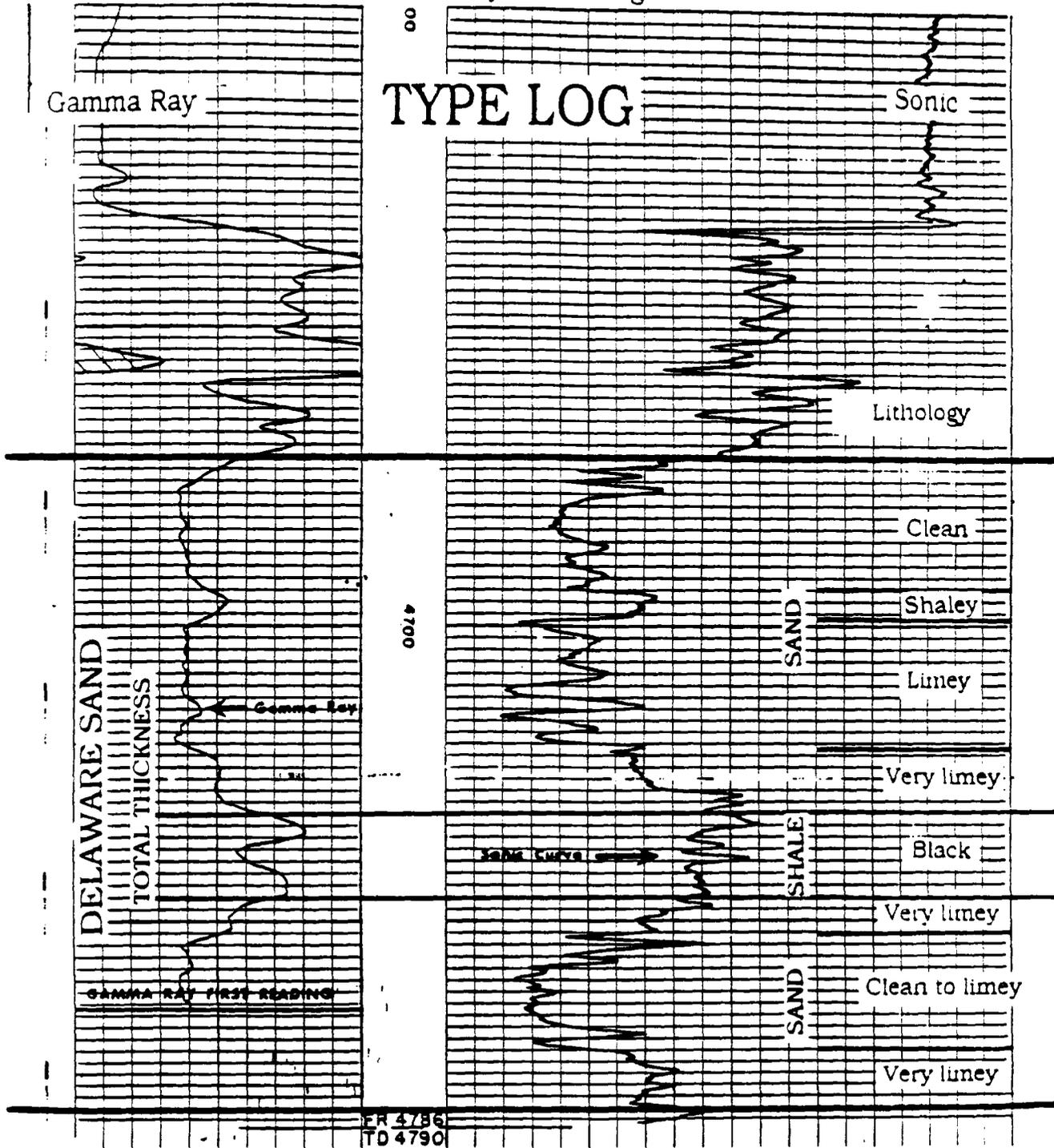


EXHIBIT D