

CASE 3626: Application of GULF  
for the dual completion of its  
R. E. COLE (NCT-A) WELL NO. 8.

Case Number

3626

Application

Transcripts.

Small Exhibits

ETC.

NEW MEXICO OIL CONSERVATION COMMISSION  
SANTA FE, NEW MEXICO

HOBBS OFFICE O.C.C. 61-56

AUG 16 3 54 PM '67

PACKER-SETTING AFFIDAVIT  
(Dual Completions)

STATE OF New Mexico )  
County of Lea ) ss

G. W. Osborn, being first duly sworn according to law, upon his oath deposes and says:

That he is of lawful age and has full knowledge of the facts herein below set out.

That he is employed by Gulf Oil Corporation in the capacity of Production Foreman and as such is its authorized agent.

That on August 14, 1967, he personally supervised the setting of a Baker Model D in Gulf Oil Corporation's  
(Make and Type of Packer) (Operator)

R. E. Cole (NCT-A) Well No. 8, located in Unit  
(lease)  
Letter K, Section 16, Township 22-S, Range 37-E, NMPM,  
Lea County, New Mexico.

That said packer was set at a subsurface depth of 7240' feet,  
said depth measurement having been furnished by Tubing Tallies.

That the purpose of setting this packer was to effect a seal in the annular space between the two strings of pipe where the packer was set so as to prevent the commingling, within the well-bore, of fluids produced from a stratum below the packer with fluids produced from a stratum above the packer. That this packer was properly set and that it did, when set, effectively and absolutely seal off the annular space between the two strings of pipe where it was set in such manner as that it prevented any movement of fluids across the packer.

Gulf Oil Corporation  
(Company)

G. W. Osborn  
(its Agent)

Subscribed and sworn to before me this the 16th day of August, AD, 1967.

Robert Lee Lipkin  
Notary Public in and for the County  
of Lea New Mexico

My Commission Expires 8-21-69

BEFORE THE OIL CONSERVATION COMMISSION  
OF THE STATE OF NEW MEXICO

IN THE MATTER OF THE HEARING  
CALLED BY THE OIL CONSERVATION  
COMMISSION OF NEW MEXICO FOR  
THE PURPOSE OF CONSIDERING:

CASE No. 3626  
Order No. R-3293

APPLICATION OF GULF OIL CORPORATION  
FOR A DUAL COMPLETION, LEA COUNTY,  
NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 a.m. on July 26, 1967, at Santa Fe, New Mexico, before Examiner Elvis A. Utz.

NOW, on this 7th day of August, 1967, the Commission, a quorum being present, having considered the testimony, the record, and the recommendations of the Examiner, and being fully advised in the premises,

FINDS:

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

(2) That the applicant, Gulf Oil Corporation, seeks authority to complete its R. E. Cole (NCT-A) Well No. 8, located in Unit K of Section 16, Township 22 South, Range 37 East, NMPM, Lea County, New Mexico, as a dual completion (conventional) to produce oil from an undesignated Silurian oil pool and an undesignated Montoya oil pool through parallel strings of 2 3/8-inch tubing, with separation of zones by a packer set at approximately 7240 feet.

(3) That the mechanics of the proposed dual completion are feasible and in accord with good conservation practices.

(4) That approval of the subject application will prevent waste and protect correlative rights.

IT IS THEREFORE ORDERED:

(1) That the applicant, Gulf Oil Corporation, is hereby authorized to complete its R. E. Cole (NCT-A) Well No. 8, located in Unit K of

-2-

CASE No. 3626

Order No. R-3293

Section 16, Township 22 South, Range 37 East, NMPM, Lea County, New Mexico, as a dual completion (conventional) to produce oil from an undesignated Silurian oil pool and an undesignated Montoya oil pool through parallel strings of tubing, with separation of zones by a packer set at approximately 7240 feet;

PROVIDED HOWEVER, that the applicant shall complete, operate, and produce said well in accordance with the provisions of Rule 112-A of the Commission Rules and Regulations insofar as said rule is not inconsistent with this order;

PROVIDED FURTHER, that the applicant shall take packer-leakage tests upon completion and annually thereafter during the Annual Gas-Oil Ratio Test Period for the undesignated Montoya pool.

(2) That jurisdiction of this cause is retained for the entry of such further orders as the Commission may deem necessary.

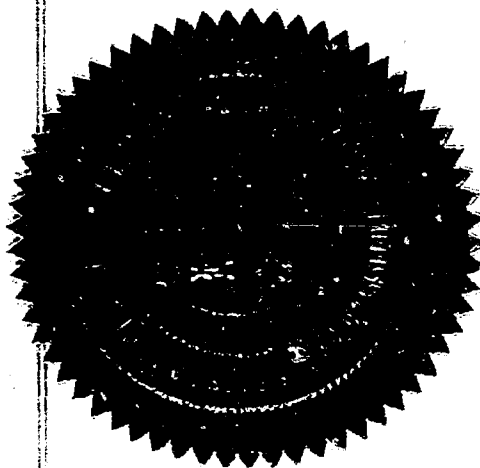
DONE at Santa Fe, New Mexico, on the day and year hereinabove designated.

STATE OF NEW MEXICO  
OIL CONSERVATION COMMISSION

  
DAVID F. CARGO, Chairman

  
GUYTON B. HAYS, Member

  
A. L. PORTER, Jr., Member & Secretary



esr/

GOVERNOR  
DAVID F. CARGO  
CHAIRMAN

State of New Mexico  
**Oil Conservation Commission**



LAND COMMISSIONER  
GUYTON B. HAYS  
MEMBER

P. O. BOX 2088  
SANTA FE

STATE GEOLOGIST  
A. L. PORTER, JR.  
SECRETARY - DIRECTOR

August 7, 1967

Mr. Bill Kastler  
Gulf Oil Corporation  
Post Office Box 1938  
Roswell, New Mexico 88201

Re: Case No. 3626  
Order No. R-3293  
Applicant:  
Gulf Oil Corporation

Dear Sir:

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

Very truly yours,

A handwritten signature in cursive script, reading "A. L. Porter, Jr.".

A. L. PORTER, Jr.  
Secretary-Director

ALP/ir

Carbon copy of order also sent to:

Hobbs OCC x

Artesia OCC       

Aztec OCC       

Other \_\_\_\_\_

Case 3626

Heard 7-26-67

Recd 8-2-67.

1. Grant Gulf request for a dual completions in ~~an~~ undesignated ~~from~~ Pools, Silurian and Montoya. The well is their R. E. Colo (NCT-A) #8, K 16-225-37E. Leas Co.

The dual will be ~~a~~ conventional with 2 7/8" tubing producing each zone & a packer set 22' to 40' between the 2 zones.  
Thudal

DOCKET: EXAMINER HEARING - WEDNESDAY - JULY 26, 1967

9 A.M. - OIL CONSERVATION COMMISSION CONFERENCE ROOM,  
STATE LAND OFFICE BUILDING - SANTA FE, NEW MEXICO

---

The following cases will be heard before Elvis A. Utz, Examiner, or  
Daniel S. Nutter, Alternate Examiner:

- CASE 3620: Application of Pubco Petroleum Corporation for an unorthodox location and a dual completion, San Juan County, New Mexico. Applicant, in the above-styled cause, seeks approval of the dual completion (conventional) of its Federal Well No. 16 to produce gas from the Blanco-Mesaverde and Basin-Dakota Pools at an unorthodox location for said pools 330 feet from the South line and 990 feet from the West line of Section 9, Township 27 North, Range 8 West, San Juan County, New Mexico.
- CASE 3621: Application of Mobil Oil Corporation for an amendment to Commission Rule 1103 A. Applicant, in the above-styled cause, seeks the amendment to Rule 1103 A to eliminate the requirement for filing Form C-103 as a notice of intention to acidize, fracture, or clean out previously completed wells.
- CASE 3622: Application of Ryder Scott Management Company for a waterflood buffer zone, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks the designation of the N/2 NE/4, SW/4 NE/4 of Section 20, Township 18 South, Range 28 East, Eddy County, New Mexico, as a waterflood buffer zone in the Artesia Pool offsetting its waterflood project in Section 21 and Cima Capitan's waterflood project in Section 17 of the same township.
- CASE 3623: Application of Agua, Inc. for salt water disposal, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to dispose of produced salt water into the Devonian formation in the interval from 11,610 feet to 11,800 feet in the Amerada Petroleum Corporation State "BTC" Well No. 2, located in Unit B of Section 35, Township 11 South, Range 33 East, Bagley Field, Lea County, New Mexico.
- CASE 3624: Application of Texas Pacific Oil Company to amend Order No. R-69-D, Lea County, New Mexico. Applicant, in the above-styled cause, seeks the amendment to the Bagley Siluro-Devonian Pool Rules promulgated by Order No. R-69-D to



CASE 3624 continued

permit the completion of more than one well on an 80-acre proration unit in said pool, the second well on a unit being located within 150 feet of the center of the NE/4 or the SW/4 of the quarter section, with the 80-acre allowable being produced from either well in any proportion.

CASE 3625: Application of Gulf Oil Corporation for a dual completion, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval for the dual completion (conventional) of its C. E. LaMunyon Well No. 11 located in Unit C of Section 27, Township 23 South, Range 37 East, Lea County, New Mexico, to produce oil from the Teague McKee and Teague Ellenburger Pools through parallel strings of tubing.

CASE 3626: Application of Gulf Oil Corporation for a dual completion, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval for the dual completion (conventional) of its R. E. Cole (NCT-A) Well No. 8 located in Unit K of Section 16, Township 22 South, Range 37 East, Lea County, New Mexico, to produce oil from undesignated Silurian and Montoya oil pools through parallel strings of tubing.

CASE 3627: Application of Gulf Oil Corporation for an unorthodox location, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to drill its R. E. Cole (NCT-A) Well No. 9 at an unorthodox oil well location 1075 feet from the South line and 2395 feet from the West line of Section 16, Township 22 South, Range 37 East, Lea County, New Mexico, said well being projected to undesignated Silurian and Montoya Oil Pools.

CASE 3628: Application of Charles E. Seed for four Ogallala oil proration units and special rules, Lea County, New Mexico. Applicant, in the above-styled cause, seeks the establishment of the SW/4 of Section 30, Township 18 South, Range 38 East, Lea County, New Mexico, as four oil proration units for the production of oil from the Ogallala formation. Applicant also seeks the establishment of special rules governing said 40-acre tracts including a maximum density of one well per 0.625-acre with a provision that wells should be drilled no nearer than 82.5 feet to the outer boundary of a 40-acre unit and no nearer than 165 feet to another well producing from the same formation, provided that an exception should be made for existing

CASE 3628 continued

wells which are not located in conformance with said spacing rules. Applicant also seeks a temporary exception to Rule 307 for each well to permit utilization of a vacuum-type drilling unit during the drilling and completion operations. Applicant also seeks authority to produce the wells at capacity even though the aggregate production from wells on a 40-acre tract exceeds the 40-acre normal unit allowable.

CASE 3629:

Application of Southern Minerals Corporation for salt water disposal and a dual completion, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to complete its State "D" Well No. 1 located in Unit E of Section 8, Township 11 South, Range 34 East, Lea County, New Mexico, in such a manner as to permit the production of oil from the Inbe-Pennsylvanian Pool and the disposal of produced salt water through the intermediate casing-production casing annulus into the Glorieta and other formations in the open hole interval from 4045 feet to 7168 feet.

# Gulf Oil Corporation

EXPLORATION AND PRODUCTION DEPARTMENT—U. S. OPERATIONS  
ROSWELL DISTRICT

W. B. Hopkins  
DISTRICT MANAGER  
M. I. Taylor  
DISTRICT PRODUCTION  
MANAGER  
F. O. Mortlock  
DISTRICT EXPLORATION  
MANAGER  
H. A. Rankin  
DISTRICT SERVICES MANAGER

June 28, 1967

P. O. Drawer 1938  
Roswell, New Mexico 88201

'67 JUN 29 AM 8 11

Case 3626

Oil Conservation Commission  
State of New Mexico  
Post Office Box 2088  
Santa Fe, New Mexico 87501

Attention: Mr. A. L. Porter, Jr.

Re: Application of Gulf Oil Corporation for a Dual Completion  
Conventional and Discovery Allowable, Undesignated Silurian  
and Montoya Oil Pools, Lea County, New Mexico

Gentlemen:

Gulf Oil Corporation respectfully requests an Examiner Hearing to consider its request for approval of a dual completion conventional and discovery allowable for the R. E. Cole (NCT-A) Well No. 8, located 2130 feet from the south line and 2130 feet from the west line of Section 16, T-22-S, R-37-E, undesignated Silurian and Montoya Oil Pools, Lea County, New Mexico.

Applicant will request approval of a discovery allowable of 35,870 barrels for the Silurian zone and 370 barrels for the Montoya zone.

Applicant proposes to dual complete the well utilizing two strings of 2-3/8" O.D. tubing with a packer to separate the Silurian and Montoya formations.

Attached is a completed Form C-107, Application For Multiple Completion, and a lease plat showing the R. E. Cole (NCT-A) Lease outlined in red, and the Well No. 8 circled and colored in red.

Respectfully submitted,

GULF OIL CORPORATION

*M. I. Taylor*

M. I. Taylor

Attachments  
JHH:sz

cc: New Mexico Oil Conservation Commission  
Post Office Box 1980  
Hobbs, New Mexico 88240



DOCKET MAILED

Date 7-14-67

NEW MEXICO OIL CONSERVATION COMMISSION  
SANTA FE, NEW MEXICO  
APPLICATION FOR MULTIPLE COMPLETION

Form C-107  
5-1-61

Case 3626

Operator Gulf Oil Corporation		County Lea	Date June 28, 1967
Address P.O. Box 1938, Roswell, New Mexico 88201		Lease R. E. Cole (NCT-A)	Well No. 8
Location of Well K	Unit 16	Township 22 South	Range 37 East

1. Has the New Mexico Oil Conservation Commission heretofore authorized the multiple completion of a well in these same pools or in the same zones within one mile of the subject well? YES \_\_\_\_\_ NO X
2. If answer is yes, identify one such instance: Order No. \_\_\_\_\_; Operator Lease, and Well No.: \_\_\_\_\_

3. The following facts are submitted:	Upper Zone	Intermediate Zone	Lower Zone
a. Name of Pool and Formation	Undesignated Silurian	-	Undesignated Montoya
b. Top and Bottom of Pay Section (Perforations)	7186' - 7210'	-	7234' - 7286'
c. Type of production (Oil or Gas)	Oil	-	Oil
d. Method of Production (Flowing or Artificial Lift)	Flow	-	Flow

4. The following are attached. (Please check YES or NO)

- |                                     |                                     |   |
|-------------------------------------|-------------------------------------|---|
| Yes                                 | No                                  |   |
| <input type="checkbox"/>            | <input checked="" type="checkbox"/> | a. Diagrammatic Sketch of the Multiple Completion, showing all casing strings, including diameters and setting depths, centralizers and/or turbolizers and location thereof, quantities used and top of cement, perforated intervals, tubing strings, including diameters and setting depth, location and type of packers and side door chokes, and such other information as may be pertinent. |
| <input checked="" type="checkbox"/> | <input type="checkbox"/>            | b. Plat showing the location of all wells on applicant's lease, all offset wells on offset leases, and the names and addresses of operators of all leases offsetting applicant's lease.   |
| <input type="checkbox"/>            | <input checked="" type="checkbox"/> | c. Waivers consenting to such multiple completion from each offset operator, or in lieu thereof, evidence that said offset operators have been furnished copies of the application.*  |
| <input type="checkbox"/>            | <input checked="" type="checkbox"/> | d. Electrical log of the well or other acceptable log with tops and bottoms of producing zones and intervals of perforation indicated thereon. (If such log is not available at the time application is filed it shall be submitted as provided by Rule 112-A.)   |

5. List all offset operators to the lease on which this well is located together with their correct mailing address.

See Attached Sheet

MAIN OFFICE 0-0

'67 JUN 29 AM 8 11

6. Were all operators listed in Item 5 above notified and furnished a copy of this application? YES \_\_\_\_\_ NO X. If answer is yes, give date of such notification \_\_\_\_\_.

District

CERTIFICATE: I, the undersigned, state that I am the Production Manager of the Gulf Oil Corporation

(company), and that I am authorized by said company to make this report; and that this report was prepared under my supervision and direction and that the facts stated therein are true, correct and complete to the best of my knowledge.

*M. J. Taylor*  
Signature

\*Should waivers from all offset operators not accompany an application for administrative approval, the New Mexico Oil Conservation Commission will hold the application for a period of twenty (20) days from date of receipt by the Commission's Santa Fe office. If, after said twenty-day period, no protest nor request for hearing is received by the Santa Fe office, the application will then be processed.

NOTE: If the proposed multiple completion will result in an unorthodox well location and/or a non-standard proration unit in one or more of the producing zones, then separate application for approval of the same should be filed simultaneously with this application.

Case 3626

OFFSET OPERATORS  
R. E. COLE (NCT-A) LEASE

Shell Oil Company  
Post Office Box 1509  
Midland, Texas 79701

Humble Oil & Refining Company  
Post Office Box 1600  
Midland, Texas 79701

Skelly Oil Company  
Post Office Box 1650  
Tulsa, Oklahoma 74102

Texas Pacific Oil Company  
Post Office Box 4067  
Midland, Texas 79701

Sohio Petroleum Company  
970 First National Office Bldg.  
Oklahoma City, Oklahoma 73102

Amerada Petroleum Corporation  
Post Office Box 2040  
Tulsa, Oklahoma 74102

Carter Foundation Production Company  
Post Office Box 1036  
Fort Worth, Texas 76101

Marathon Oil Company  
Post Office Box 220  
Hobbs, New Mexico 88240

Tidewater Oil Company  
Post Office Box 547  
Hobbs, New Mexico 88240

Cities Service Oil Company  
Post Office Box 69  
Hobbs, New Mexico 88240

Campbell & Hedrick  
Post Office Box 401  
Midland, Texas 79701

Continental Oil Company  
Post Office Box 460  
Hobbs, New Mexico 88240

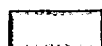
Guy R. Zachry  
Post Office Box 1685  
Hobbs, New Mexico 88240



PLAT

GULF OIL CORPORATION  
R. E. COLE (NCT-A) LEASE  
UNDESIGNATED SILURIAN AND MONTOYA OIL POOLS  
LEA COUNTY, NEW MEXICO

- LEGEND -



Pertinent Lease



Pertinent Well

Case 3626

dearnley-meier reporting service, inc.

SPECIALIZING IN: DEPOSITIONS, HEARINGS, STATEMENTS, EXPERT TESTIMONY, DAILY COPY, CONVENTIONS

1120 SIMAS BLDG. • P. O. BOX 1092 • PHONE 243-6691 • ALBUQUERQUE, NEW MEXICO



BEFORE THE  
NEW MEXICO OIL CONSERVATION COMMISSION  
Santa Fe, New Mexico  
July 26, 1967

EXAMINER HEARING

IN THE MATTER OF:

Application of Gulf Oil Corporation for  
a dual completion, Lea County, New Mexico)

Case No. 3626

BEFORE:

Elvis A. Utz, Examiner

TRANSCRIPT OF HEARING

MR. UTZ: Case 3626.

MR. HATCH: Case 3626, application of Gulf Oil Corporation for a dual completion, Lea County, New Mexico.

MR. KASTLER: May the record show that Mr. Hoover is already sworn and that his qualifications have been accepted.

MR. UTZ: The record will so show.

JOHN H. HOOVER, called as a witness by the Applicant, having been previously duly sworn, was examined and testified as follows:

DIRECT EXAMINATION

BY MR. KASTLER:

Q Mr. Hoover, what is Gulf seeking in this application?

A We are asking for approval of a dual completion conventional for R. E. Cole NCT-A Well Number 8 in the undesignated Silurian and Montoya oil pools, Lea County, New Mexico.

(Whereupon, Applicant's Exhibit Number 1 was marked for identification.)

Q Refer to Exhibit Number 1 and tell us what it shows.

A Exhibit Number 1 is a lease plat of our R. E. Cole lease. The R. E. Cole lease is outlined in red and is described as all of Section 16, Township 22 South, Range 37 East.

dearnley-meier reporting services, inc.

SPECIALIZING IN: DEPOSITIONS, HEARINGS, STATEMENTS, EXPERT TESTIMONY, DAILY COPY, CONVENTIONS

1120 SIMMS BLDG. • P.O. BOX 1092 • PHONE 243-6691 • ALBUQUERQUE, NEW MEXICO 87101  
1400 FIRST NATIONAL BANK EAST • PHONE 256-1294 • ALBUQUERQUE, NEW MEXICO 87108



dearnley-meier reporting services, inc.

SPECIALIZING IN: DEPOSITIONS, HEARINGS, STATEMENTS, EXPERT TESTIMONY, DAILY COPY, CONVENTIONS

1120 SIMMS BLDG. • P.O. BOX 1092 • PHONE 243-6691 • ALBUQUERQUE, NEW MEXICO 87101  
1400 FIRST NATIONAL BANK EAST • PHONE 256-1294 • ALBUQUERQUE, NEW MEXICO 87108

Well Number 8, which is the pertinent well in this case, is circled and colored in red and it is located 2130 feet from the south line and 2130 feet from the west line of this Section 16.

(Whereupon, Applicant's Exhibit Number 2 was marked for identification.)

Q Is Exhibit Number 2 a log of Well Number 8, and if so, what is shown?

A Yes, it is a log of Well Number 8, and we have shown thereon the top of the Silurian and the top of the Montoya. The top of the Silurian shows 7152 feet. The top of the Montoya is 7254 feet. The Silurian perforations are also shown thereon as 7186 feet to 7210 feet and the Montoya perforations are 7284 feet to 7268 feet. I have got those in reverse. That is an error on the log, I would like to correct that. The Montoya perforations are 7284 feet to 7286 feet instead of 68 feet.

(Whereupon, Applicant's Exhibit Number 3 was marked for identification.)

Q What is shown on Exhibit Number 3?

A Anyway, the Montoya perforations should be from 7284 feet to 7286 feet.

Q Now, what is shown on Exhibit 3?

A Exhibit Number 3 is a schematic diagram of our proposed installation of this dual. We have nine and five-eighths inch "OD" casing set at 1159 feet and the cement was circulated. We have seven inch casing set at 7302 feet, it was also cemented and the cement circulated.

We will have two strings of tubing, which will be two and three-eighths inch tubing. We will have a Baker Model D packer set at 7240 feet to separate the Silurian and Montoya zones. The Montoya will be produced through the lower string of tubing. The Silurian will be produced through the short string of tubing, which will be set in a Baker parallel string anchor at 7150 feet. The well was drilled to a total depth of 7302 feet and plugged back total depth, 7295 feet.

The Silurian perforations as shown on this mechanical installation is 7186 feet to 7210 feet. The Montoya perforations, 7284 feet to 7286 feet.

Q Is the proposed method of dually completing this well, more or less standard?

A Yes, sir, it is. It employs the same equipment which has been used in many dual completions.

(Whereupon, Applicant's Exhibit Number 4 was marked for identification.)

Q Please go to Exhibit Number 4 and explain what is

shown thereon.

A Exhibit Number 4 is a tabulation of the results of a fluid analysis of the Silurian and Montoya production. The upper third of Exhibit 4 is a hydrocarbon analysis by low temperature fractional distillation. We have two columns there. One of them is the Montoya and one is the Silurian. Under each zone we show mold percent and liquid percent. And, just briefly referring to what we have here, under the propane on the Montoya was .09 mold percent, and for the Silurian .27 mold percent. Of the iceobutane for the Montoya was .68 mold percent, compared to .81 mold percent for the Silurian.

Without going through all of these, you can see that the mold percent for the Montoya and Silurian is a difference. You get down to the heptanes plus, the mold percent for the Montoya was 81.48 percent; for the Silurian, it is 77.8 percent.

In the middle of the exhibit is a "ASTM" distillation of these crudes. Here again, we show the Montoya and the Silurian, the initial boiling point, on the left-hand side we show the initial boiling point, and the, the percentage that was over at the temperatures listed. For example, the initial boiling point for the Montoya was 128 degrees, the Silurian 130. Five percent was over on the Montoya at 183 degrees, whereas, only 154 degrees on the Silurian. All the

way down there is a difference in the temperature at the percentage that it went over. In the 90 percent over, the Montoya was at 691 degrees, the Silurian was 676 degrees.

To the bottom third of the exhibit, we show the sulphur content and the "API" gravity of the two crudes. For the Montoya, the sulphur was .419 percent, that is, weight percent. The Silurian was .408 percent. The "API" gravity for the Montoya was 40.4, for the Silurian, 42.4.

Q Do you know where or by whom these tests were made?

A Yes, they were made by, part of it was made by Savo Lab on the analysis, and the hydrocarbon, the distillation, and the low temperature of distillation were made by Commercial Laboratory in Houston for Gulf on request.

Q Actually they gave you the information in letter form, which was tabulated on this?

A Yes, that's correct.

MR. KASTLER: Mr. Utz, does the Examiner want copies of these original data furnished?

MR. UTZ: Oh, I don't think so, if you will stipulate that this is a copy of their report to you.

MR. KASTLER: Fine.

Q (By Mr. Kastler) Mr. Hoover, in your opinion, does the analysis indicate these to be different crudes and therefore

deanley-meier reporting service, inc.

SPECIALIZING IN: DEPOSITIONS, HEARINGS, STATEMENTS, EXPERT TESTIMONY, DAILY COPY, CONVENTIONS  
1120 SIMMS BLDG. • P.O. BOX 1092 • PHONE 243-4691 • ALBUQUERQUE, NEW MEXICO 87101  
1400 FIRST NATIONAL BANK EAST • PHONE 256-1294 • ALBUQUERQUE, NEW MEXICO 87108

two different reservoirs?

A Yes, sir, in my opinion, the crudes are different and would indicate two pools.

Q Do you have any bottom hole pressure information in these pay zones?

A Yes, we made a bottom hole pressure build-up test on these two zones and after fourteen hours, the Silurian zone was 2836 PSIG, and the Montoya zone was 2892 PSIG. These were taken at a datum of 7198 feet and 7285 feet respectively, which are the center of the perforations.

MR. UTZ: What were those datums again?

THE WITNESS: 7198 feet for the Silurian and 7285 feet for the Montoya; those are the center of the perforated zones.

Q (By Mr. Kastler) Do you have any cost figures concerning the dual completion in the two single zone wells?

A Yes, we estimate the cost to drill and dual complete as shown on our Exhibit 3, at \$150,000.00.. The estimated cost for two single zone wells would be approximately \$210,000.00, for a saving of approximately \$60,000.00.

Q Do you have anything further to add in this case?

A No, sir.

Q Is this application in the interest of conservation

and the prevention of waste?

A Yes, it is.

MR. KASTLER: I would like to, at this time, move to enter Exhibits 1,2,3 and 4 into evidence, and we rest our case.

MR. UTZ: Without objection, Exhibits 1,2,3 and 4 will be entered into the record of this case.

(Whereupon, Applicant's Exhibits 1,2,3 and 4 were admitted in evidence.)

CROSS EXAMINATION

BY MR. UTZ:

Q Mr. Hoover what is the producing ability of these zones? Would each zone be top allowable?

A The Silurian will, the Montoya is questionable. The Silurian was potentialed for 336 barrels of oil, 31 barrels of water in twenty-four hours through a fifteen-sixty-fourths inch choke, with a gas-oil ratio of 322.

The Montoya, I do not believe that a potential test has been filed, but we did make a test of the zone. It produced 113 barrels of oil, 21 barrels of water in twenty-four hours, with a tubing pressure of 525 pounds. We did not get a gas-oil ratio on that. The tubing pressure on the Silurian, although I do not have it, from other tests, would be in the

neighborhood of 700 pounds, flowing tubing pressure.

Q Have you by chance discussed this nomenclature with our Hobb's office?

A No, I have not discussed it with them, but we have just filed an application for a discovery allowable for the Silurian zone, and in talking to the personnel in here this morning, I understand that it will be set for the August State-wide, for the discovery allowable for the Silurian, and the Commission has decided that they will advertise it as the McCormick South Silurian.

Now, on the Montoya, we are not asking for discovery allowable, and to my knowledge that one, probably, has not been named, I did not check on that one, it is possible that the Commission has checked the name, but I do not know.

MR. KASTLER: Has the Montoya been discovered, never the less, in this area?

THE WITNESS: Yes, as far as we know.

MR. HATCH: The application did ask for a discovery bonus for it too, didn't it, the original one?

THE WITNESS: Yes, we did. We filed an application for dual and discovery allowables at the same time, and we did ask for it, but it is questionable if we could make it, so we decided that there is no use asking for it. It is so small

anyway that it is just a drop in a bucket. But, it wouldn't make it, so we dropped that part of it and filed our application only for the Silurian, with a note on the C109, that we were not asking for it, ~~for the Montoya~~.

MR. UTZ: Are there any other questions of the witness? He may be excused.

(Witness excused.)

MT. UTZ: The case will be taken under advisement.

dearnley-meier reporting services, inc.

SPECIALIZING IN: DEPOSITIONS, HEARINGS, STATEMENTS, EXPERT TESTIMONY, DAILY COPY, CONVENTIONS

1120 SIMMS BLDG. • P.O. BOX 1092 • PHONE 243-6691 • ALBUQUERQUE, NEW MEXICO 87101  
1400 FIRST NATIONAL BANK EAST • PHONE 256-1294 • ALBUQUERQUE, NEW MEXICO 87108



SPECIALIZING IN: DEPOSITIONS, HEARINGS, STATEMENTS, EXPERT TESTIMONY, DAILY COPY, CONVENTIONS  
1120 SIMMS BLDG. • P.O. BOX 1092 • PHONE 243-6691 • ALBUQUERQUE, NEW MEXICO 87101  
1400 FIRST NATIONAL BANK EAST • PHONE 256-1294 • ALBUQUERQUE, NEW MEXICO 87108

dearnley-meier recording

PAGE 11

STATE OF NEW MEXICO )  
COUNTY OF BERNALILLO ) SS

I, JERRY M. POTTS, Court Reporter, do hereby certify that the foregoing and attached transcript of proceedings before the New Mexico Oil Conservation Commission Examiner at Santa Fe, New Mexico, is a true and correct record to the best of my knowledge, skill and ability.

IN WITNESS WHEREOF I have affixed my hand and notarial seal this 7th day of August, 1967.

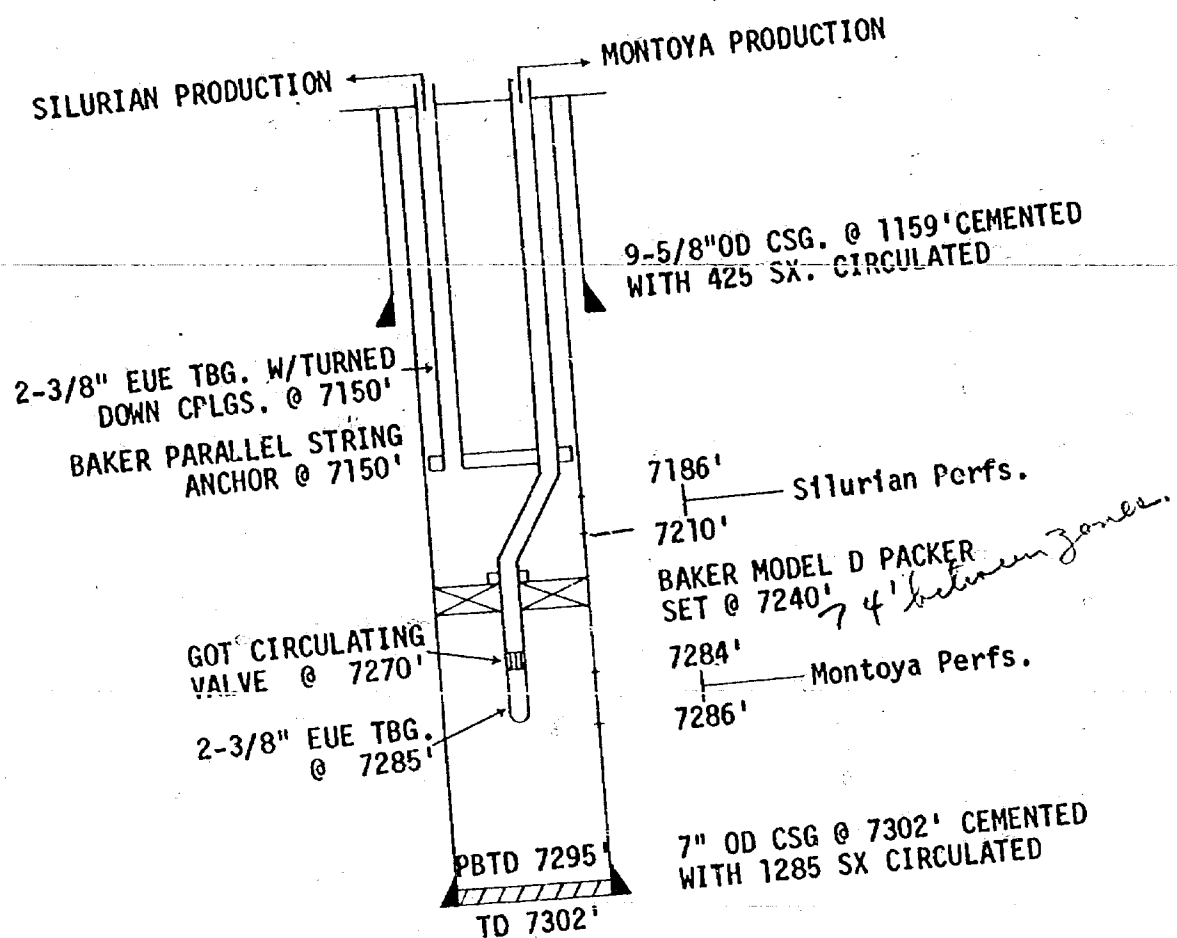
Jerry Potts  
Court Reporter and Notary Public

My Commission Expires:

7-10-70

I do hereby certify that the foregoing is a complete record of the proceedings in the Bernalillo hearing of Case No. 3626, heard on July 26, 1967.  
Shirley M. [Signature], Examiner  
New Mexico Oil Conservation Commission

JULY 26, 1967



PROPOSED MECHANICAL INSTALLATION

DUAL COMPLETION

R. E. COLE (NCT-A) NO. 8

UNDESIGNATED MONTOYA & SILURIAN OIL POOLS  
LEA COUNTY, NEW MEXICO

GULF OIL CORPORATION

BEFORE EXAMINER UTZ  
OIL CONSERVATION COMMISSION  
*Gulf* EXHIBIT NO. 43  
CASE NO. 3626

CASE NO. 3626  
EXHIBIT NO. 3

JULY 26, 1967

# *Sample 1000* *9/10/67* **HYDROCARBON ANALYSIS LOW TEMPERATURE FRACTIONAL DISTILLATION**

	Montoya		Silurian	
	Mol %	Liquid %	Mol %	Liquid %
Propane	.09	.04	.27	.11
Iso-Butane	.68	.33	.81	.43
N. Butane	2.52	1.17	4.15	2.10
Iso-Pentane	2.23	1.20	3.16	1.85
N-Pentane	3.59	1.91	3.70	2.33
Hexanes	9.41	5.69	10.83	7.15
Heptanes plus	81.48	89.66	77.08	86.03

## **ASTM DISTILLATION**

IBP	Montoya		Silurian	
	128° F		130° F	
5%	183		154	
10	222		190	
20	284		256	
30	346		342	
40	424		405	
50	507		493	
60	591		573	
70	652 (cracking)		661 (cracking)	
80	666		682	
90	691		676	

	Montoya		Silurian	
	.419%		.408%	
Total Sulfur				
API Gravity	40.4		42.4	

**BEFORE EXAMINER UTZ**

CHIEF OF DIVISION OF COMMISSION

EXHIBIT NO. 4

CASE NO. 3626

Case No. 3626

Exhibit No. 4

July 26, 1967