STATE OF NEW MEXICO

ENERGY AND MINERALS DEPARTMENT

OIL CONSERVATION DIVISION

TONEY ANAYA
GOVERNOR

October 30, 1986

POST OFFICE BOX 2088
STATE LAND OFFICE BUILDING
SANTA FE, NEW MEXICO 87501-2088
(505) 827-5800

Exxon Corporation
P. O. Box 1600
Midland, Texas 79702

Gentlemen:

In accordance with the provisions of Orders Nos. R-8062 and R-8062-A, the Oil Conservation Division is reopening Cases 8696 and 8790 in order to give all operators in the Shipp-Strawn Pool the opportunity to appear and show cause why said pool should not be developed on 40-acre spacing units instead of 80-acre units.

These cases will be heard before an examiner on November 19, 1986, in the Oil Conservation Division Conference Room, State Land Office Building, Santa Fe, New Mexico, at 8:15 a.m. A copy of the advertisement for this hearing is enclosed.

Sincerely,

Florene Davidson

Florene Davidson
OC Staff Specialist

enc.

November 15, 1985

Memo

From
Melba Carpenter
Oil Conservation Staff
Specialist

To Dick Stamets

Here is a little "input" on R-8062 as requested.

Oil Conservation Division **Hobbs, New Mexico 88240**
P.O. Box 1980

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT
OIL CONSERVATION DIVISION
HOBBS DISTRICT OFFICE

50 YEARS
1935 - 1985

TONEY ANAYA
GOVERNOR

POST OFFICE BOX 1980
HOBBS, NEW MEXICO 88240
(505) 393-6161

TO: Jerry Sexton, Supervisor
District I

FROM: Paul Kautz, Geologist
District I

DATE: November 15, 1985

RE: General Guidelines for Creation of New Pools by means other than A Standard Nomenclature Case

When a new pool is created which contains only one well, it is impossible to determine which acreage will be producible. If the well for which the new pool is created is an oil well, the acreage assigned to the new pool should be limited to a 1/4 section. This would allow any completions near the existing pool to be handled under the Standard Nomenclature procedures. If it is a gas well, the acreage assigned should be limited to one section if there are special rules allowing for 640 acres, 1/2 section if the well spacing is 320 acres, and 1/4 section if the well spacing is 160 acres. Any request for the creation of new pools larger than as stated above should notify the district geologist.

If there is no recommended name for the pool, the district geologist should be requested to select a name which would fit into the existing nomenclature or a geographical name.

If there is a recommended name for the new pool, check for conflict in usage, check to see if it geographically corresponds to nomencaltural usage, and the name should not be the name of a person. Geographical names are preferred. If there are any conflicts, the district geologist should be contacted.

Check for overlapping pool boundaries.

November 15, 1985

SUBJECT: Order R-8062

I agree that the Pennzoil Company, Vierson Weil #1 Located in Unit I of Section 4, Twonship 17 South, Range 37 East, has discovered a seperate commom source of supply in the Strawn formation. Also, I agree with the creation of a new pool for this well.

However, I have found several problems with the order creating a new pool and discovery allowable for this well:

(1) The pool was created with an area covering approximately 2240 acres with only one producing well in this 2240 acres. At this time, it cannot be determined if all of this acreage will produce. Also, the reefing trend is subject to interpretation. Many geologists believe that the trend is 90° different than the interpretation of Pennzoil. If Pennzoil's interpretation is wrong, the special pool rules should not be limited to the pool boundary as described in finding (6) of the order.

(2) Discovery allowable was incorrectly figured. This allowable is figured on the depth of the upper perforations below ground level. However, the figure used in the order is the depth of the upper perforations from the kelly bushing. The correct discovery allowable should be:

(11,138-19) X 5 = 55,595 barrels

Based on only one well, it is impossible to determine what acreage will be able to produce. Therefore, when a new pool is created with only one oil well in it, the acreage assigned to it should not exceed a quarter section.

Paul F. Kautz
Geologist

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT
OIL CONSERVATION DIVISION
HOBBS DISTRICT OFFICE

November 15, 1985

TONEY ANAYA
GOVERNOR

POST OFFICE BOX 1980
HOBBS, NEW MEXICO 88240
(505) 393-6161

To: Jerry Sexton, Supervisor, District I

From: Melba Carpenter, OC Staff Specialist

Re: Division Order No. R-8062--Suggested Revisions and/or Corrections

Paragraph 6 in Findings
Paragraph 1 in Order------Delete NW/4 NW/4 of Section 4, T-17-S, R-37-E, from East Lovington Penn Pool, and include all of Section 4 in the Shipp Strawn Pool. The horizontal limits as defined in R-8062 divide one operator's 160 acre lease in half. This may also be true in other sections. As an alternative to the above, the deletion of Paragraph 8 from the "Findings" would allow the deletion and extension to be handled on the regular nomenclature case.

Paragraph 7 in Findings---Delete

Paragrpah 8 in Findings---Delete

Under Special Rules and Regulations for the Shipp Strawn Pool

Rule 1.---Delete "within said pool limits", and replace with standard statement, "within one mile, etc."

Rule 4.---Revise to read, "Each well shall be located no closer than 330 feet to any quarter-quarter section line." (Omit the stipulation for 990 feet from any other well capable of producing from the Strawn formation. This could conceivably force one operator to drill at a center location while allowing another to drill at a 330 location)

Approve the unorthodox location for the Pennzoil Viersen Well No. 2 located 1300/S & 1650/E, Section 4, T-17-S, R-37-E.

GENERAL OBSERVATIONS

It would be helpful if points covered in the "Findings" sections of the Order were restated in the "Therefore Ordered" section when these findings are to be a part of the special pool rules.

An effective date for the new pool rules would be helpful in all orders approving special rules.

KELLAHIN and KELLAHIN
Attorneys at Law
El Patio - 117 North Guadalupe
Post Office Box 2265
Santa Fe, New Mexico 87504-2265

W. Thomas Kellahin
Karen Aubrey

Jason Kellahin
Of Counsel

Telephone 982-4285
Area Code 505

November 24, 1986

Mr. David Catanach
Oil Conservation Division
P. O. Box 2088
Santa Fe, New Mexico 87504

Re: Pennzoil Company
Shipp-Strawn Oil Pool
NMOCD Cases 8696 and 8790

Dear Mr. Catanach:

In accordance with your request at the hearing of the referenced cases held on November 19, 1986, please find enclosed three copies of the interference information documenting the interference between the Shipp #1 well and the Tipperary State "4" Well No. 1.

Please call me if you have any questions.

Very truly yours,

W. Thomas Kellahin

WTK:ca
Enc.

cc: Paul Bruce
Pennzoil Company
P. O. Box 1828
Midland, Texas 79701

2ND TEST

REPORT NO. 10076F SSDP

PAGE NO. 1

TEST DATE: 19-Dec-1985

WELL PERFORMANCE TESTING™ REPORT

A Production System Analysis (NODAL™)
Based On Model Verified™ Interpretation

FLOPETROL JOHNSTON
Schlumberger

Company: PENNZOIL COMPANY

Well: B.E. SHIPP ESTATE #1

TEST IDENTIFICATION

Test Type	SSDP slickline
Test No.	One
Formation	Strawn
Test Interval (ft)	N/A

WELL LOCATION

Field	--
County	Lea
State	New Mexico
Sec/Twn/Rng	4/ 17s/ 37e

COMPLETION CONFIGURATION

Total Depth (MD/TVD) (ft)	N/A
Casing/Liner I.D. (in)	5 1/2
Hole Size (in)	--
Perforated Interval (ft)	N/A
Shot Density (shots/ft)	N/A
Perforation Diameter (in)	N/A
Net Pay (ft)	25

TEST STRING CONFIGURATION

Tubing Length (ft)/I.D. (in)	-- / 2.441
Tubing Length (ft)/I.D. (in)	--
Packer Depth (ft)	N/A
Gauge Depth (ft)/Type	10787 / SSDP
Downhole Valve (Y/N)/Type	None

TEST CONDITION

Tbg/Wellhead Pressure (psi)	N/A
Separator Pressure (psi)	--

INTERPRETATION RESULTS

Model of Behavior	Not determined
Fluid Type Used For Analysis	Liquid
Reservoir Pressure (psi)	Greater than 2410
Transmissibility (md.ft/cp)	
Effective Permeability (md)	
Skin Factor	
Storativity Ratio	
Interporosity Flow Coeff.	
Distance to an Anomaly (ft)	
Radius of Investigation (ft)	

ROCK/FLUID/WELLBORE PROPERTIES

Oil Density (deg. API)	45
Basic Solids (%)	
Gas Gravity	0.65 (est)
GOR (scf/STB)	730
Water Cut (%)	0
Viscosity (cp)	0.39
Total Compressibility (1/psi)	1.16 E-04
Porosity (%)	10
Reservoir Temperature (F)	162
Form.Vol.Factor (bbl/STB)	1.40

MAXIMUM PRODUCTION RATE DURING TEST: --

TEST OBJECTIVES:

The objective of this test was to moniter the pressure to see if there was any detectable decrease as a result of production from nearby wells.

There are three wells completed in the same formation that are producing at the time of this test: Viersen #1 (at 1900 ft); Viersen #2 (at 2300 ft); Tipperary State #4-1 (at 1600 ft).

COMMENTS:

The results of the analysis indicates that there is some communication from at least one of the producing wells and perhaps from all three.

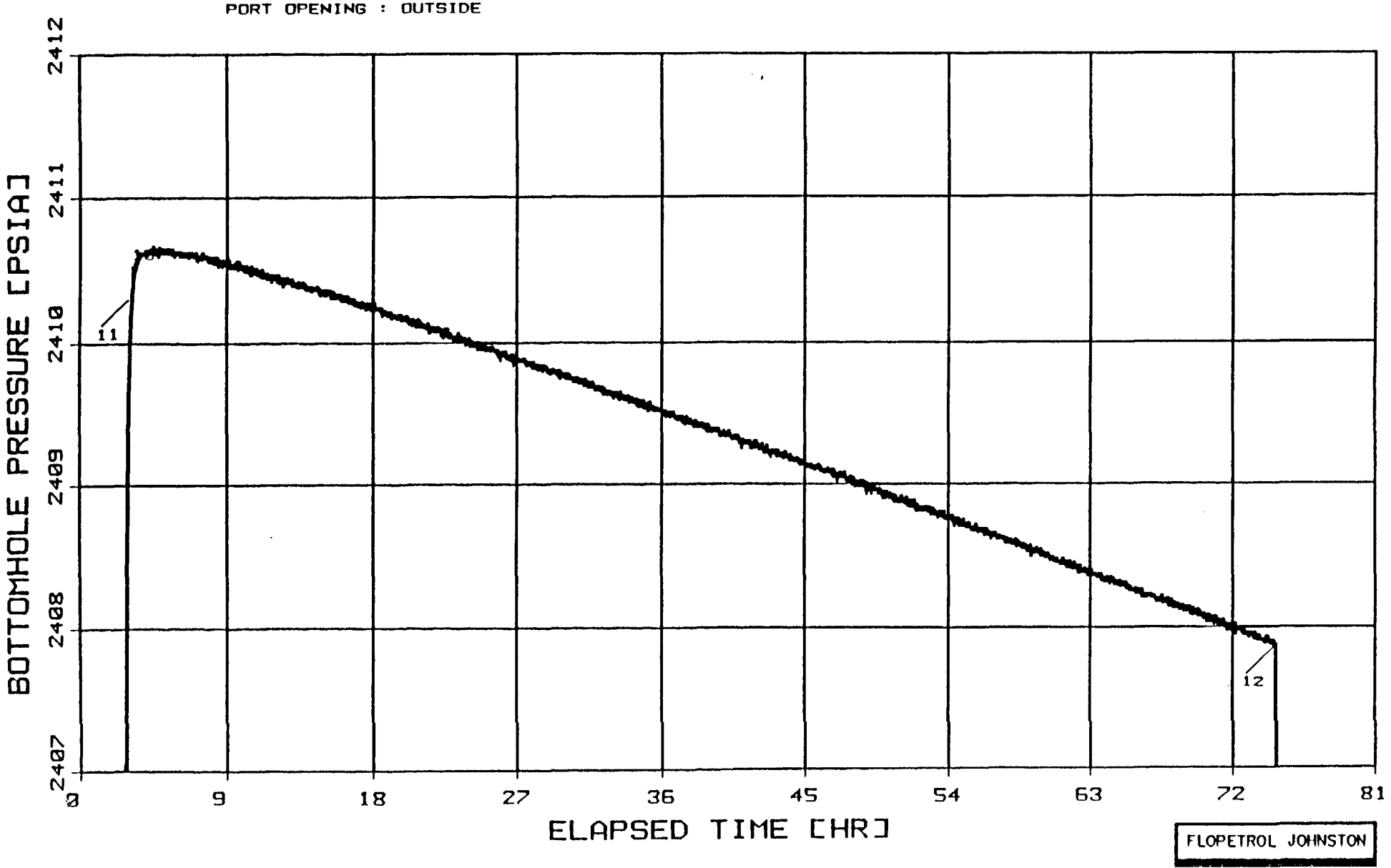
The slope of the pressure decrease during the last 63 hours of the test was 0.041 psi/hr (0.986 psi/day) which is of the same magnitude as the estimated pressure response from all three wells (test design report #10030I; total pressure drop= 1.063 psi/day, Tipperary State #4-1= 0.799 psi/day, Viersen #2= 0.213 psi/day, Viersen #1= 0.071 psi/day). This suggests that if all the assumptions are correct the well is seeing the production from the Tipperary and the Viersen #2 wells, the response from the Viersen #1 is so small as to possibly be unnoticable. To verify this communication we suggest either an extended interference test with the surface readout equipment (minimum lag time of about 10 days) or a regular (monthly) cycle of pressure buildups with the SSDP (+/- 3 days) to track the decrease in reservoir pressure in each well as a function of produced volumes.

FIGURE III

BOTTOMHOLE PRESSURE LOG

FIELD REPORT NO. 10076F
INSTRUMENT NO. 85297
DEPTH : 10787 FT
CAPACITY : 10000 PSI
PORT OPENING : OUTSIDE

COMPANY : PENNZOIL EXPL. & PROD. COMPANY
WELL : B. E. SHIPP ESTATE #1



B. E. Shipp Estate No. 1 Testing

Test Design

Just after Tipperary completed their Tipperary St. "4" No. 1 Pennzoil completed the B. E. Shipp Est. No. 1. Pennzoil suggested an interference test between these two wells but Tipperary was uncooperative. Pennzoil knew, however, that the Tipperary well was flowing at its maximum allowable rate.

A test was designed using the Viersen No. 1, Viersen No. 2 and the Tipperary No. 1 as producers. The Shipp No. 1 would be used as the observation well. Knowing the approximate withdrawal rates and reservoir parameters, the objective was to determine the magnitude of the pressure decline transients created by each of the producing wells assuming communication.

By using Earlougher's expotential integral solution type curve and knowing the surface distance between wells the following pressure declines per day were predicted:

From the Viersen No. 1	0.071 psi/day
From the Tipperary St. "4" No. 1	0.799 psi/day
From the Viersen No. 2	0.213 psi/day

Discussion and Results

After clean-up the Shipp No. 1 was shut-in for nine days. Flopetrol Johnston monitored the last 72 hours with their SSDP downhole recorder (gauge specification sheet attached). As shown in Figure V the last 63 hours of the test showed a pressure loss of 0.041 psi/hr or 0.986 psi/day. Total cost for this test was $5,637.

Interpretation of Results

Analysis indicated communication with at least the Tipperary St. "4" No. 1. The Pennzoil Shipp No. 1 initial reservoir pressure was 144 psig less than the initial Tipperary St. "4" No. 1 pressure which supported this conclusion. The Shipp No. 1 pressure was approximately the same initial pressure as that of the Viersen Nos. 1 and 2; reflecting no drainage from the Viersen Nos. 1 and 2.

At this time it was concluded that the Viersen Nos. 1 and 2 were each in their own reservoir and the Shipp No. 1 was in a larger reservoir with Tipperary St. "4" No. 1. Fairly reliable reserve estimates were then possible using this interpretation.

2nd Test

REPORT NO. 10076F SSDP

PAGE NO. 1

TEST DATE: 19-Dec-1985

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Field	--
County	Lea
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COMPLETION CONFIGURATION

Total Depth (MD/TUD) (ft)	N/A
Casing/Liner I.D. (in)	5 1/2
Hole Size (in)	--
Perforated Interval (ft)	N/A
Shot Density (shots/ft)	N/A
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Net Pay (ft)	25

TEST STRING CONFIGURATION

Tubing Length (ft)/I.D. (in)	-- / 2.441
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TEST CONDITION

Tbg/Wellhead Pressure (psi)	N/A
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Model of Behavior	Not determined
Fluid Type Used For Analysis	Liquid
Reservoir Pressure (psi)	Greater than 2410
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COMPANY : PENNZOIL EXPL. & PROD. COMPANY
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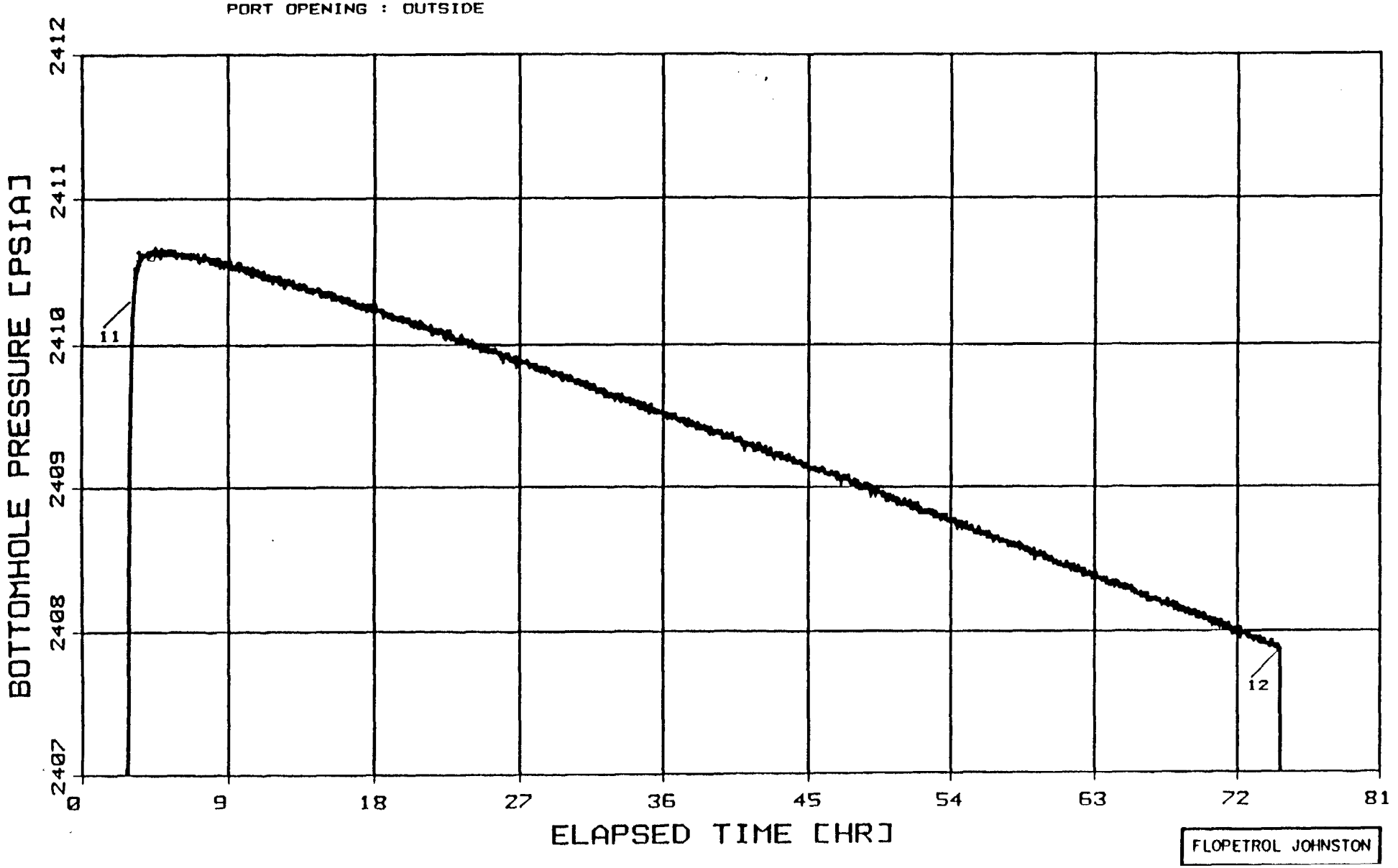

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CAMPBELL & BLACK, P.A.
LAWYERS

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December 3, 1985

R. L. Stamets, Director
Oil Conservation Division
New Mexico Department of
Energy and Minerals
Post Office Box 2088
Santa Fe, New Mexico 87504-2088

Re: Oil Conservation Division Case 8790: Application of Oil Conservation Division on its own Motion to Amend Division Order No. R-8062 in the Special Pool Rules for the Horizontal Limits of the Shipp-Strawn Pool, and to Contract the East Lovington-Pennsylvanian Pool, Lea County, New Mexico.

Dear Mr. Stamets:

Pursuant to our conversation of November 26, 1985, I am writing this letter to advise the Division that Tipperary Oil and Gas Corporation and Chevron U.S.A., Inc. support the application of the Division in the above-referenced case.

As you are aware, Tipperary and Chevron each hold leases in the W/2 of Section 4, Township 17 South, Range 37 East, N.M.P.M., Lea County, New Mexico. Under Order R-8062, only part of each of these leases has been included in the newly created Shipp-Strawn Pool. Since the rules for this pool are limited to the existing pool boundary, part of each lease is under 40-acre spacing rules and part under 80-acre spacing rules in the Strawn formation. The extension of the pool to include all the NW/4 of Section 4 and the deletion of the provisions which limit the effect of the special rules to the pool boundaries will eliminate the problems that Order No. R-8062 created for Tipperary and Chevron, and will provide for the orderly development of the Strawn oil pool in this area.

Tipperary and Chevron also support the Division's proposal to require well locations in the Shipp-Strawn Pool within 150 feet of the center of a quarter-quarter section.

Your assistance in resolving the problems with the existing Special Pool Rules for the Shipp-Strawn Pool is appreciated.

Very truly yours,

William F. Carr

WFC/cv

cc: Mr. Mark Martin
Tipperary Oil and Gas Corporation
Box 3179
Midland, Texas 79702

cc: Chevron, U.S.A.
Post Office Box 1150
Midland, Texas 79702

cc: W. Thomas Kellahin, Esq.
Kellahin & Kellahin
Post Office Box 2265
Santa Fe, New Mexico 87504-2265

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT
OIL CONSERVATION DIVISION

TONEY ANAYA
GOVERNOR

POST OFFICE BOX 2088
STATE LAND OFFICE BUILDING
SANTA FE, NEW MEXICO 87501
(505) 827-5800

December 19, 1996

Mr. Thomas Bellahin
Bellahin & Bellahin
Attorneys at Law
Post Office Box 2265
Santa Fe, New Mexico

Re: CASE NO. 8696 and 8790
ORDER NO. R-8062-B

Applicant:

OCD (Pennzoil Company)

Dear Sir:

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

Sincerely,

R. L. STAMETS
Director

RLS/fd

Copy of order also sent to:

Hobbs OCD x
Artesia OCD x
Aztec OCD

Other James Bruce, Peter Ives