CASE 3140: Application of CAULKINS for a non-standard location and a ______dual completion, Rio Arriba County

APPliCATION,
TYANSCHIPTS,
SMALL Exhibits
ETC.

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. 3140 Order No. R-2811

APPLICATION OF CAULKINS OIL COMPANY FOR A NON-STANDARD LOCATION AND A DUAL COMPLETION, RIO ARRIBA COUNTY, NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 o'clock a.m. on November 12, 1964, at Santa Fe, New Mexico, before Examiner Elvis A. Utz.

NOW, on this 24th day of November, 1964, 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, Caulkins Oil Company, seeks an exception to the Special Rules and Regulations governing the South Blanco-Pictured Cliffs Gas Pool and the Special Rules and Regulations governing the Basin-Dakota Gas Pool to complete its Breech B Well No. PD-123 at an unorthodox location 700 feet from the North line and 1800 feet from the East line of Section 7, Township 26 North, Range 6 West, NMPM, Rio Arriba County, New Mexico.
- (3) That the applicant also seeks authority to complete the subject well as a dual completion (conventional) to produce gas from the South Blanco-Pictured Cliffs Gas Pool through 1 1/4-inch tubing and to produce gas from the Basin-Dakota Gas Pool

-2-CASE No. 3140 Order No. R-2811

through 2 3/8-inch tubing, with separation of zones by a packer set at approximately 6385 feet.

- (4) That the subject well was completed as a water injection well in the Tocito formation pursuant to the provisions of Order No. R-1191-B but has not been an effective injection well.
- (5) That the mechanics of the proposed dual completion are feasible and in accord with good conservation practices.
- (6) That approval of the subject application will prevent the drilling of unnacessary wells and will otherwise prevent waste and protect correlative rights.

IT IS THEREFORE ORDERED:

- (1) That the applicant, Caulkins Oil Company, is hereby granted an exception to the Special Rules and Regulations governing the South Blanco-Pictured Cliffs Gas Pool and the Special Rules and Regulations governing the Basin-Dakota Gas Pool to complete its Breech B Well No. PD-123 at an unorthodox location 700 feet from the North line and 1800 feet from the East line of Section 7, Township 26 North, Range 6 West, NMPM, Rio Arriba County, New Mexico.
- (2) That the applicant is hereby authorized to complete the subject well as a dual completion (conventional) to produce gas from the South Blanco-Pictured Cliffs Gas Pool through 1 1/4-inch tubing and to produce gas from the Basin-Dakota Gas Pool through 2 3/8-inch tubing, with separation of zones by a packer set at approximately 6385 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 packerleakage tests upon completion and annually thereafter during the Deliverability Test Period for the Basin-Dakota Gas Pool. -3-CASE No. 3140 Order No. R-2811

(3) 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 herein-above designated.

STATE OF NEW MEXICO OIL CONSERVATION COMMISSION

JACK M. CAMPBELL, Chairman

E. S. WALKER, Member

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

GOVERNOR JACK M. CAMPBELL CHAIRMAN

State of New Mexico

Bil Conserbation Commission

LAND COMMISSIONER

E. S. JOHNNY WALKER

MEMBER



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

November 24, 1964

Mr. Jason Kellahin
Kellahin & Fox
Attorneys at Law
Post Office Box 1769
Santa Fe, New Mexico

Re: CASE NO. 3140
ORDER NO. R-2811
APPLICANT CAULKINS

Dear Sir:

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

Very truly yours,

A. L. PORTER, Jr. Secretary-Director

11/					
Carbon copy	of order	also	sent	tos	
Hobbs OCC	<u> </u>				
Artesia OCC_					
Aztec OCC	×				
OTHER	······································	To -10, -10, -10			

DRAFT
JMD/esr

(2)

BEFORE THE OIL CONSERVATION COMMISSION OF THE STATE OF NEW MEXICO

	\mathbf{CF}	Subj.		
IN THE MATTER OF THE HEARING				
CALLED BY THE OIL CONSERVATION				
COMMISSION OF NEW MEXICO FOR				
THE PURPOSE OF CONSIDERING:				
V		CASI	E No.	3140
v ,	8 1	•		

Order No. R- 38//

APPLICATION OF CAULKINS OIL COMPANY FOR A NON-STANDARD LOCATION AND A DUAL COMPLETION, RIO ARRIBA COUNTY, NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 o'clock a.m. on November 12, 1964, at Santa Fe, New Mexico, before Examiner BANKANX SXX MAKKEX XXX Elvis A. Utz.

NOW, on this day of November, 1964, 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.
- exception to the Special Rules and Regulations governing the

 South Blanco-Pictured Cliff Pool to drift its Breech B Well No.

 PD-123 at an unorthodox South Blanco-Pictured Cliffs location

 700 feet from the North line and 1800 feet from the East line of Section 7, Township 26 North, Range 6 West, NMPM, Rio Arriba

 County, New Mexico.
- (3) That the applicant also seeks authority to complete the subject well as a dual completion (conventional) to produce

and the special late a legalation governing the Brain-Alberta per Box Box

gas from the South Blanco-Pictured Cliffs Pool through 1 1/4-inch tubing and to produce gas from the Basin-Dakota Gas Pool through 2 3/8-inch tubing, with separation of zones by a packer set at approximately 4 381 feet.

- (4) that the subject well was Completed as a water injection well in the Societo formation pursuant to the gravisions of Order Mo R-1191-B but has not formation to be an affective injection well.
- (5) Hat the mechanics of the proposed dual completion on feasible and in second with good conservation practices.
- (6) Hat approval of the subject application will prevent the drilling of unnecessary wells and will otherwise prevent waste and protect correlative rights.

during the Kleinschitz Test Period for the Bain-Walter

(3) 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.

784 Oct 16 A

BEFORE THE OIL CONSERVATION COMMISSION OF NEW MEXICO

IN THE MATTER OF THE APPLICATION OF CAULKINS OIL COMPANY FOR APPROVAL OF DUAL COMPLETION OF ITS BREECH B WELL NO. PD-123 AND ITS BREECH C WELL NO. D-144 AND FOR UNORTHODOX WELL LOCATIONS IN THE PICTURED CLIFFS AND THE SOUTH BLANCO-TOCITO POOLS, RIO ARRIBA COUNTY, NEW MEXICO.

J. 6. 12 3/7 0

APPLICATION

Comes now Caulkins Oil Company and applies to the Oil Conservation Commission of New Mexico for the following:

- 1. Approval of the dual completion of its Breech B Well No. PD-123, located 700 feet from the North line and 1,800 feet from the East line of Section 7, Township 26 North, Range 6 West, N.M.P.M., for production from the South Blanco-Pictured Cliffs Gas Pool and the Basin Dakota Gas Pool, Rio Arriba County, New Mexico.
- 2. Approval of an unorthodox well location for the Breech B Well No. PD-123 for production from the South Blanco-Pictured Cliffs Gas Pool at the above-described location.
- 3. Approval of the dual completion of its Breech C Well No. D-144, located 990 feet from the North line and 1,090 feet from the East line of Section 12, Township 26 North, Range 6 West, N.M.P.M., for production from the Basin Dakota Gas Pool, and the South Blanco-Tocito Pool, Rio Arriba County, New Mexico.
- 4. Approval of an unorthodox well location for the Breech C Well No. D-144 for production from the South Blanco-Tocito Pool at the above described location.

Posts & shitch regarded
plats & shitch regarded
on 78" PD-123
for Branch B' PD-123

0/12/0 3/10 Submitted herewith are plats showing the area involved in this application, together with schematic diagrams of the proposed dual completions.

Approval of this application is in the interests of conservation and the prevention of waste.

WHEREFORE, applicant pray that this application be set for hearing before the Commission's duly appointed examiner, and that after notice and hearing as required by law, the Commission enter its order approving the application of Caulkins Oil Company in this case.

Respectfully submitted, CAULKINS OIL COMPANY

By Kellahin & Fox
P. O. Box 1769
Santa Fe, New Mexico

ATTORNEYS FOR APPLICANT

ROBERT E. FOX

KELLAHIN AND FOX ATTORNEYS AT LAW 54% EAST SAN FRANCISCO STREET POST OFFICE BOX 1713 1769 SANTA FE, NEW MEXICO

S. क्रिड-5331 वृद्धिः-3336

CO

October 15, 1964

Care 3140

Oil Conservation Commission of New Mexico P. O. Box 2088 Santa Fe, New Mexico

Gentlemen:

Enclosed find three copies of application of Caulkins Oil Company for unorthodox well locations and dual completions, as more fully set out in application, for filing. The application is being forwarded at this time so that it may be advertised in time for the November 12 examiner hearing.

The exhibits referred to in the application are not available at this time, however, they will be forwarded as soon as received.

Very truly yours,

KELLAHIN & FOX

foron W. Killahi Jason W. Kellahin

JWK:mas enclosures

cc/enclosures: Mr. Art Holland Mr. Frank Gray

DOCKET MAILED

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. 1420 Order No. R-1191-B

APPLICATION OF CAULKINS OIL
COMPANY AND EL PASO NATURAL GAS
PRODUCTS COMPANY FOR AN ORDER
AMENDING IN CERTAIN PARTICULARS
THE SPECIAL RULES GOVERNING THE
SOUTH BLANCO-TOCITO WATER
INJECTION PROJECT IN RIO ARRIBA
COUNTY, NEW MEXICO, AS SET FORTH
IN ORDER R-1191, FOR PERMISSION
TO CONVERT TWO WELLS IN SAID
PROJECT TO WATER INJECTION, FOR
PERMISSION TO DUALLY COMPLETE A
WELL IN SAID PROJECT AS A
PRODUCING-INJECTION WELL AND
FOR APPROVAL OF AN UNORTHODOX LOCATION FOR SAID WELL

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 o'clock a.m. on April 8, 1959, at Santa Fe, New Mexico, before E. J. Fischer, Examiner duly appointed by the New Mexico Oil Conservation Commission in accordance with Rule 1214 of the Commission Rules and Regulations, and Order No. R-1191-A was entered denying the application in one respect, whereupon this case came on for hearing de novo at 9 o'clock a.m. on July 15, 1959.

NOW, on this 3rd day of August, 1959, the Commission, a quorum being present, having considered the application and the evidence adduced, 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 in the subject hearing de novo, Caulkins Oil Company, is the operator of Well No. T-123 located in the NW/4 NE/4 of Section 7, Township 26 North, Range 6 West, NMPM, Rio Arriba County, New Mexico.

-2-Case No. 1420 Order No. R-1191-B

- (3) That the applicant in the subject hearing de novo, Caulkins Oil Company, has requested that only that portion of Order No. R-1191-A dealing with the proposed dual completion of its said Caulkins Well No. T-123 be considered at this hearing.
- (4) That the applicant seeks permission to deepen the said Caulkins Well No. T-123 and to dually complete it in such a manner as to permit water injection into the Tocito formation and the production of gas from the Dakota Producing Interval through parallel strings of 2-3/8 inch EUE tubing.
- (5) That the maximum expected surface pressure which will be required for water injection into the Tocito formation, plus the hydrostatic head of the water column, is such as to constitute a hazard to the known gas reserves in the Dakota Producing Interval.
- (6) That in order to ensure that the Dakota Producing Interval is not damaged, permission to dually complete the aforesaid Caulkins Well No. T-123 in such a manner as to permit the injection of water into the Tocito formation and the production of gas from the Dakota Producing Interval should, under the Commission's obligation to prevent the waste of oil or gas, be denied.
- (7) That permission should be granted, at the operator's option, to dually complete the said Caulkins Well No. T-123 in such a manner as to permit the production of oil from the Tocito formation and the production of gas from the Dakota Producing Interval through parallel strings of tubing, or to utilize said well as a water injection well in the Tocito formation without deepening it to produce from the Dakota Producing Interval, or to singly complete the well to produce gas from the Dakota Producing Interval and neither produce from nor inject into the Tocito formation.
- (8) That the unorthodox gas well location of the said Caulkins Well No. T-123 should be approved inasmuch as the operator may choose one of the above options to produce the well from the Dakota Producing Interval.

IT IS THEREFORE ORDERED:

(1) That the application of Caulkins Oil Company for permission to deepen its Well No. T-123, located in the NW/4 NE/4 of Section 7, Township 26 North, Range 6 West, NMPM, Rio Arriba County, New Mexico, and to complete said well in such a manner as to permit the injection of water into the Tocito formation and the production of gas from the Dakota Producing Interval through parallel strings of tubing be and the same is hereby denied.

-3-Case No. 1420 Order No. R-1191-B

- (2) That the applicant be and the same is hereby authorized to complete the said Caulkins Well No. T-123 in accordance with any one of the following procedures:
- (a) Complete the well as a single completion in the Tocito formation, utilizing it as a water injection well in said Tocito formation or as a producing well in said formation.
- (b) Complete the well as a single completion in the Dakota Producing Interval, utilizing said well for the production of gas from the Dakota Producing Interval.
- (c) Complete the well as a dual completion, utilizing said well to produce oil from the Tocito formation and to produce gas from the Dakota Producing Interval.
- (3) That an unorthodox gas well location for said Caulkins Well No. T-123 in the Dakota Producing Interval be and the same is hereby approved.

DONE at Santa Fe, New Mexico, on the day and year herein-above designated.

STATE OF NEW MEXICO OIL CONSERVATION COMMISSION

JOHN BURROUGHS, Chairman

MURRAY E. MORGAN, Member

SEAL

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

vem/

DOCKET: EXAMINER HEARING - THURSDAY - NOVEMBER 12, 1964

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

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

CASE 3129: (Continued from the October 13, 1964 Examiner Hearing).

Application of Shell Oil Company for a unit agreement, Les County,
New Mexico. Applicant, in the above-styled cause, seeks approval
of the West Wilson Deep Unit Area comprising 3360 acres, more or
less, of State and Fee lands in Township 21 South, Range 34 East,
Lea County, New Mexico.

CASE 3138: In the matter of the hearing called by the Oil Conservation Commission upon its own motion to consider exempting certain oil pools in Lea, Chaves, Roosevelt and Eddy Counties, New Mexico, from the gas-oil ratio testing requirements of Rule 301 of the Commission Rules and Regulations. The following pools will be considered for exemption:

ARTESIA DISTRICT

Atoka-San Andres Atoka-Grayburg Benson-Yates, East Bitter Lake San Andres, South Bitter Laws-San Andres, West Brown, Q. Gbr. Brushy Draw-Delaware Canyon-Wolfcamp Carlsbad-Delaware Cass Draw-Delaware Cave (Gbr.) Case-San Andres, West Cedar Lake-Cisco Chisum-Devonian Corral Canyon-Delaware Cotton Draw-Brushy Canyon Coyote-Queen Dark Canyon-Delaware Dayton-Abo Dayton-Grayburg, East Dayton-San Andres, West Diablo-San Andres Dog Canyon-Grayburg Dos Hermanos, Yates-Seven Rivers Eagle Creek-San Andres Empire Paddock Empire-Yates-Seven Rivers, E. Four Mile Draw-San Andres Fren Paddock Hackberry-Seven Rivers Hackberry-Yates, North L. E. Ranch-San Andres

Leo-Queen-Grayburg, South Leslie Spring-San Andres Linda-San Andres Loco Hills-San Andres, South Logan Draw-San Andres Malaga-Delaware McMillan Seven Rivers-Queen, East Millman-Seven Rivers, East Palmillo-Seven Rivers Parallel-Delaware Pecos-Delaware Pecos-San Andres Penasco-San Andres Penasco-Wolfcamp Quahada Ridge-Delaware Red Hills- Yates Red Lake-Queen-Grayburg, East Red Lake-Seven Rivers, South Remuda-Wolfcamp Round Tank-San Andres Saladar-Yates Sand Tank-Queen Shugart-Bone Springs Shugart-Wolfcamp

Square Lake Grayburg-San Andres, North Sulphate Draw-Delaware
Twin Lakes-Devonian
U. S. Delaware
Welch-Delaware
White Ranch Siluro-Devonian
White Ranch-Devonian, West
Windmill-San Andres

HOBBS DISTRICT

Baish-Wolfcamp, North Baum-Wolfcamp Bishop Canyon-Queen Bowers-Seven Rivers Caprock-Wolfcamp, East CLR-San Andres Corbin-Queen, South Corbin-Yates Crossroads-Mississippian Crossroads-San Andres, West Dollarhide-Queen Dublin-Devonian Echols-Devonian, East Echols-Devonian, North Edson-Pennsylvanian Elliott-Abo Field Ranch-Wolfcamp Gladiola-Wolfcamp, South Hume-Queen

Hume-Queen, West Jenkins-Devonian Jenkins-San Andres King-Wolfcamp Lea-Yates Littman-San Andres Lone-Wolfcamp Lovington-San Andres Lovington-San Andres, West Lynch-Yates, Middle Pearl-Pennsylvanian Querecho Plains-Bone Springs Querecho Plains-Delaware Querecho Plains-Yates Teague-Devonian Teague-Ellenburger Teague Simpson Warren-Abo Williams-Pennsylvanian, North Young-San Andres

CASE 3139: Application of Shell Oil Company for a dual completion and a non-standard gas proration unit, Lea County, New Mexico. Applicant, in the abovestyled cause, seeks approval of a 160-acre non-standard gas proration unit comprising the S/2 SW/4, NE/4 SW/4, and SW/4 SE/4 of Section 3, Township 21 South, Range 37 East, Tubb Gas Pool, Lea County, New Mexico, to be dedicated to its Livingston Well No. 7 located in Unit V of said Section 3. Applicant further seeks approval of said well as a dual completion (conventional) to produce oil from the Drinkard Pool through 2-3/8 inch tubing and to produce gas from the Tubb Gas Pool through the casing-tubing annulus.

CASE 3140;

Application of Caulkins Oil Company for a non-standard location and a dual completion, Rio Arriba County, New Mexico. Applicant, in the abovestyled cause, seeks approval of an unorthodox location for its Breech B Well No. PD-123 to be located 700 feet from the North line and 1800 feet from the East line of Section 7, Township 26 North, Range 6 West, Rio Arriba County, New Mexico. Applicant further seeks authority to complete said well as a dual completion (conventional) to produce gas from the South Blanco-Pictured Cliffs Pool through 1-1/4 inch tubing and to produce gas from the Basin-Dakota Gas Pool through 2-3/8 inch tubing.

CASE 3141: Application of Caulkins Oil Company for a non-standard location and a dual completion, Rio Arriba County, New Mexico. Applicant, in the abovestyled cause, seeks approval of an unorthodox location for its Breech C Well No. D-144 to be located 990 feet from the North line and 1,090 feet from the East line of Section 12, Township 26 North, Range 6 West, Rio Arriba County, New Mexico. Applicant further seeks authority to complete said well as a dual completion (conventional) to produce oil from the South Blanco-Tocito Pool through 2-3/8 inch tubing and to produce gas from the Basin-Dakota Gas Pool through 1-1/4 inch tubing.

- 3 - November 12 Examiner Hearing

- CASE 3142: Application of N. B. Hunt for a non-standard proration unit, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval of a 280-acre non-standard gas proration unit comprising the SW/4, W/2 SE/4, and SE/4 SE/4 of Section 21, Township 21 South, Range 37 East, Eumont Gas Pool, Lea County, New Mexico, to be dedicated to his Wantz Well No. 2 located in Unit L of said Section 21. In the event all of said acreage is not approved for said Well No. 2, applicant seeks approval of another non-standard unit comprising the remaining acreage to be dedicated to his Wantz Well No. 1 in Unit A of said Section 21.
- CASE 3143: Application of Texaco Inc. for a dual completion, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to complete its H. H. Harris Well No. 2 located in Unit O of Section 35, Township 12 South, Range 38 East, Lea County, New Mexico, as a dual completion (combination) to produce oil from the Bronco Wolfcamp Pool through 2-7/8 inch casing and to produce oil from the Bronco Siluro-Devonian Pool through tubing in a parallel string of 3-1/2 inch casing cememted in a common well bore.
- CASE 3144: Application of Texaco Inc. for force-pooling, Lea County, New Mexico. Applicant, in the above-styled cause, seeks an order force-pooling all mineral interests in the Drinkard Pool underlying the SE/4 of the SW/4 of Section 17, Township 22 South, Range 38 East, Lea County, New Mexico.
- CASE 3145: Application of Sunray DX Oil Company for a dual completion and salt water disposal, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to complete its State "AS" Well No. 1 located in Unit G of Section 29, Township 11 South, Range 33 East, Lea County, New Mexico, as a dual completion to produce oil from the Pennsylvanian formation through tubing and to dispose of produced salt water down the production-intermediate casing annulus into the San Andres, Glorieta, and Tubb formations from 3840 feet to 8600 feet.
- CASE 2660: (Reopened and continued from the October 28th Examiner Hearing)
 In the matter of Case No. 2660 being reopened pursuant to the provisions of Order No. R-2348-A, which continued the original order establishing 80-acre proration units for the Middle Lane-Pennsylvanian Pool, Lea County, New Mexico, for an additional year. All interested parties may appear and show cause why said pool should not be developed on 40-acre proration units.

El Paso Natural Gas Company

El Paso, Texas

October 27, 1964

POST OFFICE BOX 980 FARMINGTON, NEW MEXICO

Caulkins Oil Company P. O. Box 780 Farmington, New Mexico

Attn: Mr. Frank O. Gray

Re: Caulkins Oil Company Breech "B" Well No. PD-123

Gentlemen:

El Paso Natural Gas Company has no objections to your unorthodox Pictured Cliffs completion in the above-captioned well.

It is our understanding that this well is located 700 feet from the North line and 1800 feet from the East line of Section 7, Township 27 North, Range 6 West, Rio Arriba County, New Mexico.

Very truly yours,

Area Manager

Land & Geological Department

DNC:ed

Care 3/40 Kland 11-82-64 Rec. 11-13-64

Shout Coulkins a dual completion (consentional) for their Breach'B' PD-#123, 766/N, 1800/F lines sec. 7-26N-6Woin the .5. Blanco-Pictured Cliff. and Basim-Hakota Las Pools.

Also grant as now led location for both Zones. This is an old hole worked over & should be granted on that basis.

This Ce. L.

Water flood 1141-B

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

dearnley-meier reparting

. P. O. BOX 1092 . PHONE 243-6691 . ALSUQUERQUE, NEW MEXICO

1120 SIMMS BLDG.

BEFORE THE
NEW MEXICO OIL CONSERVATION COMMISSION
Santa Fe, New Mexico
November 12, 1964

EXAMINER HEARING

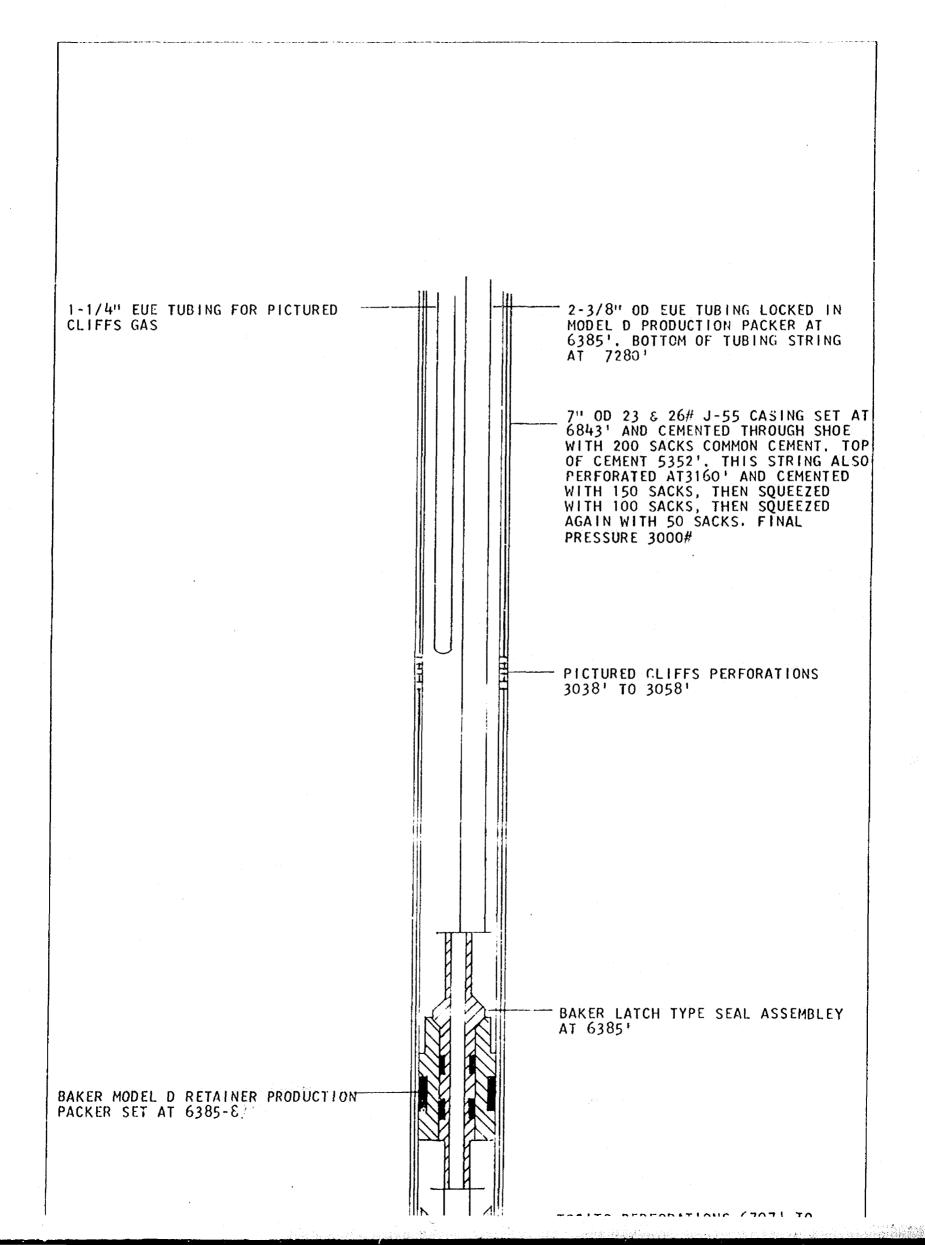
IN THE MATTER OF: Application of Caulkins Oil Company for a non-standard location and a dual completion, Rio Arriba County, New Mexico.
Applicant, in the above-styled cause, seeks approval of an unorthodox location for its Breech B Well No. PD-123 to be located 700 feet from the North line and 1800 feet from the East line of Section 7, Township 26 North, Range 6 West, Rio Arriba County, New Mexico.
Applicant further seeks authority to complete said well as a dual completion (conventional) to produce gas from the South Blanco-Pictured Cliffs Pool through 1 1/4 inch tubing and to produce gas from the Basin-Dakota Gas Pool through 2 3/8 inch tubing.

Case No. 3140

BEFORE: ELVIS A. UTZ, EXAMINER

TRANSCRIPT OF HEARING





A FULL STRING OF 4-1/2" CASING WAS RUN
TO 7570' WITH ROTO SCRATCHERS FROM 7270'
TO 7570' AND CENTRALIZERS AT 7568',
7475', 7381' AND 7287'. AFTER FRACTURING
THE DAKOTA ZONE, THE 4-1/2" CASING WAS
CUT AND PULLED FROM 6409' LEAVING A
LINER 6409' TO 7570'

10CITO PERFURATIONS 0/9/ 10
6812 WERE SQUEEZE CEMENTED WITH
100 SACKS, THEN SQUEEZED AGAIN
WITH 100 SACKS. FINAL PRESSURE
3000#

4-1/2" 11.6# LINER 6409' TO 7570' CEMENTED FROM 7570' TO 6490' WITH 110 SACKS, TOP OF CEMENT 6490'

DAKOTA PERFORATIONS 72841 TO 7504

TD 7570' PBTD 7530'

OIL CONSERVATION COMMISSION

EXHIBIT NO. ______

CASE NO. _____ 3/46

PICTURED CLIFFS-DAKOTA DUAL COMPLETION CAULKINS OIL COMPANY

BREECH "B" PD-123

NW NE SECTION 7-26N-6W

RIO ARRIBA COUNTY, NEW MEXICO

ž

BOX 1092 . PHONE 243-6691 . ALBUQUERQUE

MR. UTZ: The next case will be Case 3140.

MR. DURRETT: Application of Caulkins Oil Company for a non-standard location and a dual completion, Rio Arriba County, New Mexico.

MR. KELLAHIN: Jason Kellahin, Kellahin and Fox, appearing for the Applicant. I have one witness, Mr. Frank Gray, I would like to have sworn, please.

(Witness sworn.)

(Whereupon, Applicant's Exhibits 1, 2 & 3 marked for identification.

FRANK GRAY, called as a witness, having been first duly sworn, was examined and testified as follows:

DIRECT EXAMINATION

BY MR. KELLAHIN:

- A Would you state your name, please?
- A Frank Gray.
- Q By whom are you employed and in what position?
- A I am employed by Caulkins Oil Company as a Superintendant in the Farmington, New Mexico area.
- Q Have you ever testified before the Oil Conservation Commission and made your qualifications a matter of record?
 - A Yes, I have.

MR. KELLAHIN: Are the witness's qualifications acceptable?



MR. UTZ: Yes, sir, they are.

- Q (By Mr. Kellahin) Mr. Gray, are you familiar with the application of Caulkins Oil Company in Case 3140?
 - A Yes, sir.
- Q Would you state briefly what is proposed by Caulkins in this application?

A We seek approval of an unorthodox location for

Pictured Cliff production in Qur PD-123; it is on the Breech

B Lease located 750 feet from the North line and 1800 feet from
the East line of Section 7, Township 26 North, Range 6 West.

We also seek approval of the dual Tocito-Pictured Cliffs completion.

- Q Referring to what has been marked as Exhibit Number 1, would you identify that exhibit?
- A Exhibit Number 1 is a map of the area showing the ownership of the leases adjoining Section 12, the tract on which -- Excuse me, Section 7, on which this well is located.

It also shows the acreage dedicated to the Dakota completion, also the Pictured Cliffs completion.

- Q How are the two acreage dedications shown on the map?
- A Acreage dedication for the Dakota is a solid red line. The Pictured Cliff acreage dedication is shown by a broken line.
 - Q Now, referring to what has been marked as Exhibit



1092

Number 2, would you identify that exhibit and state what is shown on it?

Exhibit Number 2 is a Schlumberger induction electric log showing the formation tops, also the perforating record of the Pictured Cliffs and the Dakota zones.

Q Referring to what has been marked as Exhibit Number 3, would you identify that exhibit and discuss it?

It's a diagramatic sketch showing the mechanical Α arrangement of the packers, tubing, perforations --

- Is this a type of --
- -- in the well.
- Pardon me. Q
- It is a conventional dual completion.
- Is it a type of completion that has been approved Q by this Commission before?

Yes, it has been. This same arrangement was used in our PD-233, which was completed several years ago. PD-233 is located in Section 16, 26 North, 6 West.

Would you discuss the history of this well and it's present status?

This well was drilled as a Tocito producer in 1953, with 10 3/4-inch surface casing set at 470 feet, and 7-inch casing set at 6843. The Tocito zone was perforated at that time from 6797 to 6812. It was converted to a water injection well



Š

as part of the South Blanco-Tocito Water Injection Project, in, early in 1960, in accordance with Commission Order R- 1191B dated August 3, 1959.

It was operated as an injection well from February 26, 1960 through April 30, 1963. At that time it was a water injection, but that particular well was abandoned, and in August, 1964, the Tocito zone was squeezed off with cement and the well was deepened through the Dakota formation to a depth of 7570 which was also as provided by Order R-1191-B.

Before deepening the well the 7-inch casing was perforated at 3160 and cemented with 150 sacks of cement. These perforations were squeezed and made the hole the final pressure of 3000 pounds. The deepening operations were started.

The well was then gas-drilled to a depth of 7570 and a string of 4 1/2-inch casing run and cemented at that depth with 110 sacks. The top of the cement on this job was at 6490.

The Dakota zone was then perforated in the Dakota sand stringers, the top perforation being at 7284, the bottom-most being at 7504, and the well sand-water fractured with 180,000 pounds of sand, after which the 4 1/2-inch casing was cut and pulled from 6409.

After recovering the 4 1/2-inch casing the Pictured Cliffs sand was perforated from 3038 to 3058 and sand-water fractured with 40,000 pounds of sand.



NEX.

The plugs that were used to control the fracture jobs were removed by drilling and Baker Model D Retainer Production Packer was set at 6385 to 6387. Two-inch tubing for Dakota production was then run to a total depth of 7280 and sealed off in the Model D Packer at 6385.

A parallel string of inch and a quarter tubing was run to a depth of 3,030 for Pictured Cliffs production.

The well has had a packer leakage test and there is no communication between zones indicated.

- What occasions the need for the unorthodox location for this well?
- Pictured Cliffs spacing in the San Juan Basin requires that the wells be located 990 feet from the property line with a tolerance of 200 feet. This location lacks about 90 feet of complying with that requirement.

MR. UTZ: Which line, the North line?

- The well is located 700 from the North line and to comply it would have to be 790 from the North line.
- (By Mr. Kellahin) Were Exhibits 1, 2 and 3 prepared by you or under your supervision?
 - Yes, sir.

MR. KELLAHIN: At this time I would like to offer in evidence Exhibits 1, 2 and 3.

MR. UTZ: Without objection Exhibits 1, 2 and 3 will



NEW MECICO

· ALBUQUERQUE,

PHONE 243-6691

1092

ğ

815G. • P. O.

be entered into the record of this case.

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

MR. KELLAHIN: That's all I have on direct examination.

CROSS EXAMINATION

BY MR. UTZ:

- Q The Dakota will produce through the 2 3/8s?
- A Yes, and on the Pictured Cliffs through an inch and a quarter.
- Q I notice you have the top of the cement and the 4 1/2 inch liner at 6490. How about the cement behind your, what is your other string?
- A The long string was originally 7-inch, 23 and 26 pound. The top of the cement behind that string was at 5352.
 - Q Then you had surface casing in the well?
- A Surface casing was set at 470 feet, which is a requirement of the South Blanco-Tocito Pool, or pool rules.
- $\ensuremath{\mathbb{Q}}$ So you got quite a bit of the 7-inch without any cement behind the casing.
 - A It's not cemented from 5352 back to 3160.
 - Q Any oil or gas production zones in that area?
- A There is a remote possibility that we would have some gas production from the Point Lookout, however, it's, it would be rather scimpy from the experience we have had in other



ž

ALBUQUEROUE

HONE

385

wells around there.

The cementing program that we used was discussed and received the approval of the United States Geological Survey, and it was also discussed with the Aztec Office of the Oil Conservation Commission. They verbally approved it.

We have a weak zone in the formations either at the top of the Point Lookout or just above it that breaks down. We frequently lost circulation in that zone and we didn't want to try to raise a full column of cement from 5352 back up through the Pictured Cliffs formation, because of the possibility of the formation breaking down, and also because we felt that the efficiency of the cement job through the Pictured Cliffs zone would be impaired.

In cementing the Pictured Cliffs we washed it with MCA acid to remove the mud from the formation and to bring that MCA up through that much open hole we felt that it would become so contaminated that it would be ineffective when it reached the Pictured Cliffs zone, which was the zone of interest.

There has been no indication of corrosion problems in the area. The 150 sacks that was used on the Pictured Cliffs zone would have filled it up at least to 2400, and probably higher than that. Using 150 percent calculation would rate it to about 2400 feet, which would be as high as the other wells, as high as the cement is brought in the other wells in that area.



Q What other formation do you have open behind the hole as a possible Point Lookout production?

A The Cliffhouse is open and there's also a zone in the I believe that's Chocra, a very thin stringer of sand that might produce gas.

Q Do you think there is any danger of sharing any thief zones with these possible producing zones?

A No, the Pictured Cliffs perforations were squeezed once after the initial 150 sack Bradenhead job, they were squeezed with 100 sacks and then again with 50 sacks. We had a final pressure of 3,000 pounds on the last squeeze job, and after drilling it out we tested it with 1800 pounds water pressure and it held the 1800 pounds for 30 minutes without loss.

The Tocito perforations are from 6797 to 6812, and the top of the cement around the 4 1/2-inch liner is 6490. That zone also was tested with 1800 pounds pressure before drilling out.

The temperature survey showed the cement at 6490 and when we prepared to pull the pipe we ran a dial log from the point and found the pipe had some movement as far down as 6535. It was cut at 6475 but could not be pulled. We cut it again then at 6409 and were successful in pulling it; but I think there's very little question but what we have the two strings cemented



together tightly.

Q There would be a possibility, however, the Mesa Verde and the Chocra formation commingling behind the pipe, would there not?

A I think the chances are practically nil. The hole was full of ten and a half-pound mud when the well was drilled; the mud was undisturbed, not cut, and we had good circulation when we did the Bradenhead cement job on the Pictured Cliffs zone.

- Q This is a standard location for a Dakota?
- A No, sir, it is not. The location did have the Commission's approval on Order R-1191-B.
 - Q That was for an injection?

A No, sir, that was for -- We had several authorizations, we were authorized to complete the well as a single completion in a Tocito, using it as a water injection well, we had permission to complete the well as a single completion in the Dakota producing interval, utilizing said well for the production of gas from the Dakota producing interval; we had permission to complete the well as a dual completion, utilizing said well to produce oil from the Tocito and gas from the Dakota. In addition, the order granted that an unorthodox location for Caulkins Well T-123 in the 1-B, and the same is hereby approved.



MR. UTZ: Any other questions of the witness? The witness will be excused.

(Witness excused.)

MR. UTZ: Any statements in this case? The case will be taken under advisement.

STATE OF NEW MEXICO)
) ss
COUNTY OF BERNALILLO)

I, ADA DEARNLEY, 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, skillaand ability.

IN WITNESS WHEREOF I have affixed my hand and notarial seal this 20th day of November, 1964.

Oda Dear leg Notary Public - Court Reporter

My Commission Expires: June 19, 1967

I do hereby certify that the foregoing is a complete record of the proceedings in the Examiner hearing of Case No. 3.40.

New Mexico Oil Conservation Commission



PECIALIZING IN: DEPOSITIONS, HEARINGS, STATEMENTS, EXPERT TESTIMONY, DAILT COTT, CO

PHONE 243-6691 . ALBUQUERQUE, HEW MEXICO

BEFORE THE
NEW MEXICO OIL CONSERVATION COMMISSION
Santa Fe, New Mexico
November 12, 1964

EXAMINER HEARING

IN THE MATTER OF: Application of Caulkins Oil)
Company for a non-standard location and a dual)
completion, Rio Arriba County, New Mexico.
Applicant, in the above-styled cause, seeks
approval of an unorthodox location for its
approval of an unorthodox location for its
Breech B Well No. PD-123 to be located 700
feet from the North line and 1800 feet from
the East line of Section 7, Township 26 North,
Range 6 West, Rio Arriba County, New Mexico.
Applicant further seeks authority to complete
said well as a dual completion (conventional)
to produce gas from the South Blanco-Pictured
Cliffs Pool through 1 1/4 inch tubing and to
produce gas from the Basin-Dakota Gas Pool
through 2 3/8 inch tubing.

Case No. 3140

BEFORE:

ELVIS A. UTZ, EXAMINER

TRANSCRIPT OF HEARING



MR. UTZ: The next case will be Case 3140.

MR. DURRETT: Application of Caulkins Oil Company for a non-standard location and a dual completion, Rio Arriba County, New Mexico.

MR. KELLAHIN: Jason Kellahin, Kellahin and Fox, appearing for the Applicant. I have one witness, Mr. Frank Gray, I would like to have sworn, please.

(Witness sworn.)

(Whereupon, Applicant's Exhibits 1, 2 & 3 marked for identification.)

FRANK GRAY, called as a witness, having been first duly sworn, was examined and testified as follows:

DIRECT EXAMINATION

BY MR, KELLAHIN:

- A Would you state your name, please?
- A Frank Gray.
- Q By whom are you employed and in what position?
- A I am employed by Caulkins Oil Company as a Superintendant in the Farmington, New Mexico area.
- Q Have you ever testified before the Oil Conservation Commission and made your qualifications a matter of record?
 - A Yes, I have.

MR. KELLAHIN: Are the witness's qualifications acceptable?



PHONE

MR. UTZ: Yes, sir, they are.

- Q (By Mr. Kellahin) Mr. Gray, are you familiar with the application of Caulkins Oil Company in Case 3140?
 - A Yes, sir.
- Q Would you state briefly what is proposed by Caulkins in this application?

A We seek approval of an unorthodox location for

Pictured Cliff production in our PD-123; it is on the Breech

B Lease located 750 feet from the North line and 1800 feet from
the East line of Section 7, Township 26 North, Range 6 West.

We also seek approval of the dual Tocito-Pictured Cliffs completion.

- Q Referring to what has been marked as Exhibit Number 1, would you identify that exhibit?
- A Exhibit Number 1 is a map of the area showing the ownership of the leases adjoining Section 12, the tract on which -- Excuse me, Section 7, on which this well is located.

It also shows the acreage dedicated to the Dakota completion, also the Pictured Cliffs completion.

- Q How are the two acreage dedications shown on the map?
- A Acreage dedication for the Dakota is a solid red line. The Pictured Cliff acreage dedication is shown by a broken line.
 - Q Now, referring to what has been marked as Exhibit



Number 2, would you identify that exhibit and state what is shown on it?

- A Exhibit Number 2 is a Schlumberger induction electric log showing the formation tops, also the perforating record of the Pictured Cliffs and the Dakota zones.
- Q Referring to what has been marked as Exhibit Number 3, would you identify that exhibit and discuss it?
- A It's a diagramatic sketch showing the mechanical arrangement of the packers, tubing, perforations --
 - Q Is this a type of --
 - A -- in the well.
 - O Pardon me.
 - A It is a conventional dual completion.
- Q Is it a type of completion that has been approved by this Commission before?
- A Yes, it has been. This same arrangement was used in our PD-233, which was completed several years ago. PD-233 is located in Section 16, 26 North, 6 West.
- Q Would you discuss the history of this well and it's present status?
- A This well was drilled as a Tocito producer in 1953, with 10 3/4-inch surface casing set at 470 feet, and 7-inch casing set at 6843. The Tocito zone was perforated at that time from 6797 to 6812. It was converted to a water injection well



It was operated as an injection well from February 26, 1960 through April 30, 1963. At that time it was a water injection, but that particular well was abandoned, and in August, 1964, the Tocito zone was squeezed off with cement and the well was deepened through the Dakota formation to a depth of 7570 which was also as provided by Order R-1191-B.

Before deepening the well the 7-inch casing was perforated at 3160 and cemented with 150 sacks of cement. These perforations were squeezed and made the hole the final pressure of 3000 pounds. The deepening operations were started.

The well was then gas-drilled to a depth of 7570 and a string of 4 1/2-inch casing run and cemented at that depth with 110 sacks. The top of the cement on this job was at 6490.

The Dakota zone was then perforated in the Dakota sand stringers, the top perforation being at 7284, the bottom-most Ling at 7504, and the well sand-water fractured with 180,000 pounds of sand, after which the 4 1/2-inch casing was cut and pulled from 6409.

After recovering the 4 1/2-inch casing the Pictured Cliffs sand was perforated from 3038 to 3058 and sand-water fractured with 40,000 pounds of sand.



NEW MEXICO BOX 1092 • PHONE 243-6691 .0.

The plugs that were used to control the fracture jobs were removed by drilling and Baker Model D Retainer Production Packer was set at 6385 to 6387. Two-inch tubing for Dakota production was then run to a total depth of 7280 and sealed off in the Model D Packer at 6385.

A parallel string of inch and a quarter tubing was run to a depth of 3,030 for Pictured Cliffs production.

The well has had a packer leakage test and there is no communication between zones indicated.

What occasions the need for the unorthodox location for this well?

Pictured Cliffs spacing in the San Juan Basin Α requires that the wells be located 990 feet from the property line with a tolerance of 200 feet. This location lacks about 90 feet of complying with that requirement.

MR. UTZ: Which line, the North line?

The well is located 700 from the North line and to comply it would have to be 790 from the North line.

(By Mr. Kellahin) Were Exhibits 1, 2 and 3 prepared by you or under your supervision?

Yes, sir.

MR. KELLAHIN: At this time I would like to offer in evidence Exhibits 1, 2 and 3.

MR. UTZ: Without objection Exhibits 1, 2 and 3 will



be entered into the record of this case.

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

MR. KELLAHIN: That's all I have on direct examination.

CROSS EXAMINATION

BY MR. UTZ:

- Q The Dakota will produce through the 2 3/8s?
- A Yes, and on the Pictured Cliffs through an inch and a quarter.
- Q I notice you have the top of the cement and the 4 1/2 inch liner at 6490. How about the cement behind your, what is your other string?
- A The long string was originally 7-inch, 23 and 26 pound. The top of the cement behind that string was at 5352.
 - Q Then you had surface casing in the well?
- A Surface casing was set at 470 feet, which is a requirement of the South Blanco-Tocito Pool, or pool rules.
- Q So you got quite a bit of the 7-inch without any cement behind the casing.
 - A It's not cemented from 5352 back to 3160.
 - Q Any oil or gas production zones in that area?
- A There is a remote possibility that we would have some gas production from the Point Lookout, however, it's, it would be rather scimpy from the experience we have had in other



BOX 1092 . PHONE 243-6691 . ALBUQUEROUE, NEW MEXICO

SIMMS BLDG. . P. O.

wells around there.

The cementing program that we used was discussed and received the approval of the United States Geological Survey, and it was also discussed with the Aztec Office of the Oil Conservation Commission. They verbally approved it.

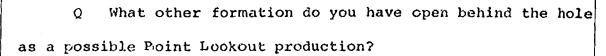
We have a weak zone in the formations either at the top of the Point Lookout or just above it that breaks down. We frequently lost circulation in that zone and we didn't want to try to raise a full column of cement from 5352 back up through the Pictured Cliffs formation, because of the possibility of the formation breaking down, and also because we felt that the efficiency of the cement job through the Pictured Cliffs zone would be impaired.

In rementing the Pictured Cliffs we washed it with MCA acid to remove the mud from the formation and to bring that MCA up through that much open hole we felt that it would become so contaminated that it would be ineffective when it reached the Pictured Cliffs zone, which was the zone of interest.

There has been no indication of corrosion problems in the area. The 150 sacks that was used on the Pictured Cliffs zone would have filled it up at least to 2400, and probably higher than that. Using 150 percent calculation would rate it to about 2400 feet, which would be as high as the other wells, as high as the cement is brought in the other wells in that area.



ž



- The Cliffhouse is open and there's also a zone in the, I believe that's Chocra, a very thin stringer of sand that might produce gas.
- Do you think there is any danger of sharing any thief zones with these possible producing zones?

No, the Pictured Cliffs perforations were squeezed once after the initial 150 sack Bradenhead job, they were squeezed with 100 sacks and then again with 50 sacks. We had a final pressure of 3,000 pounds on the last squeeze job, and after drilling it out we tested it with 1800 pounds water pressure and it held the 1800 pounds for 30 minutes without loss.

The Tocito perforations are from 6797 to 6812, and the top of the cement around the 4 1/2-inch liner is 6490. That zone also was tested with 1800 pounds pressure before drilling out.

The temperature survey showed the cement at 6490 and when we prepared to pull the pipe we ran a dial log from the point and found the pipe had some movement as far down as 6535. It was cut at 6475 but could not be pulled. We cut it again then at 6409 and were successful in pulling it; but I think there's very little question but what we have the two strings cemented



together tightly.

Q There would be a possibility, however, the Mesa Verde and the Chocra formation commingling behind the pipe, would there not?

A I think the chances are practically nil. The hole was full of ten and a half-pound mud when the well was drilled; the mud was undisturbed, not cut, and we had good circulation when we did the Bradenhead cement job on the Pictured Cliffs zone.

- Q This is a standard location for a Dakota?
- A No, sir, it is not. The location did have the Commission's approval on Order R-1191-B.
 - Q That was for an injection?

authorizations, we were authorized to complete the well as a single completion in a Tocito, using it as a water injection well, we had permission to complete the well as a single completion in the Dakota producing interval, utilizing said well for the production of gas from the Dakota producing interval; we had permission to complete the well as a dual completion, utilizing said well to produce oil from the Tocito and gas from the Dakota. In addition, the order granted that an unorthodox location for Caulkins Well T-123 in the 1-B, and the same is hereby approved.



MR. UTZ: Any other questions of the witness? The witness will be excused.

(Witness excused.)

MR. UTZ: Any statements in this case? The case will be taken under advisement.

STATE OF NEW MEXICO)
) ss
COUNTY OF BERNALILLO)

I, ADA DEARNLEY, 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 20th day of November, 1964.

Ada Dearnley
Notary Public " Court Reporter

My Commission Expires: June 19, 1967

I do hereby certify that the foregoing is a complete record of the proceedings in the Examinar hearing of Case No. 3/40, heard by ne on the control of the proceedings in the Examinar hearing of Case No. 3/40, heard by ne on the control of the con

New Mexico Oil Conservation Commission:

