CASE 3201: Application of UNION TEXAS PETROLEUM for an exception to RULE 14(A) of ORDER R-1670.

CASE No.
3201

Application,
Transcripts,
Small Exhibits
ETC.

GOVERNOR
JACK M. CAMPBELL
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

March 15, 1965

Re: Case No. 3201
Order No. R-2878
Applicant:

UNION TEXAS PETROLEUM

Mr. Clarence Hinkle
Hinkle, Bondurant & Christy
Attorneys at Law
Post Office Box 10
Roswell, New Mexico

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.
A. L. PORTER, Jr.
Secretary-Director

ir/

Carbon copy of order also sent to:

Hobbs OCC x
Artesia OCC
Aztec OCC x
OTHER

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. 3201
Order No. R-2878

APPLICATION OF UNION TEXAS PETROLEUM,
DIVISION ALLIED CHEMICAL CORPORATION,
FOR AN EXCEPTION TO RULE 14(A) OF THE
GENERAL RULES AND REGULATIONS FOR PRO-
RATED GAS POOLS IN NORTHWEST NEW MEXICO
PROMULGATED BY ORDER NO. R-1670, AS
AMENDED.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 o'clock a.m. on January 27, 1965, at Santa Fe, New Mexico, before Examiner Elvis A. Utz.

NOW, on this 15th day of March, 1965, 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, Union Texas Petroleum, Division of Allied Chemical Corporation, seeks an exception to the underproduction cancellation provisions of Rule 14(A) of Order No. R-1670 for its Johnson Federal Well No. 4 located in the SW/4 NE/4 of Section 33, Township 31 North, Range 9 West, NMPM, Blanco-Mesaverde Gas Pool, San Juan County, New Mexico, to permit said well to carry forward into the next gas proration period the unproduced allowable which was previously carried forward and to permit the same to be produced during the proration period beginning February, 1965, in addition to the allowable currently assigned to said well.

(3) That the applicant has not established that approval of the subject application would prevent waste or protect correlative rights.

(4) That the subject application should be denied.

IT IS THEREFORE ORDERED:

(1) That the subject application is hereby denied.

(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

Jack M Campbell

JACK M. CAMPBELL, Chairman

Guyton B. Hays

GUYTON B. HAYS, Member

A. L. Porter, Jr.

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

ear/

Case 3201
Heard. 1-27-65
Rec. 2-3-65

1. Denis Union of Tex. request for non Cancellation of some 203,000 MCF underage which was carried thru the and not produced during the proration period from 8-1-64 thru 1-31-65.
2. This well was given the same opportunity to produce this allowed. as many other wells in San Juan Basin and actually ~~prob~~ probably more because of the purchaser making more than the usual effort to produce the allowable from the well.

Thos A Vel.

The well in question is Shell - Johnson - Fed # 4 unit H - 33 - 31N - 4W - Blanco - Mesaverde Gas Pool.

Ch

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. 2713
Order No. R-2400

APPLICATION OF SUNRAY DX OIL COMPANY
TO MAKE UP UNDERPRODUCTION, LEA COUNTY,
NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 o'clock a.m. on December 6, 1962, at Santa Fe, New Mexico, before Daniel S. Nutter, Examiner duly appointed by the Oil Conservation Commission of New Mexico, hereinafter referred to as the "Commission," in accordance with Rule 1214 of the Commission Rules and Regulations.

NOW, on this 28th day of December, 1962, the Commission, a quorum being present, having considered the application, the evidence adduced, and the recommendations of the Examiner, Daniel S. Nutter, 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, Sunray DX Oil Company, seeks permission to make up underproduction occurring in October, 1962, and resulting from mechanical failure and lease shut-down during installation of certain equipment on its U. D. Sawyer Lease, Crossroads Pool, Lea County, New Mexico.

(3) That the Commission afforded all operators in the subject pool an equal opportunity to produce their fair share of the monthly allowable and that the applicant has failed to establish that its loss of production could not have been prevented by adequate lease maintenance and programing of installations.

(4) That the application should be denied.

IT IS THEREFORE ORDERED:

(1) That the subject application is hereby denied.

(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

TOM BOLACK, Chairman

E. S. WALKER, Member

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

S E A L

esr/

CASE 3199: Application of Sinclair Oil & Gas Company for a non-standard gas proration unit, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval of a 240-acre non-standard gas proration unit comprising the NW/4 and the N/2 SW/4 of Section 20, Township 24 South, Range 37 East, Jalmat Gas Pool, Lea County, New Mexico, to be dedicated to its William H. Harrison "C" WN Well No. 3 located in Unit L of said Section 20.

CASE 3189: (Continued from the January 6, 1965, Examiner Hearing)
Application of Continental Oil Company for a dual completion, Rio Arriba County, New Mexico. Applicant, in the above-styled cause, seeks approval of the dual completion (conventional) of its Jicarilla Apache 30 Well No. 2 located in Unit C of Section 29, Township 25 North, Range 4 West, Rio Arriba County, New Mexico, to produce gas from the Chacra formation and oil from the Gallup formation through the casing-tubing annulus and tubing, respectively.

CASE 3200: Application of Cabot Corporation for salt water disposal, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to dispose of produced salt water into the Wolfcamp formation through perforations from 9406 to 10,037 feet in its Lowe "C" Well No. 1 located in Unit O of Section 26, Township 12 South, Range 37 East, King Field, Lea County, New Mexico.

CASE 3201: Application of Union Texas Petroleum, Division Allied Chemical Corporation, for an exception to Rule 14(A) of the General Rules and Regulations for Prorated Gas Pools in Northwest New Mexico under Order No. R-1670, as amended. Applicant, in the above-styled cause, seeks an exception to the underproduction cancellation provisions of Rule 14(A) of Order No. R-1670 for its Johnson Federal No. 4 Well, located in the SW/4 NE/4 of Section 33, Township 31 North, Range 9 West, Blanco-Mesaverde Gas Pool, San Juan County, New Mexico, to permit said well to carry forward into the next gas proration period the unproduced allowable which was previously carried forward and to permit the same to be produced during the proration period beginning February, 1965, in addition to the allowable currently assigned to said well.

CASE 3202: Application of International Oil & Gas Corporation for a waterflood project, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks authority to institute a waterflood project in the Artesia Pool by the injection of water into the Queen, Grayburg, and San Andres formations through 9 wells in Sections 10 and 11, Township 18 South, Range 28 East, Eddy County, New Mexico

Docket No. 3-65

DOCKET: EXAMINER HEARING - WEDNESDAY - JANUARY 27, 1965

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 3193: Application of International Oil & Gas Corporation for a unit agreement, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks approval of the High Lonesome Penrose Unit Area comprising 320 acres of State and Federal lands in Section 15, Township 16 South, Range 29 East, Eddy County, New Mexico.

CASE 3194: Application of International Oil & Gas Corporation for expansion of a waterflood project, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks authority to expand its High Lonesome Waterflood Project by the conversion to water injection of three wells located in Units A, B, and J, Section 15, Township 16 South, Range 29 East, High Lonesome Pool, Eddy County, New Mexico.

CASE 3195: Application of H & M Oil Company, et al for a waterflood project, Eddy County, New Mexico. Applicants, H & M Oil Company, Kincaid & Watson, N. E. Salsich, Jr., and Kersey, seek authority to institute a waterflood project in the Square Lake Pool by the injection of water into the Grayburg and San Andres formations through six injection wells in Section 1, Township 17 South, Range 29 East and one injection well in Section 6, Township 17 South, Range 30 East, Eddy County, New Mexico.

CASE 3196: Application of Texas Pacific Oil Company for a non-standard gas proration unit, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval of a 320-acre non-standard gas proration unit comprising the N/2 of Section 8, Township 22 South, Range 36 East, Jalmat Gas Pool, Lea County, New Mexico, to be simultaneously dedicated to its State "A" A/c-2 Well No. 49 located in Unit C and to its State "A" A/c-2 Well No. 43 located in Unit H of said Section 8.

CASE 3197: Application of Texas Pacific Oil Company for a non-standard gas proration unit, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval of a 320-acre non-standard gas proration unit comprising the S/2 of Section 5, Township 22 South, Range 36 East, Jalmat Gas Pool, Lea County, New Mexico, to be simultaneously dedicated to its State "A" A/c-2 Well No. 41 located in Unit M and its State "A" A/c-2 Well No. 27 located in Unit P of said Section 5.

CASE 3198: Application of Texaco Inc. for an amendment of Order No. R-2758, San Juan County, New Mexico. Applicant, in the above-styled cause, seeks an amendment to Rule 6 of Order No. R 2758, which order promulgated special pool rules for the Tocito Dome-Pennsylvanian "D" Pool, San Juan County, New Mexico. Applicant seeks a 160 acre proportional factor for said pool of 4.77 rather than a factor of 2.77 as previously established by the Commission.

Form C-122-A
Revised April 20, 1955

NEW MEXICO OIL CONSERVATION COMMISSION

GAS WELL TEST DATA SHEET - - SAN JUAN BASIN

(TO BE USED FOR FRUITLAND, PICTURED CLIFFS, MESAVERDE, & ALL DAKOTA EXCEPT BARKER DOME STORAGE AREA)

Pool Blanco Formation Mesaverde County San Juan

Purchasing Pipeline El Paso Natural Gas Date Test Filed

Operator Union Texas Petroleum Co. Lease Johnston Well No. 4

Unit H Sec. 33 Twp. 31 Rge. 9 Pay Zone: From 4572 To 5373

Casing: OD 7 WT. 23 Set At 4821 Tubing: OD Mixed WT. T. Perf. 4572

Produced Through: Casing Tubing X Gas Gravity: Measured .662 Estimated

Date of Flow Test: From 3-8 To 3-16 * Date S.I.P. Measured 3-23-64

Meter Run Size 4 Orifice Size 2.75 Type Chart Type Taps

OBSERVED DATA

Flowing casing pressure (Dwt)		psig + 12 =		psia	(a)
Flowing tubing pressure (Dwt)	608	psig + 12 =	620	psia	(b)
Flowing meter pressure (Dwt)	564	psig + 12 =	576	psia	(c)
Flowing meter pressure (meter reading when Dwt. measurement taken:					
Normal chart reading		psig + 12 =		psia	(d)
Square root chart reading (7.55)² x spring constant	1000	=	570	psia	(d)
Meter error (c) - (d) or (d) - (c)	±	=	+6	psi	(e)
Friction loss, Flowing column to meter:					
(b) - (c) Flow through tubing: (a) - (c) Flow through casing		=	44	psi	(f)
Seven day average static meter pressure (from meter chart):					
Normal chart average reading		psig + 12 =		psia	(g)
Square root chart average reading (7.55)² x sp. const.		=	570	psia	(g)
Corrected seven day avge. meter press. (p_f) (g) + (e)		=	576	psia	(h)
P_t = (h) + (f)		=	620	psia	(i)
Wellhead casing shut-in pressure (Dwt)		psig + 12 =		psia	(j)
Wellhead tubing shut-in pressure (Dwt)	740	psig + 12 =	752	psia	(k)
P_c = (j) or (k) whichever well flowed through		=	752	psia	(l)
Flowing Temp. (Meter Run)	°F + 460	=		°Abs	(m)
P_d = ½ P_c = ½ (l)		=	602	psia	(n)

FLOW RATE CALCULATION

$$Q = \underset{\text{(integrated)}}{9860} \times \left(\frac{\sqrt{(c)}}{\sqrt{(d)}} = 1.0105 = 1.0053 \right)^{*} = 9912 \text{ MCF/da}$$

DELIVERABILITY CALCULATION

$$D = Q\ 9912 - \left[\frac{\left(P_c^2 - P_d^2\right) = 203{,}100}{\left(P_c^2 - P_w^2\right) = 134{,}120} \right]^{n} 1.3650 = 13{,}530 \text{ MCF/da.}$$

1.5143

SUMMARY

P_c =	752	psia
Q =	9912	Mcf/day
P_w =	657	psia
P_d =	602	psia
D =	13,530	Mcf/day

Company
By
Title
Witnessed by
Company

RECEIVED APR 3 1964 OIL CON. COM. DIST. 3

* This is date of completion test.
* Motor error correction factor

REMARKS OR FRICTION CALCULATIONS

	GL	$(1-e^{-s})$	$(F_cQ)^2$	$\frac{(F_cQ)^2}{R^2}(1-e^{-s})$	P_t^2 (Column 1)	$P_t^2 + R^2$	P_w
7"	94	.007	20.197	.141	384,400	431,384	657
2 7/8"	11	.001	3027.420	3.027			
4½"	2920	.191	229.401	43.816			
				46.984			

Form C-104-A
Revised April [illegible]

NEW MEXICO OIL CONSERVATION COMMISSION

GAS WELL TEST DATA SHEET - - SAN JUAN BASIN

(TO BE USED FOR FRUITLAND, PICTURED CLIFFS, MESAVERDE & ALL [illegible]
EXCEPT BARKER DOME STORAGE AREA)

Pool **Blanco** Formation **Mesa Verde** County **San Juan**

Purchasing Pipeline **El Paso Natural Gas** Date Test Filed

Operator **Union Texas Pet. Corp.** Lease **Johnston** Well No. **4**

Unit **H** Sec. **[illegible]** Twp. **[illegible]** Rge. **[illegible]** Pay Zone: From **4572** To **5373**

Casing: OD **7** WT **23** Set At **4821** Tubing: OD ***Mixed** WT. ___ Set At **4572**

Produced Through: Casing ___ Tubing **x** Gas Gravity: Measured **.672** Estimated ___

Date of Flow Test: From **4-7** To **4-15** * Date S.I.P. Measured **4-22-63**

Meter Run Size ___ Orifice Size **2.75-2.75** Type Chart ___ Type Taps ___

OBSERVED DATA

Flowing casing pressure (Dwt)	-	psig + 12 =		psia	(a)
Flowing tubing pressure (Dwt)	682	psig + 12 =	694	psia	(b)
Flowing meter pressure (Dwt)	525	psig + 12 =	537	psia	(c)
Flowing meter pressure (meter reading when Dwt. measurement taken:					
Normal chart reading		psig + 12 =		psia	(d)
Square root chart reading (7.30)^2 x spring constant	1000	=	533	psia	(d)
Meter error (c) - (d) or (d) - (c)		=	-4	psi	(e)
Friction loss, Flowing column to meter:					
(b) - (c) Flow through tubing: (a) - (c) Flow through casing		=	157	psi	(f)
Seven day average static meter pressure (from meter chart):					
Normal chart average reading		psig + 12 =		psia	(g)
Square root chart average reading (7.30)^2 x sp. const.		=	562	psia	(g)
Corrected seven day avge. meter press. (p_f) (g) + (e)		=	566	psia	(h)
P_t = (h) + (f)		=	723	psia	(i)
Wellhead casing shut-in pressure (Dwt)	-	psig + 12 =		psia	(j)
Wellhead tubing shut-in pressure (Dwt)	762	psig + 12 =	774	psia	(k)
P_c = (j) or (k) whichever well flowed through		=	774	psia	(l)
Flowing Temp. (Meter Run)		°F + 460 =	619	°Abs	(m)
P_d = ½ P_c = ½ (l)	80%	=		psia	(n)

FLOW RATE CALCULATION

Q = **8,471** (Integrated) X ($\sqrt{(c)}$ = **1.0075** = **1.0037** / $\sqrt{(m)}$) = **8,502** MCF/da

DELIVERABILITY CALCULATION

D = Q **8,502** [$(P_c^2 - P_d^2)$ = **215.915** / $(P_c^2 - P_w^2)$ = **42.594**] = **3.3788** **28,722** MCF/da

5.0691 235,548 / 96,382 1.0505 - 16,617

SUMMARY

P_c =	**774**	808	psia
Q =	**8,502**	8502	Mcf/day
P_w =	**746**	746	psia
P_t =	**619**	646	psia
D =	28,722	16,617	Mcf/day

Company **Union Texas Pet. Corp.**
By ___
Title ___
Witnessed by ___
Company **Thurmond-McGlothlin**

RECEIVED MAY 16 1963 OIL CON. COM. DIST. 3

* This is date of completion test.

* Meter error correction factor

REMARKS OR FRICTION CALCULATIONS

GL	$(1-e^{-s})$	$(F_cQ)^2$	$(F_cQ)^2 (1-e^{-s}) / R^2$	P_t^2 (Column)	$P_a^2 + R^2$	P_w
3072	.200	168.766	33.753	522.729	556.482	746

4411' - 4½" - 11.6# Csg F_c-1.528
16' - 2-7/8"-6.5# Tb F_c-5.551
2' - 7" - 23# Csg F_c-.4534

5.4511

OIL CONSERVATION COMMISSION
P. O. BOX 2088
SANTA FE, NEW MEXICO

LEGAL DIVISION
PHONE 827-2741

COPY

January 8, 1965

Mr. Clarence E. Hinkle
Attorney at Law
P. O. Box 10
Roswell, New Mexico

Re: Case No. 3201

Dear Clarence:

I have your letter of January 7, 1965, and the application of Union Texas Petroleum Division of Allied Chemical, Houston, Texas, for an exception to Rule 14(A) of the General Rules and Regulations for Northwest New Mexico.

The above case has been docketed for the January 27 Examiner Hearing.

Very truly yours,

J. M. DURRETT, Jr.
Attorney

JMD/esr

CLARENCE E. HINKLE
W. E. BONDURANT, JR.
S. B. CHRISTY IV
LEWIS C. COX, JR.
PAUL W. EATON, JR.
CONRAD E. COFFIELD
HAROLD L. HENSLEY, JR.
MICHAEL R. WALLER

LAW OFFICES
HINKLE, BONDURANT & CHRISTY
HINKLE BUILDING
ROSWELL, NEW MEXICO

OF COUNSEL: HIRAM M. DOW

TELEPHONE 622-6510
AREA CODE 505
POST OFFICE BOX 10

January 7, 1965

Mr. James Durrett
Attorney
Oil Conservation Commission
Box 2088
Santa Fe, New Mexico 87501

'65 JAN 8 AM

Dear Jim:

This will refer to our telephone conversation of today wherein I gave you the information relative to the proposed application of Union Texas Petroleum Division of Allied Chemical for an exception to Rule 14(A) of the general rules and regulations for Northwest New Mexico so as to permit Union Texas to carry forward into the next gas proration period its unproduced back allowable so that the same may be produced during the next proration period beginning February 1, 1965. It is my understanding that you were to include this on the current publication for the examiner's hearing to be held on January 27. We enclose herewith original and 2 copies of application of Union Texas to be filed in connection with this matter.

Thanking you for your cooperation, we are

Yours sincerely,

HINKLE, BONDURANT & CHRISTY

By _____

CEH:cs
Enc.
cc: Mr. Raymond Ricketts
Union Texas Petroleum

DOCKET MAILED
Date 1-15-65

El Paso Natural Gas Company

El Paso, Texas 79999

January 21, 1965

'65 JAN 25

New Mexico Oil Conservation Commission
P. O. Box 2088
Santa Fe, New Mexico 87501

Re: Case 3201, Document #3-65
Examiner Hearing, January 27, 1965

Gentlemen:

In Case 3201, Union Texas Petroleum Corporation seeks exception to the underproduction cancellation provisions of Rule 14-A of Order R-1670 for its Johnson Federal #4 permitting the wells to carry forward unproduced allowable subject to cancellation January 31, 1965. El Paso is the gas purchaser from the Union Texas Petroleum Johnson Federal #4.

El Paso, as purchaser, expects to be able to provide a market for all volumes of gas which the Commission permits to be produced from the above mentioned well.

Yours very truly,

F. Norman Woodruff

F. NORMAN WOODRUFF, Manager
Gas Proration Operations

FNW:mgs

NEW MEXICO OIL CONSERVATION COMMISSION

SANTA FE, NEW MEXICO

Application of Union Texas Petroleum Division of Allied Chemical, Houston, Texas, for an exception to Rule 14(A) of the general rules and regulations for Northwest New Mexico under Order R-1670 as amended by Order R-1670-A and Order R-2307 as the same relate to the Johnson Federal No. 4 well located in the SE¼NE¼ Sec. 33, T. 31 N., R. 9 W., Blanco Mesa Verde Gas Pool, San Juan County. Union Texas seeks an exception to the general rules to permit it to carry forward into the next gas proration period its unproduced back allowable so that the same may be produced during the next proration period beginning February 1, 1965 in addition to the allowable assigned to the Johnson Federal No. 4 well.

New Mexico Oil Conservation Commission
Santa Fe, New Mexico

Comes Union Texas Petroleum Division of Allied Chemical of Houston, Texas, acting by and through the undersigned attorneys and hereby makes application for an exception to Rule 14(A) of the general rules and regulations relating to prorated gas pools of Northwest New Mexico under Order R-1670 as amended by Order R-1670-A and Order R-2307, as the same relate to the Johnson Federal No. 4 well located in the SE¼NE¼ of Section 33, Township 31 North, Range 9 West, Blanco Mesa Verde Gas Pool, San Juan County, New Mexico, and in support thereof respectfully shows:

That applicant carried forward its underproduction for the preceding proration period ending July 31, 1964 in connection with its Johnson Federal No. 4 well and it is estimated that its unproduced back allowable and its unproduced allowable for the current period ending January 31, 1965 will be in the neighborhood of 725,000 MCF.

Applicant desires an exception to Rule 14(A) under Order R-1670 as amended as said order relates to the Johnson Federal No. 4 well to permit applicant to carry forward and produce said unproduced back allowable during the gas proration period beginning February 1, 1965. The El Paso Natural Gas Company, which has been purchasing gas from said well, has indicated that it may be able to purchase the back allowable in addition to the allowable which may be assigned to the Johnson Federal No. 4 well for the gas proration period beginning February 1, 1965.

It is respectfully requested that this matter be set down to be heard at the examiner's hearing on January 27, 1965.

Respectfully submitted,

UNION TEXAS PETROLEUM DIVISION
ALLIED CHEMICAL

By _____
Attorney

HINKLE, BONDURANT & CHRISTY
Attorneys for Union Texas
Petroleum Division Allied Chemical

BEFORE THE
NEW MEXICO OIL CONSERVATION COMMISSION
Santa Fe, New Mexico
January 27, 1965

EXAMINER HEARING

IN THE MATTER OF:

APPLICATION OF UNION TEXAS PETROLEUM, DIVISION ALLIED CHEMICAL CORPORATION, FOR AN EXCEPTION TO RULE 14A OF THE GENERAL RULES AND REGULATIONS FOR PRORATED GAS POOLS IN NORTHWEST NEW MEXICO UNDER ORDER NO. R-1670, AS AMENDED

Case No. 3201

BEFORE:

ELVIS A. UTZ

TRANSCRIPT OF HEARING

MR. UTZ: Case Number 3201.

MR. DURRETT: Application of Union Texas Petroleum, Division Allied Chemical Corporation, for an exception to Rule 14A of the General Rules and Regulations for Prorated Gas Pools in Northwest New Mexico under Order No. R-1670, as amended.

MR. HINKLE: Clarence Hinkle of Hinkle, Bondurant & Christy, Roswell, representing Union Texas Petroleum Division of Allied Chemical Corporation. We have one witness, Charles Hurd, and four exhibits which the reporter has marked Exhibits 1 through 4, inclusive. Will you be sworn, please.

C H A R L E S H U R D, the witness, having been duly sworn, was examined and testified as follows:

DIRECT EXAMINATION

BY MR. HINKLE:

Q State your name and residence, and by whom you are employed.

A Charles Hurd, Denver, Colorado; employed by Union Texas Petroleum.

Q In what capacity are you employed at the present time?

A District Superintendent.

Q Have you previously testified before the Oil Conservation Commission?

A No, sir.

Q Are you a graduate petroleum engineer?

A Yes, sir.

Q From what school?

A University of Oklahoma, 1947.

Q Have you practiced your profession since you were graduated?

A Yes, sir.

Q What companies have you been associated with since you graduated?

A First with Skelly Oil Company, Hobbs, New Mexico, for three and a half years; then with Anderson-Pritchard Oil Corporation, Oklahoma City, for five years; district engineer and superintendent for Anderson-Pritchard in Denver, and now with Union Texas.

Q Union Texas acquired Anderson-Pritchard properties in San Juan County?

A Right.

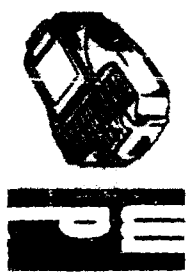
Q Are you familiar with Union Texas's properties in San Juan?

A Yes, sir.

Q And have been for the last eight years?

A Right.

Q Are you familiar with the application of Union



Texas Petroleum as filed in Case Number 3201?

A Yes, sir.

Q What is Union Texas seeking by this application?

A We are asking to have reinstated an approximate 700,000,000 cubic feet of gas which normally would be cancelled February 1st, 1965.

Q Is this in connection with a particular well?

A Right. It's the Union Texas Petroleum Johnston Federal Number 4, located in the southeast of the northeast of Section 33, 31 North, 9 West.

Q Are you seeking an exception to the general rules and regulations of the Oil Conservation Commission for New Mexico?

A That's right.

Q For northwestern New Mexico?

A That's right.

Q What provision of that general rule are you seeking an exception to?

A To Rule 14a.

Q And does that provide for cancellation of under-production as of February 1st where it has been carried forward and non-produced?

A Yes.

Q That is, it would be cancelled as of February 1st,

1965, right?

A Right.

Q What kind of a well is the Johnston Number 4 well you referred to? Is it a normal well or an unusual well?

A It's an unusual well, and considered unique along with probably four other wells in the Blanco Mesa Verde field, and does have an extremely high deliverability, and therefore, allowable.

Q Have you made a tabulation of the annual deliverability by tests in connection with the Johnston Federal Number 4 well?

A Yes, sir, from the date 1954 through the last test taken in 1964.

Q Would you refer to Applicant's Exhibit 1 and explain whether or not that is the tabulation you refer to, and what it shows.

A This is a tabulation I prepared, and primarily it indicates the flowing well head, pressure at the time of test, or during test; line pressure at the meter during the test, the seven-day surface or well shut-in, pressure after flow period, volume of gas produced per day during test, and calculated deliverability. Incidentally, on the test dated 1963 and 1964 under remarks "D", 180% is correct, and I think there was a typographical error. I'm not sure what your copies do show,

but that's a percent sign.

MR. DURRETT: Which line was that?

A The "Remarks" column, in the 1963 and 1964 test.

MR. HINKLE: In this particular case is there any reason why in your opinion an exception should be made to Rule 14a of the General Regulations?

A Generally I think there are two. One is that the well is rather unique and--in that it does have a very high capability to produce, it does have a high allowable, and the line surface well is not a sufficient design to allow the well to flow against what would be considered normal pressure, somewhere in the range of 500 pounds. The meter on this one particular well operated by El Paso is located approximately a half-mile away, and even at this point you can see that the line pressure greatly exceeds the more or less average 500 pounds throughout the field. The friction loss of the average volume flowing through this line results in a very high well head flowing pressure and therefore a drawdown not sufficient to produce the allowable during the last proration period.

Q Did the Oil Conservation Commission request that you make a special test of this well?

A Right. We received a letter dated February 19, 1964 from the Commission, requesting that during annual deliverability test and during shutin period we run a bottom hole

pressure survey in this well, and as I understand, the purpose of their request was to determine if there was any fluid in the well bore, and if this fluid would cause an abnormally low shut-in surface pressure which might affect the deliverability test.

Q Did you make the test as requested?

A We did make the test, and the test was made on the 23rd of March, 1964. This test was filed with the Commission and, among other things, indicates that we did have a bottom hole pressure of 831 PSI, a recorded pressure in the lubricator of 758 which agreed very well with the 740-pound dead weight test, but most important, I think, in our case, indicated a normal gradient of 20 pounds per thousand feet, which would indicate gas in the well bore.

Q The results of that test are a matter of record with the Oil Conservation Commission, are they not?

A Yes, sir.

Q As a result of this test did you receive any communication from the Commission with respect to revision of the allowable?

A No direct communication, immediately after taking the bottom hole pressure and filing the report with the Commission. However, there was some conversation, and as I understood, the Commission was thinking about reducing the

deliverability of this well to what I assume they felt would be a more realistic test, and on August 17th we received a letter from the Commission.

Q I refer to Applicant's Exhibit 2. Is that the communication you referred to?

A Yes, sir.

Q And what did it require?

A It required that, effective August 1st, 1964, the shut-in pressure used to calculate the deliverability was reduced from--was increased, rather, from 774 PSIA to 808 PSIA and this was calculated from averaging pressures of four offset wells with the Johnston Federal Number 4 well.

Q Was there any other well in the same category on which there was a special test made, as was made in connection with the Johnston Number 4?

A It is my understanding that there were several wells. One I know of is the Pubco State Number 6.

Q And after the test was made by Pubco was Pubco's allowable revised on the same basis as the revision that was made for Johnston Federal Number 4?

A Yes, sir.

Q At the time of this special test had Union Texas taken any steps or were they figuring on taking any steps to increase delivery of gas to the purchaser?

A Due to a mechanical problem, the high friction loss in the El Paso system, we felt that we would have to do something in order to permit this well to have a normal draw-down, and in order to produce the allowable and the underage carry-over from the previous period. We contemplated during this previous time--all of 1964, in fact--the installation of compressers to alleviate this mechanical problem. However, during this time, because of the request for a bottom hole survey and the possibility that the Commission would revise our deliverability, it was impossible to determine what allowable we would need to produce; therefore it was impossible to define any compression facilities that would adequately take care of it.

Q What investment were you considering with respect to delivering this gas--that is, installation of compressers? What cost would have been involved?

A Roughly $50,000.00.

Q And due to this request of the Oil Conservation Commission to make this special test, and the subsequent revision of your allowable, did you--what did you decide to do about the installation of the compressers?

A When we received the directive from the Commission that the allowable had been revised we dropped the idea of a compresser installation immediately.

Q Has the order of the Commission making the revision been revoked or rescinded?

A Yes, on October 5th we received another letter from the Commission, rescinding their order dated August 17, 1964, and effective August 1st.

Q I refer to Exhibit 3. State whether or not this is the letter you refer to as rescinding the previous order revising the allowable.

A Yes, sir, it is.

Q Do you know why the previous order of the Commission was rescinded?

A I'm sure it was the result of a hearing before the Commission on a motion by Pubco asking for rescinding of the order covered by Exhibit 2.

Q You know that the Commission did enter an order in connection with the Pubco hearing, rescinding their previous order requiring the allowables in connection with the Pubco Number 6 well to be revised?

A Yes, sir.

Q And then they simply notified the Union Texas of a similar revision?

A Yes, sir.

Q In rescinding this order, did it place the allowable back in its former status as far as 1963 is concerned?

A 1964.

Q 1964, I mean.

A Yes, sir.

Q After you received the rescinding order, did Union Texas decide to install compressors which they had formerly contemplated installing?

A Yes, sir, we now have installed two compressors--200-horsepower compressors, and they were installed last week, or the first part of this week, rather, and we are delivering through the line now approximately 12,000,000 feet of gas per day.

Q If it had not been for the special test made of this well, the revision of the allowable and then the revocation of it, Union Texas would have installed compressors a long time before they did, and would have been able to sell the underproduced gas which they now are attempting to carry over, is that right?

A Yes, sir.

Q I believe you stated that El Paso was purchasing the gas from this well?

A Right.

Q Have you received any communication or do you know of any indication from El Paso whether or not they would be able to take this underproduction in the event it is carried

forward for the next proration period?

A Yes, sir. We received a copy of a letter directed to the Commission dated January 21, 1965 in which they indicated the probability that they could take all the gas that would be allocated to this well during the next proration period.

Q Referring to Applicant's Exhibit 4, is that the letter to which you refer?

A Yes, sir.

Q Under the circumstances of this case do you feel that it is equitable and proper to permit this back allowable to be carried forward into the next proration period, beginning February 1, 1965?

A Yes, sir.

Q So that Union Texas will be given an opportunity to produce and sell the gas?

A Yes, sir.

MR. HINKLE: We would like to offer in evidence Applicant's Exhibits 1 through 4.

MR. UTZ: Without objection, Applicant's Exhibits 1 through 4 will be entered into the record of this case.

MR. HINKLE: That's all we have of this witness at this time.

CROSS-EXAMINATION

BY MR. UTZ:

Q I gather from your testimony, Mr. Hurd, that you are basing this entire case on the fact that the Commission left you in somewhat of a confused state as to what to do about the compressors?

A Yes, sir.

Q From the period of August 17th to October 5th?

A Even before that, Mr. Utz. There was some question as far back as the request for the bottom hole pressure, and whatever I might say in regard to conversations is hearsay and I'd rather not outline it at this time, except that it was my impression that the Commission in fact after this period was considering the reduction of deliverability on this well and similar wells.

Q But your actual notification was August 17th?

A Right.

Q So that there was a period during the approximate time of August 17th to October 5th, say roughly two months, that you were prevented from making an installation of compressors, so that you could produce some of this underage that you knew was going to be cancelled?

A Yes.

Q And on what date was this compressor installed?

A Monday of this last week, which would be the 25th

of February.

Q As far as the Commission's action is concerned, you only lost out of the six-months period, about two months?

A Well, we think--oh, I see what you mean. You're right.

Q Therefore any retribution the Commission might feel it had toward your problem would be for a period of only two months? In other words, you're asking for six months time in which to make up this?

A Right.

Q Actually our action only delayed you something like two months.

A That's what the correspondence reveals, but in fact I think it prevented us from making plans from March 19th, and in that regard, when it was my understanding that the--some action possibly and probably would be taken by the Commission, I think I indicated that in all probability Union Texas would not protest this Commission directive, and in fact did not, at the Pubco hearing. But during this time I think it was impossible to know what our allowable situation actually would be.

Q But the well, without a compressor, was actually--during the whole six-months period it was actually going behind in its current allowable each month, was it not?

A Right.

Q Do you know how the well was produced during that period--how many days it was on the line?

A Most of the time.

Q Practically all the time? It was a clear case that the well just couldn't put it on the line?

A Right.

Q In your opinion, would the well have been entitled to produce this allowable during the period when it actually did not have the physical ability or physical connections, such as the compressor, to put its allowable into the system?

A What was the question again?

Q Do you think the well was entitled to--

A I think beyond a doubt--at least, it's my understanding that the proration formula as exists in itself, as defined as ratability, that the only reason the well would not produce the normal allowable during this is because of the high line pressure and the friction loss in the line. Had the draw-down in this well been approximately the same as the other average wells in the area, we could have produced the allowable, and all our deliverability information will pretty well bear this out, I think.

Q But the Commission had nothing to do with the physical connections of any nature?

A None at all.

Q During the period before you installed the compressors we gave you an allowable and the opportunity to produce the allowable, did we not?

A Yes, sir.

Q What I'm specifically asking, do you think before you put the well into physical condition to produce its allowable--do you think that well was entitled to an allowable? The same type of question would be, would the well be entitled to an allowable before you drilled it?

A I don't think it would be quite the same, in that we know from deliverability tests approximately what the well would do under certain draw-downs, or at least we can compute them, and we know about what kind of well we have, whereas when we drill a well we would not. Assuming that we utilized the same energy, or could, mechanically, on this well as any other average well in the field, we should produce this well against approximately 500 pounds--consistently it was over 600 pounds, and so we knew that something would have to be done, but before you can set compression equipment, or before you should, you should know what the allowable situation is, how much you're going to produce, at what calculated suction pressure, and what calculated discharge pressure; temperature would be another factor--after cooling, and there are so many

contingencies--you need to know what you're going to produce before you start.

Q When did Union Texas take over the well?

A Union Texas Natural Gas purchased Anderson-Pritchard Gas Corporation I believe in 1961, and approximately a year later this was merged into Allied Chemical Corporation. At the present time Union Texas is a division of Allied Chemical Corporation.

Q Did this well have any allowable cancelled in 1961?

A No, sir.

Q It made all its allowable?

A As far as I know.

Q How about 1962?

A Yes.

Q It made it all?

A Right.

Q Has this well ever had any allowable cancelled?

A Not that I know of.

MR. UTZ: Are there other questions of the witness?

MR. HINKLE: I have one or two.

REDIRECT EXAMINATION

BY MR. HINKLE:

Q I believe you made the statement that the well was being under-produced, it couldn't make its allowable after

August 1st. Didn't it in fact make its allowable that was set for August 1st, from then on?

A No, sir, even from August 1st to the present time it wasn't making its allowable.

Q Was it making its allowable just before August 1st, the period just before that?

A Yes, I believe pretty much. It didn't make up the underage, but it did make up its allowable. -- I'm sorry--no. I'm getting confused with the proration periods. It was a somewhat similar situation even prior to August 1st, and in fact it was about February 1st when this new allowable was given, and we started falling behind.

Q When they cut the deliverability for two months, it made its allowable then, did it not?

A It made its allowable, or would have, had this actually ever gone into effect, and this is what I'm not sure of, subsequent to the order, if this ever appeared in the proration schedule. If it did, I know it was rescinded. But there's a possibility that not enough time had elapsed from the time of the order itself and the revocation, for it to have been on the proration schedule.

MR. UTZ: I can answer that. It never did appear in the proration schedule.

MR. HINKLE: When did Union Texas first consider

installing a compressor, or compressors?

A When we started getting higher allowables. Last year was a very good year--the nominations were high and the present well allowable for the respective deliverabilities was very good, and it was approximately February 1st, 1964 when we started getting these high allowables, that this was first contemplated.

Q And then why didn't you go forward with the installation at that time?

A Just not being sure of what our future allowable situation would be.

Q And you were not sure because of what situation?

A Well, the request for bottom hole pressure, and my understanding that the deliverability possibly would be changed on this well, which would affect the allowable.

Q How did you gain that impression? Through conversations with Commission staff, or any other personnel?

A Right.

Q And through things which you now refer to that might have been hearsay testimony?

A Right.

Q But installation of the compressors was actually held up because of that?

A Right.

Q And then your impression was right, in that soon after, a month or two later, they did call for a test of this well?

A Right.

Q Several months later?

A Well, the bottom hole pressure test was formally requested on March 19, 1964.

Q But you had that impression before that, and were considering this installation of compressors long before that time?

A No, sir, not long before that.

Q Not long before?

A No.

Q Do you feel that by the installation of the compressors you will be able to deliver the gas which has been under-produced and which you would like to carry forward in the event El Paso is able to purchase it?

A I believe so.

MR. HINKLE: I believe that's all.

RECROSS-EXAMINATION

BY MR. UTZ:

Q Has there been any physical change in the well head equipment, or well equipment, rather, from the well head in this well, in the last period when the 1963 test was taken and

up to the period when the 1964 test was taken?

A Only recently, after--or during the compressor installation we changed the well head where there is a full four-inch opening valve and lines going through a separator, and tied into the El Paso lines.

Q This happened a considerable time after the 1964 test was taken?

A Right.

Q Looking at your 1964 test in comparison with your 1963 test, we couldn't help but note that in 1963 there was a substantially greater pressure drop between the well head and the meter than there was in the 1964 test. As a matter of fact, the two figures, by way of comparison, is 157 pounds as compared to 44; 44 being at the rate of 9912, and 157 being at the rate of 8502. Can you explain that?

A I couldn't have until this afternoon, in all honesty. I know the test was high--we got a very good test, and I could offer no logical explanation, but I did discover that a by-pass either may have been or was closed somewhere in this system during that test.

Q During the 1963 test?

A Right.

Q The 157 pounds?

A Right.

Q Then was that by-pass open on your 1964 test?

A I assume it was. Actually I can't testify either way; I don't know. Normally in our operations we're the producer and we're responsible to the well head, and from that point I don't know.

Q You hired someone else to test the well?

A Thurman-McLaughlin.

Q Did they inform you as to the nature of the 1963 test that was made?

A No, only the test itself--the dead-weight test.

Q They sent you a copy of the test?

A Right.

Q Do you know whether or not Thurman-McLaughlin is aware of the fact that the well should be produced into the pipe line unrestricted, to comply with the order?

A Yes.

Q Actually to comply with the order he should have had the by-pass open on the 1962 test?

A We neither had the by-pass open or closed. I'm not sure--I assume if the by-pass was closed he was ignorant of it, or possibly did not know there was a by-pass. I'm not sure where the by-pass was, or which by-pass, or that it even existed, before this afternoon. I'm not even sure a testing company would know all of the provisons, and the hook-up of

what we still have to use for testing.

Q Are you aware of the fact that that restriction in the line is actually what caused your deliverability to be 28,000,722?

A No, sir, I'm not aware of it--I think there's a possibility.

Q --And that with the by-pass open, or you say you don't know for sure, but that friction loss between the well head and the meter of only 44 pounds at a higher rate of flow actually lowered your deliverability in 1964 from 28 million to about 13?

A Right.

Q So a large part of the difference between the two figures was actually due to restriction between the well head and the meter house?

A I don't see that it would, necessarily.

Q Have you made a compilation?

A No, but as long as your slope is right, and your back pressure curve and friction calculations are accurate, in reality whether you have restriction or not, your deliverability should be the same. In practice, I agree--

Q Your statement is not illogical, but neither is it provable. I'll put it another way. This restriction, 157 pounds, actually caused you to have only 3-4/10% draw-down

in 1963, did it not?

A 3-4/10%?

Q Yes, 3-4/10%--the difference between 774 and 746.

A Okay.

Q Whatever you did to lower the friction in 1964, you had a draw-down of something like--what was the figure--12.7%. You say you're speaking of slopes. A 12.7% draw-down would have less correction on a slope--that was probably an error for this well--than 3.4; you would have less correction back to the 80% ~~PCD~~?

A Right.

Q And you and I both know we use average slopes there?

A Right.

Q So the further you get away from the 80% figure with your test, the more correction you have; and the more correction you have with an erroneous slope, the more error you're going to have in deliverability tests?

A This would certainly appear so, and I can't argue, except that we'll compare the 1958 and 1959 test, in which our draw-down in 1959 was so much higher than it was in 1958, and yet we resulted in a deliverability of 32 million in 1959, where it was 24 million in 1958, so this is data which completely reverses itself. So what I'm trying to say, I think it's a good possibility that this is one reason for this

extremely high deliverability, but there could be other factors also.

Q Other factors, such as what? Do you have anything in mind, specifically?

A No, sir, just whatever factor that caused this one test to increase from a deliverability of 24 million in 1958 to 32 million in 1959, when in fact the draw-down in 1959 was much greater than it was in 1958.

MR. ARNOLD: Can I ask a question at this point? One thing came to my mind--the 1959 deliverability was 32,576 MCF, and I believe you testified that although that was the highest deliverability the well ever had, during 1959 or 1960 the well had no underage cancelled?

A To the best of my knowledge.

Q Still, in 1963 when it shows a deliverability of 28,722, which is some four to five million less calculated deliverability and therefore less allowable, suddenly it's having trouble making its allowable. Doesn't this indicate to you that possibly the capability of the well has declined much more rapidly than the calculated deliverability, due to this error?

A It could be. However, this deliverability of 28,-722 per day is based on 8% of the shut-in pressure, whereas the deliverability of 32,576 to which you refer is based on

50% of the shut-in pressure.

Q I believe I re-calculated that test at 50 deliverability pressure. Calculated deliverability would have been 49 million, which is some further evidence of some sort of mathematical perversion during this period. Obviously if we hadn't changed the deliverability to 80% it would probably have been impossible to produce the allowable even with the compressors.

A No, I don't believe that that's correct, because this well is calculated at 80% and every other well is calculated on 80, so whether it's 80 or 50, as long as the All allowable's for deliverability is calculated on the same basis, it wouldn't affect the allowable at all.

Q Do you think on 95% of the wells in the pool, changing the deliverability pressure from 50% to 80% would make anything like the allowable difference, percentage-wise, that it made on this particular well on this test? In other words, the increase was from 28 million to 49 million by simply changing the PD from 50 to 80%, and normally in most wells in the pool you wouldn't expect that sort of percentage change, would you?

A No, I wouldn't.

Q Insofar as the tests are concerned, do you have copies of the 1963 and 1964 tests to look at?

A Only the 1963--28,722.

Q I'll give you these. Actually if all we're trying to determine from that test is whether or not a restriction exists, aren't the only things we have to consider are the flow rate and that friction loss figure, which is Line 1, I believe--at 157 pounds on the 1963 test and 44 pounds on the 1964 test?

A Yes.

Q I mean, if you have a flow rate on the 1963 test of 8502--

A Right.

Q And a pressure drop of 157 pounds; and then on the 1964 test you have a flow rate of 9912, a larger flow rate, and still a pressure drop of only 44 pounds, this almost proves beyond all doubt that a restriction did exist in that line?

A Yes. I'm not questioning that.

Q I just wasn't sure that that was clear in the record. Actually Testing Order 333 F~~UR~~, or whatever it is, says that all production during the 14-day condition period and seven-day deliverability test period shall be at static well head pressure not in excess of 75% of the previous annual seven-day shut-in pressure of the well, and further, in the event the existing line pressure does not permit a draw-down as specified, with the well producing unrestrictedly in the pressure

line, the operator shall request an exception to this requirement on Form C-122-A. Were you aware of that language in the order?

A Not the exact words, but the order itself, I was.

Q Therefore actually it appears that if there was a restriction on that test and the test was not--did not attain a 25% draw-down, probably it wasn't a legal test under the order?

A I certainly realize there was a restriction now, and I think--this is without a doubt--at the time of the test I certainly wasn't aware of it, and I doubt that the Commission was either.

MR. UTZ: I think we can assure you we were not, at that time.

MR. ARNOLD: The point is, you actually don't know until you have a comparison between these two tests, that it existed?

A Although we did have the previous test. For instance, 1962 or 1961 or 1960 or 1959, and so had I or any of us examined the test closely enough, we would have found it.

MR. ARNOLD: I don't think I have any further questions.

MR. UTZ: Are there other questions of the witness?

REDIRECT EXAMINATION

BY MR. HINKLE:

Q Just one or two. As I understand your testimony, you were not aware of anything being wrong with the deliverability test for 1963 at any time until today?

A Right.

Q You had no indication from anybody or from the Commission or the people--the engineers who made the test, or anybody else, that anything was wrong with it?

A Right.

Q And it went on the proration schedule for 1964, based upon the 1963 deliverability test?

A Right.

Q No one ever raised any question about it?

A No, sir.

Q And it has been on the proration schedule that way ever since?

A Yes, sir.

Q And even though when the order came out or this special test and the revision in August and revocation of that, it went back on the schedule, insofar as you know, on the same basis as it was before--it wasn't called to your attention that there was any error in it at that time?

A Right.

MR. HINKLE: That's all.

RECROSS-EXAMINATION

BY MR. UTZ:

Q Mr. Hurd, do you agree that the man that tested this well should have been aware of the restriction, and also aware of the provision in the order that dis-allowed a restriction?

A I think he should have been aware of it, but probably less aware than the Commission or Union Texas.

Q You're also aware that we're spread pretty thin, aren't you?

A Yes--so am I.

Q And the tester was on the well, making a physical test?

A I say that, by and large, he is a tester, but he can't control certain things. He can take readings, and this, by and large, is his responsibility, that they are accurate and his computations are accurate, and this is his primary responsibility. As far as accuracy in abiding by the Commission rules and regulations, this is more your responsibility and mine, I believe, than his.

Q Does he have any control over the valves between the well head and the meter at all, insofar as conducting the test?

A I don't think--don't get me wrong; there can be, certainly, cooperation, and there has to be, in order for these

tests to be conducted, and the Commission and the company in the past, and I think certainly in the future, has given us every cooperation, but if this is an error or if a valve were closed, I hardly expect the testing company to know this.

Q It would be pretty hard to make out one of these tests without noticing a 150-pound pressure drop between the well head and the meter, if you were in the process of checking that--you would certainly notice that?

A Evidently not. I did see the tests; I reviewed them, and you did too.

Q But there's always some difference between just looking, and calculating?

A The man who does the test--I don't see that it would be more obvious to him than the man who is critically reviewing the test.

MR. ARNOLD: I have one question. If the test was in error and as a result of that the deliverability was in error, and as a result of that the allowable was in error on this well, would there be any way you can suggest that the Commission could come up with some reasonable estimate of what the allowable should have been if it had been a correct test? I realize now we're just talking; you can't test in the past, because obviously it was tested wrong, but is there any reasonable way you can suggest that the Commission can calculate or

estimate what the allowable should have been, within any reasonable bounds?

A No.

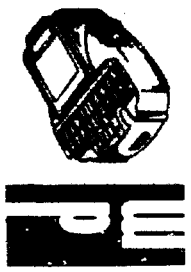
Q I was wondering about the--what about the new test? Do you feel that that is any kind of reasonable basis?

A No. In my honest opinion, and I hope you will judge this case on its own merits, and not make the supposition that it is a bad test--I think that doesn't really involve this case. If we are allowed to make up this underage--I think this is what you should decide, and this only, and so you either allow it or not allow it.

Q You mean even if we know the figure we are authorizing or would be authorizing, by order, is an erroneous figure, actually too large?

A This is a supposition I'm not quite willing to--to make. I'm not sure the test is wrong or I'm not sure it's right, but it is the test, and I'm sure the data is correct, to the best of my knowledge and--

Q If the Commission should decide that they believe the test was correct, I realize there wouldn't be any problem, because they would just then have to decide whether or not they would permit you to make it up in the manner you're seeking. But the problem I'm trying to get some insight into is, what if the Commission should determine that they are convinced or



believe that this was an erroneous test. Then--

A I can't suggest to the Commission what they should do on any supposition.

Q That's what I wanted to know--if you had any opinion on it.

A Yes, sir.

MR. ARNOLD: Thank you.

MR. UTZ: Mr. Hurd, I'm sure you are aware that many other people in the Blanco Mesa Verde pool shall have underages subject to cancellation as of February 1st. How do you differentiate your situation from all those other people?

A I think that we presented two unique facets. This is a big well, we do have extremely high friction loss; flowing well head pressures are much higher, which would give us less draw-down and restrict the normal rate of flow as against approximately 500 pounds...this being the first, but you can't control this; but primarily it's this period during which there was some doubt as to what our deliverability would be, and the time in which we had no idea what our allowability would be, to do something about our second problem.

Q In other words, I gather that your feeling would be that only those people, then, that were affected by this--shall we call it an interim order--that we issued, reducing deliverability for a period of some sixty days, should have the

opportunity to have non-cancellation of allowables?

A There may be people on the other list with certain other circumstances which are not involved here. I think the people, if the circumstances are the same--the friction losses due to as big a mechanical problem, and if they were faced with compression but didn't know how much to compress during what period of time--then the situation is the same and then they should be allowed.

Q But it would be limited to only those people who were affected by this interim order--would that be your opinion?

A Unless they had certain other problems which don't appear here. Oh, I'm not limiting it to these people at all--if they have other just cause or reasons, certainly they should be allowed to make up an allowable that would normally be cancelled.

MR. UTZ: Are there any other questions? ... If there are no other questions, the witness is excused. Do you have anything further?

MR. HINKLE: Did I offer those exhibits in evidence? I believe I did.

MR. UTZ: Yes, you introduced them. The case will be taken under advisement.

* * *

STATE OF NEW MEXICO)
) ss
COUNTY OF BERNALILLO)

I, ELIZABETH K. HALE, Notary Public and Court Reporter, do hereby certify that the proceedings in Case Number 3201 were taken and transcribed by me, and that the foregoing is a true and correct transcript of proceedings to the best of my knowledge, skill and ability.

IN WITNESS WHEREOF, my hand and seal of office this 2nd day of March, 1965.

Notary Public

My commission expires:

May 23, 1968.

I do hereby certify that the foregoing is a complete record of the proceedings in the Examiner hearing of Case No. 3201, heard by me on Jan 27, 1965.

Examiner
New Mexico Oil Conservation Commission

~~302~~ 3201

JOHNSON-FEDERAL #1

ANNUAL DELIVERABILITY TEST

Date	Flowing Well Head Pressure psia	Meter or Line Pressure psia	SIP psia	Q MCF/day	D MCF/day	Remarks
[illegible]	598	530	1086	2053	2435	D @ 500 psia
[illegible]	580	515	991	2125	[illegible]	D @ 496 psia
[illegible]	562	556	985	2065	2304	D @ 492 psia
[illegible]	532	497	967	2086	2835	D @ 484 psia
[illegible]	812	542	962	3174	[illegible]	D @ 482 (after WO)
[illegible]	719	684	884	13691	30576	D @ 442 psia flowing thru casing
1960	732	674	888	13137	30732	D @ 414 psia
1961	719	657	790	10180	27284	D @ 395 psia
1961	646	544	794	11271	28892	After mach. WO flowing through 4-1/2" tubing D @ 391 psia
1962	608	591	769	9146	32373	D @ 384psia
1963	694	537	774	8908	20722	D @ 80% SI or 619 psia
1964	680	570	734	9918	13730	D @ 80% SI or 602 psia

594

RECEIVED

AUG 19 1964

WAC		CAP	
CS		SAK	
FPS		JCB	
JW		D	
HLT		C	
DB			
KHS		IP	
		LLM	

NEW MEXICO OIL CONSERVATION COMMISSION
1000 RIO BRAZOS ROAD
Aztec, New Mexico
August 17, 1964

Union Texas Natural Gas Corporation
1700 Broadway
Denver, Colorado

Gentlemen:

Effective August 1, 1964 the calculated deliverability for your Johnston #4 well, located H-33-31-9, Blanco Mesaverde Pool is being corrected pursuant to Chapter II, Section II, Paragraph 9 of Order R-333-F of the New Mexico Oil Conservation Commission.

It is the Commission's position that the shut-in pressure previously measured and used for the 1963 annual deliverability test was abnormally low and does not accurately reflect the average reservoir pressure. We have therefore corrected the shut-in pressure used in the deliverability calculation by averaging its pressure with the deadweight pressures measured on the offset wells listed below.

WELL			LOCATION	PRESSURE
EPNG	Schwerdtfeger	#1	M-27-31-9	768
Union Texas	Johnston	#2	K-33-31-9	817
EPNG	Sheets	#1	N-28-31-9	847
EPNG	Prichard	#3-2	K-34-31-9	833
Union Texas	Johnston	#4	H-33-31-9	774
				4039
				808

Gas supplement number NW 8478 is being issued this date correcting your gas allowable effective August 1, 1964. The corrected deliverability for your well as recalculated is 16,617 MCFPD. Revised Form C-122-A is attached.

If you have any question regarding the above action or find errors in the deliverability recalculation please contact this office.

[illegible]

cc: OCC, Santa Fe
[illegible]

Eff 2

STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION
1000 Rio Brazos Road
Aztec, New Mexico
October 5, 1964

Union Texas Natural Gas Corporation
1740 Broadway
Denver, Colorado

Gentlemen:

This letter will rescind my letter of August 17, 1964 and attachments concerning correction of the calculated deliverability for your # 4 Johnston well. Located M-33-31N-9W Blanco Mesaverde pool.

Yours very truly

Emery C. Arnold
Supervisor, District III

ECA:ks

cc: OCC, Santa Fe, N.M.
Transportation Div. - Farmington

W/8. Copy to W. I. Hyde

EY3

El Paso Natural Gas Company

El Paso, Texas

January 21, 1968

New Mexico Oil Conservation Commission
P. O. Box 2088
Santa Fe, New Mexico 87501

Re: Case 3301, Document 68-46
Examiner Hearing, January 27, 1968

Gentlemen:

In Case 3301, Union Texas Petroleum Corporation seeks exception to the underproduction cancellation provisions of Rule 14-A of Order R-1670 for its Johnson Federal #4 permitting the wells to carry forward unproduced allowable subject to cancellation January 31, 1968. El Paso is the gas purchaser from the Union Texas Petroleum Johnson Federal #4.

El Paso, as purchaser, expects to be able to provide a market for all volumes of gas which the Commission permits to be produced from the above mentioned well.

Yours very truly,

Original Signed
F. NORMAN WOODRUFF

F. NORMAN WOODRUFF, Manager
Gas Proration Operations

FNW:mgc

BCC: Mr. Charles Hurd ✓
Union Texas Petroleum Corp.
Suite B-400
1740 Broadway
Denver, Colorado 80202

Mr. Sim Christy
Hinkle, Bondurant, and Christy
P. O. Box 10
Roswell, New Mexico

JAN 25 1968

#4 ✓