CASE 6677: TEXAS PACIFIC OIL COMPANY, INC. FOR DOWNHOLE COMMINGLING, LEA COUNTY, NEW MEXICO

CASE NO.

6677

APPlication, Transcripts, Small Exhibits,

ETC.



STATE OF NEW MEXICO ENERGY AND MINERALS DEPARTMENT OIL CONSERVATION DIVISION

BRUCE KING GOVERNOR LARRY KEHOE SECHETARY POST OFFICE BOX 2008 STATE LAND OFFICE BUILDING SANTA FE, NEW MEXICO 87501 (505) 827-2434

January 30, 1980

Mr. William F. Carr Campbell and Black Attorneys at Law Post Office Box 2208 Santa Fe, New Mexico Re: CASE NO. 6677 ORDER NO. R-6257

Applicant:

Texas Pacific Oil Company, Inc.

Dear Sir:

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

Pours very truly, Ũ JOE D. RAMEY Director

JDP/fd

Copy of order also sent to:

Hobbs OCD	x
Artesia OCD	X
Aztec OCD	·

Other

STATE OF NEW MEXICO ENERGY AND MINERALS DEPARTMENT OIL CONSERVATION DIVISION

IN THE MATTER OF THE HEARING CALLED BY THE OIL CONSERVATION DIVISION FOR THE PURPOSE OF CONSIDERING:

> CASE NO. 6677 Order No. R-6257

APPLICATION OF TEXAS PACIFIC OIL COMPANY, INC. FOR DOWNHOLE COMMINGLING, LEA COUNTY, NEW MEXICO.

ORDER OF THE DIVISION

BY THE DIVISION:

This cause came on for hearing at 9 a.m. on October 2, 1979, at Santa Fe, New Mexico, before Examiner Richard L. Stamets.

NOW, on this 28th day of January, 1980, the Division Director, 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 Division has jurisdiction of this cause and the subject matter thereof.

(2) That the applicant, Texas Pacific Oil Company, Inc., is the owner and operator of the Elliott B-6 Well No. 1, located in Unit M of Section 6, Township 22 South, Range 37 East, NMPM, Lea County, New Mexico.

(3) That the applicant seeks authority to commingle oil production from the Arrowhead-Grayburg Pool and gas production from the Eumont Gas Pool within the wellbore of the abovedescribed well.

(4) That from the Arrowhead-Grayburg zone, the subject well is capable of low marginal production only.

(5) That from the Eumont zone, the subject well is capable of low marginal production only.

(6) That while the proposed commingling might result in the recovery of additional hydrocarbons from each of the subject pools, waste could occur through the wetting of the Eumont gas -2-Case No. 6677 Order No. R-6257

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Contraction of the second

sands by Arrowhead-Grayburg oil if the well were shut in for an extended period.

(7) That there is no mechanism to assure the Division that said Elliett B-6 Well No. 1 would not be shut-in for an extended period following completion of the proposed downhole commingling.

(8) That to avoid the potential for waste the subject application should be <u>denied</u>.

IT IS THEREFORE ORDERED:

(1) That the application of Texas Pacific Oil Company,
 Inc., to commingle Arrowhead-Grayburg oil production and Eumont
 gas production within the wellbore of the Elliott B-6 Well No.
 1, located in Unit M of Section 6, Township 22 South, Range 37
 East, NMPM, Lea County, New Mexico, is hereby denied.

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

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

STATE OF NEW MEXICO OIL CONSERVATION DIVISION V mer JOE D. RAMEY Director

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			1 2 3 4 5	ENERGY AND Oil Cons State L Santa 2 Oc	OF NEW MEXICO MINERALS DEPARTMENT ervation Division and Office Bldg. Fe, New Mexico tober 1979 NER HEARING	
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	And a long of the state and a state and		8	TTER OF: Application of Te Company, Inc., fo mingling, Lea Cour	r downhole com-)	CASE 6677
		No in the	0 BEFORE: F	Richard L. Stamets		•
		A V A	2	TRANSC	RIPT OF HEARING	
		SA Sente	4	ΔΡΡΙ	EARANCES	
			5 For the Oi Division 7	1 Conservation	Ernest L. Padill Legal Counsel fo State Land Offic Santa Fe, New Me	or the Divisi ce Bldg.
			8 9 For the Ap 0 1	plicant:	William F. Carr, CAMPBELL AND BL Jefferson Place Santa Fe, New Me	ACK P. A.
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JACK M. ROSE

Direct Examination by Mr. Carr Cross Examination by Mr. Stamets

LLY WALTON BOY MPED AMORTHAND REPORT Plaza Blanca (605) 471-5 Plaza Pa, New Markoo 6750

EXHIBITS

Applicant Exhibit One, Plat
Applicant Exhibit Two, Sketch
Applicant Exhibit Three, Production History
Applicant Exhibit Four, Production History
Applicant Exhibit Five, Tabulation
Applicant Exhibit Six, Letters

				Page
			1	MR. STAMETS: Call next Case 6677.
			2	MR. PADILLA: Application of Texas Pacific
	ar pris		3	Oil Company, Inc., for downhole commingling, Lea Courty,
-	- - , #		4	New Mexico.
		-	5	MR. CARR: I'm William F. Carr, Campbell
			6	and Black, P. A., Santa Fe, appearing on behalf of the appli-
			7	cant. I have one witness who needs to be sworn.
			8	
. v.			9	(Witness sworn.)
		OYD ONTEN 1-1101 T101	10	
		ON BC	11	JACK M. ROSE
		VALT HOATHA Mar (12	being called as a witness and having been duly sworn upon
		LLY V Neveo se Place B nata Po,	13	his oath, testified as follows, to-wit:
			14	
			15	DIRECT EXAMINATION
			16	BY MR. CARR:
			17	Q. Will you state your full name and place
			18	of residence, please?
			19	A. Jack M. Rose, Midland, Texas.
			20	Q. Mr. Rose, by whom are you employed and in
			21	what capacity?
			22	A. Texas Pacific Oil Company as Petroleum
	3		23	Engineer. /
			24	Q Have you previously testified before this
anta Alianta Alianta			25	Commission and had your credentials as a petroleum engineer

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	Page4
1	accepted and made a matter of record?
2	A. I have.
3	Q Are you familiar with the application of
4	Texas Pacific in this case?
5	A. Yes, sir.
6	MR. CARR: Are the witness' qualifications
7	acceptable?
8	MR. STAMETS: They are.
9	Q. (Mr. Carr continuing.) Mr. Rose, will you
10	briefly state what Texas Pacific seeks with this application
 . 11	A. Texas Pacific Oil Company is seeking ap-
12	proval to commingle Arrowhead-Grayburg oil and Eumont gas
13	production in the wellbore of Elliott "B" 6 Well No. 1,
14	located 330 feet from the south line, 610 feet from the
15	west line of Section 6, Township 22 South, Range 37 East,
16	Lea County.
17	Q Will you refer to what has been marked
18	for identification as Applicant's Exhibit Number One and ex-
19	plain to the Examiner what it is and what it shows?
20	A. Exhibit One is a 4-section plat showing the
21	subject lease highlighted in yellow and the subject well
22	pointed out by the red arrow. Also shown are surrounding
23	active Arrowhead oil and Eumont gas wells.
24	The Arrowhead oil wells are spotted with
25	the green dots and the Eumont gas wells are spotted with the

SALLY WALTON BOYD CENTFRED SHONTHAND REPONTER 2020 PALLE BADOR (006) 171-3402 BADIA Pa, New Maridoo 27601

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red dots.

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Q Will you now refer to Exhibit Number Two and summarize the information contained thereon for the Examiner?

A. Exhibit Two is a wellbore sketch of the Elliott "B" 6 No. 1 in its current state. The Eumont-Queen zone is producing through the casing tubing annulus and the Arrowhead-Grayburg is being pumped through the tubing under a packer. The sliding sleeve at 3569 feet is closed, separating the two zones.

Q. Now, Mr. Rose, I direct your attention to what has been marked as Applicant's Exhibit Number Three and ask that you review this for the Examiner.

 A. Exhibit Three is a production history for the Elliott B-6 No. 1 Eumont gas zone. This zone produces no condensate.

Q. And now I direct your attention to Exhibit Number Four and ask that you identify this for the Examiner.

A. Exhibit Four is also a production history
 for the Elliott B-6 No. 1 for the Arrowhead-Grayburg oil
 zone. This zone was TA'd in 1972 because it quit flowing.

Q. Now, Mr. Rose, if you'll refer to Exhibit Number Five and using this exhibit give a brief history of the subject well for the Examiner.

A.

Exhibit Five is a 3-page tabulation of the

Y WALTON BOYD D BHOATHAND REPONTER D BHINGA (661) 471-3463 Pe, New Moxico 87801 well test covering the last year and one-half, including a short commingled swab test.

The Elliott B-6 No. 1 was originally completed in the Arrowhead oil zone in 1945. Subsequently, in 1956, the well was made a dual by completion in the Eumont gas zone. Both of these zones are flowing with the Arrowhead producing through the tubing underneath a packer and the Eumont producing through the casing tubing annulus.

The Arrowhead was producing both oil and gas and the Eumont was producing only gas.

The Arrowhead zone quit flowing in 1972 and at that time it was uneconomical to try to attempt to re-establish that production. Interest was renewed in the Arrowhead zone with increased prices and attempt was made to re-establish that Arrowhead production in February of this year.

During this work permission was given to conduct a commingled test from the two zones and results indicated that the Arrowhead would not flow, so the sliding sleeve at 59 -- excuse me, 3569 was opened and the two zones were commingled.

The well was swabbed on two separate occasions while commingled and if you'll refer to Exhibit Five, and for 10 hours they were swabbed commingled with the casing shut in and 17 barrels of oil and 24 barrels of oil were

ALLY WALTON BOYD ATTRIED SHORTHAND REPORTER 18 FEAL BILDON (1645) 411-3445 18424 FF. New Roadoo 11501 1

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recovered respectively with no gas.

The casing was then opened with the zones still commingled and the tubing was swabbed again. This test recovered 41 barrels of oil and 262 Mcf of gas. The results were very encouraging and as a result we decided to install a test pumping unit to determine the feasibility of pumping the Arrowhead oil from underneath the packer, while producing the Eumont gas through the casing-tubing annulus. This well has been pumped in this manner to date and the rate from the Arrowhead is now around 3 barrels of oil and 20 Mcf per day.

This can be seen also on Exhibit Five. The significant results of this test are the recoveries from the Eumont gas zone. Prior to any work, the Eumont was producing through the tubing with a sliding sleeve open. The last three well tests in 1978, as you can see on Exhibit Five, showed a rate of around 110 Mcf per day. After commingling the two zones, swabbing the well, and then producing the Eumont separately through the casingtubing annulus, we initially recovered around 160 Mcf per day. This rate has now declined to around 90 Mcf per day. This indicates to us that the Eumont is giving up just enough water to eventually load itself up and reduce its rate.

If we are allowed to downhole commingle

SALLY WALTON BOYD ERTIFIED SHOATHAND REPONTER 018 Place (501) 111-2410 Santa Fe, New Motion 1101 1

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these two zones, we would pump the Arrowhead through tubing as deep as possible without a packer and with the casing open.

Presently Arrowhead rates are insufficient to support a pumping unit; however, if we are able to commingle the two zones we feel that we can keep the Eumont unloaded and increase its rate. The Arrowhead rates, with an increase in the Eumont rates, would make the project economically attractive.

It should also be noted that our best test of 41 barrels of oil and 262 Mcf of gas was obtained while swabbing the tubing with the casing open. This test leads us to believe that we will see significantly higher recoverics from both zones with our proposed commingling production arrangement.

In summary, if we are able to downhole commingle these two zones, we feel that we will recover additional Eumont reserves and previously unrecoverable Arrowhead reserves, oil and gas reserves.

The alternative, if we are not able to commingle the two zones, would be abandonment of the Arrowhead zone.

Now, Mr. Rose, what is the GOR for the

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Eumont?

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A.

The Eumont has no --

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:	1	Q. It has no GOR
	2	A. No.
	3	Q because it's only producing gas and
	4	the GOR for the Grayburg is shown on Exhibit Five?
	5	A. Right. The GOR is running on the order
u*	6	of the average over the since we've been pumping it under
	7	a packer, the average GOR has been 7400 cubic feet per bar-
	8	rel.
	9	Q. Has notice of this application been given
BOYD EPORTER 471-3462	10	to offsetting operators?
F ~ X	11	A. Yes, it has.
VALTON 0 SHORTHAND 0 SHORTHAND 0 SHORT (6 01 0 , New Media	12	Q. And are copies of those letters marked for
LLY V TIFIED S Plaza F	13	identification as Applicant's Exhibit Six?
SA Sector	- 14	A Yes, they are.
	15	Q. Now, Mr. Rose, are both zones at this time
	16	capable of only marginal production?
	17	A. Yes, they are.
	18	Q. Will the proposed completion in your
	19	opinion result in the migration of hydrocarbons between zones?
	20	A. We feel that on the with the Eumont
	21	being the gas zone and higher up in the well, we feel that
	22	by keeping the well pumped off, we feel that we can eliminate
	23	the possibility of migration of any fluid up to the Eumont
	24	gas zone. We feel like the rates from the Arrowhead are low
	25	enough that even if we experience mechanical difficulties at

	1	times, we would have sufficient time to be able to correct	
	2	these problems and get it pumped off before we any fluid	
	3	migrated from the Arrowhead up into the Eumont.	
	4	Q. Will the fluids produced be compatible?	
	5	A. Yes. There are twenty-six leases in south-	
	6	east New Mexico that are commingled from these two zones	i C
. •	7	on the surface, on the surface in some manner, either on the	
	8	pipeline or wellhead, or whatever.	
	9	0. Is the mineral ownership common in the	
BOYD EPONTER ATL-1413	10	two zones to be commingled?	
E X	11	A. Yes, it is.	
WALTON HONTHAND Bhines (111)	12	Q. Will granting your application result in	5
LLLY V Three Bo	13	recovery of hydrocarbons that would otherwise be lost?	
	14	A	
	15	Q. Would granting the application jeopardize	
	16	any future secondary recovery efforts in the area?	and the second
	17	A. No, it wouldn't.	- مار يكانيك الماركو
	18	Q. Do you have a recommendation to make to	
	19	the Examiner as to the allocation of production between the	
	20	zones?	and the second
22	21	A. Yes, I do. The production history it	والتناسية المناسبة
	22	was difficult to obtain a uniform decline from the production	ويتعلم أناجاهم
	23	histories, so the method that we propose to split the pro-	
 *	24	duction, what we did was we averaged the since we've had	والمرادعة والمحاد
	25	the test pumping unit on the well, we've averaged the rates	1.1. A.
			كالمراح

from both the Eumont and the Arrowhead and those averages 1 were totaled and each zone was taken as a percentage of that 2 total. The split would -- the proposed split would be 78 3 percent of the gas allocated toward Eumont; 22 percent for 4 the Arrowhead gas; and of course all of the oil would be 5 allocated to the Grayburg. 6 7 In your opinion will granting this appli-Q. cation be in the interests of conservation, the prevention 8 of waste, and the protection of correlative rights? 9 Yes, it will. 10 Ά. WALTON BOYD 11 Were Exhibits One through Five prepared Q. 12 by you? 13 Yes, they were. A. 14 MR. CARR: At this time, Mr. Examiner, We 15 would offer into evidence Applicant's Exhibits One through 16 Six. 17 MR, STAMETS: These exhibits will be ad-18 mitted. 19 MR. CARR: We have nothing further on 20 direct. 21 22 CROSS EXAMINATION 23 BY MR. STAMETS: 24 Mr. Rose, could waste occur if the fluid <u>Q</u>. 25 level in the Grayburg zone was allowed to rise to opposite

1 the Eumont zone, the well was shut in? 2 A. We would probably lose some fluid from the 3 Grayburg into the Arrowhead zone, however --You mean into the Eumont zone. Q. A Into the Eumont zone. How can the Commission be assured that --0. 7 that this well will remain on pump? 8 A. We will assure that it will remain on pump, 9 and we'll pump it off. That's all I can say at the present 10 time. 11 Is there any automatic way that you can Q. 12 think of that we could be advised if you should have any 13 kind of a pump failure or --14 A. We do have -- that you could be advised 15 or that we would be advised? 16 That we would be advised. Q. 17 Yes, we can notify you in case -- we can A. 18 shoot a fluid level after -- if the pump does go down we can 19 shoot a fluid level at that time and determine if any damage 20 has occurred. 21 Do you know what the static fluid level of Q. 22 the Grayburg zone is? 23 Well, when we swabbed the zone, of course Δ. 24 we could only swab it down to the sliding sleeve and a swab 25 going through the sliding sleeve will open and close it, so

WALTON BOYD HHOATHAND REPOATER Banda (646) 471-2462 - New Mexico 873-01

normally that has been our static fluid level.

The ARrowhead zone has filled up and has been loaded since '72.

Q. Now Mr. Carr questioned you about secondary recovery. Are there any secondary recovery operations in the immediate vicinity?

A. No, there aren't, not in this particular not that I'm aware of.

Q. If you had to start pumping large volumes of secondary oil and/or injection water out of this well, that would certainly make a difference in whether or not you cculd efficiently produce the Eumont gas, would it not?

Yes, it would.

A.

Q.

Q What would you do under those circumstances? A. It's according to how much fluid we were receiving. If we could handle it with a larger pumping unit, we could put a larger pumping unit on at that time, with an attempt to pump it off. If we were unable to pump it off and we received damage in the -- we thought we might receive damage in the Eumont zone, we would probably TA the Arrowhead and produce the Eumont by itself at that time.

Q. What acreage is dedicated to this well?
A. To the -- to the gas?
Q. Yes.

It's a -- just a second here, 73-acre

WALTON BOYD SHORTHAND REPORTER Blanda (505) 471-3462 6, New Mexico 57501 1

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	1	proration unit.	And it's .46 of an acreage factor for the
	2	Eumont zone f	ield.
	3	Q.	It would be all of the lease that's
	4	colored in	
	5	А.	Right.
	6	Q	yellow on your Exhibit Number One?
	7	A.	Right.
	8	Q.	And the Arrowhead Well, I presume, is a
	9	40-acre?	
YD 8161 811	10	A.	Right.
N BC	11	Q.	But all of the interests under the 40-acre
ALTO Onthan	12	and the 73-acres	are identical.
LY W FEO SH	13	A.	They're common.
SAL CERT 1910F	14		MR. STAMETS: Are there other questions
	. 15	of the witness?	He may be excused.
	16		Anything further in this case?
	17		MR. CARR: Nothing further.
	18		MR. STAMETS: The case will be taken
	19	under advisement	
	20	under advisement	
	21		
• 1 •	22		(Hearing concluded.)
	23		
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Market Street

REPORTER'S CERTIFICATE

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I, SALLY W. BOYD, a court reporter, DO HEREBY CERTIFY that the foregoing and attached Transcript of Hearing before the Oil Conservation Division was reported by me; that the said transcript is a full, true, and correct record of the hearing, prepared by me to the best of my ability from my notes taken at the time of the hearing.

Sally W. Boyd, C.S.R.

Pao

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I do hereby certify that the foregoing is a complete record of the proceedings in the Examiner hearing of Case No. 6672 heard by me op 10=2 lam F. Examiner hard <u>í</u> <u>A</u>.

Oil Conservation Division

1 STATE OF NEW MEXICO ENERGY AND MINERALS DEPARTMENT 2 Oil Conservation Division State Land Office Bldg. Santa Fe, New Mexico 3 2 October 1979 EXAMINER HEARING 5 6 ß IN THE MATTER OF: ۱ 7 Application of Texas Pacific Oil CASE) Company, Inc., for downhole com-8 6677) mingling, Lea County, New Mexico.) 9) SALLY WALTON BOYD CERTPHED SHORTHAND REPORTER 2010 PTALL BADGA (1005) 411-3462 Sauta Pe, New Mexico 411-34 10 BEFORE: Richard L. Stamets 11 12 TRANSCRIPT OF HEARING 13 14 APPEARANCES 15 For the Oil Conservation Ernest L. Padilla, Esq. 16 Division: Legal Counsel for the Division State Land Office Bldg. 17 Santa Fe, New Mexico 87503 18 19 For the Applicant: William F. Carr, Esq. CAMPBELL AND BLACK P. A. 20 Jefferson Place Santa Fe, New Mexico 87501 21 22 23 24 25 1

JACK M. ROSE Direct Examination by Mr. Carr Cross Examination by Mr. Stamets

EXHIBITS

Applicant Exhibit One, Plat Applicant Exhibit Two, Sketch Applicant Exhibit Three, Production History Applicant Exhibit Four, Production History Applicant Exhibit Five, Tabulation Applicant Exhibit Six, Letters

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Q Will you now refer to Exhibit Number Two and summarize the information contained thereon for the Examiner?

A Exhibit Two is a wellbore sketch of the Elliott "B" 6 No. 1 in its current state. The Eumont-Queen zone is producing through the casing tubing annulus and the Arrowhead-Grayburg is being pumped through the tubing under a packer. The sliding sleeve at 3569 feet is closed, separating the two zones.

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Q And now I direct your attention to Exhibit Number Four and ask that you identify this for the Examiner.

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Q Now, Mr. Rose, if you'll refer to Exhibit Number Five and using this exhibit give a brief history of the subject well for the Examiner.

A.

Exhibit Five is a 3-page tabulation of the

LLY WALTON BOYD THEE SHORTHAND REPORTER THEE BANCA (111-111) THEE BANCA (111-111) well test covering the last year and one-half, including a short commingled swab test.

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LY WALTON BOYD FED SMONTHAND REPORTER MARA BADDA (501) 411-445 1

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recovered respectively with no gas.

The casing was then opened with the zones still commingled and the tubing was swabbed again. This test recovered 41 barrels of oil and 262 Mcf of gas. The results were very encouraging and as a result we decided to install a test pumping unit to determine the feasibility of pumping the Arrowhead oil from underneath the packer, while producing the Eumont gas through the casing-tubing annulus. This well has been pumped in this manner to date and the rate from the Arrowhead is now around 3 barrels of oil and 20 Mcf per day.

> This can be seen also on Exhibit Five. The significant results of this test are

the recoveries from the Eumont gas zone. Prior to any work, the Eumont was producing through the tubing with a sliding sleeve open. The last three well tests in 1978, as you can see on Exhibit Five, showed a rate of around 110 Mcf per day. After commingling the two zones, swabbing the well, and then producing the Eumont separately through the casingtubing annulus, we initially recovered around 160 Mcf per day. This rate has now declined to around 90 Mcf per day. This indicates to us that the Eumont is giving up just enough water to eventually load itself up and reduce its rate.

If we are allowed to downhole commingle

ALLY WALTON BOYD Entired shonthand nefonter 212 Mark Blade (615) 471-2422 Santa 70, New Mexico 27591 1

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these two zones, we would pump the Arrowhead through tubing as deep as possible without a packer and with the casing open.

Presently Arrowhead rates are insufficient to support a pumping unit; however, if we are able to commingle the two zones we feel that we can keep the Eumont unloaded and increase its rate. The Arrowhead rates, with an increase in the Eumont rates, would make the project economically attractive.

It should also be noted that our best test of 41 barrels of oil and 262 Mcf of gas was obtained while swabbing the tubing with the casing open. This test leads us to believe that we will see significantly higher recoveries from both zones with our proposed commingling production arrangement.

In summary, if we are able to downhole commingle these two zones, we feel that we will recover additional Eumont reserves and previously unrecoverable Arrowhead reserves, oil and gas reserves.

The alternative, if we are not able to commingle the two zones, would be abandonment of the Arrowhead zone.

Now, Mr. Rose, what is the GOR for the

Eumont?

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The Eumont has no ---

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	1	Q It has no GOR
	2	A No.
	3	Q because it's only producing gas and
	4	the GOR for the Grayburg is shown on Exhibit Five?
	5	A. Right. The GOR is running on the order
	6	of the average over the since we've been pumping it under
	-7	a packer, the average GOR has been 7400 cubic feet per bar-
	8	rel.
	9	Q Has notice of this application been given
BOYD NEPONTER 111-3102 0 87501	10	to offsetting operators?
N BC N BC	11	A. Yes, it has.
ALTC Ontrue New K	12	Q. And are copies of those letters marked for
SALLY WALTON SERTIFYED SHORTHAND 1 010 Park Blanca (505) Banka Po, New Marile	13	identification as Applicant's Exhibit Six?
SALL	. 14.	A. Yes, they are.
	15	Q. Now, Mr. Rose, are both zones at this time
	1 6	capable of only marginal production?
	17	A. Yes, they are.
	18	Q Will the proposed completion in your
	19	opinion result in the migration of hydrocarbons between zones?
	20	A. We feel that on the with the Eumont
	21	being the gas zone and higher up in the well, we feel that
	22	by keeping the well pumped off, we feel that we can eliminate
	23	the possibility of migration of any fluid up to the Eumont
	24	gas zone. We feel like the rates from the Arrowhead are low
	25	enough that even if we experience mechanical difficulties at

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1 times, we would have sufficient time to be able to correct 2 these problems and get it pumped off before we -- any fluid 3 migrated from the Arrowhead up into the Eumont. Will the fluids produced be compatible? 0 5 A. Yes. There are twenty-six leases in south-6 east New Mexico that are commingled from these two zones 7 on the surface, on the surface in some manner, either on the 8 pipeline or wellhead, or whatever. 9 Is the mineral ownership common in the Ģ. 10 two zones to be commingled? 11 Yes, it is. A. 12 Will granting your application result in Q. 13 recovery of hydrocarbons that would otherwise be lost? 14 Ã. Yes, 15 Would granting the application jeopardize Q. 16 any future secondary recovery efforts in the area? 17 No, it wouldn't. A. 18 Do you have a recommendation to make to **û** 19 the Examiner as to the allocation of production between the 20 zones? 21 Yes, I do. The production history -- it A. 22 was difficult to obtain a uniform decline from the production 23 histories, so the method that we propose to split the pro-24 duction, what we did was we averaged the -- since we've had 25 the test pumping unit on the well, we've averaged the rates

from both the Eumont and the Arrowhead and those averages were totaled and each zone was taken as a percentage of that total. The split would -- the proposed split would be 78 percent of the gas allocated toward Eumont; 22 percent for the Arrowhead gas; and of course all of the oil would be allocated to the Grayburg.

Q. In your opinion will granting this application be in the interests of conservation, the prevention of waste, and the protection of correlative rights?

A. Yes, it will.

Q. Were Exhibits One through Five prepared by you?

A. Yes, they were.

MR. CARR: At this time, Mr. Examiner, We would offer into evidence Applicant's Exhibits One through Six.

MR. STAMETS: These exhibits will be ad-

MR. CARR: We have nothing further on

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CROSS EXAMINATION

BY MR. STAMETS:

Q. Mr. Rose, could waste occur if the fluid level in the Grayburg zone was allowed to rise to opposite

1 the Eumont zone, the well was shut in? 2 ٨. We would probably lose some fluid from the 3 Grayburg into the Arrowhead zone, however ---Q You mean into the Eumont zone. 5 λ. Into the Eumont zone. 6 How can the Commission be assured that --Q. 7 that this well will remain on pump? 8 We will assure that it will remain on pump, A. 9 and we'll pump it off. That's all I can say at the present 10 time. 11 Is there any automatic way that you can ٦Q. 12 think of that we could be advised if you should have any 13 kind of a pump failure or --14 We do have -- that you could be advised λ 15 or that we would be advised? 16 That we would be advised. Q. 17 Yes, we can notify you in case -- we can A. 18 shoot a fluid level after -- if the pump does go down we can 19 shoot a fluid level at that time and determine if any damage 20 has occurred. 21 Do you know what the static fluid level of Q. 22 the Grayburg zone is? 23 Well, when we swabbed the zone, of course A. 24 we could only swab it down to the sliding sleeve and a swab 25 going through the sliding sleeve will open and close it, so

WALTON BOYD SHORTHAND REPORTER BLOCK (101-2142 2. New Morton 2120-2120 _12

normally that has been our static fluid level.

The ARrowhead zone has filled up and has been loaded since '72.

Q. Now Mr. Carr questioned you about secondary recovery. Are there any secondary recovery operations in the immediate vicinity?

A No, there aren't, not in this particular not that I'm aware of.

Q If you had to start pumping large volumes of secondary oil and/or injection water out of this well, that would certainly make a difference in whether or not you could efficiently produce the Eumont gas, would it not?

Yes, it would.

A.

Q What would you do under those circumstances? A. It's according to how much fluid we were receiving. If we could handle it with a larger pumping unit, we could put a larger pumping unit on at that time, with an attempt to pump it off. If we were unable to pump it off and we received damage in the -- we thought we might receive damage in the Eumont zone, we would probably TA the Arrowhead and produce the Eumont by itself at that time.

Q. What acreage is dedicated to this well?
A. To the -- to the gas?
Q. Yes.
Q. It's a -- just a second here, 73-acre

Y WALTON BOYD Ed shorthand neponter is Bluck (101, 111-2463 178, New Mation 81361 1

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	1	proration unit.	And it's .46 of an acreage factor for the
	2	Eumont zong fi	.e.d.
	3	ዪ	It would be all of the lease that's
	4	colored in	
	5	λ.	Right.
	6	Q	yellow on your Exhibit Number One?
	7	λ.	Right.
	8	ß	And the Arrowhead Well, I presume, is a
	9	40-acre?	
1911	10	Α.	Right.
le kico	11	Q	But all of the interests under the 40-acres
	12	and the 73-acres	are identical.
Sents Fe, New Mexico 27361	13	A.	They're common.
	14		MR. STAMETS: Are there other questions
	15	of the witness?	He may be excused.
	16		Anything further in this case?
	17		MR. CARR: Nothing further.
	18		MR. STAMETS: The case will be taken
	19	under advisement.	
	20		
	21		(Version inversional)

SALLY WALTON BOYD CERTIFED SHORTHAND REPORTER 3020 Plance Bances (106) 471-2405 Banta Pe, New Marico 37301

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N.S.A.

(Hearing Concluded.)

REPORTER'S CERTIFICATE
I, SALLY W. BOYD, a court reporter, DO HEREBY
CERTIFY that the foregoing and attached Transcript of
Nearing before the Oil Conservation Division was reported
by me; that the said transcript is a full, true, and correct
record of the hearing, prepared by me to the best of my

SALLY WALTON BOYD CERTIFIED SHORTHAND REPORTER ability from my notes taken at the time of the hearing.

Sally W. Boyd, C.S.R.

Page

I do hereby certify that the foregoing is a complete record of the proceedings in the Examiner hearing of Case No. heard by me on ______19____

, Examiner

15-

Oil Conservation Division

TEXAS PACIFIC OIL COMPANY, INC. Elliott "B-6" No. 1 330' FSL & 610' FWL, Sec. 6, T-22-S, R-37-E Lea County, New Mexico Cont Top 10' Srom Sun 10 Elevation 3457 G.L., 3459 RF. Completion date 2-28-45 .18"-100 Well History 461 15% 7-30-45 Perf 3690'- 3722', Ac/ 1000 gals 20%, AC/5000 gals 15% 667 12/2 Erayburg 3-1-52 AC/ 1000 gals 15% (3705-3722) 8 78 32" Second Class 1061 Cmt 6/575 SX Set CIBP @ 3650 W/ISX on top, 11-1-56 Perf 3468'-3530 Queen 2788' Cmt Top (Calc) SOT W/8000 gals lease oil & 11 - 6 - 56 8000 # of 20/40 Snd (3468-3530) 3468 DOBP push to TP, set PKr 3598' Queen Perfs 45PF. 3468'-3530 1 1/2" x 2" x 16" Pump + 141 3/4" Rods 3555 3530 PSI Type L stiding Slee 3569 3598' PKr Guiberson Ki 2" EUE Tubing 3690 Grayburg Perfs 8399 3690'-3722' 3723' 51/2" 14 t Cant w/300 3724 TD 3722 70" CIBP drilled out and pushed to bottom or TD
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Connents

JACK M. CAMPBELL BRUCE D. BLACK MICHAEL B. CAMPBELL WILLIAM F. CARR PAUL R. CALDWELL

BEFOR' EV THE REAS OST OFFICE BOX 2208 CHEE 目的 234 JEFFERSON PLACE Islicents 6 SANTA FE. NEW MEXICO 87501 6677 TELEPHONE 16081 984-447 Julas-50 4. 2, 1979 Flearing Date \mathcal{S} September 21, 1979

Continental Oil Co. Box 460 Hobbs, New Mexico 88240

Gentlemen:

Enclosed is a copy of the Oil Conservation Division Docket for October 2, 1979. You may have an interest affected by Case No. 6677.

Very truly yours,

William F. Carr

WFC:tn

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LAWYERS

JACH M. CAMPBELL BRUCE D. BLACK MICHAEL B. CAMPBELL WILLIAM F. CARR PAUL R. CALDWELL

POST OFFICE BOX 2208 JEFFERSON PLACE SANTA FE. NEW MEXICO 87501 TELEPHONE (806) 888-14121

September 21, 1979

Gulf Energy & Minerals Co. U.S.A. Box 670 Hobbs, New Mexico 88240

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JACK M. CAMPBELL BRUCE D. BLACK MICHAEL B. CAMPBELL WILLIAM F. CARR PAUL R. CALDWELL FOST OFFICE BOX 2208 JEFFERSON PLACE SANTA FE. NEW MEXICO 87501 TELEPHONE (BOB) 988-4481

September 21, 1979

Martindale Petroleum Co. Box 1955 Hobbs, New Mexico 88240

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William F. Carr



LAWYERS

JACK M. CAMPBELL BRUCE D. BLACK MICHAEL B. CAMPBELL WILLIAM F. CARR PAUL R. CALDWELL POST OFFICE BOX 2208 JEFFERSON PLACE SANTA FE, NEW MEXICO 87501 TELEPHONE (808) 988-4421

September 21, 1979

USGS P.O. Box 1157 Hobbs, New Mexico 88240

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10 - Eumont Gas

Comments

CAMPBELL AND BLACK, P.A. LAWYERS

JACK M. CAMPBELL BRUCE D. BLACK M.CHAEL B. CAMPBELL WILLIAM F. CARR

PAUL R. CALDWELL

BEFORE LYAN INFO STANISTS OST OFFICE BOX 2204 OIL COL . JEFFERSON PLACE applicants 6 SANTA PET NEW MEXICO 87501 TELEPHONE (506) 988-4421 6677 Submitted by Oleras to Hearing Date Def. Z 79 14 ptember 21, 1979

Continental Oil Co. Box 460 Hobbs, New Mexico 88240

Gentlemen:

Enclosed is a copy of the Oil Conservation Division Docket for October 2, 1979. You may have an interest affected by Case No. 6677.

Very truly yours,

William F. Carr



LAWYERS

ACA M. CAMPBELL BRUCCE D. BLACK MICHAEL B. CAMPBELL WILLIAM F. CARR PAUL R. CALDWELL

POST OFFICE BOX 2208 JEFFERSON PLACE SANTA FE, NEW MEXICO 87501 TELEPHONE (806) 948-4421

September 21, 1979

Gulf Energy & Minerals Co. U.S.A. Box 670 Hobbs, New Mexico 88240

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WFC:tn



LAWYERS

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POST OFFICE BOX 8208 JEFFERBON PLACE SANTA FE. NEW MEXICO 87501 TELEPHONE (808) 888-4481

September 21, 1979

Martindale Petroleum Co. Box 1955 Hobbs, New Mexico 88240

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William F. Carr

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LAWYERS

JAUK M CAMPBELL BRUCE D. BLACK MICHAEL B. CAMPBELL WILLIAM F CARR PAUL R. CALOWELL POST OFFICE BOX 2208 JEFFERSON PLACE SANTA FE. NEW MEXICO 87501 TELEPHONE (808) 988-4421

September 21, 1979

USGS P.O. Box 1157 Hobbs, New Mexico 88240

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Very truly yours,

William F. Carr



TEXAS PACIFIC OIL COMPANY, INC. Elliott "B-6" No. 1 330' FSL & 610' FWL, Sec. 6, T-22-S, R-37-E Lea County, New Mexico 10 CATE TOP 10' STOR SUR 3457 G.L., 3457 RF. Elevation Completion date 2-28-45 - 18". 100 Well History 461 15% 7 - 30 - 45 Perf 3690'- 3722', Ac/ 1000 gals 20%, AC/ 5000 gals 15% 667-12/2 Grayburg. 3-1-52 Ac/ 1000 gals 15% (3705-3722) 10.61 8 48" 32" Second class cmt w/575 Sx 11-1-56 Set CIBP @ 3650 W/I SX on top, Perf 3468'-3530 Queen 2788' Cmt Top (Calc) 11 - 6 - 56 SOT W/ 8000 gals lease oil ? 8000 # of 20/40 Snd (3468-3530) 3468 Queen Perfs 458F 3468' - 3530 DOBP push to TP, set PKr 3598' 1 1/2" x 2" x 16" Pump 3555 + 141 3/4" Rods 3555 3530 3569 PSI Type 1 stiding Slee 3598' PKr Guiberson KV 2" EUE Tubing 3690 Grayburg lerfs 8391 3690'= 3722' 3722 3723', 5 1/2" 14 t Cmt w/300 3724 TD 10" CIBP drilled out and pushed to bottom or TO

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IAWYERS	BEFORE FOR SECRETARY SETS	
JACK M. CAMPBELL BRUCE D. BLACK M.CHAEL B. CAMPBELL WILLIAM F. CARR	Applicants and the second to the second	POST OFFICE BOX 2208 JEFFERSON PLACE SANTA FE, NEW MEXICO 8750
PAUL R. CALDWELL	CALENDER 6677 Submitted by Clarke Pacific	TELEPHONE 1608) 988-4421
	Hearing Date Oct. 2, 1979	21 1979

Continental Oil Co. Box 460 Hobbs, New Mexico 88240

Gentlemen:

Enclosed is a copy of the Oil Conservation Division Docket for October 2, 1979. You may have an interest affected by Case No. 6677.

Very truly yours,

William F. Carr

WFC:tn



JACK M. CAMPBELL BRUCE D. BLACK MICHAEL B. CAMPBELL WILLIAM F. CARR PAUL R. CALOWELL

POST OFFICE BOX 2208 JEFFERSON PLACE SANTA FE. NEW MEXICO 87501 TELEPHONE (508) 888-4421

September 21, 1979

Gulf Energy & Minerals Co. U.S.A. Box 670 Hobbs, New Mexico 88240

Gentlemen:

Enclosed is a copy of the Oil Conservation Division Docket for October 2, 1979. You may have an interest affected by Case No. 6677.

Very truly yours,

William F. Carr

WFC:tn



LAWYERS

JACK M. CAMPBELL BRUCE D. BLACK MICHAEL B. CAMPBELL WILLIAM F. CARR RAUL R. CALDWELL POST OFFICE BOX 2208 JEFFERSON PLACE SANTA FE, NEW MEXICO 87501 TELEPHONE (806) 989-4421

September 21, 1979

Martindale Petroleum Co. Box 1955 Hobbs, New Mexico 88240

Gentlemen:

Enclosed is a copy of the Oil Conservation Division Docket for October 2, 1979. You may have an interest affected by Case No. 6677.

Very truly yours,

William F. Carr



LAWYERS

JACK M. CAMPBELL BRUCE D. BLACK MICHAEL B. CAMPBELL WILLIAM F. CARR PAUL R. CALDWELL POST OFFICE BOX 2208 JEFFERSON PLACE SANTA FE, NEW MEXICO 87501 TELEPHONE (608) 968-4421

September 21, 1979

USGS P.O. Box 1157 Hobbs, New Mexico 88240

Gentlemen:

Enclosed is a copy of the Oil Conservation Division Docket for October 2, 1979. You may have an interest affected by Case No. 6677.

Very truly yours,

William F. Carr



Page 2 of 4

Examiner Hearing - Tuesday - October 2, 1979

Docket No. 38-79

CASE 6644: (Continued from September 19, 1979, Examiner Hearing)

Application of Tenneco Oil Corporation for downhole commingling, San Juan County, New Mexico. Applicant, in the above-styled cause, seeks approval for the downhole commingling of Fruitland and Pictured Cliffs production in the wellbores of its State K Com Well No. 12 located in Unit E of Section 16, Township 30 North, Range 9 West, and its Florence Well No. 60R in Unit E of Section 1, Township 29 North, Range 9 West.

CASE 6675: Application of Gifford, Mitchell & Wisenbaker for a unit agreement, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval for the Pawnee Unit Area, comprising 3,840 acres, more or less, of State and federal lands in Township 26 South, Range 36 East.

CASE 6671: (Continued from September 19, 1979, Examiner Hearing)

Application of Chapman and Schneider for salt water disposal, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to dispose of produced salt water in the Seven Rivers Reef formation in the open-hole interval from 3422 feet to 3504 feet in its I. B. Ogg "A" Well No. 3 located in Unit E of Section 35, Township 24 South, Range 36 East, Jalmat Pool.

CASE 6676: Application of Doyle Hartman for an unorthodox well location and a non-standard proration unit, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval of an 80-acre nonstandard gas proration unit comprising the SW/4 NE/4 and SE/4 NW/4 of Section 36, Township 24 South, Range 36 East, Jalmat Gas Pool, to be dedicated to a well to be drilled at an unorthodox location 2310 feet from the North line and 1650 feet from the East line of said Section 36.

CASE 6677:

1.1

6677: Application of Texas Pacific Oil Company, Inc. for downhole commingling, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval for the downhole commingling of Arrowhead-Grayburg and Eumont production in the wellbore of its Elliott B-6 Well No. 1 located in Unit M of Section 6, Township 22 South, Range 37 East.

- CASE 6678: Application of Texas Pacific Oil Company, Inc. for downhole commingling and a special casinghead gas allowable, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval for the downhole commingling of Blinebry and Tubb production in the wellbore of its Eva Owens Well No. 1 located in Unit M of Section 25, Township 21 South, Range 37 East. Applicant further seeks an increase in the casinghead gas allowable for said well.
- CASE 6660: (Continued from September 19, 1979, Examiner Hearing)

Application of B. & W. Oil Reclaiming for an oil treating plant permit, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks authority for the construction and operation of an oil treating plant for the purpose of treating and reclaiming sediment oil at a site in the NE/4 NE/4 NE/4 of Section 34, Township 18 South, Range 26 East.

<u>CASE 6679</u>: Application of El Paso Natural Gas Company for a gas storage unit agreement, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks approval of the Washington Ranch Morrow Unit Area comprising the Morrow formation and the first 100 feet immediately above and below said formation underlying all or parts of Sections 21 thru 23, 26 thru 29, and 32 thru 36, Township 25 South, Range 24 East; Sections 1 thru 5 and 9 thru 14, Township 26 South, Range 24 East; and Sections 6, 7, and 18, Township 26 South, Range 25 East, Washington Ranch-Morrow Gas Pool, Eddy County, New Mexico. Said unit area would be for the purpose of conducting a gas storage project and would comprise 12,158 acres, more or less, of State, federal and fee lands.

CASE 6630: (Continued from August 22, 1979, Examiner Hearing)

Application of El Paso Natural Gas Company for downhole commingling, Rio Arriba County, New Mexico. Applicant, in the above-styled cause, seeks approval for the downhole commingling of Basin-Dakota and BS Mesa-Gallup production in the wellbore of its San Juan 27-4 Unit Well No. 37 located in Unit N of Section 33, Township 27 North, Range 4 West.

<u>CASE 6680</u>: Application of Robert C. Anderson for surface commingling, San Juan County, New Mexico. Applicant, in the above-styled cause, seeks approval for the surface commingling of all production from his Ute Mountain Ute Lease, Wells Nos. 1, 3 and 4, located in Section 14, Township 31 North, Range 16 West.

CASE 6681: Application of Yates Petroleum Corporation for an unorthodox gas well location, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks approval for the unorthodox location of a Wolfcamp-Mississippian test well to be located 660 feet from the South line and 1100 feet from the West line of Section 31, Township 18 South, Range 26 East, the S/2 of said Section 31 to be dedicated to the well.

LAWYERS

JACK M. CAMPBELL BRUCE D. BLACK MICHAEL B. CAMPBELL WILLIAM F. CARR PAUL R. CALDWELL POST OFFICE BOX 2208 JEFFERSON PLACE SANTA FE, NEW MEXICO 87501 TELEPHONE (505) 988-4421

September 17, 1979

Mr. Joe D. Ramey Division Director Oil Conservation Division New Mexico Department of Energy and Minerals Post Office Box 2088 Santa Fe, New Mexico 87501

> RE: 0il Conservation Division Case 6677: In the Matter of the Application of Texas Pacific Oil Company, Inc. for Downhole Commingling, Lea County, New Mexico.

Dear Mr. Ramey:

Enclosed herewith, in triplicate, is an application of Texas Pacific Oil Company, Inc. The applicant requests that this case be set for the examiner's hearing scheduled to be held on October 2, 1979.

Very truly yours, William F. Carr

WFC:tn

Enclosure

cc: Texas Pacific Oil Company, Inc. c/o Mel Schroder Post Office Box 4067 Midland, Texas 79701

BEFORE THE



OIL CONSERVATION DIVISION

NEW MEXICO DEPARTMENT OF ENERGY AND MENISERVATION DIVISION

IN THE MATTER OF THE APPLICATION OF TEXAS PACIFIC OIL COMPANY, INC. FCR DOWNHOLE COMMINGLING, LEA COUNTY, NEW MEXICO.

CASE No. 6677

APPLICATION

Comes now, TEXAS PACIFIC OIL COMPANY, INC., by and through its undersigned attorneys, and hereby makes application to the Oil Conservation Division for approval of Downhole Commingling and in support thereof respectfully states:

> 1. Applicant is the operator of the Elliott B-6 Well No. 1 located 330 feet from the South line and 610 feet from the West line of Section 6, Township 22 South, Range 37 East, NMPM, Lea County, New Mexico, which is completed in the Eumont Gas Zone and the Arrowhead Grayburg Oil Zone.

2. That Arrowhead Grayburg production declined resulting in this zone being temporarily abandoned as uneconomic to produce.

3. That applicant tested the Arrowhead Grayburg Zone by pumping it under a packer and determined that it was not economically feasible to produce this zone in this fashion.

4. That commingling the two zones will result in it being economically feasible to produce both zones thereby increasing production from the subject well. 5. That granting the application will result in the recovery of hydrocarbons which would otherwise not be recovered thereby preventing waste.

6. That granting the application is in the interest in conservation and will not impair correlative rights.

WHEREFORE, applicant respectfully requests that this matter be set for hearing before the Division's duly appointed examiner on October 2, 1979, that notice be given as required by law and the rules of the Commission and that, upon hearing, an order be entered granting this application.

- 2

Respectfully submitted,

CAMPBELL AND BLACK, P.A.

Attorneys for Applicant Post Office Box 2208 Santa Fe, New Mexico 87501

BEFORE THE



OIL CONSERVATION DIVISION

SANTA FE

NEW MEXICO DEPARTMENT OF ENERGY AND MINERALS

IN THE MATTER OF THE APPLICATION OF TEXAS PACIFIC OIL COMPANY, INC. FOR DOWNHOLE COMMINGLING, LEA COUNTY, NEW MEXICO.

CASE No. 6677

APPLICATION

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2. That Arrowhead Grayburg production declined resulting in this zone being temporarily abandoned as uneconomic to produce.

3. That applicant tested the Arrowhead Grayburg Zone by pumping it under a packer and determined that it was not economically feasible to produce this zone in this fashion.

4. That commingling the two zones will result in it being economically feasible to produce both zones thereby increasing production from the subject well.

- 1 -

5. That granting the application will result in the recovery of hydrocarbons which would otherwise not be recovered thereby preventing waste.

6. That granting the application is in the interest in conservation and will not impair correlative rights.

WHEREFORE, applicant respectfully requests that this matter be set for hearing before the Division's duly appointed examiner on October 2, 1979, that notice be given as required by law and the rules of the Commission and that, upon hearing, an order be entered granting this application.

- 2 -

Respectfully submitted, CAMPBELL AND BLACK, P.A.

Attorneys for Applicant Post Office Box 2208 Santa Fe, New Mexico 87501

BEFORE THE

OIL CONSERVATION DIVISION OIL CONSERVATION DIVISION

NEW MEXICO DEPARTMENT OF ENERGY AND MINERALSTA FE

IN THE MATTER OF THE APPLICATION OF TEXAS PACIFIC OIL COMPANY, INC. FOR DOWNHOLE COMMINGLING, LEA COUNTY, NEW MEXICO.

CASE No. 6677

APPLICATION

Comes now, TEXAS PACIFIC OIL COMPANY, INC., by and through its undersigned attorneys, and hereby makes application to the Oil Conservation Division for approval of Downhole Commingling and in support thereof respectfully states:

> 1. Applicant is the operator of the Elliott B-6 Well No. 1 located 330 feet from the South line and 610 feet from the West line of Section 6, Township 22 South, Range 37 East, NMPM, Lea County, New Mexico, which is completed in the Eumont Gas Zone and the Arrowhead Grayburg Oil Zone.

2. That Arrowhead Grayburg production declined resulting in this zone being temporarily abandoned as uneconomic to produce.

3. That applicant tested the Arrowhead Grayburg Zone by pumping it under a packer and determined that it was not economically feasible to produce this zone in this fashion.

4. That commingling the two zones will result in it being economically feasible to produce both zones thereby increasing production from the subject well.

1 -

5. That granting the application will result in the recovery of hydrocarbons which would otherwise not be recovered thereby preventing waste.

6. That granting the application is in the interest in conservation and will not impair correlative rights.

WHEREFORE, applicant respectfully requests that this matter be set for hearing before the Division's duly appointed examiner on October 2, 1979, that notice be given as required by law and the rules of the Commission and that, upon hearing, an order be entered granting this application.

2 -

Respectfully submitted, CAMPBELL AND BLACK, P.A.

iam F. Carr

Attorneys for Applicant Post Office Box 2208 Santa Fe, New Mexico 87501



Memo Grom FLORENE DAVIDSON ADMINISTRATIVE SECRETARY Called in by Bill Carr 9/12/>9 Texas Pacific Oil Co., Inc. Alownhole Commingling arrowhead - Grayburg and Eumont Elliott B-6 # 1-M 6-225-37E

OIL CONSERVATION COMMISSION-SANTA FE

STATE OF NEW MEXICO ENERGY AND MINERALS DEPARTMENT OIL CONSERVATION DIVISION

IN THE MATTER OF THE HEARING CALLED BY THE OIL CONSERVATION DIVISION FOR THE PURPOSE OF CONSIDERING:

	CASE	NO. 6677
•	Orde	r No. <u><u>R-6257</u></u>
APPLICATION OF	TEXAS PACIFIC OIL CO	MPANY, INC.
FOR DOWNHOLE CO	MMINGLING, LEA	· · ·
COUNTY, NEW MEX	100.	Nau
	ORDER OF THE DIVIS	SION

BY THE DIVISION:

This cause came on for hearing at 9 a.m. on October 2 19 79 , at Santa Fe, New Mexico, before Examiner Richard L. Stamets

NOW, on this <u>day of October</u>, 1979, the Division Director, having considered the testimony, the record, and the recommendations of the Examiner, and being fully advised in the premises,

FINDS:

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

(2) That the applicant,	Texas Pacifi	c Oil Company,Inc,	is
the owner and operator of the	Elliott B-6 Arrawkezd	Well No. 1	¹
located in Unit M of Sect	ion <u>6</u> ,	Township 22 South	/
Range, NMPM,	Lea	County, New Mexico	0.

from the Arrowhead-Grayburg Part

(3) That the applicant seeks authority to commingle oilproduction des production from the head-Grayburg Real and 1 Eumont Ges Pool production

within the wellbore of the above-described well.

dr/

(4) That from the Arrowhead-Grayburg zone, the subject well is capable of low marginal production only. (5) That from the Eumont zone, the subject well is capable of low marginal production only. (6) That the proposed commingling the result in the recovery of additional hydrocarbons from each of the subject pools, thereby Weste could occur Through the wetting of the Eumont gos sands by Arrowhend -Graybury oil if The well were shut in for an extended period. (7) that There is no mechanism to assum The Division That said Elliot B-6 Well No 1 would not be shut-in for an extended period following completion of The proposed downhole comming ling (9) That to avoid the potential for waste the subject application should be denied.

IT IS THEREFORE ORDERED:

(1) That the applicate, Texas Pacific 011 Company, Inc., te hereby-authorized to commingle Arrowhead-Grayburg cilproduc Eumont <u>gus</u> production within the wellbore of the Elliott B-6 Well No. 1 , located in Unit M of Section 6, Township 22 South, Range 37 East Lea County, New Mexico is hereby denie C. NMPM, (2) That the applicant shall consult with the Supervisor of the Hobbs district dffice of the Division and determine an allocation formula for the allocation of production to each zone in each of the subject wells. (ALTERNATE)

(2) That _____ percent of the commindled _____ production shall be allocated to the _____ Arrowhead-Grayburg _____ zone and ______ percent of the commingled _____ production shall be allocated to the _____ Eumont _____ zone.

(3) That the operator of the subject well shall immediately notify the Division's <u>Hobbs</u> district office any time the well has been shut-in for 7 consecutive days and shall concurrently present, to the Division, a plan for remedial action.

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

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