CASE 6436: AMERADA HESS CORPORATION FOR

February 28

# CASE NO.

6436

APPlication, Transcripts, Small Exhibits,

ETC.

#### RMERADA HESS CORPORATION

March 14, 1979

P. O. BOX 2040 TULSA, DKLAHOMA 74102

Mr. R. L. Stamets Technical Support Chief New Mexico Oil Conservation Commission Post Office Box 2088 State Land Office Building Santa Fe, New Mexico 87501

Re: Eumont Gas Pool,

Case Nos. 6434 and 6436 Amerada Hess Corporation - Applicant

Dear Mr. Stamets:

The captioned cases were presented and heard on February 28, 1979, and, with consent of the Commission, this letter is submitted as part of the record of those hearings to correct testimony on a single point which later investigation proves to have been inadvertently in error.

In response to cross-examination regarding the attached performance curve exhibit of the Amerada Hess State "P" Gas Com No. 2-2 Replacement Well No. 3 indicating reduced production from said replacement well, Amerada Hess stated that the replacement well had been frac treated using CO2 as the fracture median. This representation was based on a written recommendation and proposal from our contractor and contained in our well file.

A review of that operation which was made immediately after the hearing shows that the proposed CO<sub>2</sub> frac was performed on the State "J" No. 4 Well and not the State "P" No. 3 Well, which was the subject of the hearing, was foam fractured in the Eumont Queen Zone on August 3, 1977 in open hole with 260 barrels 2% KCL water, 835,000 SCF Nitrogen and 36,500 pounds of 20/40 sand.

We therefore request that the record reflect that Nitrogen was the fracture fluid utilized in the well, and not CO2. Unfortunately, subsequent treatments in similar wells have indicated that a better increase

in production would have been realized if CO2 had in fact been used in frac treating the well.

We apologize for any inconvenience or misconception created by our mistake in presenting our evidence. It is our intention that this transmittal will serve to correct the record and to preserve our integrity as to matters coming before the Commission.

Thank you for your consideration and assistance in this matter.

Very truly yours,

AMERADA HESS CORPORATION

llbert E. Miller

Supervisor, Production Conservation

GEM: bjt Attachment

cc: W. Thomas Kellahin, Esq. Kellahin & Kellahin Post Office Box 1769 Santa Fe, New Mexico

#### 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. 6436 Order No. R-5956

APPLICATION OF AMERADA HESS CORPORATION FOR APPROVAL OF INFILL DRILLING, LEA COUNTY, NEW MEXICO.

#### ORDER OF THE DIVISION

#### BY THE DIVISION:

This cause came on for hearing at 9 a.m. on February 28, 1979, at Santa Fe, New Mexico, before Examiner Richard L. Stamets.

NOW, on this 30th day of March, 1979, 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, Amerada Hess Corporation, seeks a finding that the drilling of its State "U" Gas Com Well No. 2 to be located in Unit C of Section 32, Township 19 South, Range 37 East, NMPM, Eumont Gas Pool, Lea County, New Mexico, is necessary to effectively and efficiently drain a portion of the reservoir covered by the proration unit which cannot be so drained by the existing well.
- (3) That the applicant further seeks approval of a waiver of existing well-spacing requirements.
- (4) That the standard spacing unit in the Eumont Gas Pool is 640 acres.
- (5) That Amerada Hess Corporation is the operator of a 240-acre non-standard proration unit consisting of the NW/4 and W/2 NE/4 of said Section 32 in said Eumont Gas Pool.

-2-Case No. 6436 Order No. R-5956

- (6) That said 240-acre non-standard proration unit is dedicated to the applicant's State "U" Gas Com Well No. 1 located in Unit E of said Section 32.
- (7) That the evidence presented demonstrated that said State "U" Gas Com Well No. 1 cannot as effectively and efficiently drain said dedicated 240-acre non-standard proration unit as would a new well to be drilled thereon (said State "U" Gas Com Well No. 2) which may be completed and stimulated using modern techniques and processes.
- (8) That the evidence presented further demonstrated that the drilling and completion of applicant's said State "U" Gas Com Well No. 2 should result in the production of an additional 730,000 MCF of gas from said non-standard proration unit which would not otherwise be recovered from the proration unit.
- (9) That such additional recovery will result in said unit being more efficiently and economically drained.
- (10) That said State "U" Gas Com Well No. 2 is to be drilled as an "infill" well on the existing 240-acre non-standard proration unit.
- (11) That in order to permit the drainage of a portion of the reservoir covered by said 240-acre non-standard proration unit which cannot be effectively and efficiently drained by the existing well thereon, the subject application for infill drilling should be approved as an exception to the standard well spacing requirements for said Eumont Gas Pool.

#### IT IS THEREFORE ORDERED:

- (1) That the applicant, Amerada Hess Corporation, is hereby authorized to drill its State "U" Gas Com Well No. 2 to be located in Unit C of Section 32, Township 19 South, Range 37 East, NMPM, as an infill well on an existing 240-acre nonstandard proration unit being the NW/4 and W/2 NE/4 of said Section 32, Eumont Gas Pool, Lea County, New Mexico. The authorization for infill drilling granted by this order is an exception to applicable well spacing requirements and is necessary to permit the drainage of a portion of the reservoir covered by the existing 240-acre non-standard proration unit which cannot efficiently and economically be drained by any existing well thereon.
- (2) That jurisdiction of this cause is retained for the entry of such further orders as the Division may deem necessary.

-3-Case No. 6436 Order No. R-5956

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

STATE OF NEW MEXICO OIL CONSERVATION DIVISION

JOE D. RAMEY Director

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STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT
OIL CONSERVATION DIVISION
State Land Office Building
Santa Fe, New Mexico
31 January 1979

#### EXAMINER HEARING

IN THE MATTER OF:

Application of Amerada Hess Corporation for approval of infill ) 6434
Drilling, Lea County, New Mexico. ) 6435
6436

BEFORE: Richard L. Stamets

TRANSCRIPT OF HEARING

#### APPEARANCES

For the Oil Conservation Division:

Lynn Teschendorf, Esq. Legal Counsel for the Division State Land Office Bldg. Santa Fe, New Mexico 87503

For the Applicant:

W. Thomas Kellahin, Esq. KELLAHIN & KELLAHIN 500 Don Gaspar Santa Fe, New Mexico 87501

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1010 Plaza Blanca (501) 411-2462
Sauta Pe, New Mexico 311501

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24 25 MR. STAMETS: We'll call next Case 6434.

MS. TESCHENDORF: Case 6434. Application of Amerada Hess Corporation for approval of infill drilling, Lea County, New Mexico.

MR. KELLAHIN: Tom Kellahin of Kellahin and Kellahin, Santa Fe, New Mexico, appearing on behalf of Amerada Hess Corporation. I have one witness to be sworn.

(Witness sworn.)

#### WAYNE WISE

being called as a witness and having been duly sworn upon his oath, testifled as follows, to-wit:

#### DIRECT EXAMINATION

#### BY MR. KELLAHIN:

- Q. Please state your name and occupation.
- A. Wayne Wise. I'm currently employed with Amerada Hess as Staff Engineer.
  - Q Mr. Wise, in what field do you hold a degree?
  - A. Mechanical engineering.
- Q. Have you previously testified before the Oil Conservation Division?
  - A. Yes, sir.

# SALLY WALTON BOY CENTIFED SHORTHAND MEDORT 1923 Place (545) 471-54 Banta Po. New Mexico 1119

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#### A. Yes, sir.

MR. KELLAHIN: We tender Mr. Wise as an expert witness.

MR. STAMETS: He is considered qualified.

O. (Mr. Kellahin continuing.) Would you refer to the land plat, which I've marked as Applicant Exhibit Number One, identify that for us, and explain what Amerada Hess is seeking to accomplish?

A. This is a plat of the State "O" Gas Zone and the final designation is the proposed new location to place the Well No. 1.

- Q What is the proration unit, Mr. Wise?
- A. 160 acres.
- Q And it is what portion of Section 30?
- A It's the northeast quarter.

Q I note that there are a number of wells indicated in the northeast quarter of Section 30. Commencing with Well No. 1, would you describe the information for each well?

A. Okay. The figures in red are average 1978 gas production over cum.

The figures in green are average oil pro-

Q The only producing gas well in the proration unit is the No. 1 Well, is that correct?

# SALLY WALTON BOYD CERTIFED SHORTHAND REPORTER 1010 Place Binnes (61) 471-411 State Fe. New Worlds 31601

tubing.

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	۸.	Yes, sir.
	Q	And it is producing from the Eumont Gas
Pool?		
	Α.	Yes, sir.
	Q	The second well on the proration unit, how
is it	going t	to be identified? What's its name? Do you
have a	name f	for that well yet?
	A	Oh, it will be the State "O" No. 5, I believ
yes, s	ir.	
	Q.	State "O" No. 5, located in Unit H, is that
correct	<b>t?</b>	
	A.	Yes, sir.
	Q	All right. What are you seeking to accompli
Mr. Wis	3 <b>6</b> ?	
	Α.	We are currently handicapped by the wellbore
on No.	1. We	are producing pumping the Eumont excuse
me, the	Monum	ent-Grayburg zone, and showing the Eumont gas
going u	ip the	annulus.
	Q.	The No. 1 Well is a dual completion?
	A.	Yes, sir.
	Q.	And tell me how the Eumont gas is being
produce	ાતે.	
	<b>7.</b>	Between the annulus and the 2-1/2 inch
4 4 1 19 4	* <b>2</b> *	大大的 化光光 经经济 医二氯甲基苯酚

And it is also producing Monument-Grayburg

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A Yes, sir.

Q In your opinion can you efficiently and effectively continue to produce the Eumont gas zone through this dual completed well?

A. No.

Q Why not?

A. Due to the producing limitations there, the Eumont in this case is continually loading up and we are having to swab it off regularly and there are increasing expenses involved in this.

Q So it's your desire to replace that particular well with the State "O" Well No. 5.

A Yes, sir.

Q Will that well also be a dual completion?

A. No, sir, that will be a single only in the Eumont gas.

Q What are your plans for the No. 1 Well?

A. Okay, well, in either case we are going to plug off -- we're going to have to drill a new gas well.

And we will plug off, squeeze off the Eumont first. The oil produced from the Mc.:ument-Grayburg now through the 1/2 inch tubing by pump, 5/8'th rods, we are incurring increasing -- problems.

By going to a single completion in each well

SALLY WALTON BOY CERTIFIED SHORTHAND REPORT 802 PRIZE BLEICH (865) 472-24 SHIRE FG. NEW MERICO 8750

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we expect to increase production where can almost ensure increased production and increased recovery.

Q For the No. 1 Well, in your opinion, can you effectively and efficiently continue to produce the Grayburg Oil Zone with the Eumont gas zone open?

A No.

Ω Let's go to Exhibit Number Two and have you identify that.

A This is the Commission Form C-101 to permit to drill deep and plug back. It was submitted last year.

Q This is for the replacement well, is that right, for the State "O" No. 5 Well?

A Yes, sir.

Q All right, sir. Would you refer to Exhibit
Number Three and identify it?

A This is the Commission Form C-132, application for well-head category determination.

Q Would you refer to the schematic. I believe it should be properly labeled as Exhibit Number Four?

A Yes. This is the Current Completion or the schematic of the Current Completion, with production equipment. As you can see, you have 6-5/8 inch casing. The gas is flowing between the 6 and 5/8ths and the 3 and 1/2 inch tubing. Your 1 and 1/2 inch tubing for the Eumont - Grayburg is your producing tubing.

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How would you propose to re-complete this for production of the Monument - Grayburg oil?

We'd squeeze off the Monument first, pull the 3 and 1/2 inch tubing and packer and run in there either with 2 and 3/8 inch tubing, or 2 and 7/8 inch tubing. Doing this, we will get rid of our spaghetti string, so to speak, and go to a larger rod string and pump-sized also. We will also go deeper down to the Monument - Grayburg zone there.

In your opinion, will that be a more effective and efficient way in which to produce the Grayburg 011?

Α Considerably. We anticipate an increase of approximately 40 barrels a day by doing this.

Would you refer to the Commission Order which we have marked as Exhibit Number Five?

This is the Order R-303 for the dual completion of this well back in 1953.

Exhibit Number Six and Exhibit Number Seven, would you identify those Exhibits, please?

Exhibit Number Six is the Decline Curve of Eumont Gas Zone. Number Seven is a decline Curve of Oil and Gas Production from the Eumont - Grayburg Zone. I might add that we feel like a drilling of this new well, that we can increase gas production by a minimum of 500 Mcf a day over the current 100 in the State "O" Number 1.

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Q Would you refer to what we have marked as Exhibit Number Eight and identify the significance of these particular graphs?

A This is a trial well we did last year that the Commission approved. The circumstances were the same. You had a Monument - Grayburg Oil Zone dualed with a Eumont Gas Zone. 6 and 5/8 inch casing, 3 and 1/2 inch tubing pumping the Monument - Grayburg Zone through 1 and 1/2 inch tubing. We drilled another gas well and we were able to increase oil production in the No. 2 well by approximately 40 barrels a day. We increased the gas production of the No. 3 Well by 250 Mcf per day.

Q In your opinion, Mr. Wise, will there be Eumont gas within the proration unit that the No. 1 Well will not be able to produce?

A Yes, sir.

Q In your opinion, Mr. Wise, will the State
"O" No. 5 Well be necessary to effectively and efficiently
drain that portion of the reservior covered by this particular proration unit?

\*A Yes, sir.

Q In your opinion, will the State "O" No. 5
Well be required to effectively and efficiently produce the
Eumont gas reserves under this proration unit without regard
to the gas price?

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Α	Yes,	sir.

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

A Yes, sir.

Q Were Exhibits One through -- I believe it was Eight -- compiled or produced under your supervision and direction?

#### A Yes, sir.

MR. KELLAHIN: We move the introduction of Amerada Hess's Exhibits One through Eight.

MR. STAMETS: These Exhibits will be admitted.

MR. KELLAHIN: That concludes our direct examination.

#### EXAMINATION

#### BY MR. STAMETS:

Q Mr. Wise, why could you not go in and work over the No. 1 Well and complete it in the Eumont Pool?

A You mean the gas?

Q Yes.

A Nobody knows what it could be in the gas.

Q I asked the wrong question. Let's try this again. Why do you want an infill well in this unit? You are going to replace the No. 1 Well, is what you intend to do?

Α	Yes.	sir.
43	X C D ,	

Q Why do you want to do that?

A Okay. We are currently handicapped -- our production capacity is handicapped by the dual completion.

Q Okay. Now, why don't you seek to take the dual completion equipment out of the No. 1 Well and make it a Eumont gas single?

A Okay. You can either do that. In that case you are going to have to drill a Grayburg Well.

Q Right.

A Grayburg Well is more expensive. You've got to go approximately three to five hundred foot deeper.

Q Is there any reason, dealing with the Eumont Zone only, why you choose not to work over the No. 1 Well and make it a Eumont single?

A I'm not sure I understand the question, sir.

Q The FIRK Regulations require that the well that you drill is an infill well.

A Yes, sir.

Q Recover gas from the proration unit which would not be recovered by another well on the proration unit. What I'm trying to get at is, is there any reason that the No. 1 Well could not be put in a condition to recover this same gas in the proration unit?

A Well, by -- no, I guess there is no reason

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why you couldn't. But by going to a new location, which is less drained, we will pick up additional reserves that the No. 1 Well will not.

Q Are you going to pick those reserves up ultimately, or only as a temporary increase in production from the unit?

- A It will be ultimate.
- Q How much is that?
- A We have not calculated that, sir.
- Q So you can't give us a figure that represents the difference between what would be produced from this unit. from the existing well, and what would be produced by this unit from a new well?
  - A Not at this time, sir. No.

MR. STAMETS: Ms. Teschendorf?

#### EXAMINATION

#### BY MS. TESCHENDORF:

- Q Is this a non-standard unit for the Eumont gas?
- A Well, it is 160 acres. I think the standard proration unit is 640.
- Q Do you happen to know or could you find out for us what authorized the non-standard unit?
  - A Yes.
  - Q If it was an administrative order, what

SALLY WALTON BOY CERTIFED SHORTHAND REPORT 303 OF PART BRANCE (\$0.5), 471-24 SETAL FO. NOW MOREO 3750 number? Okay.

MR. STAMETS: That may be one that's older than the 640 rules. Completed in 1936. I'm confident that this is one that was originally on 160.

MR. WISE: Well, now, the initial gas completion wasn't until 1953 -- '54.

#### EXAMINATION

BY MR. RAMEY:

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Q Mr. Wise, what's the No. 1 making from the Eumont now?

A Right now approximately 100 Mcf per day.

Q How much liquids are you making?

A That, sir, I don't know.

Q But you are having a liquid problem. You way you have to go in and swab it off occasionally?

A Yes, sir. There are ways of enhancing the production from this well, but you are going to sacrifice it someplace else, mainly in the Monument - Grayburg Zone.

Q Your ultimate recovery from this well in the Eumont has been in excess of 3 million Mcf?

A Yes, sir.

Q This seems to be a good well. I only see a couple in the whole area that made more gas than it.

A Yes, sir.

Q What makes you think you are going to increase

the ultimate recovery from the unit?

A Well, first off, you are picking up some structure by going to the east. We're going in an area which has not been as drained severely as the No. 1. Also, you call it new completion practices, I guess you would say.

In other words, we have gone to open hole, setting pipe above the bay, open hole it with gas. Then only if necessary fracing it with CO. So we just anticipate a better well.

Q If this well were not a dual completion, just a Eumont single completion, is there any re-work that you could do this well to increase the present and ultimate recovery?

A Yes, sir. We could probably go in there and frac it. Put some tubing in it. Of course, if it's a single completion, you already have tubing in there. There are ways, if it is a single completion only, to increase your ultimate recovery from this well.

Q But because of mechanical problems you have evolved with the dual completion?

A Yes, sir.

Q The fact that you have to run a macaroni string inside the 3 inch, that's why are you limited on what you can do to the well?

A Yes, sir.

	Q	And to	increase	the ultimate	recovery	from
both	* * * * * * * * * * * * * * * * * * * *					

- A Both zones, yes, sir.
- Q It would be necessary that you squeeze off this well and drill a new one?

A Yes, sir.

MR. STAMETS: Let's go off the record.

(Whereupon a discussion was held off the

record.)

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MR. KELLAHIN: If the Examiner please, there appears to be some additional information that is available to us which we could supply the Commission or the Division in order to make an appropriate decision in this matter.

We would request that this case and the two subsequent cases for Amerada Gas be continued to the next scheduled Examiner hearing, scheduled for February 14th.

MR. STAMETS: Okay. I don't have any problem with that. We will continue Case 6434 to the Examiner hearing on the 28th of February. Ms. Teschendorf, will you call Case 6435 and Case 6436, which we will also continue to that date?

MR. KELLAHIN: 14th or the --

MS. TESCHENDORF: 28th, 'cause it will be the same Examiner.

MR. KELLAHIN: We have to re-advertise that

again anyway?

MR. STAMETS:

MS. TESCHENDORF: Case 6435, application of Amerada Hess Corporation for approval of infill drilling, Lea County, New Mexico, and Case 6436 is also application of Amerada Hess Corporation for approval of infill drilling, Lea County, New Mexico.

> MR. STAMETS: Those cases will be continued. (Hearing Concluded.)

#### REPORTER'S CERTIFICATE

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I, STEFANIE XANTHULL, 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, knowledge, and skill, from my notes taken at the time of the hearing.

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STEFANIE XANTHULL, C.S.R.

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3 Examiner

Oll Conservation Division

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> Nye Reporting Service, Inc. Certified Shorthand Reporters 621 Old Santa Fe Trail - Suite 7 Santa Fe, New Mexico 87501



NICK FRANKLIN SECRETARY

Aztec OCC

Other

## ENERGY AND MINERALS DEPARTMENT

OIL CONSERVATION DIVISION

April 3, 1979

POST OFFICE BOX 2088 STATE LAND OFFICE BUILDING BANTA FE, NEW MEXICO 87501 (505) 827-2434

Mr. Tom Kellahin	Re:	CASE NO.		6436 -5956	
Kellahin & Kellahin Attorneys at Law Post Office Box 1769 Santa Fe, New Mexico	34 34	Applican	t:		
		Amerada	Hess	Corpo	ration
Dear Sir:					
		± 1.7			
Yours very truly,  JOE D. RAMEY  Director					
JOE D. RAMEY					
JOE D. RAMEY					

SALLY WALTON BOYD: ENTIPED SHORTHAND REPORTER 330 Plata Blanca (605) 471-3462 Santa Fe, New Menico 57502 7

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STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT
OIL CONSERVATION DIVISION
State land Office Building
Santa Fe, New Mexico
28 February 1979

#### EXAMINER HEARING

#### IN THE MATTER OF:

Application of Amerada Hess Corporation ) for approval of infill drilling, Lea ) County, New Mexico.

CASE 6436

BEFORE: Richard L. Stamets

#### TRANSCRIPT OF HEARING

#### APPEARANCES

For the Oil Conservation Division:

Lynn Teschendorf, Esq. Legal Counsel for the Division State Land Office Bldg. Santa Fe, New Mexico 87503

For the Applicant:

W. Thomas Kellahin, Esq. KELLAHIN & KELLAHIN 500 Don Gaspar Santa Fe, New Mexico 87501

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1 1 1 1 1 1 1	1.44
WAYNE	WISE

Direct Examination by Mr. Kellahin Cross Examination by Mr. Stamets 

#### ROBERT W. LANSFORD

Direct Examination by Mr. Kellahin Cross Examination by Mr. Stamets 

#### EXHIBITS

Applicant Exhibit One, Plat Applicant Exhibit Two, C-101 Applicant Exhibit Three, C-132 Applicant Exhibit Four, Diagram Applicant Exhibit Five, Order R-301 Applicant Exhibit Six, Plat Applicant Exhibit Seven, Plat Applicant Exhibit Eight, Decline curve Applicant Exhibit Nine, Decline Curve Applicant Exhibit Ten, Structure map Applicant Exhibit Eleven, Cross Section Applicant Exhibit Twelve, Graph 

#### EXHIBITS CONT'D

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Applicant Exhibit Eighteen, Report

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MR. STAMETS: We'll call next Case 6436.

MS. TESCHENDORF: Case 6436. Application of Amerada Hess Corporation for approval of infill drilling, Lea County, New Mexico.

MR. STAMETS: Call for appearances.

MR. KELLAHIN: Tom Kellahin of Santa Fe, New Mexico, appearing on behalf of Amerada Hess, and I have the same two witnesses that were qualified and sworn in Case 6434.

MR. STAMETS: The record in Case 6436 shall show that these witnesses are sworn and qualified.

#### WAYNE WISE

being called as a witness and having been previously sworn upon his oath, testified as follows, to-wit:

#### DIRECT EXAMINATION

BY MR. KELLAHIN:

Q All right, Mr. Wise, would you please refer to what we've marked as Exhibit Number One, and identify it, and tell us what you're seeking to accomplish?

A. This exhibit is -- shows a surface plat of the State "U" Lease Gas Com. It has a 240-acre allowable. The No. 1 is in the E proration letter unit. The triangle designates the proposed State "U" No. 3.

SALLY WALTON BC CERTIFIED SHORTHAND REPO 1010 Plaza Blanca (601) 471 Santa Pe, New Mexico 31

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	1.5	Q	You've	not	spudded	the	second	well,	have	you,
26.0	Wise?									
MIT.	MTS6;		1		•					

- A. No, sir, we have not.
- Q Would you refer to Exhibit Number Two and identify it?
- A. Exhibit Number Two is the C-101, Application to drill the No. 3, that was approved December 12th, 1978.
  - Q. Exhibit Number Three?
- A. Form C-132 of the Oil Commission, it's

  Application for Wellhead Price Ceiling Category Determination

  for the State "U" Gas Com No. 3.
- Q Would you refer to what we've marked as Exhibit Number Four and identify it?
- A. Exhibit Number Four is the current downhole situation of the Well No. 1, showing the Eumont completion, Grayburg completion, casing and tubing in the hole.
- Q. Would you refer to Exhibit Number Five and identify it?
- A. Exhibit Number Five is Order R-301 that allowed Amerada to dually complete State "U" No. 1.
  - Q Okay, and Exhibit Number Six?
- A. Exhibit Number Six if offset gas production. The top figure is November's daily production. The bottom figure is the cum through November '78.
  - Q. What is the November cumulative production

### SALLY WALTON BOY CERTIFIED SHORTHAND REPORT 225 Plana Banca (845) 471-54 Barta Pe, New Notice 3759

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for the No. 1 Well?

- A. 4,266 Mcf.
- Q Is the cumulative production?
- A. Yes, sir.
- Q. Not the monthly production? For November?
- A. It would be 30 times 209; that's the daily production, the top figure.
- Q. Okay. All right, what's Exhibit Number Seven?
- A. This is the offset oil production of the Eunice-Monument-Grayburg-San Andres zone. The top figure is daily average for 1978. The bottom figure is cum for 1978 -- through 1978.
  - Q. Okay, Exhibit Number Eight.
- A. It is s decline curve, decline curve of the Eumont, showing the Eumont gas production of the State "U" No. 1, 1978. It shows approximately 20,000. Currently it's producing 6,000 Mcf per month.
  - Q. And Exhibit Number Nine?
- A. Exhibit Number Nine is a decline curve of the oil and gas production from the Eumont-Grayburg-San Andres State "U" No. 1.
  - Q Exhibit Ten?
- A. Exhibit Number Ten is a structure map showing the top -- of the top of the Eumont -- structure map of the

### SALLY WALTON BOY (EXTIFED SHORTIAMD REPORT 1910 Plans Blanca (605) 471-24 Senta Fe, New Mexico 2750

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Eumont showing the top of the Penrose.

The State "O" -- excuse me, the State "U" lease in Section 32, which is on the righthand side, the south northwest quarter.

- Q. Does structure play a factor with regard to the second well?
  - A. No, sir, we are losing structure.
  - Q Exhibit Number Eleven?
- A. Exhibit Number Eleven is a structural cross section, showing the State "U" No. 1, the Larson No. 1, the proposed State "U" No. 3, and the Larson No. 3.
- Q Again there is no sturctural advantage with regards to these four wells?
  - A. No, sir.
- Q All right. Refer to Exhibit Number Twelve and have you identify that exhibit.
- A. Exhibit Number Twelve is of the State "P" Lease, State "P" No. 2.
- Q. All right, and would you look at Exhibit Thirteen, also.
- A. Exhibit Thirteen is the gas side of the State "P" No. 2, showing the workover that was done on the State "P" No. 2, drilling of the State "P" No. 3, and the increase in production of the State "P" No. 3.
  - Q Why have you --

SALLY WALTON BOY!
ERTIFED SHORTHAND MEDORTE
618 Plant, Blanca (685) 473-243
Santa Pe, New Mexico 5716.3

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MR. STAMETS: Which is which, now?

Which is the Eumont?

MR. KELLAHIN: Thirteen is the Eumont.

A. Exhibit Thirteen is the Eumont.

MR. STAMETS: Exhibit Thirteen is the Eumont, okay, and just a second while I renumber those two.

Okay.

Q. (Mr. Kellahin continuing.) What's the purpose of the exhibit, Mr. Wise?

A. To show that by single completing we will pick up extra oil reserves, extra oil production; also that there's a chance, if you attempt to workover the gas zone, you can lose it. Also, the increased production by drilling a single completion in the Eumont gas zone.

Q. The State "P" Gas Com No. 2 Well, why have you chosen this particular well as an example?

A. It was one where we had a -- it was identical to the State "U" No. 2. It was dual Grayburg-San Andres and Eumont producer.

Q. Okay. Go to Exhibit Fourteen and have you identify that.

A.  $\odot$  Exhibit Fourteen is a 72-hour shut-in well-head pressure plot versus cumulative production.

Q. For which well?

A. State "U" No. -- State "U" No. 1.

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Q. All right, and what does that show me?

A. The -- based on information available, on anticipated increase in reservoir pressure of anywhere from 85 to 100 pounds, we would have picked up approximately .7-billion cubic feet of gas.

Q What do you anticipate to be the total cumulative production from the State "U" No. 3?

A. 2.6-billion.

Q And how did you arrive at the .7-billion cubic feet? Is that a portion of the 2.6?

A. Yes, sir. Yes, sir. It is the difference between the two plots here.

And the .7-billion cubic feet of gas represents that additional gas that would be recovered from the second well that could not be recovered from the first well?

A. Yes, sir, if you assume that the second well will produce -- will decline in the manner that the first well has.

Q Okay. In your opinion, Mr. Wise, is the second well, the State "U" No. 3 -- I'm sorry, State "U" No. 2, isn't it?

A. Yes.

Q State "U" No. 2, is that well necessary to effectively and efficiently drain the proration unit that's been assigned to the No. 1 Well?

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A. Yes, sir, without that you will lose .7-billion cubic feet; also, we calculate that there is 81,000 barrels of oil still in place that the State "U" No. 1 could recover; however, under current situations it would produce only 14,600 barrels, and you will leave in place 6,400 barrels of oil.

Q. Okay.

Refer to -- would you refer to Exhibit Number Fifteen and identify that?

A. Exhibit Fifteen is a plot showing our Hare 8,
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Q. Is this the same exhibit introduced in Case
Number 6434?

A. Yes, sir.

Q. Would you look at that exhibit and Exhibit Sixteen and Seventeen and explain what information those three exhibits taken together convey?

A. Okay. Exhibit Sixteen is a production plot versus time of the three wells.

Exhibit Seventeen is a plot of the same thing showing all wells starting at the same time.

What we're attempting to show here is that the increase or sustained production by our is due mainly to the  ${\rm CO}_2{\rm frac}$ .

Q You have a second witness who will address

SALLY WALTON BOYD
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1920 Flata Blanca (865) 471-546
Senta Po, New Mexico 21591

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himself to the CO<sub>2</sub> treatment, do you not?

A. Yes, sir.

Q Do you have anything else you'd like to add to your testimony?

A. No, sir.

MR. KELLAHIN: If the Examiner please, we move the introduction of Exhibits One through Seventeen.

MR. STAMETS: These exhibits will be admitted.

MR. KELLAHIN: That concludes our examination

of Mr. Wise.

#### CROSS EXAMINATION

BY MR. STAMETS:

 ${\tt Q}$  Mr. Wise, was the  ${\tt CO}_2$  frac treatment used on the State "P" Well No. 2?

A. Yes, sir.

Q So that falls in the 5 percent category that didn't work out so well?

A. Yes and no. The CO<sub>2</sub> frac was half of the size of the one we used on the Hare 8, and the State "P"

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So you're talking about treating 200 foot of

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Do you feel this will eliminate the potential

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Okay, this is a 240-acre nonstandard proration unit?

Yes, sir.

And a standard unit is 640 in this pool?

Yes, sir.

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ALLY WALTON BOYD
TOPED SHORTHAND REPORTER
Plans Blazer (845) 411-4445

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Mr. Examiner, is that Mr. Lansford identify his report as
Exhibit Number Eighteen and we enter it as part of the record
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of the record made in 6434 with regards to writing this particular order.

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I would like to make certain that that testimony is a part
of the record in this case by whatever method we can figure
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#### ROBERT W. LANSFORD

being called as a witness and having previously been sworn upon his oath, testified as follows, to-wit:

## DIRECT EXAMINATION

# BY MR. KELLAHIN:

Q Mr. Lansford, you are the same Mr. Lansford that testified on behalf of Amerada Hess in Case 6434 earlier today, are you not?

A. Yes, sir.

Q Have you made a study of and are you familiar with the facts regarding the State "U" Gas Com Well No. 2,

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- And would your opinions made with regard to the first case concerning the risks involved and the inability to CO<sub>2</sub> treat the first well on the unit be the same?
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MR. KELLAHIN: If the Examiner please, we move to incorporate Mr. Lansford's testimony from 6434 in Case 6436.

MR. STAMETS: That testimony will be incorporated in this case.

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BY MR. STAMETS:

 ${\tt Q}$  Mr. Lansford, there was one bit of additional testimony in this case concerning the usefulness of the  ${\tt CO}_2$  frac in an open hole completion.

- Does Halliburton recommend against trying to use the CO<sub>2</sub> in open hole, or do you have a lesser degree of success in open hole completions?
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Using an open hole completion technique, youdepending, of course, how large an area you're trying to
fracture, you may have to go to a diverting material to
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had a large area to cover.

Q It would be your recommendation to an operator as he's drilling the well to go ahead and set pipe through the zone that's going to be treated?

A. On my part stimulationwise, I prefer a cased hole.

Q Do you feel that that would give him the greatest chance for success in fracturing?

A. Yes, sir.

MR. STAMETS: Okay. Any other questions of this witness? He may be excused.

> Anything further in this case? The case will be taken under advisement. (Hearing concluded.)

#### REPORTER'S CERTIFICATE

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, knowledge, and skill, from my notes taken at the time of the hearing.

Solly W. Boyd, C.S.R.

I do hereby certify that the foregoing is Oil Conservation Division

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT
OIL CONSERVATION DIVISION
State land Office Building
Santa Fe, New Mexico
28 February 1979

## EXAMINER HEARING

#### IN THE MATTER OF:

Application of Amerada Hess Corporation )
for approval of infill drilling, Lea )
County, New Mexico.

CASE 6436

BEFORE: Richard L. Stamets

#### TRANSCRIPT OF HEARING

#### APPEARANCES

For the Oil Conservation Division

Lynn Teschendorf, Esq.
Legal Counsel for the Division
State Land Office Bldg.
Santa Fe, New Mexico 87503

For the Applicant:

W. Thomas Kellahin, Esq. KELLAHIN & KELLAHIN 500 Don Gaspar Santa Fe, New Mexico 87501

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WAYNE WISE

Direct Examination by Mr. Kellahin Cross Examination by Mr. Stamets 

ROBERT W. LANSFORD

Direct Examination by Mr. Kellahin Cross Examination by Mr. Stamets 

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# EXHIBITS CONT'D

Applicant Exhibit Thirteen, Graph Applicant Exhibit Fourteen, Plot Applicant Exhibit Fifteen, Plat Applicant Exhibit Sixteen, Plot Applicant Exhibit Seventeen, Plot Applicant Exhibit Eighteen, Report 

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MR. STAMETS: We'll call next Case 6436.

MS. TESCHENDORF: Case 6436. Application of Amerada Hess Corporation for approval of infill drilling, Lea County, New Mexico.

MR. STAMETS: Call for appearances.

MR. KELLAHIN: Tom Kellahin of Santa Fe, New Mexico, appearing on behalf of Amerada Hess, and I have the same two witnesses that were qualified and sworn in Case 6434.

MR. STAMETS: The record in Case 6436 shall show that these witnesses are sworn and qualified.

#### WAYNE WISE

being called as a witness and having been previously sworn upon his oath, testified as follows, to-wit:

#### DIRECT EXAMINATION

BY MR. KELLAHIN:

O. All right, Mr. Wise, would you please refer to what we've marked as Exhibit Number One, and identify it, and tell us what you're seeking to accomplish?

A. This exhibit is -- shows a surface plat of the State "U" Lease Gas Com. It has a '240-acre allowable.

The No. 1 is in the E proration letter unit. The triangle designates the proposed State "U" No. 3.

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	Q	You've	not	spudded	the	second	well,	have	you
Mr. Wise?			. **	a a					
	A.	No, sir	c, we	have no	ot.		4		

Would you refer to Exhibit Number Two and

A Exhibit Number Two is the C-101, Application

to drill the No. 3, that was approved December 12th, 1978.

Q Exhibit Number Three?

Q.

A Form C-132 of the Oil Commission, it's

Application for Wellhead Price Ceiling Category Determination,

for the State "U" Gas Com No. 3.

Q Would you refer to what we've marked as Exhibit Number Four and identify it?

A. Exhibit Number Four is the current downhole situation of the Well No. 1, showing the Eumont completion, Grayburg completion, casing and tubing in the hole.

Q Would you refer to Exhibit Number Five and identify it?

A. Exhibit Number Five is Order R-301 that allowed Amerada to dually complete State "U" No. 1.

Q Okay, and Exhibit Number Six?

A. Exhibit Number Six if offset gas production. The top figure is November's daily production. The bottom figure is the cum through November '78.

Q What is the November cumulative production

# SALLY WALTON BOY CERTIFED SHORTHAND METORI 1920 Parks Blanca (601) 411-44 80 Parks Pc, Novy Montho 5150

for the No. 1 Well?

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- Q Not the monthly production? For November?
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  - Q Okay, Exhibit Number Eight.
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The State "0" -- excuse me, the State "U" lease in Section 32, which is on the righthand side, the south northwest quarter.

- Q Does structure play a factor with regard to the second well?
  - A No, sir, we are losing structure.
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- A. Exhibit Number Twelve is of the State "P" Lease, State "P" No. 2.
- Q All right, and would you look at Exhibit Thirteen, also.
- A. Exhibit Thirteen is the gas side of the State "P" No. 2, showing the workover that was done on the State "P" No. 2, drilling of the State "P" No. 3, and the increase in production of the State "P" No. 3.
  - Q Why have you --

SALLY WALTON BOYD
ERRIPED SHORTHAND REPORTER
25 Place Blance (546) 411-448
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MR. STAMETS: Which is which, now?

Which is the Eumont?

MR. KELLAHIN: Thirteen is the Eumont.

A. Exhibit Thirteen is the Eumont.

MR. STAMETS: Exhibit Thirteen is the Eumont, okay, and just a second while I renumber those two.

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Q (Mr. Kellahin continuing.) What's the purpose of the exhibit, Mr. Wise?

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Q And how did you arrive at the .7-billion cubic feet? Is that a portion of the 2.6?

A. Yes, sir. Yes, sir. It is the difference between the two plots here.

And the .7-billion cubic feet of gas represents that additional gas that would be recovered from the second well that could not be recovered from the first well?

A. Yes, sir, if you assume that the second well will produce -- will decline in the manner that the first well has.

Q Okay. In your opinion, Mr. Wise, is the second well, the State "U" No. 3 -- I'm sorry, State "U" No. 2, isn't it?

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himself to the CO2 treatment, do you not?

Yes, sir.

Do you have anything else you'd like to add to your testimony?

> A. No, sir.

MR. KELLAHIN: If the Examiner please, we move the introduction of Exhibits One through Seventeen.

MR. STAMETS: These exhibits will be admitted MR. KELLAHIN: That concludes our examination of Mr. Wise.

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Q And a standard unit is 640 in this pool?

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A. Yes, sir.

(i)

MR. STAMETS: Okay. Any other questions of this witness? He may be excused.

> Anything further in this case? The case will be taken under advisement. (Hearing concluded.)

# REPORTER'S CERTIFICATE

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, knowledge, and skill, from my notes taken at the
time of the hearing.

Sally W. Boyd, C.S.R.

do hereby considerate foregoing is a complete the marking of Case No. 6436. Hearthly may on 3-28 1929.

Dichoud A. Thurt, Examiner

Oil Conservation Division

SALLY WALTON BOY ENTITIED SHORTHAND REPORT 120 Part Blanca (415) (11-5) Senia Pt., Novy Moxido 519,

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# MEXICO OIL CONSERVATION COMMIS. AN WELL LOCATION AND ACREAGE DEDICATION PLAT

Form C-102 Supercedes C-128 Effective 1-1-65

		All distances must be from	the outer boundaries of	the Section	
Amei	rada Hess Corp.	L	State U Ga	s Com.	Well No.
C C	Section 32	Township 19 South	Range 37 East	County	
Actual Feelage Lo		orth Itne and	2160	t from the West	
Ground : gvel Elev. 3594.1		mation Po		i non me	Dedicated Acreage: 240
1. Outline the state of the st	han one lease is nd royalty).  an one lease of decommunitization, u  No If ar	ted to the subject well dedicated to the well, o ifferent ownership is ded nitization, force-pooling.	by colored pencil of utline each and ide icated to the well, etc?	ntify the ownership have the interests o	he plat below. thereof (both as to working f all owners been consoli- ated. (Use reverse side of
this form i No allowal	f necessary.)ble will be assigned	ed to the well until all int	erests have been c	onsolidated (by con h interests, has been to hereby to load he	certify that the Information con-
	2160'			Name Supv.Drl Pealtien	Hess Corporation  8, 1978
TAN STA	MEXICO NEST			shown on notes of under my is true en knowledge  Date Surveyor Novem	mensional Engineer
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# APPLICATION FOR SHEETHAND PRICE CELLING CATEGORY DETERMENATION

PRICE CELLING CATEGORY DETERMIN	ATION Kind of Cease
1. FOR DIVISION USE ONLY	State, Federal of Fee STATE
pris deplications in a specie indication in the matrix or which the column property.	5, State oil & Gan Lease No.
DATE OF: APPLICATION	11111111111111111111111111111111111111
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Contricted	7, Unit Agreement Trans-
PARTICIPANTS (2)	8, Vitto of Lorine time
Amerada Hess Corporation	State "U" Gas Comm
At these of Cretitist	9, Well 185.
P. O. Box 2040, Tulsa, Oklahoma 74102	
UNIT LETTER C 990 PEET PROMITE North LINE AND 2	160 reer reom
THE West LINE, SECTION 32 TOANSHIP 195 MANGE	37E Eumont
11. Name and Address of Transporter(s) Northern Natural Ga	
2223 Dodge St., Omaha, Neb. 68102	
WELL CATEGORY INFORMATION	
Check appropriate box for category sought and information su	bmitted.
1. Category(ies) Sought (By NGPA Section No.)	
2. All Applications must contain:	<del>i karangan di karangan karang</del> Karangan karangan ka
X a. C-101 APPLICATION FOR PERMIT TO DRILL, DEEPEN OR PLU	G BACK
☐ b. C-105 WELL COMPLETION OR RECOMPLETION REPORT	
c. DIRECTIONAL DRILLING SURVEY, IF REQUIRED UNDER RULE	111
an 🔤 ang ang agampan ing ang kalanggan ang ang ang ang ang ang ang ang a	
d. AFFIDAVITS OF MAILING OR DELIVERY	
3. NEW NATURAL GAS UNDER SEC. 102(c)(1)(B) (using 2.5 Mile	or 1000 Feet Deeper Test)
a. Location Plat	PEFORE ENAPHMER STAMETS
4. NEW NATURAL GAS UNDER SEC. 102(c) (1) (C) (new onshore rese	ervoir, CONSE VALUE N DIVISION
a. C-122 Multipoint and one point back pressure test	EXPLU NO. 3
5. NEW ONSHORE PRODUCTION WELL	CALE NO. 6436
n e <u>n de</u> la	The state of the s
	Submitted by
b. No. of order authorizing infill program	Hearing Date
6. STRIPPER GAS	
a. C-116 GAS-OIL RATIO TEST	
D. PRODUCTION CURVE FOR 12-MONTH PERIOD	
C. PRODUCTION CURVE FOR THE 90-DAY PERIOD ON WHICH THE A	PPLICATION IS BASED
I HEREBY CERTIFY THAT THE INFORMATION CONTAINED HEREIN IS TRUE AND COMPLETE TO THE BEST OF MY KNOWLEDGE AND BELIEF.	USE ONLY
and the second s	ved
WALL OF ADOLYCAVE	
Title Conservation Supervisor	proved in the state of the second of the second and the second of the se
The 17	nformation contained herein includes  I the information required to be
Jamiary 31 1979	by the applicant under Subpart B
signed (filler) 111 clu	tt 274.
EXA	ITNER

1.0 API well number: (If not available, leave blank, 14 digits.)	0-025-26169							
Type of determination being sought:     (Use the codes found on the front     of this form.)	103 Section of NGPA Category Code							
3.0 Depth of the deepest completion location: (Only needed if sections 103 or 107 in 2.0 above.)	3650 feet							
4.0 Name, address and code number of applicant: (35 letters per line maximum. If code number not available, leave blank.)	Amerada Hess Corporation  P. O. Box 2040  Street  Tulsa, Okla. 74102 City State Zip Code	000459 Seller Code						
5.0 Location of this well: (Complete (a) or (b).) (a) For onshore wells (35 letters maximum for field name.)	Eumont Field Name Lea New Mexicounty State	<b>.</b> ∞						
(b) For OCS wells:	Area Name Block Number  Date of Lease:  Mo, Day Yr. OCS Lease Number							
(c) Name and identification number of this well: (35 letters and digits maximum.)	State ''U'' Gas Comm. No. 2							
(d) If code 4 or 5 in 2.0 above, name of the reservoir: (35 letters maximum.)	Queen							
6.0 (a) Name and code number of the purchaser: (35 letters and digits maximum. If code number not available, leave blank.)	Northern Natural Gas Company	013767 Buyer Code						
(b) Date of the contract:	<u>(0: 6: 2:1:7:4:</u> Mo. Day Yr.							
(c) Estimated annual production:	183MMcf.							
		d) Total of (a), b) and (c)						
7.0 Contract price: (As of filing date. Complete to 3 decimal places.)	1.980134	2.114						
8.0 Maximum lawful rate: (As of filing date. Complete to 3 decimal places.)	1.980							
9.0 Person responsible for this application:  Agency Use Only  Date Received by Juris. Agency  Date Received by FERC	Gilbert E. Miller Conservation  Name Title  Conservation  Title  January 31, 1979  Date Application is Completed  Phone Number	lon Supvr.						

FT7900806/2-2

State 'U' No. 1 Sec. 32 Twp 19S - R37E Lea County, New Mexico

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Dual Completion Eumont Gas & Monument G-SA Oil

# 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. 512 ORDER No. R-301

THE APPLICATION OF AMERADA PETROLEUM CORPORATION FOR AN ORDER GRANTING PERMISSION TO DUALLY COMPLETE AND PRODUCE ITS STATE 'U', WELL NO. 1, LOCATED IN THE SW/4 NW/4 OF SECTION 32, TOWNSHIP 19 SOUTH, RANGE 37 EAST, NMPM, LEA COUNTY, NEW MEXICO.

	· · · · · · · · · · · · · · · · · · ·	
	BEHORE EXAMINER STAMETS	
	HOLL COLUMN WITH MINISTER	
41	EXHIBIT NO. 3	
	CASO 6435	
	Supplied by manager and a continue	
	Hearing Dale	, <u>.</u>

# ORDER OF THE COMMISSION

# BY THE COMMISSION:

This cause came on for hearing at 9 o'clock a.m. on March 17, 1953, at Santa Fe, New Mexico, before the Oil Conservation Commission, hereinafter referred to as the "Commission".

NOW, on this 3/ day of MARCh, 1953, the Commission, a quorum being present, having considered the records and the testimony adduced, and being fully advised in the premises,

## FINDS:

- (1) That due notice having been given as required by law, the Commission has jurisdiction of the case and the persons and subject matter thereof.
- (2) That the applicant's State 'U', Well No. 1, SW/4 NW/4 Section 32, Township 19 South, Range 37 East, NMPM, Lea County, New Mexico, was completed in August 1937 as an oil well producing from the Grayburg formation of the Eunice-Monument Pool in the open-hole interval 3780-3912, having drilled through the Seven Rivers-Queen formation of the Eumont Gas Pool at an approximate depth of 3250-3570.
- (3) That although recent experiments tend to show that mechanical packers and other devices are ordinarily available for successful dual/multiple completions of oil gas wells, the Commission is unconvinced of the soundness as a waste-prevention practice, of such dual/multiple completions as a general practice in New Mexico without specific controls over each such project.

# IT IS THEREFORE ORDERED:

That the applicant herein, Amerada Petroleum Corporation, be, and it hereby is authorized to dually complete and produce its State 'U', Well No. 1, SW/4 NW/4 Section 32, Township 19 South, Range 37 East, NMPM, Lea County, New Mexico, in such a manner that gas from the Seven Rivers-Oueen formation of the Eumont Gas Pool may be produced through the annular space between the casing and the tubing, and oil from the Grayburg formation of the Eunice-Monument Pool through the tubing by proper perforations and the installation of a proper packer;

PROVIDED, HOWEVER, That upon the actual dual completion of such subject well applicant shall submit to the District Office of the Commission in which the subject well is located Form C-103, Form C-104, Form C-110 and Form C-122 outlining the information required on these forms by existing Rules and Regulations.

PROVIDED, HOWEVER, That subject well shall be completed, and thereafter produced, in such a manner that there will be no commingling within the well bore, either within or outside the casing of gas, oil and gas, or oil produced from either or both of the separate strata, and,

PROVIDED FURTHER, That said subject well for dual completion and production shall be equipped in such a way that reservoir pressures may be determined separately for each of the two specified strata, and further, be equipped with all necessary connections required to permit recording meters to be installed and used, at any time, as may be required by the Commission or its representatives, in order that natural gas, oil, or oil and gas from each separate stratum may be accurately measured and the gas-oil ratio thereof determined, and,

PROVIDED FURTHER, That the operator applicant shall make any and all tests, including segregation tests, but not excluding other tests and/or determinations at any convenient time and in such manner as deemed necessary by the Commission; the original and all subsequent tests shall be witnessed by representatives of the Commission and by representatives of offset operators, if any there be, at their election, and the results of each test properly attested to by the applicant herein and all witnesses, and shall be filed with the Commission within ten (10) days after the completion of such test, and,

PROVIDED FURTHER, That upon the actual dual completion of such subject well, applicant shall submit to the Commission a diagrammatic sketch of the mechanical installation which was actually used to complete and produce the seal between the strata, and a special report of production, gas/oil ratio and reservoir pressure determination of each producing zone or stratum immediately following completion.

IT IS FURTHER ORDERED: That jurisdiction of this cause is hereby retained by the Commission for such further order or orders as may seem necessary or convenient for the prevention of waste and/or protection of correlative rights; upon failure of applicant to comply with any requirement of this order after proper notice and hearing, the Commission may terminate the authority hereby granted and require applicant or its successors and assigns to limit its activities to regular single-zone production in the interests of conservation.

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

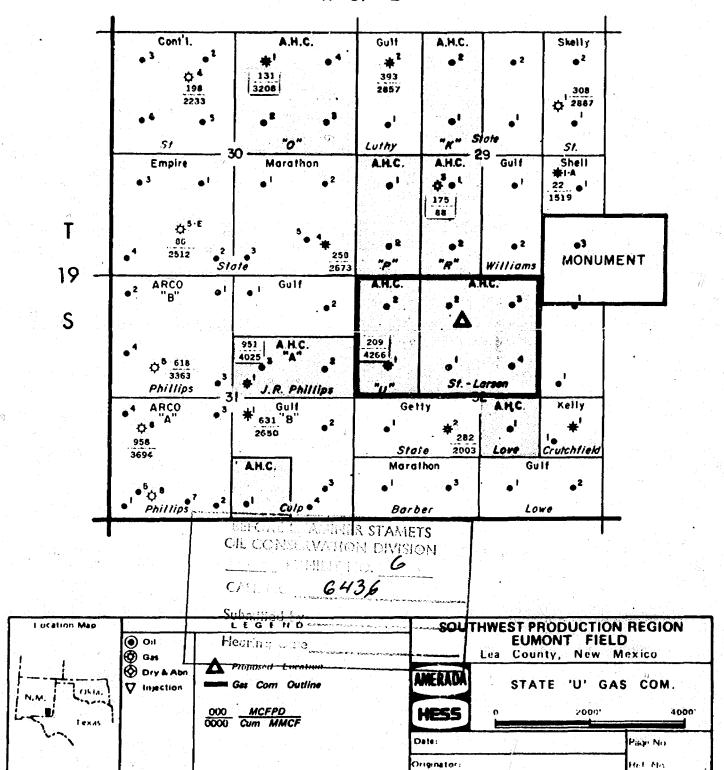
STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION

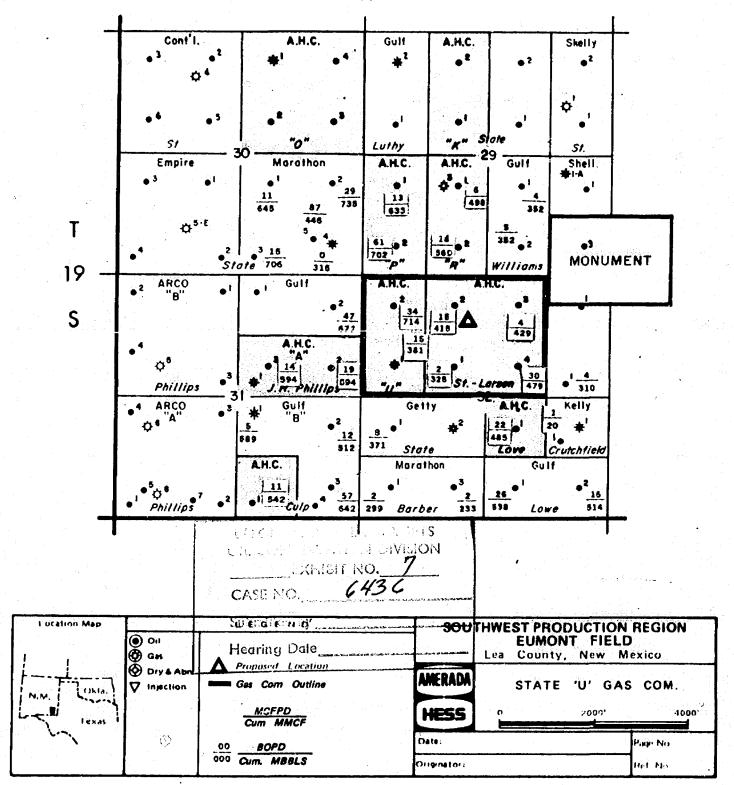
EDWIN L. MECHEM, Chairman

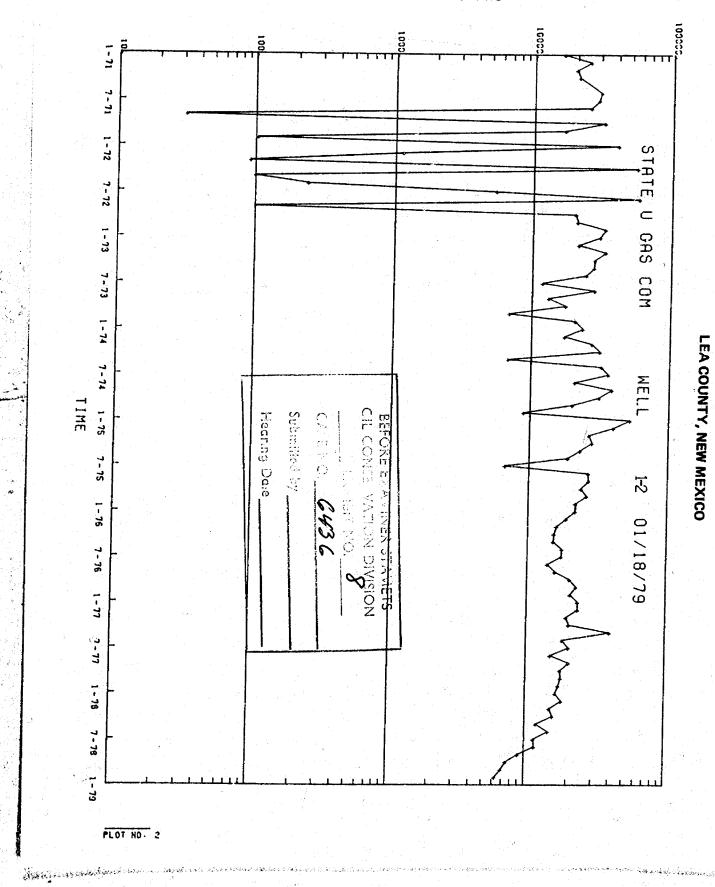
E. S. WALKER, Member

R. R. SPURRIEK, Secretary

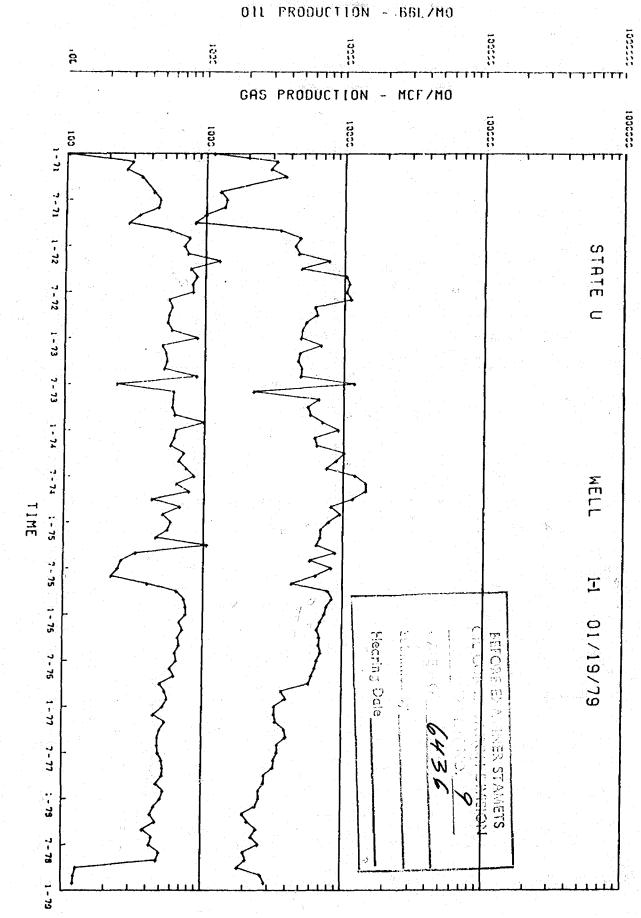
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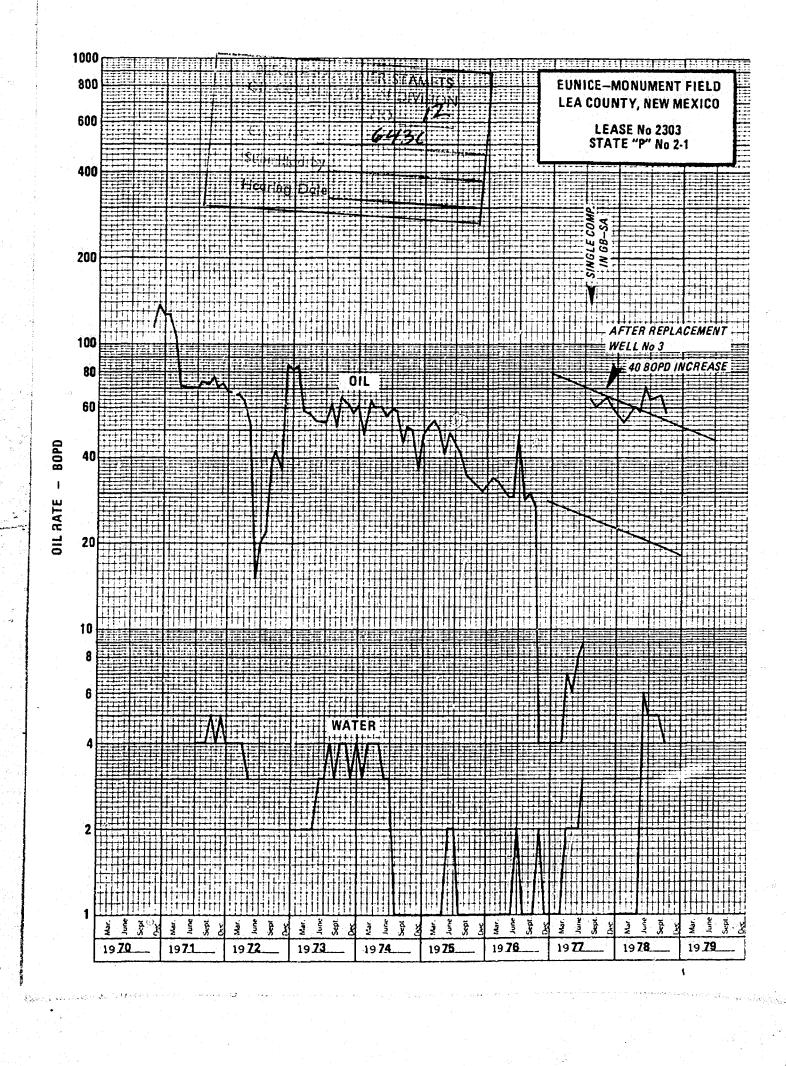


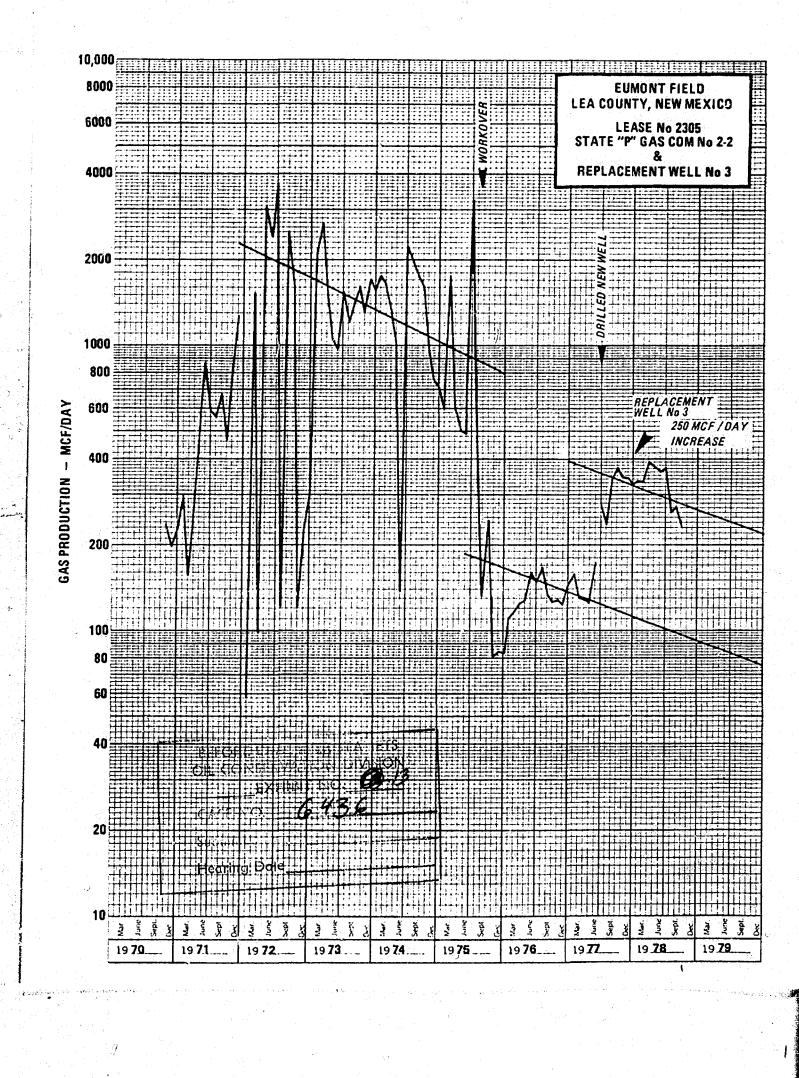


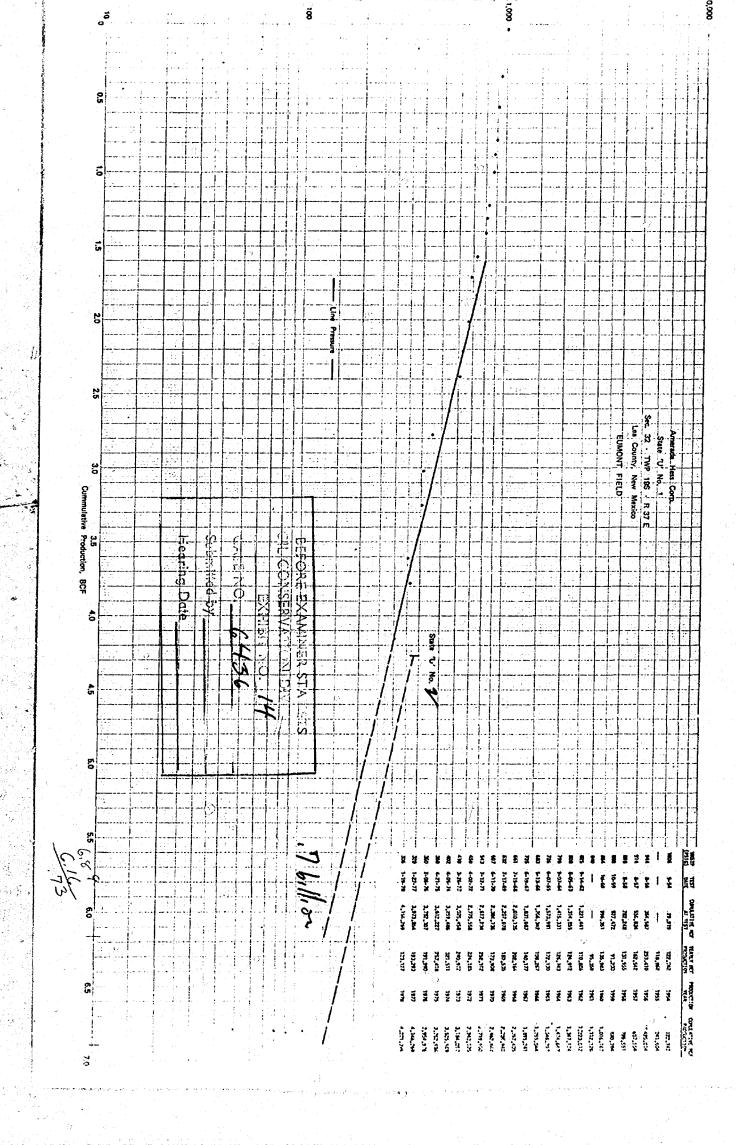
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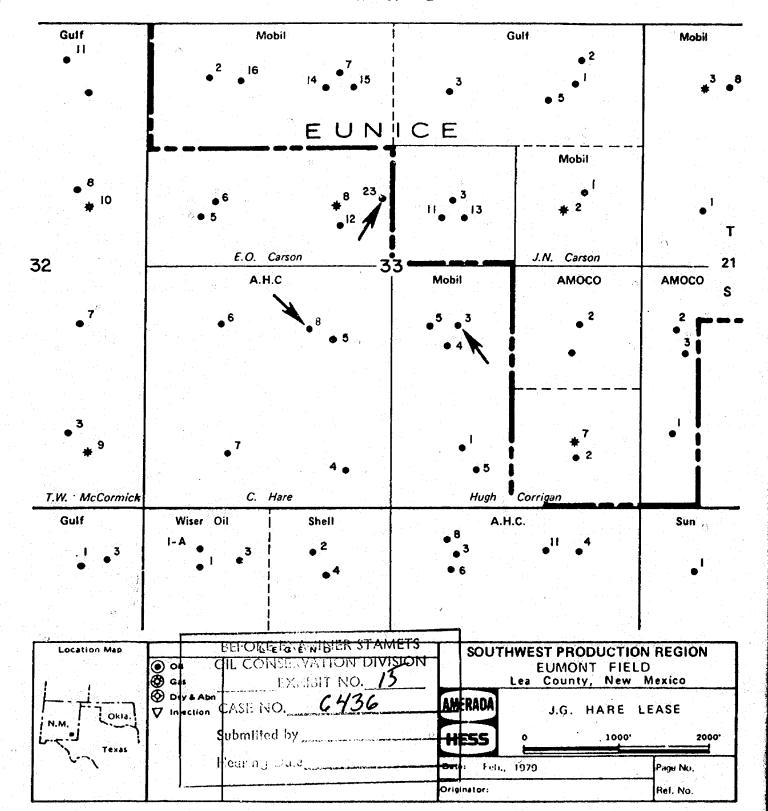


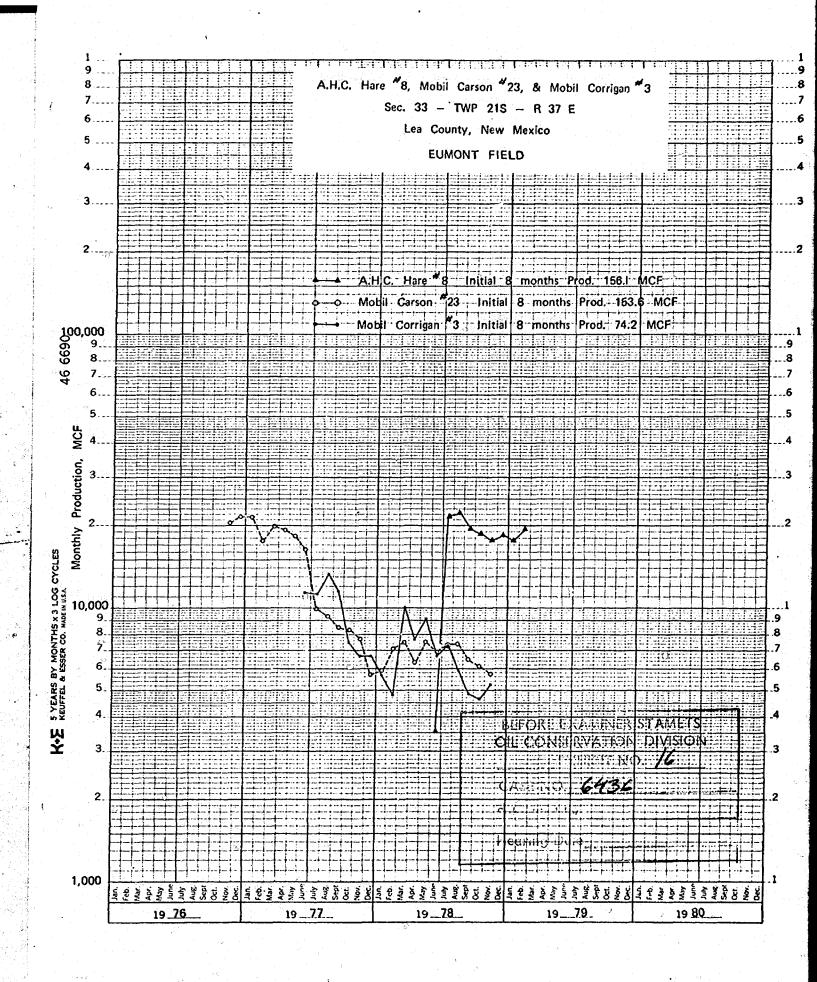
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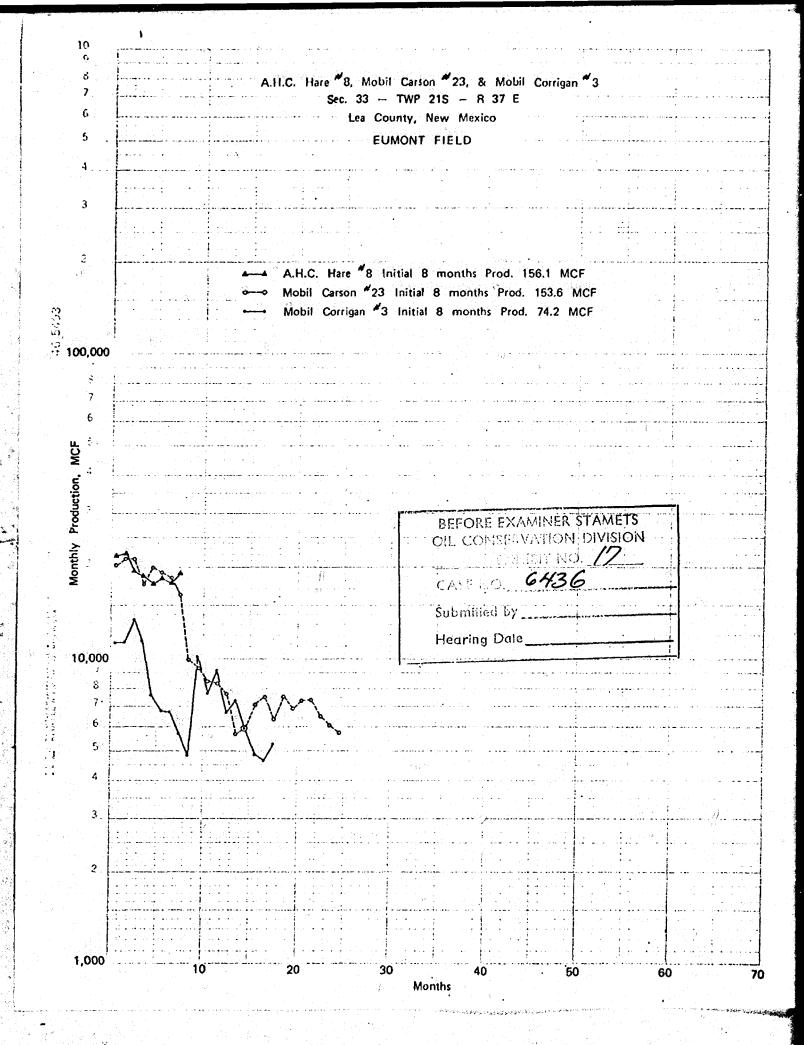














P. O. BOX 1889, MIDLAND, TEXAS 79702

J. R. (BUDDY) REDDEN, JR. Sales Manager Midland Division

December 8, 1978

GENERALIZED STIMULATION PROCEDURE TECHNIQUE FOR STIMULATING LOW BOTTOM HOLE PRESSURE OIL AND GAS WELLS IN THE PERMIAN BASIN

The purpose of this report is to give a generalized procedure of a stimulation technique used in the Permian Basin for stimulating low bottom hole pressure oil and gas wells (113 lbs. up). This technique has been utilized in the Seven Rivers, Yates, Queens, Grayburg, Penrose, Tubbs, and Cisco formations with very impressive results.

The following procedure and outline of a typical stimulation job incorporating this technique is shown, but it should also be pointed out that the volumes have varied from 10,000 gallons to 60,000 gallons of the 50-50 gelled water and CO, mixture depending upon the desired frac length to be obtained.

We have been recommending the selected zone of interest used with this procedure be acidized with 100 gallons per net foot of pay with 15% MCA acid with sufficient amount of ball sealers to open and treat all existing perforations. The spent acid should then be swabbed back and the well can then be evaluated. At this point, the proper chemicals and surfactants should be determined for the fracturing fluid on the particular litholigy of the formation to be treated. This is extremely important with the compatability of the system to assure minimal damage during and after stimulating the zone of interest.

An important consideration is to determine the proper depth to place the tubing. The main factor of course is the bottom hole pressure, the lower the pressure the lower the tubing should set. This should allow the well to clean up and produce at this point saving the damage a well might receive from loading the hole with water to move the tubing.

A typical 40,000 gallon 50/50 water and CO<sub>2</sub> frac for example would consist of 20,000 gallons gelled water and 20,000 gallons CO<sub>2</sub> carrying 40,000 pounds 20-40 sand and 62,000 pounds 10-20 sand. The treatment is usually done down tubing and tubing-casing annulus at 20 BPM at 2,300 psi surface treating pressure. A 2,000 gallon pre-pad containing selected surfactants should be pumped ahead of the frac treatment for scale or paraffin control. All fluid should contain 2 to 3% KCl.

BEFORE EXAMINER STAMETS OIL CONSERVATION DIVISION EXHIBIT NO. 18

CAME NO. 6436 Submitted by A Halliburtum Company Hearing Date



The fluid used is designed to be as compatible as possible with the lithology found in each well. A majority of the sand formations have been found to contain a high percentage of clays. To keep the clays from swelling, 3% KCl water is used in conjunction with a high concentration of CO<sub>2</sub> which makes a weak acid solution that provides a low pH environmentthat is advantageous to the compabilities of the clays.

### GENERAL PROCEDURE:

- 1. After perforating, circulate hole with 2% KC1 water containing 1 gallon Morflo II per 1,000 gallons and spot acid over the perforated interval in the same operation.
- 2. Raise the tubing approximately 50 feet above the top perforations.
- 3. Acidize with the remaining acid injecting sufficient amount of ball sealers to ball-off perforations.
- 4. Lower tubing to desired depth.
- 5. Swab and evaluate zone.
- 6. Rig up Halliburton to frac down tubing and both sides of the casing as follows:

	Fluid Vol./Gal.	CO2 Vol./Gal.	Total Vol./Gal.	Sand ( @ Blender Lbs./Gal.	Concentra Sand <u>Mesh</u>	tion @ Perfs. Lbs./Gal.
a.	2,000	- 0 -	2,000	Р	RE-PAI	)
b.	2,000	2,000	4,000	14 - 14 - 14 - 14 <del>14 14 14 14 1</del>	P A D	
c.	2,000	2,000	4,000	2.0	20-40	1.0
d.	3,000	3,000	6,000	4.0	20-40	2.0
e.	4,000	4,000	8.000	· 6.0	20-40	3.0
f.	4,000	4,000	8,000	5.0	10-20	2.5
g.	7,000	7,000	14,000	6.0	10-20	3.0

- h. Flush to bottom perforation with treated KCl water and CO<sub>2</sub> which varies depending on well conditions.
- i. Shut well in for a total of one (1) hour and flow back on a controlled choke setting.

FLUID COMPOSITION: Additives Per 1,000 Gallons

Acid 15% MCA

1 gallon corrosion inhibitor

Pre-Pad

No CO<sub>2</sub> 3% KC1

Surfactant (for individual well)

CO2

50% frac fluid

Gelled Water

50% CO<sub>2</sub> 3% KCI

50 pounds gel 50 pounds Adomite Aqua 10 pounds buffer

2 gallons surfactant "A" (individual well)
1 gallon surfactant "B" (individual well)
Special breaker

Flush

% CO<sub>2</sub> (ratio varies on individual well) 3% KCI 15 pounds gel 4 gallons surfactant "A"

Clean tanks plus clean <u>fresh</u> water is essential to the success of this fracturing technique.

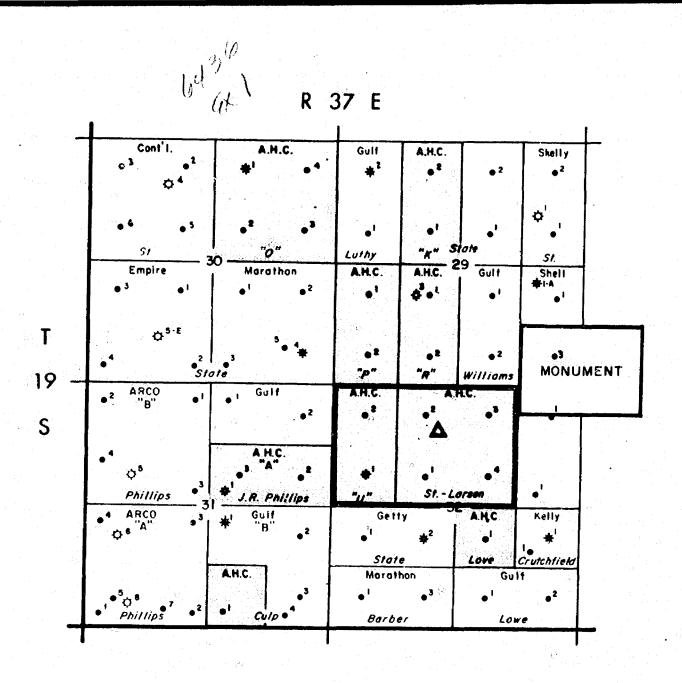
## TYPICAL WELLS FRACED:

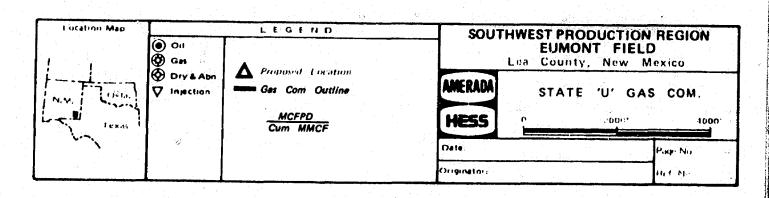
No.	County	Formation	Prod. Before CFPD or BPD	Potential After CFPD or BPD
<b>a.</b>	Lea	Yates	25 M	4.1 MM
ъ.	Lea	Queens	75 M	2.8 MM 12 oil
c.	Lea	Penrose	12M	800 M
đ.	Lea	Queens	20M	7.2 MM
e.	Nolan*	Cisco	-0-	150 M 144 oil
	* Surround:	ing wells prod	ucing 1 to 8 BOP	D.
<b>f</b> .	Lea	Grayburg	20 M 1 oi1	5.0 MM 30 oil
g.	Lea	Tubbs	400 M	1.4 MM
h.	Lea	7 Rivers	8 M (trace oil)	600 MM 28 oil
i.	Lea	Yates	-0-	4.7 MM
j.	Lea	Yates	18 M	4.3 MM
k.	Lea	Queens	10 M	800 M

The example wells shown are a small percentage of the wells treated with the typical results. The impressive point is the surrounding wells that have not used this technique are producing noticeably less or not at all.

Prepared by:

Lansford, Service Sales Engineer





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Andrea de deservación

# MEXICO OIL CONSERVATION COMMIS. IN WELL LOCATION AND ACREAGE DEDICATION PLAT

Porm C-102 Supersedes C-128 Ellective 1-1-65

All distances must be from the outer boundaries of the Section

Ameroda Hess Corp.			State U Go	s Com.	Well No.
'nit 1 etter	Section 32	Township 19 South	Range 37 East	County	•
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this form No allows	if necessary.) able will be assign	ed to the well until all	interests have been	consolidated (by commit hinterests, has been a	ed. (L'ae reverse side of unitization, unitization, unitization, pproved by the Commis- CERTIFICATION  Lify that the information commits the true and complete to the powledge and belief.
	2160			Name Supv.Drlg. Pcalition	H.O.Porter Admin.Svcs.
12	ATE OF STATES			shown on this notes of ects under my sup is true and knowledge en	rilly that the well location is plat was plotted from field yol surveys made by me or ervision, and that the same correct to the best of my d belief.

#### APPLICATION FOR MULLIPAD PRICE CEILING CATEGORY DETERMINATION

PRICE CEILING CATEO	CORY DETERMINATION   Kind of Leave
1. FOR DIVISION USE ONLY	State, Federal or Fee STATE
DATE OF: APPLICATION	5, Stite of La Gas Leuse No.
DEVERGINATION	11111111111111111111111111111111111111
20191100120	
PARTICIPANTS	7, Unit Agranment Time
ti me el Operator	e, Fram or Lenne Brane
Amerada Hess Corporation	State "U" Gas Comm
P. O. Box 2040, Tulsa, Oklahoma 74	
UNIT LETTER C 990 FEET FROM THE NORTH	LINE AND 2160 FEET FROM
THE West Line, Section 32 TOANSHIP 195	MANGE 37E RUMONT
11. Name and Address of Transporter(s) Northern	n Natural Gas Co.
2223 Dodge St., Omeha, Neb., 68102	Lea
WELL CATEGORY I	Care transaction of the Control of t
Check appropriate box for category sought and in	nformation submitted.
1. Category (ies) Sought (By NGPA Section No.)	<del>a ang manganaka aka aka aka aka aka aka aka aka ak</del>
2. All Applications must contain:	
X a. C-101 APPLICATION FOR PERMIT TO DRILL, [	DEEPEN OR PLUG BACK
b. C-105 WELL COMPLETION OR RECOMPLETION RE	PORT
c. DIRECTIONAL DRILLING SURVEY, IF REQUIRED	UNDER RULE 111
d. AFFIDAVITS OF MAILING OR DELIVERY	e e e e e e e e e e e e e e e e e e e
3. NEW NATURAL GAS UNDER SEC. 102(c)(1)(B) (usi	ng 2.5 Mile or 1000 Fact Deeper Test)
a. Location Plat	
4. NEW NATURAL GAS UNDER SEC. 102(c)(1)(C) (new	and the second of the second o
a. C-122 Multipoint and one point back pres	sure test
5. NEW ONSHORE PRODUCTION WELL	
X a. C-102 WELL LOCATION AND ACREAGE DEDICATI	ON PLAT
☐ b. No. of order authorizing infill program	
6. STRIPPER GAS	
a. C-116 GAS-OIL RATIO TEST	
☐ b. PRODUCTION CURVE FOR 12-MONTH PERIOD	
C. PRODUCTION CURVE FOR THE 90-DAY PERIOD OF	N WHICH THE APPLICATION IS BASED
I HEREBY CERTIFY THAT THE INFORMATION CONTAINED HEREIN IS TRUE AND COMPLETE TO THE BEST OF MY KNOWLEDGE AND BELIEF.	DIVISION USE ONLY
	Approved
Gilbert E. Miller NAME OF APPLICANT (Type or Print)	Disapproved
Title Conservation Supervisor	Control of the section to the form and the control of the control
	The information contained herein includes all of the information required to be
Date Jamary 31, 1979	filed by the applicant under Subpart B of Part 274.
Signed (felbert) Miller	
Exhibit 3 case 6436	EXAMINER

State 'U' No. 1 Sec. 32 Twp 19S - R37E Lea County, New Mexico

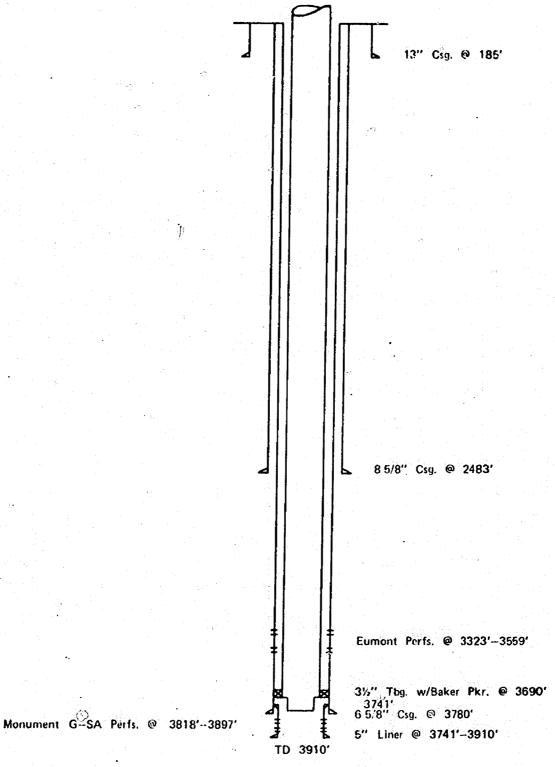


Exhibit y case 6436

Dual Completion Eumont Gas & Monument G-SA Oil

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## 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. 512 ORDER No. R-301

THE APPLICATION OF AMERADA PETROLEUM CORPORATION FOR AN ORDER GRANTING PERMISSION TO DUALLY COMPLETE AND PRODUCE ITS STATE 'U', WELL NO. 1, LOCATED IN THE SW/4 NW/4 OF SECTION 32, TOWNSHIP 19 SOUTH, RANGE 37 EAST, NMPM, LEA COUNTY, NEW MEXICO.

Exhibit 5 Case 6436

#### ORDER OF THE COMMISSION

## BY THE COMMISSION:

This cause came on for hearing at 9 o'clock a.m. on March 17, 1953, at Santa Fe, New Mexico, before the Oil Conservation Commission, hereinafter referred to as the "Commission".

NOW, on this 3/ day of MARCh, 1953, the Commission, a quorum being present, having considered the records and the testimony adduced, and being fully advised in the premises.

#### FINDS:

- (1) That due notice having been given as required by law, the Commission has jurisdiction of the case and the persons and subject matter thereof.
- (2) That the applicant's State 'U', Well No. 1, SW/4 NW/4 Section 32, Township 19 South, Range 37 East, NMPM, Lea County, New Mexico, was completed in August 1937 as an oil well producing from the Grayburg formation of the Eunice-Monument Pool in the open-hole interval 3780-3912, having drilled through the Seven Rivers-Queen formation of the Eumont Gas Pool at an approximate depth of 3250-3570.
- (3) That although recent experiments tend to show that mechanical packers and other devices are ordinarily available for successful dual/multiple completions of oil gas wells, the Commission is unconvinced of the soundness as a waste-prevention practice, of such dual/multiple completions as a general practice in New Mexico without specific controls over each such project.

## IT IS THEREFORE ORDERED:

That the applicant herein, Amerada Petroleum Corporation, be, and it hereby is authorized to dually complete and produce its State 'U', Well No. 1, SW/4 NW/4 Section 32, Township 19 South, Range 37 East, NMPM, Lea County, New Mexico, in such a manner that gas from the Seven Rivers-Oueen formation of the Eumont Gas Pool may be produced through the annular space between the casing and the tubing, and oil from the Grayburg formation of the Eunice-Monument Pool through the tubing by proper perforations and the installation of a proper packer;

PROVIDED, HOWEVER, That upon the actual dual completion of such subject well applicant shall submit to the District Office of the Commission in which the subject well is located Form C-103, Form C-104, Form C-110 and Form C-122 outlining the information required on these forms by existing Rules and Regulations.

PROVIDED, HOWEVER, That subject well shall be completed, and thereafter produced, in such a manner that there will be no commingling within the well bore, either within or outside the casing of gas, oil and gas, or oil produced from either or both of the separate strata, and,

PROVIDED FURTHER, That said subject well for dual completion and production shall be equipped in such a way that reservoir pressures may be determined separately for each of the two specified strata, and further, be equipped with all necessary connections required to permit recording meters to be installed and used, at any time, as may be required by the Commission or its representatives, in order that natural gas, oil, or oil and gas from each separate stratum may be accurately measured and the gas-oil ratio thereof determined, and,

PROVIDED FURTHER, That the operator applicant shall make any and all tests, including segregation tests, but not excluding other tests and/or determinations at any convenient time and in such manner as deemed necessary by the Commission; the original and all subsequent tests shall be witnessed by representatives of the Commission and by representatives of offset operators, if any there be, at their election, and the results of each test properly attested to by the applicant herein and all witnesses, and shall be filed with the Commission within ten (10) days after the completion of such test, and,

PROVIDED FURTHER, That upon the actual dual completion of such subject well, applicant shall submit to the Commission a diagrammatic sketch of the mechanical installation which was actually used to complete and produce the seal between the strata, and a special report of production, gas/oil ratio and reservoir pressure determination of each producing zone or stratum immediately following completion.

IT IS FURTHER ORDERED: That jurisdiction of this cause is hereby retained by the Commission for such further order or orders as may seem necessary or convenient for the prevention of waste and/or protection of correlative rights; upon failure of applicant to comply with any requirement of this order after proper notice and hearing, the Commission may terminate the authority hereby granted and require applicant or its successors and assigns to limit its activities to regular single-zone production in the interests of conservation.

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

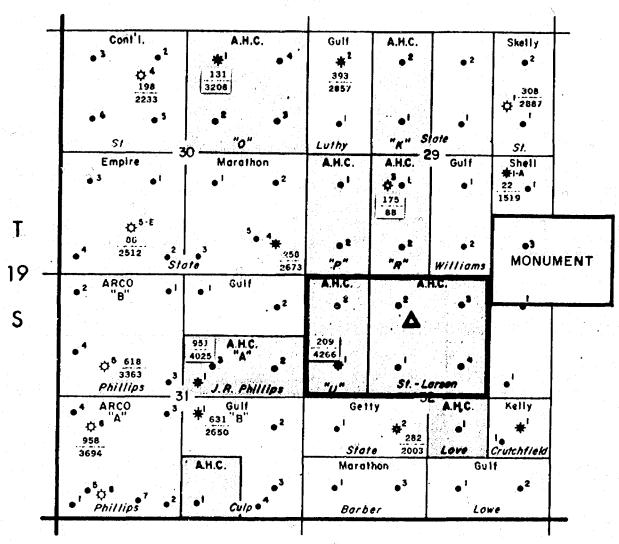
STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION

EDWIN L. MECHEM, Chairman

E. S. WALKER, Member

R. R. SPURRIEK, Sceretary

SEAL



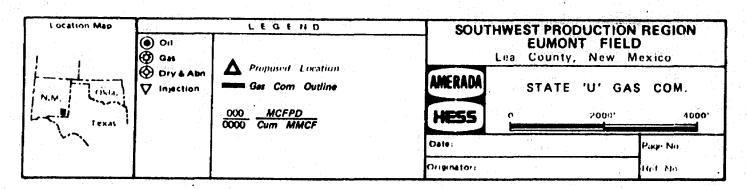
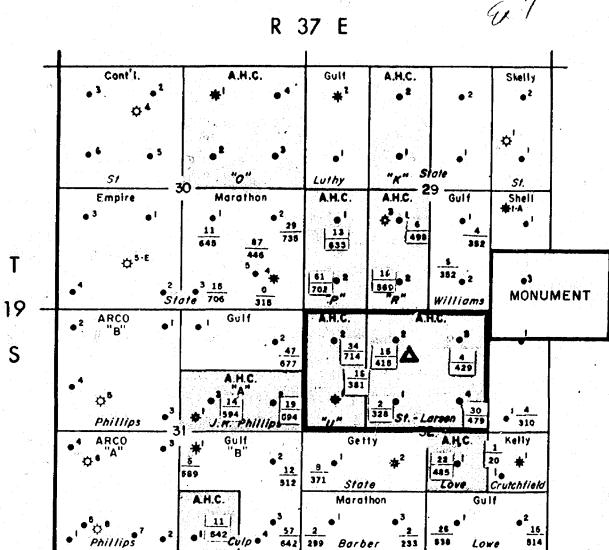
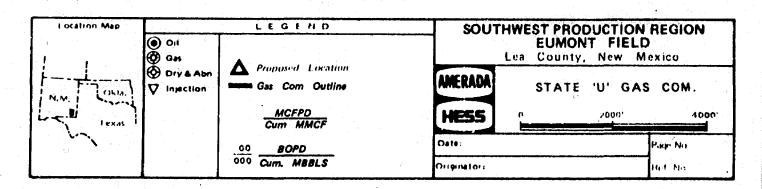


Exhibit La Case 6436

1.0 API well number: (If not available, leave blank. 14 digits.)	0-025-26169
2.0 Type of determination being sought: (Use the codes found on the front of this form.)	103 Section of NGPA Category Code
3.0 Depth of the deepest completion location: (Only needed if sections 103 or 107 in 2.0 above.)	
4.0 Name, address and code number of applicant: (35 letters per line maximum. If code number not available, leave blank,)	Amerada Hess Corporation 000459    Name
5.0 Location of this well: [Complete (a) or (b).] (a) For onshore wells (35 letters maximum for field name.)	Eumont: Field Name Lea New Mexico County State
(b) For OCS wells:	Area Name Block Number  Date of Lease:  Mo. Day Yr. OCS Lease Number
(c) Name and identification number of this well: (35 letters and digits maximum.)	State ''U'' Gas Comm. No. 2
(d) If code 4 or 5 in 2.0 above, name of the reservoir: (35 letters maximum.)	Queen
6.0 (a) Name and code number of the purchaser: (35 letters and digits maximum. If code number not available, leave blank.)	Northern Natural Gas Company 013767 Name O13767 Buyer Code
(b) Date of the contract:	<u>(0, 6, 2, 1, 7, 4,</u> Mo. Day Yr.
(c) Estimated annual production:	183 <sub>MMcf.</sub>
	(a) Base Price (b) Tax (c) All Other (d) Total of (a), (S/MMBTU) (b) and (c) (+) or (-).]
7.0 Contract price: {As of filing date. Complete to 3 decimal places.}	1.980134 2.114
8.0 Maximum lawful rate: (As of filing date. Complete to 3 decimal places.)	1.980
9.0 Person responsible for this application:	Gilbert E. Miller Conservation Supvr.
Agency Use Only Date Received by Juris, Agency	Name Title Can Signature
Date Received by FERC	January 31, 1979 918-584-5554  Date Application is Completed Phone Number

FT7900806/2-2





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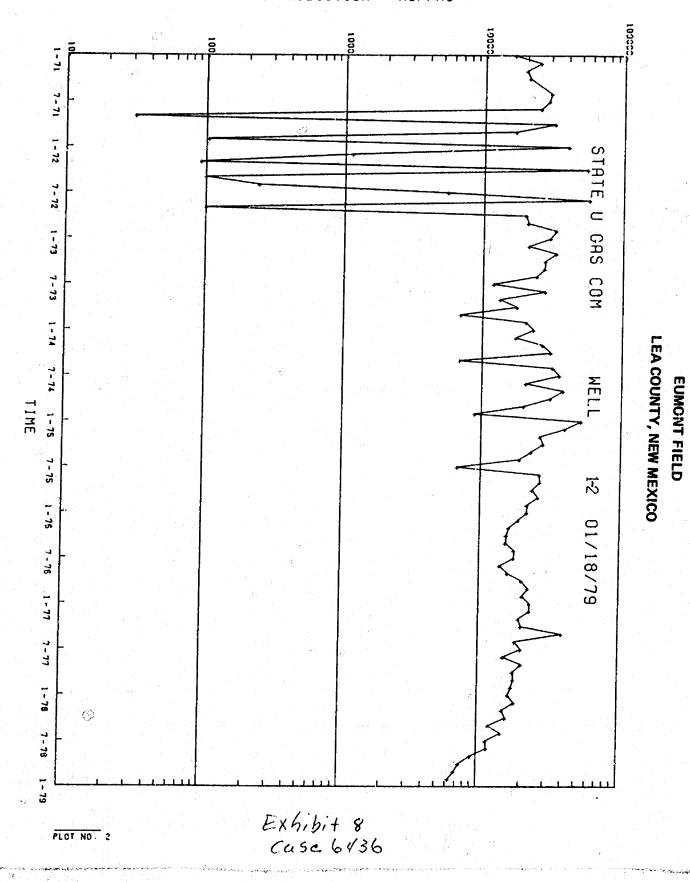
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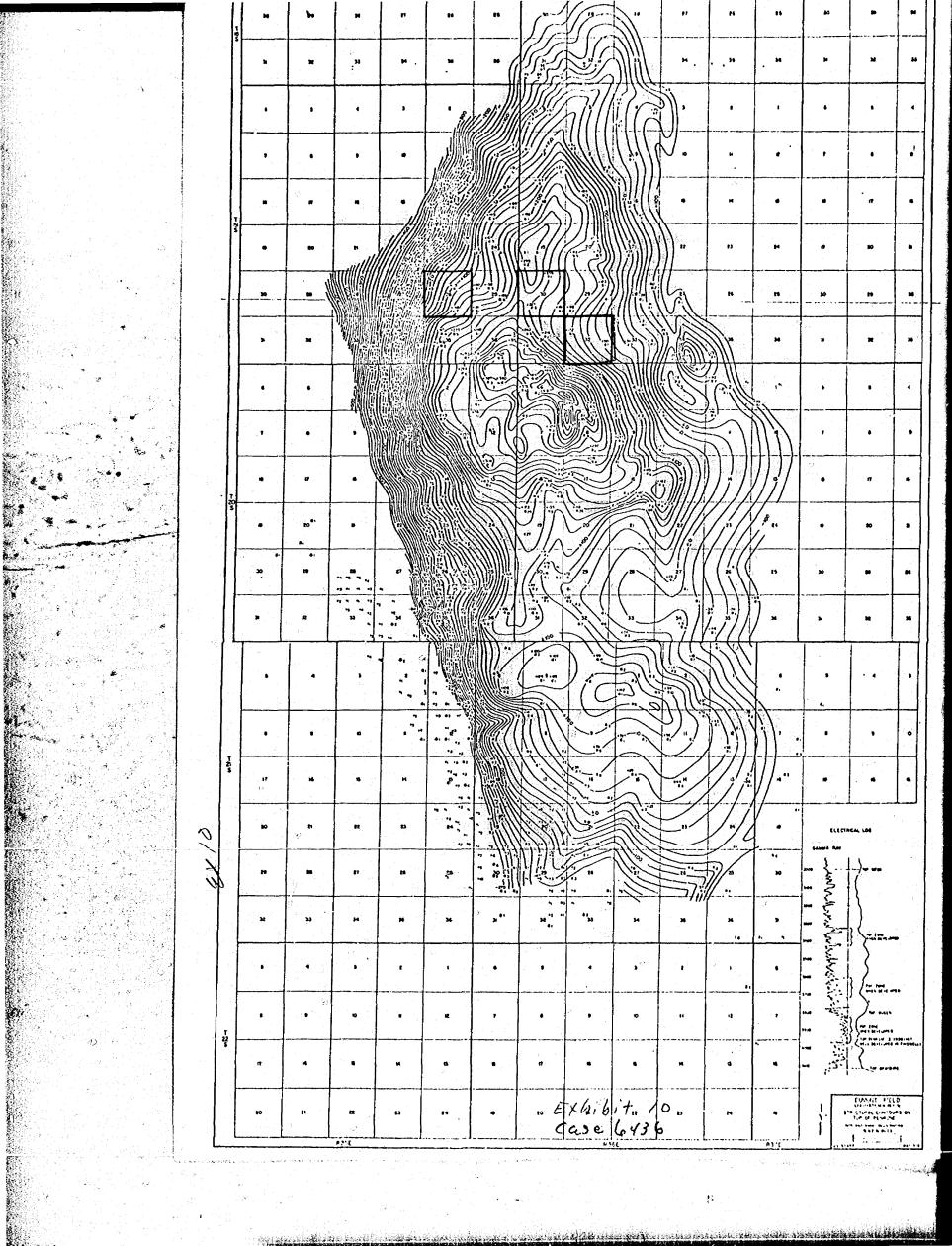
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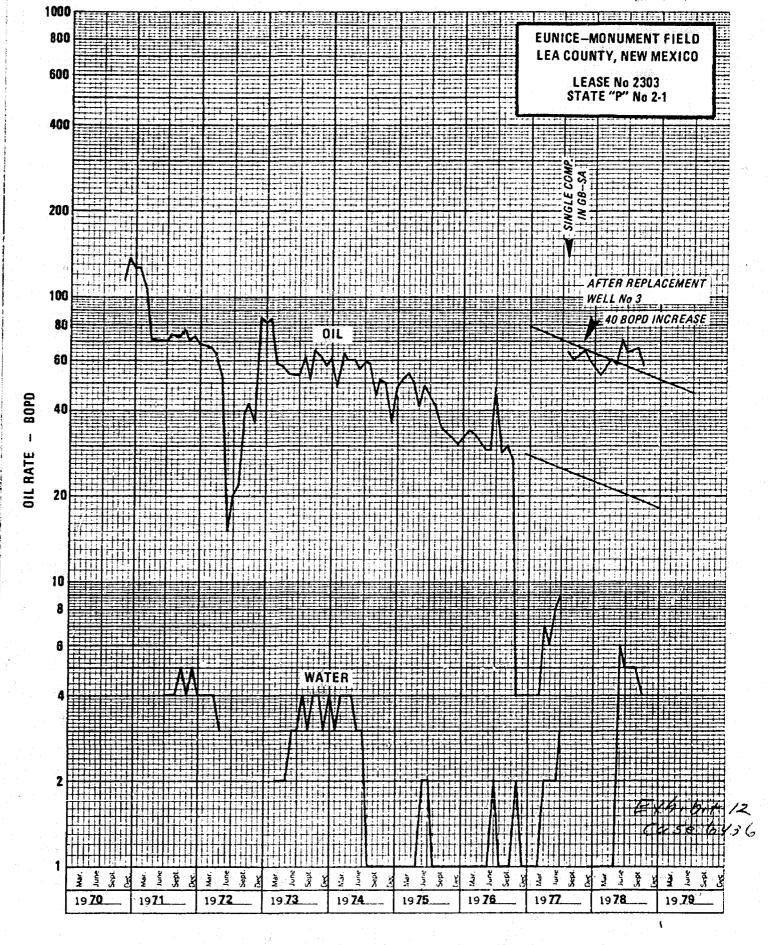
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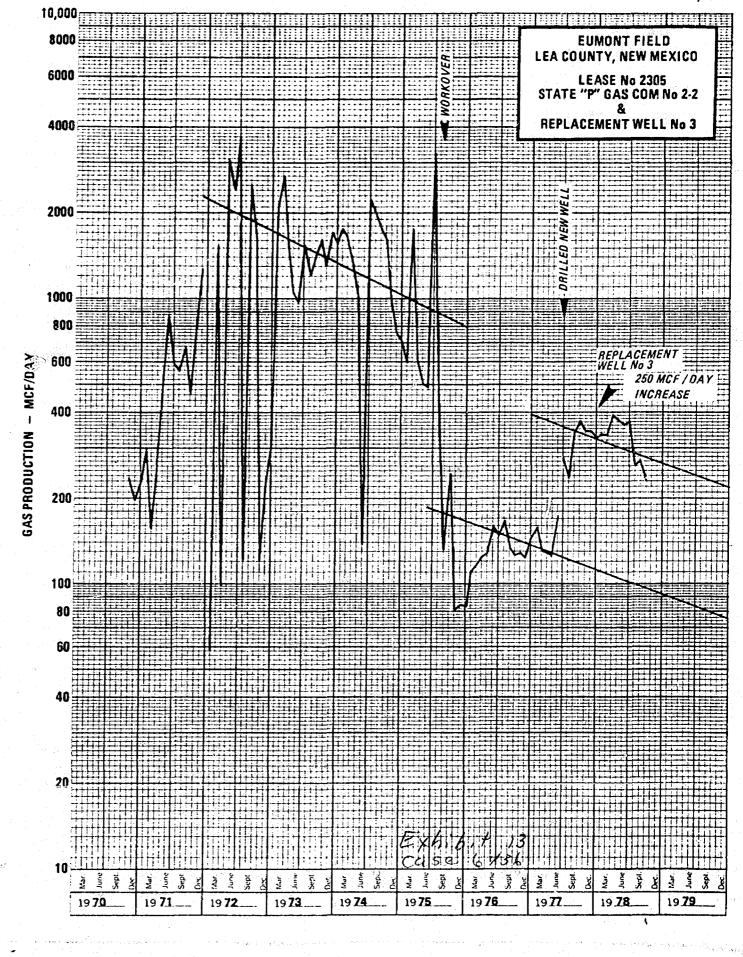
Exhibit > Case. 6436



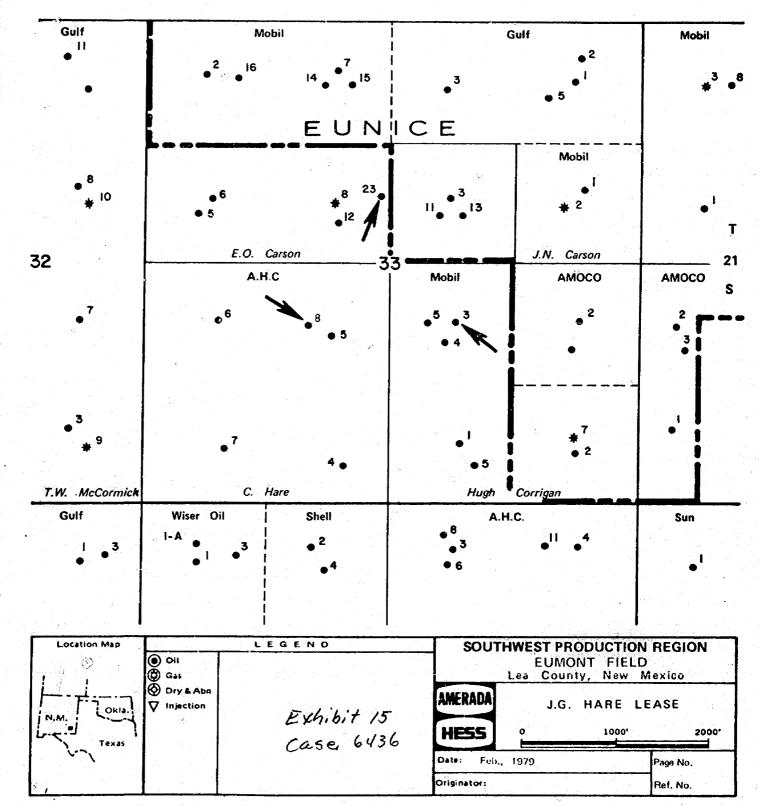
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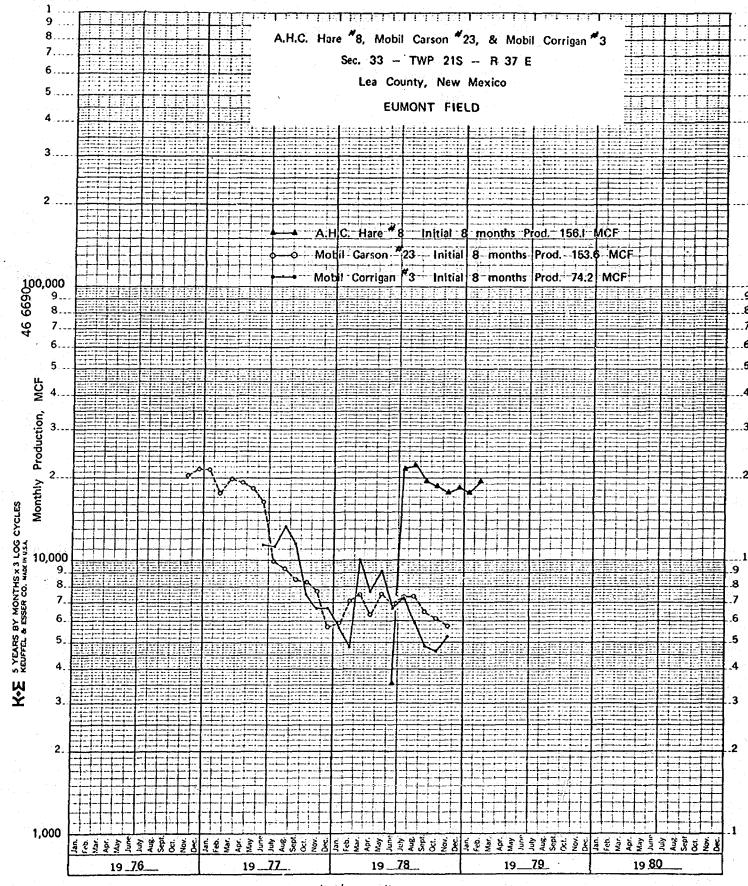
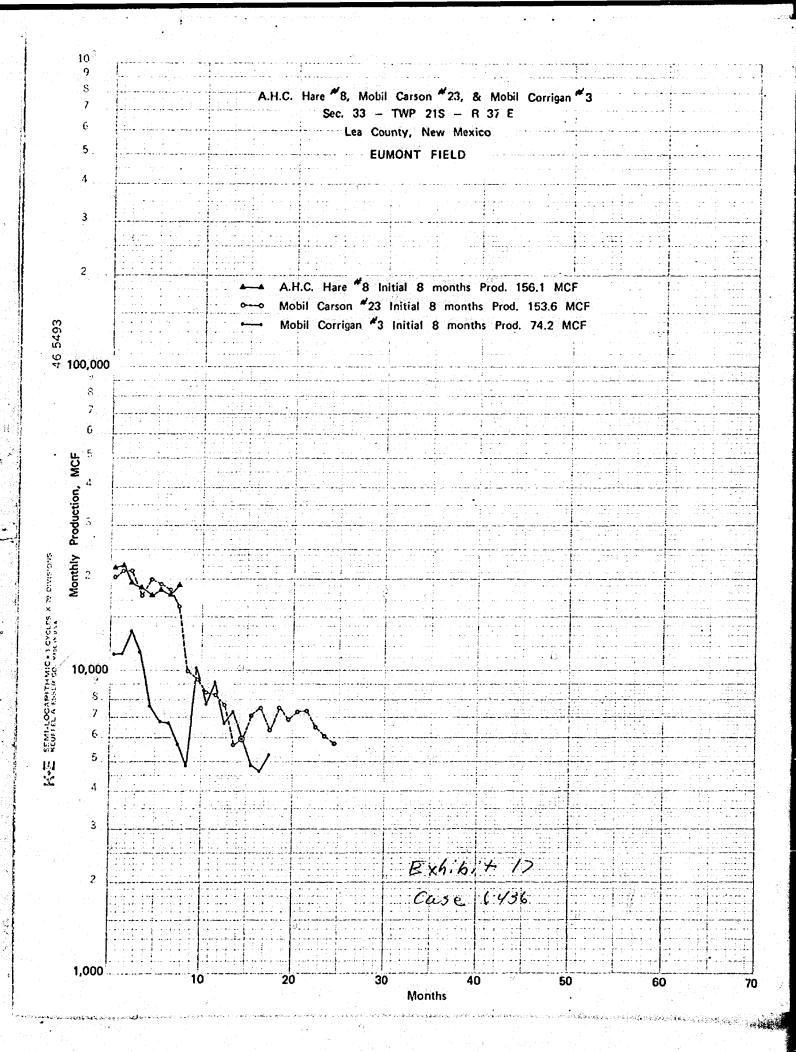


Exhibit 1/2 Case 4136



Dockets Nos. 9-79 and 10-79 are tentatively set for hearing on March 14 and 28, 1979. Applications for hearing must be filed at least 22 days in advance of hearing date.

Docket No. 7-79

#### DOCKET: COMMISSION HEARING - FRIDAY - FEBRUARY 23, 1979

OIL CONSERVATION COMMISSION - 9 A.M. - ROOM 205 STATE LAND OFFICE BUILDING, SANTA FE, NEW MEXICO

CASE 6461: In the matter of the hearing called by the Oil Conservation Commission on its own motion to permit Mayor Eddie Armenta, the Village of Jemez Springs, and all other interested parties to appear and show cause why the Jemez Well No. 1 located in Unit A of Section 26, Township 18 North, Range 2 East, Sandoval County, New Mexico, should not be plugged and abandoned in accordance with a Division-approved plugging program.

Docket No. 8-79

#### DOCKET: EXAMINER HEARING - WEDNESDAY - FEBRUARY 28, 1979

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

The following cases will be heard before Richard L. Stamets, Examiner, or Daniel S. Nutter, Alternate Examiner:

CASE 6422: (Continued from January 31, 1979, Examiner Hearing)

In the matter of the hearing cailed by the Oil Conservation Division on its own motion to permit Michon Engineering & Geological Services, Inc., Travelers Indemnity Company, and all other interested parties to appear and show cause why the Brent Well No. 1 located in Unit M of Section 29 and the Brent Well No. 3 located in Unit G of Section 19, both in Township 13 North, Range 6 East, Sandoval County, New Mexico, should not be plugged and abandoned in accordance with a Division-approved plugging program.

(Continued from January 31, 1979, Examiner Hearing) CASE 6434:

> Application of Amerada Hens Corporation for approval of infill drilling, Lea County, New Mexico. Applicant, in the above-styled cause, seeks a finding that the drilling of its State "O" Well No. 5 to be located in Unit H of Section 30, Township 19 South, Range 37 East, Eumont Gas Pool, Lea County, New Mexico, is necessary to effectively and efficiently drain that portion of the proration unit which cannot be so drained by the existing well, and further seeks approval of a waiver of existing well-spacing requirements.

CASE 6435: (Continued from February 14, 1979, Examiner Hearing)

> Application of Amerada Hess Corporation for approval of infill drilling, Lea County, New Mexico. Applicant, in the above-styled cause, seeks a finding that the drilling of its W. A. Weir "B" Well No. 3 located in Unit B of Section 26, Township 19 South, Range 36 East, Eumont Gas Pool, Lea County, New Mexico, is necessary to effectively and efficiently drain that portion of the proration unit which cannot be so drained by the existing well, and further secks approval of a waiver of existing well-spacing requirements.

CASE 6436: (Continued from January 31, 1979, Examiner Hearing)

> Application of Amerada Hess Corporation for approval of infill drilling, Lea County, New Mexico. Applicant, in the above-styled cause, seeks a finding that the drilling of its State "U" Gas Com Well No. 2 to be located in Unit C of Section 32, Township 19 South, Range 37 East, Eumont Gas Pool, Lea County, New Mexico, is necessary to effectively and efficiently drain that portion of the proration unit which cannot be so drained by the existing well, and further seeks approval of a waiver of existing well-spacing requirements.

Application of McClellan Oil Corporation for an unorthodox well location, Chaves County, New Mexico. CASE 6462: Applicant, in the above-styled cause, seeks approval for the unorthodox location of its Marlisue State Well No. 3 to be located 1155 feet from the North line and 1485 feet from the West line of Section 24, Township 14 South, Range 29 East, Double "L" Queen Associated Pool, Chaves County, New Mexico, the NE/4 NW/4 of said Section 24 to be dedicated to the well.

Application of Orville Slaughter for pool and lease commingling, San Juan County, New Mexico. CASE 6463: Applicant, in the above-styled cause, seeks authority to commingle Oswell-Farmington Pool production from his Sangre de Cristo Well No. 1 with undesignated Fruitland production from his Sangre de Cristo Well No. 2, both located in Unit D of Section 34, Township 30 North, Range 11 West, San Juan County, New Mexico.

- CASE 6464: Application of Dalias McCasland for clarification of Orders Nos. R-2789 and R-2794, Lea County, New Mexico, Applicant, in the above-styled cause, seeks clarification of Orders Nos. R-2789 and R-2794 to determine what formations have been unitized and what formations are subject to a waterflood project under the South Penrose-Skelly Unit, Sections 6 and 7, Township 22 South, Range 37 East, Lea County, New Mexico, and of the vertical limits of the Eumont and Penrose-Skelly Pools in said sections.
- CASE 6465: Application of Getty Oil Company for an unorthodox well location and a non-standard proration unit, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval of a 160-acre non-standard gas proration unit comprising the SE/4 of Section 31, Township 24 South, Range 37 East, Jalmat Gas Pool, Lea County, New Mexico, to be dedicated to its J. W. Sherrell Well No. 9 located 2250 feet from the South line and 1650 feet from the East line of said Section 31.
- CASE 6466: Application of Getty Oil Company for a dual completion, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval for the dual completion of its State 35 Well No. 1 located in Unit K of Section 35, Township 21 South, Range 34 East, Lea County, New Mexico, to produce oil from an undesignated Wolfcamp pool and gas from the Grama Ridge-Morrow Gas Pool through parallel strings of tubing.
- CASE 6467: Application of Getty 0il Company for pool creation and special pool rules, Lea County, New Mexico.

  Applicant, in the above-styled cause, seeks an order creating a new oil pool in the Wolfcamp forwation for its State 35 Well No. 1 located in Unit K of Section 35, Township 21 South, Range 34 East, Lea County, New Mexico, and for promulgation of special pool rules, including provision for 160-acre spacing.
- CASE 6468: Application of Dome Petroleum Corporation for an exception to Order No. R-1069, San Juan County, New Mexico. Applicant, in the above-styled cause, seeks an exception to Rule 2 of Order No. R-1069, as amended, for the Bisti-Lower Gallup Oil Pool to approve the following 13 non-standard proration units: the W/2 NW/4, W/2 NE/4, E/2 SW/4, and the E/2 SE/4 of Sections 3, 4, and 9, and the W/2 NW/4 of Section 10, all in Township 26 North, Range 14 West, San Juan County, New Mexico.
- CASE 6469: Application of Continental Oil Company for a dual completion, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks approval for the dual completion of its Fed. 34 Well No. 1 located in Unit N of Section 34, Township 20 South, Range 26 East, Eddy County, New Mexico, to produce gas from the Springs-Upper Pennsylvanian Pool and an undesignated Morrow pool through parallel strings of tubing.
- CASE 6470: Application of Phillips Petroleum Company for approval of infill drilling, Lea County, New Mexico. Applicant, in the above-styled cause, seeks a waiver of existing well spacing requirements to permit an infill drilling program in its East Vacuum Unit Area, Vacuum Grayburg-San Andres Pool, Lea County, New Mexico, and a finding that such infill wells are necessary to effectively and efficiently drain that portion of their proration units which is not presently being drained by any existing well. Applicant specifically seeks such waivers and findings now for ten wells, all in Township 17 South, Range 35 East, and located as follows: Unit K of Section 27; Units M and O, Section 28; Units B, I, and M of Section 32; Units C, H, and M of Section 33; and Unit C of Section 34.
- CASE 6471: Application of Consolidated 011 & Gas, Inc. for approval of infill drilling, San Juan County, New Mexico. Applicant, in the above-styled cause, seeks a waiver of existing well-spacing requirements and a finding that the drilling of its Freeman Well No. 1-A to be located in Unit C of Section 11, Township 31 North, Range 13 West/Basin-Dakota Pool, San Juan County, New Mexico, is necessary to effectively and efficiently drain that portion of the proration unit which cannot be so drained by the existing well.
- CASE 6472: Application of Consolidated 011 & Gas, Inc. for approvel of infill drilling, Rio Arriba County, New Mexico. Applicant, in the above-styled cause, seeks a waiver of existing well-spacing requirements and a finding that the drilling of its Jenny Well No. 1-A to be located in Unit P of Section 13, Township 26 North, Range 4 West, Basin-Dakota Pool, Rio Arriba County, New Mexico, is necessary to effectively and efficiently drain that portion of the proration unit which cannot be so drained by the existing well.
- CASE 6473: Application of Consolidated Oil & Gas, Inc. for approval of infill drilling, Rio Arriba County, New Mexico. Applicant, in the above-styled cause, seeks a waiver of existing well-spacing requirements and a finding that the drilling of its McIntyre Well No. 1-A to be located in Unit K of Section 11, Township 26 North, Range 4 West, Basin-Dakota Pool, Rio Arriba County, New Mexico, is necessary to effectively and efficiently drain that portion of the provation unit which cannot be so drained by the existing well.
- Application of Consolidated Oil & Cas, Inc. for approval of infill drilling, San Juan County, New Mexico. Applicant, in the above-styled cause, seeks a waiver of existing well-spacing requirements and a finding that the drilling of its Williams Well No. 1-A to be located in Unit C of Section 24, Township 31 North, Range 13 West, Basin-Dakota Pool, San Juan County, New Mexico, is necessary to effectively and efficiently drain that portion of the provation unit which cannot be so drained by the existing well.

- CASE 6475: Application of Consolidated 011 & Cas, Inc. for approval of infill drilling, San Juan County, New Mexico. Applicant, in the above-styled cause, seeks a waiver of existing well-spacing requirements and a finding that the drilling of its Montoya Well No. 1-A to be located in Unit I of Section 35, Township 32 North, Range 13 West, Basin-Dakota Pool, San Juan County, New Mexico, is necessary to effectively and efficiently drain that portion of the proration unit which cannot be so drained by the existing well.
- CASE 6476: Application of Pennzoil Company for an unorthodox gas well location, Eddy County, New Mexico.

  Applicant, in the above-styled cause, seeks approval for the unorthodox location of a well to be located 660 feet from the South line and 990 feet from the West line of Section 24, Township 17 South, Range 28 East, Aid-Morrow Gas Pool, Eddy County, New Mexico, the S/2 of said Section 24 to be dedicated to the well.
- CASE 6477: Application of Sun Oil Company for a waterflood project, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks authority to institute a waterflood project on its East Millman Pool Unit Area by the injection of water into the Queen and Grayburg formations through eleven wells located in Sections 12 and 13 of Township 19 South, Range 28 East, East Millman Pool, Eddy County, New Mexico.
- CASE 6437: (Continued and Readvertised)

Application of Curtis Little for compulsory pooling, approval of infill drilling, and a non-standard proration unit, San Juan County, New Mexico. Applicant, in the above-styled cause, seeks the rescission of Order No. R-4556 and approval of an order pooling all mineral interests in the Dakota formation underlying all of Section 11 and Lot 4 and the SW/4 SW/4 of Section 12, Township 28 North, Range 13 West, Basin-Dakota Pool, San Juan County, New Mexico, to form a 344.36-acre non-standard gas proration unit to be dedicated to a well to be located 1085 feet from the South line and 285 feet from the West line of said Section 12. Also to be considered will be the cost of drilling and completing said well and the allocation of the cost thereof as well as actual operating costs and charges for supervision. Also to be considered will be the designation of applicant as operator of the well and a charge for risk involved in drilling said well.

Applicant further seeks a finding that the drilling of said well is necessary to effectively and efficiently drain that portion of the proration unit which cannot be so drained by the existing well.

- CASE 6478: Application of Coronado Exploration Corp. for compulsory pooling, Chaves County, New Mexico.

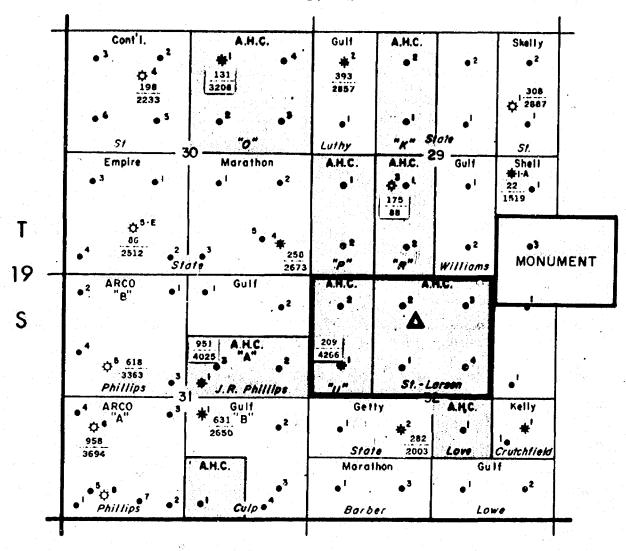
  Applicant, in the above-styled cause, seeks an order pooling all mineral interests in the San Andres formation underlying the NW/4 ½E/4 of Section 26, Township 10 South, Range 28 East, Chaves County, New Mexico, to be dedicated to a well to be located at a standard location thereon. Also to be considered will be the cost of drilling and completing said well and the allocation of the cost thereof as well as actual operating costs and charges for supervision. Also to be considered will be the designation of applicant as operator of the well and a charge for risk involved in drilling said well.
- Application of Coronado Exploration Corp. for compulsory pooling, Chaves County, New Mexico.

  Applicant, in the above-styled cause, seeks an order pooling all mineral interests in the San Andres formation underlying the SE/4 SE/4 of Section 5, Township 10 South, Range 28 East, Chaves County, New Mexico, to be dedicated to a well to be located at a standard location thereon. Also to be considered will be the cost of drilling and completing said well and the allocation of the cost thereof as well as actual operating costs and charges for supervision. Also to be considered will be the designation of applicant as operator of the well and a charge for risk involved in drilling said well.
- CASE 6480: Application of Harvey E. Yates Company for an NGPA determination, Lea County, New Mexico. Applicant, in the above-styled cause, seeks a new onshore reservoir or in the alternative a new onshore production well determination for its State 22 Well No. 1 located in Unit P of Section 22, Township 18 South, Range 35 East, Queen formation, Lea County, New Mexico.
- CASE 6481: Application of Harvey E. Yates Company for an NGPA determination, Lea County, New Mexico. Applicant, in the above-styled cause, seeks a new onshore reservoir or in the alternative a new onshore production well determination for its Hanlad State Well No. 1 located in Unit K of Section 2, Township 18 South, Range 35 East, Queen formation, Lea County, New Mexico.
- CASE 6482: Application of Harvey E. Yates Company for an NGPA determination, Lea County, New Mexico. Applicant, in the above-styled cause, seeks a new onshore reservoir or in the alternative a new onshore production well determination for its Mobil 27 State Well No. 1 located in Unit A of Section 27, Township 18 South, Range 35 East, Queen formation, Lea County, New Mexico.
- CASE 6483: Application of Harvey E. Yates Company for compulsory pooling, Lea County, New Mexico. Applicant, in the above-styled cause, seeks an order pooling all mineral interests in the Wolfcamp, Pennsylvanian, and Mississippian formations underlying the \$/2 of Section 8, Township 14 South, Range 36 East, Lea County, New Mexico, to be dedicated to a well to be drilled at a standard location thereon. Also to be considered will be the cost of drilling and completing said well and the allocation of the cost thereof as well as actual operating costs and charges for supervision. Also to be considered will be the designation of applicant as operator of the well and a charge for risk involved in drilling said

(†)

- CASE 6484: Application of Harvey E. Yates Company for compulsory pooling, Lea County, New Mexico. Applicant, in the above-styled cause, seeks an order pooling all mineral interests in the Wolfcamp, Pennsylvanian, and Mississippian formations underlying the E/2 of Section 28, Township 16 South, Range 37 East, Lea County, New Mexico, to be dedicated to a well to be drilled at a standard location thereon. Also to be considered will be the cost of drilling and completing said well and the allocation of the cost thereof as well as actual operating costs and charges for supervision. Also to be considered will be the designation of applicant as operator of the well and a charge for risk involved in drilling said well.
- CASE 6485: Application of Harvey E. Yates Company for compulsory pooling, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks an order pooling all mineral interests in the Wolfcamp, Pennsylvanian, and Mississippian formations underlying the S/2 of Section 13, Township 18 South, Range 28 East, Eddy County, New Mexico, to be dedicated to a well to be drilled at a standard location thereon. Also to be considered will be the cost of drilling and completing said well and the allocation of the cost thereof as well as actual operating costs and charges for supervision. Also to be considered will be the designation of applicant as operator of the well and a charge for risk involved in drilling said well.
- CASE 6486: Application of Depco Inc. for an unorthodox well location, Chaves County, New Mexico. Applicant, in the above-styled cause, seeks approval for the unorthodox location of a well to be located 660 feet from the North and East lines of Section 21, Township 13 South, Range 30 East, undesignated Morrow pool, Chaves County, New Mexico, the E/2 of said Section 21 to be dedicated to the well.
- CASE 6487: Application of El Paso Natural Gas Company for approval of infill drilling, Lez County, New Mexico.

  Applicant, in the above-styled cause, seeks a waiver of existing well-spacing requirements and a
  finding that the drilling of its Sheil E State Com Well No. 2 located in Unit N of Section 6, Township 21 South, Range 36 East, Eumont Gas Pool, Lea County, New Mexico, is necessary to effectively
  and efficiently drain that portion of the proration unit which cannot be so drained by the existing



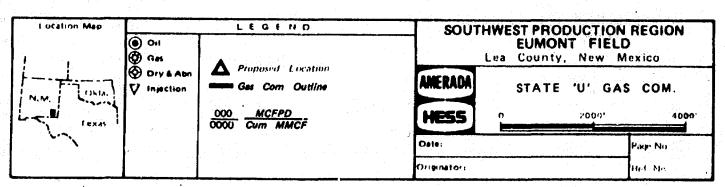
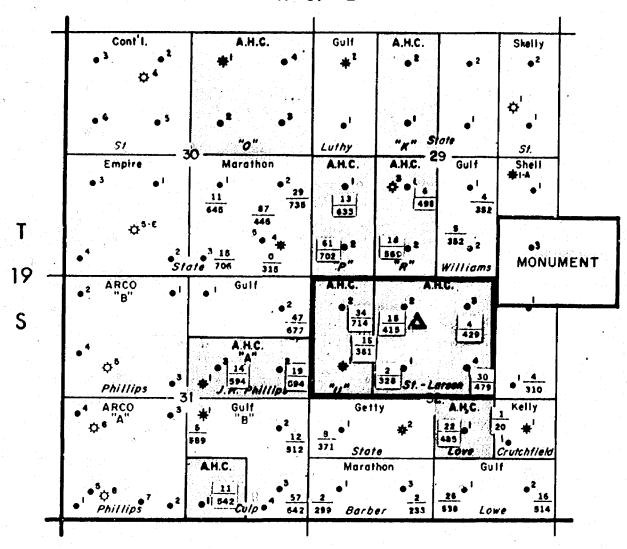
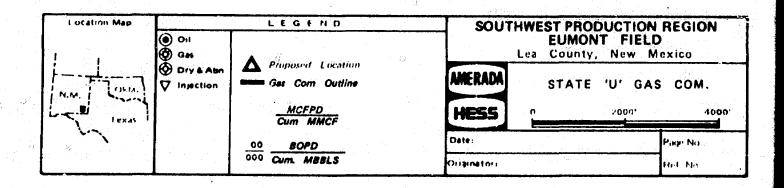
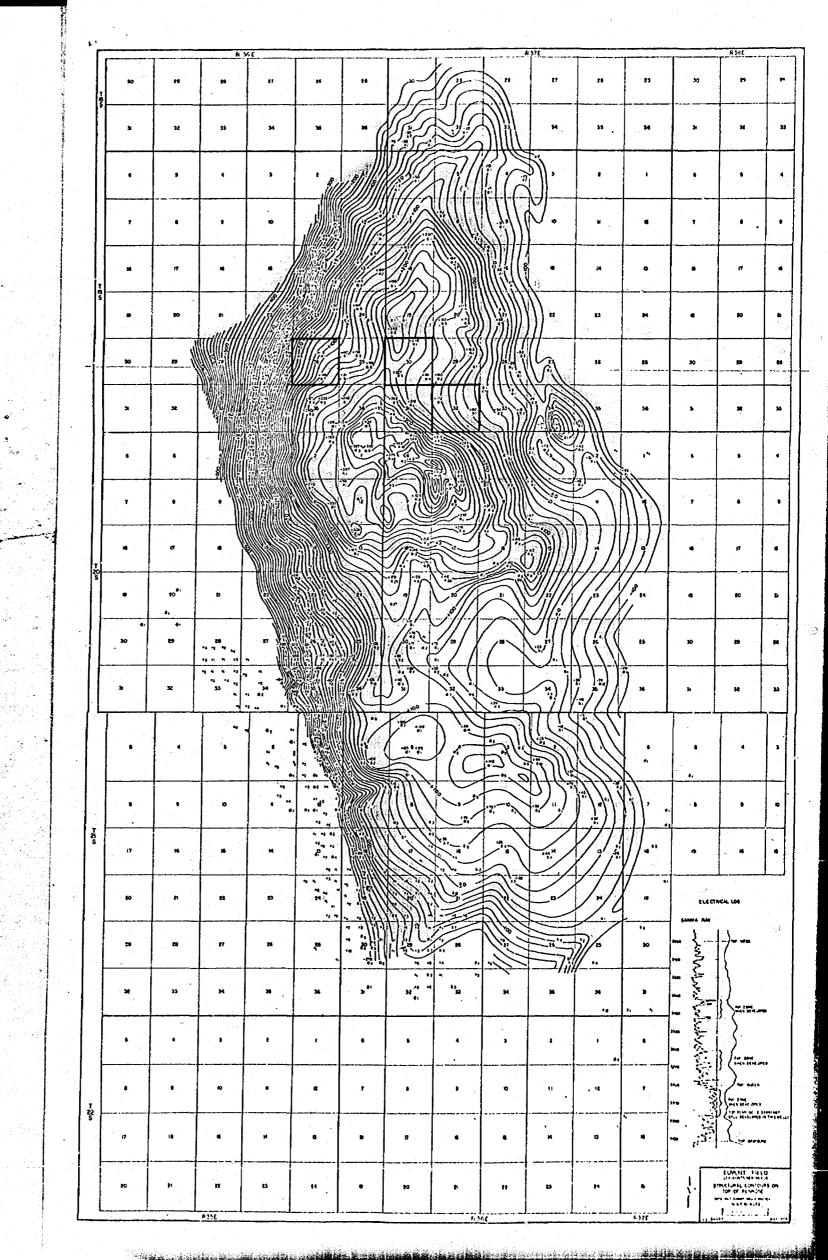
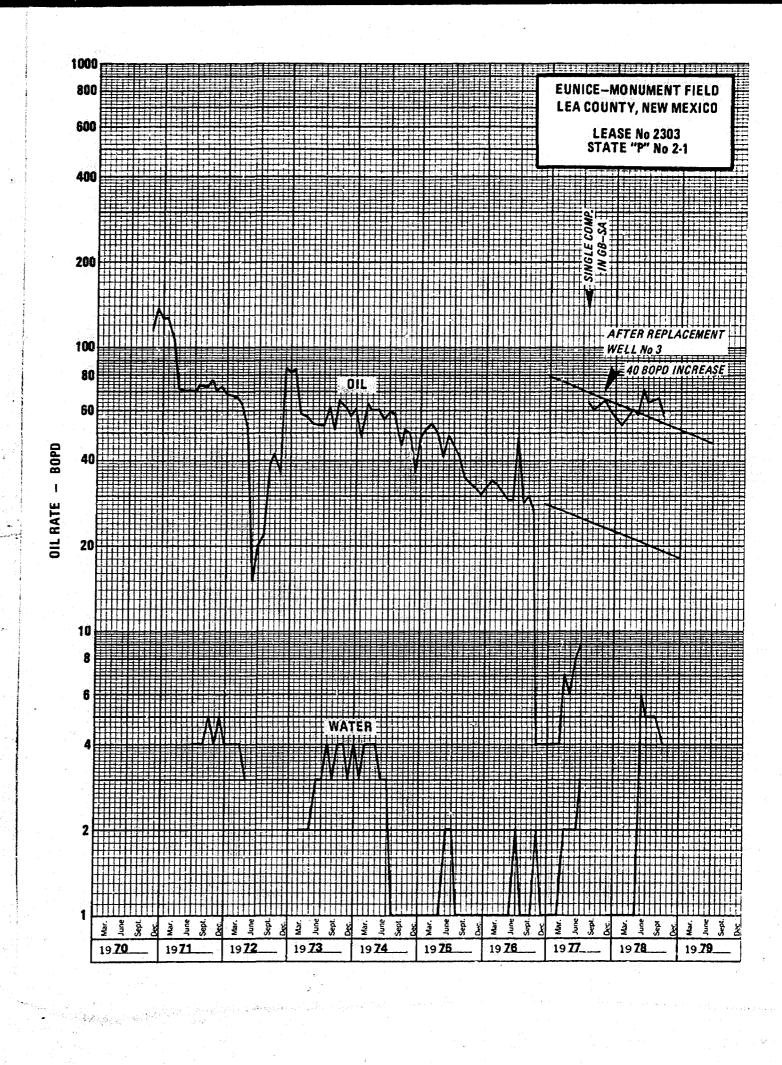


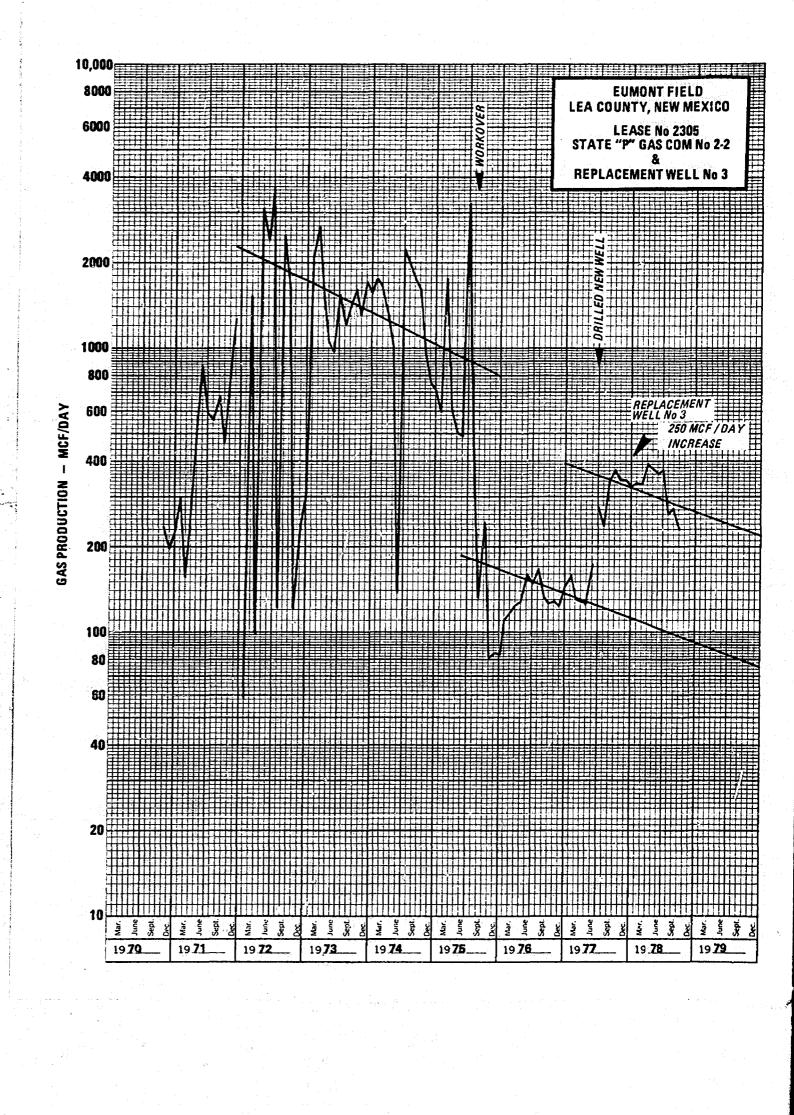
Exhibit 1 case 6436

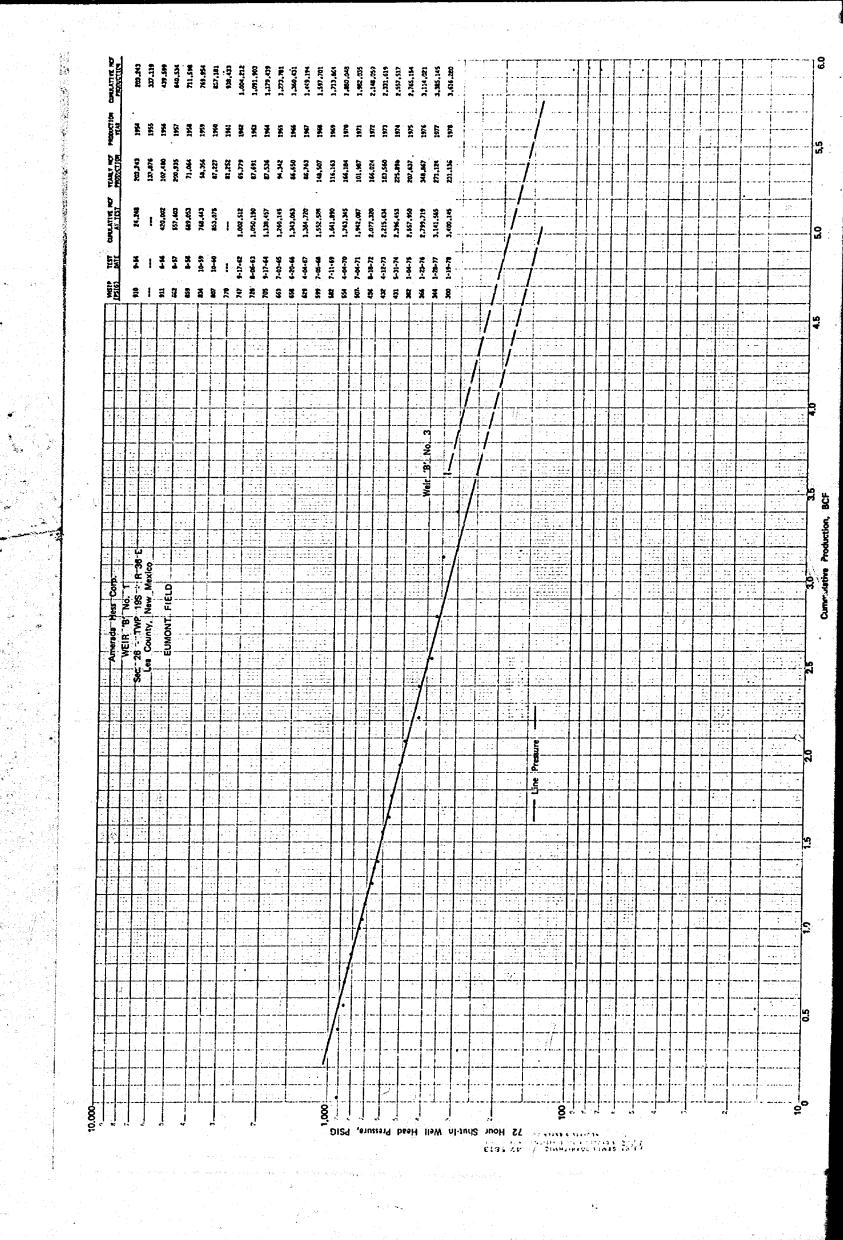


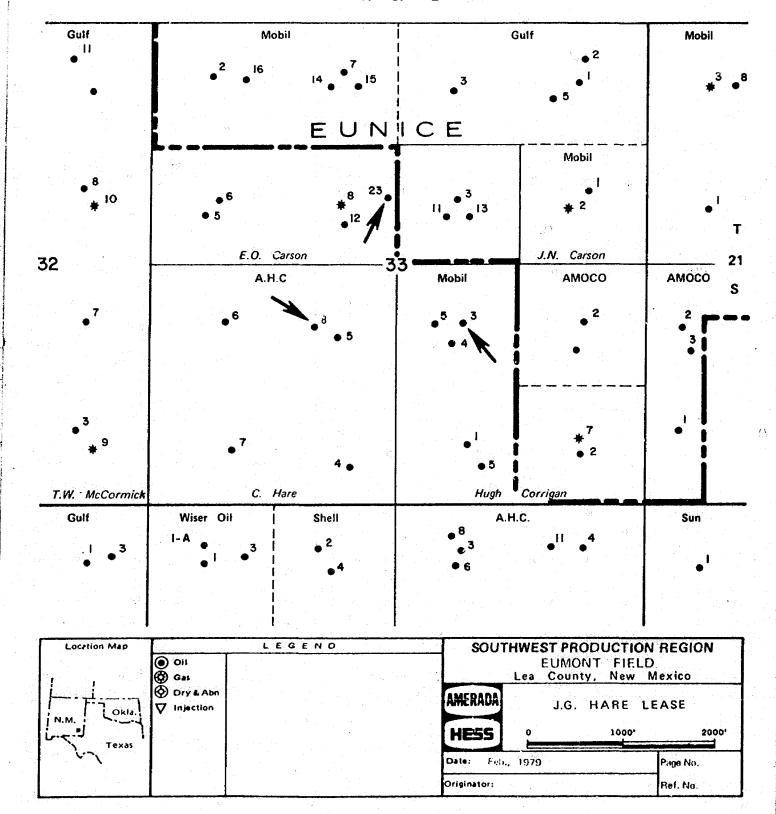


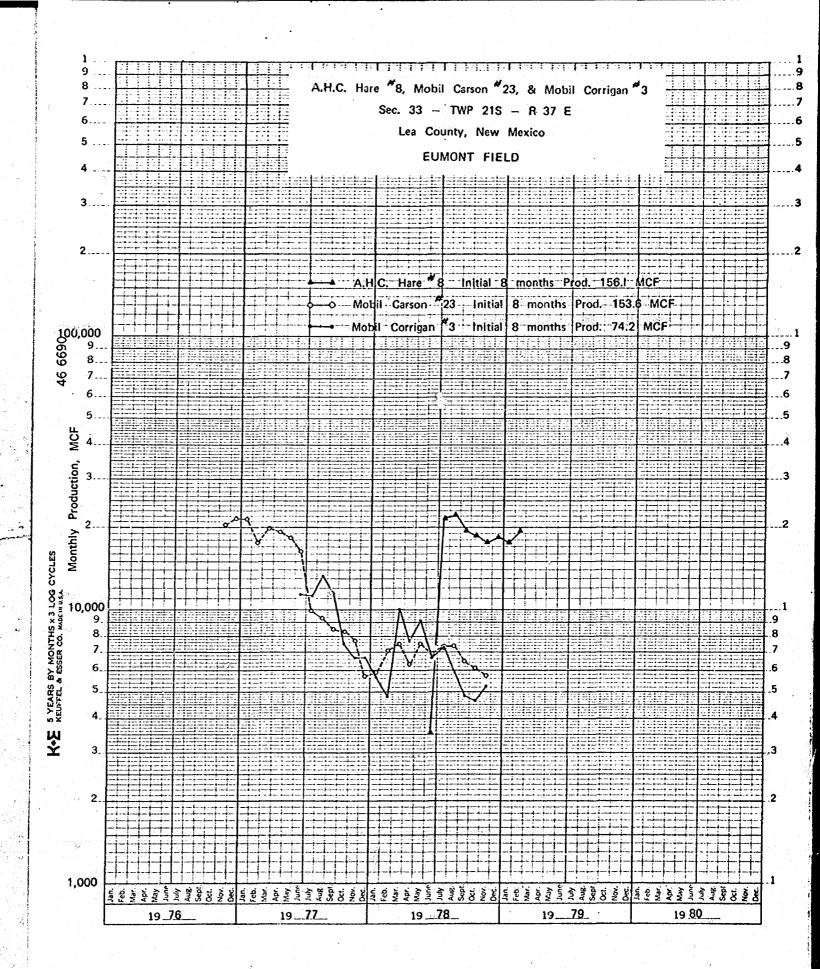


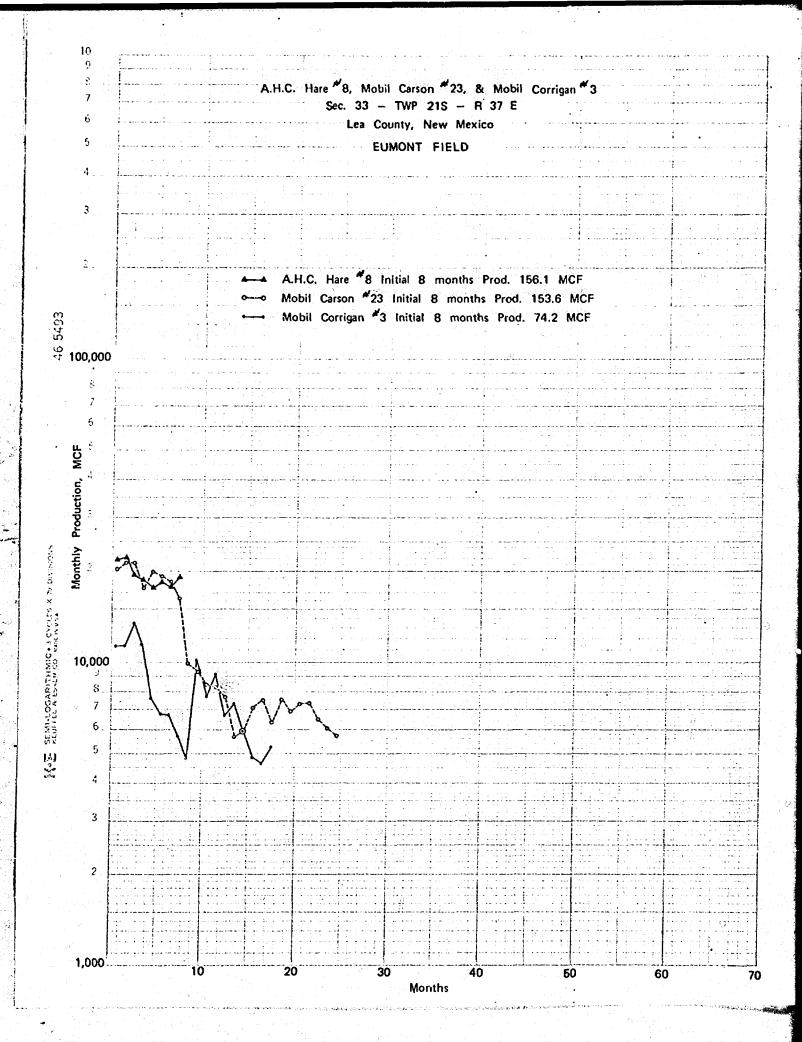












Dockets Nos. 5-79 and 6-79 are tentatively set for hearing on February 14 and 28, 1979. Applications for hearing must be filed at least 22 days in advance of hearing date.

#### DOCKET: EXAMINER HEARING - WEDNESDAY - JANUARY 31, 1979

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

The following cases will be heard before Richard L. Stamets, Examiner, or Daniel S. Nutter, Alternate Examiner:

- CASE 6422: In the matter of the hearing called by the Oil Conservation Division on its own motion to permit Helton Engineering & Geological Services, Inc., Travelers Indemnity Company, and all other interested parties to appear and show cause why the Brent Well No. 1 located in Unit M of Section 29 and the Brent Well No. 3 located in Unit G of Section 19, both in Township 13 North, Range 6 East, Sandoval County, New Mexico, should not be plugged and abandoned in accordance with a Division-approved plugging program.
- CASE 6415: (Continued from January 17, 1979, Examiner Hearing)

Application of Yates Petroleum Corporation for compulsory pooling, Lea County, New Mexico. Applicant, in the above-styled cause, seeks an order pooling all mineral interests in the Wolfcamp thru Devonian formations underlying the W/2 of Section 20, Township 14 South, Range 36 East, Lea County, New Mexico, to be dedicated to a well to be drilled at a standard location thereon. Also to be considered will be the cost of drilling and completing said well and the allocation of the cost thereof as well as actual operating costs and charges for supervision. Also to be considered will be the designation of applicant as operator of the well and a charge for risk involved in drilling said well.

CASE 6419: (Continued from January 17, 1979, Examiner Hearing)

Application of Yates Petroleum Corporation for a dual completion, Eddy County, New Mexico.

Applicant, in the above-styled cause, seeks approval for the dual completion (conventional) of its
Lanning JC Well No. 1 located in Unit B of Section 7, Township 18 South, Range 26 East, Eagle Creek
Field, Eddy County, New Mexico, to produce gas from the Strawn formation through the casing-tubing
annulus and from the Morrow formation through tubing.

- CASE 6423:

  Application of Yates Petroleum Corporation for an unorthodox well location, Eddy County, New Mexico.

  Applicant, in the above-styled cause, seeks approval for the unorthodox location of its Jackson AT

  Well No. 9 located 660 feet from the South and West lines of Section 13, Township 17 South, Range 25

  East, Eddy County, New Mexico, to test the Wolfcamp, Pennsylvanian, and Mississippian formations,
  the S/2 of said Section 13 to be dedicated to the well.
- Application of Yates Petroleum Corporation for an unorthodox well location, Eddy County, New Mexico.

  Applicant, in the above-styled cause, seeks approval for the unorthodox location of its Superior
  Fed. KJ Well No. 1 located 990 feet from the North and West lines of Section 7, Township 20 South,
  Range 29 East, Eddy County, New Mexico, to test the Wolfcamp and Pennsylvanian formations, the N/2
  of said Section 7 to be dedicated to the well.
- CASE 6425: Application of T. B. Knox Estate for exception to Order No. R-111-A, Eddy County, New Mexico.

  Applicant, in the above-styled cause, seeks an exception to the casing/cementing rules for the OilPotash Area as promulgated by Order No. R-111-A to permit its Lucia Brookes Well No. 2 located in
  Unit K of Section 14, Township 18 South, Range 30 East, Eddy County, New Mexico, to be completed in
  the following manner: set surface casing and circulate cement; eliminate salt protection string;
  and do not circulate cement on production casing.
- CASE 6426: Application of C. W. Trainer for an unorthodox gas well location, Lea County, New Mexico.

  Applicant, in the above-styled cause, seeks approval for the unorthodox location of a well to be located 660 feet from the North and West lines of Section 24, Township 20 South, Range 32 East, South Salt Lake-Morrow Pool, Lea County, New Mexico, the N/2 of said Section 24 to be dedicated to the well.
- CASE 6427:

  Application of Caribou Four Corners, Inc., for an unorthodox well location, San Juan County, New Mexico. Applicant, in the above-styled cause, seeks approval for the unorthodox location of its Caribou/Kirtland Well No. 1 to be located 1214 feet from the North line and 650 feet from the East line of Section 13, Township 29 North, Range 15 West, Cha Cha-Gallup Pool, San Juan County, New Mexico, the E/2 NE/4 to be dedicated to the well.
- CASE 6428: Application of Mobil Oil Corporation for the amendment of Order No. R-5801, Lea County, New Mexico.

  Applicant, in the above-styled cause, seeks the amendment of Order No. R-5801 to delete the requirements for lined tubing in injection wells in the North Vacuum Abo East Pressure Maintenance Project, Lea County, New Mexico.

- CASE 6429: Application of Zia Energy, Inc., for approval of infill drilling, Lea County, New Mexico.

  Applicant, in the above-styled cause, seeks a finding that the drilling of its Elliott State Well

  No. 2 to be located in Unit B of Section 34, Township 20 Eouth, Range 36 East, Eumont Gas Pool,

  Lea County, New Mexico, is necessary to effectively and efficiently drain that portion of the

  provation unit which cannot be so drained by the existing well, and further seeks approval of a

  waiver of existing well-spacing requirements.
- CASE 6430: Application of Phoenix Resources Company for a unit agreement, Chaves County, New Mexico.

  Applicant, in the above-styled cause, seeks approval for its Buckhorn Canyon Unit Area comprising 23,009 acres, more or less, of Federal and state lands in Township 19 South, Ranges 19 and 20 East, Chaves County, New Mexico.
- CASE 6431: Application of HNG Oil Company for compulsory pooling, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks an order pooling all mineral interests in the Pennsylvanian formation underlying the N/2 of Section 35, Township 23 South, Range 28 East, Eddy County, New Mexico, to be dedicated to a well to be drilled at a standard location thereon. Also to be considered will be the cost of drilling and completing said well and the allocation of the cost thereof as well as actual operating costs and charges for supervision. Also to be considered will be the designation of applicant as operator of the well and a charge for risk involved in drilling said well.
- CASE 6432: Application of John Yuronka for compulsory pooling, Lea County, New Mexico. Applicant, in the above-styled cause, seeks an order pooling all mineral interests in the Langlie Mattix Pool underlying the NE/4 NW/4 and the SE/4 NW/4 of Section 29, Township 24 South, Range 37 East, Lea County, New Mexico, to form two 40-acre units, each to be dedicated to a well to be drilled at a standard location thereon. Also to be considered will be the cost of drilling and completing said wells and the allocation of the cost thereof as well as actual operating costs and charges for supervision. Also to be considered will be the designation of applicant as operator of the wells and a charge for risk involved in drilling said wells.
- CASE 6433: Application of Cities Service Company for compulsory pooling, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks an order pooling all mineral interests in the Pennsylvanian formations underlying the S/2 of Section 8, Township 23 South, Range 28 East, Eddy County, New Mexico, to be dedicated to a well to be drilled at a standard location thereon. Also to be considered will be the cost of drilling and completing said well and the allocation of the cost thereof as well as actual operating costs and charges for supervision. Also to be considered will be the designation of applicant as operator of the well and a charge for risk involved in drilling said well.
- CASE 6434: Application of Amerada Hess Corporation for approval of infill drilling, Lea County, New Mexico.

  Applicant, in the above-styled cause, seeks a finding that the drilling of its State "O" Well No.

  5 to be located in Unit H of Section 30, Township 19 South, Range 37 East, Eumont Gas Pool, Lea
  County, New Mexico, is necessary to effectively and efficiently drain that portion of the proration
  unit which cannot be so drained by the existing well, and further seeks approval of a waiver of
  existing well-spacing requirements.
- CASE 6435: Application of Amerada Hess Corporation for approval of infill drilling, Lea County, New Mexico.

  Applicant, in the above-styled cause, seeks a finding that the drilling of its W. A. Weir "B" Well:

  No. 3 located in Unit B of Section 26, Township 19 South, Range 36 East, Eumont Gas Pool, Lea County,

  New Mexico, is necessary to effectively and efficiently drain that portion of the proration unit

  which cannot be so drained by the existing well, and further seeks approval of a waiver of existing

  well-spacing requirements.
- CASE 6436: Application of Amerada Hess Corporation for approval of infill drilling, Lea County, New Mexico.

  Applicant, in the above-styled cause, seeks a finding that the drilling of its State "U" Gas Com

  Well No. 2 to be located in Unit C of Section 32, Township 19 South, Range 37 East, Eumont Gas Pool,

  Lea County, New Mexico, is necessary to effectively and efficiently drain that portion of the

  proration unit which cannot be so drained by the existing well, and further seeks approval of a

  waiver of existing well-spacing requirements.
- CASE 6437:

  Application of Curtis Little for approval of infill drilling and a non-standard proration unit, San Juan County, New Mexico. Applicant, in the above-styled cause, seeks a finding that the drilling of a well to be located 1085 feet from the South line and 285 feet from the West line of Section 12, Township 28 North, Range 13 West, Basin-Dakota Pool, San Juan County, New Mexico, is necessary to effectively and efficiently drain that portion of the proration unit which cannot be so drained by the existing well. Applicant further seeks rescission of Order No. R-4556 and approval of a 344.36-acre non-standard gas proration unit comprising all of Section 11, and Lot 4 and the SW/4 SW/4 of Section 12 for said well.
- CASE 6438: Application of Caulkins Oil Company for dual completions and downhole commingling, Rio Arriba County, New Mexico. Applicant, in the above-styled cause, seeks approval for the dual completion of its Breech Well No. 812 located in Unit N of Section 18, Township 26 North, Range 6 West, and its Breech Well No. 224-A located in Unit B of Section 13, Township 26 North, Range 7 West, Rio Arriba County, New Mexico, to produce gas from the Dakota formation through a separate string of tubing and to commingle Chacra and Mesaverde production in the wellbores of said wells.

(3)

- Application of Caulkins Oil Company for downhole commingling, Rio Arriba County, New Mexico.

  Applicant, in the above-styled cause, seeks approval for the downhole commingling of Mesaverde and Dakota production in the wellbore of its Breech A Well No. 229 located in Unit D of Section 17, Township 26 North, Range 6 West, Rio Arriba County, New Mexico.
- CASE 6440: Application of Caulkins Oil Company for a dual completion and downhole commingling, Rio Arriba County, New Mexico. Applicant, in the above-styled cause, seeks approval for the dual completion of its Breech F Well No. 8 located in Unit A of Section 34, Township 27 North, Range 6 West, Rio Arriba County, New Mexico, to produce gas from the Pictured Cliffs formation through a separate string of tubing and to commingle Mesaverde and Dakota production in the wellbore of said well.
- CASE 6441:
  Application of Caulkins 011 Company for downhole commingling, Rio Arriba County, New Mexico.
  Applicant, in the above-styled cause, seeks approval for the downhole commingling of Pictured Cliffs and Mesaverde production in the wellbore of its Breech F Well No. 12 located in Unit A of Section 35, Township 27 North, Range 6 West, Rio Arriba County, New Mexico.
- CASE 6442: Application of Caulkins 011 Company for downhole commingling, Rio Arriba County, New Mexico.

  Applicant, in the above-styled cause, seeks approval for the downhole commingling of Pictured Cliffs, Chacra and Mesaverde production in the wellbore of its Breech E Well No. 109 located in Unit M of Section 3, Township 26 North, Range 6 West, Rio Arriba County, New Mexico.
- CASE 6443: Application of Caulkins 0il Company for a dual completion and downhole commingling, Rio Arriba
  County, New Mexico. Applicant, in the above-styled cause, seeks approval for the dual completion
  (conventional) of its Breech B Well No. 220-R located in Unit B of Section 14, Township 26 North,
  Range 7 West, to produce gas from the Dakota formation through a separate string of tubing and to
  commingle Pictured Cliffs, Chacra and Mesaverde production in the wellbore of said well.
- Application of Caulkins Oil Company for downhole commingling, Rio Arriba County, New Mexico.

  Applicant, in the above-styled cause, seeks approval for the downhole commingling of Pictured Cliffs, Mesaverde, Chacra and Greenhorn production in the wellbore of its Breech Well No. 224 located in Unit A of Section 13, Township 26 North, Range 7 West, Rio Arriba County, New Mexico.

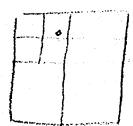
#### BEFORE THE

## NEW MEXICO ENERGY AND MINERALS DEPARTMENT OIL CONSERVATION DIVISION

Case 6 436

Comes now Amerada Hess Corporation and applies to the New Mexico Energy and Minerals Department, Oil Conservation Division, and applies to the Division for an order for well-head price ceiling category determination pursuant to the Special Rules of the Division, and Part 271.305 (b) Federal Energy Regulatory Commission's Regulations Implementing the Natural Gas Policy Act of 1978, and in support thereof would show the Division:

- 1. Applicant proposes to drill its State "U" Gas Com Well No. 2, to be located in Unit 7, Section 32, Township 19 South, Range 37 East, N.M.P.M., Lea County, New Mexico, spudding said well after a well classification determination has been made. The subject well will be located 990 feet from the North line and 2160 feet from the West line of Section 32.
- 2. The well will be projected to the Queen formation, at an approximate depth of 3,650 feet.
- 3. Applicant seeks a determination pursuant to the F.E.R.C. rules, Part 271.305 that the subject well is necessary to effectively and efficiently drain a portion of the Eumont-Queen reservoir covered by the proposed proration unit which cannot be effectively and efficiently drained by any existing well within the proration unit and will offer evidence in support of that determination.
- 4. In the alternative applicant seeks determination of wellhead price ceiling category determination pursuant to the provisions of Part 271.305 (c) of the F.E.R.C. Regulations



Implementing the Natural Gas Policy Act of 1978, based upon a review of the records of the Division affecting the area and producing formation involved, as provided by the above section of the Regulations.

WHEREFORE Applicant respectfully requests that this matter be set for hearing at the January 17, 1979 Examiner hearing, and that after notice and hearing as required by law, the Division enter its order making the wellhead price ceiling category determination as requested.

Respectfully submitted,
AMERADA HESS CORPORATION

By KELLAHIN & KELLAHIN

P. O. Box 1769 Santa Fe, New Mexico 87501

ATTORNEYS FOR APPLICANT

#### BEFORE THE

### NEW MEXICO ENERGY AND MINERALS DEPARTMENT OIL CONSERVATION DIVISION

Case 6436

Comes now Amerada Hess Corporation and applies to the New Mexico Energy and Minerals Department, Oil Conservation Division, and applies to the Division for an order for well-head price ceiling category determination pursuant to the Special Rules of the Division, and Part 271.305 (b) Federal Energy Regulatory Commission's Regulations Implementing the Natural Gas Policy Act of 1978, and in support thereof would show the Division:

- 1. Applicant proposes to drill its State "U" Gas Com Well No. 2, to be located in Unit—F, Section 32, Township 19 South, Range 37 East, N.M.P.M., Lea County, New Mexico, spudding said will after a well classification determination has been made. The subject well will be located 990 feet from the North line and 2160 feet from the West line of Section 32.
- 2. The well will be projected to the Queen formation, at an approximate depth of 3,650 feet.
- 3. Applicant seeks a determination pursuant to the F.E.R.C. rules, Part 271.305 that the subject well is necessary to effectively and efficiently drain a portion of the Eumont-Queen reservoir covered by the proposed proration unit which cannot be effectively and efficiently drained by any existing well within the proration unit and will offer evidence in support of that determination.
- 4. In the alternative applicant seeks determination of wellhead price ceiling category determination pursuant to the provisions of Part 271.305 (c) of the F.E.R.C. Regulations

Implementing the Natural Gas Policy Act of 1978, based upon a review of the records of the Division affecting the area and producing formation involved, as provided by the above section of the Regulations.

WHEREFORE Applicant respectfully requests that this matter be set for hearing at the January 17, 1979 Examiner hearing, and that after notice and hearing as required by law, the Division enter its order making the wellhead price ceiling category determination as requested.

Respectfully submitted,
AMERADA HESS CORPORATION

REPLAITIN & KELLAITIN

Santa Fe, New Mexico 87501

ATTORNEYS FOR APPLICANT

#### BEFORE THE

# NEW MEXICO ENERGY AND MINERALS DEPARTMENT 05025 1978 OIL CONSERVATION DIVISION

Comes now Amerada Hess Corporation and applies to the New Mexico Energy and Minerals Department, Oil Conservation Division, and applies to the Division for an order for well-head price ceiling category determination pursuant to the Special Rules of the Division, and Part 271.305 (b) Federal Energy Regulatory Commission's Regulations Implementing the Natural Gas Policy Act of 1978, and in support thereof would show the Division:

- 1. Applicant proposes to drill its State "U" Gas Com Well No. 2, to be located in Unit—F, Section 32, Township 19 South, Range 37 East, N.M.P.M., Lea County, New Mexico, spudding said well after a well classification determination has been made. The subject well will be located 990 feet from the North line and 2160 feet from the West line of Section 32.
- 2. The well will be projected to the Queen formation, at an approximate depth of 3,650 feet.
- 3. Applicant seeks a determination pursuant to the F.E.R.C. rules, Part 271.305 that the subject well is necessary to effectively and efficiently drain a portion of the Eumont-Queen reservoir covered by the proposed proration unit which cannot be effectively and efficiently drained by any existing well within the proration unit and will offer evidence in support of that determination.
- 4. In the alternative applicant seeks determination of wellhead price ceiling category determination pursuant to the provisions of Part 271.305 (c) of the F.E.R.C. Regulations

Implementing the Natural Gas Policy Act of 1978, based upon a review of the records of the Division affecting the area and producing formation involved, as provided by the above section of the Regulations.

WHEREFORE Applicant respectfully requests that this matter be set for hearing at the January 17, 1979 Examiner hearing, and that after notice and hearing as required by law, the Division enter its order making the wellhead price ceiling category determination as requested.

Respectfully submitted,
AMERADA HESS CORPORATION

KELLAHIN & KELLAHIN
P. O. Box 1769

Santa Fe, New Mexico 87501

ATTORNEYS FOR APPLICANT

(3)

dr/

#### 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.

Order No. R-5956

APPLICATION OF AMERADA HESS CORPORATION FOR APPROVAL OF INFILL DRILLING, LEA COUNTY, NEW MEXICO.

#### ORDER OF THE DIVISION

#### BY THE DIVISION:

This cause came on for hearing at 9 a.m. on February 28 19 79 , at Santa Fe, New Mexico, before Examiner Richard L. Stamets. NOW, on this day of March , 1979 , 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. Corporation,
- That the applicant, Amerada Hess/ . seeks a finding that the drilling of its State "U" Gas Com Well / to be located in Unit C of Section 32 Township 19 South, Range 37 East, MAN

Eumont Gas Pool, Lea County, New Mexico, is necessary to of Mirristry of covered by effectively and efficiently drain that portion of the proration unit which cannot be so drained by the existing well.

#### Applicant

- (3) That the applicant further seeks approval of a waiver of existing well-spacing requirements.
- (4) That the standard spacing unit in the Eumont Gas Pool is 640 acres.

  Corporation
  - (5) That Amerada Hess/ is the operator of and the control of and the control of t

a 240 -acre 1704-5tandard provation unit consisting of the NW/4 and W/2 NE/4 of Said Section 32 in soid Cumon & for Park

extensivel**v** 

worked over being cleaned out, having additional zones perforated and being acid fraced.

(10) That said workover was unsuccessful and in fact production declined to an average rate of \_\_\_MCF per month or a figure equal to about \_\_percent of its preworkover rate.

(6) that said 240-acre non standard provation Unit is dedicated to the applicant's State "I" Gres Com Well Not located in Unit E of Said Section 32.

as now well to be drilled thereon (soid State "" Com Well No. 2) which may be completed and stimulated using modern techniques and processes.

(#1) That the evidence presented demonstrated that said

Swell Gin Wall No / Canno is no longer effectively and efficiently draining said dedicated and acre non-standard proration unit

(8)(12) That the evidence presented further demonstrated that the drilling and completion of applicant's said State "U" Gas Com Well No. 2 should result in the production of an additional Soid Providence production of an additional 730,000 MCF of gas from applicant's acreage which would not otherwise be recovered from the proration unit.

(9)(13) That such additional recovery from the nonstandard proration unit will result in such unit being more efficiently and economically drained.

(10)(14) That said State "U" Gas Com Well / is to be drilled 240 as an "infill" well on the existing 160-acre non-standard proration unit.

of the reservoir covered by said 160-acre non-standard proration unit which cannot be effectively and efficiently drained by the existing well thereon, the subject application for infill drilling should be approved as an exception to the standard well spacing requirements for said Eumont Gas Pool.

#### IT IS THEREFORE ORDERED:

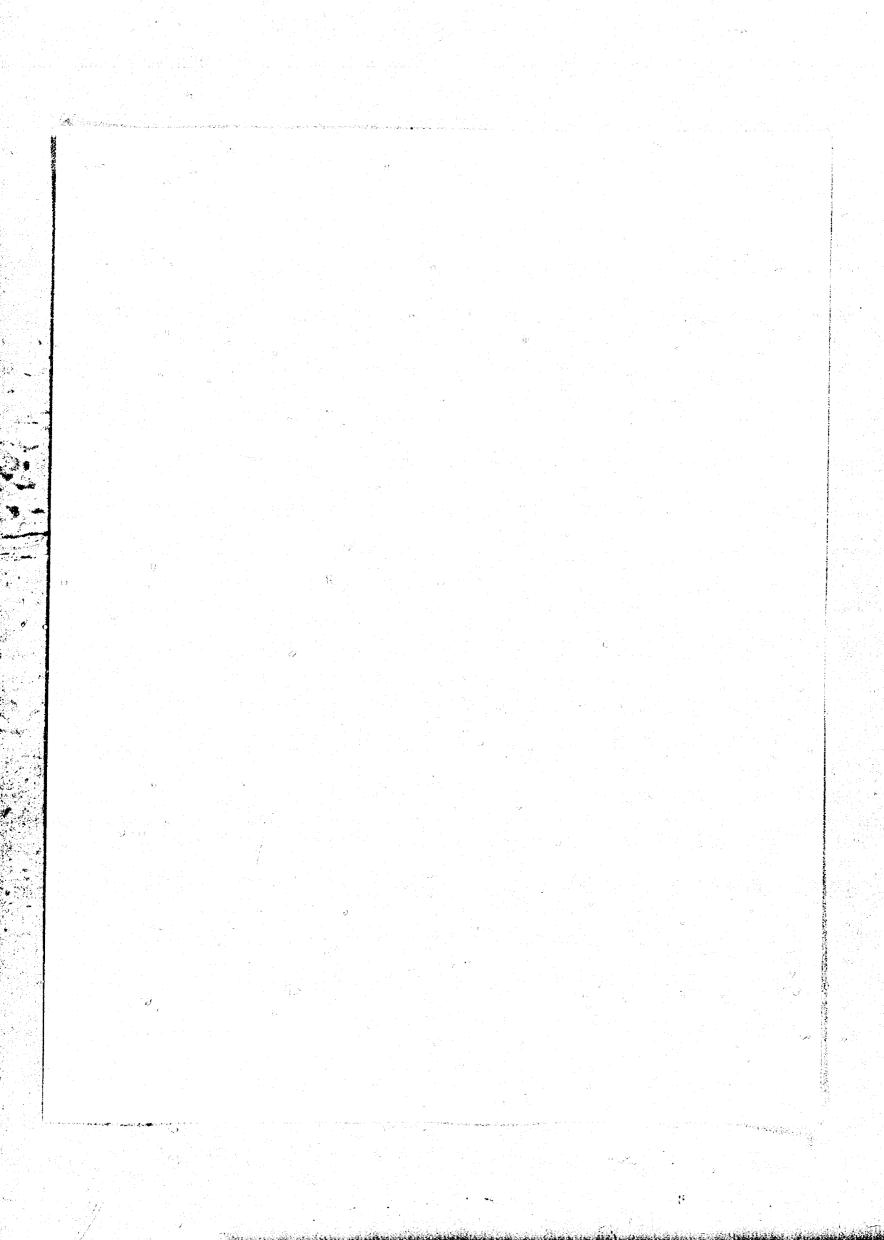
Corporation

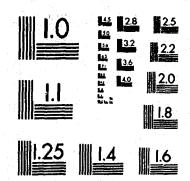
(1) That the applicant, Amerada Hess / , is hereby authorized No.2 to drill its State "U" Gas Com Well / to be located in Unit C NAIN, of Section 32, Township 19 South, Range 37 East, as an infill 240 well on an existing 160-acre non-standard proration unit being the Null of said Section 32, Eumont Gas Pool, Lea County, New Mexico. That The authorization for infill drilling granted by this order is an exception to applicable well spacing requirements and is necessary to permit the drainage of a portion of 240 the reservoir covered by the existing 160-acre non-standard proration unit which cannot efficiently and economically be drained by any existing well thereon.

(2) Jurisdiction

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DOCUMENT TYPE Oil CONSCRUPTION Division DATE OF FILMING Sept 23, 1985 ENDING DOCUMENT COSE 6436 EMETHOD HESS Corp | Suffl Dilling





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#### STATEMENT OF DOCUMENT CERTIFICATION

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R. David Orter SUPERVISOR

STATE OF NEW MEXICO COUNTY OF VALENCIA	) ) SS. )	
Sworn and Subscribed t	o me, A Notary Public,	
This /at da	y of Mumen , 19 83	
		Ageni argan NOTARY PUBLIC
MY COMMISSION EXPIRES:	10-2-76	NOTANT PUBLIC

#### CERTIFICATE OF AUTHENICITY

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CANEDA OPERATOR

#### STATEMENT OF DOCUMENT CERTIFICATION

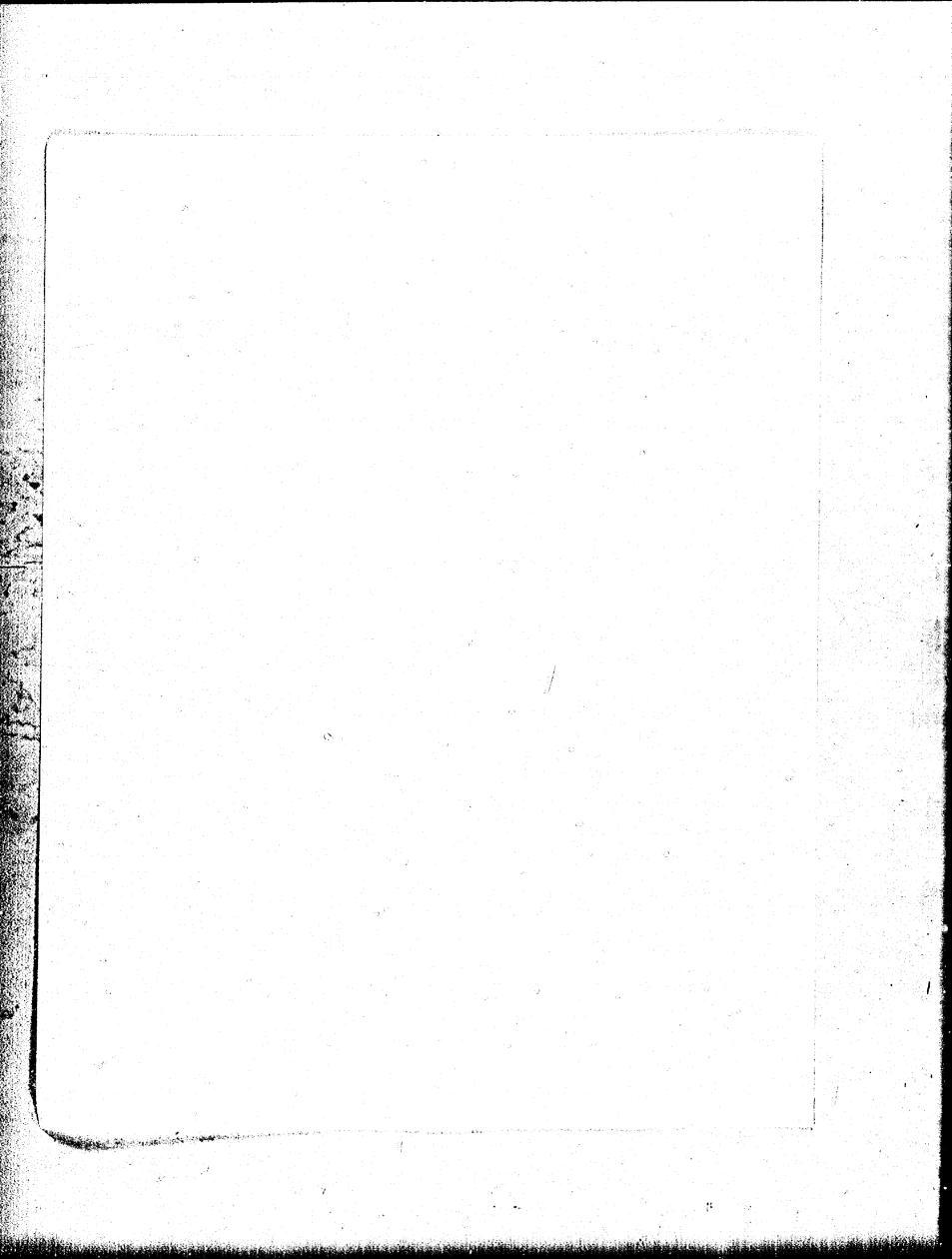
All microphotgraphics images of documents following this certificate are of authorized documents in the possession of this Agency. These documents are routinely microfilmed as a necessary operation in the generation of an inviolate document file.

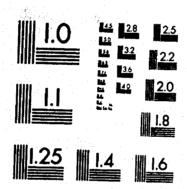
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