CASE 6425: T. B. ENOX ESTATE SON CRETION TO ORDER NO. E-111-A, EDGY COUNTY, NEW MEXICO 9 (1 (j)

CASE NO.

6425

APPlication,
Transcripts,
Small Exhibits,

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 T. B. Knox Estate for) exception to Order No. R-111-A, Eddy) County, New Mexico.

CASE 6425

BEFORE: Richard L. Stamets

TRANSCRIPT OF HEARING

// APPEARANCES

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For the Oil Conservation Division:

Lynn Teschendorf, Esq.
Legal Counsel for the Division
State Land Office Building
Santa Fe, New Mexico 87501

For the Applicant:

Joel Carson, Esq. LOSEE, CARSON & DICKERSON Artesia, New Mexico

SALLY WALTON BOYD CERTIFIED SHOTHLIND REPORTER 1016/Jun Blanch (1645) 471-141 State Pe., New Mischoo 571-91

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MR. STAMETS: We'll call next Case 6425.

MS. TESCHENDORF: Case 6425. Application of T. B. Knox Estate for exception to Order No. R-111-A, Eddy County, New Mexico.

MR. STAMETS: Call for appearances in this case.

MR. CARSON: Mr. Examiner, my name is Joel Carson, Losee, Carson, and Dickerson, P. A., Artesia, New Mexico, appearing on behalf of the Applicant, T. B. Knox Estate. I'll have one witness.

MR. STAMETS: I'd like to have him stand and be sworn.

Are there any other appearances in this case?
(Witness sworn.)

PAUL WHITE

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

DIRECT EXAMINATION

BY MR. CARSON:

- Would you state your name, please?
- A. Paul White.
- Q And, Mr. White, by whom are you employed?
- A. I'm employed as Vice President of Production

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for Summit Energy, Incorporated, and in this case I have been retained as consulting petroleum engineer to represent T. B. Knox Estate.

- A Yes, sir.
- And have your qualifications been accepted?
- A. Yes, sir, they have.

MR. CARSON: Are his qualifications acceptable Mr. Examiner?

MR. STAMETS: They are.

Q (Mr. Carson continuing.) Mr. White, would you state the purpose of this application?

A. The purpose of the application is to seek an exception to the Commission's Rule 111-A, which applies to casing and cementing rules in the potash/oil area.

The estate of T. B. Knox seeks to drill the Lucia Brookes Well No. 2, which is located in this oil/potash area in Unit K of Section 14, Township 18 South, Range 30 East, Eddy County, New Mexico.

The Estate of T. B. Knox would like to set surface casing and circulate cement, eliminate the salt protection string, and not circulate cement on the production casing.

Q Now, Mr. White, I'm going to hand you what's

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A This is a plat showing the location in red of the Lucia Brookes No. 2, which is the well which the estate of T. B. Knox plans to drill in the area. The well marked in blue in Section 15, 18, 30, is a well that is being drilled right now by LaRue and Muncy, the Federal FR No. 1, and this well, the LaRue and Muncy Federal FR No. 1 was granted an exception to Rule 111-A in the oil and potash area.

Q It's your contention that their situation and your situation are similar.

A. Yes, sir, that's my contention.

Q. Now, Mr. White, is there any fresh water to be found in this -- in the area to be encountered by this salt protection string?

A. No, sir, to my knowledge there is not.

Q Okay. Is the potash in this area to be found in commercial quantities?

A. No, sir. We have a letter and also statements saying that this potash in this area is not commercial.

Q Mr. White, I'm going to refer you to Applicant's Exhibit Number Two and ask you to identify that letter.

A. This is a letter which we got from Duval Cor-

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poration. Duval Corporation has the potash leased in this area. And this is a letter signed by Mr. Magraw, Superintendent for Duval Corporation, saying that in the letter, that he has no objection to the drilling of this well in this area, and this indicates that the potash is noncommercial.

- Mr. White, have you taken this matter up with the Mining Division of the USGS as well as the Oil and Gas Division of the United States Geological Survey?
- Yes, sir. I talked on January 24th, 1979, to Mr. John Burleson in Carlsbad, New Mexico. Mr. Burleson is the Mining Supervisor for the United States government, and he had no objection to the drilling of this well and casing it in the manner that the estate of T. B. Knox wishes to case it in; run the two strings of pipe instead of three.

I talked to Mr. Jim Knauf with the United States Geological Survey on the same date and Mr. Knauf had no objection to running the two strings of casing instead of the three strings.

This was on January 24th, 1979.

- Mr. White, I hand you Applicant's Exhibit Number Three and ask you to identify that.
- Okay. This first page shows a mailing list of all of the offset operators to this Lucia Brookes No. 2

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Well, which the estate of T. B. Knox wishes to drill.

This is a list of waiver letters all signed and dated by offset operators showing that they have no objection to this request for the exception to R-111-A.

- I hand you Applicant's Exhibit Number Four and ask you if that exhibit was prepared by you or under your supervision?
 - Yes, sir, I did prepare this.
- Would you explain to the Examiner what that exhibit purports to show?
- Exhibit Number Four shows a diagrammatic sketch of the T. B. Knox Estate Lucia Brookes No. 2 Well, which shows the approximate depth to which surface casing would be set, which is just into the top of the salt at approximately 600 feet. Cement would be circulated on that string of casing to the surface.

The other string of casing, this 5-1/2-inch, and it shows this to be set at approximately 3750. That will be the approximate total depth of the well.

We want to calculate 100 percent capacity for the hole between the pipe and the hole on the 5-1/2-inch casing and use that much cement on this 5-1/2.

- Mr. White, I hand you Applicant's Exhibit Number Five and ask you to identify that.
 - This is an authorization for expenditure for

a drilling cost estimate on the Lucia Brookes No. 2. I felt it would be well to have some economics and so I prepared this exhibit and Exhibit Number Five shows the completed well costs on the last page.

If we run two strings of casing, if we run the 8-5/8ths inch casing and circulate cement and then run the 5-1/2 inch casing, and the total is \$130,292 if we drill and complete the well in that manner.

Dry hole cost, total expenditure, \$77,063 on that exhibit.

Now, let me have this one, a copy of the one that shows the --

> A. Okay.

MR. STAMETS: I think you've got those two exhibits backwards.

MR. CARSON: What, has that got the -show \$150,000? \$154,329 on the last page?

MR. STAMETS: Right. Number Five shows that and Exhibit Number Six shows \$130,292.

We have got them backwards, then, Mr. Examiner.

MR. STAMETS: Okay, we'll change the numbers,

MR. CARSON: Number Five shows the \$154,000? MR. STAMETS: Yes.

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then.

MR. STAMETS: So we'll change Number Five and label it the Number Six and we'll change Number Six to be Number Five.

And now I believe Mr. White's testimony is accurate as to the exhibits as renumbered.

Yes, sir, that is correct.

MR. CARSON: The only one who's confused is Which one is Number Six?

Six is \$154,000.

MR. CARSON: Okay.

(Mr. Carson continuing.) Mr. White, I hand you what's been marked as Applicant's Exhibit Number Six and ask you to identify that, please.

I prepared this authorization for expenditure to show an estimate of well costs if we drilled the well and followed the R-111-A rule and equipped the well with a surface string of casing and then ran an intermediate salt protection string and then ran the 5-1/2 inch casing, and this total is, for a completed well, is \$154,329 and for a dry hole estimate, \$101,100.

And these two exhibits are interrelated in that they, Five and Six, in that they show the difference in the well cost as related to the different casing programs.

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Mr. White, is your proposal in accordance with sound engineering practice?

- Yes, sir, that's right.
- And do you feel that it's necessary to have three strings of casing in this particular area?
- No, sir. Since there's a lack of fresh water and the potash is not commercial, I do not feel that in this particular area of the oil and potash country that it is necessary to have three strings.
- And is it your professional opinion that to require the three strings would just cause you to incur an unnecessary expense?
 - Yes, sir, that's right.

MR. CARSON: I'd like to move the introduction of Exhibits, Mr. Examiner.

MR. STAMETS: These exhibits will be admitted.

MR. CARSON: We have no further questions of this witness.

CROSS EXAMINATION

BY MR. STAMETS:

Mr. White, the area that you are drilling in is one of those that has been subject to water flow, not necessarily the exact location you've got there, but the

SALLY WALTON BOYC EXTREE SHORTHAND REPORTE 010 Plane Blane, (915) (11, 414) Sente Fe, New Mexico, 3776) general vicinity, the Shugart area, I think, down in the North Benson, Benson waterflow. If you discovered a waterflow below the salt in this well, what would the consequences of that be?

A. If we had a strong waterflow, if we had a weak waterflow below the base of the salt, Probably our decision would be, providing that the Commission would grant this, would be to go ahead and drill the well down and log it and get the pipe run and circulate, be sure and circulate cement up over the oil string into the surface pips.

If we had a strong waterflow we would have to deal with that in a different way and we probably would run intermediate casing.

Q Would you be willing to report any such flow both to the -- any flow, strong or weak, to the USGS and the Division?

A. Yes, sir, Mr. Examiner, it's a matter of concern to all of us. In fact, the -- we have equipped wells in this area for an intensive examination to be made by your representatives in the district, and we would report any flow that we encountered.

Q Okay. Now, getting back to Exhibit Number
Two, I don't see here that you have advised the Duval Corporation of your intention to just set a single string of

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pipe through the salt.

A No, sir, we did not advise them in that -in that manner. We did not tell the Duval Corporation we
would just set one string of pipe.

Q I wonder if they would have been so willing to approve your location had they known.

A I feel certain that they would, Mr. Examiner, because we have talked to them about this on the phone, even though they have not been notified of such by letter, but in our application for intention to drill the well, all of the documents were furnished to Duval Corporation and they had an opportunity to object to anything in the intention. They are all aware of the fact that we do want to set two strings of casing, a production and surface string, and there has been no objection to that.

I feel that Duval Corporation in their admission that the potash is not commercial in the area is really not worried about it there. To the south of this they are.

Q They have been given a copy of your application to drill and they could look at that and tell what you're proposing.

A. No, sir. On our application to drill, we filed it according to R-lll-A and they were furnished a copy of that, but that would indicate we would run three

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strings, and they've only been talked to, Mr. Magraw on the phone, as to the change in casing program.

He had no objection. He felt like this was between the Oil Commission and the Energy Department, the Oil Commission and the operator and he had no objection to it.

I believe R-111-A does provide that you will have to furnish them with a copy of the application to drill, which will show them two strings of pipe instead of three.

We felt this way about that, Mr. Examiner, if we are successful in the hearing, we would revamp the intention to drill to the USGS, showing the two strings would be set instead of three, and we would send in a corrected intention to drill and casing program, and then at that time furnish the Duval Corporation with all the documents.

Okay, and that would still provide them an opportunity to object, if they so chose.

Yes, sir.

Okay. What's the base of the potash in this area?

It's about 1300 feet, I believe, Mr. Examiner.

Is that the potash or the salt? Q.

That's the salt, pardon me, the salt.

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Q Okay, that's what I wanted. I said potash but I meant salt.

A. Salt, I'm sorry.

All right. If the cement does not circulate, would you be willing to take a temperature survey to determine the cost?

A. Yes, sir, we would.

Q. And report that to the USGS and the Division and circulate it if it's required?

A. Yes, sir.

Q. Very good.

MR. STAMPTS: Any other questions of the witness? Mr. Ramey.

CROSS EXAMINATION

BY MR. RAMEY:

Mr. White, do you intend to drill this well
in accordance with R-111-A except for the one string, the
salt protection string?

A. Yes, sir, that's right.

Q Are you going to use brine water to drill through the salt section?

A. Yes, sir.

MR. STAMETS: Any other questions? The witness may be excused.

Anything further in this case?

MR. CARSON: No, Mr. Examiner.

MR. STAMETS: The case will be taken under

advisement.

(Hearing concluded.)

REPORTER'S CERTIFICATE

I, SALLY WALTON 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 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.

Dichert L. Hamber, Branchey

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NEW MEXICO OIL CONSERVATION COMMISSION

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	SANTA	FE	. NEW MEXICO

Hearing Date JANUARY 31, 1979

Time: 9:00 A.M.

NAME	REPRESENTING
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Joh & Euch for	EPNI EPMG
Gordon D. Ryon	Rmoco Prod. Co.
Charles Verguer	Caulkins Oil Co.
Joel Carson	Losa Carson + Dichuson
Paul G white	Estate of T.B. Knox
Faris Melson	Zia Energ, Inc.
Virgil Henry	Zia Energy, en.
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STATE OF NEW MEXICO
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OIL CONSERVATION DIVISION
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31 January 1979

EXAMINER HEARING

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PAUL WHITE

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Applicant	Exhibit Five, Estimate 1	0
Applicant	Exhibit Six, Estimate	0

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Mr. White, have you previously testified before this Commission?

- A Yes, sir.
- Q And have your qualifications been accepted?
- A. Yes, sir, they have.

MR. CARSON: Are his qualifications acceptable,
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A. The purpose of the application is to seek an exception to the Commission's Rule 111-A, which applies to casing and cementing rules in the potash/oil area.

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- Q It's your contention that their situation and your situation are similar.
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- Q Okay. Is the potash in this area to be found in commercial quantities?
- A. No, sir. We have a letter and also statements saying that this potash in this area is not commercial.
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Mr. White, have you taken this matter up with the Mining Division of the USGS as well as the Oil and Gas Division of the United States Geological Survey?

Yes, sir. I talked on January 24th, 1979, to Mr. John Burleson in Carlsbad, New Mexico. Mr. Burleson is the Mining Supervisor for the United States government, and he had no objection to the drilling of this well and casing it in the manner that the estate of T. B. Knox wishes to case it in; run the two strings of pipe instead of three.

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- Q I hand you Applicant's Exhibit Number Four and ask you if that exhibit was prepared by you or under your supervision?
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- Q Would you explain to the Examiner what that exhibit purports to show?

sketch of the T. B. Knox Estate Lucia Brookes No. 2 Well, which shows the approximate depth to which surface casing would be set, which is just into the top of the salt at approximately 600 feet. Cement would be circulated on that string of casing to the surface.

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If we run two strings of casing, if we run the 8-5/8ths inch casing and circulate cement and then run the 5-1/2 inch casing, and the total is \$130,292 if we drill and complete the well in that manner.

Dry hole cost, total expenditure, \$77,063 on that exhibit.

Now, let me have this one, a copy of the one that shows the --

Okay.

MR. STAMETS: I think you've got those two exhibits backwards.

MR. CARSON: What, has that got the -show \$150,000? \$154,329 on the last page?

MR. STAMETS: Right. Number Five shows that and Exhibit Number Six shows \$130,292.

We have got them backwards, then, Mr. Examiner.

MR. STAMETS: Okay, we'll change the numbers, then.

> Number Five shows the \$154,000? MR. CARSON: MR. STAMETS: Yes.

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MR. CARSON: Okay.

MR. STAMETS: So we'll change Number Five and label it the Number Six and we'll change Number Six to be Number Five.

And now I believe Mr. White's testimony is accurate as to the exhibits as renumbered.

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A. Six is \$154,000.

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SALLY WALTON BGY STIFFED SHORTHAND REPORT STORES BLANK (665) 411-6

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	Ŭ	Mr. Whi	te, is	your	proposal	in	accordance
with	sound	engineering	practio	e?			

- A Yes, sir, that's right.
- And do you feel that it's necessary to have three strings of casing in this particular area?
- A No, sir. Since there's a lack of fresh water and the potash is not commercial, I do not feel that in this particular area of the oil and potash country that it is necessary to have three strings.
- Q And is it your professional opinion that to require the three strings would just cause you to incur an unnecessary expense?
 - A. Yes, sir, that's right.

MR. CARSON: I'd like to move the introduction of Exhibits, Mr. Examiner.

MR. STAMETS: These exhibits will be admitted.

MR. CARSON: We have no further questions of this witness.

CROSS EXAMINATION

BY MR. STAMETS:

Mr. White, the area that you are drilling in is one of those that has been subject to water flow, not necessarily the exact location you've got there, but the

SALLY WALTON BOY CENTERS SHORTHARD REPORT 2015 Flant Blanca (345), 411 4 Senta Fe, New Mexico 571 10

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general vicinity, the Shugart area, I think, down in the North Benson, Benson vaterflow. If you discovered a water-flow below the salt in this well, what would the consequences of that be?

M. If we had a strong waterflow, if we had a weak waterflow below the base of the salt, Probably our decision would be, providing that the Commission would grant this, would be to go ahead and drill the well down and log it and get the pipe run and circulate, be sure and circulate cement up over the oil string into the surface pips.

If we had a strong waterflow we would have to deal with that in a different way and we probably would run intermediate casing.

Nould you be willing to report any such
flow both to the -- any flow, strong or weak, to the USGS
and the Division?

A. Yes, sir, Mr. Examiner, it's a matter of concern to all of us. In fact, the --- we have equipped wells in this area for an intensive examination to be made by your representatives in the district, and we would report any flow that we encountered.

Okay. Now, getting back to Exhibit Number
Two, I don't see here that you have advised the Duval Corporation of your intention to just set a single string of

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pipe through the salt.

A No, sir, we did not advise them in that -in that manner. We did not tell the Daval Corporation we
would just set one string of pipe.

Q I wonder if they would have been so willing to approve your location had they known.

because we have talked to them about this on the phone, even though they have not been notified of such by letter, but in our application for intention to drill the well, all of the documents were furnished to buval Corporation and they had an opportunity to object to anything in the intention. They are all aware of the fact that we do want to set two strings of casing, a production and surface string, and there has been no objection to that.

I feel that Duval Corporation in their admission that the potash is not commercial in the area is really not worried about it there. To the south of this they are.

Q. They have been given a copy of your application to drill and they could look at that and tell what you're proposing.

filed it according to R-111-A and they were furnished a copy of that, but that would indicate we would run three

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strings, and they've only been talked to, Mr. Magraw on the phone, as to the change in casing program.

Ke had no objection. He felt like this was between the Oil Commission and the Energy Department, the Oil Commission and the operator and he had no objection to it.

Q Okay. I believe R-111-A does provide that you will have to furnish them with a copy of the application to drill, which will show them two strings of pipe instead of three.

A. We felt this way about that, Mr. Examiner, if we are successful in the hearing, we would revamp the intention to drill to the USGS, showing the two strings would be set instead of three, and we would send in a corrected intention to drill and easing program, and then at that time furnish the Duval Corporation with all the documents.

Okay, and that would still provide them an opportunity to object, if they so chose.

A Yes, sir.

Q. Okay. What's the base of the potash in this area?

A. It's about 1300 feet, I believe, Mr. Examiner.

Q. Is that the potash or the salt?

A. That's the salt, pardon me, the salt.

	1	Q. Okay, that's what I wanted. I said potash
	2	but I meant salt.
	3	A. Salt, I'm sorry.
	4	All right. If the cement does not circulate,
	5	would you be willing to take a temperature survey to deter-
	6	mine the cost?
REO(70)	7	A. Yes, sir, we would.
	8	Q. And report that to the USGS and the Division
	9	and circulate it if it's required?
	10	y company of the state of the s
	11	\mathfrak{g} Very good.
	12	MR. STAMETS: Any other questions of the
X 2 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	13	witness? Mr. Ramey.
SAL Separate	. 14	ententententententententententententente
	15	CROSS EXAMINATION
	16	BY MR. RAMEY:
	17	Q Mr. White, do you intend to drill this well
	18	in accordance with R-111-A except for the one string, the
	19	salt protection string?
	20	A. Yes, sir, that's right.
	21	Are you going to use brine water to drill
	22	through the salt section?
	23	A. Yes, sir.
	24	MR. STAMETS: Any other questions? The
	25	witness may be excused.

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Anything further in this case?

MR. CARSON: No, Mr. Examiner.

The case will be taken under

advisement.

(Hearing concluded.)

REPORTEP'S CERTIFICATE

I, SALLY WALTON 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 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 certify that the foregoing is a complete received the proceedings in the Examiner hearing of Casa No. 6425, heard by me on 19.22.

Oil Conservation Division

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STATE OF NEW MEXICO ENERGY AND MINERALS DEPARTMENT OIL CONSERVATION DIVISION

JERRY APODACA

NICK FRANKLIN BECRETARY February 21, 1979

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

Re: Mr. Joel M. Carson Losee, Carson & Dickerson	CASE NO. 6425 ORDER NO. R-5918
Attorneys at Law Post Office Drawer 239 Artesia, New Mexico 88210	Applicant:
	T. B. Knox Estate
Dear Sir:	ang kalamatan di panggalang kalamatan di kalamatan di kalamatan di kalamatan di kalamatan di kalamatan di kala Kalamatan di Kalamatan di Kalama
Yours very truly, JOE D. RAMEY Director	opies of the above-referenced ered in the subject case.
JDR/fd	
Copy of order also sent to:	
Hobbs OCC x Artesia OCC X Aztec OCC	

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. 6425 Order No. R-5918

APPLICATION OF T. B. KNOX ESTATE FOR EXCEPTION TO ORDER NO. R-111-A, EDDY COUNTY, NEW MEXICO.

ORDER OF THE DIVISION

BY THE DIVISION:

This cause came on for hearing at 9 a.m. on January 31, 1979, at Santa Fe, New Mexico, before Examiner Richard L. Stamets.

NOW, on this 20th day of February, 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, T. B. Knox Estate, seeks an exception to the casing/cementing rules for the Oil-Potash 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 with a string of surface casing set and circulated with cement at a depth of approximately 600 feet and a production casing string set at a depth of approximately 3750 feet with a volume of cement calculated to be sufficient to circulate.
- (3) That the evidence presented indicates that there are no potash mining operations nor deposits of commercial potash ore in proximity to the proposed well and that the proposed method of completion will not result in endangerment of potash resources nor operations.

Case No. 6425 Order No. R-5918

SE CHARLE

- (4) That the applicant should report the following both to the district office of the Division and the U.S.G.S. and may be required to circulate cement to the surface around the production casing:
 - (a) Any water flows encountered;
 - (b) The top of the cement around the production casing as determined by temperature survey if such cement does not circulate.
- (5) That approval of the subject application will protect correlative rights, will prevent waste and will not cause the waste of potash.
 - (6) The application should be approved.

IT IS THEREFORE ORDERED:

(1) That the applicant, T. B. Knox Estate, is hereby authorized an exception to the casing/cementing rules for the Oil-Potash Area as promulgated by Order No. R-III-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 with a string of surface casing set and circulated with cement at a depth of approximately 600 feet and a production casing string set at a depth of approximately 3750 feet with a volume of cement calculated to be sufficient to circulate.

PROVIDED HOWEVER, that the applicant shall report the following, both to the district office of the Division and the U.S.G.S.:

- (a) Any water flows encountered; and
- (b) The top of the cement around the production casing as determined by temperature survey if such cement does not circulate.

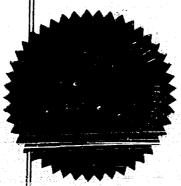
PROVIDED FURTHER, that the applicant may be required to re-cement the production casing to the surface if cement on said casing did circulate to the surface.

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

-3-Case No. 6425 Order No. R-5918

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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Applicant republik #1 Lucia Brookes #2 Can # 6425 LARUER MUNCY Fed. FR.#1

Duval Corporation P.O. Box 115 Carlsbad, N.M. 88240

Attn: Mr. John Mc Graw

Dear Mr. Mc Graw:

T. B. Knox Estate plans to drill the Lucia Brooks #2 well, located 1980' FSL and 1980' FWL, Section 14, T18S-R30E, Eddy County, New Mexico.

Duval Corporation still has active mining leases in this area. We have discussed this location with Mr. John Burleson, the Federal Mining Supervisor, and he has no objection to the drilling of the well.

Would you please check this location and if in agreement, we respectfully request that you sign this letter as a waiver to any objections to the drilling of this prospect.

Sincerely,

Paul G. White Engineer

PGW/gb

Signed W Magraus

CASE NO. 642.

Submilled by Applicant
Hearing Dale

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MAILING LIST

- 1. LaRue & Muncy P.O. Box 196 Artesia, N.M. 88210
- 2. Marbob Energy, Corp. P.O. Box 304 Artesia, N.M.88210
- Yates Petroleum Corp.
 207 S. 4th
 Artesia, N.M.88210
- 4. Featherstone Development 1717 W. 2nd Roswell, N.M. 88201
- 5. Texaco, Inc. P.O. Box 728 Hobbs, N.M. 88240
- 6. Kersey and Co. 808 W. Grand Artesia, N.M. 88210
- 7. Holly Energy, Inc. Box 726 Artesia, N.M. 88210
- 8. Pennzoil Co. 5th Floor Wall Towers West Drawer 1828 Midland, Texas 79701

CALE F. C. Applicant
Submitted by 6425
Hearing Date

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Re: Hearing for Exception to R-111A, State of New Mexico

Gentlemen:

T.B. Knox Estate has set for hearing before the Department of Energy & Minerals, Oil Conservation Division, a request for an exception to R-111A as pertains to casing requirements in the Potash Mining area.

R-111A requires three strings of casing in the Potash Area.
T.B. Knox Estate will request that 8 5/8" casing be set at 600' with cement circulated and 5½" casing will be set at approximately 3750' with a calculated cement return to surface.

The well will be drilled at a location 1980' FSL, 1980' FWL, Section 14-T18S-R30E, Eddy County, New Mexico. Well designation is the Lucia Brookes No. 2.

.It would assist us with our success at the hearing if you will please sign one copy of this letter which will waive any objection you have to our request.

Sincerely,

Paul sul lite

Paul G. White Representative of T.B. Knox Estate

PGW/gb

(We)(I) the undersigned have no objection to the request by T.B. Knox Estate for exception to Rule 111-A as pertains to casing and cementing program.

DATED

as 1779 SIGNED:

) 12 Re: Hearing for Exception to R-111A, State of New Mexico

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Paul sul lite

Paul G. White Representative of T.B. Knox Estate

PGW/gb

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TED: 1-24-79 SIGNED: 1/1

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Re: Hearing for Exception to R-111A, State of New Mexico

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Sincerely,

Paul swhite

Paul G. White Representative of T.B. Knox Estate

PGW/gb

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DATED: (100 22 197

SIGNED

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Hearing for Exception to R-111A, State of New Mexico

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Sincerely,

Paul sur hite

Paul G. White Representative of T.B. Knox Estate

PGW/gb

(We) (I) the undersigned have no objection to the request by T.B. Knox Estate for exception to Rule 111-A as pertains to casing and cementing program. DATED: January 19 1979 SIGNED: Obank. 180. Tiske)

Wice - President

Re: Hearing for Exception to R-111A, State of New Mexico

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Sincerely,

Paul sul lite

Paul G. White Representative of T.B. Knox Estate

PGW/gb

(We) (I) the undersigned have no objection to the request by T.B. Knox Estate for exception to Rule 111-A as pertains to casing and cementing program.

DATED: 1-18-79 SIGNED: 10 Lannon

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Hearing for Exception to R-111A, State of New Mexico

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Sincerely,

Paul sur lite

Paul G. White Representative of T.B. Knox Estate

PGW/gb

(We) (I) the undersigned have no objection to the request by T.B. Knox Estate for exception to Rule 111-A as pertains to casing and cementing program. SIGNED: Harred Icersey

Re: Hearing for Exception to R-1114, State of New Mexico

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Sincerely,

Paul sou lite

Paul G. White Representative of T.B. Knox Estate

PGW/gb

(We)(I) the undersigned have no objection to the request by T.B. Knox Estate for exception to Rule 111-A as pertains to casing and cementing program.

DATED: 1-24-79

SIGNED:

Holly Energy INC

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T.B. Knox Estate has set for hearing before the Department of Energy & Minerals, Oil Conservation Division, a request for an exception to R-111A as pertains to casing requirements in the Potash Mining area.

R-111A requires three strings of casing in the Potash Area.
T.B. Knox Estate will request that 8 5/8" casing be set at 600' with cement circulated and 5½" casing will be set at approximately 3750' with a calculated cement return to surface.

The well will be drilled at a location 1980' FSL, 1980' FWL, Section 14-T18S-R30E, Eddy County, New Mexico. Well designation is the Lucia Brookes No. 2.

It would assist us with our success at the hearing if you will please sign one copy of this letter which will waive any objection you have to our request.

Sincerely,

Paul sur lite

Paul G. White Representative of T.B. Knox Estate

PGW/gb

(We)(I) the undersigned have no objection to the request by T.B. Knox Estate for exception to Rule 111-A as pertains to casing and cementing program.

DATED: 1-18-79 SIGNED: C. H. Foret
Pennzoll Company

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		LUCIA BROOKS NO 2
980' FSL	1980' FWL	SECTION 14-TIBS - R30E
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EDDY	COUNTY,	NEM WEXICO
4		E Cement Circulate
W. C. C. C.		
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		Landing at 570
		centralizer et 570 85 - 20 - Casing b
		Coment Calculated To (
		1300 BX
		Centralizer at 3630
A PINERAL AND S		Controliser at 3720
VALLEN MARION		st"- 14" - Casing 3750"

12.

AFE DRILLING COST ESTIMATE

PE: Wildcat	StraightL	OCATION: Onshore X
Development X	Directional	Inland/Bay
		1
		Offshore
IN	TANGIBLE DRILLING COST ESTIMATE	
CATION	Elementario de la companya de la co	
Surface Damage	s (Patented Land)	400
Surveyors & Equ	uipment	
Kig/Location p	reparations (Includes Road)	13,178
Road Construct	ion/easements	Incl. w/location
Cut Off/back of	re anneus	
Cement (Equipmen		· · · · · · · · · · · · · · · · · · ·
Crop Damages	it w gervices)	
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	t & Services) with one pump tri	ack -
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Inspection of p		
Casing Crew/Equ		y ang ang mga katang tang tang tang tang tang tang tang
Tong Operator/Ed		
Liner/Float Equ	ipment BEFORE EXAMINER STANK	A Court and a second se
Centralizers/Sci		-10
		,
	s, Oil, Water & Services)	6,000
S egretaria (1986)	CASI NO 6425	
of	_ 'J OD A AGO Thit	Market (122 de caracter para)
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01	on a bit	* 18 P. A. State Code Spring Section 1
of	OD Bearing Date /bit	

	days (0 \$ /day /day	
ABOR & SUPPLIES	days 😥 \$/day	1,000
	• 1	
RENTALS Work String Asse	mbly	
Rotating head Separator	days (3 \$ /day	
Separator P.V.T. Flow line	days @ \$ /day sensor & pump days @	\$ /day
D-Gasser	days @ \$ /day	
Choke d TOTCO CDR Record	ays @ \$ /day	
Other		
THER		
	TOTAL	66,553
A STATE OF THE STA		
INT	ANGIBLE FORMATION EVALUATION	COST ESTIMATE
LECTRIC LOGS		
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PMETER LOGS		
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	TOTAL	5,500
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Casing Crew/Equip	ment	1,200
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	Ray/CBL/Si				/N/CBL/Signa		
ERFORATING		giacine .		m. o-my	w com organ	e	3,200
		uipment Ma	terial 8	Service	es)		3,200
		WLPs, BPs			,		
REATING (etc.)		9,000
RODUCTION	TESTING (E	quipment &	Service	s)			2,000
THER BIIP	Surveys	a a					
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				TO	DTAL		25,420
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RST INTERI	MEDIATE CA	STNC	U GROKE		CEC CPLS\$ 5.	. 63 / Ft	3,310
Ft	"OD	#/Ft	GR	THD	CPLS\$	/Ft	
Ft -		#/Ft	GR	THD	CPLS\$	/Ft	
Ft	"OD	#/Ft	GR	THD	CPLS\$	/rt	
Ft	"OD_	#/Ft	GR	THD	CPLS\$	/Ft	
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TERMEDIATE							
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DUCTION CA	ASTNO						
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Ft	"ÖD	#/Ft	GR	THD	CPLSS	/Ft	
DUCTION TO	JBING						
00 Ft 2 3	/8 "OD 4.7	#/Ft 8RD	GR EVE	THD	CPLS\$ 2.0	00/Ft	7,400
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Ft	"OD	#/Ft	GR	THD	CLPS\$	/Ft	

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- 3 -

TUBING MEAD W/valves CHRISTMAS TREE Single	e Dual Triple	2,000
SUB-SURFACE EQUIPMENT (packers	s, seal assemblies, landing	2,000
(nipples, BPs, storm chokes, OTHER	, blast joints, flow couplings)	1,500
	TOTAL	27,809
<u>A</u> I	E COST ESTIMATE SUMMARY	***
	DRY HOLE	COMPLETED
INTANGIBLE	66.553	66,553
	5,500	5,500 25,420
TOTAL	72.053	97,473
TANGIBLE	5,010	5,010 27,809
TOTAL	5,010	32,819
TOTAL EXPENDITURE	77,063	130,292
PREPARED BY: Paul G. White	DATE: <u>January 2</u>	25, 1979
NON-OPERATORS APPROVAL:		
NON-OFERNIORS AFFROVAL:		
교회하는 보이 전투 해를 갖춰 하는 것이 되었다. 1985년 - 1985년		
4.		

^{*}AFE Does not include Rods, Pump, Pumping unit, Motor, Flowlines or Tank Battery.

AFE DRILLING COST ESTIMATE

LEASE: LUCIA BROOKES REGULATORY PE	RMIT NUMBER
AREA/FIELD: Leo Queen Grayburg, Eddy County, N.	AWELL: 2 (14-T18S-R30E)
TYPE: Wildest Straight	LOCATION: Onshore X
Development X Directional	Inland/Bay
	Offshore
THE LIGHT BY DOLL THE COMMERCE OF THE PARTY AND THE PARTY	•
INTANGIBLE DRILLING COST ESTIMAT	
LOCATION	
Surface Damages (Patented Land)	
Surveyors & Equipment Rig/Location preparations (Includes Road)	400 13,178
Road Construction/easements	Incl.w/ location
A BANDOMENT	
Cut Off/back off casing	
Cement (Equipment & Services) Crop Damages	
Footage 3700 Ft. @ \$ 9.75 /Ft. W/DP 2 Days @ \$ 2600 /day	36,075 5,200
W/DP 2 Days @ \$ 2600 /day	5,200
W/O DP 2 days @ \$ 2600 /day SURFACE CASING SERVICES (10 3/4")	5,200
Inspection of pipe	
Casing Crew/Equipment	1,200
Tong Operator/Equipment	
Float Equipment Incl. in Cement Centralizers/Incl. in Cement	
Cement (Equipment & Services)	3,500
FIRST INTERMEDIATE CASING SERVICES (8 5/8")	
Inspection of pipe	
Casing Crew/Equipment Tong Operator/Equipment	1,200
Float Equipment	
Centralizers/Seratchers	
Cement (Equipment & Services) with one pump to	ruck 2,000
SECOND INTERMEDIATE CASING SERVICES Inspection of pipe	
Casing Crew/Equipment	
Tong Operator/Equipment	
Float Equipment	
Centralizers/Scratchers Cement (Equipment & Services)	
THIRD INTERMEDIATE CASING SERVICES	
Inspection of pipe	
Casing Crew/Equipment	Con grad and with the training
Tong Operator/Equipment BEFORE EXAMINES Float Equipment OIL CONSERVANT	TAGEIS
Cement (Equipment & Services)	0.6
INTERMEDIATE LINER SERVICES CASE NO. 64	25
Casing Crew/Equipment Submitted by	hrank-
Tong Operator/Equipment Hearing Date	The same of the sa
Liner/Float Equipment	Marie and the state of the stat
Centralizers/Scratchers	
Cement (Equipment & Services) MUD (Weight, Chemicals, Oil, Water & Services)	6,000
BITS	
ofof/blt	
of "OD @ /hit	
of "OD @ /bit	Andrew Control of the

FUEL days @ \$ /day	
LAROR & SUPPLIES days @ S /day	
COMPANY SUPERVISION 6 days @ \$ 200 /day	1.200
RENTALS	
Work String Assembly Rotating head days @ \$ /day	
Rotating head days @ \$ /day Separator days @ \$ /day	
PUT Flow line sensor & numb days AS /day	
D-Gasser days @ \$ /day	
Choke days @ \$ /day TOTCO CDR Recorder	
Other	
OTHER	
TOTAL	75,153
	-
	ita.
INTANGIBLE FORMATION EVALUATION COST ESTIM	VTE
ELECTRIC LOGS	
	-
POROSITY LOGS	
Gamma Ray/Neutron	4.000
YAMIIQ NOTANGULI OIL.	
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DIPMETER LOGS	
A STATE OF THE STA	
CALIPER LOGS	
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DRILL STEM TESTS	
Test 1 @/ft	
Test 2 @ /ft	
Test 3 @ /ft Test 4 @ /ft	
MUD LOGGING	
No. of days	
Equipment/Services @ \$ /day	
TRANSPORTATION days @ \$ /day	
FUEL days @ \$ /day LABOR & SUPPLIES days @ \$ /day	
COMPANY SUPERVISION days @ \$ /day	
RENTALS	
Work String Assembly	
OTHER - Contract geologist	1,500
ΤΟΤΛΙ	5,500
뿐 그리고의 그 일본다고 한다는 경우를 하는 회사에 가능하는 사회 스피어	
INTANGIBLE COMPLETION COST ESTIMATE	
RIG/WELL SERVICE UNIT	
W/DP 6 days @ \$ 720 /day	4.320
W/O DP days @ \$ /day	
PRODUCTION CASING Inspection of pipe	1 200
Casing Crew/Equipment 7"	
Tong Operator/Equipment	
Float Equipment (Incl in Cement)	
Centralizers/Scratchers (Incl. in Cement	7 000
Cement (Equipment & Services) w/stand-by truck	3.000

PRODUCTION	The second secon	VICES		• •	7. 		
Inspect							
	il coating perator/Equ	francis				-	·
	e Testing	T buca e					
MUD/COMPLET							1,500
BITS	1000						1,300
TRANSPORTAT	'ION	days @	\$	/dny		********	
FUEL	days (A	\$		_/day			
LABOR & SUP			ys (i) \$	/da			
COMPANY SUP	ERVISION _	6	_days 🖟	\$	_/day		1,200
RENTALS	Betrauer in in Insula	*4					
Work St Other	ring Asseml	o.r.y	The rest				
OTHER COMPLETION/	DDODUCTTON	LOCGING					
		i-Ray/N		Ray/N/CRI	/Signature		
NL		VLL/G-Ra			NLL/G-R		· ·
	Ray/CBL/Sig				N/CBL/Signa		en e
ERFORATING	Tipo Toola National Color of Carlon Re						3,200
Queeze cem	ENTING (Equ	ipment i	Material a	& Service	es)		
TRELINE WO							
REATING (etc.)		9,000
	TESTING (Eq	ulpment	& Service	es)			2,000
THER BIIP	burveys	a't					
3.3				ጥረ	TAL		25,420
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URFACE CASI	ING						
600 Ft 10	3/4"OD 40.	<u>5_#/FtH</u>	-40 GR8RI	TIMST	&C_CPLS\$ 13	5.53/Ft_	8.118
	MEDIATE CAS					ver ne ve it ije	
300 Ft 8 5		#/Ft			<u> </u>		10,829
Ft		_#/Ft_	GR	THO	cpls\$	/rt	
Ft		_#/Ft_	GR	THD	CPLS\$	/Ft	
Ft Ft	"OD" "OD	#/Ft_ #/Ft	GR GR	THD THD	CPLS\$	/Ft	
	MEDIATE CA		GK	1nv	CPLS\$	[/] FT	<u></u>
Ft	"OD	#/Ft	GR	THD	CPI.S\$	/Ft	
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Ft	"OD	#/ft	GR	THD	CPIS\$	/Ft	
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Ft	"OD	#/Ft	GR	THD	CPIS\$	/rt	
Ft	מסיי	_#/Ft	GR	TIID	CPLS\$	/Ft	
Ft'	"ດກ	#/Ft_	GR	THD	CPLS\$	/Ft_	
RFACE CASI	NG JIEAD or	Casing	read spool	l w/valve	s, S & S as	ssevbli es	
	CASING HEA	D, w/Val	lves, slip	% seal	assemblies	· · · · · · · · · · · · · · · · · · ·	1,500
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				TOT	AU.		20,44/
		m • • •	CHAPA AAAA	\F P\ R L \P \A. \ \	AM BOOTH		
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DUCTION CA	QTAV						
00 Ft 53		#/Ft	K GR 8R	n muneme	C CPIS\$ 4.5	.7 /r+	16,909
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Ft -	"0p"	-#/Ft	GR_	TID	CPLSS	/Ft	· · · · · · · · · · · · · · · · · · ·
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DUCTION TU	BING				<mark></mark> 7° ATT 1		
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F+	מחיי	サイドナ	CR	TUD	Ct pec	/F+	

- 3 -

TUBING HEAD w/val CHRISTMAS TREE SUB-SURFACE EQUIF	Single MENT (packers,	seal assemblies, l	Triple landing	2,000
(nipples, BPs, OTHER	storm chokes, b	last joints, flow	couplings)	1,500
		TOTAL		27,809
		en e		
	<u>AFE</u>	COST ESTIMATE SUMM	MRY	
		DRY HOLE		COMPLETED
INTANGIBLE		75,153		75,153
		5,500		5,500 25,420
	TOTAL =	80,653		106,073
TANGIBLE		20,447		20,447 27,809
landa en de la compresión la granda la compresión granda en la compresión de la compresión	TOTAL	20,447		48,256
TOTAL EXPENDITURE		101,100	 Specific and the state of the s	154,329
PREPARED BY:	Paul G. White	DATE:	January 25,	1979
NON-OPERATORS APPR	ROVAL:			
			19 (19 A) (19 A) 19 (19 A) (19 A) (19 A) 19 (19 A) (19 A) (19 A) (19 A)	α

^{*}AFE Does not include Rods, Pump, Pumping Unit, Motor, Flowlines or Tank Battery.

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5:0772 10mf of 10frs)	Manumani (minumani manumani minumani mi		Heaty Energy et al	Holly Brangs and 867 81159 Ess Reson	Pennzeil Hally Energy et al 9 - 1 - 36 Hally Energy et al 20099 Hally Energy et al	Molly Energy, Phal 81/936
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Applicant Exhibital Lucia Brookes #2 • Care NO 6425 LA Rue & Muncy Fed. FR.#1 •

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Applicant est. Inst 11 Lucia Brookes #2 • Care NO 6425 LARUE & MUNCY Fed. FR.#1

December 19, 1978

Duval Corporation P.O. Box 115 Carlsbad, N.M. 88240

Attn: Mr. John Mc Graw

Dear Mr. Mc Graw:

T. B. Knox Estate plans to drill the Lucia Brooks #2 well, located 1980' FSL and 1980' FWL. Section 14, 1185-R30E, Eddy County, New Mexico.

Duval Corporation still has active mining leases in this area. We have discussed this location with Mr. John Burleson, the Federal Mining Supervisor, and he has no objection to the drilling of the well.

Would you please check this location and if in agreement, we respectfully request that you sign this letter as a waiver to any objections to the drilling of this prospect.

Sincerely,

Paul G. White Engineer

PGW/gb

Signed $\frac{U}{1/aq}$

Applicant # 2 Care NO 6425

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MAILING LIST

- 1. LaRue & Muncy P.O. Box 196 Artesia, N.M. 88210
- 2. Marbob Energy, Corp. P.O. Box 304 Artesia, N.M.88210
- Yates Petroleum Corp.
 207 S. 4th
 Artesia, N.M.88210
- 4. Featherstone Development 1717 W. 2nd Roswell, N.M. 88201
- 5. Texaco, Inc. P.O. Box 728 Hobbs, N.M. 88240
- 6. Kersey and Co. 808 W. Grand Artesia, N_/M. 88210
- 7. Holly Energy, Inc. Box 726 Artesia, N.M. 88210
- 8. Pennzoil Co. 5th Floor Wall Towers West Drawer 1828 Midland, Texas 79701

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Re: Hearing for Exception to R-111A, State of New Mexico

Gentlemen:

T.B. Knox Estate has set for hearing before the Department of Energy & Minerals, Oil Conservation Division, a request for an exception to R-111A as pertains to casing requirements in the Potash Mining area.

R-111A requires three strings of casing in the Potash Area. T.B. Knox Estate will request that 8 5/8" casing be set at 600' with cement circulated and 54" casing will be set at approximately 3750' with a calculated cement return to surface.

The well will be drilled at a location 1980' FSL, 1980' FWL, Section 14-T18S-R30E, Eddy County, New Mexico. Well designation is the Lucia Brookes No. 2.

It would assist us with our success at the hearing if you will please sign one copy of this letter which will waive any objection you have to our request.

Sincerely,

Paul soul lite

Paul G. White Representative of T.B. Knox Estate

PGW/gb

(We)(I) the undersigned have no objection to the request by T.B. Knox Estate for exception to Rule 111-A as pertains to casing and cementing program.

DATED:

20177 SIGNED: By and

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Paul sul lite

Paul G. White Representative of T.B. Knox Estate

PGW/gb

(We) (I) the undersigned have no objection to the request by T.B. Knox Estate for exception to Rule 111-A as pertains to casing and cementing program. 1-24-79 SIGNED: Mark C. Chan

Re: Hearing for Exception to R-111A, State of New Mexico

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Paul swhite

Paul G. White Representative of T.B. Knox Estate

PGW/gb

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DATED: January 19 1979 SIGNED: Chante M. Thicks

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Paul G. White Representative of T.B. Knox Estate

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DATED: 18-79 SIGNED: SCAnnow

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DATED: 1/18/79 SIGNED: Harold ICEL

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Paul sur lite

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PGW/gb

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DATED: 1-24-79

SIGNED:

Ily Knerou INC

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PGW/gb

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DATED: 1-18-79 SIGNED:

Pennzoil Company

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TUBING INCAD W.	/valves E Single	Dual Triple	2,000
SUB-SURFACE EX (nipples, B OTHER	QUIPMENT (packers Ps, storm chokes,	Dual Triple, seal assemblies, landing blast joints, flow couplings	
<u>.</u>		JATOT	27,809
	<u>A</u> F	E COST ESTIMATE SUMMARY	
		DRY HOLE	COMPLETED
INTANGIBLE		66,553 5,500	66,553 5,500 25,420
	TOTAL	72.053	97,473
TANGIBLE		5,010	5,010 27,809
	TOTAL	5,010	32,819
TOTAL EXPENDIT	rure	77.063	130,292
		and the second of the second o	
PREPARED BY:	Paul G. White	DATE:January	25, 1979
NON-OPERATORS	APPROVAL:		

*AFE Does not include Rods, Pump, Pumping unit, Motor, Flowlines or Tank Battery.

AFE DRILLING COST ESTIMATE

LEASE: LUCIA BROOKES REGULATORY PE	RMIT NUMBER
AREA/FIELD: Leo Queen Grayburg, Eddy County, N.	MWELL: 2 (14-T18S-R30E)
TYPE: Wildest Straight_	LOCATION: Onshore X
Development X Directional	Inland/Bay
	Offshore
INTANGIBLE DRILLING COST ESTIMA	Tr
LOCATION Surface Damages (Patented Land)	
Surveyors & Equipment Rig/Location preparations (Includes Road)	400 13,178
Road Construction/easements	Incl.w/ location
ABANDOMENT Cut Off/back off casing	
Cement (Equipment & Services)	
Crop Damages	***
Footage 3700 Ft. @ \$ 9.75 /Ft.	36,075
W/DP <u>2</u> Days @ \$ 2600 /day	5,200
W/O DP 2 days @ \$ 2600 /day SURFACE CASING SERVICES (10 3/4")	5,200
Inspection of pipe	en e
Inspection of pipe Casing Crew/Equipment	1,200
Tong Operator/Equipment Float Equipment Incl. in Coment	
Centralizers/Incl. in Cement	
Cement (Equipment & Services) FIRST INTERMEDIATE CASING SERVICES (8 5/8")	3,500
Inspection of pipe	
Casing Crew/Equipment	1,200
Tong Operator/Equipment Float Equipment	
Centralizers/Scratchers	
Cement (Equipment & Services) with one pump t SECOND INTERMEDIATE CASING SERVICES	ruck 2,000
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Tong Operator/Equipment Float Equipment	
Centralizers/Scratchers	· · · · · · · · · · · · · · · · · · ·
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Tong Operator/Equipment Float Equipment	
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Cement (Equipment & Services) BEFOR O A HAR	RATA ATA
Inspection of pipe	N. T. W.
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Tong Operator/Equipment Liner/Float Equipment	W Cam
Centralizers/Scratchers Selection 1/64	25
Cement (Equipment & Services)	6 000
fUD (Weight, Chemicals, Oil, Water & Services)	6,000
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ABOR & SUPPLIES	TARON & CURRETTEC	5 c ///n		
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Cement (Equipment & Services) w/stand-by truck 3.000	Centralizers/Scratchers (Incl.	in Cement	_	

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TUBING HEAD W/V: CHRISTMAS TREE	Singl	eDual	_Triple	2,000
SUB-SURFACE EQUI (nipples, BPs OTHER	IPMENT (packer , storm chokes	s, seal assemblies, , blast joints, flow	landing couplings)	1,500
		TOTAL		27,809
	<u>A</u>	FE COST ESTIMATE SUM	MARY	
		DRY HOLE		COMPLETED
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Maria de la compania de la compania La compania de la co	TOTAL	80,653	•	106,073
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	TOTAL	20,447		48,256
OTAL EXPENDITUR		101,100		154,329
REPARED BY:	Paul G. Whi	te DATE:	January 25,	1979
ON-OPERATORS AP				

^{*}AFE Does not include Rods, Pump, Pumping Unit, Motor, Flowlines or Tank Battery.

Duval Corporation P.O. Box 115 Carlsbad, N.M. 88240

Attn: Mr. John Mc Graw

Dear Mr. Mc Graw:

T. B. Knox Estate plans to drill the Lucia Brooks #2 well, located 1980' FSL and 1980' FWL, Section 14, T18S-R30E, Eddy County, New Mexico.

Duval Corporation still has active mining leases in this area. We have discussed this location with Mr. John Burleson, the Federal Mining Supervisor, and he has no objection to the drilling of the well.

Would you please check this location and if in agreement, we respectfully request that you sign this letter as a waiver to any objections to the drilling of this prospect.

Sincerely,

Paul Sulte Paul G. White Engineer

PGW/gb

Signed Wagraus

Date: 17-20-48

DEFORE EXAMPLES STABLES OIL CONSENDENT NO. 2

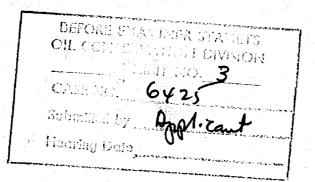
CASE NO. 6425

Submitted by Applicant
Hearing Date

11

MAILING LIST

- 1. LaRue & Muncy P.O. Box 196 Artesia, N.M. 88210
- 2. Marbob Energy, Corp. P.O. Box 304 } Artesia, N.M.88210
- 3. Yates Petroleum Corp. 207 S. 4th Artesia, N.M.88210
- 4. Featherstone Development 1717 W. 2nd Roswell, N.M. 88201
- 5. Texaco, Inc. P.O. Box 728 Hobbs, N.M. 88240
- 6. Kersey and Co. 808 W. Grand Artesia, N.M. 88210
- 7. Holly Energy, Inc. Box 726 Artesia, N.M. 88210
- 8. Pennzoil Co. 5th Floor Wall Towers West Drawer 1828 Midland, Texas 79701



Gentlemen:

T.B. Knox Estate has set for hearing before the Department of Energy & Minerals, Oil Conservation Division, a request for an exception to R-111A as pertains to casing requirements in the Potash Mining area.

R-111A requires three strings of casing in the Potash Area. T.B. Knox Estate will request that 8 5/8" casing be set at 600' with cement circulated and $5\frac{1}{2}$ " casing will be set at approximately 3750' with a calculated cement return to surface.

The well will be drilled at a location 1980' FSL, 1980' FWL, Section 14-T18S-R30E, Eddy County, New Mexico. Well designation is the Lucia Brookes No. 2.

It would assist us with our success at the hearing if you will please sign one copy of this letter which will waive any objection you have to our request.

Sincerely,

Paul sou lite

Paul G. White Representative of T.B. Knox Estate

PGW/gb

(We)(I) the undersigned have no objection to the request by T.B. Knox Estate for exception to Rule 111-A as pertains to casing and cementing program.

DATED:

7 ay 179 SIGNED:

ق. « مارد و بيدنم

i.

January 17, 1979

Re: Hearing for Exception to R-111A, State of New Mexico

Gentlemen:

T.B. Knox Estate has set for hearing before the Department of Energy & Minerals, Oil Conservation Division, a request for an exception to R-111A as pertains to casing requirements in the Potash Mining area.

R-111A requires three strings of casing in the Potash Area. T.B. Knox Estate will request that 8 5/8" casing be set at 600' with cement circulated and 54" casing will be set at approximately 3750' with a calculated cement return to surface.

The well will be drilled at a location 1980' FSL, 1980' FWL, Section 14-T18S-R30E, Eddy County, New Mexico. Well designation is the Lucia Brookes No. 2.

It would assist us with our success at the hearing if you will please sign one copy of this letter which will waive any objection you have to our request.

Sincerely,

Paul sullite

Paul G. White Representative of T.B. Knox Estate

PGW/gb

(We)(I) the undersigned have no objection to the request by T.B. Knox Estate for exception to Rule 111-A as pertains to casing and cementing program.

DATED: 1-24-79 SIGNED: Mark C. Char

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January 17, 1979

Re: Hearing for Exception to R-111A, State of New Mexico

Gentlemen:

T.B. Knox Estate has set for hearing before the Department of Energy & Minerals, Oil Conservation Division, a request for an exception to R-111A as pertains to casing requirements in the Potash Mining area.

R-111A requires three strings of casing in the Potash Area.
T.B. Knox Estate will request that 8 5/8" casing be set at 600' with cement circulated and 5½" casing will be set at approximately 3750' with a calculated cement return to surface.

The well will be drilled at a location 1980' FSL, 1980' FWL, Section 14-T18S-R30E, Eddy County, New Mexico. Well designation is the Lucia Brookes No. 2.

It would assist us with our success at the hearing if you will please sign one copy of this letter which will waive any objection you have to our request.

Sincerely,

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DATED: January 19 1979 SIGNED: Chanter Mr. Ticks)

Vice - President

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DATED: 1-18-79 SIGNED:

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DATED: 1-24-79

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Holly Energy INC

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DATED: 1-18-79 SIGNED: C.A. How E. H. Foret

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	en e		OKS NO 2
1980 FSL	1980' FWL	SECTION 14	<u>- TI85 - R30E</u>
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AFE DRILLING COST ESTIMATE

LEASE: LUCIA BROOKES REGULATORY PERMI	
AREA/FIELD: Leo Queen Grayburg, Eddy County, N.MU	il.: 2 (14-T18S-R3
TYPE: Wildeat Straight LOC	CATTON: OnshoreX
Development X Directional	Inland/Bay
	Offshore
INTANGIBLE DRILLING COST ESTIMATE	WI ZOHOL G
LOCATION COST ESTIMATE	
Surface Damages (Patented Land) Surveyors & Equipment	
Rig/Location propagations (The last, n. 1)	400
Road Construction/easements ABANDOMENT	13,178 Incl. w/location
Cut Off/back off casing	TER MI TOCULION
Cement (Equipment & Scrvices) Crop Damages	
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Other CHER - Contract geologist TOTAL INTANGIBLE COMPLETION COST ESTIMATE G/WELL SERVICE UNIT W/DP 6 days @ \$ 720 /day W/O DP days @ \$ /day ODUCTION CASING Inspection of pipe Casing Crew/Equipment Tong Operator/Equipment Float Equipment (Incl in Cement) Centralizers/Scratchers (Incl. in Cement	一直大厅,大厅大家的事情,一点一点,一点面,一点面,一点一点,一点一点,一点,只有一点一点。			
TOTAL INTANGIBLE COMPLETION COST ESTIMATE G/WELL SERVICE UNIT W/DP 6 days @ \$ 720 /day W/O DP days @ \$ /day ODUCTION CASING Inspection of pipe Casing Crew/Equipment Tong Operator/Equipment Float Equipment (Incl in Cement) Centralizers/Scratchers (Incl. in Cement		n om men skriver og skriver i skriver i Her i kallender i skriver i sk	and the second s	
INTANGIBLE COMPLETION COST ESTIMATE G/WELL SERVICE UNIT W/DP 6 days @ \$ 720 /day W/O DP days @ \$ /day ODUCTION CASING Inspection of pipe Casing Crew/Equipment Tong Operator/Equipment Float Equipment (Incl in Cement) Centralizers/Scratchers (Incl. in Cement		to the second second	•	1,500
INTANGIBLE COMPLETION COST ESTIMATE G/WELL SERVICE UNIT W/DP 6 days @ \$ 720 /day W/O DP days @ \$ /day ODUCTION CASING Inspection of pipe Casing Crew/Equipment Tong Operator/Equipment Float Equipment (Incl in Cement) Centralizers/Scratchers (Incl. in Cement				
G/WELL SERVICE UNIT W/DP 6 days @ \$ 720 /day W/O DP days @ \$ /day ODUCTION CASING Inspection of pipe Casing Crew/Equipment Tong Operator/Equipment Float Equipment (Incl in Cement) Centralizers/Scratchers (Incl. in Cement		TOTAL	raga restriction of the production of the	5,500
G/WELL SERVICE UNIT W/DP 6 days @ \$ 720 /day W/O DP days @ \$ /day CODUCTION CASING Inspection of pipe Casing Crew/Equipment Tong Operator/Equipment Float Equipment (Incl in Cement) Centralizers/Scratchers (Incl. in Cement			en de la companya de La companya de la co	
W/DP 6 days @ \$ 720 /day W/O DP days @ \$ /day ODUCTION CASING Inspection of pipe Casing Crew/Equipment Tong Operator/Equipment Float Equipment (Incl in Cement) Centralizers/Scratchers (Incl. in Cement		E COMPLETION COST ESTIMA	TE	
W/O DP days @ \$ /day ODUCTION CASING Inspection of pipe Casing Crew/Equipment Tong Operator/Equipment Float Equipment (Incl in Cement) Centralizers/Scratchers (Incl. in Cement		\$ 720 /J		A 720
ODUCTION CASING Inspection of pipe Casing Crew/Equipment Tong Operator/Equipment Float Equipment (Incl in Cement) Centralizers/Scratchers (Incl. in Cement	W/O DP days @	y // /day	-	4,340
Inspection of pipe Casing Crew/Equipment Tong Operator/Equipment Float Equipment (Incl in Cement) Centralizers/Scratchers (Incl. in Cement	ODUCTION CASING	- Aug		
Casing Crew/Equipment 1,200 Tong Operator/Equipment Float Equipment (Incl in Cement) Centralizers/Scratchers (Incl. in Cement				
Tong Operator/Equipment Float Equipment (Incl in Cement) Centralizers/Scratchers (Incl. in Cement	Casing Crew/Equipment			1,200
Centralizers/Scratchers (Incl. in Cement	Tong Operator/Equipme			
Centralizers/Scratchers (Incl. in Cement			•	
Cement (Equipment & Services) w/stand-by truck 3.000	Centralizers/Scratcher	rs (Incl. in Cement		3,000

PRODUCTION		ERVICES		•	•		
Inspect	ion 1 coatin	•				•	
	erator/D					-	
Pressur	e Testing	ζ				-	
MUD/COMPLET	ION FLUI)				all-page	1.500
BITS	Attan	• <u>-</u>		1.1			
TRANSPORTAT		_ days 🚇	\$	_/day	4.	-	
FUEL FOR	days		······································	_/day	O O	-	
LABOR & SUP COMPANY SUP			ıys @ \$		lay	-	
RENTALS	INICATO TOM	6	days 🖟	3 _ 400_	_/пау		1.200
	ring Asse	mb l y		and the same			
Other	or of the second sections						······································
COMPLETION		and the second second second second second		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	eren er til som er		
	Ray	_G-Ray/N	G-		L/Signatur	e	
NLI	L Ray <mark>/CBL/S</mark>	NLL/G-Ra		NNL/N	NLL/G-	Ray/N	
PERFORATING	vay/ CBL/ S	ignature	N	ibli/G~Ray	/N/CBL/Sig	nature	
SQUEEZE CEMI	ENTING CE	guipment	Material	& Servic	esì	-	3.200
WIRELINE WOR	kk (To se	t WiPs, B	Ps, SCs.	etc.)			
TREATING (A	kcidize,	frac, gra	vel/Plast	ic pack,	etc.)		9,000
PRODUCTION 1	esting (Equipment	& Servic	es)			2.000
OTHER BIP S	lurveys					-	
				en e	OTENT		05 400
χ				1.0	OTAL		25,420
		TANCTO	LE DRILLI	NC COCM 1	COMTAINE		
		INNGID	DE DRIBEI	NG CUST I	EST1MATE:		e Cheer Commission (Commission Commission Commission Commission Commission Commission Commission Commission Co Commission
CONDUCTOR CA	SING						
řť	"OD	#/Ft	GR	THD	CPLG\$	/Ft	
SURFACE CASI							
600 Ft 8 5	<u> </u>	20_#/Ft_	H40 GR 8R	D TIIDS?	rec cpls\$_5	.85/rt	3,510
FIRST INTERM				1.00			
Ft Ft	"()D "()D	#/Pt	GR_	THD	CPLS\$_	/Ft	
Ft	''OD	#/Ft #/Ft	GR GR	TIID TIID	CPLS\$	/Ft	
Ft	OD	#/Ft	GR	THD_	CPLS\$ CPLS\$	/Ft	
Ft	"OD	#/Ft	GR GR	TIID	CPLS\$		
SECOND INTER		ASING	• • • • • • • • • • • • • • • • • • • •		0	<u>ੋਂ</u>	· - · · · · · · · · · · · · · · · · · ·
Ft	OD	#/Ft	GR	THD	CPLS\$	/Ft	
Ft Ft	"OD	#/Ft	GR	TIID	CPLS\$	/Ft	
Ft	. ''OD ''OD	#/Ft#/Ft	GR	THD	CPIS\$	/Ft	
It is in the last of the l	'OD	#/Ft_	GR GR	THD THD	CPLS\$ CPLS\$	/Ft	
THIRD INTERME		SING			CrixQ	′	
Ft	"OD	#/Ft	GR	THD	CPLS\$	/Ft	
Ft		#/Ft	GR	THD	CPIS\$	/Ft	
Ft	מסיי	#/Ft	GR	THD	CPLS\$	/Ft	
Ft Ft		#/Ft	GR	THD	CPLS\$	/Ft	
INTERMEDIATE	LINER CAS	#/Ft_	GR	THD	CPIS\$	/Ft	-
Ft	"OD	#/Ft	GR	THD	CPIS\$	/Ft	(1997년 - 1997년 - 1997년 - 1997년 - 1997
Ft	"OD	#/Ft	GR GR	THD	CPLS\$	/Ft	
Ft	OD	#/Ft	GR	THD	CPLS\$	/Ft	
Ft	"OD	#/Ft	GR	THO	CPLS\$	/Ft	
Ft CARTY	''OD	#/Ft	GR_	THD	CPLS\$	/Ft	
SURFACE CASIN	CASTAIC UE	Casing 1	read spool	W/Va]ve	s, S & S a	ssevblies	
OTHER	CHOING UE	aus, w∧vau	rves : sirib	, w scar	assemblies		1,500
							
			A CONTRACTOR	TOT	AL.		5,010
	• .	TANG	THE COMP	LETTON C	OST ESTIN	ጥም	
<u> / l. </u>	rintis.	1.3	1	21 VIII G	THE PERSON NAMED IN	- ••	
PRODUCTION CAS							
3700 Ft 513	_''OD 14				CCPLS\$ 4.5		16,909
Pt Ft	_'''OD '''OD	#/Ft	GR	THD	CPLSS	/Ft	
Ft -	'''ט <u>י</u> מסיי	#/Ft#/Ft	GR	THD	CPLS\$	/Ft	
Ft -	 	_#/rt	GR GR	THD	CPLS\$	/Ft	
PRODUCTION TUB	ING		U/\	THD	CPIS\$	/rt	· · · · · · · · · · · · · · · · · · ·
3700 Ft 2 3/8	8 "OD 4.7		D GR EVE	TIID	CPIS\$ 2.	00/Ft	7,400
Ft	מסיי_	_#/rt	GR	Tim	CPISS	/rt	
Ft	_''OD	#/Ft	GR	THE	CLESS	/F+	

_ 3

UB-SURIACE EQ	UIPMENT (packers	, seal assemblies, landing blast joints, flow couplings	1,500
(nipples, br THER	a, storm enokes,	prest lothes, trow conbings	1,300
	•••	TOTAL	27,809
	A Company of the Comp		
	<u>AF</u>	E COST ESTIMATE SUMMARY	
		DRY HOLE	COMPLETED
en de la companya de La companya de la co			
NTANGIBLE		66,553	66.553
		5,500	5,500 25,420
	TOTAL	<u>72,053</u>	97,473
ANGIBLE		5,010	5,010
			27,809
en e	TOTAL	5,010	32,819
TAL EXPENDIT	URE	77,063	130,292
PEPÁRED RY.	<u>Paul G. White</u>	DATE:	V 25 1070
N-OPERATORS A	APPROVAL:		
alika yang pertabang di kapang pangang bang Kabupatèn Kabupatèn Bangang Bangang Bangang Bangang Bangang Bangang	e kaje je projekti si su mono se su se in se ili je in je se se ili je in je se se ili je in je se se ili je s Postava sa se		
		er for the first of the first o	

*AFE Does not include Rods, Pump, Pumping unit, Motor, Flowlines or Tank Battery.

AFE DRILLING COST ESTIMATE

LEASE: LUCIA BROOKES REGULATORY P	ERMIT NUMBER
AREA/FIELD: Leo Queen Grayburg, Eddy County, N.	MWELL: 2 (14-T18S-R30E)
TYPE: Wildcat Straight	LOCATION: Onshore X
Development X Directional	Inland/Bay
	Offshore
INTANGIBLE DRILLING COST ESTIMA	ATE
LOCATION	
Surface Damages (Patented Land)	
Surveyors & Equipment	400
Rig/Location preparations (Includes Road) Road Construction/easements	13,178 Incl.w/ location
A BANDOMENT	Incr.w/ Ideactor
Cut Off/back off easing	
Cement (Equipment & Services) Crop Damages	
RIG	
Footage 3700 Ft. 0 \$ 9.75 / I't.	36,075
W/DP 2 Days @ \$ 2600 /day	5,200 5,200
W/O DP 2 days @ \$ 2600 /day SURFACE CASING SERVICES (10 3/4")	3,200
Inspection of pipe	
Casing Crew/Equipment	1,200
Tong Operator/Equipment Ploat Equipment Incl. in Coment	nd Mode i Aliabita a trader i Baran Innon a tradest o Briggi al primat
Centralizers/Incl. in Cement	· · · · · · · · · · · · · · · · · · ·
Cement (Equipment & Services)	3,500
FIRST INTERMEDIATE CASING SERVICES (8 5/8")	Superior State of the State of
Inspection of pipe Casing Crew/Equipment	1,200
Tong Operator/Equipment	
Float Equipment	The state of the s
Centralizers/Scratchers Cement(Equipment & Services) with one pump	truck 2,000
SECOND INTERMEDIATE CASING SERVICES	truck 2,000
Inspection of pipe	
Casing Crew/Equipment Tong Operator/Equipment	
Float Equipment	-
Centralizers/Scratchers	
Cement (Equipment & Services) THIRD INTERMEDIATE CASING SERVICES	
Inspection of pipe	
Casing Crew/Equipment	
Tong Operator/Equipment	
Float Equipment Centralizers/Scratchers	
Coment (Equipment & Services)	The state of the s
INTERMEDIATE LINER SERVICES	
Inspection of pipe Casing Crew/Equipment	Company of the Compan
Tong Operator/Equipment	H DIVINON
Liner/Float Equipment	B
Centralizers/Scratchers Cement (Equipment & Services)	
MUD (Weight, Chemicals, Oil, Water & Services)	6,000
BITS Submitted by An	picant
of "OD @ Hourn Abit U	1
of "OD @	Constitution of the Consti
of OD @ /bit	

TRANSPORTATION days @ \$1 1 /d FUEL days @ \$ /day	lay	
LABOR & SUPPLIES days @ \$	/day	
COMPANY SUPERVISION 6 days 0 \$ 200	/day 1,200	
RENTALS		
Work String Assembly		
Rotating head days @ \$	/day	
Separator days @ \$	/day	
P.V.T. Flow line sensor & pump D-Gasser days @ \$	days @\$ /day	
Choke days 8 \$ /day	day	
TOTCO CDR Recorder		
Other		
OTHER		
TOTAL	75,153	
andre de la companya de la companya La companya de la co		
INTANGIBLE FORMATION EVA	LUATION COST ESTIMATE	
ELECTRIC LOCC		
ELECTRIC LOGS		
The state of the s		

POROSITY LOGS	4 000	
Gamma Ray/Neutron	4,000	
y transport ny taona 2008, ao amin'ny dia mandra dia 200 1. Ny faritr'ora dia GMT+1.		
DIPMETER LOGS		
DIPURIER INGS		
	tana di Kabupatèn Balandaran Balandaran Balandaran Balandaran Balandaran Balandaran Balandaran Balandaran Bala Balandaran Balandaran Balandaran Balandaran Balandaran Balandaran Balandaran Balandaran Balandaran Balandaran	
	the same of the sa	illes Valliars
CALIPER LOGS		
CADITER LOGS		
		
DRILL STEM TESTS Test 1 @ //ft		
Test 2 @ /ft		
Test 3 @ /ft		
Test 4 @ /ft		
MUD LOGGING		
No. of days Equipment/Services @ \$	/day	
TRANSPORTATION days @ \$	/day	
FUEL days @ \$ /d		
LABOR & SUPPLIES days @ \$	/day	
COMPANY SUPERVISION days @ \$	/day	
Work String Assembly	and the second s	
Other		
OTHER - Contract geologist	1.500	**************************************
TOTAL	5,500	
	en e	
INTANGIBLE COMPLETION COST	ESTIMATE	
RIG/WELL SERVICE UNIT W/DP 6 days @\$ 720 /day	4 720	
W/DP 6 days (9 \$ 720 /day W/O DP days (9 \$ /day		
PRODUCTION CASING	to the second se	
Inspection of pipe	1,200	
Casing Crew/Equipment 7"		
Tong Operator/Equipment		
Float Equipment (Incl in Cement) Centralizers/Scratchers (Incl. in Cemen).+	
Cement (Equipment & Services) w/stand-l	by truck 3.000	

	ection	KATCES					
	ection chal coating						
Tong	Operator/Equ						
Press	sure Testing	•					
	LETION FLUID						1,500
BITS	n			13		·	
TRANSPORT		days 🛈 \$		_/day _/day			
	days (SUPPLIES) \$	s @ \$	_/uay _/d	9V	,, -	
	SUPERVISION						1,200
RENTALS	· N. MINATOTAM	<u> </u>	Tue Au Ch	- 200			1,200
	String Assen	bly					
Other							
	N/PRODUCTION	LOGGING					.45
		G-Ray/N			L/Signature		
		NLL/G-Ray			NLL/G-R		
	G-Ray/CBL/Si	gnature	N	LLZG-Ray	/N/CBL/Sign	ature	7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7
PERFORATI	NG EMENTING (Eq	iir	.tou:51 1	· Camila	28 5	*****	3,200
	WORK (To set				ຂຮງ		
	(Acidize, f				etc.)	-	9,000
PRODUCTIO	N TESTING (E	quipment a	Service	es)	ccc.,		2,000
OTHER BII		**		,			
	•						
		O MALL TO THE CONTRACTOR		T	DTAL	· · · · <u> · · · · · · · · · · · · ·</u>	25,420
		TANGIBLE	DRILLIN	G COST I	ESTIMATE		
lugaj jakiska inika i k	AND AND SERVICE AND						
CONDUCTOR			andra, M	41 <u>4.4.</u>			n a mai se na fiketo filosoficia. Tanta
Ft	"OD	#/Ft	GR	THD	CPLG\$	/rt_	
SURFACE CA		p #/mi		Maina-	10 A OST NA	, , , , , , , , , , , , , , , , , , ,	
FIDER TAR	<u>0 3/4"OD 40.</u> ERMEDIATE CAS	<u>5 #/FTH-</u>	40 GK8RI	<u> </u>	<u> </u>	5.53/1t	8,118
	5/8 "OD 24	The state of the s	K GR 8F	n miner	ec cpiss 8.	77 /104	16 920
1300 Ft 8	"OD 24	#/Ft	K GR 81	THE	CPISS 8.	33 /Ft_ /Ft	10,829
Ft	"OD		GR GR	THD	CPIS\$	/rt-	
Ft	''OD	#/Ft	GR GR	THD	CPIS\$	/Ft_	
Ft	"OD	#/Ft	GR	THD	CPLS\$	/Ft	
	TERMEDIATE CA				1000 4418		
Ft	"OD	#/Ft	GR	THD	cpls\$	/Ft	
Ft _	"OD	#/Ft	GR	THD	CPLS\$	/Ft	
Ft _	"00	#/Ft	GR	THD	CPLS\$	/Ft	
Ft Ft	"OD "OD	#/Ft #/Ft	GR GR	THD THD	CPLS\$ CPLS\$	/Ft /Ft	
	RMEDIATE CAS		- Gil		crube	J 1 7	
Ft	"OD	#/Ft	GR	THD	CPLS\$	∕I't	and the second s
	"OD	#/Ft	GR GR	THD	CPLS\$	/Ft	
Ft	"OD_	#/Ft	GR	THD	CPLS\$	/Ft	
Ft	"OD_	#/Ft	GR_	THD	CPLS\$	/Ft	
Ft	"OD	#/Ft	GR	THD	CPLS\$	/Ft	
INTERMEDIA				<u> </u>			
Ft	"OD_	#/Ft	GR	OHD	CPLS\$	/Ft	
Ft Ft	"OD"	#/Ft #/Ft	GR CP	THD	CPLS\$	/Ft	
Ft	ທີ່ "OD	#/Ft #/Ft	GR GR	THD	CPLS\$	/Ft	
Ft -	"OD	#/Ft	GR	THD_ THD	CPLS\$ CPLS\$	/Ft /Ft	a a a a a a a a a a a a a a a a a a a
	SING HEAD or				CLTWA		8
INTERMEDIA	TE CASING HE	AD. w/Val	ves. slir	Seas &	assemblies	POCADITE	1,500
OTHER			, <u>-</u>			da da jarah	-1000
•	17 17			TOT	rat,	·	20,447
		THE STATE OF SERVICE	Wanasa Talahan	A STAN A STAN A	Agus Markeyagayan b		
		TANG	BLE COMP	LETION (COST ESTIMA	re.	
garan da sa	o de la companya de l						
PRODUCTION					in the second of		$g_{ij} = \frac{g_{ij}}{g_{ij}}$
3700 Ft		/ #/Tt K		THOST	C CPLS\$ 4.5		16,909
Ft	"OD	#/Ft	GR	THO	CPLS\$	/Ft	
Ft	"OD	#/Ft	GR	THD	CPLS\$	/Ft_	
Ft Pt	"OD"	#/Ft#/Ft	GR GR	THI	CPLS\$	_/rt	
PRODUCTION			- or	THE	CPIS\$	/Ft	
and the second s	3/8 "OD 4.7	#/Ft 8 R	D GR EVI	TIID	CPLS\$ 2.0	10 /F+	7,400
Ft	"OD	#/Ft	GR	Tild	CPIS\$	/Ft	
Ft	"OD	#/Ft	GR	THO	CLPS\$	_/Ft	

- 3 -

TUBING HEAD w/val	lves			
CHRISTMAS TREE	Single	Dual	Triple	2.000
SUB-SURFACE EQUII	MENT (packers,	seal assemblies, clast joints, flow	landing	1,500
OTHER	atorii chokes, b	rast joints, ritow	couprings	1,300
	• •			
		TOTAL		27,809
	AFE	COST ESTIMATE SUM	MARY	
		DRY HOLE		COMPLETED
		DKI NULE		COMPLETED
ne da a siña de la maior de la siña de la siña de la siña de la maior de la siña de la siña de la siña de la s Notación de la siña de				tologia. Valentaria
INTANGIBLE		75,153		75,153
	Tayror .	3,300		25,420
	• 4 × 4 × 4 × 4 × 4 × 4 × 4 × 4 × 4 × 4		•	
	TOTAL :	80,653		106,073
TANGIBLE	(9)	20,447		20,447
	ing the second of the second o			27,809
en e	TOTAL	20,447		48,256
TOTAL EXPENDITURE		101,100		154,329
TOTAL DATEMPTICAL				134,323
PREPARED BY:	Paul G. White	DATE:	January 25,	1979
NON-OPERATORS APPI	anua i	Alguny Programme in Table		enda en la compositorio della composita. Communicati di consiste di
non Ormanono mili	Winst			
			n in the Allendary States (1997).	

^{*}AFE Does not include Rods, Pump, Pumping Unit, Motor, Flowlines or Tank Battery.

AFE DRILLING COST ESTIMATE

TYPE: WildestStraightLOCA	ATION:Onshore X
Development X Directional	Inland/Bay
	Offshore
INTANGIBLE DRILLING COST ESTIMATE	en e
LOCATION	
Surface Damages (Patented Land)	
Surveyors & Equipment	400
Rig/Location preparations (Includes Road) Road Construction/easements	13,178 Incl.w/ locati
BANDOMENT	incling locati
Cut Off/back off casing	
Cement (Equipment & Services) Crop Damages	
IIG	
Footage 3700 Ft. @ \$ 9.75 /rt.	36,075
Footage 3700 Ft. @ \$ 9.75 /Ft. W/DP 2 Days @ \$ 2600 /day W/O DP 2 days @ \$ 2600 /day	5,200
W/O DP 2 days @ \$ 2600 /day URFACE CASING SERVICES (10 3/4")	5,200
Inspection of pipe	in a second of granted in the second of the
Casing Crew/Equipment	1,200
Tong Operator/Equipment	
Float Equipment Incl. in Coment Centralizers/Incl. in Cement	umas, alkiesi kiri sii sii sii sii sii sii sii sii sii
Cement (Equipment & Services)	3,500
IRST INTERMEDIATE CASING SERVICES (8 5/8")	
Inspection of pipe	
Common Crew/Equipment Tong Operator/Equipment	1,200
Float Equipment	
Centralizers/Scratchers	
Cement (Equipment & Services) with one pump truck	2,000
ECOND INTERMEDIATE CASING SERVICES Inspection of pipe	
Casing Crew/Equipment	
Tong Operator/Equipment	
Float Equipment Centralizers/Scratchers	
Cement (Equipment & Services)	
HIRD INTERMEDIATE CASING SERVICES	
Inspection of pipe	
Casing Crew/Equipment Tong Operator/Equipment	
Float Equipment	
Centralizers/Scratchers	
Cement (Equipment & Services)	
TERMEDIATE LINER SERVICES Inspection of pipe	
Casing Crew/Equipment	
Tong Operator/Equipment	
Liner/Float Equipment	
Centralizers/Scratchers Cement (Equipment & Services)	
D (Weight, Chemicals, Oil, Water & Services)	6,000
TS of "OD@ /bit	
of "OD@ /bit	
of" OD @/bit	
of "OD @/bit	
1 2 1 2	

TRANSPORTATION days @	days 🖯 ६	/day /day		
LABOR & SUPPLIES	days 🖭	\$ /day		
COMPANY SUPERVISION	6 days 0 \$	\$/day /day		1,200
RENTALS	, •			
Work String Assemb	ly			
Rotating head	davs A S	/day		
Separator	days @ \$	/day days @\$	/day	-
P.V.T. Flow line s D-Gasser da	ensor a pump vs a S	days ७३_ /day	/uay	
Choke day	s @ \$	/day		47
TOTCO CDR Recorder				
Other				
THER				
		TOTAL.		75,153
				<u>_</u>
INTAN	GIBLE FORMAT	CON EVALUATION CO	OST ESTIMAT	E
LECTRIC LOGS				
				
100 mm		÷ 4.		
OROSITY LOGS				
Gamma Ray/Neutron				4.000
			And the second second	
				Alternative Control of the Control o
IPMETER LOGS				
			en de la companya de La companya de la co	
		a de la companya de		
ALTPER LOGS				
A Company of the Comp				——————————————————————————————————————
			arang di ari da arang di A	
RILL STEM TESTS	A.C.			
Test 1 @ Test 2 @	∕/ft ∕/ft		Talan	
Test 3 @	/ft			
Test 4 @	/ft			
JD, LOGGI NG			14	
No. of days	<u>নি</u> ¢	73		7
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PREPARED BY:	Paul G.	White	DATE: _	January 25	5, 1979
NON-OPERATORS AP	PROVAL:				
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*AFE Does not include Rods, Pump, Pumping Unit, Motor, Flowlines or Tank Battery.

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 N 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)

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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.
- CASE 6424: 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 Oil-Potash 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 5427: 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 Noith, 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.

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- CASE 6429: Application of Zia Luergy, 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 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 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 0il 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
 provation 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 Curt. 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.

- CASE 6439: 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 Messaverde and Dakota production in the wellbore of said well.
- CASE 6441: 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 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 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, 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 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 (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.
- CASE 6444: 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.

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Department of Energy and Minerals Oil Conservation Division P.O. Box 2088 Santa Fe, New Mexico 87501

Re: T. B. Knox Estate, Lucia Brookes No. 2 1980' FSL, 1980' FWL, Sec. 14-T18S-R30E Eddy County, New Mexico Case 6425

DEC 29 1978

Gentlemen:

T. B. Knox Estate, Operator, intends to drill a 3700' Lovington test at the proposed location. The well will be located in the Potash-Oil Area of Eddy County, New Mexico.

The potash in the area is non-commercial and for this reason, T. B. Knox Estate requests approval of an exception to Rule R111-A, as the rule pertains to casing and cementing requirements.

We request approval to set surface casing and circulate cement according to R111-A. We request a hearing before the Commission for exception to running a salt protection string of casing and an exception to the circulation of cement on the production casing if such be run.

Would you please schedule the hearing as soon as possible and please notify the operator's representative, Mr. Paul G. White, 112 N. First Street, Artesia, New Mexico 88210?

Thank you,

Paul Swhite

Paul G. White Engineer

PGW/gb

cc: Mr. Jack Knox

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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. 6405 6425 Order No. R-5888

APPLICATION OF CARUE AND MUNCY FOR EXCEPTION TO ORDER NO. R-111-A, EDDY COUNTY, NEW MEXICO.

ORDER OF THE DIVISION

BY THE DIVISION:

This cause came on for hearing at 9 a.m. on December 7, 1978, at Santa Fe, New Mexico, before Examiner Richard L. Stamets.

NOW, on this <u>-29th</u> day of December, 1978, 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, LaRue and Muncy, seeks an exception to the casing/cementing rules for the Oil-Potash Area as promulgated by Order No. R-111-A to permit its Lucia Bracks Well No. 2 located in Unit K of Section /4, Township 18 South, Range 30 East, Eddy County, New Mexico, to be completed with a string of surface casing set and circulated with cement at a depth of approximately 600- feet and a production casing string set at a depth of approximately 3750 feet with a volume of cement calculated to be sufficient to circulate.
- (3) That the evidence presented indicates that there are no potash mining operations nor deposits of commercial potash ore in proximity to the proposed well and that the proposed method of completion will not result in endangerment of potash resources nor operations.

- (4) That the applicant should report the following both to the district office of the Division and the U.S.G.S. and may be required to circulate cement to the surface around the production casing:
 - (a) Any water flows encountered;
 - (b) The top of the cement around the production casing as determined by temperature survey if such cement does not circulate.
- (5) That approval of the subject application will protect correlative rights, will prevent waste and will not cause the waste of potash.
 - (6) The application should be approved.

IT IS THEREFORE ORDERED:

(1) That the applicant, barne and Muney, is hereby authorized an exception to the casing/cementing rules for the Oil-Potash Area as promulgated by Order No. R-111-A to permit its Lucia Bris Aus Well No. 2 located in Unit K of Section 14 Township 18 South, Range 30 East, Eddy County, New Mexico, to be completed with a string of surface casing set and circulated with cement at a depth of approximately 600 feet and a production casing string set at a depth of approximately 3750 feet with a volume of cement calculated to be sufficient to circulate.

PROVIDED HOWEVER, that the applicant shall report the following, both to the district office of the Division and the U.S.G.S:

- (a) Any water flows encountered; and
- (b) The top of the cement around the production casing as determined by temperature survey if such cement does not circulate.

FROVIDED FURTHER, that the applicant may be required to re-cement the production casing to the surface if cement on said casing did circulate to the surface.

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

Done etc