

CASE 5982: SAM H. SNODDY FOR
DIRECTIONAL DRILLING AND A NON-STANDARD
GAS PRORATION UNIT, LEA COUNTY, NM

Case Number

5982

Application

Transcripts.

Small Exhibits

ETC.

BEFORE THE
NEW MEXICO OIL CONSERVATION COMMISSION
Santa Fe, New Mexico
20 July 1977

EXAMINER HEARING

IN THE MATTER OF:

Application of Sam H. Snoddy for
directional drilling and a non-
standard gas proration unit, Lea
County, New Mexico. CASE
5982

BEFORE: Richard L. Stamets

TRANSCRIPT OF HEARING

A P P E A R A N C E S

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1 MR. STAMETS: Call now Case 5982.

2 MS. TESCHENDORF: Case 5982. Application of Sam

3 H. Snoddy for directional drilling and a non-standard pro-

4 ration unit, Lea County, New Mexico.

5 MR. CHRISTY: Sim Christy, Jennings, Christy and

6 Copple, Roswell, New Mexico.

7 We have one witness, Mr. Examiner. Stand and be

8 sworn, please.

9 MR. STAMETS: Are there any other appearances in

10 this case?

11 MR. KELLY: Yes, Booker Kelly, White, Koch, Kelly

12 and McCarthy, appearing on behalf of Texaco.

13 MR. STAMETS: Do you have any witnesses?

14 MR. KELLY: Two witnesses.

15 MR. STAMETS: Would they all stand and be sworn

16 at this time, please?

17 (Witnesses sworn.)

18 MR. STAMETS: You may proceed, Mr. Christy.

19 MR. CHRISTY: Thank you.

20

21 JAMES C. WHITTEN

22 being called as a witness and being duly sworn upon his oath,

23 testified as follows, to-wit:

24

25 DIRECT EXAMINATION

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1 BY MR. CHRISTY:

2 Q Would you please state your name, address, by whom
3 you're employed, and in what capacity?

4 A My name is James C. Whitten. I'm a petroleum
5 geologist. I'm representing Sam H. Snoddy in this case, and
6 I'm an independent geologist.

7 Q Where do you live, Mr. Whitten?

8 A I live in Midland, Texas.

9 Q All right. Are you the same witness that testified
10 in Case 5891, which is a companion case to this?

11 A Correct.

12 MR. CHRISTY: Mr. Examiner, I would ask that the
13 testimony in Case 5891 be incorporated in this record. It
14 might save us a little time on qualifications, et cetera.
15 They are basically the same case.

16 MR. STAMETS: That was Case 5981?

17 MR. CHRISTY: 5891.

18 MR. STAMETS: 5891. Okay, that record will be
19 incorporated.

20 MR. CHRISTY: Thank you.

21 Q Mr. Whitten, are you familiar with what is sought
22 by the application in Case 5892?

23 A I am.

24 Q And what is, just generally, sought; what's the
25 basis?

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1 A. The basis for this hearing is that we wish to drill
2 two wells in location P, Section 25 of 20 South, 22 East,
3 which we will drill these wells to a depth of not less than
4 4000 feet before we directionally drill and bottom up in
5 two separate bottom hole locations.

6 The first, Number One, will be bottomed up at the
7 center of the northeast quarter of Section 25. The Number
8 Two will be bottomed up at the center of the southeast quarter
9 of Section 25.

10 We wish to dedicate 320 acres of the north half of
11 Section 25 to Well Number One and we wish to get a non-standard
12 gas proration unit for the 160 acres in the southeast -- ex-
13 cuse me -- in the southwest quarter of Section 25 for the
14 Number Two.

15 Q. Referring to Exhibit A to this application, does
16 that depict your surface location and your bottom hole areas?

17 A. It does.

18 Q. I notice that there's a well adjacent to where
19 you're starting your surface locations. What is the name of
20 that well?

21 A. That's the Texaco Number One Audi-Richards.

22 Q. And how far away from that well will you be in your
23 surface locations?

24 A. We propose to drill that within one hundred feet
25 of that particular well.

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1 Q Why did you pick one hundred feet?

2 A We were requested by the potash people -- I say
3 potash people, Kerr McGee Potash Company -- to drill that
4 well, or these wells, close to that particular Texaco well
5 in order to save potash. By that they indicated to us that
6 there is a certain amount of potash that will be wasted around
7 a well where they have to have a column of -- column of dirt
8 around any particular well, and since the Texaco well is
9 already there, they feel that we cannot do no more damage to
10 that particular area by drilling wells that close to the
11 Texaco well.

12 Q That request, as you used the term, was pursuant
13 to an informal hearing on Rule R-111A, wasn't it?

14 A That's correct.

15 Q At which the United States Geological Survey and
16 the New Mexico Oil Conservation Commission and the potash
17 people were present?

18 A That is correct.

19 Q And that is the basis of why you moved your loca-
20 tion from the location that you had in Case 5891?

21 A That hearing was held last May and the potash --
22 or at least Kerr McGee, who has the minerals in that parti-
23 cular area, the potash mineral leases, gave us approval, and
24 this is part of our exhibits.

25 Q In fact, it's Exhibit Five, is it not?

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1 A. That's correct.

2 Q And that's within one hundred feet of the Texaco
3 well, is what they --

4 A. Yes. They said that they would allow us to drill
5 within one hundred feet of the Texaco well.

6 Q And I believe USGS concurred on that, did they
7 not, were the mining people at that hearing?

8 A. Yes, they were.

9 Q All right, let's go on with what you're proposing
10 here, and let's refer to Exhibit Two and tell me what that
11 depicts and what's the importance? This appears to be a
12 blown-up version of Exhibit One, is it not?

13 A. Yes. It shows the target area of each of the
14 wells. It shows the surface location of each of the wells
15 on a plat. I might point out the fact that we intend to
16 drill this well below 4000 feet before we attempt to kick
17 it off, directional drilling.

18 Q That gets well down below the potash level?

19 A. Below the potash, out of interference at all with
20 mining of the potash.

21 MR. STAMETS: Was that Texaco well located 660
22 from the south and east?

23 MR. CHRISTY: It is.

24 MR. STAMETS: Okay, thank you.

25 A. So, our location for the Number One will be one

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1 hundred feet north of the well. Our location for the Number
2 Two will be one hundred feet west of the well.

3 Q Is there anything else in particular on Exhibit
4 Two other than the locations that you're showing?

5 A No.

6 Q All right, what about Exhibit Three, please, sir?
7 What's the purpose of Exhibit Three?

8 A Exhibit Three was also prepared Whipstock, or
9 Eastman Whipstock, and it depicts the procedure that we may
10 comply with on this well. We plan to drill at the present
11 time to 7500 feet before we kick off from the vertical.

12 Q That is variable; it's just below 4000?

13 A Yes, this is something -- this is not a specific
14 plan; this is something we attempt to show that we can do.
15 We might want to, if the hole is deviating, we will be taking
16 surveys before we reach this depth. If we find that we need
17 to deviate the hole prior to this, in other words, if it's
18 going the wrong way, we might want to start early. So this
19 is not a filed plan on our procedure. We may deviate from
20 this procedure, but as of now, we plan to drill below 4000
21 feet and deviate the hole. That's about all I can say.

22 This is an example of what we possibly may do.

23 Q All right, sir. I notice your TD shown on Exhibit
24 Three is about 13,500. Could you really go below that?

25 A Yes, that's TVD --

1 Q Yeah.

2 A True Vertical Depth. Our hole, in further con-
3 sultation with Eastman, I find that with this particular plan
4 of drilling, we will be bottoming up approximately 14,401
5 feet, and you'll note in our application, we applied for TD
6 of approximately 14,000, so it will be -- that will be a
7 variable depth. When we start drilling, I guess we ought to
8 send in an amended location -- or an amended depth on that
9 particular --

10 Q Find out where you get to. Now, what -- let's
11 talk a little bit more about this whipstocking; that's kind
12 of an expert TD. Do you have anything from an expert on
13 that, particularly in reference to cost?

14 A Yes, we have. That's Exhibit Four.

15 Q All right, sir.

16 A With the plan that we presented of deviating it
17 at 7500 feet and building our angle on up to approximately
18 thirty-two degrees, our cost will average about \$700 a day
19 in excess of all our other costs; this is just the cost of
20 deviating the hole. So we are going to an additional expense
21 to deviate this hole. We wished in the beginning to drill
22 the well straight down on our particular lease, vertically,
23 and alleviate any problems we might have with cost, additional
24 cost, but this interfered with the use of the potash and we
25 have thrashed this out with the potash people and they've

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1 agreed that we could drill this well, as I said, this hundred
2 feet away from Texaco, the Texaco Number One Audi-Richards.

3 Q In your opinion will the granting of this appli-
4 cation prevent waste?

5 A Yes.

6 Q Were Exhibits One through Five prepared by you or
7 under your -- One through Four prepared by you or under your
8 direct supervision?

9 A Exhibits -- yes, right, they all were.

10 MR. CHRISTY: I think that's all, Mr. Examiner.

11 MR. STAMETS: Are there any questions of the wit-
12 ness?

13 MR. KELLY: Yes.

14 MR. STAMETS: Mr. Kelly.

15

16 CROSS EXAMINATION

17 BY MR. KELLY:

18 Q Do you acknowledge that Texaco has the lease on
19 this southwest quarter?

20 A Yes.

21 Q And what authority or right are you claiming to
22 be able to drill on this particular acreage?

23 A We have a -- we have a letter from the surface
24 owner, which we have acquired from them the rights to a loca-
25 tion to drill on their surface. We also have a lease on

1 potash mineral.

2 Q But you are not going after potash by this --

3 A Nope. No.

4 Q Your --

5 A Our rights to drill are our rights to drill a well
6 on our lease, and we're being drained at the time, and we
7 have no way of drilling straight down.

8 Q But you are not proposing to drill on your lease,
9 is that correct?

10 A We will bottom up on our lease.

11 Q Yeah. Now, and as I understand your testimony,
12 a better location for you, if you couldn't drill actually on
13 your lease, would be as close as you could get to the north-
14 west corner of this quarter section, is that correct?

15 A Yeah, it would be best. In fact, at this first
16 hearing that we had, we proposed to drill out of the north-
17 west quarter -- excuse me, the northwest part of the southeast
18 quarter, and that was granted by the Oil Conservation Com-
19 mission.

20 Q Now, at that first hearing, did you produce or
21 was there produced as an exhibit, the production plan of the
22 potash industry?

23 A No.

24 Q Have you had any discussions with Texaco about
25 getting their consent for drilling this well?

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1 A. Mr. Snoddy's had some discussions. I have not had
2 any.

3 Q. If I were to show you a copy of -- have you ever
4 seen the potash production plan?

5 A. Yes. See, we had a hearing, an informal hearing
6 in May in which we --

7 Q. But Texaco was not at that hearing?

8 A. No.

9 Q. Now, if you drill a well one hundred feet -- first,
10 let me clarify. Are you saying you're going to use one
11 location for both wells?

12 A. We will be drilling a well north one hundred feet
13 and a well west one hundred feet of the Texaco well.

14 Q. And so you're -- are you able to state with cer-
15 tainty that your location will be one hundred feet on either
16 side?

17 A. Yes.

18 Q. Okay. Now, the unit that will be necessarily
19 placed on both drilling and production is actually taller
20 than a hundred foot on both of those locations.

21 A. Are you talking about the drilling rig?

22 Q. Yes, the drilling rig and --

23 A. Yes, it certainly is.

24 Q. So if it fell over it could fall into the Texaco
25 operation.

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1 A. Possibly.

2 Q And, of course, a location one hundred foot away
3 if there was any fire on any of the three units, could easily
4 spread and catch the other two.

5 A. That's very possible.

6 Q And then, of course, you have guy wires and things
7 like that that would spread out over that area.

8 A. I won't be easy.

9 Q It's not a good location for either you or Texaco,
10 is it?

11 A. No, it is not. It is the best location that we
12 can work out with them.

13 Q You're saying it's the best location as far as
14 the potash people are concerned.

15 A. Well, the potash people, the BLM, the USGS, they
16 were all here and this is what the potash people said they
17 would tolerate, and the BLM said that they would go along
18 with it.

19 Q Now, you also recognize that drilling that close,
20 you could have migration of your drilling fluids into the
21 Texaco well.

22 A. Not if the Texaco well has been cemented in the
23 proper procedure.

24 Q Well, if you don't -- if you're drilling -- to the
25 extent you're drilling vertically within a hundred feet, when

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1 you get below their cement, then you do have the potential
2 for migration and damage, isn't that correct?

3 A. Yes. It is our understanding that the Texaco well
4 has cement tied in; they've cemented their well. Texaco did
5 cement that well and case it completely through that parti-
6 cular area; at least through the potash. I've forgotten now
7 just how far back.

8 Q Well, the best evidence of that would be the
9 diagrammatic sketch of the well itself.

10 Let me show you what I will mark Texaco's Exhibit
11 A. Mr. Examiner, shall I use an alphabet or a letter to keep
12 it straight? You have numbers on the Snoddy exhibits.

13 MR. STAMETS: That will be -- the alphabet will
14 be fine.

15 MR. KELLY: Okay. A.

16 Q (Mr. Kelly continuing.) Can you identify that for
17 me? Is that something you've seen before?

18 A. Yes, sir, it looks like that's the same map that
19 was presented by the Kerr McGee Company at that hearing.

20 Q And this particular quarter section shows your
21 original proposal location, is that correct?

22 A. Correct.

23 Q Now, as I understand it, the tunnels of the proposed
24 potash development plan are shown on that plat, is that cor-
25 rect?

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1 A. Correct.

2 Q. And they show a tunnel that would go right along
3 the south border of this particular quarter section.

4 A. Correct.

5 Q. So it is a fact that a location at the very center
6 of that quarter section would be farthest removed from any
7 tunnels, at least?

8 A. Yes. Well, you're saying farthest removed; possibly
9 even farther north than this.

10 Q. Well, certainly as you go toward the center you're
11 getting farther away from the tunnel?

12 A. Right.

13 MR. KELLY: Mr. Examiner, I would object to, and
14 ask that the testimony of this witness be stricken on the
15 grounds that there is no showing that the -- that Snoddy has
16 any authority or right to even drill on this acreage. He's
17 admitted that it's under lease to Texaco and there's been
18 no offering of any evidence to show that they have the right,
19 and certainly --

20 THE WITNESS: May I address myself to that, Mr.
21 Examiner?

22 MR. STAMETS: As soon as Mr. Kelly's through.

23 THE WITNESS: Excuse me, I thought you were, Mr.
24 Kelly.

25 MR. KELLY: Also, though the exhibits have been

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1 offered, I would object to the introduction of Exhibit Number
2 Five as being absolute hearsay. We were not parties to any
3 of these meetings. It's a letter from someone who is identi-
4 fied as Mark Adams to Mr. Christy, containing conclusions
5 and contentions about damage to the potash area, and I think
6 even under the liberal rules of the Oil Conservation Commis-
7 sion would be considered rank hearsay,

8 But, as I say, it hasn't been offered, so maybe
9 I'm a little bit premature.

10 MR. STAMETS: Mr. Christy?

11 MR. CHRISTY: Mr. Examiner, I think correctly the
12 Commission has no authority, nor should it concern itself,
13 with whether or not a party may lawfully be on the surface;
14 however, we do have the surface leased. I don't know whether
15 we have it with us, but we can produce it.

16 Secondly, Texaco seems to be complaining that they
17 have an oil and gas lease. I would call counselor's attention
18 to the case in which Texaco lost it in the United States
19 Supreme Court. It's Russell versus Texas Company, 238
20 Federal 2d, 636, cert denied, 354 U.S. 938. That case
21 directly holds that you may get a surface location where the
22 oil and gas operator already has an oil and gas lease, in
23 that case, Texaco. Someone else got a surface location and
24 they may drill if they have the permission of the surface
25 owner; however, they cannot bottom and produce off of the oil

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1 and gas lease, which Texaco had, which we do not intend to do.

2 But, again, I think the Commission has no -- no
3 reason to get into the question of what the law is with re-
4 spect to who can drill and who can't drill. This has to do --
5 your duty is to prevent waste and protect correlative rights.
6 Your duty has to do with the sub-surface. You're not involved
7 other than a lawful surface location. You're involved with
8 the production of hydrocarbons, which has nothing to do with
9 the surface location. That's all.

10 MR. STAMETS: Mr. Kelly, your objections are denied.

11 MR. KELLY: Including my evidentiary objection?

12 MR. STAMETS: Yes.

13 MR. KELLY: You're going to allow in this letter?

14 MR. STAMETS: We haven't had any request for ad-
15 mission of the exhibits at this point.

16 MR. KELLY: I have no further questions.

17
18 CROSS EXAMINATION

19 BY MR. STAMETS:

20 Q Mr. Whitten?

21 A Yes, sir.

22 Q Does this proposal that you've made here for
23 drilling additional wells in proximity to an existing well,
24 does that differ substantially from, say, situations which
25 may exist in areas in New Mexico, like the Justis area, where

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1 there may be many wells drilled from the same location, same
 2 general area?

3 A. I'm not all that familiar with the Justis pool,
 4 but I do know there are wells in New Mexico, and I can't re-
 5 call which ones, that are deviated for this purpose, same
 6 purpose that I'm requesting.

7 Q. And when you've been out in the field have you seen
 8 where wells have been drilled within a hundred feet of one
 9 another?

10 A. Oh, yes.

11 Q. So this is not an uncommon operation as to surface
 12 locations?

13 A. No, sir, it is not.

14 Q. Now, Mr. Kelly asked you about migration of the
 15 drilling fluids to the Texaco well, and it wasn't clear to
 16 me whether he was referring to the producing formation or
 17 not. What zone, to your knowledge, is the Texaco well pro-
 18 ducing from?

19 A. It's producing from the Pennsylvanian.

20 Q. Pennsylvanian, how deep?

21 A. Oh, approximately -- I have a cross-section here,
 22 if you'll allow me time to find it. I can give you the
 23 depth. The Texaco Richards produces from the information
 24 I obtained at the Oil Conservation Commission office in
 25 Hobbs, they're producing from approximately 13,000 feet.

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1 Q Okay, when your wells are drilled through the zone
2 the Texaco well is producing from, approximately how far away
3 from the Texaco well will these --

4 A We hope to be very close to our target.

5 Q If you look at Exhibit --

6 A Our target will be in the approximate center of
7 the northeast quarter of Section 25.

8 Q If you look at Exhibit Number Three and just, say,
9 go down to 13,000 feet, could you estimate about how far away
10 from the Texaco wellbore your wellbore would be?

11 A Well, our well will be approximately 3200 feet
12 away at TD, 32-something; 3267, according to the plot by
13 Eastham Whipstock.

14 Q In your opinion is there any serious -- any real
15 danger of drilling fluids migrating through the producing
16 interval between your well and the Texaco well?

17 A No, sir. You see, you're well aware of in this
18 particular area, some of these wells are drilled as close as
19 660 from the line, and our bottom location will be 1320 from
20 the line. We hope to bottom up right there. We're actually
21 drilling farther north, or farther away from the Texaco well
22 than we normally are obligated if we were drilling vertically.
23 If we were drilling vertically, or were able to drill on our
24 lease without involving the potash deposits, we would pro-
25 bably stake our location at 660 from the line.

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1 Q Will the casing and cementing program on this well,
2 while it might be traveling through formations which Texaco
3 would be allowed to produce under their oil and gas lease,
4 will the casing and cementing program be such as to prohibit
5 or prevent the migration of fluids from any formation pene-
6 trated on Texaco's lease?

7 A We're obligated to set pipe below the potash and
8 tie in our cement with our surface pipe. Because of the
9 presence of the Seven Rivers formation in here and the lower
10 circulation zone, and so forth, we felt that we should drill
11 to approximately 5100 feet and this is in our application,
12 before we set casing, and when we do set casing we will cer-
13 tainly cement to tie in to the surface pipe.

14 So everything above 5100 feet will be sealed off
15 as completely as possible. Below 5100 feet to the TD we are
16 not obligated to tie in our cement and there's possible
17 migration of fluids; however, the point is that when we get
18 down to producing horizons in the Texaco Number One Audi-
19 Richards, we will be well within our -- on our lease. There
20 will be no violation of their rights.

21 Q If there were any potentially productive horizons
22 on Texaco's lease between wherever you set your intermediate
23 casing and total depth, would Mr. Snoddy protect those with
24 cement when he sets his production casing?

25 A We'd rather not.

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1 Q That wasn't the question I asked. The question
2 is would you?

3 A If we are ordered, yes.

4 Q Now, Mr. Whitten, if I understand your testimony
5 correctly, the locations that you have picked, were picked
6 in consultation with the potash company in the area and the
7 U. S. Geological Survey and the Commission staff such as to
8 permit you to drill to and develop the acreage in the north
9 half of this section and the southwest quarter of this section
10 and these are the only locations which resulted from that
11 meeting, is that correct?

12 A That is correct.

13 MR. STAMETS: Any further questions of the wit-
14 ness?

15 MR. RAMEY: Let me ask a question.

16
17 CROSS EXAMINATION

18 BY MR. RAMEY:

19 Q Mr. Whitten, back to the locations, you initially
20 requested to drill these wells from the extreme northwest
21 quarter of the southeast quarter?

22 A That is correct and we were granted approval by
23 the Commission.

24 Q By the Oil Commission but then the potash people
25 involved objected to this location because it would do damage

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1 to potash?

2 A. Yes.

3 Q. And create waste in potash?

4 A. Right.

5 Q. And these were the only locations that were agree-
6 able to the USGS and the potash people?

7 A. That is correct.

8 Q. So this is the -- essentially these locations are
9 the only available locations you have in the area to develop
10 your area?

11 MR. KELLY: I will object to that question on the
12 grounds that it's absolutely beyond the pale that it's the
13 only available location. This Commission itself has the
14 jurisdiction to decide which are the available locations, and
15 that any decision that was made at a hearing other than a
16 public hearing would be totally improper. It seems to me
17 that we're pre-judging the application by that question.

18 Q. (Mr. Ramey continuing.) You did attend an arbi-
19 tration meeting between yourself, Kerr McGee and USGS, and
20 the Director of the Oil Conservation Commission sometime in
21 May?

22 A. Yes, sir.

23 Q. And these locations were at that time approved --

24 A. That's correct.

25 Q. -- verbally by both the USGS and the potash com-

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1 pany?

2 MR. KELLY: Again, I'll object; it's hearsay and
3 it's improper on the grounds I previously stated.

4 MR. STAMETS: I believe, my understanding of this
5 is that the witness has answered these questions, all ques-
6 tions related to the locations, as he remembers the meeting,
7 and Mr. Whitten, you were a participant in that meeting, were
8 you not?

9 A. I was, yes, sir.

10 MR. STAMETS: And all of your answers are from
11 your knowledge of that meeting?

12 A. Yes.

13 MR. STAMETS: Objections denied. Any other ques-
14 tions?

15 RE CROSS EXAMINATION

16 BY MR. STAMETS:

17 Q Mr. Whitten, do you have any indication from the
18 Geological Survey that they will approve applications to
19 drill?
20

21 MR. KELLY: Once again I'm objecting, it's pure
22 hearsay on behalf of Texaco. The basis of the hearsay ob-
23 jection is the fact that one of the parties to this applica-
24 tion was not present at the conversations.

25 A. In answer to your question, they will not object.

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1 MR. STAMETS: I won't -- I'll deny your objection
2 to my question.

3 Would you answer the question, please.

4 A. They, no, the people involved in that meeting,
5 the USGS and Kerr McGee, all agree that this is the only
6 location. It's a double usage location; it had to be hammered
7 out as to how we would manage to protect our rights, and this
8 is the only way that Kerr McGee would come across and say
9 this, you can do this and you'll be able to protect your
10 rights and we'll be able to protect our rights. It's as
11 simple as that.

12 Q (Mr. Stamets continuing.) So your affirmative
13 answer again goes back to this meeting which you attended?

14 A. Correct.

15 MR. STAMETS: Okay, any other questions of the
16 witness?

17 He may be excused.

18 MR. CHRISTY: We offer in evidence Applicant's
19 Exhibits One through Four inclusive.

20 MR. STAMETS: Do you wish to renew your objection,
21 Mr. Kelly?

22 MR. CHRISTY: He didn't object to One through Four.

23 MR. KELLY: No, I don't.

24 MR. STAMETS: I'm sorry. I wasn't paying attention
25 One through Four, One through Four will be admitted.

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1 MR. CHRISTY: We offer in evidence Applicant's
2 Exhibit Five.

3 MR. KELLY: I will renew my objection to that.

4 MR. STAMETS: The objection is sustained and Ex-
5 hibit Number Five will not be admitted in evidence.

6 MR. CHRISTY: We accept the honorable administrative
7 tribunal's ruling, and we have nothing further for the appli-
8 cant.

9 PAUL H. DAVIS
10 being called as a witness and having been duly sworn upon his
11 oath, testified as follows, to-wit:

12
13 DIRECT EXAMINATION

14 BY MR. KELLY:

15 Q Would you state your name, position, and by whom
16 employed?

17 A Yes, my name is Paul H. Davis. I'm a Division
18 Proration Engineer for Texaco, Incorporated, Midland, Texas.

19 Q Have you previously qualified as an expert witness
20 in your field before this Commission?

21 A No, sir, I have not.

22 Q Would you give the examiner --

23 MR. CHRISTY: We'll admit the qualifications of
24 the witness.

25 MR. STAMETS: I'd like to have them on the record,

1 please.

2 Q (Mr. Kelly continuing.) Would you go ahead and
3 give a brief summary of your professional and educational
4 background?

5 A Yes. I'm a graduate Petroleum Engineer from Okla-
6 homa University and I've worked for Texaco approximately
7 sixteen years, both in field operations and in reservoir work.
8 I've also worked in unitization and proration work for ap-
9 proximately two years each.

10 Q Does your area of supervision include the Audi-
11 Richards Unit?

12 A Yes, sir, it does.

13 Q And the subject well?

14 A Yes, sir.

15 MR. KELLY: I would tender the witness as an ex-
16 pert in the field of petroleum engineering.

17 MR. STAMETS: What year was your degree?

18 A 1961.

19 MR. STAMETS: The witness is considered qualified.

20 Q (Mr. Kelly continuing.) Mr. Davis, can you tell
21 us what Texaco's objection is to the proposed application as
22 far as an engineering aspect both as to surface and sub-surface
23 problems?

24 A Yes, the location is a hundred feet away from
25 Texaco's existing well, and we feel like this offers an undue

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1 hazard to Texaco's well in several respects.

2 First of all, the height of the pulling unit, or
3 a workover unit, on either of the wells is approximately 122
4 feet, and the hundred foot distance between the surface loca-
5 tion as proposed would not allow enough distance should this
6 rig fall over.

7 The second danger, as far as surface considerations,
8 are the danger of fire on either of the two proposed wells or
9 on Texaco's well in trying to control that fire in proximity
10 to other wells.

11 Insofar as sub-surface is concerned, I think it's
12 possible to -- for the surface casing on the two wells and
13 the surface hole to come together. I calculate this at 4000
14 feet with a two degree deviation as 140 feet horizontal dis-
15 tance. Now, should Texaco's well deviate in the opposite
16 direction and toward the proposed location, this could be
17 as much total deviation as 280 feet to the two wells, and as
18 such we feel like a hundred foot surface location would be
19 too close.

20 Also, we feel that at a hundred feet, because of
21 some of the unprotected casing that we have below our inter-
22 mediate casing, that there could be fluid migration across --
23 drilling fluid migration from the proposed location to
24 Texaco's well.

25 Q Now, in that connection, have you prepared what

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1 has been marked Texaco's Exhibit B?

2 A. Yes, sir, I have.

3 Q. Okay. Referring to Texaco's Exhibit B, would you
 4 illustrate what you mean by that?

5 A. Yes, sir, there are two intervals, one between the
 6 13-3/8 casing set at 2753 and the 9-5/8 casing set at 8130
 7 feet, part of which is unprotected by cement.

8 Also between the 9-5/8 casing and the 7 inch casing
 9 there is an interval that's unprotected by cement. It's
 10 shown on this diagram the top of the cement is 11,790 feet.

11 Q. Okay, now your calculation of two percent deviation
 12 is a two percent deviation, say, at 4000 feet, would that
 13 be unusual or is that a fairly normal range of deviation?

14 A. Two degree deviation would not be considered to
 15 be excess.

16 Q. And it's possible that Texaco itself has a two
 17 degree deviation in their well?

18 A. Yes, sir, it's possible.

19 Q. Now, so if -- based upon your calculation of 140
 20 feet, what would be the minimum safe distance for that -- for
 21 the Snoddy rig?

22 A. Texaco feels like a minimum safe distance would be
 23 300 feet.

24 Q. All right.

25 A. Between surface locations.

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1 Q Okay, now, referring you to what has been marked
2 Texaco's Exhibit A, what's been identified as the production
3 plan of the potash industry, do you have an opinion, based
4 upon that plan of where the best location would be as far as
5 being farthest away from causing any problems with the potash
6 industry?

7 MR. CHRISTY: I'm going to object to the question
8 on the grounds that there's no showing that this witness is
9 an expert in potash mining. We admit he's an expert in oil
10 and gas, but his expertise, I do not know goes to potash and
11 location of where a well, or corridors and the columns, and
12 so forth, should be. I don't think he's qualified to answer
13 that question.

14 MR. STAMETS: I'm going to hear the response before
15 I consider your objection.

16 Q (Mr. Kelly continuing.) All right, go ahead.

17 A Yes, sir. Based on the map that has been furnished
18 us, the potash corridors and the mining area around the south-
19 east quarter of the Section 25 would adjoin it on the north
20 and on the west and on the south, and since all of that area
21 would be eventually exploited for potash, it would appear to
22 us that the center of the southeast quarter would be a better
23 location insofar as protection of the potash owners.

24 Q And that location would be how far away from
25 Texaco's well?

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1 A. This location would be 933 feet.

2 Q. And it would also be closer to the target location
3 of Snoddy, right?

4 A. Yes, sir, it would be.

5 Q. And presumably, then, would be cheaper as far as
6 directional drilling?

7 A. Yes, sir, I'm sure it would.

8 MR. CHRISTY: Renew the objection.

9 MR. STAMETS: The objection is sustained and I
10 would like the response stricken from the record.

11 Q. (Mr. Kelly continuing.) Now, this Texaco Well is
12 in the Audi-Richard Unit, is that correct?

13 A. No, sir.

14 Q. What is the name of the unit?

15 A. The Little Eddy Unit.

16 Q. Little Eddy Unit?

17 A. Yes, sir.

18 Q. And that is subject to a unit agreement, is that
19 correct?

20 A. Yes, sir.

21 Q. And is that -- is the unitized area all -- every-
22 thing below the surface?

23 A. Yes, sir, it is.

24 Q. Okay. In your opinion would the granting of this
25 application at the proposed location endanger the Texaco --

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1 Texaco's existing well and possibly cause an impairment of
2 Texaco's rights in that well, and damage that well?

3 A. Yes, sir, I feel that it would for the reasons
4 previously stated.

5 Q And in your opinion would the -- would a location
6 farther away, at least a minimum of three hundred feet, give
7 Texaco better protection so that their well would not be en-
8 dangered?

9 A. Yes, I think it would give better protection, not
10 only to ours, but to Mr. Snoddy's wells.

11 MR. KELLY: All right, I have nothing further from
12 this witness.

13 I would move the introduction of Texaco's Exhibits
14 A and B.

15 MR. CHRISTY: No objection.

16 MR. STAMETS: The exhibits will be admitted.

17 Any questions of the witness?

18
19 CROSS EXAMINATION

20 BY MR. CHRISTY:

21 Q Mr. Davis, do you know what the deviation is in the
22 Texaco well?

23 A. No, sir, I do not.

24 MR. CHRISTY: Thank you very much, sir.

25 MR. STAMETS: Does that conclude your cross examin-

1 ation?

2 MR. CHRISTY: Yes, sir.

3 MR. STAMETS: Okay.

4

5 CROSS EXAMINATION

6 BY MR. STAMETS:

7 Q Mr. Davis, have you drilled a number of wells or
8 supervised the drilling of a number of wells in your time with
9 Texaco?

10 A Yes, sir, I have.

11 Q Have you ever supervised the drilling of a well
12 as close as a hundred feet to an existing hole?

13 A No, sir.

14 Q Have you ever seen a location where holes were
15 drilled within a hundred feet of one another?

16 A Yes, sir. I've seen places where Texaco has drilled
17 that close to their wells.

18 Q How deep were those wells, do you recall?

19 A The deeper zones on them were as deep as 12,000.

20 Q How about the shallower wells?

21 A Five to six thousand.

22 Q Do you know of your own knowledge if Texaco took
23 any special precautions in drilling those wells?

24 A No, sir. I think they just assumed a business risk
25 and did it.

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1 Q What would you normally expect when holes are
2 drilled close together like that, would they tend to auto-
3 matically deviate toward one another or would they more likely
4 deviate in the same direction, tend to parallel one another?

5 A I feel like that would be dependent upon the
6 geology. If the structure was relatively flat, that they
7 could deviate toward each other, as well as away from. On
8 more steeply dipping beds you might be able to assume that
9 they would dip in the same direction, but in relatively flat
10 areas, such as we have up here, I don't think that would be
11 predictable.

12 Q Have you any experience, or made any observations
13 on which to base your answer? Have you seen any wells which
14 were drilled in relatively horizontal beds that deviated to-
15 ward one another?

16 A Well, to some degree, yes, sir. We've drilled
17 directional wells, which we do have continuous surveys run
18 on those wells, where we do that from the surface to TD. In
19 the areas where those wells deviated -- or were to be drilled
20 straight, now, they did deviate in a random manner, yes, sir.
21 This is in Texas, in Grayson County.

22 Q In this random manner did they deviate toward one
23 another?

24 A Yes, sir, they could.

25 Q To a significant degree?

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- 1 A. Yes, sir.
- 2 Q. How close did they come, do you know?
- 3 A. No, sir, I don't. These wells weren't twin wells;
- 4 they were just wells in the same field.
- 5 Q. So these were not wells that were located within
- 6 a hundred feet of one another?
- 7 A. No, sir.
- 8 Q. So the conditions that were existent at each
- 9 location could have been somewhat different and caused them
- 10 to deviate in the manner that they did?
- 11 A. It's possible; geologically that wouldn't be true,
- 12 but I suppose it's possible.
- 13 Q. Have you heard of any wells in New Mexico that were
- 14 drilled within a hundred feet of another hole that were ac-
- 15 tually drilled into the first hole?
- 16 A. No, sir.
- 17 Q. Where is the top of the cement on the 9-5/8" casing?
- 18 A. There was not a survey run on that and we don't
- 19 know. Our records didn't reflect it.
- 20 Q. Did you make any calculations on where that should
- 21 have come?
- 22 A. No, sir, I did not.
- 23 Q. Do you know the hole size and what was run in that
- 24 hole where you could calculate that?
- 25 A. Yes, sir, if you'll give me just a minute.

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1 Q Okay.

2 A I feel like our hole size would be very close to
3 the size of the largest bit that would fit in that casing,
4 but I don't have that actual size, on those two strings.

5 Q Well, just assume for the moment that it is the
6 largest diameter bit that you could get in there, inside
7 13-3/8" casing, and that you run 2600 feet of neat cement,
8 what kind of fill-up would you expect?

9 A Well, not having done those calculations, I think
10 it would be kind of speculative, but I feel that we would
11 not have come back up 5500 feet with our cement to -- to
12 bring it up back to the intermediate.

13 Q But you don't know if you did or not and you can-
14 not calculate whether -- where the top would be?

15 A Not with the data that I have available to me here,
16 no, sir.

17 Q Okay. To your knowledge is there any productive
18 zone in this well between 8130 feet and 2753 feet?

19 A There have been drill stem tests indicating that
20 oil and gas does occur within this interval, yes, sir.

21 Q What depths?

22 A A drill stem test was taken from 7840 feet to
23 7930 feet, during which interval oil and gas cut mud were
24 taken in as fluid.

25 Q Okay. What about the interval between 8130 feet

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1 and 11,790 feet?

2 A. Yes, sir, there were drill stem tests taken during
3 or in that interval. Drill stem test number three was from
4 9330 feet to 9461 feet. It recovered gas cut mud from that
5 interval.

6 There was a drill stem test number four taken from
7 10,425 feet to 453 feet and recovered gas and oil from that
8 interval. And that would be the last drill stem test down
9 to 11,790 feet.

10 MR. STAMETS: I'd like to have those drill stem
11 tests made a part of the record, if I could, please?

12 MR. KELLY: Can you get those, can you get those
13 furnished?

14 THE WITNESS: Yes, sir, I'm sure we can. I do
15 not have them with me, but --

16 MR. KELLY: We will furnish them as soon as pos-
17 sible, Mr. Examiner.

18 MR. STAMETS: Okay, with the pressures and the
19 recoveries.

20 MR. KELLY: You understand what --

21 THE WITNESS: Yes, sir, I did.

22 MR. KELLY: All right.

23 MR. STAMETS: Are there any other questions for
24 the witness?

25 MR. KELLY: Just one question.

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REDIRECT EXAMINATION

BY MR. KELLY:

Q The examiner asked you if you were familiar with other wells that were drilled within a hundred feet of each other, and I believe you said that you did, other Texaco wells.

Are you aware of any situation where the well has been forced upon an operator?

A No, sir. All the wells I'm aware of have been a single operator and not between operators.

Q And in the normal -- in the normal practice of drilling wells, is a location that close considered desirable? Or is it done because of other considerations, cost considerations?

A It was done because of cost considerations, primarily.

Q It's a decision that is made by an operator in determining his own economic risks, in other words?

A Yes, sir, that and the proration interval insofar as distances between lease lines and wells is concerned.

Q But is it -- can you state whether it is, without those specific considerations, whether it is better practice to have greater distances between drilling units?

A Mechanically and from a risk standpoint, yes, sir, the greater the distance the better -- the lower the risk.

1 MR. KELLY: I have nothing further of this witness.

2 MR. CHRISTY: Could I?

3 MR. STAMETS: Yes, sir.

4

5 RECROSS EXAMINATION

6 BY MR. CHRISTY:

7 Q Mr. Davis, were you on the well when it was drilled,
8 the Texaco well?

9 A No, sir.

10 Q Do you know whether or not a well record was kept
11 and submitted to the OCC?

12 A Yes, sir, I'm sure it was.

13 MR. CHRISTY: I call the Commission's attention to
14 a well record report of February 13th, 1958. It has the data
15 the Commission wanted, except it does not have the pressures
16 that you mentioned in the tests.

17 Q (Mr. Christy continuing.) My last question is,
18 Mr. Davis, would you furnish us with a copy as you furnish
19 the OCC a copy of this data?

20 MR. KELLY: I have no objection.

21 MR. CHRISTY: Thank you very much. That's all.

22 MR. STAMETS: Anything further of this witness?
23 He may be excused.

24 MR. KELLY: We have one more witness.

25

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JACK D. GLENN

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

DIRECT EXAMINATION

BY MR. KELLY:

Q Would you state your full name and by whom employed
and in what capacity?

A Jack D. Glenn, Texaco, Incorporated, in Midland,
as Senior Development Geologist.

Q Have you previously testified before this Commis-
sion and made your qualifications a matter of record?

A Yes, sir.

Q Mr. Glenn, do you have knowledge of the particular
well involved in this application?

A Yes, sir.

Q And can you tell the Commission the present status
of that well?

A Beg pardon?

Q What is the present status of that well? Where is
it --

A It's producing gas from the Pennsylvanian.

Q And it is part of a unit agreement?

A Yes, sir.

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1 Q And that unit includes all sub-surface zones, is
2 that correct?

3 A Yes, sir.

4 Q Can you tell the Commission whether, in Texaco's
5 opinion, there is any danger of -- to other potential zones
6 in the area under your lease from the drilling of these
7 proposed two wells within a hundred feet off from your well?

8 A Yes, sir.

9 Q Go ahead and explain what those dangers are.

10 A There is shallow production in the immediate vici-
11 nity of this area. There are three fields here that produce
12 from the Yates within a radius of about four and a half miles.

13 This is the Salt Lake Field, the Halfway (sic)
14 Field, and the West Teas Field.

15 Although this interval had no shows in the Texaco
16 Number One Audi-Richards, it is a known zone of production
17 in the immediate area.

18 In addition to this, there are other zones that
19 have carried shows in wells in the area. Some of these are
20 down in the Delaware Mountain group, which in the south off-
21 set to it, tested oil. Texaco Number One New Mexico CH had
22 a drill stem test at 6040 to 6165. This well recovered five
23 feet of free oil.

24 There are other zones that have carried shows, as
25 far as sample shows, which the two proposed wells would pene-

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1 trate.

2 Q Now, are you able to give us any calculation of
3 how deep those proposed wells would be when they finally
4 left your lease line?

5 A If you take it on a straight angle basis or going
6 directly from the 4000 feet that they'd previously indicated
7 in the hearing, I notice here, they would deviate from the
8 14,000 feet. This is 10,000 feet that they would go from
9 one position, or their surface location, to their bottom
10 hole. Figure that about halfway to get to the lease line,
11 this will make it somewhere nine to ten thousand feet depth
12 at which they would have crossed the plane of the lease line
13 from the Texaco lease to their lease.

14 Q Then all of these producing zones would be affected
15 that you've mentioned?

16 A The zones that have carried shows and would be
17 within this interval.

18 Q Now, in what way would there be damage to those
19 zones by drilling through them?

20 A In the event of some high pressure-type zone,
21 which is always a possibility, you could encounter a blowout,
22 the dissipation of pressure, which would actually be the
23 energy which would allow us to produce this zone if was
24 productive. There could be lost circulation zones in which
25 there could result in some formation damage.

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1 Q Based upon that risk, then, would it be Texaco's
2 recommendation that no location anywhere in that quarter
3 section be granted?

4 A That is correct.

5 Q In other words, your concern is the geology rather
6 than the surface problems or engineering problems, which
7 could be alleviated by moving it farther away from the pro-
8 posed location?

9 A Yes, sir.

10 MR. KELLY: I have nothing further of this wit-
11 ness.

12
13 CROSS EXAMINATION

14 BY MR. CHRISTY:

15 Q Mr. Glenn, let me show you Applicant's Exhibit Six
16 and see if you can identify for me these producing areas that
17 you're speaking of, with respect to the Texaco lease.

18 Where are these other producing areas that you're
19 speaking of?

20 A The Halfway Field is approximately four and a
21 half miles northwest. The Salt Lake Field is approximately
22 two and a half miles almost due north. The West Teas area
23 is approximately four and a half miles northeast, I believe
24 it is.

25 Q Okay, those are the three you're speaking of, sir?

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1 A. Yes, sir.

2 Q. Now, the north half and the southwest of Section

3 25, which Snoddy plans to bottom in, that's not in the Little

4 Eddy Unit, is it?

5 A. Not to my knowledge.

6 Q. Do you know whether or not Mr. Snoddy's a party

7 to that Little Eddy Unit?

8 A. No, sir.

9 MR. CHRISTY: I offer in evidence Applicant's

10 Exhibit Six.

11 MR. STAMETS: This is the map that you were re-

12 ferring to when you cross examined this witness?

13 MR. CHRISTY: That is correct, sir. I think I

14 identified it in my question.

15 MR. KELLY: No objection.

16 MR. STAMETS: Would this be Six?

17 MR. CHRISTY: Six.

18 MR. KELLY: Five was --

19 MR. CHRISTY: Five was not admitted. The record

20 shows Five so you've got to say Six.

21 MR. STAMETS: Exhibit Six will be admitted.

22 MR. CHRISTY: No further questions. Thank you.

23 MR. KELLY: May I ask just one further question?

24 MR. STAMETS: Yes.

25

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REDIRECT EXAMINATION

BY MR. KELLY:

Q. Though these -- these other pools are in the locations you've described, as I understand it, the section that we're talking about, the quarter section has certainly not been totally tested to determine whether it is productive in those zones, too?

A. This is correct. There is one point of penetration, I believe, on the quarter section in question here.

MR. KELLY: Nothing further.

CROSS EXAMINATION

BY MR. STAMETS:

Q. In a similar type situation, although obviously not the same, occasionally operators will have shallow rights and other operators will have deep rights. When the operator with the deep rights drills through the shallow rights, let's say he has a blowout in the shallow area, do you know what his obligations are to the owner of the shallow rights?

A. No, sir. I would assume that he would have some sort of -- legally bound, though, to pay the operator for the damage that he has done. I don't know this; this is not in my field of expertise.

MR. STAMETS: I'd ask any of the witnesses that

1 we've had today, does anyone have any knowledge of that?

2 No response. Any other questions of this witness?

3 Mr. Ramey, do you have some?

4

5 CROSS EXAMINATION

6 BY MR. RAMEY:

7 Q How deep is the Yates in the Audi-Richards Number
8 One?

9 A I believe it's close to 3000 feet. I could get an
10 exact figure if this is not adequate.

11 Q Is that interval covered with cement in this well?

12 A I don't have a copy of that exhibit.

13 Q You have 13-3/8 at 273? At 2753, I'm sorry?

14 And you show a window from 2753 to some other cement top.

15 A This is the questionable thing here where it indi-
16 cates that we don't have the information here to calculate
17 the height of the cement, how far it came up in that 9-5/8
18 string, which is the string that is set through the Yates.
19 I can't answer your question.

20 Q So this interval could be covered?

21 A It's possible.

22 Q Or it could be open. Okay, where a potential zone
23 shouldn't be covered with cement?

24 A Well, the zone was evaluated and had no shows in
25 the drilling of the Number One Audi-Richards. The prospective

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1 ness as far as one point of penetration on the lease was
2 drilled and essentially condemned at that time, but then this
3 is only one point. Whether or not they met the qualifications
4 of what should be protected or not, I don't know.

5 Q And the Snoddy wells will be within a hundred feet
6 of your well and probably be condemned in this interval also?

7 A. This is possible.

8 MR. STAMETS: Any other questions of the witness?
9 He may be excused.

10 Anything further in this case?

11 MR. KELLY: I'd like to make a statement, if I
12 may.

13 MR. STAMETS: Mr. Kelly.

14 MR. KELLY: Mr. Examiner, this Commission has
15 jurisdiction, as I read the statutes, to do a lot of things
16 other than protect potash, which is the last item, Item
17 Number 17 of 65-3-11. It also has an obligation to prevent
18 waste and protect correlative rights; to require wells to be
19 drilled and operated and produced in such a manner as to
20 prevent injury to neighboring leases or properties; to prevent
21 petroleum oil and natural gas, water, or other things from
22 escaping from the strata in which they are found into another
23 stratum or other strata; and obviously, in this situation,
24 there are competing interests involved between operators,
25 which the Commission seems to be absolutely disregarding,

1 based upon some decision by a party who is not even a party
2 to this hearing, that their potash may be endangered. There
3 is an absolute lack of any testimony, and certainly any proper
4 testimony, as to what danger, if any, is going to be encountered
5 by the potash industry if this well is moved 300 feet or 900
6 feet.

7 On the other hand, the evidence before the Com-
8 mission is that if you move to the center of this section
9 you're going to be farther away from any of their tunnels
10 than you would in any other location, and I cannot see how
11 this Commission, based upon the evidence in this record, can
12 consider conclusions, consultations, or whatever they might
13 have been, that was part of this public hearing, and certainly
14 the evidence is just the rankest of hearsay under any definition
15 of the word, and should not be considered.

16 But even the evidence that was allowed in does not
17 establish by any preponderance of the evidence that there is
18 going to be any -- any damage to the potash industry in this
19 case. And I would point out that that is just one of the
20 considerations the Commission is obligated to regulate and
21 where necessary prohibit drilling or production operations
22 for oil and gas within any area containing commercial deposits
23 of potash where such operations would have the effect unduly
24 to reduce the total quantity of such commercial deposits of
25 potash, or may reasonably be recovered in commercial quanti-

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1 ties, or where such operations would interfere unduly with
2 the orderly commercial development of such potash deposits.

3 That, again, is up to the Commission, and they are
4 not bound by any determination made by any other body as to
5 what may or may not be the result of a particular drilling
6 program. I also would like to point out that based upon the
7 applicant's own information, it would be much better for them
8 to drill in a location that would be better for Texaco, it
9 would be cheaper, it would be closer to their target location,
10 and there was no testimony from their witness that it would
11 in any way endanger the potash industry, and as I understand
12 it, this Commission has already ruled after public hearing
13 that that location is permissible.

14 So, I would submit that based upon the evidence
15 before the -- before this Commission, that it is Texaco's
16 opinion, based on the geological information, that any loca-
17 tion would endanger Texaco's sub-surface rights, but that a
18 minimum either a 300, and at best a 900 foot location, would
19 achieve all of the objectives of protecting the potash and
20 protecting the correlative rights of Texaco and Snoddy.

21 Also, I would again renew my point that there is
22 no showing here that Snoddy has any right to even be on this
23 lease. One of the powers of the Commission is to identify
24 the ownership of oil or gas producing leases, properties, et
25 cetera. That's Item Number 8. So I think the Commission does

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1 have that responsibility and authority, and you can't deter-
2 mine correlative rights until you determine ownership, and
3 Sims versus Meachum, 382 Pacific 2d, 183, says that you've
4 got to determine correlative rights.

5 Thank you.

6 MR. STAMETS: Mr. Christy, do you have a closing
7 statement?

8 MR. CHRISTY: No, thank you, I wouldn't presume
9 to tell this administrative tribunal what its rights are.

10 MR. STAMETS: Anything further in the case?
11 The case will be taken under advisement.

12 (Hearing concluded.)
13
14
15
16
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25

I do hereby certify that the foregoing is
a complete record of the proceedings in
the Examiner hearing of Case No.
heard by me on, 19.....

....., Examiner
New Mexico Oil Conservation Commission

REPORTER'S CERTIFICATE

I, SALLY WALTON BOYD, a Certified Shorthand Reporter,
do hereby certify that the foregoing and attached Transcript
of hearing before the New Mexico Oil Conservation Commission
was reported by me, and the same is a true and correct record
of the said proceedings to the best of my knowledge, ability
and skill.

Sally Walton Boyd
Sally Walton Boyd, C. S. R.

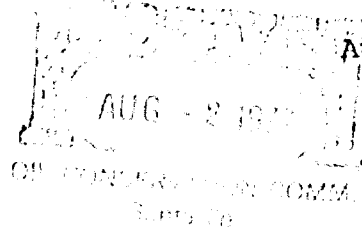
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I do hereby certify that the foregoing is
a complete record of the proceedings in
the Examiner hearing of Case No. 5982
heard by me on July 20, 1977
Richard L. Plam Examiner
New Mexico Oil Conservation Commission

WHITE,
KOCH, KELLY
&
McCARTHY

August 1, 1977



Mr. R. L. Stamets
New Mexico Oil Conservation Commission
P. O. Box 2088
Santa Fe, New Mexico 87501

Re: Case No. 5982 - Application of Sam H. Snoddy
for Directional Drilling & For A Non-Standard
Gas Proration Unit Salt Lake Morrow (Gas Pool)
Lea County, New Mexico

Dear Mr. Stamets:

Enclosed find the drill stem tests you requested
at the hearing of the above referred to case.

Sincerely,

Booker Kelly
BOOKER KELLY

BK:mjq
Enclosure

cc: S. B. Christy, Esq.

*L. C. White
Sumner S. Koch
William Booker Kelly
John F. McCarthy, Jr.
Kenneth Bateman
Benjamin Phillips*

*C. Emery Cuddy, Jr.
Larry C. White*

220 Otero St., P.O. Box 787, (505)982-4374, Santa Fe, N.M. 87501

Attorneys and Counselors at Law

LOCATION	Wildcat				OIL WELL CEMENTING CO				Date	1-19-57
COUNTY	Lea								Ticket No	87340
STATE	New Mexico				HOLE AND TOOL DATA				HOWCO DISTRICT	Hobbs
CONTRACTOR	Parker				Total Depth	6520'	Color Penetration	Top Bottom	Kind of Job	Open Hole
MUD DATA					Top Parker Depth	6522'	Bottom Parker Depth	6535'	Pile	8243.00
Kind	Gel				Casing or Hole Size	12 1/2"	Line or Rig Hole Size	-	Second Parker Assembly	79.00
Weight	9.4				Formation Tested	Bolarware			Safety Joint	15.00
Viscosity	36				Size Drill Pipe	5 9/16" P.H.	Size Drill Collars	-	Extra Packer Charge	
Filter Loss	14 c.c. Filter Rate 2/32 in.				Size Bottom Choke	1"	Size Surface Choke	1"	Boxen	100.00
Est. Gauge Depth Temp.	Galg. 110				Size Hook Wall Packer	-	Size Rings	-	No. Rings	-
Time Tool Open	1 hour				Size & Type Wall Packer	11" D.E.W.P.	No. Packers	2	Total	\$437.00
Time Closed In	20 minutes				Size & Length Anchor	Howco 5 3/4" x 25' & D.C. 7 3/4" x 60' x 2 3/4"			Witnessed By	G.J. Postert
Depth BT. Gauge	6610'				PRD Device No.	3162	Depth	6611'	Blanked Off	YES
BT. P.R.D. No.	35	Blanked Off	no		REMARKS:	Tool opened with a weak blow, dying in 25 minutes. Recovered 90' of drilling mud.				
12	Hr. Clock No. 862									
Pressure Readings	Field		Office Corrected							
Initial Hydro Mud Pressure	3250		3263 p.s.i.							
Initial Flow Pres.	95		101 p.s.i.							
Final Flow Pres.	108		110 p.s.i.							
Closed in Pres.	108		110 p.s.i.							
Final Hydro Mud Pressure	3250		3253 p.s.i.		Amount of Cushion	NONE		All depths measured from	Rotary Table	No. Folders Reproduced

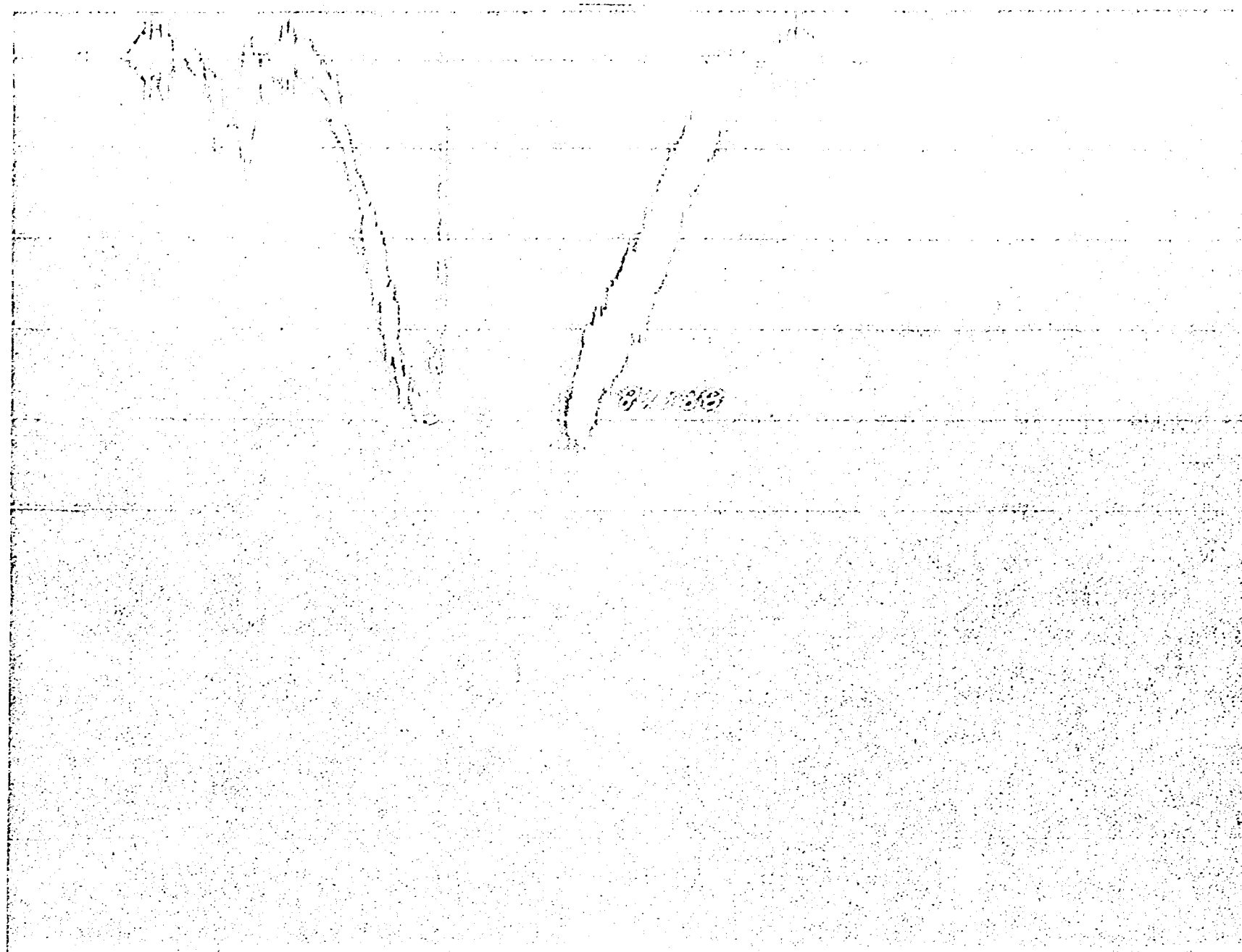
TIME

PRESSURE

Each Horizontal Line Equal to 1000 p.s.i.

LOCATION FIELD Wildcat COUNTY Los STATE New Mexico CONTRACTOR Parker Drilling Company		WELL NO. 3175 SURF NO. 7922 HOLE AND TOOL DATA Total Depth 7930 Top of Hole Depth 7833' Bottom of Hole Depth 7841' Casing or Hole Size 12 1/4" Formation Tested Lower Delaware Size Drill Pipe 5 9/16" F.H. Size Bottom Choke 5/8" Size Hook Wall Packer - Size & Type Wall Packer 11" S.E.W.P. Size & Length Anchor 58' x 6 5/8" Reg. D.C. & 31' x 5 3/4" Perf. PRD Device No. 3175 Depth 7926' Blanked Off yes		DATE 2-2-57 WELL NO. 3175 HOWCO DISTRICT Terminale RIG NO. Cron Hole RIG 6246.00 Casing 79.00 Safety Joint 15.00 Extra Folders Charge 100.00 Total 8460.00 Witnessed By Mr. Postert Tester O.R. Knight	
MUD DATA Kind Salt Base Weight 9.5 lbs./gal. Viscosity 37 Sec. Filter Loss 1 1/2 cc. Filter Cake 2/32 in. Fst. Gauge Depth Temp. Cale. 120 F° Time Tool Open 1 hour, 45 minutes Time Closed In 20 minutes Depth BT. Gauge 7922' BT. P. R. D. No. 115 Blanked Off no Hr. Clock No. 2606		REMARKS: Tool opened with a fair blow, increasing to a good blow throughout test. Recovered 920' of drilling fluid, slightly oil and gas cut mud above tool to T.C. Valve.			
Pressure Readings Initial Hydro Mud Pressure 3960 Initial Flow Pres. 210 Final Flow Pres. 390 Closed in Pres. 1385 Final Hydro Mud Pressure 3925		Office Corrected 4029 p.s.i. 182 p.s.i. 377 p.s.i. 1396 p.s.i. 4029 p.s.i.		Amount of Cussion none All depths measured from Rotary Table No. Folders Reproduced 3	

TIME



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AUDIE RICHARDS

LEASE

1

WELL NO.

3

TEST NO.

THE TEXAS COMPANY

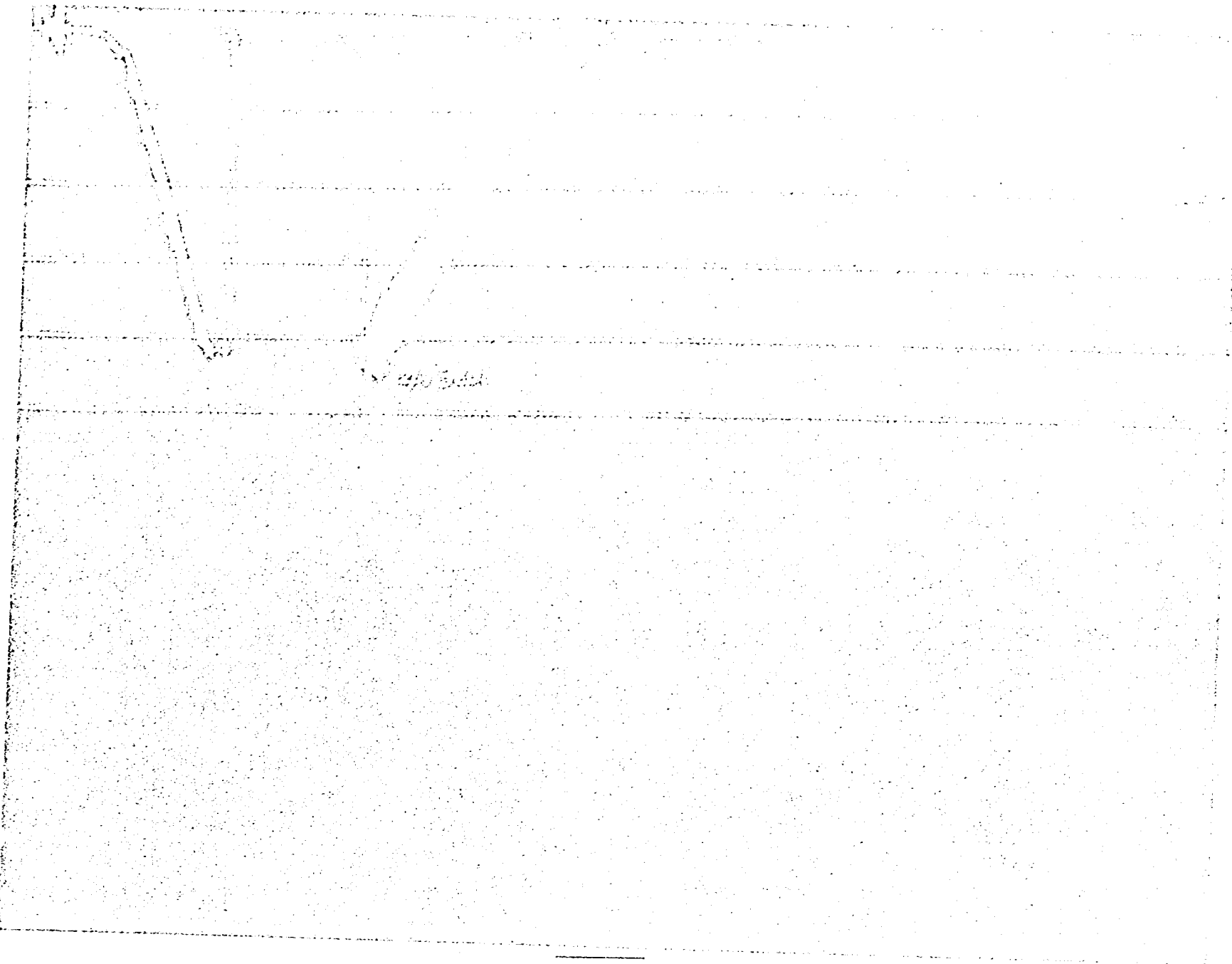
COMPLETION

HOOPS

HOOPS

LOCATION					Date	2-24-57	
FIELD	Wildcat				Ticket No.	11311	
COUNTY	Lea				HOWCO DISTRICT	Seminole	
STATE	New Mexico				Kind of Job	Open Hole	
CONTRACTOR	Parker Drilling Company				Price	\$289.00	
MUD DATA		Total Depth	9461'	Casing Perforations	Top Bottom		
Kind	Chemical Gel	Top Packer Depth	9325'	Bottom Packer Depth	9330'	Second Packer Assembly	79.00
Weight	8.8 lbs./gal.	Casing or Hole Size	3 5/8"	Liner or Pathole Size	3 5/8"	Safety Joint	15.00
Viscosity	35 Sec.	Formation Tested	Sand			Extra Packer Charge	
Filter Loss	12 c. c. Filter Cake 1/32 in.	Size Drill Pipe	4" F.H.	Size Drill Collars	7" x 612'	Jars	Bowen 100.00
Est. Gauge Depth Temp.	Actual 180 F°	Size Bottom Choke	1/2"	Size Surface Choke	5/8"		
Time Tool Open	2 hours	Size Hook Wall Packer	-	Size Rings	-	No. Rings	-
Time Closed In	30 minutes	Size & Type Wall Packer	7" F.S.W.P.	No. Packers	2	Total	\$433.00
Depth BT. Gauge	9452'	Size & Length Anchor	41' x 5 3/4" & 90' x 7" D.C.			Witnessed By	Mr. Postert
BT. P. R. D. No.	75	PRD Device No.	3358	Depth	9455'	Blanked Off	yes
		Blanked Off	no			Tester	Byron L. Moline
Hr. Clock No.		2313					
Pressure Readings		Field					
Initial Hydro Mud Pressure		4290					
Initial Flow Pres.		100					
Final Flow Pres.		100					
Closed in Pres.		495					
Final Hydro Mud Pressure		4290					
Office Corrected		4217 p.s.i.					
Initial Flow Pres.		76 p.s.i.					
Final Flow Pres.		82 p.s.i.					
Closed in Pres.		499 p.s.i.					
Final Hydro Mud Pressure		4217 p.s.i.					
Amount of Cushion		none					
All depths measured from		Drive Bushing					
No. Packer Reproduced		3					

TIME



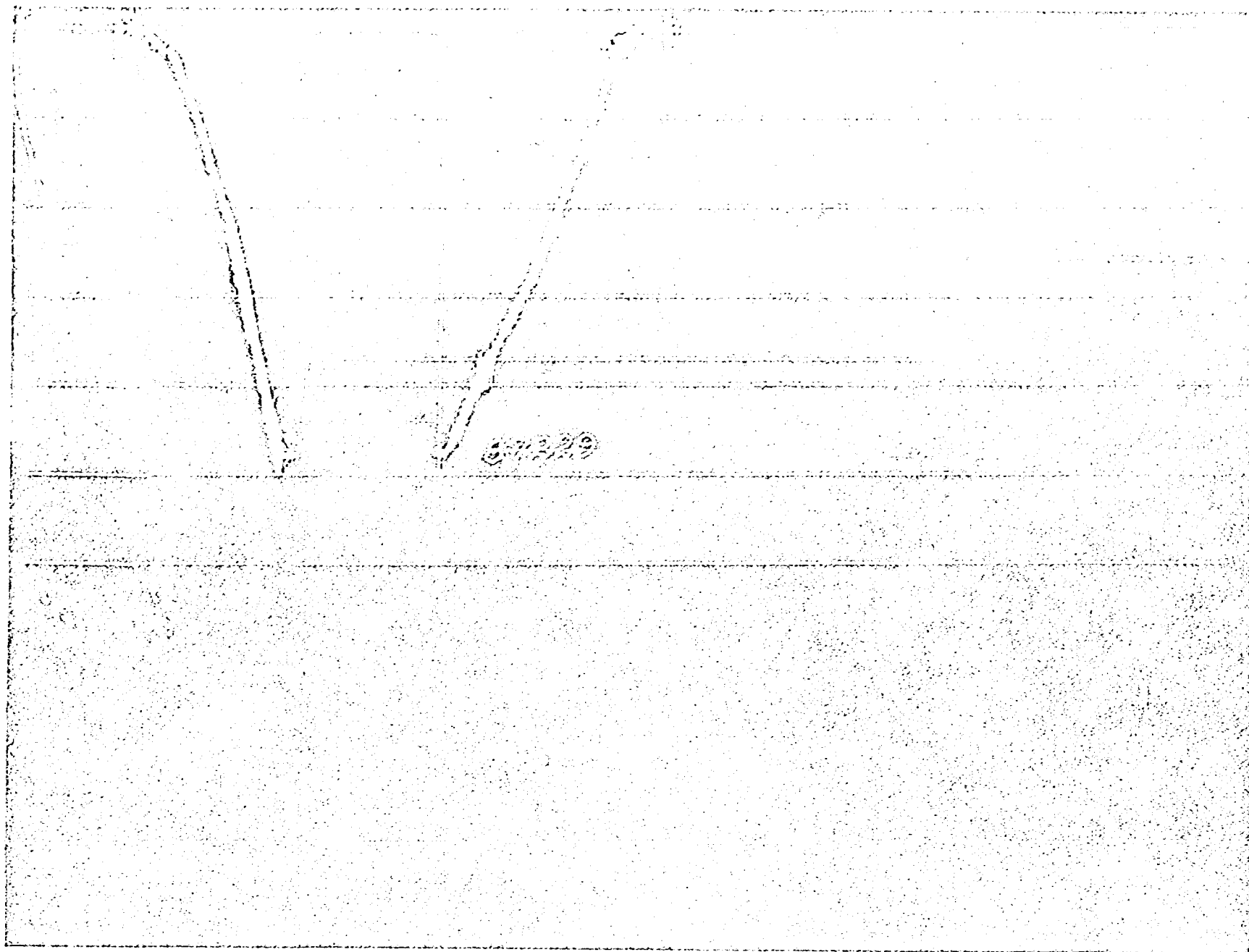
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LOCATION		WELL NO.		DATE		TIME	
WILDCAT- Halfway		10,453'		3-14-57		87219	
LOA		10,453'		HOBBS		HOBBS	
New Mexico		10,453'		Open Hole		8300.00	
Parker		10,453'		10,425'		79.00	
MUD DATA		10,453'		10,425'		15.00	
Gel		10,453'		10,425'		100.00	
8.9		10,453'		10,425'		100.00	
37		10,453'		10,425'		100.00	
9.6		10,453'		10,425'		100.00	
Calc. 190		10,453'		10,425'		100.00	
2 hours, 8 minutes		10,453'		10,425'		100.00	
30 minutes		10,453'		10,425'		100.00	
10,453'		10,453'		10,453'		10,453'	
97		10,453'		10,453'		10,453'	
24		10,453'		10,453'		10,453'	
Initial Hydro Mud Pressure		10,453'		10,453'		10,453'	
Initial Flow Pres.		10,453'		10,453'		10,453'	
Final Flow Pres.		10,453'		10,453'		10,453'	
Closed in Pres.		10,453'		10,453'		10,453'	
Final Hydro Mud Pressure		10,453'		10,453'		10,453'	
Amount of Cushion		10,453'		10,453'		10,453'	
All depths measured from Rotary Table		10,453'		10,453'		10,453'	
No. Folders Reproduced		10,453'		10,453'		10,453'	

REMARKS: Tool opened with a good blow, decreasing to a fair blow at end of test. Recovered 1980' of gas, and 15' of drilling mud with a rainbow of oil.

TIME

PRESSURE

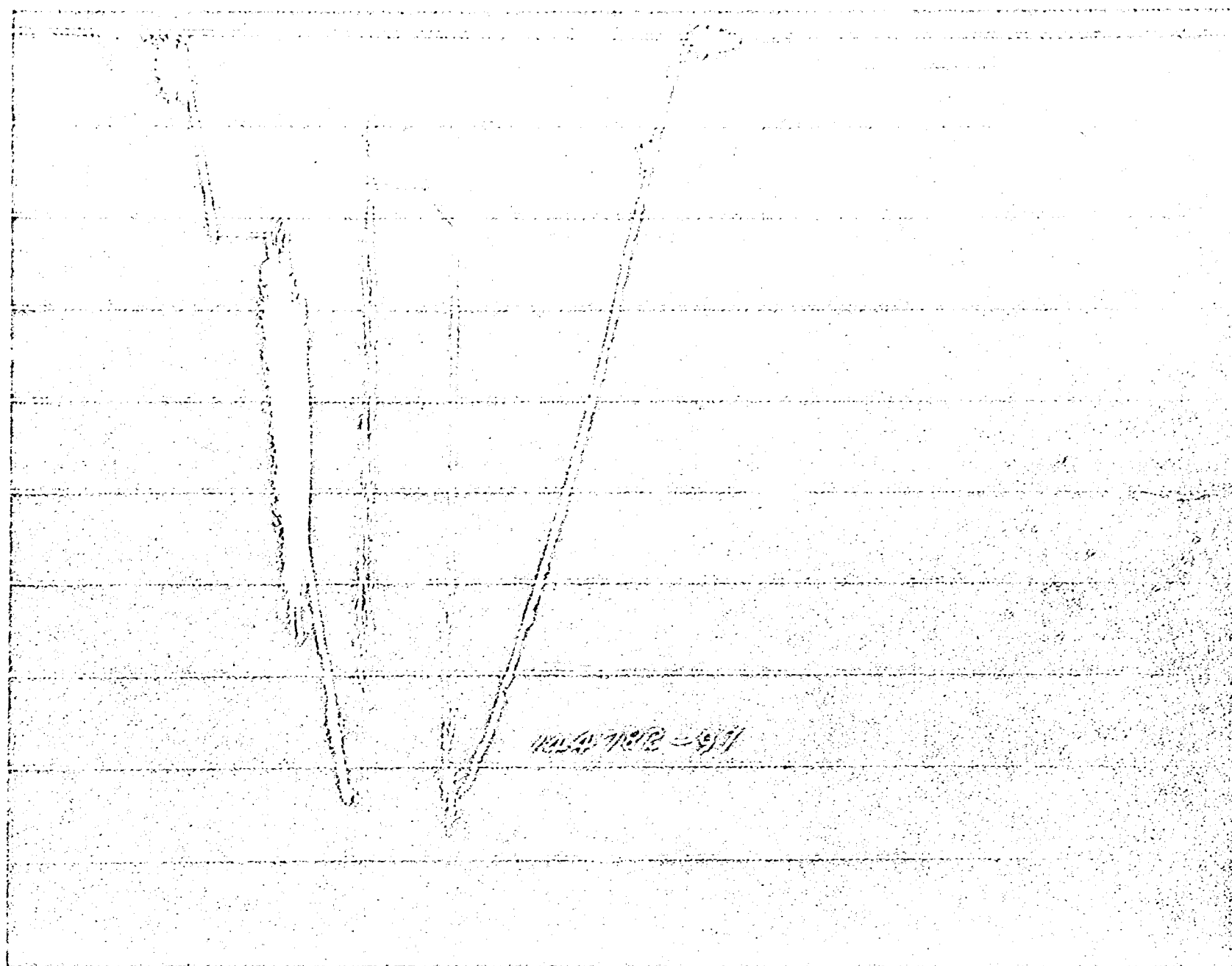


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LOCATION					Date	4-5-37	
WELL	Wildcat				Ticket No.	144782	
COUNTY	Lea				HOWCO DISTRICT	Hobbs	
STATE	New Mexico				Kind of Job	Open Hole	
CONTRACTOR	Parker Drilling Co.				Price	\$347.00	
MUD DATA		HOLE & TOOL DATA			Second Packer Assembly (2) 158.00		
Kind	Line Base	Total Depth	14,062'	Casing Penetration	Top Bottom	Safety Joint	15.00
Weight	11.3 lbs./gal.	Top Packer Depth (1)	13,955'	Bottom Packer Depth (3)	13,965'	Extra Folder Charge	
Viscosity	75 Sec.	Casing or Hole Size	8 5/8"	Liner or Borehole Size	-	Loss	100.00
Filter Loss	1.2 c.c. Filter Cake 1/32 in.	Formation Tested	Mississippian	Size Drill Pipe	1 1/2"	Size Drill Collars	7" x 120'
Est. Gauge Depth Temp.	Actual 178 F.	Size Bottom Choke	3"	Size Surface Choke	1/8"	Total	\$620.00
Tool Open	1 hour	Size Hook Wall Packer	-	Size Rings	-	Witnesed By	-
Time Closed In	30 minutes	Size & Type Wall Packer	8" E.S.A.	No. Packers	3	Tester	R. L. Crites
Depth Top Gauge	13,940' Ft.	Depth Bottom Gauge	14,057' Ft.	Amount of Cushion	3150'	REMARKS: Tool opened with a fair blow for 35 minutes.	
WT. P. R. D. No.	97 Blanked Off NO	WT. P. R. D. No.	132 Blanked Off YES	Recovered 1860' of water cushion, 1250' of very slightly gas cut water cushion and 40' of slightly mud and gas cut water cushion.			
24 Hr. Clock No.	1751	24 Hr. Clock No.	2606				
Pressure Readings	Field Office Corrected	Field Office Corrected					
Initial Hydro Mud Pressure	8325	8345	8515	8456	p.s.i.		
Initial Flow Pres.	1645	1691	1785	1835	p.s.i.		
Final Flow Pres.	1675	1691	1825	1835	p.s.i.		
Closed in Pres.	2115	2103	2185	2223	p.s.i.		
Final Hydro Mud Pressure	8325	8345	8515	8456	p.s.i.		
				All depths measured from Kelly Bushing		No. Folders Reproduced	3

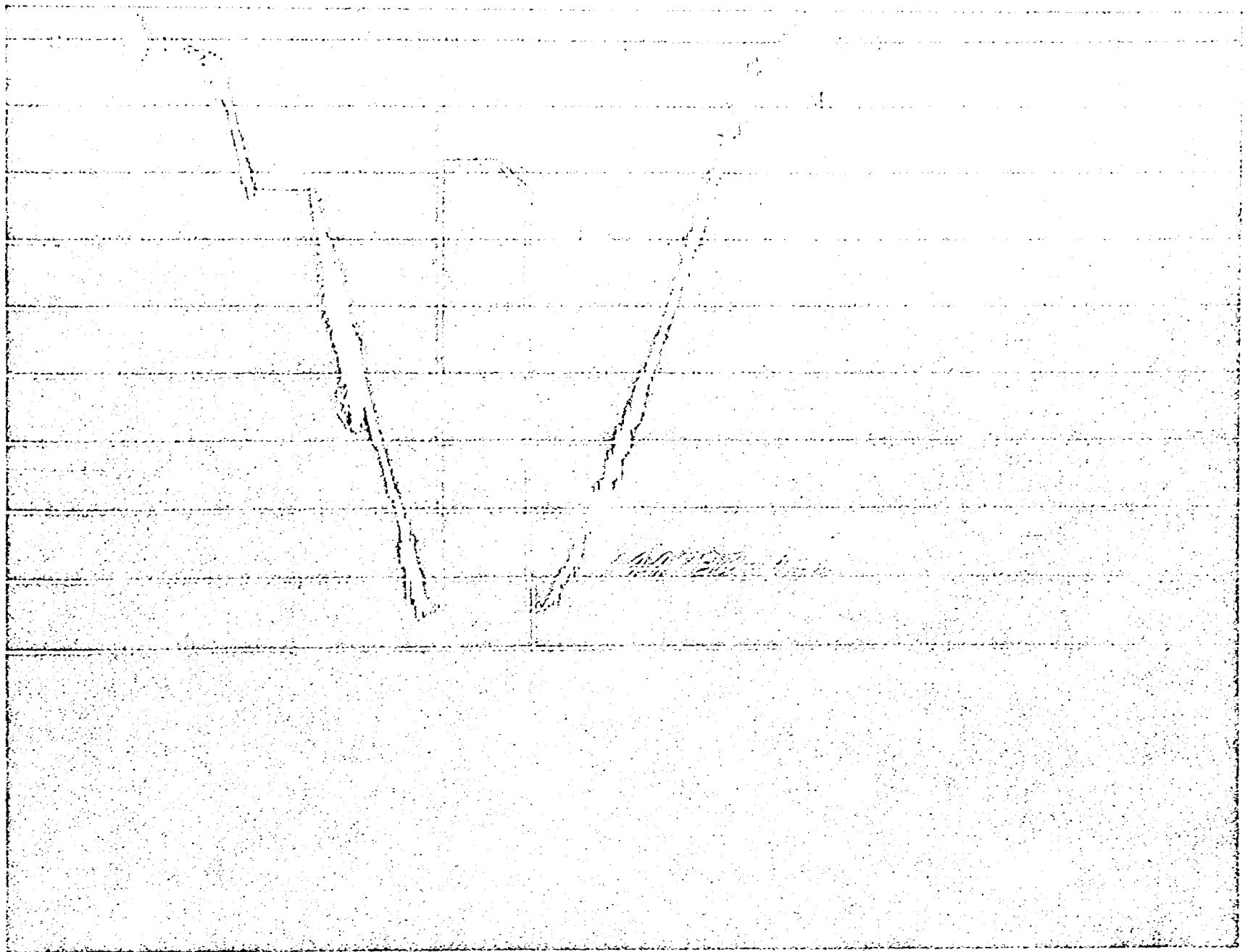
Top Recorder

TIME



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PRESSURE



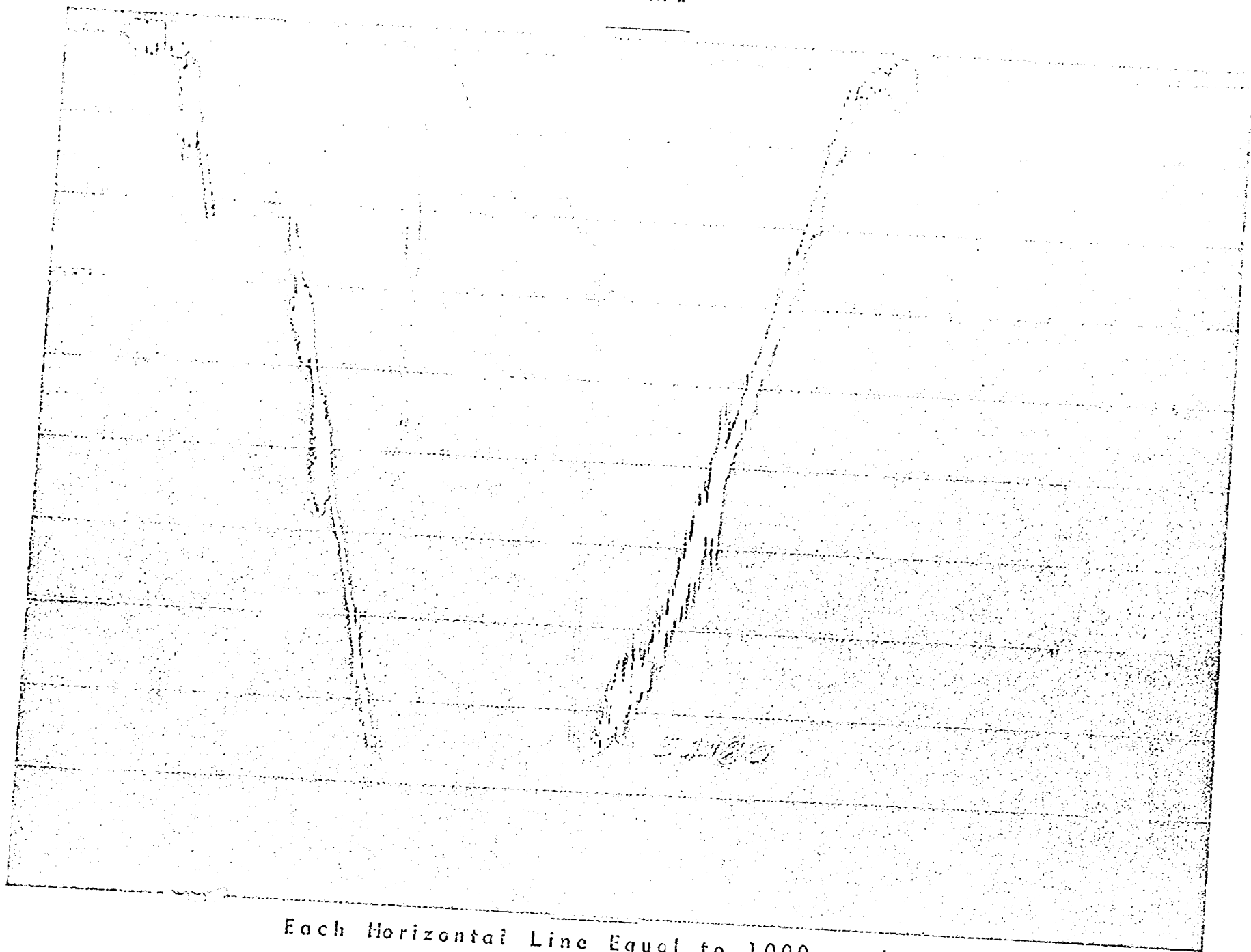
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RICHARDS		1		5		THE TEXAS COMPANY		MIDLAND	
WELL NO.		WELL NO.		WELL NO.		WELL NO.		WELL NO.	
LOCATION	"							Date	6-17-57
FIELD	Wildcat							WELL NO.	54180
COUNTY	Ica							HOWCO DISTRICT	Lovington
STATE	New Mexico	HOLE AND TOOL DATA						Kind of Hole	Open Hole
CONTRACTOR	Parker Drilling Co.	Total Depth	14355'	Casing Perforations	Top	Bottom	Price	\$347.00	
MUD DATA		Top Packer Depth	14307' - 14311'	Bottom Packer Depth	14315'		Second Packer Assembly	158.00	
Kind	Chemical Base	Casing or Hole Size	8 5/8"	Liner or Borehole Size	"		Safety Joint	15.00	
Weight	10.7 lbs./gal.	Formation Tested	Devonian				Extra Packer Charge		
Viscosity	71 Sec.	Size Drill Pipe	4" F.H.	Size Drill Collars	2 1/2" I.D. x 480'		Price	100.00	
Filter Loss	4.2 c.c. Filter Cake 1/32 in.	Size Bottom Choke	5/8"	Size Surface Choke	1" & 3/8"				
Est. Gauge Depth, Temp.	Calc. 200 F.	Size Mock Wall Packer	-	Size Rings	-	No Rings			
Time Tool Open	3 hours	Size & Type Wall Packer	8" E.S.A.	No. Packers	3		Total	\$620.00	
Time Closed In	30 minutes	Size & Length Anchor	40' x 5 3/4" F.J.				Witnessed By	Mr. Hazle	
Depth BT. Gauge	14345'	BRD Device No.	-	Depth	-	Blacked Off	Tester	W. Gentry	
BT. P.R.D. No.	46	Blacked Off	YES	REMARKS:					
24 Hr. Clock No.	2493	Tool opened with a weak blow of air, increasing to a strong blow in 2 hours. Gas to surface in 3 hours and 5 minutes. No fluid to surface.							
Pressure Readings	Field	Office Corrected	Recovered 3240' of water blanket and 180' of sulphur water.						
Initial Hydro Mud Pressure	8590	8522 p.s.i.	NO P.R.D. WAS RUN.						
Initial Flow Pres.	1635	1822 p.s.i.							
Final Flow Pres.	1605	1779 p.s.i.							
Closed in Pres.	2230	2360 p.s.i.							
Final Hydro Mud Pressure	8515	8363 p.s.i.	Amount of Cushion	3240'	All depths measured from:	Rotary Table	No. Folders Reproduced	3	

Top Recorder

TIME

PRESSURE

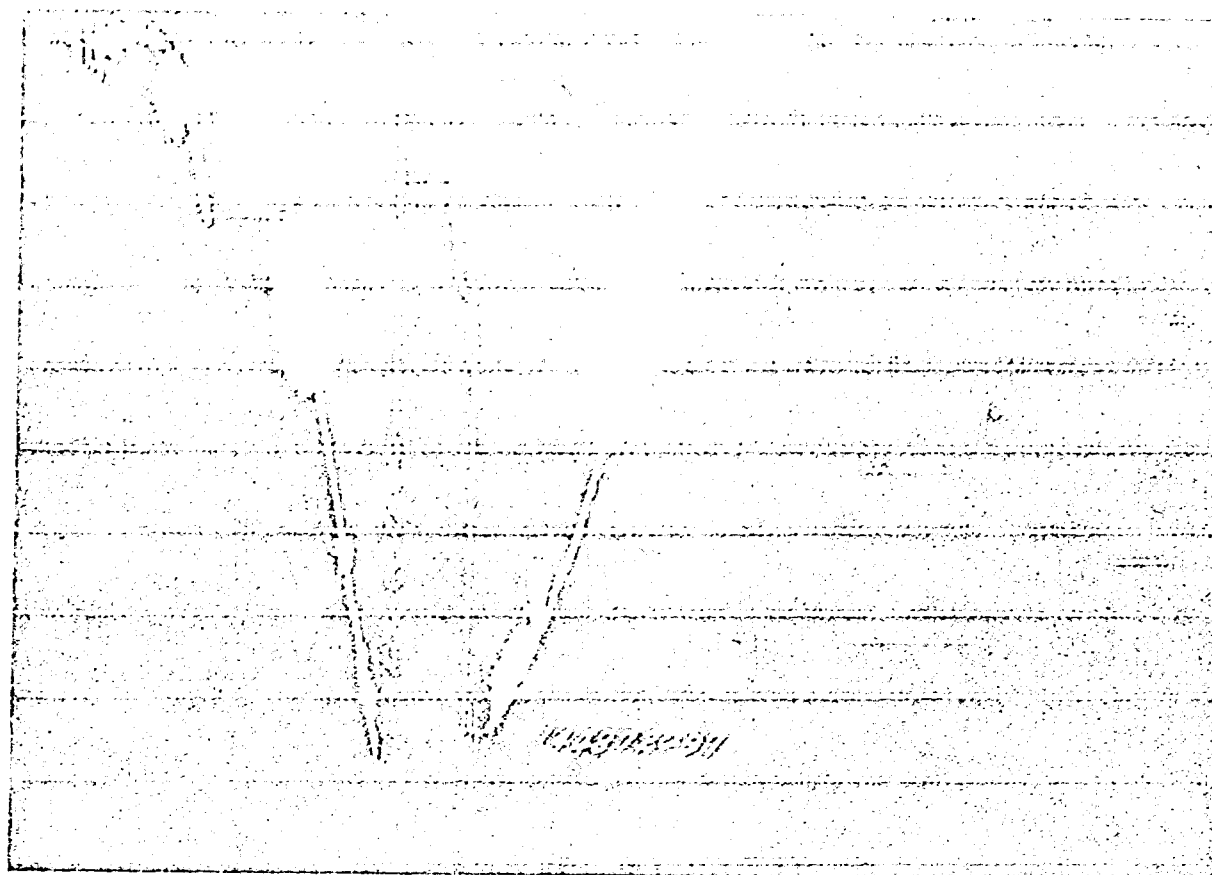


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Top Recorder

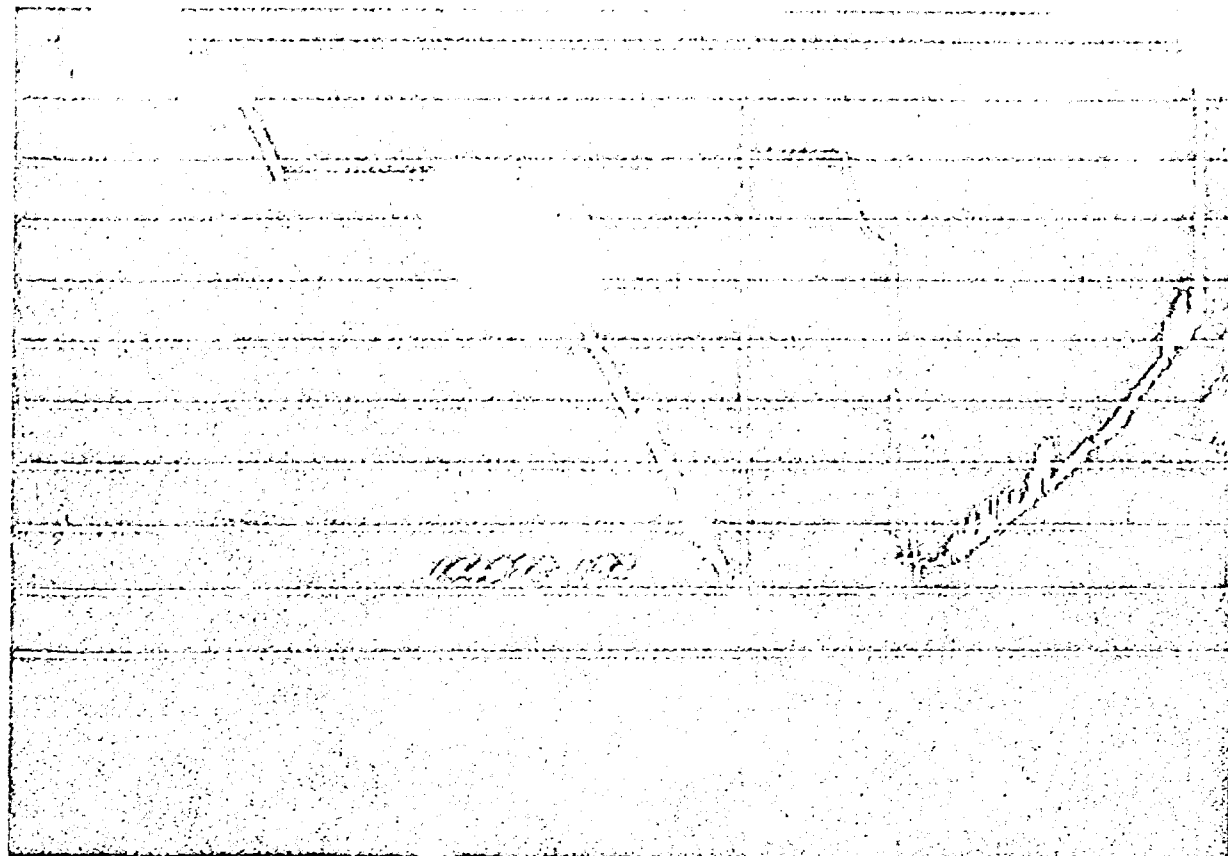
TIME

PRESSURE



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PRESSURE



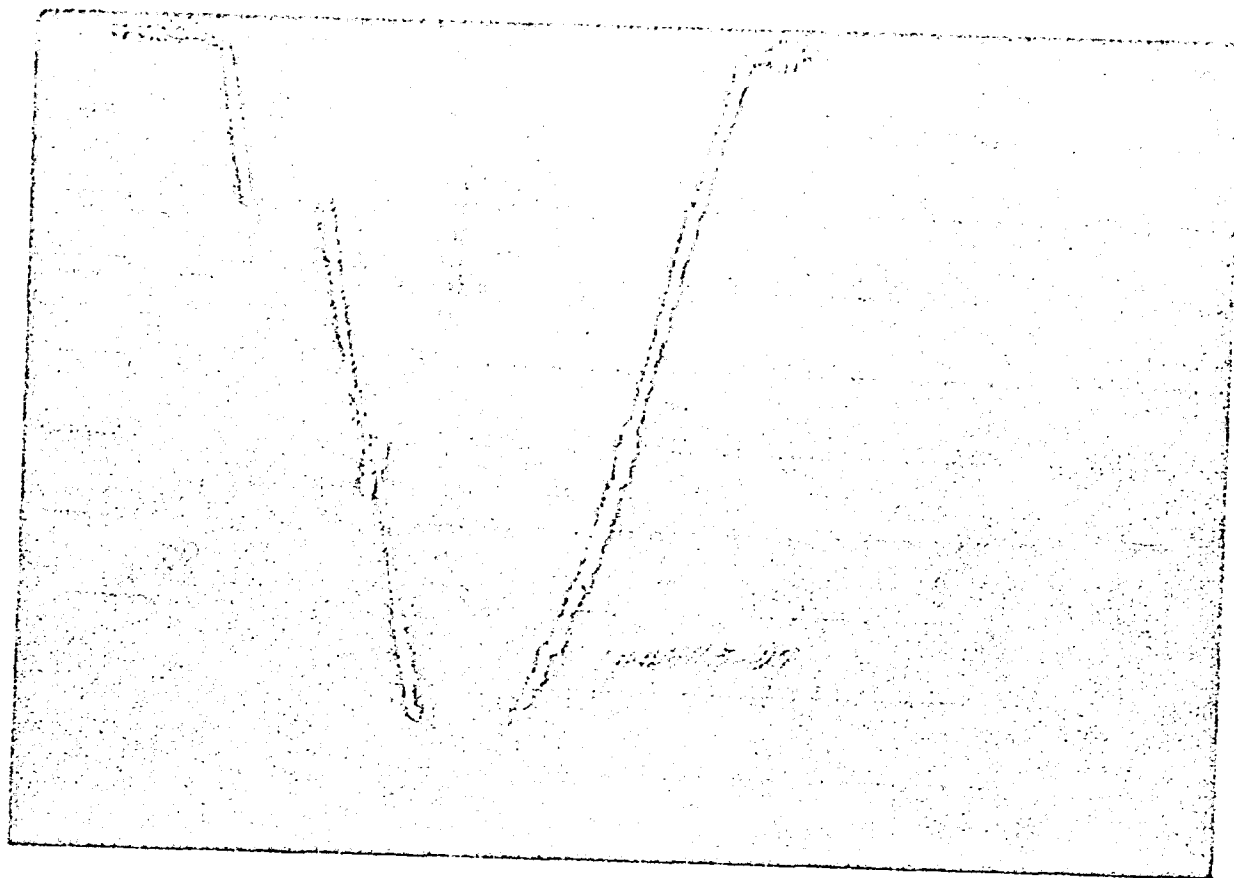
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HOSCO No. 1101-A (Printed in U. S. A.)—Southwestern—5-1-68

Top Recorder

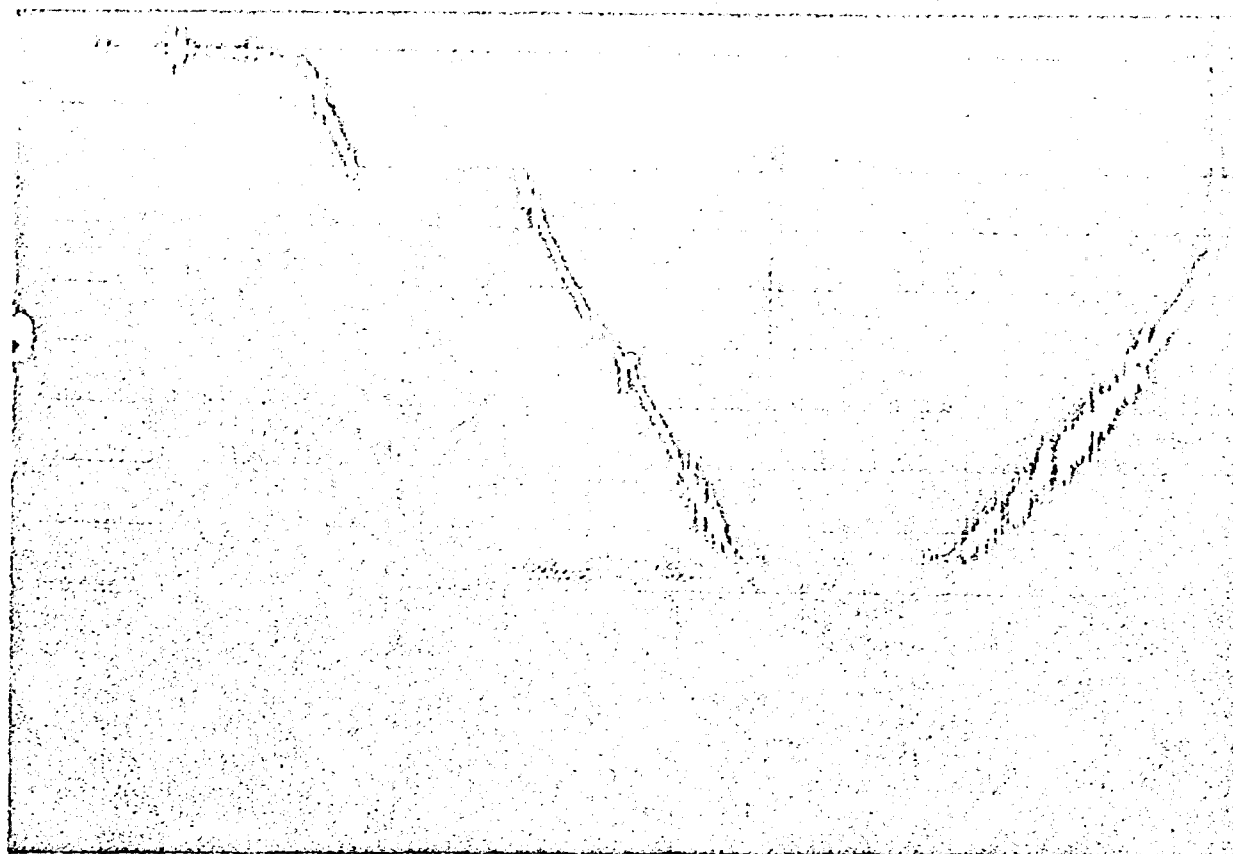
TIME

PRESSURE



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PRESSURE

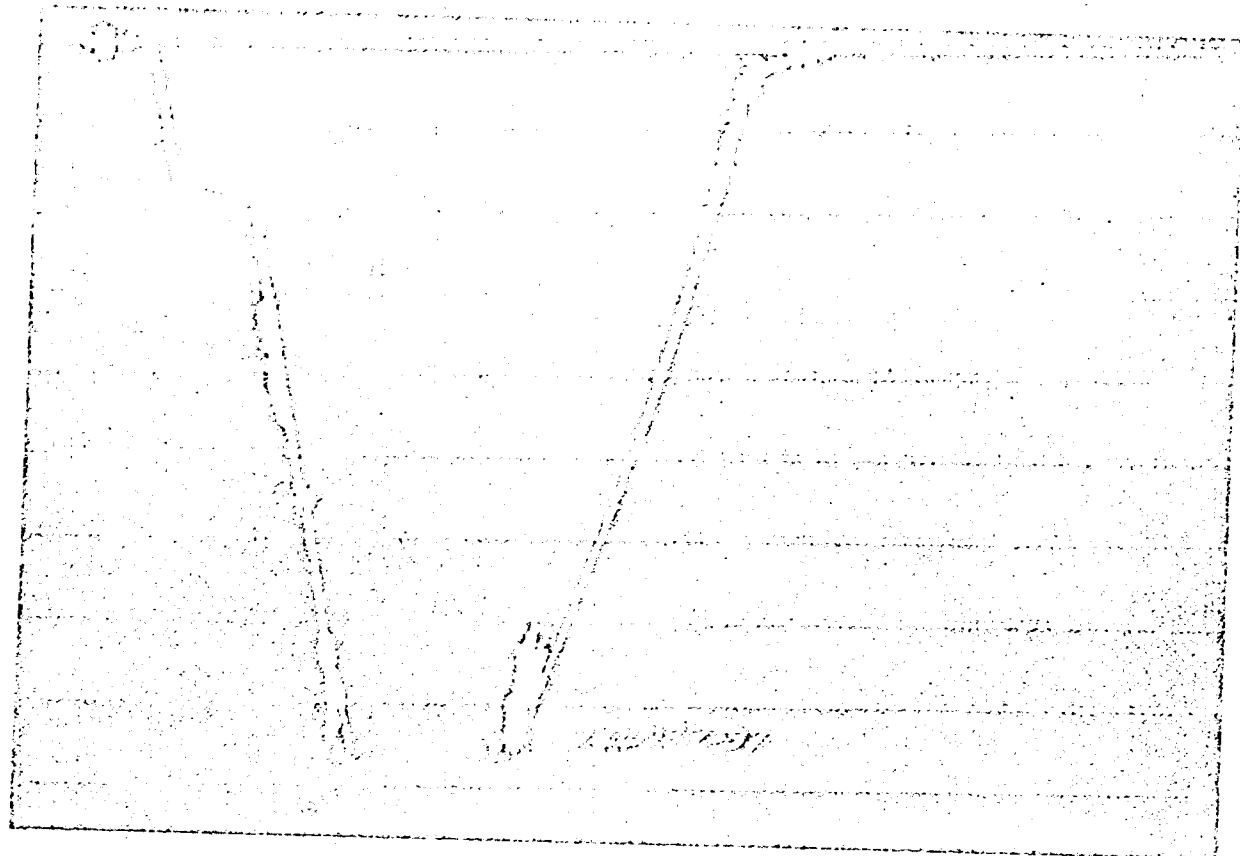


Each Horizontal Line Equal to 1000 p.s.i.

AUDREY RICHARDS		1		8		THE TITAN COMPANY		NEWARK DISTRICT	
PAGE		WELL NO.		HOLE NO.		COMPANY		DISTRICT	
LOCATION						Date		7-2-44	
FIELD						Ticket No.		144737	
COUNTY						HOWCO DISTRICT		Hobbs	
STATE		New Mexico				HOLE & TOOL DATA		Kind of Job	
CONTRACTOR		Parker Drilling Co.				Total Depth		14,635'	
MUD DATA		Top Packer Depth				14,505' - 14,520'		Bottom Packer Depth	
Kind		Gel				Casing or Hole Size		8 5/8"	
Weight		10.8				Liner or Borehole Size		-	
Viscosity		61				Formation Tested		Devonian	
Filter Loss		4 c. c. Filter Cake 2/32				Size Drill Pipe		1"	
Est. Gauge Depth Temp.		Actual 216				Size Drill Collars		6 5/8" x 14 1/2'	
Tool Open		2 hours, 10 minutes				Size Bottom Choke		5/8"	
Time Closed In.		30 minutes				Size Hook Wall Packer		-	
Depth Top Gauge		14,629'				Size Rings		-	
BT. P. R. D. No.		97				Size & Type Wall Packer		8" E.S.A.	
Blanked Off		no				Size & Length Anchor		5 3/4" x 31' & 6 5/8" x 89' D.C.	
BT. P. R. D. No.		132				Amount of Cushion		3434'	
Blanked Off		yes				REMARKS:		Tool opened with a good blow, diminishing to	
Hr. Clock No.		1751				no blow in 1 hour, 30 minutes. Recovered 3434' of			
Hr. Clock No.		12				water cushion and 10334' of salty sulphur water.			
Pressure Readings		Field		Office Corrected		Field		Office Corrected	
Initial Hydro Mud Pressure		8615		8656		8655		8724 p.s.i.	
Initial Flow Pres.		2560		2590		3390		3002 p.s.i.	
Final Flow Pres.		6310		6327		6440		6459 p.s.i.	
Closed in Pres.		6310		6327		6440		6459 p.s.i.	
Final Hydro Mud Pressure		8615		8656		8655		8724 p.s.i.	
All depths measured from		Kelly Bushing				No. Folders Reproduced		3	

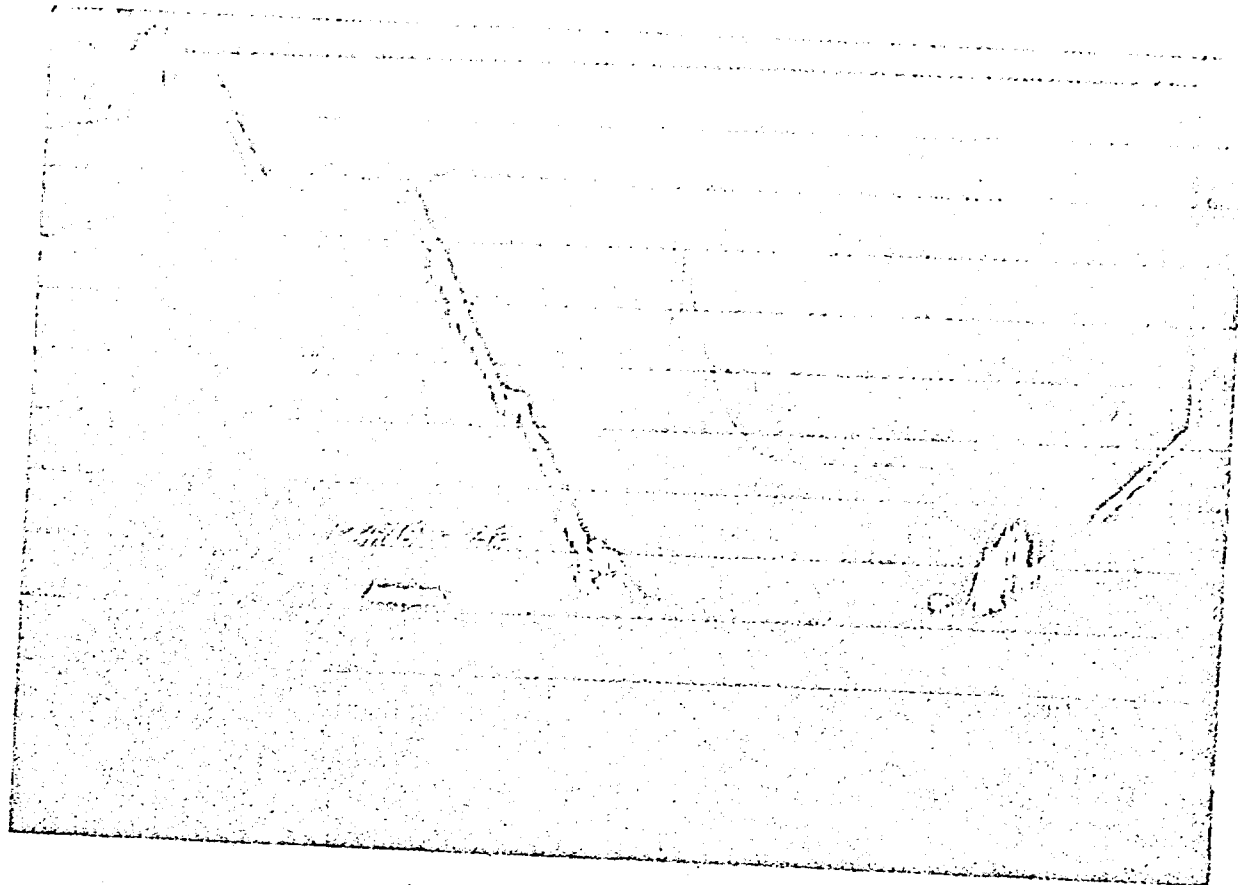
Top Recorder

TIME



Each Horizontal Line Equal to 1000 p.s.i.

PRESSURE



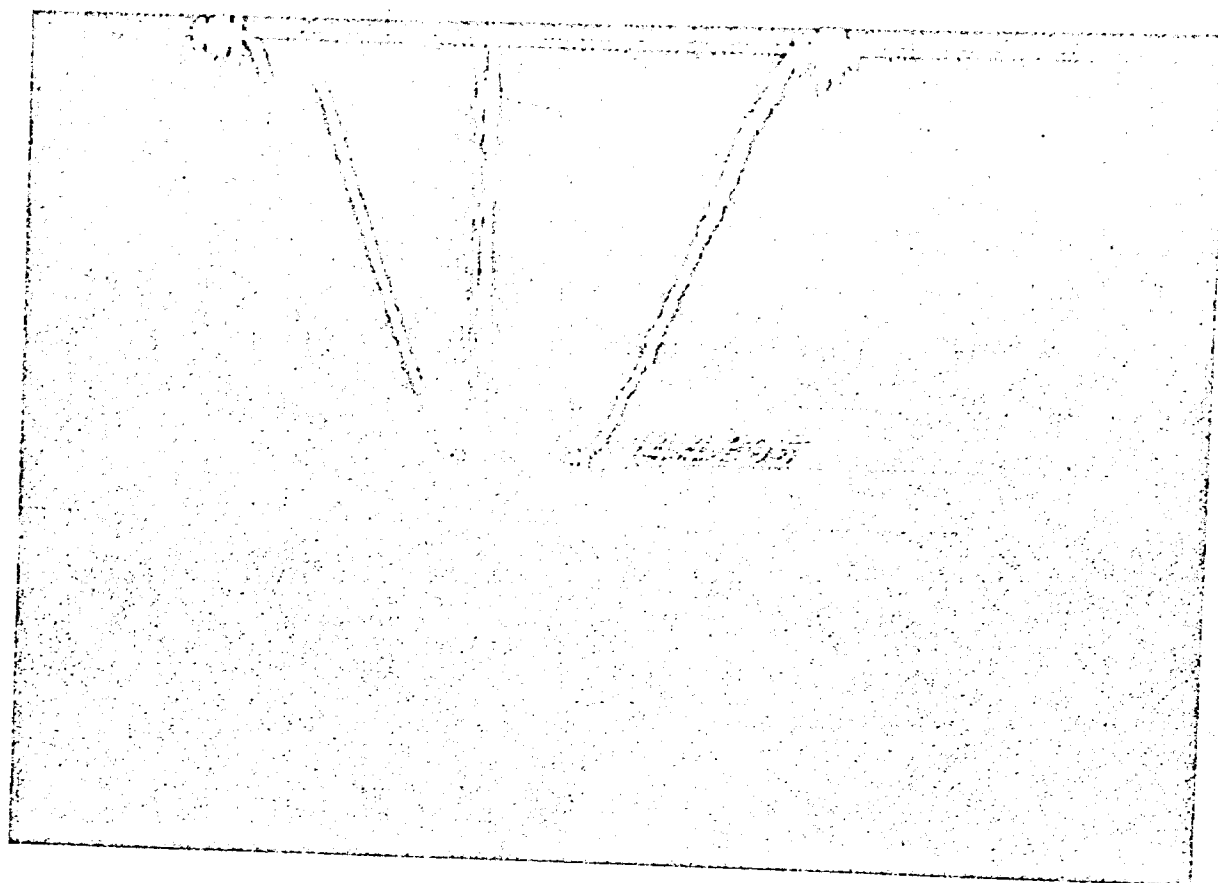
Each Horizontal Line Equal to 1000 p.s.i.

LOCATION	Helford, N. M.		DATE		8-20-57	
FIELD	Wildcat		TRIP NO.		34495	
COUNTY	Lea		HOWCO DISTRICT		Hobbs	
STATE	New Mexico		HOLE & TOOL DATA		Kind of Job	
CONTRACTOR	Parker Drilling Co.		Total Depth	15,485'	Casing Perforations	Top
MUD DATA			Top Packer Depth	(1) 15,313'	Bottom Packer Depth	(2) 15,319'
Kind	Gel		Casing or Hole Size	5 7/8"	Inner or Outside Size	
Weight	8.6 lbs./gal.		Formation Tested	Russellman		Price
Viscosity	50 Sec.		Size Drill Pipe	2 7/8"	Size Drill Collars	2 7/8" I.D.
Filter Loss	7.6 cc. Filter Cake 1/32 in.		Size Bottom Choke	1"	Size Surface Choke	5/8"
Ext. Gauge Depth Temp.	Calc. 200 F.		Size Hook Well Packer	-	Size Rings	-
Time Tool Opened	1 hour, 30 minutes		Size & Type Well Packer	5" E.S.A.	No. Packers	3
Time Closed In	30 minutes		Size & Length Anchor	3 7/8" x 41' & 1 1/4" x 119' D.C.		Total
Depth BT. Gauge	15,300'		PRD Device No.	3343	Depth	15,480'
BT. P.R.D. No.	132		Blanked Off	no		Tester
	Blanked Off		REMARKS: Tool opened with a slight blow, continuing throughout test. Recovered 1440' of water cushion, 90' of drilling mud and 720' of sulphur water.			
24 Hr. Clock No.	1751					
Pressure Readings	Field	Office Corrected				
Initial Hydro Mud Pressure	6975	6921 p.s.i.				
Initial Flow Pres.	910	903 p.s.i.				
Final Flow Pres.	1150	1152 p.s.i.				
Closed in Pres.	5985	5990 p.s.i.				
Final Hydro Mud Pressure	6975	6921 p.s.i.	Amount of Cushion	1440'		depths measured from Kelly Bushing
						No. Folders Reproduced
						3

Top Recorder

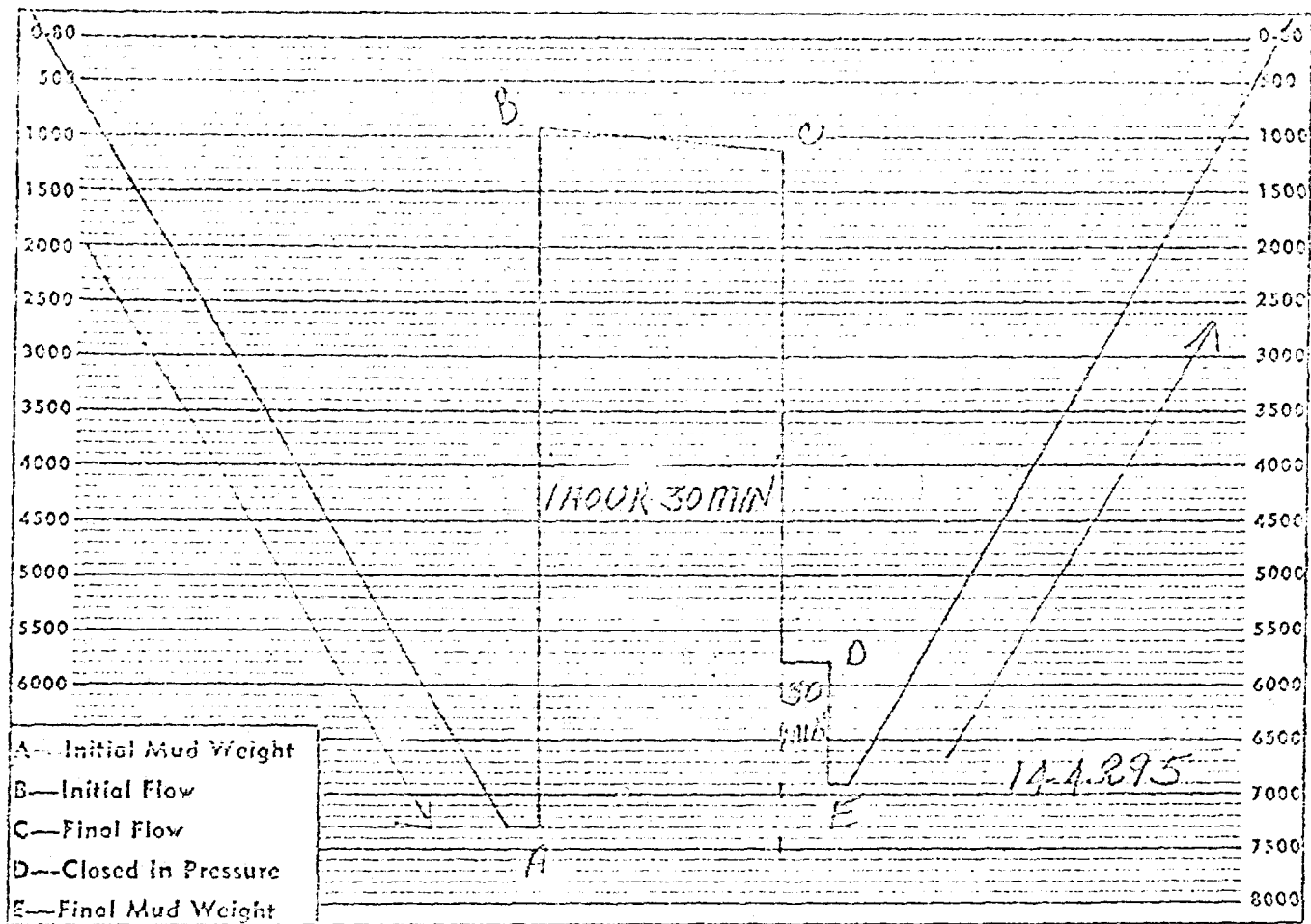
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PRESSURE



Each Horizontal Line Equal to 1000 p.s.i.

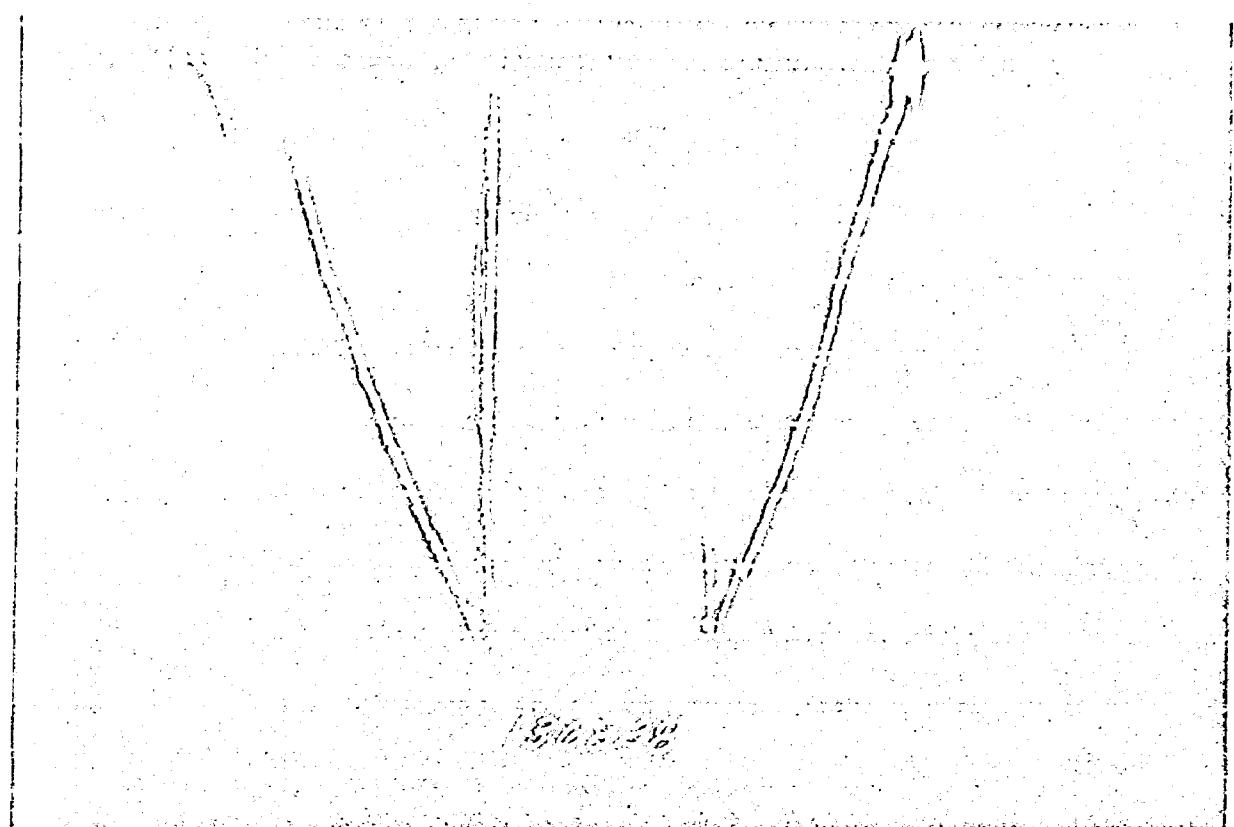
PRESSURE



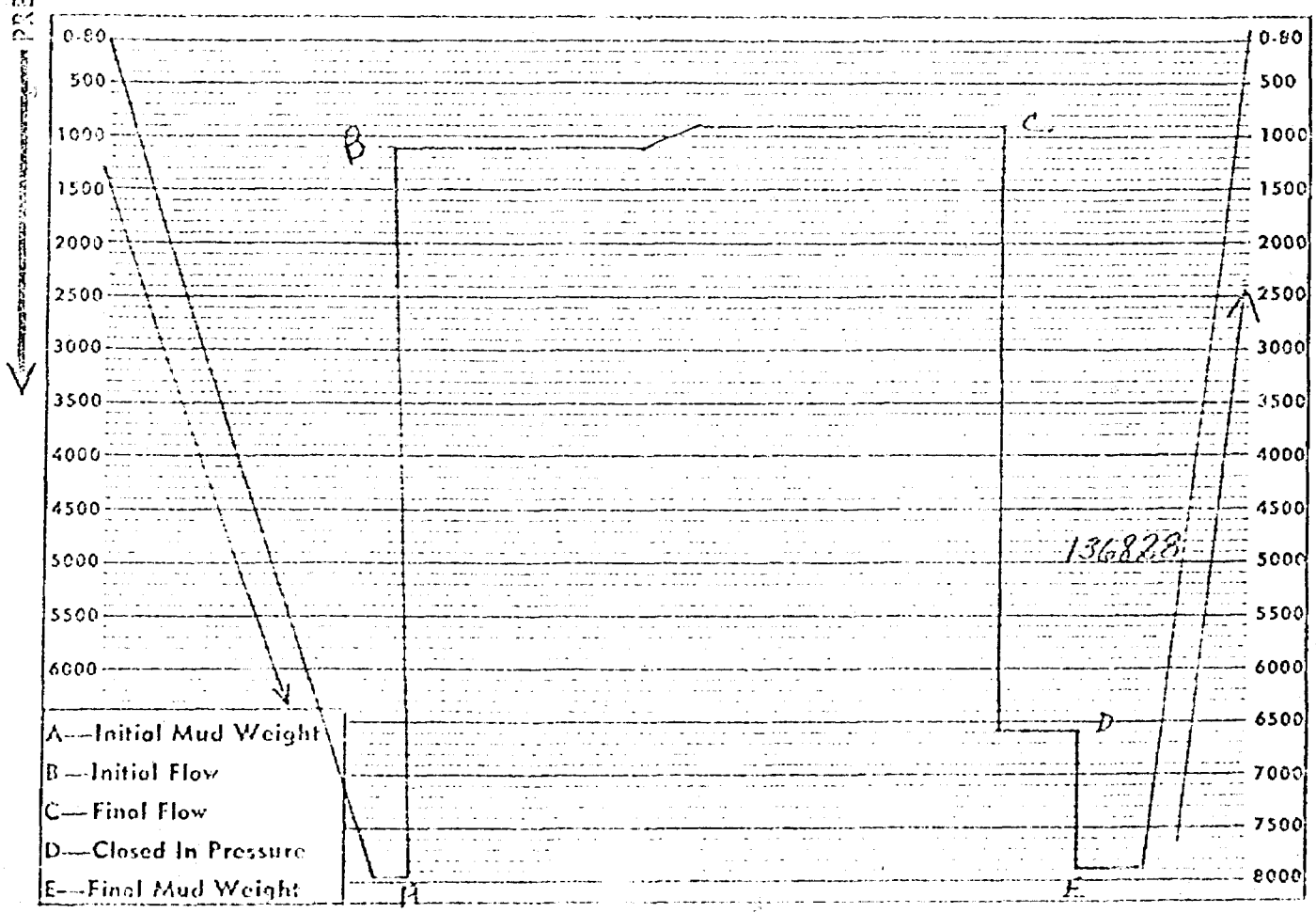
Each Horizontal Line Equal to 1000 p.s.i.

Initial Closed By Time .. Minutes		Date 2-27-37		LOCATION DISTRICT
Tool Open Flow Period 240 Minutes		Ticket No. 13623		
Final Closed In Time 30 Minutes		HOWCO DISTRICT Hobbs		
Depth Top Gauge 16,172 ft. Blanked Off NO		Kind of Job Open Hole		CONTRACTOR Parker Drilling Co.
BT. P.R.D. No 110 2h Hr. Clock		HOLE & TOOL DATA		
Pressure Readings Field Office Corrected		Elevation - Top Packer Depth (1) 16,188'		FIELD WELL NO. 1
Initial Hydro Mud Pressure 7535 7931		(2) 16,194'		
Initial Closed in Pres. ..		Bottom Packer Depth (3) 16,200'		
Initial Flow Pres. 1135 1119		Total Depth 16,280'		WINDGATE COUNTY
Final Flow Pres. 965 925		Casing or Hole Size 5 7/8" Size & Type Wall Packer 5 1/4" E.O.A.		
Final Closed in Pres. 6605 6738		Liner or Rathole Size .. Size Bottom Choke 5/8"		
Final Hydro Mud Pressure 7765 7931		Casing Perforations Top Bottom Size Surface Choke 5/8"		TOWN LEASE OWNER
Depth Center Gauge .. Ft. Blanked Off ..		Interval Tested 80' ID & Length Air Chamber -		
BT. P.R.D. No .. Hr. Clock		Formation Tested Ellenberger ID & Length Drill Collars 2" I.D. x 120'		
Pressure Readings Field Office Corrected		Est. Gauge Depth Temp. Calc. 200 F° Size Drill Pipe 2 7/8"		STATE NEED DATE
Initial Hydro Mud Pressure ..		MUD DATA Weight 9.3 Viscosity 57		
Initial Closed in Pres. ..		All depths measured from Kelly Bushing No. Folders Reproduced 3		
Initial Flow Pres. ..		REMARKS: Tool opened with a slight blow		DISTRICT
Final Flow Pres. ..		through a 1/4" choke, increasing to a good		
Final Closed in Pres. ..		blow. Opened to a 5/8" choke in 1 hour, 28		
Final Hydro Mud Pressure ..		minutes. Gas to surface in 1 hour, 10 minutes		DISTRICT
Depth Bottom Gauge 16,275 Ft. Blanked Off ..		Water to surface in 2 hours, 20 minutes. Open		
BT. P.R.D. No 3334 Hr. Clock		ed to 1" choke in 2 hours, 20 minutes. Spray		
Pressure Readings Field Office Corrected		of distillate to surface in 3 hours, 20 min		DISTRICT
Initial Hydro Mud Pressure ..		utes. Surface pressure 12 1/2.		
Initial Closed in Pres. ..		Recovered 1700 Feet of water cushion.		
Initial Flow Pres. ..		Recovered Feet of		DISTRICT
Final Flow Pres. ..		Recovered Feet of		
Final Closed in Pres. ..		Recovered Feet of		
Final Hydro Mud Pressure ..		Witnessed By Mr. Postert		DISTRICT
Amount-Type of Cushion 2000		Tester R. L. Orites		
Amount-Type of Cushion 2000		Tester R. L. Orites		

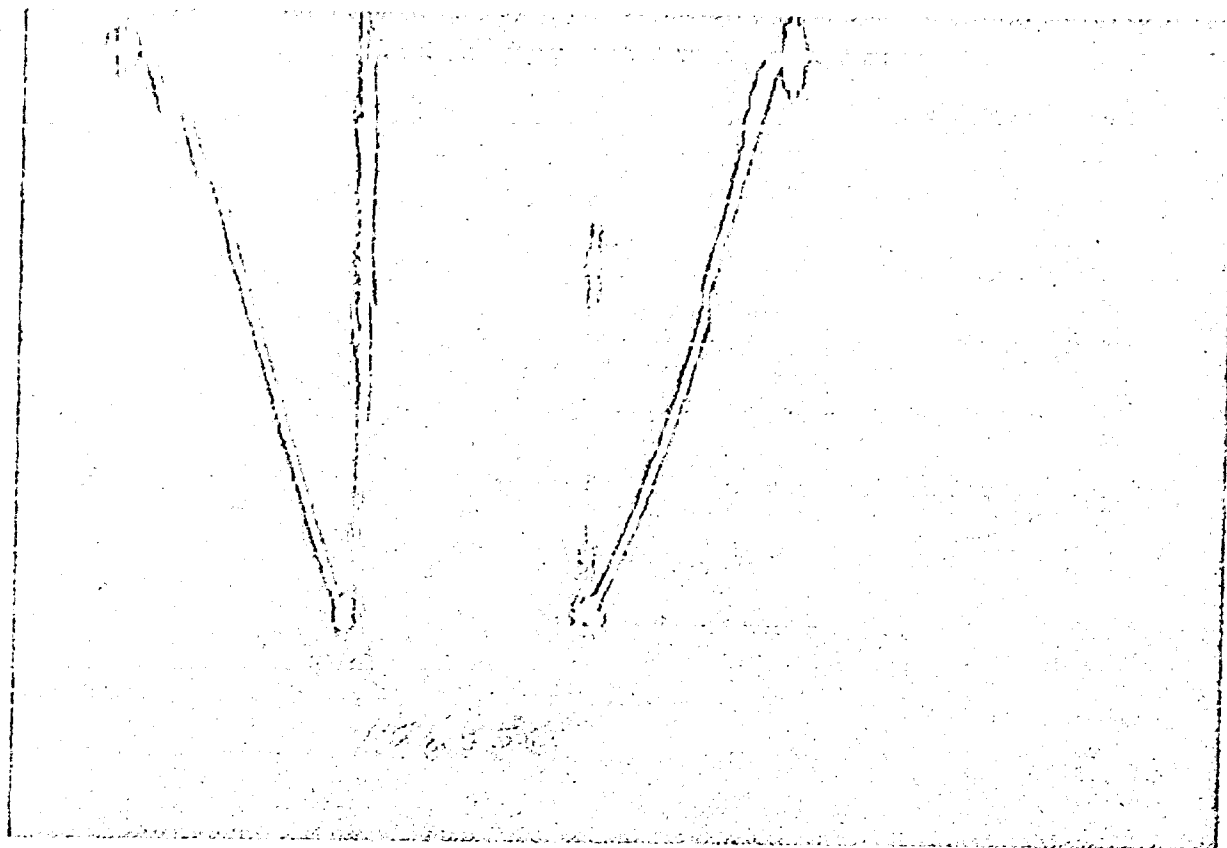
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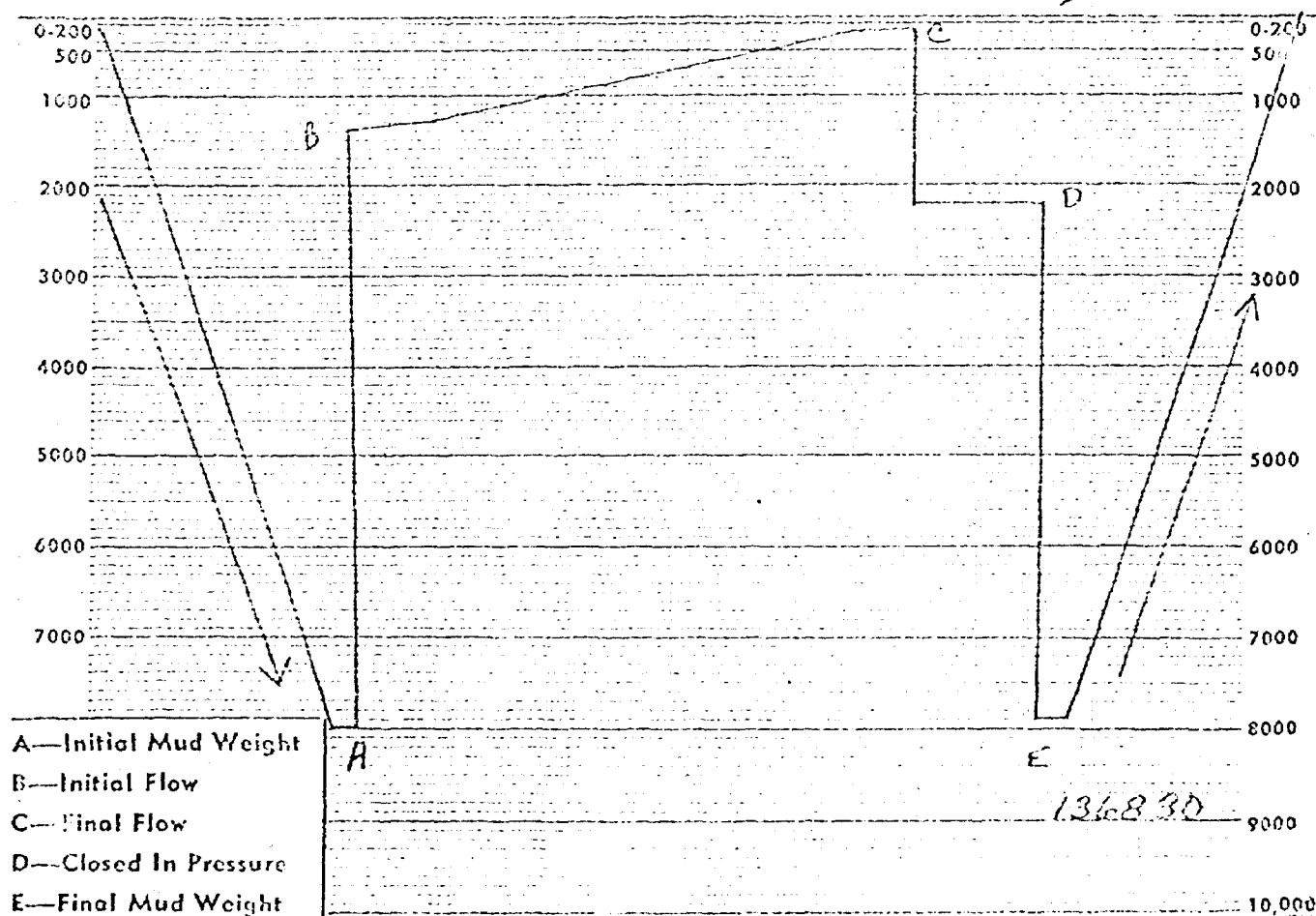


Initial Closed In Time .. Minutes		Date 9-15-57		LOCATION	
Test Open Flow Period 21.0 Minutes		Ticket No. 106830			WELL NO. 1
Final Closed In Time 1.0 Minutes		HOWCO DISTRICT Hobbs				TEST NO. 11
Depth Top Gauge 16,251 Ft.		Blanked Off ..		FIELD	
BT. P.R.D. No. 110		Hr. Clock ..			TITAN
Pressure Readings Field		Office Corrected		COUNTY	
Initial Hydro Mud Pressure 7735		7914			STATE
Initial Closed in Pres. ..		..		CONTRACTOR Parker Drilling Co.
Initial Flow Pres. 1495		1463			HOLE & TOOL DATA
Final Flow Pres. 145		200		Elevation ..	
Final Closed in Pres. 2405		2402		Top Packer Depth (7) 16,200'	
Final Hydro Mud Pressure 7700		7801		Bottom Packer Depth (3) 15,280'	
Depth Bottom Gauge .. Ft.		Blanked Off ..		Total Depth 16,220'	
BT. P.R.D. No. ..		Hr. Clock ..		Casing or Hole Size 5 7/8"	
Pressure Readings Field		Office Corrected		Size & Type Well Packer 5 1/4" B.P.A.	
Initial Hydro Mud Pressure ..		..		Line or Rathole Size ..
Initial Closed in Pres. ..		..		Size Bottom Choke 5/8"
Initial Flow Pres. ..		..		Casing Perforations Top Bottom
Final Flow Pres. ..		..		Size Surface Choke 5/8"
Final Closed in Pres. ..		..		Interval Tested 50'
Final Hydro Mud Pressure ..		..		ID & Length Air Chamber ..
Depth Bottom Gauge 16,225 Ft.		Blanked Off ..		Formation Tested Ellenburger	
BT. P.R.D. No. 6236		Hr. Clock ..		ID & Length Drill Collars 2" L.D. x 104'	
Pressure Readings Field		Office Corrected		Est. Gauge Depth Temp. 240.200 F	
Initial Hydro Mud Pressure ..		..		Size Drill Pipe 2 7/8"
Initial Closed in Pres. ..		..		MUD DATA
Initial Flow Pres. ..		..		Weight 9.3
Final Flow Pres. ..		..		Viscosity 68
Final Closed in Pres. ..		..		All depths measured from ..
Final Hydro Mud Pressure ..		..		No. Folders Reproduced 3
Amount-Type of Cushion 2000'		..		REMARKS: Tool opened with a fair blow	
				through a 1 1/4" choke, increasing to a good	
				blow. Opened to a 5/8" choke in 4 minutes.	
				Fluid to surface in 18 minutes. Opened to a	
				1" choke in 14 minutes. 100% surface pressure	
				with water cushion through 5/8" choke. 75%	
				through 1" choke, decreasing to 0%. Dry gas	
				to surface in 2 hours, 10 minutes.	
				Recovered 500 Feet of drilling mud.	
				Recovered Feet of	
				Recovered Feet of	
				Recovered Feet of	
				Witnessed By Mr. Postert	
				Tester R. L. Grites	



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Initial Closed In Time				Minutes		Date		9-23-57	
Tool Open Flow Period				Minutes		Ticket No.		136860	
Final Closed In Time				Minutes		HOWCO DISTRICT		Hobbs	
Depth Top Gauge				16,307 Ft.		Blanked Off		NO	
BT. P.R.D. No.				35		Hr. Clock		2h	
Pressure Readings				Field		Office Corrected		CONTRACTOR	
Initial Hydro Mud Pressure				"		"		Parker Drilling Co.	
Initial Closed in Pres.				"		"		HOLE & TOOL DATA	
Initial Flow Pres.				"		"		Elevation	
Final Flow Pres.				"		"		Top Packer Depth (1) 16,318'	
Final Closed in Pres.				"		"		Total Depth (16,409')	
Final Hydro Mud Pressure				"		"		Bottom Packer Depth (2) 16,321'	
Depth Bottom Gauge				"		"		Casing or Hole Size 5 7/8"	
BT. P.R.D. No.				"		"		Size & Type Wall Packer 5 1/4" BSWP	
Pressure Readings				Field		Office Corrected		Liner or Rathole Size 5 7/8"	
Initial Hydro Mud Pressure				"		"		Size Bottom Choke 5/8"	
Initial Closed in Pres.				"		"		Casing Perforations Top Bottom	
Initial Flow Pres.				"		"		Size Surface Choke 5/8"	
Final Flow Pres.				"		"		Interval Tested 79'	
Final Closed in Pres.				"		"		ID & Length Air Chamber	
Final Hydro Mud Pressure				"		"		Formation Tested Ellenburger Lime	
Depth Bottom Gauge				16,404 Ft.		Blanked Off		ID & Length Drill Collars 3 3/4"	
BT. P.R.D. No.				"		"		Est. Gauge Depth Temp. Actual 225 F	
Pressure Readings				Field		Office Corrected		Size Drill Pipe 2 7/8" IF	
Initial Hydro Mud Pressure				"		"		MUD DATA Weight 11.0 Viscosity 80	
Initial Closed in Pres.				"		"		All depths measured from Drive Bushing No. Folders Reproduced 3	
Initial Flow Pres.				"		"		REMARKS: MISRUN: No packer seat.	
Final Flow Pres.				"		"		Readings taken from PRD Chart,	
Final Closed in Pres.				"		"			
Final Hydro Mud Pressure				"		"			
Depth Bottom Gauge				16,404 Ft.		Blanked Off		YES	
BT. P.R.D. No.				1305		Hr. Clock			
Pressure Readings				Field		Office Corrected			
Initial Hydro Mud Pressure				7800		7825			
Initial Closed in Pres.				"		"		Recovered Feet of	
Initial Flow Pres.				"		"		Recovered Feet of	
Final Flow Pres.				"		"		Recovered Feet of	
Final Closed in Pres.				"		"		Recovered Feet of	
Final Hydro Mud Pressure				7900		7825		Witnessed By M. Pontort	
Amount-Type of Cushion				1300'				Tester B. L. Moline	

HOWCO No. 125

ALVIN RICHARDS

WELL NO. 1

TEST NO. 12

THE TEXAS COMPANY

MIDLAND

LOCATION

WELL NAME

FIELD

SECTION

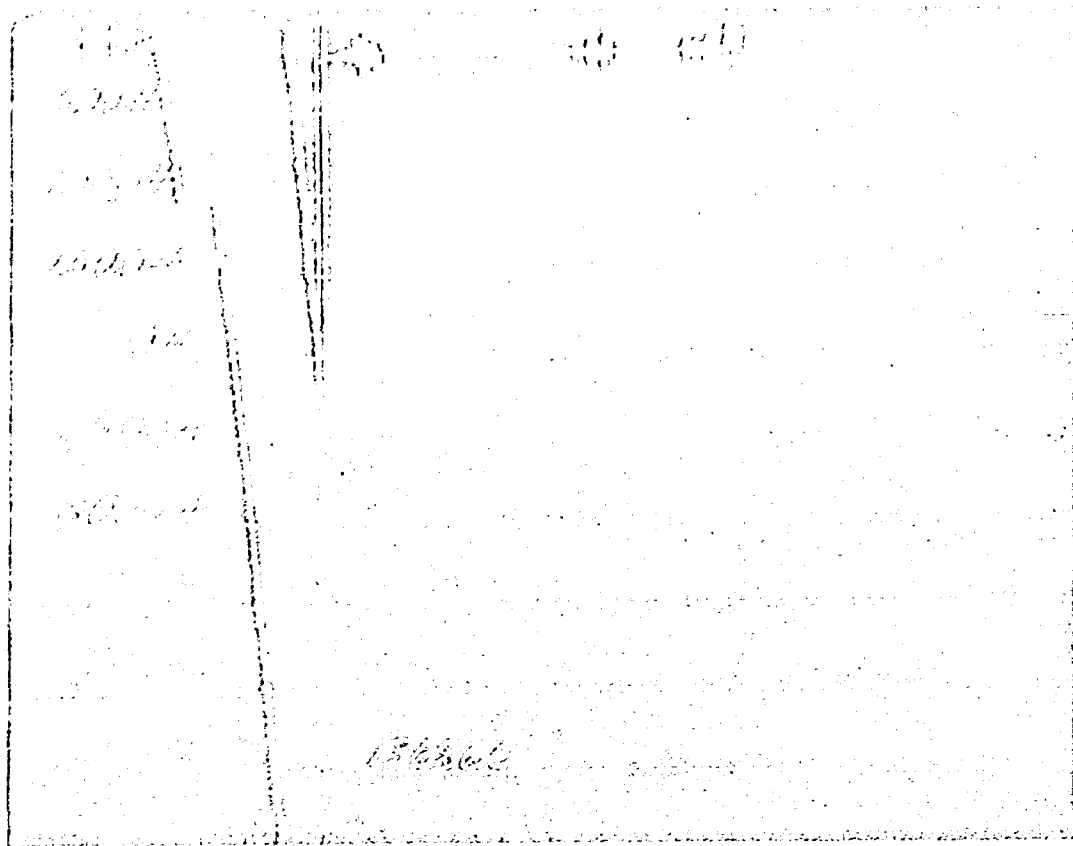
COUNTY

LEASE OWNER

STATE

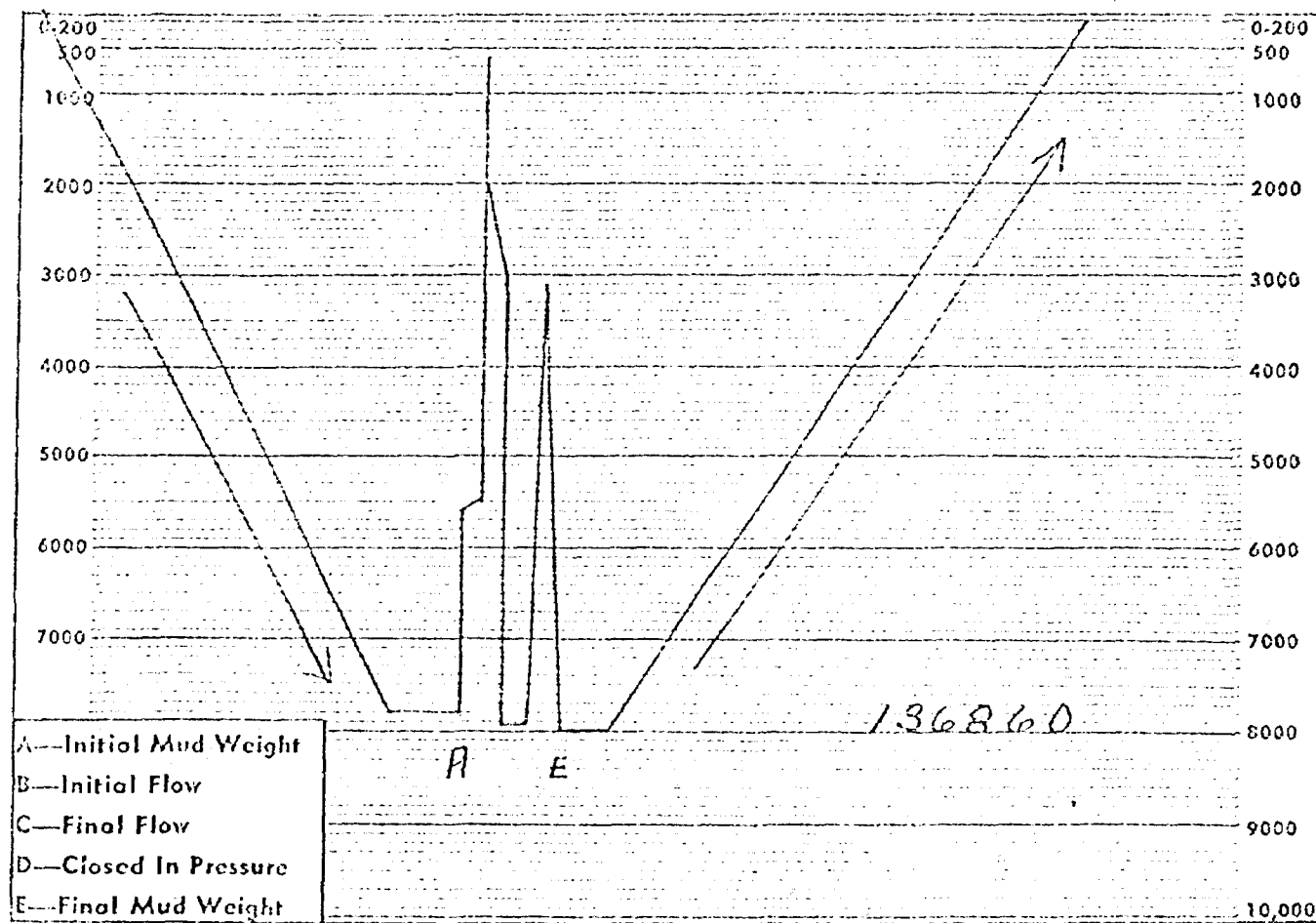
NEW MEXICO

OWNERS DISTRICT



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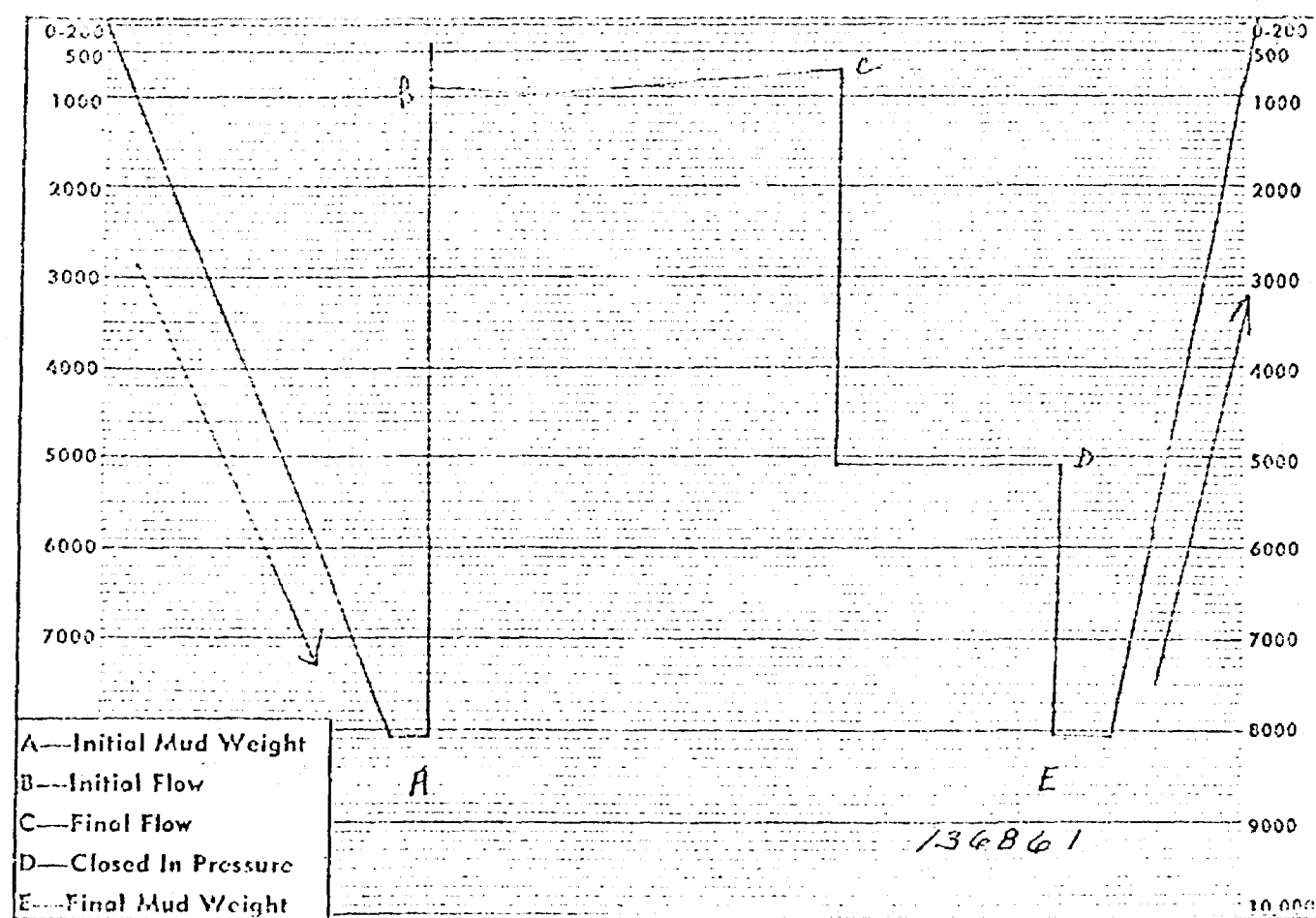
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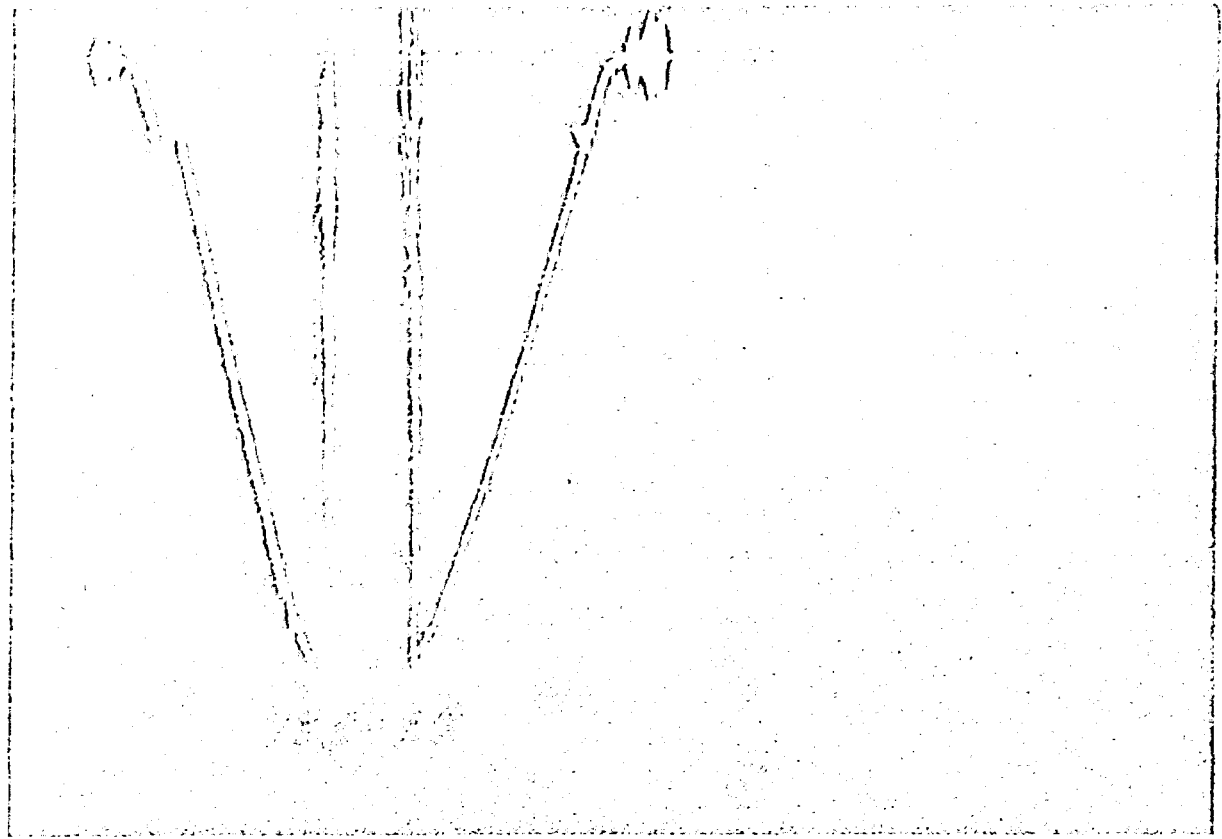
Initial Closed In Time	Minutes	Date	9-22-57	LOCATION LEASE NAME WELL NO. TEST NO.	
Tool Open Flow Period	Minutes	Ticket No.	139261		
Final Closed In Time	Minutes	HOWCO DISTRICT	Hobbs		
Depth Top Gauge	16,285 ft.	Blanked Off	NO	Kind of Job	Open Hole
BT, P.R.D. No.	110	21	Hr. Clock	CONTRACTOR	Proctor Drilling Co.
Pressure Readings	Field	Office Corrected		HOLE & TOOL DATA	
Initial Hydro Mud Pressure	7700	7700		Elevation	-
Initial Closed in Pres.	-	-		Total Depth	16,115'
Initial Flow Pres.	830	830		Casing or Hole Size	5 7/8"
Final Flow Pres.	600	600		Liner or Rothole Size	5 7/8"
Final Closed in Pres.	6120	6011		Casing Perforations	Top Bottom
Final Hydro Mud Pressure	7300	7700		Inter Test	112'
Depth Center Gauge	-	Blanked Off	-	Formation Tested	Ellenberger Lime
BT, P.R.D. No.	-	-	Hr. Clock	Est. Gauge Depth Temp.	Actual 250 F
Pressure Readings	Field	Office Corrected		MUD DATA	
Initial Hydro Mud Pressure	-	-		Weight	9.3
Initial Closed in Pres.	-	-		Viscosity	65
Initial Flow Pres.	-	-		All depths measured from	Drive Picking
Final Flow Pres.	-	-		No. Folders Reproduced	3
Final Closed in Pres.	-	-		REMARKS: Tool cement with a fair blow, increasing to a good blow. Gas to surface in 25 minutes. Water cushion to surface in 10 minutes.	
Final Hydro Mud Pressure	-	-			
Depth Bottom Gauge	16,110 ft.	Blanked Off	YES		
BT, P.R.D. No.	6136	-	Hr. Clock		
Pressure Readings	Field	Office Corrected			
Initial Hydro Mud Pressure	-	-			
Initial Closed in Pres.	-	-		Recovered	800 Feet of slightly gas cut water cushion.
Initial Flow Pres.	-	-		Recovered	270 Feet of gas cut mud.
Final Flow Pres.	-	-		Recovered	Feet of
Final Closed in Pres.	-	-		Recovered	Feet of
Final Hydro Mud Pressure	-	-		Witnessed By	Mr. Postert
Amount-Type of Cushion	20001			Tester	R. L. Molino

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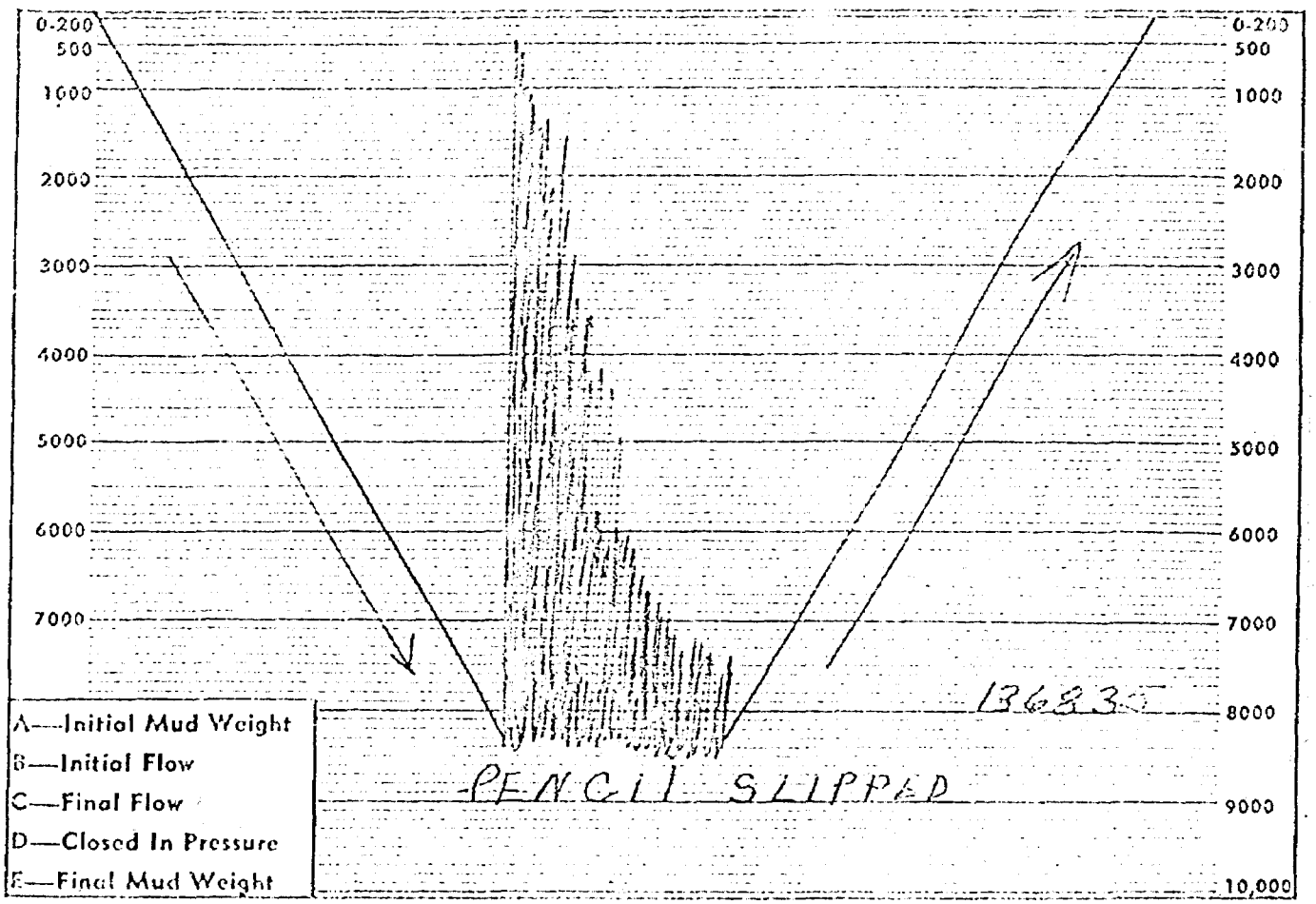


Initial Closed In Time	Minutes	Date	10-1-57
Tool Open Flow Period	Minutes	Ticket No.	130935
Final Closed In Time	Minutes	HOWCO DISTRICT	Hobbs
Depth Top Gauge	16,383 ft.	Blanked Off	NO
BT. P.R.D. No.	110	Kind of Job	Open Hole
Pressure Readings	Field	Office Corrected	
Initial Hydro Mud Pressure	8255	8331	
Initial Closed in Pres.			
Initial Flow Pres.	1005	1022	
Final Flow Pres.	1005	1022	
Final Closed in Pres.	1265	1277	
Final Hydro Mud Pressure	8255	8331	
Depth Bottom Gauge		Blanked Off	
BT. P.R.D. No.		Hr. Clock	
Pressure Readings	Field	Office Corrected	
Initial Hydro Mud Pressure			
Initial Closed in Pres.			
Initial Flow Pres.			
Final Flow Pres.			
Final Closed in Pres.			
Final Hydro Mud Pressure			
Depth Bottom Gauge	16,497 ft.	Blanked Off	
BT. P.R.D. No.	6136	Hr. Clock	
Pressure Readings	Field	Office Corrected	
Initial Hydro Mud Pressure			
Initial Closed in Pres.			
Initial Flow Pres.			
Final Flow Pres.			
Final Closed in Pres.			
Final Hydro Mud Pressure			
Amount-Type of Cushion	2000	Tester	R. I. Griton



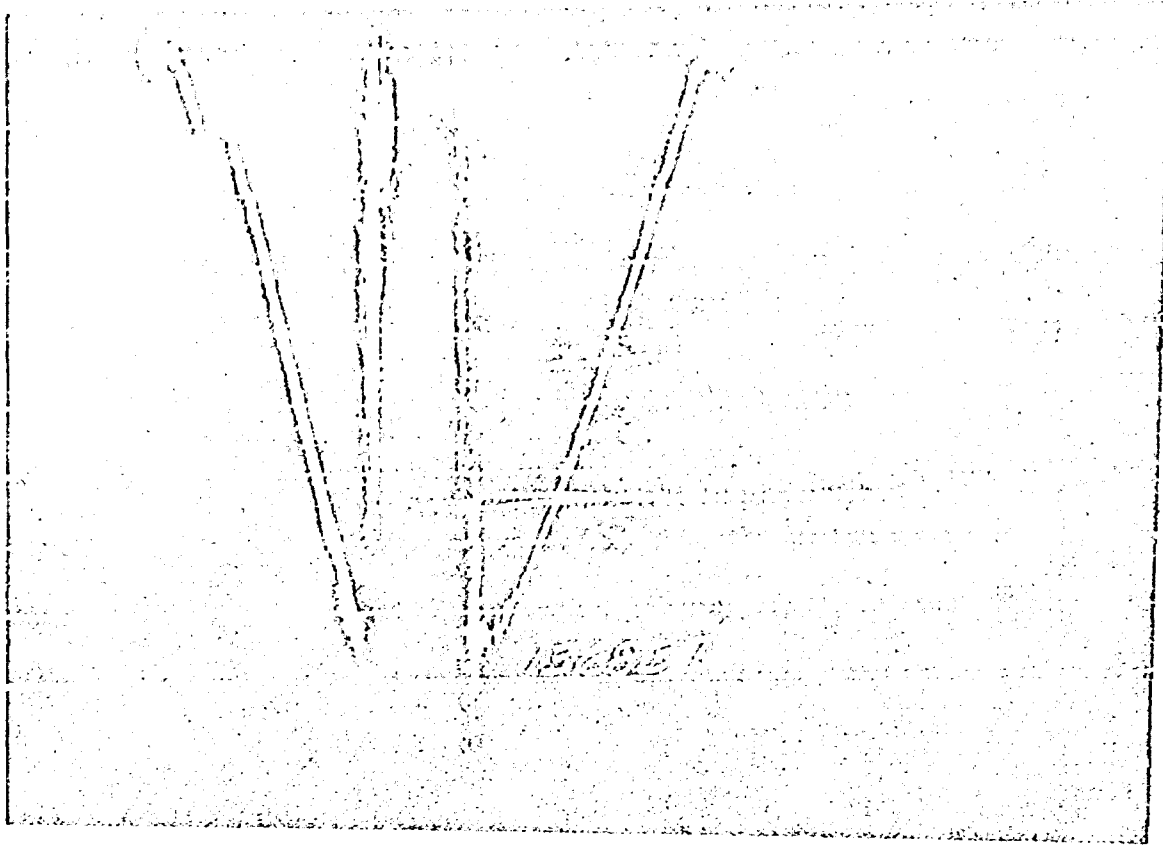
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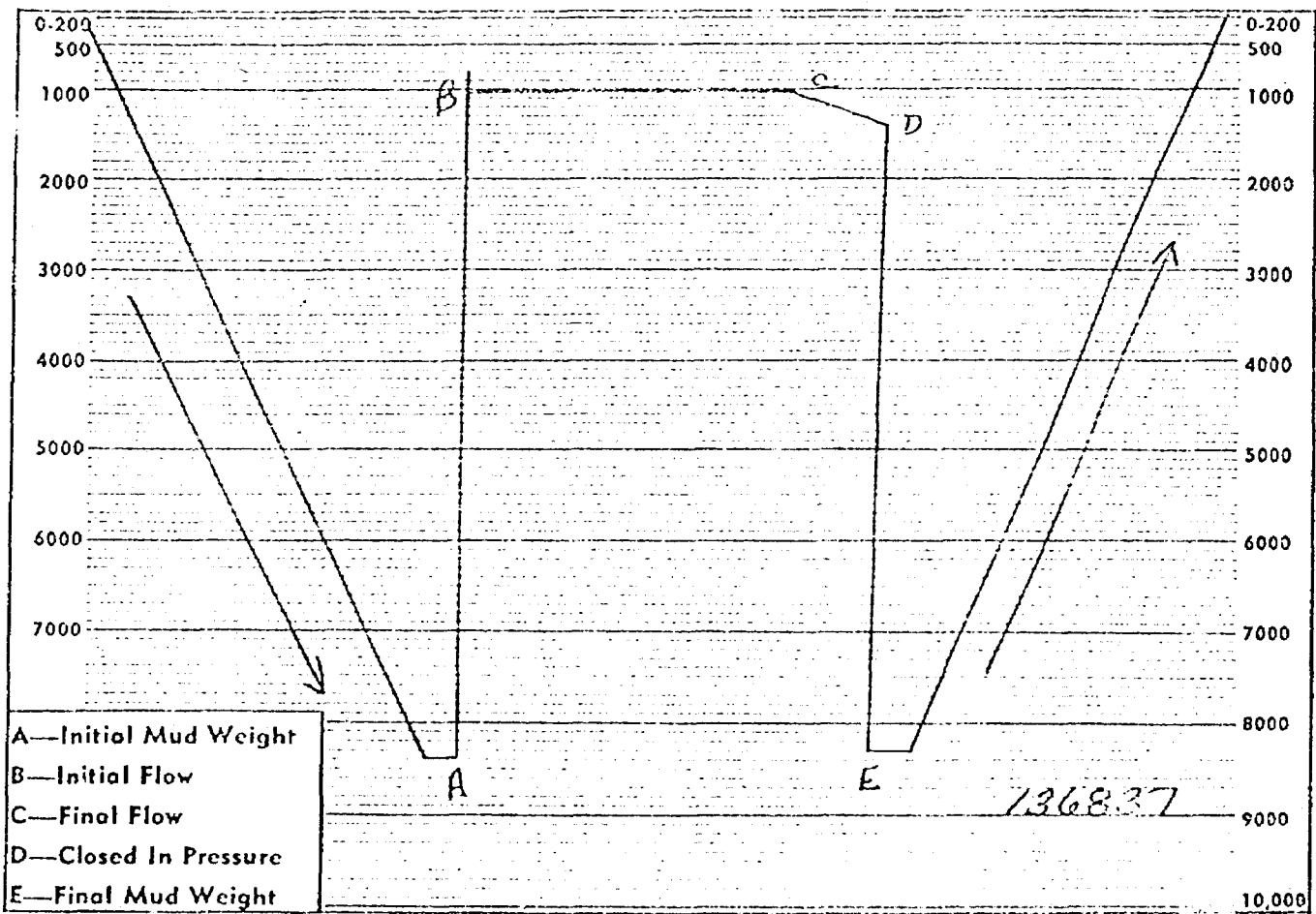


Initial Close In Time		Minutes	Date		10-3-37
Tool Open Flow Period		Minutes	Ticket No.		15637
Final Closed In Time		Minutes	HOWCO DISTRICT		52nd
Depth Top Gauge		Blanked Off	Kind of Job		Open Hole
BT. P.R.D. No		110	CONTRACTOR		Parsons Drilling Company
Pressure Readings		Field	Office Corrected		
Initial Hydro Mud Pressure		8373	HOLE & TOOL DATA		
Initial Closed in Pres.			Elevation		Top Packer Depth 16,120'
Initial Flow Pres.		995	Total Depth		16,576'
Final Flow Pres.		995	Casing or Hole Size		5 7/8"
Final Closed in Pres.		1016	Liner or Rathole Size		Size Bottom Choke 5/8"
Final Hydro Mud Pressure		8373	Casing Perforations		Top Bottom Size Surface Choke 7/8"
Depth Center Gauge		Blanked Off	Interval Tested		7h'
BT. P.R.D. No			Formation Tested		Ellerhorner
Pressure Readings		Field	Est. Gauge Depth Temp.		210 F
Initial Hydro Mud Pressure			MUD DATA		Weight 9.3 Viscosity 73
Initial Closed in Pres.			All depths measured from		Kelly Pushing No. Folders Reproduced 3
Initial Flow Pres.			REMARKS:		Tool opened with a slight momentary blow.
Final Flow Pres.					
Final Closed in Pres.					
Final Hydro Mud Pressure					
Depth Bottom Gauge		16,569 Ft.	Blanked Off		
BT. P.R.D. No		6136	Hr. Clock		
Pressure Readings		Field	Office Corrected		
Initial Hydro Mud Pressure					
Initial Closed in Pres.					
Initial Flow Pres.			Recovered		2000 Feet of Water cushion.
Final Flow Pres.			Recovered		Feet of
Final Closed in Pres.			Recovered		Feet of
Final Hydro Mud Pressure			Recovered		Feet of
Amount-Type of Cushion		2000' Water	Witnessed By		Mr. Postorb
			Tester		J. C. Carter

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OIL CONSERVATION COMMISSION

STATE OF NEW MEXICO

P. O. BOX 2088 - SANTA FE

87501

DIRECTOR
JOE D. RAMEY

LAND COMMISSIONER
PHIL R. LUCERO
September 7, 1977



STATE GEOLOGIST
EMERY C. ARNOLD

Mr. Sim Christy
Jennings, Christy & Copple
Attorneys at Law
Post Office Box 1180
Roswell, New Mexico 88201

Re: CASE NO. 5982
ORDER NO. R-5521

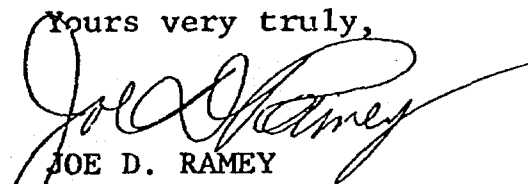
Applicant:

Sam H. Snoddy

Dear Sir:

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

Yours very truly,


JOE D. RAMEY
Director

JDR/fd

Copy of order also sent to:

Hobbs OCC x
Artesia OCC x
Aztec OCC

Other Booker Kelly

BEFORE THE OIL CONSERVATION COMMISSION
OF THE STATE OF NEW MEXICO

IN THE MATTER OF THE HEARING
CALLED BY THE OIL CONSERVATION
COMMISSION OF NEW MEXICO FOR
THE PURPOSE OF CONSIDERING:

CASE NO. 5982
Order No. R-5521

APPLICATION OF SAM H. SNODDY FOR
DIRECTIONAL DRILLING AND A NON-STANDARD
GAS PRORATION UNIT, LEA COUNTY, NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 a.m. on July 20, 1977, at Santa Fe, New Mexico, before Examiner Richard L. Stamets.

NOW, on this 6th day of September, 1977, the Commission, a quorum being present, having considered the testimony, the record, and the recommendations of the Examiner, and being fully advised in the premises,

FINDS:

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

(2) That the applicant, Sam H. Snoddy, seeks approval of a 160-acre non-standard gas proration unit comprising the SW/4 of Section 25, Township 20 South, Range 32 East, NMPM, Lea County, New Mexico.

(3) Applicant also seeks approval for the directional drilling of two 14,000-foot Morrow gas wells in Unit P of Section 25, Township 20 South, Range 32 East, NMPM, one of which would be vertically drilled to a depth of 4,000 feet from a surface location 760 feet from the South line and 660 feet from the East line of said Section 25, then directionally drilled in a North-Northwesterly direction and bottomed in the approximate center of the NE/4 of said Section 25, the N/2 of the section being dedicated to the well; the other well would be vertically drilled to a depth of 4,000 feet from a surface location 660 feet from the South line and 760 feet

-2-

Case No. 5982
Order No. R-5521

from the East line of said Section 25, then directionally drilled in a West-Northwesterly direction and bottomed in the approximate center of the SW/4 of said Section 25.

(4) That the entire non-standard proration unit may reasonably be presumed productive of gas from the South Salt Lake-Morrow Gas Pool and that the entire non-standard gas proration unit can be efficiently and economically drained and developed by the aforesaid well to be completed in the SW/4 of said Section.

(5) That said surface locations and drilling procedures are the result of an arbitration meeting held under the provisions of Commission Order No. R-111-A (Potash-Oil Area Order), and are the only locations and procedures which could be used by the applicant to develop his leases in said Section 25 without objection by the potash operator therein.

(6) That approval of the subject application will afford the applicant the opportunity to produce his just and equitable share of the gas in the South Salt Lake-Morrow Gas Pool, will prevent the economic loss caused by the drilling of unnecessary wells, avoid the augmentation of risk arising from the drilling of an excessive number of wells, and will otherwise prevent waste and protect correlative rights.

IT IS THEREFORE ORDERED:

(1) That the applicant, Sam H. Snoddy, is hereby authorized to directionally drill two wells to test the Morrow formation, all in Section 25, Township 20 South, Range 32 East, South Salt Lake-Morrow Gas Pool, Lea County, New Mexico, and with acreage dedications as follows:

Federal Well No. 1, from a surface location 760 feet from the South line and 660 feet from the East line of said Section 25 to a bottom-hole location within 200 feet of a point 1320 feet from the North and East lines with the N/2 of said Section 25 being dedicated thereto.

Federal Well No. 2, from a surface location 660 feet from the South line and 760 feet from the East line of said Section 25 to a bottom hole location within 200 feet of a point 1320 feet from the South and West lines with the SW/4 of said Section 25, a 160-acre non-standard gas proration unit hereby approved, being dedicated thereto.

-3-
Case No. 5982
Order No. R-5521

PROVIDED HOWEVER, that each of said wells shall be drilled vertically to a depth of 4,000 feet and thence directionally to their intended bottom-hole locations.

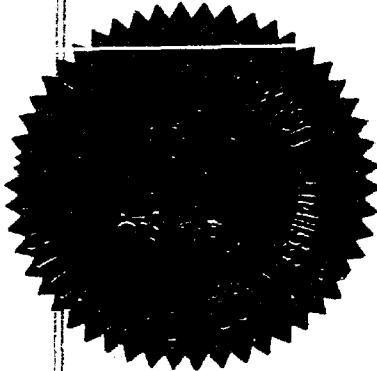
PROVIDED FURTHER, that subsequent to the above-described directional drilling, should said wells be producers, a continuous multi-shot directional survey shall be made of the wellbore from total depth to the surface, or to the whipstock point if the same has been determined in this manner, with shot points not more than 100 feet apart; that the operator shall cause the surveying company to forward a copy of the survey report directly to the Santa Fe office of the Commission, Box 2088, Santa Fe, New Mexico; and that the operator shall notify the Commission's Hobbs district office of the date and time said surveys are to be commenced.

(2) That Form C-105 shall be filed in accordance with Commission Rule 1108 and the operator shall indicate thereon true vertical depths in addition to measured depths.

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

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

STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION


Phil R. Lucero
PHIL R. LUCERO, Chairman

EMERY C. ARNOLD, Member

Joe D. Ramey
JOE D. RAMEY, Member & Secretary

S E A L

dr/

Mr. Sam H. Snoddy

Federal Well No. 1 & 2

Lea Co., New Mexico



(915) 563-0511 / Telex: 74-3452
P. O. Box 5577 / Midland, Texas 79701
Int'l: TWX 910-881-5066 / Cable: EASTCO

March 16, 1977

Mr. Sam H. Snoddy
202 Mid American Bldg.
Midland, Texas 79701

Dear Mr. Snoddy;

Please find enclosed an Angle Build up schedule proposal, Surface Plat showing both surface locations and bottom hole locations and Cost Estimates to control directional drill your pending Federal Wells No. 1 and 2, in Lea County, New Mexico.

I believe the cost estimates are realistic but will do more research into the actual planning of the kick-off point. We will be looking for a drilling break in the vicinity of 7500'. The kick-off point could vary a few 100' either way.

We appreciate the opportunity to submit this proposal to you and as always, it is our pleasure to be of service.

Sincerely,

Ray Warner
Ray Warner
District Representative

RW/pj

enc:

Sam H. Snoddy

Federal Well No. 1#2
Lea Co., New Mexico

ANGLE BUILD-UP SCHEDULE

2° per 100'

Measured Depth	Angle	TVD	Displacement
7500'	0°	7500.00'	0°
7600'	2°	7599.98'	1.75'
7700'	4°	7699.84'	6.98'
7800'	6°	7799.45'	15.70'
7900'	8°	7898.70'	27.89'
8000'	10°	7997.46'	43.54'
8100'	12°	8095.62'	62.63'
8200'	14°	8193.05'	85.13'
8300'	16°	8289.63'	111.02'
8400'	18°	8385.26'	140.27'
8500'	20°	8479.80'	172.84'
8600'	22°	8573.15'	208.68'
8700'	24°	8665.19'	247.77'
8800'	26°	8755.81'	290.05'
8900'	28°	8844.89'	335.14'
9000'	30°	8932.34'	383.96'
9100'	32°	9017.04'	435.48'
14401.16'	32°17'	13500.00'	3267.31'

Sam H. Snoddy

Federal No. 1 # 2
Lea Co., New Mexico

COST ESTIMATE

Cost Estimate based on 44 Straight Hole Drilling days from kick-off point, 7500' TVD, to total depth of 13,500' TVD.

Directional Surveys 0' to 13,500'	\$ 2,420.00
1st Day Directional Drilling Service	575.00
67 Additional days @ \$310.00 per day	20,770.00
67 Days Meals and Lodging @ \$30.00 per day	2,010.00
Down Hole Motor (initial run, 15 hrs.)	1,850.00
Loss in Hole Coverage	110.00
2 Down Hole Motor (corrective run, 8 hrs.)	2,020.00
Loss in Hole Coverage	70.00
Wire Line Charges--1st run	1,000.00
Surface Read-Out--1st run	2,300.00
2° Deflecting sub w/sleeve min. 7.50 @ 15 days	112.50
6 1/4 X 25' Non Magnetic Drill Collar	
67 days @ 60.60 per day	4,060.20
Directional Single Shot Instrument	
67 days @ 34.00 per day	2,278.00
7 7/8" Diamond Bit	3,500.00
3 Reamer Body Rentals @ 165.00 each	495.00
7 Sets 7 7/8" Reamer Cutters @ 315.00 each	2,205.00
6 1/2" X 10' Steel Drill Collar	
56 Days @ 9.00 per day	504.00
Miscellaneous subs, trucking, mileage, etc.	<u>600.00</u>
	\$46,879.70

Average cost per day -- \$699.69

Sam H. Snoddy

Federal Well No. 1 & 2
Lea Co., New Mexico

RECOMMENDED PRODECURES

1. Run directional survey 0' to 500' (casing point) either on 5/16" (minimum) wire line or run 6 1/2" x 25' non-magnetic drill collar on last bit trip before drilling to casing point and drop multiple shot and survey on trip out of hole.
2. Drill to approximately 7000' and drop multiple shot survey on trip out. (Accumulated deviation in off-set well is 133'). It is possible that this deviation could be in the opposite direction of the proposed direction. In this case it is possible we would have to start deflecting the well at this point (depending on where the bottom hole location from surface and/or proposed bottom hole location). If the bottom hole location is in a favorable position we would drill to a deeper depth for our kick off point.
3. Upon reaching kick off point, we would run 7 7/8" diamond bit, down hole mud motor, 2° deflecting sub w/orienting sleeve, 6 1/2" x 25' non-magnetic drill collar and regular steel drill collars and drill pipe and drill 60' +/- w/surface read out equipment to deflect the well bore with the proper direction and angle.
4. Run regular drilling bit, extension sub, bottom hole reamer, non-magnetic drill collar and steel collars until average angle is reached.
5. Run packer hole assembly consisting of regular drilling bit, bottom hole reamer, short steel drill collar, reamer, non-magnetic drill collar, reamer and steel drill collars.
6. Drill until it is determined that a corrective deflecting tool is needed or to total depth.

Note: It may be necessary to change the recommended procedures because of hole conditions or other considerations.

WILLIAM A. SLOAN
JACKSON G. AKIN
JOHN D. ROBB
CHARLES B. LARABEE
JAMES C. RITCHIE
JOHN P. EASTMAN
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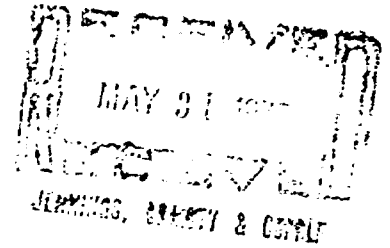
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RODEY, DICKASON, SLOAN, AKIN & ROBB, P.A.
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20 FIRST PLAZA, SUITE 700
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ALBUQUERQUE, NEW MEXICO 87103

OF COUNSEL
DON L. DICKASON
PEARCE C. RODEY
1889-1959

TELEPHONE 765-5900
AREA CODE 505

May 25, 1977



S. B. Christy IV
Jennings, Christy & Coppel
P. O. Box 1180
Roswell, New Mexico 88201

Re: Sam H. Snoddy
Felmont Federal No. 1 and No. 2
Section 25-T-20S-R32E
Lea County, New Mexico

Dear Sir:

As Bob Lane and I advised you yesterday at the Oil Conservation Commission arbitration meeting, Kerr-McGee Corporation would not object to an application by Mr. Snoddy to drill his proposed Felmont Federal No. 1 and No. 2 wells from sites within 100 feet of the existing Texaco well in SE 1/4 Sec. 25, T20S, R32E, if the verticle portions of the wells extended below the salt section or 4,000 feet from the surface, whichever is deeper. A well or wells drilled from another location in Sec. 25 would unduly interfere with the orderly development and recovery and result in the waste of potash reserves.

Yours very truly,

RODEY, DICKASON, SLOAN, AKIN & ROBE, P.A.

Mark K. Adams

Mark K. Adams

MKA:kab

STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION
5982 EXHIBIT NO. 5
CASE NO. _____
Submitted by _____
Hearing Date _____

Not Adm. H'd

BEFORE EXAMINER STAMETS
OIL CONSERVATION COMMISSION

Texaco EXHIBIT NO. *8*

CASE NO. *5922*

Submitted by *Texaco*

Hearing Date *July 20, 1977*

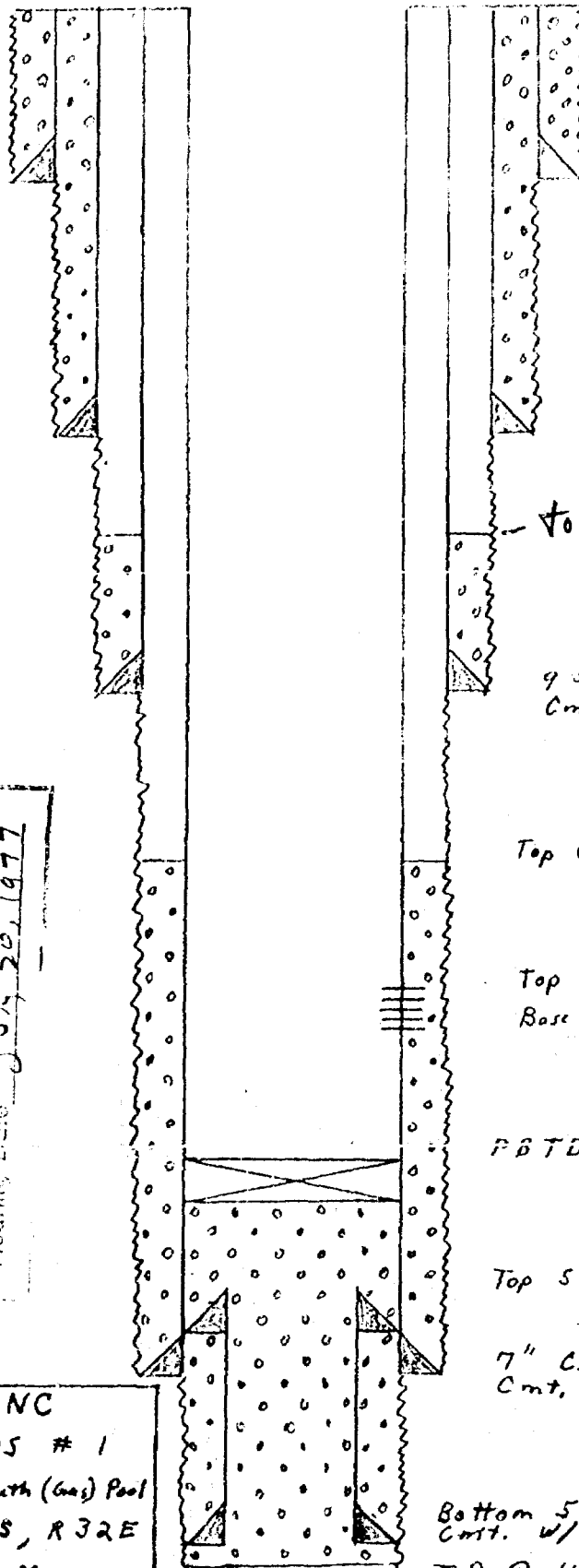
TEXACO INC

AUDIE RICHARDS # 1

Salt Lake Morrow, South (Gas) Pool
SE/4, Sec 25, T20S, R32E

Lea County, New Mexico

July 20, 1977



20" Csg @ 1229'
Cmt. w/ 2100 Skts
Cmt. Circulated

13 3/8" Csg @ 2752'
Cmt. w/ 3250 Skts
Cmt. Circulated

- top ?

9 5/8" Csg @ 8130'
Cmt. w/ 2600 Skts

Top Cmt @ 11,790'

Top Perf @ 12,909'
Base Perf @ 12,916'

PBTD @ 12,725'

Top 5 1/2" Liner @ 14,882'

7" Csg @ 14,945'
Cmt. w/ 500 Skts

Bottom 5 1/2" liner @ 16,595'
Cmt. w/ 160 Skts
TD @ 16,600'

EXHIBIT NO. _____

Dockets Nos. 25-77 and 26-77 are tentatively set for hearing on August 3 and August 17, 1977. Applications for hearing must be filed at least 22 days in advance of hearing date.

DOCKET: EXAMINER HEARING - WEDNESDAY - JULY 20, 1977

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

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

ALLOWABLE: (1) Consideration of the allowable production of gas for August, 1977, from fifteen prorated pools in Lea, Eddy, Chaves, and Roosevelt Counties, New Mexico.

(2) Consideration of the allowable production of gas for August, 1977, from four prorated pools in San Juan, Rio Arriba, and Sandoval Counties, New Mexico.

CASE 5932: Application of Sam H. Snoddy for directional drilling and a non-standard gas proration unit, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval for the directional drilling of two 14,000-foot Morrow gas wells in Unit P of Section 25, Township 20 South, Range 32 East, South Salt Lake-Morrow Gas Pool, Lea County, New Mexico, one of which would be vertically drilled to a depth of 4000 feet from a surface location 660 feet from the South line and 760 feet from the East line of said Section 25, then directionally drilled in a North-Northwesterly direction and bottomed in the approximate center of the NE $\frac{1}{4}$ of said Section 25, the N $\frac{1}{2}$ of the section being dedicated to the well; the other well would be vertically drilled to a depth of 4000 feet from a surface location 760 feet from the South line and 660 feet from the East line of said Section 25, then directionally drilled in a West-Northwesterly direction and bottomed in the approximate center of the SW $\frac{1}{4}$ of said Section 25, which would be a 160-acre non-standard unit for said well.

CASE 5933: Application of Yates Petroleum Corporation for the amendment of Order No. R-5445, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks the amendment of Order No. R-5445 to provide for a 200 percent risk factor for drilling the unit well rather than 20 percent. Said order pooled the N $\frac{1}{2}$ of Section 19, Township 20 South, Range 25 East, Eddy County, New Mexico.

CASE 5934: Application of Morris R. Antweil for compulsory pooling, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks an order pooling all mineral interests in and underlying the N $\frac{1}{2}$ of Section 20, Township 18 South, Range 25 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 5985: Application of Orla Petco, Inc., for an unorthodox gas well location, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks approval for the unorthodox location of its B. K. Morrison Well No. 1 to be located 1930 feet from the South line and 660 feet from the West line of Section 5, Township 19 South, Range 26 East, Eddy County, New Mexico, the S $\frac{1}{2}$ of said Section 5 to be dedicated to the well.

CASE 5986: Application of J. Gregory Merrion for downhole commingling, Rio Arriba County, New Mexico. Applicant, in the above-styled cause, seeks approval for the downhole commingling of Devils Fork-Gallup and Mesaverde production in the wellbore of his Edna Well No. 2 located in Unit O of Section 7, Township 24 North, Range 6 West, Rio Arriba County, New Mexico.

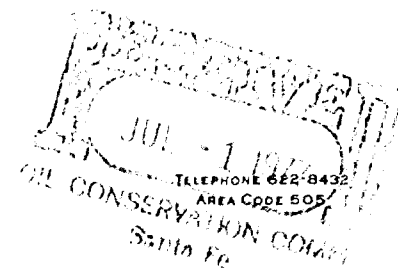
CASE 5987: Application of Getty Oil Company for downhole commingling, Rio Arriba County, New Mexico. Applicant, in the above-styled cause, seeks approval for the downhole commingling of Gallup, Mesaverde, and Dakota production in the wellbore of its C. W. Roberts Well No. 5, located in Unit F of Section 17, Township 25 North, Range 3 West, Rio Arriba County, New Mexico. Applicant also seeks approval for the reopening of its C. W. Roberts Wells Nos. 3 and 4 and its Lydia Rentz Well No. 4 to commingle Dakota, Mesaverde, and possibly Gallup production within the wellbores of the above-described wells located in Units O, M, and A of Sections 18, 17, and 19, respectively, of the same township.

CASE 5988: Application of Continental Oil Company for three unorthodox locations, Rio Arriba County, New Mexico. Applicant, in the above-styled cause, seeks an exception to Rule 2-A of the Blanco-Mesaverde Gas Pool Rules, to permit the drilling of its AXI Apache "N" Wells Nos. 12 and 14 in the NW $\frac{1}{4}$ of Sections 11 and 1, respectively, and its AXI Apache "O" Well No. 10 in the SE $\frac{1}{4}$ of Section 3, all in Township 25 North, Range 4 West, Rio Arriba County, New Mexico. Each of said wells is the first Mesaverde well on its proration unit.

JAMES T. JENNINGS
SIM B. CHRISTY IV
BRIAN W. COPPLE

LAW OFFICES OF
JENNINGS, CHRISTY & COPPLE
1012 SECURITY NATIONAL BANK BUILDING
P. O. BOX 1180
ROSWELL, NEW MEXICO 88201

June 30, 1977



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

Attention: Mr. Dan Nutter

Re: Sam H. Snoddy
Lea County, New Mexico

Order R-111-A

Dear Dan:

Thank you for your telephone call in connection with the captioned and enclosed is substitute Application for invoking Order R-111-A.

My understanding is that Kerr-McGee is the only potash operator in the area and we have a waiver on the proposed drilling from their attorney, copy of which is enclosed. However, we are sending an additional copy of this revised Application to the Kerr-McGee attorney to be certain that they have no objection to our proceeding.

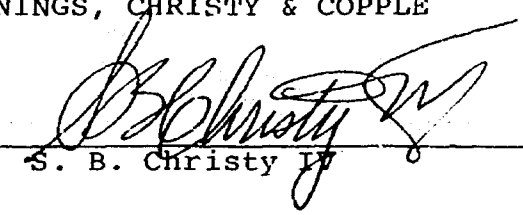
This of course does not alleviate the necessity for a hearing on Mr. Snoddy's Application for directional drilling and nonstandard proration unit; we sent you this Application June 27.

It is our understanding that with respect to Order R-111-A, and assuming that the matter is satisfactory with Kerr-McGee and with U.S.G.S., no further hearing will be necessary. However, if a hearing is necessary please let us know.

Respectfully,

JENNINGS, CHRISTY & COPPLE

By


S. B. Christy IV

SBC/jy
Encl.

cc: Mr. Sam H. Snoddy
cc: Mark K. Adams, Attorney
for Kerr-McGee Corporation
cc: U.S.G.S. (Roswell)

WILLIAM A. SLOAN
JACKSON G. AKIN
JOHN D. ROBB
CHARLES B. LARRABEE
JAMES C. RITCHIE
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COUNSELLORS AND ATTORNEYS AT LAW

20 FIRST PLAZA, SUITE 700

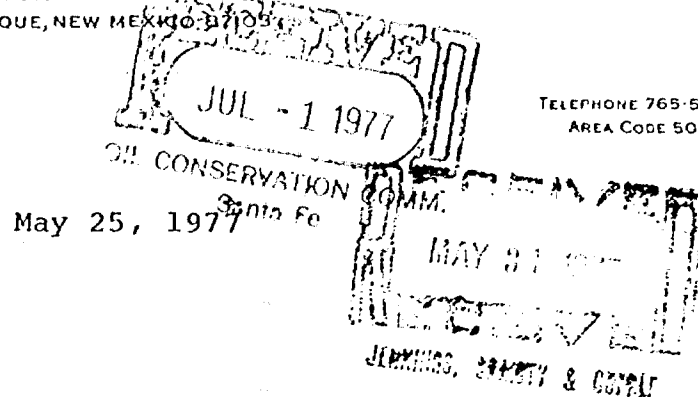
P. O. BOX 1888

ALBUQUERQUE, NEW MEXICO 87103

OF COUNSEL
DON L. DICKASON

PEARCE C. RODEY
1889-1958

TELEPHONE 765-5900
AREA CODE 505



S. B. Christy IV
Jennings, Christy & Coppel
P. O. Box 1180
Roswell, New Mexico 88201

Re: Sam H. Snoddy
Felmont Federal No. 1 and No. 2
Section 25-T-20S-R32E
Lea County, New Mexico

Dear Sir:

As Bob Lane and I advised you yesterday at the Oil Conservation Commission arbitration meeting, Kerr-McGee Corporation would not object to an application by Mr. Snoddy to drill his proposed Felmont Federal No. 1 and No. 2 wells from sites within 100 feet of the existing Texaco well in SE 1/4 Sec. 25, T20S, R32E, if the verticle portions of the wells extended below the salt section or 4,000 feet from the surface, whichever is deeper. A well or wells drilled from another location in Sec. 25 would unduly interfere with the orderly development and recovery and result in the waste of potash reserves.

Yours very truly,

RODEY, DICKASON, SLOAN, AKIN & ROBB, P.A.

Mark K. Adams

Mark K. Adams

MKA:kab

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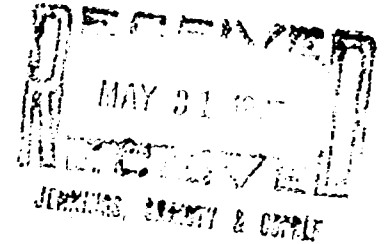
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ALBUQUERQUE, NEW MEXICO 87103

OF COUNSEL
DON L. DICKASON
PEARCE C. RODEY
1889-1958

TELEPHONE 765-5900
AREA CODE 505

May 25, 1977



S. B. Christy IV
Jennings, Christy & Coppel
P. O. Box 1180
Roswell, New Mexico 88201

Re: Sam H. Snoddy
Felmont Federal No. 1 and No. 2
Section 25-T-20S-R32E
Lea County, New Mexico

Dear Sir:

As Bob Lane and I advised you yesterday at the Oil Conservation Commission arbitration meeting, Kerr-McGee Corporation would not object to an application by Mr. Snoddy to drill his proposed Felmont Federal No. 1 and No. 2 wells from sites within 100 feet of the existing Texaco well in SE 1/4 Sec. 25, T20S, R32E, if the verticle portions of the wells extended below the salt section or 4,000 feet from the surface, whichever is deeper. A well or wells drilled from another location in Sec. 25 would unduly interfere with the orderly development and recovery and result in the waste of potash reserves.

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RODEY, DICKASON, SLOAN, AKIN & ROBB, P.A.

Mark K. Adams

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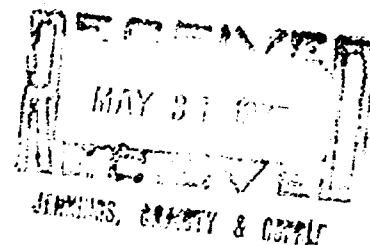
OIL CONSERVATION COM. Santa Fe

OF COUNSEL
DON L. DICKASON

PEARCE C. RODEY
1889-1958

TELEPHONE 765-5900
AREA CODE 505

May 25, 1977



S. B. Christy IV
Jennings, Christy & Coppel
P. O. Box 1180
Roswell, New Mexico 88201

Re: Sam H. Snoddy
Felmont Federal No. 1 and No. 2
Section 25-T-20S-R32E
Lea County, New Mexico

Dear Sim:

As Bob Lane and I advised you yesterday at the Oil Conservation Commission arbitration meeting, Kerr-McGee Corporation would not object to an application by Mr. Snoddy to drill his proposed Felmont Federal No. 1 and No. 2 wells from sites within 100 feet of the existing Texaco well in SE 1/4 Sec. 25, T20S, R32E, if the verticle portions of the wells extended below the salt section or 4,000 feet from the surface, whichever is deeper. A well or wells drilled from another location in Sec. 25 would unduly interfere with the orderly development and recovery and result in the waste of potash reserves.

Yours very truly,

RODEY, DICKASON, SLOAN, AKIN & ROBB, P.A.

Mark K. Adams

Mark K. Adams

MKA:kab

BEFORE THE NEW MEXICO OIL CONSERVATION COMMISSION

STATE OF NEW MEXICO

IN THE MATTER OF THE APPLICATION OF)
SAM H. SNODDY FOR DIRECTIONAL DRILL-)
ING PURSUANT TO ORDER R-111-A, LEA)
COUNTY, NEW MEXICO.)

Case No. _____

APPLICATION

COMES NOW Sam H. Snoddy and pursuant to Order R-111-A of the Oil Conservation Commission hereby makes application to directionally drill two wells in Lea County, New Mexico, and states:

1. Applicant is the owner of a farmout from the record title holder, Felmont Oil Corporation, covering U.S.A. Lease NM-15907 as to:

Township 20 South, Range 32 East, N.M.P.M.
Section 25: N $\frac{1}{2}$, SW $\frac{1}{4}$

2. Applicant is further the owner and holder of a right to use and possess the surface estate, for the purpose of drilling for oil, gas and associated hydrocarbons, in the SE $\frac{1}{4}$ SE $\frac{1}{4}$ Section 25, Township 20 South, Range 32 East, N.M.P.M.

3. Applicant proposes to drill the following wells:

(a) Well designated as Felmont Federal No. 1 to be located on the surface 760 feet from the South line and 660 feet from the East line of Section 25, Township 20 South, Range 32 East, N.M.P.M., and thereafter directionally drilled to a bottom hole location at approximately the center of the NE $\frac{1}{4}$ of said Section 25; and,

(b) Well designated as Felmont Federal No. 2 to be located on the surface 660 feet from the South line and 760 feet from the East line of Section 25, Township 20 South, Range 32 East, N.M.P.M., and thereafter directionally drilled to a bottom hole location at approximately the center of the SW $\frac{1}{4}$ of said Section 25.

4. Applicant hereby requests the Oil Conservation Commission to grant permission to directionally drill said wells, and each of them, and states that in his opinion the granting of this Application will result in the prevention of waste and will not violate the correlative rights of any parties. Applicant agrees to comply with all provisions of Order R-111-A, and all other applicable rules incident to the drilling, testing, completing and producing of the directionally drilled wells sought by this Application.

JENNINGS, CHRISTY & COPPLE

By 

S. B. Christy IV,
As a Member of the Firm
P. O. Box 1180
Roswell, New Mexico 88201
(505) 622-8432

ATTORNEYS FOR SAM H. SNODDY

cc: United States Geological Survey
P. O. Drawer 1857
Roswell, New Mexico 88201

cc: Kerr-McGee Corporation
c/o Rodey, Dickason, Sloan, Akin & Robb, P.A.
P. O. Box 1888
Albuquerque, New Mexico 87103

cc: Mr. Sam H. Snoddy
202 Mid-America Building
Midland, Texas 79701

BEFORE THE NEW MEXICO OIL CONSERVATION COMMISSION
STATE OF NEW MEXICO

IN THE MATTER OF THE APPLICATION)
OF SAM H. SNODDY FOR DIRECTIONAL)
DRILLING AND FOR A NON-STANDARD)
GAS PRORATION UNIT, LEA COUNTY,)
NEW MEXICO.)

APPLICATION

COMES NOW Sam H. Snoddy and hereby makes application for the following:

1. For directional drilling of two 14,000 foot Morrow test wells from the following locations:

(a) Well designated as Felmont Federal No. 1 to be located on the surface 760 feet from the South line and 660 feet from the East line of Section 25, Township 20 South, Range 32 East, N.M.P.M., and thereafter directionally drilled to a bottom hole location at approximately the center of the NE $\frac{1}{4}$ of said Section 25; and,

(b) Well designated as Felmont Federal No. 2 to be located on the surface 660 feet from the South line and 760 feet from the East line of Section 25, Township 20 South, Range 32 East, N.M.P.M., and thereafter directionally drilled to a bottom hole location at approximately the center of the SW $\frac{1}{4}$ of said Section 25.

2. Applicant proposes to dedicate the N $\frac{1}{2}$ of said Section 25 to the Felmont Federal No. 1 well.

3. Applicant proposes to dedicate the SW $\frac{1}{4}$ of said Section 25 to the Felmont Federal No. 2 well and hereby requests approval of a 160-acre non-standard gas proration unit comprising the SW $\frac{1}{4}$ of said Section 25 for the Felmont Federal No. 2 well.

4. In the opinion of Applicant the entire non-standard proration unit may be reasonably presumed to be productive of gas from the South Salt Lake-Morrow Gas Pool and that the entire non-standard gas proration unit can be effectively and economically drained and developed by the aforesaid Felmont Federal No. 2 well to be completed in the SW $\frac{1}{4}$ of said Section 25.

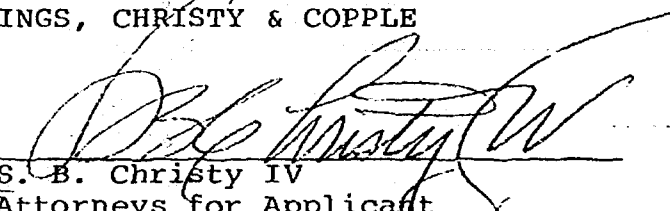
5. That in the opinion of Applicant the approval of this Application will afford Applicant the opportunity to produce his just and equitable share of the gas in the South Salt Lake-Morrow Gas Pool, will prevent the economic loss caused by the drilling of unnecessary wells, avoid the augmentation of risks arising by the drilling of an excessive number of wells, and will otherwise prevent waste and protect correlative rights. Applicant offers to determine the subsurface location of the bottom of each of the holes in the above wells by means of a continuous multi-shot directional survey conducted subsequent to the directional drilling if said wells are completed as producing wells.

6. The wells will be drilled as "straight holes" (as far as practicable) to a depth of not less than 4,000 feet and thereafter directionally drilled to their respective bottom hole location.

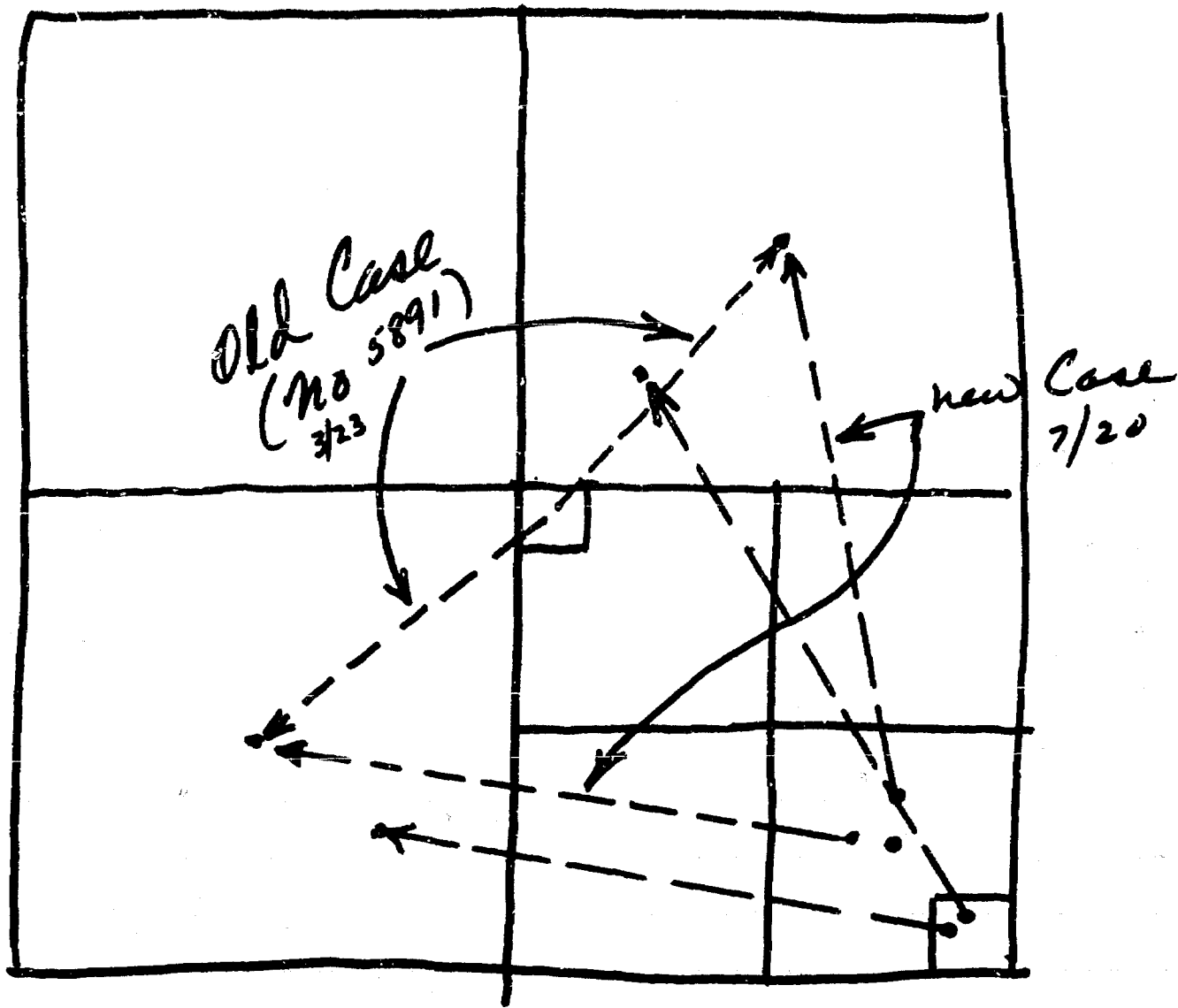
WHEREFORE, Applicant prays that after notice and hearing he be authorized to directionally drill the two above wells and to complete the Felmont Federal No. 2 well as a non-standard gas proration unit; and for all proper relief.

JENNINGS, CHRISTY & COPPLE

By


S. B. Christy IV
Attorneys for Applicant
P. O. Box 1180
Roswell, New Mexico 88201
(505) 622-8432

cc: Texaco Inc.
cc: Felmont Oil Corporation
cc: Mrs. Emily Bingham
cc: United States Geological Survey
cc: Mr. Sam H. Snoddy
cc: Kerr-McGee Corporation
c/o Rodey, Dickason, Sloan, Akin & Robb



Disregard appl for red wells.

BEFORE THE NEW MEXICO OIL CONSERVATION COMMISSION

STATE OF NEW MEXICO

IN THE MATTER OF THE APPLICATION OF)
SAM H. SNODDY FOR DIRECTIONAL DRILL-)
ING PURSUANT TO RULE 111, LEA COUNTY,)
NEW MEXICO)

Case No. 5982

APPLICATION

COMES NOW Sam H. Snoddy and pursuant to Rule III of the Oil Conservation Commission Rules hereby makes application to directionally drill two wells in Lea County, New Mexico, and states:

1. Applicant is the owner of a farmout from the record title holder, Felmont Oil Corporation, covering U. S. A. Lease NM-15907 as to:

Township 20 South, Range 32 East, N. M. P. M.

Section 25: N $\frac{1}{2}$, SW $\frac{1}{4}$

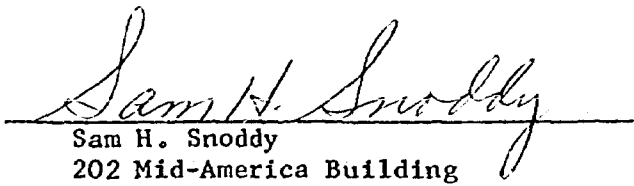
2. Applicant is further the owner and holder of a right to use and possess the surface estate, for the purpose of drilling for oil, gas and associated hydrocarbons, of a five acre tract in the form of a square in the extreme Southeast corner of the SE $\frac{1}{4}$ SE $\frac{1}{4}$ Section 25, Township 20 South, Range 32 East, N. M. P. M.

3. Applicant proposes from his surface location aforesaid to drill a well, within the confines of the SE $\frac{1}{4}$ SE $\frac{1}{4}$ of said Section 25 to a depth of not less than 4,000 feet, and thereafter directionally drill such well to a legal location in the NE $\frac{1}{4}$ of said Section 25 at a projected total depth of 14,000 feet or sufficient depth to test the Lower Morrow zone of the Pennsylvanian formation.

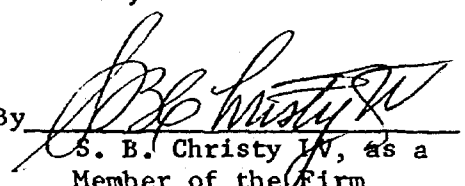
4. Applicant proposes from his surface location aforesaid to drill a well, within the confines of the SE $\frac{1}{4}$ SE $\frac{1}{4}$ of said Section 25 to a depth of not less than 4,000 feet, and thereafter directionally drill such a well to a legal location in the SW $\frac{1}{4}$ of said Section 25 at a projected total depth of 14,000 feet or sufficient depth to test the Lower Morrow zone of the Pennsylvanian formation.

Disregard
this appl.
talked to S. Christy
about this
6/30
Dank

5. Applicant hereby requests the Oil Conservation Commission to grant permission to directionally drill said wells, and each of them, and states that in his opinion the granting of this Application will result in the prevention of waste and will not violate the correlative rights of any parties. Applicant agrees to comply with all provisions of Rule 111, and all other applicable rules incident to the drilling, testing, completing and producing of the directionally drilled wells sought by this Application.


Sam H. Snoddy
202 Mid-America Building
Midland, Texas 79701

JENNINGS, CHRISTY & COPPLE

By 
S. B. Christy IV, as a
Member of the Firm
P. O. Box 1180
Roswell, New Mexico 88201
(505) 622-8432
Attorneys for Applicant

cc: (Certified Mail)
Texaco Inc.
P. O. Box 3109
Midland, Texas 79701

Felmont Oil Corporation
P. O. Box 2266
Midland, Texas 79701

Mrs. Emily Bingham
708 West Silver
Hobbs, New Mexico 88240

United States Geological Survey
P. O. Drawer 1857
Roswell, New Mexico 88201

Kerr-McGee Corporation
c/o Rodey, Dickason, Sloan, Akin & Robb, P.A.
P. O. Box 1888
Albuquerque, New Mexico 87103

WILLIAM A. SLOAN
JACKSON G. AKIN
JOHN D. ROBB
CHARLES B. LARRABEE
JAMES C. RITCHIE
JOHN P. EASTHAM
WILLIAM C. SCHAAB
WILLIAM C. ERIGOS
PAT H. RODEY
ROBERT D. TAICHERT
ROBERT M. ST. JOHN
JOSEPH J. MULLINS
DUBNE C. GILKEY
MARK K. ADAMS
ROBERT G. MCCORMIE
PETER G. PRINA
BRUCE D. HALL

JOHN P. SALAZAR
WILLIAM S. DIXON
JOHN P. BURTON
KEN D. THACKERMORTON
JONATHAN W. HEWES
GENE C. WALTON
RICHARD C. MINZNER
W. ROBERT LASATER, JR.
KENNETH R. BRANDT
ROBERT L. SCHWARTZ
VICTOR H. MARSHALL
CARL H. ESBECK

RODEY, DICKASON, SLOAN, AKIN & ROBB, P.A.

COUNSELLORS AND ATTORNEYS AT LAW

20 FIRST PLAZA, SUITE 700

P. O. BOX 1888

ALBUQUERQUE, NEW MEXICO 87103

OF COUNSEL
DON L. DICKASON

PEARCE C. RODEY
1889-1958

TELEPHONE 765-5900
AREA CODE 505

July 6, 1977

S. B. Christy, IV
Jennings, Christy & Copple
P. O. Box 1180
Roswell, New Mexico 88201

Re: Kerr-McGee Corporation - Potash-Oil Area - Application
of Sam H. Snoddy

Dear Sir:

This letter will confirm that our client Kerr-McGee Corporation has no objection to the drilling of the Felmont Federal No. 1 and No. 2 wells as described in the Application of Sam H. Snoddy sent to the Oil Conservation Commission with your June 27, 1977 letter, and that no arbitration or hearing will be required under Order No. R111-A.

Yours very truly,

MARK K. ADAMS

Mark K. Adams

MKA:kab

cc: D. S. Nutter, Chief Engineer
Oil Conservation Commission
P. O. Box 2088
Santa Fe, New Mexico 87501

*File Case
5982
Snoddy*

JAMES T. JENNINGS
SIM B. CHRISTY IV
BRIAN W. COPPLE

LAW OFFICES OF
JENNINGS, CHRISTY & COPPLE
1012 SECURITY NATIONAL BANK BUILDING
P. O. BOX 1180
ROSWELL, NEW MEXICO 88201

TELEPHONE 622-8432
AREA CODE 505

June 27, 1977

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

Attention: Mr. Joe D. Ramey
Secretary-Director

Dear Mr. Ramey:

We are enclosing herewith Application in triplicate by our client,
Sam H. Snoddy, for:

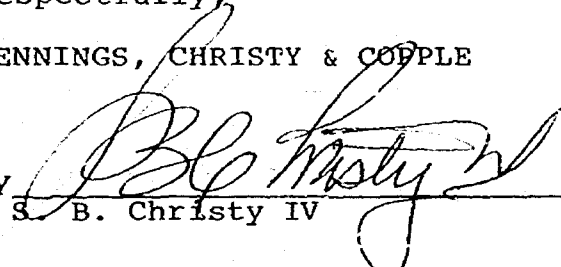
1. Two directionally drilled wells with one non-standard proration unit.
2. Application in conformity with Rule 111.

both relating to Mr. Snoddy's leases in the N $\frac{1}{2}$, SW $\frac{1}{4}$ Section 25, Township 20 South, Range 32 East, N.M.P.M., Lea County, New Mexico. Appropriate notification by certified mail of the Application under Rule 111 has been made to Kerr-McGee Corporation, c/o of its attorneys Rodey, Dickason, Sloan, Akin & Robb (Mark K. Adams).

Respectfully,

JENNINGS, CHRISTY & COPPLE

By


S. B. Christy IV

SBC:pv

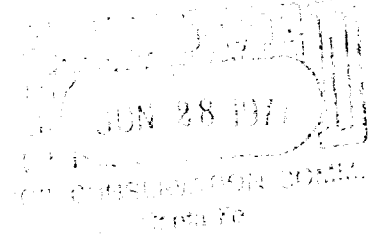
Encl.

cc: Mr. Sam H. Snoddy
cc: (Certified Mail)
Mark K. Adams, Attorney
for Kerr-McGee Corporation

BEFORE THE NEW MEXICO OIL CONSERVATION COMMISSION

STATE OF NEW MEXICO

IN THE MATTER OF THE APPLICATION)
 OF SAM H. SNODDY FOR DIRECTIONAL)
 DRILLING AND FOR A NON-STANDARD)
 GAS PRORATION UNIT, LEA COUNTY,)
 NEW MEXICO.)



APPLICATION

COMES NOW Sam H. Snoddy and hereby makes application for the following:

1. For directional drilling of two 14,000 foot Morrow test wells from the following locations:

(a) Well designated as Felmont Federal No. 1 to be located on the surface 760 feet from the South line and 660 feet from the East line of Section 25, Township 20 South, Range 32 East, N.M.P.M., and thereafter directionally drilled to a bottom hole location at approximately the center of the NE $\frac{1}{4}$ of said Section 25; and,

(b) Well designated as Felmont Federal No. 2 to be located on the surface 660 feet from the South line and 760 feet from the East line of Section 25, Township 20 South, Range 32 East, N.M.P.M., and thereafter directionally drilled to a bottom hole location at approximately the center of the SW $\frac{1}{4}$ of said Section 25.

2. Applicant proposes to dedicate the N $\frac{1}{2}$ of said Section 25 to the Felmont Federal No. 1 well.

3. Applicant proposes to dedicate the SW $\frac{1}{4}$ of said Section 25 to the Felmont Federal No. 2 well and hereby requests approval of a 160-acre non-standard gas proration unit comprising the SW $\frac{1}{4}$ of said Section 25 for the Felmont Federal No. 2 well.

4. In the opinion of Applicant the entire non-standard proration unit may be reasonably presumed to be productive of gas from the South Salt Lake-Morrow Gas Pool and that the entire non-standard gas proration unit can be effectively and economically drained and developed by the aforesaid Felmont Federal No. 2 well to be completed in the SW $\frac{1}{4}$ of said Section 25.

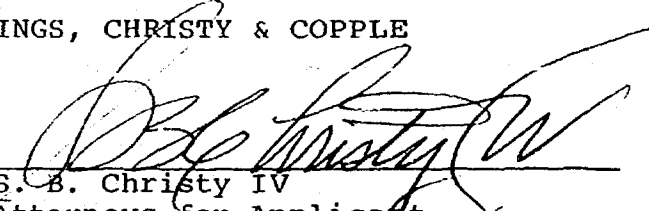
5. That in the opinion of Applicant the approval of this Application will afford Applicant the opportunity to produce his just and equitable share of the gas in the South Salt Lake-Morrow Gas Pool, will prevent the economic loss caused by the drilling of unnecessary wells, avoid the augmentation of risks arising by the drilling of an excessive number of wells, and will otherwise prevent waste and protect correlative rights. Applicant offers to determine the subsurface location of the bottom of each of the holes in the above wells by means of a continuous multi-shot directional survey conducted subsequent to the directional drilling if said wells are completed as producing wells.

6. The wells will be drilled as "straight holes" (as far as practicable) to a depth of not less than 4,000 feet and thereafter directionally drilled to their respective bottom hole location.

WHEREFORE, Applicant prays that after notice and hearing he be authorized to directionally drill the two above wells and to complete the Felmont Federal No. 2 well as a non-standard gas proration unit; and for all proper relief.

JENNINGS, CHRISTY & COPPLE

By


S. B. Christy IV
Attorneys for Applicant
P. O. Box 1180
Roswell, New Mexico 88201
(505) 622-8432

cc: Texaco Inc.
cc: Felmont Oil Corporation
cc: Mrs. Emily Bingham
cc: United States Geological Survey
cc: Mr. Sam H. Snoddy
cc: Kerr-McGee Corporation
c/o Rodey, Dickason, Sloan, Akin & Robb

Case 5982

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LAND OFFICE	
OPERATOR	

NEW MEXICO OIL CONSERVATION COMMISSION

Form C-101
Revised 1-1-85

5A. Indicate Type of Lease	
STATE <input type="checkbox"/>	FEE <input checked="" type="checkbox"/> *
5. State Oil & Gas Lease No.	
U.S. 15907	
7. Unit Agreement Name	
8. Farm or Lease Name	
Felmont Federal	
9. Well No.	
1	
10. Field and Pool, or Wildcat	
Salt Lake Morrow, So.	
12. County	
Lea	
18. Proposed Depth	19A. Formation
14,000**	Morrow
20. Rotary or C.T.	
Rotary	
21. Elevations (Show whether DF, RT, etc.)	21A. Kind & Status Plug. Bond
3580' G.L. Est.	Blanket-Active
21B. Drilling Contractor	22. Approx. Date Work will start
Moranco	Upon Approval

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. Type of Work

b. Type of Well DRILL ☒ DEEPEN ☐ PLUG BACK ☐

OIL WELL ☐ GAS WELL ☒ OTHER ☐ SINGLE ZONE ☒ MULTIPLE ZONE ☐

2. Name of Operator

Sam H. Snoddy

3. Address of Operator

2602 McClintic Midland, Texas 79701

4. Location of Well UNIT LETTER P LOCATED 760 FEET FROM THE South LINE

AND 660 FEET FROM THE East LINE OF SEC. 25 TWP. 20-S RGE. 32-E NMPM

19. Proposed Depth

14,000**

19A. Formation

Morrow

20. Rotary or C.T.

Rotary

21. Elevations (Show whether DF, RT, etc.)

3580' G.L. Est.

21A. Kind & Status Plug. Bond

Blanket-Active

21B. Drilling Contractor

Moranco

22. Approx. Date Work will start

Upon Approval

23. PROPOSED CASING AND CEMENT PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	SACKS OF CEMENT	EST. TOP
16"	13 3/8"	48#	500'	600 sxs (Cir)	Surface
12 1/4"	9 5/8"	40#	5,100'	3250 sxs	500'
8 3/4"	5 1/2"	17# to 20#	14,000'	700 sxs	11,000'

* Surface location will be on Fee acreage as follows:
760' FSL & 660' FEL of Section 25, T-20-S, R-32-E N.M.P.M.

Bottom Hole location will be under Federal acreage as follows:
Bottom of hole will be in the approximate center of the NE/4 of the same
Section 25 (within a target of 200' radius and 3200' from the surface
location in a direction of N 12° W.

** T.D. 14,000' TVD 13,500'

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM; IF PROPOSAL IS TO DEEPEN OR PLUG BACK, GIVE DATA ON PRESENT PRODUCTIVE ZONE AND PROPOSED NEW PRODUCTIVE ZONE. GIVE BLOWOUT PREVENTER PROGRAM, IF ANY.

I hereby certify that the information above is true and complete to the best of my knowledge and belief.

Signed James C. Whitten Title Geologist for Sam H. Snoddy Date June 24, 1977

(This space for State Use)

APPROVED BY _____ TITLE _____ DATE _____

CONDITIONS OF APPROVAL, IF ANY:

NEW MEXICO OIL CONSERVATION COMMISSION
WELL LOCATION AND ACREAGE DEDICATION PLAT

Case 5982

Form C-102
Supersedes C-128
Effective 12-65

All distances must be from the outer boundaries of the Section.

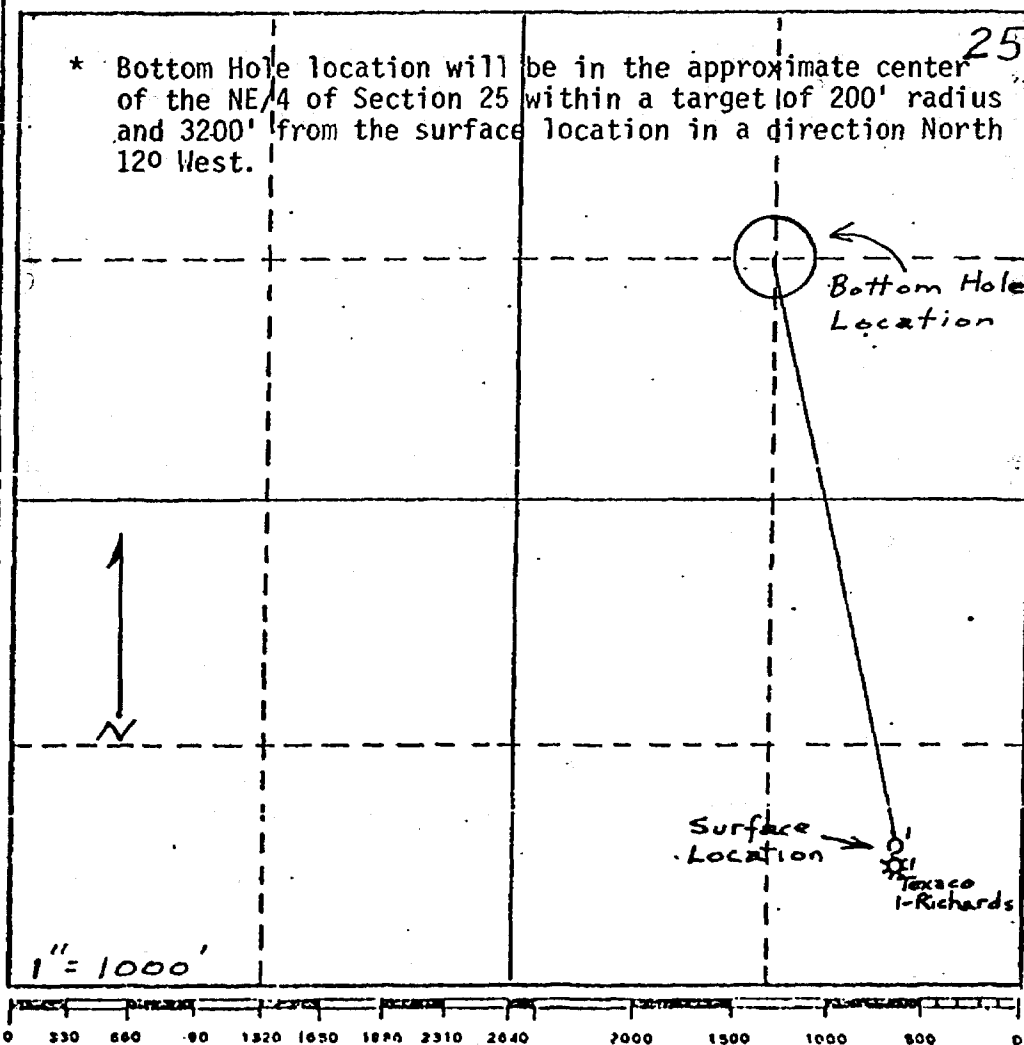
Operator Sam H. Snoddy		Location Felmont Federal		Well No. 1
Unit Letter *P	Section 25	Township 20-S	Range 32-E	County Lea
Actual Footage Location of Well:				
760 feet from the South line and		660 feet from the East line		
Ground Level Elev. 3580' est.	Producing Formation Morrow	Pool Salt Lake Morrow, South	Dedicated Acreage: 320 Acres	

1. Outline the acreage dedicated to the subject well by colored pencil or hatchure marks on the plat below.
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).
3. If more than one lease of different ownership is dedicated to the well, have the interests of all owners been consolidated by communitization, unitization, force-pooling, etc?

☐ Yes ☐ No If answer is "yes," type of consolidation _____

If answer is "no," list the owners and tract descriptions which have actually been consolidated. (Use reverse side of this form if necessary.) _____

No allowable will be assigned to the well until all interests have been consolidated (by communitization, unitization, forced-pooling, or otherwise) or until a non-standard unit, eliminating such interests, has been approved by the Commission.



CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.

Name
James C. White

Position
Geologist

Company
Sam H. Snoddy

Date
June 24, 1977

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my knowledge and belief.

Date Surveyed _____

Registered Professional Engineer and/or Land Surveyor

Certificate No. _____

DRAWWORKS
 Mid Continent U-712A
 Drum: 1 1/4" Iebus grooved
 Compound: 2-engine oil bath chain drive
 Brake: Hydromatic Parkersburg 46" Double

ENGINES
 Two 610-H.P. D379TA Caterpillar Diesel

DERRICK
 Lee C. Moore, 131', 550,000 lb. nominal capacity

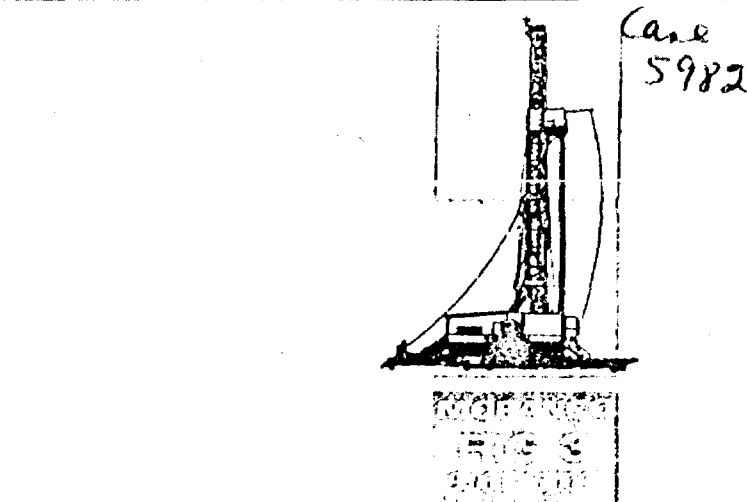
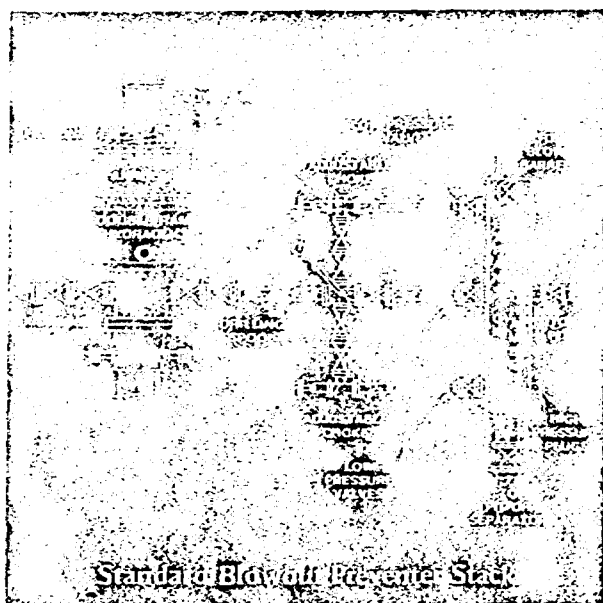
SUBSTRUCTURE
 Lee C. Moore, 18' high, 550,000 lb. nominal capacity

MUD PUMPS
 Pump No. 1: Emsco F-800 Triplex. 800 H.P. with steel fluid end. 4 1/4" - 6 1/2" liners, 9" stroke. Compound-drive.
 Pump No. 2: Emsco DB550, powered by D379 Caterpillar Diesel.

DRILL STRING
 3000' 4 1/2" Grade E, 20 lb.
 Tool Joints: 4 1/2" H-90, 6 1/4" OD, 12000' 4 1/2" Grade E, 16.60 lb.
 Tool Joints: 4" H-90, 6" OD
 Thirty Drilco spiral-grooved 6 1/2" OD, 2 1/4" ID. With 4" H-90 Joints.
 Other sized drillpipe & drillcollars available.

BLOWOUT PREVENTERS
 One Shaffer LWS hydraulic double 10" x 1500 series. One Hydril 10" x 1500 series.
 Choke manifold 4" x 1500 series flanged connections. Payne 4 valve accumulator closing unit.

MUD SYSTEM
 3 - 30 x 8 x 6 steel pits, with 750 Bbl. capacity. Complete low pressure circulating system, consisting of four submerged mud guns and two counter sunk jets in each pit. System utilizes two - 6 x 8 centrifugal pumps, powered by diesel.



MUD HOUSE
 One - 8' x 30' Steel Storage House.

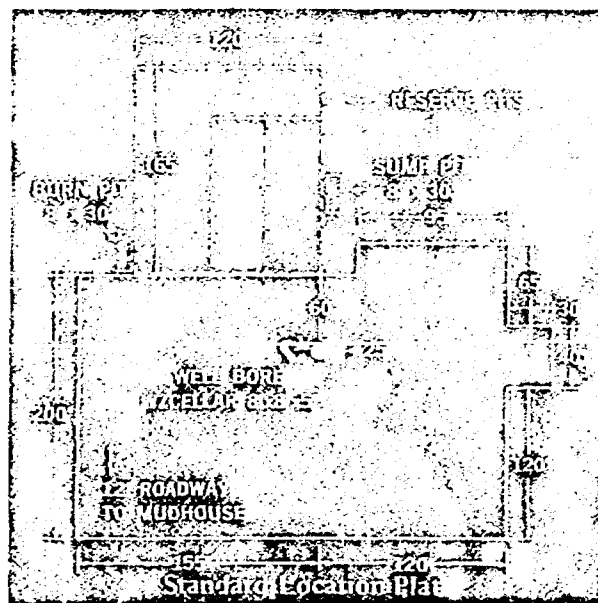
COMMUNICATIONS
 24 - Hour direct telephone interconnection through Hobbs (A.C. 505-397-3291) or Midland - Odessa (A.C. 915-563-0562).

OTHER EQUIPMENT
 BLOCKS - Oilwell 350 Ton
 HOOK - BJ4300 350 Ton
 SWIVEL - NAT P400 350 Ton
 LIGHT PLANTS - One 40 KW and one 15 KW AC generators, powered by diesel engines.

LIGHTS - AC fluorescent or mercury - All vapor proof.

FRESH WATER STORAGE - two 500 Bbl. and one 400 Bbl. horizontal tanks.

HOUSING - 1 - 8' x 36' airconditioned trailer house, with sleeping and cooking facilities.



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U.S.G.S.	
LAND OFFICE	
OPERATOR	

NEW MEXICO OIL CONSERVATION COMMISSION

Form O-101
Revised 1-1-65

5A. Indicate Type of Lease	STATE <input type="checkbox"/> FEE <input checked="" type="checkbox"/> *
5. State Oil & Gas Lease No.	U.S. 15907

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. Type of Work		7. Unit Agreement Name	
b. Type of Well OIL WELL <input type="checkbox"/> GAS WELL <input checked="" type="checkbox"/> OTHER <input type="checkbox"/>		8. Farm or Lease Name Felmont Federal	
2. Name of Operator Sam H. Snoddy		9. Well No. 2	
3. Address of Operator 2602 McClintic Midland, Texas 79701		10. Field and Pool, or Wildcat Salt Lake Morrow, So.	
4. Location of Well UNIT LETTER P LOCATED 660 FEET FROM THE South LINE AND 760 FEET FROM THE East LINE OF SEC. 25 TWP. 20-S RGE. 30-E NMPM		12. County Lea	
19. Proposed Depth 14,000 **		19A. Formation Morrow	
20. Rotary or C.T. Rotary		21. Elevations (Show whether DF, RT, etc.) 3580' G.L. Est.	
21A. Kind & Status Plug. Bond Blanket-Active		21B. Drilling Contractor Moranco	
22. Approx. Date Work will start Upon Approval			

23.

PROPOSED CASING AND CEMENT PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	SACKS OF CEMENT	EST. TOP
16"	13 3/8"	48#	500'	Circulate	Surface
12 1/4"	9 5/8"	40#	5,100'	3250 sxs	500'
8 3/4"	5 1/2"	17# to 20#	14,000'	700 sxs	11,000'

- * Surface location will be on Fee acreage as follows:
660' FSL & 760' FEL of Section 25, T-20-S, R-32-E NMPM

Bottom Hole location will be under Federal acreage as follows:
Bottom of hole will be in the approximate center of the SW/4 of the same
Section 25 (within a target of 200' radius and 3200' from the surface
location in a direction of N 79° West.)

** T.D. 14,000' TVD 13,500'

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: IF PROPOSAL IS TO DEEPEN OR PLUG BACK, GIVE DATA ON PRESENT PRODUCTIVE ZONE AND PROPOSED NEW PRODUCTIVE ZONE. GIVE BLOWOUT PREVENTER PROGRAM, IF ANY.

I hereby certify that the information above is true and complete to the best of my knowledge and belief.

Signed James C. Whittle Title Geologist Date June 24, 1977
(This space for State Use)

APPROVED BY _____ TITLE _____ DATE _____
CONDITIONS OF APPROVAL, IF ANY:

NEW MEXICO OIL CONSERVATION COMMISSION
WELL LOCATION AND ACREAGE DEDICATION PLAT

Case 5982

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

All distances must be from the outer boundaries of the Section.

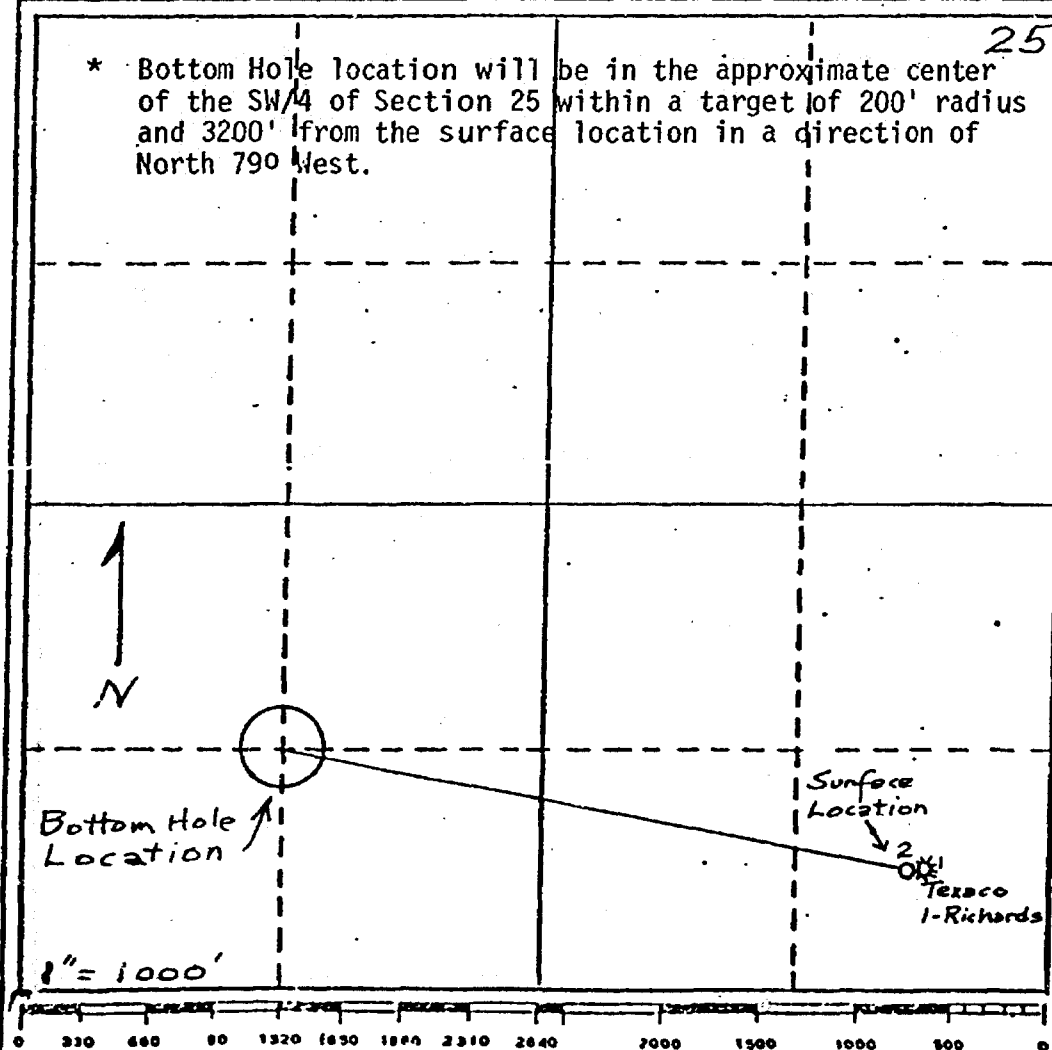
Operator Sam H. Snoddy		Locality Felmont Federal		Well No. 2
Unit Letter *P	Section 25	Township 20-S	Range 32-E	County Lea
Actual Footage Location of Well:				
660 feet from the South line and		760 feet from the East line		
Ground Level Elev. 3580" est.	Producing Formation Morrow	Pool Salt Lake Morrow, South	Dedicated Acreage: 160 Acres	

1. Outline the acreage dedicated to the subject well by colored pencil or hachure marks on the plat below.
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).
3. If more than one lease of different ownership is dedicated to the well, have the interests of all owners been consolidated by communitization, unitization, force-pooling, etc?

☐ Yes ☐ No If answer is "yes," type of consolidation _____

If answer is "no," list the owners and tract descriptions which have actually been consolidated. (Use reverse side of this form if necessary.) _____

No allowable will be assigned to the well until all interests have been consolidated (by communitization, unitization, forced-pooling, or otherwise) or until a non-standard unit, eliminating such interests, has been approved by the Commission.



CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.

Name
James C. Whittle
Position
Geologist
Company
Sam H. Snoddy
Date
June 24, 1977

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my knowledge and belief.

Date Surveyed
Registered Professional Engineer and/or Land Surveyor
Certificate No.

DRAWWORKS
 Mid Continent U-712A
 Drum: 1 1/4" Lebus grooved
 Compound: 2-engine oil bath chain drive
 Brake: Hydromatic Parkersburg 46" Double

ENGINES
 Two 610-H.P. D379TA Caterpillar Diesel

DERRICK
 Lee C. Moore, 131', 550,000 lb. nominal capacity

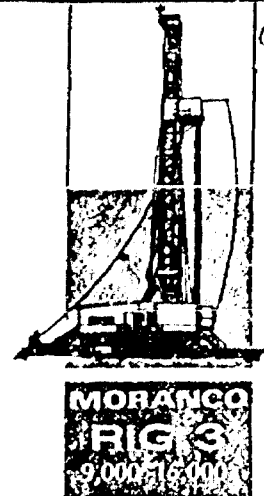
SUBSTRUCTURE
 Lee C. Moore, 18' high, 550,000 lb. nominal capacity

MUD PUMPS
 Pump No. 1: Emsco F-800 Triplex. 800 H.P. with steel fluid end. 4 3/4" - 6 1/2" liners, 9" stroke. Compound-drive.
 Pump No. 2: Emsco DB550, powered by D379 Caterpillar Diesel.

DRILL STRING
 3000' 4 1/2" Grade E, 20 lb.
 Tool Joints: 4 1/2" H-90, 6 1/4" OD, 12000' 4 1/2" Grade E, 16.60 lb.
 Tool Joints: 4" H-90, 6" OD
 Thirty Drilco spiral-grooved 6 1/2" OD, 2 1/4" ID. With 4" H-90 joints.
 Other sized drillpipe & drillcollars available.

BLOWOUT PREVENTERS
 One Shaffer LWS hydraulic double 10" x 1500 series. One Hydral 10" x 1500 series.
 Choke manifold 4" x 1500 series flanged connections. Payne 4 valve accumulator closing unit.

MUD SYSTEM
 3 - 30 x 8 x 6 steel pits, with 750 Bbl. capacity. Complete low pressure circulating system, consisting of four submerged mud guns and two counter sunk jets in each pit. System utilizes two - 6 x 8 centrifugal pumps, powered by diesel.



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MUD HOUSE
 One - 8' x 30' Steel Storage House.

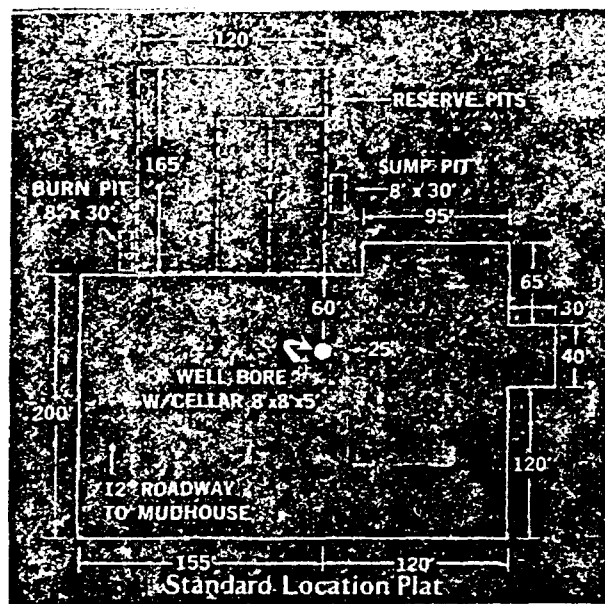
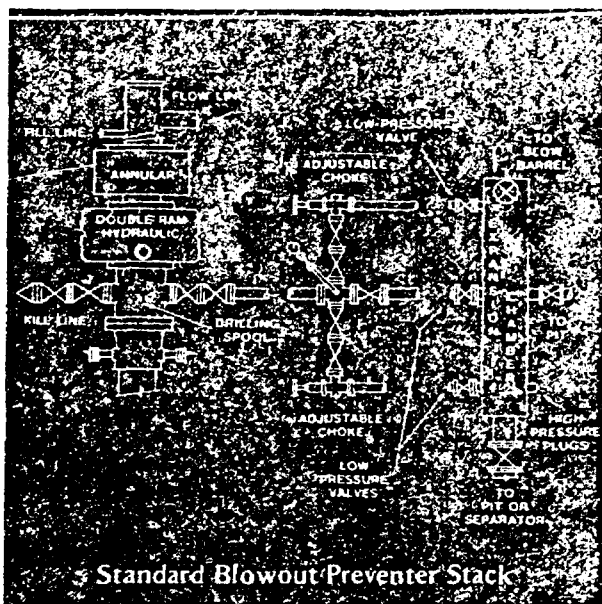
COMMUNICATIONS
 24 - Hour direct telephone interconnection through Hobbs (A.C. 505-397-3291) or Midland - Odessa (A.C. 915-563-0562).

OTHER EQUIPMENT
BLOCKS - Oilwell 350 Ton
HOOK - BJ4300 350 Ton
SWIVEL - NAT P400 350 Ton
LIGHT PLANTS - One 40 KW and one 15 KW AC generators, powered by diesel engines.

LIGHTS - AC fluorescent or mercury - All vapor proof.

FRESH WATER STORAGE - two 500 Bbl. and one 400 Bbl. horizontal tanks.

HOUSING - 1 - 8' x 36' airconditioned trailer house, with sleeping and cooking facilities.



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BEFORE THE OIL CONSERVATION COMMISSION
OF THE STATE OF NEW MEXICO

IN THE MATTER OF THE HEARING
CALLED BY THE OIL CONSERVATION
COMMISSION OF NEW MEXICO FOR
THE PURPOSE OF CONSIDERING:

CASE NO. 5982

Order No. R- 5521

APPLICATION OF SAM H. SNODDY FOR
DIRECTIONAL DRILLING AND A NON-STANDARD
GAS PRORATION UNIT, LEA COUNTY, NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 a.m. on July 20
1977, at Santa Fe, New Mexico, before Examiner Richard L. Stamets.

NOW, on this day of ~~July~~ ^{Sept.}, 1977, the Commission,
a quorum being present, having considered the testimony, the record,
and the recommendations of the Examiner, and being fully advised
in the premises,

FINDS:

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

(2) That the applicant, Sam H. Snoddy, seeks approval of a
160-acre non-standard gas proration unit comprising the ^{SW 1/4} of
Section 25, Township 20 South, Range 32 East, NMPM, Lea County,
New Mexico.

(3) Applicant also seeks approval for the directional drilling of two 14,000-foot Morrow gas wells in Unit P of Section 25, Township 20 South, Range 32 East, NMPM, one of which would be vertically drilled to a depth of 4,000 feet from a surface location 760 feet from the South line and 460 feet from the East line of said Section 25, then directionally drilled in a North-Northwesterly direction and bottomed in the approximate center of the NE/4 of said Section 25, the N/2 of the section being dedicated to the well; the other well would be vertically drilled to a depth of 4,000 feet from a surface location 460 feet from the South line and 760 feet from the East line of said Section 25, then directionally drilled in a West-Northwesterly direction and bottomed in the approximate center of the SW/4 of said Section 25.

(4) That the entire non-standard proration unit may reasonably be presumed productive of gas from the South Salt Lake-Morrow Gas Pool and that the entire non-standard gas proration unit can be efficiently and economically drained and developed by the afore-said well to be completed in the SW/4 of said Section.

(5) That said surface locations and drilling procedures ~~were~~ are the result of an arbitration meeting held between the applicant ~~the owner of potash mining operations in said Section 25 (Kerr-McGee Corporation), representatives~~ under the provisions of Commission Order R-111-17 (Potash-Oil Area Order), and are the only locations and procedures which could be used by the applicant to develop his leases in ~~and~~ Section 25 without objection by the potash operator ~~in said~~ & therein.

See
under

see
under

Case No. 5891
Order No. R-5408

(5) That approval of the subject application will afford the applicant the opportunity to produce his just and equitable share of the gas in the South Salt Lake-Morrow Gas Pool, will prevent the economic loss caused by the drilling of unnecessary wells, avoid the augmentation of risk arising from the drilling of an excessive number of wells, and will otherwise prevent waste and protect correlative rights, provided that the applicant should be required to determine the subsurface location of the bottom of each of the holes by means of a continuous multi-shot directional survey conducted subsequent to directional drilling, if said wells are to be completed as producing wells.

IT IS THEREFORE ORDERED:

(1) That the applicant, Sam H. Snoddy, is hereby authorized to directionally drill two wells to test the Morrow formation, all in Section 25, Township 20 South, Range 32 East, South Salt Lake-Morrow Gas Pool, Lea County, New Mexico, and with acreage dedications as follows:

South line and 660 feet from the East line

Federal Well No. 1, from a surface location ~~at least 10 feet from any quarter section line in the extreme Northwest five acres of the NW/4 SE/4~~ *at 760 feet from the* of said Section 25 to a bottom-hole location within 200 feet of a point 1320 feet from the North and East lines with the N/2 of said Section 25 being dedicated thereto.

660 feet from the South line and 760 feet from the East line

Federal Well No. 2, from a surface location at ~~least 10 feet from any quarter section line in the extreme Northwest five acres of the NW/4 SE/4~~ of said Section 25 to a bottom hole location within 200 feet of a point 1320 feet from the South and West lines with the SW/4 of said Section 25, a 160-acre non-standard gas proration unit hereby approved, being dedicated thereto.

PROVIDED HOWEVER, that each of said wells shall be drilled vertically to a depth of 4000 feet and thence directionally to their intended bottom-hole locations.

PROVIDED FURTHER, that subsequent to the above-described directional drilling, should said wells be producers, a continuous multi-shot directional survey shall be made of the wellbore from total depth to the surface, or to the whipstock point if the same has been determined in this manner, with shot points not more than 100 feet apart; that the operator shall cause the surveying company to forward a copy of the survey report directly to the Santa Fe office of the Commission, Box 2088, Santa Fe, New Mexico; and that the operator shall notify the Commission's Hobbs district office of the date and time said surveys are to be commenced.

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Case No. 5891
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(2) That Form C-105 shall be filed in accordance with Commission Rule 1108 and the operator shall indicate thereon true vertical depths in addition to measured depths.

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

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

STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION

PHIL R. LUCERO, Chairman


EMORY C. ARNOLD, Member


JOE D. RAMEY, Member & Secretary

S E A L

jr/