CASE 6629: HILLIARD OIL & GAS, INC. FOR DIRECTIONAL DRILLING, LEA COUNTY, NEW MEXICO

# CASE NO.

6629

APPlication,
Transcripts,
Small Exhibits,

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STATE OF NEW MEXICO ENERGY AND MINERALS DEPARTMENT Oil Conservation Division State Land Office Building Santa Fe, New Mexico 22 August 1979

### EXAMINER HEARING

IN THE MATTER OF:

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Application of Hilliard Oil & Gas, )
Inc. for directional drilling, Lea ) County, New Mexico.

CASE 6629

BEFORE: Daniel S. Nutter

TRANSCRIPT OF HEARING

### APPEARANCES

For the Oil Conservation Division:

Ernest L. Padilla, Esq. Legal Counsel for the Division State Land Office Bldg. Santa Fe, New Mexico 87503

For the Applicant:

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

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EDWARD DAVID

Direct Examination by Mr. Kellahin

Cross Examination by Mr. Nutter

EXHIBITS

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Applicant Exhibit Five, C-102

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MR. PADILLA: Application of Hilliard Oil and Gas, Inc., for directional drilling, Lea County, New Mexico.

MR. KELLAHIN: Tom Kellahin of Santa Fe,
New Mexico, appearing on behalf of the applicant, and I have
one witness.

#### (Witness sworn.)

#### EDWARD DAVID

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

#### DIRECT EXAMINATION

#### BY MR. KELLAHIN:

Q. Mr. David, would you please state your name, by whom you're employed, and in what capacity?

A. Edward David. I'm a consulting geologist from Roswell, New Mexico, and I'm employed by Hilliard Oil and Gas.

Q. Mr. David, have you previously testified before the Oil Conservation Division and had your qualifications as an expert geologist accepted and made a matter of

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record?

A. Yes, I have testified and they were accepted.

MR. KELLAHIN: We tender Mr. David as an expert geologist.

MR. NUTTER: Mr. David is qualified.

Q. Would you please refer to what we've marked as Exhibit Number One, identify it, and explain what Hilliard Oil and Gas, Inc. is seeking to accomplish?

A. The Exhibit One is a land plat, Township 9 South, Range 35 East. It shows the acreage outlined in yellow that Hilliard Oil and Gas has under lease, which covers all of Section 20, all of Section 21, and acreage which adjoins it in Section 17.

The Hilliard Oil and Gas is seeking authority to directionally drill the Hanson Bonds No. 1, which is located 1650 feet from the north line and 330 feet from the east line of Section 20.

- Q That's the well indicated by the arrow?
- A. That's correct. It's indicated by the arrow.

Section 20, Township 9 South, Range 35

East, and our proposed TD is in the Devonian and the location of the bottom of the hole target would be within 100 feet of a point 1325 feet from the north line and 430 feet from the

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A. Yes. In addition to the subject well, the Hanson No. 1 Bonds, which was a Devonian failure in Section 20, there's an east offset in Section 21 which was drilled by Hilliard Oil and Gas. It's the Hilliard No. 1 Glenn. It's located in the southwest of the northwest of 21.

There are other wells in the Devonian to the southwest in Section 19 and Section 30.

Q There's a well located in the northwest of the northeast quarter of Section 20. What is that well?

A. That's an abandoned San Andres oil producer

Q. If I understand you correctly, Mr. David, the proposal is to re-enter this old Devonian well and to directionally drill or deviate from that wellbore at some point and to bottom the well, then, at a location northwest of the surface location for that particular --

A. That is correct.

Q Would you turn to Exhibit Number Two and identify that?

A. Exhibit Number Two is a structure map contoured on top of the Devonian. It has a contour interval of 50 feet and a scale of 1-inch-to-2000-feet.

In this area the acreage under lease by Hilliard is outlined in yellow; also spotted on this map are only the wells which have penetrated the Devonian formation in the mapped area.

The top of the Devonian is highlighted in yellow and there are four wells in the mapped area which have penetrated the Devonian.

Q. Would you summarize for the Examiner what information you have used in order to compile this structure map?

A. First, we used the four Devonian points wells which are shown in the area. In addition to this we had seismic data available in the area, which is the basis for faulting and the orientation of our structural axis in the area.

Also we have a dipmeter survey on the Hanson No. 1 Bonds in Section 20.

- Q. Your exhibit shows the existence of some faults in this area. Would you describe those for us?
- A. The first fault would be a fault which trends roughly northeast-southwest and it cuts the Devonian and Woodford sections in the Hanson No. 1 Bond in Section 20.

As you look at this Hanson No. 1 Bonds you notice that there are two Devonian tops. We had a re-

peat section of the Devonian. Both the Upper Devonian and Lower Devonian tops are shown on the map.

So this well is known to exist by this particular well. Also there is a fault bounding the structure to the north, which goes through Section 17, and this is based on seismic data.

Q Would you explain to us why Hilliard is seeking to re-enter and deviate an existing wellbore rather than simply drilling a new well?

A. Well, the primary reason is the savings in cost. We feel that estimated cost to a casing point of reentering this well, the Hanson No. 1 Bonds, would approximate \$272,000.

On the other hand, if we were to drill a new well in the area without a re-entry, it would approximately cost \$230,000 additional, which would run the cost of a new well probably in excess of \$500,000.

Q. And based upon those costs, Mr. David, would it be economically feasible for Hilliard to drill a new well to test the Devonian in this area as opposed to re-entering this old well and directionally drilling?

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A. There is no pool designation within the area. Both the wells in Section 20 and 21 were dry holes.

Q. Without special pool rules, then, this well would be dedicated to a 40-acre tract?

A. That is correct.

Q. In fact, what do you anticipate to dedicate to the particular well?

A. In the event that the well is completed as a Devonian producer, we would propose that the east half of the northeast quarter of Section 20, the 80 acres, be dedicated as a proration unit.

Q. Would you please refer to Exhibit Number
Three and identify that?

A. Exhibit Number Three is a cross section in the mapped area.

The cross section has a datum -- the cross section has a datum of -8000 feet. Both the vertical and horizontal scale of 1-inch equal 100-feet.

The well on the righthand side, the eastern most point, subsurface control is the Hilliard No. 1 Glenn, which is located in Section 21.

The well on the lefthand side is the proposed re-entry in Section 20, the Hanson No. 1 Bonds.

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lar well the proposed directionally drilled hole from 11,200 to 12,600.

The Hilliard No. 1 Glenn, the well to the east and to the right on the cross section, encountered a normal Woodford Devonian section and found the top of the Devonian to be highly permeable, and it contained both oil and water.

We had two drill stem tests, as shown on the cross section. These wells recovered -- or these drill stem tests recovered 500 feet of free oil and 600 feet of free oil, but in addition to this they recovered anywhere from 600 feet of sulphur water to 1000 feet of sulphur water and it wasn't economically feasible to attempt a completion since it did not appear it would make an economical completion from the Devonian.

So the well was plugged and abandoned.

The second well on the cross section to the west is the Hanson No. 1 Bonds, the proposed re-entry. This well was entirely different. We found that in this well that we had a repeat of the Woodford formation and the Devonian. The repeats of these are shown on the cross section. We show the first Woodford, the first Devonian, the second Woodford and the second Devonian in descending order.

Our interpretation is that this is a reverse fault upthrown to the west.

Also, the Devonian rock was different; that is, it was tight. We ran two drill stem tests. DST number one was in the first Devonian. We recovered drilling mud. The second test was in the second Devonian and on that test we recovered only 700 feet of sulphur water, and in addition to that the bottom of the test is where we encountered the porosity. So we found that there was a substantial loss of porosity and permeability when we crossed this fault.

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Q Would you turn now to Exhibit Number Four? With the information on that exhibit, Mr. David, would you describe for the Examiner how Hilliard proposes to deviate this well?

A. First, we plan to drill the cement plugs and clean out to 11,800.

Q. When do you propose to commence the drilling of the well?

A. I have a rig scheduled to move in the 27th of this month.

And at that point we propose to run a directional survey of the hole from surface to 11,800 feet. At 11,800 feet this depth will tie in with the directional survey we'd run on the other well, so that would give us a

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complete directional survey on the old Hanson No. 1 Bonds.

And then we plan to set cement plugs and we propose to directionally drill a new hole from 11,200 to total depth, which would be approximately 12,600 feet.

And we also propose to run a directional survey of the new hole. By then, based on that, we would either run 5-1/2 production string if we have a reservoir, or in the vent of a dry hole, plug and abandon it.

Q Who's the drilling contractor for Hilliard for the deviated hole?

A. We use Moranco.

Q Would you identify what is marked as Exhibit Number Five?

A. This is a well location and acreage dedication plat, which is a New Mexico standard form C-102.

Q. Mr. David, were Exhibits One through Five compiled under your direction or prepared by you directly?

A. The -- yes, with the exception of the last two exhibits, Four and Five, and these were prepared by Hilliard.

And have you examined information contained on Exhibit Four and Exhibit Five, and to the best of your knowledge, information, and belief, is the information contained on those exhibits true and accurate?

A. That is correct.

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Yes, it will.

MR. KELLAHIN: Mr. Examiner, we move the introduction of Exhibits One through Five.

MR. NUTTER: Applicant's Exhibits One through Five will be admitted in evidence.

# CROSS EXAMINATION

BY MR. NUTTER:

Mr. David, where is the nearest Devonian production to this well?

The nearest pool that's currently producing would be the Bough-Devonian Field to the east here, approximately one, two, a little over three miles to the northeast.

These wells up here in Section 13 and 14 of Township 9, 35, are Devonian wells?

Yes. Those are in Section 13 and 14 and that would be in Township 9 South, Range 35 East.

Now, your surface location is 1650 from the north and 330 from the east.

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Okay. Now, on your Exhibit Number Four it shows the casing that's in this well. Was all this casing

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Q. Oh, I see, okay. You had a note here. I was looking for what that asterisk meant. I see it now.

All casing was left in the hole.

A. Yes. And the 7-7/8ths, that's what we propose to run in the event of production in the Devonian.

Q I see. 7-7/8ths-inch hole, 5-1/2-inch casing.

A. Yes, that's correct.

Now, you mentioned you'd dedicate the east half of the northeast quarter. Actually, in the absence of pool rules you'd be limited to a 40-acre dedication. So if the well were bottomed in the 40 in which the surface location is, you'd have the southeast of the northest dedicated to the well.

A. That is correct.

MR. NUTTER: Are there any further questions of the witness? He may be excused.

Do you have anything further, Mr. Kellahin?
MR. KELLAHIN: No, sir.

MR. NUTTER: Does anyone have anything they wish to offer in Case Number 6629?

We'll take the case under advisement.

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#### RELPORTER'S CERTIFICATE

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

I do hereby comity that the foregoing is a complete record of the proceedings in the Examiner hearing of Case No. , Examiner

Conservation Division

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STATE OF NEW MEXICO ENERGY AND MINERALS DEPARTMENT Oil Conservation Division State Land Office Building Santa Fe, New Mexico 22 August 1979

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# SALLY WALTON BOYD ERTHED SHORTHAND REPORTER 230 Place Bence (605) 471-246 Santa Fe. New Mexico 57501

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- A You feel like that the formation was originally a porous formation but the action of the faulting is what compressed the rock and made it tight there?
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- Q And so just to get away from the fault, you'd get into the more permeable and porous section of the Devonian?
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left in the well when the well was plugged?

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MR. NUTTER: Are there any further questions of the witness? He may be excused.

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MR. KELLAHIN: No, sir.

MR. NUTTER: Doos anyone have anything they

wish to offer in Case Number 6629?

We'll take the case under advisement.

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#### RELPORTER'S CERTIFICATE

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

Sally W. Boyd, C.S.R.

I do hereby certify that the foregoing is a complete record of the proceedings in the Examiner hearing of Case No. Examiner Oll Conservation Division

SALLY WALTON BOYD CERTIFIED SHORTHAND REPORTER 3030 Plaza Banca (605) 471-2463 Santa Fe, New Mexico 37501



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

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	and the control of t
Mr. Thomas Kellahin	Re: CASE NO. 6629
Kellahin & Kellahin	ORDER NO. R-6089
Attorneys at Law	
Post Office Box 1769	Applicant:
Santa Fe, New Mexico	
The second secon	Hilliard Oil & Gas, Inc
Dear Sir:	
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Enclosed herewith are two co	copies of the above-referenced
Division order recently enter	
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#### STATE OF NEW MEXICO ENERGY AND MINERALS DEPARTMENT OIL CONSERVATION DIVISION

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

> CASE NO. 6629 Order No. R-6089

APPLICATION OF HILLIARD OIL & GAS, INC. FOR DIRECTIONAL DRILLING, LEA COUNTY, NEW MEXICO.

#### ORDER OF THE DIVISION

#### BY THE DIVISION:

This cause came on for hearing at 9 a.m. on August 22, 1979, at Santa Fe, New Mexico, before Examiner Daniel S. Nutter.

NOW, on this 28th day of August, 1979, the Division Director, having considered the testimony, the record, and the recommendations of the Examiner, and being fully advised in the premises,

#### FINDS:

- (1) That due public notice having been given as required by law, the Division has jurisdiction of this cause and the subject matter thereof.
- (2) That the applicant, Hilliard Oil & Gas, Inc. seeks approval for the directional drilling of its Hanson Bonds Well No. 1, the surface location of which is 1650 feet from the North line and 330 feet from the East line of Section 20, Township 9 South, Range 35 East, Lea County, New Mexico.
- (3) That the applicant seeks authority to re-enter said well, to directionally survey the hole from the surface to a depth of 11,800 feet, and to directionally drill from a kick-off point at a depth of 11,200 feet to a total depth of approximately 12,600 feet in the Devonian formation, bottoming said well within 100 feet of a point 1325 feet from the North line and 430 feet from the East line of said Section 20.
- (4) That the 40-acre tract under which said well is bottomed should be dedicated to said well in the Devonian formation.

-2-Case No. 6629 Order No. R-6089

- (5) That the applicant should be required to determine the subsurface location of the bottom of the hole by means of a continuous multi-shot directional survey conducted subsequent to said directional drilling, if said well is to be
- (6) That approval of the subject application will permit the drilling of the proposed well and will prevent waste and

# IT IS THEREFORE ORDERED:

(1) That the applicant, Hilliard Oil & Gas, Inc., is hereby authorized to directionally drill its Hanson Bonds Well No. 1 located 1650 feet from the North line and 330 feet from the East line of Section 20, Township 9 South, Range 35 East, to a Devonian bottom hole location within 100 feet of a point 1325 feet from the North line and 430 feet from the East line of said Section 20.

PROVIDED HOWEVER, that prior to such directional drilling, applicant shall directionally survey said well from the depth of 11,800 feet to the surface and shall cause the surveying company to forward a copy of the survey report directly to the Santa Fe Office of the Division, Box 2088, Santa Fe, New Mexico 87501.

PROVIDED FURTHER, that subsequent to the above-described directional drilling, should said well be a producer, a continuous multi-shot directional survey shall be made of the wellbore from total depth to the kick-off point 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 Division, Box 2088, Santa Fe, New Mexico, and that the operator shall notify the Division's Hobbs District Office of the date and time said survey is to be commenced.

- (2) That Form C-105 shall be filed in accordance with Division Rule 1105 and the operator shall indicate thereon true vertical depths in addition to measured depths.
- (3) That the 40-acre tract under which said well is formation.

-3-Case No. 6629 Order No. R-6089

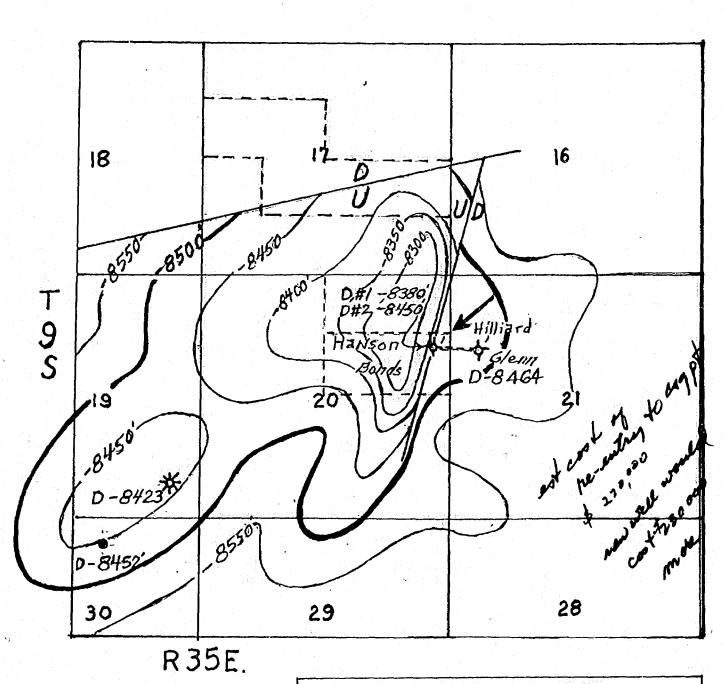
(4) That jurisdiction of this cause is retained for the entry of such further orders as the Division may deem necessary.

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

STATE OF NEW MEXICO OIL CONSERVATION DIVISION

JOE D. RAMEY Director

ARCo.M.L



WEST BOUGH PROSPECT Lea County, New Mexico HILLIARD OIL & GAS, INC.

BEFORE	EXAMINER	NUTTER
OIL CO	NISERVATION [	NOISIVIC
Hillard	EXHIBIT NO.	2
CASE NO.	6629	

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Contour Interval			50'
Scale			2,000'
Geologist E. K.	David	Date	8-14-79
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DISTRIBUTION	NEW	MEXICO OIL CONSTR	EVATION COMMISSION		orm C-101	
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- Set 5-1/2" OD production casing from surface to total depth. (Cont'd)
- In the event of a dry hole, plug and abandon as per Commission requirements.
- Annular and double ram hydraulic blowout preventers to be installed initially and then pressure tested prior to drilling out cement plug in bottom of 8-5/80 and then pressure tested prior to be operated and checked daily.

Hearing on application to intentionally deviate well docketed for August 22, 1979.

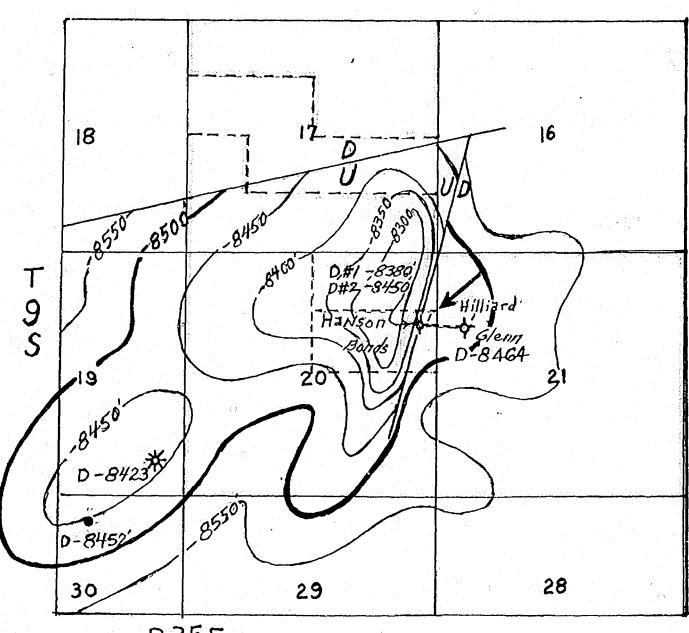
# NEW MEXICO OIL CONSTRUCTION COMMISSION WELL LOCATION AND ACREAGE DEDICATION PLAT

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

	All distances must be	train the outer boundaries		Well No.
ntor	INC.	BONDS	County	
HILLIARD OIL & GAS	Township	Hongo 35 East	Lea	
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al Postage Location of Well:	Mary h Hine o	and 330	feat from the	Dedicated Acreage:
1650 [cet from the	e NOT LTI	Pool		40 Acres
and Level Elev. Produc	nevonian	Wildcat	Labore mar	ks on the plat below.
4160'	Devonian  dedicated to the subject	well by colored pend	or nachare in.	a working
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sion.			A	CERTIFICATION
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			9	John A. Weideman  Position Drilling Engineer Company Hilliard Oil & Gas, Inc. Date August 14, 1979
			9	North  John A. Weideman  Position  Drilling Engineer  Company  Hilliard Oil & Gas, Inc.  Dato  August 14, 1979  I hereby certify that the well location  the plant was platted from field
			9	North  John A. Weideman  Position  Drilling Engineer  Company  Hilliard Oil & Gas, Inc.  Date  August 14, 1979  I hereby certify that the well location shown on this plat was platted from field the street surveys made by me of the surveys made by the surveys mad
			9	North  John A. Weideman  Position  Drilling Engineer  Company  Hilliard Oil & Gas, Inc.  Date  August 14, 1979  I hereby certify that the well location shown on this plat was plotted from field the solution of the solution
			9	None  John A. Weideman  Pontion  Drilling Engineer  Company  Hilliard Oil & Gas, Inc.  Data  August 14, 1979  I hereby certify that the well location shown on this plat was plotted from fiele notes of actual surveys made by me a under my supervision, and that the san is true and correct to the best of me
			9	North  John A. Weideman  Position  Drilling Engineer  Company  Hilliard Oil & Gas, Inc.  Date  August 14, 1979  I hereby certify that the well location shown on this plat was plotted from field the solution of the solution
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Exhibit 2 case 6629 WEST BOUGH PROSPECT Lea County, New Mexico HILLIARD OIL & GAS, INC.

Contour Horizon Top of Devonian
Contour Interval 50°
Scale 1" = 2,000°
Geologist E. K. David Date 8-14-79

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23.	Pf	ROPOSED CASING AND	CEMENT PROGR	RAM	*All Casi		in hole.
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<del></del>	1		4036'*		1480		Circ. to surfac
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2. Run directional	Survey of hole	from surface t	.0 11,000				
3. Set cement plug depth. Bottom 20.	and proceed to hole target to l	directionally be 1325' from N	drill new lorth line	7-7/8 and <sup>L</sup>	Bii hole 130' from	from 11 East 1	,2001 to total ine of Section
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- 7. Set 5-1/2" OD production casing from surface to total depth.
- 8. In the event of a dry hole, plug and abandon as per Commission requirements.
- 9. Annular and double ram hydraulic blowout preventers to be installed initially and then pressure tested prior to drilling out cement plug in bottom of 8-5/8" casing string. Preventers to be operated and checked daily.

Hearing on application to intentionally deviate well docketed for August 22, 1979.

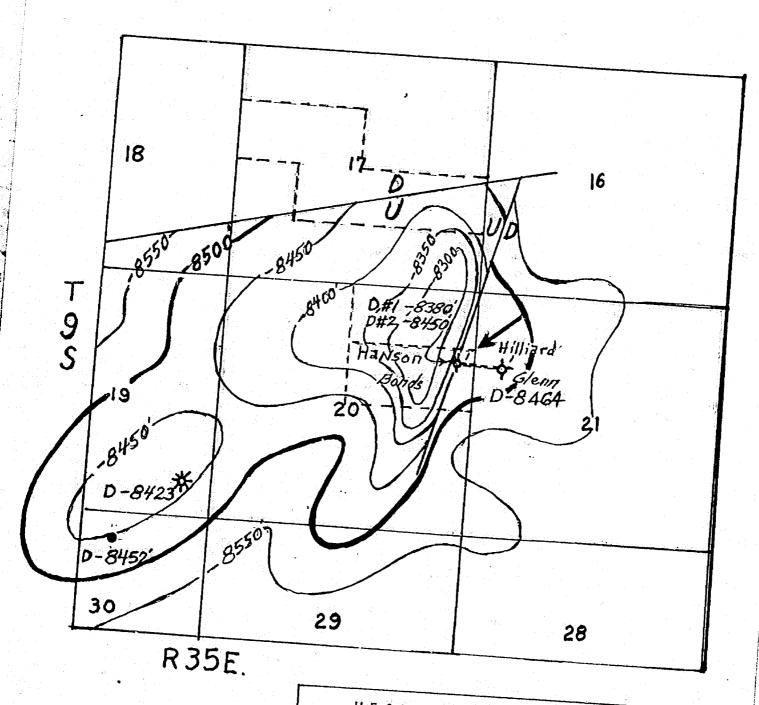
# NEW MEXICO OIL CONSTRUCTION COMMISSION WELL LOCATION AND ACREAGE DEDICATION PLAT

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

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Exhibitz case 6629 WEST BOUGH PROSPECT Lea County, New Mexico HILLIARD OIL & GAS, INC.

Contour Horizon Top of Devonian
Contour Interval 50'
Scale 1" = 2,000'
Geologist E. K. David Date 8-14-79

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ייון	8-5/8" 0.D.	24# ε 32#	40361*	1480		Circto_surfac
7-7/8''	5-1/2" 0.D.	17#	12750'	250		11,600'
/ Art						
1. Drill cement pl	ugs and clean ou	t hole to 11,8	00'. Build muc	d propert	ies.	
2. Run directional	Survey of hole	from surface t	o 11,800'.			
3. Set cement plug	and proceed to	directionally	drill new 7-7/8	3" hole	from 11	,200' to total
depth. Bottom	hole target to b	e 1325' from N	orth line and L	130' from	East	ine of Section
20.	no,o ca, gae ca a					
			ing the second s			
4. Run directional	survey of new h	ole.				
	all significant		and/or gas.			
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6. Run open hole I	ogs from total d	see reverse)				
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- 7. Set 5-1/2" OD production casing from surface to total depth. 8. In the event of a dry hole, plug and abandon as per Commission requirements.
  - Annular and double ram hydraulic blowout preventers to be installed initially and then pressure tested prior to drilling out cement plug in bottom of 8-5/8" casing string. Preventers to be operated and checked daily. casing string. Preventers to be operated and checked daily.

Hearing on application to intentionally deviate well docketed for August 22, 1979.

# NEW MEXICO OIL CONSTITUTION COMMISSION WELL LOCATION AND ACREAGE DEDICATION PLAT

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

Hum C-102 Supersedes C-128 Ellocity 1-1-65

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	IL & GAS, IN	۱C.		BONDS		1	
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Dockets Nos. 35-79 and 36-79 are tentatively set for September 5 and 19, 1979. Applications for hearing must be filed at least 22 days in advance of hearing date.

### DOCKET: EXAMINER HEARING - WEDNESDAY - AUGUST 22, 1979

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

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

CASE 6545: (Continued from July 25, 1979, Examiner Hearing)

In the matter of the hearing called by the Oil Conservation Division on its own motion to permit Corinne Grace, Travelers Indemnity Company, and all other interested parties to appear and show cause why the Kuklah Baby Well No. 1 located in Unit C of Section 24, Township 22 South, Range 26 East, Eddy County, New Mexico, should not be plugged and abandoned in accordance with a Division-approved plugging program.

- CASE 6626: Application of T. H. McElvain 011 & Gas Properties for pool commingling, Rio Arriba County, New Mexico. Applicant, in the above-styled cause, seeks approval for the commingling of Gallup and Dakota production in its Miller B Well No. 6 located in Unit G of Section 12, Township 24 North, Range 7 West.
- CASE 6627: Application of Caribou Four Corners, Inc. for compulsory pooling, San Juan County, New Mexico. Applicant, in the above-styled cause, seeks an order pooling all mineral interests in the Gallup formation underlying a previously approved 64.32-acre non-standard unit comprising the NW/4 NW/4 and that portion of Lot 5 lying north of the San Juan River, all in Section 18, Township 29 North, Range 14 West, Cha Cha-Gallup Oil Pool, 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 6628: Application of Texaco Inc. for downhole commingling, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval for the downhole commingling of Skaggs-Glorieta, Skaggs-Drinkard and East Weir-Blinebry production in the wellbore of its M. B. Weir "B" Well No. 9 located in Unit O of Section 12, Township 20 South, Range 37 East.
- CASE 6629:
  Application of Hilliard Oil & Gas, Inc. for directional drilling, Lea County, New Mexico.
  Applicant, in the above-styled cause, seeks authority to directionally drill its Hanson Bonds Well
  No. 1 located 1650 feet from the North line and 330 feet from the East line of Section 20, Township
  9 South, Range 35 East, to a Devonian bottom hole location within 100 feet of a point 1325 feet
  from the North line and 430 feet from the East line of said Section 20.
- CASE 6630: Application of El Paso Natural Cas Company for downhole commingling, Rio Arriba County, New Mexico.

  Applicant, in the above-styled cause, seeks approval for the downhole commingling of Basin-Dakota and BS Mesa-Gallup production in the wellbore of its San Juan 27-4 Unit Well No. 37 located in Unit N of Section 33, Township 27 North, Range 4 West.
- CASE 6631: Application of Reserve 011, Inc. for downhole commingling, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval for the downhole commingling of Jalmat gas and Langlie Mattix oil production in the wellbore of its Cooper Jal Unit Well No. 149-306 located in Unit J of Section 18, Township 24 South, Range 37 East.
- CASE 6632: Application of Mesa Petroleum Company for a dual completion, Eddy County, New Mexico.

  Applicant, in the above-styled cause, seeks approval for the dual completion of its Frank State Well

  No. 1 located in Unit I of Section 7, Township 19 South, Range 23 East, to produce gas from the Abo
  and Morrow formations, Runyan Ranch Field, through the casing-tubing annulus and through tubing.
- Application of Mesa Petroleum Company for a dual completion, Eddy County, New Mexico.

  Applicant, in the above-styled cause, seeks approval for the dual completion of its Yates Federal Com Well No. 1-Y located in Unit J of Section 20, Township 17 South, Range 27 East, to produce gas from the Logan Draw-Cisco Canyon Gas Pool and an undesignated Morrow pool through the casing-tubing annulus and through tubing.
- Application of Durham Inc. for special pool rules or a spacing exception, Chaves County, New Mexico.

  Applicant, in the above-styled cause, seeks the promulgation of special pool rules for the Lake
  Arthur-Pennsylvanian Gas Pool to provide for 320-acre spacing rather than 160 acres. In the absence
  of objection, this pool will be placed on the standard 320-acre spacing for Pennsylvanian gas pools
  rather than the present 160-acre spacing. In the alternative applicant seeks to limit the application of the pool's rules to the horizontal limits of the pool, being the SW/4 of Section 31, Township
  15 South, Range 27 East.

Examiner Hearing - Wednesday - August 22, 1979 Page 3 of 6

TOWNSHIP 25 NORTH, RANGE 12 WEST, NMPM
Section 4: N/2 and SE/4
Section 5: N/2
Section 6: N/2 Section 6: Section 9: NE/4 Section 10: NW/4 TOWNSHIP 26 NORTH, RANGE 12 WEST, NMPM
Section 19: SW/4
Section 20: W/2
Section 21: W/2

(c) CREATE a new pool in San Juan County, New Mexico, classified as a gas pool for Fruitland production and designated as the Farmer-Fruitland Pool. The discovery Well is Manana Gas, Township 30 North, Range 11 Incorporated Bobbie Herrera Well No. 1 located in Unit K of Section 4, Township 30 North, Range West, NMPH. Said pool would comprise:

TOWNSHIP 30 NORTH, RANGE 11 WEST, NNPM Section 4: SW/4

(d) CREATE a new pool in San Juan County, New Mexico, classified as an oil pool for Pennsylvanian production and designated as the Big Gap-Pennsylvanian Oil Pool. The discovery well is Bass Enterproduction and designated as the Big Gap-Pennsylvanian Oil Pool. The discovery well is Bass Enterproduction and designated as the Big Gap-Pennsylvanian Oil Pool. The discovery well is Bass Enterproduction and designated as the Big Gap-Pennsylvanian Oil Pool. The discovery well is Bass Enterproduction and designated as the Big Gap-Pennsylvanian Oil Pool. The discovery well is Bass Enterproduction and designated as the Big Gap-Pennsylvanian Oil Pool. The discovery well is Bass Enterproduction and designated as the Big Gap-Pennsylvanian Oil Pool. The discovery well is Bass Enterproduction and designated as the Big Gap-Pennsylvanian Oil Pool. The discovery well is Bass Enterproduction and designated as the Big Gap-Pennsylvanian Oil Pool. The discovery well is Bass Enterproduction Company Navajo 20 Well No. 1 located in Unit O of Section 20, Township 27 North, Range 19 West, NNPM. Said pool would comprise: Pribes Flounderion Company Mayajo 20 mell No. 1 3 Range 19 West, NMPM. Said pool would comprise:

TOWNSHIP 27 NORTH, RANGE 19 WEST, NMPM

(e) EXTEND the Aztec-From land Pool in San Juan County, New Mexico, to include therein:

TOWNSHIP 29 NORTH, RANGE 10 WEST, NMPM Section 29: NE/4

TOWNSHIP 29 NORTH, RANGE 11 WEST, NMPM Section 25: SE/4

(f) EXTEND the Aztec-Pictured Cliffs Pool in San Juan County, New Mexico, to include therein:

TOWNSHIP 31 NORTH, RANGE 11 WEST, NMPM Section 35: E/2

EXTEND the Bisti-Lower Gallup Oil Pool in San Juan County, New Mexico, to include therein: (g)

TOWNSHIP 26 NORTH, RANGE 14 WEST, NMPM Section 9: E/2 SE/4
Section 10: SW/4
Section 15: N/2 NE/4

(h) EXTEND the Blanco Mesaverde Pool in Rio Arriba and San Juan Counties, New Mexico, to include therein:

TOWNSHIP 25 NORTH, RANGE 3 WEST, NYPM Section 4:

TOWNSHIP 26 NORTH, RANGE 2 WEST, NAPM Section 30: All (Partial Section) Section 31: All (Partial Section)

TOWNSHIP 27 NORTH, RANGE 2 WEST, NMPM
Section 16: W/2
Section 20: E/2
Section 21: NU/A

(1) EXTEND the Blanco-Pictured Cliffs Pool in San Juan County, New Mexico, to include therein:

TOWNSHIP 29 NORTH, RANGE 8 NEST, NMPM Section 4: NW/4 NE/4 Section 5:

Examiner Hearing - Wednesday - August 22, 1979

TOWNSHIP 30 NORTH, RANGE 14 WEST, NMPM Section 35: N/2 and SE/4

(q) EXTEND the Harris Mesa-Chacra Pool in San Juan County, New Mexico, to include therein:

TOWNSHIP 27 NORTH, RANGE 9 KEST, NMPM Section 5: NE/4 Section 5:

TOWNSHIP 28 NORTH, RANGE 9 WEST, NMPM Section 32: E/2

(7) EXTEND the Kutz-Fruitland Pool in San Juan County, New Mexico, to include therein:

TOWNSHIP 28 NORTH, RANGE 11 WEST, NYPM Section 32: NE/4

(s) EXTEND the West Kutz-Pictured Cliffs Fool in San Juan County, New Mexico, to include therein:

TOWNSHIP 28 NORTH, RANGE 11 WEST, NNPM Section 26: SW/4

(t) EXTEND the La Plata-Gallup Oil Pool in San Juan County, New Mexico, to include therein:

TOWNSHIP 32 NORTH, RANGE 13 WEST, NMPM Section 32: N/2 and SW/4

(u) EXTEND the West Lind, ith Gallup-Dakota Oil Pool in Rio Arriba County, New Mexico, to include therein: therein:

TOWNSHIP 24 NORTH, RANGE 3 WEST, NMPM Section 6: S/2 (Partial Section) Section 6: S/2 (Partial Section)
Section 18: All (Partial Section)

TOWNSHIP 24 NORTH, RANGE 4 WEST, IMPM
Section 5: N/2
Section 6: N/2
Section 6: N/2

(v) EXTEND the Otero-Chacra Pool in Rio Arriba and San Juan Counties, New Mexico, to include therein: therein:

TOWNSHIP 26 NORTH, RANGE 7 WEST, NMPM
Section 3: All
Section 4: All

(w) EXTEND the Rusty-Chacra Pool in Sandoval County, New Mexico, to include therein:

TOWNSHITP 22 NORTH, RANGE 7 WEST, NMPM

(x) EXTEND the Straight Canyon-Dakota Pool in San Juan County, New Mexico, to include therein:

TOWNSHIP 31 NORTH, RANGE 16 WEST, MIPM Section 14: SE/4

(y) EXTEND the WAW Fruitland-Pictured Cliffs Pool in San Juan County, New Mexico, to include therein: therein:

TOWNSHIP 26 NORTH, RANGE 12 WEST, NMPM Section 29: 5/2 Section 30: E/2 Section 32: N/2

TOWNSHIP 26 NORTH, RANGE 13 WEST, INFOM Section 13: E/2 and SW/4 Section 14: SE/4

TOWNSHIP 27 NORTH, RANGE 13 WEST, NMPM Section 18: E/2

PHONE 505/623-1225

LDM Associates

714 PETROLEUM BUILDING July 26, 1979 / OIL CONSERVATION DIVISION SANTA FE

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

Attention: Mr. Dan Nutter

Case 6629

Gentlemen:

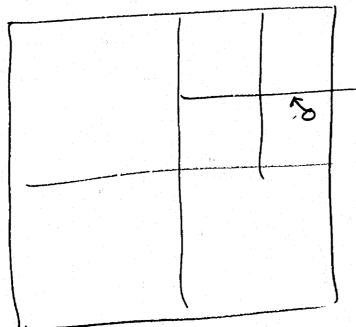
As agent for and on behalf of Hilliard Oil & Gas, Inc., 1190 Midland National Bank Building, Midland, Texas 79701, I request you docket a hearing on August 22, 1979 on applicants request to enter the abandoned Hanson Oil Corporation #1 Bonds located 1650' FNL and 330' FEL Section 20, T9S-R35E, Lea County, New Mexico for the purpose of deviating the hole to be bottomed at 1325' FNL and 430' FEL in the Devonian Formation at a depth of approximately 12,750 feet.

If you need additional information please advise.

Very truly yours,

CCL/jd

Charlie Loveloss
POBOX 566
Romèle 88201
Phone 622 1958



Directional dela
Hilliand Oil & Gas Co
Hilliand Oil & Gas Co
Houson Bonds Well No!

Houson Bonds Well No!

Furf loc 1660 FNL 330' FEL

surf loc 20, T9S R 35 E Loa

will go month 3° west 300'

Ballom Wilhin 100 feet g a sount

1325' FNC & 430' FEC

ROUGH

dr/

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

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

1 1	CASE NO.	6629	
Du	Order No.	R-6089	

APPLICATION OF HILLIARD OIL & GAS, INC. FOR DIRECTIONAL DRILLING, LEA COUNTY,

## ORDER OF THE DIVISION

## BY THE DIVISION:

This cause came on for hearing at 9 a.m. on August 22 19 79 , at Santa Fe, New Mexico, before Examiner Daniel S. Nutter NOW, on this\_ \_day of Division Director, having considered the testimony, the record, and the recommendations of the Examiner, and being fully advised in the premises, FINDS:

- That due public notice having been given as required by law, the Division has jurisdiction of this cause and the subject matter thereof.
- (2) That the applicant, Hilliard Oil & Gas, Inc. seeks approval for the surface location of which is the directional drilling of its Hanson Bonds Well No. 1, located 1650 feet from

to a depth of 11,800 feet, and to directionally drill

from a link-off quint at a depth of 11,200 feet in the Devonian formation, bottoming said will

the North line and 330 feet from the East line of Section 20, Township 9

South, Range 35 East, Lea County, New Mexico.

authority to recenter said will, to directionally surely the hole from the surface (3) That the applicant seeks approval for the directional drilling of said well to a Devonian bottom hole location within 100 feet of a point 1325 feet from the North line and 430 feet from the East line of said Section 20.

40-acre Gract under which said will is bottomed said well in to the Devonian formation.

Pool,

(5) That the applicant should be required to determine the

- (5) That the applicant should be required to determine the subsurface location of the bottom of the hole by means of a continuous multi-shot directional survey conducted subsequent to said directional drilling, if said well is to be completed as a producing well.
- (6) That approval of the subject application will permit the drilling of the proposed well and will prevent waste and protect correlative rights.

### IT IS THEREFORE ORDERED:

(1) That the applicant, Hilliard Oil & Gas, Inc., is hereby authorized to directionally drill its Hanson Bonds Well No. 1 located 1650 feet from the North line and 330 feet from the East line of Section 20, Township 9 South, Runge 35 East, to a Devonian bottom hole location within 100 feet of a point 1325 feet from the North line and 430 feet from the East line of said Section 20.

PROVIDED HOWEVER, that subsequent to the above-described directional drilling, should said well be a producer, a continuous multi-shot directional survey shall be made of the wellbore from total kick off point depth to the curface 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 Division, Box 2088, Santa Fe, New Mexico, and that the operator shall notify the Division's Hobbs District Office of the date and time said survey is to be commenced.

applicant shall directionally survey said well from the people of 11,800 feet to the surface and shall cause the surveying rompany to forward a copy of the survey report directly to the Santa 7e Office of the Director. Box 2088, Santa 7e, New Mexico 87501.

(2) That Form C-105 shall be filed in accordance with Division

Rule 1105 and the operator shall indicate thereon true vertical depths
in addition to measured depths.

(3) That the state of the dedicated to the Devonian formation.

Pool;
and all of Section 20 shall be dedicated to the

formation, Said well in the Devonian Cornection.

Pool:

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

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