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1 2	NEW MEXICO OIL CONS Santa Fe,	RE THE SERVATION New Mexic y 7, 1976		SION				
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4	EXAMINE	R HEARING						
5				)				
6	IN THE MATTER OF:			) )				
7	Application of Northern Company for a unit agreem		) )	CASE 5608				
8	County, New Mexico.			)				
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10	BEFORE: Richard L. Stamets, Examiner							
11								
12	TRANSCRIPT OF HEARING							
13	APPEA	RANCE	<u>s</u>					
14	For the New Mexico Oil				-			
15	Conservation Commission:	State Lar	nd Offi	се В				
16		Santa Fe,	New M	exic	0			
17	For the Applicant:		BONDURA	NT,	Jr., Esq. COX & EATON			
18		Hinkle Bu	uilding					
19		Roswell,	New Me	X1CO				
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1	INDEX	
2		Pag <b>e</b>
3	K. H. GRIFFIN	
4	Direct Examination by Mr. Hensley	3
5		
6	MARK SCHWEINFURTH	
7	Direct Examination by Mr. Hensley	7
8		
9		
10	·	
11	EXHIBIT INDEX	
12		Page
1		
13	Applicant's Exhibit Number One, Proposed Unit Agree.	7
13	Applicant's Exhibit Number One, Proposed Unit Agree.  Applicant's Exhibit Number Two, Geological Study	7 11
14		
14 15		
14 15 16		
14 15 16		
14 15 16 17 18 19		
14 15 16 17 18 19 20 21		
14 15 16 17 18 19 20 21		
14 15 16 17 18 19 20 21		

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MR. CARR: Case 5608, application of Northern

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MR. STAMETS: Call for appearances in this case.

MR. HENSLEY: If the Examiner please, Harold L. Hensley, Jr. of the firm of Hinkle, Bondurant, Cox and Eaton, Roswell, New Mexico for the applicant, Northern Natural Gas Company. We will have two witnesses, Mr. Ken Griffin and Mr. Mark Schweinfurth.

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(THEREUPON, the witnesses were duly sworn.)

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## BY MR. HENSLEY:

- Q. Would you state your name, please?
- A. My name is K. H. Griffin.
  - Q. What is your occupation, Mr. Griffin?
  - A. I'm an independent landman, Midland, Texas, representing Northern Natural Gas.
    - Q Have you previously testified before this Commission
- A. Yes, I have.

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A. Yes.

MR. HENSLEY: Mr. Examiner, are the qualifications of the witness acceptable?

MR. STAMETS: They are.

- Q. (Mr. Hensley continuing.) I will ask you, Mr. Griffin, to please refer to what has been marked for identification, sir, as Exhibit One and identify that exhibit if you will?
- A. Exhibit One is the proposed unit agreement for the Magruder Hill Unit Area, Eddy County, New Mexico.
- Q. Are there two separate attachments in addition to the Unit Agreement itself?
- A. Yes, to the Unit Agreement will be attached Exhibit
  A which is a plat showing the ownership and the outline of
  the Unit area. The remaining attachment is Exhibit B which
  at this time has not been prepared but will be a complete
  rundown, break down of the ownership, including royalties.

Exhibit A at this point does show all of the ownership, acreage content, nature of acreage.

- Q. Including a break down of the Federal, State and fee acreage in the Unit?
- A. Correct. The Unit covers two thousand, two hundred and fifty-seven point nine four acres, being two thousand and

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fifty-seven point nine, four acres of Federal land, forty

acres of State land and four hundred and sixty acres of

patented land. The Federal land being ninety-one point one,

four, two percent, State being one point seven, seven, two

percent and the patented land seven point oh, eight, six

percent.

- Q. Sir, has the proposed Unit Area been designated by the USGS as logically subject to exploration and development under the unitization provisions of the minerals leasing act?
- A. We have had our meeting with the USGS in Roswell, we have their tentative approval, the formal designation has been requested and is being processed through their Denver office now.
- Q. Has the proposed Unit area been informally approved by the Commissioner of Public Lands?
  - A. It has.
- Q. Has the form of unit agreement which is marked as Exhibit Number One been previously approved by the USGS, the Commissioner of Public Lands and this Commission?
- A. Yes, it has. It essentially is a 1968 reprint that is standardly used for this type unit.
  - Q All right, sir, who is the designated unit operator?
  - A. Northern Natural Gas Company.
  - Q. Are all formations to be unitized?
  - A. Yes, all formations will be unitized.

- Q. What are the provisions with respect to the initial test well?
- A. The unit agreement provides for the commencement of initial wells within six months of approval and we will drill an eleven thousand, four hundred foot Morrow test at an approved location.
- Q. What is the plan for unit development subsequent to the test well?
- A. The 1968 reprint provisions essentially provide for a six months plan of development to be filed and approved by the Supervisor, the Commissioner and the Commission.
- Q. Mr. Griffin, what is the present status of the commitment to the unit agreement of the working interest in the proposed unit area?
- A. We anticipate an excess of ninety percent sign up and participation in the unit.
- Q. I assume that ninety percent commitment would afford effective control of operations?
- A. Correct. Actually we will have effective control of every potential proration unit and the effective sign up should actually be in excess of ninety-five percent.
- Q. In your opinion, sir, is the unit agreement in the interest of conservation and will it prevent waste and protect correlative rights?
  - A. Yes, sir.

No, I have not.

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Q.	For	the	benefit	of	the	Examiner,	sir,	would	you
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- A. I received a Bachelor's degree and a Master's degree in science from the University of Cincinnati. The Master's degree was in 1958. From there I worked as a geologist for California Company in New Orleans, Tidewater and Getty Oil Companies in Midland, Texas and now Northern Natural Gas Company.
- Q. You have been gainfully employed then as a practicing geologist since your graduation?
  - A. That is correct.

MR. HENSLEY: Are the qualifications of the witness acceptable, Mr. Examiner?

MR. STAMETS: They are.

- Q. (Mr. Hensley continuing.) Have you caused a geological study of the proposed Unit Area, Mr. Schweinfurth?
  - A. I have.
- Q. What were the results of the study and what data did you consider in connection with that study?
- A. Structural and stratigraphic studies were both undertaken. The structural study was done by seismograph and it indicates a northwest-southeast trending structural anticline in the area of the Unit.

The stratigraphic studies indicate that the Morrow sand, which is the primary reservoir in this area, is present

under the Unit and will be productive from studies in the Catclaw Draw field to the north and from log analysis of several wells in the area around the Unit which are designated with red triangles.

- Q. Are the results of your study indicated by Exhibit
  Two which has been marked for identification?
  - A. They are.
- Q. What conclusions do you draw from this exhibit, Mr. Schweinfurth?
- A. From the exhibit it indicates that there is a structure in the area of the Unit, it also indicates that from log analysis the well to the north of the Unit known as the Gulf Oil Company Number 1 Hackberry Hills Unit, is productive in the Strawn formation. It has produced to date approximately two and three quarter billion cubic feet. The Morrow section in this well was not tested but log analysis indicates that it is productive.

The well to the southwest of the proposed Unit, known as the Coquina FAF Number 1, was completed in 1975 as a Cisco Canyon discovery.

The well to the south of the Unit on the plat shown as the Honolulu Number 1 McKettrick Canyon Unit.

- O. That's in Section 25?
- A. In Section 25. It was completed as a shut-in Morrow gas well in 1961. Subsequent to that time Western Oil Company

attempted to complete the well as a Morrow discovery but were unsucessful.

At the time of Honolulu's completion the well flowed approximately a million cubic feet of gas per day.

Another pertinent well is the well in Section 29 to the southeast of the Unit which was completed in 1975 as Cherry Canyon discovery for five point four million cubic feet per day.

These studies indicate that the chances of Morrow, Cisco Canyon, Strawn and perhaps Cherry Canyon gas are very good.

- Q. Is your primary objective the Morrow?
- A. Yes.
- Q. When will the test well be commenced?
- A. As soon as the administrative paper work is completed, hopefully within sixty days.
- Q. Approximately how long will it take to drill the initial well?
  - A. Approximately sixty days.
- Q. What have you calculated the approximate or estimated cost of that test well to be?
- A. Between six hundred and fifty and seven thousand dollars.
- Q. In your opinion, Mr. Schweinfurth, do you feel that the proposed Unit area contains recoverable oil and gas reserves?

A.	Yes

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- Will the proposed unit promote the prevention of waste and the protection of correlative rights within the Unit area?
  - A. Yes.
- Q. Was Exhibit Two prepared by you or under your direct supervision?
  - A. Yes, it was.

MR. HENSLEY: Mr. Examiner, we offer Exhibit Number Two, please.

MR. STAMETS: Exhibit Two will be admitted.

(THEREUPON, Applicant's Exhibit Number Two

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

(THEREUPON, the witness was excused.)

MR. STAMETS: Anything further in this case?

MR. HENSLEY: Nothing further.

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MR. STAMETS: We will take the case under advisement

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# REPORTER'S CERTIFICATE

I, SIDNEY F. MORRISH, 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, skill and ability.

Sidney F. Morrish, C.S.R.

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14 15	For the New Mexico Oil William F. Carr, Esq. Conservation Commission: Legal Counsel for the Commission
16	State Land Office Building Santa Fe, New Mexico
17	For the Applicant: Harold L. Hensley, Jr., Esq. HINKLE, BONDURANT, COX & EATON
18	Attorneys at Law Hinkle Building
19	Roswell, New Mexico
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Direct	Examination	bv	Mr.	Hensley

# MARK SCHWEINFURTH

K. H. GRIFFIN

Direct Examination by Mr. Hensley

# EXHIBIT INDEX

				Page
Applicant's Exhibit	Number	One,	Proposed Unit Agree.	7
Applicant's Exhibit	Number	Two,	Geological Study	11

5

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the Examiner housing of case 1. 5608
heard by me on 1976

New Mexico Oil Conservation Commission