

Case No.

262

Application, Transcript,  
Small Exhibits, Etc.

Case 262 - Byrd-Frost for designation and  
spacing rules for Largo Mesa Verde gas  
pool

0-115

T.E.

ORDER OF THE OIL CONSERVATION COMMISSION  
OF THE STATE OF NEW MEXICO

IN THE MATTER OF HEAR NO. 20 CASE NO.  
BY THE OIL CONSERVATION COMMISSION  
OF THE STATE OF NEW MEXICO FOR THE  
PURPOSE OF ORDER NO.

CASE NO. 214  
ORDER NO. R-16

IN THE MATTER OF THE DEFINITION AND  
CLASSIFICATION, UNDER RULE 5, OF NEW  
OIL AND GAS POOLS IN NORTHWESTERN NEW  
MEXICO, AND AMENDMENT OF ORDER NO. R-13,  
IN CASE NO. 213 BY THE ADDING TO THE FULCHER  
BASIN-KUTZ CANYON POOL, AS DEFINED THEREIN,  
OF WEST HALF SECTION 11, AND WEST HALF  
SECTION 14, TOWNSHIP 28 NORTH, RANGE 10  
WEST, N.M.P.M..

ORDER OF THE COMMISSION

BY THE COMMISSION:

This matter came on for hearing at Santa Fe, New Mexico, on March 21,  
1950, on motion of the Oil Conservation Commission and upon recommendation  
of the Northwestern New Mexico Nomenclature Committee, and the Commission  
having heard the evidence presented and having taken the matters under ad-  
judication,

FINDS:

1. That it has jurisdiction of the case and the parties interested  
therein, due notice of hearing having been regularly given; and

IT IS THEREFORE ORDERED:

1. That the exterior boundaries of sections 3 and 4, T. 27N, R. 8E,  
and all of sections 33 and 34, T. 28N, R. 8E, be, and they hereby are declared  
to be the boundaries of the Largo pool (Incewiler) hereby established, and  
classified as a gas pool.
2. That W/2 section 11, and W/2 section 14, in Township 28N, Range 10W,  
be, and they are hereby added to and hereafter included within the boundaries  
of Fulcher Basin-Kutz Canyon (Pictured Cliffs) gas pool as described by, and  
classified in, Order No. R-13, Case No. 213.

DONE at Santa Fe, New Mexico this 27th day of April, 1950.

STATE OF NEW MEXICO  
OIL CONSERVATION COMMISSION

THOMAS J. HARRY, CHAIRMAN

GUY SHEPARD, CLERK

R. H. BROWN, SECRETARY

## LEGAL NOTICE

### NOTICE OF PUBLICATION STATE OF NEW MEXICO OIL CONSERVATION COMMISSION

The State of New Mexico by its Oil Conservation Commission hereby gives notice pursuant to law and the Rules and Regulations of said Commission promulgated thereunder, of the following public hearing to be held March 20, 1951, beginning at 10:00 o'clock a. m. on that day in the City of Santa Fe, New Mexico, in the Council Chamber of the City Hall.

#### STATE OF NEW MEXICO TO:

All named parties in the following cases and notice to the public:

#### Case 282

In the matter of the application of Byrd-Frost, Inc. for designation and spacing rules for a Mesa Verde gas pool to be known as Largo Mesa Verde gas pool, comprising:

T. 29 N, R. 8 W

Sections 1 to 36, inclusive

T. 28 N, R. 8 W

Sections 7 to 18, 20 to 28, and

34 to 36

T. 27 N, R. 8 W

Sections 1 to 4, and 9 to 12

T. 29 N, R. 7 W

Sections 17 to 20 and 28 to 34

T. 28 N, R. 7 W

Sections 7 to 10, 15 to 22, and

26 to 35

GIVEN under the seal of the Oil Conservation Commission of New Mexico, at Santa Fe, New Mexico, on February 21, 1951.

STATE OF NEW MEXICO  
OIL CONSERVATION  
COMMISSION

R. R. SPURRIER

(SEAL) Secretary

Legal No. 234—Published in the Farmington Daily Times, Farmington, N. M., Monday, Feb. 26, 1951.

No 262

# AFFIDAVIT OF PUBLICATION

STATE OF NEW MEXICO }  
COUNTY OF SAN JUAN } ss.

Robert S. Magee

being first duly sworn, on oath states: that he is the publisher-advertising manager of the Farmington Daily Times, a daily newspaper published, and of general paid circulation in San Juan County, New Mexico, said newspaper being the successor, without interruption, of the Farmington Times Hustler, a weekly newspaper formerly published and of general paid circulation in said County and State, continuously and without interruption, for more than 26 weeks immediately prior to its succession by said daily paper; that said Farmington Times Hustler was, and the Farmington Daily Times is entered and mailed under the second class postal privilege in said County, that being the County in which the notice, of which a copy as published, is hereto attached and made part hereof, is required to be published; that said notice was published in the Farmington Daily Times in the English language once each week for one consecutive weeks on the following dates, to-wit:

1st Publication on the 26 day of Feb., 1951  
2nd Publication on the \_\_\_\_\_ day of \_\_\_\_\_, 19\_\_\_\_  
3rd Publication on the \_\_\_\_\_ day of \_\_\_\_\_, 19\_\_\_\_  
4th Publication on the \_\_\_\_\_ day of \_\_\_\_\_, 19\_\_\_\_

## PUBLISHER'S BILL

50 lines one time @ 10 \$ 5.00  
\_\_\_\_\_ lines @ \_\_\_\_\_ \$ \_\_\_\_\_  
Tax \_\_\_\_\_ \$ \_\_\_\_\_  
Total \_\_\_\_\_ \$ 5.00  
Received payment,

Farmington Daily Times

Robert S. Magee  
Publisher-Advertising Manager

Subscribed and sworn to before me this 26 day of Feb., 1951

My commission expires: My Comm. for Expires, 1953

Lela Smith  
Notary Public

February 22, 1951

The Farmington Times Hustler and  
Espanola Valley News

RE: Notice of Publication  
Case 262

Gentlemen:

Please publish the enclosed notice one time immediately on receipt of this request. Please proofread the notice carefully and send a copy of the paper carrying such notice to this office.

Upon completion of the publication, send publisher's affidavit in duplicate.

For payment, please submit statement in duplicate, and sign and return the enclosed voucher (do not fill in voucher).

**PLEASE PUBLISH NOT LATER THAN MARCH 1, 1951.**

Very truly yours,

Secretary and Director

Enc. - 2

NOTICE OF PUBLICATION  
STATE OF NEW MEXICO  
OIL CONSERVATION COMMISSION

The State of New Mexico by its Oil Conservation Commission hereby gives notice pursuant to law and the Rules and Regulations of said Commission promulgated thereunder, of the following public hearing to be held March 20, 1951, beginning at 10:00 o'clock a.m. on that day in the City of Santa Fe, New Mexico, in the Council Chamber of the City Hall.

STATE OF NEW MEXICO TO:  
All named parties in the following  
cases and notice to the public:

Case 262

In the matter of the application of Byrd-Frost, Inc. for designation and spacing rules for a Mesa Verde gas pool to be known as Largo Mesa Verde gas pool, comprising:

T. 29 N, R. 8 W  
Sections 1 to 36, inclusive

T. 28 N, R. 8 W  
Sections 7 to 18, 20 to 28, and 34 to 36

T. 27 N, R. 8 W  
Sections 1 to 4, and 9 to 12

T. 29 N, R. 7 W  
Sections 17 to 20 and 28 to 34

T. 28 N, R. 7 W  
Sections 7 to 10, 15 to 22, and 26 to 35

GIVEN under the seal of the Oil Conservation Commission of New Mexico, at Santa Fe, New Mexico, on February 21, 1951.

STATE OF NEW MEXICO  
OIL CONSERVATION COMMISSION

  
R. R. SPURRIER  
Secretary

SEAL

BEFORE THE  
OIL CONSERVATION COMMISSION  
STATE OF NEW MEXICO

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(Case 262. This is a hearing to set out the limits of the pool and spacing for Mesa Verde production in the vicinity of Largo pool, San Juan County, N. M., generally in Townships 27 and 28 and 29 North, Ranges 7 and 8 West.)

(Came on for hearing following noon recess.)

CHAIRMAN SHEPARD: The next case is Case 262. Will you read, Mr. Graham, please?

(Reads notice of publication.)

CHAIRMAN SHEPARD: Is the applicant ready?

MR. GORDON: Yes, sir.

CHAIRMAN SHEPARD: O. K.

MR. GORDON: My name is Joseph C. Gordon, representing Byrd-Frost Incorporated. In the area inclosed in this request Byrd-Frost Incorporated have completed 3 wells in the Mesa Verde. They are as follows: The Billie D. Day, located in the SW/4 of Section 17, T. 29N, R. 8W -- excuse me a minute. I have 3 maps here that might help you locate those. The G. W. Nickson No. 1 in the NE/4 of Sec. 33, T. 28N, R. 7W, and the H. E. Roeloffs No. 1 in the NE/4 of Sec. 22, T. 29N, R. 8W. ✓ We are currently completing J. F. Hughes No. 1 in the SW/4 of Sec. 19, T. 29N, R. 8W, and we are making locations--two locations-- on the Allie V. Tapp. One would be in the NE/4 of Sec. 17, T. 28N, R. 8W. The other would be the SW/4 of Sec.

16, T. 28N, R. 8W. Now, I have discussed this matter with representatives of the Commission, and they say we are a little ambitious in covering such a large area without more development. The fact of the matter is it is probably 10 miles in a straight line from the Billie O. Day down to the Nickson well, which is over in 28N-7W. So we would like to request this. That if the Commission sees fit they would set up an area around the Billie D. Day and the Roeloffs wells, which are located in T. 29N, R. 8W. Set up an area around those wells and if the Hughes well is completed in the very near future, include that in the same area. And possibly designate that as North Largo. Then over here around our Nickson well in 28N-7W to set up what the Commission would designate as the probable proven area around the Nickson No. 1, and designate that as East Largo. I mention this--there already has been an area designated as Largo which is around the Great Lakes Graham No. 1 well. It may be known as the Hearth. I am not sure. That is south of what we would like to have designated as North Largo and west of what we would describe as East Largo. Eventually, the entire area may tie in together there, but to date it isn't proven. Now, our well spacing or pattern has been 320 acres to the well to the Mesa Verde, with locations in the alternate 320 acres in each section, which is the same pattern as has been put in effect in the Blanco field. Field rules I think should be discussed later, but the spacing I



think should be followed, 320 acres, with the provisions for communitizing the same as are customary, and conditions like that. One of these townships has some sections on the west side that are not full 640 acres. They are irregular. I believe that is about all that I can think of right now.

CHAIRMAN SHEPARD: Any questions?

MR. McCORMICK: How deep are these wells?

MR. GORDON: These wells are running about 56 or 5700 feet.

MR. McCORMICK: And what initial production on them?

MR. GORDON: The Billie D. Day is producing from both the Cliff House and the lower formation. And the initial potential on that is 4,800,000 feet per day. The Roeloffs is producing from the lower formation and the Point Lookout and the potential on it is 5,800,000 feet.

MR. McCORMICK: How much are you actually withdrawing from each well?

MR. GORDON: These wells are not connected to a pipe line at this time. They are awaiting a contract. The Nickson No. 1 over on the east side is producing from the Point Lookout and its potential is rated at 5,350,000 per day.

MR. McCORMICK: How is it producing from two different horizons. Have you got double perforations?

MR. GORDON: The one well that is open to two sections is the Billie D. Day. The first completion--and it is just open

to both formations. The lower formation has been shot, but so far as I know the upper formation has not. Now, we are contemplating discussing among ourselves the feasibility and practicability of completing these wells with sealed casing on opposite the Cliff House, going on down and setting casing on top of the Point Lookout. Complete with cable tools in the Point Lookout and possibly set a liner or packer between the two, and eat the casing out with chemical, acid, and shoot it, and make a separate completion in that. And then possible use a packer and produce the two horizons separately by means of a packer. We haven't asked for approval on that because we do not know what the formation pressure is going to be in the Cliff House. We have only completed one well in the Cliff House and the lower formation. And we need more experience in the field before we are willing to propose field rules.

MR. McCORMICK: Well, if these wells aren't connected now, and if you haven't determined on your final method of completing them, say, what is the purpose of having the pool designated at this time?

MR. GORDON: Well, we think we will soon have a connection for the gas, by selling gas. We don't want to set up this-- set up different pool horizons. That is, between the Cliff House and the Point Lookout. But we may wish to produce them separately on account of the possible difference in pressure between

the Cliff House and the Point Lookout formations. But all we are asking for now is the name of, say, North Largo and East Largo and 320 acre spacing to be set up so that any wells drilled in the area will conform to the pattern.

MR. McCORMICK: How much of this area that you propose to include in Largo is government land?

MR. GORDON: Practically all of it.

MR. McCORMICK: And you have two distinct producing horizons there now?

MR. GORDON: Well, we will call them the Mesa Verde. We are not trying to differentiate between them.

MR. McCORMICK: How far apart vertically are they?

MR. GORDON: Five or six hundred feet I believe. I would have to check that. Quite a distance between the two.

MR. McCORMICK: There would have to be one pool set up for one pool or the other.

MR. GORDON: We are just asking for Mesa Verde gas. In the general area they are taking the Cliff House and Point Lookout as being part of the Mesa Verde, and setting up pools on the Mesa Verde only although they may be producing from one or both. In the Blanco they are producing from both in many cases.

MR. SPURRIER: Mr. Gordon, you would recommend that the now existing Largo Pool should include also these four other wells in T. 28N-8W?

MR. GORDON: I didn't make any recommendation to cover them. They are not our wells. I am making recommendations on our own producing properties.

MR. SPURRIER: It seems it might be logical to include them.

MR. GORDON: It might be, yes, sir. You might want to do that. But I wasn't requesting it.

MR. SPURRIER: All right.

CHAIRMAN SHEPARD: Any questions? Mr. Morrell?

MR. MORRELL: I am in entire accord with the statements made by the representative from Byrd-Forst with the single exception of the name of the pool. I think that the Commission should take cognizance of the structure on which this gas is located. For the information of the Commission--this is an extra copy you can have if you like; you have some in your office;;I will sketch two contours. We will take a plus 900 feet contour of the basin and a plus 1,400 foot contour of the basin. This is a single gas structure that swings southeasterly from the now defined La Plata area through the now defined Blanco area. The area of which Mr. Gordon is speaking is right in here. It is certain that there is a single common reservoir of Mesa Verde production. We will then be confronted with the fact that we can get too many names in a single pool. I think the Commission should take that into consideration for its own convenience. We have got La Plata and South La

Plata which are rapidly being absorbed. The only producing area east of the Animas is the Blanco. The name Largo is a happenstance completed south of Blanco. It isn't producing. To add to the confusion, the area which Mr. Gordon wants to have called Largo is already included in some agreements that are now before the Department of the Interior and which will be submitted to this Commission involving Delhi, Blanco, San Juan Production Company, and the El Paso Natural Gas Co. that embrace the term Blanco. There is production in the area now from southern San Juan production Co. wells, which come under the Blanco development contract. It seems to me to simplify the record it would be best to extend the name of a producing area rather than continue one that is not producing. I would suggest that this single gas structure take the name of La Plata from the Colorado line to the Animas River, and exclude from the Animas River to the Blanco. When it has been definitely proved, similar to the case of what was done in Fulcher Basin and Kutz Canyon, that was hyphenated and made a single field and cut it down to Fulcher-Kutz. We could get this to Blanco-La Plata and take it all. If you don't, you will have each operator getting his preference. We had Cedar Hill offered for a couple of wells between Blanco and La Plata. And for over-all convenience it would be much simpler to retain the names to as few as possible.

MR. McCORMICK: It is your suggestion that this area under

consideration now be included in the Blanco Pool?

MR. MORRELL: Blanco.

MR. McCORMICK: And it would be joined up all as one pool?

MR. MORRELL: Yes.

MR. GRAHAM: Why not fix Blanco for the time being?

MR. MORRELL: If you want to make it for the time being, south or east, we have no objection. But the thought of simplifying the terminology for the record, it would be very helpful. For the record, the contract I spoke of for development includes land in 28N, 8 and 9W; 29N-9W, 30N-8 and 9W. This area that Byrd-Frost has in mind includes 28N-8W as well as 29N-8W.

MR. McCORMICK: I ask you, Mr. Morrell, if you think the development has gone far enough now to include it all in one pool?

MR. MORRELL: I think it has definitely proved to be continuous. You get wide variations in the productivity of wells, but it is proved to be productive down through 28N-7W.

MR. GORDON: Now how much area is there in what you would specify as the present Blanco as designated by the state?

MR. MORRELL: This area here. I might add that south of the present designation by the state of the Blanco area wells have been drilled continuously to what is already designated as Largo a mile or two apart.

MR. GORDON: This area you are speaking of is about that big?

MR. MCCORMICK: It takes in this.

MR. GORDON: Now specified as Blanco.

MR. MORRELL: Not much larger than what is drawn there.

MR. GORDON: And the area we are talking about in this hearing is 10 miles long and about--it is maybe twice as much area. That is, the total area.

MR. MORRELL: But the present definition is ....

MR. GORDON: Well, I am just going by what is set up.

MR. SPURRIER: What do you think about the size of the pool Mr. Gordon recommended?

MR. MORRELL: I see no reason why it couldn't be carried over as much area as he suggests.

MR. SPURRIER: It goes from .... ?

MR. MORRELL: It can be fully 12 miles north and south and carried on over another 10 miles east. But the department does have much of this area that Mr. Gordon suggests as Largo in its area as Blanco, and the production will be recorded by the El Paso Natural Gas Co. as Blanco under its contract. I think the situation is that Byrd-Frost has got Largo set up on its records and would prefer to not change them. That is something to be considered too.

MR. GORDON: Yes, we have a big area there. It was called Largo before we ever went out there and bought leases. It has always been called Largo on account of Largo Canyon. That name has always stood for that area, and we would kind of like to

keep the name. But it is only a name. It doesn't make any difference, except I think the area is larger than the Blanco area now.

MR. MORRELL: Yes.

MR. McCORMICK: How about calling it Largo-Blanco?

MR. MORRELL: Than you get Largo-Blanco-La Plata. So far as local names are concerned, Southern Union wanted to call it Glade.

MR. GORDON: There is a Glade up in Colorado.

MR. MORRELL: Yes, also La Plata.

MR. GORDON: Of course, the main thing to us is the field rules and the spacing.

MR. MORRELL: I do agree with the spacing program Mr. Gordon suggests, and I think in time we would amend the present spacing program for the Blanco under existing rules to more or less conform.

CHAIRMAN SHEPARD: Anybody have anything to say? If not, we take up the next case.

STATE OF NEW MEXICO )  
: ss  
COUNTY OF BERNALILLO )

I HEREBY CERTIFY That the foregoing transcript of hearing in Case No, 262 is a true record of the same to the best of my knowledge, skill, and ability.

DONE at Albuquerque, N. M., March 27, 1951.

E. E. Gueson

My Comm. Ex.: 8-4-52





BEFORE THE OIL CONSERVATION COMMISSION  
OF THE STATE OF NEW MEXICO

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

CASE No. 262  
ORDER No. R-67

IN THE MATTER OF THE APPLICATION OF  
BYRD FROST, INC. FOR DESIGNATION AND  
SPACING RULES FOR A MESAVERDE GAS POOL  
TO BE KNOWN AS LARGO-MESAVERDE GAS POOL  
IN RIO ARRIBA AND SAN JUAN COUNTIES,  
NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION

This matter came on for hearing at Santa Fe, New Mexico at 10:00  
o'clock on March 20, 1951, and the Commission having heard the testimony  
adduced and reviewed the pertinent office records,

FINDS:

1. That due notice having been given in compliance with law, the  
Commission has jurisdiction of the interested parties and the subject matter  
hereof.
2. That heretofore on March 21, 1950, upon the recommendation of the  
then functioning Northwestern New Mexico Nomenclature Committee, there  
was, by Commission Order No. 214, duly established a pool classified as a  
gas pool designated as the Largo (Mesaverde) pool described as:

T. 28 N, R. 8 W  
Sections 33 and 34

T. 27 N, R. 8 W  
Sections 3 and 4

3. That testimony adduced at the hearing, upon Byrd-Frost, Inc.'s  
application in this case, shows that within the confines of the proposed ex-  
tension of boundaries, and since the establishment of such Largo (Mesaverde)  
pool, producing wells have been completed in:

T. 29 N, R. 8 W  
SW/4 section 17 (Billie D. Day)

NE/4 section 22 (H. E. Roeloffs No. 1)

T. 28 N, R. 7 W  
NE/4 section 33

all producing from Cliff House and/or Point Lookout in the Mesaverde  
formation.

4. That applicant testimony is that it is presently completing

T. 29 N, R. 8 W

SW/4 section 19 (J. F. Hughes No. 1), in the Mesaverde formation, and have made locations, with entire confidence of encountering Mesaverde production, as follows:

T. 28 N, R. 8 W

NE/4 section 17, and

SW/4 section 16

IT IS THEREFORE ORDERED: That the boundaries of the Largo pool, heretofore created by Order No. 214, effective April 27, 1950, be and the same hereby are extended to include not only its original boundaries of:

T. 28 N, R. 8 W

Sections 33 and 34

T. 27 N, R. 8 W

Sections 3 and 4,

but in addition thereto, the following lands:

T. 29 N, R. 8 W

Sections 1 to 36, inclusive

T. 29 N, R. 7 W

Sections 28, 29, 30, 31, 32 and 33

T. 28 N, R. 7 W

Short sections 7, 8, 9, and 10

Sections 15, 16, 17, 18, 19, 20, 21,

22, 27, 28, 29, 30, 31, 32, 33, and 34

T. 28 N, R. 8 W

Short sections 7, 8, 9, 10, 11, 12

Sections 13, 14, 15, 16, 17, 18, 20,

21, 22, 23, 24, 25, 26, 27, and 28,

35 and 36

IT IS THEREFORE ORDERED: That the spacing pattern for the pool as hereby established be and the same hereby is fixed as 320 acres for Mesaverde production, and with orthodox locations in the centers of the respective northeast quarters and the southwest quarters of each included section, with a 200-foot tolerance. Unorthodox locations may be authorized after notice of hearing, upon proper applications duly filed with the Commission, and

IT IS FURTHER ORDERED; That jurisdiction of this case be retained by the Commission for the purpose of changing by reducing or extending the designated area and for other pertinent purposes as facts may be further disclosed by exploration and development.

DONE at Santa Fe, New Mexico, this 20 day of April, 1951.

STATE OF NEW MEXICO  
OIL CONSERVATION COMMISSION

EDWIN L. MECHEM, Chairman

*Guy Shepard*  
GUY SHEPARD, Member

*R. D. [Signature]*

AGE	FORMATION	THICKNESS	CHARACTER	REMARKS
Eocene and Paleocene	Wasatch fm	250-3000	Gray to brn ss & varg. sh.	
Paleocene and Upper Cretaceous	Nacimiento grp (Torrejon & Puerco)	1700-3000	Brn & gray ss, greenish & gray sh	
	Animas / Ojo Alamo fm / ss	50-300	Brn ss with varg sh conglomeratic	
Upper Cretaceous	McDermott fm	30-250	Andesitic ss & sh	
	Kirtland sh (Farmington ss)	650-1180	Gray sh & brn ss	Farmington ss produces gas or oil at Aspec, Blanco, Bloomfield and Weyer.
	Fruitland fm	200-575	Gray sh with gray & brn ss	
	Pictured Cliffs ss	30-300	Lt gray ss with sh	Pictured Cliffs ss produces gas at Blanco, Gertie, Kutz Canyon, Fletcher Basin and Rosa.
	Lewis sh	2000	Gray sh with ss lenses	
	Mesaverde grp, Cliff House ss, Menefee sh, Point Lookout ss	300-1800	Massive ss & brn & gray sh with coal beds	Mesaverde produces oil or gas at Blanco, Hoshah, Kutz Canyon, Fletcher Basin, La Plata, Red Mountain, Seven Lakes, and Stoney Butte.
	Mancos sh	600-700	Dk gray sh with ss lenses, calc at base	Mancos shale has produced small quantities of oil at Crome, Mancos Creek and Red Mesa.
	Dakota ss	150-250	Lt brn ss with sh lenses	Dakota ss has produced oil or gas at Angeles Peak, Barker Creek, Hogback, Lindrich, Price, Rattlesnake, Table Mesa and Ute Dome.
Jurassic	Morrison fm	300-600	Gray & brn ss with varg sh	
	San Rafael group	Summerville equiv	80'	Red-brn gypsif sh
		Wanakah fm	0-100	Gypsum & lst.
		Entrada ss	50-200	Red & orange red ss with dk red sh
	Glen Canyon group	Carmel fm	25-100	Slt red-brn sdy sh
		Navajo ss	0-300	Buff & red ss
		Kayenta fm	0-40	Red-brn sdy sh locally calc.
		Wingate ss	0-750	Dk red-brn sft ss
Triassic	Chinle fm	1500	Red sh & ss	
	Shinarump cong.	0-125	Cem. fored brn crs. ss & cong	
	Moenkopi fm.	0-200	Red-brn choc & gray sh locally calc.	
Permian	Cutter fm.	1400	Red ss & red sh.	
	Rico fm	0-150	Red-brn shs with thin ls.	
Pennsylvanian	Hermosa fm.	1000-1000	Lst. ss & sh	
	Paradox fm	0-3000	Salt, gypsum & blk sh with thin lst	The Pennsylvanian has produced oil or gas at Barker Cr, Dove Cr, Rattlesnake and Ute Dome.
	Molas fm	25-100	Dk gray & purple sh	
Mississippian	Leadville lst.	100	White & brn lst.	The Ouray-Leadville lst series have produced substantial gas shows at Rattlesnake & Tootie Dome. This gas is high in helium.
Devonian	Ouray lst	100	Gray lst	
	Elbert fm.	0-110	Lst. ss & sh.	
Cambrian	Ignacio quartzite	0-80	Quartzite, sdy sh & cong.	
Pre Cambrian			Granite & schist	

# GENERALIZED STRATIGRAPHIC SECTION OF THE SAN JUAN BASIN

NEW MEXICO OIL CONSERVATION COMMISSION  
R. R. Spurrier, Director

F. C. Barnes,  
Geologist

Santa Fe, New Mexico  
1943

REPRODUCED BY  
F. C. BARNES  
&  
GEO. RESEARCH

Thicknesses not to scale

Drafted by: H. K. Dando

FIELD OFFICE  
113 WEST WHALEY  
LONGVIEW, TEXAS  
TELEPHONE 1096

BYRD-FROST, INC.  
OIL

GENERAL OFFICES  
1110 TOWER PETROLEUM BLDG.  
TELEPHONES: R-5153 R-5154 L.D. 818  
DALLAS 1, TEXAS

February 12, 1951

*Mar 20 leaving 260*

*Case 262*

Mr. R. R. Spurrier  
Oil Conservation Commission  
Capitol Building  
Santa Fe, N. M.

Re: Largo Area

Dear Dick:

The development in the Largo Area of San Juan and Rio Arriba Counties of New Mexico now covers a considerable area and Byrd-Frost, Inc. is of the opinion that this area should be designated as a Mesa Verde gas field under the name of "Largo" with spacing rules similar to those for the Blanco Field.

Should the Commission see fit to hold a hearing for this request, the area we suggest for the Largo Mesa Verde gas field is as follows:

T-29N, R-8W:  
Sections 1 to 36, inclusive.

T-28N, R-8W:  
Sections 7 to 18, 20 to 28, and <sup>33 & 34</sup> 34 to 36.

T-27N, R-8W:  
Sections 1 to 4, and 9 to 12.

T-29N, R-7W:  
Sections 17 to 20 and 28 to 34.

T-28N, R-7W:  
Sections 7 to 10, 15 to 22 and 26 to 35.

It will be appreciated if you will advise me whether a more formal request for a hearing on this matter will be required. *No*

Very truly yours,

BYRD-FROST, INC.

BY:

*Joseph C. Gordon*  
Joseph C. Gordon.

JCG:LLH

February 15, 1951

Mr. Joseph C. Gordon  
Byrd-Frost, Inc.  
Dallas, Texas

RE: Largo Area

Dear Joe:

Thank you for your recommendations of February 12 concerning designation of a Largo Mesa Verde gas pool.

Your letter was quite adequate, and there is no need for further communication regarding this pool. The matter will be included in the hearing scheduled for March 20.

Very truly yours,

bpw

Secretary and Director

DOCKET  
OIL CONSERVATION COMMISSION

Resume of applications to be heard March 20, 1951 at 10:00 o'clock a.m. in Santa Fe, New Mexico, in the Council Chamber of the City Hall.

1. Allowable
2. Case 149 - This is the Crossroads pool 80-acre versus 40-acre spacing question which was continued to March 20 by Order R-45, dated 12-29-50. Companies have been asked to furnish all remaining information available on the Crossroads pool.
3. Case 245 - This case, which involves the designation of the gas pools in Lea, Eddy, and Chaves Counties, was originally scheduled for the December hearing. At that time sufficient information was not available to enable the Commission to promulgate an order, and the case was therefore continued to the regular March hearing (March 20, 1951).
4. Case 260 - This case is an application by Tide Water Associated Oil Company of Houston, Texas, for an oil/oil dual completion of the Ellenburger and McKee formations for State S No. 4, located in the NE/4 NW/4 section 15, T. 21 S., R. 37 E; Perforations 7800-7825' for the Ellenburger and 7422-7434' for the McKee; or in the alternative to transfer allowable of State S No. 4 to State S No. 3.
5. Case 261 - This is an application by Cities Service Oil Company of Bartlesville, Oklahoma, to dually complete State S No. 3, located in the SE/4 NW/4 section 15, T. 21 S, R. 37 E, Lea County, New Mexico, for oil/oil completion in the Ellenburger and McKee formations; Perforations in the Ellenburger 7860-7900' and 7960-8000'; for the McKee 7454-7530'.
6. Case 262 - This is a hearing to set out the limits of the pool and spacing for La Verde production in the vicinity of Largo pool, San Juan County, N. M., generally in Townships 27 and 28 and 29 North, Ranges 7 and 8 West.
7. This case is a matter of nomenclature for the designation or extension of various pools, which is necessitated by recently completed wells in the vicinity of the House Pool, Bough pool, Vacuum pool, and Bagley Siluro-Devonian pool; Twin Lakes (discovery well Magnolia #1 O'Brien "B"), Fowler-Blinebry (discovery well Stanolind, State "D" Tract 14 #1, Gladiola-Abo (discovery well Sinclair, Virgie Green Tract A #1), Levick pool (discovery well Levick, State #1), Keohane pool (discovery well Keohane, Inc. #1 D. Keohane).
8. Case 264 - Kewanee Oil Co. for approval of "Four Mile Unit" Agreement T. 18 S, R. 18 E and T. 19 S, R. 18 E, Chaves County Santa Fe, N. M.  
February 22, 1951

*Case 262*  
*man. hearing*

Township.....Range..... Township.....Range.....  
Township.....Range *8 W*..... Township.....Range *7 W*.....

29  
N

28  
N

6	5	4	3	2	1	6	5	4	3	2	1
7	8	9	10	11	12	7	8	9	10	11	12
18	17	Byrd-Frost #1 Day	15	14	13	18	17	16	15	14	13
19	Byrd-Frost #1 June	21	22	23	Byrd-Frost #1 Roelofs	19	20	21	22	23	24
30	29	28	27	26	25	30	29	28	27	26	25
31	32	Byrd-Frost #1-2 Hughes	34	35	36	31	32	33	34	35	36
7	8	9	10	11	12	7	8	9	10	11	12
18	Sharp #1 Bolack	16	15	14	13	18	17	16	15	14	13
19	Sharp #2 Bolack	21	San Juan Prod. #1-A Gramblin	23	24	19	20	21	22	23	24
30	29	28	27	26	25	30	29	28	27	26	25
31	32	33	San Juan Prod. #2-A Gramblin	35	36	31	32	33	Byrd-Frost #1 Nickson	35	36
6	5	4	3	2	1	6	5	4	3	2	1
7	8	9	10	11	12	7	8	9	10	11	12
18	17	16	15	14	13	18	17	16	15	14	13