

GENERAL OFFICES
1501 PETROLEUM BUILDING
OKLAHOMA CITY, OKLAHOMA
PHONE 2-0546

BENSON & MONTIN
OIL PRODUCERS AND OPERATORS

EARL A. BENSON
WM. V. MONTIN

June 11, 1952

Re: Gallegos Canyon Unit
Pictured Cliffs
Participating Area

State of New Mexico
Oil Conservation Commission
Santa Fe, New Mexico

Gentlemen:

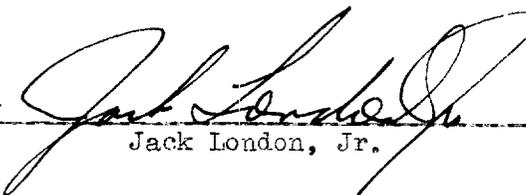
This is to advise that on June 5, 1952 our application for the establishment of the Participating Area was formally approved by the Director of the U. S. Geological Survey. The Area was approved as is set out on the attached schedule. A copy of this application was directed to you and we will greatly appreciate your **early** consideration and action on the application.

The attached schedules have been slightly revised from those previously furnished you in that eight acres have been added to Tract 20 to correct an error in our records.

Yours very truly,

BENSON & MONTIN

By


Jack London, Jr.

JLJr:wr

Encl.

23

BENSON & MONTIN

GENERAL OFFICES
1501 PETROLEUM BUILDING
OKLAHOMA CITY, OKLAHOMA
PHONE 3-0546

OIL PRODUCERS AND OPERATORS

EARL A. BENSON
WM. V. MONTIN

June 6, 1952

Case 2-111

Oil Conservation Commission
State of New Mexico
Santa Fe, New Mexico

Gentlemen:

We enclose herewith, for your consideration, copy of our application to the United States Geological Survey for the establishment of a participating area for the Pictured Cliffs formation of the Gallegos Canyon Unit, San Juan County, New Mexico. We believe the copy of the application to be self explanatory and will serve to bring you up to date as to our negotiations with U.S.G.S. We will appreciate your early consideration and action on this matter.

Yours very truly,

BENSON & MONTIN

By *Jack London, Jr.*
Jack London, Jr.

JLJr:wr

Encls.

[Faint, illegible stamp]

WV

GENERAL OFFICES
1501 PETROLEUM BUILDING
OKLAHOMA CITY, OKLAHOMA
PHONE 3-0546

BEN **B&M** MONTIN

OIL PRODUCERS AND OPERATORS

EARL A. BENSON
WM. V. MONTIN

June 3, 1952

Re: Gallegos Canyon Unit
Tracts No. 62, 63, 65, 66,
68, 83, 86, 87, 88 and 89,
Gallegos Canyon Unit
San Juan County,
New Mexico

State of New Mexico
Oil Conservation Commission
Santa Fe, New Mexico

Gentlemen:

Enclosed is one copy of Ratification and
Joinder of Unit Agreement for subject Tracts in the
Gallegos Canyon Unit, executed by Texas Pacific Coal
and Oil Company of Fort Worth.

Yours very truly,

BENSON & MONTIN

By *William V. Montin*
Lease Records Department

WR

OIL CONSERVATION COMMISSION
SANTA FE, NEW MEXICO.
RECEIVED
JUN 5 - 1952

RATIFICATION AND JOINDER OF UNIT AGREEMENT

In consideration of the execution of the Unit Agreement for the Development and Operation of the Gallegos Canyon Unit Area, County of San Juan, State of New Mexico, in form approved on behalf of the Secretary of the Interior, the undersigned owners of lands or leases, or interests therein or royalties presently held or which may arise under existing option agreements, or other interests in production covered by said Unit Agreement hereby severally, each to the extent of his particular ownership or interest, briefly described opposite his signature, consent to the inclusion of said lands within the Unit Area therein defined, approve and adopt the terms of said Unit Agreement and any modifications thereof approved by the Secretary of the Interior or his duly authorized representative as applicable to said several lands and interests, agree that the term of any lease given by the undersigned or under which the undersigned claims an interest herein is extended and modified to the extent necessary to make the same conform to the term of said Unit Agreement, agree that the drilling, development and producing requirements of all leases and other contracts in which their several rights and interests are created or defined shall be deemed fully performed by performance of the provisions of said Unit Agreement, and agree that payment for or delivery of (whichever may be required under prior agreements) oil and gas duly made at contract rates applied to the production allocated under said Unit Agreement to the particular lands to which such rights or interests do or shall apply, regardless of actual production therefrom, shall constitute full performance of all such obligations to the undersigned existing under such leases or other contracts.

This Ratification and Joinder of Unit Agreement may be executed in any number of counterparts with the same force and effect as if all parties had signed the same document and shall be binding upon all those who execute a counterpart hereof, regardless of whether or not it is executed by all other parties owning or claiming an interest in the lands affected hereby, and when so executed shall be binding upon the undersigned, his heirs, devisees, assigns or successors in interest.

SIGNATURES AND ADDRESSES

DESCRIPTION

Texas Pacific Coal and Oil Company
Fort Worth, Texas

by *C. E. Yeager*
C. E. Yeager, President

Working Interest in the following:

T29N-R13W
Section 36 - S/2 NE/4, NW/4 NW/4,
NE/4 SW/4, NW/4 SE/4

T29N-R12W
Section 32 - W/2 NW/4, NW/4 SW/4,
SE/4 SW/4, NW/4 SE/4

400 Acres

STATE OF TEXAS)
COUNTY OF TARRANT)

On this 26th day of May, 1952, before me appeared C. E. Yeager to me personally known, who, being by me duly sworn, did say that he is the President of Texas Pacific Coal and Oil Company and that the seal affixed to the said above and foregoing instrument is the corporate seal of said corporation and that said instrument was signed and sealed in behalf of said corporation, by authority of its Board of Directors and the said C. E. Yeager acknowledges such instrument to be the free act and deed of said corporation.

GIVEN UNDER MY HAND AND SEAL OF OFFICE, this 26th day of May A.D. 1952.

STATE OF _____)
COUNTY OF _____)

Joe R. Schmerber
Notary Public

On this _____ day of _____, 19____, before me personally appeared _____ to me known to be the person described in and who executed and delivered the foregoing instrument, and acknowledged to me that _____ executed the same as _____ free act and deed.

GIVEN UNDER MY HAND AND SEAL OF OFFICE, this _____ day of _____, 19____.
My Commission expires:

Notary Public

APPROVED
AS TO FORM
[Signature]
AS TO CONTENT

GENERAL OFFICES
1501 PETROLEUM BUILDING
OKLAHOMA CITY, OKLAHOMA
PHONE 3-0546

BENSON & MONTIN
OIL PRODUCERS AND OPERATORS

EARL A. BENSON
WM. V. MONTIN

April 19, 1952

Case 247

Re: Unit Tract #129
Gallegos Canyon Unit
San Juan County
New Mexico

State of New Mexico
Oil Conservation Commission
Santa Fe, New Mexico

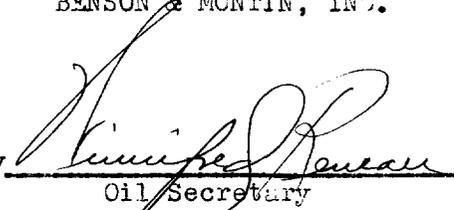
Gentlemen:

Enclosed herewith is one copy of Ratification and Joinder of Unit Agreement covering the above tract, executed by Mrs. H. B. Sammons and C. C. Culpepper and Ethelwyn Culpepper, for your files.

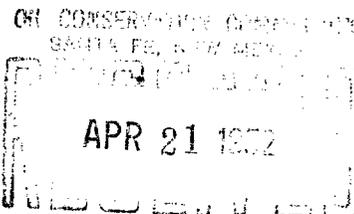
Yours very truly,

BENSON & MONTIN, INC.

By


Oil Secretary

WR



RATIFICATION AND JOINDER OF UNIT AGREEMENT

In consideration of the execution of the Unit Agreement for the Development and Operation of the Gallegos Canyon Unit Area, County of San Juan, State of New Mexico, in form approved on behalf of the Secretary of the Interior, the undersigned owners of lands or leases, or interests therein or royalties presently held or which may arise under existing option agreements, or other interests in production covered by said Unit Agreement hereby severally, each to the extent of his particular ownership or interest, briefly described opposite his signature, consent to the inclusion of said lands within the Unit Area therein defined, approve and adopt the terms of said Unit Agreement and any modifications thereof approved by the Secretary of the Interior or his duly authorized representative as applicable to said several lands and interests, agree that the term of any lease given by the undersigned or under which the undersigned claims an interest herein is extended and modified to the extent necessary to make the same conform to the term of said Unit Agreement, agree that the drilling, development and producing requirements of all leases and other contracts in which their several rights and interests are created or defined shall be deemed fully performed by performance of the provisions of said Unit Agreement, and agree that payment for or delivery of (whichever may be required under prior agreements) oil and gas duly made at contract rates applied to the production allocated under said Unit Agreement to the particular lands to which such rights or interests do or shall apply, regardless of actual production therefrom, shall constitute full performance of all such obligations to the undersigned existing under such leases or other contracts.

This Ratification and Joinder of Unit Agreement may be executed in any number of counterparts with the same force and effect as if all parties had signed the same document and shall be binding upon all those who execute a counterpart hereof, regardless of whether or not it is executed by all other parties owning or claiming an interest in the lands affected hereby, and when so executed shall be binding upon the undersigned, his heirs, devisees, assigns or successors in interest.

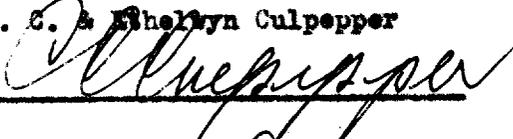
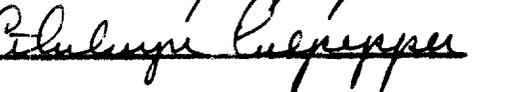
SIGNATURES AND ADDRESSES

DESCRIPTION

~~XXXXXXXXXX~~ H. B. Sammons


Tract 129 - T29N-R12W
 Section 28: S/2 NW/4
 NW/4 NW/4
 NE/4 SW/4

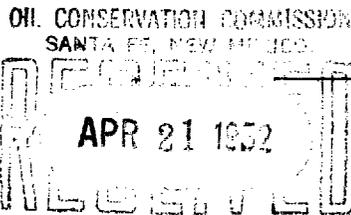
160-Acre Royalty Interest

C. C. & Ethelwyn Culpepper



STATE OF NEW MEXICO
 COUNTY OF SAN JUAN

On this 18th day of March, 1952, before me personally appeared ~~XXXXXXXXXXXXXXXX~~ H. B. Sammons, a widow C. C. Culpepper and Ethelwyn Culpepper to me known to be the persons described in and Husband and wife who executed and delivered the foregoing instrument, and acknowledged to me that ~~they~~ executed the same as ~~their~~ free act and deed.

GIVEN UNDER MY HAND AND SEAL OF OFFICE, this 18th day of March, 1952
 My Commission expires:




 Notary Public

My Commission Expires Oct 4, 1953



UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

IN REPLY REFER TO: *1000*

P. O. Box 997
Roswell, New Mexico

April 2, 1952

Benson and Montin
1501 Petroleum Building
Oklahoma City, Oklahoma

Attention: Mr. Jack London, Jr.

Gentlemen:

Enclosed is one approved copy of your Plan of Development for Calendar Year 1952 covering Callegos Canyon Unit Area, I-Sec. No. 844, San Juan County, New Mexico.

In the future, please sign all copies of such instruments submitted to this office.

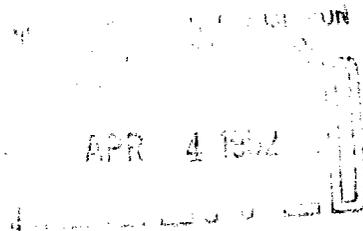
Very truly yours,

R. E. Canfield
R. E. CANFIELD

Acting Regional Oil and Gas Supervisor

Enclosure

cc: Commissioner of Public Lands, State of New Mexico
New Mexico Oil Conservation Commission ←



March 10, 1952

Benson and Montin
Oil Producers and Operators
1501 Petroleum Building
Oklahoma City, Oklahoma

Attention: Mr. Jack London, Jr.

Gentlemen:

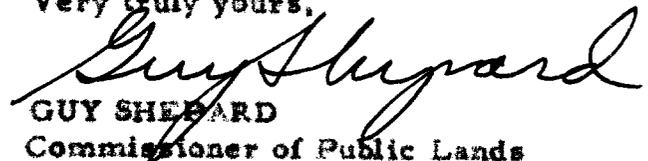
This acknowledges receipt of your letter of March 7, 1952 relating to Plan of Development of Gallegos Canyon Unit, 1952.

This is to say that I have examined the plan outlined and note the program as outlined.

Subject to like approval being first had and obtained from the proper officials of the U. S. Geological Survey I hereby approve, as Commissioner of Public Lands of the State of New Mexico, your Plan of Development for 1952, as submitted.

I am taking the liberty of filing two copies of the Plan with the New Mexico Oil Conservation Commission together with a copy of this letter. It is suggested that you provide this office and the Oil Conservation Commission each with a photostatic copy of approval by the U. S. Geological Survey.

Very truly yours,


GUY SHEPARD
Commissioner of Public Lands

GENERAL OFFICES
1501 PETROLEUM BUILDING
OKLAHOMA CITY, OKLAHOMA
PHONE 3-0546

BEN **B&M** MONTIN

OIL PRODUCERS AND OPERATORS

March 7, 1952

EARL A. BENSON
WM. V. MONTIN

Re: Plan of Development
Gallegos Canyon Unit, 1952

New Mexico Oil Conservation Commission
Santa Fe, New Mexico

Gentlemen:

In accordance with the Unit Agreement, we wish to submit for your consideration and approval our proposed plan of development for 1952 within the boundaries of the Gallegos Canyon Unit. In the event that the participating area which we recently submitted is approved, we intend to drill twenty wells to the Pictured Cliffs sand as set out on the attached plat. These wells will be drilled to the top of the sand with rotary, casing will be set and the sand drilled with cable tools until a water level is reached, at which time the wells will be plugged back and shot with nitroglycerin. We propose to core one well in ten after the production string of casing has been set.

Three of these wells, those numbered 16, 17, and 18, we propose to drill to the top of the Farmington sand with cable tools and cement a string of 7 5/8" casing and if commercial showings are encountered, completion will be made in the Farmington. Should the Farmington prove to be non-commercial, the well will be carried to the Pictured Cliffs sand and completed in the usual manner.

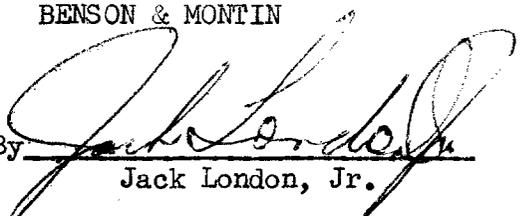
These wells represent the maximum amount of tubular goods which we will be able to obtain through normal government allocation procedures during the first three quarters of this year. Should additional tubular goods become available we anticipate that we would file a revised plan calling for additional Pictured Cliffs wells.

We propose to commence drilling operations shortly after approval of this program and the approval of the participating area. In the event that the large participating area is not approved, it will be necessary for us to void this plan of development and await definite establishment of a participating area before a development plan is submitted.

Trusting this will comply with your requirements, we are

Yours very truly,

BENSON & MONTIN

By 
Jack London, Jr.

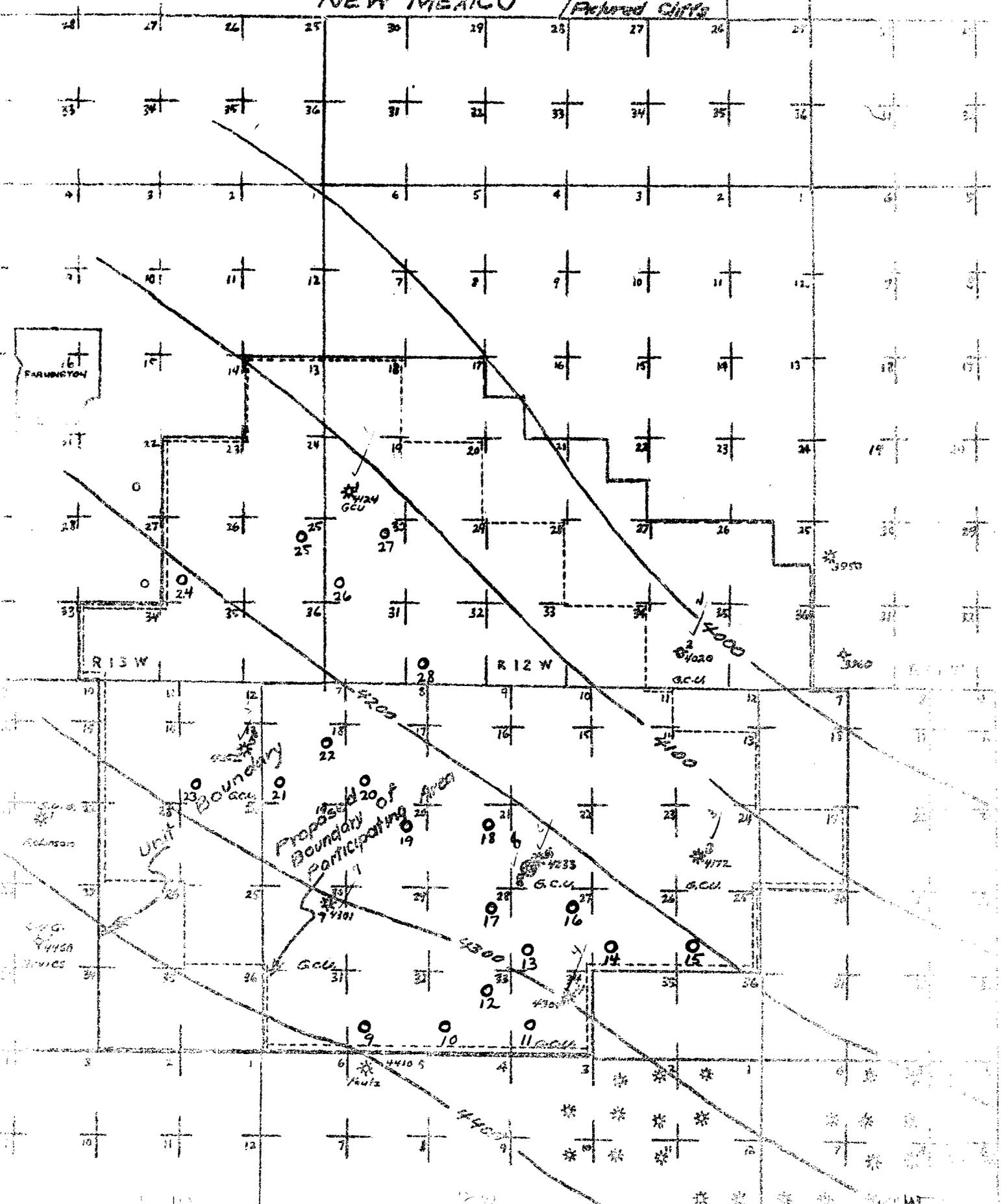
JLJr:er

Oil Conservation Commission
State of New Mexico
MAR 18 1952

Doc 247

MAP 10
GALLEGOS CANYON UNIT
SAN JUAN COUNTY
NEW MEXICO

Contours
on top of the
Pictured Cliffs



GENERAL OFFICES
1501 PETROLEUM BUILDING
OKLAHOMA CITY, OKLAHOMA
PHONE 3-0546

BENSON - MONTIN
OIL PRODUCERS AND OPERATORS

EARL A. BENSON
WM. V. MONTIN

February 27, 1952

To: The Director
United States Geological Survey
Washington 25, D. C.

THROUGH: Mr. H. E. Canfield, Acting District Supervisor
United States Geological Survey
P. O. Box 997
Roswell, New Mexico

RE: Gallegos Canyon Unit - San Juan County, New Mexico
Request for approval of land to which production from
Well No. 8, producing from the Dakota formation shall
be allocated; and request for approval of participating
area for the Pictured Cliffs formation.

Gentlemen:

In accordance with a Plan of Exploration submitted to the United States Geological Survey, July 30, 1951, Benson and Montin have drilled test wells within the Gallegos Canyon Unit, and now desire to initiate proceedings whereby these wells may be produced and additional development prosecuted.

DAKOTA FORMATION

Pursuant to Section 8 of the Unit Agreement, one well was drilled to test the Dakota formation. This well was completed in February of this year as a non-commercial gas well. As set out in Section 10 of the Unit Agreement, production from this well shall be allocated to the Federal Lease on which it is located insofar as royalty payments are concerned. It is hereby requested that the United States Geological Survey approve this allocation of production.

As set out in Section 12 of the Unit Agreement and further defined by the terms of the Unit Operating Agreement, the working interest production will be allocated to the parties financing the drilling of the Dakota well. A summary of well data covering this Dakota test well is set out in Enclosure No. 1 attached hereto. Complete details have been furnished the Survey on standard departmental forms. It is presumed that this will complete the Unit Operator's obligation under Section 8 of the Unit Agreement to test the Dakota Formation. If, however, the U.S.G.S. desires additional information, we will be glad to submit it on request.

PICTURED CLIFFS FORMATION -- GENERAL

As proposed in the Plan of Exploration submitted to the U.S.G.S., July 30, 1951, Benson and Montin have drilled the six Pictured Cliffs Wells contemplated in this Plan. In addition, Well No. 6, which was initially started as a Dakota well, has been completed as a Pictured Cliffs well. This well blew out while drilling through the Farmington sand, and it was decided at that time that the drilling cost would be prohibitive to attempt to carry this well to the Dakota formation without setting pipe through the Farmington. The well was then completed as a Pictured Cliffs well and the Dakota test was commenced at Location No. 8, in which casing was set through the Farmington sand. Benson and Montin have therefore drilled seven, rather than six, initial exploratory wells to test the Pictured Cliffs formation.

Summarized well data covering these Pictured Cliffs wells is set out in enclosure No. 1 attached hereto. Details of drilling and completion of these wells have been furnished the U.S.G.S.

Commercial production was obtained in six of these Pictured Cliffs wells. The information obtained from these wells, plus additional information from wells near the Unit, provide adequate data to reasonably prove productive a rather large portion of the Unit area.

It is impossible to tell at this time the exact limits of production. Some help is obtained, however, from the geological structure of the formation. This structure is depicted on Exhibit "A", which is a plot of the area contoured on top of the Pictured Cliffs formation. This structural map shows a gentle monocline dipping to the northeast, the strike of which is approximately northwest-southeast. There is a slight flattening of this monocline to the northwest such that the horizontal distance between the 4000' and 4400' contours increases from approximately 6-1/2 miles on the southeast side of the Unit to approximately 9 miles on the northwest side of the Unit. (It is not yet known whether this is a reflection of a deeper structural feature, but it does tend to support this possibility. This was initially indicated by the gravity meter survey which was filed with the U.S.G.S. in the initial application requesting unitization of the Gallegos Canyon area.)

At this time it appears that the commercial Pictured Cliffs wells now completed in and near the Unit are located in a stratigraphic trap trending roughly parallel to the old Kitz Canyon-Fulcher Basin Field. The productive limits of this trap appear to conform generally to the structure of the Pictured Cliffs formation such that most of the wells drilled between the 4100' and 4400' contours have shown commercial production within or near the Unit. It is believed that the down-dip limits of commercial production are controlled by a belt of low permeability sand. It is believed that as the permeability decreases the water content of the sand increases (as is customary for most formations), and it may be that

the formation water content eventually reaches such a high degree that it precludes the flow of gas in this belt which lies between the Kutz Canyon-Fulcher Basin Field and the production so far entered in the Gallegos Canyon Area. This combination of silty sands, plus increasing water content, would tend to give a down-dip limit which would roughly parallel the structural strike of the formation inasmuch as the water would have a tendency to seek a water level, although lack of permeability would preclude a definite water table. Nevertheless, this possibility, plus the definite trend as established by the drilling of wells to date, suggests that the boundaries of commercial production, especially the northeast boundary, will eventually prove to be approximately conformable to the structural strike of the formation. The fact that a permeability block exists between this area and the Kutz Canyon-Fulcher Basin field is supported by the well drilled in Section 31 T29N-R11W, which had an exceptionally small natural open flow (approximately 15 MCF per day) and the fact that a difference in initial reservoir pressure approximating 100 lbs. exists between wells in the two areas although they are removed a distance of only about four miles. An equalized pressure of approximately 575 lbs. was found in the Fulcher-Kutz field from the extreme northwest end where the wells were approximately 1400' deep to that part of the field in T28N-R10W where the wells were in excess of 2000', and which covered a distance approximating twenty miles. The initial wells in the West Kutz-Gallegos Canyon Unit Area trend show pressures taken by dead-weight gauges approximating 465 to 475 lbs. for wells which have been shut in an adequate length of time for pressure build-up. Gallegos Canyon Unit No. 1 in the extreme northwest corner of the Unit has a virgin pressure within 2 or 3 lbs. of the average initial pressure of the wells in the West Kutz area some ten miles southeast of it. This tends to confirm our thought that continuous production exists across the Unit Area along the strike of the monocline from the northwest corner to the southeast corner of the Unit.

In view of the foregoing data, it is apparent that each of the producing wells now completed in the Unit Area will eventually prove to be completed in a single, common reservoir. It is accordingly suggested that only one participating area be established, and that it include all producing wells now completed.

PICURED OIL'S FORMATION
DETAILED DISCUSSION OF
PROPOSED BOUNDARIES OF PARTICIPATING AREA

It has been our thought that the largest possible initial participating area would be the most equitable with which to commence development. In this manner all parties would benefit from the first production and no difference in equity could arise from drainage of an undrilled area by a participating area. Ninety-nine per cent (99%) of the working interest owners have concurred in this opinion and accordingly we submitted earlier this year a proposed participating area covering a large part of the unit.

This originally proposed area is shown by the dashed green line on Exhibit "B" attached hereto. The U.S.S. District Office suggested the addition of Section 34 T29N-R13W and Section 25, T28N-R13W (both colored red on Exhibit "B"). We complied with this request and the application was forwarded to the Washington Office for approval. The Washington Office returned this application suggesting the removal of the following described lands, which are colored green on Exhibit "B":

Sections 23 and 34, T29N - R12W
Sections 14 and E/2 of 11, T25N - R12W
Section 19, T28N - R11W

We understand this land should be removed because it cannot be "reasonably proven productive." Because of the nature of this gas bearing reservoir, we realize it is impossible to determine exactly the boundaries of commercially productive lands and that a degree of uncertainty exists in land on the outer boundaries of the originally proposed participating area. We believe, however, that this "degree of uncertainty" applied generally to the outer boundaries of the originally proposed participating area, and it now appears to us that if we are to be consistent in including somewhat questionable lands that the removal of the acreage colored in green on Exhibit "B" calls for the further removal of the areas colored in red and brown. For example, we believe Section 19, T28N-R11W, which is offset with Section 24, T28N-R12W, containing a commercial well and offset with Section 30, T25N-R11W, on which a well was drilled showing 250 MCF natural and which will probably yield commercial wells, to be a better risk as to commercial production prospects than Section 23, T28N-R13W, which is offset to the west with a non-commercial well. Both sections, admittedly, carry a degree of uncertainty as to commercial production possibilities, but we do not believe it consistent to remove one section and not the other.

In line with the foregoing thoughts we now submit for approval a request for a participating area to be established with boundaries as shown by the fine dashed line on Exhibit "A", and which is colored yellow on Exhibit "B". These lands are described in Schedule I attached hereto.

As described previously herein, we believe the northeast limits of production will conform approximately to the strike of the formation and where we originally chose the 4050' contour, we now withdraw to the 4100' contour in determining lands more certain to be reasonably productive. We believe this boundary to be logical from an inspection of Exhibit "B" as well as from the geologic data shown on Exhibit "A".

The southwest boundary of the productive area is far more hazardous to locate than the northeast boundary. Production appears to be limited in this area by the sand lensing out, and by water saturation of the sand. This water saturation is thought to be a result of infiltration of surface waters through the outcrop of the producing sand.

The following dry holes in this area encountered water in the Pictured Cliffs formation:

British American #1 Scott	20 - 28N - 13W
British American #1 Warren	18 - 27N - 12W
Southern Union #1 Davies	25 - 28N - 13W

These wells are shown on Exhibit "B".

Inasmuch as this water saturation is known to exist, and the fact that it is up-dip from the producing area in the Unit, makes the choosing of productive limits on the west side of the unit quite hazardous. No. 7 Gallegos Canyon Unit produced one barrel per hour of salt water along with the gas on completion tests and we are reluctant to include lands lying as far as one mile due west of this well. Section 25, T28N-R13W, is accordingly excluded.

Southern Union #1 Robinson, Section 24, T28N-R13W, was completed as a non-commercial well, with an open flow of about 100 MCF/day and a four-day shut in pressure of less than 300 lbs. After being shut in for six months its closed in pressure was only 360 lbs. The volume of gas this well will be able to produce into a 250 lb. line will be quite small. It is obviously in the non-commercial zone which lies west of the Unit. In conservatively choosing acreage on the west side of the Unit we cannot go more than halfway between #5 Gallegos Canyon Unit and Southern Union #1 Robinson. Accordingly, we are excluding the acreage in T28N-R13W which is colored brown.

A definite trend of thinning of the productive sand exists across the Unit from Southeast to Northwest. This is shown graphically by the cross section enclosed, Exhibit "C". Jensen and Montin personnel have conducted a rather thorough study of the electrical characteristics of productive sand in the Gallegos Canyon Area and will be pleased to submit additional data in this respect, should the Survey desire it. In general, the productive sand can be determined from the resistivities as shown by the colored areas on each well log on the cross section.

This information suggests that the area north and west of the Day #1 Federal will likely be marginal in economic production characteristics. In fact, Day #1 Federal is, itself, a non-commercial well and we would hesitate to offset this well to the south on land under Section 34, T29N-R13W, and have excluded this land from the proposed participating area.

From the same cross section, Exhibit "C", we believe a well drilled halfway between Day #1 Federal and Gallegos Canyon Unit #5 would likely encounter an adequate sand thickness to insure a good well. Following our established 320-acre spacing program, with wells located in the southwest and northeast quarters of each section, a well drilled in the SW/4 of Section 35, T29N-R13W, is quite reasonably assured to be commercially productive and this section is accordingly included in the proposed participating area. By the same token, Section 26, T29N-R13W, is enough closer to the commercially productive #1 Gallegos Canyon Unit to warrant inclusion in the participating area.

1163 #6

Lacking definite proof of continuation of production north and west of Mallegos Canyon Unit #1, we have excluded Sections 13 and 23, T29N-R13W.

We believe the participating area described herein will provide an equitable and practical area with which to commence development of the pictured cliffs formation, and it is hereby requested that the United States Geological Survey give us approval of this area.

Attached hereto as Schedule II is a list of the owners within the proposed participating area showing each owner's interest on an acreage basis, as required by the Unit Agreement and Unit Operating Agreement.

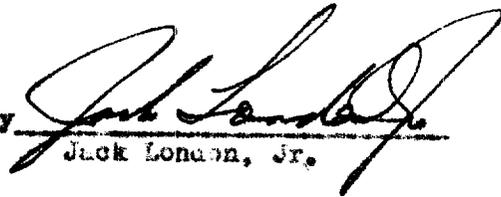
Schedule III shows all lands within the proposed participating area broken down by tracts committed to the Unit and tracts not committed to the Unit and percentage interest of each tract.

We will greatly appreciate your early consideration and action in this matter, so that we may proceed with development of this area.

Yours very truly,

W. S. S. & K. S. T. S.

By



Jack London, Jr.

cc:wr

andls.

SCHEDULE OF LANDS TO BE INCLUDED IN PARTICIPATING AREA
GALLEGOS CANYON UNIT

TWP.	RGE.	SEC.	DESCRIPTION	TWP.	RGE.	SEC.	DESCRIPTION
28N	12W	34	All	28N	13W	24	All
"	"	33	"	"	"	13	"
"	"	32	"	"	"	14	E 1/2
"	"	31	"	"	"	11	E 1/2
"	"	25	"	"	"	12	All
"	"	26	"	29N	13W	35	"
"	"	27	"	"	"	36	"
"	"	28	"	"	"	26	"
"	"	29	"	"	"	25	"
"	"	30	"	"	"	24	"
"	"	24	"	29N	12W	19	All
"	"	23	"	"	"	30	"
"	"	22	"	"	"	29	"
"	"	21	"	"	"	31	"
"	"	20	"	"	"	32	"
"	"	19	"	"	"	33	"
"	"	18	"				
"	"	17	"				
"	"	16	"				
"	"	15	"				
"	"	14	"				
"	"	11	W 1/2				
"	"	10	All				
"	"	9	"				
"	"	8	"				
"	"	7	"				

WORKING INTEREST OWNERSHIP IN PICTURED CLIFFS PARTICIPATING AREA
CALLEGOS CANYON UNIT

<u>COMMITTEE</u>	<u>ACRES</u>	<u>INTEREST</u>
E. B. Todhunter	160.00	.695062
Southern Union Gas Company	1424.60	6.188658
J. J. Hudson	160.00	.695062
Mid-Continent Petroleum Corporation	4338.13	18.845433
Albuquerque Associated Oil Company	159.69	.693672
L. B. Hodges	120.00	.521296
Elza R. Jones	80.00	.347531
Glenn J. Smith	456.24	1.981969
The Texas Company	2224.62	9.664055
Brookhaven Oil Company	120.00	.521296
L. M. Johnson	40.00	.173765
John A. Owings	120.00	.521296
E. H. Colby	40.00	.173765
C. C. Seymour	40.00	.173765
S. B. Lancaster	.50	.002172
Texas Pacific Coal & Oil Company	400.00	1.737655
Stanolind	7462.83	32.419776
Benson - Montin	875.00	3.801122
Benson & Montin, Inc.	4797.83	20.842650
	<hr/>	<hr/>
	23,019.53	100%
Federal Lands	16,237.21	70.536670
Indian Lands	3,625.46	15.749496
State Lands	1,040.00	4.517903
Patented Lands	2,116.86	9.195931
	<hr/>	<hr/>
	23,019.53	100%

LANDS NOT CONSIDERED TO OIL
 UNDEVELOPED LANDS IN CARBON AND S AND
 GEORGIA OIL AND GAS

Tract No.	Ownership/Interest	No. Acres	Interest
82	H. E. Tallentire	160.00	.400000
83	J. J. Hudson	40.00	.100000
84	Southern Union Gas Company	600.00	3.000000
85	M&A-Continental Petroleum Corporation.	2836.84	12.000000
86	M&A-Continental Petroleum Corporation.	2802.12	7.000000
87	Albuquerque Associated Oil Company	119.68	.500000
88	Stanolind	537.70	2.300000
89	Benson - Mentin	80.00	.307531
90	Benson & Mentin, Inc.	497.70	1.900000
91	Stanolind	1000.00	4.000000
92	Benson - Mentin	240.00	1.000000
93	Benson & Mentin, Inc.	840.00	3.600000
94	Stanolind	960.00	4.000000
95	Benson - Mentin	80.00	.307531
96	Benson & Mentin, Inc.	240.00	1.000000
97	Stanolind	1960.00	6.770000
98	Benson - Mentin	80.00	.307531
99	Benson & Mentin, Inc.	840.00	3.600000
100	Stanolind	432.00	1.800000
101	Benson & Mentin, Inc.	432.00	1.800000
102	Stanolind	1960.00	4.600000
103	Benson & Mentin, Inc.	580.00	2.500000
104	L. B. Hodges	120.00	.500000
105	Stanolind	160.00	.600000
106	Benson - Mentin	80.00	.307531
107	Benson & Mentin, Inc.	80.00	.307531
108	Stanolind	320.00	1.300000
109	Benson - Mentin	80.00	.307531
110	Benson & Mentin, Inc.	240.00	1.000000
111	J. J. Hudson	120.00	.500000
112	Elmer R. Jones	80.00	.307531
		<hr/>	<hr/>
		16,237.21	70.500000

LANDS NOT CONSIDERED TO OIL
 THAT ARE WITHIN PARTNERSHIP
 INTERESTS

3	Robert Sims	100.00
11-4	H. E. Deschmore	80.00
		<hr/>
		217.00

NAVAJO INDIAN ALLOTTED LANDS
COMMITTED ACREAGE IN PARTICIPATING AREA
GALLEGOS CANYON UNIT

<u>Tract No.</u>	<u>Working Interest Owner</u>	<u>No. Acres</u>	<u>Interest</u>
#37	Glenn J. Smith	156.24	1.981949
#38	The Texas Company	640.00	2.780228
#39	The Texas Company	792.62	3.443250
#40	The Texas Company	320.00	1.390124
#41	The Texas Company	472.00	2.050433
#42	Southern Union Gas Company	624.60	2.713348
#45	Stanford Oil & Gas Company	160.00	.695062
#45	Benson & Mountain	160.00	.695062
		<u>3,625.46</u>	<u>15.749496</u>

ALL LANDS WITHIN PARTICIPATING AREA ARE COMMITTED TO UNIT.

PATENTED LANDS
COMMITTED AGREEMENT IN PARTICIPATING AREA
CALLEGOS CANYON UNIT

<u>Tract No.</u>	<u>Working Interest Owner</u>	<u>No. Acres</u>	<u>Interest</u>
*105	Stanolind	6.00	.026065
	Benson & Montin, Inc.	6.00	.026065
*106	Stanolind	14.00	.060818
	Benson & Montin, Inc.	14.00	.060818
*107	Stanolind	20.00	.086883
	Benson & Montin, Inc.	20.00	.086883
*108	Stanolind	60.00	.260648
	Benson & Montin, Inc.	60.00	.260648
*110	Stanolind	37.50	.162905
	Benson & Montin, Inc.	37.50	.162905
111	S. E. Lancaster	.50	.002172
*112	Stanolind	299.465	1.300917
	Benson & Montin, Inc.	299.465	1.300917
*113	Stanolind	80.00	.347531
	Benson & Montin, Inc.	80.00	.347531
*114	Stanolind	79.56	.345620
	Benson & Montin, Inc.	79.56	.345620
*117	Stanolind	20.00	.086883
	Benson & Montin, Inc.	20.00	.086883
*118	Stanolind	45.00	.195486
	Benson - Montin	15.00	.065162
*119	Stanolind	10.00	.043441
	Benson & Montin, Inc.	10.00	.043441
*120	Stanolind	53.655	.233085
	Benson & Montin, Inc.	53.655	.233085
*121	Stanolind	8.00	.034753
	Benson & Montin, Inc.	8.00	.034753
*122	Stanolind	60.00	.260648
	Benson - Montin	60.00	.260648
*123	Stanolind	80.00	.347531
	Benson & Montin, Inc.	80.00	.347531
*125	Stanolind	80.00	.347531
	Benson & Montin, Inc.	80.00	.347531
*126	Stanolind	80.00	.347531
	Benson & Montin, Inc.	80.00	.347531
*144	Stanolind	40.00	.173765
	Benson & Montin, Inc.	40.00	.173765
		2,116.86	9.195931

LANDS NOT COMMITTED TO UNIT
THAT ARE WITHIN PARTICIPATING AREA

109	Not Leased	39.50
124	Not Leased	280.00
		319.50

STATE LANDS
 COMMITTED ACHARGE TO PARTICIPATING AREA
 GALVESTON COUNTY TRACT

Block No.	Working Interest Owner	No. Acres	Interest
46-a	Stanolind	60.00	.281818
46-b	Benson & Mentin, Inc.	60.00	.281818
62	Texas Pacific Coal & Oil Company	40.00	.171765
63	Texas Pacific Coal & Oil Company	40.00	.171765
64	Stanolind	20.00	.081818
64	Benson & Mentin, Inc.	20.00	.081818
65	Texas Pacific Coal & Oil Company	40.00	.171765
66	Texas Pacific Coal & Oil Company	40.00	.171765
67	Brookhaven Oil Company	40.00	.171765
68	Texas Pacific Coal & Oil Company	40.00	.171765
70	L. H. Johnson	40.00	.171765
71	Brookhaven Oil Company	40.00	.171765
72	Albuquerque Associated Oil Company	40.00	.171765
73	Texas Pacific Coal & Oil Company	40.00	.171765
83	John A. Orings	80.00	.34361
85	John A. Orings	40.00	.171765
86	Texas Pacific Coal & Oil Company	40.00	.171765
87	Texas Pacific Coal & Oil Company	40.00	.171765
88	Texas Pacific Coal & Oil Company	40.00	.171765
89	Texas Pacific Coal & Oil Company	40.00	.171765
90	Stanolind	20.00	.081818
90	Benson & Mentin, Inc.	20.00	.081818
91	Stanolind	20.00	.081818
91	Benson & Mentin, Inc.	20.00	.081818
92	Brookhaven Oil Company	40.00	.171765
93	E. H. Galby	40.00	.171765
94	G. C. Seymour	40.00	.171765
		<u>1,040.00</u>	<u>.431790</u>

LANDS NOT COMMITTED TO UNIT
 THAT ARE WITHIN THE PARTICIPATING AREA

69	S. E. Day	40.00
82	State (Not Leased)	40.00
		<u>80.00</u>

BENSON - MONTIN

Oil Producers and Operators

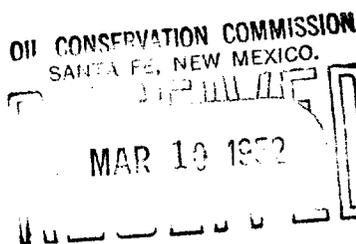
March 7, 1952

Earl A. Benson

Wm. V. Montin

General Offices
1501 Petroleum Building
Oklahoma City, Oklahoma
Phone 3-0546

New Mexico Oil Conservation Commission
Santa Fe, New Mexico



RE: Gallegos Canyon Unit - San Juan County, New Mexico
Request for approval of land to which production from
Well No. 8, producing from the Dakota Formation shall
be allocated; and request for approval of participating
area for the Pictured Cliffs formation.

Gentlemen:

In accordance with a Plan of Exploration submitted to the United States Geological Survey, July 30, 1951, Benson and Montin have drilled test wells within the Gallegos Canyon Unit, and now desire to initiate proceedings whereby these wells may be produced and additional development prosecuted.

DAKOTA FORMATION

Pursuant to Section 8 of the Unit Agreement, one well was drilled to test the Dakota formation. Work on this well has been completed this month and completion records will be furnished as soon as an official potential has been made. Adequate tests during the completion of the well have been made, however, which definitely classify the well as a non-commercial producer. As set out in Section 10 of the Unit Agreement, production from this well shall be allocated to the Federal Lease on which it is located insofar as royalty payments are concerned. It is hereby requested that the Oil Conservation Commission approve this allocation of production.

As set out in Section 12 of the Unit Agreement and further defined by the terms of the Unit Operating Agreement, the working interest production will be allocated to the parties financing the drilling of the Dakota well. A summary of well data covering this Dakota test well is set out in Enclosure No. 1 attached hereto. Complete details will be furnished the Commission on standard departmental forms. It is presumed that this will complete the Unit Operator's obligation to test the Dakota formation, under Section 8 of the Unit Agreement. If, however, the Commission desires additional information, we will be glad to submit it on request.

PICTURED CLIFFS FORMATION

As proposed in the Plan of Exploration submitted to the U.S.G.S., July 30, 1951, Benson and Montin have drilled the six Pictured Cliffs wells contemplated in this Plan. In addition, Well No. 6, which was initially started as a Dakota well, has been completed as a Pictured Cliffs well. This well blew out while drilling through the Farmington sand, and it was decided at that time that the drilling cost would be prohibitive to attempt to carry this well to the Dakota formation without setting pipe through the Farmington. The well was then completed as a Pictured Cliffs well and the Dakota test was commenced at Location No. 8, in which casing was set through the Farmington sand. Benson and Montin have, therefore, drilled seven, rather than six, initial exploratory wells to test the Pictured Cliffs formation.

Commercial production was obtained in six of these Pictured Cliffs wells. The information obtained from these wells, plus additional information from wells near the Unit, provide adequate data to reasonably prove productive a rather large portion of the Unit Area.

It is impossible to tell at this time the exact limits of production. Some help is obtained, however, from the geological structure of the formation. This structure is depicted on Exhibit "A", which is a plat of the area contoured on top of the Pictured Cliffs formation. This structural map shows a gentle monocline dipping to the northeast, the strike of which is approximately Northwest Southeast. There is a slight flattening of this monocline to the northwest such that the horizontal distance between the 4000' and 4400' contours increases from approximately 6-1/2 miles on the southeast side of the Unit to approximately 9 miles on the northwest side of the Unit. (It is not yet known whether this is a reflection of a deeper structural feature, but it does tend to support this possibility. This was initially indicated by the gravity meter survey which was filed with the U.S.G.S. in the initial application requesting unitization of the Gallegos Canyon Area.)

At this time it appears that the commercial Pictured Cliffs wells now completed in and near the Unit are located in a stratigraphic trap trending roughly parallel to the old Kutz Canyon-Fulcher Basin Field. The productive limits of this trap appear to conform generally to the structure of the Pictured Cliffs formation such that wells drilled between the 4100' and 4400' contours have shown commercial production within or near the Unit. It is believed that the down-dip limits of commercial production are controlled by a belt of low permeability sand. It is believed that as the permeability decreases the water content of the sand increases (as is customary for most formation), and it may be that the formation water content eventually reaches such a high degree that it precludes the flow of gas in this belt which lies between the Kutz Canyon-Fulcher Basin Field and the production so far encountered in the Gallegos Canyon Area. This combination of silty sands, plus increasing water content, would tend to give a down-dip limit which would roughly parallel the structural strike of the formation inasmuch as the water would have a tendency to seek a water level, although lack of permeability would preclude a definite water table. Nevertheless, this possibility, plus the definite trend as established by the drilling of wells to date, suggests that

the boundaries of commercial production will eventually prove to be conformable to the structural strike of the formation. The fact that a permeability block exists between this area and the Kutz Canyon-Fulcher Basin Field is supported by the well drilled in Section 31, T29N-R11W, which had an exceptionally small natural open flow (approximately 15 MCF per day) and the fact that a difference in initial reservoir pressure approximating 100 lbs. exists between wells in the two areas although they are removed a distance of only about four miles. An equalized pressure of approximately 565 lbs. was found in the initial Kutz Canyon-Fulcher Basin Field from the extreme northwest edge of the field where the wells were approximately 1400' deep to that part of the field in T28N-R10W where the wells were in excess of 2000', and which covered a distance approximating twenty miles. The initial wells in the West Kutz-Gallegos Canyon Unit Area trend show pressures taken by dead-weight gauges approximating 465 to 475 lbs. for wells which have been shut-in an adequate length of time for pressure build-up. Gallegos Canyon Unit No. 1 in the extreme northwest corner of the Unit has a virgin pressure within 2 or 3 lbs. of the average initial pressures of the wells in the West Kutz area some ten miles Southeast of it. This tends to confirm our thought that continuous production exists across the Unit Area along the strike of the monocline from the northwest corner to the southeast corner of the Unit.

It is therefore suggested that the initial participating area covering the Pictured Cliffs formation be established approximately along the lines set out on Exhibit "A", which roughly conform to the structural contours. Additional drilling to the northeast, outside of the proposed participating area, can be done at a later date if it is necessary at that time to define the limits of production more closely, and additional productive land be included at that time if it is encountered. It now appears to us, however, that wells with decreasing capacity will be encountered northeastward, and it is doubtful that commercial production will be obtained northeast of this proposed participating area. It is anticipated that tighter, siltier sand will be encountered to the northeast and that a pressure gradient will be found showing increasing pressures progressively northeastward until the drainage area of the old Kutz Canyon-Fulcher Basin Field is encountered, at which time an abrupt decrease in pressure will be found.

The limits of production to the southwest appear to be defined by lenticular sands and water saturation, which probably is a result of infiltration of water from the outcrop. Inasmuch as gas production in the Unit is down-dip from water bearing wells southwest of the Unit, we are reluctant at this time to step out as far from productive wells on the southwest side of the Unit as we can on the northeast side of the Unit. In our opinion, estimates of the limit of production to the southwest are far more hazardous than estimates of productive limits to the northeast. For this reason we have held the southwest boundary of the proposed participating area very closely to the producing wells now located in Section 5, T27N-R12W, Gallegos Canyon Unit No. 7, and the well in Section 22, T28N-R13W.

Attached hereto as Exhibit "C" is a list of the owners within the proposed participating area showing each owner's interest on an acreage basis, as required by the Unit Agreement and Unit Operating Agreement.

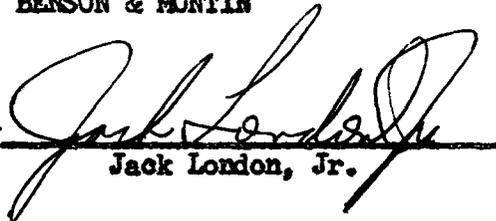
In order to be as equitable as possible to all parties concerned, we believe it best to make the initial participating area as large as possible as long as it contains land reasonably proven to be productive. In this manner all parties will benefit from the first production and no difference in equity can arise from drainage of an undrilled area by a participating area. We believe the participating area outlined on Exhibit "A" will give us an equitable and practical area to commence development of the Pictured Cliffs formation, and it is hereby requested that the Commission give us approval of this area. Exhibit "B" attached hereto shows all lands in this proposed participating area.

Exhibit "D" shows all lands within the proposed participating area broken down by tracts committed to the Unit and tracts not committed to the Unit and percentage interest of each tract. It shows further the working interest owners within the proposed participating area who favor establishing this as an initial participating area and who concur with us in this application. We have signed instruments in our files from the working interest owners of those tracts marked with an asterisk. These amount to approximately 99%. With regard to those which are not marked, we have contacted each and every one of them and have had no negative response whatsoever from any working interest owner.

Very truly yours,

BENSON & MONTIN

By



Jack London, Jr.

JLjr:er

Enclosure #1

WELL NO. 8 LEASE Gallegos Canyon Unit
 OPERATOR Benson & Martin

COMPLETION SUMMARY

SCHEDULE OF DATES	MONTH	DAY	YEAR
LOCATION MADE	10	16	51
ROTARY RIGGING UP	10	18	51
DRILLING COMMENCED	12	7	51
DRILLING COMPLETED	1	10	52
FIRST PRODUCTION			
POTENTIAL TEST	2	8	52
OFFICIAL COMPLETION			
PLUGGED (IF DRY HOLE)			

LOCATION DATA			
FIELD	Wildcat	FORMATION COMPLETED IN	Dakota
COUNTY	San Juan	STATE	New Mexico
LOCATION	1065	FEET North OF THE South LINE	
AND	890	FEET East OF THE West LINE OF	
SECTION	22	TOWNSHIP	28N RANGE 12W
SURVEY		BLOCK NO.	
ELEVATION GROUND	5661	ELEVATION K. B.	5666
ELEVATION CASINGHEAD	5658	WELL SPACING ACRES	

BRIEF DESCRIPTION OF COMPLETION

FORMATION, OPEN HOLE OR PERF., SINGLE, DUAL, TRIPLE, OIL, GAS, WATER, DRY, ETC.

Completed in Dakota sand, open hole. 125 MCF wet gas.

PLAT OF
GALLIOS CANYON UNIT
SAN JUAN COUNTY
NEW MEXICO

Exhibit "A"

Centers
on top of the
Red Cliffs

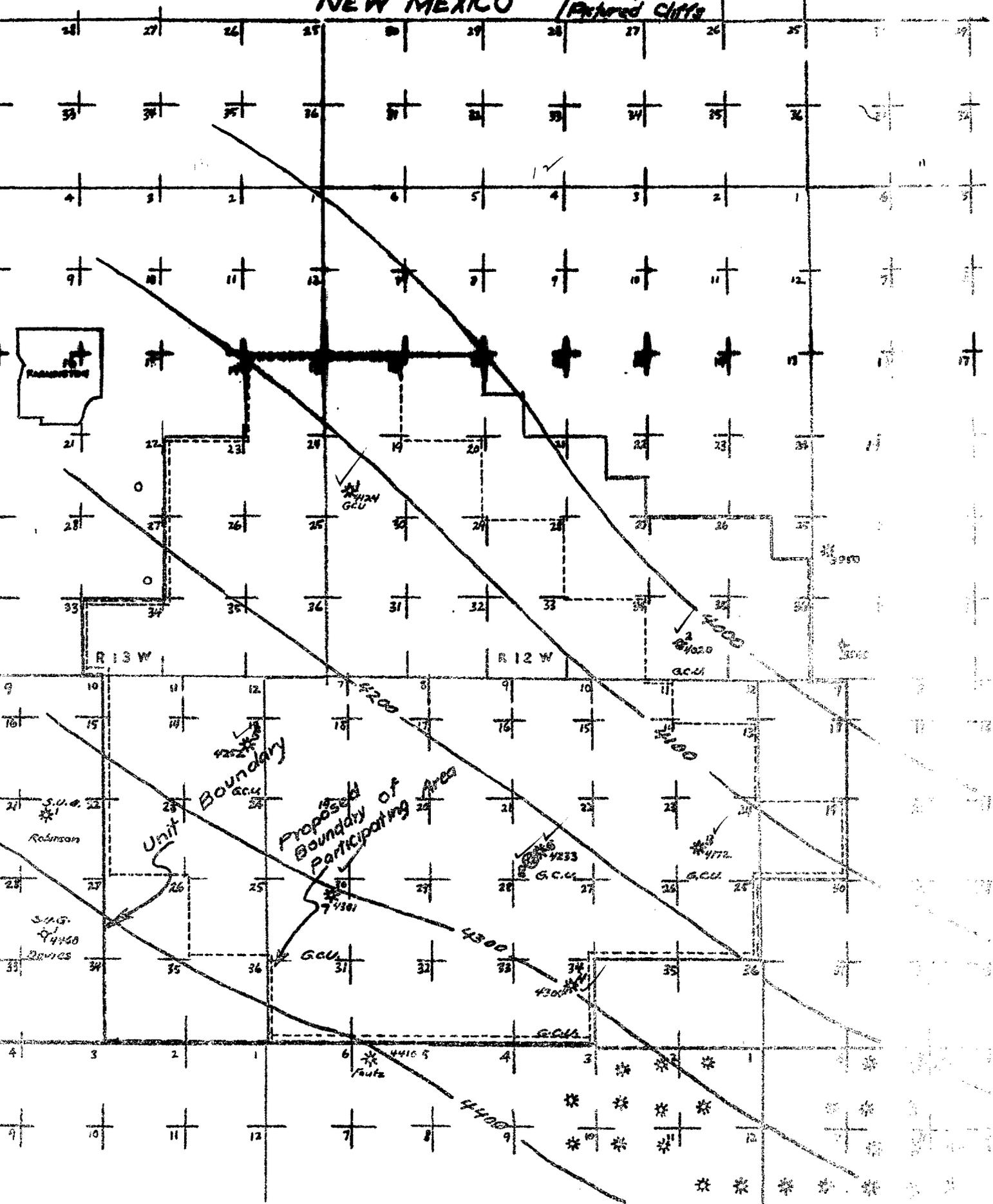


Exhibit "B"
 Schedule of Lands to be Included in Participating Area
 Gallegos Canyon Unit
 San Juan County, New Mexico

<u>TWP.</u>	<u>RGE.</u>	<u>SECTION</u>	<u>DESCRIPTION</u>	<u>TWP.</u>	<u>RGE.</u>	<u>SECTION</u>	<u>DESCRIPTION</u>
28N	12W	34	All	29N	13W	35	All
"	"	33	"	"	"	36	"
"	"	32	"	"	12W	31	"
"	"	31	"	"	"	32	"
"	"	30	"	"	"	33	"
"	"	29	"	"	"	34	"
"	"	28	"	"	"	28	"
"	"	27	"	"	"	29	"
"	"	26	"	"	"	30	"
"	"	25	"	"	13W	25	"
28N	11W	19	"	"	"	26	"
"	12W	24	"	"	"	23	"
"	"	23	"	"	"	24	"
"	"	22	"	"	12W	19	"
"	"	21	"	"	"	20	"
"	"	20	"	"	"	18	"
"	"	19	"	"	13W	13	"
"	13W	24	"	"	"	34	"
"	"	23	"				
"	"	14	"				
"	"	13	"				
"	12W	18	"				
"	"	17	"				
"	"	16	"				
"	"	15	"				
"	"	14	"				
"	"	13	"				
"	"	11	"				
"	"	10	"				
"	"	9	"				
"	"	8	"				
"	"	7	"				
"	13W	12	"				
"	"	11	"				
"	"	25	"				

WORKING INTEREST OWNERSHIP IN PARTICIPATING AREA
GALLEGOS CANYON UNIT

	<u>No. Acres</u>	<u>Interest</u>
E. B. Todhunter	160	.5550900
Southern Union Gas Company	2864.60	9.9381941
J. J. Hudson	1158.75	4.0200665
Mid-Continent Petroleum Corporation	4458.13	15.4666486
Albuquerque Associated Oil Company	364.68	1.2651890
L. B. Hodges	199.48	.6920585
Elma R. Jones	80	.2775450
Glenn J. Smith	456.24	1.5828393
The Texas Company	2224.62	7.7179032
Bertha & Frieda Rahn	80	.2775450
Phillip Gates	40	.1387725
Brookhaven Oil Company	120	.4163175
L. M. Johnson	40	.1387725
John A. Cwings	120	.4163175
E. H. Colby	40	.1387725
C. C. Seymour	40	.1387725
Dorothy Krause	80	.2775450
Geo. H. Krause	80	.2775450
S. B. Lancaster	.5	.0017346
Mary Roberts Berry	8	.0277545
Stanolind Oil and Gas Company	8059.575	27.9611888
Benson & Martin, Inc.	7039.575	24.4224895
Benson - Martin	1035	3.5907390
Carroll & Cornell	75	.2601984
	<hr/>	
	28,824.15	

PATENTED LANDS
COMMITTED AGREEMENT IN PARTICIPATING AREA
GALLEGOS CANYON UNIT

<u>Treat No.</u>	<u>Working Interest Owner</u>	<u>No. Acres</u>	<u>Interest</u>
*95	George H. Krause	80	.2775450
*95	Dorothy J. Krause	80	.2775450
*96	Stanolind - Benson & Montin	40	.1387725
*97	" " "	40	.1387725
*98	" " "	32	.1110180
*99	" " "	20	.0693862
*100	" " "	60	.2081587
*102	" " "	133	.4614186
*104	" " "	15	.0520396
*105	" " "	12	.0416317
*106	" " "	28	.0971407
*107	" " "	40	.1387725
*108	" " "	120	.4163175
*110	" " "	75	.2601984
111	S. B. Lancaster	.5	.0017346
*112	Stanolind - Benson & Montin	598.93	2.0778756
*113	" " "	160	.5550900
*114	" " "	159.12	.5520370
*115	" " "	119.37	.4141318
*116	" " "	80	.2775450
*117	" " "	60	.2081587
*118	" " "	60	.2081587
*119	" " "	20	.0693862
*120	" " "	107.31	.3722919
*121	" " "	16	.0550900
*122	" " "	120	.4163175
*123	" " "	160	.5550900
*125	" " "	200	.6938626
*126	" " "	200	.6938626
*127	" " "	20	.0693862
*128	" " "	80	.2775450
*129	" " "	160	.5550900
*130	" " "	120	.4163175
*135	" " "	60	.2081587
*136	" " "	20	.0693862
*142	" " "	200	.6938626
*143	" " "	160	.5550900
*144	" " "	160	.5550900
*155	Mary Roberts Berry	8	.0277545
		3,824.23	13.2674488

LANDS NOT COMMITTED TO UNIT
THAT ARE WITHIN PARTICIPATING AREA

101	Not Leased	12
103	Not Leased	240
109	Not Leased	39.50
124	Not Leased	320
		611.50

FEDERAL LANDS
COMMITTED ACREAGE IN PARTICIPATING AREA
GALLEGOS CANYON UNIT

<u>Tract No.</u>	<u>Working Interest Owner</u>	<u>No. Acres</u>	<u>Interest</u>
*1	E. B. Todhunter	160	.5550900
*3	J. J. Hudson	39.43	.1367950
*4	J. J. Hudson	160	.5550900
6	Southern Union Gas Company	1600	5.5509008
*9	Mid-Continent Petroleum Corporation	2536.94	8.8014390
*10	Mid-Continent Petroleum Corporation	1921.19	6.6652095
*11	Albuquerque Associated Oil Company	199.68	.6927524
*12	Albuquerque Associated Oil Company	75	.2601984
*12	Carroll & Cornell	45	.1561190
*13	J. J. Hudson	199.32	.6915034
*16	Stanolind - Benson & Montin	1235.40	4.2899893
*17	" " "	2240	7.7712612
*18	" " "	2180	7.5631024
*19	" " "	2480	8.6038963
*20	" " "	1167.18	4.0493128
*21	" " "	1640	5.6896734
*22	L. B. Hodges	199.48	.6920585
*24	Stanolind - Benson & Montin	320	1.1101801
*25	" " "	640	2.2203603
*28	J. J. Hudson	120	.4163175
*31	Stanolind - Benson & Montin	280	.9714076
*34	J. J. Hudson	640	2.2203603
*34-A	Albuquerque Associated Oil Company	50	.1731656
	Carroll & Cornell	30	.1040793
*35	Stanolind - Benson & Montin	635.84	2.2059280
36	Elma R. Jones	80	.2775450
		19,974.46	72.4200351

LANDS NOT COMMITTED TO UNIT
THAT ARE WITHIN PARTICIPATING
AREA

8	Robert Mims	275.36
11-A	H. K. Beardmore	160
23	L. N. Hagood	640
		1,075.36

STATE LANDS
 COMMITTED ACREAGE IN PARTICIPATING AREA
 GALLEGOS CANYON UNIT

<u>Tract No.</u>	<u>Working Interest Owner</u>	<u>No. Acres</u>
#16-A	Stanolind - Benson & Montin	120
#58	Bertha Rahn	80
#59	Phillip Gates	40
#64	Stanolind - Benson & Montin	40
#67	Brookhaven Oil Company	40
#70	L. M. Johnson	40
#71	Brookhaven Oil Company	40
#78	Albuquerque Associated Oil Company	40
#84	John A. Orings	80
#85	John A. Orings	40
#90	Stanolind - Benson & Montin	40
#91	" " "	40
#92	Brookhaven Oil Company	40
#93	E. H. Colby	40
#94	C. C. Seymour	40
		760

LANDS NOT COMMITTED TO UNIT
 THAT ARE WITHIN THE PARTICIPATING AREA

56	Skelly	80
57	Paul Purcell	40
62	Texas Pacific Coal and Oil Company	40
63	Texas Pacific Coal and Oil Company	40
65	Texas Pacific Coal and Oil Company	40
66	Texas Pacific Coal and Oil Company	40
68	Texas Pacific Coal and Oil Company	40
69	S. E. Day	40
82	Texas Pacific Coal and Oil Company	40
83	Texas Pacific Coal and Oil Company	40
86	Texas Pacific Coal and Oil Company	40
87	Texas Pacific Coal and Oil Company	40
88	Texas Pacific Coal and Oil Company	40
89	Texas Pacific Coal and Oil Company	40
		600

NAVAJO INDIAN ALLOTTED LANDS
COMMITTED ACREAGE IN PARTICIPATING AREA
CALLEGOS CANYON UNIT

<u>Tract No.</u>	<u>Working Interest Owner</u>	<u>No. Acres</u>	<u>Interest</u>
*37	Glenn J. Smith	456.24	1.5828593
*38	The Texas Company	640.	2.2203603
*39	The Texas Company	792.62	2.7422449
*40	The Texas Company	320.	1.1101801
*41	The Texas Company	472.	1.6375137
42	Southern Union Gas Company	624.60	2.1669329
43	Southern Union Gas Company	640.	2.2203603
*45	Stanolind - Bensen & Montin	320.	1.1101801
		4,265.46	14.7982156

ALL LANDS WITHIN PARTICIPATING AREA ARE COMMITTED TO UNIT.

BENSON - MONTIN

General Offices
1501 Petroleum Building
Oklahoma City, Oklahoma
Phone 3-0546

Oil Producers and Operators
March 7, 1952

Earl A. Benson
Wm.V. Montin

RECEIVED
STATE LAND OFFICE

MAR 10 9 52 AM '52

State Land Commission
P. O. Box 791
Santa Fe, New Mexico

SANTA FE, N. M.

Attention: Mr. Guy Shepard

RE: Gallegos Canyon Unit - San Juan County, New Mexico
Request for approval of land to which production from
Well No. 8, producing from the Dakota Formation shall
be allocated; and request for approval of participating
area for the Pictured Cliffs formation.

Gentlemen:

In accordance with a Plan of Exploration submitted to the United States Geological Survey, July 30, 1951, Benson and Montin have drilled test wells within the Gallegos Canyon Unit, and now desire to initiate proceedings whereby these wells may be produced and additional development prosecuted.

DAKOTA FORMATION

Pursuant to Section 8 of the Unit Agreement, one well was drilled to test the Dakota formation. Work on this well has been completed this month and completion records will be furnished as soon as an official potential has been made. Adequate tests during the completion of the well have been made, however, which definitely classify the well as a non-commercial producer. As set out in Section 10 of the Unit Agreement, production from this well shall be allocated to the Federal Lease on which it is located insofar as royalty payments are concerned. It is hereby requested that the State Land Commission approve this allocation of production.

As set out in Section 12 of the Unit Agreement and further defined by the terms of the Unit Operating Agreement, the working interest production will be allocated to the parties financing the drilling of the Dakota well. A summary of well data covering this Dakota test well is set out in Enclosure No. 1 attached hereto. Complete details will be furnished the Commission on standard departmental forms. It is presumed that this will complete the Unit Operator's obligation to test the Dakota formation, under Section 8 of the Unit Agreement. If, however, the Commission desires additional information, we will be glad to submit it on request.

PICTURED CLIFFS FORMATION

As proposed in the Plan of Exploration submitted to the U.S.G.S., July 30, 1951, Benson and Montin have drilled the six Pictured Cliffs wells contemplated in this Plan. In addition, Well No. 6, which was initially started as a Dakota well, has been completed as a Pictured Cliffs well. This well blew out while drilling through the Farmington sand, and it was decided at that time that the drilling cost would be prohibitive to attempt to carry this well to the Dakota formation without setting pipe through the Farmington. The well was then completed as a Pictured Cliffs well and the Dakota test was commenced at Location No. 8, in which casing was set through the Farmington sand. Benson and Montin have, therefore, drilled seven, rather than six, initial exploratory wells to test the Pictured Cliffs formation.

Commercial production was obtained in six of these Pictured Cliffs wells. The information obtained from these wells, plus additional information from wells near the Unit, provide adequate data to reasonably prove productive a rather large portion of the Unit Area.

It is impossible to tell at this time the exact limits of production. Some help is obtained, however, from the geological structure of the formation. This structure is depicted on Exhibit "A", which is a plat of the area contoured on top of the Pictured Cliffs formation. This structural map shows a gentle monocline dipping to the northeast, the strike of which is approximately Northwest Southeast. There is a slight flattening of this monocline to the northwest such that the horizontal distance between the 4000' and 4400' contours increases from approximately 6-1/2 miles on the southeast side of the Unit to approximately 9 miles on the northwest side of the Unit. (It is not yet known whether this is a reflection of a deeper structural feature, but it does tend to support this possibility. This was initially indicated by the gravity meter survey which was filed with the U.S.G.S. in the initial application requesting unitization of the Gallegos Canyon Area.)

At this time it appears that the commercial Pictured Cliffs wells now completed in and near the Unit are located in a stratigraphic trap trending roughly parallel to the old Kutz Canyon-Fulcher Basin Field. The productive limits of this trap appear to conform generally to the structure of the Pictured Cliffs formation such that wells drilled between the 4100' and 4400' contours have shown commercial production within or near the Unit. It is believed that the down-dip limits of commercial production are controlled by a belt of low permeability sand. It is believed that as the permeability decreases the water content of the sand increases (as is customary for most formation), and it may be that the formation water content eventually reaches such a high degree that it precludes the flow of gas in this belt which lies between the Kutz Canyon-Fulcher Basin Field and the production so far encountered in the Gallegos Canyon Area. This combination of silty sands, plus increasing water content, would tend to give a down-dip limit which would roughly parallel the structural strike of the formation inasmuch as the water would have a tendency to seek a water level, although lack of permeability would preclude a definite water table. Nevertheless, this possibility, plus the definite trend as established by the drilling of wells to date, suggests that

the boundaries of commercial production will eventually prove to be conformable to the structural strike of the formation. The fact that a permeability block exists between this area and the Kutz Canyon-Fulcher Basin Field is supported by the well drilled in Section 31, T29N-R11W, which had an exceptionally small natural open flow (approximately 15 MCF per day) and the fact that a difference in initial reservoir pressure approximating 100 lbs. exists between wells in the two areas although they are removed a distance of only about four miles. An equalized pressure of approximately 565 lbs. was found in the initial Kutz Canyon-Fulcher Basin Field from the extreme northwest edge of the field where the wells were approximately 1400' deep to that part of the field in T28N-R10W where the wells were in excess of 2000', and which covered a distance approximating twenty miles. The initial wells in the West Kutz-Gallegos Canyon Unit Area trend show pressures taken by dead-weight gauges approximating 465 to 475 lbs. for wells which have been shut-in an adequate length of time for pressure build-up. Gallegos Canyon Unit No. 1 in the extreme northwest corner of the Unit has a virgin pressure within 2 or 3 lbs. of the average initial pressures of the wells in the West Kutz area some ten miles Southeast of it. This tends to confirm our thought that continuous production exists across the Unit Area along the strike of the monocline from the northwest corner to the southeast corner of the Unit.

It is therefore suggested that the initial participating area covering the Pictured Cliffs formation be established approximately along the lines set out on Exhibit "A", which roughly conform to the structural contours. Additional drilling to the northeast, outside of the proposed participating area, can be done at a later date if it is necessary at that time to define the limits of production more closely, and additional productive land be included at that time if it is encountered. It now appears to us, however, that wells with decreasing capacity will be encountered northeastward, and it is doubtful that commercial production will be obtained northeast of this proposed participating area. It is anticipated that tighter, saltier sand will be encountered to the northeast and that a pressure gradient will be found showing increasing pressures progressively northeastward until the drainage area of the old Kutz Canyon-Fulcher Basin Field is encountered, at which time an abrupt decrease in pressure will be found.

The limits of production to the southwest appear to be defined by lenticular sands and water saturation, which probably is a result of infiltration of water from the outcrop. Inasmuch as gas production in the Unit is down-dip from water bearing wells southwest of the Unit, we are reluctant at this time to step out as far from productive wells on the southwest side of the Unit as we can on the northeast side of the Unit. In our opinion, estimates of the limit of production to the southwest are far more hazardous than estimates of productive limits to the northeast. For this reason we have held the southwest boundary of the proposed participating area very closely to the producing wells now located in Section 5, T27N-R12W, Gallegos Canyon Unit No. 7, and the well in Section 22, T28N-R13W.

Attached hereto as Exhibit "C" is a list of the owners within the proposed participating area showing each owner's interest on an acreage basis, as required by the Unit Agreement and Unit Operating Agreement.

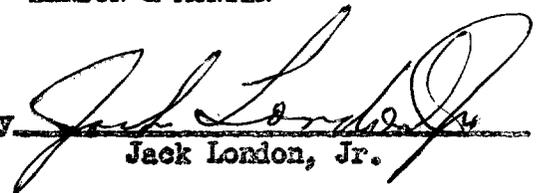
In order to be as equitable as possible to all parties concerned, we believe it best to make the initial participating area as large as possible as long as it contains land reasonably proven to be productive. In this manner all parties will benefit from the first production and no difference in equity can arise from drainage of an undrilled area by a participating area. We believe the participating area outlined on Exhibit "A" will give us an equitable and practical area to commence development of the Pictured Cliffs formation, and it is hereby requested that the Commission give us approval of this area. Exhibit "B" attached hereto shows all lands in this proposed participating area.

Exhibit "D" shows all lands within the proposed participating area broken down by tracts committed to the Unit and tracts not committed to the Unit and percentage interest of each tract. It shows further the working interest owners within the proposed participating area who favor establishing this as an initial participating area and who concur with us in this application. We have signed instruments in our files from the working interest owners of those tracts marked with an asterisk. These amount to approximately 99%. With regard to those which are not marked, we have contacted each and every one of them and have had no negative response whatsoever from any working interest owner.

Very truly yours,

HENSON & MONTIN

By


Jack London, Jr.

JLjr:er

WELL NO. 8 LEASE Gallegos Canyon Unit
 OPERATOR Benson & Montin

COMPLETION SUMMARY

SCHEDULE OF DATES	MONTH	DAY	YEAR
LOCATION MADE	10	16	51
ROTARY RIGGING UP	10	18	51
DRILLING COMMENCED	12	7	51
DRILLING COMPLETED	1	10	52
FIRST PRODUCTION			
POTENTIAL TEST	2	8	52
OFFICIAL COMPLETION			
PLUGGED (IF DRY HOLE)			

LOCATION DATA	
FIELD <u>Wildcat</u>	FORMATION COMPLETED IN <u>Dakota</u>
COUNTY <u>San Juan</u>	STATE <u>New Mexico</u>
LOCATION <u>1065</u> FEET <u>North</u> OF THE <u>South</u> LINE	
AND <u>890</u> FEET <u>East</u> OF THE <u>West</u> LINE OF	
SECTION <u>22</u> TOWNSHIP <u>28N</u> RANGE <u>12W</u>	
SURVEY	BLOCK NO.
ELEVATION GROUND <u>5661</u>	ELEVATION K. B. <u>5666</u>
ELEVATION CASINGHEAD <u>5658</u>	WELL SPACING ACRES

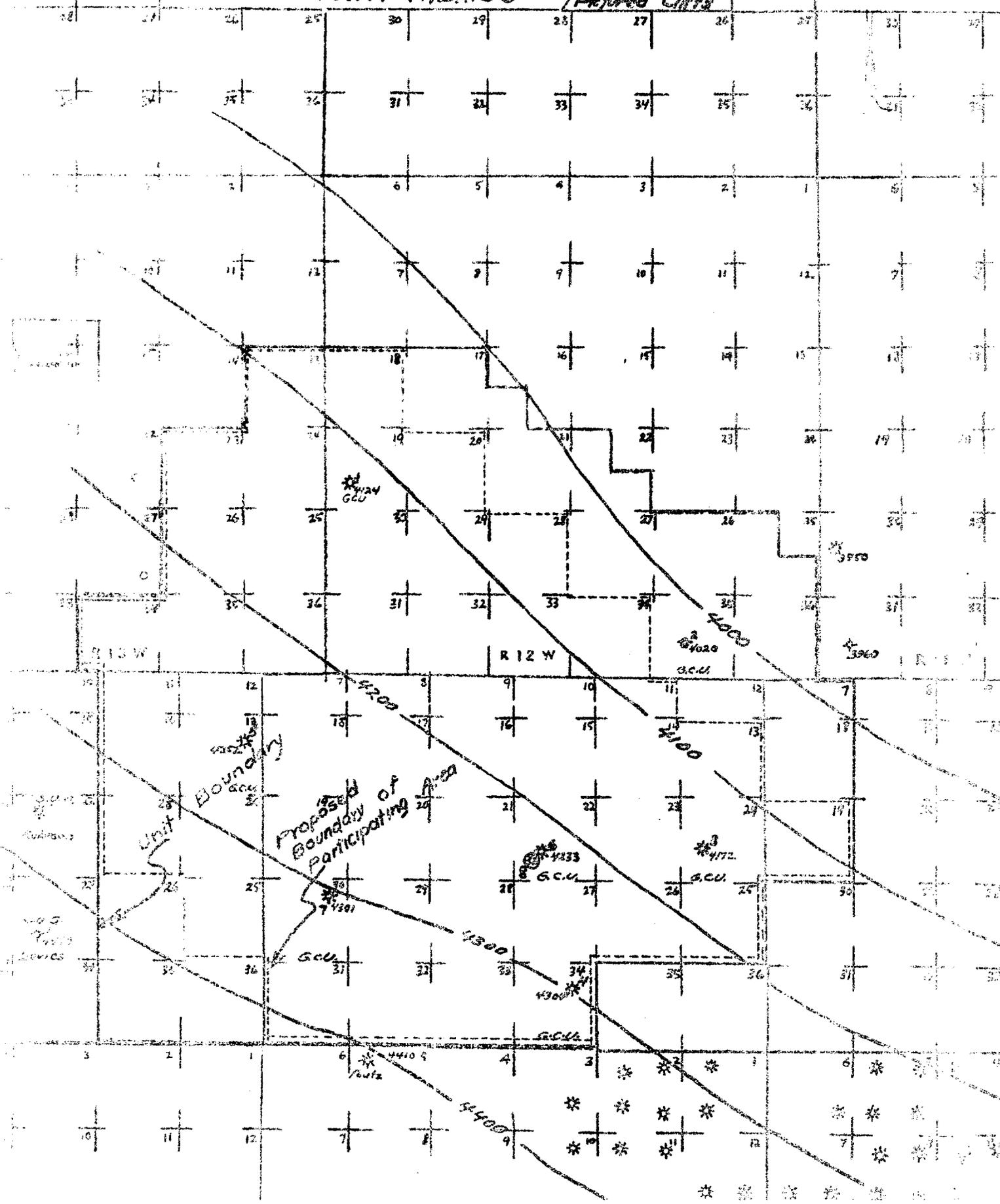
BRIEF DESCRIPTION OF COMPLETION

FORMATION, OPEN HOLE OR PERF., SINGLE, DUAL, TRIPLE, OIL, GAS, WATER, DRY, ETC.

Completed in Dakota Sand, open hole. 125 MCF wet gas.

PART OF
BELLGOS CANYON UNIT
SAN JUAN COUNTY
NEW MEXICO

Contours
on top of the
Red Cliffs



Schedule of Lands to be Included in Participating Area
 Gallegos Canyon Unit
 San Juan County, New Mexico

<u>TWP.</u>	<u>RGE.</u>	<u>SECTION</u>	<u>DESCRIPTION</u>	<u>TWP.</u>	<u>RGE.</u>	<u>SECTION</u>	<u>DESCRIPTION</u>
28N	12W	34	All	29N	13W	35	All
"	"	33	"	"	"	36	"
"	"	32	"	"	12W	31	"
"	"	31	"	"	"	32	"
"	"	30	"	"	"	33	"
"	"	29	"	"	"	34	"
"	"	28	"	"	"	28	"
"	"	27	"	"	"	29	"
"	"	26	"	"	"	30	"
"	"	25	"	"	13W	25	"
28N	11W	19	"	"	"	26	"
"	12W	24	"	"	"	23	"
"	"	23	"	"	"	24	"
"	"	22	"	"	12W	19	"
"	"	21	"	"	"	20	"
"	"	20	"	"	"	18	"
"	"	19	"	"	13W	13	"
"	13W	24	"	"	"	34	"
"	"	23	"				
"	"	14	"				
"	"	13	"				
"	12W	18	"				
"	"	17	"				
"	"	16	"				
"	"	15	"				
"	"	14	"				
"	"	13	"				
"	"	11	"				
"	"	10	"				
"	"	9	"				
"	"	8	"				
"	"	7	"				
"	13W	12	"				
"	"	11	"				
"	"	25	"				

WORKING INTEREST OWNERSHIP IN PARTICIPATING AREA
GALLEGOS CANYON UNIT

	<u>No. Acres</u>	<u>Interest</u>
E. B. Todhunter	160	.5550900
Southern Union Gas Company	2864.60	9.9381941
J. J. Hudson	1158.75	4.0200665
Mid-Continent Petroleum Corporation	4458.13	15.4666486
Albuquerque Associated Oil Company	364.68	1.2651890
L. B. Hodges	199.48	.6920585
Edna R. Jones	80	.2775450
Glean J. Smith	456.24	1.5828393
The Texas Company	2224.62	7.7179032
Bertha & Frieda Rahn	80	.2775450
Phillip Gates	40	.1387725
Brookhaven Oil Company	120	.4163175
L. M. Johnson	40	.1387725
John A. Owings	120	.4163175
E. H. Colby	40	.1387725
C. C. Seymour	40	.1387725
Dorothy Krause	80	.2775450
Geo. H. Krause	80	.2775450
S. B. Lancaster	.5	.0017346
Mary Roberts Berry	8	.0277545
Stanolind Oil and Gas Company	8059.575	27.9611888
Benson & Montin, Inc.	7039.575	24.4224895
Benson - Montin	1035	3.5907390
Carroll & Cornell	75	.2601984
	<hr/>	
	28,824.15	

**PATENTED LANDS
COMMITTED AGREEMENT IN PARTICIPATING AREA
GALLEGOS CANYON UNIT**

<u>Tract No.</u>	<u>Working Interest Owner</u>	<u>No. Acres</u>	<u>Interest</u>
*95	George H. Krause	80	.2775450
*95	Dorothy J. Krause	80	.2775450
*96	Stanolind - Benson & Montin	40	.1387725
*97	" " "	40	.1387725
*98	" " "	32	.1110180
*99	" " "	20	.0693862
*100	" " "	60	.2081587
*102	" " "	133	.4614186
*104	" " "	15	.0520396
*105	" " "	12	.0416317
*106	" " "	28	.0971407
*107	" " "	40	.1387725
*108	" " "	120	.4163175
*110	" " "	75	.2601984
111	S. B. Lancaster	.5	.0017346
*112	Stanolind - Benson & Montin	598.93	2.0778756
*113	" " "	160	.5550900
*114	" " "	159.12	.5520370
*115	" " "	119.37	.4141318
*116	" " "	80	.2775450
*117	" " "	60	.2081587
*118	" " "	60	.2081587
*119	" " "	20	.0693862
*120	" " "	107.31	.3722919
*121	" " "	16	.0555090
*122	" " "	120	.4163175
*123	" " "	160	.5550900
*125	" " "	200	.6938626
*126	" " "	200	.6938626
*127	" " "	20	.0693862
*128	" " "	80	.2775450
*129	" " "	160	.5550900
*130	" " "	120	.4163175
*135	" " "	60	.2081587
*136	" " "	20	.0693862
*142	" " "	200	.6938626
*143	" " "	160	.5550900
*144	" " "	160	.5550900
*155	Mary Roberts Berry	8	.0277545
		3,824.23	13.2674488

**LANDS NOT COMMITTED TO UNIT
THAT ARE WITHIN PARTICIPATING AREA**

101	Not Leased	12
103	Not Leased	240
109	Not Leased	39.50
124	Not Leased	320
		611.50

FEDERAL LANDS
COMMITTED ACREAGE IN PARTICIPATING AREA
GALLEGOS CANYON UNIT

<u>Tract No.</u>	<u>Working Interest Owner</u>	<u>No. Acres</u>	<u>Interest</u>
#1	E. B. Todhunter	160	.5550900
#3	J. J. Hudson	39.43	.1367950
#4	J. J. Hudson	160	.5550900
6	Southern Union Gas Company	1600	5.5509008
#9	Mid-Continent Petroleum Corporation	2536.94	8.8014390
#10	Mid-Continent Petroleum Corporation	1921.19	6.6652095
#11	Albuquerque Associated Oil Company	199.68	.6927524
#12	Albuquerque Associated Oil Company	75	.2601984
#12	Carroll & Cornell	45	.1561190
#13	J. J. Hudson	199.32	.6915034
#16	Stanolind - Benson & Montin	1235.40	4.2859893
#17	" " "	2240	7.7712612
#18	" " "	2180	7.5631024
#19	" " "	2480	8.6038963
#20	" " "	1167.18	4.0493128
#21	" " "	1640	5.6896734
#22	L. B. Hodges	199.48	.6920585
#24	Stanolind - Benson & Montin	320	1.1101801
#25	" " "	640	2.2203603
#28	J. J. Hudson	120	.4163175
#31	Stanolind - Benson & Montin	280	.9714076
#34	J. J. Hudson	640	2.2203603
#34-A	Albuquerque Associated Oil Company	50	.1734656
	Carroll & Cornell	30	.1040793
#35	Stanolind - Benson & Montin	635.84	2.2059280
36	Elma R. Jones	80	.2775450
		19,974.46	72.4200351

LANDS NOT COMMITTED TO UNIT
THAT ARE WITHIN PARTICIPATING
AREA

8	Robert Mims	275.36
11-A	H. K. Beardmore	160
23	L. N. Hagood	640
		1,075.36

STATE LANDS
 COMMITTED ACREAGE IN PARTICIPATING AREA
 GALLEGOS CANYON UNIT

<u>Tract No.</u>	<u>Working Interest Owner</u>	<u>No. Acres</u>
#46-A	Stanolind - Benson & Montin	120
#58	Bertha Rahn	80
#59	Phillip Gates	40
#64	Stanolind - Benson & Montin	40
#67	Brookhaven Oil Company	40
#70	L. M. Johnson	40
#71	Brookhaven Oil Company	40
#78	Albuquerque Associated Oil Company	40
#84	John A. Owings	80
#85	John A. Owings	40
#90	Stanolind - Benson & Montin	40
#91	" " "	40
#92	Brookhaven Oil Company	40
#93	E. H. Colby	40
#94	C. C. Seymour	40
		760

LANDS NOT COMMITTED TO UNIT
 THAT ARE WITHIN THE PARTICIPATING AREA

56	Skelly	80
57	Paul Purcell	40
62	Texas Pacific Coal and Oil Company	40
63	Texas Pacific Coal and Oil Company	40
65	Texas Pacific Coal and Oil Company	40
66	Texas Pacific Coal and Oil Company	40
68	Texas Pacific Coal and Oil Company	40
69	S. E. Day	40
82	Texas Pacific Coal and Oil Company	40
83	Texas Pacific Coal and Oil Company	40
86	Texas Pacific Coal and Oil Company	40
87	Texas Pacific Coal and Oil Company	40
88	Texas Pacific Coal and Oil Company	40
89	Texas Pacific Coal and Oil Company	40
		600

NAVAJO INDIAN ALLOTTED LANDS
 COMMITTED ACREAGE IN PARTICIPATING AREA
 CALLEGOS CANYON UNIT

<u>Tract No.</u>	<u>Working Interest Owner</u>	<u>No. Acres</u>	<u>Interest</u>
#37	Glenn J. Smith	456.24	1.5823993
#38	The Texas Company	640.	2.2203603
#39	The Texas Company	792.62	2.7482459
#40	The Texas Company	320.	1.1102001
#41	The Texas Company	472.	1.6375157
42	Southern Union Gas Company	624.60	2.1689329
43	Southern Union Gas Company	640.	2.2203603
#45	Stanolind - Benson & Montin	320.	1.1102001
		<u>4,265.46</u>	<u>14.7382156</u>

ALL LANDS WITHIN PARTICIPATING AREA ARE COMMITTED TO UNIT.

GENERAL OFFICES
1501 PETROLEUM BUILDING
OKLAHOMA CITY, OKLAHOMA
PHONE 3-0546

BEN **B&M** MONTIN
OIL PRODUCERS AND OPERATORS

EARL A. BENSON
WM. V. MONTIN

February 18, 1952

Case 247

State of New Mexico
Oil Conservation Commission
Santa Fe, New Mexico

Gentlemen:

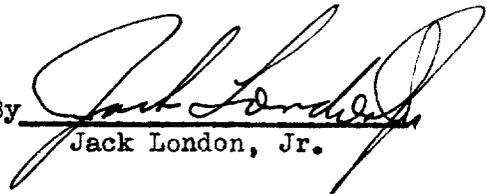
Enclosed herewith for your files is one copy each of Ratification and Joinder of Unit Agreement, as follows:

Tract No. 5 - Billie Dunlap Day

Tract No. 37 - Glin nos bah
Alth ta yo lalth or Roy Victor
Nah da lathe cah or Robert Adobe
Nita yealth na dalth or Joe Adobe
Nati ye na yah or John Adobe
Natinnie Blackie
Rastus Elackie
Glen na pah
Joe Blackie.

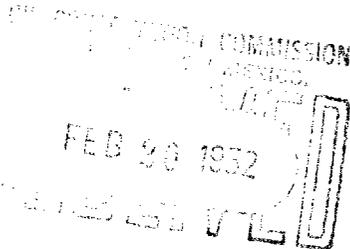
Yours very truly,

BENSON & MONTIN

By 
Jack London, Jr.

JLJr:wr

Encls. (2)



RATIFICATION AND JOINDER OF UNIT AGREEMENT

In consideration of the execution of the Unit Agreement for the Development and Operation of the Gallegos Canyon Unit Area, County of San Juan, State of New Mexico, in form approved on behalf of the Secretary of the Interior, the undersigned owners of lands or leases, or interests therein or royalties presently held or which may arise under existing option agreements, or other interests in production covered by said Unit Agreement hereby severally, each to the extent of his particular ownership or interest, briefly described opposite his signature, consent to the inclusion of said lands within the Unit Area therein defined, approve and adopt the terms of said Unit Agreement and any modifications thereof approved by the Secretary of the Interior or his duly authorized representative as applicable to said several lands and interests, agree that the term of any lease given by the undersigned or under which the undersigned claims an interest herein is extended and modified to the extent necessary to make the same conform to the term of said Unit Agreement, agree that the drilling, development and producing requirements of all leases and other contracts in which their several rights and interests are created or defined shall be deemed fully performed by performance of the provisions of said Unit Agreement, and agree that payment for or delivery of (whichever may be required under prior agreements) oil and gas duly made at contract rates applied to the production allocated under said Unit Agreement to the particular lands to which such rights or interests do or shall apply, regardless of actual production therefrom, shall constitute full performance of all such obligations to the undersigned existing under such leases or other contracts.

This Ratification and Joinder of Unit Agreement may be executed in any number of counterparts with the same force and effect as if all parties had signed the same document and shall be binding upon all those who execute a counterpart hereof, regardless of whether or not it is executed by all other parties owning or claiming an interest in the lands affected hereby, and when so executed shall be binding upon the undersigned, his heirs, devisees, assigns or successors in interest.

SIGNATURES AND ADDRESSES

DESCRIPTION

(Mrs.) Billie Dunlap Day
302 West Third Street
Roswell, New Mexico

Tract No. 5
Township 29 N R 12 W.
Section 21 - NE/4
160 acres - Working Interest

Billie Dunlap Day

STATE OF New Mexico
COUNTY OF Chaves

On this 23rd day of January, 19 52, before me personally appeared Billie Dunlap Day to me known to be the person described in and who executed and delivered the foregoing instrument, and acknowledged to me that she executed the same as her free act and deed.

GIVEN UNDER MY HAND AND SEAL OF OFFICE, this 23rd day of Jan., 1952.
My Commission expires:

Emerson B. Jodhunter
Notary Public

My Commission Expires 20th 1952

RATIFICATION AND JOINDER OF UNIT AGREEMENT

In consideration of the execution of the Unit Agreement for the Development and Operation of the Gallegos Canyon Unit Area, County of San Juan, State of New Mexico, in form approved on behalf of the Secretary of the Interior, the undersigned owners of lands or leases, or interests therein or royalties presently held or which may arise under existing option agreements, or other interests in production covered by said Unit Agreement hereby severally, each to the extent of his particular ownership or interest, briefly described opposite his signature, consent to the inclusion of said lands within the Unit Area therein defined, approve and adopt the terms of said Unit Agreement and any modifications thereof approved by the Secretary of the Interior or his duly authorized representative as applicable to said several lands and interests, agree that the term of any lease given by the undersigned or under which the undersigned claims an interest herein is extended and modified to the extent necessary to make the same conform to the term of said Unit Agreement, agree that the drilling, development and producing requirements of all leases and other contracts in which their several rights and interests are created or defined shall be deemed fully performed by performance of the provisions of said Unit Agreement, and agree that payment for or delivery of (whichever may be required under prior agreements) oil and gas duly made at contract rates applied to the production allocated under said Unit Agreement to the particular lands to which such rights or interests do or shall apply, regardless of actual production therefrom, shall constitute full performance of all such obligations to the undersigned existing under such leases or other contracts.

This Ratification and Joinder of Unit Agreement may be executed in any number of counterparts with the same force and effect as if all parties had signed the same document and shall be binding upon all those who execute a counterpart hereof, regardless of whether or not it is executed by all other parties owning or claiming an interest in the lands affected hereby, and when so executed shall be binding upon the undersigned, his heirs, devisees, assigns or successors in interest.

SIGNATURES AND ADDRESSES

DESCRIPTION

Glin nos bah
Glin nos bah

Tract No. 37 - T28N-R12W
Section 9, Lots 1 and 2
S/2 SE/4
Section 16, N/2

Roy Victor
Alth ta yo Ialth or Roy Victor

Robert Doby 11005
Nah da lathe cah or Robert Adobe

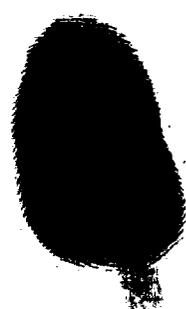
Joe Doby
Ialth na dalth or Joe Adobe



John Adobe
Ialth na yah or John Adobe

Natannie Blackie
Natannie Blackie

Jackie
Jackie
pah



Joe Blackie's

STATE OF *New Mexico*

COUNTY OF *San Juan*

On this *12th* day of *Feb*, 19*52*, before me personally appeared

the above people to me known to be the person*s* described in and who executed and delivered the foregoing instrument, and acknowledged to me that *they* executed the same as *their* free act and deed.

GIVEN UNDER MY HAND AND SEAL OF OFFICE, this *12* day of *Feb*, 19*52*
My Commission expires: *3-2-53*

James [Signature]
Notary Public

GENERAL OFFICES
1501 PETROLEUM BUILDING
OKLAHOMA CITY, OKLAHOMA
PHONE 3-0546

BEN **B&M** MONTIN
OIL PRODUCERS AND OPERATORS

EARL A. BENSON
WM. V. MONTIN

February 4, 1952

Case 247

Re: Ratification and Joinder
of Unit Agreement

State of New Mexico
Oil Conservation Commission
Santa Fe, New Mexico

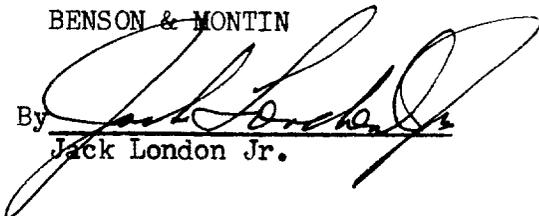
Gentlemen:

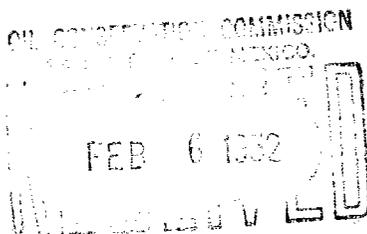
Enclosed herewith, for your files, is a copy of Ratification and Joinder of Unit Agreement by Benson & Montin, Inc., covering the following tracts in the Gallegos Canyon Unit:

Tracts No. 16, 17, 18, 19
Tracts No. 20, 21, 24, 25
Tract No. 35
Tract No. 46
Tract No. 64
Tract No. 72
Tracts No. 90, 91, 96, 97, 98, 99
Tracts No. 100, 102, 105, 106, 107, 108
Tracts No. 112, 113, 114, 115, 116, 117
118, 119, 110
Tracts No. 120, 121, 123, 125, 126, 127, 128, 129
Tracts No. 130, 132, 134, 135, 137, 139
Tracts No. 141, 142, 143, 144, 146, 147, 148, 159
Tracts No. 150, 151, 152
Working Interest Owner

Yours very truly,

BENSON & MONTIN

By 
Jack London Jr.



Encl.
WF

RATIFICATION AND JOINDER OF UNIT AGREEMENT

In consideration of the execution of the Unit Agreement for the Development and Operation of the Gallegos Canyon Unit Area, County of San Juan, State of New Mexico, in form approved on behalf of the Secretary of the Interior, the undersigned owners of lands or leases, or interests therein or royalties presently held or which may arise under existing option agreements, or other interests in production covered by said Unit Agreement hereby severally, each to the extent of his particular ownership or interest, briefly described opposite his signature, consent to the inclusion of said lands within the Unit Area therein defined, approve and adopt the terms of said Unit Agreement and any modifications thereof approved by the Secretary of the Interior or his duly authorized representative as applicable to said several lands and interests, agree that the term of any lease given by the undersigned or under which the undersigned claims an interest herein is extended and modified to the extent necessary to make the same conform to the term of said Unit Agreement, agree that the drilling, development and producing requirements of all leases and other contracts in which their several rights and interests are created or defined shall be deemed fully performed by performance of the provisions of said Unit Agreement, and agree that payment for or delivery of (whichever may be required under prior agreements) oil and gas duly made at contract rates applied to the production allocated under said Unit Agreement to the particular lands to which such rights or interests do or shall apply, regardless of actual production therefrom, shall constitute full performance of all such obligations to the undersigned existing under such leases or other contracts.

This Ratification and Joinder of Unit Agreement may be executed in any number of counterparts with the same force and effect as if all parties had signed the same document and shall be binding upon all those who execute a counterpart hereof, regardless of whether or not it is executed by all other parties owning or claiming an interest in the lands affected hereby, and when so executed shall be binding upon the undersigned, his heirs, devisees, assigns or successors in interest.

SIGNATURES AND ADDRESSES

BENSON & MONTIN, INC.
 1501 Petroleum Building
 Oklahoma City, Oklahoma

By Carl A. Benson
 Carl A. Benson, President

Attest: Jack London, Jr.
 Jack London, Jr., Secretary

DESCRIPTION

Tracts No.	16, 17, 18, 19,
"	" 20, 21, 24, 25,
"	" 35
"	" 46
"	" 64
"	" 72
"	" 90, 91, 96, 97, 98, 99
"	" 100, 102, 105, 106, 107, 108
"	" 112, 113, 114, 115, 116, 117,
"	118, 119, 110
"	" 120, 121, 123, 125, 126, 127, 128, 129
"	" 130, 132, 134, 135, 137, 139,
"	" 141, 142, 143, 144, 145, 149
"	" 150, 151, 152

Working Interest Owner

STATE OF OKLAHOMA)
 COUNTY OF OKLAHOMA)

On this 25th day of January, 1952, before me appeared Earl A. Benson, to me personally known, who, being by me duly sworn, did say that he is the President of Benson & Montin, Inc. and that the seal affixed to said above and foregoing instrument is the corporate seal of said corporation and that said instrument was signed and sealed in behalf of said Corporation by authority of its Board of Directors and said Earl A. Benson acknowledges such instrument to be the free act and deed of said Corporation. Given under my hand and seal of office this 25th day of January, 1952.

William J. Swann
 Notary Public

My Commission expires 7/10/55

STATE OF _____)
 COUNTY OF _____)

On this _____ day of _____, 19____, before me personally appeared _____ to me known to be the person described in and who executed and delivered the foregoing instrument, and acknowledged to me that _____ executed the same as _____ free act and deed.

GIVEN UNDER MY HAND AND SEAL OF OFFICE, this _____ day of _____, 19____. My Commission expires:

 Notary Public

BEN **B&M** MONTIN

GENERAL OFFICES
316-19 PETROLEUM BUILDING
OKLAHOMA CITY, OKLAHOMA
PHONE 7-8844

OIL PRODUCERS AND OPERATORS

1501 Petroleum Building
Oklahoma City, Oklahoma
January 25, 1952

EARL A. BENSON
WM. V. MONTIN

Case 247

State of New Mexico
Oil Conservation Commission
Santa Fe, New Mexico

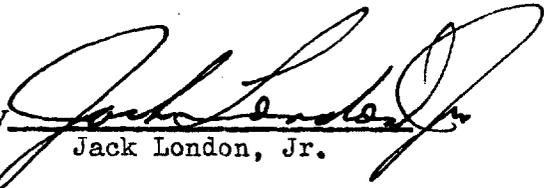
Gentlemen:

We enclose herewith, for your information only, one copy of the Unit Operating Agreement under the Unit Agreement for the Development and Operation of Gallegos Canyon Unit, San Juan County, New Mexico. Also enclosed are four Ratifications and Joinders of outstanding interests under Tracts No. 118, 34, 34-A, 92 and 140, for your files.

Very truly yours,

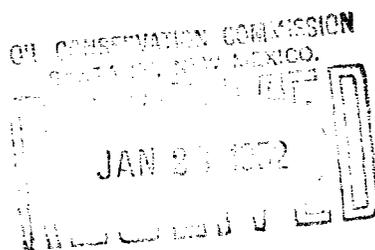
BENSON & MONTIN

By


Jack London, Jr.

JLJr:wr

encls.



RATIFICATION AND JOINDER OF UNIT AGREEMENT

In consideration of the execution of the Unit Agreement for the Development and Operation of the Gallegos Canyon Unit Area, County of San Juan, State of New Mexico, in form approved on behalf of the Secretary of the Interior, the undersigned owners of lands or leases, or interests therein or royalties presently held or which may arise under existing option agreements, or other interests in production covered by said Unit Agreement hereby severally, each to the extent of his particular ownership or interest, briefly described opposite his signature, consent to the inclusion of said lands within the Unit Area therein defined, approve and adopt the terms of said Unit Agreement and any modifications thereof approved by the Secretary of the Interior or his duly authorized representative as applicable to said several lands and interests, agree that the term of any lease given by the undersigned or under which the undersigned claims an interest herein is extended and modified to the extent necessary to make the same conform to the term of said Unit Agreement, agree that the drilling, development and producing requirements of all leases and other contracts in which their several rights and interests are created or defined shall be deemed fully performed by performance of the provisions of said Unit Agreement, and agree that payment for or delivery of (whichever may be required under prior agreements) oil and gas duly made at contract rates applied to the production allocated under said Unit Agreement to the particular lands to which such rights or interests do or shall apply, regardless of actual production therefrom, shall constitute full performance of all such obligations to the undersigned existing under such leases or other contracts.

This Ratification and Joinder of Unit Agreement may be executed in any number of counterparts with the same force and effect as if all parties had signed the same document and shall be binding upon all those who execute a counterpart hereof, regardless of whether or not it is executed by all other parties owning or claiming an interest in the lands affected hereby, and when so executed shall be binding upon the undersigned, his heirs, devisees, assigns or successors in interest.

SIGNATURES AND ADDRESSES

DESCRIPTION

Rebecca Cordes

Rebecca Cordes
Route #1
Rapid City
South Dakota

Tract 118
SPN - 124 Sec. 19
X 60 acres E/2 SW/4
Undivided one-half royalty
interest in 60 acres.

STATE OF South Dakota }
COUNTY OF Pennington }

On this 2nd day of August, 19 51, before me personally appeared Rebecca Cordes to me known to be the person described in and who executed and delivered the foregoing instrument, and acknowledged to me that she executed the same as her free act and deed.

GIVEN UNDER MY HAND AND SEAL OF OFFICE, this 2nd day of August, 19 51.
My Commission expires:

JR Drury
Notary Public

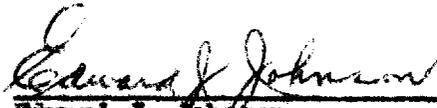
RATIFICATION AND JOINDER OF UNIT AGREEMENT

In consideration of the execution of the Unit Agreement for the Development and Operation of the Gallegos Canyon Unit Area, County of San Juan, State of New Mexico, in form approved on behalf of the Secretary of the Interior, the undersigned owners of lands or leases, or interests therein or royalties presently held or which may arise under existing option agreements, or other interests in production covered by said Unit Agreement hereby severally, each to the extent of his particular ownership or interest, briefly described opposite his signature, consent to the inclusion of said lands within the Unit Area therein defined, approve and adopt the terms of said Unit Agreement and any modifications thereof approved by the Secretary of the Interior or his duly authorized representative as applicable to said several lands and interests, agree that the term of any lease given by the undersigned or under which the undersigned claims an interest herein is extended and modified to the extent necessary to make the same conform to the term of said Unit Agreement, agree that the drilling, development and producing requirements of all leases and other contracts in which their several rights and interests are created or defined shall be deemed fully performed by performance of the provisions of said Unit Agreement, and agree that payment for or delivery of (whichever may be required under prior agreements) oil and gas duly made at contract rates applied to the production allocated under said Unit Agreement to the particular lands to which such rights or interests do or shall apply, regardless of actual production therefrom, shall constitute full performance of all such obligations to the undersigned existing under such leases or other contracts.

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SIGNATURES AND ADDRESSES

Edward J. Johnson
223 Greenbank Avenue
Piedmont, California



Edward J. Johnson

DESCRIPTION

Tract No. 34 - 29N 12W
Section 19 - E/2 NE/4, NE/4 SE/4
Section 20 - E/2, E/2 S/2, SE/4 SE/4
640 Acres - Lease Owner of Record

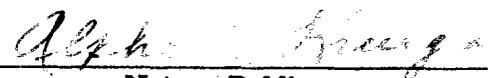
Tract No. 34-A - 29N 12W
Section 21 - S/2 SW/4
Section 28 - NE/4 NW/4, NW/4 NE/4
160 Acres - 5% ORRI

STATE OF California)
COUNTY OF Alameda)

On this 21st day of July, 1951, before me personally appeared Edward J. Johnson to me known to be the person described in and who executed and delivered the foregoing instrument, and acknowledged to me that he executed the same as his free act and deed.

GIVEN UNDER MY HAND AND SEAL OF OFFICE, this 21st day of July, 1951
My Commission expires:

9-25-54.



Notary Public

RATIFICATION AND JOINDER OF UNIT AGREEMENT

In consideration of the execution of the Unit Agreement for the Development and Operation of the Gallegos Canyon Unit Area, County of San Juan, State of New Mexico, in form approved on behalf of the Secretary of the Interior, the undersigned owners of lands or leases, or interests therein or royalties presently held or which may arise under existing option agreements, or other interests in production covered by said Unit Agreement hereby severally, each to the extent of his particular ownership or interest, briefly described opposite his signature, consent to the inclusion of said lands within the Unit Area therein defined, approve and adopt the terms of said Unit Agreement and any modifications thereof approved by the Secretary of the Interior or his duly authorized representative as applicable to said several lands and interests, agree that the term of any lease given by the undersigned or under which the undersigned claims an interest herein is extended and modified to the extent necessary to make the same conform to the term of said Unit Agreement, agree that the drilling, development and producing requirements of all leases and other contracts in which their several rights and interests are created or defined shall be deemed fully performed by performance of the provisions of said Unit Agreement, and agree that payment for or delivery of (whichever may be required under prior agreements) oil and gas duly made at contract rates applied to the production allocated under said Unit Agreement to the particular lands to which such rights or interests do or shall apply, regardless of actual production therefrom, shall constitute full performance of all such obligations to the undersigned existing under such leases or other contracts.

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SIGNATURES AND ADDRESSES

DESCRIPTION

Brookhaven Oil Company
P. O. Box 644
Albuquerque, New Mexico

Tract No. 92 - 29N 13W
Section 36, SE/4 SW/4

By Thos. B. Scott, Jr.

STATE OF NEW MEXICO)
COUNTY OF BERNALILLO)

On this 27th day of July, 1951,
before me appeared Thos. B. Scott, Jr.
to me personally known, who being by me duly sworn,
did say that he is the President ^{27th} of Brookhaven Oil Company, and
that the seal ~~affixed to~~ ^{is} said above and foregoing ~~instrument~~ ^{is} the corporate
seal of said corporation and that said instrument was signed and sealed in
behalf of said corporation ~~by its authority~~ ^{by the authority} of its Board of Directors and said
Thos. B. Scott, Jr. acknowledges such instrument to be the free
act and deed of said corporation.

~~WITNESSED~~ UNDER MY HAND AND SEAL OF OFFICE, this 27th day of July, 1951.

Margaret H. Seef
Notary Public

My commission expires:

July 25, 1955.

STATE OF _____)
COUNTY OF _____)

On this _____ day of _____, 19____, before me personally appeared _____ to me known to be the person described in and who executed and delivered the foregoing instrument, and acknowledged to me that _____ executed the same as _____ free act and deed.

GIVEN UNDER MY HAND AND SEAL OF OFFICE, this _____ day of _____, 19____.

My Commission expires:

Notary Public

ATIFICATION AND JOINDER OF UNIT AGREEMENT

In consideration of the execution of the Unit Agreement for the Development and Operation of the Gallegos Canyon Unit Area, County of San Juan, State of New Mexico, in form approved on behalf of the Secretary of the Interior, the undersigned owners of lands or leases, or interests therein or royalties presently held which may arise under existing option agreements, or other interests in production covered by said Unit Agreement hereby severally, each to the extent of his particular ownership or interest, hereby described opposite his signature, consent to the inclusion of said lands within the Unit Area therein, approve and adopt the terms of said Unit Agreement and any modifications thereof approved by the Secretary of the Interior or his duly authorized representative as applicable to said several lands and interests, agree that the term of any lease given by the undersigned or under which the undersigned claims an interest herein is extended and modified to the extent necessary to make the same conform to the term of said Unit Agreement, agree that the drilling, development and producing requirements of all leases and other contracts in which their several rights and interests are created or defined shall be deemed fully performed by performance of the provisions of said Unit Agreement, and agree that payment for or delivery of (whichever may be required under prior agreements) oil and gas duty and contract rates applied to the production allocated under said Unit Agreement to the particular lands to which such rights or interests do or shall apply, regardless of actual production therefrom, shall constitute full performance of all such obligations to the undersigned existing under such leases or other contracts.

This ratification and Joinder of Unit Agreement may be executed in any number of counterparts with the same force and effect as if all parties had signed the same document and shall be binding upon all those who execute a counterpart hereof, regardless of whether or not it is executed by all other parties owning or claiming an interest in the lands affected hereby, and when so executed shall be binding upon the undersigned, his heirs, devisees, assigns or successors in interest.

SIGNATURES AND ADDRESSES

DESCRIPTION

Louie Dustin Estate
Washington, New Mexico

Louie Dustin

Treaty No. 104, 29E 12E
Section 23 - Begin at SW cor. of
the NE 1/4 of Sec 25, T12S
R 60 W; thence N 40 W;
thence N 60 W; thence
40 W to beginning.
15 Acres - 12 1/2 RT - 67.5000 RT

STATE OF NEW MEXICO }
COUNTY OF SAN JUAN }

On this 2 day of May, 1951, before me personally appeared Louie Dustin to me known to be the person described in and who executed and delivered the foregoing instrument, and acknowledged to me that she executed the same as her free act and deed.

GIVEN UNDER MY HAND AND SEAL OF OFFICE, this 2 day of May, 1951.

My Commission expires:

My Commission Expires

La Verne W. Burman

OIL CONSERVATION COMMISSION
SANTA FE, NEW MEXICO

August 28, 1951

C
O
P
Y

Mr. Albert R. Greer
Benson & Montin
316 Petroleum Building
Oklahoma City - Oklahoma

Dear Mr. Greer:

This will acknowledge your letter of August 20, 1951, with the attached unit operating agreement for the Gallegos Unit of San Juan County.

You say in the last paragraph of your letter: "It is our understanding that neither the Oil Conservation Commission nor the State Land Office desires to approve the unit operating agreement....." I should say that your statement is incorrect, because both the State Land Office and the Oil Conservation Commission do desire to approve the unit operating agreement, and especially so when production is obtained. I cite you to Paragraph 9 of the original unit agreement entitled "Plan of Further Development and Operation," which, in the first half dozen lines, states that the unit operator shall submit for the approval of the Supervisor, the State Commissioner (which should be State Land Commissioner) and the Commission an acceptable plan of development...etc.

I notice, however, that the last line of your letter says "This unit operating agreement covers distribution of cost among working interest owners." While we have no particular interest in this one item, we do wish to be informed and given an opportunity to approve the working agreement if and when oil or gas is obtained.

Very truly yours,

R. R. Spurrier
Secretary - Director

RRS:nr

GENERAL OFFICES
316-19 PETROLEUM BUILDING
OKLAHOMA CITY, OKLAHOMA
PHONE 7-8844

BEN **B&M** MONTIN
OIL PRODUCERS AND OPERATORS

EARL A. BENSON
WM. V. MONTIN

August 20, 1951

RECEIVED
STATE LAND OFFICE
AUG 21 1 18 PM '51
SANTA FE, N. M.

Oil Conservation Commission
P. O. Box 871
Santa Fe, New Mexico

Attention: Mr. R. R. Spurrier, Director

Gentlemen:

As set out in the Hearing April 24th, 1951, whereby the Gallegos Canyon Unit Agreement was given approval by the Commissioner of Public Lands in the State of New Mexico and the Oil Conservation Commission, we have agreed to provide you with an information copy of the unit operating Agreement. This is pursuant to the requests of some of the working interest owners within the unit.

It is our understanding that neither the Oil Conservation Commission nor the State Land Office desires to approve the Unit Operating Agreement, but will receive it and keep it on file with other State records pertaining to the unitization. This Unit Operating Agreement covers distribution of cost among working interest owners.

Very truly yours,

BENSON & MONTIN

Albert R. Greer
Albert R. Greer

ARG:ho

#2
 CWC 247

GALLEGOS CANYON UNIT
 SCHEDULE OF LANDS & LEASES COMMITTED
 AS OF APRIL 24, 1951

<u>INTERESTS COMMITTED</u>					<u>INTERESTS NOT COMMITTED</u>	
Tract No.	Tract Size (acres)	Royalty Interest Committed (acres)	Working Interest Committed (acres)	Fully Committed Interests (acres)	Royalty Interest Not Committed (acres)	Working Interest Not Committed (acres)
1	160.00	160.00	160.00	160.00	-	-
2	106.90	106.90	106.90	106.90	106.90	106.90
3	39.43	39.43	39.43	39.43	-	-
4	160.00	160.00	160.00	160.00	-	-
5	160.00	160.00	160.00	160.00	-	-
6	1,600.00	1,600.00	1,600.00	1,600.00	-	-
7	1,280.00	1,280.00	1,280.00	1,280.00	-	-
8	275.36	-	-	-	275.36	275.36
9	2,536.94	2,536.94	2,536.94	2,536.94	-	-
10	2,561.19	2,561.19	2,561.19	2,561.19	-	-
11	239.68	239.68	239.68	239.68	-	-
11-A	160.00	-	-	-	160.00	160.00
12	120.00	120.00	120.00	120.00	-	-
13	439.32	439.32	439.32	439.32	-	-
14	80.00	80.00	80.00	80.00	-	-
15	160.00	160.00	160.00	160.00	-	-
16	1,235.40	1,235.40	1,235.40	1,235.40	-	-
17	2,240.00	2,240.00	2,240.00	2,240.00	-	-
18	1,280.00	1,280.00	1,280.00	1,280.00	-	-
19	2,480.00	2,480.00	2,480.00	2,480.00	-	-
20	1,207.18	1,207.18	1,207.18	1,207.18	-	-
21	1,640.00	1,640.00	1,640.00	1,640.00	-	-
22	199.48	199.48	199.48	199.48	-	-
23	640.00	640.00	-	-	640.00	640.00
24	320.00	320.00	320.00	320.00	-	-
25	640.00	640.00	640.00	640.00	-	-
26	120.00	120.00	120.00	120.00	-	-
27	80.00	80.00	80.00	80.00	-	-
28	120.00	120.00	120.00	120.00	-	-
29	160.00	-	-	-	160.00	160.00
30	160.00	-	-	-	160.00	160.00
31	280.00	280.00	280.00	280.00	-	-
32	160.00	160.00	160.00	160.00	-	-
33	160.00	160.00	160.00	160.00	-	-
34	640.00	640.00	640.00	640.00	-	-
34-A	160.00	160.00	160.00	160.00	-	-
35	635.84	635.84	635.84	635.84	-	-
36	80.00	80.00	80.00	80.00	-	-
37	456.24	-	-	-	456.24	456.24
38	640.00	640.00	640.00	640.00	640.00	-
		621.52		621.52		

INTERESTS COMMITTED

INTERESTS NOT COMMITTED

Tract No.	Tract Size (acres)	INTERESTS COMMITTED			INTERESTS NOT COMMITTED	
		Royalty Interest Committed (acres)	Working Interest Committed (acres)	Fully Committed Interests (acres)	Royalty Interest Not Committed (acres)	Working Interest Not Committed (acres)
39	792.62	792.62	792.62	792.62	-	-
40	320.00	320.00	320.00	320.00	-	-
41	472.00	472.00	472.00	472.00	-	-
42	624.60	624.60	624.60	624.60	-	-
43	640.00	640.00 ^{86.67}	640.00	640.00	586.67	-
44	640.00	640.00 ^{486.60}	640.00	640.00	486.60	-
45	320.00	320.00 ^{314.67}	320.00	320.00	314.67	-
46	829.26	-	-	-	829.26	829.26
47	263.24	263.24	263.24	263.24	-	-
48	27.55	27.55*	27.55*	27.55*	-	-
49	40.00	40.00*	40.00*	40.00*	-	-
50	40.00	40.00*	40.00*	40.00*	-	-
51	40.00	40.00	40.00	40.00	-	-
52	40.00	40.00*	40.00*	40.00*	-	-
53	38.95	38.95	38.95	38.95	-	-
54	27.60	27.60	27.60	27.60	-	-
55	40.00	40.00	40.00	40.00	-	-
56	80.00	80.00	80.00	80.00	-	-
57	40.00	-	-	-	40.00	40.00
58	80.00	80.00	80.00	80.00	-	-
59	40.00	-	-	-	-	-
60	40.00	40.00	40.00	40.00	-	-
61	40.00	-	-	-	-	-
62	40.00	40.00*	40.00*	40.00*	-	-
63	40.00	40.00*	40.00*	40.00*	-	-
64	40.00	40.00	40.00	40.00	-	-
65	40.00	40.00*	40.00*	40.00*	-	-
66	40.00	-	-	-	40.00	40.00
67	40.00	-	-	-	40.00	40.00
68	40.00	40.00*	40.00*	40.00*	-	-
69	40.00	-	-	-	40.00	40.00
70	40.00	40.00	40.00	40.00	-	-
71	40.00	-	-	-	40.00	40.00
72	40.00	40.00*	40.00*	40.00*	-	-
73	40.00	-	-	-	40.00	40.00
74	40.00	40.00	40.00	40.00	-	-
75	40.00	40.00*	40.00*	40.00*	-	-
76	40.00	40.00	40.00	40.00	-	-
77	80.00	-	-	-	80.00	80.00
78	120.00	120.00	120.00	120.00	-	-
79	40.00	-	-	-	40.00	40.00
80	40.00	40.00*	40.00*	40.00*	-	-
81	40.00	40.00*	40.00*	40.00*	-	-
82	40.00	40.00*	40.00*	40.00*	-	-
83	40.00	40.00*	40.00*	40.00*	-	-
84	80.00	80.00	80.00	80.00	-	-
85	40.00	40.00	40.00	40.00	-	-
86	40.00	40.00*	40.00*	40.00*	-	-
87	40.00	40.00*	40.00*	40.00*	-	-

INTERESTS COMMITTED

INTERESTS NOT COMMITTED

Tract No.	Tract Size (acres)	INTERESTS COMMITTED			INTERESTS NOT COMMITTED	
		Royalty Interest Committed (acres)	Working Interest Committed (acres)	Fully Committed Interests (acres)	Royalty Interest Not Committed (acres)	Working Interest Not Committed (acres)
88	40.00	40.00*	40.00*	40.00*	-	-
89	40.00	40.00*	40.00*	40.00*	-	-
90	40.00	40.00	40.00	40.00	-	-
91	40.00	40.00	40.00	40.00	-	-
92	40.00	-	-	-	40.00	40.00
93	40.00	40.00	40.00	40.00	-	-
94	40.00	40.00	40.00	40.00	-	-
95	160.00	160.00	160.00	160.00	-	-
96	40.00	40.00	40.00	40.00	-	-
97	40.00	40.00	40.00	40.00	-	-
98	32.00	32.00	32.00	32.00	-	-
99	20.00	20.00	20.00	20.00	-	-
100	60.00	60.00	60.00	60.00	-	-
101	12.00	-	-	-	12.00	12.00
102	133.00	-	133.00	-	133.00	-
103	240.00	-	-	-	-	-
104	15.00	-	-	-	240.00	240.00
105	12.00	12.00	12.00	12.00	15.00	15.00
106	28.00	28.00	28.00	28.00	-	-
107	40.00	40.00	40.00	40.00	-	-
108	120.00	120.00	120.00	120.00	-	-
109	39.50	-	-	-	37.50	37.50
110	75.00	75.00	75.00	75.00	-	-
111	.50	.50	.50	.50	-	-
112	598.93	598.93	598.93	598.93	-	-
113	160.00	160.00	160.00	160.00	-	-
114	159.12	-	159.12	159.12	159.12	-
115	119.37	-	119.37	119.37	119.37	-
116	80.00	-	80.00	80.00	80.00	-
117	60.00	60.00	60.00	60.00	-	-
118	60.00	60.00	60.00	60.00	-	-
119	20.00	20.00	20.00	20.00	-	-
120	107.31	107.31	107.31	107.31	-	-
121	16.00	16.00	16.00	16.00	-	-
122	120.00	120.00	120.00	120.00	-	-
123	160.00	160.00	160.00	160.00	-	-
124	320.00	-	-	-	320.00	320.00
125	200.00	200.00	200.00	200.00	-	-
126	200.00	200.00	200.00	200.00	-	-
127	20.00	20.00	20.00	20.00	-	-
128	140.00	70.00	140.00	70.00	70.00	-
129	160.00	-	160.00	-	160.00	-
130	120.00	120.00	120.00	120.00	-	-
131	20.00	20.00	20.00	20.00	-	-
132	40.00	40.00	40.00	40.00	-	-
133	40.00	40.00	40.00	40.00	-	-
134	20.00	10.00	20.00	10.00	10.00	-
135	80.00	-	80.00	80.00	80.00	-
136	40.00	40.00	40.00	40.00	-	-
137	20.00	-	20.00	-	20.00	-
138	120.00	-	-	-	120.00	120.00

INTERESTS COMMITTED

INTERESTS NOT COMMITTED

Tract No.	Tract Size (acres)	INTERESTS COMMITTED			INTERESTS NOT COMMITTED	
		Royalty Interest Committed (acres)	Working Interest Committed (acres)	Fully Committed Interests (acres)	Royalty Interest Not Committed (acres)	Working Interest Not Committed (acres)
139	80.00	—	80.00	—	80.00	—
140	40.00	—	—	—	40.00	40.00
141	80.00	80.00	80.00	80.00	—	—
142	320.00	240.00	320.00	240.00	80.00	—
143	160.00	160.00	160.00	160.00	—	—
144	160.00	160.00	160.00	160.00	—	—
145	160.00	96.00	160.00	96.00	64.00	—
146	320.00	192.00	320.00	192.00	128.00	—
147	40.00	40.00	40.00	40.00	—	—
148	40.00	20.00	20.00	20.00	20.00	20.00
149	360.00	360.00	360.00	360.00	—	—
150	80.00	26.67	80.00	26.67	50.00	—
151	30.00	30.00	30.00	30.00	—	—
152	160.00	160.00	160.00	160.00	—	—
153	120.00	—	—	—	120.00	120.00
154	74.00	—	—	—	74.00	74.00
155	8.00	8.00	8.00	8.00	—	—
156	10.00	—	—	—	10.00	10.00
157	6.00	—	—	—	6.00	6.00

* Unleased state lands considered as committed

RECAPITULATION BY LAND CLASSIFICATION

(AREA)

<u>Land Classification</u>	<u>Total Acres</u>	<u>INTERESTS COMMITTED</u>			<u>INTERESTS NOT COMMITTED</u>	
		<u>Royalty Interest Committed (acres)</u>	<u>Working Interest Committed (acres)</u>	<u>Fully Committed Interests (acres)</u>	<u>Royalty Interest Not Committed (acres)</u>	<u>Working Interest Not Committed (acres)</u>
Federal	24,716.72	23,214.46	23,214.46	23,214.46	1,502.26	1,502.26
Indian	4,905.46	4,212.06	4,449.22	4,212.06	693.40	456.24
State	3,186.60	1,957.34	1,957.34	1,957.34	1,229.26	1,229.26
Patented	6,515.73	4,265.74	5,499.23	4,265.74	2,249.99	1,016.50
TOTALS	39,324.51	33,649.60	35,120.25	33,649.60	5,674.91	4,204.26

RECAPITULATION BY PERCENTAGE COMMITMENTS

WITHIN EACH LAND CLASSIFICATION

<u>Land Classification</u>	<u>Total %</u>	<u>INTERESTS COMMITTED</u>			<u>INTERESTS NOT COMMITTED</u>	
		<u>Royalty Interest Committed (acres)</u>	<u>Working Interest Committed (acres)</u>	<u>Fully Committed Interests (acres)</u>	<u>Royalty Interest Not Committed (acres)</u>	<u>Working Interest Not Committed (acres)</u>
Federal	100%	93.9%	93.9%	93.9%	6.1%	6.1%
Indian	100%	85.9%	90.7%	85.9%	14.1%	9.3%
State	100%	61.4%	61.4%	61.4%	38.6%	38.6%
Patented	100%	65.5%	84.5%	65.5%	34.5%	15.6%
TOTAL	100%	85.6%	89.3%	85.6%	14.4%	10.7%

CLASS OF SERVICE

This is a full-rate Telegram or Cablegram unless its deferred character is indicated by a suitable symbol above or preceding the address.

WESTERN UNION

1201

SYMBOLS

DL=Day Letter
NL=Night Letter
LT=Int'l Letter Telegram
VLT=Int'l Victory Ltr.

W. P. MARSHALL, PRESIDENT

The filing time shown in the date line on telegrams and day letters is STANDARD TIME at point of origin. Time of receipt is STANDARD TIME at point of destination

LA02 SA432 LA469

1951 APR 24 AM 7 17

L.AYA032 NL PD=ALBUQUERQUE NMEX 23=

DICK SPURRIER, STATE GEOLOGIST =

Case 247

NEW MEXICO OIL AND GAS CONSERVATION COMMISSION

SANTA FE. MEX=

RETEL HAVE TALKED AL GREAR MY OBJECTIONS TO GALLEGOS UNIT
 HAVE BEEN COMPLETELY SATISFIED AND TELEGRAM DIRECTED TO THE
 CONSERVATION COMMISSION ON APRIL 23RD IS WITHDRAWN AND NO
 OBJECTIONS EXIST=

J J HUDSON=..=

THE COMPANY WILL APPRECIATE SUGGESTIONS FROM ITS PATRONS CONCERNING ITS SERVICE

CLASS OF SERVICE



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WESTERN UNION

1201

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W. P. MARSHALL, PRESIDENT

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LA96 SSC589

1951 APR 23 PM 4 50

LAAYB112 PD=ALBUQUERQUE NMEX 23 307P=

NEW MEXICO CONSERVATION COMMISSION=

SANTA FE NMEX=

(Handwritten marks)
 247

UNTIL FURTHER NOTICE, ANY ACREAGE COMMITTED SUPPOSEDLY WHICH I OWN OR CONTROL IS NOT COMMITTED UNTIL SUCH TIME AS PRIVATE AGREEMENTS ARE COMPLETE, IF THEN, WITHINT THE GALLEGOS CANYON UNIT COMING BEFORE YOU FOR HEARING TOMORROW=

JAMES J HUDSON=

THE COMPANY WILL APPRECIATE SUGGESTIONS FROM ITS PATRONS CONCERNING ITS SERVICE

March 2, 1951

Mr. J. O. Seth
Seth and Montgomery
Santa Fe, N. M.

RE: Case No. 247

Dear Mr. Seth:

We are enclosing Order R-53 continuing the captioned case to April 24, 1951.

Very truly yours,

bpw

Secretary and Director

J. O. SETH
A. K. MONTGOMERY
OLIVER SETH
Wm. FEDERIC!
JUSTIN T. REID

SETH AND MONTGOMERY
ATTORNEYS AND COUNSELORS AT LAW
111 SAN FRANCISCO ST.
SANTA FE, NEW MEXICO

January 9, 1951

Mr. R. R. Spurrier
OIL CONSERVATION COMMISSION
State Capitol Building
Santa Fe, New Mexico

Dear Mr. Spurrier:

Re: Application of Benson & Montin

Enclosed please find in duplicate Motion for
Continuance of the hearing on the Gallegos
Canyon Unit, No. 247.

Very truly yours,



JOS:f
Enc.

BEFORE THE OIL CONSERVATION COMMISSION
OF THE STATE OF NEW MEXICO

IN THE MATTER OF THE APPLICATION OF
EARL A. BENSON and WILLIAM V. MONTIN
FOR THE APPROVAL OF GALLEGOS CANYON
UNIT AGREEMENT EMBRACING 39,324.51
ACRES OF LAND IN TOWNSHIP 28 NORTH,
RANGES 11, 12 and 13 WEST AND TOWNSHIP
29 NORTH, RANGES 12 and 13 WEST, N.M.P.M.,
SAN JUAN COUNTY, NEW MEXICO.

No. 247

MOTION FOR CONTINUANCE

Come now Earl A. Benson and William V. Montin, applicants
in the above-entitled matter, and state:

That owing to unexpected delays they have been unable to
complete the signing of the Unit Agreement involved in the above-
entitled cause, and it is practically certain that they will be
unable to obtain the necessary signatures in time for the hearing
now set for January 25, 1951.

Applicants further state that they are causing all opera-
tors interested in the foregoing Unit Agreement to be notified of
this motion for continuance.

WHEREFORE, applicants pray that the setting of the above-
entitled cause for January 25, 1951 be vacated, and that the same
be set for the regular hearing date in February 1951.

SETH and MONTGOMERY

By *Seth Montgomery*

ATTORNEYS FOR BENSON & MONTIN

Santa Fe, New Mexico

12/18/50
12/17

December 18, 1950

Mr. Burrel H. Crawford
Route 3
Farmington, New Mexico

Dear Sir:

This is in reply to your letter of December 9.

This will advise that a hearing had been set for the unit agreement you mention in your letter, for December 28. However, Benson and Montin have asked for a continuance to the January 16, 1951 hearing.

The Oil Conservation Commission rules and regulations permit drilling upon any size tract. However, you should bear in mind that your prorated share or the amount which you may produce will be an amount which compares to a full allowable as the acreage in the tract upon which you drill compares to a full drilling or proration unit. For example, a 40-acre tract located in a pool for which the proration unit was 160 acres, would receive one-fourth of a full allowable.

It is your privilege if you feel this would be an economical venture, to drill upon any small tract. If you join the unit you will receive your prorata share from any production which is found in the unit, which is all you could get under any circumstances.

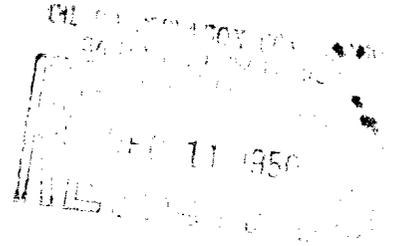
Very truly yours,

STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION

R. R. Spurrier
Secretary-Director

RRS:bw

247
Farmington, New Mexico,
December 9, 1950.



New Mexico Oil & Gas Conservation Commission,
Santa Fe, New Mexico.

Gentlemen:

I am inclosing a sketch of a four section group, which Benson and Montin, of Oklahoma City, are planning on unitizing into one large unit. It shows the location of some of my land, which they plan to unitize in this large unit.

I am opposed to unitizing with a larger acreage than the minimum set forth for this area. However, my land does not form a solid block and I would like to know if I will be forced to unitize with them, in order to protect my oil and gas rights; or if I will be able to drill on my lands after the rest has been unitized.

I have a well down 995 feet in the Northeast part of the NE $\frac{1}{4}$ NW $\frac{1}{4}$ Section 25, Township 29 North, Range 12 West NMPM. The Pictured Cliff sand is around 1500 feet. I would like to know if I would be permitted to deepen this well and produce gas from it, while the land around it is unitized in the above mentioned unit.

Please let me hear from you at the earliest possible moment concerning this matter, or if a conference with you would expediate matters I would be glad to have an appointment.

Very sincerely yours,

Burrel H. Crawford
Burrel H. Crawford,
Route 3,
Farmington, N. M.

TOWNSHIP 27 N

RANGE 12 W

SEC 26

SEC 25

well
 NE 1/4
 NW 1/4
 B.H. CRAWFORD

B.H. CRAWFORD
 SE 1/4
 SE 1/4
 P.J. FARRELL

B.H. CRAWFORD
 S 1/2 SW 1/4

SEC 35

SEC 36

J. O. SETH
A. K. MONTGOMERY
OLIVER SETH
WM. FEDERICI
JUSTIN T. REID

SETH AND MONTGOMERY
ATTORNEYS AND COUNSELORS AT LAW
III SAN FRANCISCO ST.
SANTA FE, NEW MEXICO

RECEIVED
DEC 15 1950

December 15, 1950

OIL CONSERVATION COMMISSION
Santa Fe, New Mexico

Gentlemen:

ATTENTION: Mr. Dick Spurrier

Please refer to the application for approval of the Gallegos Cañon Unit now set for hearing at Santa Fe on December 28.

Mr. Greer, representing Benson & Montin, advises that the signatures to the unit agreement will not be sufficient by December 28, 1950 to justify the submission of the agreement to the Commission. We, accordingly, request that the matter be continued until the date set for hearings in January 1951. Mr. Greer informed me that he is advising all interested parties of this postponement.

Very truly yours,



Attorney for Benson & Montin

JOS:f
cc: Mr. Albert Greer
Dallas, Texas

ALBERT R. GREER
REGISTERED PETROLEUM ENGINEER
STATE OF NEW MEXICO

C O P Y

502 Continental Building
Dallas, Texas
4 December 1950

Ex #5
Case 247

Benson & Montin
316 Petroleum Building
Oklahoma City, Oklahoma

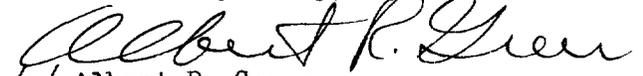
RE: Oil and Gas Prospect
Gallegos Canyon Area
San Juan County, New Mexico

Gentlemen:

A Geological Report was prepared for you dated February 20, 1950 pertaining to the unitizing of certain lands described therein and recommending the drilling of test wells. This report is nearly ten months old and a number of additional wells have been drilled in the general area.

I have investigated these wells and it is my opinion that this development does not affect my original recommendation that the area be unitized and that wells be drilled as initially recommended.

Yours very truly,


s/ Albert R. Greer

ALBERT R. GREER
REGISTERED PETROLEUM ENGINEER
STATE OF NEW MEXICO

C O P Y

502 Continental Building
Dallas, Texas
20 February, 1950

Benson & Montin
316 Petroleum Building
Oklahoma City, Oklahoma

RE: Oil and Gas Prospect
Gallegos Canyon Area
San Juan County, New Mexico

Gentlemen:

I have studied captioned prospect relative to testing for oil and gas and recommend that test wells be drilled as herein discussed, provided the area can first be unitized.

Both of the two horizons which now appear most likely to be commercially productive should be unitized in order to protect correlative rights and to more efficiently use the reservoir energy of prospective oil and gas deposits. Unitization of this area is strongly recommended.

AREA: The proposed unit area comprises about 39,300 acres, the center of which is approximately seven miles southeast of the town of Farmington, San Juan County, New Mexico. The San Juan River crosses the area, flowing from east to west; and the Gallegos Canyon, from which the area derives its name, enters the unit area from the south and flows northward into the San Juan River. As indicated on the map attached hereto, the proposed unit area occupies the major part of T. 28 N., R. 12W., the approximate south half of T. 29 N., R. 12 W., and parts of T. 28N., R. 11 W., T. 28 N., R. 13 W., T. 29 N., R. 13 W.; and lies wholly within the large sedimentary feature known as the San Juan Basin of northwestern New Mexico and southwestern Colorado.

GEOPHYSICAL DATA: The Gallegos Canyon Area is a geophysical prospect, the outline of which is based primarily on the results of a gravity meter survey. We do not yet have enough drilling data to evaluate the accuracy of geophysical methods in the San Juan Basin, and must do a certain amount of pioneering in this respect. Nevertheless it is sound practice to accept geophysical work in large unexplored areas, such as this, until it is condemned.

A gravity meter survey with residual corrections indicated a large circular anomaly covering nearly all of T. 28 N., R. 12 W., and parts of T. 28 N., R. 11 W., T. 28 N., R. 13 W., T. 29 N., R. 12 W., T. 29 N., R. 13 W. A map showing the results of this survey is attached hereto. The proposed unit area is outlined in red.

There is a possibility that this anomaly is a reflection of a subsurface high in the basement complex and carried through as a structural feature in the Dakota formation.

GENERAL GEOLOGICAL DATA: The presence of a closed Dakota structure cannot be confirmed by surface mapping because of the unconformity between the exposed Tertiary beds and the underlying Cretaceous.

Fairly good subsurface control of the Pictured Cliffs formation indicates a gently dipping monocline in the upper Cretaceous. Thinning of the Lewis shale southward, however, suggests that the Pictured Cliffs may not be conformable with the Mesa Verde and the lower (Dakota, etc.) formations. It is therefore possible, and at this time logical, that we accept the gravity anomaly as a possible indication of a Dakota structure.

The Farmington, Pictured Cliffs, Mesa Verde, and Dakota formations of Cretaceous age produce gas and oil in surrounding areas of San Juan County. The Hermose formation of Pennsylvanian age has produced oil in one field, and the Paradox formations of the Pennsylvanian produces gas in the Barker Creek Field about 20 miles northwest.

The probably stratigraphic section existing in the Gallegos Canyon Area is set out below. The exact depth at which each formation will be encountered will depend partly on the location chosen within the unit area, but will be approximately as follows:

Period	Formation	Estimated Depth	
		Top	Bottom
Tertiary	Torrejon-Puerco-Ojo Alamo	0	1,200
Cretaceous	Kirtland	1,200	1,900
	Fruitland	1,900	2,000
	Pictured Cliffs	2,000	2,200
	Lewis	2,200	3,600
	Cliffhouse	3,600	3,700

20 February, 1950

<u>Period</u>	<u>FORMATION</u>	<u>Estimated Depth</u>	
		<u>Top</u>	<u>Bottom</u>
	Menefee	3,700	4,400
	Point Lookout	4,400	4,600
	Mancos	4,600	6,500
	Dakota	6,500	6,800
Jurassio	Morrison, Navajo, Wingate	6,800	8,400
Triassic	Chinle, Shinarump, Moenkopi	8,400	9,400
Permian	DeChelly, Cutfer, Rice	9,400	10,900
Pennsylvanian	Hermosa, Paradox, Molas	10,900	12,450
Mississippian	Leadville	12,400	12,650
Devonian	Quray, Elbert	12,650	12,800
Cambrian	Ignacio	12,800	?
Pre-Cambrian	Granite	?	?

RECOMMENDATIONS:

(1) Jurassio and Lower Formations: Due to the excessive drilling cost to reach the Pennsylvanian formations (about 12,000 feet) and the limited knowledge of the quality and areal extent of productive reservoirs in these formations, it is recommended at this time that they not be tested. We are very short of the necessary data to determine whether the returns will be commensurate with the risk. At present it is logical to test the Pennsylvanian in only the prospects which show extremely large anomalies and with exceptionally high relief.

(2) Cretaceous Formations: The Dakota, Mesa Verde and Pictured Cliffs are the most promising of the Cretaceous formations, and it is recommended that they be adequately tested by drilling.

(a) Dakota: The proposed unit area lies at the approximate geographic center of a triangle with apexes at the Hogback field, Ute dome (and Barker Creek), and the Kutz Canyon (Dakota) fields. Sand development is sufficiently good in the Dakota at the Hogback field to permit commercial oil production there. The same is true of sand development at the Ute dome and Barker Creek fields; here, however, gas instead of oil is produced. The sand appears very tight in the well drilled to the Dakota sand in the Kutz Canyon area. However, it produces some oil and gas. It is within reason to anticipate regional improvement in the Dakota sand moving northwestward from the Kutz Canyon well across the Gallegos Canyon Unit toward the two commercial fields. If sufficient structural relief is present to allow the unit area to be above a possible water table in the Dakota, chances are

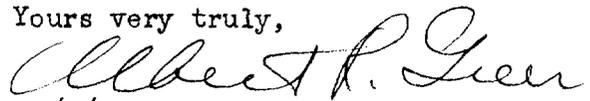
20 February, 1950

reasonably good for commercial production in this area. In view of the high gas-oil ratio at which the Kutz Canyon Dakota well produces, it is possible that the apex of the Gallegos Canyon structure may carry free gas, and that the logical location of a test well would be partly down dip. Should this condition result, it would be imperative to unitize the area to permit orderly development. It is only logical to unitize first.

(b) Mesa Verde Group: These formations are less promising than the Pictured Cliffs or the Dakota, but routine coring and drill stem testing should be done to test these formations in drilling the exploratory Dakota well.

(c) Pictured Cliffs: This formation should be tested by drilling four or five wells. Commercial production is obtained a few miles east of the Gallegos Canyon Area and it is possible that commercial production may result in the unit area. Because of the marginal nature of this production economically, it is difficult to protect correlative rights under ordinary rules and regulations. It is very strongly urged that this formation be unitized so that orderly development may be allowed and correlative rights protected. Because of the mixed ownership (Federal, State, Fee and Indian lands), it is necessary to unitize the Pictured Cliffs formation. Otherwise, protection of correlative rights will impose such an obligation on the lessees as to cause the lands to be more of a liability than is offset by prospective production from the deeper formations.

Yours very truly,


/s/ Albert R. Greer