

CASE NO. 5451: CONSOLIDATED OIL & GAS
INC., FOR DOWNHOLE COMMINGLING, SAN
JUAN COUNTY, NEW MEXICO.

CASE No.

5451

Application,
Transcripts,
Small Exhibits

ETC.

BEFORE THE
NEW MEXICO OIL CONSERVATION COMMISSION
Santa Fe, New Mexico
April 2, 1975

EXAMINER HEARING

IN THE MATTER OF:

Application of Consolidated Oil
and Gas, Inc., for downhole com-
mingling, San Juan County, New
Mexico.

Case No.
5451

BEFORE: Richard L. Stamets, Examiner.

TRANSCRIPT OF HEARING

A P P E A R A N C E S

For the New Mexico Oil
Conservation Commission:

William Carr, Esq.
Legal Counsel for the
Commission
State Land Office Bldg.
Santa Fe, New Mexico

For the Applicant:

W. Thomas Kellahin, Esq.
KELIAHIN & FOX
500 Don Gaspar
Santa Fe, New Mexico

CASE 5451

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I N D E X

PAGE

FLOYD E. ELLISON, JR.

Direct Examination by Mr. Kellahin

3

Cross Examination by Mr. Stamets

9

E X H I B I T S

Marked

Admitted

Applicant's Exhibits Nos.
1 through 6

--

9

THE NYE REPORTING SERVICE
STATE-WIDE DEPOSITION NOTARIES
225 JOHNSON STREET
SANTA FE, NEW MEXICO 87501
TEL. (505) 982-0386

ELLISON-DIRECT

CASE 545₁
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MR. STAMETS: Call the next case, 5451.

MR. CARR: Case 5451. Application of Consolidated Oil and Gas, Inc., for downhole commingling, San Juan County, New Mexico.

MR. KELLAHIN: Tom Kellahin, Kellahin & Fox, Santa Fe, New Mexico, appearing on behalf of the Applicant, and I have one witness to be sworn.

MR. STAMETS: He'll stand and be sworn, please.

(Witness sworn.)

FLOYD E. ELLISON, JR.

called as a witness, having been first duly sworn, was examined and testified as follows:

DIRECT EXAMINATION

BY MR. KELLAHIN:

Q Would you please state your name, by whom you are employed, and in what capacity?

A I'm Floyd E. Ellison, Jr., Consolidated Oil and Gas Company out of Denver, Colorado, and I'm the Area Production Manager.

Q Mr. Ellison, have you previously testified before this Commission and had your qualifications as an expert witness accepted and made a matter of record?

A Yes, I have.

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CASE 5451

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Q And are you familiar with the facts surrounding this particular application by Consolidated?

A Yes, I am.

MR. KELLAHIN: If the Examiner please, are the Witness' qualifications acceptable?

MR. STAMETS: They are.

BY MR. KELLAHIN:

Q Mr. Ellison, would you refer to what has been marked as Applicant's Exhibit No. 1 and identify it and state briefly what Consolidated is seeking?

A All right. The Exhibit No. 1 is a plat of the area surrounding the Linda 1-31 Well in Section 31, Township 27 North, 8 West, San Juan County, New Mexico. I might just point out that I believe that some of these wells that show as let's say Turner I believe are now part of Warfano Unit being operated by El Paso, but basically these are the locations of the well. Consolidated is requesting permission to commingle the Linda 1-31 Well downhole, commingling the Pictured Cliffs Zone with the Mesaverde Zone.

Q Please refer to Exhibit No. 2 and identify it.

A Yes. This is a diagrammatic sketch of the Linda 1-31 Well, and it portrays the present hook-up in

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ELLISON-DIRECT

CASE 5451

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the well as it presently stands, with a hole, which is not designated here, but a hole that would be expected to be approximately opposite the Pictured Cliffs Zones between 1938 and 2014.

Q Is the hole in the tubing what has necessitated the application for downhole commingling?

A That is correct.

Q Please refer to Exhibit 3 and identify it.

A Yes. This is the dual completion order for the Linda 1-31 Well.

Q Would you refer to Exhibit 4 and describe it?

A This is a request to commingle sent the U.S. Geological Survey requesting permission to downhole commingle. In it is set forth the facts and cost to do so, what the problem is, and the basis for feeling that we can properly allocate production to both the Pictured Cliffs and Mesaverde Wells, based upon what is called a P over Z curve versus cumulative curve.

Q Within Exhibit 4 would you turn to the first attachment and describe that table and what conclusions we may draw from it?

A Yes. The first table represents the production from the various zones setting forth the percentages of

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each and also on it shows what we believe to be the remaining reserve to a 50-pound abandonment pressure from January 1st, 1975, and the percentage of remaining reserves to each well based upon this figure.

Q Would you turn to the first graph and describe it?

A Yes. The graph is a P over Z curve versus cumulative, which a straight-line curve is projected to a 50-pound abandonment pressure whereby we attempt to determine what is the remaining reserves for this well in the Pictured Cliffs Zone.

Q All right, and graph No. 2.

A It's the same type of curve but it is for the Mesaverde Zone and abandonment pressure of 50 pounds.

Q As of this date have either or both producing formations reached the state of being marginal?

A They are classed as marginal, if that's what you mean. We are classed as marginal within the rules of the New Mexico Conservation Commission.

Q Would you direct your attention back to the estimated cost of repairs for the tubing and explain for the Examiner what those anticipated costs are?

A All right. We had projected a cost of \$14,700

to repair the well by moving in a rig; prepointing and cutting off the tubing above the sand, and then electronically inspecting the tubing and then running a tubing patch and returning the well to production as a dual producer. Then, if we were to go so far as to try to recover the tubing stubb, which would be left in the hole by cutting it off and trying to repair it from what we know of a similar experience in 1970, that the tubing is sanded in, this would add an estimated \$6000 to this cost, and these costs are based upon experiencing no unusual difficulties.

Q What is the status with regard to the ownership of the two producing formations?

A Ownership for the Pictured Cliffs Zone is the same as that for the Mesaverde Zone as far as working interests are concerned. The royalty -- this is a Navajo Indian allottee situation with it being the same for everyone concerned for the Navajo Indians.

Q Please refer to Exhibit 5 and identify it.

A Exhibit 5 is a request to the Geological Survey in which we were sending in a sundry notice for permission to commingle, and with it, of course, is the form 9-331 requesting permission to commingle.

ELLISON-DIRECT

CASE 5451

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Q All right, and Exhibit No. 6?

A In Exhibit No. 6 is a letter dated February 14 from Carl C. Traywick, acting area Oil and Gas Supervisor for the U.S.G.S. in which he is satisfied with our procedure for dividing up production and basically giving their approval for this downhole commingling.

Q And would you state for the record and for the Examiner what percentages would you allocate to the two zones?

A Based upon our remaining reserves from January 1st, 1975, on, we projected that 42.26 percent of the remaining reserves should be assigned to the Pictured Cliffs Zone and 57.74 percent to the Mesaverde Zone, with all of the oil production being credited to the Mesaverde Zone.

Q Were Exhibits 1 through 6 either prepared by you directly or compiled under your direction and supervision?

A That is correct.

Q In your opinion, Mr. Ellison, will the granting of this Application be in the best interests of conservation, prevention of waste, and a protection of correlative rights?

ELLISON-DIRECT
CROSS

CASE 5451
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A Yes.

MR. KELLAHIN: If the Examiner please, we move the introduction of Exhibits 1 through 6.

MR. STAMETS: Exhibits 1 through 6 will be admitted into evidence.

(Whereupon, Applicant's

Exhibits Nos. 1 through 6 were admitted into evidence.)

MR. KELLAHIN: That concludes our direct examination.

CROSS EXAMINATION

BY MR. STAMETS:

Q Mr. Ellison, is the Mesaverde prorated in this pool?

A The pool is prorated but the well itself is classed as marginal.

Q What about the Ballard-Pictured Cliffs?

A That is no longer under proration.

Q They have one zone prorated and the other zone not?

A That's correct.

Q If these are commingled downhole there will be a single meter at the surface, is that right?

ELLISON-CROSS

CASE 5451

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A That is correct.

Q And as far as reporting is concerned, Consolidated can make that division before filing Form C-115?

A That is correct.

(Whereupon, a discussion was

held off the record.)

MR. STAMETS: Are there any other questions of the Witness?

MR. KELLAHIN: No, sir.

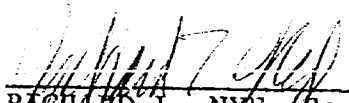
MR. STAMETS: He may be excused. Is there anything further in this case? We will take the case under advisement.

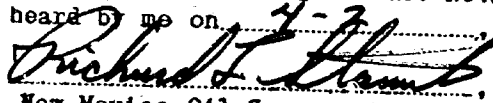
CASE 5451

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STATE OF NEW MEXICO)
COUNTY OF SANTA FE) SS.

I, RICHARD L. NYE, Court Reporter, do hereby certify that the foregoing and attached Transcript of Hearing before the New Mexico Oil Conservation Commission was reported by me, and the same is a true and correct record of the said proceedings, to the best of my knowledge, skill and ability.


RICHARD L. NYE, Court Reporter

I do hereby certify that the foregoing is a complete record of the proceedings in the Examiner hearing of Case No. 5451 heard by me on 3-3-75, 19 75.
, Examiner
New Mexico Oil Conservation Commission

THE NYE REPORTING SERVICE
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OIL CONSERVATION COMMISSION

STATE OF NEW MEXICO
P. O. BOX 2088 - SANTA FE
87501

April 22, 1975

I. R. TRUJILLO
CHAIRMAN

LAND COMMISSIONER
PHIL R. LUCERO
MEMBER

STATE GEOLOGIST
A. L. PORTER, JR.
SECRETARY - DIRECTOR

Mr. Tom Kellahin
Kellahin & Fox
Attorneys at Law
Post Office Box 1769
Santa Fe, New Mexico

Re: CASE NO. 5451
ORDER NO. R-5000

Applicant:

Consolidated Oil & Gas, Inc.

Dear Sir:

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

Very truly yours,

A. L. PORTER, Jr.
Secretary-Director

ALP/ir

Copy of order also sent to:

Hobbs OCC X
Artesia OCC
Aztec OCC X

Other

BEFORE THE OIL CONSERVATION COMMISSION
OF THE STATE OF NEW MEXICO

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

CASE NO. 5451
Order No. R-5000

APPLICATION OF CONSOLIDATED OIL
AND GAS, INC., FOR DOWNHOLE COMMINGLING,
SAN JUAN COUNTY, NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 a.m. on April 2, 1975,
at Santa Fe, New Mexico, before Examiner Richard L. Stamets.

NOW, on this 22nd day of April, 1975, the Commission,
a quorum being present, having considered the testimony, the
record, and the recommendations of the Examiner, and being
fully advised in the premises,

FINDS:

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

(2) That the applicant, Consolidated Oil and Gas, Inc.,
is the owner and operator of the Linda 1-31 Well, located in
Unit M of Section 31, Township 27 North, Range 8 West, NMPM,
San Juan County, New Mexico.

(3) That the subject well is dually completed in the
Ballard-Pictured Cliffs Pool and Blanco-Mesaverde Pool.

(4) That a hole in the Mesaverde tubing opposite the
Pictured Cliffs producing interval has resulted in the
downhole commingling of the production from both zones in
said well.

(5) That the applicant seeks authority to commingle
Ballard-Pictured Cliffs and Blanco-Mesaverde production
within the wellbore of the above-described well to avoid
the unnecessary risk and expense which would be incurred
in performing workover operations to achieve separation of
the producing zones in said well.

(6) That from the Ballard-Pictured Cliffs zone, the
subject well is capable of low rates of production only.

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Case No. 5451
Order No. R-5000

(7) That from the Blanco-Mesaverde zone, the subject well is capable of marginal production only.

(8) That the reservoir characteristics of each of the subject zones are such that underground waste would not be caused by the proposed commingling provided that the well is not shut-in for an extended period.

(9) That the application for downhole commingling should be approved.

(10) That to afford the Commission the opportunity to assess the potential for waste and to expeditiously order appropriate remedial action, the operator should notify the Aztec district office of the Commission any time the subject well is shut-in for 7 consecutive days.

(11) That in order to allocate the commingled production to each of the commingled zones in the subject well, 42 percent of the commingled gas production should be allocated to the Ballard-Pictured Cliffs zone, 58 percent of the commingled gas production to the Blanco-Mesaverde zone, and 100 percent of the commingled oil production to the Blanco-Mesaverde zone.

IT IS THEREFORE ORDERED:

(1) That the applicant, Consolidated Oil and Gas, Inc., is hereby authorized to commingle Ballard-Pictured Cliffs and Blanco-Mesaverde production within the wellbore of the Linda 1-31 Well, located in Unit M of Section 31, Township 27 North, Range 8 West, NMPM, San Juan County, New Mexico.

(2) That 42 percent of the commingled gas production shall be allocated to the Ballard-Pictured Cliffs zone, 58 percent of the commingled gas production shall be allocated to the Blanco-Mesaverde zone, and 100 percent of the commingled oil production shall be allocated to the Blanco-Mesaverde zone.

(3) That the operator of the subject well shall immediately notify the Commission's Aztec district office any time the well has been shut-in for 7 consecutive days and shall concurrently present, to the Commission, a plan for remedial action.

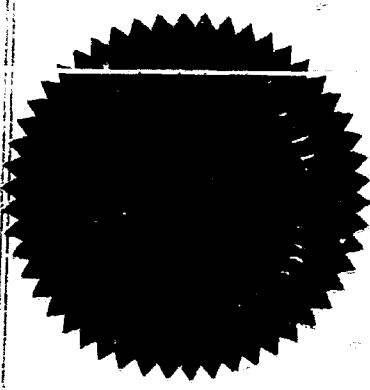
(4) That jurisdiction of this cause is retained for the entry of such further orders as the Commission may deem necessary.

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Case No. 5451
Order No. R-5000

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

STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION



I. R. Trujillo
I. R. TRUJILLO, Chairman

Phil R. Lucero
PHIL R. LUCERO, Member

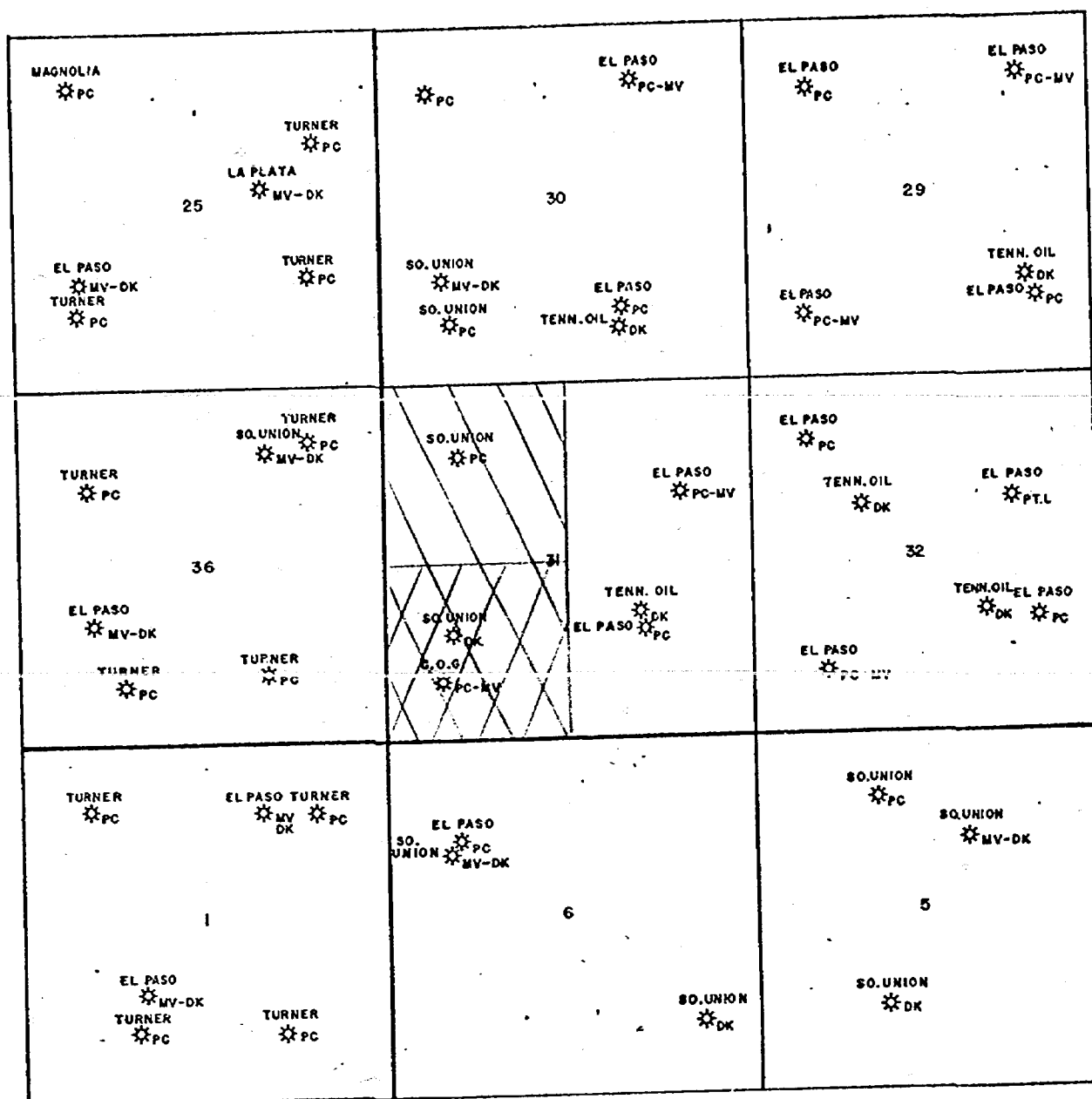
A. L. Porter, Jr.
A. L. PORTER, Jr., Member & Secretary

S E A L

dr/

R9W

R8W

T
27
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N

SAN JUAN COUNTY, NEW MEXICO



MV Unit



PC Unit

BEFORE EXAMINER STAMETS
OIL CONSERVATION COMMISSION

Consolidated EXHIBIT NO. 1

CASE NO. 5451

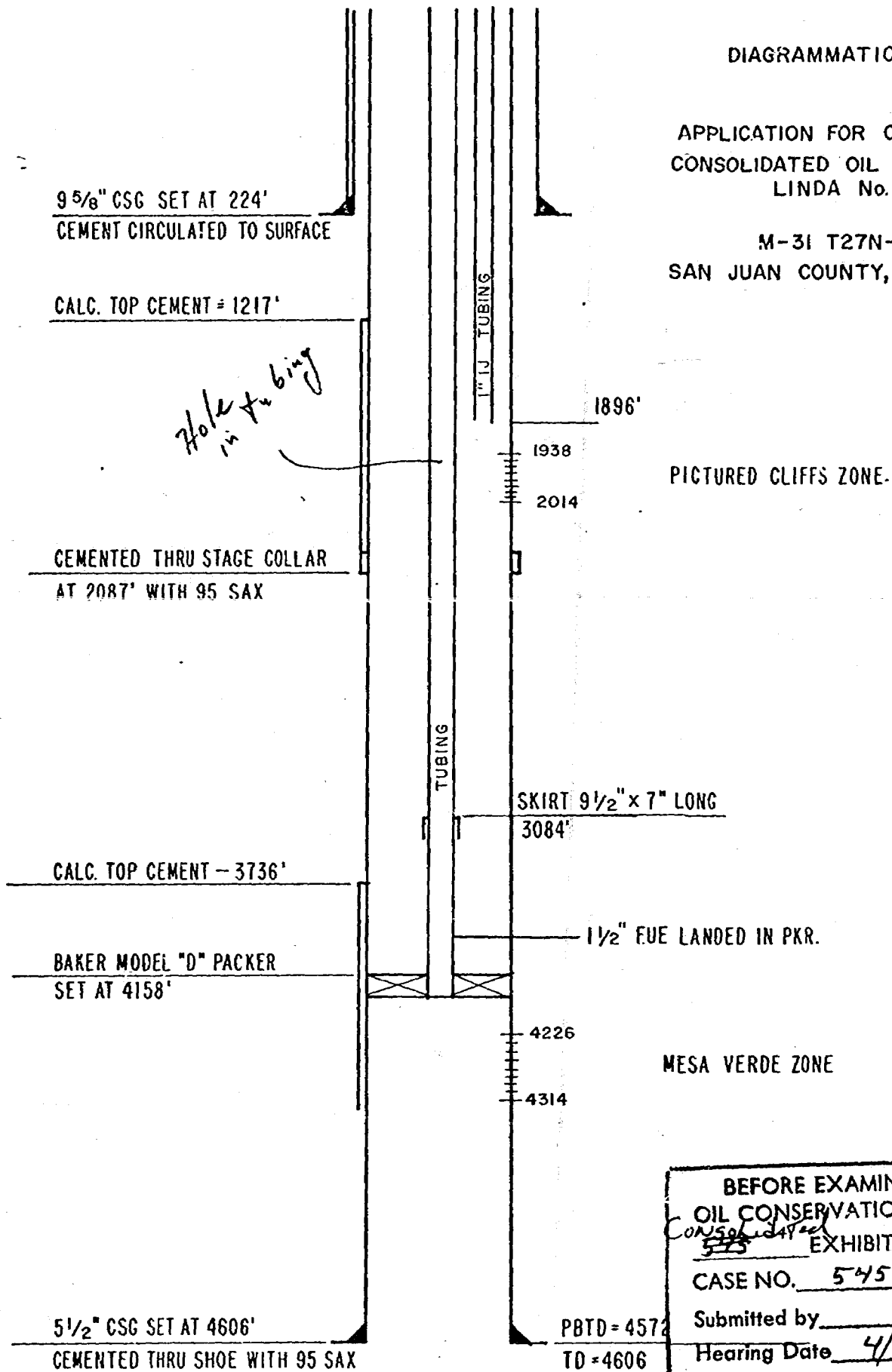
Submitted by _____

Hearing Date _____

DIAGRAMMATIC SKETCH

APPLICATION FOR COMMINGLING
CONSOLIDATED OIL AND GAS, INC.
LINDA No. I-31

M-31 T27N-R8W
SAN JUAN COUNTY, NEW MEXICO



BEFORE EXAMINER STAMETS	
OIL CONSERVATION COMMISSION	
Consolidated	EXHIBIT NO. <u>2</u>
CASE NO. <u>5451</u>	
Submitted by	
Hearing Date	<u>4/2/75</u>

THE APPLICATION OF CONSOLIDATED
OIL & GAS, INC. FOR A DUAL
COMPLETION.

ORDER NO. MC-1270

ADMINISTRATIVE ORDER
OF THE OIL CONSERVATION COMMISSION

Under the provisions of Rule 112-A, Consolidated Oil & Gas, Inc. made application to the New Mexico Oil Conservation Commission on December 17, 1962, for permission to dually complete its Linda Well No. 1-31 located in Unit M of Section 31, Township 27 North, Range 8 West, NMPM, San Juan County, New Mexico, in such a manner as to produce gas from the Ballard-Pictured Cliffs Pool and the Mesaverde Formation adjacent to the Blanco-Mesaverde Pool.

Now, on this 7th day of January, 1963, the Secretary-Director finds:

- (1) That application has been duly filed under the provisions of Rule 112-A of the Commission's Rules and Regulations;
- (2) That satisfactory information has been provided that all operators of offset acreage have been duly notified; and
- (3) That no objections have been received within the waiting period as prescribed by said rule.
- (4) That the proposed dual completion will not cause waste nor impair correlative rights.
- (5) That the mechanics of the proposed dual completion are feasible and consonant with good conservation practices.

IT IS THEREFORE ORDERED:

That the applicant herein, Consolidated Oil & Gas, Inc., be and the same is hereby authorized to dually complete its Linda Well No. 1-31 located in Unit M of Section 31, Township 27 North, Range 8 West, NMPM, San Juan County, New Mexico, in such a manner as to produce gas from the Ballard-Pictured Cliffs Pool and the Mesaverde Formation adjacent to the Blanco-Mesaverde Pool through parallel strings of tubing.

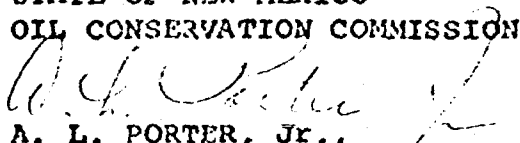
PROVIDED HOWEVER, That applicant shall complete, operate, and produce said well in accordance with the provisions of Rule 112-A.

PROVIDED FURTHER, That applicant shall take packer-leakage tests upon completion and annually thereafter during the Annual Deliverability Test Period for the Blanco-Mesaverde Pool.

IT IS FURTHER ORDERED: That jurisdiction of this cause is hereby retained for the entry of such further orders as the Commission may deem necessary.

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

BEFORE EXAMINER STAMETS OIL CONSERVATION COMMISSION
Consolidated EXHIBIT NO. <u>3</u>
CASE NO. <u>5451</u>
Submitted by _____
Hearing Date <u>SEAL 4/2/75</u>

STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION

A. L. PORTER, Jr.,
Secretary-Director

Well file

BEFORE EXAMINER STAMETS	
OIL CONSERVATION COMMISSION	
<i>Consolidated</i>	EXHIBIT NO. <u>4</u>
CASE NO. <u>5451</u>	
Submitted by _____	
Hearing Date <u>4/8/75</u>	

January 24, 1975

U. S. Geological Survey
Department of the Interior
P. O. Box 959
Farmington, New Mexico 87401

Re: Request to Commingle
Pictured Cliff and Mesaverde Zones
Linda 1-31
Ballard Pictured Cliff Field
Blanco Mesaverde Field
SW/4 Sec. 31-T27N-R8W
San Juan County, New Mexico

Gentlemen:

Consolidated Oil & Gas, Inc. is requesting permission to commingle the Pictured Cliff and Mesaverde zones in Linda 1-31 well and to allocate production 42.26% and 57.74% respectively, based on an engineering evaluation of remaining reserves from January 1, 1975 to an abandonment pressure of 50 psig.

Downhole communications of the Pictured Cliff and Mesaverde zones recently occurred, apparently caused by a hole in the Mesaverde production tubing. Corrective action is, therefore, necessary either by repairing the communications problem or by obtaining permission to commingle the two zones and allocate production. A similar problem occurred earlier in the well and was corrected in 1970.

The Mesaverde tubing is sanded in above the permanent packer with frac sand. Repair of the problem will require moving in a workover unit, killing both zones, freepointing and cutting off the tubing above the sand, electronically inspecting the tubing, running a tubing patch and/or washing over and recovering the tubing stub, and returning the well to production as a dual producer. The estimated cost to repair the situation by running a tubing patch is estimated at \$14,700 if no problems are encountered, whereas, correcting the problem by washing over and recovering the tubing stub would add an estimated \$6,000 to the cost if no problems are encountered.

U. S. Geological Survey
January 24, 1975
Page 2

It is Consolidated's understanding that the W/2 of Section 31-T21N-R8W is covered by one base lease from Navajo Indian allottees. Since the working interest owners in the Pictured Cliff and Mesaverde zones are the same and the royalty interest is the same, both royalty and working interests are protected no matter how the production is divided. Thus, from a practical standpoint, the only valid reason for division of production is to properly allocate the production to both zones for bookkeeping purposes. This allocation, we feel, can be done in the following manner:

When production decline curves can not be used with any degree of accuracy due to allowables, changing line pressure, etc., disrupting production performance -- as is the case for the Linda 1-31 well, one of the more acceptable engineering methods to determine gas reserves is to plot a well's static bottom-hole pressure, corrected for compressibility, against the well's cumulative production. Plotting of these points should result in a straight line on coordinate paper if the reservoir is allowed to build to its absolute static condition and the proper compressibility (Z) factor is used. This we have done for both the Pictured Cliff and Mesaverde zones in the Linda 1-31 using the yearly wellhead shut-in pressures reported to the New Mexico Oil Conservation Commission corrected for compressibility to bottom-hole conditions with the aid of a Garrett Computing Systems program. As Graphs I and II demonstrate, a very good straight line fit can be made to the Pictured Cliff points while a reasonably good straight line fit can be made to the Mesaverde points when certain explainable anomalous points are excluded. Using the line fits shown on Graphs I and II and projecting to an abandonment economic limit of 50 psig, the projected ultimate production for the Pictured Cliff is 765,000 Mcf and the projected ultimate production for the Mesaverde is 1,580,000 Mcf. Based on these projections, the remaining reserves from January 1, 1975 for the Pictured Cliff are 342,550 Mcf and 467,960 Mcf for the Mesaverde, or 42.26% and 57.74%, respectively, of the total remaining reserves. (See attached Table I.)

Production history since the hole was repaired in the tubing in 1970 shows a gradual increase in the Pictured Cliff's share of total production due, apparently, to the pressure differential between the zones and the line pressure changing as well as the lowering of the line pressure. The Pictured Cliff share of the total was 30.71% in 1971, 35.37% in 1972 and 43.55% in 1973. A review of production curves suggests only the first 8 months of 1973 should be used for a corrected share of 38.43% since a gradual increase in Pictured Cliff production corresponds with a gradual loss in Mesaverde production beginning in September indicating the

U. S. Geological Survey
January 24, 1975
Page 3

start and enlargement of the tubing hole. This shift toward the Pictured Cliff producing a larger percentage of the total over the last several years supports the crediting of the Pictured Cliff with a larger percentage of the remaining reserves than it produces on a current rate basis.

Even though the approximate current producing rate of 150 Mcf/D from the Pictured Cliff and 230 Mcf/D from the Mesaverde would pay out the tubing repair work assuming no problems are encountered and another hole does not develop at some future date, Consolidated feels the workover expense to correct the communications problem is an unnecessary allocation of resources for both Consolidated and the public. We base our position on the fact that both royalty and working interest owners will be properly protected and production from the well can be adequately allocated to the two zones for bookkeeping purposes. We, therefore, request approval to commingle production from the Pictured Cliff and Mesaverde zones in the Linda 1-31 well and allocate future production 42.26% to the Pictured Cliff zone and 57.74% to Mesaverde zone, based on the above described reserve projection.

Yours very truly,

CONSOLIDATED OIL & GAS, INC.

Floyd E. Ellison, Jr.
Area Production Manager

FEE:lt
Attach.

TABLE I

Linda 1-31

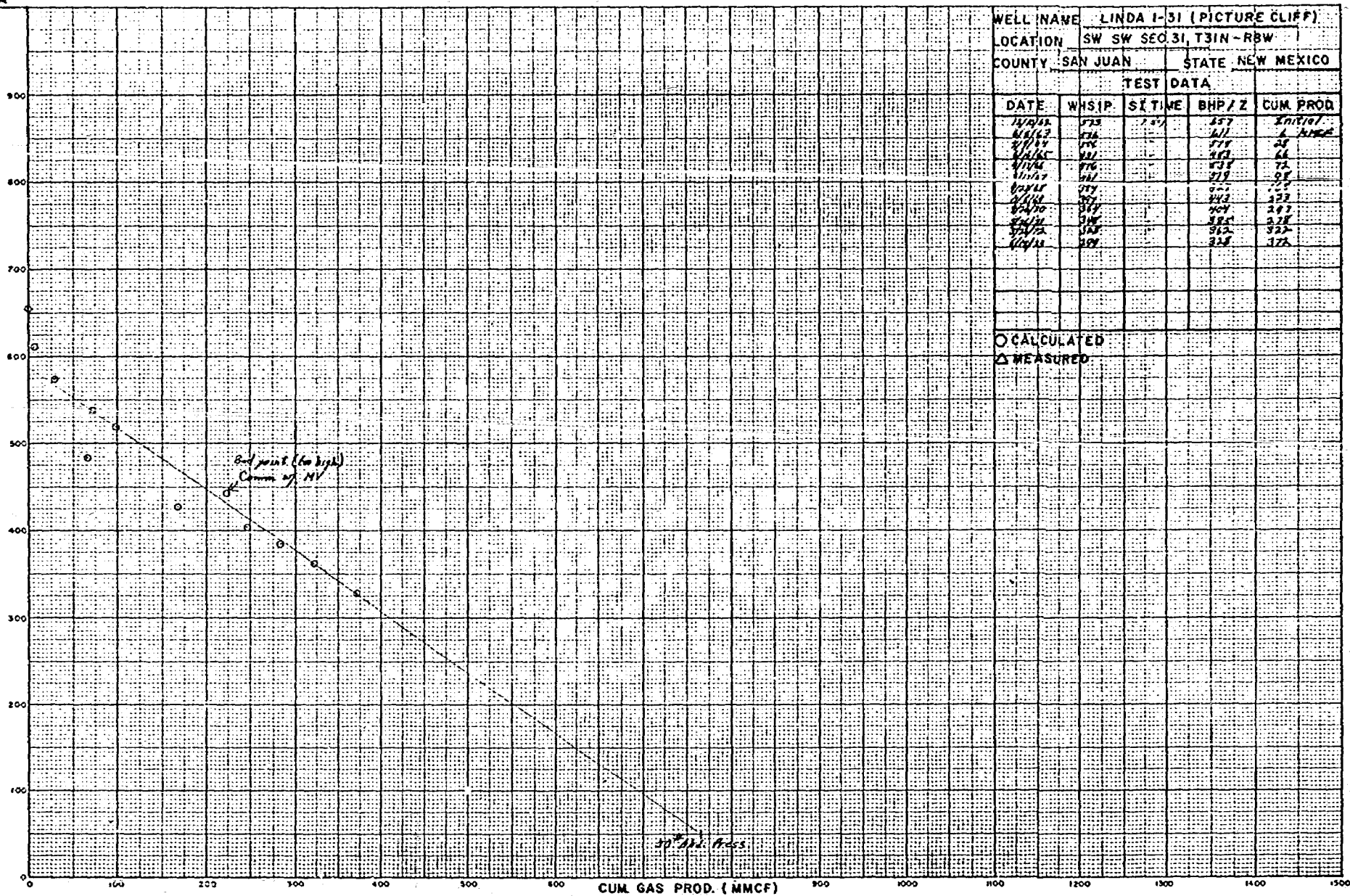
<u>Year</u>	<u>Pictured Cliff</u>	<u>Mesaverde</u>	<u>Total</u>	<u>Percentage Production</u>	
	<u>Production</u>	<u>Production</u>	<u>Production</u>	<u>Pictured Cliff</u>	<u>Mesaverde</u>
1970	Not representative. Communications problem corrected during year				
1971	42,817	96,601	139,418	30.71	69.29
1972	47,541	86,884	134,425	35.37	64.63
1973 (total year)	56,952	73,816	130,768	43.55	56.49 *
1973 (1st 8 mos.)	33,086	53,000	86,086	38.43	61.57

* Not representative. Communications problem appear to have developed late in year.

Remaining Reserves to 50# Abandonment Pressure
as of January 1, 1975

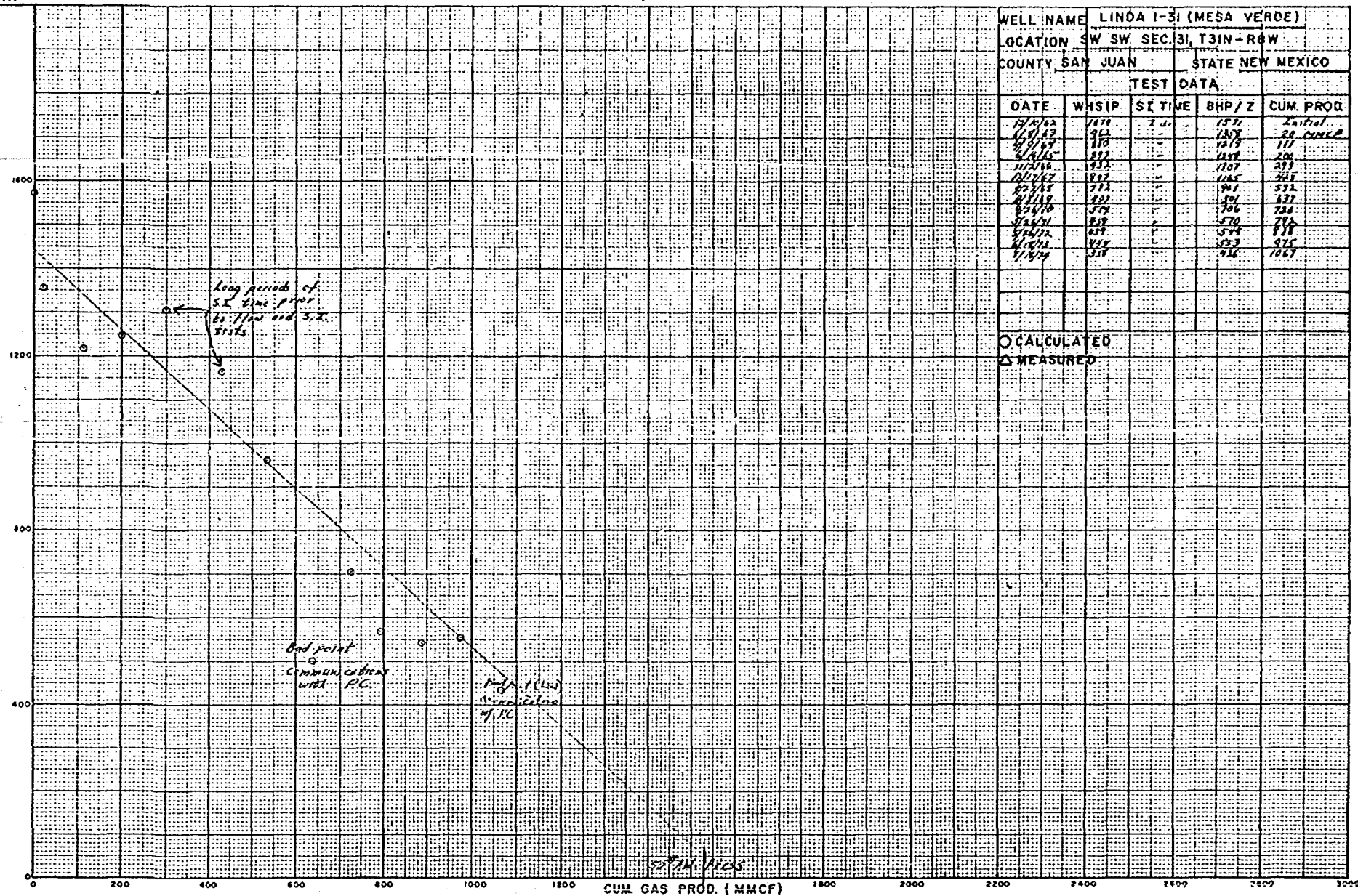
	<u>Pictured Cliff</u>	<u>Mesaverde</u>	<u>Total</u>
Ultimate	765,000	1,580,000	
Cum. 1/1/75	<u>422,450</u>	<u>1,112,040</u>	
Remaining Reserves	342,550	467,960	810,510
% Remaining Reserves	42.26%	57.74%	

BHP/Z
PSIA



Graph I

BHP/Z
PSIA



Graph II

W. file

January 24, 1975

U. S. Geological Survey
Department of the Interior
P. O. Box 959
Farmington, New Mexico 87401

Re: Linda 1-31
Sec. 31-T27N-8W
San Juan County, New Mexico

Gentlemen:

Enclosed are five copies of Form 9-331, "Sundry Notices
and Reports on Wells," requesting permission to commingle the
Pictured Cliff and Mesaverde zones in the Linda 1-31 well.

Yours very truly,

CONSOLIDATED OIL & GAS, INC.

Floyd E. Ellison, Jr.
Area Production Manager

FEE:lt
Enclosures

BEFORE EXAMINER STAMETS OIL CONSERVATION COMMISSION	
<i>Consolidated</i>	EXHIBIT NO. <u>5</u>
CASE NO. <u>5451</u>	
Submitted by _____	
Hearing Date <u>4/2/75</u>	

Form 9-331
(May 1963)

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

SUBMIT IN TRIPL
(Other Instructions on reverse side)

Form approved.
Budget Bureau No. 42-R1424.
5. LEASE DESIGNATION AND SERIAL NO.

SUNDY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir.
Use "APPLICATION FOR PERMIT" for such proposals.)

1. OIL ☐ GAS ☒ OTHER ☐

2. NAME OF OPERATOR
Consolidated Oil & Gas, Inc.

3. ADDRESS OF OPERATOR
1860 Lincoln Street, Denver, Colorado 80203

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.
See also space 17 below.)
At surface
SW/4 Sec. 31-T27N-R8W

6. IF INDIAN, ALLOTTEE OR TRIBE NAME
1-149-Ind. 8469

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME
Linda

9. WELL NO.
1-31

10. FIELD AND FOOT, OR WILDCAT
Blanco MV Ballard PC

11. SEC., T., R., N., OR S.E., AND
SURVEY OR AREA
Sec. 31-T27N-R8W

12. COUNTY OR PARISH
San Juan

13. STATE
New Mex.

14. PERMIT NO.

15. ELEVATIONS (Show whether DF, RT, CR, etc.)
KB 6094

Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data

16.

NOTICE OF INTENTION TO:

TEST WATER SHUT-OFF
FRACTURE TREAT
SHOOT OR ACIDIZE
REPAIR WELL
(Other)

PULL OR ALTER CASING
MULTIPLE COMPLETE
ABANDON*
CHANGE PLANS
Commingle

WATER SHUT-OFF
FRACTURE TREATMENT
SHOOTING OR ACIDIZING
(Other)

REPAIRING WELL
ALTERING CASING
ABANDONMENT*

(Note: Report results of multiple completion on Well
Completion or Recombination Report and Log form.)

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)

Consolidated requests permission to commingle production from the Pictured Cliff and Mesaverde formations in subject well. Royalty and working interest owners are the same in both zones. Allocation of gas production would be 42.26% to the Pictured Cliff and 57.74% to the Mesaverde based on an engineering estimate of remaining reserves from January 1, 1975 to an abandonment pressure of 50 psig determined by plotting BHP/Z vs. cumulative gas. All produced oil would be credited to the Mesaverde since the Pictured Cliff has not produced any oil in the past.

18. I hereby certify that the foregoing is true and correct

SIGNED

Floyd E. Ellington Jr.

TITLE

Area Production Manager

DATE

Jan. 24, 1975

(This space for Federal or State office use)

TITLE

DATE

APPROVED BY
CONDITIONS OF APPROVAL, IF ANY:

*See Instructions on Reverse Side



United States Department of the Interior

GEOLOGICAL SURVEY

P. O. Drawer 1857
Roswell, New Mexico 88201

February 14, 1975

Consolidated Oil & Gas Inc.
1860 Lincoln St.
Denver, Colorado 80203

Attn: Floyd E. Ellison, Jr.

Gentlemen:

Your letter of January 24, 1975, with attachments, requests approval for the downhole commingling of production from the Mesaverde and Pictured Cliffs zones of your No. 1 Linda dual completion well, located in the SW $\frac{1}{4}$ sec. 31, T. 27 N., R. 8 W., San Juan County, New Mexico.

As outlined in your letter, mechanical failure of the tubing has allowed communication to occur and remedial work would involve hazards and expense not justified provided commingling is approved by this office and by a hearing with the New Mexico Oil & Gas Conservation Commission.

The method you propose would allow both zones to commingle and be produced as one unit with allocation for each zone being based on a "remaining reserves" projection plot using 42.26% for the Pictured Cliffs zone and 57.74% to the Mesaverde zone.

The method you propose for the commingling of the zones is satisfactory to this office. Form 9-361, Lessees Monthly Report of Sales and Royalties, must show all computations used in the allocation. Like approval must be obtained by hearing with the N.M.O.C.C.

Sincerely yours,

CARL C. TRAYWICK
Acting Area Oil & Gas Supervisor

BEFORE EXAMINER STAMETS OIL CONSERVATION COMMISSION	
Consolidated	EXHIBIT NO. <u>6</u>
CASE NO.	<u>5451</u>
Submitted by	_____
Hearing Date	<u>4/2/75</u>

Docket No. 8-75

Dockets Nos. 9-75 and 10-75 are tentatively set for hearing on April 16 and April 30, 1975. Applications for hearing must be filed at least 22 days in advance of hearing date.

DOCKET: EXAMINER HEARING - WEDNESDAY - APRIL 2, 1975

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

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

CASE 5408: (Continued from the March 5, 1975, Examiner Hearing)

In the matter of the hearing called by the Oil Conservation Commission on its own motion to permit W. E. Medlock and Reliance Insurance Company and all other interested parties to appear and show cause why the Queen Ridge No. 1 Well located in Unit M of Section 36, Township 10 South, Range 26 East, Chaves County, New Mexico, should not be plugged and abandoned in accordance with a Commission-approved plugging program.

CASE 5449: Application of Belco Petroleum Corporation for compulsory pooling, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks an order pooling all mineral interests of Pennsylvanian age or older underlying the W/2 of Section 20, Township 22 South, Range 27 East, South Carlsbad-Morrow Gas Pool, Eddy County, New Mexico, to be dedicated to its Belco Martin Well No. 1, to be drilled at a standard location for said unit. Also to be considered will be the cost of drilling and completing said well and the allocation of such costs as well as actual operating costs and charges for supervision. Also to be considered will be the designation of the applicant as operator of the well and a charge for the risk involved in drilling said well.

CASE 5450: Application of Texaco Inc., for downhole commingling, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to commingle East Weir-Blinberry and Skaggs-Drinkard production in the wellbore of its M. B. Weir "B" Federal Well No. 9, located in Unit O of Section 12, Township 20 South, Range 37 East, Lea County, New Mexico.

CASE 5451: Application of Consolidated Oil and Gas, Inc., for downhole commingling, San Juan County, New Mexico. Applicant, in the above-styled cause, seeks authority to commingle Ballard-Pictured Cliffs and Blanco-Mesaverde production in the wellbore of its Linda 1-31 Well, located in Unit M of Section 31, Township 27 North, Range 8 West, San Juan County, New Mexico.

CASE 5452: Application of Dugan Production Corporation for downhole commingling, San Juan County, New Mexico. Applicant, in the above-styled cause, seeks authority to commingle Totah-Gallup Oil and Basin-Dakota Gas production in the wellbore of its Federal I well No. 1, located at a standard location in Unit E of Section 11, Township 29 North, Range 14 West, San Juan County, New Mexico.

CASE 5453: Application of Dugan Production Corporation for a non-standard gas proration unit and downhole commingling, Rio Arriba County, New Mexico. Applicant, in the above-styled cause, seeks approval for a 160-acre non-standard gas proration unit comprising the SW/4 of Section 14, Township 24 North, Range 5 West, Basin-Dakota Pool, Rio Arriba County, New Mexico, to be dedicated to a well at a standard location in Unit L of said Section 14. Applicant further seeks authority to commingle Otero-Gallup Oil and Basin-Dakota Gas production in the wellbore of said well.

CASE 5448: Southeastern New Mexico nomenclature case calling for the creation, extension, and abolishment of certain pools in Lea and Chaves Counties, New Mexico:

(a) CREATE A new pool in Lea County, New Mexico, classified as a gas pool for Morrow production and designated as the Legg-Morrow Gas Pool. The discovery well is the Brunson & McKnight, Inc. R. F. Leggett Well No. 1 located in Unit H of Section 33, Township 21 South, Range 33 East, NMPM. Said pool would comprise:

TOWNSHIP 21 SOUTH, RANGE 33 EAST, NMPM
SECTION 33: E/2

(b) CREATE A new pool in Lea County, New Mexico, classified as an oil pool for Bone Springs production and designated as the East Lusk-Bone Springs Pool. The discovery well is the Sun Oil Company Jennings Federal Com Well No. 1 located in Unit F of Section 15, Township 19 South, Range 32 East, NMPM. Said pool would comprise:

TOWNSHIP 19 SOUTH, RANGE 32 EAST, NMPM
SECTION 15: NW/4

(c) ABOLISH the East Skaggs-Drinkard Gas Pool in Lea County, New Mexico, described as:

TOWNSHIP 20 SOUTH, RANGE 38 EAST, NMPM
SECTION 19: SE/4

(d) EXTEND the Skaggs-Drinkard Pool in Lea County, New Mexico, to include therein:

TOWNSHIP 20 SOUTH, RANGE 38 EAST, NMPM
SECTION 18: N/2 and SE/4
SECTION 19: E/2

(e) EXTEND the Corbin-Abo Pool in Lea County, New Mexico, to include therein:

TOWNSHIP 17 SOUTH, RANGE 32 EAST, NMPM
SECTION 36: NW/4

(f) EXTEND the South Corbin-Morrow Gas Pool in Lea County, New Mexico, to include therein:

TOWNSHIP 18 SOUTH, RANGE 33 EAST, NMPM
SECTION 17: W/2
SECTION 18: E/2
SECTION 20: W/2

(g) EXTEND the D-K Drinkard Pool in Lea County, New Mexico, to include therein:

TOWNSHIP 20 SOUTH, RANGE 39 EAST, NMPM
SECTION 30: SW/4

(h) EXTEND the Hobbs-Drinkard Pool in Lea County, New Mexico, to include therein:

TOWNSHIP 18 SOUTH, RANGE 38 EAST, NMPM
SECTION 33: NE/4

(i) EXTEND the Querecho Plains-Queen Pool in Lea County, New Mexico, to include therein:

TOWNSHIP 18 SOUTH, RANGE 32 EAST, NMPM
SECTION 23: NW/4

(j) EXTEND the Sawyer-San Andres Gas Pool in Lea County, New Mexico, to include therein:

TOWNSHIP 9 SOUTH, RANGE 38 EAST, NMPM
SECTION 9: Lots 3 and 4 and W/2 SW/4

(k) EXTEND the North Shoe Bar-Wolfeamp Pool in Lea County, New Mexico, to include therein:

TOWNSHIP 16 SOUTH, RANGE 35 EAST, NMPM
SECTION 14: SW/4

(l) EXTEND the Sulimar-Queen Pool in Chaves County, New Mexico, to include therein:

TOWNSHIP 15 SOUTH, RANGE 30 EAST, NMPM
SECTION 19: NW/4

(m) EXTEND the Wantz-Granite Wash Pool in Lea County, New Mexico, to include therein:

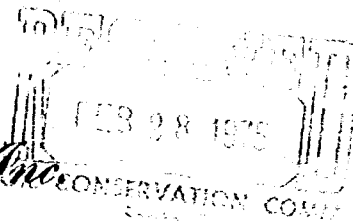
TOWNSHIP 22 SOUTH, RANGE 37 EAST, NMPM
SECTION 1: NW/4



LINCOLN TOWER BUILDING
1860 LINCOLN STREET
DENVER, COLORADO 80203
(303) 255-1751

Consolidated Oil & Gas, Inc.

Case 5451



February 26, 1975

New Mexico Oil Conservation Commission
State Land Office Building
Santa Fe, New Mexico 87501

Re: Application to Commingle
Pictured Cliffs & Mesaverde Zones
Linda 1-31
Ballard Pictured Cliffs Field
Blanco Mesaverde Field
SW/4 Sec. 31-T27N-R8W
San Juan County, New Mexico

Gentlemen:

Consolidated Oil & Gas, Inc. hereby makes application for a hearing, at the earliest possible date, to commingle the Pictured Cliffs and Mesaverde zones in the Linda 1-31 well located in the SW/4 Sec. 31-T27N-R8W, San Juan County, New Mexico.

In support of this application we are sending to you a copy of our request to the U. S. Geological Survey for permission to commingle which outlines our position and method of allocation. Also enclosed is a copy of a letter from the U. S. Geological Survey dated February 14, 1975, expressing approval to commingle using the production allocation method we proposed if like approval is obtained from the New Mexico Oil Conservation Commission. It is our understanding the U. S. Geological Survey has already forwarded to you several copies of our request to them after they had reviewed and approved our request.

Yours very truly,

CONSOLIDATED OIL & GAS, INC.

Floyd E. Ellison, Jr.

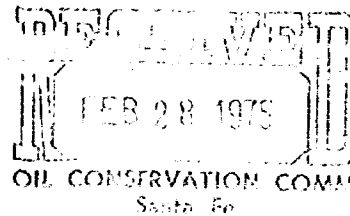
Floyd E. Ellison, Jr.
Area Production Manager

FEE:lt
Enclosures

DOCKET MAILED

Date 3-21-75

*Copy 5451
W. file*



January 24, 1975

U. S. Geological Survey
Department of the Interior
P. O. Box 959
Farmington, New Mexico 87401

Re: Linda 1-31
Sec. 31-T27N-8W
San Juan County, New Mexico

Gentlemen:

Enclosed are five copies of Form 9-331, "Sundry Notices
and Reports on Wells," requesting permission to commingle the
Pictured Cliff and Mesaverde zones in the Linda 1-31 well.

Yours very truly,

CONSOLIDATED OIL & GAS, INC.

Floyd E. Ellison, Jr.
Area Production Manager

FEE:lt
Enclosures

Form 9-331
(May 1963)

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

SUBMIT IN TRIPL. RE.
(Other instructions on re-
verse side)

Form approved.
Budget Bureau No. 42-R1424.

5. LEASE DESIGNATION AND SERIAL NO.

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

1-149-Ind. 8469

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME

Linda

9. WELL NO.

1-31

10. FIELD AND POOL, OR WILDCAT

Blanco MV Ballard PC

11. SEC., T., R., N., OR ELM, AND
SURVEY OR AREA

Sec. 31-T27N-R8W

14. PERMIT NO.

15. ELEVATIONS (Show whether DF, RT, CR, etc.)

KB 6094

12. COUNTY OR PARISH

13. STATE

San Juan

New Mex.

16. Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:

STOP WATER SHUT-OFF

FRACTURE TREAT

SHOOT OR ACIDIZE

REPAIR WELL

(Other)

PULL OR ALTER CASING

MULTIPLE COMPLETE

ABANDON*

CHANGE PLANS

Commingle

SUBSEQUENT REPORT OF:

WATER SHUT-OFF

FRACTURE TREATMENT

SHOOTING OR ACIDIZING

(Other)

REPAIRING WELL

ALTERING CASING

ABANDONMENT*

(NOTE: Report results of multiple completion on well
Completion or Recompletion Report and Log form.)

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)

Consolidated requests permission to commingle production from the Pictured Cliff and Mesaverde formations in subject well. Royalty and working interest owners are the same in both zones. Allocation of gas production would be 42.26% to the Pictured Cliff and 57.74% to the Mesaverde based on an engineering estimate of remaining reserves from January 1, 1975 to an abandonment pressure of 50 psig determined by plotting BHP/Z vs. cumulative gas. All produced oil would be credited to the Mesaverde since the Pictured Cliff has not produced any oil in the past.

18. I hereby certify that the foregoing is true and correct

SIGNED

TITLE

Area Production Manager

DATE

Jan. 24, 1975

(This space for Federal or State office use)

APPROVED BY

TITLE

DATE

CONDITIONS OF APPROVAL, IF ANY:

*See Instructions on Reverse Side

Case 5451

P. O. Drawer 1857
Roswell, New Mexico 88201

February 14, 1975

Consolidated Oil & Gas Inc.
1860 Lincoln St.
Denver, Colorado 80203

Attn: Floyd E. Ellison, Jr.

Gentlemen:

Your letter of January 24, 1975, with attachments, requests approval for the downhole commingling of production from the Mesaverde and Pictured Cliffs zones of your No. 1 Linda dual completion well, located in the SW $\frac{1}{4}$ sec. 31, T. 27 N., R. 8 W., San Juan County, New Mexico.

As outlined in your letter, mechanical failure of the tubing has allowed communication to occur and remedial work would involve hazards and expense not justified provided commingling is approved by this office and by a hearing with the New Mexico Oil & Gas Conservation Commission.

The method you propose would allow both zones to commingle and be produced as one unit with allocation for each zone being based on a "remaining reserves" projection plot using 42.26% for the Pictured Cliffs zone and 57.74% to the Mesaverde zone.

The method you propose for the commingling of the zones is satisfactory to this office. Form 9-361, Lessees Monthly Report of Sales and Royalties, must show all computations used in the allocation. Like approval must be obtained by hearing with the N.M.O.C.C.

Sincerely yours,

(ORIG. SGD.) CARL C. TRAYWICK

CARL C. TRAYWICK
Acting Area Oil & Gas Supervisor

cc:
/ NMOCC, Santa Fe
Farmington
Accounts

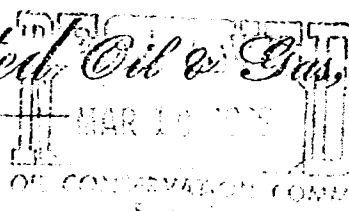
MLSeelinger:st
2-10-75

See hearing (Energy Council)



LINCOLN TOWER BUILDING
1860 LINCOLN STREET
DENVER, COLORADO 80203
(303) 255-1751

Consolidated Oil & Gas, Inc.



Cons. No. 5451

RECEIVED

JAN 29 1975

U. S. GEOLOGICAL SURVEY
FARMINGTON, N. M.

January 24, 1975



U. S. Geological Survey
Department of the Interior
P. O. Box 959
Farmington, New Mexico 87401

Re: Request to Commingle
Pictured Cliff and Mesaverde Zones
Linda 1-31
Ballard Pictured Cliff Field
Blanco Mesaverde Field
SW/4 Sec. 31-T27N-R8W
San Juan County, New Mexico

Gentlemen:

Consolidated Oil & Gas, Inc. is requesting permission to commingle the Pictured Cliff and Mesaverde zones in Linda 1-31 well and to allocate production 42.26% and 57.74% respectively, based on an engineering evaluation of remaining reserves from January 1, 1975 to an abandonment pressure of 50 psig.

Downhole communications of the Pictured Cliff and Mesaverde zones recently occurred, apparently caused by a hole in the Mesaverde production tubing. Corrective action is, therefore, necessary either by repairing the communications problem or by obtaining permission to commingle the two zones and allocate production. A similar problem occurred earlier in the well and was corrected in 1970.

The Mesaverde tubing is sanded in above the permanent packer with frac sand. Repair of the problem will require moving in a workover unit, killing both zones, freepointing and cutting off the tubing above the sand, electronically inspecting the tubing, running a tubing patch and/or washing over and recovering the tubing stub, and returning the well to production as a dual producer. The estimated cost to repair the situation by running a tubing patch is estimated at \$14,700 if no problems are encountered, whereas, correcting the problem by washing over and recovering the tubing stub would add an estimated \$6,000 to the cost if no problems are encountered.

U. S. Geological Survey
January 24, 1975
Page 2

It is Consolidated's understanding that the W/2 of Section 31-T21N-R8W is covered by one base lease from Navajo Indian allottees. Since the working interest owners in the Pictured Cliff and Mesaverde zones are the same and the royalty interest is the same, both royalty and working interests are protected no matter how the production is divided. Thus, from a practical standpoint, the only valid reason for division of production is to properly allocate the production to both zones for bookkeeping purposes. This allocation, we feel, can be done in the following manner:

When production decline curves can not be used with any degree of accuracy due to allowables, changing line pressure, etc., disrupting production performance -- as is the case for the Linda 1-31 well, one of the more acceptable engineering methods to determine gas reserves is to plot a well's static bottom-hole pressure, corrected for compressibility, against the well's cumulative production. Plotting of these points should result in a straight line on coordinate paper if the reservoir is allowed to build to its absolute static condition and the proper compressibility (Z) factor is used. This we have done for both the Pictured Cliff and Mesaverde zones in the Linda 1-31 using the yearly wellhead shut-in pressures reported to the New Mexico Oil Conservation Commission corrected for compressibility to bottom-hole conditions with the aid of a Garrett Computing Systems program. As Graphs I and II demonstrate, a very good straight line fit can be made to the Pictured Cliff points while a reasonably good straight line fit can be made to the Mesaverde points when certain explainable anomalous points are excluded. Using the line fits shown on Graphs I and II and projecting to an abandonment economic limit of 50 psig, the projected ultimate production for the Pictured Cliff is 765,000 Mcf and the projected ultimate production for the Mesaverde is 1,580,000 Mcf. Based on these projections, the remaining reserves from January 1, 1975 for the Pictured Cliff are 342,550 Mcf and 467,960 Mcf for the Mesaverde, or 42.26% and 57.74%, respectively, of the total remaining reserves. (See attached Table I.)

Production history since the hole was repaired in the tubing in 1970 shows a gradual increase in the Pictured Cliff's share of total production due, apparently, to the pressure differential between the zones and the line pressure changing as well as the lowering of the line pressure. The Pictured Cliff share of the total was 30.71% in 1971, 35.37% in 1972 and 43.55% in 1973. A review of production curves suggests only the first 8 months of 1973 should be used for a corrected share of 38.43% since a gradual increase in Pictured Cliff production corresponds with a gradual loss in Mesaverde production beginning in September indicating the

U. S. Geological Survey
January 24, 1975
Page 3

start and enlargement of the tubing hole. This shift toward the Pictured Cliff producing a larger percentage of the total over the last several years supports the crediting of the Pictured Cliff with a larger percentage of the remaining reserves than it produces on a current rate basis.

Even though the approximate current producing rate of 150 Mcf/D from the Pictured Cliff and 230 Mcf/D from the Mesaverde would pay out the tubing repair work assuming no problems are encountered and another hole does not develop at some future date, Consolidated feels the workover expense to correct the communications problem is an unnecessary allocation of resources for both Consolidated and the public. We base our position on the fact that both royalty and working interest owners will be properly protected and production from the well can be adequately allocated to the two zones for bookkeeping purposes. We, therefore, request approval to commingle production from the Pictured Cliff and Mesaverde zones in the Linda 1-31 well and allocate future production 42.26% to the Pictured Cliff zone and 57.74% to Mesaverde zone, based on the above described reserve projection.

Yours very truly,

CONSOLIDATED OIL & GAS, INC.

Floyd E. Ellison, Jr.

Floyd E. Ellison, Jr.
Area Production Manager

FEE:lt
Attach.



TABLE I

Linda 1-31

RECEIVED

JAN 29 1975

U. S. GEOLOGICAL SURVEY
FARMINGTON, N. M.

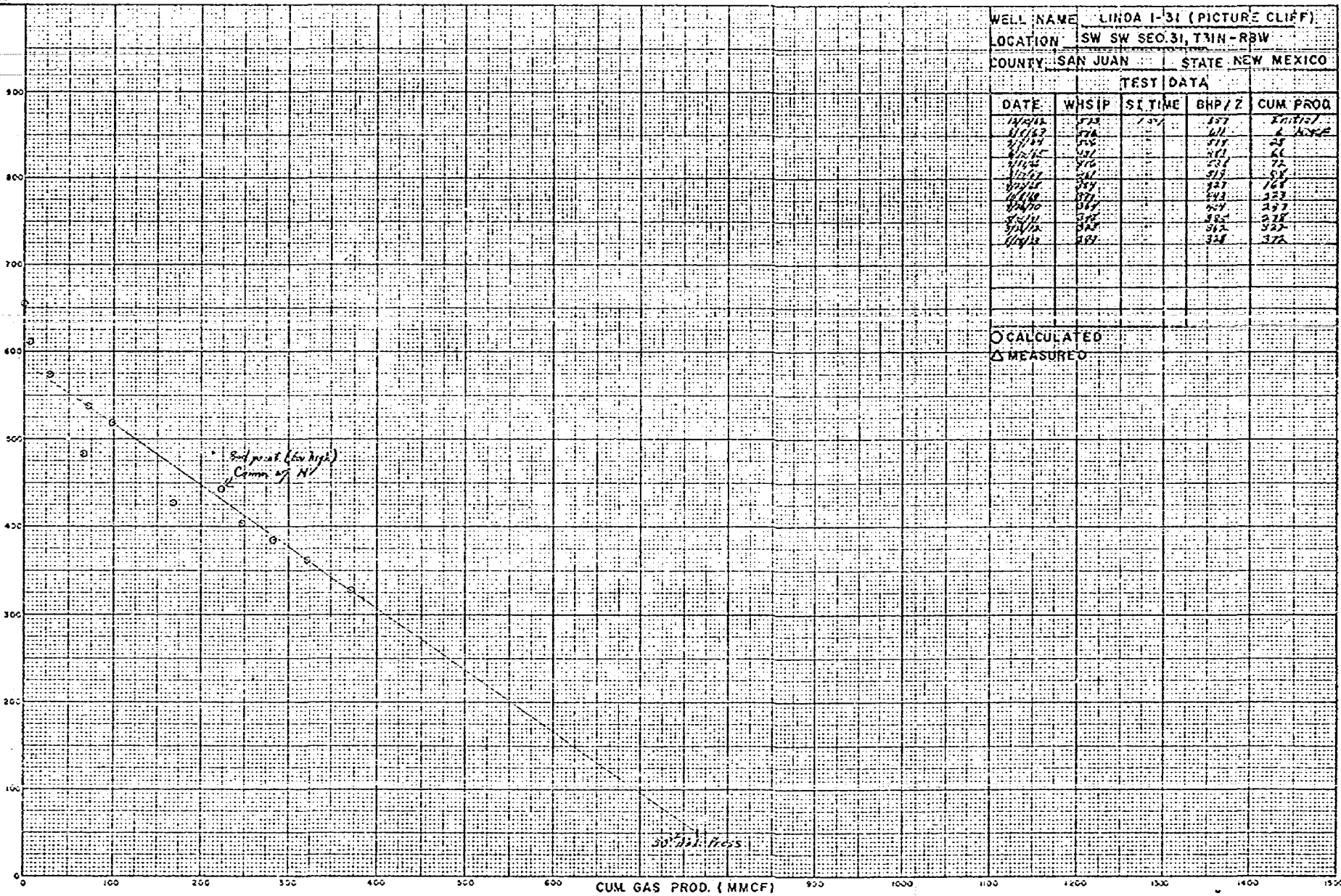
<u>Year</u>	<u>Percentage Production</u>		<u>Total Production</u>	<u>Percentage Production</u>	
	<u>Pictured Cliff Production</u>	<u>Mesaverde Production</u>		<u>Pictured Cliff</u>	<u>Mesaverde</u>
1970	Not representative. Communications problem corrected during year				
1971	42,817	96,601	139,418	30.71	69.29
1972	47,541	86,884	134,425	35.37	64.63
1973 (total year)	56,952	73,816	130,768	43.55	56.49 *
1973 (1st 8 mos.)	33,086	53,000	86,086	38.43	61.57

* Not representative. Communications problem appear to have developed late in year.

Remaining Reserves to 50# Abandonment Pressure
as of January 1, 1975

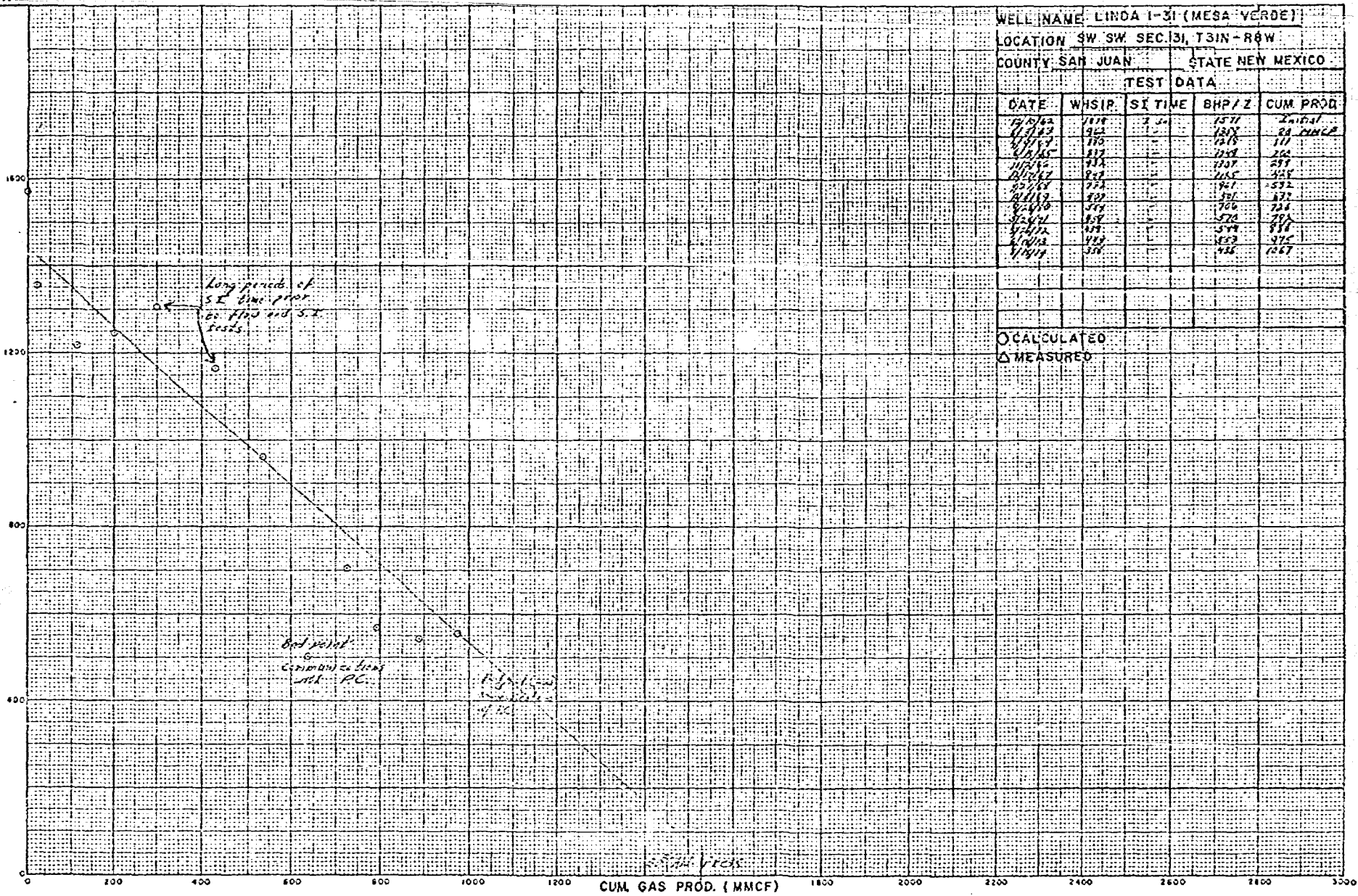
	<u>Pictured Cliff</u>	<u>Mesaverde</u>	<u>Total</u>
Ultimate	765,000	1,580,000	
Cum. 1/1/75	422,450	1,112,040	
Remaining Reserves	342,550	467,960	810,510
% Remaining Reserves	42.26%	57.74%	

BHP/Z
PSIA



Graph I

BHP/Z
PSIA



Graph II

Form 9-351
(May 1963)

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

SUBMIT IN TRIPPLICATE
(Other instructions on re-
verse side)

Form approved
Budget Bureau No. 42-111424

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir.
Use "APPLICATION FOR PERMIT" for such proposals.)

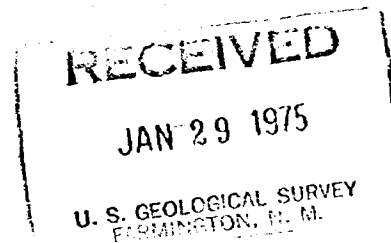
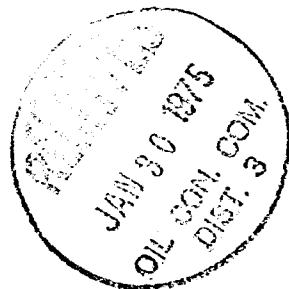
1. OIL <input type="checkbox"/> GAS <input checked="" type="checkbox"/> OTHER <input type="checkbox"/>	5. LEASE DESIGNATION AND SERIAL NO. I-149-Ind. 8469
2. NAME OF OPERATOR Consolidated Oil & Gas, Inc.	6. IF INDIAN, ALLOTTEE OR TRIBE NAME
3. ADDRESS OF OPERATOR 1860 Lincoln Street, Denver, Colorado 80203	7. UNIT AGREEMENT NAME
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.* See also space 17 below.) At surface SW/4 Sec. 31-T27N-R8W	8. FARM OR LEASE NAME Linda
	9. WELL NO. 1-31
	10. FIELD AND POOL, OR WILDCAT Blanco MV Ballard PC
	11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA Sec. 31-T27N-R8W
13. PERMIT NO.	12. COUNTY OR PARISH San Juan
15. ELEVATIONS (Show whether DF, RT, CR, etc.) KB 6094	13. STATE New Mex.

16. Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:		SUBSEQUENT REPORT OF:	
TEST WATER SHUT-OFF <input type="checkbox"/>	FULL OR ALTER CASING <input type="checkbox"/>	WATER SHUT-OFF <input type="checkbox"/>	REPAIRING WELL <input type="checkbox"/>
FRACTURE TREAT <input type="checkbox"/>	MULTIPLE COMPLETE <input type="checkbox"/>	FRACTURE TREATMENT <input type="checkbox"/>	ALTERING CASING <input type="checkbox"/>
SHOOT OR ACIDIZE <input type="checkbox"/>	ABANDON* <input type="checkbox"/>	SHOOTING OR ACIDIZING <input type="checkbox"/>	ABANDONMENT* <input type="checkbox"/>
REPAIR WELL <input type="checkbox"/>	CHANGE PLANS <input type="checkbox"/>	(Other) <input type="checkbox"/>	
(Other) <input type="checkbox"/>	Commingle <input checked="" type="checkbox"/>	(NOTE: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)	

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)*

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18. I hereby certify that the foregoing is true and correct

SIGNED Floyd C. Ellison Jr. TITLE Area Production Manager DATE Jan. 24, 1975

(This space for Federal or State office use)

APPROVED BY _____ TITLE _____ DATE _____

CONDITIONS OF APPROVAL, IF ANY: _____

*See Instructions on Reverse Side

DRAFT

jr/

BEFORE THE OIL CONSERVATION COMMISSION
OF THE STATE OF NEW MEXICO

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

CASE NO. 5451

Order No. R-5000

APPLICATION OF CONSOLIDATED OIL AND GAS,
INC., FOR DOWNHOLE COMMINGLING, SAN JUAN
COUNTY, NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 a.m. on April 2, 1975
at Santa Fe, New Mexico, before Examiner Richard L. Stamets.

NOW, on this day of April, 1975, the Commission,
a quorum being present, having considered the testimony, the record,
and the recommendations of the Examiner, and being fully advised
in the premises,

FINDS:

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

(2) That the applicant, Consolidated Oil and Gas, Inc.,
is the owner and operator of the Linda 1-31 Well, located in
Unit M of Section 31, Township 27 North, Range 8 West, NMPM,
San Juan County, New Mexico.

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1 (3) That the subject well is dually completed in the Ballard-
Pictured Cliffs Pool and Blanco-Mesaverde Pool.

2 (4) That a hole in the Mesaverde tubing opposite Pictured
3 Cliffs producing interval has resulted in the downhole commingling
4 of the production from both zones in said well.

5 (5) That the applicant seeks authority to commingle Ballard-
6 Pictured Cliffs and Blanco-Mesaverde production within the
7 wellbore of the above-described well to avoid the unnecessary
8 risk and expense which would be incurred in performing workover
9 operations to achieve separation of the producing zones in said
10 well.

11 (6) That from the Ballard-Pictured Cliffs zone, the subject
12 well is capable of low rates of production only.

13 (7) That from the Blanco-Mesaverde zone, the subject well
14 is capable of marginal production only.

15 (8) That the reservoir characteristics of each of the
16 subject zones are such that underground waste would not be
17 caused by the proposed commingling provided that the well is
18 not shut-in for an extended period.

19 (9) That the application for downhole commingling should be
20 approved.

21 (10) That to afford the Commission the opportunity to assess
22 the potential for waste and to expeditiously order appropriate
23 remedial action, the operator should notify the Aztec district
24 office of the Commission any time the subject well is shut-in
25 for 7 consecutive days.

26 (11) That in order to allocate the commingled production
27 to each of the commingled zones in the subject well, 42 percent
28 of the commingled gas production should be allocated to the
29 Ballard-Pictured Cliffs zone, 58 percent of the commingled gas
30 production to the Blanco-Mesaverde zone, and 100 percent of the
31 commingled oil production to the Blanco-Mesaverde zone.
32

IT IS THEREFORE ORDERED:

(1) That the applicant, Consolidated Oil and Gas, Inc., is hereby authorized to commingle Ballard-Pictured Cliffs and Blanco-Mesaverde production within the wellbore of the Linda 1-31 Well, located in Unit M of Section 31, Township 27 North, Range

8 West, NMPM, San Juan County, New Mexico.

(2) That 42 percent of the commingled gas production shall be allocated to the Ballard-Pictured Cliffs zone, 58 percent of the commingled gas production shall be allocated to the Blanco-Mesaverde zone, and 100 percent of the commingled oil ~~and~~ production shall be allocated to the Blanco-Mesaverde zone.

(3) That the operator of the subject well shall immediately notify the Commission's Aztec district office any time the well has been shut-in for 7 consecutive days and shall concurrently present, to the Commission, a plan for remedial action.

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

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