

CASE NO. 5399: COASTLINE PETROIEUM
CO., INC. FOR DOWNHOLE COMMINGLIN
SAN JUAN COUNTY, NEW MEXICO

CASE No.

5399

Application,

Transcripts,

Small Exhibits

ETC.

BEFORE THE
NEW MEXICO OIL CONSERVATION COMMISSION
Santa Fe, New Mexico
February 5, 1975

EXAMINER HEARING

IN THE MATTER OF:

Application of Coastline Petroleum
Company, Inc., for downhole
commingling, San Juan County,
New Mexico.

CASE NO. 5399

BEFORE: Richard L. Stamets, Examiner

For the New Mexico Oil
Conservation Commission:

Thomas Derryberry, Esq.
Legal Counsel for the
Commission
State Land Office Building
Santa Fe, New Mexico

For the Applicant:

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

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

I N D E XPAGEEWELL N. WALSH

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MR. STAMETS: Case 5399.

MR. DERRYBERRY: Case 5399. Application of Coastline Petroleum Company, Inc., for downhole commingling, San Juan County, New Mexico.

MR. STAMETS: We call for appearances in this case?

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

(Witness sworn.)

MR. STAMETS: You may proceed, Mr. Kellahin.

EWELL N. WALSH

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 My name is Ewell N. Walsh. I am President of Walsh Engineering and Production Corporation, Farmington, New Mexico, and I am a Petroleum Engineer Consultant.

Q Have you been retained by Coastline Petroleum Company as a consultant with regard to this Application?

A Yes, I have.

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Q Have you previously testified as an expert witness before the Oil Conservation Commission of New Mexico and had your qualifications as an expert accepted and made a matter of record?

A Yes, I have.

Q Are you familiar with the facts surrounding this particular Application?

A Yes, I am.

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

MR. STAMETS: Yes, they are.

BY MR. KELLAHIN:

Q Mr. Walsh, will you please refer to what has been marked as Applicant's Exhibit No. 1, identify it and state briefly what Coastline is seeking?

A Exhibit No. 1 is a Xerox copy of a map indicating the area included in Township 32 North, Range 8 West. In the center portion of this map there is an arrow indicating the subject well which is now the Coastline Petroleum Company 94 Well No. 1. The map does indicate it as Schalk Lonestar Industry, however, the change in operator has been made since the time the map was prepared.

Q Why is the Applicant seeking to have this well

produced as downhole commingling as opposed to a dual completion or some other type of completion?

A Basically, for economics. In the testing program on the subject well, the Dakota was determined after stimulation to produce approximately 91 MCF of natural gas. Testing did not indicate it would produce any measurable quantity of condensate or oil. Also, the Gallup formation which is the upper zone in which the well was completed was indicated to have a test of calculated absolute open-flow of 2901 MCF. To separate these two producing horizons as it is normally done in a dually completed well would be of considerable additional cost to the well, therefore, the operator does not believe the economics justify such an expenditure to separate the small gas volume from the Dakota and from the Gallup. Also, due to the smaller gas volume of the Dakota, this could cause producing conditions which the Dakota may not be able to produce its gas properly.

Q Please refer to what has been marked as Exhibit No. 2 and summarize the information contained on that exhibit?

A Exhibit No. 2 is the well completion or recompletion report and log filed with the U.S.G.S. upon completion of this well. Included in this report of form are the basic information obtained during the drilling of

the well and how the well was completed.

Q Would you refer to Exhibit No. 3 and identify it?

A Exhibit No. 3 is a schematic diagram indicating the type of installation of equipment, downhole equipment in the well, and also indicating the perforated intervals in both the Dakota and Gallup and how these intervals were stimulated.

Q Please refer to Exhibit No. 4 and summarize the information contained on that exhibit?

A Exhibit No. 4 is a multi-point back pressure test conducted for Coastline, or at that time, Lonestar Industries by the West Texas Consulting Service firm to determine the potential of the well producing both from the Gallup and the Dakota at the time of the test.

Q Exhibit No. 5?

A Exhibit No. 5 is the New Mexico Oil Conservation Commission Well Location and Acreage Dedication Plat which is filed with the State, indicating what could be the proposed Dakota acreage dedication as normally set forth in the Commission rules, consisting of the north half of Section 26, Township 32 North, Range 8 West, and also the 160-acre dedication for the Gallup within the northeast quarter of that section.

Q Please refer to what has been marked as Exhibit No. 6?

A Exhibit No. 6 is information as provided to me by the operator concerning some bottomhole pressure data on the subject well. The Gallup zone was determined to have a bottomhole pressure of 2505 pounds from the drill stem test as conducted on the producing interval. Also, it is indicated there, the Dakota was determined or estimated to have approximately 3500 pounds of bottomhole pressure, and this was determined by a comparison of the other Dakota wells in the area, however, in addition to this information I received from the operator at the time the Dakota interval was tested or flowed by itself, the surface snut-in pressure at that time, after it had been shut in for several days was 2400 pounds. Using a gas column with a specific gravity of .64, I have calculated that the bottomhole pressure of the Dakota at that time was at least 2892 pounds, assuming nothing but gas, however, if there was fluid in the well, this pressure would be higher. Therefore, in my knowledge of the Dakota, the bottomhole pressure probably is in the 3300 to 3500 pound range.

Q According to your calculations, Mr. Walsh, what would you anticipate to be the pressure differential between

WALSH-DIRECT

the two zones?

A According to my calculations, the pressure differential would be somewhere in the neighborhood of 385 pounds.

Q As a result of that pressure differential, do you anticipate any potential problems with migration between the two zones?

A The only time there would possibly be migration or pressuring of the Gallup interval by the Dakota would be during the shut-in status. With the well on a producing basis or flowing basis, the Dakota in this area has a characteristic of being a very very tight formation or low permeability. Therefore, after even a short period of flow, the flowing bottomhole pressure of the Dakota will decrease very very rapidly, and with the Gallup having the better gas production, any gas that went into the Gallup would be brought back out and during -- under flowing conditions, I cannot foresee where the Dakota, gas flowing from the Dakota would have any effect on the Gallup gas.

Q In your opinion, then, Mr. Walsh, will underground waste be caused by the proposed commingled production?

A No.

Q Please refer to what has been marked as Exhibit No. 7 and identify that?

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A Exhibit No. 7 is a description of the lease ownership of both the north half of Section 26, Township 32 North and 8 West, and the south half. As indicated there, all of the north half of this section has common ownership down and through the base of the Dakota formation.

Q Would you please refer to Exhibit No. 8 and summarize the information contained on that exhibit?

A Exhibit No. 8 is a suggested gas allocation formula for the gas produced from this well. This suggests that gas allocation is based upon the measure of gas from the Dakota after several days of testing, and based upon the flow of the gas naturally from the Gallup formation during the drill stem test. The Dakota interval was measured separately from the Gallup at 91.86 MCF, or 92 MCF. The Gallup drill stem test during that period had a final flow rate at the end of three hours of 994 MCF. Therefore, using these volumes, it has been calculated here a formula for the Dakota portion of production to be $8\frac{1}{2}$ percent and the Gallup production portion to be $91\frac{1}{2}$ percent for a total of 100 percent.

It may be necessary with the Commission at this time to have a gas allocation, however, I would like to bring to the attention of the Commission a situation

WALSH-DIRECT

concerning both the Gallup and Dakota downhole commingled production in the area I am familiar with which is the west Lindrith-Gallup Dakota Oil Pool. By Order No. 4314, production from these two intervals was permitted by the Commission to be commingled downhole. Basically, we have a similar type situation here in that the economics do not justify a complete separation and separate production, but it is probably not in the scope of this hearing for that, but I just wanted to bring this to the Commission's attention in view of possibly the setting of a pool such as this.

Q In your opinion, Mr. Walsh, will the approval of this Application result in the recovery of additional gas from each of the commingled gas zones that otherwise would not be recovered?

A Yes, it would.

Q In your opinion, will the approval of this Application be in the best interest of conservation and prevention of waste and protection of correlative rights?

A Yes, it would.

Q Have you examined and determined the correctness and accuracy of Exhibits 1 through 8 to the best of your knowledge and information?

A Yes, I have.

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MR. KELLAHIN: If the Examiner please, we move the introduction into evidence of Exhibits 1 through 8.

MR. STAMETS: Without objection, Exhibits 1 through 8 will be admitted.

(Whereupon, Applicants' Exhibits Nos. 1 through 8 were marked for identification, and were admitted into evidence.)

MR. KELLAHIN: That concludes our direct examination.

MR. STAMETS: Are there questions of this witness?

CROSS EXAMINATION

BY MR. STAMETS:

Q Mr. Walsh, referring to Exhibit No. 5, and Exhibit 7, I believe I understand your testimony to be that even though there are different acreage requirements for the Gallup proration unit and the Dakota proration unit, that no matter what size units exist in this north half of the section, the ownership is the same throughout, and they share identically throughout in royalties, overrides and so on?

A That is correct.

Q Have you made any calculations of what the bottom-hole pressure differential would be if you projected this 2505 pounds from the Gallup on down to the Dakota horizon?

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A Well, using the 2505 and my calculated 2892, that would be, what, 387 pound differential.

Q Are those two figures projected to the same point in the hole?

A No. I am sorry. I did not project the Gallup because we had a definite measured pressure at that point. I don't understand the reasoning for projecting the Gallup because the Gallup pressure isn't going to go down hole. Do you want to bring the Dakota pressure back up to the Gallup pressure?

Q It is six of one and half dozen of the other, which ever way you would like to do it.

A I could do that. There would be, I would say, approximately 2700 pounds at that interval, the Gallup interval, so, therefore, you would have 195 pounds of differential.

Q You indicated that the only potential for migration would be when the well was shut in. Do you anticipate that the well will be shut in for any extended period of time?

A No, sir, only to be shut in in accordance with deliverability test by the New Mexico Oil Conservation Commission, or weather conditions or pipelines. No months

of shut in.

Q Do you feel that the testing of the two zones was sufficient to demonstrate the accuracy of the formula for allocation?

A Yes. The Dakota interval, which was measured separately, was flowed for several days and the gas was measured by orifice well tester. The volumes I have given you there was during about the last 22 hours of flow during that period. A volume for the Gallup is based upon the drill stem test and my examination of the orifice well tester charts on that did indicate a pretty level flow, a steady flow of gas, so I would say this is the best we can offer to come up with an allocation formula, under these conditions.

Q Would the Dakota zone in itself be good enough to put on line in an economical venture?

A No.

MR. STAMETS: Are there any other questions of this witness? Mr. Arnold?

CROSS EXAMINATION

BY MR. ARNOLD:

Q Mr. Walsh, you may have testified to this, but I missed it if you did: How would you handle a deliverability

test as far as allocating the test in each zone?

A I would use the same basis as the production allocation.

Q You would calculate one deliverability and then apply the factors?

A Yes, I believe that would be the simplest method to do it.

MR. ARNOLD: That's all.

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

(Witness dismissed.)

MR. STAMETS: Is there anything further in this case?

We will take the case under advisement.

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

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. 5399 heard by me on 3-5, 1975.

Richard L. Nye, Examiner
New Mexico Oil Conservation Commission

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BEFORE THE
NEW MEXICO OIL CONSERVATION COMMISSION
Santa Fe, New Mexico
January 8, 1975

EXAMINER HEARING

IN THE MATTER OF:

Application of Coastline Petroleum Com-
pany, Inc., for downhole commingling,
San Juan County, New Mexico.

Case No.
5399

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

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MR. STAMETS: Call the next Case, Case 5399.

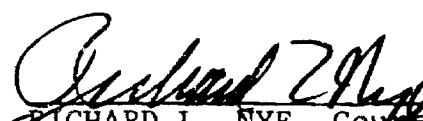
MR. CARR: Case 5399. Application of Coastline Petroleum Company, Inc., for downhole commingling, San Juan County, New Mexico.

Mr. Examiner, we received a request that this Case be continued until the first Examiner Hearing in February.

MR. STAMETS: Case 5399 will be continued until February 7th.

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

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. 5399 heard by me on 1-8, 1975


Richard L. Nye, Examiner
New Mexico Oil Conservation Commission

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TEL. (505) 982-0386



OIL CONSERVATION COMMISSION

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

I. R. TRUJILLO
CHAIRMAN

LAND COMMISSIONER
PHIL R. LUCERO
MEMBER

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

February 11, 1975

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

Re: CASE NO. 5399
ORDER NO. R-4959

Applicant:

Coastline Petroleum Co., Inc.

Dear Sir:

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

Very truly yours,

A. H. Porter, Jr.

A. L. PORTER, Jr.
Secretary-Director

ALP/ir

Copy of order also sent to:

| | |
|-------------|-----------------------------------|
| Hobbs OCC | <u> x </u> |
| Artesia OCC | <u> </u> |
| Aztec OCC | <u> x </u> |

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. 5399
Order No. R-4959

APPLICATION OF COASTLINE PETROLEUM
COMPANY, 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 February 5, 1975, at Santa Fe, New Mexico, before Examiner Richard L. Stamets.

NOW, on this 11th day of February, 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, Coastline Petroleum Company, Inc., is the owner and operator of the Schalk 94 Well No. 1, located in Unit A of Section 26, Township 32 North, Range 8 West, NMPM, San Juan County, New Mexico.
- (3) That the applicant seeks authority to commingle Undesignated Gallup and Basin-Dakota production within the wellbore of the above-described well.
- (4) That from the Undesignated Gallup zone, the subject well is capable of low rates of production only.
- (5) That from the Basin-Dakota zone, the subject well is capable of low marginal production only.
- (6) That the proposed commingling may result in the recovery of additional hydrocarbons from each of the subject pools, thereby preventing waste, and will not violate correlative rights.

-2-
Case No. 5399
Order No. R-4959

(7) 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.

(8) 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.

(9) That in order to allocate the commingled production and deliverabilities to each of the commingled zones in the subject well, 91 percent of the commingled production should be allocated to the Undesignated Gallup zone, and 9 percent of the commingled production to the Basin-Dakota zone.

IT IS THEREFORE ORDERED:

(1) That the applicant, Coastline Petroleum Company, Inc., is hereby authorized to commingle Undesignated Gallup and Basin-Dakota production within the wellbore of its Schalk 94 Well No. 1, located in Unit A of Section 26, Township 32 North, Range 8 West, NMPM, San Juan County, New Mexico.

(2) That for the allocation of production and deliverability, 91 percent of the commingled production shall be allocated to the Undesignated Gallup zone and 9 percent of the commingled production shall be allocated to the Basin-Dakota zone.

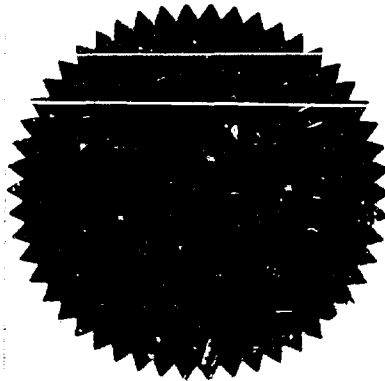
(3) That the operator of the subject well shall immediately notify the Commission's Aztec district office any time the well has been shut-in for 7 consecutive days and shall concurrently present, to the Commission, a plan for remedial action.

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

-3-
Case No. 5399
Order No. R-4959

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

STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION



I. R. TRUJILLO, Chairman

Phil R. Lucero

PHIL R. LUCERO, Member

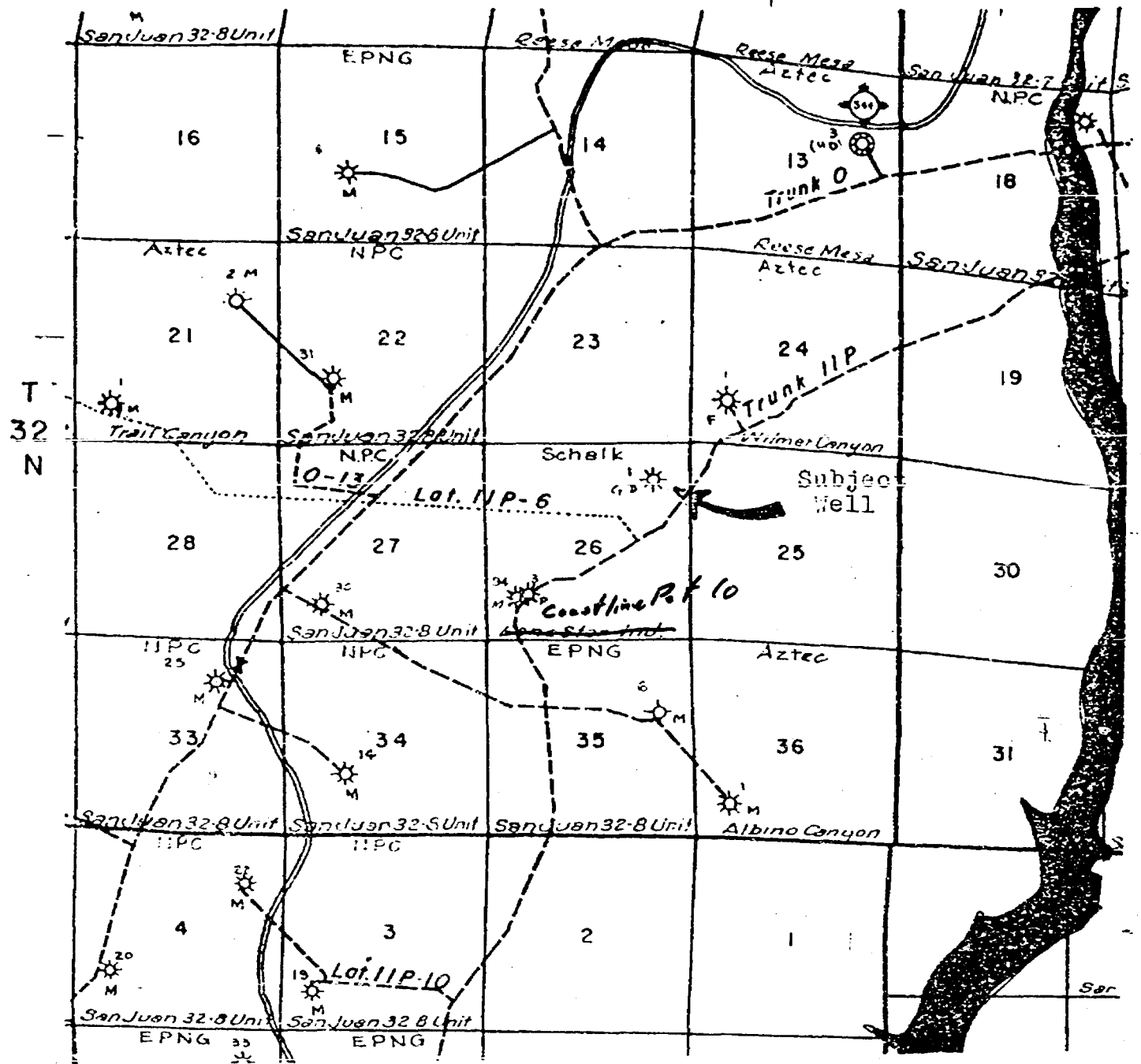
A. L. Porter, Jr.






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

S E A L

dr/

R-8-W



-  F Fruitland Production
-  P Pictured Cliffs
-  M Mesaverde Prod.
-  G Gallup Production
-  D Dakota Production

COASTLINE PETROLEUM COMPANY INC.
SAN JUAN COUNTY, NEW MEXICO.

BEFORE EXAMINER STAMETS
OIL CONSERVATION COMMISSION
Coastline EXHIBIT NO. 1
CASE NO. 5399
Submitted by W. A. S. H.
Hearing Date 5 Feb 75

AMENDED

(Commingle of Dakota and Gallup pending NMOCC approval)

AMENDED

AMENDED

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

SUBMIT IN DUPLICATE*

(See other in-
structions on
reverse side)Form approved.
Budget Bureau No. 42-R355.5.

WELL COMPLETION OR RECOMPLETION REPORT AND LOG *

1. TYPE OF WELL: OIL WELL ☐ GAS WELL ☒ DRY ☐ Other _____

2. TYPE OF COMPLETION:

NEW WELL ☒ WORK OVER ☐ DEEP-EN ☐ PLUG BACK ☐ DIFF. RESV. ☐ Other _____

3. NAME OF OPERATOR

Coastline Petroleum Company, Inc.

4. ADDRESS OF OPERATOR

P. O. Box 2478, Midland, Texas 79701

5. LOCATION OF WELL (Report location clearly and in accordance with any State requirements)*

At surface 960' from the north line, 800' from the east line

At top prod. interval reported below

same

At total depth

same

14. PERMIT NO.

DATE ISSUED

12. COUNTY OR PARISH

San Juan

13. STATE

New Mexico

15. DATE SPUDDED 16. DATE T.D. REACHED 17. DATE COMPL. (Ready to prod.) 18. ELEVATIONS (DT, RKB, RT, GR, ETC.)* 19. ELEV. CASINGHEAD

8-2-73

9-2-73

9-6-73

6793 KB

6781

20. TOTAL DEPTH, MD & TVD

8437 KB

21. PLUG BACK T.D., MD & TVD

8438.41 KB

22. IF MULTIPLE COMPL., HOW MANY*

2 zones commingled

23. INTERVALS DRILLED BY

ROTARY TOOLS

CABLE TOOLS

rotary

24. PRODUCING INTERVAL(S), OF THIS COMPLETION—TOP, BOTTOM, NAME (MD AND TVD)*

7545-7605 Rosa Gallup

8220-8344 Basin Dakota

25. WAS DIRECTIONAL SURVEY MADE

No

26. TYPE ELECTRIC AND OTHER LOGS RUN

CNL, FDC/GR, DIL

27. WAS WELL CORED

No

28. CASING RECORD (Report all strings set in well)

| CASING SIZE | WEIGHT, LB./FT. | DEPTH SET (MD) | HOLE SIZE | CEMENTING RECORD | AMOUNT PULLED |
|-------------|-----------------|----------------|-----------|-----------------------|---------------|
| 13 3/8" | 48# | 373 KB | 17 1/4" | 350 sacks - Class "A" | None |
| 4 1/2" | 11.6# 10.5# | 8446 KB | 7 7/8" | 1st stage 320 sacks | None |
| | | | | 2nd stage 200 sacks | |
| | | | | 3rd stage 650 sacks | |

29. LINER RECORD

| SIZE | TOP (MD) | BOTTOM (MD) | SACKS CEMENT* | SCREEN (MD) | SIZE | DEPTH SET (MD) | PACKER SET (MD) |
|------|----------|-------------|---------------|-------------|--------|----------------|-----------------|
| none | | | | | 2 3/8" | 8291 | None |

30. TUBING RECORD

31. PERFORATION RECORD (Interval, size and number)

7545 - 7560

8262-8274

7570-7605

8314-8324

Commingled with

8334-8344

8220-8224

2 shots / foot

8230-8238

32. ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC.

| DEPTH INTERVAL (MD) | AMOUNT AND KIND OF MATERIAL USED |
|---------------------|--------------------------------------|
| 7545-7605 | 15% HCL acid - 5000 gallons |
| 8220-8344 | 7 1/2% HCL - 300 gal., 15% HCL - 500 |
| | Lo-Gel 160 - 58520 gallons |
| | 40-60 sand - 57500 pounds |

33. PRODUCTION

DATE FIRST PRODUCTION PRODUCTION METHOD (Flowing, gas lift, pumping—size and type of pump) WELL STATUS (Producing or shut-in)

Waiting on pipeline

shut-in

DATE OF TEST HOURS TESTED CHOKE SIZE PROD'N. FOR TEST PERIOD OIL—BBL. GAS—MCF. WATER—BBL. GAS-OIL RATIO

1/24/74

4

5/16

C

2901 AOF

no oil

FLOW. TUBING PRESS. CASING PRESSURE CALCULATED 24-HOUR RATE OIL—BBL. GAS—MCF. WATER—BBL. OIL GRAVITY-API (CORR.)

843

930

C

2901 AOF

34. DISPOSITION OF GAS (Sold, used for fuel, vented, etc.)

vented

TEST WITNESSED BY

Joe Roberson

35. LIST OF ATTACHMENTS

separator and vent line

36. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records

SIGNED

Robert S. [Signature]

TITLE manager

DATE 12/12/74

*(See Instructions and Spaces for Additional Data on Reverse Side)

5000 gal. sold with U.S.C. for separation 12/13/74

INSTRUCTIONS

General: This form is designed for submitting a complete and correct well completion report and log on all types of lands and leases to either a Federal agency or a State agency, or both, pursuant to applicable Federal and/or State laws and regulations. Any necessary special instructions concerning the use of this form and the number of copies to be submitted, particularly with regard to local, area, or regional procedures and practices, either are shown below or will be issued by, or may be obtained from, the local Federal and/or State office. See instructions on items 22 and 24, and 33, below regarding separate reports for separate completions.

If not filed prior to the time this summary record is submitted, copies of all currently available logs (drillers, geologists, sample and core analysis, all types electric, etc.), formation and pressure tests, and directional surveys, should be attached hereto, to the extent required by applicable Federal and/or State laws and regulations. All attachments should be listed on this form, see item 35.

Item 4: If there are no applicable State requirements, locations on Federal or Indian land should be described in accordance with Federal requirements. Consult local State or Federal office for specific instructions.

Item 12: Indicate which elevation is used as reference (where not otherwise shown) for depth measurements given in other spaces on this form and in any attachments.

Items 22 and 24: If this well is completed for separate production from more than one interval zone (multiple completion), so state in item 22, and in item 24 show the producing interval, or intervals, top(s), bottom(s) and name(s) (if any) for only the interval reported in item 33. Submit a separate report (page) on this form, adequately identified, for each additional interval to be separately produced, showing the additional data pertinent to such interval.

Item 29: "Seeds Concept": Attached supplemental records for this well should show the details of any multiple stage cementing and the location of the cementing tool.

Item 33: Submit a separate completion report on this form for each interval to be separately produced. (See instruction for items 22 and 24 above.)

37. SUMMARY OF FORMER ZONES:

SHOW ALL IMPORTANT ZONES OF FORMER AND CURRENT INTEREST: CORED INTERVALS; AND ALL DRILL-STEM TESTS, INCLUDING
 SHUT-IN PRESSURE, CUSHION USED, TIME TOOL OPEN, PLOUGHING AND SHUT-IN PRESSURE, AND RECOVERIES

FORMATION

TOP

BOTTOM

DESCRIPTION, CONTENTS, ETC.

38.

GEOLOGIC MARKERS

NAME

MEAS. DEPTH

TRUE VERT. DEPTH

F-unitland
 Pictured Cliff
 Lewis
 Cliff House
 Manefee
 Paint Lookout
 Mancos
 Gallup
 Greenhorn
 G-aneros
 Dakota
 T)

3595
 3672
 3764
 5673
 5734
 6003
 6185
 7335
 8043
 8098
 8210
 8437

3672
 3764
 5678
 5734
 6003
 6185
 7335
 8043
 8098
 8210
 8437

interbedded sand, shale & coal
 sand and shale
 silty shale
 sand and shale
 interbedded sand, shale & coal
 tan, fine grained sand
 silty shale
 sand - DST 7491-7634 rec 510' GCM
 black silty shale with calcite
 pyritic silty shale
 interbedded sand and shale

Surface Pipe:
13 3/8" - 48" at 373' KB

Cement: 350 sacks Class A
Cement circulated
to surface

CEMENT:

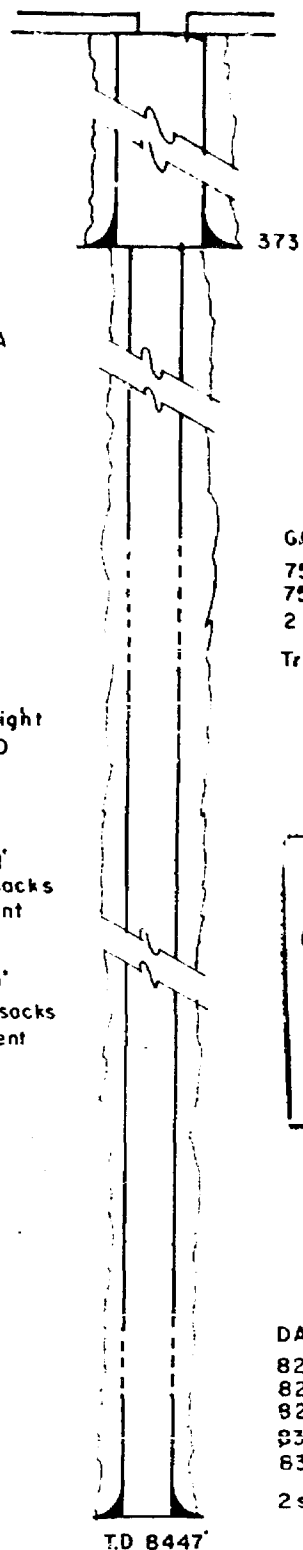
1st. stage - 170 sacks Hallilight
& 150 sacks 50/50
Pozmix cement.

2nd. stage - Collar at 6281'
circulate 200 sacks
Hallilight cement

3rd. stage - Collar at 3930'
circulate 650 sacks
Hallilight cement

Production Tbg:
2 3/8" - 8279'

Production Csg:
4 1/2" - 10.5" & 11.6"
set at 8446' KB



373'

T.D 8447'

GALLUP Perfs:

7545 - 60
7570 - 7605
2 shots/ft

Treatment: 5000 gal. 15 % HCl acid

| | |
|-----------------------------|---------------|
| BEFORE EXAMINER STAMETS | |
| OIL CONSERVATION COMMISSION | |
| Coastline | EXHIBIT NO. 3 |
| CASE NO. | 5399 |
| Submitted by | Walsh |
| Hearing Date | 5 Feb 75 |

DAKOTA Perfs:

8220 - 24
8230 - 38
8262 - 74
8314 - 24
8334 - 44

2 shots/ft

Treatment:

300 gal. 7 1/2 %
500 gal. 15 % HCl acid
Lo - Gel 160 - 58520 gal
40-60 sand - 57500 lb.

COASTLINE PETROLEUM COMPANY, INC.
SCHALK 94-1

COMPLETION DIAGRAM

| | | | |
|---|----------------------------------|---|---|
| Type Test <input checked="" type="checkbox"/> Initial <input type="checkbox"/> Annual <input type="checkbox"/> Special | | Test Date 1-24-74 | |
| Company Lone Star Industries, Inc. | | Connection None | |
| Well Wildcat | | Formation Rosa Gallup and Basin Dakota | |
| Completion Date 9-16-73 | Total Depth 8347 | Plug Back TD | Elevation 6781 |
| Form or Lease Name Schalk '94' | | | |
| Case Size 4 1/2 | Wt. 11.6 | Set At 8446 | Perforations: From 7545 To 7605 |
| Case Size 2 3/8 EUE | Wt. C | Set At 7720 | Perforations: From 8220 To 8344 |
| Type Well - Single - Freehold - G.G. or G.O. Multiple Single | | Pecker Set At None | County San Juan |
| Producing Zone Tubing | Reservoir Temp. °F 244 @ 8279 | Mean Annual Temp. °F 60 | Baro. Press. - P _a 12.0 |
| State New Mexico | | | |
| L 8279 | H 8279 | G _g .640 | % CO ₂ % N ₂ % H ₂ S |
| Prover | | Meter Run Taps | |

| FLOW DATA | | | | | | | TUBING DATA | | CASING DATA | | Duration of Flow |
|-----------|------------------|---|--------------|-----------------|----------------------|----------|-----------------|----------|-----------------|----------|------------------|
| NO. | Prover Line Size | X | Critice Size | Press. p.s.i.g. | Diff. h _w | Temp. °F | Press. p.s.i.g. | Temp. °F | Press. p.s.i.g. | Temp. °F | |
| 1 | 2.0 | | 3/32 | 1692 | | 42 | 1750 | 42 | 1750 | 42 | |
| 2 | 2.0 | | 7/32 | 1295 | | 48 | 1692 | 48 | 1692 | 48 | 1 Hr |
| 3 | 2.0 | | 1/4 | 1095 | | 58 | 1295 | 58 | 1440 | 58 | 1 Hr |
| 4 | 2.0 | | 5/16 | 843 | | 62 | 1095 | 62 | 1250 | 62 | 1 Hr |
| 5 | 2.0 | | | | | 64 | 843 | 64 | 930 | 64 | 1 Hr |

| RATE OF FLOW CALCULATIONS | | | | | | | |
|---------------------------|-----------------------|------------------|-------------------------|-----------------------|-------------------------------|--|----------------------|
| NO. | Coefficient (24 Hour) | $\sqrt{h_w P_m}$ | Pressure P _m | Flow Temp. Factor Ft. | Gravity Factor F _g | Super. Compress. Factor, F _{pv} | Rate of Flow Q, Mscf |
| 1 | .1410 | | 1704 | 1.012 | 1.250 | 1.194 | 363 |
| 2 | .8393 | | 1307 | 1.002 | 1.250 | 1.146 | 1605 |
| 3 | 1.087 | | 1107 | .9981 | 1.250 | 1.118 | 1678 |
| 4 | 1.672 | | 855 | .9962 | 1.250 | 1.087 | 1935 |
| 5 | | | | | | | |

| NO. | P _r | Temp. °R | T _r | Z | Gas Liquid Hydrocarbon Ratio | None Produced | Mcf/Std. |
|-----|----------------|----------|----------------|------|---------------------------------------|---------------|------------|
| 1 | 2.54 | 508 | 1.37 | .702 | A.P.G. Gravity of Liquid Hydrocarbons | | |
| 2 | 1.95 | 518 | 1.39 | .762 | Specific Gravity Separator Gas | .640 | XXXXXXXXXX |
| 3 | 1.65 | 522 | 1.40 | .800 | Specific Gravity Flowing Fluid | XXXXXX | |
| 4 | 1.26 | 524 | 1.41 | .847 | Critical Pressure | 670 | P.S.I.A. |
| 5 | | | | | Critical Temperature | 372 | °R |

| NO. | P _r ² | P _w ² | P _w ² | P _r ² - P _w ² |
|-----|-----------------------------|-----------------------------|-----------------------------|---|
| 1 | 1704 | 2904 | 201 | |
| 2 | 1452 | 2108 | 997 | |
| 3 | 1272 | 1618 | 1487 | |
| 4 | 942 | 887 | 2218 | |
| 5 | | | | |

(1) $\frac{P_r^2}{P_r^2 - P_w^2} = \frac{3105}{1487}$

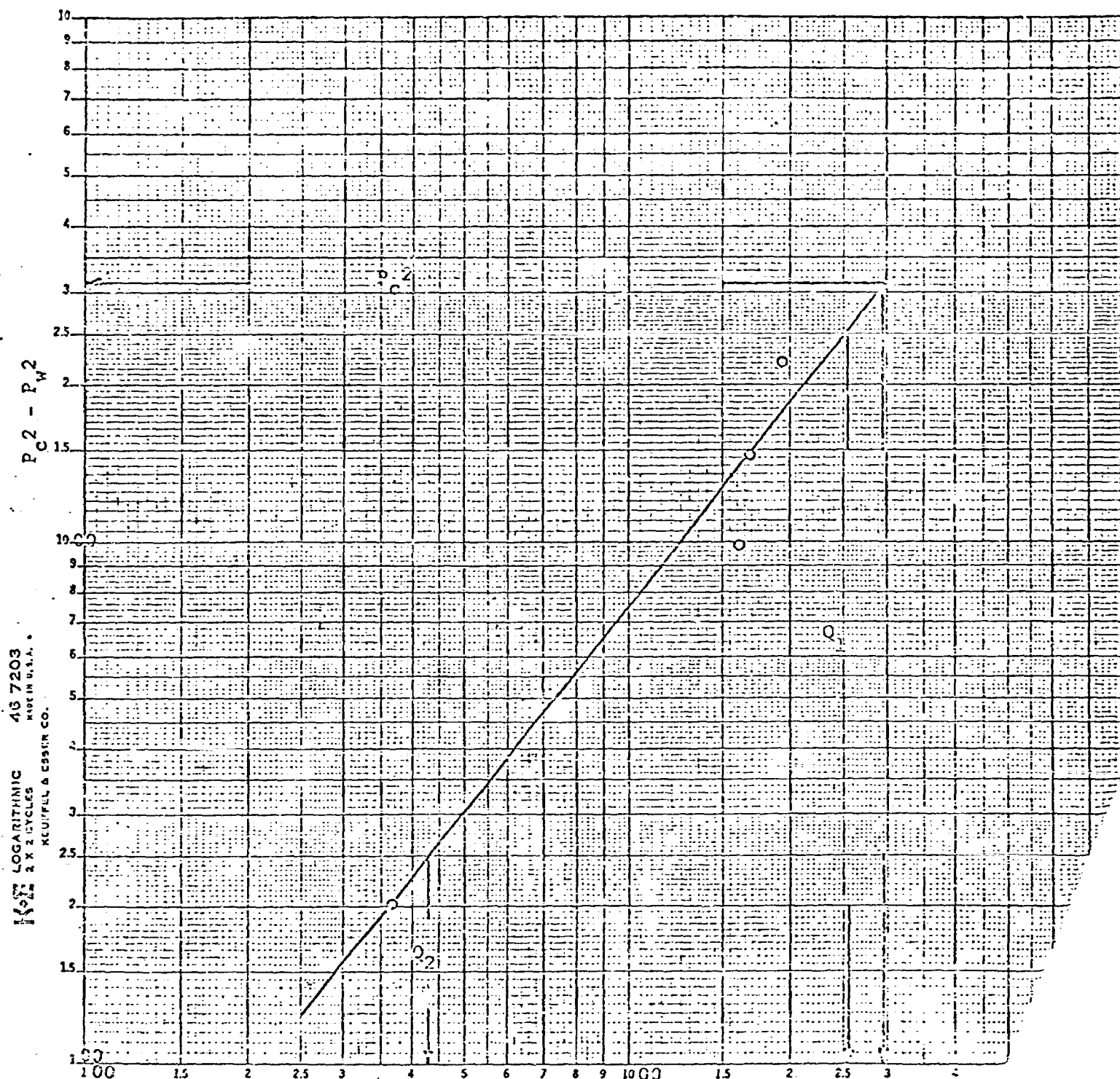
AOF = Q $\left[\frac{P_r^2}{P_r^2 - P_w^2} \right]^n = 2901$

(2) $\left[\frac{P_r^2}{P_r^2 - P_w^2} \right]^n = 1.72912$

| | | | | | | |
|--------------------|------|--------------|------------------|---------|----------|------|
| Absolute Open Flow | 2901 | Mcf @ 15.025 | Angle of Slope @ | 53° 22' | Slope, n | .744 |
|--------------------|------|--------------|------------------|---------|----------|------|

| | | | |
|-------------------------------------|---|------------------------------|-------------|
| Approved by: Joe Roberson | Conducted by: Don Douglas & Joe Roberson | Calculated by: H L Hagler | Checked by: |
| WEST TEXAS CONSULTING SERVICE, INC. | | | |

| | | |
|----------|----------------------|------|
| ERATOR | Lone Star Indus tric | Inc. |
| LEASE | Schalk '94' | |
| WELL NO. | 1 | |
| FIELD | Wildcat | |
| COUNTY | San Juan, New Mexico | |
| DATE | January 24, 1974 | |



| | | |
|-------------------------|--------------|-----------------------------|
| Q in Mcf/Day | $Q_1 = 2550$ | $\text{Log } Q_1 = 3.40654$ |
| $\theta = 53^\circ 22'$ | $Q_2 = 460$ | $\text{Log } Q_2 = 2.66275$ |
| $n = .744$ | | $.74372$ |

Absolute Open Flow = 2901 Mcf/Day

**NEW MEXICO OIL CONSERVATION COMMISSION
WELL LOCATION AND ACERAGE DEDICATION PLAT**

All distances must be from the outer boundaries of the Section

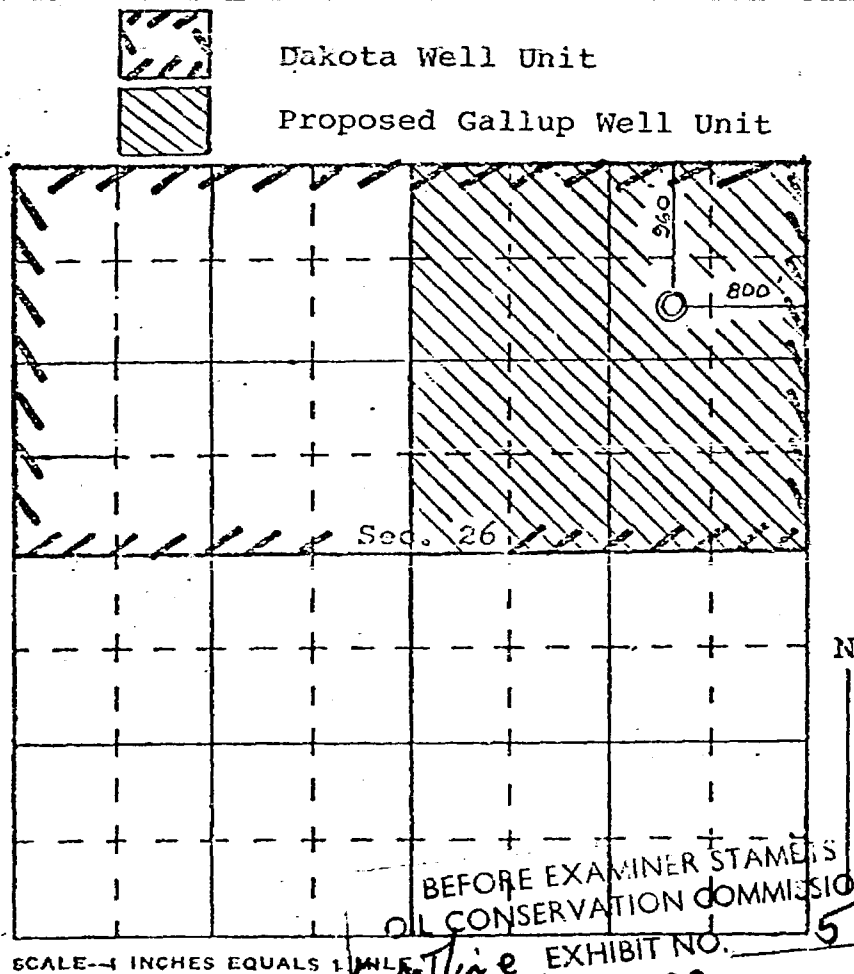
| | | | | |
|-------------------------------------|--------------------------------------|--|---------------------------------|---------------------------|
| Operator JOHN E. SCHALK | | Lease LONE STAR INDUSTRIES-SCHALK-94 | | Well No. 1 |
| Unit Letter A | Section 26 | Township 32 NORTH | Range 8 WEST | County SAN JUAN |
| Actual Footage Location of Well: | | | | |
| 960 | feet from the | NORTH | line and | 800 |
| | | | feet from the | EAST |
| Ground Level Elev. 6781.0 | Producing Formation DAKOTA | Foot | Dedicated Acreage 320 | Ac. |

1. Outline the acreage dedicated to the subject well by colored pencil or hatchure marks on the plat below.
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).
3. If more than one lease of different ownership is dedicated to the well, have the interests of all owners been consolidated by communitization, unitization, force-pooling, etc?

() Yes () No If answer is "yes," type of consolidation _____

If answer is "no," list the owners and tract descriptions which have actually consolidated. (Use reverse side of this Form if necessary.) _____

No allowable will be assigned to the well until all interests have been consolidated (by communitization, unitization, forced-pooling, or otherwise) or until a non standard unit, eliminating such interests, has been approved by the Commission.



SAN JUAN ENGINEERING COMPANY, FARMINGTON, N.M.

BEFORE EXAMINER STAMER'S
OIL CONSERVATION COMMISSION

Coastline EXHIBIT NO. **5**
CASE NO. **5399**
Submitted by **WALSH**
Hearing Date **5 Feb 75**

CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.

John E. Schalk
Name
OPERATOR
Position

Company
JULY 23, 1973
Date

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my knowledge and belief.

16 July, 1973
Date Signed
James P. Leese
Professional Engineer
and Land Surveyor
JAMES P. LEESE
Certificate No. **1163**

Bottom Hole Pressure Data:

Gallup zone DST 2505

Typical Dakota on new well completed by Coastline
and calculated by West Texas Engineering 3500#
at a depth of 8018 to 76 as compared to depth on
94-1 of 8220 -8334

Bottom Hole Pressure on 94-1 2149 as calculated
by West Texas Engineering

| | |
|--|---------------|
| BEFORE EXAMINER STAMETS OIL CONSERVATION COMMISSION | |
| Coastline | EXHIBIT NO. 6 |
| CASE NO. | 5399 |
| Submitted by | W.A. / sh |
| Hearing Date | 5 Feb 75 |

Coastline Petroleum Company, Inc.

A subsidiary of LONE STAR INDUSTRIES

P. O. Box 2478 • Midland, Texas 79701
915 684-6301

Lease No. NM 6894

Legal Description:

All the North one-half (N/2) of Sec. 26, T-32-N,
R-8-W, N.M.P.M., containing 320 acres, from the
surface down to and including the base of the Dakota
Formation; and

All the South one-half (S/2) of Sec. 26, T-32-N,
R-8-W, N.M.P.M., containing 320 acres from the
surface down to a depth of 6,413 feet,

located in San Juan County, State of New Mexico.

Division of Interest:

Royalty:

United States of America .1250

Overriding Royalty Interest:

Aztec Oil & Gas Company .1250

John E. Schalk, whose wife
is Martha R. Schalk .0250

Thomas S. Schalk, whose wife
is Betty Schalk .0250

Working Interest:

Coastline Petroleum Company, Inc. .7000

| | |
|-----------------------------|---------------|
| BEFORE EXAMINER STAMETS | |
| OIL CONSERVATION COMMISSION | |
| Coastline | EXHIBIT NO. 7 |
| CASE NO. | 5399 |
| Submitted by | Walsh |
| Hearing Date | 5 Feb 75 |

Suggested Gas Allocation Formula 94-1

Volume of Gas:

1. Dakota after several days of testing

91.86 MCF/D

2. Gallup DST During flow period of 3 hrs

Initial rate 1.291 MCF/D

Final rate 994 MCF/D

Formula:

$$\text{Dakota } \frac{91.86}{91.86 + 994} = .0846 \text{ or } 8.5\%$$

$$\text{Gallup } \frac{994}{91.86 + 994} = .9154 \text{ or } 91.5\%$$

| | |
|-----------------------------|----------------------|
| BEFORE EXAMINER STAMETS | |
| OIL CONSERVATION COMMISSION | |
| <i>Castline</i> | EXHIBIT NO. <u>8</u> |
| CASE NO. | <u>5399</u> |
| Submitted by | <u>Walsh</u> |
| Hearing Date | <u>5 Feb 75</u> |

- CASE 5396: Application of Continental Oil Company for salt water disposal, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to convert its Lynn A Well No. 5, located in Unit A of Section 28, Township 23 South, Range 37 East, Jalmat and Langlie-Mattix Pools, Lea County, New Mexico, to dispose of produced salt water into the Seven Rivers formation through perforations in the overall interval from 3470 to 3679 feet.
- CASE 5397: Application of Cities Service Oil Company for pool creation and special pool rules, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks the creation of a new gas pool for Wolfcamp production for its Government T Well No. 1 located in Unit C of Section 14, Township 20 South, Range 28 East, Eddy County, New Mexico, and the promulgation of temporary special pool rules therefor, including a provision for 320-acre spacing and proration units.
- CASE 5398: Application of Pennzoil United, Inc., for downhole commingling, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks approval for the downhole commingling of Atoka and Morrow production in the wellbore of its Mobil 12 Federal Well No. 1, located in Unit B of Section 12, Township 23 South, Range 26 East, South Carlsbad Field, Eddy County, New Mexico.
- CASE 5399: Application of Coastline Petroleum Company, Inc., for downhole commingling, San Juan County, New Mexico. Applicant, in the above-styled cause, seeks approval for the downhole commingling of undesignated Gallup and Basin-Dakota gas production in the wellbore of its Schalk 94 Well No. 1, located in Unit A of Section 26, Township 32 North, Range 8 West, San Juan County, New Mexico.
- CASE 5400: Application of Twinlakes Oil Company for amendment of special pool rules, Chaves County, New Mexico. Applicant, in the above-styled cause, seeks amendment of the special rules and regulations for the Twin Lakes-San Andres Pool, Chaves County, New Mexico, to permit the drilling of oil wells on gas proration units, the simultaneous dedication of acreage to oil and gas wells, and to limit production from such wells.
- CASE 5379: Southeastern New Mexico nomenclature case calling for the creation and extension of certain pools in Lea and Eddy Counties, New Mexico:
- (a) Create a new pool in Lea County, New Mexico, classified as an oil pool for Paddock production and designated as the Spencer-Paddock Pool. The discovery well is the Aztec Oil & Gas Company State DS Well No. 3 located in Unit J of Section 24, Township 17 South, Range 36 East, NMPM. Said pool would comprise:

TOWNSHIP 17 SOUTH, RANGE 36 EAST, NMPM
Section 24: SE/4

CASE 5399: (Continued from the January 8, 1975, Examiner Hearing)

Application of Coastline Petroleum Company, Inc., for downhole commingling, San Juan County, New Mexico. Applicant, in the above-styled cause, seeks approval for the downhole commingling of undesignated Gallup and Basin-Dakota gas production in the wellbore of its Schalk 94 Well No. 1, located in Unit A of Section 26, Township 32 North, Range 8 West, San Juan County, New Mexico.

CASE 4899: (Reopened)

In the matter of Case 4899 being reopened pursuant to the provisions of Order No. R-4477, which order established temporary special pool rules for the Cedar Canyon-Morrow Gas Pool, including a provision for 640-acre spacing units. All interested parties may appear and show cause why said pool should not be developed on 320-acre spacing units.

CASE 4900: (Reopened)

In the matter of Case 4900 being reopened pursuant to the provisions of Order No. R-4478, which order established temporary special pool rules for the West Jal-Fusselman Gas Pool, Lea County, New Mexico, including a provision for 640-acre spacing units. All interested parties may appear and show cause why said pool should not be developed on 320-acre spacing units.

CASE 5099: (Reopened)

In the matter of Case 5099 being reopened pursuant to the provisions of Order No. R-4683, which order established temporary special pool rules for the South Carlsbad-Wolfcamp Gas Pool, Eddy County, New Mexico, including a provision for 320-acre spacing units. All interested parties may appear and show cause why said pool should not be developed on 160-acre spacing units.

CASE 5409: Application of Atlantic Richfield Company for a non-standard gas proration unit, an unorthodox gas well location, and simultaneous dedication, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval of a 320-acre non-standard gas proration unit comprising the SE/4 of Section 12 and the NE/4 of Section 13, both in Township 24 South, Range 36 East, Jalmat Gas Pool, Lea County, New Mexico, to be simultaneously dedicated to its George W. Toby WN Wells Nos. 4, 1, and 1-A, located, respectively, in Units A and H of said Section 12 and in Unit A of said Section 13.

CASE 5410: Application of Texas Pacific Oil Co., Inc. for two unorthodox gas well locations, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks approval for the unorthodox locations of its Berry Well No. 1, to be located 990 feet from the South and West lines of Section 23, and its Hnulik Well No. 1, located 1315 feet from the North line and 660 feet from the West line of Section 26, both in Township 17 South, Range 26 East, Kennedy Farms-Morrow Gas Pool, Eddy County, New Mexico, the W/2 of said Section 23 and the N/2 of said Section 26 to be dedicated, respectively, to said wells.

Case 5379

KELLAHIN AND FOX
ATTORNEYS AT LAW
500 DON GASPAR AVENUE
POST OFFICE BOX 1789
SANTA FE, NEW MEXICO 87501

JASON W. KELLAHIN
ROBERT E. FOX
W. THOMAS KELLAHIN

TELEPHONE 982-4315
AREA CODE 505

November 25, 1974

Oil Conservation Commission
of New Mexico
P.O. Box 2008
Santa Fe, New Mexico 87501

ATTENTION: Ida Rodriguez

Dear Ida:

Please find enclosed an application to be filed
with the Commission on behalf of Coastline Petroleum
Company, Inc., for Downhole Commingling in San Juan
County, New Mexico.

Yours very truly,

KELLAHIN & FOX

By 
Secretary

:ks

Enclosure

DOCKET MAILED

Date 1-24-75

DOCKET MAILED

Date 12-26-74

BEFORE THE
OIL CONSERVATION COMMISSION OF NEW MEXICO

IN THE MATTER OF THE APPLICATION
OF COASTLINE PETROLEUM COMPANY, INC.,
FOR DOWN-HOLE COMMINGLING, SAN JUAN
COUNTY, NEW MEXICO

A P P L I C A T I O N

COMES NOW Coastline Petroleum Company, Inc., and applies to the Oil Conservation Commission of New Mexico for an order approving down-hole commingling of gas in its Schalk 94-1 well, and in support thereof would show the Commission.

1. Applicant has completed its Schalk ⁹⁴~~94-1~~ well No. 1 located 960 feet from the North line, and 800 feet from the East line of Section 26, Township ³²~~31~~ North, Range 8 West, N.M.P.M., for production of gas from the Basin-Dakota Gas Pool, and gas from an undesignated Gallup gas pool.

2. The subject well has been shut in awaiting pipeline connection.

3. Applicant proposes to produce the two zones by commingling production in the well-bore. Allocation of production to the two zones will be made on the basis of available well test data.

4. Pressures, gas characteristics, are such that no damage will occur to either reservoir by commingling production as proposed. The correlative rights of all parties will be protected.

WHEREFORE applicant prays that this application be set for hearing before the Commission or the Commission's duly appointed examiner, and that after notice and hearing as required by law, the Commission enter its order approving commingling of production as proposed.

Respectfully submitted,
COASTLINE PETROLEUM COMPANY, INC.

By _____
KELLAHIN & FOX
P. O. Box 1769
Santa Fe, New Mexico 87501

ATTORNEYS FOR APPLICANT

DRAFT

BEFORE THE OIL CONSERVATION COMMISSION
OF THE STATE OF NEW MEXICO

dr/

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

CASE NO. 5399

Order No. R-7154

APPLICATION OF COASTLINE PETROLEUM
COMPANY, 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 Jan 5, 1975
at Santa Fe, New Mexico, before Examiner Richard L. Stamets.

NOW, on this 5 day of January, 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, Coastline Petroleum Company, Inc., is
the owner and operator of the Schalk 94 Well No. 1, located in
Unit A of Section 26, Township 32 North, Range 8 West, NMPM,
San Juan County, New Mexico.

(3) That the applicant seeks authority to commingle Undesignated Gallup and Basin-Dakota production within the wellbore of the above-described well.

(4) That from the Undesignated Gallup zone, the subject well is capable of ~~low rates of~~ ^{low rates of} marginal production only.

(5) That from the Basin-Dakota zone, the subject well is capable of low marginal production only.

(6) That the proposed commingling may result in the recovery of additional hydrocarbons from each of the subject pools, thereby preventing waste, and will not violate correlative rights.

(7) 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.

(8) 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.

(9) That in order to allocate the commingled production ~~and~~ ^{deliverabilities to} each of the commingled zones in the subject well, 91 percent of the commingled ~~production~~ production should be allocated to the Undesignated Gallup zone, and 9 percent of the commingled ~~production~~ production to the Basin-Dakota zone.

IT IS THEREFORE ORDERED:

(1) That the applicant, Coastline Petroleum Company, Inc., is hereby authorized to commingle Undesignated Gallup and Basin-Dakota production within the wellbore of ~~its~~ ^{the} Schalk 94 Well No. 1, located in Unit A of Section 26, Township 32 ~~NORTH~~ ^N, Range 8 West, NMPM, San Juan County, New Mexico.

~~(10) That the deliverability of the Dakota zone should be determined by applying the percentages set out in finding (9) above to the deliverability~~ ^{Basin}

-3-
Case No. 5399
Order No. R-

That for the allocation of production and deliverability,

(2) ~~90~~ 91 percent of the commingled 144 production shall be allocated to the Undesignated Gallup zone and 9 percent of the commingled 144 production shall be allocated to the Basin-Dakota 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.