STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT

OIL CONSERVATION DIVISION
P. O. Box 2088
SANTA FE, NEW MEXICO
87501

ADMINISTRATIVE ORDER
NFL 39

INFILL DRILLING FINDINGS PURSUANT TO
SECTION 271.305(b) OF THE FEDERAL ENERGY REGULATORY
COMMISSION REGULATIONS, NATURAL GAS POLICY ACT OF 1978
AND OIL CONSERVATION DIVISION ORDER NO. R-6013-A

I.

Operator C & E Operators, Inc. Well Name and No. Fee Well No. 12

Location: Unit I Sec. 12 Twp. 30-N Rng. 12-W Cty. San Juan

II.

THE DIVISION FINDS:

(1) That Section 271.305(b) of the Federal Energy Regulatory Commission Regulations promulgated pursuant to the Natural Gas Policy Act of 1978 provides that, in order for an infill well to qualify as a new onshore production well under Section 103 of said Act, the Division must find that the infill well is necessary to effectively and efficiently drain a portion of the reservoir covered by the proration unit which cannot be so drained by any existing well within that unit.

(2) That by Order No. R-6013-A, dated February 8, 1980, the Division established an administrative procedure whereby the Division Director and the Division Examiners are empowered to act for the Division and find that an infill well is necessary.

(3) That the well for which a finding is sought is completed in the Aztec-Pictured Cliffs Pool, and the standard spacing unit in said pool is 160 acres.

(4) That a 160-acre proration unit comprising the SE/4 of Sec. 12, Twp. 30-N, Rng. 12-W, is currently dedicated to the Jensen Well No. 1 located in Unit I of said section.

(5) That this proration unit is (X) standard ( ) nonstandard; if nonstandard, said unit was previously approved by Order No. --.

(6) That said proration unit is not being effectively and efficiently drained by the existing well(s) on the unit.

(7) That the drilling and completion of the well for which a finding is sought should result in the production of an additional 24,000 MCF of gas from the proration unit which would not otherwise be recovered.

(8) That all the requirements of Order No. R-6013-A have been complied with, and that the well for which a finding is sought is necessary to effectively and efficiently drain a portion of the reservoir covered by said proration unit which cannot be so drained by any existing well within the unit.

(9) That in order to permit effective and efficient drainage of said proration unit, the subject application should be approved.

IT IS THEREFORE ORDERED:

(1) That the applicant is hereby authorized to drill the well described in Section I above as an infill well on the existing proration unit described in Section II(4) above. The authorization for infill drilling granted by this order is necessary to permit the drainage of a portion of the reservoir covered by said proration unit which cannot be effectively and efficiently drained by any existing well thereon.

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

DONE at Santa Fe, New Mexico, on this 24th day of March, 19 82.

DIVISION DIRECTOR ___ EXAMINER ___

A. R. "Al" Kendrick

P. O. Box 516 • Aztec, New Mexico 87410 • (505) 334-2555

February 22, 1982

Mr. Joe D. Ramey
Oil Conservation Division
P.O. Box 2088
Santa Fe, New Mexico 87501

RE: Application for Approval of Infill Well for Gas Pricing

Dear Mr. Ramey:

We respectfully request that the C & E Operators, Inc. Fee #12 well located 1595' FSL 1025' FEL of Section 12, T30N, R12W be approved as a necessary infill well in the Aztec-Pictured Cliffs Pool to effectively and efficiently drain the spacing unit shared with the Jensen #1 well.

The standard spacing unit in the Aztec-Pictured Cliffs Pool is 160 acres.

Enclosed for your consideration are copies of tee Permit to Drill, Acreage Dedication Plat, Data Sheet, Structure Map, and Map showing the cumulative gas production to 1/1/81.

The only developed spacing units offsetting this drill tract are operated by C & E Operators, Inc. Therefore, copies of this application are not being sent to other operators.

If further information is desired, please contact us.

Yours very truly,

AR Kendrick

A. R. Kendrick

Enclosures

| NO. OF COPIES RECEIVED | 5 | |
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| DISTRIBUTION | | |
| SANTA FE | 1 | |
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SANTA FE

Form C-101
Revised 1-1-65

5a. Indicate Type of Lease STATE [ ] FEE [X]

5. State Oil & Gas Lease No.

# APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. Type of Work

b. Type of Well
DRILL [X] DEEPEN [ ] PLUG BACK [ ]
OIL WELL [ ] GAS WELL [X] OTHER SINGLE ZONE [ ] MULTIPLE ZONE [ ]

7. Unit Agreement Name

8. Farm or Lease Name
Fee

2. Name of Operator
C & E Operators, Inc.

9. Well No.
12

3. Address of Operator
One Energy Square - Suite #170 - Dallas, Texas 75206

10. Field and Pool, or Wildcat
Blanco

4. Location of Well
UNIT LETTER I LOCATED 1595 FEET FROM THE South LINE
AND 1025 FEET FROM THE East LINE OF SEC. 12 TWP. 30N RGE. 12W NMPM

12. County
San Juan

| 19. Proposed Depth | 19A. Formation | 20. Rotary or C.T. |
|---|---|---|
| 4800' | Mesa Verde | Rotary |

| 21. Elevations (Show whether DF, RT, etc.) | 21A. Kind & Status Plug. Bond | 21B. Drilling Contractor | 22. Approx. Date Work will start |
|---|---|---|---|
| 5666' GL | | Young Drilling Company | 12/15/79 |

23.

PROPOSED CASING AND CEMENT PROGRAM

| SIZE OF HOLE | SIZE OF CASING | WEIGHT PER FOOT | SETTING DEPTH | SACKS OF CEMENT | EST. TOP |
|---|---|---|---|---|---|
| 12-1/4" | 9-5/8" | 32# | 240' | 130 Sks.-Class | B |
| 9-5/8" | 7" | 20# | 2240' | 180 Sks- Poz | |
| 6-3/4" | 4-1/2" | 10.5# | 4740' | 310 Sks- 50/50 | Poz |

10-3/4" API 900 Series

Shaffer Hydraulic Double

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gas not dedicated

APPROVAL VALID
FOR 90 DAYS UNLESS
DRILLING COMMENCED,
EXPIRES 3-9-80

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: IF PROPOSAL IS TO DEEPEN OR PLUG BACK, GIVE DATA ON PRESENT PRODUCTIVE ZONE AND PROPOSED NEW PRODUCTIVE ZONE. GIVE BLOWOUT PREVENTER PROGRAM, IF ANY.

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

Signed L. R. Cunningham by mwt Title Agent Date 12/7/79

(This space for State Use)

APPROVED BY Frank S. Lange TITLE DEPUTY OIL & GAS INSPECTOR, DIST. #3 DATE DEC 10 1979

CONDITIONS OF APPROVAL, IF ANY:

All distances must be from the outer boundaries of the Section.

| Operator | Lease | Well No. |
|---|---|---|
| C & E Operators, Inc. | Fee | 1 |

| Unit Letter | Section | Township | Range | County |
|---|---|---|---|---|
| I | 12 | 30N | 12W | San Juan |

Actual Footage Location of Well: 1595 feet from the South line and 1025 feet from the East line

| Ground Level Elev. | Producing Formation | Pool | Dedicated Acreage: |
|---|---|---|---|
| 5653' | Picture Cliff | Aztec | 160 Acres |

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1. Outline the acreage dedicated to the subject well by colored pencil or hachure marks on the plat below.

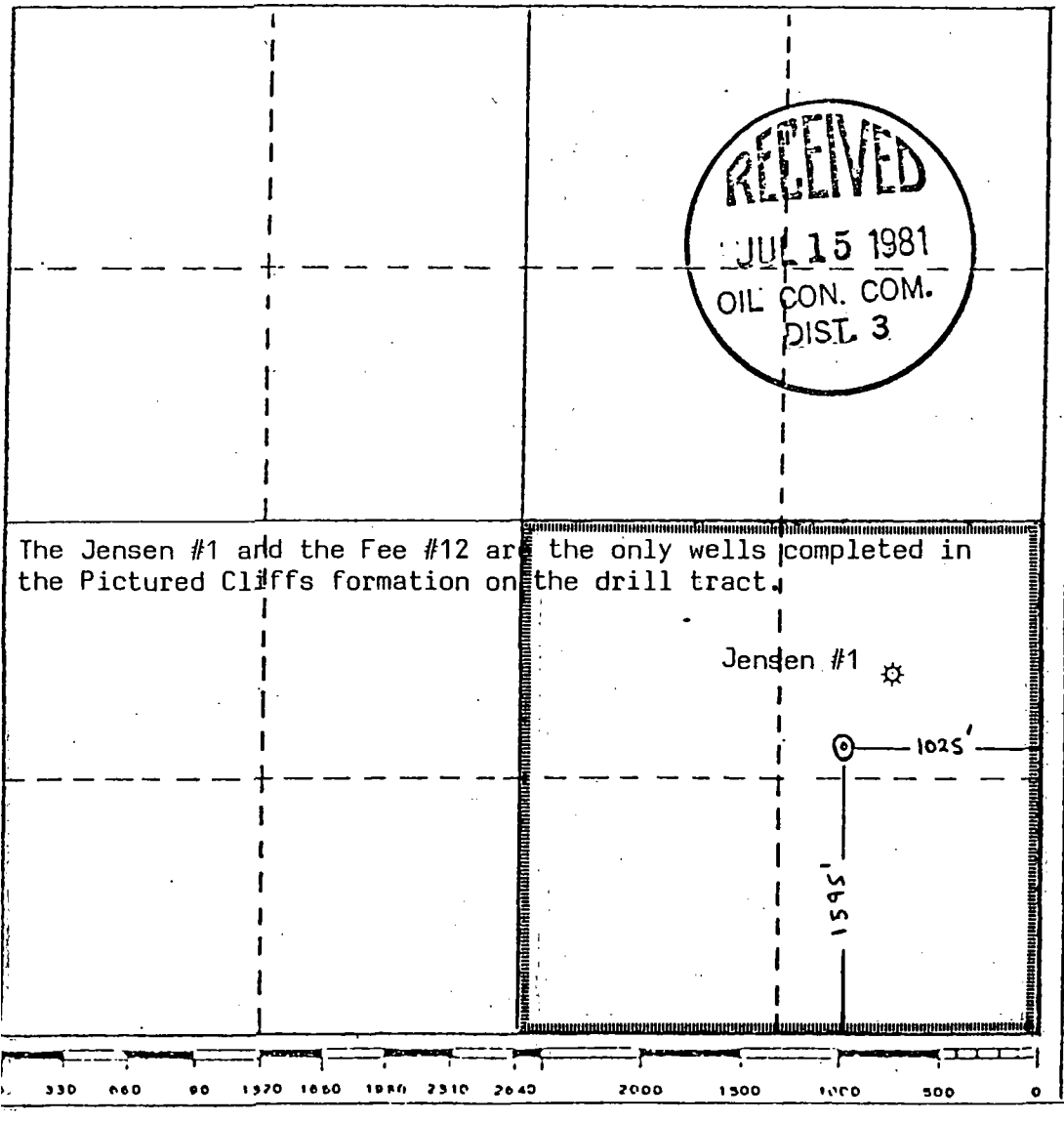
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).

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 been 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 Division




CERTIFICATION

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

L. R. Cunningham

Name: L. R. Cunningham

Position: Agent

Company: C & E Operators, Inc.

Date: 7/14/81

*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.*

Date Surveyed

Registered Professional Engineer and/or Land Surveyor

Certificate No.

# DATA SHEET

ORIGINAL WELL:

Operator: C & E Operators, Inc.
Lease: Jensen #1
Location: 1827' FSL 790' FEL Section 12, T3ON, R12W
Spud: 7/22/54 Completed: 8/25/54
Stimulation: Shot w/ 176 quarts of solidified nitroglycerin
Mechanical problems: none
Retreatment: Sand/oil fractured w/ 6832 gallons of oil and 5400 pounds of sand
Current production rate: 1669 MCF during 1980

REASON that the existing well cannot effectively and efficiently drain the drill tract is because of the narrow radius of effective stimulation by the shot and low-volume fracture treatments. A high-volume fracture treatment is not feasible at this time due to the possibility of casing rupture. Four wells are shown on the structure map which have been plugged due to casing failure.

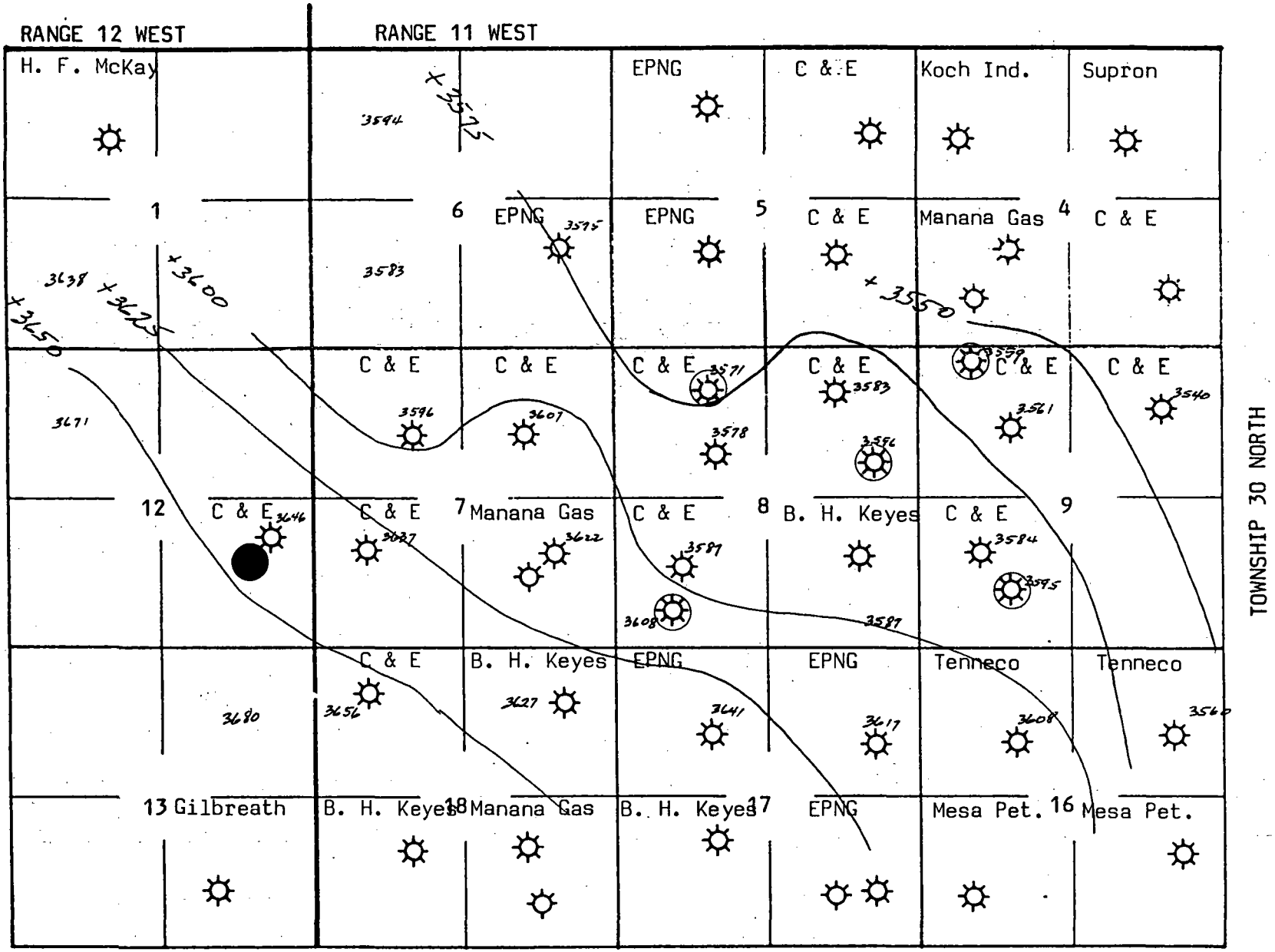
INFILL WELL:

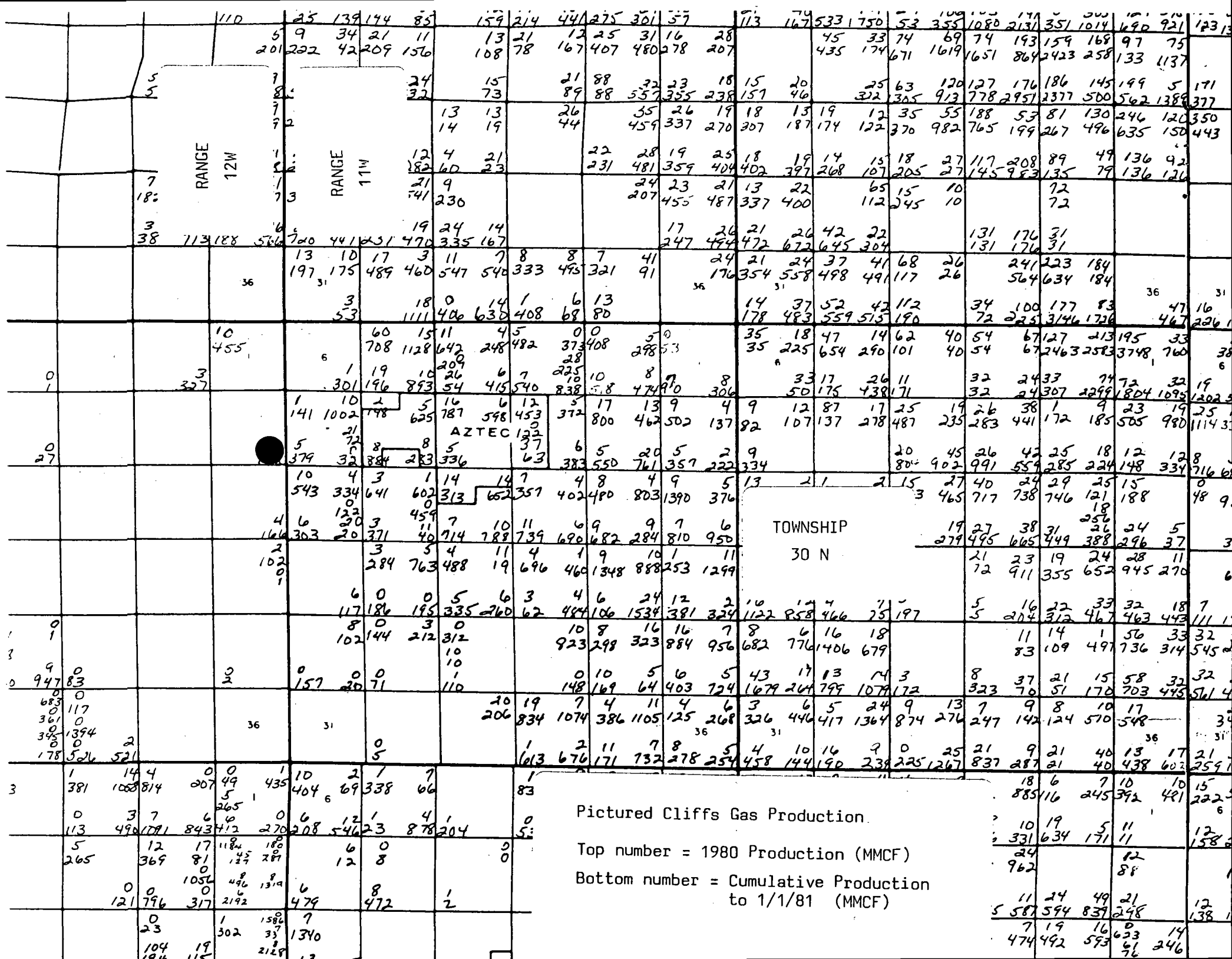
Operator: C & E Operators, Inc.
Lease: Fee #12
Location: 1595' FSL 1025' FEL Section 12, T3ON, R12W
Spud: 12/3/79 Completed: 6/10/81
Stimulation: Sand/foam fractured w/ 70 quality foam and 60,000 pounds of sand

VOLUME of expected additional recovery: 24 MMCF

BASED on Boyle's Law, if the initial shut-in pressure of 649 psi represented 100% of the recoverable reserves, and if the shut-in pressure of 249 psi measured 10/19/81 represented the remaining recoverable reserves, and considering the production of 109 MMCF having been produced through 10/31/81; then, the remaining recoverable reserves were 54 MMCF at an abandonment pressure of 50 psi. The shut-in pressure of 335 psi measured 12/2/81 on the infill well indicates recoverable reserves of 78 MMCF at an abandonment pressure of 50 psi. Therefore, the additional recoverable reserves will be 24 MMCF.

# PICTURED CLIFFS STRUCTURE MAP




RANGE 12W
RANGE 11W
AZTEC
TOWNSHIP 30 N
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Top number = 1980 Production (MMCF)
Bottom number = Cumulative Production to 1/1/81 (MMCF)

Infill Well Application
A.R. "Al" Kendrick for C+E Operations, Inc.
Fed' Well No. 12, I-12-T30N-R12W, San Juan Co., NM,
Offsetting Jensen Well No. 1 in Unit I also.

Given: I.S.I.P. = 649 psi
Current S.I.P. = 249 psi
Cummulative Production to date = 109 MMCF
Abandonment Pressure = 50 psi
Infill Well S.I.P. = 335 psi

649 psi - 249 psi = 400 psi, pressure decline

$x/649\,psi = 109\,MMCF/400\,psi$

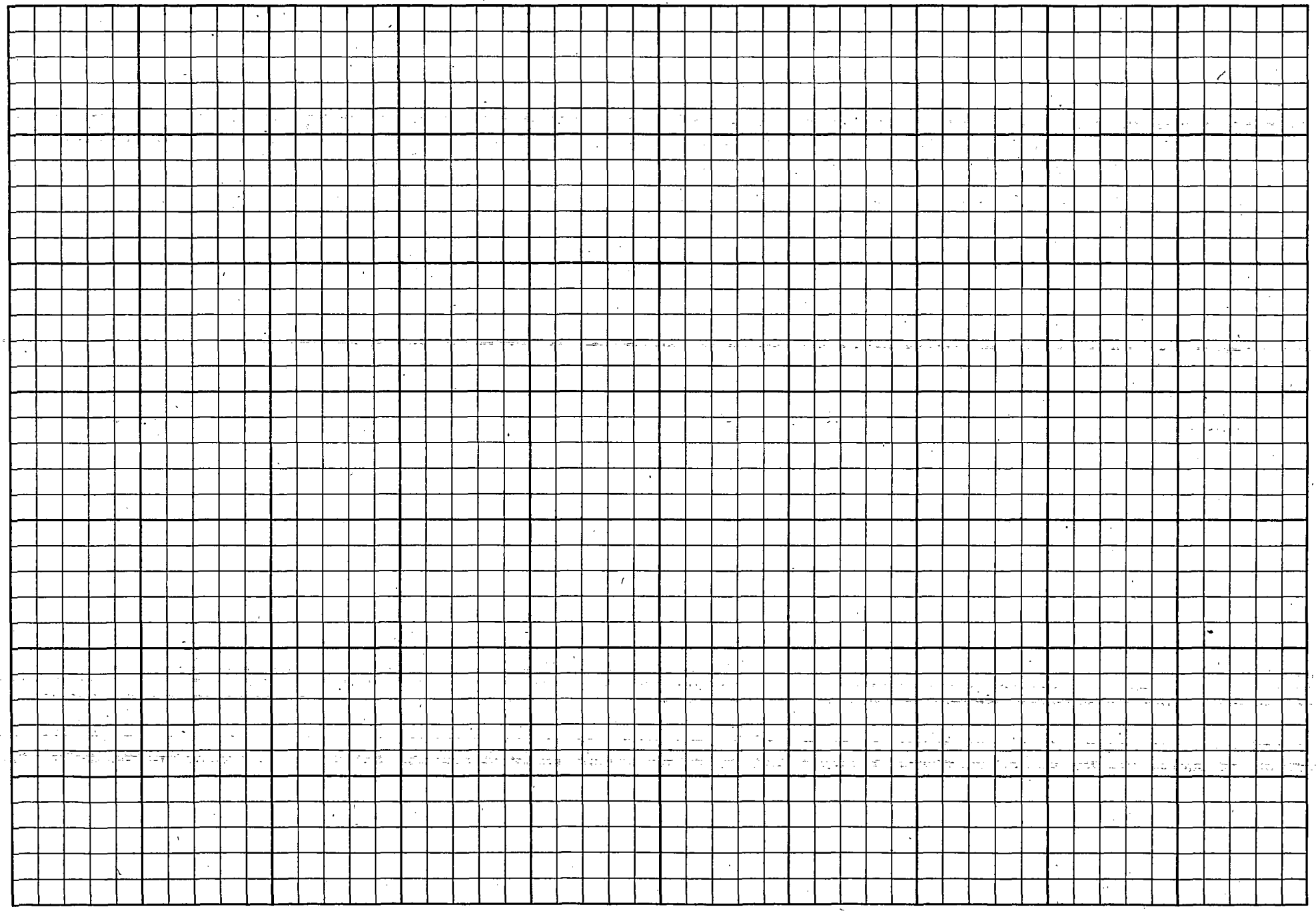
$x = 177$ MMCF, Orig. Res. @ 649 psi.

$50\,psi/649\,psi\ (177\,MMCF) = 14$ Res. @ Abandonment

177 MMCF
- 109 MMCF
68 MMCF Remaining Reserves to Date
- 14 MMCF
54 MMCF Remaing Rec. Res.

$335\,psi/649\,psi\ (177\,MMCF) = 91$ MMCF, Infill Well Res.

91 MMCF
- 14 MMCF
77 MMCF Rec. Res. of Infill Well
- 54 MMCF
23 MMCF Add'l Res.



# A. R. "Al" Kendrick

P. O. Box 516 • Aztec, New Mexico 87410 • (505) 334-2555

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P.O. Box 2088
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SANTA FE

Form C-101
Revised 1-1-65

24089

5A. Indicate Type of Lease STATE [ ] FEE [X]

5. State Oil & Gas Lease No.

# APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

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b. Type of Well

DRILL [X] DEEPEN [ ] PLUG BACK [ ]

OIL WELL [ ] GAS WELL [X] OTHER SINGLE ZONE [ ] MULTIPLE ZONE [ ]

7. Unit Agreement Name

8. Farm or Lease Name: Fee

2. Name of Operator: C & E Operators, Inc.

9. Well No.: 12

3. Address of Operator: One Energy Square - Suite #170 - Dallas, Texas 75206

10. Field and Pool, or Wildcat: Blanco

4. Location of Well UNIT LETTER I LOCATED 1595 FEET FROM THE South LINE AND 1025 FEET FROM THE East LINE OF SEC. 12 TWP. 30N RGE. 12W NMPM

12. County: San Juan

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gas not dedicated

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Signed T. F. Cunningham by mt Title Agent Date 12/7/79

(This space for State Use)

APPROVED BY Frank T. Chavez TITLE DEPUTY OIL & GAS INSPECTOR, DIST. #3 DATE DEC 10 1979

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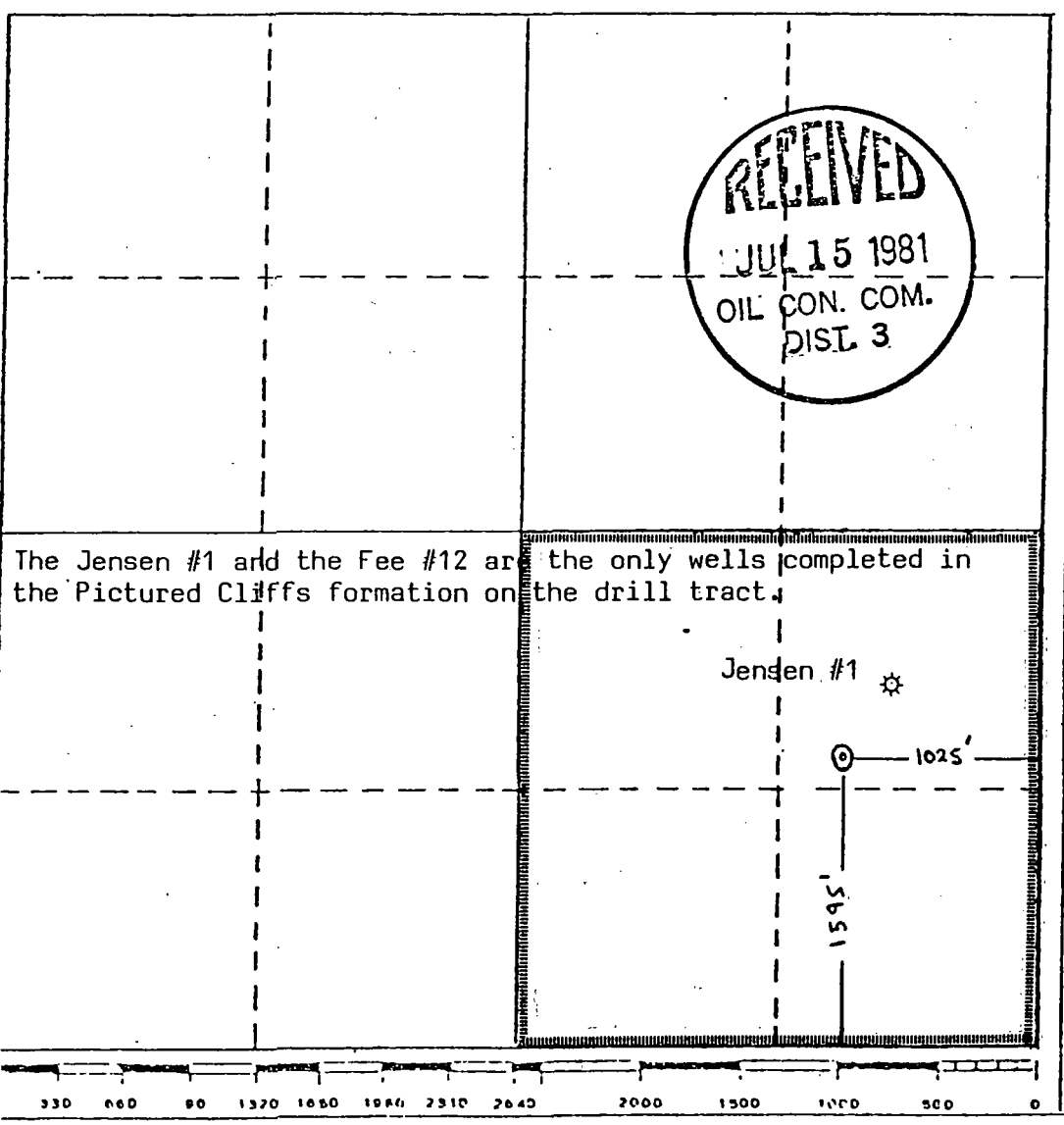


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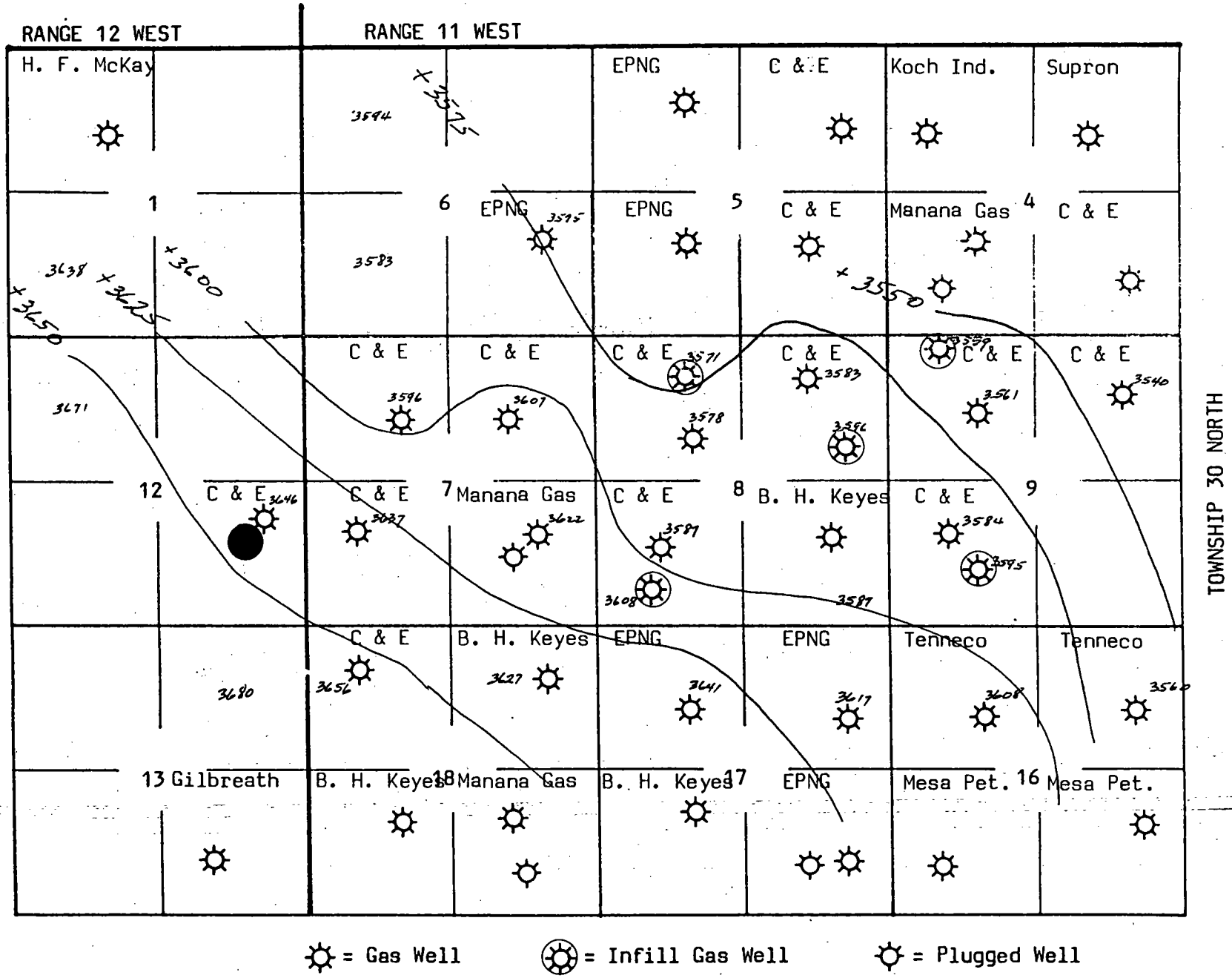

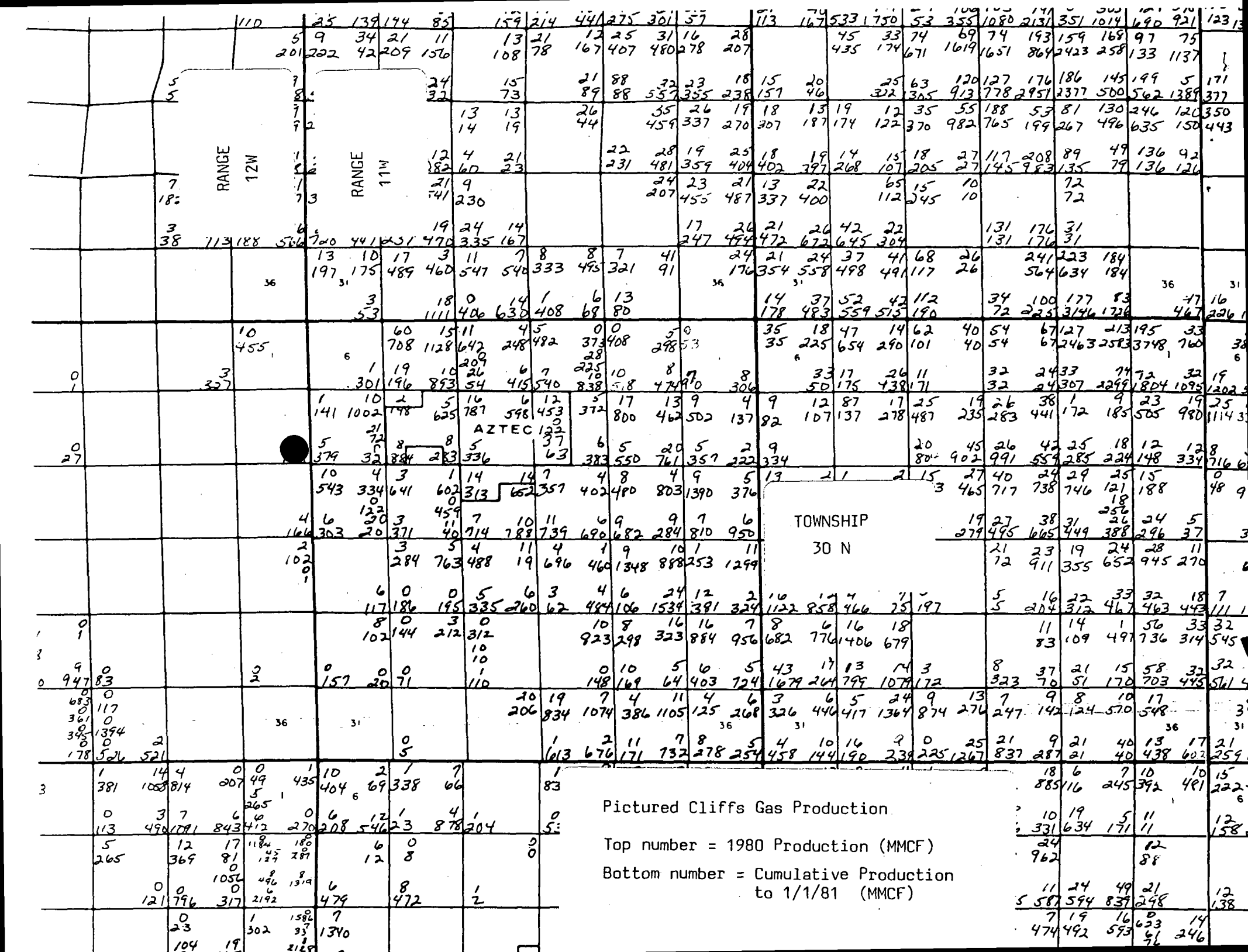
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