

INFILL DRILLING FINDINGS AND WELL-SPACING WAIVER
MADE 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

I.

Operator HCW Exploration, Inc. Well Name and No. R. W. Cowden "C" Well No. 9
Location: Unit H Sec. 31 Twp. 23S Rng. 37E Cty. Lea

II.

THE DIVISION FINDS:

- (1) That Section 271.305(b) of the Federal Energy Regulatory Commission Interim 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, prior to the commencement of drilling, that the 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, and must grant a waiver of existing well-spacing requirements.
- (2) That by Order No. R-6013, dated June 7, 1979, 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 to be completed in the JalmatTansillYatesSeven Rivers (ProratedGas) pool, and the standard spacing unit in said pool is 640 acres.
- (4) That a 316-acre proration unit comprising the N/2 of Sec. 31, Twp. 23S, Rng. 37E, is currently dedicated to the R. W. Cowden "C" Well No. 4 located in Unit C of said section.
- (5) That this proration unit is () standard (X) nonstandard; if nonstandard, said unit was previously approved by Order No. NSP-143.
- (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 179,700 MCF of gas from the proration unit which would not otherwise be recovered.
- (8) That all the requirements of Order No. R-6013 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 as an exception to the standard well spacing requirements for the pool.

IT IS THEREFORE ORDERED:

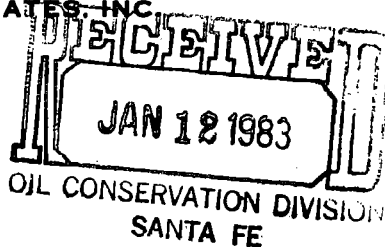
- (1) That the applicant is hereby authorized to drill the well described in Section I above as an infill well on the existing proration unit described in Section II(4) above. The authorization for infill drilling granted by this order is an exception to applicable well spacing requirements and is necessary 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 22nd day of February, 19 83.


DIVISION DIRECTOR EXAMINER

WILLIAM P. AYCOCK & ASSOCIATES, INC.

Petroleum Engineering Consultants
308 WALL TOWERS WEST
MIDLAND, TEXAS 79701
PHONE 915/683-5721



December 29, 1982

New Mexico Department of Energy and Minerals,
Oil Conservation Division
P. O. Box 2088
Santa Fe, New Mexico 87501

Attention: Mr. Mike Stogner

Subject: Administrative Application for Infill Well Findings
for HCW Exploration Company's Cowden "C" No. 9 Well,
Section 31, Township 23 South, Range 37 East,
1650' FNL and 800' FEL, Jalmat (Gas) Pool,
Lea County, New Mexico

Gentlemen:

Application is hereby made for an administrative infill well finding effective with initial gas deliveries for the described well in accordance with Exhibit "A", Order R-6013-A. The following constitute the requirements of the said Order:

- Rule 5: Attached are copies of the Forms C-101 and C-102.
- Rule 6: The name of the pool in which the infill well has been drilled is the Jalmat Pool, and the standard spacing therefor is 640 acres.
- Rule 7: The non-standard proration unit and unorthodox well location were approved administratively by Order No. NSP-1335, a copy of which is attached hereto.
- Rule 8: See attached Table No. 1, "Summary of Required Information, Rule 8, Exhibit "A", Order No. R-6013-A" for requirements of Sections "a." through "f.". Also required by Section "g." is "a clear and concise statement indicating why the existing well(s) on the proration unit cannot effectively and efficiently drain the portion of the reservoir covered by the proration unit." The Jalmat (Gas) Pool well to which the 320-acres were assigned that included the present 160-acre

non-standard proration unit was the HCW Exploration Company Cowden "C" No. 4; this well was last produced in July, 1980, with an accumulative gas production of 5,743 MMCF. Since July, 1982 and prior to the drilling and completion of the infill HCW Exploration Company Cowden "C" No. 9, there was no gas production from the east one-half of the original 320-acre proration unit which was assigned to the infill well from the Jalmat (Gas) Pool. Accordingly, any gas reserves that would have been recoverable after July, 1982 beneath the 160-acre proration unit would not have been produced unless an infill well had been drilled.

Rule 9:

- Section a. Requires that a formation structure map be submitted; attached is a Yates formation structure map of the area including and immediately surrounding the subject 160-acre proration unit.
- Section b. Requires that the "volume of increased ultimate recovery expected to be obtained and a narrative describing how the increase was determined " be submitted. The estimated ultimate gas recovery for the HCW Exploration Cowden "C" No. 9 is 180 MMCF. Since there is no gas to be recovered from the proration unit assigned to this infill well other than anticipated volume of gas, the increased ultimate recovery is 180 MMCF. The estimate of increased recovery for the HCW Exploration Company Cowden "C" No. 9 was accomplished as follows:

(1) Well logs for the HCW Cowden "C" No. 9 were analyzed, resulting in the following:

Mean Porosity, Fraction of Bulk Volume	0.171
Mean Connate Water Saturation, Fraction of Net Effective Pore Volume	0.39
Net Effective Pay Thickness, Feet	39.

Since the gross pay thickness constituting potential gas reservoir for the Cowden "C" No. 9 is 55 feet, the above represents a net effective pay to gross pay ratio of approximately 71 percent.

(2) The production test for the Cowden "C" No. 9 performed on October 15, 1982, was analyzed, resulting in the following:

Stabilized Deliverability Coefficient, MCF/day per psia ² ,	0.0265022
Initial Stabilized Wellhead Shut-in Pressure (Pc), psia	143.2
Initial Gas Formation Volume Factor scf/rcf	9.68

(3) The results of steps (1) and (2) were then combined,
resulting in the following:

Original Gas-in-Place

MMCF/Acre	1.722
MMCF/160 Acres	276.0
Estimated Gas Recovery Factor, Fraction of Original Gas-in-Place	0.651
Estimated Ultimate Recovery, MMCF per 160 Acres	179.7

Section c. Other supporting data submitted include the following:

Gas Production History Tabulation and Graph for HCW
Exploration Company Cowden "C" No. 4 (the pre-existing
well).

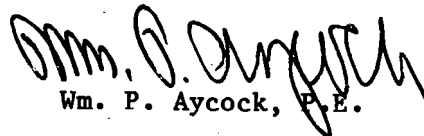
Complete New Mexico Oil Conservation Division (NMOCD) Forms
on file for both the pre-existing HCW Exploration Company
Cowden "C" No. 4 and the Infill HCW Exploration Co. Cowden
"C" No. 9.

New Mexico Oil Conservation Division Order No. NSP-1335

New Mexico Department of Energy and Minerals
Oil Conservation Division
December 29, 1982
Page 4

We believe that the above adequately documents this request and has been prepared in accordance with Exhibit "A", Order R-6013-A; however, we should be pleased to supply anything else which you might require in this connection.

Very truly yours,


Wm. P. Aycock, P.E.

WPA/pkm

Enclosures

TABLE NO. 1

SUMMARY OF REQUIRED INFORMATION, RULE 8, EXHIBIT "A", ORDER R-6013-A,
 (Sections "a." through "f.")
 NATURAL GAS POLICY ACT INFILL FINDINGS, ADMINISTRATIVE PROCEDURE

<u>SECTION OF RULE 8</u>	<u>RULE 8 REQUIREMENT</u>	<u>PRE-EXISTING WELL OPERATOR HCW EXPLORATION COMPANY</u>	<u>INFILL APPLICATION WELL OPERATOR HCW EXPLORATION COMPANY</u>
a.	Lease Name and Well Location	R. W. Cowden "C" No. 4	R. W. Cowden "C" No. 9
b.	Spud Date	October 30, 1949	September 10, 1982
c.	Completion Date	November 18, 1949, in Langlie-Mattix	October 15, 1982
d.	Mechanical Problems	None; PB to Jalmat 11-18-52	None.
e.	Current Rate of Production	None; Last produced 68 MCF in June 1982.	C-105: 494 MCF/day
f.	Date of Plug and Abandonment	Not Plugged. Casing side of dual completion as water injection well (Getty Oil Co. Myers Langlie-Mattix Unit No. 61).	Not Plugged.

I-1- CUM: UPDATED THRU: 7-82 BY:

100 000

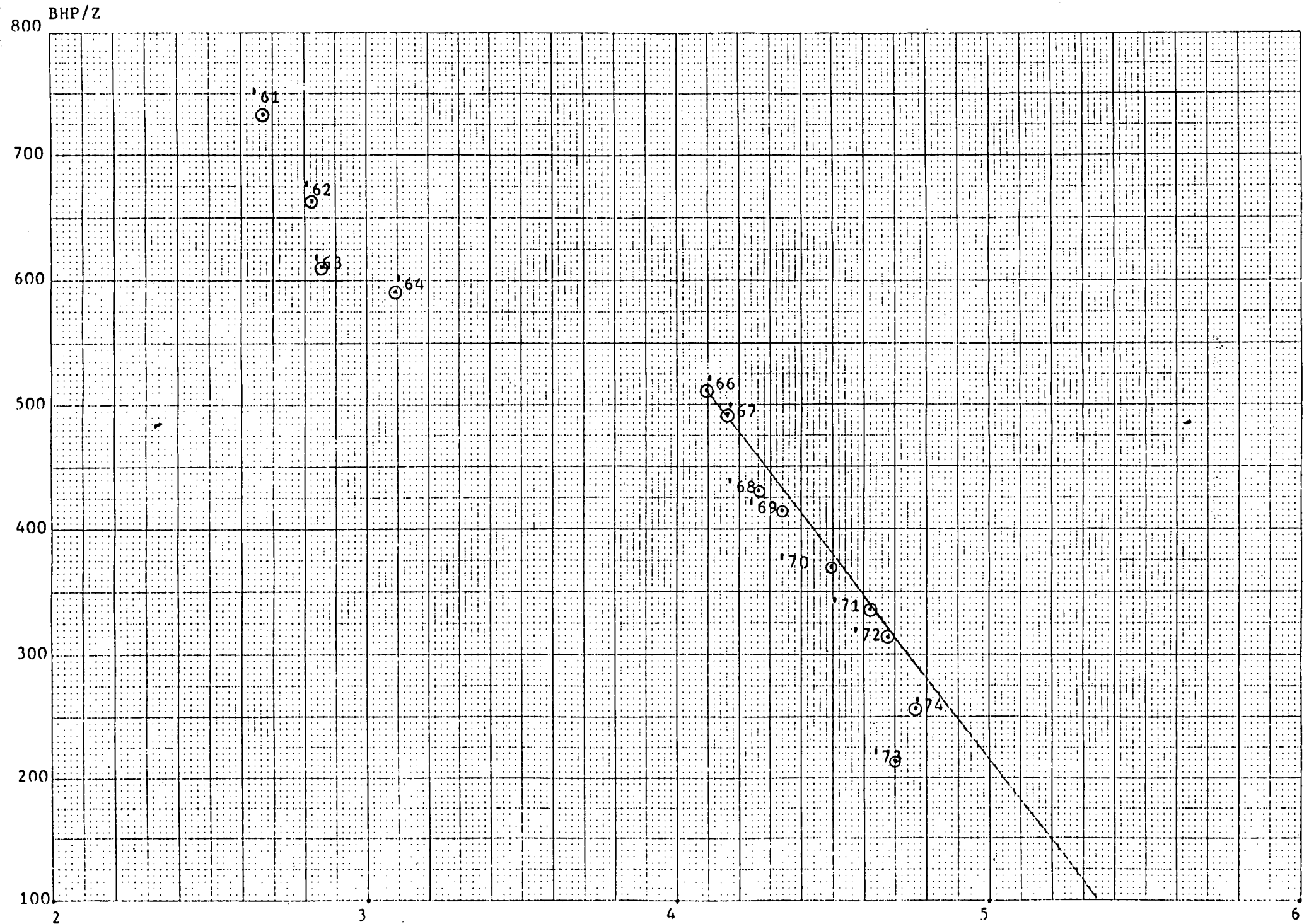
FIELD: Jalmat Tansill Yates 7 Rivers	
OPERATOR: HCW EXPLORATION, INC.	
LEASE: R.W. COWDEN "C"	
LOCATION: 31(C) T-23S, R-37E	DIST: <input type="checkbox"/> OIL <input checked="" type="checkbox"/> GAS
COUNTY: LEA	STATE: N.M.
NO. WELLS: 1	WELL NOS: 4-C
DATE PROD BEGAN:	ACRES:
MIDLAND	

GAS PRODUCTION - MCF/MONTH

MONTHS X 3 LOG CYCLES

100

Mar 19 72	June 19 72	Sept 19 72	Dec 19 72	Mar 19 73	June 19 73	Sept 19 73	Dec 19 73	Mar 19 74	June 19 74	Sept 19 74	Dec 19 74	Mar 19 75	June 19 75	Sept 19 75	Dec 19 75	Mar 19 76	June 19 76	Sept 19 76	Dec 19 76	Mar 19 77	June 19 77	Sept 19 77	Dec 19 77	Mar 19 78	June 19 78	Sept 19 78	Dec 19 78	Mar 19 79	June 19 79	Sept 19 79	Dec 19 79	Mar 19 80	June 19 80	Sept 19 80	Dec 19 80	Mar 19 81	June 19 81	Sept 19 81	Dec 19 81	Mar 19 82	June 19 82	Sept 19 82	Dec 19 82	Mar 19 83	June 19 83	Sept 19 83	Dec 19 83	Mar 19 84	June 19 84	Sept 19 84	Dec 19 84	Mar 19 85	June 19 85	Sept 19 85	Dec 19 85	Mar 19 86	June 19 86	Sept 19 86	Dec 19 86	Mar 19 87	June 19 87	Sept 19 87	Dec 19 87	Mar 19 88	June 19 88	Sept 19 88	Dec 19 88	Mar 19 89	June 19 89	Sept 19 89	Dec 19 89	Mar 19 90	June 19 90	Sept 19 90	Dec 19 90	Mar 19 91	June 19 91	Sept 19 91	Dec 19 91
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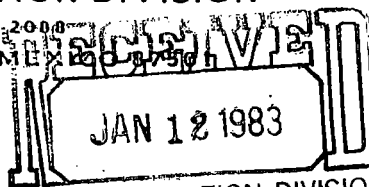
STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT

OIL CONSERVATION DIVISION

P. O. BOX 2000
SANTA FE, NEW MEXICO 87501

Form C-101
Revised 10-1-78

NO. OF COPIES RECEIVED	
DISTRIBUTION	
SANTA FE	
FILE	
U.S.G.S.	
LAND OFFICE	
OPERATOR	



5A. Indicate Type of Lease
STATE ☐ FEE ☒
5. State Oil & Gas Lease No.

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

a. Type of Work
b. Type of Well
OIL WELL ☐ GAS WELL ☒ OTHER ☐
c. Name of Operator
HCW Exploration, Inc.
d. Address of Operator
P. O. Box 10585 Midland, Texas 79702
e. Location of Well
UNIT LETTER H LOCATED 1650 FEET FROM THE North LINE
AND 800 FEET FROM THE East LINE OF SEC. 31 TWP. 23S RGE. 37E NADP

7. Unit Agreement Name
8. Farm or Lease Name
R. W. Cowden "C"
9. Well No.
9
10. Field and Pool, or Wildcat
Jalmat (Gas)
12. County
Lea

1. Elevations (Show whether DT, RT, etc.)
3329' GR
21A. Kind & Status Plug Bond
Blanket
19. Proposed Depth
3300'
19A. Formation
Yates
20. Rotary or C.T.
Rotary
21B. Drilling Contractor
To be Determined
22. Approx. Date Work will start
August 1982

PROPOSED CASING AND CEMENT PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	SACKS OF CEMENT	EST. TOP
11"	8 5/8"	24#	400'	150	Surface
7 7/8"	4 1/2"	10.5#	3300'	500	Surface

Propose to drill 11" hole to 400' and run 8 5/8" casing. Will cement with sufficient cement volume to circulate cement to surface. Nipple up 10" 3000 psi BOP with pipe rams and blind rams. Drill 7 7/8" hole to approximately 2700' using brine water. Will drill with mud from 2700' to 3300' TD. Run open hole logs and if well looks productive, run 4 1/2" casing. Will try to circulate cement to surface on 4 1/2" casing. Will attempt to complete well as Yates gas well.

APPROVAL VALID FOR 180 DAYS
PERMIT EXPIRES 2/25/83
UNLESS DRILLING UNDERWAY

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 Steve A. Douglas Steve Douglas Title Division Engineer Date August 20, 1982

(This space for State Use)
ORIGINAL SIGNED BY
JERRY SEXTON

AUG 25 1982

APPROVED BY _____ TITLE _____ DATE _____
CONDITIONS OF APPROVAL, IF ANY

NEW MEXICO OIL CONSERVATION COMMISSION
WELL LOCATION AND ACREAGE DEDICATION

RECEIVED

Form C-102
Supersedes C-128
Effective 1-1-85

JAN 12 1983

All distances must be from the outer boundaries of the Section

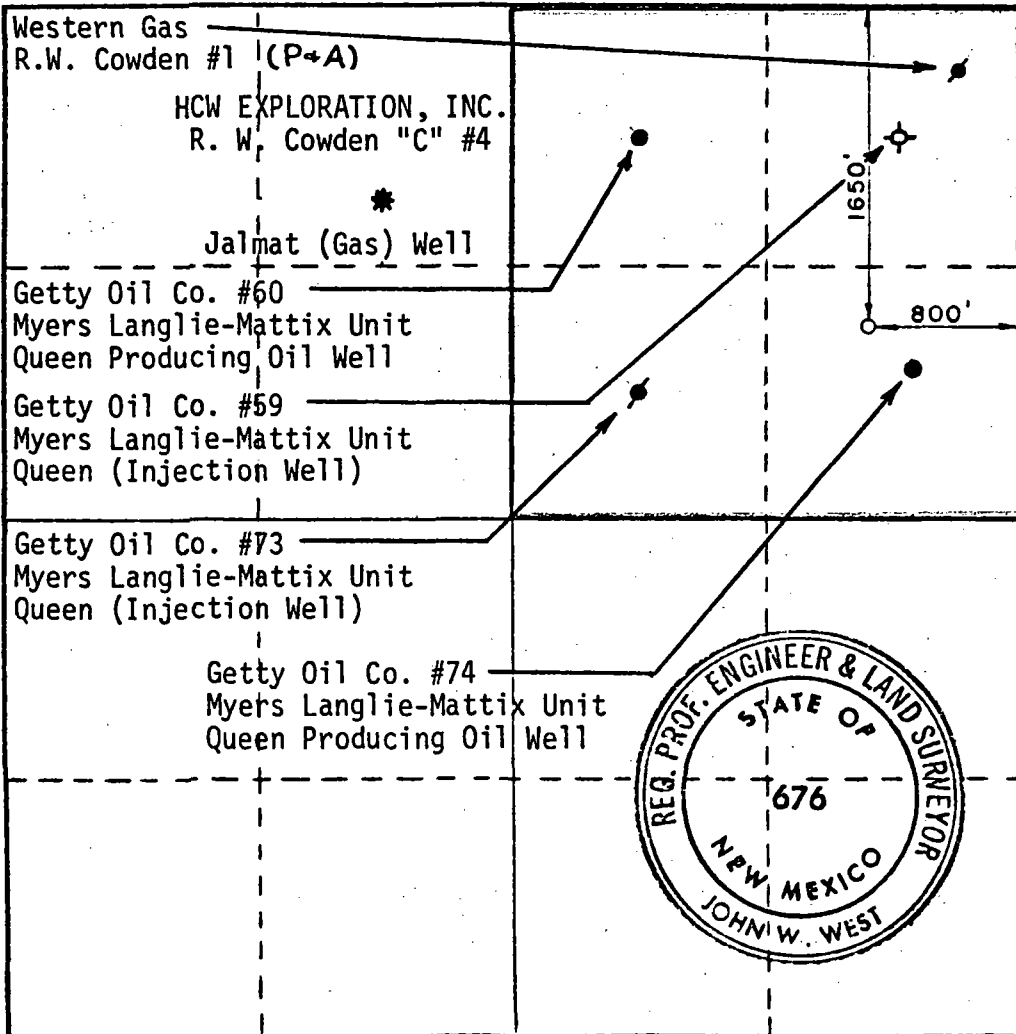
Operator H.C.W. EXPLORATION INC.			Lease R.W. COWDEN			Well No. 9		
Unit Letter H	Section 31	Township 23-SOUTH	Range 37-EAST	County SANTA FE				
Actual Footage Location of Well:								
1650 feet from the NORTH line and			800 feet from the EAST line					
Ground Level Elev. 3328.8	Producing Formation Yates		Pool Jalmat (Gas)			Dedicated Acreage: 160 Acres		

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 Commission.



CERTIFICATION

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

Steve A Douglas

Name
Steve A. Douglas
Position
Division Engineer
Company
HCW Exploration, Inc.

Date
August 20, 1982

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.

AUGUST 17, 1982

Date Surveyed

Registered Professional Engineer and/or Land Surveyor

John W. West

Certificate No. **JOHN W. WEST 676**
PATRICK A. ROMERO 6865
Ronald J. Eidson 3239



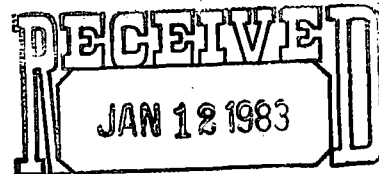
STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT
OIL CONSERVATION DIVISION

BRUCE KING
GOVERNOR

November 15, 1982

POST OFFICE BOX 2088
STATE LAND OFFICE BUILDING
SANTA FE, NEW MEXICO 87501
(505) 827-2434

HCW Exploration, Inc.
P. O. Box 10585
Midland, Texas 79702



OIL CONSERVATION DIVISION
SANTA FE

Attention: Steve A. Douglas

Administrative Order NSP-1335

Gentlemen:

Reference is made to your application for a 160-acre non-standard proration unit consisting of the following acreage in the Jalmat Gas Pool:

LEA COUNTY, NEW MEXICO
TOWNSHIP 23 SOUTH, RANGE 37 EAST, NMPM
Section 31: NE/4

It is my understanding that this unit is to be dedicated to your R. W. Cowden "C" Well No. 9 located 1650 feet from the North line and 800 feet from the East line of said Section 31.

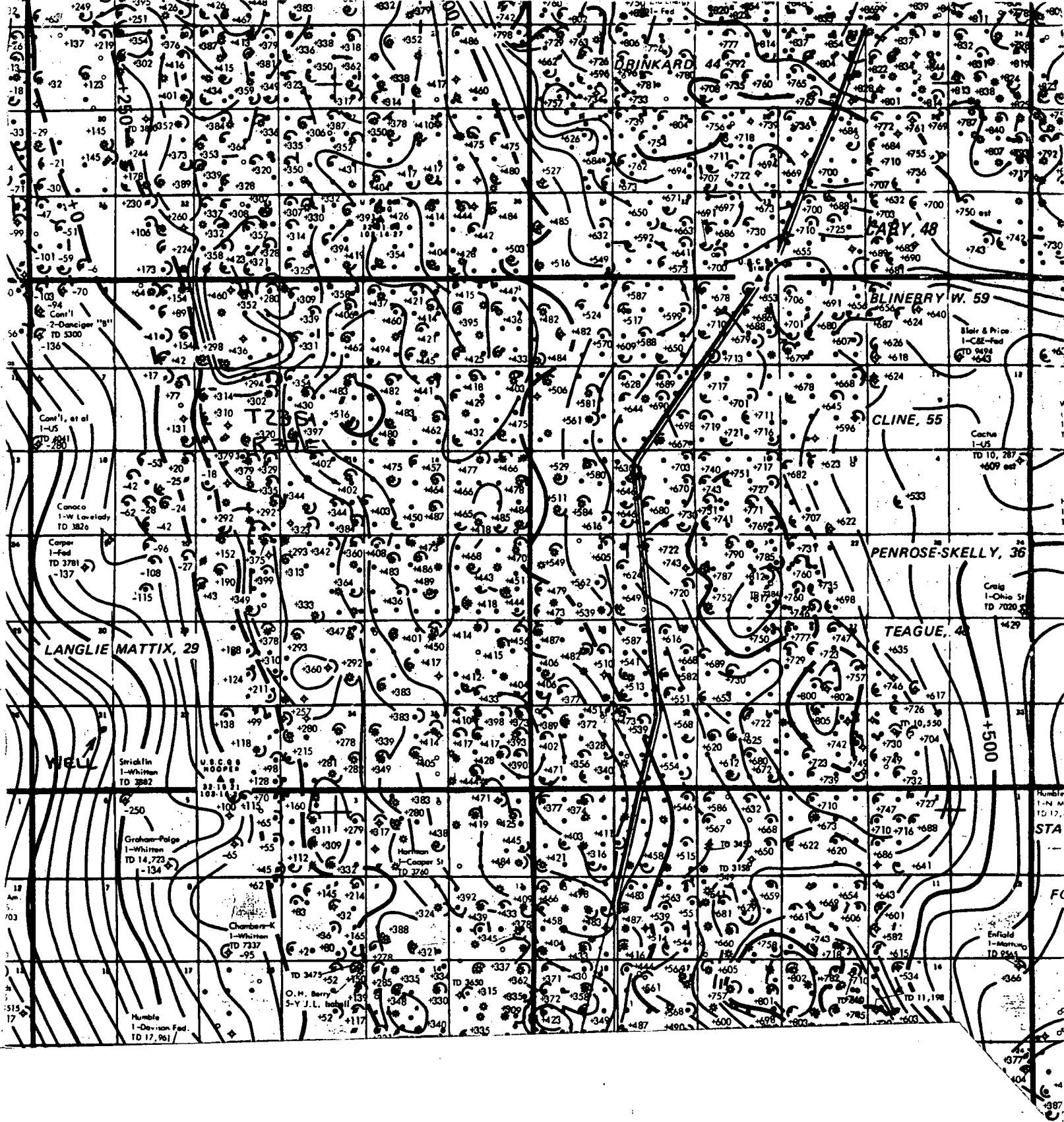
By authority granted me under the provisions of Rule 5(c)(3) of Order No. R-1670, the above non-standard proration unit is hereby approved.

Sincerely,

JOE D. RAMEY,
Director

JDR/RLS/dr

cc: Oil Conservation Division - Hobbs
Oil & Gas Engineering Committee - Hobbs



New Mexico Oil

Conservation Division

February 21, 1983

Michael E. Stogner
Petroleum Engineer

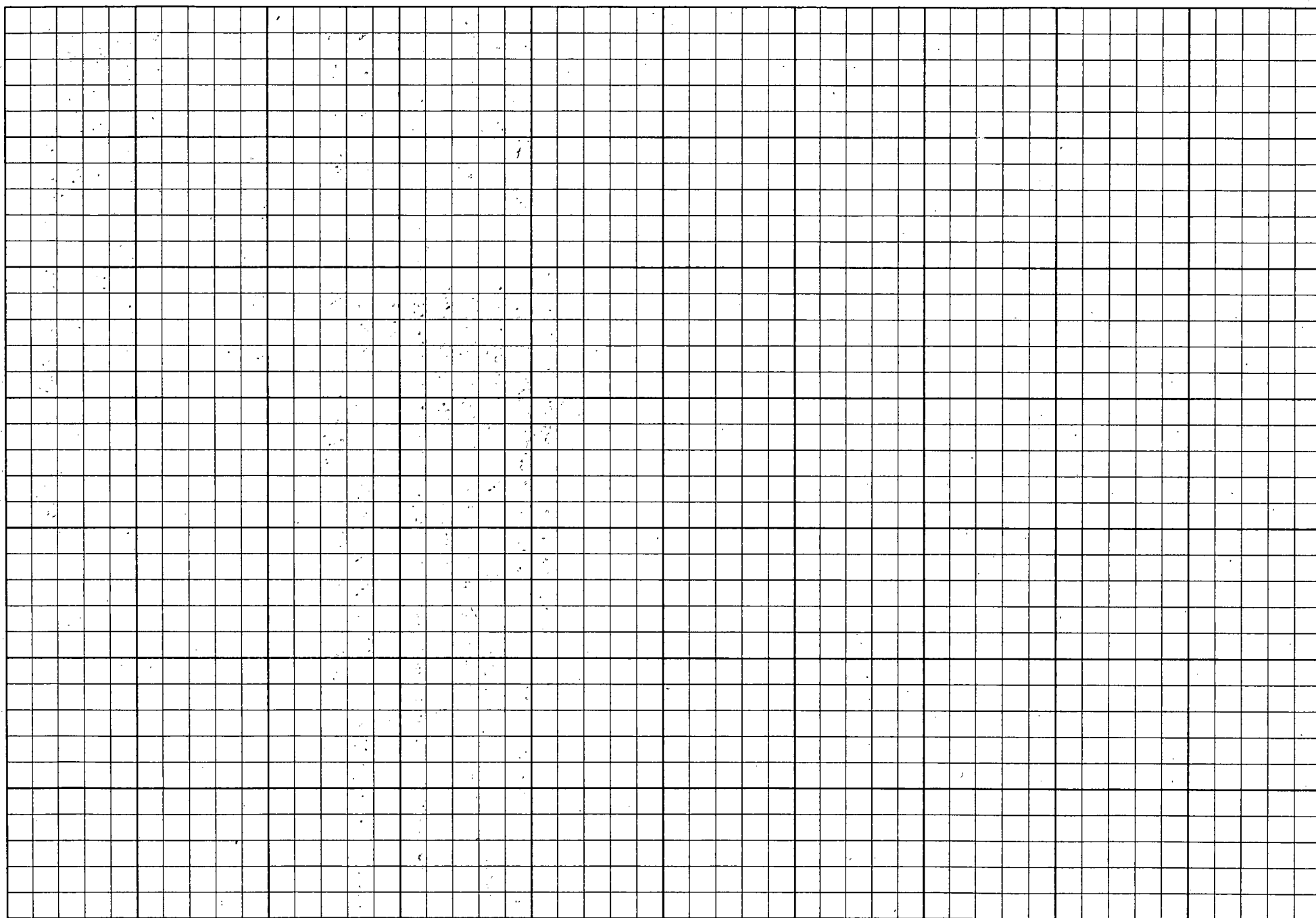
Administrative Application for Infill Well Findings
HCU Exploration, Inc.
R.W. Cowden "C" Well No. 9
Unit H, Section 31, Township 23 South, Range 37 East,
Lea County

Sequence of Events

- October 27, 1949 - R.W. Cowden "C" Well No. 4 Spudded.
- December 1953 - R.W. Cowden "C" Well No. 4 Completed (Dually) in Jalmat zone.
- June 8, 1955 - ASP-143 approving W/G, 316 acre non-standard production unit dedicated to Well No. 4
- September 10, 1982 - R.W. Cowden "C" Well No. 9 Spudded.
- October 1982 - R.W. Cowden "C" Well No. 9 Completed in Jalmat zone.
- November 15, 1982 - ASP-1335 approving W/G, 160 acre non-standard production unit dedicated to Well No. 9.

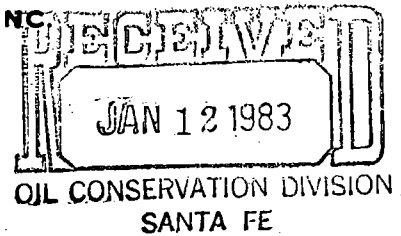


42-381 50 SHEETS 5 SQUARE
42-382 100 SHEETS 5 SQUARE
42-389 200 SHEETS 5 SQUARE
MADE IN U.S.A.



WILLIAM P. AYCOCK & ASSOCIATES, INC.

Petroleum Engineering Consultants
308 WALL TOWERS WEST
MIDLAND, TEXAS 79701
PHONE 915/883-5721



December 29, 1982

New Mexico Department of Energy and Minerals,
Oil Conservation Division
P. O. Box 2088
Santa Fe, New Mexico 87501

Attention: Mr. Mike Stogner

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- Rule 6: The name of the pool in which the infill well has been drilled is the Jalmat Pool, and the standard spacing therefor is 640 acres.
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Rule 9:

Section a. Requires that a formation structure map be submitted; attached is a Yates formation structure map of the area including and immediately surrounding the subject 160-acre proration unit.

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Section c. Other supporting data submitted include the following:

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well).

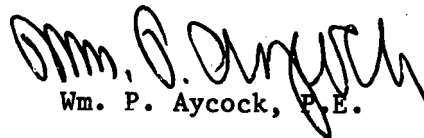
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"C" No. 9.

New Mexico Oil Conservation Division Order No. NSP-1335

New Mexico Department of Energy and Minerals
Oil Conservation Division
December 29, 1982
Page 4

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Very truly yours,


Wm. P. Aycock, P.E.

WPA/pkm

Enclosures

TABLE NO. 1

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 (Sections "a." through "f.")
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c.	Completion Date	November 18, 1949, in Langlie-Mattix	October 15, 1982
d.	Mechanical Problems	None; PB to Jalmat 11-18-52	None.
e.	Current Rate of Production	None; Last produced 68 MCF in June 1982.	C-105: 494 MCF/day
f.	Date of Plug and Abandonment	Not Plugged. Casing side of dual completion as water injection well (Getty Oil Co. Myers Langlie-Mattix Unit No. 61).	Not Plugged.

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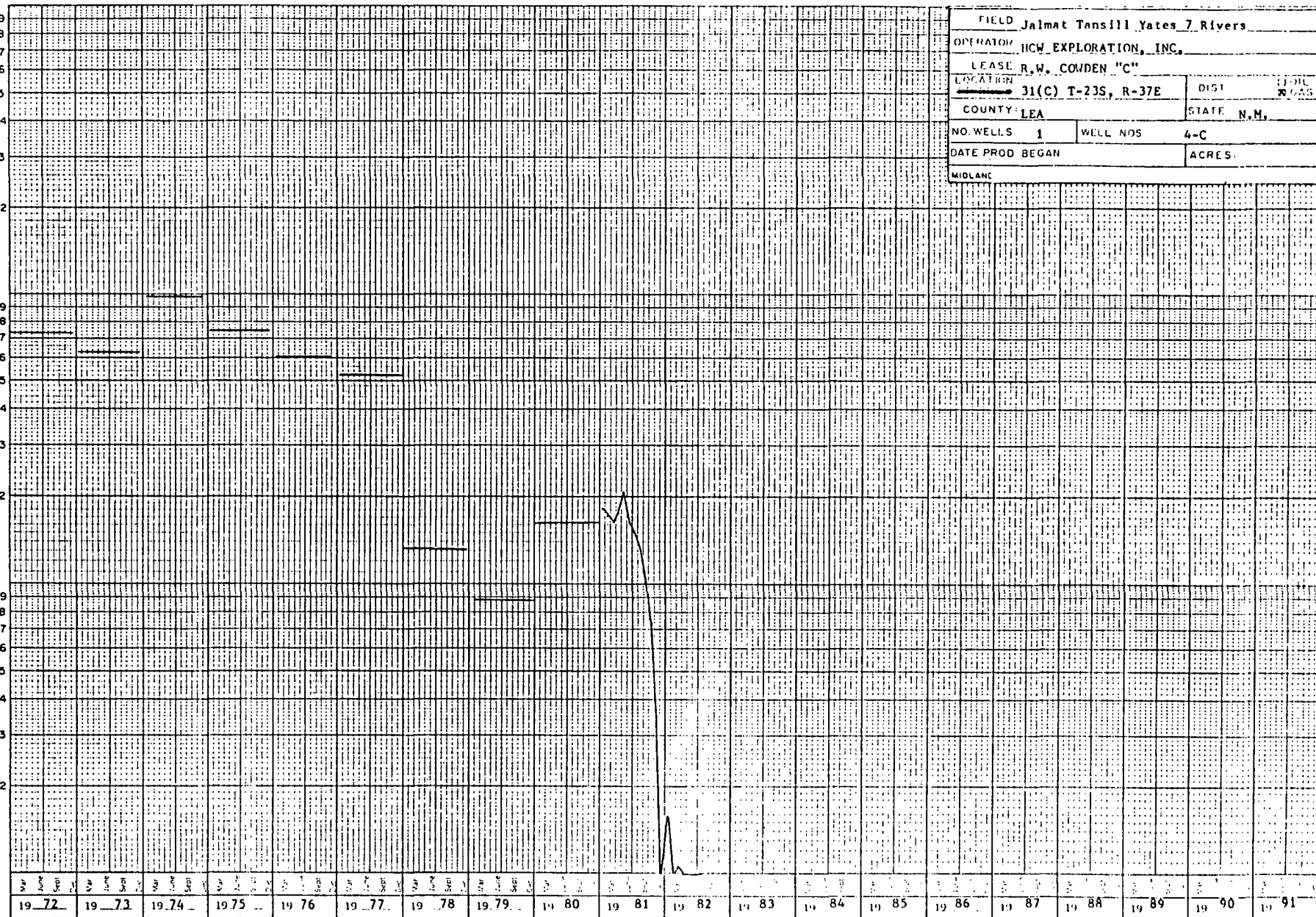
GAS PRODUCTION - MCF/MONTH

10 000

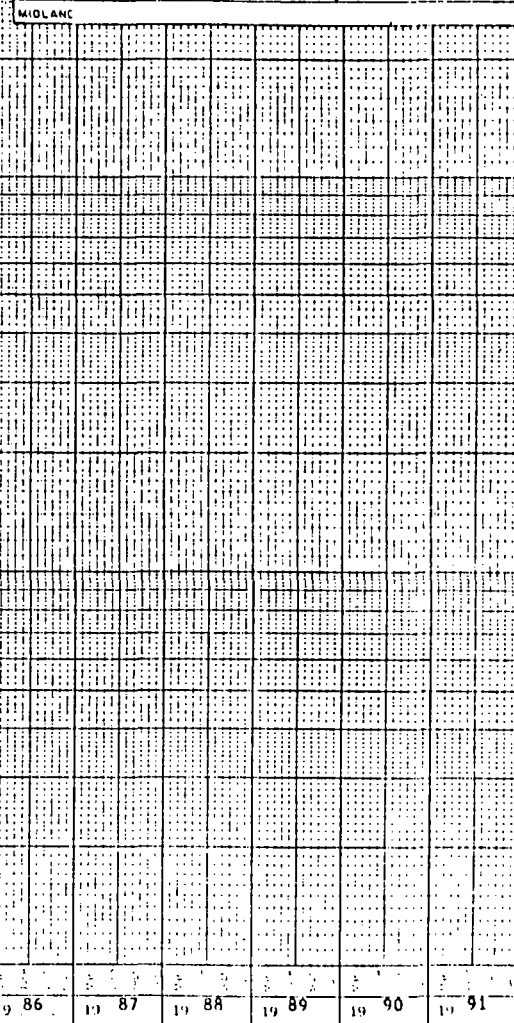
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MONTHS & 3 LOG CYCLES

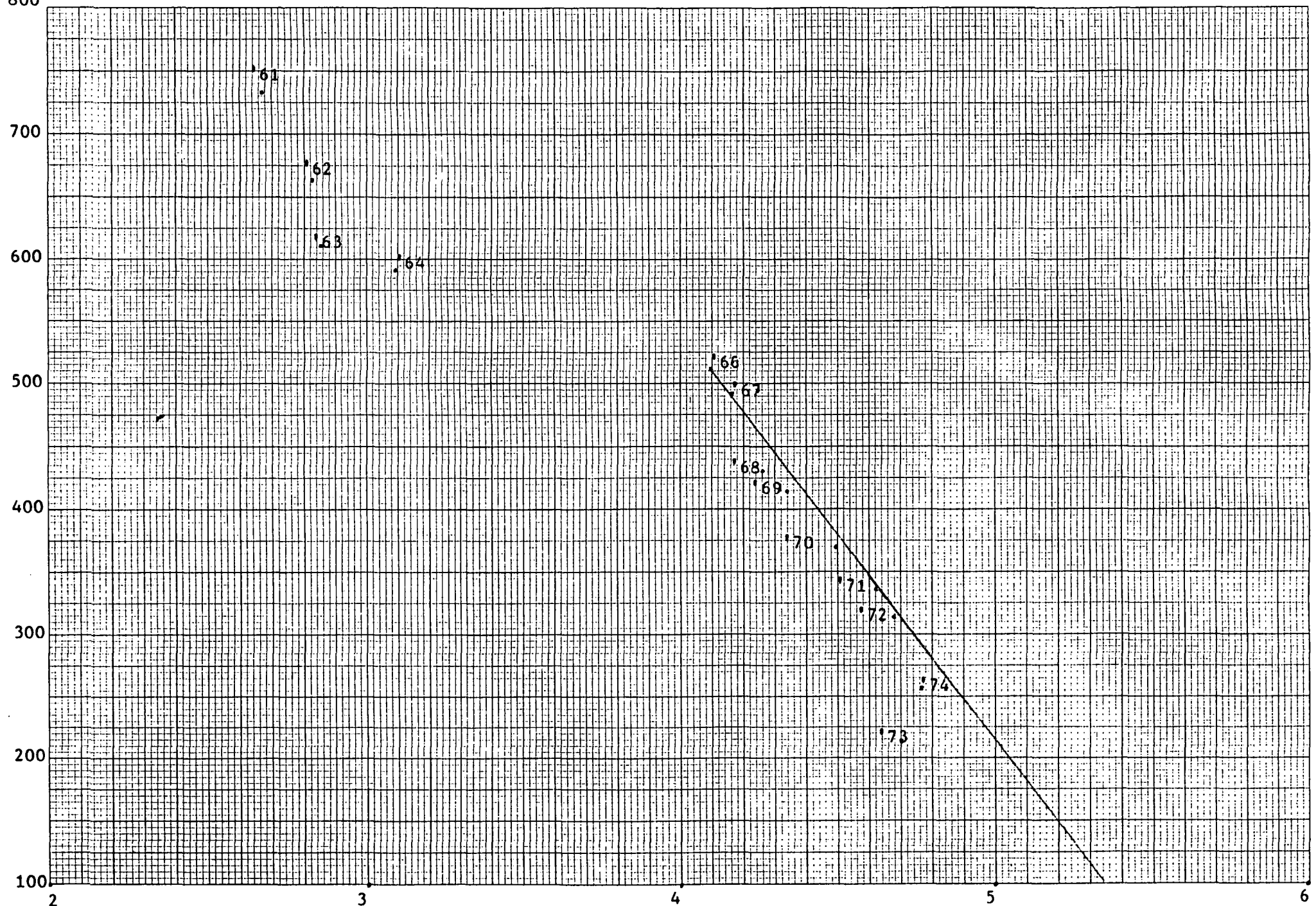


FIELD Jalmat Tansill Yates 7 Rivers	
OPERATOR HCW EXPLORATION, INC.	
LEASE R.W. COWDEN "C"	
LOCATION 31(C) T-23S, R-37E	DIST 10-11
COUNTY LEA	STATE N.M.
NO. WELLS 1	WELL NOS 4-C
DATE PROD BEGAN	ACRES



HCW EXPLORATION, INC.
R.W. COWDEN "C" #1

800 BHP/Z



STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT

OIL CONSERVATION DIVISION

P. O. BOX 2000
SANTA FE, NEW MEXICO 87501

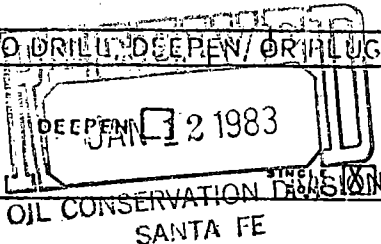
Form C-101
Revised 10-1-78

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SANTA FE	
FILE	
U.S.G.S.	
LAND OFFICE	
OPERATOR	

5A. Indicate Type of Lease
STATE ☐ FEDERAL ☒
5. State Oil & Gas Lease No.

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

a. Type of Work
b. Type of Well
OIL WELL ☐ GAS WELL ☒ OTHER ☐
Name of Operator
HCW Exploration, Inc.
Address of Operator
P. O. Box 10585 Midland, Texas 79702
Location of Well
UNIT LETTER H LOCATED 1650 FEET FROM THE North LINE
800 FEET FROM THE East LINE OF SEC. 31 TWP. 23S R. 37E N.M.P.M.



7. Unit Agreement Name
8. Farm or Lease Name
R. W. Cowden "C"
9. Well No.
9
10. Field and Pool, or Wildcat
Jalmat (Gas)

11. Elevations (Show whether DP, RT, etc.)
3329' GR
21A. Kind & Status Plug. Bond
Blanket
21B. Drilling Contractor
To be Determined
22. Approx. Date Work will start
August 1982

12. County
Lea
19. Proposed Depth
3300'
19A. Formation
Yates
20. Rotary or C.T.
Rotary

PROPOSED CASING AND CEMENT PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	SACKS OF CEMENT	EST. TOP
11"	8 5/8"	24#	400'	150	Surface
7 7/8"	4 1/2"	10.5#	3300'	500	Surface

Propose to drill 11" hole to 400' and run 8 5/8" casing. Will cement with sufficient cement volume to circulate cement to surface. Nipple up 10" 3000 psi BOP with pipe rams and blind rams. Drill 7 7/8" hole to approximately 2700' using brine water. Will drill with mud from 2700' to 3300' TD. Run open hole logs and if well looks productive, run 4 1/2" casing. Will try to circulate cement to surface on 4 1/2" casing. Will attempt to complete well as Yates gas well.

APPROVAL VALID FOR 180 DAYS
PERMIT EXPIRES 2/25/83
UNLESS DRILLING UNDERWAY

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 Steve A. Douglas Steve Douglas Title Division Engineer Date August 20, 1982

(This space for State Use)
ORIGINAL SIGNED BY
JERRY SEXTON

AUG 25 1982

APPROVED BY _____ TITLE _____ DATE _____
CONDITIONS OF APPROVAL, IF ANY

NEW MEXICO OIL CONSERVATION COMMISSION
WELL LOCATION AND ACREAGE DEDICATION

JAN 12 1983

Form C-102
Supersedes C-128
Effective 1-1-83

All distances must be from the outer boundaries of the Section CONSERVATION DIVISION

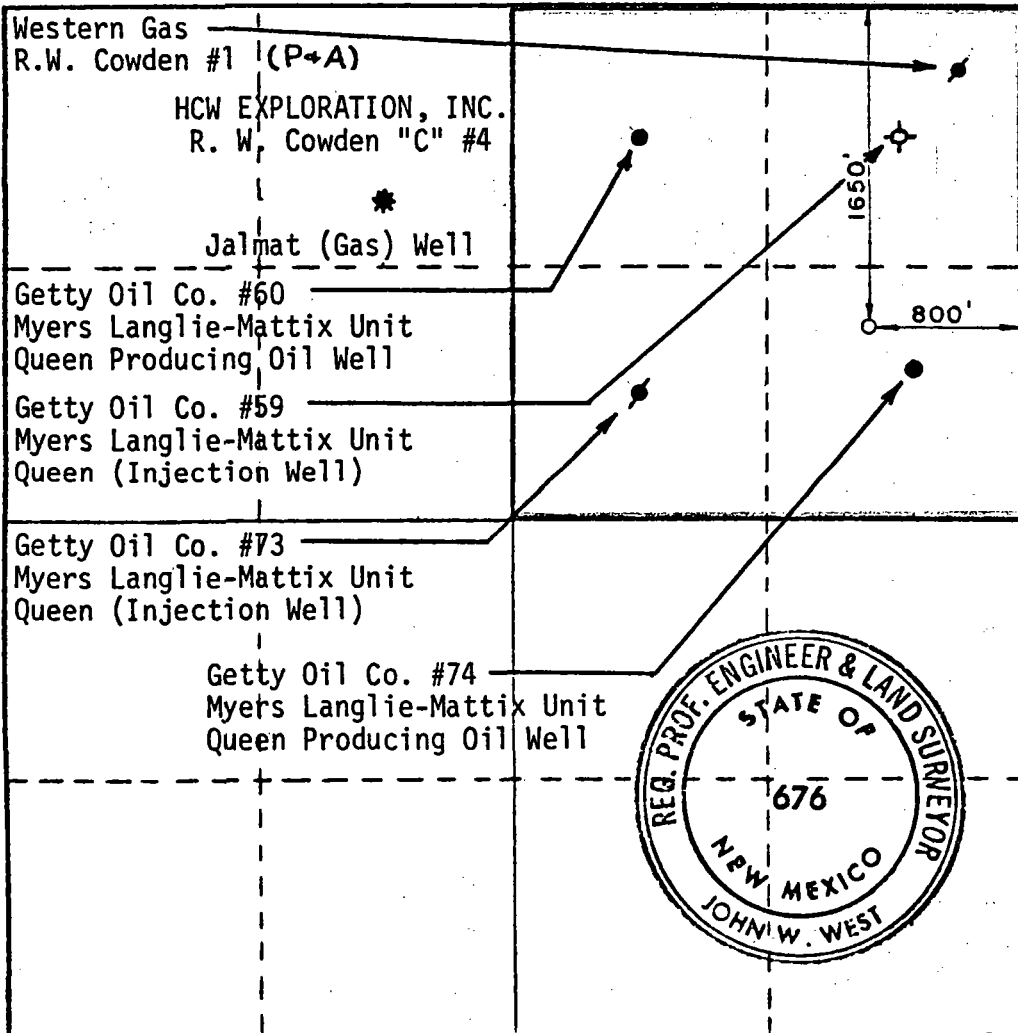
Operator H.C.W. EXPLORATION INC.		Lease R.W. COWDEN "C"		SANTA FE		Well No. 9
Unit Letter H	Section 31	Township 23-SOUTH	Range 37-EAST	County LEA		
Actual Footage Location of Well: 1650 feet from the NORTH line and 800 feet from the EAST line						
Ground Level Elev. 3328.8	Producing Formation Yates		Pool Jalmat (Gas)		Dedicated Acreage: 160 Acres	

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 Commission.



CERTIFICATION

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

Steve A Douglas

Name

Steve A. Douglas

Position

Division Engineer

Company

HCW Exploration, Inc.

Date

August 20, 1982

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.

AUGUST 17, 1982

Date Surveyed

Registered Professional Engineer and/or Land Surveyor

John W. West

Certificate No. **JOHN W. WEST 676**
PATRICK A. ROMERO 6663
Ronald J. Eidson 3239



STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT
OIL CONSERVATION DIVISION

BRUCE KING
GOVERNOR

November 15, 1982

POST OFFICE BOX 2088
STATE LAND OFFICE BUILDING
SANTA FE, NEW MEXICO 87501
(505) 827-2434

HCW Exploration, Inc.
P. O. Box 10585
Midland, Texas 79702

Attention: Steve A. Douglas

Administrative Order NSP-1335

Gentlemen:

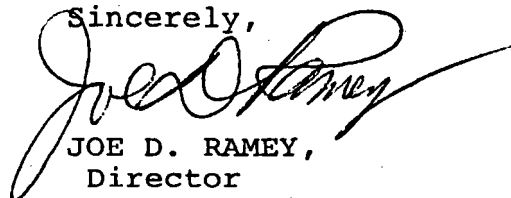
Reference is made to your application for a 160-acre non-standard proration unit consisting of the following acreage in the Jalmat Gas Pool:

LEA COUNTY, NEW MEXICO
TOWNSHIP 23 SOUTH, RANGE 37 EAST, NMPM
Section 31: NE/4

It is my understanding that this unit is to be dedicated to your R. W. Cowden "C" Well No. 9 located 1650 feet from the North line and 800 feet from the East line of said Section 31.

By authority granted me under the provisions of Rule 5(c)(3) of Order No. R-1670, the above non-standard proration unit is hereby approved.

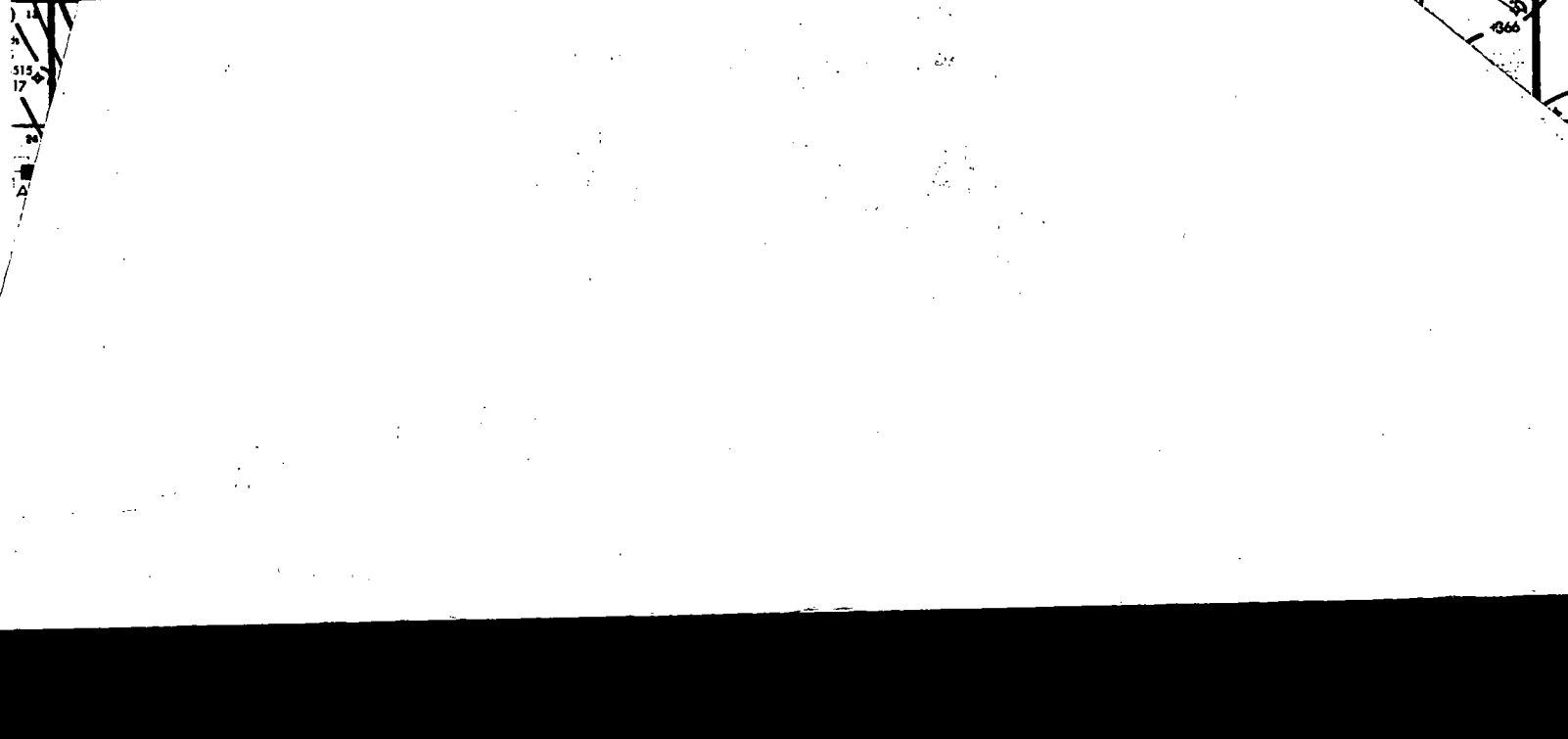
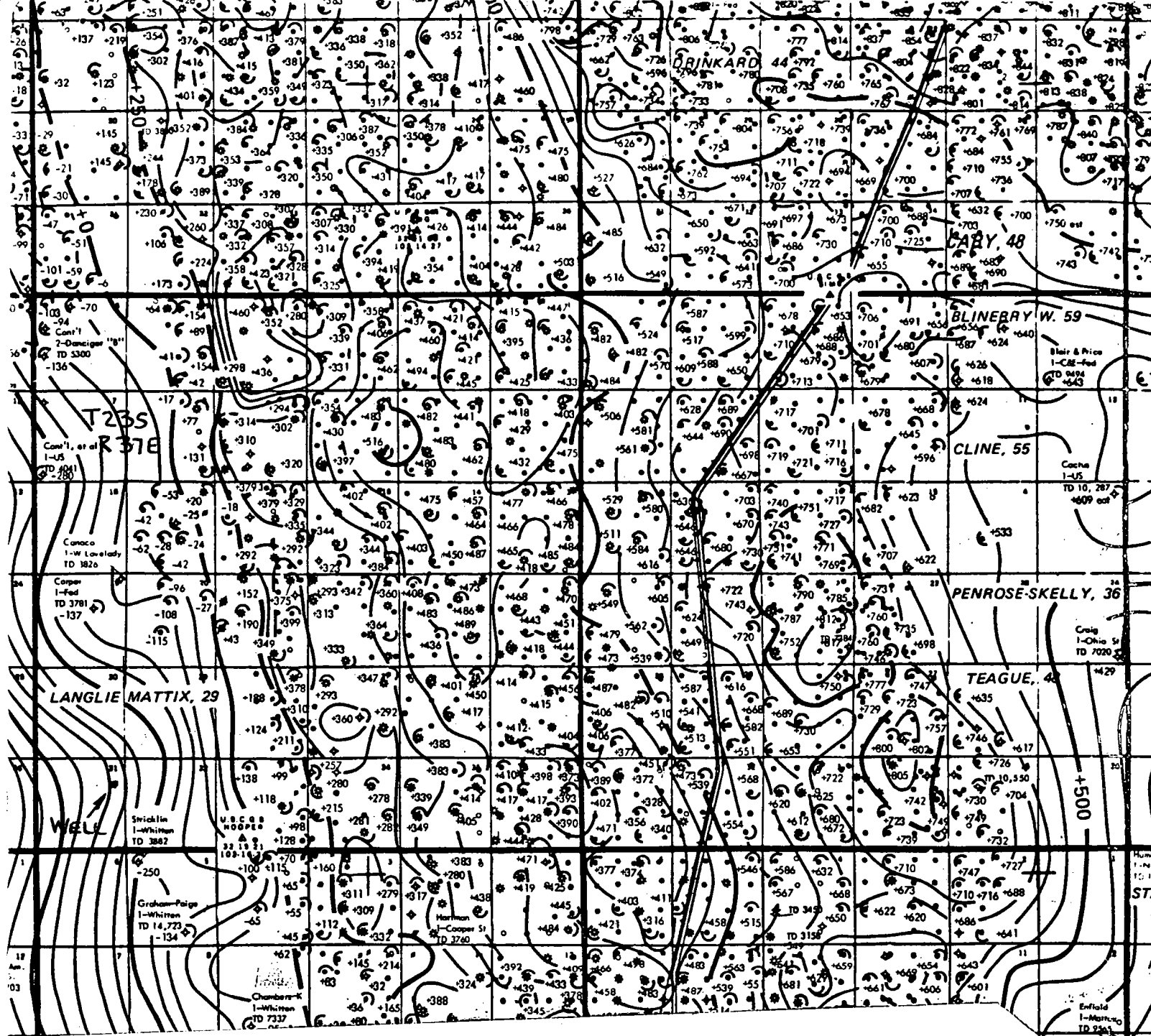
Sincerely,



JOE D. RAMEY,
Director

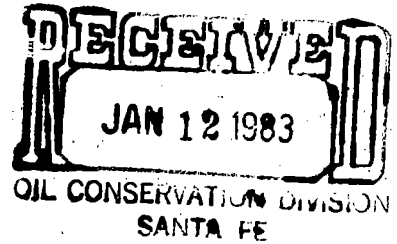
JDR/RLS/dr

cc: Oil Conservation Division - Hobbs
Oil & Gas Engineering Committee - Hobbs



WILLIAM P. AYCOCK & ASSOCIATES, INC.

Petroleum Engineering Consultants
308 WALL TOWERS WEST
MIDLAND, TEXAS 79701
PHONE 915/683-5721



December 29, 1982

New Mexico Department of Energy and Minerals,
Oil Conservation Division
P. O. Box 2088
Santa Fe, New Mexico 87501

Attention: Mr. Mike Stogner

Subject: Administrative Application for Infill Well Findings
for HCW Exploration Company's Cowden "C" No. 9 Well,
Section 31, Township 23 South, Range 37 East,
1650' FNL and 800' FEL, Jalmat (Gas) Pool,
Lea County, New Mexico

Gentlemen:

Application is hereby made for an administrative infill well finding effective with initial gas deliveries for the described well in accordance with Exhibit "A", Order R-6013-A. The following constitute the requirements of the said Order:

- Rule 5: Attached are copies of the Forms C-101 and C-102.
- Rule 6: The name of the pool in which the infill well has been drilled is the Jalmat Pool, and the standard spacing therefor is 640 acres.
- Rule 7: The non-standard proration unit and unorthodox well location were approved administratively by Order No. NSP-1335, a copy of which is attached hereto.
- Rule 8: See attached Table No. 1, "Summary of Required Information, Rule 8, Exhibit "A", Order No. R-6013-A" for requirements of Sections "a." through "f.". Also required by Section "g." is "a clear and concise statement indicating why the existing well(s) on the proration unit cannot effectively and efficiently drain the portion of the reservoir covered by the proration unit." The Jalmat (Gas) Pool well to which the 320-acres were assigned that included the present 160-acre

non-standard proration unit was the HCW Exploration Company Cowden "C" No. 4; this well was last produced in July, 1980, with an accumulative gas production of 5,743 MMCF. Since July, 1982 and prior to the drilling and completion of the infill HCW Exploration Company Cowden "C" No. 9, there was no gas production from the east one-half of the original 320-acre proration unit which was assigned to the infill well from the Jalmat (Gas) Pool. Accordingly, any gas reserves that would have been recoverable after July, 1982 beneath the 160-acre proration unit would not have been produced unless an infill well had been drilled.

Rule 9:

Section a. Requires that a formation structure map be submitted; attached is a Yates formation structure map of the area including and immediately surrounding the subject 160-acre proration unit.

Section b. Requires that the "volume of increased ultimate recovery expected to be obtained and a narrative describing how the increase was determined " be submitted. The estimated ultimate gas recovery for the HCW Exploration Cowden "C" No. 9 is 180 MMCF. Since there is no gas to be recovered from the proration unit assigned to this infill well other than anticipated volume of gas, the increased ultimate recovery is 180 MMCF. The estimate of increased recovery for the HCW Exploration Company Cowden "C" No. 9 was accomplished as follows:

(1) Well logs for the HCW Cowden "C" No. 9 were analyzed, resulting in the following:

Mean Porosity, Fraction of Bulk Volume	0.171
Mean Connate Water Saturation, Fraction of Net Effective Pore Volume	0.39
Net Effective Pay Thickness, Feet	39.

Since the gross pay thickness constituting potential gas reservoir for the Cowden "C" No. 9 is 55 feet, the above represents a net effective pay to gross pay ratio of approximately 71 percent.

(2) The production test for the Cowden "C" No. 9 performed on October 15, 1982, was analyzed, resulting in the following:

Stabilized Deliverability Coefficient, MCF/day per psia ² ,	0.0265022
Initial Stabilized Wellhead Shut-in Pressure (Pc), psia	143.2
Initial Gas Formation Volume Factor scf/rcf	9.68

(3) The results of steps (1) and (2) were then combined,
resulting in the following:

Original Gas-in-Place

MMCF/Acre	1.722
MMCF/160 Acres	276.0
Estimated Gas Recovery Factor, Fraction of Original Gas-in-Place	0.651
Estimated Ultimate Recovery, MMCF per 160 Acres	179.7

Section c. Other supporting data submitted include the following:

Gas Production History Tabulation and Graph for HCW
Exploration Company Cowden "C" No. 4 (the pre-existing
well).

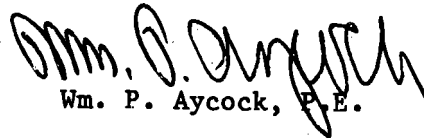
Complete New Mexico Oil Conservation Division (NMOCD) Forms
on file for both the pre-existing HCW Exploration Company
Cowden "C" No. 4 and the Infill HCW Exploration Co. Cowden
"C" No. 9.

New Mexico Oil Conservation Division Order No. NSP-1335

New Mexico Department of Energy and Minerals
Oil Conservation Division
December 29, 1982
Page 4

We believe that the above adequately documents this request and has been prepared in accordance with Exhibit "A", Order R-6013-A; however, we should be pleased to supply anything else which you might require in this connection.

Very truly yours,


Wm. P. Aycock, P.E.

WPA/pkm

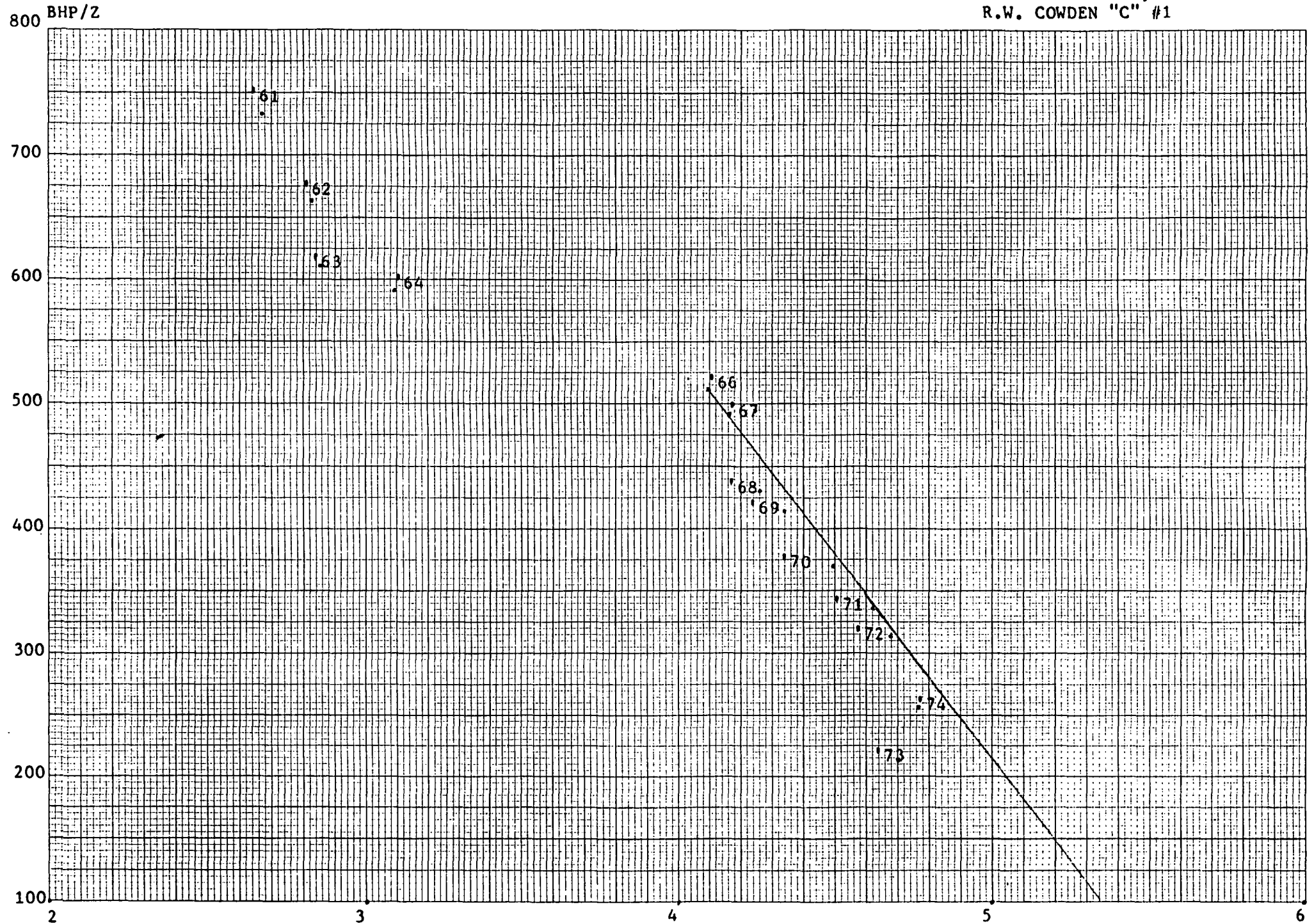
Enclosures

TABLE NO. 1

SUMMARY OF REQUIRED INFORMATION, RULE 8, EXHIBIT "A", ORDER R-6013-A,
 (Sections "a." through "f.")
 NATURAL GAS POLICY ACT INFILL FINDINGS, ADMINISTRATIVE PROCEDURE

<u>SECTION OF RULE 8</u>	<u>RULE 8 REQUIREMENT</u>	<u>PRE-EXISTING WELL OPERATOR HCW EXPLORATION COMPANY</u>	<u>INFILL APPLICATION WELL OPERATOR HCW EXPLORATION COMPANY</u>
a.	Lease Name and Well Location	R. W. Cowden "C" No. 4	R. W. Cowden "C" No. 9
b.	Spud Date	October 30, 1949	September 10, 1982
c.	Completion Date	November 18, 1949, in Langlie-Mattix	October 15, 1982
d.	Mechanical Problems	None; PB to Jalmat 11-18-52	None.
e.	Current Rate of Production	None; Last produced 68 MCF in June 1982.	C-105: 494 MCF/day
f.	Date of Plug and Abandonment	Not Plugged. Casing side of dual completion as water injection well (Getty Oil Co. Myers Langlie-Mattix Unit No. 61).	Not Plugged.

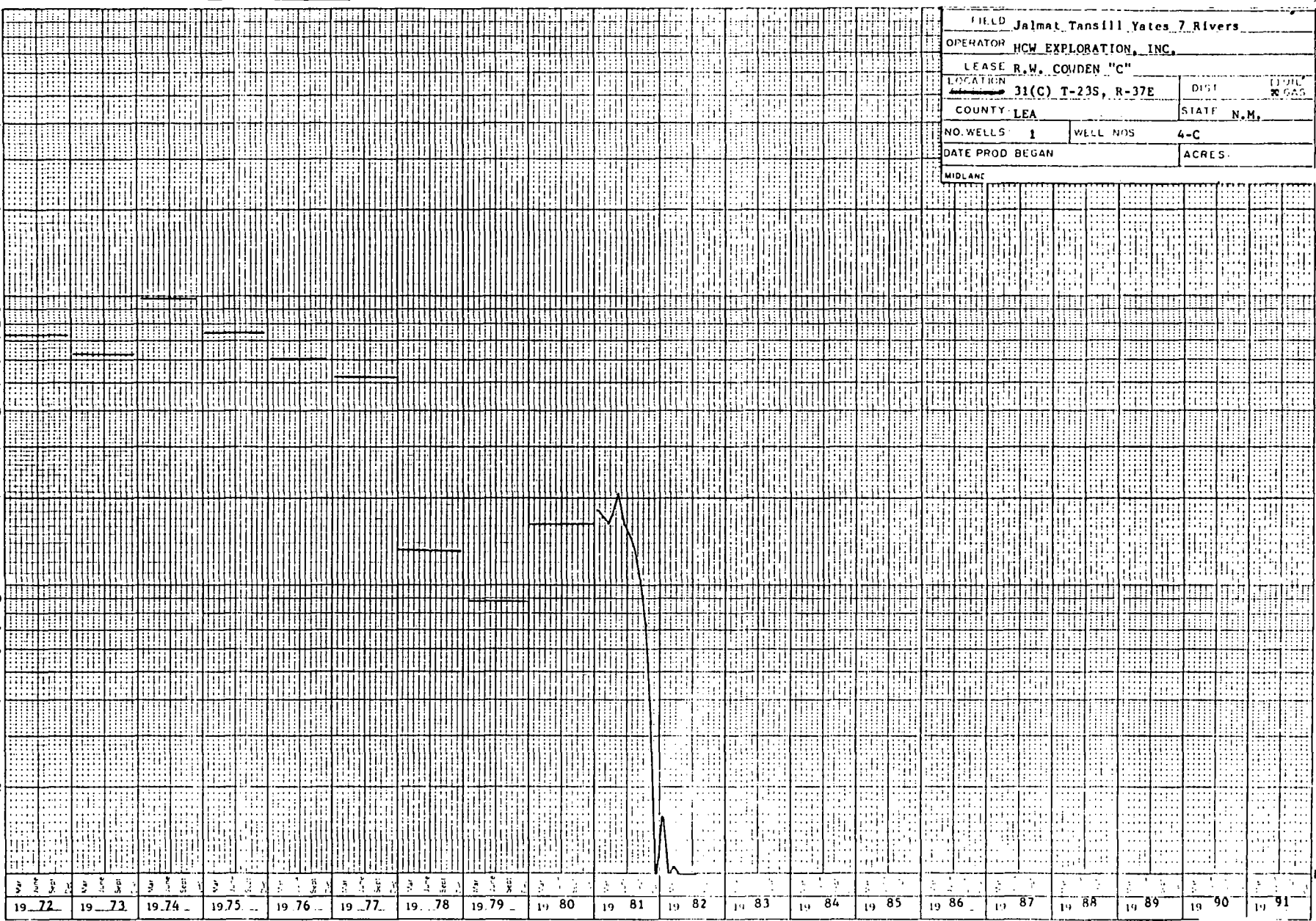
HCW EXPLORATION, INC.
R.W. COWDEN "C" #1



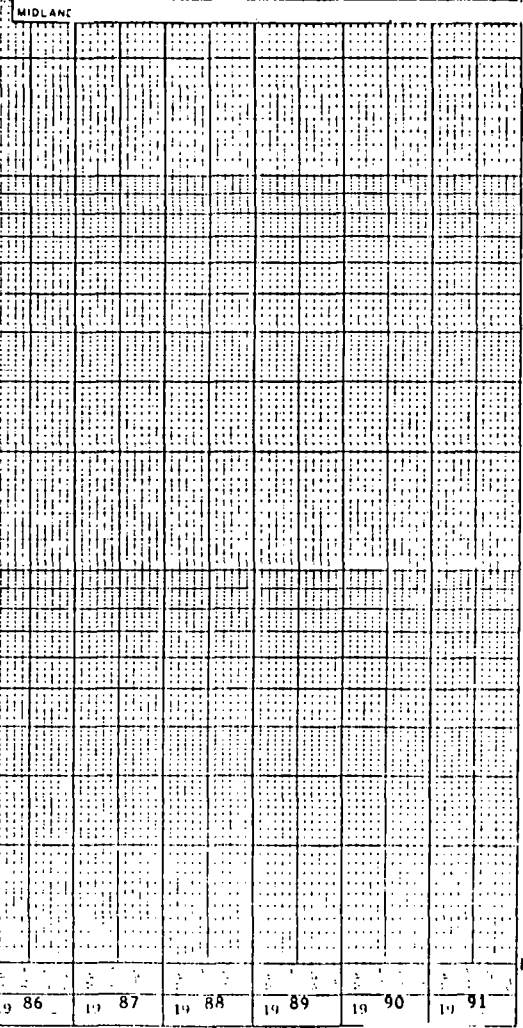
100 000

GAS PRODUCTION - MCF/MONTH

MONTHS x 3 LOG CYCLES



FIELD Jalmat Tansill Yates 7 Rivers	
OPERATOR HCW EXPLORATION, INC.	
LEASE R.W. CONDEN "C"	
LOCATION 31(C) T-23S, R-37E	DIST 1000 N GAS
COUNTY LEA	STATE N.M.
NO. WELLS 1	WELL NOS 4-C
DATE PROD BEGAN	ACRES



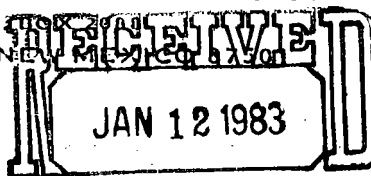
STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT

OIL CONSERVATION DIVISION

30-025-27918

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FILE	
U.S.G.S.	
LAND OFFICE	
OPERATOR	

P. O. BOX 10585
SANTA FE, NEW MEXICO 87501



Form C-101
Revised 10-1-78

5A. Indicate Type of Lease
STATE ☐ FEDERAL ☒
5. State Oil & Gas Lease No.

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

a. Type of Work
DRILL ☒ DEEPEN ☐ PLUG BACK ☐
b. Type of Well
OIL WELL ☐ GAS WELL ☒ OTHER ☐
c. Name of Operator
HCW Exploration, Inc.
d. Address of Operator
P. O. Box 10585 Midland, Texas 79702
e. Location of Well
UNIT LETTER H LOCATED 1650 FEET FROM THE North LINE
AND 800 FEET FROM THE East LINE OF SEC. 31 TWP. 23S RGE. 37E NADP/M

7. Unit Agreement Name
8. Farm or Lease Name
R. W. Cowden "C"
9. Well No.
9
10. Field and Pool, or Wildcat
Jalmat (Gas)
12. County
Lea

1. Elevations (Show whether DF, RT, etc.)
3329' GR
21A. Kind & Status Plug Bond
Blanket
19. Proposed Depth
3300'
19A. Formation
Yates
20. Rotary or C.T.
Rotary
21B. Drilling Contractor
To be Determined
22. Approx. Date Work will start
August 1982

PROPOSED CASING AND CEMENT PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	SACKS OF CEMENT	EST. TOP
11"	8 5/8"	24#	400'	150	Surface
7 7/8"	4 1/2"	10.5#	3300'	500	Surface

Propose to drill 11" hole to 400' and run 8 5/8" casing. Will cement with sufficient cement volume to circulate cement to surface. Nipple up 10" 3000 psi BOP with pipe rams and blind rams. Drill 7 7/8" hole to approximately 2700' using brine water. Will drill with mud from 2700' to 3300' TD. Run open hole logs and if well looks productive, run 4 1/2" casing. Will try to circulate cement to surface on 4 1/2" casing. Will attempt to complete well as Yates gas well.

APPROVAL VALID FOR 180 DAYS
PERMIT EXPIRES 2/25/83
UNLESS DRILLING UNDERWAY

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 Steve A. Douglas Steve Douglas Title Division Engineer Date August 20, 1982

(This space for State Use)
ORIGINAL SIGNED BY
JERRY SEXTON

AUG 25 1982

APPROVED BY _____ TITLE _____ DATE _____
CONDITIONS OF APPROVAL, IF ANY

NEW MEXICO OIL CONSERVATION COMMISSION
WELL LOCATION AND ACREAGE DEDICATION

Form C-102
Supersedes C-128
Effective 1-4-65

All distances must be from the outer boundaries of the section

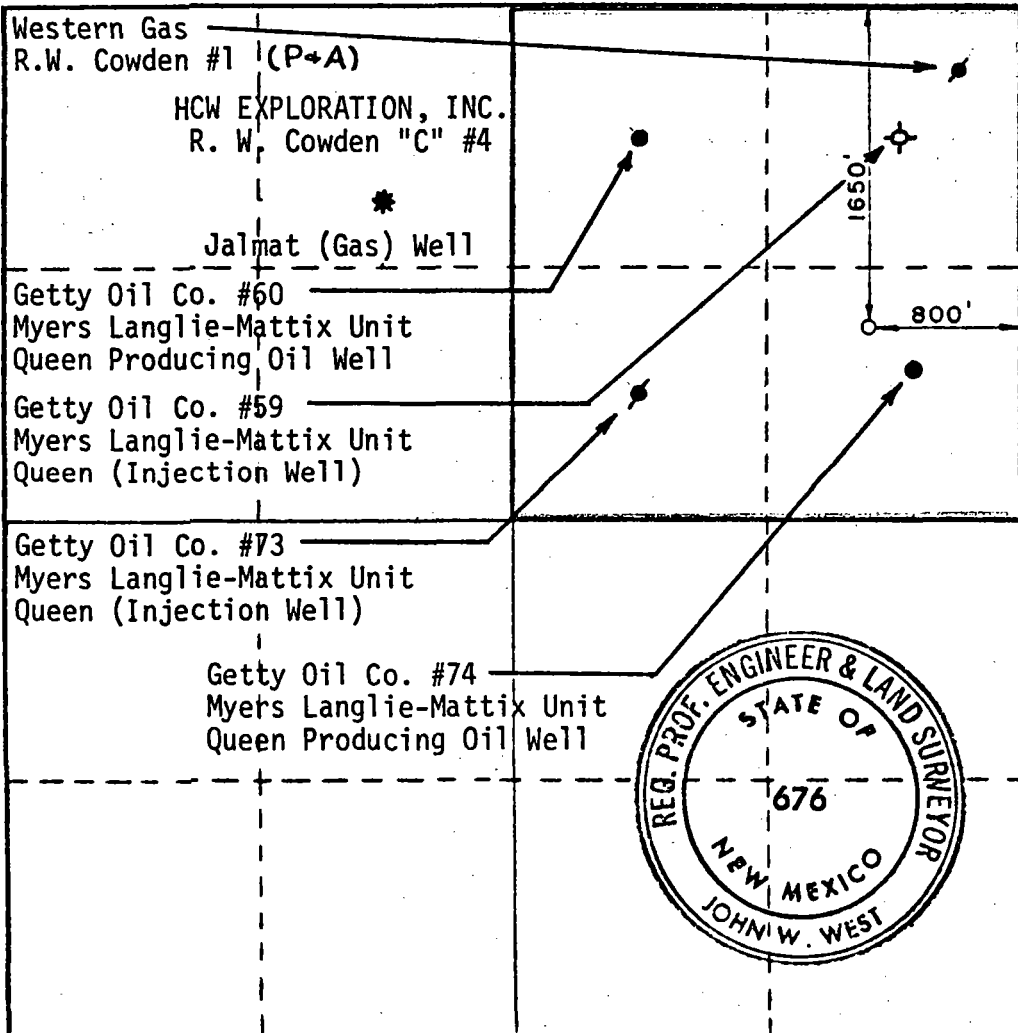
Operator H.C.W. EXPLORATION INC.		Lease R.W. COWDEN		JAN 12 1983		Well No. 9
Unit Letter H	Section 31	Township 23-SOUTH	Range 37-EAST	County CONSERVATION DIVISION SANTA FE		
Actual Footage Location of Well: 1650 feet from the NORTH line and 800 feet from the EAST line						
Ground Level Elev. 3328.8	Producing Formation Yates		Pool Jalmat (Gas)		Dedicated Acreage: 160 Acres	

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 Commission.



CERTIFICATION

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

Steve A Douglas

Name
Steve A. Douglas
Position
Division Engineer
Company
HCW Exploration, Inc.
Date
August 20, 1982

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.

AUGUST 17, 1982
Date Surveyed

Registered Professional Engineer and/or Land Surveyor

John W. West

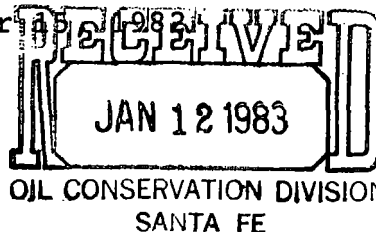
Certificate No. **JOHN W. WEST 676**
PATRICK A. ROMERO 6663
Ronald J. Eidson 3239



STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT
OIL CONSERVATION DIVISION

BRUCE KING
GOVERNOR

November 15, 1982



POST OFFICE BOX 2088
STATE LAND OFFICE BUILDING
SANTA FE, NEW MEXICO 87501
(505) 827-2434

HCW Exploration, Inc.
P. O. Box 10585
Midland, Texas 79702

Attention: Steve A. Douglas

Administrative Order NSP-1335

Gentlemen:

Reference is made to your application for a 160-acre non-standard proration unit consisting of the following acreage in the Jalmat Gas Pool:

LEA COUNTY, NEW MEXICO
TOWNSHIP 23 SOUTH, RANGE 37 EAST, NMPM
Section 31: NE/4

It is my understanding that this unit is to be dedicated to your R. W. Cowden "C" Well No. 9 located 1650 feet from the North line and 800 feet from the East line of said Section 31.

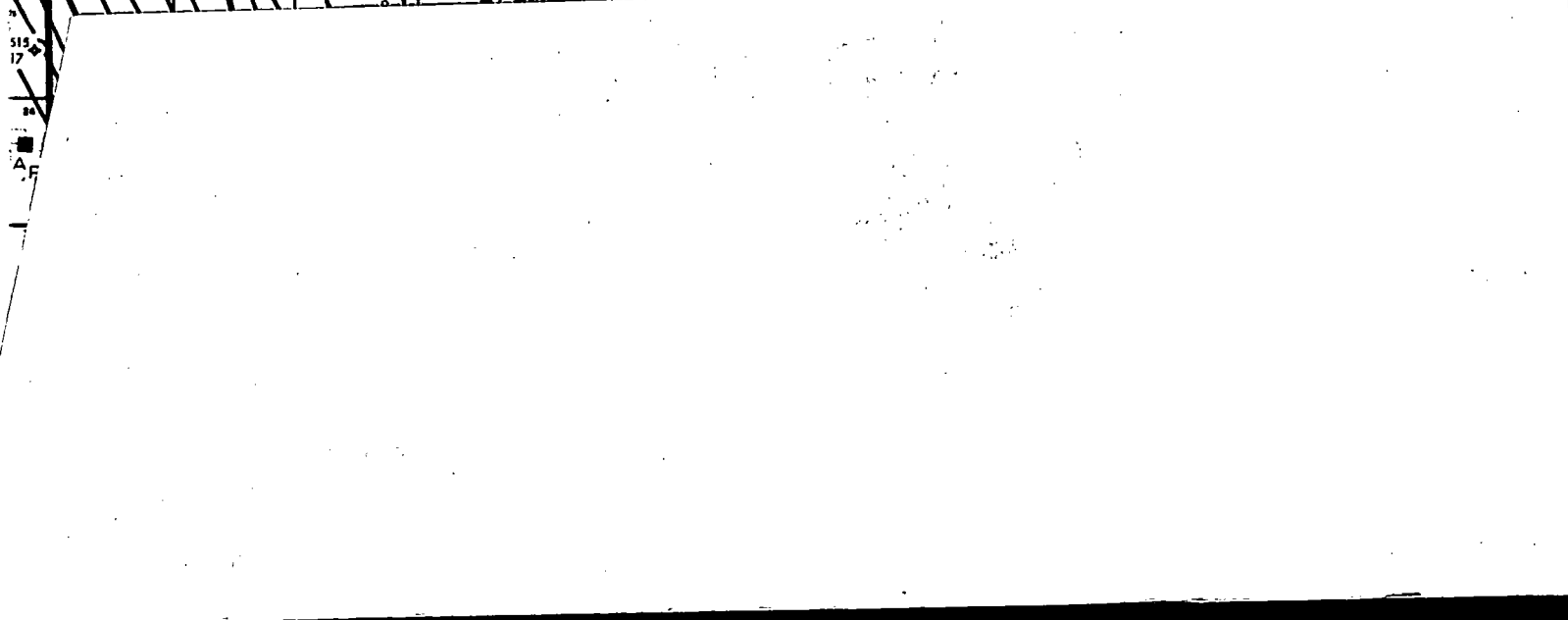
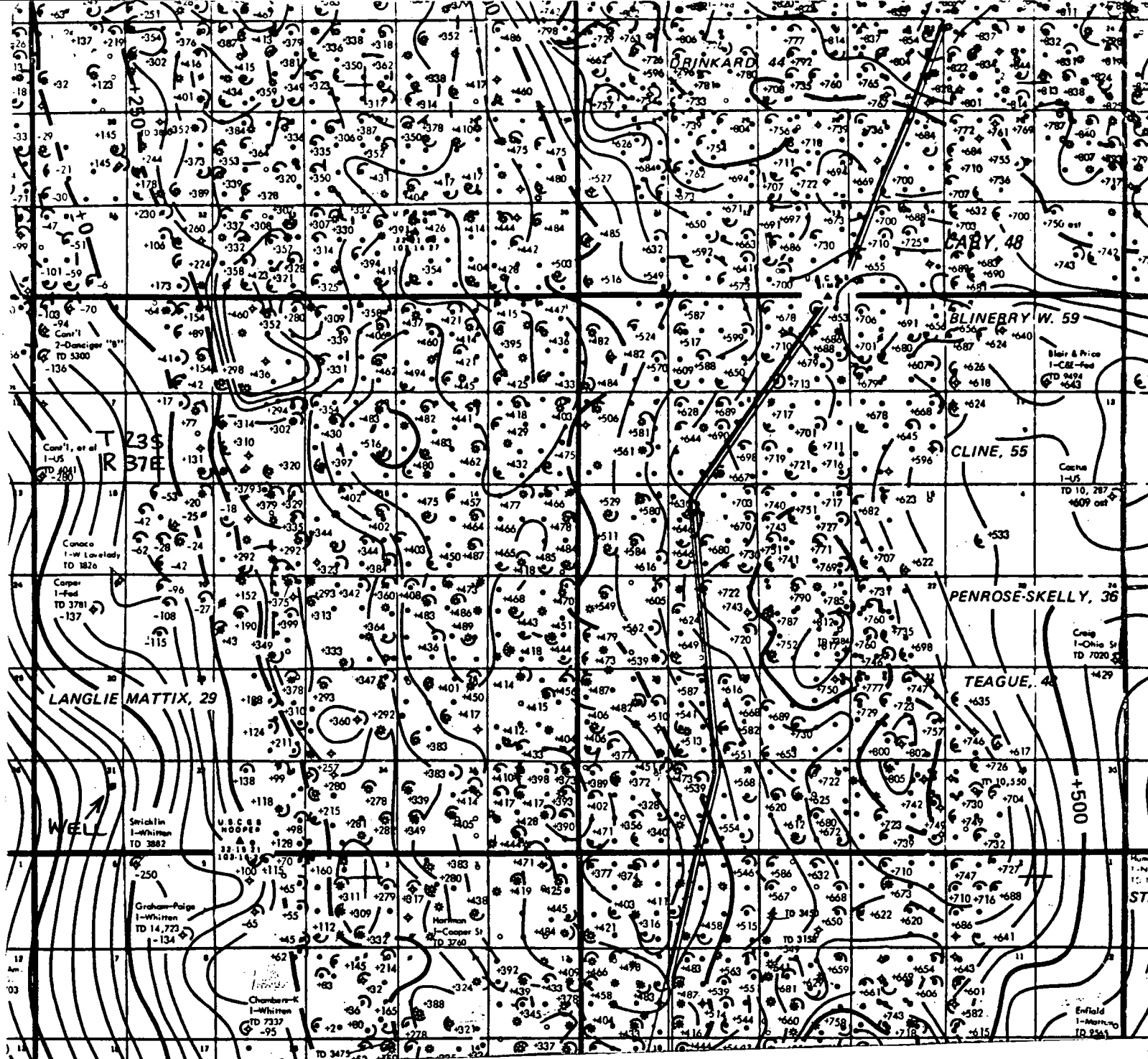
By authority granted me under the provisions of Rule 5(c)(3) of Order No. R-1670, the above non-standard proration unit is hereby approved.

Sincerely,

JOE D. RAMEY,
Director

JDR/RLS/dr

cc: Oil Conservation Division - Hobbs
Oil & Gas Engineering Committee - Hobbs





STATE OF NEW MEXICO
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION
2040 S. PACHECO
SANTA FE, NEW MEXICO 87505
(505) 827-7131

September 16, 1996

Doyle Hartman, Oil Operator
Attention: Don Mashburn
P. O. Box 10426
Midland, Texas 79702

Roca Production, Inc.
Attention: Steven Douglas, President
P. O. Box 10139
Midland, Texas 79702

Administrative Order NSP-143-B(L)(SD)

Dear Messrs. Mashburn and Douglas:

Reference is now made to: (i) the application filed by Doyle Hartman, Oil Operator ("Hartman") by letter dated June 20, 1996; (ii) the Division's initial response to said application from Mr. Michael E. Stogner by letter dated June 25, 1996; (iii) to the letter dated August 7, 1996 from Mr. Don Mashburn of Hartman's office in Midland, Texas; (iv) Division Administrative Order NSP-143-A(L)(SD), dated August 14, 1996; and, (v) to the application filed by Roca Production, Inc. ("Roca") by letter dated August 21, 1996: all of which pertain to both parties requests to divide the existing 315.98-acre non-standard gas spacing and proration unit ("GPU") in the Jalmat Gas Pool comprising Lots 1 and 2, the NE/4, and the E/2 NW/4 (N/2 equivalent) of Section 31, Township 23 South, Range 37 East, N.M.P.M., Lea County, New Mexico, into two separate gas spacing and proration units to comprise:

- (a) the 235.98 acres consisting of Lots 1 and 2 (being the W/2 NW/4 equivalent), the W/2 NE/4, and the E/2 NW/4 of said Section 31; and,
- (b) the 80 acres consisting of the E/2 NE/4 of said Section 31.

Said 315.98-acre GPU was authorized by Division Administrative Order NSP-143, dated June 8, 1996 and had dedicated thereon the Doyle Hartman R. W. Cowden "C" Well No. 4/OXY USA, Inc. Myers Langlie Mattix Unit Well No. 61 (API No. 30-025-10903), located at a standard gas well location for the 315.98-acre GPU 990 feet from the North line and 1980 feet from the West line (Unit C) of said Section 31, and, by Division Administrative Order NFL-71, dated February 22, 1983, the R. W. Cowden "C" Well No. 9 (API No. 30-025-27918), located at a standard gas well location 1650 feet from the North line and 800 feet from the East line (Unit H), now operated by Roca Production, Inc., was simultaneously dedicated to said 315.98-acre GPU.

It is our understanding by the subject applications and related correspondence that:

- (1) Hartman will be operator of the proposed 235.98-acre non-standard GPU comprising Lots 1 and 2, the W/2 NE/4, and the E/2 NW/4 of said Section 31 in which said acreage is to be simultaneously dedicated to the aforementioned R. W. Cowden "C" Well No. 4 and to the proposed R. W. Cowden "C" Well No. 10 to be drilled at an unorthodox gas well location 1650 feet from the North line and 330 feet from the West line (Lot 2/Unit E) of said Section 31, and,
- (2) the remaining 80 acres comprising the E/2 NE/4 of said Section 31 is to be operated by Roca Production, Inc. and have dedicated to it the above-described R. W. Cowden "C" Well No. 9 now located at an unorthodox gas well location for the resulting 80-acre GPU.

The Division finds at this time that, both of the subject applications filed by Doyle Hartman, Oil Operator and Roca Production, Inc. have been duly filed under the provisions of Rule 104.F of the General Rules and Regulations of the New Mexico Oil Conservation Division ("Division"), revised by Division Order No. R-10533, issued by the Oil Conservation Commission in Case 11,351 on January 18, 1996 and Rule 2(d) of the *"General Rules for the Prorated Gas Pools of New Mexico/Special Rules and Regulations for the Jalmat Gas Pool"*, as promulgated by Division Order No. R-8170, as amended. Pursuant to said rules no objection to the subject applications have been received within the required 20-day waiting periods.

Therefore, by the authority granted me under the provisions of the aforementioned rules applicable in this matter, it is hereby ordered:

(a) that Doyle Hartman, Oil Operator ("Hartman") be designated the operator of the 235.98 acres, comprising Lots 1 and 2, the W/2 NE/4, and the E/2 NW/4 of said Section 31, thereby forming a non-standard gas spacing and proration unit ("GPU") within the Jalmat Gas Pool in which is to be simultaneously dedicated to the existing R. W. Cowden "C" Well No. 4/OXY USA, Inc. Myers Langlie Mattix Unit Well No. 61 (API No. 30-025-10903), located at a standard Jalmat gas well location for the 235.98-acre GPU 990 feet from the North line and 1980 feet from the West line (Unit C) of said Section 31 and to its proposed R. W. Cowden "C" Well No. 10 to be drilled at an unorthodox gas well location 1650 feet from the North line and 330 feet from the West line (Lot 2/Unit E) of said Section 31. Also, Hartman is hereby authorized to simultaneously dedicate Jalmat gas production from the proposed R. W. Cowden "C" Well No. 10 with the existing R. W. Cowden "C" Well No. 4. Furthermore, Hartman is permitted to produce the allowable assigned the subject GPU from both wells in any proportion; and,

(b) that Roca Production, Inc. ("Roca") be authorized to operate the

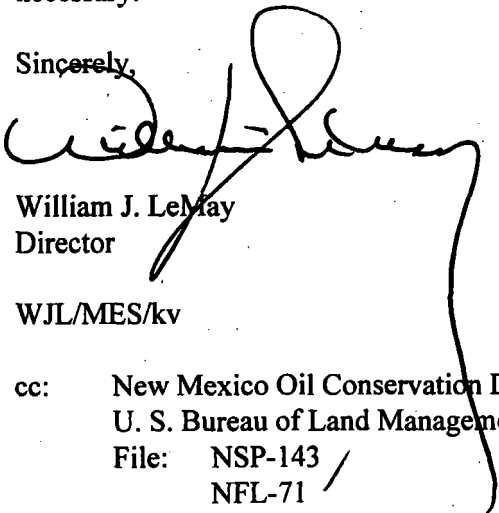
Administrative Order NSP-143-B(L)(SD)
Doyle Hartman/Roca Production, Inc.
September 16, 1996
Page 3

remaining 80 acres comprising the E/2 NE/4 of said Section 31, as a non-standard gas spacing and proration unit ("GPU") within the Jalmat Gas Pool in which is to be dedicated to the existing R. W. Cowden "C" Well No. 9 (API No. 30-025-27918), located at an unorthodox gas well location for the subject 80-acre GPU 1650 feet from the North line and 800 feet from the East line (Unit H) of said Section 31.

Division Administrative Orders NSP-143, NFL-71, NSP-143-A(L)(SD) shall be placed in abeyance until further notice.

Jurisdiction of this cause is retained for the entry of such further orders as the Division may deem necessary.

Sincerely,



William J. LeMay
Director

WJL/MES/kv

cc: New Mexico Oil Conservation Division - Hobbs
U. S. Bureau of Land Management - Carlsbad
File: NSP-143 /
NFL-71 /
NSP-1335
NSP-143-A(L)(SD)



STATE OF NEW MEXICO
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION

2040 S. PACHECO
SANTA FE, NEW MEXICO 87505
(505) 827-7131

August 14, 1996

Doyle Hartman, Oil Operator
Attention: Don Mashburn
P. O. Box 10426
Midland, Texas 79702

Roca Production, Inc.
Attention: James C. Brown
P. O. Box 10139
Midland, Texas 79702

Administrative Order NSP-143-A(L)(SD)

Dear Messrs. Mashburn and Brown:

Reference is made to: (i) the application filed by Doyle Hartman, Oil Operator ("Hartman") by letter dated June 20, 1996; (ii) the Division's initial response to said application from Mr. Michael E. Stogner by letter dated June 25, 1996; and, (iii) to the letter dated August 7, 1996 from Mr. Don Mashburn of Hartman's office in Midland, Texas; for authorization to divide the existing 315.98-acre non-standard gas spacing and proration unit ("GPU") in the Jalmat Gas Pool comprising Lots 1 and 2, the NE/4, and the E/2 NW/4 (N/2 equivalent) of Section 31, Township 23 South, Range 37 East, N.M.P.M., Lea County, New Mexico, into two separate gas spacing and proration units comprising 235.98 acres and 80 acres.

Said 315.98-acre GPU was authorized by Division Administrative Order NSP-143, dated June 8, 1996 and had dedicated thereon the Doyle Hartman R. W. Cowden "C" Well No. 4/OXY USA, Inc. Myers Langlie Mattix Unit Well No. 61 (API No. 30-025-10903), located at a standard gas well location for the 315.98-acre GPU 990 feet from the North line and 1980 feet from the West line (Unit C), of said Section 31, and, by Division Administrative Order NFL-71, dated February 22, 1983, the R. W. Cowden "C" Well No. 9 (API No. 30-025-27918), located at a standard gas well location 1650 feet from the North line and 800 feet from the East line (Unit H), now operated by Roca Production, Inc., was simultaneously dedicated to said 315.98-acre GPU.

It is our understanding by the subject application and related correspondence that:

- (1) Hartman will be operator of the proposed 235.98-acre non-standard GPU comprising Lots 1 and 2, the W/2 NE/4, and the E/2 NW/4 of said Section 31 in which said acreage is to be simultaneously dedicated to the aforementioned R. W. Cowden "C" Well No. 4 and to the proposed R. W. Cowden "C" Well No. 10 to be drilled at an unorthodox gas well location 1650 feet from the North line and 330 feet from the West line (Lot 2/Unit E) of said Section 31, and,
- (2) the remaining 80 acres comprising the E/2 NE/4 of said Section 31 is to be operated by Roca Production, Inc. and have dedicated to it the above-described R. W. Cowden "C" Well No. 9 now located at an unorthodox gas well location for the resulting 80-acre GPU.

The Division finds at this time that, the subject application of Doyle Hartman, Oil Operator has been duly filed under the provisions of Rule 104.F of the General Rules and Regulations of the New Mexico Oil Conservation Division ("Division"), revised by Division Order No. R-10533, issued by the Oil Conservation Commission in Case 11,351 on January 18, 1996 and Rule 2(d) of the *"General Rules for the Prorated Gas Pools of New Mexico/Special Rules and Regulations for the Jalmat Gas Pool"*, as promulgated by Division Order No. R-8170, as amended. Pursuant to said rules no objection to the subject application has been received within the required 20-day waiting period. It should be further noted that Roca Production, Inc. has not responded to either Hartman's application or to the Division's letter dated June 25, 1996.

It is therefore ordered, by the authority granted me under the provisions of said rules, that Doyle Hartman, Oil Operator ("Hartman") is hereby authorized to operate the 235.98 acres, comprising Lots 1 and 2, the W/2 NE/4, and the E/2 NW/4 of said Section 31, as a non-standard gas spacing and proration unit ("GPU") within the Jalmat Gas Pool in which is to be simultaneously dedicated to the existing R. W. Cowden "C" Well No. 4/OXY USA, Inc. Myers Langlie Mattix Unit Well No. 61 (API No. 30-025-10903), located at a standard Jalmat gas well location for the 235.98-acre GPU 990 feet from the North line and 1980 feet from the West line (Unit C) of said Section 31 and to its proposed R. W. Cowden "C" Well No. 10 to be drilled at an unorthodox gas well location 1650 feet from the North line and 330 feet from the West line (Lot 2/Unit E) of said Section 31.

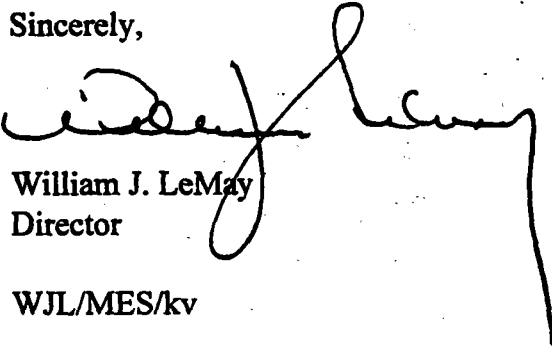
Also, Hartman is hereby authorized to simultaneously dedicate Jalmat gas production from the proposed R. W. Cowden "C" Well No. 10 with the existing R. W. Cowden "C" Well No. 4. Furthermore, Hartman is permitted to produce the allowable assigned the subject GPU from both wells in any proportion.

It is further ordered that the remaining 80 acres comprising the E/2 NE/4 of said Section 31, operated by Roca Production, Inc.: (i) is no longer dedicated to producing Jalmat acreage; (ii) that the existing R. W. Cowden "C" Well No. 9 is producing without a proper assignment of allowable; and, (iii) that said well is considered to be at an unapproved unorthodox Jalmat gas well location. It is ordered however that Roca Production, Inc. is granted a temporary 45-day authorization to produce its R. W. Cowden "C" Well No. 9 with an acreage factor of 0.50 to be ascribe against the Jalmat allowable for said well. If however no formal application from Roca Production, Inc. has been submitted to the Division within this 45-day period, the temporary allowable shall be canceled and the well ordered to be shut-in until such application has been submitted and approved.

Said Division Orders NSP-143 and NFL-71 shall be placed in abeyance until further notice.

Jurisdiction of this cause is retained for the entry of such further orders as the Division may deem necessary.

Sincerely,



William J. LeMay
Director

WJL/MES/kv

cc: Oil Conservation Division - Hobbs
Michael E. Stogner, Chief Hearing Officer - OCD, Santa Fe
U. S. Bureau of Land Management - Carlsbad
File: NSP-143
NFL-71 ✓
NSP-1335



NFL-71

NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

BILL RICHARDSON

Governor

Joanna Prukop

Cabinet Secretary

August 4, 2006

Mark E. Fesmire, P.E.

Director

Oil Conservation Division**Plantation Operating, L.L.C.****2203 Timberloch Place, Suite 229****The Woodlands, Texas 77380****Attention: John Allred, P.E.****jallred@plantationpetro.com****AMENDED Division Administrative Order NSP-143-B (L) (SD)**

Dear Mr. Allred:

Reference is made to the following: (i) your initial application submitted to the New Mexico Oil Conservation Division ("Division") in Santa Fe, New Mexico on June 8, 2006 (*administrative application reference No. pMES0-621637048*); (ii) your letter dated June 22, 2006 with supplemental information to support this application; (iii) your e-mail of June 26, 2006 checking on the status of this application; and (iv) the Division's records in Hobbs and Santa Fe, including the files on Division Administrative Orders NSP-143, NSP-143-A (L) (SD), NSP-143-B (L) (SD), NSP-1335 and NFL-71: all concerning Plantation Operating, L.L.C.'s ("Plantation") request to amend both Division Administrative Orders NSP-143-A (L) (SD), dated August 14, 1996, and NSP-143-B (L) (SD), dated September 16, 1996, to reflect a location change for one of the wells that was the subject of the 235.98-acre non-standard Jalmat gas spacing unit comprising Lots 1 and 2, the W/2 NE/4, and the E/2 NW/4 of Section 31, Township 23 South, Range 37 East, NMPM, Jalmat Gas Pool (79240), Lea County, New Mexico, established in part by these orders.

Division Administrative Order NSP-143-A (L) (SD) split a previously approved 315.98-acre non-standard Jalmat gas spacing unit comprising the N/2 equivalent of Section 31 (see Division Administrative Order NSP-143, dated June 8, 1955) into two separate units comprising:

- (a) the above-described 235.98-acre unit to be operated by Doyle Hartman, Oil Operator ("Hartman") and simultaneously dedicated to the existing R. W. Cowden "C" Well No. 4 (*API No. 30-025-10903*), located at a standard gas well location 990 feet from the North line and 1980 feet from the West line (Unit C) of Section 31 and the proposed R. W. Cowden "C" Well No. 10 to be drilled at an unorthodox gas well location 1650 feet from the North line and 330 feet from the West line (Lot 2/Unit E) of Section 31; and
- (b) the remaining 80 acres comprising the E/2 NE/4 to be operated by Roca Production, Inc. ("Roca") and dedicated to the existing R. W. Cowden "C" Well No. 9 (*API No. 30-025-27918*), located at an unorthodox gas well location 1650 feet from the North line and 800 feet from the East line (Unit H) of Section 31.

Plantation Operating, L.L.C.

AMENDED Division Administrative Order NSP-143-B (L) (SD)

August 4, 2006

Page 2

Division Administrative Order NSP-143-B (L) (SD) formalized this arrangement and placed Division Administrative Order NSP-143-A (L) (SD) in abeyance.

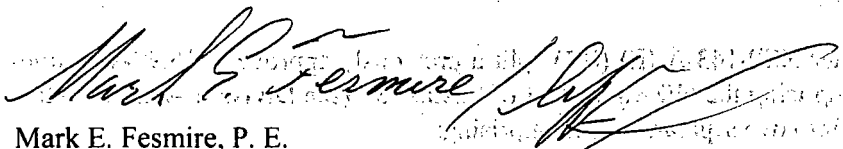
According to your application and the Division's records, Hartman never drilled the R. W. Cowden "C" Well No. 10 at the proposed unorthodox Jalmat infill well location in Unit "E" of Section 31. It is Plantation's intent at this time however, as successor operator to the Hartman acreage, to drill its R. W. Cowden "C" Well No. 10 (*API No. 30-025-36771*) at a standard infill gas well location within the 235.98-acre non-standard unit 990 feet from the North line and 660 feet from the West line (Lot 1/Unit D) of Section 31.

By the authority granted me under the provisions of Rules 4 (B) and (D) of the special rules governing the Jalmat Gas Pool, Division Administrative Order NSP143-B (L) (SD) is hereby amended, authorizing Plantation to simultaneously dedicate Jalmat gas production to the 235.98-acre non-standard Jalmat gas spacing unit from its above-described R. W. Cowden "C" Well No. 4 (*API No. 30-025-10903*) in Unit "C" of Section 31 and proposed R. W. Cowden "C" Well No. 10 (*API No. 30-025-36771*) in Lot 1 (Unit C) of Section 31.

All provisions of Division Administrative Order NSP-143-B (L) (SD) not in conflict with this order shall remain in full force and affect until further notice.

Jurisdiction of this matter shall be further retained for the entry of any such subsequent orders, as the Division may deem necessary.

Sincerely,



Mark E. Fesmire, P. E.
Director

MEF/ms

cc: New Mexico Oil Conservation Division - Hobbs
Roco Production Inc. - Midland, Texas

File: NSP-143

NSP-143-A (L) (SD)

NSP-143-B (L) (SD)

NFL-71

NSP-1335

INFILL DRILLING FINDINGS AND WELL-SPACING WAIVER
MADE 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

I.

Operator HCW Exploration, Inc. Well Name and No. R. W. Cowden "C" Well No. 9
Location: Unit H Sec. 31 Twp. 23S Rng. 37E Cty. Lea

II.

THE DIVISION FINDS:

(1) That Section 271.305(b) of the Federal Energy Regulatory Commission Interim 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, prior to the commencement of drilling, that the 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, and must grant a waiver of existing well-spacing requirements.

(2) That by Order No. R-6013, dated June 7, 1979, 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 to be completed in the JalmatTansillYatesSeven Rivers (ProratedGas) Pool, and the standard spacing unit in said pool is 640 acres.

(4) That a 316-acre proration unit comprising the N/2 of Sec. 31, Twp. 23S, Rng. 37E, is currently dedicated to the R. W. Cowden "C" Well No. 4 located in Unit C of said section.

(5) That this proration unit is () standard (X) nonstandard; if nonstandard, said unit was previously approved by Order No. NSP-143.

(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 179,700 MCF of gas from the proration unit which would not otherwise be recovered.

(8) That all the requirements of Order No. R-6013 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 as an exception to the standard well spacing requirements for the pool.

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 an exception to applicable well spacing requirements and 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 22nd day of February, 19 83.


DIVISION DIRECTOR

EXAMINER

Note to File (NSP-1335)

*This NFL Order negated NSP-1335.
The original 320-acre, minor less, NSP authorized by
NSP-143, dated 6-8-1955, is still in effect.*





NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

BILL RICHARDSON

Governor

Joanna Prukop

Cabinet Secretary

August 21, 2006

Mark E. Fesmire, P.E.

Director

Oil Conservation Division

Plantation Operating, L.L.C.
2203 Timberloch Place, Suite 229
The Woodlands, Texas 77380

Attention: **John Allred, P.E.**
jallred@plantationpetro.com

REVISED: AMENDED Division Administrative Order NSP-143-B (L) (SD)

Dear Mr. Allred:

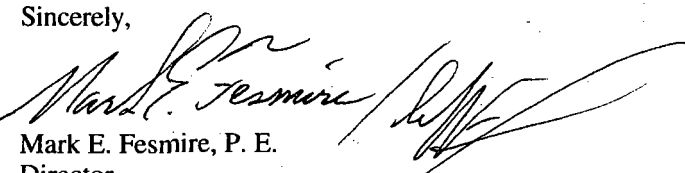
Reference is made to the following: (i) your e-mail to Mr. Michael E. Stogner, Staff Engineer with the New Mexico Oil Conservation Division ("Division") in Santa Fe, New Mexico Wednesday, August 16, 2006, which is hereby entered into the Division's administrative database as administrative application reference No. pMES0-623355598; and (ii) the Division's records in Hobbs and Santa Fe: all concerning AMENDED Division Administrative Order NSP-143-B (L) (SD) issued on Division administrative application reference No. pMES0-621637048 and dated August 4, 2006.

The API Number for Plantation Operating, L.L.C.'s proposed R. W. Cowden "C" Well No. 10 as shown in the second and third paragraphs on page 2 of said Division administrative order as "~~30-025-36771~~" shall revised to accurately read "~~30-025-37969~~."

The revision set forth in this order shall be entered retroactively as of August 4, 2006; further, all other provisions of AMENDED Division Administrative Order NSP-143-B (L) (SD) issued by the Division on August 4, 2006 shall remain in full force and effect until further notice.

Jurisdiction of this matter shall be further retained for the entry of any such subsequent orders, as the Division may deem necessary.

Sincerely,


Mark E. Fesmire, P. E.
Director

MEF/ms

cc: New Mexico Oil Conservation Division – Hobbs
Roco Production Inc. – Midland, Texas

File: NSP-143 – *Division reference No. pNSP0-001432002*
NSP-143-A (L) (SD) – *Division reference No. p2002-NSP000143*
NSP-143-B (L) (SD) – *Division reference No. p2002-nsp00014b*
AMENDED NSP-143-B (L) (SD) – *Division reference No. pMES0-621637048*
NFL-71
NSP-1335