



STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT
 OIL CONSERVATION DIVISION



June 9, 1986

TONEY ANAYA
 GOVERNOR

POLICE OFFICE BOX 2068
 STATE LAND OFFICE BUILDING
 SANTA FE, NEW MEXICO 87501
 (505) 827-5800

Administrative Order No. DHC-618

Chevron USA Inc.
 P. O. Box 670
 Hobbs, New Mexico 88240

Attention: R. C. Anderson

Re: W. M. Rinewalt No. 2 Well, Unit E,
 Sec. 4, T-22 South, R-37 East, NMPM,
 Lea County, New Mexico
 Drinkard and Blinebry Oil & Gas Pools

Gentlemen:

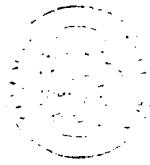
Reference is made to your recent application for an exception to Rule 303-A of the Division Rules and Regulations to permit the subject well to commingle the production from both pools in the wellbore.

It appearing that the subject well qualifies for approval for such exception pursuant to the provisions of Rule 303-C, and that reservoir damage or waste will not result from such downhole commingling, and correlative rights will not be violated thereby, you are hereby authorized to commingle the production as described above and any Division Order which authorized the dual completion and required separation of the two zones is hereby placed in abeyance.

In accordance with the provisions of Rule 303.C.4., total commingled oil production from the subject well shall not exceed 40 barrels per day, and total water production from the well shall not exceed 80 barrels per day. The maximum amount of gas which may be produced daily from the well shall be determined by multiplying 4,000 by top unit allowable for the Blinebry Oil and Gas Pool.

Assignment of allowable to the well and allocation of production from the well shall be on the following basis:

Blinebry Pool: Oil 22%, Gas 4%
 Drinkard Pool: Oil 78%, Gas 96%



STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT
OIL CONSERVATION DIVISION
HOSES DISTRICT OFFICE

May 13, 1986

TO: SANTA FE,
NEW MEXICO

POST OFFICE BOX 1580
HOSES, NEW MEXICO 88240
(505) 333-5161

BNC-618

OIL CONSERVATION DIVISION
P. O. BOX 2083
SANTA FE, NEW MEXICO 87501

RE: Proposed:

MC _____
DHC XX
NSL _____
NSP _____
SWD _____
WFX _____
PMX _____

Gentlemen:

I have examined the application for the:

Chevron USA Inc. W. M. Rinewalt #2-E 4-22-37
Operator Lease & Well No. Unit S-T-R

and my recommendations are as follows:

OK -- Jerry Sexton

Yours very truly,

Jerry Sexton
Supervisor, District 1

/sc



Chevron U.S.A. Inc.
P. O. Box 670, Hobbs, NM 88240

Production Department
Hobbs Division

May 6, 1986

O J J

**APPLICATION TO DOWNHOLE
COMMINGLE CHEVRON'S
W. M. RINEWALT WELL NO. 2
LOCATED IN UNIT E, SECTION
4-T22S-R37E, LEA COUNTY,
NEW MEXICO**

Richard L. Stamets
Oil Conservation Division
P.O. Box 2088
Santa Fe, New Mexico 87504-2088

Gentlemen:

Pursuant to the provision of Statewide Rule 303-C, Chevron U.S.A. Inc. respectfully requests administrative approval to commingle production from the Blinebry and Drinkard pools within the subject wellbore. The W. M. Rinewalt Well No. 2 was drilled and completed in 1947 as an Ellenburger producer. The well has since been recompleted in the Wantz Abo, Penrose Skelly, Drinkard and Blinebry. From 1973 to 1984 the well produced from the Drinkard as a flowing gas well. In 1984 the well became a marginal producer and required considerable swabbing to unload the fluid and maintain production. The well ceased producing in late 1985.

The Blinebry horizon was perforated in 1966 and closed in later the same year as an uneconomical producer. The Blinebry perfs have remained isolated in the casing while the Drinkard flowed from beneath a packer.

Under the lease agreement, we had until April 18, 1986 to restore production from the subject well. The well could not be produced without pumping equipment, therefore we requested permission from J. T. Sexton, District 1 Supervisor-OCD, to downhole commingle the two zones while we were working on the well. By doing so we eliminated unnecessary expense.

In the interest of conservation and prevention of waste, we request administrative approval for the downhole commingling of the Blinebry and Drinkard pools within the subject wellbore. Enclosed is pertinent data supporting this application as outlined in Rule No. 303-C. If additional information is necessary, please contact Mike Casey at (505)-393-4121.

Yours very truly,


R. C. ANDERSON

MWC/jc

Attachments

cc: J. T. Sexton
District I Supervisor
Oil Conservation Division
P.O. Box 1980
Hobbs, N.M. 88240

Offset Operators - (List Attached)

T. M. Mighton - Hobbs
M. J. Costello - Houston
D. K. Owen - Hobbs

OFFSET OPERATORS

Texaco Inc.
P.O. Box 728
Hobbs, N.M. 88240

Sohio Petroleum Co.
10 Desta Drive, Ste. 600 W.
Midland, Tx. 79705

Wiser Oil Co.
310 W. Texas, Ste. 904
Midland, Tx. 79701

Shell Oil Co.
P.O. Box 2463
Houston, Tx. 77001

RECEIVED
MAY 12 1986
C. I. A.
Hous. Service

1. Operator: Chevron U.S.A. Inc., P.O. Box 670, Hobbs, N.M. 88240
2. Lease, Well and Location: W. M. Rinewalt Well No. 2, 1874' FNL and 750' FWL of Section 4-T22S-R37E, Lea County, N.M.
3. Producing Zones: Blinebry and Drinkard
4. Decline Curve: The Drinkard is expected to IP at 7 BOPD and 150 MCFGPD and decline at 26% per year. The Blinebry is expected to IP at 2 BOPD and 7 MCFGPD and decline at 14% per year.
5. Bottom Hole Pressure: Blinebry calculated BHP of 566 psi at a depth of 5806'. The Drinkard BHP measured 277 psi at a depth of 6300'.
6. Fluid Characteristics: The BLinebry and Drinkard are currently surface commingled at the battery under Commingling Order PC-518. To date there has been no evidence of fluid incompatibility.
7. Well History: The subject well was drilled and completed in 1947 in the Ellenburger at a total depth of 8136'. Thirteen and three-eights inch surface casing was set at 308' and cement was circulated to the surface. Nine and five-eights inch casing was set at 2975' and cemented with 1300 sacks, TOC at 533' by T. S. Seven inch production casing set at 7980' and cemented with 900 sacks, TOC at 3245' by T. S. The well was openhole completed in the Ellenburger.

10/56: Stimulated with 5000 gal 15% NEFE Acid.

11/56: Plug back with hydromite to 8030'.

12/56: Squeeze open hole with cement, plug back to 7900'. Perforate 7592'-7890'. Frac with 5000 gal oil and 5000 lb. sand.

6/60: Set CIBP @ 7568' w/25 sxs cmt on top. Perforate Wantz Abo from 7132'-7245', acidize and frac with 9000 gal 15% acid and 20,000 gal oil with 18,000 lb. sand.

10/60: Set CIBP @ 7050' w/25 sxs cmt on top. Perforate Penrose Skelly from 3674'-3734', FRAC with 16,000 gal. oil w/48,000 lb. sand.

2/66: Squeeze Penrose Skelly perfs and Perforate Blinebry from 5746'-5867', frac with 20,000 gal water w/17,250 lb. sand.

7/66: Closed well in, uneconomical to produce.

12/73: Perforated Drinkard from 6376'-6606', frac with 27,000 gal. gel water w/40,000 lb. sand.

4/86: Received temporary permission to downhole commingle the Blinebry and Drinkard from the Oil Conservation District I Supervisor, Jerry Sexton, (Letter Attached). Equipped well to pump.

8. Value of Commingled Fluids: The Blinebry and Drinkard are being commingled at the surface on the subject lease as authorized by Division Order PC-518. Therefore, downhole commingling will not effect the price.
9. Current Production: The downhole commingled Blinebry and Drinkard tested for 9 BOPD, 39 BWPD and 157 MCFGPD.
10. Recommended Oil and Gas Allotments:

<u>Blinebry</u>	<u>Drinkard</u>
22% Oil	78% Oil
4% Gas	96% Gas

11. Ownership and Royalty Interests: Ownership of the two pools to be commingled is common and correlative rights will not be violated.
12. Future Secondary Operations: Commingling will not jeopardize the efficiency of future secondary recovery operations in either zone.
13. Production Methods: The commingled production will be pumped and the fluid level monitored to maintain a pumped off condition and eliminate the possibility of cross flow between reservoirs.
14. Copies of this application have been furnished to all offset operators by certified mail.

RECEIVED
MAY 12 1986
C. S. C.
HOBBS OFFICE

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STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT

OIL CONSERVATION DIVISION

P. O. BOX 2088
SANTA FE, NEW MEXICO 87501

Form C-102
Revised 10-1-78

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

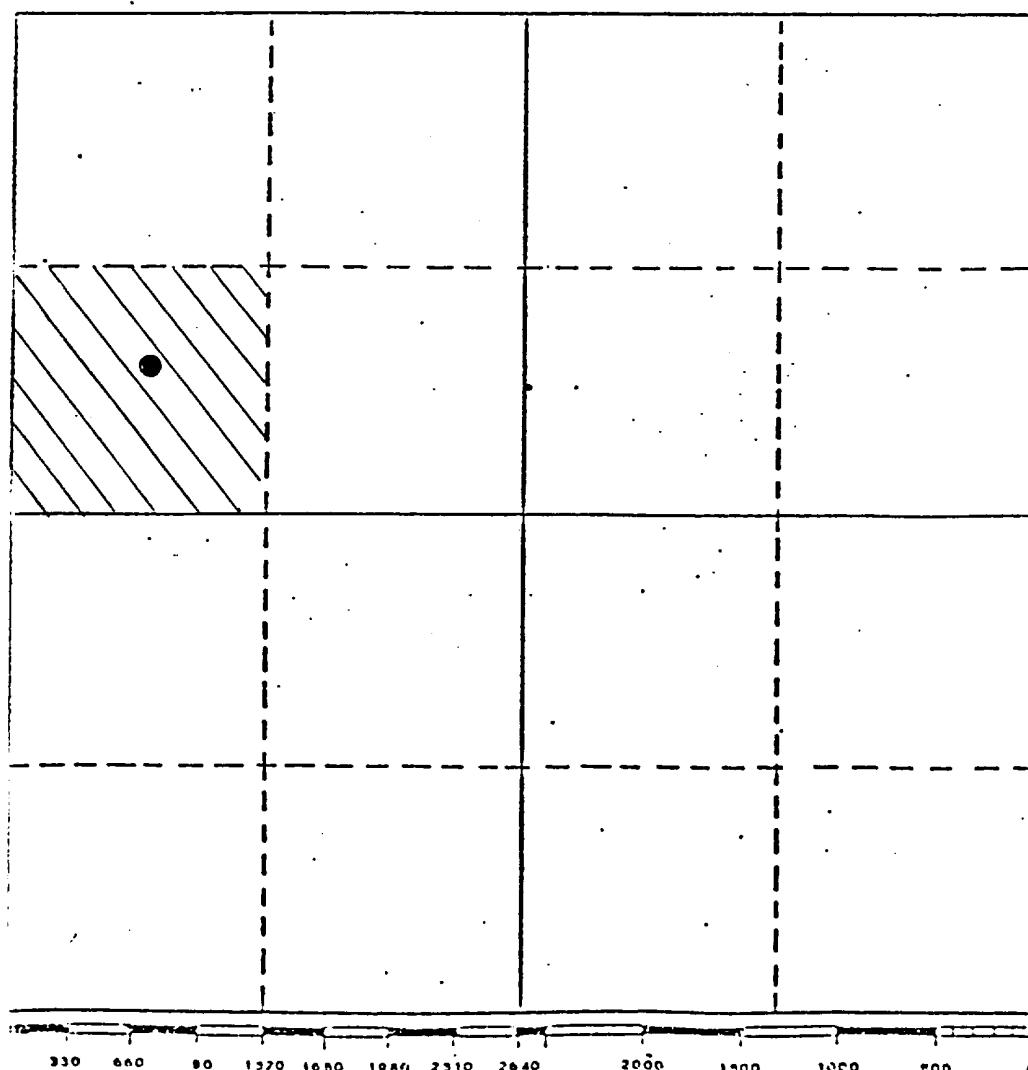
Operator		Lease			Well No.
Chevron U.S.A. Inc.		W. M. Rinewalt			2
Unit Letter	Section	Township	Range	County	
E	4	225	37E	Lea	
Actual Postage Location of Well:					
1874	feet from the North	line and	750	feet from the West	line
Ground Level Elev.	Producing Formation	Pool		Dedicated Acreage:	
3456'	Blinebry/Drinkard	Blinebry/Drinkard (CDH)		40	Acres

- Outline the acreage dedicated to the subject well by colored pencil or hachure marks on the plat below.
- If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).
- 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.

Name: *M.W. Casey*
Position: Division Proration Engineer
Company: Chevron U.S.A. Inc.
Date: May 6, 1986

I hereby certify that the well location shown on this plot 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.

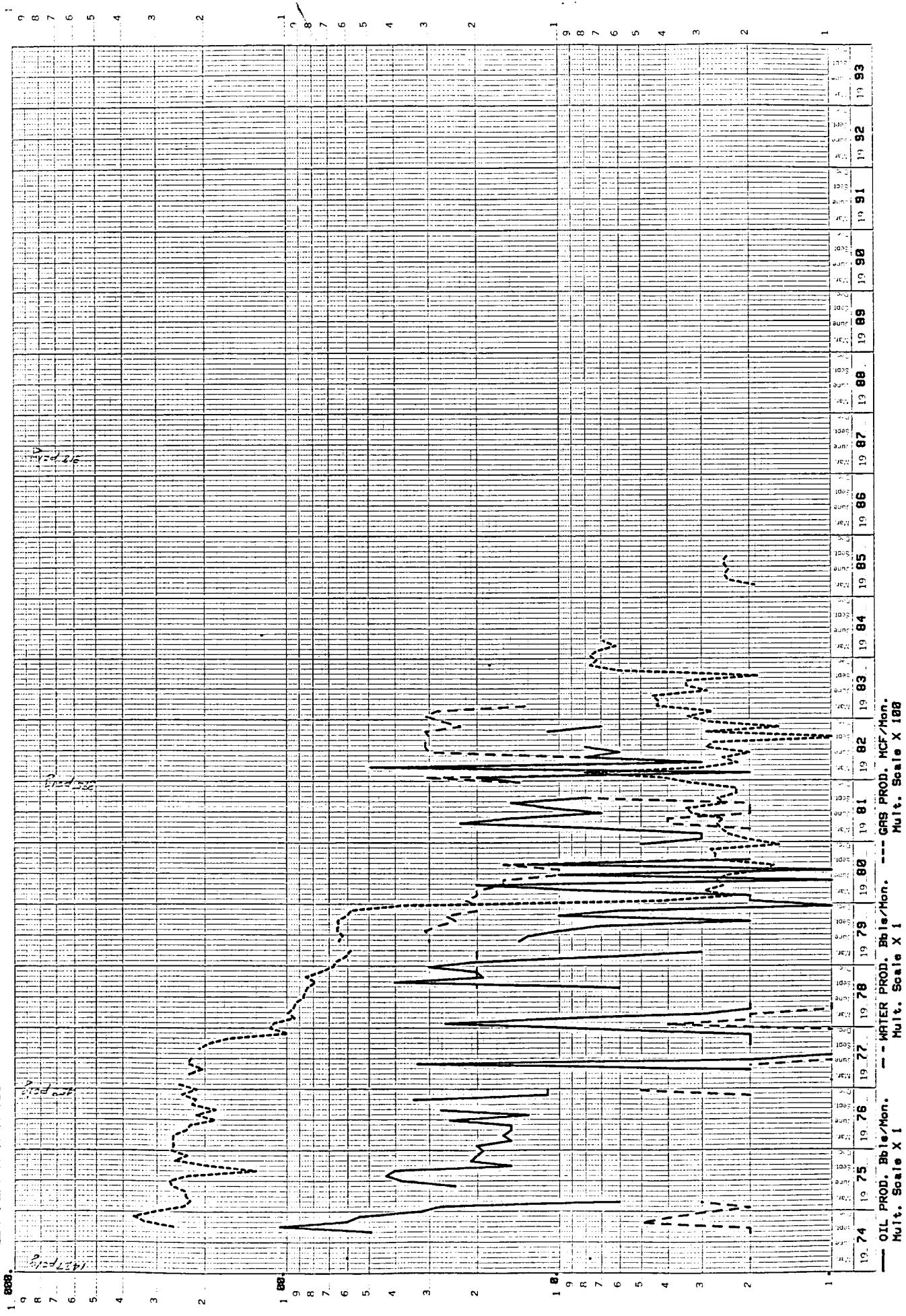
Date Surveyed

Registered Professional Engineer
and/or Land Surveyor

Certificate No.

DRINKARD

W. M. RINEWALT #2





CALCULATION SHEET
Chevron U.S.A. Inc.

Prepared by	Page No.
M.W.C.	of

Title W M. RINEWALT WELL No. 2 - Downhole Commissary Location Department Project Number

Blinebry BHP Calculation

$$P_{RES} = P_{BHP} = P_{CSG.} + P_{GAS} + P_{OIL \text{ IN } COLUMN}$$

$$\textcircled{1} \quad P_{\text{CSG}} = 522 \text{ psi (measured)}$$

$$\textcircled{2} \quad P_{\text{GAS}} = \text{GAS Gradient (psf/ft)} \times \text{Depth (ft)}$$

GAS Gradient = 0.0006 psi/ft (ESTIMATED)

DEPTH TO TOP OF FWD = 5704 ft

$$P_{GAS} = (0.0006 \text{ psi/ft})(5704 \text{ ft}) = 3.42 \text{ PSI}$$

$$\textcircled{3} \quad \text{Poisson} = \text{Fluid GRADIENT } (\text{psi/ft}) \times \text{Column Ht. (ft)}$$

Fluid Gradient = 0.40 psf/ft (Estimated)

$$\begin{aligned}
 \text{Col. Ht} &= \text{Mio Perfs (ft)} - \text{Fluid Level (ft)} \\
 &= 5804 \text{ ft} - 5704 \text{ ft} \\
 &= 102 \text{ ft}
 \end{aligned}$$

$$P_{out} : \text{bar} = (0.40 \text{ psi}) / (102 \text{ ft}) = 40.8 \text{ PSI}$$

$$\therefore P_{\text{res.}} = P_{\text{CSG}} + P_{\text{gas}} + P_{\text{oil/water}} = 522 \text{ psi} + 3.42 \text{ psi} + 49.8 \text{ psi} = \underline{\underline{566.2 \text{ PSI}}}$$

$$P_{res} = 566.2 \text{ PSI}$$

RECEIVED
MAY 12 1986
HOBBS OFFICE

JOHN W. WEST ENGINEERING COMPANY
412 NORTH DAL PASO, HOBBS, NEW MEXICO

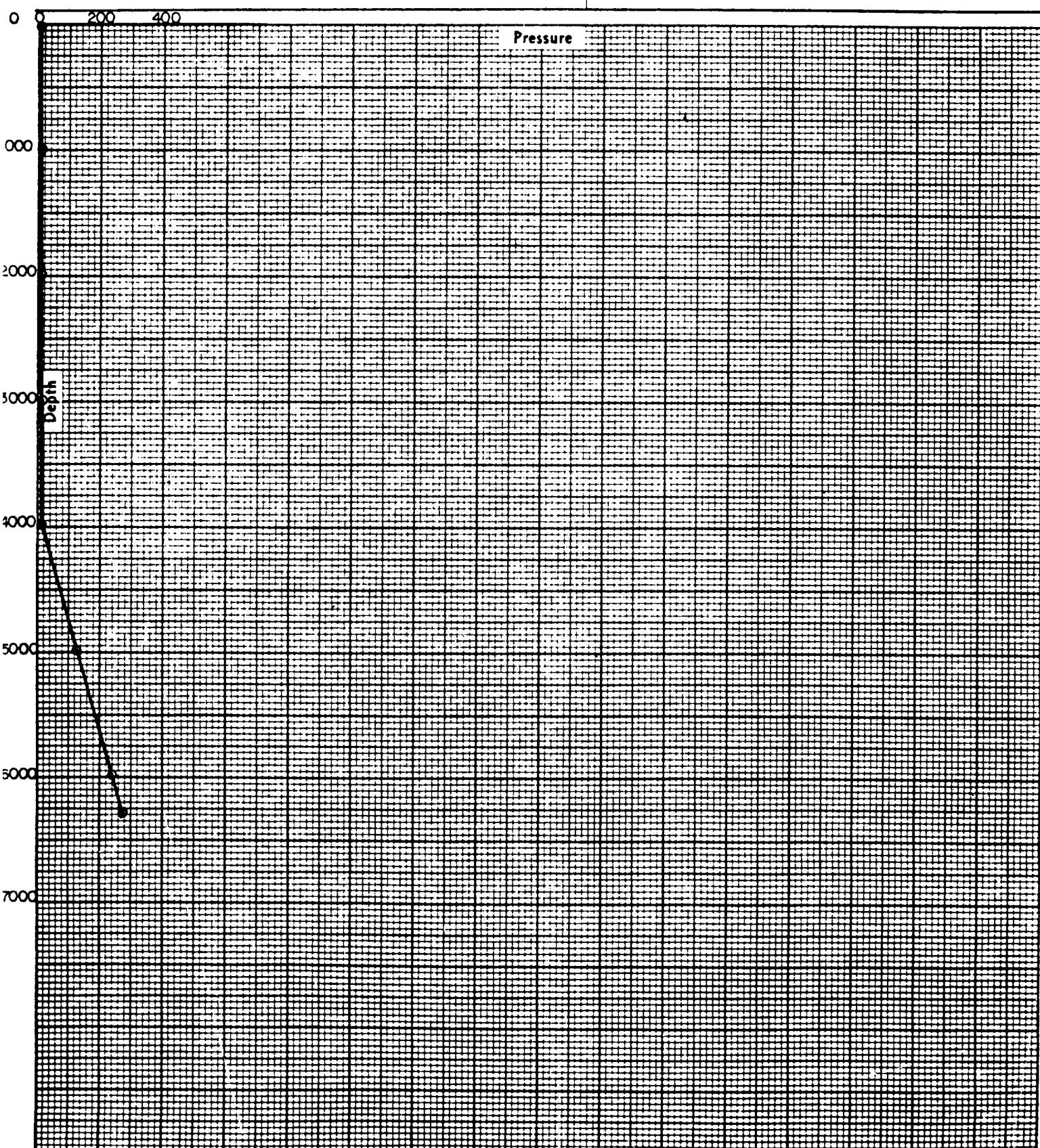
TELEPHONES 393-3942
393-3117

BOTTOM HOLE PRESSURE SURVEY REPORT

OPERATOR CHEVRON U.S.A., INC.
LEASE RINEWALT
WELL NO. 2
FIELD DRINKARD
DATE 4-9-86 TIME 3:30 P.M.
STATUS Shut-In TEST DEPTH 6300'
TIME S.I. LAST TEST DATE
CAS. PRES. BHP LAST TEST
TUB. PRES. 9 PSI BHP CHANGE
ELEV. FLUID TOP
DATUM WATER TOP
TEMP RUN BY B.T.
CLOCK NO. 24959 GAUGE NO. 16389
ELEMENT NO. 25613 (0-945 PSI)

DEPTH	PRESSURE	GRADIENT
000	009	
1000	010	.001
2000	010	Neg.
3000	012	.002
4000	013	.001
5000	122	.109
6000	240	.118
6300	277	.123

A 1 $\frac{1}{4}$ " Sinker Bar was run to 6320'



CURRENT DOWNHOLE COMMINGLED INSTALLATION

LEASE & WELL NO. W.M. Rincausit #2 FIELD/POOL Rinconia/Drinker DATE 4-25-86

LOCATION 766 FEET FROM West LINE AND 1874 FEET FROM North LINE

SECTION Section 4 T22S R37E COUNTY Lea STATE NM

GE 3456
KDB to GE
DF to GE 12.00

Date Completed 9-12-47
Initial Formation Ellenburger
From: 7952 to 8136 GOR 1065
Initial: Production 856 bpd 0 bwpd
Or: Injection bwpd @ psi

Completion Data:
Natural Completion - no stimulation

13 3/8" OD Surface Pipe
set @ 308 w/u 300 sx
Circulated? Yes

2 3/8" Production Tubing
SET @ 6479

9 5/8" OD 36 # Thd
Gr. H-40,
set @ 2975 w/u 1200 sx
Circulated? No
TOC @ 532 by TS

3674-3724

TBG ANCHOR @ 5508'

BUNEBY PERFS
5746, 5805, 5824, 5867 1-1" HPP

DRINKARD Perfs
6376-6604 w/u 0.72 " J4PF
(total 28 holes)

Fill in hole to 6485'

Baker CIEP @ 7050'
7132-7226 4-7/8" J4PF
7239-7245 4-7/8" J4PF

Baker CIEP @ 7568'
7592-7626

7876-7890'

FETD = 7900'
7942-7972 4-7/8" J4PF

FETD = 7973'
7" OD 26 gpm Thd
Gr. H-40 J-5 LT 4C Csg.
set @ 7980 w/u 900 sx
Circulated? No
TOC @ 3745 by TS

→ Eye open hole
300sx cmnt.

FETD = 8020 (PR w/ Hydromite)
TD = 8136

Subsequent Workover or Reconditioning:

- 4-51 Install new lift equipment - P-Lore: S1
Hitter: 271 PW 12# PW
- 8-52 Install submersible - P-Lore: S1
Hitter: 93 PW 412 PW
- 6-53 Relined rods - P-Lore: 30 PW 47 PW
Hitter: 57 PW 446 PW
- 7-53 Relined w/u 3000 ft LTNE - P-Lore S1 PW
24 PW. Hitter 59 PW 52 PW
- 8-57 Relined rods - P-Lore: 19 PW 27 PW
Hitter: 71 PW 72 PW
- 12-58 Relined rods - P-Lore: 38 PW 44 PW
Hitter: 24 PW 600 PW
- 10-58 Treated 7980-8024, w/u 5000 ft 15Y. NEFE
- 11-59 PR w/u Hydromite to 7020'
- 12-59 PP w/u 8mt to 7973'
- 12-60 Part! 7007-7072' Holes unlined 15Y NEFE
Covered w/u 1000x PPTA 7980'
- 12-61 Part. 7075-7145' Fins w/u 5000 ft 24" oil/gas
11b - PL. Perf 7592-7626 Holes 1 w/u 3000 ft
Mud laid.
- 6-62 Set CIEP @ 7567' crowd 125x and Part 7121-7226'
Hitter - unlined 15Y. NEFE Part 7239-7245
- 6-63 Hitter - 7121-7245 w/u 2000 ft 15Y. NEFE
- 8-60 Fins 7121-7245 w/u 20,000 ft ret. oil 513 KGS
- 10-60 Set CIEP @ 7020 and w/u 5000 ft Set CIEP
3015 bad w/u 24" and Part 3674-3724 Fins
w/u 16000 ft 24" and oil 10 3/16" IDG
- 2-66 Set CIEP @ 7020 3000 ft 17.25" 20-40 S-1 12-20 UCLP
Fins w/u 20,000 ft 17.25" 20-40 S-1 12-20 UCLP
oil/gas laid.
- 11-73 Part 6271-71 6452-54 6480-77 6572-25 6544-47
6575-77 6602-06 Fins 1 w/u 27,000 ft 24"
- 6-70 3000 ft 17.25" 20-40 S-1
- 4-81 Downhole Commingled Liner @ 100' ID
100' m Pimp.

Present Inj. bwpd @ psi Date
Present Prod. 24 bpd 39 bwpd Date 4-24-86
GAS 120 MCFPD _____

Remarks Or Additional Data:

Formation Tops:
Unlined 1170
Pase salt. 2440
Yates 3630
San Andres 3270
Llorona 5090
Tulah 6080
Vivian 6440-6530
Simeon 7270
Ellenburger 7952