



STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT

OIL CONSERVATION DIVISION
AZTEC DISTRICT OFFICE

1000 RIO BRAZOS ROAD
AZTEC, NEW MEXICO 87410
(505) 334-6178

OIL CONSERVATION DIVISION
BOX 2088
SANTA FE, NEW MEXICO 87501

DATE October 11, 1985

RE: Proposed MC _____
Proposed DHC α _____
Proposed NSL _____
Proposed SWD _____
Proposed WFX _____
Proposed PMX _____

Gentlemen:

I have examined the application dated October 7, 1985
for the Canthin Oil Co. Block A 625E L-8-26N-6W
Operator Lease and Well No. Unit, S-T-R

and my recommendations are as follows:

Approve

Yours truly,

Eric J. Gray

CAULKINS OIL COMPANY

P. O. BOX 780
FARMINGTON, NEW MEXICO 87401

October 3, 1985

Mr. Frank Chavez
Oil Conservation Division
1000 Rio Brazos Road
Aztec, New Mexico 87410

Dear Frank,

As set forth in rule 303-C we hereby request administration approval for downhole commingling of our well No. 625-E, located in SW 1/4 of section 8, 26N, 6W Rio Arriba County, New Mexico.

In support of commingling we offer the following:

- (1) Mesa Verde Zone capable of producing low volumes only and tests show it will produce fluid, therefore it will be necessary to have some form of artificial lift.
- (2) As shown on attached schematic, Packer was set between Zones with Reverse Flow Check Valve installed to prevent crossflow from Dakota Zone to Mesa Verde Zone.
- (3) Fluids from both Zones compatible.
- (4) Ownership common, including working interests and Royalty interest.
- (5) Bottomhole pressure results attached show Mesa Verde BHP 1222 @ 5000' and Dakota BHP 1822 @ 5000'.

Rule #303-C
Section 2

- (a) Caulkins Oil Company
P.O. Box 780
Farmington, New Mexico 87499
- (b) Breech "A" 625-E
Unit L, Section 8, 26N, 6W
Rio Arriba County, New Mexico

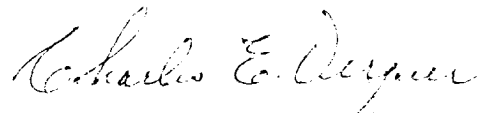
RECEIVED
OCT 07 1985
OIL CON. DIV.
DIST. 3

Blanco Mesa Verde - Basin Dakota Zones to be Commingled.

- (c) 9 section plat attached showing all offset acreage, also shows all wells now commingled in Mesa Verde - Dakota Zones, identified by arrow.
- (d) NA
- (e) Zones were tested individually after running BHP Survey.
Dakota Zone Rate of Flow after flowing 3 hours thru 3/4" positive choke 1,727 MCFPD.
Mesa Verde Zone Rate of Flow after flowing 3 hours thru 3/4" positive choke 580 MCFPD.
This test shows Dakota produces 75% of all Gas and Mesa Verde produces 25% of all Gas.
Both Zones produce Condensate.
Estimate same amount from each Zone.
Copies of Completion Report for each Zone attached.

- (f) BHP results attached.
- (g) Fluids are compatible and sale value is the same.
- (h) A 3 hour Potential Test run 10-1-85 shows:
Rate of Flow for commingled Zones as 2,440 MCFPD.
Individule Potential Tests run previously show combined total to be 2,307 MCFPD
- (i) From results of tests run on individual Zones. We recommend production be split as follows:
Dakota Zone - 75% of all Gas and 50% of all Oil.
Mesa Verde Zone - 25% of all Gas and 50% of all Oil.
- (j) All offset operators have been furnished with copy of the application.
Reciept for Certified Mail attached.
Copy of Sundry Notice sent to BIM, attached.

Yours very truly,



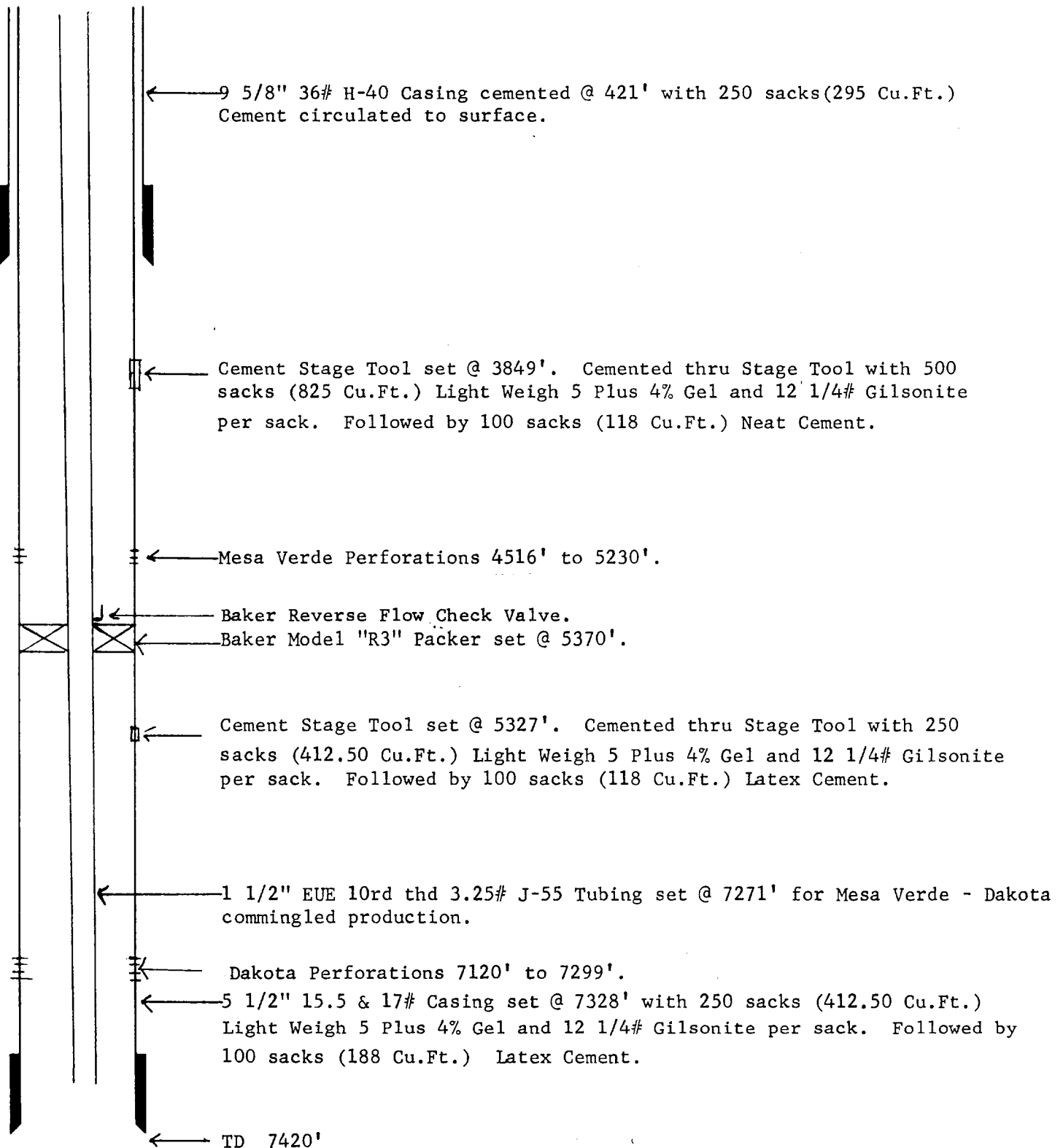
Charles E. Verquer, Supt.
Caulkins Oil Company

cc: Denver
El Paso Natural Gas Company
Mesa Petroleum

BAKER PACKERS DIVISION

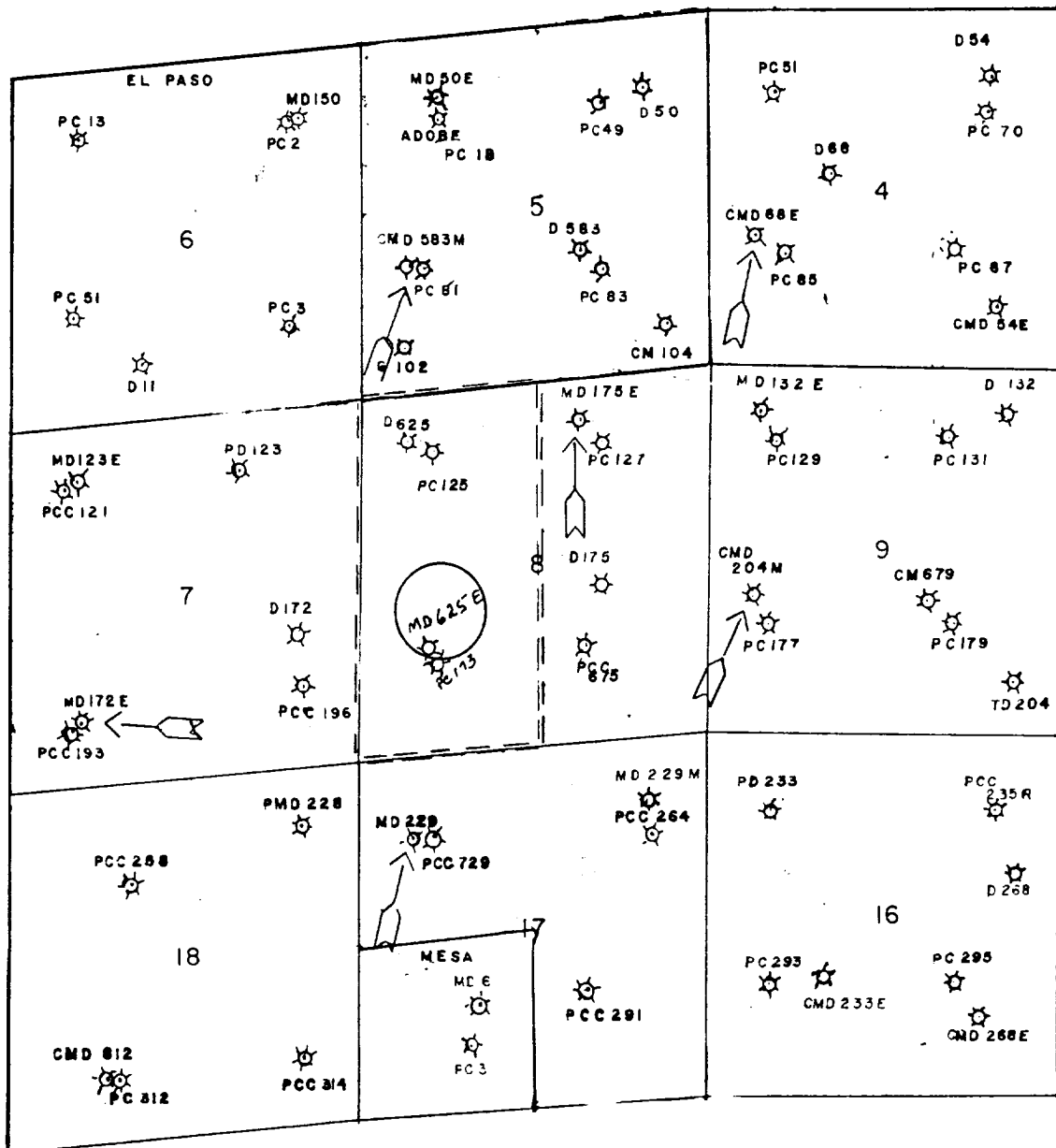
Blanco Mesa Verde
Basin Dakota

DATE _____ WELL NO. 625-E LEASE Breech "A" FIELD _____



CAULKINS OIL COMPANY

P. O. BOX 780
FARMINGTON, NEW MEXICO 87401





MIDLAND, TEXAS / FARMINGTON, NEW MEXICO
GRAND JUNCTION, COLORADO

P. O. Box 5247
Midland, Texas 79704
(915) 682-5574

September 17, 1985

Caulkins Oil Company
P.O. Box 340
Bloomfield, New Mexico 87413

Attention: Mr. Charles Verquer

Subject: Bottomhole Pressure Measurements
Breach "A" No. 625-E
Basin Dakota Field
Dakota & Mesa Verde Formation
Rio Arriba County, New Mexico
Our File No. 2-17326-WL&P

Gentlemen:

Attached hereto are the results of bottomhole pressure measurements which were conducted on the above captioned well September 9, 1985.

The data presented are in tabular and graphical form.

It has been our pleasure to have conducted this service for you. If we may be of further assistance, please call us at any time.

Respectfully submitted,

TEFTELLER, INC.

Neil Tefteller

NT/ct



JEFF MILLER, INC.

Pressure measuring data

1000 PSI = 1000

1 2
2-17326-WL&P

Company CAULKINS OIL COMPANY

Well BREECH "A"

625-E

Field MESA VERDE

County

RIO ARriba

State NEW MEXICO

Location MESA VERDE

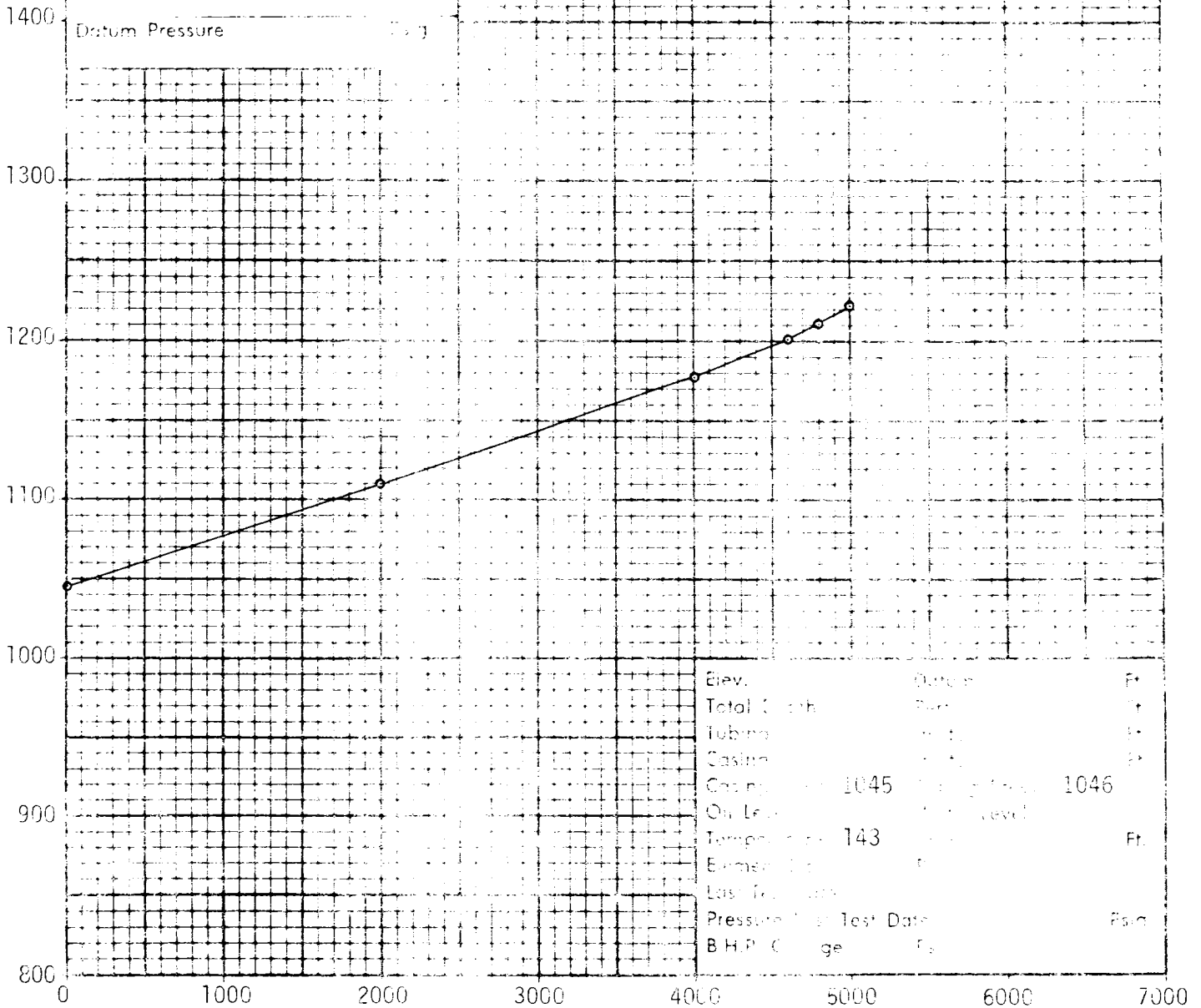
Test Date

SEPTEMBER 9, 1985

Status of Well Shut-in new completion

DEPTH	PRESSURE	GRAD FWT
Feet	Psi g	Psi
10	1046	
2000	1110	0.032
4000	1178	0.034
4600	1201	0.038
4800	1211	0.050
5000	1222	0.055

Datum Pressure Psi g



Elev. _____ Datum _____ Ft.
Total Depth _____ Ft.
Tubing _____ Ft.
Casing _____ Ft.
Casing _____ 1045 _____ 1046
On Level _____ Level
Temperature _____ 143 _____ Ft.
Exposure _____ Ft.
Last Test Date _____
Pressure _____ Test Date _____
B.H.P. _____ ge _____ Psi



REFLECTOR, INC.

precision engineering data

11111 W. 10TH AVE

DAKOTA

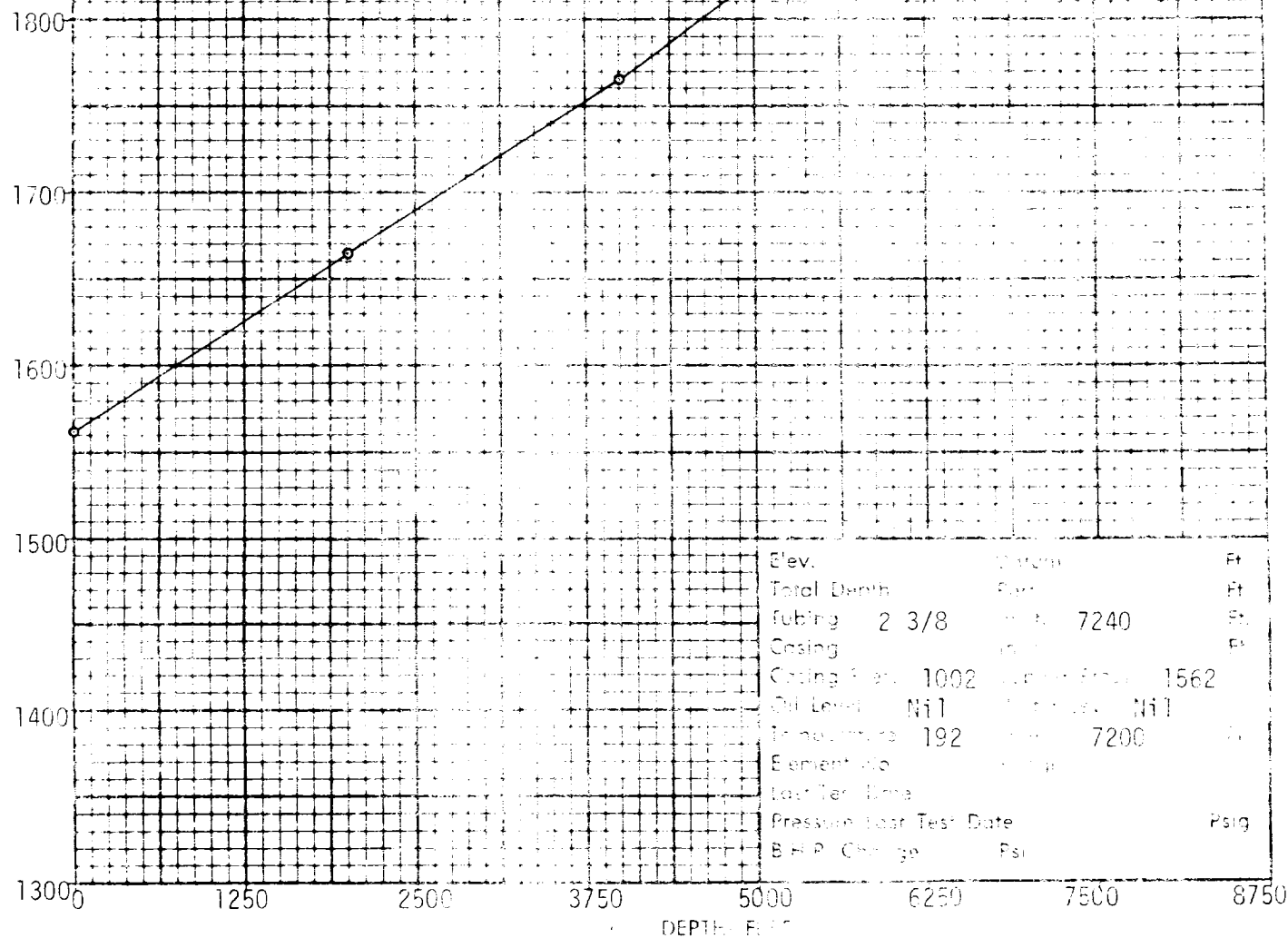
2 2
2-17326-WL&P

Company CAULKINS OIL COMPANY Lease BRECCH "A" 625-E
Field BASIN DAKOTA County RIO ARRIBA NEW MEXICO
Test Date SEPTEMBER 9, 1985

Shut-in new completion

DEPTH	PRESSURE	GRADIENT
Feet	Psig	PSIG/FT
10	1562	
2000	1665	0.054
4000	1766	0.051
6000	1882	0.058
6800	1923	0.051
7000	1936	0.065
7200	1948	0.060

Datum Pressure Psig



UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

SUBMIT IN DUPLICATE*

(See other In-
structions on
reverse side)

Form approved.
Budget Bureau No. 1004-0137
Expires August 31, 1985

WELL COMPLETION OR RECOMPLETION REPORT AND LOG *

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

2. TYPE OF COMPLETION:

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

2. NAME OF OPERATOR

Caulkins Oil Company

3. ADDRESS OF OPERATOR

P.O. Box 780 Farmington, New Mexico 87499

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

At surface 1590' F/S and 1000' F/W

At top prod. interval reported below Same

At total depth Same

14. PERMIT NO.

DATE ISSUED

5. LEASE DESIGNATION AND SERIAL NO.

SF 079035-A

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME

Breech "A"

9. WELL NO.

625-E

10. FIELD AND POOL, OR WILDCAT

Blanco Mesa Verde

11. SEC. T. R. M., OR BLOCK AND SURVEY OR AREA

Section 8, 26N 6W

12. COUNTY OR PARISH

13. STATE

Rio Arriba New Mexico

15. DATE SPUDDED

7-19-85

16. DATE T.D. REACHED

7-31-85

17. DATE COMPL. (Ready to prod.)

9-24 85

18. ELEVATIONS (OF, RKB, RT, CR, ETC.)*

6496 GR

19. ELEV. CASINGHEAD

6496

20. TOTAL DEPTH, MD & TVD

7420'

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

7328'

22. IF MULTIPLE COMPL., HOW MANY*

(2) Commingled

23. INTERVALS DRILLED BY

0-7420

ROTARY TOOLS

CABLE TOOLS

No

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

4516' to 5230' (Mesa Verde)

25. WAS DIRECTIONAL SURVEY MADE

No

26. TYPE ELECTRIC AND OTHER LOGS RUN

Dual Induction SFL - Formation Density - Depth Correlation Log

27. WAS WELL CORED

No

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

CASING SIZE	WEIGHT, LB./FT.	DEPTH SET (MD)	HOLE SIZE	CEMENTING RECORD	AMOUNT PULLED
9 5/8"	36# H-40	424'	12 1/4"	250 sacks (295 Cu.Ft.)	None
5 1/2"	15.5 & 17#	7328'	7 7/8"	1300 sacks (2004 Cu.Ft.)	None

29. LINER RECORD

SIZE	TOP (MD)	BOTTOM (MD)	SACKS CEMENT*	SCREEN (MD)

30. TUBING RECORD

SIZE	DEPTH SET (MD)	PACKER SET (MD)
1 1/2"	7271'	5370'

31. PERFORATION RECORD (Interval, size and number)

1-.42-4516 1-.42-5122 1-.42-5230
1-.42-4992 1-.42-5134
1-.42-5022 1-.42-5139
1-.42-5084 1-.42-5154
1-.42-5086 1-.42-5178

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

DEPTH INTERVAL (MD) AMOUNT AND KIND OF MATERIAL USED
4516' to 5230' 23,000# 20-40 Sand and
1125 bbls. 20# Gel Fluid

33. PRODUCTION

DATE FIRST PRODUCTION		PRODUCTION METHOD (Flowing, gas lift, pumping—size and type of pump)				WELL STATUS (Producing or shut-in)	
10-1-85		Flowing				Shut-in	
DATE OF TEST	HOURS TESTED	CHOKE SIZE	PROD'N. FOR TEST PERIOD	OIL—BBL.	GAS—MCF.	WATER—BBL.	GAS-OIL RATIO
10-1-85	3 Hours	3/4"	→		305		
FLOW. TUBING PRESS.	CASING PRESSURE	CALCULATED 24-HOUR RATE	OIL—BBL.	GAS—MCF.	WATER—BBL.	OIL GRAVITY-API (CORR.)	
387	PKR	→		2,440			

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

TEST WITNESSED BY

Gas to be sold to Gas Company of New Mexico (Condensate to Giant Refinery Co.)

35. LIST OF ATTACHMENTS

Complete cement records.

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

SIGNED Charles E. Dugan TITLE Superintendent

DATE 10-3-85

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

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

Ran New 5 1/2" K-55 Smls 8rd thd Casing as follows:

7328' to 6298'	(1030')	New 5 1/2"	17#	LT&C	K-55 Smls Casing
6298' to 821'	(5477')	New 5 1/2"	15.5#	ST&C	K-55 Smls Casing
821' to Surface	(821')	New 5 1/2"	17#	LT&C	K-55 Smls Casing

Stage Tools run in 5 1/2" Casing at 5327' and 3849'.

Cement Baskets run on 5 1/2" Casing at 5369' and 3891'.

24 Centralizers run on Casing string at following points:

7290', 7248', 7206', 7164', 7123', 7083', 7041', 7000', 6959', 6919', 6879', 6837', 5411', 5385', 5242', 5202', 5160', 5117', 5077', 5034', 4992', 4950', 3934' and 3807'.

Cemented 5 1/2" Casing in three (3) Stages.

First Stage thru Shoe at 7328' with 250 sacks (412.50 Cu.Ft.) Light Weigh 5 Plus 4% Gel and 12 1/4# Gilsonite per sack. Followed by 100 sacks (118 Cu.Ft.) Latex Cement.
Plug down 1:00 PM 8-1-85.

Second Stage Cemented thru Stage Tool set at 5327' with 250 sacks (412.50 Cu.Ft.) Light Weigh 5 Plus 4% Gel and 12 1/4# Gilsonite per sack. Followed by 100 sacks (118 Cu.Ft.) Latex Cement.
Plug down 2:15 PM 8-1-85.

Third Stage Cemented thru Stage Tool set at 3849' with 500 sacks (825 Cu.Ft.) Light Weigh 5 Plus 4% Gel and 12 1/4# Gilsonite per sack. Followed by 100 sacks (118 Cu.Ft.) Neat Cement.
Plug down 3:45 PM 8-1-85.

Cement circulated on all three Stages.

Approx 7 bbls slurry on first Stage.
Approx 5 bbls slurry on second Stage.
Approx 9 bbls slurry on third Stage.

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

SUBMIT IN DUPLICATE*

(See other in-
structions on
reverse side)

Form approved.
Budget Bureau No. 1004-0137
Expires August 31, 1985

WELL COMPLETION OR RECOMPLETION REPORT AND LOG *

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

b. TYPE OF COMPLETION:

NEW WELL ☒ WORK OVER ☐ DEEPEN ☐ PLUG BACK ☐ DIFF. REVEN. ☐ Other _____

2. NAME OF OPERATOR

Caulkins Oil Company

3. ADDRESS OF OPERATOR

P.O. Box 780 Farmington, New Mexico

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

At surface 1590' F/S and 1000' F/W

At top prod. interval reported below Same

At total depth Same

14. PERMIT NO.

DATE ISSUED

15. DATE SPUDDED

7-19-85

16. DATE T.D. REACHED

7-31-85

17. DATE COMPL. (Ready to prod.)

9-24-85

18. ELEVATIONS (OF RKB, RT, GR, ETC.)*

6496 GR

19. ELEV. CASINGHEAD

20. TOTAL DEPTH, MD & TVD

7420'

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

7328'

22. IF MULTIPLE COMPL., HOW MANY?

(2) Commingled

23. INTERVALS DRILLED BY

0-7420

ROTARY TOOLS

CABLE TOOLS

No

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

7120' to 7299' (Dakota)

25. WAS DIRECTIONAL SURVEY MADE

No

26. TYPE ELECTRIC AND OTHER LOGS RUN

Dual Induction SFL - Formation Density - Depth Correlation Log

27. WAS WELL CORED

No

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

CASING SIZE	WEIGHT, LB./FT.	DEPTH SET (MD)	HOLE SIZE	CEMENTING RECORD	AMOUNT PULLED
9 5/8"	36# H-40	424'	7 7/8"	250 sacks (295 Cu.Ft.)	None
5 1/2"	15.5 & 17#	7328'	12 1/4"	1300 Sacks (2004 Cu.Ft.)	None

29. LINER RECORD

SIZE	TOP (MD)	BOTTOM (MD)	SACKS CEMENT*	SCREEN (MD)	SIZE	DEPTH SET (MD)	PACKER SET (MD)
					1 1/2"	7271'	5370'

31. PERFORATION RECORD (Interval, size and number)

1-.42-7120 1-.42-7230 1-.42-7299
1-.42-7124 1-.42-7246
1-.42-7214 1-.42-7202
1-.42-7218 1-.42-7290
1-.42-7220 1-.42-7294

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

DEPTH INTERVAL (MD)	AMOUNT AND KIND OF MATERIAL USED
7120' to 7299'	128,000# 20-40 Sand and 2644 bbls. Cross Link Fluid

33.* PRODUCTION

DATE FIRST PRODUCTION		PRODUCTION METHOD (Flowing, gas lift, pumping—size and type of pump)				WELL STATUS (Producing or shut-in)	
10-1-85		Flowing				Shut-in	
DATE OF TEST	HOURS TESTED	CHOKE SIZE	PROD'N. FOR TEST PERIOD	OIL—BBL.	GAS—MCF.	WATER—BBL.	GAS-OIL RATIO
10-1-85	3 Hours	3/4"	→		305		
FLOW. TUBING PRESS.	CASING PRESSURE	CALCULATED 24-HOUR RATE	OIL—BBL.	GAS—MCF.	WATER—BBL.	OIL GRAVITY-API (CORR.)	
387	PKR	→		2.440			

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

TEST WITNESSED BY

Gas to be sold to Gas Company of New Mexico (Condensate to Giant Refinery Co.)

35. LIST OF ATTACHMENTS

Complete Cement Records.

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

SIGNED Charles E. Vesper TITLE Superintendent

DATE 10-3-85

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

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37. SUMMARY OF POROUS ZONES: (Show all important zones of porosity and contents thereof; cored intervals; and all drill-stem, tests, including depth interval tested, cushion used, time tool open, flowing and shut-in pressures, and recoveries):

FORMATION	TOP	BOTTOM	DESCRIPTION, CONTENTS, ETC.	NAME	TOP	
					MEAS. DEPTH	TRUE VERT. DEPTH
Alamo	2222	2308	Water Sand	Alamo	2222	2222
Pictured Cliffs	2806	2900	Gas Sand	Pictured Cliffs	2806	2806
Chacra	3716	3828	Gas Sand	Chacra	3716	3716
Mesa Verde	4512	5266	Gas Sand	Mesa Verde	4512	4512
Greenhorn	6993	7052	Gas Sand	Greenhorn	6993	6993
Dakota	7100	7316	Gas Sand	Dakota	7100	7100
Hole Deviation Test						
Depth			Degrees			
434			1 1/2			
946			1 1/2			
1479			1 1/2			
2077			1			
2581			1 1 1/4			
3085			1 1 1/4			
3579			1 1 1/2			
4080			1 1 1/2			
4400			1			
4900			1			
5412			1			
5916			1 1 1/4			
6419			1 1 1/4			
6914			1			
7012			3 3/4			
7420			1			

38. GEOLOGIC MARKERS

Ran New 5 1/2" K-55 Smls 8rd thd Casing as follows:

7328' to 6298'	(1030')	New 5 1/2"	17#	LT&C	K-55 Smls Casing
6298' to 821'	(5477')	New 5 1/2"	15.5#	ST&C	K-55 Smls Casing
821' to Surface	(821')	New 5 1/2"	17#	LT&C	K-55 Smls Casing

Stage Tools run in 5 1/2" Casing at 5327' and 3849'.

Cement Baskets run on 5 1/2" Casing at 5369' and 3891'.

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Plug down 1:00 PM 8-1-85.

Second Stage Cemented thru Stage Tool set at 5327' with 250 sacks (412.50 Cu.Ft.) Light Weigh 5 Plus 4% Gel and 12 1/4# Gilsonite per sack. Followed by 100 sacks (118 Cu.Ft.) Latex Cement.
Plug down 2:15 PM 8-1-85.

Third Stage Cemented thru Stage Tool set at 3849' with 500 sacks (825 Cu.Ft.) Light Weigh 5 Plus 4% Gel and 12 1/4# Gilsonite per sack. Followed by 100 sacks (118 Cu.Ft.) Neat Cement.
Plug down 3:45 PM 8-1-85.

Cement circulated on all three Stages.

Approx 7 bbls slurry on first Stage.
Approx 5 bbls slurry on second Stage.
Approx 9 bbls slurry on third Stage.

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

SUBMIT IN TRIPLICATE*
(Other instructions on re-
verse side)

Form approved.
Budget Bureau No. 1004-0135
Expires August 31, 1985

5. LEASE DESIGNATION AND AERIAL NO.

SF 079035-A

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME

Breech "D"

9. WELL NO.

625-E

10. FIELD AND POOL, OR WILDCAT

Blanco MV - Basin Dakota

11. SEC., T. R., M., OR BLK. AND
SURVEY OR ARMA

Section 8, 26N 6W

12. COUNTY OR PARISH

Rio Arriba

13. STATE

New Mexico

SUNDRY NOTICES AND REPORTS ON WELLS
(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir.
Use "APPLICATION FOR PERMIT—" for such proposals.)

OIL ☐ GAS ☒ OTHER ☐
WELL WELL

2. NAME OF OPERATOR

Caulkins Oil Company

3. ADDRESS OF OPERATOR

P.O. Box 780 Farmington, New Mexico 87499

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.*
See also space 17 below.)
At surface

1590' F/S and 1000' F/W

14. PERMIT NO.

15. ELEVATIONS (Show whether DP, RT, GR, etc.)

6496 GR

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

NOTICE OF INTENTION TO:

TEST WATER SHUT-OFF ☐

FRACTURE TREAT ☐

SHOOT OR ACIDIZE ☐

REPAIR WELL ☐

(Other) Commingle Well

PULL OR ALTER CASING ☐

MULTIPLE COMPLETE ☐

ABANDON* ☐

CHANGE PLANS ☐

X

SUBSEQUENT REPORT OF:

WATER SHUT-OFF ☐

FRACTURE TREATMENT ☐

SHOOTING OR ACIDIZING ☐

(Other) ☐

REPAIRING WELL ☐

ALTERING CASING ☐

ABANDONMENT* ☐

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

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

10-3-85

It is our intention to seek administration approval for
downhole commingling of the Mesa Verde and Dakota Zones
in this well from New Mexico Oil Conservation Division.

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

SIGNED

Charles E. Vergara

TITLE

Superintendent

DATE

10-3-85

(This space for Federal or State office use)

APPROVED BY

TITLE

DATE

CONDITIONS OF APPROVAL, IF ANY:

*See Instructions on Reverse Side