

DHC 8/16/99

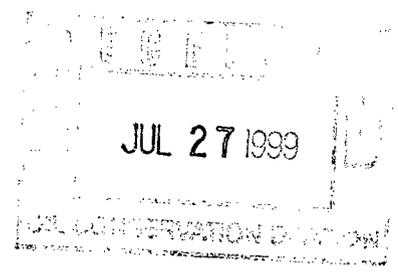
CAULKINS OIL COMPANY

P. O. BOX 340
BLOOMFIELD, NEW MEXICO 87413
PHONE: 505-632-1544
FAX 505-632-1471

2430

July 23, 1999

State of New Mexico
Oil Conservation Division
ATTN: Lori Wrotenberry
2040 South Pacheco
Santa Fe, NM 87504



Re: Administrative Approval to Downhole Commingle
Sanchez 4-R
1750' F/N 1550' F/W Sec. 25-T26N-R6W
Rio Arriba County, New Mexico

Dear Ms Wrotenberry:

Caulkins Oil Company requests to downhole commingle the Pictured Cliffs – Chacra above a packer and the Dakota - Mesa Verde below a packer in this well.

This well is presently a dual completed Dakota and Mesa Verde. We have submitted sundries with our intentions to plug and abandon the Sanchez 3 Pictured Cliffs and Sanchez 4 Chacra wells located in the NW 1/4 of section 25-26N-6W.

Sundry notice of intent has been submitted to recomplete this well in the Pictured Cliffs and Chacra formations pending commingling and dual completion approval.

	<u>Commingle Order</u>	<u>Gas Allocations</u>	<u>Oil Allocations</u>
Pictured Cliffs	Order #R-5648	70%	
Chacra	Order #R-5648	30%	
Dakota		61%	24%
Mesa Verde		39%	76%

- Please find enclosed:
- A. Form C-107-A
 - B. Form C-102 for each zone
 - C. BLM sundry notice of intent
 - D. One year production volumes
 - E. Notification list of offset operators
 - F. Vicinity Map

*South Blanca - PC
Zero Chacra*

If you have any questions, please contact me at 505-632-1544. Thank you.

Sincerely,

Robert L. Verquer
Superintendent

DISTRICT I

State of New Mexico

Form C-107-A

P.O. Box 1980, Hobbs, NM 88240

Energy, Minerals and Natural Resources Department

New 3-12-96

DISTRICT II

OIL CONSERVATION DIVISION

APPROVAL PROCESS:

811 South First St., Artesia, NM 88210

2040 South Pacheco

X Administrative Hearing

DISTRICT III

Santa Fe, New Mexico 87505-6429

EXISTING WELLBORE

1000 Rio Brazos Rd., Aztec, NM 87410

APPLICATION FOR DOWNHOLE COMMINGLING

YES NO

CAULKINS OIL COMPANY

P.O. BOX 340, BLOOMFIELD, NM 87413

OPERATOR

ADDRESS

SANCHEZ

4-R

F - SEC. 25-26N-6W

RIO ARRIBA

LEASE

WELL NO.

UNIT LTR. - SEC. - TWP. - RGE.

COUNTY

Spacing Unit Lease types: (check 1 or more)

OGRID NO. 003824

Property Code 2463

API NO. 30-039-23723

Federal X, State, (and/or) Fee

Table with 4 columns: The following facts are submitted in support of downhole commingling, Upper Zone, Intermediate Zone, Lower Zone. Rows include Pool Name, Top and Bottom of Pay Section, Type of production, Method of Production, Bottomhole Pressure, Oil Gravity, Producing or Shut-In, Production Marginal?, and Fixed Percentage Allocation.

9. If allocation formula is based upon something other than current or past production, or is based upon some other method, submit attachments with supporting data and/or explaining method and providing rte projections or other required data.

10. Are all working, overriding, and royalty interests identical in all commingled zones? X Yes No

If not, have all working, overriding, and royalty interests been notified by certified mail? Yes No

Have all offset operators been given written notice of the proposed downhole commingling? X Yes No

11. Will cross-flow occur? X Yes No If yes, are fluids compatible, will the formations not be damaged, will any cross-flowed production be recovered, and will the allocation formula be reliable. X Yes No (If No, attach explanation)

12. Are all produced fluids from all commingled zones compatible with each other? X Yes No

13. Will the value of production be decreased by commingling? Yes X No (If Yes, attach explanation)

14. If this well is on, or communitized with, state or federal lands, either the Commissioner or Public Lands or the United States Bureau of Land Management has been notified in writing of this application. X Yes No

15. NMOCD Reference Cases of Rule 303C Exceptions: ORDER NO(S). DHC - 659, R-10239

16. ATTACHMENTS:

- C-102 for each zone to be commingled showing its spacing unit and acreage dedication.
Production curve for each zone for at least one year. (If not available, attach explanation.)
For zones with no production history, estimated production rates and supporting data.
Data to support allocation method or formula.
Notification list of all offset operators.
Notification list of working, overriding, and royalty interests for uncommon interest cases.
Any additional statements, data, or documents required to support commingling.

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

SIGNATURE Robert L. Verquer TITLE SUPERINTENDENT DATE July 23, 1999

TYPE OR PRINT NAME ROBERT L. VERQUER

TELEPHONE NO. (505) 632-1544

District I
 PO Box 1980, Hobbs, NM 88241-1980
 District II
 811 South First, Artesia, NM 88210
 District III
 1000 Rio Brazos Rd., Aztec, NM 87410
 District IV
 2040 South Pacheco, Santa Fe, NM 87505

State of New Mexico
 Energy, Minerals & Natural Resources Department

OIL CONSERVATION DIVISION
 2040 South Pacheco
 Santa Fe, NM 87505

Form C-102
 Revised October 18, 1994
 Instructions on back
 Submit to Appropriate District Office
 State Lease - 4 Copies
 Fee Lease - 3 Copies

AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number 30-039-23723		² Pool Code 71599	³ Pool Name BASIN DAKOTA
⁴ Property Code 2463	⁵ Property Name SANCHEZ		⁶ Well Number 4-R
⁷ OGRID No. 003824	⁸ Operator Name Caulkins Oil Company		⁹ Elevation 6662 GR

¹⁰ Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
F	25	26N	6W		1750'	North	1550'	West	Rio Arriba

¹¹ Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County

¹² Dedicated Acres 320	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ Order No.
--------------------------------------	-------------------------------	----------------------------------	-------------------------

NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

	<p>¹⁷ OPERATOR CERTIFICATION</p> <p><i>I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief</i></p> <p>Signature <i>Robert L. Verquer</i></p> <p>Printed Name Robert L. Verquer</p> <p>Title Superintendent</p> <p>Date July 23, 1999</p>
	<p>¹⁸ SURVEYOR CERTIFICATION</p> <p><i>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.</i></p> <p>Date of Survey</p>
	<p>Signature and Seal of Professional Surveyor:</p>
	<p>Certificate Number</p>

District I
 PO Box 1980, Hobbs, NM 88241-1980
 District II
 811 South First, Artesia, NM 88210
 District III
 1000 Rio Brazos Rd., Aztec, NM 87410
 District IV
 2040 South Pacheco, Santa Fe, NM 87505

State of New Mexico
 Energy, Minerals & Natural Resources Department

OIL CONSERVATION DIVISION
 2040 South Pacheco
 Santa Fe, NM 87505

Form C-102
 Revised October 18, 1994
 Instructions on back
 Submit to Appropriate District Office
 State Lease - 4 Copies
 Fee Lease - 3 Copies

AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number 30-039-23723		² Pool Code 72319		³ Pool Name MESA VERDE	
⁴ Property Code 2463		⁵ Property Name SANCHEZ			⁶ Well Number 4-R
⁷ OGRID No. 003824		⁸ Operator Name Caulkins Oil Company			⁹ Elevation 6662 GR

¹⁰ Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
F	25	26N	6W		1750'	North	1550'	West	Rio Arriba

¹¹ Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County

¹² Dedicated Acres 80	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ Order No.
-------------------------------------	-------------------------------	----------------------------------	-------------------------

NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

	<p>¹⁷ OPERATOR CERTIFICATION</p> <p>I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief</p> <p>Signature <i>Robert L. Verquer</i></p> <p>Printed Name Robert L. Verquer</p> <p>Title Superintendent</p> <p>Date July 23, 1999</p>
	<p>¹⁸ SURVEYOR CERTIFICATION</p> <p>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.</p> <p>Date of Survey</p> <p>Signature and Seal of Professional Surveyor:</p> <p>Certificate Number</p>

District I
 PO Box 1980, Hobbs, NM 88241-1980
 District II
 811 South First, Artesia, NM 88210
 District III
 1000 Rio Brazos Rd., Aztec, NM 87410
 District IV
 2040 South Pacheco, Santa Fe, NM 87505

State of New Mexico
 Energy, Minerals & Natural Resources Department

OIL CONSERVATION DIVISION
 2040 South Pacheco
 Santa Fe, NM 87505

Form C-102
 Revised October 18, 1994
 Instructions on back
 Submit to Appropriate District Office
 State Lease - 4 Copies
 Fee Lease - 3 Copies

AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number 30-039-23723		² Pool Code 82329		³ Pool Name OTERO CHACRA	
⁴ Property Code 2463		⁵ Property Name SANCHEZ			⁶ Well Number 4-R
⁷ OGRID No. 003824		⁸ Operator Name Caulkins Oil Company			⁹ Elevation 6662 GR

¹⁰ Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
F	25	26N	6W		1750'	North	1550'	West	Rio Arriba

¹¹ Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
¹² Dedicated Acres 160		¹³ Joint or Infill		¹⁴ Consolidation Code		¹⁵ Order No.			

NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

	¹⁷ OPERATOR CERTIFICATION	
	I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief	
	Signature	<i>Robert L. Verquer</i>
	Printed Name	Robert L. Verquer
	Title	Superintendent
	Date	July 23, 1999
	¹⁸ SURVEYOR CERTIFICATION	
	I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my knowledge and belief.	
	Date of Survey	
	Signature and Seal of Professional Surveyor:	
	Certificate Number	

District I
 PO Box 1980, Hobbs, NM 88241-1980
 District II
 811 South First, Artesia, NM 88210
 District III
 1000 Rio Brazos Rd., Aztec, NM 87410
 District IV
 2040 South Pacheco, Santa Fe, NM 87505

State of New Mexico
 Energy, Minerals & Natural Resources Department

OIL CONSERVATION DIVISION
 2040 South Pacheco
 Santa Fe, NM 87505

Form C-102
 Revised October 18, 1994
 Instructions on back
 Submit to Appropriate District Office
 State Lease - 4 Copies
 Fee Lease - 3 Copies

AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number 30-039-23723		² Pool Code 72439		³ Pool Name PICTURED CLIFFS	
⁴ Property Code 2463		⁵ Property Name SANCHEZ			⁶ Well Number 4-R
⁷ OGRID No. 003824		⁸ Operator Name Caulkins Oil Company			⁹ Elevation 6662 GR

¹⁰ Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
F	25	26N	6W		1750'	North	1550'	West	Rio Arriba

¹¹ Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
¹² Dedicated Acres 160		¹³ Joint or Infill		¹⁴ Consolidation Code		¹⁵ Order No.			

NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

16				¹⁷ OPERATOR CERTIFICATION	
	I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief				
	Signature				
	Printed Name		Robert L. Verquer		
Title		Superintendent			
Date		July 23, 1999			
¹⁸ SURVEYOR CERTIFICATION					
I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my knowledge and belief.					
Date of Survey					
Signature and Seal of Professional Surveyor:					
Certificate Number					

**UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT**

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)

5. Lease

NMSF-079304

6. If Indian, Allottee or Tribe Name

7. Unit Agreement Name

1. Oil Well Gas Well Other
GAS WELL

8. Well Name and No.

SANCHEZ 4-R

2. Name of Operator:

Caulkins Oil Company

9. API Well No.

30-039-23723-00D1

3. Address of Operator:

(505) 632-1544

P.O. Box 340, Bloomfield, NM 87413

10. Field and Pool, Exploratory Area

DAKOTA, MESA VERDE

4. Location of Well (Footage, Sec., Twp., Rge.)

1750' F/N 1550' F/W

SEC. 25-26N-6W

11. Country or Parish, State

Rio Arriba Co., New Mexico

12. CHECK APPROPRIATE BOX(es) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION

TYPE OF ACTION

Notice of Intent

Abandonment

Change of Plans

Recompletion

New Construction

Subsequent Report

Plugging Back

Non-Routine Fracturing

Casing Repair

Water Shut-Off

Final Abandonment Notice

Altering Casing

Conversion to Injection

Other Commingle/dual complete

Dispose Water

17. Describe Proposed or Completed Operations:

7-23-99

Approval to recomplete Pictured Cliffs – Chacra formation in this well to replace Sanchez 4 Chacra and Sanchez 3 Pictured Cliffs being plugged and abandoned in NW 1/4, section 25-26N-6W is requested.

Also approval to commingle existing Dakota – Mesa Verde formations below a packer and commingle recompleted Pictured Cliffs – Chacra above a packer is requested.

Commingling documents for Dakota – Mesa Verde allocations attached.

Pictured Cliffs – Chacra would be commingled by existing order #R-5648, copy attached.

Above to be done by following procedure:

Rig up.

T.O.H. with 2 1/6" Mesa Verde tubing form 5347'.

T.O.H. with 2 1/6" Dakota production string with seal assembly from model "D" packer set at 5392'.

T.I.H. with 2 3/8" work string with packer plucker mill to drill out model "D" packer.

T.O.H. with tubing, mill and packer.

Run wireline set retrievable bridge plug to 4600'.

Pressure test 5 1/2" casing and retrievable bridge plug to 3500#.

(cont. on page 2)

NOTE: The format is issued in lieu of U.S. BLM Form 3160-5

18. I HEREBY CERTIFY THE FOREGOING IS TRUE AND CORRECT

SIGNED: Robert L. Verquer TITLE: Superintendent DATE: July 23, 1999
ROBERT L. VERQUER

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

Pull GSL log from 4600' to 2800' for correlation log across Lewis Shale, Chacra, Pictured Cliffs and Fruitland Coal.

Perforate Chacra zone 3894' – 3866'.

Nitrogen foam frac Chacra with approximately 60,000# sand and 70 quality foam.

Run wireline set retrievable bridge plug to 3050'.

Perforate Pictured Cliffs zone 3008' – 2980'.

Nitrogen foam frac Pictured Cliffs with approximately 100,000# sand and 70 quality foam.

T.I.H. with tubing and retrieving head.

Flow well to clean up Pictured Cliffs to top of retrievable bridge plug set at 3050'.

T.O.H. with tubing and retrievable bridge plug.

T.I.H. with tubing and retrieving head.

Clean out to retrievable bridge plug set at 4600'.

T.O.H. with tubing and retrievable bridge plug.

T.I.H. with 2 1/6" Dakota – Mesa Verde production tubing with model R-3 packer.

Set packer at approximately 4000' with tubing landed at approximately 7400'.

T.I.H. with 2 1/16" Pictured Cliffs – Chacra production string and land at approximately 3800'.

Rig down and move.

No new surface will be disturbed, location area will be cleaned up when workover operations are completed.

Estimated starting date, August 24, 1999

BE THE OIL CONSERVATION COMMISSION
OF THE STATE OF NEW MEXICO

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

CASE NO. 6121
Order No. R-5648

APPLICATION OF CAULKINS OIL COMPANY
FOR DOWNHOLE COMMINGLING, RIO ARRIBA
COUNTY, NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 a.m. on January 18, 1978, at Santa Fe, New Mexico, before Examiner Richard L. Stamets.

NOW, on this 21st day of February, 1978, the Commission, a quorum being present, having considered the testimony, the record, and the recommendations of the Examiner, and being fully advised in the premises,

FINDS:

(1) That due public notice having been given as required by law, the Commission has jurisdiction of this cause and the subject matter thereof.

(2) That the applicant, Caulkins Oil Company, seeks authority to commingle, within the wellbore, Pictured Cliffs and Chacra production in its wells located in Sections 3, 4, 5, 7 thru 11, 13 thru 18, 21, 22, 24, and 25 in Township 26 North, Range 6 West and Sections 13, 14, 23, and 24 in Township 26 North, Range 7 West, Rio Arriba County, New Mexico.

(3) That from the Pictured Cliffs zone, the subject wells are, or may be expected to be, capable of low rates of production only.

(4) That from the Chacra zone, the subject wells, are or may be expected to be, capable of low rates of production only.

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

(6) That the reservoir characteristics of each of the subject zones are such that underground waste would not be caused by the proposed commingling provided that the wells are not shut-in for an extended period.

(7) That to afford the Commission the opportunity to assess the potential for waste and to expeditiously order appropriate remedial action, the operator should notify the Aztec district office of the Commission any time any of the subject wells are shut-in for 7 consecutive days.

(8) That in order to allocate the commingled production to each of the commingled zones in the subject wells, 70 percent of the commingled production should be allocated to the Pictured Cliffs zone, and 30 percent of the commingled production to the Chacra zone.

(9) That if the pressure in either of the zones to be commingled under provisions of this order in any well be less than 50 percent of the pressure in the other zone in such well, or in the event that a producing potential of more than 200 MCF/day be established for each zone in any such well, the operator should notify the Secretary-Director of the Commission of such fact, and the Secretary-Director should order such action taken as he deems advisable, including the requirement for separation of the zones by dual completion equipment.

(10) That the downhole commingling of Pictured Cliffs and Chacra production in wells located on the above-described lands and subject to the above conditions will not cause but may prevent waste, and will not impair correlative rights and should be approved.

IT IS THEREFORE ORDERED:

(1) That the applicant, Caulkins Oil Company, is hereby authorized to commingle Pictured Cliffs and Chacra production within the wellbores of its wells in Sections 3, 4, 5, 7 thru 11, 13 thru 18, 21, 22, 24, and 25 in Township 26 North, Range 6 West, and Sections 13, 14, 23, and 24 in Township 26 North, Range 7 West, Rio Arriba County, New Mexico.

(2) That 70 percent of the commingled production shall be allocated to the Pictured Cliffs zone and 30 percent of the commingled production shall be allocated to the Chacra zone.

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

(4) That should the formation pressure in either the Pictured Cliffs zone or the Chacra zone in any well commingled pursuant to Order No. (1) above be less than 50 percent of the formation pressure in the other zone, or should both zones in any such well be calculated to have a producing potential in excess of 200 MCF per day, the operator shall notify the

-3-

Case No. 6121
Order No. R-5648

Secretary-Director of the Commission of such fact, and the Secretary-Director shall order such action taken as he may deem advisable, including the requirement for separation of the zones by conventional dual completion equipment.

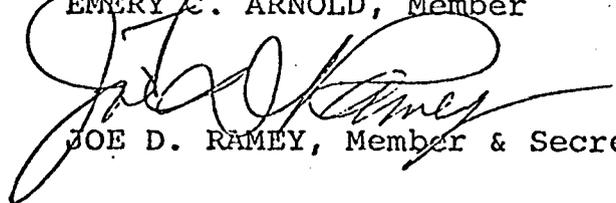
(5) That jurisdiction of this cause is retained for the entry of such further orders as the Commission may deem necessary.

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

STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION

PHIL R. LUCERO, Chairman


EMERY C. ARNOLD, Member


JOE D. RAMEY, Member & Secretary

S E A L

jr/

**LAST 12-MONTHS PRODUCTION
FOR
SANCHEZ 4-R**

DAKOTA

MONTH	GAS	OIL	WATER	DAYS	GAS DPA	OIL DPA
07/98	2,923	9	1	30	97	0.300
08/98	2,400	9	1	24	100	0.375
09/98	2,544	8	1	30	85	0.267
10/98	2,698	11	2	31	87	0.355
11/98	2,673	12	2	27	99	0.444
12/98	3,428	14	2	31	111	0.452
01/99	3,769	15	2	28	135	0.536
02/99	3,559	21	3	28	127	0.750
03/99	3,945	18	3	31	127	0.581
04/99	3,789	17	3	29	131	0.586
05/99	3,223	14	2	31	104	0.452
06/99	3,471	19	3	30	116	0.633
	38,422	167	25		110	0.478

MESA VERDE

MONTH	GAS	OIL	WATER	DAYS	GAS DPA	OIL DPA
05/98	1,845	43	6	31	60	1.387
06/98	1,798	33	5	30	60	1.100
08/98	1,852	49	7	22	84	2.227
10/98	2,508	73	11	31	81	2.355
11/98	2,279	66	10	27	84	2.444
12/98	2,325	25	4	31	75	0.806
01/99	1,919	34	5	23	83	1.478
02/99	1,813	47	7	28	65	1.679
03/99	1,909	45	7	31	62	1.452
04/99	1,811	40	6	29	62	1.379
05/99	1,801	25	4	31	58	0.806
06/99	1,699	43	6	30	57	1.433
	23,559	523	78		69	1.546

CAULKINS OIL COMPANY

P. O. BOX 340
BLOOMFIELD, NEW MEXICO 87413
PHONE: 505-632-1544
FAX 505-632-1471

July 23, 1999

The following list is all the offset operators to Caulkins Oil Company well Sanchez 4-R, section 25, township 26N, range 6W

Amoco Production Company
200 Amoco Court
Farmington, NM 87401

Joseph B. Gould
4430 South 3rd
Las Vegas, NV 89101-6225

Burlington Resources
P.O. Box 4289
Farmington, NM 87499

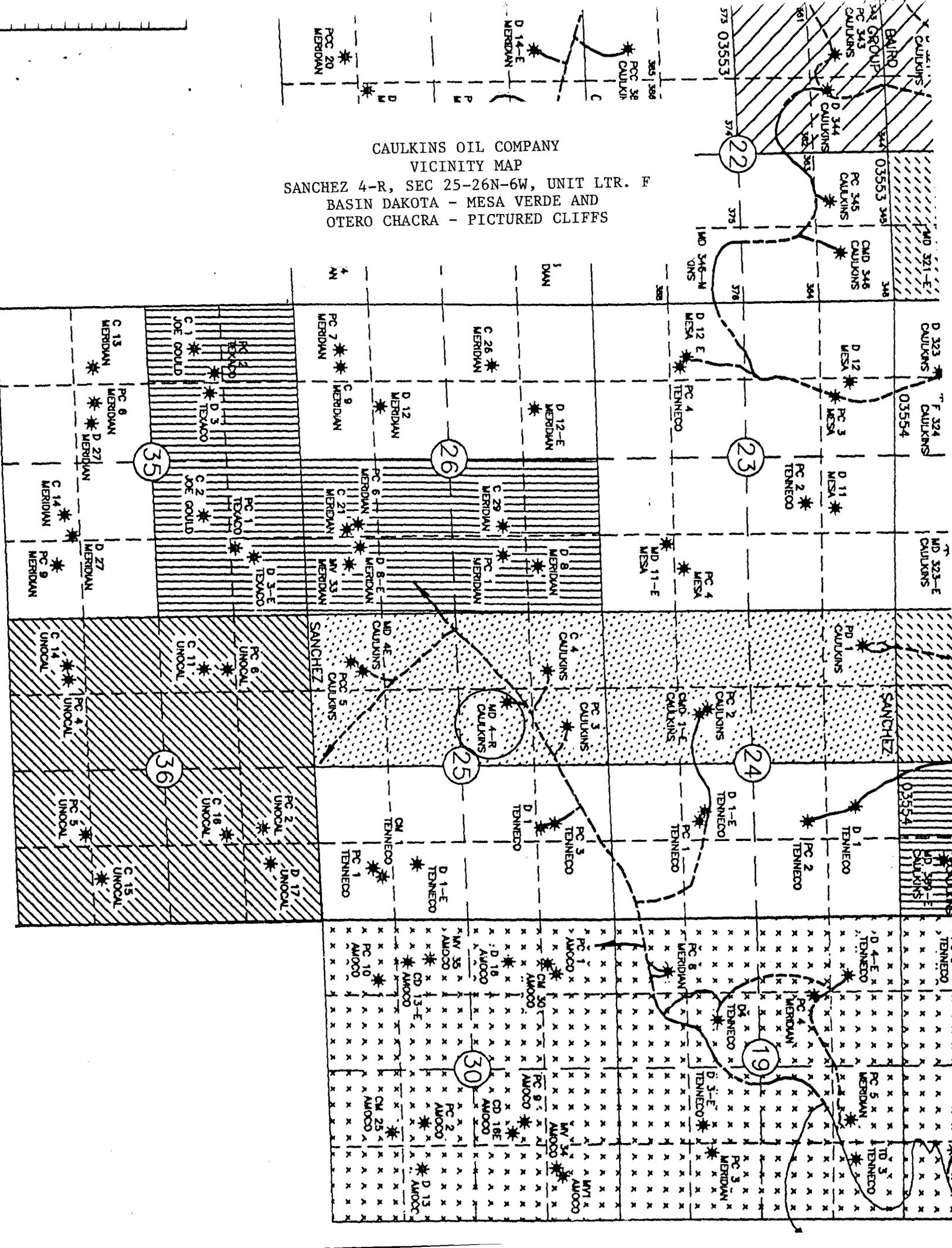
Merrion Oil & Gas Corp.
610 Reilly Ave.
Farmington, NM 87401

Conoco, Inc.
3315 Bloomfield Highway
Farmington, NM 87401

Taurus Exploraation USA, Inc.
2198 Bloomfield Highway
Farmington, NM 87402

Four Star Oil & Gas Company
3300 N. Butler Suite 100
Farmington, NM 87401

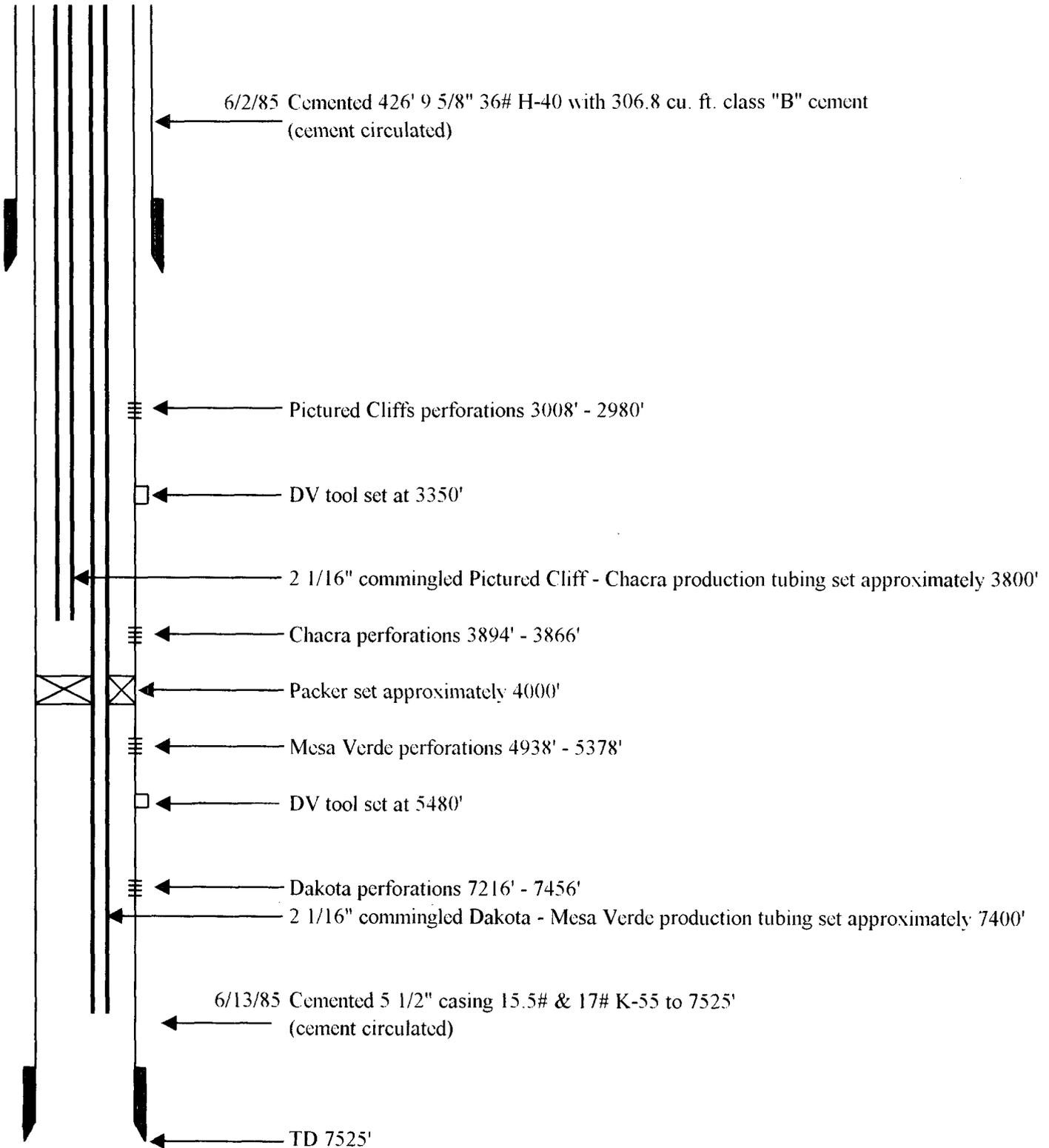
CAULKINS OIL COMPANY
VICINITY MAP
SANCHEZ 4-R, SEC 25-26N-6W, UNIT LTR. F
BASIN DAKOTA - MESA VERDE AND
OTERO CHACRA - PICTURED CLIFFS

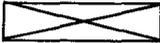


CAULKINS OIL COMPANY

REMARKS

DATE 23-Jul-99 LEASE SANCHEZ WELL NO. 4-R
 FIELD Dakota - Mesa Verde and Chacra - Pictured Cliffs SEC. 25 TWP. 26N RGE. 6W



 BRIDGE PLUG
   PACKER
  PERFORATIONS