

| | | | | | |
|-----------------|-----------------|-------------|--------------|----------|-------------------|
| DATE IN 1/19/01 | SUSPENSE 2/8/01 | ENGINEER DC | LOGGED IN KW | TYPE DHC | APP NO. 102250681 |
|-----------------|-----------------|-------------|--------------|----------|-------------------|

ABOVE THIS LINE FOR DIVISION USE ONLY

NEW MEXICO OIL CONSERVATION DIVISION

- Engineering Bureau -

1220 South St. Francis Drive, Santa Fe, NM 87505



2874

ADMINISTRATIVE APPLICATION COVERSHEET

THIS COVERSHEET IS MANDATORY FOR ALL ADMINISTRATIVE APPLICATIONS FOR EXCEPTIONS TO DIVISION RULES AND REGULATIONS WHICH REQUIRE PROCESSING AT THE DIVISION LEVEL IN SANTA FE

Application Acronyms:

[NSL-Non-Standard Location] [NSP-Non-Standard Proration Unit] [SD-Simultaneous Dedication]
 [DHC-Downhole Commingling] [CTB-Lease Commingling] [PLC-Pool/Lease Commingling]
 [PC-Pool Commingling] [OLS - Off-Lease Storage] [OLM-Off-Lease Measurement]
 [WFX-Waterflood Expansion] [PMX-Pressure Maintenance Expansion]
 [SWD-Salt Water Disposal] [IPI-Injection Pressure Increase]
 [EOR-Qualified Enhanced Oil Recovery Certification] [PPR-Positive Production Response]

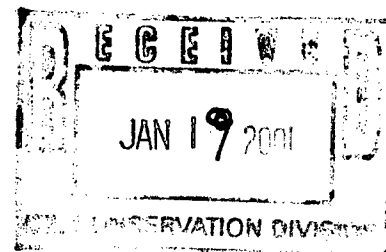
[1] TYPE OF APPLICATION - Check Those Which Apply for [A]

[A] Location - Spacing Unit - Simultaneous Dedication
☐ NSL ☐ NSP ☐ SD

Check One Only for [B] or [C]

[B] Commingling - Storage - Measurement
☒ DHC ☐ CTB ☐ PLC ☐ PC ☐ OLS ☐ OLM

[C] Injection - Disposal - Pressure Increase - Enhanced Oil Recovery
☐ WFX ☐ PMX ☐ SWD ☐ IPI ☐ EOR ☐ PPR



[2] NOTIFICATION REQUIRED TO: - Check Those Which Apply, or Does Not Apply

[A] ☐ Working, Royalty or Overriding Royalty Interest Owners

[B] ☒ Offset Operators, Leaseholders or Surface Owner

[C] ☐ Application is One Which Requires Published Legal Notice

[D] ☐ Notification and/or Concurrent Approval by BLM or SLO
 U.S. Bureau of Land Management - Commissioner of Public Lands, State Land Office

[E] ☐ For all of the above, Proof of Notification or Publication is Attached, and/or,

[F] ☐ Waivers are Attached

[3] INFORMATION / DATA SUBMITTED IS COMPLETE - Certification

I hereby certify that I, or personnel under my supervision, have reviewed the applicable Rules and Regulations of the Oil Conservation Division. Further, I assert that the attached application for administrative approval is accurate and complete to the best of my knowledge and where applicable, verify that all-interest (WI, RI, ORRI) is common.

I understand that any omission of data (including API numbers, pool codes, etc.), pertinent information and any required notification is cause to have the application package returned with no action taken.

Note: Statement must be completed by an individual with managerial and/or supervisory capacity.

Peggy Cole

Print or Type Name

Signature

Regulatory Supervisor

Title

1-12-01

Date

pbradfield@br-inc.com
 e-mail Address

District I
1625 N. French Drive, Hobbs, NM 88240
District II
811 South First Street, Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
2040 South Pacheco, Santa Fe, NM 87505

State of New Mexico
Energy, Minerals and Natural Resources Department

Form C-107A
Revised May 15, 2000

OIL CONSERVATION DIVISION
2040 South Pacheco
Santa Fe, New Mexico 87505

APPLICATION TYPE
Single Well
Establish Pre-Approved Pools
EXISTING WELLBORE
X Yes No

APPLICATION FOR DOWNHOLE COMMINGLING

| | | | |
|--|---------------------|------------------------------------|---------------------------------|
| BURLINGTON RESOURCES OIL & GAS COMPANY | | PO BOX 4289, FARMINGTON, NM 87499 | |
| Operator | | Address | |
| DAVIS | 9E | A-12-31N-12W | SAN JUAN |
| Lease | Well No. | Unit Letter-Section-Township-Range | County |
| OGRID No. 14538 | Property Code 18509 | API No. 3004523982 | Lease Type: Federal X State Fee |

| DATA ELEMENT | UPPER ZONE | INTERMEDIATE ZONE | LOWER ZONE |
|---|---|---|--|
| Pool Name | BLANCO PICTURED CLIFFS | BLANCO MESAVERDE | BASIN DAKOTA |
| Pool Code | 72359 | 72319 | 71599 |
| Top and Bottom of Pay Section (Perforated or Open-Hole Interval) | 2933'-3008' | WILL BE SUPPLIED UPON COMPLETION | 7388'-7540' |
| Method of Production (Flowing or Artificial Lift) | FLOWING | FLOWING | FLOWING |
| Bottomhole Pressure (Note: Pressure data will not be required if the bottom perforation in the lower zone is within 150% of the depth of the top perforation in the upper zone) | 502 PSI – CURRENT 950 PSI – ORIGINAL (see attachment) | 544 PSI – CURRENT 915 PSI – ORIGINAL (see attachment) | 693 PSI – CURRENT 1138 PSI – ORIGINAL (see attachment) |
| Oil Gravity or Gas BTU (Degree API or Gas BTU) | 1114 | 1179 | 1189 |
| Producing, Shut-In or New Zone | SHUT IN | NEW ZONE | SHUT IN |
| Date and Oil/Gas/Water Rates of Last Production. (Note: For new zones with no production history, applicant shall be required to attach production estimates and supporting data.) | Date: 11/30/00 Rates: 59 mcf/d | Date: New Zone Rates: (see attached) | Date: 11/30/00 Rates: 71 mcf/d |
| Fixed Allocation Percentage (Note: If allocation is based upon something other than current or past production, supporting data or explanation will be required.) | Oil % Gas % WILL BE SUPPLIED UPON COMPLETION | Oil % Gas % WILL BE SUPPLIED UPON COMPLETION | Oil % Gas % WILL BE SUPPLIED UPON COMPLETION |

ADDITIONAL DATA

Are all working, royalty and overriding royalty interests identical in all commingled zones?
If not, have all working, royalty and overriding royalty interest owners been notified by certified mail?
Yes No X
Yes X No

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

Will commingling decrease the value of production?
Yes No X

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

NMOCD Reference Case No. applicable to this well:

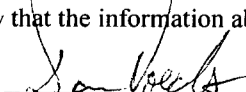
Attachments:
C-102 for each zone to be commingled showing its spacing unit and acreage dedication.
Production curve for each zone for at least one year. (If not available, attach explanation.)
For zones with no production history, estimated production rates and supporting data.
Data to support allocation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

PRE-APPROVED POOLS

If application is to establish Pre-Approved Pools, the following additional information will be required:

List of other orders approving downhole commingling within the proposed Pre-Approved Pools
List of all operators within the proposed Pre-Approved Pools
Proof that all operators within the proposed Pre-Approved Pools were provided notice of this application.
Bottomhole pressure data.

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

| | | |
|---|---------------------|---------------------|
| SIGNATURE | TITLE | DATE |
|  | Production Engineer | 01/16/01 |
| TYPE OR PRINT NAME | | TELEPHONE NO. (505) |
| Dan T. Voecks | | 326-9700 |

District I
PO Box 1980, Hobbs, NM 88241-1980
District II
PO Drawer DD, Artesia, NM 88211-0719
District III
1000 Rio Brazos Rd., Aztec, NM 87410
District IV
PO Box 2088, Santa Fe, NM 87504-2088

State of New Mexico
Energy, Minerals & Natural Resources Department

OIL CONSERVATION DIVISION
PO Box 2088
Santa Fe, NM 87504-2088

Form C-102
Revised February 21, 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

| | | | | | |
|----------------------------|--|---|--|---|-----------------------|
| API Number 30-045-23982 | | Pool Code 72359/72319/71599 | | Pool Name Basin Dakota Blanco Pictured Cliffs/Blanco Mesaverde/ | |
| Property Code 18509 | | Property Name Davis | | | Well Number 9E |
| OGRID No. 14538 | | Operator Name Burlington Resources Oil & Gas Company | | | Elevation 6342' GR |

¹⁰ Surface Location

| UL or lot no. | Section | Township | Range | Lot Ida | Feet from the | North/South line | Feet from the | East/West line | County |
|---------------|---------|----------|-------|---------|---------------|------------------|---------------|----------------|--------|
| A | 12 | 31N | 12W | | 945' | North | 820' | East | SJ |

¹¹ Bottom Hole Location If Different From Surface

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

¹² Dedicated Acres
PC - 136.82
MV/DK - E/278.78

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>I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief</i> Signature Peggy Cole Printed Name Regulatory Supervisor Title Date |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | ¹⁸ SURVEYOR CERTIFICATION <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 belief.</i> Date of Survey Signature and Seal of Professional Surveyer: Certificate Number |
| | | | | | | |
| | | | | | | |
| | | | | | | |

Davis #9E
Bottom Hole Pressures
Flowing and Static BHP
Cullender and Smith Method
Version 1.0 3/13/94

| Pictured Cliffs | | Dakota | |
|--------------------------------|-------|--------------------------------|--------|
| <u>PC-Current</u> | | <u>DK-Current</u> | |
| GAS GRAVITY | 0.675 | GAS GRAVITY | 0.663 |
| COND. OR MISC. (C/M) | C | COND. OR MISC. (C/M) | C |
| %N2 | 0.21 | %N2 | 0.18 |
| %CO2 | 0.4 | %CO2 | 2.65 |
| %H2S | 0 | %H2S | 0 |
| DIAMETER (IN) | 1.5 | DIAMETER (IN) | 2.375 |
| DEPTH (FT) | 3009 | DEPTH (FT) | 7525 |
| SURFACE TEMPERATURE (DEG F) | 60 | SURFACE TEMPERATURE (DEG F) | 60 |
| BOTTOMHOLE TEMPERATURE (DEG F) | 137 | BOTTOMHOLE TEMPERATURE (DEG F) | 198 |
| FLOWRATE (MCFPD) | 0 | FLOWRATE (MCFPD) | 0 |
| SURFACE PRESSURE (PSIA) | 502 | SURFACE PRESSURE (PSIA) | 583 |
| BOTTOMHOLE PRESSURE (PSIA) | 540.7 | BOTTOMHOLE PRESSURE (PSIA) | 692.9 |
| <u>PC-Original</u> | | <u>DK-Original</u> | |
| GAS GRAVITY | 0.675 | GAS GRAVITY | 0.663 |
| COND. OR MISC. (C/M) | C | COND. OR MISC. (C/M) | C |
| %N2 | 0.21 | %N2 | 0.18 |
| %CO2 | 0.4 | %CO2 | 2.65 |
| %H2S | 0 | %H2S | 0 |
| DIAMETER (IN) | 1.5 | DIAMETER (IN) | 2.375 |
| DEPTH (FT) | 3009 | DEPTH (FT) | 7525 |
| SURFACE TEMPERATURE (DEG F) | 60 | SURFACE TEMPERATURE (DEG F) | 60 |
| BOTTOMHOLE TEMPERATURE (DEG F) | 137 | BOTTOMHOLE TEMPERATURE (DEG F) | 198 |
| FLOWRATE (MCFPD) | 0 | FLOWRATE (MCFPD) | 0 |
| SURFACE PRESSURE (PSIA) | 878 | SURFACE PRESSURE (PSIA) | 950 |
| BOTTOMHOLE PRESSURE (PSIA) | 950.2 | BOTTOMHOLE PRESSURE (PSIA) | 1138.2 |

Davis #9E
 Bottom Hole Pressures
 Flowing and Static BHP
 Cullender and Smith Method
 Version 1.0 3/13/94

| Mesaverde | |
|--------------------------------|-------|
| <u>MV-Current</u> | |
| GAS GRAVITY | 0.688 |
| COND. OR MISC. (C/M) | C |
| %N2 | 0.274 |
| %CO2 | 1.548 |
| %H2S | 0 |
| DIAMETER (IN) | 2.375 |
| DEPTH (FT) | 7635 |
| SURFACE TEMPERATURE (DEG F) | 60 |
| BOTTOMHOLE TEMPERATURE (DEG F) | 137 |
| FLOWRATE (MCFPD) | 0 |
| SURFACE PRESSURE (PSIA) | 449 |
| BOTTOMHOLE PRESSURE (PSIA) | 543.7 |
| <u>MV-Original</u> | |
| GAS GRAVITY | 0.688 |
| COND. OR MISC. (C/M) | C |
| %N2 | 0.274 |
| %CO2 | 1.548 |
| %H2S | 0 |
| DIAMETER (IN) | 2.375 |
| DEPTH (FT) | 7635 |
| SURFACE TEMPERATURE (DEG F) | 60 |
| BOTTOMHOLE TEMPERATURE (DEG F) | 137 |
| FLOWRATE (MCFPD) | 0 |
| SURFACE PRESSURE (PSIA) | 748 |
| BOTTOMHOLE PRESSURE (PSIA) | 915.1 |

| | <u>Well Name</u> | <u>Date</u> | <u>PSI</u> |
|----|------------------|-------------|------------|
| PC | DAVIS 9E 1163701 | 1980 10 30 | 878 |
| PC | DAVIS 9E 1163701 | 1981 3 31 | 658 |
| PC | DAVIS 9E 1163701 | 1982 4 1 | 542 |
| PC | DAVIS 9E 1163701 | 1983 4 24 | 524 |
| PC | DAVIS 9E 1163701 | 1984 6 27 | 502 |

| | <u>Well Name</u> | <u>Date</u> | <u>PSI</u> |
|----|------------------|-------------|------------|
| DK | DAVIS 9E 1163702 | 1981 3 31 | 950 |
| DK | DAVIS 9E 1163702 | 1982 4 1 | 732 |
| DK | DAVIS 9E 1163702 | 1983 4 24 | 683 |
| DK | DAVIS 9E 1163702 | 1985 4 25 | 710 |
| DK | DAVIS 9E 1163702 | 1988 1 13 | 579 |
| DK | DAVIS 9E 1163702 | 1990 6 7 | 599 |
| DK | DAVIS 9E 1163702 | 1992 3 29 | 583 |

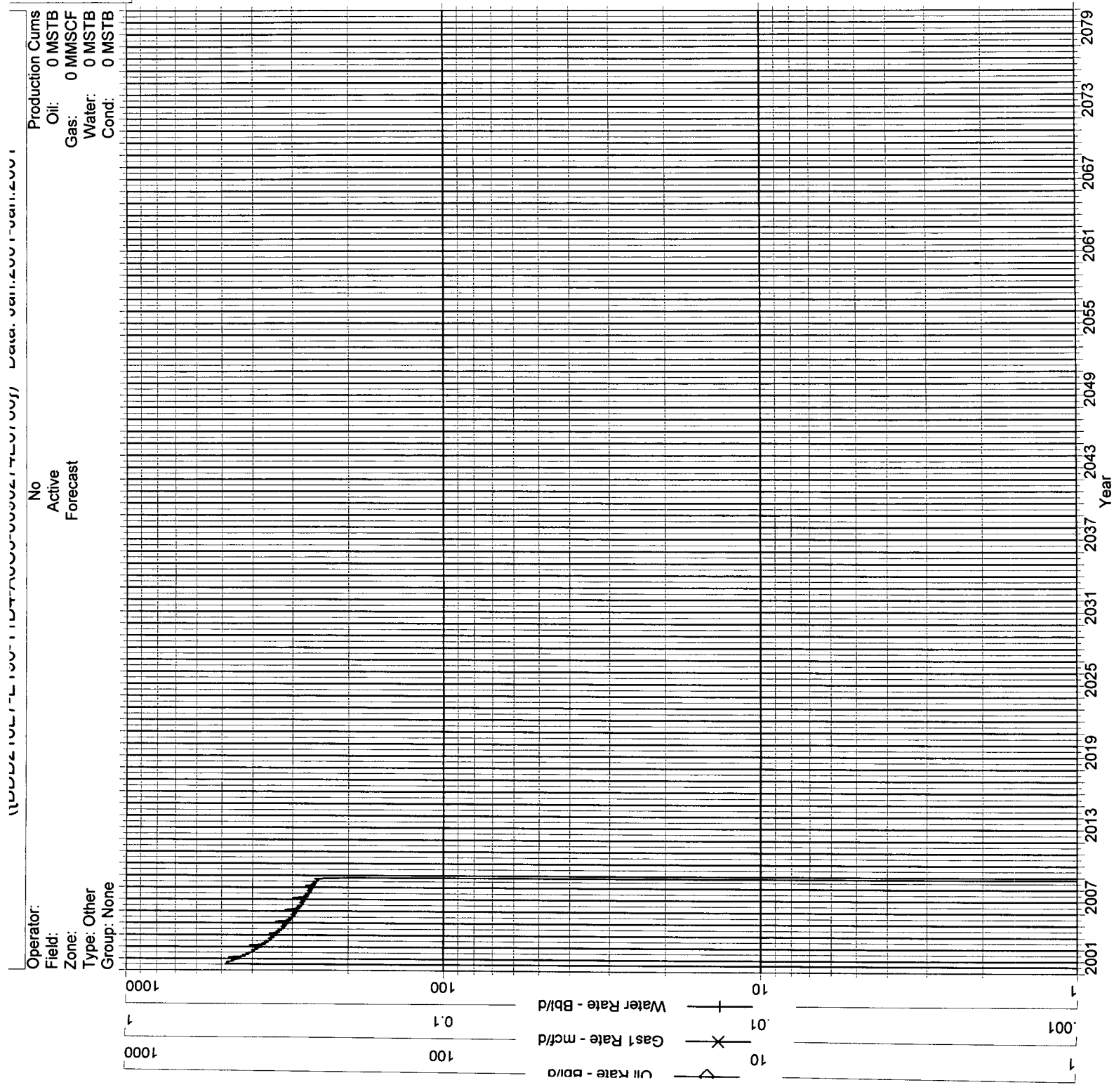
| | <u>Well Name</u> | <u>Date</u> | <u>PSI</u> |
|----|------------------|-------------|------------|
| MV | DAVIS 10 1160902 | 1970 4 18 | 748 |
| MV | DAVIS 10 1160902 | 1971 4 18 | 657 |
| MV | DAVIS 10 1160902 | 1972 3 18 | 641 |
| MV | DAVIS 10 1160902 | 1973 6 2 | 641 |
| MV | DAVIS 10 1160902 | 1974 6 19 | 587 |
| MV | DAVIS 10 1160902 | 1976 6 18 | 585 |
| MV | DAVIS 10 1160902 | 1978 5 3 | 517 |
| MV | DAVIS 10 1160902 | 1980 8 16 | 528 |
| MV | DAVIS 10 1160902 | 1982 4 8 | 520 |
| MV | DAVIS 10 1160902 | 1984 6 27 | 509 |
| MV | DAVIS 10 1160902 | 1986 2 19 | 495 |
| MV | DAVIS 10 1160902 | 1989 10 26 | 468 |
| MV | DAVIS 10 1160902 | 1991 6 19 | 446 |
| MV | DAVIS 10 1160902 | 1991 7 15 | 458 |
| MV | DAVIS 10 1160902 | 1993 6 2 | 449 |

Oil Rate - bbl/d
Cum: 0

Gas1 Rate - mcf/d
Cum: 0

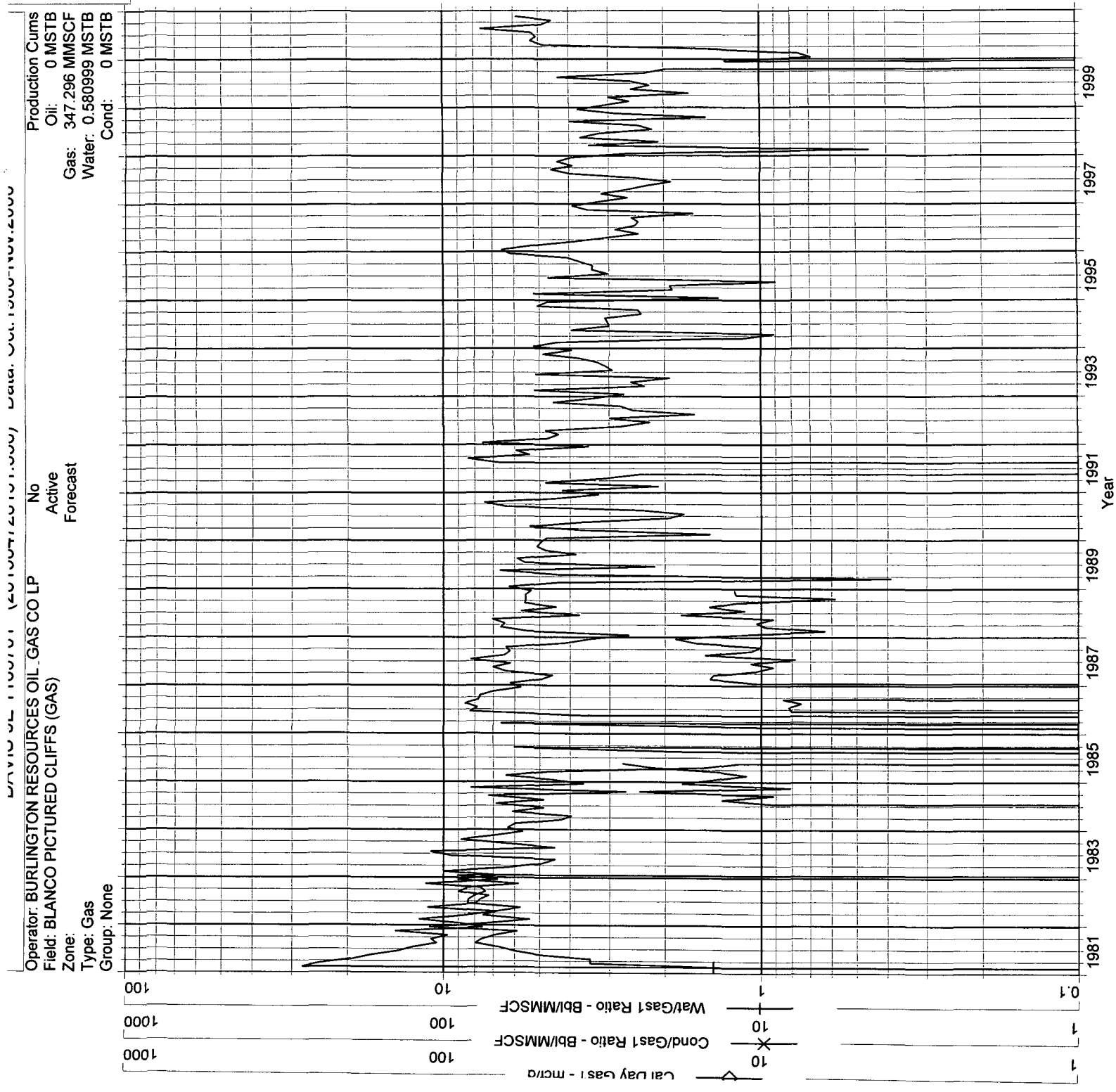
Water Rate - Bbl/d
Cum: 0

Davis #9E
Expected Production
Mesaverde



— Cal Day Gas1 - mcr/d Cum: 347,296 MMSCF
 — Cond/Gas1 Ratio - Bbl/MMSCF Cum: 0 MSTB
 — Wat/Gas1 Ratio - Bbl/MMSCF Cum: 0.580999 MSTB

Davis #9E
 Actual Production
 Pictured Cliffs



Cal Day Gas1 - mcr/d

Cum: 927.731 MMSCF

Cond/Gas1 Ratio - Bbl/MMSCF

Cum: 3.31519 MSTB

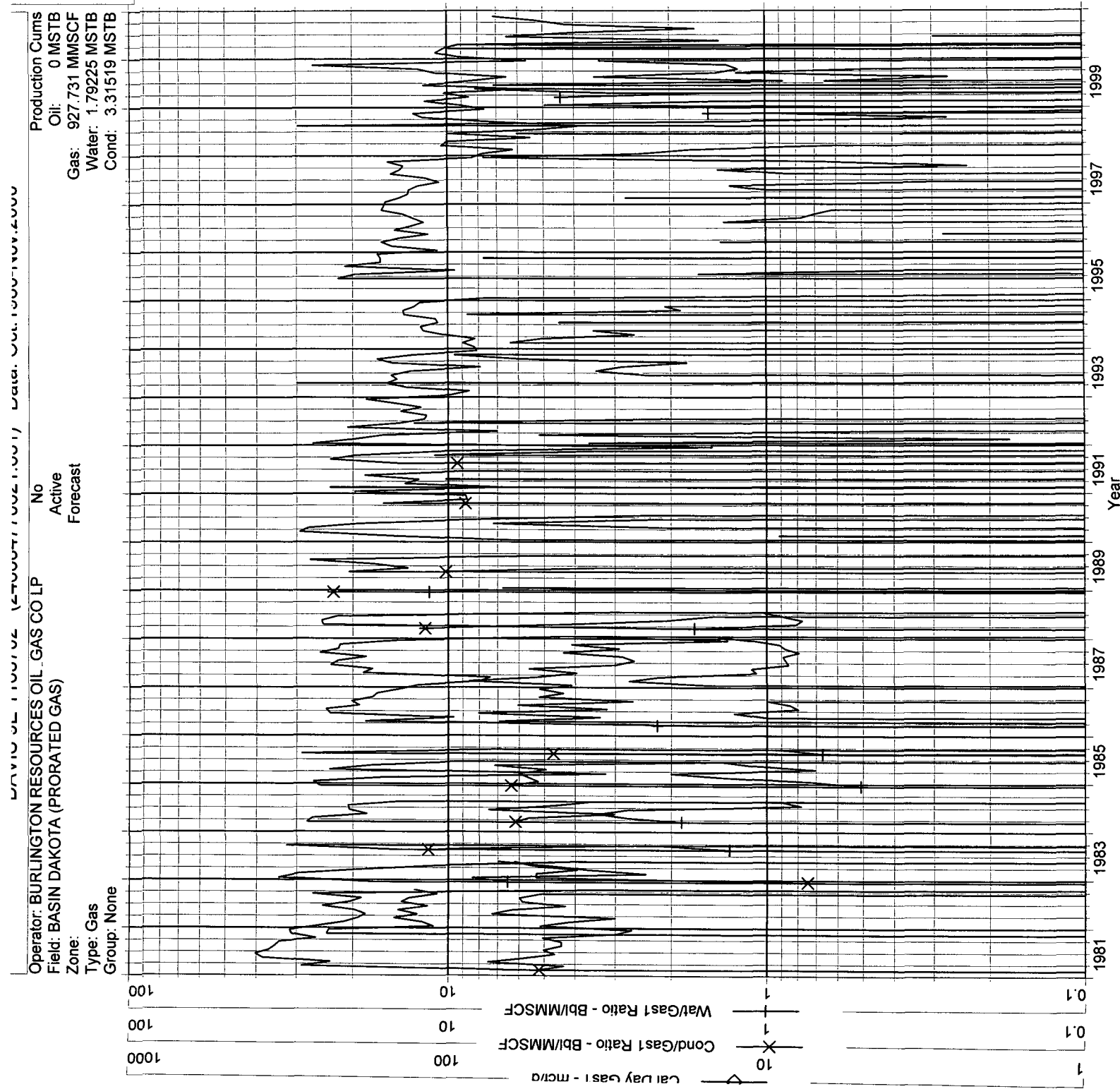
Wat/Gas1 Ratio - Bbl/MMSCF

Cum: 1.79225 MSTB

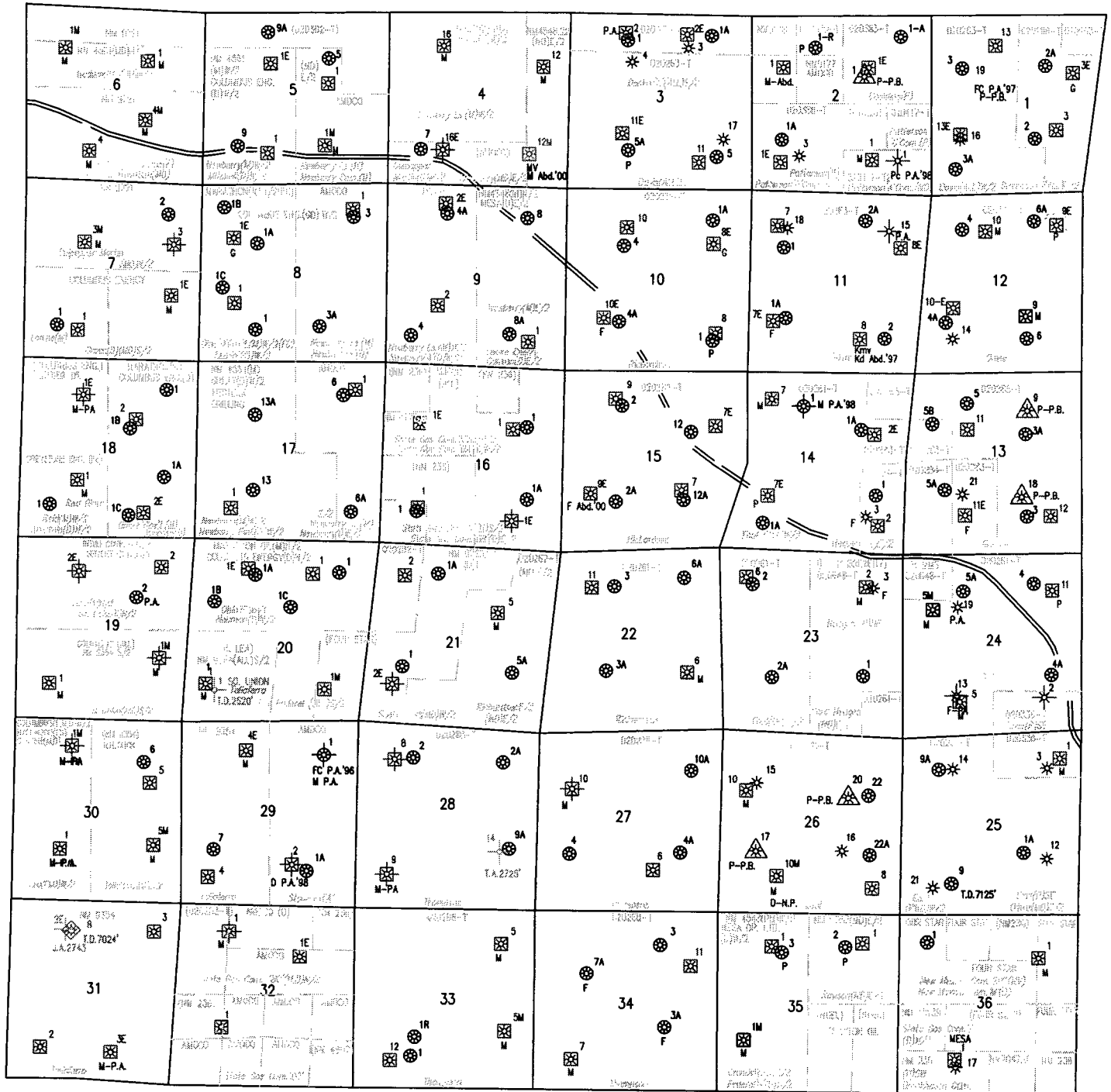
Davis #9E

Actual Production

Dakota



Davis #9E
Pictured Cliffs / Mesaverde / Dakota
31N-12W-12



Davis #9E - working interest owner

Ronald S. Davis, MD
PO Box 5912
Tyler, Texas 75711