IGINEER DC

LOGGED BY

TYPE DHC

ABOVE THIS LINE FOR DIVISION USE ONLY

NEW MEXICO OIL CONSERVATION DIVISION

- Engineering Bureau -2040 South Pacheco, Santa Fe, NM 87505



2000

ADMINISTRATIVE APPLICATION COVERSHEET

| | | | | | · | |
|--------|------------------------------|--|--|------------------------------------|--|------|
| THIS | S COVERSHEET IS N | MANDATORY FOR ALL ADMIN WHICH REQUIRE | ISTRATIVE APPLICATION PROCESSING AT THE DIVI | FOR EXCEPTIONS SION LEVEL IN SA | S TO DIVISION RULES AND REGULATIONS INTA FE | 3 |
| Applic | cation Acronym | | | | | |
| | | [NSP-Non-Standard F | | | ard Location] | |
| | | [DD-Directional | | ultaneous De | - | |
| | [DHC-Downh | role Commingling] | [CTB-Lease Commin | | -Pool/Lease Commingling] | |
| | | | .S - Off-Lease Storaç | | ff-Lease Measurement] | |
| | [V | NFX-Waterflood Expa | | | nce Expansion] | |
| | | [SWD-Salt Water i | Disposal] [iPi-injed | ction Pressur | e increase] | |
| | [EOR-Qualif | ied Enhanced Oil Rec | overy Certification] | [PPR-Posi | tive-Production-Response) | |
| | | | | | | |
| [1] | | PPLICATION - Chec | | | Commission sense and commission that the commission of the commiss | |
| | [A] | Location - Spacing 1 | Jnit - Directional Dri | lling | # IN C C 1000 | |
| | | □ NSL □ NSP | □ DD □ SD |) | JUN 2 3 1998 | |
| | | | | ¥ | | |
| | Chaol | One Only for [B] or | ·Cl | | COLOTO (ATO OL DO MOLO) | |
| | | • • • | • | } k je ∫iji Pompanere | CONSERVATION DIVISION | |
| | [B] | Commingling - Stor | · | _ | | |
| | | ☑ DHC ☐ CTB | □ PLC □ PC | OLS | □ OLM | |
| | | , | | | | |
| | [C] | Injection - Disposal | - Pressure Increase - | Enhanced Oil | Recovery | |
| | ری | □ WFX □ PMX | | | □ PPR | |
| | | AMLY ALMY | G SWD G IF | 1 GEOR | □ ITK | |
| | | | | | _ | |
| [2] | NOTIFICAT | TION REQUIRED TO | D: - Check Those Wl | nich Apply, or | Does Not Apply | |
| | [A] | ☐ Working, Royalt | y or Overriding Roya | lty Interest O | wners | |
| | [· -J | ··· •••••••, ••••, ••••, | , | , | | |
| | ED.1 | | | . . | | |
| | [B] | Uniset Operators, | Leaseholders or Sur | iace Owner | | |
| | | _ | | | | |
| | [C] | Application is Or | ne Which Requires Pr | ublished Lega | l Notice | |
| | | / | • | • | | |
| | [D] | Notification and/ | or Concurrent Appro | val by DIM a | - SI O | |
| | [D] | | Management - Commissioner of I | | | |
| | | | | 4010 241100, 04240 24 | | |
| ٠ | [E] | ☐ For all of the abo | ve, Proof of Notifica | tion or Public | ation is Attached, and/or, | |
| | | | • | | , , , | |
| | [F] | ☐ Waivers are Atta | ohad | | | |
| | [1] | - warvers are Atta | ciica | | | |
| [3] | INFORMAT | TON / DATA SUDM | TTED IS COMPL | | .• | |
| [5] | INFORMAI | TON / DATA SUBM | II IED 18 COMPLI | EIE - Certific | cation | |
| I here | by certify that I | or nerconnel under | my cumantician have | mand and asset | aplied with all applicable Rules | |
| Degul | lotions of the O | il Conservation Divis | iny supervision, nave | read and con | iplied with all applicable Rules | and |
| Regui | | in Conservation Divis | ion. Further, I asse | rt that the atta | ached application for administra | itiv |
| appro | vai is accurate a | nd complete to the bes | t of my knowledge ar | id where appli | cable, verify that all interest (WI | , RI |
| OKKI |) is common. \underline{I} | understand that any | <u>omission of data (inc</u> | cluding API n | umbers, pool codes, etc.), perti | nen |
| inforn | nation and any | required notification | s cause to have the a | pplication pag | kage returned with no action ta | ken |
| | . • | - - | | | The state of the s | |
| | Note: | Statement must be comple | ted by an individual with | managerial and/ | or supervisory capacity. | |
| | | | | - | , ,, | |
| | | \ \ \ | 1 | / | | |
| Deint | - T >1 | - Xellan | Badhuld | | | |
| rnnt o | or Type Name | Signature | 1 | Title | Date | |

DISTRICT I

P.O. Box 1980, Hobbs, NM 88241-1980

<u>DISTRICT II</u>

811 South First St., Artesia, NM 88210-2835

DISTRICT III 1000 Rio Brazos Rd, Aztec, NM 87410-1693 State of New Mexico Energy, Minerals and Natural Resources Department OIL CONSERVATION DIVISION

Form C-107-A New 3-12-96

APPROVAL PROCESS:

2040 S. Pacheco Santa Fe, New Mexico 87505-6429

X Administrative ___Hearing

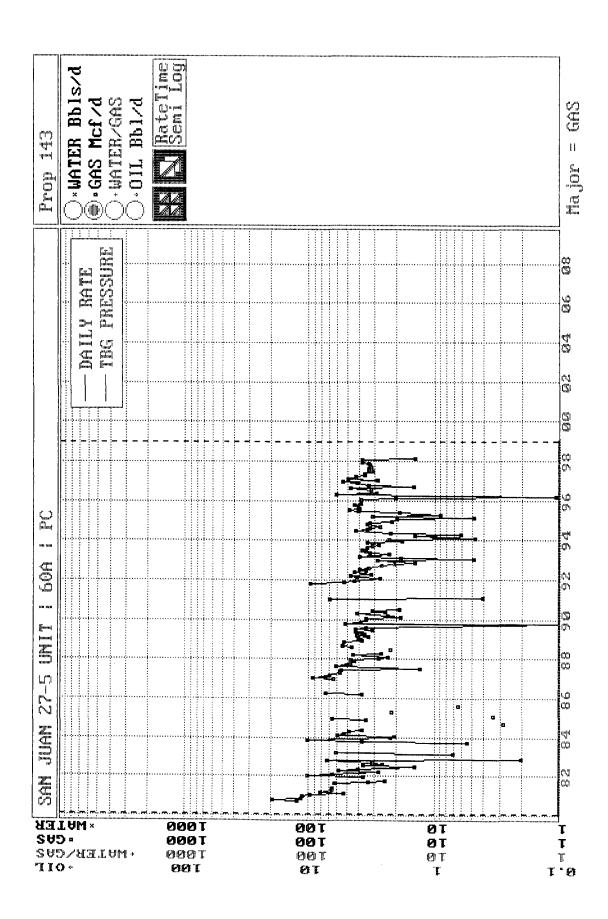
APPLICATION FOR DOWNHOLE COMMINGLING EXISTING WELLBORE X__YES ___NO

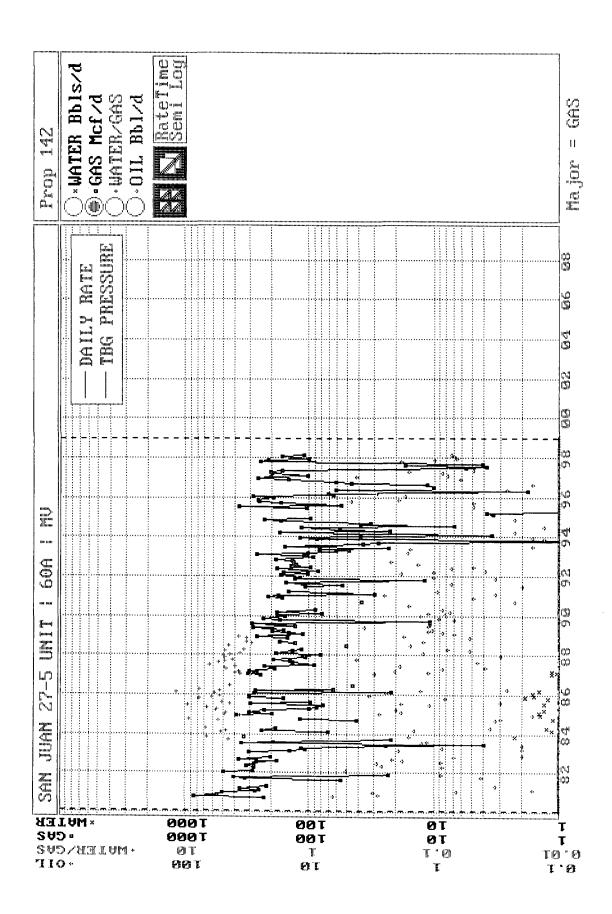
| Burlington Resources O | il and Gas | PO | Box 4289, Fa | armington, | NM 87499 |
|--|---|--|---|--|---|
| San Juan 27-5 Unit | #60A | J-04-27N- | | Ric | Arriba |
| ease | Well No. | Unit Ltr Sec - T | wp - Rge | | unty Lease Types: (check 1 or more) |
| OGRID NO. <u>14538</u> Property Code | 7454 | API NO30 | 0-039-21858 | , - | , State, Fee |
| The following facts are submitted in support of downhole commingling: | Upp Zor | er ia | Interme Zone | diate | Lower Zone |
| Pool Name and Pool Code | Tapacito Pic Clif | | | | Blanco Mesaverde - 72319 |
| 2. Top and Bottom of Pay Section (Perforations) | 3430'-3494' | | | | 5107'-5980 |
| 3. Type of production (Oil or Gas) | Gas | | | | Gas |
| 4. Method of Production (Flowing or Artificial Lift) | Flowing | | | | Flowing |
| 5. Bottomhole Pressure Oil Zones - Artificial Lift: Estimated Current | (Current) a. 368 psi (see attachmen | t) | | | a. 380 psi (see attachment) |
| Gas & Oil - Flowing: Measured Current All Gas Zones: | (Original) b. 1008 psi (see attachmer | nt) | | | b. 1028 psi (see attachment) |
| Estimated Original 6. Oil Gravity (°API) or Gas BTU Content | BTU 1158 | | | | BTU 1211 |
| 7. Producing or Shut-In? | Producing | | | | Producing |
| Production Marginal? (yes or no) | Yes | | | | No |
| * If Shut-In and oil/gas/water rates of last production | Date: N/A Rates: | | | 1 | Date: N/A Rates: |
| Note: For new zones with no production history, applicant shall be required to attach production estimates and supporting data | | | | | |
| * If Producing, give data and oil/gas/water water of recent test (within 60 days) | Date: 6/98 Rates: 35 mcfd 0 bopd | | | i | Date: 6/98 Rates: 168 mcfd 1.1 bopd |
| 8. Fixed Percentage Allocation Formula -% for each zone (total of %'s to equal 100%) | Will be supplied up | on completion. | | | Will be supplied upon completion. |
| 9. If allocation formula is based submit attachments with supp | upon something | other than cu | irrent or past pro | duction, or is b | ased upon some other metho |
| 10. Are all working, overriding, an If not, have all working, overri Have all offset operators beer | _ | | | | |
| I1. Will cross-flow occur? _X_Y production be recovered, and | | | | | |
| 2. Are all produced fluids from al | | | | | |
| 3. Will the value of production be | _ | • • • | | • | • |
| 4. If this well is on, or communi Bureau of Land Management h | | | | | blic Lands or the United Sta |
| 5. NMOCD Reference Cases for I | Rule 303(D) Excep | otions: ORDER | R NO(S). <u>R-1069</u> 4 | 4 | |
| 6. ATTACHMENTS: * C-102 for each zone * Production curve fo * For zones with no p * Data to support allo * Notification list of a * Notification list of w * Any additional state | e to be commingle or each zone for a roduction history ocation method or Il offset operators orking, overridin ements, data, or d | ed showing its s t least one year , estimated pro formula. s. g, and royalty i ocuments requ | spacing unit and a r. (If not available duction rates and nterests for uncon ired to support co | creage dedicati , attach explana supporting data nmon interest commingling. | on. tion.) ases. |
| hereby certify that the infor | mation above i | s true and co | mplete to the b | est of my kno | wledge and belief. |
| SIGNATURE J. Jom | ovel | TITLE | E_Production E | <u> Engineer</u> DA | TE6/22/98 |

TYPE OR PRINT NAME L. Tom Loveland

____TELEPHONE NO. (<u>505</u>) <u>326-9700</u>

| | | All distances must be from | the outer houndaries of | | . | | |
|---------------------|-------------------------------|-----------------------------|--|--|---------------|--|--|
| Operator DECO MII | TITLAT CAS COM | L ** | erise Single Street Com of C | (GD 0G0202) Well Ip. | | | |
| Unit Letter | TURAL GAS COM | PANI Township | SAN JUAN 27-5 | UNIT (SF-079393) 60A | | | |
| J |), | 27N | Françe 5W | Rio Arriba | | | |
| Actual Footage Loc. | atten of Well; | 2114 | 1 2n . | RIO APPION | | | |
| 1770 | feet from the S | outh line and | 1610 feet | t from the East line | | | |
| Ground Level Elev. | Producing For | | ol Blanco Mesa | | | | |
| 6585 | Mesa Verd | e-Pictured Cliffs | · · | 1310 60 % 160 00 | 1. | | |
| 1. Outline the | e acreage dedica | ted to the subject well | by colored pencil c | r hachure marks on the plat below. | | | |
| | , | • | | · | | | |
| | | dedicated to the well, | outline each and ide | ntify the ownership thereof (both as to working | g | | |
| interest an | d royalty). | | | | | | |
| 2 If more tha | n one lease of d | iffarent ownership is de | digated to the wall | have the interests of all owners been consol | : | | |
| | | mitization, force-pooling | | have the interests of all owners been consul- | 1- | | |
| | | | | Unitication | | | |
| Yes | No If an | nswer is "yes," type of o | consolidation | Unitization | _ | | |
| . A | • | | • | . 11 1 12 12 12 12 12 12 12 12 12 12 12 1 | , | | |
| | s "no," list the foccessary.) | owners and tract descrip | otions which have ac | ctually been consolidated. (Use reverse side o | oi | | |
| | • | ad to the wall watil all is | stangeta have have a | consolidated (by communitization, unitization | - | | |
| | 1.0 | | | th interests, has been approved by the Commis | | | |
| | | | | single to dual completion 8/27/79 | ., | | |
| | | | $\sim\sim\sim$ | | | | |
| ł | l I | , K | i 1 | CERTIFICATION | | | |
| | 1 | K | 1 | | | | |
| l | | N | , 1 | I hereby certify that the information contained herein is true and complete to the | | | |
| | 1 | KI . | 1 | best of my knowledge and belief. | 7= | | |
| | 1. | K) | | | | | |
| | 1 | K) | - | D. G. Busco | | | |
| | + | · | | None Clause | | | |
| | 1 | K | #60 | Drilling Clerk | | | |
| | 1 | K | , 0 | El Paso Natural Gas Co | ٥. | | |
| | . 1 | N | 1 | Company | | | |
| | į . | K | | August 31, 1979 | | | |
| | 1 | K | 1 | Date | | | |
| |) : · · · · · · | . N | i | N | | | |
| <u> </u> | 1 0 | ec (| | | | | |
| | i i | KN - | | I hereby certify that the well location | חמ | | |
| | | KM | SF-079393 | shown on this plat was platted from fiel | | | |
| | 1 | KI | ł | notes of actual surveys made by me o | | | |
| | . 1 | Ki i | 1610 | Durge of the sam | ne | | |
| | l | | | Kistin Collaboration to the pest of m | ıy | | |
| | 1 . | X | 1 | Liknowledge and belief. | | | |
| | | | | SEP <u>4 1979</u> | | | |
| | 1 | | _ | Library Charles In 1973 | | | |
| | 1 | Di | . 1 | near carried segment | | | |
| | 1 | XI | | by determine the particular for the second | • • | | |
| 1 | í | M | | may a this will got I | | | |
| | l | M | | J'endante de | | | |
| | 1 | N X X X X | \\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\ | Fred B. Korf Jr. | | | |
| O 330 000 V | 20. 1320 1040 188 | 1 1 1 | X X X X | 3950 | | | |





San Juan 27-5 Unit #60A Bottom Hole Pressures Flowing and Static BHP

Cullender and Smith Method

Version 1.0 1/14/98

| | Mesa Verde | | | | |
|--|--|---|--|--|--|
| | <u>MV-Current</u> | | | | |
| 0.66 C 0.38 0.58 0 7 3462 60 100 0 338 | GAS GRAVITY COND. OR MISC. (C/M) %N2 %CO2 %H2S DIAMETER (IN) DEPTH (FT) SURFACE TEMPERATURE (DEG F) BOTTOMHOLE TEMPERATURE (DEG F) FLOWRATE (MCFPD) SURFACE PRESSURE (PSIA) BOTTOMHOLE PRESSURE (PSIA) | 0.698 C 0.16 0.93 0 2.375 5543 60 150 0 332 | | | |
| | MV-Original | | | | |
| 0.66 C 0.38 0.58 0 7 3462 60 100 0 918 | GAS GRAVITY COND. OR MISC. (C/M) %N2 %CO2 %H2S DIAMETER (IN) DEPTH (FT) SURFACE TEMPERATURE (DEG F) BOTTOMHOLE TEMPERATURE (DEG F) FLOWRATE (MCFPD) SURFACE PRESSURE (PSIA) BOTTOMHOLE PRESSURE (PSIA) | 0.698 C 0.16 0.93 0 2.375 5543 60 150 0 885 | | | |
| | C 0.38 0.58 0 7 3462 60 0 7 3462 60 100 0 918 | MV-Current | | | |

Page No.: 4
Print Time: Tue May 12 13:48:37 1998
Property ID: 200
Property Name: SAN JUAN 27-5 UNIT | 60A | PICTURED CLIFFS
Table Name: S:\ARIES\78LTL\TEST.DBF

| DATE | -CUM_OIL- Bbl | CUM_GAS Mcf | M_SIWHP Psi | | | | |
|----------|------------------|----------------|----------------|---------|-----------|------|--------|
| 09/30/80 | | 0 | 918.0 | Origina | ١ | | |
| 11/03/80 | | 13374 | 684.0 | • | | | |
| 05/04/81 | | 28047 | 526.0 | | | | |
| 11/08/82 | | 47585 | 506.0 | | | | |
| 05/02/84 | | 61595 | 494.0 | | | | |
| 04/17/86 | | 69158 | 620.0 | | | | |
| 09/28/89 | | 111308 | 504.0 | | | | |
| 10/01/91 | | 126382 | 720.0 | | | | |
| 06/01/93 | | 145896 | 497.0 | | 11 | 0 2 | z data |
| 04/01/98 | | 199813 | 338.0 | Current | Estimated | trom | |

Page No.: 5
Print Time: Tue May 12 13:48:38 1998
Property ID: 201
Property Name: SAN JUAN 27-5 UNIT | 60A | MESAVERDE
Table Name: S:\ARIES\78LTL\TEST.DBF

| DATE | CUM_OIL- Bbl | CUM_GAS Mcf | M_SIWHP Psi | | | | |
|----------|-----------------|----------------|----------------|----------|-----------|------------|-----|
| 04/17/80 | | 0 | 885.0 | Original | | | |
| 11/03/80 | | 50242 | 562.0 | J | | | |
| 11/09/81 | | 124393 | 524.0 | | | | |
| 11/08/82 | | 206125 | 459.0 | | | | |
| 11/02/84 | | 275394 | 559.0 | | | | |
| 01/02/87 | | 391615 | 550.0 | | | | |
| 09/28/89 | | 537878 | 496.0 | | | | |
| 01/16/91 | | 589823 | 475.0 | • | | | |
| 07/22/91 | | 600134 | 487.0 | | | | _ |
| 06/01/93 | | 685376 | 452.0 | | المما | r Pz da | ta- |
| 04/01/98 | | 159140 | 332.0 | Current | estimated | from Pz da | |

Package Preparation Volume Data

| Supt: 60 | KEN RAYB | ON F | F: 335 | LARY BYARS | | MS: | 378 GARY N | IELSON | |
|----------------|------------------------|------------------------|--------|------------|----------|--------------------------|------------|-----------|------------|
| Pipeline: | WFS | Plunger: | No | D | ual: Yes | | Compre | essor: | No |
| Ov | vnership (No | Trust) | | <u>Pr</u> | ior Year | | Cur | rent Year | |
| GWI: | <u>Gas</u> 68.0078% | <u>Oil</u> 64.8149% | | MCF/M | ВОРМ | <u>Days</u> <u>On</u> | MCF/M | ворм | Days On |
| GNI: | 57.2658% | 54.8288% | Jan | 782 | 0.0 | 23.3 | 1,042 | 0.0 | 31 |
| | | | Feb | 1,412 | 0.0 | 27.8 | 328 | 0.0 | 28 |
| <u>Volumes</u> | | | Mar | 1,188 | 0.0 | 31 | 1,088 | 0.0 | 31 |
| (Days On) | MCF | D BOPD | Apr | 994 | 0.0 | 30 | 0 | 0.0 | 30 |
| 7 Day Avg | 40 | 0.0 | May | 1,008 | 0.0 | 31 | 0 | 0.0 | 0 |
| 30 Day Avg | 35 | 0.0 | Jun | 851 | 0.0 | 30 | 0 | 0.0 | 0 |
| 60 Day Avg | 35 | 0.0 | Jul | 917 | 0.0 | 31 | 0 | 0.0 | 0 |
| 3 Mo Avg | 27 | 0.0 | Aug | 924 | 0.0 | 31 | 0 | 0.0 | 0 |
| 6 Mo Avg | 30 | 0.0 | Sept | 872 | 0.0 | 30 | 0 | 0.0 | 0 |
| 12 MoAvg | 30 | 0.0 | Oct | 929 | 0.0 | 25 | 0 | 0.0 | 0 |
| | | | Nov | 915 | 0.0 | 30 | 0 | 0.0 | 0 |
| <u>Volumes</u> | | | Dec | 1,058 | 0.0 | 31 | 0 | 0.0 | 0 |
| (Days in Mo | nth) MCF | D BOPD | Total | 11,850 | 0.0 | | 2.450 | 0.0 | |
| 30 Day Avg | 35 | 0.0 | TOLAI | 11,000 | 0.0 | | 2,458 | 0.0 | |
| 60 Day Avg | 35 | 0.0 | | | | | | | |
| 3 Mo Avg | 27 | 0.0 | | | | | Pri | nt Form | |
| 6 Mo Avg | 29 | 0.0 | | | | | | | |
| 12 Mo Avg | 30 | 0.0 | | | | | Exit Vo | lumes I | Data |

Package Preparation Volume Data

| DPNo: 53393 | в (\$ | AN JUAN 27-5 | UNIT 🚉 | <u> </u> | A | | For | m: MV | |
|----------------|-----------------------|------------------------|---|------------|----------|--------------------------|------------|-----------|--------------------------|
| Supt: 60 | KEN RAYB | ON F | F: 335 | LARY BYARS | | MS: | 378 GARY N | IELSON | |
| Pipeline: W | FS | Plunger: | No | D | ual: Yes | | Compre | essor: | No |
| Own | ership (No | Trust) | | Pr | ior Year | | Cur | rent Year | |
| GWI: 6 | <u>Gas</u> 7.4570% | <u>Oil</u> 64.6688% | *************************************** | MCF/M | BOPM | <u>Days</u> <u>On</u> | MCF/M | ворм | <u>Days</u> <u>On</u> |
| | 6.8126% | 54.6845% | Jan | 6,288 | 127.0 | 31 | 5,005 | 21.0 | 31 |
| | | | Feb | 3,117 | 24.0 | 20.9 | 3,343 | 22.0 | 28 |
| Volumes | | | Mar | 6,187 | 26.0 | 31 | 2,438 | 16.0 | 31 |
| (Days On) | MCF | D BOPD | Apr | 6,324 | 48.0 | 30 | 0 | 0.0 | 30 |
| 7 Day Avg | 0 | 0.0 | May | 5,048 | 15.0 | 31 | 0 | 0.0 | 0 |
| 30 Day Avg | 168 | 3 1.1 | Jun | 60 | 0.0 | 30 | 0 | 0.0 | 0 |
| 60 Day Avg | 123 | 0.8 | Jul | 0 | 24.0 | 31 | 0 | 0.0 | 0 |
| 3 Mo Avg | 120 | 0.7 | Aug | 410 | 0.0 | 31 | 0 | 0.0 | 0 |
| 6 Mo Avg | 158 | 0.9 | Sept | 12 | 0.0 | 30 | 0 | 0.0 | 0 |
| 12 MoAvg | 111 | 0.7 | Oct | 7,703 | 56.0 | 27 | 0 | 0.0 | 0 |
| | | | Nov | 6,568 | 30.0 | 30 | 0 | 0.0 | 0 |
| <u>Volumes</u> | | | Dec | 3,051 | 20.0 | 31 | 0 | 0.0 | 0 |
| (Days in Mon | <u>th)</u> MCFI | D BOPD | Total | 44,768 | 370.0 | | 10,786 | 59.0 | |
| 30 Day Avg | 168 | 3 1.1 | TOLAI | 44,700 | 370.0 | | 10,780 | 59.0 | |
| 60 Day Avg | 123 | 0.8 | | | | | 177 | | |
| 3 Mo Avg | 120 | 0.7 | | | | | Pri | nt Form | |
| 6 Mo Avg | 154 | 0.9 | | | | | - | - | |
| 12 Mo Avg | 109 | 0.7 | | | | | Exit Vo | lumes | Data |
| 6/2/98 | | | - | | | | | | |

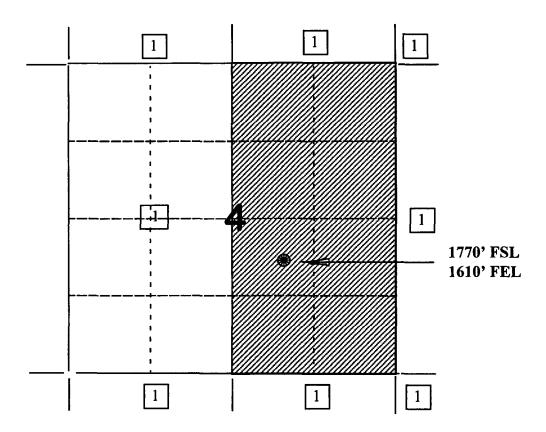
BURLINGTON RESOURCES OIL AND GAS COMPANY

San Juan 27-5 Unit #60A

OFFSET OPERATOR/OWNER PLAT

Pictured Cliffs (SE/4) / Mesaverde (E/2) Formations Commingle Well

Township 27 North, Range 5 West



1) Burlington Resources

| 32 38A 鞍 | | 52 \$\pi\$ 11A \$\pi\$ | ₩ | 5A ⊕ | 21 |
|-------------------------|-----|---------------------------|--|---------------------------------|------------------------|
| 61 © 5 61A | 52A | 60 ⊕ 5 Unit | 25A ★ #60A 3 25 ® | 21 © 21A ♥ | \$ 23A 23 \$ 99E |
| 176 70 8 63 77 | 648 | 2 86M 80 173 | 113E 113A 10 | 101A | • |
| 65 26 | | | | | |

PLH 5/27/98

San Juan 27-5 Unit #60A Sec. 4, T27N, R5W Pictured Cliffs/Mesaverde

STATE OF NEW MEXICO ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT OIL CONSERVATION DIVISION

IN THE MATTER OF THE HEARING CALLED BY THE OIL CONSERVATION DIVISION FOR THE PURPOSE OF CONSIDERING:

CASE NO. 11626 ORDER NO. R-10694

APPLICATION OF BURLINGTON RESOURCES OIL & GAS COMPANY FOR THE ESTABLISHMENT OF A DOWNHOLE COMMINGLING "REFERENCE CASE" FOR ITS SAN JUAN 27-5 UNIT PURSUANT TO DIVISION RULE 303.E AND THE ADOPTION OF SPECIAL ADMINISTRATIVE RULES THEREFOR, SAN JUAN COUNTY, NEW MEXICO.

ORDER OF THE DIVISION

BY THE DIVISION:

This cause came on for hearing at 8:15 a.m. on October 17 and November 7, 1996, at Santa Fe, New Mexico, before Examiners David R. Catanach and Michael E. Stogner, respectively.

NOW, on this 12th day of November, 1996, the Division Director, having considered the testimony, the record and the recommendations of the Examiner, and being fully advised in the premises.

FINDS THAT:

- (1) Due public notice having been given as required by law, the Division has jurisdiction of this cause and the subject matter thereof.
- (2) The applicant, Burlington Resources Oil & Gas Company (Burlington), pursuant to the provisions of Division Rule 303.E., seeks to establish a downhole commingling "reference case" to provide exceptions for (a) marginal economic criteria, (b) pressure criteria, (c) allocation formulas and (d) modification of notification rules on a unit-wide basis for downhole commingling of Dakota, Mesaverde, Fruitland Coal and Pictured Cliffs gas production within existing or future drilled wells within the San Juan 27-5 Unit, San Juan County, New Mexico.
- (3) Division Rule No. 303.E., amended by Order No. R-10470-A, currently states:

"If sufficient data exists on a lease, pool, formation, geographic area, etc., so as to render it unnecessary to repeatedly provide such data on Form C-107-A, an operator may except any of the various criteria required under Paragraph 303.D. of this rule by establishing a "reference case". The Division, upon its own motion, or by application from an operator, may establish "reference cases" either administratively or by hearing. Upon Division approval of such "reference cases" for specific criteria, subsequent applications to downhole commingle (Form C-107-A) will be required only to cite the Division order number which established such exceptions and shall not be required to submit data for those criteria."

- (4) The applicant is the current operator of the San Juan 27-5 Unit which encompasses some 23,043 acres in Township 27 North, Range 5 West, NMPM, San Juan County, New Mexico.
- (5) Within the San Juan 27-5 Unit, the applicant currently operates one hundred and one (101) Basin-Dakota Gas Pool wells, one hundred and five (105) Blanco-Mesaverde Gas Pool wells, eighty-seven (87) South Blanco-Pictured Cliffs and Tapacito-Pictured Cliffs Gas Pool wells, and four (4) Basin-Fruitland Coal Gas Pool wells.
 - (6) According to its evidence and testimony, Burlington seeks to:
 - a) establish a "reference case" for marginal economic criteria in the Dakota and Pictured Cliffs formations whereby these formations and/or pools may be identified as "marginal" on Form C-107-A's subsequently filed for wells within the San Juan 27-5 Unit. The applicant further proposes that the data provided in the immediate case serve as supplemental data or confirmation that these formations and/or pools should be classified as "marginal";
 - b) establish a "reference case" for pressure criteria in the Dakota and Pictured Cliffs formations whereby the Division may utilize data provided in the immediate case to verify the pressure data provided on Form C-107-A's subsequently filed for wells within the San Juan 27-5 Unit:

- establish a "reference case" whereby the Division utilizes the data presented in the immediate case to endorse or approve certain methods of allocating production whereby the applicant need not submit additional data or justification when proposing a certain method of allocating production on Form C-107-A's subsequently filed for wells within the San Juan 27-5 Unit; and,
- d) establish a "reference case" or an administrative procedure for authorizing the downhole commingling of existing or future drilled wells within the San Juan 27-5 Unit without additional notice to each affected interest owner as required by Division Rule No. 303.D.
- (7) In support of its request to except marginal economic criteria, the applicant presented geologic and engineering evidence and testimony which indicates that within the San Juan 27-5 Unit:
 - a) the structure and thickness of the Dakota and Pictured Cliffs formations are very consistent;
 - b) the average recoverable Dakota and Pictured Cliffs gas reserves underlying an undeveloped drill block are approximately 583 MMCFG and 426 MMCFG, respectively;
 - c) the average initial producing rate for a newly drilled or recompleted Dakota and Pictured Cliffs gas well is approximately 393 MCFGD and 63 MCFGD, respectively; and,
 - d) the estimated ultimate gas recoveries and initial producing rates from the Dakota and Pictured Cliffs formations are insufficient to justify drilling stand alone wells and/or dually completed wells to recover such gas reserves.
- (8) The evidence and testimony presented by the applicant indicates that the Dakota and Pictured Cliffs formations within the San Juan 27-5 Unit should be properly classified as "marginal".
- (9) In support of its request to except pressure criteria within the Dakota and Pictured Cliffs formations within the San Juan 27-5 Unit, the applicant presented engineering evidence and testimony which indicates that:

- a) the average shut-in bottomhole pressure within the Dakota and Pictured Cliffs formations at the time of initial development were approximately 3,141 psi and 1,118 psi, respectively; and.
- b) the average current shut-in bottomhole pressure within the Dakota and Pictured Cliffs formations are approximately 1,032 psi and 441 psi, respectively.
- (10) There is sufficient pressure data available within the San Juan 27-5 Unit so as to except pressure criteria as proposed by the applicant.
- (11) The applicant testified that various allocation methods will be utilized for downhole commingled wells within the San Juan 27-5 Unit depending on the circumstances. Some of the methods and circumstances are described as follows:
 - a) the subtraction method will likely be utilized in those instances involving the Basin-Fruitland Coal Gas Pool and in those instances where a zone with a well established decline rate is commingled with a newly completed zone;
 - b) a fixed allocation formula will be utilized in those instances where production history for both zones is available, or in those instances where newly completed zones are tested and stabilized flow rates obtained.
- (12) The allocation methods proposed by the applicant are routinely utilized by industry and approved by the Division and therefore the proposal to except allocation formulas should be approved.
- (13) In support of its request to establish a "reference case" or administrative procedure for providing notice within the San Juan 27-5 Unit the applicant presented evidence and testimony which indicates that:
 - a) the interest ownership between two zones within a given wellbore in the San Juan 27-5 Unit is generally not common;
 - b) pursuant to Division Rule No. 303.D., applicant is currently required to notify all interest owners within the San Juan 27-5 Unit every time a Form C-107-A is submitted to the Division. There is a considerable number of such interest owners within the unit:

- c) providing notice to each interest owner within the San Juan 27-5 Unit of subsequent downhole comminglings is unnecessary and is an excessive burden on the applicant;
- d) the downhole commingling of wells within the San Juan 27-5 Unit Area will benefit working, royalty, and overriding royalty interest owners. In addition, the downhole commingling of wells within the San Juan 27-5 Unit should not violate the correlative rights of any interest owner;
- e) no interest owner appeared at the hearing in opposition to the establishment of a "reference case" or administrative procedure for notice.
- (14) An administrative procedure should be established within the San Juan 27-5 Unit for obtaining approval for subsequent downhole commingled wells without notice to Unit interest owners, provided however that, all other provisions contained within Division Rule No. 303.C. are complied with.
- (15) Approval of the proposed "reference cases" for marginal economic criteria, pressure criteria, allocation formulas and notice will lessen the burden on the applicant insofar as providing the data required pursuant to Division Rule No. 303.D. and Form C-107-A, will provide the applicant a streamlined method for obtaining downhole commingling approvals within the San Juan 27-5 Unit, and will not violate correlative rights.

IT IS THEREFORE ORDERED THAT:

(1) The application of Burlington Resources Oil & Gas Company to establish a "reference case" for (a) marginal economic criteria, (b) pressure criteria, (c) allocation formulas and (d) modification of notification rules on a unit-wide basis for downhole commingling of Dakota, Mesaverde, Fruitland Coal and Pictured Cliffs gas production within existing or future drilled wells within the San Juan 27-5 Unit, San Juan County, New Mexico, is hereby approved.

- (2) Upon filing of Division Form No. C-107-A's for wells subsequently downhole commingled within the San Juan 27-5 Unit Area, the applicant shall not be required to submit supporting data to justify the classification of the Pictured Cliffs and Dakota formations as "marginal", supporting data to verify the Pictured Cliffs and Dakota pressure information provided, and support or justification for utilizing a given method or formula for allocation of production, provided however, in the event any of the data described above appearing on Form C-107-A appears to be beyond the data range provided in this case, the Division may require the submittal of additional supporting data.
- (3) In order to obtain Division authorization to downhole commingle wells within the San Juan 27-5 Unit, the applicant shall file a Form C-107-A with the Santa Fe and Aztec Offices of the Division. Such application shall contain all the information required under Rule No. 303.C. of the Division Rules and Regulations, provided however that the applicant shall not be required to provide notice to all interest owners within the San Juan 27-5 Unit of such proposed commingling.
- (4) 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 the day and year hereinabove designated.

STATE OF NEW MEXICO
OIL CONSERVATION DIVISION

WILLIAM J/ LeMAY

Director