| DATE IN 3 23 99 BUSPENSE 4 12 99 ENGAGER DC LOOGED BY KN TYPE DHC |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| |
| NEW MEXICO OIL CONSERVATION DIVISION - Engineering Bureau - 2040 South Pacheco, Santa Fe, NM 87505 |
| ADMINISTRATIVE APPLICATION COVERSHEET |
| THIS COVERSHEET IS MANDATORY FOR ALL ADMINISTRATIVE APPLICATION FOR EXCEPTIONS TO DIVISION RULES AND REGULATIONS WHICH REQUIRE PROCESSING AT THE DIVISION LEVEL IN SANTA FE |
| Application Acronyms: |
| [NSP-Non-Standard Proration Unit] [NSL-Non-Standard Location] [DD-Directional Drilling] [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 OII Recovery Certification] [PPR-Positive Production Response] |
| 1] TYPE OF APPLICATION - Check Those Which Apply for [A] 5 6 [A] Location - Spacing Unit - Directional Drilling 5 6 [A] NSL INSP DD INSD MAR 2 3 105.3 |
| 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] Coffset 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] |
| |

[F] U Waivers are Attached

[3] **INFORMATION / DATA SUBMITTED IS COMPLETE - Certification**

I hereby certify that I, or personnel under my supervision, have read and complied with all 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.

hadhul Signature

Title

DISTRICT I

P.O. Box 1980, Hobbs, NM 88241-1980 DISTRICT II 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**

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

APPLICATION FOR DOWNHOLE COMMINGLING

X Administrative _ **EXISTING WELLBORE**

APPROVAL PROCESS:

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

Hearing

_X_YES ___NO

| Burlington Resources Oil & Gas Company | | | | | PO Box 4289, Farmington, NM 87499 | | | | | |
|----------------------------------------|----------|---------------|----------|----------------------------------------|-----------------------------------|---------|---|--------------|--------------------------------|--|
| Operator | | | | | Address | | | | | |
| San Juan 27 | '-4 Unit | | 50 | | K 19-27N-04 | W | | | Rio Arriba | |
| Lease | | | Well No. | ······································ | Unit Ltr Sec - Twp | - Rge | | | County | |
| | | | | | | | | Spacing Unit | Lease Types: (check 1 or more) | |
| OGRID NO. | 14538 | Property Code | 7452 | API NO. | 30-039-20155 | Federal | x | State | (and/or) Fee | |

| The following facts are submitted in support of downhole commingling: | Upper Zone | Intermediate Zone | Lower Zone |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------|------------------------|------------------------------------------------------|
| 1. Pool Name and Pool Code | Blanco Meșaverde - 72319 | | Basin Dakota - 71599 |
| 2. Top and Bottom of Pay Section (Perforations) | will be supplied upon completion | | will be supplied upon completion |
| 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. 547 psi (see attachment) | a. | a. 1078 psi (see attachment) |
| Gas & Oil - Flowing: Measured Current All Gas Zones: Estimated or Measured Original | (Original) b. 1323 psi (see attachment) | b. | b. 3193 psi (see attachment) |
| 6. Oil Gravity (API) or Gas BTU Content | BTU 1196 | | BTU 1234 |
| 7. Producing or Shut-In? | shut in | | shut in |
| Production Marginal? (yes or no) | no | | yes |
| * If Shut-In 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 | Dațe: n/a Rates: | Date: Rates: | Date: n/a Rates: |
| * If Producing, give data and oil/gas/water water of recent test (within 60 days) | Date: n/a Rates: | Date: Rates: | Date: n/a Rates: |
| 8. Fixed Percentage Allocation Formula -% for each zone (total of %'s to equal 100%) | Oil: Gas: % % will be supplied upon completion | Oil: Gas: _% | Oil: Gas: % % will be supplied upon completion |

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 rate projections or other required data. 9.

10. Are all working, overriding, and royalty interests identical in all commingled zones? If not, have all working, overriding, and royalty interests been notified by certified mail? Have all offset operators been given written notice of the proposed downhole commingling?

____Yes __x_ _x_Yes ____ _x_Yes ___ _No _No _No

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) 11. Will cross-flow occur?

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 of Public Lands or the United States Bureau of Land Management has been notified in writing of this application. _X_Yes ____No
 15. NMOCO Defenses Compared for Bule 202(D) Exceptions: _ORDER NO(S) _______attached

15. NMOCD Reference Cases for Rule 303(D) Exceptions: ORDER NO(S). _ attached

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. 1

| SIGNATURE Wayne Flotcum | TITLE: Production Engineer | DATE: 03-08-99 |
|------------------------------------|-------------------------------|----------------|
| | | |
| TYPE OR PRINT NAME: Wayne Fletcher | TELEPHONE NO.: (505) 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., Aztee, NM 87410 District IV PO Box 2088, Santa Fe, NM 87504-2088

State of New Mexico Energy, Minerais & Natural Resources Department

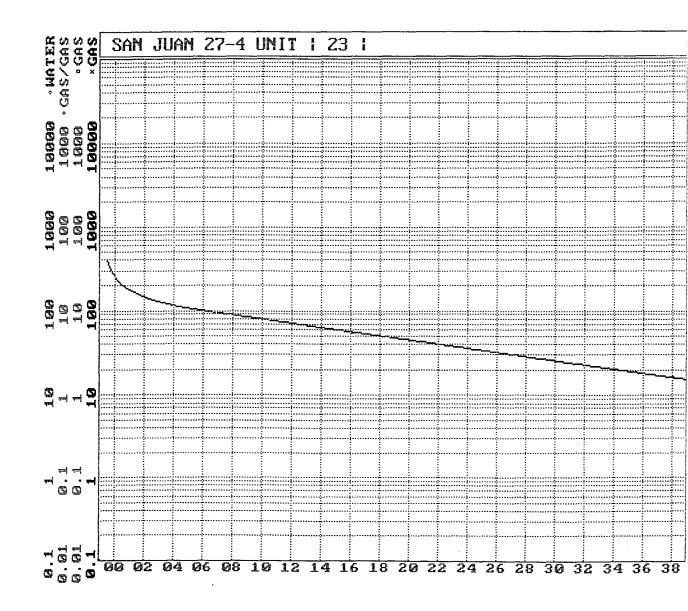
OIL CONSERVATION DIVISION PO Box 2088 Santa Fe, NM 87504-2088

Form C-1 Revised February 21, 19 Instructions on ba Submit to Appropriate District Off^{*} State Lease - 4 Cop Fee Lease - 3 Cop

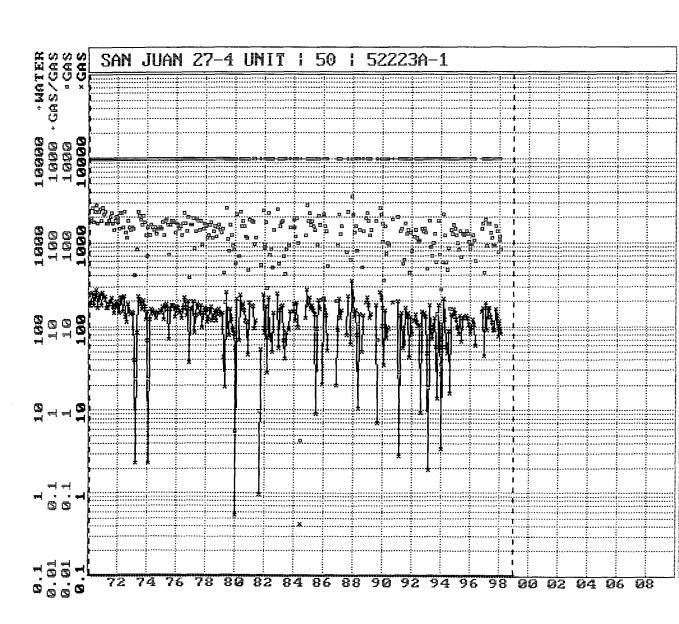
AMENDED REPOR

| | | WE | ELL LO | CATIO | ON AND | ACR | EAGE DEDI | CATION PL | .AT | | |
|---------------------------|--------------------------------------------|----------|--------------|---------|--------------------------------------|------------|------------------|------------------------------|---------------------|-------------------|------------------------------------------|
| API Number 21 | | | | | Pool Code 'Pool Name | | | | | | |
| 30-039-20155 72319 | | | | | /71599 Blanco Mesaverde/Basin Dakota | | | | | | |
| | | | | | | | Well Number | | | | |
| | 7452 San Juan 27-4 Unit 50 | | | | | | | | | | |
| 'OGRID | No. | | | | | perstor | | | | | * Elevation |
| 14538 | | | Burli | ngtor | | | 011 & Ga | s Company | | 664 | <u>2 GR</u> |
| | | | | | | | Location | | <u> </u> | | |
| UL or lot no. | Section | Township | Range | Lot Idr | | n the | North/South line | Feet from the | East/We | it line | County |
| K | 19 | 27N | 4W | ļ | 1500 | <u></u> | South | 1575 | West | | RA |
| <u> </u> | | | | | | | f Different Fr | | · | | |
| UL or lot no. | Section | Township | Range | Lot Idr | Feet from | a the | North/South line | Feet from the | East/We | it line | County |
| 12 Dediented A or | | | Consolidatio | | ¹⁵ Order No. | | | | | · · · · · · · · · | |
| "Pedicated Ac MV-W/32 | | OF LEILL | C009000800 | | " Urder No. | | | | | | |
| <u>DK-W/32</u> NO ALLO | | WILL BE | ASSIGNE | | THIS COME | N ETI | ON UNTIL ALL | INTERESTS H | AVE BE | | SOLIDATE |
| NO NELO | | | | | | | EEN APPROVED | | | 2 | |
| 16 | | | | | | Ι | | ¹⁷ OPE | RATOR | CERT | TIFICATIO |
| [[| | | | 1 | | | | | •• | - | contained herein i |
| | | | | lori | .ginal p | nlat | from | true and com | plete to the l | best of my l | knowledge and be |
| | | | | | | en 9-26-68 | 3 | | | | |
| 1 | | | | | | | | | | | |
| | | | | | | | | | | | |
| 1 | | | | | | | | Signature | <u></u> | | |
| | | | | 1 | | | | Peggy | Bradi | ield | |
| | | | | | | | | Printed Nar | | ۸dmi | nistrato |
| | | | | | | | | Title | alory | Aunt | <u>urstrat</u> |
| ł | | | | | | | | | | | |
| <u> </u> | | | | | | | | Date | | | |
| | | | | | | | | | | | TFICATIC |
| | | | | Į. | | | | | | | s shown on this p |
| | | | | | | | | or under my | supervision, | and that th | il surveys made by se same is true an |
| | 1 | | | η | | | | correct to th | e best of my | belief. | |
| 15 | 15' | | | | | | | Data of Sur | | | |
| | | | | | | | | Date of Surv Signature an | ey discal of Pro | ofessional S | urveyer: |
| | | | | | | | l. | | | | |
| ¥ 1 | |) Š | | 1 | | | | | | | |
| | | 1500 | | | | | | | | | |
| | | | | ll l | | | | | | | |
| | | | | 1 | | | | | umber | | |
| NI | | | | 11 | | | | | | | |

San Juan 27-4 Unit #50 Expected Production Curve Mesaverde Formation



San Juan 27-4 Unit #50 Actual Production Dakota Formation



San Juan 27-4 Unit #50

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

| Mesaverde | Dakota | | | |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|--|
| <u>MV-Current</u> | <u>DK-Current</u> | | | |
| GAS GRAVITY0.701COND. OR MISC. (C/M)C%N20.19%CO20.89%H2S0DIAMETER (IN)2DEPTH (FT)5710SURFACE TEMPERATURE (DEG F)60BOTTOMHOLE TEMPERATURE (DEG F)137FLOWRATE (MCFPD)0SURFACE PRESSURE (PSIA)472BOTTOMHOLE PRESSURE (PSIA)546.6 | GAS GRAVITY0.728COND. OR MISC. (C/M)C%N20.16%CO21.03%H2S0DIAMETER (IN)2.375DEPTH (FT)8682SURFACE TEMPERATURE (DEG F)60BOTTOMHOLE TEMPERATURE (DEG F)198FLOWRATE (MCFPD)0SURFACE PRESSURE (PSIA)853BOTTOMHOLE PRESSURE (PSIA)1077.7 | | | |
| <u>MV-Original</u> | <u>DK-Original</u> | | | |
| GAS GRAVITY0.701COND. OR MISC. (C/M)C%N20.19%CO20.89%H2S0DIAMETER (IN)2DEPTH (FT)5710SURFACE TEMPERATURE (DEG F)60BOTTOMHOLE TEMPERATURE (DEG F)137FLOWRATE (MCFPD)0SURFACE PRESSURE (PSIA)1122BOTTOMHOLE PRESSURE (PSIA)1323.2 | GAS GRAVITY0.728COND. OR MISC. (C/M)C%N20.16%CO21.03%H2S0DIAMETER (IN)2.375DEPTH (FT)8682SURFACE TEMPERATURE (DEG F)60BOTTOMHOLE TEMPERATURE (DEG F)198FLOWRATE (MCFPD)0SURFACE PRESSURE (PSIA)2470BOTTOMHOLE PRESSURE (PSIA)3193.3 | | | |

.*

Page No.: 1 Print Time: Tue Mar 02 13:33:08 1999 Property ID: 1228 Property Name: SAN JUAN 27-4 UNIT | 23 | 53316B-1 Table Name: Q:\PUBLIC\GENTITY\GDPNOS\TEST.DBF

--DATE-- ---CUM_GAS-- M_SIWHP

.

| 71/76/50 | • | 1100 0 |
|----------|--------|--------|
| 11/16/59 | 0 | 1122.0 |
| 11/23/59 | 0 | 1109.0 |
| 10/06/60 | 26000 | 785.0 |
| 12/20/61 | 61000 | 650.0 |
| 08/06/62 | 73000 | 633.0 |
| 04/19/63 | 84000 | 630.0 |
| 10/22/64 | 105000 | 619.0 |
| 10/25/65 | 119000 | 561.0 |
| 04/19/66 | 126000 | 554.0 |
| 05/16/67 | 139000 | 550.0 |
| 05/02/68 | 149000 | 552.0 |
| 08/28/70 | 177163 | 502.0 |
| 04/08/71 | 185550 | 452.0 |
| 08/09/72 | 200982 | 448.0 |
| 12/06/83 | 311445 | 294.0 |
| 04/21/86 | 330787 | 394.0 |
| 09/08/89 | 350765 | 362.0 |
| 09/17/91 | 359451 | 460.0 |
| 10/01/91 | 359788 | 472.0 |

San Juan 27-4 Unit #50

Mesaverde Offset

Page No.: 1 Print Time: Tue Mar 02 13:32:53 1999 Property ID: 1262 Property Name: SAN JUAN 27-4 UNIT | 50 | 52223A-1 Table Name: Q:\PUBLIC\GENTITY\GDPNOS\TEST.DBF

| DATE | CUM_GAS Mcf | M SIWHP Psi |
|----------|----------------|----------------|
| 12/17/68 | 0 | 2470.0 |
| 09/02/69 | 83956 | 1094.0 |
| 08/28/70 | 143160 | 1115.0 |
| 04/08/71 | 195067 | 1039.0 |
| 08/09/72 | 283264 | 980.0 |
| 08/20/73 | 334530 | 1031.0 |
| 06/24/75 | 428192 | 1058.0 |
| 07/06/77 | 548242 | 832.0 |
| 11/01/79 | 661096 | 897.0 |
| 04/20/81 | 721462 | 801.0 |
| 09/21/83 | 800756 | 996.0 |
| 06/05/85 | 872120 | 874.0 |
| 04/21/86 | 910438 | 923.0 |
| 10/13/88 | 985334 | 928.0 |
| 04/22/90 | 1047949 | 884.0 |
| 07/28/92 | 1116789 | 853.0 |

San Juan 27-4 Unit #50

Existing Dakota



SAN JUAN DIVISION 3535 East 30th Street: (87402-8801) P.O. BOX 4289 Farmington, New Mexico 87499-4289



SAN JUAN DIVISION 3535 East 30th Street: (87402-8801) P.O. BOX 4289 Farmington, New Mexico 87499-4289

Cinco General Partnership PO Box 451 Albuguergue, NM 87103-0451

х

х

<u>: e</u>

Bedrock Limited Partners PO Box 36480 Albuquerque, NM 87176

BURLINGTON RESOURCES

SAN JUAN DIVISION 3535 East 30th Street: (87402-8801) P.O. BOX 4289 Farmington, New Mexico 87499-4289 BURLINGTON RESOURCES

SAN JUAN DIVISION 3535 East 30th Street: (87402-8801) P.O. BOX 4289 Farmington, New Mexico 87499-4289

Tempe LTD Partnership c/o F.E. & M. K. Harrington 652 Fearrington Post Pittsboro, NC 27312 Harco LTD Partnership PO Box 216 Roswell, NM 88202



SAN JUAN DIVISION 3535 East 30th Street: (87402-8801) P.O. BOX 4289 Farmington, New Mexico 87499-4289



SAN JUAN DIVISION 3535 East 30th Street: (87402-8801) P.O. BOX 4289 Farmington, New Mexico 87499-4289

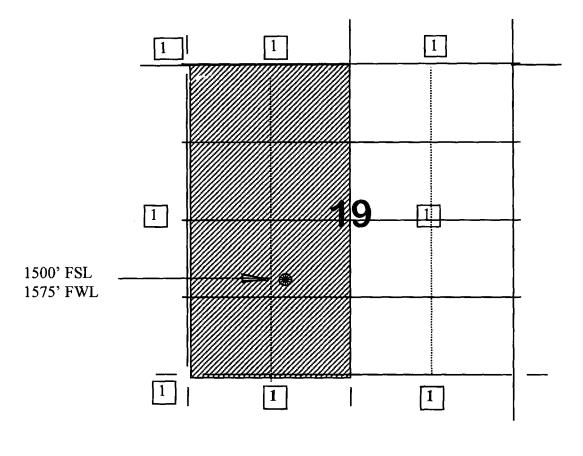
James V. Harrington PO Box 13535 Albuquerque, NM 87192

х

Mary Jone Chappell PO Box 1865 Corrales, NM 87048

BURLINGTON RESOURCES OIL AND GAS COMPANY San Juan 27-4 Unit #50 OFFSET OPERATOR/OWNER PLAT Mesaverde/Dakota Formations Commingled well

Township 27 North, Range 4 West



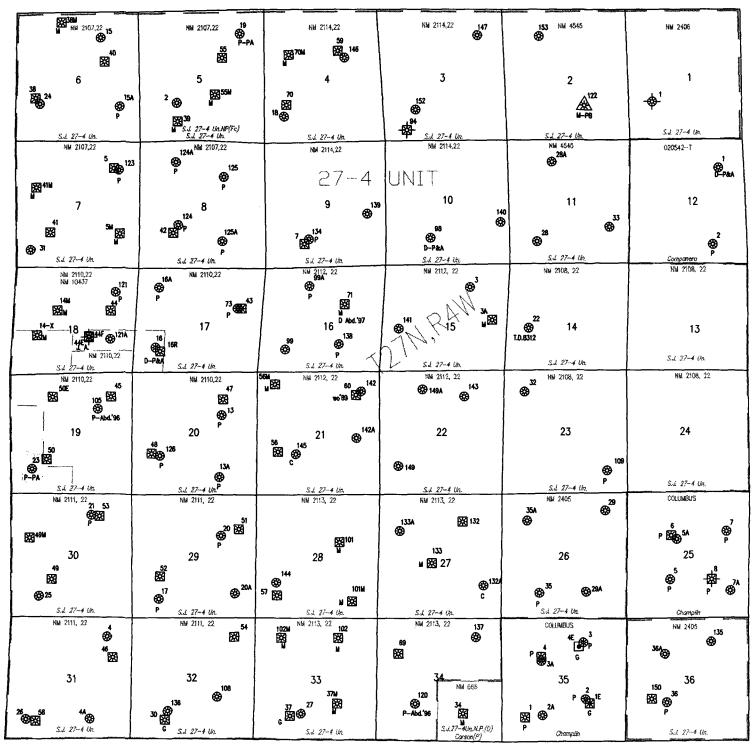
1) Burlington Resources

San Juan 27-4 Unit #50

ì

Blanco Mesaverde / Basin Dakota

27N - 4W - 19



BURLINGTON RESOURCES

SAN JUAN DIVISION 3535 East 30th Street: (87402-8801) P.O. BOX 4289 Farmington, New Mexico 87499-4289

Cinco General Partnership PO Box 451 Albuquerque, NM 87103-0451

BURLINGTON RESOURCES

SAN JUAN DIVISION 3535 East 30th Street: (87402-8801) P.O. BOX 4289 Farmington, New Mexico 87499-4289

Bedrock Limited Partners PO Box 36480 Albuquerque, NM 87176

BURLINGTON RESOURCES

SAN JUAN DIVISION 3535 East 30th Street: (87402-8801) P.O. BOX 4289 Farmington, New Mexico 87499-4289

> Tempe LTD Partnership c/o F.E. & M. K. Harrington 652 Fearrington Post Pittsboro, NC 27312

BURLINGTON RESOURCES

SAN JUAN DIVISION 3535 East 30th Street: (87402-8801) P.O. BOX 4289 Farmington, New Mexico 87499-4289

Harco LTD Partnership PO Box 216 Roswell, NM 88202



SAN JUAN DIVISION 3535 East 30th Street: (87402-8801) P.O. BOX 4289 Farmington, New Mexico 87499-4289

> James V. Harrington PO Box 13535 Albuquerque, NM 87192

BURLINGTON RESOURCES

SAN JUAN DIVISION 3535 East 30th Street: (87402-8801) P.O. BOX 4289 Farmington, New Mexico 87499-4289

Mary Jone Chappell PO Box 1865 Corrales, NM 87048

x