RECEIVED BLM

submitted in lieu of Form 3160-5

## UNITED STATES

DEPARTMENT OF THE INTERIOR 97 JAN 30 PM 12: 49

| BUREAU OF L | AND 1 | MANAGEMENT | 070 | FARIMAGTON, | NM |
|-------------|-------|------------|-----|-------------|----|
|-------------|-------|------------|-----|-------------|----|

|   | U/U (Falia)  | Waton's an   |   |
|---|--|--|---|
| Sundry Notic  | ces and Reports on Wells                               |  |   |
| 1. Type of Well   | ه معمد دی ده دی پی پی در دو در دو میکند در دو در میکند | 5.   | Lease Number NMSF-078423 If Indian, All. or                             |
| GAS   | DECENYED<br>FEB - 7 1997                               | 7.   | Tribe Name Unit Agreement Name  |
| 2. Name of Operator BURLINGTON  | FEB - 7 1997   | ž.   | San Juan 29-7 Unit  |
| RESOURCES  3. Address & Phone No. of Operator   |  | 0.   | Well Name & Number<br>San Juan 29-7 Unit #14<br>API Well No.            |
| PO Box 4289, Farmington, NM  4. Location of Well, Footage, Sec  |  | 9.   | 300392414200<br>Field and Pool  |
| 790'FNL, 1480'FWL, Sec. 8, T-2  | 29N, R-7W  | 11.  | Blanco Mesaverde/<br>Basin Dakota<br>County and State<br>Rio Arriba, NM |
| 12. CHECK APPROPRIATE BOX TO INDITED Type of Submission  _X_ Notice of Intent  Subsequent Report  Final Abandonment | Type of Action Abandonment Ch X Recompletion Ne        | ange of Pla<br>w Construct<br>n-Routine E<br>ter Shut of | ans<br>tion<br>Fracturing<br>Ef   |
|   |  | ngled. A dowr  | e attached procedure and n hole commingle order will be                 |
|   | foregoing is true and corre  (SW8) Title Regulatory Ad |  | Date 1/29/97  |
| (This space for Duane W. Spencer APPROVED BY CONDITION OF APPROVAL, if any:   | Office use)Title                                       | Date _   | EB 0 5 1997   |

Agreed WHC or Sa AMOCD

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

State of New Mexico Energy, Minerais & Natural Resources Department

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

need PHC order

Revised February 21, 1994 Instructions on back

Submit to Appropriate District Office State Lease - 4 Copies

Fee Lease - 3 Copies

| 000 Kie Brazos R                | d., Aztec.  | (M 8/410     |            | San                    | ia re,     | IAIMI C  | 3/304-2000       |               |                                      |                 |  |
|---------------------------------|-------------|--------------|------------|------------------------|------------|--|------------------|---------------|--------------------------------------|-----------------|--|
| District IV<br>PO Box 2088, San | la Fe, NM I | 7504-2088    |            |                        |            |  |                  |               |                                      | AME             | NDED REPORT  |
| -                               |             |              | L LO       | CATION                 | AND        | ACR  | EAGE DEDIC       | CATION        | PLAT                                 |                 |  |
| · A                             | Pl Numbe    |              |            | <sup>1</sup> Pool Code |            | T  | <del></del>      |               | d Name                               |                 |  |
|                                 | 9-241       |              | 72319      | /71599                 | )          | Blan   | nco Mesaver      | de/Bas        | in Dako                              | ota             |  |
| ' Property                      |             |              | <u> </u>   |                        |            | reperty N  |                  |               |                                      | 1               | Well Number  |
| 7465                            | .           |              |            | Sai                    | ı Juai     | n 29   | -7 Unit          |               | <del></del>                          | ļ               | 140  |
| OGRID                           |             |              |            |                        |            | perator i  |                  | COMBAN        | y.                                   |                 | ' Elevation 6145'  |
| 14538                           | ,           | BU           | RLING      | TON R                  | ESOUR      | CES  | OIL & GAS        | COMPAN        |                                      | <u> </u>        |  |
|                                 |             |              |            |                        | 10 Sui     | rface  | Location         |               |                                      |                 |  |
| UL or lot se.                   | Section     | Township     | Range      | Lot idn                | Feet (res  |  | North/South line | Feet from the |                                      |                 | R.A.   |
| С                               | 8           | 29-N         | 7-W        |                        | 79         |  | North            | 1480          |                                      | est             | K.A.   |
|                                 |             |              | 11 Bot     | tom Hol                | e Local    | tion I   | f Different Fro  |               |                                      |                 |  |
| UL or lot no.                   | Section     | Townsip      | Range      | Lot ids                | Feet (re   | m the  | North/South line | Feet from t   | he East/W                            | est line        | County   |
|                                 | <del></del> | 1 57 1 4 6   | oppoidatio | - Codo A 15 C          | Order No.  |  |                  |               |                                      |                 |  |
| W/320                           | -           |              |            |                        |            |  |                  |               |                                      |                 |  |
| W/320                           | WARIE       | WILL BE A    | SSIGNE     | D TO TH                | IS COM     | PLETI  | ON UNTIL ALL     | INTEREST      | S HAVE B                             | EEN CO          | ONSOLIDATED  |
| NO ALLO                         | WADLE       | OR A         | NON-ST     | ANDARD                 | UNIT I     | AS B   | EEN APPROVED     | BITHE         | DIVISION                             |                 |  |
| 3//////                         | ///////     | XIIIIIIII    |            | <b>8</b>               |            |  |                  |               |                                      |                 | TIFICATION   |
|                                 |             | 0            |            | Not                    | resur      | veye   | d, prepare       | d I heret     | y certify that the                   | information     | n contained herein is<br>ny knowledge and belief   |
|                                 |             | 16           |            | from                   | a pl       | at h   | y Fred B.        | il.           | = complete to =                      | _ 0_0 o,        | ,  |
|                                 |             | <b>↓</b> o ` |            | Kerr                   | , Jr.      | dat  | ed 9-17-85       | · _           | _                                    |                 | ٤  |
| 1480                            | 0'          |              |            | 3                      |            |  |                  |               | }                                    |                 | ,  |
|                                 |             |              |            | 3                      |            |  |                  |               | 1000 V                               | Ma              | april a  |
| 7                               |             |              |            |                        |            |  | Ì                | Signe         |                                      | 761 1           |  |
|                                 |             |              |            |                        |            |  |                  | Printe        | qqy Bra<br>d Name                    | dilel           | <u>.a</u>  |
|                                 |             |              |            | 3                      |            |  |                  |               |                                      | v Adı           | inistrator   |
|                                 |             | 1            |            |                        |            |  | 1                | Title         |                                      | _               |  |
|                                 |             |              |            |                        |            |  |                  | 2-<br>Date    | 7-97                                 |                 |  |
|                                 |             |              |            |                        |            |  |                  | 120           | (1D3/173/                            | D CE            | RTIFICATION  |
| 2                               |             |              |            | 8                      |            |  |                  |               |                                      |                 | KITPICATION<br>wien shown on this ples   |
|                                 |             |              |            |                        |            |  |                  | 1             | ioned from field                     | l notes of e    | comal surveys made by m  |
|                                 |             |              |            | 1                      | Second Sea | 1777 13 T  |                  | or w          | der my supervis<br>ct to the best of | ion, and th     | et the same is true and  |
|                                 |             |              |            |                        |            |  |                  | · ·           | 2                                    | /04/9           | 7  |
|                                 |             |              |            |                        | j.         | A 4 4  |                  | Date          | of Survey                            |                 | EDI  |
|                                 |             |              |            | Li S                   | A FEB      | 1 1 3  | 33/ ***          | Sign          | mure and Seal                        | Ties California | The state of the s |
| 1                               |             |              |            |                        | NOO 78     | en G   |                  | i i           | /,5                                  | NW              | EDWARD S   |
|                                 |             |              |            | <b>3</b> 6             |            | NUMBER OF THE PARTY OF THE PART |                  | 1             |                                      | 7 2/6           | 8570 6   |
|                                 |             |              |            | 3                      | <u>U</u>   | NST.   | 4                |               | /X                                   | المطا           |  |
|                                 |             |              |            | 3                      |            |  |                  |               | 11/20                                |                 | JEST .   |
|                                 |             |              |            |                        |            |  | 1                | CA            | ificate Number                       | TO PAR          | OFESSIONAL.  |
| <b>X/////</b>                   |             |              |            | //X                    |            |  |                  |               |                                      |                 |  |

Date: 1/11/97

## Burlington Resources - Mesaverde Initial Completion Lat-Long: 36° 44' 45"- 107° 35' 53"

#### General Well Data:

Well Name: San Juan 29-7 Unit #140

Location: Unit C, Section 08, T29N, R07W, 790' FNL, 1480' FWL

County, State: Rio Arriba County, New Mexico

Field: Blanco Mesaverde Formation: Mesaverde

#### **Project Objective:**

Recomplete Mesaverde PUD in existing Dakota wellbore. Commingle Mesaverde with Dakota production. Current Dakota production is 83 MCFD. Anticipated initial Mesaverde production 1,013 MCFD.

### **Equipment and Material Requirements:**

Deliver the following equipment to location:

- 1. 7600' of 2-3/8" 4.7# J-55 tubing
- 2. Eighteen (18) 400 bbls frac tanks to be spotted and filled w/ 2% KCL
- 3. 4-1/2" wellhead isolation tool (2 jts of 2-7/8 6.5# J-55 tubing and 4-1/2" packer)
- 4. 3-7/8" bit/mill
- 5. Six 3-1/8" drill collars

Below are materials required for fracture stimulations:

|    |                     | <u>Mesaverde</u> |      |
|----|---------------------|------------------|------|
| 1. | Fluid Type          | Slickwater       |      |
| 2. | Stages              | Two              |      |
| 3. | Acid Volume         | 65               | bbls |
| 4. | Fluid Volume 2% KCL | 5766             | bbls |
| 5. | Sand Type           | Arizona          |      |
| 6. | Sand Size           | 20/40            |      |
| 7  | Sand Volume         | 240,000          | #'s  |

Fill frac tanks w/ 3# biocide/tank & 2% KCL water. Put one load of fresh water in each tank before adding 20% concentrated KCL water. Set Location proppant container and fill with sand. Contact Production Engineering and discuss stimulation water source and quality. Run fluid tests on water. Filter water based on Stimulation company solids water analysis.

#### **Workover Procedure:**

- Hold safety meeting. MIRU completion rig. Place fire and safety equipment in strategic locations. Comply with all MOI, BLM, and NMOCD rules and regulations. Record all tubing, casing, and bradenhead, and line pressures. RU flowlines. Blowdown tbg and csg.
- Kill well w 2% KCL down tubing. ND wellhead. Replace any failed valves or seals on wellhead. NU BOP's and stripping head.

- 3. TOOH with 7424' of 1-1/2", 2.9#, 10rnd tubing. Rabbit and strap tubing. Inspect and replace any bad joints.
- 4. MIRU wireline unit, under lubricator run 3-7/8" gauge ring to PBTD of 7456'. POOH. PU 4-1/2" CIBP and RIH. Wireline set CIBP at 5500'. POOH. RD wireline.
- 5. Load hole with 2% KCL. Pressure test casing and CIBP to 1000 psi for 15 min.
- 6. NU wireline. RIH with CBL/CCL/GR log. Under 1000 psi, log from 5500' to 3050' (Top of Lewis). Cement bond required from 5500' to 4400'. POOH. RD wireline.
- 7. XO to 2-7/8" pipe rams and slips. PU 4-1/2" packer on 2 jts of 2-7/8" tubing. TIH and set packer @ 60'. RU stimulation company. Pressure test casing to 3850 psi for 15 min. Record results. Unseat packer and TOOH.

# Point Lookout and Lower Menefee Fracture Stimulation (1st Stage):

8. NU wireline company. Under a lubricator, RIH with 3-1/8" HSC casing gun. Select fire perforate Point Lookout and Menefee with 1 SPF, 0.29" diameter, 18" penetration, 12 gram charges (Owen, 306T) at the following depths:

| 5016, | 5022, | 5034, | 5090, | 5127, | 5135, | 5143,         | 5155,         | 5163, | 5172,          |
|-------|-------|-------|-------|-------|-------|---------------|---------------|-------|----------------|
| 5190, | 5203, | 5207, | 5218, | 5232, | 5235, | <b>5241</b> , | <b>524</b> 5, | 5251, | 5 <b>26</b> 9, |
|       |       |       |       | 5403. |       | <b></b> ,     |               |       |                |

(20 total Intervals, 26 total holes, 399' of gross interval)

POOH and ND wireline. Inspect casing gun to ensure all perforations fired.

- 9. PU 4-1/2" packer on 2 jts of 2-7/8" tubing. TIH and set packer @ 60'. NU stimulation company. Pressure test surface lines to 4850 psi. Prepare to breakdown perforations. Pump into perforations to establish injection rate at maximum pressure of 3850 psi. Record breakdown pressure and rate and ISIP. Note: Calculate the number of perforations open at beginning of the job. If 90% (or more) of the holes calculate to be open, pump acid but do not drop balls. Be prepared to continue right into frac job. If less then 90% of holes are open proceed to next step. If an injection rate of > 5 BPM can be established, prepare to balloff. If an injection rate cannot be established, TIH with 2-3/8 tubing and spot 7 bbls 15% HCL across perforation. TOOH.
- Begin balloff. Pump 25 bbls of 15% HCL (Add 2/1000 gallons corrosion inhibitor and 1/1000 gallons surfactant to acid.) and flush with 2% KCL at maximum rate pressure will allow. Drop a total of 52, 7/8" 1.3 SG RCN ball sealers spaced evenly throughout job. Maximum pressure at balloff is 3850 psi. ND stimulation company. Unseat packer and TOOH.
- 11. NU wireline company. Under lubricator, RIH with 4-1/2" junk basket to recover ball sealers. Run basket by perforations several times to ensure maximum ball recovery. POOH and ND wireline company. Record number of hits and balls recovered.
- 12. PU 4-1/2" packer and reset @ 60'. NU stimulation company. Hold safety meeting. Pressure test surface lines to 4850 psi. Maximum surface treating pressure during frac is 3850 psi. Fracture stimulate Point Lookout interval per attached schedule at 50 BPM, with 120,000 #'s of 20/40 Arizona sand and 2888 bbls of slickwater. Quick flush at 2 ppg with 2% KCL. Flush with 78.5 bbls of 2% KCL to 100' of top perforation. Cut pump rate throughout flush as pressure will allow. Shutdown and record ISIP, 5, 10, and 15 min shut-in pressures. ND stimulation company. Unseat packer and TOOH.
- 13. NU wireline company. Under and lubricator RIH with 4-1/2" CIBP and set @ 4982'. POOH. ND wireline company. PU 4-1/2" packer on 2 jts of 2-7/8" tubing and set @ 60'. RU stimulation company. Pressure

test CIBP to 3850 psi for 15 min. Record results. Unseat packer and TOOH.

#### Upper Menefee and Cliff House perforating and fracture stimulation (2<sup>nd</sup> Stage):

14. NU wireline company. Under a full lubricator, RIH with 3-1/8" HSC casing gun. Select fire perforate the Menefee and Cliff House with 1 SPF, 0.29" diameter, 18" penetration, 12 gram charges (Owen, 306T) at the following depths:

| 4460, | 4547, | 4582, | 4597, | 4643, | 4668, | 4681, | 4692, | 4706, | 4716, |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 4719, | 4741, | 4745, | 4749, | 4761, | 4800, | 4814, | 4839, | 4862, | 4918, |
| 4921, | 4929, | 4939, | 4957, | 4961  |       |       |       |       |       |

(21 total Intervals, 25 total holes, 501' of gross interval)

POOH and ND wireline. Inspect casing gun to ensure all perforations fired.

- 15. PU 4-1/2" packer on 2 jts of 2-7/8" tubing. TIH and set packer @ 60'. NU stimulation company. Pressure test surface lines to 4850 psi. Prepare to breakdown perforations. Pump into perforations to establish injection rate at maximum pressure of 3850 psi. Record breakdown pressure and rate and ISIP. Note: Calculate the number of perforations open at beginning of the job. If 90% (or more) of the holes calculate to be open, pump acid but do not drop balls. Be prepared to continue right into frac job. If less then 90% of holes are open proceed to next step. If an injection rate of > 5 BPM can be established, prepare to balloff. If an injection rate cannot be established, TIH with 2-3/8 tubing and spot 8 bbls 15% HCL across perforation. TOOH.
- 16. Begin balloff. Pump 25 bbls of 15% HCL (Add 2/1000 gallons corrosion inhibitor and 1/1000 gallons surfactant to acid.) and flush with 2% KCL at maximum rate pressure will allow. Drop a total of 50, 7/8" 1.3 SG RCN ball sealers spaced evenly throughout job. Maximum pressure at balloff is 3850 psi. ND stimulation company. Unseat packer and TOOH.
- 17. NU wireline company. Under lubricator, RIH with 4-1/2" junk basket to recover ball sealers. Run basket by perforations several times to ensure maximum ball recovery. POOH and ND wireline company. Record number of hits and balls recovered.
- 18. PU 4-1/2" packer and reset @ 60'. NU stimulation company. Hold safety meeting. Pressure test surface lines to 4850 psi. Maximum surface treating pressure during frac is 3850 psi. Fracture stimulate Cliffhouse/Menefee interval per attached schedule at 50 BPM, with 120,000 #'s of 20/40 Arizona sand and 2878 bbls of slickwater. Quick flush at 2 ppg with 2% KCL. Flush with 68 bbls of 2% KCL to 200' of top perforation. Cut pump rate throughout flush as pressure will allow. Shutdown and record ISIP, 5, 10, and 15 min shut-in pressures. RD stimulation company. Unseat packer and TOOH. XO to 2-3/8" pipe rams and slips.
- 19. PU 3-7/8" bit and six drill collars on 2-3/8" tubing. Clean out to CIBP set and 4982' Obtain pitot gauge. Drill out CIBP at 4982'. Clean out to CIBP set at 5500'. Clean up to less then 5 BPH water and trace of sand. Obtain stabilized pitot gauges at 15, 30, 45, and 60 min for the Mesaverde interval. Record on WIMS report.
- 20. Drill CIBP set at 5500' Clean out to PBTD of 7456'. Clean up to less then 5 BPH and trace of sand.

  Obtain stabilized pitot gauges at 15, 30, 45, and 60 min for the commingled zones. TOOH laying down 2-3/8" tubing, drill collars, and bit. Note: All production testing required for commingle allocation will be performed after rig is released.
- 21. XO to 1-1/2" pipe rams. PU 1-1/2" tubing. TIH with one joint of 1-1/2", 2.9# J-55 tubing with expendable check, a seat-nipple, and the remaining 1-1/2" tubing. Land tubing at +/- 7424. Broach tubing while

running in hole to seat-nipple with sandline. POOH

22. ND BOP's. NU Tree and manifold assembly. Pump off expendable check. Make swab run to kick well off if needed. Obtain stabilized pitot gauges at 15, 30, 45, and 60 min for the entire well. Record on WIMS report. SI well. RD and MOL.

Compiled By:

S. C. Woolverton
Production Engineer

Approval:

Regional Engineer

Engineers -

Sean Woolverton

Office - (326-9837)

Home - (326-4525)

Pager - (326-8931)

<u>James A. Smith</u> Office - (326-9713) Home - (327-3061)

Pager - (324-2420)

Frac Consultants

Mark Byars Pager - (327-8470) Mobile - (320-0349) Home - (327-0096)

Pager - (599-7429) Mob - (860-7518) Home - (326-4861)

Mike Martinez

**VENDORS:** 

**SERVICE COMPANY** 

**PHONE NUMBER** 

CASED HOLE: STIMULATION:

TBA

TBA

q:\area\!mvpud\1997\sj297140\PROCED.doc

# PERTINENT DATA SHEET SAN JUAN 29-7 UNIT #140

| Location:     | 790' FNL, 1480' FWL           | Elevation:  | 6145' GL     |
|---------------|-------------------------------|-------------|--------------|
|               | Unit C, Section 8, T29N, R7W  | <u>LAT:</u> | 36° 44' 45"  |
|               | Rio Arriba County, New Mexico | LONG:       | 107° 35' 53" |
| Field:        | Blanco Mesaverde/Basin Dakota | <u>DP#:</u> | 2532A - DK   |
| <u>TD:</u>    | 7464'                         |             | 36086A - MV  |
| PBTD:         | 7456'                         | <u>GWI:</u> | 70.79% (DK)  |
| Spud Date:    | 08/10/87                      | NRI:        | 57.73% (DK)  |
| Completion Da | ate: 10/23/87                 | <u>GWI:</u> | 62.52% (MV)  |
|               |                               | NRI:        | 52.80% (MV)  |

**Casing Record:** 

| Hole Size | Casing Size | Weight & Grade      | Depth Set | Sxs Cmt       | Cement Top |
|-----------|-------------|---------------------|-----------|---------------|------------|
| 12-1/4"   | 9-5/8"      | 32.3#, H-40         | 232'      | 110 (130 ft3) | surface    |
| 8-3/4"    | 7"          | 20.0#, K-55         | 3288'     | 260 (427 ft3) | 1400' (TS) |
| 6-1/4"    | 4-1/2"      | 10.5#, J-55         | 6521'     |               |            |
|           |             | 11.6#, J-55         | 7464'     | 340 (757 ft3) | 2840' (TS) |
|           |             | Float collar @ 7456 | 18'       |               |            |

**Tubing Record:** 

| Tubing Size                             |                            | Weight & Grade 2.9#, J-55           | Depth Set<br>7424'      | <u>bha</u><br>SN @ 7          | ) <b>7388</b> '         |  |
|---|----------------------------|-------------------------------------|-------------------------|-------------------------------|-------------------------|--|
| Formation Tops: Ojo Alamo               | 1916'                      | Chacra                              | 3926'                   | Mancos                        | 5580'                   |  |
| Kirtland<br>Fruitland<br>Pictured Cliff | 2096'<br>2650'<br>fs 2946' | Mesaverde<br>Menefee<br>Pt. Lookout | 4660'<br>4724'<br>5080' | Gallup<br>Greenhorn<br>Dakota | 6140'<br>7080'<br>7268' |  |

#### Logging Record:

Spectral-Density DSE Neutron Ind., Sandcal, Ind-Guard Temp, Induct-Guard, Spectral-Density DSN II Log No Cased Hole logs found in file

## Stimulation:

Dakota: Treated w/74,830# 20/40 sand & 80,545 gal fluid (50# gel) - screened out

Perf'd: 7195', 7199', 7212', 7215', 7218', 7221', 7274', 7296', 7299', 7302', 7324', 7339', 7342', 7348', 7370', 7384',

7388', 7393', 7396', 740+E210', w/1 SPZ

#### Workover History:

NONE

**Production History:** 

Latest Deliverability83 MCFD0 BOPDInitial Deliverability575 MCFDISIP: 1361Cums:234 MMCF160 BO

Transporter:

Oil/Condensate: Giant Gas: El Paso

# San Juan 29-7 Unit #140

## Blanco Mesaverde/Basin Dakota

Unit C, Section 8, T29N, R7W Rio Arriba County, NM Elevation: 6145' GL

LAT: 36° 44' 45" / LONG: 107° 35' 53"

date spud: 08-10-87

