

BURLINGTON RESOURCES

SAN JUAN DIVISION

March 27, 1998

Federal Express

Mr. Michael Stogner
New Mexico Oil Conservation Division
2040 South Pacheco Street
Santa Fe, New Mexico 87505

Re: Grenier B #3
1225'FSL, 2070'FWL, Section 5, T-29-N, R-10-W, San Juan County
30-045-08695

Dear Mr. Stogner:

This is a request for administrative approval for a non-standard gas well location in both the Blanco Mesa Verde and Basin Dakota pools.

Burlington Resources intends to recomplate the Grenier B #3 in the Blanco Mesa Verde pool and commingle with the Basin Dakota. Application has been made for the downhole commingling.

This well was drilled and completed in 1962 by Aztec Oil & Gas as a single Basin Dakota well. At that time the C102 well location plat stated 1650'FSL, 1650'FWL Section 5, T-29-N, R-10-W. A revised C102 plat was issued April 17, 1969 showing the location at 1225'FSL, 2070'FWL, Section 5, T-29-N, R-10-W. In researching the Company file and files at the New Mexico Oil Conservation Division, no order for the non-standard location of the Dakota can be found. In 1971 the Point Lookout member of the Blanco Mesa Verde was opened and then cement squeezed due to water production. No production was made from the Mesa Verde at that time.

Production from the Blanco Mesa Verde and the Basin Dakota is included in a 294.52 acre gas spacing and proration unit ("GPU") comprising of the south half (S/2) of Section 5.

To comply with the New Mexico Oil Conservation Division rules, we are submitting the following for your approval of this non-standard location:

1. Original Application for Permit to Drill and C102 plat - 1961
2. C-102 plat showing location of the well - revised 1969;
3. Plat showing offset owners/operators;
4. Affidavit of notification of offset owners/operators;
5. Copy of Well Completion Log for original completion.
6. Subsequent sundry for opening and squeeze cementing Mesa Verde in 1971

Mr. Michael Stogner
Page Two
March 27, 1998

Grenier B #3 Application for Non-Standard Location

Three copies of this application are being submitted to all offset owners/operators by certified mail with a request that they furnish your Santa Fe office with a copy of Waiver of Objection, return one copy to this office, and retain one copy for their files.

Sincerely yours,

BURLINGTON RESOURCES



Peggy Bradfield
Regulatory/Compliance Representative

WAIVER

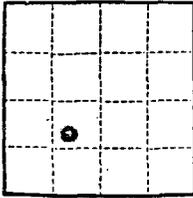
_____ hereby waives objection to Burlington Resources' application for non-standard location for the Grenier B #3 as proposed above.

By: _____ Date: _____

xc: Bureau of Land Management – Farmington
New Mexico Oil Conservation Division – Aztec
Amoco Production
Conoco Inc.

(SUBMIT IN TRIPPLICATE)

Land Office Santa Fe
Lease No. 87-078215
Unit Grenier



UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

FEB 19 1962
J. M. Salmon
P. O. Box 570
Farmington, N.M.

SUNDRY NOTICES AND REPORTS ON WELLS

NOTICE OF INTENTION TO DRILL.....	<input checked="" type="checkbox"/>	SUBSEQUENT REPORT OF WATER SHUT-OFF.....	
NOTICE OF INTENTION TO CHANGE PLANS.....		SUBSEQUENT REPORT OF SHOOTING OR ACIDIZING.....	
NOTICE OF INTENTION TO TEST WATER SHUT-OFF.....		SUBSEQUENT REPORT OF ALTERING CASING.....	
NOTICE OF INTENTION TO RE-DRILL OR REPAIR WELL.....		SUBSEQUENT REPORT OF RE-DRILLING OR REPAIR.....	
NOTICE OF INTENTION TO SHOOT OR ACIDIZE.....		SUBSEQUENT REPORT OF ABANDONMENT.....	
NOTICE OF INTENTION TO PULL OR ALTER CASING.....		SUPPLEMENTARY WELL HISTORY.....	
NOTICE OF INTENTION TO ABANDON WELL.....			

(INDICATE ABOVE BY CHECK MARK NATURE OF REPORT, NOTICE, OR OTHER DATA)

February 16, 1962

Grenier "B"
Well No. 3 is located 1650 ft. from N line and 1650 ft. from E line of sec. 5

S.W. 1/4, Section 5 23N 10W H.M.F.M.
(1/4 Sec. and Sec. No.) (Twp.) (Range) (Meridian)

Maine Dakota San Juan New Mexico
(Field) (County or Subdivision) (State or Territory)

The elevation of the derrick floor above sea level is 5775 ft. (Ungraded Ground)

DETAILS OF WORK

(State names of and expected depths to objective sands; show sizes, weights, and lengths of proposed casings; indicate mudding jobs, cementing points, and all other important proposed work)

Propose To: Set 300 ft. of 6 5/8" surface casing and cement to surface. Drill with rotary to approximate total depth of 6775 ft. or through the Dakota formation. Set 4 1/2" production casing at total depth and cement with 200 sx. Set two-stage cement collar below the Mesaverde formation and cement with 400 sx. to cover the Mesaverde and Pictured Cliffs formations.

Perforate the Dakota and sand-water frac with approximately 80,000# sand and 80,000 gals. water. Run 2 3/8" tubing.

South one-half, 180 acres, of Section 5 dedicated to this well.

I understand that this plan of work must receive approval in writing by the Geological Survey before operations may be commenced.

Company Astec Oil and Gas Company

Address P. O. Drawer 570

Farmington, New Mexico

ORIGINAL SIGNED BY JOE C. SALMON

By Joe C. Salmon

Title District Superintendent

NEW MEXICO OIL CONSERVATION COMMISSION
Well Location and Acreage Dedication Plat

SECTION A

Date February 15, 1962

Operator Astec Oil and Gas Company Lease Granior "D"
Well No. 3 Unit Letter K Section 5 Township 29N Range 10W NMPM
Located 1650 Feet From South Line 1650 Feet From West Line
County San Juan G. L. Elevation 5775 Dedicated Acreage 30 Acres
Name of Producing Formation Dakota Pool Granior

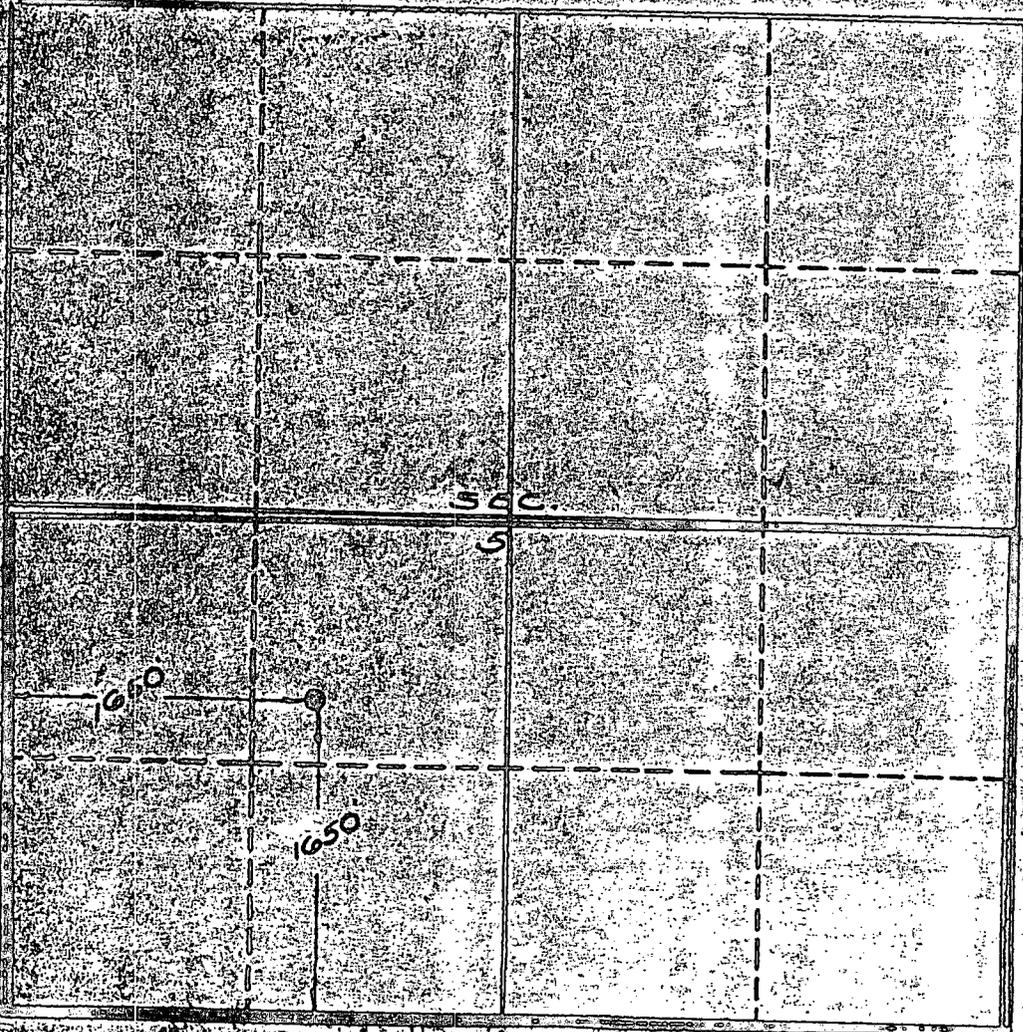
1. Is the Operator the only owner in the dedicated acreage outlined on the plat below? Yes No

2. If the answer to question One is "No," have the interests of all the owners been consolidated by communitization agreement or otherwise? Yes No If answer is "Yes," Type of Consolidation _____

3. If the answer to question Two is "No," list all the owners and their respective interests below:

OWNER	LAND DESCRIPTION

SECTION B



This is to certify that the information in Section A above is true and complete to the best of my knowledge and belief.

Astec Oil and Gas Company
(OPERATOR)

ORIGINAL SIGNED BY JOE C. SALMON

(REPRESENTATIVE)

Joe C. Salmon, Dist. Supt.
Drawer 570, Farmington, N.M.
(ADDRESS)

This is to certify that the well location shown on the plat in Section B 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 Surveyed FEB 13 1962

Four States Engineering Co.
FARMINGTON, NEW MEXICO

John W. Vial
REGISTERED ENGINEER OR
LAND SURVEYOR

Certificate No. 598



0		

(SUBMIT IN TRIPLICATE)

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

Land Office Santa Fe
Lease No. NM 03561
Unit Grenier

SUNDRY NOTICES AND REPORTS ON WELLS

NOTICE OF INTENTION TO DRILL.....	SUBSEQUENT REPORT OF WATER SHUT-OFF.....	XX
NOTICE OF INTENTION TO CHANGE PLANS.....	SUBSEQUENT REPORT OF SHOOTING OR ACIDIZE.....	
NOTICE OF INTENTION TO TEST WATER SHUT-OFF.....	SUBSEQUENT REPORT OF ALTERING CASING.....	
NOTICE OF INTENTION TO RE-DRILL OR REPAIR WELL.....	SUBSEQUENT REPORT OF RE-DRILLING OR REPAIR.....	
NOTICE OF INTENTION TO SHOOT OR ACIDIZE.....	SUBSEQUENT REPORT OF ABANDONMENT.....	
NOTICE OF INTENTION TO PULL OR ALTER CASING.....	SUPPLEMENTARY WELL HISTORY.....	
NOTICE OF INTENTION TO ABANDON WELL.....		

(INDICATE ABOVE BY CHECK MARK NATURE OF REPORT, NOTICE, OR OTHER DATA)

February 28, 1962

Grenier "B"
Well No. 3 is located 1650 ft. from S line and 1650 ft. from W line of sec. 5

SW 1/4 Section 5 T-29N R-10W N.M.P.M.
(1/4 Sec. and Sec. No.) (Twp.) (Range) (Meridian)

Basin Dakota San Juan New Mexico
(Field) (County or Subdivision) (State or Territory)

The elevation of the derrick floor above sea level is 5775 ft. G.L.

DETAILS OF WORK

(State names of and expected depths to objective sands; show sizes, weights, and lengths of proposed casings; indicate mudding jobs, cementing points, and all other important proposed work)

Well was spudded 2/21/62
Set 9 jts., 282' of 8 5/8" casing, landed at 294' with 225 sx. cmt/
Tested casing with 500# pressure for 30 minutes. No leaks.
Drilled cement 2/23/62
Tested with 500# pressure for 30 minutes
No drop in pressure.

I understand that this plan of work must receive approval in writing by the Geological Survey before operations may be commenced.

Company Aztec Oil & Gas Company

Address Drawer # 570

Farmington, New Mexico

By Joe C. Salmon

Title District Superintendent

OK
28

MEXICO OIL CONSERVATION COMMISSION
WELL LOCATION AND ACREAGE DEDICATION PLAT

Form O-162
Supersedes O-128
Effective 1-1-65

All distances must be from the outer boundaries of the Section.

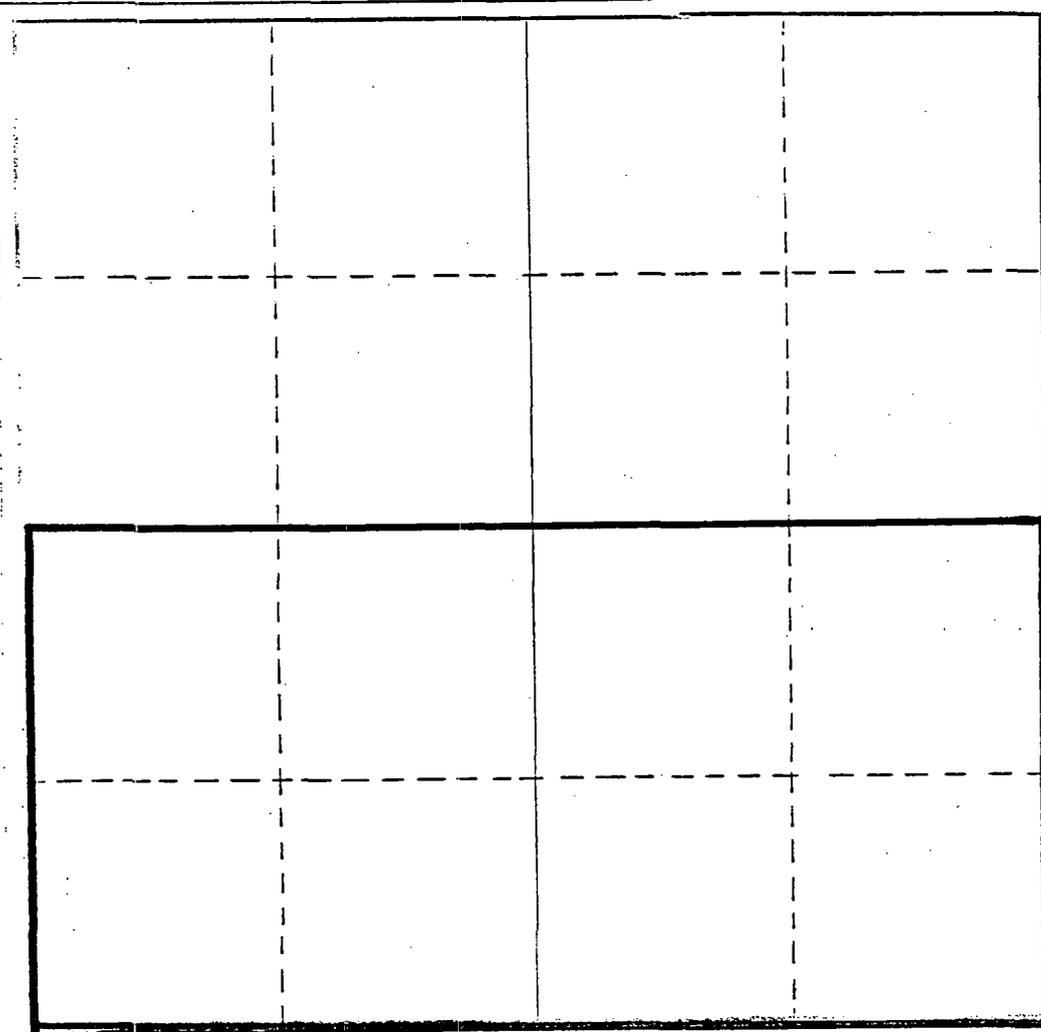
Operator Aztec Oil & Gas Company		Lease Grenier "B"		Well No. #3
Unit Letter F	Section 5	Township 29 North	Range 10 West	County San Juan
Actual Footage Location of Well:				
1225 feet from the South line and		2070 feet from the West line		
Ground Level Elev: 5775	Producing Formation Blanco	Pool Mesaverde	Dedicated Acreage: 294.52 Acres	

1. Outline the acreage dedicated to the subject well by colored pencil or hachure marks on the plat below.
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).
3. If more than one lease of different ownership is dedicated to the well, have the interests of all owners been consolidated by communitization, unitization, force-pooling, etc?

Yes No If answer is "yes," type of consolidation _____

If answer is "no," list the owners and tract descriptions which have actually been consolidated. (Use reverse side of this form if necessary.) _____

No allowable will be assigned to the well until all interests have been consolidated (by communitization, unitization, forced-pooling, or otherwise) or until a non-standard unit, eliminating such interests, has been approved by the Commission.



CERTIFICATION

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

Joe C. Salmon

Name
Joe C. Salmon

Position
District Superintendent

Company
Aztec Oil & Gas Company

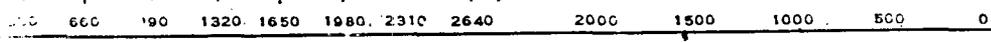
Date
December 9, 1971

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 Surveyed _____

Registered Professional Engineer and/or Land Surveyor _____

Certificate No. _____



BURLINGTON RESOURCES OIL AND GAS COMPANY

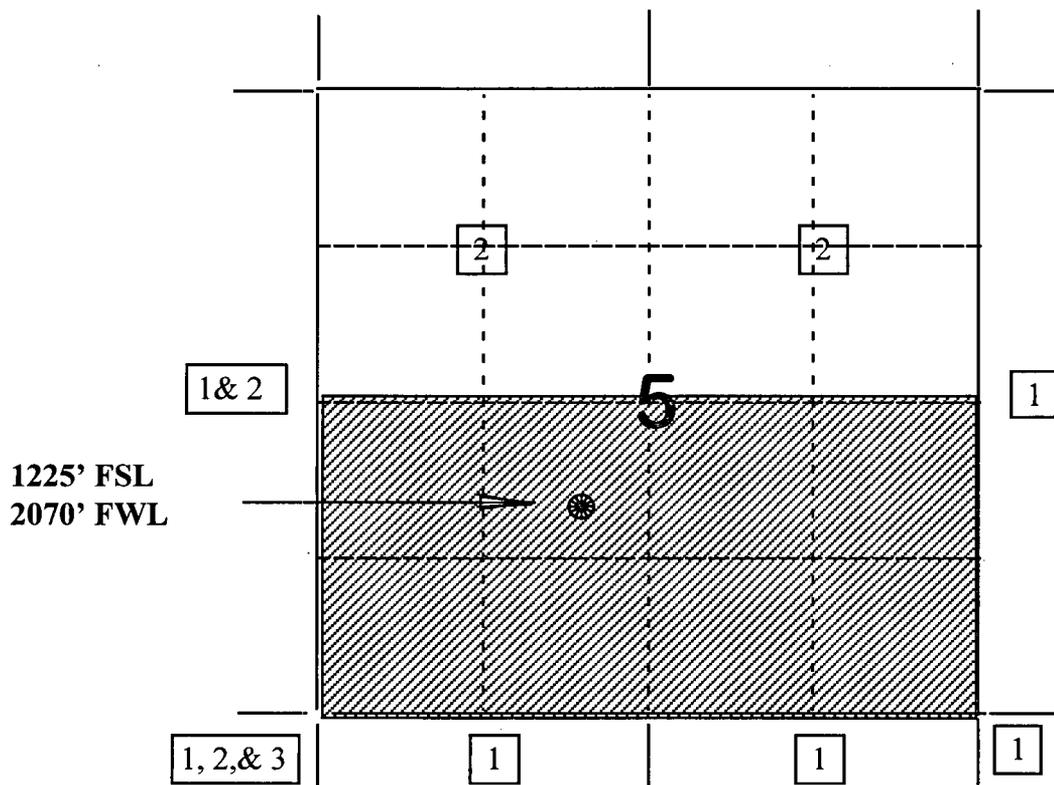
Grenier B #3

OFFSET OPERATOR/OWNER PLAT

Non Standard Location

Mesaverde / Dakota Formations Well

Township 29 North, Range 10 West



- 1) Burlington Resources
- 2) Amoco Production Company
c/o Bruce Zimney
P.O. Box 800
Denver, CO 80201
- 3) Conoco, Inc.
10 Desta Drive, Ste. 100W
Midland, TX 79705-4500

Grenier B #3
1225'FSL, 2070'FWL, Section 5, T-29-N, R-10-W, San Juan County
30-045-08695

I hereby certify that the following offset owners/operators have been notified by certified mail of our application for administrative approval for non-standard well location of the above well.

Amoco Production Company
Att: Bruce Zimney
PO Box 800
Denver, CO 80201

Conoco Inc.
10 Desta Drive, Suite 100W
Midland, TX 79705-4500



Peggy Bradfield
Regulatory/Compliance Administrator

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

SUBMIT IN TRIPLI
(Other instruction
reverse side)

Form approved.
Budget Bureau No. 42-R1424.
SEE DESIGNATION AND SERIAL NO.

NM-03561

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.)

<p>1. OIL WELL <input type="checkbox"/> GAS WELL <input checked="" type="checkbox"/> OTHER <input type="checkbox"/></p> <p>2. NAME OF OPERATOR Aztec Oil & Gas Company</p> <p>3. ADDRESS OF OPERATOR P.O. Drawer 570, Farmington, New Mexico</p> <p>4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.* Give surface 17 below.) 1650' FSL & 1650' FWL Section 5-29N-10W</p> <p>5. PERMIT NO.</p>	<p>6. IF INDIAN, ALLOTMENT OR TRIBE NAME</p> <p>7. UNIT AGREEMENT NAME</p> <p>8. FARM OR LEASE NAME Grenier "B"</p> <p>9. WELL NO. #3</p> <p>10. FIELD AND POOL, OR WILDCAT Basin Dakota Blanco Mesaverde</p> <p>11. SEC., T., E., M., OR BLK. AND SURVEY OR AREA Section 5-29N-10W</p> <p>12. COUNTY OR PARISH San Juan</p> <p>13. STATE New Mexico</p>
<p>15. ELEVATIONS (Show whether DF, RT, GR, etc.) 5775 GR</p>	

16. Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:		SUBSEQUENT REPORT OF:	
TEST WATER SHUT-OFF <input type="checkbox"/>	PULL OR ALTER CASING <input type="checkbox"/>	WATER SHUT-OFF <input type="checkbox"/>	REPAIRING WELL <input type="checkbox"/>
FRACTURE TREAT <input type="checkbox"/>	MULTIPLE COMPLETE <input type="checkbox"/>	FRACTURE TREATMENT <input type="checkbox"/>	ALTERING CASING <input type="checkbox"/>
SHOOT OR ACIDIZE <input type="checkbox"/>	ABANDON* <input type="checkbox"/>	SHOOTING OR ACIDIZING <input type="checkbox"/>	ABANDONMENT* <input type="checkbox"/>
REPAIR WELL <input type="checkbox"/>	CHANGE PLANS <input type="checkbox"/>	(Other) <input type="checkbox"/> MULTIPLE COMPLETE	
(Other) <input type="checkbox"/>		(NOTE: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)	

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work).*

- 12-11-71 Moved in, rigged up. Set choke at 6540'. Pulled tubing. Ran Casing Inspection log. Set bridge plug at 4706'. Tested casing to 2800#, held ok. Ran Bond log, showed good bond.
- 12-12-71 Perforated from 4470-85, 4495-4505. 2 shots per foot. Fraced with 1490 Bbls of water and 40,000# 20/40 sand and 20,000# 10/20 sand. Average Injection rate 57 BPM, Average pressure 1200#, Maximum pressure 2100#, Shut in pressure 300#, in 5 minutes shut in pressure.
- 12-13-71 Blowing well. Making 1" stream water, very little gas.
- 12-14-71 Set retainer at 4306'. Cemented with 200 sacks of Class "A" with 2% Cacl. Squeezed off with 2200#.
- 12-15-71 Drilled retainer at 4306'. Tested casing to 500#, held ok. Drilled bridge plug at 4706'. Cleaned out to P.B.T.D. 6795'.
- 12-16-71 Ran 201 jts of 2-3/8" tubing. Tubing landed at 6605'. Rigged down.

18. I hereby certify that the foregoing is true and correct
 SIGNED Jac. A. Johnson TITLE District Superintendent DATE December 16, 1971

(This space for Federal or State office use)

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

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

RECEIVED
BLM

Sundry Notices and Reports on Wells

97 DEC 15 PM 2:08

1. Type of Well
GAS

070 FARMINGTON, NM

- 5. Lease Number
NM-03561
- 6. If Indian, All. or
Tribe Name
- 7. Unit Agreement Name

2. Name of Operator

**BURLINGTON
RESOURCES** OIL & GAS COMPANY

3. Address & Phone No. of Operator

PO Box 4289, Farmington, NM 87499 (505) 326-9700

- 8. Well Name & Number
Grenier B #3
- 9. API Well No.
30-045-08695
- 10. Field and Pool
Blanco MV/Basin DK
- 11. County and State
San Juan Co, NM

4. Location of Well, Footage, Sec., T, R, M

1225' FSL, 2070' FWL, Sec.5, T-29-N, R-10-W, NMPM

12. CHECK APPROPRIATE BOX TO INDICATE NATURE OF NOTICE, REPORT, OTHER DATA

Type of Submission

Type of Action

- | | | |
|--|---|--|
| <input checked="" type="checkbox"/> Notice of Intent | <input type="checkbox"/> Abandonment | <input type="checkbox"/> Change of Plans |
| <input type="checkbox"/> Subsequent Report | <input checked="" type="checkbox"/> Recompletion | <input type="checkbox"/> New Construction |
| <input type="checkbox"/> Final Abandonment | <input type="checkbox"/> Plugging Back | <input type="checkbox"/> Non-Routine Fracturing |
| | <input type="checkbox"/> Casing Repair | <input type="checkbox"/> Water Shut off |
| | <input type="checkbox"/> Altering Casing | <input type="checkbox"/> Conversion to Injection |
| | <input checked="" type="checkbox"/> Other - Commingle | |

13. Describe Proposed or Completed Operations

It is intended to add the Mesaverde formation to the subject well according to the attached procedure and wellbore diagram. The well will then be down-hole commingled. A down-hole commingle order will be applied for.

RECEIVED
DEC 17 1997

14. I hereby certify that the foregoing is true and correct.

Signed *Duane W. Spencer* (PMPOpps) Title Regulatory Administrator Date 12/11/97

(This space for Federal or State Office use)

APPROVED BY /s/ Duane W. Spencer Title _____ Date DEC 17 1997

CONDITION OF APPROVAL, if any:

*Hold C-104
for NSL*

MAILED

District I
PO Box 1980, Hobbs, NM 88241-1980

District II
PO Drawer 00, 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 ()
Revised February 21,
Instructions on
Submit to Appropriate District O
State Lease - 4 C
Fee Lease - 3 C

97 DEC 15 PM 2:08 AMENDED REP

WELL LOCATION AND ACREAGE DEDICATION PLAT

*API Number 30-045-08695		*Pool Code 72319/71599	*Pool Name Blanco Mesaverde/Basin Dakota
*Property Code 18532	*Property Name GRENIER B		*Well Number 3
*GRID No. 14538	*Operator Name BURLINGTON RESOURCES OIL & GAS COMPANY		*Elevation 5775'

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
K	5	29N	10W		1225	SOUTH	2070	WEST	SAN J

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 MV-S/294.52 DK-S/294.52	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 *NOT RESURVEYED.
PREPARED FROM A PLAT
BY ERNEST V. ECHOHAWK
DATED 4-17-69.

17 OPERATOR CERTIFICATE

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

Peggy Bradfield
Signature

Peggy Bradfield
Printed Name

Regulatory Administrator
Title

12-11-97
Date

18 SURVEYOR CERTIFICATE

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made or under my supervision, and that the same is true and correct to the best of my belief.

DECEMBER 2, 1997
Date of Survey

Neil C. Edwards
Signature

NEIL C. EDWARDS
NEW MEXICO
6857
REGISTERED PROFESSIONAL SURVEYOR

6857
Certificate Number

GRENIER B #3 MV-DK
Recompletion Procedure
K 5 29 10
San Juan County, N.M.
Lat-Long: 36-45.13" - 107-54.64"

PROJECT SUMMARY: Open the Mesaverde in this existing Dakota well and commingle.

1. Comply to all NMOCD, BLM, and BROG rules and regulations. MOL and RU completion rig. NU 7-1/16" 3000 psi BOP w/flow tee and stripping head. Test operation of rams. NU blooie line and 2-7/8" relief line.
2. Set blanking plug in S.N. @ 6654' in 2-3/8" tbg and pressure test tbg to 2000 psi. TOH w/2-3/8" tbg. Run 4-1/2" csg scraper on 2-3/8" tbg to 4800". TOH. Run 4-1/2" retrievable BP on 2-3/8" tbg and set @ 4750" and top w/1 sx sand.
3. W/2-3/8" tbg @ 4740', load hole w/1% KCL water. TOH.
4. Run CBL from 4740' to find TOC above DV tool @ 4760' and an advanced integrated data processed GSL neutron log 4740'-3700' and correlate to attached open hole log. If necessary, pressure csg to 1000 psi for CBL log. **Hot-shot** logs to Mike Pippin (326-9848) to determine location of MV perfs. Pressure test 4-1/2" csg to 1000 psi.

POINT LOOKOUT:

5. TIH w/2-3/8" tbg open ended and spot 200 gal 15% HCL acid across Point Lookout perfs @ about ~4720'-4460'. TOH.
All acid on this well to contain the following additives per 1000 gal:

2 gal	CI-22	corrosion inhibitor
5 gal	Ferrotrol-300L	iron control
1 gal	Fio-back 20	Surfactant
0.5 gal	Clay Master-5C	clay control
6. Using GSL log, perf Point Lookout w/about 20 holes @ 1 spf @ about 4460' to 4720'. Perf w/select fire HSC gun using HSC-3125-302T 10 gr Owen jets which should give a 0.29" hole and 16.64" of penetration in concrete.
7. Fill 6 - 400 bbl. frac tanks with 1% KCL water. If necessary, filter all water to 25 microns. Five tanks are for gel and one tank for breakdown water. Usable gel water required for frac is 1453 bbls.
8. TIH w/4-1/2" pkr on 2-7/8" 6.5# N-80 w/shaved collars (3.5" O.D. 2.441" I.D.) rental frac string and set @ 4740' and pressure test ret BP @ 4750' to 3000 psi, then reset pkr @ 4200'. (Run 2 jts 2-3/8" N-80 on top of pkr). W/ 500 psi on annulus, breakdown and attempt to balloff Point Lookout perfs w/1500 gal 15% HCL acid and 150% excess RCN 7/8" 1.3 sp gr perf balls. Use same acid additives as in step #5. Max. pressure is 4300 psi. Lower pkr to 4740' to knock off perf balls. Reset pkr @ 4400'.
9. Pressure annulus to 500 psi and monitor during frac job. Frac Point Lookout w/60,000 gals. of 30# gel and 90,000# 20/40 Arizona sand. Pump at 40 BPM. Sand to be tagged w/ 3 RA tracers. Max. pressure is 5500 psi and estimated treating pressure is 4200 psi. Treat per the following schedule:

GRENIER B #3 MV-DK - OPEN AND FRAC MV AND COMMINGLE W/EXISTING DK

<u>Stage</u>	<u>Water (Gals.)</u>	<u>Sand Vol. (lbs.)</u>
Pad	15,000	—
1.0 ppg	10,000	10,000
2.0 ppg	25,000	50,000
3.0 ppg	10,000	30,000
Flush	<u>(1,070)</u>	<u>0</u>
Totals	60,000	90,000#

If well is on vacuum near end of frac job, cut flush as necessary to avoid overflushing and slow rate during flush. Frac with the following additives per 1000 gal frac fluid.

- * 30# J-48 (Guar Gel mix in full tank - 16,000 gal)
- * 1.0 gal. Aqua Flow (Non-ionic Surfactant mix in full tank)
- * 1.0# gvw-3 (Enzyme Breaker mix on fly)
- * 1.0# B-5 (Breaker mix on fly)
- * 0.38# - Fracide 20 (Bacteriacide in full tank)

10. Shut well in for 4 hrs to let gel break. TOH w/2-7/8" tbg and pkr. TIH w/3-7/8" bit on 2-3/8" tbg and C.O. Point Lookout w/air/mist to insure a ret BP can be set @ 4440'.

MENEFEE:

11. Set ret BP @ 4440' on wireline and top w/1 sx sand. TIH w/4-1/2" pkr on 2-3/8" tbg and set @ 4430'. Pressure test BP @ 4440' to 3000 psi. Spot 200 gal 15% HCL acid across Menefee perfs at about ~4400'~4130'. Use same acid additives as in step #5.
12. Using GSL log, perf Menefee w/about 20 holes @ 1 spf. Perf w/select fire HSC gun using HSC-3125-302T 10 gr Owen jets which should give a 0.29" hole and 16.64" of penetration in concrete.
13. Fill 6 - 400 bbl. frac tanks with 1% KCL water. If necessary, filter all water to 25 microns. Five tanks are for gel and one tank for breakdown water. Usable gel water required for frac is 1690 bbls.
14. TIH w/4-1/2" pkr on 2-7/8" 6.5# N-80 w/shaved collars (3.5" O.D. 2.441" I.D.) rental frac string and set pkr @ 3900'. (Run 2 jts 2-3/8" N-80 on top of pkr). W/ 500 psi on annulus, breakdown and attempt to balloff Menefee perfs w/1500 gal 15% HCL acid and 150% excess RCN 7/8" 1.3 sp gr perf balls. Use same acid additives as in step #5. Max. pressure is 4300 psi. Lower pkr to 4420' to knock off perf balls. Reset pkr @ 4050' and prepare to frac.
15. Pressure annulus to 500 psi and monitor during frac job. Frac Menefee w/70,000 gals. of 30# gel and 120,000# 20/40 Arizona sand. Pump at 40 BPM. Sand to be tagged w/ 3 RA tracers. Max. pressure is 5500 psi and estimated treating pressure is 4200 psi. Treat per the following schedule:

<u>Stage</u>	<u>Water (Gals.)</u>	<u>Sand Vol. (lbs.)</u>
Pad	15,000	—
1.0 ppg	10,000	10,000
2.0 ppg	25,000	50,000
3.0 ppg	20,000	60,000
Flush	<u>(985)</u>	<u>0</u>
Totals	70,000	120,000#

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GRENIER B #3 MV-DK - OPEN AND FRAC MV AND COMMINGLE W/EXISTING DK

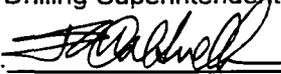
If well is on vacuum near end of frac job, cut flush as necessary to avoid overflushing and slow rate during flush. Frac with the following additives per 1000 gal frac fluid.

- * 30# J-48 (Guar Gel mix in full tank - 16,000 gal)
- * 1.0 gal. Aqua Flow (Non-ionic Surfactant mix in full tank)
- * 1.0# gvw-3 (Enzyme Breaker mix on fly)
- * 1.0# B-5 (Breaker mix on fly)
- * 0.38# - Fracide 20 (Bactericide in full tank)

16. Shut well in for 4 hrs to let gel break.
17. Open well through choke manifold and monitor flow. Flow @ 20 bbl/hr. or less, if sand is observed. Take pitot gauges when possible. TOH w/pkr.
18. TIH w/retrieving tool on 2-3/8" tbg and C.O. to ret BP @ 4440' w/air/mist. Monitor gas and water returns and Take pitot gauges when possible. When well is sufficiently clean, retrieve BP @ 4440'. TOH.
19. TIH w/retrieving tool on 2-3/8" tbg and C.O. (w/air/mist) to ret BP @ 4750'. Take pitot gauges when possible. When well is sufficiently clean, retrieve BP @ 4750' and TOH.
20. TIH w/3-7/8" bit on 2-3/8" tbg and C.O. to PBSD 6745' w/air/mist **NOTE: Do not drill BP @ 6745'.** Take pitot gauges when possible.
21. When wellbore is sufficiently clean, TOH and run after frac gamma-ray log from 4800'-3700 and perf eff log across all perf intervals from 6745'-3700'.
22. TIH and rabbit 2-3/8" 4.7# J-55 tbg w/standard seating nipple one joint off bottom and again cleanout to 6745'. When wellbore is sufficiently clean, land tbg @ 6650 KB. Take final water and gas rates.
23. ND BOP and NU wellhead and tree. Rig down and release rig.

Recommended: 
Production Engineer

Approved:  11/16/97
Drilling Superintendent

Approved:  11/16/97
Team Leader

VENDORS:

Wireline:	Blue Jet	325-5584
Fracturing:	Howco	325-3575
RA Tag:	Pro-Technics	326-7133

PMP

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Pertinent Data Sheet - GRENIER B #3 MV-DK

K 5 29 10

Location: 1225' FSL & 2070' FWL, Unit K Section 5 T29N, R10W, San Juan County, New Mexico

Field: Blanco Mesaverde
Basin Dakota

Elevation: 5786' GL
??' KB

TD: 6830'
PBTD: 6745'

Completion Date: 3/12/62

Spud Date: 2/21/62

Lease#: Fed. NM-03561
DK DP #: 25662
MV DP#: 33901A-3
GWI: 100%
NRI: 83.07%
Prop#: 0020376A

Initial Potential:

DK: AOF=1655 MCF/D, SICP=1970 PSI

Casing Record:

<u>Hole Size</u>	<u>Csg Size</u>	<u>Wt. & Grade</u>	<u>Depth Set</u>	<u>Cement</u>	<u>Cement (Top)</u>
e12-1/4"	8-5/8"	24# J-55	294'	225 sx	Cmt Circ
7-7/8"	4-1/2"	9.5&11.6#J-55	6830'	250 sx	5440'- Survey
		Stg Tool @	4760'	480 sx	2050'- Survey

Tubing Record:

2-3/8"	4.7# J-55	6686'	213 Jts
	"F" nipple @	6654'	

Formation Tops:

Ojo Alamo:	930'		
Kirtland Shale:	1050'	Cliffhouse	3754'
Fruitland:	1826	Point Lookout	4448'
Pictured Cliffs:	2166'	Gallup	5699'
		Dakota	6630'

Logging Record: Induction Log, GRN (DK), Csg Inspection Log, CBL

Stimulation: Perfed DK w/4 spf @ 6634'-60', 6690'-6702', 6762'-86' & fraced w/45,000# sand in water.

Workover History: 12/16/71: Ran csg insp log. Ran CBL. Perf MV 4470'-85', 4495'-4505' w/2 spf & fraced w/60,000# sand in water. Only cleaned well for 24 hrs. Tested 1" stream water w/very little gas. Sq MV perfs w/200 sx cmt.

7/15/97: Tbg repair workover. Drill out CIBP @ 6713'. Tested DK "wet". Set CIBP @ 6745'. TIH w/tbg.

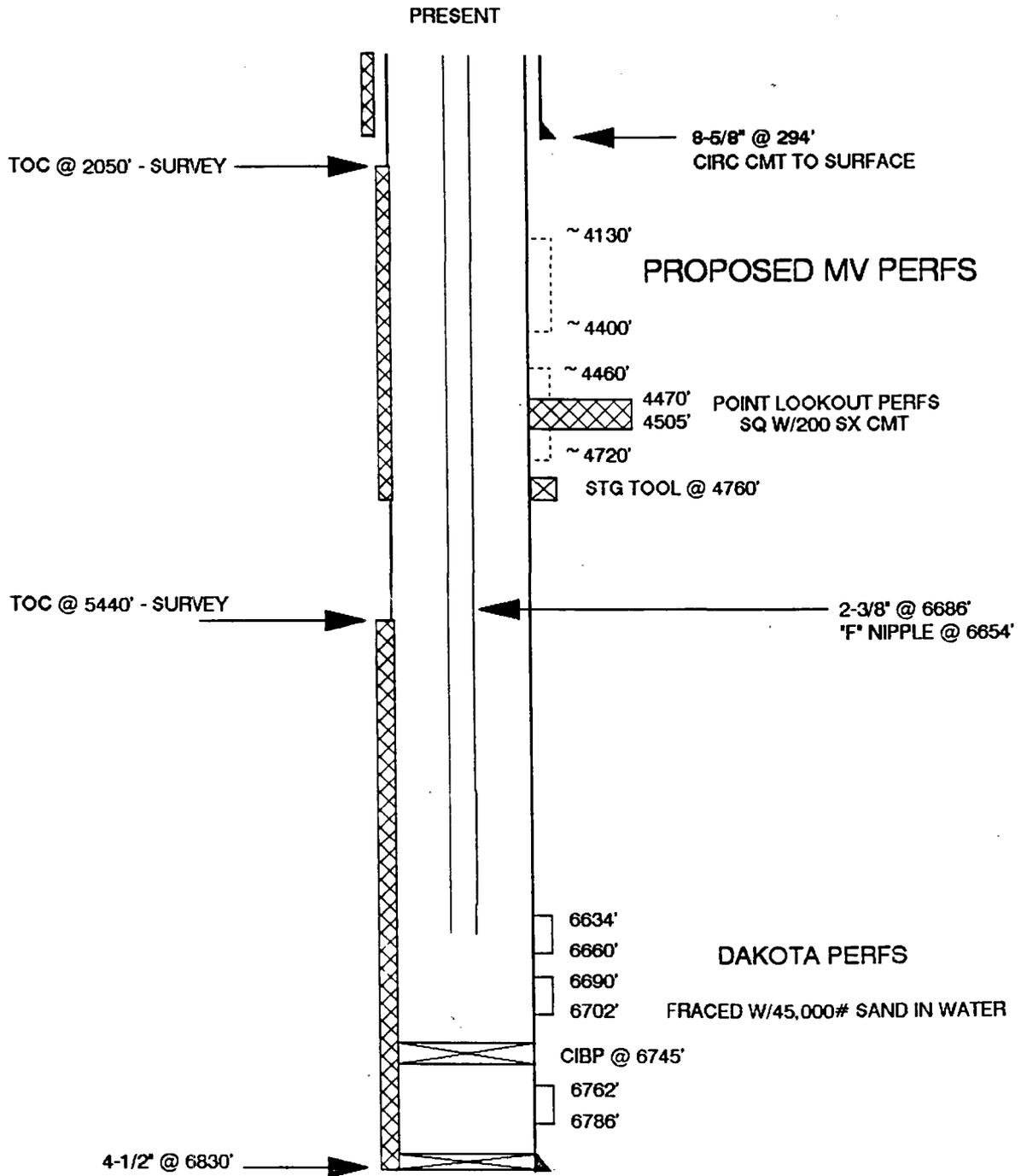
Production History: 1st delivered DK 7/26/62. DK cum = 723 MMCF & 7,074 BO. See attached DK production curve. Current DK production is 40 MCF/D.

Pipeline: Williams Field Service

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GRENIER B #3 MV-DK

UNIT K SECTION 5 T29N R10W
SAN JUAN COUNTY, NEW MEXICO



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