

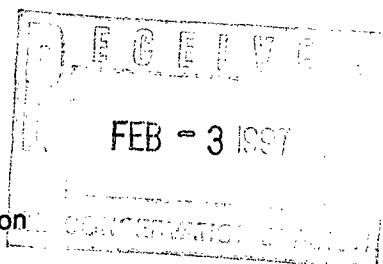
**BURLINGTON
RESOURCES**

SAN JUAN DIVISION

January 31, 1997

SENT FEDERAL EXPRESS

Mr. William LeMay
New Mexico Oil Conservation Division
2040 South Pacheco Street
Santa Fe, New Mexico 87505



Re: Grenier B #4
1850'FNL, 1580'FEL Section 4, T-29-N, R-10-W, San Juan County, NM
API #30-045-08772

Dear Mr. LeMay:

This is a request for administrative approval for downhole commingling the Blanco Mesa Verde and Basin Dakota pools in the subject well. This well was originally drilled as a dual Dakota and Mesa Verde.

To comply with the New Mexico Oil Conservation Division rules, Burlington Resources Oil & Gas Company is submitting the following for your approval of this commingling:

1. Form C107A - Application for Downhole Commingling;
2. C-102 plat for each zone showing its spacing unit and acreage dedication;
3. Production curve for the Dakota and Mesa Verde for at least year;
4. Notification list of offset operators - Burlington is the offset operator;
5. Shut in wellhead pressure and calculated down hole pressure;
6. Nine-section plats for the Mesa Verde and Dakota.

As an offset operator of this you are being notified of this application as a requirement of the New Mexico Oil Conservation Division.

We will consult with the Supervisor of the Aztec District Office of the New Mexico Oil Conservation Division to establish an allocation formula.

Please let me know if you require additional data.

Sincerely,

Peggy Bradfield
Regulatory/Compliance Administrator

encs.

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 87410-1893

State of New Mexico
Energy, Minerals and Natural Resources Department
OIL CONSERVATION DIVISION
2040 S. Pacheco
Santa Fe, New Mexico 87505-6429

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

APPROVAL PROCESS :
X Administrative ___Hearing
EXISTING WELLBORE
X YES ___ NO

APPLICATION FOR DOWNHOLE COMMINGLING

Burlington Resources Oil & Gas Company PO Box 4289, Farmington, NM 87499

Operator Address
Grenier B 4 G 4-29-10 San Juan
Lease Well No. Unit Ltr. - Sec - Twp - Rge County

Spacing Unit Lease Types: (check 1 or more)

OGRID NO. _14538_ Property Code _18532_ API NO. _30-045-08772_ 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 Mesaverde - 72319		Basin Dakota - 71599
2. Top and Bottom of Pay Section (Perforations)	4650-4720'		6782-6940'
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 Gas & Oil - Flowing: Measured Current All Gas Zones: Estimated or Measured Original	(Current) a. 716 psi (see attachment)	a.	a. 742 psi (see attachment)
	(Original) b. 1248 psi (see attachment)	b.	b. 2496 psi (see attachment)
6. Oil Gravity (°API) or Gas BTU Content	BTU 1226		BTU 1119
7. Producing or Shut-In?	Producing		Producing
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. * If Producing, give data and oil/gas/water of recent test (within 60 days)	Date: n/a Rates:	Date: Rates:	Date: n/a Rates:
	Date: 10/96 Rates: 116 MCF/D 0.24 BOPD	Date: Rates:	Date: 11/96 Rates: 8 MCF/D 0.12 BOPD
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

9. 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.
10. Are all working, overriding, and royalty interests identical in all commingled zones? _X_ Yes ___ No
If not, have all working, overriding, and royalty interests been notified by certified mail? ___ Yes ___ No
Have all offset operators been given written notice of the proposed downhole commingling? _X_ Yes ___ No
11. 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)
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. NMOC Reference Cases for Rule 303(D) Exceptions: ORDER NO(S). _____
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.

SIGNATURE P. M. Pippin TITLE Production Engineer DATE 1/30/97

TYPE OR PRINT NAME P. M. Pippin TELEPHONE NO. (505) 326-9700

MEXICO OIL CONSERVATION BOARD WELL LOCATION AND ACREAGE DEDICATION PLAT

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

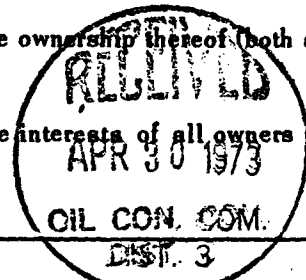
Operator Aztec Oil & Gas Company			Lease Grenier B		Well No. #4
Unit Letter G	Section 4	Township 29 North	Range 10 West	County San Juan	
Actual Footage Location of Wells: 1850 feet from the North line and 1580 feet from the East line					
Ground Level Elev. 5931 GR	Producing Formation Mesaverde		Pool Blanco	Dedicated Acreage: 293.29 228 Ac	

- Outline the acreage dedicated to the subject well by colored pencil or hachure marks on the plat below.
- If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to work interest and royalty).
- 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

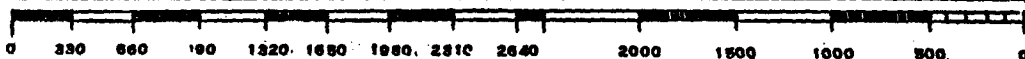
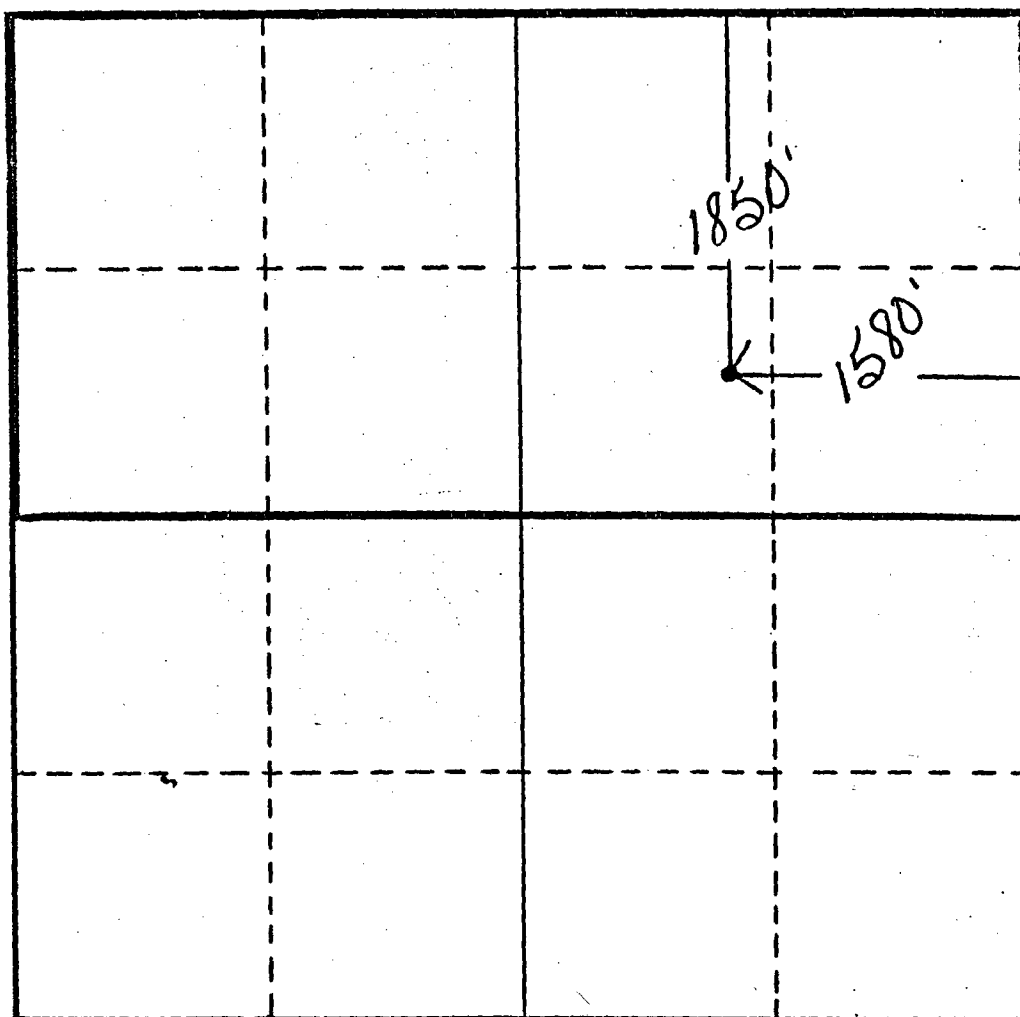
April 27, 1973

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.



Section 7		Range 10 North		Township 10 West		County San Juan	
Line and		1680		feet from the		East line	
Dedicated Acreage		N 293.29		Acres			
Basin Dakota		Basin Dakota					

1. Outline the acreage dedicated to the subject well by colored pencil or hatchure 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?

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Name

Joe C. Salmon

Position

District Superintendent

Company

Aztec Oil and Gas Company

Date

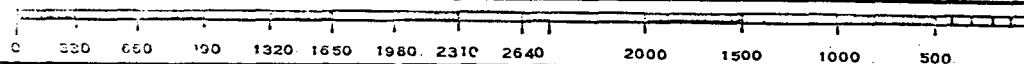
October 6, 1969

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.

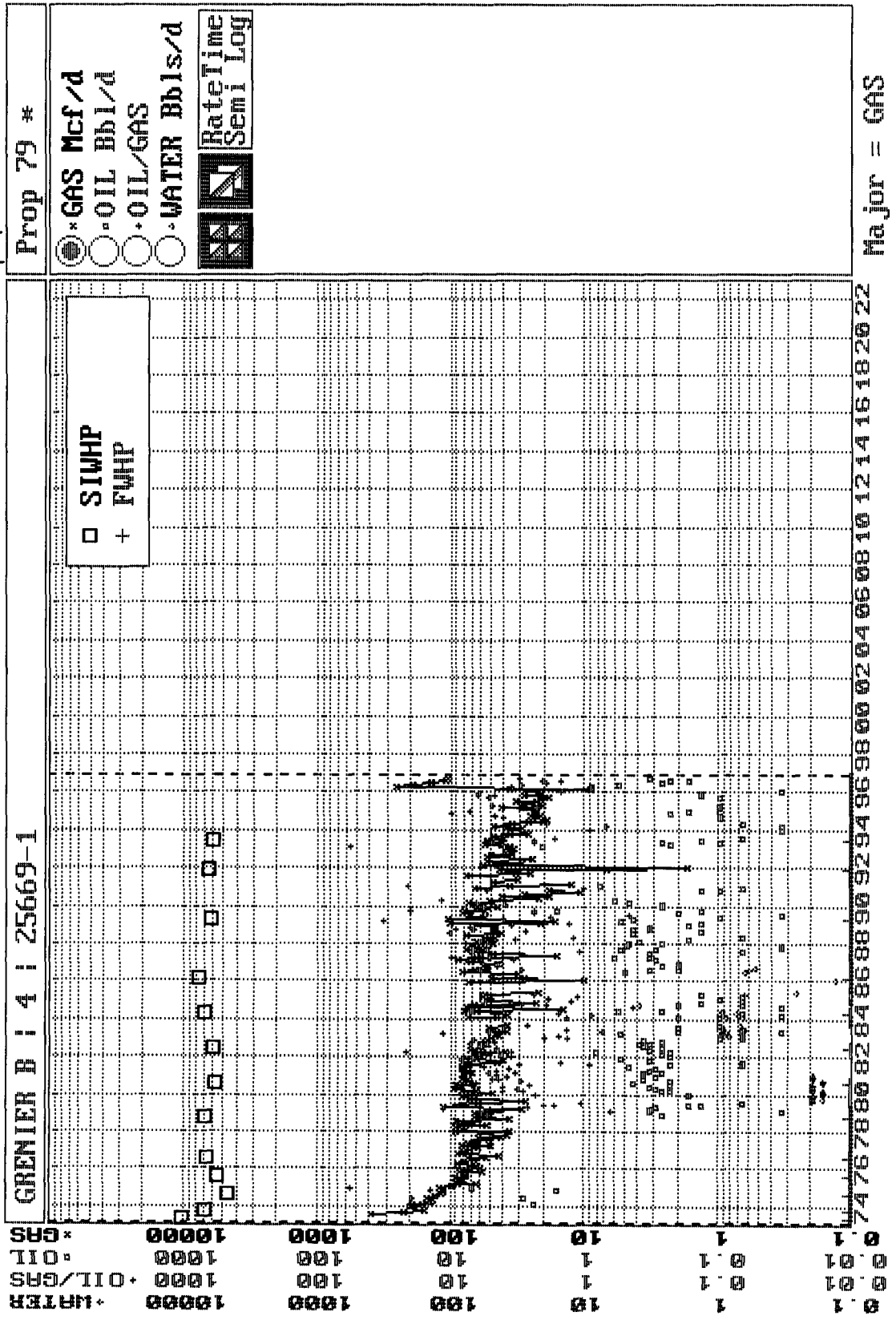
Date Surveyed

Registered Professional Engineer and/or Land Surveyor

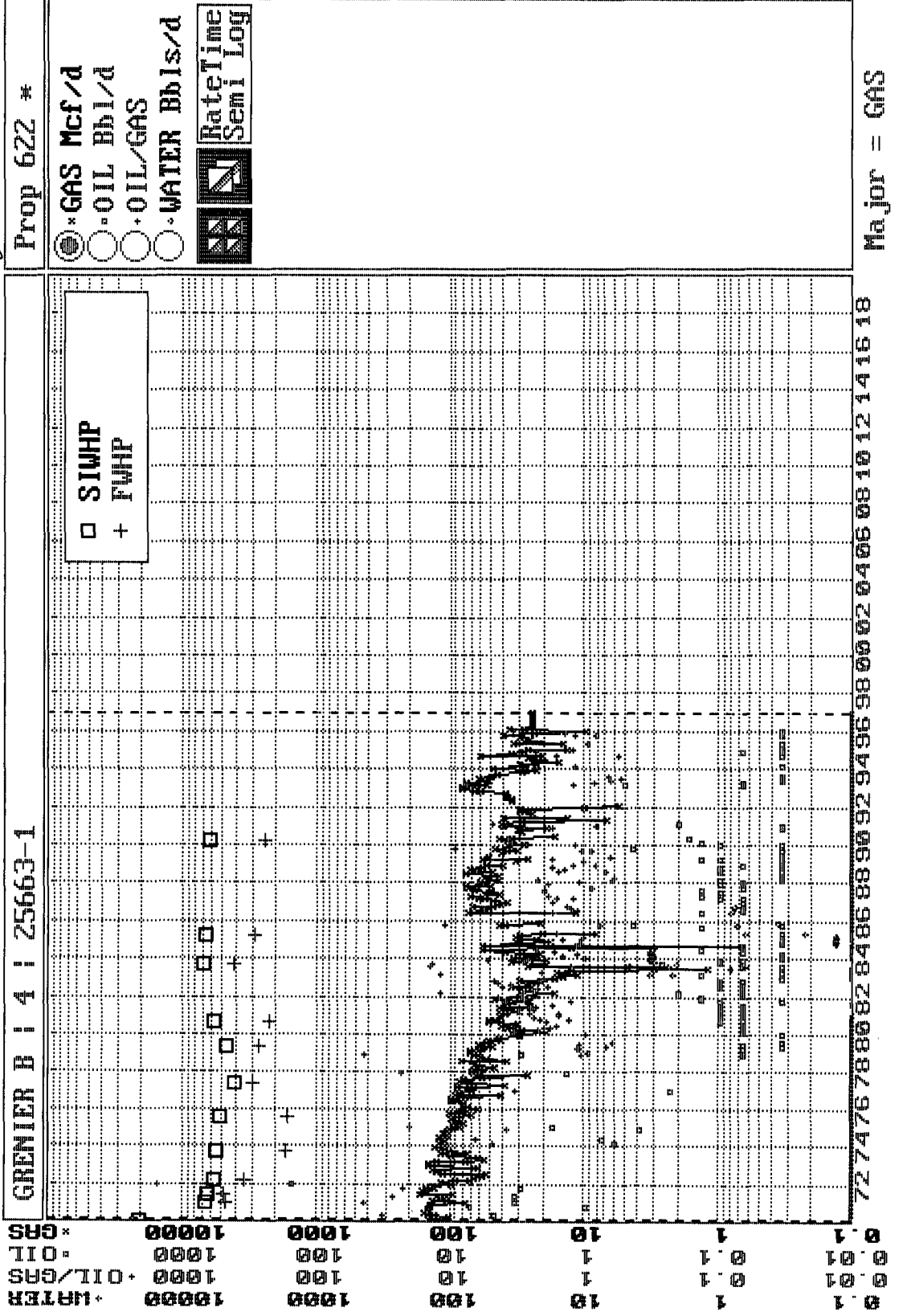
Certificate No.



MV



DK

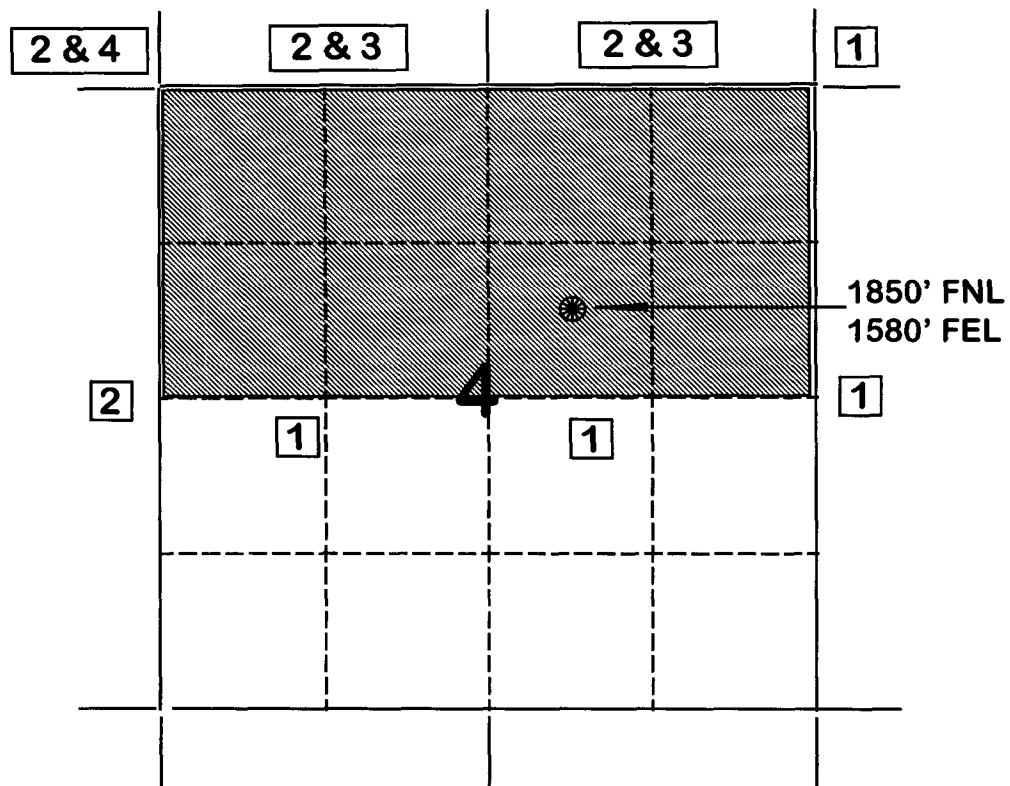


BURLINGTON RESOURCES OIL AND GAS COMPANY

**Grenier B #4
OFFSET OPERATOR \ OWNER PLAT**

Mesaverde/Dakota Formations Commingle Well

Township 29 North, Range 10 West



- 1) Burlington Resources Oil and Gas Company Successor to Meridian Oil Inc.
- 2) Amoco Production Company
Attn: Bruce Zimney
P.O. Box 800
Denver, CO 80201
- 3) Conoco Inc.
10 Desta Drive, Suite 100W
Midland, TX 79705-4500
- 4) Four Star Oil & Gas Company
P.O. Box 2100
Denver, CO 80201

**FLOWING AND STATIC BHP
CULLENDER AND SMITH METHOD**

VERSION 10.3/13/94

GAS GRAVITY	0.71
COND. OR MISC. (C/M)	C
%N2	0.87
%CO2	0.74
%H2S	0
DIAMETER (IN)	2.4
DEPTH (FT)	6985
SURFACE TEMPERATURE (DEG F)	60
BOTTOMHOLE TEMPERATURE (DEG F)	150
FLOWRATE (MCFPD)	0
SURFACE PRESSURE (PSIA)	596
BOTTOMHOLE PRESSURE (PSIA)	716.3

GRENIER B #4 MESAVERDE (CURRENT)

**FLOWING AND STATIC BHP
CULLENDER AND SMITH METHOD**

VERSION 10.3/13/94

GAS GRAVITY	0.71
COND. OR MISC. (C/M)	C
%N2	0.87
%CO2	0.74
%H2S	0
DIAMETER (IN)	2.4
DEPTH (FT)	6985
SURFACE TEMPERATURE (DEG F)	60
BOTTOMHOLE TEMPERATURE (DEG F)	150
FLOWRATE (MCFPD)	0
SURFACE PRESSURE (PSIA)	1023
BOTTOMHOLE PRESSURE (PSIA)	1248.0

GRENIER B #4 MESAVERDE (ORIGINAL)

MESA VERDE
Organize Data ScreenGraph Economics Report Plot Utility Quit
Browsing: GRENIER B | 4 | 25669-1 Property No.: 79
Table(T): TEST/M,P,H,E,T,Z,C,A,O,D,N,1,2,3,B,U,S Rec: 1/13/691
Item: 2/3/33 Name: DATE Type: Date Len: 8/27/203

--DATE--	---CUM GAS--	M SIWHP
	Mcf	Psi
04/17/73	0	1023.0
09/26/73	22908	693.0
08/02/74	67145	465.0
08/02/75	103176	568.0
08/02/76	129417	672.0
10/03/78	181813	691.0
08/16/80	228325	582.0
06/08/82	274339	605.0
04/04/84	301639	701.0
03/12/86	326928	763.0
05/10/89	389764	622.0
11/12/91	425898	650.0
05/31/93	447803	596.0

F1=Help F3=PrvPro F5=PrvTbl F7=Calcu F9=Utils Alt+TableLtr=Change Table
F2=Jump F4=NxtPro F6=NxtTbl F8=Print F10=Exit Shift+<- ->=Fast Tbl R & L

**FLOWING AND STATIC BHP
CULLENDER AND SMITH METHOD**

VERSION 10.3/13/94

GAS GRAVITY	0.65
COND. OR MISC. (C/M)	C
%N2	0.17
%CO2	1.88
%H2S	0
DIAMETER (IN)	2.4
DEPTH (FT)	6985
SURFACE TEMPERATURE (DEG F)	60
BOTTOMHOLE TEMPERATURE (DEG F)	200
FLOWRATE (MCFPD)	0
SURFACE PRESSURE (PSIA)	634
BOTTOMHOLE PRESSURE (PSIA)	742.2

GRENIER B #4 DAKOTA (CURRENT)

**FLOWING AND STATIC BHP
CULLENDER AND SMITH METHOD**

VERSION 10.3/13/94

GAS GRAVITY	0.65
COND. OR MISC. (C/M)	C
%N2	0.17
%CO2	1.88
%H2S	0
DIAMETER (IN)	2.4
DEPTH (FT)	6985
SURFACE TEMPERATURE (DEG F)	60
BOTTOMHOLE TEMPERATURE (DEG F)	200
FLOWRATE (MCFPD)	0
SURFACE PRESSURE (PSIA)	2091
BOTTOMHOLE PRESSURE (PSIA)	2496.4

GRENIER B #4 DAKOTA (ORIGINAL)

DAKOTA

Organize Data ScreenGraph Economics Report Plot Utility Quit
 Browsing: GRENIER B | 4 | 25663-1 Property No.: 622
 Table(T): TEST/M,P,H,E,T,Z,C,A,O,D,N,1,2,3,B,U,S Rec: 1/12/103224
 Item: 2/3/33 Name: DATE Type: Date Len: 8/27/203

--DATE--	---CUM GAS--	M SIWHP
	Mcf	Psi
04/26/62	0	2091.0
12/25/70	566917	664.0
05/26/71	584303	638.0
03/18/72	623136	590.0
09/26/73	674152	572.0
08/02/75	746230	527.0
05/17/77	795732	405.0
05/17/79	840724	464.0
08/16/80	858649	582.0
08/24/83	889359	700.0
04/03/85	906378	680.0
03/21/90	978743	634.0

F1=Help F3=PrvPro F5=PrvTbl F7=Calcu F9=Utils Alt+TableLtr=Change Table
 F2=Jump F4=NxtPro F6=NxtTbl F8=Print F10=Exit Shift+<- ->=Fast Tbl R & L

DATE: January 31, 1997

NAME: GRENIER B 4

FORM: MESAVERDE/DAKOTA

LOCATION

UNIT: G

SEC: 4

TWN: 29N

RNG: 10W

<p>[32]</p> <p>New Mexico Com J 1(DK)</p> <p>Stewart A Com A LS 2(MV)</p>	<p>Bassett Com 1(DK)</p> <p>Trieb Federal 2E (MV/DK)</p> <p>Bassett B 1(MV)</p> <p>Bassett B 1(MV)</p> <p>Bassett Com 1M(DK)</p> <p>Trieb Federal Com 2(DK)</p>	<p>Greiner A 3M(MV/DK)</p> <p>Greiner A 3(MV/DK)</p> <p>[34]</p> <p>Sanchez 3(DK)</p> <p>Sanchez 3E(MV/DK)</p> <p>Sanchez 3A(MV)</p>	<p>T 30 N</p>
<p>Ludwick 19(DK)</p> <p>Ludwick LS 13(MV)</p> <p>[5]</p> <p>Grenier B 3(MV/DK)</p> <p>Grenier B 3E(MV/DK)</p>	<p>Grenier B 4A(MV)</p> <p>Grenier B 4R(DK)</p> <p>Grenier B 4(MV/DK)</p> <p>Feuille A 5E(DK)</p> <p>Feuille A 5(DK)</p>	<p>Hare 16(MV/DK)</p> <p>[3]</p> <p>Hare 15(MV/DK)</p> <p>Hare 15M(MV/DK)</p>	<p>T 29 N</p>
<p>Nye Federal Com 2(MV/DK)</p> <p>[8]</p> <p>Nye Federal Com 1(DK)</p>	<p>Nye 3 #3(DK)</p> <p>Nye Federal Com 3(MV)</p> <p>Rock Island Federal 1(DK)</p>	<p>Hare 18(MV/DK)</p> <p>[10]</p> <p>Hare 14(MV/DK)</p> <p>Hare 18M(MV/DK)</p>	

LEGEND

*
WELL NAME