

DATE IN 12/2/99	SUSPENSE 12/22/99	ENGINEER DC	LOGGED MW	TYPE DHC
-----------------	-------------------	-------------	-----------	----------

ABOVE THIS LINE FOR DIVISION USE ONLY

NEW MEXICO OIL CONSERVATION DIVISION
- Engineering Bureau -

2562

ADMINISTRATIVE APPLICATION COVERSHEET

THIS COVERSHEET IS MANDATORY FOR ALL ADMINISTRATIVE APPLICATIONS FOR EXCEPTIONS TO DIVISION RULES AND REGULATIONS

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 Oil Recovery Certification] [PPR-Positive Production Response]

[1] TYPE OF APPLICATION - Check Those Which Apply for [A]

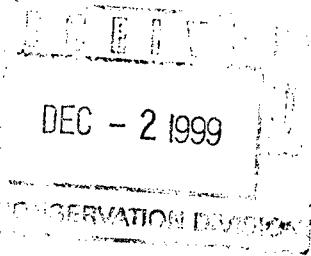
[A] Location - Spacing Unit - Directional Drilling
NSL NSP DD SD

Check One Only for [B] and [C]

[B] Commingling - Storage - Measurement

X 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] Offset Operators, Leaseholders or Surface Owner

[C] Application is One Which Requires Published Legal Notice

[D] X Notification and/or Concurrent Approval by BLM or SLO

U.S. Bureau of Land Management - Commissioner of Public Lands, State Land Office

[E] For all of the above, Proof of Notification or Publication is Attached, and/or,

[F] Waivers are Attached

[3] INFORMATION / DATA SUBMITTED IS COMPLETE - Statement of Understanding

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, information or notification is cause to have the application package returned with no action taken.

Note: Statement must be completed by an individual with supervisory capacity.

Peggy Cole

Peggy Cole

Regulatory/Compliance Administrator

Print or Type Name

Signature

Title

Date

DISTRICT I
1625 N. French Dr., Hobbs, NM 88240
DISTRICT II
811 South First St., Artesia, NM 88210
DISTRICT III
1000 Rio Brazos Rd, Aztec, NM 87410
DISTRICT IV
2040 S. Pacheco, Santa Fe, NM 87505

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
Revised August 1999

APPROVAL PROCESS:

___ 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

13E

F 20-31N-11W

SAN JUAN

Lease

Well No.

Unit Ltr. - Sec - Twp - Rge

County

Spacing Unit Lease Types: (check 1 or more)

OGRID NO. 14538 Property Code 18530 API NO. 30-045-25332 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)	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: Gas & Oil - Flowing: All Gas Zones: Estimated Current Measured Current Estimated Or Measured Original	a. (Current) 506 psi (see attachment) b. (Original) 1095 psi (see attachment)	a. (Current) b. (Original) 	a. (Current) 800 psi (see attachment) b. (Original) 2384 psi (see attachment)
6. Oil Gravity (EAPI) or Gas BTU Content	BTU 1224		BTU 1156
7. Producing or Shut-In?	SHUT-IN		SHUT-IN
Production Marginal? (yes or no)	NO		YES
* If Shut-In, give date 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 date and oil/gas/water rates of recent test (within 60 days)	Date: N/A Rates:	Date: N/A Rates:	Date: N/A Rates:
	Date: N/A Rates:	Date: N/A 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: % WILL BE SUPPLIED UPON COMPLETION	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
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. NMOCD 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 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

Dan T. Voecks

TITLE PRODUCTION ENGINEER

DATE:

11/30/99

TYPE OR PRINT NAME DAN T. VOECKS

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., 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 C-102
Revised February 21, 1994
Instructions on back
Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

1 API Number 30-045-25332		2 Pool Code 72319/71599		3 Pool Name Blanco Mesaverde/Basin Dakota	
4 Property Code 18530		5 Property Name Grenier			6 Well Number 13E
7 OGRID No. 14538		8 Operator Name Burlington Resources Oil & Gas Company			9 Elevation 6104' GR

10 Surface Location

UL or lot no. F	Section 20	Township 31N	Range 11W	Lot Idn	Feet from the 1760	North/South line North	Feet from the 1520	East/West line West	County SJ
--------------------	---------------	-----------------	--------------	---------	-----------------------	---------------------------	-----------------------	------------------------	--------------

11 Bottom Hole Location If Different From Surface

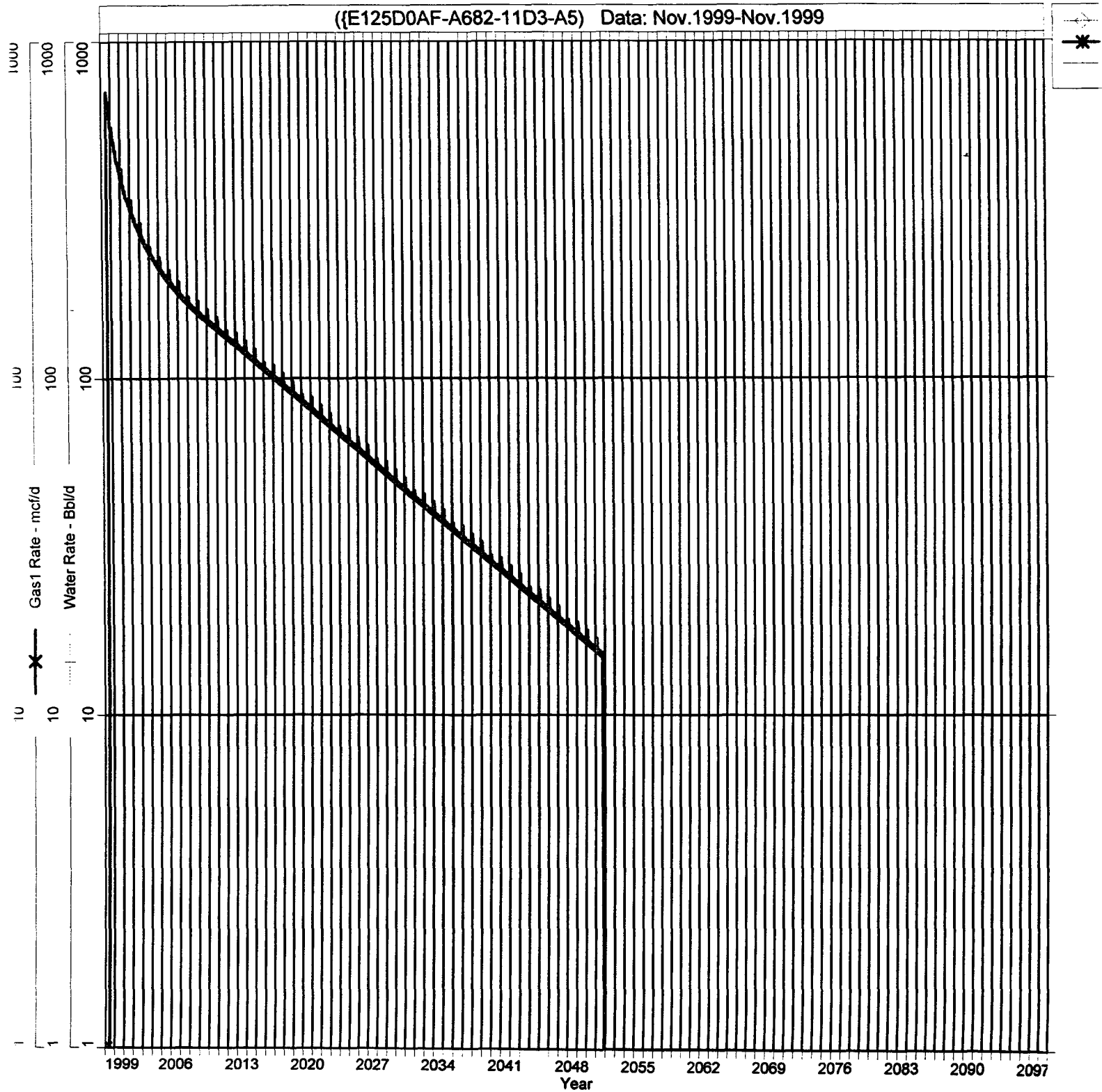
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
---------------	---------	----------	-------	---------	---------------	------------------	---------------	----------------	--------

12 Dedicated Acres W/320	13 Joint or Infill	14 Consolidation Code	15 Order No.
-----------------------------	--------------------	-----------------------	--------------

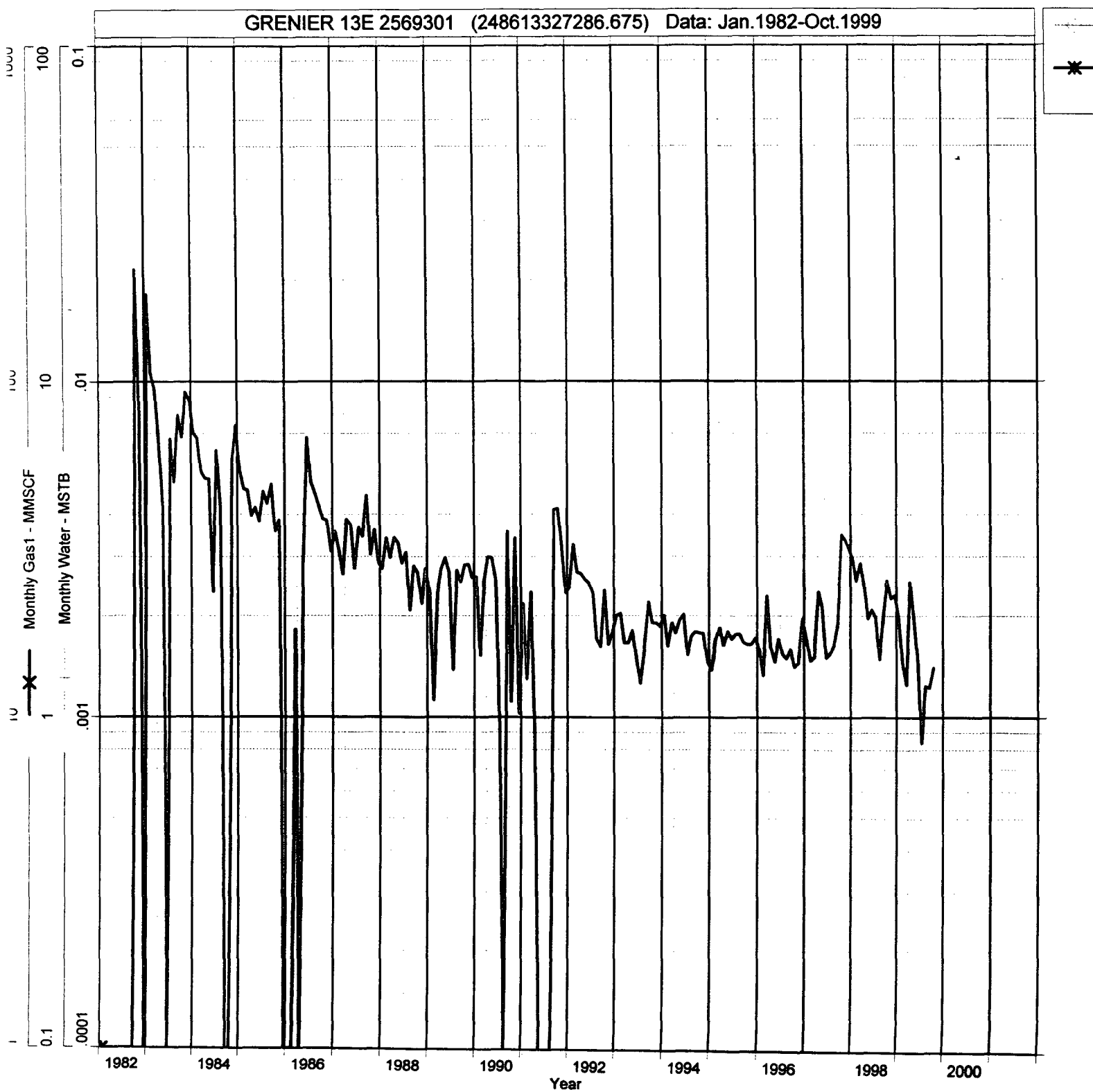
NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED
OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

<div data-bbox="107 1038 342 1264" data-label="Text"> <p>16</p> </div> <div data-bbox="107 1264 342 1504" data-label="Text"> <p>1520'</p> </div>	<div data-bbox="342 1038 589 1264" data-label="Text"> <p>1760'</p> </div>	Original plat from Fred B. Kerr Jr. 1-8-82		<div data-bbox="1081 1029 1572 1072" data-label="Section-Header"> <p>17 OPERATOR CERTIFICATION</p> </div> <div data-bbox="1081 1072 1572 1127" data-label="Text"> <p>I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief</p> </div> <div data-bbox="1081 1276 1572 1302" data-label="Text"> <p>Signature</p> </div> <div data-bbox="1081 1302 1572 1340" data-label="Text"> <p>Peggy Cole</p> </div> <div data-bbox="1081 1336 1572 1361" data-label="Text"> <p>Printed Name</p> </div> <div data-bbox="1081 1361 1572 1419" data-label="Text"> <p>Regulatory Administrator</p> </div> <div data-bbox="1081 1419 1572 1444" data-label="Text"> <p>Title</p> </div> <div data-bbox="1081 1459 1572 1483" data-label="Text"> <p>Date</p> </div>	
					<div data-bbox="1081 1504 1572 1547" data-label="Section-Header"> <p>18 SURVEYOR CERTIFICATION</p> </div> <div data-bbox="1081 1547 1572 1653" data-label="Text"> <p>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 belief.</p> </div> <div data-bbox="1081 1696 1572 1723" data-label="Text"> <p>Date of Survey</p> </div> <div data-bbox="1081 1723 1572 1757" data-label="Text"> <p>Signature and Seal of Professional Surveyer:</p> </div> <div data-bbox="1081 1930 1572 1957" data-label="Text"> <p>Certificate Number</p> </div>

Grenier #13E
Expected Production
Mesaverde Formation



Grenier #13E
Expected Production
Dakota Formation



Grenier #13E
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 GRAVITY	0.707	GAS GRAVITY	0.684
COND. OR MISC. (C/M)	C	COND. OR MISC. (C/M)	C
%N2	0.36	%N2	0.31
%CO2	0.87	%CO2	2.16
%H2S	0	%H2S	0
DIAMETER (IN)	2.375	DIAMETER (IN)	2.375
DEPTH (FT)	5220	DEPTH (FT)	7205
SURFACE TEMPERATURE (DEG F)	60	SURFACE TEMPERATURE (DEG F)	60
BOTTOMHOLE TEMPERATURE (DEG F)	137	BOTTOMHOLE TEMPERATURE (DEG F)	198
FLOWRATE (MCFPD)	0	FLOWRATE (MCFPD)	0
SURFACE PRESSURE (PSIA)	442	SURFACE PRESSURE (PSIA)	672
BOTTOMHOLE PRESSURE (PSIA)	505.6	BOTTOMHOLE PRESSURE (PSIA)	799.5
<u>MV-Original</u>		<u>DK-Original</u>	
GAS GRAVITY	0.707	GAS GRAVITY	0.684
COND. OR MISC. (C/M)	C	COND. OR MISC. (C/M)	C
%N2	0.36	%N2	0.31
%CO2	0.87	%CO2	2.16
%H2S	0	%H2S	0
DIAMETER (IN)	2.375	DIAMETER (IN)	2.375
DEPTH (FT)	5220	DEPTH (FT)	7205
SURFACE TEMPERATURE (DEG F)	60	SURFACE TEMPERATURE (DEG F)	60
BOTTOMHOLE TEMPERATURE (DEG F)	137	BOTTOMHOLE TEMPERATURE (DEG F)	198
FLOWRATE (MCFPD)	0	FLOWRATE (MCFPD)	0
SURFACE PRESSURE (PSIA)	945	SURFACE PRESSURE (PSIA)	1960
BOTTOMHOLE PRESSURE (PSIA)	1095.4	BOTTOMHOLE PRESSURE (PSIA)	2383.9

Grenier #13E
Mesaverde Offset

<u>Well Name</u>	<u>Date</u>	<u>Pressure</u>
GRENIER 6A	04/17/77	945
GRENIER 6A	05/18/78	549
GRENIER 6A	06/16/79	546
GRENIER 6A	08/24/80	544
GRENIER 6A	01/16/83	556
GRENIER 6A	08/22/84	481
GRENIER 6A	02/19/86	502
GRENIER 6A	02/21/89	464
GRENIER 6A	05/15/91	430
GRENIER 6A	05/29/91	442

Grenier #13E
Existing Dakota

<u>Well Name</u>	<u>Date</u>	<u>Pressure</u>
GRENIER 13E	07/09/82	1,960
GRENIER 13E	11/16/82	1,277
GRENIER 13E	04/24/83	996
GRENIER 13E	08/22/84	786
GRENIER 13E	05/29/85	828
GRENIER 13E	01/13/88	624
GRENIER 13E	02/06/91	672

31N - 11W - 20E