

DISTRICT I  
P.O. Box 1980, Hobbs, NM 88240  
DISTRICT II  
811 South First St., Artesia, NM 88210  
DISTRICT III  
1000 Rio Brazos Rd. Aztec, NM 87410

RECEIVED  
OCT - 3 1997

State of New Mexico  
Energy, Minerals and Natural Resources Department  
OIL CONSERVATION DIVISION  
2040 S. Pacheco  
Santa Fe, New Mexico 87506-6429

DHC 10/23/97  
Form C-107-A  
New 3-12-96

APPROVAL PROCESS:  
\_\_\_ Administrative \_\_\_ Hearing  
EXISTING WELLBORE  
\_\_\_ YES \_\_\_ NO

APPLICATION FOR DOWNHOLE COMMINGLING

Operator BONNEVILLE FUELS CORPORATION 1660 Lincoln Street, Ste 1800, Denver, CO 80264  
E Scott Federal 9 E Sec 23 T27N R11W San Juan  
Well No. Unit Ltr. - Sec - Twp - Rgs Spacing Unit Lease Types: (check 1 or more)  
OGRID NO. 002678 Property Code 002161 API NO. 30-045-06382 Federal  State \_\_\_ (and/or) Fee \_\_\_

The following facts are submitted in support of downhole commingling:	Upper Zone	Intermediate Zones	Lower Zone
1. Pool Name and Pool Code	77280 Gallegos Fruitland S		79680 West Kutz Pictured Cliffs
2. Top and Bottom of Pay Section (Perforations)	1728'-33' 1736'-44'		
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	a. (Current) 250 psi	a.	a. 175 psi (est)
	b. (Original) 425 psi	b.	b. 175 psi (est)
6. Oil Gravity (° API) or Gas BTU Content	1198 BTU		1125 BTU est
7. Producing or Shut-In?	Producing		Not Completed
Production Marginal? (yes or 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: 9/21/97 Rates: 12 MCF/D	Date: Rates:	Date: Rates:
	Date: Rates:	Date: Rates:	Date: Rates:
8. Fixed Percentage Allocation Formula - % for each zone	Oil: 50 % Gas: 7 %	Oil: % Gas: %	Oil: 50 % Gas: 93 %

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?  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?  Yes \_\_\_ No
11. Will cross-flow occur? \_\_\_ 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. \_\_\_ Yes \_\_\_ No (If No, attach explanation)
12. Are all produced fluids from all commingled zones compatible with each other?  Yes \_\_\_ No
13. Will the value of production be decreased by commingling? \_\_\_ Yes  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.  Yes \_\_\_ No
15. NMOCD Reference Cases for Rule 303(C) 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 Alan L. Merrill TITLE Operations Engineer DATE 9/29/97  
TYPE OR PRINT NAME Alan L. Merrill TELEPHONE NO. ( 303 ) 863-1555

Submit to Appropriate District Office  
 State Lease - 4 copies  
 Fee Lease - 3 copies

State of New Mexico  
 Energy, Minerals and Natural Resources Department

Form C-102  
 Revised 1-1-89

**OIL CONSERVATION DIVISION**

P.O. Box 2088  
 Santa Fe, New Mexico 87504-2088

**DISTRICT I**  
 P.O. Box 1980, Hobbs, NM 88240

**DISTRICT II**  
 P.O. Drawer DD, Artesia, NM 88210

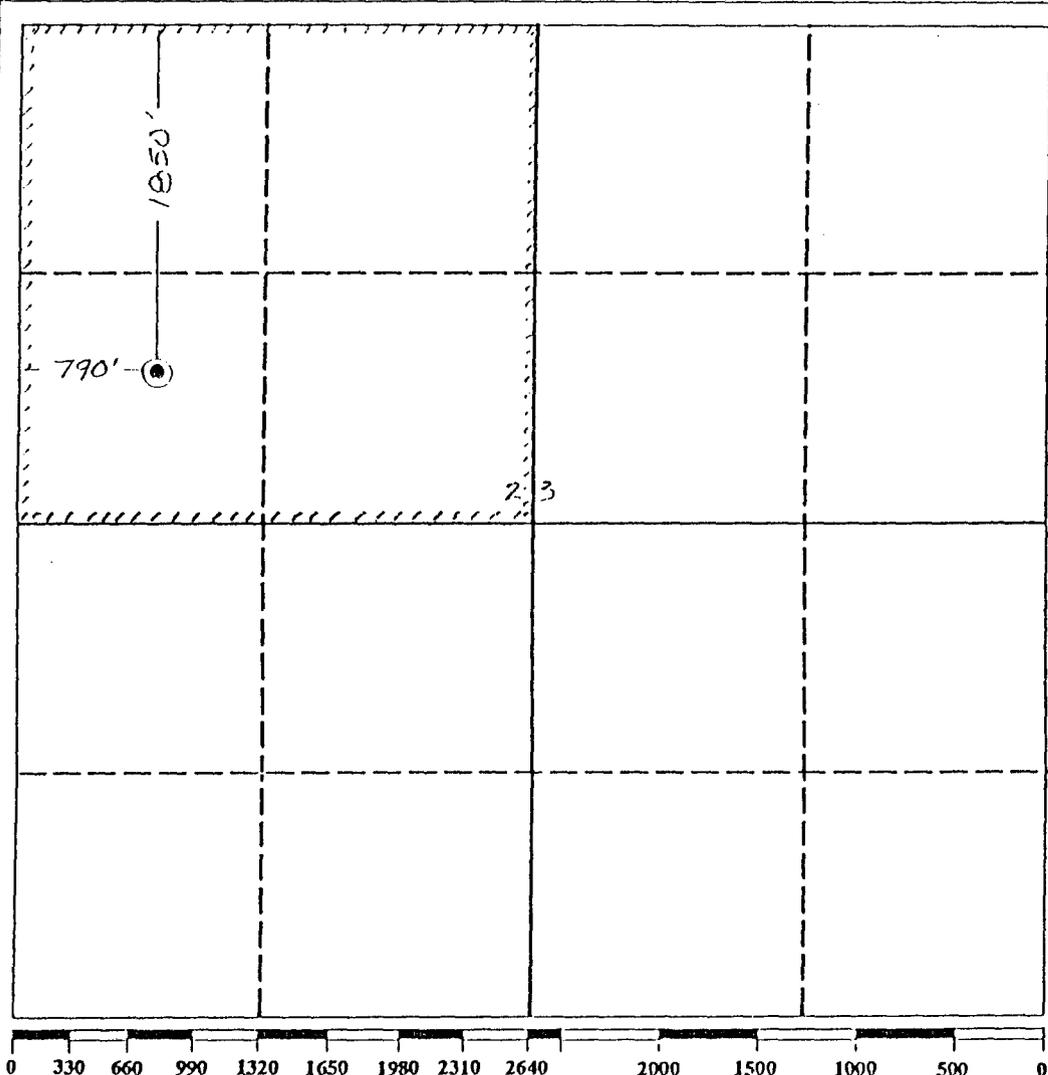
**DISTRICT III**  
 1000 Rio Brazos Rd., Aztec, NM 87410

**WELL LOCATION AND ACREAGE DEDICATION PLAT**

All Distances must be from the outer boundaries of the section

Operator Bonneville Fuels Corporation			Lease E Scott Federal			Well No. 9		
Unit Letter E	Section 23	Township 27N	Range 11W	County San Juan		NMPM		
Actual Footage Location of Well: 1850' feet from the N line and 790 feet from the W line								
Ground level Elev. 6337		Producing Formation Fruitland Sand			Pool Gallegos		Dedicated Acreage: NW 160 Acres	

- 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 working interest and royalty). *N/A*
- If more than one lease of different ownership is dedicated to the well, have the interest of all owners been consolidated by communitization, unitization, force-pooling, etc.?  
 Yes     No    If answer is "yes" type of consolidation *N/A*  
 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 interest, has been approved by the Division.



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

*Larry Lillo*  
 Signature  
 Larry Lillo  
 Printed Name  
 Land Manager  
 Position  
 Bonneville Fuels Corp.  
 Company  
 12/10/92  
 Date

**SURVEYOR CERTIFICATION**  
 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  
 Signature & Seal of Professional Surveyor  
 Certificate No.

District I  
 PO Box 1900, Hobbs, NM 88241-1900  
 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 10, 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

API Number 30-045-06382		Pool Code 79680	Pool Name West Kutz Pictured Cliffs
Property Code 002161	Property Name E. Scott Federal		Well Number 9
OGRID No. 002678	Operator Name BONNEVILLE FUELS CORPORATION		Elevation 6337 GL

<sup>10</sup> Surface Location

UL or lot no.	Section	Township	Range	Lot Ida	Feet from the	North/South line	Feet from the	East/West line	County
E	23	27N	11W		1850	N	790	W	San Juan

<sup>11</sup> Bottom Hole Location If Different From Surface

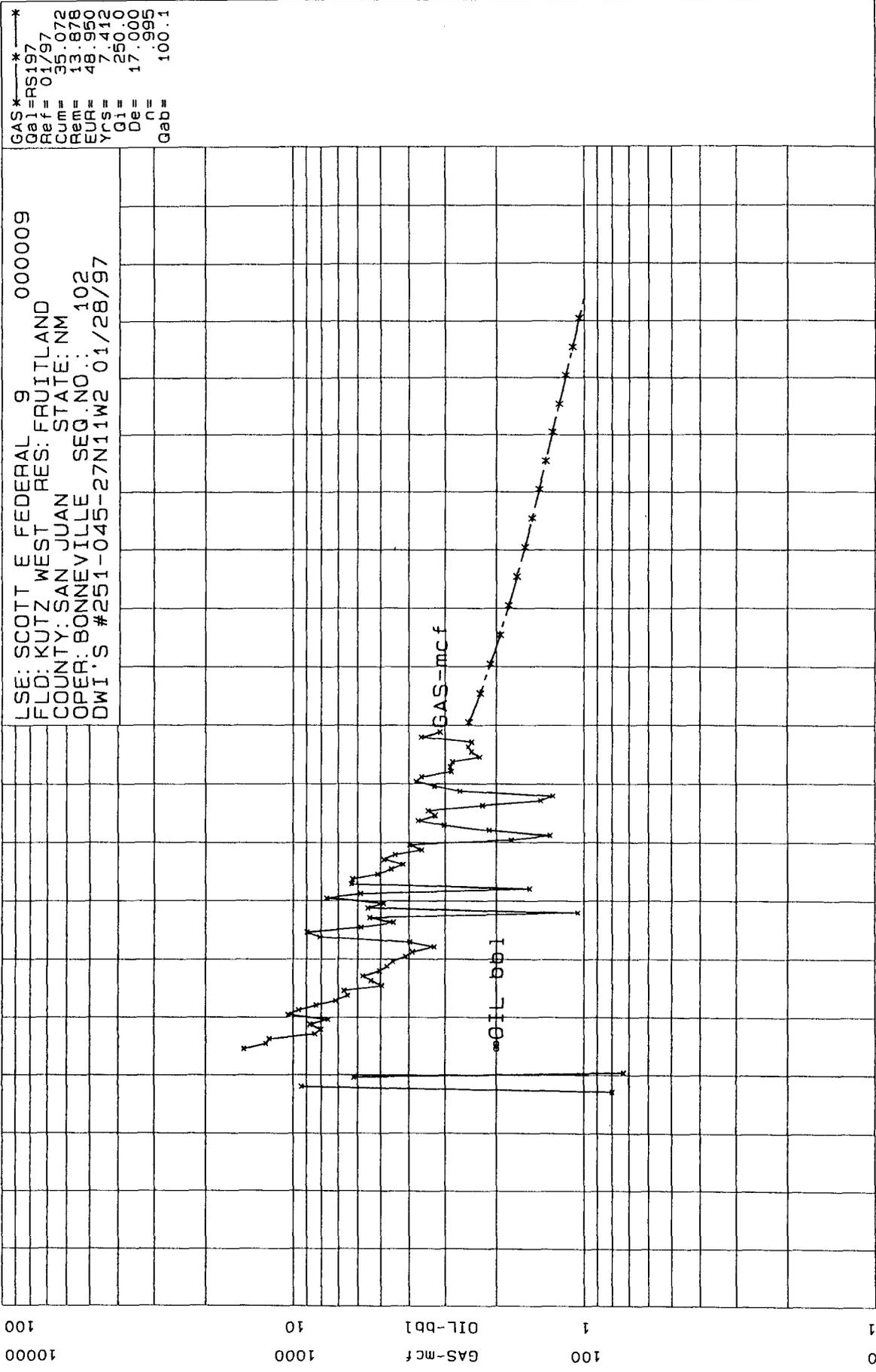
UL or lot no.	Section	Township	Range	Lot Ida	Feet from the	North/South line	Feet from the	East/West line	County
Same as	above								

<sup>12</sup> Dedicated Acres 160	<sup>13</sup> Joint or Infill	<sup>14</sup> Consolidation Code	<sup>15</sup> Order No.
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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

	<p><sup>17</sup> OPERATOR CERTIFICATION</p> <p>I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.</p> <p><i>Alan J. Merrill</i></p> <p>Signature</p> <p>Alan Merrill</p> <p>Printed Name</p> <p>Operations Engineer</p> <p>Title</p> <p>9/29/97</p> <p>Date</p>
	<p><sup>18</sup> SURVEYOR CERTIFICATION</p> <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> <p>Date of Survey</p> <p>Signature and Seal of Professional Surveyor:</p> <p>Certificate Number</p>

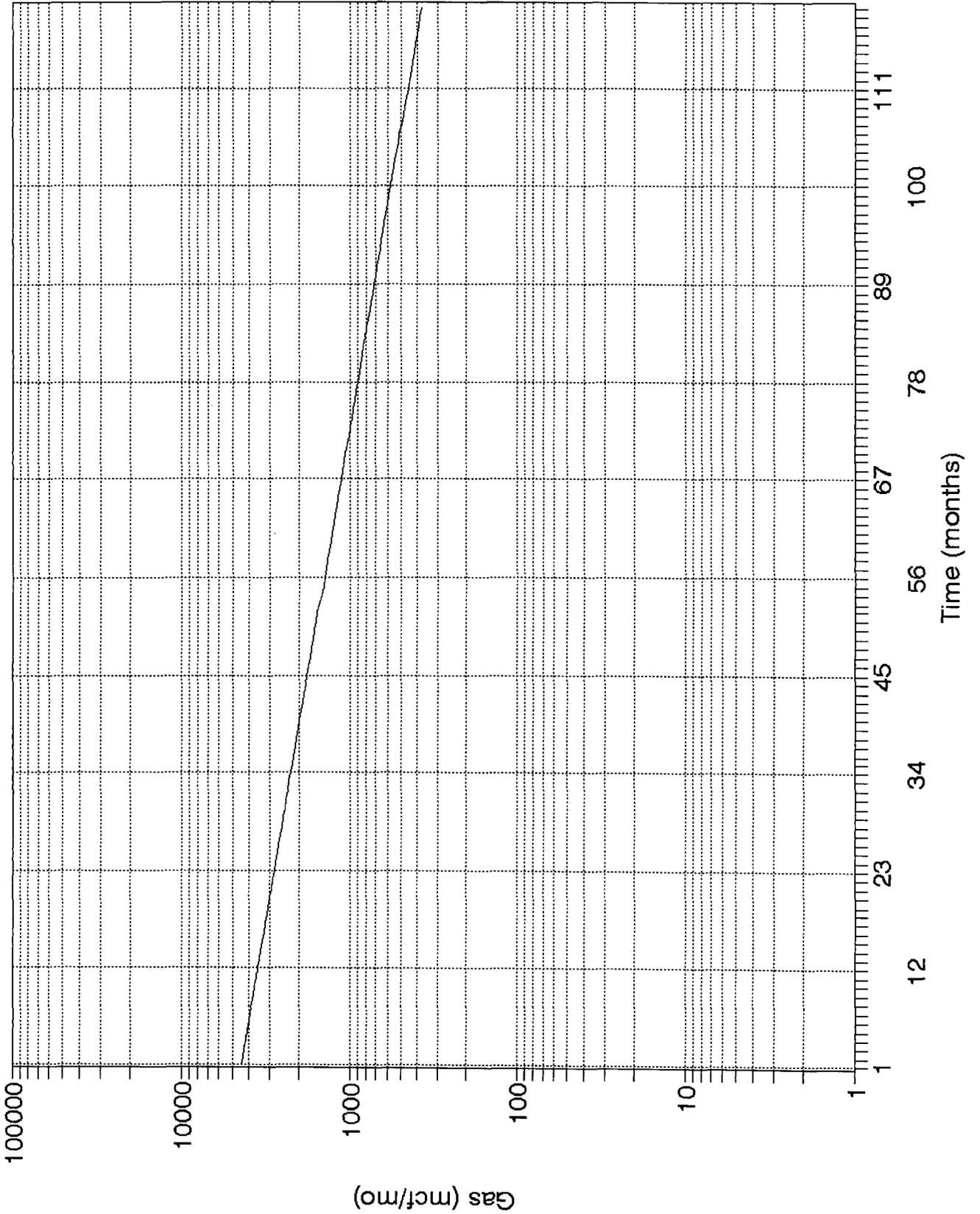
# Fruitland Sand Decline Curve Scott #9



DATE 87 88 89 90 91 92 93 94 95 96 97 98 99 00 01 02 03 04 05 06

Pictured Cliffs Estimated Decline Curve  
Scott #9

Scott E. Federal #9  
Pictured Cliffs Est. Production Rates



## Allocation Method

Fruitland Sand/Pictured Cliffs Commingle  
Scott E. Federal #9  
NW/4 Sec. 23-T27N-R11W  
San Juan Co., New Mexico

The allocation formula will be a fixed percentage allocation based on the estimated ultimate reserves (EUR) for the Pictured Cliffs and the estimated remaining reserves (ERR) in the Fruitland Sand.

The gas production allocation for the Scott E. Federal #9 will be based on the following information:

Pictured Cliffs Estimated Ultimate Reserves: .175 BCF  
Fruitland Sand Estimated Remaining Reserves: .014 BCF  
Total Estimated Reserves: .189 BCF

Decline curves for both zones are attached. The Pictured Cliffs EUR is based on an estimated decline curve based on the following:

IP = 150 MCF/D            Exponential Decline = 25%/yr

Abandonment Rate = 30 MCF/D

The reserves estimate and the allocation may be modified after testing the Pictured Cliffs zone and establishing a production rate. The Fruitland Sand ERR is based on current production and reserves for the Scott E. Federal #9 which is currently producing from this zone. The reserves estimate for the Pictured Cliffs may be modified after testing the zone and establishing a production rate.

The allocation for the zones will be calculated by dividing the reserves for each zone by the total reserves.

### Fruitland Sand Gas Allocation

$.014 \text{ BCF} / .189 \text{ BCF} \times 100 = 7\%$

### Pictured Cliffs Gas Allocation

$.175 \text{ BCF} / .189 \text{ BCF} \times 100 = 93\%$

### Oil Allocation

Oil production is expected to be negligible. If any oil is produced it will be allocated evenly between the two zones.

**Notification of Offset Owners**

Fruitland Sand/Pictured Cliffs Commingle  
Scott E. Federal #9  
NW/4 Sec. 23-T27N-R11W  
San Juan Co., New Mexico

Bonneville Fuels Corporation is the operator of all offset spacing units in the Gallegos Fruitland Sand and West Kutz Pictured Cliffs. No notification of offset operators is required for this commingling application.