<u>DISTRICT I</u>

P.O. BOX 1980, Hobbs, NM 88241-1980

DISTRICT II

811 South First St., Artesia, NM 88210-2835

2040 S. Pacheco

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

OIL CONSERVATION DIVISION

Santa Fe, New Mexico 87505-6429

State of New Mexico

Energy, Minerals and Natural Resources Department

	APPROVAL PR	ROCESS:
<u>x</u>	Administrative	Hearing

-	•••	•	•	•	• •		•	•	 _	_	_
Αc	lm	in	is	tra	tiv	e _	_		Н	ea	rin

1000 Rio Brazos Rd., Aztec, NM 87410-1693

APPLICATION FOR DOWNHOLE COMMINGLING

EXISTING	WELLBORE
x YES	NO

Robert L. Bayless, Producer LLC	P.O. Box 168, Farmington,					
Operator	Address					
E-4777	Krause #1 C Sec	2, T26N R11W	Can luan			
Lease	Well No. Unit Ltr.	- Sec - Twp - Rge	San Juan County			
OGRID NO. 150182 Property C	ode 25033 API NO.		g Unit Lease Type: (check 1 or more) , State X , (and/or) Fee			
The following facts are submitted in	Upper	Intermediate	Lower			
support of downhole commingling:	Zone	Zone	Zone			
Pool Name and		6. 15.16.5				
Pool Code	Basin Fruitland Coal		West Kutz Pictured Cliffs			
2. Top and Bottom of			23			
Pay Section (Perforations) 3. Type of Production	1780' - 1831'	S JAN 2000	1874' - 1889'			
(Oil or Gas)	Gas	© RECEIVED	Gas			
4. Method of Production		OIL CON DIV	Gas			
(Flowing or Artificial Lift)	Flowing	OIL CONT. 3	Flowing			
5. Bottomhole Pressure		60	·3			
Oil Zones - Artificial Lift:	(Current)	2010	(Current)			
Estimated Current	a. 325 psi (estimate from offset wells)	a. 2030303	a. 450 psi			
Gas & Oil - Flowing:	(commute nom onset wens)		(estimate from offset wells)			
Measured Current	(Original)		(Original)			
All Gas Zones:	b. 325 psi	b.	b. 450 psi			
Estimated or Measured Original 6. Oil Gravity (* AP!) or	(estimate from offset wells)		(estimate from offset wells)			
Gas BTU Content	1040 BTU		4000 8711			
7. Producing or Shut-in?	1040 810		1080 BTU			
	Not Completed Yet		Not Completed Yet			
Production Marginal? (yes or no)						
If Shut-in, give date and oil/gas/	Yes		Yes			
water rates of last production	Date:	Date:	Date:			
	Rates: N/A	Rates:	Rates: N/A			
Note: For new zones with no production history, applicant shall be required to attach production						
estimates and supporting data						
If Producing give data and sillens	Date: Not Books to 1					
If Producing, give date and oil/gas/ water rates of recent test	Date: Not Producing Rates: Production Estimates	Date: Rates:	Date: Not Producing			
(within 60 days)	Attached	rates.	Rates: Production Estimates Attached			
Fixed Percentage Allocation	Oil; Gas:	Oil: Gas:	Oil: Gas:			
Formula - % for each zone	N/A % 77 %	% %	N/A % 23 %			
 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?						
44 VACII C O						
 Will cross-flow occur? X flowed production be recovered, an 	YesNo If yes, are fluids cond will the allocation formula be reliab	mpatible, will the formations not le. X Yes No (If				
12. Are all produced fluids from all com		other? X Yes	No			
13. Will the value of production be deci		YesX_No				
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 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 abo	ve is true and complete to the best o	f my knowledge and halist				
The state of the s	Mar and complete to the best of	my knowledge and bellet.				
SIGNATURE Um	Mux	TITLE Petroleum Engineer	DATE January 12, 2000			
TVDE OD DDINT NAME	WaCand					
TYPE OR PRINT NAME Kevin H.	WICCOrd	TELEPHONE	E NO (505) 326-2659			

· District I PO Box 1980, Hubbs, NM 88241-1980 District II PO Drawer DD, Artesia, NM 88211-0719 District III

589°56'W

State of New Mexico Energy, Minerals & Natural Resources Department

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

Form C-1(2 Revised February 21, 19' 4 Instructions on back

Submit to Appropriate District Office State Lease - 4 Copies

Fee Lease - 3 Copies

mr is nowalinka

8466

Certificate Number

1000 Rio Brazos Rd., Aztec, NM 87410 District IV ■ AMENDED REPORT PO Box 2088, Santa Fe, NM 87504-2088 WELL LOCATION AND ACREAGE DEDICATION PLAT ³ Pool Name 1 Pool Code API Number 71629 Basin Fruitland Coal . Well Number ⁵ Property Nume 1 KRAUSE * Elevation Operator Name ROBERT L. BAYLESS, PRODUCER LLC 6376 150182 10 Surface Location County North/South line Feet from the East/West line Towaship املا امل Feet from the UL or lot no. Section Runge 1450 San Juan 1190 North West 11 W 26 N 3 2 11 Bottom Hole Location If Different From Surface Lot Ida North/South line Feet from the East/West line County Feet from the UL or lot no. Section Township Range 13 Joint or Infill 14 Consolidation Code 15 Order No. 12 Dedicated Acres 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 80.0004 OPERATOR CERTIFICATION 8995 I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief 2 3 1450 Price M. Bayless Printed Name Engineer Title Dute October 26, 1999 18SURVEYOR 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 belief.

79.58c4 New Mexico Oil Conservation Division 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

PO Box 2088, Santa Fe, NM 87504-2088

District IV

State of New Mexico Energy, Minerals & Natural Resources Department

OIL CONSERVATION DIVISION PO Box 2088 Santa Fe, NM 87504-2088 Form C-1(2)
Revised February 21, 19'-4
Instructions on back
Submit to Appropriate District Office
- State Lease - 4 Copies
Fee Lease - 3 Copies

☐ AMENDED REPORT

10 Box 2006, Sai			11.10	CATION		REAGE DEDI	CA′	ΓΙΟΝ PL	.AT		
'API Number 'Pool Cod					AND ACREAGE DEDICATION PLAT						
30-045-30024				9680	⁴ Property		CIC	KLD CHE	115	•	Well Number
Property Code			•		KRAUS			1 1			1
25033			_		1 Operator						* Elevation
'OGRID	į			ROBER	•		R L	LC			6376
150182	2				ROBERT L. BAYLESS, PRODUCER LLC 63 10 Surface Location						
						North/South line	E	t from the	East/Wes	t line	County
UL or lot no.	Section	Township	Range	Lot ldn	Feet from the		1	450	West		San Juan
3	2	26 N	11 W		1190	North			W-200	, 	Dan Juan
		•	¹¹ Bot	tom Hole	e Location	If Different Fro	_				
UL or lot no.	Section	Township	Range	Lot Ida	Feet from the	n the North/South line i		Feet from the East/Wes		t line	County
12 Dedicated Acr		WILL BE A	Consolidation	D ТО ТНІ	rder No. S COMPLET	ON UNTIL ALL	INT	ERESTS H	AVE BE	EN COI	NSOLIDATED
suuuuuu	uuuu	unior A	<i>13-11911</i>	ANDARD		EEN APPROVED	BY				-
Foel.	5899	54'W		E.	80.4	00c4, F	d.				FIFICATION
4	i	.06			SZ 15 16 17 %	LOTNO. GYT	96CH.	I hereby certly true and comp	fy that the in plete to the b	formation best of my	contained herein is knowledge and belief
1450		•		THUE OF	M 2000 CO	N. 132	/9	Venn		. M	(4)
78.64ta			C-a		CZIIEM		20.09cu.	Printed Num PETR Title	N H. M	ENGIN	EER
Fdimm	mmm	mmmin	mmm					18CHDV	EVOR	CEDT	TEICATION
40.154				2			. 40.1704.	I hereby certification was plotted from or under to and correct to Date of Survey	fy that the woom field not my supervisit the best of	vell location es of actual on, and the my belief.	TIFICATION In shown on this plat all surveys made by at the same is true
NO.41'W	S89°.	5/. 'h/			201	58c4.	M.12.0N		seal of pro	156) 10 Mahin	19:

New Mexico Oil Conservation Division

ROBERT L. BAYLESS PRODUCER, LLC

Downhole Commingle Application Krause #1

ESTIMATED PRODUCTION AND ALLOCATION METHOD

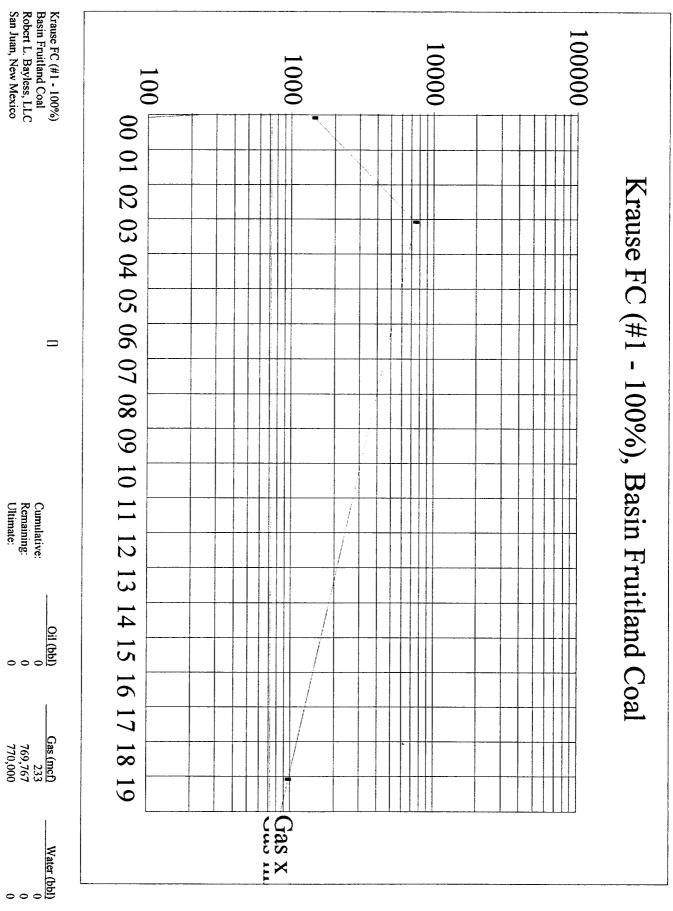
Robert L. Bayless Producer, LLC estimates the ultimate natural gas production from the Krause #1 well will be 1 BCF of gas, 770,000 MCF of this gas coming from the Fruitland Coal formation, and 230,000 MCF of gas coming from the Pictured Cliffs formation. Decline curves are provided which show the estimated gas production rates from both of these formations.

Bayless proposes to allocate production from the Krause #1 well using a fixed percentage allocation. Study has been made of offsetting wells' ultimate recovery from both the Fruitland Coal and Pictured Cliffs formations. The closest 3 offset wells producing from each the Fruitland Coal and the Pictured Cliffs formation were examined, and the average ultimate recovery from the three wells for each zone was decided to be the best estimate of ultimate recovery for the Krause #1 well.

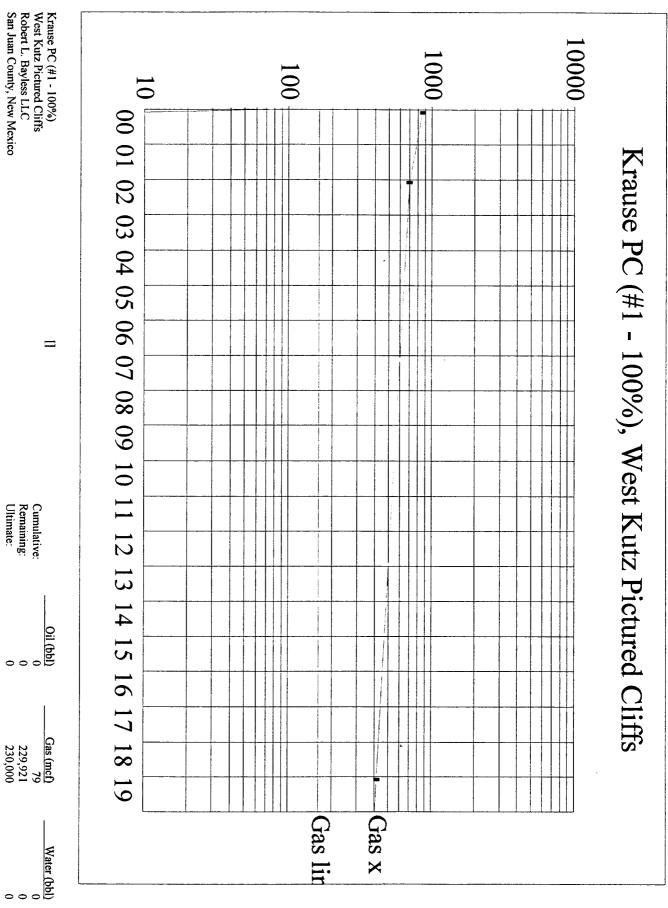
Presented with this application are decline curves for the 3 closest Fruitland Coal formation wells to the Krause #1 well location. These wells are (1) Burlington's Douthit Fed #352 (SW, Sec 35, T27N R11W), (2) Burlington's Douthit Fed #351 (NE, Sec 35, T27N R11W), and (3) Conoco's Delhi Taylor D#1E (NW, Sec 3, T26N R11W). The ultimate gas recovery from these wells is calculated to be 1,034,777 MCF, 702,536 MCF, and 566,928 MCF, respectfully. The average ultimate recovery for these 3 wells is calculated to be 768,080 MCF.

Decline curves are also presented for the 3 closest Pictured Cliffs formation wells to the Krause #1 well location. These wells are (1) Benson-Montin-Greer's Wininger State #1 (NE, Sec 2, T26N R11W), (2) Merrion's Mead #1 (NE, Sec 3, T26N R11W), and (3) Merrion's Navajo #1 (SW, Sec 3, T26N R11W). The ultimate gas recovery from these wells is calculated to be 317,942 MCF, 226,795 MCF, and 141,054 MCF, respectfully. The average ultimate recovery for these 3 wells is calculated to be 228,597 MCF.

From this information presented, the ultimate natural gas recoveries for the Krause #1 well are estimated to be 770,000 MCF of gas from the Fruitland Coal formation and 230,000 MCF from the Pictured Cliffs formation. Using these ultimate recovery values, the Fruitland Coal formation is expected to produce 77% and the Pictured Cliffs formation is expected to produce 22% of the total natural gas production from the Krause #1 well. These are the allocation values Bayless propose to use for downhole commingling in the Krause #1 well.



Cumulative: Remaining: Ultimate:

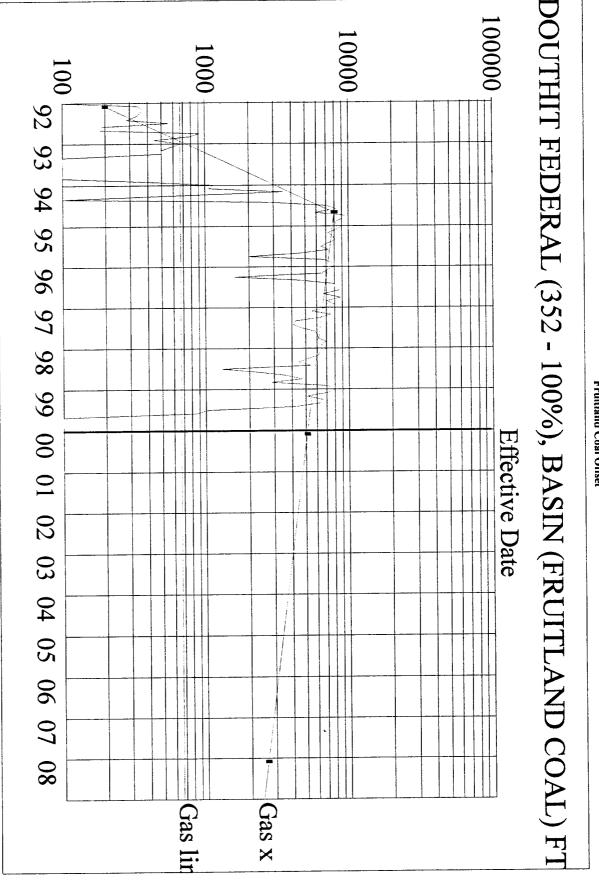


 \Box

Cumulative: Remaining: Ultimate:

Oil (bbl) 0 0 0

Gas (mcf) 79 229,921 230,000



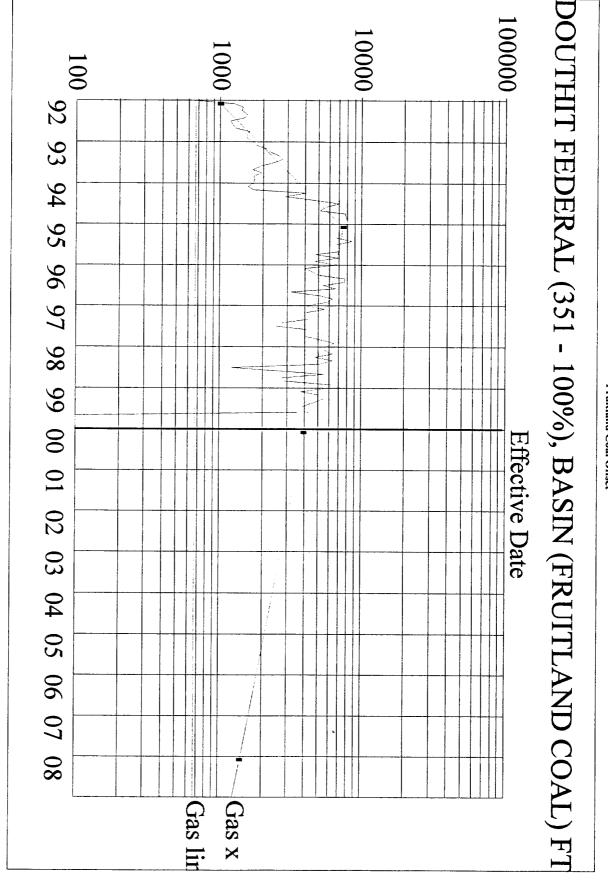
DOUTHIT FEDERAL (352 - 100%) BASIN (FRUITLAND COAL) FT BURLINGTON RES O&G CO SAN JUAN, NM

[30045284050000] FRUITLAND COAL 35M 27N 11W

Cumulative: Remaining: Ultimate:

Oil (bbl) 0 0 0

Gas (mcf) 395,961 638,816 1,034,777



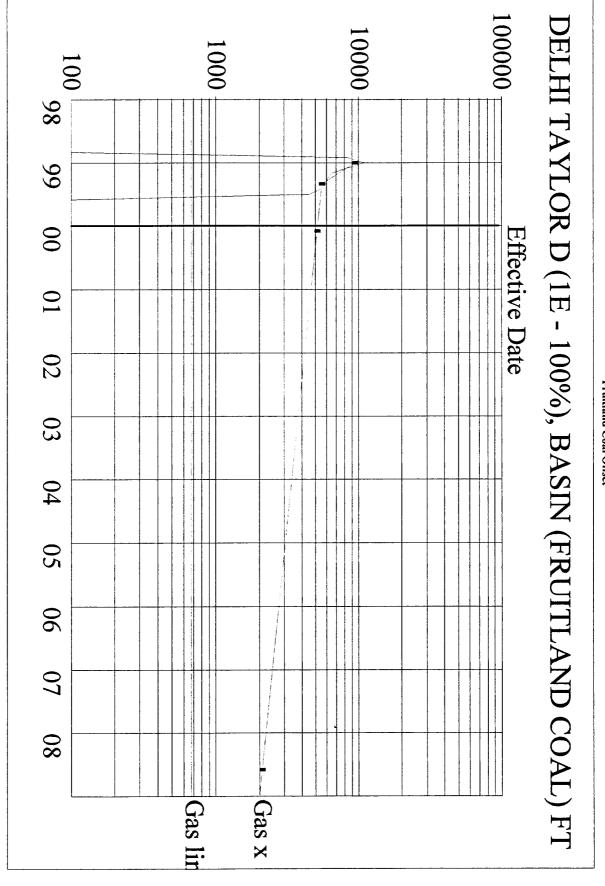
DOUTHIT FEDERAL (351 - 100%)
BASIN (FRUITLAND COAL) FT
BURLINGTON RES O&G CO
SAN JUAN, NM

[30045284040000] FRUITLAND COAL 35A 27N 11W

Cumulative: Remaining: Ultimate:

Oil (bbl) 0 0 0

> Gas (mcf) 392,061 310,475



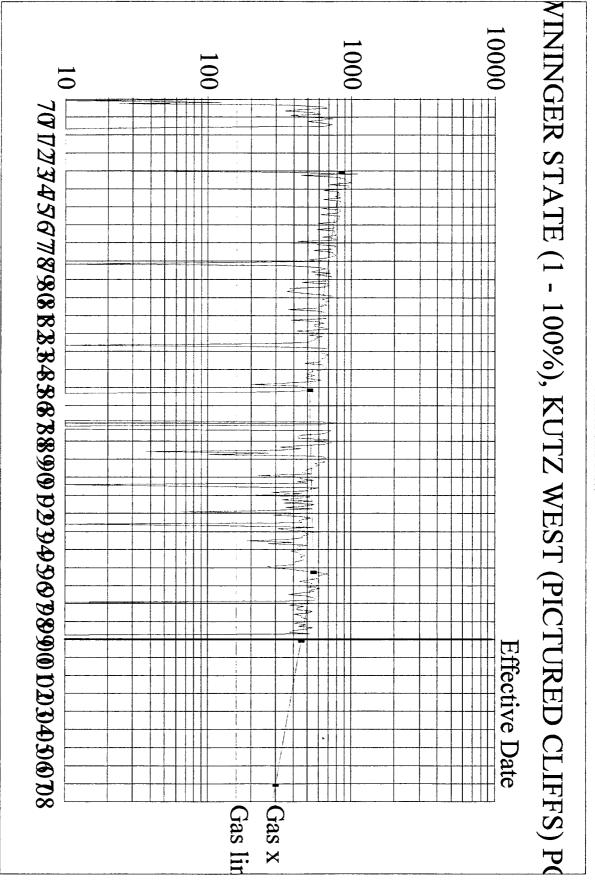
DELHI TAYLOR D (1E - 100%) BASIN (FRUITLAND COAL) FT CONOCO INC SAN JUAN, NM

> [30045237960000] FRUITLAND COAL 3 26N 11W

Cumulative: Remaining: Ultimate:

Oil (bbl) 0 0 0

Gas (mcf) 56,220 510,708 566,928



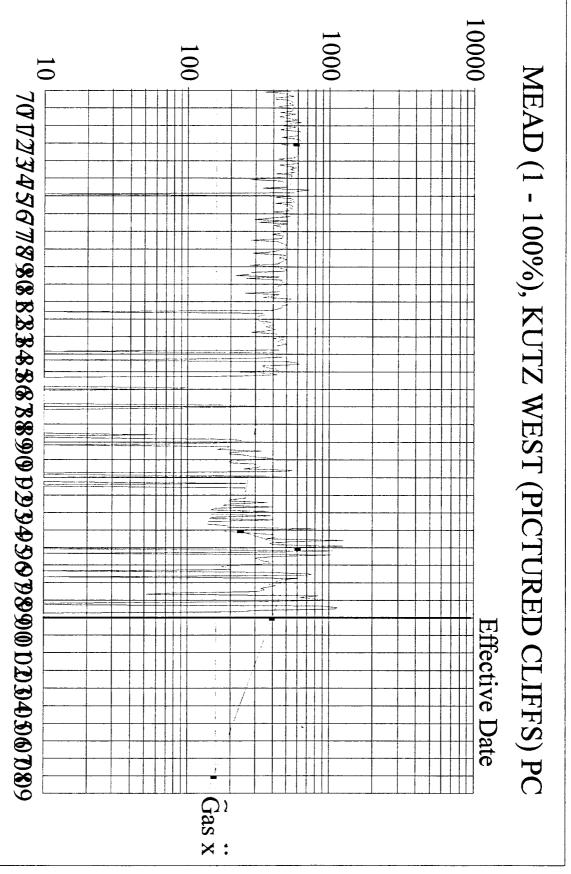
SAN JUAN, NM KUTZ WEST (PICTURED CLIFFS) PC BENSON MONTIN GREER DRLG WININGER STATE (1 - 100%)

> 2A 26N 11W [30045060750000] PICTURED CLIFFS

Cumulative: Remaining: Ultimate:

Oil (bbl) 0 0 0

Gas (mcf) 248,840 69,102 317,942



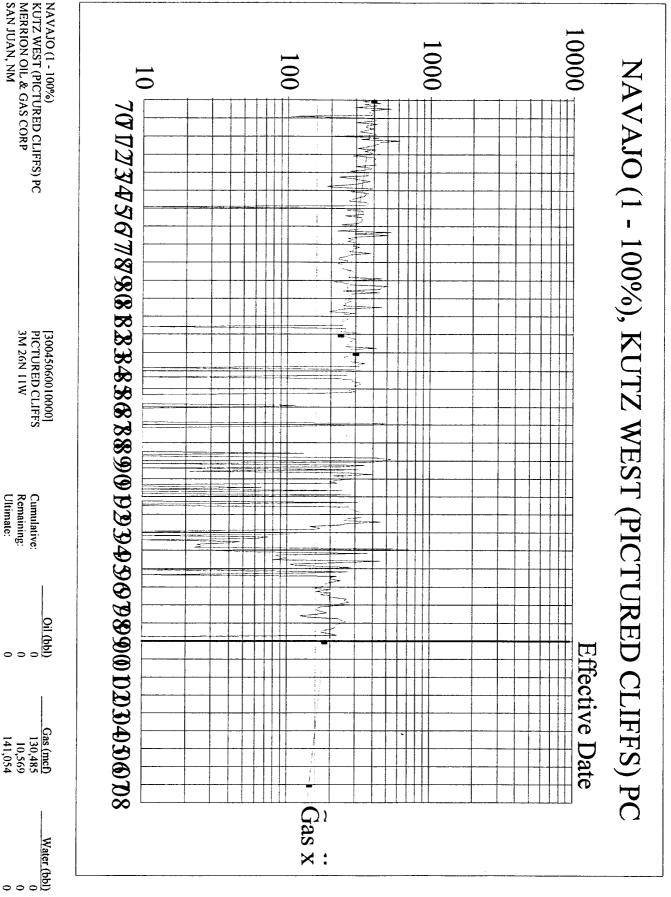
MEAD (1 - 100%)
KUTZ WEST (PICTURED CLIFFS) PC
MERRION OIL & GAS CORP
SAN JUAN, NM

PICTURED CLIFFS [30045060780000]

Cumulative: Remaining: Ultimate:

Oil (bbl)

Gas (mcf) 199,618 27,177 226,795



10,569 141,054

ROBERT L. BAYLESS PRODUCER, LLC

Downhole Commingle Application Krause #1

OFFSETTING OPERATOR AND AREA MAP

T27N RIIW

BURLINGTON	BURLIN		BONNEVILLE	Dugi wy Toul
MARATHON	BURLINGTON	6100	BONNENCEE	BURLINGTON
DREY FUS	Douthit Fed	Burling in Douthit Fed 351		Buelwe Huerfu Huerfu Hait 16
34	BURLINGTON		BONNEVILLE	Burungto
	Douthit Fed 352		Scott 18E	Huertano Unit 84
CONOCO + MERRION MERRION MERRION MERRION Meart Delhi Taylor Meart	BAYLESS + GRI	EER BMG Wininger#1	BURLIA	BURLINGTON
D+16	Krause*			Huerfano Unit 9
MERRION * Novajo#				
CROSS TIMBERS	Dugan	BURLINGTON	BURLING	STON
Į D	ı	 	JORDAN	2
			FAILS	

ROBERT L. BAYLESS PRODUCER, LLC

Downhole Commingle Application Krause #1

Offset Operators Notification List

	NAME	ADDRESS	CITY & STATE	ZIP CODE
Ι.	Benson-Montin-Greer Drilling Corporation	4900 College Blvd.	Farmington, NM	87402
2 .	Bonneville Fuels Corporation	1660 Lincoln, Suite 1800	Denver, CO	80264
3.	Burlington Resources Oil and Gas Company	P.O. Box 4289	Farmington, NM	87499~4289
4 .	Conoco Inc.	10 Desta Drive, Suite 100W	Midland, TX	79705-4500
5.	Cross Timbers Oil Company	810 Houston St., Suite 2000	Fort Worth, TX	76102-6298
6.	Dugan Production Corp.	P.O. Box 420	Farmington, NM	87499-0420
7.	Energen Resources Corporation	2198 Bloomfield Highway	Farmington, NM	87401
8.	Thomas G. Fails	1777 Larimer #1203	Denver, CO	80202
9.	Jordan Oil & Gas Co.	P.O. Box 1919	Healdsburg, CA	95448-1919
10.	Louis Dreyfus Natural Gas	14000 Quail Springs, #600	Oklahoma City, OK	73134-2600
11.	Marathon Oil Co.	P.O. Box 3128	Houston, TX	77253-3128
12.	Merrion Oil & Gas Corporation	610 Reilly Avenue	Farmington, NM	87401

ROBERT L. BAYLESS, PRODUCER LLC

OIL & GAS PRODUCER

P. O. Box 168 FARMINGTON, NM 87499

FAX NO. (505) 326-6911 OFFICE NO. (505) 326-2659

KRAUSE #1
1190' FNL & 1450' FWL
Section 2, T26N, R11W
San Juan County, New Mexico

SLOPE TEST

<u>Depth</u>	Hole Deviation					
135'	1/4°					
600,	1/4°					
1100'	1/2°					
1600'	FEB 2000 3/4°					
2025	FEB 2000 RECEIVED OIL CON. DIV OIL CON. 3					
State of New Mexico)) ss County of San Juan)	CONTROLL OF THE PARTY OF THE PA					
I,						
Subscribed and sworn before me this 7th day of February, 49 2000. Panula E. Clement						
My Commission Expires: 05/15/2	Notary Phone					

