



OIL CONSERVATION DIVISION
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5/23/96
Amend DHC-1217
Southern

Rockies

Business

Unit

April 30, 1996

Mr. William J. LeMay, Director
New Mexico Oil Conservation Division
2040 S. Pacheco Street
P. O. Box 6429
Santa Fe, NM 87505

1217

Correction of Application for Exception to Rule 303-C

Downhole Commingling

Lackey #1E Well

1540 FSL & 940' FEL, Unit I Section 23-T28N-R9W

Blanco Mesaverde (Pool IDN 72319) and Basin Dakota (Pool IDN 71599) and Otero Chacra (Pool IDN 82329) Pools

San Juan County, New Mexico

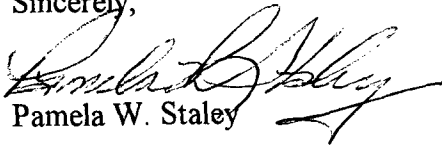
Amoco Production Company recently requested and received administrative approval to downhole commingle production from the Blanco Mesaverde and Basin Dakota Pools in the Lackey #1E well referenced above. The Lackey #1E is currently completed in the Dakota formation. We had planned to recomplete the well in the Mesaverde with both the Mesaverde and Dakota formations being downhole commingled in the wellbore. Since the Chacra formation is a separate pool in this area we are herein updating that application to include the Otero Chacra formation. All production estimates were correctly stated in our original application, however we did not delineate the Chacra as a pool separate from the Mesaverde. The three zones are expected to produce at a total commingled rate of about 204 MCFD with less than 2 BCPD. The ownership (WI, RI, ORI) of these pools is not common in this wellbore.

After approval from the NMOCD, the BLM asked that we allocate this well based on the subtraction method. We extrapolated the existing gas production from the Dakota through the life of the well and sent a letter to you and the BLM on April 16, 1996 stating that we would use the tabulated production forecast by month for the Dakota attributing the remaining production to the Mesaverde. We now want to amend the gas allocation to split the Mesaverde stream into Mesaverde and Chacra percentage allocations based on percentages developed from offset producers from the Chacra and the Mesaverde. Since the Chacra does not produce condensate, we recommend that all condensate be allocated based on the gas percentage for the Dakota with the remaining percentage being attributed to the Mesaverde.

The recommended gas percentage allocations are based on offset production. Attached is a tabulation of nearby Mesaverde and Chacra wells used to establish this allocation and the

recommended allocation percentages for those formations. Should you have questions concerning this matter, please contact me at (303) 830-5344.

Sincerely,


Pamela W. Staley

Enclosures

cc: Mark Rothenberg
Patty Haefele
Wellfile
Proration file

Frank Chavez, Supervisor
NMOCD District III
1000 Rio Brazos Road
Aztec, NM 87410

Duane Spencer
Bureau of Land Management
1235 La Plata Hwy.
Farmington, NM 87401

CHACRA AND MESAVERDE NEARBY WELLS

	<u>LOCATION</u>	<u>MCFD</u>	<u>%GAS</u>	<u>BOPD</u>	<u>%COND</u>
MESAVERDE					
Warren A LS 1A	C-25-28-9	76 MCFD		1.0 BOPD	
McCulley LS #3	L-24-28-9	50 MCFD		0.5 BOPD	
Warren A LS #2	A-23-28-9	200 MCFD		0.2 BOPD	
	Average	<u>108 MCFD (90%)</u>		<u>0.57 BOPD (100%)</u>	
CHACRA					
Lackey #2	K-26-28-9	10 MCFD		0.0 BOPD	
Hancock A #8	P-26-28-9	12 MCFD		0.0 BOPD	
	Average	<u>11 MCFD (10%)</u>		<u>0.0 BOPD (0%)</u>	

Restatement of Allocation formula

Gas Allocation:

Dakota gas: use tabulated MCFD for month (See attached April 16 letter)

Total Gas production minus Dakota tabulated gas = Remaining gas

Split Remaining gas 90% to Mesaverde and 10% to Chacra

Condensate Allocation:

Dakota Allocation = Gas percentage used for Dakota

Mesaverde Allocation = Total Condensate minus Dakota percentage

Chacra Allocation = 0 (no condensate)



Southern

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Business

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April 16, 1995

Mr. Ben Stone
New Mexico Oil Conservation Division
2040 S. Pacheco Street
P. O. Box 6429
Santa Fe, NM 87505

Downhole Commingling Application - Change of Allocation Method
Lackey #1E
Unit I Section 23-T28N-R9W
Basin Dakota and Blanco Mesaverde Pools
San Juan County, New Mexico

I am sending this letter per our telephone conversation of today on how to handle differing allocation methods approved by the NMOCD and the BLM. Amoco Production Company is in receipt of NMOCD Administrative Order DHC - 1217 wherein you approved our commingling of the subject wellbore and the allocation as recommended by Amoco. The United States Bureau of Land Management has also recently approved our application, however a condition of their approval is that we must allocate this production by the subtraction method. The BLM has stipulated that we must extrapolate the production for the current producing horizon (Dakota) through the life of the well and attribute that production to the Dakota. Any production in excess of that curve would be attributed to the Mesaverde formation. Attached you will find a tabulated gas production forecast by month for the remaining life of the Dakota. The allocation for the condensate would be the same ratio used for the gas once that was determined from the production each month.

We are simultaneously transmitting this future production schedule to Ray Hager at the BLM for their files. Should you have questions, please do not hesitate to call me at 303-830-5344.

Sincerely,

Pamela W. Staley

Attachment

cc: Mark Rothenberg - Denver
Mark Stelling - Farmington
Frank Chavez, Supervisor
NMOCD District III
1000 Rio Brazos Road
Aztec, NM 87410

Ray Hager
Bureau of Land Management
1235 La Plata Hwy.
Farmington, NM 87401

LACK1E

wellid	wellname	btu	Date	Monthly mcf	Daily MCF
300452491100DK	LACKEY 1E	1184	01-Jan-96	2249.6	74
300452491100DK	LACKEY 1E	1184	01-Feb-96	2188.8	72
300452491100DK	LACKEY 1E	1184	01-Mar-96	2158.4	71
300452491100DK	LACKEY 1E	1184	01-Apr-96	2128	70
300452491100DK	LACKEY 1E	1184	01-May-96	2097.6	69
300452491100DK	LACKEY 1E	1184	01-Jun-96	2036.8	67
300452491100DK	LACKEY 1E	1184	01-Jul-96	2006.4	66
300452491100DK	LACKEY 1E	1184	01-Aug-96	1976	65
300452491100DK	LACKEY 1E	1184	01-Sep-96	1945.6	64
300452491100DK	LACKEY 1E	1184	01-Oct-96	1884.8	62
300452491100DK	LACKEY 1E	1184	01-Nov-96	1854.4	61
300452491100DK	LACKEY 1E	1184	01-Dec-96	1824	60
300452491100DK	LACKEY 1E	1184	01-Jan-97	1793.6	59
300452491100DK	LACKEY 1E	1184	01-Feb-97	1763.2	58
300452491100DK	LACKEY 1E	1184	01-Mar-97	1732.8	57
300452491100DK	LACKEY 1E	1184	01-Apr-97	1702.4	56
300452491100DK	LACKEY 1E	1184	01-May-97	1672	55
300452491100DK	LACKEY 1E	1184	01-Jun-97	1641.6	54
300452491100DK	LACKEY 1E	1184	01-Jul-97	1611.2	53
300452491100DK	LACKEY 1E	1184	01-Aug-97	1580.8	52
300452491100DK	LACKEY 1E	1184	01-Sep-97	1550.4	51
300452491100DK	LACKEY 1E	1184	01-Oct-97	1520	50
300452491100DK	LACKEY 1E	1184	01-Nov-97	1489.6	49
300452491100DK	LACKEY 1E	1184	01-Dec-97	1459.2	48
300452491100DK	LACKEY 1E	1184	01-Jan-98	1428.8	47
300452491100DK	LACKEY 1E	1184	01-Feb-98	1398.4	46
300452491100DK	LACKEY 1E	1184	01-Mar-98	1398.4	46
300452491100DK	LACKEY 1E	1184	01-Apr-98	1368	45
300452491100DK	LACKEY 1E	1184	01-May-98	1337.6	44
300452491100DK	LACKEY 1E	1184	01-Jun-98	1307.2	43
300452491100DK	LACKEY 1E	1184	01-Jul-98	1276.8	42
300452491100DK	LACKEY 1E	1184	01-Aug-98	1246.4	41
300452491100DK	LACKEY 1E	1184	01-Sep-98	1246.4	41
300452491100DK	LACKEY 1E	1184	01-Oct-98	1216	40
300452491100DK	LACKEY 1E	1184	01-Nov-98	1185.6	39
300452491100DK	LACKEY 1E	1184	01-Dec-98	1155.2	38
300452491100DK	LACKEY 1E	1184	01-Jan-99	1155.2	38
300452491100DK	LACKEY 1E	1184	01-Feb-99	1124.8	37
300452491100DK	LACKEY 1E	1184	01-Mar-99	1094.4	36
300452491100DK	LACKEY 1E	1184	01-Apr-99	1094.4	36
300452491100DK	LACKEY 1E	1184	01-May-99	1064	35
300452491100DK	LACKEY 1E	1184	01-Jun-99	1033.6	34
300452491100DK	LACKEY 1E	1184	01-Jul-99	1033.6	34
300452491100DK	LACKEY 1E	1184	01-Aug-99	1003.2	33
300452491100DK	LACKEY 1E	1184	01-Sep-99	1003.2	33
300452491100DK	LACKEY 1E	1184	01-Oct-99	972.8	32
300452491100DK	LACKEY 1E	1184	01-Nov-99	942.4	31
300452491100DK	LACKEY 1E	1184	01-Dec-99	942.4	31
300452491100DK	LACKEY 1E	1184	01-Jan-00	912	30
300452491100DK	LACKEY 1E	1184	01-Feb-00	912	30
300452491100DK	LACKEY 1E	1184	01-Mar-00	881.6	29
300452491100DK	LACKEY 1E	1184	01-Apr-00	881.6	29
300452491100DK	LACKEY 1E	1184	01-May-00	851.2	28
300452491100DK	LACKEY 1E	1184	01-Jun-00	820.8	27
300452491100DK	LACKEY 1E	1184	01-Jul-00	820.8	27
300452491100DK	LACKEY 1E	1184	01-Aug-00	790.4	26
300452491100DK	LACKEY 1E	1184	01-Sep-00	790.4	26
300452491100DK	LACKEY 1E	1184	01-Oct-00	760	25
300452491100DK	LACKEY 1E	1184	01-Nov-00	760	25
300452491100DK	LACKEY 1E	1184	01-Dec-00	760	25

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wellid	wellname	btu	Date	Monthly mcf	Daily MCF
300452491100DK	LACKEY 1E	1184	01-Jan-01	729.6	24
300452491100DK	LACKEY 1E	1184	01-Feb-01	729.6	24
300452491100DK	LACKEY 1E	1184	01-Mar-01	699.2	23
300452491100DK	LACKEY 1E	1184	01-Apr-01	699.2	23
300452491100DK	LACKEY 1E	1184	01-May-01	668.8	22
300452491100DK	LACKEY 1E	1184	01-Jun-01	668.8	22
300452491100DK	LACKEY 1E	1184	01-Jul-01	668.8	22
300452491100DK	LACKEY 1E	1184	01-Aug-01	638.4	21
300452491100DK	LACKEY 1E	1184	01-Sep-01	638.4	21
300452491100DK	LACKEY 1E	1184	01-Oct-01	608	20
300452491100DK	LACKEY 1E	1184	01-Nov-01	608	20
300452491100DK	LACKEY 1E	1184	01-Dec-01	608	20
300452491100DK	LACKEY 1E	1184	01-Jan-02	577.6	19
300452491100DK	LACKEY 1E	1184	01-Feb-02	577.6	19
300452491100DK	LACKEY 1E	1184	01-Mar-02	547.2	18
300452491100DK	LACKEY 1E	1184	01-Apr-02	547.2	18
300452491100DK	LACKEY 1E	1184	01-May-02	547.2	18
300452491100DK	LACKEY 1E	1184	01-Jun-02	516.8	17
300452491100DK	LACKEY 1E	1184	01-Jul-02	516.8	17
300452491100DK	LACKEY 1E	1184	01-Aug-02	516.8	17
300452491100DK	LACKEY 1E	1184	01-Sep-02	516.8	17
300452491100DK	LACKEY 1E	1184	01-Oct-02	486.4	16
300452491100DK	LACKEY 1E	1184	01-Nov-02	486.4	16
300452491100DK	LACKEY 1E	1184	01-Dec-02	486.4	16
300452491100DK	LACKEY 1E	1184	01-Jan-03	456	15
300452491100DK	LACKEY 1E	1184	01-Feb-03	456	15
300452491100DK	LACKEY 1E	1184	01-Mar-03	456	15
300452491100DK	LACKEY 1E	1184	01-Apr-03	425.6	14
300452491100DK	LACKEY 1E	1184	01-May-03	425.6	14
300452491100DK	LACKEY 1E	1184	01-Jun-03	425.6	14
300452491100DK	LACKEY 1E	1184	01-Jul-03	425.6	14
300452491100DK	LACKEY 1E	1184	01-Aug-03	395.2	13
300452491100DK	LACKEY 1E	1184	01-Sep-03	395.2	13
300452491100DK	LACKEY 1E	1184	01-Oct-03	395.2	13
300452491100DK	LACKEY 1E	1184	01-Nov-03	395.2	13
300452491100DK	LACKEY 1E	1184	01-Dec-03	364.8	12
300452491100DK	LACKEY 1E	1184	01-Jan-04	364.8	12
300452491100DK	LACKEY 1E	1184	01-Feb-04	364.8	12
300452491100DK	LACKEY 1E	1184	01-Mar-04	364.8	12
300452491100DK	LACKEY 1E	1184	01-Apr-04	334.4	11
300452491100DK	LACKEY 1E	1184	01-May-04	334.4	11
300452491100DK	LACKEY 1E	1184	01-Jun-04	334.4	11
300452491100DK	LACKEY 1E	1184	01-Jul-04	334.4	11
300452491100DK	LACKEY 1E	1184	01-Aug-04	334.4	11
300452491100DK	LACKEY 1E	1184	01-Sep-04	304	10
300452491100DK	LACKEY 1E	1184	01-Oct-04	304	10
300452491100DK	LACKEY 1E	1184	01-Nov-04	304	10
300452491100DK	LACKEY 1E	1184	01-Dec-04	304	10
300452491100DK	LACKEY 1E	1184	01-Jan-05	304	10
300452491100DK	LACKEY 1E	1184	01-Feb-05	273.6	9
300452491100DK	LACKEY 1E	1184	01-Mar-05	273.6	9
300452491100DK	LACKEY 1E	1184	01-Apr-05	273.6	9
300452491100DK	LACKEY 1E	1184	01-May-05	273.6	9
300452491100DK	LACKEY 1E	1184	01-Jun-05	273.6	9
300452491100DK	LACKEY 1E	1184	01-Jul-05	273.6	9
300452491100DK	LACKEY 1E	1184	01-Aug-05	243.2	8
300452491100DK	LACKEY 1E	1184	01-Sep-05	243.2	8
300452491100DK	LACKEY 1E	1184	01-Oct-05	243.2	8
300452491100DK	LACKEY 1E	1184	01-Nov-05	243.2	8
300452491100DK	LACKEY 1E	1184	01-Dec-05	243.2	8

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Well ID	Well Name	btu	Date	Monthly mcf	Daily MCF
300452491100DK	LACKEY 1E	1184	01-Jan-06	243.2	8
300452491100DK	LACKEY 1E	1184	01-Feb-06	212.8	7
300452491100DK	LACKEY 1E	1184	01-Mar-06	212.8	7
300452491100DK	LACKEY 1E	1184	01-Apr-06	212.8	7
300452491100DK	LACKEY 1E	1184	01-May-06	212.8	7
300452491100DK	LACKEY 1E	1184	01-Jun-06	212.8	7
300452491100DK	LACKEY 1E	1184	01-Jul-06	212.8	7
300452491100DK	LACKEY 1E	1184	01-Aug-06	212.8	7
300452491100DK	LACKEY 1E	1184	01-Sep-06	212.8	7
END OF FORECAST (ECONOMIC LIMIT OF WELL REACHED)					