

DATE IN 4/2/04	SUSPENSE 5/1/04	ENGINEER WJS	LOGGED IN PWN	TYPE 0413351513	APP NO. DHC-3277
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ABOVE THIS LINE FOR DIVISION USE ONLY

NEW MEXICO OIL CONSERVATION DIVISION  
- Engineering Bureau -  
1220 South St. Francis Drive, Santa Fe, NM 87505



APR 21 2004  
OIL CONSERVATION DIVISION

## ADMINISTRATIVE APPLICATION CHECKLIST

THIS CHECKLIST IS MANDATORY FOR ALL ADMINISTRATIVE APPLICATIONS FOR EXCEPTIONS TO DIVISION RULES AND REGULATIONS WHICH REQUIRE PROCESSING AT THE DIVISION LEVEL IN SANTA FE:

### Application Acronyms:

[NSL-Non-Standard Location] [NSP-Non-Standard Proration Unit] [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-Quallified Enhanced Oil Recovery Certification] [PPR-Positive Production Response]

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

[A] Location - Spacing Unit - Simultaneous Dedication  
☐ NSL ☐ NSP ☐ SD

Check One Only for [B] or [C]

[B] Commingling - Storage - Measurement  
☒ DHC ☐ CTB ☐ PLC ☐ PC ☐ OLS ☐ OLM

[C] Injection - Disposal - Pressure Increase - Enhanced Oil Recovery  
☐ WFX ☐ PMX ☐ SWD ☐ IPI ☐ EOR ☐ PPR

[D] Other: Specify \_\_\_\_\_

### [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] ☐ 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] SUBMIT ACCURATE AND COMPLETE INFORMATION REQUIRED TO PROCESS THE TYPE OF APPLICATION INDICATED ABOVE.

[4] CERTIFICATION: I hereby certify that the information submitted with this application for administrative approval is accurate and complete to the best of my knowledge. I also understand that no action will be taken on this application until the required information and notifications are submitted to the Division.

Note: Statement must be completed by an individual with managerial and/or supervisory capacity.

Paul C. Thompson  
Print or Type Name

Paul C. Thompson  
Signature

Agent  
Title

4/15/04  
Date

PAUL@WALSHENG.NET  
e-mail Address

District I  
1625 N. French Drive, Hobbs, NM 88240

District II  
1301 W. Grand Avenue, Artesia, NM 88210

District III  
1000 Rio Brazos Road, Aztec, NM 87410

District IV  
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico  
Energy, Minerals and Natural Resources Department

Form C-107A  
Revised June 10, 2003

Oil Conservation Division  
1220 South St. Francis Dr.  
Santa Fe, New Mexico 87505

APPLICATION TYPE

☒ Single Well

☐ Establish Pre-Approved Pools

EXISTING WELLBORE

☒ Yes ☐ No

APPLICATION FOR DOWNHOLE COMMINGLING

Manana Gas, Inc

c/o Walsh Engineering, 7415 E. Main St., Farmington, NM 87402

Operator

Lucky Lindy #1

Address

N 13 T30N R12W

San Juan

Lease

Well No.

Unit Letter-Section-Township-Range

County

OGRID No. 13931 Property Code API No. 30-045-32010 Lease Type: ☐ Federal ☐ State ☒ Fee

DATA ELEMENT	UPPER ZONE	INTERMEDIATE ZONE	LOWER ZONE
Pool Name	Basin Fruitland Coal		<del>Uude</del> Aztec Pictured Cliffs
Pool Code	71629		71280
Top and Bottom of Pay Section (Perforated or Open-Hole Interval)	1785' - 1809' Proposed		1820' - 1830' Proposed
Method of Production (Flowing or Artificial Lift)	Pumping		Pumping
Bottomhole Pressure (Note: Pressure data will not be required if the bottom perforation in the lower zone is within 150% of the depth of the top perforation in the upper zone)			
Oil Gravity or Gas BTU (Degree API or Gas BTU)			
Producing, Shut-In or New Zone	New Zone		New Zone
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.)	Date:  Rates:	Date:  Rates:	Date:  Rates:
Fixed Allocation Percentage (Note: If allocation is based upon something other than current or past production, supporting data or explanation will be required.)	Oil                  Gas  0 %                  80 %	Oil                  Gas  %                          %	Oil                  Gas  0 %                  20 %

ADDITIONAL DATA

Are all working, royalty and overriding royalty interests identical in all commingled zones?  
If not, have all working, royalty and overriding royalty interest owners been notified by certified mail?

Yes \_\_\_\_\_ No ☒  
Yes ☒ No \_\_\_\_\_

Are all produced fluids from all commingled zones compatible with each other?

Yes ☒ No \_\_\_\_\_

Will commingling decrease the value of production?

Yes \_\_\_\_\_ No ☒

If this well is on, or communitized with, state or federal lands, has either the Commissioner of Public Lands  
or the United States Bureau of Land Management been notified in writing of this application?

Yes \_\_\_\_\_ No \_\_\_\_\_

NMOCD Reference Case No. applicable to this well: R-11363

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, royalty and overriding royalty interests for uncommon interest cases.
- Any additional statements, data or documents required to support commingling.

PRE-APPROVED POOLS

If application is to establish Pre-Approved Pools, the following additional information will be required:

- List of other orders approving downhole commingling within the proposed Pre-Approved Pools
- List of all operators within the proposed Pre-Approved Pools
- Proof that all operators within the proposed Pre-Approved Pools were provided notice of this application.
- Bottomhole pressure data.

I hereby certify that the information above is true and complete to the best of my knowledge and belief.

SIGNATURE Paul C. Thompson TITLE \_\_\_\_\_ Agent \_\_\_\_\_ DATE 4/15/04

TYPE OR PRINT NAME Paul C. Thompson, P.E. TELEPHONE NO. (505) 327-4892

E-MAIL ADDRESS paul@walsheng.net

State of New Mexico  
Energy, Minerals and Natural Resources Department

Form C-103  
Revised 1-1-89

OIL CONSERVATION DIVISION

2040 Pacheco St.  
Santa Fe, New Mexico 87505

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

DISTRICT I  
P.O. Drawer DD, Artesia, NM 88210

DISTRICT I  
1000 Rio Brazos Rd., Aztec, NM 87410

WELL API NO.

30-045-32010

5. Indicate Type of Lease

STATE ☐

FEE

☒

6. State Oil & Gas Lease No.

7. Lease Name or Unit Agreement Name

Lucky Lindy

8. Well No.

#1

9. Pool name or Wildcat

Basin Fruitland Coal / Aztec Pictured Cliffs

SUNDRY NOTICES AND REPORTS ON WELLS

(DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A  
DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT"  
(FORM C-101) FOR SUCH PROPOSALS)

1. Type of Well:

OIL

GAS

WELL ☐

WELL

☒

OTHER

2. Name of Operator

Manana Gas Company

3. Address of Operator

c/o Walsh Engineering, 7415 East Main Street, Farmington, NM 87402

4. Well Location

Unit Letter N : 750' Feet From The South Line and 1426' Feet From The West Line

Section 13 Township 30N Range 12W NMPM County

10. Elevation (Show whether DF, RKB, RT, GR, etc.)

5540' GR 5545' KB

Check Appropriate Box to Indicate Nature of Notice, Report, or Other Data

11. NOTICE OF INTENTION TO:

PERFORM REMEDIAL WORK ☐

PLUG AND ABANDON ☐

TEMPORARILY ABANDON ☐

CHANGE PLANS ☐

PULL OR ALTER CASING ☐

OTHER: Downhole Commingle ☒

SUBSEQUENT REPORT OF:

REMEDIAL WORK ☐ ALTERING CASING ☐

COMMENCE DRILLING OPNS. ☐ PLUG & ABANDONMENT ☐

CASING TEST AND CEMENT JOB ☐

OTHER: ☐

12. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent date, including estimated date of starting any proposed work).  
SEE RULE 1103.

Manana Gas Company seeks administrative approval to down hole commingle the production from the Basin Fruitland Coal (71629) and Aztec Pictured Cliffs (71280) pools. These two pools were pre-approved in Division Order R-11363. The proposed PC perforations are from 1820' - 1830'. The proposed FTC perfs are from 1785' to 1809'. Based on the calculated ultimate gross reserves from all of the existing PC and FTC wells in T30N and R12W, 20% of the production will be allocated to the Pictured Cliffs and 80% will be allocated to the Fruitland Coal. Commingling will not reduce the value of the total remaining production. Ownership in the two formations is not common. All of the interest owners have been notified of this application by certified mail. A copy of the notification letter and a list of the interest owners is attached.

I hereby certify that the information above is true and complete to the best of my knowledge and belief.

SIGNATURE

Paul C. Thompson

TITLE Agent/Engineer

DATE 04/15/04

TYPE OR PRINT NAME

Paul C. Thompson

TELEPHONE NO. (505) 327-4892

(This space for State Use)

APPROVED BY

TITLE

DATE

CONDITIONS OF APPROVAL, IF ANY:

DISTRICT I  
P.O. Box 1980, Hobbs, N.M. 88241-1980

DISTRICT II  
P.O. Drawer DD, Artesia, N.M. 88211-0719

DISTRICT III  
1000 Rio Brazos Rd., Aztec, N.M. 87410

DISTRICT IV  
PO Box 2088, Santa Fe, NM 87504-2088

State of New Mexico  
Energy, Minerals & Natural Resources Department

Form C-102

Revised February 21, 1994

Instructions on back

Submit to Appropriate District Office

State Lease - 4 Copies

Fee Lease - 3 Copies

OIL CONSERVATION DIVISION

P.O. Box 2088

Santa Fe, NM 87504-2088

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

<sup>1</sup> API Number <b>30-045-32010</b>	<sup>2</sup> Pool Code <b>71280</b>	<sup>3</sup> Pool Name <b>AZTEC PICTURED CLIFFS</b>
<sup>4</sup> Property Code	<sup>5</sup> Property Name <b>LUCKY LINDY</b>	<sup>6</sup> Well Number <b>1</b>
<sup>7</sup> OGRID No. <b>13931</b>	<sup>8</sup> Operator Name <b>MANANA GAS, INC.</b>	<sup>9</sup> Elevation <b>5540.23</b>

<sup>10</sup> Surface Location

UL or lot no. <b>N</b>	Section <b>13</b>	Township <b>30N</b>	Range <b>12W</b>	Lot Idn.	Feet from the <b>750.39</b>	North/South line <b>SOUTH</b>	Feet from the <b>1426.05</b>	East/West line <b>WEST</b>	County <b>SAN JUAN</b>
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<sup>11</sup> 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
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<sup>12</sup> Dedicated Acres <b>160</b>	<sup>13</sup> Joint or Infill <b>Y</b>	<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

<div>16</div> <div>SECTION 13</div> <div>1426.05'</div> <div>750.39'</div>	<div>17 OPERATOR CERTIFICATION</div> <p>I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief</p> <div>Paul C. Thompson</div> <div>Signature</div> <div>Paul C. Thompson</div> <div>Printed Name</div> <div>Agent</div> <div>Title</div> <div>4/15/04</div> <div>Date</div> <div>18 SURVEYOR CERTIFICATION</div> <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 knowledge and belief.</p> <div>OCTOBER 10, 2003</div> <div>Date of Survey</div> <div>JOHN D. WAYNE</div> <div>Signature and Seal of Professional Surveyor</div> <div>9673</div> <div>Certificate Number</div> <div>N.M. PLS 9673</div>
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DISTRICT II  
P.O. Drawer DD, Artesia, N.M. 88211-0719

DISTRICT III  
1000 Rio Brazos Rd., Aztec, N.M. 87410

DISTRICT IV  
PO Box 2088, Santa Fe, NM 87504-2088

## OIL CONSERVATION DIVISION

P.O. Box 2088  
Santa Fe, NM 87504-2088

☐ AMENDED REPORT

## WELL LOCATION AND ACREAGE DEDICATION PLAT

<sup>1</sup> API Number 30-045-32010	<sup>2</sup> Pool Code 71629	<sup>3</sup> Pool Name Basin Fruitland Coal
<sup>4</sup> Property Code	<sup>5</sup> Property Name LUCKY LINDY	<sup>6</sup> Well Number 1
<sup>7</sup> OGRID No. 13931	<sup>8</sup> Operator Name MANANA GAS, INC.	<sup>9</sup> Elevation 5540.23

<sup>10</sup> Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
N	13	30N	12W		750.39	SOUTH	1426.05	WEST	SAN JUAN

<sup>11</sup> 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
---------------	---------	----------	-------	---------	---------------	------------------	---------------	----------------	--------

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

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>16</p>		<p>17 OPERATOR CERTIFICATION</p> <p><i>I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief</i></p>
		<p><i>Paul C. Thompson</i></p> <p>Signature</p> <p>Paul C. Thompson</p> <p>Printed Name</p> <p>Agent/Engineer</p> <p>Title</p> <p>11/14/03</p> <p>Date</p>
<p>SECTION 13</p> <p>1426.05'</p> <p>750.39'</p>		<p>18 SURVEYOR CERTIFICATION</p> <p><i>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.</i></p> <p>OCTOBER 2003</p> <p>Date of Survey</p> <p>Signature and Seal of Professional Surveyor</p> <p>NEW MEXICO</p> <p>9673</p> <p>REGISTERED PROFESSIONAL LAND SURVEYOR</p> <p>Certificate Number N.M. PLS 9673</p>

Lucky Lindy #1  
Downhole Commingling Application

Allocation Formula

The Lucky Lindy #1 is a new Aztec Pictured Cliffs and Basin Fruitland Coal well. Since the well has not yet been completed there is no pressure or test information available. However, there are several other downhole commingled Pictured Cliffs - Fruitland Coal wells in this township and these pools have been pre-approved for downhole commingling. For this reason it is reasonable to expect the bottom hole pressures to be similar and the wellbore fluids to be compatible. Neither zone is expected to make any appreciable amount of liquid hydrocarbons.

There are currently 51 Aztec Pictured Cliffs wells in this township. Using current economic parameters, the 51 wells should have ultimate gross reserves of 410,940 MCF/well. The 75 current Fruitland Coal wells in this township should have 1,629,300 MCF/well of ultimate gross reserves. Please refer to the attached rate-time plots and cash-flow forecasts that were used to calculate the ultimate gross reserves for each pool. Using the averages from all the wells in the two proposed commingled pools, Manana Gas, Inc., **proposes to allocate 20% of the gas production to the Aztec Pictured Cliffs pool and the remaining 80% of the gas production to the Basin Fruitland Coal pool.** In the unlikely event that the well produces some liquid hydrocarbons, then 100% of the liquids production will be allocated to the Pictured Cliffs.

# Annual CashFlow Report

Project: C:\Program Files\IHS Energy\PowerTools v6.0\Projects\MananaDHC.MDB

Lease Name: 30-12 Pictured Cliffs Wells ()

Operator:

County, ST: ,

Field Name:

Location: 0-0-0

Date	Well Count	Gross Production		Net Production		Average Prices		Sales Total (\$)
		Oil (Bbl)	Gas (Mcf)	Oil (Bbl)	Gas (Mcf)	Oil (\$/Bbl)	Gas (\$/Mcf)	
12/2004	11	0	608,702	0	486,962	0.00	4.00	1,947,846
12/2005	11	0	832,874	0	666,299	0.00	4.00	2,665,196
12/2006	11	0	768,508	0	614,806	0.00	4.00	2,459,225
12/2007	11	0	653,232	0	522,585	0.00	4.00	2,090,342
12/2008	11	0	555,247	0	444,198	0.00	4.00	1,776,790
12/2009	11	0	471,960	0	377,568	0.00	4.00	1,510,272
12/2010	11	0	401,166	0	320,933	0.00	4.00	1,283,731
12/2011	11	0	340,991	0	272,793	0.00	4.00	1,091,171
12/2012	11	0	289,842	0	231,874	0.00	4.00	927,496
12/2013	11	0	246,366	0	197,093	0.00	4.00	788,371
12/2014	11	0	209,411	0	167,529	0.00	4.00	670,116
12/2015	11	0	177,999	0	142,400	0.00	4.00	569,598
12/2016	11	0	151,300	0	121,040	0.00	4.00	484,159
12/2017	11	0	128,605	0	102,884	0.00	4.00	411,535
12/2018	11	0	109,314	0	87,451	0.00	4.00	349,805
Remainder:		0	578,174	0	462,539	0.00	4.00	1,850,157
Grand Total:		0	6,523,691	0	5,218,953	0.00	4.00	20,875,810

Date	Operating Expenses (\$)	Taxes (\$)	Operating Income (\$)	Other Costs (\$)	Periodic Cash Flow (\$)	Cumulative Cash Flow (\$)	10% Cash Flow (\$)
12/2004	317,851	0	1,629,995	0	1,629,995	1,629,995	1,566,651
12/2005	434,437	0	2,230,759	0	2,230,759	3,860,755	1,972,688
12/2006	402,254	0	2,056,971	0	2,056,971	5,917,726	1,656,129
12/2007	344,616	0	1,745,726	0	1,745,726	7,663,452	1,277,763
12/2008	295,623	0	1,481,167	0	1,481,167	9,144,619	985,568
12/2009	253,980	0	1,256,292	0	1,256,292	10,400,911	759,944
12/2010	218,583	0	1,065,148	0	1,065,148	11,466,059	585,747
12/2011	188,496	0	902,676	0	902,676	12,368,735	451,274
12/2012	162,921	0	764,575	0	764,575	13,133,309	347,486
12/2013	141,183	0	647,188	0	647,188	13,780,497	267,398
12/2014	122,706	0	547,410	0	547,410	14,327,908	205,613
12/2015	107,000	0	462,599	0	462,599	14,790,506	157,962
12/2016	93,650	0	390,509	0	390,509	15,181,015	121,225
12/2017	82,302	0	329,232	0	329,232	15,510,247	92,913
12/2018	72,657	0	277,148	0	277,148	15,787,395	71,104
Remainder:	589,087	0	1,261,070	0	1,261,070	17,048,465	217,233
Grand Total:	3,827,345	0	17,048,465	0	17,048,465	17,048,465	10,736,698

**Discount Present Worth:**

0.00 %	17,048,465
10.00 %	10,736,698
20.00 %	7,907,364
30.00 %	6,319,918
40.00 %	5,306,101
50.00 %	4,602,768
60.00 %	4,086,085
70.00 %	3,690,264
80.00 %	3,377,156
90.00 %	3,123,129
100.00 %	2,912,770

**Economic Dates:**

Effective Date	04/2004
Calculated Limit	08/2035
Economic Life	377 Months
	31 Years 5 Months

**Economics Information:**

Net Payout Date:	04/2004
Rate of Return:	>100 %
Return on Investment:	0.00
Disc Return on Invest:	0.00
Initial Division of Interest:	

**Economics Summary:**

	Bbl Oil	Mcf Gas
Ultimate Gross	1,088	20,958,062
Historic Gross	1,088	14,234,527
Gross at Eff Date	1,088	14,434,371
Remaining Gross	0	6,523,691
Remaining Net	0	5,218,953

	NRI	ORI
Oil:	80.000000	0.000000
Gas:	80.000000	0.000000
Injection:	0.000000	0.000000

Reversion Date: None

20,958,062 / 51 = 410,940 MCF/WELL AVERAGE

# Rate/Time Graph

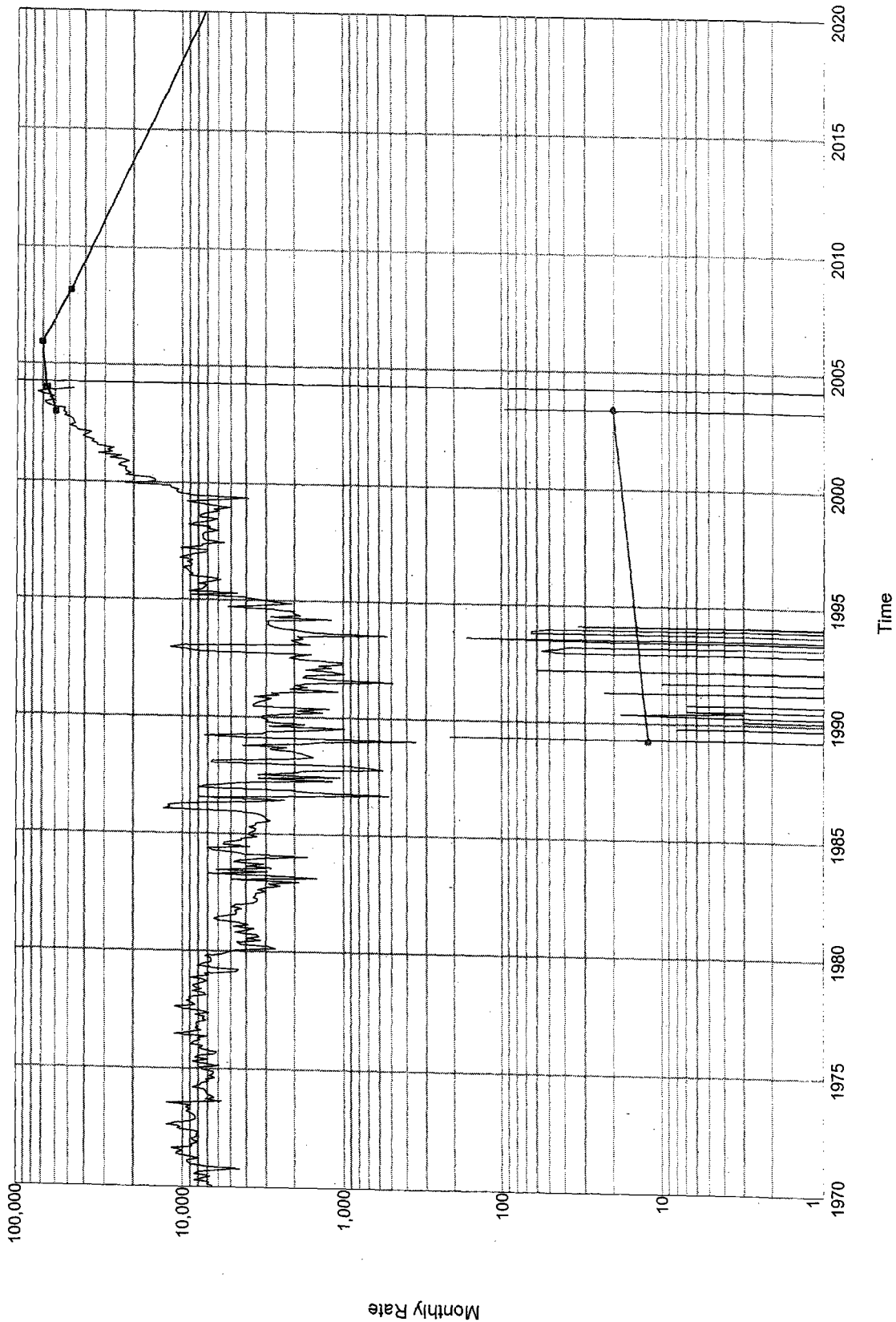
Project: C:\Program Files\HS Energy\PowerTools v6.0\Projects\MananaDHC.MDB

Date: 4/12/2004  
Time: 1:27 PM

Lease Name: 30-12 Pictured Cliffs Wells ()  
County, ST: ,  
Location: 0-0-0

Operator:  
Field Name:

30-12 Pictured Cliffs Wells -





# Annual CashFlow Report

Project: C:\Program Files\IHS Energy\PowerTools v6.0\Projects\MananaDHC.MDB

Lease Name: 30-12 Fruitland Coal ()

Operator:

County, ST: ,

Field Name:

Location: 0-0-0

Date	Well Count	Gross Production		Net Production		Average Prices		Sales Total (\$)
		Oil (Bbl)	Gas (Mcf)	Oil (Bbl)	Gas (Mcf)	Oil (\$/Bbl)	Gas (\$/Mcf)	
12/2004	54	0	8,678,613	0	6,942,891	0.00	4.00	27,771,563
12/2005	54	0	11,050,760	0	8,840,608	0.00	4.00	35,362,433
12/2006	54	0	9,933,216	0	7,946,573	0.00	4.00	31,786,291
12/2007	54	0	8,443,234	0	6,754,587	0.00	4.00	27,018,347
12/2008	54	0	7,176,749	0	5,741,399	0.00	4.00	22,965,595
12/2009	54	0	6,100,236	0	4,880,189	0.00	4.00	19,520,756
12/2010	54	0	5,185,201	0	4,148,161	0.00	4.00	16,592,643
12/2011	54	0	4,407,421	0	3,525,937	0.00	4.00	14,103,746
12/2012	54	0	3,746,308	0	2,997,046	0.00	4.00	11,988,184
12/2013	54	0	3,184,361	0	2,547,489	0.00	4.00	10,189,957
12/2014	54	0	2,706,707	0	2,165,366	0.00	4.00	8,661,463
12/2015	54	0	2,300,701	0	1,840,561	0.00	4.00	7,362,244
12/2016	54	0	1,955,596	0	1,564,477	0.00	4.00	6,257,907
12/2017	54	0	1,662,257	0	1,329,805	0.00	4.00	5,319,221
12/2018	54	0	1,412,918	0	1,130,334	0.00	4.00	4,521,338
Remainder:		0	7,965,284	0	6,372,227	0.00	4.00	25,488,910
Grand Total:		0	85,909,562	0	68,727,650	0.00	4.00	274,910,598

Date	Operating Expenses (\$)	Taxes (\$)	Operating Income (\$)	Other Costs (\$)	Periodic Cash Flow (\$)	Cumulative Cash Flow (\$)	10% Cash Flow (\$)
12/2004	4,352,807	0	23,418,756	0	23,418,756	23,418,756	22,516,931
12/2005	5,543,380	0	29,819,053	0	29,819,053	53,237,809	26,385,907
12/2006	4,984,608	0	26,801,683	0	26,801,683	80,039,492	21,578,616
12/2007	4,239,617	0	22,778,731	0	22,778,731	102,818,223	16,672,411
12/2008	3,606,374	0	19,359,221	0	19,359,221	122,177,444	12,881,433
12/2009	3,068,118	0	16,452,638	0	16,452,638	138,630,082	9,952,203
12/2010	2,610,600	0	13,982,042	0	13,982,042	152,612,124	7,688,856
12/2011	2,221,710	0	11,882,036	0	11,882,036	164,494,160	5,940,041
12/2012	1,891,154	0	10,097,031	0	10,097,031	174,591,191	4,588,806
12/2013	1,610,181	0	8,579,776	0	8,579,776	183,170,967	3,544,781
12/2014	1,371,354	0	7,290,110	0	7,290,110	190,461,076	2,738,136
12/2015	1,168,351	0	6,193,893	0	6,193,893	196,654,969	2,114,912
12/2016	995,798	0	5,262,109	0	5,262,109	201,917,078	1,633,413
12/2017	849,128	0	4,470,093	0	4,470,093	206,387,171	1,261,422
12/2018	724,459	0	3,796,879	0	3,796,879	210,184,050	974,043
Remainder:	4,566,142	0	20,922,767	0	20,922,767	231,106,817	3,282,629
Grand Total:	43,803,781	0	231,106,817	0	231,106,817	231,106,817	143,754,540

**Discount Present Worth:**

0.00 %	231,106,817
10.00 %	143,754,540
20.00 %	106,055,566
30.00 %	85,070,002
40.00 %	71,689,869
50.00 %	62,405,637
60.00 %	55,579,046
70.00 %	50,342,871
80.00 %	46,195,150
90.00 %	42,825,219
100.00 %	40,030,519

**Economic Dates:**

Effective Date	04/2004
Calculated Limit	05/2051
Economic Life	566 Months
	47 Years 2 Months

**Economics Information:**

Net Payout Date:	04/2004
Rate of Return:	>100 %
Return on Investment:	0.00
Disc Return on Invest:	0.00
Initial Division of Interest:	

**Economics Summary:**

	Bbl Oil	Mcf Gas
Ultimate Gross	140	122,177,248
Historic Gross	140	33,297,776
Gross at Eff Date	140	36,267,686
Remaining Gross	0	85,909,562
Remaining Net	0	68,727,650

WI:	100.000000	Oil:	80.000000	ORI	0.000000
		Gas:	80.000000		0.000000
		Injection:	0.000000		0.000000

Reversion Date: None

$$122,177,248 / 75 = 1,629,300 \text{ MCF/WELL}$$

# Rate/Time Graph

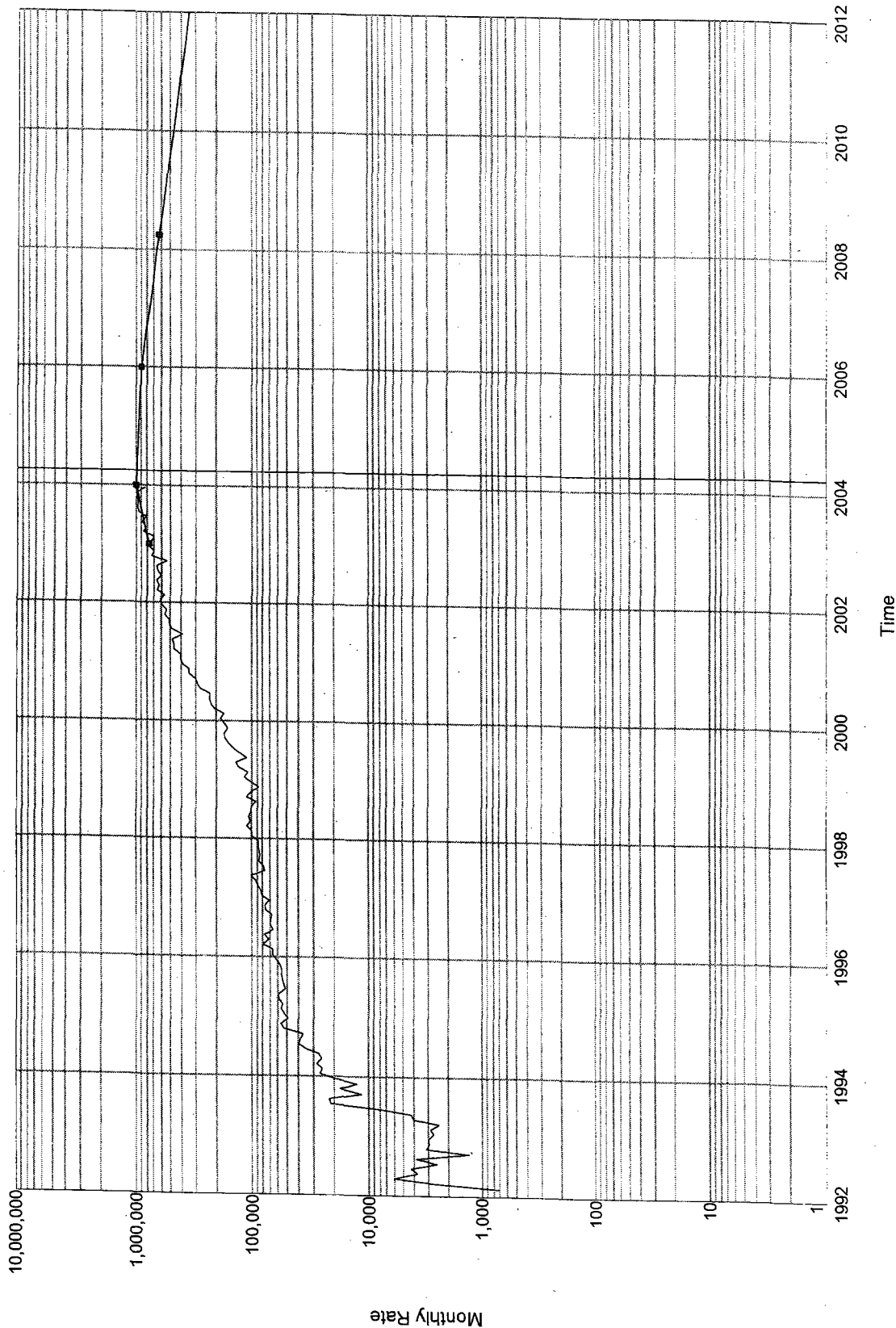
Lease Name: 30-12 Fruitland Coal (1)  
County, ST.:  
Location: 0-0-0

Project: C:\Program Files\IHS Energy\PowerTools v6.0\Projects\MananaDHC.MDB

Date: 4/12/2004  
Time: 1:17 PM

Operator:  
Field Name:

30-12 Fruitland Coal -



Unknown Reservoir

Section 0

Unknown Field

30-12 Fruitland Coal

FRUITLAND COAL

Section 2

BASIN

MOSELEY (1)

MOSELEY (1G)

Section 3

BASIN

L C KELLY (13)

L C KELLY (14)

L C KELLY (8)

L C KELLY (9)

Section 4

BASIN

L C KELLY (15)

L C KELLY (7)

Section 5

BASIN

L C KELLY (11)

L C KELLY (16)

Section 6

BASIN

TEXAKOMA FEDERAL 6 (1)

Section 7

BASIN

FLOYD (6)

TEXAKOMA FEDERAL 7 (1)

Section 8

BASIN

FEDERAL 8 FC (1)

FEDERAL 8 FC (2)

Section 9

BASIN

MCKENZIE A (2)

MCKENZIE A (3)

Section 10

BASIN

BROWN (1G)

BROWN (1Y)

Section 11

BASIN

CHRISMAN GAS COM (2)

L C KELLY (6A)

LITTLE STINKER (1)

LITTLE STINKER (2)

Section 13

BASIN

CAPT H W SAWYER (1)

CAPT H W SAWYER (1S)

Section 15

BASIN

HANCOCK GAS COM (2)

HANCOCK GAS COM (3)

JOHNSON GAS COM D (2)

JOHNSON GAS COM D (3)

Section 17

BASIN

FLOYD (3)

FLOYD (7)

FLOYD (8)

Section 18

BASIN

FEDERAL 18 (1)

Section 19

BASIN

FRUITLAND COAL & PICTURED COFFS WELLS  
IN T30N - R12W

FOOTHILLS C (1)

TEXAKOMA FOOTHILLS D (1)

Section 20

BASIN

SAN JUAN FEDERAL (1)

SAN JUAN FEDERAL (2)

Section 21

BASIN

FARMINGTON LAKE (1)

FARMINGTON LAKE (2)

TEXAKOMA-AMOCO A (1)

Section 22

BASIN

OSBORN (1)

OSBORN (2)

Section 23

BASIN

CHUCKY (2)

CHUCKY (3)

Section 24

BASIN

JOSE JAQUEZ (1)

Section 25

BASIN

ROWLAND GAS COM A (1)

ROWLAND GAS COM A (2)

RUBY CORSCOT A (1)

RUBY CORSCOT A (2)

Section 26

BASIN

KATY COM (1)

KATY COM (2)

Section 27

BASIN

DUFF GAS COM C (2)

DUFF GAS COM C (4)

STEDJE GAS COM (2)

STEDJE GAS COM (2R)

STEDJE GAS COM (3)

Section 28

BASIN

GILBREATH (1)

MCCOY GAS COM D (2)

MCCOY GAS COM D (3)

Section 29

BASIN

BROWN (3)

JUHAN (1)

Section 30

BASIN

FEDERAL GAS COM E (2)

TEXAKOMA-FARMINGTON (1)

Section 31

BASIN

FEDERAL GAS COM H (2)

QUINE GAS COM (2)

Section 32

BASIN

SAMMONS (100)

SHIOTANI (8)

Section 33

BASIN

REDFERN (2)

SHIOTANI (7)

Section 34

BASIN

HUDSON (2)

Section 35

BASIN

CARNAHAN COM (1)  
CARNAHAN COM (1Y)  
HUDSON J (3)

Section 36

BASIN

FC STATE COM (24)  
NEW MEXICO COM N (100)

PICTURED CLIFFS

175 FRUITLAND COAL WELLS.

Section 1

AZTEC

BOLACK F (2)  
MAXWELL (1)

Section 2

AZTEC

UPTEGROVE (1)  
UPTEGROVE (1R)

Section 3

AZTEC

CHUCKY (1)  
L C KELLY (8)

Section 4

AZTEC

L C KELLY (7)

Section 5

AZTEC

L C KELLY (10)  
L C KELLY (11)  
L C KELLY (12)

Section 7

FULCHER KUTZ  
FLOYD (2)

Section 9

SAN JUAN

BLANCO 30 12 (5)  
BLANCO 30 12 D (11)

Section 12

AZTEC

FEE (12)  
FEE (12A)  
JENSEN (1)

Section 13

AZTEC

BLANCETT (2)  
BLANCETT (2R)

Section 17

FULCHER KUTZ

FLOYD (3)  
FLOYD (4)

Section 19

FULCHER KUTZ

FOOTHILLS (1)  
FOOTHILLS (2)

Section 23

AZTEC

CHUCKY (2)

Section 24

AZTEC

BLANCETT (1)

Section 25

AZTEC

ROWLAND GAS COM A (1)  
RUBY (1)

Section 26

AZTEC

KATY COM (1)  
KATY COM (2)

Section 27

FULCHER KUTZ

SMITH (1)

Section 28

FULCHER KUTZ

MCCARTY (1)

MONTANO (1)

MONTGOMERY (1)

PALMER (1)

Section 29

FULCHER KUTZ

BROWN (2)

COPP (1)

HOLDER (1)

JUHAN (1)

MCCARTY (1)

WAGGONER (1)

WYPER (2)

Section 30

FULCHER KUTZ

BROWN (1)

Section 32

FULCHER KUTZ

SAMMONS (1)

WAGGONER (2)

Section 33

FULCHER KUTZ

HARGIS (1)

HARGIS (2)

HUDSON E (1)

JULANDER (2)

Section 34

FULCHER KUTZ

HUDSON (1)

HUDSON (2)

JULANDER (1)

MCGRATH (2)

/ 51 PICTURED CLIFFS WALL.

**WALSH**

ENGINEERING &amp; PRODUCTION CORP.

Petroleum Engineering Consulting  
Lease Management  
Contract Pumping7415 East Main  
Farmington, New Mexico 87402  
(505) 327-4892 • Fax: (505) 327-9834CERTIFIED- RETURN RECEIPT

April 15, 2004

Merrion Oil and Gas  
610 Reilly Ave  
Farmington NM 87401Re: Downhole Commingling Application  
Manana Gas, Inc.  
Lucky Lindy #1  
Section 13, T30N R12W  
San Juan County, NM  
Aztec Pictured Cliffs/Basin Fruitland Coal*Example*

Dear Merrion Oil and Gas ,

Manana Gas, Inc. has applied to the New Mexico Oil Conservation Division for administrative approval to downhole commingle the gas production from the Aztec Pictured Cliffs and Basin Fruitland Coal pools in the Lucky Lindy #1. Based on offset production, Manana proposes to allocate 20% of the gas production to the Pictured Cliffs and 80% to the Fruitland Coal. As an interest owner in one or both of these pools, you are being notified of this application pursuant to NMOC rules.

If you desire to submit remarks concerning the application, please send them to the New Mexico Oil Conservation Division, 1220 S. St. Francis Drive, Santa Fe, New Mexico, within 20 days from the receipt of this notice. If you have no objection to the proposal, no action is required on your part.

Thank you for your consideration in this matter and if you have any questions, please do not hesitate to call upon me.

Sincerely,

Paul C. Thompson, P.E.

Lucky Lindy, Aztec Pictured Cliffs/ Basin Fruitland Coal  
Interest Owners

errion Oil and Gas  
O Reilly Ave  
Farmington NM 87401

McCulliss Resources Co  
PO Box 3248  
Littleton CO 80161

George Vaught  
PO Box 13557  
Denver CO 80201

Wilmington Resources  
1 Cherry Street Ste 200  
Fort Worth TX 76102

XTO Energy  
810 Houston St  
Fort Worth TX 76102

Four Star Oil & Gas  
PO Box 730424  
Dallas TX 75373

Edward Hartman  
2520 Tramway Terrace Ct NE  
Albuquerque NM 87122

Betty Hartman QTIP Trust  
1002 Tramway Lane NE  
Albuquerque NM 87122

Hartman Oil and Gas  
2520 Tramway Terrace Ct NE  
Albuquerque NM 87122

Harvard & Lemay Exploration  
PO Box 936  
Roswell NM 88201

Lamp Investments  
PO Box 85  
Bronte TX 76933

Sylvia Little  
PO Box 1258  
Farmington NM 87499

Manana Gas Inc  
2520 Tramway Terrace Ct NE  
Albuquerque NM 87122

BP American Production Co  
PO Box 277897  
Atlanta GA 30384

Robert Bayless  
PO Box 168  
Farmington NM 87499

Cynthia Calvin  
747 Newport Street  
Denver CO 80220

Edward Calvin  
2380 Forest St  
Denver CO 80207

Max Coll  
Arroyo Hondo Rd #152  
Santa Fe NM 87505

Duff-Leach Family Trust  
PO Box 30396  
Albuquerque NM 87190

TE Duff Trust  
PO Box 9908  
Midland TX 79708

Howard Henderson Living Trust  
5809 N 24th Pl  
Phoenix AZ 85016

Weldon C. & John Julander Trustees  
PO Box 2773  
Littleton CO 80161

Mrs. BJ McDonald  
PO Box 50014  
Albuquerque NM 87181

Christine Buvens Living Trust  
301 La Chamisal Lane NE  
Albuquerque NM 87107

Carl Bannowsky  
20 Rd 2595  
Aztec NM 87410

Shirley Bannowsky  
#4 RD 3589  
Flora Vista NM 87415

CH & BR Beaty Trustees  
#77 Rd 3235  
Aztec NM 87410



Barbara Butler  
01 West MacArthur Apt 32-A  
Santa Ana CA 92704

Dwayne Butler  
26732 NE Comegys  
Duvall WA 98019

Melvin Eugene and Sylvia Payne  
7635 East Mesa Drive  
Cornville AZ 86325

Charles & Eula Dunagan  
PO Box 8  
Aztec NM 87410

DJ Elkins  
PO Box 1326  
Aztec NM 87410

Craig & Angela Erickson  
RT 3 Box 23  
Aztec NM 87410

Nancy Hartman  
302 Tramway Lane NE  
Albuquerque NM 87122

Donna Denne Frye  
2505 Riverside Dr.  
Farmington NM 87401

Shelly Greer c/o Carolyn Schnack  
4876 Durham St  
Boulder CO 80501

Decil Henry  
63 Rd 3050  
Aztec NM 87410

James & Christine Hopper  
2204 Ranch Dr  
Farmington NM 87401

Dorothy Hopper  
PO Box 832  
Aztec NM 87410

Richard Irvin  
5208 Hallmark Rd  
Farmington NM 87402

Amanda Lasky  
PO Box 134  
Lone Pine CA 93545

Adelia Luna Trustee  
PO Box 753  
Bloomfield NM 87413

Lynda Lyons  
15123 Brookhurst #65  
Westminster CA 92683

Janice McCoy  
PO Box 4  
Flora Vista NM 87415

Eugene & Nancy Minor  
187 Rd 3050  
Aztec NM 87410

Joe W & Janet Palmer  
43 Rd 3235  
Aztec NM 87410

Ernest & Olinda Reneau  
14 Campbell Farms Road  
Belen NM 87002

Riggs Oil & Gas Co.  
PO Box 711  
Farmington NM 87499

Lester & Lou Emma Roberts  
PO Box 1514  
Farmington NM 87499

Carolyn Schnack  
4876 Durham Street  
Boulder CO 80501

Kermit & Faye Sloan  
Box 178 Rd 3050  
Aztec NM 87410

Glendora Smith  
3605 Dakota NE  
Albuquerque NM 87110

Watson Spencer Administrator  
PO Box 361  
Farmington NM 87499

Coy Stocking Administrator  
PO Box  
Aztec NM 87410

Douglas & Joetta Thomas  
210 Rd 3050  
Aztec NM 87410

Louise Windsor  
319 E Tycksen  
Farmington NM 87401

a Bohen  
7 Thunderbird  
llerton CA 92635

Bob & Gywenh Browning  
301 Browning Rd  
Farmington NM 87401

Carmen Burson  
437 Rd 2900  
Aztec NM 87410