

DATE IN 12/14/98	SUSPENSE 12/24/98	ENGINEER DC	LOGGED BY KW	TYPE DHC
------------------	-------------------	-------------	--------------	----------

ABOVE THIS LINE FOR DIVISION USE ONLY

NEW MEXICO OIL CONSERVATION DIVISION
- Engineering Bureau -

2165

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

DEC 14 1998

Check One Only for [B] and [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

[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] 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.

Kay Maddox
Print or Type Name

Kay Maddox
Signature

Regulatory Agent
Title

12/10/98
Date

DISTRICT I
P.O. Box 1980, Hobbs, NM 88241 1980

DISTRICT II
811 Southl First St. Artesia NM 88210 2835

DISTRICT III
1000 Rio Brazos Rd. Aztec, NM 87410 1693

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
New 3-12-96

APPROVAL PROCESS:

☒ Administrative ☐ Hearing

EXISTING WELLBORE

☒ YES ☐ NO

APPLICATION FOR DOWNHOLE COMMINGLING

Operator Conoco Inc. Address 10 Desta Dr. Ste 100W, Midland, Tx. 79705-4500

Lease Primo Well No #1A Unit Ltr Sec Twp Rge Section 6, T-31-N, R-10-W, D County San Juan

OGRID NO. 005073 Property Code 003232 API NO. 30-045-21827 Spacing Unit Lease Types: (check 1 or more)
Federal ☒ 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	Animas Chacra 70340		Blanco Mesaverde 72319
2. TOP and Bottom of Pay Section (Perforations)	3444-3990'		4208-5028'
3. Type of production (Oil or Gas)	Gas		Gas
4. Method of Production (Flowing or Artificial Lift)	Flowing		Flowing
5. Bottomhole Pressure	a (Current)	a.	a.
Oil Zones - Artificial Lift: Estimated Current	201		373
Gas & Oil - Flowing: Measured Current	b (Original)	b.	b.
All Gas Zones: Estimated Or Measured Original	846		1250
6. Oil Gravity (°API) or Gas BT Content	1077		1077
7. Producing or Shut-In?	Producing		Shut-in
Production Marginal? (yes or no)	No		Yes
• If Shut-In give date and oil/gas/water rates of last production	Date Rates	Date Rates:	Date Rates 8/96 53 MCFD/.03 BOPD .2 BWPD Subtraction Method See attached
Note For new zones with no production history applicant shall be required to attach production estimates and supporting data			
• If Producing, date and oil/gas/water rates of recent test (within 60 days)	Date Rates 10/15/98 308 MCFD/.3 BOPD 1.0 BWPD Subtraction Method, See attached	Date Rates	Date Rates
8. Fixed Percentage Allocation Formula - % for each zone	oil: % Gas %	oil: % Gas %	Oil: % Gas %

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 others ☒ 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(D) Exceptions: ORDER NO(S). _____

16. ATTACHMENTS

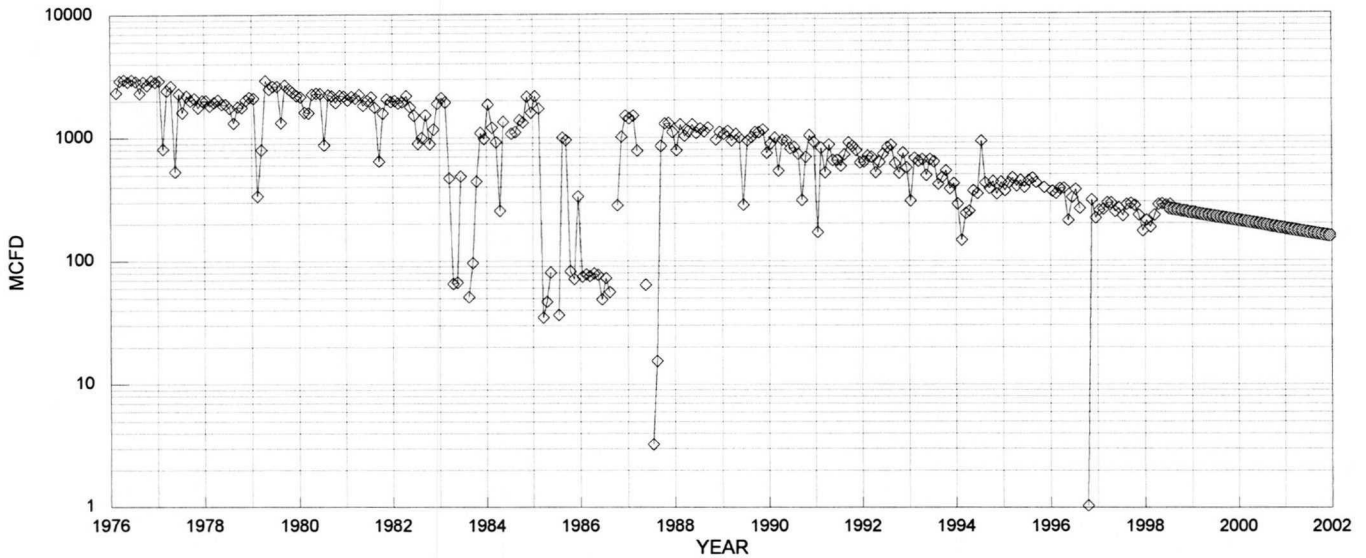
- * C-102 for each zone to be commingled showing its spacing unit and acreage dedication.
- * Production curve for each zone for at least one year. (If not available, attach explanation.)
- * For zones with no production history, estimated production rates and supporting data.
- * Data to support allocation 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 above is true and complete to the best of my knowledge and belief.

SIGNATURE Kay Maddox TITLE Regulatory Agent DATE December 10 1998

TYPE OR PRINT NAME Kay Maddox TELEPHONE NO. (915) 686-5798

**PRIMO #1A CHACRA PRODUCTION
SECTION 6D-31N-10W**



◇ CHACRA MCFD ● FIT MCFD

CHACRA HISTORICAL DATA

1ST PROD: 2/76

OIL CUM: 2.1 MBO
GAS CUM: 8456.8 MMCF
OIL YIELD: 0.0002 BBL/MCF

CHACRA PROJECTED DATA

1/1/99 Qi: 241 MCFD
DECLINE RATE: 13.75% (EXPONENTIAL)
OIL YIELD: 0.0004 BBL/MCF, LAST 3 YEARS

PRODUCTION FORECAST FOR SUBTRACTION METHOD COMMINGLE ALLOCATION

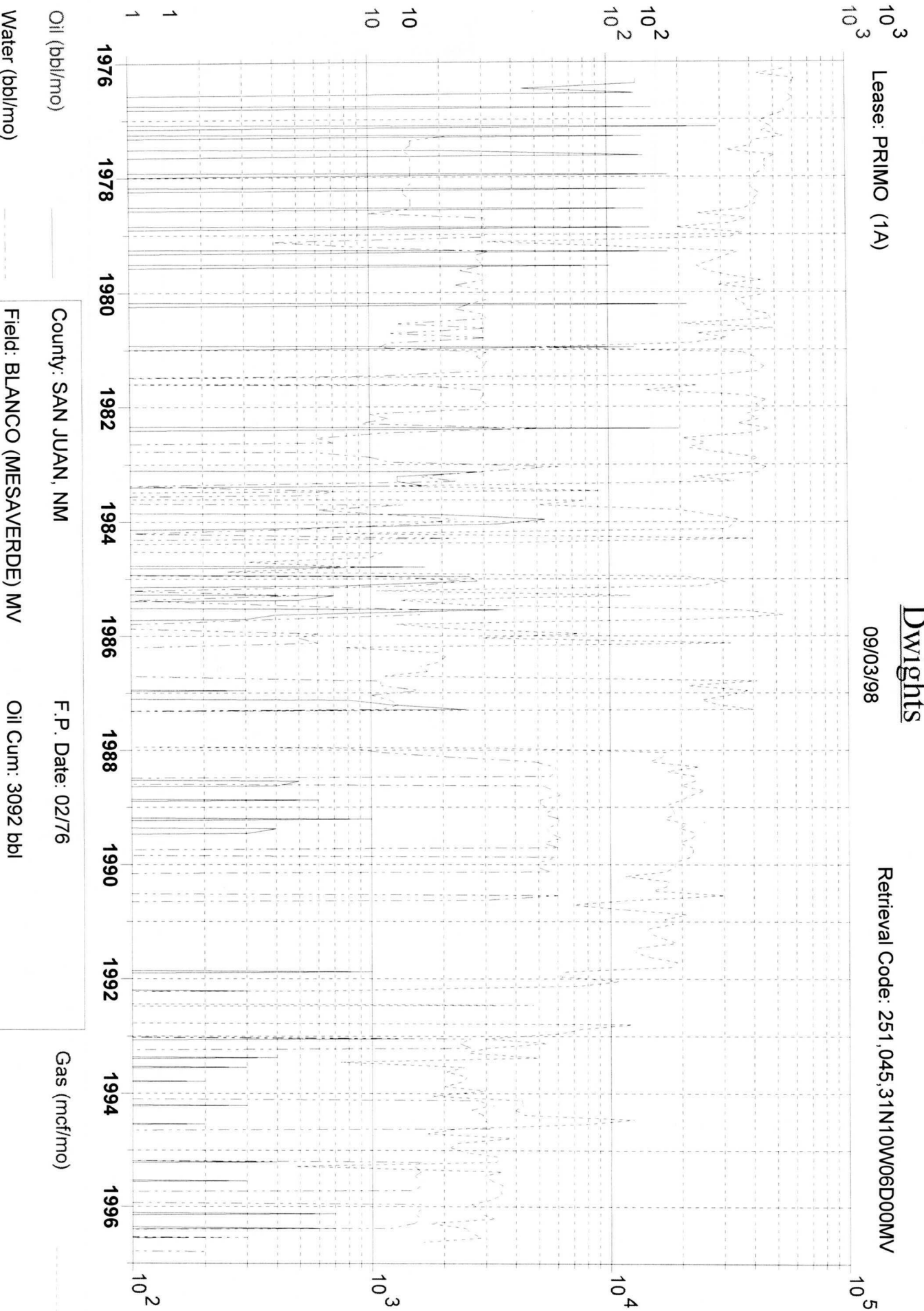
YEAR	MID-YEAR AVG MCFD	MID-YEAR AVG BOPD
1999	224	0.10
2000	193	0.08
2001	167	0.07
2002	144	0.06
2003	124	0.05
2004	107	0.05
2005	92	0.04
2006	80	0.03
2007	69	0.03
2008	59	0.03
2009	51	0.02
2010	44	0.02
2011	38	0.02
2012	33	0.01
2013	28	0.01
2014	24	0.01
2015	21	0.01
2016	18	0.01
2017	16	0.01
2018	13	0.01
2019	12	0.00
2020	10	0.00
2021	9	0.00
2022	7	0.00
2023	6	0.00
2024	6	0.00
2025	5	0.00
2026	4	0.00
2027	4	0.00
2028	3	0.00

Dwights

Lease: PRIMO (1A)

09/03/98

Retrieval Code: 251,045,31N10W06D00MV



County: SAN JUAN, NM

F.P. Date: 02/76

Field: BLANCO (MESAVARDE) MV

Oil Cum: 3092 bbl

Reservoir: MESAVARDE

Gas Cum: 5029 mmcf

Operator: CONOCO INC

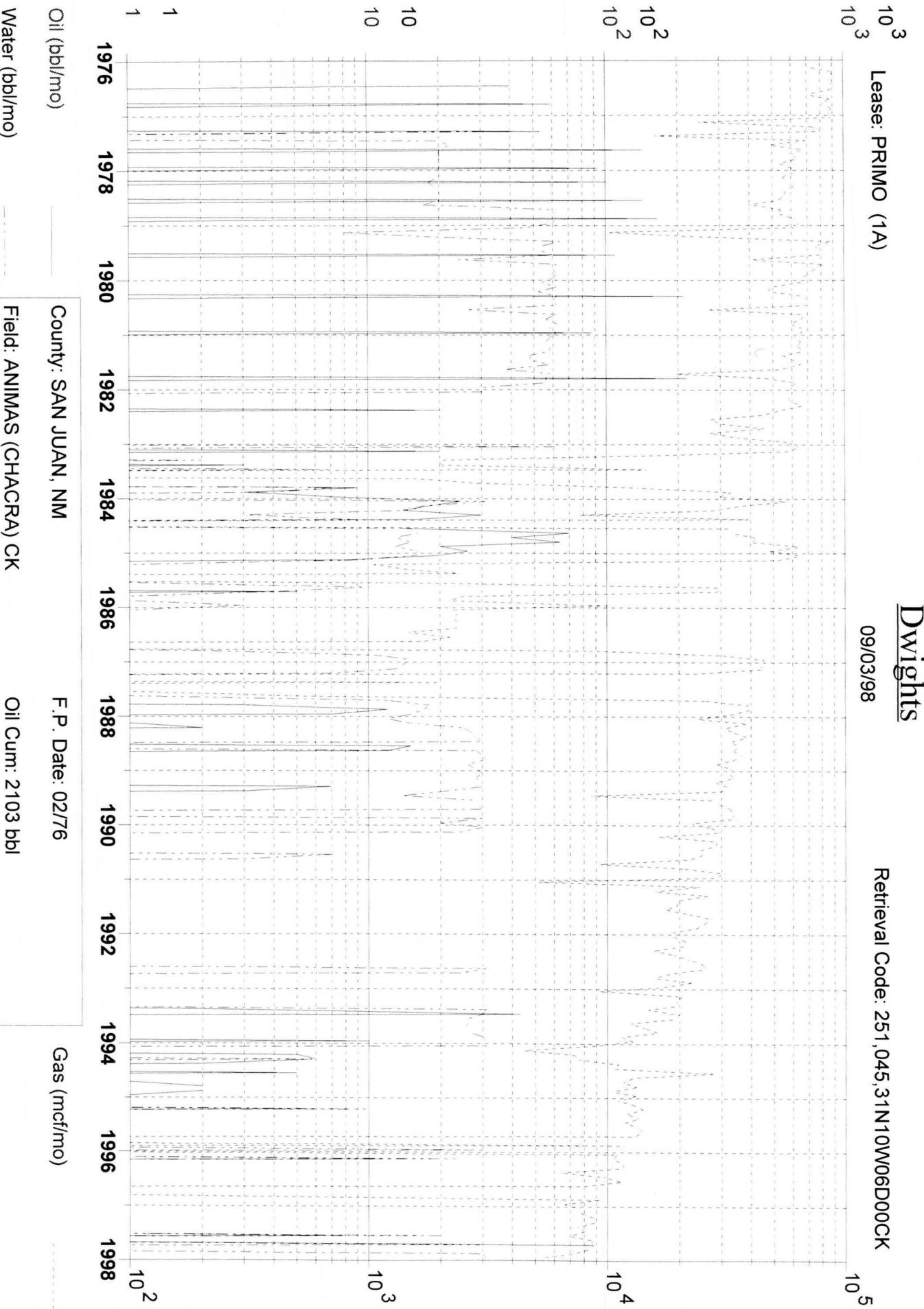
Location: 6D 31N 10W

Dwights

Lease: PRIMO (1A)

09/03/98

Retrieval Code: 251,045,31N10W06D00CK



Oil (bbl/mo)

Water (bbl/mo)

County: SAN JUAN, NM

Field: ANIMAS (CHACRA) CK

Reservoir: CHACRA

Operator: CONOCO INC

F.P. Date: 02/76

Oil Cum: 2103 bbl

Gas Cum: 8404 mmcf

Location: 6D 31N 10W

Gas (mcf/mo)

Calculate BHP and Z-factor from surface shut-in pressure

DESCRIPTION:	Chacra Formation - current pressure based on measured SIP		
WELL NAME :	Primo #1A (6D 31N 10W)		
GAS GRAVITY:	0.65	% N2	0.53 %
CONDENSATE (YES=1):	1	% CO2	0.31 %
RESERVOIR TEMP:	125 'F	% H2S	0.00 %
SURFACE TEMP:	60 'F	Pc =	668.32
DEPTH OF ZONE:	3,717 feet	Tc =	370.04

SURFACE PRES	BHP	Z	BHP/Z
psi	psi		psi
185	201	0.9755	206

Calculate BHP and Z-factor from surface shut-in pressure

DESCRIPTION:	Chacra Formation - original pressure based on measured SIP		
WELL NAME :	Primo #1A (6D 31N 10W)		
GAS GRAVITY:	0.65	% N2	0.53 %
CONDENSATE (YES=1):	1	% CO2	0.31 %
RESERVOIR TEMP:	125 'F	% H2S	0.00 %
SURFACE TEMP:	60 'F	Pc =	668.32
DEPTH OF ZONE:	3,717 feet	Tc =	370.04

SURFACE PRES	BHP	Z	BHP/Z
psi	psi		psi
771	846	0.9004	940

Calculate BHP and Z-factor from surface shut-in pressure

DESCRIPTION:	Mesaverde Formation - current pressure based on offsets		
WELL NAME :	Primo #1A (6D 31N 10W)		
GAS GRAVITY:	0.70	% N2	0.40 %
CONDENSATE (YES=1):	1	% CO2	0.85 %
RESERVOIR TEMP:	150 'F	% H2S	0.00 %
SURFACE TEMP:	60 'F	Pc =	667.68
DEPTH OF ZONE:	4,618 feet	Tc =	381.89

SURFACE PRES	BHP	Z	BHP/Z
psi	psi		psi
333	373	0.9566	390

Calculate BHP and Z-factor from surface shut-in pressure

DESCRIPTION:	Mesaverde Formation - original pressure based on offsets		
WELL NAME :	Primo #1A (6D 31N 10W)		
GAS GRAVITY:	0.70	% N2	0.40 %
CONDENSATE (YES=1):	1	% CO2	0.85 %
RESERVOIR TEMP:	150 'F	% H2S	0.00 %
SURFACE TEMP:	60 'F	Pc =	667.68
DEPTH OF ZONE:	4,618 feet	Tc =	381.89

SURFACE PRES	BHP	Z	BHP/Z
psi	psi		psi
1,097	1,250	0.8686	1,439

NE MEXICO OIL CONSERVATION COMMISSION
WELL LOCATION AND ACREAGE DEDICATION PLAT

Form C-102
Supersedes C-128
Effective 1-1-65

All distances must be from the outer boundaries of the Section.

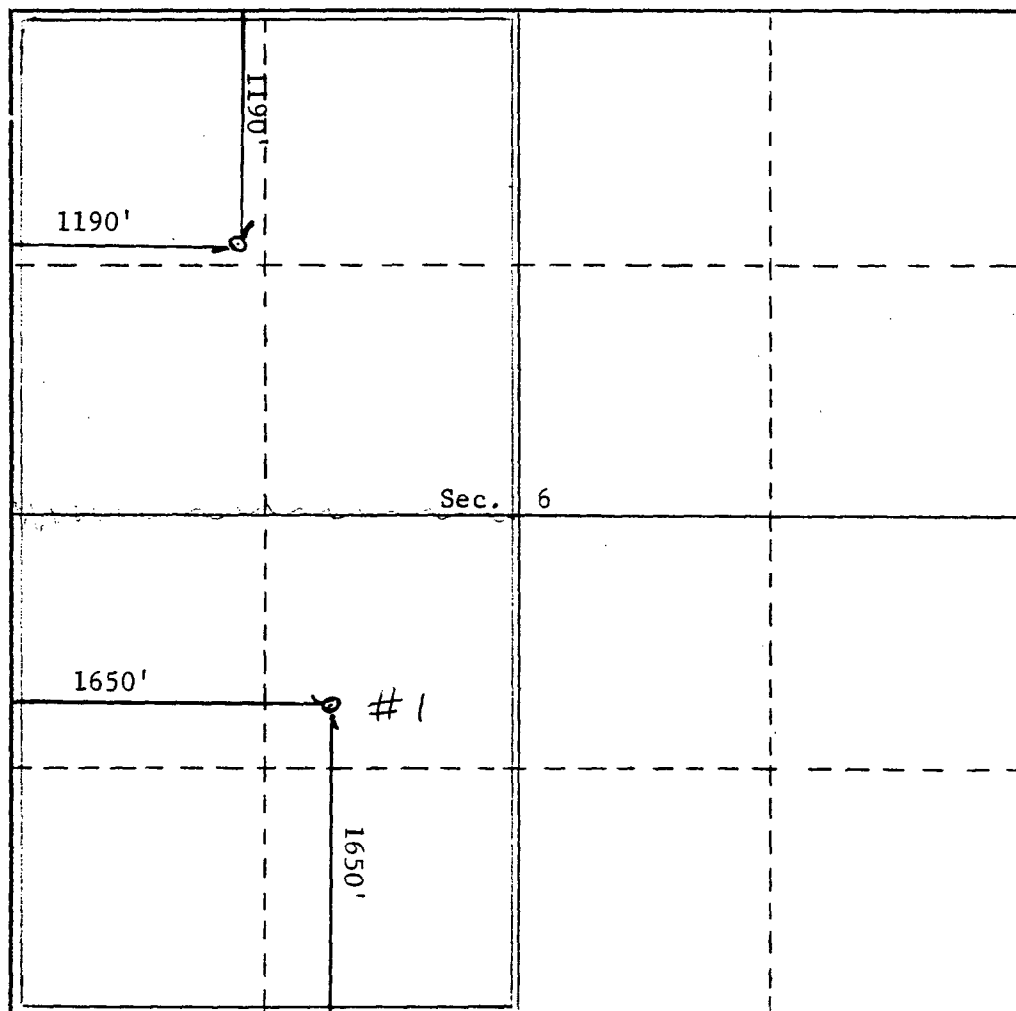
Operator Mesa Petroleum Co.			Lease Primo		Well No. 1A
Unit Letter D	Section 6	Township 31 North	Range 10 West	County San Juan	
Actual Footage Location of Well: 1190 feet from the North line and 1190 feet from the West line					
Ground Level Elev. 5943'	Producing Formation Chacra	Pool -Blanco Undersaturated	Dedicated Acreage: 151.09 Acres		

1. Outline the acreage dedicated to the subject well by colored pencil or hachure marks on the plat below.
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).
3. If more than one lease of different ownership is dedicated to the well, have the interests of all owners been consolidated by communitization, unitization, force-pooling, etc?

☐ Yes ☐ No If answer is "yes," type of consolidation _____

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 interests, has been approved by the Commission.



CERTIFICATION

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

Name
J. L. Farrell

Position
Operations Manager

Company
Mesa Petroleum Co.

Date
11/7/75

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

Registered Professional Engineer and/or Land Surveyor

Certificate No.

NEW MEXICO OIL CONSERVATION COMMISSION
WELL LOCATION AND ACREAGE DEDICATION PLAT

Form C-102
Supersedes C-128
Effective 1-1-65

All distances must be from the outer boundaries of the Section.

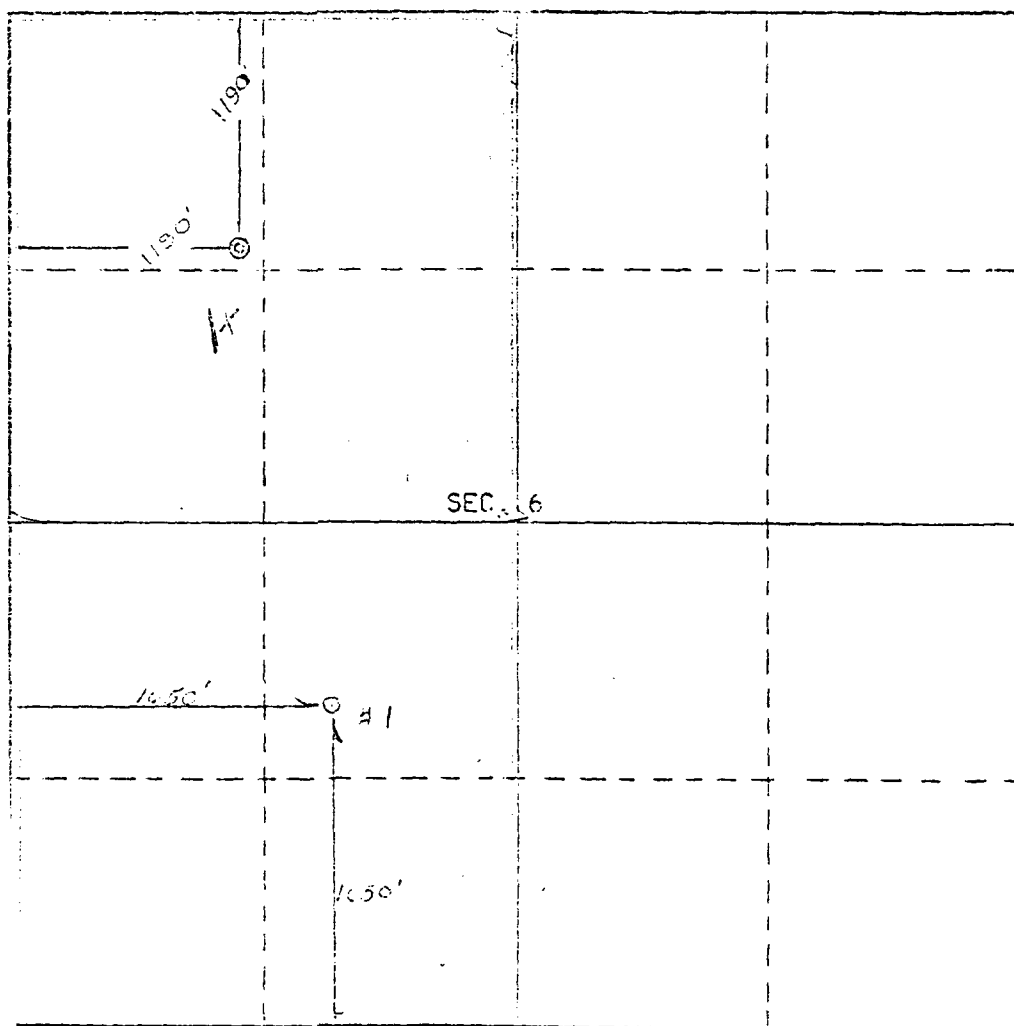
Owner Mesa Petroleum Co.		Lease Primo Federal		Well No. 1 A
Section 6	Township 31 North	Range 10 West	County San Juan	
Actual Storage Location of Well: 1190 feet from the North line and 1190 feet from the West line				
Ground Level Elev. 5943	Producing Formation Mesaverde	Pool Blanco	Dedicated Acreage: 30.57 320 Acres	

1. Outline the acreage dedicated to the subject well by colored pencil or hatchure marks on the plat below.
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).
3. If more than one lease of different ownership is dedicated to the well, have the interests of all owners been consolidated by communitization, unitization, force-pooling, etc?

☐ Yes ☐ No If answer is "yes," type of consolidation _____

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 interests, has been approved by the Commission.



CERTIFICATION

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

Name
R. J. Flaker
Position
Prod. Engr.
Company
Mesa Petroleum Co.
Date
3/12/75

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
January 15, 1975
Registered Land and/or Mineral Surveyor
E. V. Echshaw

Signature
E. V. Echshaw
License No. **3602**
E. V. Echshaw LS

Primo #1A
Section 6, T-31-N, R-10-W, D
API # 30-045-21827
San Juan County, NM

RE: Application to Downhole Commingle

Notification of Offset Operators:

Amoco
PO Box 800
Denver, CO 80201

Burlington Resources
PO Box 4289
Farmington, NM 87499

A copy of the C-107A Application has been sent to the above listed parties

Primo #1A
Section 6, T-31-N, R-10-W, D
API # 30-045-21827
San Juan County, NM

RE: Application to Downhole Commingle Mesaverde & Chacra (C107A)

Notification Of Working, Overriding & Royalty Interest Owners

The attached owners have been sent a certified copy of the C-107A application – see attached evidence.

Patricia Ledvina Himes
2201 E 27th St
Tulsa OK 74114-4241

Joe E. Guyer
12 Woodway Oaks Ln
Houston, TX 77056-1300

Julia Page
PO Box 610
Lawrence KS 66044-0610

Ellen Ledvina Garland
3718 E 48th Sssst
Tulsa, OK 74135-1929

Myra K. Cummins Estate
Louis M Cummins Personal Rep.
PO Box 1495
Durango, CO 81302-1495

Basil C Larcher
#6543
Avenida Wilfredo
La Jolla CA 92037-6256

Ruby Leeper
1083 Rd 2900
Aztec, NM 87410-9735

Taurus Expl USA Inc
2101 Sixth Ave N
Birmingham AL 35203-2749

WP Carr & Gladys Carr
STE 950
8333 Douglas
Dallas, TX 75255-5896

Reola Whitney
361 9th Street
Durango, CO 81301-5224

Amoco Production Co.
PO Box 800
Denver, CO 80201

Moore Loyal Trust
Lee Wayne & Joann
Montgomery Moore Trustees
403 Marienfeld
Midland, TX 79701-4397

George W Umbach
Apt 496
2620 S Maryland PKY
Las Vegas, NV 89109-1673

Robert Umbach
PO Box 5310
Farmington, NM 87499-5310

Minerals MGT Service
Onshore Federal #17555
PO Box 5810
Denver, CO 80217-5810

Z 137 529 832

US Postal Service
Receipt for Certified MailMyra K. Cummins Estate
Louis M Cummins Personal Rep.
PO Box 1495
Durango, CO 81302-1495

Postage	\$
---------	----

Z 137 529 834

US Postal Service
Receipt for Certified Mail
No Insurance Coverage Provided.Amoco Production Co.
PO Box 800
Denver, CO 80201

Postage	
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	

Z 137 529 837

US Postal Service
Receipt for Certified Mail
No Insurance Coverage Provided.Moore Loyal Trust
Lee Wayne & Joann
Montgomery Moore Trustees
403 Marienfeld
Midland, TX 79701-4207

Z 137 529 841

US Postal Service
Receipt for Certified MailJulia Page
PO Box 610
Lawrence KS 66044-0610

Postage	\$
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	
Return Receipt Showing to Whom, Date, & Addressee's Address	
TOTAL Postage & Fees	\$
Postmark or Date	

Z 137 529 831

US Postal Service
Receipt for Certified Mail
No Insurance Coverage Provided.Joe E. Guyer
12 Woodway Oaks Ln
Houston, TX 77056-1300

Postage	\$
Certified Fee	

Z 137 529 835

US Postal Service
Receipt for Certified Mail
No Insurance Coverage Provided.Robert Umbach
PO Box 5310
Farmington, NM 87499-5310

Postage	\$
Certified Fee	
Special Delivery Fee	

Z 137 529 838

US Postal Service
Receipt for Certified MailWP Carr & Gladys Carr
STE 950
8333 Douglas
Dallas, TX 75255-5896

Postage	\$
---------	----

Z 137 529 842

US Postal Service
Receipt for Certified Mail
No Insurance Coverage Provided.
Do not use for International Mail (See reverse)

Sent to	Amoco
Street & Number	PO Box 800
Post Office, State, & ZIP Code	Denver CO 80201
Postage	\$
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	
Return Receipt Showing to Whom, Date, & Addressee's Address	
TOTAL Postage & Fees	\$
Postmark or Date	

rm 3800, April 1995

Z 137 529 833

US Postal Service
Receipt for Certified MailTaurus Expl USA Inc
2101 Sixth Ave N
Birmingham AL 35203-2749

Postage	\$
---------	----

Z 137 529 836

US Postal Service
Receipt for Certified Mail
No Insurance Coverage Provided.Minerals MGT Service
Onshore Federal #17555
PO Box 5810
Denver, CO 80217-5810

Postage	
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	

Z 137 529 840

US Postal Service
Receipt for Certified Mail
No Insurance Coverage Provided.Basil C Larcher
#6543
Avenida Wilfredo
La Jolla CA 92037-6256

Postage	\$
---------	----

Z 137 529 839

US Postal Service
Receipt for Certified Mail
No Insurance Coverage Provided.
Do not use for International Mail (See reverse)

Sent to	Burling Resources
Street & Number	PO Box 4289
Post Office, State, & ZIP Code	Farmington NM 87429
Postage	\$
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	
Return Receipt Showing to Whom, Date, & Addressee's Address	
TOTAL Postage & Fees	\$
Postmark or Date	

rm 3800, April 1995

Z 137 529 826

US Postal Service
Receipt for Certified Mail
No Insurance Coverage Provided

Patricia Ledvina Himes
2201 E 27th St
Tulsa OK 74114-4241

Postage	\$
Certified Fee	
Special Delivery Fee	

Z 137 529 828

US Postal Service
Receipt for Certified Mail
No Insurance Coverage Provided.

Ruby Leeper
1083 Rd 2900
Aztec, NM 87410-9735

Postage	\$
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	
Return Receipt Showing to Whom, Date, & Addressee's Address	
TOTAL Postage & Fees	\$
Postmark or Date	

PS Form 3800, April 1995

Z 137 529 830

US Postal Service
Receipt for Certified Mail

George W Umbach
Apt 496
2620 S Maryland PKY
Las Vegas, NV 89109-1673

Postage	\$
Certified Fee	
Special Delivery Fee	

Z 137 529 829

US Postal Service
Receipt for Certified Mail
No Insurance Coverage Provided

Reola Whitney
361 9th Street
Durango, CO 81301-5224

Postage	\$
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	
Return Receipt Showing to Whom, Date, & Addressee's Address	
TOTAL Postage & Fees	\$
Postmark or Date	

PS Form 3800, April 1995

Z 137 529 827

US Postal Service
Receipt for Certified Mail
No Insurance Coverage Provided.

Ellen Ledvina Garland
3718 E 48th Sssst
Tulsa, OK 74135-1929

Postage	\$
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	
Return Receipt Showing to Whom, Date, & Addressee's Address	
TOTAL Postage & Fees	\$
Postmark or Date	

PS Form 3800, April 1995