



Southern

Rockies

Business

Unit

April 8, 1996

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

Corrected Application for Exception to Rule 303-C
Downhole Commingling
Russell LS #3 Well
Unit M Section 23-T28N-R8W
Blanco Mesaverde and South Blanco Pictured Cliffs Pools
San Juan County, New Mexico

RECEIVED
APR 11 1996
OIL CON. DIV.
DIST. 3

Enclosed please find an administrative application form (C-107-A) and attachments for downhole commingling for the captioned well. This application was formerly sent to you with the captioned wellname on the cover letter of Russell LS #1. The correct wellname as reflected in the rest of the information you received is the Russell LS #3. I apologize for any inconvenience that this may have caused you. All other information enclosed is unchanged.

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

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

OIL CONSERVATION DIVISION

APPROVAL PROCESS:

2040 S. Pacheco
Santa Fe, New Mexico 87505-6429

☒ Administrative ☐ Hearing

DISTRICT III
1000 Rio Brazos Rd. Aztec, NM 87410-1893

EXISTING WELLBORE
☒ YES ☐ NO

APPLICATION FOR DOWNHOLE COMMINGLING

Amoco Production Company

P.O. Box 800 Denver, CO 80201

Cipriator
Russell LS

3

Address
M-23-28N-8W

San Juan

Lease

Well No.

Unit Ltr. - Sec Twp - Rge

County

GRID NO. 000778

Property Code

001000

API NO.

3004507242

Federal

Spacing Unit Lease Types: (check 1 or more)

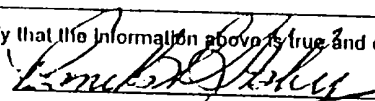
☒ State

(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	SOUTH BLANCO PICTURED CLIFFS 72439		BLANCO MESAVERDE 72319
2. Top and Bottom of Pay Section (Perforations)	2338' - 2432'		4009' - 4726'
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 Gas & Oil - Flowing All Gas Zones: Estimated or Measured Original	(Current) 445 PSI (Original) 1152 PSI		a. 855 PSI b. 1248 PSI
6. Oil Gravity (" API) or Gas BTU Content	1149 BTU		1280 BTU / 49 DEG API
7. Producing or Shut-In?	PRODUCING		PRODUCING
Production Marginal? (yes or no)	YES		YES
• If Shut In, give data 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:
• If Producing, give date and oil/gas/water rates of recent test (within 90 days)	1/96 32 MCFD 0 BCPD 0 BWPD	Date: Rates:	1/96 53 MCFD 0.35 BCPD 0 BWPD
8. Fixed Percentage Allocation Formula -% for each zone	Oil: 0 % Gas: 20 % ##	Oil: % Gas: %	Oil: 100 % Gas: 80 % ##

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?
If not, have all working, overriding, and royalty interests been notified by certified mail?
I have all offset operators been given written notice of the proposed downhole commingling?
☒ Yes ☐ No
☐ Yes ☐ No
☒ 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 SF-078499 NM-013860-A COM 14-08-001-4706
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. ## SEE ATTACHED
 - 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 

TITLE

REGULATORY AFFAIRS REP

DATE

4/4/96

TYPE OR PRINT NAME PAMELA W. STALEY

TELEPHONE NO. (303) 830-5344

Well Location and Acreage Dedication Plat

Section A.

Date **FEBRUARY 24, 1950**

Operator **EL PASO NATURAL GAS COMPANY**
 Well No. **3 (PM)** Unit Letter **M** Section **23** Lease **RUSSELL,** NM **013860-A**
 Located **820** Feet From **SOUTH** Line, **11/10** Township **20-N** Range **8-W** NADIM
 County **SAN JUAN** G. L. Elevation **5865** Feet From **WEST** Line
 Name of Producing Formation **MESA VERDE & PICTURED CLIFF** Dedicated Acreage **320 & 160** Acre
 Pool **MV - BLANCO, PC - WILDCAT**

1. Is the Operator the only owner in the dedicated acreage outlined on the plat below?
 Yes ☒ No ☐
2. If the answer to question one is "no", have the interests of all the owners been consolidated by communitization agreement or otherwise? Yes ☐ No ☐ If answer is "Yes", Type of Consolidation,

3. If the answer to question two is "no", list all the owners and their respective interests below:

Owner

Land Description

RECEIVED
 MAR 4 1950
 U. S. GEOLOGICAL SURVEY
 FARMINGTON, NEW MEXICO

Section B.

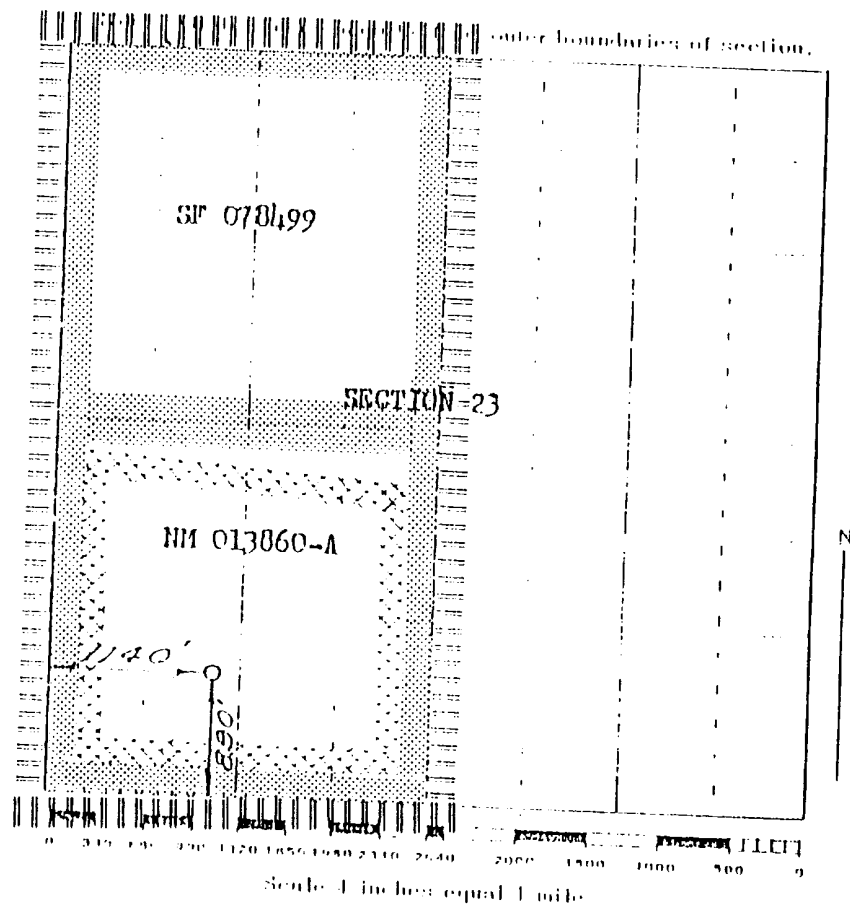
This is to certify that the information in Section A above is true and complete to the best of my knowledge and belief.

El Paso Natural Gas Company
 (Operator)

Original Signed D. C. Johnston
 (Signature)

Box 997
 (Address)

Farmington, New Mexico



This is to certify that the above plat was prepared from field notes of actual surveys made by me or under my supervision and that the same are true and correct to the best of my knowledge and belief.

(Seal)

Farmington, New Mexico

Date Surveyed **OCTOBER 23, 1957**

David C. Johnston
 Registered Professional Engineer and Surveyor

Engr: zmar16

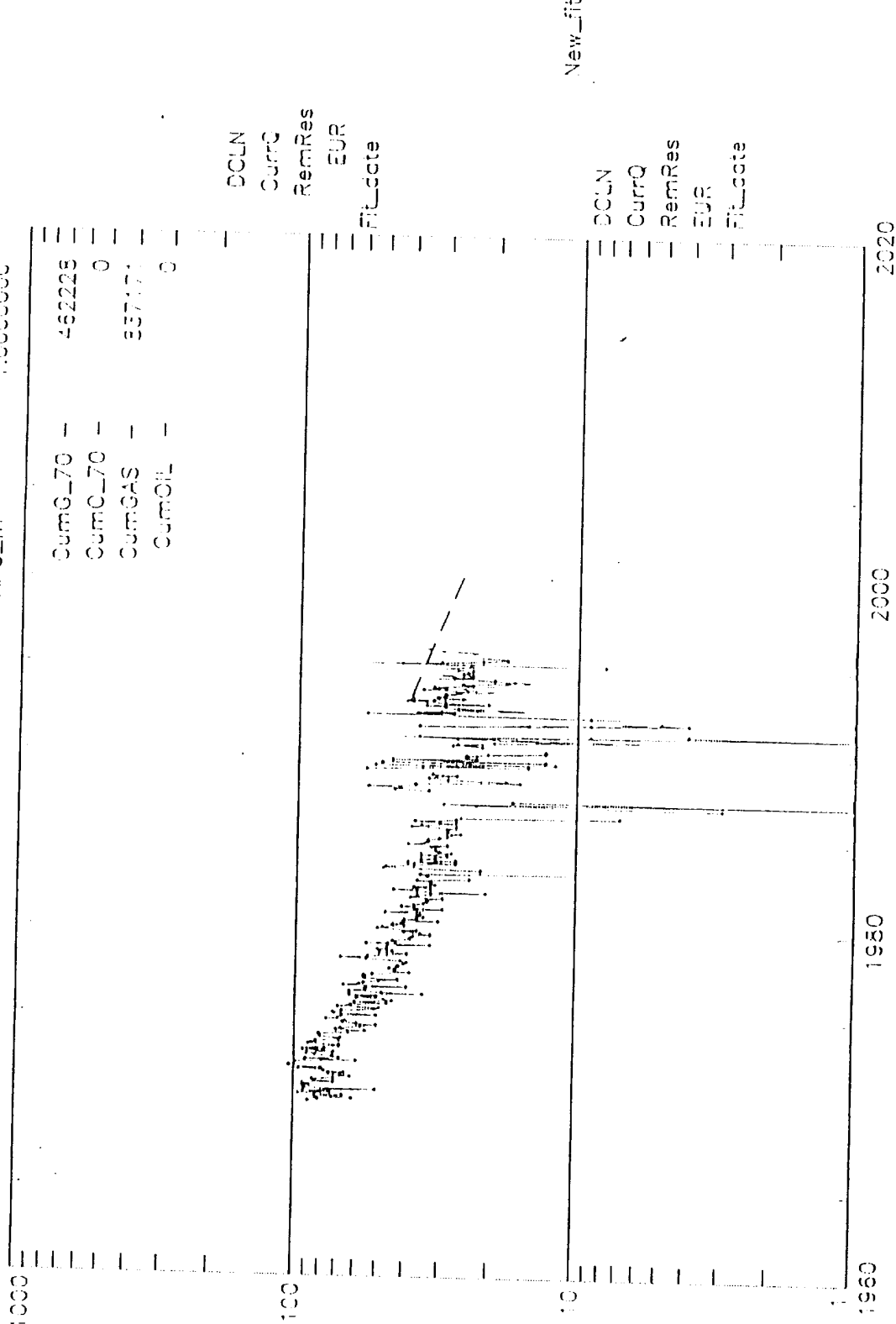
RUSSELL LS 5

Operator- AMOCO PRODUCTION CO

M232808-003 PC

APC_WI - 1.0000000

300450724200PC



Engn: amara's

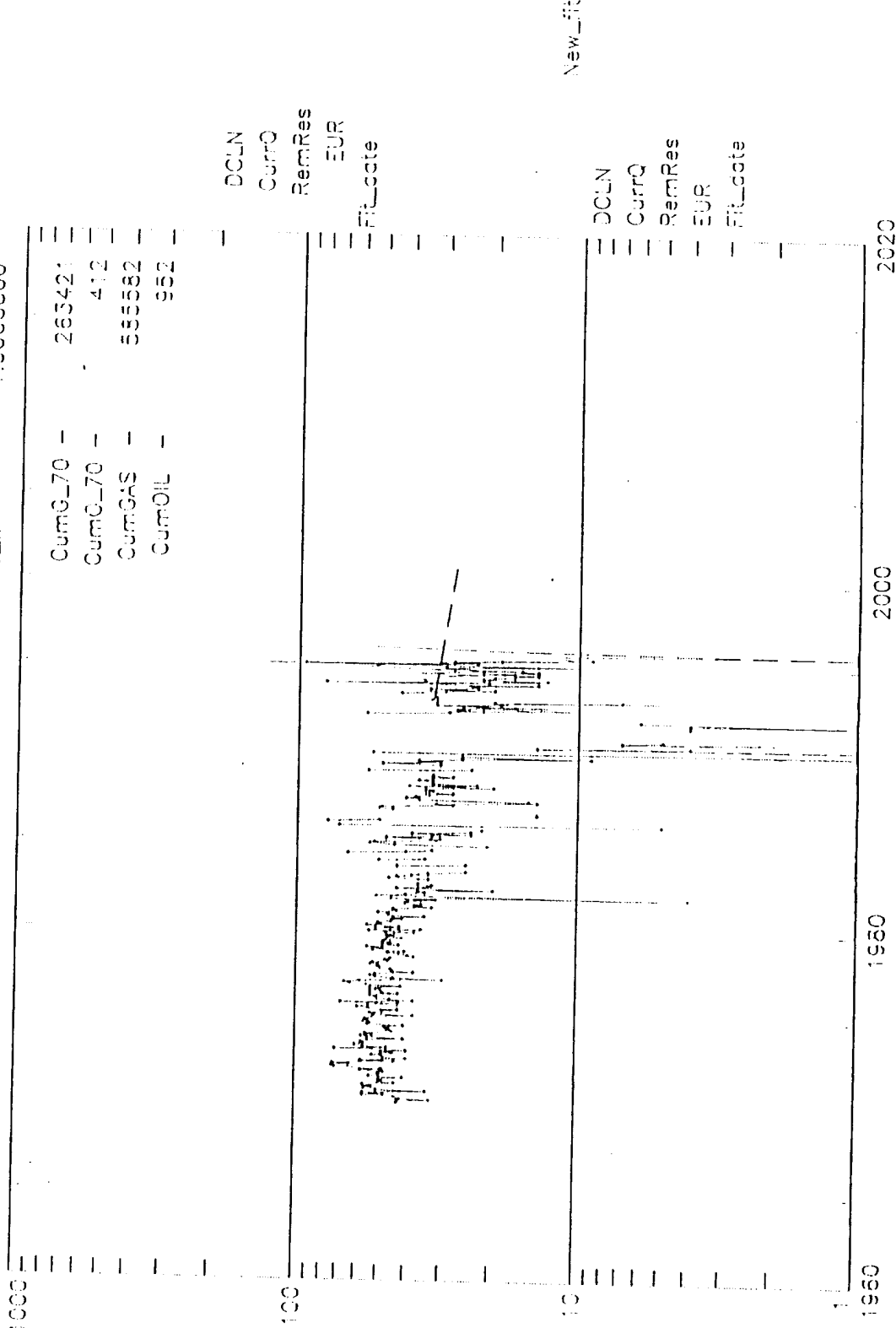
RUSSELL LS 3

Operator- AMOCO PRODUCTION CO

M232808-003 MV

APC_WI - 1.0000000

300450724200MV



METHOD OF ALLOCATION
RUSSELL LS #3

This well has a significant Cliffhouse zone in the Mesaverde which has never been completed. The pay additions will more than double the perforations in the Mesaverde. (See attached logs and Work Procedure) As a result of the Mesaverde pay additions, we feel that the Mesaverde will increase significantly in production and recommend allocating 80% of gas production to the Mesaverde and 20% of gas production to the Dakota. Liquid allocations are not expected to change.



SJOET Well Work Procedure

Wellname: Russell LS 3
Version: #1
Date: Feb. 15, 1996
Budget: Repair
Workover Type: Pay Add

Objectives:

1. Remove/Mill out packer
2. Recomplete the Cliffhouse.
3. Establish gas rates and shut-in pressures on the CH.
4. Place well on production and commingle PC and MV.

Portinent Information:

Location:	890' FSL, 1140' FWL, M23-28N-8W	Horizon:	PC/MV dual
County:	San Juan	API #:	30-045-07242
State:	New Mexico	Engr:	Mark Rothenberg
Lease:	Federal # NM-013860	Phone:	W--(303)830-5612
Well Flac:	9785390		H--(303)696-7309
Lease Flac:	698779/698761		P--(303)553-6448

Economic Information:

APC WI:	100%	PC Prod. Before:	35 MCFD
Estimated Cost:	\$100,000	PC Anticipated Prod:	35 MCFD
Payout:	4.9 years	MV Prod. Before:	40 MCFD
PV15:	\$14.6M	MV Anticipated Prod:	140 MCFD
		TOTAL Anticipated Prod:	175 MCFD

NOTE: Repair will be done as this is a positive PV(15) job. This is best payadd oppertunity from geological study.

Formation Tops: (Estimated formation tops)

Kirtland Shale:	1520
Fruitland:	2100
Pictured Cliffs:	2336
Lewis Shale:	2438
Cliffhouse:	3949
Menefee:	4095
Point Lookout:	4577
Mancos Shale:	4752

Bradenhead Test Information:

Test Date: 9/27/92 Tubing: 284-PC Casing: 309 BH: 0

Time	BH	CSG	INT	CSG
5 min	0	309		
10 min	0	309		
15 min	0	309		
20 min	0	309		

Comments: MV tubing pressure 288.

Suggested Procedure:

1. Check location for anchors. Install if necessary. Test anchors.
2. MIRUSU. Record STTPs and CP. Blow down well. Kill only if necessary with water.
3. NDWH. NUBOP.
4. Circulate hole above packer clean. TOH with short string.
5. TOH with long string, and seal assembly. If packer cannot be retrieved, mill out packer.
6. RHH with tbg and RBP, set RBP at 4500'. Circulate hole clean, spot 10' of sand on RBP.
7. Run CBL/CCL/GR from RBP to top of liner at 2442' to determine condition of cement behind pipe. Relay CBL info to Mark Rothenberg in Denver (continuous fax # 303-830-4264) to verify if remedial cement squeezes will be needed prior to any frac treatment.
8. Correlate to Schlumberger Gamma Ray-Induction log (4/20/58) for depth control. Perf select fire 23 shots at:
4009, 4023, 4039, 4047, 4049, 4051, 4057, 4059, 4061, 4063, 4065
4073, 4075, 4083, 4085, 4087, 4089, 4091, 4093, 4095, 4243, 4285, 4397
9. Frac well down tubing according to attached frac procedure.
NOTE: Set packer/frac string below TOL.
10. Flow well back as soon as possible to tank on a 1/4" choke for 8 hours, then increase choke to 1/2".
11. Once sand production has stopped, RHH with tubing and packer and set packer at 3950' to establish and record gas, water, oil rates and producing and shut-in TP and Cps. Obtain water and as samples.
NOTE: We would like an accurate flow test of the Cliffhouse and Menefee only. This is why we would like to flow up tubing and a packer.
12. RHH with bit and scraper for 4.5" csg and c/o sand to RBP at 4500'. Retrieve RBP and TOOH.
13. THH with 2" production string, tag for fill and clean out if necessary, and land opened at original depth of 4715 (1/2 mule shoe on btm and a SN 1 JT off btm). RDMOSU
14. Place well on production.

If problems are encountered, please contact:

MARK ROTHENBERG

(W) (303) 830-5612

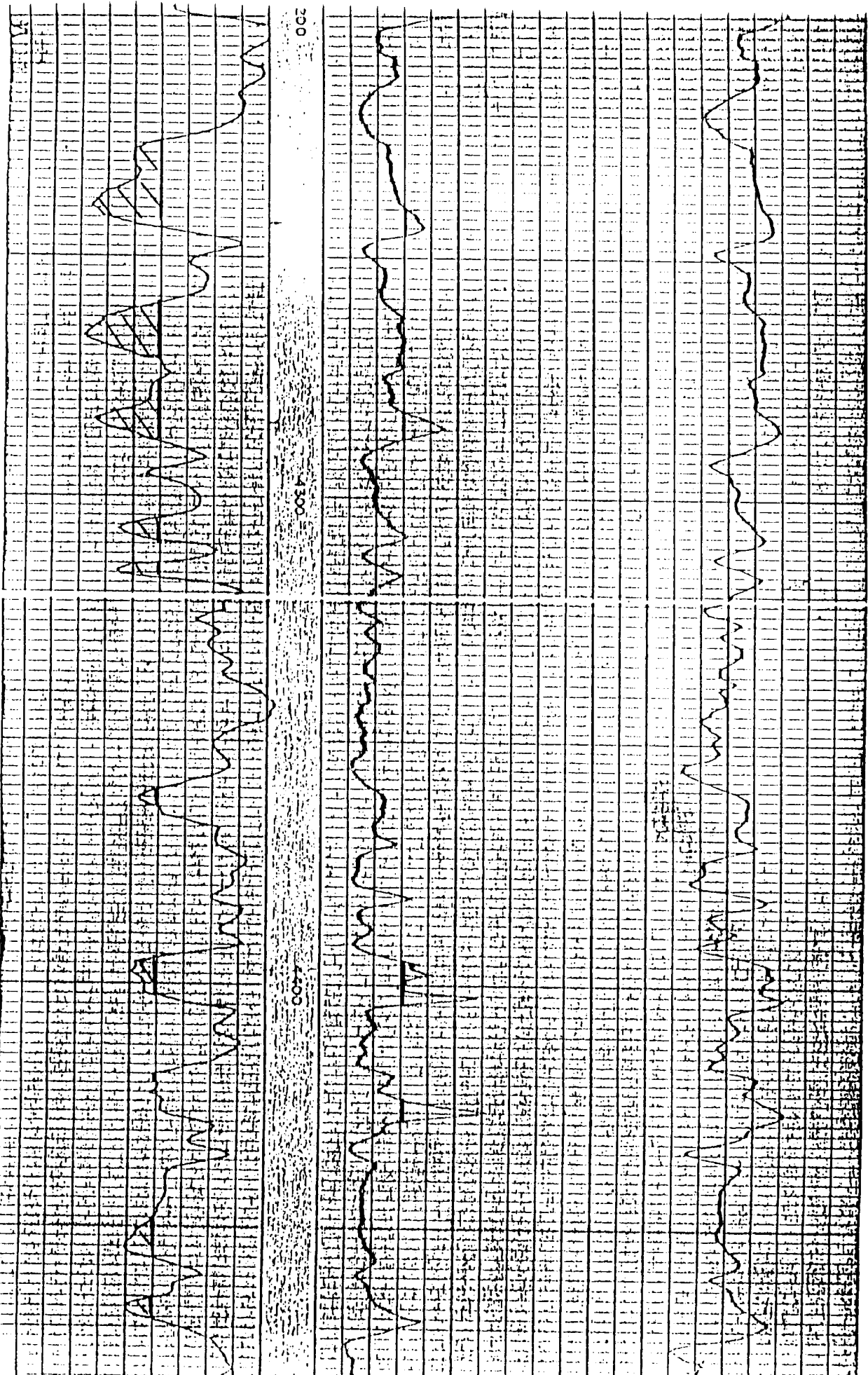
(H) (303) 696-7309

(P) (303) 553-6448



4200

400





LIST OF OFFSET OPERATORS
Russell LS #1

Meridian Oil, Inc.
P.O. Box 4289
Farmington, NM 87499