



**Application of Amoco Production Company
for Surface Commingling
Atlantic A LS 9A Well, Unit C
Section 27, T31N, R10W
San Juan County, New Mexico**

**BEFORE THE
OIL CONSERVATION DIVISION
Santa Fe, New Mexico**

Case No. 11644 Exhibit No. 1

Submitted by: Amoco Production Company

Hearing Date: November 7, 1996



Southern

Rockies

Business

Unit

October 14, 1996

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

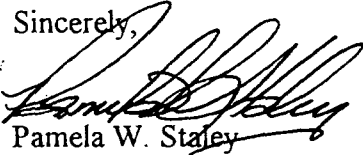
Application for Exception to Rule 303-A Surface Commingling
Atlantic A LS 9A
1185' FNL & 1575' FWL, Unit C Section 27-T31N-R10W
Blanco Mesaverde and Blanco Pictured Cliffs Pools
San Juan County, New Mexico

Amoco Production Company hereby makes application for exception to NMOCD general rule 303(A) to permit surface commingling of production from the Blanco Mesaverde Pool and the Blanco Pictured Cliffs Pool for the Atlantic A LS 9A Well located in Unit C of Section 27-T31N-R10W, San Juan County, New Mexico. In support of this application, Amoco states the following:

1. Amoco is the operator of the Blanco Mesaverde Pool underlying the west half of Section 27-T31N-R10W, San Juan County, New Mexico currently dedicated to the Atlantic A LS 9A Well.
2. Amoco is the operator of the Blanco Pictured Cliffs Pool underlying the northwest quarter of Section 27-T31N-R10W, San Juan County, New Mexico currently dedicated to the Atlantic A LS 9A Well.
3. The ownership (WI, RI, ORRI) is common for the pools which are proposed for surface commingling.
4. The surface commingling will offer an economical method of production using a single train of production equipment.
5. The actual commercial value of the commingled production will not be less than the sum of the values of the production from each of the common sources of supply.
6. Approval of this application will otherwise be in the best interest of conservation, the prevention of waste, and the protection of correlative rights.

Amoco requests that this application be set for examiner hearing of the Oil Conservation Division on November 7, 1996. These wells are on federal lease number NM0606 and a copy of the application will be sent to the Bureau of Land Management.

Sincerely,



Pamela W. Staley

Attachments

cc: Pat Archuleta
wellfile
proration files

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



NEW MEXICO ENERGY, MINERALS
& NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION
2040 South Pacheco Street
Santa Fe, New Mexico 87505
(505) 827-7131

September 10, 1996

Amoco Production Company
P.O. Box 800
Denver, Colorado 80201

Attention: Ms. Pamela W. Staley

Dear Ms. Staley:

I have reviewed your recent application to surface commingle Blanco-Mesaverde and Blanco-Pictured Cliffs Gas Pool production from the dually completed Atlantic A "LS" Well No. 9A located in Section 27, Township 31 North, Range 10 West, NMPM, San Juan County, New Mexico. The data submitted in your application indicates that the well is currently producing at rates of approximately 416 and 276 MCFG per day, respectively, from the Mesaverde and Pictured Cliffs zones.

The Division views surface commingling as a method of economically producing two or more zones which may otherwise not be economically producible. It does not appear that this well would qualify pursuant to current Division policy. If you have additional data you wish us to consider in reviewing this application, please submit.

If you have any questions, please contact me at (505) 827-8184.

Sincerely,

A handwritten signature in dark ink, appearing to read "David Catanach", with a long horizontal flourish extending to the right.

David Catanach
Engineer

xc: William J. LeMay

992,100.78 FT. E
107° 53' 46" W

21

1 LAMB
WOOD RIVER OIL&REFINING
300451046200
MYRD

3 LAMB
WOOD RIVER OIL&REFINING
300451060900
MYRD

NO 6A
ATLANTIC
EL PASO NATURAL GAS CO
300452238800
PCCF ,MYRD

6 ATLANTIC
EL PASO NATURAL GAS
300451048600
MYRD

5R ATLANTIC
MERIDIAN OIL INC
300452893300
MYRD

5-A ATLANTIC
EL PASO NATURAL GAS
300452242800
PCCF ,MYRD

8-A ATLANTIC COM-B
EL PASO NATURAL GAS
300452225200
MYRD

7 ATLANTIC
EL PASO NATURAL GAS
300451058300
MYRD

8 ATLANTIC COM B
EL PASO NATURAL GAS
300451046500
MYRD

3A ATLANTIC A
EL PASO NATURAL GAS
300452250700
MYRD ,MYRD ,FRLO

2-9 ATLANTIC
DELHI TAYLOR OIL
300451036300
MYRD

9-A ATLANTIC-A
EL PASO NATURAL GAS
300452249200
PCCF ,MYRD ,MYRD

6-A ATLANTIC-A
EL PASO NATURAL GAS
300452287800
PCCF ,MYRD

6 ATLANTIC A LS
TENNECO OIL
300451036601
MYRD

6A ATLANTIC
EL PASO NATURAL GAS
300451036800
MYRD

3A ATLANTIC
DELHI TAYLOR OIL
300451024200
MYRD

2-A ATLANTIC-A
EL PASO NATURAL GAS
300452299300
MYRD

9A ATLANTIC
EL PASO NATURAL GAS
300451026200
MYRD

1A ATLANTIC
EL PASO NATURAL GAS
300451028100
MYRD

1-A ATLANTIC-A
EL PASO NATURAL GAS
300452288000
MYRD

5 ATLANTIC A
EL PASO NATURAL GAS
300451028000
MYRD

1-B ATLANTIC
EL PASO NATURAL GAS
300451017900
MYRD

6-A ATLANTIC-B
EL PASO NATURAL GAS
300452299400
PCCF ,MYRD

7 ATLANTIC B
EL PASO NATURAL GAS
300451019000
MYRD

NO 1A
ATLANTIC C WELL
EL PASO NATURAL GAS CO
300452273200
PCCF ,MYRD

2 ATLANTIC C
EL PASO NATURAL GAS
300451017800
MYRD

6 ATLANTIC B
EL PASO NATURAL GAS
300451004700
MYRD

1-A ATLANTIC-B
EL PASO NATURAL GAS
300452299500
MYRD

9 ATLANTIC B
EL PASO NATURAL GAS
300451007200
MYRD

9-A ATLANTIC-B
EL PASO NATURAL GAS
300452297700
PCCF ,MYRD

1-C ATLANTIC
EL PASO NATURAL GAS
300451007500
MYRD

31N-10W

SAN JUAN

30N-10W

36° 50' 51" N
13,383,857.37 FT. N

36° 50' 51" N
13,383,857.37 FT. N

All geological and geophysical data, including the interpretation thereof, appearing on this map is the private and confidential property of Amoco Production Company. The publication or reproduction thereof without the written permission of said Company is strictly prohibited.

AMOCO PRODUCTION COMPANY
PLAT MAP
Atlantic A LS 9A
Mesaverde

POLYCONIC CENTRAL MERIDIAN - 107° 52' 9" W LON
SPHEROID - 6

SCALE 1 IN. = 2,000 FT. MAY 19, 1995

992,100.78 FT. E
107° 53' 46" W

4
LAMBE
KOCH INDUSTRIES
300452189800
PCCF

8
LAMBE
KOCH INDUSTRIES
300452195300
PCCF

NO 6A
ATLANTIC
EL PASO NATURAL GAS CO
300452238800
PCCF, MVRD

NO 9
ATLANTIC
EL PASO NATURAL GAS CO
300452279900
PCCF

NO 11
ATLANTIC COM D
EL PASO NATURAL GAS CO
300452272900
PCCF

21

7
LAMBE
KOCH INDUSTRIES
300452190100
PCCF

NO 6
SUNRAY
EL PASO NATURAL GAS CO
300452406900
PCCF

18
ATLANTIC
EL PASO NATURAL GAS
300452317200
PCCF

5-A
ATLANTIC
EL PASO NATURAL GAS
300452242800
PCCF, MVRD

12
ATLANTIC
EL PASO NATURAL GAS
300452343100
PCCF

NO 13
ATLANTIC
EL PASO NATURAL GAS CO
300452328300
PCCF

NO 15
ATLANTIC A
EL PASO NATURAL GAS CO
300452426400
PCCF

9-A
ATLANTIC-A
EL PASO NATURAL GAS
300452249200
PCCF, MVRD, MVRD

19
ATLANTIC A 19
TENNECO OIL CO
300452678900
PCCF

6-A
ATLANTIC-A
EL PASO NATURAL GAS
300452287800
PCCF, MVRD

28

SAN JUAN
31N-10W

18
ATLANTIC-A
EL PASO NATURAL GAS
300452322800
PCCF

NO 17
ATLANTIC A
EL PASO NATURAL GAS CO
300452328000
PCCF

5-A
ATLANTIC-A
EL PASO NATURAL GAS
300452287900
PCCF, MVRD, MVRD

6-A
ATLANTIC-B
EL PASO NATURAL GAS
300452299400
PCCF, MVRD

NO 25
ATLANTIC B
EL PASO NATURAL GAS CO
300452414400
PCCF

18
ATLANTIC-B
EL PASO NATURAL GAS
300452278000
PCCF

NO 1A
ATLANTIC C WELL
EL PASO NATURAL GAS CO
300452273200
PCCF, MVRD

17
ATLANTIC-C
EL PASO NATURAL GAS
300452343200
PCCF

33

NO 20
ATLANTIC B
EL PASO NATURAL GAS CO
300452349600
PCCF

26
ATLANTIC-B
EL PASO NATURAL GAS
300452304400
PCCF

34
9-A
ATLANTIC-B
EL PASO NATURAL GAS
300452297700
PCCF, MVRD

NO 13
ATLANTIC C
EL PASO NATURAL GAS CO
300452126900
PCCF

NO 10
ATLANTIC C
EL PASO NATURAL GAS CO
300452068900
PCCF

30N-10W

36° 50' 51" N
13,383,857.37 FT. N

36° 50' 51" N
13,383,857.37 FT. N

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AMOCO PRODUCTION COMPANY
PLAT MAP
Atlantic A LS 9A
Pictured Cliffs

SCALE 1 IN. = 2,000 FT. MAY 19, 1995

POLYCONIC CENTRAL MERIDIAN - 107° 52' 9" W LON
SPHEROID - 6

All distances must be from the outer boundaries of the Section

Operator EL PASO NATURAL GAS COMPANY			Lease ATLANTIC A (NM-0606)		Well No. 9A
Unit Letter C	Section 27	Township 31-N	Range 10-W	County SAN JUAN	

Actual Footage Location of Well:

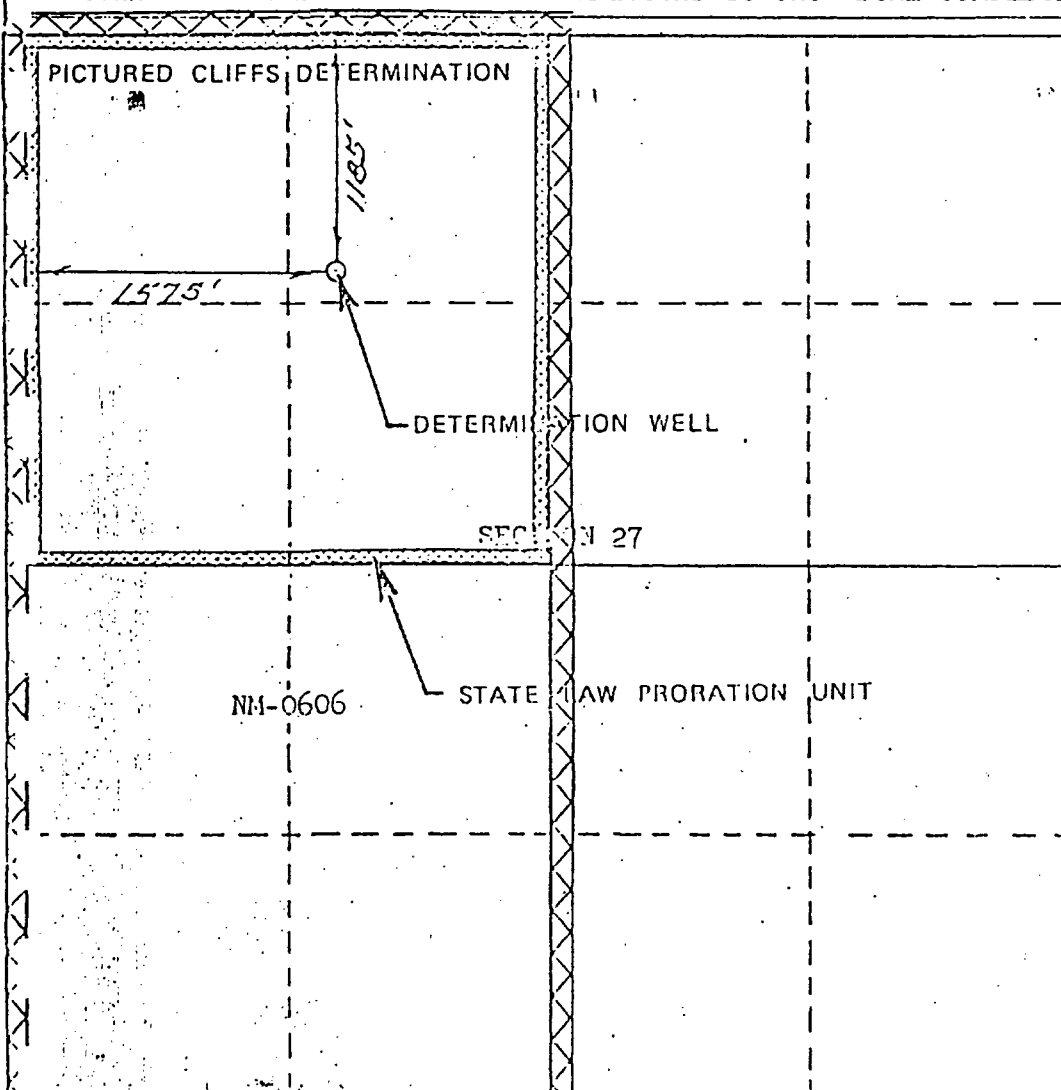
1185	feet from the	NORTH	line and	1575	feet from the	WEST	line
Ground Level Elev. 6144	Producing Formation MESA VERDE - PICTURED CLIFFS		Pool	BLANCO PICTURED CLIFFS BLANCO MESA VERDE		Dedicated Acreage: 163.50 ± 322.90 Acres	

- Outline the acreage dedicated to the subject well by colored pencil or hatchure marks on the plat below.
- If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).
- 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. NOTE: THIS PLAT IS REISSUED TO SHOW DUAL COMPLETION. 2-22-80



CERTIFICATION

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

D. D. Lisco
Drilling Clerk

El Paso Natural Gas Co.

February 29, 1980

Date

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

MARCH 29, 1977

Registered Professional Engineer
and/or Land Surveyor

Original Signed By:
David O. Vilven

Plat No. 1750

Is your RETURN ADDRESS completed on the reverse side?

SENDER:

- Complete items 1 and/or 2 for additional services.
- Complete items 3, and 4a & b.
- Print your name and address on the reverse of this form so that we can return this card to you.
- Attach this form to the front of the mailpiece, or on the back if space does not permit.
- Write "Return Receipt Requested" on the mailpiece below the article number.
- The Return Receipt will show to whom the article was delivered and the date delivered.

I also wish to receive the following services (for an extra fee):

1. ☐ Addressee's Address
2. ☐ Restricted Delivery

Consult postmaster for fee.

3. Article Addressed to:

BUREAU OF LAND MANAGEMENT
ATTN MR DUANE SPENCER
1235 LA PLATA HIGHWAY
FARMINGTON NM 87401

4a. Article Number

2296794860

4b. Service Type

- ☐ Registered ☒ Insured
☒ Certified ☐ COD
☐ Express Mail ☐ Return Receipt for Merchandise

7. Date of Delivery

10-18-96

5. Signature (Addressee)

[Signature]

6. Signature (Agent)

8. Addressee's Address (Only if requested and fee is paid)

Thank you for using Return Receipt Service.

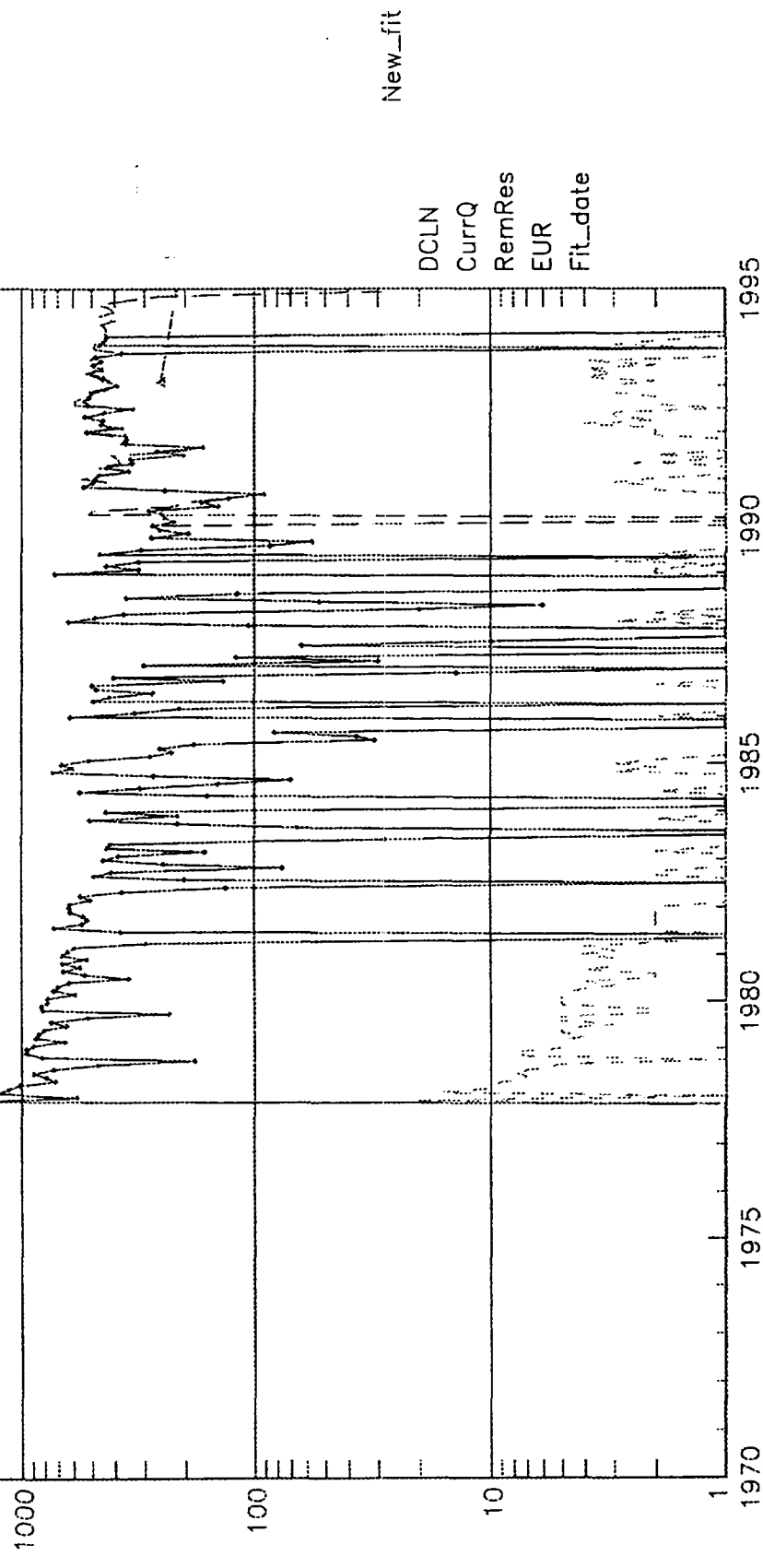
ATLANTIC A LS 9A

Operator-- AMOCO PRODUCTION CO

300452249200MV C273110-009AMV

APC_WI - 0.25000000

CumG_70 -	0
CumO_70 -	0
CumGAS -	2242811
CumOIL -	11810

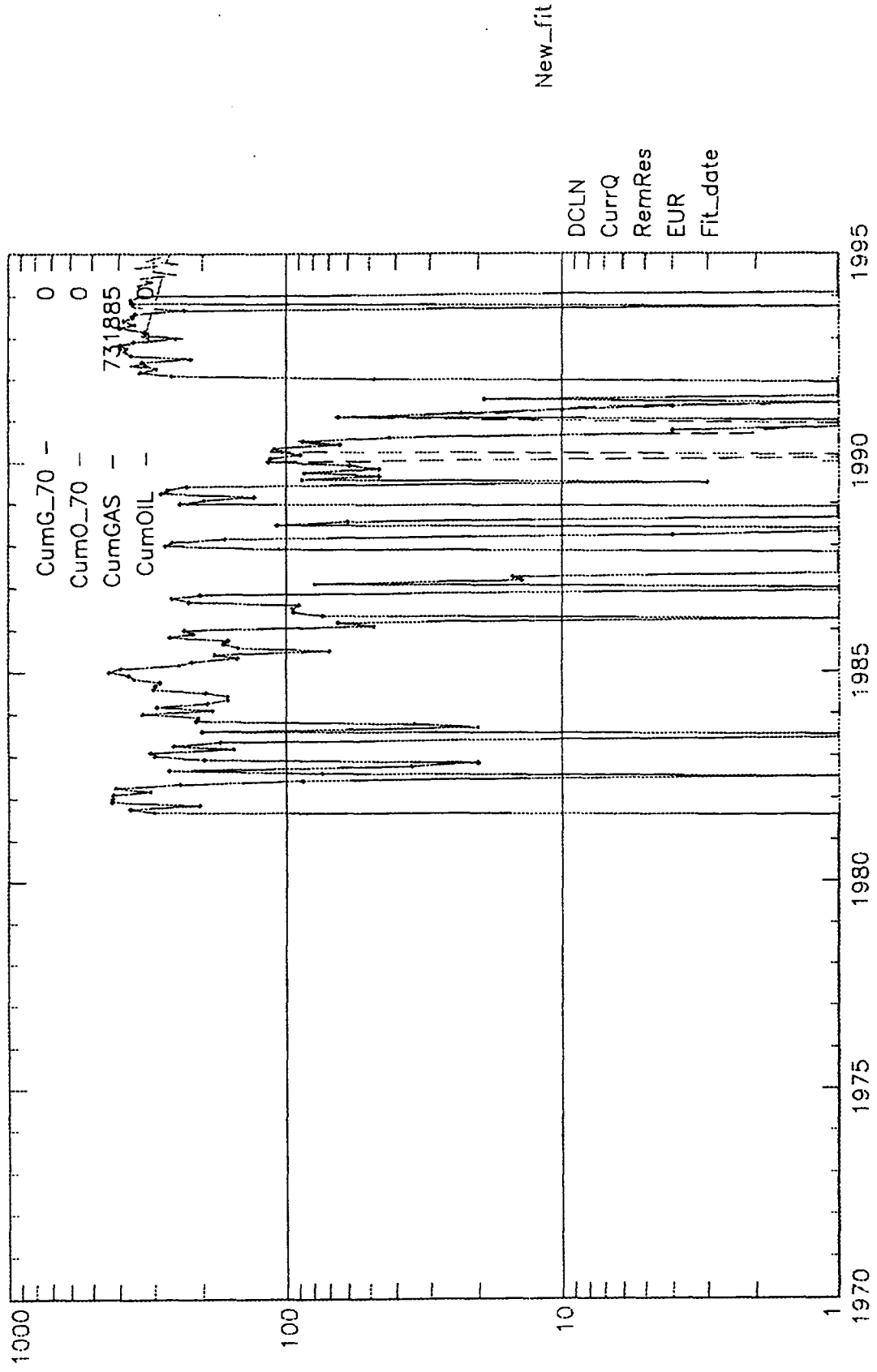


Engr: zrar06

ATLANTIC A LS 9A

Operator- AMOCO PRODUCTION CO

300452249200PC C273110-009APC APC_WI - 0.25000000



AMOCO PRODUCTION COMPANY
SAN JUAN OPERATIONS CENTER
FARMINGTON, NMONSHORE FEDERAL AND INDIAN
SITE FACILITY DIAGRAMLEASE NAME & WELL NUMBER Atlantic ALS 9A (PC & MV)

LEASE NUMBER _____

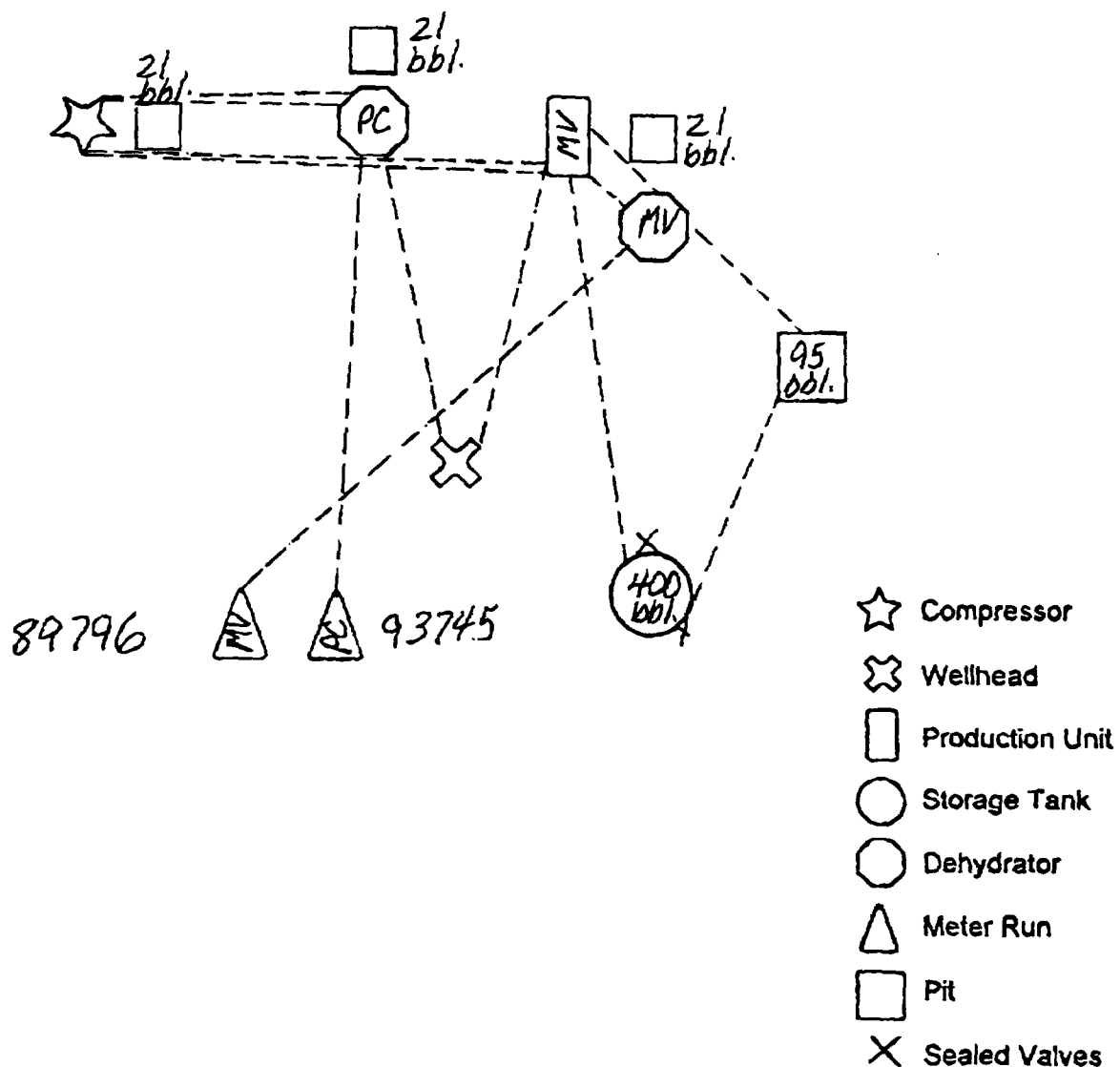
COMMUNITIZATION NUMBER _____

LOCATION Unit C SEC 27 T 31-N R 10-W

This diagram subject to site security plan _____

Sealed valves are normally closed during production phase. Drain line valve to pit open to draw off water and load line valve open to sell condensate.

Current Location



SAVINGS FROM SURFACE COMMINGLING
ATLANTIC A LS 9A WELL

DUPLICATE EQUIPMENT TO BE USED ON ANOTHER LEASE VS BUYING NEW

DEHYDRATOR	\$7000
PIT 21 BBL	\$3000
PIPELINE	\$3000
JUPITER AUTOMATION SYSTEM	<u>\$6000</u>
 TOTAL	 \$19,000

EQUIPMENT WOULD COST \$38,000 TO EQUIP BOTH SIDES

TOTAL SAVINGS TO EQUIP COMMINGLED WELL = \$19,000

ADDITIONAL SAVINGS:

GAS ANALYSIS ANNUAL \$70 / YR
CALIBRATION QUARTERLY 1 PUMPER DAY @ \$162

ADDITIONAL SAVINGS IN OPERATING COSTS: \$232 /YR

PRODUCTION AND ALLOCATION METHOD
ATLANTIC A LS 9A WELL

- Recommend allocation by annual well test
- Current average gas production is 416 MCFD Mesaverde and 276 MCFD Pictured Cliffs
- Current condensate production is 0.5 BCPD
- Pictured Cliffs produces no liquids therefore allocate 100% of liquids to Mesaverde
- Liquid gravity of Mesaverde is 58.6 degrees API

SURFACE COMMINGLING

292 PC 416 MW

692

WELL NAME	LOCATION	DATE	CASE	ORDER	FM	PROD	FM	PROD	TOTAL PROD	COMMENTS
STOREY LS #4A	34-28-8	Apr-94		PC-895	DK	225 MCFD	MV	546 MCFD	771 MCFD	1, 2
GONZALES GAS COM A #1	E-20-29-10	Apr-94		PC-891	MV	160 MCFD	PC	148 MCFD	300 MCFD	1, 2
MICHENER A LS #4	28-28-9	Dec-94		PC-897	MV	320 MCFD	PC	80 MCFD	400 MCFD	1, 2
MARTINEZ GAS COM G #1	A-24-29-20	Feb-95	11153	R-10315	MV	320 MCFD	DK	100 MCFD	420 MCFD	1
SCHWERTFEGER A LS 15A/16	21-27-8	Aug-95		PC-914	MV	31 MCFD	PC	320 MCFD	351 MCFD	1, 2
ATLANTIC #1E	D-34-31-10	Sep-95		PC-917	DK	150 MCFD	PC	120 MCFD	270 MCFD	2
BOLACK A #1E / F #1	2-27-11	Apr-96	11496	R-10578	DK	225 MCFD	PC	190 MCFD	415 MCFD	3
HUTCHIN LS #1A	7-31-10	May-96	11503	R-10596	MV	428 MCFD	PC	89 MCFD	517 MCFD	3

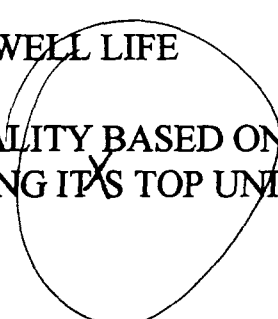
1 If this method is to be authorized, all commingled production must be of marginal nature: further, the operator shall notify the Santa Fe office of the Division in the event any well in the commingled battery becomes capable of top allowable production..

2 This facility should be installed and operated in accordance with the applicable provisions of Rule 309-B of the Division rules and Regulations and the Division "Manual for the Installation and Operation of Commingling Facilities".

3 "Approval will allow the applicant to reduce operating expenses ...thereby extending the economic life of each well which may result in the recovery of additional gas reserves from the subject proration units, thereby preventing waste."

JUSTIFICATION FOR SURFACE COMMINGLING

REVIEW OF RECENT SURFACE COMMINGLING ORDERS SUGGEST THAT THOSE APPROVALS WERE BASED UPON:

- REDUCE OPERATING EXPENSES WHICH MAY RESULT IN RECOVERY OF ADDITIONAL GAS THEREBY PREVENTING WASTE
 - UTILIZING A SINGLE TRAIN OF PRODUCTION EQUIPMENT TO REDUCE OPERATING EXPENSES FROM BOTH FORMATIONS
 - EXTEND WELL LIFE
 - MARGINALITY BASED ON THE WELL BEING INCAPABLE OF PRODUCING ITS TOP UNIT ALLOWABLE
- 

ECONOMIC JUSTIFICATION FOR SURFACE COMMINGLING

NO ECONOMIC CRITERIA MENTIONED IN THE 303 B RULE

RULE 303 B SURFACE COMMINGLING REFERS TO THE “MANUAL”

**MANUAL FOR THE INSTALLATION AND OPERATION OF
COMMINGLING FACILITIES**

- **MANUAL STATES THAT THE NMOC D RECOGNIZES COMMINGLING AS BEING PRACTICAL IF THE FACILITIES ARE PROPERLY DESIGNED AND OPERATED, PROVIDE A RELIABLE AND ECONOMIC MEANS FOR RECEIVING, MEASURING, AND STORING ...**
- **MANUAL STATES THAT EITHER MARGINAL ZONES OR TOP ALLOWABLE WELLS MAY BE COMMINGLED AND OUTLINES PROCESS FOR BOTH TYPES OF WELLS**

STATEMENTS IN SUPPORT OF SURFACE COMMINGLING

- SURFACE COMMINGLING DOES NOT RESULT IN A WASTE
ISSUE AS ALL FLUIDS ARE ACCOUNTED FOR
- WELL TESTING CAN BE DONE AT ANY TIME TO CONFIRM
ALLOCATION SO CORRELATIVE RIGHTS ARE NOT VIOLATED
- THE BLM IS IN SUPPORT OF THIS APPLICATION AND HAS
APPROVED IT