



American Exploration Company

May 10, 1989

RECEIVED

MAY 16 1989
OIL CONSERVATION DIV.
SANTA FE

Re: Application for Downhole
Commingling of the
Blinebry/Abo/Drinkard Pools
GPS Federal No. 1
Sec. 6, T22S, R38E
Lea County, New Mexico

New Mexico Oil Conservation Division
P. O. Box 2088
Santa Fe, New Mexico 87501

Attn: Mr. David Catanach

Gentlemen:

American Exploration Company respectfully requests administrative approval for amending DHC-78 under the provisions of Rule 303-C to downhole commingle the Blinebry/Abo/Drinkard pools in the GPS Federal No.1 Well. This well is presently completed in the Blinebry/Abo Pools and produces 3 BOPD, 0 MCFPD and 7 BWPD. We recently tested the Drinkard for 20 BOPD, 5 MCFPD and 9 BWPD. Producing only the Blinebry/Abo is economically marginal due to the low rates, but commingling the three zones should return the well to profitability.

A summary of information required for commingling is attached. Additionally, American has a 100% interest in this lease and the royalty interests of each zone are common. Based on the information we have gathered, we believe the request to commingle is justified in the interest of conservataion.

If there are any questions, please contact the undersigned as soon as possible.

Very truly yours,

AMERICAN EXPLORATION COMPANY

Marty B. McClanahan
Marty B. McClanahan
Sr. Production Analyst

MBM:mm
Encl.

cc: Mr. J. T. Sexton
New Mexico Conservation Division
P. O. Box 1980
Hobbs, New Mexico 88240

GPS Federal No.1
Information for Downhole Commingling

- a. Operator: American Exploration Company
2100 RepublicBank Center
Houston, Texas 77002
- b. Lease, Well Location and Pools:
GPS Federal No. 1
1980' FEL & 660' FSL of Sec. 6, T22S, R38E
Lea County, New Mexico
Blinebry/Abo/Drinkard Pools
- c. Acreage Dedication (40 acres) Form C-102 is attached. Offset operators are listed on schedule attached.
- d. 24 hour productivity test - Form C-116 attached.
- e. Commingling Computations - Attached.
- f. Allocation of Production - based on latest production tests.

	<u>Oil</u>	<u>Gas</u>	<u>Water</u>
Blinebry	11%	0%	27%
Abo	2%	0%	23%
Drinkard	87%	100%	50%

- g. Notification to Offset Operators.
A copy of the notice sent to offset operators.
- h. A complete resume of the well's completion history.
- i. Fluid Compatibility - See attached water analysis.



American Exploration Company

May 11, 1989

Re: Notification of Intent to
Commingle the Blinebry/
Drinkard Pools
GPS Federal No. 1
1980' FEL & 660' FSL of
Sec. 6, T22S, R38E
Lea County, New Mexico

OFFSET OPERATORS
GPS FEDERAL NO. 1

Gentlemen:

In accordance with New Mexico Oil Conservation Division regulations, you are hereby notified of American Exploration Company's application to downhole commingle production from the Blinebry/Drinkard pools in the GPS Federal No. 1 Lease.

Very truly yours,

AMERICAN EXPLORATION COMPANY

Marty B. McClanahan
Sr. Production Analyst

MBM:mm

LIST OF OFFSET OWNERS
GPS FEDERAL NO. 1 LEASE

SE/4 SW/4-6, T22S, R38E

D.M. Royalties, Ltd. (15% N/2 SE/4, SE/4 SE/4-6
P. O. Box 1716
Fort Worth, Texas 76101

Exxon Corp. (All-NE/4 NE/4-7)
P. O. Box 1600
Midland, Texas 79701

Zachary Oil Operating (SE/4-6)
1212 Commerce Building
Fort Worth, Texas 76102

Neville G. Penrose Estate (85% N/2 SE/4, SE/4 SE/4-6)
201 Main Street
Fort Worth, Texas 76102

Bureau of Land Management
P. O. Box 1778
Carlsbad, New Mexico 88220

MEMORANDUM

TO WHOM IT MAY CONCERN:

Pursuant to Rule 303 (C) (2) (i) of the rules and regulations of the State of New Mexico for downhole commingling, the following formula should apply as to the production allocation for the new zone added to the following well:

GPS Federal No. 1 (NM 029029) located in Unit C; 1980' FEL and 660' FSL of Section 6, T22S, R38E, Lea County, New Mexico.

Prior Production (Before Recent Workover)

°100 BOPM @ 10% Decline

$$\frac{(\text{Initial Prod.}) - (\text{Economic Limit}) (12 \text{ Mo.})}{-\ln (1-\text{decline})} = \text{Total Production}$$

$$\frac{(100-30) 12}{-\ln (1-.90)} = °8,000 \text{ BO}$$

3.3 BOPD (IP)
1.0 BOPD (E.L.)
10% decline

Current Production (After Workover)

$$\frac{(600 - 30) 12}{-\ln (1-.80)} = °30,000 \text{ BO}$$

20 BOPD (IP)
1.0 BOPD (E.L.)
20% decline

30 MBO - 8MBO = 22 MBO for new zone (Drinkard)

Op: KIRBY EXPLORATION COMPANY
Cat:

Decline ~10%/yr.

A detailed log plot on a grid with a vertical axis from 65 to 89 and a horizontal axis from 0 to 100. The plot displays several data series:

- Oil (bbl)**: A series of peaks and troughs, with values ranging from approximately 46 to 53.
- Gas (mcf)**: A series of peaks and troughs, with values ranging from approximately 46 to 53.
- Water (bbl)**: A series of peaks and troughs, with values ranging from approximately 46 to 53.
- Oil (bbl)**: A series of peaks and troughs, with values ranging from approximately 46 to 53.
- Gas (mcf)**: A series of peaks and troughs, with values ranging from approximately 46 to 53.
- Water (bbl)**: A series of peaks and troughs, with values ranging from approximately 46 to 53.

HISTORICAL PRODUCTION DATA

Property No. : 1943709 1 2 Lease Name : FEDERAL GPS #1

Mo	Yr	Oil (Bbls)	Cumulative Oil	Gas (MCF)	Cumulative Gas	GOR (SCF/Bbl)
--	--	-----	-----	-----	-----	-----
5	88	10	10	58	58	580
6	88	10	20	10	68	100
7	88	10	30	10	78	100

HISTORICAL PRODUCTION DATA

Property No. : 1943709 1 0 Lease Name : FEDERAL GPS #1

Mo	Yr	Oil (Bbls)	Cumulative Oil	Gas (MCF)	Cumulative Gas	GOR (SCF/Bbl)
--	--	-----	-----	-----	-----	-----
5	88	93	93	58	58	62
6	88	88	181	94	152	106
7	88	88	269	94	246	106

Submit 2 copies to Appropriate District Office.
DISTRICT I
P.O. Box 1980, Hobbs, NM 88240
DISTRICT II
P.O. Drawer DD, Artesia, NM 88210
DISTRICT III
1000 Rio Brazos Rd., Aztec, NM 87410

State of New Mexico
Energy, Minerals and Natural Resources Department
OIL CONSERVATION DIVISION
P.O. Box 2088
Santa Fe, New Mexico 87504-2088

Form C-116
Revised 1/1/89

GAS - OIL RATIO TEST

Operator American Exploration Company		Pool Drinkard		County Lea												
Address 2100 RepublicBank Center, Houston, Texas 77002		TYPE OF TEST - (X)		Completion <input checked="" type="checkbox"/> Special <input type="checkbox"/>												
LEASE NAME	WELL NO.	LOCATION				DATE OF TEST	STATUS	CHOKE SIZE	TBG. PRESS.	DAILY ALLOW-ABLE	LENGTH OF TEST HOURS	PROD. DURING TEST			GAS - OIL RATIO CU./FT/8BL.	
		U	S	T	R							WATER BBL.S.	GRAV. OIL	OIL BBL.S.		GAS M.C.F.
GPS Federal	1	0	6	22	38	2/05/89	P	2"	18	M	24	9	39	20	5	2500

Instructions:

During gas-oil ratio test, each well shall be produced at a rate not exceeding the top unit allowable for the pool in which well is located by more than 25 percent. Operator is encouraged to take advantage of this 25 percent tolerance in order that well can be assigned increased allowables when authorized by the Division.

Gas volumes must be reported in MCF measured at a pressure base of 15.025 psia and a temperature of 60° F. Specific gravity base will be 0.60.
Report casing pressure in lieu of tubing pressure for any well producing through casing.

(See Rule 301, Rule 1116 & appropriate pool rules.)

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

Signature

Marty B. McClanahan
Marty B. McClanahan, Sr. Production Analyst
Printed name and title

4/11/89

713-237-0800

Date

Telephone No.

Submit to Appropriate
District Office
State Lease - 4 copies
Fee Lease - 3 copies

State of New Mexico
Energy, Minerals and Natural Resources Department

Form C-102
Revised 1-1-89

OIL CONSERVATION DIVISION

P.O. Box 2088
Santa Fe, New Mexico 87504-2088

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

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

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

WELL LOCATION AND ACREAGE DEDICATION PLAT

All Distances must be from the outer boundaries of the section

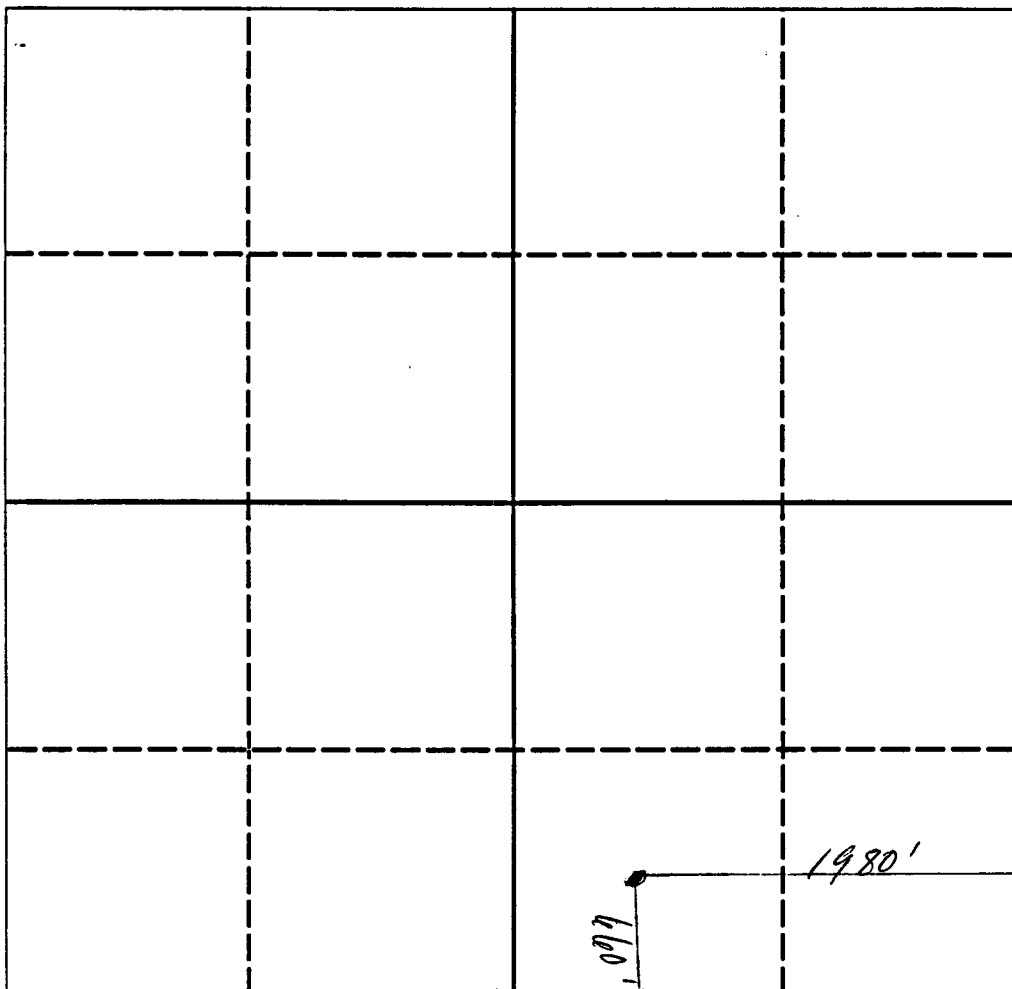
Operator American Exploration Company			Lease Federal GPS		Well No. 1
Unit Letter 0	Section 6	Township 22S	Range 38E	County NMPM	
Actual Footage Location of Well: 1980 feet from the East line and 660 feet from the South line					
Ground level Elev. 3358.5	Producing Formation Drinkard		Pool Drinkard	Dedicated Acreage: 40 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 interest 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 interest, has been approved by the Division.



0 330 660 990 1320 1650 1980 2310 2640 2000 1500 1000 500 0

OPERATOR CERTIFICATION

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

Signature

Marty McClanahan

Printed Name

Sr. Production Analyst

Position
American Exploration Company

Company

February 20, 1989

Date

SURVEYOR CERTIFICATION

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

Signature & Seal of
Professional Surveyor

Certificate No.

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

OIL CONSERVATION DIVISION
P.O. Box 2088
Santa Fe, New Mexico 87504-2088

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

REQUEST FOR ALLOWABLE AND AUTHORIZATION
TO TRANSPORT OIL AND NATURAL GAS

I.

Operator American Exploration Company	Well API No.
Address 2100 RepublicBank Center, Houston, Texas 77002	
Reason(s) for Filing (Check proper box) New Well <input type="checkbox"/> Change in Transporter of: <input checked="" type="checkbox"/> Other (Please explain) Recompletion <input type="checkbox"/> Oil <input type="checkbox"/> Dry Gas <input type="checkbox"/> Form C-104 filed to add Drinkard to the Change in Operator <input type="checkbox"/> Casinghead Gas <input type="checkbox"/> Condensate <input type="checkbox"/> Blinebry-Wantz Abo	
If change of operator give name and address of previous operator	

II. DESCRIPTION OF WELL AND LEASE

Lease Name GPS Federal	Well No. 1	Pool Name, including Formation Drinkard	Kind of Lease State, Federal or Fee Federal	Lease No. NM 029029
Location Unit Letter 0 : 1980 Feet From The East Line and 660 Feet From The South Line Section 6 Township 22S Range 38E , NMPM, Lea County				

III. DESIGNATION OF TRANSPORTER OF OIL AND NATURAL GAS

Name of Authorized Transporter of Oil <input checked="" type="checkbox"/> or Condensate <input type="checkbox"/> Phillips Petroleum Company	Address (Give address to which approved copy of this form is to be sent) 4001 Penbrook, Odessa, Texas 79762					
Name of Authorized Transporter of Casinghead Gas <input type="checkbox"/> or Dry Gas <input type="checkbox"/>	Address (Give address to which approved copy of this form is to be sent)					
If well produces oil or liquids, give location of tanks.	Unit 0	Sec. 6	Twp. 22S	Rge. 38E	Is gas actually connected?	When ?

If this production is commingled with that from any other lease or pool, give commingling order number:

IV. COMPLETION DATA

Designate Type of Completion - (X)	Oil Well <input checked="" type="checkbox"/>	Gas Well	New Well	Workover <input checked="" type="checkbox"/>	Deepen	Plug Back	Same Res'v	Diff Res'v <input checked="" type="checkbox"/>
Date Spudded 9/18/69	Date Compl. Ready to Prod. 11/20/68		Total Depth 7375'		P.B.T.D. 7335'			
Elevations (DF, RKB, RT, GR, etc.) 3355.8	Name of Producing Formation Drinkard		Top Oil/Gas Pay 6546		Tubing Depth 6311			
Perforations 6546-6769					Depth Casing Shoe 7375			
TUBING, CASING AND CEMENTING RECORD								
HOLE SIZE	CASING & TUBING SIZE		DEPTH SET		SACKS CEMENT			
13-3/4	10-3/4		850		400			
9-7/8	7-5/8		7375		800			

V. TEST DATA AND REQUEST FOR ALLOWABLE

OIL WELL (Test must be after recovery of total volume of load oil and must be equal to or exceed top allowable for this depth or be for full 24 hours.)

Date First New Oil Run To Tank	Date of Test 2-05/89	Producing Method (Flow, pump, gas lift, etc.) Pump	
Length of Test 24	Tubing Pressure 18	Casing Pressure	Choke Size
Actual Prod. During Test 20	Oil - Bbls. 20	Water - Bbls. 9	Gas- MCF 5

GAS WELL

Actual Prod. Test - MCF/D	Length of Test	Bbls. Condensate/MMCF	Gravity of Condensate
Testing Method (pilot, back pr.)	Tubing Pressure (Shut-in)	Casing Pressure (Shut-in)	Choke Size

VI. OPERATOR CERTIFICATE OF COMPLIANCE

I hereby certify that the rules and regulations of the Oil Conservation Division have been complied with and that the information given above is true and complete to the best of my knowledge and belief.

Signature Narty B. McClanahan Sr. Production Analyst
Printed Name
Date 2/20/89 Title
Telephone No. 713-237-0800

OIL CONSERVATION DIVISION

Date Approved _____
By _____
Title _____

INSTRUCTIONS: This form is to be filed in compliance with Rule 1104

- 1) Request for allowable for newly drilled or deepened well must be accompanied by tabulation of deviation tests taken in accordance with Rule 111.
- 2) All sections of this form must be filled out for allowable on new and recompleted wells.
- 3) Fill out only Sections I, II, III, and VI for changes of operator, well name or number, transporter, or other such changes.
- 4) Separate Form C-104 must be filed for each pool in multiply completed wells.

Allocation of production

Allocation as per Dec-78

Blinky - 10%

Alto 90%

Current Prod. 3 BOPD 0 NCFB 7 BOPD

or

3 BOPD - Blinky

2.7 BOPD - Alto

Desired Prod -

20 BOPD 5 NCFB 9 BOPD

Total Allocation

Blinky	Oil	Gas
	1.0%	0
Alto	12.0%	0
Desired	87.0%	100%