

Submit 3 Copies  
to Appropriate  
District Office

State of New Mexico  
Energy, Minerals and Natural Resources Department

Form C-103  
Revised 1-1-89

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

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

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

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

WELL API NO.	30-045-24286
5. Indicate Type of Lease	STATE <input checked="" type="checkbox"/> FEE <input type="checkbox"/>
6. State Oil & Gas Lease No.	SF 080723

**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 WELL  GAS WELL  OTHER

2. Name of Operator  
 BHP Petroleum (Americas) Inc.

3. Address of Operator  
 5847 San Felipe Suite #3600 Houston, Texas 77057

4. Well Location  
 Unit Letter I : 2015 Feet From The S Line and 830 Feet From The E Line

Section 19 Township 29N Range 12W NMPM San Juan County  
 10. Elevation (Show whether DF, RKB, RT, GR, etc.)  
5415 GR

7. Lease Name or Unit Agreement Name  
 Gallegos Canyon Unit

8. Well No.  
 306

9. Pool name or Wildcat  
 W. KUTZ Fruitland & Mesaverde *WC*

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

NOTICE OF INTENTION TO:		SUBSEQUENT REPORT OF:	
PERFORM REMEDIAL WORK <input type="checkbox"/>	PLUG AND ABANDON <input type="checkbox"/>	REMEDIAL WORK <input type="checkbox"/>	ALTERING CASING <input type="checkbox"/>
TEMPORARILY ABANDON <input type="checkbox"/>	CHANGE PLANS <input type="checkbox"/>	COMMENCE DRILLING OPNS. <input type="checkbox"/>	PLUG AND ABANDONMENT <input type="checkbox"/>
PULL OR ALTER CASING <input type="checkbox"/>		CASING TEST AND CEMENT JOB <input type="checkbox"/>	
OTHER: <u>Increase perf. density in SWD formation</u> <input checked="" type="checkbox"/>		OTHER: <input type="checkbox"/>	

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

See Attached

**RECEIVED**  
APR 25 1991  
OIL CON. DIV.]  
DIST. 3

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

SIGNATURE Rosemarie Murphy TITLE Regulatory Affairs Tech. DATE April 17, 1991

TYPE OR PRINT NAME Rosemarie Murphy TELEPHONE NO. \_\_\_\_\_

(This space for State Use)

APPROVED BY Original Signed by FRANK T. CHAVEZ TITLE SUPERVISOR DISTRICT # 3 DATE APR 25 1991

CONDITIONS OF APPROVAL, IF ANY:

Gallegos Canyon Unit #306  
 Fruitland & Mesaverde Formation  
 NE $\frac{1}{4}$ , SE $\frac{1}{4}$ , Sec. 19, T29N, R12W  
 San Juan County, New Mexico  
 SF 080723

Due to increased water production in the Gallegos Canyon Unit, it has become necessary to increase the density and area of perforations in the Mesaverde formation. BHP proposes to increase the density of existing perforations from 2 spf to 4 spf and add perforations to additional areas in the Mesaverde formation at 4 spf as described below. Approval has been requested from the N.M.O.C.D., copy attached.

Existing perforations:	3022' - 3042'	(20')
@ 2 spf	3102' - 3108'	(6')
	3145' - 3152'	(7')
	3175' - 3190'	(15')
propose to add 2 spf	3306' - 3314'	(8')
	3342' - 3368'	(26')
	3520' - 3546'	(26')
	3574' - 3600'	(26')
Proposed new perforation:	3317' - 3323'	(6')
(4spf)	3329' - 3333'	(4')
	3400' - 3407'	(7')
	3412' - 3418'	(6')
	3473' - 3500'	(27')

February 28, 1991

State of New Mexico  
Oil Conservation Division  
P O Box 2088  
Santa Fe, New Mexico 87504-2088

Attention: Mr. David Catanach

RE: Gallegos Canyon Unit #306 (SWD)  
NE $\frac{1}{4}$ , SE $\frac{1}{4}$ , Sec. 19, T29N, R12W  
San Juan, New Mexico



Dear Mr. Catanach:

The above referenced well was authorized to be used as a salt water disposal well by Order No. SWD - 225 on May 21, 1980.

BHP Petroleum respectfully requests authorization to increase the density of the existing perforations and to perforate additional areas within the previously authorized Mesaverde formation.

This request is necessary to accommodate increased produced water volumes in the Gallegos Canyon Unit.

I have enclosed the original and one copy of completed Form C-108 and 2 copies of the Dual Induction log showing where the existing perforations are located and the areas where we propose to add perforations.

The existing perforation density is two shots per foot. We propose to increase this density to four shots per foot in the previously perforated areas.

We propose to perforate additional areas within the Mesaverde formation at a rate of four shots per foot.

The existing and proposed perforation areas are listed below and indicated on the enclosed log.

Existing perforations:	3022' - 3042'	(20')
(@ 2 spf)	3102' - 3108'	(6')
	3145' - 3152'	(7')
	3175' - 3190'	(15')
(propose to add 2 spf)	3306' - 3314'	(8')
	3342' - 3368'	(26')
	3520' - 3546'	(26')
	3574' - 3600'	(26')
Proposed new perforation:	3317' - 3323'	(6')
(4spf)	3329' - 3333'	(4')
	3400' - 3407'	(7')
	3412' - 3418'	(6')
	3473' - 3500'	(27')

Mr. David Catanach  
February 28, 1991  
Page 2

Please don't hesitate to contact me, if any additional information is required.

Sincerely,

A handwritten signature in cursive script that reads "Chuck Williams".

Chuck Williams  
Field Services Administrator  
Inland Business Unit

CW: rm

Enclosure - Dual Induction log & Form C-108

cc: Mr. Ernie Busch, N.M.O.C.D., Aztec, NM.  
BLM Farmington, NM.  
Fred Lowery - BHP Farmington, NM.  
Well File

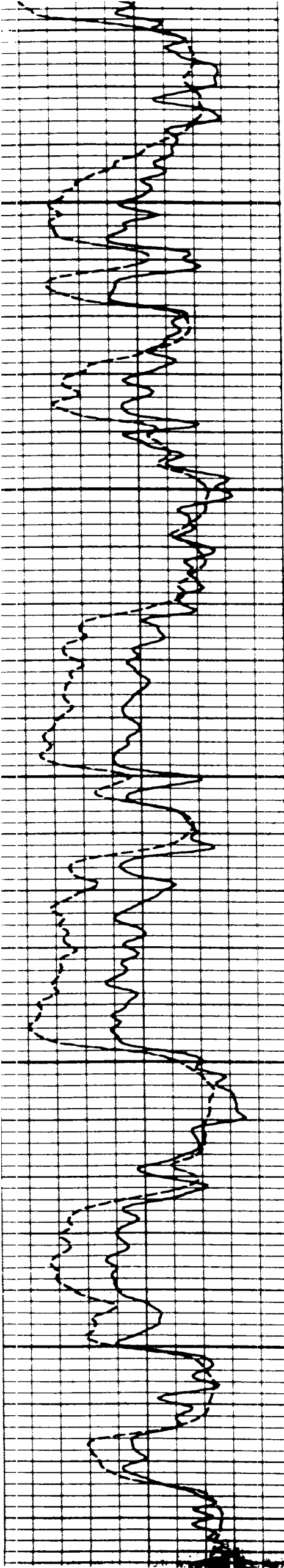
## APPLICATION FOR AUTHORIZATION TO INJECT

- I. Purpose:  Secondary Recovery  Pressure Maintenance  Disposal  Storage  
Application qualifies for administrative approval?  yes  no
- II. Operator: BHP Petroleum (Americas) Inc.  
Address: 5847 San Felipe #3600 Houston, Texas 77057  
Contact party: Chuck Williams, Field Services Admin. Phone: (713) 780-5448
- III. Well data: Complete the data required on the reverse side of this form for each well proposed for injection. Additional sheets may be attached if necessary.
- IV. Is this an expansion of an existing project?  yes  no  
If yes, give the Division order number authorizing the project SWD - 225
- V. Attach a map that identifies all wells and leases within two miles of any proposed injection well with a one-half mile radius circle drawn around each proposed injection well. This circle identifies the well's area of review.
- \* VI. Attach a tabulation of data on all wells of public record within the area of review which penetrate the proposed injection zone. Such data shall include a description of each well's type, construction, date drilled, location, depth, record of completion, and a schematic of any plugged well illustrating all plugging detail.
- VII. Attach data on the proposed operation, including:
1. Proposed average and maximum daily rate and volume of fluids to be injected;
  2. Whether the system is open or closed;
  3. Proposed average and maximum injection pressure;
  4. Sources and an appropriate analysis of injection fluid and compatibility with the receiving formation if other than reinjected produced water; and
  5. If injection is for disposal purposes into a zone not productive of oil or gas at or within one mile of the proposed well, attach a chemical analysis of the disposal zone formation water (may be measured or inferred from existing literature, studies, nearby wells, etc.).
- \*VIII. Attach appropriate geological data on the injection zone including appropriate lithologic detail, geological name, thickness, and depth. Give the geologic name, and depth to bottom of all underground sources of drinking water (aquifers containing waters with total dissolved solids concentrations of 10,000 mg/l or less) overlying the proposed injection zone as well as any such source known to be immediately underlying the injection interval.
- IX. Describe the proposed stimulation program, if any.
- \* X. Attach appropriate logging and test data on the well. (If well logs have been filed with the Division they need not be resubmitted.)
- \* XI. Attach a chemical analysis of fresh water from two or more fresh water wells (if available and producing) within one mile of any injection or disposal well showing location of wells and dates samples were taken.
- XII. Applicants for disposal wells must make an affirmative statement that they have examined available geologic and engineering data and find no evidence of open faults or any other hydrologic connection between the disposal zone and any underground source of drinking water.
- XIII. Applicants must complete the "Proof of Notice" section on the reverse side of this form.
- XIV. Certification
- I hereby certify that the information submitted with this application is true and correct to the best of my knowledge and belief.
- Name: Chuck Williams Title Field Services Administrator  
Signature: Chuck Williams Date: February 28, 1991

\* If the information required under Sections VI, VIII, X, and XI above has been previously submitted, it need not be duplicated and resubmitted. Please show the date and circumstance of the earlier submittal.

DISTRIBUTION: Original and one copy to Santa Fe with one copy to the appropriate Division district office.





3400

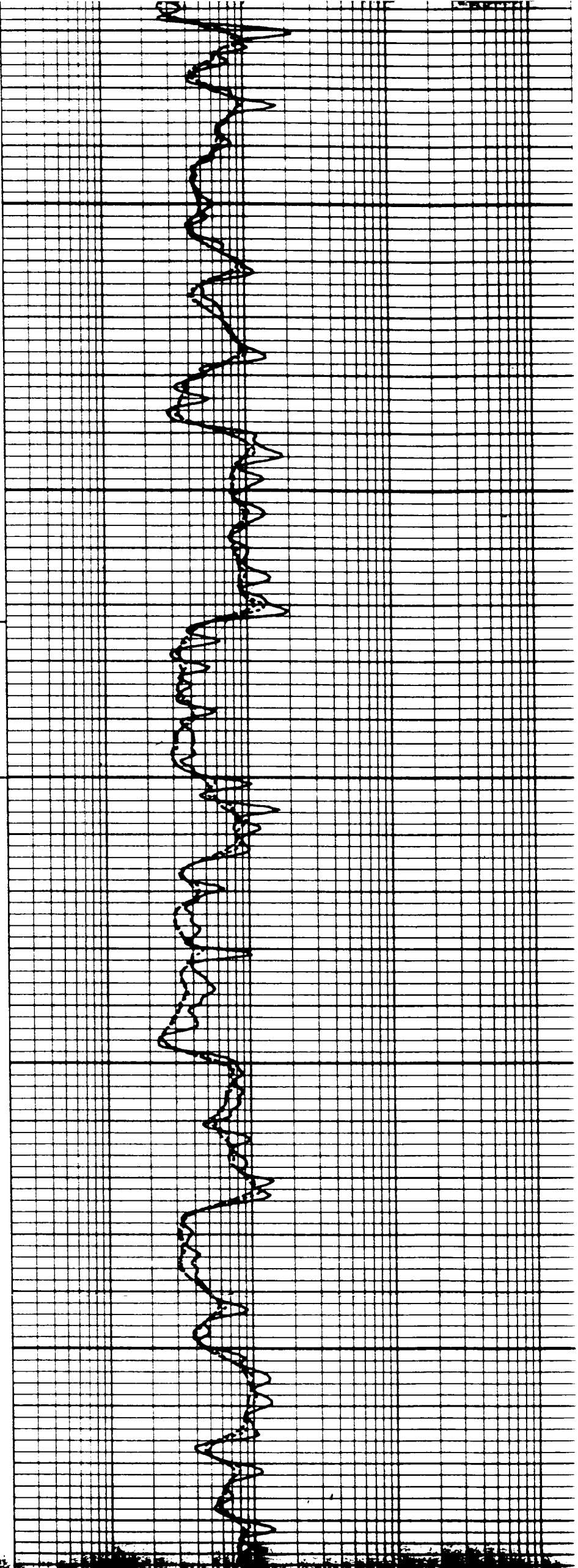
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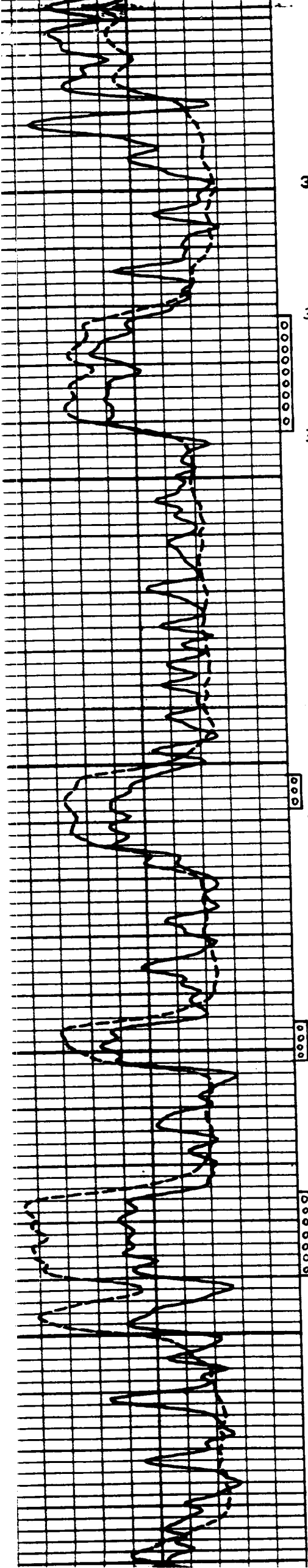
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3600





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3042

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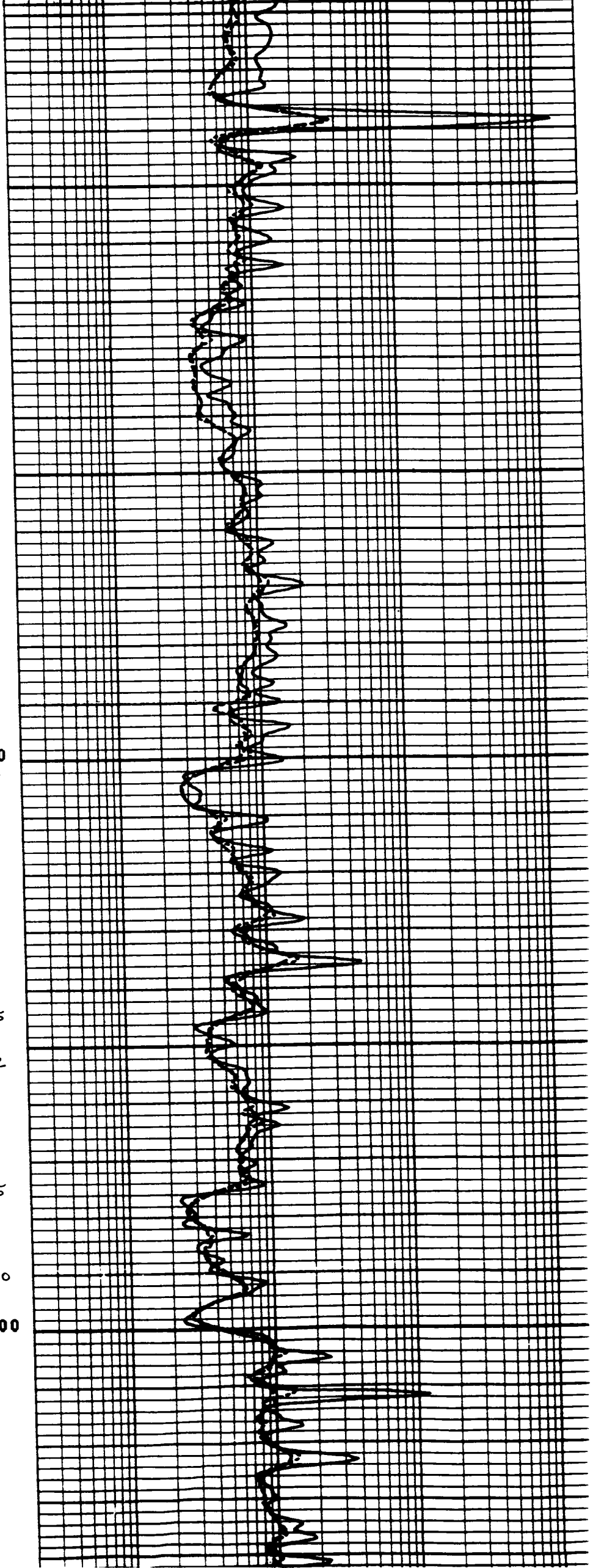
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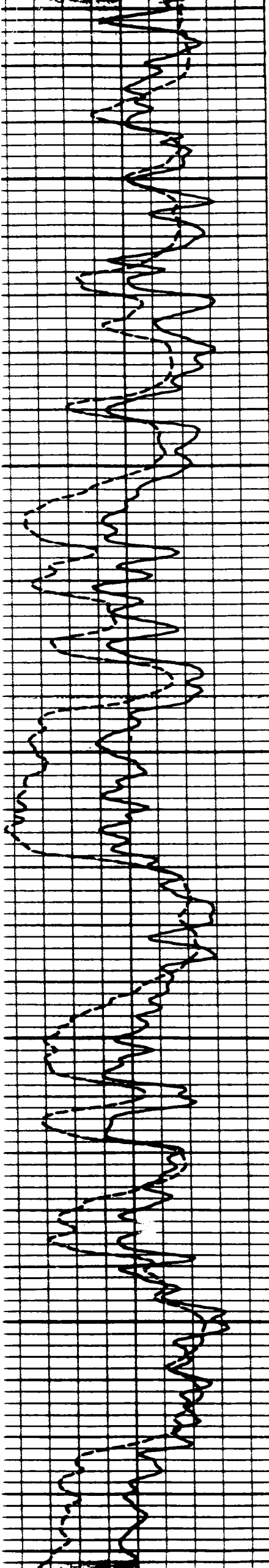
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3300

3306

3314

NEW

NEW

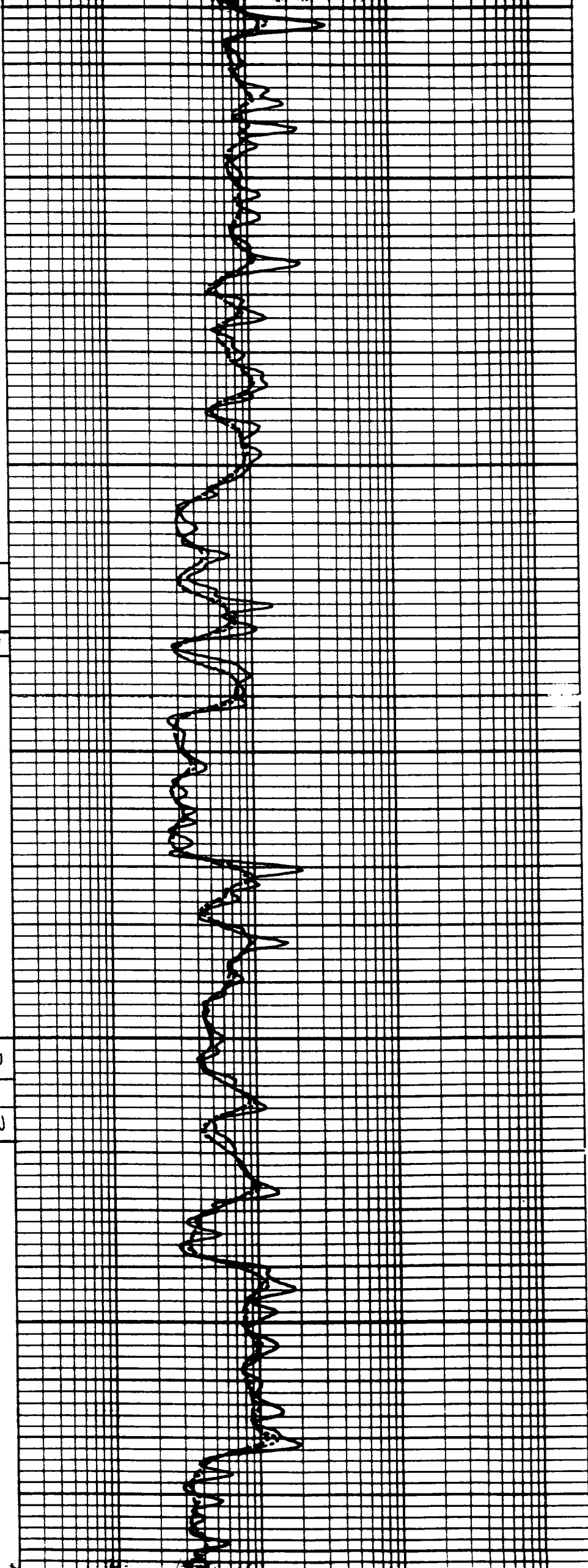
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NEW

NEW



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JUL 20 1992

STATE OF NEW MEXICO  
ENERGY and MINERALS DEPARTMENT

OIL CONSERVATION DIVISION

OIL CON. DIV.  
DIST. 3

Page 1  
Revised 10/01/78

This form is not to  
be used for reporting  
packer leakage tests  
in Southeast New Mexico

NORTHWEST NEW MEXICO PACKER-LEAKAGE TEST

Operator BHP PETROLEUM (AMERICAS) INC. Lease GALLEGOS CANYON UNIT Well No. 306  
Location of Well: Unit I Sec. 19 Twp. 29N Rge. 12W County SAN JUAN

	NAME OF RESERVOIR OR POOL	TYPE OF PROD. (Oil or Gas)	METHOD OF PROD. (Flow or Art. Lift)	PROD. MEDIUM (Tbg. or Csg.)
Upper Completion	PINON FRUITLAND	GAS	FLOW	CSG.
Lower Completion	MESA VERDE	SWD ZONE	INJECTION	TBG.

PRE-FLOW SHUT-IN PRESSURE DATA

Upper Completion	Hour, date shut-in	Length of time shut-in	St press. psig	Stabilized? (Yes or No)
	9:00 am 04-19-92	6 DAYS	212	YES
Lower Completion	Hour, date shut-in	Length of time shut-in	St press. psig	Stabilized? (Yes or No)
	9:00 am 04-19-92	3 DAYS	380	YES

FLOW TEST NO. 1

TIME (hour, date)	LAPSED TIME SINCE*	PRESSURE		Zone producing (Upper or Lower)	PROD. ZONE TEMP.	REMARKS
		Upper Completion	Lower Completion			
10:00 am 04-23-92	1 DAY	212	1150			FRUITLAND SHUT IN INJECTION MESA VERDE
11:00 am 04-24-92	2 DAY	212	1140			FRUITLAND SHUT IN INJECTION MESA VERDE
9:30 am 04-25-92	3 DAY	212	1170			FRUITLAND SHUT IN INJECTION MESA VERDE

Production rate during test

Oil: 0 BOPD based on \_\_\_\_\_ Bbls. in \_\_\_\_\_ Hours. \_\_\_\_\_ Grav. \_\_\_\_\_ GOR \_\_\_\_\_  
Gas: 0 MCFPD; Tested thru (Orifice or Meter): \_\_\_\_\_

MID-TEST SHUT-IN PRESSURE DATA

Upper Completion	Hour, date shut-in	Length of time shut-in	St press. psig	Stabilized? (Yes or No)
Lower Completion	Hour, date shut-in	Length of time shut-in	St press. psig	Stabilized? (Yes or No)

(Continue on reverse side)



District I  
 PO Box 1980, Hobbs, NM 88241-1980  
 District II  
 PO Drawer DD, Artesia, NM 88211-0719  
 District III  
 1000 Rio Brazos Rd., Aztec, NM 87410  
 District IV  
 PO Box 2088, Santa Fe, NM 87504-2088

State of New Mexico  
 Energy, Minerals & Natural Resources Department

**RECEIVED**  
 AUG 31 1994

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  
 PO Box 2088  
 Santa Fe, NM 87504-2088

**OIL CON. DIV.**  
**DIST. 3**

AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

<sup>1</sup> API Number <b>30 045 24286</b>		<sup>2</sup> Pool Code <b>96160</b>	<sup>3</sup> Pool Name <b>SWD; MESAVERDE</b>	
<sup>4</sup> Property Code <b>2038</b>	<sup>5</sup> Property Name <b>GALLEGOS CANYON UNIT</b>			<sup>6</sup> Well Number <b>306 SWD-</b>
<sup>7</sup> OGRID No. <b>2217</b>	<sup>8</sup> Operator Name <b>BHP PETROLEUM (AMERICAS) INC.</b>			<sup>9</sup> Elevation <b>5415 GL</b>

<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
<b>I</b>	<b>19</b>	<b>29N</b>	<b>12W</b>		<b>2015</b>	<b>SOUTH</b>	<b>830</b>	<b>EAST</b>	<b>SAN JUAN</b>

<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. <b>MC 2761</b>
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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

16					17 OPERATOR CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief  <i>FRED Lowery</i> Signature <b>FRED LOWERY</b> Printed Name <b>OPERATION SUPT.</b> Title <b>08-30-94</b> Date
		<b>SEC.</b>		<b>19</b>	
				<b>830'</b>	18 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 belief.  Date of Survey Signature and Seal of Professional Surveyer:  <b>ORIGINAL ON FILE</b>  Certificate Number
				<b>2015'</b>	

New Mexico Oil Conservation Division  
C-102 Instructions

IF THIS IS AN AMENDED REPORT, CHECK THE BOX LABELED "AMENDED REPORT" AT THE TOP OF THIS DOCUMENT.

Surveyors shall use the latest United States government survey or dependent resurvey. Well locations will be in reference to the New Mexico Principal Meridian. If the land is not surveyed contact the appropriate OCD district office. Independent subdivision surveys will not be acceptable.

1. The OCD assigned API number for this well
2. The pool code for this (proposed) completion
3. The pool name for this (proposed) completion
4. The property code for this (proposed) completion
5. The property name (well name) for this (proposed) completion
6. The well number for this (proposed) completion
7. Operator's OGRID number
8. The operator's name
9. The ground level elevation of this well
10. The surveyed surface location of this well measured from the section lines **NOTE: If the United States government survey designates a Lot Number for this location use that number in the 'UL or lot no.' box. Otherwise use the OCD unit letter.**
11. Proposed bottom hole location. If this is a horizontal hole indicate the location of the end of the hole.
12. The calculated acreage dedicated to this completion to the nearest hundredth of an acre
13. Put a Y if more than one completion will be sharing this same acreage or N if this is the only completion on this acreage
14. If more than one lease of different ownership has been dedicated to the well show the consolidation code from the following table:

C	Communitization
U	Unitization
F	Forced pooling
O	Other
P	Consolidation pending

**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!**

15. Write in the OCD order(s) approving a non-standard location, non-standard spacing, or directional or horizontal drilling

16. This grid represents a standard section. You may superimpose a non-standard section over this grid. Outline the dedicated acreage and the separate leases within that dedicated acreage. Show the well surface location and bottom hole location, if it is directionally drilled, with the dimensions from the section lines in the cardinal directions. (Note: A legal location is determined from the perpendicular distance to the edge of the tract.) If this is a high angle or horizontal hole show that portion of the well bore that is open within this pool.

Show all lots, lot numbers, and their respective acreage.

If more than one lease has been dedicated to this completion, outline each one and identify the ownership as to both working interest and royalty.

17. The signature, printed name, and title of the person authorized to make this report, and the date this document was signed.
18. The registered surveyors certification. This section does not have to be completed if this form has been previously accepted by the OCD and is being filed for a change of pool or dedicated acreage.