`			/	en de les companyones de la companyon de la co
Submit 3 Cc-ries to Appropriate District Office	State of New M Energy, Minerals and Natural F			Form C-103 Revised 1-1-89
DISTRICT 1 P.O. Box 1980, Hobbs, NM 88240	OIL CONSERVATION	ON DIVISION	WELL API NO.	
DISTRICT II P.O. Drawer DD, Artesia, NM 88210	P.O. Box 20 Santa Fe, New Mexico		30-045-242	
DISTRICT III 1000 Rio Brazos Rd., Aztec, NM 87410		/	5. Indicate Type of Le	STATE X FEE
			6. State Oil & Gas Le SF 080723	ase No.
DIFFERENT RESE	ICES AND REPORTS ON WE OPOSALS TO DRILL OR TO DEEPEN RVOIR. USE "APPLICATION FOR PE -101) FOR SUCH PROPOSALS.)	OP BLUC BACK TO A	7. Lease Name or Uni	t Agreement Name
1. Type of Well: OIL GAS WELL X	OTHER		Gallegos C	anvon Unit
2. Name of Operator	\		8. Well No.	anyon onic
3. Address of Operator			9. Pool name or Wildo	
5847 San Felipe Suite 4. Well Location	#3600 Houston, Texas	77057	I WIKUTZ	Mesaverde
Unit Letter I : 201	5 Feet From The S	Line and 830		
Section 19	Township 29N Ra	ange12W	NMPM San I.	
	10. Elevation (Show whether 5415 GR	DF, RKB, RT, GR, etc.)	NMPM San Ju	an County
11. Check	Appropriate Box to Indicate 1	Nature of Notice Re	POOR OF Other D	
NOTICE OF INT	ENTION TO:	SUB	SEQUENT REP	ORT OF:
PERFORM REMEDIAL WORK	PLUG AND ABANDON	REMEDIAL WORK		ERING CASING
TEMPORARILY ABANDON	CHANGE PLANS	COMMENCE DRILLING		IG AND ABANDONMENT
PULL OR ALTER CASING		CASING TEST AND CEI	_	
OTHER: Increase perf. dens	sity in SWD formation.	OTHER:		
 Describe Proposed or Completed Operat work) SEE RULE 1103. 	ions (Clearly state all pertinent details, an	d give pertinent dates, includi	ing estimated date of start	ing any proposed
See Attached			M P = .	
			R E G I	EIVEM
	•		APPO	
			AFRZ (5 1991;
			OIL CON	V. DIV.
			DIST,	N. DIV.
				•

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

SIGNATURE REGULATORY Affiars Tech.

TITLE Regulatory Affiars Tech.

DATE April 17, 1991

TYPE OR PRINT NAME ROSEMATIE Murphy

TELEPHONE NO.

APPROVED BY Original Signed by FRANK T. CHAVEZ

TITLE SUPERVISOR DISTRICT #3

DATE APR 2 5 1991

CONDITIONS OF APPROVAL, F ANY:

Gallegos Canyon Unit #306 Fruitland & Mesaverde Formation NE¼, SE¼, 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: @ 2 spf	3022' - 3042' 3102' - 3108'	(20') (6')
propose to add 2 spf	3145' - 3152' 3175' - 3190' 3306' - 3314'	(7') (15') (8')
	3342' - 3368' 3520' - 3546' 3574' - 3600'	(26') (26') (26')
Proposed new perforation: (4spf)	3317' - 3323' 3329' - 3333' 3400' - 3407' 3412' - 3418' 3473' - 3500'	(6') (4') (7') (6') (27')

5847 San Felipe Suite 3600 Houston, Texas 77057 Telephone: (713) 780-5000 FAX (713) 780-5273 Telex 9108813603

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) NE¼, SE¼, 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')
(0 2 spf)	3102′	-	3108′	(6′)
	3145′	-	3152′	(71)
	3175 ′	-	3190′	(15')
(propose to add 2 spf)	3306 ′	-	3314′	(81)
	3342′	-	3368 ′	(26')
	3520 ′	-	3546'	(26')
	3574′	-	3600′	(26')
Proposed new perforation:	3317 <i>′</i>		3323′	(6 ′)
(4spf)	3329 ′	-	3333′	(4')
	3400'	-	3407'	(71)
	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,

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

I.	n
	Purpose: Secondary Recovery Pressure Maintenance X Disposal Storage Application qualifies for administrative approval?
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 <u>SWD - 225</u>
٧.	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 whic 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:
	 Proposed average and maximum daily rate and volume of fluids to be injected; Whether the system is open or closed; Proposed average and maximum injection pressure; Sources and an appropriate analysis of injection fluid and compatibility with the receiving formation if other than reinjected produced water; and If injection is for discosal 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
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:

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

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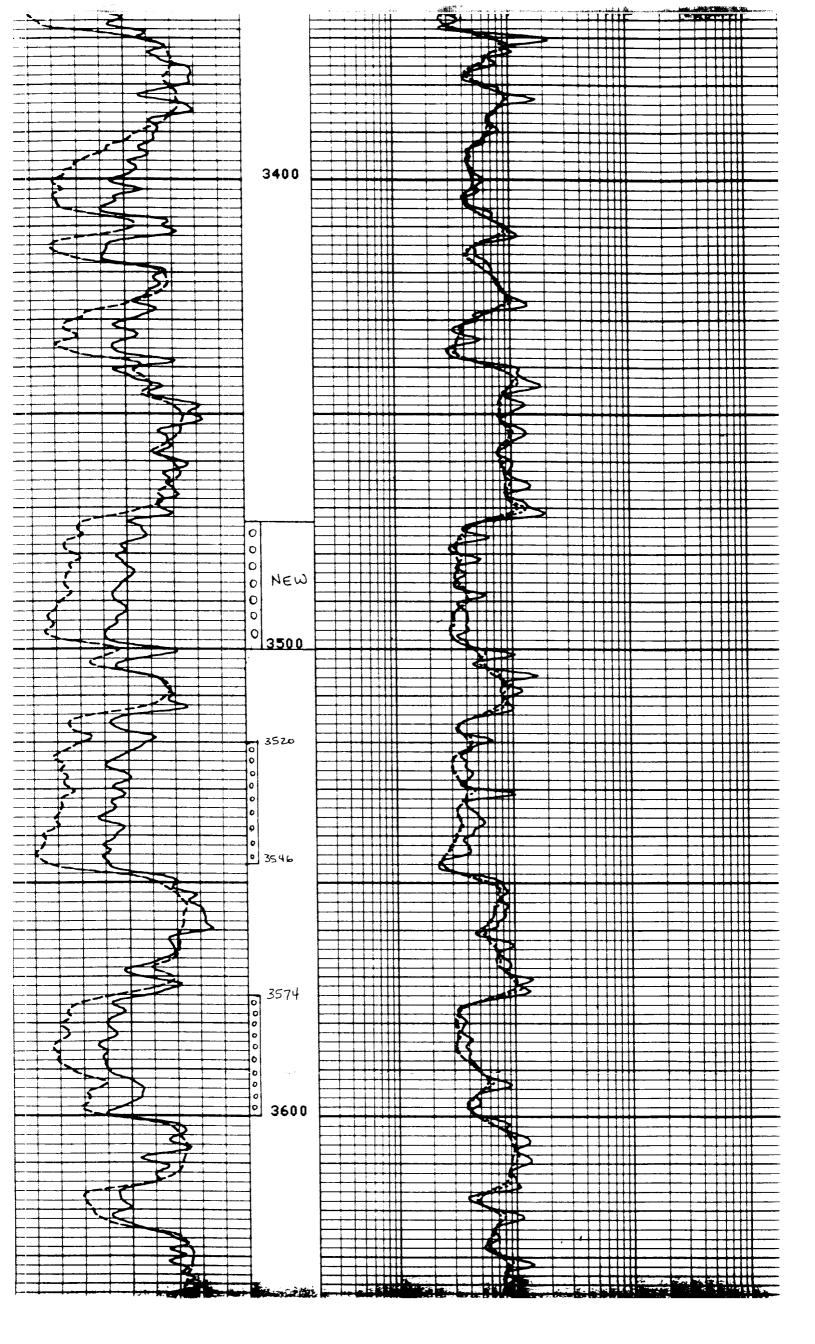
PARAMETERS

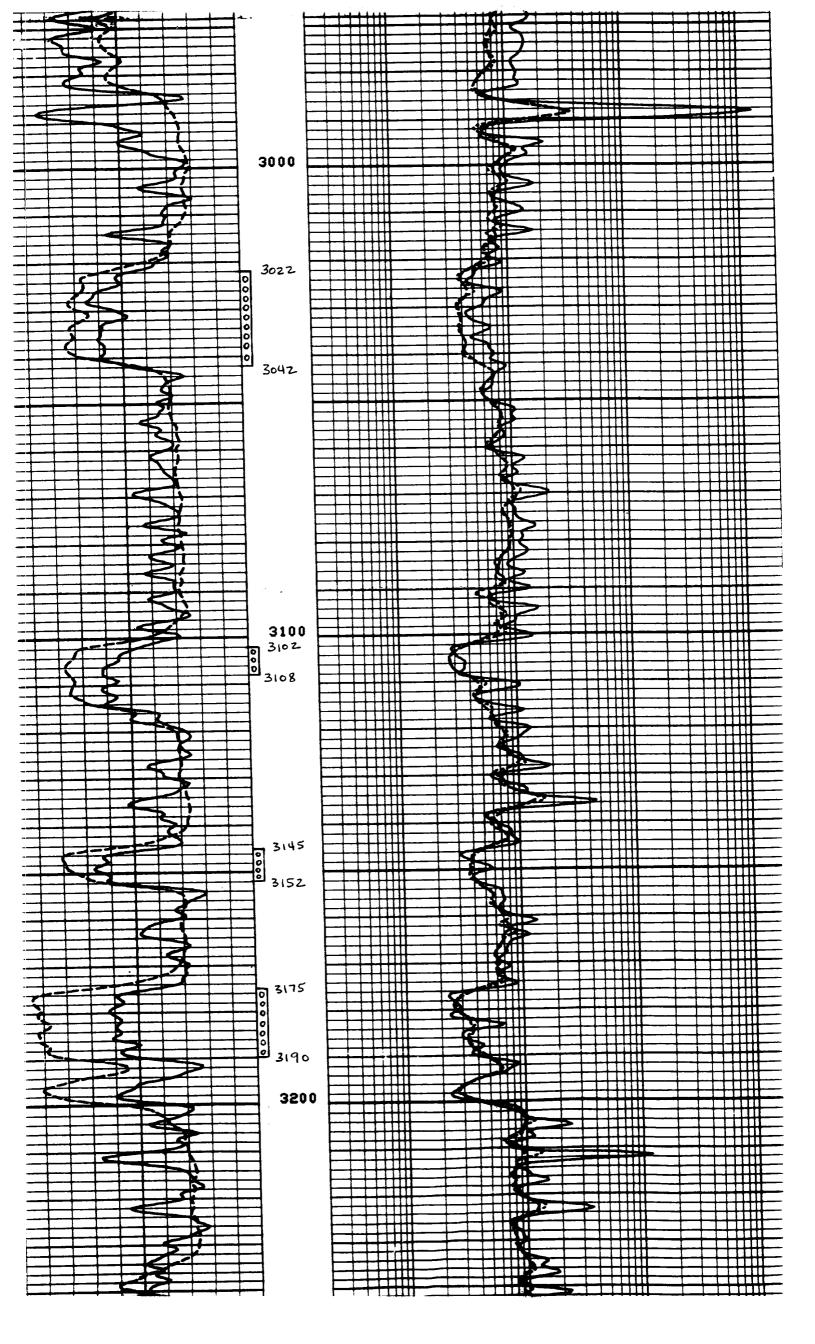
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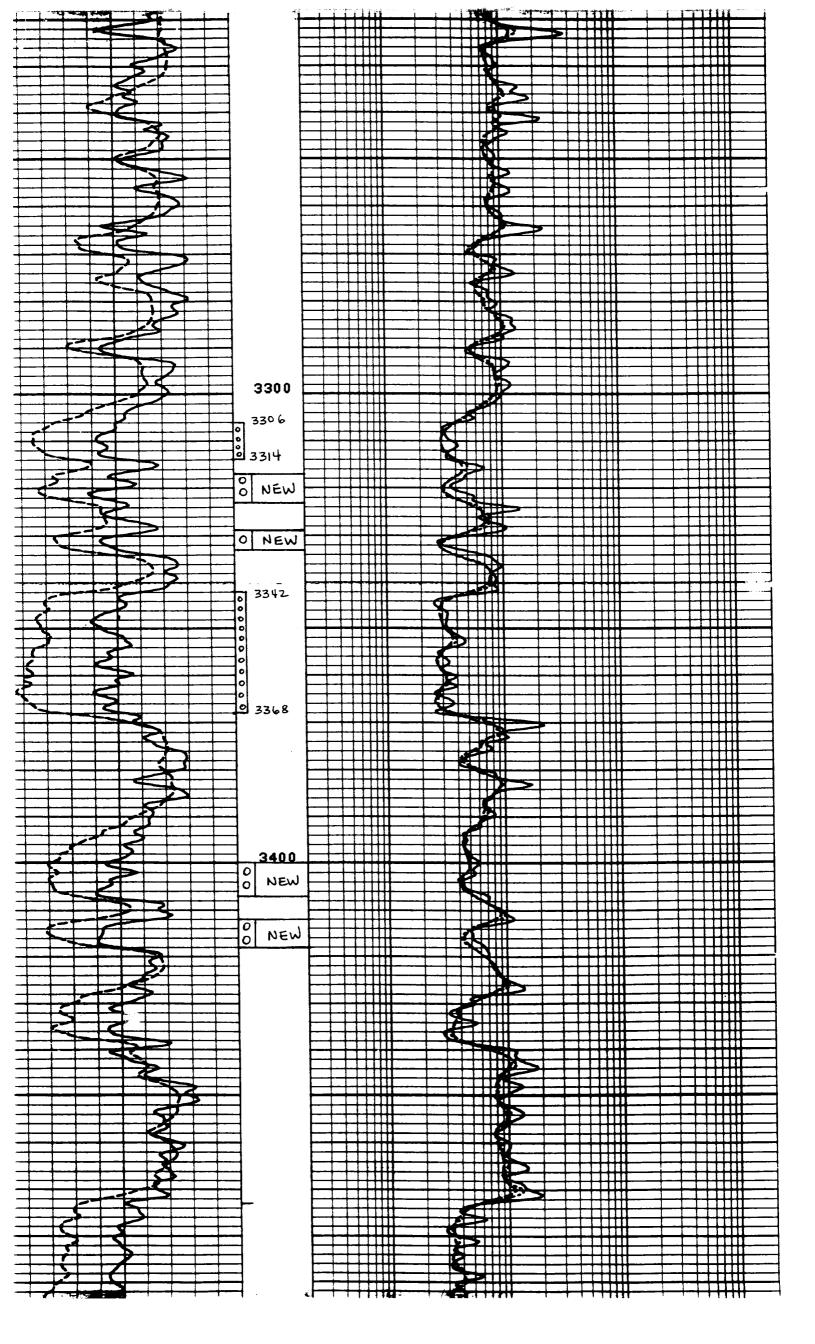
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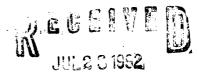
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STATE OF NEW MEXICO ENERGY and MINERALS DEPARTMENT

OIL CONSERVATION DIVISION

OIL CON. DIV.

Page 1 evised 10/01/78

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

NORTHWEST NEW MEXICO PACKER-LEAKAGE TEST

Operator Location			(AMERICAS) I	LC136 _	GALLEGOS CA	NYON UNIT	Well 306
of Well: U	Unit	I Sec19	Twp. 29N	Rge	12W	Cour	nty SAN JUAN
		NAME OF RESERVE	DIR OR POOL	TYPE OF		METHOD OF PROD. (Flow or Art. Lift)	PROD. MEDIUM (Tog. or Cog.)
Upper Completion	~~·	PINON FRUI	TLAND	GAS	5	FLOW	l CSG.
Lower Completion	···	MESA VER	DE	SWD Z	ONE :	INJECTION	TBG.
	4				RESSURE DATA	١	
Completion:	9:00 10ur. dale s	am 04-19-9	Length of time shi	AYS	Si press. psig 21 Si press, psig	12	Stabilized? (Yes or No) YES Stabilized? (Yes or No)
Completion	9:00	am 04-19-9	2 1 3 DA	AYS	38		YES
Conimenced a	t (hour, dat	(e) * 1	· · · · · · · · · · · · · · · · · · ·	FLOW TEST	·		
TIME (hour, de	_	LAPSED TIME	PRES Upper Completion	SURE	Zone producing (U PROD. ZONE TEMP,	pper or Lowery	REMARKS
10:00 04-23 11:00	3-92	1 DAY	212	1150		INJECTIO	D SHUT IN N MESA VERDE
9:30	1-92	2 DAY	212	1140		INJECTIO	D SHUT IN N MESA VERDE D SHUT IN
04-25	5-92	3 DAY	212	1170			N MESA VERDE
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HORTHWEST NEW MEXICO PACKER LEAKAGE TEST INSTRUCTIONS

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be taken as desired, or may be requested on wells which have previously shown quentem tainireig jahre prince for the foreign on the prince (taining the foreign may flow period, at lean one time during each flow period (at approximately the midway conclusion of each flow period. These terms immediately prior to the beginning of each hourh interest Dieterfree, unduding one pressure measurement innividually prior to the te bite lose period, se lufteen minute inten in duing the live how thereof, sha se bichamic kanke at mue internals at follows: 3 hourn terus immediately pitot to the bekinn-Therefore for gastions term must be measured on rath some with a deadweight.

ing gauge shall be required on the oil sone only, with deadweight premuten as required deadweight presoure gauge. If a well is a gainfl or an oil-gar doub complesion, the recordcheeked at Itam rwite, oner at the beginning and one at the end of each tern, with a meaning and incolored with incoloring presents kanter the armitaci of which man be \$4. hour oil sone sent. all premutes, throughout the entire tent, shall be continuously

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> manustion a migened of when requented by the Divason. picker of the rubing have been dimuted. Tou shall also be taken at any time that comive treament, and whenever temedual work has been done on a well during which the multiple completions within seven day following recompletion and to themical or fracorder sucherung the multiple completion Such term thall also be commenced on all seven days after actual completion of the well, and annually therefare as prescribed by the A packet leabate ten thall be commenced on each multiply completed well within

> brillion or od oils lishe rioisiogo thall notify the Division in writing of the ease tune the test is to be commenced. Office, An Icase 12 linum prior to the commencement of any parker leakage (ed., the operator

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פן ז ליוצרווטו נפווטובוופט ואו נווש לבוווק ואדון אב ואבב ניסחש an initial public leader tent, i gra well a being flowed to the aumenhitte due to the lack ween direct in the rid of a gar well and be bound in the case of an oil well. Mose: if, on iste of production while the other tone remains shutting Such tert shall be continued for

dure with Pungraph 3 shore). Following completion of Flow Ten No. 1, the well shall again be shirt-in, in secon-

word gritish britishin tree ford on dynody men brinchots at little to sitted and ...

This Me I. Pravedure for Fore Ten No 1 a to Me the tem a los Fire Ten No. 1 exerps

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

State of New Mexico EG

Form C-102 Revised February 21, 1994

ORIGINAL ON FILE

Certificate Number

Fee Lease - 3 Copies

OIL CONSERVATION DIVISION Instructions on back Submit to Appropriate District Office PO Box 2088 State Lease - 4 Copies Santa Fe, NM 87504-2011 GON. DIV. PO Box 2088, Santa Fc, NM 87504-2088 ☐ AMENDED REPORT WELL LOCATION AND ACREAGE DEDICATION API Number ² Pool Code 30 045 24286 96160 SWD; MESAVERDE ⁴ Property Code ⁵ Property Name Well Number 2038 GALLEGOS CANYON UNIT 306 SWD-7 OGRID No. * Operator Name ' Élevation 2217 BHP PETROLEUM (AMERICAS) INC. 5415 GL Surface Location UL or lot no. Section Township Range Lot Idn Feet from the North/South line Feet from the East/West line County I 19 29N 12W 2015 SOUTH 830 EAST SAN JUAN 11 Bottom Hole Location If Different From Surface UL or lot no. Section Township Lot Idn Feet from the North/South line Feet from the East/West line County 12 Dedicated Acres 13 Joint or Infill 14 Consolidation Code 15 Order No. MC 2761 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 Signature SEC. FRED LOWERY Printed Name OPERATION SUPT. 08-30-94 Date 19 18SURVEYOR CERTIFICATION I hereby certify that the well location shown on this plat 830 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:

2015,

New Mexico Oil Conservation Division C-102 Instructions

IF THIS IS AN AMENDED REPORT, CHECK THE BOX LABLED "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
- 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
- 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 Othe
 - 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!

 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.

- 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.