

STATE OF NEW MEXICO
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT
OIL CONSERVATION DIVISION

GARREY CARRUTHERS
GOVERNOR

POST OFFICE BOX 2088
STATE LAND OFFICE BUILDING
SANTA FE, NEW MEXICO 87504
(505) 827-5800

October 12, 1990

BHP Petroleum
5847 San Felipe
Suite 3600
Houston, TX 77057

Attention: Chuck Williams

Administrative Order NSL-2896

Dear Mr. Williams:

Reference is made to your application dated September 5, 1990 for a non-standard coal gas well location for your **Gallegos Canyon Unit Well No. 390** to be located 245 feet from the South line and 1530 feet from the West line (Unit N) of Section 23, Township 29 North, Range 13 West, NMPM, Basin Fruitland Coal (Gas) Pool, San Juan County, New Mexico. The W/2 of said Section 23 shall be dedicated to the well forming a standard 320-acre gas spacing and proration unit for said pool.

By the authority granted me under the provisions of Rule 8 of the Special Rules and Regulations for the Basin-Fruitland Coal (Gas) Pool as promulgated by Division Order No. R-8768, the above-described unorthodox coal gas well location is hereby approved.

Sincerely,

William J. LeMay
Director

WJL/MES/ag

cc: Oil Conservation Division - Aztec
US Bureau of Land Management - Farmington

RECEIVED
OCT 17 1990
OIL CON. DIV
DIST. 3



STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT
OIL CONSERVATION DIVISION
AZTEC DISTRICT OFFICE

1000 RIO ABATOS ROAD
AZTEC, NEW MEXICO 87410
(505) 334-0178

JARREY CARRUTHERS
GOVERNOR

Date: 10-3-90

Attn: Mr. Stegner

Oil Conservation Division
P.O. Box 2088
Santa Fe, NM 87504-2088

Re: Proposed HC _____
Proposed DHC _____
Proposed NSL X _____
Proposed SWD _____
Proposed WFX _____
Proposed PMX _____

Gentlemen:

I have examined the application dated 9-12-90

for the B.H.P. PET. (AMERICAS) INC. G.C.U. #390
Operator Lease & Well No.

N-23-29N-13W and my recommendations are as follows:
Unit, S-T-R

Approved

Yours truly,

Ernie Baulch

9/11/90
Attn: E. Busch

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

September 5, 1990

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



RE: Unorthodox Location, Administrative Approval Request
Gallegos Canyon Unit #390
SE 1/4 SW 1/4 Sec. 23 T29N R13W
San Juan County, New Mexico

Gentlemen:

BHP Petroleum respectfully requests that a non standard location be administratively approved to allow the GCU #390 well to be drilled 245' FSL and 1530' FWL to be completed in the Fruitland Coal.

The non standard location is requested due to topographical reasons and the surface owner's reluctance to allow any additional disturbance.

The proposed unorthodox location is adjacent to Amoco's existing #161-E Dakota well on a rock bluff approximately 220' above the river bottom. Movement to an orthodox location would require removal of several extremely large trees on the river bottom and construction and extensive maintenance of an access road along the river bottom.

The surface owner is the Bolack family and they have told us that the presently proposed location is the only acceptable place for the well.

The operations of the offsetting proration units not operated by BHP Petroleum are listed below and will be notified by certified mail, return receipt requested of our unorthodox location request.

Amoco Production Company
General Minerals Corporation

Mesa Limited Partnership
Paramount Petroleum Corporation

Ernie Busch visited the subject location with J. C. Harris and myself on August 10, 1990.

Please do not hesitate to contact me if you have any questions.

Sincerely,

Chuck Williams

Chuck Williams 
Field Services Administrator

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SEP 12 1990
OIL CON. DIV.
DIST. 3

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. TYPE OF WORK

DRILL ☒

DEEPEN ☐

PLUG BACK ☐

b. TYPE OF WELL

OIL
WELL ☐

GAS
WELL ☒

OTHER

SINGLE
ZONE ☒

MULTIPLE
ZONE ☐

2. NAME OF OPERATOR

BHP Petroleum (Americas) Inc.

3. ADDRESS OF OPERATOR

5847 San Felipe #3600 Houston, Texas 77057

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)*

At surface

SE SW

At proposed prod. zone

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*

Approximately 1 mile south of Farmington, New Mexico

15. DISTANCE FROM PROPOSED*

LOCATION TO NEAREST
PROPERTY OR LEASE LINE, FT.
(Also to nearest drlg. unit line, if any) boundary

1530' from the unit

16. NO. OF ACRES IN LEASE

2,561.19

18. DISTANCE FROM PROPOSED LOCATION*
TO NEAREST WELL, DRILLING, COMPLETED,
OR APPLIED FOR, ON THIS LEASE, FT.

<150'

19. PROPOSED DEPTH

1625'

21. ELEVATIONS (Show whether DF, RT, GR, etc.)

5645' GR

23.

PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
8 3/4"	7"	20#	± 130'	50 sx (57.5 cu. ft.)
6 1/4"	4 1/2"	10.5 #	± 1625'	205sx (253 cu. ft.)

5. LEASE DESIGNATION AND SERIAL NO.

NM 03654

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

Gallegos Canyon Unit

8. FARM OR LEASE NAME

Gallegos Canyon Unit

9. WELL NO.

390

10. FIELD AND POOL, OR WILDCAT

Basin Fruitland Coal

11. SEC., T., R., M., OR BLK.
AND SURVEY OR AREA

Sec 23, T29N R13W

12. COUNTY OR PARISH

San Juan

13. STATE

N.M.

17. NO. OF ACRES ASSIGNED
TO THIS WELL

320

20. ROTARY OR CABLE TOOLS

Rotary

22. APPROX. DATE WORK WILL START*

Fall '90

RECEIVED
SEP 12 1990
ON CON. DIV. I
DIST. 3

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen or plug back, give data on present productive zone and proposed new productive zone. If proposal is to drill or deepen directionally, give pertinent data on subsurface locations and measured and true vertical depths. Give blowout preventer program, if any.

24.

SIGNED

Chuck Williams

TITLE Field Service Administrator DATE 8/1/90

(This space for Federal or State office use)

PERMIT NO.

APPROVAL DATE

APPROVED BY

CONDITIONS OF APPROVAL, IF ANY:

TITLE

DATE

*See Instructions On Reverse Side

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

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-362
Revised 2-1-89

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

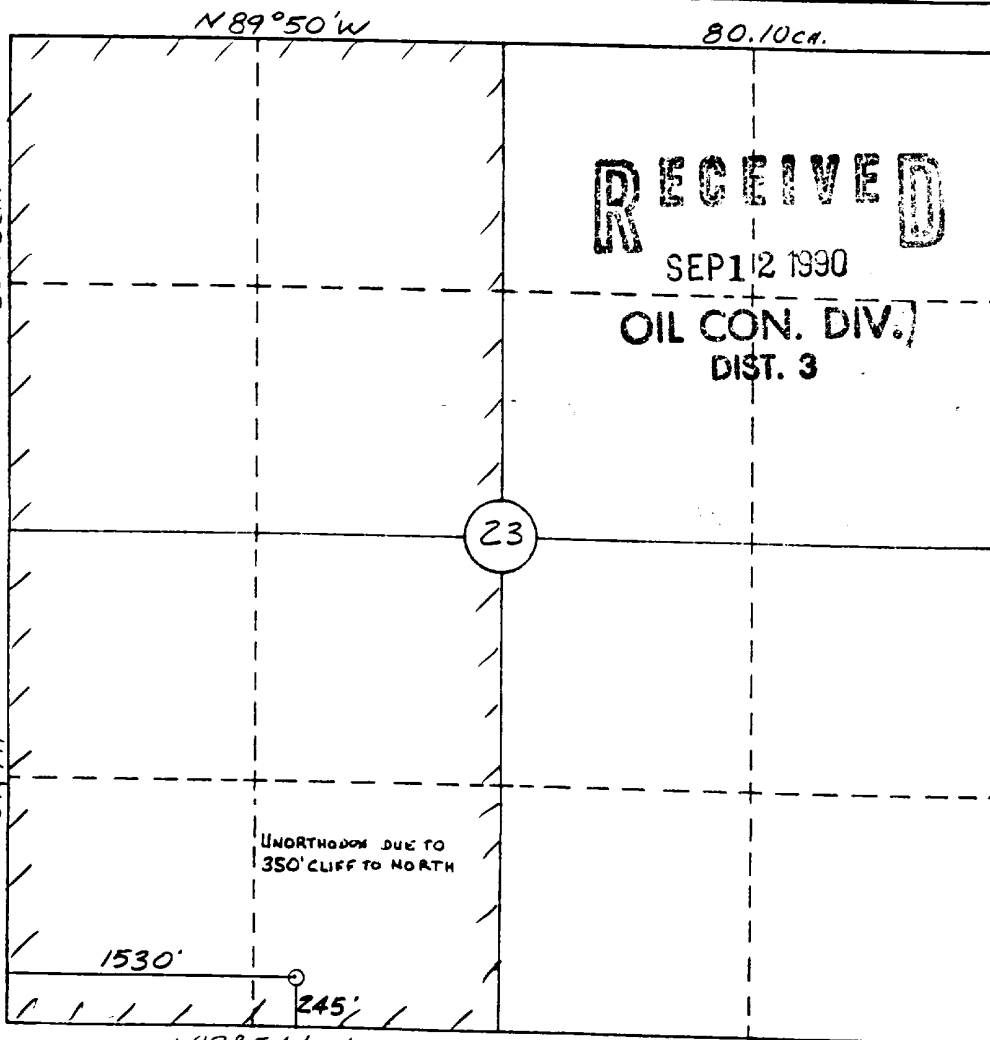
DISTRICT III
1000 Rio Brazos Rd., Aztec, NM 87410

WELL LOCATION AND ACREAGE DEDICATION PLAT

All Distances must be from the outer boundaries of the section

Operator BHP PETROLEUM (AMERICAS) INC.		Lease GALLEGOS CANYON UNIT		Well No. 390
Unit Letter N	Section 23	Township 29 N	Range 13 W	County San Juan
Actual Footage Location of Well: 245 feet from the South line and 1530 feet from the West line				
Ground level Elev. 5645	Producing Formation Fruitland Coal	Pool Basin Fruitland Coal	Dedicated Acreage: 320 Acres	
<p>1. Outline the acreage dedicated to the subject well by colored pencil or hatchure marks on the plat below.</p> <p>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).</p> <p>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.? <input type="checkbox"/> Yes <input type="checkbox"/> No If answer is "yes" type of consolidation _____</p> <p>If answer is "no" list the owners and tract descriptions which have actually been consolidated. (Use reverse side of this form if necessary.) _____</p> <p>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.</p>				

0 330 660 990 1320 1650 1980 2310 2640 2970 3300 3630 3960 4290 4620 4950 5280 5610 5940 6270 6600



OPERATOR CERTIFICATION

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

Signature
Chuck Williams
Printed Name
Chuck Williams
Position
Field Services Administrator
Company
BHP Petroleum (Americas) Inc
Date
08/01/90

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.

7-12-90

Date Surveyed
William B. Mahnke II

Signature & Seal of
Professional Surveyor

WILLIAM B. MAHNKE II
NEW MEXICO
#8466
REGISTERED PROFESSIONAL LAND SURVEYOR
Certificate No. 8466

SURFACE USE & OPERATIONS PLAN

WELL NAME AND NO.: Gallegos Canyon Unit Well No. 390

LOCATION: 245' FSL 1530' FWL (SE/SW) Section 23, T29N-R13W

LEASE NO.: NM 03654

1) **EXISTING ROADS:**

- A. See Attached map.
- B. Travel south on Road #371 for approximately .5 miles, turn left on ridge road, go to auto gate, travel north toward radio towers, go 1.2 miles past towers to Amoco Production Company's #161-E well. Proposed well is adjacent to Amoco well.
- C. Access Roads to Location: See map
- D. Exploratory well: N/A
- E. Development Well: For all applicable access roads within a one (1) mile radius, see attached map.
- F. Plans for Improvement and/or Maintenance: BHP Petroleum, Amoco, and El Paso Natural Gas Company currently maintain the non-county, state or Irrigation Project roads. Maintenance is conducted on an as-needed basis.

2) **PLANNED ACCESS ROADS:**

- A. No new road is required.

3) **LOCATION OF EXISTING WELLS:**

- A. Water Wells: None
- B. Abandoned Wells: None
- C. Temporarily Abandoned Wells: None
- D. Disposal Wells: Gallegos Canyon Unit #307 is the nearest disposal well.
- E. Drilling Wells: None presently.
- F. Producing Wells: Amoco #161-E is the nearest well, approximately 150' away. For additional wells see map.
- G. Shut-in Wells: None.
- H. Injection Wells: None.
- I. Monitoring or Observation Wells: None.

4) **LOCATION OF EXISTING AND/OR PROPOSED FACILITIES OWNED AND/OR CONTROLLED BY BHP:**

- A. Existing facilities: BHP Petroleum currently operates the Pictured Cliffs participating area within the Gallegos Canyon unit.
 - 1. Tank Batteries: No oil or condensate is currently produced from BHP wells in the unit.
 - 2. Production: All wells produce natural gas.
Facilities: Some wells are equipped with rod pumps to remove excess water. Wells are normally equipped with a two (2) phase separator. El Paso Natural Gas Company has a glycol dehy unit upstream of the sales meter.
 - 3. Oil Gathering Lines: N/A
 - 4. Gas Gathering Lines: El Paso Natural Gas Company purchases all gas produced by BHP in this unit. There are two (2) systems in which our wells are introduced depending on the initial wellhead pressure.
 - 5. Injection Lines: N/A
 - 6. Disposal Lines: Each well which produces water is tied into one of four (4) disposal systems.

B. New Production Facilities:

1. Proposed Tank Battery: None
2. Dimensions of Facilities: All new facilities are restricted to the existing pad area. New facilities will consist of a separator, dehy unit, meter house and two small earthen pits, unless the well requires a disposal line to remove excess water, in which case a pumping unit will be installed and the separator pit eliminated. All surface equipment to be painted tan. If water disposal pipelines are need, they will be applied for at a later date.
3. Construction Methods and Materials: The site will be leveled with a crawler type dozer. Native soils will be used. Any foundation material such as gravel will be purchased and trucked to the site if a pumping unit is needed.
4. Protective Measures and Devices: Any pits will be fenced to prevent entry by livestock or wildlife.

5) **LOCATION AND TYPE OF WATER SUPPLY:**

- A. Location: San Juan River
- B. Method of Transportation: Water will be hauled by truck over existing roads.
- C. Water Wells to be Drilled: N/A

6) **SOURCE OF CONSTRUCTION MATERIALS:**

- A. Location: Only native materials are necessary for the construction of drill site and related facilities.
- B. From Federal or Indian Lands: N/A
- C. Additional Materials: It may be necessary to haul gravel for a pumping unit base. If needed it will be hauled from Farmington.
- D. Access Roads on Federal or Indian Lands: All access roads are on private land. Amoco Production Company's Right-of-Way easements will be utilized for access.

7) **METHODS OF HANDLING WASTE DISPOSAL:**

- A. Cuttings and drilling fluids will be placed in the reserve pit.
- B. Same as listed above.
- C. Produced fluids (water) will be placed in the reserve pit during testing.
- D. Sewage will be contained in a portable chemical toilet.
- E. Garbage and other water material will be place in a small trash cage, and disposed of in an approved sanitary land fill.
- F. Upon completion of the well the reserve pit will be backfilled.

8) **ANCILLARY FACILITIES:**

- A. None are planned.
- B. Location and Pits and Stock Piles: For location of mud tanks, reserve pit, and pipe rack see attached diagram.
- C. Pad Orientation: For rig orientation and access roads, see attached diagram.
- D. Lining of Pits: It is not planned to line the reserve pit.
- E. O.S.H.A. Requirements: The disturbed area requested is sufficient to allow fracturing operations in a safe manner and in accordance with O.S.H.A. standards.

9) **PLAN FOR RESTORATION OF THE SURFACE:**

- A. Revegetation will be in accordance with BLM stipulations.

10) **OTHER INFORMATION:**

- A. Topography, Soil Characteristics, Geologic Features, Flora and Fauna:

The Gallegos Canyon Unit area topography varies considerably throughout the participating area. The southwest portion is primarily highly eroded sandstone with deep channels and rock outcroppings. The southeast portion is separated by the Gallegos Wash and is mostly

within the NAPI farming area. The north portion is separated by the San Juan River. Most all of the area north of the river is private land consisting of rural business and small farms and residences.

This site is on an existing well pad serving Amoco well #161-E. No significant additional disturbance will be required.

- B. Surface Use: Livestock grazing.
- C. Surface Ownership: Surface is privately owned.
- D. Proximity of Water, Dwellings, Archaeological, Historical Sites: Closest live water is the San Juan River approximately .5 miles north of the proposed location.
- E. There are no occupied dwellings within close proximity to the proposed location.

Archaeology

- F. A cultural inventory report will be mailed directly to the Farmington BLM office.

11) **LESSEE'S OR OPERATOR'S FIELD REPRESENTATIVE:**

BHP Petroleum (Americas) Inc.
Post Office Box 977
Farmington, New Mexico
Houston, Texas 77057
c/o Fred Lowery

BHP Petroleum (Americas) Inc.
5847 San Felipe, Suite 3600

c/o Chuck Williams

(505) 327-1639 (24 hour answering service)

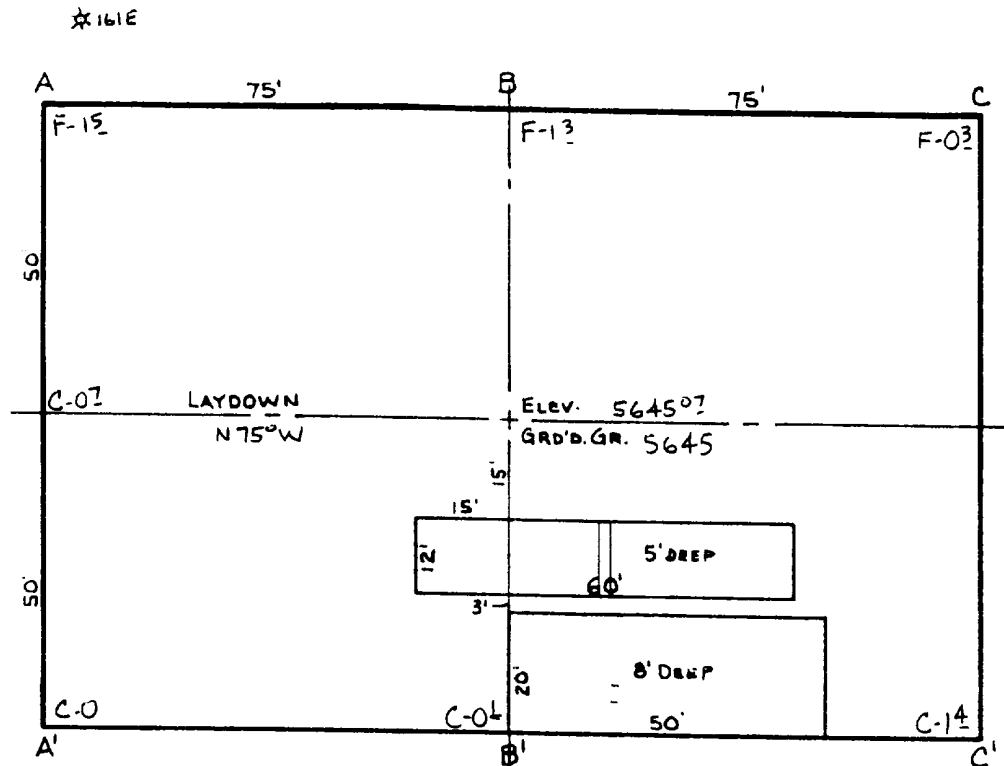
(713) 780-5448

12) **CERTIFICATION:**

I hereby certify that I, or persons under my direct supervision, have inspected the proposed drill site and access route; that I am familiar with the conditions which presently exist; that the statements made in this plan are to the best of my knowledge true and correct; and that the work associated with the operations proposed herein will be performed by BHP Petroleum (Americas) Inc. and its contractors in conformity with this plan and the terms and conditions under which it is approved.


Signed

BHP PETROLEUM (AMERICAS) INC.
 GALLEGOS CANYON UNIT #390
 245' FSL & 1530' FWL
 Sec. 23, T29N, R13W
 San Juan Co., N.M.



SCALE: 1" = 30'



A-A'	Vert.: 1" = 30'	Horiz.: 1" = 50'	C/L
5650			
5640			

B-B'	Vert.: 1" = 30'	Horiz.: 1" = 50'	C/L
5650			
5640			

C-C'	Vert.: 1" = 30'	Horiz.: 1" = 50'	C/L
5650			
5640			

BHP PETROLEUM (AMERICAS) INC.
 GALLEGOS CANYON UNIT #390
 245' FSL & 1530' FWL
 Sec. 23, T29N, R13W
 San Juan Co., N.M.

