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UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

FORM APPROVED  
OMB NO. 1004-0135  
Expires: November 30, 2000

**SUNDRY NOTICES AND REPORTS ON WELLS**  
*Do not use this form for proposals to drill or to re-enter an abandoned well. Use form 3160-3 (APD) for such proposals.*

**SUBMIT IN TRIPLICATE - Other instructions on reverse**

1. Type of Well <input type="checkbox"/> Oil Well <input checked="" type="checkbox"/> Gas Well <input type="checkbox"/> Other		5. Lease Serial No. NMSF - 078807-A	
2. Name of Operator AMOCO PRODUCTION COMPANY		6. If Indian, Allottee or Tribe Name	
3a. Address P.O. BOX 3092 HOUSTON, TX 77253		7. If Unit or CA/Agreement, Name and/or No.	
3b. Phone No. (include area code) Ph: 281.366.4491 Fx: 281.366.0700		8. Well Name and No. GALLEGOS CANYON UNIT 571	
4. Location of Well (Footage, Sec., T., R., M., or Survey Description) Sec 14 T28N R13W Mer SWSE 1695FNL 1415FEL 36.39900 N Lat, 108.11100 W Lon		9. API Well No. 30-045-30703	
		10. Field and Pool, or Exploratory BASIN FRUITLAND COAL	
		11. County or Parish, and State SAN JUAN COUNTY, NM	

12. CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION			
<input checked="" type="checkbox"/> Notice of Intent	<input type="checkbox"/> Acidize	<input type="checkbox"/> Deepen	<input type="checkbox"/> Production (Start/Resume)	<input type="checkbox"/> Water Shut-Off
<input type="checkbox"/> Subsequent Report	<input type="checkbox"/> Alter Casing	<input type="checkbox"/> Fracture Treat	<input type="checkbox"/> Reclamation	<input type="checkbox"/> Well Integrity
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> New Construction	<input type="checkbox"/> Recomplete	<input checked="" type="checkbox"/> APDCH
	<input type="checkbox"/> Change Plans	<input type="checkbox"/> Plug and Abanden	<input type="checkbox"/> Temporarily Abandon	
	<input type="checkbox"/> Convert to Injection	<input type="checkbox"/> Plug Back	<input type="checkbox"/> Water Disposal	

13. Describe Proposed or Completed Operation (clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recomple horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recomple in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the site is ready for final inspection.)

On June 15, 2001, Amoco Production Company submitted for your approval an application for permit to drill the subject well. Attached please find amendments to our original drilling and completion plan as well as the correct formation top data. Additionally, we are amending the total depth from 1884' to 1561' and the casing and cementing data for the 4 1/2" casing string is as follows:  
Hole size: 6 1/4" Casing Size: 4 1/2" 10.5# J-55 ST&C

Setting Depth: 1561'  
Cement: 120 SXS (251 CU FT) CLS B Lead 44 SXS (97 CU FT) Tail  
Density/Yield/Water: LEAD 11.4 2.68 16.6 TAIL 15.6 1.19 5.25 Excess 70%

14. I hereby certify that the foregoing is true and correct. <b>Electronic Submission #5613 verified by the BLM Well Information System For AMOCO PRODUCTION COMPANY, sent to the Farmington Committed to AFMSS for processing by Maurice Johnson on 07/12/2001 ()</b>	
Name (Printed/Typed) MARY CORLEY	Title AUTHORIZED REPRESENTATIVE
Signature	Date 07/11/2001

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved By <i>David J. Markiewicz</i>	Title <i>AFM minerals</i>	Date <i>8/15/01</i>
Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.		Office

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make 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.

**\*\* ORIGINAL \*\* ORIGINAL \*\* ORIGINAL \*\* ORIGINAL \*\* ORIGINAL \*\* ORIGINAL \*\* ORIGINAL \*\***

District I  
PO Box 1780, Hobbs NM 88241-1980  
District II  
PO Drawer KK, Artesia, NM 87211-0719  
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

**OIL CONSERVATION DIVISION**  
PO Box 2088  
Santa Fe, NM 87504-2088

Form C-102  
Revised February 21, 1994  
Instructions on back  
Submit to Appropriate District Office  
State Lease - 4 Copies  
Fee Lease - 3 Copies

☐ AMENDED REPORT

**WELL LOCATION AND ACREAGE DEDICATION PLAT**

API Number <b>30-045-30703</b>		Pool Code <b>116229</b>	Pool Name <b>Basin Fruitland Coal</b>
Property Code <b>000570</b> GRID No.	Property Name <b>Gallegos Canyon Unit</b>		Well Number <b># 571</b>
<b>1118</b>	Operator Name <b>AMOCO PRODUCTION COMPANY</b>		Elevation <b>5678</b>

**Surface Location**

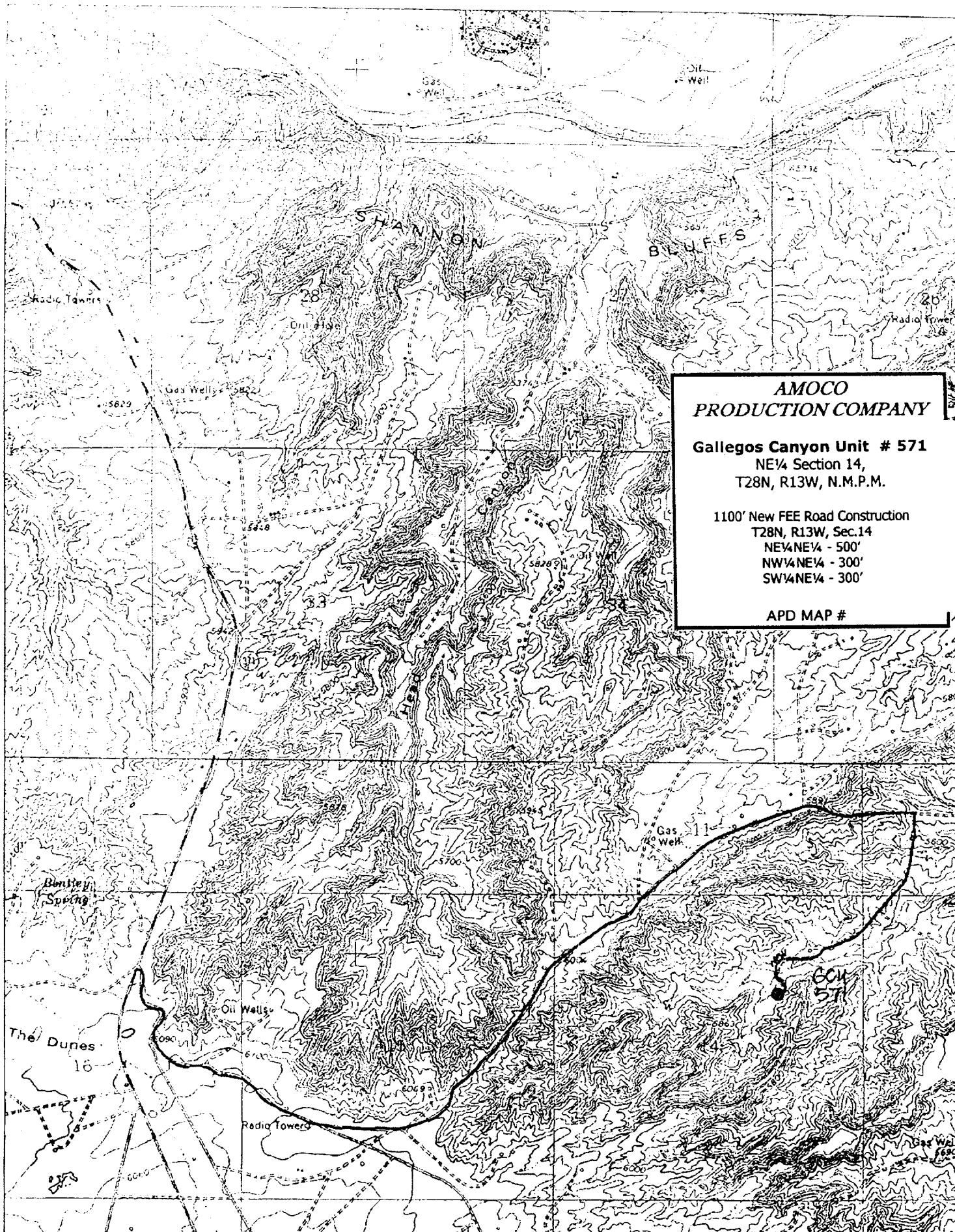
UL or Lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South Line	Feet from the	East/West line	County
<b>G</b>	<b>14</b>	<b>28 N</b>	<b>13 W</b>		<b>1695</b>	<b>NORTH</b>	<b>1415</b>	<b>EAST</b>	<b>San Juan</b>

**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
Dedicated Acres <b>3.20 1/2</b>	Joint or Infill	Consolidation Code		Order No.					

**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**

	<p><b>17 OPERATOR CERTIFICATION</b></p> <p>I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.</p> <p>Signature: <i>Mary Corley</i></p> <p>Printed Name: <b>MARY CORLEY</b></p> <p>Title: <b>SR. REGULATORY ANALYST</b></p> <p>Date: <b>06-15-2001</b></p>
	<p><b>18 SURVEYOR CERTIFICATION</b></p> <p>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.</p> <p>Date of Survey: <b>June 8, 2001</b></p> <p>Signature and Seal of Professional Surveyor: <i>GARY D. VANN</i></p> <p></p> <p>Certificate Number: <b>7016</b></p>



**AMOCO  
PRODUCTION COMPANY**

**Gallegos Canyon Unit # 571**  
NE $\frac{1}{4}$  Section 14,  
T28N, R13W, N.M.P.M.

1100' New FEE Road Construction  
T28N, R13W, Sec.14  
NE $\frac{1}{4}$ NE $\frac{1}{4}$  - 500'  
NW $\frac{1}{4}$ NE $\frac{1}{4}$  - 300'  
SW $\frac{1}{4}$ NE $\frac{1}{4}$  - 300'

APD MAP #

**AMOCO PRODUCTION COMPANY  
DRILLING AND COMPLETION PROGRAM**

**Prospect Name:** GCU 571  
**Lease:** GALLEGOS CANYON UNIT  
**County:** San Juan  
**State:** New Mexico  
**Date:** July 11, 2001

**Well No:** 571  
**Surface Location:** 1695' FNL & 1415' FEL  
 Sec. 14, 28N-13W  
**Field:** Basin Fruitland Coal

**OBJECTIVE:** Drill 150' into the Pictured Cliffs, set 4 1/2" casing to TD, perf & stimulate Fruitland Coal interval

METHOD OF DRILLING		APPROXIMATE DEPTHS OF GEOLOGICAL MARKER			
TYPE OF TOOLS	DEPTH OF DRILLING	Estimated GL: 5678		Estimated KB: 5689	
Rotary/Top Drive	0 - TD	MARKER		SUBSEA	MEAS. DEPTH
		Ojo Alamo		5652	37
		Kirtland		5549	140
		Fruitland Ccal	#	4555	1134
		Pictured Cliffs	*	4290	1399
		TOTAL DEPTH		4128	1561
<b>LOG PROGRAM</b> TYPE DEPTH INVERAL Open Hole (Platform Express) TD to base of surface casing		# Completion interval			
		* Possible Pay			
<b>SPECIAL TESTS</b> TYPE None		<b>DRILL CUTTING SAMPLES</b> FREQUENCY DEPTH None		<b>DRILLING TIME</b> FREQUENCY DEPTH Geolograph 0-TD	
REMARKS: - Please report any flares (magnitude & duration).					

**MUD PROGRAM:**

Approx. Interval	Type Mud	Weight, #/gal	Vis, sec/qt	W/L cc's/30 min	Other Specification
0 - 120-135 3 jts.	Spud	8.6-9.2			
120-135 - TD (1)	Water/LSND	8.6-9.2			

**REMARKS:**

(1) The hole will require sweeps to keep unloaded while fresh water drilling. Let hole conditions dictate frequency.

**CASING PROGRAM:** (Normally, tubular goods allocation letter specifies casing sizes to be used. Hole sizes will be governed by Contract)

Casing String	Estimated Depth	Casing Size	Grade	Weight	Hole Size	Landing Point, Cement, Etc.
Surface/Conductor	120-135	7"	J 55 ST&C	23#	8.75"	1
Production	1561	4 1/2"	J 55 ST&C	10.5#	6.25"	1,2

**REMARKS:**

- (1) Circulate Cement to Surface  
 (2) Set casing 150' above below top of Pictured Cliffs

**CORING PROGRAM:**

None

**COMPLETION PROGRAM:**

Rigless, Single Stage Hydraulic Frac

**GENERAL REMARKS:**

Notify BLM/NMOCD 24 hours prior to Spud, BOP testing, and Casing and Cementing.

Form 46 Reviewed by: \_\_\_\_\_ Logging program reviewed by: DLJ

<b>PREPARED BY:</b>	<b>APPROVED:</b>	<b>DATE:</b>
KAS/JLP		
Form 46 6-99 KAT		

## PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	GRADE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT	DENSITY (lb/gal)	YIELD (ft <sup>3</sup> /sk)	WATER (gal/sk)	EXCESS %
8 3/4'	J-55 ST&C 7"	23#	135'	95 SXS (113 CU.FT.) CLS B CIRC TO SURFACE	15.6	1.19	5.25	100%
6 1/4'	J-55 ST&C 4 1/2"	10.5	1884'	140 SXS (251 CU.FT.) CLS B - LEAD 44 SXS (97 CU.FT.) CLS B - TAIL	11.4 15.6	2.68 1.19	16.6 5.25	70%
				2%CuCl w 3% SMS				

## FEDERAL CEMENTING REQUIREMENTS

1. All permeable zones containing fresh water and other usable water containing 10,000 PPM or less total dissolved solids will be isolated and protected from contamination by cement circulated in place for the protection of permeable zones per the NTL-FRA 90-1 Section III A.
2. The hole size will be no smaller than 1 1/2" larger diameter than the casing O.D. across all water zones.
3. An adequate spacer will be pumped ahead of the cement slurry to help prevent mud contamination of the cement.
4. An adequate number of casing centralizers will be run through usable water zones to ensure that the casing is centralized through these zones. The adequate number of centralizers to use will be determined by API SPEC 10D.
5. Centralizers will impart a swirling action around the casing and will be used just below and into the base of the lowest usable water zone.
6. A chronological log will be kept recording the pump and slurry information and will be sent to the BLM with the subsequent sundry.

**Amoco Production Company  
BOP Pressure Testing Requirements**

Well Name: Gallegos Canyon Unit 571  
County: San Juan

State: New Mexico

Formation	TVD	Anticipated Bottom Hole Pressure	Maximum Anticipated Surface Pressure **
Ojo Alamo	351		
Kirtland	545		
Fruitland Coal	1380		
Pictured Cliffs	734		

\*\* Note: Determined using the following formula:  $ABHP - (.22 * TVD) = ASP$

<b>Requested BOP Pressure Test Exception: 750 PSI</b>
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**SAN JUAN BASIN  
Fruitland Coal Formation  
Pressure Control Equipment**

**Background**

The objective Fruitland Coal formation maximum surface pressure is anticipated to be less than 1000 PSI, based on shut-in surface pressures from adjacent wells. Pressure control equipment working pressure minimum requirements are therefore 2000 PSI. Equipment to be used will conform to API RP-53 (Figure 2.C.2) for a 2000 PSI system per Federal Onshore Order No. 2. Due to available conventional equipment within the area, 3000 PSI rated pressure control equipment will typically be utilized in a double ram type arrangement. Regional drilling rights to be utilized have substructure height limitations which exclude the use of annular preventers; therefore a rotating head will be installed above these rams. This pressure control equipment will be utilized for conventional drilling below conductor to total depth. No abnormal temperature, pressure, or Hydrogen Sulfide gas is anticipated.

**Equipment Specification**

**Interval**

**BOP Equipment**

Below conductor casing to total depth

11" nominal or 7 1/16", 3000 PSI double ram  
preventer with rotating head.

All ram type preventers and related control equipment will be hydraulically tested to 250 PSI (low pressure) and 750 PSI (high pressure), upon installation, following any repairs or equipment replacements, or at 30 day intervals. Accessories to BOP equipment will include Kelly cock, upper Kelly cock with a handle available, floor safety valves and choke manifold which will also be tested to equivalent pressure at the appropriate intervals.