

District I  
 PO Box 1980, Hobbs, NM 88241-1980  
 District II  
 811 South First, Artesia, NM 88210  
 District III  
 1000 Rio Brazos Rd., Aztec, NM 87410  
 District IV  
 2040 South Pacheco, Santa Fe, NM 87505

State of New Mexico  
 Energy, Minerals & Natural Resources Department

OIL CONSERVATION DIVISION  
 2040 South Pacheco  
 Santa Fe, NM 87505

Form C-101  
 Revised October 18, 1994  
 Instructions on back  
 Submit to Appropriate District Office  
 State Lease - 6 Copies  
 Fee Lease - 5 Copies

AMENDED REPORT

APPLICATION FOR PERMIT TO DRILL, RE-ENTER, DEEPEN, PLUGBACK, OR ADD A ZONE

<sup>1</sup> Operator Name and Address. Amoco Production Company P.O. Box 800 Denver, CO 80201		<sup>2</sup> OGRID Number 000778
		<sup>3</sup> API Number 30 - 0 45-29226
<sup>4</sup> Property Code 16903	<sup>5</sup> Property Name Burnham Gas Com A	<sup>6</sup> Well No. 1

<sup>7</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
F	12	29N	13W		1450	North	1520	West	San Juan

<sup>8</sup> Proposed 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>9</sup> Proposed Pool 1 West Kutz Pictured Cliffs Ext.					<sup>10</sup> Proposed Pool 2				

<sup>11</sup> Work Type Code N	<sup>12</sup> Well Type Code G	<sup>13</sup> Cable/Rotary Rotary	<sup>14</sup> Lease Type Code P	<sup>15</sup> Ground Level Elevation 5355'
<sup>16</sup> Multiple No	<sup>17</sup> Proposed Depth 1581'	<sup>18</sup> Formation Pictured Cliffs	<sup>19</sup> Contractor Aztec	<sup>20</sup> Spud Date 4/30/95

<sup>21</sup> Proposed Casing and Cement Program

Hole Size	Casing Size	Casing weight/foot	Setting Depth	Sacks of Cement	Estimated TOC
8.75"	7"	23#	250'	100	Surface
6.25"	3.5"	9.2#	1581'	227	Surface

<sup>22</sup> Describe the proposed program. If this application is to DEEPEN or PLUG BACK give the data on the present productive zone and proposed new productive zone. Describe the blowout prevention program, if any. Use additional sheets if necessary.

*This updated form approved 9/14/95  
 JAF [unclear] [unclear]*

RECEIVED  
 SEP 18 1995  
 OIL CON. DIV.  
 DIST. 3

<sup>23</sup> I hereby certify that the information given above is true and complete to the best of my knowledge and belief.

Signature: Patty Haebele  
 Printed name: Patty Haebele  
 Title: Staff Assistant  
 Date: 9/14/95 Phone: (303) 830-4988

OIL CONSERVATION DIVISION

Approved by: \_\_\_\_\_  
 Title: \_\_\_\_\_  
 Approval Date: \_\_\_\_\_ Expiration Date: \_\_\_\_\_  
 Conditions of Approval:  
 Attached

**C-101 Instructions**

Measurements and dimensions are to be in feet/inches. Well locations will refer to the New Mexico Principal Meridian.

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

program. Attach additional sheets if necessary.

23

The signature, printed name, and title of the person authorized to make this report. The date this report was signed and the telephone number to call for questions about this report.

- 1 Operator's OGRID number. If you do not have one it will be assigned and filled in by the District office.
- 2 Operator's name and address
- 3 API number of this well. If this is a new drill the OCD will assign the number and fill this in.
- 4 Property code. If this is a new property the OCD will assign the number and fill it in.
- 5 Property name that used to be called 'well name'
- 6 The number of this well on the property.
- 7 The surveyed location of this well New Mexico Principal Meridian 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.
- 8 The proposed bottom hole location of this well at TD
- 9 and 10 The proposed pool(s) to which this well is being drilled.
- 11 Work type code from the following table:

N	New well
E	Re-entry
D	Drill deeper
P	Plugback
A	Add a zone
- 12 Well type code from the following table:

O	Single oil completion
G	Single gas completion
M	Multiple completion
I	Injection well
S	SWD well
W	Water supply well
C	Carbon dioxide well
- 13 Cable or rotary drilling code

C	Propose to cable tool drill
R	Propose to rotary drill
- 14 Lease type code from the following table:

S	State
P	Private
- 15 Ground level elevation above sea level
- 16 Intend to multiple complete? Yes or No
- 17 Proposed total depth of this well
- 18 Geologic formation at TD
- 19 Name of the intended drilling company if known.
- 20 Anticipated spud date.
- 21 Proposed hole size ID inches, proposed casing OD inches, casing weight in pounds per foot, setting depth of the casing or depth and top of liner, proposed cementing volume, and estimated top of cement
- 22 Brief description of the proposed drilling program and BOP

Submit to Appropriate District Office  
State Lease - 6 copies  
Fee Lease - 5 copies

State of New Mexico  
Energy, Minerals and Natural Resources Department

Form C-101  
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

API NO. (assigned by OCD on New Wells)

30-045-29226 ✓

5. Indicate Type of Lease

STATE

FEE

6. State Oil & Gas Lease No.

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. Type of Work:

DRILL

RE-ENTER

DEEPEN

PLUG BACK

b. Type of Well:

OIL WELL

GAS WELL

OTHER

SINGLE ZONE

MULTIPLE ZONE

7. Lease Name or Unit Agreement Name

Burnham Gas Com A

2. Name of Operator

AMOCO PRODUCTION COMPANY 778

Attention:

Julie L. Acevedo

8. Well No.

#1

3. Address of Operator

P.O. Box 800

Denver

Colorado

80201

9. Pool name or Wildcat

160 West Rutz Pictured Cliffs EXT

4. Well Location

Unit Letter F

: 1450

Feet From The

North

Line and

1520

Feet From The

West

Line

Section 12

Township 29N

Range 13W

NMPM

SAN JUAN

County

10. Proposed Depth

1581' TD

11. Formation

Pictured Cliffs

12. Rotary or C.T.

Rotary

13. Elevations (Show whether DF, RT, GR, etc.)

5355' GR

14. Kind & Status Plug. Bond

15. Drilling Contractor

Aztec

16. Approx. Date Work will start

4/30/95

17. PROPOSED CASING AND CEMENT PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	SACKS OF CEMENT	EST. TOP
8.75"	7"	23#	250'	100 sx CI B	Surface
6.25"	3.5"	9.2#	1581'	227 sx CI B	Surface

RECEIVED  
MAR 28 1995

OIL CON. DIV.  
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. GIVE BLOWOUT PREVENTER PROGRAM, IF ANY.

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

SIGNATURE Julie L. Acevedo  
TYPE OR PRINT NAME Julie L. Acevedo

TITLE Sr. Staff Assistant DATE 03-24-1995

TELEPHONE NO. (303) 830-6003

(This space for State Use)

APPROVED BY Emie Burch

TITLE DEPUTY OIL & GAS INSPECTOR, DIST. #3 DATE 3-29-95  
MAR 29 1995

CONDITIONS OF APPROVAL, IF ANY:

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

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 <i>30-045-29226</i>		Pool Code <i>79680</i>		Pool Name <i>West Katy Pictured Cliffs EXT</i>	
Property Code <i>16903</i>		Property Name Burnham Gas Com A			Well Number #1
OGRID No. 00778		Operator Name AMOCO PRODUCTION COMPANY			Elevation 5355

<sup>10</sup> Surface Location

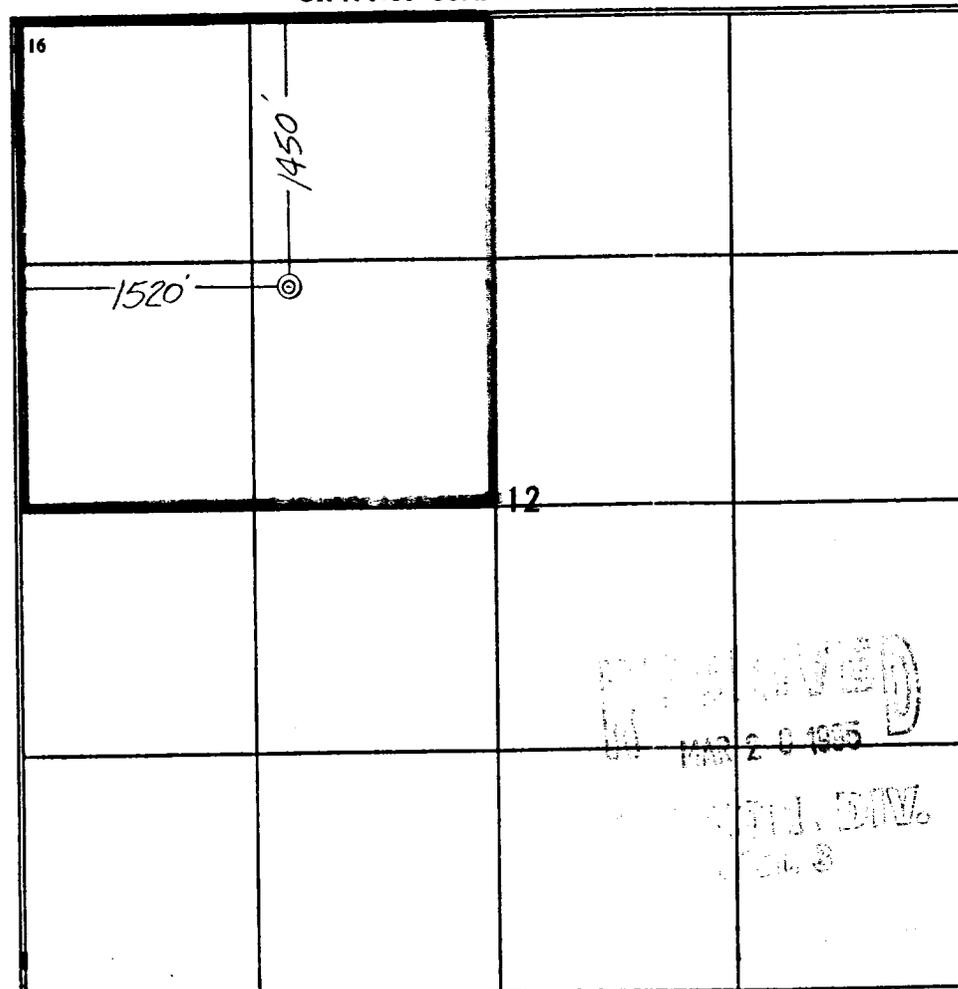
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
F	12	29 N	13 W		1450	NORTH	1520	WEST	SAN JUAN

<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 160	<sup>13</sup> Joint or Infill	<sup>14</sup> Consolidation Code	<sup>15</sup> Order No.
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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



<sup>17</sup> OPERATOR CERTIFICATION  
 I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief

*Julie L. Acevedo*  
 Signature  
 Julie L. Acevedo  
 Printed Name  
 Sr. Staff Assistant  
 Title  
 3/24/95  
 Date

<sup>18</sup> 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.

November 1, 1994  
 Date of Survey

GARY D. VAN...  
 Signature and Seal of Professional Surveyor

7016  
 Certificate Number

RECEIVED  
 MAR 20 1995  
 OIL CONSERVATION DIVISION  
 SANTA FE, NM

**AMOCO PRODUCTION COMPANY  
DRILLING PROGRAM**

File No.: burngac1.xlw  
Date: 1/26/95

Lease: Burnham G. C. A      Well No. #1  
County: San Juan County, New Mexico      Surface Location: 1450' FNL & 1520' FWL of Section 12, T29N, R13W  
Former name:      Field:

<b>OBJECTIVE:</b> Develop PC			
<b>METHOD OF DRILLING</b>		<b>APPROXIMATE DEPTHS OF GEOLOGICAL MARKER</b>	
<b>TYPE OF TOOLS</b>	<b>DEPTH OF DRILLING</b>	GL-----Estimated KB	5355      5368
Rotary	Ground Level - TD	<b>Marker</b>	<b>Depth (ft.)      SS Elev. (ft.)</b>
<b>LOGGING PROGRAM</b>		Ojo Alamo	
<b>TYPE</b>	<b>DEPTH</b>	PC **	1,288      4,080
Cased Hole Neutron-GR	No open hole logs required. To be logged during completion.	Lewis Shale	1,531      3,837
		Cliff House	
		Menefee Shale	
		Point Lookout	
		Mancos	
		Gallup	
		Greenhorn	
		Dakota	
<b>REMARKS:</b>		<b>TOTAL DEPTH</b>	1,581      3,787
* Possible pay ** Probable completion Ojo Alamo is possible usable water			
<b>SPECIAL TESTS</b>		<b>DRILL CUTTING SAMPLES</b>	
<b>TYPE</b>	<b>DEPTH INTERVAL, ETC</b>	<b>FREQUENCY      DEPTH</b>	<b>FREQUENCY      DEPTH</b>
None		Geolograph	Int - TD
<b>Remarks:</b>		Mud Logging Program:      None	
		Coring Program:      None	

**MUD PROGRAM:**

Approx. Interval	Type Mud	Weight, #/g	Vis, sec/qt	W/L, cc's/30 min.
0 - 250'	Spud			
Production	LSND	8.6 - 9.5	Sufficient to clean hole	

**REMARKS:**

**CASING PROGRAM:**

Casing String	Estimated Depth	Casing Size	Hole Size	Landing Point, Cement, Etc
Conductor				
Surface	250	7"	8.75"	1
Intermediate				
Production	1,581	3.5"	6.25"	1, 2, 3

**Remarks:**  
1 - Circulate cement to surface.  
2 - Production cement to be designed by Denver drilling staff.  
3 - Casing set 50' into the Lewis Shale.

**GENERAL REMARKS:**

Business Unit Engineering staff to design completion program.

Form 46 Reviewed by:	Logging program reviewed by:	
<b>PREPARED BY:</b> Grotke/Ovitz	<b>APPROVED:</b> For Production Dept	<b>APPROVED:</b> For Exploration Dept.
Form 46 7-84bw 3/23/95 17:36		

**CEMENTING PROGRAM**  
Burnham Gas Com 'A' #1

<b>Well Name:</b> <u>Burnham Gas Com 'A' #1</u>	<b>Field:</b>
<b>Location:</b> 1450' FNL X 1520' FWL, Sec 12, T29N, R13W	<b>API No.:</b>
<b>County:</b> San Juan	<b>Well Flac:</b>
<b>State:</b> New Mexico	<b>Formation:</b> Pictured Cliff
	<b>KB Elev. (est.):</b> 5368 ft.
	<b>GL Elev. (est.):</b> 5355 ft.

**Casing Program:**

Casing String	Est. Depth (ft.)	Hole Size (in.)	Casing Size (in.)	Casing Weight (lb/ft.)	Casing Grade	Thread	TOC (ft.)
Surface	250	8.75	7.000	23	J-55	8R, LT&C	Surface
Production	1,581	6.25	3.500	9.2	H-40	8R, EUE	Surface

**Casing Properties:** (No Safety Factor Included)

Casing String	Casing Weight (lb/ft.)	Burst (psi.)	Collapse (psi.)	Joint St. (1000 lbs.)	Capacity (bbl/ft.)	Torque(ft. lbs.) Opt/Min/Max	Drift (in.)
Surface	23	4360	3270	313	0.0393		6.241
Production	9.2	5080	5380	79	0.0087		2.867

**Mud Program:**

Apx. Interval (ft.)	Mud Type	Mud Weight (lb/gal)	Recommended Mud Properties Prior Cementing:	
			PV	<20
			YP	<10
0 - SCP	Spud	8.6-8.8	Fluid Loss	<15
SCP - TD	LSND	8.6-9.5		

**Cementing Program:**

	Surface	Production
Excess %, Bit	75	30
Excess %, Caliper	NA	30
BHST (est. deg. F)	55	100
Pipe Movement	NA	NA
Rate, Max. (bpm)	1 truck	4
Rate, Recommended (bpm)	6	4
Pressure, Max. (psi)	200	2000
Shoe Joint	40'	40
Batch Mix	NA	NA
Circulating prior cmtng (hr.)	0.5	1
Time Between Stages,(hr.)	NA	NA
Special Instructions	1,6,7	2,4,6,8

- 1 Do not wash pumps and lines
- 2 Wash pumps and lines.
- 3 Do not reverse out
- 4 Run Blend Test on Cement
- 5 Record Rate , Pressure, and Density on 3.5" disk
- 6 Confirm densometer with pressurized mud scales
- 7 1" cement to surface if cement is not circulated.
- 8 If cement is not circulated to the surface, run temp. survey 10-12 hr. after landing plug.

**Notes:**

- \*\*\* Displace top plug on the production casing job with 0.2% Clay Fix II or 2% KCl water.
- \*\*\* Do not wash up on top of plug. Wash pumps and lines. We want to do rig less completions.

## CEMENTING PROGRAM

Burnham Gas Com 'A' #1

**Production:**

Preflush	20 bbl. 10 bbl.	Mud Flush Fresh Water	
Lead Cement Slurry 1		50/50 Std. Cmt/Poz A + 2% gel (total) + 5 lb/sk gilsonite + 0.4% Halad-344 + 1/4 lb/sk flocele	300 cu. ft.

Slurry Properties:	density (lb/gal)	yield (ft <sup>3</sup> /sk)	water (gal/sk)
slurry 1	13.50	1.32	5.59

**Note:** The job should be pumped at 4 bpm max rate. Do not exceed 2 bpm on displacement. Slow to 2 bpm for the displacement. Displace with 2% KCl or 0.2% Clay Fix II water. This is to be a rigless completion.

**Casing Equipment:** Halliburton 3 1/2", 8R, EUE, (no need to cut long pin)

- 1 Super Seal II Float Shoe
- 10 S-4 Fluidmaster Centralizer
- 1 Lock Clamp
- 1 Weld A
- 1 Omega Latch Down Plug and Baffle

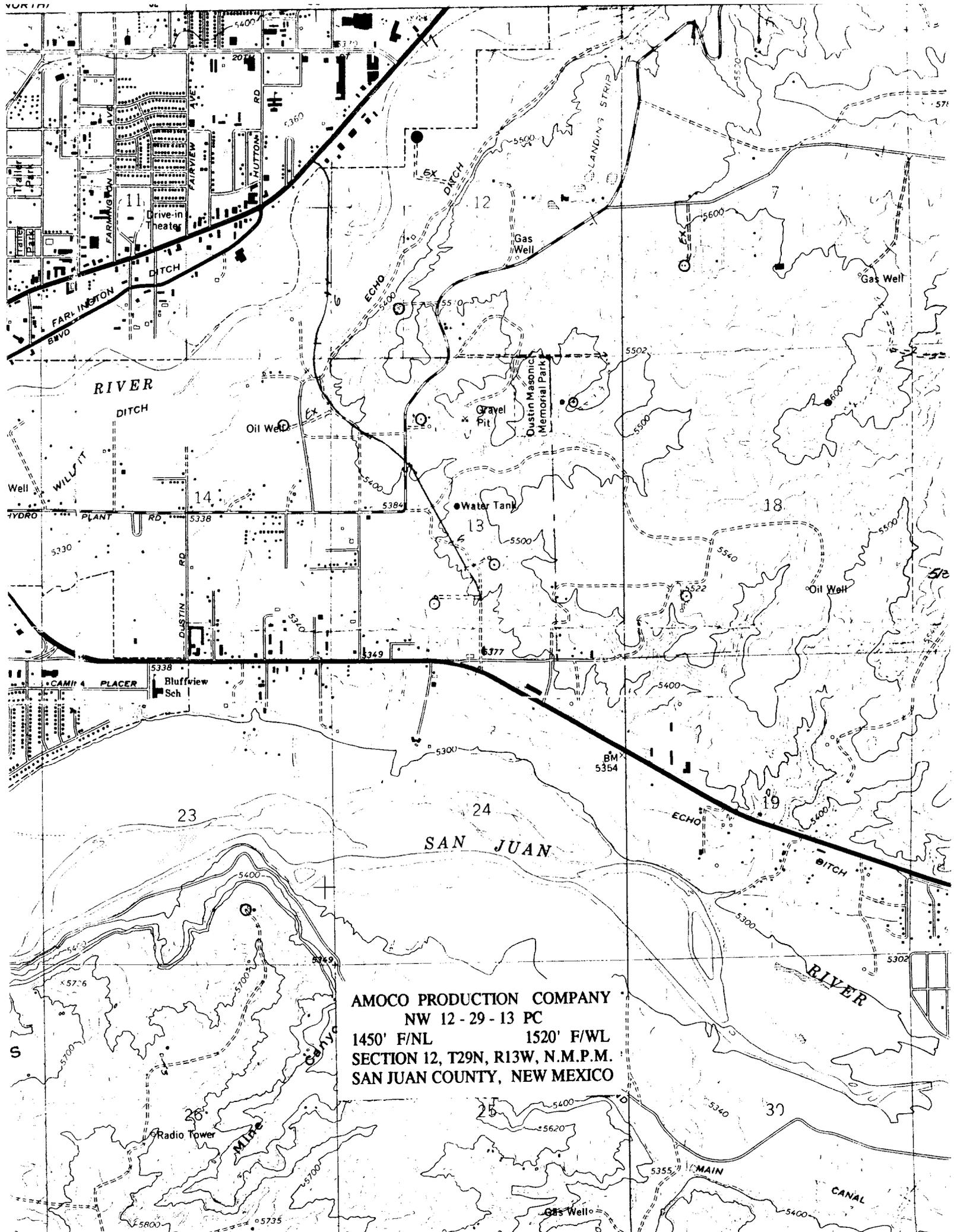
**CEMENTING PROGRAM**  
 Burnham Gas Com 'A' #1

**Surface:**

Preflush	20 bbl.	Fresh Water + dye marker	
Slurry 1 TOC@Surface	100 sk	Standard Cement + 2% CaCl2 + 1/4 lb/sk flocele	95 cu. ft.

<b>Slurry Properties:</b>	density (lb/gal)	yield (ft3/sk)	water (gal/sk)
slurry 1	15.60	1.18	5.20

- Casing Equipment:** (Halliburton) 7", 8R, ST&C
- 1 Type M Guide Shoe
  - 1 Insert Float w Auto Fill
  - 1 Weld A
  - 3 S-4 Centralizer
  - 1 Top Wooden Plug



AMOCO PRODUCTION COMPANY  
NW 12 - 29 - 13 PC  
1450' F/NL                      1520' F/WL  
SECTION 12, T29N, R13W, N.M.P.M.  
SAN JUAN COUNTY, NEW MEXICO