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

[1] Operator Name and Address.	[2] OGRID Number
Amoco Production Company P.O. Box 800 Denver, CO 80201	000778
	[3] API Number 30 - 045 - 29367

[4] Property Code	[5] Property Name	[6] Well No.
13506	State Gas Com	40

[7] 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	16	30N	11W		1980	North	2505	West	San Juan

[8] 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

[9] Proposed Pool 1	[10] Proposed Pool 2
72319 Blanco Mesaverde W/320	71599 Basin Dakota W/320

[11] Work Type Code	[12] Well Type Code	[13] Cable/Rotary	[14] Lease Type Code	[15] Ground Level Elevation
N	M	Rotary	S	5692'
[16] Multiple	**[17] Proposed Depth**	**[18] Formation**	**[19] Contractor**	**[20] Spud Date**
Yes	6724'	Dakota/Mesaverde	Aztec	6/1/96

[21] Proposed Casing and Cement Program

Hole Size	Casing Size	Casing weight/foot	Setting Depth	Sacks of Cement	Estimated TOC
12.25"	9.625"	36#	120'	106 cu.ft.	surface
8.75"	7.000"	23#	2389'	589 cu.ft.	surface
6.25"	3.500"	9.3#	6724'	880 cu.ft.	2080'

[22] 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.

RECEIVED
APR 11 1996
OIL CON. DIV.
DIST. 3

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

Signature: Patty Haefele
Printed name: Patty Haefele
Title: Staff Assistant
Date: 4/10/96
Phone: (303) 830-4988

OIL CONSERVATION DIVISION

Approved by: Ernie Busch
Title: DEPUTY OIL & GAS INSPECTOR, DIST. #3
Approval Date: APR 11 1996
Expiration Date: APR 11 1997
Conditions of Approval: Attached ☐ HOLD C-104 FOR NSL

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 LABLED "AMENDED REPORT" AT THE TOP OF THIS DOCUMENT.

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 beeing 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 Mutiple 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 mutiple 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 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.

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State of New Mexico
Energy, Minerals & Natural Resources Department

OIL CONSERVATION DIVISION
2040 South Pacheco
Santa Fe, NM 87505

Form C-102
Revised October 18, 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

1 API Number	2 Pool Code	3 Pool Name
30-045-29367	72319	Blanco Mesaverde

4 Property Code	5 Property Name	6 Well Number
13506	State Gas Com	40

7 OGRID No.	8 Operator Name	9 Elevation
000778	Amoco Production Company	5692'

10 Surface Location

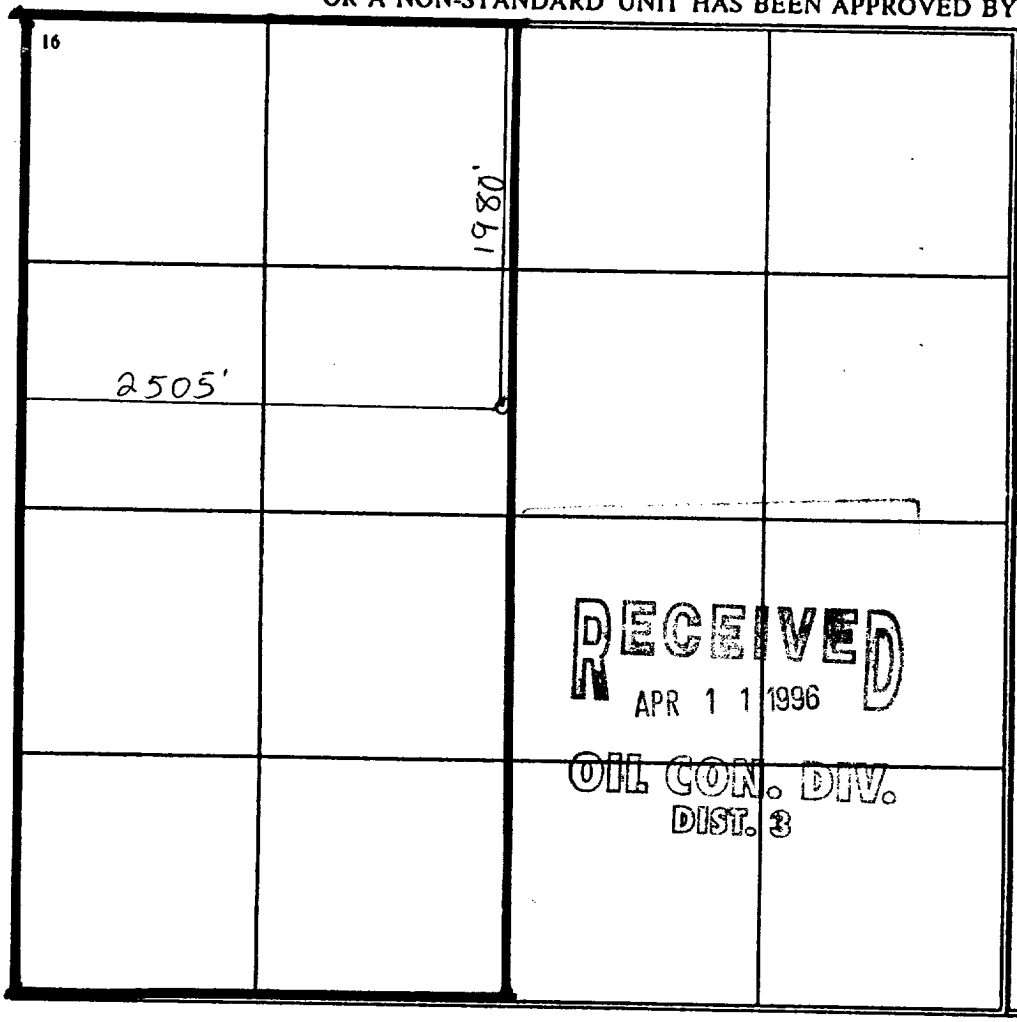
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
F	16	30N	11W		1980	North	2505	West	San Juan

11 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

12 Dedicated Acres	13 Joint or Infill	14 Consolidation Code	15 Order No.
W/320			

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



RECEIVED
APR 11 1996
OIL CON. DIV.
DIST. 3

17 OPERATOR CERTIFICATION

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

Patty Haefele
Signature

Patty Haefele
Printed Name

Staff Assistant
Title

4/3/96
Date

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.

11/3/93
Date of Survey

Signature and Seal of Professional Surveyer:

on file

7016
Certificate Number

New Mexico Oil Conservation Division
C-102 Instructions

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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

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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.

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☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

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30-045-29367	71599	Basin Dakota

4 Property Code	5 Property Name	6 Well Number
13506	State Gas Com	40

7 OGRID No.	8 Operator Name	9 Elevation
000778	Amoco Production Company	5692'

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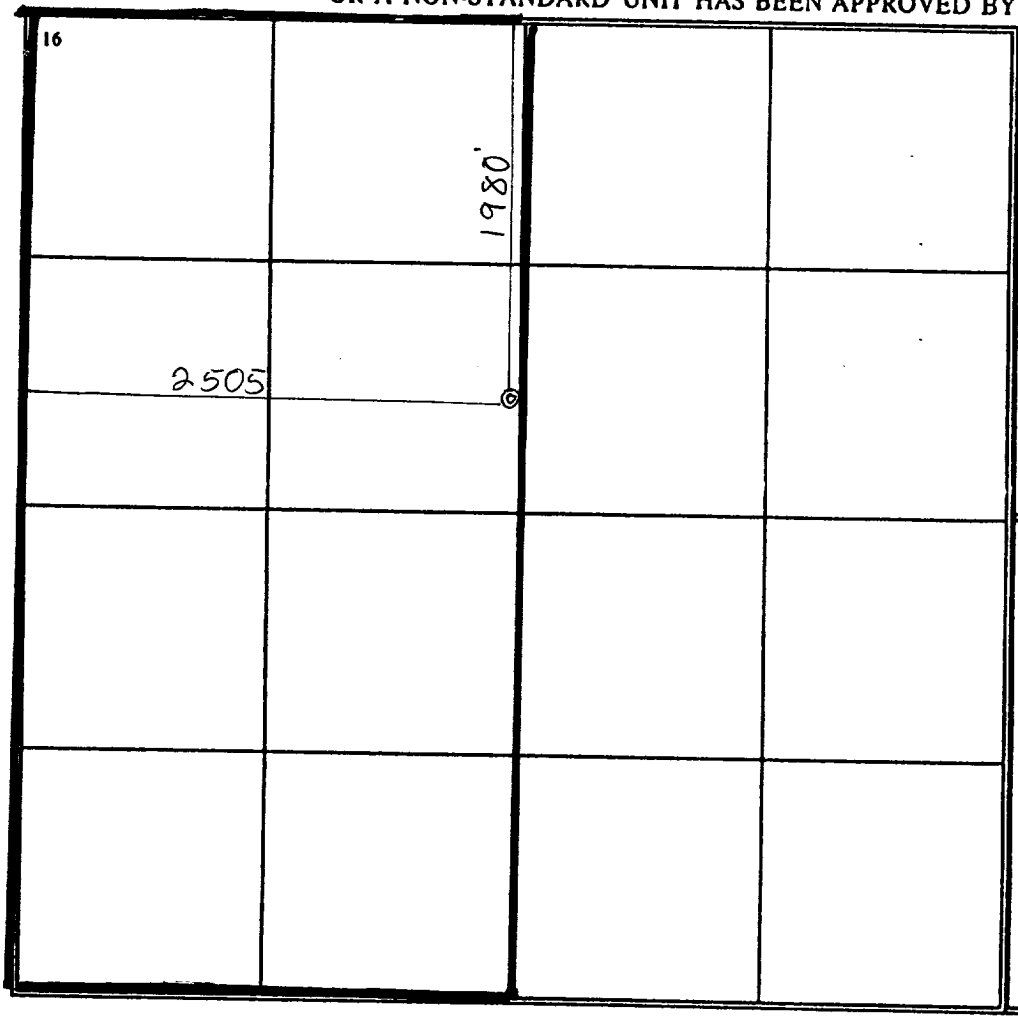

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Patty Haefele
Printed Name
Staff Assistant
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on file

7016
Certificate Number

New Mexico Oil Conservation Division
C-102 Instructions

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AMOCO PRODUCTION COMPANY

DRILLING and COMPLETION PROGRAM

Lease/Well#: State Gas Com #40
County: San Juan New Mexico
Former name:
Surface Location: 1980' FNL & 2505' FWL of Section 16, T30N, R11W
Field:

OBJECTIVE: Dual Mesa Verde & Dakota

METHOD OF DRILLING

TYPE OF TOOLS: Rotary
DEPTH OF DRILLING: Ground Level - TD

LOGGING PROGRAM

TYPE	DEPTH
Triple Combo (SP-GR-Cal-HRI-SDL-DSN-ML)	Production hole only

Logging Program Remarks:

APPROXIMATE DEPTHS OF GEOLOGICAL MARKER

Actual GL---------Estimated KB: 5692 / 5704

Marker	Depth (ft.)	SS Elev. (ft.)
Ojo Alamo	678	5,026
Kirtland	867	4,837
Fruitland Coal	1,839	3,865
PC *	2,089	3,615
Lewis Shale	2,239	3,465
Cliff House	3,654	2,050
Menefee Shale *	3,879	1,825
Point Lookout *	4,404	1,300
Mancos	4,734	970
Gallup	5,655	49
Greenhorn	6,400	-696
Graneros	6,458	-754
Dakota	6,514	-810
TOTAL DEPTH	6,724	-1,020

* Possible pay
**Probable completion
Ojo Alamo is possible usable water

SPECIAL TESTS

TYPE	DEPTH INTERVAL, ETC
None	

Remarks:

DRILL CUTTING SAMPLES

FREQUENCY	DEPTH

DRILLING TIME

FREQUENCY	DEPTH
Geolograph	Int - TD

Remarks:
Mud Logging Program: One man unit to pick TD
Coring Program: None

MUD PROGRAM:

Approx. Interval	Type Mud	Weight, #/gal	Vis, sec/qt	W/L, cc's/30 min.
0' - 2239' (1) (2)	Water	8.6 - 9.2	Sufficient to clean hole	N/C
2239' - TD (3)	Air/Mist			

Mud Program Remarks:
1 - The hole will require sweeps to keep unloaded while fresh water drilling. Let hole conditions dictate frequency.
2 - If required to mud up, mud up with a LSND designed for good hole cleaning.
3 - If required to mud up, mud up with a LSND designed for good hole cleaning, API WL between 10-15.

CASING PROGRAM:

Casing String	Estimated Depth	Casing Size	Hole Size	Landing Point, Cement, Etc
Conductor	120	9-5/8"		
Surface	2,389	7"	8.75"	1, 2
Production	6,724	3-1/2"	6.25"	3

Casing Program Remarks:
1 - Circulate cement to surface.
2 - Set casing a minimum of 150' into the Lewis Shale
3 - Circulate cement a minimum of 300' into the surface casing overlap.

GENERAL REMARKS:

Business Unit Engineering staff to design completion program.

Form 46 Reviewed by:
Logging program reviewed by:

PREPARED BY:	APPROVED:	APPROVED:
Webb/Ovitz		
Form 46 7-84bw	For Production Dept	For Exploration Dept
Date: 3/29/96	Rev. Date: 4/2/96 8:06	File: statgc40.xlw

Version No. 1
4/10/96
~ME3E37.XLS

CEMENTING PROGRAM

Dual Mesaverde - Dakota

rn

Well Name:	**State Gas Com #40**	Field:	
Location:	Sec 16, T30N, R11W	API No.	
County:	San Juan	Well Flac	
State:	New Mexico	Formation:	Dakota
		KB Elev. (est.)	5704 ft.
		GL Elev. (act.)	5692 ft.

Casing Program:

Casing String	Est. Depth (ft.)	Hole Size (in.)	Casing Size (in.)	Thread	TOC (ft.)	Stage Tool Or TOL (ft.)	Cmt Circ. Out (bbl.)
Surface	120	12.25	9.625	8R, ST&C	Surface	NA	
Intermediate	2,389	8.75	7.000	8R, ST&C	Surface	NA	
Production	6,724	6.25	3.500	8R, EUE	2080	NA	

Casing Properties: (No Safety Factor Included)

Casing String	Size (in.)	Weight (lb/ft.)	Grade	Burst (psi.)	Collapse (psi.)	Joint St. (1000 lbs.)	Capacity (bbl/ft.)	Drift (in.)
Surface	9.625	36	J-55	3520	2020	394	0.0773	8.765
Intermediate	7.000	23	J-55	4360	3270	284	0.0393	6.241
Production	3.500	9.3	J-55	6980	7400	142	0.0087	2.867

Mud Program:

Apx. Interval (ft.)	Mud Type	Mud Weight (lb/gal)
0 - 3053	Water	8.6 - 9.2
3053 - TD	Air/Mist	NA

Recommended Mud Properties Prior Cementing:

PV	< 20
YP	< 10
Fluid Loss	< 15

Cementing Program:

	Surface	Intermediate	Production
Excess %, Bit	75	60	30
Excess %, Caliper	NA	NA	20
BHST (est. deg. F)	70	100	175
Pipe Movement	NA	Rotate/Reciprocate	Rotate/Reciprocate
Rate, Max. (bpm)	6	6	4
Rate, Recommended (bpm)	6	6	4
Pressure, Max. (psi)	200	2000	2000
Shoe Joint	40	80	40
Batch Mix	NA	NA	NA
Circulating prior cmtng (hr.)	0.5	1.5	1
Time Between Stages,(hr.)	NA	NA	NA
Special Instructions	1,6,7	1,6,8	2,4,6

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 rigless completions.**

CEMENTING PROGRAM

Dual Mesaverde - Dakota

Surface:

Preflush	10 bbl.	Fresh Water	
Slurry 1 TOC @ surface	90 sk	Standard Cement + 2% CaCl2 (not mixed) or 1.5 cu. yard Ready Mix	106 cu. ft.

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

Casing Equipment: (Halliburton) 9 5/8", 8R, ST&C

1 Top Wooden Plug

Intermediate:

Preflush	20 bbl. 20 bbl.	Mud Flush Fresh Water + dye marker	
Lead Slurry 1 TOC @ surface		50/50 Standard Cement/Blended Silicalite + 02% gel (total) + 0.4% Halad-344 + 02% CaCl2 + 1/4 lb/sk flocele	460 cu. ft.
Tail slurry 2	100 sk	Standard Cement + 0.4% Halad-344 + 0.4% CFR-3 + 5 lb/sk gilsonite + 1/4 lb/sk flocele	129 cu. ft.

Slurry Properties:	density (lb/gal)	yield (ft3/sk)	water (gal/sk)
slurry 1	12.00	2.03	11.45
slurry 2	15.11	1.29	5.40

Casing Equipment: (Halliburton) 7.0", 8R, ST&C

1 Type Regular Guide Shoe
1 Super Seal II Float Collar
1 Weld A
14 S-4 Centralizer — 1 ea. on 1st 12 joints, 1 ea. above and below Ojo Alamo
1 Top Rubber Plug

CEMENTING PROGRAM

Dual Mesaverde - Dakota

Production:

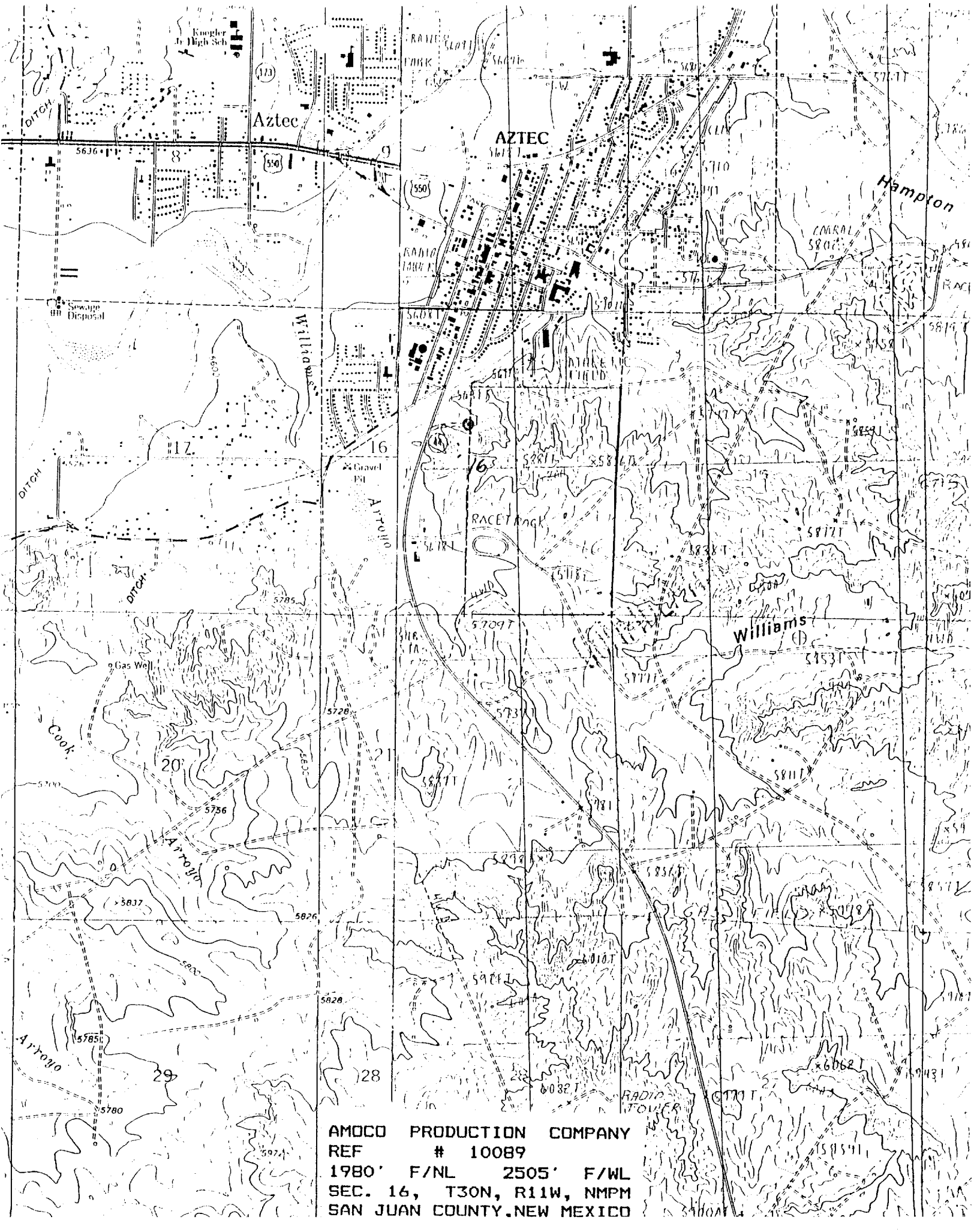
Preflush	10 bbl.	Chemical Wash	
	5 bbl.	Fresh Water	
Lead Cement		50/50 Std. Cmt/Poz A	880 cu. ft.
Slurry 1		+ 2% gel (total)	
TOC @ 2080 ft.		+ 5 lb/sk gilsonite	
		+ 0.4% Halad-344	
		+ 1/4 lb/sk flocele	

Slurry Properties:	density (lb/gal)	yield (ft3/sk)	water (gal/sk)
slurry 1	13.50	1.32	5.59

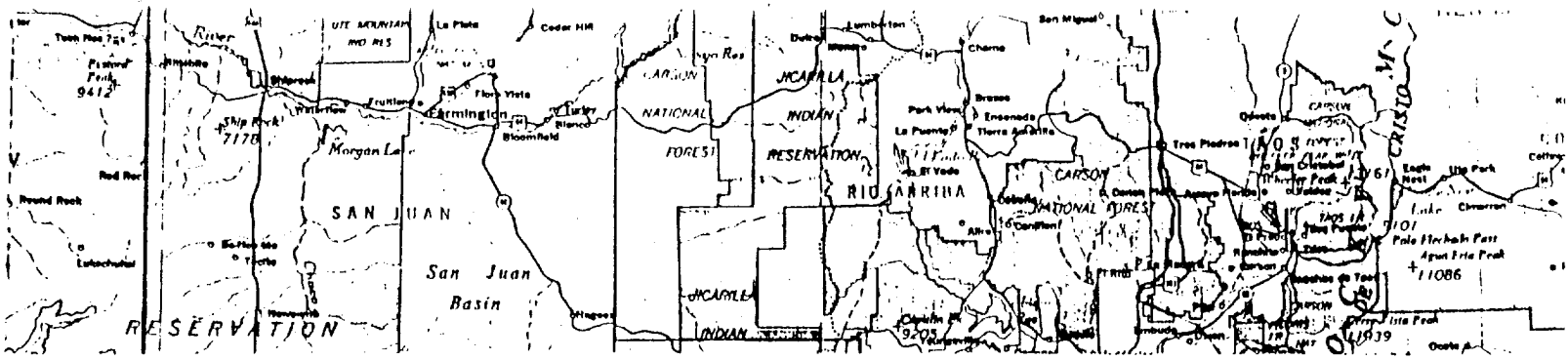
Note: The job should be pumped at 4 bpm max rate. Do not exceed 2 bpm on displacement. Slow to 2 bpm for the displacement. Displace with 2% KCl or 0.2% Clay Fix II water. This is to be a rigless completion. Wash pumps and lines before displacing.

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

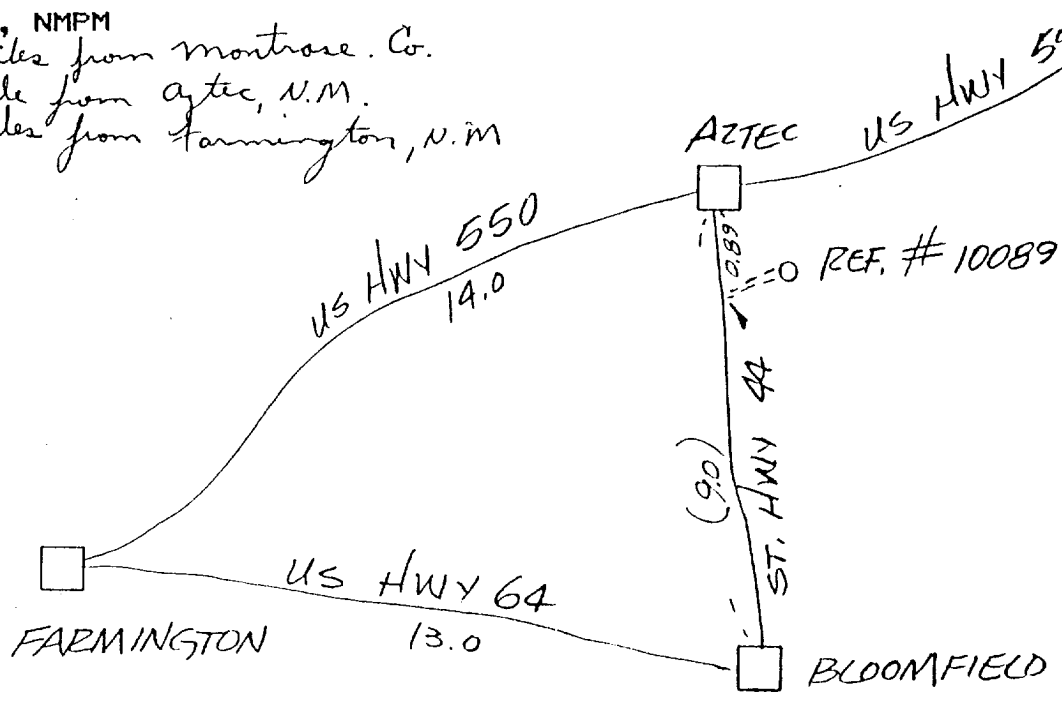
1	Super Seal II Float Shoe	
20	S-4 Fluidmaster Centralizer (3 1/2" x 6 1/4")	1st 10 centralizers every other joint,
1	Lock Clamp	then 1 every 10th joint.
1	Weld A	
1	Omega Latch Down Plug and Baffle	



AMOCO PRODUCTION COMPANY
REF # 10089
1980' F/NL 2505' F/WL
SEC. 16, T30N, R11W, NMPM
SAN JUAN COUNTY, NEW MEXICO



REF # 10089
1980' F/NL 2505' F/WL
SEC. 16, T30N, R11W, NMPM
RAIL POINT: 144 miles from Montrose, Co.
MUD POINT: .89 mile from Aztec, N.M.
CEMENT POINT: 15 miles from Farmington, N.M



Amoco Production Company
BOP Pressure Testing Requirements

Lease/Well#: State Gas Com #40
County: San Juan State: New Mexico

Formation	TVD	Anticipated Bottom Hole Pressure	Maximum Anticipated Surface Pressure **
Ojo Alamo	678		
Kirtland	867		
Fruitland Coal	1,839	700	295
PC	2,089	500	40
Lewis Shale	2,239		
Cliff House *	3,654	1200	396
Menefee Shale *	3,879		
Point Lookout *	4,404	1700	731
Mancos	4,734		
Gallup	5,655		
Greenhorn	6,400		
Graneros	6,458		
Dakota	6,514	1800	367

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

Requested BOP Pressure Test Exception: 750