Form 3160-3
August 1999

FORM APPROVED
OMB No. 1004-0136
Expires November 30, 2000

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

NOV 2001

APPLICATION FOR PERMIT TO DRILL OR REENTER

5. Lease Serial No.
NMSF - ~~079387-A~~ 078387A

6. If Indian, Allottee or Tribe Name

1a. Type of Work: ☒ DRILL ☐ REENTER

7. If Unit or CA Agreement, Name and No.

1b. Type of Well: ☐ Oil Well ☒ Gas Well ☐ Other ☐ Single Zone ☒ Multiple Zone

8. Lease Name and Well No.
FLETCHER 2M

2. Name of Operator
AMOCO PRODUCTION COMPANY
Contact: MARY CORLEY
E-Mail: corleyml@bp.com

9. API Well No.
30-045-30706

3a. Address
P.O. BOX 3092
HOUSTON, TX 77253

3b. Phone No. (include area code)
Ph: 281.366.4491 Fx: 281.366.0700

10. Field and Pool, or Exploratory
BASIN DAKOTA/BLANCO MESAVERDE

4. Location of Well *(Report location clearly and in accordance with any State requirements.*)*

At surface SENE Lot H 2070FNL 660FEL 36.52200 N Lat, 107.41500 W Lon

At proposed prod. zone

11. Sec., T., R., M., or Blk. and Survey or Area
H Sec 29 T31N R8W Mer NMP

14. Distance in miles and direction from nearest town or post office*
24 MILES FROM AZTEC, NM

12. County or Parish
SAN JUAN

13. State
NM

15. Distance from proposed location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any)

16. No. of Acres in Lease
320.00

17. Spacing Unit dedicated to this well
320.00 E/2

18. Distance from proposed location to nearest well, drilling, completed, applied for, on this lease, ft.

19. Proposed Depth
8169 MD

20. BLM/BIA Bond No. on file

21. Elevations (Show whether DF, KB, RT, GL, etc.
6515 GL

22. Approximate date work will start
07/20/2001

23. Estimated duration

24. Attachments

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No. 1, shall be attached to this form:

1. Well plat certified by a registered surveyor.
2. A Drilling Plan.
3. A Surface Use Plan (if the location is on National Forest System Lands, the SUPO shall be filed with the appropriate Forest Service Office).
4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above).
5. Operator certification
6. Such other site specific information and/or plans as may be required by the authorized officer.

25. Signature — Name (Printed/Typed) MARY CORLEY — Date 06/19/2001

Title
AUTHORIZED REPRESENTATIVE

Approved by (Signature) D. J. Mankiewicz — Name (Printed/Typed) — Date 11/19/01

Title AFM minerals — Office

Application approval does not warrant or certify the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.
Conditions of approval, if any, are attached.

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.

Additional Operator Remarks (see next page)

Electronic Submission #5114 verified by the BLM Well Information System
For AMOCO PRODUCTION COMPANY, sent to the Farmington
Committed to AFMSS for processing by Maurice Johnson on 06/21/2001 ()

This action is subject to technical and procedural review pursuant to 43 CFR 3165.3 and appeal pursuant to 43 CFR 3165.4.

SUBJECT TO COMPLIANCE WITH ATTACHED "GENERAL REQUIREMENTS"

**** ORIGINAL ** ORIGINAL ** ORIGINAL ** ORIGINAL ** ORIGINAL ** ORIGINAL ** ORIGINAL ****

HOLD C104 FOR NSL - Basin Dakota

NMOCD

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

1 API Number	2 Pool Code	3 Pool Name
30-045-30706	71599 & 72319	BASIN DAKOTA & BLANCO MESAVERDE

4 Property Code	5 Property Name	6 Well Number
000517	Fletcher	# 2M
7 OGRID No.	8 Operator Name	9 Elevation
000778	AMOCO PRODUCTION COMPANY	6515

10 Surface Location

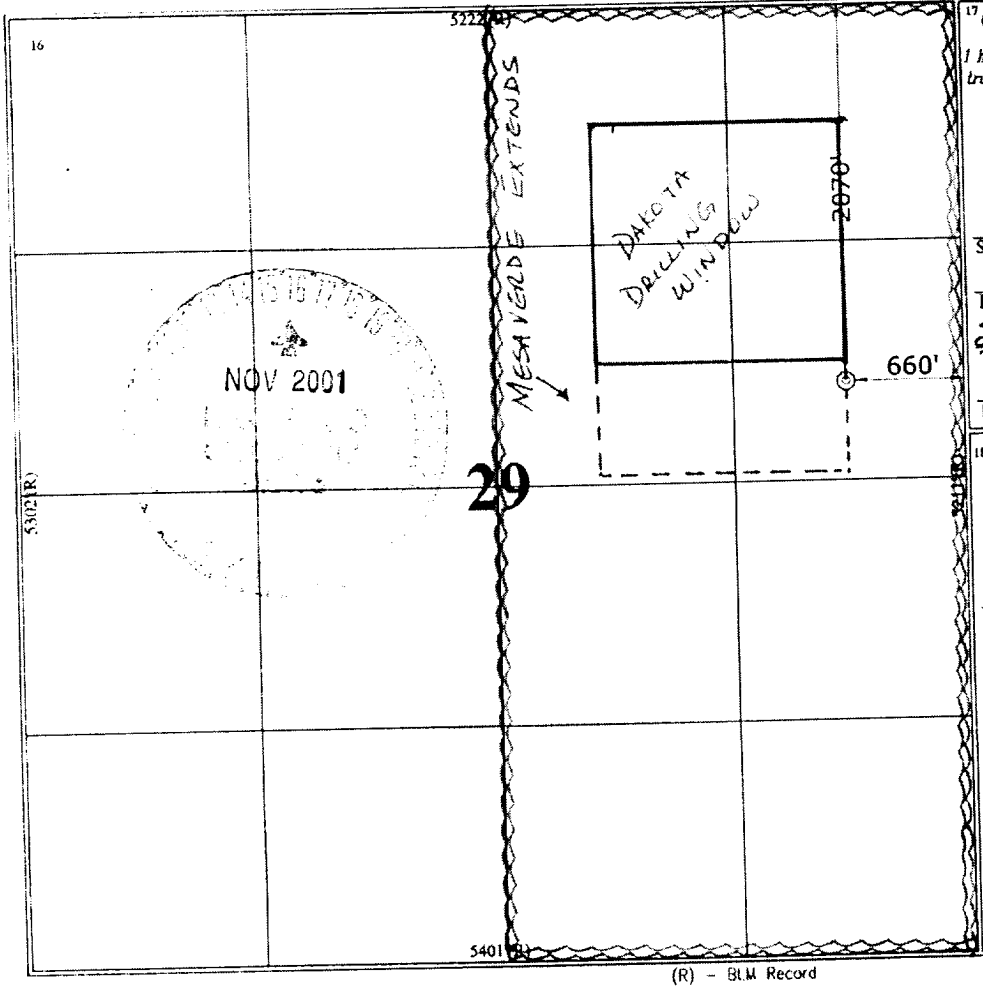
UL or Lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
H	29	31 N	8 W		2070	NORTH	660	EAST	SAN JUAN

11 Bottom Hole Location If Different From Surface

7 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.
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



17 OPERATOR CERTIFICATION

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

Mary Corley
Signature

MARY CORLEY
Printed Name

SR. REGULATORY ANALYST
Title

6-19-2001
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.

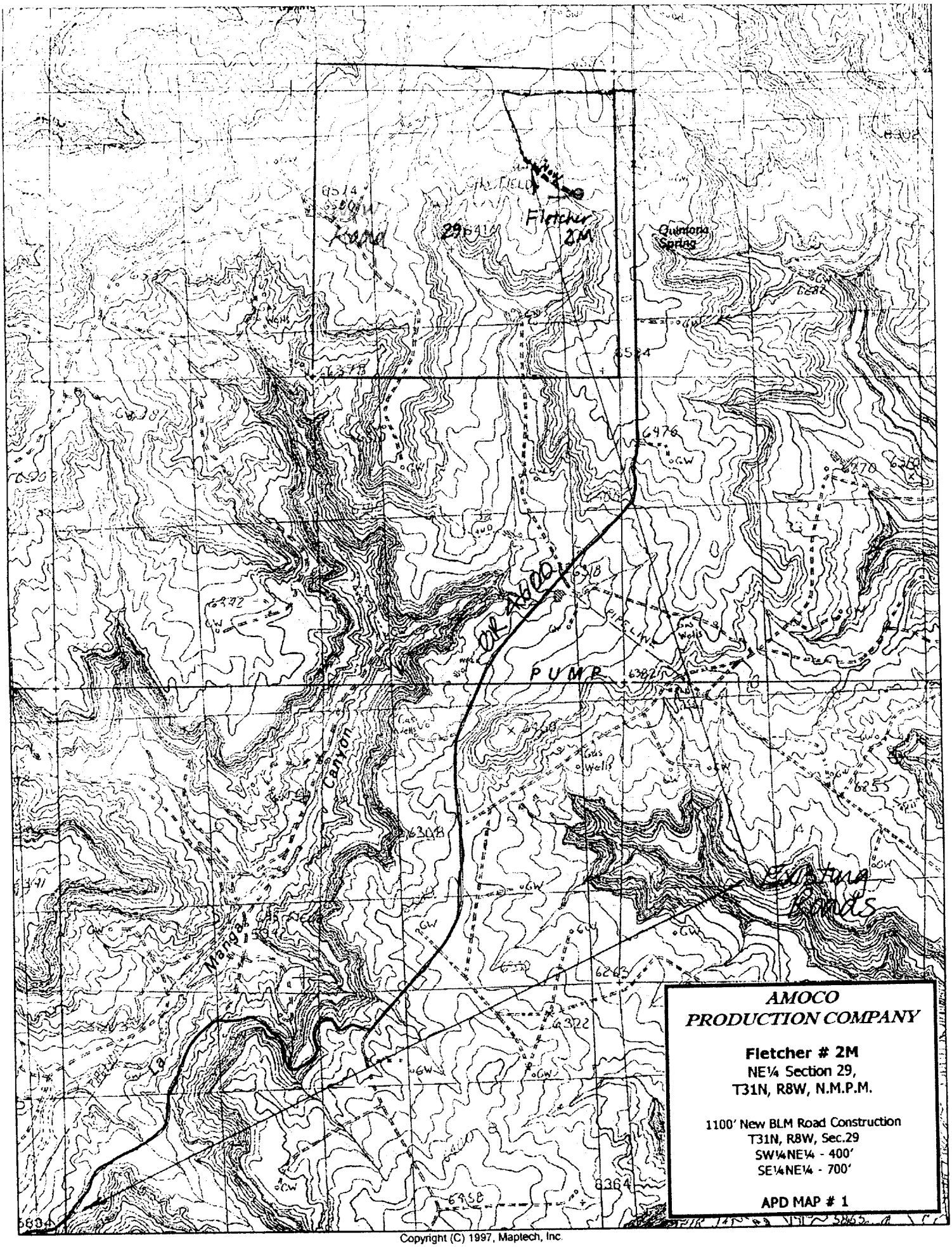
March 23, 2001
Date of Survey

Signature and Seal of Professional Surveyor

GARY D. VANN
NEW MEXICO
7016
REGISTERED PROFESSIONAL LAND SURVEYOR

7016
Certificate Number

(R) - BLM Record



AMOCO PRODUCTION COMPANY
DRILLING AND COMPLETION PROGRAM

Prospect Name: Fletcher
Lease: FLETCHER
County: San Juan
State: New Mexico
Date: June 19, 2001

Well No: 2M
Surface Location: 29-31N-8W, 2070 FNL,660 FEL
Field: Blanco Mesaverde/Basin Dakota

OBJECTIVE: Drill 450' below the base of the Greenhorn Limestone, set 41/2" production casing, Stimulate LS, CH, MF, PL and DK intervals

METHOD OF DRILLING

TYPE OF TOOLS	DEPTH OF DRILLING
Rotary	0 - TD

LOG PROGRAM

TYPE	DEPTH INVERAL
OPEN HOLE	
GR-Induction	TD to 7" shoe
Density/Neutron	TD to 7" shoe
CASED HOLE	
GR-CCL-TDT	TDT – TD to 7" shoe
CBL	Identify 4 ½" cement top

REMARKS:
- Please report any flares (magnitude & duration).

APPROXIMATE DEPTHS OF GEOLOGICAL MARKER

Estimated GL: 6515 Estimated KB: 6529

MARKER		SUBSEA	MEAS. DEPTH
Ojo Alamo		3996	2533
Fruitland Coal	*	3430	3099
Pictured Cliffs	*	3147	3382
Lewis Shale	#	2972	3557
Cliff House	#	1291	5238
Menefee Shale	#	1235	5295
Point Lookout	#	908	5621
Mancos		530	6000
Greenhorn		-1132	7661
Bentonite Marker		-1190	7719
Two Wells	#	-1275	7804
Dakota MB	#	-1352	7881
Burro Canyon	*	-1480	8009
Morrison	*	-1525	8054
TOTAL DEPTH		-1640	8169

Probable completion interval * Possible Pay

SPECIAL TESTS

TYPE
None

REMARKS:

DRILL CUTTING SAMPLES

FREQUENCY	DEPTH
10 feet	Production hole

DRILLING TIME

FREQUENCY	DEPTH
Geolograph	0-TD

MUD PROGRAM:

Approx. Interval			Type Mud	Weight, #/ga	Vis, sec/qt	W/L cc's/30 min	Other Specification
0	- 200		Spud	8.6-9.2			
200	- 3657	(1)	Water/LSND	8.6-9.2		<6	
3657	- 8004		Gas/Air/N2/Mist	Volume sufficient to maintain a stable and clean wellbore			
8004	8169	(2)	LSND	9.0-9.2		<6	

REMARKS:
(1) The hole will require sweeps to keep unloaded while fresh water drilling. Let hole conditions dictate frequency.
(2) Mud up 50' above Morrison +/-.

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 Pt, Cmt, Etc.
Surface/Conductor	200	9 5/8"	H-40 ST&C	32#	12.25"	1
Intermediate 1	3657	7"	J/K-55 ST&C	20#	8.75"	1,2
Production	8169	4 1/2"	J-55	11.6#	6.25"	3

REMARKS:
(1) Circulate Cement to Surface
(2) Set casing 100' into Lewis Shale
(3) Bring cement 100' above 7" shoe

CORING PROGRAM:
None

COMPLETION PROGRAM:
Rigless, 4-6 Stage Limited Entry 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: N/A

PREPARED BY:	APPROVED:	DATE:	
HGJ/KAT		May 8, 2001 Version 1.0	

Form 46 12-00 KAT

Amoco Production Company
BOP Pressure Testing Requirements

Well Name: Fletcher 2M
County: San Juan State: New Mexico

Formation	TVD	Anticipated Bottom Hole Pressure	Maximum Anticipated Surface Pressure **
Ojo Alamo	2533		
Fruitland Coal	3099		
PC	3382		
Lewis Shale	3557		
Cliff House	5238	500	0
Menefee Shale	5295		
Point Lookout	5621	600	0
Mancos	6000		
Dakota	7804	2600	1280

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

Requested BOP Pressure Test Exception: 3000 PSI

SAN JUAN BASIN
Dakota Formation
Pressure Control Equipment

Background

The objective Dakota 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 in the Basin Dakota. No abnormal temperature, pressure, or H2S 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 2000 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.