

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR DEEPEN

1a. TYPE OF WORK DRILL <input checked="" type="checkbox"/> DEEPEN <input type="checkbox"/>		5. LEASE DESIGNATION AND SERIAL NO. SF - 078116
b. TYPE OF WELL OIL WELL <input type="checkbox"/> GAS WELL <input checked="" type="checkbox"/> OTHER <input type="checkbox"/> SINGLE ZONE <input type="checkbox"/> MULTIPLE ZONE <input checked="" type="checkbox"/>		6. IF INDIAN, ALLOTTEE OR TRIBE NAME
2. NAME OF OPERATOR AMOCO PRODUCTION COMPANY P.O. BOX 3092 HOUSTON, TX 77079		7. UNIT AGREEMENT NAME
3. ADDRESS AND TELEPHONE NO. MARY CORLEY AUTHORIZED REPRESENTATIVE PHONE 281.366.4491 EXT: FAX: 281.366.0700 EMAIL: corleym1@bp.com		8. FARM OR LEASE NAME, WELL NO. FLORANCE 2M
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)* At Surface 2355FNL AND 1785FEL SWNE SEC 20 T30N R9W At proposed prod. zone		9. API WELL NO. 30-045-30624
14. DISTANCE IN MILES AND DIRECTION FROM THE NEAREST TOWN OR POST OFFICE 12 MILES FROM AZTEC		10. FIELD AND POOL, OR WILDCAT BASIN DAKOTA/BLANCO MESAVERDE
15. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drig. unit line, if any)	16. NO. ACRES IN LEASE 320.00	11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA SECTION 20 T30N R9W MERIDIAN NMP
18. DISTANCE FROM PROPOSED LOCATION* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE FT.	19. PROPOSED DEPTH 7476 MD / TVD	12. COUNTY OR PARISH SAN JUAN
21. ELEVATIONS (Show whether DF, RT, GR, etc.) 6080 GL	20. ROTARY OR CABLE TOOLS ROTARY	13. STATE NM
22. APPROX. DATE WORK WILL START* 05/14/2001		

23. PROPOSED CASING AND CEMENTING PROGRAM				
SIZE OF HOLE	GRADE, SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT

Notice of Staking Submitted 01/19/2001. Amoco Production Company respectfully request permission to drill the subject well to a total depth of approximately 7476', complete in the Basin Dakota Pool, produce the well for approximately 30 days to establish production rate, add the Blanco Mesaverde Pool and commingle production downhole. Application for downhole commingling authority (NMOCD order R-11363) will be submitted to all appropriate parties for approval after production has been established in the Basin Dakota Pool and prior to completion of and downhole commingling with the Blanco Mesaverde. Please see attachment for well drilling and completion program and supporting documentations.

This application is subject to the procedural review pursuant to 43 CFR 3165.3 and appeal pursuant to 43 CFR 3165.4.

RECEIVED
BUREAU OF LAND MANAGEMENT
U.S. DEPARTMENT OF THE INTERIOR
WASHINGTON, D.C.

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen, give data on present productive zone and proposed 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. ELECTRONIC SUBMISSION #3524 VERIFIED BY THE BLM WELL INFORMATION SYSTEM
FOR AMOCO PRODUCTION COMPANY SENT TO THE FARMINGTON FIELD OFFICE
SIGNED: MARY CORLEY TITLE: AUTHORIZED REPRESENTATIVE DATE: 04/09/2001

PERMIT NO. APPROVAL DATE: 11/14/01

Application approval 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. CONDITIONS OF APPROVAL, IF ANY:

APPROVED BY: [Signature] TITLE: AFM DATE: 11/14/01

District I
PO Box 1980, 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

¹ API Number 30-045-30624	² Pool Code 71599 & 72319	³ Pool Name BASIN DAKOTA & BLANCO MESAVERDE
⁴ Property Code 00518	⁵ Property Name FLORANCE	⁶ Well Number # 2M
⁷ OGRID No. 000778	⁸ Operator Name AMOCO PRODUCTION COMPANY	⁹ Elevation 6080

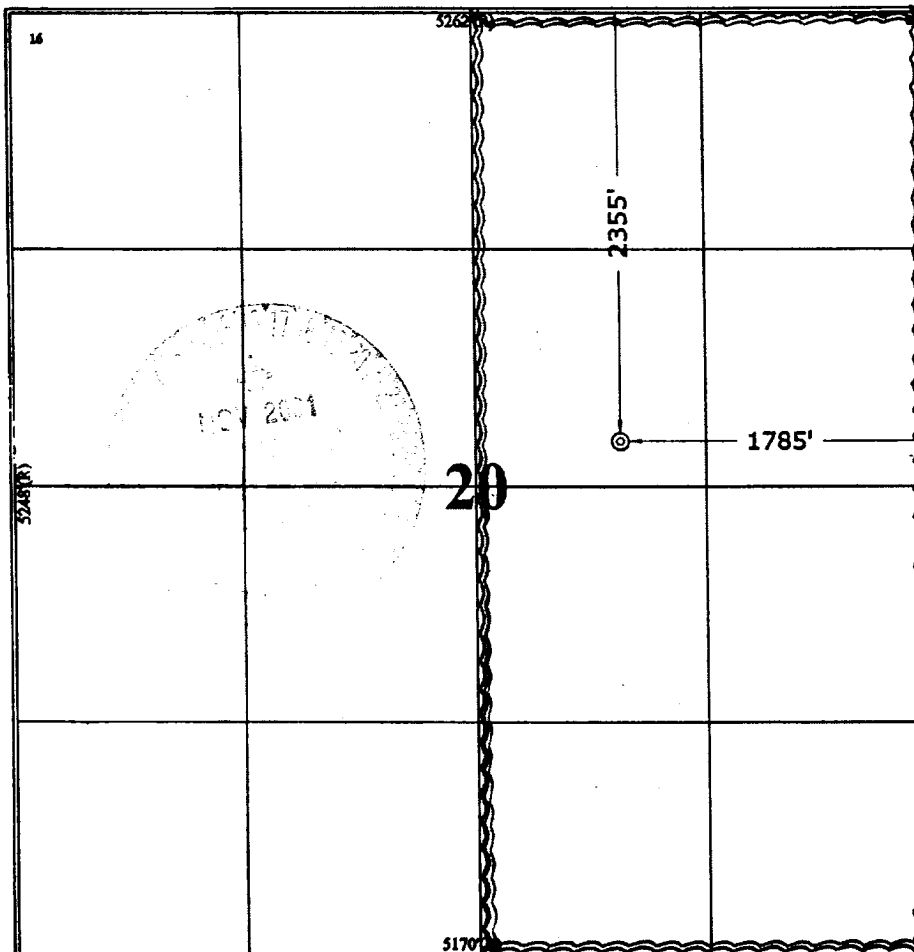
¹⁰ Surface Location

UL or Lot No. G	Section 20	Township 30 N	Range 9 W	Lot Idn	Feet from the 2355	North/South line NORTH	Feet from the 1785	East/West line EAST	County SAN JUAN
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¹¹ Bottom Hole Location If Different From Surface

¹² UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
¹³ Dedicated Acres 320.00	¹⁴ Joint or Infill	¹⁵ Consolidation Code	¹⁶ 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>¹⁷ OPERATOR CERTIFICATION</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 MARY CORLEY</p> <p>Printed Name SR. REGULATORY ANALYST</p> <p>Title 04-09-2001</p> <p>Date</p>
	<p>¹⁸ SURVEYOR CERTIFICATION</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>January 5, 2001</p> <p>Date of Survey</p> <p>Signature and Seal of Professional Surveyor</p> <p>7016</p> <p>Certificate Number</p>

**AMOCO
PRODUCTION COMPANY**

Florance # 2M
NE¼ Section 20,
T30N, R9W, N.M.P.M.

1350' New BLM Road Construction

T30N, R9W, Sec.20
SE¼NE¼ - 400'
SW¼NE¼ - 950'

APD MAP # 1

**AMOCO PRODUCTION COMPANY
DRILLING AND COMPLETION PROGRAM**

Prospect Name: Florance
Lease: FLORANCE
County: San Juan
State: New Mexico
Date: May 27, 2001

Well No: 2M
Surface Location: 20-30N-9W, 2355 FNL, 1785 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		APPROXIMATE DEPTHS OF GEOLOGICAL MARKER			
TYPE OF TOOLS	DEPTH OF DRILLING	Estimated GL: 6080		Estimated KB: 6094	
Rotary	0 - TD	MARKER		SUBSEA	MEAS. DEPTH
LOG PROGRAM		Ojo Alamo		4580	1514
TYPE	DEPTH INVERAL	Fruitland Coal	*	3906	2188
<u>OPEN HOLE</u>		Pictured Cliffs	*	3317	2777
GR-Induction	TD to 7" shoe	Lewis Shale	#	3239	2855
Density/Neutron	TD to 7" shoe	Cliff House	#	1690	4404
		Menefee Shale	#	1496	4598
<u>CASED HOLE</u>		Point Lookout	#	1072	5022
GR-CCL-TDT	TDT – TD to 7" shoe	Mancos		962	5132
CBL	Identify 4 ½" cement top	Greenhorn		-930	7024
REMARKS: - Please report any flares (magnitude & duration).		Bentonite Marker		-982	7076
		Two Wells	#	-1025	7119
		Dakota MB	#	-1168	7262
		Burro Canyon	*	-1318	7412
		Morrison	*	-1368	7462
		TOTAL DEPTH		-1472	7566
		# Probable completion interval		# Possible Pay	
SPECIAL TESTS		DRILL CUTTING SAMPLES		DRILLING TIME	
TYPE		FREQUENCY	DEPTH	FREQUENCY	DEPTH
None		10 feet	Production hole	Geolograph	0-TD
REMARKS:					

MUD PROGRAM:							
Approx. Interval			Type Mud	Weight, #/ga	Vis, sec/qt	W/L cc's/30 min	Other Specification
0	-	120-135	3 jts.	Spud	8.6-9.2		
120-135	-	2955	(1)	Water/LSND	8.6-9.2	<6	
2955	-	7412		Gas/Air/N2/Mist	Volume sufficient to maintain a stable and clean wellbore		
7412		7566	(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	120-135	9 5/8"	H-40 ST&C	32#	12.25"	1
Intermediate 1	2955	7"	J/K-55 ST&C	20#	8.75"	1,2
Production	7566	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 1, 2001	
Form 46 12-00 KAT		Version 2.0	

**Amoco Production Company
BOP Pressure Testing Requirements**

Well Name: **FLORANCE 2M**
County: **San Juan**

State: **New Mexico**

Formation	TVD	Anticipated Bottom Hole Pressure	Maximum Anticipated Surface Pressure **
Ojo Alamo	1514		
Fruitland Coal	2188		
PC	2777		
Lewis Shale	2855		
Cliff House	4404	500	0
Menefee Shale	4598		
Point Lookout	5022	600	0
Mancos	5132		
Dakota	7119	2600	1471

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

Requested BOP Pressure Test Exception: 3000 PSI
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**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

Below conductor casing to total depth

BOP Equipment

**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.