

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

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

APPLICATION FOR PERMIT TO DRILL OR REENTER

1a. Type of Work: <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER		5. Lease Serial No. NM - 0606
1b. Type of Well: <input type="checkbox"/> Oil Well <input checked="" type="checkbox"/> Gas Well <input type="checkbox"/> Other <input type="checkbox"/> Single Zone <input checked="" type="checkbox"/> Multiple Zone		6. If Indian, Allottee or Tribe Name
2. Name of Operator BP AMERICA PRODUCTION COMPANY		7. If Unit or CA Agreement, Name and No.
Contact: CHERRY HLAVA E-Mail: hlavacl@bp.com		8. Lease Name and Well No. ATLANTIC A LS 2M
3a. Address P.O. BOX 3092 HOUSTON, TX 77253-3092	3b. Phone No. (include area code) Ph: 281.366.4081 Fx: 281.366.0700	9. API Well No. 30-045-22512
4. Location of Well (Report location clearly and in accordance with any State requirements. *) At surface SWNE 2000FNL 1260FEL 36.86750 N Lat, 107.88333 W Lon At proposed prod. zone SWNE 2215FNL 1670FEL 36.86750 N Lat, 107.88333 W Lon		10. Field and Pool, or Exploratory BASIN DAKOTA & BLANCO MV
14. Distance in miles and direction from nearest town or post office* 7.99 MILES EAST FROM AZTEC, NM		11. Sec., T., R., M., or Blk. and Survey or Area Sec 28 T31N R10W Mer NMP
15. Distance from proposed location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) 1260	16. No. of Acres in Lease 7519 MD	12. County or Parish SAN JUAN
18. Distance from proposed location to nearest well, drilling, completed, applied for, on this lease, ft. 1200	19. Proposed Depth 7519 MD	13. State NM
21. Elevations (Show whether DF, KB, RT, GL, etc.) 6122 GL	22. Approximate date work will start 10/15/2004	17. Spacing Unit dedicated to this well 301.86 E/2
23. Estimated duration 7 DAYS		20. BLM/BIA Bond No. on file WY2924

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 (Electronic Submission)	Name (Printed/Typed) CHERRY HLAVA	Date 08/10/2004
Title REGULATORY ANALYST		
Approved by (Signature)	Name (Printed/Typed)	Date
Signature	Office	11/3/04

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)

HOLD C104 FOR Directional Survey

Electronic Submission #34341 verified by the BLM Well Information System
For BP AMERICA PRODUCTION COMPANY, sent to the Farmington

DRILLING OPERATIONS AUTHORIZED ARE
SUBJECT TO COMPLIANCE WITH ATTACHED
"GENERAL REQUIREMENTS".

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

** OPERATOR-SUBMITTED ** OPERATOR-SUBMITTED ** OPERATOR-SUBMITTED **

NRMOCD

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 30-015-32512		2 Pool Code 71599; 72319		3 Pool Name Basin Dakota; Blanco Mesaverde		
4 Property Code 007767		5 Property Name Atlantic A LS			6 Well Number # 2M	
7 OGRID No. 000778		8 Operator Name BP AMERICA PRODUCTION COMPANY			9 Elevation 6122	

10 Surface Location

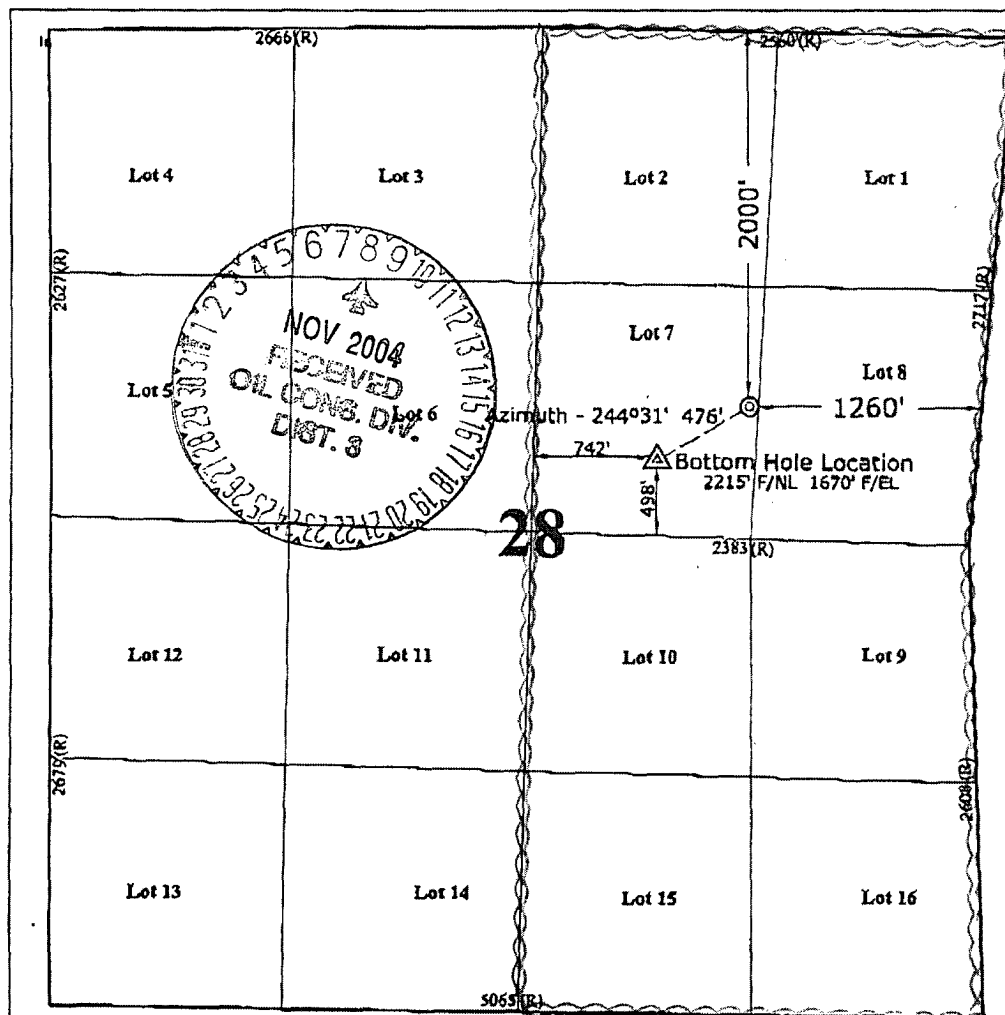
UL or Lot No.	Section	Township	Range	Lot Ida	Feet from the	North/South line	Feet from the	East/West line	County
G (Lot 7)	28	31 N	10 W		2000	NORTH	1260	EAST	SAN JUAN

11 Bottom Hole Location If Different From Surface

7 UL or lot no.	Section	Township	Range	Lot Ida	Feet from the	North/South line	Feet from the	East/West line	County
G (Lot 7)	28	31 N	10 W		2215	NORTH	1670	EAST	SAN JUAN

12 Dedicated Acres 301.86	13 Joint or Infill	14 Consolidation Code	15 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



17 OPERATOR CERTIFICATION

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

Signature: Cherry Hlava
Printed Name: Cherry Hlava
Title: Regulatory Analyst
Date: 8-10-04

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.

Revised: August 9, 2004
June 9, 2004

Date of Survey
Signature and Seal of Professional Surveyor

GARY D. VANM
NEW MEXICO
REGISTERED PROFESSIONAL LAND SURVEYOR
7016
Certificate Number

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
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4 Property Code 001767		5 Property Name Atlantic A LS			6 Well Number # 2M
7 OGRID No. 000778		8 Operator Name BP AMERICA PRODUCTION COMPANY			9 Elevation 6122

10 Surface Location

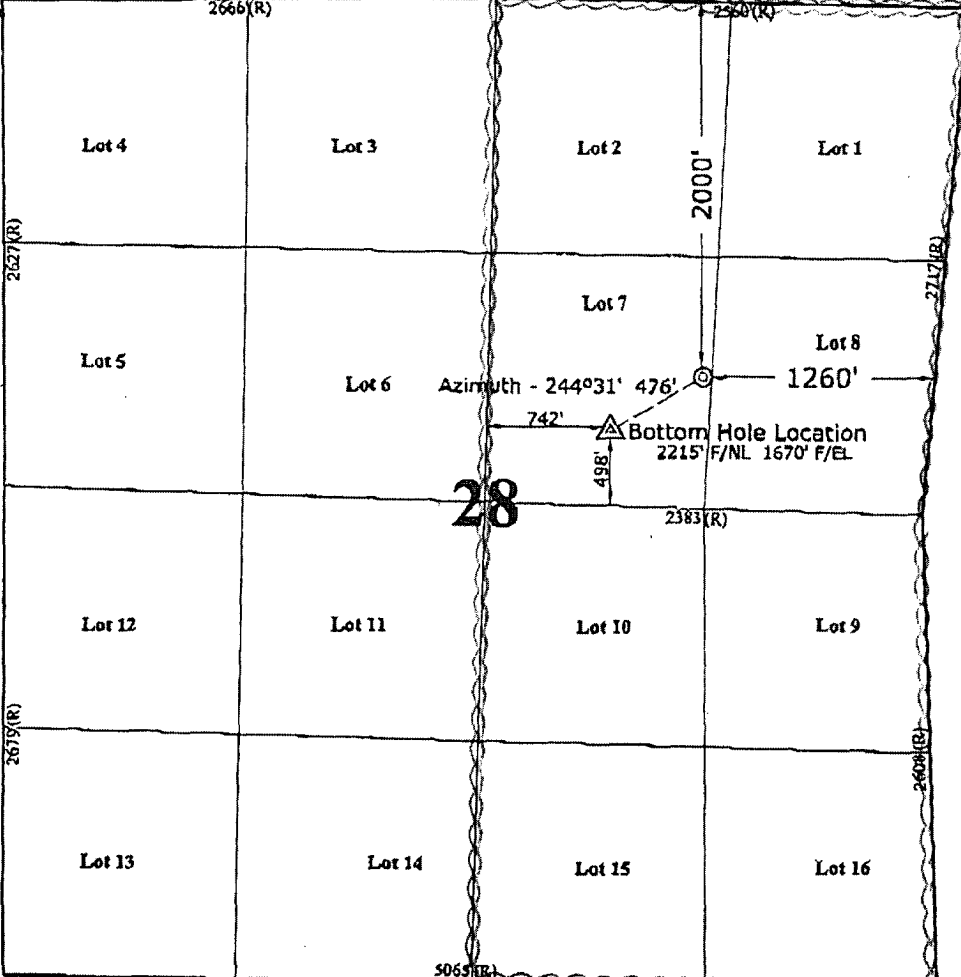
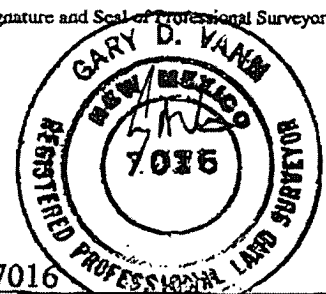
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G (Lot 7)	28	31 N	10 W		2215	NORTH	1670	EAST	SAN JUAN

12 Dedicated Acres 3.30186	13 Joint or Infill	14 Consolidation Code	15 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

	<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><i>Cherry Hlava</i> Signature Cherry Hlava Printed Name Regulatory Analyst Title 8-10-04 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>Revised: August 9, 2004 June 9, 2004 Date of Survey</p> <p>Signature and Seal of Professional Surveyor  7016 Certificate Number</p>

Submit 3 Copies To Appropriate District
Office

District I

1625 N. French Dr., Hobbs, NM 88240

District II

1301 W. Grand Ave., Artesia, NM 88210

District III

1000 Rio Brazos Rd., Aztec, NM 87410

District IV

1220 S. St. Francis Dr., Santa Fe, NM
87505

State of New Mexico
Energy, Minerals and Natural Resources

OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-103

March 4, 2004

WELL API NO.

NEW WELL

5. Indicate Type of Lease

STATE ☐ FEE ☐

6. State Oil & Gas Lease No.

7. Lease Name or Unit Agreement Name

Atlantic A LS

(APD filed with BLM NM 0606)

8. Well Number

2 M

9. OGRID Number

10. Pool name or Wildcat

Basin Dakota & Blanco Mesaverde

SUNDRY NOTICES AND REPORTS ON WELLS

(DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A
DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH
PROPOSALS.)

1. Type of Well:

Oil Well ☐ Gas Well ☒ Other

2. Name of Operator

BP AMERICA PRODUCTION CO

3. Address of Operator

P.O. BOX 3092 HOUSTON, TX 77079-2064

4. Well Location

Unit Letter G : 2000 feet from the North line and 1260 feet from the East line

Section 28

Township 31N

Range 10W

NMPM SAN JUAN

County

11. Elevation (Show whether DR, RKB, RT, GR, etc.)

6122'

Pit or Below-grade Tank Application (For pit or below-grade tank closures, a form C-144 must be attached)

Pit Location: UL G Sect 28 Twp 31N Rng 10W Pit type Drilling Depth to Groundwater >100' Distance from nearest fresh water well >1000'

Distance from nearest surface water >1000' Below-grade Tank Location UL G Sect 28 Twp 31N Rng 10W ;

1900 feet from the North line and 1235 feet from the East line PLEASE SEE ATTACHED PAD LAYOUT

12. Check Appropriate Box to Indicate Nature of Notice, Report or Other Data

NOTICE OF INTENTION TO:

PERFORM REMEDIAL WORK ☐ PLUG AND ABANDON ☐

TEMPORARILY ABANDON ☐ CHANGE PLANS ☐

PULL OR ALTER CASING ☐ MULTIPLE COMPLETION ☐

OTHER: Lined Drilling Pit Permit ☒

SUBSEQUENT REPORT OF:

REMEDIAL WORK ☐ ALTERING CASING ☐

COMMENCE DRILLING OPNS. ☐ PLUG AND ABANDONMENT ☐

CASING TEST AND CEMENT JOB ☐

OTHER: ☐

13. Describe proposed or completed operations. (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work). SEE RULE 1103. For Multiple Completions: Attach wellbore diagram of proposed completion or recompletion.

Please reference BP America's San Juan Basin Drilling/Workover Pit Construction Plan on file with the NMOCD. Pit construction Plan issued date of 04/15/2004. Pit will be closed according to closure plan on file.

I hereby certify that the information above is true and complete to the best of my knowledge and belief. I further certify that any pit or below-grade tank has been/will be constructed or closed according to NMOCD guidelines ☐, a general permit ☐ or an (attached) alternative OCD-approved plan ☐.

SIGNATURE _____ TITLE Regulatory Analyst DATE 8/10/04

Type or print name Cherry Hlava

E-mail address: hlavacl@bp.com

Telephone No. 281-366-4081

(This space for State use)

APPROVED BY

TITLE

DATE

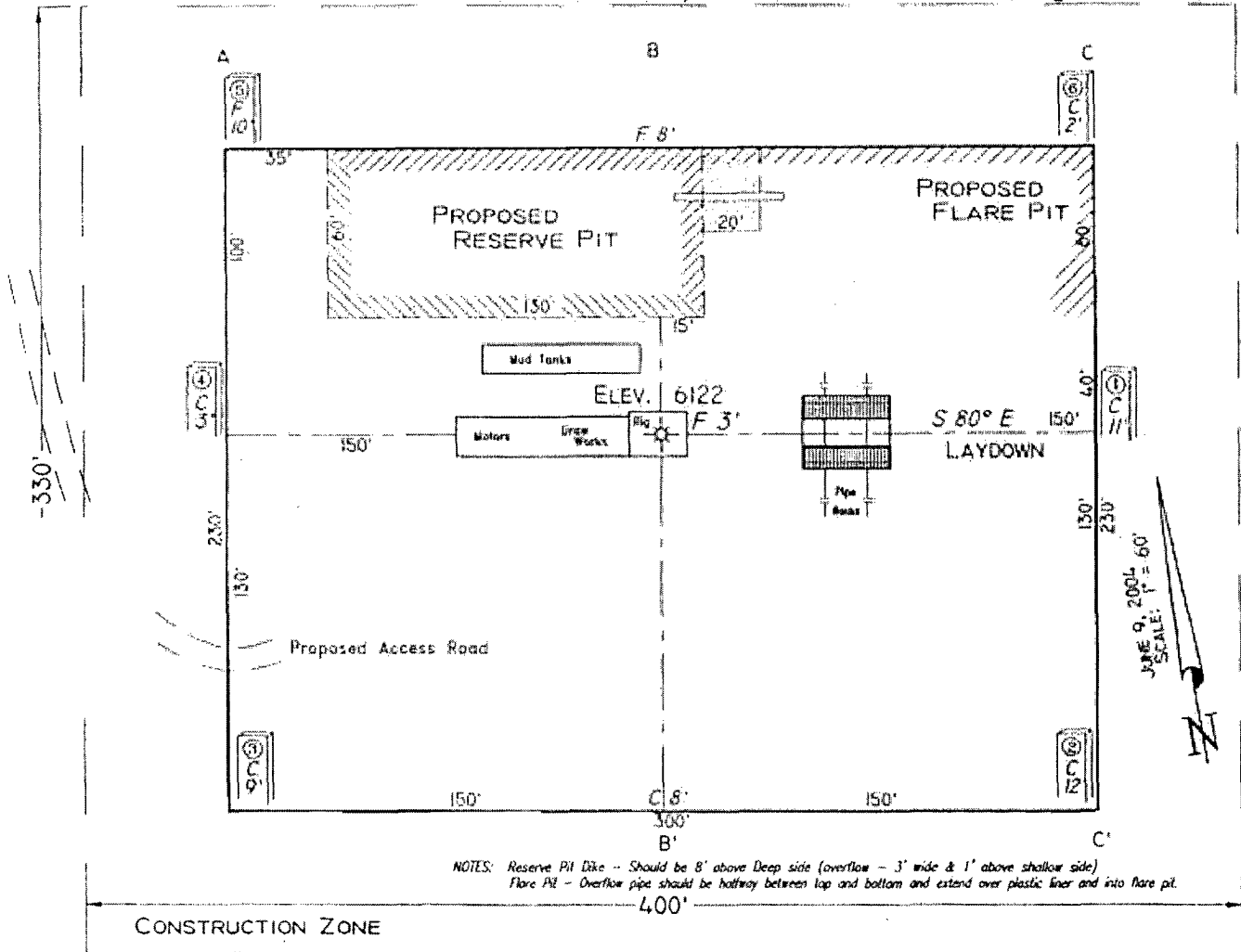
Conditions of approval, if any:

DEPUTY OIL & GAS INSPECTOR, DIST. VI

NOV - 8 2004

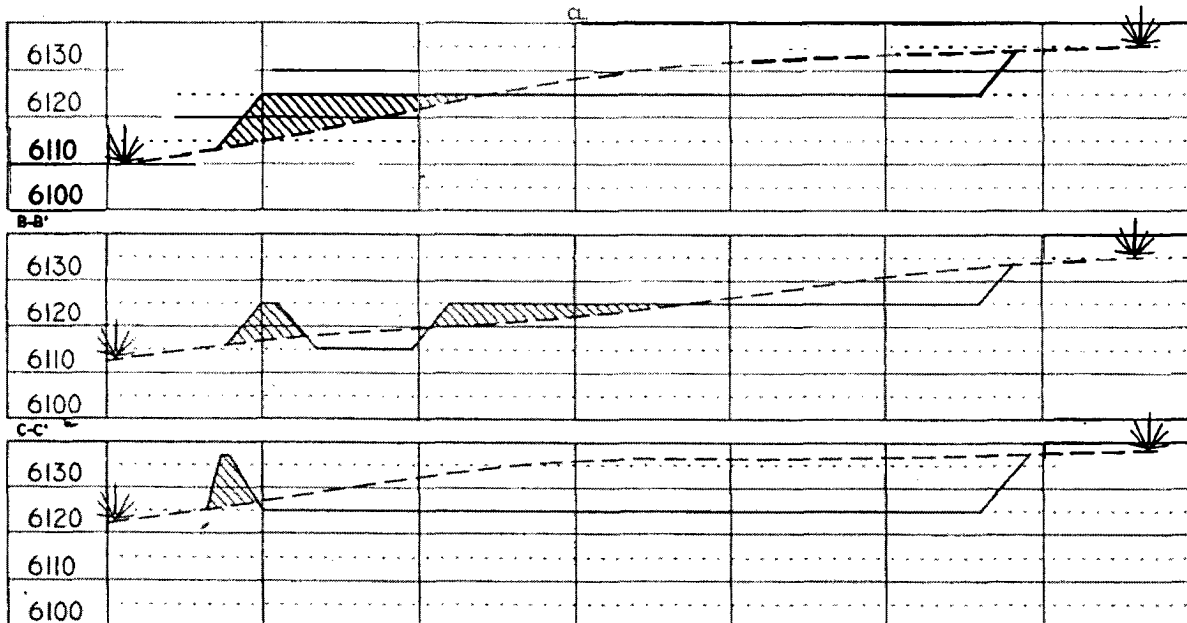
PAD LAYOUT PLAN & PROFILE
BP AMERICA PRODUCTION COMPANY
 Atlantic A LS #2M
 2000' F/NL 1260' F/EL
 SEC. 28, T31N, R10W, N.M.P.M.
 SAN JUAN COUNTY, NEW MEXICO

Lat: 36°52'17"
 Long: 107°53'00"



Area of Construction Zone - 330'x400' or 3.03 acres, more or less.

SCALE: 1"=60'-HORIZ.
 1"=40'-VERT.



VANN SURVEYS
 P. O. Box 1306
 Farmington, NM

Additional Operator Remarks:

Notice of Staking was submitted on 08/05/2004.

BP America Production Company respectfully requests permission to drill the subject well to a total depth of approximately 7519 feet and complete into the Basin Dakota Pool, produce the well to establish a production rate, perform a deliverability test, isolate the Dakota then complete into the Blanco Mesaverde Pool and commingle production downhole.

SUPPLEMENTAL TO SURFACE USE PLAN**New Facilities:**

A 4" diameter buried steel pipeline that is + or - 800 feet in length will be constructed. The pipe wall thickness is .156 and the pipe wall strength is 42,000#. It will be adjacent to the access road and tie the well into an existing gas meter operated by BP America Production Company. The pipeline will not be used to transport gas to drill the well. After the well is spud the pipeline will be authorized by a right-of-way issued by El Paso Services.

If conditions allow, it is our intent to pre-set the 9 5/8" casing on the above mentioned well by drilling a surface hole with air/air mist in lieu of drilling mud and the surface casing be cemented with 94.5 cu/ft type I-II, 20% FLYASH, 14.5 PPG, 7.41 gal/sk, 1.61 cf/sk Yield, 80 DEG BHST ready mix cement. If the area will not allow for pre-set the approved cement program will be followed.

APD/ROW

BP AMERICA PRODUCTION COMPANY

DRILLING AND COMPLETION PROGRAM

8/4/2004

Lease:	Atlantic A LS	Well Name & No.	Atlantic A LS #2M	Field:	Blanco Mesaverde/Basin Dakota
County:	San Juan, New Mexico	Surface Location:	28-31N-10W: 2000' FNL, 1260' FEL		
Minerals:	State	Surface:	Lat: 36.8711729 deg; Long: -107.8831584 deg		
Rig :	Aztec 184	BH Location:	2215 FNL & 1670 FEL; Lat: 36.8705816 deg; Long: -107.8845937		
OBJECTIVE:	Drill 250' below the top of the Two Wells Mbr, set 4-1/2" production casing, Stimulate DK, MF, and PL intervals.				

METHOD OF DRILLING		APPROXIMATE DEPTHS OF GEOLOGICAL MARKER			
TYPE OF TOOLS	DEPTH OF DRILLING	Actual GL:	6122	Estimated KB: 6,136.0'	
Rotary	0 - TD	Marker		SUBSEA	TVD

LOG PROGRAM		APPROXIMATE DEPTHS OF GEOLOGICAL MARKER			
Type	Depth Interval	Marker		SUBSEA	TVD
Single Run		Ojo Alamo		4,651'	1,485'
		Kirtland		4,532'	1,604'
		Fruitland	*	3,713'	2,423'
		Fruitland Coal	*	3,554'	2,582'
		Pictured Cliffs	*	3,335'	2,801'
		Lewis	*	3,231'	2,905'
Cased Hole		Cliff House	#	1,793'	4,343'
TDT- CBL		Menefee	#	1,479'	4,657'
	TD to 7" shoe	Point Lookout	#	1,064'	5,072'
	Identify 4 1/2" cement top				

REMARKS:		Mancos		699'	5,437'
- Please report any flares (magnitude & duration).		Greenhorn		-962'	7,098'
		Graneros (bent,mkr)		-1,012'	7,148'
		Two Wells	#	-1,066'	7,202'
		Paguate	#	-1,152'	7,288'
		Cubero	#	-1,187'	7,323'
		L. Cubero	#	-1,220'	7,356'
		Encinal Cyn	#	-1,264'	7,400'
		TOTAL DEPTH:		-1,316'	7,452'
		# Probable completion interval		* Possible Pay	

SPECIAL TESTS	DRILL CUTTING SAMPLES		DRILLING TIME	
TYPE	FREQUENCY	DEPTH	FREQUENCY	DEPTH
None	30'/10' intervals	3055 - TD	Geolograph	0 - TD

REMARKS:	
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MUD PROGRAM:					
Interval	Type <input type="checkbox"/> Mud	#/gal	Vis, <input type="checkbox"/> sec/qt	/30 min	Other Specification
200'	Spud	8.8 - 9.0	Sufficient to clean hole.		
3,055'	Water/LSND	8.4 - 9.0		<9	Sweep hole while whilst water drilling, LCM onsite
7,519'	Air	1	1000 cfm for hammer		Volume sufficient to maintain a stable and clean wellbore

CASING PROGRAM:							
Casing <input type="checkbox"/> String	Depth	Size	Casing Size	Grade, Thread	Weight	Landing Point	Cement
Surface/Conductor	200'	13 1/2"	9-5/8"	H-40 ST&C	32#		cmt to surface
Intermediate 1	3,055'	8-3/4"	7"	J/K-55 ST&C	20#	100' below LWIS	cmt to surface
Production	7,519'	6-1/4"	4-1/2"	J-55	11.6#	DKOT	150' inside Intermediate - TOC survey required

CORING PROGRAM:	None
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COMPLETION PROGRAM:	Rigless, 2-3 Stage Limited Entry Hydraulic Frac, FMC Unihead
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GENERAL REMARKS:	Notify BLM/NMOCD 24 hours prior to Spud, BOP testing, and Casing and Cementing.
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BOP Pressure Testing Requirements			
Formation	Depth	Anticipated bottom hole pressure	Max anticipated surface pressure**
Cliffhouse	4,343'	500	0
Point Lookout	5,072'	600	0
Dakota	7,202'	2600	1015.56

Requested BOP Pressure Test Exception = 1500 psi	** Note: Determined using the following formula: ABHP - (.22*TVDD) = ASP
--	--

Form 46 Reviewed by:	Logging program reviewed by:	DATE:	APPROVED:	DATE:
HGJ	JMP	4-Aug-04		
Form 46 7-84bw	For Drilling Dept.		For Production Dept.	

Cementing Program

Well Name: Atlantic A LS 2M	Field: Blanco Mesaverde / Basin Dakota	
Location: 28-31N-10W: 2000' FNL, 1260' FEL		
County: San Juan	Well Flac	
State: New Mexico	Formation: Dakota Mesa Verde	
	KB Elev (est) 6136	
	GL Elev. (es) 6122	

Casing Program:

Casing String	Est. Depth (ft.)	Hole Size (in.)	Casing Size (in.)	Thread	TOC (ft.)	Stage Tool Or TOL (ft.)	Cmt Cir. Out (bbl.)
Surface	200	13.5	9.625	ST&C	Surface	NA	
Intermediate	3055	8.75	7	LT&C	Surface	NA	
Production -	7519	6.25	4.5	?	2955	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	32	H-40	2270	1400	254	0.0787	8.845
Intermediate	7	20	K-55	3740	2270	254	0.0405	6.456
Production -	4.5	11.6	J-55	5350	4960	154	0.0155	3.875

Mud Program

Apx. Interval (ft.)	Mud Type	Mud Weight	Recommended Mud Properties Prio Cementing:
			PV <20
			YP <10
			Fluid Lo <15
0 - SCP	Water/Spud	8.6-9.2	
SCP - ICP	Water/LSND	8.6-9.2	
ICP - ICP2	Gas/Air Mist	NA	
ICP2 - TD	LSND	8.6 - 9.2	

Cementing Program:

	Surface	Intermediate	Production
Excess %, Lead	100	75	40
Excess %, Tail	NA	0	40
BHST (est deg. F)	75	128	190
Special Instructions	1,6,7	1,6,8	2,4,6

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

Notes:

*Do not wash up on top of plug. Wash lines before displacing production cement job to minimize drillout.

Surface:

Preflush	20 bbl.	Fresh Water	
Slurry 1	160	60 sx Class C Cement	203 cuft
TOC@Surface		+ 2% CaCl ₂ (accelerator)	
			0.4887 cuft/ft OH

Slurry Properties:

	Density (lb/gal)	Yield (ft ³ /sk)	Water (gal/sk)
Slurry 1	15.2	1.27	5.8

Casing Equipment:

9-5/8", 8R, ST&C
 1 Guide Shoe
 1 Top Wooden Plug
 1 Autofill insert float valve
 Centralizers, 1 per joint except top joint
 1 Stop Ring
 1 Thread Lock Compound

Intermediate:

Fresh Water	20 bbl	fresh water	
Lead	260	60 sx Class "G" Cement	654 cuft
Slurry 1		+ 3% D79 extender	
TOC@Surface		+ 2% S1 Calcium Chloride	
		+ 1/4 #/sk. Cellophane Flake	
		+ 0.1% D46 antifoam	
Tail	60	50/50 Class "G"/Poz	75 cuft
Slurry 2		+ 2% gel (extender)	
500 ft fill		0.1% D46 antifoam	
		+ 1/4 #/sk. Cellophane Flake	0.1503 cuft/ft OH
		+ 2% CaCl ₂ (accelerator)	0.1746 cuft/ft csg ann

Slurry Properties:

	Density (lb/gal)	Yield (ft ³ /sk)	Water (gal/sk)

Cementing Program

Slurry 1	11.4	2.61	17.77
Slurry 2	13.5	1.27	5.72

Casing Equipment: 7", 8R, ST&C

- 1 Float Shoe (autofill with minimal LCM in mud)
- 1 Float Collar (autofill with minimal LCM in mud)
- 1 Stop Ring
- 14 Centralizers (one in middle of first joint, then every third collar)
- 2 Fluidmaster vane centralizers @ base of Ojo
- 1 Top Rubber Plug
- 1 Thread Lock Compound

Production:

Fresh Water	10 bbl	CW100
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Lead Slurry 1 TOC, 100' above 7" shoe	170 LiteCrete D961 / D124 / D154 + 0.03 gps D47 antifoam + 0.5% D112 fluid loss + 0.11% D65 TIC	424 cuft
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Tail Slurry 2 1515 ft fill	160 sx 50/50 Class "G"/Poz + 5% D20 gel (extender) + 0.1% D46 antifoam + 1/4 #/sk. Cellophane Flake + 0.25% D167 Fluid Loss	218 cuft + 5 #/sk D24 gilsonite + 0.15% D65 TIC + 0.1% D800 retarder
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0.1026 cuft/ft OH

Slurry Properties:	Density (lb/gal)	Yield (ft ³ /sk)	Water (gal/sk)	
Slurry 1	9.5	2.52	6.38	
Slurry 2	13	1.44	6.5	
				Top of Mancos 5504

Casing Equipment: 4-1/2", 8R, ST&C

- 1 Float Shoe (autofill with minimal LCM in mud)
- 1 Float Collar (autofill with minimal LCM in mud)
- 1 Stop Ring
- Centralizers, every 4th joint
- 1 Top Rubber Plug
- 1 Thread Lock Compound

BP America Production Company
Well Control Equipment Schematic

