

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

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

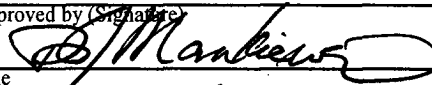
APPLICATION FOR PERMIT TO DRILL OR REENTER

1a. Type of Work: <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER		5. Lease Serial No. SF - 076337
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. W.D. HEATH A 8M
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. 3004532296
4. Location of Well (Report location clearly and in accordance with any State requirements. *) At surface SWNW 1820FNL 895FWL 36.43700 N Lat, 107.48500 W Lon At proposed prod. zone		10. Field and Pool, or Exploratory BASIN DAKOTA & BLANCO MESAVE
14. Distance in miles and direction from nearest town or post office* 11 MILES EAST FROM BLOOMFIELD, NM		11. Sec., T., R., M., or Blk. and Survey or Area E Sec 17 T29N R9W Mer NMP
15. Distance from proposed location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) 895'	16. No. of Acres in Lease 1600.00	12. County or Parish SAN JUAN
18. Distance from proposed location to nearest well, drilling, completed, applied for, on this lease, ft.	19. Proposed Depth 6726 MD	13. State NM
21. Elevations (Show whether DF, KB, RT, GL, etc.) 5660 GL	22. Approximate date work will start 06/15/2004	17. Spacing Unit dedicated to this well 320.00 N/2 - BMV N/2 - BJK
		20. BLM/BIA Bond No. on file WY2924
		23. Estimated duration 7 DAYS

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 04/12/2004
Title REGULATORY ANALYST		
Approved by (Signature) 	Name (Printed/Typed)	Date 6-14-04
Title AFM	Office FFO	

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 #29392 verified by the BLM Well Information System
For BP AMERICA PRODUCTION COMPANY, sent to the Farmington

IT IS THE POLICY OF THE BUREAU OF LAND MANAGEMENT
TO COMPLY 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 **

NMOCD

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 30-045-32296		² Pool Code 71599, 72319		³ Pool Name Basin Dakota; Blanco Mesaverde	
⁴ Property Code 000665		⁵ Property Name W. D. Heath A			⁶ Well Number # 8M
⁷ OGRID No. 000778		⁸ Operator Name BP AMERICA PRODUCTION COMPANY			⁹ Elevation 5660

¹⁰ Surface Location

UL or Lot No. E	Section 17	Township 29 N	Range 9 W	Lot Idn	Feet from the 1820	North/South line NORTH	Feet from the 895	East/West line WEST	County SAN JUAN
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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 320		¹³ Joint or Infill		¹⁴ Consolidation Code		¹⁵ 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>¹⁶ 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: <u>Cherry Hlava</u></p> <p>Printed Name: <u>Cherry Hlava</u></p> <p>Title: <u>Regulatory Analyst</u></p> <p>Date: <u>4-7-04</u></p>
	<p>¹⁷ 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>Date of Survey: <u>February 23, 2004</u></p> <p>Signature and Seal of Professional Surveyor: <u>GARY D. VANN</u></p> <p></p> <p>Certificate Number: <u>7016</u></p>

Additional Operator Remarks:

Notice of Staking was submitted on 03/10/2004

BP America Production Company respectfully requests permission to drill the subject well to a total depth of approximately 6726' and complete into the Basin Dakota, 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.

Application for Downhole commingling authority (NMOCD order R-11363) will be submitted to NMOCD after Permit to Drill has been approved. 100% BP in both DK & MV formations.

SUPPLEMENTAL TO SURFACE USE PLAN

New Facilities:

A 4" diameter buried steel pipeline that is + or - 600 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 terrain allows 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.

C-102 Information:

The Basin Dakota portion of this well is a laydown in the North 1/2 and the Blanco Mesaverde is a stand-up in the West 1/2

**BP AMERICA PRODUCTION COMPANY
DRILLING AND COMPLETION PROGRAM**

Prospect Name: W. D. Heath A
Lease: W. D. Heath
County: San Juan
State: New Mexico

Well No: 8 M
Surface Location: 17-29N-9W, 1820 FNL, 895 FWL
Field: Basin Dakota/Blanco Mesaverde

Date: April 5, 2004

OBJECTIVE: Drill 250' below the top of the Two Wells; set 4 1/2" production casing. Stimulate CH, MF, PL and DK intervals

METHOD OF DRILLING		APPROXIMATE DEPTHS OF GEOLOGICAL MARKER			
TYPE OF TOOLS	DEPTH OF DRILLING	Estimated GL: 5660		Estimated KB: 5674	
Rotary	0 - TD	MARKER		SUBSEA	TVD.
LOG PROGRAM		Ojo Alamo		4658'	1016'
		Kirkland		4597'	1077'
		Fruitland		4127'	1547'
		Fruitland Coal	*	3841'	1833'
		Pictured Cliffs	*	3552'	2122'
		Lewis Shale	#	3362'	2312'
		Cliff House	#	2072'	3602'
		Menefee Shale	#	1762'	3912'
		Point Lookout	#	1306'	4368'
		Mancos		906'	4768'
		Greenhorn		-682'	6356'
		Bentonite Marker		-737'	6411'
		Two Wells	#	-802'	6476'
		Paguate	#	-875'	6549'
		Cubero Upper	#	-920'	6594'
		Cubero Lower	#	-956'	6630'
		Encinal Canyon	#	-994'	6668'
		TOTAL DEPTH		-1052'	6726'
		# Probable completion interval		* Possible Pay	
SPECIAL TESTS		DRILL CUTTING SAMPLES		DRILLING TIME	
TYPE		FREQUENCY	DEPTH	FREQUENCY	DEPTH
None		10'	2412' -TD	Geograph	0-TD
REMARKS:					

MUD PROGRAM:					
Approx. Interval	Type Mud	Weight, #/ga	Vis, sec/qt	W/L cc's/30 min	Other Specification
0 - 120	Spud	8.6-9.2			
120 - 2412 (1)	Water/LSND	8.6-9.2		<6	
2412 - 6726	Gas/Air/N2/Mist	Volume sufficient to maintain a stable and clean wellbore			

REMARKS:						
(1) The hole will require sweeps to keep unloaded while fresh water drilling. Let hole conditions dictate frequency.						
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	9 5/8"	H-40 ST&C	32#	13.5"	1
Intermediate 1	2412	7"	J/K-55 ST&C	20#	8.75"	1,2
Production	6726	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, 3-4 Stage Limited Entry Hydraulic Frac						

GENERAL REMARKS:						
Notify BLM/NMOCDD 24 hours prior to Spud; BOP testing, and Casing and Cementing.						

Form 46 Reviewed by:			Logging program reviewed by: N/A			
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PREPARED BY:		APPROVED:		DATE:		
HGJ/MNP/JMP				April 5, 2004		
Form 46 12-00 MNP				Version 1.0		

BOP Test Pressure

BP America Production Company BOP Pressure Testing Requirements

Well Name: W. D. Heath A
County: San Juan

8 M
State: New Mexico

Formation	TVD	Anticipated Bottom Hole Pressure	Maximum Anticipated Surface Pressure **
Ojo Alamo	1016		
Fruitland Coal	1833		
PC	2122		
Lewis Shale	2312		
Cliff House	3602	500	0
Menefee Shale	3912		
Point Lookout	4368	600	0
Mancos	4768		
Dakota	6476	2600	1449

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

Requested BOP Pressure Test Exception: 1500 psi

SAN JUAN BASIN
Dakota/MV 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

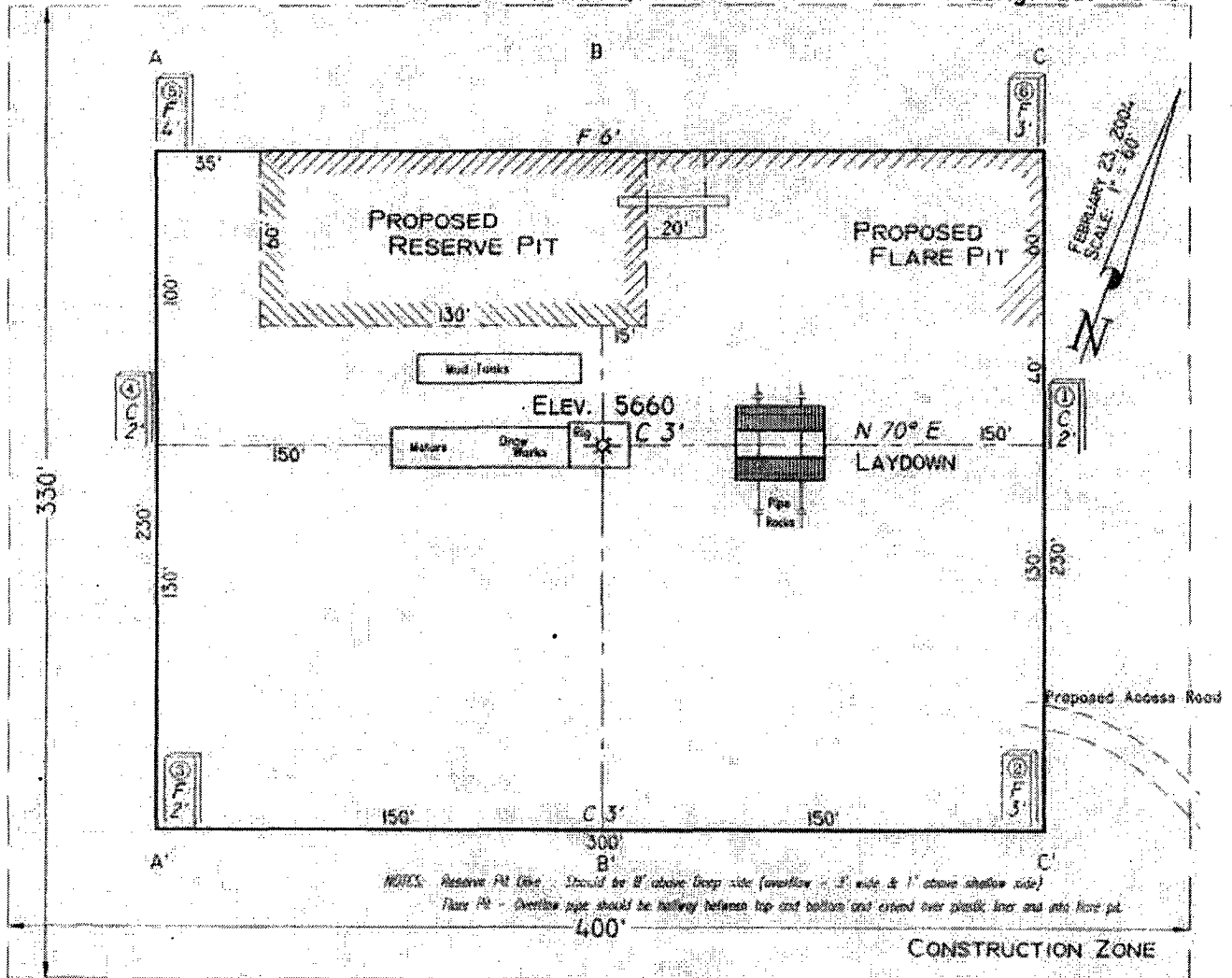
BOP Equipment

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.

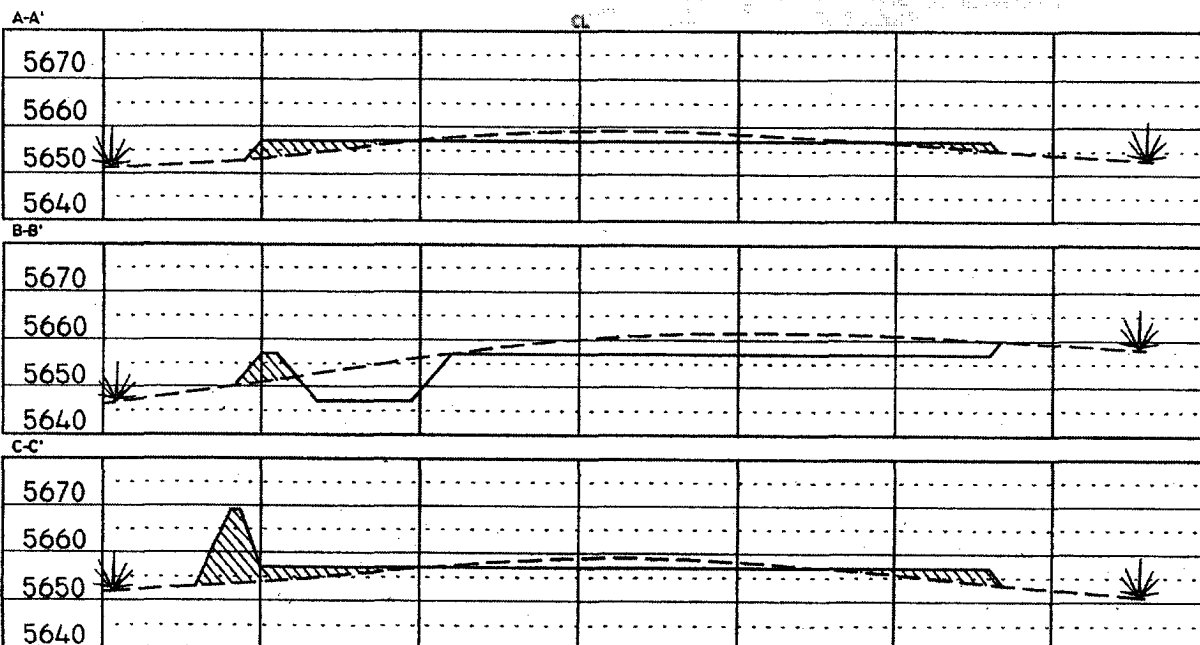
PAD LAYOUT PLAN & PROFILE
BP AMERICA PRODUCTION COMPANY
W.D. Heath A #8M
1820' F/NL 895' F/WL
SEC. 17, T29N, R9W, N.M.P.M.
SAN JUAN COUNTY, NEW MEXICO

Lat: 36°43'39"
 Long: 107°48'28"



Area of Construction Zone - 330'x400' or 1.03 acres, more or less.

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



NOTE: Contractor should call One-Call for location of any marked or unmarked buried pipelines or cables on well pad and/or access road at least two (2) working days prior to construction.

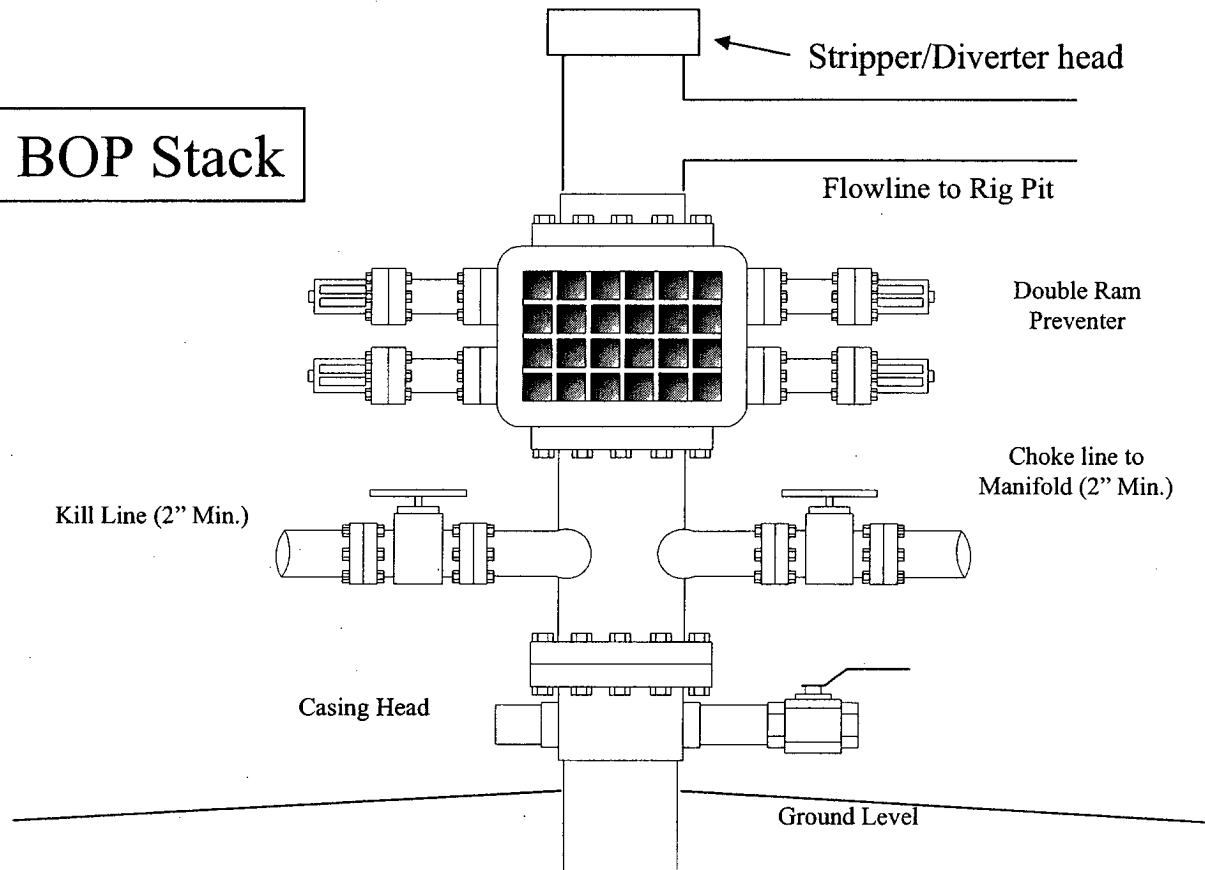
Cuts and fills shown are approximate - final finished elevation is to be adjusted so earthwork will balance. Corner stakes are approximate and do not include additional areas needed for sideslopes and drainages. Final Pad Dimensions are to be verified by Contractor.

VANN SURVEYS
 P. O. Box 1306
 Farmington, NM

BP American Production Company
Well Control Equipment Schematic



BOP Stack



Choke & Kill Manifold

