

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 080358
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 Contact: CHERRY HLAVA E-Mail: HLAVAL@BP.COM		7. If Unit or CA Agreement, Name and No.
3a. Address HOUSTON, TX 77253-3092	3b. Phone No. (include area code) Ph: 281-366-4081	8. Lease Name and Well No. NYE LS 1 N
4. Location of Well (Report location clearly and in accordance with any State requirements. *) At surface SWNE 2365FNL 1900FEL 36.88472 N Lat, 107.95750 W Lon At proposed prod. zone SWNE 2365FNL 1900FEL 36.88472 N Lat, 107.95750 W Lon		9. API Well No. 30-045-3067
14. Distance in miles and direction from nearest town or post office* 6 MILES NORTH FROM AZTEC, NM		10. Field and Pool, or Exploratory BASIN DK & BLANCO MV
15. Distance from proposed location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) 1900	16. No. of Acres in Lease 320.00	11. Sec., T., R., M., or Blk. and Survey or Area Sec 23 T31N R11W Mer NMP 6
18. Distance from proposed location to nearest well, drilling, completed, applied for, on this lease, ft. 1400	19. Proposed Depth 7100 MD 7100 TVD	12. County or Parish SAN JUAN
21. Elevations (Show whether DF, KB, RT, GL, etc.) 5829 GL	22. Approximate date work will start 02/15/2004	13. State NM
20. BLM/BIA Bond No. on file WY2924		17. Spacing Unit dedicated to this well 320.00 E/L
23. Estimated duration 7		

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 Ph: 281-366-4081	Date 12/14/2004
Title AGENT		
Approved by (Signature) <i>[Signature]</i>	Name (Printed/Typed)	Date 3-30-05
Title AFM	Office PFO	

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 #51871 verified by the BLM Well Information System  
For BP AMERICA PRODUCTION COMPANY, sent to the Farmington

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

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

NMOCD

DRILLING OPERATIONS AUTHORIZED ARE  
SUBJECT TO COMPLIANCE WITH ATTACHED  
TECHNICAL REQUIREMENTS

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

API Number <b>30-045-32767</b>		Pool Code <b>71599:72319</b>		Pool Name <b>Basin Dakota; Blanco Mesa Verde</b>	
Property Code <b>000934</b>		Property Name <b>Nye LS</b>		Well Number <b># 1N</b>	
OGRID No. <b>000778</b>		Operator Name <b>BP AMERICA PRODUCTION COMPANY</b>		Elevation <b>5829</b>	

10 Surface Location

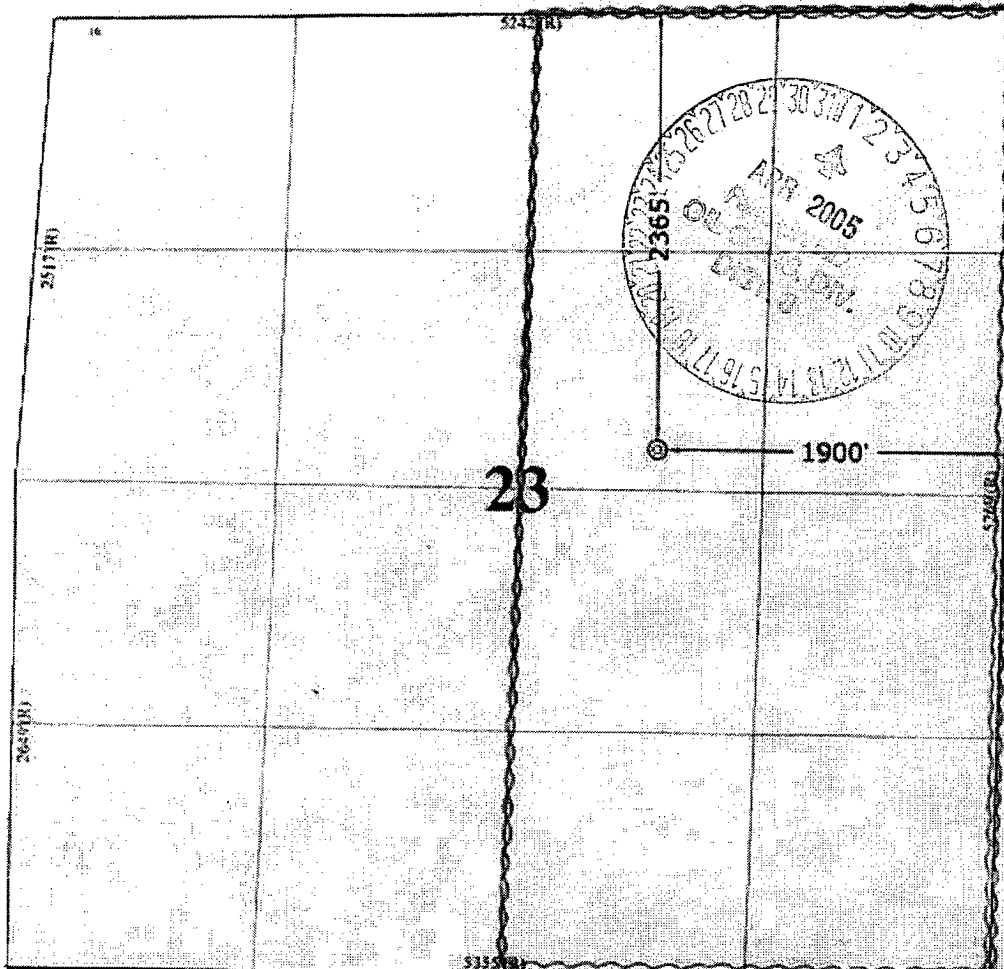
UL or Lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
<b>G</b>	<b>23</b>	<b>31 N</b>	<b>11 W</b>		<b>2365</b>	<b>NORTH</b>	<b>1900</b>	<b>EAST</b>	<b>SAN JUAN</b>

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

Dedicated Acres <b>320</b>	Joint or Infill	Consolidation Code	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



12 OPERATOR CERTIFICATION

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

*Cherry Hava*  
Signature  
**Cherry Hava**  
Printed Name  
**Regulatory Analyst**  
Title  
**12-3-04**  
Date

13 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.

**September 8, 2004**  
Date of Survey  
Signature and Seal of Professional Surveyor

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

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

Form C-103  
March 4, 2004

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

WELL API NO.	
New Well	
5. Indicate Type of Lease STATE <input type="checkbox"/> FEE <input type="checkbox"/>	
6. State Oil & Gas Lease No.	
7. Lease Name or Unit Agreement Name Nye LS (Federal well NNSF 079511A)	
8. Well Number 1 N	
9. OGRID Number 000778	
10. Pool name or Wildcat Basin Dk & Blanco MV	

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 : 2365 feet from the North line and 1900 feet from the EAST line  
Section 23 Township 31N Range 11W NMPM SAN JUAN County

11. Elevation (Show whether DR, RKB, RT, GR, etc.)  
5829' GR

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 23 Twp 31N Rng 11W Pit type Drilling Depth to Groundwater >100' Distance from nearest fresh water well <1000'  
Distance from nearest surface water <1200' Below-grade Tank Location UL G Sect 23 Twp 31N Rng 11W ;  
2315' feet from the North line and 1885 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. Drilling 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 12/14/04

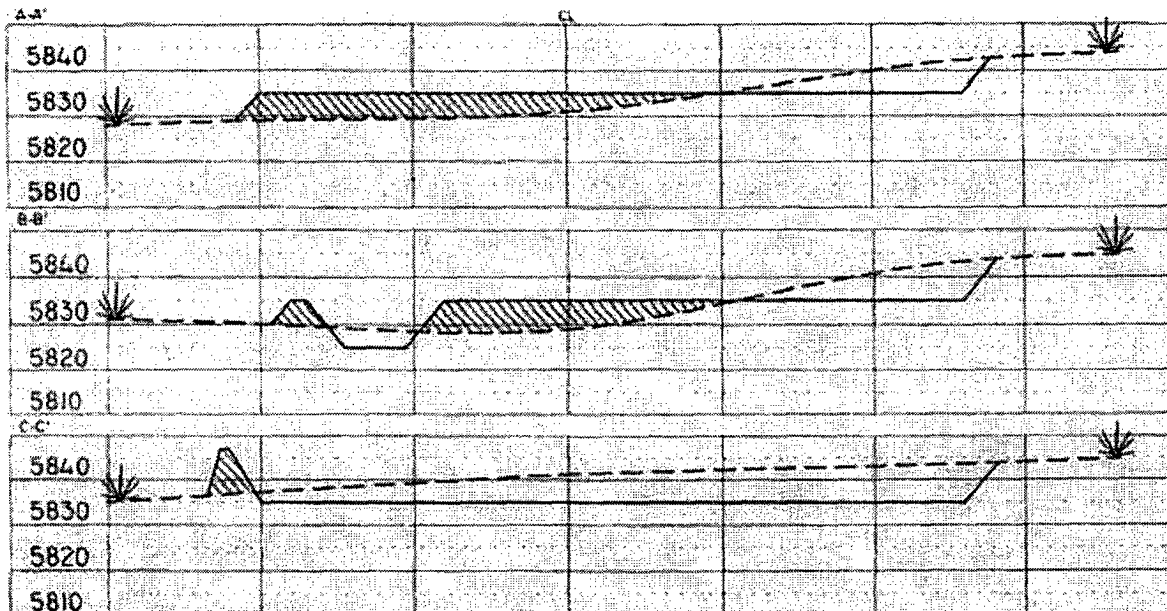
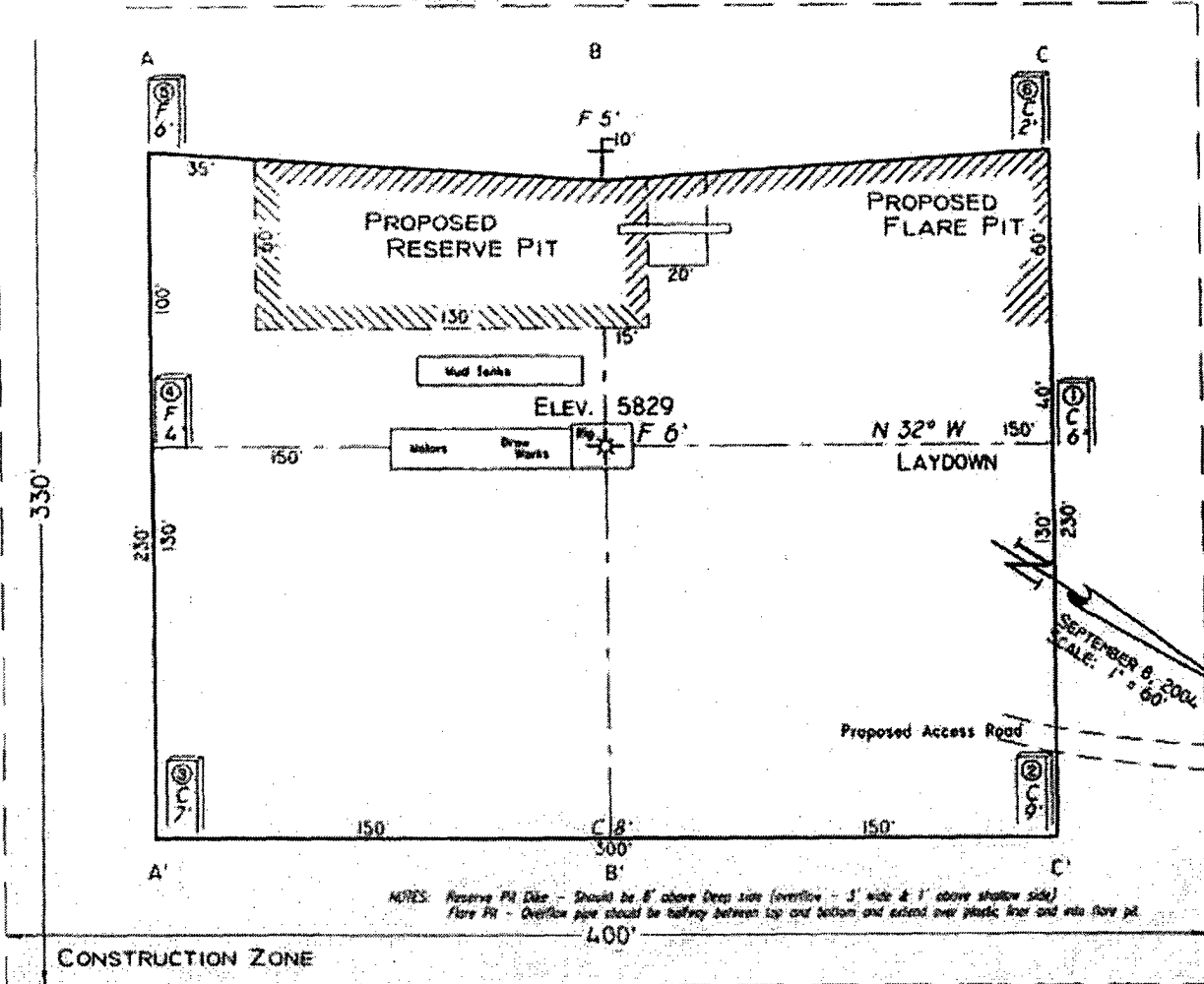
Type or print name Cherry Hlava E-mail address: \_\_\_\_\_ Telephone No. 281-366-4081

(This space for State use)

APPROVED BY [Signature] TITLE DEPUTY OIL & GAS INSPECTOR, DIST. #1 DATE APR - 1 2005  
Conditions of approval, if any: \_\_\_\_\_

**PAD LAYOUT PLAN & PROFILE**  
**BP AMERICA PRODUCTION COMPANY**  
 Nyc LS # 1N  
 2365' F/NL 1900' F/EL  
 SEC. 23, T31N, R11W, N.M.P.M.  
 SAN JUAN COUNTY, NEW MEXICO

Lat: 36°53'05"  
 Long: 107°57'27"



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 AMERICA PRODUCTION COMPANY

## DRILLING AND COMPLETION PROGRAM

10/8/2004

<b>Lease:</b>	Nye LS	<b>Well Name &amp; No.</b>	Nye LS #1N	<b>Field:</b>	Blanco Mesaverde/Basin Dakota
<b>County:</b>	San Juan, New Mexico	<b>Surface Location:</b>	23-31N-11W:2365' FNL, 1900' FEL		
<b>Minerals:</b>	BLM	<b>Surface:</b>	Lat: 36.8845776 Long:-107.9570025		
<b>Rlg :</b>	Aztec 184	<b>BH Location:</b>	same		
<b>OBJECTIVE:</b>	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:	5829	Estimated KB:	5,843.0'
Rotary	0 - TD	Marker		SUBSEA	TVD
LOG PROGRAM					APPROX. MD
Type	Depth Interval	Ojo Alamo	4,548'	1,295'	1,295'
Single Run		Kirtland	4,517'	1,326'	1,326'
		Fruitland	* 3,964'	1,879'	1,879'
		Fruitland Coal	* 3,729'	2,114'	2,114'
		Pictured Cliffs	* 3,353'	2,490'	2,490'
		Lewis	* 3,149'	2,694'	2,694'
Cased Hole	TD to 7" shoe	Cliff House	# 1,879'	3,964'	3,964'
TDT- CBL		Menefee	# 1,558'	4,285'	4,285'
		Point Lookout	# 1,119'	4,724'	4,724'
		Mancos	748'	5,095'	5,095'
		Greenhorn	-900'	6,743'	6,743'
	Identify 4 1/2" cement top	Graneros (bent,mkr)	-951'	6,794'	6,794'
		Two Wells	# -1,006'	6,849'	6,849'
		Paguate	# -1,090'	6,933'	6,933'
		Cubero	# -1,129'	6,972'	6,972'
		L. Cubero	# -1,169'	7,012'	7,012'
		Encinal Cyn	# -1,224'	7,067'	7,067'
		TOTAL DEPTH:	-1,257'	7,100'	7,100'
REMARKS:		# Probable completion interval		* Possible Pay	
- Please report any flares (magnitude & duration).		DRILL CUTTING SAMPLES		DRILLING TIME	
		FREQUENCY	DEPTH	FREQUENCY	DEPTH
		30'/10' intervals	2,794' to TD	Geolograph	0 - TD

<b>SPECIAL TESTS</b>	<b>DRILL CUTTING SAMPLES</b>	<b>DRILLING TIME</b>
TYPE	FREQUENCY	DEPTH
None	30'/10' intervals	2,794' to TD
<b>REMARKS:</b>	Geolograph	0 - TD

<b>MUD PROGRAM:</b>					
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.		
2,794'	Water/LSND	8.4 - 9.0		<9	Sweep hole while whilst water drilling, LCM onsite
7,100'	Air	1	1000 cfm for hammer		Volume sufficient to maintain a stable and clean wellbore

<b>CASING PROGRAM:</b>							
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	2,794'	8-3/4"	7"	J/K-55 ST&C	20#	100' below LWIS	cmt to surface
Production	7,100'	6-1/4"	4-1/2"	J-55	11.6#	DKOT	150' inside Intermediate - TOC survey required

<b>CORING PROGRAM:</b>							
None							

<b>COMPLETION PROGRAM:</b>							
Rigless, 2-3 Stage Limited Entry Hydraulic Frac, FMC Unihead							

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

<b>BOP Pressure Testing Requirements</b>			
Formation	Depth	Anticipated bottom hole pressure	Max anticipated surface pressure**
Cliffhouse	3,964'	500	0
Point Lookout	4,724'	600	0
Dakota	6,849'	2600	1093.22

Requested BOP Pressure Test Exception = 1500 psi		** Note: Determined using the following formula: ABHP – (.22*TVD) = ASP			
Form 46 Reviewed by:	Logging program reviewed by:				
PREPARED BY:	APPROVED:		DATE:	APPROVED:	DATE:
HGJ	JMP			8-Oct-04	
Form 46 7-84bw	For Drilling Dept.			For Production Dept.	

# Cementing Program

Well Name: Nye LS #1N  
 Location: 23-31N-11W:2365' FNL, 1900' FEL  
 County: San Juan  
 State: New Mexico

Well Flac  
 Formation: Blanco Mesaverde/Basin Dakota  
 KB Elev (est) 5843  
 GL Elev. (est) 5829

## 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	2794	8.75	7	LT&C	Surface	NA	
Production -	7100	6.25	4.5	ST&C	2694	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	3370	1400	254	0.0787	8.845
Intermediate	7	20	K-55	3740	2270	234	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	<u>Recommended Mud Properties Prio Cementing:</u>	
			PV	<20
			YP	<10
			Fluid Loss	<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	120	183
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	154 sx Class C Cement		195 cuft
TOC@Surface	+ 2% CaCl <sub>2</sub> (accelerator)		
			0.4887 cuft/ft OH

Slurry Properties:	Density (lb/gal)	Yield (ft <sup>3</sup> /sk)	Water (gal/sk)
Slurry 1	15.2	1.27	5.8

# Cementing Program

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		223 sx Class "G" Cement	586 cuft
Slurry 1		+ 3% D79 extender	
TOC@Surface		+ 1/4 #/sk. Cellophane Flake	
		+ 5 lb/sk Gilsonite	
Tail		59 sx 50/50 Class "G"/Poz	75 cuft
Slurry 2		+ 2% gel (extender)	
500 ft fill		+ 1/4 #/sk. Cellophane Flake	0.1503 cuft/ft OH
		+ 2% CaCl <sub>2</sub> (accelerator)	0.1746 cuft/ft csg ann
		+ 5 lb/sk Gilsonite	

Slurry Properties:	Density	Yield	Water
	(lb/gal)	(ft <sup>3</sup> /sk)	(gal/sk)
Slurry 1	11.4	2.63	15.8
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  
 Centralizers one in middle of first joint, then every third collar  
 1 Top Rubber Plug  
 1 Thread Lock Compound

## Production:

Fresh Water	10 bbl	CW100	
Lead		169 LiteCrete D961 / D124 / D154	427 cuft
Slurry 1		+ 0.03 gps D47 antifoam	
TOC, 150' above 7" shoe		+ 0.5% D112 fluid loss	
		+ 0.11% D65 TIC	
Tail		150 sx 50/50 Class "G"/Poz	216 cuft
Slurry 2		+ 5% D20 gel (extender)	
1505 ft fill		+ 0.1% D46 antifoam	
		+ 1/4 #/sk. Cellophane Flake	
		+ 0.25% D167 Fluid Loss	
		+ 5 lb/sk Gilsonite	

## Cementing Program

+0.1% d800, retarder  
+0.15% D65, dispersant

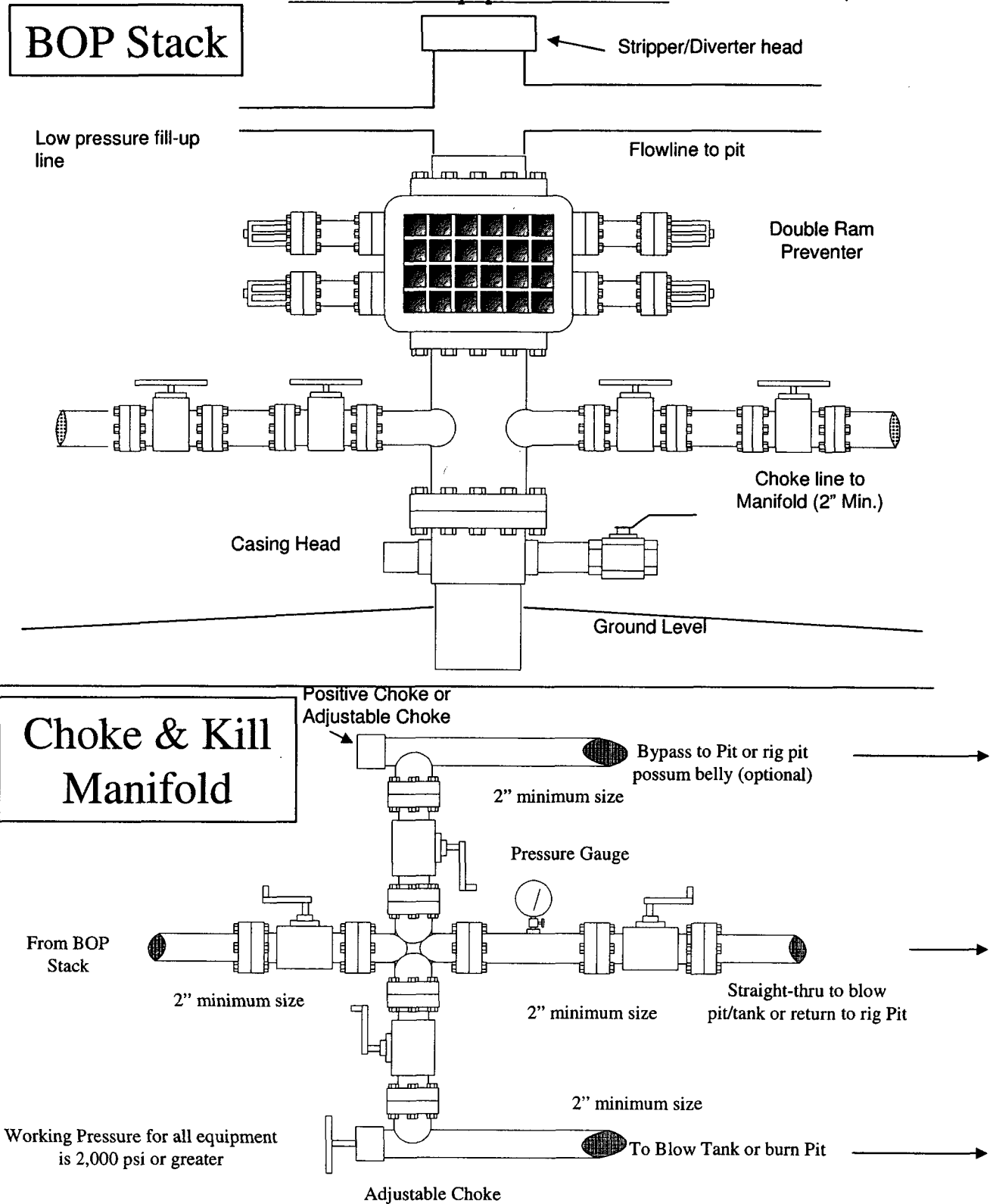
Slurry Properties:	Density	Yield	Water	0.1026 cuft/ft OH
	(lb/gal)	(ft <sup>3</sup> /sk)	(gal/sk)	0.1169 cuft/ft csg ann
Slurry 1	9.5	2.52	6.38	
Slurry 2	13	1.44	6.5	Top of Mancos
				5095

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, as needed
- 1 Top Rubber Plug
- 1 Thread Lock Compound



**BP America Production Company**  
Well Control Equipment Schematic



Additional Operator Remarks  
Nye LS 1N  
APD

BP America Production Company respectfully requests permission to drill the subject well to a total depth of approximately 7100'. Complete in the Basin Dakota Pool, isolate the Dakota; complete into the Blanco Mesaverde, establish a production rate; drill out the bridge plug and commingle production downhole.

Application for Downhole Commingling authority (NMOCD order R-11363) will be submitted to all appropriate for approval after Permit to Drill has been approved.

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.

**SUPPLEMENTAL TO SURFACE USE PLAN**

**New Facilities:**

A 4.5" diameter buried steel pipeline that is +/- 300 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 Field Services.

APD/ROW

**SAN JUAN BASIN  
Dakota Formation  
Pressure Control Equipment**

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**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 H<sub>2</sub>S 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.