

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. NMSF - 080597	
1b. Type of Well: <input type="checkbox"/> Oil Well <input checked="" type="checkbox"/> Gas Well <input type="checkbox"/> Other <input checked="" type="checkbox"/> Single Zone <input type="checkbox"/> Multiple Zone		6. If Indian, Allottee or Tribe Name 50	
2. Name of Operator BP AMERICA PRODUCTION COMPANY		7. If Unit or CA Agreement, Name and No.	
Contact: MARY CORLEY E-Mail: corley@m@bp.com		8. Lease Name and Well No. GARTNER A 2B	
3a. Address P.O. BOX 3092 HOUSTON, TX 77253		9. API Well No. 30-045-31006	
3b. Phone No. (include area code) Ph: 281.366.4491 Fx: 281.366.0700		10. Field and Pool, or Exploratory BLANCO MESAVERDE	
4. Location of Well (Report location clearly and in accordance with any State requirements.)* At surface SENE Lot H 2340FNL 750FEL 36.47000 N Lat, 107.40500 W Lon At proposed prod. zone		11. Sec., T., R., M., or Blk. and Survey or Area H Sec 28 T30N R8W Mer NMP	
14. Distance in miles and direction from nearest town or post office* 21 MILES FROM BLOOMFIELD		12. County or Parish SAN JUAN	
15. Distance from proposed location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) 750		13. State NM	
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.		20. BLM/BIA Bond No. on file	
19. Proposed Depth 5617 MD		21. Elevations (Show whether DF, KB, RT, GL, etc.) 6182 GL	
22. Approximate date work will start 03/15/2002		23. Estimated duration 7 DAYS	
24. Attachments This action is subject to technical and procedural review pursuant to 43 CFR 3165.3 and appeal pursuant to 43 CFR 3165.4.		DRILLING OPERATIONS AUTHORIZED ARE SUBJECT TO COMPLIANCE WITH ATTACHED "GENERAL REQUIREMENTS"	
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.		4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above).	
2. A Drilling Plan.		5. Operator certification	
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).		6. Such other site specific information and/or plans as may be required by the authorized officer.	
25. Signature (Electronic Submission) Mary Corley		Name (Printed/Typed) MARY CORLEY	
Title AUTHORIZED REPRESENTATIVE		Date 02/20/2002	
Approved by (Signature) David J. Mankiewicz		Name (Printed/Typed)	
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 #10426 verified by the BLM Well Information System
For BP AMERICA PRODUCTION COMPANY, sent to the Farmington

NMOCB

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

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 30045-31006		² Pool Code 72319		³ Pool Name BLANCO MESA VERDE	
⁴ Property Code 000 589		⁵ Property Name GARTNER A			⁶ Well Number # 2B
⁷ OGRID No. 000 778		⁸ Operator Name BP AMERICA PRODUCTION COMPANY			⁹ Elevation 6182

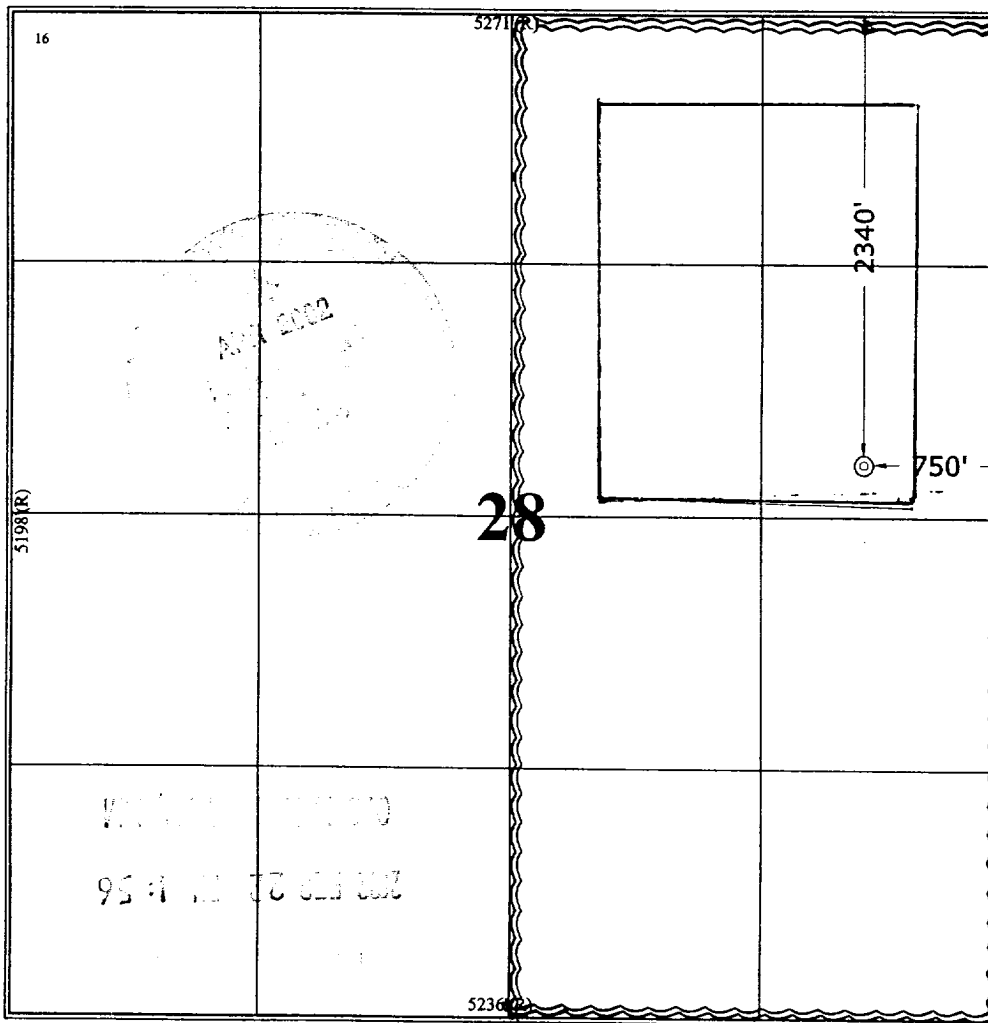
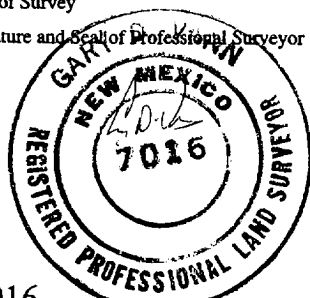
¹⁰ Surface Location

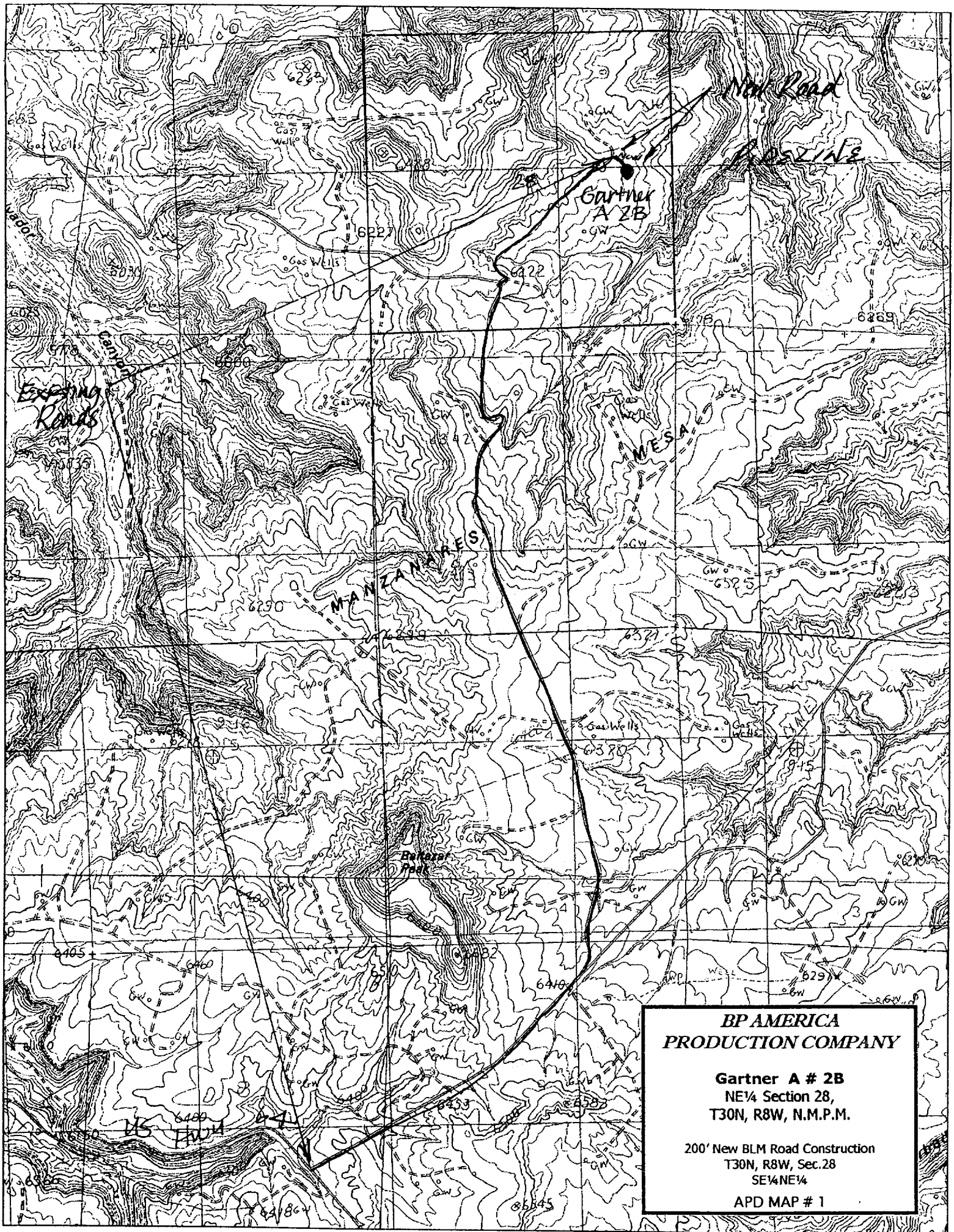
UL or Lot No. H	Section 28	Township 30 N	Range 8 W	Lot Idn	Feet from the 2340	North/South line NORTH	Feet from the 750	East/West line EAST	County SAN JUAN
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¹¹ Bottom Hole Location If Different From Surface

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>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>Mary Corley</i> Signature Mary Corley Printed Name Sr Regulatory Analyst Title 02.20.2002 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 29, 2002 Date of Survey Signature and Seal of Professional Surveyor  7016 Certificate Number</p>



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

Prospect Name: Gartner A
Lease: Gartner A
County: San Juan
State: New Mexico
Date: February 20, 2002

Well No: 2B
Surface Location: 28-30N-8W, 2340 FNL, 750 FEL
Field: Blanco Mesaverde

OBJECTIVE: Drill 50' below the base of the Mancos Shale, set 4 1/2" production casing, Stimulate LS, CH, MF and PL intervals

METHOD OF DRILLING

TYPE OF TOOLS **DEPTH OF DRILLING**
 Rotary 0 - TD

LOG PROGRAM

TYPE **DEPTH INTERVAL**
OPEN HOLE
 GR-Induction
 Density/Neutron

CASED HOLE
 GR-CCL-TDT TDT - TD to 7" shoe
 CBL Identify 4 1/2" cement top

APPROXIMATE DEPTHS OF GEOLOGICAL MARKER

Estimated GL: 6182 Estimated KB: 6196

MARKER		SUBSEA	MEAS. DEPTH
Ojo Alamo		4388	1808
Fruitland Coal	*	3613	2583
Pictured Cliffs	*	3235	2961
Lewis Shale	#	3099	3097
Cliff House	#	1610	4586
Menefee Shale	#	1404	4792
Point Lookout	#	1038	5158
Mancos		629	5567
Greenhorn			
Bentonite Marker			
Two Wells	#		
Dakota MB	#		
Burro Canyon	*		
Morrison	*		
TOTAL DEPTH		579	5617

REMARKS:

- Please report any flares (magnitude & duration).

Probable completion interval * Possible Pay

SPECIAL TESTS

TYPE **DRILL CUTTING SAMPLES** **DRILLING TIME**
 None **FREQUENCY** **DEPTH** **FREQUENCY** **DEPTH**
 10 feet Production hole 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 - 2533 (1)	Water/LSND	8.6-9.2		<6	
2533 - 5617	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#	12.25"	1 —
Intermediate 1	2533	7"	J/K-55 ST&C	20#	8.75"	1,2 —
Production	5617	4 1/2"	J-55	10.5#	6.25"	3 —

REMARKS:

- (1) Circulate Cement to Surface
- (2) Set casing 50' above Fruitland Coal
- (3) Bring cement 100' above 7" shoe

CORING PROGRAM:

None

COMPLETION PROGRAM:

Rigless, 3-4 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:

HGJ/MNP

Form 46 12-00 MNP

APPROVED:

DATE:

8th February 2002
 Version 1.0

**BP AMERICA PRODUCTION COMPANY
BOP Pressure Testing Requirements**

Well Name: Gartner A
County: San Juan

2B
State: New Mexico

Formation	TVD	Anticipated Bottom Hole Pressure	Maximum Anticipated Surface Pressure **
Ojo Alamo	1808		
Fruitland Coal	2583		
PC	2961		
Lewis Shale	3097		
Cliff House	4586	500	0
Menefee Shale	4792		
Point Lookout	5158	600	0
Mancos	5567		

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

Requested BOP Pressure Test Exception: 750 psi

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

Background

The objective Mesaverde 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. No abnormal temperature, pressure, or Hydrogen Sulfide gas is 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 750 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 at the appropriate intervals

Cementing Program

1 Stop Ring
1 Thread Lock Compound

Intermediate:

Fresh Water	20 bbl	fresh water	
Lead	230	Class "G" Cement	596 cuft
Slurry 1		+ 3% D79 extender	
TOC@Surface		+1/4 #/sk. Cellophane Flake	
		+ 0.1% D46 antifoam	
		50/50 Class "G"/Poz	
Tail	60	+ 2% gel (extender)	75 cuft
Slurry 2		0.1% D46 antifoam	
500 ft fill		+1/4 #/sk. Cellophane Flake	0.1503 cuft/ft OH
		+ 2% S1 Calcium Chloride	0.1746 cuft/ft csg ann
			80 % excess

Slurry Properties:	Density (lb/gal)	Yield (ft ³ /sk)	Water (gal/sk)
Slurry 1	11.7	2.61	17.77
Slurry 2	13.5	1.27	5.72

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

1 Float Shoe
1 Float Collar
1 Stop Ring
Centralizers, one every other joint to base of Ojo
2 Turbolizers across Ojo
Centralizers, one every 4th joint from Ojo to base of surface casing
1 Top Rubber Plug
1 Thread Lock Compound

Production:

Fresh Water	10 bbl	CW100		
Slurry		190 LiteCrete D961 / D124 / D154		
		+ 0.03 gps D47 antifoam		459 cuft
		+ 0.5% D112 fluid loss		
TOC@Liner Top		+ 0.11% D65 TIC		
				0.1026 cuft/ft OH
Slurry Properties:	Density	Yield	Water	40 % excess
	(lb/gal)	(ft3/sk)	(gal/sk)	0.1169 cuft/ft csg ann
Slurry	9.5	2.52	6.38	

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 in mud drilled holes, none in air drilled holes
1 Top Rubber Plug
1 Thread Lock Compound

Cementing Program

Well Name: Gartner A2B
 Location: 28-30N-8W, 2340 FNL, 750 FEL
 County: San Juan
 State: New Mexico

Field: Blanco Mesaverde / Basin Dakota
 API No.
 Well Flac
 Formation: Dakota MesaVerde
 KB Elev (est) 6196
 GL Elev. (est) 6182

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	120	12.25	9.625	ST&C	Surface	NA	
Intermediate	2533	8.75	7	LT&C	Surface	NA	
Production -	5617	6.25	4.5	?	2433	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	Recommended Mud Properties Prio Cementing:	
			PV	<20
			YP	<10
			Fluid Los:	<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	100	40
Excess %, Tail	NA	0	40
BHST (est deg. F)	72	108	154
Time Between Stages, (hr)	NA	NA	NA
Special Instructions	1,6	1,6	2,6

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.	FreshWater	
Slurry 1	70 sx Class G Cement		75 cuft
TOC@Surface	+ 2% CaCl2 (accelerator)		
	0.25 #/sk Cellophane Flake (lost circulation additive)		0.3132 cuft/ft OH
	0.1% D46 antifoam		100 % excess
Slurry Properties:	Density (lb/gal)	Yield (ft3/sk)	Water (gal/sk)
Slurry 1	15.8	1.16	4.95

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