

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

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

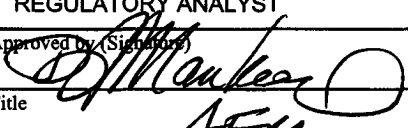
APPLICATION FOR PERMIT TO DRILL OR REENTER

1a. Type of Work: <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER		5. Lease Serial No. SF - 078195
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 CO		7. If Unit or CA Agreement, Name and No.
3a. Address HOUSTON, TX 77253-3092		8. Lease Name and Well No. SELLERS FEDERAL LS 2 N
3b. Phone No. (include area code) Ph: 281.366.4081		9. API Well No. 30-045-32927
4. Location of Well (Report location clearly and in accordance with any State requirements.)* At surface NESE Lot 13 2170FSL 660FEL 36.78167 N Lat, 107.91861 W Lon At proposed prod. zone NESE Lot 13 2170FSL 660FEL 36.78167 N Lat, 107.91861 W Lon		10. Field and Pool, or Exploratory BASIN DK & BLANCO MV
14. Distance in miles and direction from nearest town or post office* 6.5 MILES S/E FROM AZTEC, NM		11. Sec., T., R., M., or Blk. and Survey or Area I Sec 30 T30N R10W Mer NMP
15. Distance from proposed location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) 660		12. County or Parish SAN JUAN
16. No. of Acres in Lease 310.68		13. State NM
17. Spacing Unit dedicated to this well 310.68 E/p		
18. Distance from proposed location to nearest well, drilling, completed, applied for, on this lease, ft. 1400		20. BLM/BIA Bond No. on file WY2924
19. Proposed Depth 7152 MD 7152 TVD		21. Estimated duration 7
21. Elevations (Show whether DF, KB, RT, GL, etc.) 6068 GL		
22. Approximate date work will start 05/15/2005		

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 03/03/2005
Title REGULATORY ANALYST		
Approved by (Signature) 	Name (Printed/Typed) AFM	Date 6-1-05
Title 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 #54684 verified by the BLM Well Information System
For BP AMERICA PRODUCTION CO, sent to the Farmington

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

NMOC

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 30-045-32927		² Pool Code 71599-72319		³ Pool Name Basin Dakota & Blanco Mesaverde	
⁴ Property Code 013517		⁵ Property Name Sellers Federal LS			⁶ Well Number # 2N
⁷ OGRID No. 000778		⁸ Operator Name BP AMERICA PRODUCTION COMPANY			⁹ Elevation 6068

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
I (Lot 13)	30	30 N	10 W		2170	SOUTH	660	EAST	SAN JUAN

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
¹² Dedicated Acres 310.68		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

¹⁶ OPERATOR CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief. Signature: <i>Cherry Hlava</i> Printed Name: <i>Cherry Hlava</i> Title: <i>Regulatory Analyst</i> Date: <i>3-1-05</i>			
¹⁷ 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. Date of Survey: <i>March 8, 2004</i> Signature and Seal of Professional Surveyor: <i>[Signature]</i> Certificate Number: <i>7016</i>			

30

660'

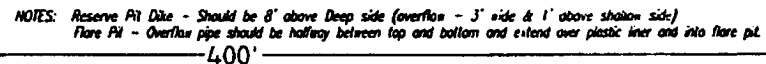
2170'

2607(R)

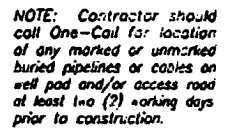
(R) - BLM Record

SEC. 30, T30N, R10W, N.M.P.M.
SAN JUAN COUNTY, NEW MEXICO

Lat: 36°46'54"
Long: 107°55'07"



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



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 side slopes and drainage. 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											
2/25/2005											
Lease:	Sellers LS		Well Name & No.	Sellers Federal LS #2N		Field:	Basin Dakota/Blanco Mesaverde				
County:	San Juan, New Mexico		Surface Location:	30-30N-10W: 2170' FSL, 660' FEL							
Minerals:	Federal		Surface:	Lat: 36.7815270 deg; Long: -107.9181073 deg							
Rig :	Aztec 184		BH Location:	same							
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: 6068		Estimated KB: 6,082.0'					
Rotary		0 - TD		Marker		SUBSEA		TVD	APPROX. MD		
LOG PROGRAM											
Type		Depth Interval				4,926'		1,156'	1,156'		
Single Run				Kirtland		4,768'		1,314'	1,314'		
				Fruitland		4,151'		1,931'	1,931'		
				Fruitland Coal		3,847'		2,235'	2,235'		
				Pictured Cliffs		3,573'		2,509'	2,509'		
				Lewis		3,123'		2,959'	2,959'		
Cased Hole				Cliff House		2,183'		3,899'	3,899'		
TDT- CBL		TD to 7" shoe		Menefee		1,770'		4,312'	4,312'		
		Identify 4 1/2" cement top		Point Lookout		1,267'		4,815'	4,815'		
REMARKS: - Please report any flares (magnitude & duration).				Mancos		874'		5,208'	5,208'		
				Greenhorn		-710'		6,792'	6,792'		
				Graneros (bent,mkr)		-770'		6,852'	6,852'		
				Two Wells		# -820'		6,902'	6,902'		
				Paguete		# -894'		6,976'	6,976'		
				Cubero		# -949'		7,031'	7,031'		
				L. Cubero		# -978'		7,060'	7,060'		
				Encinal Cyn		# -1,009'		7,091'	7,091'		
				TOTAL DEPTH:				-1,070'	7,152'	7,152'	
								# Probable completion interval			* Possible Pay
SPECIAL TESTS				DRILL CUTTING SAMPLES			DRILLING TIME				
TYPE				FREQUENCY		DEPTH		FREQUENCY		DEPTH	
None				30'/10' intervals		3,059' to TD		Geolograph		0 - TD	
REMARKS:											
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.								
3,059'	Water/LSND	8.4 - 9.0			<9 Sweep hole while whilst water drilling, LCM onsite						
7,152'	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	3,059'	8-3/4"	7"	J/K-55 ST&C	20#	100' below LWIS	cmt to surface				
Production	7,152'	6-1/4"	4-1/2"	J-55	11.6#	DKOT	150' inside Intermediate - TOC survey required				
CORING PROGRAM:											
None											
COMPLETION PROGRAM:											
Rigless, 2-3 Stage Limited Entry Hydraulic Frac, FMC Unihead											
GENERAL REMARKS:											
Notify BLM/NMOCD 24 hours prior to Spud, BOP testing, and Casing and Cementing.											
BOP Pressure Testing Requirements											
Formation	Depth	Anticipated bottom hole pressure				Max anticipated surface pressure**					
Cliffhouse	3,899'	500				0					
Point Lookout	4,815'	600				0					
Dakota	6,902'	2600				1081.56					
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				25-Feb-05							
Form 46 7-84bw		For Drilling Dept.				For Production Dept.					

Additional Operator Remarks
Sellers Federal LS 2N
APD

BP America Production Company respectfully requests permission to drill the subject well to a total depth of approximately 7152', 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 +/- 1200 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**

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

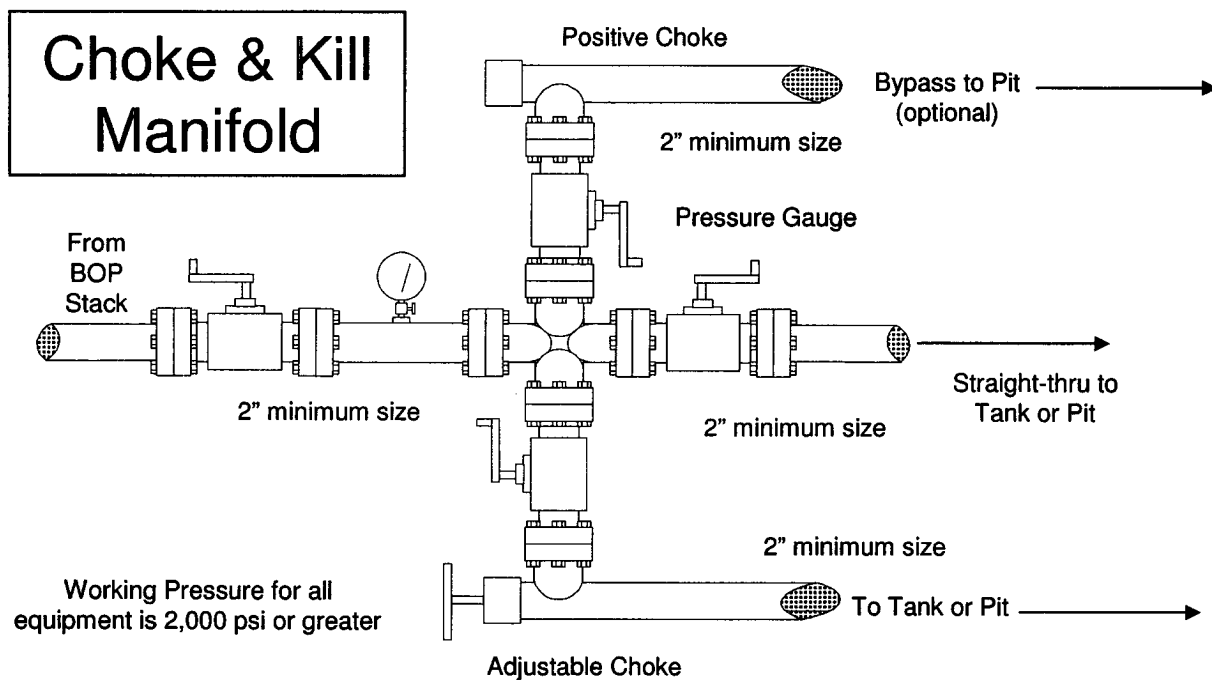
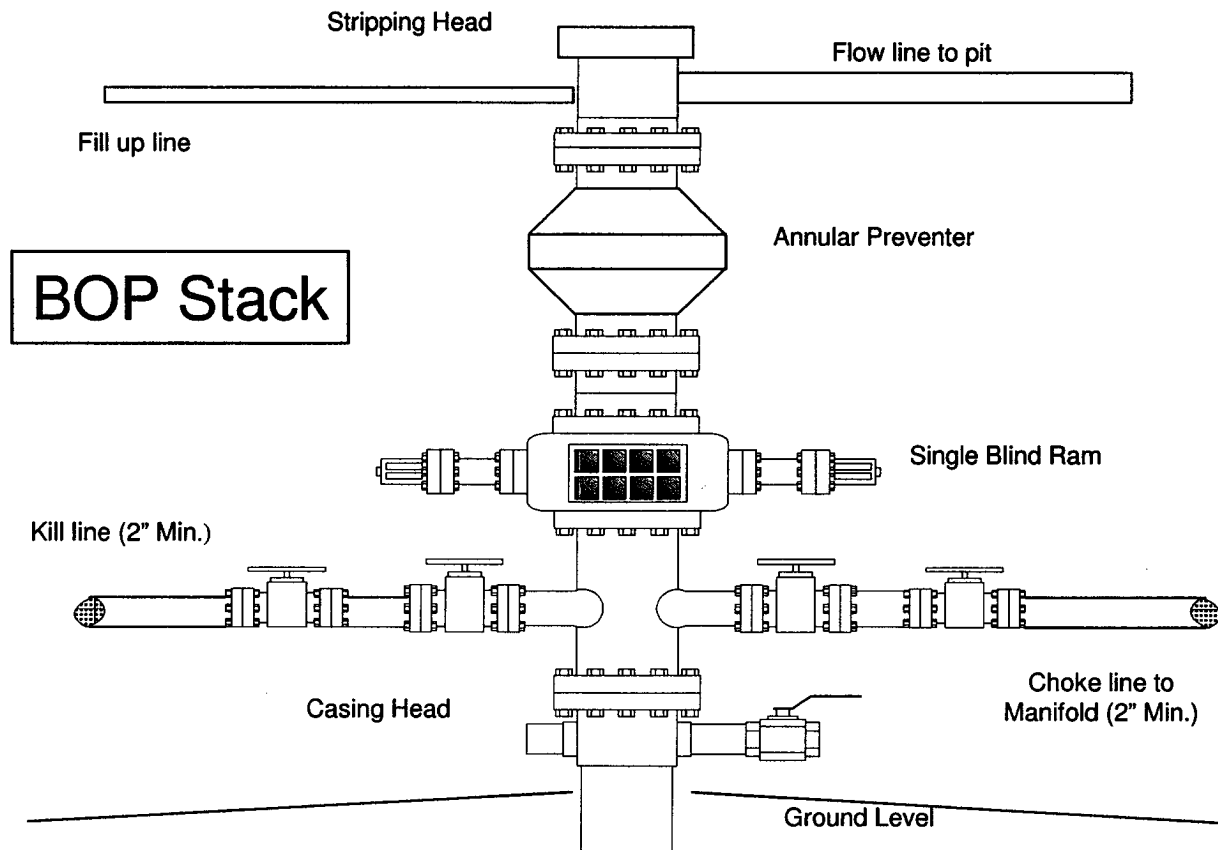
BOP Equipment

Below conductor casing to total depth 11" nominal or 7 1/16", 2000 psi single ram preventer with 3000 psi annular preventer and rotating head.

All ram type and annular preventers as well as 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.

BP American Production Company

Well Control Equipment Schematic



FEDERAL CEMENTING REQUIREMENTS

- 1. All permeable zones containing fresh water and other usable water containing 10,000 PPM or less total dissolved solids will be isolated and protected from contamination by cement circulated in place for the protection of permeable zones per the NTL-FRA 90-1 Section III A.**
 - 2. The hole size will be no smaller than 1 ½" larger diameter than the casing O.D. across all water zones.**
 - 3. An adequate spacer will be pumped ahead of the cement slurry to help prevent mud contamination of the cement.**
 - 4. An adequate number of casing centralizers will be run through usable water zones to ensure that the casing is centralized through these zones. The adequate number of centralizers to use will be determined by API SPEC 10D.**
 - 5. Centralizers will impart a swirling action around the casing and will be used just below and into the base of the lowest usable water zone.**
 - 6. A chronological log will be kept recording the pump and slurry information and will be sent to the BLM with the subsequent sundry.**
-

Cementing Program

Well Name: Sellers Federal LS 2N
 Location: 30-30N-10W, 2170 FSL, 660 FEL
 County: San Juan
 State: New Mexico

Field: Blanco Mesaverde / Basin Dakota
 API No.
 Well Flac
 Formation: Dakota MesaVerde
 KB Elev (est) 6082
 GL Elev. (est) 6068

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	3059	8.75	7	LT&C	Surface	NA	
Production -	7152	6.25	4.5	ST&C	2959	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 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	170 sx Class G Cement		195 cuft
TOC@Surface	+ 3% CaCl ₂ (accelerator)		
	+ 0.25 #/sk Cellophane Flake (lost circulation additive)		0.4887 cuft/ft OH

Slurry Properties:

	Density (lb/gal)	Yield (ft ³ /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
- 1 Stop Ring
- 1 Thread Lock Compound

Intermediate:

Fresh Water	20 bbl	fresh water
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Cementing Program

Lead		250	Class "G" Cement	655 cuft
Slurry 1			+ 3% D79 extender	
TOC@Surface			+ 1/4 #/sk. Cellophane Flake	
			+ 5 lb/sk Gilsonite	
Tail		60	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% CaCl2 (accelerator)	0.1746 cuft/ft csg ann
			+ 5 lb/sk Gilsonite	
Slurry Properties:	Density	Yield	Water	
	(lb/gal)	(ft3/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			
<hr/>				
Production:				
	Fresh Water	10 bbl	CW100	
Lead		180	LiteCrete D961 / D124 / D154	446 cuft
Slurry 1			+ 0.03 gps D47 antifoam	
TOC, 400' above 7" shoe			+ 0.5% D112 fluid loss	
			+ 0.11% D65 TIC	
Tail		150	50/50 Class "G"/Poz	207 cuft
Slurry 2			+ 5% D20 gel (extender)	
	1444 ft fill		+ 0.1% D46 antifoam	
			+ 1/4 #/sk. Cellophane Flake	
			+ 0.25% D167 Fluid Loss	
			+ 5 lb/sk Gilsonite	
			+ 0.1% d800, retarder	
			+ 0.15% D65, dispersant	
				0.1026 cuft/ft OH
Slurry Properties:	Density	Yield	Water	
	(lb/gal)	(ft3/sk)	(gal/sk)	
Slurry 1	9.5	2.52	6.38	
Slurry 2	13	1.44	6.5	
				0.1169 cuft/ft csg ann
				Top of Mancos
				5208
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			