

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

SUNDRY NOTICES AND REPORTS ON WELLS
Do not use this form for proposals to drill or to re-enter an abandoned well. Use form 3160-3 (APD) for such proposals.

FORM APPROVED
OMB NO. 1004-0135
Expires: November 30, 2000

5. Lease Serial No.
NMSF - 078201

6. If Indian, Allottee or Tribe Name

7. If Unit or CA/Agreement, Name and/or No.

SUBMIT IN TRIPLICATE - Other instructions on reverse side.

8. Well Name and No.
FLORANCE O 20B

9. API Well No.
30-045-30570

10. Field and Pool, or Exploratory
BLANCO MESAVERDE

11. County or Parish, and State
SAN JUAN COUNTY, NM

1. Type of Well
☐ Oil Well ☒ Gas Well ☐ Other

2. Name of Operator
BP AMERICA PRODUCTION COMPANY

Contact: MARY CORLEY
E-Mail: corleym1@bp.com

3a. Address
P.O. BOX 3092
HOUSTON, TX 77253

3b. Phone No. (include area code)
Ph: 281.366.4491
Fx: 281.366.0700

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)
Sec 24 T30N R9W SWNE 2560FNL 1880FEL
36.47800 N Lat, 107.43700 W Lon

12. CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION			
☒ Notice of Intent	☐ Acidize	☐ Deepen	☐ Production (Start/Resume)	☐ Water Shut-Off
☐ Subsequent Report	☐ Alter Casing	☐ Fracture Treat	☐ Reclamation	☐ Well Integrity
☐ Final Abandonment Notice	☐ Casing Repair	☐ New Construction	☐ Recomplete	☒ Other
	☐ Change Plans	☐ Plug and Abandon	☐ Temporarily Abandon	Change to Original PD
	☐ Convert to Injection	☐ Plug Back	☐ Water Disposal	

13. Describe Proposed or Completed Operation (clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recompleat horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompleat in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the site is ready for final inspection.)

Application for Permit to Drill for the subject well was submitted on 02/19/2001 and approved by your office on 03/19/2001. Sundry Notice to amend drilling program submitted on 06/11/2001 and approved on 06/15/2001. Well was originally permitted as a Dakota and Mesaverde completion.

It is now our intention to complete the well as a Mesaverde completion only. We submit for your approval the amendments as indicated on the attached drilling, completion and cementing programs. Additionally, we request that the well number be changed from 20M to 20B.

14. I hereby certify that the foregoing is true and correct.

Electronic Submission #10820 verified by the BLM Well Information System
For BP AMERICA PRODUCTION COMPANY, sent to the Farmington

Name (Printed/Typed) MARY CORLEY

Title AUTHORIZED REPRESENTATIVE

Signature

(Electronic Submission)

Date 03/19/2002

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved By

Title

Date

3/22/02

Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Office

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.

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**AMOCO PRODUCTION COMPANY
DRILLING AND COMPLETION PROGRAM**

Prospect Name: Florance O
Lease: Florance O
County: San Juan
State: New Mexico
Date: March 19, 2002

Well No: 20B
Surface Location: 24-30N-9W, 2560 FN., 1880 FEL
Field: Blanco Mesaverde
Bottom Location: 24-30N9W, 2300FNL 1231 FEL

OBJECTIVE: Drill 50' below the base of the Mancos Shale, set 41/2" production liner, Stimulate LS, CH, MF and PL intervals												
METHOD OF DRILLING			APPROXIMATE DEPTHS OF GEOLOGICAL MARKER									
TYPE OF TOOLS Rotary		DEPTH OF DRILLING 0 - TD	Estimated GL: 5803		Estimated KB: 5817							
LOG PROGRAM <table style="width:100%;"> <tr> <td style="width:20%;">TYPE</td> <td style="width:80%;">DEPTH INVERAL</td> </tr> <tr> <td><u>OPEN HOLE</u> none</td> <td></td> </tr> <tr> <td><u>CASED HOLE</u> GR-CCL-TDT CBL</td> <td>TDT – TD to 7" shoe Identify 4 1/2" cement top</td> </tr> </table>			TYPE	DEPTH INVERAL	<u>OPEN HOLE</u> none		<u>CASED HOLE</u> GR-CCL-TDT CBL	TDT – TD to 7" shoe Identify 4 1/2" cement top	MARKER		TVD	MEAS. DEPTH
			TYPE	DEPTH INVERAL								
			<u>OPEN HOLE</u> none									
			<u>CASED HOLE</u> GR-CCL-TDT CBL	TDT – TD to 7" shoe Identify 4 1/2" cement top								
			Ojo Alamo		1255	1302						
			Kirkland		1476	1541						
			Fruitland		1968	2075						
			Fruitland Coal	*	2118	2238						
			Pictured Cliffs	*	2537	2663						
			Lewis Shale	#	2700	2826						
			Cliff House	#	4045	4171						
			Menefee Shale	#	4361	4487						
Point Lookout	#	4758	4884									
Mancos		5150	5276									
REMARKS: - Please report any flares (magnitude & duration).			TOTAL DEPTH		5200							
			# Probable completion interval		* Possible Pay							
SPECIAL TESTS			DRILL CUTTING SAMPLES		DRILLING TIME							
TYPE None			FREQUENCY	DEPTH	FREQUENCY	DEPTH						
			none	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 - 2184 (1)		Water/LSND	8.6-9.2		<6							
2184 - 5326		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	2184	7"	J/K-55 ST&C	20#	8.75"	1,2						
Production Liner	5326	4 1/2"	J-55	10.5#	6.25"	3, 4						
REMARKS:												
(1) Circulate Cement to Surface												
(2) Set casing 50' above the Fruitland Coal												
(3) Bring cement 100' above 7" shoe												
(4) 100' Overlap												
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:		APPROVED:		DATE:								
HGJ/MNP				19 th March 2002								
Form 46 12-00 MNP				Version 1.0								

Amoco Production Company BOP Pressure Testing Requirements

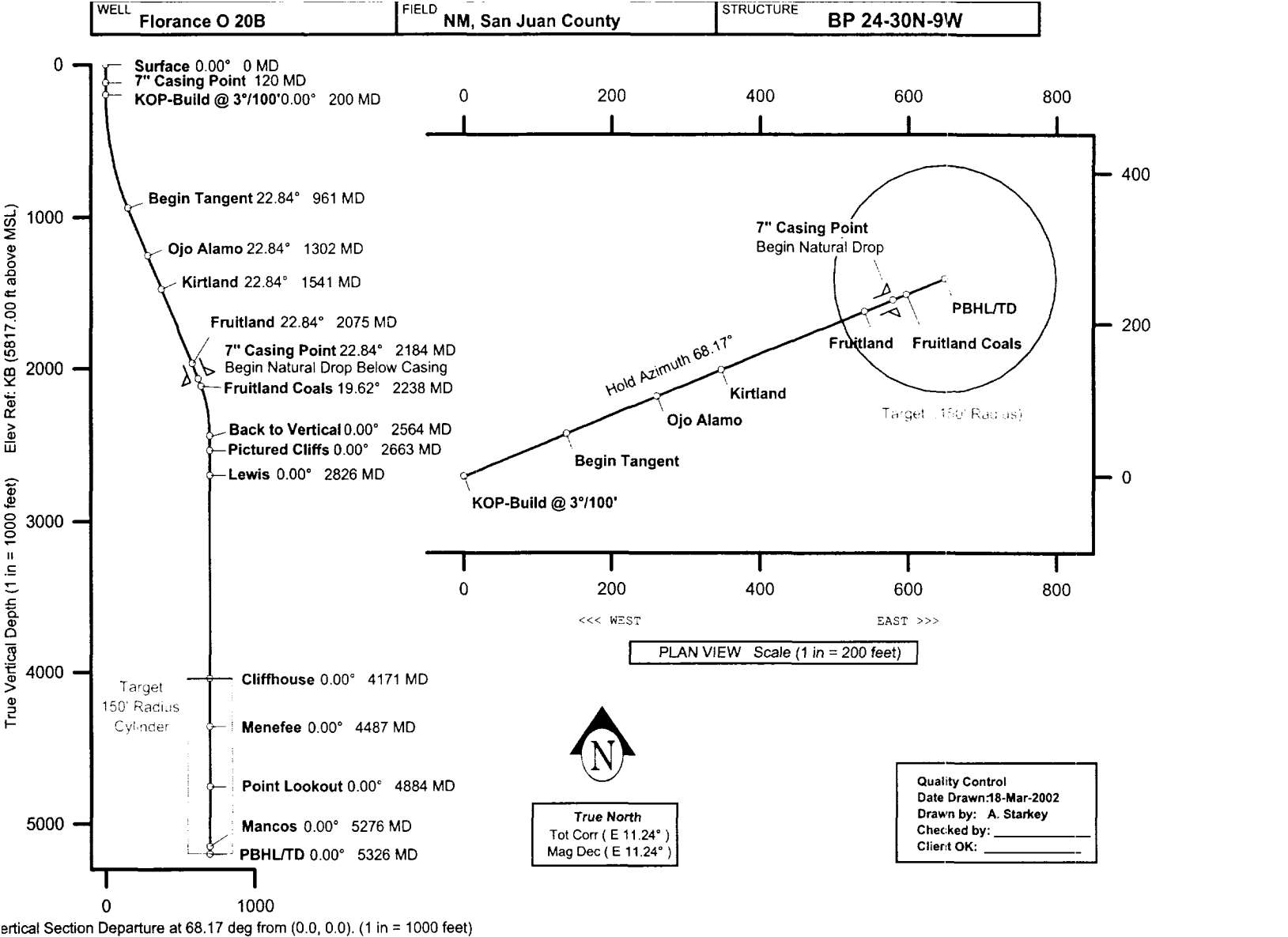
Well Name: Florance O
County: San Juan

20B
State: New Mexico

Formation	TVD	Anticipated Bottom Hole Pressure	Maximum Anticipated Surface Pressure **
Ojo Alamo	1255		
Kirkland	1476		
Fruitland	1968		
Fruitland Coal	2118		
PC	2537		
Lewis Shale	2700		
Cliff House	4045	500	0
Menefee Shale	4361		
Point Lookout	4758	600	0
Mancos	5150		

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

Requested BOP Pressure Test Exception: 750 psi



Vertical Section Departure at 68.17 deg from (0.0, 0.0). (1 in = 1000 feet)

Surface Location: North:2007835.00 ftUS, East:2561475.60 ftUS NAD83 New Mexico State Planes, Western Zone, US Feet

Target Name	Grid Coord		TVD ft	VSEC ft	Local Coord		Shape	Major Axis
	N(+)/S(-) ftUS	E(+)/W(-) ftUS			N(+)/S(-) ft	E(+)/W(-) ft		
Florance O 20B Cli	2008091.27	2562126.04	4045.00	699.14	260.00	649.00	Circle	300.0
Critical Points	MD	INCL	AZIM	TVD	VSEC	N(+)/S(-)	E(+)/W(-)	DLS
Surface	0.00	0.00	68.17	0.00	0.00	0.00	0.00	0.00
9 5/8" Casing Poi	120.00	0.00	68.17	120.00	0.00	0.00	0.00	0.00
KOP-Build @ 3 deg	200.00	0.00	68.17	200.00	0.00	0.00	0.00	0.00
Begin Tangent	961.37	22.84	68.17	941.36	149.76	55.69	139.02	3.00
Ojo Alamo	1301.69	22.84	68.17	1255.00	281.87	104.82	261.65	0.00
Kirtland	1541.50	22.84	68.17	1476.00	374.95	139.44	348.06	0.00
Fruitland	2075.36	22.84	68.17	1968.00	582.19	216.51	540.43	0.00
7" Casing Point	2183.85	22.84	68.17	2067.98	624.30	232.17	579.52	6.00
Begin Natural Dro	2183.87	22.84	68.17	2068.00	624.31	232.17	579.53	6.00
Fruitland Coals	2237.51	19.62	68.17	2118.00	643.73	239.39	597.56	6.00
Back to Vertical	2564.45	0.00	68.17	2438.59	699.15	260.00	649.00	6.00
Pictured Cliffs	2662.86	0.00	68.17	2537.00	699.15	260.00	649.00	0.00
Lewis	2825.86	0.00	68.17	2700.00	699.15	260.00	649.00	0.00
Cliffhouse	4170.86	0.00	68.17	4045.00	699.15	260.00	649.00	0.00
Menefee	4486.86	0.00	68.17	4361.00	699.15	260.00	649.00	0.00
Point Lookout	4883.86	0.00	68.17	4758.00	699.15	260.00	649.00	0.00
Mancos	5275.86	0.00	68.17	5150.00	699.15	260.00	649.00	0.00
PBHL/TD	5325.86	0.00	68.17	5200.00	699.15	260.00	649.00	0.00

Proposed Well Profile

Report Date: March 18, 2002	Survey / DLS Computation Method: Minimum Curvature / Lubinski
Client: BP	Vertical Section Azimuth: 68.170°
Field: NM, San Juan County	Vertical Section Origin: N 0.000 ft, E 0.000 ft
Structure / Slot: BP 24-30N-9W (Florance O 20B) No Certified Plat	TVD Reference Datum: KB
Well: Florance O 20B	TVD Reference Elevation: 5817.0 ft relative to MSL
Borehole: Original Hole	Sea Bed / Ground Level Elevation: 5803.000 ft relative to MSL
UWI / API#:	Magnetic Declination: 11.242°
Survey Name / Date: Rev1 aas 18-Mar02 / March 18, 2002	Total Field Strength: 51528.425 nT
Tort / AHD / DDI / ERD ratio: 45.682° / 699.15 ft / 4.515 / 0.134	Magnetic Dip: 63.362°
Grid Coordinate System: NAD83 New Mexico State Planes, Western Zone, US Feet	Declination Date: March 18, 2002
Location Lat / Long: N 36 31 0.000, W 108 23 0.001	Magnetic Declination Model: BGGM 2001
Location Grid N/E Y/X: N 2007835.000 ftUS, E 2561475.600 ftUS	North Reference: True North
Grid Convergence Angle: -0.32728780°	Total Corr Mag North -> True North: +11.242°
Grid Scale Factor: 0.99994655	Local Coordinates Referenced To: Well Head

Station ID	MD (ft)	Incl (°)	Azim (°)	TVD (ft)	VSec (ft)	N/S (ft)	E-W (ft)	Closure (ft)	at Azim (°)	DLS (°/100ft)	TF (°)
Surface	0.00	0.00	68.17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	68.2MTF
9 5/8" Casing Point	120.00	0.00	68.17	120.00	0.00	0.00	0.00	0.00	0.00	0.00	68.2MTF
KOP- Build @ 3°/100'	200.00	0.00	68.17	200.00	0.00	0.00	0.00	0.00	0.00	0.00	68.2MTF
	300.00	3.00	68.17	299.95	2.62	0.97	2.43	2.62	68.17	3.00	68.2MTF
	400.00	6.00	68.17	399.63	10.46	3.89	9.71	10.46	68.17	3.00	0.0
	500.00	9.00	68.17	498.77	23.51	8.74	21.83	23.51	68.17	3.00	0.0
	600.00	12.00	68.17	597.08	41.74	15.52	38.74	41.74	68.17	3.00	0.0
	700.00	15.00	68.17	694.31	65.08	24.20	60.41	65.08	68.17	3.00	0.0
	800.00	18.00	68.17	790.18	93.48	34.76	86.77	93.48	68.17	3.00	0.0
	900.00	21.00	68.17	884.43	126.85	47.17	117.75	126.85	68.17	3.00	0.0
Begin Tangent	961.37	22.84	68.17	941.36	149.76	55.69	139.02	149.76	68.17	3.00	0.0
Ojo Alamo	1301.69	22.84	68.17	1255.00	281.87	104.82	261.65	281.87	68.17	0.00	0.0

Kirtland	1541.50	22.84	68.17	1476.00	374.95	139.44	348.06	374.95	68.17	0.00	0.0
Fruitland	2075.36	22.84	68.17	1968.00	582.19	216.51	540.43	582.19	68.17	0.00	0.0
	2183.77	22.84	68.17	2067.91	624.27	232.16	579.49	624.27	68.17	0.00	180.0
7" Casing Point	2183.85	22.84	68.17	2067.98	624.30	232.17	579.52	624.30	68.17	6.00	180.0
Begin Natural Drop	2183.87	22.83	68.17	2068.00	624.31	232.17	579.53	624.31	68.17	6.00	180.0
	2200.00	21.87	68.17	2082.92	630.44	234.45	585.22	630.44	68.17	6.00	180.0
Fruitland Coals	2237.51	19.62	68.17	2118.00	643.73	239.39	597.56	643.73	68.17	6.00	180.0
	2300.00	15.87	68.17	2177.50	662.76	246.47	615.23	662.76	68.17	6.00	180.0
	2400.00	9.87	68.17	2274.95	685.02	254.75	635.89	685.02	68.17	6.00	180.0
	2500.00	3.87	68.17	2374.18	696.97	259.19	646.99	696.97	68.17	6.00	68.2MTF
Back to Vertical	2564.45	0.00	68.17	2438.59	699.15	260.00	649.00	699.15	68.17	6.00	68.2MTF
Pictured Cliffs	2662.86	0.00	68.17	2537.00	699.15	260.00	649.00	699.15	68.17	0.00	68.2MTF
Lewis	2825.86	0.00	68.17	2700.00	699.15	260.00	649.00	699.15	68.17	0.00	68.2MTF
Cliffhouse	4170.86	0.00	68.17	4045.00	699.15	260.00	649.00	699.15	68.17	0.00	68.2MTF
Menefee	4486.86	0.00	68.17	4361.00	699.15	260.00	649.00	699.15	68.17	0.00	68.2MTF
Point Lookout	4883.86	0.00	68.17	4758.00	699.15	260.00	649.00	699.15	68.17	0.00	68.2MTF
Mancos	5275.86	0.00	68.17	5150.00	699.15	260.00	649.00	699.15	68.17	0.00	68.2MTF
PBHL/TD	5325.86	0.00	68.17	5200.00	699.15	260.00	649.00	699.15	68.17	0.00	0.0MTF

Survey Error Model: (No Error Model Selected)

Well Name:	Florance O 20B	Field:	Blanco Mesaverde / Basin Dakota
Location:	24-30N-9W, 2560 FNL, 1880 FWL	API No.	
County:	San Juan	Well Flac	
State:	New Mexico	Formation:	MesaVerde
		KB Elev (est)	5817
		GL Elev. (est)	5803

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	2184	8.75	7	LT&C	Surface	NA	
Production -	5326	6.25	4.5		2084	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 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	110	159
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

Intermediate:

Fresh Water 20 bbl fresh water

Lead		190 sx Class "G" Cement	491 cuft
Slurry 1		+ 3% D79 extender	
TOC@Surface		+1/4 #/sk. Cellophane Flake	
		+ 0.1% D46 antifoam'	
Tail		60 sx 50/50 Class "G"/Poz	75 cuft
Slurry 2		+ 2% gel (extender)	
		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
 Centalizers, 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	468 cuft
	+ 0.03 gps D47 antifoam	
	+ 0.5% D112 fluid loss	
TOC@100' into 7"	+ 0.11% D65 TIC	

Slurry Properties:	Density (lb/gal)	Yield (ft ³ /sk)	Water (gal/sk)	0.1026 cuft/ft OH 40 % excess 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