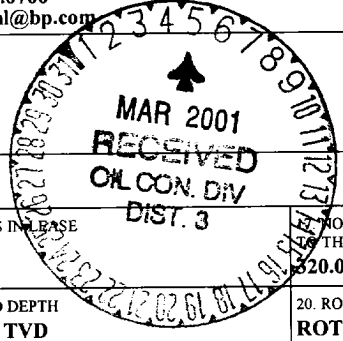


**UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT**

APPLICATION FOR PERMIT TO DRILL OR DEEPEN

a. TYPE OF WORK DRILL <input checked="" type="checkbox"/> - DEEPEEN <input type="checkbox"/>		5. LEASE DESIGNATION AND SERIAL NO. SF - 080005
b. TYPE OF WELL OIL WELL <input type="checkbox"/> GAS WELL <input checked="" type="checkbox"/> - OTHER <input type="checkbox"/> SINGLE ZONE <input type="checkbox"/> MULTIPLE ZONE <input checked="" type="checkbox"/>		6. IF INDIAN, ALLOTTEE OR TRIBE NAME
2. NAME OF OPERATOR AMOCO PRODUCTION COMPANY P.O. BOX 3092 HOUSTON, TX 77079		7. UNIT AGREEMENT NAME
3. ADDRESS AND TELEPHONE NO. MARY CORLEY SUBMITTING CONTACT PHONE 281.366.4491 EXT: FAX: 281.366.0700 EMAIL: corleym@bp.com		8. FARM OR LEASE NAME, WELL NO. FLORANCE U 6M
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements. *) At Surface 1930FSL AND 2400FEL NWSE SEC 23 T30N R9W At proposed prod. zone		9. API WELL NO. 30-045-30407
14. DISTANCE IN MILES AND DIRECTION FROM THE NEAREST TOWN OR POST OFFICE 15 MILES FROM AZTEC, NM		10. FIELD AND POOL, OR WILDCAT BASIN DAKOTA/BLANCO MESAVERDE
15. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drlg. unit line, if any)	16. NO. ACRES IN LEASE 320.00	11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA SECTION 23 T30N R9W MERIDIAN NMP
18. DISTANCE FROM PROPOSED LOCATION* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE FT.	19. PROPOSED DEPTH 7419 MD / TVD	12. COUNTY OR PARISH SAN JUAN
21. ELEVATIONS (Show whether DF, RT, GR, etc.) 5983 GL	20. ROTARY OR CABLE TOOLS ROTARY	13. STATE NM
22. APPROX. DATE WORK WILL START* 04/10/2001		



23. PROPOSED CASING AND CEMENTING PROGRAM				
SIZE OF HOLE	GRADE, SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT

Notice of Staking Submitted 12-07-2000 as Florance U #6E. Please change well number to 6M. Amoco Production Company respectfully request permission to drill the subject well to a total depth of approximately 7419', complete in the Basin Dakota Pool, produce the well for approximately 30 days to establish production rate, add the Blanco Mesaverde Pool and commingle production downhole. Application for downhole commingling authority (NMOCD order R-11363) will be submitted to all appropriate parties for approval after production has been established in the Basin Dakota Pool and prior to completion of and downhole commingling with the Blanco Mesaverde. In support of our application for permit to drill we have attached 8 documents (1 .doc and 7 .pdf files).

procedural review pursuant to 43 CFR 3165.3 and appeal pursuant to 43 CFR 3165.4.

BLM FIELD OFFICE, FARMINGTON, NM
SUBMITTED TO BLM FIELD OFFICE, FARMINGTON, NM
"GENERAL REQUIREMENTS"

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen, give data on present productive zone and proposed productive zone. If proposal is to drill or deepen directionally, give pertinent data on subsurface locations and measured and true vertical depths. Give blowout preventer program, if any.

24. **ELECTRONIC SUBMISSION #2689 VERIFIED BY THE BLM WELL INFORMATION SYSTEM FOR AMOCO PRODUCTION COMPANY SENT TO THE FARMINGTON FIELD OFFICE**

SIGNED MARY CORLEY TITLE SUBMITTING CONTACT DATE 02/19/2001

PERMIT NO. _____ APPROVAL DATE _____

Application approval 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. CONDITIONS OF APPROVAL, IF ANY:

APPROVED BY /s/ Jim Lovato TITLE _____ DATE _____

Basin Dakota Pool

MAR - 2

✓ X

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 30-045-30407		* Pool Code 71599 & 72319	* Pool Name Basin Dakota & Blanco Mesaverde
* Property Code 000553	* Property Name FLORANCE U		* Well Number 6M
* OGRID No. 000778	* Operator Name AMOCO PRODUCTION COMPANY		* Elevation 5983

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
J	23	30 N	9 W		1930	SOUTH	2400	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

* Dedicated Acres **320.00** ** Joint or Infill ** 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

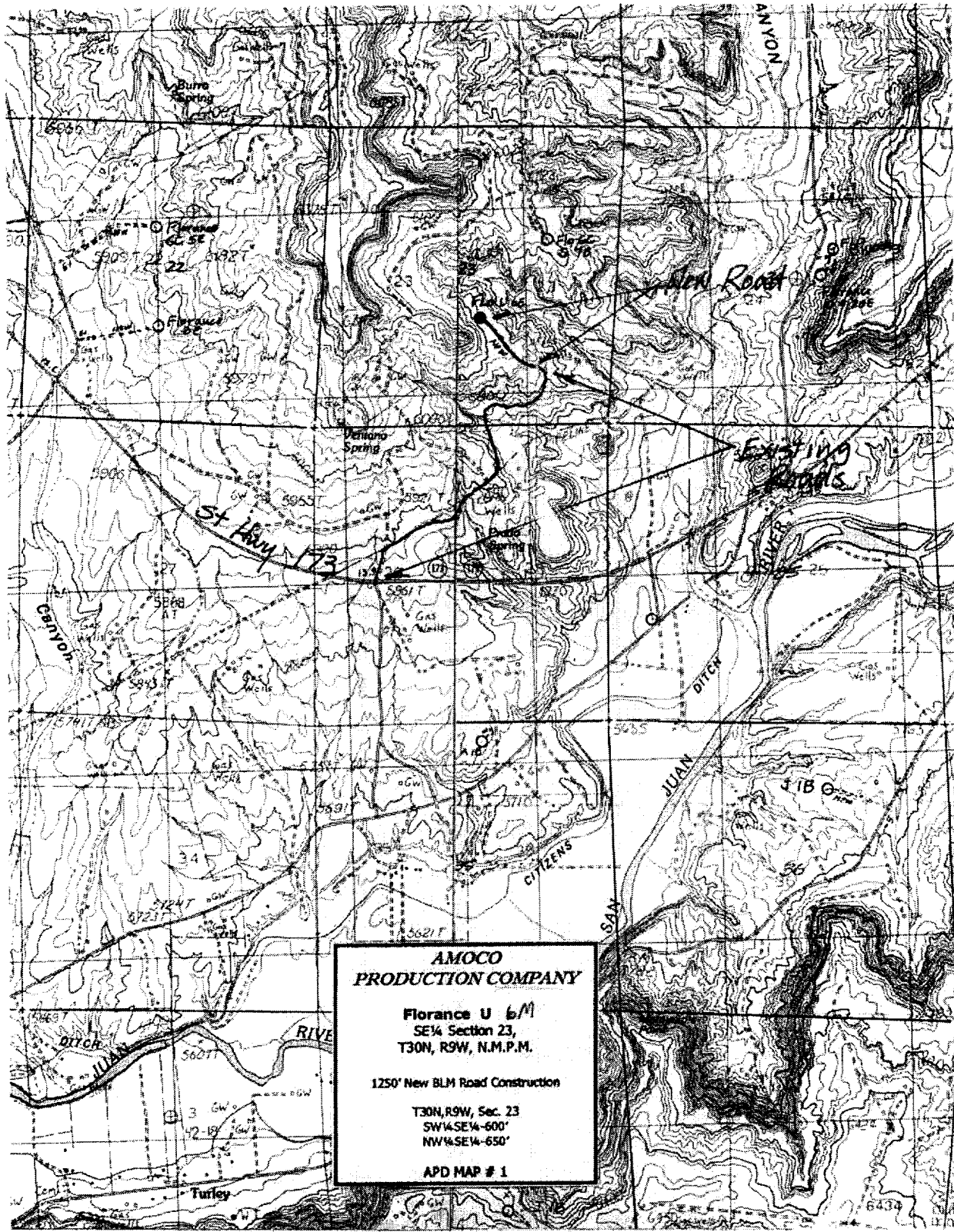
17 OPERATOR CERTIFICATION
I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.

Signature: *Mary Cooley*
 Printed Name: **Mary Cooley**
 Title: **Sr. Regulatory Analyst**
 Date: **02/19/2001**

18 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: **November 24, 2000**
 Signature and Seal of Professional Surveyor:

 Certificate Number: **7016**



**AMOCO
PRODUCTION COMPANY**

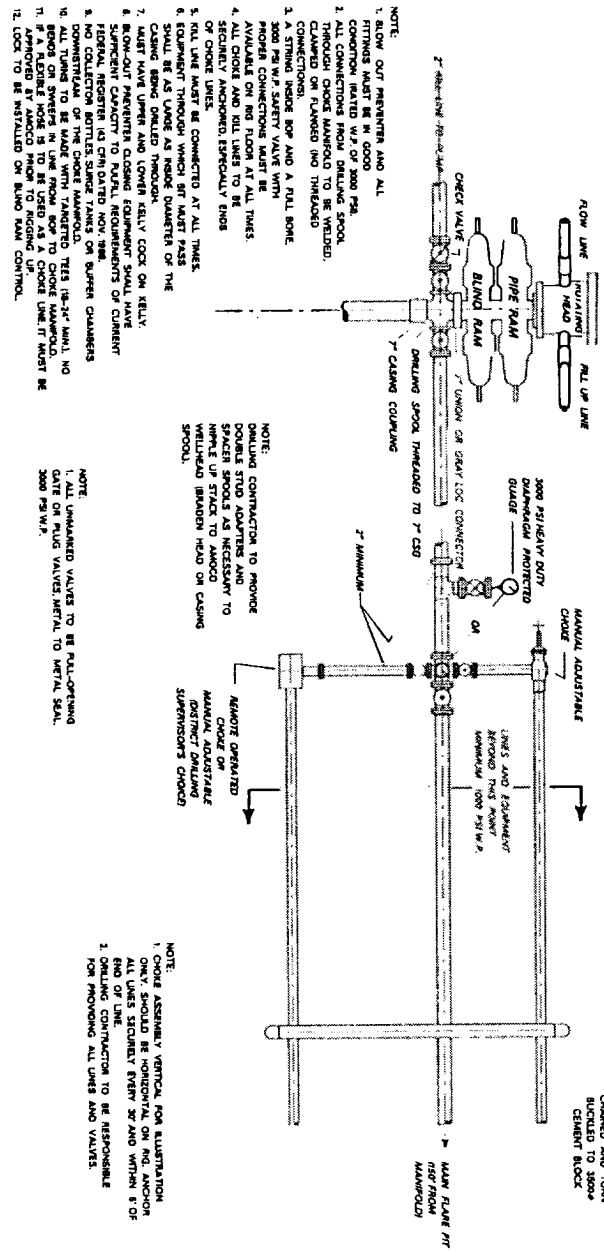
Florance U 6/M
SE $\frac{1}{4}$ Section 23,
T30N, R9W, N.M.P.M.

1250' New BLM Road Construction

T30N, R9W, Sec. 23
SW $\frac{1}{4}$ SE $\frac{1}{4}$ -600'
NW $\frac{1}{4}$ SE $\frac{1}{4}$ -650'

APD MAP # 1

MINIMUM BLOW-OUT PREVENTER REQUIREMENTS
 $\frac{3}{4}$ " OR 1" (NOMINAL) 3,000 PSI W.P.
 Typical Ductile /Meeswede Air /Mud (SRBU)



- NOTE:**
1. BLOW OUT PREVENTER AND ALL FITTINGS MUST BE TESTED TO 3,000 PSI.
 2. ALL CONNECTIONS FROM DRILLING SPOOL THROUGH CHOKE MANIFOLD TO BE WELDED, CLAMPED OR FLANGED (NO THREADED CONNECTIONS FOR BOP AND A RAIL BONE).
 3. 3000 PSI W.P. SAFETY VALVE WITH PROPER CONNECTIONS MUST BE AVAILABLE ON THE FLOOR AT ALL TIMES.
 4. ALL CHOKE AND RAIL LINES TO BE SECURED TO PREVENT ESPECIALLY 6" BOP.
 5. RAIL LINE MUST BE CONNECTED AT ALL TIMES.
 6. EQUIPMENT THROUGH WHICH BIT MUST PASS SHALL BE AS LARGE AS INSIDE DIAMETER OF THE CASING BONE DRILLED THROUGH.
 7. MUST HAVE UPPER AND LOWER HELLY COCK ON HELLY.
 8. BLOW-OUT PREVENTER TO BE TESTED TO 3,000 PSI W.P. FEDERAL REGISTER HQ CHN DATED NOV. 1988.
 9. NO COLLECTOR BOTTLES, SLURRY TANKS OR BUFFER CYLINDERS ON THE CHOKE MANIFOLD.
 10. BOP OR SWERS IN LINE FROM BOP TO CHOKE MANIFOLD.
 11. IF A FLEXIBLE HOSE IS TO BE USED AS A CHOKE LINE, IT MUST BE APPROVED BY AMOCO FROM TOP TO BOTTOM.
 12. LOCK TO BE INSTALLED ON BOP FOR CONTROL.

- NOTE:**
1. ALL UNMANNED VALVES TO BE FULL-OPENING DATE ON PLUG VALVES METAL TO METAL SEAL.
 2. 3000 PSI W.P.

- NOTE:**
1. CHOKES ASSEMBLY VERTICAL FOR ILLUSTRATION.
 2. ALL LINES TO BE SECURED TO THE END ANCHOR.
 3. ALL LINES TO BE SECURED WITHIN 8" OF END OF LINE.
 4. DRILLING CONTRACTOR TO BE RESPONSIBLE FOR PROVIDING ALL LINES AND VALVES.

**AMOCO PRODUCTION COMPANY
DRILLING AND COMPLETION PROGRAM**

Prospect Name: Florance U
Lease: FLORANCE U
County: San Juan
State: New Mexico
Date: February 19, 2001

Well No: 6M
Surface Location: 23-30N-9W, 1930 FSL,2400 FEL
Field: Blanco Mesaverde/Basin Dakota

OBJECTIVE: Drill 400' below the base of the Greenhorn Limestone, set 4" Liner across Dakota, Stimulate LS, CH, MF, PL and DK intervals			
METHOD OF DRILLING		APPROXIMATE DEPTHS OF GEOLOGICAL MARKER	
TYPE OF TOOLS	DEPTH OF DRILLING	Estimated GL: 5983	Estimated KB: 5997
Rotary	0 - TD	MARKER	SUBSEA
LOG PROGRAM			MEAS. DEPTH
TYPE	DEPTH INVERAL	Ojo Alamo	1501
<u>OPEN HOLE</u>		Fruitland Coal *	2198
GR-Induction	TD to 5 1/2" shoe	Pictured Cliffs *	2741
Density/Neutron	TD to 5 1/2" shoe	Lewis Shale #	2778
Sonic	TD to 5 1/2" shoe	Cliff House #	4354
<u>CASED HOLE</u>		Menefee Shale #	4549
GR-CCL-TDT	TDT - PBTD-7 5/8" shoe	Point Lookout #	4957
	GR-CCL - PBTD-0'	Mancos	5069
CBL	Top of 4" - 50' above 7 5/8 "shoe	Greenhorn	6964
REMARKS:		Bentonite Marker	7019
- Please report any flares (magnitude & duration).		Two Wells #	7068
		Dakota MB #	7197
		Burro Canyon *	7304
		Morrison *	7354
		TOTAL DEPTH	7419
		# Probable completion interval	* Possible Pay
SPECIAL TESTS		DRILL CUTTING SAMPLES	
TYPE		FREQUENCY	DEPTH
None		10 feet	Production hole
		DRILLING TIME	
		FREQUENCY	DEPTH
		Geograph	0-TD
REMARKS:			

MUD PROGRAM:						
Approx. Interval	Type Mud	Weight, #/gal	Vis, sec/qt	W/L cc's/30 min	Other Specification	
0 - 120-135	3 jts. Spud	8.6-9.2				
120-135 - 2148	(1)(2) Water/LSND	8.6-9.2				
2148 - 7019	Gas/Air/Mist	Volume sufficient to maintain a stable and clean wellbore				
7019 - 7419	LSND	8.6-9.2				

REMARKS:
(1) The hole will require sweeps to keep unloaded while fresh water drilling. Let hole conditions dictate frequency.
(2) Top set Fruitland Coal to minimize lost circulation, air volume to maintain hole stability.

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	120-135	10 3/4"	J-55 ST&C	40.5#	14.75"	1
Intermediate 1	2148	7 5/8"	K-55 LT&C	26.4#	9.875"	1,2
Intermediate 2	7019	5 1/2"	K-55 LT&C	15.5#	6.75"	4
Production (liner)	7419	4"	K-55 H 511	11#	4.75"	3

REMARKS:
(1) Circulate Cement to Surface _____ (4) Bring cement 200' above 7 5/8" shoe
(2) Set casing 50' above Fruitland Coal
(3) Liner Lap should be a minimum of 100'

CORING PROGRAM:
None

COMPLETION PROGRAM:
Rigless, 4-6 Stage Limited Entry Hydraulic Frac

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

Form 46 Reviewed by: _____ Logging program reviewed by: N/A

PREPARED BY: KAS/KAT	APPROVED:	DATE: January 5, 2001 Version 1.0
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Cementing Program: Florance U 6M

	Surface	Intermediate	I2	Liner
Excess %, Bit	100%	80	50	10
Excess %, Caliper	NA	NA	NA	30
BHST (est deg. F)	60	120	150	160
Pipe Movement	NA	Rotate/Reciprocate	Rotate/Reciprocate	as per Liner Co.
Rate, Max (bpm)	7	4	4	2
Rate Recommended (bpm)	6	4	3	2
Pressure, Max (psi)	200	2000	2000	2000
Shoe Joint	40	80	80	40
Batch Mix	NA	NA	NA	NA
Circulating prior cmtng (hr)	0.5	1.5	2.5	2
Time Between Stages, (hr)	NA	NA	NA	NA
Special Instructions	1,6,7	1,6,8	1,6,9	2,3,4,6

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 liner cement job to minimize drillout.
- ** After cement set time the liner top will be drilled out and liner circulated clean with treated water.
- *** Run TMD cased hole logs to identify pay; Perforating and CH logs can be run rigless.

Surface:				
Preflush	20 bbl.	FreshWater		
Slurry 1	120sx Class G Cement			139cuft
TOC@Surface	+ 2% CaCl ₂ (accelerator)			
	0.25 #/sk Cellophane Flake (lost circulation additive)			0.5563cuft/ft OH
	0.1% D46 antifoam			100% excess
Slurry Properties:	Density	Yield	Water	
	(lb/gal)	(ft ³ /sk)	(gal/sk)	
Slurry 1	15.8	1.16	4.95	
Casing Equipment:	10-3/4", 8R, ST&C			
	1 Guide Shoe			
	1 Top Wooden Plug			
	1 Autofill insert float valve			
	4 Centralizers			
	1 Stop Ring			
	1 Thread Lock Compound			

Cementing Program: Florance U 6M

Intermediate:

Fresh Water	20 bbl	fresh water	
Lead		213sx Class "G" Cement	618cuft
Slurry 1		+ 3% D79 extender	
TOC@Surface		+ 2% S1 Calcium Chloride	
		+1/4 #/sk. Cellophane Flake	
		+ 0.1% D46 antifoam'	
Tail		152sx 50/50 Class "G"/Poz	193cuft
Slurry 2		+ 2% gel (extender)	
	500ft fill	0.1% D46 antifoam	0.2148cuft/ft OH
		+1/4 #/sk. Cellophane Flake	0.2338cuft/ft csg ann
		+ 2% CaCl2 (accelerator)	80% excess

Slurry Properties:	Density	Yield	Water
	(lb/gal)	(ft3/sk)	(gal/sk)
Slurry 1	11.4	2.9	17.77
Slurry 2	13.5	1.27	5.72

Casing Equipment:

7-5/8", 8R, ST&C

- 1 Float Shoe (autofill with minimal LCM in mud)
- 1 Float Collar (autofill with minimal LCM in mud)
- 1 Stop Ring
- 9 Centralizers (one in middle of first joint, then every third collar)
- 2 Fluidmaster vane centralizers @ base of Ojo
- 8 Centralizers one every 4th joint from Ojo to base of surface casing
- 1 Top Rubber Plug
- 1 Thread Lock Compound

Int 2:

Fresh Water	10 bbl	CW100	
Lead		466LiteCrete D961 / D124 / D154	997cuft
Slurry 1		+ 0.03 gps D47 antifoam	
TOC@Surface		+ 0.5% D112 fluid loss	
		+ 0.11% D65 TIC	
Tail		80sx 50/50 Class "G"/Poz	115cuft
Slurry 2		+ 5% D20 gel (extender)	+ 5 #/sk D24 gilsonite
	500ft fill	+ 0.1% D46 antifoam	+ 0.15% D65 TIC
		+ 1/4 #/sk. Cellophane Flake	+ 0.1% D800 retarder
		+ 0.25% D167 Fluid Loss	

Slurry Properties:	Density	Yield	Water
	(lb/gal)	(ft3/sk)	(gal/sk)
Slurry 1	9.5	2.14	6.38
Slurry 2	13	1.44	6.5

Casing Equipment:

5-1/2", 8R, ST&C

- 1 Float Shoe (autofill with minimal LCM in mud)
- 1 Float Collar (autofill with minimal LCM in mud)
- 1 Stop Ring
- 35 Centralizers (every third joint)
- 1 Top Rubber Plug
- 1 Thread Lock Compound

Cementing Program: Florance OU 6M

Production (liner):				
Preflush	10 bbl.	CW100 / LCM wash		
Lead Cement		2350/50 Poz/G		34 cuft
Slurry 1		5% D20 bentonite	0.1% D46 antifoam	
	100ft lap	0.25#/sk D29 cellophane		
	100ft cap	0.25% D167 Fluid loss		0.0358 cuft/ft OH
		0.15% D65 TIC		0.0464 cuft/ft csg ann
		0.15% D800 retarder		0.1336 cuft/ft csg
Slurry Properties:		Density	Water	10 % excess
		(lb/gal)	(gal/sk)	
Slurry 1		13	1.44	6.5
Liner Float Equipment:		Float Shoe and Float Collar (furnished by Liner Hanger Company)		
		1 Thread Lock Compound		
Note:				
1. Coordinate w/Liner hand to drop plug, or set/release Liner as required				
2. The job should be pumped at 2-3 bpm max rate. Do not exceed 3 bpm on displacement				
3. Wash pump and lines before displacement. Slow to 1 bpm for the last 30 bbl of displacement.				
4. This is to be a rigless completion. After cement set time, liner top will be dressed off an liner circulated clean with 2 % KCl or 2 gal/1000 gal L64.				

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.