

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 - 078596-A
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
2. Name of Operator BP AMERICA PRODUCTION COMPANY		7. If Unit or CA Agreement, Name and No.
Contact: CHERRY HLAVA E-Mail: hlavacl@bp.com		8. Lease Name and Well No. FLORANCE T 123S
3a. Address P.O. BOX 3092 HOUSTON, TX 77253-3092	3b. Phone No. (include area code) Ph: 281.366.4081 Fx: 281.366.0700	9. APL Well No. 30-045 32365
4. Location of Well (Report location clearly and in accordance with any State requirements. *) At surface SWNW 1955FNL 660FWL 36.45400 N Lat, 107.40200 W Lon At proposed prod. zone		10. Field and Pool, or Exploratory BASIN FRUITLAND COAL
14. Distance in miles and direction from nearest town or post office* 19.8 MILES EAST FROM BLOOMFIELD, NM		11. Sec., T., R., M., or Blk. and Survey or Area Sec 3 T29N R8W Mer NMP E
15. Distance from proposed location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) 660'	16. No. of Acres in Lease	12. County or Parish SAN JUAN
18. Distance from proposed location to nearest well, drilling, completed, applied for, on this lease, ft.	19. Proposed Depth 3150 MD	13. State NM
21. Elevations (Show whether DF, KB, RT, GL, etc.) 6304 GL	22. Approximate date work will start 08/15/2004	17. Spacing Unit dedicated to this well 324.16 W/2
		20. BLM/BIA Bond No. on file WY2924
		23. Estimated duration 67 DAYS

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. | 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)	Name (Printed/Typed) CHERRY HLAVA	Date 05/19/2004
Title REGULATORY ANALYST		
Approved by (Signature) Original Signed: Stephen Mason	Name (Printed/Typed)	Date SEP 27 2004
Title	Office	

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 #29342 verified by the BLM Well Information System
For BP AMERICA PRODUCTION COMPANY, sent to the Farmington

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".

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

NMOCD

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 30-045-32365		Pool Code 71629	Pool Name Basin Fruitland Coal
Property Code 000552	Property Name Florance T		Well Number # 123S
OGRID No. 000778	Operator Name BP AMERICA PRODUCTION COMPANY		Elevation 6304

10 Surface Location

UL or Lot No. E	Section 3	Township 29 N	Range 8 W	Lot Idn.	Feet from the 1955	North/South line NORTH	Feet from the 660	East/West line WEST	County SAN JUAN
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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 324.16		Joint or Infill		Consolidation Code		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: <i>Cherry Hlava</i> Printed Name: <i>Cherry Hlava</i> Title: <i>Regulatory Analyst</i> Date: <i>5-19-04</i>
	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. March 17, 2004 Date of Survey Signature and Seal of Professional 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

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

Form C-103

March 4, 2004

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 Florance T (Federal well SF - 078596-A)
8. Well Number 123 S
9. OGRID Number
10. Pool name or Wildcat Basin Fruitland Coal

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 E : 1955 feet from the NORTH line and 660 feet from the WEST line

Section 3 Township 29N Range 08W NMPM SAN JUAN County

11. Elevation (Show whether DR, RKB, RT, GR, etc.)
6304' GR

Pit or Below-grade Tank Application (For pit or below-grade tank closures, a form C-144 must be attached)

Pit Location: UL E Sect 3 Twp 29N Rng 08W Pit type Drilling Depth to Groundwater >100' Distance from nearest fresh water well >1000'

Distance from nearest surface water >1000' Below-grade Tank Location UL E Sect 3 Twp 29N Rng 08W ;
1855' feet from the NORTH line and 675 feet from the WEST line PLEASE SEE ATTACHED PAD LAYOUT

12. Check Appropriate Box to Indicate Nature of Notice, Report or Other Data

NOTICE OF INTENTION TO:		SUBSEQUENT REPORT OF:	
PERFORM REMEDIAL WORK <input type="checkbox"/>	PLUG AND ABANDON <input type="checkbox"/>	REMEDIAL WORK <input type="checkbox"/>	ALTERING CASING <input type="checkbox"/>
TEMPORARILY ABANDON <input type="checkbox"/>	CHANGE PLANS <input type="checkbox"/>	COMMENCE DRILLING OPNS. <input type="checkbox"/>	PLUG AND ABANDONMENT <input type="checkbox"/>
PULL OR ALTER CASING <input type="checkbox"/>	MULTIPLE COMPLETION <input type="checkbox"/>	CASING TEST AND CEMENT JOB <input type="checkbox"/>	
OTHER: PIT PERMIT <input type="checkbox"/>		OTHER: <input type="checkbox"/>	

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 Cherry Hlava TITLE Regulatory Analyst DATE 5/20/04

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

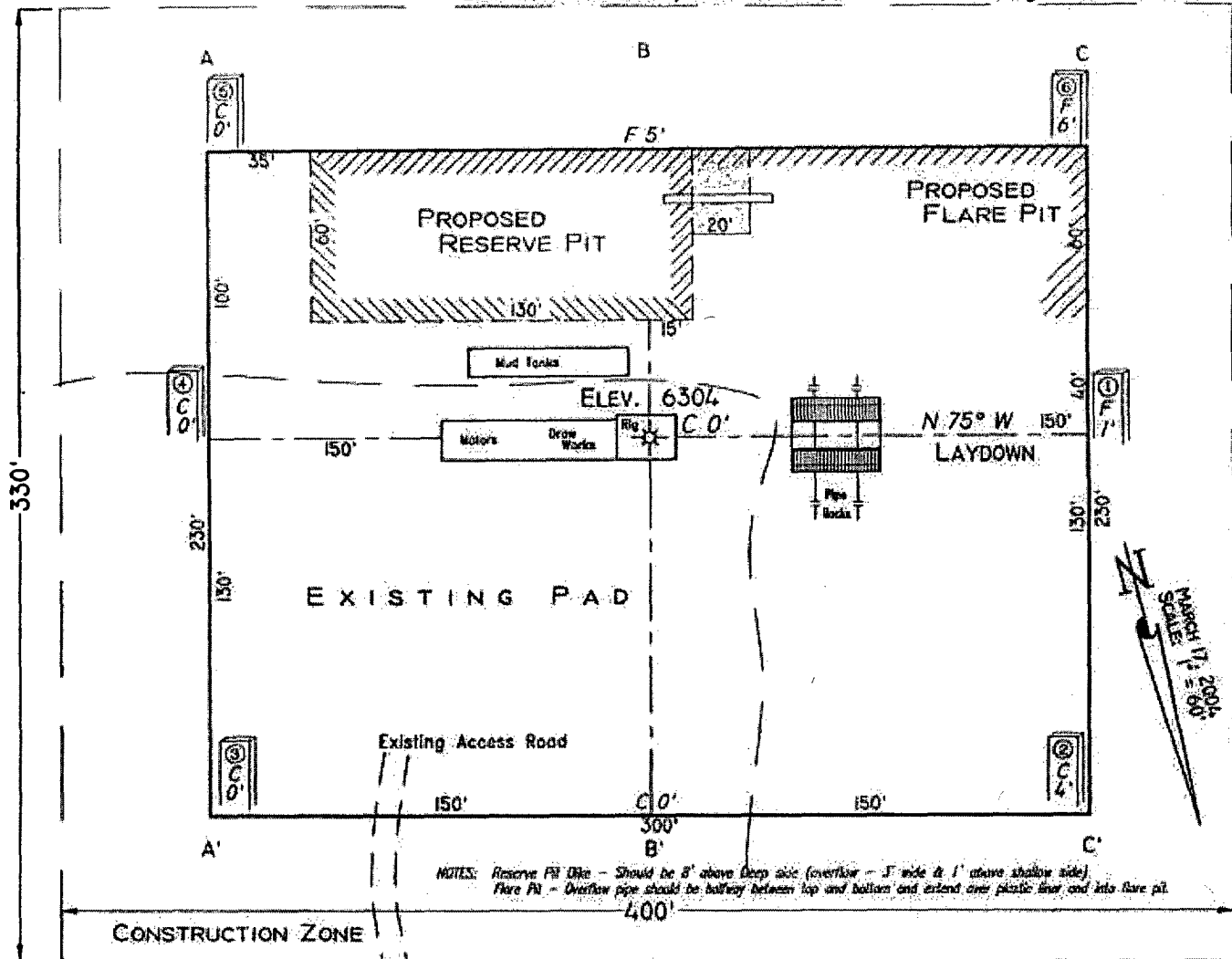
(This space for State use)

APPROVED BY [Signature] TITLE REGULATORY ANALYST DATE SEP 20 2004

Conditions of approval, if any:

PAD LAYOUT PLAN & PROFILE
BP AMERICA PRODUCTION COMPANY
 Florance T # 123S
 1955' F/NL 660' F/WL
 SEC. 3, T29N, R8W, N.M.P.M.
 SAN JUAN COUNTY, NEW MEXICO

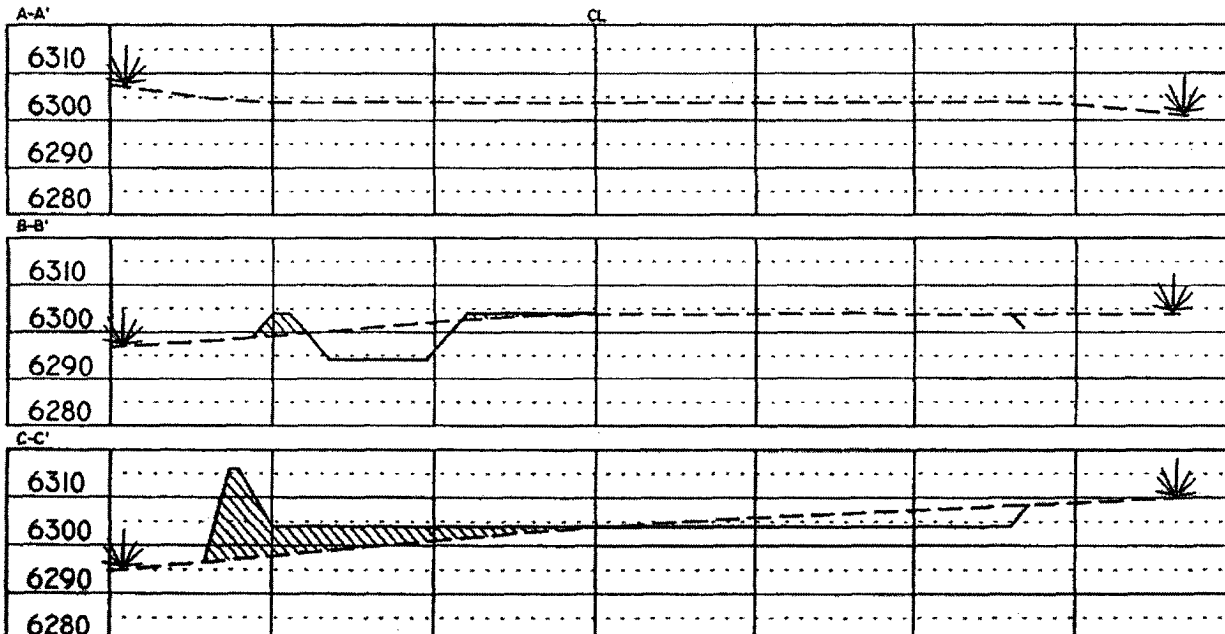
Lat: 36°45'23"
 Long: 107°40'10"



NOTES: Reserve Pit Dike - Should be 8" above Deep side (overflow - 5" wide at 1" above shallow side).
 Flare Pit - Overflow pipe should be halfway between top and bottom and extend over plastic liner and into flare pit.

Area of Construction Zone - 330'x400' or 3.03 acres, more or less.

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



NOTE: Contractor should call One-Call for location of any marked or unmarked buried pipelines or cables on well pad and/or access road at least two (2) working days prior to construction.

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**

Prospect Name: Florance T123S
Lease:

Well No: 123S
Surface Location: Section 3E, T29N, R08W; 1955'
FNL, 660' FWL
Field: Basin Fruitland Coal

County: San Juan
State: New Mexico
Date: April 26, 2004

OBJECTIVE: Drill to a TD of 3150' kb set 7" casing and perf and frac the Fruitland Coal interval.							
METHOD OF DRILLING				APPROXIMATE DEPTHS OF GEOLOGICAL MARKER			
TYPE OF TOOLS		DEPTH OF DRILLING		Estimated GL: 6304		Estimated KB: 6317	
Rotary		0 – 3137' MD, 3150' KB					
LOG PROGRAM				MARKER			
TYPE		DEPTH INVERAL		SUBSEA		MEAS. DEPTH	
<u>OPEN HOLE</u>							
Run1: Run Platform Express (array induction, 3-detector Litho-Density, compensated neutron, caliper, microlog, SP and gamma ray). (see Remarks section below).		TD up to minimum charge.		Ojo Alamo		4401 1916	
				Kirtland		4226 2091	
				Fruitland		3627 2690	
				Fruitland Coal		3475 2842	
				Pictured Cliffs		3311 3006	
Run 2: Run dipole sonic (compressional and shear delta t required for frac gradient log)		TD up to minimum charge.					
REMARKS:				TOTAL DEPTH			
- Primary presentation is Bulk Density Presentation (5"=100') with <1.75 g/cc shaded as coal. High resolution pass across the Fruitland interval only. Three final prints to Dennis Hilkewich in Houston. Customer LAS file to Dennis Hilkewich in Houston – hilkewdn@bp.com				3167 3150			
				# Probable completion interval * Possible Pay			
SPECIAL TESTS				DRILL CUTTING SAMPLES		DRILLING TIME	
TYPE				FREQUENCY DEPTH		FREQUENCY DEPTH	
None				none none		Geolograph 0-3150	
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 - 3150 (1)		Water/LSND	8.6-9.2		<6		
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	8-5/8"	H-40, 8 RND	20.0	12.5"	1	
Intermediate	3150	5-1/2"	J-55, 8 RND	15.5	8.75"	1	
REMARKS:							
(1) Circulate Cement to Surface							
CORING PROGRAM:							
None							
COMPLETION PROGRAM:							
Rigless, Single 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:			
Daniel Crosby				4/26/2004			
Form 46 12-00 MNP							

Additional Operator Remarks:

Additional Operator Remarks:

Notice of Staking was submitted on 04/07/2004

BP America Production Company respectfully requests permission to drill the subject well to a total depth of approximately 3150' and complete into the Basin Fruitland Coal Pool as per the attached drilling plan

SUPPLEMENTAL TO SURFACE USE PLAN

New Facilities:

A 4" diameter buried steel pipeline that is + or - 400 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 Williams Field Services.

If conditions allow 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, 80-100 PSI ready mix cement. If the area will not allow for pre-set the approved cement program will be followed.

BOP Test Pressure

BP America Production Company BOP Pressure Testing Requirements

Well Name: Florance T123S
County: San Juan

State: New Mexico

Formation	TVD	Anticipated Bottom Hole Pressure	Maximum Anticipated Surface Pressure **
Ojo Alamo	1916		
Kirtland	2091		
Fruitland Coal	2690	400	0
PC			
Lewis Shale			
Cliff House			
Menefee Shale			
Point Lookout			
Mancos			
Dakota			

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

Requested BOP Pressure Test Exception: 850 psi

SAN JUAN BASIN
Fruitland Formation
Pressure Control Equipment

Background

The objective Fruitland Coal 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 Fruitland Coal. No abnormal temperature, pressure, or H2S 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.

Cementing Program

Well Name: Florance T123S	Field: Basin Fruitland Coal
Location: Sec 03 - 29N - 08W, 1955' FNL, 660' FWL	API No.
County: San Juan	Well Flac
State: New Mexico	Formation: Fruitland Coal
	KB Elev (est) 6317
	GL Elev. (est) 6304

Casing Program:

Casing String	Est. Depth (ft.)	Hole Size (in.)	Casing Size (in.)	Thread	TOC (ft.)
Surface	120	12.5	8 5/8	8rd	Surface
Production -	3150	8.75	5 1/2	8rd	Surface

Casing Properties:

(No Safety Factor Included)			
Casing String	Size (in.)	Weight (lb/ft)	Grade
Surface	8 5/8	20	H-40
Production -	5 1/2	15.5	J-55

Mud Program

Apx. Interval (ft.)	Mud Type	Mud Weight	Recommended Mud Properties Prio Cementing:
			PV <20
			YP <10
			Fluid Loss <6
0 - SCP	Water/Spud	8.6-9.2	
SCP - TD	Water/LSND	8.6-9.2	

Cementing Program:

	Surface	Production
Excess %, Lead	100	40
Excess %, Tail	NA	40
BHST (est deg. F)	75	120
Special Instructions	1,6,7	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.	FreshWater	
Slurry 1	80 sx Class C Cement		99 cuft
TOC @ Surface	+ 2% CaCl ₂ (accelerator)		
			0.4127 cuft/ft OH

Slurry Properties:

	Density (lb/gal)	Yield (ft ³ /sk)	Water (gal/sk)
Slurry 1	15.2	1.27	5.8

Casing Equipment:

8-5/8", 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

Production:

Fresh Water	10 bbl	CW100	
Lead	360 sx Class "G" Cement		919 cuft
Slurry 1	+ 3% D79 extender		

Cementing Program

TOC@Surface		+ 2% S1 Calcium Chloride		
		+1/4 #/sk. Cellophane Flake		
		+ 0.1% D46 antifoam'		
Tail		140 sx 50/50 Class "G"/Poz		177 cuft
Slurry 2		+ 2% gel (extender)		
	500 ft fill	0.1% D46 antifoam		0.2526 cuft/ft OH
		+1/4 #/sk. Cellophane Flake		0.2009 cuft/ft csg ann
		+ 2% CaCl ₂ (accelerator)		
Slurry Properties:		Density	Yield	Water
		(lb/gal)	(ft ³ /sk)	(gal/sk)
Slurry 1		11.4	2.61	17.77
Slurry 2		13.5	1.27	5.72
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 Top Rubber Plug		
		1 Thread Lock Compound		
