Form 3160-5 (August 1999)		A LANDA			
UNITED STATES DEPARTMENT OF THE INTERIOR		FORM APPROVED OMB No. 1004-0135 Expires November 30, 2000			
BUREAU OF LAND MANGEMENT SUNDRY NOTICES AND REPORTS ON WELLS	5. Lease Se SF - 07865				
Do not use this form for proposals to drill or to re-enter an Abandoned well. Use Form 3160-3 (AFD) for such proposals.		Allottee or tribe Name			
		r CA/Agreement, Name and/or No.			
SUBMIT IN TRIPLICATE – Other instructions on reverse 070 FARMINGTOI	de	CROSS BLADE			
1. Type of Well					
Oil Well Gas Well Other	Decker LS	······································			
BP AMERICA PRODUCTION COMPANY	9. API We 30-045-3				
3a. Address 3b. Phone No. (include area code) PO BOX 3092 HOUSTON, TX 77253 281-366-4081	10. Field ar	d Pool, or Exploratory Area AKOTA & BLANCO MV			
4. Location of Well (Footage, Sec., T., R., M., or Survey Description) 860' FNL & 1165' FWL; SEC 17 T32N R10W NWNW		11. County or Parish, State SAN JUAN, NM			
12. CHECK APPROPRIATE BOX(ES) TO INDICATE NATU		T, OR OTHER DATA			
TYPE OF SUBMISSION	PE OF ACTION	D			
Notice of Intent	Production (Start	· —			
Alter Casing Fracture Treat ,	Reclamation				
Casing Repair New Construction	Recomplete	Other <u>Change Casing</u> <u>Sizes</u>			
Final Abandonment Notice	Water Disposal				
13. Describe Proposed or Completed Operation (clearly state all pertinent details, including estimation of the proposal is to deepen directionally or recomplete horizontally, give subsurface locat Attach the Bond under which the work will be performed or provide the Bond No. on fit following completion of the involved operations. If the operation results in a multiple contrasting has been completed. Final Abandonment Notices shall be filed only after all recondetermined that the site is ready for final inspection. On 02/28/06 BP submitted application for permit to drill. APD was appling it is now our intent to change the casing sizes. The design changes are through the Fruitland Coal. Instead of setting the Intermediate csg into the intermediate string & thus include the possibility of running a contingent FC or PC while drilling to the DK. In that case, contingency will applicative #1 as shown on Revised Form 46 will apply. Please see a contingency, which is not expected to be used.	s and measured and true vith BLM/BIA. Require etion or recompletion in ements, including reclam oved 04/14/06 o better manage th Lewis we are plan y drilling liner in ca y. Should we not	vertical depths of all pertinent markers and zones. d subsequent reports shall be filed within 30 days a new interval, a Form 3160-4 shall be filed once ation, have been completed, and the operator has e lost circulation issues while drilling ning to topset the coal with an upsized ase wtr influx is encountered from the encounter any fluid influx the design			
 I hereby certify that the foregoing is true an dcorrect Name (Printed/typed) 					
Cherry Hlava Title	gulatory Analyst				
Signature Chiting Hline Date	/26/2006				
THIS SPACE FOR FEDERAL OI	TATE OFFICE USE				
Approved by Title	edr. Eng	Date 8/3/06			
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.	7	· ·			
Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person k any false, fictitious or fraudulent statements or representations as to any matter witin its jurisdiction.	vingly and willfully to ma	ke to any department or agency of the United States			

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ar a				B		RICA PRO	DUCTION		MPA				
46' ·*						NG AND CO	MPLETION						
							1/2006			C	Blanco Mesave		11-
						er LS #1N	0' FNL. 1	165' FV		Bianco Mesave	roe/Basiri Da	кота	
	County: San Juan, New Mexico Surface Location: 17-33 Inerals: State Surface: Lat: 3												
	Aztec 184				BH	Location: 690					10709075157		
		elow t	the top of th	ne Tw		or, set 4-1/2"casi							
			DD OF DRI								GEOLOGICA	LMARKER	
TYPE	OF TOOL				PTH OF D	RILLING	Actual		145		Estimated KB:		
	Rotary				0 - T()	Marker		T	SUBSEA			ROX. MD
		LO	G PROGR	AM		······································	Ojo Alamo			4,936'	1,22	3'	1,247'
Туре							Kirtland			4,860'	1,29	9'	1,326'
Single F	Run						Fruitland		·	3,883'	2,27	6'	2,345'
							Fruitland Coa	l	·	3,685'	2,47	4'	2,551'
							Pictured Cliffs	<u> </u>	·	3,274'	2,88		2,975'
							Lewis			2,883'	3,27		3,373
Cased H		1	-		7.5/01.1		Cliff House	<u> </u>	#	1,690'	4,46		4,567'
RST-C	DL				7 5/8" sho		Menefee Reint Leekour	•	#	1,292' 977'	4,86		4,965' 5,280'
DEMARKS.	, <i>a</i> ,	1	ider	iury 4	1/2" cemen		Point Lookout Mancos	ι	#	<u> </u>	5,18		5,280
REMARKS:	ded that this		Denetrate 4	hrow	h the ontir	e BRCN interval	Greenhorn		-1,116'	7,27		7,373'	
		o weil	Penetrate	mout	,, . endi	o Ditora interval	Graneros (be	nt.mkr)	1	-1,163'	7.32		7,420'
with TD in the N	lorrison.						Two Wells		#	-1,703			7,498'
L							Paguate		#	-1,292'	7,45		7,549'
							Cubero		#	-1,317			7,574
Due to the proxi	imity of a st	trong E	3RCN prod	ucer a	about 1 mil	e to the east, it	L. Cubero		#	-1,339'	7,49		7,596'
is recommende	d that the b	oreho	le be drilled	l with	mud (for p	ressure control)	Encinal Cyn		#	-1,430'	7,58	9'	7,687'
is recommended that the borehole be drilled with mud starting 150 ft. below the top of the Two Wells and end					•	Burro Canyor	1	#	-1,477				
istanting 150 n. c		op ot u	ne iwo we	lis an	a enaing a	tiD. See	TOTAL D	epth:		-1,521'	7,68	0	7,778'
attached cross-							# Probable c					ssible Pay	
SPECIAL TEST	rs						DRILL CUTTING SAMPLES DRILLING TIME						
TYPE None							FREQUI 30'/10' int			DEPTH	FREQUEN Geologra		DEPTH 0 - TD
MUD PROGRA													
Approx.	r	Jud	Weigh	t,	v	is, sec/qt	W/L.cc's			Othe	er Specificatio	n	
200'	TypeMu Spuc	Ą	8.8 - 9	.0		is, sec/qt ent to clean hole.	W/L cc's						<u>_</u>
200' 2,501'	TypeMu Spuc Water/LS	J SND	8.8 - 9 8.4 - 9	.0	Sufficie	ent to clean hole.	W/L.cc's <9		- <u> </u>	hole while v	vhilst water drill	ing, LCM ons	
200' 2,501' 7,778'	TypeMu Spuc Water/LS Air/Mist/	J SND	8.8 - 9	.0	Sufficie				- <u> </u>	hole while v		ing, LCM ons	
200' 2,501' 7,778' CASING PROG	TypeMu Spuc Water/LS Air/Mist/I iRAM:	J SND Fluid	8.8 - 9. 8.4 - 9. 1	.0	Sufficie	ent to clean hole. cfm for hammer	<9	Volu	ume su	hole while v fficient to ma	vhilst water drill aintain a stable	ing, LCM ons and clean w	ellbore
200' 2,501' 7,778' CASING PROG CasingSt	TypeMu Spuc Water/LS Air/Mist/I SRAM: ring	J SND Fluid	8.8 - 9 8.4 - 9 1 timated	0	Sufficie 1000 d Hole	ent to clean hole. cfm for hammer Casing Size	<9 Grade, Thr	Volu ead W	ume su leight	hole while v	vhilst water drill aintain a stable	ing, LCM ons and clean w Ceme	ellbore
200' 2,501' 7,778' CASING PROG CasingStr Surface/Conduc	TypeMu Spuc Water/LS Air/Mist/I SRAM: ring	J SND Fluid Es	8.8 - 9 8.4 - 9 1 timated 200'	0	Sufficie 1000 (Hole 14 3/4*	ent to clean hole. cfm for hammer Casing Size 10 3/4*	<9 Grade, Thro J-55 ST&	Volu ead W C 4	ume su eight 0.5#	hole while v fficient to ma Landing	vhilst water drill aintain a stable g Point	ing, LCM ons and clean we Ceme cmt to su	ellbore ent rface
200' 2,501' 7,778' CASING PROG CasingStr Surface/Conduc Intermediate	TypeMu Spuc Water/LS Air/Mist/I SRAM: ring	f SND Fluid Es	8.8 - 9 8.4 - 9 1 timated 200' 2,501'	0	Sufficie 1000 d Hole 14 3/4" 9 7/8"	ent to clean hole. cfm for hammer Casing Size 10 3/4" 7 5/8"	<9 Grade, Thr J-55 ST& K-55 LT &	Volu ead W C 4 C 2	ume su 'eight 0.5# 26.4#	hole while v fficient to ma Landing 50' abo	vhilst water drill aintain a stable g Point we FC	ing, LCM ons and clean w Ceme cmt to su cmt to su	ellbore ent rface rface
200' 2,501' 7,778' CASING PROG CasingStr Surface/Conduc	TypeMu Spuc Water/LS Air/Mist/I SRAM: ring	J SND Fluid Es	8.8 - 9 8.4 - 9 1 timated 200'	0	Sufficie 1000 (Hole 14 3/4*	ent to clean hole. cfm for hammer Casing Size 10 3/4*	<9 Grade, Thro J-55 ST&	Volu ead W C 4 C 2	ume su eight 0.5#	hole while v fficient to ma Landing	vhilst water drill aintain a stable g Point we FC	ing, LCM ons and clean we Ceme cmt to su cmt to su 0' inside Inte	ellbore ent rface rface ermediate -
200' 2,501' 7,778' CASING PROG CasingStr Surface/Conduc Intermediate Production	TypeMu Spuc Water/LS Air/Mist/I sRAM: ring ctor	SND Fluid Es	8.8 - 9. 8.4 - 9. 1 :timated 200' 2,501' 7,778'	0	Sufficie 1000 d Hole 14 3/4* 9 7/8" 6 3/4*	ent to clean hole. cfm for hammer Casing Size 10 3/4* 7 5/8* 4-1/2*	<9 Grade, Three J-55 ST&r K-55 LT & P-110	Volu ead W C 4 C 2 1	ume su eight 0.5# 26.4# 1.6#	hole while v fficient to ma Landing 50' abo DK(vhilst water drill aintain a stable g Point we FC	ing, LCM ons and clean w Ceme cmt to su cmt to su	ellbore ent rface rface ermediate -
200' 2,501' 7,778' CASING PROG CasingStr Surface/Conduc Intermediate Production	TypeMu Spuc Water/LS Ait/Mist/I sRAM: ring Ctor Y; In case	SND Fluid Es	8.8 - 9. 8.4 - 9. 1 :timated 200' 2,501' 7,778'	0	Sufficie 1000 d Hole 14 3/4* 9 7/8" 6 3/4*	ent to clean hole. cfm for hammer Casing Size 10 3/4" 7 5/8"	<9 Grade, Three J-55 ST&r K-55 LT & P-110	Volu ead W C 4 C 2 1 Dllowing	ume su eight 0.5# 26.4# 1.6#	hole while v fficient to ma Landing 50' abo DK(vhilst water drill aintain a stable g Point ive FC DT 15	ing, LCM ons and clean we Ceme cmt to su cmt to su 0' inside Inte	ellbore ent rface rrface ermediate - required
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200' 2,501' 7,778' CASING PROG CasingStr Surface/Conduc Intermediate Production CasingStr Surface/Conduc Intermediate Production Production Line	TypeMu Spuc Water/LS Air/Mist/I iRAM: ring ctor Y; In case ring ctor	SND Fluid Es of wat	8.8 - 9. 8.4 - 9. 1 timated 200' 2,501' 7,778' ter influx b timated 200' 2,501'	0 0 	Sufficie 1000 d Hole 14 3/4" 9 7/8" 6 3/4" the intern Hole 14 3/4" 9 7/8"	Casing Size 10 3/4" 7 5/8" 4-1/2" nediate pipe we Casing Size 10 3/4" 7 5/8"	Srade, Thro J-55 ST& K-55 LT & P-110 will run the for Grade, Thro J-55 ST& K-55 LT &	Volu ead W C 4 C 2 1 Dillowing ead W C 4 C 4 C 2 & C	veight 0.5# 1.6# casing veight 0.5# 26.4#	hole while v fficient to ma 50' abo DK(program: Landing 50' abo	vhilst water drill aintain a stable g Point NVE FC DT 15 g Point NVE FC NVE FC MNCS 1	ing, LCM ons and clean we cmt to su cmt to su o' inside Inte TOC survey Ceme cmt to su cmt to su	ellbore ent rface ermediate - required ent rface ent rface ermediate
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200' 2,501' 7,778' CASING PROG CasingStr Surface/Conduc Intermediate Production CasingStr Surface/Conduc Intermediate Production Production Line CORING PROG None COMPLETION Rigless, 2-3 Sta	TypeMu Spuc Water/LS Air/Mist/J RAM: ring ctor Y; In case ring ctor SRAM: PROGRAM	A:	8.8 - 9. 8.4 - 9. 1 200' 2,501' 7,778' eer influx b timated 200' 2,501' 5,716' 7,778'	elow	Sufficie 1000 d Hole 14 3/4" 9 7/8" 6 3/4" the intern Hole 14 3/4" 9 7/8" 6 3/4" 4 3/4"	Casing Size 10 3/4" 7 5/8" 4-1/2" nediate pipe we Casing Size 10 3/4" 7 5/8" 5-1/2" 3 1/2"	<9 Grade, Thro J-55 ST& K-55 LT & P-110 will run the for Grade, Thro J-55 ST& K-55 LT & P-110 LT &	Volu ead W C 4 C 2 1 Dillowing ead W C 4 C 4 C 2 & C	ume su 2eight 0.5# 26.4# 1.6# casing /eight 0.5# 26.4# 17#	hole while v fficient to ma 50' abo DK(program: Landing 50' abo 100' into	vhilst water drill aintain a stable g Point ove FC DT 15 g Point ove FC o MNCS 1	ing, LCM ons and clean we cmt to su cmt to su o' inside Inte TOC survey Ceme cmt to su cmt to su cmt to su	ellbore ent rface ermediate - required ent rface ent rface ermediate
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200' 2,501' 7,778' CASING PROG CasingStr Surface/Conduc Intermediate Production CONTINGENCY CasingStr Surface/Conduc Intermediate Production Line CORING PROG None COMPLETION Rigless, 2-3 Sta GENERAL REM Notify BLM/NMC	TypeMu Spuc Water/LS Air/Mist/ FRAM: ring ctor Y; In case ring ctor SRAM: PROGRAM age Limited MARKS: OCD 24 ho Testing R	SND Fluid Es of wat Es fluid	8.8 - 9. 8.4 - 9. 1 200' 2,501' 7,778' er influx b timated 200' 2,501' 5,716' 7,778' Hydraulic f or to Spud, ements	0 0 elow	Sufficie 1000 o Hole 14 3/4" 9 7/8" 6 3/4" the intern Hole 14 3/4" 9 7/8" 6 3/4" 4 3/4" FMC Unih P testing, an	ent to clean hole. cfm for hammer 10 3/4" 7 5/8" 4-1/2" 10 3/4" 7 5/8" Casing Size 10 3/4" 7 5/8" 5-1/2" 3 1/2" ead nd Casing and C	Srade, Thrown J-55 ST& Grade, Thrown J-55 ST& Grade, Thrown The for Grade, Thrown J-55 ST& Grade, Thrown J-55 S	Volu ead W C 4 .C 2 1 bollowing ead W C 4 .C 2 &C 5 511 5	ume su 2eight 0.5# 26.4# 1.6# casing /eight 0.5# 26.4# 17#	hole while v fficient to ma 50' abo DK(DC program: Landing 50' abo 100' into TI	vhilst water drill aintain a stable g Point ve FC DT 15 g Point ve FC MNCS 1 D 100	ing, LCM ons and clean w Ceme cmt to su cmt to su 0' inside Inte TOC survey Ceme cmt to su cmt to su 50' inside Inte 'inside Prod	ellbore int iface iface ermediate - required iface iface ermediate duction Cas.
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200' 2,501' 7,778' CASING PROG CasingSt Surface/Conduc Intermediate Production ContingEncy CasingSt Surface/Conduc Intermediate Production Intermediate Production Line CORING PROG None COMPLETION Rigless, 2-3 Sta GENERAL REM Notify BLM/NMC BOP Pressure Format Cliffhou Point Loc Dakot Reque Form 46 Review PREPARED BY	TypeMu Spuc Water/LS Air/Mist/ FRAM: ring ctor Y; In case ring ctor SRAM: PROGRAM age Limited MARKS: OCD 24 ho Testing Re cion use okout ta ested BOP I wed by: f;	SND Fluid Es of wat Es Entry urs pri-	8.8 - 9. 8.4 - 9. 1 2.501' 7.778' 2.501' 7.778' 2.501' 5.716' 7.778' Hydraulic f or to Spud, ments Depth 4,469' 5,182' 7,400' ure Test Ex	0 0 elow Frac, BOP	Sufficie 1000 d Hole 14 3/4* 9 7/8* 6 3/4* the intern Hole 14 3/4* 9 7/8* 6 3/4* 4 3/4* 9 7/8* 6 3/4* 4 3/4* FMC Unih P testing, an Don = 1500 p	Casing Size 10 3/4* 7 5/8* 4-1/2* mediate pipe we Casing Size 10 3/4* 7 5/8* 4-1/2* mediate pipe we Casing Size 10 3/4* 7 5/8* 5-1/2* 3 1/2* ead mticipated botto 500 600 260 psi ** N	Srade, Thr. J-55 ST& K-55 LT & P-110 will run the for Grade, Thr. J-55 ST& K-55 LT & P-110 LT & L-80 Hyd 5 ementing. m hole presser 0 0 ote: Determine	Volue ead W C 4 C 2 Dollowing ead W C 4 C 2 SC 2 SC 3 S11 5 S11 5 S12 S S12 S	ume su eight 0.5# 6.4# 1.6# casing /eight 0.5# 26.4# 17# 9.2#	hole while v fficient to ma 50' abo DK(program: Landing 50' abo 100' into 100' into TI	vhilst water drill aintain a stable g Point ve FC DT 15 g Point ve FC MNCS 1 D 100 mticipated surfi 0 0 972	ing, LCM ons and clean we cmt to su cmt to su cmt to su o' inside Inte TOC survey Ceme cmt to su cmt to su cmt to su 50' inside Inte ' inside Prod	ellbore ent rface rface ermediate - required ent rface ermediate luction Cas. e**
200' 2,501' 7,778' CASING PROG CasingSt Surface/Conduc Intermediate Production ContingEncy CasingSt Surface/Conduc Intermediate Production Production Line CORING PROG None COMPLETION Rigless, 2-3 Sta GENERAL REM Notify BLM/NMC BOP Pressure Format Cliffhou Point Loc Dakot Reque Form 46 Review	TypeMu Spuc Water/LS Air/Mist/J FRAM: ring ctor Y; In case ring ctor SRAM: PROGRAM age Limited MARKS: OCD 24 ho Testing Re tion use okout ta ested BOP I wed by: f: JMP/GGZ	SND Fluid Es of wat Es Entry urs pri-	8.8 - 9. 8.4 - 9. 1 2.501' 7.778' 2.501' 7.778' 2.501' 5.716' 7.778' Hydraulic f or to Spud, ments Depth 4,469' 5,182' 7,400' ure Test Ex	0 0 elow Frac, BOP	Sufficie 1000 d Hole 14 3/4* 9 7/8* 6 3/4* the intern Hole 14 3/4* 9 7/8* 6 3/4* 4 3/4* 9 7/8* 6 3/4* 4 3/4* FMC Unih P testing, and program references P testing and P testing and	ead conticipated botto control casing and C control casing and	Srade, Thr. J-55 ST& K-55 LT & P-110 will run the for Grade, Thr. J-55 ST& K-55 LT & P-110 LT & L-80 Hyd 5 ementing. m hole presser 0 0 ote: Determine	volue ead W C 4 C 2 1 Dollowing ead W C 4 C 2 SC 2 SC 3 S11 5 S11 5 S11 5 S12 S SC 4 S11 5 S12 S SC 3 SC 3 SC 4 SC 4 SC 4 SC 4 SC 4 SC 4 SC 4 SC 4	ume su eight 0.5# 6.4# 1.6# casing /eight 0.5# 26.4# 17# 9.2#	hole while v fficient to ma 50' abo DK(program: Landing 50' abo 100' into 100' into TI	vhilst water drill aintain a stable g Point DT 15 g Point D 100 mNCS 1 D 100 mNCS 1 D 100 micipated surfa 0 0 972 ula: ABHP - (.2	ing, LCM ons and clean we cmt to su cmt to su cmt to su o' inside Inte TOC survey Ceme cmt to su cmt to su cmt to su 50' inside Inte ' inside Prod	ellbore ent rface rface ermediate - required ent rface ermediate duction Cas. eff

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10 3/4 7 5/8 5 1/2 3 1/2 e e	Weight ((lb/ft) 40.5 . 26.4 H 17 F 9.2 L Mud Weight 8.6-9.2 8.6-9.2 NA	Grade J55 K-55 P110	(psi.) 3130 4140 10640 10159 <u>Recommend</u> PV YP	(psi.) led Mud Pr .<20 <10	2890 7460 10533	Prio Cementin	<u>ıq:</u>		
10 3/4 7 5/8 5 1/2 3 1/2 e	(lb/ft) 40.5 26.4 17 F 9.2 L Mud Weight 8.6-9.2 8.6-9.2 NA	J55 K-55 P110	(psi.) 3130 4140 10640 10159 <u>Recommend</u> PV YP	(psi.) led Mud Pr .<20 <10	2890 7460 10533	Prio Cementin	<u></u>		
10 3/4 7 5/8 5 1/2 3 1/2 e e	40.5 . 26.4 + 17 F 9.2 L Mud Weight 8.6-9.2 8.6-9.2 NA	K-55 P110	3130 4140 10640 10159 <u>Recommend</u> PV YP	led Mud Pi <20 <10	2890 7460 10533	Prio Cementin	<u></u>	<u></u>	
7 5/8 5 1/2 3 1/2 e e	26.4 + 17 F 9.2 L Mud Weight 8.6-9.2 8.6-9.2 NA	K-55 P110	4140 10640 10159 <u>Recommend</u> PV YP	led Mud Pi .<20 <10	2890 7460 10533	Prio Cementin	<u></u>		
5 1/2 3 1/2 e bud SND	17 F 9.2 L Mud Weight 8.6-9.2 8.6-9.2 NA	P110	10640 10159 <u>Recommend</u> PV YP	led Mud Pi .<20 <10	7460 10533	Prio Cementin	<u></u>	<u></u>	
3 1/2 e bud SND	9.2 L Mud Weight 8.6-9.2 8.6-9.2 NA		10159 Recommend PV YP	led Mud Pi .<20 <10	10533	Prio Cementin	<u>IQ:</u>	<u></u>	
e bud SND	Mud Weight 8.6-9.2 8.6-9.2 NA		Recommend PV YP	led Mud Pi .<20 <10		<u>Prio Cementin</u>	<u></u>		
oud SND	8.6-9.2 8.6-9.2 NA		PV YP	.<20 <10	roperties	Prio Cementin	<u>iq:</u>		
oud SND	8.6-9.2 8.6-9.2 NA		PV YP	.<20 <10	roperties	Prio Cementin	<u>iq:</u>		
SND	8.6-9.2 NA		YP	<10					
SND	8.6-9.2 NA								
SND	8.6-9.2 NA		Fluid Loss	· <15					
	NA								
dist									
	8.6 - 9.2								
		Surface		Interme	ediate			Production-Line	
		100		75	5		40	n/a	
		NA		0)		40	40	
		78		11	3		161	192	
		1,6,7		1,6	,8		2,4,6	2,4,6	
t wash pu	imps and lines.								
pumps a	nd lines.								
se out									
lend Test	t on Cement								
5. Record Rate, Pressure, and Density on 3.5" disk									
 Confirm densitometer with pressurized mud scales 1" cement to surface if cement is not circulated. 									
ent is not	t circulated to s	surface, run ten	np. survey 10-	12 hr. aftei	r landing	plug.			
vash up a	on top of plug.	Wash lines bet	ore displacing	production	n cemen	i job to minmize	e drillout.		
		20 bbl.	FreshWater						
		20 001.	110011110101						
	175 s	sx Class C Cer	nent				223	3 cuft	
urface		+ 2% CaCl2 (a	ccelerator)						
		(,				0.5563	3 cuft/ft OH	
	Densitv		Yield			Water			
	•								
			• •	,		(0)	8		
			1.27			5.0	U C		
		ac							
	-	•							
	Centralizers, a	is needed							
	1 Stop Ring								
	1 Thread Lock	Compound							
		Density (lb/gal) 9-5/8", 8R, ST 1 Guide Shoe 1 Top Wooder 1 Autofill inser Centralizers, a 1 Stop Ring	Density (Ib/gal) 15.2 9-5/8", 8R, ST&C 1 Guide Shoe 1 Top Wooden Plug 1 Autofill insert float valve Centralizers, as needed 1 Stop Ring 1 Thread Lock Compound	Density Yield (lb/gal) (ft3/sk) 15.2 1.27 9-5/8", 8R, ST&C 1 Guide Shoe 1 Top Wooden Plug 1 Autofill insert float valve Centralizers, as needed 1 Stop Ring 1 Thread Lock Compound	Density Yield (Ib/gal) (ft3/sk) 15.2 1.27 9-5/8", 8R, ST&C 1 Guide Shoe 1 Top Wooden Plug 1 Autofill insert float valve Centralizers, as needed 1 Stop Ring 1 Thread Lock Compound	Density Yield (lb/gal) (ft3/sk) 15.2 1.27 9-5/8", 8R, ST&C 1 Guide Shoe 1 Top Wooden Plug 1 Autofill insert float valve Centralizers, as needed 1 Stop Ring 1 Thread Lock Compound	Density Yield Water (lb/gal) (ft3/sk) (gal/sk) 15.2 1.27 5.4 9-5/8", 8R, ST&C 1 Guide Shoe 1 Top Wooden Plug 1 Autofill insert float valve Centralizers, as needed 1 Stop Ring 1 Thread Lock Compound	0.5563 Density Yield Water (lb/gal) (ft3/sk) (gal/sk) 15.2 1.27 5.8 9-5/8", 8R, ST&C 1 Guide Shoe 1 Top Wooden Plug 1 Autofill insert float valve Centralizers, as needed 1 Stop Ring	

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Cementing Program

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Intermediate:		<u></u>			
	Fresh Water Lead Slurry 1 TOC@Surface	20 ыл	fresh water 339 sx Class "G" Cement + 3% D79 extender +1/4 #/sk. Cellophane Flake + 5 lb/sk Gilsonite	e	891 cuft
					100
	Tail		104 sx 50/50 Class "G"/Poz		132 cuft
	Slurry 2 500	D ft fill	+ 2% gel (extender) +1/4 #/sk. Cellophane Flakı + 2% CaCl2 (accelerator) + 5 lb/sk Gilsonite	e	0.2646 cuft/ft OH 0.2836 cuft/ft csg ann
Slurry Properties:		Density	Yield	Water	
		(Ib/gal)	(ft3/sk)	(gal/sk)	
Slurry 1		11.4	2.63	15.8	
Slurry 2		13.5	1.27	5.72	
Casing Equipmen	nt:	7", 8R, ST&C			
		-			
Production:					
	Fresh Water	10 bbl	CW100		
	Lead		157 LiteCrete D961 / D124 / D	154	397 cuft
	Slurry 1		+ 0.03 gps D47 antifoam		
	TOC, 150' above	e 7 5/8" shoe	+ 0.5% D112 fluid loss		
			+ 0.11% D65 TIC		
~ - ·					0.0835 cuft/ft OH
Slurry Properties:		Density	Yield	Water	
		(lb/gal)	(ft3/sk)	(gal/sk)	0.0999 cuft/ft csg ann
Slurry 1		9.5	2.52	6.38	
Casing Equipmen	nt:	4-1/2", 8R, ST&C			
		1 Float Shoe (autofill	with minimal LCM in mud)		
		1 Float Collar (autofi	ll with minimal LCM in mud)		
		1 Stop Ring			
		Centralizers, as need	ded		
		1 Top Rubber Plug			
		1 Thread Lock Comp	ound		
Production - Line					
	Fresh Water	10 bbl	CW100		
	Lead		123 sx 50/50 Class "G"/Poz		177 cuft
	Slurry 1		+ 5% D20 gel (extender)		
	TOC, 100' above	e 5 1/2" shoe	+ 0.1% D46 antifoam		
			+ 1/4 #/sk. Cellophane Fla	ke	
			+ 0.25% D167 Fluid Loss		
			+0.1% d800, retarder		0.05624 cuft/ft OH
			+0.15% D65, dispersant		
					0.0637 cuft/ft csg ann
			Schlumberger Private		
Атосо			Schlumberger Private Page 2		7/26/2

Cementing Program

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Slurry Properties:	Density	Yield	Water				
	(lb/gal)	(ft3/sk)	(gal/sk)				
Slurry 1	13	1.44	6.5				
Casing Equipment:	3-1/2", 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, as needed						
	1 Rubber Plug						
	1 Thread Lock Compound						

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7/26/2006