Forn 3160-5 (\ugust 2007)

UNITED STATES DEPARTMENT OF THE INTERIOR OCD Artesia BUREAU OF LAND MANAGEMENT

FORM APPROVED OMB No. 1004-0137 Expires: July 31, 2010

5. Lease Serial No.

NMNM-007724

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

6. If Indian, Allottee or Tribe Name

SUBMIT IN	ner instructions on p	page 2.	ge 2. 7. If Unit of CA/Agreement, Name and/or No.					
I. Type of Well	☐ Gas Well	Other			8. Well Nan	ne and No. LAS 18 FEDERAL #1		
2. Name of Operator			· -		9. API Well			
APACHE C 3. Address	ORPORATION <		o. (include are	a Codo	30-015-			
303 VETERANS	00	`	,	10. Field and Pool or Exploratory Area				
MIDLAND	, TX 79705	432-010-	1167 / 432-81	8-1193 		LS;GLORIETA-YESO <96718>		
4. Location of Well (Footage,	Sec., T., R., M., or	Survey Description	1)		1	or Parish, State		
1980' FNL & 330' FEL UL: H	SEC: 18 T16S	R30E			EDDY CO	UNTY, NM		
12. CHECK	THE APPROPRIAT	E BOX(ES) TO IND	ICATE NATUR	RE OF NOTIO	CE, REPORT C	OR OTHER DATA		
TYPE OF SUBMISSION			TY	PE OF ACTI	ON			
Notice of Intent Subsequent Report Final Abandonment Notice	Alter Casing Fa			Reclam	Production (Start/Resume) Reclamation Recomplete Temporarily Abandon Water Shut- Well Integri Other Pool Co			
& MUD PROGRAM:	NWIDE / NMB00073	M HORIZONTA SEE ATTA	CHED F	OR	·	IS CHANGE IN CSG, CMT Accepted for record		
PROPOSED CSG:		CONDITIO				NMOCD 18		
HOLE DEPTH OD CS		DLLAR GRADE	COLLAPSE	BURST	TENSION	RECEIVED W		
	3 3/8 48# ST 5/8 24# ST 28# ST	C J55	1.0 1.0	1.21 1.21	1.8 1.8	OCT 11 2012		
7-7/8 0'-5600' 5.	5 17# ST	TC J55	1.0	1.21	1.8	NMOCD ARTESIA		
4. I hereby certify that the forego Name (Printed/Typed)	ing is true and correc	t.						
SORINA		Title St	UPV OF DRIL	LING SERVICE				
Signature Sorina L'Hores Da				/16/12		APPROVED		
	THIS SF	PACE FOR FEDE	RAL OR ST	ATE OFFI				
Approved by		· · · · · · · · · · · · · · · · · · ·				JUL 2 1 2012		
	•		Title			Date - /////		
Conditions of approval, if any, are atta ertify that the applicant holds legal or which would entitle the applicant to co	equitable title to those	rights in the subject leas				WESLEY W. INGRAM PETROLEUM ENGINEER		

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.

Form 3160-5 (cont.)

BOQUILLAS 18 FEDERAL #1 (api # 30-015-40266)

PROPOSED CMT PROGRAM:

13-3/8" SURFACE: (100% Excess, cmt to surf)

Lead: 230 sx Class H 50/50 w/10% Gel + 0.5# Star seal + 0.25% Defoamer + 3% Salt (13.5 wt, 1.75 yld)

Tail: 210 sx Class C W/0.25% Defoamer (14.8 wt, 1.33 yld)

Comp Strengths: 12hr - 813 psi 24hr - 1205 psi

8-5/8" INTERMEDIATE (50% Excess, cmt to surf)

Lead: 560 sx Class H 50/50 w/10% Gel + 2# Star seal + 0.25% Defoamer (13.5 wt, 1.75 yld)

Tail: 210 sx Class C w/ 1% CaCl + 0.25% Defoamer (14.8 wt, 1.34 yld)

Comp Strengths: 12hr - 813 psi 24hr - 1205 psi

5.5" PRODUCTION (35% Excess, TOC: 2000')

Lead: 80 sx Class H 50/50 w/10% Gel + 2# Star seal + 0.25% Defoamer (11.9 wt, 2.24 yld)

Tail: 310 sx Class C w/1% CaCL + 0.25% Defoamer (14.8 wt, 1.34 yld)

Comp Strengths: 12hr – 813 psi 24hr – 1205psi

PROPOSED MUD PROGRAM:

INTERVAL	MW (ppg)	VISC (Sec/qt)	FLUID LOSS (cc)	MUD TYPE
0'-422'	8.6 - 8.8	28 – 30	NC	Fresh Water
422' – 2800'	9.8 - 10.2	28 – 34	NC	Brine
2800' – 5600'	8.6 – 9.1	28 – 36	NC	Cut Brine

DISTRICT I
1625 N French Dr., Hobbs, NM 88240
Phone: (575) 393-6161 Fax (575) 393-0720
DISTRICT II
811 S First St., Artesia, NM 88210
Phone: (575) 748-1283 Fax. (575) 748-9720
DISTRICT III
1600 Rio Brazos Road, Azec, NM 87410
Phone: (505) 334-6178 fax. (505) 334-6170
DISTRICT IV
1220 S. St. Francis Dr., Santa Fe, NM 87505
Phone: (505) 476-3460 Fax (505) 476-3462

State of New Mexico Energy, Minerals & Natural Resources Department OIL CONSERVATION DIVISION 1220 South St. Francis Dr. Santa Fe, New Mexico 87505

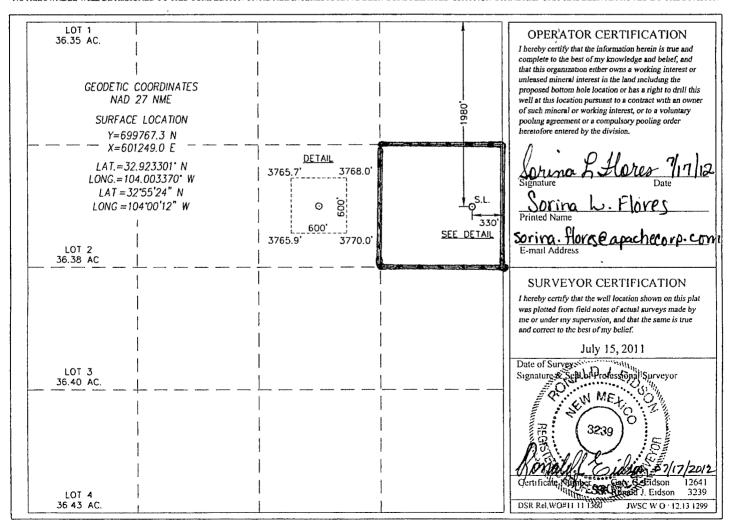
Form C-102
Revised August 1, 2011
Submit one copy to appropriate
District Office

AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

	4 Number	ì		Pool Code	1	Pool Name				
30-015-40266 96718					1	Loco Hills; Glorieta-Yeso				
Property C	ode	Property Name						W	Well Number	
392	16	BOQUILLAS 18 FEDERAL							1	
OGRIDA	No.	Operator Name					I	Elevation		
813		APACHE CORPORATION						3767'		
					Surface Locat	ion				
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County	
Н	18	16-S	30-E		1980	NORTH	330	EAST	EDDY	
		<u> </u>		Bottom Hol	e Location If Diffe	erent 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	Joint or	In Ell C	onsolidation C	ode Ord	er No					
Dedicated Acres	Joint of	min C	onsongation C	oue Oiu	EI INU					
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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



Boquillas 18 Federal 1 30-015-40266 Apache Corporation July 21, 2012 Conditions of Approval

Original Conditions of Approval are applicable except for changes noted in this document.

- 1. Operator to modify intermediate casing string as follows: Operator shall set approximately 2260' of J-55 to meet BLM collapse safety factor of 1.125 for collapse. Operator shall set approximately 540' of HCK-55.
- 2. Production casing cement as presented results in a negative 8% excess. To achieve the 35% excess that the operator proposed, the lead cement volume will need to increase to 200 sacks with the tail volume remaining as proposed. Also, the lead cement composition is identical to that used for the surface and intermediate casing, but the weight and yield are considerably different. Is this the correct cement blend?
- 3. BLM's safety factor minimums are: collapse = 1.125, burst = 1.0, tension = 1.8

A. CASING

Changes to the approved APD casing program need prior approval if the items substituted are of lesser grade or different casing size. The Operator can exchange the components of the proposal with that of superior strength (i.e. changing from J-55 to N-80, or from 36# to 40#). Changes to the approved cement program need prior approval if the altered cement plan has less volume or strength or if the changes are substantial (i.e. Multistage tool, ECP, etc.).

Centralizers required on surface casing per Onshore Order 2.III.B.1.f.

Wait on cement (WOC) time prior to drilling out for a primary cement job will be a minimum 18 hours for a water basin, 24 hours in the potash area, or 500 pounds compressive strength, whichever is greater for all casing strings. DURING THIS WOC TIME, NO DRILL PIPE, ETC. SHALL BE RUN IN THE HOLE. Provide compressive strengths including hours to reach required 500 pounds compressive strength prior to cementing each casing string. See individual casing strings for details regarding lead cement slurry requirements.

No pea gravel permitted for remedial or fall back remedial without prior authorization from the BLM engineer.

Possible lost circulation in the San Andres Formation.

- 1. The 13-3/8 inch surface casing shall be set at approximately 422 feet (a minimum of 25 feet into the Rustler Anhydrite and above the salt) and cemented to the surface. If salt is encountered, operator shall set casing a minimum of 25 feet above the salt.
 - a. If cement does not circulate to the surface, the appropriate BLM office shall be notified and a temperature survey utilizing an electronic type temperature survey with surface log readout will be used or a cement bond log shall be run to verify the top of the cement. Temperature survey will be run a minimum of six hours after pumping cement and ideally between 8-10 hours after completing the cement job.
 - b. Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry.
 - c. Wait on cement (WOC) time for a remedial job will be a minimum of 4 hours after bringing cement to surface or 500 pounds compressive strength, whichever is greater.
 - d. If cement falls back, remedial cementing will be done prior to drilling out that string.
- 2. The minimum required fill of cement behind the 8-5/8 inch intermediate casing is:
 - ☐ Cement to surface. If cement does not circulate see B.1.a, c-d above.
- 3. The minimum required fill of cement behind the 5-1/2 inch production casing is:
 - ⊠ Cement as proposed. Operator shall provide method of verification.
- 4. If hardband drill pipe is rotated inside casing, returns will be monitored for metal. If metal is found in samples, drill pipe will be pulled and rubber protectors which have a larger diameter than the tool joints of the drill pipe will be installed prior to continuing drilling operations.

WWI 072112

NMOCD: Must be in compliance w/ Rule 5.9 prior to placing well on production