## Form 3160-5 (March 2012)

## RECEIVED

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

MAR 29 2013

FORM APPROVED

OMB No.	1004-0137
Expires: Oc	tober 31, 201

Do not use tins i	onn for proposals i	PARMINGTO DRTS ON WELLS of La to drill or to re-enter a PD) for such proposa		ndian, Allottee o	or Tribe Name .	
SUBMIT IN TRIPLICATE Other instructions on page 2.			7. If U	7. If Unit of CA/Agreement, Name and/or No.		
1. Type of Well Gas Well Other				8. Well Name and No. Logos #3		
2. Name of Operator Logos Operating, LLC				I Well No. 43-21135		
3a. Address 3b. Phone No. (include area code)			10. Field and Pool or Exploratory Area			
4001 North Butler Avenue, Building 7101 Farmington, NM 87401		505-436-2627	Pleas	lease see below.		
4. Location of Well (Footage, Sec., T.,R.,M., or Survey Description) 741' FSL. 1263' FEL Section 5, T22N, R6W, UL P				11. County or Parish, State Sandoval County, NM		
12. CHEC	K THE APPROPRIATE BO	X(ES) TO INDICATE NATUR	E OF NOTICE, RE	PORT OR OTH	ER DATA	
TYPE OF SUBMISSION	TYPE OF SUBMISSION TYPE OF ACT					
Notice of Intent	Acidize Alter Casing	Deepen Fracture Treat	Reclamation	Start/Resume)	Water Shut-Off  Well Integrity  ✓ Other Completion	
Subsequent Report	Classing Repair	New Construction Plug and Abandon	Recomplete	Alexades	Other Completion	
Final Abandonment Notice	Change Plans Convert to Injection	Plug Back		Femporarily Abandon  Water Disposal		
Attach the Bond under which the water following completion of the involve testing has been completed. Final adtermined that the site is ready for Logos Operating, LLC requests approximately approxim	ed operations. If the operation Abandonment Notices must be final inspection.)  roval for the attached completion detail attached pletion detail attached	on results in a multiple completine filed only after all requirement place on the Logos #	on or recompletion its, including recland	n a new interval	, a Form 3160-4 must be filed once	
		,	•	ACCEP	TED FOR RECORD	
				AP	R 0 & 2013	
		CONFIDE		FARMING BY_\\	TONFIELD OFFICE Liam_Tambekou	
14. I hereby certify that the foregoing is tr	ue and correct. Name (Printed	1/Typed)			·	
Kristy Graham		Title Product	ion Engineer			
Signature Kur		Date 03/28/20	013	-	,	
<del></del>	THIS SPACE	FOR FEDERAL OR ST	ATE OFFICE	USE		

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.

l'itle

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.

Approved by

2/23/13 – RU wireline and set Frac Plug at 5752'. Perforate interval 5440-5504 with 4 SPF (36 holes). Frac with 2000 gal of 10% HCl; 10,840# of 100 mesh sand; 93,805# of 40/70 sand; 70Q Foam (2,245 BBLs of slickwater and 2.6MMSCF N2). RU wireline and set frac plug at 5414', tested plug to 3100 PSI for 5 min, held good. Perforate interval 5268-5392' with 3 SPF (36 holes). Frac with 2000 gal of 10% HCl; 10,000# of 100 mesh; 94,000# of 40/70 sand; 70Q Foam (2401 BBLS of Slickwater and 2.3MMSCF N2). RU wireline and set frac plug @ 5210', tested plug to 3000 PSI for 5 minutes, held good. Perforate interval from 5024-5150 with 2 SPF (34 holes). Frac with 2000 gal of 10% HCl; 10,000# 100 mesh sand; 90,500# of 40/70 sand; 6,633 bbls of slickwater.

3/4/13 – RU wireline and set composite bridge plug @ 4970'. Perforate 3727', 3908'-3918', 3953' with 3 SPF (36 holes). Pump 750 gal of 15% HCl and displace with 118 BBLS of water. Shut well in.

3/7/13-3/11/13 – TIH with tbg and packer and set packer at 3691'. Swab test interval from 3727-3953' and recover nothing but water, no show of oil. Recovered over 300 BW from swabbing, no show of oil or gas. Prepare to sqz perforated interval 3727-3953'.

3/12/13 – Set CICR at 3858'. Squeeze perforations 3908-3953' with 175 sx of type 3 cement (14.8 PPG, 1.33 cuft/sx). Final squeeze pressure 1830 PSI, stung out of retainer and circulate tubing and casing. PU 2<sup>nd</sup> CICR and set at 3690' and squeezed perforation at 3727' with 100 sx of type 3 cement (14.8 ppg, 1.33 cuft/sx yield). Final squeeze PSI 1890 PSI, stung out of retainer and circulated tubing and casing clean.

3/14/13 - PU bit and tubing and drill out CICR and cement. Tagged TOC above retainer at 3458'. Drilled out cmt to top of CICR at 3690' and tested casing to 500 PSI for 15 min, held good. Drilled out CICR @ 3690'.

3/15/13 - TOOH with tri-cone bit and laid it down. PU mill and TIH, tagged TOC @ 3693'. Drill out cement to top of CICR @ 3858' and tested casing to surface at 500 PSI for 30 min, held good. Drilled out CICR @ 3858 and continue drilling cement to 3860'.

3/16/13 – Drill cement from 3863-3960' and circulate the well clean. Continue cleaning well down to 4926'. Load and test casing from 4926' to surface at 500 PSI for 30 min, held good. RU swab tools and swab test for fluid entry. Swabbed tubing and found no sign of fluid entry. RD swab tools. Drilled out composite bridge plug @ 4970'.

3/17/13 – Drill out frac plug @ 5210'. Continue and drill out composite frac plug @ 5414'. Continue and drill out composite frac plug @ 5752'.

3/18/13 – Drill out composite bridge plug @ 6100'. Continue cleaning out well to PBTD @ 6616'.

3/20/13 - PU 2-7/8", J-55, 6.5#, tubing/BHA and set EOT @ 4887', SN @ 4855', TAC @ 4790'. PU rods/pump and TIH w/ 2" insert pump on  $\frac{3}{4}$ " rods. Test pump for good pump action. RDMO.