Form 3160-5 (March 2012)

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

MAR 05 2014

FORM APPROVED
OMB No. 1004-0137
Expires: October 31, 201

5. Lease Serial No.

Do not use this i	form for proposals :	DRTS ON WELLS _{อเมื่} to drill or to re-enter a APD) for such proposa	n	6:1f Indian Allouce o Jicarilla Apache Na		
SUBMIT IN TRIPLICATE – Other instructions on page 2.				7. If Unit of CA/Agreement, Name and/or No.		
1. Type of Well						
✓ Oil Well ☐ Gas Well ☐ Other			8. Well Name and No. Logos #601H			
2. Name of Operator Logos Operating, LLC				9. API Well No. 30-043-21182		
3a. Address	3b. Phone No. (include area code) 10. Field and Pool or		Exploratory Area			
4001 North Butler Avenue, Building 7101 Farmington, NM 87401		505-330-9333		WC 22N5W6; Wildcat Gallup		
4. Location of Well (Footage, Sec., T., 440' FNL, 560' FWL BHL: 432	;		11. County or Parish, State			
Section 5, T22N, R5W, UL D];		Sandoval County, NM			
12. CHEC	K THE APPROPRIATE BO	X(ES) TO INDICATE NATUI	RE OF NOTIC	E, REPORT OR OTH	ER DATA	
TYPE OF SUBMISSION	TYPE OF ACTION					
Notice of Intent	Acidize	Deepen	Produ	Production (Start/Resume) Water Shut-Off		
	Alter Casing	Fracture Treat	Reclai	mation	Well Integrity	
Subsequent Report	Casing Repair	New Construction	Recor	nplete	Other Completion	
- accordant report	Change Plans	Plug and Abandon	☐ Temp	orarily Abandon		
Final Abandonment Notice	Convert to Injection	Plug Back	☐ Water	Disposal		
13. Describe Proposed or Completed Or the proposal is to deepen directions Attach the Bond under which the v following completion of the involv testing has been completed. Final determined that the site is ready for	ally or recomplete horizontal work will be performed or pro- ed operations. If the operation Abandonment Notices must be	ly, give subsurface locations and ovide the Bond No. on file with on results in a multiple completi	d measured and BLM/BIA. Reion or recomple	d true vertical depths of equired subsequent rep etion in a new interval	of all pertinent markers and zones. Forts must be filed within 30 days , a Form 3160-4 must be filed once	
02/12/14 MIRU AWS656. NDmaster P110 tie-back string. 02/14/14 Spac clean returns. POOH, LD tbg & bit.	ce out, land & lock mandre	el. PT csg to 1000psi for 30m	l-1/2" Halibur <u>nin,</u> test ok. ∽ 1	on tie-back seal ass IH w/bit to 8650'. 02	sembly. TIH w/116jts 4-1/2" 11.6# 2/15/14 Finish TIH to 10,606', circ	
02/17/14 ND spacer tool, NU frac sta	ack & PT, test ok.				RCVD MAR S '14	

14. I hereby certify that the foregoing is true and correct. Name (Printed/Typed)					
Tamra Sessions	Title Operations Technician				
Signature Confession	Date 03/04/2014				
THIS SPACE FOR FEDERAL OR STATE OFFICE USE ACCEPTED FOR RECORD					
Approved by	Process 1 200 1 321 131 131 131 131 131 131 131 131 1				

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 FARMINGTON FIELD OFFICE entitle the applicant to conduct operations thereon. 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.

Title

Office



see attached page 2.



OIL CONS. DIV.

DIST. 3

Logos 601H API# 30-043-21182 Wildcat Gallup Logos Operating, LLC Page 2 of Completion Sundry

02/23/14 RU Baker & Basin WL to perf Gallup w/.385" diam, 6SPF @ 10414'-10597' = 24 holes. 02/24/14 Acidize w/48bbl 15% HCL Acid. Frac 1st Stage Gallup (10414'-10597') w/3677bbls Slickwater 70Q N2, 7246# 100Mesh, 197460# 40/70 Ottawa Sand, 3.697mmscf N2. Set CFP @ 10386'.

Perf Gallup w/.385" diam, 6SPF @ 10141'-10358' = 30 holes. Acidize w/48bbl 15% HCL Acid. Frac 2nd Stage Gallup (10141'-10358') w/3688bbls Slickwater 70Q N2, 7148# 100Mesh, 210600# 40/70 Ottawa Sand, 3.858mmscf N2. Set CFP @10113'.

Perf Gallup w/.385" diam, 6SPF @ 9874'-10085' = 30 holes. Acidize w/48bbl 15% HCL Acid. **Frac 3rd Stage** Gallup (9874'-10085') w/3612bbls Slickwater 70Q N2, 7086# 100Mesh, 210860# 40/70 Ottawa Sand, 3.538mmscf N2. **Set CFP @9841'**.

Perf Gallup w/.385" diam, 6SPF @ 9597'-9813' = 30 holes. 02/25/14 Acidize w/48bbl 15% HCL Acid. Frac 4th Stage Gallup (9597'-9813') w/3799bbls Slickwater 70Q N2, 7172# 100Mesh, 202130# 40/70 Ottawa Sand, 3.637mmscf N2. Set CFP @9567'.

Perf Gallup w/.385" diam, 6SPF @ 9325'-9541' = 30 holes. Acidize w/48bbl 15% HCL Acid. Frac 5th Stage Gallup (9325'-9541') w/3617bbls Slickwater 70Q N2, 7288# 100Mesh, 203474# 40/70 Ottawa Sand, 3.511mmscf N2. Set CFP @9297'.

Perf Gallup w/.385" diam, 6SPF @ 9054'-9269' = 30 holes. Acidize w/48bbl 15% HCL Acid. Frac 6th Stage Gallup (9054'-9269') w/3249bbls Slickwater 70Q N2, 6940# 100Mesh, 207080# 40/70 Ottawa Sand, 3.169mmscf N2. Set CFP @9024'.

Perf Gallup w/.385" diam, 6SPF @ 8780'-8996' = 30 holes. 02/26/14 Acidize w/48bbl 15% HCL Acid. Frac 7th Stage Gallup (8780'-8996') w/3512bbls Slickwater 70Q N2, 7797# 100Mesh, 202163# 40/70 Ottawa Sand, 3.231mmscf N2. Set CFP @8756'.

Perf Gallup w/.385" diam, 6SPF @ 8508'-8724' = 30 holes. Acidize w/48bbl 15% HCL Acid. Frac 8th Stage Gallup (8508'-8724') w/3552bbls Slickwater 70Q N2, 7030# 100Mesh, 199513# 40/70 Ottawa Sand, 3.438mmscf N2. Set CFP @8477'.

Perf Gallup w/.385" diam, 6SPF @ 8236'-8452' = 30 holes. Acidize w/48bbl 15% HCL Acid. Frac 9th Stage Gallup (8236'-8452') w/3315bbls Slickwater 70Q N2, 6869# 100Mesh, 207236# 40/70 Ottawa Sand, 3.07mmscf N2. Set CFP @8208'.

Perf Gallup w/.385" diam, 6SPF @ 7963'-8180' ≈ 30 holes. 02/27/14 Acidize w/24bbl 15% HCL Acid. Frac 10th Stage Gallup (7963'-8180') w/3613bbls Slickwater 70Q N2, 7060# 100Mesh, 202311# 40/70 Ottawa Sand, 3.185mmscf N2. Set CFP @7935'.

Perf Gallup w/.385" diam, 6SPF @ 7691'-7907' = 30 holes. Acidize w/24bbl 15% HCL Acid. **Frac 11th Stage** Gallup (7691'-7907') w/3340bbls Slickwater 70Q N2, 7000# 100Mesh, 206048# 40/70 Ottawa Sand, 3.263mmscf N2. **Set CFP @7665'**.

Perf Gallup w/.385" diam, 6SPF @ 7419'-7635' = 30 holes. Acidize w/24bbl 15% HCL Acid. **Frac 12th Stage** Gallup (7419'-7635') w/3523bbls Slickwater 70Q N2, 6714# 100Mesh, 201860# 40/70 Ottawa Sand, 3.628mmscf N2. **Set CFP @7391'**.

Logos 601H API# 30-043-21182 Wildcat Gallup Logos Operating, LLC Page 3 of Completion Sundry

Perf Gallup w/.385" diam, 6SPF @ 7146'-7359' = 30 holes. 02/28/14 Acidize w/24bbl 15% HCL Acid. Frac 13th Stage Gallup (7146'-7359') w/3381bbls Slickwater 70Q N2, 7348# 100Mesh, 208120# 40/70 Ottawa Sand, 3.2mmscf N2. Set CFP @7118'.

Perf Gallup w/.385" diam, 6SPF @ 7090'-6874' = 30 holes. Acidize w/24bbl 15% HCL Acid. **Frac 14th Stage** Gallup (7090'-6874') w/3184bbls Slickwater 70Q N2, 7290# 100Mesh, 204140# 40/70 Ottawa Sand, 3.2mmscf N2. **Set CFP @6848'**.

Perf Gallup w/.385" diam, 6SPF @ 6818'-6602' = 30 holes. Acidize w/24bbl 15% HCL Acid. Frac 15th Stage Gallup (6818'-6602') w/3136bbls Slickwater 70Q N2, 7302# 100Mesh, 202700# 40/70 Ottawa Sand, 3.0mmscf N2. Set CFP @6574'.

Perf Gallup w/.385" diam, 6SPF @ 6548'-6330' = 30 holes. 03/01/14 Acidize w/24bbl 15% HCL Acid. Frac 16th Stage Gallup (6548'-6330') w/3731bbls Slickwater 70Q N2, 7634# 100Mesh, 208420# 40/70 Ottawa Sand, 3.5mmscf N2. Set CFP @6302'.

Perf Gallup w/.385" diam, 6SPF @ 6269'-6055' = 30 holes. Acidize w/24bbl 15% HCL Acid. **Frac 17th Stage** Gallup (6269'-6055') w/3606bbls Slickwater 70Q N2, 7424# 100Mesh, 208160# 40/70 Ottawa Sand, 3.4mmscf N2. **Set CFP @6029'**.

Perf Gallup w/.385" diam, 6SPF @ 6001'-5781' = 30 holes. Acidize w/24bbl 15% HCL Acid. **Frac 18th Stage** Gallup (6001'-5781') w/4338bbls Slickwater 70Q N2, 6998# 100Mesh, 194100# 40/70 Ottawa Sand, 3.7mmscf N2. **Set CBP @ 4800'**.

RD & release WL & Frac equipment 03/01/14.

03/05/14 Start Flowback.