

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

FORM APPROVED  
OMB NO. 1004-0137  
Expires: January 31, 2018

**SUNDRY NOTICES AND REPORTS ON WELLS**  
*Do not use this form for proposals to drill or to re-enter an abandoned well. Use form 3160-3 (APD) for such proposals.*

**SUBMIT IN TRIPLICATE - Other instructions on page 2**

1. Type of Well <input checked="" type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input type="checkbox"/> Other		5. Lease Serial No. NMNM18463
2. Name of Operator LOGOS OPERATING LLC		6. If Indian, Allottee or Tribe Name
3a. Address 2010 AFTON PLACE FARMINGTON, NM 87401		7. If Unit or CA/Agreement, Name and/or No. NMNM138586
3b. Phone No. (include area code) Ph: 505-787-2218		8. Well Name and No. HEROS 23 08 09L COM 1H
4. Location of Well (Footage, Sec., T., R., M., or Survey Description) Sec 9 T23N R8W NWSW 1476FSL 210FWL 36.238493 N Lat, 107.694942 W Lon		9. API Well No. 30-045-35688-00-S1
		10. Field and Pool or Exploratory Area NAGEEZI GALLUP
		11. County or Parish, State SAN JUAN COUNTY, NM

12. CHECK THE APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION			
<input type="checkbox"/> Notice of Intent	<input type="checkbox"/> Acidize	<input type="checkbox"/> Deepen	<input type="checkbox"/> Production (Start/Resume)	<input type="checkbox"/> Water Shut-Off
<input checked="" type="checkbox"/> Subsequent Report	<input type="checkbox"/> Alter Casing	<input type="checkbox"/> Hydraulic Fracturing	<input type="checkbox"/> Reclamation	<input type="checkbox"/> Well Integrity
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> New Construction	<input type="checkbox"/> Recomplete	<input checked="" type="checkbox"/> Other
	<input type="checkbox"/> Change Plans	<input type="checkbox"/> Plug and Abandon	<input type="checkbox"/> Temporarily Abandon	Venting and/or Flaring
	<input type="checkbox"/> Convert to Injection	<input type="checkbox"/> Plug Back	<input type="checkbox"/> Water Disposal	

13. Describe Proposed or Completed Operation. Clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recomple horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports must be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompletion in a new interval, a Form 3160-4 must be filed once testing has been completed. Final Abandonment Notices must be filed only after all requirements, including reclamation, have been completed and the operator has determined that the site is ready for final inspection.

LOGOS flared the following well due to the frac activity on Heros 2308 09L Com 2H, 3H, 4H and 5H.  
Gas sample attached.

Flared: 8/9/2018 - 8/16/2019  
Volume: 11,094

NMOC

DEC 04 2019

DISTRICT III

14. I hereby certify that the foregoing is true and correct. <b>Electronic Submission #494186 verified by the BLM Well Information System For LOGOS OPERATING LLC, sent to the Farmington Committed to AFMSS for processing by JOHN HOFFMAN on 12/03/2019 (18WMT1068S)</b>	
Name (Printed/Typed) MARIE E FLOREZ	Title REGULATORY SPECIALIST
Signature (Electronic Submission)	Date 12/02/2019

**THIS SPACE FOR FEDERAL OR STATE OFFICE USE**

Approved By <b>ACCEPTED</b>	JOHN HOFFMAN Title PETROLEUM ENGINEER	Date 12/03/2019
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.		
Office Farmington		

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.

(Instructions on page 2)

**\*\* BLM REVISED \*\* BLM REVISED \*\* BLM REVISED \*\* BLM REVISED \*\* BLM REVISED \*\***

NMOC

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2030 Afton Place  
Farmington, NM 87401  
(505) 325-6622

Analysis No: N2180044  
Cust No: 46600

### Well/Lease Information

## LOGOS OPERATING

Well Name: HEROS #1H  
County/State: NEW MEXICO  
Location:  
Formation:  
Meter Number:  
Foreman: BRYAN LOVATO

Source: Meter Run  
Well Flowing: Yes  
Pressure: 325  
Flow Temp: 83 F  
Ambient Temp: 65 F  
Sample Method: Purge & Fill  
Date Sampled: 8/7/2018  
Time Sampled: 5:30 AM  
Sampled By:(Co.) LOGOS  
Sampled By: JERONIMO C.

GPA Standard: GPA 2261-14

GC: SRI Instruments 8610 Last Cal/Verify: 8/7/2018

Remarks:

### Analysis

Component:	Mole%:	Un-normalized Mole%:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	72.230	70.444	7.9527	0.00	0.6986
Methane	19.188	18.714	3.2554	193.80	0.1063
CO2, C2-C6+	8.582	8.370	2.4339	198.76	0.1256
Total	100.000	97.527	13.6420	392.56	0.9305

\* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

\*\*@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z):	0.9990	CYLINDER #:	4010
BTU/CU.FT IDEAL:	393.5	CYLINDER PRESSURE:	36
BTU/CU.FT (DRY REAL) CORRECTED FOR (1/Z):	393.9	ANALYSIS DATE:	8/7/2018
BTU/CU.FT (WET REAL) CORRECTED FOR (1/Z):	387.0	ANALYZED BY:	Dawn Blessingame
REAL SPECIFIC GRAVITY:	0.9310		

GPM, BTU, and SPG calculations as shown  
above are based on current GPA factors.



2030 Afton Place  
Farmington, NM 87401  
(505) 325-6622

Analysis No: N2180147  
Cust No: 46600

### Well/Lease Information

## LOGOS OPERATING

Well Name: HEROS 2308 09L COM 14  
County/State: NEW MEXICO  
Location:  
Formation:  
Meter Number:  
Foreman: BRYAN LOVATO

Source: Meter Run  
Well Flowing: Yes  
Pressure: 114  
Flow Temp: 70 F  
Ambient Temp: 29 F  
Sample Method: Purge & Fill  
Date Sampled: 8/27/2018  
Time Sampled: 6:00 AM  
Sampled By: (Co.)  
Sampled By:

GPA Standard: GPA 2261-14

GC: SRI Instruments 8610 Last Cal/Verify: 8/27/2018

Remarks:

### Analysis

Component:	Mole%:	Un-normalized Mole%:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	24.263	23.700	2.6796	0.00	0.2347
Methane	45.241	44.192	7.6992	456.93	0.2506
CO <sub>2</sub> , C <sub>2</sub> -C <sub>6</sub> +	30.496	29.790	8.6755	706.28	0.4463
Total	100.000	97.682	19.0544	1163.21	0.9315

\* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

\*\*@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBILITY FACTOR (1/Z):	0.9959	CYLINDER #:	6017
BTU/CU.FT IDEAL:	1165.9	CYLINDER PRESSURE:	80
BTU/CU.FT (DRY REAL) CORRECTED FOR (1/Z):	1170.7	ANALYSIS DATE:	8/27/2018
BTU/CU.FT (WET REAL) CORRECTED FOR (1/Z):	1150.2	ANALYZED BY:	Dawn Blassingame
REAL SPECIFIC GRAVITY:	0.9350		

GPM, BTU, and SPG calculations as shown  
above are based on current GPA factors.