Form 3160-5 (March 2012)

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

SUNDRY NOTICES AND REPORTS ON WELLS

FORM APPROVED OMB No. 1004-0137 Expires: October 31, 2014

FEB 04 20 MM 109397

6. If Indian, Allottee or Tribe Name

Do not use this form for proposals to drill or to reFentemation Field Office

abandoned well.	Use Form 3160-3 (/	APD) for such pr	<u>opośals</u> nd M	an agemen.	·		
SUBMI	IT IN TRIPLICATE – Othe	er instructions on page	2.	7. If Unit of CA/Agre	pement, Name and/or No.		
1. Type of Well			_				
✓ Oil Well ☐ Gas Well ☐ Other				8. Well Name and No Logos #4	8. Well Name and No. Logos #4		
2. Name of Operator Logos Operating, LLC				9. API Well No. 30-045-35420			
3a. Address 4001 North Butler Avenue, Building 7101		3b. Phone No. (includ	le area code)	10. Field and Pool or	•		
Farmington, NM 87401		505-436-2627		Lybrook Gallup Ext	. NSPU		
4. Location of Well (Footage, Sec., T.R.M., or Survey Description) 336' FNL, 2121' FWL Section 1, T23N, R8W, UL C				'	11. County or Parish, State San Juan County, NM		
12. CHEC	CK THE APPROPRIATE B	OX(ES) TO INDICATE	NATURE OF NO	TICE, REPORT OR OTH	IER DATA		
TYPE OF SUBMISSION			TYPE OF A	CTION			
✓ Notice of Intent	Acidize	Deepen		roduction (Start/Resume)	Water Shut-Off		
Twitee of thich	Alter Casing	Fracture Trea	ıt 🔲 R	eclamation	Well Integrity		
Subsequent Penart	Casing Repair	New Constru	etion 🔲 R	ecomplete	Other Location Change		
Subsequent Report	Change Plans	Plug and Aba	ındon 🔲 T	emporarily Abandon			
Final Abandonment Notice	Convert to Injection	Plug Back	\/	/ater Disposal			
from the NE/4 of Unit Letter C, Sect Please find attached the revised pla				(a) 6, 666, 677, 1261,	RCVD FEB 12'13 OIL CONS. DIV. DIST. 3		
				60	MFIDENTIAL		
14. I hereby certify that the foregoing is to	rue and correct. Name (Printe	ed/Typed)					
Kristy Graham		Title	Director of Admir	nistration and Engineeri	ng Support		
Signature S	<u>~</u>	Date	02/04/2013				
	THIS SPACE	FOR FEDERAL	OR STATE O	FFICE USE			
Approved by William Tambelcou	l	J	"illo Petroleun	n Englineer	02/06/2013		
Conditions of approval, if any, are attached hat the applicant holds legal or equitable to entitle the applicant to conduct operations t	 Approval of this notice doc itle to those rights in the subje 	s not warrant or certify set lease which would (Office FFO				

fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

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.

DISTRICT_I 1625 N. French Dr., Hobbs, N.M. 88240 Phone: (876) 393-6161 Fax: (576) 393-0720 DISTRICT_II 811 S. Piret St., Artesia, N.M. 66210 Phone: (575) 748-1283 Fax: (575) 748-9720 DISTRICT III 1000 Rio Brazos Rd., Azteo, N.M. 87410 Phone: (505) 934-6178 Fex: (505) 934-6170

1220 S. St. Francis Dr., Santa Fe, NM 87505 Phone: (505) 476-3460 Fax: (505) 476-3462

DISTRICT_IV

State of New Mexico

OIL CONSERVATION DIVISIONFEB 04 2013 to appropriate

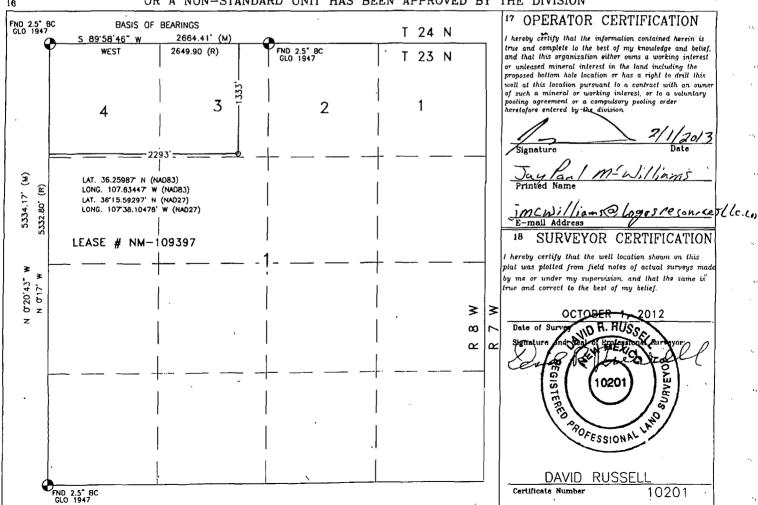
Form C-102

Revised August 1, 2011

1220 South St. Francis Dr. Santa Fe, NM 87505 Farmington Field Office Bureau of Land Managemeix AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

1 API Number 1 Pool Code 30-045-35420 4228			*Pool Name						
30-049	<u>5 - 55</u>	3420	1 9	228	9 1		·LYBRO	OK GALLUP,	EXT. NSPU
Property Co	de	⁶ Property Name						Well Number	
31196	23	LOGOS						4	
OGRID No.		Operator Name				^o Elevation			
289408	3 .	LOGOS OPERATING LLC					6939'		
¹⁰ Surface Location									
UL or lot no.	Section	Township	Range	Lot Idn	Feet from t	he North/South line	Feet from the	East/West lin	e County
С	1	23N	8W	3	1333'	NORTH	2293'	WEST	SAN JUAN
¹¹ Bottom Hole Location If Different From Surface									
UL or lot no.	Section	Township	Range	Lot Idn	Feet from t	he North/South line	Feet from the	East/West lin	re County FEE 12'13
18 Dedicated Acres			18 Joint or	Infill	14 Consolidati	lon Code	¹⁸ Order No.	OIL (ONS. DIV.
40.20	Acresi	NEHANAH				•.			NST. 3
NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED OR A NON-STANDARD LINIT HAS BEEN APPROVED BY THE DIVISION									



LATITUDE: 36.25987° N LONGITUDE: 107.63447° W DATUM: NAD 83

LOGOS DPERATING, LLC

LOGOS #4

1333' FNL & 2293' FWL

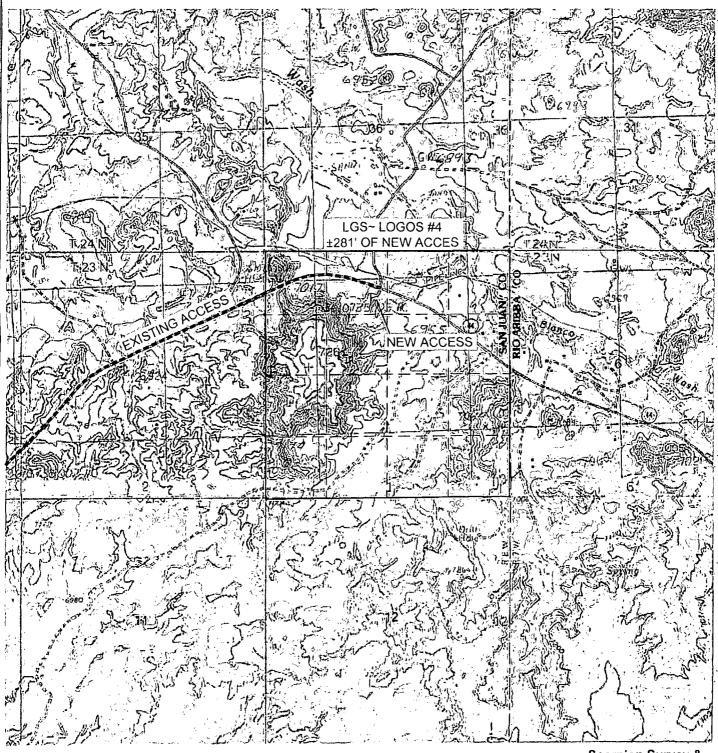
LOCATED IN THE NE/4 NW/4 OF SECTION 1,

T23N, R8W, N.M.P.M.,

SAN JUAN COUNTY, NEW MEXICO

GROUND ELEVATION: 6939', NAVD 88

±281' OF NEW ACCESS ACROSS BLM LANDS



U.S.G.S. QUAD: CROW MESA WEST

SCALE: 1" = 2000' (1:24,000)

JOB No.: LGS007 DATE: 10/02/12

NEW OR RECONSTRUCTED ROADS MUST MEET SMA DESIGN STANDARDS INSTALL CULVERTS AS NEEDED



Scorpion Survey & Consulting, L.L.C. 55 County Road 3312 Aztec, New Mexico 87410 (505) 333-2945

LOGOS OPERATING; LLC

LOGOS #4

1333' FNL & 2293' FWL

LOCATED IN THE NE/4 NW/4 OF SECTION 1,

T23N, R8W, N.M.P.M.,

SAN JUAN COUNTY, NEW MEXICO

DIRECTIONS

1) FROM THE INTERSECTION OF HWY 550 AND HWY 64 IN BLOOMFIELD, TRAVEL SOUTH ON 550 FOR 43.4 MILES WHERE ACCESS IS STAKED ON RIGHT SIDE OF ROAD.

WELL FLAG LOCATED AT LAT. 36.25987° N, LONG.107.63447° W (NAD 83).

Scorpion Survey & Consulting, L.L.C. 55 County Road 3312 Aztec, New Mexico 87410 (505) 333-2945

LOGOS OPERATING, LLC. OPERATIONS PLAN LOGOS #4

Note: This procedure will be adjusted on site based on actual conditions.

I. Location: 1333' FNL & 2293' FWL

Date: February 1, 2013

Sec 1, T23N, R8W

San Juan County, NM

Field: Lybrook Gallup Ext. NSPU Elev: GL 6,939'

Surface: Federal Minerals: Federal

II. Geology: Surface formation Nacimiento

Formation Tops	Depths
Ojo Alamo	1,149'
Kirtland	1,488′
Fruitland	1,820'
Pictured Cliffs	1,838'
Lewis	1,910'
Chacra	2,235'
Chacra Mrkr	2,674'
Cliff House	3,317'
Menefee	3,344'
Point Lookout	4,201'
Mancos	4,390′
Niobrara B	5,224'
Niobrara C	5,320'
Greenhorn	5,916'
Dakota	5,983'
Morrison	6,363′
Total Depth	6,373'
	Ojo Alamo Kirtland Fruitland Pictured Cliffs Lewis Chacra Chacra Mrkr Cliff House Menefee Point Lookout Mancos Niobrara B Niobrara C Greenhorn Dakota Morrison

Estimated depths of anticipated water, oil, gas, and other mineral bearing formations which are expected to be encountered:

Water and gas -1.820', 1.838', 2.235', 3.317', 4.201' Water, gas, and oil -4.390', 5.224', 5.320', and 5.983'

B. Logging Program: Induction/GR and density/neutron logs from TD to the surface casing point. Mud logs will be run from below the surface casing to TD. No DST's or cores are planned for this well. Cased hole GR/CCl and CBL logs will be run from PBTD to surface.

C. No over pressured zones are expected in this well. No $\rm H_2S$ zones will be penetrated in this well. Max. BHP = 2,850 psig. Lost circulation zones may be encountered in the Mesa Verde group and Niobrara sections.

III. Drilling

- A. Contractor:
- B. Mud Program:

The surface hole will be drilled with a fresh water mud.

The production hole will be drilled with a fresh water mud and will use bentonite to increase the viscosity. The weighting material will be drill solids or if conditions dictate, barite. The maximum mud weight expected is 9.2 ppg. The water loss will be controlled to a 6-8 cc/30 min. and loss circulation will be controlled with cedar fiber, paper, etc.

The Charca, Cliff House, Menefee, and Point Lookout, Mancos, Niobrara, and Dakota formations will all be considered for completion in this well. A completion procedure will be developed after evaluating the wireline and mud logs.

C. Minimum Blowout Control Specifications:

Double ram type 2000 psi working pressure BOP with a rotating head. See the attached Exhibit #1 for details on the BOP equipment. All ram type preventers and related equipment will be hydraulically tested at nipple-up to 250 psi (Low) for 5 minutes and 1,500 psi (High) for 10 minutes. Surface casing will be tested to 600 psi before drillout. All tests and inspections will be recorded in the daily drilling tour book.

The blind rams will be hydraulically activated and checked for operational readiness each time pipe is pulled out of the hole. All checks of the BOP stack and equipment will be noted on the daily drilling report. The BOP equipment will include a kelly cock, floor safety valve, and choke manifold all rated to 2000 psi.

IV. Materials

A. Casing Program:

Hole Size	Depth	Casing Size	Wt. & Grade
12-1/4"	320 ′	9-5/8"	36# J-55
7-7/8"	6,600′	5-1/2"	15.5# L-80

B. Float Equipment:

- a) Surface Casing: Notched collar, aluminum insert float in the first collar, and 3 centralizers on the bottom 3 joints.
- b) Production Casing: Production Casing: 5-1/2" cement float shoe and self-fill insert float collar. Place float one joint above shoe. **Place DV tool at 4,440**'. Place ten centralizers spaced every other joint above the shoe, two turbolizers on the collars below the DV tool and two turbolizers above the DV tool. Place five turbolizers every third joint from the top of the well.

V. Cementing:

Note: Cement volumes will be adjusted based on actual conditions.

Surface casing: 9-5/8" - Use 225 sx (266 cu. ft.) of Type V with 2% CaCl₂ and $\frac{1}{2}$ #/sk celloflake (Yield = 1.18 cu. ft./sk; slurry weight = 15.6 PPG). 100% excess to circulate cement to surface. WOC 12 hours. Pressure test surface casing to 1500 psi.

Production Casing: 5-1/2" - Before cementing circulate hole with at least 1-1/2 hole volumes of mud. Precede cement with 30 bbls of fresh water. 1^{st} Stage: Lead with 260 sx (458 cu.ft.) of Cl "B" 65/35 poz with 6% gel, 1% CaCl₂, 4% phenoseal, and 4 #/sx celloflake (Yield = 1.76 cu.ft./sk; slurry weight = 12.8 PPG). Tail with 100 sx (146 cu.ft.) of Cl "B" 50/50 poz with 0.15% dispersant, 1% CaCl₂ and 4#/sk. celloflake. (Yield = 1.46 cu. ft./sk; slurry weight = 13.0 PPG). 2^{nd} Stage: Precede cement with 20 bbls of water. Lead with 600 sx (1056 cu.ft) Cl "B" 65/35 poz with 6% gel, 1% CaCl₂, and 4#/sx celloflake (Yield = 1.76 cu.ft./sk; slurry weight = 12.8 PPG). Tail with 100 sx (146 cu.ft.) of Cl "B" 50/50 poz with 0.15% dispersant, 1% CaCl₂ and 4#/sk. celloflake. (Yield = 1.46 cu. ft./sk; slurry weight = 13.0 PPG). Total cement volume is 1806 cu.ft. (50% excess to hole volume to circulate cement to surface).

Jay Paul McWilliams

President

Logos Operating, LLC