Form 3160-5 (June 2015)		UNITED STATES EPARTMENT OF THE INTERIOR UREAU OF LAND MANAGEMENT					FORM APPROVED OMB NO. 1004-0137 Expires: January 31, 2018			
		INDRY NOTICES AND REPORTS ON WELLS t use this form for proposals to drill or to re-enter an oned well. Use form 3160-3 (APD) for such the post and Field						5. Lease Serial No. NMNM113940 6. If Indian, Allottee or Tribe Name		
	SUBMIT IN 1	RIPLICATE - Other inst	ructions on			Arter	Office 7. If Unit or CA	Agreemer	nt, Name and/or No.	
1. Type of Well							8. Well Name an			
🛛 Oil Well	l 🔲 Gas Well 🔲 Oth						PLUCKY BL		RAL COM 5H	
2. Name of Ope EOG Y RE	SOURCES INC	REYS		 API Well No. 30-015-442 		.1				
	NM 88210		3b. Phone No. (include area code) Ph: 432-686-3693			2)	10. Field and Pool or Exploratory Area UNDESIGNATED			
4. Location of V	Well (Footage, Sec., T	, R., M., or Survey Description)				11. County or Parish, State			
Sec 14 T2	6S R26E SESE 250	FSL 660FEL					EDDY COUNTY, NM			
12	2. CHECK THE AI	PPROPRIATE BOX(ES)	TO INDICA	TE NAT	URE C)F NOTICE, F	REPORT, OR	OTHER	L DATA	
TYPE OF	SUBMISSION			5	ГҮРЕ О	F ACTION				
Notice of	f Intent	🗖 Acidize	Deepen			Production	Production (Start/Resume)] Water Shut-Off	
—		Alter Casing				🗖 Reclamat	Reclamation		Well Integrity	
	-	Casing Repair				-	□ Recomplete		Change to Original A	
 Final Abandonment Notice Change Plans Convert to Injection 			_ <u>-</u>				Temporarily Abandon PD Water Disposal			
following contesting has be determined the EOG Y Re the casing	mpletion of the involved een completed. Final Al hat the site is ready for f esources, Inc. reque program.	rk will be performed or provide operations. If the operation re bandonment Notices must be fil inal inspection. sts an amendment to our centralizer requirement of	sults in a multip ed only after all approved Af	le completi requirement PD for thi	on or rec nts, inclu s well to	completion in a ne ding reclamation, o reflect chang	w interval, a For have been comp	m 3160-4 :	must be filed once	
•		elated to this change.		suomy, o	0,1 110	N	M OIL CO	NSERV	ATION	
- No na	ew Coa is neg	juine A ·	Accepted for	I/-	8 -/ • NMC		NOV O			
							Rece	ived		
14. I hereby cer	tify that the foregoing is	Electronic Submission #	RESOURCES	NC, sen	t to the	Carlsbad	•			
Name (Printe		H HUMPHREYS		Title		OW & LEASE				
Signature	(Electronic S	Submission)		Date	10/26/	APPK	UVED	,		
		THIS SPACE FO	DR FEDER	AL OR S	TATE	OFFICE US	Ę			
					TROUT				Data 10/20/2017	
	MUSTAFA HAQUE	d Approval of this paties d	not warrant an		BU	EUM-ENGINE REAU OF LANI	D MANAGEME		Date 10/30/2017	
certify that the app		d. Approval of this notice does aitable title to those rights in the act operations thereon.		Office	Carlsba	CARLSBAD F				
Title 18 U.S.C. Se	ection 1001 and Title 43	U.S.C. Section 1212, make it a statements or representations as		erson know	vingly an	d willfully to mak	te to any departm	ent or age	ncy of the United	
States any faile,	, nemious of naudurent	succinente el representations de	any matter w							

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(Instructions on page 2) ** BLM REVISED **

1. GEOLOGIC NAME OF SURFACE FORMATION: Permian

2. ESTIMATED TOPS OF IMPORTANT GEOLOGICAL MARKERS:

Castille	306'
Top of Salt	1,090'
Base of Salt	1,818'
Lamar	1,931'
Bell Canyon	1,971'
Cherry Canyon	2,861'
Brushy Canyon	3,990'
Bone Spring Lime	5,512'
1 st Bone Spring Sand	6,376'
2 nd Bone Spring Sand	7,269'
TD	7,350'

3. ESTIMATED DEPTHS OF ANTICIPATED FRESH WATER, OIL OR GAS:

Upper Permian Sands	0-300'	Fresh Water
Brushy Canyon	3,990'	Oil
Bone Spring Lime	5,512'	Oil
1 st Bone Spring Sand	6,376'	Oil
2 nd Bone Spring Sand	7,269'	Oil

No other Formations are expected to give up oil, gas or fresh water in measurable quantities. Surface fresh water sands will be protected by setting 13.375" casing at 360' and circulating cement back to surface.

Hole	_	Csg			~	DFmin	DF _{min}	DFmin
Size	Interval	OD	Weight	Grade	Conn	Collapse	Burst	Tension
17.5"	0' - 360'	13.375"	54.5#	J55	STC	1.125	1.25	1.60
12.25"	0 – 1,950'	9.625"	40#	J55	LTC	1.125	1.25	1.60
8.75"	0' – 14,865'	5.5"	17#	HCP-110	LTC	1.125	1.25	1.60

4. CASING PROGRAM - NEW

Variance is requested to wave the centralizer requirements for the 5-1/2" casing in the 8-3/4" hole size. An expansion additive will be utilized, in the cement slurry, for the entire length of the 8-3/4" hole interval to maximize cement bond and zonal isolation.

Cementing Program:

No. Wt. Yld Mix

Depth	Sacks	ppg	Ft ³ /ft	Water Gal/sk	Slurry Description
13-3/8" 360'	325	13.5	1.73	9.13	Lead: Class C + 4.0% Bentonite + 0.6% CD- $32 + 0.5\%$ CaCl ₂ + 0.25 lb/sk Cello-Flake (TOC @ Surface)
	200	14.8	1.34	6.34	Tail: Class C + 0.6% FL-62 + 0.25 lb/sk Cello-Flake + 0.2% Sodium Metasilicate
9-5/8" 1,950'	500	12.7	2.22	12.38	Lead: Class 'C' + 1.50% R-3 + 0.25 lb/sk Cello-Flake + 2.0% Sodium Metasilicate + 10% Salt + 0.005 lb/sk Static Free (TOC @ surface)
	200	14.8	1.38	6.48	Tail: Class 'C' + 0.25 lb/sk Cello Flake + 0.005 lb/sk Static Free
5-1/2" 14,865'	225	10.8	3.67	21.7	Lead: 60:40:0 Class 'C' + 15.00 lb/sk BA-90 + 4.00% MPA-5 + 3.00% SMS + 5.00% A-10 + 1.00% BA-10A + 0.80% ASA-301 + 2.90% R-21 + 8.00 lb/sk LCM-1 + 0.005 lb/sk Static Free (TOC @ 1,450')
	200	11.8	2.38	13.25	Middle: 50:50:10 Class 'H' + 0.80% FL-52 + 0.45% ASA-301 + 0.40% SMS + 2.00% Salt + 3.00 lb/sx LCM-1 + 0.20% R-21 + 0.25 lb/sk Cello Flake + 0.005 lb/sk Static Free
	900	14.2	1.28	5.75	Tail: 50:50:2 Class 'H' + 0.65% FL-52 + 0.20% CD-32 + 0.15% SMS + 2.00% Salt + 0.10% R-3 + 0.005 lb/sk Static Free

Note: Cement volumes based on bit size plus at least 25% excess in the open hole plus 10% excess in the cased-hole overlap section.

5. MINIMUM SPECIFICATIONS FOR PRESSURE CONTROL:

Variance is requested to use a co-flex line between the BOP and choke manifold (instead of using a 4" OD steel line).

The minimum blowout preventer equipment (BOPE) shown in Exhibit #1 will consist of a single ram, mud cross and double ram-type (10,000 psi WP) preventer and an annular preventer (5000-psi WP). Both units will be hydraulically operated and the ram-type will be equipped with blind rams on bottom and drill pipe rams on top. All BOPE will be tested in accordance with Onshore Oil & Gas order No. 2.

Before drilling out of the surface casing, the ram-type BOP and accessory equipment will be tested to 5000/250 psig and the annular preventer to 3500/250 psig. The surface casing will be tested to 1500 psi for 30 minutes.

Before drilling out of the intermediate casing, the ram-type BOP and accessory equipment will be tested to 5000/250 psig and the annular preventer to 3500/250 psig. The intermediate casing will be tested to 2000 psi for 30 minutes.

Pipe rams will be operationally checked each 24-hour period. Blind rams will be operationally checked on each trip out of the hole. These checks will be noted on the daily tour sheets.

A hydraulically operated choke will be installed prior to drilling out of the intermediate casing shoe.

6. TYPES AND CHARACTERISTICS OF THE PROPOSED MUD SYSTEM:

During this procedure we plan to use a Closed-Loop System and haul contents to the required disposal.

The applicable depths and properties of the drilling fluid systems are as follows.

Depth	Туре	Weight (ppg)	Viscosity	Water Loss
0 - 360'	Fresh - Gel	8.6-8.8	28-34	N/c
300' - 1,950'	Brine	8.8-10.0	28-34	N/c
1,950' – 14,865'	Cut Brine	9.0-10.0	28-34	N/c
Lateral				

An electronic pit volume totalizer (PVT) will be utilized on the circulating system, to monitor pit volume, flow rate, pump pressure and stroke rate.

Sufficient mud materials to maintain mud properties and meet minimum lost circulation and weight increase requirements will be kept at the wellsite at all times.

7. AUXILIARY WELL CONTROL AND MONITORING EQUIPMENT:

- (A) A kelly cock will be kept in the drill string at all times.
- (B) A full opening drill pipe-stabbing valve (inside BOP) with proper drill pipe connections will be on the rig floor at all times.
- (C) H₂S monitoring and detection equipment will be utilized from surface casing point to TD.

8. LOGGING, TESTING AND CORING PROGRAM:

Open-hole logs are not planned for this well.

GR–CCL Will be run in cased hole during completions phase of operations.

9. ABNORMAL CONDITIONS, PRESSURES, TEMPERATURES AND POTENTIAL HAZARDS:

The estimated bottom-hole temperature (BHT) at TD is 130 degrees F with an estimated maximum bottom-hole pressure (BHP) at TD of 3822 psig. No hydrogen sulfide or other hazardous gases or fluids have been encountered, reported or are known to exist at this depth in this area.

3.

10. ANTICIPATED STARTING DATE AND DURATION OF OPERATIONS:

The drilling operation should be finished in approximately one month. If the well is productive, an additional 60-90 days will be required for completion and testing before a decision is made to install permanent facilities.

(A)EOG Resources requests the option to contract a Surface Rig to drill, set surface casing, and cement on the subject well. If the timing between rigs is such that EOG Resources would not be able to preset the surface, the Primary Rig will MIRU and drill the well in its entirety per the APD.

11. WELLHEAD:

A multi-bowl wellhead system will be utilized.

After running the 13-3/8" surface casing, a 13-5/8" BOP/BOPE system with a minimum working pressure of 5000 psi will be installed on the wellhead system and will be pressure tested to 250 psi low followed by a 5000 psi pressure test. This pressure test will be repeated at least every 30 days, as per Onshore Order No. 2

The minimum working pressure of the BOP and related BOPE required for drilling below the surface casing shoe shall be 5000 psi.

The multi-bowl wellhead will be installed by vendor's representative(s). A copy of the installation instructions for the Stream Flo FBD100 Multi-Bowl WH system has been sent to the NM BLM office in Carlsbad, NM.

The wellhead will be installed by a third party welder while being monitored by WH vendor's representative.

All BOP equipment will be tested utilizing a conventional test plug. Not a cup or J-packer type.

A solid steel body pack-off will be utilized after running and cementing the intermediate casing. After installation the pack-off and lower flange will be pressure tested to 5000 psi.

Both the surface and intermediate casing strings will be tested as per Onshore Order No. 2 to at least 0.22 psi/ft or 1500 psi, whichever is greater.