OCD-ARTESIA

Form 3160-5 (August 2007)

UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

5. Lease Serial No NMNM0558851

6. If Indian, Allottee or Tribe Name

FORM APPROVED OMB No. 1004-0137 Expires: July 31, 2010

SUNDRY NOTICES AND REPORTS ON WELLS

	form for proposals to Use Form 3160-3 (A	N/A	N/A		
SUBMI	T IN TRIPLICATE - Other	7. If Unit of CA/Agreen	ment, Name and/or No:		
1 Type of Well					
Oil Well Gas W	/D-1285	8. Well Name and No. Loco Hills SWD 33	3 6		
2. Name of Operator COG Operating LLC			9. API Well No. 30-015-39478	9. API Well No. 30-015-39478	
3a. Address		3b. Phone No. (include area code)	10 Field and Pool or E	10 Field and Pool or Exploratory Area	
550 W. Texas Ave., Suite 100 Midland, TX 797	01	432-685-4332	SWD;Wolfcamp	SWD;Wolfcamp	
4 Location of Well (Footage, Sec., T.	R.,M., or Survey Description)		11. Country or Parish, S		
Sec 33 T17S R30E 2210 FNL 2145 FEL			EDDY COUNTY, NM		
12. CHEC	K THE APPROPRIATE BO	X(ES) TO INDICATE NATURE O	F NOTICE, REPORT OR OTHE	R DATA	
TYPE OF SUBMISSION		ТҮРЕ	OF ACTION		
✓ Notice of Intent	Acıdize	Deepen [Production (Start/Resume)	Water Shut-Off	
•	Alter Casing	Fracture Treat	Reclamation	Well Integrity	
Subsequent Report	Casing Repair	New Construction	Recomplete	Other	
	Change Plans	Plug and Abandon	Temporarily Abandon		
Final Abandonment Notice	Convert to Injection	Plug Back	Water Disposal		
testing has been completed. Final determined that the site is ready for JAN 2 NMOCD A	Abandonment Notices must be refinal inspection.) Notice of Intent of Particle of Intent of In		33 #6 APPROVED JAN 2 5 2012	completed and the operator has	
Kanicia Castillo		Title Lead Regul	aton/ Analyst		
1/		1.000 -1090			
Signature		Date 01/24/2012			
	THIS SPACE	FOR FEDERAL OR STAT	E OFFICE USE		
Approved by					
Conditions of approval, if any, are attached hat the applicant holds legal or equitable tentile the applicant to conduct operations. Title 18 U.S.C. Section 1001 and Title 43	itle to those rights in the subject thereon.	t lease which would Office		or agency of the United States any false.	
	centerions as to any motter with		to many department	o, oed outes any turse,	

(Instructions on page 2)

- Subject of Notice: COG Operating LLC's Loco Hills SWD 33 #6 well, API 30-015-39478-00-X1, 2210 FNL; 2145 FEL, Unit Ltr. G, Sec 33, T17S; R30E, Eddy Co., NM.
- II. Objective of Notice: Obtain approval for the completion procedure for this well.
- III. <u>Reason for Notice:</u> This notice is to comply with stipulations in the COA for this well. That certain stipulation being designated as Item E. 'Well Completion', requiring this NOI to be filed as set forth on page 12 of 15 for Lease No. NM0558581.

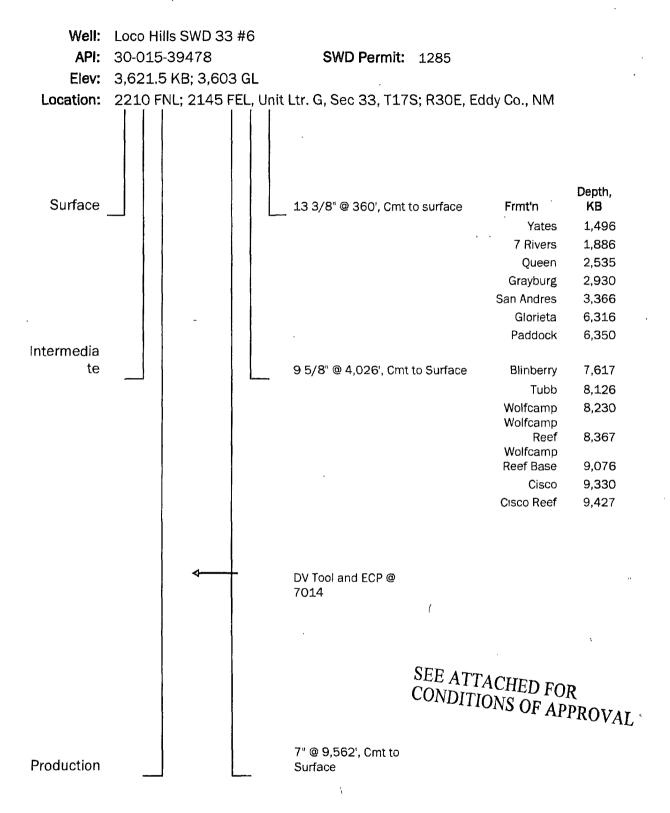
IV. <u>Authorities Granted</u>:

- a. <u>State of New Mexico Authority to Dispose</u>, Permit: SWD 1285, June 1, 2011
- b. <u>Federal Bureau of Land Management in Carlsbad, New Mexico</u> drilled as per approved Form 3160-3 and all other documents and Sundry Notices and Reports on Wells and COA's as approved or ordered. Form 3160-3 dated August 30, 2011
- V. <u>Well Status:</u> COG's Loco Hills SWD 33 #6 is currently in a suspended state pending approval of this NOI for completion. Below is a summary of the casing as run and cemented in this well. All casing strings have cement circulated to surface of the ground.

Casing	Size	Set @	Top Cmt
Surface	13 3/8"	360	Circ
Intermediate	9 5/8"	4,026	Circ
Production	7"	9,562	Circ

A graphic representation of the well is shown on the next page.

SEE ATTACHED FOR CONDITIONS OF APPROVAL



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VI. Proposed Completion Procedure:

- 1. MIRU Well Service Unit.
- 2. Set 3000 psig WP, BOP, Hydraulic, blind by pipe, with upper bag type preventer. Contact BLM for witness 4 hours prior to function and pressure test by third party.
- 3. Set up closed loop system consisting of reverse unit pit.
- 4. GIH w/ 6 1/8" mill tooth bit, drill collars and 2 7/8" work string. Drill out DV tool and ECP. POOH w/ mill tooth bit.
- 5. GIH to btm and circulate hole clean. POOH w/ tubing, collars and bit.
- 6. RU cased hole logging truck to run GR/CLL/CBL. GR tie to OH log as follows: Schlumberger Well Service, Platform Express, date 1/13/2012.
- 7. Perforate specified intervals, 4 jet shots per foot, inclusive within the permitted depth range of approximately 8,500 to 9,250.
- 8. GIH w/ packer and work string. Spot acid across perforated interval, breakdown the interval. Record ISIP and 5, 10 and 15 minute SI's.
- 9. Acidize full interval after analysis of breakdown pressures.
- 10. Swab test interval to insure no commercial hydrocarbon production. Notify BLM 4 hours prior to swab test in the event the BLM wishes to witness.
- 11. POOH w/ work string, PU packer with O/F tool and profiles, GIH w/ pkr and 3 ½", 8rd, EUE, IPC tubing. Set pkr within 100' of top perf.
- 12. Run step rate test to determine parameters for disposal pump design.
- 13. <u>No disposal</u> will be made into this well until the ROW from COG Main Line to well is completed and approved by BLM, Carlsbad Realty Section.

SEE ATTACHED FOR CONDITIONS OF APPROVAL

Conditions of Approval

COG Operating LLC Loco Hills SWD API 3001539478

January 24, 2012

- 1. Submit evaluation that proposed injection formation perforations are not productive in paying quantities. That evaluation is to be reviewed by BLM prior to initiating injection.
- 2. Surface disturbance beyond the existing pad must have prior approval.
- 3. Casing added or replaced requires a prior notice of intent (BLM Form 3160-5) approval of the design.
- 4. Closed loop system required. 3M BOP to be used. All blowout preventer (BOP) and related equipment (BOPE) shall comply with reasonable well control requirements. A two ram system with a blind ram and a pipe ram designed for the work string shall be adequate. Tapered work strings will require an additional pipe ram. The manifold shall comply with Onshore Oil and Gas Order #2 (attachment 1, 3M diagrams of choke manifold equipment). The accumulator system shall have an immediately available power source to close the rams and retain 200 psi above pre-charge. The pre-charge test shall follow requirements in Onshore Order #2.
- 5. Posting well logs on the NMOCD website has considerable value to the oil & gas community. Contact:

Patricia Martinez
EMNRD – OCD District 1
1625 N. French Drive
Hobbs, NM 88240

Phone 575-393-6161 Ext 100, Fax: 575-393-0720

Patricia.Martinez@state.nm.us

- 6. Prior BLM approval of a notice of intent (BLM Form 3160-5) is required for fracture treatment of injection wells. The operator will be required to tag fracture material with a tracer and run a tracer survey to verify that the fracture material is not placed out of zone. Results of the tracer to be reported on the workover subsequent sundry Form 3160-5.
- 7. Workover approval is good for 90 days (completion to be within 90 days of approval).

Well with a Packer - Operations

- 1) Conduct a Mechanical Integrity Test of the tubing/casing annulus after a tubing, packer or casing seal is established. Repair that seal any time more than five barrels of packer fluid is replaced within 30 days.
 - a) The minimum test pressure should be 500 psig for 30 minutes or 300 psig for 60 minutes, with 200 psig differentials between tubing and casing pressure (at test time) but no more than 70% of casing burst pressure as described by Onshore Order 2.III.B.1.h. (The tubing or reservoir pressure may need to be reduced). An alternate method for a BLM approved MIT is to have the fluid filled system open to atmospheric pressure and have a loss of less than five barrels in 30 days witnessed by a BLM authorized officer.
 - b) Document the pressure test on a calibrated recorder chart registering within 25 to 85 per cent of its full range. Greater than 10% pressure leakoff will be viewed as a failed MIT. Less than 10% pressure leakoff will be evaluated site specifically and may restrict injection approval.
 - c) At least 24 hours before the test: In Eddy County email Paul R. Swartz <u>paul_swartz@blm.gov</u>, (phone 575-200-7902). If there is no response phone 575-361-2822. In Lea County email Andy Cortez <u>andy_cortez@blm.gov</u>, (phone 575-393-3612 or 575-631-5801). Note the contact notification method, time, & date in your subsequent report.

- d) Submit a subsequent Sundry Form 3160-5 relating the MIT activity. Include a copy of the recorded MIT pressure chart. List the name of the BLM witness, or the notified person and date of notification. NMOCD is to retain the original recorded MIT chart.
- e) Use of tubing internal protection, tubing on/off equipment just above the packer, and an in line tubing check valve below the packer or between the on/off tool and packer is required. The setting depths and descriptions of each are to be included in the subsequent sundry. List (by date) descriptions of daily activity of any previously unreported wellbore workover.
- f) Submit the original subsequent sundry with three copies to BLM Carlsbad.
- 2) Compliance with a NMOCD Administrative Order is required, submit documentation of that authorization.
 - a) Approved injection pressure compliance is required.
 - b) If injection pressure exceeds the approved pressure you are required to reduce that pressure and notify the BLM within 24 hours.
 - c) When injection pressure is within 50 psig of the maximum pressure, install automation equipment that will prevent exceeding that maximum.
 - i) Submit a subsequent report (Sundry Form 3160-5) describing the installed automation equipment within 30 days.
- 3) Other unexplained significant variations of rate or pressure to be reported within 5 days of notice.
- 4) The casing/tubing annulus is required to be monitored for communication with injection fluid or loss of casing integrity.
- 5) The annulus is to be maintained full of packer fluid at atmospheric pressure. Installation of equipment that will display on site, continuous open to the air fluid level is required. A BLM inspector may request verification of this fluid level at any time.
- 6) **Submit a subsequent report (Sundry Form 3160-5)** describing the installation of packer fluid level monitoring equipment within 30 days of beginning injection.
- 7) The operator shall keep monthly records documenting that the casing annulus is fluid filled. A suggested format for these records is available from the BLM Carlsbad Field Office. Copies of those records shall be furnished at the request of a BLM authorized officer.
 - 8) Loss of packer fluid above five barrels per month requires notification of the BLM authorized officer within 5 days.
 - 9) Gain of annular fluid requires notification within 24 hours. Cease injection and maintain a production casing pressure of Opsia. Notify the BLM's authorized officer (Paul R. Swartz <u>paul swartz@blm.gov</u> phone 575-200-7902). If there is no response phone 575-361-2822.
 - 10) Also submit to this office a (Sundry Form 3160-5) Notice of Intent (NOI) for planned well work involving a formation change, casing repair/replacement, and injection well fracture treatment for approval by BLM and NMOCD. Verbal approval for the plan may be given by a BLM authorized officer, with the NOI filed within five business days. Packer and tubing repair (normal maintance procedures) do not require a NOI, but a subsequent sundry needs to be filed. http://www.blm.gov/nm/st/en/prog/energy/oil and gas.html (see CFR § 3162.3-2 43 & CFR § 3160.0-9 (c)(1)).
 - a) Submit a (Sundry Form 3160-5) subsequent report (daily reports) describing all wellbore activity and Mechanical Integrity Test as per item 1) above. Include the date(s) of the well work, and the setting depths of required equipment: internally corrosive protected tubing, tubing on/off equipment just above the packer, and an in line tubing check valve below the packer or between the on/off tool and packer is required. The setting depths and descriptions of each are to be included in the subsequent sundry. List (by date) descriptions of daily activity of any previously unreported wellbore workover.