Form 3160-5 (August 2007)

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

NOV 2 1 2014 5. Lease Serial No.

■ Water Disposal

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SUNDRY Do not use th abandoned we		NMNM96781  6. If Indian, Allottee or Tribe Name				
SUBMIT IN TRI		7. If Unit or CA/Agreement, Name and/or No.				
1. Type of Well  B Oil Well Gas Well Otl		8. Well Name and No. AZTEC 22 FED 01				
2. Name of Operator EOG RESOURCES INCORP		9. API Well No. 30-025-29216-00-S3				
3a. Address MIDLAND, TX 79702		3b. Phone No. (include area code) Ph: 432-686-3688 OCD		10. Field and Pool, or Exploratory CORBIN		
4. Location of Well (Footage, Sec.; 7 Sec. 22 T18S R33E SENW 19	1	11. County or Parish, and State  LEA COUNTY, NM				
12. CHECK APPI	ROPRIATE BOX(ES) T	O INDICATE NATURE OF NO	TICE, REPOR	T, OR OTHE	R DATA	
TYPE OF SUBMISSION	TYPE OF ACTION					
Notice of Intent  Subsequent Report  Final Abandonment Notice	☐ Acidize ☐ Alter Casing ☐ Casing Repair ☐ Change Plans	☐ Fracture Treat ☐ New Construction	☐ Production (Start/Resume) ☐ Reclamation ☐ Recomplete ☐ Temporarily Abandon		□ Water Shut-Off □ Well Integrity □ Other	

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 recomplete 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 shall 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 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation; have been completed, and the operator has determined that the site is ready for final inspection.)

□ Plug Back

EOG Resources proposes to convert this well to SWD injection as follows:

- Set 5-1/2" CIBP at 9485'.
- Spot 100 sx Class H cement at 9485' (or top of CIBP). WOC minimum 6 hrs and TAG.

Convert to Injection

- Perforate 5-1/2" casing at 7875'. Squeeze 50 sx Class H cement at 7875'. WOC minimum 6 hrs and TAG.
- Perforate 5-1/2" casing at 6000'.
- Squeeze 75 sx Class C cement at 6000'. WOC minimum 4 hrs and TAG.
- Spot 35 sx Class C cement at 4760'. WOC minimum 4 hrs and TAG.
- Perforate casing in injection interval between 4000' and 5075'.

certify that the applicant holds legal or equitable title to those rights in the subject lease

France distimulate perforated injection interval.

14. I hereby certify that the foregoing is true and correct.

which would entitle the applicant to conduct operations thereon.

SEE HEFACHED FOR CONDITIONS OF APPROVAL

SUBJECT TO LIKE

	Committed to AFMSS for pro	RCES INCOMPORATED, sent to the sessing by LINDA JIMENEZ on 10	the Hobbs 1/08/2014 (15L	J0010SE)
Name(Printed/T	yped) STAN WAGNER	Title REGULAT	ORY ANALY	YST DDDOVED
Signature	(Electronic Submission)	Date 06/25/201		APPROVED
	THIS SPACE F	R FEDERAL OR STATE OF	FFICE USE	
Approved By		Title		PAR LUMINA
	al, if any, are attached. Approval of this notice doe		BI	JREAU OF LAND MANAGEMENT

Electronic Submission #250827 verified by the BLM Well Information System

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

Office

### Additional data for EC transaction #250827 that would not fit on the form

#### 32. Additional remarks, continued

10. TIH with 2-7/8" IPC tubing, set 5-1/2" nickel plated injection packer at 3950' (or within 100' of uppermost injection perf).
11. Notify NMOCD and conduct MIT. With successful MIT, place well on injection.

SWD order is submitted and pending approval with NMOCD.

### **Conditions of Approval**

# EOG Resources Incorprorated Aztec - 01, API 3001529216 T18S-R33E, Sec 22, 1980FNL & 1980FWL November 19, 2014

- 2. A NMOCD Form C-102 "Well Location and Acreage Dedication Plat" with updated information is necessary with the notice of intent package when recompletion changes a well's Pool designation.
- 3. Before casing or a liner is added, replaced, or repaired prior BLM approval of the design is required. Use notice of intent Form 3160-5.
- 4. Subject to like approval by the New Mexico Oil Conservation Division.
- 5. Notify BLM 575-200-7902 Eddy Co. as work begins. Some procedures are to be witnessed. If there is no response, call 575-361-2822, leave a voice mail with the API#, workover purpose, and a call back phone number
- 6. Surface disturbance beyond the existing pad must have prior approval.
- 7. A closed loop system is required. The operator shall properly dispose of drilling/circulating contents at an authorized disposal site. Tanks are required for all operations, no excavated pits.
- 8. Functional H<sub>2</sub>S monitoring equipment shall be on location.
- 9. 5000 (5M) Blow Out Prevention Equipment to be used. All BOPE and workover procedures shall establish fail safe well control. Ram(s) for the work string(s) used is required equipment. Manual BOP closure system including a blind ram and pipe ram(s) designed to close on all (hand wheels) equipment shall be installed regardless of BOP design. Function test the installed BOPE to 500psig when well conditions allow. Related equipment, (choke manifolds, kill trucks, gas vent or flare lines, etc.) shall be employed when needed for reasonable well control requirements.
- 10. All waste (i.e. trash, salts, chemicals, sewage, gray water, etc.) created as a result of work over operations shall be safely contained and disposed of properly at a waste disposal facility. No waste material or fluid shall be disposed of on the well location or surrounding area. Porto-johns and trash containers will be on-location during fracturing operations or any other crew-intensive operations.
- 11. Provide BLM with an electronic copy (Adobe Acrobat Document) cement bond log record from 8100 or below to top of cement taken with 0psig casing pressure. The CBL may be attached to a <u>pswartz@blm.gov</u> email. The CFO BLM on call engineer may be reached at 575-706-2779.

- 12. Plugback of the lower formations do not meet federal requirements, (no formation top plugs were set).
- 13. The BLM PET witness is to run the tally and agree to cement volumes and placement.
  Sample each plug for cement curing time and tag and/or pressure test as requested by BLM PET witness.
- 14. This procedure is subject to the next three numbered paragraphs.
- 15. Set cement plugs to cover a minimum of 100ft plus 10ft for every 1,000ft from the bottom of the plug, rounding the number of necessary sacks up to the nearest 5 sacks. Never use less than 25sx. Examples: A cement plug set at 8000 in 7" casing would require a min of 35sx. A 25sx plug in 5 ½" casing should cover 250ft, which may exceed 100ft plus 10ft per 1000ft.
- 16. Class H > 7500ft & C < 7500ft) cement plugs(s) will be necessary. For any plug that requires a tag or pressure test a minimum WOC time of 4 hours(C) & 8 hours(H) is recommended. Formation isolation plugs of Class "C" to be mixed 14.8#/gal, 1.32 ft³/sx, 6.3gal/sx water and "H" to be mixed 16.4#/gal, 1.06ft³/sx, 4.3gal/sx water.</p>
- 17. Minimum requirement for mud placed between plugs is 25 sacks of salt water gel per 100 barrels in 9 lb/gal brine.
- 18. Tag the CIBP at ±13190 and set a Class H 25sx minimum cement plug from 13190 to cover the Morrow formation.
- 19. Set a CIBP at ±12350 and set a Class H 25sx minimum cement plug from 12684 to cover the Strawn formation.
- 20. Set a CIBP at ±10695 and set a Class H 25sx minimum cement plug from 10695 to cover the Wolfcamp formation.
- 21. Set a CIBP at ±8877 and set a Class H 25sx minimum cement plug from 8877 to cover the Bone Spring formation.
- 22. Consider the CBL of Step 11. A 25sx minimum cement plug is required to cover 200ft of the drilled hole from 6200ft. Should the CBL not show cement bond from ±6200 to ±6000 perforate and squeeze. Tag the plug with tubing.
- 23. After setting the top plug and before perforating, perform a charted casing integrity test of 800psig minimum. Document the pressure test on a one hour full rotation calibrated (within 6 months) recorder chart registering within 25 to 85 per cent of its full range. Verify all annular casing vents are plumbed to the surface and open during this pressure test.

  Call BLM 575-200-7902 and arrange for a BLM witness of that pressure test. Include a copy of the chart in the subsequent sundry for this workover.
- 24. The operator shall test for oil and gas production from the injection zone. Demonstrate that paying quantities of hydrocarbons are not produced when the well has a pumped off fluid level. Open hole logs may support the evaluation. BLM agreement is to be obtained prior completion as a disposal well.
- 25. The operator shall not fracture the water disposal interval.
- 26. A notice in intent for a step rate test is required for injection pressure increase above .2 x depth of the top perforation.

- 27. Approval is granted for disposal of water produced from the lease agreement of this well only. Disposal fluid from another operator, lease, communitization, or unit agreement require BLM surface right-of-way agreement approvals and if applicable, authorization from the surface owner.
- 28. Disposal of water from another operator requires that the well be designated as a commercial well and BLM surface right-of-way agreement approvals.
- 29. If the well is to receive off-lease water or commercial disposal, the operator shall provide proof of surface right-of-way approval prior to injection.
- 30. File intermediate subsequent sundry Form 3160-5 within 30 days of any interrupted workover procedures and a complete workover subsequent sundry.
- 31. Submit the BLM Form 3160-4 Recompletion Report within 30 days of the date all BLM approved procedures are complete.
- 32. Workover approval is good for 90 days (completion to be within 90 days of approval). A legitimate request is necessary for extension of that date.

An inactive/shut-in well bore is a non-producing completion that is capable of "beneficial use" i.e. production in <u>paying quantities</u> or of service use.

- 33. Submit evidence to support your determination that the well has been returned to active "beneficial use" for BLM approval on the Sundry Notice Form 3160-5 (the original and 3 copies) before 06/15/2015.
- 34. Should "beneficial use" not be achieved submit for BLM approval a plan for plug and abandonment.

PRS 111914

#### Operations for a Well with an Inj Packer

- 1) Conduct a Mechanical Integrity Test of the tubing/casing annulus after a tubing, packer or casing seal is established.
- 2) The minimum test pressure should be 500 psig for 30 minutes or 300 psig for 60 minutes, with a minimum 200 psig differential 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). Verify all annular casing vent valves are open to the surface during this pressure test. 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.
- 3) Document the pressure test on a one hour full rotation calibrated (within 6 months) 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.

- 4) Make arrangements 24 hours before the test for BLM to witness. In Eddy County email Paul R. Swartz <a href="mailto:pswartz@blm.gov">pswartz@blm.gov</a> or phone 575-200-7902, if there is no response, 575-361-2822. If no answer, leave a voice mail or email with the API#, workover purpose, and a call back phone number.
- 5) 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.
- 6) Use of tubing internal protection, tubing on/off equipment just above the packer, a profile nipple, and an in line tubing check valve below the packer or between the on/off tool and packer is a "Best Management Practice". The setting depths and descriptions of each are to be included in the subsequent sundry.
- 7) Submit the original subsequent sundry to BLM Carlsbad.
- 8) Compliance with a NMOCD Administrative Order is required, submit documentation of that authorization.
- 9) When injection pressure is within 50 psig of the maximum pressure, install automation equipment that will prevent exceeding that maximum. Submit a subsequent report (Sundry Form 3160-5) describing the installed automation equipment within 30 days.
- 10) Unexplained significant variations of rate or pressure to be reported within 5 days of notice.
- 11) The casing/tubing annulus is required to be monitored for communication with injection fluid or loss of casing integrity. A BLM inspector may request verification of a full annular fluid level at any time.
- 12) A "Best Management Practice" is to maintain the annulus full of packer fluid at atmospheric pressure. Equipment that will display on site, continuous open to the air fluid level is necessary to achieve this goal.
- 13) Loss of packer fluid above five barrels per month indicates a developing problem. Notify BLM Carlsbad Field Office, Petroleum Engineering within 5 days.
- 14) A suggested format for monthly records documenting that the casing annulus is fluid filled is available from the BLM Carlsbad Field Office.
- 15) Gain of annular fluid pressure requires notification within 24 hours. Cease injection and maintain a production casing pressure of Opsia. Notify the BLM's authorized officer ("Paul R. Swartz" pswartz@blm.gov>, cell phone 575-200-7902). If there is no response phone 575-361-2822.
- 16) 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 installed 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. The setting depths and descriptions of each are to be included in the subsequent sundry.

# Access information for use of Form 3160-5 "Sundry Notices and Reports on Wells"

NM Fed Regs & Forms - http://www.blm.gov/nm/st/en/prog/energy/oil and gas.html

§ 43 CFR 3162.3-2 Subsequent Well Operations.

§ 43 CFR 3160.0-9 (c)(1) Information collection.

§ 3162.4-1 (c) Well records and reports.