

OCD-ARTESIA

Form 3160-5
(March 2012)UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENTFORM APPROVED
OMB No 1004-0137
Expires October 31, 2014**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.5 Lease Serial No
NM 91078
6 If Indian, Allottee or Tribe Name**SUBMIT IN TRIPLICATE – Other instructions on page 2**

1 Type of Well

☐ Oil Well ☐ Gas Well ☒ Other SWD2 Name of Operator
CHEVRON U S A. INC3a Address
15 SMITH ROAD
MIDLAND, TEXAS 797053b Phone No. (include area code)
432-687-7375

7 If Unit of CA/Agreement, Name and/or No

8 Well Name and No
LENTINI 1 FEDERAL #179 API Well No
30-015-2973510 Field and Pool or Exploratory Area
BELL CANYON4 Location of Well (Footage, Sec., T., R., M., or Survey Description)
1686' FNL & 2505' FWL, SECTION 1, UL. F., T-23S, R-28E11 County or Parish, State
EDDY COUNTY, NEW MEXICO

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

TYPE OF SUBMISSION	TYPE OF ACTION			
<input checked="" 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 type="checkbox"/> Subsequent Report	<input type="checkbox"/> Alter Casing	<input type="checkbox"/> Fracture Treat	<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 ACIDIZE
	<input type="checkbox"/> Change Plans	<input type="checkbox"/> Plug and Abandon	<input type="checkbox"/> Temporarily Abandon	
	<input type="checkbox"/> Convert to Injection	<input type="checkbox"/> Plug Back	<input type="checkbox"/> Water Disposal	

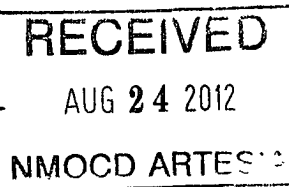
13 Describe Proposed or Completed Operation. Clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recomplete horizontally, give subsurface locations and measured and true vertical depths 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 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.)

CHEVRON INTENDS TO ACIDIZE THE SUBJECT WELL

PLEASE FIND ATTACHED, THE INTENDED PROCEDURE AND C-144 INFORMATION FOR NMOCD.

THIS IS FOR INFORMATIONAL PURPOSES ONLY

SINCE THE BLM DOES NOT HAVE AUTHORITY OVER THIS SWD WELL, THE SECTION "WELL WITH A PACKER" CAN BE DISREGARDED.



SEE ATTACHED FOR
CONDITIONS OF APPROVAL

approve w/ attached
COA 07/12/2012 *[Signature]*

14 I hereby certify that the foregoing is true and correct. Name (Printed/Typed)
DENISE PINKERTON

Title REGULATORY SPECIALIST

Signature

[Signature of Denise Pinkerton]

Date 04/18/2012

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by

/s/ JD Whitlock Jr

Title

Date

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

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)

1/31/2012
Lentini 1 Fed 17 SWD
Acidize SWD

RECOMMENDATION:

Lentini 1 Federal 17 is a SWD well in the Lentini lease of the Herradura Bend field. The well currently can dispose of 700 - 800 bfpd before reaching the max allowable pressure. While this is suitable for the current production setup, we plan to convert the Lentini 15W to a producer which will require additional disposal capacity. The objective is to cleanout and acidize the well to see if we can stimulate the reservoir and be able to dispose of more fluid.

ECONOMICS:

Economics are based on 2 BOPD incremental production due to the increase in disposal capacity. A 5 year economic life was assumed.

PROCEDURE:

- * **Set up an exclusion zone on your coiled tubing operations and discuss in the JSA the area from the wellhead to the unit and to the crane (essentially the area below the goose neck and coil) to ensure we do not have people in these areas when the coil is being run in or out of the well.**
 - * **Verify that braden head does not have pressure or flow. If braden head has pressure or flow contact remedial engineer. Prior to CT RU shut in well.**
 - * **This procedure is meant to be followed. It is up to the WSM, Remedial Engineer and Production Engineer to make the decisions necessary to do SAFELY what is best for the well. In the extent that this procedure does not reflect actual operations, please contact RE, PE and Superintendent for MOC.**
 - * **Ran slickline on 2/6/12 with 1.5" bar, 1.75" bit thru profile. Tagged fill @ 3160'.**
- 1 Prep Work, MI open top flow back tank and RU flow back manifold. Notify OCD 24 hours prior to MIRU CTU **575-393-6161**. (Ensure that manifold and lines have been tested to 5,000 psi prior to being on location.)
 - 2 MIRU Halliburton 1 5" coil tubing unit NU swedge connection to 2-7/8" gate valve (**verify that valve and all the equipment is rated to 5000 psi and is large enough for 1.5" CT replace if required**) 2a
BOP setup from top-bottom: Blind, shear, slip, and pipe rams 3a.
Ensure pop-off setup is for less than 5,000 psi
 - 3 PU 1 5" CT injector and run out pipe to attach BHA PU & MU 1 5" slip-on CT connector, 1.5" back pressure valve, disconnect and 1.5" Pulsonix TF oscillating wash nozzle
 - 4 Fill CT with FW. Pull CT back up into injector and make up Quad CT BOP to injector head with flow tee to take returns and send to the manifold PU injector head and BOP, lower onto WH MU Bowen hand union on BOP to WH crossover. Keep crane in bind to make up for increased pipe weight in hole. **WH is not designed to hold weight.** Test BOP to 500 low, 5000 high (if valve is rated to 5000 psi do not exceed equipment maximum rated working pressure.)
 - 5 Open WH and prep to RIH. Open WH flowline.

6 RIH to ~500' (no greater than 50 ft/min), perform weight check. Perform weight checks every additional 500' to PBTD (3197'), unless a tag occurs (if tag occurs, perform weight check before washing through fill).

7 Wash out 50' intervals with gel pills in between. Spot acid and pull CT up out of it as needed (allow acid to spend for ten minutes before continuing to wash through scale) to break down scale. (Circulate bottoms up from current depth if acid is spotted to break up scale). (Packer @ 2,820' and PBTD @ 3,197')

8 Once PBTD is reached, circulate twice bottoms up with 10 bbl gel pill with dye, shut in backside and begin pumping acid. Wash over perforations from 2,855'-3,159', in three passes, up, down, up with 4,000 gals 15% NEFE HCl acid* at a maximum bottom-hole rate of 1 BPM and a maximum surface pressure of **5000 psi (do not exceed equipment maximum rated working pressure)**, Displace acid to bottom perf at 3,159'

* See Halliburton Acid proposal on back to verify additives are on location and added to the system.

9 POOH above packer (2,820') pumping minimum rate, displace coil with fresh water to flowback tank containing soda ash to neutralize acid. While displacing, maintain same flowrate in as flowrate out to allow remaining acid to stay below end of coil. Shut in for 1 hour for the acid to spend.

10 RIH to TD, wash over perms. Circulate a minimum of 1 ½ bottoms up volumes or until returns are clean. POOH with CT.

11 RDMO CT. Shut in overnight.

12 Turn well over to production.

* Standard Operating Guidelines for Coiled Tubing are attached on back for reference.

Conditions of Approval

Chevron U.S.A. Inc.

Lentini - 017

API 3001529735

July 12, 2012

1. **Provide BLM with an electronic copy (Adobe Acrobat Document) cement bond log record from 2800 or below to top of cement. .**
2. Surface disturbance beyond the existing pad shall have prior approval.
3. 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.
4. Functional H₂S monitoring equipment shall be on location.
5. A 2000(2M) BOPE 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, 2M 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.
6. 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.

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.
- 2) 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.
- 3) 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.

- 4) At least 24 hours before the test: In Eddy County 575-361-2822, if there is no response email Paul R. Swartz pswartz@blm.gov phone 575-200-7902. Note the contact notification method, time, & date in your subsequent report.
- 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. List (by date) descriptions of daily activity of any previously unreported wellbore workover.
- 7) **Submit the original subsequent sundry with three copies to BLM Carlsbad.**
- 8) 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. Submit a subsequent report (Sundry Form 3160-5) describing the installed automation equipment within 30 days.
- 9) Unexplained significant variations of rate or pressure to be reported within 5 days of notice.
- 10) 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 the annular fluid level at any time.
- 11) 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.
- 12) Loss of packer fluid above five barrels per month indicates a developing problem. Notify BLM Carlsbad Field Office, Petroleum Engineering within 5 days.
- 13) A suggested format for monthly records documenting that the casing annulus is fluid filled is available from the BLM Carlsbad Field Office.
- 14) 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" <pswartz@blm.gov>, cell phone 575-200-7902). If there is no response phone 575-361-2822.
- 15) 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 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. List (by date) descriptions of daily activity of any previously unreported wellbore workover.

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.