3R-1008

Plugging Report / Monitor Well

Date 2/16/10

Submit 3 Copies To Appropriate District Office
District I
1625 N. French Dr., Hobbs, NM 87240
District II
1301 W. Grand Ave , Artesia, NM 88210
District III
1000 Rio Brazos Rd., Aztec, NM 87410
District IV
1220 S St. Francis Dr , Santa Fe, NM 87505

State of New Mexico
Energy, Minerals and Natural Resources

OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-103
June 19, 2008

WELL API NO.

5. Indicate Type of Lease
STATE ☐ FEE ☒

6. State Oil & Gas Lease No.

SUNDRY NOTICES AND REPORTS ON WELLS

(DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH PROPOSALS.)

7. Lease Name or Unit Agreement Name: BLOOMFIELD YARD CATHODIC

1. Type of Well:
Oil Well ☐ Gas Well ☐ Other CATHODIC PROTECTION WELL

8. Well Number #3R-1008

2. Name of Operator
XTO ENERGY INC.

9. OGRID Number

3. Address of Operator
382 CR 3100 AZTEC, NM 87410

10. Pool name or Wildcat

4. Well Location
Unit Letter A : _____ feet from the _____ line and _____ feet from the _____ line

Section 28 Township 29N Range 11W NMPM County SAN JUAN

11. Elevation *(Show whether DR, RKB, RT, GR, etc.)*

12. Check Appropriate Box to Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:				SUBSEQUENT REPORT OF:			
PERFORM REMEDIAL WORK	☐	PLUG AND ABANDON	☐	REMEDIAL WORK	☐	ALTERING CASING	☐
TEMPORARILY ABANDON	☐	CHANGE PLANS	☐	COMMENCE DRILLING OPNS.	☐	P AND A	☐
PULL OR ALTER CASING	☐	MULTIPLE COMPL	☐	CASING/CEMENT JOB	☐		
DOWNHOLE COMMINGLE	☐						
OTHER:	☒			OTHER:			☐

13. Describe proposed or completed operations. (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work). SEE RULE 1103. For Multiple Completions: Attach wellbore diagram of proposed completion or recompletion.

Please see the attached Cathodic Protection plugging plans.

RCVD FEB 25'10
OIL CONS. DIV.
DIST. 3

Notify NMOCD 24 hrs prior to beginning operations

Spud Date: _____ Rig Release Date: _____

I hereby certify that the information above is true and complete to the best of my knowledge and belief.

SIGNATURE _____ TITLE REGULATORY ANALYST DATE 2/22/10

Type or print name LORRI D. BINGHAM E-mail address: lorri_bingham@xtoenergy.com PHONE 505-333-3204

For State Use Only

APPROVED BY Kelly G. Roberts TITLE Deputy Oil & Gas Inspector, District #3 DATE MAR 0 2 2010

Conditions of Approval (if any):

XTO ENERGY

Bloomfield yard cathodic well

3R-1008

A, 28, 29N, 11W

Proposal

To: Charlie T. Perrin
District Supervisor
State of New Mexico Oil Conservation Division
1000 Rio Brazos Road
Aztec, NM 87410

From: Geoffrey Steiner
Operations Engineer
XTO Energy
382 Road 3100
Aztec, NM 87410

Date: February 16, 2010

Subject: Repair the Masden Gas Com #1 Cathodic Well
T29N – R11W – S28

XTO Energy's *Masden Gas Com #1 Cathodic Well* (located in the City of Bloomfield construction yard in Section 28 of Township 29 North and Range 11 West, adjacent to XTO Energy's Masden Gas Com #1) was damaged in September 2009. Unforeseen high pressures in this cathodic well brought water to the surface at a pressure of 130 psig and a flowrate of approximately 400 bbls/day. XTO Energy stopped the water flow on the cathodic well and it has been shut in since October.

Pressure readings have been recorded on the *Masden Gas Com #1 Cathodic Well* since it has been shut in. The shut in pressure of the well has averaged 130 psig. In October, Enterprise performed routine maintenance on their gas pipeline that serves XTO Energy's wells in this area. During this shut in, the cathodic well showed a pressure increase to 170 psig. Both XTO Energy and the State of New Mexico Oil Conservation Division decided that it would be judicious to monitor the pressure in the *Masden Gas Com #1 Cathodic Well* to determine the source of this high pressure and to determine if the pressure increase was a function of the Enterprise shut in. Recent pressures on the cathodic well tubing have been averaging 173 psig. Gas leaks have not been detected at the surface of the *Masden Gas Com #1 Cathodic Well* until recently.

High pressures on the inadequate P.V.C. tubing and gas leakage at the surface bring much concern to XTO Energy. It is not a standard practice with XTO Energy to monitor high pressures with inadequate equipment. XTO Energy assumes a high environmental and safety risk by using the *Masden Gas Com #1 Cathodic Well* as a monitoring well. Individuals at risk include the public, the City of Bloomfield personnel, XTO Energy personnel, and XTO Energy contractors.

XTO Energy proposes to repair the *Masden Gas Com #1 Cathodic Well* and case the well with steel casing. Should the repair happen to mask the high pressures in the cathodic well, XTO Energy will attempt to drill one offset Pressure Monitoring Well constructed with steel casing at the State of New Mexico Oil Conservation Division's specified location. The repair to the *Masden Gas Com #1 Cathodic Well* or the Pressure Monitoring Well will enable the State of New Mexico Oil Conservation Division to monitor pressures in an appropriate manner.

XTO ENERGY

MASDEN GAS COM #1 CATHODIC WELL REPAIR
SEC 28, T29N, R11W
SAN JUAN CO., NM

PROPOSAL

Proposed construction

COND. CSG: 7", 23#, J-55 CSG @ ±80'
PROD. CSG: 4-1/2", 10.5#, J-55 CSG @ ±300'

PROCEDURE:

1. Confirm NMOCD approval to repair the Masden Gas Com #1 Cathodic well.
2. MIRU drilling rig with closed loop mud system & cementing equipment.
3. Bleed down pressure on 1" P.V.C. tubing. Flow water to flowback tank.
4. Pump cement down 1" P.V.C. to control pressure and water flow. WOC.
5. TIH w/1-1/4" mule shoe alongside the 1" P.V.C. to the coke breeze. Clean out wiring and components as deep as possible.
6. TOH w/mule shoe & pipe.
7. TIH w/spear & tag cathodic well wiring and components. Recover as much wiring as possible.
8. TOH w/cathodic well wiring and components.
9. Drill 8-3/4" hole to ±80' (drill past boulders into formation).
10. TOH w/bit.
11. TIH w/±2 jts of 7", 23#, J-55 csg & set at ±80'.
12. Cement conductor casing. Circulate cement to surface.
13. TIH w/6-1/4" bit and drill out 1" P.V.C. Drill 6-1/4" hole w/closed loop mud system to ±300'. **Note: Carefully document any pressure increase or water influx and corresponding depth while drilling.**

14. TIH w/guide shoe, 20' jt of 4-1/2", 10.5#, J-55 csg, float collar, & 4-1/2", 10.5#, J-55 csg with 3 centralizers to surface. Set csg @ ±300'.

15. Cement 4-1/2" casing. Bump plug. Do not overdisplace. Circulate cement to surface.

16. RDMO drilling rig.

17. Set appropriate wellhead.

18. MIRU WL unit.

19. Log cased hole with GR/Neutron log to determine formation tops.

20. TIH w/perf gun & perforate holes in water/pressure producing zone. **Note: Confirm perforation depths with Dusty Mecham, Geoffrey Steiner, and NMOCD before perforating.**

21. Report progress to Dusty Mecham and Geoffrey Steiner.

22. The State of New Mexico Oil Conservation Division will assume operation of the Masden Gas Com #1 Cathodic Well upon drilling, completion, logging, and perforating.

PROCEED ONLY IF THE REPAIR TO THE CATHODIC WELL PLUGS OFF THE PRESSURE PRODUCING ZONE

23. P&A Masden Gas Com #1 Cathodic well.

24. Confirm NMOCD approval to spud the Masden Gas Com #1 Pressure Monitoring Well.

25. Spud 8-3/4" hole at NMOCD's specified location and drill to ±80' (Drill past boulders into formation).

26. TIH w/2 jts of 7", 23#, J-55 csg & set at ±80'.

27. Cement conductor casing. Circulate cement to surface.

28. TIH w/6-1/4" bit. Drill 6-1/4" hole w/closed loop mud system to ±300'. **Note: Carefully document any pressure increase or water influx and corresponding depth while drilling.**

29. TIH w/guide shoe, 20' jt of 4-1/2", 10.5#, J-55 csg, float collar, & 4-1/2", 10.5#, J-55 csg with 3 centralizers to surface. Set csg @ ±300'.

30. Cement 4-1/2" casing. Bump plug. Do not overdisplace. Circulate cement to surface.

31. RDMO drilling rig.

32. Set appropriate wellhead.

33. MIRU WL unit.

34. Log cased hole with GR/Neutron log to determine formation tops.

35. TIH w/perf gun & perforate holes in water/pressure producing zone. **Note: Confirm perforation depths with Dusty Mecham and Geoffrey Steiner before perforating.**

36. Report progress to Dusty Mecham and Geoffrey Steiner.

37. The State of New Mexico Oil Conservation Division will assume operation of the Masden Gas Com #1 Pressure Monitoring Well upon drilling, completion, logging, and perforating.

Regulatory Requirements
NMOCD approval

Services
Drilling rig
Cementing services
WL/perforating services

Equipment List
8-3/4" bit
6-1/4" bit
2 jts of 7", 23#, J-55 csg
±6 jts of 4-1/2", 10.5#, J-55 csg

XTO ENERGY

RCVD FEB 16 '10

OIL CONS. DIV.

DIST. 3

NMOCD Approval

Approved: 2-16-2010
Date

Approved by: CHARLIE PERRIN
Name **(Please print)**

Signature

Title: District Supervisor

Bloomfield Yard Cathodic well

A Cathodic well in the Bloomfield city yard was hit by a city vehicle causing water to spray from the well. The well is located close to the XTO Masden Gas Com #1 well. While repairing the leak it was determined that the pressure on the well is almost as high as the PVC burst rating on the pipe.

There appears to be a water formation that is charged up. The subsequent investigation of the water and the wellbores in the area showed no contamination in the water and no link between XTO's operations and the pressure.

The pressure on the Cathodic well is a safety hazard. XTO has indicated they can plug the well. Plugging the well will resolve the potential hazard but does not allow us to monitor the formation pressure.

XTO has offered to convert the cathodic well into a monitoring well, if converting the cathodic well is not possible XTO has volunteered to plug the cathodic well then drill a new monitor well. Once the monitor well is in-place NMOCD will use the well to monitor the high pressure in the formation and if determined that OCD plugging operations has resolved the issue the OCD will P&A the monitor well. If it is determined the pressure is caused by a operators well we will require the responsible operator to P&A the monitor well upon elimination of the pressure issue.

This will allow the NMOCD to safely monitor the pressure while continuing the search for the cause of the pressure. It will save the OCD the expense of drilling a monitor well.