

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

OCD-ARTESIA

FORM APPROVED
OMB NO 1004-0137
Expires March 31, 2007

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.

SUBMIT IN TRIPLICATE - Other instructions on reverse side

RECEIVED

FEB -2 2010

NMOCD ARTESIA

5. Lease Serial No

NM-17589

6. If Indian, Allottee or Tribe Name

7. If Unit or CA/Agreement, Name and/or No
Nash Unit

8 Well Name and No.

Nash Unit #29

9. API Well No

30-015-29434

10. Field and Pool, or Exploratory Area
Nash Draw; Delaware/BS
(Avalon Sand)

11 County or Parish, State

Eddy County NM

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

TYPE OF SUBMISSION

- ☒ Notice of Intent
☐ Subsequent Report
☐ Final Abandonment Notice

TYPE OF ACTION

- ☐ Acidize ☐ Deepen ☐ Production (Start/Resume) ☐ Water Shut-Off
☐ Alter Casing ☐ Fracture Treat ☐ Reclamation ☐ Well Integrity
☐ Casing Repair ☐ New Construction ☐ Recomplete ☒ Other Convert to
☐ Change Plans ☐ Plug and Abandon ☐ Temporarily Abandon SWD Well
☐ Convert to Injection ☐ Plug Back ☐ Water Disposal AO - SWD-1157

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 recompletable 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 recompletable 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 final site is ready for final inspection.)

Due to BLM additional conditions of approval dated January 14, 2010, drill out existing CIBP's & cement plugs. BLM is requiring 4 CIBPs & 2 - 150' cement plugs across Cherry Canyon, Bell Canyon, and Bone Spring formation. Well will be placed on disposal to allow for disposal of produced water from the four laterals for 2010.

Procedure Attached on Next Page.

SEE ATTACHED FOR
CONDITIONS OF APPROVAL

Accepted for record

NMOCD RT 2/11/10

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

Kristy Ward

Title

Regulatory Analyst

Date 01/20/10

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by

Title

Office

APPROVED

JAN 27 2010

WESLEY W. INGRAM
PETROLEUM ENGINEER

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.

Title 18 U.S.C. Section 1001, and Title 43 U.S.C. Section 1212, makes 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.



**NASH UNIT #29 SWD
EDDY COUNTY, NEW MEXICO
JANUARY 20, 2010**

ELEVATION: PBTD - 3890' KB - 3005'
TD - 7210' GL - 2991'

WELL DATA:

Surface Casing: 13-3/8", 48 ppf. Set at 309'. Cemented with 425 sx.
Circulated.

Inter. Casing: 8-5/8", 32 ppf. Set at 3000'. Cemented with
900 sx. Circulated.

Prod. Csg: 5-1/2", 17 ppf J-55 Csg. Set at 7250'.
Cemented with 1245 sx in three stages, DV tools @ 4496' &
6076'
Circulated 1st & 2nd stages, TOC @ 2060' CBL

PERFORATIONS: Bell Canyon 3192-3786'

OBJECTIVE: Due to BLM additional conditions of approval dated Jan 14 2010,
drill out existing CIBPs and cement plugs. BLM is requiring 4
CIBPs and 2- 150' cement plugs across Cherry Canyon, Bell
Canyon and Bone Spring formation. Well will be placed on
disposal to allow for disposal of produced water from the four
laterals for 2010. .

RECOMMENDED PROCEDURE

**NOTIFY BLM(Carlsbad), OCD and MOSAIC POTASH 24 HOURS PRIOR
TO STARTING WORK.**

1. MIRU PU and reverse unit. ND WH. NU BOP. POH w/ 2 7/8" injection tbg and packer.
2. PU 2 7/8" WS. TIH with WS & bit to PBTD. Drill out cmt and 1st CIBP @ 3900'.
Continue in hole to cement and 2nd CIBP @ 5400'. Drill out CIBP and continue in hole
to +/- 7100'. POH w/ WS. RD reverse unit.
3. RU WL. RIH w/ WL & set CIBP @ +/- 6988'. Correlate depth to Computalog Cement
Bond Log w/ Gamma Ray / CCL ran on May 15, 1997. POH w/ WL
4. RIH w/ WL & dump bailer. Dump 35' CL C (5 sx) cmt on top of CIBP. POH w/ WL.




**NASH UNIT #29 SWD
EDDY COUNTY, NEW MEXICO
JANUARY 20, 2010**

5. RIH w/ WL & set CIBP @ +/- 6775'. Correlate depth to Computalog Cement Bond Log w/ Gamma Ray / CCL ran on May 15, 1997. POH w/ WL.
6. RIH w/ WL & dump bailer. Dump 35' CL C (5 sx) cmt on top of CIBP. POH w/ WL.
7. RIH w/ 2 7/8" WS to 6150'. Spot 25 sx CL C + 2% CaCL₂ balance cement plug (~250' in 5 1/2" csg) from 5950'-6150' across DV tool @ 6076'. Pull WS up to 5500' and reverse clean. WOC for 3 hours. RIH w/ WS and tag plug. Top of cmt plug must be 6026' or above. POH w/ 2 7/8" WS.
8. RIH w/ WL & set CIBP @ +/- 5400'. Correlate depth to Computalog Cement Bond Log w/ Gamma Ray / CCL ran on May 15, 1997. POH w/ WL.
9. RIH w/ WL & dump bailer. Dump 35' CL C (5 sx) cmt on top of CIBP. POH w/ WL.
10. RIH w/ 2 7/8" WS to 4550'. Spot 25 sx CL C + 2% CaCL₂ balance cement plug (~250' in 5 1/2" csg) from 4350'-4550' across DV tool @ 4496'. Pull WS up to 4000' and reverse clean. WOC for 3 hours. RIH w/ WS and tag plug. Top of cmt plug must be 4446' or above. POH w/ 2 7/8" WS.
11. RIH w/ WL & set CIBP @ +/- 3900'. Correlate depth to Computalog Cement Bond Log w/ Gamma Ray / CCL ran on May 15, 1997. POH w/ WL.
12. RIH w/ WL & dump bailer. Dump 35' CL C (5 sx) cmt on top of CIBP. POH w/ WL.
13. TIH w/ Loc-Set packer & 2 7/8" J-55 IPC tbg to +/- 3150'. Test tbg in hole to 5000 psi. Circulate packer fluid. Set packer @ +/- 3150'.
14. ND BOP. NU WH. Notify NM OCD, BLM Carlsbad and Mosaic Potash of MIT. Perform MIT test.

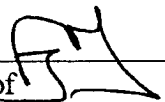


**NASH UNIT #29 SWD
EDDY COUNTY, NEW MEXICO
JANUARY 20, 2010**

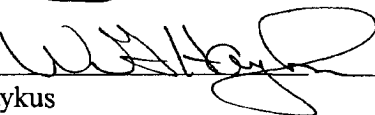
15. RD PU. Assuming NM OCD, BLM and Mosiac Potash approval put well on disposal. Maximum allowable surface pressure is 638 psi. Notify Midland engineering of rates and pressures.

Prepared by: 
Richard Lauderdale

Date: 1/20/2010

Approved by: 
Trey Krampf

Date: 1/20/10

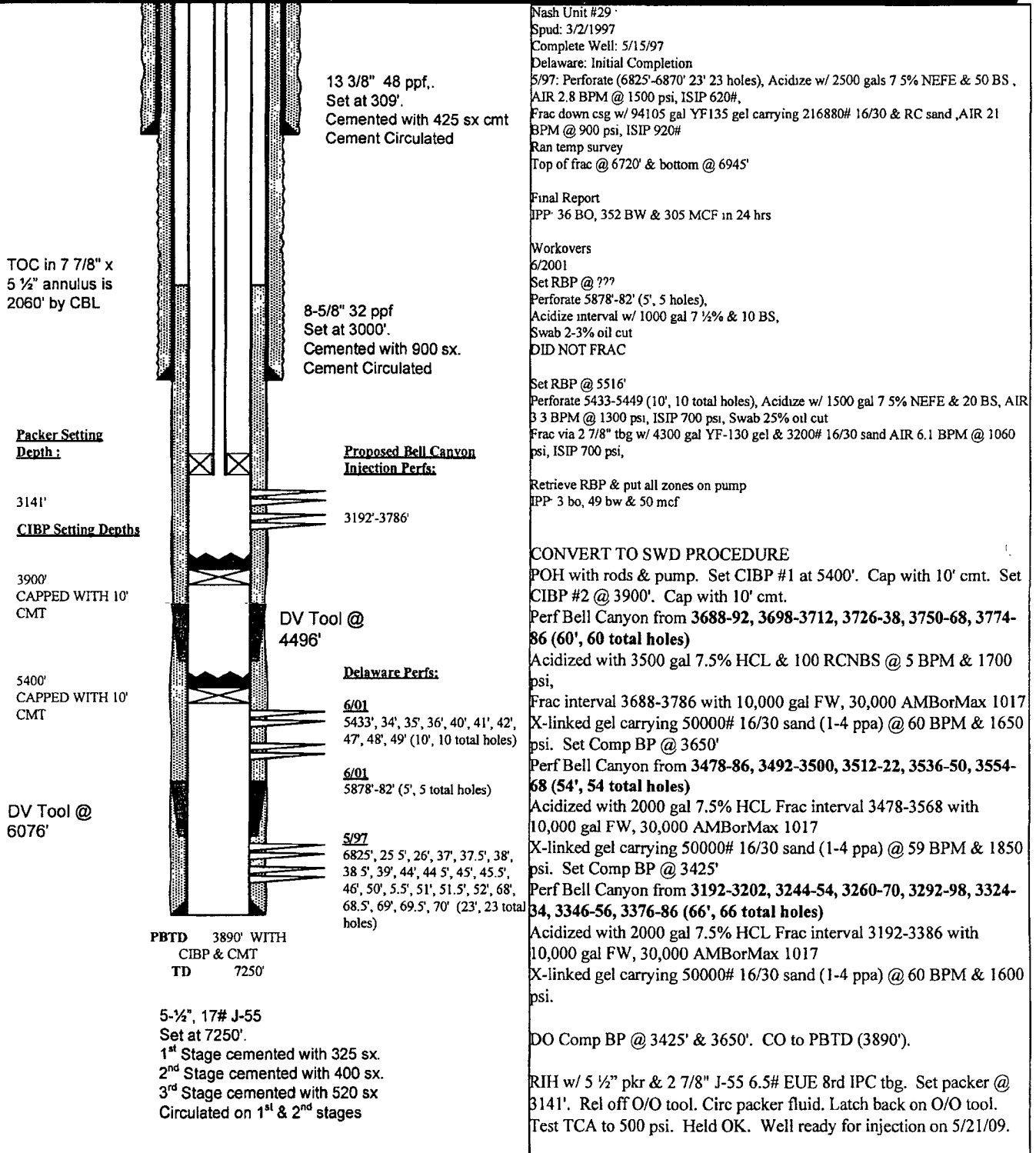
Approved by: 
Guy Haykus

Date: 01/20/10

XTO ENERGY - ACTUAL AFTER 5/2009 WORK

Well: Nash Unit #29
 Area: Carlsbad
 Location: Section 13, T23S, R29E
 County: Eddy
 Elevation: 2991 GL 3005 KB

WI: 86.593973%
 NRI: 66.807591%
 Spud: 3/2/1997
 State: New Mexico



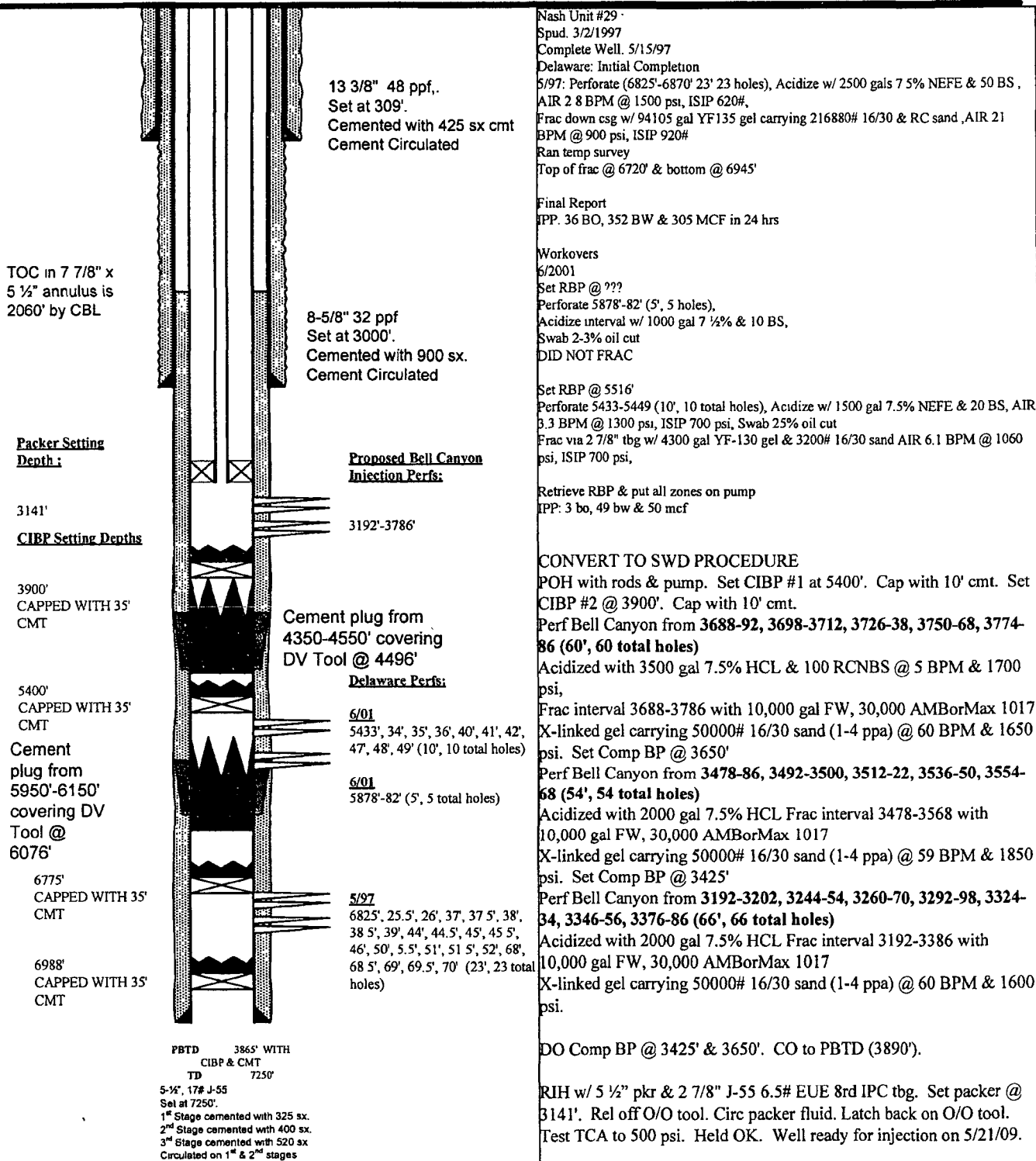
PREPARED BY: Richard Lauderdale

DATE: 9/17/09

XTO ENERGY - PROPOSED AFTER 1/2010 WORK

Well: Nash Unit #29
 Area: Carlsbad
 Location: Section 13, T23S, R29E
 County: Eddy
 Elevation: 2991 GL 3005 KB

WI: 86.593973%
 NRI: 66.807591%
 Spud: 3/2/1997
 State: New Mexico



PREPARED BY: Richard Lauderdale

DATE: 1/20/10

**Nash Unit #29
30-015-29434
XTO Energy
January 14, 2010
Conditions of Approval**

- 1. Contact the BLM at 575-361-2822 a minimum of 24 hours prior to starting work.**
- 2. As per NMOCD, verification of the new cement top in Nash Unit Well No. 1 must be submitted prior to work beginning on Nash Unit #29.**
- 3. Work completed in May 2009 was done prior to approval. Well has not been plugged back properly. Work required in original approval of August 8, 2009 shall be completed prior to the well being used as an injection well. This will be the remedy for the Incident of Non-Compliance that has been issued.**
- 4. The Nash Unit #29 completion report indicated the Bone Spring formation at 6888'. A plug is required at the top of this formation. Due to the proximity of the lower perforations, this plug should also cover those perforations. Plug to be set from 6940 – 6770' and must be tagged at 6770' or shallower. Plug to be 170' in length and a minimum of 25 sacks.**
- 5. Plug required across DV tool at 6076'. Plug to be set from 6150 – 5990' and tagged at 5990' or shallower. Plug to be 160' in length and a minimum of 25 sacks.**
- 6. CIBP at 5400' is to have 35' of cement bailed or 25 sacks of cement pumped on top of CIBP.**
- 7. Plug required across DV tool at 4496'. Plug to be set from 4550 – 4405' and must be tagged at 4405' or shallower. Plug to be 145' in length and a minimum of 25 sacks.**
- 8. CIBP at 3900' will require 35' of cement bailed or 25 sacks of cement pumped on top.**
- 9. Proceed with proposed procedure.**
- 10. Subsequent sundry required detailing all work and when well was placed on injection.**

WWI 011410

**Nash Unit #29
30-015-29434
XTO Energy
January 27, 2010
Conditions of Approval**

NOTE: THE STATEMENT THAT ADDITIONAL CONDITIONS WERE ADDED ON JANUARY 14, 2010 IS INCORRECT. THESE CONDITIONS WERE A REITERATION OF THOSE ORIGINALLY SENT AUGUST 8, 2009. HOWEVER, THE OPERATOR HAD ALREADY PERFORMED CONVERSION WORK ON A FEDERAL WELL BASED ON AN APPROVAL BY NMOCD. COPY OF ORIGINAL COA FROM THE SUNDRY OF APRIL 8, 2009 APPROVED AUGUST 8, 2009 IS ATTACHED. OPERATOR WAS INFORMED PRIOR TO APPROVAL IN AUGUST THAT BLM WAS REVIEWING THIS DOCUMENT AND MIGHT NOT APPROVE THE CONVERSION.

- 1. Contact the BLM at 575-361-2822 a minimum of 24 hours prior to starting work.**
- 2. As per NMOCD, verification of the new cement top in Nash Unit Well No. 1 must be submitted prior to work beginning on Nash Unit #29.**
- 3. Work completed in May 2009 was done prior to approval. Well has not been plugged back properly. Work required in original approval of August 8, 2009 shall be completed prior to the well being used as an injection well. This will be the remedy for the Incident of Non-Compliance that has been issued.**
- 4. Bone Spring plug will be done by setting a CIBP at 6988' with 35' of cement. Top of plug will be at approximate depth allowed when drilling Delaware wells.**
- 5. CIBP will be set at approximately 6775' (may vary somewhat in depth due to collars) with 35' of cement bailed on top.**
- 6. Plug required across DV tool at 6076'. Plug to be set from 6150 – 5990' and tagged. Plug to be tagged a minimum of 50' above top of DV tool. Plug to be 160' in length and a minimum of 25 sacks.**
- 7. CIBP at approximately 5383' (may vary somewhat in depth due to collars) with 35' of cement bailed on top.**
- 8. Plug required across DV tool at 4496'. Plug to be set from 4550 – 4405' and tagged. Plug to be tagged a minimum of 50' above top of DV tool. Plug to be 145' in length and a minimum of 25 sacks.**
- 9. CIBP at approximately 3900' with 35' of cement bailed on top.**
- 10. Proceed with proposed procedure.**
- 11. Subsequent sundry required detailing all work and when well was placed on injection.**
- 12. New completion report required for injection zone.**

WWI 012710

Nash Unit #29
30-015-29434
XTO Energy
August 8, 2009
Conditions of Approval

1. Contact the BLM at 575-361-2822 a minimum of 24 hours prior to starting work.
2. Per NMOCD Order SWD-1157, the Nash Unit Well No. 1 is to have a squeeze cement procedure to raise the existing cement top to above the 10-3/4" casing shoe set at 3325 feet. No procedure has been received by the BLM for this work. This is a unit well and the BLM requires notification on work taking place in unit wells. As per NMOCD, verification of the new cement top must be submitted prior to work beginning on Nash Unit #29.
3. A monitor well is required to monitor potential water flow toward the potash mine workings and potential mine workings. This monitor well is to be located on the half section line approximately 50 feet from the west line of Section 13. The monitor well should be to a depth just below the salt formation.
4. The Nash Unit #29 completion report indicated the Bone Spring formation at 6888'. A plug is required at the top of this formation. Due to the proximity of the lower perforations, this plug should also cover those perforations. Plug to be set from 6940 – 6770' and must be tagged at 6770' or shallower. Plug to be 170' in length and a minimum of 25 sacks.
5. Plug required across DV tool at 6076'. Plug to be set from 6150 – 5990' and tagged at 5990' or shallower. Plug to be 160' in length and a minimum of 25 sacks.
6. CIBP at 5400' is to have 35' of cement bailed or 25 sacks of cement pumped on top of CIBP.
7. Plug required across DV tool at 4496'. Plug to be set from 4550 – 4405' and must be tagged at 4405' or shallower. Plug to be 145' in length and a minimum of 25 sacks.
8. CIBP that was to be set at 3900' will need to be moved deeper as the BLM after further review will require that the Cherry Canyon be the injection interval. The CIBP will require 35' of cement bailed or 25 sacks of cement pumped on top.
9. Proceed with proposed procedure, but for the Cherry Canyon.
10. Subsequent sundry required detailing all work and when well was placed on injection.

WWI 080809