

10/27/08 DATE IN	SUSPENSE	W Jones ENGINEER	10/27/08 LOGGED IN	SWD TYPE	PKR0830156902 APP NO.
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ABOVE THIS LINE FOR DIVISION USE ONLY

## NEW MEXICO OIL CONSERVATION DIVISION

- Engineering Bureau -

1220 South St. Francis Drive, Santa Fe, NM 87505



Nash Unit #29 SWA  
30-015-29434

### ADMINISTRATIVE APPLICATION CHECKLIST

THIS CHECKLIST IS MANDATORY FOR ALL ADMINISTRATIVE APPLICATIONS FOR EXCEPTIONS TO DIVISION RULES AND REGULATIONS WHICH REQUIRE PROCESSING AT THE DIVISION LEVEL IN SANTA FE

#### Application Acronyms:

[NSL-Non-Standard Location] [NSP-Non-Standard Proration Unit] [SD-Simultaneous Dedication]  
[DHC-Downhole Commingling] [CTB-Lease Commingling] [PLC-Pool/Lease Commingling]  
[PC-Pool Commingling] [OLS - Off-Lease Storage] [OLM-Off-Lease Measurement]  
[WFX-Waterflood Expansion] [PMX-Pressure Maintenance Expansion]  
[SWD-Salt Water Disposal] [IPI-Injection Pressure Increase]  
[EOR-Qualified Enhanced Oil Recovery Certification] [PPR-Positive Production Response]

#### [1] TYPE OF APPLICATION - Check Those Which Apply for [A]

[A] Location - Spacing Unit - Simultaneous Dedication  
☐ NSL ☐ NSP ☐ SD

Check One Only for [B] or [C]

[B] Commingling - Storage - Measurement  
☐ DHC ☐ CTB ☐ PLC ☐ PC ☐ OLS ☐ OLM

[C] Injection - Disposal - Pressure-Increase - Enhanced Oil Recovery  
☐ WFX ☐ PMX ☒ SWD ☐ IPI ☐ EOR ☐ PPR

[D] Other: Specify \_\_\_\_\_

#### [2] NOTIFICATION REQUIRED TO: - Check Those Which Apply, or Does Not Apply

[A] ☐ Working, Royalty or Overriding Royalty Interest Owners

[B] ☒ Offset Operators, Leaseholders or Surface Owner

[C] ☒ Application is One Which Requires Published Legal Notice

[D] ☒ Notification and/or Concurrent Approval by BLM or SLO  
U.S. Bureau of Land Management - Commissioner of Public Lands, State Land Office

[E] ☒ For all of the above, Proof of Notification or Publication is Attached, and/or,

[F] ☐ Waivers are Attached

#### [3] SUBMIT ACCURATE AND COMPLETE INFORMATION REQUIRED TO PROCESS THE TYPE OF APPLICATION INDICATED ABOVE.

[4] **CERTIFICATION:** I hereby certify that the information submitted with this application for administrative approval is **accurate** and **complete** to the best of my knowledge. I also understand that **no action** will be taken on this application until the required information and notifications are submitted to the Division.

Note: Statement must be completed by an individual with managerial and/or supervisory capacity.

Kristy Ward  
Print or Type Name

Kristy Ward  
Signature

Regulatory Analyst 10-23-08  
Title Date

Kristy-ward@xtenergy.com  
e-mail Address

RECEIVED  
2008 OCT 27 PM 2 29

Nash Unit# 29 30-015-2943 4

**APPLICATION FOR AUTHORIZATION TO INJECT**

- I. PURPOSE: \_\_\_\_\_ Secondary Recovery \_\_\_\_\_ Pressure Maintenance ☒ Disposal \_\_\_\_\_ Storage  
Application qualifies for administrative approval? ☒ Yes \_\_\_\_\_ No
- II. OPERATOR: XTO Energy, Inc.  
ADDRESS: 200 N. Loraine, Ste. 800 Midland, TX 79705  
CONTACT PARTY: Kristy Ward PHONE: 432-620-6740
- III. WELL DATA: Complete the data required on the reverse side of this form for each well proposed for injection.  
Additional sheets may be attached if necessary.
- IV. Is this an expansion of an existing project? \_\_\_\_\_ Yes ☒ No  
If yes, give the Division order number authorizing the project: N/A
- V. Attach a map that identifies all wells and leases within two miles of any proposed injection well with a one-half mile radius circle drawn around each proposed injection well. This circle identifies the well's area of review. **Attached.**
- VI. Attach a tabulation of data on all wells of public record within the area of review which penetrate the proposed injection zone. Such data shall include a description of each well's type, construction, date drilled, location, depth, record of completion, and a schematic of any plugged well illustrating all plugging detail. **Attached.**
- VII. Attach data on the proposed operation, including: **Attached.**
1. Proposed average and maximum daily rate and volume of fluids to be injected;
  2. Whether the system is open or closed;
  3. Proposed average and maximum injection pressure;
  4. Sources and an appropriate analysis of injection fluid and compatibility with the receiving formation if other than reinjected produced water; and,
  5. If injection is for disposal purposes into a zone not productive of oil or gas at or within one mile of the proposed well, attach a chemical analysis of the disposal zone formation water (may be measured or inferred from existing literature, studies, nearby wells, etc.). **See Attached Water Analysis**
- \*VIII. Attach appropriate geologic data on the injection zone including appropriate lithologic detail, geologic name, thickness, and depth. Give the geologic name, and depth to bottom of all underground sources of drinking water (aquifers containing waters with total dissolved solids concentrations of 10,000 mg/l or less) overlying the proposed injection zone as well as any such sources known to be immediately underlying the injection interval. **Attached.**
- IX. Describe the proposed stimulation program, if any. **Attached.**
- \*X. Attach appropriate logging and test data on the well. (If well logs have been filed with the Division, they need not be resubmitted). **Logs Attached.**
- \*XI. Attach a chemical analysis of fresh water from two or more fresh water wells (if available and producing) within one mile of any injection or disposal well showing location of wells and dates samples were taken. **N/A – See Explanation Attached**
- XII. Applicants for disposal wells must make an affirmative statement that they have examined available geologic and engineering data and find no evidence of open faults or any other hydrologic connection between the disposal zone and any underground sources of drinking water. **Attached.**
- XIII. Applicants must complete the "Proof of Notice" section on the reverse side of this form. **Attached.**
- XIV. Certification: I hereby certify that the information submitted with this application is true and correct to the best of my knowledge and belief.
- NAME: Kristy Ward TITLE: Regulatory Analyst  
SIGNATURE: Kristy Ward DATE: October 23, 2008  
E-MAIL ADDRESS: kristy\_ward@xtoenergy.com
- \* If the information required under Sections VI, VIII, X, and XI above has been previously submitted, it need not be resubmitted. Please show the date and circumstances of the earlier submittal: \_\_\_\_\_

### III. WELL DATA

A. The following well data must be submitted for each injection well covered by this application. The data must be both in tabular and schematic form and shall include: **Wellbore Diagrams Attached.**

- (1) Lease name; Well No.; Location by Section, Township and Range; and footage location within the section.
- (2) Each casing string used with its size, setting depth, sacks of cement used, hole size, top of cement, and how such top was determined.
- (3) A description of the tubing to be used including its size, lining material, and setting depth.
- (4) The name, model, and setting depth of the packer used or a description of any other seal system or assembly used.

Division District Offices have supplies of Well Data Sheets which may be used or which may be used as models for this purpose. Applicants for several identical wells may submit a "typical data sheet" rather than submitting the data for each well.

B. The following must be submitted for each injection well covered by this application. All items must be addressed for the initial well. Responses for additional wells need be shown only when different. Information shown on schematics need not be repeated.

- (1) The name of the injection formation and, if applicable, the field or pool name. **Bell Canyon, Delaware, Nash Draw**
- (2) The injection interval and whether it is perforated or open-hole. **3192'-3786' - Perforated**
- (3) State if the well was drilled for injection or, if not, the original purpose of the well. **Producer, Brushy Canyon, Delaware**
- (4) Give the depths of any other perforated intervals and detail on the sacks of cement or bridge plugs used to seal off such perforations. **See Wellbore Diagram Attached.**
- (5) Give the depth to and the name of the next higher and next lower oil or gas zone in the area of the well, if any.  
**The lowest injection zone is approx. 700' above the uppermost pay objection in the Nash Draw Delaware Fld. The uppermost injection zone is 50' below the top of the Delaware.**

### XIV. PROOF OF NOTICE

All applicants must furnish proof that a copy of the application has been furnished, by certified or registered mail, to the owner of the surface of the land on which the well is to be located and to each leasehold operator within one-half mile of the well location. **The Surface land is owned by the State and BLM. Attached.**

Where an application is subject to administrative approval, a proof of publication must be submitted. Such proof shall consist of a copy of the legal advertisement which was published in the county in which the well is located. The contents of such advertisement must include: **Attached.**

- (1) The name, address, phone number, and contact party for the applicant;
- (2) The intended purpose of the injection well; with the exact location of single wells or the Section, Township, and Range location of multiple wells;
- (3) The formation name and depth with expected maximum injection rates and pressures; and,
- (4) A notation that interested parties must file objections or requests for hearing with the Oil Conservation Division, 1220 South St. Francis Dr., Santa Fe, New Mexico 87505, within 15 days.

NO ACTION WILL BE TAKEN ON THE APPLICATION UNTIL PROPER PROOF OF NOTICE HAS BEEN SUBMITTED.

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NOTICE: Surface owners or offset operators must file any objections or requests for hearing of administrative applications within 15 days from the date this application was mailed to them.

## INJECTION WELL DATA SHEET

OPERATOR: XTO Energy, Inc.WELL NAME & NUMBER: Nash Unit #29WELL LOCATION: 1980' FSL & 2310' FEL J 13 23S 29E  
FOOTAGE LOCATION UNIT LETTER SECTION TOWNSHIP RANGEWELLBORE SCHEMATICWELL CONSTRUCTION DATA  
Surface CasingHole Size: 17 1/2" Casing Size: 13 3/8"Cemented with: 425 sx. or ft<sup>3</sup>Top of Cement: Surface Method Determined: CirculatedIntermediate CasingHole Size: 11" Casing Size: 8 5/8"Cemented with: 900 sx. or ft<sup>3</sup>Top of Cement: Surface Method Determined: CirculatedProduction CasingHole Size: 7 7/8" Casing Size: 5 1/2"Cemented with: 1245 sx. or ft<sup>3</sup>Top of Cement: Surface Method Determined: CirculatedTotal Depth: 7250'Injection Interval3192' feet to 3786' Perforated

(Perforated or Open Hole; indicate which)

**INJECTION WELL DATA SHEET**Tubing Size: 2 7/8" Lining Material: IPCType of Packer: Arrowset 1-XPacker Setting Depth: 3100'Other Type of Tubing/Casing Seal (if applicable): N/AAdditional Data

1. Is this a new well drilled for injection? Yes X No

If no, for what purpose was the well originally drilled? Oil Producer

2. Name of the Injection Formation: Bell Canyon

3. Name of Field or Pool (if applicable): Delaware, Nash Draw

4. Has the well ever been perforated in any other zone(s)? List all such perforated intervals and give plugging detail, i.e. sacks of cement or plug(s) used. **No. See Wellbore Diagram**

5. Give the name and depths of any oil or gas zones underlying or overlying the proposed injection zone in this area: Delaware 5433'-6870' Below

**XTO Energy Inc.**  
**Nash Unit #29 SWD #1**  
**API # 30-015-29434**  
**Section: 13, Township: 23S, Range: 29E**  
**Lea County, New Mexico**  
**C-108 (Application for the Authorization to Inject)**

**VII. Data For Proposed Operation**

1. Proposed average and maximum daily rate and volume of fluids to be injected.  
Average daily rate – 1000 BWIPD; Maximum Daily Rate – 2000 BWIPD.
2. System is closed.
3. Proposed average and maximum injection pressure – Average – 350 psi;  
Maximum – 638 psi, 0.2 psi/ft.
4. The source of the injection fluids will be the produced water from the Nash Draw  
Unit wells producing from 4400' to 7300'.
5. See Water Analysis Attached.

**VIII. Geologic Data**

Zones to be injected: 3192'-3206', 3243'-3255', 3260'-3304', 3324'-3334', 3345'-  
3367', 3376'-3388', 3392'-3404', 3478'-3486', 3492'-3500', 3512'-3532', 3536'-3580',  
3628'-3638', 3684'-3712', 3726'-3786'.

This interval does not produce oil in the vicinity. The lowest injection zone is approximately 465 feet above the uppermost pay objective in the Nash Delaware field. The uppermost injection zone is 46' below the top of the Delaware. Mud log shows were not encountered in any of the Nash Unit wells in this interval of the Bell Canyon formation.

### **IX. Proposed Stimulation Program**

The subject well will be stimulated using a fracture treatment consisting of 3500 gal 7.5% NEFE, 85,400 gal 30# linear gel, and 42,700 gal 40# linear gel containing 95,000 lbs proppant.

### **X. Well Test Information**

No well Test Information available. Logs are attached.

### **XI. Chemical Analysis**

There are no fresh water wells within one mile of the Nash Unit #29.

### **XII. Geological Statement**

XTO Energy has examined all available geologic and engineering data in this area and finds no evidence of open faults or other hydrologic connections between the disposal zone and any portable aquifers.

### **XIII. Proof of Notice**

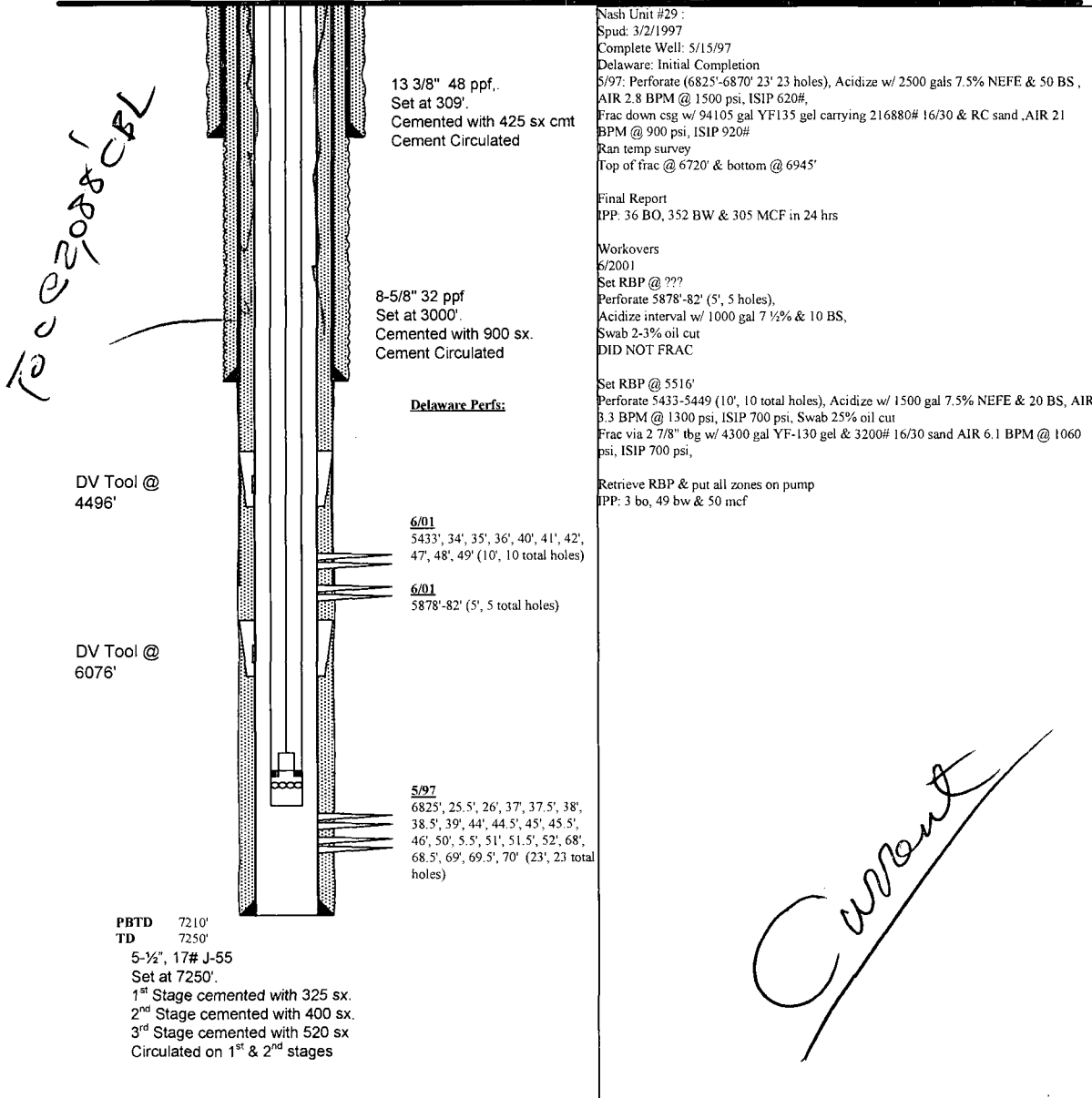
Proof of Notice on Attached Page.

# XTO ENERGY - CURRENT



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



Nash Unit #29 :  
 Spud: 3/2/1997  
 Complete Well: 5/15/97  
 Delaware: Initial Completion  
 5/97: Perforate (6825'-6870' 23' 23 holes), Acidize w/ 2500 gals 7.5% NEFE & 50 BS, AIR 2.8 BPM @ 1500 psi, ISIP 620#  
 Frac down csg w/ 94105 gal YF135 gel carrying 216880# 16/30 & RC sand, AIR 21 BPM @ 900 psi, ISIP 920#  
 Ran temp survey  
 Top of frac @ 6720' & bottom @ 6945'  
 Final Report  
 IPP: 36 BO, 352 BW & 305 MCF in 24 hrs  
 Workovers  
 6/2001  
 Set RBP @ ???  
 Perforate 5878'-82' (5', 5 holes),  
 Acidize interval w/ 1000 gal 7 1/2% & 10 BS,  
 Swab 2-3% oil cut  
 DID NOT FRAC  
 Set RBP @ 5516'  
 Perforate 5433'-5449' (10', 10 total holes), Acidize w/ 1500 gal 7.5% NEFE & 20 BS, AIR 3.3 BPM @ 1300 psi, ISIP 700 psi, Swab 25% oil cut  
 Frac via 2 7/8" tbg w/ 4300 gal YF-130 gel & 3200# 16/30 sand AIR 6.1 BPM @ 1060 psi, ISIP 700 psi,  
 Retrieve RBP & put all zones on pump  
 IPP: 3 bo, 49 bw & 50 mcf

PREPARED BY: Richard Lauderdale

DATE: 10/20/08

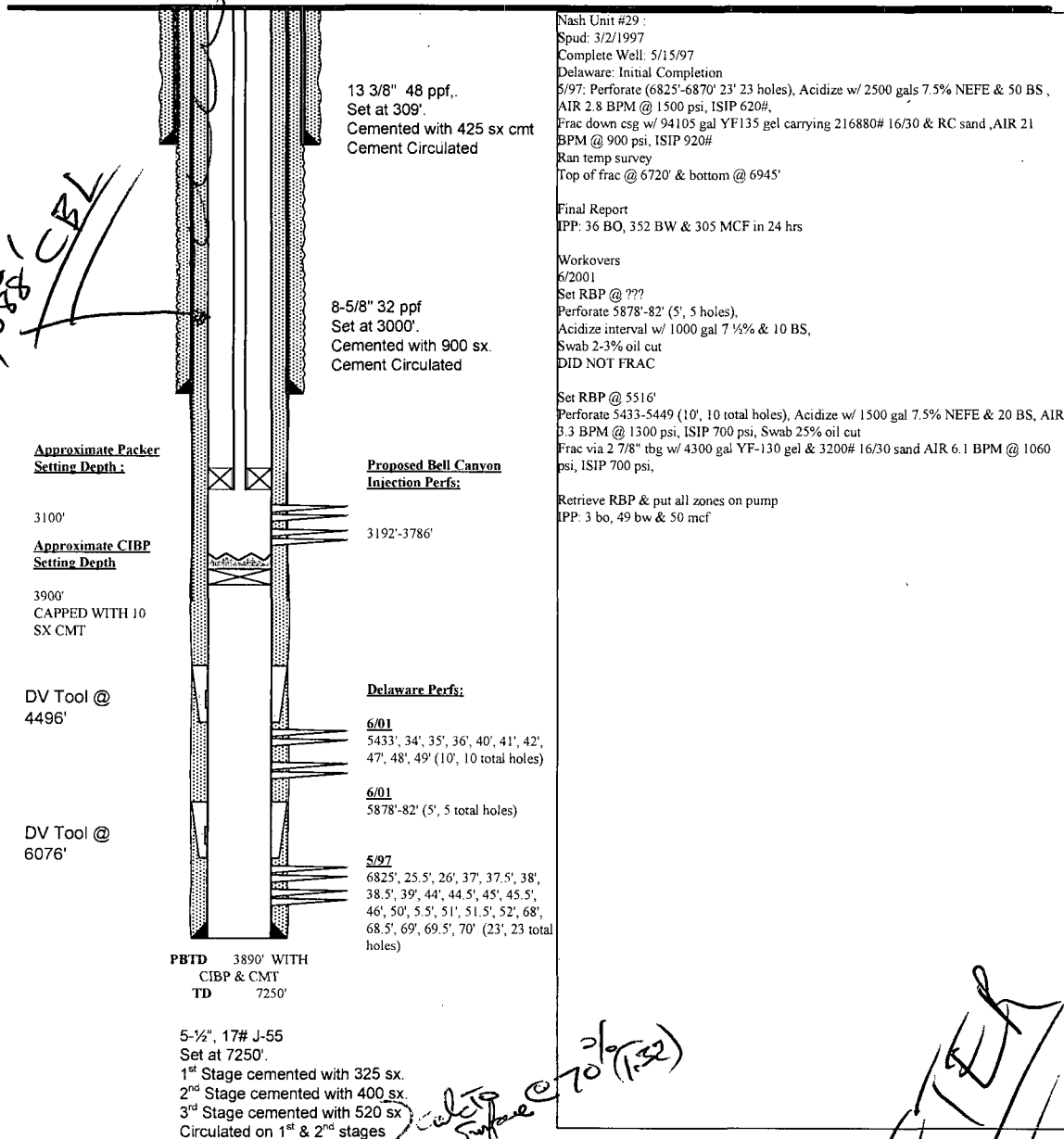


#2

**XTO ENERGY - PROPOSED WITH CIBP REVISION**

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: 12/9/08

#### XIV. Surface Owner

The land is all State and BLM. The grazing owner is:

Hart M. Greenwood, Jr.  
P.O. Box 104  
Carlsbad, NM 88220

Section 12 SESE and Section 13 E2NE is State, the rest of the four sections is BLM land.

#### Offset Operators Within Half-Mile Radius (active wells)

BEPCO, L.P.  
P.O. Box 2760  
Midland, TX 79706

XTO Energy Inc.  
200 N. Loraine, Ste. 800  
Midland, TX 79701

\*Notification was not sent to BEPCO, L.P. due to well not drilled. Please advise if we need to. XTO was the only other offset operator.

I, Kristy Ward, do hereby certify that on October 23, 2008, the above and attached listed interest parties were mailed copies of the application to dispose of water in the Nash Unit #29 Well.

Kristy Ward  
Regulatory



October 23, 2008

Hart M. Greenwood, Jr.  
P.O. Box 104.  
Carlsbad, NM 88220

Re: Surface Owner Notice  
Application to Convert Well to Injection  
Nash Unit #29 SWD

To Whom It May Concern:

This letter is to notify you that XTO Energy Inc. has submitted to the Oil Conservation Division an application to convert a well to injection. Our records indicate that you are a surface owner. Attached is a copy of the application sent to the Oil Conservation Division for your review.

All interested parties must file objections or requests for hearing with the Oil Conservation Division, 1220 South St. Francis Dr., Santa Fe, NM 87505, within 15 days.

If you have any questions please call me at 432-620-6740.

Sincerely,

*Kristy Ward*

Kristy Ward  
Regulatory

SENDER: COMPLETE THIS SECTION		COMPLETE THIS SECTION ON DELIVERY	
<ul style="list-style-type: none"><li>■ Complete items 1, 2, and 3. Also complete Item 4 if Restricted Delivery is desired.</li><li>■ Print your name and address on the reverse so that we can return the card to you.</li><li>■ Attach this card to the back of the mailpiece, or on the front if space permits.</li></ul>		<b>A. Signature</b> <b>X</b> <div style="text-align: right;"><input type="checkbox"/> Agent <input type="checkbox"/> Addressee</div>	
		<b>B. Received by (Printed Name)</b>	<b>C. Date of Delivery</b>
<b>1. Article Addressed to:</b>  Hart M. Greenwood, Jr. P.O. Box 104 Carlsbad, NM 88220		<b>D. Is delivery address different from item 1?</b> <input type="checkbox"/> Yes If YES, enter delivery address below: <input type="checkbox"/> No	
		<b>3. Service Type</b> <input checked="" type="checkbox"/> Certified Mail <input type="checkbox"/> Express Mail <input type="checkbox"/> Registered <input type="checkbox"/> Return Receipt for Merchandise <input type="checkbox"/> Insured Mail <input type="checkbox"/> C.O.D.	
		<b>4. Restricted Delivery? (Extra Fee)</b> <input type="checkbox"/> Yes	
<b>2. Article Number</b> (Transfer from service label)		7007 0220 0002 5083 9669	

XTO Energy Inc.

Ques #1



December 9, 2008

Bureau of Land Management.  
620 E. Greene St.  
Carlsbad, NM 88220-6292

Re: Surface Owner Notice  
Application to Convert Well to SWD  
Nash Unit #29 SWD

To Whom It May Concern:

This letter is to notify you that XTO Energy Inc. has submitted to the Oil Conservation Division an application to convert a well to salt water disposal. Our records indicate that you are a surface owner. Attached is a copy of the application sent to the Oil Conservation Division for your review.

All interested parties must file objections or requests for hearing with the Oil Conservation Division, 1220 South St. Francis Dr., Santa Fe, NM 87505, within 15 days.

If you have any questions please call me at 432-620-6740.

Sincerely,

*Kristy Ward*

Kristy Ward  
Regulatory

SENDER: COMPLETE THIS SECTION		COMPLETE THIS SECTION ON DELIVERY	
<ul style="list-style-type: none"> <li>Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.</li> <li>Print your name and address on the reverse so that we can return the card to you.</li> <li>Attach this card to the back of the mailpiece, or on the front if space permits.</li> </ul>		<p>A. Signature <span style="float: right;"><input type="checkbox"/> Agent <input type="checkbox"/> Addressee</span></p> <p><b>X</b></p>	
<p>1. Article Addressed to:</p> <p style="text-align: center;">BLM 620 E. Greene St. Carlsbad, NM 88220-6292</p>		<p>B. Received by (Printed Name) <span style="float: right;">C. Date of Delivery</span></p>	
<p>2. Article Number (Transfer from ser)</p>		<p>D. Is delivery address different from item 1? <input type="checkbox"/> Yes If YES, enter delivery address below: <input type="checkbox"/> No</p>	
<p>3. Service Type</p> <p><input checked="" type="checkbox"/> Certified Mail <input type="checkbox"/> Express Mail  <input type="checkbox"/> Registered <input type="checkbox"/> Return Receipt for Merchandise  <input type="checkbox"/> Insured Mail <input type="checkbox"/> C.O.D.</p>		<p>4. Restricted Delivery? (Extra Fee) <input type="checkbox"/> Yes</p>	
<p>2. Article Number (Transfer from ser)</p>		<p>7007 0220 0002 5083 9546</p>	

XTO Energy Inc. - 2



December 9, 2008

Mosaic Potash Carlsbad, Inc.  
1361 Potash Mines Rd.  
Carlsbad, NM 88220

Re: Leasehold Operator Notification  
Nash #29 SWD  
API #30-015-29434

To Whom It May Concern:

This letter is to notify you that XTO Energy Inc. has submitted to the Oil Conservation Division, an application to convert a well to saltwater disposal. Our records indicate that you are an offset operator. Attached is a copy of the application sent to the Oil Conservation Division for your review.

All interested parties must file objections or requests for hearing with the Oil Conservation Division, 1220 South St. Francis Dr., Santa Fe, NM 87505, within 15 days.

If you have any questions please call me at 432-620-6740.

Sincerely,

*Kristy Ward*

Kristy Ward  
Regulatory

SENDER: COMPLETE THIS SECTION		COMPLETE THIS SECTION ON DELIVERY	
<ul style="list-style-type: none"> <li>Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.</li> <li>Print your name and address on the reverse so that we can return the card to you.</li> <li>Attach this card to the back of the mailpiece, or on the front if space permits.</li> </ul>		<p>A. Signature <b>X</b></p>	
<p>1. Article Addressed to:</p> <p><i>MOSAIC Potash Carlsbad, Inc. 1361 Potash Mines Rd. Carlsbad, NM 88220</i></p>		<p>B. Received by (Printed Name)</p>	
		<p>C. Delivery address (Printed Name)</p>	
<p>2. Article Number (Transfer from service label)</p>		<p>D. Is delivery address different from item 1? If YES, enter delivery address below:</p>	
		<p>3. Service Type</p> <p> <input checked="" type="checkbox"/> Certified Mail    <input type="checkbox"/> Express Mail  <input type="checkbox"/> Registered    <input type="checkbox"/> Return Receipt for  <input type="checkbox"/> Insured Mail    <input type="checkbox"/> C.O.D.         </p>	
<p>4. Restricted Delivery? (Extra Fee)</p>			
<p>2. Article Number (Transfer from service label)</p>		<p>7007 0220 0002 5083 9553</p>	

XTO Energy Inc. 200 North



January 5, 2009

BEPCO, L.P.  
P.O. Box 2760  
Midland, TX 79706

Re: Leasehold Operator Notification  
Nash #29 SWD  
API #30-015-29434

To Whom It May Concern:

This letter is to notify you that XTO Energy Inc. has submitted to the Oil Conservation Division, an application to convert a well to salt water disposal. Our records indicate that you are an offset operator. Attached is a copy of the application sent to the Oil Conservation Division for your review.

All interested parties must file objections or requests for hearing with the Oil Conservation Division, 1220 South St. Francis Dr., Santa Fe, NM 87505, within 15 days.

If you have any questions please call me at 432-620-6740.

Sincerely,

*Kristi*

Kristi  
Regu

XTC

7007 0220 0002 5083 9652

CERTIFIED MAIL RECEIPT	
(Domestic Mail Only. No Insurance Coverage Provided.)	
For delivery information, visit our website at <a href="http://www.usps.com">www.usps.com</a>	
Postage \$	Postmark Here
Certified Fee	
Return Receipt Fee (Endorsement Required)	
Restricted Delivery Fee (Endorsement Required)	
Total Postage & Fees \$	
Sent To: <b>BEPCO, Inc.</b>	
Street, Apt. No. or P.O. Box No. <b>P.O. Box 2760</b>	
City, State, ZIP+4 <b>Midland, TX 79706</b>	

**SENDER: COMPLETE THIS SECTION**

- 1. Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.
- 2. Print your name and address on the reverse so that we can return the card to you.
- 3. Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:

*BEPCO, L.P.  
P.O. Box 2760  
Midland, TX 79706*

2. Article Number

(Transfer from sender)

7007 0220 0002 5083 9652

**COMPLETE THIS SECTION ON DELIVERY**

A. Signature

**X**

☐ Agent

☐ Address

B. Received by (Printed Name)

C. Date of Delivery

D. Is delivery address different from item 1? ☐ Yes  
If YES, enter delivery address below: ☐ No

3. Service Type

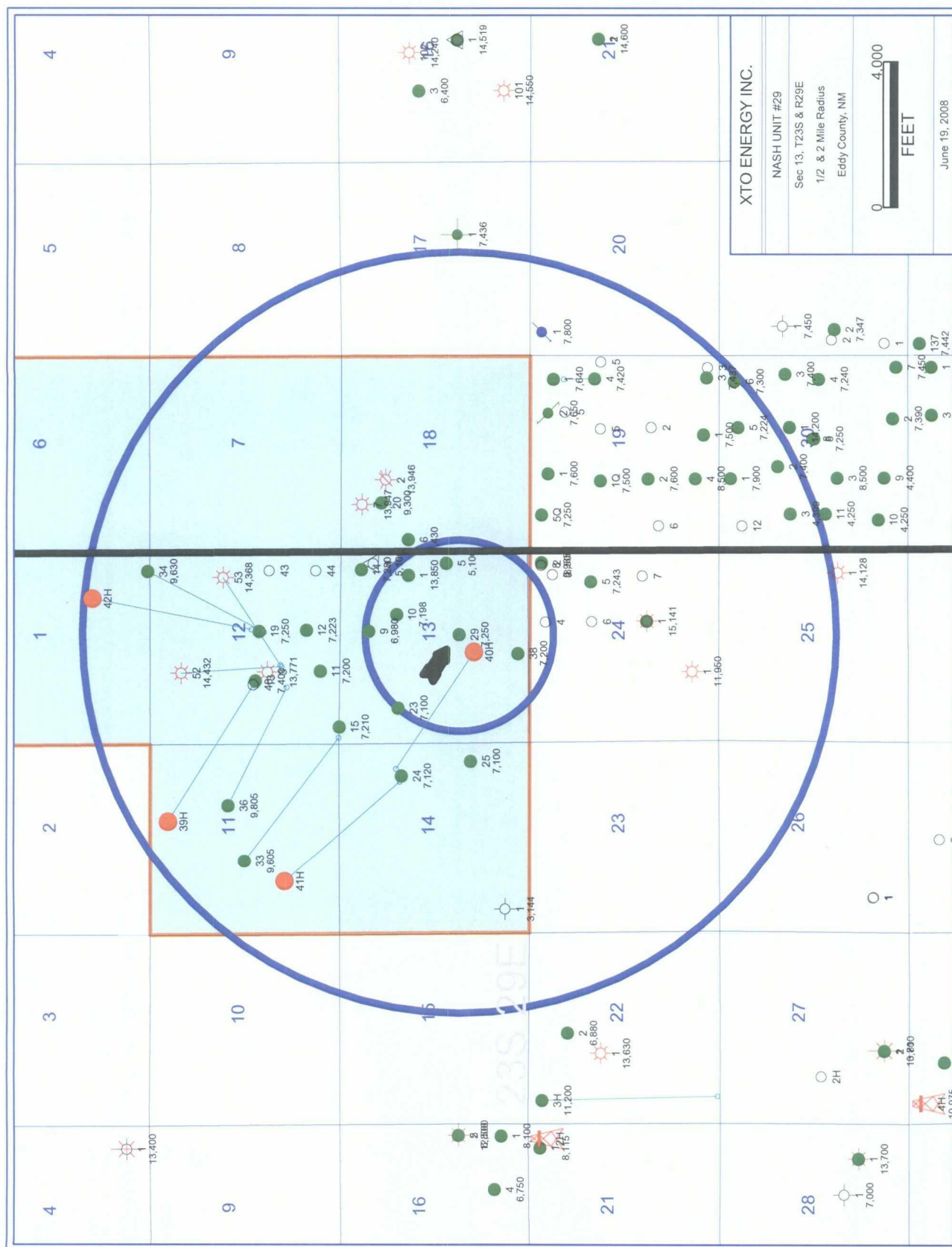
☒ Certified Mail ☐ Express Mail

☐ Registered ☐ Return Receipt for Merchandise

☐ Insured Mail ☐ C.O.D.

4. Restricted Delivery? (Extra Fee)

☐ Yes



Nash Unit #29 - SWD 1/2 Mile Radius Wells  
XTO Energy, Inc.

Well Name	Well No.	TD	Status	Spud Date	Comp Date	Field	Township	Range	Section	County	API #	Operator
NASH UNIT	10	7198	Oil-Active	12/07/92	01/03/93	Nash Draw	23S	29E	13	EDDY	30015269920000	XTO ENERGY
NASH UNIT	1	13850	Oil-Active	07/25/74	05/30/75	Nash Draw	23S	29E	13	EDDY	30015212770000	XTO ENERGY
NASH UNIT	5	5100	Oil-Active	07/16/76	07/28/76	Nash Draw	23S	29E	13	EDDY	30015218000000	XTO ENERGY
NASH UNIT	9	6980	Oil-Active	05/28/92	07/20/92	Nash Draw	23S	29E	13	EDDY	30015269910000	XTO ENERGY
NASH UNIT	38	7200	Oil-Active	09/09/97	12/25/97	Nash Draw	23S	29E	13	EDDY	30015297370000	XTO ENERGY
NASH UNIT	40H		Not Drilled			Nash Draw	N	E		EDDY		XTO ENERGY
REMUDA BASIN 24 STATE	4		Not Drilled			Nash Draw	23S	29E	24	EDDY	30015346330000	BEPCO, L.P.

\*Wells & Operators that are highlighted were not notified due to these wells were not drilled.



# XTO ENERGY



**Well:** Nash Unit #1  
**Area:** Carlsbad  
**Location:** Section 13, T23S, R29E  
**County:** Eddy  
**Elevation:** 3005 GL

**WI:** 95.00430%  
**NRI:** 74.605082%  
**Spud:** 7/25/1974  
**State:** New Mexico

3205' Top of Delaware  
 8/31/74  
 TOC 3960' T.S.  
 CBL

DV Tool @  
 6866'

7 5/8" N-80  
 26.4, 29.7, 33.7 ppf  
 Set at 10908'.  
 First stage 800 sx  
 2<sup>nd</sup> stage 650 sx

PBTD 8450'  
 TD 13850'

16" 65 ppf.  
 Set at 300'.  
 Cemented with 375 sx cmt  
 Cement 8' from surface

10 3/4" 40.5 ppf  
 Set at 3325'.  
 Cemented with 1113 sx.  
 Cement at surface

**Perfs:**  
10/92  
 4780-4784  
 4936-4942  
 Both zones were sqzd in  
 1992

7/02  
 5477'-5480' (4', 4 total  
 holes)

7/02  
 5750'-56' (7', 7 total  
 holes)

2/95  
 6385'-6400' (15', 31 total  
 holes)

2/95  
 6772', 73', 74', 75', 76',  
 80', 81', 82', 83', 84', 86',  
 87', 88', 89', 90', 6800',  
 01', 02', 03', 12', 13', 14',  
 15', 16' (24', 24 total  
 holes)

10/82  
 6882', 6886'-6899'  
 (14', 14 total holes)

10/82  
 6980-6981' (2', 4 total  
 holes)

12/74  
 Strawn  
 12138'-150'

12/74  
 Morrow  
 13175'-184', 13334'-339',  
 13341'-352', 13434'-443',  
 13607'-609'

5" 23.2 C-75 Hydril liner  
 TOL @ 10551'. BOL @ 13845'  
 Cmt w/ 650 sx Cmt  
 13751'-761', 13764'-768',  
 13770'-776'

Nash Unit #1:  
 Spud: 7/25/1974  
 Complete Well: 12/15/1974  
 Morrow: Initial Completion  
 12/74: Perforate (13751'-13776' 20' 20 holes), Acidize w/ 2000 gals  
 Plug back to 13700'  
 Perforate 13175-13609, IP 2100 MCFPD  
 Acidize w/ 5000 gal  
 IP: 4400 MCFPD 1/2" choke @ 1000 psi FTP  
 Perforate Strawn, 12138-12150, IP 3000 MCFPD flowing thru 1" choke FTP 175 psi  
 Acidize w/ 2500 gals  
 Strawn interval SI, Produced Morrow  
**Workover**  
 Recompleted to the Delaware in Jan 92, Perforated 4780-4784 & 4936-4942 but these  
 perfs made high water production  
 9/82 - Set CIBP @ 4900', Set CIBC @ 4724', Squeeze with 300sx cmt, DO cmt & CIBP  
 to 5036', Set CIBC @ 4892', retainer failed, Set CIBC @ 4703', Squeeze perfs w/ 515 sx  
 cmt, DO to 8450', Pressure test csg to 1000 psi, Test OK

## Run CBL

Perf 4 squeeze holes @ 6980' & 6981', DID NOT CEMENT SQUEEZE THIS  
 INTERVAL

Set RBP @ 6962'  
 Perforate (6882'-6899', 14', 14 holes), Acidize w/ 1200 gal 7.5% NEFE & 28 BS, AIR 4  
 BPM @ 2100 psi, ISIP 700 psi, Swab & flow 25-35% oil cut  
 Frac down tbg w/ 16800 gal 35# 2% KCL Borate Gel, 24500 16/30 sand & 11,200 # 16/  
 30 DC sand

IPF: 177 BO, 47 BW, GAS NA on 20/64" choke FTP 380 psi

8/93  
 Put zone on pump

2/95  
 Set RBP @ 6850',  
 Perforate 6772'-6816' (24', 24 holes), Zone is communicated with lower zone  
 Set RBP @ 6450',  
 Perforate 6385-6400 (15', 31 total holes)  
 Acidize w/ 1500 gal 7 1/2% HCL & BS, AIR 3 BPM @ 1300 psi, ISIP 750 psi  
 Swab 25% oil cut  
 Frac interval w/ 5500 gal YF120 gel & 8780# 20/40 (ramp 1-6 ppg), AIR 4-8 BPM @  
 1000 psi,  
 Pull RBP & RWTP  
 IPP: 14 BO, 34 BW, 210 MCF on 3/20/95

7/02  
 Set RBP @ 5800', Perf 5750-5756' (7', 7 holes), Acidize w/ 1200 gals 7 1/2% HCL & 14  
 BS, AIR 3 BPM @ 1300 psi, ISIP 380 psi, Swab 100' FE per hour @ 10-20% oil cut  
 DID NOT FRAC INTERVAL  
 Set RBP 5545'  
 Perforate 5477-80 (4', 4 total holes), Acidize w/ 1000 gal 7.5% NEFE & 8 BS, AIR 3  
 BPM @ 2200 psi, Swab 5% oil cut  
 Frac interval down tbg w/ 4600 gal Gelled WF-140 carrying 3500# 16/30 RC sand, AIR  
 5 BPM @ 1000 psi, ISIP 654 psi  
 Pull RBP & return all zones to production

Final Report  
 14 BO, 49 BW & 72 MCF in 24 hours on 10/7/02

08/07  
 POOH w/ 54-1" & 35-7/8 rods, pin broke in 7/8" rods. Hot oil tbg and repair rod part.  
 RWTP.

PREPARED BY: Richard Lauderdale

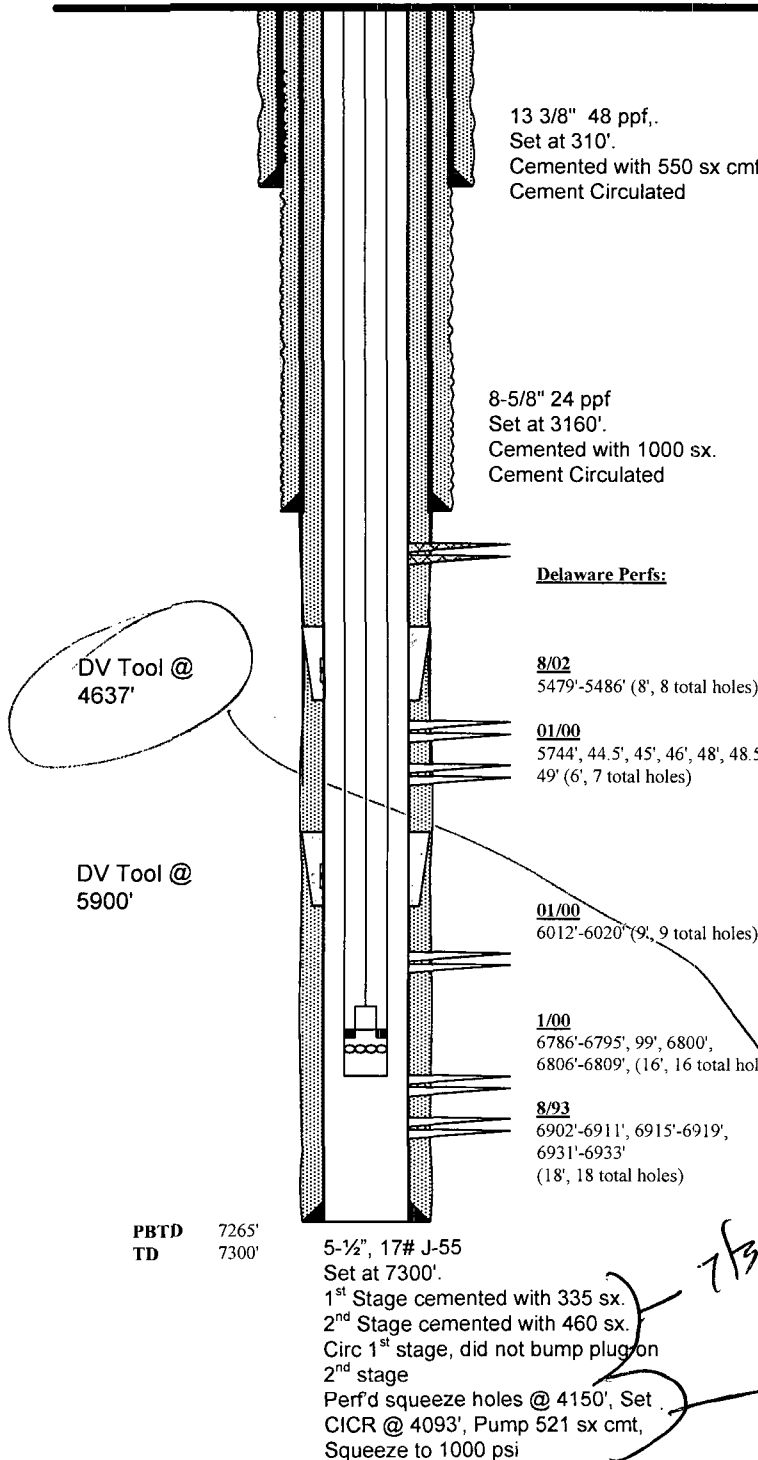
DATE: 7/9/08

# XTO ENERGY



Well: Nash Unit #5  
Area: Carlsbad  
Location: Section 13, T23S, R29E  
County: Eddy  
Elevation: 3015 GL 3027 KB

WI: 87.674140%  
NRI: 66.639132%  
Spud: 7/21/93  
State: New Mexico



Nash Unit #20 :  
Spud: 7/21/93  
Complete Well: 8/7/1993  
Delaware: Initial Completion  
8/93: Perforate (6902'-6933' 18' 18 holes), Acidize w/ 1500 gals 7.5% NEFE  
AIR 2.8 BPM @ 950 psi, ISIP 710 psi, Swab 350' per hour (50% OC)  
Frac down 2 7/8" tbg w/ 26500 YF135 gel carrying 41000# 16/30 RC. AIR 8 BPM @  
2500 psi, Ramp sand from 1-6 ppg, ISIP 998 psi

FINAL REPORT  
IPF: 98 BO, 111 BW, 186 MCF in 24 hours, 19/64 choke TP 550#

Workover:  
7/94:  
Put zone on pump

Set RBP @ 6874'  
Perforate 6786-6809 (16', 16 holes), Did not acidize as zone was on vacuum

Set RBP @ 6112',  
Perforate 6012-20 (9', 9 total holes) Acidize w/ 1000 gal 7 1/2% HCL + BS, AIR 3 BPM  
@ 1100 psi, ISIP 610 psi, Had paraffin problem but after cleaning out w/ hot water, zone  
swabbed 75-80% oil cut. DID NOT FRAC INTERVAL

Set RBP @ 5948',  
Perforate 5744'-49' (7', 7 total holes), Acidize w/ 900 gal 7 1/2% HCL & BS, balled out,  
AIR 2.9 BPM @ 1100 psi, ISIP 440 psi, Swab FE was 100% oil cut @ 150/hr. Frac  
interval w/ 4500 gal YF140 gel & 3000# 16/30 RC sand. Ramp sand 1-4 ppa, AIR 6  
BPM @ 1161 psi, ISIP 600#

Set RBP @ 5529'  
Perforate 5479'-86' (8', 8 total holes), Acidize w/ 1500 gal & 16 BS, AIR 3 BPM @ 1200  
psi, ISIP 690 psi, Swab results - 500' per hour FE w/ 25% oil cut  
Frac interval w/ 4400 gal YF140 gel & 3000# 16/30 sand, ramp from 1-4 ppa, AIR 6  
BPM @ 2100 psi, ISIP 650 psi,

Pull RBP, CO sand & RWTP in all intervals

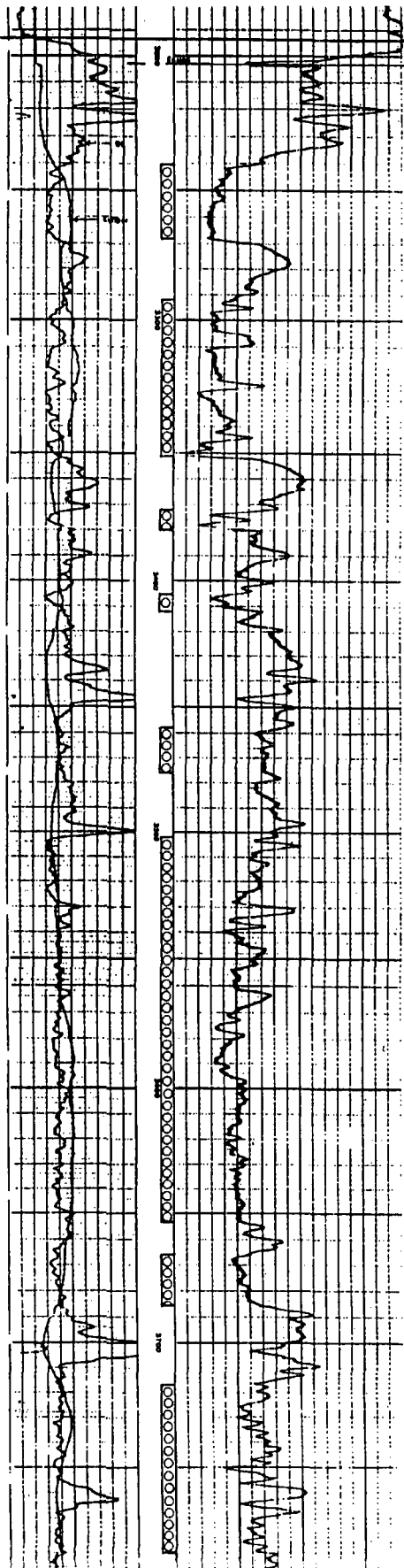
IPP: 50 BOPD, 61 BW & 100 MCF in 24 hours  
3/31/00

*Handwritten note:* 7/31/93 TO 9@ 3700'  
no well records  
need info in well file

TOP OF DELAWARE  
BELL CANYON FM.

CASING SHOE  
3203'

STRATA PRODUCTION COMPANY  
NASH UNIT #4  
SECTION 13, T23S, R29E  
990' FNL & 330' FEL  
K.B. = 3014'  
GROSS PERF. INTERVAL 3241' - 3784'



UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

NM OIL CONS. COM. APPROVED  
Budget Bureau No. 1004-0135  
Expires: March 31, 1993  
Artesia, NM 88220

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to deepen or reentry to a different reservoir.  
Use "APPLICATION FOR PERMIT—" for such proposals.

SUBMIT IN TRIPLICATE

OCT - 4 1993

1. Type of Well

☒ Oil Well ☐ Gas Well ☐ Other

2. Name of Operator

Strata Production Company

3. Address and Telephone No.

P.O. Box 1030, Roswell, New Mexico 88202-1030

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)

2310' FSL & 330' FEL  
Section 13-23S-29E

NM-17589

6. If Indian, Allottee or Tribe Name

7. If Unit or CA, Agreement-Designation

Nash Unit

8. Well Name and No.

Nash Unit #5

9. API Well No.

30-015-21800

10. Field and Pool, or Exploratory Area

Undesignated Bone Spring

11. County or Parish, State

Eddy, New Mexico

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

TYPE OF SUBMISSION

☐ Notice of Intent  
☒ Subsequent Report  
☐ Final Abandonment Notice

TYPE OF ACTION

☐ Abandonment  
☐ Recompletion  
☐ Plugging Back  
☐ Casing Repair  
☐ Altering Casing  
☒ Other Re-entry, casing, cement  
☐ Change of Plans  
☐ New Construction  
☐ Non-Routine Fracturing  
☐ Water Shut-Off  
☐ Conversion to Injection  
☐ Dispose Water

(Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

13. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)\*

07/21/93: MIRU Grace Drilling Rig #348. Spud drilling cement plugs at 8:00 PM on 7/21/93. Weld head. NU BOP. Test to 1500#. Held OK.

07/31/93: Drilled to 7300' TD. Ran 177 joints (7307.61') 5 1/2" 17# J55 casing. Cemented at 7300' First Stage with 335 sacks 50/50 Poz H with 5# D-44, 3% D-60, 2.5# B-28 and 1/4# D-29 per sack. Circulated 77 sacks cement to pit. Plug down at 6:45 AM on 8/1/93. Cemented Second Stage with 460 sacks 50/50 Poz H with 5# D-44, 3% D-60, 2.5# B-28 and 1/4# D-29 per sack. Second Stage could not bump plug. Plug down at 12:15 PM on 8/1/93.

08/01/93: Ran Temperature Survey. Top of cement at 3700'.

CONTINUED ON ATTACHMENT

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

Signed

Carol J. Garcia

Title Production Records Manager Date 9/2/93

(This space for Federal or State office use)

Approved by

Conditions of approval, if any:

Title

ACCEPTED FOR RECORD

J. Lara  
OCT - 4 1993

Title 18 U.S.C. Section 1001, 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.

\*See instruction on Reverse Side

CARLSBAD, NEW MEXICO

Submit 3 Copies  
Appropriate District Office  
DISTRICT I  
P.O. Box 1980, Hobbes, NM 88240

DISTRICT II  
P.O. Drawer DD, Artesia, NM 88210

DISTRICT III  
1000 Rio Brazos Rd., Aztec, NM 87410

State of New Mexico  
Energy, Minerals and Natural Resources Department

OIL CONSERVATION DIVISION  
P.O. Box 2088  
Santa Fe, New Mexico 87504-2088

Form C-104  
Revised 1-1-89  
See Instructions  
at Bottom of Page

RECEIVED

SEP - 7 1993

REQUEST FOR ALLOWABLE AND AUTHORIZATION  
TO TRANSPORT OIL AND NATURAL GAS

Operator Strata Production Company ✓		Well APN No. 30-015-21800
Address P.O. Box 1030, Roswell, New Mexico 88202-1030		
Reason(s) for Filing (Check proper box) <input type="checkbox"/> Other (Please explain)		
New Well <input type="checkbox"/>	Change in Transporter of:	
Recompletion <input checked="" type="checkbox"/>	Oil <input type="checkbox"/> Dry Gas <input type="checkbox"/>	
Change in Operator <input type="checkbox"/>	Casinghead Gas <input type="checkbox"/> Condensate <input type="checkbox"/>	
If change of operator give name and address of previous operator		

II. DESCRIPTION OF WELL AND LEASE

Lease Name Nash Unit	Well No. #5	Pool Name, Including Formation Nash Draw Brushy Canyon	Kind of Lease State, Federal <input checked="" type="checkbox"/> Private	Lease No. NM-17589
Location Unit Letter <u>I</u> : 2310 Feet From The <u>South</u> Line and 330 Feet From The <u>East</u> Line Section 13 Township 23 South Range 29 East, NMPM, Eddy County				

III. DESIGNATION OF TRANSPORTER OF OIL AND NATURAL GAS

Name of Authorized Transporter of Oil <input checked="" type="checkbox"/> or Condensate <input type="checkbox"/> Petro Source Partners, Ltd.	Address (Give address to which approved copy of this form is to be sent) 9801 Westheimer, St 900, Houston, TX 77042					
Name of Authorized Transporter of Casinghead Gas <input checked="" type="checkbox"/> or Dry Gas <input type="checkbox"/> Enron/Transwestern Pipeline	Address (Give address to which approved copy of this form is to be sent) P.O. Box 1188, Houston, TX 77002					
If well produces oil or liquids, give location of tanks.	Unit B	Sec. 13	Twp. 23S	Rge. 29E	Is gas actually connected? Yes	When? 8/17/93

If this production is commingled with that from any other lease or pool, give commingling order number:

IV. COMPLETION DATA

Designate Type of Completion - (X)	Oil Well <input checked="" type="checkbox"/>	Gas Well	New Well	Workover	Deepen <input checked="" type="checkbox"/>	Plug Back	Same Res'v	Diff Res'v
Date Spudded 7/16/76	Date Compl. Ready to Prod. 8/17/93		Total Depth 7300'		P.B.T.D. 7265'			
Elevations (DF, RKB, RT, GR, etc.) 3015' GR	Name of Producing Formation Delaware Brushy Canyon		Top Oil/Gas Pay on 6902'-6933'		Tubing Depth 6797'			
Perforations 6902' - 6933'					Depth Casing Shoe 7300'			
TUBING, CASING AND CEMENTING RECORD								
HOLE SIZE	CASING & TUBING SIZE	DEPTH SET		SACKS CEMENT				
17 1/2"	13 3/8"	310'		550 Class 'C'				
12 1/4"	8 5/8"	3160'		800HLW; 200 Class 'C'				
7 7/8"	5 1/2"	7300'		795 50/50 Poz H; 254				
	2 7/8"	6797'		65/35 Poz C; 267 Class 'C'				

V. TEST DATA AND REQUEST FOR ALLOWABLE

OIL WELL (Test must be after recovery of total volume of load oil and must be equal to or exceed top allowable for this depth or be for full 24 hours.)			
Date First New Oil Run To Tank 8/16/93	Date of Test 8/18/93	Producing Method (Flow, pump, gas lift, etc.) Flowing	
Length of Test 24 hours	Tubing Pressure 490#	Casing Pressure - 0 -	Choke Size 20/64
Actual Prod. During Test 436	Oil - Bbls. 171	Water - Bbls. 265	Gas - MCF 137

GAS WELL

Actual Prod. Test - MCF/D	Length of Test	Bbls. Condensate/MMCF	Gravity of Condensate
Testing Method (prior, back pr.)	Tubing Pressure (Shut-in)	Casing Pressure (Shut-in)	Choke Size

VI. OPERATOR CERTIFICATE OF COMPLIANCE

I hereby certify that the rules and regulations of the Oil Conservation Division have been complied with and that the information given above is true and complete to the best of my knowledge and belief.

Carol J. Garcia  
Signature  
Carol J. Garcia, Production Records Mgr.  
Printed Name  
9/2/93 (505) 622-1127  
Date Telephone No.

OIL CONSERVATION DIVISION  
SEP 2 2 1993

Date Approved

By ORIGINAL SIGNED BY  
MIKE WILLIAMS  
Title SUPERVISOR, DISTRICT II

INSTRUCTIONS: This form is to be filed in compliance with Rule 1104

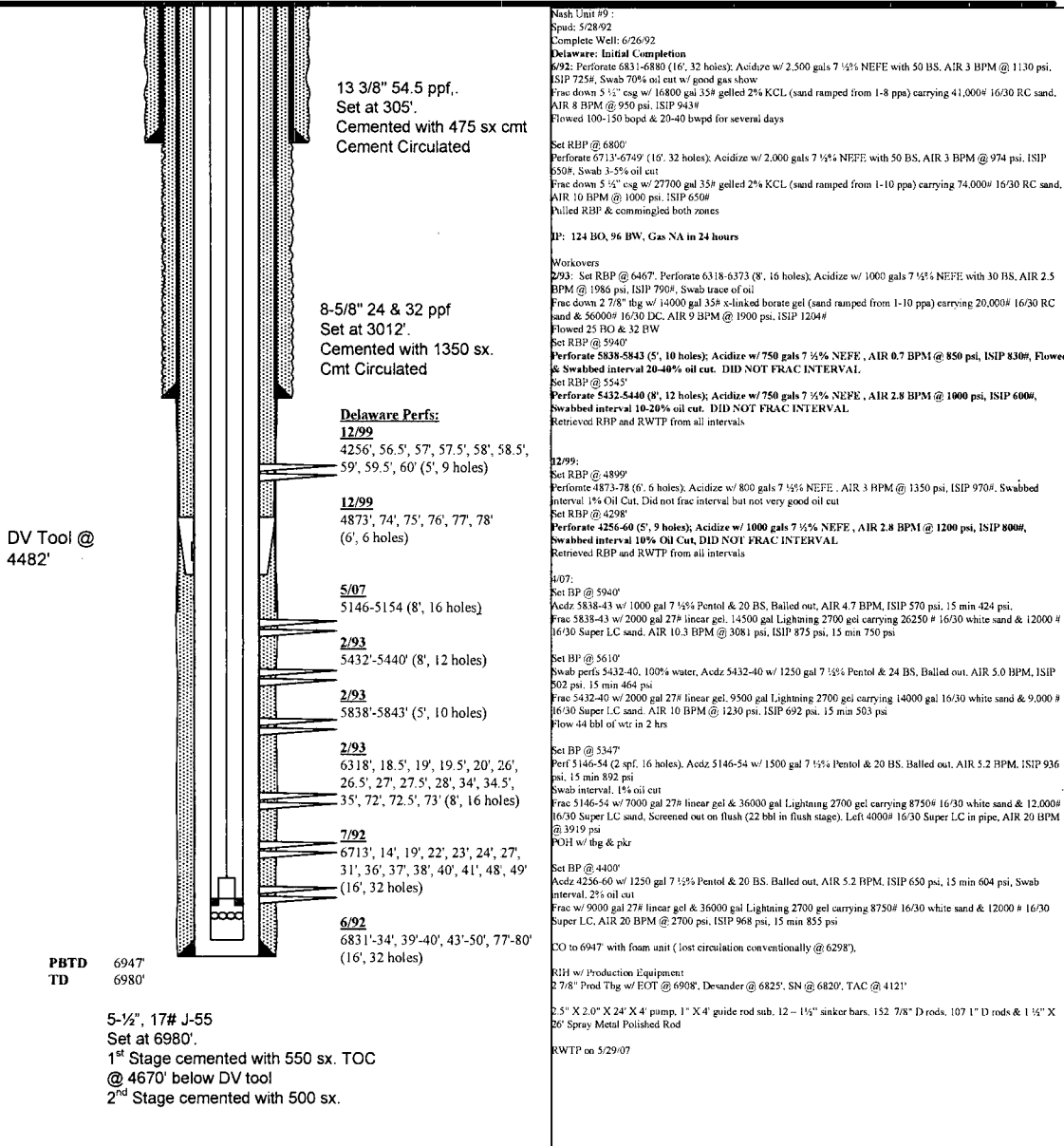
- 1) Request for allowable for newly drilled or deepened well must be accompanied by tabulation of deviation tests taken in accordance with Rule 111.
- 2) All sections of this form must be filled out for allowable on new and recompleted wells.
- 3) Fill out only Sections I, II, III, and VI for changes of operator, well name or number, transporter, or other such changes.

OFFSET  
Well

# XTO ENERGY

**Well:** Nash Unit #9  
**Area:** Carlsbad  
**Location:** Section 13, T23S, R29E  
**County:** Eddy  
**Elevation:** 2994 GL, KB 12' AGL

**WI:** 87.67414%  
**NRI:** 66.639132%  
**Spud:** 5/28/92  
**State:** New Mexico



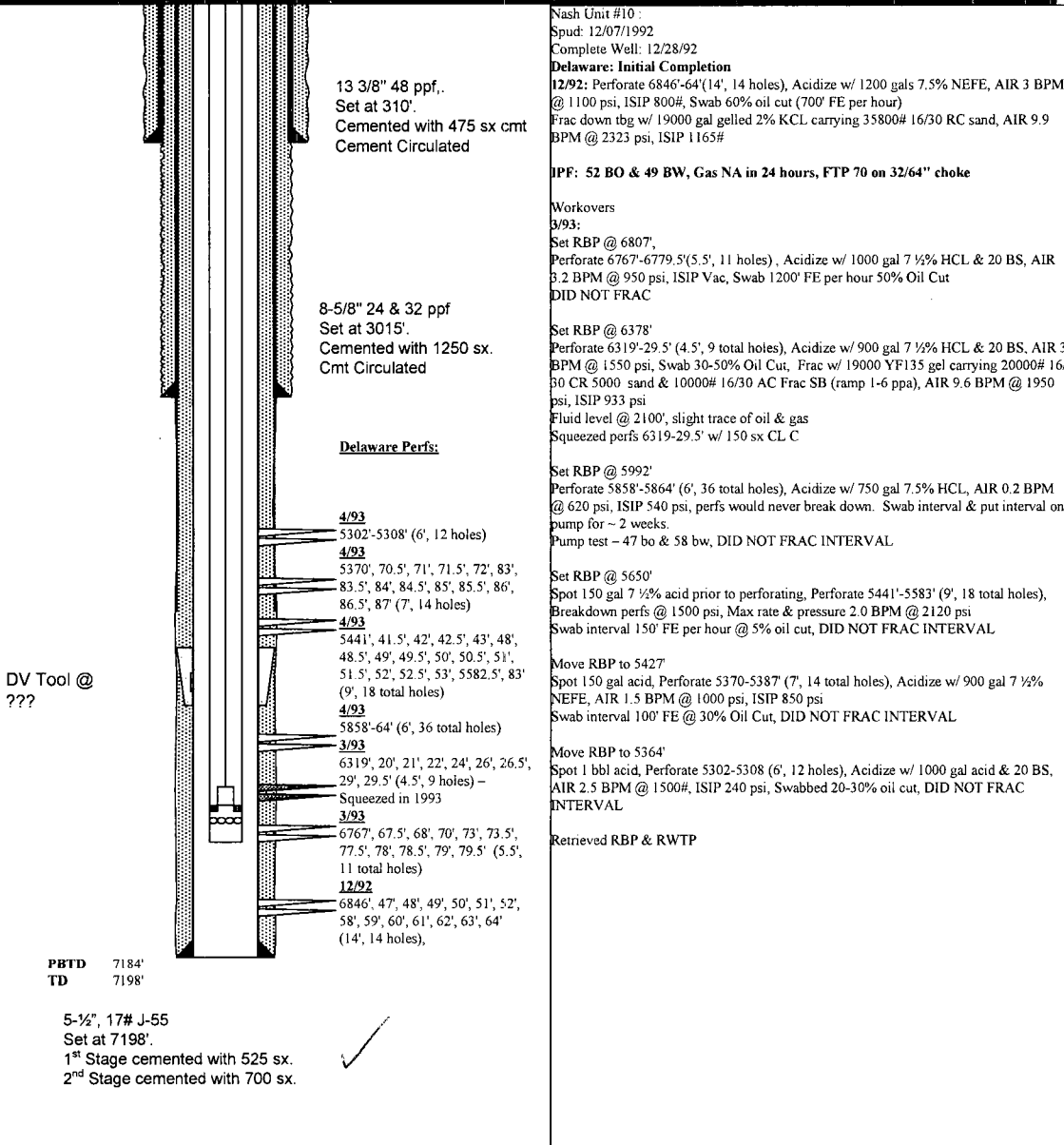
PREPARED BY: Richard Lauderdale

DATE: 5/30/07

# XTO ENERGY

Well: Nash Unit #10  
 Area: Carlsbad  
 Location: Section 13, T23S, R29E  
 County: Eddy  
 Elevation: 2998 GL 3010 KB

WI: 87.674140%  
 NRI: 70.564533%  
 Spud: 12/07/92  
 State: New Mexico

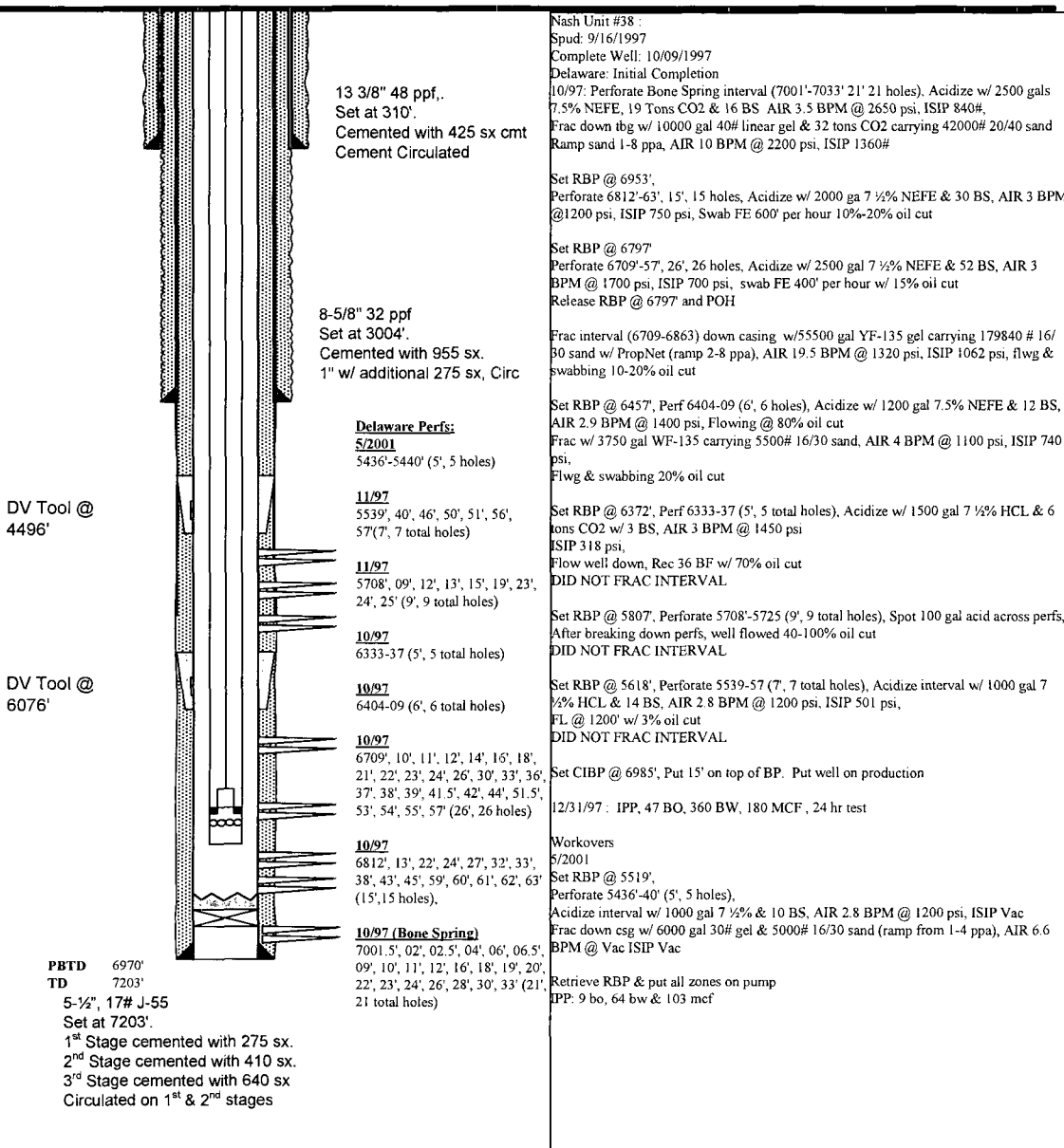


PREPARED BY: Richard Lauderdale DATE: 3/23/07

# XTO ENERGY

Well: Nash Unit #38  
Area: Carlsbad  
Location: Section 13, T23S, R29E  
County: Eddy  
Elevation: 2998 GL 3014 KB

WI: 100.00000%  
NRI: 76.976358%  
Spud: 9/16/1997  
State: New Mexico



PREPARED BY: Richard Lauderdale

DATE: 3/26/07





# Water Analysis Report

5/22/2008

Address:

Customer: XTO Energy, Inc.

Lease: NASH

Attention: Jerry Parker

Formation:

Salesman: Jeromie Pickering

CC:

Target Name: NASH 5

Sample Point: NASH 5

Sample Date: 04/17/2008

Test Date: 05/21/2008

## Water Analysis(mg/L)

Calcium	29714
Magnesium	4593
Barium	0
Strontium	5759
Sodium(calc.)	17806
Bicarbonate Alkalinity	37
Sulfate	76
Chloride	98000
Resistivity	0.0410

## Appended Data(mg/L)

CO2	1210
H2S	51
Iron	37
Oxygen	

## Physical Properties

Ionic Strength(calc.)	3.76
pH(calc.)	4.87
Temperature(°F)	90
Pressure(psia)	50
Density	9.23

## Additional Data

Specific Gravity	1.11
Total Dissolved Solids(Mg/L)	156022
Total Hardness(CaCO3 Eq Mg/	93109

## Dew Point

Lead	
Zinc	

## Calcite Calculation Information

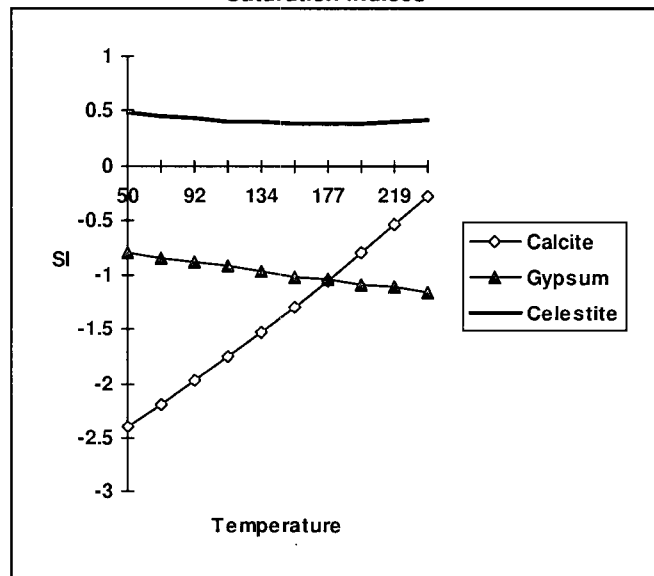
Calculation Method	Value
CO2 in Brine(mg/L)	1210

Remarks:

## SI & PTB Results

Scale Type	SI	PTB
Calcite (Calcium Carbonate)	-2.00	
Gypsum (Calcium Sulfate)	-0.88	
Hemihydrate (Calcium Sulfate)	-0.91	
Anhydrite (Calcium Sulfate)	-0.78	
Barite (Barium Sulfate)		
Celestite (Strontium Sulfate)	0.43	22.80

## Saturation Indices



## Saturation Index Data Points

	50	71	92	113	134	156	177	198	219	240
Calcite	-2.40	-2.19	-1.98	-1.76	-1.53	-1.29	-1.05	-0.80	-0.54	-0.28
Gypsum	-0.79	-0.84	-0.88	-0.92	-0.97	-1.01	-1.04	-1.08	-1.11	-1.15
Celestite	0.48	0.45	0.43	0.41	0.40	0.39	0.39	0.39	0.40	0.42

Lab Tech.: *[Signature]*



# Water Analysis Report

5/22/2008

Address:

Customer: XTO Energy, Inc.

Attention: Jerry Parker

Lease: NASH

Formation:

Salesman: Jeromie Pickering

CC:

Target Name: NASH 10

Sample Point: NASH 10

Sample Date: 04/17/2008

Test Date: 05/21/2008

## Water Analysis(mg/L)

Calcium	41303
Magnesium	8505
Barium	0
Strontium	5588
Sodium(calc.)	52340
Bicarbonate Alkalinity	37
Sulfate	108
Chloride	183000
Resistivity	0.0220

## Appended Data(mg/L)

CO2	
H2S	2
Iron	29
Oxygen	

## Additional Data

Specific Gravity	1.20
Total Dissolved Solids(Mg/L)	290910
Total Hardness(CaCO3 Eq Mg/	138114

## Physical Properties

Ionic Strength(calc.)	6.61
pH(calc.)	
Temperature(°F)	90
Pressure(psia)	50
Density	10.01

Dew Point	
Lead	
Zinc	

## Calcite Calculation Information

Calculation Method	Value
CO2 in Brine(mg/L)	

Remarks:

## SI & PTB Results

Scale Type	SI	PTB
Calcite (Calcium Carbonate)		
Gypsum (Calcium Sulfate)	-0.44	
Hemihydrate (Calcium Sulfate)	-0.38	
Anhydrite (Calcium Sulfate)	-0.01	
Barite (Barium Sulfate)		
Celestite (Strontium Sulfate)	1.10	39.60

Lab Tech.: *for*



# Water Analysis Report

5/22/2008

Address:

Customer: XTO Energy, Inc.

Attention: Jerry Parker

Lease: NASH

Formation:

Salesman: Jeromie Pickering

CC:

Target Name: NASH 1

Sample Point: NASH 1

Sample Date: 04/17/2008

Test Date: 05/21/2008

## Water Analysis(mg/L)

Calcium	33844
Magnesium	3110
Barium	0
Strontium	4865
Sodium(calc.)	67588
Bicarbonate Alkalinity	49
Sulfate	93
Chloride	177000
Resistivity	0.0223

## Appended Data(mg/L)

CO2	1120
H2S	3
Iron	26
Oxygen	

## Additional Data

Specific Gravity	1.20
Total Dissolved Solids(Mg/L)	286575
Total Hardness(CaCO3 Eq Mg/	97356

## Physical Properties

Ionic Strength(calc.)	6.02
pH(calc.)	5.83
Temperature(°F)	90
Pressure(psia)	50
Density	9.99

Dew Point	
Lead	
Zinc	

## Calcite Calculation Information

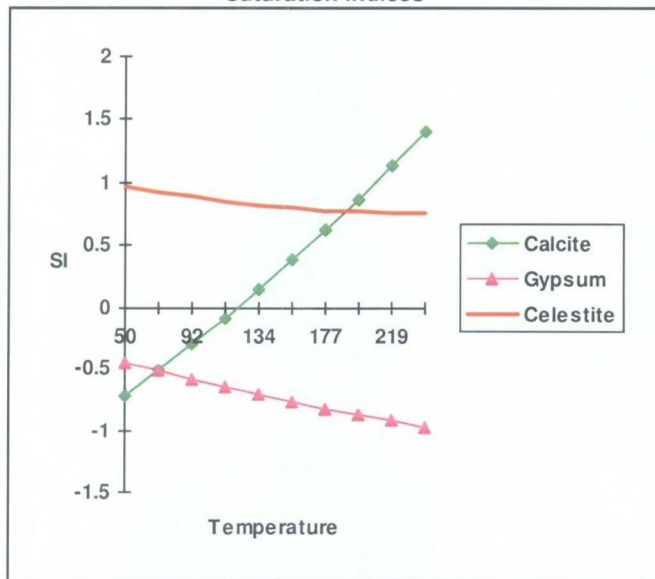
Calculation Method	Value
CO2 in Brine(mg/L)	1120

Remarks:

## SI & PTB Results

Scale Type	SI	PTB
Calcite (Calcium Carbonate)	-0.33	
Gypsum (Calcium Sulfate)	-0.58	
Hemihydrate (Calcium Sulfate)	-0.55	
Anhydrite (Calcium Sulfate)	-0.23	
Barite (Barium Sulfate)		
Celestite (Strontium Sulfate)	0.89	37.90

## Saturation Indices



## Saturation Index Data Points

	50	71	92	113	134	156	177	198	219	240
Calcite	-0.72	-0.52	-0.31	-0.09	0.14	0.38	0.62	0.87	1.13	1.40
Gypsum	-0.46	-0.52	-0.59	-0.65	-0.71	-0.77	-0.82	-0.87	-0.92	-0.97
Celestite	0.97	0.93	0.89	0.85	0.82	0.80	0.78	0.77	0.76	

Lab Tech.: *[Signature]*

# Advertising Receipt

Hobbs Daily News-Sun

201 N Thorp  
P O Box 936  
Hobbs, NM 88241-0850  
Phone: (575) 393-2123  
Fax: (575) 397-0610

ATTN: KRISTY WARD  
XTO ENERGY INC.  
200 LORAIN, SUITE 800  
MIDLAND, TX 79701

REC'D/MIDLAND  
JUN 24 2008

Cust#: 01102696-000

Ad#: 02601045

Phone: (432)682-8873

Date: 06/18/08

Ad taker: C2

Salesperson: 05

Classification: 672

Description	Start	Stop	Ins.	Cost/Day	Surcharges	Total
07 07 Daily News-Sun	06/20/08	06/20/08	1	29.34		29.35
Bold						1.00
2 Affidavits (Legals)						6.00

## Payment Reference:

LEGAL NOTICE  
June 20, 2008

Notice of Applications for Fluid Injection Well Permit  
Nash Unit #29 SWD

Total: 36.35

Tax: 2.43

Net: 38.78

Prepaid: 0.00

**Total Due 38.78**

XTO Energy, Inc., 200 N. Loraine, Ste. 800, Midland, Tx 79701, Attention-Kristy Ward -432-620-6740, has applied for a permit to dispose fluid into a formation which is productive of oil and gas. The applicant proposes to dispose fluid at the location of Unit Ltr. J, Section 13, Township-23S, Range-29E, Footae location of this well is 1980' FSL & 2310" FEL. The API# is 30-015-29434. Fluid will be disposed into the Bell Canyon Delaware formation at a depth interval from 3192'-3786', with a maximum injection rage of 2000 BWIPD and a maximum injection pressure of 638 psi.

All interested parties must file objections or requests for hearing with the Oil Conservation Division, 1220 South St. Francis Dr., Santa Fe, NM 87505, with in 15 days.

AFFIDAVIT OF PUBLICATION

State of New Mexico,  
County of Lea.

I, KATHI BEARDEN

PUBLISHER

of the Hobbs News-Sun, a  
newspaper published at  
Hobbs, New Mexico, do solemnly  
swear that the clipping attached  
hereto was published once a  
week in the regular and entire  
issue of said paper, and not a  
supplement thereof for a period.

of 1

weeks.

Beginning with the issue dated

June 20

2008

and ending with the issue dated

June 20

2008

*Kathi Bearden*

PUBLISHER

Sworn and subscribed to before

me this 20th day of

June

2008

*[Signature]*  
Notary Public.

My Commission expires  
February 07, 2009  
(Seal)



OFFICIAL SEAL  
DORA MONTZ  
NOTARY PUBLIC  
STATE OF NEW MEXICO

My Commission Expires: \_\_\_\_\_

This newspaper is duly qualified  
to publish legal notices or adver-  
tisements within the meaning of  
Section 3, Chapter 167, Laws of  
1937, and payment of fees for  
said publication has been made.

LEGAL NOTICE

June 20, 2008

Notice of Applications for Fluid Injection Well Permit  
Nash Unit #29 SWD

XTO Energy, Inc., 200 N. Loraine, Ste. 800, Midland, TX  
79701, Attention: Kristy Ward, 432-620-6740, has applied  
for a permit to dispose fluid into a formation which is pro-  
ductive of oil and gas. The applicant proposes to dispose  
fluid at the location of Unit Ltr. J, Section 13, Township-23S,  
Range-29E. Footage location of this well is 1980' FSL &  
2310' FEL. The API # is 30-015-29434. Fluid will be dis-  
posed into the Bell Canyon-Delaware formation at a depth  
interval from 3192'-3786' with a maximum injection rage of  
2000 BWIPD and a maximum injection pressure of 638 psii.

All interested parties must file objections or requests for  
hearing with the Oil Conservation Division, 1220 South St.  
Francis Dr., Santa Fe, NM 87505, with in 15 days.  
#24144

01102696000

02601045

XTO ENERGY INC.  
200 LORAIN, SUITE 800  
MIDLAND, TX 79701

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

FORM APPROVED  
Budget Bureau No. 1004-0135  
Expires: March 31, 1993

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to deepen or reentry to a different reservoir.

Use "APPLICATION FOR PERMIT-" for such proposals.

SUBMIT IN TRIPLICATE

I. Type of Well  
Oil Gas  
☒ Well ☐ Well ☐ Other

2. Name of Operator

STRATA-PRODUCTION COMPANY

3. Address and Telephone No.

P. O. Box 1030

Roswell, New Mexico 88202-1030

505-622-1127

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)

1980' FSL & 2310' FEL

Section 13-23S-29E

7. If Unit or CA, Agreement Designation

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 Brushy Canyon Oil Pool

11. County or Parish, State

Eddy County, New Mexico

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

TYPE OF SUBMISSION

☐ Notice of Intent

☒ Subsequent Report

☐ Final Abandonment Notice

TYPE OF ACTION

☐ Abandonment

☐ Recompletion

☐ Plugging Back

☐ Casing Repair

☐ Altering Casing

☒ Other

Completion Operations

☐ Change of Plans

☐ New Construction

☐ Non-Routine Fracturing

☐ Water Shut-Off

☐ Conversion to Injection

☐ Dispose Water

(Note: Report results of multiple completion on Well Completion or Recompletion Report and Log Form.)

13. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)

05/13/97: MIRU pulling unit. Tag cement at 4350'.

05/14/97: Drill out cement and DV tools at 4498' and 6112'. Test casing to 1000#. Held OK.

05/15/97: Run CBL. Perf 23 .42 holes at 6825'-6870'.

05/16/97: Acidize with 2500 gallons 7 1/2% NEFE acid. Swab test.

05/19/97: Frac with 94,105 gallons gel and 216,880# 16/30 sand. Swab test.

05/27/97: TIH with production string, pump and rods.

05/29/97: Release rig at 12:00 PM. RDMO.

05/30/97: Set pumping unit. Lay and connect flowlines.

05/31/97: Start pumping unit at 8:30 AM. Well placed on production.

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

Signed Carol G. Garcia

Title Production Records Manager Date 6/10/97

(This space for Federal or State office use)

Approved by

Title

Date

Conditions of approval, if any:

Permanent Datum: G.L.; Elev. 3004.8  
 Log Measured From: K.3. 19.2 Above Perm. Datum  
 Drilling Measured From: K.8.  
 Elev. K.R. 3024  
D.F. 3023  
G.L. 3004.

Date	8-9-74	8-29-74	12-4-74
Rent No.	ONE	TWO	THREE
Depth-Driller	5836	10901	13850
Depth-Logger (Schl.)	5809	10912	13850
Bar. Log Interval	5794	10898	13836
Top Log Interval	3370	5595	10906
Coring-Driller	1034@ 3325	10374@3325	7506@ 10908
Coring-Logger	3370	3370	10906
Bar Size	9 1/2	9 1/2	6 1/2
Type Fluid in Hole	BRINE	BRINE	SALT MUD
Dens. Visc.	9.4	9.3	12.3
pH	Fluid Loss	8	7
Spence of Sample	PIT	PIT	PIT
Rap @ Meas. Temp.	.056 @ 90 °F	.064 @ 73 °F	.078 @ 72 °F
Rap @ Meas. Temp.	.050 @ 88 °F	.064 @ 73 °F	.062 @ 72 °F
Time @ Meas. Temp.	.084 @ 90 °F	@ °F	@ °F
Source: Reef	Rmic	H	H
km @ BRT	M40@ 128F	.029 @162 °F	.03 @ 187F
Calculation Skipped	7 HOURS	8-29 0330	12-4 0500
Logger on bottom	128	8-29 1900	12-14 1900
Max. Rec. Temp.	°F	162	187
Depth, Location	3721 H0385	7627 H0885	7627 H0885
Recorded by	KEPNER	LAKE	BIRKHEAD, WYANT
Interpreted by Mr.	COWLEY	JEFFERS, PALE	JEFFERS

The well name, location and borehole reference data were furnished by the customer.

On the Logarithmic Overlay presentation, appropriate scales permit direct reading for values of porosity and water saturation.

$$S_w = \sqrt{\frac{FR_w}{R_f}} = \sqrt{\frac{R_o}{R_f}}$$

Mud Measurements:	$R_m = .064 @ 73^\circ F$	$R_{mf} = .064 @ 73^\circ F$	BHT = 162
-------------------	---------------------------	------------------------------	-----------

Schlumberger

COMPOSITE BOREHOLE COMPENSATED  
SONIC LOG AND COMPENSATED  
NEUTRON-FORMATION DENSITY LOG

COUNTY EDDY

FIELD or

LOCATION WILDCAT

WELL NASH UNIT #1

COMPANY MESA PETR. CO.

COMPANY MESA PETROLEUM COMPANY

MDR. PES - 13175-13609 - PESOK, MDR. GAS/COND.  
STR. PES - 13138-150-PESOK, STR. GAS/COND.

WELL NASH UNIT #1

FIELD WILDCAT

COUNTY EDDY STATE NEW MEXICO

Location: 1980' FNL  
660' FEL

Other Services:

DLL

Sec. 13 Twp. 23-S Rge. 29-E

Permanent Datum: G.L.; Elev.: 3004.8

Log Measured From K.B. 19.2 Ft. Above Perm. Datum

Drilling Measured From K.B.

Elev.: K.B. 3024

D.F. 3023

G.L. 3004.8

Date	8-9-74	8-29-74	12-4-74	
Run No.	ONE (BHC)	TWO (BHC)	THREE (CNL-FDC)	
Depth-Driller	5836	10901	13850	
Depth-Logger	5809	10913	13851	
Btm. Log Interval	5807	10911	13850	
Top Log Interval	SURF	5593	10700	
Casing-Driller	10 3/4 @ 3325	10 3/4 @ 3325	7 3/8 @ 10908	@
Casing-Logger	3370	3370	10908	
Bit Size	9 1/2	9 1/2	6 1/2	
Type Fluid in Hole	BRINE	BRINE WTR.	SALT MUD	
Dens.	9.4	9.3	12.3	45
Visc.	-	27		
pH	-	8	7	4 ml
Fluid Loss	- ml	- ml		
Source of Sample	PIT	PIT	PIT	
R <sub>m</sub> @ Meas. Temp.	.056 @ 90 °F	.064 @ 73 °F	.078 @ 72 °F	@
R <sub>mf</sub> @ Meas. Temp.	.050 @ 88 °F	.064 @ 73 °F	.062 @ 72 °F	@
R <sub>mc</sub> @ Meas. Temp.	.084 @ 90 °F	- @ - °F	- @ - °F	@
Source: R <sub>mf</sub>   R <sub>mc</sub>	M   C	M   -	M   -	
R <sub>m</sub> @ BHT	.040 @ 128 °F	.029 @ 162 °F	.03 @ 187 °F	@ °F
TIME Circulation Stopped	1100	0330	0500	
Logger on Bottom	1500	0930	1030	
Max. Rec. Temp.	128 °F	162 °F	187 °F	°F
Equip.   Location	3721   HOBBS	7627   HOBBS	7627   HOBBS	
Recorded By	KEMPER	LAKE	BIRKHEAD-WYANT	
Witnessed By	CROWLEY	JEFFERS, PAGE	JEFFERS	

This well name, location and borehole reference data were furnished by the customer.





## OIL CONSERVATION COMMISSION

STATE OF NEW MEXICO  
P. O. DRAWER DD - ARTESIA

88210

July 17, 1975

I. R. TRUJILLO  
CHAIRMAN

LAND COMMISSIONER  
PHIL R. LUCERO  
MEMBER

STATE GEOLOGIST  
A. L. PORTER, JR.  
SECRETARY - DIRECTOR

Mesa Petroleum Company  
904 Gihls Tower West  
Midland, Texas 79701

Re: Nash Unit  
#1-H, 13-23-29  
Eddy County, N. M.

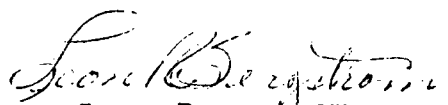
Gentlemen:

A recent inspection of subject well revealed the following deficiencies:

1. No well identification sign.
2. No zone identification markers on well head.
3. Gas bubbling through water in cellar.

Please correct the above mentioned deficiencies at your earliest convenience.

Yours truly,

  
Leon Bergstrom  
Oil & Gas Inspector

LB/ep



STATE OF NEW MEXICO

**ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT**

OIL CONSERVATION DIVISION  
ARTESIA DISTRICT OFFICE

GARREY CARRUTHERS  
GOVERNOR

P.O. DRAWER DD  
ARTESIA, NEW MEXICO 88210  
(505) 748-1283

March 6, 1989

Mesa Operating Limited Partnership  
P.O. Box 2009  
Amarillo, TX 79189

RE: Nash Unit #1  
13-23S-29E  
Cherry Canyon

Gentlemen:

In updating our records we find that the last report we received on the above well was dated June 29, 1988. In that report you had plugged back and perf'd the Upper Cherry Canyon. As of this date we have not received any subsequent reports. Please submit all necessary reports including the completion, deviation survey and logs run.

Thank you for your prompt attention to this matter.

Sincerely,

A handwritten signature in cursive script, appearing to read "Mike Williams".

Mike Williams  
Supervisor, District II

MW/cw

OIL CONSERVATION DIVISION  
P.O. BOX 2088  
SANTA FE, NEW MEXICO 87501

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SANTA FE	
FILE	
U.S.G.S.	
LAND OFFICE	
OPERATOR	<input checked="" type="checkbox"/>

SEP 24 1991  
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5a. Indicate Type of Lease State <input checked="" type="checkbox"/> Fee <input type="checkbox"/>
5. State Oil & Gas Lease No. K 6600
7. Unit Agreement Name
8. Form or Lease Name NASH UNIT
9. Well No. 1
10. Field and Pool, or Wildcat Cherry Canyon
12. County Eddy

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.)

1. <input type="checkbox"/> OIL WELL <input checked="" type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER
2. Name of Operator Mesa Operating Limited Partnership
3. Address of Operator P.O. Box 2009, Amarillo, Texas 79189
4. Location of Well UNIT LETTER <u>H</u> <u>1980'</u> FEET FROM THE <u>north</u> LINE AND <u>660</u> FEET FROM THE <u>east</u> LINE, SECTION <u>13</u> TOWNSHIP <u>23S</u> RANGE <u>29E</u> NMPM.
15. Elevation (Show whether DF, RT, GR, etc.) 3005' GR

16. Check Appropriate Box To Indicate Nature of Notice, Report or Other Data

## NOTICE OF INTENTION TO:

PERFORM REMEDIAL WORK ☐  
TEMPORARILY ABANDON ☐  
PULL OR ALTER CASING ☐  
OTHER ☐

PLUG AND ABANDON ☐  
CHANGE PLANS ☐  
OTHER ☐

## SUBSEQUENT REPORT OF:

REMEDIAL WORK ☐  
COMMENCE DRILLING OPS. ☐  
CASING TEST AND CEMENT JOB ☐  
OTHER Commence Plug Back (Set plugs & Perf) ☒

17. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work) SEE RULE 1703.

MI & RU completion unit on 6/14/88. RIH w/jet cutter; jet cutter stopped @ 12,104'; received permission from Johnny Robinson, NMOCD on 6/15/88 to cut @ 12,103' and to omit dumping 35' cement on top of packer. Cut 2 7/8" tubing @ 12,103'. WIH & set CIBP @ 12,100'; dump bailed 35' of cement on top of CIBP. Set CIBP @ 11,405' and dumped 35' cement on top. PBSD 11,370'. Set 7 5/8" CIBP @ 10,400' with 35' cement on top. RU Western, displaced hole with 326 bbls brine water. Tested 7 5/8" csg to 3000 psi (OK). Set 200' balanced plug from 8400'-8600' with 50 sx Class H. Mike Stubblefield with NMOCD on location. Set 200' balanced cement plug from 7000'-6800' with 50 sx Classs "H". Ran GR-CCL-CBL log. Perf'd the Upper Cherry Canyon from 4936'-42' w/4 SPF; and 4780'-84' w/4 SPF. Acidized the Cherry Canyon perfs from 4780'-4942' with 1000 gals SHA 7½% NEFe acid. Current operations: Swabbing

RECEIVED

JUL 08 1988

REGULATORY/SAFETY

xc: NMOCD-A (0+2), Prod Rcds, Reg, Land, Expl., Partners

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

SIGNED Charles Cummings TITLE Regulatory Analyst

DATE 6/29/88

APPROVED BY Mike Williams TITLE Oil & Gas Inspector  
CONDITIONS OF APPROVAL, IF ANY:

DATE JUN 30 1988

DISTRICT I  
P.O. Box 1980, Hobbs, NM 88240

DISTRICT II  
P.O. Drawer DD, Artesia, NM 88210

DISTRICT III  
1000 Rio Brazos Rd., Aztec, NM 87410

OIL CONSERVATION DIVISION  
P.O. Box 2088  
Santa Fe, New Mexico 87504-2088

WELL API NO.  
30-015-21277

5. Indicate Type of Lease  
STATE ☒ FEE ☐

6. State Oil & Gas Lease No.  
K-6600

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  
Nash Unit O.C.D.

1. Type of Well:  
OIL WELL ☒ GAS WELL ☐ OTHER ☐

2. Name of Operator  
Strata Production Company

8. Well No.  
#1

3. Address of Operator  
P. O. Box 1030, Roswell, New Mexico 88202-1030

9. Pool name or Wildcat  
Nash Unit-Delaware

4. Well Location  
Unit Letter H : 1980 Feet From The North Line and 660 Feet From The East Line

Section 13 Township 23 South Range 29 East NMPM Eddy County

10. Elevation (Show whether DF, RKB, RT, GR, etc.)  
3005' GR

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

NOTICE OF INTENTION TO:		SUBSEQUENT REPORT OF:	
PERFORM REMEDIAL WORK <input type="checkbox"/>	PLUG AND ABANDON <input type="checkbox"/>	REMEDIAL WORK <input checked="" type="checkbox"/>	ALTERING CASING <input type="checkbox"/>
TEMPORARILY ABANDON <input type="checkbox"/>	CHANGE PLANS <input type="checkbox"/>	COMMENCE DRILLING OPNS. <input type="checkbox"/>	PLUG AND ABANDONMENT <input type="checkbox"/>
PULL OR ALTER CASING <input type="checkbox"/>		CASING TEST AND CEMENT JOB <input type="checkbox"/>	
OTHER: <input type="checkbox"/>		OTHER: <input type="checkbox"/>	

12. 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.

9/28/92 RU Pool Well Service pulling unit. TOH w/pump, rods and tubing.

9/29/92 TIH w/cement retainer and set at 4724'. Squeeze perfs from 4780' to 4784' with 300 sacks Class "C" with 2% KCL.

10/03/92 TIH with RTTS packer and set at 4703'. Squeeze perfs from 4936' to 4942' with 215 sacks Class "C" with 2% KCL. Tail in with 300 sacks Class "C" Neat. Total 465 sacks cement in formation and 50 sacks cement in casing.

10/12/92 RU Schlumberger. Ran CBL and CET.

\* 10/15/92 Perf (4) .42 holes from 6980' to 6981'. CMT SQZ.

CONTINUED

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

SIGNATURE Carol J. Garcia TITLE Production Supervisor DATE 12/17/92  
TYPE OR PRINT NAME Carol J. Garcia TELEPHONE NO. 622-1127

(This space for State Use)

APPROVED BY [Signature] TITLE DATE DEC 23 1992  
CONDITIONS OF APPROVAL, IF ANY:

\* AS NOTED ABOVE

# HALLIBURTON DIVISION LABORATORY

## HALLIBURTON SERVICES

### ARTESIA DISTRICT

#### LABORATORY REPORT

No. W121, W122, & W123-93

TO Strata Production  
648 Petroleum Building  
Roswell, NM 88201

Date March 25, 1993

This report is the property of Halliburton Services and neither it nor any part thereof, nor a copy thereof is to be published or disclosed without first securing the express written approval of laboratory management. It may however, be used in the course of regular business operations by any person or concern and employees thereof receiving such report from Halliburton Services.

Submitted by \_\_\_\_\_ Date Rec. \_\_\_\_\_


Well No. \_\_\_\_\_ Depth \_\_\_\_\_ Formation \_\_\_\_\_

Field \_\_\_\_\_ County \_\_\_\_\_ Source \_\_\_\_\_

	3-25-93 Nash Draw #10	3-24-93 Nash Draw #10	3-24-93 Fresh Water
Resistivity .....	0.050 @ 70°	0.051 @ 70°	4.18 @ 70°
Specific Gravity ..	1.204 @ 70°	1.1200 @ 70°	1.0016 @ 70°
pH .....	7.0	7.2	7.0
Calcium .....	33,040	29,901	2,478
Magnesium .....	3,607	4,008	902
Chlorides .....	188,000	184,000	600
Sulfates .....	600	800	200
Bicarbonates .....	275	244	153
Soluble Iron .....	250	250	0
<u>KCL</u> .....	Trace	1/2%	
-----			
-----			

Remarks:

MAR 29 1993

  
 Respectfully submitted

Analyst: Eric Jacobson - Operations Engineer

HALLIBURTON SERVICES

#### NOTICE:

This report is for information only and the content is limited to the sample described. Halliburton makes no warranties, express or implied, as to the accuracy of the contents or results. Any user of this report agrees Halliburton shall not be liable for any loss or damage, regardless of cause, including any act or omission of Halliburton, resulting from the use hereof.

# INSTRUCTIONS

**General:** This form is designed for submitting a complete and correct well completion report and log on all types of lands and leases to either a Federal agency or a State agency, or both, pursuant to applicable Federal and/or State laws and regulations. Any necessary special instructions concerning the use of this form and the number of copies to be submitted, particularly with regard to local, area, or regional procedures and practices, either are shown below or will be issued by, or may be obtained from, the local Federal and/or State office. See instructions on items 22 and 24, and 33, below regarding separate reports for separate completions.

If not filed prior to the time this summary record is submitted, copies of all currently available logs (drillers, geologists, sample and core analysis, all types electric, etc.), formation and pressure tests, and directional surveys, should be attached hereto, to the extent required by applicable Federal and/or State laws and regulations. All attachments should be listed on this form, see item 35.

**Item 4:** If there are no applicable State requirements, locations on Federal or Indian land should be described in accordance with Federal requirements. Consult local State or Federal office for specific instructions.

**Item 18:** Indicate which elevation is used as reference (where not otherwise shown) for depth measurements given in other spaces on this form and in any attachments.

**Items 22 and 24:** If this well is completed for separate production from more than one interval zone (multiple completion), so state in item 22, and in item 24 show the producing interval, or intervals, top(s), bottom(s) and name(s) (if any) for only the interval reported in item 33. Submit a separate report (page) on this form, adequately identified, for each additional interval to be separately produced, showing the additional data pertinent to such interval.

**Item 29: "Sacks Cement":** Attached supplemental records for this well should show the details of any multiple stage cementing and the location of the cementing tool.

**Item 33:** Submit a separate completion report on this form for each interval to be separately produced. (See instruction for items 22 and 24 above.)

37. SUMMARY OF POROUS ZONES: SHOW ALL IMPORTANT ZONES OF POROSITY AND CONTENTS THEREOF: CORED INTERVALS, AND ALL DRILL-STEM TESTS, INCLUDING DEPTH INTERVAL TESTED, CUSHION USED, TIME TOOL OPEN, FLOWING AND SHUT-IN PRESSURES, AND RECOVERIES				38. GEOLOGIC MARKERS			
FORMATION	TOP	BOTTOM	DESCRIPTION, CONTENTS, ETC.	NAME	MEAS. DEPTH	TOP	TRUE VERT. DEPTH
Delaware SS	3250	4293	Log calculations indicate water	Lamar	3218		
Cherry Canyon	4293	4801	Water	Delaware SS	3250		
1st Cherry Can	4801	4950	Water	Cherry Canyon	4293		
2nd Cherry Can	4950	5100	Water, see DST Summary, Attached	1st Cherry Can	4801		
				2nd Cherry Can	4950		

RECEIVED

AUG 03 1976

U. S. GEOLOGICAL SURVEY  
ARTESIA, NEW MEXICO



"Jones, William V.,  
EMNRD"

<William.V.Jones@state.nm.us>

To <Kristy\_Ward@xtoenergy.com>

"Ezeanyim, Richard, EMNRD"

cc <richard.ezeanyim@state.nm.us>, "Warnell, Terry G,  
EMNRD" <TerryG.Warnell@state.nm.us>, "Reeves,

12/07/2008 08:43 PM

2008 DEC 16  
Subject

PM 12 17

Disposal Application from XTO Energy, Inc: Nash Unit  
#29 30-015-29434

Hello Kristy:

The following items should be addressed prior to finalizing the evaluation of this injection permit into the Bell Canyon. Well is located east of Loving New Mexico in the Potash area.

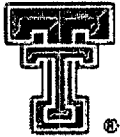
- \* / 1) Please provide proof of notice to Bepco (as leaseholders in the N/2N/2 of Section 24), BLM (as surface owner of the well site), and to all nearby Potash Leaseholders. *Attached*
- / 2) A CIBP would be required within 200 feet of the lowermost injection perforation – send a new “post-conversion” wellbore diagram reflecting this. *Attached*
- / 3) Please send a copy of the CBL run on the subject well. *attached*
- / 4) Send a copy of the CBL run in 1992 on the offset well: Nash Unit #1. The injected water must not be allowed to enter the un-cemented bradenhead on this well. *attached*
- / 5) Please send an explanation from a geologist or engineer as to how the Potash reserves in this area would be protected from this injection. What is the maximum depth of the Potash reserves in this area? *attached*

Thank you for the other logs you sent and for covering the issue of producibility of the Bell Canyon in the subject well.

Regards,

William V. Jones PE  
New Mexico Oil Conservation Division  
1220 South St. Francis  
Santa Fe, NM 87505  
505-476-3448

(1) \* BEPCO was not notified due to the well not drilled.



Richard  
Lauderdale/MID/CTOC  
12/11/2008 02:04 PM

To Kristy Ward/MID/CTOC@CTOC  
cc Ralph Nelson/FTW/CTOC@CTOC, TJ  
Midkiff/FTW/CTOC@CTOC  
bcc

Question #5 from NM OCD concerning Disposal  
Subject Application from XTO Energy, Inc: Nash Unit #29  
30-015-29434

5) Please send an explanation from a geologist or engineer as to how the Potash reserves in this area would be protected from this injection. What is the maximum depth of the Potash reserves in this area?

Based on the Computalog Cement Bond /Gamma Ray/CCL log ran on subject well on 05/15/1997, the top of cement is determined to be 2060' from surface in the 5 1/2" x 8 5/8" annulus. The top proposed perforation in the Bell Canyon is 3192'. Thus the Potash reserves would be protected in the area by the cement bond as supported by CBL data. The maximum depth of potash reserves in the area is 800'

Richard Lauderdale  
Sr. Operations Engineer  
XTO Energy  
Cell # (432) 638-2732  
Office # (432) 620-6736  
Fax # (432) 687-0862



## **Jones, William V., EMNRD**

---

**From:** Jones, William V., EMNRD  
**Sent:** Sunday, December 07, 2008 7:43 PM  
**To:** 'Kristy\_Ward@xtoenergy.com'  
**Cc:** Ezeanyim, Richard, EMNRD; Warnell, Terry G, EMNRD; Reeves, Jacqueta, EMNRD  
**Subject:** Disposal Application from XTO Energy, Inc: Nash Unit #29 30-015-29434

Hello Kristy:

The following items should be addressed prior to finalizing the evaluation of this injection permit into the Bell Canyon. Well is located east of Loving New Mexico in the Potash area.

- 1) Please provide proof of notice to Bepco (as leaseholders in the N/2N/2 of Section 24), BLM (as surface owner of the well site), and to all nearby Potash Leaseholders.
- 2) A CIBP would be required within 200 feet of the lowermost injection perforation – send a new “post conversion” wellbore diagram reflecting this.
- 3) Please send a copy of the CBL run on the subject well.
- 4) Send a copy of the CBL run in 1992 on the offset well: Nash Unit #1. The injected water must not be allowed to enter the un-cemented bradenhead on this well.
- 5) Please send an explanation from a geologist or engineer as to how the Potash reserves in this area would be protected from this injection. What is the maximum depth of the Potash reserves in this area?

Thank you for the other logs you sent and for covering the issue of producibility of the Bell Canyon in the subject well.

Regards,

William V. Jones PE  
New Mexico Oil Conservation Division  
1220 South St. Francis  
Santa Fe, NM 87505  
505-476-3448

**Jones, William V., EMNRD**

---

**From:** Jones, William V., EMNRD  
**Sent:** Friday, December 26, 2008 12:11 PM  
**To:** 'Kristy\_Ward@xtoenergy.com'  
**Cc:** Warnell, Terry G, EMNRD; Reeves, Jacqueta, EMNRD; Guye, Gerry, EMNRD; Brooks, David K., EMNRD  
**Subject:** RE: Disposal Application from XTO Energy, Inc: Nash Unit #29 30-015-29434

Hello Kristy:  
Thanks for sending this information.

After reviewing your info, only a couple of items remain:

Notice issues:

Still missing the proof of notice to BEPCO, you could obtain a signed waiver from them to avoid a further 15 day delay. Even if BEPCO has not yet drilled a staked well, if they control the mineral rights in the N/2 N/2 of Section 24, then they are an "affected" party, see definitions below.

**19.15.26.8B.(2)** The applicant shall furnish, by certified or registered mail, a copy of the application to each owner of the land surface on which each injection or disposal well is to be located and to each leasehold operator or other affected person within any tract wholly or partially contained within one-half mile of the well.

**19.15.26.7 DEFINITIONS:**

A. "Affected person" means the division designated operator; in the absence of an operator, a lessee whose interest is evidenced by a written conveyance document either of record or known to the applicant as of the date the applicant files the application; or in the absence of an operator or lessee, a mineral interest owner whose interest is evidenced by a written conveyance document either of record or known to the applicant as of the date the applicant filed the application for permit to inject.

Nash Unit #5:

The OCD well file is missing information on the squeeze of cement and completion of the Delaware upper intervals – please look through your internal well files and send a copy of the well activity attached to a sundry form to the OCD in Artesia. Apparently Strata was negligent in reporting to the OCD. To complete info needed to process this permit, I need proof that this well has cement across the 3200 to 3800 proposed offsetting injection interval. Send any info you have to me here in Santa Fe to back up this cement top. Otherwise, the permit will have a pre-requisite to run a CBL and possibly squeeze this well prior to injection.

Nash Unit #1:

Your CBL shows a cement top below the intended injection interval. Any permit to inject into the Nash Unit #29 will require this #1 well to have a cement squeeze prior to beginning injection. Please let your managers know this will be in the permit.

We have had issues with offsetting wells cemented identically to the above area of review wells. As a result, our Division Director has instructed the engineering bureau to not approve permits to inject, without notice and examiner hearing, if offsetting wells are not completely cemented across the proposed equivalent injection interval.

Regards,

William V. Jones PE  
New Mexico Oil Conservation Division  
1220 South St. Francis  
Santa Fe, NM 87505  
505-476-3448



Kristy Ward/MID/CTOC

01/05/2009 04:51 PM

To "Jones, William V., EMNRD"  
<William.V.Jones@state.nm.us>

cc

bcc

Subject

RE: Disposal Application from XTO Energy, Inc: Nash  
Unit #29 30-015-29434

RECEIVED

2009 JAN 9 PM 1 27

Hi Bill, I am mailing you all the additional information required per your request. You should receive it in the next few days.

Thanks for your help.

Kristy S. Ward  
XTO Energy, Inc.  
Ph: 432-620-6740  
Fax: 432-684-9681  
E-Fax 432-618-3527  
kristy\_ward@xtoenergy.com

"Jones, William V., EMNRD" <William.V.Jones@state.nm.us>



"Jones, William V.,  
EMNRD"  
<William.V.Jones@state.nm.us>

12/26/2008 01:10 PM

To <Kristy\_Ward@xtoenergy.com>

"Warnell, Terry G, EMNRD"

<TerryG.Warnell@state.nm.us>, "Reeves, Jacqueta,

cc EMNRD" <Jacqueta.Reeves@state.nm.us>, "Guye, Gerry,  
EMNRD" <gerry.guye@state.nm.us>, "Brooks, David K.,  
EMNRD" <david.brooks@state.nm.us>

Subject RE: Disposal Application from XTO Energy, Inc: Nash  
Unit #29 30-015-29434

Hello Kristy:

Thanks for sending this information.

After reviewing your info, only a couple of items remain:

Notice issues:

Still missing the proof of notice to BEPCO, you could obtain a signed waiver from them to avoid a further 15 day delay. Even if BEPCO has not yet drilled a staked well, if they control the mineral rights in the N/2 N/2 of Section 24, then they are an "affected" party, see definitions below.

I have attached a copy of the Proof of Notice to BEPCO. (Will be sent in mail to you)

19.15.26.8B.(2) The applicant shall furnish, by certified or registered mail, a copy of the application to each owner

of the land surface on which each injection or disposal well is to be located and to each leasehold operator or other affected person within any tract wholly or partially contained within one-half mile of the well.

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**Nash Unit #5:**

The OCD well file is missing information on the squeeze of cement and completion of the Delaware upper intervals - please look through your internal well files and send a copy of the well activity attached to a sundry form to the OCD in Artesia. Apparently Strata was negligent in reporting to the OCD. To complete info needed to process this permit, I need proof that this well has cement across the 3200 to 3800 proposed offsetting injection interval. Send any info you have to me here in Santa Fe to back up this cement top. Otherwise, the permit will have a pre-requisite to run a CBL and possibly squeeze this well prior to injection.

Will send attachments showing proof when circulated cement to surface as shown on the date of 8/5/93 drilling reports and sundry notices. We do not have a CBL...will have to run one.

**Nash Unit #1:**

Your CBL shows a cement top below the intended injection interval. Any permit to inject into the Nash Unit #29 will require this #1 well to have a cement squeeze prior to beginning injection. Please let your managers know this will be in the permit.

We Agree.

We have had issues with offsetting wells cemented identically to the above area of review wells. As a result, our Division Director has instructed the engineering bureau to not approve permits to inject, without notice and examiner hearing, if offsetting wells are not completely cemented across the proposed equivalent injection interval.

Regards,

William V. Jones PE  
New Mexico Oil Conservation Division  
1220 South St. Francis  
Santa Fe, NM 87505  
505-476-3448

**From:** Kristy\_Ward@xtoenergy.com [mailto:Kristy\_Ward@xtoenergy.com]

**Sent:** Friday, December 12, 2008 1:27 PM

**To:** Jones, William V., EMNRD

**Subject:** Re: Disposal Application from XTO Energy, Inc: Nash Unit #29 30-015-29434

I have mailed you the information you requested below. Please let me know if there is anything else you need.

Thanks,

Kristy S. Ward  
XTO Energy, Inc.  
Ph: 432-620-6740  
Fax: 432-684-9681  
kristy\_ward@xtoenergy.com

"Jones, William V., EMNRD"  
<William.V.Jones@state.nm.us> To: <Kristy\_Ward@xtoenergy.com>  
"Ezeanyim, Richard, EMNRD" <richard.ezeanyim@state.nm.us>, "Warnell, Terry G, EMNRD"  
cc: <TerryG.Warnell@state.nm.us>, "Reeves, Jacqueta, EMNRD"  
<Jacqueta.Reeves@state.nm.us>  
12/07/2008 08:43 PM Subj: Disposal Application from XTO Energy, Inc: Nash Unit #29 30-015-29434  
ect

Hello Kristy:

The following items should be addressed prior to finalizing the evaluation of this injection permit into the Bell Canyon. Well is located east of Loving New Mexico in the Potash area.

- 1) Please provide proof of notice to Bepco (as leaseholders in the N/2N/2 of Section 24), BLM (as surface owner of the well site), and to all nearby Potash Leaseholders.
- 2) A CIBP would be required within 200 feet of the lowermost injection perforation – send a new “post conversion” wellbore diagram reflecting this.
- 3) Please send a copy of the CBL run on the subject well.
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- 5) Please send an explanation from a geologist or engineer as to how the Potash reserves in this area would be protected from this injection. What is the maximum depth of the Potash reserves in this area?

Thank you for the other logs you sent and for covering the issue of producibility of the Bell Canyon in the subject well.

Regards,

William V. Jones PE  
New Mexico Oil Conservation Division  
1220 South St. Francis  
Santa Fe, NM 87505  
505-476-3448

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This inbound email has been scanned by the MessageLabs Email Security System.

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UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

OPERATOR'S COPY

FORM APPROVED

Budget Bureau No. 1004-0135

Expires: March 31, 1993

**SUNDRY NOTICES AND REPORTS ON WELLS**

Do not use this form for proposals to drill or to deepen or reentry to a different reservoir.  
Use "APPLICATION FOR PERMIT-" for such proposals

**SUBMIT IN TRIPLICATE**

1. Type of Well

Oil Gas  
☒ Well ☐ Well ☐ Other

2. Name of Operator

STRATA PRODUCTION COMPANY

3. Address and Telephone No.

P. O. Box 1030  
Roswell, New Mexico 88202-1030 505-622-1127

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)

2310' FSL & 330' FEL  
Section 13-23S-29E

5. Lease Designation and Serial No.

NM-17589

6. If Indian, Allottee or Tribe Name

7. If Unit or CA, Agreement Designation

Nash Unit

8. Well Name and No.

Nash Unit #5

9. API Well No.

30-015-21800

10. Field and Pool, or Exploratory Area

Nash Draw Brushy Canyon

11. County or Parish, State

Eddy County, New Mexico

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

TYPE OF SUBMISSION

☒ Notice of Intent  
☒ Subsequent Report  
☐ Final Abandonment Notice

TYPE OF ACTION

☐ Abandonment  
☒ Recompletion  
☐ Plugging Back  
☐ Casing Repair  
☐ Altering Casing  
☐ OTHER  
☐ Change of Plans  
☐ New Construction  
☐ Non-Routine Fracturing  
☐ Water Shut-Off  
☐ Conversion to Injection  
☐ Dispose Water

(Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

13. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)\*

01/10/00: MI.  
01/11/00: RU. TOH with rods and pump. NU BOP. TOH with tubing.  
01/12/00: Perf 16 .42 holes at 6786'-6809' and 9 .42 holes at 6012'-6020'.  
01/13/00: Acidize perfs at 6012'-6020' with 1000 gallons acid. Clean out paraffin. Swab test.  
01/25/00: Perf 7 .42 holes at 5744'-5749'.  
01/26/00: Acidize with 900 gallons acid. Swab test and evaluate.  
01/31/00: Frac with 4500 gallons gel and 3000# 16/30 RC sand. Swab test and evaluate.  
02/04/00: Perf 8 .42 holes at 5479'-5486'.  
02/05/00: Acidize with 1500 gallons acid. Swab test and evaluate.  
02/07/00: Frac with 3000# 16/30 RC sand and 4400 gallons gel.  
02/10/00: TOH with tools. TIH with production string. ND BOP. Flange up wellhead. TIH with pump and rods. Hang on. Start pumping. Release rig. RDMO. Place on production.

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

Signed Carol J. Garcia

Title Production Records Manager

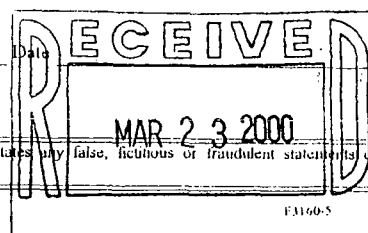
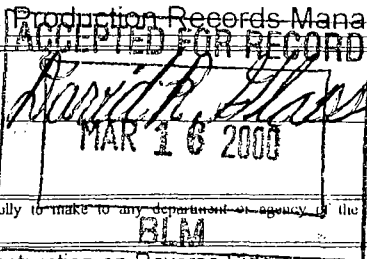
Date 3/14/2000

(This space for Federal or State office use)

Approved by

Title

Conditions of approval, if any:



Title 18 U.S.C. Section 1001, 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.

\* See Instruction on Reverse Side

Form 3160-4  
(July 1989)  
(formerly 2-330)

UNIT STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

CONTACT RECEIVING  
OFFICE FOR NUMBER  
OF COPIES REQUIRED

PERMIT DISTRICT  
Roswell District  
Modified Form No.  
NM60-3160-3

WELL COMPLETION OR RECOMPLETION REPORT AND LOG

1a. TYPE OF WELL: OIL WELL ☒ GAS WELL ☐ DRY ☐ Other ☐

b. TYPE OF COMPLETION: NEW WELL ☐ WORK OVER ☐ DEEPEN ☒ PLUG BACK ☐ DIFF. REMED. ☐ Other ☐

2. NAME OF OPERATOR  
Strata Production Company

3. ADDRESS OF OPERATOR  
P.O. Box 1030, Roswell, New Mexico 88202-1030

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements)\*  
At surface

At top prod. interval reported below 2310' FSL & 330' FEL

At total depth

9a. API Well No.  
30-015-21800

14. PERMIT NO. DATE ISSUED

15. DATE SHIPPED 7/16/76 16. DATE T.D. REACHED 7/30/93 17. DATE COMPL. (Ready to prod.) 8/17/93 18. ELEVATIONS (TOP, RKR, RT, GR, ETC.)\* 3015' GR

20. TOTAL DEPTH, MD & TVD 7300' 21. PLUG BACK T.D., MD & TVD 7265' 22. IS MULTIPLE COMPL. N/A 23. INTERVALS DRILLED BY

24. PRODUCING INTERVAL(S), OF THIS COMPLETION--TOP, BOTTOM, NAME (MD AND TVD) 6902'-6933' Delaware

26. TYPE ELECTRIC AND OTHER LOGS RUN CNL; DLL/MSFL; CBL; PR; CS; CEL CARLSBAD, NEW MEXICO

28. CASING RECORD (Report all strings set in well)

CASING SIZE	WEIGHT, LB./FT.	DEPTH SET (MD)	HOLE SIZE	CEMENTING RECORD	AMOUNT FILLED
13 3/8"	48#	310'	17 1/2"	550 sx Class "C"	Circ
8 5/8"	24#	3160'	12 1/4"	800 sx HLW; 200 sx Class "C"	Circ
5 1/2"	17#	7300'	7 7/8"	795 sx 50/50 Poz H; 264 sx 112 sx 65/35 Poz C; 267 sx Class "C"	

29. LINER RECORD

SIZE	TOP (MD)	BOTTOM (MD)	SACKS CEMENT*	SCREEN (MD)	SIZE	DEPTH SET (MD)	PACKER SET (MD)
					2 7/8"	6797'	6797'

31. PERFORATION RECORD (Interval, size and number)

6902'-6933' (18) .42 holes

32. ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC.

33. PRODUCTION

DATE FIRST PRODUCTION 8/16/93 PRODUCTION METHOD (Flowing, gas lift, pumping--size and type of pump) Flowing WELL STATUS (Producing or shut-in) Producing

DATE OF TEST 8/18/93 HOURS TESTED 24 CHOKE SIZE 20/64 PROD'N. FOR TEST PERIOD OIL--BBL. 171 GAS--MCF. 137 WATER--BBL. 265 GAS-OIL RATIO 801/1

FLOW, TUBING PRESS. 490# CASING PRESSURE -0- CALCULATED 24-HOUR RATE OIL--BBL. 171 GAS--MCF. 137 WATER--BBL. 265 OIL GRAVITY-API (CORR.) 38.7

34. DISPOSITION OF GAS (Sold, used for fuel, vented, etc.) Sold TEST WITNESSED BY

35. LIST OF ATTACHMENTS  
CNL; DLL/MSFL; Deviation Survey

36. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records  
SIGNED Carol J. Garcia TITLE Production Records Manager DATE 9/2/93

\*(See Instructions and Spaces for Additional Data on Reverse Side)

Title 18 U.S.C. Section 1001, 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.

RECEIVED

Form 160-6 1993  
(June 1990)

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

RECEIVED

FORM APPROVED  
Budget Bureau No. 1004-0135  
Expires: March 31, 1993

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to deepen or reentry to a different reservoir.  
Use "APPLICATION FOR PERMIT—" for such proposals

SUBMIT IN TRIPLICATE

1. Type of Well

☒ Oil Well ☐ Gas Well ☐ Other

2. Name of Operator

Strata Production Company

3. Address and Telephone No.

P.O. Box 1030, Roswell, New Mexico 88202-1030

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)

2310' FSL & 330' FEL  
Section 13-23S-29E

7. If Unit or CA, Agreement Designation

Nash Unit

8. Well Name and No.

Nash Unit #5

9. API Well No.

30-015-21800

10. Field and Pool, or Exploratory Area

Undesignated Bone Spring

11. County or Parish, State

Eddy, New Mexico

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

TYPE OF SUBMISSION

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

TYPE OF ACTION

- ☐ Abandonment  
☐ Recompletion  
☐ Plugging Back  
☐ Casing Repair  
☐ Altering Casing  
☒ Other Re-entry, casing, cement

- ☐ Change of Plans  
☐ New Construction  
☐ Non-Routine Fracturing  
☐ Water Shut-Off  
☐ Conversion to Injection  
☐ Dispose Water

(Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

13. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)

07/21/93: MIRU Grace Drilling Rig #348. Spud drilling cement plugs at 8:00 PM on 7/21/93. Weld head. NU BOP. Test to 1500#. Held OK.

07/31/93: Drilled to 7300' TD. Ran 177 joints (7307.61') 5 1/2" 17# J55 casing. Cemented at 7300' First Stage with 335 sacks 50/50 Poz H with 5# D-44, 3% D-60, 2.5# B-28 and 1/4# D-29 per sack. Circulated 77 sacks cement to pit. Plug down at 6:45 AM on 8/1/93. Cemented Second Stage with 460 sacks 50/50 Poz H with 5# D-44, 3% D-60, 2.5# B-28 and 1/4# D-29 per sack. Second Stage could not bump plug. Plug down at 12:15 PM on 8/1/93.

08/01/93: Ran Temperature Survey. Top of cement at 3700'.

Unable to find attachment. J. Lara  
CONTINUED ON ATTACHMENT

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

Signed Carol G. Garcia

Title Production Records Manager Date 9/2/93

(This space for Federal or State office use)

Approved by \_\_\_\_\_  
Conditions of approval, if any:

Title \_\_\_\_\_

ACCEPTED FOR RECORD

J. Lara  
OCT - 4 1993

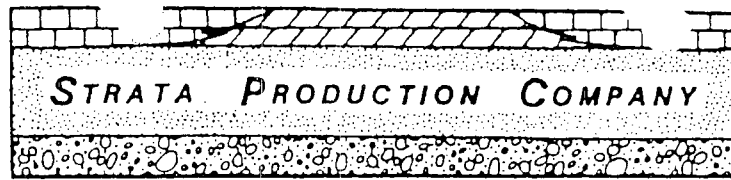
Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

\*See Instruction on Reverse Side

CARLSBAD, NEW MEXICO



POST OFFICE DRAWER 1030  
ROSWELL, NM 88202-1030



TELEPHONE (505) 622-1127  
FACSIMILE (505) 623-3533

200 WEST FIRST STREET, ROSWELL PETROLEUM BUILDING, SUITE 700  
ROSWELL, NEW MEXICO 88201

**ATTACHMENT TO FORM 3160-5  
SUNDRY NOTICES AND REPORTS ON WELLS  
LEASE NUMBER NM-17589  
NASH UNIT #5  
SECTION 13-23S-29E  
EDDY COUNTY, NEW MEXICO**

08/02/93: MIRU completion unit. Tag top of cement. Shoot squeeze holes at 4150'.

08/05/93: Set cement retainer at 4093'. Cemented with 254 sacks 65/35 Poz "C" with additives and 267 sacks Class "C" with .75% D-127 and 1% Cellofill. Increase PSI to 1000#. Sting out of retainer. Circulated 35 sacks cement to pit. WOC.

08/06/93: Test to 1000# for 15 min. Held OK.

STRATA PRODUCTION COMPANY

NASH UNIT #5 RE-ENTRY  
2310' FSL & 330' FEL  
Section 13-23S-29E  
Eddy County, New Mexico

Grace Drilling Rig #348 Page (4)  
Elevation = 3015' GL  
KB = 3027'

=====

08/21/93:	Flowing TP 680# on 18/64 choke.	168 BO and 214 BW.
08/22/93:	Flowing TP 650# on 18/64 choke.	140 BO and 170 BW.
08/23/93:	Flowing TP 650# on 18/64 choke.	137 BO and 164 BW.
08/24/93:	Flowing TP 600# on 18/64 choke.	128 BO and 148 BW.
08/25/93:	Flowing TP 590# on 18/64 choke.	124 BO and 141 BW.
08/26/93:	Flowing TP 580# on 18/64 choke.	118 BO and 130 BW.
08/27/93:	Flowing TP 575# on 19/64 choke.	125 BO and 134 BW.
08/28/93:	Flowing TP 550# on 19/64 choke.	104 BO and 118 BW.
08/29/93:	Flowing TP 580# on 19/64 choke.	115 BO and 127 BW.
08/30/93:	Flowing TP 540# on 19/64 choke.	104 BO and 121 BW.
08/31/93:	Flowing TP 550# on 19/64 choke.	98 BO and 111 BW and 186 MCF.

FINAL REPORT - COMPLETION REPORT ENCLOSED  
SHOULD YOU REQUIRE COPIES OF MONTHLY  
PRODUCTION REPORTS (C-115), PLEASE NOTIFY  
CAROL GARCIA, PRODUCTION RECORDS MANAGER

# STRATA PRODUCTION COMPANY

NASH UNIT #5 RE-ENTRY  
2310' FSL & 330' FEL  
Section 13-23S-29E  
Eddy County, New Mexico

Grace Drilling Rig #348 Page (3)  
Elevation = 3015' GL  
KB = 3027'

=====

08/07/93: RU Dowell. Circ 100 gal 7 1/2% NEFE at 6944'. TOH w/tbg. LDDC. RU Schlumberger. TIH w/4" csg guns. Perf (18) .42 holes as follows: 6902', 03', 04', 05', 06', 07', 08', 09', 10', 11', 15', 16', 17', 18', 19', 31', 32', 33'. TOH w/csg guns. TIH w/pkr and set at 6797'. Prep to acidize w/1500 gal 7 1/2% NEFE and 36 BS. Break down perfs at 2100#. Open by-pass. Spot acid to pkr. Close by-pass. Resume job. Good ball action. Avg PSI 950#. Avg rate 2.8 BPM. ISDP 710#, 5 min 680#, 10 min 645#, 15 min 600#. Total 77 BLW to rec. RU swab. Flow well down. Rec 37 BLW. SISD. DC \$8,202. CC \$213,877.

08/08/93: TP 375#. FL 2400'. Rec 800' oil on first swab run. Swab well down. Rec 350'/hr w/50% oil cut. Prep to frac. SISD. DC \$735. CC \$214,612.

08/09/93: TP 580#. Open well up. Flow well down. Prep to frac. SISD. DC \$315. CC \$214,927.

08/10/93: TP 613#. Open well up. Flow well down. Prep to frac. SISD. DC \$315. CC \$215,242.

08/11/93: TP 1150#. Prep to frac.

08/12/93: TP 1150#. Prep to frac.

08/13/93: TP 1150#. Prep to frac.

08/14/93: TP 1175#. RU Dowell. Frac w/19000 gal YF135, 41000# 16/30 RC and 7500 gal pad. Tag pad w/SC-146 3 MCI. Ramp sand 1 to 6 PPG w/26000# 16/30. Tag w/SB-124 10 MCI. Ramp sand 7 to 8 PPG w/15000# 16/30. Tag w/IR-192 6 MCI. Avg PSI 2500#. Avg rate 8 BPM. ISDP 998#, 5 min 856#, 10 min 819#, 15 min 778#. Total 435 BLW to rec. SISD. DC \$32,068. CC \$247,310.

08/15/93: TP 125#. RU Schlumberger. Run Tracer Scan across perfs at 6932'-6906' for evaluation. RD Schlumberger. Flow well down. RU swab. Rec 66 BLW. Kick well off. Place on 5/8 positive choke w/TP 160#. Flowing to frac tank. SD. DC \$5,806. CC \$253,116.

08/16/93: TP 120#. Flowing on 5/8 positive choke. Rec 298 BTF in 18 hrs. 122 BO and 176 BW. Total 250 BLW to rec. DC \$525. CC \$253,641.

08/17/93: Flowing TP 200# on 5/8 choke. 192 BO and 288 BW. Place on 21/64 variable choke. Flowing TP 310# w/50% oil cut. Flowing to Nash #9 battery at 2:30 PM. DC \$840. CC \$254,481.

08/18/93: Flowing TP 490# on 20/64 choke. 171 BO and 265 BW.

08/19/93: Flowing TP 550# on 20/64 choke. 331 BO and 216 BW. Late guage.

08/20/93: Flowing TP 560# on 20/64 choke. 117 BO and 93 BW. Early guage.

# STRATA PRODUCTION COMPANY

NASH UNIT #5 RE-ENTRY

2310' FSL & 330' FEL

Section 13-23S-29E

Eddy County, New Mexico

Grace Drilling Rig #348 Page (2)

Elevation = 3015' GL

KB = 3027'

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07/29/93: Drlg at 7255', formation Shale and Lime, ftg made 521'.  
Ran Totco at 7069' 2°. Mud wt 9.2, Vis 29, WL 15, FC  
Film, KCL 4%, PH 10, CL 72,000. Bit wt 55, RPM 65, Bit  
#3, 19 hrs, ftg 521'. Water loads (0). Reaming 4 1/4  
hrs, Rot 19 hrs, Totco 1/2 hr, Svc rig 1/4 hr.  
DC \$6,954. CC \$97,426.

07/30/93: Logging at 7300', formation Shale and Sand, ftg made 45'.  
Ran Totco at 7300' 1 3/4°. Mud wt 9.2, Vis 29, WL 15, FC  
Film, KCL 4%, PH 10, CL 72,000. Bit wt 55, RPM 65, Bit  
#3, Serial #C89WC, Type J44C, Jets (3) 14, Depth out  
7300', Depth in 6734', 20 1/4 hrs, ftg 566'. Pump type  
Wilson 600, SPM 60, Liner 5 1/2", PSI 1200#. DC #32, 6",  
932.93', 65,000#. Water loads (1) fresh. Del 5 1/2" csg  
to loc. Rot 1 1/4 hr, Circ 2 1/4 hrs, Trip 3 1/2 hrs,  
Logging 16 3/4 hrs, Totco 1/4 hr.  
DC \$48,689. CC \$146,115.

07/31/93: Circ First Stage at 7300' TD. Ran 177 jts (7307.61') 5  
1/2" 17# J55 csg. Cmdt at 7300' First Stage w/335 sx  
50/50 Poz H w/5# D-44, 3% D-60, 2.5# B-28 and 1/4# D-29  
per sx. Circ 77 sx cmt to pit. PD at 6:45 AM on 8/1/93.  
Cmdt Second Stage w/460 sx 50/50 Poz H w/5# D-44, 3% D-  
60, 2.5# B-28 and 1/4# D-29 per sx. Second Stage could  
not bump plug. PD at 12:15 PM on 8/1/93. Water loads  
(2) fresh. WO Dowell. Circ 7 1/2 hrs, Trip 2 3/4 hrs,  
LDDP 5 1/4 hrs, Run csg 5 1/2 hrs, Pump cmt out and WO  
Dowell 3 hrs.  
DC \$30,890. CC \$174,197.

08/1/93: MO drilling rig at 7300' TD. Ran Temp Survey. TOC at  
3700'. Circ 4 3/4 hrs, Cmt csg 1 hr, Pump cmt 6 1/2 hrs,  
WO Temp Survey 4 1/2 hrs, Run Temp Survey 2 1/2 hrs, Set  
slips, cut off and NU "C" Section 4 hrs. Rel rig at  
12:00 AM on 8/2/93.  
DC \$1,387. CC \$175,584.

08/02/93: WOC. MIRU completion unit. RU Computalog. TIH. Tag  
top of cmt. PU and shoot squeeze holes at 4150'. TOH w/  
Computalog. SDON.  
DC \$1,413. CC \$176,997.

08/03/93: PU and TIH w/tbg. Stand tbg in derrick. Prep to cmt.  
WO equipment. SD.  
DC \$20,590. CC \$197,587.

08/04/93: SD.

08/05/93: RU Dowell. Est rate in squeeze holes. Set cmt ret at  
4093'. Prep to circ cmt. Cmdt w/254 sx 65/35 Poz "C"  
w/additives and 267 sx Class "C" w/.75% D-127 and 1%  
Cellofill. Increase PSI to 1000#. Sting out of ret.  
Circ 1 bbl cmt to pit. TOH. SD.  
DC \$3,532. CC \$201,119.

08/06/93: PU and TIH w/bit and DC. Prep to drl out squeeze. Drl  
out cmt squeeze. Test to 1000# for 15 min. Held OK.  
Drl out DV tools at 4637' and 5900'. Clean out to 7037'.  
Circ hole w/2% KCL. TOH w/tbg and tools. PBTD 7265'.  
SD.  
DC \$4,556. CC \$205,675.

# STRATA PRODUCTION COMPANY

## NASH UNIT #5 RE-ENTRY

2310' FSL & 330' FEL

Section 13-23S-29E

Eddy County, New Mexico

Grace Drilling Rig #348 Page (1)

Elevation = 3015' GL

KB = 3027'

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07/22/93: MIRU Grace Drilling Rig #348. Spud drlg cmt plugs at 8:00 PM on 7/21/93. Drlg cmt at 824', ftg made 824'. Mud wt 8.6, Vis 28, PH 10. Bit wt 5-10, RPM 60, Bit #1, Serial #B02WY, Type J35C, Jets (3) 14, Depth in 0', 7 hrs, ftg 824'. Pump type Wilson 600, SPM 60, Liner 5 1/2", PSI 900#. DC #26, 6", 753', 58000#. Water loads (15) fresh and (6) hauled from Nash #14. Weld head. NU BOP. Test to 1500#. Held OK. MIRU 6 hrs, Rot 7 hrs, Weld head, NU and test BOP 11 hrs. DC \$37,787. CC \$37,787.

07/23/93: Drlg cmt at 1975', ftg made 1151'. Mud wt 9, Vis 28, WL no control, PH 11. Bit wt 30, RPM 60-65, Bit #1, 30 3/4 hrs, ftg 1975'. DC #32, 6", 932', 65000#. Water loads (3) brine hauled from Nash #14. Rot 23 3/4 hrs, Svc Rig 1/4 hr. DC \$7,272. CC \$45,059.

07/24/93: Drlg cmt at 4170', ftg made 2195'. Mud wt 9, Vis 28, PH 11. Bit wt 40, RPM 65, Bit #1, 54 1/2 hrs, ftg 4170'. Water loads (1) fresh and (3) hauled from Nash #14. Rot 23 3/4 hrs, Svc Rig 1/4 hr. DC \$6,042. CC \$51,101.

07/25/93: Drlg at 5230', formation Sand, ftg made 1060'. Ran Totco at 5100' 1 1/2°. Mud wt 9.2, Vis 28, WL 24, KCL 4%, PH 11, CL 61,000. Bit wt 40-50, RPM 65, Bit #1, 77 hrs, ftg 5230'. Water loads (3) brine. Rot 20 1/4 hrs, Circ 3 hrs, Totco 1/2 hr, Svc Rig 1/4 hr. DC \$6,182. CC \$57,283.

07/26/93: Drlg at 6114', formation Sand, Shale and Lime, ftg made 884'. Ran Totco at 5600' 1°. Mud wt 9.2, Vis 29, WL 15, KCL 4%, PH 10, CL 78,000. Bit wt 55, RPM 65, Bit #1, 101 1/4 hrs, ftg 6114'. Water loads (0). Rot 23 1/4 hrs, Totco 1/2 hr, Svc Rig 1/4 hr. DC \$10,112. CC \$67,395.

07/27/93: Trip for Bit #2 at 6650', formation Lime, Sand and Shale, ftg made 536'. Ran Totco at 6074' 2° and 6574' 1 3/4°. Mud wt 9.2, Vis 28, WL 15, FC Film, KCL 4%, PH 10, CL 78,000. Bit wt 55, RPM 65, Bit #1, Serial #B02WY, Type J35C, Jets (3) 14, Depth out 6650', Depth in 0', 117 hrs, ftg 6650'. Water loads (2) fresh and (1) hauled from Snoddy. Rot 16 3/4 hrs, Trip 6 hrs, Totco 1 hr, Svc rig 1/4 hr. DC \$11,022. CC \$78,417.

07/28/93: Reaming at 6734' Corrected, formation Sand and Shale, ftg made 0'. Mud wt 9.2, Vis 28, FC Film, KCL 4%, PH 10, CL 78,000. Bit wt 3-5 Reaming, RPM 65, Bit #2, Serial #C14WV, Type J44C, Jets (3) 14, Depth out 6734', Depth in 6734', 0 hrs, ftg 0'. Bit #3, Serial #C89WC, Type J44C, Jets (3) 14, Depth in 6734', 0 hrs, ftg 0'. Water loads (2) fresh and (1) oil hauled from Nash #1. Bit #2 wedged in hole. Spotted oil and worked free. Ream to bottom. Ream Rot 4 hrs, Trip 13 1/2 hrs, Circ 1 1/2 hrs, Stuck 3 3/4 hrs, Cut drlg line 1 1/4 hr. DC \$12,060. CC \$90,472.

# Injection Permit Checklist (7/8/08)

Case \_\_\_\_\_ R- SWD 1151 WFX \_\_\_\_\_ PMX \_\_\_\_\_ IPI \_\_\_\_\_ Permit Date 12/1/08 UIC Qtr (Oct/Nov/Dec '08)  
 # Wells \_\_\_\_\_ Well Name: Nash UNIT #29  
 API Num: (30-) 015-29434 Spud Date: 97 New/Old: N (UIC primacy March 7, 1982)  
 Footages 198 FSL/2310 FEL Unit J Sec 13 Tsp 23S Rge 29E County Edgar  
 Operator: XTO Energy, INC Contact Krissy Ward  
 OGRID: 5380 RULE 40 Compliance (Wells) OK (Finan Assur) OK  
 Operator Address: 200 N. Lorraine, Suite 800, Midland TX, 79705

Current Status of Well: \_\_\_\_\_

Planned Work to Well: \_\_\_\_\_

Planned Tubing Size/Depth: 27/8 @ 3700'

	Sizes Hole.....Pipe	Setting Depths	Cement Sx or Cf	Cement Top and Determination Method
Existing _____ Surface	<u>17 1/2 13 1/8</u>		<u>425</u>	<u>CIRC</u>
Existing _____ Intermediate	<u>11 8 5/8</u>		<u>900</u>	<u>CIRC</u>
Existing _____ Long String	<u>7 7/8 5 1/2</u>	<u>7,250</u>	<u>1245</u>	<u>CIRC (CBL = ?)</u>

DV Tool \_\_\_\_\_ Liner \_\_\_\_\_ Open Hole \_\_\_\_\_ Total Depth \_\_\_\_\_ PBDT \_\_\_\_\_

Well File Reviewed \_\_\_\_\_

Diagrams: Before Conversion ☒ After Conversion ☒ Elogs in Imaging File: \_\_\_\_\_

Intervals:	Depths	Formation	Producing (Yes/No)
Above (Name and Top)			
Above (Name and Top)			
Injection..... Interval TOP:	<u>3192</u>	<u>Bell C.</u>	<u>NO</u>
Injection..... Interval BOTTOM:	<u>3786</u>	<u>Bell C.</u>	<u>NO</u>
Below (Name and Top)			

638 PSI Max. WHIP

Open Hole (Y/N) \_\_\_\_\_

Deviated Hole? NO

Sensitive Areas: Capitan Reef \_\_\_\_\_ Cliff House \_\_\_\_\_

Salt Depths 349-3061

.... Potash Area (R-111-P) ☒

Potash Lessee MOSAIC

Noticed? ☒

Fresh Water: Depths: \_\_\_\_\_

Wells(Y/N) N

Analysis Included (Y/N): \_\_\_\_\_

Affirmative Statement ☒

Salt Water: Injection Water Types: Draper Del. Water

Analysis? \_\_\_\_\_

Injection Interval.....Water Analysis: \_\_\_\_\_

Hydrocarbon Potential None

Notice: Newspaper(Y/N) ☒

Surface Owner BLM

Mineral Owner(s) \_\_\_\_\_

RULE 701B(2) Affected Parties: \_\_\_\_\_

Area of Review: Adequate Map (Y/N) ☒

and Well List (Y/N) ☒

Active Wells 5 Num Repairs 1

Producing in Injection Interval in AOR NO

..P&A Wells 0 Num Repairs 0

All Wellbore Diagrams Included? ☒

Questions to be Answered:

Send NOTICE TO BLM in 60 days; others

1 N/2 N/2 Sec 24 1/2

Required Work on This Well: Send Map of Sand Proof of Notice to BLM

Request Sent \_\_\_\_\_ Reply: \_\_\_\_\_

AOR Repairs Needed: \_\_\_\_\_

Request Sent \_\_\_\_\_ Reply: \_\_\_\_\_

Request Sent \_\_\_\_\_ Reply: \_\_\_\_\_