District I
1625 N. French Dr , Hobbs, NM 88240
District II
1301 W Grand Avenue, Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-101
June 16, 2008

Submit to appropriate District Office

☐ AMENDED REPORT

# APPLICATION FOR PERMIT TO DRILL, RE-ENTER, DEEPEN, PLUGBACK, OR ADD A ZONE

| [1] Operator Name and Address | [2] OGRID Number |
|---|---|
| XTO Energy, Inc<br>200 North Loraine, Suite 800<br>Midland, TX 79701 | 005380 |
| | [3] API Number<br>30 – 015 – 39400 |

| [3] Property Code | [5] Property Name | [6] Well No |
|---|---|---|
| 38709 | Nash Unit SWD | 53 |

| [9] Proposed Pool 1 | [10] Proposed Pool 2 |
|---|---|
| SWD; Devonian (96101) | |

## [7] Surface Location

| UL or lot no | Section | Township | Range | Lot Idn | Feet from the | North line | Feet from the | East line | County |
|---|---|---|---|---|---|---|---|---|---|
| H | 13 | 23S | 29E | | ~~360~~ 1620 | N | ~~500~~ 1120 | E | Eddy |

## [8] Proposed Bottom Hole Location If Different From Surface

| UL or lot no | Section | Township | Range | Lot Idn | Feet from the | North/South line | Feet from the | East/West line | County |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | |

## Additional Well Information

| [11] Work Type Code | [12] Well Type Code | [13] Cable/Rotary | [14] Lease Type Code | [15] Ground Level Elevation |
|---|---|---|---|---|
| N | S | Rotary | S | ~~3000~~ 2999 |
| **[16] Multiple** | **[17] Proposed Depth** | **[18] Formation** | **[19] Contractor** | **[20] Spud Date** |
| No | 16,510' | Devonian | | |

## [21] Proposed Casing and Cement Program

| Hole Size | Casing Size | Casing weight/foot | Setting Depth | Sacks of Cement | Estimated TOC |
|---|---|---|---|---|---|
| 26" | 20" | 94# | 225' | 930 | Surface |
| 17 ½" | 13 3/8" | 68# | 3,500' | 2630 | Surface |
| 12 ¼" | 9 5/8" | 47# | 11,000' | 2350 | Surface |
| 8 ¾" | 7" | 32# | 15,100' | 640 | TOL @ 10,500' |
| | | | | | |

[22] Describe the proposed program. If this application is to DEEPEN or PLUG BACK, give the data on the present productive zone and proposed new productive zone Describe the blowout prevention program, if any. Use additional sheets if necessary.

See Attached.

SWD-1291 needs to be admended prior to disposing into this well also MIT needs to be conducted before disposing into this well.

RECEIVED
JUL 05 2011
NMOCD ARTESIA

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

Signature: Barry W. Hunt

Printed name: Barry W. Hunt

Title: Permit Agent for XTO Energy

E-mail Address: specialtpermitting@gmail com

Date: 4/18/11 Phone: 575-361-4078

OIL CONSERVATION DIVISION

Approved by: [signature] 9/21/11

Title:

Approval Date: 9/13/11 Expiration Date: 9/13/13

Conditions of Approval Attached ☐

XTO ENERGY

December 8, 2010

To Whom It May Concern:

Mr. Barry Hunt is employed by XTO Energy Inc. to sign as their agent for APD's and Right of Ways in the state of New Mexico and Texas.

If you have any questions, please contact me at my office at 432-682-8873.

Sincerely,

Don Eubank
XTO Energy Inc.
Drilling Manager

XTO Energy Inc. 200 North Loraine, Suite 800 · Midland, Texas 79701 (432) 682-8873 · Fax: (432) 687-0862

Mosaic Potash Carlsbad Inc.
P.O. Box 71
1361 Potash Mines Road
Carlsbad, NM 88221-0071
www.mosaicco.com

Tel: 505-887-2871

September 7, 2011

XTO Energy Inc.
Attn: DeeAnn Kemp
200 N. Loraine, Ste 800
Midland, Texas 79701

Dear Ms. Kemp:

Per our discussions the Nash Unit #53 SWD well, located at 1620' FNL and 1120' FEL of Section 13, T-23-S, R-29-E; Mosaic Potash Carlsbad Inc. does have a potash lease within one mile of this area, this location is outside our LMR but within the ½ mile buffer required for wells of this depth. The location is "behind" previously drilled wells in the area that have already impacted the potash reserves. The drilling of this disposal well should cause no further loss of potash reserves, therefore Mosaic does not object to its location at this time and waives any 20 day waiting period required for further potash company response.

As more information becomes available, our estimates of the extent of potash resources in any given area may change. Therefore, please consider a "no objection" or "objection" to these locations to be valid for one year only. Do not consider a "no objection offered" or an "objection offered" decision to be permanent.

Mosaic Potash submits this letter in lieu of the forms requested.

Sincerely,

Dan Morehouse
Mine Engineering Superintendent

# DRILLING PROGRAM

XTO Energy Inc., 200 North Loraine, Suite 800, Midland, TX
**Nash Unit SWD #53**
360' FNL & 500' FEL
Unit A, Section 13, T-23-S, R-29-E
Eddy County, NM
Projected TD: 16,510' TVD/MD

## 1. GEOLOGIC NAME OF SURFACE FORMATION: Quaternary

## 2. ESTIMATED TOPS OF GEOLOGICAL MARKERS & DEPTHS OF ANTICIPATED FRESH WATER, OIL OR GAS:

| Formation | Well Depth (ft) |
|---|---|
| Salado | 248 |
| Bell Canyon* | 3190 |
| Cherry Canyon* | 4081 |
| Brushy Canyon* | 5567 |
| Bone Spring* | 6941 |
| Wolfcamp | 10222 |
| Strawn | 12050 |
| Atoka Lime | 12546 |
| Morrow | 13033 |
| Miss. Lime | 14549 |
| Woodford | 14869 |
| Devonian | 15074 |
| Simpson | 16510 |

(*) Primary hydrocarbon-bearing strata

## 3. CASING PROGRAM:

The surface fresh water sands will be protected by setting 20" casing at ±225' and circulating cement back to surface. The hydrocarbon productive intervals will be isolated by setting 9-5/8" and 7" casing to total depth and circulating cement to surface.

| Hole Size | Depth | OD Csg | Weight | Collar | Grade | New/Used |
|---|---|---|---|---|---|---|
| 26" | 0' – 225' | 20" | 94 | STC | H-40 | New API |
| 17-1/2" | 0' – 3500' | 13-3/8" | 68# | STC | K-55 | New API |
| 12-1/4" | 0' – 11000' | 9-5/8" | 47# | LTC | P-110 | New API |
| 8-3/4" | 10500' – 15100 | 7" | 32# | LTC | P-110 | New API |

## 4. CEMENT PROGRAM:

### A. Surface Cement:

Lead Slurry: 200 sx Class-C, gilsonite, Cal-Seal 60.
(14.2 ppg, 1.62 cu ft/sk, 6.97 gal/sk)

Tail Slurry: - 730 sx HalCem-C + 2% CaCl
(14.8 ppg, 1.35 cu ft/sk, 6.39 gal/sk)

All volumes 100% excess. Cement to surface.

### B. 1st Intermediate Cement:

Lead Slurry: 2075 sx EconoCem-HLC + 5% salt
(12.7 ppg, 1.97 $ft^3$/sk, 10.69 gal wtr/sk)

Tail Slurry: 560 sx HalCem-C
(14.8 ppg, 1.33 $ft^3$/sk, 6.34 gal/sx wtr)

All volumes to be adjusted per caliper log. Cement to surface.

### C. 2nd Intermediate Cement:

Stage 1- Lead Slurry: 840 sx Versacem-H
(11.9 ppg, 2.25 $ft^3$/sk, 12.28 gal wtr/sk). Tail Slurry: 220 sx HalCem-H
(15.8 ppg, 1.17 $ft^3$/sk, 4.58 gal wtr/sk). Cement to circulate.

DV Tool at 6500'

Stage 2- Lead Slurry: 1090 sx Versacem-H
(11.7 ppg, 2.36 $ft^3$/sk, 13.74 gal wtr/sk). Tail Slurry: 200 sx HalCem-H
(15.6 ppg, 1.19 $ft^3$/sk, 5.39 gal wtr/sk).

All volumes to be adjusted per caliper log. Cement to surface.

### D. Production liner Cement:

Lead Slurry: 440 sx VersaCem-PBSH2
(13.2 ppg, 1.59 $ft^3$/sk, 8.26 gal wtr/sk)

Tail Slurry: 200 sx VersaCem-H
(14.4 ppg, 1.23 $ft^3$/sk, 5.45 gal/sx wtr)

All volumes to be adjusted per caliper log. Cement to top of liner.

## 5. PRESSURE CONTROL EQUIPMENT:

The blowout preventer stack for the production hole will consist of a double ram blowout preventer and annular preventer rated to 5000 psi working pressure. All BOP's and accessory equipment will be tested before drilling out. A hydraulic closing unit will be a part of this equipment and will be function tested daily.

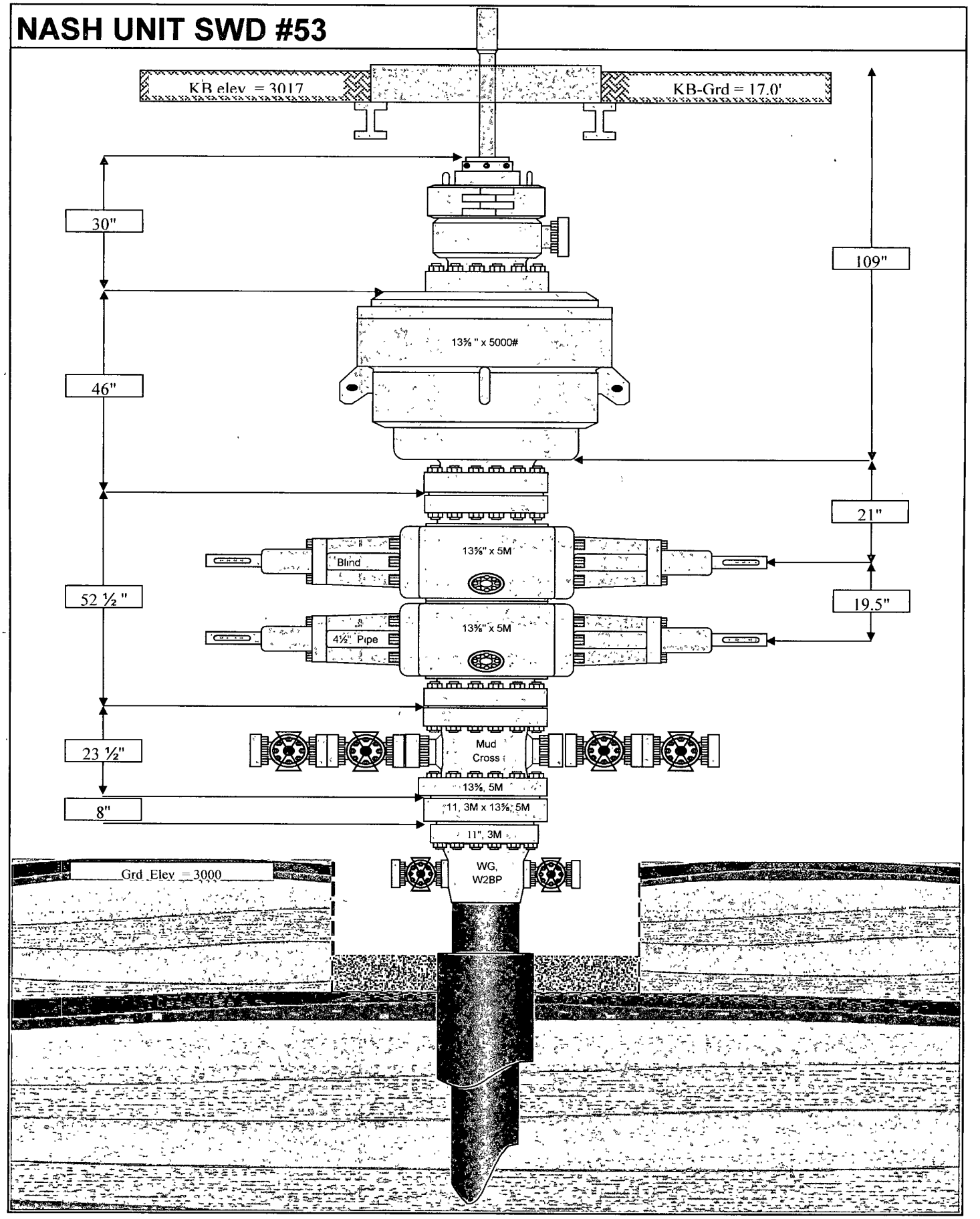
## 6. AUXILIARY WELL CONTROL AND MONITORING EQUIPMENT:

A. A kelly cock will be in the drill string at all times.
B. A full opening drill pipe stabbing valve having appropriate connections will be on the rig floor at all times.

## 7. ANTICIPATED STARTING DATE AND DURATION OF OPERATIONS:

Road and location construction will begin after OCD has approved APD. Anticipated spud date will be as soon as possible after OCD approval and a rig becomes available. Move in operations and drilling is expected to take 25 days. If production casing is run then an additional 30 days will be needed to complete well and construct surface facilities and/or lay flow lines in order to place well on production.

# NASH UNIT SWD #53



# Choke Manifold

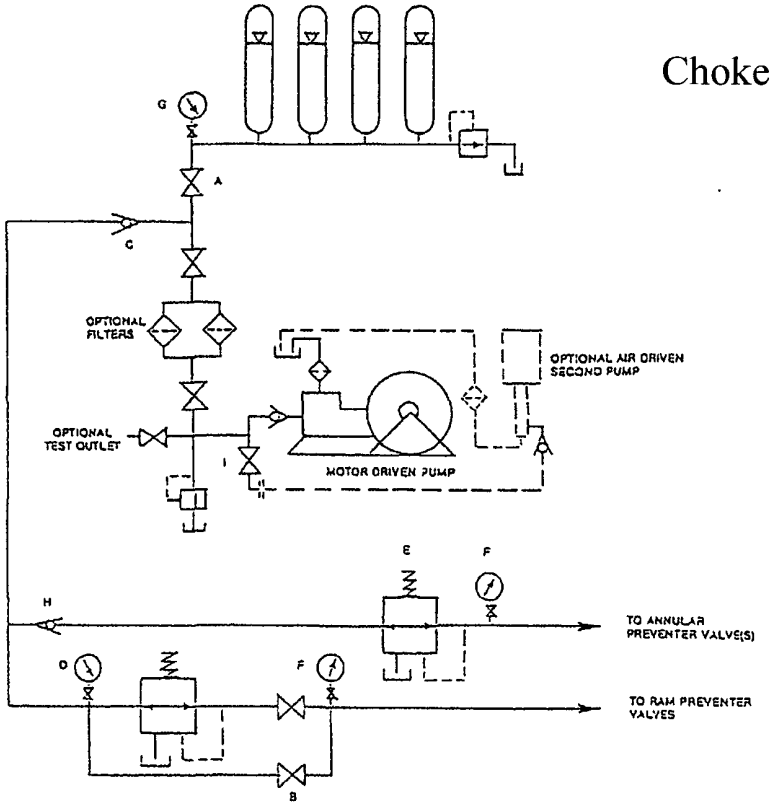



FIGURE K6-1. The schematic sketch of an accumulator system shows required and optional components.

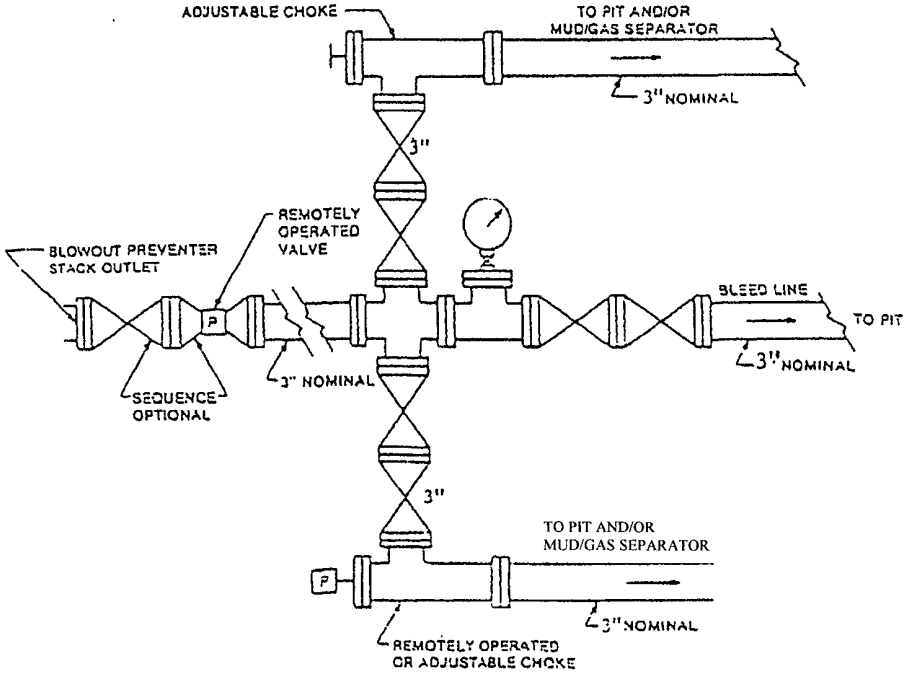



FIGURE K4-2 Typical choke manifold assembly for 5M rated working pressure service – surface installation