Form 3160-3 (Seatember 2001)

UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

FORM APPROVED OMB NO. 1004-0136 Expires January 31, 200

| • | BUREAU (| OF LAND MANAGE | MENT | EE(| DEIVE | | Exp | ires Januar | y 31, 2004 |
|--|--|--|---------------------------------|-------------------------------------|---|----------------|-------------------------------|-------------------|--------------------|
| A | PPLICATION FOR | PERMIT TO DRIL | L OR REI | | _/ _ I V <u>L</u> _ | . 1 5 | Lease Serial No | | |
| a. Type of Work | x DRILL | REEN | TER | 703 FE | 12 // | ি: 5 3 | . If Indian, Allote | | Name |
| b. Type of Well | Oil Well X Gas | Well Other | Single | Zòne 🗶 | Multiple Zone | NA 7 | . Unit or CA Ag | eement Na | me and No. |
| Name of Operator | | | | | 2 8 0 m | | Lease Name an | d Well No. | |
| XTO Energy Inc. Address | | | 3b. | Phone No. (m | clude area cod | | Armenta G | as Com ' | 'C" #1R |
| 2700 Farmington | Ave., Bldg. K. S | te 1 Farmingto | n, NM | A. W. | 110 3 | | | 145 | 32/93 |
| * * | ort location clearly and i | • | | iente)* O | 000000 | 20 L | Hield and Pool, Hasin Dake | or Explora | tory nco Mesave |
| At proposed prod. zone | 660' FNI | x 660' FEL in | Sec 27, 5 | 12 0 R10 | 6 6 0 0 | , Ι <u>Σ</u> Σ | Sec 22, ' | | R10W |
| 4. Distance in miles and dis | rection from nearest tow | n or post office* | | Eg. | • | | County or Paris | sh 13.S | tate |
| | | of the Bloomfie | | | | | an Juan | | M |
| Distance from propose location to nearest | d* | | 16. No. | of Acres in lea | \$6.36.86.86.00 N | 17.Spaci | ng Unit dedicate | d to this w | ell |
| property or lease line, it (Also to nearest drg. un | | 660' | | 80.00 |) | | 320 acres | √ 1/2 (bo | oth) |
| Distance from propose to nearest well, drilling | , completed, | | 19. Prop | oosed Depth | | 20.BLM | /BIA Bond No | on file | |
| applied for, on this leas | 750 re, ft. | 1 | | 7,000' MI | | | | | |
| .Elevations (Show wheth | er DF, KDB, RT, GL, e | tc. | 22. App | roximate date | work will star | t* | 23. Estimated | duration | |
| 5,594' Ungra d | led Ground Level | | | Spring | 2004 | | | 3 week | s |
| he following, completed in | n accordance with the re | quirements of Onshore (| 24. Attach | | all be attached | to this fo | rm: | | |
| Well plat certified by a A Drilling Plan A Surface Use Plan (if SUPO shall be filed wi | | • | | Item 20 abo Operator ce | ve). rtification. site specific ini | | s covered by an o | J | , |
| 5. Signuature | 0,41/)4 | | Name (Prin | nted/Typed) | | | D | ate | |
| | () () Paller | 1 | Jeffrey | W. Patto | n | | , | 2 | 2/17/04 |
| itle Drilling Engin | eet | | | | | | · · · · · · · · · | | |
| pproved by (Signautre) | Kanfier | 2 | Name (Prin | nted/Typed) | | | | rate 7 - 8 - 6 | 24 |
| itle | AFM | | Office | -CO | | | | <u> </u> | |
| pplication approval does onduct operations thereon onditions of approval, if a | | nat the applicant holds l | egal or equit | able title to th | ose rights in t | he subjec | t lease which w | ould entitle | the applicant |
| itle 18 U.S.C. Section 100 tates any false, fictitious o | 01 and Title 43 U.S.C. S r fraudulent statements of | ection 1212, make it a cor representations as to a | rime for any p iny matter wi | person knowlir thin its jurisdic | gly and willfu | lly to mak | e to any departr | nent or age | ncy of the Unit |

*(Instructions on Reverse)

HOLD CHAPOR Directiona (Survey)

DRILLING OPERATIONS AUTHORIZED ARE SUBJECT TO COMPLIANCE WITH ATTACHED "GENERAL REQUIREMENTS",

NMOCD

This action is subject to technical and procedural review pursuant to 43 CFR 3165.3 and appeal pursuant to 43 CFR 3165.4

DISTRICT I 1625 N. French Dr., Hobbs, N.M. 88240

State of New Mexico Energy, Minerals & Natural Resources Department

Form C-102 Revised August 15, 2000

DISTRICT II 811 South First, Artesia, N.M. 88210

1000 Rio Brazos Rd., Aztec, N.M. 87410

OIL CONSERVATION DIVISION 2040 South Pacheco Santa Fe, NM 87505

Submit to Appropriate District Office State Lease — 4 Copies Fee Lease — 3 Copies

☐ AMENDED REPORT

DISTRICT IV 2040 South Pacheco, Santa Fe, NM 87505

| | WELL LOCATION AND ACREAGE DEDICATION PLAT | | | | | | | | | | |
|--|---|----------|--------|-----------|-------------------------|------------------|---------------|---------|---------------|--------|------|
| 30 0°4 | Number 3 | 2193 | | Pool Code | q | В | Pool Name | | 2DE | | |
| Property Cod | ie | | | | ⁸ Property N | ame | | | • Well Number | | |
| 2258 ARMENTA GAS COM "C" | | | | | | | | | 1R | | |
| OGRID No. | | | | | *Operator h | *Operator Name | | | | | |
| | | | | | XTO ENERG | XTO ENERGY INC. | | | | | |
| ¹⁰ Surface Location | | | | | | | | | | | |
| UL or lot no. | Section | Township | Range | Lot idn | Feet from the | North/South line | Feet from the | East/We | st line | County | |
| P | 22 | 29-N | 10-W | | 210 | SOUTH | 1165 | EA | ST | SAN | JUAN |
| | | | " Bott | om Hole | Location | lf Different Fr | om Surface | | | | |
| UL or lot no. | Section | Township | Range | Lot Idn | Feet from the | North/South line | Feet from the | East/We | st line | County | |
| A | 27 | 29-N | 10-W | | 660, | NORTH | 660' | EA | ST | SAN | JUAN |
| ¹² Dedicated Acres ¹³ Joint or Infill ¹⁴ Consolidation Code ¹⁵ Order No. | | | | | | | | | | | |
| 32D | \$ | Ź | I | | | | | | | | |

NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED FOR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION [...[..] FD BC 17 OPERATOR CERTIFICATION B.L.M. I hereby certify that the information contained herein 1967 22 is true and complete to the best of my knowledge and N 01-39-35 W 2674.0' (M) JUL MICENTO T: 36°42'19" N. (NAD 27) NG: 107°52'00" W. OR CONS. PATTON Printed Name DRILLING ENGINEER Date FD BC FD BC 18 **B. L. M**. SURVEYOR CERTIFICATION B.L.M. *******99**8 **1999** reby certify that the well location shown on this plat was plotted from field notes of actual surveys made by S 89-05-40 W REDITOR me or under my supervision, and that the same is true 1302.75' (M) and correct to the best of my belief. HOLE 00-02-17\E 1348.38' (M) Date of FD BC 27 B.L.M. 1999 S 00-02-05 E 1348.50' (M) FO BC 14827 B.L.M. Certificate Number 1998

DISTRICT | 1625 N. French Dr., Hobbs, N.M. 88240

State of New Mexico Energy, Minerals & Natural Resources Department

Form C-102 Revised August 15, 2000

DISTRICT II 811 South First, Artesio, N.M. 88210

DISTRICT III
1000 Rio Brazos Rd., Aztec, N.M. 87410

OIL CONSERVATION DIVISION 2040 South Pacheco Santa Fe, NM 87505 Submit to Appropriate District Office
State Lease — 4 Copies
Fee Lease — 3 Copies

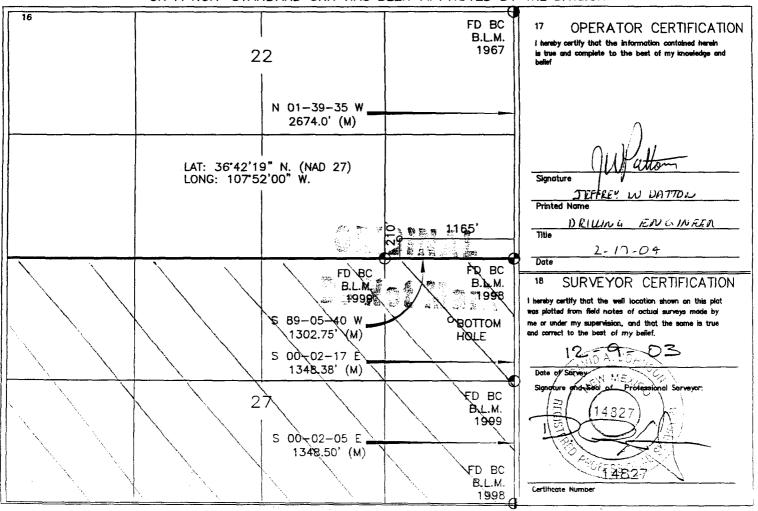
☐ AMENDED REPORT

DISTRICT IV 2040 South Pacheco, Santa Fe, NM 87505

WELL LOCATION AND ACREAGE DEDICATION PLAT

| ¹ API | Number | | - | *Pool Code 71599 | | | Pool Name | • | |
|------------------------------|---------|----------|----------------|---------------------|-------------------------------|------------------|---------------|---------------------------------------|-------------|
| *Property Co | de | | | <u> </u> | ⁸ Property N | lame | | | Vell Number |
| ARMENTA GAS COM "C" 1R | | | | | | | | | 1R |
| OGRID No. | | | | | *Operator 1 | lame | | | Elevation |
| | ĺ | | | | XTO ENERG | Y INC. | | | 5594' |
| - | | | | · | ¹⁰ Surface | Location | | | |
| UL or lot na. | Section | Township | Range | Lot Idn | Feet from the | North/South line | Feet from the | East/West line | County |
| P | 22 | 29-N | 10-W | | 210 | SOUTH | 1165 | EAST | SAN JUAN |
| | | | 11 Bott | om Hole | Location | lf Different Fr | om Surface | | |
| UL or lot no. | Section | Township | Range | Lot Idn | Feet from the | North/South line | Feet from the | East/West line | County |
| Α | 27 | 29-N | 10-W | | 660' | NORTH | 660' | EAST | SAN JUAN |
| ² Dedicated Acres | | <u> </u> | 13 Joint or II | าฟิโ | ¹⁴ Consolidation C | ode | 15 Order No. | · · · · · · · · · · · · · · · · · · · | |
| 3 21 |) 4 | 1/2 | ュ | - - | | | | | |
| NO ALLOY | | /III BE | ASSIGNE | | S COMPLETI | ON UNTIL ALL | INTERESTS | HAVE BEEN C | ONSOLIDA |

NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION



Form 316Q-5 (September 2001)

UNITED STATES DEPARTMENT OF THE INTERIOR

SUNDRY NOTICES AND REPORTS ON WELLS

BUREAU OF LAND MANAGEMENT

| FORM APPROVED |
|--------------------------|
| OMB NO. 1004-0135 |
| Expires January 31, 2004 |

5. Lease Serial No.

| 7 | _ | ስ ደ1 | በ7ደ | |
|---|---|-------------|-----|--|

6. If Indian, Allottee or Tribe Name Do not use this form for proposals to drill or to re-enter an

| API Well No. 3a. Address 2700 Parminotron Ave., Bldg. K. Ste 1 Farminoton, 4. Location of Well (Footage, Sec., T., R., M., or Survey Description) Surface Location: 210' FSL x 1,165' FKL in Sec 22, T29N, RION 12. CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA TYPE OF SUBMISSION TYPE OF SUBMISSION TYPE OF ACTION Notice of Intent | 1. Type of Well | Other instructions on reverse side 8 9 10 7 M | ent, Name and/or No |
|--|--|---|----------------------|
| 2. Name of Operator XTO Energy Inc. 3a. Address 2700 Farmincton Ave., Bldg. K. Ste 1 Farmington, 3b. Photogo. (including of the 300 July 300 Ju | Oil Well X Gas Well Other | /_ | #1R |
| 3a. Address 2700 Farmington Ave., Bldg. K. Ste 1 Farmington 3b. Photogo. (inflowing July 10 Percentification) Surface Location: 210' FSL x 1,165' FEL in Sec 22, T29N, R100 12. CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA TYPE OF SUBMISSION TYPE OF ACTION Notice of Intent | 2. Name of Operator | | |
| 2700 Farmington Ave. Bilder. K. Ste 1 Farmington, 4. Location of Well (Footage, Sec., T., R., M., or Survey Description) Surface Location: 210' FSL x 1,165' FEL in Sec 22, T29N, RION 12. CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA TYPE OF SUBMISSION TYPE OF ACTION Notice of Intent | | API Well No. | 7/92 |
| A Location of Well (Footage, Sec., T., R., M., or Survey Description) Surface Location: 210' FSL x 1,165' FEL in Sec 22, T29N, RION Basin Dakota Blanco Mesaverde Blanco Mesaverde | | | -74 |
| 12. CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA TYPE OF SUBMISSION TYPE OF ACTION X Notice of Intent | | | xpioratory Area |
| 12. CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA TYPE OF SUBMISSION TYPE OF ACTION Acidize | Surface Location: 210' FSL x 1,165 | 5' FEL in Sec 22, T29N, R10N (29, C21, 2) Blanco Mesaverde | |
| 12. CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA TYPE OF SUBMISSION TYPE OF ACTION X Notice of Intent | | | ate |
| TYPE OF SUBMISSION TYPE OF ACTION Acidize | | | |
| Notice of Intent | 12. CHECK APPROPRIATE | BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DA | TA |
| Subsequent Report Subsequent Report Casing Repair New Construction Recomplete Other | TYPE OF SUBMISSION | TYPE OF ACTION | |
| Subsequent Report | X Notice of Intent | Acidize Deepen Production (Start/Resume) Wa | ter Shut-Off |
| Casing Repair New Construction Recomplete Other | | X Alter Casing Fracture Treat Reclamation Well | Integrity |
| Describe Proposed or Completed Operation (clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration the If the proposal is to deepen directionally or recomplete horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and z. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BlA. Required subsequent reports shall be filed within 30 following completion of the involved operations. If the operation results in a multiple completion or recompletion in a new interval, a Form 3160-4 shall be filed testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operato determined that the final site is ready for final inspection.) XTO Energy Inc. has revised the casing design and directional drill plan for the above mentioned well. The APD for this well is still in the process of being approved. The 9-5/8" surface casing will now be set at 950'. The 7" intermediate casing weight has been changed to 23#/ft and will be set at 4,152'. The 4-1/2" production casing has been changed to 11.6#/ft, LTC casing set at TD. The directional drill plan has been revised by moving the KOP to 1,100' and the back to vertical point down to 5,250. This design change will allow the hold angle to be reduced and which will | Subsequent Report | Casing Repair New Construction Recomplete Oth | ег |
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| Describe Proposed or Completed Operation (clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration the lift the proposal is to deepen directionally or recomplete horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zo Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports shall be filed within 30 following completion of the involved operations. If the operation results in a multiple completion or recompletion in a new interval, a Form 3160-4 shall be filed testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operato determined that the final site is ready for final inspection.) XTO Energy Inc. has revised the casing design and directional drill plan for the above mentioned well. The APD for this well is still in the process of being approved. The 9-5/8" surface casing will now be set at 950'. The 7" intermediate casing weight has been changed to 23#/ft and will be set at 4,152'. The 4-1/2" production casing has been changed to 11.6#/ft, LTC casing set at TD. The directional drill plan has been revised by moving the KOP to 1,100' and the back to vertical point down to 5,250. This design change will allow the hold angle to be reduced and which will | T Blan / Blander Bland Notice | Convert to Injection Plug Back Water Disposal | |
| | | | and the operator ha |
| prevent the intermediate casing from being set through both the build and drop angles. | ATO Energy Inc. has revised the of the APD for this well is still in The 9-5/8" surface casing will no 23#/ft and will be set at 4,152'. set at TD. | casing design and directional drill plan for the above mentions in the process of being approved. ow be set at 950'. The 7" intermediate casing weigth has been . The 4-1/2" production casing has been changed to 11.6#/ft, 1 | ed well. changed to |
| | XTO Energy Inc. has revised the or The APD for this well is still in The 9-5/8" surface casing will no 23#/ft and will be set at 4,152'. set at TD. The directional drill plan has be down to 5,250. This design chang prevent the intermediate casing for the direction of the set of the se | casing design and directional drill plan for the above mentions in the process of being approved. ow be set at 950'. The 7" intermediate casing weigth has been. The 4-1/2" production casing has been changed to 11.6#/ft, I een revised by moving the KOP to 1,100' and the back to verticate will allow the hold angle to be reduced and which will from being set through both the build and drop angles. | ed well. changed to |
| 14. Thereby certify that the foregoing is true and correct Name (Printed/Typed) Jeffrey W. Patton Drilling Engineer | XTO Energy Inc. has revised the control of the APD for this well is still in the 9-5/8" surface casing will not 23#/ft and will be set at 4,152'. set at TD. The directional drill plan has be down to 5,250. This design change prevent the intermediate casing for the please see the attached revised design. | casing design and directional drill plan for the above mentione in the process of being approved. ow be set at 950'. The 7" intermediate casing weigth has been. The 4-1/2" production casing has been changed to 11.6#/ft, 1 een revised by moving the KOP to 1,100' and the back to vertice ge will allow the hold angle to be reduced and which will from being set through both the build and drop angles. drilling program for the changes being requested. | ed well. changed to |
| Date 3/5/04 | XTO Energy Inc. has revised the or The APD for this well is still in The 9-5/8" surface casing will no 23#/ft and will be set at 4,152'. set at TD. The directional drill plan has be down to 5,250. This design chang prevent the intermediate casing for the please see the attached revised down to 14. I hereby certify that the foregoing is true and correct Name (Printed/Typed) | casing design and directional drill plan for the above mentione in the process of being approved. Ow be set at 950'. The 7" intermediate casing weigth has been in the 4-1/2" production casing has been changed to 11.6#/ft, 1 een revised by moving the KOP to 1,100' and the back to vertice ge will allow the hold angle to be reduced and which will from being set through both the build and drop angles. drilling program for the changes being requested. | ed well. changed to |
| THIS SPACE FOR FEDERAL OR STATE OFFICE USE | XTO Energy Inc. has revised the or The APD for this well is still in The 9-5/8" surface casing will no 23#/ft and will be set at 4,152'. set at TD. The directional drill plan has be down to 5,250. This design chang prevent the intermediate casing for the please see the attached revised down to 14. I hereby certify that the foregoing is true and correct Name (Printed/Typed) | casing design and directional drill plan for the above mentione in the process of being approved. ow be set at 950'. The 7" intermediate casing weigth has been. The 4-1/2" production casing has been changed to 11.6#/ft, I eem revised by moving the KOP to 1,100' and the back to verticate will allow the hold angle to be reduced and which will from being set through both the build and drop angles. drilling program for the changes being requested. Title Drilling Engineer | ed well. changed to |

Title 18 U.S.C. Section 1001, and Title 43 U.S.C. Section 1212, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

which would entitle the applicant to conduct operations thereon

XTO ENERGY INC.

Armenta Gas Com "C" #1R **APD Data** March 4, 2004

Surface Location: 210' FSL & 1,165' FEL, Sec 22, T29N, R10W County: San Juan State: New Mexico

Bottomhole Location: 890' FNL & 765' FEL, Sec 27, T29N, R10W

TOTAL DEPTH: $\pm 7,200'$ MD

OBJECTIVE: Dakota/Mesaverde

GR ELEV: 5,594'

Est KB ELEV: <u>5,607' (13' AGL)</u>

1. MUD PROGRAM:

| INTERVAL | 0' to 950' | 950' to ±4,150' | 4,000' to TD |
|------------|----------------------|-----------------|--------------|
| HOLE SIZE | 12-1/4" | 8-3/4" | 6-1/4" |
| MUD TYPE | FW/Native (spud) Mud | FW/Polymer | LSND |
| WEIGHT | 8.6-8.8 | 8.6-9.0 | 8.8-9.2 |
| VISCOSITY | 28-100 | 29-34 | 45-60 |
| WATER LOSS | NC | NC | <10 cc's |

Remarks: Use fibrous materials as needed to control seepage and lost circulation. Pump high viscosity sweeps as needed for hole cleaning.

2. CASING PROGRAM:

Surface Casing: 9-5/8" casing to be set at \pm 950' in 8.8 ppg mud

| | | | | | Coll | Burst | | | | | | |
|----------|--------|-------|------|------|--------|--------|---------|-------|-------|------|-------|-------|
| 1 | | | | | Rating | Rating | Jt Str | ID | Drift | SF | SF | SF |
| Interval | Length | Wt | Gr | Cplg | (psi) | (psi) | (M-lbs) | (in) | (in) | Coll | Burst | Ten |
| 0'-950' | 950' | 36.0# | J-55 | STC | 2020 | 3520 | 394 | 8.921 | 8.765 | 4.64 | 4.91 | 11.52 |

Intermediate Casing:

7" casing to be set at $\pm 4,152$ ' in 8.8-9.0 ppg mud.

| | | | | | | Coll | Burst | | | | | | |
|---|----------|--------|-------|------|------|--------|--------|---------|-------|-------|------|-------|------|
| 1 | | | | | | Rating | Rating | Jt Str | ID | Drift | SF | SF | SF |
| L | Interval | Length | Wt | Gr | Cplg | (psi) | (psi) | (M-lbs) | (in) | (in) | Coll | Burst | Ten |
| | 0'- | 4,152' | 23.0# | J-55 | STC | 3270 | 4360 | 284 | 6.366 | 6.241 | 1.68 | 1.39 | 2.97 |
| L | 4,152' | | | | | | | | | | | | |

Production Casing:

4-1/2" casing to be set at 7,200' in 9.2 ppg mud.

| | | | | | | | F F C | | | | | |
|----------|--------|-------|------|------|--------|--------|---------|-------|-------|------|-------|------|
| | | | | | Coll | Burst | | | | | | |
| 1 | | | | | Rating | Rating | Jt Str | ID | Drift | SF | SF | SF |
| Interval | Length | Wt | Gr | Cplg | (psi) | (psi) | (M-lbs) | (in) | (in) | Coll | Burst | Ten |
| 0'- | 7,200 | 11.6# | J-55 | LTC | 4910 | 5350 | 162 | 4.000 | 3.875 | 1.42 | 1.10 | 1.93 |
| 7,200' | | J | | | | | | | | | | |

Drilling Prognosis
Page 2 of 3

3. WELLHEAD:

A. Bradenhead:

9-5/8" x 7" 2,000 psig WP (4,000 psig test).

Casinghead:

7" x 4-1/2" 3,000 psig WP (6,000 psig test).

4. <u>CEMENT PROGRAM (Slurry design may change slightly, but the plan is to circulate cement to surface on both casing strings):</u>

A. Surface:

9-5/8", 36.0#, J-55, STC casing to be set at \pm 950'.

<u>Lead:</u> 430 sx of Type III or equivalent cement containing accelerator and LCM typically mixed at 14.5 ppg, 1.39 ft³/sk, & 6.30 gal wtr/sk.

Total slurry volume is 598 ft³, 100% excess of calculated annular volume to 950'.

B. Intermediate:

7", 23.0#, J-55, STC casing to be set at $\pm 4,152$ '.

<u>Lead:</u> 350 sx of Type III or equivalent cement containing extender, accelerator and LCM typically mixed at 11.4 ppg, 3.03 ft³/sk, 18.51 gal wtr/sx.

<u>Tail:</u> 150 sx of Type III or equivalent cement containing accelerator and LCM typically mixed at 14.5 ppg, 1.41 ft³/sk, 6.30 gal wtr/sx.

Total slurry volume is 1,272 ft³, circulated to surface. This value is $\pm 100\%$ (excess) over gage hole volume.

C: Production: 4-1/2", 11.5#, J-55, LTC casing to be set at $\pm 7,200$ '.

<u>Lead:</u> **200 sx** of Class "H" Premium Lite High Strength (65/35/6) containing dispersant, fluid loss, salt and LCM typically mixed at 12.5 ppg, 2.01 ft³/sk, 10.12 gal wtr/sx.

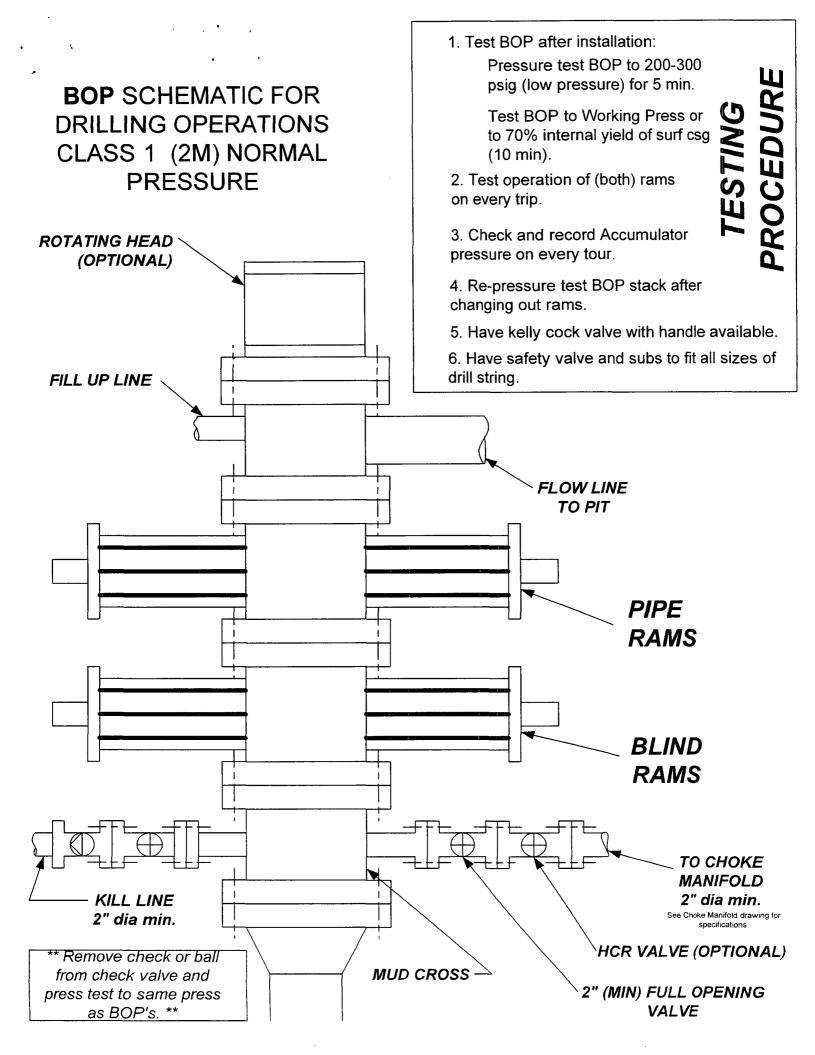
<u>Tail:</u> 150 sx of Class "H" or equivalent cement containing extender, dispersant, fluid loss and LCM typically mixed at 14.2 ppg, 1.54 ft³/sk, 7.50 gal wtr/sx..

Total estimated slurry volume for the 4-1/2" production casing is 633 ft³ for 4,700' of fill. Est. TOC should be @ $\pm 3,500'$. 40% (excess) over gage hole volume has been added to the number of sacks indicated.

Note: The slurry design may change slightly based upon actual conditions. Final cement volumes will be determined for the caliper logs plus 40%.

5. LOGGING PROGRAM:

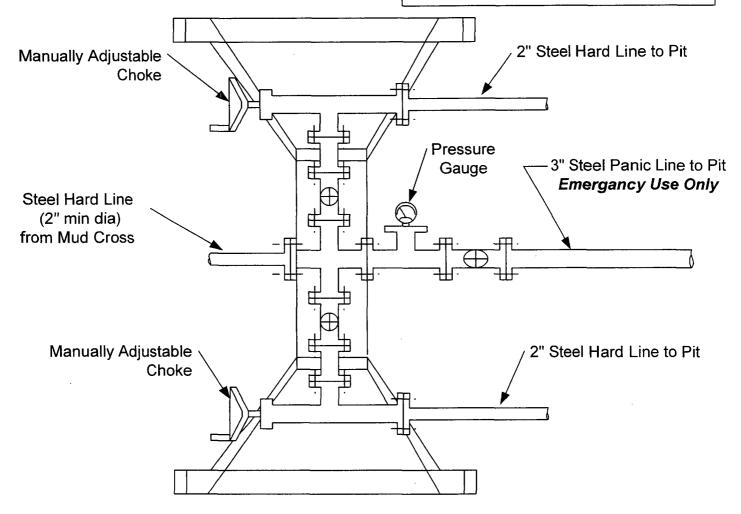
- A. Mud Logger: A two man mud logging crew will come on the hole @ 2,900' and remain on the hole until TD.
- B. Open Hole Logs as follows: Run Dual Induction/MSFL/GR/CAL/SP/CNL/LDT (lithodensity) from TD to the bottom of the intermediate csg (@ $\pm 4,000$ ' MD). Run cased hole GR/CCL from TD to surface.

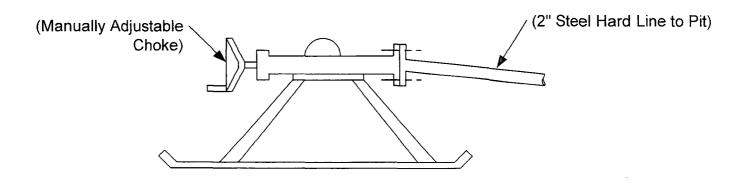


CHOKE MANIFOLD SCHEMATIC FOR DRILLING OPERATIONS CLASS 1 (2M) NORMAL PRESSURE

- 1. Stake all lines from choke manifold to pit.
- 2. Pressure test choke monifold after installation.
- 3. Pressure test manifold at the same time with the BOP Stack. Test manifold to the same test pressures.

TESTING PROCEDURE





Planning an S-Shape Trajectory

Well Name:Armenta GC C #1REnter KOP, feet1100Enter Build Rate, %100'2.00Enter Target TVD5250Enter Drop Rate, %100'2.00Enter Target Coordinate, North-1100

Enter Target Coordinate, East

400

| | MD | TVD | Drift | Departure | Coordina | tes, Feet |
|--------------|---------|---------|----------|-----------|----------|-----------|
| Item | Feet | Feet | Angle, ° | Feet | North | East |
| KOP | 1100.00 | 1100.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| End of Build | 2132.31 | 2110.12 | 20.65 | 183.99 | -172.91 | 62.88 |
| Begin Drop | 4408.25 | 4239.88 | 20.65 | 986.48 | -927.09 | 337.12 |
| Target | 5440.56 | 5250.00 | 0.00 | 1170.47 | -1100.00 | 400.00 |

Transpose TVD To MD, Drift Angle, Departure, and Coordinates:

| Enter TVD | MD | Drift | Departure | Coordina | ites, Feet |
|-----------|------|----------|-----------|----------|------------|
| Feet | Feet | Angle, ° | Feet | North | East |
| 0 | 0 | 0.00 | 0 | 0 | 0 |
| 500 | 500 | 0.00 | . 0 | 0 | 0 |
| 1000 | 1000 | 0.00 | o | 0 | 0 |
| 1500 | 1501 | 8.03 | 28 | -26 | 10 |
| 2000 | 2016 | 18.31 | 145 | -136 | 50 |
| 2500 | 2549 | 20.65 | 331 | -311 | 113 |
| 3000 | 3083 | 20.65 | 519 | -488 | 177 |
| 3500 | 3618 | 20.65 | 708 | -665 | 242 |
| 4000 | 4152 | 20.65 | 896 | -842 | 306 |
| 4500 | 4682 | 15.18 | 1071 | -1006 | 366 |
| 5000 | 5190 | 5.01 | 1160 | -1090 | 396 |
| 5500 | 5691 | 0.00 | 1170 | -1100 | 400 |
| 6000 | 6191 | 0.00 | 1170 | -1100 | 400 |
| 6500 | 6691 | 0.00 | 1170 | -1100 | 400 |
| 7000 | 7191 | 0.00 | 1170 | -1100 | 400 |
| 0 | 0 | 0.00 | 0 | 0 | 0 |
| 0 | 0 | 0.00 | 0 | 0 | 0 |
| 0 | 0 | 0.00 | 0 | 0 | 0 |
| 0 | 0 | 0.00 | 0 | 0 | 0 |
| 0 | 0 | 0.00 | 0 | 0 | 0 |
| 1 | 0 | 0.00 | 0 | 0 | 0 |
| | 0 | 0.00 | 0 | 0 | 0 |
| | 0 | 0.00 | 0 | 0 | 0 |
| | 0 | 0.00 | 0 | 0 | 0 |
| | 0 | 0.00 | 0 | 0 | 0 |
| [| 0 | 0.00 | 0 | 0 | 0 |
| | 0 | 0.00 | 0 | 0 | 0 |
| | 0 | 0.00 | 0 | 0 | 0 |
| | 0 | 0.00 | 0 | 0 | 0 |
| | 0 | 0.00 | 0 | 0 | 0 |

XTO ENERGY INC. LAT. = $36^{\circ}42'19"N$ ARMENTA GAS COM "C" No. 1R, 210' FSL 1165' FEL SECTION 22, T29N, R10W, N.M.P.M., SAN JUAN COUNTY, N. M. LONG. = 107°52'00"W NAD 1927 GROUND ELEVATION: 5594', DATE: NOVEMBER 25, 2003 CONSTRUCTION ZONE B C (6) 2.8 (5) A F_1.7 F 4.2 9 Install drain PIPE on 2.1 Slopes Reserve Pit FRUITLAND FORMATIONS ONLY اچ **BLOW PIT** 8' DEEP 10' DEEP - 70' 15' 4 30, LAYDOWN S 83° W Wellhead to Back Wellhead to Front F 3.2 120 120 REAR C 2.4 ① C 3.8 110 7' 2 TRACK & NEW ACCESS O to 6% C 1.2 C 0.0 d C, 3 A C 6.6 2 В, 200' X 240' $(300' \times 340') = 2.34 \text{ ACRES}$ RESERVE PIT DIKE: TO BE 8' ABOVE DEEP SIDE (OVERFLOW - 3' WIDE AND 1' ABOVE SHALLOW SIDE). *
BLOW PIT: OVERFLOW PIPE HALFWAY BETWEEN TOP AND BOTTOM AND TO EXTEND OVER PLASTIC LINER AND INTO BLOW PIT. DAGGETT ENTERPRISES, INC. IS NOT LIABLE FOR UNDERGROUND UTILITIES OR PIPELINES. NEW MEXICO ONE CALL TO BE NOTIFIED 48 HOURS PRIOR TO EXCAVATION OR CONSTRUCTION. NOTE: 12/8/03 C/L ELEV. A-A 5610 9. 5600 쏦 5590 5580 RESTAKE C/L ELEV. B-B' 5610 5600 5590 Daggett Enterprises, Inc.
Surveying and Oil Field Services
O. Box 15068 Farmington, NM 87401
e (505) 326-1772 Fox (505) 326-6019 5580 C/L ELEV. C-C 5610 5600 5590

NOTE: CONTRACTOR SHOULD CALL ONE-CALL FOR LOCATION OF ANY MARKED OR UNMARKED BURIED PIPELINES OR CABLES ON WELL PAD AND OR ACCESS ROAD AT LEAST TWO (2) WORKING DAYS PRIOR TO CONSTRUCTION.

DRAWN BY: B.S.

5580

ROW#: CR029

CADFILE: CR029CF8

DATE: 11/7/01

P. O. Box Phone (505)