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SEP 29 2009

Bureau of Land Management
Farmington Field Office

Form 3160-3
(April 2004)

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

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER

5 Lease Serial No. ~~NOG 0503173M~~ NMNM120923

6. If Indian, Allotee or Tribe Name
NAVAJO ALLOTMENT

1a. Type of work: ☑ DRILL ☐ REENTER

7 If Unit or CA Agreement, Name and No
PENDING

1b. Type of Well: ☐ Oil Well ☑ Gas Well ☐ Other ☑ Single Zone ☐ Multiple Zone

8. Lease Name and Well No.
LABOR #21 H

2. Name of Operator
XTO Energy Inc.

9 API Well No.
30-045- 35030

3a. Address **382 CR 3100**
Aztec, NM 87410

3b. Phone No. *(include area code)*
505/ 333-3100

10 Field and Pool, or Exploratory
BASIN FRUITLAND COAL

4. Location of Well *(Report location clearly and in accordance with any State requirements.*)*
At surface **1946' FSL x 386' FWL**
At proposed prod. zone **700' FSL x 700' FEL**

11. Sec , T. R. M or Blk and Survey or Area
(L) Sec 23, T25N, R10W

14. Distance in miles and direction from nearest town or post office*
23 miles SE of Bloomfield P.O.

12 County or Parish
SAN JUAN

13. State
NM

15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig unit line, if any) **386'**	16 No. of acres in lease **160**	17 Spacing Unit dedicated to this well **FC: S/2 320**
18 Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft **1229'**	19 Proposed Depth **5659' MD/1699' TVD**	20 BLM/BIA Bond No. on file **BIA104312789**
21 Elevations (Show whether DF, KDB, RT, GL, etc) **6615' Ground Elevation**	22. Approximate date work will start* **01/01/2010**	23 Estimated duration **2 Weeks**

24. Attachments

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No 1, shall be attached to this form

RCVD FEB 3 '10

1 Well plat certified by a registered surveyor.
2. A Drilling Plan
3 A Surface Use Plan (if the location is on National Forest System Lands, the SUPO shall be filed with the appropriate Forest Service Office)
4 Bond to cover the operations unless covered by an existing bond on file (see Item 20 above)
5 Operator certification
6 Such other site specific information and/or plans as may be required by the authorized officer

OIL CONS. DIV.

DIST. 3

25. Signature Malia Villers	Name *(Printed/Typed)* **Malia Villers**	Date **09/23/2009**
Title **Permitting Tech.**		
Approved by *(Signature)* /s/ Mankiewicz	Name *(Printed/Typed)*	Date 2/3/2010
Title AFM	Office FFO	

Application approval does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon
Conditions of approval, if any, are attached.

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

NOTIFY AZTEC OCD 24 HRS. PRIOR TO CASING & CEMENT

BLM'S APPROVAL OF THIS ACTION DOES NOT RELIEVE THE LESSEE AND OPERATOR FROM OBTAINING ANY OTHER AUTHORIZATION REQUIRED FOR OPERATIONS ON FEDERAL AND INDIAN LANDS

*(Instructions on page 2)

Hold C104 for Directional Survey and "As Drilled" plat

NOTIFY AZTEC OCD 24 HRS. PRIOR TO CASING & CEMENT

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

NMOCD

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

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

State of New Mexico
Energy, Minerals & Natural Resources Department

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

RECEIVED
SEP 29 2009
Bureau of Land Management
Farmington Field Office

Form C-102
Revised October 12, 2005
Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies
☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

[1] API Number	[2] Pool Code	[3] Pool Name
	71629	FRUITLAND COAL

[4] Property Code	[5] Property Name	[6] Well Number
35977	LABOR	21 H

[7] OGRID No.	[8] Operator Name	[9] Elevation
5380	XTO ENERGY, INC.	6615

[10] Surface Location

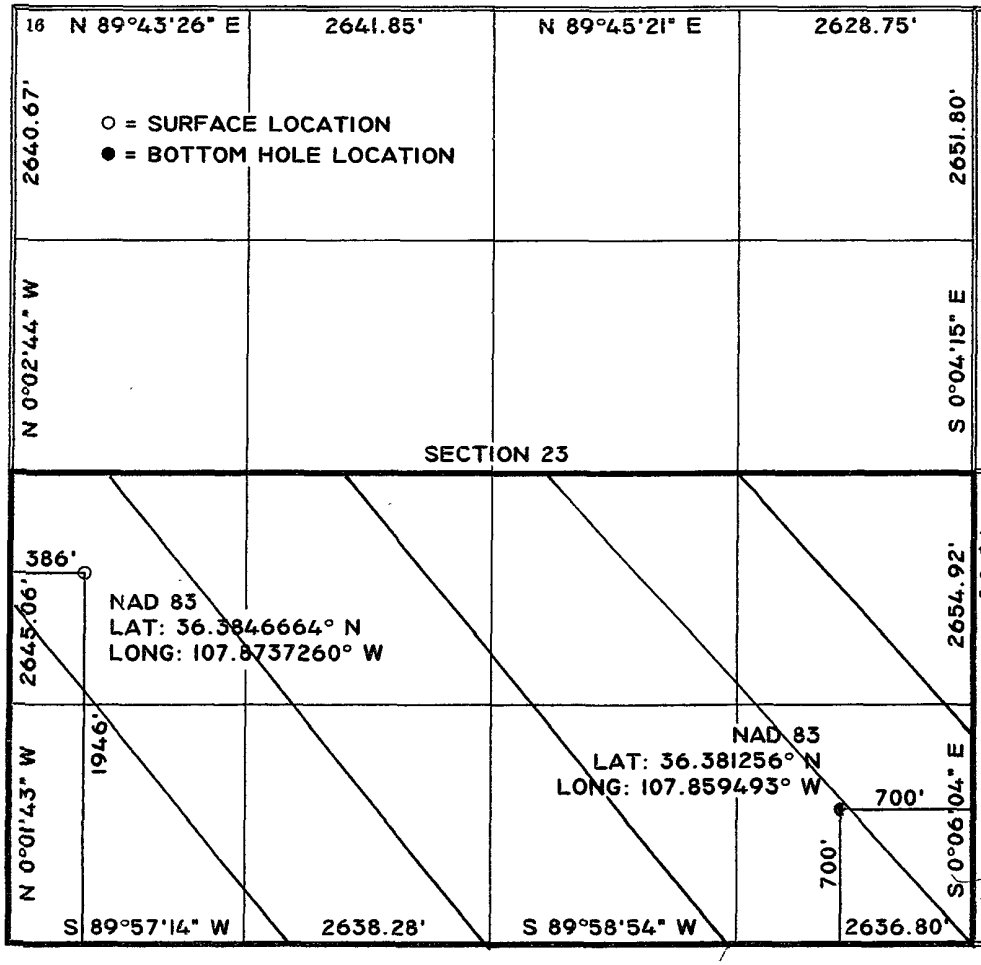
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
L	23	25 N	10 W		1946	SOUTH	386	WEST	SAN JUAN

[11] 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
P	23	25 N	10 W		700	SOUTH	700	EAST	SAN JUAN

[12] Dedicated Acres	[13] Joint or Infill	[14] Consolidation Code	[15] Order No.
S/2, 320 AC ±			

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



[17] OPERATOR CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.

Malia Villers 9/23/09
Signature Date

Malia Villers
Printed Name

[18] SURVEYOR CERTIFICATION

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.

4/15/09
Date of Survey

Signature and Seal of Professional Surveyor:

ROBERT L. POUNDS
NEW MEXICO
6846
LICENSED PROFESSIONAL SURVEYOR

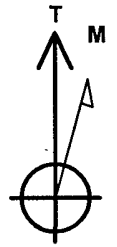
Certificate Number

XTO ENERGY

Well Name: Labor #21

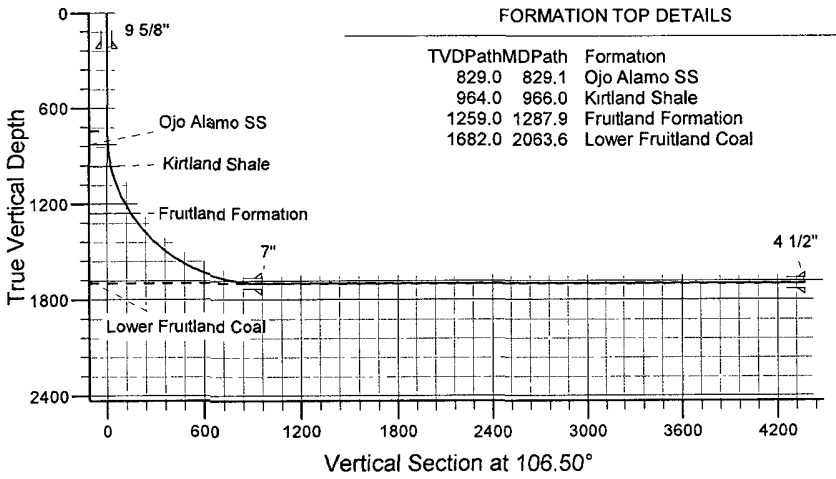
San Juan Division
Drilling Department

Calculation Method: Minimum Curvature
Geodetic Datum: North American Datum 1983
Lat: 36° 23' 4.799 N
Long: 107° 52' 25.414 W



Azimuths to True North
Magnetic North: 10.11°

Magnetic Field
Strength: 50728.3snT
Dip Angle: 63.19°
Date: 7/29/2009
Model: IGRF200510

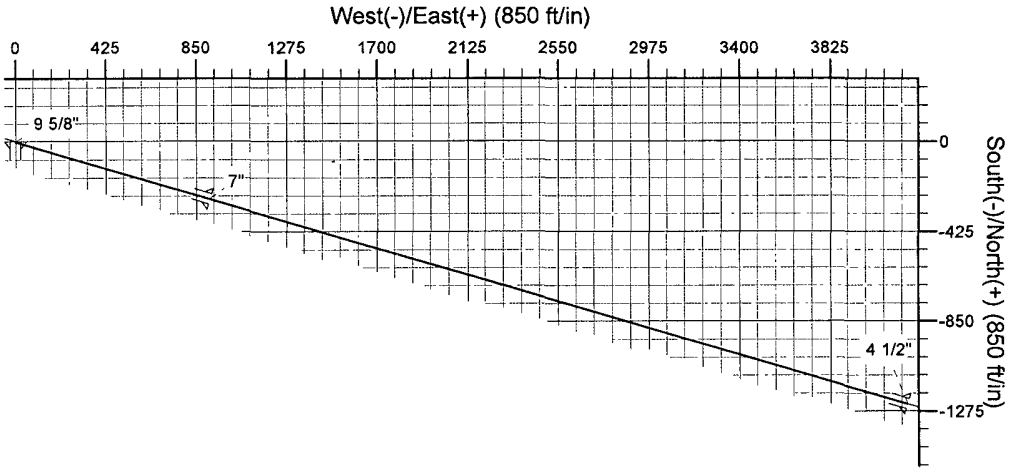


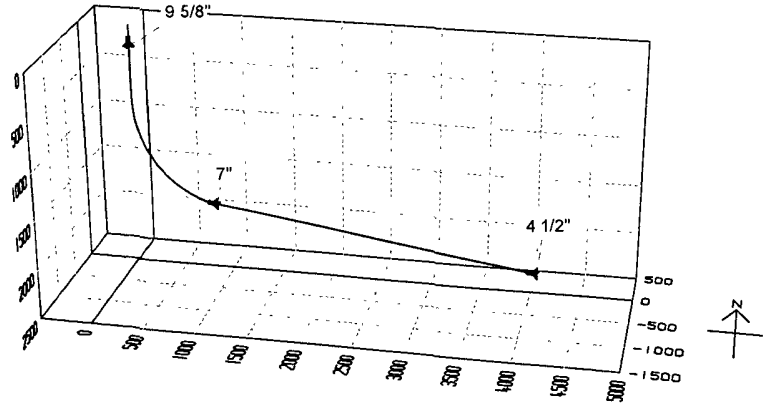
FORMATION TOP DETAILS

TVDPath	MDPath	Formation
829.0	829.1	Ojo Alamo SS
964.0	966.0	Kirtland Shale
1259.0	1287.9	Fruitland Formation
1682.0	2063.6	Lower Fruitland Coal

CASING DETAILS

TVD	MD	Name	Size
225.0	225.0	9 5/8"	9-5/8
1699.0	2244.1	7"	7
1699.0	5658.7	4 1/2"	4-1/2





SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	Target
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
2	744.1	0.00	0.00	744.1	0.0	0.0	0.00	0.00	0.0	
3	2244.1	90.00	106.50	1699.0	-271.2	915.6	6.00	106.50	954.9	
4	5658.7	90.00	106.50	1699.0	-1241.2	4189.6	0.00	0.00	4369.6	Proposed BHL--Labor #21

Form 3160-5
(August 2007)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

RECEIVED
JAN 28 2010
Bureau of Land Management
Farmington Field Office

FORM APPROVED
OMB NO. 1004-0137
Expires July 31, 2010

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to re-enter an abandoned well. Use Form 3160-3 (APD) for such proposals.

SUBMIT IN TRIPLICATE *- Other instructions on page 2*

5. Lease Serial No.
NMNM 120923

6. If Indian, Allottee or Tribe Name
N/A

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

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

8. Well Name and No.
LABOR #21

2. Name of Operator
XTO Energy Inc.

9. API Well No.
30-045- 35030

3a. Address
382 CR 3100 Aztec, NM 87410

3b. Phone No. *(include area code)*
505/333-3100

10. Field and Pool, or Exploratory Area
BASIN FRUITLAND COAL

4. Location of Well *(Footage, Sec., T., R., M., or Survey Description)*
SHL: 1946' FSL X 386' FWL (L) SEC. 23-T25N-R10W
BHL: 700' FSL X 700' FEL

11. County or Parish, State
SAN JUAN NM

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

TYPE OF SUBMISSION	TYPE OF ACTION			
☒ Notice of Intent	☐ Acidize	☐ Deepen	☐ Production (Start/Resume)	☐ Water Shut-Off
☐ Subsequent Report	☐ Alter Casing	☐ Fracture Treat	☐ Reclamation	☐ Well Integrity
☐ Final Abandonment Notice	☐ Casing Repair	☐ New Construction	☐ Recomplete	☒ Other REVISED HORIZONTAL PLAN
	☐ Change Plans	☐ Plug and Abandon	☐ Temporarily Abandon	
	☐ Convert to Injection	☐ Plug Back	☐ Water Disposal	

13. Describe Proposed or Completed Operation (clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recomplete horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompletion in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the final site is ready for final inspection.)

Please see attached revised horizontal plan.

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

14. I hereby certify that the foregoing is true and correct
Name *(Printed/Typed)* MALIA VILLERS
Title PERMITTING TECH.

Signature Malia Villers
Date 1/28/2010

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by Troy L. Salyers
Title Petroleum Engineer
Date 2/3/2010

Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.
Office FFO

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.

NMOCD

XTO ENERGY INC.

Labor #21
APD Data
January 28, 2010

Location: 1946' FSL x 386' FWL Sec 23, T25N, R10W **County**: San Juan **State**: New Mexico
Bottomhole Location: 700' FSL x 700' FEL Sec 23, T25N, R10W

GREATEST PROJECTED TVD: 1699'
GREATEST PROJECTED MD: 5659'
OBJECTIVE: Fruitland Coal

APPROX GR ELEV: 6615'
Est KB ELEV: 6627' (12' AGL)

1. MUD PROGRAM:

INTERVAL	0' to 225'	225' to 2244'	2244' to TD
HOLE SIZE	12.25"	8.75"	6.125"
MUD TYPE	FW/Spud Mud	FW/Polymer	Air/Mist
WEIGHT	8.6-9.0	8.4-8.8	NA
VISCOSITY	28-32	28-32	NA
WATER LOSS	NC	NC	NC

Remarks: Use fibrous materials as needed to control seepage and lost circulation. Pump high viscosity sweeps as needed for hole cleaning. Raise viscosity at TD for logging. Reduce viscosity after logging for cementing purposes. Use Fruitland Coal produced water as make-up water for mist fluid. Pump enough fluid to dampen vibration at directional BHA. If directional control is not maintainable in air/mist environment convert to polymer mud.

2. CASING PROGRAM:

Surface Casing: 9.625" casing to be set at ± 225' in a 12-1/4" hole filled with 9.20 ppg mud

Interval	Length	Wt	Gr	Cplg	Coll Rating (psi)	Burst Rating (psi)	Jt Str (M-lbs)	ID (in)	Drift (in)	SF Coll[1]	SF Burst[2]	SF Ten[3]
0'-225'	225'	36.0#	J-55	ST&C	2020	3520	394	8.921	8.765	18.76	32.7	48.6

Intermediate Casing: 7" casing to be set at ±2244' MD, 1699' TVD in 8.75" hole filled with 9.20 ppg mud.

Interval	Length	Wt	Gr	Cplg	Coll Rating (psi)	Burst Rating (psi)	Jt Str (M-lbs)	ID (in)	Drift (in)	SF Coll[1]	SF Burst[2]	SF Ten[3]
0'-2244	2244'	23.0#	J-55	ST&C	3270	4360	284	6.276	6.151	4.02	5.36	5.50

Production Casing: 4.5" casing to be set at ±5659' MD, 1699' TVD in 6.125" hole filled with 8.4 ppg mud.

Interval	Length	Wt	Gr	Cplg	Coll Rating (psi)	Burst Rating (psi)	Jt Str (M-lbs)	ID (in)	Drift (in)	SF Coll[1]	SF Burst[2]	SF Ten[3]
2184'-5659'	3475'	10.5	J-55	ST&C	4010	4790	132	4.052	3.927	5.40	6.45	3.62

[1]Collapse SF is based on evacuated annulus and hydrostatic at TVD.
[2]Burst SF is based on evacuated casing and hydrostatic at TVD.
[3]Tensile SF is based on hanging air weight of casing in a vertical hole at measured depth.

3. WELLHEAD:

A. Casing Head: WHI QDF System (or equivalent), 9-5/8" x 7", 3,000 psig WP (4,000 psig test) with 9-5/8" 8rnd thread ST&C pin end on bottom and 4-1/2" slips on top.
B. Tubing Head: WHI W2F (or equivalent), 7.063" nominal, 5,000 psig WP (5,000 psig test), 5-1/2" slip-on or weld-on.

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

A. Surface: 9.625", 36.0#, J-55, ST&C casing to be set at ± 225' in 12-1/4" hole.

140 sx of Type III cement (or equivalent) typically containing accelerator and LCM, mixed at 14.5 ppg, 1.39 ft^3/sk, & 6.70 gal wtr/sk.

Total slurry volume is 177 ft^3, 100% excess of calculated annular volume to 250'.

B. Production Casing: 7", 23#/ft, J-55, ST&C casing to be set at ±2244'MD, 1699' TVD in 8.75" hole.

LEAD:
± **146** sx of Premium Lite FM or CBM Lite typically containing accelerator, LCM, dispersant, and fluid loss additives at 12.1 ppg, 2.22 ft^3/sk, & 12.04 gal wtr/sk.

TAIL:
± **100** sx of Type III or V cement typically containing accelerator, LCM, dispersant, and fluid loss additives at 14.2 ppg, 1.48 ft^3/sk, & 7.34 gal wtr/sk.

Total estimated slurry volume for the 7" production casing is 472 ft^3.

C. Production Liner: 4.5", 10.5#/ft, J-55, ST&C casing is to be set at 5659' MD, 1699' TVD in 6.125" hole.

The production liner will be set using an uncemented liner hanger. The liner may be tied back to surface during the completion of the well.

Note: The slurry design may change slightly based upon actual conditions. Final cement volumes will be determined from the caliper logs (if available) plus 40%. It will be attempted to circulate cement to the surface.

5. LOGGING PROGRAM:

A. Mud Logger: A geologic consultant or unmanned mud logging unit will begin logging the well once the surface shoe is drilled out and remain on the well to TD.

B. Open Hole Logs as follows: Gamma Ray from Surface shoe to TD.

6. FORMATION TOPS:

See attached Directional Program.

**** Maximum anticipated BHP should be <2,000 psig (<0.30 psi/ft) *****

7. COMPANY PERSONNEL:

Name	Title	Office Phone	Home Phone
Justin Niederhofer	Drilling Engineer	505-333-3199	505-320-0158
Bobby Jackson	Drilling Superintendent	505-333-3224	505-486-4706
John Klutsch	Project Geologist	817-885-2800	--

JDN
1/27/10

Database:	EDM 2003.21 Single User Db	**Local Co-ordinate Reference:**	Well Labor #21
Company:	XTO Energy	**TVD Reference:**	Rig KB @ 6627 0ft (Aztec 507)
Project:	San Juan Basin (NAD 83)	**MD Reference:**	Rig KB @ 6627 0ft (Aztec 507)
Site:	Labor #21	**North Reference:**	True
Well:	Labor #21	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Labor #21		
Design:	Permitted Wellbore		

Casing Points

Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (")	Hole Diameter (")
225 0	225.0	9 5/8"	9-5/8	12-1/4
2,244.1	1,699 0	7"	7	8-3/4
5,658 7	1,699.0	4 1/2"	4-1/2	6-1/8

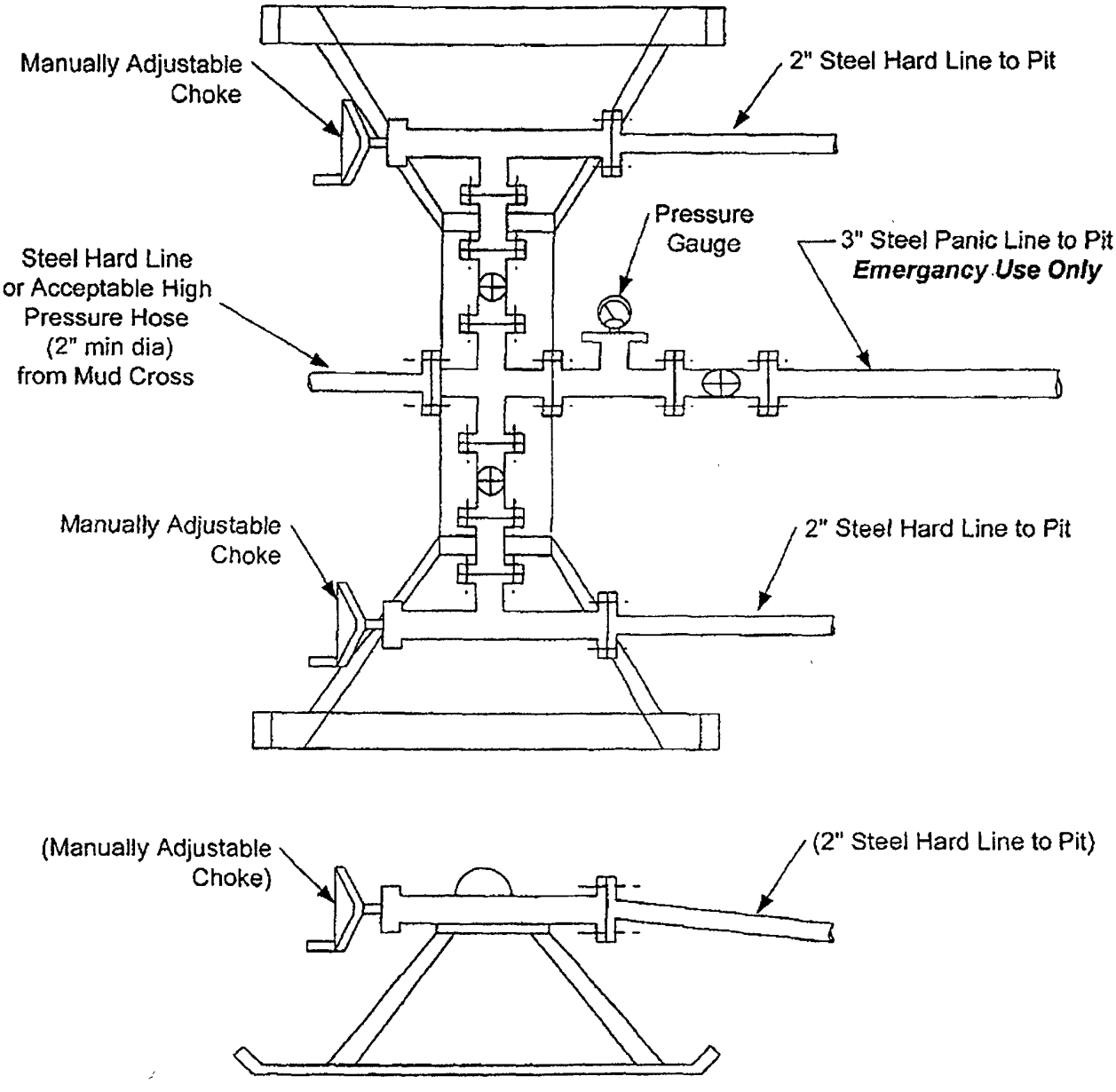
Formations

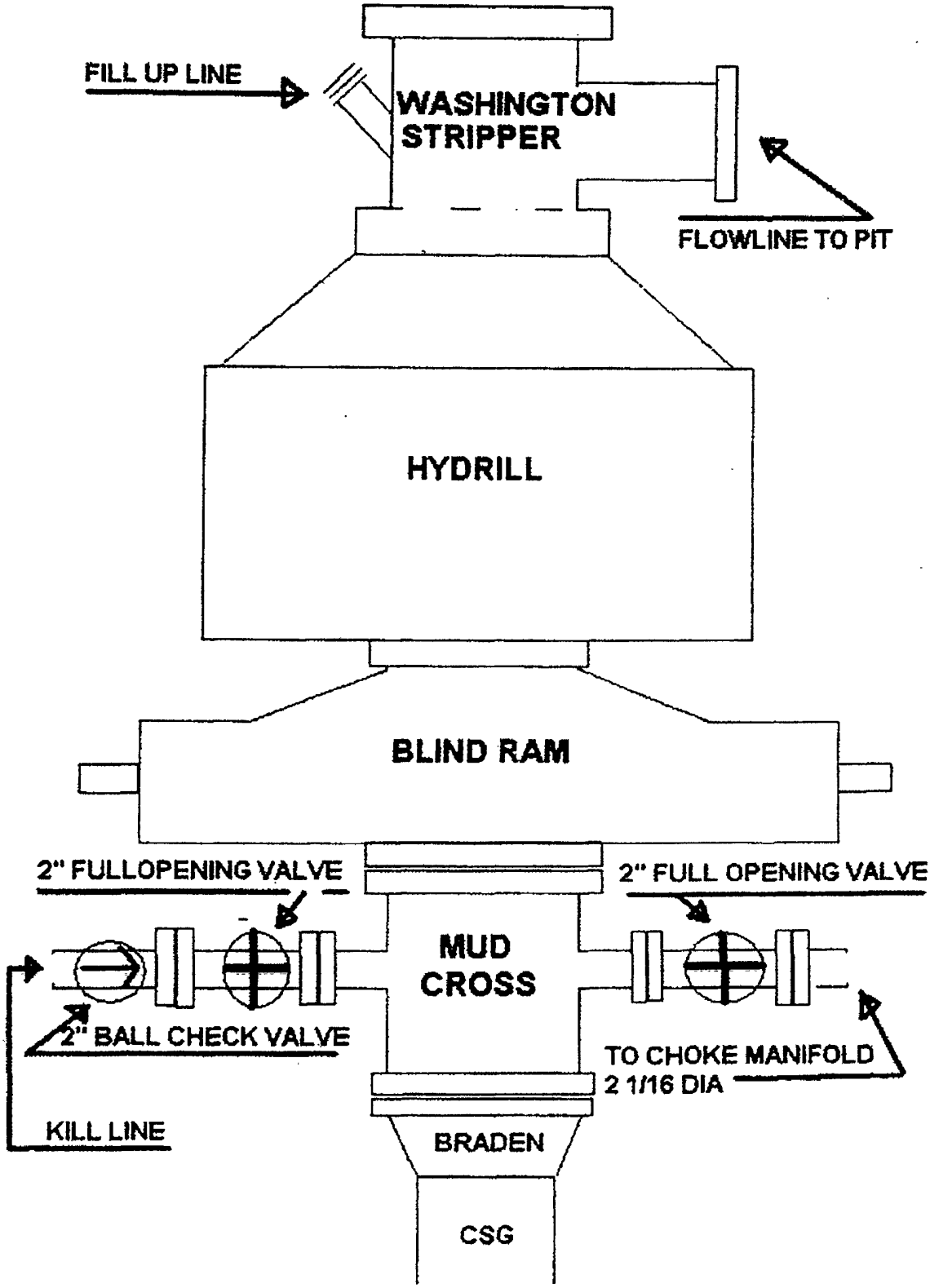
Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)
829 1	829 0	Ojo Alamo SS		0 00	
966 0	964 0	Kirtland Shale		0 00	
1,287 9	1,259.0	Fruitland Formation		0.00	
2,063 6	1,682.0	Lower Fruitland Coal		0.00	

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

TESTING PROCEDURE

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




FILL UP LINE
WASHINGTON STRIPPER
FLOWLINE TO PIT
HYDRILL
BLIND RAM
2" FULLOPENING VALVE
2" FULL OPENING VALVE
MUD CROSS
2" BALL CHECK VALVE
TO CHOKE MANIFOLD
2 1/16 DIA
KILL LINE
BRADEN
CSG