

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

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

APPLICATION FOR PERMIT TO DRILL OR REENTER

1a. Type of Work <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER		5. Lease Serial No. SF-078138
1b. Type of Well <input type="checkbox"/> Oil Well <input checked="" type="checkbox"/> Gas Well <input type="checkbox"/> Other <input checked="" type="checkbox"/> Single Zone <input type="checkbox"/> Multiple Zone		6. If Indian, Allottee or Tribe Name N/A
2. Name of Operator KTO Energy Inc.		7. Unit or CA Agreement Name and No. N/A
3a. Address 2700 Farmington Ave., Bldg. K. Ste 1 Farmington, NM		8. Lease Name and Well No. FEDERAL B #3
3b. Phone No. (include area code) 505-324-1090		9. API Well No. 30-045-32859
4. Location of Well (Report location clearly and in accordance with any State requirements)* At surface 960' 2320' FNL x 1920' FEL in Sec 28, T30N, R11W		10. Field and Pool, or Exploratory Basin DAKOTA
At proposed prod. zone same		11. Sec., T., R., M., or Blk. and Survey or Area Sec 28, T30N, R11W
14. Distance in miles and direction from nearest town or post office* Approx 5.03 air miles North of Bloomfield, NM Post Office		12. County or Parish San Juan
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drg. unit line, if any) 1165'		13. State NM
16. No. of Acres in lease 2063.26		17. Spacing Unit dedicated to this well E/2 320.08
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. 249'		20. BLM/BIA Bond No. on file
19. Proposed Depth 7150'		21. Elevations (Show whether DF, KDB, RT, GL, etc.) 54.31' 6010' Ground Elevation
22. Approximate date work will start* summer 2005		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:

- | | |
|---|--|
| 1. Well plat certified by a registered surveyor. | 4. Bond to cover the operations unless covered by an existing bond on file (see item 20 above). |
| 2. A Drilling Plan | 5. Operator certification. |
| 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). | 6. Such other site specific information and/or plans as may be required by the authorized officer. |

25. Signature Kyla Vaughan	Name (Printed/Typed) Kyla Vaughan	Date 01/24/05
Title Regulatory Compliance Tech		
Approved by (Signature) [Signature]	Name (Printed/Typed) [Signature]	Date 6-29-05
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.

*(Instructions on page 2)

HOLD C104 FOR **NSL**

APD/ROW

NMOCD

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

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

DISTRICT I
1835 N. French Dr., Hobbs, N.M. 88240

DISTRICT II
1301 W. Grand Ave., Artesia, N.M. 88210

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

DISTRICT IV
1220 South St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy, Minerals & Natural Resources Department

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

Form C-102
Revised June 10, 2003

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

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number 30045-32859	Pool Code 71599	Pool Name Basin Dakota
Property Code 34839	Property Name FEDERAL B	Well Number 3
OGRIID No. 167067	Operator Name XTO ENERGY INC.	Elevation 5937

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
B	28	30-N	11-W	2	960	NORTH	2320	EAST	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
Dedicated Acres 320.0812			Joint or Infill		Consolidation Code		Order No.		

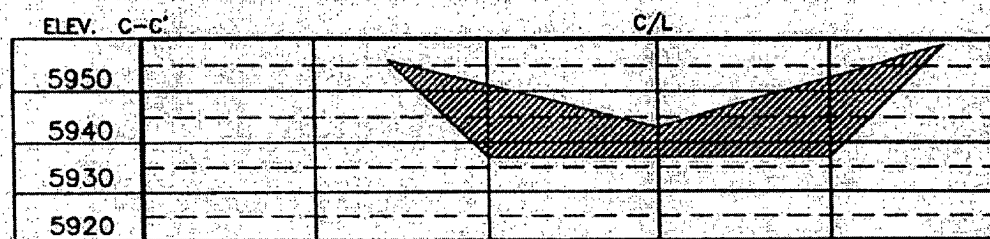
NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED
OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

<div>16</div> <div>QTR. CORNER FD 3 1/4" BC 1969 BLM</div> <div>LOT 3</div> <div>LAT: 36°47'17.0" N (NAD 27) LONG: 107°59'40.0" W (NAD 27)</div> <div>LOT 4</div> <div>LOT 5</div> <div>LOT 11</div> <div>LOT 12</div>						<div>17 OPERATOR CERTIFICATION</div> <div>I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.</div> <div><u>Kelly K Small</u> Signature</div> <div><u>Kelly K Small</u> Printed Name</div> <div><u>Drilling Assistant</u> Title</div> <div><u>5/6/05</u> Date</div>					
<div>LOT 2</div> <div>LOT 1</div> <div>SEC. CORNER FD 3 1/4" BC 1969 BLM</div> <div>LOT 6</div> <div>LOT 7</div> <div>LOT 9</div> <div>LOT 8</div> <div>LOT 14</div> <div>LOT 15</div>						<div>18 SURVEYOR CERTIFICATION</div> <div>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.</div> <div>APR 10 2005</div> <div>NEW MEXICO</div> <div>REGISTERED PROFESSIONAL SURVEYOR</div> <div>14831</div> <div>14831</div> <div>14831</div>					

LAT. = 36°47'17.0" N
LONG. = 107°59'40.0" W
NAD 27




NOTE: 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: 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.

WORKSHEET NO.	DATE	RECORD NO.
101-220-101421	12/02/04	03
ESTIMATE FILE LOCATION	05/28/05	N.Y.



Daggett Enterprises, Inc.
 Surveying and Oil Field Services
 P. O. Box 15008 • Farmington, NJ 07401
 Phone (505) 336-1772 • Fax (505) 336-6019

DATE	NEW MEXICO U.S. No. 14431
DATE	04/08/08
DATE	08/10/21/04

DATE

10/21/04

DATE

08/10/21/04

DATE

08/10/21/04

DATE

08/10/21/04

Submit 3 Copies To Appropriate District
Office
District I
1625 N. French Dr., Hobbs, NM 87240
District II
1301 W. Grand Ave., Artesia, NM 88210
District III
1000 Rio Brazos Rd., Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy, Minerals and Natural Resources

Form C-103
May 27, 2004

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

WELL API NO.
5. Indicate Type of Lease STATE <input type="checkbox"/> FEE <input type="checkbox"/>
6. State Oil & Gas Lease No. SF-078138
7. Lease Name or Unit Agreement Name: FEDERAL B
8. Well Number #3
9. OGRID Number 167067
10. Pool name or Wildcat BASIN DAKOTA

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. Type of Well: Oil Well <input type="checkbox"/> Gas Well <input checked="" type="checkbox"/> Other
2. Name of Operator XTO Energy Inc.
3. Address of Operator 2700 Farmington Ave., Bldg. K. Ste 1 Farmington, NM 87401
4. Well Location Unit Letter <u>B</u> : <u>1165</u> feet from the <u>NORTH</u> line and <u>1820</u> feet from the <u>EAST</u> line Section <u>28</u> Township <u>30N</u> Range <u>11W</u> NMPM <u>NMPM</u> County <u>SAN JUAN</u>
11. Elevation (Show whether DR, RKB, RT, GR, etc.) 6010' GL
Pit or Below-grade Tank Application <input checked="" type="checkbox"/> or Closure <input type="checkbox"/> Pit type <u>DRILL</u> Depth to Groundwater <u>>100</u> Distance from nearest fresh water well <u>1 MILE</u> Distance from nearest surface water <u>1 MILE</u> Pit Liner Thickness: <u>12</u> mil Below-Grade Tank: Volume _____ bbls; Construction Material _____

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

NOTICE OF INTENTION TO:

PERFORM REMEDIAL WORK ☐ PLUG AND ABANDON ☐
TEMPORARILY ABANDON ☐ CHANGE PLANS ☐
PULL OR ALTER CASING ☐ MULTIPLE COMPLETION ☐
OTHER: RESERVE PIT ☒

SUBSEQUENT REPORT OF:

REMEDIAL WORK ☐ ALTERING CASING ☐
COMMENCE DRILLING OPNS. ☐ PLUG AND ABANDONMENT ☐
CASING TEST AND CEMENT JOB ☐
OTHER: ☐

13. 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. For Multiple Completions: Attach wellbore diagram of proposed completion or recompletion.

See Attachment

I hereby certify that the information above is true and complete to the best of my knowledge and belief. I further certify that any pit or below-grade tank has been/will be constructed or closed according to NMOCD guidelines ☐ , a general permit ☐ or an (attached) alternative OCD-approved plan ☐

SIGNATURE Kyla Vaughan TITLE Regulatory Compliance Tech DATE 01/24/05
Type or print name Kyla Vaughan E-mail address: Kyla_Vaughan@xtoenergy.com
Telephone No. 505-324-1090

For State Use Only

APPROVED BY [Signature] TITLE DEPUTY OIL & GAS INSPECTOR, DIST. 58 DATE JUL - 1 2005
Conditions of Approval, if any: _____

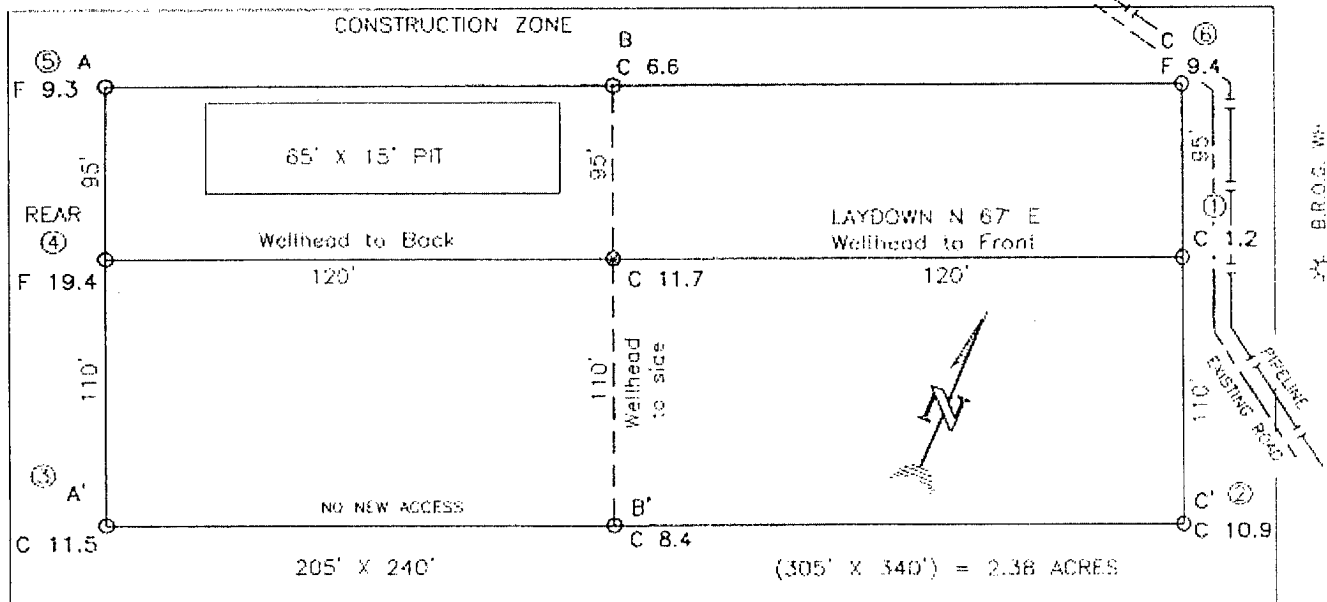
EXHIBIT D

FEDERAL B #3

XTO Energy Inc. proposes to install a lined, earthen reserve pit on location for drilling. The pit will be removed from location in accordance with New Mexico Oil Conservation division guidelines when work is completed.

XTO ENERGY INC.
 FEDERAL B NO. 3, 1165' FNL 1820' FEL
 SECTION 28, T30N, R11W, N.M.P.M., SAN JUAN COUNTY, N. M.
 GROUND ELEVATION: 6010', DATE: OCTOBER 13, 2004

LAT. = 36°47'15.1" N
 LONG. = 107°59'33.9" W
 NAD 27

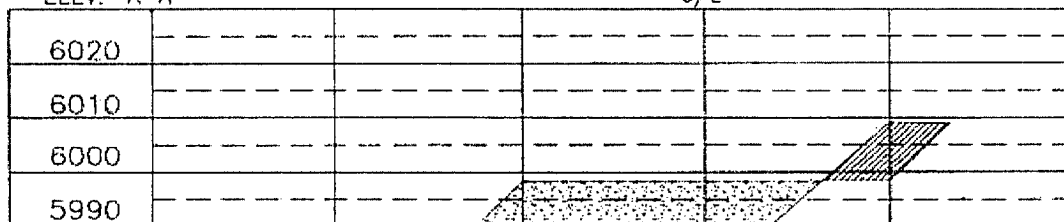


RESERVE PIT DIKE: TO BE 8" ABOVE DEEP SIDE (OVERFLOW - 3' WIDE AND 1' ABOVE SHALLOW SIDE)
 BLOW PIT: OVERFLOW PIPE HALFWAY BETWEEN TOP AND BOTTOM AND TO EXTEND OVER PLASTIC LINER AND INTO BLOW PIT

NOTE: 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.

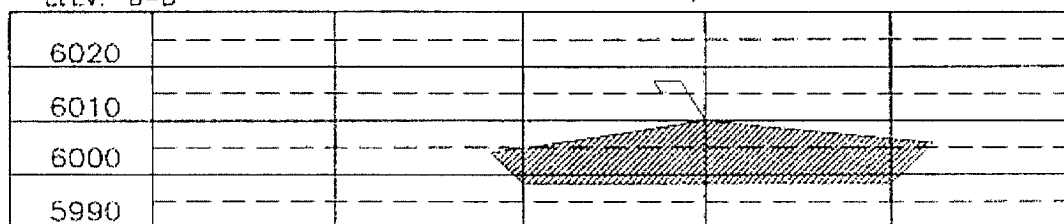
ELEV. A-A'

C/L



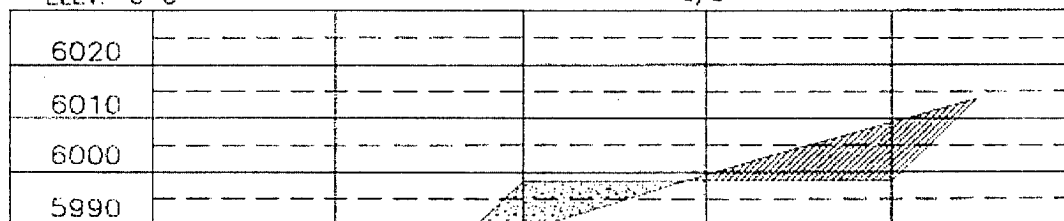
ELEV. B-B'

C/L



ELEV. C-C'

C/L



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.

DATE	12/02/04	DATE	10/21/04
WELL PAD ROTATED		WELL PAD ROTATED	
Doggett Enterprises, Inc. Surveying and Oil Field Services P.O. Box 15068 - Farmington, NM 87401 Phone (505) 335-1312 - Fax (505) 335-5010 NEW MEXICO U.S. No. 14831		DRAWN BY: G.H. CHECKED BY: G.H.	

EXHIBIT E

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

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

SUNDRY NOTICES AND REPORTS ON WELLS

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

SUBMIT IN TRIPLICATE - Other instructions on reverse side

1. Type of Well

☐ Oil Well ☒ Gas Well ☐ Other

2. Name of Operator

XTO Energy Inc.

3a. Address

2700 Farmington Ave., Bldg. K, Ste 1 Farmington, NM

3b. Phone No. (include area code)

505-224-1090

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

1,165' FNL X 1,820' FEL in Sec. B28, T30N, R11W (Old Location)

960' FNL X 2,320' FEL in Sec. B28, T30N, R11W (New Location)

5. Lease Serial No.

SF-078138

6. If Indian, Allottee or Tribe Name

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

8. Well Name and No.

FEDERAL "B" #3

9. API Well No.

3004532859

10. Field and Pool, or Exploratory Area

Basin Dakota

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

☐ Notice of Intent
☒ Subsequent Report
☐ Final Abandonment Notice

TYPE OF ACTION

☐ Acidize ☐ Deepen ☐ Production (Start/Resume) ☐ Water Shut-Off
☐ Alter Casing ☐ Fracture Treat ☐ Reclamation ☐ Well Integrity
☐ Casing Repair ☐ New Construction ☐ Recomplete ☐ Other
☒ 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 recompleat 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 recompleat 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.)

XTO Energy Inc. filed the APD for the above mentioned well on 01/24/05. The APD is currently in the process of being approved. The original location of the wellsite was in an area of ecological disturbance. The wellsite has now been moved and the plats have been revised to show the new location.

A copy of the new plats are attached for your review. Please attach the revised plats to the APD.

Original Location: 1,165' FNL x 1,820' FEL in Sec. B28, T30N, R11W

New Location: 960' FNL x 2,320' FEL in Sec. B28, T30N, R11W

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

Kelly K. Small

Title

Drilling Assistant

Date 05/06/05

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by

Title

Date

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 these rights in the subject lease which would entitle the applicant to conduct operations thereon.

Office

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.

Federal "B" #3

APD Data

January 24, 2005

Location: 1,165' FNL x 1,820' FEL Sec 28, T30N, R11W

County: San Juan

State: New Mexico

GREATEST PROJECTED TD: 7,150'

APPROX GR ELEV: 6,010'

OBJECTIVE: Basin Dakota

Est KB ELEV: 6,022' (12' AGL)

1. MUD PROGRAM:

INTERVAL	0' to 360'	360' to 4,000'	4,000' to TD
HOLE SIZE	12-1/4"	7-7/8"	7-7/8"
MUD TYPE	FW/Spud Mud	FW/Polymer	LSND / Gel Chemical
WEIGHT	8.6-9.0	8.4-8.8	8.6-9.0
VISCOSITY	28-32	28-32	45-60
WATER LOSS	NC	NC	8-10

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.

2. CASING PROGRAM:

Surface Casing: 8-5/8" casing to be set at $\pm 360'$ in a 12-1/4" hole filled with 8.8 ppg mud

Interval	Length	Wt	Gr	Cplg	Coll Rating (psi)	Burst Rating (psi)	Jt Str (M-lbs)	ID (in)	Drift (in)	SF Coll	SF Burst	SF Ten
0'-360'	360'	24.0#	J-55	STC	1370	2950	244	8.097	7.972	7.32	7.95	29.39

Production Casing: 5-1/2" casing to be set at TD ($\pm 7,150'$) in 7-7/8" hole filled with 9.0 ppg mud.

Interval	Length	Wt	Gr	Cplg	Coll Rating (psi)	Burst Rating (psi)	Jt Str (M-lbs)	ID (in)	Drift (in)	SF Coll	SF Burst	SF Ten
0'-TD	7,150'	15.5#	J-55	STC	4040	4810	222	4.950	4.825	1.22	1.45	2.02

202

3. WELLHEAD:

- A. Casing Head: Larkin Fig 92 (or equivalent), 9" nominal, 2,000 psig WP (4,000 psig test) with 8-5/8" 8rnd thread on bottom and 11-3/4" 8rnd thread on top.
- B. Tubing Head: Larkin Fig 612 (or equivalent), 6.456" nominal, 2,000 psig WP (4,000 psig test), 5-1/2" 8rnd female thread on bottom, 8-5/8" 8rnd thread on top.

EXHIBIT F

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

A. Surface: 8-5/8", 24#, J-55, STC casing to be set at $\pm 360'$ in 12-1/4" hole.

210 sx of Type III cement (or equivalent) typically containing accelerator and LCM, mixed at 14.5 ppg, 1.39 ft³/sk, & 6.70 gal wtr/sk.

Total slurry volume is 297 ft³, 100% excess of calculated annular volume to 360'.

B. Production: 5-1/2", 15.5#, J-55 (or K-55), STC casing to be set at $\pm 7,150'$ in 7-7/8" hole. DV Tool set @ $\pm 4,000'$

1st Stage

LEAD:

225 sx of Premium Lite HS (Type III/Poz/Gel) with 2% salt, 1/4 pps cello, 0.2% dispersant, 0.5% fluid loss & 2% LCM mixed at 12.5 ppg, 2.01 ft³/sk, 10.55 gal wtr/sx.

TAIL:

150 sx Type III with 5% bonding additive, 1/4 pps cello, 2% LCM, 0.3% dispersant & 0.2% fluid loss mixed at 14.2 ppg, 1.54 cuft/sx, 8.00 gal/sx.

2nd Stage

LEAD:

410 sx of Type III with 8% gel, 1/4 pps cello & 2% LCM mixed at 11.9 ppg, 2.54 ft³/sk, 15.00 gal wtr/sx.

TAIL:

100 sx Type III neat mixed at 14.5 ppg, 1.39 cuft/sx, 6.3 gal/sx.

Total estimated slurry volume for the 5-1/2" production casing is 1,863 ft³.

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

5. LOGGING PROGRAM:

A. Mud Logger: The mud logger will come on at 5,000' and will remain on the hole until TD. The mud will be logged in 10' intervals.

B. Open Hole Logs as follows: Run Array Induction/SFL/GR/SP fr/TD (7,200') to the bottom of the surface csg. Run Neutron/Lithodensity/Pe/GR/Cal from TD (7,200') to 5,000'.

6. **FORMATION TOPS:**

Est. KB Elevation: 6,022'

Formation	Subsea Depth	Well Depth
Ojo Alamo SS	+5109'	913'
Kirtland Shale	+4960'	1062'
Farmington SS	+4860'	1162'
Fruitland Formation	+3970'	2052'
Lower Fruitland Coal	+3870'	2152'
Pictured Cliffs SS	+3670'	2352'
Lewis Shale	+3458'	2564'
Chacara	+2624'	3398'
Cliffhouse SS	+1980'	4042'
Menefee	+1890'	4132'
Point Lookout SS	+1346'	4676'
Mancos Shale	+1000'	5022'
Gallup SS	+95'	5927'
Greenhorn Limestone	-650'	6672'
Graneros Shale	-700'	6722'
1 st Dakota SS	-755'	6777'
2 nd Dakota SS	n/a	n/a
3 rd Dakota SS	-800'	6822'
4 th Dakota SS	n/a	n/a
5 th Dakota SS	-850'	6872'
6 th Dakota SS	-920'	6942'
Burro Canyon SS	-980'	7002'
Morrison Shale	-1010'	7032'
Project TD	-1110'	7150'

7. **COMPANY PERSONNEL:**

Name	Title	Office Phone	Home Phone
Jeff Patton	Drilling Engineer	505-324-1090	505-632-7882
Dennis Elrod	Drilling foreman	505-486-6460	505-326-2024
Red Meek	Project Geologist	817-885-2800	817-427-2475
Barry Voigt	Reservoir Engineer	817-885-2462	817-540-2092

JWP
1/24/05

EXHIBIT F

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

TESTING PROCEDURE

1. Test BOP after installation:

Pressure test BOP to 200-300
psig (low pressure) for ~~5~~¹⁰ min.

Test BOP to Working Press or
to 70% internal yield of surf csg
(10 min) or which ever is less.

2. Test operation of (both) rams on every trip.

3. Check and record Accumulator pressure on every tour.

4. Re-pressure test BOP stack after changing out rams.

5. Have kelly cock valve with handle available.

6. Have safety valve and subs to fit all sizes of drill string on the rig floor and ready to go.

ROTATING HEAD
(OPTIONAL)

FILL UP LINE

FLOW LINE
TO PIT

PIPE
RAMS

BLIND
RAMS

KILL LINE
2" dia min.

TO CHOKE
MANIFOLD
2" dia min.

See Choke Manifold drawing for
specifications

HCR VALVE (OPTIONAL)

MUD CROSS

2" (MIN) FULL OPENING
VALVE

** Remove check or ball
from check valve and
press test to same press
as BOP's. **

EXHIBIT F

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

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.

TESTING PROCEDURE

