

DATE IN 4/11/08	SUSPENSE 4/21/08	ENGINEER W Jones	LOGGED IN 4/11/08	TYPE SWD	APP NO. PKVR0810256532
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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



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

RECEIVED
 2008 APR 11 PM 3 26

[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.

Anne Jones
 Print or Type Name

Anne Jones
 Signature

Land Surface Coordinator
 Title
 anne_jones@xtoenergy.com

4/10/08
 Date

e-mail Address



382 Road 3100 Aztec, New Mexico 87410
Phone: (505) 333-3100 FAX: (505) 333-3280

April 10, 2008

State of New Mexico
Oil Conservation Division
Mr. William Jones
1220 South Saint Francis Drive
Santa Fe, New Mexico 87505

Re: Salt Water Disposal Application
Canyon SWD #1
Section 35, Township 26 North, Range 11 West, NMPM
San Juan County, New Mexico

Dear Mr. Jones:

XTO Energy Inc. is applying for the referenced salt-water disposal Well. Enclosed please find one original and one copy of the complete application. A copy has been furnished to the Aztec OCD Office and the Farmington BLM Office.

Should you require further documentation please feel free to call my office 505-333-3213 or e-mail anne_jones@xtoenergy.com and I will be happy to furnish any additional information.

Mr. Loren Fothergill is the engineer in charge should you need clarification of engineering data and is available at the number listed above.

Thank you for your prompt attention to this matter.

Yours truly,

A handwritten signature in black ink, appearing to read "Anne Jones".

Anne Jones
Land Surface Coordinator

CC: Aztec OCD
BLM - Farmington

XTO ENERGY, INC.
CANYON SWD #1
845' FSL & 1945' FWL
SEC. 35, T. 26 N., R. 11 W.
SAN JUAN COUNTY, NEW MEXICO

- I. Purpose is produced water disposal.
- II. Operator is: XTO Energy, Inc. OGRID 5380 (formerly Cross Timbers Operating Company)
Operator phone number is: (505) 333-3100
- III. Operator address is: 382 CR 3100
Aztec, NM 87410
Contact is: Loren Fothergill, Engineer, Phone is (505) 333-3100
- IV. Lease number is NMNM-012759 and contains 160.0 acres.
Lease is located in the SW/4 of Section 35, T26N, R11W.

The proposed Canyon SWD #1 is 845' from the closest lease line. Maps indicating all leases (fee or BLM) within a half mile and within 2 miles are attached as Exhibit "A".

Well name and number will be the Canyon SWD #1 and is located 845' FSL and 1,945' FWL Sec. 35, T26N, R11W, NMPM, San Juan County, New Mexico
Disposal zone will be Mesaverde Point Lookout sandstone. Fracture gradient is expected to be a normal ≈ 0.65 psi per foot.

- V. Exhibit "B" is a map attached indicating two producing wells, one proposed well location within a one half mile radius and all wells within a two mile radius. Within the area of review both of the producing wells penetrate the Mesaverde Point Lookout. The Gallegos #13E is the closest well to the proposed Canyon SWD #1 and is the deepest at 6,401'. There are no plugged and abandoned wells within the area of review. Cement information for both wells is included as Exhibit "B-1".

<u>OPERATOR</u>	<u>WELL</u>	<u>LOCATION ((26N-11W)</u>	<u>ZONE</u>	<u>TD</u>	<u>STATUS</u>
XTO	Gallegos #13E	NWSE Sec 35	Mancos/Dakota	6405	PGW
<u>OPERATOR</u>	<u>WELL</u>	<u>LOCATION ((25N-11W)</u>	<u>ZONE</u>	<u>TD</u>	<u>STATUS</u>
CONOCO/PHILLIPS	Erin Stays Com #1E	NENW Sec 2	Dakota	6130	PGW

According to the records in the Office of the State Engineer, Carson Living Waters is the owner of a fresh water well, indicated on Exhibit "C", and is $\pm 1,800'$ from the proposed disposal well. The well was drilled in 1997 to a depth of 275 'water depth is shown as 165'. The Office of the State Engineer's records indicated there were no other water wells within the two mile radius of the proposed well. The water from the well was analyzed with the following results:

Sodium	Bicarbonate	Potassium	Calcium	Chloride	Iron	Magnesium	pH	Sulfate	TDS
1356	610	6	16	900	0	17	7.7	1250	4156

No existing underground drinking water sources are below the Mesaverde within a two mile radius. Underground sources of drinking water above the Mesaverde are generally alluvial and average 165' deep. The deepest bedrock aquifer is the Ojo

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CANYON SWD #1
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Alamo sandstone, base of which is at 687'. There will be $\approx 3,682'$ vertical separation between the bottom of the lowest underground drinking water source and the top of the Mesaverde Point Lookout. XTO is not aware of any geologic or engineering data which may indicate the Mesaverde is in hydrologic connection with any underground sources of water.

- VI. The Canyon SWD #1 has not yet been drilled. It will be drilled for the exclusive purpose of water disposal from present and future XTO wells indicated on Exhibit "D". Water analyses from the Basin Dakota, Gallup, Fruitland Coal, and Pictured Cliffs are attached as Exhibit "E".

Zone	Sodium	Bicarbonate	Calcium	Chloride	Iron	Magnesium	pH	Sulfate	TDS
Fruitland Coal	8684	529	24	13300	0	37	7.3	0	22637
Fruitland Coal	12831	407	68	20000	0	46	7.0	0	33552
Fruitland Coal	190344	141	1280	300000	0	781	6.2	0	49457
Fruitland Coal	18788	691	80	29000	0	39	7.0	0	48768
Pictured Cliffs	16600	366	100	25800	0	32	6.8	0	43038
Dakota	14606	203	40	22800	0	34	7.6	0	37914
Gallup	12254	945	432	17000	104.60	0	7.7	2881	33617

Wellbore has not yet been perforated since it has not been drilled. The current perforation plan is from $\approx 4,000'$ to $\approx 4,100'$ (logs will determine exact interval after drilling). Top of the Mesaverde sandstone (Cliff House) is at $\approx 2,995'$ and top of the Point Lookout section is at $\approx 3,958'$. Oil and gas are produced elsewhere in the San Juan Basin from this formation. Closest Mesaverde field is the Angel Peak Gallup Mesaverde which is ≈ 11.33 miles North and East in the Huerfano Unit #28. Bottom of the closest overlying productive formation Pictured Cliffs is at ≈ 4.81 miles West at a depth of 1,250' in the Windfall #1. There will be minimum 2,227' interval between highest injection perforation and bottom of the Pictured Cliffs. XTO will attempt to swab load water back after the acid job and then catch a Mesaverde water sample. If successful, then the analysis will be provided to the NMOCD). In general, Mesaverde water near recharge zones (basin fringe) has a specific conductance of $<1,500 \mu\text{mhos}$. Stone et al in Hydrogeology and water resources of San Juan Basin, New Mexico state, "Generally, however, water from the Mesaverde is not suitable for drinking, especially in deeper parts of the basin." Summaries of analyses of Mesaverde produced water follow. The samples (see Exhibit "F") are from XTO's Dawson Federal #1B at SWNW Sec. 6, T29N-R8W, Federal Gas Com #4, at NESW Sec 27, T27N-R10W.

XTO ENERGY, INC.
 CANYON SWD #1
 845' FSL & 1945' FWL
 SEC. 35, T. 26 N., R. 11 W.
 SAN JUAN COUNTY, NEW MEXICO

<u>Parameter</u>	<u>Dawson Federal 1B</u>	<u>Federal Gas Com. #4</u>
Bicarbonate	976	1342
Calcium	60	180
Chloride	18000	11800
Iron	0	0
Magnesium	12	27
pH	7.1	7.5
Sodium	11901	7103
Sulfate	0	65
Specific Gravity	1.015	1.015
Total Dissolved Solids	31017	21917

VII. This is not an expansion of an existing injection project.

- VIII. 1. Average injection rate \approx 3,000 bwpd. Maximum \approx 5,000 bwpd.
 2. System will be open (water will be trucked). Facilities will include skimmer tank, 300 bbl oil tank, 6 - 500 barrel settling tanks, 5- 500 barrel storage tanks, centrifugal charge pump, two filtering systems (housed) for injection pump suction, and a house for the injection pump may also be installed. A security fence will surround the facility.
 3. Average injection pressure \approx 800 psi.

IX. The Mesaverde sandstone is a very porous and permeable sandstone. It produces oil and gas elsewhere in the Basin. The gross estimated thickness of the Mesaverde is 1,160' thick in the wellbore. The Point Lookout gross thickness is 197'. Top is \approx 3,958' and bottom is \approx 4,155'. Estimated wellbore formation tops are:

Alluvium: 0'
 Nacimiento Mudstone & Sandstone:
 Ojo Alamo Sandstone: 500'
 Kirtland Shale: 608'
 Farmington Sandstone: '
 Fruitland Formation: 945'
 Lower Fruitland Coal: 1,441'
 Pictured Cliffs Sandstone: 1,460'
 Lewis Shale: 1,731'
 Chacra Sandstone: 2,231'
 Cliffhouse Sandstone: 2,995'
 Menefee Formation: 3,021'
 Point Lookout Sandstone: 3,958'
 Mancos Shale: 4,155'
 Total Depth: 4,200'

XTO ENERGY, INC.
CANYON SWD #1
845' FSL & 1945' FWL
SEC. 35, T. 26 N., R. 11 W.
SAN JUAN COUNTY, NEW MEXICO

Surface Casing 9.625", 36#, J-55, ST&C will be set at $\pm 1,220'$ in a 12.25" hole and cemented to the surface with ± 541 sacks (100% excess) 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 752 ft³, 100% excess of calculated annular volume to 1,200'. Top will be determined by visual observation.

Production Casing 7", 23.0#, J-55 (or K-55), ST&C will be set at $\pm 4,200'$ in a 8.75" hole with DV tool @ $\pm 2,950'$.

Cement 1st Stage

Lead: with ± 16 sx Premium Lite HS (Type III/Poz/Gel) or equivalent with dispersant fluid loss, accelerator & LCM mixed at 12.5 ppg. 2.01 ft³/sk, 10.55 gal wtr/sx.

Tail: 150 sx type III or equivalent cement with bonding additive, LCM, dispersant & fluid loss mixed at 14.2 ppg, 1.54 cuft/sx, 8.00 gal/sx.

Cement 2nd Stage

Lead: ± 201 sx of Type III or equivalent cement with 8% gel & 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 912 ft³.

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.

Casing will be hydraulically pressure tested before perforating.

Tubing will be 2-7/8" 6.5# internal plastic lined injection string. It will be set at $\approx 3,900'$ (disposal interval will be $\approx 4,000'$ to $\approx 4,100'$).

If a permanent packer is used, then a Baker Model D packer or its equivalent will be set at $\approx 3,900'$ (which will be $\approx 85'$ above top perforation) with an anchor seal assembly stung into the packer. If a retrievable packer is used, then a Baker Lok-set packer or its equivalent with an on/off tool assembly will be set at $\approx 3,900'$. Disposal interval will be $\approx 4,000'$ to $\approx 4,100'$ (well logs will determine exact interval after drilling).

The well will be perforated (0.40") with four shots per foot.

The well will be stimulated with $\approx 1,000$ to $\approx 1,500$ gallons of 15% HCL acid. If needed, a small cross linked gel water sand frac job will be done.

XTO ENERGY, INC.
CANYON SWD #1
845' FSL & 1945' FWL
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Array Induction/SFL/GR/SP will be ran from TD (4,200') to the bottom of the surface casing. Neutron/Lithodensity/Pe/GR/Cal will be ran from TD (4,200') to 3,000'. Copies will then be provided to the NMOCD.

- X. Notice (this application) has been sent to Burlington Resources Oil & Gas Company, Inc. (Conoco/Phillips) operator of the Erwin Stays Com No. 1E, the only non XTO operated well within the area of review of the proposed SWD. A copy of the letter with Postal Certification of delivery is attached as Exhibit "G". A legal ad (see Exhibit "H") was published on Wednesday, March 12, 2008, in the Farmington Daily Times.

LEASES WITHIN 2 MILE AND 1/2 MILE RADIUS
XTO ENERGY INC.

PROPOSED CANYON SWD #1 WELL

EXHIBIT "A"

NMSF 0077937

18

NMSF 0080425B

NMSF 0077933

19

NMSF 0081051

NMSF 0080425

26 N 10 W

NMNM 0002890

30

NMNM 0002890

NMSF 0078372

31

NMSF 0080373

6

NMNM 008007

7

25 N 10 W

NMNM 020307

19

16

NMNM

13

NMSF 0078899A

NMSF 0078641

21

22

23

24

NMSF 0078899A

NMSF 0078899

26 N 11 W

NMSF 0078937

NMSF 0078978

28

27

26

25

NMSF 0081186A NMNM 0089656

fee

I 49-Ind-7971

NMSF 0078978

NMNM 012758

NDOC

14-20-3621

NDOC

14-20-3622

NDOC

14-20-3623

NDOC

14-20-4321

Canyon SWD #1

NMNM 012759

NDOC

14-20-3024

EO-3148

LO
4334

B1
894

NDOC

14-20-3602

NDOC

14-20-3601

NDOC

14-20-3599

NDOC

14-20-3598

NMNM 003778

LG
0296

NMNM 016467

NMSF 0078978

NMSF 0080373

6

NDOC
14-20-3600

NDOC

14-20-3596

NDOC

14-20-3597

NMNM 008405

NMNM 0468006

NDOC
14-20-3606

NDOC

14-20-3609

NDOC

14-20-3608

NDOC 14-
20-3782

NDOC

14-20-3783

NMNM 008007

7

9

NMNM 011088

NDOC

14-20-3610

NDOC

14-20-3607

NDOC 14-
3411

25 N 11 W

NMNM 0468006

NMSF 0078228B

16

NMNM 0036253

15

14

NMSF 0078978

13

18

21

NMNM 10030522

23

NMNM 096042

NMNM 023063

24

19

EXHIBIT "B"

26N 11W

26N 10W

25N 10W

25N 11W

XTO ENERGY INC.

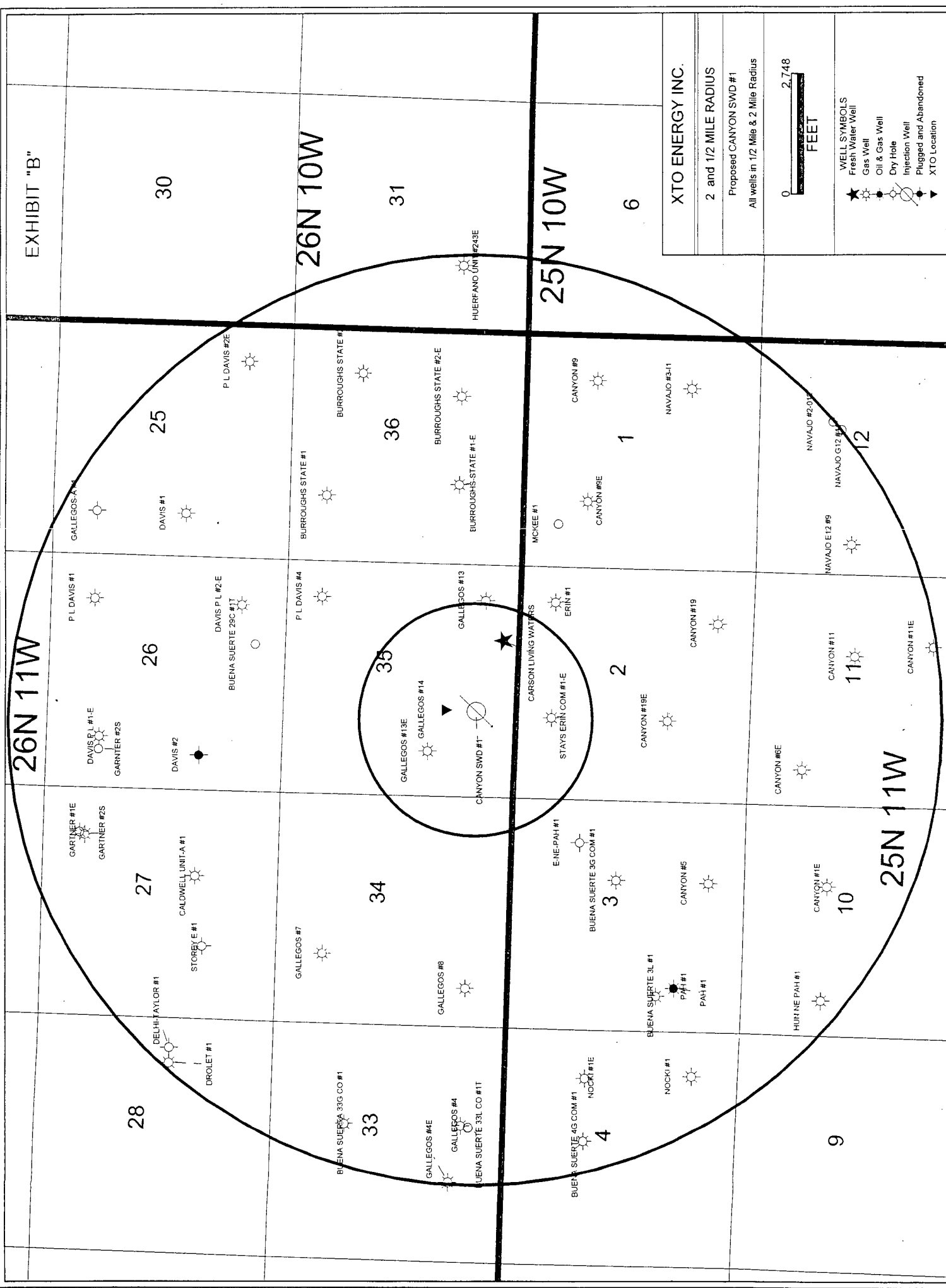
2 and 1/2 MILE RADIUS

Proposed CANYON SWD #1

All wells in 1/2 Mile & 2 Mile Radius



- WELL SYMBOLS
- ★ Fresh Water Well
 - ☼ Gas Well
 - ⊙ Oil & Gas Well
 - ⊖ Dry Hole
 - ⊕ Injection Well
 - ⊗ Plugged and Abandoned
 - ▲ XTO Location

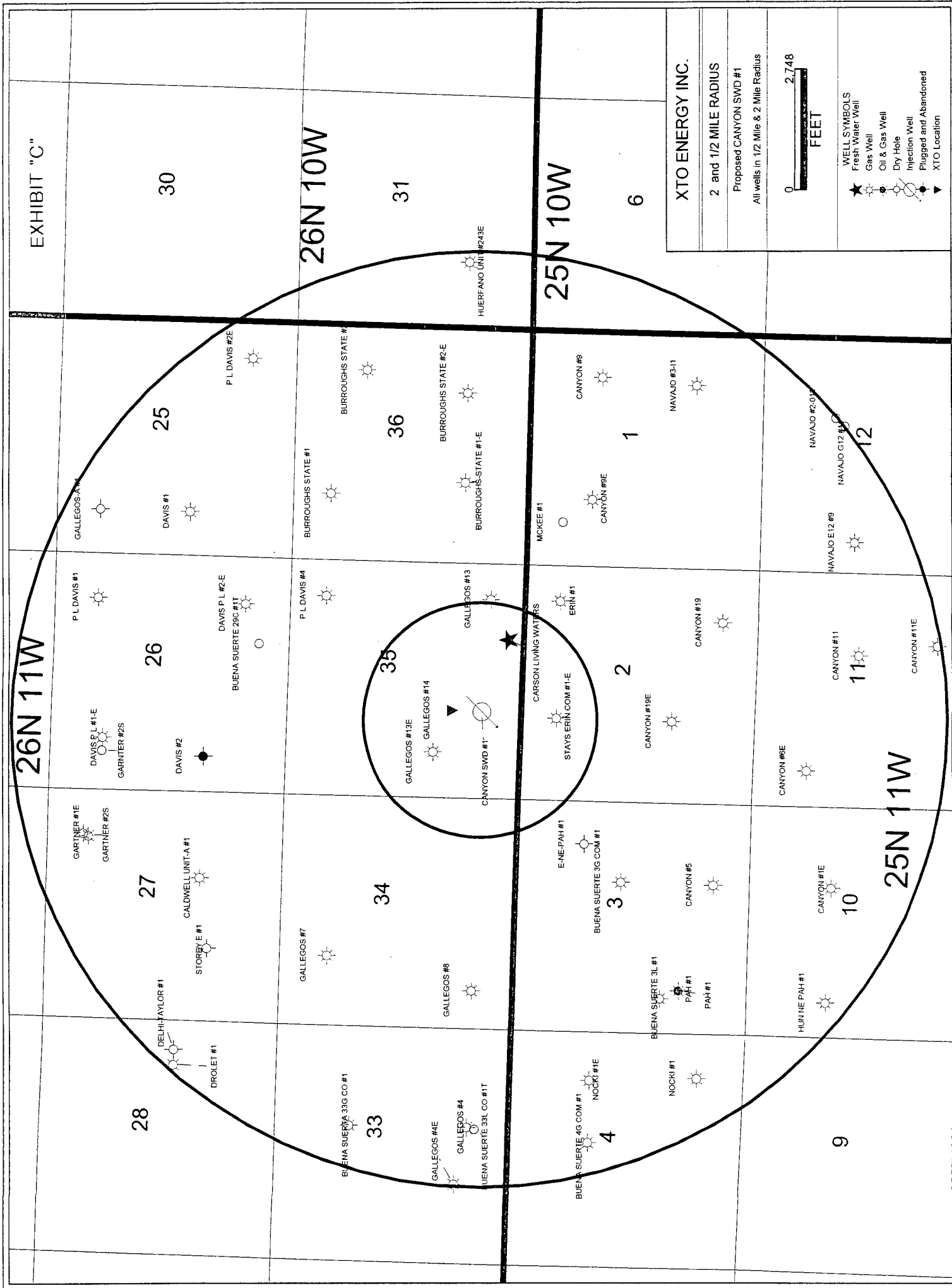


Cement Information
Wells within 1/2 Mile of Proposed Canyon SWD #1
Penetrating MesaVerde

EXHIBIT "B-1"

<u>OPER</u>	<u>API #</u>	<u>WELL</u>	<u>LOCATION</u>	<u>DATE DRILLED</u>	<u>DATE COMPLETED</u>	<u>ZONE</u>	<u>TD</u>	<u>STATUS</u>	<u>CASING SIZE</u>	<u>CASING DEPTH</u>	<u>CEMENT VOLUMES</u>	<u>CEMENT TOPS</u>	<u>Mtd Det TOPS</u>
XTO	30-045-34008	Gallegos 13E	NW/SW Sec 35 T26N- R11W 1890' FSL & 1020' FWL	2/18/2007	4/24/2007	Wildcat Basin Mancos	6397	PGW	8 5/8" 5 1/2"	374' 6397'	275 SX 760 sx	Surface	Circ cmt to surf
Conoco/ Phillips	30-045-24273	Erin Stays Com #1E	NE/NW Sec 2 T25N-R11W 790 FNL & 1805 FWL	4/7/1980	4/22/1980	Basin Dakota	6130	PGW	8 5/8" 4 1/2"	561' RKB 6130' RKB	300 SX 650 SX	1580' by CBL Perf sqz hole # 1,448'	CBL SQZ by circ cmt to surf

No Circ on bottom of DV
but Calc To Circ @ 80 ft
No. ≈ OK !!



XTO ENERGY INC.

2 and 1/2 MILE RADIUS

Proposed CANYON SWD #1
All wells in 1/2 Mile & 2 Mile Radius



- WELL SYMBOLS
- Fresh Water Well
 - Gas Well
 - Oil & Gas Well
 - Dry Hole
 - Injection Well
 - Plugged and Abandoned
 - XTO Location

HALLIBURTON

Water Analysis Report

*Fresh water
Well*

FLMM #: 7896

Well Name: Living Waters Gallegos #8 Berger A 2 S Gallegos #13 E

Specific Gravity	1.005	1.015	1.025	1.030
Water pH	7.7	7.3	7.0	7.6
Resistivity @ 70°F	3.1	0.4	0.3	0.3
Iron (mg/L)	0	0	0	0
Potassium (mg/L)	6	63	200	230
Sodium (mg/L)	1356	8684	12831	14606
Calcium (mg/L)	16	24	68	40
Magnesium (mg/L)	17	37	46	34
Chlorides (mg/L)	900	13300	20000	22800
Sulfates (mg/L)	1250	0	0	0
Carbonates (mg/L)	0	0	0	0
Bicarbonates (mg/L)	610	529	407	203
TDS (mg/L)	4156	22637	33552	37914

Respectfully: Colt A. Kalcich

Title: Lab Technician

HALLIBURTON

Water Analysis Report

FLMM #:	7899	7901	7902
Well Name:	Fullerton Fed 2J	Scott E Fed 25-13	Fullerton Fed 10
Specific Gravity	1.005	1.030	1.030
Water pH	5.3	6.8	7.0
Resistivity @ 70°F	4.4	0.3	0.2
Iron (mg/L)	10	0	0
Potassium (mg/L)	13	140	170
Sodium (mg/L)	1832	16600	18788
Calcium (mg/L)	12	100	80
Magnesium (mg/L)	41	32	39
Chlorides (mg/L)	3000	25800	29000
Sulfates (mg/L)	0	0	0
Carbonates (mg/L)	0	0	0
Bicarbonates (mg/L)	0	366	691
TDS (mg/L)	4908	43038	48768

Respectfully: Colt A. Kalcich

Title: Lab Technician

NOTICE: This report is limited to the described sample tested. Any person using or relying on this report agrees that Halliburton shall not be liable for any loss or damage whether due to act or omission resulting from such report or its use.

HALLIBURTON

Water Analysis Report

To: XTO Date: 7/24/2007
Submitted by: Halliburton Energy Services Date Rec: 7/24/2007
Attention: John Mulnix Report #: FLMM7916
Well Name: Scott E Fed 22-11 #36-1 Formation: FC

Specific Gravity	1.200	
pH	6.2	
Resistivity	0.10	@ 70° F
Iron (Fe)	0	Mg / L
Potassium (K)	2000	Mg / L
Sodium (Na)	190344	Mg / L
Calcium (Ca)	1280	Mg / L
Magnesium (Mg)	781	Mg / L
Chlorides (Cl)	300000	Mg / L
Sulfates (SO4)	0	Mg / L
Carbonates (CO3)	0	Mg / L
Bicarbonates (HCO3)	141	Mg / L
Total Dissolved Solids	494547	Mg / L

Respectfully: Colt A. Kalcich
Title: Lab Technician
Location: Farmington, NM

NOTICE: This report is limited to the described sample tested. Any person using or relying on this report agrees that Halliburton shall not be liable for any loss or damage whether due to act or omission resulting from such report or its use.



Bio Tech, Inc.

Water Analysis Form

Operator : XTO

Date : 07/20/04

Lease : Garner- Gartzner

County : San Juan

Wellid : 1E

State : NM

Bio Tech Dist : OKC

Requested By : L. Westmoreland

Lab Measurements

Oxygen	<u>1.4</u>	<u>mg/L</u>
Carbon Dioxide	<u>160</u>	<u>mg/L</u>
Bicarbonate	<u>945</u>	<u>mg/L</u>
Hydrogen Sulfide	<u>2.0</u>	<u>mg/L</u>
pH	<u>7.7</u>	
Temperature	<u>72</u>	<u>°F</u>
Iron	<u>104.60</u>	<u>mg/L</u>
Oil in Water	<u>n/a</u>	<u>mg/L</u>

Specific Gravity	<u>1.0210</u>	
Total Dissolved Solids (TDS)	<u>Calc. 33,617</u>	<u>mg/L</u>
Barium	<u>0</u>	<u>mg/L</u>
Sulfate	<u>2,881</u>	<u>mg/L</u>
Chloride	<u>17,000</u>	<u>mg/L</u>
Total Hardness	<u>1,080</u>	<u>mg/L</u>
Calcium Hardness	<u>1,080</u>	<u>mg/L</u>

Cations (+)	mg/L	mEq/L
Barium (Ba)	0	0.00
Calcium (Ca)	432	21.60
Magnesium (Mg)	0	0.00
Sodium (Na) <small>Calc.</small>	12,254	532.79
Iron (Fe) <small>Total</small>	104.60	3.75

Anions (-)	mg/L	mEq/L
Carbonate (CO ₃)	0	0.00
Bicarbonate (HCO ₃)	945	15.49
Chloride (Cl)	17,000	478.87
Sulfate (SO ₄)	2,881	60.02

Probable Scale Composition

Compound	mEq/L	mg/L	Saturation mg/L	Scale Formation Potential @ 70°F
Barium Sulfate	0.00	0	2.40	Scale Formation Potential Exists
Calcium Carbonate	15.49	1,255	13.00	
Calcium Sulfate	6.11	416	2090	

*Basin Data
Gallegos Gallego*

HALLIBURTON

Water Analysis Report

To: XTO
Submitted by: Halliburton Energy Services
Attention: Loren Fothergill
Well Name: Dawson Federal 1B

Date: 5/19/2006
Date Rec: 5/17/2006
Report #: FLMM6506

Specific Gravity	1.015	
pH	7.1	
Resistivity	0.29	@ 70° F
Iron (Fe)	0	Mg / L
Potassium (K)	68	Mg / L
Sodium (Na)	11901	Mg / L
Calcium (Ca)	60	Mg / L
Magnesium (Mg)	12	Mg / L
Chlorides (Cl)	18000	Mg / L
Sulfates (SO ₄)	0	Mg / L
Carbonates (CO ₃)	0	Mg / L
Bicarbonates (HCO ₃)	976	Mg / L
Total Dissolved Solids	31017	Mg / L

Respectfully: Holly Lopez
Title: Lab Technician
Location: Farmington, NM

NOTICE: This report is limited to the described sample tested. Any person using or relying on this report agrees that Halliburton shall not be liable for any loss or damage whether due to act or omission resulting from such report or its use.

HALLIBURTON

Water Analysis Report

To:	<u>XTO</u>	Date:	<u>12/27/2005</u>
Submitted by:	<u>Halliburton Energy Services</u>	Date Rec:	<u>12/26/2005</u>
Attention:	<u>Jimmy Costalez</u>	Report #:	<u>FLMM5B76</u>
Well Name:	<u>Federal Gas Com #4</u>	Formation:	<u>Mesa Verde</u>

Specific Gravity	1.015	
pH	7.5	
Resistivity	0.33	@ 70° F
Iron (Fe)	0	Mg / L
Potassium (K)	1400	Mg / L
Sodium (Na)	7103	Mg / L
Calcium (Ca)	180	Mg / L
Magnesium (Mg)	27	Mg / L
Chlorides (Cl)	11800	Mg / L
Sulfates (SO4)	65	Mg / L
Carbonates (CO3)	0	Mg / L
Bicarbonates (HCO3)	1342	Mg / L
Total Dissolved Solids	21917	Mg / L

Respectfully: Holly Lopez
Title: Lab Technician
Location: Farmington, NM

NOTICE: This report is limited to the described sample tested. Any person using or relying on this report agrees that Halliburton shall not be liable for any loss or damage whether due to act or omission resulting from such report or its use.



382 Road 3100 Aztec, New Mexico 87410
Phone: (505) 333-3100 FAX: (505) 333-3280

CERTIFIED MAIL 7004 2510 0005 9630 9151

March 31, 2008

Conoco/Phillips
Burlington Resources Oil & Gas LP
3401 East 30th
Farmington, NM 87402

Re: XTO Energy Inc. Canyon SWD #1
845' FSL & 1945' FWL
Sec. 35, T26N-R11W
San Juan County, New Mexico

To Whom It May Concern:

XTO Energy Inc. is proposing the drill the subject disposal well to the Mesa Verde Point Lookout formation at a depth of 3,958' to 4,155' at a maximum rate of 3000 barrels of water per day and a maximum pressure of 800 psi. A complete copy of the application is enclosed to comply with OCD Regulations.

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

Additional information may be obtained by contacting Loren Fothergill, 382 Road 3100, Aztec, NM 87410, 505-333-3100

Yours truly,

A handwritten signature in cursive script, appearing to read 'Anne Jones', is written over a horizontal line.

Anne Jones
Land Surface Coordinator

SENDER: COMPLETE THIS SECTION

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

1. Article Addressed to:

Conoco/Phillips
Burlington Resources Oil & Gas
LP
3401 East 30th
Farmington, NM 87402

COMPLETE THIS SECTION ON DELIVERY

A. Signature

X

Linda Paymer

☐ Agent☐ Addressee

B. Received by (Printed Name)

Linda Paymer

C. Date of Delivery

4/6/05

D. Is delivery address different from item 1? ☐ YesIf 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

2. Article Number

(Transfer from service label)

7004 2510 0005 9630 9151

PS Form 3811, February 2004

Domestic Return Receipt

Canyon SWD

102595-02-M-1540

U.S. Postal Service™
CERTIFIED MAIL™ RECEIPT
(Domestic Mail Only; No Insurance Coverage Provided)

For delivery information, visit our website at www.usps.com

OFFICIAL USE

Postage	\$
Certified Fee	
Return Receipt Fee (Endorsement Required)	
Restricted Delivery Fee (Endorsement Required)	
Total	

Sent To: Conoco/Phillips
Burlington Resources Oil & Gas
LP
3401 East 30th
Farmington, NM 87402

Street, or P.O. E
City, St

PS Form 3800, June 2002

See Reverse for Instructions

7004 2510 0005 9630 9151

FARMINGTON NM 87401
USPS

Anne Jones

AFFIDAVIT OF PUBLICATION

Ad No. 59891

STATE OF NEW MEXICO
County of San Juan:

BOB WALLER, being duly sworn says: That he is the CLASSIFIED MANAGER of THE DAILY TIMES, a daily newspaper of general circulation published in English at Farmington, said county and state, and that the hereto attached Legal Notice was published in a regular and entire issue of the said DAILY TIMES, a daily newspaper duly qualified for the purpose within the meaning of Chapter 167 of the 1937 Session Laws of the State of New Mexico for publication and appeared in the Internet at The Daily Times web site on the following day(s):

Wednesday March 12, 2008

And the cost of the publication is \$47.35

ON 3/14/08 BOB WALLER appeared before me, whom I know personally to be the person who signed the above document.

Wynell Corey
My Commission expires NOV-17, 2008

COPY OF PUBLICATION

Public Notice

XTO Energy Inc. is applying with the New Mexico Oil Conservation Division (NMOCD) to drill the Canyon SWD #1, as a water disposal well. The Canyon SWD #1 will be located at 845' FSL & 1945' FWL, Sec 35, T26N-R11W, San Juan County, NM. The well will dispose of water produced from oil and gas wells into the Mesa Verde Point Lookout formation at a depth of 3,958' to 4,155' at a maximum rate of 3000 barrels of water per day and a maximum pressure of 1,800 psi. Interested parties must file objections or requests for hearing with the NM Oil Conservation Division, 1220, South Saint Francis Drive, Santa Fe, NM 87505, within 15 days. Additional information can be obtained by contacting Loren Fothergill, 382 Road 3100, Aztec, NM 87410, 505-333-3100.

Legal No. 59891 published in The Daily Times, Farmington, New Mexico Wednesday March 12, 2008



Form 3160-3
(February 2005)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER

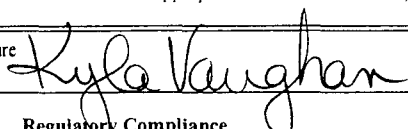
FORM APPROVED
OMB No. 1004-0137
Expires March 31, 2007

1a. Type of work: <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER		5. Lease Serial No. NMNM 012759
1b. Type of Well: <input type="checkbox"/> Oil Well <input checked="" type="checkbox"/> Gas Well <input type="checkbox"/> Other <input type="checkbox"/> Single Zone <input checked="" type="checkbox"/> Multiple Zone		6. If Indian, Allottee or Tribe Name N/A
2. Name of Operator XTO Energy, Inc.		7. If Unit or CA Agreement, Name and No. N/A
3a. Address 382 CR 3100 AZTEC, NM 87410		8. Lease Name and Well No. CANYON SWD #1
3b. Phone No. (include area code) 505-333-3100		9. API Well No. 30-045-
4. Location of Well (Report location clearly and in accordance with any State requirements.) At surface 845' FSL x 1945' FWL At proposed prod. zone same		10. Field and Pool, or Exploratory BLANCO MESA VERDE
14. Distance in miles and direction from nearest town or post office* Approximately 18 miles South of Bloomfield, NM post office		11. Sec., T. R. M. or Blk. and Survey or Area (N) Sec 35, T26N, R11W
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) 845'	16. No. of acres in lease 160	17. Spacing Unit dedicated to this well N/A
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. 101'	19. Proposed Depth 4200'	20. BLM/BIA Bond No. on file UTB-000138
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 6329' Ground Elevation	22. Approximate date work will start* 12/01/2007	23. Estimated duration 2 weeks

24. Attachments

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No. 1, must 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 must be filed with the appropriate Forest Service Office). | 6. Such other site specific information and/or plans as may be required by the BLM. |

25. Signature 	Name (Printed/Typed) Kyla Vaughan	Date 10/03/2007
Title Regulatory Compliance		
Approved by (Signature)	Name (Printed/Typed)	Date
Title Office		

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)

APD/ROW

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

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

DISTRICT III
1000 Rio Grande 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 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 (SWD)		3 Well Name BLANCO MESA VERDE	
4 Property Code		5 Property Name CANYON SWD		6 Well Number 1	
7 OORID No. 5380		8 Operator Name XTO ENERGY INC.		9 Elevation 6329	

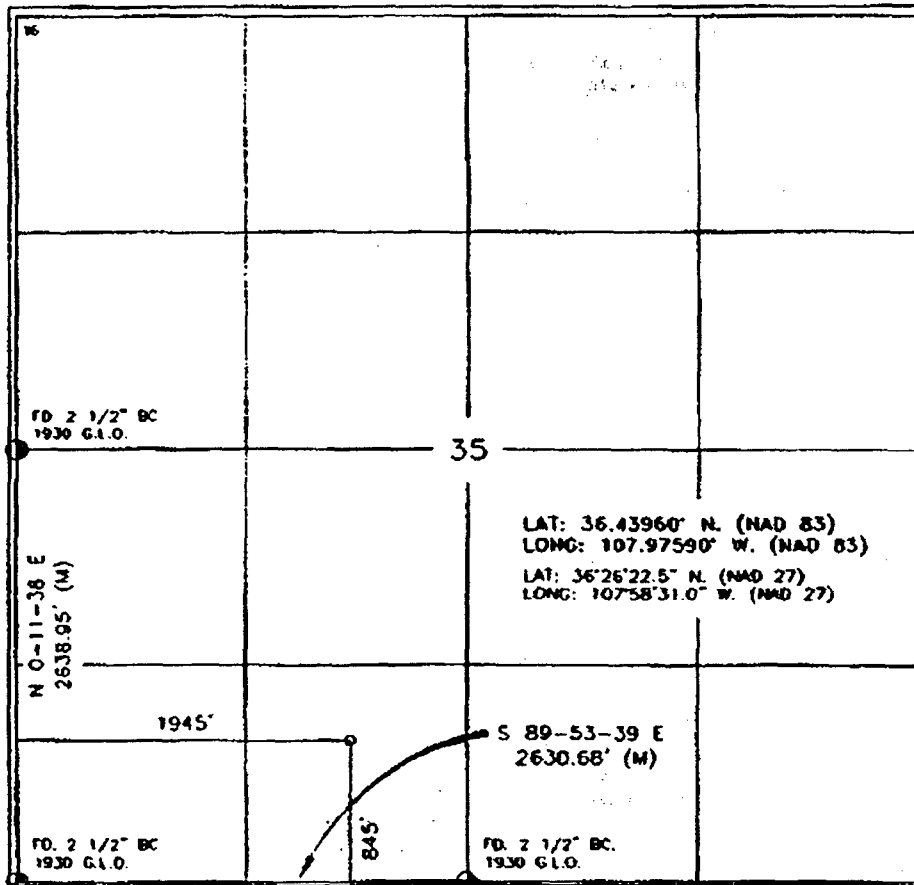
10 Surface Location

UL or lot no.	Section	Township	Range	Lot 10n	Feet from the	North/South line	Feet from the	East/West line	County
N	35	26-N	11-W		845	SOUTH	1945	WEST	SAN JUAN

11 Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot 10n	Feet from the	North/South line	Feet from the	East/West line	County
12 Dedicated Acres			13 Joint or lease		14 Consideration Code		15 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



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 undivided 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.

Kyla Vaughan 5/25/07
Signature Date
Kyla Vaughan
Printed Name

18 SURVEYOR CERTIFICATION

I hereby certify that the well location shown on this plat was plotted from GRS 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.

Date of Survey 5/25/07
Signature and Seal of Surveyor
Professional Land Surveyor
Certificate Number

Operator Certification:

a. Permitting and Compliance:

Kyla Vaughan
Regulatory Compliance
XTO ENERGY INC.
382 CR 3100
AZTEC, NM 87410
505-333-3100

b. Drilling and Completions:

John Egelston
XTO Energy Inc.
382 CR 3100
Aztec, NM 87410
505-333-3100

c. Certification:

I hereby certify that I, or persons under my direct supervision, have inspected the proposed drill site and access route; that I am familiar with the conditions which currently exist; that the statements made in this APD package are, to the best of my knowledge, true and correct; and that the work associated with the operations proposed herein will be performed by XTO Energy Inc. and its contractors and subcontractors in conformity with this APD package and the terms and conditions under which it is approved. I also certify responsibility for the operations conducted on that portion of the leased lands associated with this application, with bond coverage being provided by XTO Energy Inc. This statement is subject to provisions of 18 U.S.C. § 1001 for the filing of a false statement.

Signature: _____

Kyla Vaughan 10/3/07
Kyla Vaughan

SURFACE USE PLAN

**XTO Energy Inc.
Canyon SWD #1
845' FSL x 1945' FWL
Section 35, T28N, R11W
San Juan County, New Mexico**

THIRTEEN POINT SURFACE USE PLAN

The dirt contractor will be provided with an approved copy of the surface use plan of operations before initiating construction.

1. Existing Roads:

- a. Proposed route to location is shown on the Huerfano Trading Post USGS quadrangle map: **See Exhibit "A".**
- b. Location of proposed well in relation to town or other reference point:
From Bloomfield, NM go South on US 550 21.4 miles and turn right. Follow main dirt road 5.6 miles. Turn right and go 400 feet into location.
- c. All existing roads within 1 mile of the drill site are shown on Exhibit "A". **If necessary, all existing roads that will be used for access to the well location will be maintained to their current condition or better unless BLM approval or consent is given to upgrade the existing road(s).**

2. Planned Access Roads:

- a. Location (centerline): **Starting from a point along an existing road in the SESW of sec 35, T28N, R11W.**
- b. Length of new access to be constructed: **Approx 0 feet of new access will be constructed in order to gain safe access to the wellpad. See Exhibit "A"**
- c. Length of existing roads to be upgraded: **No additional upgrades should be necessary to existing oilfield service roads.**
- d. Maximum total disturbed width: **Typically both existing roads and new access roads require up to 40' of disturbed width in order to obtain a 20' driving surface. If both the road and pipeline are capable of sharing the ROW, then only 50' of disturbed width may be needed.**
- e. Maximum travel surface width: **25' or less**
- f. Maximum grades: **Maximum grades will not exceed 10% after construction.**
- g. Turnouts: **No turnouts are planned at this time. Turnouts may be specified in the approved APD.**
- h. Surface materials: **Only native materials will be used during construction. If necessary, gravel or rock may be purchased and used to improve road conditions and travel.**

- i. Drainage (crowning, ditching, culverts, etc): **Roads will be crowned and bar ditches will be located along either side. 18-24" dia CMP culverts will be installed as necessary.**
- j. Cattleguards: **No cattle guards are planned at this time. Cattle guards will be specified in the stipulations if necessary.**
- k. Length of new and/or existing roads which lie outside the lease or unit boundary for which a BLM/state/fee right-of-way is required: **None**
- l. Other: **See general information below.**

Surface disturbance and vehicular travel will be limited to the approved location and access road only. Any additional surface area needed must be approved by BLM in advance.

If any additional right-of-way is necessary, no surface disturbing activities shall take place on the subject right-of-way until the associated APD is approved. The holder will adhere to conditions of approval in the Surface Use Program of the approved APD, relevant to any right-of-way facilities.

If a right-of-way is secured, boundary adjustments in the lease or unit shall automatically amend this right-of-way to include that portion of the facility no longer contained within the lease or unit. In the event of an automatic amendment to this right-of-way grant, the prior on-lease/unit conditions of approval of this facility will not be affected even though they would now apply to facilities outside of the lease/unit as a result of a boundary adjustment. Rental fees, if appropriate shall be recalculated based on the conditions of this grant and the regulations in effect at the time of an automatic amendment.

If at any time the facilities located on public lands authorized by the terms of the lease are no longer included in the lease (due to a contraction in the unit or other lease or unit boundary change) the BLM will process a change in authorization to the appropriate statute. The authorization will be subject to appropriate rental, or other financial obligations as determined by the BLM.

If the well is productive, the access road will be rehabilitated as needed and brought to Resource (Class III) Road Standards within a time period specified by the BLM. If upgraded, the access road must be maintained at these standards until the well is properly abandoned. If this time frame cannot be met, the Field Office Manager will be notified so that temporary drainage control can be installed along the access road.

- 3. Location of Existing Wells within a one mile radius of the proposed well:

See attached Exhibit "B".

- 4. Location of Production Facilities:

- a. a. On-site facilities: **Typical on-site facilities will consist of a wellhead, flow lines (typ 3" dia.), gas/oil/water separator (3 phase), water storage tanks (500 bbl), oil storage tanks (300 bbls), Qter filtration system, disposal pumps, gas measurement and water measurement equipment, and a heated enclosure/building for weather and environmental protection. The tank battery will typically be constructed and surrounded by a berm of sufficient capacity to contain 1½ times the storage capacity of the largest tank(s).**

The tanks typically necessary for the production of this well will be 1 – 210 bbl steel, above ground tank for oil/condensate and 1 – 100 bbl steel, below grade tank for produced water.

All loading lines and valves for these tanks will be placed inside the berm surrounding the tank battery. All oil/condensate production and measurement shall conform to the provisions of 43 CFR § 3162.7 and Onshore Oil and Gas Order No. 4, if applicable. Other on-site equipment and system may include methanol injection and winter weather protection.

All permanent (in place for six months or longer) structures constructed or installed on the well site location will be painted a flat, nonreflective color to match the standard environmental colors, as specified by the COA's in the APD. All facilities will be painted within six months of installation. Facilities required by comply with the Occupational Safety and Health Act (OSHA) may be excluded.

- b. Off-site facilities: **N/A**
- c. Pipelines: **This is an injection well, pipeline will not be necessary.**
- d. Powerlines: **There are no plans to include powerlines in this application. In the event power is required, a ROW application will be submitted to the appropriate agencies.**

5. Location and Type of Water Supply:

All water needed for drilling purposes will be obtained from (describe location and/or show on a map): **Water will be purchased from a commercial water source and trucked via third party to the location over approved access roads.**

Water obtained on private land, or land administered by another agencies, will require approval from the owner or agency for use of said water.

6. Source of Construction Material:

Pad construction material will be obtained from (if the material source is Federally owned, a map will be included showing the location of the material): **All construction material will be purchased from private landowners and or from a commercial gravel/materials pit. All material will be trucked to location via third party trucking using only approved access roads.**

The use of materials under BLM jurisdiction will conform to 43 CFR § 3610.2-3, if applicable.

7. Methods of Handling Waste Disposal:

Describe the methods and locations proposed for safe containment and disposal of waste material, e.g. cuttings, produced water, garbage, sewage, chemicals, etc.

The reserve pit will typically be lined with a synthetic material, ±12 mils in thickness. The reserve pit shall be located in cut material, with at least 50% of the pit volume being below original ground level. Three sides of the reserve pit will be fenced before drilling starts. The fourth side will be fenced as soon as drilling is completed, and shall remain until the pit is dry. The amount of time the pit may remain open will typically be specified by the COA's in the APD.

Once dry, the pit liner will be cut and removed at the mud line and the pit will be covered and buried in place. Trash must be contained in a trash cage and hauled away to an approved disposal site as necessary but no later than at the completion of drilling operations.

Sewage from trailers and chemical portable toilets will be removed on a regular basis by a third party contractor and disposed of at an authorized sanitary waste facility.

Any and all chemicals used during the drilling and completion of the well will be kept to a minimum and stored within the boundaries of the well pad. The third party chemical contractor will be responsible for containment and clean-up and removal of all spilled chemicals on location.

8. Ancillary Facilities: No ancillary facilities will be required during the drilling or completion of the well.

The State of New Mexico Sundry form C-103 (used for reserve pit information) is attached. See Exhibit "C".

9. Well Site Layout -depict the pit, rig, cut and fill, topsoil, etc. on a plat with a scale of at least 1"=50'. See Exhibit "D & E".

All equipment and vehicles that will be used to drill and complete this well will remain within the boundaries of the approved wellpad. Any equipment and or vehicles park or stored off of the location will be considered trespassing on federal lands and will NOT be tolerated.

Materials obtained from the construction of location, like topsoil and vegetation will be stock piled as indicated and permitted by the approved APD. The stock piles themselves may be outside the approved boundaries of the wellpad.

10. Plans for Restoration of the Surface:

The top 6 inches of topsoil material will be removed from the location and stockpiled separately on: **Typically as specified by the approved APD.**

Topsoil along the access road will be reserved in place adjacent to the road as indicted by the approved APD.

Within 30-45 days after completion of well, all equipment that is not necessary for production shall be removed.

The reserve pit and that portion of the location not needed for production will be reclaimed in a given time period as specified by the BLM in the approved APD.

Before any dirt work to restore the location takes place, the reserve pit must be dry and ready for burial. If necessary, any approvals needed to commence the burial operation will be obtained.

All road surfacing will be removed prior to the rehabilitation of roads, if necessary.

Reclaimed roads will have the berms and cuts reduced and will be closed to vehicle use.

All disturbed areas will be recontoured to replicate the natural slope.

The stockpiled topsoil will be evenly distributed over the disturbed area.

Prior to reseeding, all disturbed areas, including the access roads, will be scarified and left with a rough surface.

Seed will be broadcast or drilled between during a time specified by the BLM and or state. If broadcast, a harrow or some other implement will be dragged over the seeded area to assure uniform seed coverage.

The following seed mixture will be used: **As specified in the conditions of approval.**

If necessary, an abandonment marker will be one of the following, as specified by BLM:

- 1) at least four feet above ground level,
- 2) at restored ground level, or
- 3) below ground level.

In any case the marker shall be inscribed with the following: operator name, lease number, well name and surveyed description (township, range, section and either quarter-quarter or footages).

Additional requirements: **None**

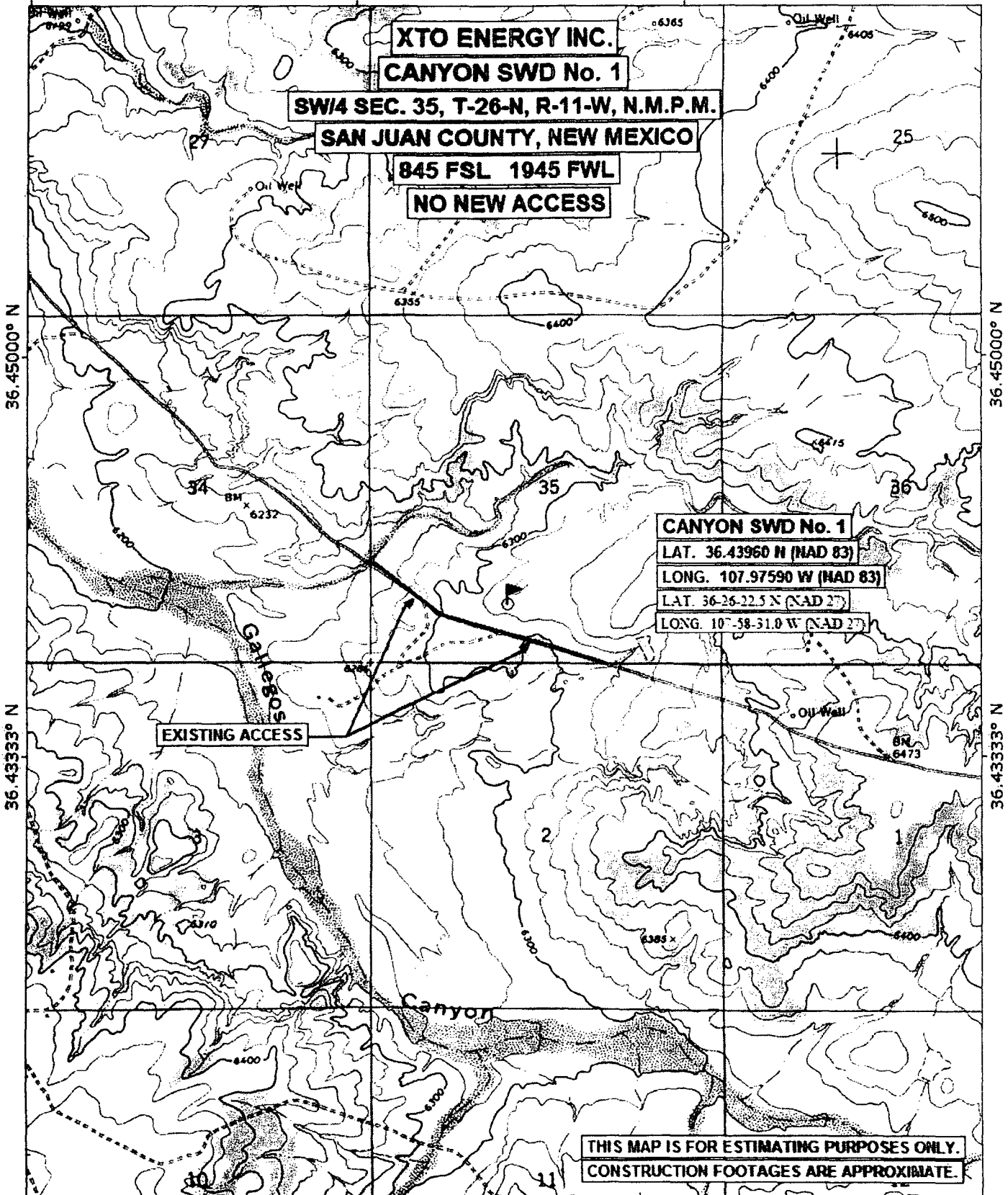
11. Surface and Mineral Ownership: **Both the surface and the minerals are property of the United States Federal Government and are managed by the Bureau of Land Management.**

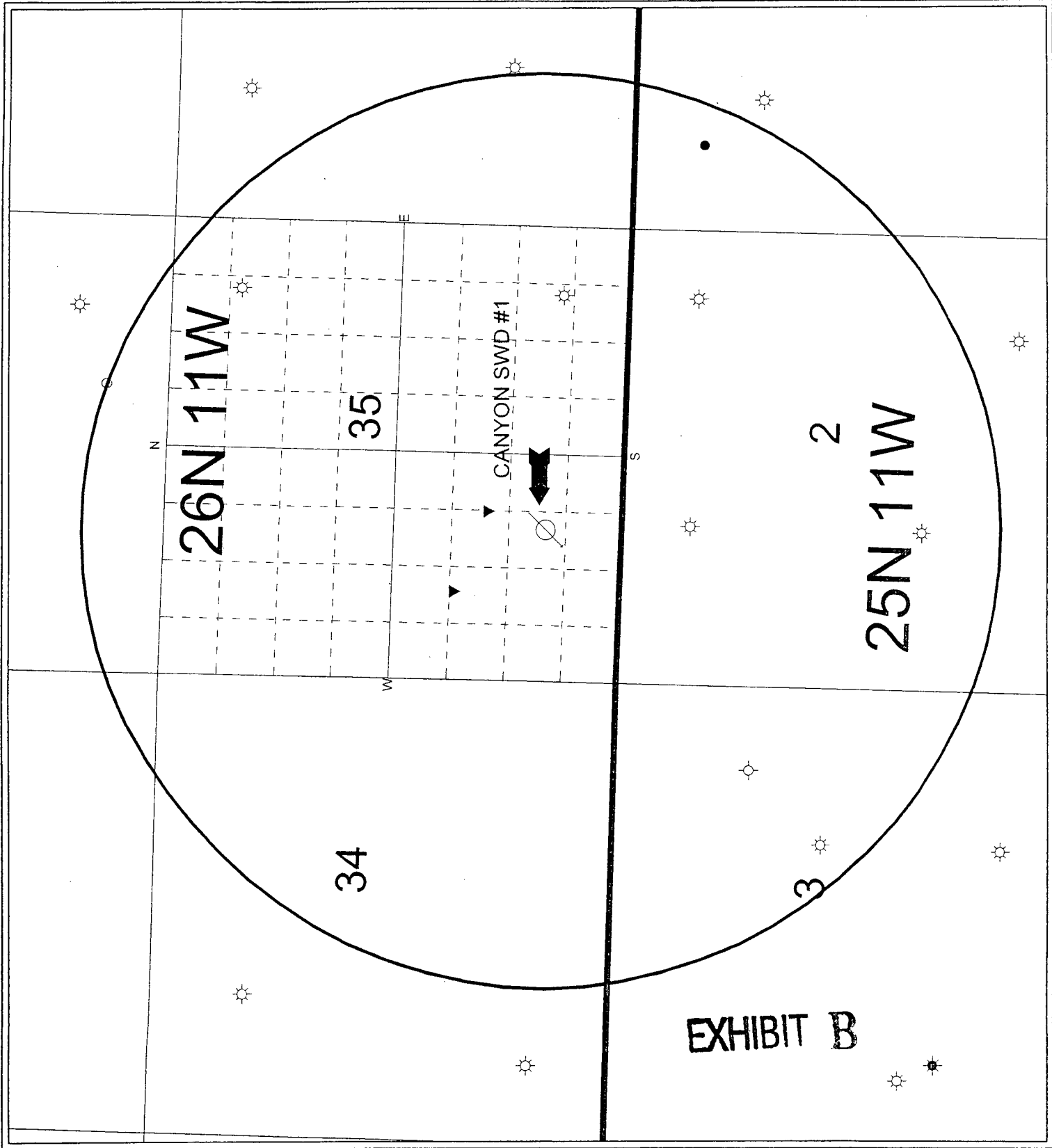
12. Other Information:

- a. Archeological Concerns: **A BLM approved contractor will submit the appropriate reports to the agency as required. Special stipulations will be included in the COA's of the approved APD.**

The operator is responsible for informing all persons in the area who are associated with this project that they will be subject to prosecution for knowingly disturbing historic or archaeological sites, or for collecting artifacts. If historic or archaeological materials are uncovered during construction, the operator is to immediately stop work that might further disturb such materials, and contact the appropriate BLM Field Office for further instructions.

- b. Threatened and Endangered Species Concerns: **An BLM approved contractor will submit the appropriate reports to the agency as required. Special stipulation will be included in the COA's of the approved APD.**
- c. Wildlife Seasonal Restrictions: **Current wildlife restrictions and closure dates, if applicable, will be specified in the approved APD.**
- d. **The Drilling Program is attached. See Exhibit "F".**





XTO ENERGY INC.

1 MILE RADIUS

Proposed CANYON SWD #1



WELL SYMBOLS
Location Only

- Oil Well
- Gas Well
- Oil & Gas Well
- Dry Hole
- Injection Well
- XTO Location

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.
7. Lease Name or Unit Agreement Name: CANYON SWD
8. Well Number #1
9. OGRID Number 5380
10. Pool name or Wildcat BLANCO MESAVERDE

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 382 CR 3100 AZTEC, NM 87410 505-333-3100
4. Well Location Unit Letter N 845 feet from the SOUTH line and 1945 feet from the WEST line Section 35 Township 26N Range 11W NMPM NMNM County SAN JUAN
11. Elevation (Show whether DR, RKB, RT, GR, etc.) 6329' GROUND ELEVATION
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>>1000</u> Distance from nearest surface water <u>>1000</u>
Pit Liner Thickness: <u>12</u> mil Below-Grade Tank: Volume <u>8000</u> 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: 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.

XTO Energy plans to install a lined pit on location for drilling.

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 10/03/07

Type or print name Kyla Vaughan

E-mail address: kyla_vaughan@xtoenergy.com

Telephone No. 505-333-3159

For State Use Only

APPROVED BY _____ TITLE _____ DATE _____

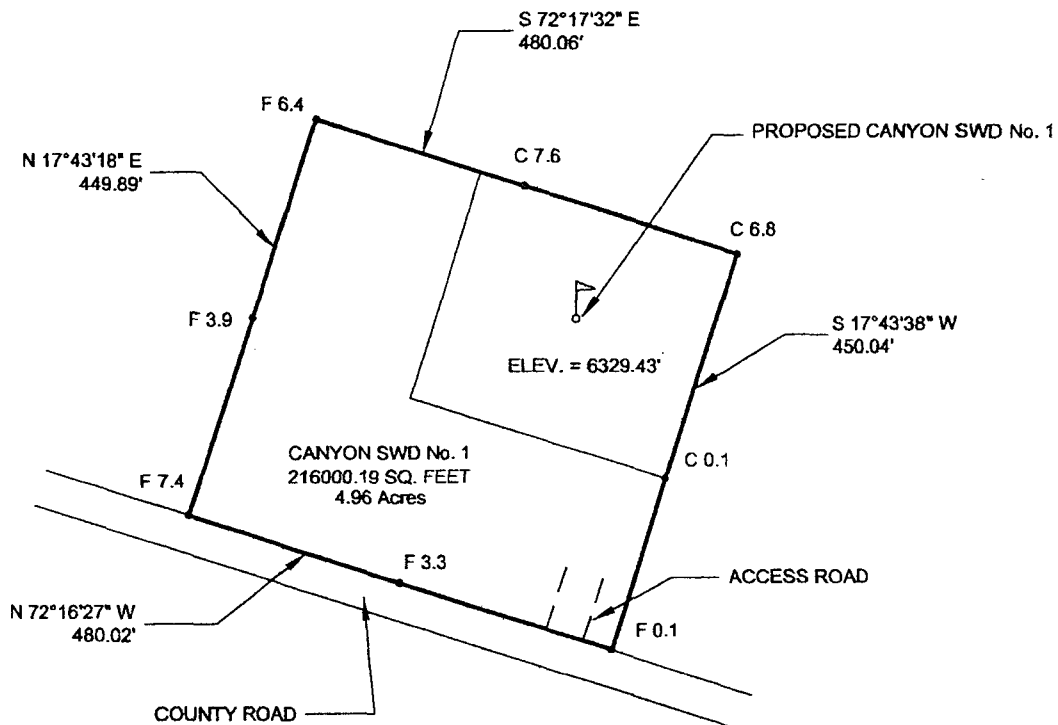
Conditions of Approval, if any:

EXHIBIT C

A FACILITY SITE MAP LOCATED ON B.L.M. LANDS FOR

**XTO ENERGY INC.
PROPOSED CANYON SWD No. 1**

SW/4 OF SEC. 35, TOWNSHIP 26 NORTH, RANGE 11 WEST, N.M.P.M.
SAN JUAN COUNTY, NEW MEXICO



0 100 200
SCALE: 1"=200'

NOTES

- 1) DATE OF FIELD WORK - JANUARY 5, 2007
- 2) 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.


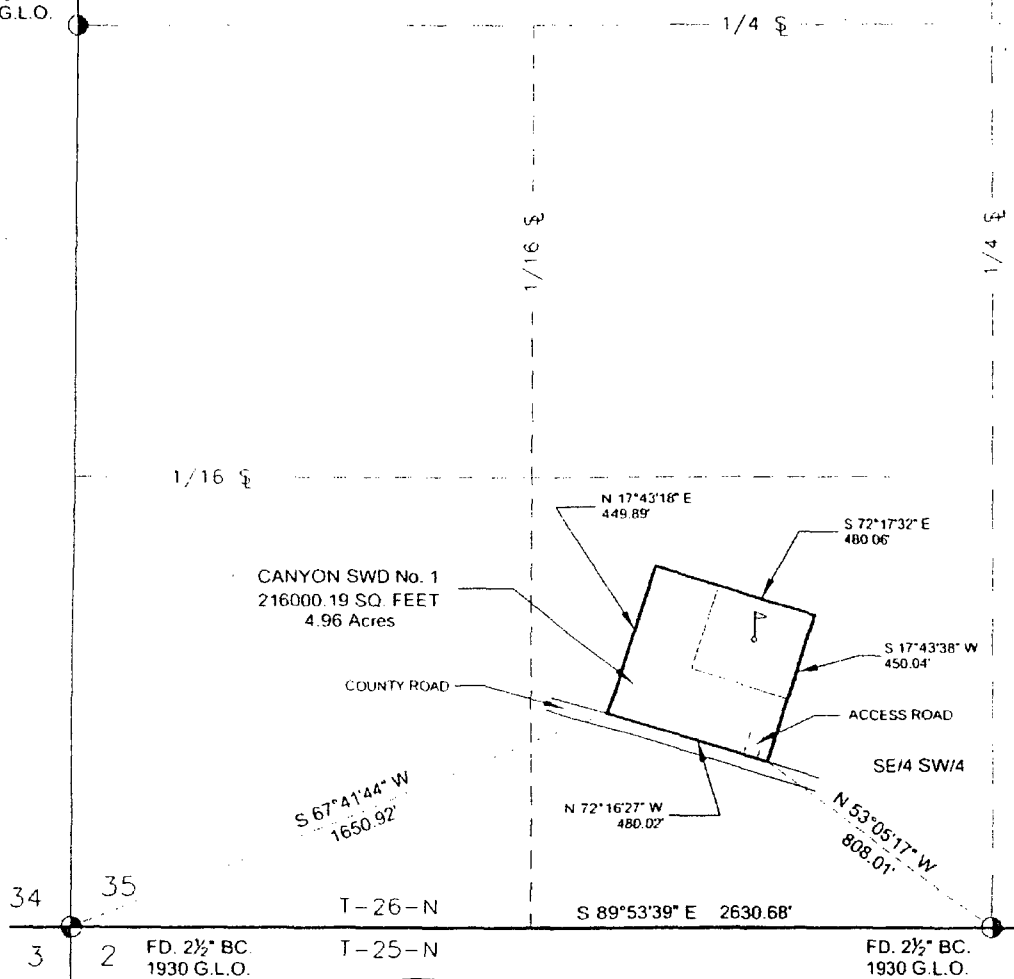
REVISION	REV. BY	DATE
ADDED BEARING & DISTANCES TO LOCATION SITE	G.V.	10/03/07
		
Daggett Enterprises, Inc. Surveying and Oil Field Services P. O. Box 510 Farmington, NM 87499 Phone (505) 326-1772 Fax (505) 326-6019		
PAGE 1 OF 1		CADFILE: CR876_B02
DRAWN BY: G.V.	ROW#: CR876	DATE: 2/27/07

EXHIBIT D

A FACILITY SITE MAP LOCATED ON B.L.M. LANDS FOR
XTO ENERGY INC.
PROPOSED CANYON SWD No. 1
 SW/4 OF SEC. 35, TOWNSHIP 26 NORTH, RANGE 11 WEST, N.M.P.M.
 SAN JUAN COUNTY, NEW MEXICO

FD. 2½" BC.
 1930 G.L.O.



NOTES

- 1) DATE OF FIELD WORK - JANUARY 5, 2007
- 2) 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.


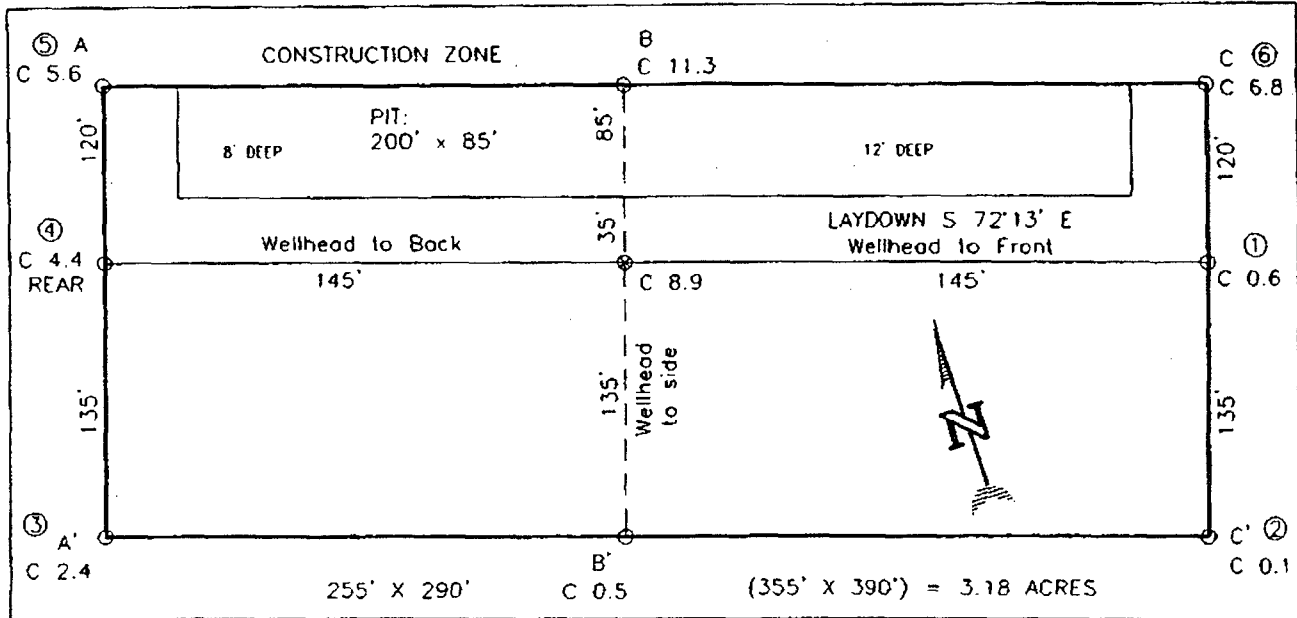
REVISION	REV. BY	DATE
 Daggett Enterprises, Inc. Surveying and Oil Field Services P. O. Box 15068 Farmington, NM 87401 Phone (505) 326-1772 Fax (505) 326-6019		
PAGE 1 OF 1		CADFILE: CR876_B01
DRAWN BY: G.V.	ROW#: CR876	DATE: 2/27/07

EXHIBIT D

XTO ENERGY INC.
 CANYON SWD No. 1, 845 FSL 1945 FWL
 SECTION 35, T26N, R11W, N.M.P.M., SAN JUAN COUNTY, N.M.
 GROUND ELEVATION: 6329' DATE: JANUARY 5, 2007

NAD 83
 LAT. = 36.43960° N
 LONG. = 107.97590° W
 NAD 27
 LAT. = 36°26'22.5" N
 LONG. = 107°58'31.0" W



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				
6340					
6330					
6320					
6310					

ELEV. B-B'	C/L				
6340					
6330					
6320					
6310					

ELEV. C-C'	C/L				
6340					
6330					
6320					
6310					

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.

Daggett Enterprises, Inc. Surveying and Oil Field Services P. O. Box 15068 Farmington, NM 87401 Phone (505) 326-1772 • Fax (505) 326-6019 NEW MEXICO L.S. No. 8894	REVISION: _____ DATE: _____	DESIGNED BY: _____ DATE: _____
	DRAWN BY: C.V. DATE: 2/28/07	
	CHECKED BY: C.V. DATE: 2/28/07	
	APPROVED BY: _____ DATE: _____	

EXHIBIT E

XTO ENERGY INC.

Canyon SWD #1

APD Data

October 3, 2007

Location: 845' FSL x 1945' FWL Sec 35, T26N, R11W County: San Juan State: New Mexico

GREATEST PROJECTED TD: 4200'

OBJECTIVE: Mesaverde Disposal

APPROX GR ELEV: 6329'

Est KB ELEV: 6341' (12' AGL)

1. MUD PROGRAM:

INTERVAL	0' to 1200'	1200' to 2500'	2500' to 4200'
HOLE SIZE	12.25"	8.75"	8.75"
MUD TYPE	FW/Spud Mud	FW/Polymer	LSND / Gel Chemical
WEIGHT	8.6-9.0	8.4-8.8	8.6- 9.20
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: 9.625" casing to be set at \pm 1200' in a 12.25" 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	SF Burst	SF Ten
0'-1200'	1200'	36.0#	J-55	ST&C	2020	3520	394	8.921	8.765	3.520	6.13	9.12

Production Casing: 7" casing to be set at TD (\pm 4200') 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	SF Burst	SF Ten
0'-4200'	4200'	23.0#	J-55	ST&C	3270	4360	284	6.366	6.241	1.63	2.17	2.94

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 (or slip-on, weld-on), 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: 9.625", 36.0#, J-55, ST&C casing to be set at $\pm 1200'$ in 12-1/4" hole.

541 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 752 ft³, 100% excess of calculated annular volume to 1200'.

B. Production: 7", 23.0#, J-55 (or K-55), ST&C casing to be set at $\pm 4200'$ in 8.75" hole. DV Tool set @ $\pm 2950'$

1st Stage

LEAD:

± 16 sx of Premium Lite HS (Type III/Poz/Gel) or equivalent, with dispersant, fluid loss, accelerator, & LCM mixed at 12.5 ppg, 2.01 ft³/sk, 10.55 gal wtr/sx.

TAIL:

150 sx Type III or equivalent cement with bonding additive, LCM, dispersant, & fluid loss mixed at 14.2 ppg, 1.54 cuft/sx, 8.00 gal/sx.

2nd Stage

LEAD:

± 201 sx of Type III or equivalent cement with 8% gel & 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 912 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: None.

B. Open Hole Logs as follows: Run Array Induction/SFL/GR/SP fr/TD (4200') to the bottom of the surface csg. Run Neutron/Lithodensity/Pe/GR/Cal from TD (4200') to 3,000'.

EXHIBIT F

6. FORMATION TOPS:

Est. KB Elevation: 6341'

FORMATION	Sub-Sea	MD
Ojo Alamo SS	5841	500
Kirtland Shale	5733	608
Farmington SS		
Fruitland Formation	5396	945
Lower Fruitland Coal	4900	1441
Pictured Cliffs SS	4881	1460
Lewis Shale	4610	1731
Chacra SS	4010	2331
Cliffhouse SS*	3346	2995
Menefee**	3320	3021
Point Lookout SS*	2383	3958
Mancos Shale	2186	4155
TD	2141	4200

**** 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	505-566-7946	505-320-0158
Jerry Lacy	Drilling Superintendent	505-566-7917	505-320-6543
John Klutsch	Project Geologist	817-885-2800	--

JWE
10/3/07

,06

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 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

TO CHOKE
MANIFOLD
2" dia min.

See Choke Manifold drawing for
specifications

KILL LINE
2" dia min.

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

CHOKES 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

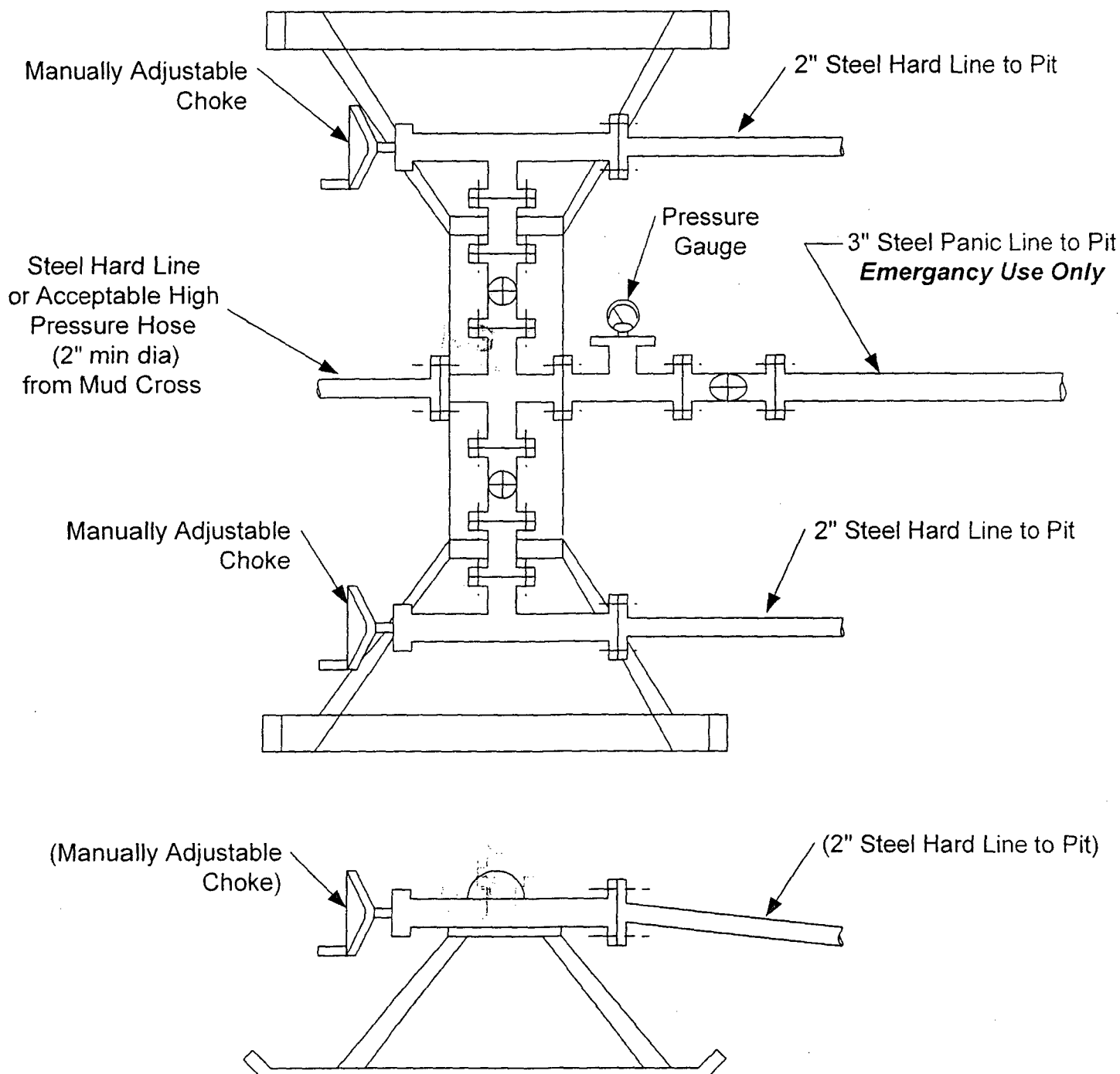


EXHIBIT F

Jones, William V., EMNRD

From: Jones, William V., EMNRD
Sent: Monday, April 28, 2008 10:18 AM
To: 'Anne_Jones@xtoenergy.com'
Cc: Ezeanyim, Richard, EMNRD; Warnell, Terry G, EMNRD
Subject: SWD Application from XTO: Canyon SWD #1 30-045-34454 Point Lookout

Hello Anne:

Thank you for the very thorough application. I would like to release this today, but better send you these comments and requests.

TWO REQUESTS:

- 1) Would you send an "after conversion or after completion" wellbore diagram? You can fax to my attention at 505-476-3462 or scan and email it.
- 2) Send proof that the BLM was sent a copy of this application. Please always formally send a notice to the BLM (surface owner) - send them a full copy of this application with a clear statement that this well will accept trucked in waters from other leases, even if only from XTO operations. It seems apparent that the BLM is aware that this well will be a disposal, but the BLM has complained recently about not getting a copy of the applications for SWD - and our rules for notice are listed in 701B(2).

COMMENT FOR THIS APPLICATION:

The permit will require a swab test of the Point Lookout and water analysis of the sample swabbed.

For future applications:

- 1) You do not have to list ALL wells that XTO operates in an SWD application - just a map showing the 2 mile circle and you could list those wells.
- 2) For all 1/2 mile Area of Review wells, please put the DV tool setting depth and the cement tops both above and below this stage tool.
- 3) You should send an application to Santa Fe's engineering bureau and a copy to the district office in Aztec. We don't need additional copies here. Keep a copy for yourself.

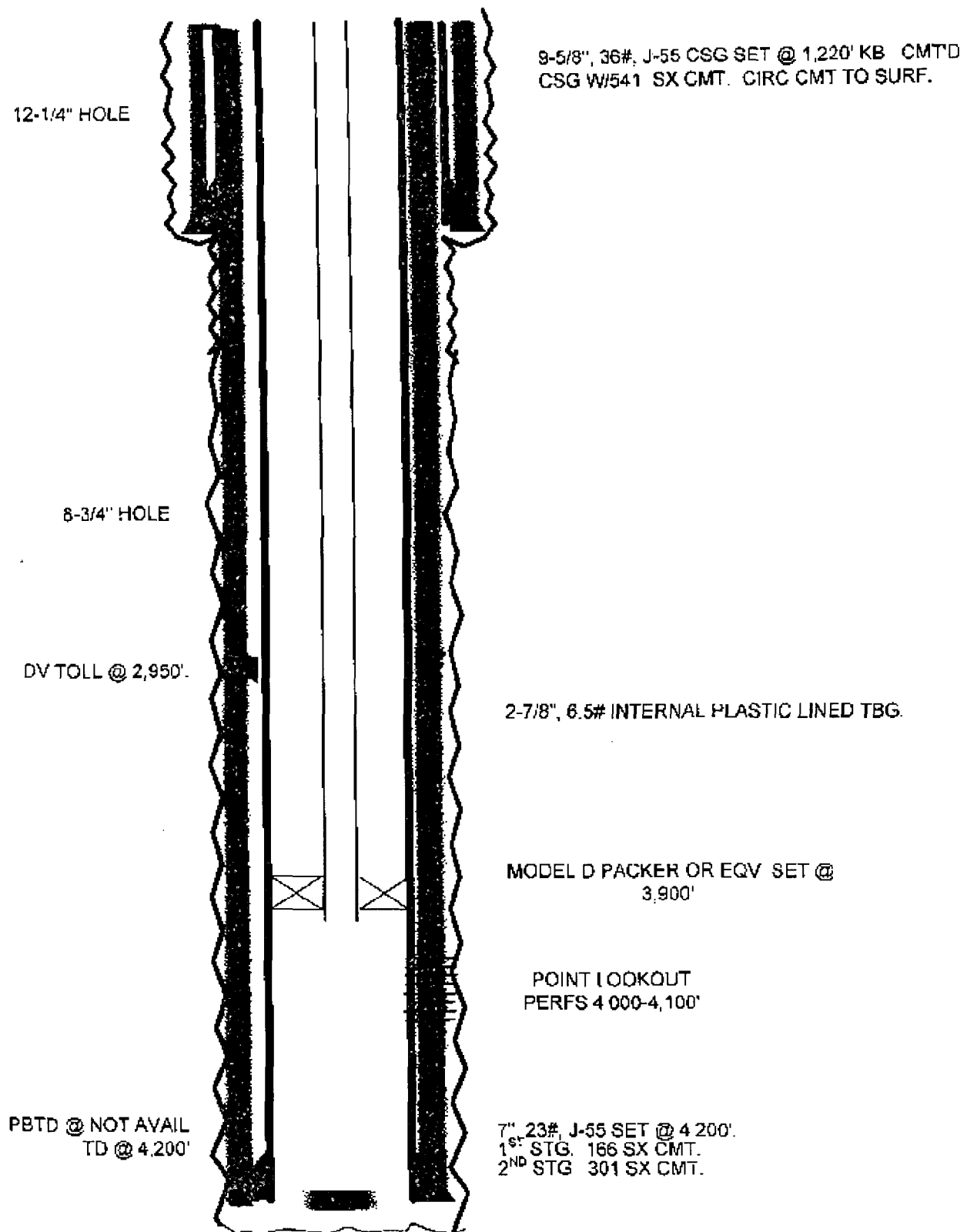
Overall, this was a very good application, thanks again.

I will prepare this permit and hold it until you send the well diagram and the proof that the BLM was sent a copy of the application.

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

4/28/2008

CANYON SWD #1



ALL DEPTH ARE APPROXIMATE. WELL LOGS
WILL DETERMINE THE ACTUAL DEPTHS



Jim_Lovato@nm.blm.gov
04/29/2008 08:56 AM

To: anne_jones@xtoenergy.com
cc
bcc
Subject: Canyon #1 SWD, 3004531454

Anne,
The APD for the subject well was approved 4/14/2008. We have all the necessary components, including the UIC application. Let me know if you need anything else... Thanks JL

RECEIVED

OCT 4 2007

Bureau of Land Management
Farmington Field Office

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

1a Type of work <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER		5 Lease Serial No. NMNM 012759
1b Type of Well <input type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input checked="" type="checkbox"/> Other <input type="checkbox"/> Single Zone <input checked="" type="checkbox"/> Multiple Zone		6 If Indian, Allottee or Tribe Name N/A
2 Name of Operator XTO Energy, Inc.		7 If Unit or CA Agreement, Name and No N/A
3a Address 382 CR 3100 AZTEC, NM 87410	3b Phone No. (include area code) 505-333-3100	8 Lease Name and Well No CANYON SWD #1
4 Location of Well (Report location clearly and in accordance with any State requirements*) At surface 845' FSL x 1945' FWL At proposed prod zone same		9 API Well No. 30-045-34454
14 Distance in miles and direction from nearest town or post office* Approximately 18 miles South of Bloomfield, NM post office		10 Field and Pool, or Exploratory MESAVERDE SWD
15 Distance from proposed* location to nearest property or lease line, ft (Also to nearest drg unit line, if any) 845'	16 No. of acres in lease 160	11 Sec., T. R. M. or Blk and Survey or Area (N) Sec 35, T26N, R11W
18 Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft 101'	19 Proposed Depth 4200'	12 County or Parish San Juan
21 Elevations (Show whether DF, KDB, RT, GL, etc) 6329' Ground Elevation	22 Approximate date work will start* 12/01/2007	13 State NM
17 Spacing Unit dedicated to this well N/A		
20 BLM/BIA Bond No on file UTB-000138		
23 Estimated duration 2 weeks		

24. Attachments

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No 1, must 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 must be filed with the appropriate Forest Service Office) | 6 Such other site specific information and/or plans as may be required by the BLM. |

25 Signature <i>Kyla Vaughan</i>	Name (Printed/Typed) Kyla Vaughan	Date 10/03/2007
Title Regulatory Compliance		
Approved by <i>[Signature]</i>	Name (Printed/Typed)	Date <i>4/14/08</i>
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

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

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

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

APR 21 2008

APD/ROW

NMOC

NOTIFY AZTEC OCD 24 HRS.
PRIOR TO CASING & CEMENT

Hold permission to inject pending SWD order from NMOC

Injection Permit Checklist 2/8/07

SWD Order Number 1119 Dates: Division Approved _____ District Approved _____

Well Name/Num: CANYON SWD #1 Date Spudded: New

API Num: (30-) 045-34454 County: San JUAN

Footages 845 FSL / 1945 FWL Sec 35 Tsp 26N Rge 11W

Operator Name: XTO ENERGY, INC Contact ANNE JONES

Operator Address: 382 ROAD 3100, AZTEC, NM, 87410

Current Status of Well: Proposed well Planned Work: _____ Inj. Tubing Size: 2 7/8

	Hole/Pipe Sizes	Depths	Cement	Top/Method
Surface	12 1/4 9 5/8	1220	544	CIRC
Intermediate	8 3/4 7"	4200	1665x/below DV.	circ
Production			3015x/above DV.	
Last DV Tool		@ 2950' (below Chocoma above CLIFF HOUSE)		
Open Hole/Liner				
Plug Back Depth				

Diagrams Included (Y/N): Before Conversion ☒ After Conversion ☒

Checks (Y/N): Well File Reviewed ☒ ELogs in Imaging New well

Intervals:	Depths	Formation	Producing (Yes/No)
Salt/Potash			
Capitan Reef			
Cliff House, Etc:			
Formation Above			
Top Inj Interval	≈ 4000	PLD.	NO
Bottom Inj Interval	≈ 4100	PLD.	NO
Formation Below			

FOR XTO wells only,
Water Trucked in)

800 PSI Max. WHIP

NO Open Hole (Y/N)

NO Deviated Hole (Y/N)

Fresh Water: Depths: 0-165' OTO ALAMO Wells (Y/N) Yes Analysis Included (Y/N): Yes Affirmative Statement ☒

Salt Water Analysis: Injection Zone (Y/N/NA) Yes DispWaters (Y/N/NA) _____ Types: DKTA/Gully/FRC/PC

Notice: Newspaper (Y/N) ☒ Surface Owner BLM Mineral Owner(s) NAC/BLM

Other Affected Parties: Burke/COPI/Alamo

AOR/Repairs: NumActiveWells 2 Repairs? NO Producing in Injection Interval in AOR NO

AOR Num of P&A Wells 0 Repairs? _____ Diagrams Included? _____ RBDMS Updated (Y/N) ☒

Well Table Adequate (Y/N) ☒ AOR STRs: Sec _____ Tsp _____ Rge _____ UIC Form Completed (Y/N) ☒

New AOR Table Filename _____ Sec _____ Tsp _____ Rge _____ This Form completed ☒

Conditions of Approval: Sec _____ Tsp _____ Rge _____ Data Request Sent _____

SWAB Test, Report analysis

AOR Required Work: _____

Required Work to this Well: _____