



west virginia department of environmental protection

Office of Oil and Gas
601 57th Street SE
Charleston, WV 25304
(304) 926-0450
(304) 926-0452 fax

Earl Ray Tomblin, Governor
Randy C. Huffman, Cabinet Secretary
www.dep.wv.gov

May 27, 2014

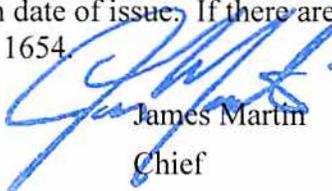
WELL WORK PLUGGING PERMIT

Plugging

This permit, API Well Number: 47-3303302, issued to XTO ENERGY, INC., is evidence of permission granted to perform the specified well work at the location described on the attached pages and located on the attached plat, subject to the provisions of Chapter 22 of the West Virginia Code of 1931, as amended, and all rules and regulations promulgated thereunder, and to all conditions and provisions outlined in the pages attached hereto. Notification shall be given by the operator to the Oil and Gas Inspector at least 24 hours prior to the construction of roads, locations, and/or pits for any permitted work. In addition, the well operator shall notify the same inspector 24 hours before any actual well work is commenced and prior to running and cementing casing. Spills or emergency discharges must be promptly reported by the operator to 1-800-642-3074 and to the Oil and Gas inspector.

Upon completion of the plugging well work, the above named operator will reclaim the site according to the provisions of WV Code 22-6-30. The above named operator will also file, as required in WV Code 22-6-23, an affidavit on form WR-38 by two experienced persons in the operator's employment and the Oil and Gas inspector that the work authorized under this permit was performed and a description given. Failure to abide by all statutory and regulatory provisions governing all duties and operations here under may result in suspensions or revocation of this permit and in addition may result in civil and/or criminal penalties being imposed upon the operator.

This permit will expire in two (2) years from date of issue. If there are any questions, please free to contact me at (304) 926-0499 ext. 1654.



James Martin
Chief

Operator's Well No: LYONS S-25
Farm Name: VENTURA, JOHN
API Well Number: 47-3303302
Permit Type: Plugging
Date Issued: 05/27/2014

Promoting a healthy environment.

PERMIT CONDITIONS

West Virginia Code § 22-6-11 allows the Office of Oil and Gas to place specific conditions upon this permit. Permit conditions have the same effect as law. Failure to adhere to the specified permit conditions may result in enforcement action.

CONDITIONS

1. All pits must be lined with a minimum of 20 mil thickness synthetic liner.
2. In the event of an accident or explosion causing loss of life or serious personal injury in or about the well or while working on the well, the well operator or its contractor shall give notice, stating the particulars of the accident or explosion, to the oil and gas inspector and the Chief within twenty-four (24) hours.
3. Well work activities shall not constitute a hazard to the safety of persons.
4. This well is under a consent order and must be plugged within two years of the date of issuance of this permit.

1) Date: 4/11/14
2) Operator's Well Number
Lyons S-25

3) API Well No.: 47 - 033 - 03302

STATE OF WEST VIRGINIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS
NOTICE OF APPLICATION TO PLUG AND ABANDON A WELL

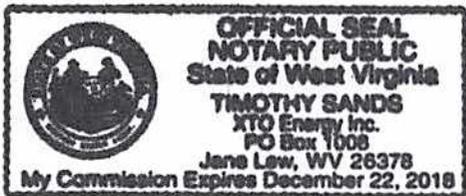
4) Surface Owner(s) to be served:	5) (a) Coal Operator
(a) Name <u>Jonathon D. Ventura</u> ✓	Name _____
Address <u>2709 Rummel Brown Dr.</u>	Address _____
<u>Charleston, WV 25302-4927</u>	
(b) Name <u>William J. Ventura</u> ✓	(b) Coal Owner(s) with Declaration
Address <u>PO Box 964</u>	Name <u>Jonathon D. Ventura</u> ✓
<u>Scott Depot, WV 25560</u>	Address <u>2709 Rummel Brown Dr.</u>
	<u>Charleston, WV 25302-4927</u>
(c) Name _____	Name <u>William J. Ventura</u> ✓
Address _____	Address <u>PO Box 964</u>
	<u>Scott Depot, WV 25560</u>
6) Inspector <u>Sam Ward</u>	(c) Coal Lessee with Declaration
Address <u>PO Box 2327</u>	Name _____
<u>Buckhannon, WV 26201</u>	Address _____
Telephone <u>304-389-7583</u>	

TO THE PERSONS NAMED ABOVE: You should have received this Form and the following documents:

- (1) The application to Plug and Abandon a Well on Form WW-4B, which sets out the parties involved in the work and describes the well its and the plugging work order; and
- (2) The plat (surveyor's map) showing the well location on Form WW-6.

The reason you received these documents is that you have rights regarding the application which are summarized in the instructions on the reverses side. However, you are not required to take any action at all.

Take notice that under Chapter 22-6 of the West Virginia Code, the undersigned well operator proposes to file or has filed this Notice and Application and accompanying documents for a permit to plug and abandon a well with the Chief of the Office of Oil and Gas, West Virginia Department of Environmental Protection, with respect to the well at the location described on the attached Application and depicted on the attached Form WW-6. Copies of this Notice, the Application, and the plat have been mailed by registered or certified mail or delivered by hand to the person(s) named above (or by publication in certain circumstances) on or before the day of mailing or delivery to the Chief.



Well Operator XTO Energy Inc.
 By: [Signature]
 Its: Production Superintendent
 Address PO Box 1008
Jane Lew, WV 26378
 Telephone 304-884-6000

Received

APR 22 2014

Office of Oil and Gas
WV Dept. of Environmental Protection

Subscribed and sworn before me this 11th day of April 2014

[Signature] Notary Public
My Commission Expires 12/22/18

Oil and Gas Privacy Notice

The Office of Oil and Gas processes your personal information, such as name, address and phone number, as a part of our regulatory duties. Your personal information may be disclosed to other State agencies or third parties in the normal course of business or as needed to comply with statutory or regulatory requirements, including Freedom of Information Act requests. Our office will appropriately secure your personal information. If you have any questions about our use of your personal information, please contact DEP's Chief Privacy Officer at depprivacyofficer@wv.gov.

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OFFICIAL USE

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

William Ventura ✓
 PO Box 964
 Scott Depot, WV 25560

JANE LEW WV
 APR 14
 Postmark Here

26378

*Lyons 5-25
 Plugging
 Application*

7012 1010 0002 5911 6529

U.S. Postal Service™
CERTIFIED MAIL™ RECEIPT
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Certified Fee	
Return Receipt Fee (Endorsement Required)	
Restricted Delivery Fee (Endorsement Required)	
Total Postage & Fees	\$

Jonathon Ventura ✓
 2709 Rummel Brown Dr.
 Charleston, WV 25302

JANE LEW WV
 APR 14 2
 Postmark Here

26378

*Lyons 5-25
 Plugging
 Application*

7012 1010 0002 5911 6512

Received

APR 23 2014

Office of Oil and Gas
 WV Dept. of Environmental Protection

1) Date 4/11, 2014
2) Operator's
Well No. Lyons S-25
3) API Well No. 47-033 - 03302

STATE OF WEST VIRGINIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
OFFICE OF OIL AND GAS

APPLICATION FOR A PERMIT TO PLUG AND ABANDON

4) Well Type: Oil ___ / Gas X / Liquid injection ___ / Waste disposal ___ /
(If "Gas, Production X or Underground storage ___) Deep ___ / Shallow X

5) Location: Elevation 1003' Watershed Limestone Run-West Fork River
District Coal County Harrison Quadrangle Clarksburg 7.5'

6) Well Operator XTO Energy Inc 7) Designated Agent Gary Beall
Address PO Box 1008 Address PO Box 1008
Jane Lew, WV 26378 Jane Lew, WV 26378

Received

8) Oil and Gas Inspector to be notified Name Sam Ward
Address PO Box 2327
Buckhannon, WV 26201
9) Plugging Contractor Name _____
Address _____
APR 22 2014

Office of Oil and Gas
WV Dept. of Environmental Protection

10) Work Order: The work order for the manner of plugging this well is as follows:
RIH and check TD, POOH and run 1 1/2" tubing down to TD, then circulate 6% gel back to surface and pump cement from 4475' up to 4300', perfs at 4424'-4421', pull tubing up to 4000' and wait for cement to set up, RIH with small tools and tag T.O.C., pull tubing up to 3200' and pump cement up to 2900', perfs at 3144'-3142' and 3016'-3010', pull 1 1/2" tubing out and run free point tool in to find where 2 7/8" tubing is free, make cut estimated at 2400', pump cement up to 2200', bottom of 7" casing at 2272', pull 2 7/8" tubing up to 1700' and pump cement up to 1600', pull tubing up to 1050' and pump cement up to 900', pull tubing up to 325' and pump cement to surface. Install monument.

- Cement - 4475'-4300' = 175' in 2 7/8" Cement - 1700'-1600' = 100' in 7" casing
- Cement - 3200'-2900' = 300' in 2 7/8" Cement - 1050' - 900' = 150' in 7"
- Cement - 2400'-2200' = 200' in 6 1/4" hole Cement - 325' - 0' = 325' in 7"

(NEED TO FREEPOINT 7" CASING & CUT & PULL)

All Free casing must be pulled.
IF 7" is not CTS must be pulled or ripped/shot if not free & cemented according to standards

IF WELL CONSTRUCTION IS DIFFERENT THAN EXPECTED AND PLUGGING PROCEDURES

NEED MODIFIED, NOTIFY SAM WARD WR 38 MUST REFLECT CHANGES.

Notification must be given to the district oil and gas inspector 24 hours before permitted work can commence.

Work order approved by inspector S. D. Warratt Date 4/15/2014

RM WW-2(B) FILE COPY

Reverse)

IS

RECEIVED
JAN 31 1986



1) Date: January 15th 1985

2) Operator's Well No. Lyons S-25

3) API Well No. 47-033-3302-D
State County Permit

STATE OF WEST VIRGINIA
DIVISION OF OIL AND GAS DEPARTMENT OF ENERGY, OIL AND GAS DIVISION
DEPARTMENT OF ENERGY APPLICATION FOR A WELL WORK PERMIT

- 4) WELL TYPE: A Oil Gas
 - B (If "Gas", Production Underground storage Deep Shallow)
- 5) LOCATION: Elevation: 985 Watershed: West Fork River
District: Coal 3 County: Harrison Quadrangle: Clarksburg 297
- 6) WELL OPERATOR Sheldon & Sheldon CODE: 44675 7) DESIGNATED AGENT David J. Sheldon
Address 901 W. Main St. Suite 201 Address 118 Westwood Ave.
Bridgeport, WV 26330 Bridgeport, WV 26330
- 8) OIL & GAS INSPECTOR TO BE NOTIFIED Name Steve Casey
Address RT 2 Box 232D
Jane Lew, WV 26378
- 9) DRILLING CONTRACTOR: Name Coastal Corporation
Address 3501 Emerson Ave. Suite 4B
Parkersburg, WV 26104
- 10) PROPOSED WELL WORK: Drill Drill deeper Redrill Stimulate
Plug off old formation Perforate new formation
Other physical change in well (specify) _____
- 11) GEOLOGICAL TARGET FORMATION, Benson
 - 12) Estimated depth of completed well, 5,000 feet
 - 13) Approximate true depths: Fresh, 80,120 feet; salt, _____ feet.
 - 14) Approximate coal seam depths: 220,360 Is coal being mined in the area? Yes No

15) CASING AND TUBING PROGRAM

CASING OR TUBING TYPE	SPECIFICATIONS					FOOTAGE INTERVALS		CEMENT FILL-UP OR SACKS (Cubic feet)	PACKERS
	Size	Grade	Weight per ft.	New	Used	For drilling	Left in well		
Conductor	N/A								Kind
Fresh water									
Coal	<u>EXISTING</u>					<u>1300'</u>	<u>1300'</u>		<u>Squeezed Cement</u>
Intermediate	<u>7"</u>		<u>23</u>		<u>X</u>	<u>1400'</u>	<u>1400'</u>	<u>120 SKS</u>	<u>300'-80'</u>
Production	<u>4 1/2"</u>	<u>J55</u>	<u>10.5</u>		<u>X</u>	<u>4650'</u>	<u>4650'</u>	<u>265 SKS</u>	<u>Depths set or as required</u>
Tubing									<u>by rule 15.01</u>
Lin.									Perforations:
									Top Bottom

OFFICE USE ONLY
DRILLING PERMIT

Permit number 47-033-3302-D

January 31 19 86
Date

This permit covering the well operator and well location shown below is evidence of permission granted to drill in accordance with the pertinent legal requirements subject to the conditions contained herein and on the reverse hereof. Notification must be given to the District Oil and Gas Inspector. (Refer to in. 8) Prior to the construction of roads, locations and pits for any permitted work. In addition, the well operator or his contractor shall notify the proper district oil and gas inspector 24 hours before actual permitted work has commenced.)

The permitted work is as described in the Notice and Application, plat, and reclamation plan, subject to any modifications and conditions specified on the reverse hereof.

Permit expires January 31, 1988 unless well work is commenced prior to that date and prosecuted with due diligence.

Bond: <input checked="" type="checkbox"/>	Agent: <u>AS</u>	Plat: <u>AS</u>	Casing: <u>AS</u>	Fee: <u>3349</u> <u>3347</u>	WPCP: <u>AS</u>	S&E: <u>AS</u>	Other: _____
---	------------------	-----------------	-------------------	---------------------------------	-----------------	----------------	--------------

NOTE: Keep one copy of this permit posted at the drilling location.

[Signature]
Director, Division of Oil and Gas

File

See the reverse side of the APPLICANT'S COPY for instructions to the well operator.

5041

0100

Well log

7" Set 1300'

t.D. old hole 2350'

Will file complete well
log after get drill deeper.

is complete + get log

Run on well

RECEIVED
JAN 31 1986

DIVISION OF OIL & GAS
DEPARTMENT OF ENERGY





IV-35
(Rev 8-81)

OIL AND GAS

APR 23 1986

State of West Virginia
Department of Mines
Oil and Gas Division

Date April 17, 1986
Operator's
Well No. S-25
Farm Lyons
API No. 47 - 033 - 3302-D

WELL OPERATOR'S REPORT
OF
DRILLING, FRACTURING AND/OR STIMULATING, OR PHYSICAL CHANGE

WELL TYPE: Oil ___ / Gas x / Liquid Injection ___ / Waste Disposal ___ /
(If "Gas," Production ___ / Underground Storage ___ / Deep ___ / Shallow x /)

LOCATION: Elevation: 985 Watershed West Fork River WS
District: Coal County Harrison Quadrangle Clarksburg,

COMPANY Sheldon and Sheldon, Inc.
ADDRESS 901 W. Main St., Suite 201, BRDGT, WV
DESIGNATED AGENT David J. Sheldon
ADDRESS 118 Westwood Ave., BRDGT, WV 26339
SURFACE OWNER Pete Perry & Helen Ventura
ADDRESS Clarksburg, WV
MINERAL RIGHTS OWNER Hugh K. Spencer
Leon F. Wilson
ADDRESS 700 Stealey Ave., Clarksburg, WV
OIL AND GAS INSPECTOR FOR THIS WORK

Steve Casey ADDRESS Rt. 2 Box 232D Jane Lew, WV

PERMIT ISSUED January 15th, 1986
DRILLING COMMENCED January 21, 1986
DRILLING COMPLETED March 13, 1986

IF APPLICABLE: PLUGGING OF DRY HOLE ON
CONTINUOUS PROGRESSION FROM DRILLING OR
REWORKING. VERBAL PERMISSION OBTAINED
ON N/A

Casing & Tubing	Used in Drilling	Left in Well	Cement fill up Cu. ft.
Size 20-16 Cond.		Received	
13-10"		APR 22 2014	
9 5/8			
8 5/8		Office of Oil and Gas WV Dept. of Environmental Protection	
7	2272	2272	350
5 1/2			
4 1/2			
3			
2 7/8	4534	4534	150
Liners used			

GEOLOGICAL TARGET FORMATION Benson Depth 4420' feet
Depth of completed well 4552 feet Rotary ___ / Cable Tools ___
Water strata depth: Fresh 290 feet; Salt ___ feet
Coal seam depths: ___ Is coal being mined in the area? No

OPEN FLOW DATA

Producing formation Benson & Speechly Pay zone depth 3003-32 feet
4412-26
Gas: Initial open flow ___ Mcf/d Oil: Initial open flow 0 Bbl/d
Final open flow 104 Mcf/d Oil: Final open flow 0 Bbl/d
Time of open flow between initial and final tests 4 hours
Static rock pressure 815 psig (surface measurement) after 72 hours shut in
(If applicable due to multiple completion--)
Second producing formation ___ Pay zone depth ___ feet
Gas: Initial open flow ___ Mcf/d Oil: Initial open flow ___ Bbl/d
Final open flow ___ Mcf/d Oil: Final open flow ___ Bbl/d
Time of open flow between initial and final tests ___ hours
Static rock pressure ___ psig (surface measurement) after ___ hours shut in

HARR 3302-DD

DETAILS OF PERFORATED INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC.

Perf. 4421-4424- 13holes

Frac using - 300 acid, 30,000#20-40-Sand, 207 bbls H2O and 488,000 s.c.f. N2.

ES 14A

Perf. 3010-3016- 6holes 3142-44 4holes

Frac used using - 750 gals acid, 28,000 #20-40 Sand, 152 bbls H2O & 330,000 s.c.f. N2.

WELL LOG

FORMATION	COLOR	HARD OR SOFT	TOP FEET	BOTTOM FEET	REMARKS Including indication of all fresh and salt water, coal, oil and gas
Clay	Red	Soft	0	20	
Shale & sand	Gray	Soft	20	280	
Sand	"	Hard	280	345	Fresh Water 290
Shale & sand	"	Hard	345	600	
Sand	"	Hard	600	704	
Shale	"	Soft	704	742	
Sand & shale	"	Hard	742	833	
Sand	"	Hard	833	922	
Shale & sand	"	Medium	922	1292	
Big Lime	"	Hard	1292	1350	
Big Injun	"	Medium	1350	1470	
Shale	"	Soft	1470	1820	
Sand & shale	"	Soft	1820	2302	Gas 3010'
5th Sand	"	Medium	2302	2353	Gas 3144'
Shale	"	Soft	2353	2696	Gas 4421'
Sand & shale	"	Soft	2696	3007	
Speckly & sand		Medium	3007	3032	
Shale & sand	"	Soft	3032	4412	
Benson	Brown	Soft	4412	4425	
Shale	Gray	Soft	4425	4552 T.D.	

Received

APR 22 2014

Office of Oil and Gas
WV Dept. of Environmental Protection

(Attach separate sheets as necessary)

SHELDON AND SHELDON, INC.

Well Operator

By:

Date: Apr 17th, 1986

Note: Regulation 2.02(i) provides as follows:
"The term 'log' or 'well log' shall mean a systematic detailed geological record of all formations, including coal, encountered in the drilling of a well."

RECEIVED
SEP 18 1986

INSPECTOR'S PERMIT SUMMARY FORM

DIVISION OF OIL & GAS
DEPARTMENT OF ENERGY

WELL TYPE _____
ELEVATION 985
DISTRICT Coal
QUADRANGLE Clarksburg
COUNTY Harrison

API# 47-033-3302-D
OPERATOR Sheldon & Sheldon
TELEPHONE _____
FARM _____
WELL # Lyons s-25

SURFACE OWNER Ventura, John
TARGET FORMATION _____
DATE STARTED _____
LOCATION _____

COMMENTS _____ TELEPHONE _____
DATE APPLICATION RECEIVED 2-4-86
NOTIFIED DRILLING COMMENCED 2-24-86

WATER DEPTHS _____
COAL DEPTHS _____

PDC sub. rig

CASING

Ran _____ feet of 2 7/8 "pipe on 3-4-86 with 400 fill up
Ran _____ feet of _____ "pipe on _____ with _____ fill up
Ran _____ feet of _____ "pipe on _____ with _____ fill up
Ran _____ feet of _____ "pipe on _____ with _____ fill up

TD 4552 feet on 3-4-86

PLUGGING

Type	From	To	Pipe Removed

Pit Discharge date: _____ Type _____
Field analysis ph _____ fe _____ cl _____
Well Record received _____

Date Released 9-16-86

IR-26 Provided by O&G
Reverse

API# 47-33-3502-D

LIST ALL VISITS FOR THIS PERMIT

	DATE	TIME	PURPOSE	COMMENTS
1	2-6-86		Inspect	no one at rig
2	2-26		"	clean out at 2445'
3	3-6		"	TD.
4	9-14		"	reclamation OK
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				

Notes
 old 7" squeezed at 300'
 " 7" " " at 514'

CK #0007497008
\$ 100.00

STATE OF WEST VIRGINIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
OFFICE OF OIL AND GAS

CONSTRUCTION AND RECLAMATION PLAN AND SITE REGISTRATION APPLICATION FORM
GENERAL PERMIT FOR OIL AND GAS PIT WASTE DISCHARGE

Operator Name XTO Energy Inc. OP Code 494487940

Watershed Limestone Run-West Fork River Quadrangle Clarksburg 7.5'

Elevation 1003' County Harrison District Coal

Description of anticipated Pit Waste: Fluids from plugging operations.

Will a synthetic liner be used in the pit? Yes 2014

SDW
4/15/2014

Proposed Disposal Method For Treated Pit Wastes:

- Land Application
- Underground Injection (UIC Permit Number 4707302523, 4708505151, 4708509721)
- Reuse (at API Number _____)
- Off Site Disposal (Supply form WW-9 for disposal location)
- Other (Explain Meadowbrook Landfill SWF#1032, RES Water Recycling -WMGR123SW005 (PA))

Proposed Work For Which Pit Will Be Used:

- Drilling
- Workover
- Other (Explain _____)
- Swabbing
- Plugging

I certify that I understand and agree to the terms and conditions of the GENERAL WATER POLLUTION PERMIT issued on August 1, 2005, by the Office of Oil and Gas of the West Virginia Department of Environmental Protection. I understand that the provisions of the permit are enforceable by law. Violations of any term or condition of the general permit and/or other applicable law or regulation can lead to enforcement action.

I certify under penalty of law that I have personally examined and am familiar with the information submitted on this application form and all attachments thereto and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine or imprisonment.

Received

Company Official Signature [Signature] APR 22 2014

Company Official (Typed Name) Gary Beall

Company Official Title Production Superintendent

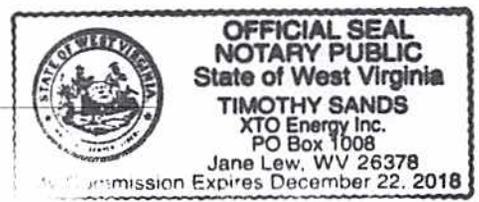
Office of Oil and Gas
WV Dept. of Environmental Protection

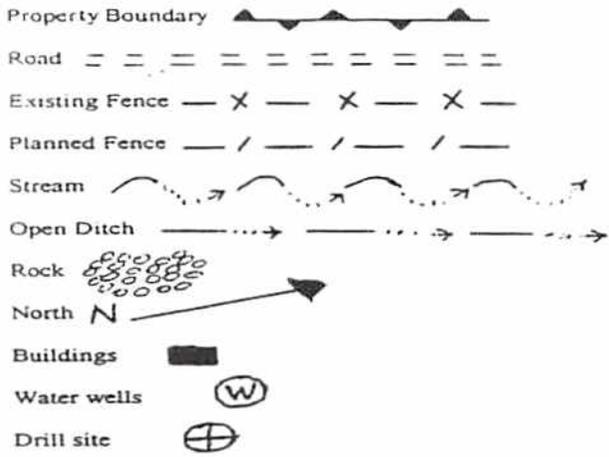
Subscribed and sworn before me this 11th day of April, 2014

[Signature]

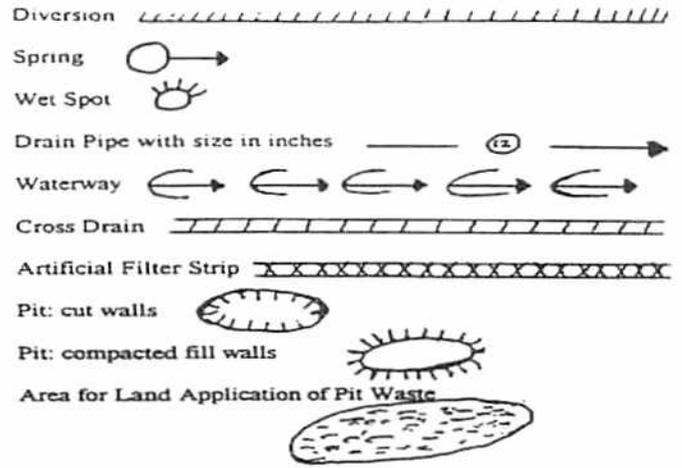
Notary Public

My commission expires 12/22/18





LEGEND



Proposed Revegetation Treatment: Acres Disturbed .24 +/- Prevegetation pH _____

Lime 3 Tons/acre or to correct to pH _____

Fertilizer (10-20-20 or equivalent) 1000 lbs/acre (500 lbs minimum)

Mulch 3 Tons/acre

Seed Mixtures

Seed Type	Area I lbs/acre	Seed Type	Area II lbs/acre
Kentucky Bluegrass	20		
Redtop	3		
Birdsfoot Trefoil	10		

Attach:
Drawing(s) of road, location, pit and proposed area for land application.

Photocopied section of involved 7.5' topographic sheet.

Received

APR 22 2014

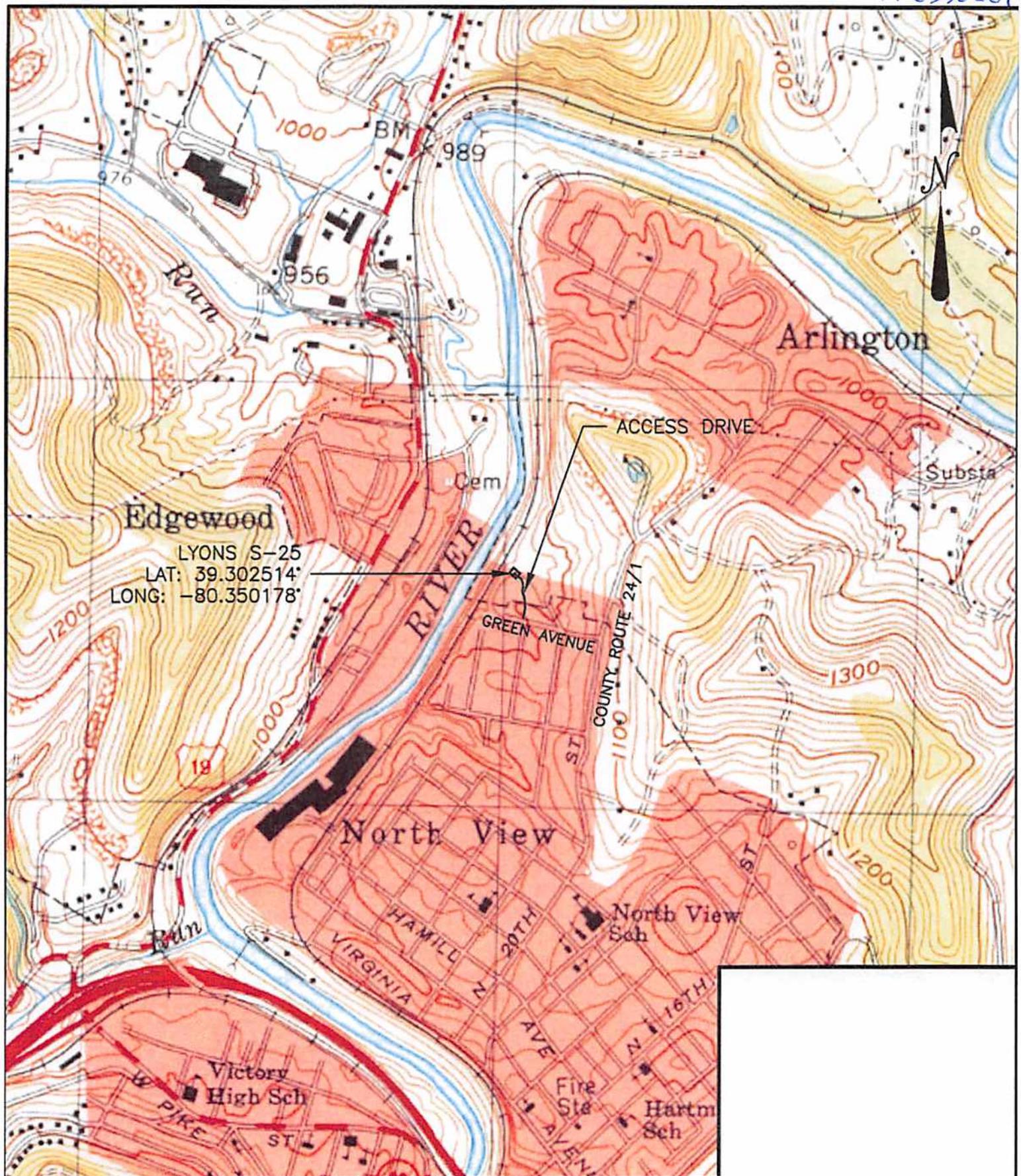
Plan Approved by: S. D. Ward

Comments: _____

Office of Oil and Gas
WV Dept. of Environmental Protection

Title: Oil & Gas Inspector Date: 4/15/2014

Field Reviewed? () Yes (X) No



LYONS S-25
 LAT: 39.302514°
 LONG: -80.350178°

SCALE: 1:1000	DESIGNED BY: JMH	REVISION BY: _____	DATE: _____	DESCRIPTION: _____
	REVIEWED BY: MMV	REVISION BY: _____	DATE: _____	DESCRIPTION: _____
	DRAWN BY: JMH	REVISION BY: _____	DATE: _____	DESCRIPTION: _____
	DATE: 4/23/14	REVISION BY: _____	DATE: _____	DESCRIPTION: _____
	PROJ. NO.:	REVISION BY: _____	DATE: _____	DESCRIPTION: _____
	DRAWING NO.:	REVISION BY: _____	DATE: _____	DESCRIPTION: _____

DRAWING NO.

SHEET NO.
1

LYONS S-25
 prepared for
XTO ENERGY, INC.
 situated
 GREEN AVENUE, HARRISON COUNTY, WEST VIRGINIA
 UBGS MAP - CLARKSBURG QUADRANGLE

MKA **Morris Knowles**
 & Associates, Inc.
 Consulting Engineers and Land Surveyors
 443 Albana Drive
 Dalmat, PA 15628
 Telephone: (724) 468-4822
 Fax: (724) 468-8940

WW-7
8-30-06



West Virginia Department of Environmental Protection
Office of Oil and Gas
WELL LOCATION FORM: GPS

API: 47-033-03302 WELL NO.: 302147 (Lyons S-25)

FARM NAME: John Ventura

RESPONSIBLE PARTY NAME: XTO Energy, Inc.

COUNTY: Harrison 33 DISTRICT: Coal 3

QUADRANGLE: Clarksburg 7.5' 297

SURFACE OWNER: Jonathan D. & William J. Ventura, et al.

ROYALTY OWNER: Sam Lacaria

UTM GPS NORTHING: 4350549

UTM GPS EASTING: 556030 GPS ELEVATION: 306 m (1003 ft)

The Responsible Party named above has chosen to submit GPS coordinates in lieu of preparing a new well location plat for a plugging permit or assigned API number on the above well. The Office of Oil and Gas will not accept GPS coordinates that do not meet the following requirements:

1. Datum: NAD 1983, Zone: 17 North, Coordinate Units: meters, Altitude: height above mean sea level (MSL) – meters.
2. Accuracy to Datum – 3.05 meters
3. Data Collection Method:
Survey grade GPS : Post Processed Differential
Real-Time Differential
Mapping Grade GPS : Post Processed Differential
Real-Time Differential
4. Letter size copy of the topography map showing the well location.

Received

APR 22 2014

Office of Oil and Gas
WV Dept. of Environmental Protection

I the undersigned, hereby certify this data is correct to the best of my knowledge and belief and shows all the information required by law and the regulations issued and prescribed by the Office of Oil and Gas.

Stacy O'Brien
Signature
11/3/14
Date

PS # 2180
Title

EROSION AND SEDIMENTATION CONTROL PLAN NOTES:

- ONLY LIMITED DISTURBANCE WILL BE PERMITTED TO PROVIDE ACCESS TO CHANNELS OF CONVEYANCE AS APPROPRIATE FOR GRADING AND ACCORDING BORROW TO CONSTRUCT THOSE CONTROLS.
- EROSION AND SEDIMENTATION CONTROLS MUST BE CONSTRUCTED, STABILIZED, AND FUNCTIONAL BEFORE SITE DISTURBANCE WITHIN THE TRIBUTARY AREAS OF THOSE CONTROLS.
- AFTER SITE STABILIZATION HAS BEEN ACHIEVED, TEMPORARY EROSION AND SEDIMENTATION CONTROLS MUST BE REMOVED. AREAS DISTURBED DURING REMOVAL OF THE CONTROLS MUST BE STABILIZED.
- STORMWATER DRAINS WHICH DO NOT DISCHARGE TO SEDIMENT TRAPS OR BASINS, MUST BE PROTECTED UNTIL THE TRIBUTARY AREAS ARE STABILIZED.
- SEDIMENT MUST BE REMOVED WHEN ACCUMULATIONS REACH 1/2 THE ABOVE GRADE HEIGHT OF THE FENCE.
- STOCKPILE HEIGHTS MUST NOT EXCEED 35 FEET. STOCKPILE SLOPES MUST BE 2:1 OR FLATTER.
- ANY DISTURBED AREA ON WHICH ACTIVITY HAS CEASED AND WHICH WILL REMAIN EXPOSED FOR MORE THAN 20 DAYS MUST BE STABILIZED IMMEDIATELY. DURING NON-GERMINATING PERIODS, MULCH MUST BE APPLIED AT THE RECOMMENDED RATES. DISTURBED AREAS WHICH ARE NOT AT FINISHED GRADE AND WHICH WILL BE REDISTURBED WITHIN ONE YEAR MAY BE STABILIZED IN ACCORDANCE WITH TEMPORARY SEEDING SPECIFICATIONS. DISTURBED AREAS WHICH ARE EITHER AT FINISHED GRADE OR WILL NOT BE REDISTURBED WITHIN ONE YEAR MUST BE STABILIZED IN ACCORDANCE WITH PERMANENT SEEDING SPECIFICATIONS.
- STOCKPILES MUST BE STABILIZED IMMEDIATELY.
- HAY OR STRAW MULCH MUST BE APPLIED AT RATES OF AT LEAST 3.0 TONS PER ACRE.
- UNTIL THE SITE IS STABILIZED, ALL EROSION AND SEDIMENTATION CONTROLS MUST BE MAINTAINED PROPERLY. MAINTENANCE MUST INCLUDE INSPECTIONS OF ALL EROSION AND SEDIMENTATION CONTROLS AFTER EACH RUNOFF EVENT AND ON A WEEKLY BASIS. ALL PREVENTATIVE AND REMEDIAL MAINTENANCE WORK, INCLUDING CLEAN OUT, REPAIR, REPLACEMENT, REGRADING, RESEEDING, REMULCHING, AND RESETTING.
- THE CONTRACTOR SHALL RECYCLE MATERIALS WHENEVER APPROPRIATE AND WHEN IN ACCORDANCE WITH LOCAL, STATE, & FEDERAL REQUIREMENTS. ALL MATERIAL REMOVED FROM THE SITE SHALL BE DISPOSED OF PROPERLY IN A C&D LANDFILL OR IF CLEAN FILL MATERIAL IS REMOVED FROM THE SITE, IT SHALL BE TAKEN TO AN APPROVED C&D LANDFILL OR IF THE CONTRACTORS RESPONSIBILITY TO OBTAIN AN APPROVED E&S PLAN IF OVER 5000 SQUARE FEET OF AREA IS DISTURBED.

EROSION AND SEDIMENT CONTROL FACILITIES MAINTENANCE SCHEDULE:

- ALL EROSION AND SEDIMENT CONTROLS SHALL BE MAINTAINED UNTIL A UNIFORM 70% PERENNIAL VEGETATIVE COVER IS ESTABLISHED.

STONE CONSTRUCTION ENTRANCE:

- THE STONE CONSTRUCTION ENTRANCES ARE TO BE INSPECTED AT THE END OF EACH WORKING DAY AND REPAIRED IMMEDIATELY.
- THE THICKNESS OF THE ROCK CONSTRUCTION ENTRANCE SHALL BE CONSTANTLY MAINTAINED AT 6".
- A STONE STOCKPILE IS TO BE READILY AVAILABLE ON THE SITE AT ALL TIMES FOR IMMEDIATE REPAIR.

COMPOST FILTER SOCK:

- COMPOST FILTER SOCK MUST BE INSTALLED AT LEVEL GRADE, BOTH ENDS OF EACH COMPOST FILTER SOCK SECTION MUST EXTEND AT LEAST 10 FEET UPSLOPE AT 45 DEGREES TO THE MAIN COMPOST FILTER SOCK ALIGNMENT.
- THE CONTRACTOR SHALL MAINTAIN THE COMPOST FILTER SOCK IN A FUNCTIONAL CONDITION AT ALL TIMES AND IT SHALL BE ROUTINELY INSPECTED.
- WHERE THE SOCK REQUIRES REPAIR, IT WILL BE ROUTINELY REPAIRED.
- THE CONTRACTOR SHALL REMOVE SEDIMENT COLLECTED AT THE BASE OF THE SOCK WHEN IT REACHES 1/2 OF THE EXPOSED HEIGHT OF THE SOCK OR AS DIRECTED BY THE ENGINEER.
- THE COMPOST FROM THE FILTER SOCK WILL BE DISPERSED ON THE SITE WHEN SITE REACHES 70% VEGETATIVE COVER.

VEGETATION:

- THE CONTRACTOR SHALL INSPECT VEGETATED AREAS WEEKLY AND AFTER EACH STORM (RUNOFF) EVENT.
- THE CONTRACTOR SHALL INSPECT THE SITE FOR RILLS OR GULLIES ON CUT OR FILL SLOPES. THE CONTRACTOR SHALL FILL RILLS AND GULLIES, REGRADE DISTURBED AREAS TO PROVIDE A UNIFORM SLOPE, THEN RESEED/MULCH AND REPAIR/REPLACE MATS TO ORIGINAL SPECIFICATIONS.
- THE REPAIRS SHALL BE MADE WITHIN 2 DAYS OF DISCOVERING PROBLEM.

GRADING NOTES:

- THE CONTRACTOR SHALL REMOVE ALL EXISTING ASPHALT PAVEMENT AND CONCRETE SLABS FROM THE SITE.
- THE CONTRACTOR SHALL PROOF ROLL THE SITE TO THE SATISFACTION OF THE GEOTECHNICAL ENGINEER AND REMOVE ANY SOFT SOFT PRIOR TO THE IMPORTING OF ANY FILL MATERIAL.
- THE CONTRACTOR SHALL REPLACE ALL CURB SECTIONS, SIDEWALKS, AND PAVEMENT, WHICH HAS BEEN CUT AND DISTURBED WITHIN THE RIGHT-OF-WAY WITH WEST VIRGINIA DEPARTMENT OF TRANSPORTATION'S STANDARD MATERIALS.
- THE CONTRACTOR SHALL ADJUST TO GRADE ALL WATER AND GAS VALVES.
- THE CONTRACTOR SHALL COMPACT ALL FILL MATERIALS TO NOT LESS THAN 95% OF MAXIMUM DENSITY AS DETERMINED BY ASTM D1557 TO PROMOTE STABILITY AND PREVENT SETTLEMENT.
- THE CONTRACTOR SHALL USE WEST VIRGINIA EROSION AND SEDIMENT CONTROL FIELD MANUAL.

SITE STABILIZATION INSTALLATION AND MAINTENANCE (TEMPORARY AND PERMANENT):

- TILL SOIL TO DEPTH OF 2". REMOVE ALL OBJECTS 2" OR LARGER.
- BLEND COMMERCIAL FERTILIZER INTO THE SOIL TO A DEPTH OF 2". FERTILIZER MAY BE BLENDED DURING TILLING.
- SOW REQUIRED SEED MIXTURE UNIFORMLY ON THE PREPARED AREA BY HYDRAULIC SEEDING EQUIPMENT, HAND SEEDING, OR ANY OTHER APPROPRIATE METHOD.
- AFTER SEEDING ROLL TOPSOILED AREAS THAT ARE TO BE MOWED. USE A ROLLER WEIGHING NOT MORE THAN 65 LBS./FT. WIDTH.
- FOR PERMANENT SITE STABILIZATION APPLY SLOW RELEASE NITROGEN FERTILIZER TO THE SURFACE OF SEEDING AREAS.
- PLACE MULCH IMMEDIATELY AFTER SEEDING OR WITHIN 48 HOURS AFTER SEEDING IS COMPLETED. PLACE HAY & STRAW UNIFORMLY IN A CONTINUOUS BLANKET AT THE MINIMUM RATE SPECIFIED ABOVE. AN ACCEPTABLE MECHANICAL BLOWER MAY BE USED TO APPLY MULCH. MACHINES WHICH CUT MULCH INTO SHORT PIECES WILL NOT BE PERMITTED.
- MAINTENANCE - SATISFACTORILY MAINTAIN GRASS AREAS WITHIN GRADING LIMITS, UNTIL THE ENTIRE PROJECT HAS BEEN COMPLETED. MOW AS INDICATED AND WHEN DIRECTED. CONTROL PROHIBITED AND NOxious WEED GROWTH BY HERBICIDE SPRAYING OR CUTTING. AFTER THE SEEDING AND SOIL SUPPLEMENT WORK ON A SLOPE HAS BEEN SATISFACTORILY COMPLETED, IF A SLOPE FAILURE OCCURS, ONE WHICH REQUIRES REDRESSING, EXCAVATION, OR ESTABLISHMENT OF A NEW SLOPE, REAPPLY SOIL SUPPLEMENTS, THEN RESEED, AS SPECIFIED FOR THE ORIGINAL TREATMENT.
- A SITE WILL BE CONSIDERED TO BE PERMANENTLY STABILIZED WHEN ALL PERMANENT CONTROL MEASURES AND FACILITIES HAVE BEEN COMPLETED AND ARE OPERATIONAL. TEMPORARY CONTROL MEASURES AND FACILITIES REMOVED, AND UNIFORM 70% PERENNIAL VEGETATIVE COVER IS ESTABLISHED TO THE POINT WHERE THE SURFACE SOIL IS CAPABLE OF RESISTING EROSION DURING RUNOFF EVENTS. THE STANDARD FOR THIS VEGETATIVE COVER WILL BE A UNIFORM COVERAGE OR DENSITY OF 70% ACROSS THE DISTURBED AREA.
- THE CONTRACTOR SHALL MAINTAIN THE SITE PER THE PROVISIONS OF THIS PLAN UNTIL PERMANENT STABILIZATION IS ESTABLISHED.

PERMANENT STABILIZATION

SPECIES: KENTUCKY BLUEGRASS/ REDTOP/ BIRDFOOT TREFOIL
 SEED: 20 LBS./ACRE, 3 LBS./ACRE, AND 10 LBS./ACRE, RESPECTIVELY
 APPLICATION RATE: COMMERCIAL FERTILIZER 10-20-20
 FERTILIZER TYPE: COMMERCIAL - 1000 LBS./ACRE
 LIMING RATE: 3 TONS/ACRE
 MULCH TYPE: HAY & STRAW
 MULCHING RATE: 3 TONS/ACRE
 ANCHOR MATERIAL: RECYCLED CELLULOSE FIBER/WOOD FIBER MIXTURE
 ANCHORING METHOD: HYDRAULIC SEEDING EQUIPMENT
 RATE OF ANCHOR: 310 LBS./1000 SQ. YD.
 MATERIAL APPLICATION: YEAR AROUND
 SEEDING SEASON DATES:

TEMPORARY STABILIZATION:

SPECIES: ANNUAL RYEGRASS
 SEED: 40 LBS./ACRE
 APPLICATION RATE: COMMERCIAL FERTILIZER 10-10-10
 FERTILIZER TYPE: COMMERCIAL FERTILIZER 10-10-10
 RATE: 1000 LBS./ACRE
 LIMING RATE: 3 TONS/ACRE
 MULCH TYPE: HAY & STRAW
 MULCHING RATE: 3 TONS/ACRE

PERMANENT- STEEP SLOPE:

SPECIES: KENTUCKY BLUEGRASS/ REDTOP/ BIRDFOOT TREFOIL
 SEED: 20 LBS./ACRE, 3 LBS./ACRE, 8 LBS./ACRE, RESPECTIVELY
 APPLICATION RATE: COMMERCIAL FERTILIZER 10-20-20
 FERTILIZER TYPE: COMMERCIAL - 1000 LBS./ACRE
 LIMING RATE: 3 TONS/ACRE
 MULCH TYPE: HAY & STRAW
 MULCHING RATE: 3 TONS/ACRE
 ANCHOR MATERIAL: RECYCLED CELLULOSE FIBER/WOOD FIBER MIXTURE
 ANCHORING METHOD: HYDRAULIC SEEDING EQUIPMENT
 RATE OF ANCHOR: 310 LBS./1000 SQ. YD.
 MATERIAL APPL.: YEAR AROUND
 SEEDING DATES:

GENERAL NOTES:

- THE GENERAL CONTRACTOR SHALL NOTIFY ALL UTILITY COMPANIES INVOLVED IN THE SITE NO MORE THAN TEN DAYS AND NO LESS THAN THREE DAYS IN ADVANCE OF EXCAVATION EXCLUDING SATURDAY, SUNDAY, AND FEDERAL OR STATE HOLIDAYS. (WV CHAPTER 24C-1-5, UNDERGROUND FACILITY DAMAGE PROTECTION ACT).
- TRAFFIC SHALL BE MAINTAINED ON ALL ADJACENT STREETS AND DRIVES AT ALL TIMES. TRAFFIC CONTROL SHALL BE MAINTAINED IN ACCORDANCE WITH WVDOT'S REQUIREMENTS.
- CONTRACTOR SHALL VERIFY THE LOCATION AND INVERT ELEVATION OF ALL EXISTING UTILITIES WITH PROPOSED CONNECTIONS PRIOR TO CONSTRUCTION AND GRADING OF THE SITE.

DRILL PITS:

- THE PIT SHALL BE CONSTRUCTED AND MAINTAINED SO AS TO PREVENT SEEPAGE, LEAKAGE, AND OVERFLOWS.
- PITS SHOULD BE CONSTRUCTED BELOW SURFACE GROUND LEVEL, WHEN POSSIBLE. ANY ABOVEGROUND PIT WALLS, AS IS THE CASE WITH PITS CONSTRUCTED IN THE LOWER SLOPE AREAS OF THE WELLSITE, SHALL BE CONSTRUCTED WITH A GIDE SLOPE BEING MAINTAINED THAT WILL PRESERVE THE STRUCTURAL INTEGRITY. THE FILL MATERIAL SHOULD CONTAIN THE PROPER AMOUNT OF MOISTURE TO ENSURE THAT COMPACTION WILL BE ACHIEVED.
- ALL PITS SHALL BE DESIGNED, CONSTRUCTED, LOCATED, MAINTAINED, AND USED IN ACCORDANCE WITH TITLE 35CSR4.21 AND IN SUCH A MANNER AS TO MINIMIZE ADVERSE ENVIRONMENTAL IMPACTS AND TO ASSURE SAFETY TO THE PUBLIC.

EROSION CONTROL BLANKETING:

- EROSION CONTROL BLANKETING TO BE INSTALLED ON ALL SLOPES OF 3:1 GRADING OR STEEPER IN ACCORDANCE WITH EROSION CONTROL BLANKETING DETAIL PROVIDED.
- PROPERLY PREPARE SOIL BEFORE INSTALLING BLANKETS.
- ANCHOR BLANKETS IN A TRENCH AT THE TOP OF SLOPE USING A ROW OF STAPLES/STAKES.
- BACKFILL AND COMPACT THE TRENCH AFTER STAPLING.
- APPLY SEED TO COMPACTED SOIL AND FOLD REMAINING 12" (30cm) PORTION OF BLANKET BACK OVER SEED AND COMPACTED SOIL.
- SECURE BLANKET OVER COMPACTED SOIL WITH A ROW OF STAPLES/STAKES ACROSS THE WIDTH OF THE BLANKET
- ALL BLANKETS MUST BE SECURELY FASTENED TO SOIL SURFACE.
- OVERLAP PARALLEL BLANKETS.
- IN LOOSE SOIL CONDITIONS, THE USE OF STAPLE OR STAKE LENGTHS GREATER THAN 6" (15cm) MAY BE NECESSARY TO PROPERLY SECURE THE BLANKETS.

HYDRAULICALLY APPLIED BLANKETS:

- HYDRAULICALLY APPLIED BLANKETS SHOULD NOT BE USED IN AREAS OF CONCENTRATED FLOW (E.G. CHANNELS).
- A BONDED FIBER MATRIX (BFM) CAN BE AN EFFECTIVE METHOD OF STABILIZING STEEP SLOPES WHEN USED PROPERLY. BFM'S MAKE USE OF A CROSS-LINKED HYDROCOLLOID TACKIFIER TO BOND THERMALLY PROCESSED WOOD FIBERS. APPLICATION RATES VARY ACCORDING TO SITE CONDITIONS. FOR SLOPES UP TO 3:1 THE BFM SHOULD BE APPLIED AT A RATE OF 3,000 LB./ACRE. STEEPER SLOPES MAY NEED AS MUCH AS 4,000 LB./ACRE. IN ANY CASE, MANUFACTURER'S RECOMMENDATIONS SHOULD BE FOLLOWED. BFM'S SHOULD ONLY BE USED WHEN NO RAIN IS FORECAST FOR AT LEAST 48 HOURS FOLLOWING THE APPLICATION. THIS IS TO ALLOW THE TACKIFIER SUFFICIENT TIME TO CURE PROPERLY. ONCE PROPERLY APPLIED, A BFM IS TYPICALLY 90% EFFECTIVE IN PREVENTING ACCELERATED EROSION. BONDED FIBER MATRIX SHOULD NOT BE APPLIED BETWEEN SEPTEMBER 30 AND APRIL 1, ONCE FIBER MATRICES THAT HAVE BEEN SHOWN TO BE EFFECTIVE IN PREVENTING EROSION ON DISTURBED SURFACES MAY BE USED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS IF SUFFICIENT SUPPORTING DOCUMENTATION IS PROVIDED.
- A FLEXIBLE GROWTH MEDIUM (FGM) HAS THE ADDED COMPONENT OF 1/2 INCH LONG, CRIMPED ORGANIC OR MANMADE FIBERS WHICH ADD A MECHANICAL BOND TO THE CHEMICAL BOND PROVIDED BY BFM'S. THIS INCREASES THE BLANKETS RESISTANCE TO BOTH RAINDROP IMPACT AND EROSION DUE TO RUNOFF. UNLIKE BFM'S, A FLEXIBLE GROWTH MEDIUM TYPICALLY DOES NOT REQUIRE A CURING TIME TO BE EFFECTIVE. PROPERLY APPLIED, AN FGM MAY BE AS MUCH AS 95% EFFECTIVE.
- A POLYMER STABILIZED FIBER MATRIX (PSFM) CAN ALSO BE AN EFFECTIVE METHOD OF STABILIZING STEEP SLOPES WHEN USED PROPERLY. PSFM'S MAKE USE OF A LINEAR POLYMER STABILIZING TACKIFIER THAT WORKS DIRECTLY ON SOIL TO MAINTAIN SOIL STRUCTURE, MAINTAIN PORE SPACE CAPACITY AND FLOCCULATE DISLOOGED SEDIMENT THAT WILL SIGNIFICANTLY REDUCE RUNOFF TURBIDITY. PROPERLY APPLIED, A PSFM MAY BE AS MUCH AS 98% EFFECTIVE. PSFM'S CAN BE USED IN RE-VEGETATION APPLICATIONS AND FOR SITE WINTERIZATION AND/OR DORMANT SEEDING - FALL PLANTING FOR SPRING GERMINATION - APPLICATIONS. APPLICATION RATES VARY ACCORDING TO SITE CONDITIONS AND THE FOLLOWING APPLICATION RATES ARE SUGGESTED. IN ANY CASE, MANUFACTURER'S RECOMMENDATIONS SHOULD BE FOLLOWED. THE FOLLOWING ARE TYPICAL APPLICATION RATES:

TYPICAL POLYMER STABILIZED FIBER MATRIX APPLICATION RATES

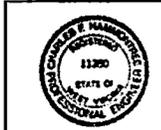
MAXIMUM RAINFALL OF < 20"	SLOPE						
	0:1	1:1	4:1	3:1	2:1	1.5:1	1:1
SOIL STABILIZER (cwt/acre)	4	5	8	7	8	9	10
FIBER (lb/acre)	1,500	1,200	1,500	1,500	2,000	2,500	3,000

MAXIMUM RAINFALL OF > 20" AND FOR SITE WINTERIZATION

SLOPE	SOIL STABILIZER (cwt/acre)			FIBER (lb/acre)
	< 1:1	4:1	> 4:1	
SOIL STABILIZER (cwt/acre)	5	8	10	
FIBER (lb/acre)	3,000	2,500	3,000	

- UNLIKE ROLLED BLANKETS, THERE IS NO NEED TO SMOOTH THE SLOPE PRIOR TO APPLICATION OF HYDRAULICALLY APPLIED BLANKETS. IN FACT SOME ROUGHENING OF THE SURFACE, EITHER NATURAL OR MECHANICALLY INDUCED, IS PREFERABLE. HOWEVER, LARGE ROCKS, THOSE > 8 INCHES, AND EXISTING RILLS SHOULD BE REMOVED PRIOR TO APPLICATION. TRACKING OR GROWING OF SLIPES SHOULD BE CONSIDERED TO SLOW WATER FLOWS DURING A STORM EVENT. SLOPE INTERRUPTION DEVICES SUCH AS STAIR, STOP GRADING OR BENCHING SHOULD BE APPLIED PRIOR TO THE APPLICATION. MIXING AND APPLICATION RATES SHOULD FOLLOW MANUFACTURER'S RECOMMENDATIONS.
- HYDRAULICALLY APPLIED BLANKETS ARE TYPICALLY APPLIED IN TWO STAGES. UNLESS SPECIFICALLY RECOMMENDED TO BE APPLIED IN ONE APPLICATION BY THE MANUFACTURER, THE SEED MIXTURE AND SOIL AMENDMENTS SHOULD BE APPLIED FIRST. IF THE SEED IS APPLIED AT THE SAME TIME AS THE HYDRAULICALLY APPLIED BLANKET, THE BONDED FIBERS MAY KEEP THE SEED FROM MAKING SUFFICIENT CONTACT WITH THE SOIL TO GERMINATE. AFTER THE SEED MIXTURE IS APPLIED, THE FGM, FGM, OR PSFM SHOULD BE SPRAYED OVER THE AREA AT THE REQUIRED APPLICATION RATE.

Received
APR 22 2014
Office of Oil and Gas
WV Dept. of Environmental Protection



MORRIS KIVNILES & ASSOCIATES, INC.
 A PROFESSIONAL COMPANY
 ENGINEERS, PLANNERS, SURVEYORS
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 GREENSBORO, WV 26033
 PHONE: (208) 468-4622 FAX: (208) 468-8940
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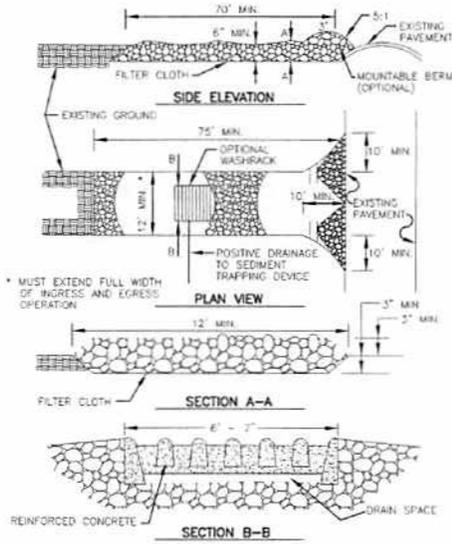
DESIGNED BY: JESSIE J. JENSEN
 DRAWN BY: JESSIE J. JENSEN
 PLO BY: JESSIE J. JENSEN
 BK BY: JESSIE J. JENSEN
 DATE: 04/22/14

EROSION & SEDIMENT CONTROL NOTES
 LYONS S-25
 470 GREEN AVE.
 HARRISON COUNTY, WEST VIRGINIA

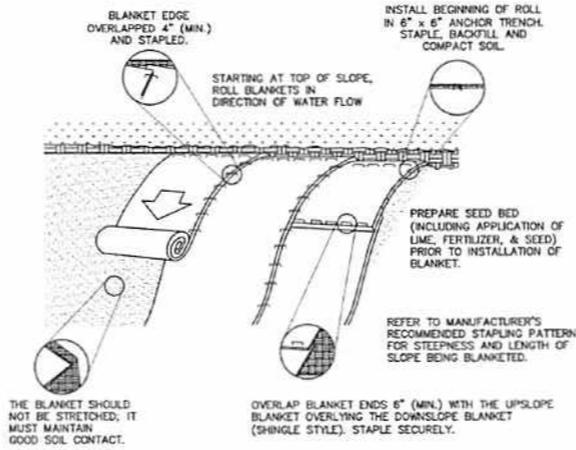
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**STANDARD CONSTRUCTION DETAIL
STONE CONSTRUCTION ENTRANCE**
NOT TO SCALE

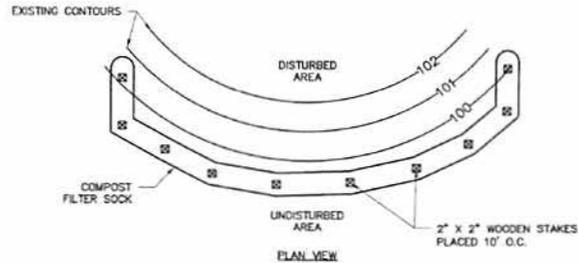
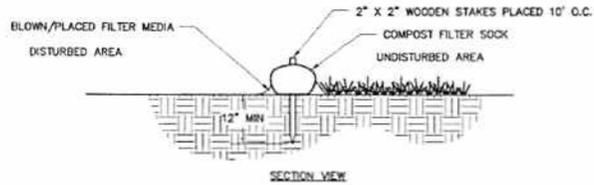


**STANDARD CONSTRUCTION DETAIL
EROSION CONTROL BLANKET**
NOT TO SCALE



1. PREPARE SOIL BEFORE INSTALLING BLANKETS, INCLUDING ANY NECESSARY APPLICATION OF LIME, FERTILIZER, AND SEED. NOTE: WHEN USING CELL-0-SEED DO NOT SEED PREPARED AREA. CELL-0-SEED MUST BE INSTALLED WITH PAPER SIDE DOWN.
 2. BEGIN AT THE TOP OF THE SLOPE BY ANCHORING THE BLANKET IN A 6" (15cm) DEEP x 6" (15cm) WIDE TRENCH WITH APPROXIMATELY 12" (30cm) OF BLANKET EXTENDED BEYOND THE UP-SLOPE PORTION OF THE TRENCH. ANCHOR THE BLANKET WITH A ROW OF STAPLES/STAKES APPROXIMATELY 12" (30cm) APART IN THE BOTTOM OF THE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING. APPLY SEED TO COMPACTED SOIL AND FOLD REMAINING 12" (30cm) PORTION OF BLANKET BACK OVER SEED AND COMPACTED SOIL. SECURE BLANKET OVER COMPACTED SOIL WITH A ROW OF STAPLES/STAKES SPACED APPROXIMATELY 12" (30cm) APART ACROSS THE WIDTH OF THE BLANKET.
 3. ROLL THE BLANKETS (A.) DOWN OR (B.) HORIZONTALLY ACROSS THE SLOPE. BLANKETS WILL UNROLL WITH APPROPRIATE SIDE AGAINST THE SOIL SURFACE. ALL BLANKETS MUST BE SECURELY FASTENED TO SOIL SURFACE BY PLACING STAPLES/STAKES IN APPROPRIATE LOCATIONS AS SHOWN IN THE STAPLE PATTERN GUIDE. WHEN USING OPTIONAL DOT SYSTEM, STAPLES/STAKES SHOULD BE PLACED THROUGH EACH OF THE COLORED DOTS CORRESPONDING TO THE APPROPRIATE STAPLE PATTERN.
 4. THE EDGES OF PARALLEL BLANKETS MUST BE STAPLED WITH APPROXIMATELY 2"-5" (5cm-12.5cm) OVERLAP DEPENDING ON BLANKET TYPE. TO ENSURE PROPER SEAM ALIGNMENT, PLACE THE EDGE OF THE OVERLAPPING BLANKET (BLANKET BEING INSTALLED ON TOP) EVEN WITH THE COLORED SEAM STITCH ON THE PREVIOUSLY INSTALLED BLANKET.
 5. CONSECUTIVE BLANKETS SPICED DOWN THE SLOPE MUST BE PLACED END OVER END (SHINGLE STYLE) WITH AN APPROXIMATE 3" (7.5cm) OVERLAP, STAPLE THROUGH OVERLAPPED AREA, APPROXIMATELY 12" (30cm) APART ACROSS ENTIRE BLANKET WIDTH.
- * IN LOOSE SOIL CONDITIONS, THE USE OF STAPLE OR STAKE LENGTHS GREATER THAN 6" (15cm) MAY BE NECESSARY TO PROPERLY SECURE THE BLANKETS.

**STANDARD CONSTRUCTION DETAIL
COMPOST FILTER SOCK**
NOT TO SCALE



NOTES:

1. ALL MATERIAL TO MEET DEP SPECIFICATIONS.
2. FILTER SOCK/COMPOST/SOIL/ROCK/SEED FILL TO MEET DEP REQUIREMENTS.
3. FILTER SOCK DEPICTED IS FOR MINIMUM SLOPES. GREATER SLOPES MAY REQUIRE LARGER SOCKS PER THE ENGINEER.
4. COMPOST MATERIAL TO BE DISPERSED ON SITE, AS DETERMINED BY ENGINEER.

Received

APR 22 2014

Office of Oil and Gas
WV Dept. of Environmental Protection



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DESIGN BY:	JMB	DATE:		DESIGN:	
DRAWN BY:	JMB	DATE:		DESIGN:	
REVISED BY:		DATE:		DESIGN:	
FILED BY:		DATE:		DESIGN:	
DATE:	07/13/14			DESIGN:	

EROSION & SEDIMENT CONTROL DETAILS
LYONS S-25
XTO ENERGY, INC.
GREEN AVE.
HARRISON COUNTY, WEST VIRGINIA



WVDEP
Office of Oil & Gas
601 57th Street, SE
Charleston, WV 25304-2345

Re: Application to Plug and Abandon
Lyons S-25
Coal District
Harrison County, WV

To Whom It May Concern:

In accordance with Article 22-6-23 of the West Virginia State Code regarding oil and gas operations, please find the attached application for the plugging and abandonment of the subject well. Notices of our intention to plug this wellbore have been sent to the surface owner, coal owners with declarations recorded, and coal operators associated with this well. Copies of the certified mail receipts are attached for your records. If you have any questions or need additional information, please feel free to contact me at 304-884-6000.

Sincerely,

A handwritten signature in blue ink, appearing to read 'Gary Beall', written over a horizontal line.

Gary Beall
PO Box 1008
Jane Lew, WV 26378

GB/tps

Received

APR 22 2014

Office of Oil and Gas
WV Dept. of Environmental Protection



WVDEP
Office of Oil & Gas
Attn: Inspector Sam Ward
601 57th Street, SE
Charleston, WV 25304-2345

Re: Application to Plug and Abandon
Lyons S-25
Coal District
Harrison County, WV

Mr. Ward:

In accordance with Article 22-6-23 of the West Virginia State Code regarding oil and gas operations, please find the attached application for the plugging and abandonment of the subject well. Notices of our intention to plug this wellbore have been sent to the surface owner, coal owners with declarations recorded, and coal operators associated with this well. Copies of the certified mail receipts are attached for your records. If you have any questions or need additional information, please feel free to contact me at 304-884-6000.

Sincerely,

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Jane Lew, WV 26378

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Office of Oil and Gas
WV Dept. of Environmental Protection