

west virginia department of environmental protection

Office of Oil and Gas 601 57th Street, S.E. Charleston, WV 25304 (304) 926-0450 fax: (304) 926-0452 Jim Justice , Governor Austin Caperton , Cabinet Secretary www.dep.wv.gov

Monday, July 31, 2017 WELL WORK PERMIT Vertical / Plugging

XTO ENERGY, INC. 810 HOUSTON STREET

FORT WORTH, TX 76102

Re: Permit approval for 1

47-097-01274-00-00

This well work permit 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 any additional specific 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.

Please be advised that form WR-35, Well Operators Report of Well Work is to be submitted to this office within 90 days of completion of permitted well work, as should form WR-34 Discharge Monitoring Report within 30 days of discharge of pits, if applicable. Failure to abide by all statutory and regulatory provisions governing all duties and operations hereunder may result in suspension or revocation of this permit and, in addition, may result in civil and/or criminal penalties being imposed upon the operators.

Per 35 CSR 4-5.2.g this permit will expire in two (2) years from the issue date unless permitted well work is commenced. If there are any questions, please feel free to contact me at (304) 926-0450.

James A. Martin Chief

Operator's Well Number: 1

Farm Name: STRADER, FORMAN G.

U.S. WELL NUMBER: 47-097-01274-00-00

Vertical / Plugging

Date Issued: 7/31/2017

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.

WW-4B Rev. 2/01

1)Date	7/13	, 20 17
2) Opera	tor's	-11.77
Well	No.1	
3) APT W	ell No. 47-09	7 - 01274

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

()	Well Type: Oil/ Gas X/ Liqui	id injection/ Waste disposal/
	(If "Gas, Production X or Ur	nderground storage) Deep/ Shallow X
)	Location: Elevation 1439	Watershed Buckhannon River (050200103)
	District Buckhannon	County Upshur Quadrangle Adrian
١	Well Operator XTO Energy Inc	7) Designated Agent Gary Beall
1	Address PO Box 1008	Address PO Box 1008
	Jane Lew, WV 26378	Jane Lew, WV 26378
)	Oil and Gas Inspector to be notified Name Bryan Harris	9)Plugging Contractor Name
	Address PO Box 157	Address
	Volga, WV 26238	
Ρ.	Work Order: The work order for the man	nner of plugging this well is as follows: RECEIVED Office of Oil and Gas JUL 17 2017 WW Department of Environmental Protection
٦,		RECEIVED Office of Oil and Gas
۲.		RECEIVED Office of Oil and Gas JUL 1 7 2017
ti	See attached	RECEIVED Office of Oil and Gas JUL 1 7 2017

47-097-01274

Plugging Procedure

RIH with 2" tubing - 2454'

6% gel 2454' - surface = 40 bbls

Cement - 2454' - 2200' = 254' x .0163 = 4.1 bbl = 20 sks

Perfs - 2402 - 2406'

Tag cement and pull tubing

RIH to CBL 4.5 - Estimate TOC at 1900'

6% gel 1900' - Surface

Cut 4 1/2"

Cement - 1900' - 1750' = 150' x .0602 = 9 bbl = 44 sks

Gel - 1750' - 1500'

Elevation 1440'

Cement - 1500' - 1340' = 160' x .0602 = 9.7 bbl = 46 sks

Gel - 1340 - 910'

8 5/8" bottom @ 854'

Cement - 910' - 780' = 130' = 8.5 bbl - 44 sks

Gel - 780 - 700 CEMENT FROM 700' - 600' (COUM COME & 639-645) GEL FRIM 600-200'

Cement 200' - Surface = 200 x .0641 = 13 bbl = 62 sks

8 5/8" cemented to surface

.

SWM

RECEIVED Office of Oil and Gas

JUL 17 2017

Install Well Monument

Total Cement - 216 sks

Total Gel - 2000 lbs

WV Department of Environmental Protection m OG-10



STATE OF WEST VIRGINIA DEPARTMENT OF MINES

Rotary 😡 Spudder 🗀

OIL AND GAS WELLS DIVISION

Cable Tools

ermit No. ups 1274

uadrangle Crawford

WELL RECORD

Oil or Gas Well -gas

			Oll or (Gas Well Gas (KIND)
ompany POM CORPORATION Address Ann Arbor, Michigan	Casing and Tubing	Used in Drilling	Left in Well	Packers
ocation (waters) Snyder Run at Stone Coal Creek Well No. Sp #109 Elev. 1440'	Size 16 13			Kind of Packer
District Buckhannon County upshur The surface of tract is owned in fee by F.J. G. Strader Buckhannon Address	10x 11-3/4" 81x 5/8"		183' 854'	Size of
Mineral rights are owned by F. G. Strader	5 3/16.	·		Depth set
Drilling commenced 1-18-70 Drilling completed 1-28-70 Date Shot From To	3 2 Liners Used	S 113	2520.	Perf. top2402' Perf. bottom 2406' Perf. top
Open Flow /10ths Water in Inch /10ths Merc. in Inch Volume Cu. Fr Rock Pressure lbs. hrs. Oil bbls. 1st 24 hrs	Amount of cemer Name of Service	NTED $4\frac{1}{2}$ tt of used (bags).	SIZE 2520'	No. Ft. 1–28–70 Date
WELL ACIDIZED (DETAILS) REMETTER. WELL FRACTURED (DETAILS) Dowell Co. fractured (500 gal. acid, 30,000# 20-40 sand, 50 sks. c	FEET FEET Gordon zone u	INC INC sing 670 b	HES HES bl. treate	FEET INCHES FEET INCHES ed water
RESULT AFTER TREATMENT (Initial open Flow or bbls.) ROCK PRESSURE AFTER TREATMENT 580 Fresh Water Feet	HOURS Salt Water	5/610 cr 9	674 80. Feet	0.000 6.25
	-4 -1	Depth 249	U	Address A. A. Charles

Shale	Formation	Color	Hard or Soft	Тор	Bottom	Oil, Gas or Water	Depth	Remarks
Send 118 124 140 142 140 142 140 142 140 142 140 142 140 142 140 142 140 142 140 142 140 142 140 142 140 142 140 142 140 142 140 142 140 142 140	Surface			0	40			
124				40				
140	Find			118	124			
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Shale Shale & Red Rock		100	1	180	247			
Shale & Red Rock Sand (Hard) Coal Sand & Shale Shale Shale				2.47	310			
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Coal			1	612				
Sand & Shale	Coal	1		6.39		1		
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RECEIVED Office of Oil and Gas

JUL 17 2017

WW-4A Revised 6-07

	Date: 7//3/ Operator's Well Number	17	WV ! Environ	Department of mental Protection	n_
3)	API Well No.: 47 -	097		01274	

STATE OF WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS NOTICE 0F APPLICATION TO PLUG AND ABANDON A WELL

(a) Name	ner(s) to be served: Joseph & Mary Corder	5) (a) (Coal Operator Name	r
Address	21 Tillman LN Buckhannon, WV 26201		Address	
(b) Name Address	Buckfatfion, VV 20201		(b) Coal Ov Name	wner(s) with Declaration Joseph & Mary Corder
			Address	21 Tillman LN
20/45				Buckhannon, WV 26201
(c) Name			Name	
Address	-		Address	
6) Inspector	Bryan Harris		(c) Coal Les	essee with Declaration
Address	PO Box 157		Name	
	Volga, WV 26238		Address	
Telephone	304-553-6087			-
				eived this Form and the following documents: a sets out the parties involved in the work and describes the

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.

OFFICIAL SEAL	Well Operator By:	XTO Energy Inc.	
NOTARY PUBLIC State of West Virginia	ts:	Regulatory Compliance Technician	
YVONNE A. DUTCHESS	Address	PO Box 1008	
RR 3, Box 745 Lost Creek, WV 26385		Jane Lew, WV 26378	
My Commission Expires September 26, 2018	Telephone	304-884-6000	
Subscribed and sworn before me this	10th di	ay of July 2017 Notary Public	

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 depprivacyoffier@wv.gov.

Royalty Owners

47-097-01274

Joseph A Corder

XTO Energy Inc.

RECEIVED Office of Oil and Gas

JUL 1708/04/2017

W Department of Environmental Protection WW-9 (5/16)

API Number 47 - 097	_ 01274
Operator's Well No. 1	

DEPARTMENT OF ENVIRONMENT OF ENVIRON	EST VIRGINIA ONMENTAL PROTECTION OIL AND GAS	Office of Oil and Gas
FLUIDS/ CUTTINGS DISPOS	SAL & RECLAMATION PLAN	JUL 1 7 2017
Operator Name XTO Energy Inc.	OP Code 494487940	WW Department of Environmental Protection
Watershed (HUC 10) Buckhannon River (050200103)	Quadrangle Adrian	Protection
Do you anticipate using more than 5,000 bbls of water to complet Will a pit be used? Yes No	e the proposed well work? Yes	No 🗸
If so, please describe anticipated pit waste: Fluids from	plugging operations will be put into tanks	
Will a synthetic liner be used in the pit? Yes	No If so, what ml.?	
Proposed Disposal Method For Treated Pit Wastes:		
Reuse (at API NumberOff Site Disposal (Supply form WW-	Number_4707302523, 4708505151, 4708509721)
Will closed loop systembe used? If so, describe: NA		
Drilling medium anticipated for this well (vertical and horizontal)	? Air, freshwater, oil based, etc. NA - Plug	gging
-If oil based, what type? Synthetic, petroleum, etc. NA		
Additives to be used in drilling medium? NA		
Drill cuttings disposal method? Leave in pit, landfill, removed of	fsite, etc. Any solid waste from plugging will be	e taken to landfill.
-If left in pit and plan to solidify what medium will be us	sed? (cement, lime, sawdust) NA	
-Landfill or offsite name/permit number? Meadowbrook La	andfill SWF#1032	
Permittee shall provide written notice to the Office of Oil and Gas West Virginia solid waste facility. The notice shall be provided w where it was properly disposed.		
I certify that I understand and agree to the terms and cor on April 1, 2016, by the Office of Oil and Cas of the West Virgin provisions of the permit are enforceable by law. Violations of any or regulation can lead to enforcement action. I certify under penalty of law that I have personally e application form and all attachments thereto and that, based on my the information, I believe that the information is true, accurate, submitting false information, including the possibility of fine or in	tia Department of Environmental Protection of the general permit are examined and am familiar with the informal inquiry of those individuals immediately and complete. I am aware that there are	on. I understand that the nd/or other applicable law mation submitted on this responsible for o btaining
Company Official Signature Tim Sands		
Company Official Title Regulatory Compliance Technician		
Company Official Title Regulatory Compliance Technician		
Subscribed and sworn before me this 10th day of (When A Mutchessel My commission expires September 7-le	Notary Public	08/04/2017
my commission copies XIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII	1	00/07/2017



Seed Mixtures Temporary Permanent Seed Type Ibs/acre Seed Type Ibs/acre Per Plans Matach: Maps(s) of road, location, pit and proposed area for land application (unless engineered plans including this info have been provided). If water from the pit will be land applied, provide water volume, include dimensions (L, W, D) of the pit, and did L, W), and area in acres, of the land application area. Photocopied section of involved 7.5' topographic sheet.					
Fertilizer type 10-20-20 Fertilizer amount 500 lbs/acre Mulch 2 Tons/acre Seed Mixtures Temporary Permanent Seed Type lbs/acre Seed Type lbs/acre Per Plans Per Plans Per Plans Attach: Maps(s) of road, location, pit and proposed area for land application (unless engineered plans including this info have been rovided). If water from the pit will be land applied, provide water volume, include dimensions (L, W, D) of the pit, and did L, W), and area in acres, of the land application area. Photocopied section of involved 7.5' topographic sheet.	osed Revegetation Treatment:	Acres Disturbed	35 +/-	Preveg etation pH	1
Fertilizer amount 500	Lime 4 To	ons/acre or to corre	ect to pH		
Fertilizer amount 500 Ibs/acre Office of O	Fertilizer type 10-20-20		0		BEGEN ED
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	s(s) of road, location, pit and proided). If water from the pit will by, and area in acres, of the land ocopied section of involved 7.5' Approved by:	be land applied, po application area. topographic sheet	rovide water volume, i	nclude dimensions (L,	W, D) of the pit, and dimensions
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WW-9- GPP Rev. 5/16

Page	of	
API Number 47 - 097	- 01274	
Operator's Well No. 1		

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

Operator Name: XTO Energy Inc.	
Watershed (HUC 10): Buckhannon River (050200103)	Quad: Adrian
Farm Name: Strader, Forman G.	
 List the procedures used for the treatment and discharge of flu groundwater. 	ids. Include a list of all operations that could contaminate the
Fluids will not be discharged.	
2. Describe procedures and equipment used to protect groundwate	er quality from the list of potential contaminant sources above.
NA	
3. List the closest water body, distance to closest water body, a discharge area.	and distance from closest Well Head Protection Area to the
NA	
I. Summarize all activities at your facility that are already regulat	ed for groundwater protection.
NA	
	Office of Oil and Gas
	IIII 1 7 A.

5. Discuss any existing groundwater quality data for your facility or an adjacent property.

WV Department of Environmental Protection

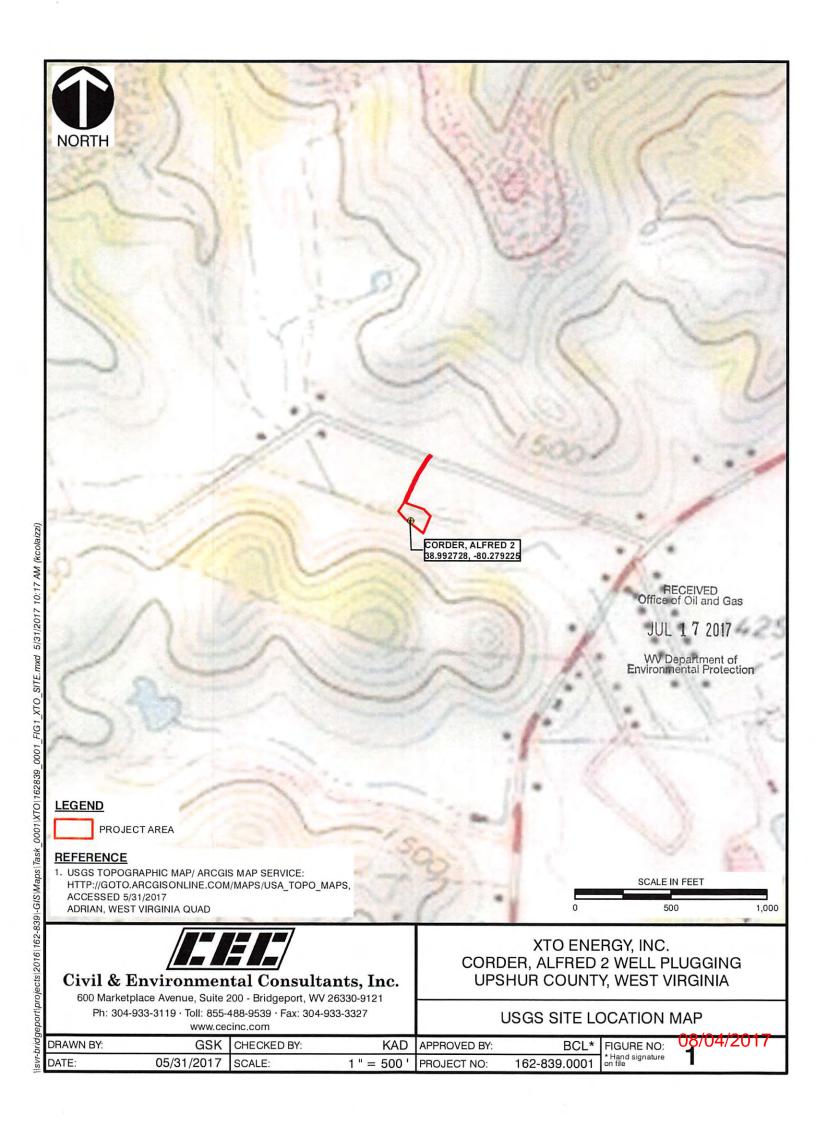
08/04/2017

√W-9- GPP	Page of	Page of			
ev. 5/16	API Number 47 - <u>097</u> - <u>01274</u>				
	Operator's Well No. 1				
A					
Provide a statement that no waste material	will be used for deicing or fill material on the property.				
NA					
Describe the groundwater protection instr provide direction on how to prevent groun	ruction and training to be provided to the employees. Job procedures shall adwater contamination.	1]			
NA					
• •					
Provide provisions and frequency for inspe	ections of all GPP elements and equipment.				
NA					
,	•				
ignature: Ti Aa					
Date: 7/10/17					
Date: // (0///					

RECEIVED Office of Oil and Gas

JUL 17 2017/04/2017

WV Department of Environmental Protection



WW-7 8-30-06



West Virginia Department of Environmental Protection Office of Oil and Gas

WELL LOCATION FORM: GPS

API: 47-097-01274	WELL NO.: 1	
FARM NAME: Forman G. Strader		
RESPONSIBLE PARTY NAME: XTO E	nergy, Inc.	
COUNTY: Upsher	DISTRICT: Bud	ckhannon
QUADRANGLE: Adrian, WV		
SURFACE OWNER: Joseph & Mary	Corder	
ROYALTY OWNER: See attached		
UTM GPS NORTHING: 4316215.8		
	GPS ELEVAT	ION: 1439
preparing a new well location plat for a pluggir above well. The Office of Oil and Gas will not the following requirements: 1. Datum: NAD 1983, Zone: 17 North height above mean sea level (MSL) 2. Accuracy to Datum – 3.05 meters 3. Data Collection Method: Survey grade GPS: Post Processed Di	accept GPS coordinate, Coordinate Units: me meters.	es that do not meet
Real-Time Differ	ential	
Mapping Grade GPS X : Post Processed	Differential	
Real-Time Dif		
4. Letter size copy of the topography I the undersigned, hereby certify this data is cobelief and shows all the information required by prescribed by the Office of Oil and Gas.	rrect to the best of my	knowledge and
B.C. Eth Proje	ct Manager	6-13-17
Signature	Title	Date

Office of Oil and Gas

JUL 1 7 2017

WV Department of Environmental Projection 08/04/2017

ALFRED CORDER 2 WELL PLUGGING PROJECT EROSION AND SEDIMENT CONTROL PLAN XTO ENERGY, INC.

LAT./LONG: N 38.992728° W -80.279225° (LOCATION OF WELL)

PROJECT OWNER/APPLICANT

XTO ENERGY, INC.

PH (304) 269-0400 CONTACT RON HOOTEN - DISTRICT ENGINEER

PENNSYLVANIA

MARYLAND

Eastern Panhandle

PO BOX 1008 JANE LEW WV 26378 PH (304) 884-6036 CONTACT TIM SANDS

CIVIL ENGINEER

SPILL HOTLINE

CIVIL & ENVIRONMENTAL CONSULTANTS, INC. 500 MARKETPLACE AVE - SUITE 200 BRIDGEPORT, VW 26330

WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION (WVDEP) PH (800) 642-3074

PH: (304) 933-3119 CONTACT STEVEN A. CAIN, P.E.

NATIONAL RESPONSE CENTER PH (800) 424-8802

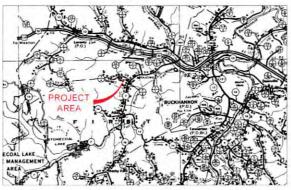
LOCAL EMERGENCY SERVICES				
	NAME	TELEPHONE NO		
AMBULANCE		911		
HOSPITAL EMERGENCY ROOM	ST JOSEPH'S HOSPITAL OF BUCKHANNON	(304) 473-2000		
	BUCKHANNON FIRE DEPARTMENT	(304) 472-2868		
POLICE DEPARTMENT		911		
POISON CONTROL CENTER	WEST VIRGINIA POISON CENTER	(800) 222-1222		



Upshur County Regional Airport







SHEET INDEX EROSION AND SEDIMENT CONTROL PLAN NOTES EROSION AND SEDIMENT CONTROL PLAN

PLAN REPRODUCTION WARNING

THE PLANS HAVE BEEN CREATED ON ANSI D (22' X 34') SHEETS. FOR REDUCTIONS. REFER TO GRAPHIC

Office of Oil and Gas

23:7

THE PLANS HAVE BEEN CREATED FOR FULL COLOR PLOTTING. ANY SET OF THE PLANS THAT IS NOT PLOTTED IN FULL COLOR SHALL NOT BE CONSIDERED ADEQUATE FOR CONSTRUCTION PURPOSES.

*WARNING** INFORMATION MAY BE LOST IN COPYING AND OR GRAY SCALE PLOTTING.



ESTIMATED QUANTITIES					
	EST. QTY	UNITS	BID QTY	UNIT PRICE	TOTAL COST
STABILIZED CONSTRUCTION ENTRANCE	750	SF			
TIMBER MAT BRIDGE*	1	EA.			
PERMANENT SEEDING	1.694	SY			
12' COMPOST FILTER SOCK	150	LF			
ORANGE CONSTRUCTION FENCE	125	LF			

[.] SEE DIMENSIONS ON PLAN DRAWINGS

XTO ENERGY, INC.
ALFRED CORDER 2 WELL PLUG
BUCKHANNON DISTRICT
UPSHER COUNTY, WV

AUG 2018 DIMINN	WALRY.	RDB
S SHOWN OF	CKED BY	CMZ

Civil & Environmental

VICINITY MAP PROJECT UPSHER COUNTY ROAD MAPS AREA SCALE IN FEET 1 INCH = 1 MILE

SATAGONA ANDTHAN THISWAYS AND MANAGOS

- PRINCIPLE DESCRIPTION IN PROPERTY IN THE PROLET IS TO HETALL DESCRIPTION OF STREET FOR THE AUTHOR COOKER. IN THE PROPERTY OF THE PROLET IS TO HETALL DESCRIPTION OF AUTHORS AND AUTHORS AN
- AND SIDMEDIATION CONTROL MEASURES TO BE USED FOR THIS PROJECT MRE COMPORT FAITE SOOKS, STARRIZED CONSTRUCTION,

 4. MO TABLES MAI BROCKS FOR STREAM AND WITHING CHOSSING (WHO APPLICABLE). IF PROJECT LIMITS CHANGE FOR MILES OF

 AND ADDITIONAL MATERIORISM AND/ON WITHINGS MRY TO BE CHOOSED ON MAPHICITY, IT IS THE CONFIDENCE RESPONSIBILITY TO

 A MAIN ADDITIONAL MATERIORISM AND/ON WITHINGS MRY TO BE CHOOSED ON MAPHICITY, IT IS HE CONFIDENCE RESPONSIBILITY TO

 RE MICESSARY PREMIST REPORT TO MAINTAIN WORK OF TO THE AT METALE FROM MARKETS OF THE ON-THE MARKET STORY

 THE LOCATION OF THE ACCESS ROADS AND THE CONTROL MASSARIES TO BE USED. THERE SHALL BE NO BORROW AREA CUITEDED OF THE

 TO CONSTRUCTION AREA.
- POSCH, MO. STOWNT CHIEFL MAGNETS: URLESS OTHERWISE ROCATED, ALL VESTAINE AND STRUCTURAL DISCORN AND SEDMENT CONTROL PRACTICES SHALL BE CONSTRUCTED AND MANTANED ACCORDED TO SECOME STANDARDS AND SELECTIONS OF THE CERRITH REST VESTAIN WORD STANDARDS AND SELECTIONS OF THE CERRITH REST VESTAIN WORD CONTROL THE LOYOUTS BOOK OF THE MEST VESTAIN AND CONTROL THE LOYOUTS BOOK OF THE MEST VESTAIN MANUAL. THE MANTAND STANDARDS OF THE MEST VESTAIN AND CONTROL MEST VESTAIN AND AND ADDRESS OF THE MEST VESTAIN AND AND ADDRESS OF THE MASS VESTAIN STANDARD OF THE MEST VESTAIN AND AND ADDRESS OF THE MEST VESTAIN AND AND ADDRESS OF THE MASS VESTAIN AND ADDRESS OF THE MEST VESTAIN AND AND ADDRESS OF THE MEST VESTAIN AND ADDRESS OF THE MEST VESTA
- COCCUMA MARTIET DESCRIPTO. TOPOSO, MIL DE STROPPO TROM DE STE AND STOCKPLO DE MA ANA OCTUMANO DE DA CELO. UPON DE COMMISSION DE PROCESSO DESCRIPTO DE STATEMA DE STAT
- MUNICIPIES, STRATEGES. CONSTRUCTION WILL BE STOUDLED SO THAT OPPRATIONS WILL BECH AND DIO AS 500H AS POSSBUE. THE JOB IMPRINTEDISTANCE OF ALL DESCONDANCE OF ALL DESCONDANCE STRUCTURE OF THE ACCUMULATION AND MANIFESTANCE OF ALL DESCONDANCE STRUCTURE OF THE ACCUMULATION AND MANIFESTANCE OF THE ACCUMULATION AND ACCUMULATION AND STRUCTURE OF THE ACCUMULATION AND AC
- CONSTRUCTION ELEVENTS:
- A OBTAIN ALL PERMITS AND APPROVALS PRIOR TO CONSTRUCTION
- B # CONSTRUCTION LIARTS NEED TO BE EXPANDED BYTONG THE LIARTS OF DISTURBANCE AREA SHOWN ON THE PLANS, A PRE-CONSTRUCTION EMPROMADITAL ENLISTION WILL NEED TO BE CONDUCTED. CONFIRCT THE EMPROMADITAL BUILDINGS AREAS ON THE NEW AREAS PRODE TO CONSTRUCTION.
- C. INSTALL THE STABLEED CONSTRUCTION ENTRANCES AT THE ACCESS ROAD. STABLEED CONSTRUCTION ENTRANCES MAY BE MELDED AT THE ACCESS ROAD PENDING ITS USE AT THE TIME OF THIS PROJECTS CONSTRUCTION.
- D. WARK ALL CLEARING LIMITS AND SENSITIVE AREAS SLICH AS STREAMS, WETLANDS, ETC.
- E. WISTALL ORDACE CONSTRUCTION FORCE NEAR STREAMS, WITLANDS, AND STRUCTURES WITHIN THE LIMITS OF DISTURBANCE TO PROVIDE A PHYSICAL BARRER TO DETER DISTURBANCE BY CONSTRUCTION ACTIVITIES.
- F. ACO CREWEL TO ACCESS ROAD AS NEEDED, BUT NO GRADING OR IMPACTS TO EXISTING DRAININGS FEATURES ARE TO BE MODIFIED.
- G. ON A DMAY BASS, CLEAN THE ROADS THOROUGHLY BY REMOVING TRACKED SECREPCE BY SHOVELING OR SWIETPING. STREET WASHING TO A MATERICORISE OR STORM DRAIN SYSTEM IS NOT ALLOHOLD.
- M. INSTALL COMPOST PLTER SOCK IMMERE SHOWN, PARALLEL TO THE SLOPE AND ON THE DOWN-CRACKENT SIZE OF THE LIMITS OF DISTURBANCE TO PREVENT SIZEMENTATION FROM LEAVING THE PROJECT AREA.
- 1. CLEAR AND CRUB ALONG THE R-O-W. PRESERVE NATURAL VEGETATION AS MUCH AS POSSIBLE, WITHOUT SCHAFIGANT INTERFERENCE WITH CONSTRUCTION ACTIVITIES.
- K. RE-ESTABLISH THE GRADE TO THE PRE-CONSTRUCTION CONDITIONS
- L. RE-STABLIZE THE DISTURBED SOUS WITHIN 7 DAYS BY PLACING TEMPORARY SEEDING IF NOT FINAL GRADED, AND PERMANENT SEEDING WITH A NURSE CROP IF FINAL CRADED.
- M. MULCH AND FERTILIZE AS STATED IN THIS PLAN
- N. PLACE ROLLED EROSON CONTROL PRODUCTS (RECP), AND BLANKETS ON TOP OF SEEDED AREAS, ON STEEP SLOPES WHERE SEEDING MY BE DAYLED ON RAMOT, THROULY, SLIPES CHAITER HAM NEW MEET TO MAKE AN DESCON CONTROL MAY ON BLANKET PLACE NOT SEEDED SENIOR AND MY PLACE ROLLY OF HIS SIEP SLOPES ALLICIANT ON AN AND ALL STRUCKS GREENWELF (THRONG 7 DIST) AND HELE PLACE ALLICIANT ON AN AND ALL STRUCKS GREENWELF (THRONG 7 DIST) AND HELE PLACE ALLICIANT ON AN AND ALL STRUCKS GREENWELF (THRONG 7 DIST) AND HELE PLACE ALLICIANT ON AN AND ALL STRUCKS GREENWELF AND AND ALL STRUCKS.
- O. MANTAIN ALL BEST MANAGENENT PRACTICES (BMP'S) AS MEDIED TO ASSURE CONTINUED PERFORMANCE OF THEIR INTERIOED FUNCTION
- P. ALL BUT'S SMALL BE REPETED AT LEAST ONCE EVENT STADA CALDRONA DAYS AND WITHIN 24 HOURS ATTER ANY STORM EVENT CREATER THAN 0.5 INCIDES PICE 24 HOURS PERSON, ANY FERROR REPORCE ANY FERROR EXPANSES SCOULD BE MICE REQUESTED. BE RELIGIOUS THE RELIGION OF SECREPANT THAT IS ONCE HALF TO BE RECORD OF THE COPY FILED SCOUL (I. DAY FOR BELLE OR AS STORM REGISTS RECORD).
- O. TOMPORARY BUT'S MUST BE REMOVED WHICH SO DAYS AFTER FINAL STIL STABLEDATION IS ADSIVED OR AFTER THE TEMPORARY BUT'S ARE NO LONGER MEDICO. TRAFFED SERVANDING STABLESTED ON STIL DESTROBED SERVE RESEARCH FROM REMOVAL OF REM'S OR FEDERAL BUT'S ARE NO FEDERAL BUT BUT'S CONFERENCE ACCURATE ACC
- NO NEW OR PERMINENT OUT OR FILL SLOPES ARE TO REMAN ON-SITE, GRADING DIVIDUAL BE DONE SUCH THAT POST-CONSTRUCTION CONTOURS AFTER CONSTRUCTION IS COMPLETE. ALL AREAS IN THE LOO THE WIRE VICETATED IN CONTOURS OF COMPLETE. ALL AREAS IN THE LOO THE WIRE VICETATED IN THE CONSTRUCTION.
- PERMANENT STANDARDEN. ALL AREAS LETT UNCOCKTED BY CITIER BULLDINGS OR PAYDEDIN SHALL BE STANDARD WITH PERMANENT SEEDING BANDONIERY FOLLOWING FINEN GRADING AND WITHIN 7 CHTS. AT NO TREE SHALL LAND LAY CORRANT FOR LONGER THAN 21 DAYS. SEE SECURINE OF FLOWER OR RATES.
- 13.
- SOTION LESSES. THE MENUEL SHOWN ALONG THE FILES STEMESTITE TITEMEN, WITH PRINCE, AND PRINCE, AS SHOWN ON THE FAUNCE, AND STREET MENUELS, AND PRINCE, A
- MANTEMENT PROCESSE. SEDMENT TRACKED ONTO ANY PUBLIC ROLDBAY OR SOCIENCE SHALL BE RETURNED TO THE CONSTRUCTION STIE INMEDIATE. AND DEPOSED IN THE MANGED DECERBED IN THIS PLAN. IN NO CASE SHALL THE SEDMENT BE WASHED, SHOWELD OR SHEPT INTO ANY ROLDSOCIOUS CORP. OR SHEPT CHATE.

GENERAL FROSION CONTROL NOTES

- THE CONTRACTOR SHALL ARRANCE FOR A PRE-CONSTRUCTION CONFERENCE WITH THE APPROPRIATE EROSION AND SEDMENT CONTROL INSPECTOR 48 HOURS PRED TO PETAMONE WORK
- ALL EROSION CONTROL DEVICES AS SHOWN OR AS REQUIRED, ARE TO BE CONSTRUCTED TO THE CURRENT STANDARDS AND SPECIFICATIONS OF THE WEST VIRGINIA (ROSSION AND SEDMEDIT CONTROL BEST MANAGEMENT PRACTICE MANAGEMENT AND ARE TO BE IN PLACE PROOF TO WORK.
- EROSON MO SEDMENT CONTROL MEASURES SHALL BE MANTANED CONTROLOUSLY, RELOCATED WHOM MO AS MEETSMAY MO SHALL BE CHECKED REGULARLY MO SHALL BE WATERED, FERRILLED , RE-SEDED MO MACHOS AS MEETSMAY SHALL BE WATERED, FERRILLED , RE-SEDED MO MACHOS AS MEETSMAY SHALL BE WATERED, FERRILLED , RE-SEDED MO MACHOS AS MEETSMAY SHALL BE WATERED, FERRILLED , RE-SEDED MO MACHOS AS
- ALL DRAW HALTS SHALL BE PROTECTED FROM SATATON, INSPECTING PROTECTION DEVICES SHALL BE MANEDATELY REPLACED AND THE HALT CLEANED FLUSHING, IS NOT AN ACCUPABLE METHOD OF CLEANING.
- DURING THE CONSTRUCTION OF THE PROJECT, SOIL STOCKPILES SHALL BE STABLIZED OR PROTECTED WITH SEDMENT TRAPPING MEASURES.
- SECURENT BASINS AND TRAPS, PERMETER DIXES, SECURENT BARREDS AND OTHER MEASURES INTENDED TO TRAP SEDAMENT SHALL BE CONSTRUCTED AS A FIRST STEP IN ANY LIAND DISTURBING ACTIVITY AND SHALL BE MICE PLANCED MIL BEFORE LIPSCOPE LIAND DISTURBING FAMILS PLACE.
- all tempoway proson and sedamen control measures shall be reliable whom 30 days after final site stablization or after the Tempoway valuraris are no longer record, usales stablerest autoretto by the departer trapped sedamen and to destined som Reliablike from the opposition of tempoway magares shall be pramamentary stablized to precipie further design and supportation.
- ALL DISTURBED AREAS NOT PAYED OR BULL UPON SHALL BE MYDRO-SEEDED AND FERTILIZED. PERFORM PERMANENT TOP SOUNG, SEEDING AND FERTILIZED AS SOON AFTER OFFINIANCE FINEN GRADE AS POSSBELL SEEDING SWALL COMPLY WITH THE FOLLOWING.
- B. FERTILIZER- 500 POUNDS PER ACRES OF 10-20-20 FERTILIZER OR EQUIVALENT POUNDAGE OF DIFFERENT AMALYSIS. WORK WITO SOL PRIOR TO
- D. MULCH- WOOD FIBER OR CHOPPED STRAW AT RATE OF 2 TONS PER ACRE, HYDRO-MULCH AT RATE OF 30 BALES PER ACRE.

- THE CONTRACTOR SHALL NOTIFY ALL LITERY COMPANIES INNOVLED IN THE SITE NO MORE THAN TEN DAYS AND NO LESS THAN THREE DAYS IN ADVANCE OF EXCANATION EXCLUDING SATURDAY, SURGAY, AND FEDERAL OR STATE HOLDINGS. CONFACT MISS LITERTY OF INV AT 811.
- TRACTOR CHAIR OF MANUFACTOR ON ALL ACCORDING STORES AND DIRECT AND THAT IS A ACCORDING TO WITH WARDS DESCRIPTION OF THE CONTRACT OF THE CONTRA
- DISTURBED AREAS CREATED DUE TO WELL PLUG REMOVAL SHALL BE RECLARADD, MULCHED, AND SEEDED TO REDUCE EROSION AND SEEDELENTATION
- 4. API IDENTIFICATION NUMBERS SHALL BE DISPLAYED AT THE WELL IN ACCORDANCE WITH STATE REQUIREMENTS

RECEIVED Office of Oil and Gas

WV Department of Environmental Protection JUL 17 2017

SPECIES/WIXTURE	SEEDING RATE (LBS/AC) SOIL DRAMAGE PREFERENCE				PH RANK
CROWNVETCH/ TALL FESCUE	10 - 15 30	WELL - MOO. WELL	5.0 - 7		
CROWNVETCH/ PERENNAL RYEGRASS	10 - 15 20	WELL - MOD. WELL	5.0 - 7		
FLATPEA OR PERED OS AL PEA TALL FESCUE	29 15	AUT - NOO' AUT	49.44		
IADMO CLOVER/ SERECIA LESPEDEZA/ TALL FESCU	30 25 2	witt - woo with	4.5 ~ 7		
TALL FESCUE/ LADRIC CLONER/ REDTOP	40 3 3	MELL - MOD MELL	5.0 - 7		
CROMMYETCH/ TALL FESCUE/ REDTOP	10 20 3	WELL - MOD. WELL	5.0 - 7		
TALL FESCUE/ B-RDSF001 TREFOL/ REDTOP	40 10 3	WELL - WOO WELL	5.0 - 7		
SERCEA LESPEDEZA/ TALL FESCUE/ REDTOP	25 30 3	METT - MOD METT	4.5 - 7		
REDIDP/ TALL FESCUE/ CREEPING RED	30 3 50	שלנו - WOD שלנו	5.0 - 7		
TALL FTSCUE	50	WELL - POORLY	4.5 - 2		
PEREIMAAL RYEGRAES' TALL FEBCUE' LATHCO FLATPEA *	10 15 20	WELL - POORLY	£0-02		
AMNUAL RYECRASS/ ** CLIMAX TIMOTHY/ BESTFOR INTERMEDIATE RYECRASS/ POTOMAC ORCHARDCRASS/ MEDIUM RED CLOVER (COATED)	30 25 20 15	WELL - MOD WELL	6.0 - 7		

NOTE: MIXTURES LISTED IN BOLD ARE SUITABLE FOR USE IN SHADED WOODDLAND SETTINGS; THOSE IN ITALICS ARE SUITABLE FOR USE IN FILTER STRIPS

NOTE: FOR UNPREPARED SEEDBEDS OR SEEDING OUTSIDE THE OPTIMUM TIMEFRAMES, AND SON MORE SEED TO THE SPECIFIED RATE

LATHCO' FLATPEA IS POTENTIALLY POISONOUS TO SOME LIVESTOCK ALL LEGUMES SHOULD BE PLANTED WITH PROPER INOCULARITS PRIOR TO SEEDING

. SWISHER WEADOW MIX

SPECIES	SEEDING RATE (LBS/AC)	OPTHANN SEEDING DATES	DRAINAGE	Pr RANGE
WHUAL RYECRASS	40	3/1 - 6/15 DR 8/15 - 9/15	WELL - POORLY	55 - 7.5
FELD BROWEGRASS	40	3/1 - 6/15 OR 8/15 - 9/15	WELL - MOD. WELL	6.0 - 7.0
SPRING DATS	96	3/1 - 5/15	#ELL - POORLY	5.5 - 7.0
SUDANCRASS	40	5/15 - 8/15	WELL - POORLY	5.5 - 7.5
WINETER RYE	168	8/15 - 10/15	WELL - POORLY	5.5 - 7.5
WINTER WHEAT	180	8/15 - 11/15	WELL - MOD. WELL	5.5 - 7.0
JAPANESE WILLET	30	6/15 - 8/15	WELL	4.5 - 7.0
REDTOP	5	3/1 - 6/15	Will	4.0 - 7.5
ANNUAL RYEGRASS	26	3/1 - 6/15	WELL - POORLY	5.5 - 7.5
SPRING DATS	64	3/1 - 6/15	WELL - POORLY	5.5 - 7.5

NOTE: THESE RATES SHOULD BE INCREASED BY 50% IF PLANTED APRIL 15 - AUGUST 1 AND OCTOBER 1 - MARCH 1



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XTO ENERGY, INC. ALFRED CORDER 2 WELL PLUG UPSHUR COUNTY, WV

A SEDIMENT PLAN NOTES EROSION

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