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**west virginia** department of environmental protection

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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

March 11, 2015

**WELL WORK PERMIT**

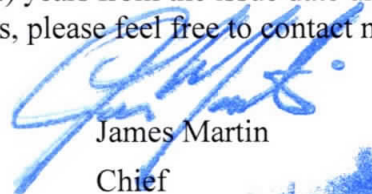
**Horizontal 6A Well**

This permit, API Well Number: 47-4902361, 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.

Please be advised that form WR-35, Well Operators Report of Well Work is to be submitted to this office within 90 days 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.

In addition to the applicable requirements of this permit, and the statutes and rules governing oil and gas activity in WV, this permit may contain specific conditions which must be followed. Permit conditions are attached to this cover letter.

Per 35CSR-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) 926-0499 ext. 1654.



James Martin  
Chief

Operator's Well No: HUGHES 11H  
Farm Name: ROCKWELL, FAYE C.  
**API Well Number: 47-4902361**  
**Permit Type: Horizontal 6A Well**  
Date Issued: 03/11/2015

**Promoting a healthy environment.**

**08/27/2021**

## PERMIT CONDITIONS

West Virginia Code § 22-6A-8(d) 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.

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### CONDITIONS

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1. This proposed activity may require permit coverage from the United States Army Corps of Engineers (USACE). Through this permit, you are hereby being advised to consult with USACE regarding this proposed activity.
2. If the operator encounters an unanticipated void, or an anticipated void at an unanticipated depth, the operator shall notify the inspector within 24 hours. Modifications to the casing program may be necessary to comply with W. Va. Code § 22-6A-5a (12), which requires drilling to a minimum depth of thirty feet below the bottom of the void, and installing a minimum of twenty (20) feet of casing. Under no circumstance should the operator drill more than fifty (50) feet below the bottom of the void or install less than twenty (20) feet of casing below the bottom of the void.
3. When compacting fills, each lift before compaction shall not be more than 12 inches in height, and the moisture content of the fill material shall be within limits as determined by the Standard Proctor Density test of the actual soils used in specific engineered fill, ASTM D698, Standard Test Method for Laboratory Compaction Characteristics of Soil Using Standard Effort, to achieve 95 % compaction of the optimum density. Each lift shall be tested for compaction, with a minimum of two tests per lift per acre of fill. All test results shall be maintained on site and available for review.
4. Operator shall install signage per § 22-6A-8g (6) (B) at all source water locations included in their approved water management plan within 24 hours of water management plan activation.
5. Oil and gas water supply wells will be registered with the Office of Oil and Gas and all such wells will be constructed and plugged in accordance with the standards of the Bureau for Public Health set forth in its Legislative rule entitled *Water Well Regulations*, 64 C.S.R. 19. Operator is to contact the Bureau of Public Health regarding permit requirements. In lieu of plugging, the operator may transfer the well to the surface owner upon agreement of the parties. All drinking water wells within fifteen hundred feet of the water supply well shall be flow tested by the operator upon request of the drinking well owner prior to operating the water supply well.
6. Pursuant to the requirements pertaining to the sampling of domestic water supply wells/springs the operator shall, no later than thirty (30) days after receipt of analytical data provide a written copy to the Chief and any of the users who may have requested such analyses.
7. If any explosion or other accident causing loss of life or serious personal injury occurs in or about a well or well work on a well, the well operator or its contractor shall give notice, stating the particulars of the explosion or accident, to the oil and gas inspector and the Chief, within 24 hours of said accident.
8. During the casing and cementing process, in the event cement does not return to the surface, the oil and gas inspector shall be notified within 24 hours.
9. Operator shall provide the Office of Oil & Gas notification of the date that drilling commenced on this well. Such notice shall be provided by sending an email to DEPOOGNotify@wv.gov within 30 days of commencement of drilling.

08/27/2021

STATE OF WEST VIRGINIA  
DEPARTMENT OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS  
WELL WORK PERMIT APPLICATION

49 4 606

1) Well Operator: XTO Energy Inc.

<u>494487940</u>	<u>Marion</u>	<u>Mannington</u>	<u>Shinnston</u>
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Operator ID County District Quadrangle

2) Operator's Well Number: Hughes 11H Well Pad Name: Hughes Pad

3) Farm Name/Surface Owner: Faye Rockwell Public Road Access: Harrison County Rt. 3 (Robinson Wyatt Run)

4) Elevation, current ground: 1,560' Elevation, proposed post-construction: 1,286'

5) Well Type (a) Gas  Oil  Underground Storage   
Other

(b) If Gas Shallow  Deep   
Horizontal

6) Existing Pad: Yes or No No

7) Proposed Target Formation(s), Depth(s), Anticipated Thickness and Associated Pressure(s):  
Target Formation: Marcellus, Depth 7,500', Anticipated Thickness: 150', Associated pressure: 4,650 psi

8) Proposed Total Vertical Depth: 7,500'

9) Formation at Total Vertical Depth: Marcellus

10) Proposed Total Measured Depth: 14,175'

11) Proposed Horizontal Leg Length: 6,075'

12) Approximate Fresh Water Strata Depths: 88', 283', 373'

13) Method to Determine Fresh Water Depths: Offsetting Reports

14) Approximate Saltwater Depths: 1,300'

15) Approximate Coal Seam Depths: 192', 354', 545'

16) Approximate Depth to Possible Void (coal mine, karst, other): 545'

17) Does Proposed well location contain coal seams directly overlying or adjacent to an active mine? Yes  No

(a) If Yes, provide Mine Info: Name: Robinson Run 95  
Depth: 545'  
Seam: Pittsburgh  
Owner: Consolidation Coal

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10-20-14

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WW-6B  
(9/13)

18)

**CASING AND TUBING PROGRAM**

TYPE	Size	New or Used	Grade	Weight per ft. (lb/ft)	FOOTAGE: For Drilling	INTERVALS: Left in Well	CEMENT: Fill-up (Cu. Ft.)
Conductor	20"	New	H-40	94#	40'	40'	50 cuft - C.T.S
Fresh Water	13 3/8"	New	MS-50	48#	600'	600'	600 cuft - C.T.S.
Coal							
Intermediate	9 5/8"	New	J-55	36#	3,100'	3,100'	Lead 700/Tail 700' - C.T.S.
Production	5 1/2"	New	CYP-110	17#	14,175'	14,175'	3,000 cuft
Tubing							
Liners							

*WRH  
10-20-14*

TYPE	Size	Wellbore Diameter	Wall Thickness	Burst Pressure	Cement Type	Cement Yield (cu. ft./k)
Conductor	20"	24"	0.438"	960	Type 1	1.19
Fresh Water	13 3/8"	17.5"	0.33"	2,160	Type 1	1.19
Coal						
Intermediate	9 5/8"	12.25"	0.352"	3,520	Type 1	Lead 1.26/Tail 1.19
Production	5 1/2"	8.75" 8.5"/7.875"	0.304"	10,640	Type 1	1.32
Tubing						
Liners						

**PACKERS**

Kind:				
Sizes:				
Depths Set:				

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**Hughes 11H – Mine Void Encounter Plan**

Per communications with the WV Geology and Economic Survey there is a possible mine void in the Pittsburgh Coal seam under the Hughes Pad in Marion County, WV. In preparation for drilling through a mine void, we will nipple up an annular preventer to be able to handle any flow should the void actually be encountered. We expect it to come in around 545' TVD from GL. We plan to set 13 3/8" casing as a surface/coal protective string ~50' below the base of this void.

A cement basket will be run as close as possible to the top of the void.

A cement balance job will be performed to cement the shoe and the annulus below the mine if circulation cannot be established. A grout cement job will be performed on the annulus to cement above the mine.

Once cemented in place, we will continue on with our normal casing design, which would be to set 9 5/8" intermediate casing at ~3000'.

Morgan O'Brien  
Drilling Engineer  
XTO Appalachia  
Cell: 724-272-8097  
Morgan\_OBrien@xtoenergy.com

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19) Describe proposed well work, including the drilling and plugging back of any pilot hole:

Drill a new horizontal Marcellus well, utilizing synthetic mud and a closed loop system for both drilling and completion. Install new casing with centralizers.

20) Describe fracturing/stimulating methods in detail, including anticipated max pressure and max rate:

1. Acid Stage - Typically 1500 gallons of 7.5% hydrochloric acid to clear the perforation path in the wellbore. 1500 gals 15% HCl acid. 2. Sand / Proppant Stages - Several stages of pumping water combined with sand at a targeted 80 bpm rate. The maximum pressure and rate used is 10,000 psig and 120 bpm. The sand size may vary from 100 mesh to 30/50 mesh size. 12,500 bbls slick water with 220,000 lbs 40/70, 270,000 lbs 100 mesh sands and 2,200 gals FR 133, 1,500 gals Bioplex 301 and 1,500 gals Bioplex 301 and 1,190 gals antiscale 30. 3. Flush Stage - Slickwater water stage to fill the wellbore to flush the sand from the wellbore. Depending on the water quality, a biocide, friction reducer, iron control, and scale inhibitor may be injected during the completion as well.

21) Total Area to be disturbed, including roads, stockpile area, pits, etc., (acres): 35.835 +/-

22) Area to be disturbed for well pad only, less access road (acres): 6 +/-

23) Describe centralizer placement for each casing string:

Conductor: none  
Fresh Water: 1"-6" above float shoe, 1 at float collar, & 1 at every 4th joint to surface  
Intermediate: 1"-6" above float shoe, 1 at float collar, & 1 at every 4th joint to surface  
Production: 1 at every 4th joint from the kickoff point to 1000' above the kickoff point

24) Describe all cement additives associated with each cement type:

Conductor - Type 1 - no additives  
Fresh Water - Tail - Type 1 - 2% Calcium Chloride, Super Flake  
Intermediate - Lead - Type 1 - 2% Calcium Chloride, Super Flake  
Tail - Type 1 - 2% Calcium Chloride, Super Flake  
Production - Tail 50/50 POZ - Type 1 - Sodium Chloride, Bentonite, Super Flake, Air-Out, R-1, AG-350

25) Proposed borehole conditioning procedures:

See attached sheet

\*Note: Attach additional sheets as needed.

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Hughes 11H Detailed Casing and Cementing Program

Type	Hole Size (inches)	Csg Size (in)	Length (ft)	Top/Bottom of String	Grade	Weight (ppf)	Wall Thickness	Burst Pressure Rating	Centralizer Placement	Cementing Program		
										Type	Yield (cu. ft/risk)	Estimated Volume (cu. ft.)
Conductor	24	20	40	0' / 40'	H-40	94	0.438	960	none	Type 1	1.19	50
Coal	19	16	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD
Surface / Mine	17.5	13 3/8	600	0' / 600'	MS-50	48	0.33"	2160	1-6" above float shoe 1-ail float collar 1-every 4th ft to surface	Tail - Type 1	1.19	600
Intermediate	12.25	9 5/8	3100	0' / 3100'	J-55	36	0.352"	3520	1-6" above float shoe 1-ail float collar 1-every 4th ft to surface	Lead - Type 1 Tail - Type 1	1.26 1.19	700 700
Production	8.75/ 8.5/ 7.875	5 1/2	14,175	0' / 14175'	CYP-110	17	0.304	10640	centralizers will be run every 3rd joint from top of cement to landing point	Tail-50/50 POZ-Type 1	1.32	3000
Tubing Liners												

Hughes 11H Proposed Directional Data

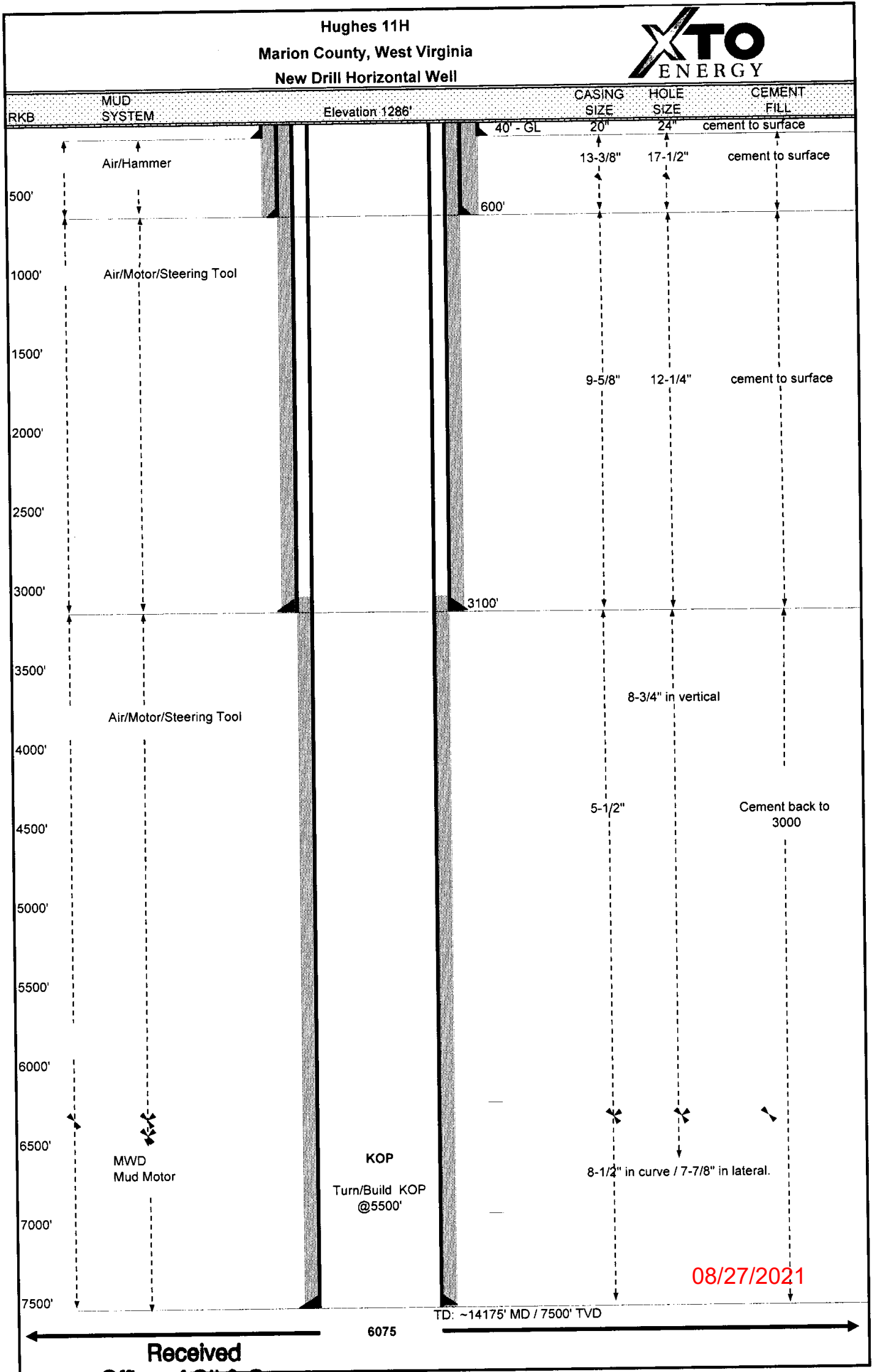
Hole Section	Hole Size	Drilling Fluid	Drilling	Condition Procedures		
				At TD	Running Casing	Prior to Cementing
Conductor	24	Air/Water	Hole will be circulated with high pressure air	Hole will be blown clean with air prior to pulling out of hole to run casing	Hole will be filled with fluid and circulated to surface if conditions require	Casing will be filled with fluid and returns taken at surface prior to pumping cement
Coal	20	Air/Water	Hole will be circulated with high pressure air	Hole will be blown clean with air prior to pulling out of hole to run casing	Hole will be filled with fluid and circulated to surface if conditions require	Casing will be filled with fluid and returns taken at surface prior to pumping cement
Fresh Water	17.5	Air/Water	Hole will be circulated with high pressure air	Hole will be blown clean with air prior to pulling out of hole to run casing	Hole will be filled with fluid and circulated to surface if conditions require	Casing will be filled with fluid and returns taken at surface prior to pumping cement
Intermediate	12.25	Air/Water	Hole will be circulated with high pressure air	Hole will be blown clean with air prior to pulling out of hole to run casing	Hole will be filled with fluid and circulated to surface if conditions require	Casing will be filled with fluid and returns taken at surface prior to pumping cement
Production	8.75 8.57/ 8.75	Air / Non-aqueous based mud	Hole will be circulated at high pump rate and the drill string will be rotated at the maximum rpm.	The hole will be circulated at maximum possible pump rate and the drill string will be rotated at the maximum rpm.	Hole will be circulated as necessary while running casing	Hole will be circulated at least one bottom up prior to pumping cement.
Tubing Liners						

Hughes 11H Proposed Directional Data

Other directional data  
 KOP 5500  
 LP 8100  
 approx. TD 14175 (rounded up)

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BOP Equipment Specifications/Diagram/Testing Schedule

Type	Model	Size	Pressure Rating	Testing Schedule	
Annular	Shaffer Spherical	11"	5,000 psi	-full pressure test to 100% of rating Vertical Hole upon installation every 30 days	upon installation after each bit trip weekly
Pipe Ram	Cameron Type U	11"	5,000 psi	upon installation every 30 days	upon installation after each bit trip weekly
Blind Ram	Cameron Type U	5"	5,000 psi	upon installation every 30 days	upon installation after each bit trip weekly
Mud Cross					
Wellhead		11"	5,000 psi		

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

FLUIDS/ CUTTINGS DISPOSAL & RECLAMATION PLAN

Operator Name XTO Energy Inc. OP Code 494487940

Watershed (HUC 10) Bingamon Creek (0502000206) Quadrangle Shinnston

Elevation 1,286' County Marion District Mannington

Do you anticipate using more than 5,000 bbls of water to complete the proposed well work? Yes  No

Will a pit be used? Yes  No

If so, please describe anticipated pit waste: \_\_\_\_\_

Will a synthetic liner be used in the pit? Yes  No  If so, what ml.? \_\_\_\_\_

Proposed Disposal Method For Treated Pit Wastes:

- Land Application
- Underground Injection ( UIC Permit Number 4707302523 4705500319 4708505151 4708509721 3416729577 3412124037 3405320968 )
- Reuse (at API Number \_\_\_\_\_)
- Off Site Disposal (Supply form WW-9 for disposal location)
- Other (Explain \_\_\_\_\_)

Will closed loop system be used? If so, describe: Depending on brand, system would entail 2 centrifuges & another cutting drying method grinder, drying shakers or vert-g mud.

Drilling medium anticipated for this well (vertical and horizontal)? Air, freshwater, oil based, etc. Air/water to 7100', then switch to synthetic

-If oil based, what type? Synthetic, petroleum, etc. Synthetic

Additives to be used in drilling medium? See additional page

Drill cuttings disposal method? Leave in pit, landfill, removed offsite, etc. Landfill

-If left in pit and plan to solidify what medium will be used? (cement, lime, sawdust) NA

-Landfill or offsite name/permit number? Meadowbrook Landfill - #SWF 1032, S&S Landfill - #SWF 4902

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.

Company Official Signature [Signature]

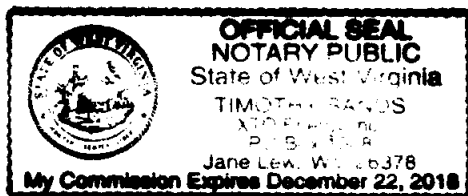
Company Official (Typed Name) Gary Beall

Company Official Title Production Superintendent

Subscribed and sworn before me this 17<sup>th</sup> day of October, 2014

[Signature] Notary Public

My commission expires 12/22/18



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Form WW-9

Operator's Well No. Hughes 11H

XTO Energy Inc.

Proposed Revegetation Treatment: Acres Disturbed 35.835 +/- Prevegetation pH \_\_\_\_\_

Lime 2-4 Tons/acre or to correct to pH \_\_\_\_\_

Fertilizer type 10-20-20 or Equivalent

Fertilizer amount 500 lbs/acre

Mulch 2-3 Tons/acre

Seed Mixtures

**Temporary**

**Permanent**

Seed Type lbs/acre

Seed Type lbs/acre

Per Plans

Temporary		Permanent	
Seed Type	lbs/acre	Seed Type	lbs/acre
Per Plans			

Attach:

Drawing(s) of road, location, pit and proposed area for land application (unless engineered plans including this info have been provided)

Photocopied section of involved 7.5' topographic sheet.

Plan Approved by: *Bill Hanchus*

Comments: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Title: Environmental Inspector Date: 10-20-19

Field Reviewed? (  ) Yes (  ) No

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**XTO Drilling Additives**

<b>Product Name</b>	<b>CAS #</b>	<b>Approximate Amount on Location (lbs)</b>
Bentone 910	14808-60-7	2500
Cedar Fiber	n/a	5000
CyberDrill	93762-80-2	20000
Calcium Chloride	10043-52-4	20000
	111-40-0	
	26952-14-7	
CyberCoat	62442-97-7	3000
CyberMul	70321-73-2	3000
CyberPlus	71-36-3	3000
Lime	1305-62-0	15000
New Carb	1317-65-3	3000
Walnut Shells	n/a	2500
	7727-43-7	
	1332-58-7	
	14808-60-7	
New Bar	471-34-1	200000
OptiThin	68442-97-7	8000
	12174-11-7	
	14808-60-7	
Oil Dry	01309-48-4	600
	9016-45-9	
	68131-71-5	
	1310-73-2	
	27176-87-0	
	1300-72-7	
OptiClean	7758-29-4	1800
OptiG	12002-43-6	5000
SynDril 470	64741-86-2	81000

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XTO Energy Inc.  
Well Site Safety Plan

Hughes Pad  
39.453972  
-80.370627

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POINT	SOURCE	LAST NAME	MAILING ADDRESS	CITY	STATE	ZIP	BEARING	DISTANCE	PARCEL ID WITHING 3000'
C	HOUSE POSSIBLE	FAVE C ROCKWELL	316 EAST RUN RD	FARMINGTON	WV	26571	S 56°50'53" W	1544	12-58-34

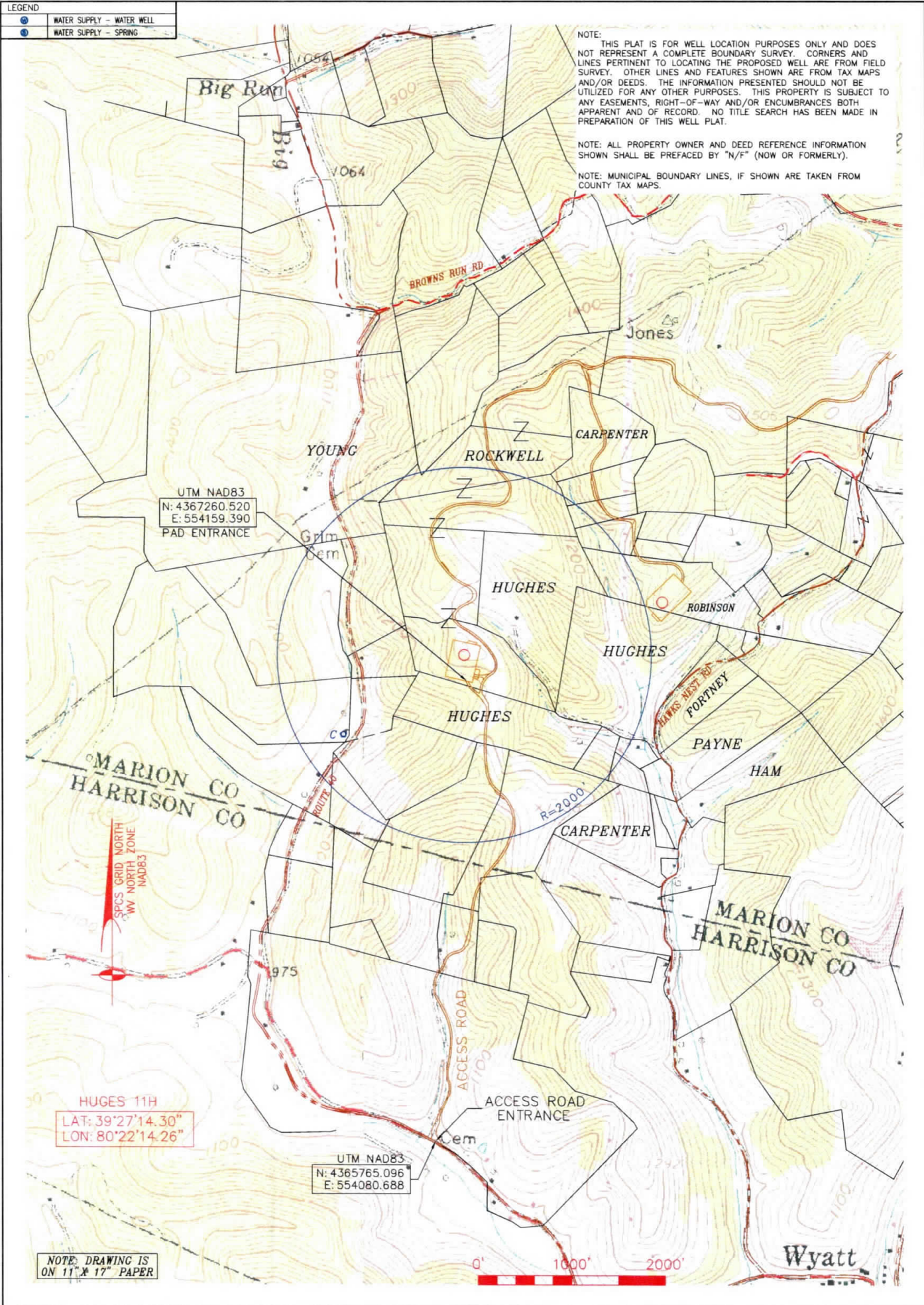
XTO ENERGY INC. XTO00657-09 HUGHES WATER OFFSET (2000' OFFSET) 06/31/2014

HUC-10 WATERSHED & NUMBER BINGAMON CREEK (0502000206)

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LEGEND	
	WATER SUPPLY - WATER WELL
	WATER SUPPLY - SPRING



REVISED	COMMENTS
07/11/2014	BMK-ADDED TOPO IMAGE-REMOVED PURVEYORS OVER 1500'-ADDED UTM NAD83 CORDS

**TRI - COUNTY ENGINEERING, LLC**  
 319 PAINTERSVILLE ROAD  
 HUNKER, PA 15639  
 VOICE: 724 / 635-0210 FAX: 724 / 635-0676



<b>HUGHES UNIT WATER OVERALL</b>	
<b>XTO ENERGY INC.</b>	
DRAWN BY: BMK	DATE: 6/30/14
MANNINGTON TOWNSHIP MARION COUNTY, WEST VIRGINIA	
SCALE: 1" = 1000'	SHEET: 1
FILE NO. XTO0G57-11	

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State Plane Coord.  
West Virginia North  
NAD27

Top Hole Loc  
(N) 348567.868  
(E) 1754096.245

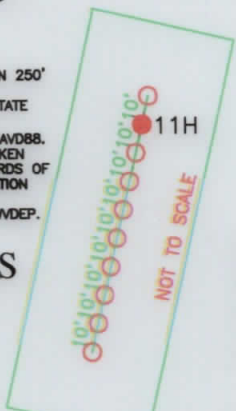
HUGHES 11H LANDING POINT		
STATE PLANE COORDINATES NORTH ZONE - NAD 27 (N) 348568 (E) 1754096	L&L DECIMAL NAD 27 (N) 38.455241 (E) 80.367244	UTM (NAD 83) ZONE 17 METERS 4367486 554455

HUGHES 11H BOTTOM HOLE		
STATE PLANE COORDINATES NORTH ZONE - NAD 27 (N) 348182 (E) 1759773	L&L DECIMAL NAD 27 (N) 38.444605 (E) 80.350641	UTM (NAD 83) ZONE 17 METERS 4366328 555892

NOTES ON SURVEY:

1. NO DWELLINGS WITHIN 625' WERE FOUND.
2. NO WATER WELLS OR DEVELOPED SPRINGS WITHIN 250' WERE FOUND.
3. TIES TO WELLS AND CORNERS ARE BASED ON STATE PLANE GRID NORTH WV NORTH NONE NAD '27.
4. WELL LAT./LONG ESTABLISHED BY DIRECT GPS NAVD88.
5. SURFACE OWNER AND ADJOINER INFORMATION TAKEN FROM THE ASSESSOR AND COUNTY CLERK RECORDS OF MARION COUNTY IN DATE OF YEAR AND INFORMATION PROVIDED BY XTO ENERGY INC.
6. WELLS SHOWN ARE TAKEN FROM RECORDS OF WVDEP.

HUGHES 11H



HUGHES 11H SURFACE HOLE		
STATE PLANE COORDINATES NORTH ZONE - NAD 27 (N) 348568 (E) 1754096	L&L DECIMAL NAD 27 (N) 38.455241 (E) 80.367244	UTM (NAD 83) ZONE 17 METERS 4367486 554455

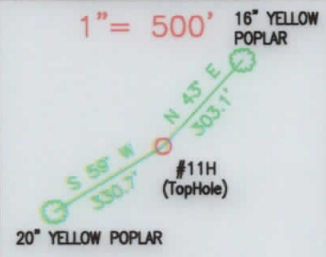
LEASE	LESSOR	MINERAL ACRES
1)	FAY C ROCKWELL	107.50±
2)	PERRY L HUGHES	39.08±
3)	DAVID GREY ARNETT	17.22±
4)	BARBARA TETROCK	17.22±
5)	HOWIE B & HURLEY E HAN	18.52±
6)	BRETT E & SHIRLEY BERRY & JOHN C & LYNN S BERRY	147.86±
7)	CONSOLIDATED COAL COMPANY	43.65±

LINE LEGEND	
LEASE BOUNDARY	---
SURFACE BOUNDARY	----
CREEK / STREAM	~~~~~
ROADS	=====
PROPOSED LATERAL	-----
500' LATERAL OFFSET	-----

319 PAINTERSVILLE RD. TCE@TRICOUNTYENG.COM  
HUNKER, PA 15639 (724) 635-0210

TRI-COUNTY ENGINEERING, LLC

REFERENCES



FILE # XTOOG57-11  
 DRAWING # OG57-11-11H  
 SCALE: 1" = 1500'  
 MINIMUM DEGREE OF ACCURACY: 1:2500  
 PROVEN SOURCE OF ELEVATION: DIRECT GPS

I, THE UNDERSIGNED, HEREBY CERTIFY THAT THIS PLAT IS CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF AND SHOWS ALL THE INFORMATION REQUIRED BY LAW AND REGULATIONS ISSUED AND PRESCRIBED BY THE DEPARTMENT OF ENVIRONMENTAL PROTECTION.

Signed: Donald R. Hixson  
 R.P.E.: 17818 L.L.S.:



(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS

**WVDEP**  
**OFFICE OF OIL & GAS**  
**601 57TH STREET**  
**CHARLESTOWN, WV 25304**



DATE: 11/29/2014 PLACE SEAL HERE  
 OPERATOR'S WELL #: HUGHES 11H  
 API WELL #: 47 49 02361  
 STATE COUNTY PERMIT

Well Type:  Oil  Waste Disposal  Production  Deep  
 Gas  Liquid Injection  Storage  Shallow

WATERSHED: BINGAMON CREEK WATERSHED ELEVATION: 1286' (PROPOSED GRADE)  
 COUNTY/DISTRICT: MARION - MANNINGTON QUADRANGLE SHINNSTON 7.5'  
 SURFACE OWNER FAYE C. ROCKWELL ACREAGE 107.50±  
 OIL & GAS ROYALTY OWNER: FAYE C. ROCKWELL ACREAGE 394.55±

DRILL  CONVERT  DRILL DEEPER  REDRILL  FRACTURE OR STIMULATE   
 PLUG OFF OLD FORMATION  PERFORATE NEW FORMATION  PLUG & ABANDON   
 CLEAN OUT & REPLUG  OTHER CHANGE  (SPECIFY): \_\_\_\_\_

TARGET FORMATION MARCELLUS ESTIMATED DEPTH: 7500' / 14175'

WELL OPERATOR XTO ENERGY INC. DESIGNATED AGENT GARY BEALL  
 Address 810 HOUSTON STREET Address P.O. BOX 1008  
 City FORT WORTH State TX Zip Code 76102 City JANE LEW State WV Zip Code 26378

08/27/2021

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 FEB. 06 2015



**STATE OF WEST VIRGINIA  
DEPARTMENT OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS  
NOTICE CERTIFICATION**

Date of Notice Certification: 10/22/14

API No. 47- \_\_\_\_\_  
Operator's Well No. Hughes 11H  
Well Pad Name: Hughes Pad

**Notice has been given:**

Pursuant to the provisions in West Virginia Code § 22-6A, the Operator has provided the required parties with the Notice Forms listed below for the tract of land as follows:

State:	<u>West Virginia</u>	UTM NAD 83 Easting:	<u>554149</u>
County:	<u>Marion</u>	UTM NAD 83 Northing:	<u>4367345</u>
District:	<u>Mannington</u>	Public Road Access:	<u>Harrison County Rt. 3 (Robinson Wyatt Run)</u>
Quadrangle:	<u>Shinnston</u>	Generally used farm name:	<u>Faye Rockwell</u>
Watershed:	<u>Bingamon Creek (0502000206)</u>		

Pursuant to West Virginia Code § 22-6A-7(b), every permit application filed under this section shall be on a form as may be prescribed by the secretary, shall be verified and shall contain the following information: (14) A certification from the operator that (i) it has provided the owners of the surface described in subdivisions (1), (2) and (4), subsection (b), section ten of this article, the information required by subsections (b) and (c), section sixteen of this article; (ii) that the requirement was deemed satisfied as a result of giving the surface owner notice of entry to survey pursuant to subsection (a), section ten of this article six-a; or (iii) the notice requirements of subsection (b), section sixteen of this article were waived in writing by the surface owner; and Pursuant to West Virginia Code § 22-6A-11(b), the applicant shall tender proof of and certify to the secretary that the notice requirements of section ten of this article have been completed by the applicant.

<p>Pursuant to West Virginia Code § 22-6A, the Operator has attached proof to this Notice Certification that the Operator has properly served the required parties with the following:</p> <p>*PLEASE CHECK ALL THAT APPLY</p> <p><input type="checkbox"/> 1. NOTICE OF SEISMIC ACTIVITY or <input checked="" type="checkbox"/> NOTICE NOT REQUIRED BECAUSE NO SEISMIC ACTIVITY WAS CONDUCTED</p> <p><input checked="" type="checkbox"/> 2. NOTICE OF ENTRY FOR PLAT SURVEY or <input type="checkbox"/> NO PLAT SURVEY WAS CONDUCTED</p> <p><input type="checkbox"/> 3. NOTICE OF INTENT TO DRILL or <input checked="" type="checkbox"/> NOTICE NOT REQUIRED BECAUSE NOTICE OF ENTRY FOR PLAT SURVEY WAS CONDUCTED or</p> <p style="padding-left: 100px;"><input type="checkbox"/> WRITTEN WAIVER BY SURFACE OWNER (PLEASE ATTACH)</p> <p><input checked="" type="checkbox"/> 4. NOTICE OF PLANNED OPERATION</p> <p><input checked="" type="checkbox"/> 5. PUBLIC NOTICE</p> <p><input checked="" type="checkbox"/> 6. NOTICE OF APPLICATION</p>	<p><b>OOG OFFICE USE ONLY</b></p> <p><input checked="" type="checkbox"/> RECEIVED/ NOT REQUIRED</p> <p><input checked="" type="checkbox"/> RECEIVED</p> <p><input checked="" type="checkbox"/> RECEIVED/ NOT REQUIRED</p> <p><input type="checkbox"/> RECEIVED</p> <p><input checked="" type="checkbox"/> RECEIVED</p> <p><input checked="" type="checkbox"/> RECEIVED</p>
--	--

**Required Attachments:**

The Operator shall attach to this Notice Certification Form all Notice Forms and Certifications of Notice that have been provided to the required parties and/or any associated written waivers. For the Public Notice, the operator shall attach a copy of the Class II Legal Advertisement with publication date verification or the associated Affidavit of Publication. The attached Notice Forms and Certifications of Notice shall serve as proof that the required parties have been noticed as required under West Virginia Code § 22-6A. Pursuant to West Virginia Code § 22-6A-11(b), the Certification of Notice to the person may be made by affidavit of personal service, the return receipt card or other postal receipt for certified mailing.

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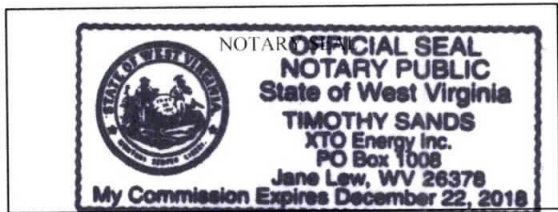
**08/27/2021**

**Certification of Notice is hereby given:**

THEREFORE, I Gary Beall, have read and understand the notice requirements within West Virginia Code § 22-6A. I certify that as required under West Virginia Code § 22-6A, I have served the attached copies of the Notice Forms, identified above, to the required parties through personal service, by registered mail or by any method of delivery that requires a receipt or signature confirmation. I certify under penalty of law that I have personally examined and am familiar with the information submitted in this Notice Certification and all attachments, 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 and imprisonment.

Well Operator: XTO Energy Inc.  
By: [Signature]  
Its: Production Superintendent  
Telephone: 304-884-6000

Address: PO Box 1008  
Jane Lew, WV 26378  
Facsimile: 304-884-6809  
Email: \_\_\_\_\_



Subscribed and sworn before me this 22nd day of October 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 telephone number, as 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 or your personal information, please contact DEP's Chief Privacy Officer at [deprivacyofficer@wv.gov](mailto:deprivacyofficer@wv.gov).

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**STATE OF WEST VIRGINIA  
DEPARTMENT OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS  
NOTICE OF APPLICATION**

**Notice Time Requirement:** notice shall be provided no later than the **filing date of permit application.**

**Date of Notice:** 10/22/14 **Date Permit Application Filed:** 10/22/14

**Notice of:**

- PERMIT FOR ANY WELL WORK       CERTIFICATE OF APPROVAL FOR THE CONSTRUCTION OF AN IMPOUNDMENT OR PIT

**Delivery method pursuant to West Virginia Code § 22-6A-10(b)**

- PERSONAL SERVICE       REGISTERED MAIL       METHOD OF DELIVERY THAT REQUIRES A RECEIPT OR SIGNATURE CONFIRMATION

Pursuant to W. Va. Code § 22-6A-10(b) no later than the filing date of the application, the applicant for a permit for any well work or for a certificate of approval for the construction of an impoundment or pit as required by this article shall deliver, by personal service or by registered mail or by any method of delivery that requires a receipt or signature confirmation, copies of the application, the erosion and sediment control plan required by section seven of this article, and the well plat to each of the following persons: (1) The owners of record of the surface of the tract on which the well is or is proposed to be located; (2) The owners of record of the surface tract or tracts overlying the oil and gas leasehold being developed by the proposed well work, if the surface tract is to be used for roads or other land disturbance as described in the erosion and sediment control plan submitted pursuant to subsection (c), section seven of this article; (3) The coal owner, operator or lessee, in the event the tract of land on which the well proposed to be drilled is located [sic] is known to be underlain by one or more coal seams; (4) The owners of record of the surface tract or tracts overlying the oil and gas leasehold being developed by the proposed well work, if the surface tract is to be used for the placement, construction, enlargement, alteration, repair, removal or abandonment of any impoundment or pit as described in section nine of this article; (5) Any surface owner or water purveyor who is known to the applicant to have a water well, spring or water supply source located within one thousand five hundred feet of the center of the well pad which is used to provide water for consumption by humans or domestic animals; and (6) The operator of any natural gas storage field within which the proposed well work activity is to take place. (c)(1) If more than three tenants in common or other co-owners of interests described in subsection (b) of this section hold interests in the lands, the applicant may serve the documents required upon the person described in the records of the sheriff required to be maintained pursuant to section eight, article one, chapter eleven-a of this code. (2) Notwithstanding any provision of this article to the contrary, notice to a lien holder is not notice to a landowner, unless the lien holder is the landowner. W. Va. Code R. § 35-8-5.7.a requires, in part, that the operator shall also provide the Well Site Safety Plan ("WSSP") to the surface owner and any water purveyor or surface owner subject to notice and water testing as provided in section 15 of this rule.

Application Notice    WSSP Notice    E&S Plan Notice    Well Plat Notice   is hereby provided to:

SURFACE OWNER(s)  
Name: Faye Rockwell  
Address: 316 East Run Rd  
Farmington, WV 26571  
Name: \_\_\_\_\_  
Address: \_\_\_\_\_

SURFACE OWNER(s) (Road and/or Other Disturbance)  
Name: Barbara Wagner  
Address: PO Box 47 ✓  
Wyatt, WV 26463  
Name: David Webb ✓  
Address: 931 Joetown Rd  
Mannington, WV 26582

SURFACE OWNER(s) (Impoundments or Pits)  
Name: \_\_\_\_\_  
Address: \_\_\_\_\_

COAL OWNER OR LESSEE  
Name: Consolidation Coal Company ✓  
Address: 1000 Consol Energy Drive  
Canonsburg, PA 15317

COAL OPERATOR  
Name: Murray American Energy ✓  
Address: 1 Bridge St  
Monongah, WV 26554

SURFACE OWNER OF WATER WELL AND/OR WATER PURVEYOR(s)  
Name: Faye Rockwell ✓  
Address: 316 East Run Rd  
Farmington, WV 26571

OPERATOR OF ANY NATURAL GAS STORAGE FIELD  
Name: \_\_\_\_\_  
Address: \_\_\_\_\_

\*Please attach additional forms if necessary

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**08/27/2021**



**Notice is hereby given:**

Pursuant to West Virginia Code § 22-6A-10(b), notice is hereby given that the undersigned well operator has applied for a permit for well work or for a certificate of approval for the construction of an impoundment or pit.

**This Notice Shall Include:**

Pursuant to W. Va. Code § 22-6A-10(b), this notice shall include: (1) copies of the application; (2) the erosion and sediment control plan required by section seven of this article; and (3) the well plat.

Pursuant to W. Va. Code § 22-6A-10(f), this notice shall include: (1) a statement of the time limits for filing written comments; (2) who may file written comments; (3) the name and address of the secretary for the purpose of filing the comments and obtaining additional information; and (4) a statement that the persons may request, at the time of submitting written comments, notice of the permit decision and a list of persons qualified to test water.

Pursuant to W. Va. Code R. § 35-8-5.7.a, the operator shall provide the Well Site Safety Plan to the surface owner and any water purveyor or surface owner subject to notice and water testing as provided in section 15 of this rule.

Pursuant to W. Va. Code R. § 35-8-15.2.c, this notice shall: (1) contain a statement of the surface owner's and water purveyor's right to request sampling and analysis; (2) advise the surface owner and water purveyor of the rebuttable presumption for contamination or deprivation of a fresh water source or supply; advise the surface owner and water purveyor that refusal to allow the operator to conduct a pre-drilling water well test constitutes a method to rebut the presumption of liability; (3) advise the surface owner and water purveyor of his or her independent right to sample and analyze any water supply at his or her own expense; advise the surface owner and water purveyor whether or not the operator will utilize an independent laboratory to analyze any sample; and (4) advise the surface owner and or water purveyor that he or she can obtain from the Chief a list of water testing laboratories in the subject area capable of and qualified to test water supplies in accordance with standard acceptable methods.

Additional information related to horizontal drilling may be obtained from the Secretary, at the WV Department of Environmental Protection headquarters, located at 601 57<sup>th</sup> Street, SE, Charleston, WV 25304 (304-926-0450) or by visiting [www.dep.wv.gov/oil-and-gas/pages/default.aspx](http://www.dep.wv.gov/oil-and-gas/pages/default.aspx).

**Well Location Restrictions**

Pursuant to W. Va. Code § 22-6A-12, Wells may not be drilled within two hundred fifty feet measured horizontally from any existing water well or developed spring used for human or domestic animal consumption. The center of well pads may not be located within six hundred twenty-five feet of an occupied dwelling structure, or a building two thousand five hundred square feet or larger used to house or shelter dairy cattle or poultry husbandry. This limitation is applicable to those wells, developed springs, dwellings or agricultural buildings that existed on the date a notice to the surface owner of planned entry for surveying or staking as provided in section ten of this article or a notice of intent to drill a horizontal well as provided in subsection (b), section sixteen of this article was provided, whichever occurs first, and to any dwelling under construction prior to that date. This limitation may be waived by written consent of the surface owner transmitted to the department and recorded in the real property records maintained by the clerk of the county commission for the county in which such property is located. Furthermore, the well operator may be granted a variance by the secretary from these distance restrictions upon submission of a plan which identifies the sufficient measures, facilities or practices to be employed during well site construction, drilling and operations. The variance, if granted, shall include terms and conditions the department requires to ensure the safety and protection of affected persons and property. The terms and conditions may include insurance, bonding and indemnification, as well as technical requirements. (b) No well pad may be prepared or well drilled within one hundred feet measured horizontally from any perennial stream, natural or artificial lake, pond or reservoir, or a wetland, or within three hundred feet of a naturally reproducing trout stream. No well pad may be located within one thousand feet of a surface or ground water intake of a public water supply. The distance from the public water supply as identified by the department shall be measured as follows: (1) For a surface water intake on a lake or reservoir, the distance shall be measured from the boundary of the lake or reservoir. (2) For a surface water intake on a flowing stream, the distance shall be measured from a semicircular radius extending upstream of the surface water intake. (3) For a groundwater source, the distance shall be measured from the wellhead or spring. The department may, in its discretion, waive these distance restrictions upon submission of a plan identifying sufficient measures, facilities or practices to be employed during well site construction, drilling and operations to protect the waters of the state. A waiver, if granted, shall impose any permit conditions as the secretary considers necessary. (c) Notwithstanding the foregoing provisions of this section, nothing contained in this section prevents an operator from conducting the activities permitted or authorized by a Clean Water Act Section 404 permit or other approval from the United States Army Corps of Engineers within any waters of the state or within the restricted areas referenced in this section. (d) The well location restrictions set forth in this section shall not apply to any well on a multiple well pad if at least one of the wells was permitted prior to the effective date of this article. (e) The secretary shall, by December 31, 2012, report to the Legislature on the noise, light, dust and volatile organic compounds generated by the drilling of horizontal wells as they relate to the well location restrictions regarding occupied dwelling structures pursuant to this section. Upon a finding, if any, by the secretary that the well location restrictions regarding occupied dwelling structures are inadequate or otherwise require alteration to address the items

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examined in the study required by this subsection, the secretary shall have the authority to propose for promulgation legislative rules establishing guidelines and procedures regarding reasonable levels of noise, light, dust and volatile organic compounds relating to drilling horizontal wells, including reasonable means of mitigating such factors, if necessary.

**Water Well Testing:**

Pursuant to West Virginia Code § 22-6A-10(d), notification shall be made, with respect to surface landowners identified in subsection (b) or water purveyors identified in subdivision (5), subsection (b) of this section, of the opportunity for testing their water well. The operator shall provide an analysis to such surface landowner or water purveyor at their request.

**Water Testing Laboratories:**

Pursuant to West Virginia Code § 22-6A-10(i), persons entitled to notice pursuant to subsection (b) of this section may contact the department to ascertain the names and locations of water testing laboratories in the subject area capable and qualified to test water supplies in accordance with standard accepted methods. In compiling that list of names the department shall consult with the state Bureau for Public Health and local health departments. A surface owner and water purveyor has an independent right to sample and analyze any water supply at his or her own expense. The laboratory utilized by the operator shall be approved by the agency as being certified and capable of performing sample analyses in accordance with this section.

**Rebuttable Presumption for Contamination or Deprivation of a Fresh Water Source or Supply:**

W. Va. Code § 22-6A-18 requires that (b) unless rebutted by one of the defenses established in subsection (c) of this section, in any action for contamination or deprivation of a fresh water source or supply within one thousand five hundred feet of the center of the well pad for horizontal well, there is a rebuttable presumption that the drilling and the oil or gas well or either was the proximate cause of the contamination or deprivation of the fresh water source or supply. (c) In order to rebut the presumption of liability established in subsection (b) of this section, the operator must prove by a preponderance of the evidence one of the following defenses: (1) The pollution existed prior to the drilling or alteration activity as determined by a predrilling or prealteration water well test. (2) The landowner or water purveyor refused to allow the operator access to the property to conduct a predrilling or prealteration water well test. (3) The water supply is not within one thousand five hundred feet of the well. (4) The pollution occurred more than six months after completion of drilling or alteration activities. (5) The pollution occurred as the result of some cause other than the drilling or alteration activity. (d) Any operator electing to preserve its defenses under subdivision (1), subsection (c) of this section shall retain the services of an independent certified laboratory to conduct the predrilling or prealteration water well test. A copy of the results of the test shall be submitted to the department and the surface owner or water purveyor in a manner prescribed by the secretary. (e) Any operator shall replace the water supply of an owner of interest in real property who obtains all or part of that owner's supply of water for domestic, agricultural, industrial or other legitimate use from an underground or surface source with a comparable water supply where the secretary determines that the water supply has been affected by contamination, diminution or interruption proximately caused by the oil or gas operation, unless waived in writing by that owner. (f) The secretary may order the operator conducting the oil or gas operation to: (1) Provide an emergency drinking water supply within twenty-four hours; (2) Provide temporary water supply within seventy-two hours; (3) Within thirty days begin activities to establish a permanent water supply or submit a proposal to the secretary outlining the measures and timetables to be used in establishing a permanent supply. The total time in providing a permanent water supply may not exceed two years. If the operator demonstrates that providing a permanent replacement water supply cannot be completed within two years, the secretary may extend the time frame on case-by-case basis; and (4) Pay all reasonable costs incurred by the real property owner in securing a water supply. (g) A person as described in subsection (b) of this section aggrieved under the provisions of subsections (b), (e) or (f) of this section may seek relief in court... (i) Notwithstanding the denial of the operator of responsibility for the damage to the real property owner's water supply or the status of any appeal on determination of liability for the damage to the real property owner's water supply, the operator may not discontinue providing the required water service until authorized to do so by the secretary or a court of competent jurisdiction.

**Written Comment:**

Pursuant to West Virginia Code § 22-6A-11(a), all persons described in subsection (b), section ten of this article may file written comments with the secretary as to the location or construction of the applicant's proposed well work within thirty days after the application is filed with the secretary. All persons described in West Virginia Code § 22-6A-10(b) may file written comments as to the location or construction of the applicant's proposed well work to the Secretary at:

Chief, Office of Oil and Gas  
Department of Environmental Protection  
601 57<sup>th</sup> St. SE  
Charleston, WV 25304  
(304) 926-0450

Such persons may request, at the time of submitting written comments, notice of the permit decision and a list of persons qualified to test water. **NOTE: YOU ARE NOT REQUIRED TO FILE ANY COMMENT.**

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**OCT 23 2014**

**08/27/2021**

**Time Limits and Methods for Filing Comments.**

The law requires these materials to be served on or before the date the operator files its Application. You have **THIRTY (30) DAYS** after the filing date to file your comments. Comments must be filed in person or received in the mail by the Chief's office by the time stated above. You may call the Chief's office to be sure of the date. Check with your postmaster to ensure adequate delivery time or to arrange special expedited handling. If you have been contacted by the well operator and you have signed a "voluntary statement of no objection" to the planned work described in these materials, then the permit may be issued at any time.

Pursuant to West Virginia Code § 22-6A-11(c)(2), Any objections of the affected coal operators and coal seam owners and lessees shall be addressed through the processes and procedures that exist under sections fifteen, seventeen and forty, article six of this chapter, as applicable and as incorporated into this article by section five of this article. The written comments filed by the parties entitled to notice under subdivisions (1), (2), (4), (5) and (6), subsection (b), section ten of this article shall be considered by the secretary in the permit issuance process, but the parties are not entitled to participate in the processes and proceedings that exist under sections fifteen, seventeen or forty, article six of this chapter, as applicable and as incorporated into this article by section five of this article.

**Comment Requirements**

Your comments must be in writing and include your name, address and telephone number, the well operator's name and well number and the approximate location of the proposed well site including district and county from the application. You may add other documents, such as sketches, maps or photographs to support your comments.

Disclaimer: All comments received will be placed on our web site <http://www.dep.wv.gov/oil-and-gas/Horizontal-Permits/Pages/default.aspx> and the applicant will automatically be forwarded an email notice that such comments have been submitted. The applicant will be expected to provide a response to comments submitted by any surface owner, water purveyor or natural gas storage operator noticed within the application.

**Permit Denial or Condition**

The Chief has the power to deny or condition a well work permit. Pursuant to West Virginia Code § 22-6A-8(d), the permit may not be issued or be conditioned, including conditions with respect to the location of the well and access roads prior to issuance if the director determines that:

- (1) The proposed well work will constitute a hazard to the safety of persons;
- (2) The plan for soil erosion and sediment control is not adequate or effective;
- (3) Damage would occur to publicly owned lands or resources; or
- (4) The proposed well work fails to protect fresh water sources or supplies.

A permit may also be denied under West Virginia Code § 22-6A-7(k), the secretary shall deny the issuance of a permit if the secretary determines that the applicant has committed a substantial violation of a previously issued permit for a horizontal well, including the applicable erosion and sediment control plan associated with the previously issued permit, or a substantial violation of one or more of the rules promulgated under this article, and in each instance has failed to abate or seek review of the violation within the time prescribed by the secretary pursuant to the provisions of subdivisions (1) and (2), subsection (a), section five of this article and the rules promulgated hereunder, which time may not be unreasonable.

Pursuant to West Virginia Code § 22-6A-10(g), any person entitled to submit written comments to the secretary pursuant to subsection (a), section eleven of this article, shall also be entitled to receive from the secretary a copy of the permit as issued or a copy of the order modifying or denying the permit if the person requests receipt of them as a part of the written comments submitted concerning the permit application. Such persons may request, at the time of submitting written comments, notice of the permit decision and a list of persons qualified to test water.

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WW-6A  
(8-13)

API NO. 47- \_\_\_\_\_ - \_\_\_\_\_  
OPERATOR WELL NO. Hughes 11H  
Well Pad Name: Hughes Pad

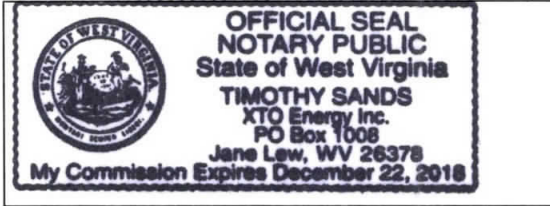
**Notice is hereby given by:**

Well Operator: XTO Energy, Inc.  
Telephone: 304-884-6000  
Email: \_\_\_\_\_

Address: PO Box 1008  
Jane Lew, WV 26378  
Facsimile: 304-884-6809

**Oil and Gas Privacy Notice:**

The Office of Oil and Gas processes your personal information, such as name, address and telephone number, as 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 or your personal information, please contact DEP's Chief Privacy Officer at [deprivacyofficer@wv.gov](mailto:deprivacyofficer@wv.gov).



Subscribed and sworn before me this 22 day of Oct., 2014.

*[Signature]* Notary Public

My Commission Expires 12/22/18

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	<b>Hughes 11H</b>
<b>Landowners</b>	✓ Barbara Wagner, PO Box 47, Wyatt, WV 26463
	✓ David Webb, 931 Joetown Rd., Mannington, WV 26582
	✓ Fara May Webb, 1084 Joetown Rd, Mannington, WV 26852
	✓ Faye Rockwell, 316 East Run Rd., Farmington, WV 26571
	✓ Gerald Lucas Heirs, 1457 Wyatt Rd., Mannington, WV 26582
	✓ Janet Nutter, 324 Elmhurst St., Morgantown, WV 26505
	✓ John & Rita Heldreth, 12 Humanity St., Fairmont, WV 26554
	✓ Kathleen Crim Stone, 5117 New Carlisle Pike, Springfield, OH 45504
	✓ Perry Hughes, 70 Twin Creek Trl., Buffalo, MO 65622
<b>Coal Owners/Operators</b>	✓ Faye Rockwell, 316 East Run Rd., Farmington, WV 26571
	✓ Consolidated Coal, 1000 Consol Energy Drive, Cannonsburg, PA 15317
	✓ Murray American Energy, attn: Troy Freels, 1 Bridge St, Monongah, WV 26554
<b>Water</b>	✓ Faye Rockwell, 316 East Run Rd., Farmington, WV 26571

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POINT	SOURCE	LAST NAME	MAILING ADDRESS	CITY	STATE	ZIP	BEARING	DISTANCE	PARCEL ID WITHING 3000'
C	HOUSE POSSIBLE	FAYE C ROCKWELL	316 EAST RUN RD	FARMINGTON	WV	26571	S 56°50'53" W	1544	12-58-34

XTO ENERGY INC. XTO0057-09 BINGAMON CREEK (0502000206) HUGHES WATER OFFSET (2000' OFFSET) 06/31/2014

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**CERTIFIED MAIL™ RECEIPT**  
(Domestic Mail Only; No Insurance Coverage Provided)

For delivery information visit our website at [www.usps.com](http://www.usps.com)

**OFFICIAL USE**

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

Barbara Wagner  
PO Box 47  
Wyatt, WV 26463

*Hughes 11M Permit App*

Postmark Here

For Instructions

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

For delivery information visit our website at [www.usps.com](http://www.usps.com)

**OFFICIAL USE**

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

David Webb  
931 Joetown Rd  
Mannington, WV 26582

*Hughes 11M Permit App*

Postmark Here

For Instructions

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

For delivery information visit our website at [www.usps.com](http://www.usps.com)

**OFFICIAL USE**

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

Fara May Webb  
1084 Joetown Rd.  
Mannington, WV 26852

*Hughes 11M Permit App*

Postmark Here

For Instructions

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

For delivery information visit our website at [www.usps.com](http://www.usps.com)

**OFFICIAL USE**

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

Faye Rockwell  
316 East Run Rd  
Farmington, WV 26571

*Hughes 11M Permit App*

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Fairmont, WV 26554

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5117 New Carlisle Pike  
Springfield, OH 45504

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Perry Hughes  
70 Twin Creek Trl.  
Buffalo, MO 65622

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**CONSOL Energy**

Attn: Mr. Donald Puglio P.G.  
CNX Center  
1000 Consol Energy Drive  
Cannonsburg, PA 15317-6506

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Permit  
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for Instructions

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Murray American Energy  
Attn: Troy Freels  
1 Bridge St.  
Monongah, WV 26554

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Total Postage & Fees	\$



Murray Energy Corporation  
Attn: Alex O'Neil, PE  
46226 National Road  
St. Clairsville, OH 43950

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OCT 23 2014 08/27/2021



**STATE OF WEST VIRGINIA**  
**DEPARTMENT OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS**  
**NOTICE OF PLANNED OPERATION**

**Notice Time Requirement:** notice shall be provided no later than the **filing date of permit application.**

**Date of Notice:** 10/22/14      **Date Permit Application Filed:** 10/22/14

**Delivery method pursuant to West Virginia Code § 22-6A-16(c)**

- CERTIFIED MAIL                                       HAND  
RETURN RECEIPT REQUESTED                                      DELIVERY

Pursuant to W. Va. Code § 22-6A-16(c), no later than the date for filing the permit application, an operator shall, by certified mail return receipt requested or hand delivery, give the surface owner whose land will be used for the drilling of a horizontal well notice of the planned operation. The notice required by this subsection shall include: (1) A copy of this code section; (2) The information required to be provided by subsection (b), section ten of this article to a surface owner whose land will be used in conjunction with the drilling of a horizontal well; and (3) A proposed surface use and compensation agreement containing an offer of compensation for damages to the surface affected by oil and gas operations to the extent the damages are compensable under article six-b of this chapter. (d) The notices required by this section shall be given to the surface owner at the address listed in the records of the sheriff at the time of notice.

**Notice is hereby provided to the SURFACE OWNER(s)**  
(at the address listed in the records of the sheriff at the time of notice):

Name: <u>Faye Rockwell</u>	Name: <u>See attached</u>
Address: <u>316 East Run Rd</u>	Address: _____
<u>Farmington, WV 26571</u>	_____

**Notice is hereby given:**

Pursuant to West Virginia Code § 22-6A-16(c), notice is hereby given that the undersigned well operator has developed a planned operation on the surface owner's land for the purpose of drilling a horizontal well on the tract of land as follows:

State: <u>West Virginia</u>	UTM NAD 83 Easting: <u>554149</u>
County: <u>Marion</u>	Northing: <u>4367345</u>
District: <u>Mannington</u>	Public Road Access: <u>Harrison County Rt. 3 (Robinson Wyatt Run)</u>
Quadrangle: <u>Shinnston</u>	Generally used farm name: <u>Faye Rockwell</u>
Watershed: <u>Bingamon Creek (0502000206)</u>	

**This Notice Shall Include:**

Pursuant to West Virginia Code § 22-6A-16(c), this notice shall include: (1) A copy of this code section; (2) The information required to be provided by **W. Va. Code § 22-6A-10(b)** to a surface owner whose land will be used in conjunction with the drilling of a horizontal well; and (3) A proposed surface use and compensation agreement containing an offer of compensation for damages to the surface affected by oil and gas operations to the extent the damages are compensable under article six-b of this chapter. Additional information related to horizontal drilling may be obtained from the Secretary, at the WV Department of Environmental Protection headquarters, located at 601 57<sup>th</sup> Street, SE, Charleston, WV 25304 (304-926-0450) or by visiting [www.dep.wv.gov/oil-and-gas/pages/default.aspx](http://www.dep.wv.gov/oil-and-gas/pages/default.aspx).

Well Operator: <u>XTO Energy Inc.</u>	Address: <u>PO Box 1008</u>
Telephone: <u>304-884-6000</u>	<u>Jane Lew, WV 26378</u>
Email: _____	Facsimile: <u>304-884-6809</u>

**Oil and Gas Privacy Notice:**

The Office of Oil and Gas processes your personal information, such as name, address and telephone number, as 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](mailto:depprivacyofficer@wv.gov).

**Received**  
**Office of Oil & Gas**  
**OCT 23 2014**

**08/27/2021**

	<b>Hughes 11H</b>
<b>Landowners</b>	Barbara Wagner, PO Box 47, Wyatt, WV 26463
	David Webb, 931 Joetown Rd., Mannington, WV 26582
	Fara May Webb, 1084 Joetown Rd, Mannington, WV 26852
	Faye Rockwell, 316 East Run Rd., Farmington, WV 26571
	Gerald Lucas Heirs, 1457 Wyatt Rd., Mannington, WV 26582
	Janet Nutter, 324 Elmhurst St., Morgantown, WV 26505
	John & Rita Heldreth, 12 Humanity St., Fairmont, WV 26554
	Kathleen Crim Stone, 5117 New Carlisle Pike, Springfield, OH 45504
	Perry Hughes, 70 Twin Creek Trl., Buffalo, MO 65622

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Barbara Wagner  
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Wyatt, WV 26463

*Hughes 11M Permit App*

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David Webb  
931 Joetown Rd  
Mannington, WV 26582

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Restricted Delivery Fee (Endorsement Required)	
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Fara May Webb  
1084 Joetown Rd.  
Mannington, WV 26852

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Faye Rockwell  
316 East Run Rd  
Farmington, WV 26571

*Hughes 11M Permit App*

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Gerald Lucas Heirs  
1457 Wyatt Rd.  
Mannington, WV 26582

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Janet Nutter  
324 Elmhurst St.  
Morgantown, WV 26505

*Hughes 11M Permit App*

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John & Rita Heldreth  
12 Humanity St.  
Fairmont, WV 26554

*Hughes 11M Permit App*

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Restricted Delivery Fee (Endorsement Required)	
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Kathleen Crim Stone  
5117 New Carlisle Pike  
Springfield, OH 45504

*Hughes 11M Permit App*

for Instructions

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08/27/2021

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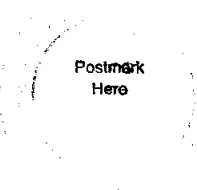
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Perry Hughes  
70 Twin Creek Trl.  
Buffalo, MO 65622

Hughes  
11M  
Permit  
APP

for Instructions

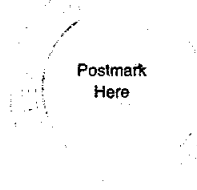
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Total Postage & Fees	\$



CONSOL Energy  
Attn: Mr. Donald Puglio P.G.  
CNX Center  
1000 Consol Energy Drive  
Cannonsburg, PA 15317-6506

Hughes  
11M  
Permit  
APP

for Instructions

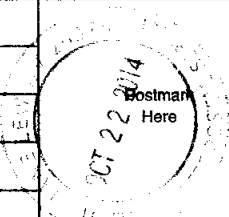
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Murray American Energy  
Attn: Troy Freels  
1 Bridge St.  
Monongah, WV 26554

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11M  
Permit  
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for Instructions

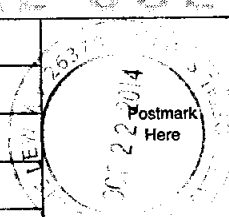
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Murray Energy Corporation  
Attn: Alex O'Neil, PE  
46226 National Road  
St. Clairsville, OH 43950

Hughes  
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WEST VIRGINIA DEPARTMENT OF TRANSPORTATION

**Division of Highways**

1900 Kanawha Boulevard East • Building Five • Room 110  
Charleston, West Virginia 25305-0430 • (304) 558-3505

Earl Ray Tomblin  
Governor

Paul A. Mattox, Jr., P. E.  
Secretary of Transportation/  
Commissioner of Highways

February 18, 2015

James A. Martin, Chief  
Office of Oil and Gas  
Department of Environmental Protection  
601 57<sup>th</sup> Street, SE  
Charleston, WV 25304

Subject: DOH Permit for the Hughes Well Pad, Marion County  
Hughes 11H

Dear Mr. Martin,

This well site will be accessed from Permit #04-2014-1246 issued to XTO Energy, Inc. for access to the State Road for a well site located off of Marion County Route 3 SLS.

The operator has signed a STATEWIDE OIL AND GAS ROAD MAINTENANCE BONDING AGREEMENT and provided the required Bond. This operator is currently in compliance with the DOH OIL AND GAS POLICY dated January 3, 2012.

Very Truly Yours,

Gary K. Clayton, P.E.  
Regional Maintenance Engineer  
Central Office O&G Coordinator

Cc: Tim Sands  
XTO Energy, Inc.  
CH, OM, D-4  
File

E.E.O./AFFIRMATIVE ACTION EMPLOYER

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FEB 18 2015

WV Department of  
Environmental Protection

08/27/2021



# Hydraulic Fracturing Fluid Product Component Information Disclosure

Hydraulic Fracturing Fluid Composition:

Trade Name	Supplier	Purpose	Ingredients	Chemical Abstract Service Number (CAS #)	Maximum Ingredient Concentration in Additive (% by mass)**	Maximum Ingredient Concentration in HF Fluid (% by mass)**	Comments
Water	XTO	Carrier/Base Fluid	Water	7732-18-5	100.00%	88.35%	
Sand (Proppant)	Universal	Proppant	Silica Substrate		100.00%	11.20%	
Hydrochloric Acid (10%)	PPG Industries	Acidizing	Hydrochloric Acid	7647-01-0	10.00%	0.00%	
			Other - (non-hazardous)		85.00%	0.00%	
Hydrochloric Acid (7.5%)	PPG Industries	Acidizing	Hydrochloric Acid	7647-01-0	7.50%	0.03%	
			Other - (non-hazardous)		92.50%	0.34%	
Acid Inhibitor, Unihib G	GeoSafe	Acid Inhibitor	Proprietary Blend Surfactants		35.00%	0.00%	
			Short Chained Glycol Ether	112-34-5	50.00%	0.00%	
			Ethoxylated alcohol		35.00%	0.00%	
Biocide, EC6116A	Nalco	Biocide	Dibromoacetonitrile	3252-43-5	5.00%	0.00%	
			2,2-Dibromo-3-nitripropionamide	10222-01-2	30.00%	0.00%	
			Polyethylene Glycol	25322-68-3	60.00%	0.01%	
			Other - (non-hazardous)		5.00%	0.00%	
Clay Stabilizer, Cla-Chek G	Shrieve	Clay Stabilizer	Water	7732-18-5	15.00%	0.00%	
			Other - (non-hazardous)		85.00%	0.00%	
Friction Reducer, Unislick ST-50	CESI Chemical	Friction Reducer	Petroleum distillates, hydrotreated light	64742-47-8	30.00%	0.02%	
			Other - (non-hazardous)		70.00%	0.04%	
Scale Inhibitor, ScaleHib A	Nalco	Scale Inhibitor	Ethylene Glycol	107-21-1	30.00%	0.00%	
			Other - (non-hazardous)		70.00%	0.01%	
Gel Breaker, LEB-10X	Universal	Gel Breaker	Ethylene Glycol	107-21-1	40.00%	0.00%	
			Other - (non-hazardous)		60.00%	0.00%	
Unigel 5F	Universal	Gel	Guar Gum	9000-30-0	99.00%	0.00%	
			Other - (non-hazardous)		1.00%	0.00%	
Slurry Gel, WGA-7 SLR	Universal	Gel	Guar Gum	9000-30-0	50.00%	0.00%	
			Petroleum Distillate	64742-47-8	55.00%	0.00%	
			Clay		5.00%	0.00%	
			Surfactant		5.00%	0.00%	
			Buffer		5.00%	0.00%	

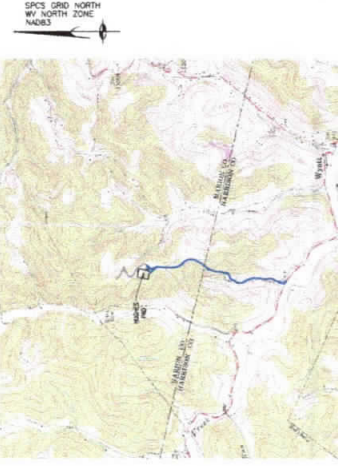
08/27/2021

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Office of Oil & Gas

OCT 23 2014

# SEDIMENT CONTROL PLAN FOR THE HUGHES WELL PAD & ACCESS ROAD EAGLE & MANNINGTON DISTRICTS HARRISON & MARION COUNTIES, WEST VIRGINIA



**SITE LOCATION MAP**  
SCALE 1" = 2000'

APPROVED  
WVDEP OOG  
2/25/2015

AP#H 49002361



PROPERTY OWNER	TAX I.D.	DISTURBED AREA
FARA MAY WEBB	09-148-05	1,002 AC.
DANIEL W. WEBB	09-148-05.2	9,700 AC.
GERALD L. LUGOS	12-59-9.2	0,100 AC.
CIRM FAMILY LIVING TRUST	12-59-55	1,800 AC.
JOHN G. & RITA L. WELDRITH	12-59-10	0,003 AC.
JOHN G. & RITA L. WELDRITH	12-59-10.5	4,600 AC.
BARBARA W. WELDRITH	12-59-10	6,700 AC.
CIRM FAMILY LIVING TRUST	12-59-55	0,040 AC.
FAYE C. ROCKWELL	12-59-09	1,600 AC.
FERRY L. HUGHES	12-59-15	2,900 AC.
FERRY L. HUGHES	12-59-15	1,500 AC.
FAYE C. ROCKWELL	12-59-08	4,500 AC.
FAYE C. ROCKWELL	12-59-08	4,700 AC.

PLAN	TITLE	SHEET NUMBER
SEDIMENT CONTROL PLAN		
"SEDIMENT CONTROL PLAN"		
ES CONTROL PLAN - COVER		SHEET 1
ACCESS ROAD TO HUGHES WELL PAD		SHEET 2
ACCESS ROAD TO HUGHES WELL PAD		SHEET 3
ACCESS ROAD TO HUGHES WELL PAD		SHEET 4
HUGHES WELL PAD, ACCESS ROAD, & STOCKPILE AREAS		SHEET 5
FILL AREAS 1, 2, & 3		SHEET 6
ACCESS ROAD PROFILES		SHEET 7
STOCKPILE CROSS SECTIONS		SHEET 8
ACCESS ROAD CROSS SECTIONS		SHEET 9
ACCESS ROAD CROSS SECTIONS		SHEET 10
ACCESS ROAD CROSS SECTIONS		SHEET 11
DETAILS		SHEET 12
DETAILS		SHEET 13
DETAILS		SHEET 14
NARRATIVE		SHEET 15
NARRATIVE		SHEET 16
PAD LAYOUT (DRILL PHASE)		SHEET 17
PAD LAYOUT (FRAC PHASE)		SHEET 18
DETAILS		SHEET 19
		SHEET 20

NO.	REVISIONS	DATE	BY

NOTE: PROPOSING ENGINEER/OWNER SHALL BE RESPONSIBLE TO VERIFY THE ACCURACY OF THE DATA AND INFORMATION PROVIDED IN THIS PLAN. THE ENGINEER/OWNER SHALL BE RESPONSIBLE TO VERIFY THE ACCURACY OF THE DATA AND INFORMATION PROVIDED IN THIS PLAN. THE ENGINEER/OWNER SHALL BE RESPONSIBLE TO VERIFY THE ACCURACY OF THE DATA AND INFORMATION PROVIDED IN THIS PLAN.

**XTO ENERGY**  
810 HOUSTON STREET  
FORT WORTH, TX 76102

**TRI-COUNTY ENGINEERING, LLC**  
1100 W. 19th Street, Suite 100  
Fort Worth, TX 76102  
Tel: (817) 333-0275  
Fax: (817) 433-0418

**Engineering Solutions**  
Since 1979

**SEDIMENT CONTROL PLAN - COVER**  
**HUGHES WELL PAD & ACCESS ROADS**

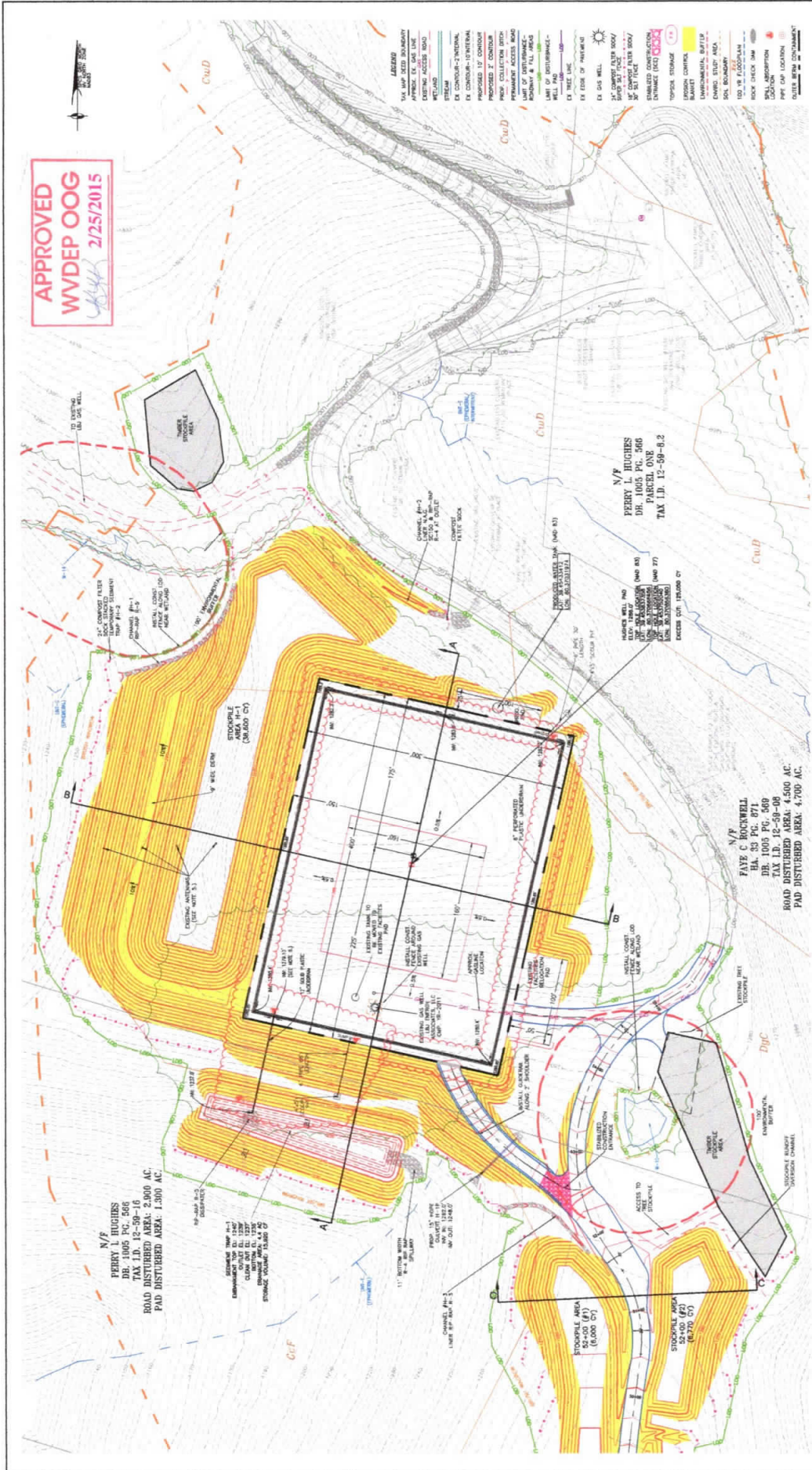
Project No: 17/01/15  
Date: 1/7/15  
Scale: AS SHOWN  
Sheet No: 19 of 20  
Sheet Title: HUGHES WELL PAD & ACCESS ROADS

Electronic version of these plans may be viewed at: Q:\OIL GAS\SAY FILES\REVIEWS

08/27/2021



**APPROVED**  
**WVDEP OOG**  
 2/25/2015



**TRI-COUNTY ENGINEERING, LLC**  
 1400 W. WYOMING ST. SUITE 100  
 FORT WORTH, TX 76102  
 PHONE: (817) 338-8810 FAX: (817) 338-8870

**Engineering**  
 Sustainable  
 Since 1978

**SEDMENT CONTROL PLAN**  
**HUGHES WELLS PAD, ACCESS ROAD, & STOCKPILE AREAS**

DATE: 1/29/15  
 DRAWN BY: JAMES GARDNER  
 CHECKED BY: JAMES GARDNER  
 SCALE: 1" = 50'  
 SHEET NO. 3 OF 3

**XTO ENERGY**  
 810 HOUSTON STREET  
 FORT WORTH, TX 76102

GRAPHIC SCALE 1" = 50'

**STOP - CALL BEFORE YOU DIG!**  
 Mass Utility of West Virginia  
 1-800-245-4648  
 TOLLFREE 1-800-245-4648

NOTICE: REGARDING UNDERGROUND UTILITIES, AN INDUSTRY OR AGENCY THAT HAS BEEN ADVISED OF THE LOCATION OF EXISTING UTILITIES SHOULD MAINTAIN THE EXISTING UTILITIES AND NOT BE RESPONSIBLE FOR ANY DAMAGE TO EXISTING UTILITIES. ANY DAMAGE TO EXISTING UTILITIES WILL BE THE RESPONSIBILITY OF THE PARTY CONDUCTING THE WORK AT 1-800-245-4648. BE SATISFIED, IN WRITING, BY CONTACTING THE MAINT. AT 1-800-245-4648.

11. DISTURBED AREAS SHALL BE RESTORED TO ORIGINAL OR BETTER CONDITION.  
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 20. DISTURBED AREAS SHALL BE RESTORED TO ORIGINAL OR BETTER CONDITION.

**REVISIONS**

NO.	DESCRIPTION	DATE	BY
1	ISSUED	2/23/15	AG

1. DISTURBED AREAS SHALL BE RESTORED TO ORIGINAL OR BETTER CONDITION.  
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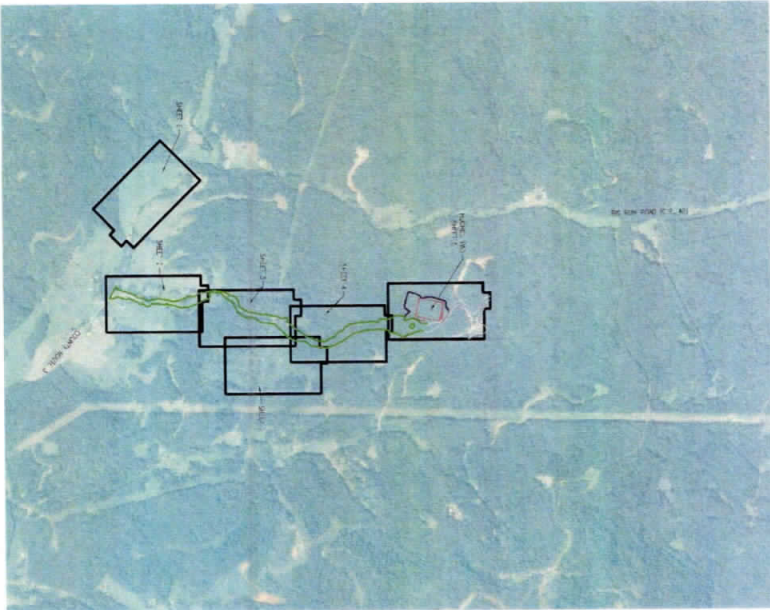
08/27/2021



# SEDIMENT CONTROL PLAN FOR THE HUGHES WELL PAD & ACCESS ROAD EAGLE & MANNINGTON DISTRICTS HARRISON & MARION COUNTIES, WEST VIRGINIA



PROPERTY OWNER	TAX ID	DISTURBED AREA
FARM WAY WEST	09-144-05	7.992 AC
LAND W. WEST	09-144-05.2	8.700 AC
GRACE L. LUDGE	12-59-9.2	0.700 AC
CHAM FARM, V. LYONS	12-59-5C	600 AC
JANE L. MATHES & MILDRED H. MATHES	12-59-1E	0.600 AC
JANE L. MATHES & MILDRED H. MATHES	12-59-1G.5	4.600 AC
CHAM FARM, V. LYONS	12-59-1E	8.700 AC
CHAM FARM, V. LYONS	12-59-5C	0.040 AC
FARM C. ROCKWELL	12-59-9B	1.600 AC
FARM B. ROCKWELL	12-59-1B	2.900 AC
FARM HUGHES	12-59-1H	1.000 AC
FARM C. ROCKWELL	12-59-0B	4.500 AC
FARM C. ROCKWELL	12-59-0E	4.700 AC



08/27/2021

WRH  
10-20-14

PLAN	TITLE	SHEET NUMBER
SEDIMENT CONTROL PLAN		
ES&S CONTROL PLAN - COVER		SHEET 1
ACCESS ROAD TO HUGHES WELL PAD		SHEET 2
ACCESS ROAD TO HUGHES WELL PAD		SHEET 3
ACCESS ROAD & FILL AREA 2		SHEET 4
HUGHES WELL PAD ACCESS ROAD & STOCKPILE AREAS		SHEET 5
HUGHES WELL PAD ACCESS ROAD & STOCKPILE AREAS		SHEET 6
FILL AREAS 1		SHEET 7
FILL AREAS 3, 4, & 5		SHEET 8

Received  
Office of Oil & Gas  
OCT 23 2014

### REVISIONS

NO.	DESCRIPTION	DATE	BY

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810 HOUSTON STREET  
FORT WORTH, TX 76102

Projecting  
SINCE 1978

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PROJECT: HUGHES WELL PAD & ACCESS ROADS

DATE: 08/27/21

SCALE: 1" = 1000'

PROJECT NO: 10-20-14

TRO-COUNTY ENGINEERING, LLC

1000 E. MAIN STREET, SUITE 100  
FORT WORTH, TEXAS 76102  
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FAX: 817.335.1235  
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