



west virginia department of environmental protection

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

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

August 07, 2015

WELL WORK PLUGGING PERMIT

Plugging

This permit, API Well Number: 47-4901339, issued to XTO ENERGY, INC., is evidence of permission granted to perform the specified well work at the location described on the attached pages and located on the attached plat, subject to the provisions of Chapter 22 of the West Virginia Code of 1931, as amended, and all rules and regulations promulgated thereunder, and to all conditions and provisions outlined in the pages attached hereto. Notification shall be given by the operator to the Oil and Gas Inspector at least 24 hours prior to the construction of roads, locations, and/or pits for any permitted work. In addition, the well operator shall notify the same inspector 24 hours before any actual well work is commenced and prior to running and cementing casing. Spills or emergency discharges must be promptly reported by the operator to 1-800-642-3074 and to the Oil and Gas inspector.

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

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

James Martin

Chief

Operator's Well No: E-0530

Farm Name: ICE, RICHARD A.

API Well Number: 47-4901339

Permit Type: Plugging

Date Issued: 08/07/2015

Promoting a healthy environment.

PERMIT CONDITIONS

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

CONDITIONS

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

WW-4B
Rev. 2/01

1) Date 7/13, 20 15
2) Operator's Well No. E-0530
3) API Well No. 47-049 - 01339

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

APPLICATION FOR A PERMIT TO PLUG AND ABANDON

- 4) Well Type: Oil / Gas / Liquid injection / Waste disposal /
(If "Gas, Production or Underground storage) Deep / Shallow
- 5) Location: Elevation 1126' Watershed Tevebaugh Creek
District Lincoln County Marion Quadrangle Shinnston
- 6) Well Operator XTO Energy Inc 7) Designated Agent Gary Beall
Address PO Box 1008 Address PO Box 1008
Jane Lew, WV 26378 Jane Lew, WV 26378
- 8) Oil and Gas Inspector to be notified 9) Plugging Contractor
Name Bill Hendershot Name _____
Address 403 James Street Address _____
Mannington, WV 26582

10) Work Order: The work order for the manner of plugging this well is as follows:

RIH and check TD with tools at 3900', POOH and run 2" tubing to 3870' and circulate 6% gel back to surface, then pump cement from 3870' up to 3575', perfs at 3806 - 3700', pull tubing up to 3400' and flush tubing, then wait for cement to set up, RIH down tubing to tag cement at 3575', POOH and if ok, pull tubing up to 2885' and pump cement from 2885' up to 2520', perfs at 2831 - 2578', pull tubing up to 2510' and pump cement up to 2200', perfs at 2498 - 2311' pull tubing up to 1980' and pump cement up to 1700', perfs at 1923 - 1824', pull tubing out and run CBL in 4.5 casing, log shows cement top at 1150', cut casing at 1150' and circulate 6% gel back to surface, pull casing out and run tubing back in to 1200' and pump cement from 1200' up to 1000', elev. at 1126', pull tubing up to 200' and pump cement to surface. 7" casing is cemented to surface. Install well monument.

Cement 3870 - 3575' = 295' in 4.5" Cement 1980 - 1700' = 280' in 4.5"
Cement 2885 - 2520' = 365' in 4.5" Cement 1200 - 1000' = 200' in 7"
Cement 2510 - 2200' = 310' in 4.5" Cement 200 - 0' = 200' in 7"

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

Work order approved by inspector Bill Hendershot Date 7-14-15

Received
Office of Oil & Gas
JUL 20 2015

WR-35

December 21, 2001
API # 47-49-1339

Reviewed ARTS

STATE OF WEST VIRGINIA
DIVISION OF ENVIRONMENTAL PROTECTION
SECTION OF OIL AND GAS

WELL OPERATOR'S REPORT OF WELL WORK

FARM NAME: Richard A. Ico OPERATOR WELL NO: E-530

LOCATION: ELEVATION: 1126.75 QUADRANGLE: Shinnston

DISTRICT: Lincoln COUNTY: MARION
LATITUDE: 4770 FEET SOUTH OF 39 DEG. 30 MIN. 00 SEC.
LONGITUDE: 6110 FEET WEST OF 80 DEG. 17 MIN. 30 SEC.

COMPANY: EXPLORATION PARTNERS, LLC

PO BOX 930
BRIDGEPORT, WV 26330

AGENT: LOUIS A. FERRARI
INSPECTOR: RANDY MICK
PERMIT ISSUED: 5/17/01
WELL WORK COMMENCED: 6/11/01
WELL WORK COMPLETED: 6/26/01

CASING & TUBING SIZE	USED IN DRILLING	LEFT IN WELL	CEMENT FILL UP CU. FT.
13 3/8	30'	30'	
9 5/8	499'	499'	173 SKS
7	1470'	1470'	230 SKS
4 1/2	3933'	3933'	180 SKS

VERBAL PLUGGING
PERMISSION GRANTED ON:
ROTARY X CABLE RIG
TOTAL DEPTH (FEET) 3960'
FRESH WATER DEPTHS (FT) 210

SALT WATER DEPTHS (FT) N/A

IS COAL BEING MINED IN AREA (Y/N)? N
COAL DEPTHS (FT) 130-135,295-300,800-804,
832-835

RECEIVED
Office of Oil & Gas
Permitting
AUG 28 2002
WV Department of
Environmental Protection

OPEN FLOW DATA
PRODUCING FORMATIONS ball town, 5th sand, gordon, 30', 50', pocono, big injun PAY ZONES
DEPTH (FT) 1769-3700
GAS: INITIAL OPEN FLOW show MCF/D OIL: INITIAL OPEN FLOW N/A BBL/
FINAL OPEN FLOW 331 MCF/D FINAL OPEN FLOW N/A BBL/
TIME OF OPEN FLOW BETWEEN INITIAL AND FINAL TESTS 24 HOUR(S)
STATIC ROCK PRESSURE 170 PSIG (SURFACE PRESSURE AFTER 24 HOUR(S))

SECOND PRODUCING FORMATION PAY SONE DEPTH (FT)
GAS: INITIAL OPEN FLOW MCF/D OIL: INITIAL OPEN FLOW N/A BBL/
FINAL OPEN FLOW MCF/D FINAL OPEN FLOW N/A BBL/
TIME OF OPEN FLOW BETWEEN INITIAL AND FINAL TESTS HOUR(S)
STATIC ROCK PRESSURE PSIG (SURFACE PRESSURE AFTER HOUR(S))

NOTE: ON BACK OF THIS FORM PUT THE FOLLOWING: 1) DETAILS OF PERFORATE INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC., 2) THE WELL LOG WHICH IS A SYSTEMATIC DETAILED GEOLOGICAL RECORD OF ALL FORMATIONS INCLUDING COAL ENCOUNTERED BY THE WELLBORE.

FOR: EXPLORATION PARTNERS, LLC

BY: _____ LOUIS A. FERRARI
DATE: December 21, 2001

Received
Office of Oil & Gas
JUL 20 2015

MAR 1339

FORM IV-35
(REVERSE)

47-49-1339

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

- I. (3700-3806), 18 holes, 500 gal. HCL, 200 sks 20/40, 190 BBL Gelled H2O
- II. (2816-2831), 15 holes, 500 gal. HCL, 100 sks 20/40, 140 BBL Gelled H2O
- III. (2578-2700), 22 holes 500 gal HCL, 100 sks 20/40, 156 BBL Gelled H2O
- IV. (2311-2498), 20 holes, 750 gal. HCL, 125sks 20/40, 170 BBL Gelled H2O
- V. (1906-1923), 16 holes, 500 gal. HCL 150 sks 20/40, 180 BBL Gelled H2O
- VI. (1824-1896), 20 holes, 750gal. HCL, 250 sks 20/40, 210 BBL Gelled H2O

WELL LOG

FORMATION COLOR HARD OR SOFT	TOP FEET	BOTTOM FEET	REMARKS-including indication of all fresh and salt water, coal and gas
dirt	0	30	
shale	30	130	
coal	130	135	
shale & sand	135	295	H2O 210
coal	295	300	
sand & shale	300	800	
coal	800	804	
shale	804	832	
coal	832	835	
sand & shale	835	1700	
big lime	1700	1760	
big injun	1760	1850	
pocono	1850	1900	
shale	1900	2320	
50'	2320	2460	
shale	2460	2490	
30'	2490	2500	
shale	2500	2610	
gordon	2610	2670	
shale	2670	2690	
5 th sand	2690	2800	
shale	2800	3670	
ball town	3670	3700	
shale	3700	3860	
bradford	3860	3870	
shale	3870	3960	DTD

RECEIVED
Office of Oil & Gas
Permitting

AUG 26 2002

VA Department of
Environmental Quality

Received
Office of Oil & Gas
JUL 20 2015

4901339P

WW-4A
Revised 6-07

1) Date: 7/13/15
2) Operator's Well Number
E-0530

3) API Well No.: 47 - 049 - 01339

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

4) Surface Owner(s) to be served:	5) (a) Coal Operator
(a) Name <u>Lester Crim Jr. & Sharon Moore</u>	Name <u>Murray American Energy</u>
Address <u>849 Detyems Rd.</u>	Address <u>46226 National Road</u>
<u>Mount Pleasant, SC 29464</u>	<u>St. Clairsville, OH 43950</u>
(b) Name _____	(b) Coal Owner(s) with Declaration
Address _____	Name <u>See attached</u>
(c) Name _____	Address _____
Address _____	Name _____
Address _____	Address _____
6) Inspector <u>Bill Hendershot</u>	(c) Coal Lessee with Declaration
Address <u>403 James Street</u>	Name _____
<u>Mannington, WV 26582</u>	Address _____
Telephone <u>304-206-7750</u>	Address _____

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

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

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

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



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

Subscribed and sworn before me this 13th day of July 2015
[Signature] Notary Public
 My Commission Expires Sept. 26, 2018

Oil and Gas Privacy Notice

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

Office of Oil & Gas
JUL 20 2015

47-049-01339

Coal Owners

Consol Mining Company ✓
1000 Consol Energy Drive
Cannonsburg, PA 15317

Adonis Keith Raddish ✓
PO BOX 385
Farmington, WV 26571

Devon Thomas Raddish ✓
PO Box 241
Bridgeport, WV

Rondell Mark Raddish ✓
13049 Barrow St.
Spring Hill, FL 34609

Ferrari IV OG LLC ✓
300 Summers St.
Charleston, WV

WV. Minerals, Inc ✓
PO Box 5044
Fairmont, WV 26555

Piney Holding, Inc
PO Box 5065
Fairmont, WV

Received
Office of Oil & Gas
JUL 20 2015

4901339 P

CK 7735022
10050

WW-9
(2/15)

API Number 47 - 049 - 01339
Operator's Well No. E-0530

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) Tevebaugh Creek Quadrangle Shinnston

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: Fluids from plugging operations.

Will a synthetic liner be used in the pit? Yes No If so, what ml.? Yes - 20 mil.

Proposed Disposal Method For Treated Pit Wastes:

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

Will closed loop system be used? If so, describe: NA

Drilling medium anticipated for this well (vertical and horizontal)? Air, freshwater, oil based, etc. NA - Plugging

-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 offsite, etc. Any solid waste from plugging will be taken to 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

Permittee shall provide written notice to the Office of Oil and Gas of any load of drill cuttings or associated waste rejected at any West Virginia solid waste facility. The notice shall be provided within 24 hours of rejection and the permittee shall also disclose where it was properly disposed.

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 Tim Sands

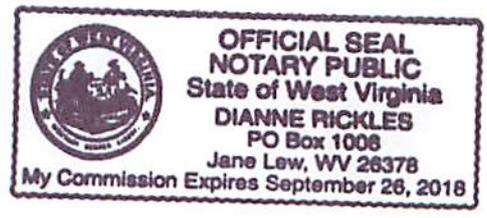
Company Official (Typed Name) Tim Sands

Company Official Title Regulatory Compliance Technician

Subscribed and sworn before me this 13th day of July, 20 15
Dianne Rickles Notary Public

Received
Office of Oil & Gas
JUL 20 2015

My commission expires Sept. 26, 2018



Form WW-9

Operator's Well No. E-0530

XTO Energy Inc.

Proposed Revegetation Treatment: Acres Disturbed .6 Prevegetation pH _____

Lime 3 Tons/acre or to correct to pH _____

Fertilizer type Commercial Fertilizer 10-20-20

Fertilizer amount 1000 lbs/acre

Mulch 3 Tons/acre

Seed Mixtures

Temporary		Permanent	
Seed Type	lbs/acre	Seed Type	lbs/acre
Annual Ryegrass	40	Kentucky Bluegrass	20
		Redtop	3
		Birdsfoot Trefoil	10

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: *Pell Newkirk*

Comments: _____

Title: Environmental Inspector Date: 7-14-15

Field Reviewed? () Yes () No

Received
Office of Oil & Gas
JUL 20 2015

4901359 P

PROJECT DESCRIPTION

TRI-COUNTY ENGINEERING, LLC (TCE), ON BEHALF OF XTO ENERGY, INC., PREPARED THIS SEDIMENT CONTROL PLAN FOR THE ICE E-0530 WELL PLUG PROJECT. THE PROJECT IS LOCATED APPROXIMATELY 2.1 MILES NORTHEAST OF LEMBERTON IN THE LINCOLN DISTRICT OF MARRION COUNTY, WEST VIRGINIA. THE PROPOSED ICE E-0530 WELL PLUG PROJECT INVOLVES THE PLUGGING AND ABANDONMENT OF THE ICE E-0530 SHALLOW GAS WELL, THE WELLHEAD, CASING, AND PRODUCTION EQUIPMENT WILL BE REMOVED. ONCE CEMENT PLUGS ARE PLACED WITHIN THE BOREHOLE, THE WELL PAD AREA WILL BE RECLAIMED AND GRADED TO BE CONSISTENT WITH THE GENERAL CONTOUR OF THE IMMEDIATE SURROUNDING LAND. THE SITE WILL BE SEEDING AS REQUIRED, WITH A MAT APPROVED BY WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION (WVDEP). THE PROJECT CONSISTS OF AN ACCESS ROAD APPROXIMATELY 10 FEET WIDE AND 716 FEET LONG, AND A WORKSPACE APPROXIMATELY 20,000 SQUARE FEET (0.5 ACRES). THE STUDY AREA FOR THE PROJECT WAS 72,286 SQUARE FEET (1.7 ACRES).

STANDARD EROSION AND SEDIMENTATION CONTROL MEASURES AND NOTES

THE CONTRACTOR SHALL USE WEST VIRGINIA EROSION AND SEDIMENT CONTROL FIELD MANUAL. BEST MANAGEMENT PRACTICES WILL BE USED DURING CONSTRUCTION TO PREVENT MINIMIZE SEDIMENTATION TO ANY STREAMS AND/OR WETLANDS AND TO KEEP MUD, DIRT, AND DEBRIS OFF THE PUBLIC ROADS THAT COULD BE DEPOSITED FROM THE EQUIPMENT USED FOR CONSTRUCTION OF THE PROJECT. EROSION AND SEDIMENTATION CONTROL MEASURES TO BE USED FOR THIS PROJECT ARE COMPOST FILTER SOCKS, STABILIZED CONSTRUCTION ENTRANCE, AND TIMBER MAT BRIDGES FOR STREAM AND WETLAND CROSSINGS (WHEN APPLICABLE). IF PROJECT LIMITS CHANGE FOR METERS OF CONSTRUCTION, AND ADDITIONAL WATERBODIES AND/OR WETLANDS ARE TO BE CROSSED OR IMPACTED, IT IS THE CONTRACTOR'S RESPONSIBILITY TO ACQUIRE THE NECESSARY PERMITS PRIOR TO IMPACTING THESE FEATURES. IF OTHER ACCESSES ARE NEEDED OR BETTER ROUTES ARE DETERMINED, OBTAIN THE NECESSARY PERMITS PRIOR TO INITIATING WORK FOR THE NEW ROUTES. PROVIDE RECORD DRAWINGS ON THE ON-SITE SCP DRAWINGS TO INCLUDE THE LOCATION OF THE ACCESS ROADS AND THE CONTROL MEASURES, SUCH AS STABILIZED CONSTRUCTION ENTRANCES, TO BE USED.

VEGETATIVE PRACTICES - TEMPORARY AND PERMANENT

PERMANENT VEGETATIVE STABILIZATION
DISTURBED AREAS WILL RECEIVE TOPSOIL AND PERMANENT VEGETATIVE STABILIZATION, DEFINED AS A UNIFORM 70% PERENNIAL VEGETATIVE COVER. TOP SOIL TO A DEPTH OF 2" REMOVE ALL OBJECTS 3" OR LARGER. THESE AREAS WILL BE PERMANENTLY STABILIZED IN ACCORDANCE WITH THE SEEDING SPECIFICATIONS OF THIS PLAN.

TEMPORARY VEGETATIVE PRACTICES (INTERIM STABILIZATION)
SLOPE AREAS, SOIL STOCKPILES, OR EMBANKMENTS THAT WILL STAY EXPOSED DUE TO UNFORESEEN CIRCUMSTANCES DURING OPERATIONS OR THAT WILL REMAIN IN PLACE FOR MORE THAN TWO WEEKS SHALL RECEIVE TEMPORARY SEEDING. THESE AREAS WILL BE TEMPORARILY STABILIZED IN ACCORDANCE WITH THE SEEDING TABLES OF THIS PLAN.

THE PLANS AND SPECIFICATIONS FOR INSTALLING TOPSOIL SHALL BE IN KEEPING WITH THIS STANDARD AND SHALL DESCRIBE THE REQUIREMENTS FOR APPLYING THE PRACTICE TO ACHIEVE ITS INTENDED PURPOSE. AT A MINIMUM INCLUDE THE FOLLOWING ITEMS:

1. TOPSOIL SOURCE;
2. STOCKPILE LOCATION AND METHOD OF STABILIZATION PRIOR TO USE;
3. TOPSOIL/SUBSOIL BONDING PROCEDURES;
4. SITE PREPARATION PLANS AND METHODS OF APPLICATION, DISTRIBUTION AND COMPACTION.

SITE PREPARATION- BEFORE SPREADING TOPSOIL, ASSURE THAT ALL NECESSARY SEDIMENT CONTROL PRACTICES, SUCH AS DIVERSIONS AND SEDIMENT BARRIERS ARE IN PLACE AND FUNCTIONING PROPERLY. THESE PRACTICES MUST BE MAINTAINED UNTIL THE SITE IS PERMANENTLY STABILIZED.

GRADING- MAINTAIN GRADES ON THE AREAS TO BE TOPSOILED ACCORDING TO THE APPROVED PLAN AND DO NOT ALTER THEM BY ADDING TOPSOIL.

LIMING OF SUBSOIL- WHERE THE PH OF THE EXISTING SUBSOIL IS 6.0 OR LESS, OR THE SOIL IS COMPOSED OF HEAVY CLAYS, INCORPORATE AGRICULTURAL LIMESTONE IN AMOUNTS RECOMMENDED BY SOIL TESTS OR SPECIFIED FOR THE SEEDING MIXTURE TO BE USED. INCORPORATE LIME TO A DEPTH OF AT LEAST 2 INCHES BY DISKING.

ROUGHENING- IMMEDIATELY PRIOR TO SPREADING THE TOPSOIL, LOOSEN THE SUBGRADE BY DISKING OR SCARPING TO A DEPTH OF AT LEAST 4 INCHES, TO ENSURE BONDING OF THE TOPSOIL AND SUBSOIL. IF NO AMENDMENTS HAVE BEEN INCORPORATED, LOOSEN THE SOIL TO A DEPTH OF AT LEAST 5 INCHES BEFORE SPREADING THE TOPSOIL.

SPREADING TOPSOIL- UNIFORMLY DISTRIBUTE TOPSOIL TO A MINIMUM COMPACTED DEPTH OF 2 INCHES ON 3:1 SLOPES AND 4 INCHES ON FLATTER SLOPES. TOPSOIL SHALL NOT BE SPREAD WHILE IT IS FROZEN OR SATURATED. IRREGULARITIES IN THE SURFACE THAT RESULT FROM FORSLING OR OTHER OPERATIONS SHALL BE CORRECTED TO PREVENT THE FORMATION OF DEPRESSIONS OR POOLING OF WATER. COMPACT THE TOPSOIL ENOUGH TO ENSURE GOOD CONTACT WITH THE UNDERLYING SOIL, BUT AVOID EXCESSIVE COMPACTION, AS IT INCREASES RUNOFF AND INHIBITS SEED GERMINATION AND SEEDLING GROWTH. LIGHT PACKING WITH A ROLLER IS RECOMMENDED WHERE HIGH-MAINTENANCE TURF IS TO BE ESTABLISHED. IN AREAS THAT ARE NOT GOING TO BE MOWED, THE SURFACE CAN BE LEFT ROUGH.

MAINTENANCE- AFTER TOPSOIL APPLICATION, FOLLOW PROCEDURES FOR SEEDING PREPARATION. TAKE CARE TO AVOID EXCESSIVE MIXING OF TOPSOIL INTO THE SUBSOIL. PERMANENTLY STABILIZE THE SITE FOLLOWING APPROPRIATE PRACTICE STANDARDS AS QUICKLY AS PRACTICABLE. PERIODICALLY INSPECT THE SITE UNTIL PERMANENT STABILIZATION IS ACHIEVED. MAKE NECESSARY REPAIRS TO ERODED AREAS OR AREAS OF LIGHT VEGETATIVE COVER. ESTABLISH A VEGETATIVE

COVER IN THE AREAS THAT WILL ADEQUATELY PREVENT EROSION.

SEEDING PREPARATION- TO CONTROL EROSION ON BARE SOIL SURFACES, PLANTS MUST BE ABLE TO GERMINATE AND GROW. SEEDING PREPARATION IS ESSENTIAL. IF THE AREA HAS BEEN RECENTLY LOOSENED OR DISTURBED, NO FURTHER ROUGHENING IS REQUIRED. WHEN THE AREA IS COMPACTED, CRUSTED, OR HARDENED, THE SOIL SURFACE MUST BE LOOSENED BY DISKING, RAINING, HARROWING, OR OTHER ACCEPTABLE MEANS (SEE SURFACE ROUGHENING SECTION).

SEEDING- SEED SHALL BE EVENLY APPLIED WITH A BROADCAST SEEDER, DRILL, CULTIPACKER SEEDER OR HYDROSEEDER. SMALL GRASS SHALL BE PLANTED NO MORE THAN 1.5 INCHES DEEP. SMALL SEEDS, SUCH AS ANNUAL RYE, SHALL BE PLANTED NO MORE THAN A QUARTER INCH DEEP. OTHER GRASSES AND LEGUMES SHALL BE PLANTED NO MORE THAN A HALF INCH DEEP. MULCHING TEMPORARY SEEDING, CONDUCTED IN FALL FOR WINTER COVER AND DURING HOT AND DRY SUMMER MONTHS, SHALL BE MULCHED WITH STRAW OR HAY ACCORDING TO THE STANDARD FOR MULCHING. HYDROMULCHES (FEED MULCH) MAY NOT PROVIDE ADEQUATE TEMPERATURE AND MOISTURE CONTROL.

BASIC SEDIMENT CONTROL PLAN ELEMENTS

OBTAIN ALL PERMITS AND APPROVALS PRIOR TO CONSTRUCTION. IF CONSTRUCTION LIMITS NEED TO BE EXPANDED BEYOND THE LIMITS OF DISTURBANCE AREA SHOWN ON THE PLANS, A PRE-CONSTRUCTION ENVIRONMENTAL EVALUATION WILL NEED TO BE CONDUCTED. CONTACT THE ENVIRONMENTAL BIOLOGIST TO CONDUCT A REVIEW ON THE NEW AREAS PRIOR TO CONSTRUCTION. INSTALL THE STABILIZED CONSTRUCTION ENTRANCES AT THE ACCESS ROAD. STABILIZED CONSTRUCTION ENTRANCES MAY BE NEEDED AT THE ACCESS ROAD PENDING ITS USE AT THE TIME OF THIS PROJECT'S CONSTRUCTION. MARK ALL CLEARING LIMITS AND SENSITIVE AREAS SUCH AS STREAMS, WETLANDS, ETC.

INSTALL DRAINAGE CONSTRUCTION FENCE NEAR STREAMS, WETLANDS AND STRUCTURES WITHIN THE LIMITS OF DISTURBANCE TO PROVIDE A PHYSICAL BARRIER TO DETER DETERIORATION BY CONSTRUCTION ACTIVITIES.

ADD GRAVEL TO ACCESS ROAD AS NEEDED, BUT NO GRADING OR IMPACTS TO EXISTING DRAINAGE FEATURES ARE TO BE MODIFIED. ON A DAILY BASIS, CLEAN THE ROADS THOROUGHLY BY REMOVING TRACKED SEDIMENT BY SHOVELING OR SWEEPING. STREET WASHING TO A WATERCOURSE OR DETER DETERIORATION BY CONSTRUCTION ACTIVITIES.

INSTALL COMPOST FILTER SOCK WHERE SHOWING PARALLEL TO THE SLOPE AND ON THE DOWN-SLOPE SIDE OF THE LIMITS OF DISTURBANCE TO PREVENT SEDIMENTATION FROM LEAVING THE PROJECT AREA.

CLEAR AND DRIBB ALONG THE ROW. PRESERVE NATURAL VEGETATION AS MUCH AS POSSIBLE, WITHOUT SIGNIFICANT INTERFERENCE WITH CONSTRUCTION ACTIVITIES.

USE TIMBER MAT BRIDGES TO CROSS WATERBODIES AND WET AREAS, AS NEEDED. RE-ESTABLISH THE GRADE TO THE PRE-CONSTRUCTION CONDITIONS.

RE-STABILIZE DISTURBED SOILS WITHIN 7 DAYS BY PLACING TEMPORARY SEEDING IF NOT FINAL GRADED, AND PERMANENT SEEDING WITH A NURSE CROP IF FINAL GRADED.

MULCH AND FERTILIZE AS STATED IN THIS PLAN.

PLACE ROLLED EROSION CONTROL PRODUCTS (RECP), MATS AND BLANKETS ON TOP OF SEEDING AREAS. ON STEEP SLOPES WHERE SEEDING MAY BE DISPLACED BY RUNOFF. TYPICALLY, SLOPES GREATER THAN 30%V NEED TO HAVE AN EROSION CONTROL MAT OR BLANKET PLACED OVER THE SEEDING AREAS. SEED AND PLACE RECP ON THE STEEP SLOPES ADJACENT TO ANY AND ALL STREAMS IMMEDIATELY (WITHIN 7 DAYS) AFTER THE WELL PLUG IS REMOVED.

MAINTAIN ALL BEST MANAGEMENT PRACTICES (BMPs) AS NEEDED TO ASSURE CONTINUED PERFORMANCE OF THEIR INTENDED FUNCTION.

ALL BMPs SHALL BE INSPECTED AT LEAST ONCE EVERY SEVEN CALENDAR DAYS AND WITHIN 24 HOURS AFTER ANY STORM EVENT GREATER THAN 0.5 INCHES PER 24 HOUR PERIOD. ANY REQUIRED REPAIRS OR MAINTENANCE SHOULD BE MADE IMMEDIATELY. THIS INCLUDES THE REMOVAL OF SEDIMENT THAT IS OVER HALF THE HEIGHT OF THE COMPOST FILTER SOCK (1 DAY PER WEEK OR AS STORM EVENTS REQUIRE).

TEMPORARY BMPs SHOULD BE REMOVED WITHIN 30 DAYS AFTER FINAL SITE STABILIZATION IS ACHIEVED OR AFTER THE TEMPORARY BMPs ARE NO LONGER NEEDED. TRACKED SEDIMENT SHALL BE REMOVED OR STABILIZED ON-SITE. DISTURBED SOIL, RESULTING FROM REMOVAL OF BMPs OR VEGETATION SHALL BE PERMANENTLY STABILIZED. FINAL STABILIZATION MEANS THAT ALL SOIL-EXPOSING ACTIVITIES ARE COMPLETED, AND THAT EITHER A PERMANENT VEGETATIVE COVER OF THE TOTAL VEGETATED AREA WITH A DENSITY OF 70% OR GREATER HAS BEEN ESTABLISHED OR THAT THE SURFACE HAS BEEN STABILIZED BY HARD COVER SUCH AS PAVEMENT OR BUILDINGS (WHEN APPLICABLE).

NO NEW PERMANENT CUT OR FILL SLOPES ARE TO REMAIN ON-SITE. DRAINING SHOULD BE DONE SUCH THAT POST-CONSTRUCTION CONTOURS SHOULD CLOSELY MATCH APPROXIMATE ORIGINAL CONTOURS AFTER CONSTRUCTION IS COMPLETE. ALL AREAS IN THE LOD THAT WERE VEGETATED IN THE EXISTING CONDITION ARE TO BE VEGETATED AFTER CONSTRUCTION.

MINING THE PROJECT

THIS SEDIMENT CONTROL PLAN (SCP) IS TO REMAIN ON-SITE AT ALL TIMES DURING CONSTRUCTION. THE SCP SHALL BE MODIFIED WHENEVER THERE IS SIGNIFICANT CHANGE IN THE DESIGN, CONSTRUCTION, OPERATION OR MAINTENANCE OF ANY BMP.

CLEARING AND DRIVING ACTIVITIES SHOULD TAKE INTO CONSIDERATION WINDING ROADS, OF THESE AND DISTURBANCE AND COMPACTION OF NATIVE SOILS. ANY AREAS THAT REQUIRE PROTECTION OF CRITICAL OR SENSITIVE AREAS AND/OR REQUIRE BUFFERS SHALL BE DELINEATED ON BOTH THE PLANS AND ON THE SITE.

ALL BMPs SHALL BE INSPECTED, MAINTAINED AND REPAIRED AS NEEDED TO ASSURE CONTINUED PERFORMANCE OF THEIR INTENDED USE. IT IS THE CONTRACTOR'S RESPONSIBILITY TO ENSURE SEDIMENTATION AND EROSION IS BEING CONTROLLED ON-SITE, AND IS NOT IMPROVING ON ADJACENT PROPERTIES. BMPs OTHER THAN STATED IN THIS PLAN, MAY NEED TO BE IMPLEMENTED.

SPILLS OR DISCHARGE OF POLLUTANTS ARE TO BE REPORTED WITHIN 24-HOURS TO THE APPROPRIATE AGENCIES.

WASTE MATERIALS AND DISPOSAL

ALL POLLUTANTS, INCLUDING WASTE MATERIALS, SHOULD BE HANDLED AND DISPOSED OF IN A MANNER THAT DOES NOT CAUSE CONTAMINATION OF SURFACE WATER, WETLANDS (DEBRIS) MAY BE CHIPPED AND SPREAD ON-SITE AS APPROVED BY THE UNDERSEWER.

COVER, CONTAINMENT, AND PROTECTION FROM VANDALISM SHALL BE PROVIDED FOR ALL CHEMICALS, LIQUID PRODUCTS AND NON-HEAVY WASTES PRESENT ON THE SITE.

MAINTENANCE AND REPAIR OF HEAVY EQUIPMENT AND VEHICLES INVOLVING OIL CHANGES, HYDRAULIC SYSTEM DRAIN DOWN, SOLVENT AND DE-GRASING, CLEANING OPERATIONS, FUEL TANK DRAIN DOWN AND REMOVAL, AND OTHER ACTIVITIES WHICH MAY RESULT IN DISCHARGE OR SPILLAGE OF POLLUTANTS TO THE GROUND OR INTO THE SURFACE WATER RUNOFF MUST BE CONDUCTED USING SPILL PREVENTION MEASURES, SUCH AS DRIP PANS. CONTAMINATED SURFACES SHALL BE CLEANED IMMEDIATELY FOLLOWING ANY DISCHARGE OR SPILL INCIDENT. PLACE PLASTIC BENEATH THE EQUIPMENT WHEN EMERGENCY REPAIRS ARE TO BE PERFORMED ON-SITE. IF RAINING, PLACE PLASTIC OVER THE VEHICLE.

GENERAL NOTES REGARDING RECLAMATION

THE GENERAL CONTRACTOR SHALL NOTIFY ALL UTILITY COMPANIES INVOLVED IN THE SITE NO MORE THAN TEN DAYS AND NO LESS THAN THREE DAYS IN ADVANCE OF EXCAVATION EXCLUDING SATURDAY, SUNDAY, AND FEDERAL OR STATE HOLIDAYS. CONTACT MISS UTILITY OF WEST VIRGINIA AT 1-800-245-4848. TRAFFIC SHALL BE MAINTAINED ON ALL ADJACENT STREETS AND DRIVES AT ALL TIMES IN ACCORDANCE WITH WV DOT'S REQUIREMENTS.

DISTURBED AREAS CREATED DUE TO WELL PLUG REMOVAL, SHALL BE RECLAIMED, MULCHED AND SEEDING, TO REDUCE EROSION AND SEDIMENTATION.

MP NUMBERS AND IDENTIFICATION NUMBERS SHALL BE DISPLAYED AT THE WELL, IN ACCORDANCE WITH STATE REQUIREMENTS.

LANDOWNERS SHALL BE GIVEN ADEQUATE NOTICE THAT CERTAIN SPECIFIED ACTIVITIES WILL BE OCCURRING ON THEIR PROPERTY.

PERMANENT STABILIZATION SPECIES		TEMPORARY STABILIZATION SPECIES	
KENTUCKY BLUEGRASS / REDTOP / BROODFOOT TRETOIL	95%	ANNUAL RYEDRASS	50%
% PURE LIVE SEED	20 LBS/ACRE, 3 LBS/ACRE, AND 10 LBS/ACRE, RESPECTIVELY	SOB	40 LBS/ACRE
APPLICATION RATE:	COMMERCIAL FERTILIZER 10-20-20	FERTILIZER TYPE:	COMMERCIAL FERTILIZER 10-10-10
FERTILIZER TYPE:	COMMERCIAL - 1000 LBS/ACRE	APPLICATION RATE:	COMMERCIAL - 1000 LBS/ACRE
FERTILIZER APPL. RATE:	3 TONS/ACRE	FERTILIZER APPL. RATE:	3 TONS/ACRE
LIMING RATE:	HAY & STRAW	LIMING RATE:	HAY & STRAW
MULCH TYPE:	3 TONS/ACRE	MULCH TYPE:	3 TONS/ACRE
MULCHING RATE:	RECYCLED CELLULOSE FIBER/WOOD FIBER MIXTURE	MULCHING RATE:	HYDRAULIC SEEDING EQUIPMENT
ANCHOR MATERIAL:	HYDRAULIC SEEDING EQUIPMENT	WATER APPLICATION:	310 LBS/1000 SQ YD
ANCHORING METHOD:		SEEDING SEASON DATES:	YEAR ROUND
BITE OF ANCHOR:			

ESTIMATED QUANTITIES				
	UNITS	ESTIM QUANTITY	BID UNIT PRICE	TOTAL COST
EROSION & SEDIMENT CONTROL				
STONE CONSTRUCTION ENTRANCE	SP	500		
12" COMPOST FILTER SOCK	LF	209		
PERMANENT SEEDING	SA	2972		
ORANGE CONSTRUCTION FENCE	LF	150		
TIMBER MAT BRIDGE	EA	1		

* SEE PLAN DRAWING FOR TIMBER MAT DIMENSIONS

REVISIONS

NO.	DESCRIPTION	DATE	BY
1			



1787

PREPARED FOR:



XTO ENERGY
810 HOUSTON STREET
FORT WORTH, TX 76102

TRI-COUNTY ENGINEERING, LLC
An ENECON Company
319 Plummer Road
P.O. Box 1500
Marrion County, WV 26041
Phone: (724) 635-6210
Fax: (724) 635-0679
www.tri-countyeng.com

SEDIMENT CONTROL PLAN NARRATIVE

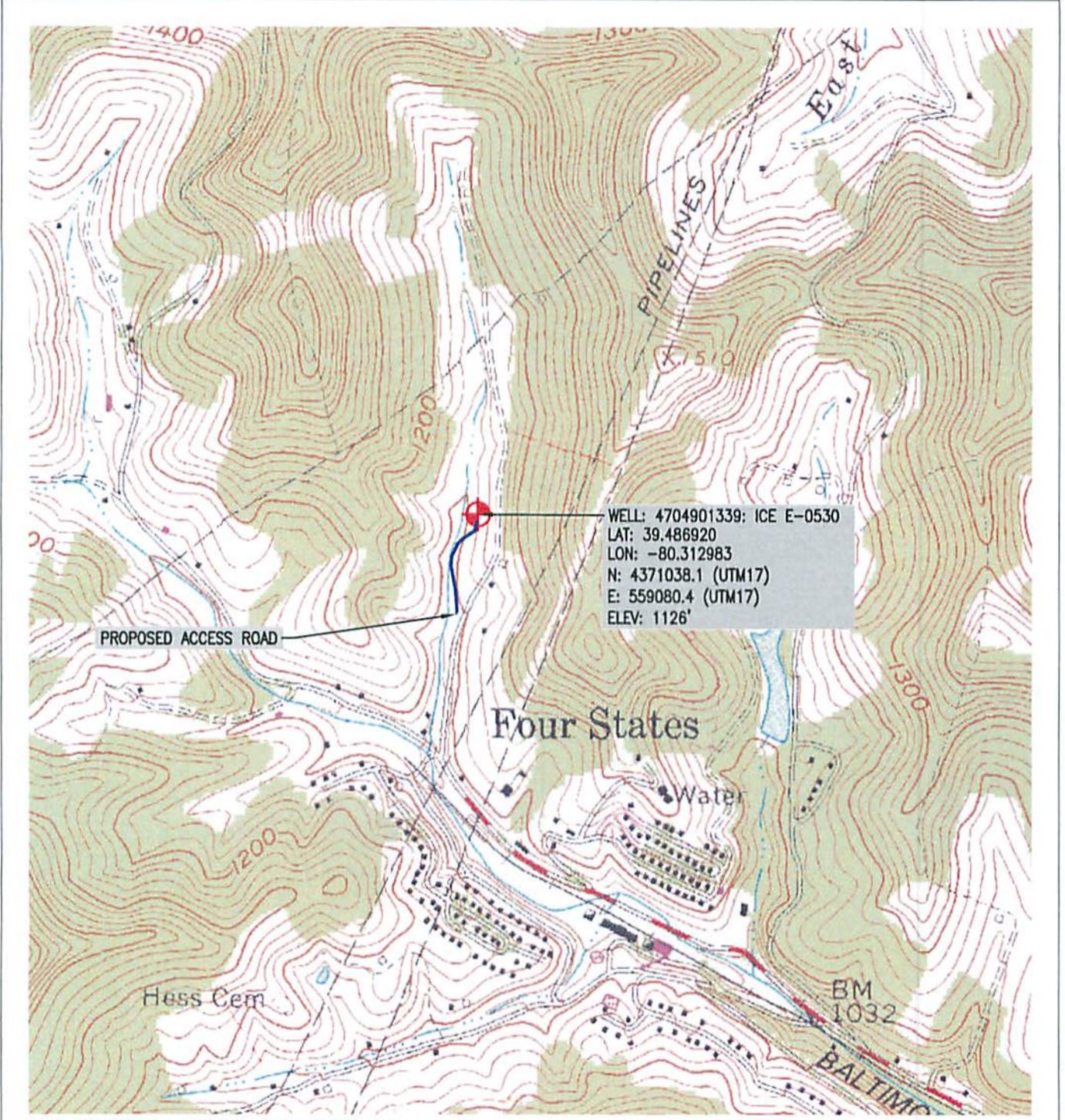
ICE E-0530 WELL PLUG

DATE: 6/29/2015

AS NOTED: 2 OF 3

PROJECT NO: 0681-05

Received
 Office of Oil & Gas
 Office of Oil & Gas
 W.R.N. JUL 20 2015
 7-14-15



WELL: 4704901339: ICE E-0530
 LAT: 39.486920
 LON: -80.312983
 N: 4371038.1 (UTM17)
 E: 559080.4 (UTM17)
 ELEV: 1126'

PROPOSED ACCESS ROAD

MAP REFERENCE: U.S.G.S. SHINNSTON, WV

WV NORTH ZONE
 SPCS GRID NORTH

XTO ENERGY
 810 HOUSTON STREET
 FORT WORTH, TX 76102

0' 1000'
 SCALE 1" = 1000'

TRI-COUNTY ENGINEERING, LLC
 An ENERCON Company
 319 Paintersville Road
 Hunker, PA 15639
 www.tricountyeng.com
 Voice: (724) 635-0210 Fax: (724) 635-0676



LOCATION MAP	
ICE E-0530 WELL PLUG	
DRAWN BY: ZJC	LINCOLN DISTRICT, MARION COUNTY, WEST VIRGINIA
DATE: 6/18/2015	SHEET: FILE NO.
SCALE: AS NOTED	1 OF 1 0661-05

WRN
 7-14-15

WW-7
8-30-06



West Virginia Department of Environmental Protection
Office of Oil and Gas

WELL LOCATION FORM: GPS

API: 47-049-01339 WELL NO.: E-0530

FARM NAME: Ice, Richard A.

RESPONSIBLE PARTY NAME: XTO Energy, Inc.

COUNTY: Marion DISTRICT: Lincoln

QUADRANGLE: Shinnston

SURFACE OWNER: Lester L. Crim & Sharon H. Moore

ROYALTY OWNER: See attached list

UTM GPS NORTHING: 4371038.1

UTM GPS EASTING: 559080.4 GPS ELEVATION: 343 meters (1125')

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

1. Datum: NAD 1983, Zone: 17 North, Coordinate Units: meters, Altitude: height above mean sea level (MSL) – meters.

2. Accuracy to Datum – 3.05 meters

3. Data Collection Method:

Survey grade GPS ; Post Processed Differential

Real-Time Differential

Mapping Grade GPS ; Post Processed Differential

Real-Time Differential

4. Letter size copy of the topography map showing the well location.

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

V. L. L. L.
Signature

Project Manager
Title

June 30, 2015
Date

Received
Office of Oil & Gas
JUL 20 2015

4901339P

WELL NUMBER	WELL NAME	OWNER NUMBER	OWNER NAME	ROYALTY INTEREST	ADDRESS LINE1	CITY	STATE	ZIP
301751	ROBEY, HT 1 (INA)	247823	WV MINERALS INC	0.005952380	PO BOX 5044	FAIRMONT	WV	265550000
301751	ROBEY, HT 1 (INA)	327756	FERRARI VI OG LLC	0.010714290	C/O FIRST NATIONAL TRUST CO ATTN: SHARON DIABLE 2ND FLOOR 4220 WILLIAM PENN HWY	MONROEVILLE	PA	151460000
301751	ROBEY, HT 1 (INA)	336081	LINDA WHITEHOUSE	0.002976187	1648 AINSDALE DR	ROSEVILLE	CA	957470000
301751	ROBEY, HT 1 (INA)	336090	VALERIE BROWN	0.000992062	77 LEVIN RD	ROCKLAND	MA	237000000
301751	ROBEY, HT 1 (INA)	336091	DAVID AYERS	0.000992062	107 TEAL DR	CURRITUCK	NC	279290000
301751	ROBEY, HT 1 (INA)	336092	SUSAN LILAVOIS	0.000992062	8318 UXBRIDGE CT	SPRINGFIELD	VA	221510000
301751	ROBEY, HT 1 (INA)	336093	EUGENE S LIEVING II	0.002976187	199 BROADVIEW AVE	FAIRMONT	WV	265540000
301751	ROBEY, HT 1 (INA)	800178	BRADLEY W THOMAS	0.010714290	4115 COVE POINT DR	MORGANTOWN	WV	265080000
301751	ROBEY, HT 1 (INA)	801036	JAMES D. ROBERTS	0.000850340			XX	0
301751	ROBEY, HT 1 (INA)	801104	LINDA SHIPP	0.002551020			XX	0
301751	ROBEY, HT 1 (INA)	801131	MARILYN VIGLIONE	0.002551020			XX	0
301751	ROBEY, HT 1 (INA)	802895	JACOB G FORD	0.010714290	115 OAK TERRACE	STAUNTON	VA	244010000
301751	ROBEY, HT 1 (INA)	804451	MARILYN RADDISH	0.017857150	(DECEASED)BOX 14	FOUR STATES	WV	265720000
301751	ROBEY, HT 1 (INA)	804507	MINALEE ICE	0.008928560	106 KING LANE	WINCHESTER	VA	226020000
301751	ROBEY, HT 1 (INA)	804794	ROBERT F HORNER	0.010714290	153 HAYWOOD RD	SHINNSTON	WV	264317038
301751	ROBEY, HT 1 (INA)	808728	RONALD P. ROBERTS	0.000850340	2407 BOXBERRY LANE	BROADVIEW HEIGHTS	OH	441470000
301751	ROBEY, HT 1 (INA)	808750	BARBARA KRAKOWSKI	0.000850340	P.O. BOX 1450	CLEVELAND	OH	441140000
301751	ROBEY, HT 1 (INA)	808785	THELMA MARTIN	0.002551020	1187 ELWOOD RD.	CLEVELAND	OH	441240000
301751	ROBEY, HT 1 (INA)	808823	EVELYN DAVIS	0.002551020	1169 E. 60TH ST.	CLEVELAND	OH	441030000
301751	ROBEY, HT 1 (INA)	808842	LYLE W. DAVIS	0.002551020	1169 EAST 60TH ST.	CLEVELAND	OH	441240000
301751	ROBEY, HT 1 (INA)	809392	ROBERT A. HAWKINS	0.005952380	6110 W PLEASANT RIDGE RD#3436	ARLINGTON	TX	760160000
301751	ROBEY, HT 1 (INA)	809447	VIRGINIA EXPLORATION INC	0.010714290	PO BOX 21145	WINSTON SALEM	NC	271011145
301751	ROBEY, HT 1 (INA)	809699	ELINOR BELL	0.005952380	3724 COMMENCEMENT BAY	TACOMA	WA	984070000
301751	ROBEY, HT 1 (INA)	809845	CORA HORVAT	0.002551020			XX	0

Received
Office of Oil & Gas
JUL 20 2015