



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

December 02, 2015

WELL WORK PLUGGING PERMIT

Plugging

This permit, API Well Number: 47-3906190, issued to BLUE CREEK GAS COMPANY, 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: TOON 2
Farm Name: TOON, CASSIUS H.
API Well Number: 47-3906190
Permit Type: Plugging
Date Issued: 12/02/2015

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.

1) Date 11-12, 2015
2) Operator's Well No. #2
3) API Well No. 47-39-06190

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 1272' Watershed _____
District Elk 04 County Kanawha Quadrangle Clendenin 299

6) Well Operator Blue Creek Gas Co. 7) Designated Agent Steve Rubin
Address 1700 Pennsylvnin Avenue Address Same
Charleston WV

8) Oil and Gas Inspector to be notified Name Terry Urban
Address P.O. bBox 1207
Clendenin, WV. 25045
9) Plugging Contractor Name Duckworth Well Service
Address P.O. Box 5871
Charleston, Wv 25263

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

- Cement 2240' - 2140'
- Cement 1550' - 1450'
- Cement 800' - 700'
- Cement 100' - Surface

*Will cover all
perfs with cement*

Pull all Free Pipe
Erect monument with API numbers
Gel between all Plugs

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

Work order approved by inspector *[Signature]*

Date 11-13-15

Received
11-13-2015
Office of Oil and Gas
WV Dept. of Environmental Protection

WR-35
Rev (5-01)

DATE: December 8, 2008
API #: 47-3906190

State of West Virginia
Department of Environmental Protection
Office of Oil and Gas

Well Operator's Report of Well Work

Farm name: TOON

Operator Well No.: #2

LOCATION: Elevation: 1272

Quadrangle: CLENDENIN

District: ELK County: Kanawha
Latitude: _____ Feet South of _____ Deg. _____ Min. _____ Sec.
Longitude _____ Feet West of _____ Deg. _____ Min. _____ Sec.

Company:

Blue Creek Gas Company	Casing & Tubing	Used in drilling	Left in well	Cement fill up Cu. Ft.
Address: 1700 Pennsylvania Avenue Charleston, WV				
Agent: Steven M. Rubin				
Inspector: Terry Urban	7	675	675	130
Date Permit Issued: '10/07/2008				
Date Well Work Commenced: '11/04/2008	4.5	2240	2240	230
Date Well Work Completed: '11/21/2008				
Verbal Plugging:				
Date Permission granted on:				
Rotary Cable Rig				
Total Depth (feet): 2314				
Fresh Water Depth (ft.): 265'				
Salt Water Depth (ft.): 1275'				
Is coal being mined in area (N/Y)? no				
Coal Depths (ft.): n/a				

OPEN FLOW DATA

Producing formation MAXTON-WEIR Pay zone depth (ft) 1789-2240
Gas: Initial open flow 0 MCF/d Oil: Initial open flow 0 Bbl/d
Final open flow 525,000MCF/d Final open flow 0 Bbl/d
Time of open flow between initial and final tests 48 Hours
Static rock Pressure 450 psig (surface pressure) after 48 Hours

Second producing formation _____ Pay zone depth (ft) _____
Gas: Initial open flow _____ MCF/d Oil: Initial open flow _____ Bbl/d
Final open flow _____ MCF/d Final open flow _____ Bbl/d
Time of open flow between initial and final tests _____ Hours
Static rock Pressure _____ psig (surface pressure) after _____ Hours

NOTE: ON BACK OF THIS FORM PUT THE FOLLOWING: 1). DETAILS OF PERFORATED 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.

Signed:

By: Steven M. Rubin
Date: _____

12/08/08

Received
NOV 11 2008
WV DEPARTMENT OF ENVIRONMENTAL PROTECTION

Mr. Department of Energy & Environmental Protection
 Office of Oil and Gas
 1000
 1000

BLUE CREEK GAS	47-3906190					
TOON #2						
TREATMENT DETAILS						
STAGE 1	WEIR	DEPTH	NO OF PERFORATIONS	SAND	N2	ACID
75 QUALITY FOAM FRAC	PERFORATIONS	2203-2240	30	29,953SKS	422,322	500 GALS
	TREATING PSI					
		2891				
STAGE 2	MAXTON	DEPTH	NO OF PERFORATIONS	SAND	N2	ACID
75 QUALITY FOAM FRAC	PERFORATIONS	1789-1803	24	30,618SKS	283,884	500 GALS
	TREATING PSI					
		2523				
FORMATION	TOP	BOTTOM				
SAND-SHALE	0	1764				
MAXTON	1764	1826				
SHALE	1826	1934				
BIG LIME	1934	2052				
SHALE	2052	2110				
WEIR	2110	2240				
SHALE	2240	2314	T.D.			

WW-4A
Revised 6-07

1) Date: 11-12-2015
2) Operator's Well Number # 2
3) API Well No.: 47 - 39 - 06190

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

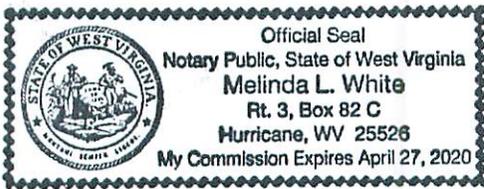
4) Surface Owner(s) to be served:	5) (a) Coal Operator
(a) Name <u>Cassius Toon</u>	Name _____
Address <u>225 Dutch Ridge Road</u>	Address _____
<u>Clendenin, WV. 25045</u>	(b) Coal Owner(s) with Declaration
(b) Name _____	Name _____
Address _____	Address _____
(c) Name _____	Name _____
Address _____	Address _____
6) Inspector <u>Terry Urban</u>	(c) Coal Lessee with Declaration
Address <u>P.O. Box 21</u>	Name _____
<u>Clendenin, WV. 1207</u>	Address _____
Telephone _____	_____

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 Blue Creek Gas Co.
 By: Stacy Kubik
 Its: President
 Address 1700 Pennsylvania Avenue
Charleston, WV
 Telephone 342-0141

Subscribed and sworn before me this 13th day of November
Melinda L. White Notary Public
 My Commission Expires April 27, 2020

Received
 NOV 13 2015
 Office of Oil and Gas
 Environmental Protection

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.

WW-9
(2/15)

API Number 47 - 39 - 6190
Operator's Well No. _____

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

FLUIDS/ CUTTINGS DISPOSAL & RECLAMATION PLAN

Operator Name Steve Rubin OP Code _____

Watershed (HUC 10) _____ Quadrangle Clendenin

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: 14 11-17-15

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 _____)
- _____ Reuse (at API Number _____)
- _____ Off Site Disposal (Supply form WW-9 for disposal location)
- _____ Other (Explain _____)

NO PIT

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

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

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

Additives to be used in drilling medium? _____

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

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

-Landfill or offsite name/permit number? _____

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 Steve Rubin

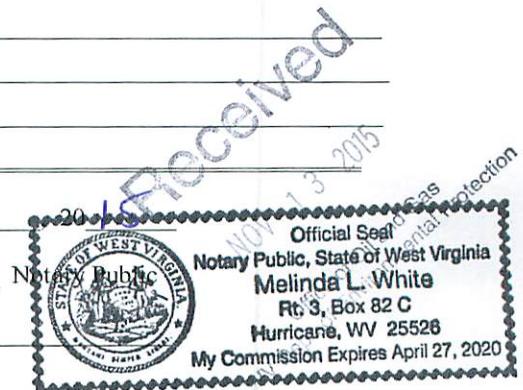
Company Official (Typed Name) Steve Rubin

Company Official Title President

Subscribed and sworn before me this 13th day of November

Melinda L. White

My commission expires April 27, 2020



Proposed Revegetation Treatment: Acres Disturbed 1/4 acres Prevegetation pH _____

Lime 3 Tons/acre or to correct to pH _____

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

Mulch 2 Tons/acre

Seed Mixtures

Seed Type	Area I lbs/acre	Seed Type	Area II lbs/acre
<u>Contracor Mix</u>			

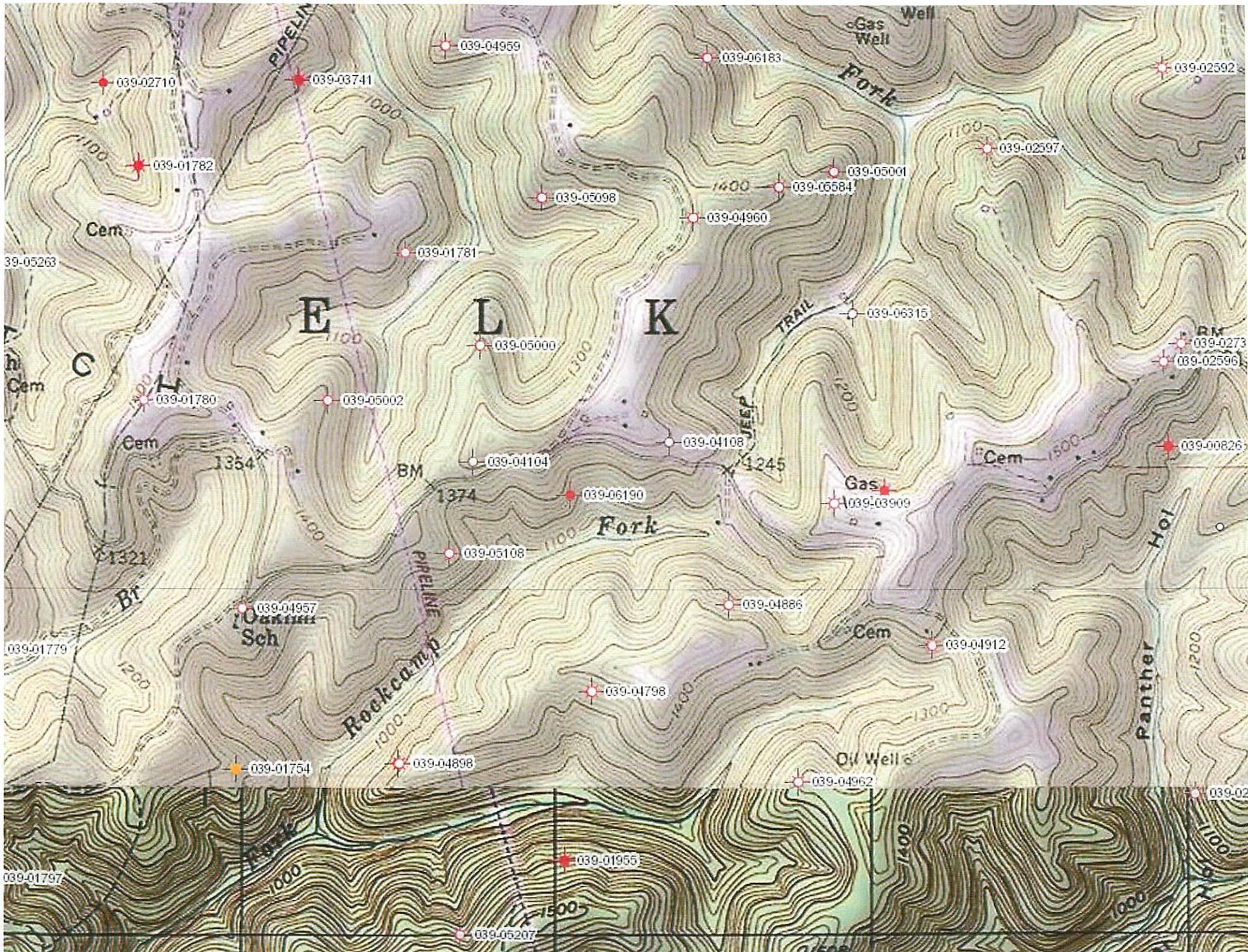
Attach:
Drawing(s) of road, location, pit and proposed area for land application.

Photocopied section of involved 7.5' topographic sheet.

Plan Approved by: *[Signature]*
Comments: _____

Title: *Field Insp Release* Date: *11-17-15*

Field Reviewed? () Yes () No



WW-7
8-30-06



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

API: 47-39-06190 WELL NO.: 2

FARM NAME: Cassie Toon

RESPONSIBLE PARTY NAME: Steve Rubin

COUNTY: Kanawha DISTRICT: E1K

QUADRANGLE: Chendenin

SURFACE OWNER: Cassie Toon

ROYALTY OWNER: Cassie Toon

UTM GPS NORTHING: 4248394.73

UTM GPS EASTING: 472053.41 GPS ELEVATION: 1272

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.

Steve Blackworth contractor
Signature Title

11-12-15
Date

Received

NOV 13 2015

Office of Oil and Gas
Department of Environmental Protection