



west virginia department of environmental protection

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

Austin Caperton, Cabinet Secretary
www.dep.wv.gov

Monday, August 3, 2020
WELL WORK PLUGGING PERMIT
Vertical Plugging

KEYROCK ENERGY LLC
PO BOX 2223
JOHNSON CITY, TN 37605

Re: Permit approval for COX 1
47-011-01002-00-00

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

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. Please be advised that form WR-38, Affidavit of Plugging and Filling Well, is to be submitted to this office within 90 days of completion of permitted well work, as should form WR-34 Discharge Monitoring Report within 30 days of discharge of pits, if applicable. Failure to abide by all statutory and regulatory provisions governing all duties and operations hereunder may result in suspension or revocation of this permit and, in addition, may result in civil and/or criminal penalties being imposed upon the operators.

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

James A. Martin
Chief

Operator's Well Number: COX 1
Farm Name: ROCKY & DIANA S. COX
U.S. WELL NUMBER: 47-011-01002-00-00
Vertical Plugging
Date Issued: 8/3/2020

I

PERMIT CONDITIONS

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

CONDITIONS

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

WW-4B
Rev. 2/01

1) Date 6/29 ~~5/22~~, 2020
2) Operator's
Well No. Cox No. 1
3) API Well No. 47-11 - 01002

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 X / Gas ___ / Liquid injection ___ / Waste disposal ___ /
(If "Gas, Production ___ or Underground storage ___) Deep ___ / Shallow ___

5) Location: Elevation 690 Watershed Lower Tom Creek
District McComas County Cabell Quadrangle Milton 7.5

6) Well Operator Keyrock Energy LLC 7) Designated Agent Linda Sadler
Address PO Box 2223 Address 209 Capitol St.
Johnson City, TN 37605 Charleston, WV 25301

8) Oil and Gas Inspector to be notified Name Jeffrey Smith 9) Plugging Contractor Name To be determined
Address 5349 Karen Circle, Apt # 2101 Address _____
Cross Lanes, WV 25313

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

1. Pull rods and pump from well.
2. Tag PBDT, expected to be at 2,560'.
3. Load hole with 6% gel (sufficient to prevent overflow by cement).
4. Set cement plug from TD to 2,275' to and pull tubing.
5. Wait 4 hours on cement and tag cement top.
6. Find free point in 4-1/2" casing and cut. Cement top expected at 1,230'. *
7. Set 100' plug over casing cut.
8. Lay down all 4-1/2" casing.
9. Set 150' plug at 750' to cover 7" shoe at 675'.
10. Pull tubing to 100' and set plug to surface.
11. Set monument and backfill.

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SALT WATER @ 2380' & 1330'
* MAKE SURE THE 1330' SW IS COVERED
BY CEMENT. IF CASING CUT IS 1230' - THE
100' CEMENT PLUG @ CUT WILL BE SUFFICIENT.

* GEL SPACERS BETWEEN PLUGS.

JMM

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

Work order approved by inspector _____ Date 7/29/2020

OK
JMM

WR-35
Rev. 8/23/13Page 1 of 4State of West Virginia
Department of Environmental Protection - Office of Oil and Gas
Well Operator's Report of Well Work

API 47-011-01002 County Cabell District Grant
 Quad Milton 7.5' Pad Name n/a Field/Pool Name n/a
 Farm name Cox Well Number 1
 Operator (as registered with the OOG) Keyrock Energy LLC
 Address P O Box 2223 City Johnson City State IN Zip 37605

As Drilled location NAD 83/UTM Attach an as-drilled plan, profile view, and deviation survey
 Top hole Northing 4,249,150.679 Easting 392,240.338
 Landing Point of Curve Northing n/a Easting n/a
 Bottom Hole Northing same as top hole Easting same as top hole

Elevation (ft) 690' GI. Type of Well New Existing Type of Report Interim Final
 Permit Type Deviated Horizontal Horizontal 6A Vertical Depth Type Deep Shallow
 Type of Operation Convert Deepen Drill Plug Back Redrilling Rework Stimulate
 Well Type Brine Disposal CBM Gas Oil Secondary Recovery Solution Mining Storage Other _____
 Type of Completion Single Multiple Fluids Produced Brine Gas NGL Oil Other _____
 Drilled with Cable Rotary

Drilling Media Surface hole Air Mud Fresh Water Intermediate hole Air Mud Fresh Water Brine
 Production hole Air Mud Fresh Water Brine

Mud Type(s) and Additive(s)

Produced water with KCL

Date permit issued 7/16/2018 Date drilling commenced 9/24/2018 Date drilling ceased 9/30/2018
 Date completion activities began 10/16/2018 Date completion activities ceased flowing back
 Verbal plugging (Y/N) _____ Date permission granted _____ Granted by _____

Please note: Operator is required to submit a plugging application within 5 days of verbal permission to plug

Freshwater depth(s) ft 250', 640' Open mine(s) (Y/N) depths n/a
 Salt water depth(s) ft 1,280', 1,330' Void(s) encountered (Y/N) depths None
 Coal depth(s) ft No coal encountered Cavern(s) encountered (Y/N) depths None
 Is coal being mined in area (Y/N) No

Reviewed

Reviewed by


 11/20/18

WR-35
Rev. 8/23/13

API 47-011 - 01002 Farm name Cox Well number 1

CASING STRINGS	Hole Size	Casing Size	Depth	New or Used	Grade w/fl	Rasket (depths)	Did cement circulate (Y/N) * Provide details below*
Conductor	12"	9&5/8"	32'	New			Sanded in
Surface	8&3/4"	7"	675'	New			Yes
Coal							
Intermediate 1							
Intermediate 2							
Intermediate 3							
Production	6&3/8"	4&1/2"	2,560'	New			Did not circulate
Tubing							
Packer type and depth set							

Comment Details _____

CEMENT DATA	Class/Type of Cement	Number of Sacks	Slurry wt (ppg)	Yield (ft ³ /sks)	Volume (ft ³)	Cement Top (MD)	WOC (hrs)
Conductor							
Surface	Class A	125 sks	156	1.20	126.2	0	8 hours
Coal							
Intermediate 1							
Intermediate 2							
Intermediate 3							
Production	Class A	170 sks	105	1.26	214.2	1,230'	n/a
Tubing							

Drillers TD (ft) 2,580' Loggers TD (ft) 2,575'
 Deepest formation penetrated Devonian Shale Plug back to (ft) _____
 Plug back procedure _____

Kick off depth (ft) _____

Check all wireline logs run caliper density deviated/directional induction
 neutron resistivity gamma ray temperature sonic

Well cored Yes No Conventional Sidewall Were cuttings collected Yes No

DESCRIBE THE CENTRALIZER PLACEMENT USED FOR EACH CASING STRING _____

WAS WELL COMPLETED AS SHOT HOLE Yes No DETAILS 20 shots evenly spaced from 2,336 - 2,350'

WAS WELL COMPLETED OPEN HOLE? Yes No DETAILS _____

WERE TRACERS USED Yes No TYPE OF TRACER(S) USED _____

WR-35
Rev. 8/23/13

API 47- 011 - 01002 Farm name Cox Well number 1

PRODUCING FORMATION(S)	DEPTHS
<u>Berea</u>	<u>TVD 2,336-2,350' MD</u>

Please insert additional pages as applicable.

GAS TEST Build up Drawdown Open Flow OIL TEST Flow Pump

SHUT-IN PRESSURE Surface _____ psi Bottom Hole _____ psi DURATION OF TEST _____ hrs

OPEN FLOW Gas _____ Oil _____ NGL _____ Water _____ GAS MEASURED BY
 mcfpd bpd bpd bpd Estimated Orifice Pilot

LITHOLOGY/ FORMATION	TOP DEPTH IN FT NAME: TVD	BOTTOM DEPTH IN FT TVD	TOP DEPTH IN FT MD	BOTTOM DEPTH IN FT MD	DESCRIBE ROCK TYPE AND RECORD QUANTITY AND TYPE OF FLUID (FRESHWATER, BRINE, OIL, H ₂ S, ETC)
Shale	0	230	0	230	Predominantly soft gray shale Minor red shale
Sand	230	260	230	260	White sand, water show at base
Sand and Shale	260	910	260	910	Thin bedded sand and shale
Shale	910	1120	910	1120	Gray Shale
Sand	1120	1426	1120	1426	Sand Salt Sand top at 1,325 Salt water at 2,380' & 1,330'
Shale	1426	1520	1426	1520	Gray Shale
Little Lime	1520	1550	1520	1550	Limestone
Shale	1550	1560	1550	1560	Gray Shale
Big Lime	1560	1700	1560	1700	Limestone
Shale	1700	1780	1700	1780	Dark Gray Shale
Injun Sand	1780	1880	1780	1880	Hard Sand
Shale	1880	2336	1880	2336	Dark Gray Shale Sunbury top at 2,321'
Berea	2336	2350	2336	2350	Sandstone Oil and Gas show
Shale	2350	TD	2350	TD	Black Shale

Please insert additional pages as applicable.

Drilling Contractor Cheyenne Drilling Inc.
 Address 60 Bosco Tipple Rd. City Huevsville State KY Zip 41640

Logging Company Keystone Wireline
 Address 344 High Street City Bradford State PA Zip 16701

Cementing Company C&J Energy Services
 Address 580 Hawthorn Dr. City Norton State VA Zip 24273

Stimulating Company Reliance Well Services
 Address 1250 Tower Lane City Eric State PA Zip 16505

Please insert additional pages as applicable.

Completed by Morgan Pate Telephone 423-276-1116
 Signature [Signature] Title Geologist Date 10/26/18

Submission of Hydraulic Fracturing Chemical Disclosure Information Attach copy of FRACFOCUS Registry

4701101002P

WW-4A
Revised 6-07

1) Date: 6/29/2020
~~5/22/2020~~
2) Operator's Well Number
Cox No. 1
3) API Well No.: 47 - 011 - 01002

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>Rocky & Diana S. Cox</u>	Name <u>n/a</u>
Address <u>2851 Little Fudges Creek Rd.</u> <u>Barboursville, WV 25504</u>	Address _____
(b) Name _____	(b) Coal Owner(s) with Declaration
Address _____	Name <u>n/a</u>
(c) Name _____	Address _____
Address _____	Name _____
Address _____	Address _____
6) Inspector <u>Jeffrey Smith</u>	(c) Coal Lessee with Declaration
Address <u>5349 Karen Circle, Apt # 2101</u>	Name <u>n/a</u>
<u>Cross Lanes, WV, 25313</u>	Address _____
Telephone <u>1-618-313-6743</u> <u>681</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.

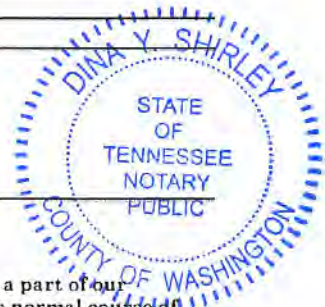
Take notice that under Chapter 22-6 of the West Virginia Code, the undersigned well operator proposes to file or has filed this Notice and Application and accompanying documents for a permit to plug and abandon a well with the Chief of the Office of Oil and Gas, West Virginia Department of Environmental Protection, with respect to the well at the location described on the attached Application and depicted on the attached Form WW-6. Copies of the Application, 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.

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Well Operator Keyrock Energy LLC
 By: Christopher Shea *Christopher Shea*
 Its: Operations Manager
 Address PO Box 2223, 207 E. Main St., Suite 2-D
Johnson City, TN 37605
 Telephone 423-720-0025

Subscribed and sworn before me this 29th day of June, 2020
Dina Y. Shirley Notary Public
 My Commission Expires 6-27-2023



Oil and Gas Privacy Notice

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

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7018 0680 0001 1679 8424

U.S. Postal Service™
CERTIFIED MAIL® RECEIPT
Domestic Mail Only

For delivery information, visit our website at www.usps.com®.

BARBOURSVILLE, WV 25504

Certified Mail Fee	\$3.55
Extra Services & Fees (check box, add fee as appropriate)	
<input type="checkbox"/> Return Receipt (hardcopy)	\$0.00
<input type="checkbox"/> Return Receipt (electronic)	\$0.00
<input type="checkbox"/> Certified Mail Restricted Delivery	\$0.00
<input type="checkbox"/> Adult Signature Required	\$0.00
<input type="checkbox"/> Adult Signature Restricted Delivery	\$0.00

Postage \$8.05

Total Postage and Fees \$11.60

OFFICIAL USE

JUN 30 2020 0791 61

Postmark Here

06/30/2020

Sent To

Mr. Rocky Cox
 Street and Apt. No., or PO Box No.
 2051 Little Fudges Creek Rd.
 City, State, ZIP+4®
 Barboursville, WV 25504

PS Form 3800, April 2015 PSN 7530-02-000-9047

See Reverse for Instructions

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 Environmental Protection

SURFACE OWNER WAIVER

Operator's Well
Number

Cox #1

INSTRUCTIONS TO SURFACE OWNERS NAMED ON PAGE WW4-A

The well operator named on page WW-4A is applying for a permit from the State to plug and abandon a well. (Note: If the surface tract is owned by more than three persons, then these materials were served on you because your name appeared on the Sheriff's tax ticket on the land or because you actually occupy the surface tract. In either case, you may be the only owner who will actually receive these materials.) See Chapter 22 of the West Virginia Code. Well work permits are valid for 24 months. If you do not own any interest in the surface tract, please forward these materials to the true owner immediately if you know who it is. Also, please notify the well operator and the Office of Oil and Gas.

**NOTE: YOU ARE NOT REQUIRED TO FILE ANY COMMENT.
WHERE TO FILE COMMENTS AND OBTAIN ADDITIONAL INFORMATION:**

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

Time Limits and methods for filing comments. The law requires these materials to be served on or before the date the operator files his Application. You have **FIVE (5) 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.

Comments must be in writing. Your comments must 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.

The Chief has the power to deny or condition a well work permit based on comments on the following grounds: RECEIVED
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- 1) The proposed well work will constitute a hazard to the safety of persons.
- 2) The soil erosion and sediment control plan is not adequate or effective;
- 3) Damage would occur to publicly owned lands or resources;
- 4) The proposed well work fails to protect fresh water sources or supplies;
- 5) The applicant has committed a substantial violation of a previous permit or a substantial violation of one or more of the rules promulgated under Chapter 22, and has failed to abate or seek review of the violation..."

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If you want a copy of the permit as it is issued or a copy of the order denying the permit, you should request a copy from the Chief.

VOLUNTARY STATEMENT OF NO OBJECTION

I hereby state that I have read the instructions to surface owners and that I have received copies of a Notice and Application For A Permit To Plug And Abandon on Forms WW-4A and WW-4B, and a survey plat.

I further state that I have no objection to the planned work described in these materials, and I have no objection to a permit being issued on those materials.

FOR EXECUTION BY A NATURAL PERSON
ETC.

FOR EXECUTION BY A CORPORATION,

	Date	Name	
Signature		By	
		Its	Date
		Signature	Date

4701101002P

WW-4B

API No. _____
Farm Name _____
Well No. _____

**INSTRUCTIONS TO COAL OPERATORS
OWNERS AND LESSEE**

The well operator named on the obverse side of WW-4 (B) is about to abandon the well described in the enclosed materials and will commence the work of plugging and abandoning said well on the date the inspector is notified. Which date shall not be less than five days after the day on which this notice and application so mailed is received, or in due course should be received by the Department of Environmental Protection Office of Oil & Gas.

This notice and application is given to you in order that your respective representatives may be present at the plugging and filling of said well. You are further notified that whether you are represented or not the operator will proceed to plug and fill said well in the manner required by Section 24, Article 6, Chapter 22 of the Code and given in detail on obverse side of this application.

NOTE: If you wish this well to be plugged according to 22-6-24(d) then as per Regulation 35CSR4-13.9 you must complete and return to this office on form OB-16 "Request by Coal Operator, Owner, or Lessee for plugging" prior to the issuance of this plugging permit.

WAIVER

The undersigned coal operator _____ / owner _____ / lessee _____ / of the coal under this well location has examined this proposed plugging work order. The undersigned has no objection to the work proposed to be done at this location, provided, the well operator has complied with all applicable requirements of the West Virginia Code and the governing regulations.

Date: _____

By: _____
Its _____

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4701101002P

WW-9
(5/16)

API Number 47 - 011 01002
Operator's Well No _____

STATE OF WEST VIRGINIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
OFFICE OF OIL AND GAS
FLUIDS/ CUTTINGS DISPOSAL & RECLAMATION PLAN

Operator Name Keyrock Energy LLC OP Code 494507629

Watershed (HUC 10) Lower Tom Creek Quadrangle Milton WV 7.5

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: 6% gel

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

ANY WELL EFFLUENT WILL BE CONTAINED IN TANKS AND DISPOSED OF OFFSITE, PROPERLY.
QMW m

Proposed Disposal Method For Treated Pit Wastes:

- Land Application (if selected provide a completed form WW-9-GPP)
- Underground Injection (UIC Permit Number _____)
- 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: No

Drilling medium anticipated for this well (vertical and horizontal)? Air, freshwater, oil based, etc. None

-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. None expected

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

-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.

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I certify that I understand and agree to the terms and conditions of the GENERAL WATER POLLUTION PERMIT issued on April 1, 2016, 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 Christopher Shea

Company Official (Typed Name) Christopher Shea

Company Official Title Operations Manager

Subscribed and sworn before me this 29th day of June, 2020

Dina Y. Shirley
Notary Public

My commission expires 6-27-2023



47-011-01002 P

Form WW-9

Operator's Well No. Cox No. 1

Proposed Revegetation Treatment: Acres Disturbed <1.5 acres Prevegetation pH 6.2

Lime 3 Tons/acre or to correct to pH 6.5

Fertilizer type 10-20-20 or equivalent

Fertilizer amount 1/3 ton lbs/acre

Mulch Hay 2 Tons/acre

Seed Mixtures.

Temporary		Permanent	
Seed Type	lbs/acre	Seed Type	lbs/acre
KY-31	40	Orchard Grass	15
Alsike Clover	5	Alsike Clover	5
Annual Rye	15		

*If land is used for farming, we will allow surface owner preference in seed mixture, and update WW-9 if required.

Attach:

Maps(s) of road, location, pit and proposed area for land application (unless engineered plans including this info have been provided). If water from the pit will be land applied, provide water volume, include dimensions (L, W, D) of the pit, and dimensions (L, W), and area in acres, of the land application area.

Photocopied section of involved 7.5' topographic sheet.

Plan Approved by: Alan P. ...

Comments: 24 H. notice to Inspector
prior to site construction.
mulch & seed per O&G, regulations.

Title: OG Inspector. Date: 5-24-2018.

Field Reviewed? Yes No

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JUN 06 2018

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N/A

47011010029

WW-9- GPP
Rev. 5/16

Page _____ of _____
API Number 47 - _____ - _____
Operator's Well No. _____

Not Applicable.

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

Operator Name: Keyrock Energy LLC
Watershed (HUC 10): _____ Quad: _____
Farm Name: Cox #1

1. List the procedures used for the treatment and discharge of fluids. Include a list of all operations that could contaminate the groundwater.

[Empty box for response to question 1]

2. Describe procedures and equipment used to protect groundwater quality from the list of potential contaminant sources above.

[Empty box for response to question 2]

3. List the closest water body, distance to closest water body, and distance from closest Well Head Protection Area to the discharge area.

Tributary to Guyandotte River, ~100', n/a.

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4. Summarize all activities at your facility that are already regulated for groundwater protection.

[Empty box for response to question 4]

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

N/A

4701101002P

WW-9- GPP
Rev. 5/16

Page _____ of _____
API Number 47 - 011 - 01002
Operator's Well No. _____

Not Applicable

n/a

6. Provide a statement that no waste material will be used for deicing or fill material on the property.

No waste material will be used for deicing or fill material on the property.

7. Describe the groundwater protection instruction and training to be provided to the employees. Job procedures shall provide direction on how to prevent groundwater contamination.

All employees will be familiar with the contents of the groundwater protection plan and how to implement it. Work practices will support the protection of groundwater from contamination per company HSE Policy.

8. Provide provisions and frequency for inspections of all GPP elements and equipment.

All GPP elements and equipment present will be inspected daily prior to use and in the event of a problem. Work will not commence until any problems are remediated and documented.

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Signature: _____

Date: _____



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WW-7
8-30-06



West Virginia Department of Environmental Protection
Office of Oil and Gas

WELL LOCATION FORM: GPS

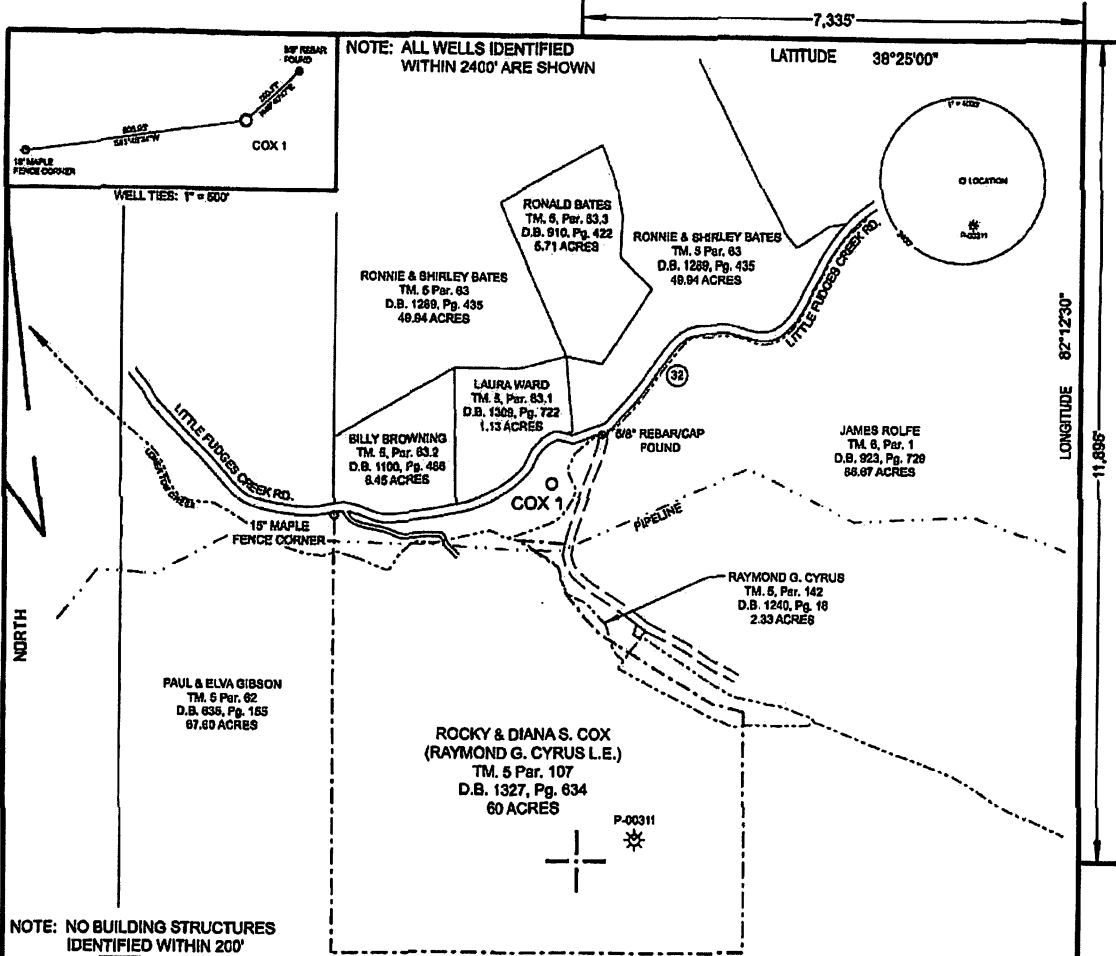
API: 47-011-01002 WELL NO.: Cox #1
FARM NAME: Cox
RESPONSIBLE PARTY NAME: Keyrock Energy LLC
COUNTY: Cabell DISTRICT: McComas
QUADRANGLE: Milton 7.5
SURFACE OWNER: Rocky Cox
ROYALTY OWNER: Rocky Cox
UTM GPS NORTHING: 4,249,150.679
UTM GPS EASTING: 392,240.338 GPS ELEVATION: 690

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:

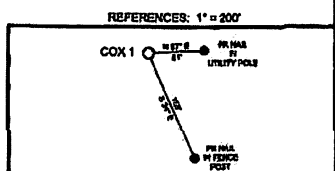
1. Datum: NAD 1983, Zone: 17 North, Coordinate Units: meters, Altitude: height above mean sea level (MSL) – meters.
2. Accuracy to Datum – 3.05 meters
3. Data Collection Method:
Survey grade GPS : Post Processed Differential _____
Real-Time Differential _____
Mapping Grade GPS _____: Post Processed Differential _____
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.

[Signature] OPERATIONS MGR June 29, 20
Signature Title Date



WELL SITE	
STATE PLANE WV	SOUTH ZONE NAD 1927
N - 508,304.09	E - 1,848,310.58
LATITUDE: (N) 38.3840738°	LONGITUDE: (W) 82.2338089°
UTM NAD83	
17 - 84W TO 78W, METERS	
N - 4,249,150.679	E - 382,240.338



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

FILE NO. COX 1. DGN

DRAWING NO. COX 1

SCALE 1" = 500'

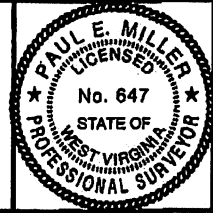
MINIMUM DEGREE OF ACCURACY 1:200

PROVEN SOURCE OF ELEVATION MAPPING GRADE 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 THE REGULATIONS ISSUED AND PRESCRIBED BY THE DEPARTMENT OF ENVIRONMENTAL PROTECTION.

(SIGNED) Paul E. Miller

R.P.E. _____ L.L.S. 647



RECEIVED
Office of Oil and Gas
JUL 07 2020
WV Department of Environmental Protection

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

DATE MAY 9, 2018

OPERATOR'S WELL NO. COX 1

API WELL NO. 47 - 011 - 01002

STATE WEST VIRGINIA COUNTY CABELL PERMIT

WELL TYPE: OIL GAS LIQUID INJECTION WASTE DISPOSAL
(IF "GAS,") PRODUCTION STORAGE DEEP SHALLOW

LOCATION: ELEVATION 880' WATER SHED LOWER TOM CREEK

DISTRICT MCCOMAS COUNTY CABELL

QUADRANGLE MILTON, WV 7.5'

SURFACE OWNER ROCKY & DIANA S. COX (RAYMOND G. CYRUS L.E.) ACREAGE 60

OIL & GAS ROYALTY OWNER ROCKY & DIANA S. COX LEASE ACREAGE 80

LEASE NO. _____

PROPOSED WORK: DRILL CONVERT DRILL DEEPER REDRILL FRACTURE OR STIMULATE PLUG OFF OLD FORMATION PERFORATE NEW FORMATION OTHER PHYSICAL CHANGE IN WELL (SPECIFY) _____

PLUG AND ABANDON CLEAN OUT AND REPLUG

TARGET FORMATION LOWER HURON ESTIMATED DEPTH 3800'

WELL OPERATOR KEY ROCK ENERGY, LLC. DESIGNATED AGENT LINDA SADLER

ADDRESS P.O. BOX 2223 JOHNSON CITY, TN 37805 ADDRESS 209 CAPITOL ST., CHARLESTON, WV 25301

FORM WW-6

COUNTY NAME
PERMIT