



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

July 09, 2014

WELL WORK PLUGGING PERMIT

Plugging

This permit, API Well Number: 47-501721, issued to EQT PRODUCTION 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: 20
Farm Name: FEDERAL COAL CO.
API Well Number: 47-501721
Permit Type: Plugging
Date Issued: 07/09/2014

Promoting a healthy environment.

07/11/2014

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 within two years of the date of issuance of this permit.

501721P

Form WW-4 (B)
Permit Copy
(Rev 2/01)

Date: 5-13-14
Operator's Well
Well No. 506038 (Federal Coal W10979)
API Well No.: 47 005 - 01721

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


APPLICATION FOR A PERMIT TO PLUG AND ABANDON

- 4) Well Type: Oil _____ Gas X Liquid Injection _____ Waste Disposal: _____
 If Gas, Production _____ X _____ Or Underground storage _____ Deep _____ Shallow X
- 5) Elevation: 1309' Watershed: Whites Branch
 Location: Crook County: Boone Quadrangle: Williams Mountain 7.5'
 District: _____
- 6) Well Operator EQT Production Company
120 Professional Place
 Address: Bridgeport, WV 26330
- 7) Designated Agent: Rex C. Ray
 Address: 120 Professional Place
Bridgeport, WV 26330
- 8) Oil & Gas Ross Eller
 Name: 121 Brierhill Drie
 Address: Beckely, WV 25801
- 9) Plugging Contractor:
 Name: HydroCarbon Well Service
 Address: PO BOX 995
Buckhannon, WV 26201

10) Work Order. The work order for the manner of plugging this well is as follows:
See Attachment for details and procedures.

OFFICE USE ONLY

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

Work order approved by inspector 

Date 5/22/14

RECEIVED
Office of Oil and Gas

JUL 9 2014

WV Department of
Environmental Protection 07/11/2014



PLUGGING PROGNOSIS

Federal Coal Co. #20 (506038)

Boone County, W.V.
API # 47-005-01721

BY: Craig Duckworth
DATE: 2/19/14

CURRENT STATUS:

- 9 5/8" @ 582' (cts)
- 7" @ 1912' (cts)
- 4 1/2" @ 5128' (496 cu.ft.)
- 2 3/8" @ 4795'

TD 5286'

Fresh Water @ 105'

Gas Shows @ None Reported

ELEV. 1315

Oil Shows @ None Reported

Salt Sand top @ 760'

Coal @ 125'-128' ; 175'-180' ; 224'-227' ; 447'-450'

Stimulation @ Lower Devonian (4213'-5013') ; Upper Devonian, Gordon, Berea (3132'-3821') ; Weir, Injun, Lime (2595'-2968') ; Lower Maxon (2054'-2075')

1. Notify inspector, Ross Eller, 304-932-6844, 24 hrs. prior to commencing operations.
2. TOOH w/tbg check condition & talley. *GEL HOLE TO 4213'*
3. TIH w/ tubing to 4213'; Set 100' C1A Cement Plug @ 4213' to 4113' (Perfs @ 4213'-5013').
4. TOOH w/ tubing @ 4113', Gel Hole @ 4113' to 3132'.
5. TOOH w/ tubing @ 3132'; Set 100' C1A Cement Plug @ 3132' to 3032' (Perfs @ 3132'-3821').
6. TOOH w/ tubing @ 3032', Gel Hole @ 3032' to 2595'.
7. TOOH w/ tubing @ 2595'; Set 100' C1A Cement Plug @ 2595' to 2495' (Perfs @ 2595'-2968').
8. TOOH w/ tubing @ 2495', Gel Hole @ 2495' to 2054'.
9. TOOH w/ tubing, Free Point 4 1/2" csg, cut 4 1/2" csg @ Free Point, TOOH w/ 4 1/2" csg
10. TIH w/ tubing @ 2054'; Set 192' C1A Cement Plug @ 2054' to 1862' (Perfs @ 2054'-2075' & 4 1/2" cut & 7" @ 1912').
11. Set a 100' C1A Cement Plug 50' In/Out of cut. Perf all Salt Sand top, FW, Gas, Oil and Coal shows below the 4.5" cut. Do not omit any plugs shown below. *1315'*
12. TOOH w/ tubing @ 1862', Gel Hole @ 1862' to ~~760'~~ *1315'* SET 100' C1A CEMENT PLUG FROM 1315' - 1215' *GEL 1215' TO 760'*
13. TOOH w/ tubing @ 760'; Set 228' C1A Cement Plug @ 760' to 532' (Salt Sand @ 760' & 9 5/8" @ 582').
14. TOOH w/ tubing @ 532', Gel Hole @ 532' to 447'.
15. TOOH w/ tubing @ 447'; Set 100' C1A Cement Plug @ 447' to 347' (Coal Show @ 447'-450').
16. TOOH w/ tubing @ 347'; Gel Hole @ 347' to 227'.
17. TOOH w/ tubing @ 227'; Set 227' C1A cement plug @ 227' to Surface' (Coal Shows @ 224', 227' & 175', 180' & 125'-128' & FW @ 105'.)
18. Top off as needed
19. Set monument to WV DEP specs
20. Reclaim Location to WV DEP Specifications.

Received

MAY 14 2014

Office of Oil and Gas
WV Dept. of Environmental Protection

07/11/2014

Received

MAY 14 2014

Office of Oil and Gas
WV Dept. of Environmental Protection

506038

WR-35

API # 47- 005-01721

[Signature]

State of West Virginia
Division of Environmental Protection
Section of Oil and Gas

Well Operator's Report of Well Work

Farm Name: Federal Coal Co.

Operator Well No.: 20
(WV-508038-Federal Coal)

LOCATION: Elevation: 1315'
District: Crook

Quadrangle: Williams Mountain
County: Boone

Latitude: 12,150 Feet South of 38 Deg. Minutes 2 Seconds 30
Longitude: 5,190 Feet West of 81 Deg. Minutes 40 Seconds 0

[Stamp: MAY 18 2014]

Company: Equitable Production Company
P.O. Box 2347, 1710 Pennsylvania Avenue
Charleston, WV 25328

Agent: Stephen G. Perdue

Inspector: Richard Campbell
Permit issued: 7/17/00

Well work commenced: 11/06/01
Well work completed: 12/13/01

Verbal Plugging

Permission granted on: _____

Rotary Rig Cable Rig _____

Total Depth 5286 feet

Fresh water depths (ft) 105'

Salt water depths (ft) 760', 2120'

Casing & Tubing Size	Used In Drilling	Left In Well	Cement Fill Up Cu. Ft.
13 3/8"	36'	36'	grouted
9 5/8"	582'	582'	236.3 ft ³
7"	1912'	1912'	448.65 ft ³
4 1/2"	5128'	5128'	498 ft ³
2 3/8"		4785'	

Is coal being mined in area?

Coal Depths (ft): 125'-128'; 175'-180'; 224'-227'; 447'-450'

OPEN FLOW DATA

Producing formation: Lower Devonian, Upper Devonian / Gordon / Berea, Weir / Injun /

Pay Zone Depth (ft): _____

See Attach for details

Lime, Lower Maxdon

Gas: Initial open flow 59 MCF/d

Oil: Initial open flow _____ Bbl/d

Final open flow: 189 MCF/d

Final open flow: _____

Time of open flow between initial and final tests _____ Hours

Static rock pressure 335 psig (surface pressure) after _____ 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: _____

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.

[Signature] 07/11/2014

**EQUITABLE PRODUCTION COMPANY
WR-35 COMPLETION REPORT - Attachment
Well Treatment Summary**

Well: WV-506038-Federal Coal

API# 47-005-01721

Date	12/05/01	12/05/01	12/05/01	12/05/01		
Type Frac Acid, N ₂ , Foam, Water	N ₂	N ₂	Acid w/ N ₂	650 Foam		
Zone Treated	Lower Devonian	Upper Devonian Gordon Berea	Weir Injun Lime	Lower Maxton		
# Perfs From - To:	40 4213'-5013'	20 3132'-3821'	36 2595'-2968'	20 2054' - 2075'		
BD Pressure @ psl	3080	3260	620	2800		
ATP psl	3541	3354	1684 / 3953			
Avg. Rate, B=B/M, S= SCFM	54,400 S	54,300 S	2000 S 39.6 B (foam)			
Max. Treat Press psl	4160	3940	2280 / 4200			
ISIP psl	3080	2930	310	3208		
Frac Gradient	.77	.94	.54	1.65		
10 min S-I Pressure	1690	1430	1290	1750 (2 min)		
Material Volume: Sand-sks Water-bbl						
SCF N ₂	852,750	754,700	348,260			
Acid-gal	600 gal 7 1/2%	650 gal 8.1%	3500 gal 14.6%	500 gal 15.6		
NOTES:				Couldn't est. rate did not treat this zone		

TOP BOTTOM FORMATION

		Coal
1957'	2246'	Lower Maxton
2323'	2386'	Little Lime
2408'	2679'	Big Lime
2878'	2985'	Weir
3114'	3131'	Sunbury
3131'	3134'	Berea
3370'	3386'	Gordon
4422'	4856'	Lower Huron
4858'	5016'	Java
5016'	5188'	Angola
5188'		Rhinstreet
	5286'	TD

REMARKS

125'-128'; 175'-180'; 224'-227'; 447'-450'
Water @ 105', 760', 2120'
GT @ 2405' = NS
GT @ 2711' = NS
GT @ 2899' = NS
GT @ 3055', 3339' = 59 mcf/d
GT @ 3743' = 59 mcf/d
GT @ 4152' = 59 mcf/d
GT @ 4403' = 59 mcf/d
GT @ 4751' = 59 mcf/d
GT @ 4909' = 59 mcf/d
GT @ 5195' = 59 mcf/d

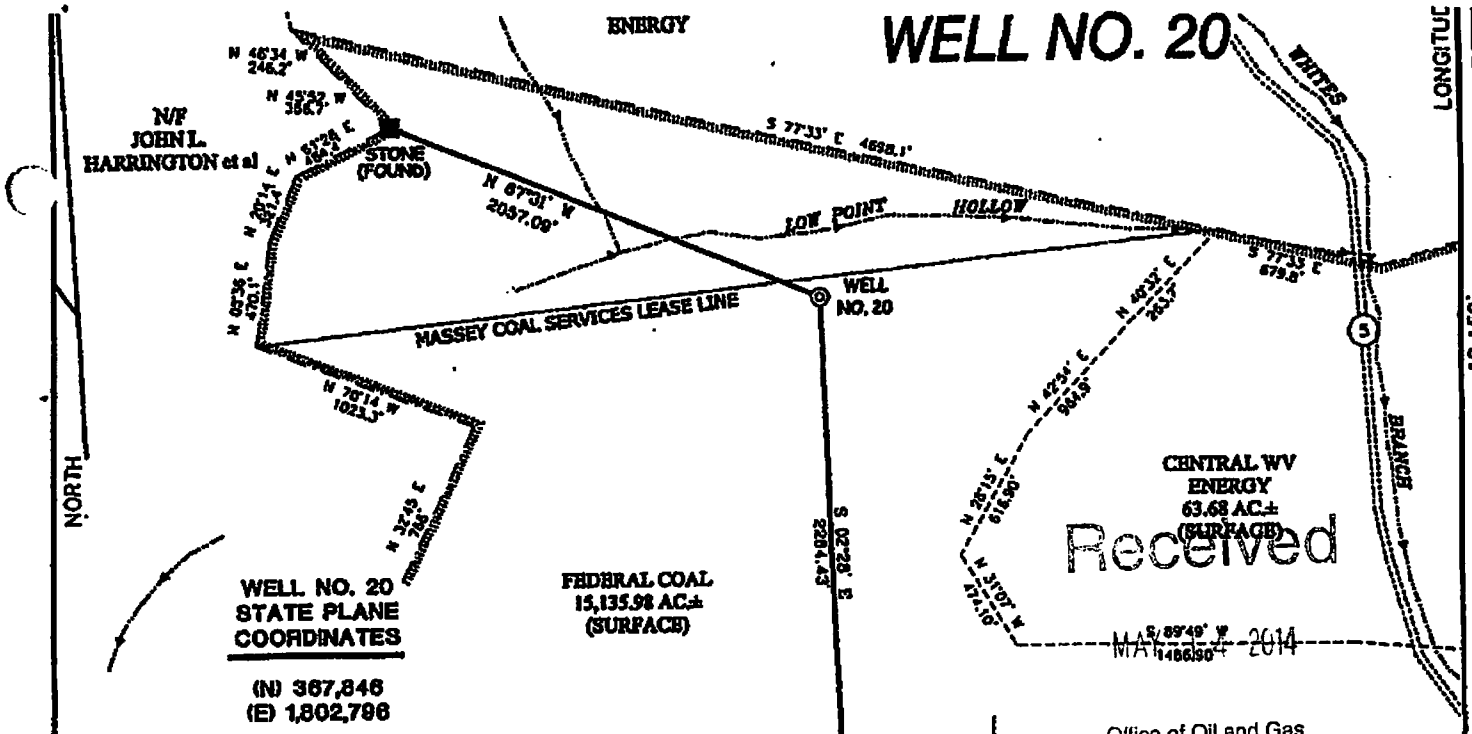
Received

MAY 14 2014

Office of Oil and Gas
WV Dept. of Environmental Protection

07/11/2014

WELL NO. 20



**WELL NO. 20
STATE PLANE
COORDINATES**

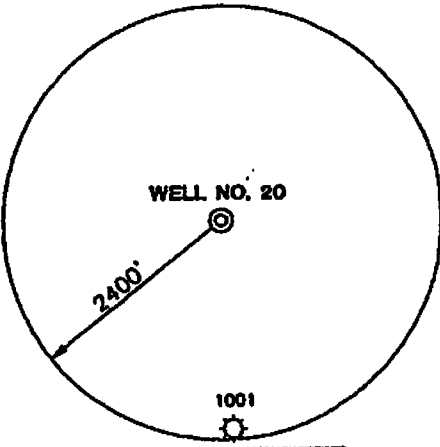
(N) 367,846
(E) 1,802,786

**FEDERAL COAL
15,135.98 AC±
(SURFACE)**

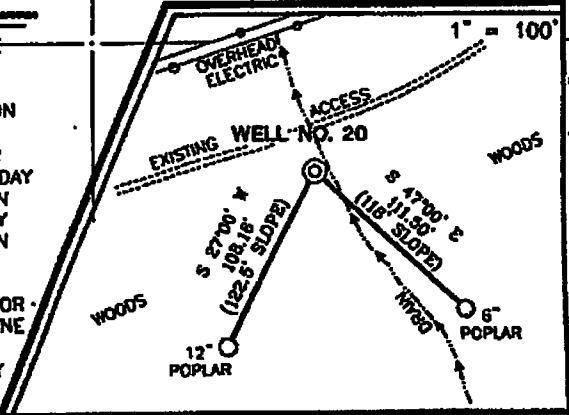
47-005-1001

NOTES ON SURVEY

1. TIES TO WELLS AND CORNERS ARE BASED ON STATE PLANE GRID NORTH WV SOUTH ZONE NAD '27.
2. TIES TO REFERENCES ARE BASED ON MAGNETIC NORTH 1/19/00.
3. LEASE BOUNDARY SHOWN HEREON TAKEN FROM A DEED DATED THE 24TH DAY OF AUGUST, 1910 BETWEEN ALDERSON LAND AND DEV. CO. AND COAL VALLEY LAND CO. AND FROM THE HARRINGTON 6635.75 AC. TRACT.
4. SURFACE OWNER AND ADJOINER INFORMATION TAKEN FROM THE ASSESSOR AND COUNTY CLERK RECORDS OF BOONE COUNTY IN OCTOBER, 1999.
5. WELL LAT./LONG. ESTABLISHED BY DGPS(SUBMETER MAPPING GRADE).

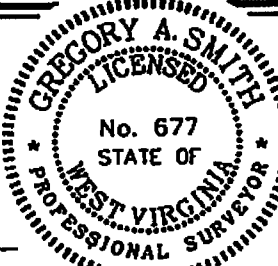


REFERENCES



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 ENERGY.

P.S. 677 *Gregory A. Smith*



(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS.
DATE FEBRUARY 1, 2000
OPERATORS WELL NO. FEDERAL COAL #20
API WELL NO. 47-005-1721
STATE COUNTY PERMIT

MINIMUM DEGREE OF ACCURACY 1 / 2500 FILE NO. 3481P20 (84-30)
PROVEN SOURCE OF ELEVATION JUNCTION OF ROADS ELEVATION 1100' SCALE 1" = 800'

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

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

LOCATION :
ELEVATION 1315' WATERSHED LOW POINT BRANCH OF WHITES BRANCH
DISTRICT CROOK COUNTY BOONE QUADRANGLE WILLIAMS MOUNTAIN 7.5'

SURFACE OWNER FEDERAL COAL COMPANY ACREAGE 15,135.98
ROYALTY OWNER FEDERAL COAL COMPANY LEASE ACREAGE 18,138
PROPOSED WORK : LEASE NO. 300528
DRILL CONVERT DRILL DEEPER REDRILL FRACTURE OR STIMULATE PLUG OFF OLD FORMATION PERFORATE NEW FORMATION PLUG AND ABANDON CLEAN OUT AND REPLUG OTHER

07/11/2014

COUNTY NAME

WW-4-A
Revised 6/07

1) Date: 5-13-14
2) Operator's Well Number
506038 (Federal Coal W10979)
3) API Well No.: 47 005 - 01721
State County Permit

STATE OF WEST VIRGINIA - BUREAU OF ENVIRONMENT
DIVISION OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL & GAS
NOTICE AND APPLICATION TO PLUG AND ABANDON WELL

4) Surface Owner(s) to be served:
(a) Name Federal Coal Co. Inc.
Address 601 Sixth Avenue.
Suite 200
St. Albans, WV 25177
(b) Name _____
Address _____
(c) Name _____
Address _____
6) Inspector Ross Eller
Address 121 Brierhill Drie
Beckely, WV 25801
Telephone 304-932-6844

5) (a) Coal Operator:
Name None
Address _____
(b) Coal Owner(s) with Declaration
Name Federal Coal Co. Inc.
Address 601 Sixth Avenue.
Suite 200
St. Albans, WV 25177
(c) Coal Lessee with Declaration
Name Pine Ridge Coal Company, LLC.
Address 500 Lee St. E.
Suite 202
Charleston, WV 25301

Received
MAY 14 2014
Office of Oil and Gas
WV Dept. of Environmental Protection

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 Division 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: EQT Production Company
By: Victoria J. Roark
Permitting Supervisor
PO Box 280
Bridgeport, WV 26330
(304) 848-0076
Subscribed and sworn to before me this 12 day of MAY, 2014
My Commission Expires: 6/27/2018 Notary Public



The Office of Oil & Gas processes your personal information, such as name, address and phone 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.

501721P

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OFFICIAL USE

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

Postmark Here

Federal Coal Company Inc.
 601 Sixth Avenue
 Suite 200
 St. Albans, WV 25177
 Plugging 506038

Sent 1
 Street or PO
 City, S

PS Form 3800, August 2006 See Reverse for Instructions

Federal Coal Company Inc.
601 Sixth Avenue
Suite 200
St. Albans, WV 25177
Plugging 506038

Received

MAY 14 2014

Office of Oil and Gas
WV Dept. of Environmental Protection

EQT
C/O Vicki Roark
P.O. Box 280
Bridgeport, WV 26330

SENDER: COMPLETE THIS SECTION

1. Article Addressed to:
 ■ Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.
 ■ Print your name and address on the reverse so that we can return the card to you.
 ■ Attach this card to the back of the mailpiece, or on the front if space permits.

Federal Coal Company Inc.
 601 Sixth Avenue
 Suite 200
 St. Albans, WV 25177
 Plugging 506038

2. Article Number (Transfer from service label)
 PS Form 3811, July 2013
 7014 0510 0000 4439 4299 Domestic Return Receipt

COMPLETE THIS SECTION ON DELIVERY

A. Signature Agent Address
 B. Received by (Printed Name) C. Date of Delivery
 D. Is delivery address different from item 1? Yes No
 If YES, enter delivery address below:

3. Service Type
 Certified Mail® Priority Mail Express™
 Registered Return Receipt for Merchandise
 Insured Mail Collect on Delivery

4. Restricted Delivery? (Extra Fee) Yes No

07/11/2014

5017 21P

FIRST-CLASS MAIL
\$07.40
ZIP 26330
041L10228692

neopost
05/13/2014
US POSTAGE

U.S. Postal Service™
CERTIFIED MAIL™ RECEIPT
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For delivery information visit our website at www.usps.com

OFFICIAL USE

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

Postmark Here

Pine Ridge Coal Company LLC
 500 Lee St. E.
 Suite 202
 Charleston, WV 25301
 Plugging 506038

PS Form 3800, August 2005 See Reverse for Instructions

Pine Ridge Coal Company LLC
500 Lee St. E.
Suite 202
Charleston, WV 25301
Plugging 506038

Received
MAY 14 2014
Office of Oil and Gas
WV Dept. of Environmental Protection

EQT
C/O Vicki Reark
P.O. Box 280
Bridgeport, WV 26330

COMPLETE THIS SECTION ON DELIVERY

A. Signature Agent
 B. Received by (Printed Name) _____
 C. Date of Delivery _____
 D. Is delivery address different from item 1? Yes No
 If YES, enter delivery address below:

3. Service Type
 Certified Mail
 Registered Mail
 Return Receipt for Merchandise
 Priority Mail Express™
 Insured Mail
 Collect on Delivery

4. Restricted Delivery? (Extra Fee)
 Yes No

2. Article Number
 7014 0510 0000 4439 4282
 (Transfer from service label)
 PS Form 3811, July 2013 Domestic Return Receipt

SENDER: COMPLETE THIS SECTION

Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.
 Print your name and address on the reverse so that we can return the card to you.
 Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:
Pine Ridge Coal Company LLC
 500 Lee St. E.
 Suite 202
 Charleston, WV 25301
 Plugging 506038

07/11/2014

501721 P

neopost®
05/13/2014
FIRST CLASS MAIL
US POSTAGE
\$02.24⁰
ZIP 26330
041L10228892



Ross Eller
121 Brierhill Dr
Beckley, WV 25801

Received

MAY 14 2014

Office of Oil and Gas
WV Dept. of Environmental Protection

EQT
C/O Vicki Roark
P.O. Box 280
Bridgeport, WV 26330

07/11/2014

**STATE OF WEST VIRGINIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL & GAS
CONSTRUCTION AND RECLAMATION PLAN AND SITE REGISTRATION APPLICATION FORM
GENERAL PERMIT FOR OIL AND GAS PIT WASTE DISCHARGE**

Operator Name: EQT PRODUCTION COMPANY OP ID: _____

Watershed: Whites Branch Quadrangle: Williams Mountain 7.5'

Elevation: 1309' County: Boone District: Crook

Description of anticipated Pit Waste: Formation Fluids

Do you anticipate using more than 5,000 bbls of water to complete the proposed well work? Yes ___ No X
Will synthetic liner be used in the pit? Yes Is so, what ml.? -10 ml 20 ml

Proposed Disposal Method for Treated Pit Wastes:

- Land Application
- _____ Underground Injection - UIC Permit Number _____
- _____ Reuse (at API Number) _____
- _____ Offsite Disposal Permit #. _____
- _____ Other: Explain _____

Drilling medium anticipated for this well? Air, freshwater, oil based, etc.
If oil based, what type? Synthetic, petroleum, etc.

Received

Additives to be used? _____ MAY 14 2014

Will closed loop system be used? _____

Drill Cuttings disposal method? Leave in pit, landfill, remove offsite, etc. _____
If left in pit and plan to solidify what medium will be used? Cement, Lime, sawdust _____
Landfill or offsite name/permit number? _____

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 Division of Environmental Protection. I understand that the provisions of the permit are enforceable by law. Violations of any terms 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.

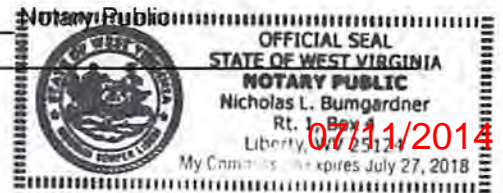
Company Official Signature *Victoria Roark*

Company Official (Typed or Printed) Victoria Roark

Company Official Title Permitting Supervisor-WV

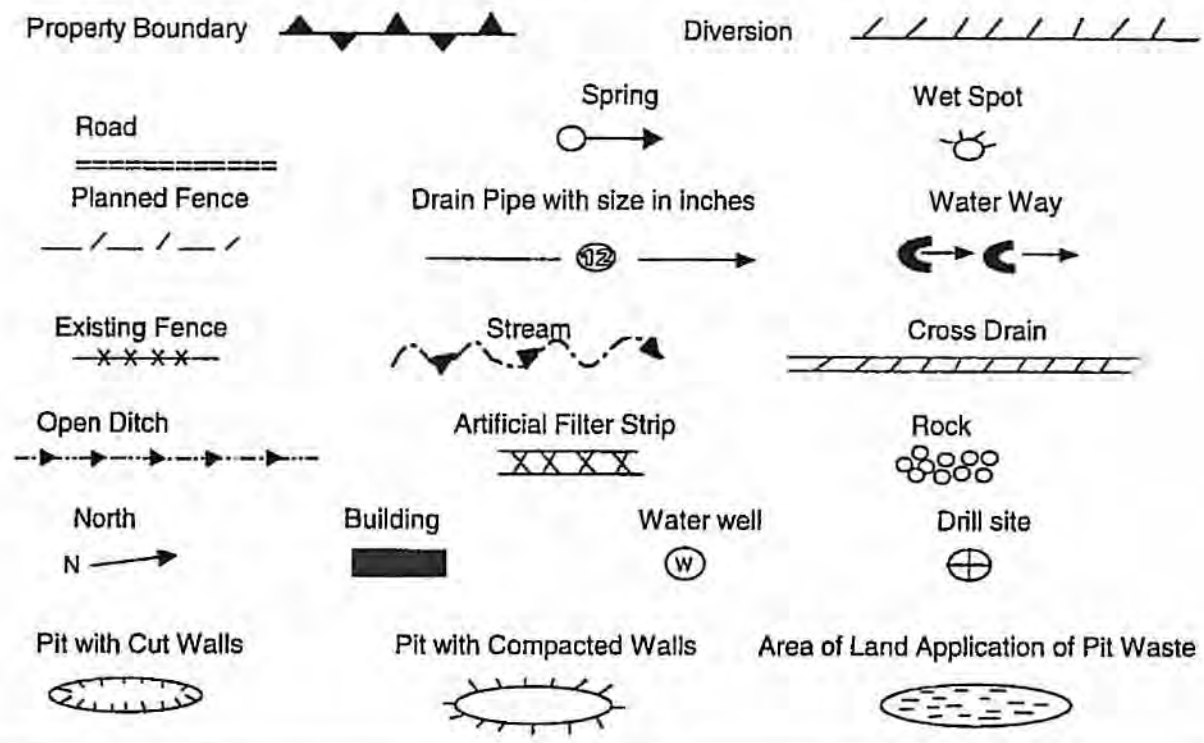
Subscribed and sworn before me this 12 day of MAY, 2014

My Commission Expires 6/27/2018



OPERATOR'S WELL NO.:
506038 (Federal Coal W10979)

LEGEND



Proposed Revegetation Treatment: Acres Disturbed: 1± Prevegetation pH 5.8
 Lime 3 Tons/acre or to correct to pH 6.5
 Fertilizer (10-20-20) or equivalent 1/3 ton lbs/acre (500 lbs minimum)
 Mulch 2 Tons/acre or hydroseed.

SEED MIXTURES

Area I		Area II	
Seed Type	lbs/acre	Seed Type	lbs/acre
KY-31	40	Orchard Grass	15
Alsike Clover	5	Alsike Clover	5
Annual Rye	15		

RECEIVED
 Office of Oil and Gas

ATTACH:
 Drawing(s) of road, location, pit and proposed area for land application.
 Photocopies section of involved 7.5' topographic sheet.

JUL 9 2014

Plan approved by: [Signature]
 Comments: _____

WV Department of
 Environmental Protection

Title: WV DEP O&G Form Date: 5/22/14
 Field Reviewed? Yes No

Topo Quad: Williams Mountain 7.5'

Scale: 1" = 2000'

County: Boone

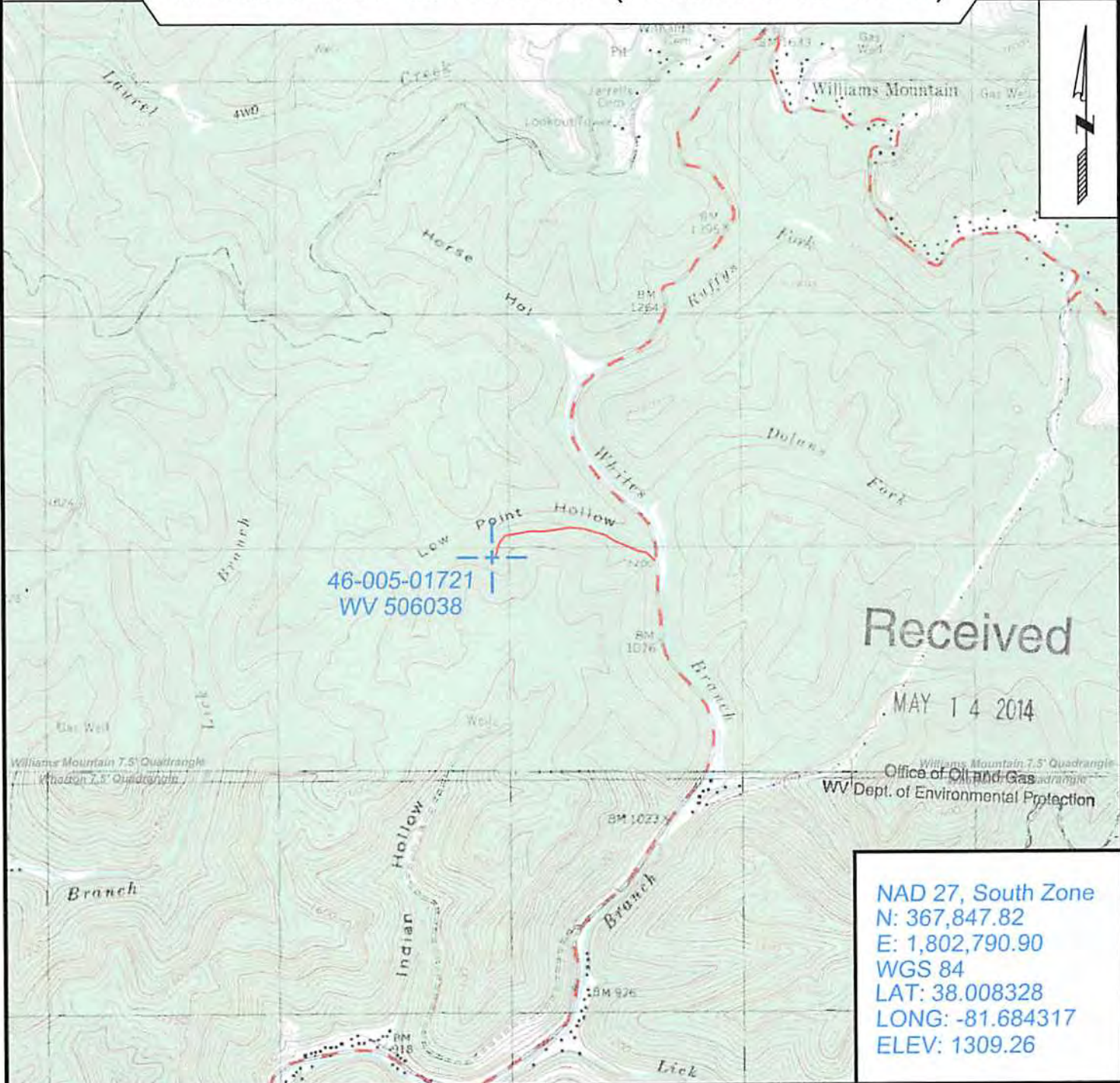
Date: May 6, 2014

District: Crook

Project No: 140-16-00-07

47-005-01721 WV 506038 (Federal Coal 10979)

Topo



NAD 27, South Zone
 N: 367,847.82
 E: 1,802,790.90
 WGS 84
 LAT: 38.008328
 LONG: -81.684317
 ELEV: 1309.26



SURVEYING AND MAPPING SERVICES PERFORMED BY:
ALLEGHENY SURVEYS, INC.
 1-800-482-8606
 237 Birch River Road
 Birch River, WV 26610
 PH: (304) 649-8606
 FAX: (304) 649-8608

PREPARED FOR:
EQT Production Company
 P.O. Box 280
 Bridgeport, WV 26330

07/11/2014

WW-7
8-30-06



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

API: 47-005-01721 WELL NO.: WV 506038 (Federal Coal W10979)

FARM NAME: Federal Coal Company

RESPONSIBLE PARTY NAME: EQT Production Company

COUNTY: Boone DISTRICT: Crook 1

QUADRANGLE: Williams Mountain 7.5' 683

SURFACE OWNER: Federal Coal Company

ROYALTY OWNER: Federal Coal Company, et al.

UTM GPS NORTHING: 4206960

UTM GPS EASTING: 439925 GPS ELEVATION: 399 m (1309 ft)

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:

- Datum: NAD 1983, Zone: 17 North, Coordinate Units: meters, Altitude: height above mean sea level (MSL) – meters.
- Accuracy to Datum – 3.05 meters
- Data Collection Method:
Survey grade GPS : Post Processed Differential
Real-Time Differential
Mapping Grade GPS : Post Processed Differential
Real-Time Differential
- Letter size copy of the topography map showing the well location.**

Received

MAY 14 2014

Office of Oil and Gas
WV Dept. of Environmental Protection

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.

Stephan
Signature

PS # 2180
Title

5/7/14
Date

Topo Quad: Williams Mountain 7.5'

Scale: 1" = 2000'

County: Boone

Date: May 6, 2014

District: Crook

Project No: 140-16-00-07

Water

47-005-01721 WV 506038 (Federal Coal 10979)

0 potential water wells within 1000'

46-005-01721
WV 506038



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07/11/2014



POTENTIAL WATER SAMPLE DATA SHEET

CLIENT: EQT PRODUCTION COMPANY
 LEASE NAME AND WELL No. Federal Coal 10979 - WV 506038 - API No. 47-005-01721

POTENTIAL SAMPLE LOCATIONS

There appears to be no known water samples within the required 1000' of the existing well WV 506038.

Received

MAY 14 2014

Office of Oil and Gas
 WV Dept. of Environmental Protection

BIRCH RIVER OFFICE
 237 Birch River Road
 Birch River, WV 26610
phone: 304-649-8606
fax: 304-649-8608

BRIDGEPORT OFFICE
 172 Thompson Drive
 Bridgeport, WV 26330
phone: 304-848-5035
fax: 304-848-5037

CALDWELL OFFICE
 212 Cumberland Street
 Caldwell, OH 43724
phone: 740-305-5007
fax: 740-305-5126

ALUM CREEK OFFICE
 P.O. Box 108 • 1413 Childress Road
 Alum Creek, WV 25003
phone: 304-756-2949
fax: 304-756-2948