



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, 2014

WELL WORK PLUGGING PERMIT

Plugging

This permit, API Well Number: 47-2103608, issued to PDC MOUNTAINEER LLC, 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: 1
Farm Name: FLINT, J. A.
API Well Number: 47-2103608
Permit Type: Plugging
Date Issued: 08/07/2014

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.

1) Date June 9, 2014
2) Operator's
Well No. J.A. Flint #1
3) API Well No. 47-021 - 03008

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 XX / Liquid injection ___ / Waste disposal ___ /
(If "Gas, Production XX or Underground storage ___) Deep ___ / Shallow XX
- 5) Location: Elevation 264m (867ft) Watershed Happy Hollow of Leading Creek
District Troy County Gilmer Quadrangle Vadis 7.5'
- 6) Well Operator PDC Mountaineer, LLC 7) Designated Agent Steven P. Johnson
Address 120 Genesis Boulevard Address 120 Genesis Boulevard
Bridgeport, WV 26330 Bridgeport, WV 26330
- 8) Oil and Gas Inspector to be notified 9) Plugging Contractor
Name Bryan Harris Name TBD
Address P.O. Box 157 Address _____
Volga, WV 26238

10) Work Order: The work order for the manner of plugging this well is as follows:
 Pull tubing. Check TD. Set C1A cement plug from 1688' to 1560'.
 Find freepoint and pull as much casing as possible.
 Set C1A cement plug from 50' below to 50' above sever point.
 Set C1A cement plug from 867' to 767'.
 If possible, sever and remove 8 1/4" at free point. Set C1A cement plug 50' below to 50' above the sever point.
 If possible remove 10". Set C1A cement plug from 200' to surface.
 Install monument. It will be a minimum of 6" diameter, 30" high and 10' below surface.
 6% gel will be placed between all plugs.

OK grom

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 6-11-14

MUDLICK OIL & GAS COMPANY

RECORD OF WELL

Map Sheet No. _____ Well No. 1
 Drilled on J. A. Flint Farm of 15 Acres, situate in _____
Troy Township Gilmer County W. Va. Lease No. _____
 Shipping Point _____ Foreman _____

Located _____ R I G _____ W E L L _____
 Notified Gen'l Office _____
 Completed Drilling December 1921
 Contractor C. W. McCall & Co.
 Address Drilled Deeper 5/20

ROCK FORMATION	TOP	BOTTOM	REMARKS	PRESSURE AND VOLUME
Conductor				1/2 Minute 160 Lbs.
Mapleton Coal				1 " 210 "
Pittsburgh Coal				2 " 230 "
Little Dunkard				3 " 240 "
Big Dunkard	460	480		4 " 250 "
Gas Sand				5 " 260 "
1st Salt Sand	510	550		10 " 280 "
2nd Salt Sand	597	795		15 " "
3rd Salt Sand	780	920		30 " "
Maxine Sand	1453	1471		1 Hour "
Little Lime	1482	1510		Back 700 "
Fencil Cove	1511	1516		Size of Tubing 3" Inch
Big Lime	1516	1595	Gas at 1595 to 1625	Size of Casing "
Big Lignite	1595	1628		122/10 Mercury
Gambel Sand				" " Pressure
50 Foot Sand			<i>Drilling Down Record,</i>	<i>428' when finished</i>
30 Foot Sand			<i>Started to drill at 1628</i>	
Garden Silt			<i>Gas 1653 to 1665</i>	
Garden Sand			<i>Gas 1667 " 1668</i>	
4th Sand			<i>Gas 1670 " 1688</i>	
5th Sand			<i>Total Depth 1704</i>	
Bayard Sand			<i>4 1/2 Wells in 3" when finished</i>	
Elizabeth				
Speechley			<i>2 1/2 Wells in 1 1/2" when started to drill down.</i>	
Bradford				

Total Depth **1628** Feet at \$ _____ per Foot \$ _____
 Gas Furnished at _____ Cents per Foot

CASING RECORD

SIZE	CHARGED TO WELL		PUT IN WELL		PULLED		LEFT IN WELL		TRANSFERRED		LEFT AT WELL		PACKER
	Feet	In.	Feet	In.	Feet	In.	Feet	In.	Feet	In.	Feet	In.	
10			32				32						Kind Larkin
8 1/2			610				610						Size 3" x 6-5/8 Gas
6			1551				1551						Set at 1561 Feet
3 Joints 3 1/2" perforated nipple below packer 76 Joints 3" Tubing above packer. = all pulled.													By _____
Wick Qty: at _____ Feet													of _____

Casing Cemented in Well _____ by _____ Company Employee _____

Received

JUN 17 2014

Office of Oil and Gas
 WV Dept. of Environmental Protection

Mud Lick Oil & Gas Company
612 Keystone Building
J. A. Flint
Well No. #1
Troy Dist., Gilmer County

Completed Drilling Dec. 1921

320
510
830

Size	Casing Record Put in Well	Left in Well
10	32	32
8 1/4"	610	610
6"	1551	1551

Packer-Larkin
Size 3" x 6-5/8"

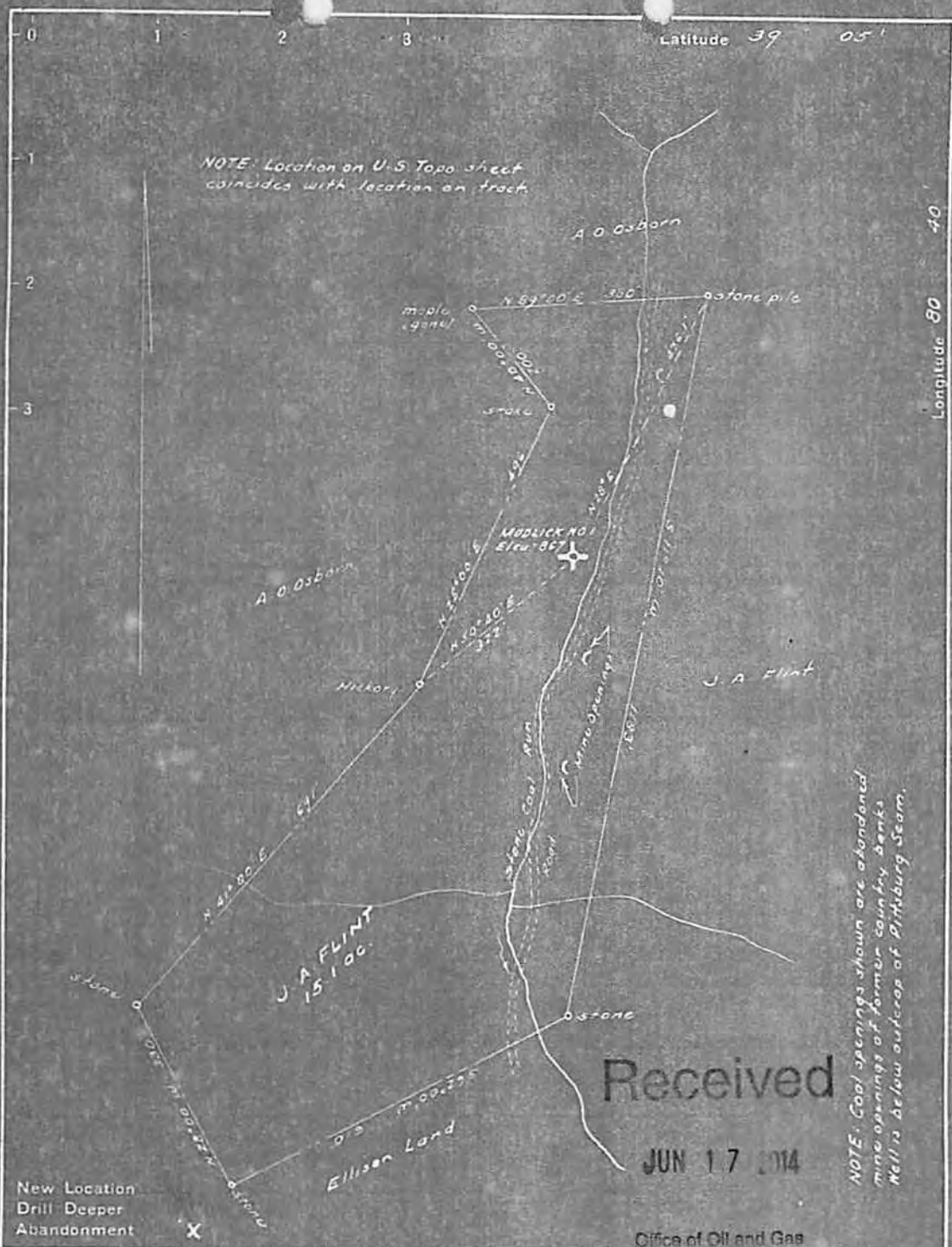
1808
1516
0292

Rock Formation	Top	Bottom
Big Dunkard	460	480
1st Salt Sand	510	550
2nd Salt Sand	597	795
3rd Salt Sand	780	930
Maxton Sand	1453	1471
Little Lime	1482	1510
Pencil Cave	1511	1516
Big Lime	1516	1595
Big Anjun	1595	1628
Started to drill	1628	

Gas at 1596 to 1625
Vol. by Mercury 122/19

Gas 1653 to 1655
Gas 1657 to 1660
Gas 1675 to 1688'
Total Depth 1704
6/10 water in 2" when finished
2/10 water in 1" when started to drill down.

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WV Department of
Environmental Protection



Received

JUN 17 1947

New Location
 Drill Deeper
 Abandonment X

Company MUD LICK OIL & GAS CO.
 Address Keystone Bldg. Pittsburgh, Pa.
 Farm J. A. Flint
 Tract _____ Acres 15.1 Lease No. _____
 Well (Farm) No. 1 Serial No. _____
 Elevation (Spirit Level) 857
 Quadrangle Vadis
 County Gilmer District Troy
 Engineer W. H. ...
 Engineer's Registration No. 1227
 File No. _____ Drawing No. _____
 Date Aug. 1947 Scale 1" = 200'

Office of Oil and Gas
 WV Dept. of Environmental Protection

STATE OF WEST VIRGINIA
 DEPARTMENT OF MINES
 OIL AND GAS DIVISION
 CHARLESTON

WELL LOCATION MAP

FILE NO. 17

- + Denotes location of well on United States Topographic Maps, scale 1 to 62,500, latitude and longitude lines being represented by border lines as shown.
- Denotes one inch spaces on border line of original tracing.

210368P

CG-10



STATE OF WEST VIRGINIA
DEPARTMENT OF MINES
OIL AND GAS DIVISION

WELL RECORD

Permit No. 47-021-03190

To be abandoned

Oil or Gas Well Gas
(KIND)

Company Mud Lick Oil & Gas Co.
 Address #612 Keystone Bldg., Pa.
 Farm J. A. Flint Acres _____
 Location (waters) _____
 Well No. 1-1 Elev. 887
 District Troy County Gilmer
 The surface of tract is owned in fee by J. A. Flint Hrs
 Address Linn, W. Va.
 Mineral rights are owned by Sarah Flint
 Address Linn, W. Va.
 Drilling commenced Nov. 15th, 1921
 Drilling completed Dec. 21st, 1921
 Date Shot not shot From _____ To _____
 With _____
 Open Flow 12 /10ths Water in _____ Inch
12 /10ths Merc. in 3" Inch
 Volume 4,284,000 Cu. Ft.
 Rock Pressure 700 lbs. _____ hrs.
 Oil _____ bbls., 1st 24 hrs.
 Fresh water _____ feet _____ feet
 Salt water _____ feet _____ feet

Casing and Tubing	Used in Drilling	Left in Well	Packers
Size			
16			Kind of Packer
13			
10	<u>32</u>	<u>32</u>	Size of
8 1/4	<u>610</u>	<u>610</u>	
6	<u>1551</u>	<u>1551</u>	Depth set
5 3/16			
3			Perf. top
2		<u>1764</u>	Perf. bottom
Liners Used			Perf. top
			Perf. bottom

CASING CEMENTED _____ SIZE _____ No. Ft. _____ Date _____
 COAL WAS ENCOUNTERED AT _____ FEET _____ INCHES
 _____ FEET _____ INCHES FEET _____ INCHES
 _____ FEET _____ INCHES FEET _____ INCHES

Formation	Color	Hard or Soft	Top	Bottom	Oil, Gas or Water	Depth Found	Remarks
Big Junkard			480	480			
1st Salt Band			510	550			
2nd Salt			597	795			
3rd Salt			780	920			
Maxton			1453	1471			
L. Lime			1482	1510			
P. Cave			1510	1516			
B. Lime			1516	1595	Gas at	1596-1525	
B. Injun			1595	1688	"	1653 1655	
Slate			1688	1704	"	1652 1688	

Packer set at 1563 - 141' anchor below packer

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WV Department of
Environmental Protection

08/08/2014

2103608 P

WW-4A
Revised 6-07

1) Date: June 9, 2014
2) Operator's Well Number
J.A. Flint #1
3) API Well No.: 47 - 021 - 03608

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: Joseph H. Bush	Name: NA
Address: 7414 Goettner Road Kingsville, MD 21087	Address: _____
(b) Name: _____	(b) Coal Owner(s) with Declaration
Address: _____	Name: NA
(c) Name: _____	Address: _____
Address: _____	Name: _____
Address: _____	Address: _____
6) Inspector: Bryan Harris	(c) Coal Lessee with Declaration
Address: P.O. Box 157	Name: NA
Volga, WV 26238	Address: _____
Telephone: 304-553-6087	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.

Received

Well Operator: PDC Mountaineer, LLC
 By: Staren P. Johnson JUN 17 2014
 Its: Agent
 Address: 120 Genesis Boulevard
 Bridgeport, WV 26330
 Telephone: 304-842-3597

Office of Oil and Gas
WV Dept. of Environmental Protection

Subscribed and sworn before me this 9th day of June,
Mark J. King
My Commission Expires December 21, 2020



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.

08/08/2014

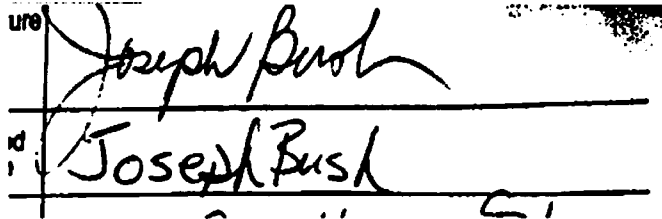


Date: June 13, 2014

Scott Raines:

The following is in response to your June 13, 2014 request for delivery information on your Certified Mail™ item number 9171969009350057245826. The delivery record shows that this item was delivered on June 12, 2014 at 3:43 pm in KINGSVILLE, MD 21087. The scanned image of the recipient information is provided below.

Signature of Recipient :

Signature of Recipient : The image shows a scanned signature of Joseph Bush. The signature is written in black ink on a white background. Below the signature, there are two horizontal lines, and the name "Joseph Bush" is printed in a black, sans-serif font between them.

Address of Recipient :

Address of Recipient : The image shows a scanned address label. The address "7414 Goethe Rd." is handwritten in black ink on a white background. Below the address, there are two horizontal lines, and the address is printed in a black, sans-serif font between them.

Thank you for selecting the Postal Service for your mailing needs.

If you require additional assistance, please contact your local Post Office or postal representative.

Sincerely,
United States Postal Service

RECEIVED
Office of Oil and Gas

JUN 17 2014

WV Department of
Environmental Protection

08/08/2014

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

CONSTRUCTION AND RECLAMATION PLAN AND SITE REGISTRATION APPLICATION FORM
GENERAL PERMIT FOR OIL AND GAS PIT WASTE DISCHARGE

Operator Name PDC Mountaineer, LLC OP Code 494494939

Watershed Happy Hollow of Leading Creek Quadrangle Vadis 7.5'

Elevation 264m (867ft) County Gilmer District Troy

Description of anticipated Pit Waste: Produced Fluids

Will a synthetic liner be used in the pit? Yes 20 ML

Proposed Disposal Method For Treated Pit Wastes:

- Land Application
- Underground Injection (UIC Permit Number #2459 Noble County, Ohio)
- Reuse (at API Number _____)
- Off Site Disposal (Supply form WW-9 for disposal location)
- Other (Explain _____)

Proposed Work For Which Pit Will Be Used:

- Drilling
- Workover
- Other (Explain _____)
- Swabbing
- Plugging

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 Steven P. Johnson

Company Official (Typed Name) Steven P. Johnson

Company Official Title Agent

Received

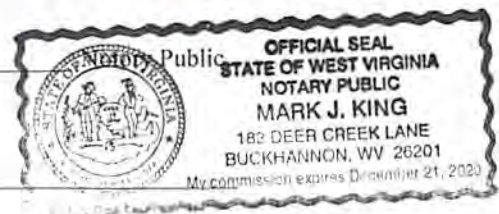
JUN 17 2014

Subscribed and sworn before me this 9th day of JUNE, 2014

Office of Oil and Gas
WV Dept. of Environmental Protection

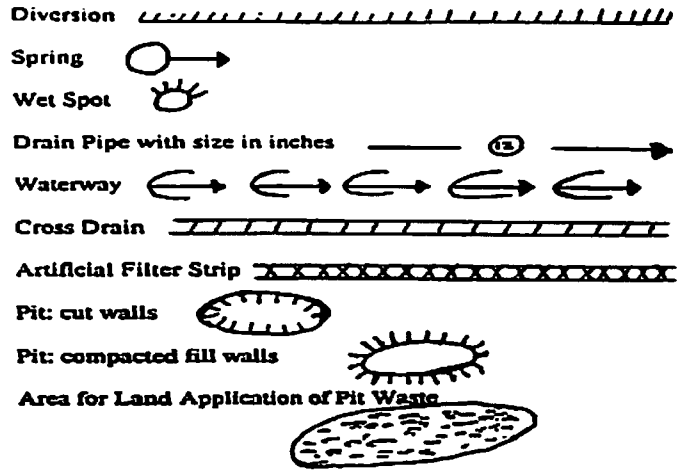
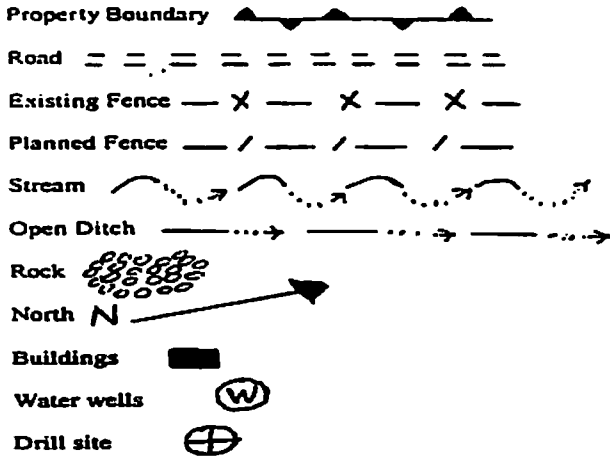
Mark J. King

My commission expires November 21, 2020



08/08/2014

LEGEND



Proposed Revegetation Treatment: Acres Disturbed 1.25+/- Prevegetation pH TBD

Lime TBD Tons/acre or to correct to pH 6.5

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

Mulch hay or straw 2 tons/acre Tons/acre

Seed Mixtures

Area I		Area II	
Seed Type	lbs/acre	Seed Type	lbs/acre
Kentucky Bluegrass	40	Orchard Grass	15
Alsike Clover	5	Alsike Clover	5
Annual Rye	1		

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

Photocopied section of involved 7.5' topographic sheet.

Plan Approved by: *Bryan O'Hara*

Comments: _____

Title: *Oil & Gas Inspector* Date: *6-11-14*

Field Reviewed? () Yes () No

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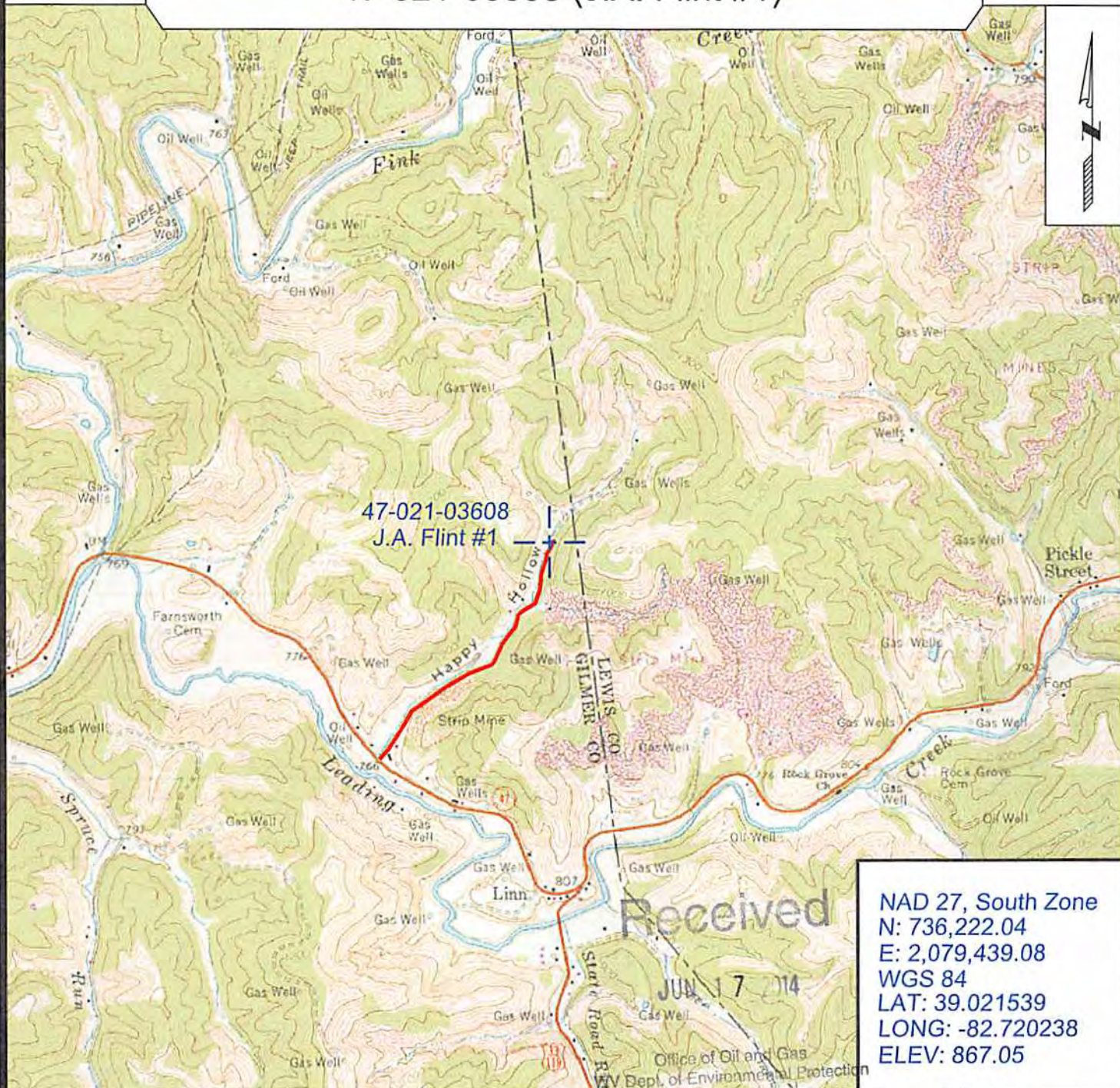
WV Department of
Environmental Protection

08/08/2014

Topo Quad: Vadis 7.5' Scale: 1" = 2000'
 County: Gilmer Date: March 21, 2014
 District: Troy Project No: 67-14 PDC

47-021-03608 (J.A. Flint #1)

Topo



47-021-03608
J.A. Flint #1

NAD 27, South Zone
 N: 736,222.04
 E: 2,079,439.08
 WGS 84
 LAT: 39.021539
 LONG: -82.720238
 ELEV: 867.05

Received

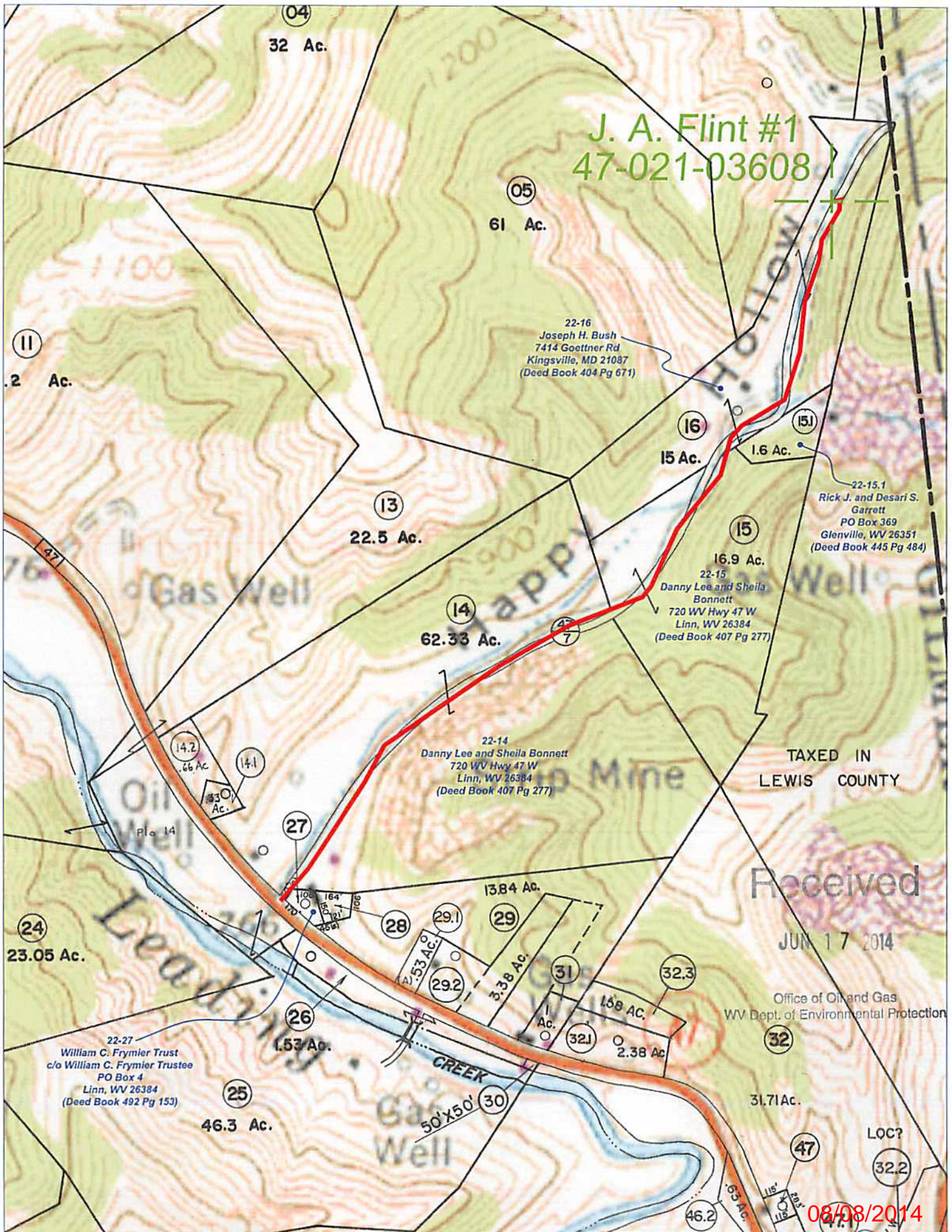
JUN 17 2014

Office of Oil and Gas
WV Dept. of Environmental Protection



SURVEYING AND MAPPING SERVICES PERFORMED BY:
ALLEGHENY SURVEYS, INC.
 1-800-482-8606
 P.O. BOX 438
 BIRCH RIVER, WV 26610
 PH: (304) 649-8606
 FAX: (304) 649-8608

PREPARED FOR:
PDC Mountaineer, LLC
 120 Genesis Blvd.
 Bridgeport, WV 26330



08/08/2014

CK
30321
100.00

WW-7
3-21-14



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

API: 47-021-03608 WELL NO.: J.A. Flint #1
FARM NAME: J.A. Flint
RESPONSIBLE PARTY NAME: PDC Mountaineer, LLC
COUNTY: Gilmer DISTRICT: Troy 4
QUADRANGLE: Vadis 7.5' 647
SURFACE OWNER: Joseph H. Bush
ROYALTY OWNER: Joseph H. Bush
UTM GPS NORTHING: 4319203.2
UTM GPS EASTING: 524217.4 GPS ELEVATION: 264 m (867 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

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 Steph O'Brien
Date 4/1/14

Title PS#2180

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JUN 17 2014

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WV Dept. of Environmental Protection

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JUN 17 2014

WV Department of Environmental Protection



PDC MOUNTAINEER

PDC Mountaineer, LLC
120 Genesis Boulevard
Bridgeport, WV 26330
304-842-3597
304-808-0913 (fax)

June 16, 2014

Office of Oil and Gas
601 57th Street, SE
Charleston, WV 25304-2345
Attn: Justin Nottingham

Re: PDC Mountaineer, LLC; Application to Plug and Abandon 47-021-03608 (J.A. Flint #1),
Troy District, Gilmer County, WV.

Dear Mr. Nottingham,

Please find subject application and fees enclosed. If you have any questions or comments regarding this application feel free to contact me at 304-842-3597 x 6558.

Sincerely,

Steven P. Johnson
Senior Regional Landman / Agent

Enc.

Received

JUN 17 2014

Office of Oil and Gas
WV Dept. of Environmental Protection

08/08/2014