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

October 01, 2015

WELL WORK PLUGGING PERMIT

Plugging

This permit, API Well Number: 47-10301233, issued to HADDAD & BROOKS INC, is evidence of permission granted to perform the specified well work at the location described on the attached pages and located on the attached plat, subject to the provisions of Chapter 22 of the West Virginia Code of 1931, as amended, and all rules and regulations promulgated thereunder, and to all conditions and provisions outlined in the pages attached hereto. Notification shall be given by the operator to the Oil and Gas Inspector at least 24 hours prior to the construction of roads, locations, and/or pits for any permitted work. In addition, the well operator shall notify the same inspector 24 hours before any actual well work is commenced and prior to running and cementing casing. Spills or emergency discharges must be promptly reported by the operator to 1-800-642-3074 and to the Oil and Gas inspector.

Upon completion of the plugging well work, the above named operator will reclaim the site according to the provisions of WV Code 22-6-30. The above named operator will also file, as required in WV Code 22-6-23, an affidavit on form WR-38 by two experienced persons in the operator's employment and the Oil and Gas inspector that the work authorized under this permit was performed and a description given. Failure to abide by all statutory and regulatory provisions governing all duties and operations here under may result in suspensions or revocation of this permit and in addition may result in civil and/or criminal penalities 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: BUMGARDNER, ANDREW
API Well Number: 47-10301233
Permit Type: Plugging
Date Issued: 10/01/2015

Promoting a healthy environment.

10301233P

PERMIT CONDITIONS

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

CONDITIONS

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

10301233P

CK # 9149
$100

WW-4B
Rev. 2/01

1) Date July 20, 2015
2) Operator's Well No. Bumgardner # 1
3) API Well No. 47- 103 - 01233

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

5) Location: Elevation 1420 Watershed Little Fishing Creek
District Proctor County Wetzel Quadrangle Wileyville

6) Well Operator Haddad & Brooks, Inc
Address 30 East Beau Street, Suite 700
Washington, Pa 15301

7) Designated Agent Lloyd Frank Henderson
Address WC 68 Box 23A
Littleton, WV 26581

8) Oil and Gas Inspector to be notified
Name Derek Haught
Address P O Box 85
Smithville WV 26178

9) Plugging Contractor
Name Lucas Well Service, Inc
Address P O Box 4652
Parkersburg, WV 26104

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

SPOT GEL.

Cement	3450 - 3300
Cut 4 1/2" casing at 2500 (or freepoint) and pull	
Cement	2500 - 2400
Cement	1425 - 1325
Cement	1285 - 1150
Cement	100 - surface
6% gel to be placed between each cement plug	
Erect monument w/ API number	

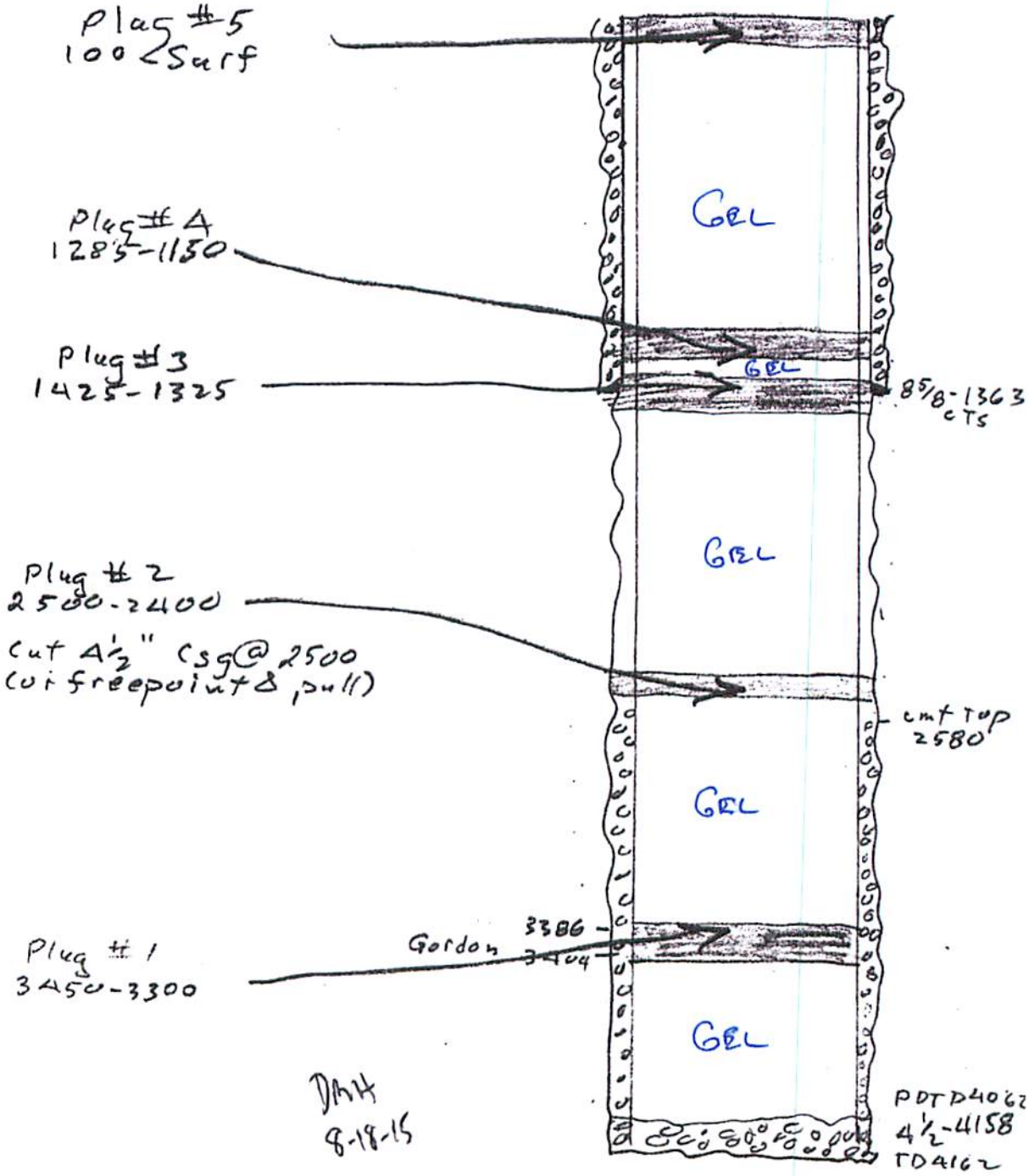
Notification must be given to the district oil and gas inspector 24 hours before permitted work can commence.

Work order approved by inspector [signature] Date 8-18-15

10301233P

Bumgardner 1
47-103-01233

El. 1420



DMH
8-18-15

10301233P

File
HB-310
Bumgardner

IV-35
(Rev 8-81)

State of West Virginia
Department of Mines
Oil and Gas Division

Date February 25, 1982
Operator's
Well No. 1
Farm Andrew Bumgardner
API No. 47 - 103 - 1233

WELL OPERATOR'S REPORT
OF
DRILLING, FRACTURING AND/OR STIMULATING, OR PHYSICAL CHANGE

WELL TYPE: Oil ___ / Gas X / Liquid Injection ___ / Waste Disposal ___ /
(If "Gas," Production X / Underground Storage ___ / Deep ___ / Shallow X /)

LOCATION: Elevation: 1420 Watershed Little Fishing Creek
District: Proctor County Wetzel Quadrangle Wileyville

COMPANY Haddad and Brooks, Inc.
ADDRESS 905 Washington Rd., Washington, PA 15301
DESIGNATED AGENT Henry M. Parsons
ADDRESS 121 Glenville Dr., New Martinsville, WV 26155
SURFACE OWNER Andrew Bumgardner
ADDRESS 763 Montana Ave., Akron, OH 44314
MINERAL RIGHTS OWNER Same
ADDRESS
OIL AND GAS INSPECTOR FOR THIS WORK
Phil Tracy ADDRESS Middlebourne, WV 26149
PERMIT ISSUED May, 1981
DRILLING COMMENCED 8-13-81
DRILLING COMPLETED 8-26-81
IF APPLICABLE: PLUGGING OF DRY HOLE ON CONTINUOUS PROGRESSION FROM DRILLING OR REWORKING. VERBAL PERMISSION OBTAINED ON

Casing & Tubing	Used in Drilling	Left in Well	Cement fill up Cu. ft.
Size 20-16 Cond.			
13-10"			
9 5/8			
8 5/8	1363'	All	150 sks Lite 150 sks Neat
7			
5 1/2			
4 1/2	4158'	All	130 sks 50:50 Poz 70 sks Thixo.
3			
2			
Liners used			

GEOLOGICAL TARGET FORMATION Warren Depth 4033' feet
Depth of completed well 4162' feet Rotary X / Cable Tools
Water strata depth: Fresh unknown feet; Salt unknown feet Drilled with fluid
Coal seam depths: 1235' (Pittsburgh Coal) Is coal being mined in the area? No

OPEN FLOW DATA
Producing formation Gordon Pay zone depth 3386-3404' feet
Gas: Initial open flow N/A Mcf/d Oil: Initial open flow 0 Bbl/d
Final open flow 40 Mcf/d Final open flow 0 Bbl/d
Time of open flow between initial and final tests 7 hours
Static rock pressure 525 psig (surface measurement) after 96 hours shut in
(If applicable due to multiple completion--)
Second producing formation Pay zone depth feet
Gas: Initial open flow Mcf/d Oil: Initial open flow Bbl/d
Final open flow Mcf/d Oil: Final open flow Bbl/d
Time of open flow between initial and final tests hours
Static rock pressure psig (surface measurement) after hours shut in

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IV-35
(REVERSE)

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

Notch Gordon at 3390'. Fractured with 480 bbl. gelled diesel, 14,000# 20/40 sand. Injected 12 BPM @ 3400 psi (Avg.)

WELL LOG

FORMATION	COLOR	HARD OR SOFT	TOP FEET	BOTTOM FEET	REMARKS Including indication of all fresh and salt water, coal, oil and gas
Undifferentiated SS & SH			0'	2476'	Pittsburgh Coal @ 1235'
Greenbrier	Tan	H	2476'	2566'	
Keener	Lt Gy	H-S	2566'	2618'	
SH	Gy	S	2618'	2627'	
Big Injun	Wt-Gy	H-S	2627'	2753'	*SSG
SH & Slst	Gy	S	2753'	2924'	
Weir	Wt-lt gy	H	2924'	2978'	*SG
SH & Slst	Gy	S	2978'	3122'	
Berea	Lt Br-lt gy	H	3122'	3161'	*SG
SH & Slst	Gy	S	3161'	3386'	
Gordon	Wt	S	3386'	3404'	*SG
SH	Lt Gy	S	3404'	3422'	
Fourth	Lt Gy	S	3422'	3432'	
SH & Slst	Gy	S	3432'	3507'	
Fifth	Lt Gy	S	3507'	3510'	*SG
SH & Slst	Gy	S	3510'	3584'	
Bayard	Lt Gy	S	3584'	3598'	*SG
SH & Slst	Gy	S	3598'	4033'	
Warren	Lt Gy	S	4033'	4064'	*SG
SH	Gy	S	4064'	4162'	T.D.
					*Shows from gas detector

(Attach separate sheets as necessary)

Haddad and Brooks, Inc.
Well Operator

By: Carl A Boe Geologist

Date: 2-25-82

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Note: *Regulation 8.02(i) provides as follows:*
"The term 'log' or 'well log' shall mean a systematic detailed geological record of all formations, including coal encountered in the drilling of a well."

103012330 9149 00 100

WW-4A
Revised 6-07

1) Date: July 20, 2015
2) Operator's Well Number
Bumgardner # 1

3) API Well No.: 47 - 103 - 01233

STATE OF WEST VIRGINIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS
NOTICE 0F APPLICATION TO PLUG AND ABANDON A WELL

4) Surface Owner(s) to be served:
(a) Name David R Calderwood
Address 4125 State Park Drive
Akron, OH 44319

(b) Name
Address

(c) Name
Address

6) Inspector Derek Haught
Address P O Box 85
Smithville, WV 26178
Telephone 304-206-7613

5) (a) Coal Operator
Name
Address

(b) Coal Owner(s) with Declaration
Name David R Calderwood
Address 4125 State Park Drive
Akron, OH 44319

Name
Address

(c) Coal Lessee with Declaration
Name
Address

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

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

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

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

Well Operator Haddad & Brooks, Inc
By: Jerrold J. Hopkins
Its: President
Address 30 East Beau Street, Suite 700
Washington, Pa 15301
Telephone 724-228-8811

Subscribed and sworn before me this 6th day of August
Theresa M. Cage Notary Public
My Commission Expires 10/19/17

COMMONWEALTH OF PENNSYLVANIA
Notarial Seal
Theresa M. Cage, Notary Public
City of Washington, Washington County
My Commission Expires Oct. 19, 2017
MEMBER, PENNSYLVANIA ASSOCIATION OF NOTARIES

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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 depprivacyoffier@wv.gov.

10301233P

SURFACE OWNER WAIVER

Operator's Well Number Bumgardner # 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:

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...".

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.

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AUG 20 2015
WV Department of Environmental Protection

FOR EXECUTION BY A NATURAL PERSON ETC.

Signature _____ Date 8/13/15

FOR EXECUTION BY A CORPORATION, ETC.

Name _____
By _____
Its _____ Date _____

Signature Date

10301233P

WW-4B

API No. 47 - 103 - 01233
Farm Name Bumgardner # 1
Well No. 47-103-01233

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 then 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 X / 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: 8/13/15

By: _____

Its _____

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10301233P

WW-9
Rev. 5/08

Page _____ of _____
API Number 47 - 103 - 01233
Operator's Well No. Bumgardner # 1

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 Haddad & Brooks, Inc. OP Code 307418

Watershed Little Fishing Creek Quadrangle Wileyville

Elevation 1420 County Wetzel District Proctor

Description of anticipated Pit Waste: Fluids from plugging operations

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

Proposed Disposal Method For Treated Pit Wastes:

- x Land Application
- ____ Underground Injection (UIC Permit Number _____)
- ____ Reuse (at API Number _____)
- ____ Off Site Dispposal (Supply form WW-9 for disposal location)
- ____ Other (Explain _____

DMH
8-18-15

Proposed Work For Which Pit Will Be Used:

- ____ Drilling
- ____ Workover
- ____ Other (Explain _____
- ____ Swabbing
- x 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 Jerrold J. Hopkins

Company Official (Typed Name) Jerrold J Hopkins

Company Official Title President

Subscribed and sworn before me this 6th day of August, 20 15

Theresa M. Cage Notory Public

My commission expires 10/19/17

COMMONWEALTH OF PENNSYLVANIA
Notarial Seal
Theresa M. Cage, Notary Public
City of Washington, Washington County
My Commission Expires Oct. 19, 2017
MEMBER PENNSYLVANIA ASSOCIATION OF NOTARIES

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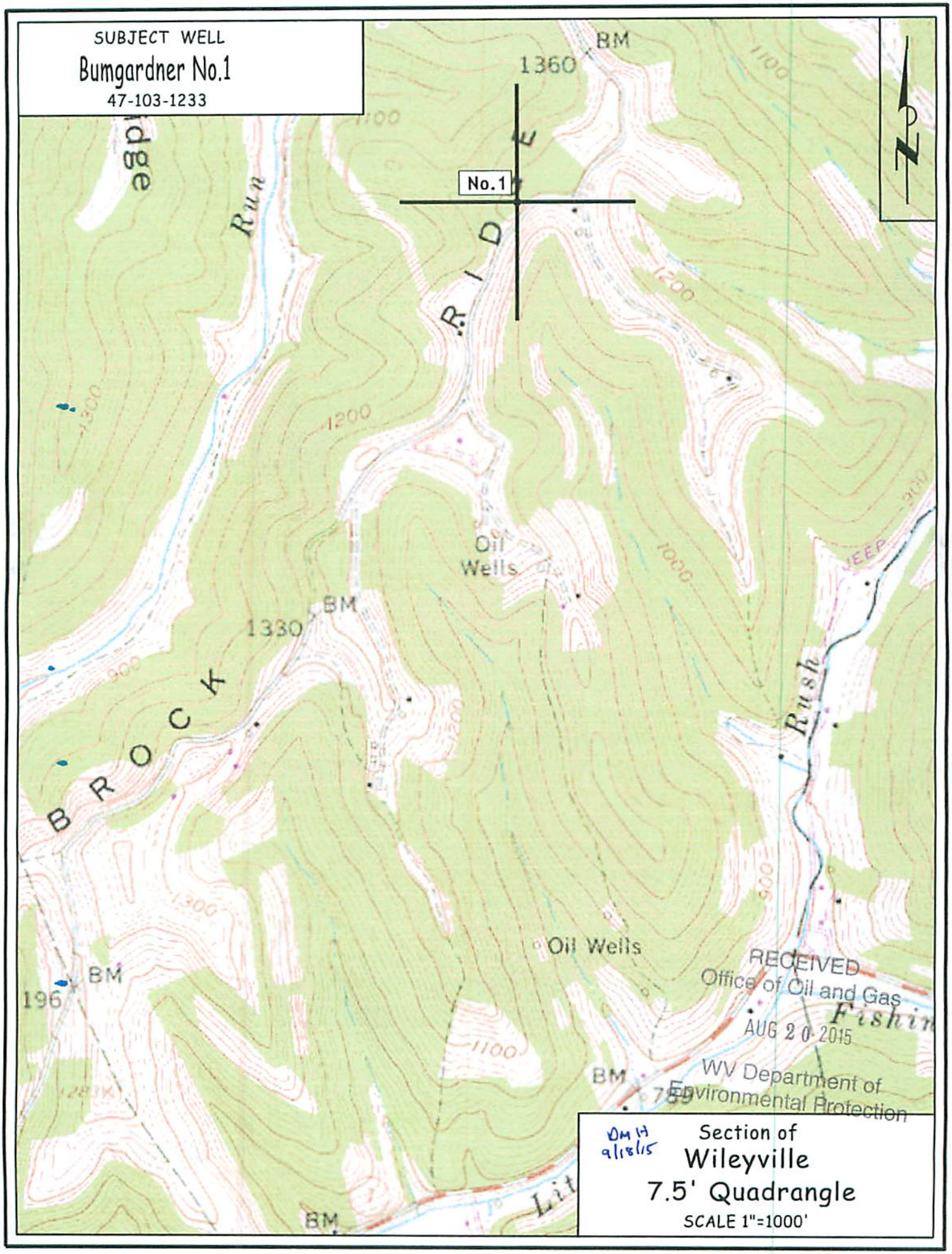

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9/18/15

10301233P

WW-7
8-30-06

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

API: 47-103-01233 WELL NO.: Bumgardner 1

FARM NAME: Andrew Bungardner

RESPONSIBLE PARTY NAME: Jerrold J Hopkins

COUNTY: Wetzel DISTRICT: Proctor

QUADRANGLE: Wileyville

SURFACE OWNER: David R Calderwood

ROYALTY OWNER: _____

UTM GPS NORTHING: 4,388,940

UTM GPS EASTING: 526,648 GPS ELEVATION: 433'

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 X : 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.

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Jerrold J. Hopkins — President — 8/6/15

Signature — Title — Date