



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

September 09, 2014

WELL WORK PERMIT

Vertical Well

This permit, API Well Number: 47-4303472, issued to HG ENERGY, 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.

Please be advised that form WR-35, Well Operators Report of Well Work is to be submitted to this office within 90 days 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.

In addition to the applicable requirements of this permit, and the statutes and rules governing oil and gas activity in WV, this permit may contain specific conditions which must be followed. Permit conditions are attached to this cover letter.

Per 35CSR-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) 926-0499 ext. 1654.



James Martin
Chief

Operator's Well No: EPHRAIM GRIFFITH NO. 215

Farm Name: BENDER, JASON ET. UX.

API Well Number: 47-4303472

Permit Type: Vertical Well

Date Issued: 09/09/2014

Promoting a healthy environment.

09/12/2014

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. If the operator encounters an unanticipated void, or an anticipated void at an unanticipated depth, the operator shall notify the inspector within 24 hours. Modifications to the casing program may be necessary to comply with W. Va. Code §22-6-20, which requires drilling to a minimum depth of thirty feet below the bottom of the void, and installing a minimum of twenty (20) feet of casing. Under no circumstance should the operator drill more than fifty (50) feet below the bottom of the void or install less than twenty (20) feet of casing below the bottom of the void.
2. Pursuant to 35 CSR 4-19.1.a, at the request of the surface owner all water wells or springs within 1000 feet of the proposed well that are actually utilized for human consumption, domestic animals or other general use shall be sampled and analyzed.
3. Pursuant to 35 CSR 4-19.1.c, if the operator is unable to sample and analyze any water well or spring with one thousand (1,000) feet of the permitted well location, the Office of Oil and Gas requires the operator to sample, at a minimum, one water well or spring located between one thousand (1,000) feet and two thousand (2,000) feet of the permitted well location.
4. All pits must be lined with a minimum of 20 mil thickness synthetic liner.
5. 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.
6. During the surface casing and cementing process, in the event cement does not return to the surface, or any other casing string that is permitted to circulate cement to the surface and does not return to the surface, the oil and gas inspector shall be notified within twenty-four (24) hours
7. Well work activities shall not constitute a hazard to the safety of persons.
8. Operator shall provide the Office of Oil & Gas notification of the date that drilling commenced on this well. Such notice shall be provided by sending an email to DEPOOGNotify@wv.gov within 30 days of commencement of drilling.

STATE OF WEST VIRGINIA
DIVISION OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS
WELL WORK PERMIT APPLICATION

- 1) Well Operator: HG Energy, LLC
- 2) Operator's Well Number: Ephraim Griffith No. 215 3) Elevation 887'
- 4) Well Type: (a) Oil X or Gas _____
 (b) If Gas: Production _____ Underground Storage _____
- 5) Proposed Target Formation(s): Berea
- 6) Proposed Total Depth: TVD 2470' ft.
- 7) Approximate fresh water strata depths: 245'
- 8) Approximate salt water depths: 950'
- 9) Approximate coal seam depths: 310'
- 10) Does land contain coal seams tributary to active mine? Yes _____ No X
- 11) Proposed Well Work: Drill and stimulate production well in Berea

12) CASING AND TUBING PROGRAM

TYPE	SPECIFICATIONS		FOOTAGE INTERVALS			CEMENT
	Size	Grade	Weight Per Ft.	For Drilling	Left in Well	Fill-up (Cu. Ft.)
Conductor						
Fresh Water	7"	LS	17#	410'	410'	Cement to surface
Coal						
Intermediate						
Production	4 1/2"	J-55	10.5#	2470'	2470'	150 Sacks
Tubing						
Liners						

RDT
7/31/14

Packers: Kind _____
 Sizes _____
 Depths set _____

For Office of Oil and Gas Use Only

- Fee(s) Paid
 - Well Work Permit
 - Reclamation Fund
 - WPCP
 - Plat
 - WW-9
 - WW-2B
 - Bond _____
 - Agent _____
- (Type)

09/12/2014

1) Date: July 25, 2014
2) Operator's Well Number
Ephraim Griffith No. 215
3) API Well No: 47 - 043 -
State County Permit

STATE OF WEST VIRGINIA - BUREAU OF ENVIRONMENT
DIVISION OF ENVIRONMENTAL PROTECTION
OFFICE OF OIL AND GAS

NOTICE AND APPLICATION FOR A WELL WORK PERMIT

4) Surface Owner(s) to be served:
(a) Name Jason & Ashley Bender ✓
Address 20 Open Harvest Drive
Yawkey, WV 25573
(b) Name
Address
(c) Name
Address
6) Inspector Ralph Triplett
Address 5539 McClellan Highway
Branchland, WV 25506
Telephone (304) - 389-0350

5) (a) Coal Operator:
Name NA
Address
(b) Coal Owner(s) with Declaration
Name NA
Address
Name
Address
(c) Coal Lessee with Declaration
Name NA
Address

TO THE PERSON(S) NAMED ABOVE TAKE NOTICE THAT:

Included is the lease or leases or other continuing contract or contracts by which I hold the right to extract oil and gas OR
 Included is the information required by Chapter 22, Article 6, Section 8(d) of the Code of West Virginia (see page 2)

I certify that as required under Chapter 22 of the West Virginia Code I have served copies of this notice and application, a location plat, and accompanying documents pages 1 through 4 on the above-named parties, by:

Personal Service (Affidavit attached)
 Certified Mail (Postmarked postal receipt attached)
 Publication (Notice of Publication attached)

Received
AUG 8 2014

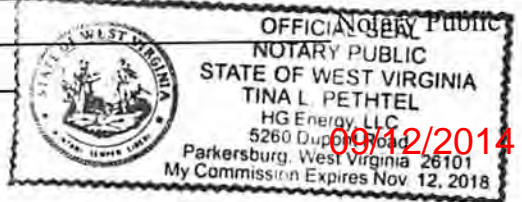
I have read and understand Chapter 22-6 and 38 CSR 11-18, and I agree to the terms and conditions of any permit issued under this application.

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, 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 and imprisonment.

Well Operator HG Energy, LLC
By: Diane C White
Its: Accountant
Address 5260 Dupont Road
Parkersburg, WV 26101
Telephone (304) 420-1119

Subscribed and sworn before me this 25 day of July 2014
Tina L Pethel
My commission expires 11/02/2018



4303472

U.S. Postal Service™
CERTIFIED MAIL™ RECEIPT
(Domestic Mail Only; No Insurance Coverage Provided)

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

OFFICIAL USE

7012 3460 0002 6850 5982

Postage	\$ 1.40
Certified Fee	13.30
Return Receipt Fee (Endorsement Required)	2.70
Restricted Delivery Fee (Endorsement Required)	10.00
Total Postage & Fees	\$ 27.40

0777

11

Postmark
Here

07/28/2014

EG 215

Sent To	Jason & Ashley Bender
Street, Apt. No.; or PO Box No.	20 Open Harvest Drive
City, State, ZIP+4	Yawkey WV 25573
PS Form 3800, August 2006 See Reverse for Instructions	



09/12/2014

INFORMATION SUPPLIED UNDER WEST VIRGINIA CODE
Chapter 22, Article 6, Section 8(d)
IN LIEU OF FILING LEASE(S) AND OTHER CONTINUING CONTRACT(S)

Under the oath required to make the verification on page 1 of this Notice and Application, I depose and say that I am the person who signed the Notice and Application for the Applicant, and that --

- (1) the tract of land is the same tract described in this Application, partly or wholly depicted in the accompanying plat, and described in the Construction and Reclamation Plan;
- (2) the parties and recordation data (if recorded) for lease(s) or other continuing contract(s) by which the Applicant claims the right to extract, produce or market the oil or gas are as follows:

<u>Grantor, Lessor, etc.</u>	<u>Grantee, Lessee, etc.</u>	<u>Royalty</u>	<u>Book/Page</u>
Ephraim & Nance Griffith	Penzoil Company	1/8	36/81

Merger and Conveyance dated July 3, 1963, from South Penn Oil Company to Penzoil Company, Kanawha County, Book 153, Page 35,

Assignment, Conveyance and Bill of Sale dated December 28, 1998, from Pennzoil Company to Pennz Energy Exploration and Production, Wetzel County, Book 12, Page 177.

Certificate of Merger filed with the WV Secretary of State, December 31, 1999, whereby Pennz Energy Exploration and Production, successor in interest to; to Penzoil Company, merged with Devon Energy Production Company, LP, Wetzel County, Book 12, Page 278.

Deed, Assignment and Bill of Sale dated June 1, 2000, from Devon Energy Production Company, LP to East Resources, Inc., recorded in Wetzel County, Book 370, Page 580.

Assignment, Conveyance and Bill of Sale, dated January 1, 2011, from East Resources, Inc., to HG Energy, LLC, Wetzel County, Book 118A, Page 253.

Upon information and belief, Operator's lease and/or other real property rights permit it to conduct drilling operations for the subject well in the location shown on the plat, including the use of access roads, pipelines and utilities.

**Acknowledgement of Possible Permitting/Approval
In Addition to the Office of Oil and Gas**

Received

The permit applicant for the proposed well work addressed in this application hereby acknowledges the possibility of the need for permits and/or approvals from local, state or federal entities in addition to the DEP, Office of Oil and Gas, including but not limited to the following:

AUG 8 2014

- WV Division of Water and Waste Management
- WV Division of Natural Resources
- WV Division of Highways
- U.S. Army Corps of Engineers
- US Fish and Wildlife Service
- County Floodplain Coordinator

Office of Oil and Gas
WV Dept. of Environmental Protection

09/12/2014

West Virginia Division of Environmental Protection
Office of Oil and Gas

NOTICE TO SURFACE OWNERS

The well operator named below is preparing to file for a permit from the state to drill a new well. Before a well work permit can be filed with the Chief of the Office of Oil and Gas, the well operator is required to have given notice of the right to request water well or spring analytical testing. This notice shall be given to the owners or occupants of land which have a water well or spring being utilized for human consumption, domestic animals, or other general use and which is located within 1000 feet of the proposed well site.

With this form, the operator is giving you notice of your right to request analytical testing, The operator is required to sample and analyze the water wells or springs of all owners or occupants who request it. Therefore if you wish to have your water well or spring tested, contact the operator named below.

All sampling shall be completed prior to drilling. Within thirty (30) days of the receipt of such sample analyses the operator shall submit the results to the Chief of the Office of Oil and Gas and to the owners or occupants who may have requested them.

If no water well or spring is located within 1000 feet, the Chief may require the operator to sample and analyze water from a water well or spring within 2000 feet of the proposed well site.

Be advised, you have the right to sample and analyze any water supply at your own expense.

The laboratory used by the operator to analyze the samples will be approved by the Chief. The operator named below has decided to use the following laboratory to analyze the water samples:

Contractor Name Sturm Environmental Services
 Well operator's private laboratory

Well Operator HG Energy, LLC
Address 5260 Dupont Road
Parkersburg, WV 26101

Telephone 304-420-1119

FOR OPERATOR'S USE ONLY: Below, or on an attached page, list those persons which were given this notice. Place an asterisk beside the one(s) that contacted you and requested sampling and analyses. If there were no requests made, indicate by underlining which one you have selected to sample and analyze. If there are no water wells or springs within 1000 feet of the proposed site please indicate such.

Edward & Janet Price
4850 Midway Road
Yawkey, WV 25573

Wanda Dean Bird
1400 Bedford Road
Charleston, WV 25314

Matthew D & Jessica Pauley
5710 Maccorkle Avenue SE
Charleston, WV 25304

Jackie & Sandra Stowers
4818 Midway Road
Yawkey, WV 25573

Jason & Ashley Bender
20 Open Harvest Drive
Yawkey, WV 25573

Received

AUG 8 2014

4303472

Operator's Well No. Ephraim Griffith No. 215

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 HG Energy, LLC OP Code 494497948
Watershed Porter Fork Quadrangle Griffithsville 7.5' 38
Elevation 887' County Lincoln 43 District Duval 02

Description of anticipated Pit Waste: Fluids encountered in drilling shallow well.
Do you anticipate more than 5,000 bbls of water to complete the proposed well work? Yes No X
Will a synthetic liner be used in pit? Yes If so, what mil.? 20 Mil.

Proposed Disposal Method For Treated Pit Wastes:
 Land Application
 Underground Injection (UIC Permit Number)
 Reuse (at API Number)
 Off Site Disposal (Supply Form WW-9 for disposal location)
X Other (Explain Fluids to be transported to offsite disposal - Vikings Permit # 2D03902210)

Drilling medium anticipated for this well? Air, fresh water, oil based, etc. Air, Fresh Water
- If oilbased, what type? Synthetic, petroleum, etc.

Additives to be used? Water, soap, KCl

Drill cuttings disposal method? Leave in pit, landfill, removed offsite, etc. Leave in Pit
- If left in pit and plan to solidify, what medium will be used? Cement, lime, sawdust Native soil, cement, lime
- 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 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.

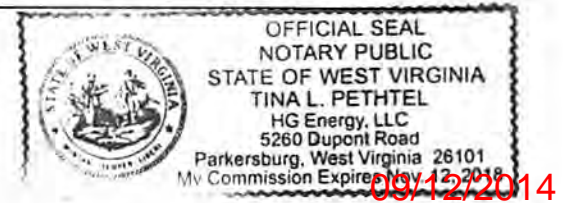
Company Official Signature Diane C White
Company Official (Typed Name) Diane C. White
Company Official Title Accountant

Received

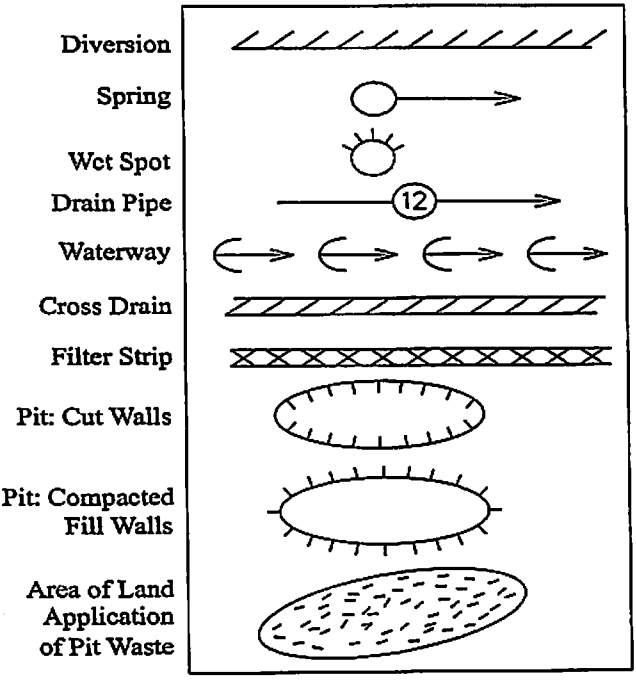
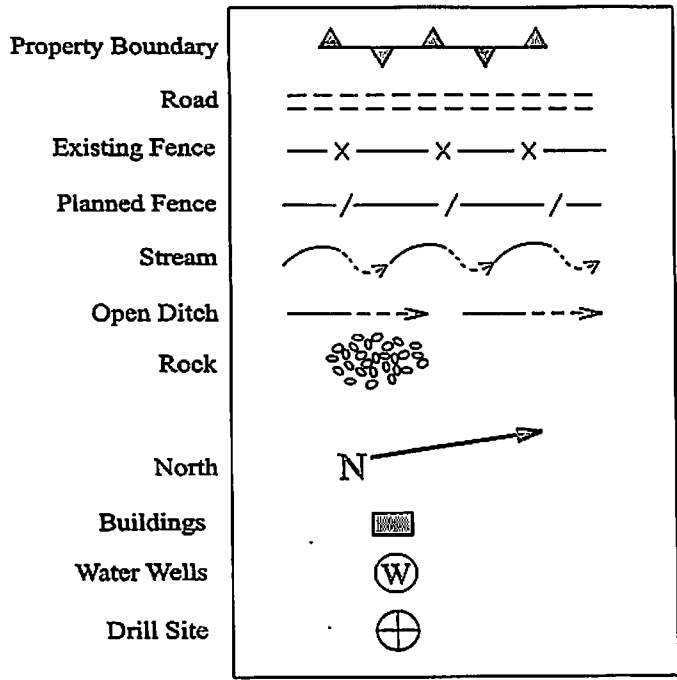
AUG 8 2014

Subscribed and sworn before me this 25 day of July 2014
Tina L. Pethel
Notary Public

My commission expires 7/20 13, 2018
Form WW-9



Legend



Proposed Revegetation Treatment: Acres Disturbed Area I Approx. 1.0 Ac. Prevegetation pH _____
Area II Approx. 1.0 Ac.

Lime 2 Tons/Acre or Correct to pH 6.5
 Fertilizer (10-20-20 or Equivalent) 500 Lbs./Acre (500 lbs. Minimum)
 Mulch Straw 2 Tons/Acre

SEED MIXTURES

Seed Type	Area I (Location)	Lbs./Ac.
Tall Fescue		40
Ladino Clover		5

Seed Type	Area II (Road)	Lbs./Ac.
Tall Fescue		40
Ladino Clover		5

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

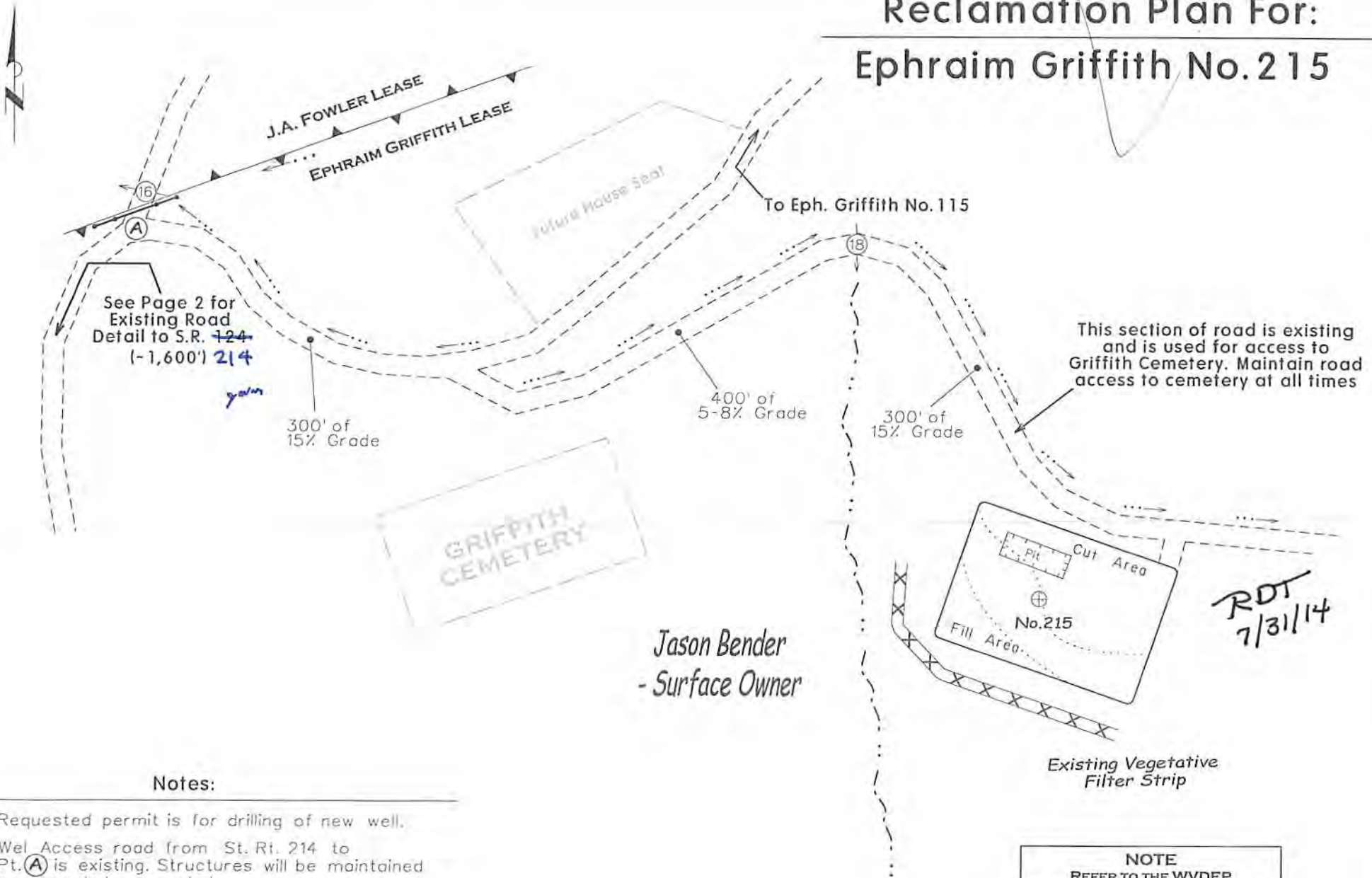
Plan approved by: Ralph D. Tripodi

Title: District Inspector

Date: July 31, 2014
09/12/2014

Field Reviewed? ✓ Yes _____ No _____

Reclamation Plan For: Ephraim Griffith No. 215



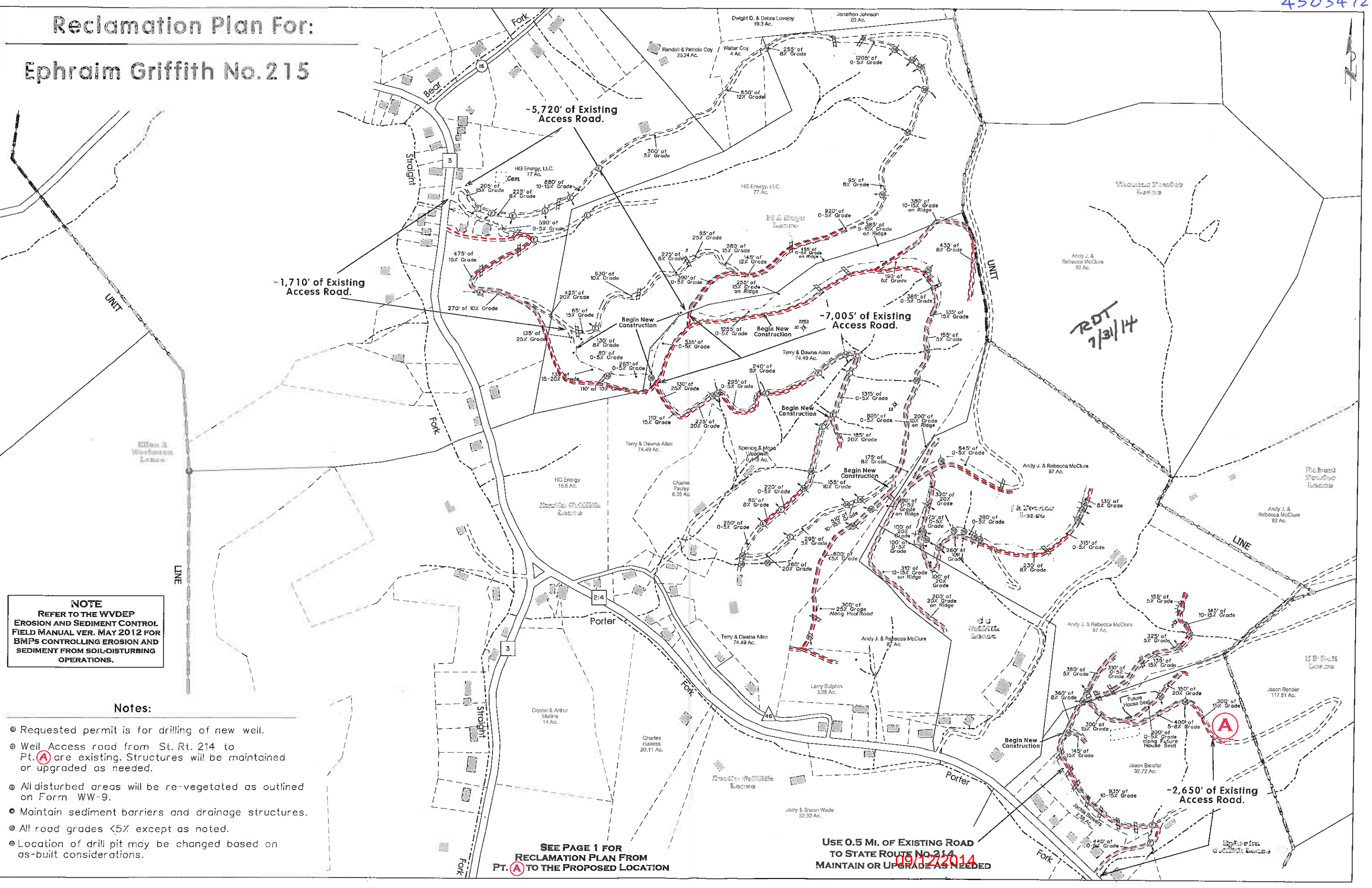
Notes:

- Requested permit is for drilling of new well.
- Well Access road from St. Rt. 214 to Pt. (A) is existing. Structures will be maintained or upgraded as needed.
- All disturbed areas will be re-vegetated as outlined on Form WW-9.
- Maintain sediment barriers and drainage structures.
- All road grades <5% except as noted.
- Location of drill pit may be changed based on as-built considerations.

NOTE
REFER TO THE WVDEP
EROSION AND SEDIMENT CONTROL
FIELD MANUAL VER. MAY 2012 FOR
BMPs CONTROLLING EROSION AND
SEDIMENT FROM SOIL-DISTURBING
OPERATIONS.

4303472

Reclamation Plan For: Ephraim Griffith No. 215



NOTE
REFER TO THE WVDEP
EROSION AND SEDIMENT CONTROL
FIELD MANUAL VER. MAY 2012 FOR
BMPs CONTROLLING EROSION AND
SEDIMENT FROM SOIL-DISTURBING
OPERATIONS.

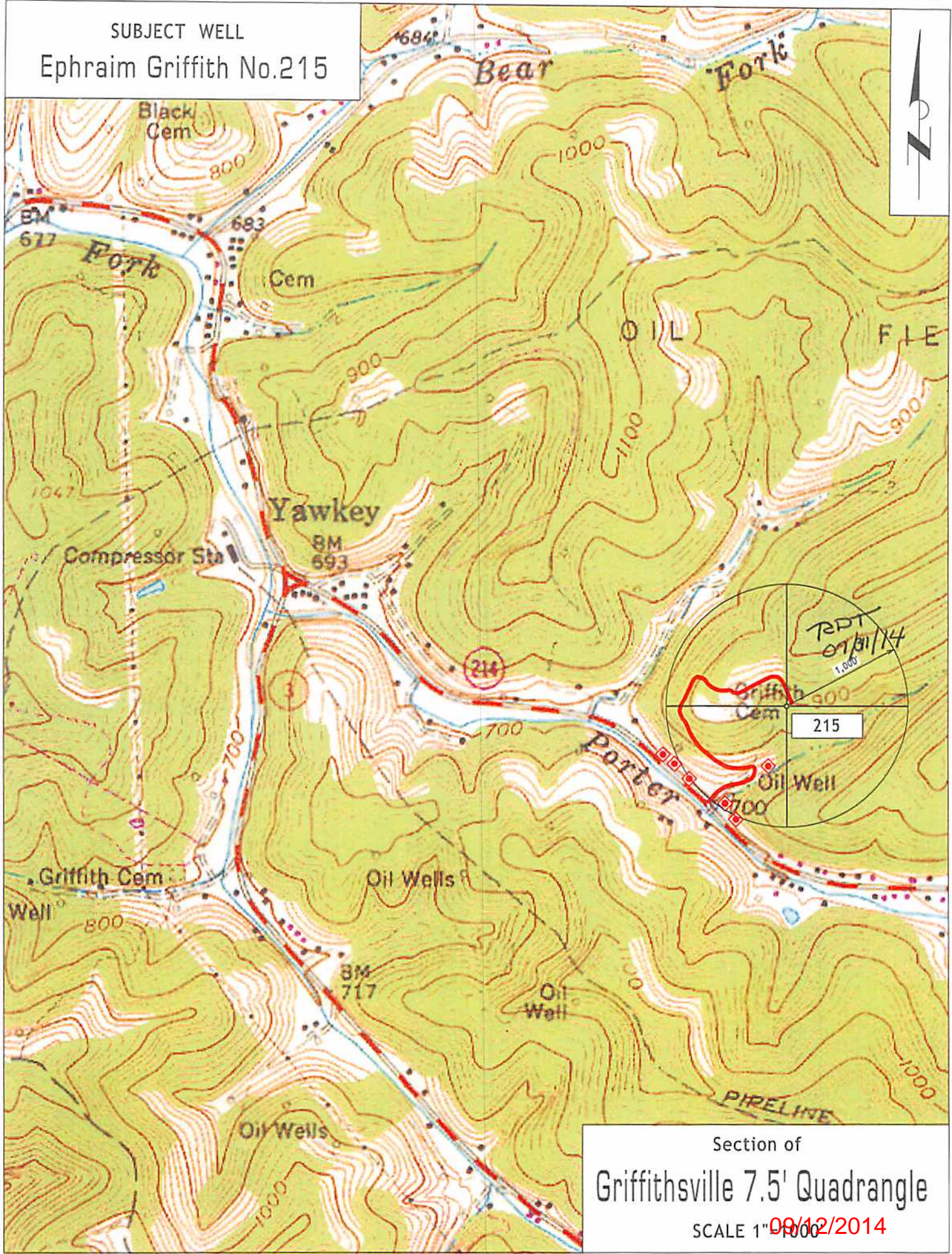
Notes:

- Requested permit is for drilling of new well.
- Well Access road from St. Rt. 214 to Pt. A are existing. Structures will be maintained or upgraded as needed.
- All disturbed areas will be re-vegetated as outlined on Form WW-9.
- Maintain sediment barriers and drainage structures.
- All road grades <5% except as noted.
- Location of drill pit may be changed based on as-built considerations.

SEE PAGE 1 FOR
RECLAMATION PLAN FROM
PT. A TO THE PROPOSED LOCATION

USE 0.5 MI. OF EXISTING ROAD
TO STATE ROUTE NO. 214
MAINTAIN OR UPGRADE AS NEEDED
09/12/2014

SUBJECT WELL
Ephraim Griffith No.215



Section of
Griffithsville 7.5' Quadrangle
SCALE 1" = 1000' 09/12/2014

Longitude = 81° 57' 03.6"

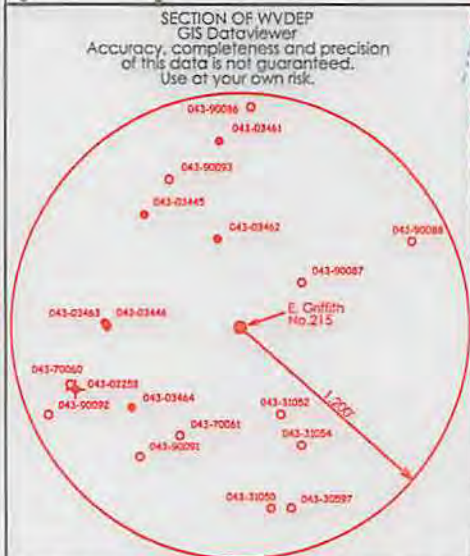
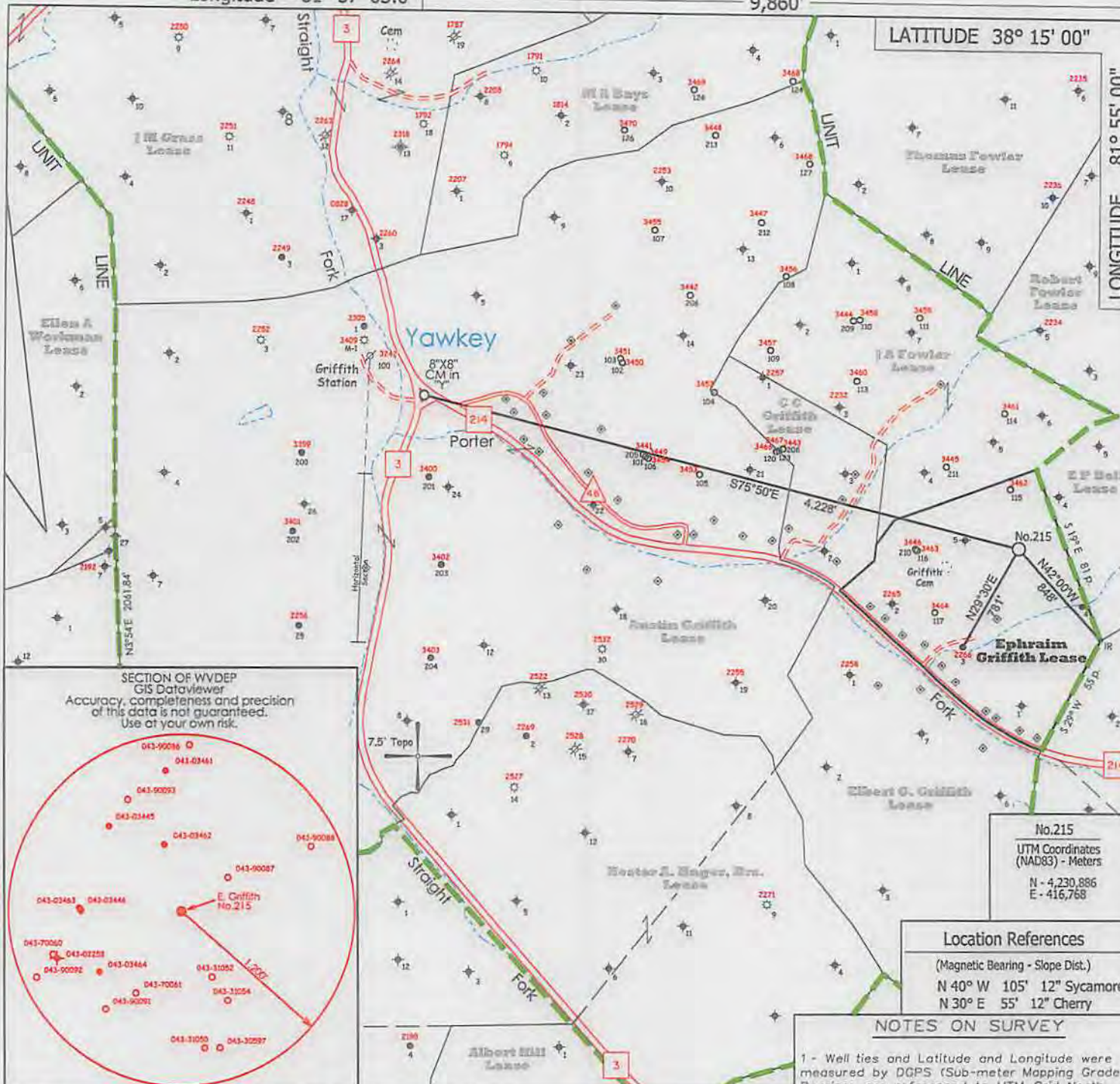
9,860'

LATITUDE 38° 15' 00"

LONGITUDE 81° 55' 00"

10,200'

Latitude = 38° 13' 19.2"



No.215
 UTM Coordinates (NAD83) - Meters
 N - 4,230,886
 E - 416,768

Location References
 (Magnetic Bearing - Slope Dist.)
 N 40° W 105' 12" Sycamore
 N 30° E 55' 12" Cherry

NOTES ON SURVEY

1 - Well ties and Latitude and Longitude were measured by DGPS (Sub-meter Mapping Grade). Bearings are referenced to UTM Grid North (Zone 17 North - NAD 1927).

2 - Surface owner information obtained from the Lincoln County Assessor's tax records.

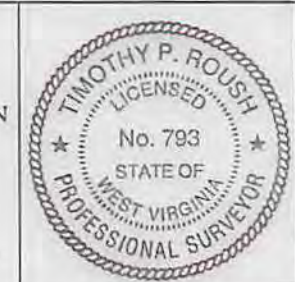
◆ - DENOTES A POSSIBLE WATER SUPPLY SOURCE LOCATED FROM CIRCA 2003 AERIAL PHOTOGRAPHY - NOT BY SURVEY. OTHER SOURCES MAY BE PRESENT.

⊕ - DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS.

FILE NO. _____
 MAP NO. N S E W
 SCALE 1" = 1000'
 MINIMUM DEGREE OF ACCURACY Sub-Meter
 PROVEN SOURCE OF ELEVATION DGPS Survey
 (Sub-Meter Mapping Grade)

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 MINES.

(SIGNED) *[Signature]*
 TIMOTHY P. ROUSH PS 793



WEST VIRGINIA
 Division of Environmental Protection
 Office of Oil and Gas
 601 57th Street
 Charleston, West Virginia 25301



DATE July 17, 2014
 FARM Ephraim Griffith No.215
 API WELL NO. 47-043-03472

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

LOCATION: ELEVATION 887' WATERSHED Porter Fork
 DISTRICT Duval COUNTY Lincoln
 QUADRANGLE Griffithville 7.5'

SURFACE OWNER Jason Bender, et ux ACREAGE 32.72 Ac.
 OIL & GAS ROYALTY OWNER HG Energy, LLC., et al LEASE ACREAGE 42.00
 LEASE NO. 71091-50 09/12/2014

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 Berea ESTIMATED DEPTH 2,470'

WELL OPERATOR HG Energy LLC. DESIGNATED AGENT Diane White
 ADDRESS 5260 DuPont Road ADDRESS 5260 DuPont Road
 Parkersburg, WV 26101 Parkersburg, WV 26101

FORM IV-6