



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

April 24, 2015

WELL WORK PERMIT

Vertical Well

This permit, API Well Number: 47-8704779, 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: IVY FISCHER 203

Farm Name: KING, WILLIE

API Well Number: 47-8704779

Permit Type: Vertical Well

Date Issued: 04/24/2015

Promoting a healthy environment.

I

8704779

WW - 2B
(Rev. 8/10)

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

1) Well Operator: HG Energy, LLC 494497948 Roane Smithfield Looneyville 7.5'
Operator ID County District Quadrangle

2) Operator's Well Number: Ivy Fischer 203 3) Elevation: 1038'

4) Well Type: (a) Oil X or Gas _____
(b) If Gas: Production _____ / Underground Storage _____
Deep _____ / Shallow X

5) Proposed Target Formation(s): Big Injun Proposed Target Depth: 2000 TVD, 2690-2800'
6) Proposed Total Depth: 2570 TVD - TMD Feet Formation at Proposed Total Depth: Big Injun
7) Approximate fresh water strata depths: 375'
8) Approximate salt water depths: 1600'

9) Approximate coal seam depths: NA

10) Approximate void depths, (coal, Karst, other): NA

11) Does land contain coal seams tributary to active mine? NA

12) Describe proposed well work and fracturing methods in detail (attach additional sheets if needed)
Drill and stimulate production well in the Big Injun. Stimulation will be small hydraulic fracture.

13) 3/6/15

CASING AND TUBING PROGRAM

TYPE	SPECIFICATIONS			FOOTAGE INTERVALS		CEMENT
	Size	Grade	Weight per ft	For Drilling	Left in Well	Fill -up (Cu. Ft.)
Conductor	7"	LS ST&C	17#	500'	500'	Cement to Surface
Fresh Water						
Coal						
Intermediate						
Production	4 1/2"	J-55	10.5#	2530'	2530'	200 sks
Tubing						
Liners						

Received
Office of Oil & Gas
MAR 13 2015

Packers: Kind: _____
Sizes: _____
Depths Set _____

OFFICIAL SEAL
ATTORNEY PUBLIC
STATE OF WEST VIRGINIA
& DANIEL DUNAWAY
2000 BANKERS BLDG
PO BOX 10000, MARTINSBURG, WEST VIRGINIA 26101
MAY 10 1978



8704779

7014 0510 0000 4074 5545

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Postage	\$ 1.61
Certified Fee	3.30
Return Receipt Fee (Endorsement Required)	2.70
Restricted Delivery Fee (Endorsement Required)	
Total Postage & Fees	\$ 7.61



IMF 203

Sent To
 Willie King
 Street, Apt. No.,
 or PO Box No. 1090 Clover Road
 City, State, ZIP+4
 Spencer, WV 25276

PS Form 3800, August 2006 See Reverse for Instructions

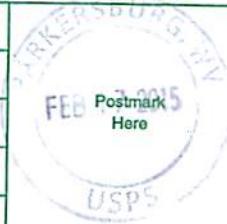
7014 0510 0000 4074 5552

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Restricted Delivery Fee (Endorsement Required)	
Total Postage & Fees	\$ 7.61



IMF203

Sent To
 Richard Fisher et al.
 Street, Apt. No.,
 or PO Box No. 4513 Clay Road
 City, State, ZIP+4
 Spencer, WV 25276

PS Form 3800, August 2006 See Reverse for Instructions

Received
Office of Oil & Gas

MAR 13 2015

WW-2A1
(Rev. 1/11)

Operator's Well Number Ivy Fischer 203

**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:

Grantor, Lessor, etc.	Grantee, Lessee, etc.	Royalty	Book/Page
J. O. Fisher	South Penn Oil Company	1/8	16/257

See Attached Document for more detail

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

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:

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

The applicant further acknowledges that any Office of Oil and Gas permit in no way overrides, replaces, or nullifies the need for other permits/approvals that may be necessary and further affirms that all needed permits/approvals should be acquired from the appropriate authority before the affected activity is initiated.

Well Operator:
By: Its:

Diane White
HG Energy, LLC
Diane White, Agent

Received
Office of Oil & Gas
MAR 13 2015

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Grantor, Lessor, etc.	Grantee, Lessee, etc.	Royalty	Book/Page
J. O. Fisher	South Penn Oil Company	1/8	16/257

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 Penzoil 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.

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- 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

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Well Operator: HG Energy, LLC
By: Diane C. White *Diane C White*
Its: Accountant

WW-2B1
(5-12)

Well No. Ivy Fischer 203

West Virginia Department 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.

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

Listed below is the laboratory chosen by operator to perform analysis, and contactor chosen to collect sample.

Certified Laboratory Name Sturm Environmental
Sampling Contractor Sturm Environmental

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 underling which one you have selected to sample and analyze. If there are no water wells or springs within 1000 feet of the proposed site, the Chief may require the operator to test wells up to 2000 feet from the proposed site.

Surface Owners with Water Sources Identified for Sampling / Analysis:

SEE
TOP
MAP

- * Willie King
1090 Clover Road
Spencer WV 25276
- * Richard Fisher
4513 Clay Road
Spencer WV 25276

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MAR 13 2015

8704779

WW-9
(5/13)

Page _____ of _____
API Number 47 - _____ - _____
Operator's Well No. Ivy Fischer 203

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

FLUIDS/ CUTTINGS DISPOSAL & RECLAMATION PLAN

Operator Name HG Energy, LLC OP Code 494497948

Watershed (HUC 10) Rush Creek of Henry's Fork Quadrangle Looneyville 7.5'

Elevation 1038' County Roane District Smithfield

Do you anticipate using more than 5,000 bbls of water to complete the proposed well work? Yes _____ No x

Will a pit be used for drill cuttings? Yes x No _____

If so, please describe anticipated pit waste: Fluids encountered while drilling subject well

Will a synthetic liner be used in the pit? Yes x No _____ If so, what ml.? 20 mil

Proposed Disposal Method For Treated Pit Wastes:

- Land Application
- Underground Injection (UIC Permit Number 25-561)
- Reuse (at API Number _____)
- Off Site Disposal (Supply form WW-9 for disposal location)
- Other (Explain _____)

Will closed loop system be used? No

Drilling medium anticipated for this well? Air, freshwater, oil based, etc. Air, Fresh Water

-If oil based, what type? Synthetic, petroleum, etc. NA

Additives to be used in drilling medium? 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.

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Office of Oil & Gas
MAR 13 2015

Company Official Signature Diane White

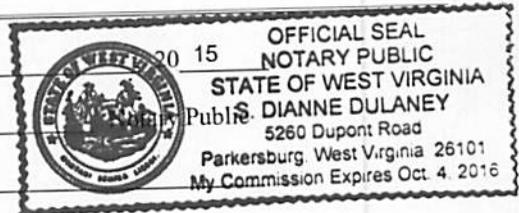
Company Official (Typed Name) Diane White

Company Official Title Agent

Subscribed and sworn before me this 16th day of February

[Signature]

My commission expires Oct. 4, 2016



IN WITNESS WHEREOF, I have hereunto set my hand and the seal of my office, this 15th day of August, 2015.

Notary Public for the State of West Virginia

My Commission Expires 08/15/17

My Office is located at



[Handwritten signature]

Form WW-9

Operator's Well No. Ivy Fischer 203

Proposed Revegetation Treatment: Acres Disturbed 1.2 acres Prevegetation pH _____

Lime 3 Tons/acre or to correct to pH 6.5

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

Mulch Straw 2 Tons/acre

Seed Mixtures

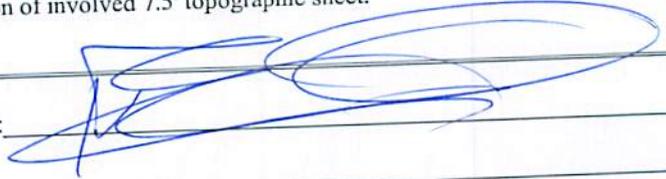
Seed Type	Area I	lbs/acre
Tall Fescue		40
Ladino Clover		5

Seed Type	Area II	lbs/acre
Tall Fescue		40
Ladino Clover		5

****Sediment Control Should Be in Place at all Times****

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

Photocopied section of involved 7.5' topographic sheet.

Plan Approved by: 

Comments: _____

Title: Inspector

Date: 3/6/15

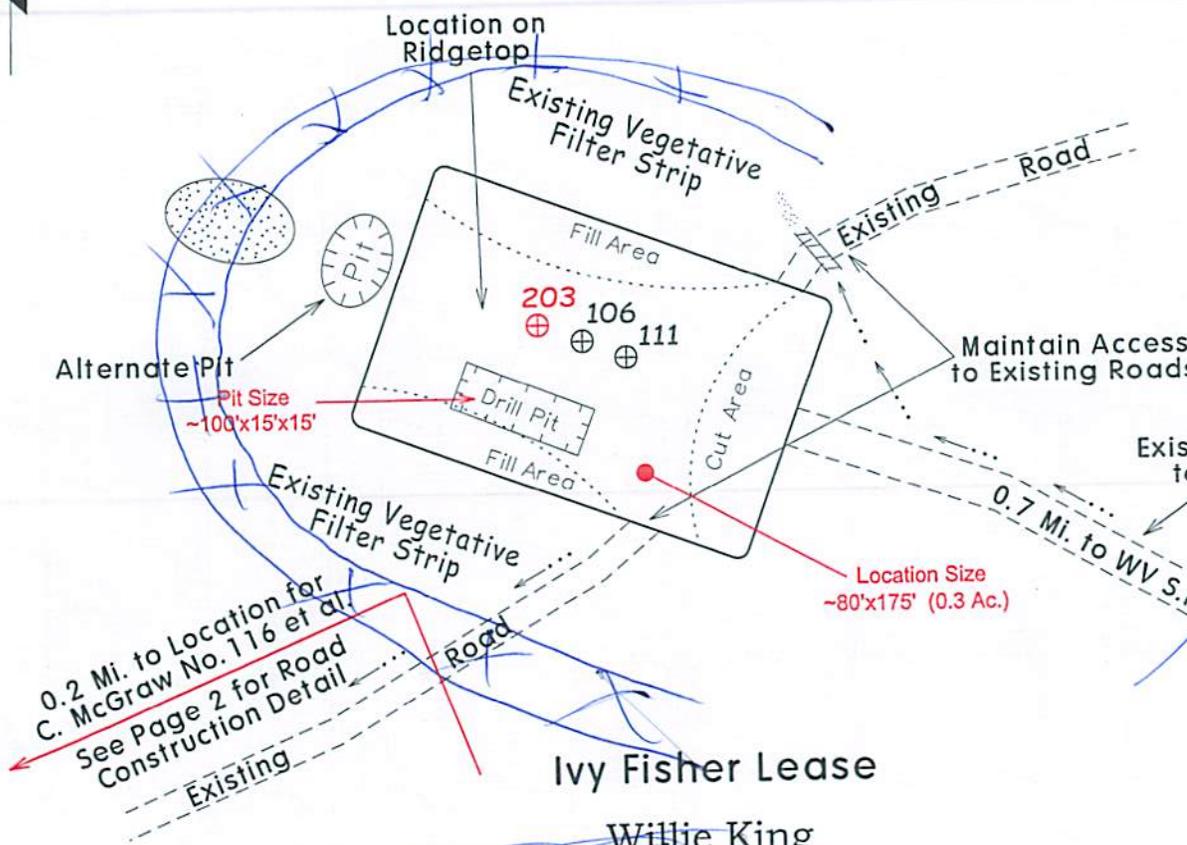
Field Reviewed? Yes No

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MAR 13 2015

Reclamation Plan For:

Ivy Fisher No. 111
 Ivy Fisher No. 203 &
 Jackson Long No. 106

8704779



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

0.2 Mi. to Location for
 C. McGraw No. 116 et al.
 See Page 2 for Road
 Construction Detail

Match line

See Page 2 for
 Road Detail to
 State Route 36

Ivy Fisher Lease

Willie King
 - Surface

Notes:

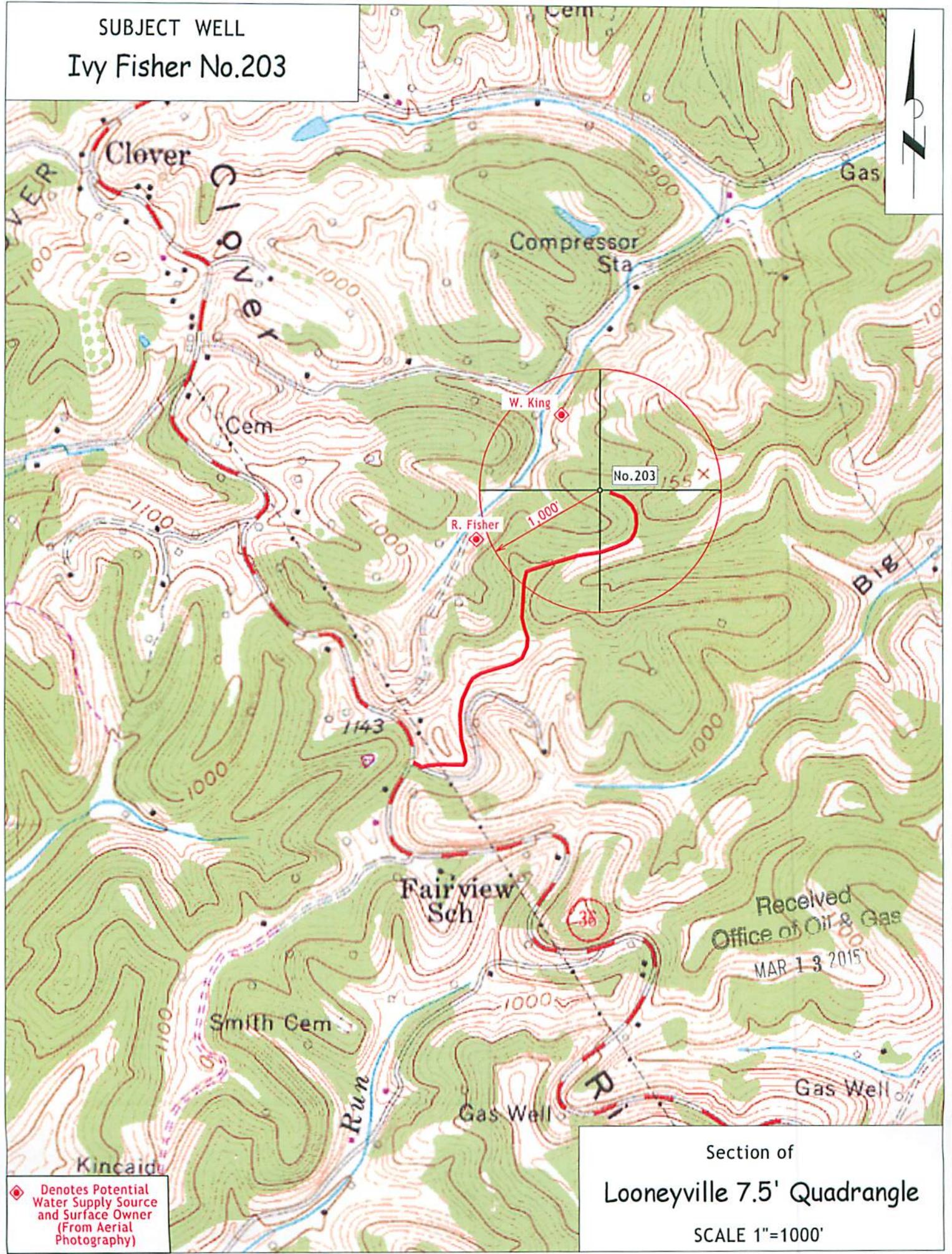
- REQUESTED PERMIT IS FOR DRILLING OF NEW WELL.
- SOME ACCESS ROADS ARE EXISTING AND WILL BE UPGRADED TO WVDEP STANDARDS. NEW STRUCTURES WILL BE INSTALLED AS SHOWN.
- STOCKPILE TOPSOIL FOR RE-DRESSING LOCATION DURING RECLAMATION
- ALL DISTURBED AREAS WILL BE RE-VEGETATED AS OUTLINED ON FORM WW-9.
- MAINTAIN SEDIMENT BARRIERS AND DRAINAGE STRUCTURES.
- ALL ROAD GRADES <5% EXCEPT AS NOTED.
- LOCATION OF DRILL PIT MAY BE CHANGED BASED ON AS-BUILT CONSIDERATIONS.
- DRAWING NOT TO SCALE.

Received
 Office of Oil & Gas
 MAR 13 2015

3/6/15

See Page 2 for
 Road to Additional Wells

SUBJECT WELL
Ivy Fisher No.203



◆ Denotes Potential Water Supply Source and Surface Owner (From Aerial Photography)

Section of
Looneyville 7.5' Quadrangle
SCALE 1"=1000'

8704779

(BOT. HL: LON:-81°16'35.6") | LON: -81°16'28.9" 7045'

SURVEY NOTES

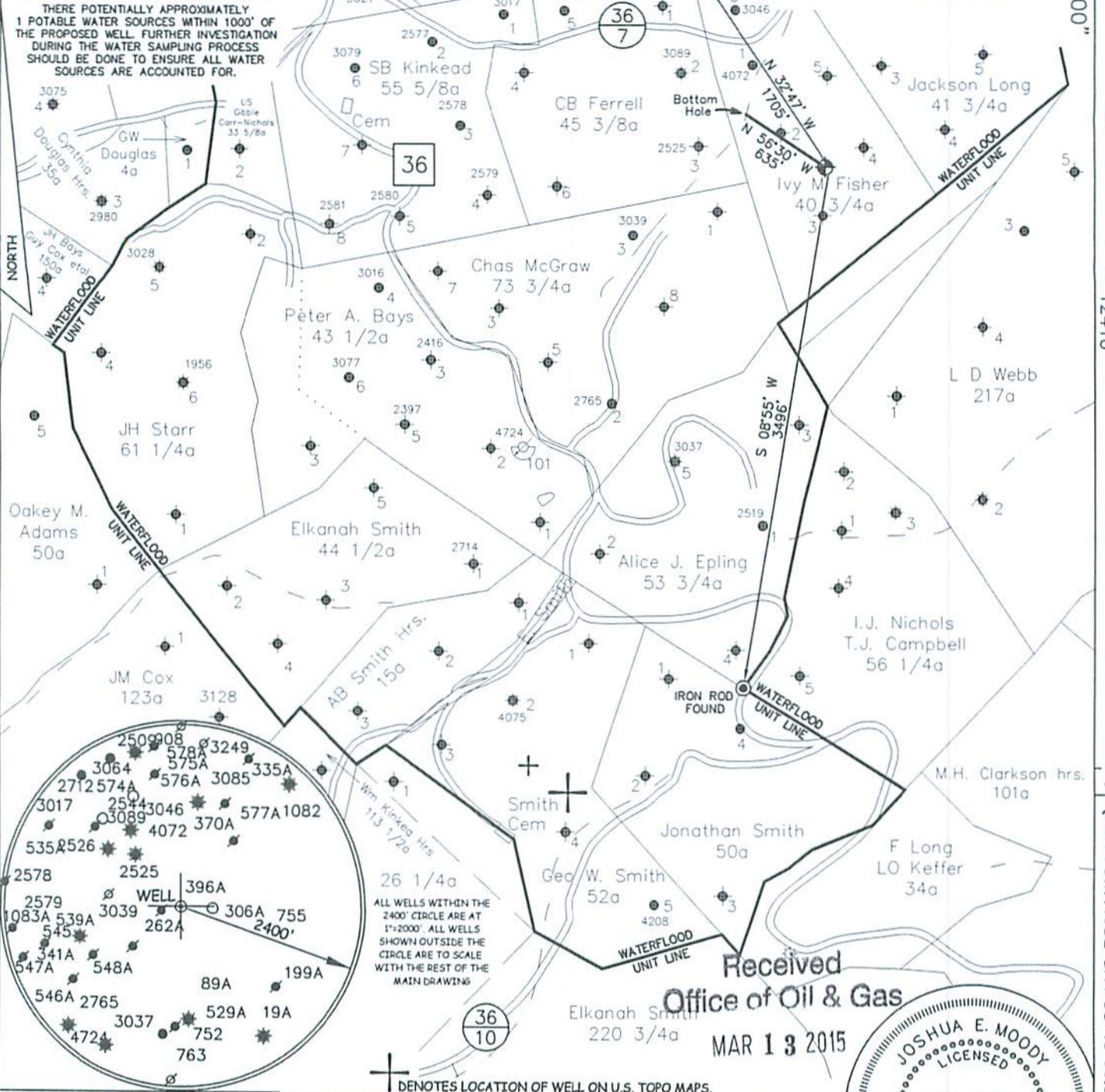
- 1 - Well ties and Latitude and Longitude were measured by DGPS (Sub-meter Mapping Grade). Bearings are referenced to UTM Grid North (Zone 17 North - NAD 1927).
- 2 - Surface owners and adjoining information obtained from the Roane County Assessor's tax records.
- 3 - No Title Opinion was provided to the Surveyor during this survey. This survey is subject to a complete title Opinion.
- 4 - Existing well spots from HGE or Seneca Tech, Inc. data

UTM Coordinates (Zone 17N-NAD 1983)	
Surface	N-4,285,299m. E-476,133m.
Bottom Hole	N-4,285,406m. E-475,972m.

LOCATION REFERENCES	
MAGNETIC BEARING	S 10° E 110.9' 6" HICKORY
	S 84° E 139.8' 10" HICKORY

LAT: 38°45'00"
**MAP OF
 H.G. ENERGY, LLC
 -WATERFLOOD UNIT-
 IVY FISCHER 203**

LON: 81°15'00"



12410'

LAT: 38°42'57.3"

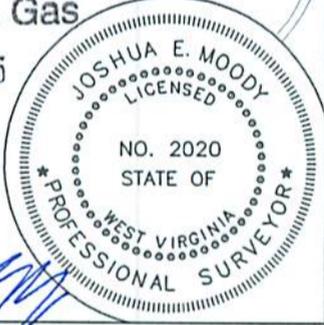
(BOTTOM HOLE: LAT: 38°43'00.8")

JOB # 14-033
 DRAWING # 14CLOVER FOLDER
 SCALE 1" = 1000'
 MINIMUM DEGREE OF ACCURACY 1/200
 PROVEN SOURCE OF ELEV. MAPPING GRADE GPS

I THE UNDERSIGNED, HEREBY CERTIFY THAT THIS PLAT IS CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF AND SHOWS ALL THE INFORMATION REQUIRED BY LAW AND THE REGULATIONS ISSUED AND PERSCRIBED BY THE DEPARTMENT OF ENVIRONMENTAL PROTECTION.



**WEST VIRGINIA DEPARTMENT
 OF ENVIRONMENTAL PROTECTION,
 OFFICE OF OIL AND GAS**
MOODY LAND SURVEYING, LLC
 ST. MARYS, WV 26170



JOSHUA E. MOODY, P.S. 2020
 DATE 12/15/14
 OPERATOR'S WELL
 IVY FISCHER # 203

WEST VIRGINIA DEPARTMENT
 OF ENVIRONMENTAL PROTECTION
 OFFICE OF OIL AND GAS

WELL TYPE: OIL GAS LIQUID INJECTION WASTE DISPOSAL HORIZONTAL
 (IF "GAS") PRODUCTION STORAGE DEEP SHALLOW
 LOCATION: ELEVATION 1038' WATERSHED RUSH CREEK OF HENRYS FORK API WELL #
 DISTRICT SMITHFIELD COUNTY ROANE 47 - 087 - 04779
 QUADRANGLE LOONEYVILLE 7.5' STATE COUNTY PERMIT

SURFACE OWNER WILLIE KING ACREAGE 40.16 ACRES +/-
 OIL & GAS ROYALTY OWNER PEARLE TAYLOR ET AL LEASE ACREAGE 40.75 ACRES +/-
 PROPOSED WORK: DRILL CONVERT DRILL DEEPER REDRILL FRACTURE OR
 STIMULATE PLUG OFF OLD FORMATION PERFORATE NEW FORMATION
 OTHER PHYSICAL CHANGE IN WELL (SPECIFY) WELL WILL BE DRILLED DIRECTIONALLY (N 56°30' W 635')
 PLUG & ABANDON CLEAN OUT & REPLUG
 TARGET FORMATION BIG INJUN ESTIMATED DEPTH TVD=2,200' MD=2,570'
 WELL OPERATOR H.G. ENERGY, LLC DESIGNATED AGENT DIANE WHITE
 ADDRESS 5260 DuPONT ROAD ADDRESS 5260 DuPONT ROAD
 PARKERSBURG, WV 26101 PARKERSBURG, WV 26101

FORM WW-6

LEASE # 57015-00

COUNTY NAME PERMIT

8704779



HG Energy, LLC
5260 Dupont Road
Parkersburg, WV 26101
(304) 420-1100 - Office
(304) 863-3172 - Fax

Received
Office of Oil & Gas
MAR 13 2015

February 13, 2015

CK # 2947

650⁰⁰

Mr. Jeff McLaughlin
West Virginia Department of Environmental Protection
Division of Oil & Gas
601 57th Street
Charleston, West Virginia 25304

RE: Ivy Fischer No. 203
Smithfield District, Roane County
West Virginia

Dear Mr. McLaughlin:

Enclosed are the Forms WW-2A, WW-2A (1), WW-2B, WW-9, WW-2(B1), mylar of plat, reclamation plan, topo map and copy of the certified mailing receipt for a permit to drill the above-captioned shallow, producing well. Our check in the amount of \$650 is attached.

If you have any questions regarding this application, please call me at 304-420-1119.

Very truly yours,

Diane White

Diane C. White

Enclosures

cc: Willie King - Certified
Richard Fisher - Certified
Ed Gainer - Inspector