



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

March 31, 2015

WELL WORK PERMIT

Vertical Well

This permit, API Well Number: 47-8704777, 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: C. MCGRAW 207

Farm Name: KING, WILLIE

API Well Number: 47-8704777

Permit Type: Vertical Well

Date Issued: 03/31/2015

Promoting a healthy environment.

04/03/2015

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.

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: Charles McGraw 207 3) Elevation: 1057'

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

5) Proposed Target Formation(s): Big Injun Proposed Target Depth: 2210 TMD, 2610 TMD

6) Proposed Total Depth: 2610 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.

[Handwritten signature]
2/17/15

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#	2570'	2570'	REG 200 sks
Tubing						Office of Oil and Gas
Liners						FEB 23 2015

Packers: Kind: _____
 Sizes: _____
 Depths Set _____

WV Department of
Environmental Protection

WW-2A
(Rev. 6-14)

1.) Date: February 12, 2015
2.) Operator's Well Number Charles McGraw 207
State 47- County Roane Permit _____
3.) API Well No.: _____

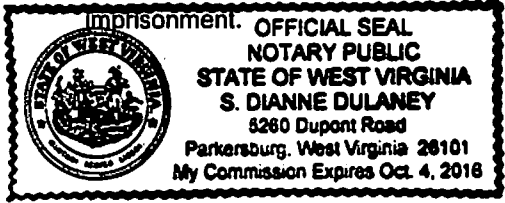
**STATE OF WEST VIRGINIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS
NOTICE AND APPLICATION FOR A WELL WORK PERMIT**

4) Surface Owner(s) to be served:
(a) Name Richard Fisher ✓
Address 4513 Clay Road ✓
Spencer, WV 25276
(b) Name Willie King ✓
Address 1090 Clover Road ✓
Spencer, WV 25276
(c) Name _____
Address _____
6) Inspector Ed Gainer
Address P. O. Box 821
Spencer, WV 25276
Telephone 304-389-7582
5) (a) Coal Operator
Name _____
Address _____
(b) Coal Owner(s) with Declaration
Name _____
Address _____
(c) Coal Lessee with Declaration
Name _____
Address _____

TO THE PERSONS NAMED ABOVE TAKE NOTICE THAT:

OR
x Included is the lease or leases or other continuing contract or contracts by which I hold the right to extract oil and gas
OR
x 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 22-6 of the West Virginia Code I have served copies of this notice and application, a location plat, and accompanying documents pages 1 through ___ on the above named parties by:
 Personal Service (Affidavit attached)
 x Certified Mail (Postmarked postal receipt attached)
 Publication (Notice of Publication attached)

I have read and understand Chapter 22-6 and 35 CSR 4, 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.



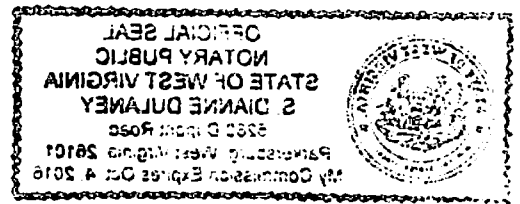
Well Operator HG Energy, LLC
By: Diane White *Diane White*
Its: Agent
Address: 5260 Dupont Road
Parkersburg, WV 26101
Telephone: 304-420-1119
Email: dwhite@hgenergyllc.com

Subscribed and sworn before me this 12 day of February, 2015

S. Dianne Dulaney
My Commission Expires Oct. 4, 2018

RECEIVED
Notary Public
Office of Oil and Gas

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 not intentionally use 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
FEB 23 2015
Environmental Protection
04/03/2015



04/03/2015

8704777

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

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



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

4845 4204 0000 0150 4102

U.S. Postal Service™
CERTIFIED MAIL™ RECEIPT
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OFFICIAL USE

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



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

1645 4204 0000 0150 4102

PAY TO THE ORDER OF WV D.F.P.
 Six Hundred Fifty Dollars and 00/100 -----
 Peoples BANK
 Working Together. Building Success.
 800.374.6123
 peoplesbankcorp.com
 FOR Permit - Charles McGraw No. 207

HG ENERGY, LLC 03-11
 304-422-6565
 5260 DUPONT RD
 PARKERSBURG, WV 26101

DATE 2-13-2015

\$ 650.00 DOLLARS

2941
 56-250/442 02

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 Office of Oil and Gas
 FEB 23 2015
 WV Department of Environmental Protection
 04/03/2015

MP



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 I 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
CH and Mary McGraw	South Penn Oil Company	1/8	17/570

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**

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
- US Fish and Wildlife Service
- County Floodplain Coordinator

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Office of Oil and Gas

FEB 23 2015

Well Operator: HG Energy, LLC **WV Department of**
 By: Diane C. White **Environmental Protection**
 Its: Accountant **04/03/2015**

**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 –

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Grantor, Lessor, etc.	Grantee, Lessee, etc.	Royalty	Book/Page
CH and Mary McGraw	South Penn Oil Company	1/8	17/570

See Attached Document for more detail

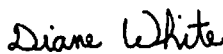
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- WV Division of Water and Waste Management
- WV Division of Natural Resources
- WV Division of Highways
- U.S. Army Corps of Engineers
- U.S. Fish and Wildlife Service
- County Floodplain Coordinator

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:



 HG Energy, LLC
 Diane White, Agent

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 FEB 23 2015
 WV Department of
 Environmental Protection
 04/03/2015

WW-2B1
(5-12)

Well No. Charles McGraw 207

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:
* Richard Fisher
4513 Clay Road
Spencer WV 25276

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WV Department of
Environmental Protection

SEE TOPO MAP

8704777

WW-9
(5/13)

Page _____ of _____
API Number 47 - _____ - _____
Operator's Well No. Charles McGraw 207

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 Henrys Fork Quadrangle Looneyville 7.5'

Elevation 1057' 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.

Company Official Signature Diane White

Company Official (Typed Name) Diane White

Company Official Title Agent

Subscribed and sworn before me this 12th day of February

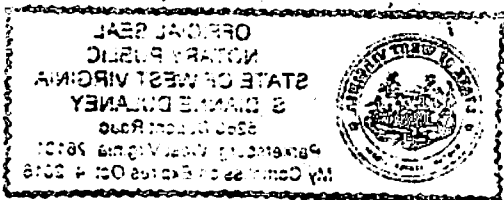
[Signature]
Oct. 4, 2016

My commission expires Oct. 4, 2016



Notary Public
WV Department of
Environmental Protection

04/03/2015



04/03/2015

8704777

Form WW-9

Operator's Well No. Charles McGraw 207

Proposed Revegetation Treatment: Acres Disturbed 2.1 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

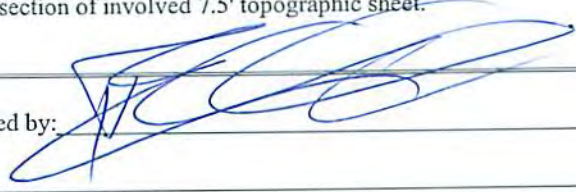
Seed Type	Area I	lbs/acre	Seed Type	Area II	lbs/acre
Tall Fescue		40	Tall Fescue		40
Ladino Clover		5	Ladino Clover		5

****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: 2/17/15 RECEIVED
Office of Oil and Gas

Field Reviewed? Yes No

FEB 23 2015

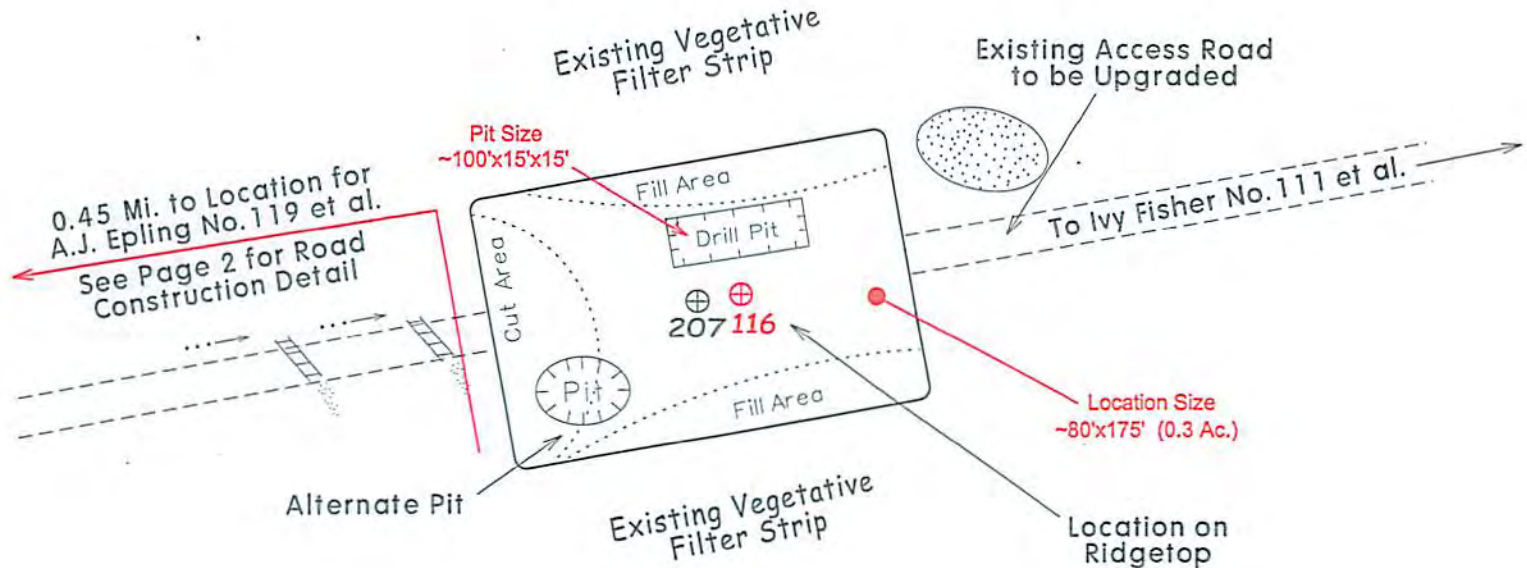
WV Department of Environmental Protection

04/03/2015

Reclamation Plan For:

Charles McGraw No. 116
Charles McGraw No. 207

[Handwritten Signature]
 2/17/15



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.

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 Office of Oil and Gas

FEB 23 2015

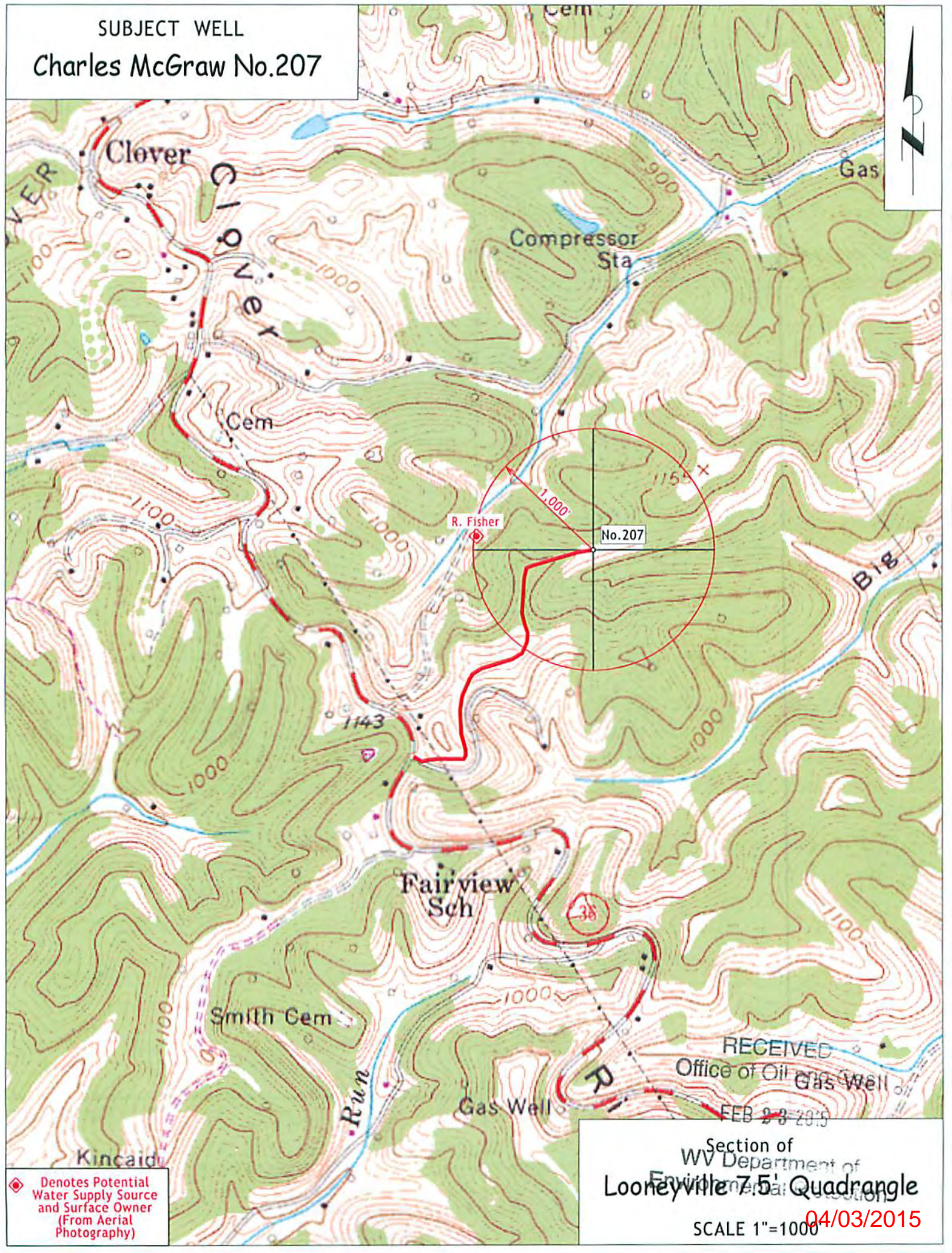
WV Department of
 Environmental Protection

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

See Page 2 for
 Road to Additional Wells

8704777

SUBJECT WELL
Charles McGraw No.207



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

RECEIVED
Office of Oil and Gas Well
FEB 23 2015

Section of WV Department of Environmental Protection
Looneyville 7.5' Quadrangle
SCALE 1"=1000' 04/03/2015

(BOT. HL: LON:-81°16'35.5") LON: -81°16'29.5" 7100'

LAT: 38°45'00"

MAP OF H.G. ENERGY, LLC -WATERFLOOD UNIT- C. MCGRAW 207

LON: 81°15'00"

12925'

LAT: 38°42'52.2"

(BOTTOM HOLE: LAT: 38°42'51.9")

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).

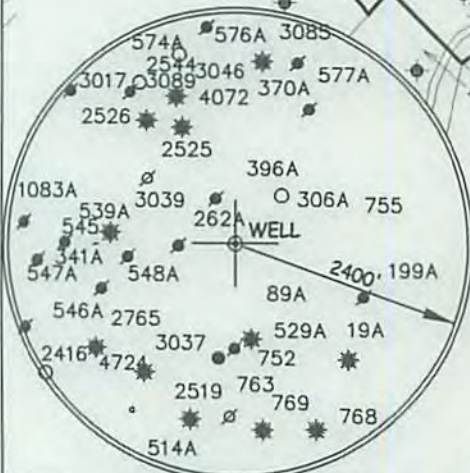
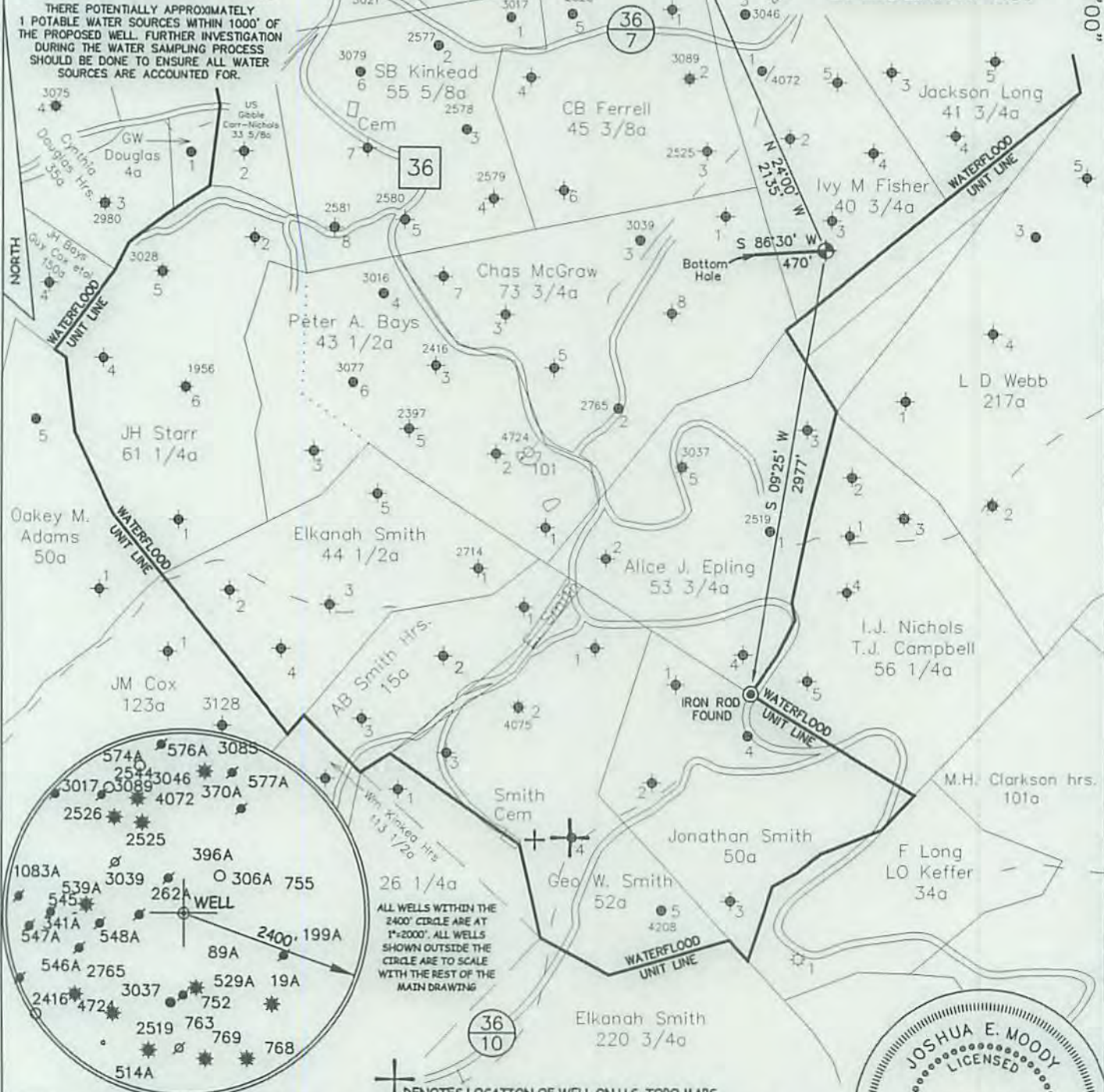
2 - Surface owners and adjoining information obtained from the Roane County Assessor's tax records.

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-4,285,142m. E-476,117m.
Bottom Hole	N-4,285,133m. E-475,974m.

LOCATION REFERENCES	
MAGNETIC BEARING	
N 48° E 127.0'	12" HICKORY
S 46° E 83.4'	8" HICKORY



ALL WELLS WITHIN THE 2400' CIRCLE ARE AT 1"=2000'. ALL WELLS SHOWN OUTSIDE THE CIRCLE ARE TO SCALE WITH THE REST OF THE MAIN DRAWING

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
C. MCGRAW # 207

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 1057' WATERSHED RUSH CREEK OF HENRYS FORK API WELL # 47-087-04777
DISTRICT SMITHFIELD COUNTY ROANE STATE 47 COUNTY 087 PERMIT 04777
QUADRANGLE LOONEYVILLE 7.5'

SURFACE OWNER WILLIE KING ACREAGE 40.16 ACRES +/-
OIL & GAS ROYALTY OWNER GEORGE W. CARR ET AL LEASE ACREAGE 75.00 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 (S 86°30' W 470')
PLUG & ABANDON CLEAN OUT & REPLUG
TARGET FORMATION BIG INJUN ESTIMATED DEPTH TVD=2,210' MD=2,610'
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 # 61420-50

04/03/2015

COUNTY NAME PERMIT

PARKERSBURG, WV 26101 ADDRESS
 H.G. ENERGY, LLC WELL OPERATOR
 BIG INJUN TARGET FORMATION
 PLUG & ABANDON CLEAN OUT & REPLUG OTHER PHYSICAL CHANGE IN WELL (SPECIFY) WELL WILL BE DRILLED DIRECTIONALLY (S 88°30' W 470')

PLUG OFF OLD FORMATION PERFORATE NEW FORMATION
 PROPOSED WORK: DRILL X CONVERT DRILL DEEPER REDRILL FRACTURE OR
 OIL & GAS ROYALTY OWNER GEORGE W. CARR ET AL
 SURFACE OWNER WILLIE KING

04/03/2015

QUADRANGLE LOONEYVILLE 7.5, DISTRICT SMITHFIELD COUNTY ROANE STATE 47 - 087 - 04777 PERMIT
 ACRES 40.16 ACRES +/-
 ACRES 75.00 ACRES +/-

WELL TYPE: OIL X GAS LIQUID INJECTION WASTE DISPOSAL HORIZONTAL
 ("IF GAS") PRODUCTION STORAGE DEEP SHALLOW X
 LOCATION: ELEVATION 1027 WATERSHED RUSH CREEK OF HENRY'S FORK
 COUNTY ROANE STATE 47 - 087 - 04777 PERMIT

WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION OFFICE OF OIL AND GAS

ST. MARYS, WV 26170 WOODY LAND SURVEYING, LLC



MAPING GRADE GPS PROVEN SOURCE OF ELEV. ACCURACY 1/200 MINIMUM DEGREE OF SCALE 1" = 100'

WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION OFFICE OF OIL AND GAS

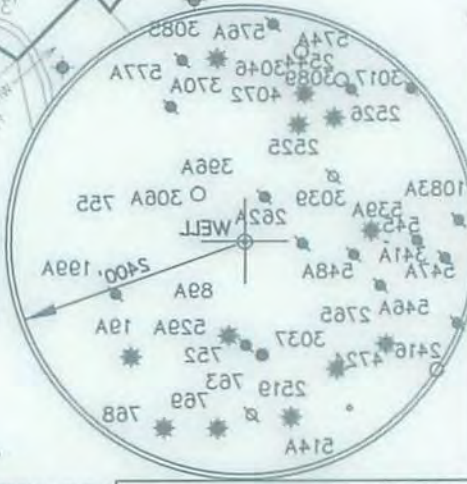
DRAWING # 14CLOVER FOLDER JOB # 14-033

THE DEPARTMENT OF ENVIRONMENTAL PROTECTION
 REQUIRED BY LAW AND THE REGULATIONS ISSUED AND DESCRIBED BY
 THE BEST OF MY KNOWLEDGE AND BELIEF AND SHOWS ALL THE INFORMATION
 I THE UNDERSIGNED, HEREBY CERTIFY THAT THIS PLAN IS CORRECT TO
 DENOTES LOCATION OF WELL ON U.S. TOPO MAPS.

C. MCGRAW # 207 OPERATOR'S WELL
 DATE 12/15/14
 JOSHUA E. MOODY, P.S. 2020 WEST VIRGINIA SURVEYOR
 NO. 2020 STATE OF WEST VIRGINIA



WITH THE REST OF THE MAIN DRAWING
 CIRCLE ARE TO SCALE
 SHOWN OUTSIDE THE
 1:2000'. ALL WELLS
 2400' CIRCLE ARE AT
 ALL WELLS WITHIN THE



1 - Well logs and latitude and longitude were measured by DGPS (Differential Global Positioning System) and recorded at UTM Grid North (Zone 17 North - NAD 1983).
 2 - Surface elevations and owners information obtained from the Boone County Assessor's tax records.
 3 - All title opinion was provided to the surveyor. This survey is subject to a complete title opinion.
 4 - Existing well spots from HGE or Geacis Tech, Inc data.
 5 - These POTENTIALLY APPROXIMATELY 1 POTABLE WATER SOURCES WITHIN 1000' OF THE PROPOSED WELL. FURTHER INVESTIGATION DURING THE WATER SAMPLING PROCESS SHOULD BE DONE TO ENSURE ALL WATER SOURCES ARE ACCOUNTED FOR.

UTM Coordinates (Zone 17N NAD 1983)
 Surface E-478,177m N-4,282,142m
 Hole E-475,974m N-4,282,133m

LOCATION REFERENCES
 MAGNETIC BEARING
 N48°E 127.0' 12. HICKORY
 S46°E 83.4' 8. HICKORY

MAP OF
 H.G. ENERGY, LLC
 -WATERFLOOD UNIT-
 C. MCGRAW 207
 LAT: 38°45'00"
 LON: 81°12'00"

BOTTOM HOLE: TVL:38°45'25".S" (LAT:38.45.25".S")
 15852.
 1700.
 (BOT. HL: LON: -81°16'.25".E") (LON: -81.16.25".E")

8704777



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

CK 2941
6500

February 12, 2015

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

RE: Charles McGraw No. 207
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: Richard Fisher – Certified
Willie King - Certified
Ed Gainer - Inspector

RECEIVED
Office of Oil and Gas
FEB 23 2015
WV Department of
Environmental Protection

04/03/2015