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west virginia department of environmental protection

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Office of Oil and Gas  
601 57<sup>th</sup> Street, S.E.  
Charleston, WV 25304  
(304) 926-0450  
fax: (304) 926-0452

Harold D. Ward, Cabinet Secretary  
[www.dep.wv.gov](http://www.dep.wv.gov)

Monday, February 1, 2021  
WELL WORK PERMIT  
Vertical / Re-Work

HG ENERGY, LLC  
5260 DUPONT ROAD  
PARKERSBURG, WV 26101

Re: Permit approval for CHARLES MCGRAW 205  
47-087-04748-00-00

This well work permit 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 any additional specific 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 of 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.

Per 35 CSR 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- 0450.

James A. Martin  
Chief

Operator's Well Number: CHARLES MCGRAW 205  
Farm Name: SNODGRASS, REVA ET AL  
U.S. WELL NUMBER: 47-087-04748-00-00  
Vertical Re-Work  
Date Issued: 2/1/2021

## 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.

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### CONDITIONS

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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	Lincoln	Duval	Griffithsville 7.5'
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Operator ID      County      District      Quadrangle

2) Operator's Well Number: C. H. McGraw 205      3) Elevation: 1120'

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: 2396'

6) Proposed Total Depth: 2601' Feet      Formation at Proposed Total Depth: Shale

7) Approximate fresh water strata depths: None

8) Approximate salt water depths: 1820'

9) Approximate coal seam depths: None

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)

Stimulate production well in the Big Injun. Stimulation will be small hydraulic fracture. ≈ 2386' - 2414' MD

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NO EXISTING PERFORATIONS

13) CASING AND TUBING PROGRAM

TYPE	SPECIFICATIONS			FOOTAGE INTERVALS		CEMENT
	Size	Grade	Weight per ft	For Drilling	Left in Well	Fill -up (Cu. Ft.)
Conductor	11 5/8"	LS		30'	30'	Sand In
Fresh Water	7"	LS	17#	550'	550'	CTS
Coal						
Intermediate						
Production	4 1/2"	J-55	10.5#	2540.8'	2540.8'	150 sks
Tubing						
Liners						

Packers: Kind: \_\_\_\_\_  
              Sizes: \_\_\_\_\_  
              Depths Set \_\_\_\_\_

*[Signature]*  
12-8-20



WR-35  
Rev. 8/23/13

State of West Virginia  
Department of Environmental Protection - Office of Oil and Gas  
Well Operator's Report of Well Work

API 47-087-04748 County ROANE District SMITHFIELD  
Quad LOONEYVILLE 7.5' Pad Name CHARLES MCGRAW Field/Pool Name CLOVER  
Farm name SNODGRASS, REVA ET AL Well Number 205  
Operator (as registered with the OOG) H.G. ENERGY LLC  
Address 5260 DuPONT ROAD City PARKERSBURG State WV Zip 26101

As Drilled location NAD 83/UTM Attach an as-drilled plat, profile view, and deviation survey  
Top hole Northing 4,285,358 M Easting 475,291 M  
Landing Point of Curve Northing \_\_\_\_\_ Easting \_\_\_\_\_  
Bottom Hole Northing 4,285,120 M Easting 475,300 M

Elevation (ft) 1,110' GL Type of Well  New  Existing Type of Report  Interim  Final  
Permit Type  Deviated  Horizontal  Horizontal 6A  Vertical Depth Type  Deep  Shallow  
Type of Operation  Convert  Deepen  Drill  Plug Back  Redrilling  Rework  Stimulate  
Well Type  Brine Disposal  CBM  Gas  Oil  Secondary Recovery  Solution Mining  Storage  Other \_\_\_\_\_  
Type of Completion  Single  Multiple Fluids Produced  Brine  Gas  NGL  Oil  Other \_\_\_\_\_  
Drilled with  Cable  Rotary

Drilling Media Surface hole  Air  Mud  Fresh Water Intermediate hole  Air  Mud  Fresh Water  Brine  
Production hole  Air  Mud  Fresh Water  Brine  
Mud Type(s) and Additive(s)  
N/A

Date permit issued 11/18/14 Date drilling commenced 1/15/15 Date drilling ceased 1/22/15  
Date completion activities began 3/23/15 Date completion activities ceased 4/30/15  
Verbal plugging (Y/N) N Date permission granted \_\_\_\_\_ Granted by \_\_\_\_\_

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Please note: Operator is required to submit a plugging application within 5 days of verbal permission to plug

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Freshwater depth(s) ft None Open mine(s) (Y/N) depths None  
Salt water depth(s) ft 1820' Void(s) encountered (Y/N) depths None  
Coal depth(s) ft None Cavern(s) encountered (Y/N) depths None  
Is coal being mined in area (Y/N) N

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Environmental Protection

Reviewed by: \_\_\_\_\_

WR-35  
Rev. 8/23/13

API 47-087 - 04748 Farm name SNODGRASS, REVA ET AL Well number 205

CASING STRINGS	Hole Size	Casing Size	Depth	New or Used	Grade wt/ft	Basket Depth(s)	Did cement circulate (Y/N) * Provide details below*
Conductor	12 1/4"	11 5/8"	30'	Used	LS		Sand In
Surface	8 3/4"	7"	550'	New	LS	64'	Y
Coal							
Intermediate 1							
Intermediate 2							
Intermediate 3							
Production	6 1/4"	4 1/2"	2540.8'	New	J-55		N
Tubing							
Packer type and depth set							

Comment Details Circulated Est. 25 sks to surface on 7" surface cement job. Did not circulate to surface on 4 1/2" cement job.

CEMENT DATA	Class/Type of Cement	Number of Sacks	Slurry wt (ppg)	Yield (ft <sup>3</sup> /sks)	Volume (ft <sup>3</sup> )	Cement Top (MD)	WOC (hrs)
Conductor							
Surface	Reg Neat	140	15.6	1.18	165.2	Surface	8
Coal							
Intermediate 1							
Intermediate 2							
Intermediate 3							
Production	50:50 Pozmix	115/125	13.2/14.2	1.64/1.27	189/186	344'	8
Tubing							

Drillers TD (ft) 2601' Loggers TD (ft) 2592'  
 Deepest formation penetrated Big Injun Plug back to (ft) N/A  
 Plug back procedure N/A

Kick off depth (ft) 550'

Check all wireline logs run  caliper  density  deviated/directional  induction  
 neutron  resistivity  gamma ray  temperature  sonic

Well cored  Yes  No Conventional Sidewall Were cuttings collected  Yes  No

DESCRIBE THE CENTRALIZER PLACEMENT USED FOR EACH CASING STRING

20 Centralizers every 88 from bottom on 4 1/2", Centralizer placed mid string on 7"

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WAS WELL COMPLETED AS SHOT HOLE  Yes  No DETAILS WV Department of Environmental Protection

WAS WELL COMPLETED OPEN HOLE?  Yes  No DETAILS

WERE TRACERS USED  Yes  No TYPE OF TRACER(S) USED

*JP*





API 47- 087 - 04748 Farm name SNODGRASS, REVA ET AL Well number 205

<u>PRODUCING FORMATION(S)</u>	<u>DEPTHS</u>			
Big Injun	2158'- 2178'	TVD	2386'- 2414'	MD
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____

Please insert additional pages as applicable.

GAS TEST  Build up  Drawdown  Open Flow OIL TEST  Flow  Pump

SHUT-IN PRESSURE Surface \_\_\_\_\_ psi Bottom Hole \_\_\_\_\_ psi DURATION OF TEST \_\_\_\_\_ hrs

OPEN FLOW Gas \_\_\_\_\_ mcfpd Oil \_\_\_\_\_ bpd NGL \_\_\_\_\_ bpd Water \_\_\_\_\_ bpd  
 GAS MEASURED BY  Estimated  Orifice  Pilot

LITHOLOGY/ FORMATION	TOP DEPTH IN FT NAME TVD	BOTTOM DEPTH IN FT TVD	TOP DEPTH IN FT MD	BOTTOM DEPTH IN FT MD	DESCRIBE ROCK TYPE AND RECORD QUANTITY AND TYPE OF FLUID (FRESHWATER, BRINE, OIL, GAS, H <sub>2</sub> S, ETC)
Sand/Shale	0	994	0	996	
Sand	994	1098	996	1102	
Shale	1098	1183	1102	1190	
Sand	1183	1374	1190	1386	
Shale	1374	1686	1386	1736	
Sand	1686	1993	1736	2152	
Little Lime	1993	2007	2152	2172	
Pencil Cave	2007	2015	2172	2184	
Big Lime	2015	2132	2184	2350	
Keener	2132	2158	2350	2386	
Big Injun	2158	2178	2386	2414	Drilled directional S 6° E a distance of 728'
Shale	2178	2305	2414	2601	
TD	2305		2601		

Please insert additional pages as applicable.

Drilling Contractor Decker Drilling  
 Address 11565 State Route 676 City Vincent State OH Zip 45784

Logging Company Weatherford International  
 Address 777 North River Avenue City Weston State WV Zip 26452 RECEIVED Office of Oil and Gas

Cementing Company Universal Services  
 Address Hall Rd City Buckhannon State WV Zip 26201 DEC 16 2020

Stimulating Company Producers Service Corp.  
 Address 109 South Graham Street City Zanesville State OH Zip 43701 WV Department of Environmental Protection

Please insert additional pages as applicable.

Completed by Roger Heldman Telephone 304-420-1107  
 Signature *Roger Heldman* Title Operations Manager Date 5/1/15

Submittal of Hydraulic Fracturing Chemical Disclosure Information Attach copy of FRACFOCUS Registry

JDT

Form WW-2A(1)  
(10/10)

Operator's Well No. C H McGraw 205

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>
C.H. 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,

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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.

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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.

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Environmental Protection

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

Well Operator: HG Energy, LLC

By: Diane C. White *Diane C White*  
Its: Accountant



WW-2A  
(Rev. 6-14)

1.) Date: November 23, 2020  
2.) Operator's Well Number C. H. McGraw 205  
State County Permit  
3.) API Well No.: 47-087-04748

**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 Ed Asbury  
Address 5345 Laguna Vista Drive  
Melbourne, FL 32934  
(b) Name \_\_\_\_\_  
Address \_\_\_\_\_  
(c) Name \_\_\_\_\_  
Address \_\_\_\_\_  
6) Inspector Joe Taylor  
Address 1478 Claylick Road  
Ripley, WV 25271  
Telephone 304-380-7473

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

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**TO THE PERSONS 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)

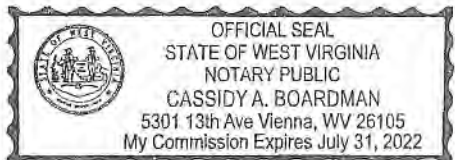
I certify that as required under Chapter 22-6 of the West Virginia Code I have served copies of this notice and application, a location plat, and accompanying documents pages 1 through      on the above named parties by:

- Personal Service (Affidavit attached)
- 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@hgeneravllc.com

Subscribed and sworn before me this 23rd day of November

Cassidy A. Boardman Notary Public  
My Commission Expires 7/31/2022

Oil and Gas Privacy Notice

The Office of Oil and Gas processes your personal information, such as name, address and phone number, as a part of our regulatory duties. Your personal information may be disclosed to other State agencies or third parties in the normal course of business or as needed to comply with statutory or regulatory requirements, including Freedom of Information Act requests. Our office will appropriately secure your personal information. If you have any questions about our use of your personal information, please contact DEP's Chief Privacy Officer at [depprivacyofficer@wv.gov](mailto:depprivacyofficer@wv.gov)



USPS TRACKING #



9590 9402 5282 9154 3533 40

United States Postal Service

Sender: Please print your name, address, and ZIP+4® in this box\*

HG ENERGY, LLC  
5260 DUPONT ROAD  
PARKERSBURG, WV 26101

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First-Class Mail  
Postage & Fees Paid  
USPS  
Permit No. G-10

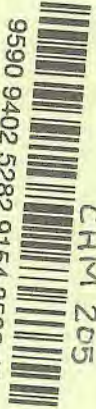
SENDER: COMPLETE THIS SECTION

- Complete items 1, 2, and 3.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:

Ed Asbury  
5345 Laguna Vista Dr  
Melbourne FL 32934

CHM 205



9590 9402 5282 9154 3533 40

2. Article Number (Transfer from service label)

7019 2280 0000 1287 1891

PS Form 3811, July 2015 PSN 7530-02-000-9053

COMPLETE THIS SECTION ON DELIVERY

- A. Signature  X
- B. Received by (Printed Name)  Agent
- C. Date of Delivery  Addressed
- D. Is delivery address different from item 1?  Yes  
If YES, enter delivery address below:  No
3. Service Type
- Adult Signature
  - Adult Signature Restricted Delivery
  - Certified Mail®
  - Certified Mail Restricted Delivery
  - Collect on Delivery
  - Collect on Delivery Restricted Delivery
  - First-Class Mail®
  - First-Class Mail Restricted Delivery
  - Registered Mail™
  - Registered Mail Restricted Delivery
  - Return Receipt for Merchandise
  - Signature Confirmation™
  - Signature Confirmation Restricted Delivery
  - Priority Mail Express®
  - Registered Mail™
  - Registered Mail Restricted Delivery
  - Return Receipt for Merchandise
  - Signature Confirmation™
  - Signature Confirmation Restricted Delivery



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

November 23, 2020

Ed Asbury  
5345 Laguna Vista Drive  
Melbourne, FL 32934

RE: C. H. McGraw No. 205  
Smithfield District, Roane County  
West Virginia

Dear Landowner:

Enclosed are copies of various application papers that we have filed with the West Virginia Department of Environmental Protection (WVDEP), Office of Oil and Gas. A well work permit is being requested for the above-referenced well.

Pursuant to WV Code Chapter 22B, Article 6, you are receiving copies of this correspondence because the well or other anticipated disturbance is located on your surface property. Your rights as a landowner are detailed in the enclosed permit application papers.

No action on your part is required. If you have any questions or comments regarding this application, you may call this office at (304) 420-1119.

Very truly yours,

*Diane White*

Diane C. White

Enclosures

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WW-2A Surface Waiver  
(4/16)

SURFACE OWNER WAIVER

County 087

Operator \_\_\_\_\_

Operator well number Charles McGraw 205

**INSTRUCTIONS TO SURFACE OWNERS NAMED ON PAGE WW2-A**

The well operator named on page WW2A is applying for a permit from the State to do oil or gas well work. (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:**

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Chief, Office of Oil and Gas  
Department of Environmental Protection  
601 57<sup>th</sup> 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 **FIFTEEN (15) 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.**

**List of Water Testing Laboratories.** The Office maintains a list of water testing laboratories which you can hire to test your water to establish water quality prior to and after drilling. Contact the Chief to obtain a copy.

**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 Well Work Permit on Form WW2-A, and attachments consisting of pages 1 through \_\_\_ including a work order on Form WW2-B, a survey plat, WW-9, and a soil and erosion plan, all for proposed well work on my surface land as described therein.

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.

FOR EXECUTION BY A NATURAL PERSON

FOR EXECUTION BY A CORPORATION, ETC.

\_\_\_\_\_  
Signature Date \_\_\_\_\_

Company Name NA  
By \_\_\_\_\_  
Its \_\_\_\_\_ Date \_\_\_\_\_

\_\_\_\_\_  
Print Name

\_\_\_\_\_  
Signature Date \_\_\_\_\_

47-087-04748 W

WW-9  
(5/16)

API Number 47 - 087 - 04748  
Operator's Well No. Charles McGraw 205

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 Run Quadrangle Looneyville 7.5'

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

Will a pit be used? Yes  No   
*ANY WELL EFFLUENT MUST BE CONTAINED IN TANKS BEFORE DISPOSING OFF-SITE. 9/11/20*

If so, please describe anticipated pit waste: If any fluids or cuttings are encountered while stimulating the production well, they'll be hauled for disposal

Will a synthetic liner be used in the pit? Yes  No  If so, what ml.? \_\_\_\_\_

Proposed Disposal Method For Treated Pit Wastes:

- Land Application (if selected provide a completed form WW-9-GPP)
- Underground Injection ( UIC Permit Number \_\_\_\_\_)
- Reuse (at API Number \_\_\_\_\_)
- Off Site Disposal (Supply form WW-9 for disposal location)
- Other (Explain \_\_\_\_\_)

Will closed loop system be used? If so, describe: No

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Drilling medium anticipated for this well (vertical and horizontal)? Air, freshwater, oil based, etc. Air, Fresh Water

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

Additives to be used in drilling medium? Water, Soap, KCl

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Environmental Protection

Drill cuttings disposal method? Leave in pit, landfill, removed offsite, etc. If any fluids or cuttings; remove offsite

-If left in pit and plan to solidify what medium will be used? (cement, lime, sawdust) NA

-Landfill or offsite name/permit number? To Be Determined Upon Approval Of The Permit

Permittee shall provide written notice to the Office of Oil and Gas of any load of drill cuttings or associated waste rejected at any West Virginia solid waste facility. The notice shall be provided within 24 hours of rejection and the permittee shall also disclose where it was properly disposed.

I certify that I understand and agree to the terms and conditions of the GENERAL WATER POLLUTION PERMIT issued on April 1, 2016, 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

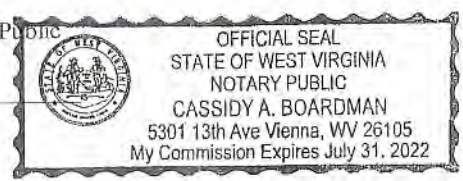
Company Official Title Accountant

Subscribed and sworn before me this 23rd day of November, 2020

*JOT*

Cassidy A. Boardman Notary Public

My commission expires 7/31/2022



Proposed Revegetation Treatment: Acres Disturbed 0.6 acres Prevegetation pH \_\_\_\_\_

Lime 3 Tons/acre or to correct to pH 6.5

Fertilizer type 10-20-20

Fertilizer amount 500 lbs/acre

Mulch Straw 2 Tons/acre

Seed Mixtures

**Temporary**

**Permanent**

Seed Type	lbs/acre
Tall Fescue	40
Ladino Clover	5

Seed Type	lbs/acre
Tall Fescue	40
Ladino Clover	5

- Erosion and Sediment Control Should Be In Place At All Times -

Attach:

Maps(s) of road, location, pit and proposed area for land application (unless engineered plans including this info have been provided). If water from the pit will be land applied, provide water volume, include dimensions (L, W, D) of the pit, and dimensions (L, W), and area in acres, of the land application area.

Photocopied section of involved 7.5' topographic sheet.

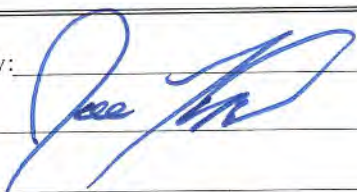
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Plan Approved by: \_\_\_\_\_

WV Department of  
Environmental Protection

Comments: \_\_\_\_\_



Title: OOG Inspector

Date: 12-8-20

Field Reviewed? (  ) Yes (  ) No



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

Operator Name: HG Energy, LLC  
Watershed (HUC 10): Rush Run Quad: Looneyville 7.5'  
Farm Name: Charles McGraw

1. List the procedures used for the treatment and discharge of fluids. Include a list of all operations that could contaminate the groundwater.

NA

2. Describe procedures and equipment used to protect groundwater quality from the list of potential contaminant sources above.

NA

3. List the closest water body, distance to closest water body, and distance from closest Well Head Protection Area to the discharge area.

NA

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4. Summarize all activities at your facility that are already regulated for groundwater protection.

NA

5. Discuss any existing groundwater quality data for your facility or an adjacent property.

NA

6. Provide a statement that no waste material will be used for deicing or fill material on the property.

NA

7. Describe the groundwater protection instruction and training to be provided to the employees. Job procedures shall provide direction on how to prevent groundwater contamination.

NA

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8. Provide provisions and frequency for inspections of all GPP elements and equipment.

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NA

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Environmental Protection

Signature: Diane White

Date: 11-23-2020

# Reclamation Plan For: C.H. McGraw No.205 47-087-4748

S.B. Kinkead Lease

Derek Gibson  
- Surface Owner

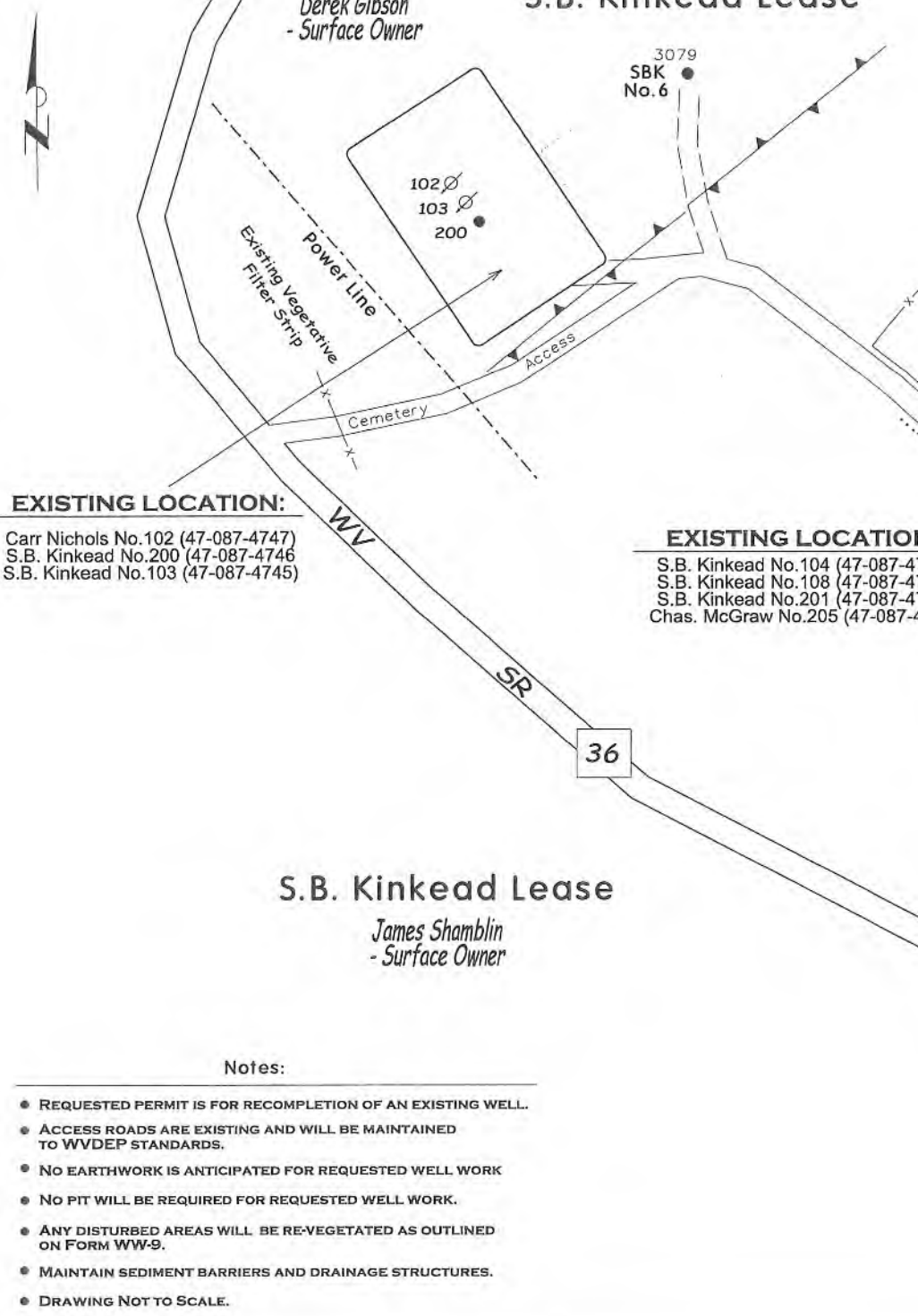
Ed Asbury  
- Surface Owner

S.B. Kinkead Lease

S.B. Kinkead Lease

James Shamblin  
- Surface Owner

Ed Asbury  
- Surface Owner



**EXISTING LOCATION:**  
 Carr Nichols No.102 (47-087-4747)  
 S.B. Kinkead No.200 (47-087-4746)  
 S.B. Kinkead No.103 (47-087-4745)

**EXISTING LOCATION:**  
 S.B. Kinkead No.104 (47-087-4751)  
 S.B. Kinkead No.108 (47-087-4749)  
 S.B. Kinkead No.201 (47-087-4750)  
 Chas. McGraw No.205 (47-087-4748)

*Ed Asbury*  
12-8-20

**Notes:**

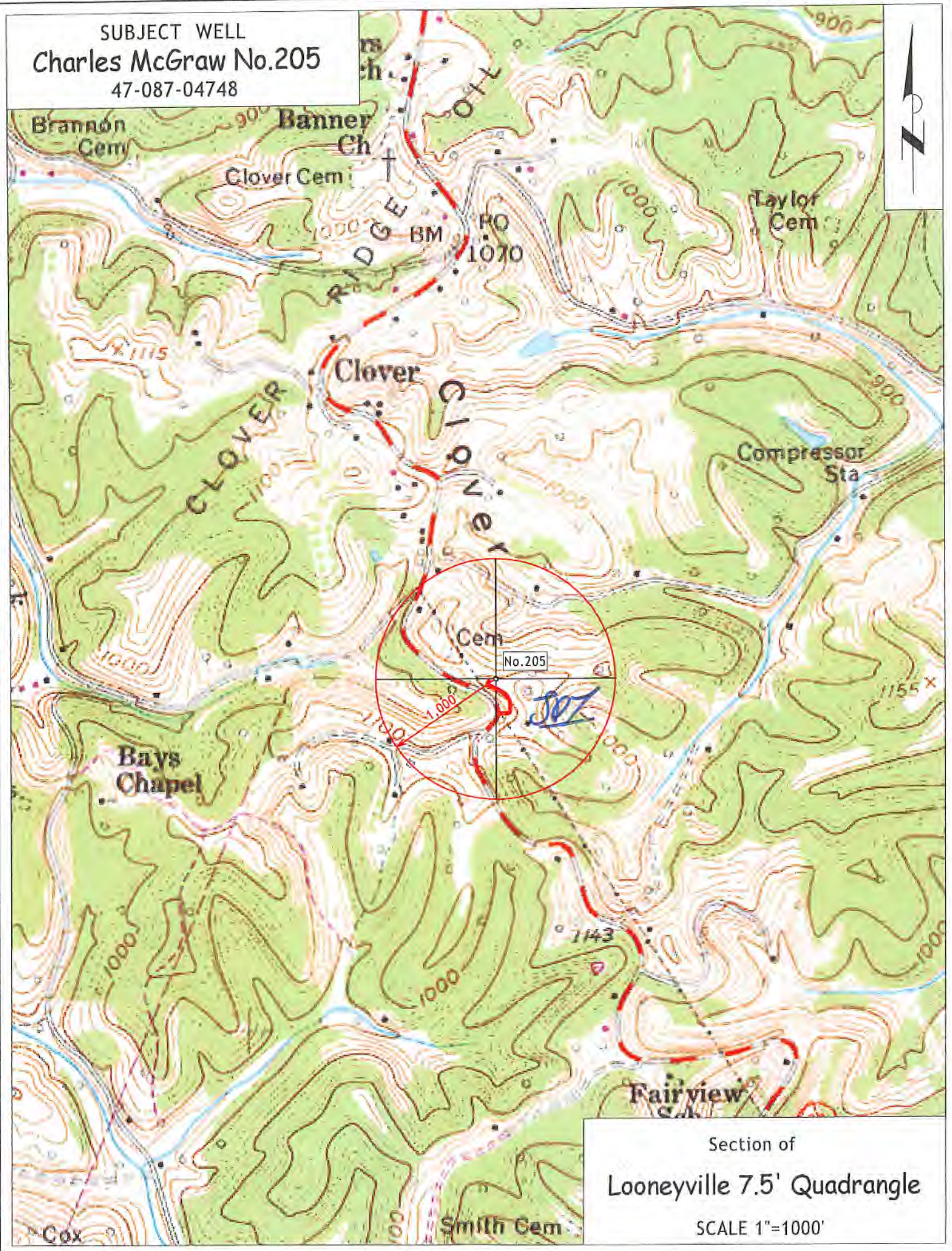
- REQUESTED PERMIT IS FOR RECOMPLETION OF AN EXISTING WELL.
- ACCESS ROADS ARE EXISTING AND WILL BE MAINTAINED TO WVDEP STANDARDS.
- NO EARTHWORK IS ANTICIPATED FOR REQUESTED WELL WORK
- NO PIT WILL BE REQUIRED FOR REQUESTED WELL WORK.
- ANY DISTURBED AREAS WILL BE RE-VEGETATED AS OUTLINED ON FORM WW-9.
- MAINTAIN SEDIMENT BARRIERS AND DRAINAGE STRUCTURES.
- DRAWING NOT TO SCALE.

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

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SUBJECT WELL  
Charles McGraw No.205  
47-087-04748



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



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



WELL TYPE: OIL  GAS  LIQUID INJECTION  WASTE DISPOSAL   
(IF "GAS") PRODUCTION STORAGE DEEP  SHALLOW   
LOCATION: ELEVATION 1,120' WATERSHED Rush Run  
DISTRICT Smithfield COUNTY Boone  
QUADRANGLE Looneyville 7.5'  
SURFACE OWNER Ed Asbury  
OIL & GAS ROYALTY OWNER George W. Carr et al.  
LEASE NO. \_\_\_\_\_  
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 REFLUG  TARGET FORMATION Big Injun  
HE Energy LLC. DESIGNATED AGENT Diane White  
5260 Dupont Road ADDRESS Parkersburg, WV 26101

DATE November 11, 2020  
FARM C.H. McGraw No. 205  
API WELL NO. 47-087-04748 W

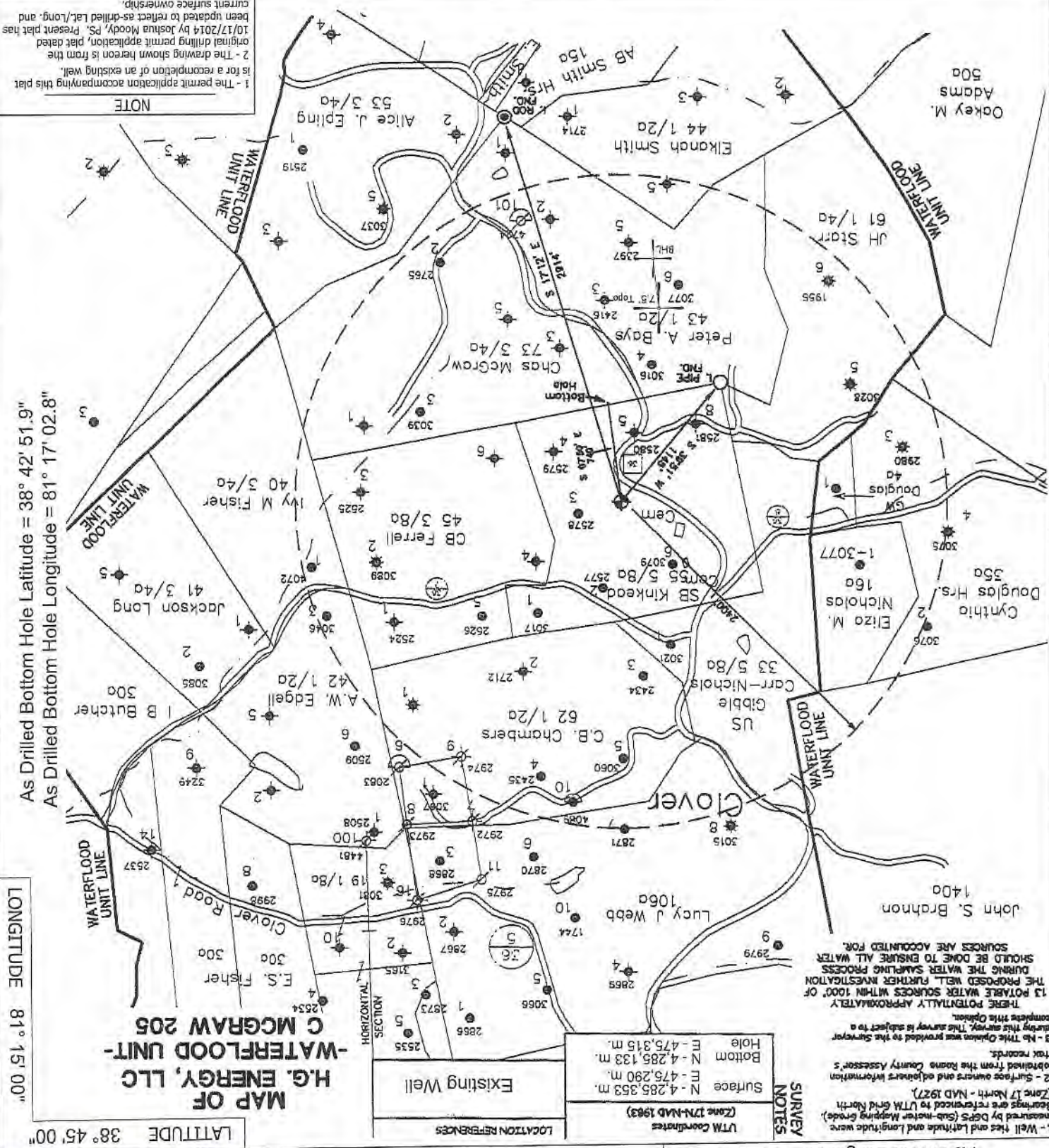
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FILE NO. \_\_\_\_\_  
SCALE 1" = 1000'  
MINIMUM DEGREE OF ACCURACY \_\_\_\_\_  
PROVEN SOURCE OF ELEVATION DGPS Survey  
(Sub-Meter Mapping Grade)

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 ENVIRONMENTAL PROTECTION.  
(SIGNED) *Timothy P. Roush*  
TIMOTHY P. ROUSH PS 793



NOTE  
1 - The permit application accompanying this plat is for a recompletion of an existing well.  
2 - The drawing shown hereon is from the original drilling permit application, plat dated 10/17/2014 by Joshua Moody, PS. Present plat has been updated to reflect as-drilled Lat./Long. and current surface ownership.



As Drilled Bottom Hole Latitude = 38° 42' 51.9"  
As Drilled Bottom Hole Longitude = 81° 17' 02.8"

LONGITUDE 81° 15' 00"

LATITUDE 38° 45' 00"

MAP OF  
H.G. ENERGY, LLC  
-WATERFLOOD UNIT-  
C MCGRAW 205

LOCATION REFERENCES

Surface	N - 4,285,353 m.
Bottom	N - 4,285,133 m.
Hole	E - 475,315 m.

SURVEY NOTES

1 - Well 14c and Longitude and Latitude were measured by DGPS (Sub-meter Mapping Grade). Bearings are referenced to UTM Grid North (Zone 17 North - NAD 1983).
2 - Surface owners and adjacent owners' records obtained from the Boone County Assessor's tax records.
3 - No The Opinion was provided to the Surveyor during the survey. The survey is subject to a complete the Opinion.

13 POTABLE WATER SOURCES WITHIN 100' OF THE PROPOSED WELL. FURTHER INVESTIGATION SHOULD BE DONE TO ENSURE ALL WATER SOURCES ARE ACCOUNTED FOR.

As Drilled Latitude = 38° 42' 59.0"

12.240"

As-Drilled Longitude = 81° 17' 03.8" 9.808' 47-087-04748 W



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.

THERE POTENTIALLY APPROXIMATELY 13 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.

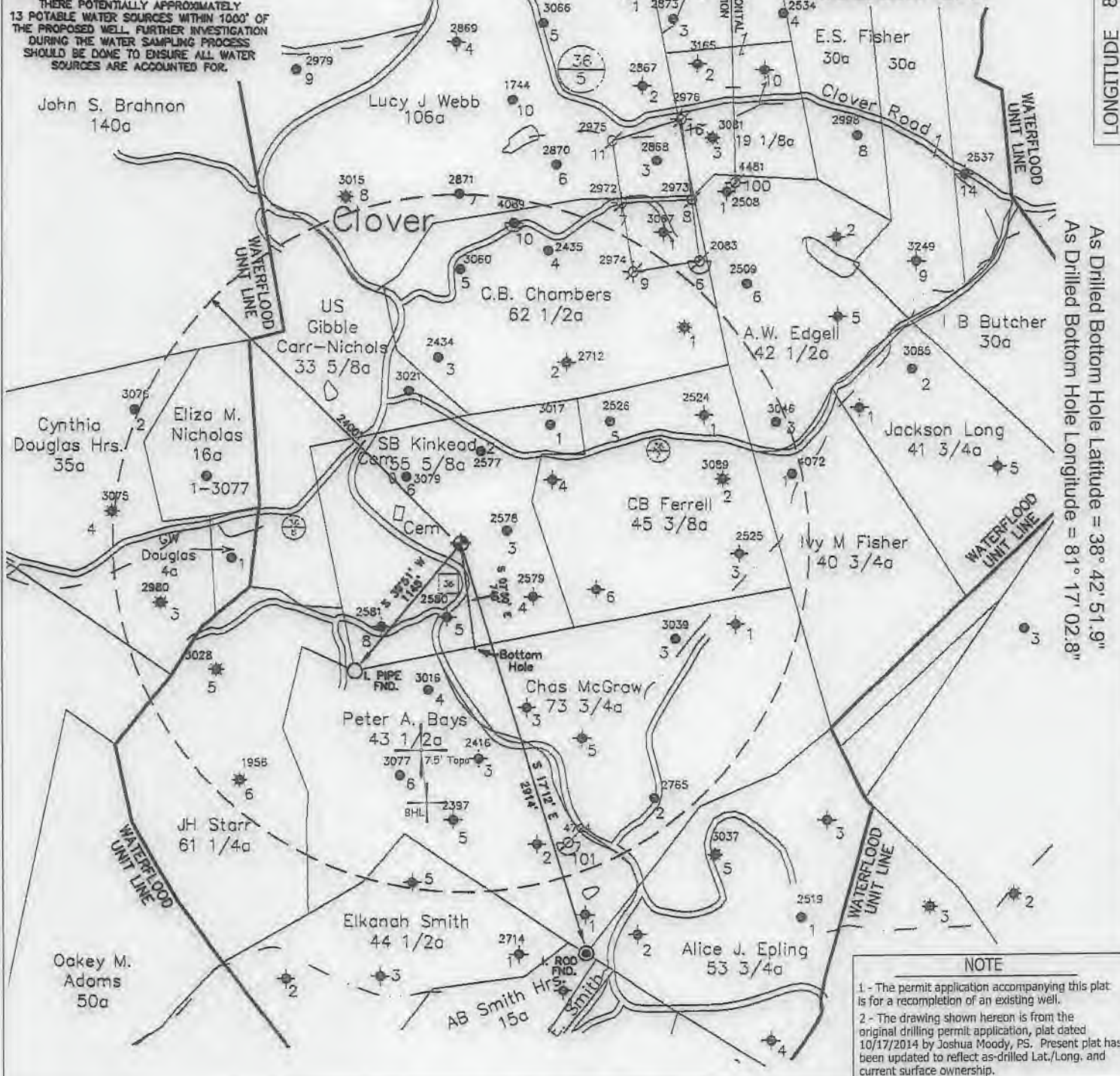
SURVEY NOTES

UTM Coordinates (Zone 17N-NAD 1983) Surface N - 4,285,353 m. E - 475,290 m. Bottom N - 4,285,133 m. Hole E - 475,315 m.

LOCATION REFERENCES

Existing Well

MAP OF H.G. ENERGY, LLC - WATERFLOOD UNIT - C MCGRAW 205



NOTE 1 - The permit application accompanying this plat is for a recompletion of an existing well. 2 - The drawing shown herein is from the original drilling permit application, plat dated 10/17/2014 by Joshua Moody, PS. Present plat has been updated to reflect as-drilled Lat/Long, and current surface ownership.

FILE NO. \_\_\_\_\_ SCALE 1" = 1000' MINIMUM DEGREE OF ACCURACY \_\_\_\_\_ 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 ENVIRONMENTAL PROTECTION. (SIGNED) Timothy P. Roush PS 793



WEST VIRGINIA Division of Environmental Protection Office of Oil and Gas 601 57th Street Charleston, West Virginia 25301 DATE November 11, 2020 FARM C.H. McGraw No.205 API WELL NO. 47 - 087 - 04748 W WELL TYPE: OIL [X] GAS LIQUID INJECTION WASTE DISPOSAL (IF "GAS") PRODUCTION STORAGE DEEP SHALLOW LOCATION: ELEVATION 1,120' WATERSHED Rush Run DISTRICT Smithfield COUNTY Roane QUADRANGLE Looneyville 7.5' SURFACE OWNER Ed Asbury ACREAGE 22 Ac. OIL & GAS ROYALTY OWNER George W. Carr et al. LEASE ACREAGE 75 Ac. LEASE NO. PROPOSED WORK: DRILL CONVERT DRILL DEEPER REDRILL FRACTURE OR STIMULATE [X] PLUG OFF OLD FORMATION PERFORATE NEW FORMATION OTHER PHYSICAL CHANGE IN WELL (SPECIFY) PLUG AND ABANDON CLEAN OUT AND REPLUG TARGET FORMATION Big Injun ESTIMATED DEPTH 2,601' MD WELL OPERATOR HG Energy LLC. DESIGNATED AGENT Diane White ADDRESS 5260 DuPont Road Parkersburg, WV 26101 ADDRESS 5260 DuPont Road Parkersburg, WV 26101



47-87-04748 W



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

November 23, 2020

Check # 4858

11/24/2020

\$550.<sup>00</sup>

Mr. Jeff McLaughlin  
WV DEP  
Division of Oil & Gas  
601 57<sup>th</sup> Street  
Charleston, West Virginia 25304

RE: C. H. McGraw No. 205  
Smithfield District, Roane County  
West Virginia

Dear Mr. McLaughlin:

Enclosed are the Forms WW-2A, WW-2A (1), WW-2B, WW-9, mylar of plat, reclamation plan, topo map and copy of the certified mailing receipt for a permit to stimulate the above-captioned shallow, producing well. Also enclosed is a check in the amount of \$550.

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

Very truly yours,

*Diane White*

Diane C. White

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Office of Oil and Gas

DEC 16 2020

WV Department of  
Environmental Protection

Enclosures

cc: Ed Ashbury - Certified  
Joe Taylor - Inspector