



west virginia department of environmental protection

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

Austin Caperton, Cabinet Secretary
www.dep.wv.gov

Tuesday, August 21, 2018
WELL WORK PLUGGING PERMIT
Vertical Plugging

HG ENERGY, LLC
5260 DUPONT ROAD

PARKERSBURG, WV 26101

Re: Permit approval for W M GOODE 2
47-043-02238-00-00

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.

Upon completion of the plugging well work, the above named operator will reclaim the site according to the provisions of WV Code 22-6-30. Please be advised that form WR-38, Affidavit of Plugging and Filling Well, 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: W M GOODE 2
Farm Name: GOODE, W. M.
U.S. WELL NUMBER: 47-043-02238-00-00
Vertical Plugging
Date Issued: 8/21/2018

PERMIT CONDITIONS

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

CONDITIONS

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

43-02238P

WW-4B
Rev. 2/01

1) Date July 9, 2018
2) Operator's Well No. WM Goode 2
3) API Well No. 47-043 - 02238

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

APPLICATION FOR A PERMIT TO PLUG AND ABANDON

4) Well Type: Oil / Gas / Liquid injection ___ / Waste disposal ___ /
(If "Gas, Production or Underground storage ___) Deep ___ / Shallow

5) Location: Elevation 1072' Watershed Trace Fork
District Duval County Lincoln Quadrangle Garrett's Bend 7.5'

6) Well Operator HG Energy, LLC 7) Designated Agent Diane White
Address 5260 Dupont Road Address 5260 Dupont Road
Parkersburg, WV 26101 Parkersburg, WV 26101

8) Oil and Gas Inspector to be notified 9) Plugging Contractor
Name Jeffery Smith Name To Be Determined Upon Approval of Permit
Address 5369 Big Tyler Road Address _____
Cross Lanes, WV 25313 _____

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

** See Attached **

RECEIVED
Office of Oil and Gas
JUL 23 2018
WV Department of
Environmental Protection

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

Work order approved by inspector Jeffrey Smith Date 7-17-18

08/24/2018

43-02238P

1) Date: July 9, 2018
2) Operator's Well Number
WM Goode # 2
3) API Well No: 47 - 043 - 2238
State County Permit

STATE OF WEST VIRGINIA
DIVISION OF ENVIRONMENTAL PROTECTION
OFFICE OF OIL AND GAS
APPLICATION FOR A PERMIT TO PLUG AND ABANDON

4) WELL TYPE: A Oil X Gas X Liquid Injection _____ Waste Disposal _____
B (If "Gas", Production _____ Underground Storage _____ Deep _____ Shallow X)
5) LOCATION: Elevation: 1072' Watershed: Trace Fork
District: Duval County: Lincoln Quadrangle: Garrett's Bend 7.5"
6) WELL OPERATOR: HG Energy LLC 308122 7) DESIGNATED AGENT Diane White
Address 5260 Dupont Road Address 5260 Dupont Road
Parkersburg, WV 26101 Parkersburg, WV 26101
8) OIL & GAS INSPECTOR TO BE NOTIFIED 9) PLUGGING CONTRACTOR
Name Jeffery L. Smith Name To Be Determined Upon Approval of Permit
Address 5369 Big Tyler Road Address _____
Cross Lanes, WV 25313

TD - 2,580'
Manners of Plugging:
Plug #1 - 2550' - 2450'
Free-point, cut, and pull 5 3/16" casing at approx 1900'
Plug #2 - Approx 2030' - 1800'
Free-point, cut and pull 1100' - 1000'
Plug #3 - 1100' - 1000'
Plug #4 - 400' - 300'
Plug #5 - 100' - 0'

JS

RECEIVED
Office of Oil and Gas
JUL 23 2018
WV Department of
Environmental Protection

Erect Monument with API #, 1/2" height numbering
Cement Plugs are Class A, Regular Neat Cement
Cement tops will be tagged WAIT 24 HRS OF 4 Hours
6% Gel between all cement plugs.

Recover all possible casing. If casing can not be recovered, perforate for plug placement.
Monument - 6" minimum diameter metal pipe, 30" above surface

OFFICE USE ONLY

PLUGGING PERMIT

Permit Number _____ Date _____ 19____

This permit covering the well operator and the well location shown below is evidence of permission granted to plug in accordance with the pertinent legal requirements subject to the conditions contained herein and on the reverse hereof. Notification must be given to the District Oil and Gas Inspector 24 hours before actual work has commenced.

The permitted work is as described in the Notice and Application, plat, subject to any modifications and conditions on the reverse hereof.

Permit expires _____ unless plugging is commenced prior to that date and prosecuted with due diligence.

Bond:	Agent:	Plat:	Casing:	WPCP	Other
-------	--------	-------	---------	------	-------

Chief, Office of Oil & Gas

NOTE: Keep one copy of this permit posted at the plugging location.

08/24/2018

State of West Virginia
Division of Environmental Protection
Section of Oil and Gas

COPY

Well Operator's Report of Well Work

Farm name: GOODE, WM Operator Well No.: W M GOODE 2
LOCATION: Elevation: 1,072.00 Quadrangle: GARRETT'S BEND 7.5'
District: DUVAL County: LINCOLN
Latitude: 11,675 Feet south of 38 Deg 17 Min 30 Sec.
Longitude: 9,000 Feet west of 81 Deg 55 Min 00 Sec.

Company: EAST RESOURCES, INC.
P.O. BOX 5519
VIENNA, WV 26105-5519

Agent: PHILIP S. ONDRUSEK

Inspector: RALPH TRIPLETT

Permit Issued: 05/02/08

Well work Commenced: NA

Well work Completed: NA

Verbal plugging permission granted on: _____

Rotary Cable Rig _____

Total Depth (feet) 2,580

Fresh water depths (ft) _____

Salt water depths (ft) NA

Is coal being mined in area (Y/N) N

Coal Depths (ft): NA

Casing/ tubing Size	Used in Drilling	Left in Well	Cement Fill Up Cu. Ft.
6 5/8"	1895'	1895'	EXISTING
5 3/16"	1977'	1977'	EXISTING

OPEN FLOW DATA

Producing formation _____ Pay zone depth (ft) _____

Gas: Initial open flow _____ MCF/d Oil: Initial open flow _____ Bbl/d

Final open flow _____ MCF/d Final open flow _____ Bbl/d

Time of open flow between initial and final tests _____ Hours

Static rock pressure _____ psig (surface pressure) after _____ Hours

Second producing formation _____ Pay zone depth (ft) _____

Gas: Initial open flow _____ MCF/d Oil: Initial open flow _____ Bbl/d

Final open flow _____ MCF/d Final open flow _____ Bbl/d

Time of open flow between initial and final tests _____ Hours

Static rock pressure _____ psig (surface pressure) after _____ Hours

NOTE: ON BACK OF THIS FORM, PUT THE FOLLOWING: 1) DETAILS OF PERFORATED INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC. 2) THE WELL LOG WHICH IS A SYSTEMATIC DETAILED GEOLOGICAL RECORD OF ALL FORMATIONS, INCLUDING COAL ENCOUNTERED BY THE WELLBORE.

RECEIVED
Office of Oil and Gas

JUL 23 2018

WV Department of
Environmental Protection

For: EAST RESOURCES, INC.

By: _____

Date: 4/27/10

08/24/2018

WFO

Treatment :

NO PERMITTED WELL WORK WAS PERFORMED ON THIS WELL.

Well Log :

SEE ORIGINAL WELL RECORD

WW-4A
Revised 6-07

1) Date: July 9, 2018
2) Operator's Well Number
WM Goode 2

3) API Well No.: 47 - 043 - 02238

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

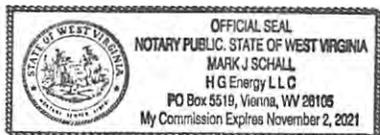
4) Surface Owner(s) to be served:	5) (a) Coal Operator
(a) Name <u>Harold Hoffman II</u>	Name <u>NA</u>
Address <u>PO Box 203</u>	Address _____
<u>Griffithsville, WV 25521</u>	_____
(b) Name _____	(b) Coal Owner(s) with Declaration
Address _____	Name <u>NA</u>
_____	Address _____
(c) Name _____	Name _____
Address _____	Address _____
_____	_____
6) Inspector <u>Jeffery L. Smith</u>	(c) Coal Lessee with Declaration
Address <u>5369 Big Tyler Road</u>	Name <u>NA</u>
<u>Cross Lanes, WV 25313</u>	Address _____
Telephone <u>681-313-6743</u>	_____

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

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

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

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



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

RECEIVED
Office of Oil and Gas

JUL 23 2018

WV Department of
Environmental Protection

Subscribed and sworn before me this 9th day of July, 2018
Mark J Schall Notary Public

My Commission Expires 11/2/2021

Oil and Gas Privacy Notice

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

08/24/2018

WW-9
(5/16)

API Number 47 - 043 - 02238
Operator's Well No. _____

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) Trace Fork Quadrangle Garrett's Bend 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

If so, please describe anticipated pit waste: NA

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 _____)

RECEIVED
Office of Oil and Gas

JUL 23 2018

WV Department of
Environmental Protection

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

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

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

Additives to be used in drilling medium? NA

Drill cuttings disposal method? Leave in pit, landfill, removed offsite, etc. NA

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

-Landfill or offsite name/permit number? NA

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

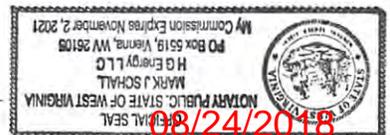
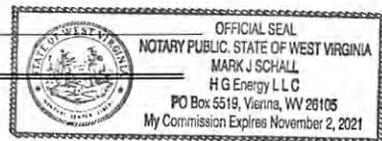
Company Official Title Agent

Subscribed and sworn before me this 9th day of JULY, 20 18

[Handwritten Signature]

Notary Public

My commission expires 11/2/2021



Form WW-9

Operator's Well No. _____

Proposed Revegetation Treatment: Acres Disturbed 0.9 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

RECEIVED
Office of Oil and Gas

JUL 23 2018

WV Department of
Environmental Protection

Seed Mixtures

Temporary		Permanent	
Seed Type	lbs/acre	Seed Type	lbs/acre
Tall Fescue	40	Tall Fescue	40
Ladino Clover	5	Ladino Clover	5

**** Sediment Control Will 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.

Plan Approved by: Jeffrey Smith

Comments: All sediment control to be removed prior to release

Title: Oil & Gas Inspector Date: 7-17-18

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): Trace Fork Quad: Garrett's Bend 7.5'
Farm Name: _____

- 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

RECEIVED
Office of Oil and Gas
JUL 23 2018
WV Department of
Environmental Protection

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

NA

- 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

RECEIVED
Office of Oil and Gas
JUL 23 2018
WV Department of
Environmental Protection

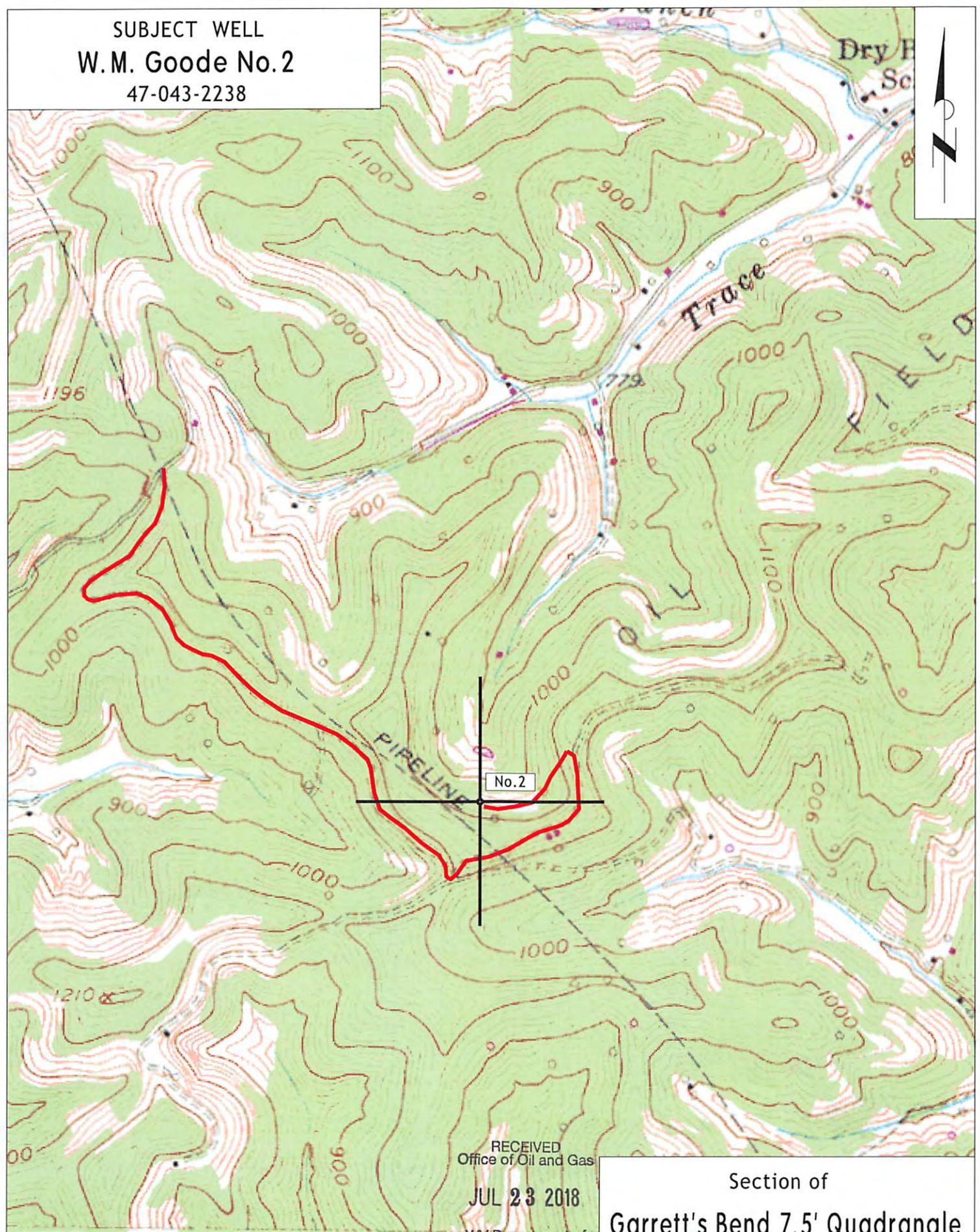
8. Provide provisions and frequency for inspections of all GPP elements and equipment.

NA

Signature: Diane White

Date: 7-9-18

SUBJECT WELL
W.M. Goode No. 2
47-043-2238



RECEIVED
Office of Oil and Gas
JUL 23 2018
WV Department of
Environmental Protection

Section of
Garrett's Bend 7.5' Quadrangle
SCALE 1"=1000 08/24/2018

416 57'30"

WW-7
8-30-06



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

API: 47- 043 - 2238 WELL NO: 2

FARM NAME: W.M. Goode No.2

RESPONSIBLE PARTY NAME: H.G. Energy, LLC

COUNTY: Lincoln DISTRICT: Duval

QUADRANGLE: Garrett's Bend 7.5'

SURFACE OWNER: Harold Hoffman II

ROYALTY OWNER: HG Energy, LLC

UTM GPS NORTHING: 4,235,058 (NAD 83)

UTM GPS EASTING: 416,731 (NAD 83) GPS ELEVATION: 329 m. (1072')

The Responsible Party named above has chosen to submit GPS coordinates in lieu of preparing a new well location plat for a plugging permit or assigned API number on the above well. The Office of Oil & Gas will not accept GPS coordinates that do not meet the following requirements:

1. Datum: NAD 1983, Zone:17 North, Coordinate Units: meters, Altitude: height above mean sea level (MSL) - meters.
2. Accuracy to Datum - 3.05 meters
3. Data Collection Method:

Survey Grade GPS	<input type="checkbox"/>	Post Processed Differential	<input type="checkbox"/>
		Real-Time Differential	<input type="checkbox"/>
Mapping Grade GPS	<input checked="" type="checkbox"/>	Post Processed Differential	<input checked="" type="checkbox"/>
		Real-Time Differential	<input type="checkbox"/>
- 4 **Letter size copy of the topography map showing the well location.**

I the undersigned, hereby certify this data is correct to the best of my knowledge and belief and shows all the information required by law and the regulations issued and prescribed by the Office of Oil and Gas.

Diane C White
Diane C. White

Designated Agent
Title

6/11/2018
Date

RECEIVED
Office of Oil and Gas

JUL 23 2018

08/24/2018