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

Earl Ray Tomblin , Governor
Randy C. Huffman , Cabinet Secretary
www.dep.wv.gov

Wednesday, August 31, 2016
WELL WORK PERMIT
Not Available / Plugging - 2

HG ENERGY, LLC
5260 DUPONT ROAD

PARKERSBURG, WV 26101

Re: Permit approval for WR MCINTYRE 2
47-095-02002-00-00

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: WR MCINTYRE 2
Farm Name: MILLER, RONNIE W.
U.S. WELL NUMBER: 47-095-02002-00-00
Not Available / Plugging - 2
Date Issued: 8/31/2016

9502002P

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.

9502002P

WW-4B
Rev. 2/01

1) Date June 20, 2016
2) Operator's Well No. W R McIntyre 2
3) API Well No. 47- 095 - 2002

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 X / Gas ____ / Liquid injection ____ / Waste disposal ____ /
(If "Gas, Production ____ or Underground storage ____) Deep ____ / Shallow X

5) Location: Elevation ~~952'~~ 1053' Watershed McIntyre Fork
District McElroy County Tyler Quadrangle Centerpoint 7.5'

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

7) Designated Agent Diane White
Address 5260 Dupont Road
Parkersburg, WV 26101

8) Oil and Gas Inspector to be notified
Name Justin Snyder
Address 200 Florence
Lumberport, WV 26386

9) Plugging Contractor
Name To Be Determined Upon Approval of Permit
Address ____

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

** See Attached Sheet **

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

Work order approved by inspector Michael Dougherty Date 7/15/16

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JUL 15 2016
WV Department of
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WW-4B - Conti
Rev. 2/01

1) Date: June 20, 2016
2) Operator's Well Number
W R McIntyre 2
3) API Well No: 47 - 095 - 2002
State County Permit

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 x Gas ____ Liquid Injection ____ Waste Disposal ____
(If "Gas", Production ____ Underground Storage ____) Deep ____ Shallow x

5) LOCATION: Elevation: ~~952'~~ 1053' Watershed: McIntyre Fork
District: McElroy County: Tyler Quadrangle Centerpoint 7.5'

6) WELL OPERATOR: HG Energy, LLC 494497948
Address 5260 Dupont Road
Parkersburg, WV 26101

7) DESIGNATED AGENT Diane White
Address 5260 Dupont Road
Parkersburg, WV 26101

8) OIL & GAS INSPECTOR TO BE NOTIFIED
Name Justin Synder
Address 200 Florence
Lumberport, WV 26386

9) PLUGGING CONTRACTOR
Name To Be Determined Upon Approval of Permit
Address ____

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

TD- 2,815'

Manners of plugging; SPOT GEL.
Plug #1 - 2750' - 2650'
Located above the Gordon
Free point, part and pull all possible 5" casing at approximately 2000'
Plug # 2 - 2325' - 2225'
Located at 5" casing shoe
Free point, part and pull 6" casing if possible at approximately 1250'
Plug #3 - 2050' - 1950'
Located at 6" casing shoe, and 5" casing stub
Plug #4 - Approx 1300' - 1200'
Located at 6" casing stub through 8" casing shoe — SET ELEVATION PLUG ~~902'-1002'~~ ACROSS 1053' JS 7/8/16
Free point, part and pull all possible 8" casing at approximately 650'
Plug #5 - 765' - 600'
Located through 6" casing stub, Pittsburgh coal and 8" casing stub. Perforate 8" casing through coal if present
Attempt to pull all possible 10" if present
Plug #6 - 250' - Surface
Located through 10" shoe and fresh water to surface

MDG 7/8/16

Recover all possible casing. If casing can not be recovered, perforate for plug placement.

Monument -
6" minimum diameter metal pipe
30" above surface
10' in well below surface
Sealed with cement
API identification (1/2") height numbering

6% Gel between all plugs

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9502002A

Well: W.R. McIntyre #2
API: 47-095-2002

Monument min. 6" dia.metal pipe, 30" above surface, 10' in well below surface, sealed with cement, API id.

Elevation 952'

Casing Information		
Size	Depth	Weight
10"	200	#/ft.
8"	1265	#/ft.
6"	2009	#/ft.
5"	2285'	#/ft.

Freepoint Cut and Pull Casing	
Size	Approx. Depth
5"	2000'
6"	1250'
8"	650'

Pittsburgh Coal 715' →

Elevation 952' →

Cement Plugs		
NO.	Bottom	Top
1	2750	2650
2	2325	2225
3	2050	1950
4	1300	1150
5	765	600'
6	250	0
→ Add Elev	1103 ~~1000~~	1003 ~~900~~

JPS 7/8/11

MAC 7/8/16

Note: 6% gel between all plugs

TD 2815 '

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950 2002 P

Elevation 952'

No. 2 A.J. Simmons & Company COMPLETION

SERIAL No. FARM W.R. McIntyre WELL No. 1

ELEVATION N. S. 1 E. W. 4

CONTRACTOR Eagon & Baker ACRES 100 MAP No.

WATERS OF Indian Creek

DISTRICT McElroy COUNTY Tyler STATE W.Va.

DRILLING COMMENCED Jul. 28, 1922 COMPLETED Oct. 2, 1922. DEPTH 2815 ft.

SANDS	TOP	BOTTOM	ELEV. TOP	CASING	
Pgh. Coal	715			10"	200
Big Injun	2060			8"	1265
Gordon Stray	2770	2783		6"	2009
Gordon	2789	2803		5"	2285
Gordon Oil	2794			PACKERS AND DEPTH SET	

INITIAL PROD. 1 Bbl. Daily SAND Gordon DEPTH 2079'

GAS TEST No Test " " "

SHOT Oct. 5, 22 QUARTS 40 " " "

REMARKS Stray Gas 2778, 9/10 Water 2" Opng.

REPORTED BY PINEY DISTRICT. ABANDONED

Sheet #20967

No. 2 A.J. Simmons & Company COMPLETION

SERIAL No. FARM W.R. McIntyre WELL No. 1.

ELEVATION N. S. 1 E. W. 4

CONTRACTOR Eagon & Baker ACRES 100 MAP No.

WATERS OF Indian Creek

DISTRICT McElroy COUNTY Tyler STATE W.Va.

DRILLING COMMENCED Jul. 28, 1922 COMPLETED Aug. 26, 1922 DEPTH 2182'

SANDS	TOP	BOTTOM	ELEV. TOP	CASING	
Pgh. Coal	715				
Big Injun	2060			10"	200
Show Gas	2065			8"	1265
Oil	2133			6"	2009
				PACKERS AND DEPTH SET	

INITIAL PROD. 1 Bbl. Daily SAND Big Injun DEPTH 1418

GAS TEST 5/10 Water thru 1" Opng. " "

SHOT Aug. 28, 1922 QUARTS 60 " " "

REMARKS

REPORTED BY PINEY DISTRICT ABANDONED

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47-095 - 0003

WV D 47-950-0003

9502002P

WW-4A
Revised 6-07

1) Date: June 20, 2016
2) Operator's Well Number
W. R. McIntyre 2

3) API Well No.: 47 - 095 - 02002

STATE OF WEST VIRGINIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS
NOTICE 0F APPLICATION TO PLUG AND ABANDON A WELL

4) Surface Owner(s) to be served:
(a) Name: Frank Simons
Address: 20913 Waterbeach Place
Sterling, VA 20165

(b) Name:
Address:

(c) Name:
Address:

6) Inspector: Justin Snyder
Address: 200 Florence
Lumberport, WV 26386
Telephone:

5) (a) Coal Operator
Name: NA
Address:

(b) Coal Owner(s) with Declaration
Name: NA
Address:

Name: NA
Address:

(c) Coal Lessee with Declaration
Name: NA
Address:

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.

OFFICIAL SEAL
NOTARY PUBLIC, STATE OF WEST VIRGINIA
MARK J SCHALL
HG Energy LLC
PO Box 5519, Vienna, WV 26105
My Commission Expires November 2, 2021

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

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AUG 31 2016
WV Department of Environmental Protection

Subscribed and sworn before me this 20th day of June, 2016
A NOTARY PUBLIC Notary Public
My Commission Expires NOVEMBER 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.

9502002P

WW-9
(5/16)

API Number 47 - 095 - 02002
Operator's Well No. WR McIntyre 2

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) McIntyre Fork Quadrangle Centerpoint 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. JMM

If so, please describe anticipated pit waste:

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 Any fluids will be hauled for off site disposal at an authorized site to be determined at the time the well is plugged.)

Will closed loop system be used? If so, describe: NA

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

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

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?

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.

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Company Official Signature Diane White

Company Official (Typed Name) Diane White

Company Official Title Agent

Subscribed and sworn before me this 20th day of June, 2016

MARK J. SCHALL Notary Public

My commission expires NOVEMBER 2, 2021

OFFICIAL SEAL
NOTARY PUBLIC, STATE OF WEST VIRGINIA
MARK J SCHALL
HG Energy LLC
PO Box 5519, Vienna, WV 26105
My Commission Expires November 2, 2021

9502002P

Form WW-9

Operator's Well No. W R McIntyre 2

Proposed Revegetation Treatment: Acres Disturbed 0.7 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	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: 7/8/16

Comments: _____

Title: Oil & Gas Inspector ~~Diane White~~ Date: 06/20/2016

Field Reviewed? (_____) Yes (✓) No

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WW-9- GPP
Rev. 5/16

Page _____ of _____
API Number 47 - 095 - 2002
Operator's Well No. W R McIntyre 2

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

Operator Name: HG Energy, LLC
Watershed (HUC 10): McIntyre Fork Quad: Centerpoint 7.5'
Farm Name: W R McIntyre

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

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

NA

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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

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

NA

Signature: Diane White

Date: 06/20/2016

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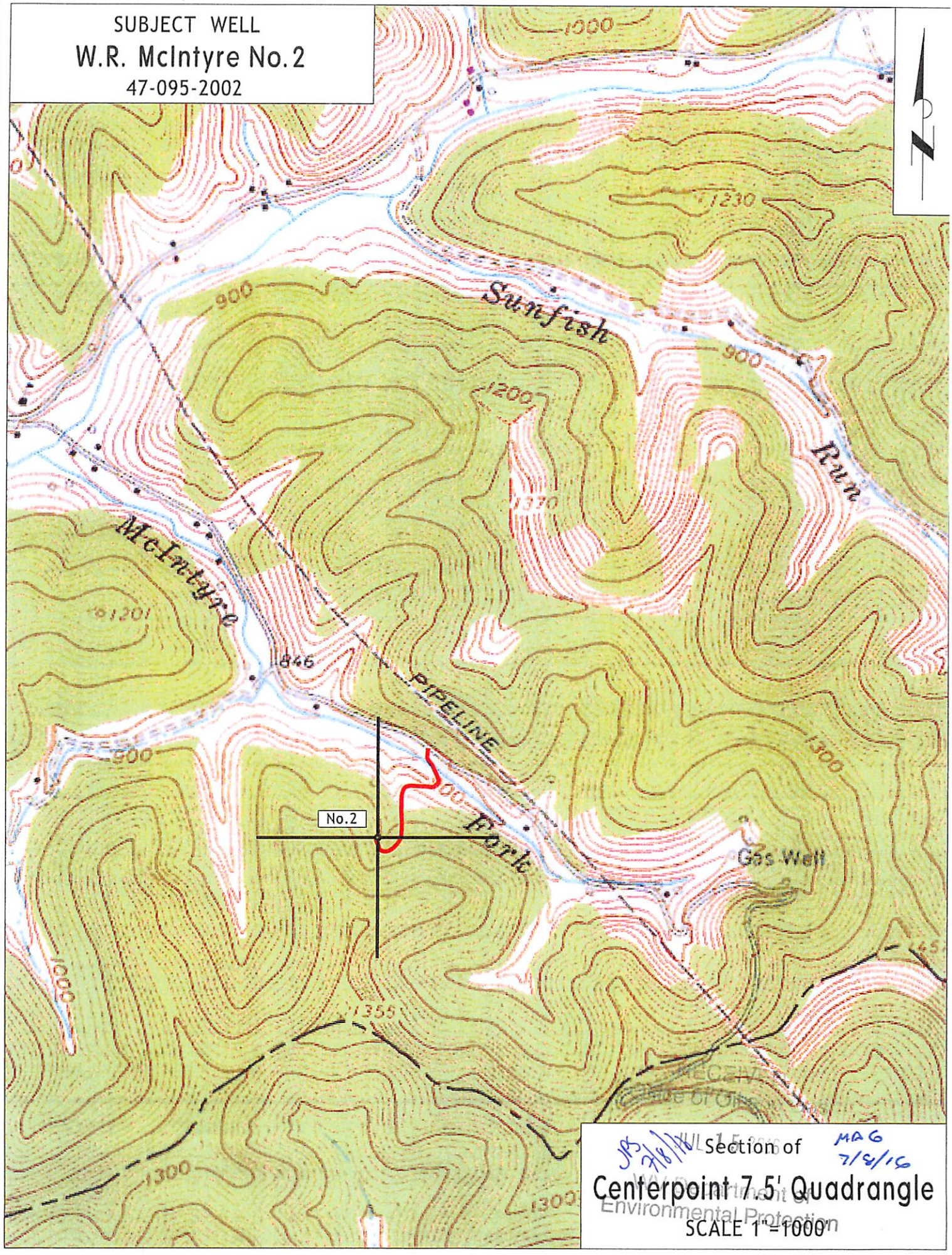
SUBJECT WELL

W.R. McIntyre No.2

47-095-2002



Section of

Centerpoint 7.5' Quadrangle

SCALE 1"=1000

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WW-7
5-02

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

API: 47- 095 - 2002 **WELL NO:** 2

FARM NAME: W.R. McIntyre No.2

RESPONSIBLE PARTY NAME: H.G. Energy, LLC

COUNTY: Tyler **DISTRICT:** McElroy

QUADRANGLE: Centerpoint 7.5'

SURFACE OWNER: Frank Simons

ROYALTY OWNER: American Energy Partners, LLC et al.

UTM GPS NORTHING: 4,365,105 (NAD 83)

UTM GPS EASTING: 527,335 (NAD 83) **GPS ELEVATION:** 321 m. ~~952 ft~~ 1053'

The Responsible Party named above has chosen to submit GPS coordinates in lieu of preparing a new well location plat for a plugging permit 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	___	Post Processed Differential	___
		Real-Time Differential	___
Mapping Grade GPS	X	Post Processed Differential	X
		Real-Time Differential	___

JPS 7/8/16

MAG 7/8/16

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 White — Diane C. White — Designated Agent

Signature — Title

June 3, 2015

Date

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