

#### west virginia department of environmental protection

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

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

Wednesday, October 17, 2018
WELL WORK PLUGGING PERMIT
Vertical Plugging

HG ENERGY, LLC 5260 DUPONT ROAD

PARKERSBURG, WV 26101

Re: Permit approval for 6 47-087-00909-00-00

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: 6

Farm Name: KAUFMAN, WILLIAM

U.S. WELL NUMBER: 47-087-00909-00-00

Vertical Plugging
Date Issued: 10/17/2018

Promoting a healthy environment.

# 7

## **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. <u>Failure to adhere to the specified permit conditions may result in enforcement action.</u>

### **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.

WW-4B Rev. 2/01

1) Date Septe	mber 5	,	2018	8
2) Operator	's			_
Well No.	111	Kaufu	nan	6
3) API Well	No. 4	17 - 087	00909	

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

	APPLICATION FOR A PERM	MIT TO PLUG AND ABANDON
4)	Well Type: Oil X / Gas/ Liquid	d injection / Waste disposal /
,		derground storage) Deep/ Shallow X
	· · · · · · · · · · · · · · · · · · ·	
5)	Location: Elevation 1076'	Watershed Clover Run
•	District Smithville	County Roane Quadrangle Looneyville 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
0 /	Name Joe Taylor	Name To Be Determined Upon Approval of Permit
	Address 1478 Claylick Road	Address
	Ripley, WV 25271	Add 635
	1400,5,111 2021	
	*See Attached	*
	fication must be given to the district of can commence.	il and gas inspector 24 hours before permitted
Work	order approved by inspector	Date 9-12-18

WW-4B - Conti Rev. 2/01

1)	Date: Se	eptembe	r 5, 2	2018		
2)	Operator's Well	Number				
	William	Kaufma	an 6			
3)	API Well No:	47	-	087	-	0909
		State		County		Permit

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

### APPLICATION FOR A PERMIT TO PLUG AND ABANDON

		APPLICAT	ION FOR A PERIVI	II IOPLOGA	AND ABANDO	M	
4)	WELL TYPE:	Oil	x Gas	Liquid Injec		_ Waste Dis	
		(If "Gas	", Production X	Undergroun	d Storage	_ ) Deep _	Shallowx
5)	LOCATION:	Elevation:	1076'	Watershed:	Clover Run		
		District:	Smithville	County:	Roane	(	Quadrangle Looneyville 7.5'
6)	WELL OPERATOR	R: HG Ene	rgy, LLC	494497948	7) DESIGNATI	ED AGENT	Diane White
-)	Address		pont Road		,, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	Address	5260 Dupont Road
		Parkersl	ourg, WV 26101			_	Parkersburg, WV 26101
8)	OIL & GAS INSPE	CTOR TO BE	NOTIFIED		9) PLUGGING	CONTRAC	TOR
0)	Name	Joe Taylor	THOTHED		Name		rmined Upon Approval of Permit
	Address	1478 Claylic	k Road		Address	10 20 2000	and open rappioral of a citati
		Ripley, WV					
Plug   Free Plug   Plug   Plug	2,220' ners of plugging; No 1 2175'-2000' point, cut, & pull 5 No 2 1950'-4850'- No 3 1125'-1025' No 4 640'-540' No 5 100'-0 ed at surface		TO COURL S	ACT WAT	-en @ 183	.s.',	
Reco	ver all possible cas	ing. If casing	g can not be recovered	ed, perforate fo	or plug placemen	nt.	
6" mi 30" a 10' in Seale API i	niment - nimum diameter m bove surface well below surface d with cement dentification (1/2")	e) height numb	pering				Office of Oil and Gas SEP 18 2018  WW Department of Environmental Protection

Jan. 12.19



## DEPARTMENT OF MINES OIL AND GAS DIVISION 36



Quadrangle WALTON

Permit No. ROA-909

### **WELL RECORD**

Oil or Gas Well OIL & GAS

Company SOUTH PENN OIL COMPANY  Address P. O. Box 1588	Casing and Tubing	Used in Drilling	Left in Well	Packers
Farm Wm. Kaufman Acres 800  Location (waters) Slab Camp Run  Well No. 6 Elev. 1076.24	Size			Kind of Packer Steel Shoe
District Smithfield County Roane  The surface of tract is owned in fee by Frank Chambers  Spencer Auto Route Address Spencer, W. Va.	1310	587 <b>'</b> 1102 <b>'</b>	NONE NONE	Size of
Mineral rights are owned by Olive O. Oberdorf, et al.  5 Hyde Park Blvd. 1-B Address Chicago 15, III.  Drilling commenced August 6, 1962	65%	2222 13"	2222 1 3"	Depth set 2190 on 8/27/62 Perf. top
Drilling completed September 1, 1962  Date Shot To To	2" Tbg. Liners Used	2236 *	2236'	Perf. bottom
With         8/10ths Water in         1/8         Inch          /10ths Merc, in        Inch           Volume         322        Cu. Ft.	CASING CEMI	ented 5½"	SIZE 2190	Perf. bottom
Rock Pressure None lbs. (No Test) hrs.  Oilbbls., 1st 24 hrs.  WELL ACIDIZED	COAL WAS EI	•	O AT	FEETINCHE _FEETINCHE

RESULT AFTER TREATMENT

ROCK PRESSURE AFTER TREATMENT 490 Lbs.

Fresh Water		Feet		Salt Water	<u> </u>	Feet	
Formation	Color	Hard or Soft	Тор	Bottom	Oil, Gas or Water	Depth	Remarks
Soil			0	14			
Conductor		:		14		: •	
Red Rock	·		14	60	·		
Slate			60	85	'		
Sand .			85	160			
Slate			160	195	:.	₩.	ALI 64.7
Red Rock			195	246			
Slate	·		246	317			
Red Rock			317	345			
Slate			345	371	· .	-	
Red Rock	·		371	386		1617 1870	
Slatë 💮			<b>⊹386</b>	470	·	(1) 10 W	
Red Rock			470	· 503		(2)// Maria	(E)
Slate			503	518	1	V SEP 1962	Dans Colonia
Sand			518'	587		RECEIVE	り引
Slate	·		587	681		RECEIVE	la 🔝
Red Rock	;		681	691	100	West VII 6"	nes 🐯
Slate		•	691	714	"	Dept. Of	1 26/2)
Sand	,	•	714	744		A System and the	600
Slate		•	744	755		1123	· ·
Red Rock		•	. 755	775	·	RECEIVE West Virgin Dept. of Mi	
Sand	. '	,	775	796			
Red Rock			796	845	1		
Slate			845	904			
Red Rock			904	948		4	
Slate	1		948	977	1	;	
Red Rock			977.	984			
Slate			984	1004		4	
Red Rock			1004	1024			
Slate			1024	1060	1		

Formation	Color	Hard or Soft	Top 36	Bottom	Oil, Gas or Water	Depth Found	Remarks
Sand Slate Sand Slate & She Sand Slate Sand	ills		1060 1198 1260 1406 1440 1510	1198 1260 1406 1440 1510 1550 1636			
Black Slate Sand Slate & She Sand			1636 1648 1724 1796	1648 1724 1796 1909	Water	1835	Hole Full
Slate & She Sand Slate & She Sand Slate Little Lime Slate Big Lime Keener Sand	lls		1909 1930 1963 1986 2012 2018 2041 2069	1930 1963 1986 2012 2018 2041 2069 2187	Oil Show	2118-2126	note Full
5½" Casing Big Injun Blue Sand Slate Total	•		2200 2222 2232	2200 2190 2222 2232 2257	Oil & Gas	2200-2222	8/10-W-1/8" F
Filled Back Total	w/Stone &	Mud	2257	2257 2220 2220			Final
74. 							
	ar.						
			. • • • • • • • • • • • • • • • • • • •				
That the round of							
	Taller Taller Caragoner Taller						

		Date	Sept	ember 14	<del></del> , :	19_62_
APPRO	VED	SOUTH	PENN OI	COMPANY		Owner
		``````````````````````````````````````		W. w. Comme		
			lilsman	(Title) Land	Agent	

WW-4A Revised 6-07

1)	Date:	September 5, 2018	
2)	Operator's	Well Number	
Willia	am Kaufman # 🛭	6	

3) API Well No.: 47 -

087

00909

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

(a) Mama	mer(s) to be served:	5)	(a) Coal Operator	Ľ	
(a) Name	Everett Nichols		Name	NA	
Address	1014 Otto Road		$\_$ Address		
	Spencer, WV 25276		900 unabot		
(b) Name			(b) Coal Ov	vner(s) with Declaration	on
Address			Name	NA	
			Address		
(c) Name			Name		
Address			Address		
	Non-contraction of the second				
6) Inspector	Joe Taylor		(c) Coal Le	ssee with Declaration	
Address	1478 Claylick Road	Λ	Name	NA	
ridaross	Ripley, WV 25271	M	Address	11/1	
Telephone	304-380-7469			**************************************	
rerephone				And a second sec	
Take notice accompany Protection, the Applica	ving documents for a permit with respect to the well at the	f the West Virginia Cod to plug and abandon a v the location described on the mailed by registered	well with the Chief of the on the attached Applicati for certified mail or de	e Office of Oil and Gas, West Von and depicted on the attached	filed this Notice and Application an irginia Department of Environmenta Form WW-6. Copies of this Notice on named above (or by publication in
		W H O			
		Well Operator		iane white	Dra
		By:	Diane White D		Office of SIVED
ACTION NOTION	OFFICIAL SEAL			MODALE OCH MATE	Office of Oil and Gas
NOTANY!	PUBLIC. STATE OF WEST VINGINIA MARK J SCHALL	Its:	Agent		Office of Oil and Gas
	PUBLIC, STATE OF WEST WINGINIA MARK J SCHALL H G Energy L L C ) Box 5519, Vienna, WV 28106		Agent 5260 Dupont Road		Office of Oil and Gas  SEP 1 8 2018
	PUBLIC. STATE OF WEST VINGINIA MARK J SCHALL	Its: Address	Agent 5260 Dupont Road Parkersburg, WV 2610		SEP 1 8 2018
	PUBLIC, STATE OF WEST WINGINIA MARK J SCHALL H G Energy L L C ) Box 5519, Vienna, WV 28106	Its:	Agent 5260 Dupont Road		SEP 1 8 2018  WV Department of Environmental Protection
PO My Com	PUBLIC. STATE OF WEST WASANA MARK J SCHALL H G Energy LL C D Box 5519, Vienna, WV 28108 amission Expires November 2, 2021  eworn before me this	Its: Address Telephone	Agent 5260 Dupont Road Parkersburg, WV 2610	01	SEP 1 8 2018

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. WW-9 (5/16)

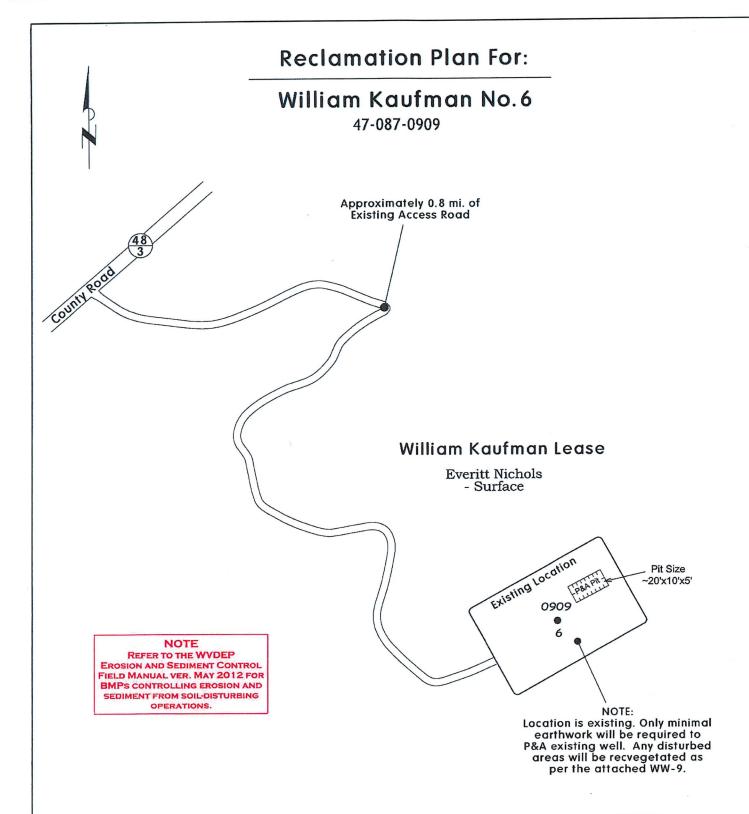
API Number 4	7 - 087	_00909	
Operator's Wel	l No. W	Kaufman	6

# 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) Clover 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 No
If so, please describe anticipated pit waste: Fluids encountered while plugging well
Will a synthetic liner be used in the pit? Yes No If so, what ml.?_20 mil
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 systembe 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. 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? Will be determined at time of offsite disposal
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 and that, based on my inquiry of those individuals immediately responsible for obtaining and 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  WW Department of Environmental Protection  Company Official (Typed Name) Diane White
Company Official (Typed Name) Diane White
Company Official Title Agent
Subscribed and sworn before me this 5th day of September, 20 18  OFFICIAL SEAL NOTARY PUBLIC. STATE OF WEST MARK J SCHALL H G Energy L C PO Box 519, Vienna, W 28 My Commission expires 11/2/3021

Proposed Revegetation Trea	atment: Acres Disturbe	ed 1.1 acres	Preveg etation p.	Н
Lime	3 Tons/acre or to	correct to pH _	6.5	
Fertilizer type 10-	-20-20	IT E		
Fertilizer amount_		500 <sub>lbs/</sub>	acre	
Mulch_Straw		2 Tons/ac	re	
		Seed ]	<u>Mixtures</u>	
Te	emporary		Permanent	
Seed Type	lbs/acre		Seed Type	lbs/acre
Tall Fescue	40		Tall Fescue	40
Ladino Clover	5		Ladino Clover	5
	it and proposed area fo	or land applicat	Times**  ion (unless engineered plans includer volume, include dimensions (L,	
Attach: Maps(s) of road, location, p provided). If water from the	it and proposed area fo pit will be land applie f the land application a	or land applicati d, provide wate rea.	ion (unless engineered plans inclu	
Attach: Maps(s) of road, location, p provided). If water from the (L, W), and area in acres, of	it and proposed area for pit will be land applie f the land application a slived 7.5' topographics	or land applicati d, provide wate rea. sheet.	ion (unless engineered plans incluer volume, include dimensions (L,	
Attach: Maps(s) of road, location, porovided). If water from the (L, W), and area in acres, of the Photocopied section of invo	it and proposed area for pit will be land applie f the land application a slived 7.5' topographics	or land applicati d, provide wate rea. sheet.	ion (unless engineered plans incluer volume, include dimensions (L,	
Attach: Maps(s) of road, location, porovided). If water from the (L, W), and area in acres, of Photocopied section of invo	it and proposed area for pit will be land applie f the land application a slived 7.5' topographics	or land applicati d, provide wate rea. sheet.	ion (unless engineered plans incluer volume, include dimensions (L,	
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Attach: Maps(s) of road, location, porovided). If water from the (L, W), and area in acres, of Photocopied section of invo	it and proposed area for pit will be land applie f the land application a slived 7.5' topographics	or land applicati d, provide wate rea. sheet.	ion (unless engineered plans incluer volume, include dimensions (L,	W, D) of the pit, and dir
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#### Notes:

- REQUESTED PERMIT IS FOR PLUGGING AN EXISTING WELL
- ALL ACCESS ROADS ARE EXISTING AND WILL BE
   UPGRADED IN ORDER TO ACCOMODATE WELL WORK
   EQUIPMENT AND THEN WILL BE RECLAIMED TO WVDEP STANDARDS.
- ALL DISTURBED AREAS WILL BE RE-VEGETATED AS OUTLINED ON FORM WW-9.
- LOCATION OF DRILL PIT MAY BE CHANGED BASED ON AS-BUILT CONSIDERATIONS.
- DRAWING NOT TO SCALE.

RECEIVED
Office of Oil and Gas

OCT 1 6 2018

WV Department of Environmental Protection WW-9- GPP Rev. 5/16

Pa	age	1	of	2	
API Number 47 - 0	87	_	00909		
Operator's Well No.	W	Ka	u-fma	21	6

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

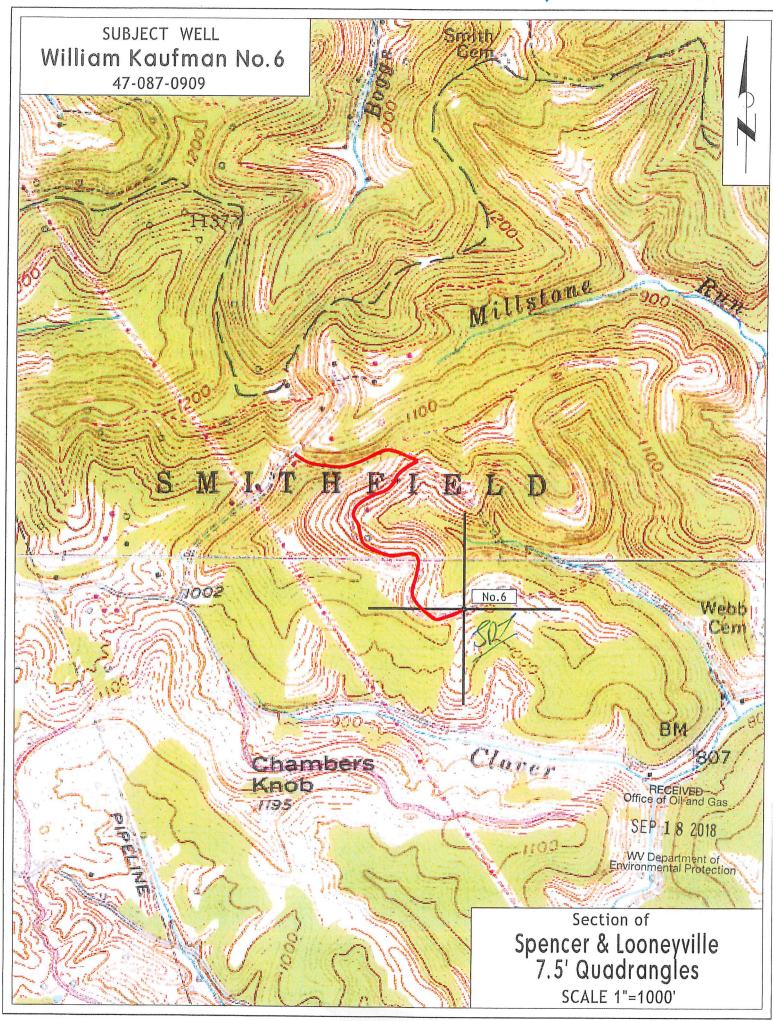
GROUNDWATER PROTECTION PLAN

perator Name: HG Energy, LLC		
Vatershed (HUC 10): Clover Run	Quad: Looneyville 7.5'	_
arm Name:		
List the procedures used for the treatment and discharge o groundwater.	of fluids. Include a list of all operations that could contaminate	the
NA		
Describe procedures and equipment used to protect ground	dwater quality from the list of potential contaminant sources abo	ove.
NA		
List the closest water body, distance to closest water bo discharge area.	dy, and distance from closest Well Head Protection Area to	the
NA		
	Or BECO	
	Office of C	il a
	SEP 18	8 2
	WV Departs Environmental pulated for groundwater protection.	
Summarize all activities at your facility that are already reg	gulated for groundwater protection.	Prot
		$\neg$
NA		
		- 1

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

WW-9- GPP Rev. 5/16	Page of
NA	
. Provide a statement that no waste material will b	be used for deicing or fill material on the property.
NA	
<ol> <li>Describe the groundwater protection instruction provide direction on how to prevent groundwater</li> </ol>	n and training to be provided to the employees. Job procedures shall er contamination.
NA	
NA	ns of all GPP elements and equipment.  SEP 1820  Environmental Protein

Date: 9-5-18



WW-7 8-30-06



## West Virginia Department of Environmental Protection Office of Oil & Gas

## WELL LOCATION FORM: GPS

API: 47-	087 - 0909	WELL NO:	6
FARM NAME:	William Kaufman No.6		
RESPONSIBLE PARTY N	AME: H.G. Energy, LI	C	
COUNTY:	Roane	DISTRICT:	Smithfield
QUADRANGLE:	Looneyville 7.5'		
SURFACE OWNER:	Everett Nichols		
ROYALTY OWNER:	HG Energy, LLC		
UTM GPS NORTHING:	4,288,921 (NAD	83)	(1069, 28')
UTM GPS EASTING:	476,912 (NAD	983) GPS ELEVATION:	326 m.
preparing a new well location above well. The Office of Countries the following requirements  1. Datum: NA	D 1983, Zone:17 North, Coordina	igned API number on the dinates that do not meet	
2. Accuracy to	re mean sea level (MSL) - meters. o Datum - 3.05 meters ction Method:		Ost RECEIVED
Survey Grade G	PS Post Processed Differential Real-Time Differential	al	Office of Oil and Gas SEP 18 2018
	GPS X Post Processed Differential Real-Time Differential copy of the topography map show		WV Department of Environmental Protection
I the undersigned, hereby o	ertify this data is correct to the best formation required by law and the re	of my knowledge and	
Diane White	Designa	ated Agent	8/17/2018
Diane C. White		Title	Date

301