

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

Monday, September 14, 2020 WELL WORK PERMIT Vertical / Re-Work

HG ENERGY, LLC 5260 DUPONT ROAD PARKERSBURG, WV 26101

Re: Permit approval for SB KINKEAD 109

47-087-04753-00-00

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

Operator's Well Number: SB KINKEAD 109

Farm Name: MAY, TIMOTHY D.

U.S. WELL NUMBER: 47-087-04753-00-00

Vertical Re-Work

Date Issued: 9/14/2020

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. 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.

FORM WW-3 (B) 1/12



1) Date: 08/04/2	020				
2) Operator's Wel	l No.	S. E	3. Kinkead 109		
3) API Well No.:	47	-	Roane	(#1)	04753
	State		County		Permit
4) UIC Permit No.	2R087	700008	5AP		

STATE OF WEST VIRGINIA

NOTICE OF LIQUID INJECTION OR WASTE DISPOSAL WELL WORK PERMIT APPLICATION FOR THE DEPARTMENT OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS

	District:	Smithfie	eld		Co	unty Roane		Quadran	gle Looneyville 7.5'
) WELL OPERA	TOR: HO	Energy, L	LC			8) DESIGNA	TED AGE	NT Diane W	hite
		60 Dupont				2.0023770002	Addres	5260 Duj	pont Road
	Pa	rkersburg,	WV 26101					Parkersb	urg, WV 26101
OIL & GAS IN	SPECTO	R TO BE	NOTIFI	ED		10) DRILLIN	IG CONTR	ACTOR	
lame Joe Tay	ylor					Name			
ddress 1478 C	laylick Road					Address			
Ripley,	WV 25271				_				
PROPOSED GEOLOGIC	TARGET I	FORMA	TION Big	hysical (Injun	change in v	/ Perfo well (specify) Depth	/ Recorate new fo	Feet (top	/ Stimulate / Convert
3) Estimated Dep							30' TMD	Feet	Office of Oil and
4) Approximate			: Fre	sh NA	6	Feet	Salt _	1730'	— Feet AUG 2 0 20
5) Approximate			NA						
6) Is coal being i					No		_		_ WV Departmen
7) Virgin reservo				on 1250	psig	g Source	Estimated		Environmental Pro
							W solve	-	psig (BHFP)
8) Estimated rese 9) MAXIMUM	PROPOSE	D INJE	CTION O	PERATI	IONS: V	olume per hou	r 25 BBL		nole pressure 2400 psi
9) MAXIMUM I 0) DETAILED I	PROPOSE DENTIFIC	D INJEC	OF MAT	PERATI TERIAL	S TO BE I	NJECTED, IN	r 25 BBL CLUDING		
9) MAXIMUM I 0) DETAILED I bactericides, and ot	PROPOSE DENTIFIC ther chemicals	D INJEC CATION as needed	CTION O OF MAT to maintain v	PERATI TERIAL	S TO BE I	NJECTED, IN	er 25 BBL CLUDING		nole pressure 2400 psi
9) MAXIMUM 1 0) DETAILED I bactericides, and ot 1) FILTERS (IF	PROPOSE DENTIFIC ther chemicals ANY) Ca	CATION CATION as needed artridge filte	CTION O. OF MAT to maintain v	PERATI FERIAL vater qualit	S TO BE I y and improve	NJECTED, IN oil recovery.	CLUDING	ADDITIVE	nole pressure 2400 psi
9) MAXIMUM 1 0) DETAILED I bactericides, and ot 1) FILTERS (IF	PROPOSE DENTIFIC ther chemicals ANY) Ca	CATION CATION as needed artridge filte	CTION O. OF MAT to maintain v	PERATI FERIAL vater qualit	S TO BE I y and improve	NJECTED, IN oil recovery.	CLUDING	ADDITIVE	nole pressure 2400 psi
9) MAXIMUM 1 0) DETAILED I bactericides, and ot 1) FILTERS (IF 2) SPECIFICAT	PROPOSE DENTIFIC her chemicals ANY) _Ca TONS FOR	D INJECTION as needed artridge filte R CATH	CTION O. OF MAT to maintain v rs ODIC PR	PERATI FERIAL vater qualit	S TO BE I y and improve	NJECTED, IN oil recovery.	CLUDING	ADDITIVE	nole pressure 2400 psi
9) MAXIMUM 1 0) DETAILED I bactericides, and ot 1) FILTERS (IF 2) SPECIFICAT 3) CASING AND	PROPOSE DENTIFIC her chemicals ANY) _Ca TONS FOR	ED INJECTION as needed artridge filte R CATH	CTION O. OF MAT to maintain v rs ODIC PR	PERATI FERIAL vater qualit	S TO BE I y and improve	NJECTED, INC oll recovery. OTHER COR	CLUDING ROSION C	ADDITIVE	sole pressure 2400 psi S Fresh water, Produced water,
9) MAXIMUM 1 0) DETAILED I bactericides, and ot 1) FILTERS (IF 2) SPECIFICAT 3) CASING AND CASING OR	PROPOSE DENTIFIC ther chemicals ANY) _Ca TONS FOR	ED INJECTION AS needed artridge filter R CATH ROGRAM	CTION O. OF MAT to maintain v rs ODIC PR M ECIFICATI	PERATI FERIAL vater qualit OTECT ONS	S TO BE I y and improve	NJECTED, INCOME OF THE COR	CLUDING ROSION C	ADDITIVE CONTROL	nole pressure 2400 psi
9) MAXIMUM 10) DETAILED I bactericides, and of 11) FILTERS (IF 22) SPECIFICAT 13) CASING AND	PROPOSE DENTIFIC her chemicals ANY) _Ca TONS FOR	ED INJECTION as needed artridge filte R CATH	CTION O. OF MAT to maintain v rs ODIC PR	PERATI FERIAL vater qualit	S TO BE I y and improve	NJECTED, INC oll recovery. OTHER COR	CLUDING ROSION C	ADDITIVE	sole pressure 2400 psi S Fresh water, Produced water,
9) MAXIMUM 10) DETAILED I bactericides, and of 11) FILTERS (IF 22) SPECIFICAT 13) CASING AND CASING OR TUBING TYPE	PROPOSE DENTIFIC ther chemicals ANY) _Ca TONS FOR	ED INJECTION AS needed artridge filter R CATH ROGRAM	CTION O. OF MAT to maintain v rs ODIC PR M ECIFICATI	PERATI FERIAL vater qualit OTECT ONS	S TO BE I y and improve	NJECTED, INCOME OF THE COR	ROSION C	ONTROL CEMENT FILL -UP OR SACKS	sole pressure 2400 psi S Fresh water, Produced water,
9) MAXIMUM 10) DETAILED I bactericides, and of 11) FILTERS (IF 22) SPECIFICAT 3) CASING AND CASING OR TUBING TYPE onductor	PROPOSE DENTIFIC her chemicals ANY) _Ca TONS FOR TUBING P	ED INJECTOR AS needed artridge filter R CATH ROGRAL SP. Grade	OF MAT to maintain v rs ODIC PR M ECIFICATI Weight per ft.	PERATI FERIAL vater qualit OTECT ONS	S TO BE I y and improve TON AND Used	OTHER COR FOOTAGE IN For Drilling	ROSION C TERVALS Left In Well	ONTROL CEMENT FILL -UP OR SACKS	S Fresh water, Produced water, PACKERS
9) MAXIMUM 1 0) DETAILED I bactericides, and ot 1) FILTERS (IF 2) SPECIFICAT 3) CASING AND CASING OR TUBING TYPE conductor resh Water	PROPOSE DENTIFIC ther chemicals ANY) Ca TONS FOR TUBING P Size 11 5/8"	ED INJECTOR OF THE PROGRAM SP. Grade	CTION O. OF MAT to maintain v rs ODIC PR M ECIFICATI Weight per ft. NA	PERATI FERIAL vater qualit OTECT ONS New	S TO BE I y and improve TON AND Used	OTHER COR FOOTAGE IN For Drilling	CLUDING ROSION C TERVALS Left In Well 30'	CEMENT FILL -UP OR SACKS (CU. FT.)	PACKERS Kinds
9) MAXIMUM 1 0) DETAILED I bactericides, and ot 1) FILTERS (IF 2) SPECIFICAT 3) CASING AND CASING OR TUBING TYPE conductor resh Water Coal	PROPOSE DENTIFIC ther chemicals ANY) Ca TONS FOR TUBING P Size 11 5/8"	ED INJECTOR OF THE PROGRAM SP. Grade	CTION O. OF MAT to maintain v rs ODIC PR M ECIFICATI Weight per ft. NA	PERATI FERIAL vater qualit OTECT ONS New	S TO BE I y and improve TON AND Used	OTHER COR FOOTAGE IN For Drilling	CLUDING ROSION C TERVALS Left In Well 30'	CEMENT FILL -UP OR SACKS (CU. FT.)	PACKERS Kinds Tension
9) MAXIMUM 1 0) DETAILED I bactericides, and ot 1) FILTERS (IF 2) SPECIFICAT 3) CASING AND CASING OR TUBING TYPE conductor resh Water total intermediate	PROPOSE DENTIFIC ther chemicals ANY) Ca TONS FOR TUBING P Size 11 5/8"	ED INJECTOR OF THE PROGRAM SP. Grade	CTION O. OF MAT to maintain v rs ODIC PR M ECIFICATI Weight per ft. NA	PERATI FERIAL vater qualit OTECT ONS New	S TO BE I y and improve TON AND Used	OTHER COR FOOTAGE IN For Drilling	CLUDING ROSION C TERVALS Left In Well 30'	CEMENT FILL -UP OR SACKS (CU. FT.)	PACKERS Kinds Tension Sizes
9) MAXIMUM 1 0) DETAILED I bactericides, and ot 1) FILTERS (IF 2) SPECIFICAT 3) CASING AND CASING OR TUBING TYPE conductor resh Water toal intermediate roduction	PROPOSE DENTIFIC ther chemicals ANY) _Ca TONS FOR TUBING P Size 11.5/8" 7"	ED INJECTOR OF THE PROGRAM SP Grade LS LS	CTION O. OF MATI to maintain virs ODIC PR M ECIFICATI Weight per ft. NA 17	PERATI TERIAL vater qualit OTECT ONS New	S TO BE I y and improve TON AND Used	NJECTED, INCOMERCED, INCOMER	CLUDING ROSION C TERVALS Left In Well 30' 508'	CEMENT FILL -UP OR SACKS (CU. FT.)	PACKERS Kinds Tension Sizes 2 400 psi PACKERS
9) MAXIMUM 1 0) DETAILED I bactericides, and of 1) FILTERS (IF 2) SPECIFICAT 3) CASING AND CASING OR TUBING TYPE conductor resh Water coal intermediate roduction rubing	PROPOSE DENTIFIC her chemicals ANY) _ Ca TONS FOR TUBING P Size 11 5/8" 7" 4 1/2"	ED INJECTOR OF THE PROGRAM SP Grade LS LS J-55	CTION O. OF MATI to maintain virs ODIC PR M ECIFICATI Weight per ft. NA 17	PERATI TERIAL vater qualit OTECT ONS New	S TO BE I y and improve TON AND Used	NJECTED, INCOMPRESSION OF THE CORDINATE	ROSION CONTERVALS Left In Well 30' 508'	CEMENT FILL -UP OR SACKS (CU. FT.)	PACKERS Kinds Tension Sizes 2 3/8" x 4" Depths set
9) MAXIMUM 1 0) DETAILED I bactericides, and ot 1) FILTERS (IF 2) SPECIFICAT 3) CASING AND CASING OR TUBING TYPE conductor resh Water total intermediate roduction ubing	PROPOSE DENTIFIC her chemicals ANY) _ Ca TONS FOR TUBING P Size 11 5/8" 7" 4 1/2"	ED INJECTOR OF THE PROGRAM SP Grade LS LS J-55	CTION O. OF MATI to maintain virs ODIC PR M ECIFICATI Weight per ft. NA 17	PERATI TERIAL vater qualit OTECT ONS New	S TO BE I y and improve TON AND Used	NJECTED, INCOMPRESSION OF THE CORDINATE	ROSION CONTERVALS Left In Well 30' 508'	CEMENT FILL -UP OR SACKS (CU. FT.)	PACKERS Kinds Tension Sizes 2 3/8" x 4" Depths set 2297'
9) MAXIMUM 1 10) DETAILED I 11 bactericides, and of 11) FILTERS (IF 12) SPECIFICAT 13) CASING AND 14 CASING OR 15 TUBING TYPE 16 CASING OR 16 CASING OR 17 CASING OR 17 CASING OR 17 CASING OR 18 CASING	PROPOSE DENTIFIC her chemicals ANY) _ Ca TONS FOR TUBING P Size 11 5/8" 7" 4 1/2"	ED INJECTOR OF THE PROGRAM SP Grade LS LS J-55	CTION O. OF MATI to maintain virs ODIC PR M ECIFICATI Weight per ft. NA 17	PERATI TERIAL vater qualit OTECT ONS New	S TO BE I y and improve TON AND Used	NJECTED, INCOMPRESSION OF THE CORDINATE	ROSION CONTERVALS Left In Well 30' 508'	CEMENT FILL -UP OR SACKS (CU. FT.)	PACKERS Kinds Tension Sizes 2 3/8" x 4" Depths set 2297' Perforations
9) MAXIMUM 1 20) DETAILED I bactericides, and of 21) FILTERS (IF 22) SPECIFICAT 23) CASING AND CASING OR	PROPOSE DENTIFIC her chemicals ANY) _ Ca TONS FOR TUBING P Size 11 5/8" 7" 4 1/2"	ED INJECTOR OF THE PROGRAM SP Grade LS LS J-55	CTION O. OF MATI to maintain virs ODIC PR M ECIFICATI Weight per ft. NA 17	PERATI TERIAL vater qualit OTECT ONS New	S TO BE I y and improve TON AND Used	NJECTED, INCOMPRESSION OF THE CORDINATE	ROSION CONTERVALS Left In Well 30' 508'	CEMENT FILL -UP OR SACKS (CU. FT.)	PACKERS Kinds Tension Sizes 2 3/8" x 4" Depths set 2297' Perforations Top Bottom
19) MAXIMUM 1 20) DETAILED I bactericides, and of 21) FILTERS (IF 22) SPECIFICAT 23) CASING AND CASING OR TUBING TYPE Conductor Fresh Water Coal Intermediate Production Tubing	PROPOSE DENTIFIC her chemicals ANY) _Ca TONS FOR TUBING P Size 11.5/8" 7" 4.1/2" 2.3/8"	ED INJECTOR IN	CTION O. OF MATI to maintain virs ODIC PR M ECIFICATI Weight per ft. NA 17 10.5 4.6	PERATI FERIAL vater qualit OTECT ONS New x	S TO BE I y and improve TON AND Used x	NJECTED, INCOMPRESSION OF THE CORDINATE	CLUDING ROSION C TERVALS Left In Well 30' 508'	CEMENT FILL -UP OR SACKS (CU. FT.)	PACKERS Kinds Tension Sizes 2 3/8" x 4" Depths set 2297' Perforations Top Bottom



WR-35 Rev. 8/23/13

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

API 47- 007	_ 04/55	County ROANE			District SMITHE	ELD	
Quad LOONEYVILLI	₹ 7.5	Pad Name KINK	EAD, S.B.		Field/Pool Name	CLOVER	
Farm name MAY, TIM	OTHY D.				Well Number 109		
Operator (as registered	with the OOG)	H.G. ENERGY LL	C				
Address 5260 DuPO			RKERSBU	RG	State WV	Zip 2	26101
As Drilled location N	.,	Attach an as-drille Northing 4,285,442 M	ed plat, profil		d deviation survey ting 475,633 M		
Landing Point		Vorthing			ting		
Botto	om Hole 1	Northing 4,285,245 M		Eas	ing 475,464 M		
Elevation (ft) 1,110' Permit Type Devi Type of Operation C Well Type Brine Dis Type of Completion Drilled with Cable Drilling Media Surface Production hole Air Mud Type(s) and Addit N/A	ated Ho convert D posal CBM Single Mul Rotary chole Air	□ Gas □ Oil □ Sec tiple Fluids Produ	tal 6A G Plug Back condary Reco	Vertical □ Redri very □ Se	olution Mining 🖂 S	□ Deep Stimulate torage Otto	Shallow e her Injection
	7/10/18		5:04	NΔ	* ***		NA
Date permit issued		Date drilling comm			Date drilling		13/3
Date completion activitie		The state of the s			vities ceased	1121110	RECEIVED
Verbal plugging (Y/N)	IA D	ate permission granted	i		Granted by	Office	of Oil and Gas
Please note: Operator is Freshwater depth(s) ft		omit a plugging applica			erbal permission to p	olug	G 2 0 2020 Department of mental Protectio
Salt water depth(s) ft		730'			Y/N) depths	None)
Coal depth(s) ft	615				I (Y/N) depths	Non	
		N	Cavern(8) e	ncountered	(1414) debuis		Э1.
Is coal being mined in ar	ea (Y/N)	37				Review	ed by:

Page 2 of 4 WR-35 Rev. 8/23/13 API 47-087 -Farm name MAY, TIMOTHY D. 04753 _Well number 109 **CASING** Hole Casing New or Grade Basket Did cement circulate (Y/N) **STRINGS** Size Size Used Depth wt/ft Depth(s) * Provide details below* Conductor 12 1/4" 11 5/8" 30' Used LS Sand In Surface 8 3/4" 7" 508' New LS 64' Υ Coal Intermediate 1 Intermediate 2 Intermediate 3 Production 6 1/4" 4 1/2" 2583.3' New J-55 Tubing Packer type and depth set Comment Details Circulated Est. 25 sks to surface on 7" surface cement job. Circulated Est. 25 sks to surface on 4 1/2" cement job. WOC **CEMENT** Class/Type Number Slurry Yield Volume Cement of Cement ft 3/sks) (Ω^3) Top (MD) DATA of Sacks wt (ppg) (hrs) Conductor Surface **Reg Neat** 130 15.6 1.18 153.4 Surface 8 Coal Intermediate 1 Intermediate 2 Intermediate 3 Production 189/186 Surface 8 1.64/1.27 50:50 Pozmix 115/125 13.2/14.2 Tubing Drillers TD (ft) 2630 Loggers TD (ft) 2623 Plug back to (ft) NA Deepest formation penetrated Big Injun Plug back procedure N/A RECEIVED Office of Oil and Gas Kick off depth (ft) 600° ■ deviated/directional **induction** Check all wireline logs run acaliper = **density** ic WV Department of Environmental Protection 🗂 gamma ray # temperature **Osonic** ■ neutron **■** resistivity Well cored ☐ Yes ■ No Conventional Sidewall Were cuttings collected ■ Yes □ No DESCRIBE THE CENTRALIZER PLACEMENT USED FOR EACH CASING STRING 20 Controlizors every 88 from bottom on 4 172", Centrolizer placed mid string on 7" WAS WELL COMPLETED AS SHOT HOLE □ Yes B No DETAILS WAS WELL COMPLETED OPEN HOLE? □ Yes B No WERE TRACERS USED Yes No TYPE OF TRACER(S) USED _

WR-35 Rev. 8/23/13 Page 3 of 4

API	47- 087 - 04753	Farm name MAY, TIMOTHY D.	_Well number_109
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PERFORATION RECORD

Stage No.	Perforation date	Perforated from MD ft.	Perforated to MD ft	Number of Perforations	Formation(s)
_1	7/23/18	2398'	2408'	60	Big Injun
			·		

Please insert additional pages as applicable.

STIMULATION INFORMATION PER STAGE

Complete a separate record for each stimulation stage.

Stage No.	Stimulations Date	Ave Pump Rate (BPM)	Ave Treatment Pressure (PSI)	Max Breakdown Pressure (PSI)	ISIP (PSI)	Amount of Proppant (lbs)	Amount of Water (bbls)	Amount of Nitrogen/other (units)
1	7/27/18	2.7	1393	NA	610	0	12	2000 gals
								15% HCL
								
							0	RECEIVED flice of Oil and Gas
								o" and Gas
							/	UG 1 2018
							14	
							Enviro	V Department of nmental Protection
								-, rotection

Please insert additional pages as applicable.

WR-35 Rev. 8/23/13										Page 2	4_of_4_
	04753	Farm	name_MAY, T	IMOTHY D	,	Well	number	109			
	FORMATION		<u>DEPTHS</u>		2383'- 2425'	MD					
Please insert ac	dditional pages	as applicable.									
GAS TEST	□ Build up	□ Drawdown	□ Open Flow	C	DIL TEST 🗆	Flow c	Pump				
SHUT-IN PRE	SSURE Sur	face	psi Botto	m Hole	psi	DURAT	TION O	FTES	т	hr	S
OPEN FLOW			NGL bpd	bpd _		GAS N				n Pilot	
LITHOLOGY/ FORMATION	TOP DEPTH IN FT NAME TVD	BOTTOM DEPTH IN FT TVD	TOP DEPTH IN FT MD	BOTTOM DEPTH IN F	TYPE OF F						
Sand/Shale	0	1665	0	1724							
Sand	1665	1671	1724	1730							
Shale	1671	1677	1730	1738							
Sand	1677	1790	1738	1878							
Shale	1790	1809	1878	1904							
Sand	1809	1972	1904	2139							
Little Lime	1972	1987	2139	2162							
Pencil Cave	1987	1998	2162	2176							
Big Lime	1998	2119	2176	2356							
Keener	2119	2148	2356	2383							
Big Injun	2148	2165	2383	2425		orilled direc	tional S	41° W a	distance	e of 771'	
Shale	2165	2312	2425	2630							
TD	2312		2630								
	dditional pages a actor_Decker Dri										
Address 11565	State Route 676		City	Vincent		State	ОН	Zip	45784		
Logging Comp Address 777 No	oany Weatherfor	rd International	City	Weston		State	wv	Zip	26452	Office (ECEIVED of Oil and
Cementing Co Address Hall R	mpany Universa d	al Services	City	Buckhannon		State	wv	Zip	26201	AUG	4.32
Stimulating Co	ompany Produ	cers Service Co	orp. City	Zanesville		State	ОН	Zip	Er 43701	WV De	epartmen: ental Prot
	dditional pages										
	Roger Heldma				Telephone	304-420	-1107	14.14.0			_
Signature	for the	ava	Title C	perations Man	ager		Date 8	71/18		-	
Submittal of H	Iydraulic Fractu	ring Chemical	Disclosure Info	rmation	Attach copy	ofFRACI	FOCUS	Regist	try		

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FORM WW-3 (A) 1/12



1) Date:	August 4, 2	2020				
2) Operato	or's Well	No.	S. B. I	Kinkead 109		
3) API We	ell No.:	47	-	087	-	04753
		State		County		Permit
4) IIIC Per	mit No	2008	700005	AD:		

STATE OF WEST VIRGINIA NOTICE OF LIQUID INJECTION OF WASTE DISPOSAL WELL WORK PERMIT APPLICATION FOR THE DEPARTMENT OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS,

Surface Ow	mer(S) To Be Served	7) (a) Coal ()perator		
(a) Name	Timothy D. May	Name	NA		
Address	242 Edgle Fork Road	Address			
	Spencer, WV 25276				
(b) Name			The second second	eclaration Of Reco	rd
Address		Name	NA.		
		Address	×		
(c) Name		Name	9		
Address		Address	-		RECEIVED
Address		riddress	-		Office of Oil and Gas
6) Inspector	Joe Taylor	7) (c) Coal I	essee with Decla	aration Of Record	AUG 2 0 2020
Address	1478 Claylick Road	Name	NA		
	Ripley, WV 25271	Address		F.	W Department
Telephone	304-380-7469				vironmental Projection
plan for e The date THE REASON APPLICATIO	struction and Reclamation Plan on Form WW rosion and sediment control and for reclamate proposed for the first injection or waste N YOU HAVE RECEIVED THESE DOON WHICH ARE SUMMARIZED IN THE ATION [(FORM WW-3(B)] DESIGNATED ALL.	tion for the sidisposal is CUMENTS 1 "INSTRUCT	te and access roa S THAT YOU IONS" ON THE	d. HAVE RIGHTS REVERSE SIDE	20 20 . REGARDING THE OF THE COPY OF
Notice and Ap West Virginia Application ar and Reclamati	at under Chapter 22-6 of the West Virginia Copplication and accompanying documents for Department of Environmental Protection, and depicted on the attached Form WW-6. Coon Plan have been mailed by registered or confirm certain circumstances) on or before the data	a Well Wor with respect opies of this ertified mail	k Permit with the to a well at the Notice, the App or delivered by	e Chief of the Off the location describ lication, the plat, as mand to the person(ice of Oil and Gas, ed on the attached nd the Construction
	The person signing this docume	ent shall mal	ce the following	g certification:	
SI cartific ands	r penalty of law that I have personally exami	ned and	Well Operator	HG Energy, LLC	
am familiar wi	th the information submitted in this documen	nt and all	Address	5260 Dupont Road	
	nd that, based on my inquiry of those individu			Parkersburg, WV 2610	1
immediately re	esponsible for obtaining the information, I be	lieve that	Ву:	Diane White	
	n is true, accurate and complete. I am aware		Its:	Agent	
	penalties for submitting false information, in of fine and imprisonment.			Diane W	Lita.
the possibility	of thie and imprisonment.		Signature:	Diane W	Inch

U.S. Postal Service" CERTIFIED MAIL® RECEIPT Domestic Mail Only	For delivery information, visit our website at www.usps.com. Certified Mail Fee State Services & Fees (check box, add fee as appropriate) Feture Receipt (electronic) Return Receipt (electronic) Adult Signature Restricted Delivery \$ Adult Signature Restricted Delivery \$ Adult Signature Restricted Delivery \$ Costage	Sent To Timothy D. May Street and April 2015 PSN 7250-020000007 See Reverse for Instructions
⊃ 0 8	Cortified Cortif	Sent To Seri To Street and City, State

RECEIVED Office of Oil and Gas

AUG 2 0 2020

WV Department of Environmental Protection

WW-2B	1
(5-12)	

Well No	SB Kinkead 109	

West Virginia Department of Environmental Protection Office of Oil and Gas

NOTICE TO SURFACE OWNERS

The well operator named below is preparing to file for a permit from the state to drill a new well. Before a well work permit can be filed with the Chief of the Office of Oil and Gas, the well operator is required to have given notice of the right to request water well or spring analytical testing. This notice shall be given to the owners or occupants of land which have a water well or spring being utilized for human consumption, domestic animals, or other general use and which is located within 1000 feet of the proposed well site.

With this form, the operator is giving you notice of your right to request analytical testing. The operator is required to sample and analyze the water wells or springs of all owners or occupants who request it. Therefore, if you wish to have your water well or spring tested, contact the operator named below.

All sampling shall be completed prior to drilling. Within thirty (30) days of the receipt of such sample analyses the operator shall submit the results to the Chief of the Office of Oil and Gas and to the owners or occupants who may have requested them.

Be advised, you have the right to sample and analyze any water supply at your own expense.

Listed below is the laboratory chosen by operator to perform analysis, and contactor chosen to collect sample.

			Office of Oil and Gas
Certified Laboratory Name Sampling Contractor		Sturm Analytical Lab	AUG 2 0 2020
		Sturm Analytical Lab	7.03 % 0 1020
			WV Department of Environmental Protection
Well Operator	HG Energy, LL	c	
Address	5260 Dupont R	oad	
	Parkersburg, W	V 26101	
Telephone	304-420-1119		

FOR OPERATOR'S USE ONLY: Below, or on an attached page, list those persons which were given this notice. Place an asterisk beside the one(s) that contacted you and requested sampling and analyses. If there were no requests made, indicate by underling which one you have selected to sample and analyze. If there are no water wells or springs within 1000 feet of the proposed site, the Chief may require the operator to test wells up to 2000 feet from the proposed site.

* Not Applicable

WW-9 (2/15)

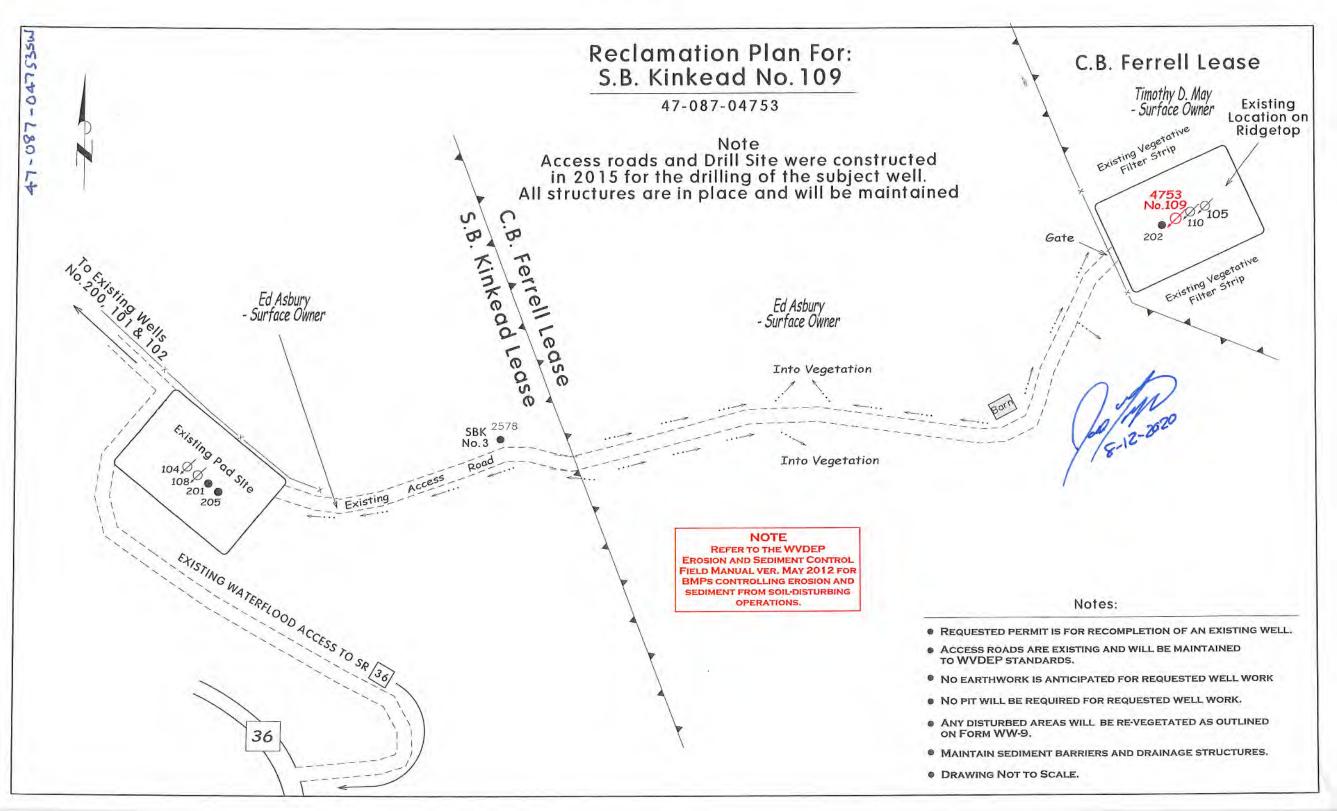
API Number 47 -	87	- 04753
Operator's	Well No.	SB Kinkead 109

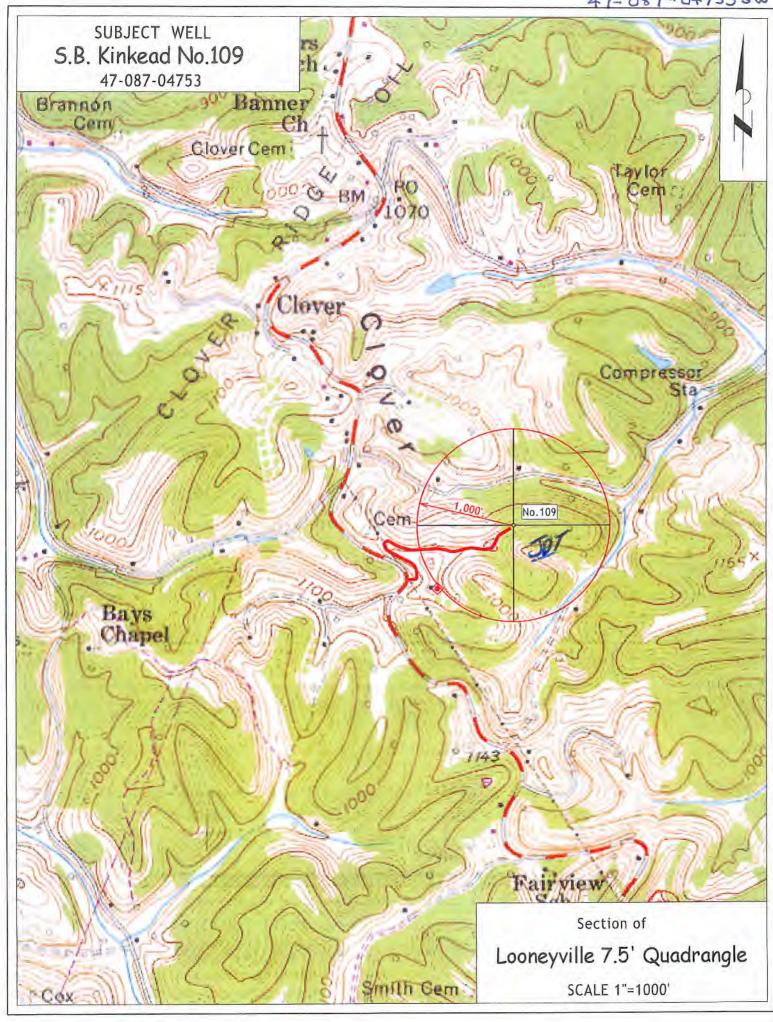
STATE OF WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION OFFICE OF OIL AND GAS

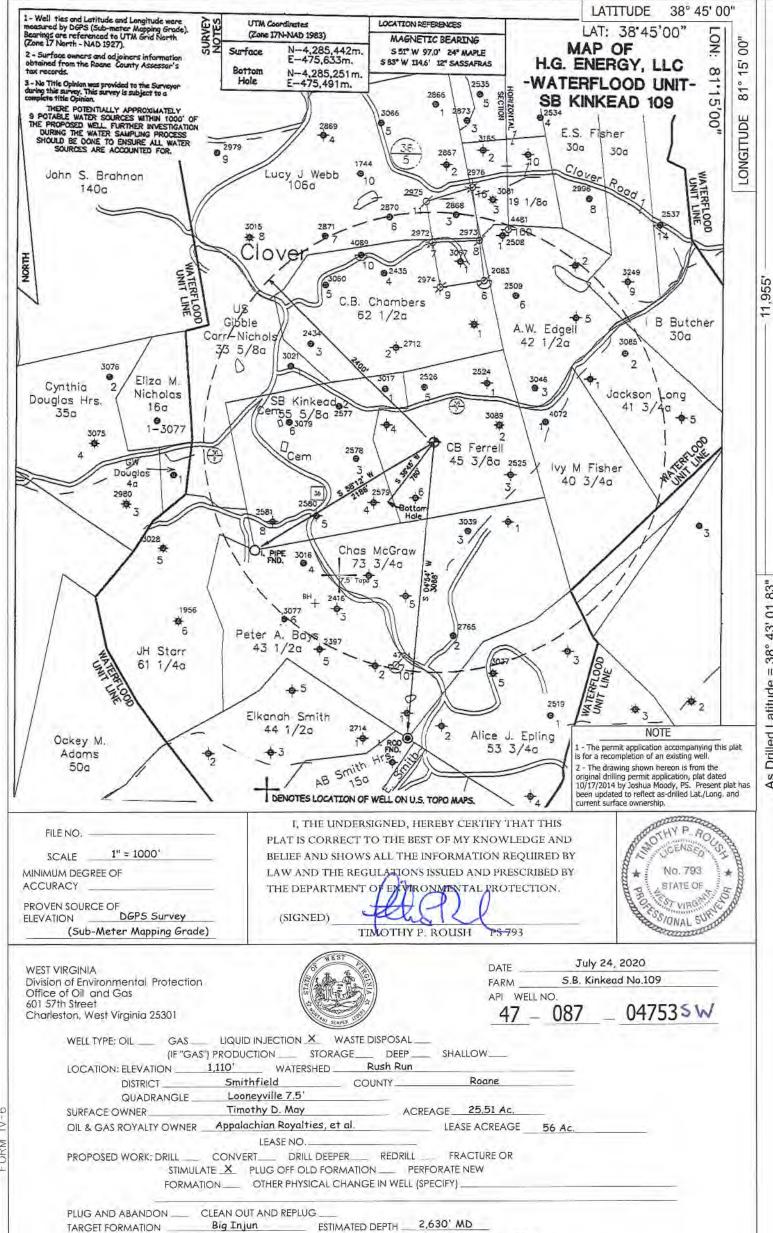
FLUIDS/ CUTTINGS DISPOSAL & RECLAMATION PLAN

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 com	
Will a pit be used? Yes No V	ANY WELL EFFLUENT MUST BE CONTAINED IN TANKS AND DISPOSED OFF-SITE.
If so, please describe anticipated pit waste: NA	garm
Will a synthetic liner be used in the pit? Yes	No If so, what ml.?
Proposed Disposal Method For Treated Pit Wastes:	
Land Application	
Underground Injection (UIC Pern Reuse (at API Number	nit Number)
Off Site Disposal (Supply form W	W-9 for disposal location)
Other (Explain No waste anticipate	ed, should there be any fluids they'll be hauled for disposal
Will placed look quotem be used? If as describe. NO	
Will closed loop system be used? If so, describe: No	ntally Air freehymter oil based etc. NA
Drilling medium anticipated for this well (vertical and horizon	
-If oil based, what type? Synthetic, petroleum, etc	
Additives to be used in drilling medium? NA	Office of Oil and Gas
Orill cuttings disposal method? Leave in pit, landfill, remove	ed offsite, etc. NA AUG 2 0 7020
-If left in pit and plan to solidify what medium will b	be used? (cement, lime, sawdust) NA
-Landfill or offsite name/permit number? NA	WV Department of Environmental Protection
Permittee shall provide written notice to the Office of Oil and West Virginia solid waste facility. The notice shall be provide where it was properly disposed.	Gas of any load of drill cuttings or associated waste rejected at any ed within 24 hours of rejection and the permittee shall also disclose
on August 1, 2005, by the Office of Oil and Gas of the West V provisions of the permit are enforceable by law. Violations law or regulation can lead to enforcement action. I certify under penalty of law that I have personal application form and all attachments thereto and that, bas	d conditions of the GENERAL WATER POLLUTION PERMIT issued Virginia Department of Environmental Protection. I understand that the of any term or condition of the general permit and/or other applicable lly examined and am familiar with the information submitted on this sed on my inquiry of those individuals immediately responsible for a true, accurate, and complete. I am aware that there are significant ibility 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 4th day of	August . 20 20
My commission expires 7/31/2022	OFFICIAL SEAL STATE OF WEST VIRGIN

Proposed Revegetation Trea	atment: Acres Disturbed	0.1 Prevegetatio	n pH
Lime 3	Tons/acre or to cor	rect to pH 6.5	
Fertilizer type1			
Fertilizer amount	50) lbs/acre	
Mulch Straw	2	Tons/acre	
withen		10115/4010	
		Seed Mixtures	
T	emporary	Per	manent
Seed Type	lbs/acre	Seed Type	lbs/acre
Tall Fescue	40	Tall Fescue	40
Ladino Clover	5	Ladino Clover	5
Attach:			s including this info have been
Attach: Drawing(s) of road, location provided)	ı, pit and proposed area fo	r land application (unless engineered plan	s including this info have been
Attach: Drawing(s) of road, location provided) Photocopied section of invo	, pit and proposed area fo	r land application (unless engineered plan	s including this info have been
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Attach: Drawing(s) of road, location provided) Photocopied section of invo	, pit and proposed area fo	r land application (unless engineered plan	
** Sediment Contro Attach: Drawing(s) of road, location provided) Photocopied section of invo Plan Approved by: Comments:	, pit and proposed area fo	r land application (unless engineered plan	RECEIVED Office of Oil and Gas





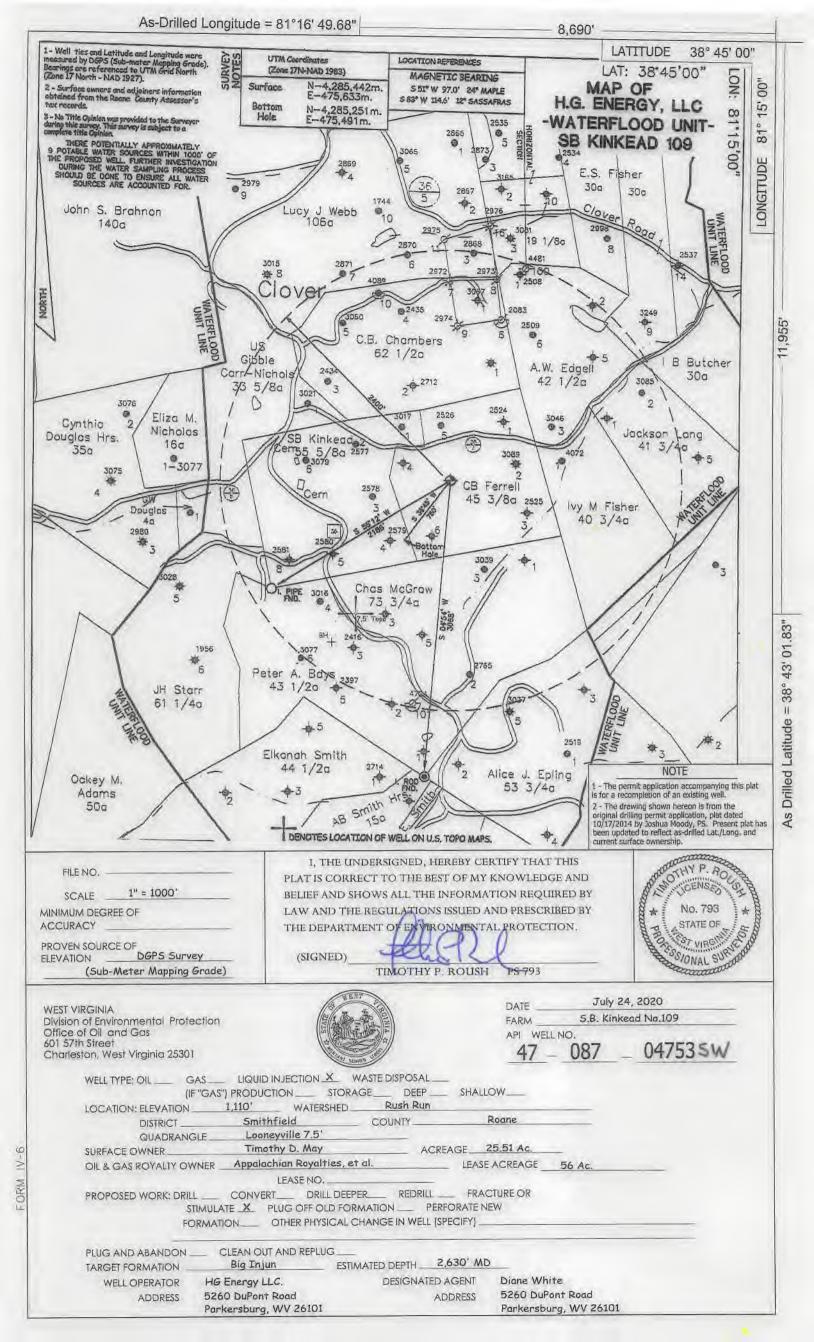


TARGET FORMATION WELL OPERATOR **ADDRESS**

HG Energy LLC.

5260 DuPont Road Parkersburg, WV 26101

DESIGNATED AGENT **ADDRESS** Diane White 5260 DuPont Road Parkersburg, WV 26101 As Drilled Latitude = 38° 43' 01.83"





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

August 4, 2020

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

RE:

S. B. Kinkead No. 109 (API 47-087-04753)

Smithfield District, Roane County

West Virginia

Diane White

Dear Mr. McLaughlin:

Enclosed are Forms WW-3A, WW-3B, WW-9, mylar of plat, reclamation plan, topo map and copies of the certified mailing receipts for a permit to stimulate an injection well. Also enclosed is our check in the amount of \$550.00 to cover the associated permit fees.

Very truly yours,

Diane C. White

RECEIVED
Office of Oil and Gas

Crest 4550 pro

AUG 2 0 2020

WV Department of Environmental Protection

Enclosures

cc:

Timothy D. May - Certified

Joe Taylor - Inspector



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

August 4, 2020

Timothy D. May 242 Edgle Fork Road Spencer, WV 25276

RE: S. B. Kinkead No. 109

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