

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 Jim Justice , Governor Austin Caperton , Cabinet Secretary www.dep.wv.gov

Friday, April 28, 2017 WELL WORK PERMIT Vertical / Plugging

PANTHER CREEK MINING, LLC (A) 3228 SUMMIT SQUARE PLACE SUITE 180 LEXINGTON, KY 40509

Re:

Permit approval for 20-S-115

47-039-01928-00-00

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.

Chief

James A. Marti

Operator's Well Number: 20-S-115 Farm Name: BLUE EAGLE LAND, LLC

U.S. WELL NUMBER: 47-039-01928-00-00

Vertical / Plugging

Date Issued: 4/28/2017

Promoting a healthy environment.

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.

WW-4B Rev. 2/01 1) Date _Feb. 20, 2017_

2) Operator's Well No. 20-S-115

3) API Well No. 47-039-01928

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

APPLICATION FOR A PERMIT TO PLUG AND ABANDON

	ALL ABANDON
4) Well Type: Oil / Gas_ X_ / Liquid injection (If "Gas, Production_X_ or Underground store	/ Waste disposal / age) Deep / Shallow
5) Location: Elevation 949.2' Watershed: Rattlesna District Malden County Kananwha Quadrang	
6) Well Operator <u>Panther Creek Mining, LLC</u> 7) Design Address 3228 Summit Square Place, Suite 180 Lexington, KY 40509	Address P.O. Box 99 Dawes, WV 25054
8) Oil and Gas Inspector to be notified 9) Plugging Cor Name Terry Urban Name Address P.O. Box 1207 Address Clendenin, WV 25045	CJ's Well Service
10) Work Order: The work order for the manner of plugging See attached plugging prognosis	g this well is as follows:
Notification must be given to the district oil and permitted work can commence.	gas inspector 24 hours before Office of Oil and Gas
Work order approved by inspector Muyullu	APR 0.8 2017 Date 3-15-17 WV Department of
	Environmental Protection

PLUGGING PROGNOSIS

Well #20-S-115 API# 47-039-01928 Malden District, Kanawha

Current Status

Elevation: 949.02'

Total Depth: 1695'

Active: Yes Plugged: No

Procedure for Plugging

- 1) Notify state inspector, Terry Urban, @ 304-549-5915, before starting.
- 2) The purpose of this plugging is to allow for cover up of the well within a future refuse area.
- 3) Cleanout hole to 1,695' (Original T.D.)
- 4) Locate free point, cut casing, and pull from hole. ≈ 1300 .
- 5) Pump Class "A" Cement from 1,695' 1,425' (T.D. to 100' above Gas Producing Formation.)
- 6) Pump Class "A" Cement or "Gel" from 1,425' surface.
- 7) Depending on site conditions, plugging procedures may be modified after approval of the inspector.
- 8) All changes to the plugging procedures will be noted in the plugging affidavit.
- 9) Erect permanent monument with API number. PER WY'S

10) Reclaim the site and access road.

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REGEIVED Office of Qil and Gas

APR 0 3 2017

WV Department of Environmental Protection

PERMANENT MAKER

should contain the name, address and telephone number of the person filing the comment, the well operator's name and well number, and the approximate location of the proposed well site including district and county as indicated in the permit application. Comments may be accompanied by other pertinent documents in support of the comment. Other than as prescribed in this rule, no particular form for the comment is prescribed.

5.5. Identification Markings.

- 5.5.a. Every well shall have attached or stamped, in a permanent manner, the API identification number which consists of the state (47), county (001 through 109), and permit number. Such number shall be no less than one-half (1/2) inch in height and detectable by any interested person approaching the well. Any additional information the well operator may desire to display may be incorporated in the permanent identification plat or stamp in such a manner that it will not confuse or distort the permanent API identification number.
- 5.5.b. Except as provided below, upon the completion of the plugging and filling of any abandoned well, a permanent monument or marker consisting of a length of pipe (minimum diameter size six (6) inches) filled with concrete (or the equivalent thereof if approved by the Chief) shall be erected over the well; the marker shall extend no less than thirty (30) inches above the surface and not less than ten (10) feet below the surface and into the well, and shall be sealed with concrete for the purpose of making the marker permanent. The API well identification number which consists of the state (47), county (001 through 109), and permit number shall be attached or stamped in a permanent manner to said monument; and such numbering shall be no less than one half (1/2) inch in height and detectable by any interested person approaching the marker. The erection of the marker shall in no way interfere with the bleeder pipe from the well where such pipe is required, or the vent or other device installed pursuant to W. Va. Code § 22-6-24. Such manner shall be accurately described on Form WR-38, "Affidavit of Plugging and Filling Well" (see subsection 13.10 below) as to time and manner of plugging and filling the well, and shall be approved by the Chief as a satisfactory landmark that may be used as such in the location of adjacent wells. Two (2) permanent reference points with courses and distances from the abandoned well shall be designated and prescribed on the plat required by subdivision 5.2.d above in the form prescribed by section 9 below, accompanying Form WW-4, "Notice of Intention to Plug and Abandon a Well," if any change in the plat is necessary, accompanying Form IV-38, "Affidavit of Plugging and Filling Well" (see subsection 13.10 below).
- 5.6. Parties Responsible. All contractors and drillers, including all service companies carrying on business or doing work in oil and gas fields in West Virginia, as well as lease holders and operators generally, shall take notice of and are hereby directed to observe and apply the provisions of W. Va. Code § 22-6 and this rule; and all contractors, drillers, service companies and operators shall be held responsible for violations thereof.

5.7. Evidence of Performance.

- 5.7.a. After the completion of the work authorized to be done by any permit required by W. Va. Code § 22-6-6, the permittee shall comply with filing requirements of W. Va. Code § 22-6-22 and section 12 of this rule.
- 5.7.b. In addition to the requirements of subdivision 5.7.a, following completion of plugging a well, the permittee shall also comply with the affidavit requirements of W. Va. Code § 22-6-23 and subsection 13.10 below.

CLERIDENIN ..



DEPARTMENT OF MINES OIL AND GAS DIVISION \dot{b}

	-1928					Oil or G	AB Well Gas
Address P.O. B	n Gas Com Box 766 - 1	Charleston,	W. Va.	Casing and Pubing	Used in Drilling	Left in Well	Packers
Farm Union	Carbide Co	orp•	Acres 3,080		 -		
Location (waters)	Rattlesnal	ke Hollow		Size	ļ ļ		•
Well No 20 - S	-115	·	Elev 911-117	16	<u> </u>		Kind of Packer
District Malden		County Kanaw	ha ·	13			
The surface of trac	et is owned in	fee by Union	<u>Carbide</u>	10	361 km	351 14	Size of
Corp.	A	Address So. Ch	as., W.Va.	81/4	10h = -	1001	<u> </u>
M 1 rights are	owned by	Sare		65%	7386	No:10	Depth set
				5 3/16			
Drilling commence	d Decembe	er 26, 1962			16831	16831	Perf. top 1525*
Drilling completed.	Januar	v 28. 1963	· · · · · · · · · · · · · · · · · · ·	2	<u> </u>		Perf. bottom 15321
Date Shot							Perf. top
With					T		Perf. bottom
Open Flow . 5 /	10ths Water is	n 2	Inch	.:			Terr. Borron
			Inch		ligh	,	No. Ft Dat
Volume 94 Me			Cu. Ft.	CASING CEN			
Rock Pressure	315	lbs. 19	hrs.	27 Dacas	- Well Serv		•
Oil			_bbls., 1st 24 hrs.		ENCOUNTERED	AT	FEETINCHE
WELL ACIDIZED	•	No		FEE	TINCH	ES	FEETINCHE
				FEE	TINCH	ES	FEETINCHE
WELL FRACTUR	ED Thro	igh perforat	ions at 1525	-1532 with	50 Bbls. Wa	ter. 25.00	x0# 2 0- 40
112211 11110101		- 250 Gal.					•
ROCK PRESSURE Fresh Water		Fect		Salt Water		Feet	<u></u>
Formation	Color	Hard or Soft	Тор	Bottom	Oil, Gas or Water	Depth	
Formation op Soil and Late & Shells and Late & Shells and Late and Broken Late and					Oil Gas or Water Oil Water	Depth Office of C 728-714 728-714 728-714 728-714 728-716 728-714 7	Remarks File Cas 3 20 Show H.F.

1365 1357 1356 1360 1373 1375 1360 1373 1375 1360 1373 1375 1361 1375 1375 1362 1373 1375 1363 1375 1375 1364 1375 1375 1365 1375 1375 1367 1375 1375 1368 1375 1375 1377 1375 1378 1375 1377 1375 1378 1375 1378 1375 1378 1375 1378 1375 1378 1375 1378 1375 1378 1375 1378 1375 1378 1378	Formation	Color	Hard or Soft	Тор в	Bottom	Oil, Gas or Water	Depth Found	Remarks
Total Depth 1/30/63 - Ram and camented har Casing at 1675. Circulated 7 Bags Aquagel theat of coment. Used 29 sacks H. Sarly. Float Collar at 1601.	Slate Line Slate Rig Lime Gray Injun Sa Red Injun Sar Slate & Shell Weir Sand	id s		1357 1360 1373 1375 1520 1512 1561 1623	1360 1373 1375 1520 1542 1564 1623 1634			
1/30/63 - Ran and camented his Casing at 1675. Circulated 7 Bags Apagel shead of coments. Used 29 sacks H. Marly. Float Collar at 1611.	19845 19845 19845	;		1695		Gas:	131-130	
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•	Date 1001 daily 21	
APPROVED	SPARTAN GAS COMPANY	Owner
•	by William T.	Beilel
	(Title)	

HOLE NUMBER WV93-Ø13 (#5)	UTM ZONE QUADRANGLE QUICK
LATITUDE Ø Ø Ø "	UTME COORDINATE
LONGITUDE Ø Ø 'Ø "	UTMN COORDINATE
DRILLER HIGNITE, J.D.	DATE 4 / 26 / 93
LAST FIRST	М
	SHWALLAUGERG-LOGOTHER NCHESFEET & TENTHS X METRIC
	LOG SHEET

PAGE 1 OF 4 PAGES

ROCK CODE	ELEVATION	UNIT THICKNESS	CUMULATIVE THICKNESS	N.P.	P.A.	SAMPLE NO.	COMMENTS
	1148.56						
001	1125.56	23.00	23.00			1	CASING OR SURFACE MATERIAL
ØØ1	1105.56	20.00	43.00				ROTARY
544	1083.86	21.70	64.70				GRAY MASSIVE SANDSTONE
:3	1083, 16	Ø. 7Ø	65.40				BONEY COAL
133	1079.26	3.90	69.30				CT GRAY SHALE W/COAL STREAKS
748	1059.26	20.00	89.30				GRAY SANDSTONE W/COAL BANDS
540	1Ø45.56	13.70	103.00				GRAY SANDSTONE
748	1037.86	7.70	110.70			1	GRAY SANDSTONE W/COAL BANDS
020	1Ø37.61	Ø. 25	110,95		1		COAL
748	1037.41	Ø. 2Ø	111.15				GRAY SANDSTONE W/COAL BANDS
023	1037.11	Ø. 3Ø	111.45			1	EONEY COAL
133	1636.66	1.05	112.50			1	LT GRAY SHALE W/COAL STREAKS
137	1035.06	1.00	113.50			1	FTRECLAY
334	1032.56	2.50	116.00				LT GRAY MASSIVE SANDY SHALE
748	998,56	34.00	150.00			1	GRAY SANDSTONE W/COAL BANDS
540	988.56	10,00	160.00				GRAY SANDSTONE
334	977.66	10.90	17Ø.9Ø		1		LT CRAY MASSIVE SANDY SHALE
124	970,66	7.00	177.90			 	DARK GRAY SHALE
020	97Ø.36	Ø. 3Ø	178,20				COAL
134	969.16	1.20	179.40				LIGHT GRAY SHALE
334	966,66	2.50	181.90			1	LT GRAY MASSIVE SANDY SHALE
546	965.56	1.10	183.00	-	1	1	GRAY SANLSTONE
334	961, 16	4.40	187, 40			 	CT GRAY MASSIVE SANDY SHALE
134	948.86	12.30	199.7Ø				LIGHT GRAY SHALE
540	945,56	3.3Ø	203.00		İ	1	GRAY SANDSTONE
334	944.36	1.20	204.20				LT GRAY MASSIVE SANDY SHALE
540	940.36	4.00	208.20				GRAY SANDSTONE
134	936.46	3.90	212.10				LIGHT GRAY SHALE
2.4	935,96	Ø. 5Ø	212.60				DARK GRAY SHALE
228	935.06	Ø.9Ø	213.50	THE REAL PROPERTY.	1	-	COAL WITH SHALE STREAKS
133	934.66	Ø. 4Ø	213.90		1		LT GRAY SHALE W/COAL STREAKS
020	934.41	Ø. 25	214.15		Stockto	-	COAL
134	934.36	0.05	214.20		The state of the s		LIGHT GRAY SHALE
620	933.31	1.05	215.25				COAL

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HOLE NUMBER WV93-Ø13 (#5)	UTM ZONE Ø	QUADRANGLE QUIC	K
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LONGITUDE Ø Ø 'Ø "	UT	MN COORDINATE	
DRILLER HIGNITE, J.D.		DATE 4	/ 26 / 93
LAST	FIRST MI		
TYPE-CORE X CHIP	_HIGHWALLAUGE	RG-LOGOTHE	R
<u>UNIT OF MEASURE</u> - FEE	T & INCHES FEE	T & TENTHS X METRI	c
	LOG SHEET		

PAGE

ROCK CUMULATIVE UNIT SAMPLE **ELEVATION** N.P. P.A. COMMENTS CODE THICKNESS **THICKNESS** NO. 114 933.06 Ø. 25 215.50 BLACK SHALE 920 932.41 Ø. 65 216.15 LXXAL 217.19 DARK GRAY SHALE 124 931,46 Ø. 95 020 218.65 <u>929,91</u> 1,55 Stockto DOAL BONEY COAL 219.05 Ø. 4Ø 929.513 <u> 22 كىد</u> 929,06 Ø. 45 219.50 DARK GRAY SHALE W/COAL STREAKS 1,35 2,15 220,85 CXDAL 020 927,71 223.00 LIGHT GRAY SHALK 134 925,56 134 923,86 1.70 224.70 SOFT GRAY SHALE 334 916,06 7.80 232.50 LT GRAY MASSIVE SANDY SHALE 263.00 GRAY MASSIVE SANUSTONE <u>544</u> 30,50 <u>885, 56</u> 748 4,35 267,35 GRAY SANDSTONE W/COAL BANDS 881,21 020 880,86 Ø. 35 267.70 COAL LT GRAY SHALE W/COAL STREAKS 2.00 269.70 133 878,86 877,36 1.50 271.20 SOFT GRAY SHALE 134 LIGHT GRAY SHALE 134 872,66 4.70 275.90 LT GRAY MASSIVE SANDY SHALE 334 869, 16 3.50 279.4Ø COAL W/SANDSTONE STKS Ø. 15 000 279.55 869.Ø1 Ø.75 00.0 868,26 280.30 COAL LIGHT GRAY SHALE 134 867,86 0.40 280.70 GRAY SANISTONE 13.50 294.20 540 854, 36 298.10 GRAY SANLSTONE W/SHALE STREAKS 543 3.90<u>850, 46</u> GRAY SANCETONE W/COAL BANCE 748 4.90 303.00 B45.56 540 317.00 GRAY SANLSTONE B31.56 14.00 748 GRAY SANDSTONE W/COAL BANDS 2,60 319.60 B28.96 823,46 5.50 LIGHT GRAY SHALE 134 325.10 822.41 Ø2Ø 1.05 326, 15 COAL BLACK SHALE 114 821.61Ø. 8Ø 326.05 CXXAL 020 Ø. 45 <u>821, 16</u> <u>327, 4Ø</u> 74 817.86 3.30 SOFT GRAY SHALE 33Ø. 7Ø 7ر. B17.26 Ø. 8Ø 331.5Ø GRAY CLAY LIGHT GRAY SHALE 134 813,76 3.30 334.8Ø 020 <u>813, 36</u> Ø. 4Ø 335.20 COAL 811,96 LIGHT GRAY SHALE 134 336,60 1.40

APPLICA ON CAMEBELLS CREEK

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HOLE NUMBER WV93-Ø13 (#5	UTM ZONE Ø	QUADRANGLE QUICK
LATITUDE Ø Ø Ø Ø "		TME COORDINATE
LONGITUDE Ø Ø 'Ø "	. UT	MN COORDINATE
DRILLER HIGNITE. J.D.		DATE 4 / 26 / 93
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TYPE-CORE X CHIP	HIGHWALLAUGE	RG-LOGOTHER
<u>UNIT OF MEASURE</u> - FE	ET & INCHES FEE	ET & TENTHS X METRIC
	LOG SHEET	

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ROCK UNIT CUMULATIVE SAMPLE **ELEVATION** N.P. P.A. COMMENTS THICKNESS CODE THICKNESS NO. 342,00 GRAY SANLETONE 540 806,56 5.40 343.00 LT GRAY MASSIVE SANDY SHALE 334 825,56 1.00 134 799, 26 6.30 349,30 LIGHT GRAY SHALE 134 796.66 2,60 351.9Ø GRAY SHALE W/FOSSILS 796.06 352.5Ø COAL W/PYRITE STKS 0.60 2 LT GRAY SHALE W/COAL STREAKS 795, 26 Ø.8Ø 353,30 .പ3 LIGHT GRAY SHALE 134 794.06 1,20 354.50 2.30 356,80 SOFT GRAY SHALE 134 791,76 360,80 LIGHT GRAY SHALE 134 787,76 4.00 334 783,56 365.00 LT GRAY MASSIVE SANDY SHALE 4,20 540 769, 36 14.20 379.20 GRAY SANDSTONE BLACK SHALE 114 767.66 1.70 380.90 COAL WITH SHALE STREAKS *0*28 767.51Ø. 15 <u> 381.05</u> 00.01 766,66 Ø. 85 <u>381.90</u> COAL W/PYRITE STKS 134 765, 56 1.10 LIGHT GRAY SHALE <u>383,000</u> 134 760, 76 4.80 387.80 SOFT GRAY SHALE LT GRAY MASSIVE SANDY SHALE 334 757, 26 3.50<u> 391, 30</u> 134 LIGHT GRAY SHALR 753, 56 3.70 395,00 GRAY SANCETONE W/COAL BANCE 748 739, 26 14.30 <u>409.30</u> BONEY COAL 023 738,96 Ø.3Ø 409,60 737, 56 DARK GRAY SHALE 124 1.40 411.00 0.80 411.80 SOFT GRAY SHALE 134 736, 76 412.20 LIGHT GRAY SHALE 134 736, 36 Ø. 4Ø 334 733, 76 2.60414.80 LT GRAY MASSIVE SANDY SHALE 124 731.26 2.50 417,30 DARK GRAY SHALE BLACK SHALE WITH COAL STREAKS 113 730.76 Ø. 5Ø <u>417,80</u> 023 730, 36 BONEY COAL 0.40 <u>418, 20</u> 419.60 LIGHT GRAY SHALE 134 728, 96 1.40 LT GRAY MASSIVE SANDY SHALE LIGHT GRAY SHALE 334 705.56 23,40 443.00 693, 56 12.00 455,00 ٦<u>4</u> DONEY COAL .3 692. 16 1.40 456,40 690,76 LIGHT GRAY SHALE 134 1.40 457.80 334 686,76 4.00 461,80 LT GRAY MASSIVE SANDY SHALE 540 684, 16 464.40 GRAY SANDSTONE 2.60

APPLIC/ ON	Camebells	CREEK
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HOLE NUMBER WV93-Ø13 (#5)	UTM ZONE QUADRANGLE QUICK	
LATITUDE Ø Ø 'Ø "	UTMF COORDINATE Ø	
LONGITUDE Ø Ø ´Ø "	UTMN COORDINATE	
DRILLER HIGNITE, J.D.	DATE 4 / 26	/ 93
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TYPE-CORE X CHIP HI	GHWALLAUGERG-LOGOTHER	
<u>UNIT OF MEASURE</u> - FEET &	INCHES FEET & TENTHS X METRIC	
	LOG SHEET PAGE 4 OF 4 PAGES	

ROCK CODE	ELEVATION	UNIT THICKNESS	CUMULATIVE THICKNESS	N.P.	P.A.	SAMPLE NO.	COMMENTS]
124	678.96	5.20	469.60		 		DARK GRAY SHALE	-
134	67Ø.96	8.00	477.60	<u> </u>	 	 	LIGHT GRAY SHALE	┨
114	67Ø.71	Ø. 25	477.85	i			BLACK SHALE	-
020	669.86	Ø. 85	478.70		<u> </u>		IXXAL	1
74	667.86	2.00	480.70		İ		LIGHT GRAY SHALE	┨
4ر	662.86	5.00	485.70				LT GRAY MASSIVE SANDY SHALE	1
124	638,96	23.90	509.60				DARK GRAY SHALE	1
Ø23	638.56	Ø. 4Ø	510.00				BONKY COAL	1
334	634.66	3.9Ø	513.90				CT GRAY MASSIVE SANDY SHALE	1
023	633.56	1.10	515.000		1		BONEY COAL	1
134	63Ø.56	3.00	518.00		T		LIGHT GRAY SHALE	1
543	6Ø7.26	23.3Ø	541.30				GRAY SANDSTONE WISHALE STREAKS	1
134	605.56	1.70	543.00				LIGHT GRAY SHALE	1
124	597.26	8.30	551.30			1	DARK GRAY SHALK	1
334	595.36	1.90	553.2Ø				DARK GRAY SANDY SHALE	1
124	594.76	Ø.6Ø	553.80				DARK GRAY SHALE	1
650	594.36	Ø. 4Ø	554.20			1	COAL	1
134	592,71	1,65	555.85				SOFT GRAY SHALE	1
1023	592.126	Ø. 65	556.50				BONEY COAL	İ
134	585, 56	6.50	563.00				LIGHT GRAY SHALE	1
124	579.66	5.90	568.9Ø				DARK GRAY SHALE	1
134	579.06	Ø. 6Ø	569.50				COFT GRAY SHALE	1
124	575.56	3,5Ø	573.00			-	DARK GRAY SHALE	1
114	575. <i>0</i> 6	Ø.5Ø	573.50				BLACK SHALE	1
020	572.81	2.25	575.75				COAL - #2 GAS	1 .
133	572,66	Ø. 15	575.9Ø	No. 2	Gas		LT GRAY SHALE W/COAL STREAKS	3.C
929	572.06	Ø. 6Ø	576.50	/			COAL	1
134	570.66	1.40	577.90		<u> </u>		LIGHT GRAY SHALE	1
544	545, 56	25. 10	603.00		<u> </u>		GRAY MASSIVE SANDSTONE	I
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WW-4A Revised 6-07

1.) Date 2/20/17

2.) Operator's Well Number 20-S-115

3.) API Well No.: 47-039-01928

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: (a) Name Blue Eagle Land, LLC. Address 148 Bristol East Rd. Bristol, VA 24202	5) (a) Coal Operator Name Blue Creek Mining, LLC. Address 3228 Summit Square Place, Suite 180 Lexington, KY 40509
(b) NameAddress	(b) Coal Owner(s) with Declaration (a) Name Blue Eagle Land, LLC. Address 148 Bristol East Rd. Bristol, VA 24202
(c) NameAddress	Name Address
6) Inspector Address P.O. Box 268 Clendenin, WV 25045 304-549-5915	(c) Coal Lessee with Declaration Name Blue Creek Mining, LLC.C Address 3228 Summit Square Place, Suite 180 Lexington, KY 40509
documents:	You should have received this Form and the following Il on Form WW-4B, which sets out the parties involved in the work and k order; and ocation on Form WW-6.
reverses side. However, you are not required to take an Take notice that under Chapter 22-6 of the West Virginia Code, the and accompanying documents for a permit to plug and abandon a Environmental Protection, with respect to the well at the location of the second	e undersigned well operator proposes to file or has filed this Notice and Application well with the Chief of the Office of Oil and Gas, West Virginia Department of described on the attached Application and depicted on the attached Form WW-6. led by registered or certified mail or delivered by hand to the person(s) named above
Well Operato	rPanther Creek Mining, LLC
OFFICIAL SEAL Notary Public, State Of West Virginia Jessica Duernberger 3691 Mill Greek Road Charleston, WV 25311 Ny Commission Expires February 14, 2022	Agent P.O. Box 99
Telephone	
Subscribed and sworn before me this	HELEIVED
Oil and Gas Privacy Notice	APR 0 3 2017

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 deprivacyoffier@wv.go

SURFACE OWNER WAIVER

Operator's Well Number: 20-S-115

INSTRUCTIONS TO SURFACE OWNERS NAMED ON PAGE WW4-A

The well operator named on page WW-4A is applying for a permit from the State to plug and abandon a well. (Note: If the surface tract is owned by more than three persons, then these materials were served on you because your name appeared on the Sheriff's tax ticket on the land or because you actually occupy the surface tract. In either case, you may be the only owner who will actually receive these materials.) See Chapter 22 of the West Virginia Code. Well work permits are valid for 24 months. If you do not own any interest in the surface tract, please forward these materials to the true owner immediately if you know who it is. Also, please notify the well operator and the Office of Oil and Gas.

NOTE: YOU ARE NOT REQUIRED TO FILE ANY COMMENT. WHERE TO FILE COMMENTS AND OBTAIN ADDITIONAL INFORMATION:

> Chief, Office of Oil and Gas Department of Environmental Protection 601 57th St. SE Charleston, WV 25304 (304) 926-0450

Time Limits and methods for filing comments. The law requires these materials to be served on or before the date the operator files his Application. You have FIVE (5) DAYS after the filing date to file your comments. Comments must be filed in person or received in the mail by the Chief's office by the time stated above. You may call the Chief's office to be sure of the date. Check with your postmaster to ensure adequate delivery time or to arrange special expedited handling. If you have been contacted by the well operator and you have signed a "voluntary statement of no objection" to the planned work described in these materials, then the permit may be issued at any time.

Comments must be in writing. Your comments must include your name, address and telephone number, the well operator's name and well number and the approximate location of the proposed well site including district and county from the application. You may add other documents, such as sketches, maps or photographs to support your comments.

The Chief has the power to deny or condition a well work permit based on comments on the following grounds:

- 1) The proposed well work will constitute a hazard to the safety of persons.
- 2) The soil erosion and sediment control plan is not adequate or effective;
- 3) Damage would occur to publicly owned lands or resources;
- 4) The proposed well work fails to protect fresh water sources or supplies;
- 5) The applicant has committed a substantial violation of a previous permit or a substantial violation of one or more of the rules promulgated under Chapter 22, and has failed to abate or seek review of the violation...".

If you want a copy of the permit as it is issued or a copy of the order denying the permit, you should request a copy from the Chief.

VOLUNTARY STATEMENT OF NO OBJECTION

VOLUNIARI STATEN	TENT OF NO OBJECTION
I hereby state that I have read the instructions to surface ow	ners and that I have received copies of a Notice and Application
For A Permit To Plug And Abandon on Forms WW-4A and WW	I-AB and a current plat
I further state that I have a live in the	-4b, and a survey plac.
Turther state that I have no objection to the planned work of	lescribed in these materials, and I have no objection to a permit
being issued on those materials.	permit
FOR EXECUTION BY A NATURAL PERSON	FOR BUT GUTTER
	FOR EXECUTION BY A CORPORATION,
DateN	lame Blue Eagle Land, LLC.
Signature	By dail Ell
	- The state of the
	Its Agent
	Date 3 27-17
	Date

REGEIVED Office of Oil and Gas

APR 0 3 2017

WV Department of **Environmental Protection**

04/28/2017

WW-4B

API No.: 47-039-01928

Farm Name: Blue Creek C & L

Well No.: 20-S-115

INSTRUCTIONS TO COAL OPERATORS OWNERS AND LESSEE

The well operator named on the obverse side of WW-4 (B) is about to abandon the well described in the enclosed materials and will commence the work of plugging and abandoning said well on the date the inspector is notified. Which date shall not be less then five days after the day on which this notice and application so mailed is received, or in due course should be received by the Department of Environmental Protection Office of Oil & Gas.

This notice and application is given to you in order that your respective representatives may be present at the plugging and filling of said well. You are further notified that whether you are represented or not the operator will proceed to plug and fill said well in the manner required by Section 24, Article 6, Chapter 22 of the Code and given in detail on obverse side of this application.

NOTE: If you wish this well to be plugged according to 22-6-24(d) then as per Regulation 35CSR4-13.9 you must complete and return to this office on form OB-16 "Request by Coal Operator, Owner, or Lessee for plugging" prior to the issuance of this plugging permit.

WAIVER

location has examined this proposed plugging	owner X / lessee / of the coal under this well work order. The undersigned has no objection to the work he well operator has complied with all applicable requirements ulations.
4	
Date: 3-27-17	Blue Eagle Land, LLC
	By: Dail G. Hunde
	Its Agent
	RESEIVED Office of Oil and Gas
	APR 0 3 2017
	WV Department of

Environmental Protection

04/28/2017

API No. 47-039-01928

Farm Name Blue Eagle Land, LLC.

Well No. 20-S-115

INSTRUCTIONS TO COAL OPERATORS OWNERS AND LESSEE

The well operator named on the obverse side of WW-4 (B) is about to abandon the well described in the enclosed materials and will commence the work of plugging and abandoning said well on the date the inspector is notified. Which date shall not be less then five days after the day on which this notice and application so mailed is received, or in due course should be received by the Department of Environmental Protection Office of Oil & Gas.

This notice and application is given to you in order that your respective representatives may be present at the plugging and filling of said well. You are further notified that whether you are represented or not the operator will proceed to plug and fill said well in the manner required by Section 24, Article 6, Chapter 22 of the Code and given in detail on obverse side of this application.

NOTE: If you wish this well to be plugged according to 22-6-24(d) then as per Regulation 35CSR4-13.9 you must complete and return to this office on form OB-16 "Request by Coal Operator, Owner, or Lessee for plugging" prior to the issuance of this plugging permit.

WAIVER

location has examined this proposed to be done at this loc	proposed plugging work orde	er. The undersigned herator has complied wi	ith all applicable requirements
Date: <u>3/28/2017</u>			Blue Creek Mining, LLC. By: <u>farl s. Moins, Pt</u> Its <u>Manager of Engineering</u>

REGENTED
Office of Oil and Gas

APR 0 3 2017

WV Department of Environmental Protection WW-9 (5/16)

API Number	47 -	039	_ 01928
Operator's W	ell No), 20-S-115	

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

FLUIDS/ CUTTINGS DISPOSAL & RECLAMATION PLAN

Operator Name_Panther Creek Mining, LLC. OP Code
Watershed (HUC 10) Rattlesnake Quadrangle Quick
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 V No No
If so, please describe anticipated pit waste: Pit will be built for precautionary purposes
Will a synthetic liner be used in the pit? Yes V No If so, what ml.? 20
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. Fresh Water
-If oil based, what type? Synthetic, petroleum, etc
Additives to be used in drilling medium?None
Drill cuttings disposal method? Leave in pit, landfill, removed offsite, etc. Leave in pit
-If left in pit and plan to solidify what medium will be used? (cement, lime, sawdust)
-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.
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 Man Lorves, P.E.
Company Official (Typed Name) Mark Morris
Company Official Title Engineering Manager
REGEIVED Office of Oil and Gas
Subscribed and sworn before me this 28th day of March, 2017
Lotte Stepp Doctary Pablic Official SEAL
My commission expires 5/30/2020 My commission expires 5/30/2020 DOTTIE STEPP DOTTIE STEPP GLEN MORGAN, WV 25/13/1/28/2017 My commission expires May 30, 2020 My commissi

Form WW-9

			Operator's	Well No. 20-S-115	
Proposed Revegetation Trea	atment: Acres Disturbed		Preveg etation	ı pH	
	Tons/acre or to con				
Fertilizer type					
Fertilizer amount_		lbs/acre			
Mulch		Tons/acre			
		Seed Mixture	<u>s</u>		
т	'emporary		Per	manent	
Seed Type	lbs/acre		Seed Type	lbs/acre	
Attach: Maps(s) of road, location, provided). If water from the (L, W), and area in acres, o	e pit will be land applied, f the land application area	provide water volun			
Photocopied section of invo					
Title: Inspech	00862	Date:	3+5-17	RESEIVED	
Field Reviewed?	()Yes	()No		APR 0 9 2017	Gas

WV Department of Environmental Protection 04/28/2017 WW-9- GPP Rev. 5/16

Pa	ge	1	of	2
API Number 47	039		01928	
Operator's Well No.	20-8	-115		

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

GROUNDWATER PROTECTION PLAN

Watershed (HUC 10): Rattlesnake Hollow Quad: Quick Farm Name: Blue Eagle Land, LLC. List the procedures used for the treatment and discharge of fluids. Include a list of all operations that could contaminate the groundwater. Plugging of gas well. Water used during drilling is pumped through a pipe and discharged into a lined pit. The pit is designed to hold approximately 150% of the anticipated drilling water. The slurry (drilling water and cuttings) in the pit is allowed to solidify and any remaining water will be sampled by a certified lab before the pit is reclaimed. The only water anticipated to be discharged to the pit is the drilling water. Brine water is not expected to be encountered while drilling and plugging the well. Water discharged into the pit may be used to mix the cement used to plug the well.
List the procedures used for the treatment and discharge of fluids. Include a list of all operations that could contaminate the groundwater. Plugging of gas well. Water used during drilling is pumped through a pipe and discharged into a lined pit. The pit is designed to hold approximately 150% of the anticipated drilling water. The slurry (drilling water and cuttings) in the pit is allowed to solidify and any remaining water will be sampled by a certified lab before the pit is reclaimed. The only water anticipated to be discharged to the pit is the drilling water. Brine water is not expected to be encountered while drilling and plugging the well. Water discharged into the pit may be used to mix the cement used to plug the well.
Plugging of gas well. Water used during drilling is pumped through a pipe and discharged into a lined pit. The pit is designed to hold approximately 150% of the anticipated drilling water. The slurry (drilling water and cuttings) in the pit is allowed to solidify and any remaining water will be sampled by a certified lab before the pit is reclaimed. The only water anticipated to be discharged to the pit is the drilling water. Brine water is not expected to be encountered while drilling and plugging the well. Water discharged into the pit may be used to mix the cement used to plug the well.
pit. The pit is designed to hold approximately 150% of the anticipated drilling water. The slurry (drilling water and cuttings) in the pit is allowed to solidify and any remaining water will be sampled by a certified lab before the pit is reclaimed. The only water anticipated to be discharged to the pit is the drilling water. Brine water is not expected to be encountered while drilling and plugging the well. Water discharged into the pit may be used to mix the cement used to plug the well.
2. Describe procedures and equipment used to protect groundwater quality from the list of potential contaminant sources above.
Water used during drilling is pumped through a pipe and discharged into a lined pit. The pit is designed to hold approximately 150% of the anticipated drilling water. The slurry (drilling water and cuttings) in the pit is allowed to solidify and any remaining water will be sampled by a certified lab before the pit is reclaimed. Straw bales, oil absorption pads, and silt fence will be available on the mine property in case of spills.
 List the closest water body, distance to closest water body, and distance from closest Well Head Protection Area to the discharge area.
The closest body of water is the rattlesnake toe pond that is approximately 3,484 ft. from the well site. This toe pond discharges into an in stream pond Rattlesnake pond #1, which is approximately 3,500 ft. from the well site.
4. Summarize all activities at your facility that are already regulated for groundwater protection.
Mining and processing operations - storage tanks regulated under two GPP plans.
Picabivisia Office of Oil and Gas
APR 0 3 2017
5. Discuss any existing groundwater quality data for your facility or an adjacent property. Wy Department of Erivironmental Protection 04/28

WW-9- GPP Rev. 5/16

	age	1	of	2
API Number 47	03	39 -	_	1928
Operator's Well No.	20-	S-115		100

Rattlesnake Hollow is sampled bimonthly. The adjacent watershed, Five mile hollow is also sampled bimonthly. The results of the bimonthly samplings is submitted to the WV DEP.

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

No waste material will be used for deicing or for fill material.

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.

Each employee and contractor involved in the drilling and plugging of the well operation will be trained on the proper environmental procedures of the job. The proper environmental procedures of the job are as follows: The pit and area around the pit will be visually examined daily for leaks and tears. If a leak or tear is observed, discharge to the pit will cease until proper repairs can be made to the pit or liner. Drilling equipment will be inspected each day before work begins to ensure there is no fluid leaks. Straw bales, oil absorption pads, and silt fences will be available on the drilling site in case of spills. Any contaminated materials will be properly disposed of in specially marked containers. If there is any remaining water in the pit, it will be analyzed by a lab before the pit is reclaimed.

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

The pit and area around the pit will be visually inspected daily for leaks and tears. Any remaining water in the pit will be analyzed by a lab before the pit is reclaimed. Drilling equipment will be inspected each day before work begins to ensure the is no fluid leaks. Straw bales, oil absorption pads, and silt fence will be available on the drilling site in case of spills.

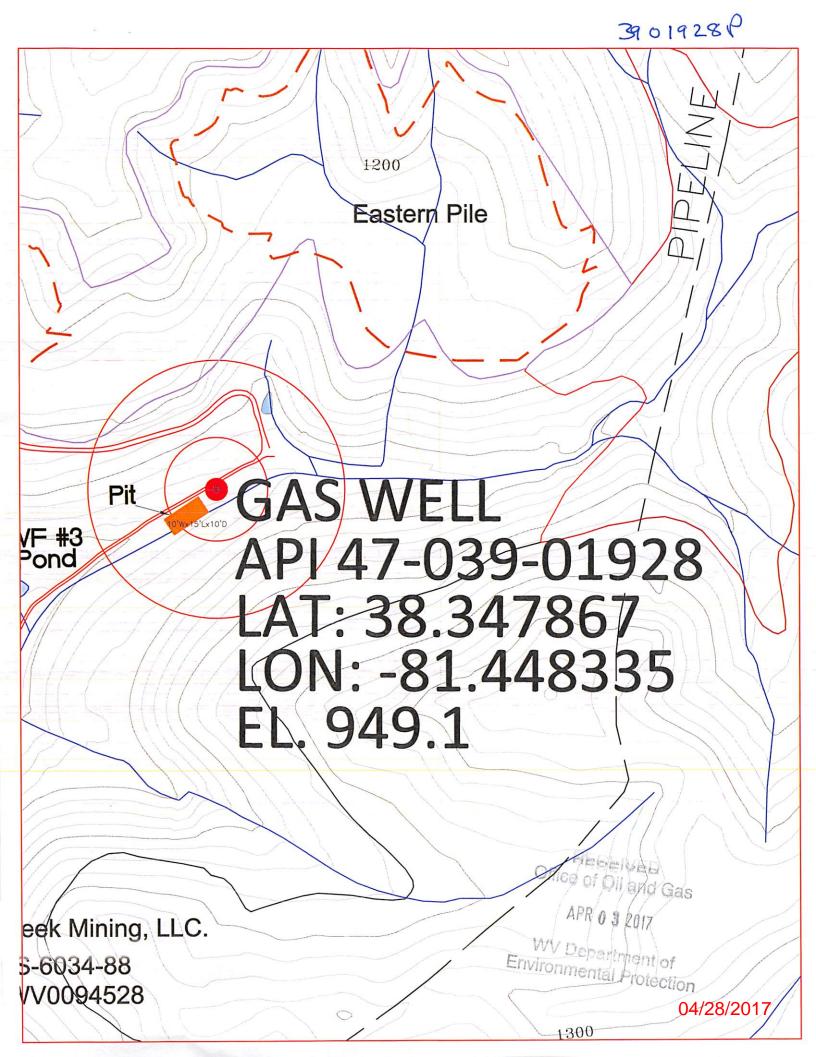
Signature

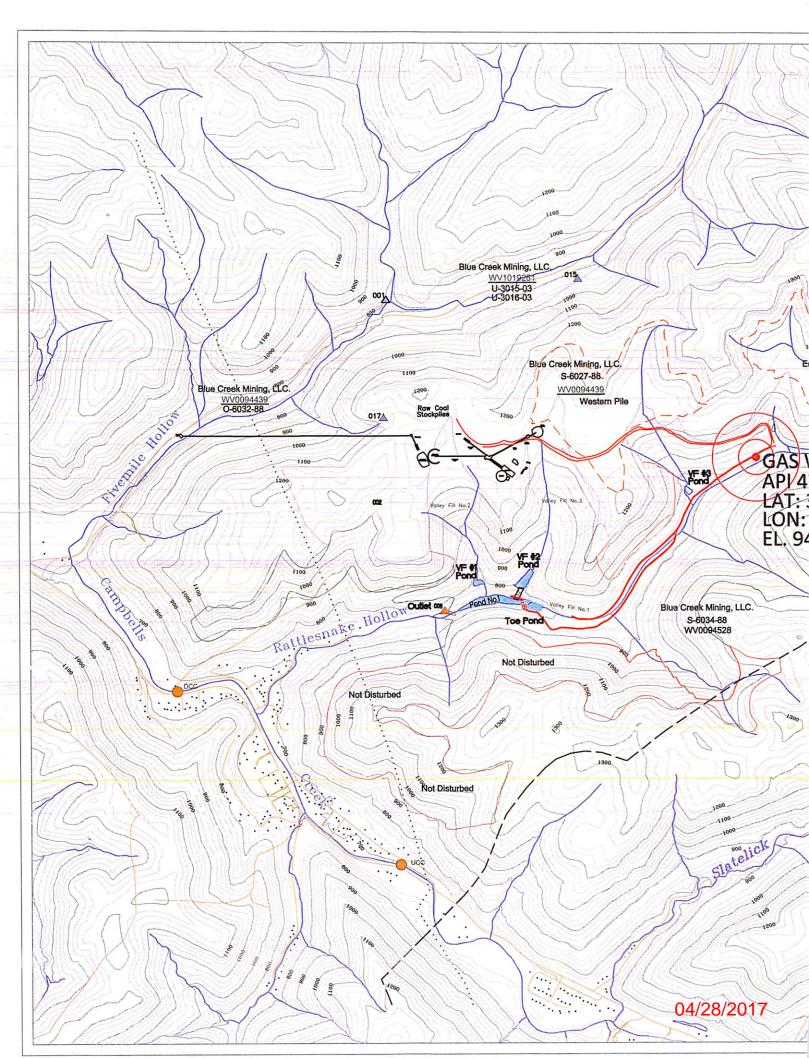
Date: 3/28/2017

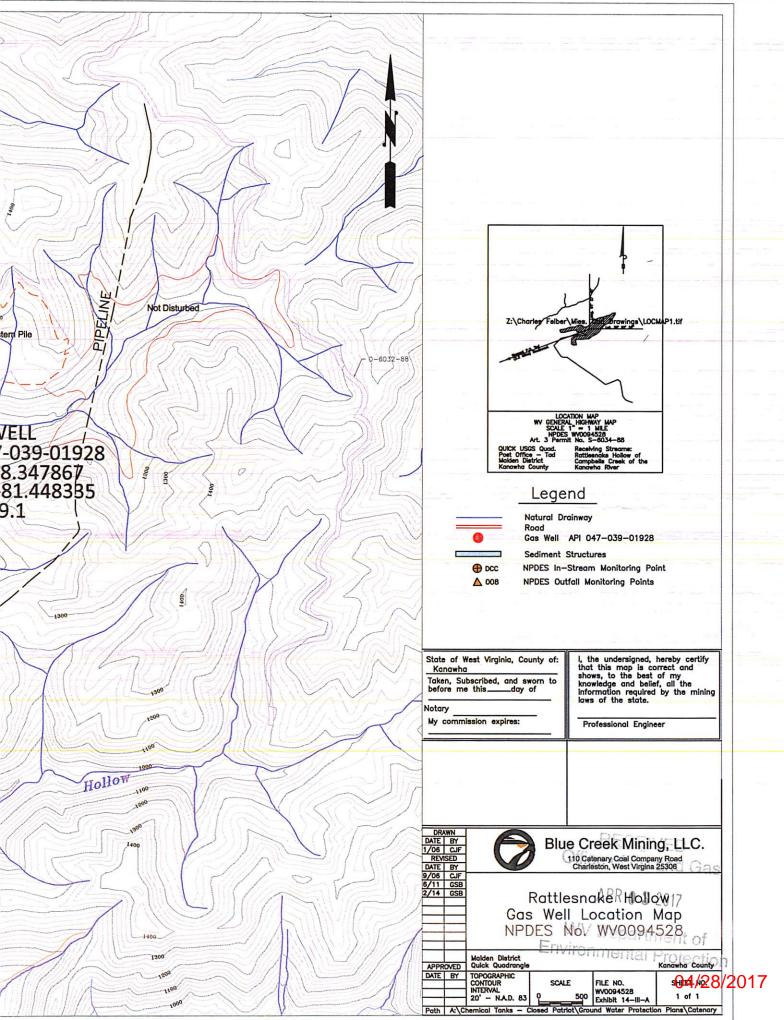
Office of Oil and Gas

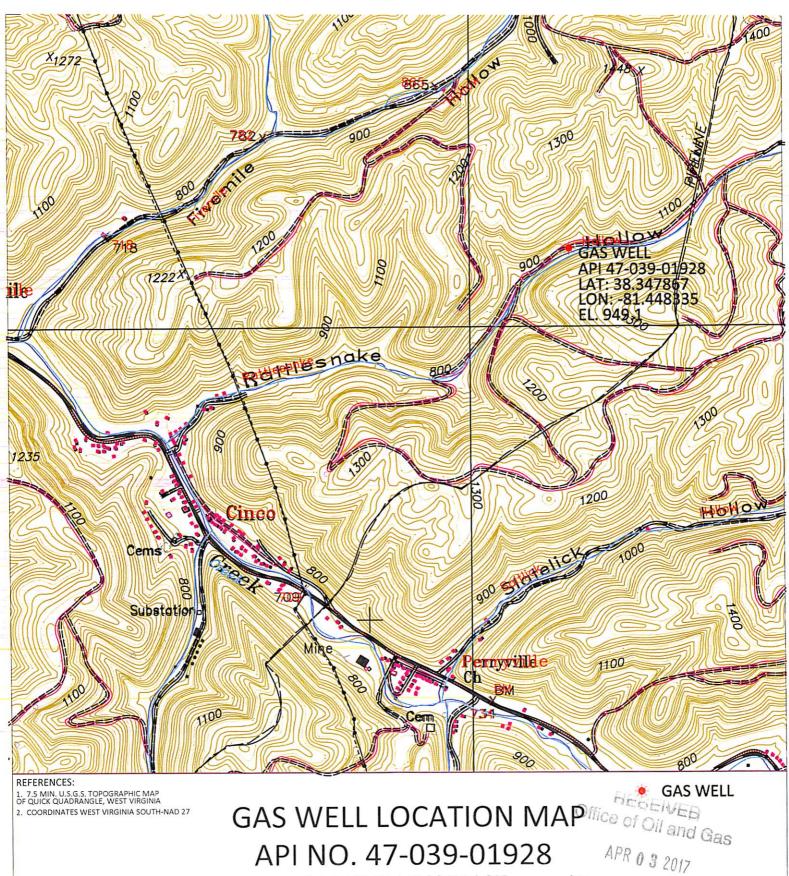
APR 0 3 2017

WV Department of Environmental Prot 04/28/2017









API NO. 47-039-01928

WV Department of MALDEN DISTRICT KANAWHA COUNTY, WEST VIRGINIA Protection 04/28/2017

04/28/2017



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

API: <u>47-039-01928</u> WELI	L NO <u>.: 20-S-115</u>	
FARM NAME: Blue Eas	gle Land, LLC.	
RESPONSIBLE PARTY NA	ME: Blue Creek Min	ing, LLC.
COUNTY: Kanawha	DISTRICT:	Malden
QUADRANGLE:	Quick	
SURFACE OWNER:	Blue Eagle Land, LLC.	
ROYALTY OWNER:	Blue Eagle Land, LLC.	
JTM GPS NORTHING: <u>4</u>	244518.9	_
JTM GPS EASTING: 46	0837.9	GPS ELEVATION: <u>949.1</u>
		rdinates in lieu of preparing a new well location
oordinates that do not meet the follo		l. The Office of Oil and Gas will not accept GP
		s, Altitude: height above mean sea level (MSL)
meters.	, 2 000	,
2. Accuracy to Datum - 3.05 met	ers	
3. Data Collection Method:		
Survey grade GPS <u>X</u> : Post P		
	ime Differential	
Mapping Grade GPS X: Po		<u></u>
Real-1	ime Differential	
4. Letter size copy of the topog	ranky man showing the well i	location
		f my knowledge and belief and shows all the
		cribed by the Office of Oil and Gas.
		Office of Oil and Gas
	_	- /- /
Mars I. Morry, Pl	Enzineering Mana Title	ger AB/23817
Signature	Title	
		WV Department of
		Environmental Prefection