

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

API 47 - 051 - 01939 County Marshall District Webster
Quad Majorsville Pad Name SHL27 Field/Pool Name _____
Farm name Steve and Ed Ward Well Number SHL27 EHS
Operator (as registered with the OOG) HG Energy II Appalachia, LLC
Address 5260 Dupont Road City Parkersburg State WV Zip 26101

As Drilled location NAD 83/UTM Attach an as-drilled plat, profile view, and deviation survey
Top hole Northing 4423219.8 Easting 535400.4
Landing Point of Curve Northing 4423422.3 Easting 535800.6
Bottom Hole Northing 4420857.3 Easting 536793.6

Elevation (ft) 1154' GL Type of Well New Existing Type of Report Interim Final
Permit Type Deviated Horizontal Horizontal 6A Vertical Depth Type Deep Shallow
Type of Operation Convert Deepen Drill Plug Back Redrilling Rework Stimulate
Well Type Brine Disposal CBM Gas Oil Secondary Recovery Solution Mining Storage Other _____
Type of Completion Single Multiple Fluids Produced Brine Gas NGL Oil Other _____
Drilled with Cable Rotary

Drilling Media Surface hole Air Mud Fresh Water Intermediate hole Air Mud Fresh Water Brine
Production hole Air Mud Fresh Water Brine

Mud Type(s) and Additive(s)
Mud type - SOBM, Additives - Lime, Calcium Chloride, Gilsonite, Asphalt, Barite, Emulsifier, Base Oil

Date permit issued 7/06/17 Date drilling commenced 3/07/18 Date drilling ceased 4/01/18
Date completion activities began 5/7/18 Date completion activities ceased 7/16/18
Verbal plugging (Y/N) _____ Date permission granted _____ Granted by _____

RECEIVED
Office of Oil and Gas
JAN 24 2019

Please note: Operator is required to submit a plugging application within 5 days of verbal permission to plug WV Department of Environmental Protection

Freshwater depth(s) ft 500' Open mine(s) (Y/N) depths N
Salt water depth(s) ft Not Observed Void(s) encountered (Y/N) depths N
Coal depth(s) ft 653' Cavern(s) encountered (Y/N) depths N
Is coal being mined in area (Y/N) Yes

Reviewed by: [Signature]
2/28/19

WR-35
Rev. 8/23/13

API 47-051 - 01939 Farm name Steve and Ed Ward Well number SHL27 EHS

CASING STRINGS	Hole Size	Casing Size	Depth	New or Used	Grade wt/ft	Basket Depth(s)	Did cement circulate (Y/N) * Provide details below*
Conductor							
Surface							
Coal							
Intermediate 1							*See Attached *
Intermediate 2							
Intermediate 3							
Production							
Tubing							
Packer type and depth set							

Comment Details _____

CEMENT DATA	Class/Type of Cement	Number of Sacks	Slurry wt (ppg)	Yield (ft ³ /sks)	Volume (ft ³)	Cement Top (MD)	WOC (hrs)
Conductor	NA	NA	NA	NA	NA		
Surface	Class A	925	15.6	1.1966	996	0	8 hours
Coal							
Intermediate 1	Class A	880	15.6	1.20		0	8 hours
Intermediate 2	Class H	1136	16.0	1.1935	1355	0	8 hours
Intermediate 3							
Production	Class A	1401	16.0	1.1935	1355	0	8 hours
Tubing							

Drillers TD (ft) 16219 TMD, 6590 TVD Loggers TD (ft) 16189

Deepest formation penetrated Marcellus Plug back to (ft) _____

Plug back procedure _____

Kick off depth (ft) 6031' MD

Check all wireline logs run caliper density deviated/directional induction
 neutron resistivity gamma ray temperature sonic

Well cored Yes No Conventional Sidewall Were cuttings collected Yes No

DESCRIBE THE CENTRALIZER PLACEMENT USED FOR EACH CASING STRING See Attached

RECEIVED
Office of Oil and Gas

JAN 24 2019

WV Department of
Environmental Protection

WAS WELL COMPLETED AS SHOT HOLE Yes No DETAILS _____

WAS WELL COMPLETED OPEN HOLE? Yes No DETAILS _____

WERE TRACERS USED Yes No TYPE OF TRACER(S) USED _____

03/29/2019

HG ENERGY II APPALACHIA, LLC. - DAILY DRILLING REPORT											
WELL INFORMATION											
Well Name & No.	E&S Ward SHL27EHS		Date:	4/1/2018			Depth (MD)	16,219	Depth (TVD)	6,589	
API #	47-051-01939		County:	Marshall	State:	WV	Drilling Contractor / Rig		Patterson 347		
CASING INFORMATION											
Conductor	Set 60' of 30" 157.5ppf LS (3 jts. - welded)						SHOWS (Fresh Water, Oil, Gas)				
	Surface	Intermediate 1	Intermediate 2	Production			Depth	Formation	Show		
No. Jts. Run	22	26	72	354			500	SD/ SH	Water		
Hole Depth	475	1063	3084	16193			758	Red Rock			
Csg Size	20	13-3/8	9 5/8	5 1/2			1,562	B. Lime			
Wt.	94	54.5	40	23			1,590	B. Injun			
Grade	J-55	J-55	J-55	P-110			1,706	Pocono			
Type Thrd	BTC	BTC	BTC	CDC HTQ			2,114	Berea			
New/Used	New	New	New	New			2,276	Gantz	2,276 TVD		
Casing Depth Set	450	1038	3054	16189			2,590	Gor. Stray	2,590 TVD		
Plug	425	999.87	3009.46	16106			2,643	Gordon	2,643 TVD		
Shoe	450	1038	3054	16189			2,755	5th Sand	2,755 TVD		
Basket	N/A	N/A	N/A	N/A			6,087	Rhinestreet	5,714 TVD		
Centralizers	7	9	39	159			6,826	Burkett	6,306 TVD		
Cmt Return	50 bbls	24	53	50			6,846	Tully	6,318 TVD		
Sks. Lead	925	880	1136	1401			6,889	Hamilton	6,344 TVD		
Type Cmt Lead.	Class A	Class A	Class H	Class A			7,170	Marcellus	6,459 TVD		
Sks. Tail	0	0	0	1374					TVD		
Type Cmt. Tail	N/A	N/A	N/A	Class A					TVD		
Top Cmt.	Surface	Surface	Surface	Surface					TVD		

RECEIVED
Office of Oil and Gas

JAN 24 2019

WV Department of
Environmental Protection

HG Energy II Appalachia, LLC**SHL27 EHS - 47-051-01939****Perforation Record**

Stage Number	Perforation	Perforated	Perforated	Number of	
Number	Date	from MD ft.	to MD ft.	Perforations	Formations
1	6/6/2018	16,055		Toe Sleeve	Marcellus
2	6/6/2018	15,971	15,803	49	Marcellus
3	6/7/2018	15,775	15,607	49	Marcellus
4	6/7/2018	15,579	15,411	49	Marcellus
5	6/8/2018	15,383	15,215	49	Marcellus
6	6/8/2018	15,177	15,019	49	Marcellus
7	6/8/2018	14,991	14,823	49	Marcellus
8	6/8/2018	14,795	14,627	49	Marcellus
9	6/9/2018	14,599	14,431	49	Marcellus
10	6/9/2018	14,358	14,221	49	Marcellus
11	6/9/2018	14,183	14,039	49	Marcellus
12	6/10/2018	14,011	13,843	49	Marcellus
13	6/10/2018	13,815	13,647	49	Marcellus
14	6/10/2018	13,619	13,451	49	Marcellus
15	6/10/2018	13,423	13,255	49	Marcellus
16	6/11/2018	13,227	13,059	49	Marcellus
17	6/11/2018	13,031	12,863	49	Marcellus
18	6/11/2018	12,835	12,667	49	Marcellus
19	6/11/2018	12,639	12,471	49	Marcellus
20	6/11/2018	12,443	12,275	49	Marcellus
21	6/12/2018	12,247	12,079	49	Marcellus
22	6/12/2018	12,051	11,883	49	Marcellus
23	6/12/2018	11,855	11,687	49	Marcellus
24	6/12/2018	11,659	11,491	49	Marcellus
25	6/12/2018	11,463	11,295	49	Marcellus
26	6/13/2018	11,267	11,099	49	Marcellus
27	6/13/2018	11,071	10,903	49	Marcellus
28	6/13/2018	10,875	10,707	49	Marcellus
29	6/14/2018	10,679	10,511	49	Marcellus
30	6/14/2018	10,483	10,315	49	Marcellus
31	6/14/2018	10,287	10,119	49	Marcellus
32	6/14/2018	10,091	9,923	49	Marcellus
33	6/14/2018	9,895	9,727	49	Marcellus
34	6/15/2018	9,699	9,531	49	Marcellus
35	6/15/2018	9,503	9,335	49	Marcellus
36	6/15/2018	9,307	9,139	49	Marcellus
37	6/15/2018	9,111	8,943	49	Marcellus
38	6/15/2018	8,915	8,747	49	Marcellus
39	6/16/2018	8,719	8,551	49	Marcellus
40	6/16/2018	8,523	8,355	49	Marcellus
41	6/16/2018	8,327	8,159	49	Marcellus
42	6/16/2018	8,131	7,963	49	Marcellus
43	6/16/2018	7,935	7,767	49	Marcellus
44	6/17/2018	7,739	7,571	49	Marcellus
45	6/17/2018	7,543	7,375	49	Marcellus
46	6/17/2018	7,347	7,179	49	Marcellus

KP

HG Energy II Appalachia, LLC
SHL27 EHS - 47-051-01939
Stimulation Information Per Stage

Stage Number	Stimulation Date	Avg Pump Rate (BPM)	Avg Pressure (psi)	Breakdown (psi)	ISIP (psi)	Amount of Propane (kbs)	Amount of Water (Bbls)	Amount of Acid (gallons)
1	6/6/2018	86.8	10,055	6,160	3,590	2,934.0	7,270	1,051
2	6/6/2018	90.0	9,887	6,459	4,621	4,513.0	13,996	1,043
3	6/7/2018	79.7	9,919	6,266	4,497	4,497.0	13,774	1,072
4	6/7/2018	95.5	9,684	5,932	4,602	4,504.6	13,906	1,050
5	6/8/2018	95.7	10,118	5,617	5,005	4,719.0	14,134	988
6	6/8/2018	91.4	10,139	-	4,880	4,986.0	14,318	990
7	6/8/2018	88.7	9,695	5,928	4,600	5,038.0	14,312	1,047
8	6/8/2018	97.5	10,467	5,981	4,822	4,743.4	14,019	1,035
9	6/9/2018	98.9	10,287	6,339	4,635	4,792.4	14,098	980
10	6/9/2018	100.2	9,754	5,646	4,911	5,012.0	14,485	988
11	6/9/2018	92.8	9,699	5,960	4,781	4,846.0	14,191	1,043
12	6/10/2018	101.4	10,247	5,716	4,930	4,919.6	14,211	1,014
13	6/10/2018	94.4	10,257	5,425	4,744	4,878.6	14,164	1,020
14	6/10/2018	96.2	10,480	5,752	4,645	4,889.0	14,013	998
15	6/10/2018	90.2	10,035	5,604	4,860	4,910.0	13,973	1,049
16	6/11/2018	14.0	9,690	6,216	4,600	61.0	3,298	2,998
17	6/11/2018	90.9	9,778	6,292	4,250	4,964.6	14,170	1,012
18	6/11/2018	99.8	10,351	5,848	4,350	5,023.0	14,389	1,012
19	6/11/2018	97.1	9,861	5,368	4,728	4,952.0	13,991	1,020
20	6/11/2018	99.9	9,871	5,888	4,584	4,963.0	14,162	1,036
21	6/12/2018	102.1	9,797	6,173	4,850	4,965.4	14,208	996
22	6/12/2018	98.8	8,173	5,933	4,700	4,951.8	14,136	994
23	6/12/2018	99.8	9,188	5,529	4,850	1,957.8	10,147	1,018
24	6/12/2018	73.1	10,500	5,433	4,953	4,445.4	13,882	1,028
25	6/12/2018	74.7	9,801	6,161	4,611	963.4	6,277	1,065
26	6/13/2018	97.0	9,651	5,744	4,621	4,993.4	14,404	1,556
27	6/13/2018	95.8	9,576	5,866	4,831	4,710.8	14,135	2,049
28	6/13/2018	96.3	9,510	5,804	4,915	5,003.6	14,381	1,990
29	6/14/2018	100.5	9,543	5,834	4,691	4,611.0	14,146	2,043
30	6/14/2018	100.6	9,146	5,647	4,513	4,084.4	13,353	1,028
31	6/14/2018	100.6	9,012	5,644	4,750	4,895.0	14,200	996
32	6/14/2018	100.8	8,740	5,659	5,031	4,791.0	14,022	1,036
33	6/14/2018	99.7	8,550	5,579	4,590	4,587.4	14,010	1,036
34	6/15/2018	100.0	8,370	5,736	4,750	4,867.2	14,213	996
35	6/15/2018	100.1	8,932	5,757	4,859	4,137.6	13,615	996
36	6/15/2018	99.2	8,931	5,640	4,625	4,919.6	14,390	1,018
37	6/15/2018	100.3	8,797	5,815	4,921	4,962.6	14,132	1,018
38	6/15/2018	100.3	9,064	5,868	4,664	4,580.6	13,796	998
39	6/16/2018	100.5	8,315	5,251	4,643	4,918.6	14,299	998
40	6/16/2018	99.8	8,219	5,508	4,846	4,512.4	13,750	1,024
41	6/16/2018	99.9	8,331	5,686	4,860	4,686.6	13,961	992
42	6/16/2018	99.3	7,916	6,028	4,902	4,515.4	13,736	1,008
43	6/16/2018	99.8	7,663	5,979	4,484	4,692.0	13,808	998
44	6/17/2018	99.6	7,795	6,518	4,535	4,597.2	14,041	1,012
45	6/17/2018	100.3	8,655	6,483	4,564	4,536.2	14,206	984
46	6/17/2018	92.2	7,935	6,247	4,303	4,540.6	14,370	1,012

KP

RECEIVED
Office of Oil and Gas

JAN 24 2019

WV Department of
Environmental Protection

WR-35
Rev. 8/23/13

API 47- 051 - 01939 Farm name Steve and Ed Ward Well number SHL27 EHS

PRODUCING FORMATION(S)	DEPTHS		
Marcellus Shale (~53" Thick)	6459	TVD	7166 MD
_____	_____	_____	_____
_____	_____	_____	_____

Please insert additional pages as applicable.

GAS TEST Build up Drawdown Open Flow OIL TEST Flow Pump

SHUT-IN PRESSURE Surface 2515 psi Bottom Hole _____ psi DURATION OF TEST 276 hrs

OPEN FLOW Gas 8959 mcfpd Oil 216 bpd NGL _____ bpd Water 504 bpd GAS MEASURED BY Estimated Orifice Pilot

LITHOLOGY/ FORMATION	TOP	BOTTOM	TOP	BOTTOM	DESCRIBE ROCK TYPE AND RECORD QUANTITY AND TYPE OF FLUID (FRESHWATER, BRINE, OIL, GAS, H ₂ S, ETC)
	DEPTH IN FT NAME TVD	DEPTH IN FT TVD	DEPTH IN FT MD	DEPTH IN FT MD	
	0		0		
					* See Attached *

Please insert additional pages as applicable.

Drilling Contractor Patterson Drilling
Address 2198 University Drive City Lemont Furnace State PA Zip 15456

Logging Company Schlumberger
Address 100 Gillingham Lane City Sugar Land State TX Zip 77478

Cementing Company C & J Energy Services
Address 3990 Rogerdale City Houston State TX Zip 77042

Stimulating Company Stingray
Address 14201 Caliber Drive City Oklahoma City State OK Zip 73134

Please insert additional pages as applicable.

Completed by Diane White Telephone 304-420-1119
Signature Diane White Title _____ Date 1-3-19

RECEIVED
Office of Oil and Gas
JAN 24 2019
WV Department of
Environmental Protection

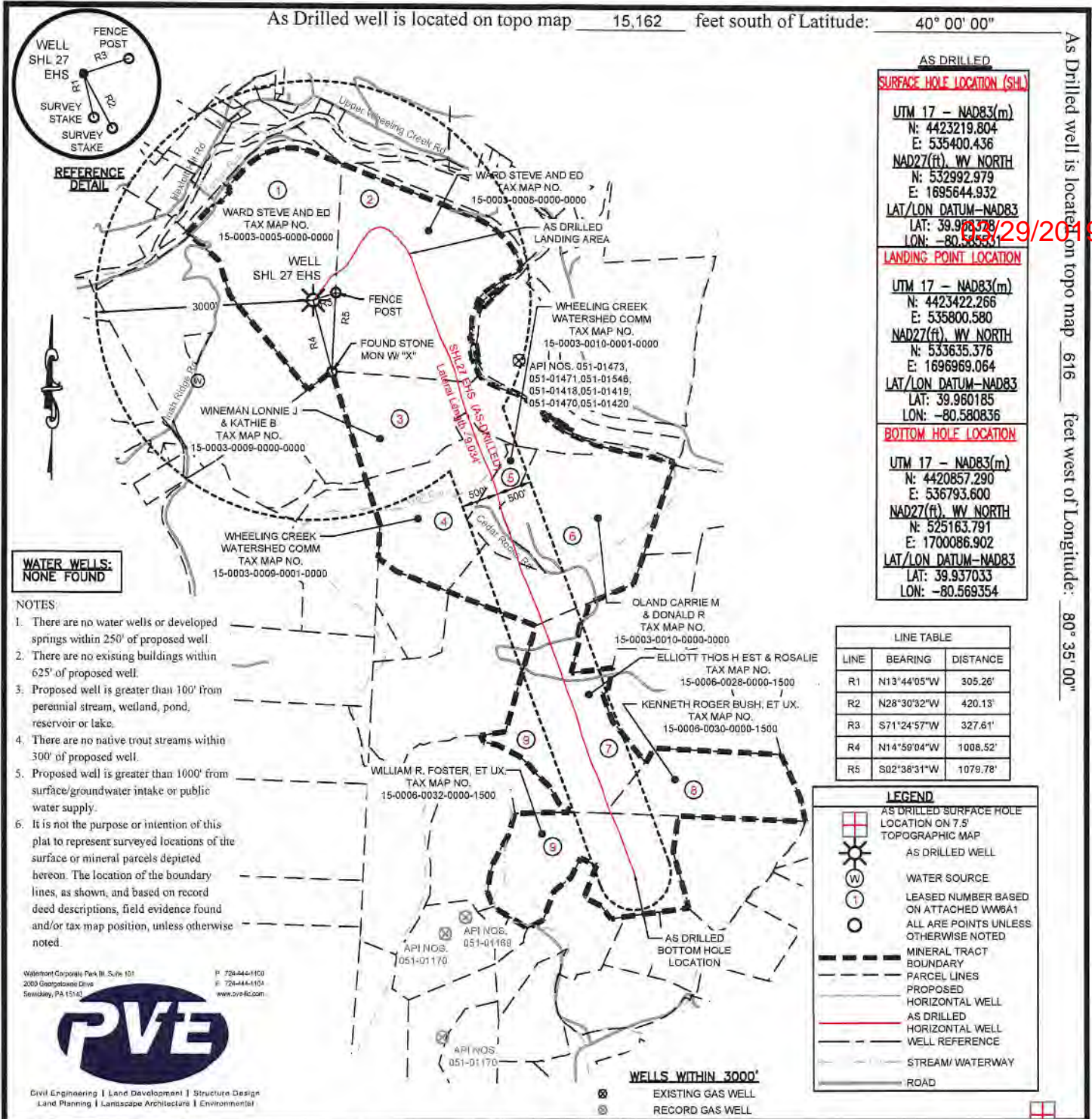
HG Energy II Appalachia, LLC
SHL27 EHS Actual tops
Lithology/Formation

	MD		TVD	
T - Pittsburgh Coal (~5' thick)	653	1257	653	1257
T - Gas/Salt Sands (~250')	1257	1562	1257	1562
T - Greenbrier Big Lime (~19' thick)	1562	1590	1562	1590
T - Loyalhanna Big Injun (~39' thick)	1590	1712	1590	1712
T - Pocono Big Injun (~153' thick)	1712	2114	1712	2114
T- Berea (~18' thick)	2114	2276	2114	2276
T - Gantz/Upper 30-Foot sand	2276	2590	2276	2590
T - Gordon Stray sand (~10' thick)	2590	2643	2590	2643
T - Gordon sand (~17' thick)	2643	2755	2643	2755
T - 5th sand (~5' thick)	2755	6087	2755	5715
T - Rhinestreet (454' thick)	6087	6188	5715	6115
T - Cashaqua (100' Thick)	6188	6271	6115	6212
T - Middlesex (32' thick)	6271	6750	6212	6239
T - West River (71' thick)	6750	6826	6239	6306
T- Burket (~10' thick)	6826	6843	6306	6317
T - Tully (~26' thick)	6843	6882	6317	6346
T-Hamilton (~115' thick)	6882	7166	6346	6459
T - Marcellus shale (~53' thick)	7166		6459	
T - Onondaga				

RECEIVED
Office of Oil and Gas
JAN 24 2019
WV Department of
Environmental Protection

As Drilled well is located on topo map 15.162 feet south of Latitude: 40° 00' 00"

As Drilled well is located on topo map 616 feet west of Longitude: 80° 35' 00"



AS DRILLED SURFACE HOLE LOCATION (SHL)
 UTM 17 - NAD83(m)
 N: 4423219.804
 E: 535400.436
 NAD27(ft), WV NORTH
 N: 532992.979
 E: 1695644.932
 LAT/LON DATUM-NAD83
 LAT: 39.96378
 LON: -80.56935

LANDING POINT LOCATION
 UTM 17 - NAD83(m)
 N: 4423422.266
 E: 535800.580
 NAD27(ft), WV NORTH
 N: 533635.376
 E: 1696969.064
 LAT/LON DATUM-NAD83
 LAT: 39.960185
 LON: -80.580836

BOTTOM HOLE LOCATION
 UTM 17 - NAD83(m)
 N: 4420857.290
 E: 536793.600
 NAD27(ft), WV NORTH
 N: 525163.791
 E: 1700086.902
 LAT/LON DATUM-NAD83
 LAT: 39.937033
 LON: -80.569354

LINE	BEARING	DISTANCE
R1	N13°44'05"W	305.26'
R2	N28°30'32"W	420.13'
R3	S71°24'57"W	327.61'
R4	N14°59'04"W	1008.52'
R5	S02°38'31"W	1079.78'

LEGEND

AS DRILLED SURFACE HOLE LOCATION ON 7.5' TOPOGRAPHIC MAP

AS DRILLED WELL

WATER SOURCE

LEASED NUMBER BASED ON ATTACHED WVA61

ALL ARE POINTS UNLESS OTHERWISE NOTED

MINERAL TRACT BOUNDARY

PARCEL LINES

PROPOSED HORIZONTAL WELL

AS DRILLED HORIZONTAL WELL

WELL REFERENCE

STREAM/WATERWAY

ROAD

WATER WELLS: NONE FOUND

- NOTES:**
1. There are no water wells or developed springs within 250' of proposed well.
 2. There are no existing buildings within 625' of proposed well.
 3. Proposed well is greater than 100' from perennial stream, wetland, pond, reservoir or lake.
 4. There are no native trout streams within 300' of proposed well.
 5. Proposed well is greater than 1000' from surface/groundwater intake or public water supply.
 6. It is not the purpose or intention of this plat to represent surveyed locations of the surface or mineral parcels depicted hereon. The location of the boundary lines, as shown, and based on record deed descriptions, field evidence found and/or tax map position, unless otherwise noted.

Waterfront Corporate Park III, Suite 101
 2000 Georgetown Drive
 Sewickley, PA 15143

P: 724-444-1100
 F: 724-444-1104
 www.pve-llc.com

Civil Engineering | Land Development | Structure Design
 Land Planning | Landscape Architecture | Environmental

FILE #: SHL 27 EHS

DRAWING #: SHL 27 EHS

SCALE: 1"=2000'

MINIMUM DEGREE OF ACCURACY: 1/2500

PROVEN SOURCE OF ELEVATION: USGS MONUMENT U 124: 951.16'

I, THE UNDERSIGNED, HEREBY CERTIFY THAT THIS PLAT IS CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF AND SHOWS ALL THE INFORMATION REQUIRED BY LAW AND THE REGULATIONS ISSUED AND PRESCRIBED BY THE DEPARTMENT OF ENVIRONMENTAL PROTECTION.

SIGNED: [Signature]

R.P.E.: 18766 L.L.S.: P.S. NO. _____



(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS WVDEP OFFICE OF OIL & GAS 601 57TH STREET CHARLESTON, WV 25304

DATE: JANUARY 18, 2019

OPERATOR'S WELL #: SHL 27 EHS

API WELL # 47 051 01939
 STATE COUNTY PERMIT

Well Type: Oil Waste Disposal Production Deep
 Gas Liquid Injection Storage Shallow

WATERSHED: WHEELING CREEK ELEVATION: 1,153.60'

COUNTY/DISTRICT: MARSHALL / WEBSTER QUADRANGLE: MAJORSVILLE, W. VA

SURFACE OWNER: STEVE WARD AND ED WARD ACREAGE: 122.47

OIL & GAS ROYALTY OWNER: BOUNTY MINERALS, LLC ACREAGE: 122.47

DRILL CONVERT DRILL DEEPER REDRILL FRACTURE OR STIMULATE
 PLUG OFF OLD FORMATION PERFORATE NEW FORMATION PLUG AND ABANDON
 CLEAN OUT & REPLUG OTHER CHANGE (SPECIFY) _____

TARGET FORMATION: MARCELLUS AS DRILLED DEPTH: TVD: 6.590' TMD: 16,219'

WELL OPERATOR: HG ENERGY II APPALACHIA, LLC DESIGNATED AGENT: DIANE C. WHITE

Address: 5260 DUPONT ROAD Address: 5260 DUPONT ROAD

City PARKERSBURG State WV Zip Code 26101 City PARKERSBURG State WV Zip Code 26101



Well bottom is located on topo map 7,756 feet south of Latitude: 39° 57' 30"

Well bottom is located on topo map 7,765 feet west of Longitude: 80° 32' 30"

03/29/2019

AS DRILLED

SURFACE HOLE LOCATION (SHL)

UTM 17 - NAD83(m)
 N: 4423219.804
 E: 535400.436

NAD27(ft), WV NORTH
 N: 532992.979
 E: 1695644.932

LAT/LON DATUM-NAD83
 LAT: 39.958378
 LON: -80.585531

LANDING POINT LOCATION

UTM 17 - NAD83(m)
 N: 4423422.266
 E: 535800.580

NAD27(ft), WV NORTH
 N: 533635.376
 E: 1696969.064

LAT/LON DATUM-NAD83
 LAT: 39.960185
 LON: -80.580836

BOTTOM HOLE LOCATION

UTM 17 - NAD83(m)
 N: 4420857.290
 E: 536793.600

NAD27(ft), WV NORTH
 N: 525163.791
 E: 1700086.902

LAT/LON DATUM-NAD83
 LAT: 39.937033
 LON: -80.569354

LEGEND

BOTTOM HOLE LOCATION ON 7.5' TOPOGRAPHIC MAP



NOTES:

1. There are no water wells or developed springs within 250' of proposed well.
2. There are no existing buildings within 625' of proposed well.
3. Proposed well is greater than 100' from perennial stream, wetland, pond, reservoir or lake.
4. There are no native trout streams within 300' of proposed well.
5. Proposed well is greater than 1000' from surface/groundwater intake or public water supply.
6. It is not the purpose or intention of this plat to represent surveyed locations of the surface or mineral parcels depicted hereon. The location of the boundary lines, as shown, and based on record deed descriptions, field evidence found and/or tax map position, unless otherwise noted.

Waterfront Corporate Park III, Suite 101
 2000 Georgetown Drive
 Sewickley, PA 15143

F: 724-444-1100
 T: 724-444-1194
 www.pveinc.com



Civil Engineering | Land Development | Structure Design
 Land Planning | Landscape Architecture | Environmental



LINE TABLE		
LINE	BEARING	DISTANCE
R1	N13°44'05"W	305.26'
R2	N28°30'32"W	420.13'
R3	S71°24'57"W	327.61'
R4	N14°59'04"W	1008.52'
R5	S02°38'31"W	1078.78'

FILE #: SHL 27 JHS

DRAWING #: SHL 27 JHS

SCALE: 1"=2000'

MINIMUM DEGREE OF ACCURACY: 1/2500

PROVEN SOURCE OF ELEVATION: USGS MONUMENT U 124: 951.16'

I, THE UNDERSIGNED, HEREBY CERTIFY THAT THIS PLAT IS CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF AND SHOWS ALL THE INFORMATION REQUIRED BY LAW AND THE REGULATIONS ISSUED AND PRESCRIBED BY THE DEPARTMENT OF ENVIRONMENTAL PROTECTION.

SIGNED:

R.P.E.: 18766 L.L.S.: P.S. NO. _____



(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS WVDEP OFFICE OF OIL & GAS 601 57TH STREET CHARLESTON, WV 25304



DATE: JANUARY 18, 2019

OPERATOR'S WELL #: SHL 27 EHS

API WELL # 47 051 01939
 STATE COUNTY PERMIT

Well Type: Oil Waste Disposal Production Deep
 Gas Liquid Injection Storage Shallow

WATERSHED: WHEELING CREEK ELEVATION: 1,153.60'

COUNTY/DISTRICT: MARSHALL / WEBSTER QUADRANGLE: MAJORSVILLE, W. VA

SURFACE OWNER: STEVE WARD AND ED WARD ACREAGE: 122.47

OIL & GAS ROYALTY OWNER: BOUNTY MINERALS, LLC ACREAGE: 122.47

DRILL CONVERT DRILL DEEPER REDRILL FRACTURE OR STIMULATE
 PLUG OFF OLD FORMATION PERFORATE NEW FORMATION PLUG AND ABANDON
 CLEAN OUT & REPLUG OTHER CHANGE (SPECIFY)

TARGET FORMATION: MARCELLUS AS DRILLED DEPTH: TVD: 6,590' TMD: 16,219'

WELL OPERATOR: HG ENERGY II APPALACHIA, LLC DESIGNATED AGENT: DIANE C. WHITE

Address: 5260 DUPONT ROAD Address: 5260 DUPONT ROAD

City PARKERSBURG State WV Zip Code 26101 City PARKERSBURG State WV Zip Code 26101