



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

Harold D. Ward, Cabinet Secretary
www.dep.wv.gov

Monday, June 28, 2021
WELL WORK PERMIT
Horizontal 6A / New Drill

HG ENERGY II APPALACHIA, LLC
5260 DUPONT ROAD
PARKERSBURG, WV 26101

Re: Permit approval for SCHOEN 1205 S-10H
47-033-06010-00-00

This well work permit is evidence of permission granted to perform the specified well work at the location described on the attached pages and located on the attached plat, subject to the provisions of Chapter 22 of the West Virginia Code of 1931, as amended, and all rules and regulations promulgated thereunder, and to any additional specific conditions and provisions outlined in the pages attached hereto. Notification shall be given by the operator to the Oil and Gas Inspector at least 24 hours prior to the construction of roads, locations, and/or pits for any permitted work. In addition, the well operator shall notify the same inspector 24 hours before any actual well work is commenced and prior to running and cementing casing. Spills or emergency discharges must be promptly reported by the operator to 1-800-642-3074 and to the Oil and Gas Inspector.

Please be advised that form WR-35, Well Operators Report of Well Work is to be submitted to this office within 90 days of completion of permitted well work, as should form WR-34 Discharge Monitoring Report within 30 days of discharge of pits, if applicable. Failure to abide by all statutory and regulatory provisions governing all duties and operations hereunder may result in suspension or revocation of this permit and, in addition, may result in civil and/or criminal penalties being imposed upon the operators.

Per 35 CSR 4-5.2.g this permit will expire in two (2) years from the issue date unless permitted well work is commenced. If there are any questions, please feel free to contact me at (304) 926- 0450.

James A. Martin
Chief

Operator's Well Number: SCHOEN 1205 S-10H
Farm Name: GEORGE & ROSEANNE SCH
U.S. WELL NUMBER: 47-033-06010-00-00
Horizontal 6A New Drill
Date Issued: 6/28/2021

PERMIT CONDITIONS

West Virginia Code § 22-6A-8(d) 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. This proposed activity may require permit coverage from the United States Army Corps of Engineers (USACE). Through this permit, you are hereby being advised to consult with USACE regarding this proposed activity.
2. 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 § 22-6A-5a (12), 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 one hundred (100) feet below the bottom of the void or install less than twenty (20) feet of casing below the bottom of the void.
3. When compacting fills, each lift before compaction shall not be more than 12 inches in height, and the moisture content of the fill material shall be within limits as determined by the Standard Proctor Density test of the actual soils used in specific engineered fill, ASTM D698, Standard Test Method for Laboratory Compaction Characteristics of Soil Using Standard Effort, to achieve 95 % compaction of the optimum density. Each lift shall be tested for compaction, with a minimum of two tests per lift per acre of fill. All test results shall be maintained on site and available for review.
4. Operator shall install signage per § 22-6A-8g (6) (B) at all source water locations included in their approved water management plan within 24 hours of water management plan activation.
5. Oil and gas water supply wells will be registered with the Office of Oil and Gas and all such wells will be constructed and plugged in accordance with the standards of the Bureau for Public Health set forth in its Legislative rule entitled *Water Well Regulations*, 64 C.S.R. 19. Operator is to contact the Bureau of Public Health regarding permit requirements. In lieu of plugging, the operator may transfer the well to the surface owner upon agreement of the parties. All drinking water wells within fifteen hundred feet of the water supply well shall be flow tested by the operator upon request of the drinking well owner prior to operating the water supply well.
6. Pursuant to the requirements pertaining to the sampling of domestic water supply wells/springs the operator shall, no later than thirty (30) days after receipt of analytical data provide a written copy to the Chief and any of the users who may have requested such analyses.
7. 24 hours prior to the initiation of the completion process the operator shall notify the Chief or his designee.
8. During the completion process the operator shall monitor annular pressures and report any anomaly noticed to the chief or his designee immediately.
9. If any explosion or other accident causing loss of life or serious personal injury occurs in or about a well or well work on a well, the well operator or its contractor shall give notice, stating the particulars of the explosion or accident, to the oil and gas inspector and the Chief, within 24 hours of said accident.
10. During the casing and cementing process, in the event cement does not return to the surface, the oil and gas inspector shall be notified within 24 hours.

API Number: _____

PERMIT CONDITIONS

11. The operator shall provide to the Office of Oil and Gas the dates of each of the following within 30 days of their occurrence: completion of construction of the well pad, commencement of drilling, cessation of drilling, completion of any other permitted well work, and completion of the well. Such notice shall be provided by sending an email to DEPOOGNotify@wv.gov.

07/02/2021

STATE OF WEST VIRGINIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS
WELL WORK PERMIT APPLICATION

1) Well Operator: HG Energy II Appalachia, L.P.

<u>494519932</u>	<u>Harrison</u> ✓	<u>Grant</u> ✓	<u>Mount Clare 7.5'</u> ✓
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Operator ID County District Quadrangle

2) Operator's Well Number: Schoen 1205 S-10H ✓ Well Pad Name: Schoen 1205 ✓

3) Farm Name/Surface Owner: George Schoen ✓ Public Road Access: McWhorter Road / SR25 ✓

4) Elevation, current ground: 1410' Elevation, proposed post-construction: 1407' ✓

5) Well Type (a) Gas Oil _____ Underground Storage _____
Other _____

(b) If Gas Shallow Deep _____
Horizontal _____

SDW
5/13/2021

6) Existing Pad: Yes or No No

7) Proposed Target Formation(s), Depth(s), Anticipated Thickness and Expected Pressure(s):
Marcellus at 7214' / 7315' and 101' in thickness. Anticipated pressure at 4314#.

8) Proposed Total Vertical Depth: 7240' ✓

9) Formation at Total Vertical Depth: Marcellus ✓

10) Proposed Total Measured Depth: 25,879' ✓

11) Proposed Horizontal Leg Length: 17,101' ✓

12) Approximate Fresh Water Strata Depths: 135', 480', 640', 728'

13) Method to Determine Fresh Water Depths: Nearest offset well data

14) Approximate Saltwater Depths: 1730, 1780, 2010

15) Approximate Coal Seam Depths: 501, 650', 730', 736' (Surface casing is being extended to cover the coal in the DTI Storage Field)

16) Approximate Depth to Possible Void (coal mine, karst, other): None

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17) Does Proposed well location contain coal seams directly overlying or adjacent to an active mine? Yes _____ No

MAY 26 2021

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(a) If Yes, provide Mine Info: Name: _____
Depth: _____
Seam: _____
Owner: _____

18) CASING AND TUBING PROGRAM

TYPE	Size (in)	New or Used	Grade	Weight per ft. (lb/ft)	FOOTAGE: For Drilling (ft)	INTERVALS: Left in Well (ft)	CEMENT: Fill-up (Cu. Ft.)/CTS
Conductor	30"	New	LS	157.5	120' ✓	120'	Drilled In
Fresh Water/Coal	20"	NEW	J-55	94	1200'	1200'	40% excess, CTS
Intermediate 1	13 3/8"	NEW	J-55	68	2100' ✓	2100'	40% excess, CTS
Intermediate 2	9 5/8"	NEW	J-55	40	2950' ✓	2950'	40% excess tail, CTS
Production	5 1/2"	NEW	P-110	23	25879' ✓	25879'	20% excess tail, CTS
Tubing							
Liners							

SDW
5/13/2021

TYPE	Size (in)	Wellbore Diameter (in)	Wall Thickness (in)	Burst Pressure (psi)	Anticipated Max. Internal Pressure (psi)	Cement Type	Cement Yield (cu. ft./k)
Conductor	30"	30"	.500				Drilled In
Fresh Water/Coal	20"	24"	.438	2110	1200	Type 1, Class A	40% excess yield = 1.20, CTS
Intermediate 1	13 3/8"	17 1/2"	.480	3450		Type 1/Class A	Lead 40% excess, Tail 0% excess
Intermediate 2	9 5/8"	12 1/4"	.395	3950		Type 1/Class A	Lead 40% excess, Tail 0% Excess
Production	5 1/2"	8 1/2"	.415	16240	12500	Type 1/Class A	20% excess yield = 1.18, tail yield 1.34
Tubing							
Liners							

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Kind:				
Sizes:				
Depths Set:				

19) Describe proposed well work, including the drilling and plugging back of any pilot hole:

Drill the vertical depth to the Marcellus at an estimated total vertical depth of approximately 7240 feet. Drill horizontal leg to estimated 17,101' lateral length, 25,879' TMD. Hydraulically fracture stimulate and be capable of producing from the Marcellus Formation. Should we encounter an unanticipated void in the coal, we will install a minimum of 20' of casing below the void but not more than 100' below the void, set a basket and grout to surface. We plan to run an ACP above the Gantz/Dominion Storage interval to aid in sealing off and isolating the storage interval.

20) Describe fracturing/stimulating methods in detail, including anticipated max pressure and max rate:

The stimulation will be completed with multiple stages divided over the lateral length of the well. Stage spacing is dependent upon engineering design. Slickwater fracturing technique will be utilized on each stage using sand, water, and chemicals. See attached list. Maximum pressure not to exceed 12,500 psi.

21) Total Area to be disturbed, including roads, stockpile area, pits, etc., (acres): 29.485 acres

22) Area to be disturbed for well pad only, less access road (acres): 9.246 acres

23) Describe centralizer placement for each casing string:

No centralizers will be used with conductor casing.
Freshwater - centralized every 3 joints to surface.
Coal - Bow Spring on every joint, will also be running ACP for isolating storage zone
Intermediate - Bow Spring on first 2 joints then every third joint to 100' from surface.
Production - Run 1 spiral centralizer every 5 joints from the top of the curve to surface. Run 1 spiral centralizer every 3 joints from the 1st 5.5' long joint to the top of the curve.

24) Describe all cement additives associated with each cement type:

Conductor - N/A, Casing to be drilled in w/ Dual Rotary Rig.
Fresh Water - 15.8 ppg PNE-1 + 3% bwoc CaCl₂ 40% Excess Yield = 1.20, CTS
Intermediate 1 - *Lead: 15.4 ppg PNE-1 + 2.5% bwoc CaCl₂ 40% Excess / Tail: 15.9 ppg PNE-1 + 2.5% bwoc CaCl₂ zero% Excess. CTS*
Intermediate 2 - *Lead: 15.4 ppg PNE-1 + 2.5% bwoc CaCl₂ 40% Excess / Tail: 15.9 ppg PNE-1 + 2.5% bwoc CaCl₂ zero% Excess. CTS*
Production - *Lead: 14.5 ppg POZ:PNE-1 + 0.3% bwoc R3 + 1% bwoc EC1 + 0.75 gal/sk FP13L + 0.3% bwoc MPA170Tail: 14.8 ppg PNE-1 + 0.35% bwoc R3 + 0.75 gal/sk FP13L + 50% bwoc ASCA1 + 0.5% bwoc MPA17020% ExcessLead Yield=1.19, CTS

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25) Proposed borehole conditioning procedures:

Conductor - Ensures the hole is clean at TD.
Fresh Water - Once casing is at setting depth, circulate a minimum of one hole volume with Fresh Water prior to pumping cement.
Coal - Once casing is at setting depth, Circulate and condition at TD. Circulate a minimum of one hole volume prior to pumping cement.
Intermediate - Once casing is at setting depth, Circulate and condition mud at TD. Circulate a minimum of one hole volume prior to pumping cement.
Production - Once on bottom/TD with casing, circulate at max allowable pump rate for at least 2x bottoms up, or until returns and pump pressures indicate the hole is clean. Circulate a minimum of one hole volume prior to pumping cement.

*Note: Attach additional sheets as needed.

HG Energy II Appalachia, LLC

Schoen 1205 Well Pad (N-1H, N-2H, N-3H, N-4H, N-5H, N-6H, S-7H, S-8H, S-9H, S-10H, S-11H)

Cement Additives

Material Name	Material Type	Material Description	CAS #																		
Premium NE-1	Portland Cement	Premium NE-1 is a portland cement with early compressive strength properties.	<table border="1"> <thead> <tr> <th>Ingredient name</th> <th>%</th> <th>CAS number</th> </tr> </thead> <tbody> <tr> <td>Portland cement</td> <td>90 - 100</td> <td>65997-15-1</td> </tr> <tr> <td>Calcium oxide</td> <td>1 - 5</td> <td>1305-78-8</td> </tr> <tr> <td>Magnesium oxide</td> <td>1 - 5</td> <td>1309-48-4</td> </tr> <tr> <td>Crystalline silica: Quartz (SiO2)</td> <td>0.1 - 1</td> <td>14808-60-7</td> </tr> </tbody> </table>	Ingredient name	%	CAS number	Portland cement	90 - 100	65997-15-1	Calcium oxide	1 - 5	1305-78-8	Magnesium oxide	1 - 5	1309-48-4	Crystalline silica: Quartz (SiO2)	0.1 - 1	14808-60-7			
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Bentonite	Extender	Commonly called gel, it is a clay material used as a cement extender and to control excessive free water.	<table border="1"> <thead> <tr> <th>Ingredient name</th> <th>%</th> <th>CAS number</th> </tr> </thead> <tbody> <tr> <td>bentonite</td> <td>90 - 100</td> <td>1302-78-9</td> </tr> <tr> <td>Crystalline silica: Quartz (SiO2)</td> <td>5 - 10</td> <td>14808-60-7</td> </tr> </tbody> </table>	Ingredient name	%	CAS number	bentonite	90 - 100	1302-78-9	Crystalline silica: Quartz (SiO2)	5 - 10	14808-60-7									
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Calcium Chloride	Accelerator	A powdered, flaked or pelletized material used to decrease thickening time and increase the rate of strength development	<table border="1"> <thead> <tr> <th>Ingredient name</th> <th>%</th> <th>CAS number</th> </tr> </thead> <tbody> <tr> <td>Calcium chloride</td> <td>90 - 100</td> <td>10043-52-4</td> </tr> </tbody> </table>	Ingredient name	%	CAS number	Calcium chloride	90 - 100	10043-52-4												
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Cello Flake	Lost Circulation	Graded (3/8 to 3/4 inch) cellophane flakes used as a lost circulation material.	<table border="1"> <thead> <tr> <th>Ingredient name</th> <th>%</th> <th>CAS number</th> </tr> </thead> <tbody> <tr> <td>No hazardous ingredient</td> <td></td> <td></td> </tr> </tbody> </table>	Ingredient name	%	CAS number	No hazardous ingredient														
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FP-13L	Foam Preventer	FP-13L is a clear liquid organic phosphate antifoaming agent used in cementing operations. It is very effective minimizing air entrapment and preventing foaming tendencies of latex systems.	<table border="1"> <thead> <tr> <th>Ingredient name</th> <th>%</th> <th>CAS number</th> </tr> </thead> <tbody> <tr> <td>Tributyl phosphate</td> <td>90 - 100</td> <td>126-73-8</td> </tr> </tbody> </table>	Ingredient name	%	CAS number	Tributyl phosphate	90 - 100	126-73-8												
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Granulated Sugar	Retarder	Used to retard cement returns at surface. A proprietary product that provides expansive properties and improves bonding at low to moderate temperatures.	<table border="1"> <thead> <tr> <th>Ingredient name</th> <th>%</th> <th>CAS number</th> </tr> </thead> <tbody> <tr> <td>Sucrose</td> <td>90 - 100</td> <td>57-50-1</td> </tr> </tbody> </table>	Ingredient name	%	CAS number	Sucrose	90 - 100	57-50-1												
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EC-1	Gas Migration	Multi-purpose polymer additive used to control free fluid, fluid loss, rheology, and gas migration.	<table border="1"> <thead> <tr> <th>Ingredient name</th> <th>%</th> <th>CAS number</th> </tr> </thead> <tbody> <tr> <td>No hazardous ingredient</td> <td></td> <td></td> </tr> </tbody> </table>	Ingredient name	%	CAS number	No hazardous ingredient														
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Poz (Fly Ash)	Base	A synthetic pozzolan, (primarily Silicon Dioxide). When blended with cement, Pozzolan can be used to create lightweight cement slurries used as either a filler slurry or a sulfate resistant completion cement.	<table border="1"> <thead> <tr> <th>Ingredient name</th> <th>%</th> <th>CAS number</th> </tr> </thead> <tbody> <tr> <td>Crystalline silica: Quartz (SiO2)</td> <td>90 - 100</td> <td>14808-60-7</td> </tr> <tr> <td>Calcium oxide</td> <td>1 - 5</td> <td>1305-78-8</td> </tr> </tbody> </table>	Ingredient name	%	CAS number	Crystalline silica: Quartz (SiO2)	90 - 100	14808-60-7	Calcium oxide	1 - 5	1305-78-8									
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R-3	Retarder	A low temperature retarder used in a wide range of slurry formulations to extend the slurry thickening time.	<table border="1"> <thead> <tr> <th>Ingredient name</th> <th>%</th> <th>CAS number</th> </tr> </thead> <tbody> <tr> <td>Organic acid salt</td> <td>40 - 50</td> <td>Trade secret.</td> </tr> </tbody> </table>	Ingredient name	%	CAS number	Organic acid salt	40 - 50	Trade secret.												
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S-5	Surfactant	Used to water wet casing and formation to facilitate cement bonding.	<table border="1"> <thead> <tr> <th>Ingredient name</th> <th>%</th> <th>CAS number</th> </tr> </thead> <tbody> <tr> <td>2-Butoxyethanol</td> <td>20 - 30</td> <td>111-76-2</td> </tr> <tr> <td>Proprietary surfactant</td> <td>10 - 20</td> <td>Trade secret.</td> </tr> <tr> <td>D-Glucopyranose, oligomeric, C10-16-alkyl glycosides</td> <td>5 - 10</td> <td>110615-47-9</td> </tr> <tr> <td>Alkylarylsulfonate amine salt</td> <td>1 - 5</td> <td>Trade secret.</td> </tr> <tr> <td>Polyoxyalkylenes</td> <td>0.1 - 1</td> <td>Trade secret.</td> </tr> </tbody> </table>	Ingredient name	%	CAS number	2-Butoxyethanol	20 - 30	111-76-2	Proprietary surfactant	10 - 20	Trade secret.	D-Glucopyranose, oligomeric, C10-16-alkyl glycosides	5 - 10	110615-47-9	Alkylarylsulfonate amine salt	1 - 5	Trade secret.	Polyoxyalkylenes	0.1 - 1	Trade secret.
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1205 S-10H
Marcellus Shale Horizontal
Harrison County, WV

1205 S-10H SHL

14218461.69N 1824098.78E

Ground Elevation

1407.3'

1205 S-10H LP

14219268.84N 1827192.48E

Azm

159.798°

1205 S-10H BHL

14203226.01N 1833095.83E

WELLBORE DIAGRAM

HOLE	CASING	GEOLOGY	TOP	BASE	MUD	CEMENT	CENTRALIZERS	CONDITIONING	COMMENTS
------	--------	---------	-----	------	-----	--------	--------------	--------------	----------

30"	30" 157.5# LS	Conductor	0	120	AIR	N/A, Casing to be drilled in w/ Dual Rotary Rig	N/A	Ensure the hole is clean at TD.	Conductor casing = 0.5" wall thickness
		Fresh Water	0	135, 480, 640, 728	AIR	15.6 ppg PNE-1 + 3% bwoc CaCl 40% Excess Yield=1.20 / CTS	Centralized every 3 joints to surface	Once casing is at setting depth, circulate a minimum of one hole volume with Fresh Water prior to pumping cement.	Surface casing = 0.438" wall thickness Burst=2110 psi
Coal	730	736							
Surface / FW	0	1200							
17.5"	13-3/8" 68# J-55 BTC	Little/Big Lime	1467 / 1510	1482 / 1556	AIR / KCL Salt Polymer	Lead: 15.4 ppg PNE-1 + 2.5% bwoc CaCl 40% Excess / Tail: 15.9 ppg PNE-1 + 2.5% bwoc CaCl zero% Excess. CTS	Bow Spring on every joint <i>*will also be running ACP for isolating storage zone*</i>	Once casing is at setting depth, Circulate and condition at TD. Circulate a minimum of one hole volume prior to pumping cement.	Intermediate casing = 0.480" wall thickness Burst=3450 psi
		Injun / Gantz (Storage)	1565 / 1900	1690 / 1970					
		Intermediate 1	0	2100					
		Fifty / Thirty Foot	1993 / 2112	2093 / 2147					
12.25"	9-5/8" 40# J-55 BTC	Gordon Stray / Gordon	2195 / 2250	2250 / 2310	AIR / KCL Salt Polymer	Lead: 15.4 ppg PNE-1 + 2.5% bwoc CaCl 40% Excess / Tail: 15.9 ppg PNE-1 + 2.5% bwoc CaCl zero% Excess. CTS	Bow Spring on first 2 joints then every third joint to 100' form surface	Once casing is at setting depth, Circulate and condition mud at TD. Circulate a minimum of one hole volume prior to pumping cement.	Intermediate casing = 0.395" wall thickness Burst=3950 psi
		5th Sand	2440	2468					
		Warren	2835	2860					
		Intermediate 2	0	2950					
		Speechley	3028	3162					
8.5" Vertical	5-1/2" 23# P-110 HP CDC HTQ	Bradford	3342	3367	9.0ppg SOBMM	Lead: 14.5 ppg POZ:PNE-1 + 0.3% bwoc R3 + 1% bwoc EC1 + 0.75 gal/sk FP13L + 0.3% bwoc MPA170 Tail: 14.8 ppg PNE-1 + 0.35% bwoc R3 + 0.75 gal/sk FP13L + 50% bwoc ASCA1 + 0.5% bwoc MPA170 20% Excess Lead Yield=1.19 Tail Yield=1.94 CTS	Run 1 spiral centralizer every 5 joints from the top of the curve to surface.	Once on bottom/TD with casing, circulate at max allowable pump rate for at least 2x bottoms up, or until returns and pump pressures indicate the hole is clean. Circulate a minimum of one hole volume prior to pumping cement.	Production casing = 0.415" wall thickness Burst=16240 psi Note:Actual centralizer schedules may be changed due to hole conditions
		Benson	4420	4455					
		Rhinestreet	5872	6549					
8.5" Curve		Cashaqua	6549	6740	11.5ppg-12.5ppg SOBMM				
		Middlesex	6740	6870					
		West River	6870	7003					
		Burkett	7003	7048					
		Tully Limestone	7048	7149					
		Hamilton	7149	7214					
		Marcellus	7214	7315					
8.5" Lateral	TMD / TVD (Production)	25879	7240	11.5ppg-12.5ppg SOBMM					
	Onondaga	7315							

LP @ 7240' TVD / 8778' MD

8.5" Hole - Cemented Long String
5-1/2" 23# P-110 HP CDC HTQ

+/-17101' ft Lateral

TD @ +/-7240' TVD
+/-25879' MD

X=centralizers

WW-9
(4/16)

API Number 47 - 033 - 06010

Operator's Well No. Schoen 1205 S-10H

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

FLUIDS/ CUTTINGS DISPOSAL & RECLAMATION PLAN

Operator Name HG Energy II Appalachia, LLC OP Code 494501907

Watershed (HUC 10) Middle West Fork Creek Quadrangle Mount Clare 7.5'

Do you anticipate using more than 5,000 bbls of water to complete the proposed well work? Yes No

Will a pit be used? Yes No

If so, please describe anticipated pit waste: NA

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 Permit Number _____)
- Reuse (at API Number TBD - At next anticipated well)
- Off Site Disposal (Supply form WW-9 for disposal location)
- Other (Explain _____)

*SDW
5/12/2021*

Will closed loop system be used? If so, describe: Yes, cuttings and fluids will be collected in a closed loop system, re-used or hauled to an approved disposal site or landfill.

Drilling medium anticipated for this well (vertical and horizontal)? Air, freshwater, oil based, etc. Vertical - Air, Air/KCl, Air/SOBM, Horizontal - SOBm

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

Additives to be used in drilling medium? Water, Soap, KCl, Barite, Base Oil, Wetting Agents

Drill cuttings disposal method? Leave in pit, landfill, removed offsite, etc. Approved Landfill

-If left in pit and plan to solidify what medium will be used? (cement, lime, sawdust) NA

-Landfill or offsite name/permit number? See Attached

Permittee shall provide written notice to the Office of Oil and Gas of any load of drill cuttings or associated waste rejected at any West Virginia solid waste facility. The notice shall be provided within 24 hours of rejection and the permittee shall also disclose where it was properly disposed.

I certify that I understand and agree to the terms and conditions of the GENERAL WATER POLLUTION PERMIT issued on August 1, 2005, 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 *Diane White*

Company Official (Typed Name) Diane White

Company Official Title Agent

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Subscribed and sworn before me this 7th day of May, 2021

Cassidy A. Boardman Notary Public

My commission expires 7/31/2022



HG Energy II Appalachia, LLC

Proposed Revegetation Treatment: Acres Disturbed 29.465 Prevegetation pH _____

Lime 3 Tons/acre or to correct to pH 6.5

Fertilizer type 10-20-20

Fertilizer amount 500 lbs/acre

Mulch Hay 2 Tons/acre

Seed Mixtures

Temporary

Permanent

Seed Type	lbs/acre
Tall Fescue	40
Ladino Clover	5

Seed Type	lbs/acre
Tall Fescue	40
Ladino Clover	5

Maintain E&S controls through the drilling and completion process

Attach:

Maps(s) of road, location, pit and proposed area for land application (unless engineered plans including this info have been provided). If water from the pit will be land applied, include dimensions (L x W x D) of the pit, and dimensions (L x W), and area in acreage, of the land application area.

Photocopied section of involved 7.5' topographic sheet.

Plan Approved by: [Signature]

Comments: Pre-seed/mulch as soon as reasonably possible per regulation.

Upgrade E&S if needed per WV DEP E&S manual.

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Title: Oil & Gas Inspector

Date: 5/13/2021

Field Reviewed? Yes No

PROPOSAL TO DRILL WITHIN DOMINION TRANSMISSION STORAGE FIELD

FIELD/ZONES: DOMINION FINK/KENNEDY/LOST CREEK -GANTZ SAND

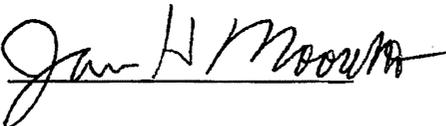
WELL NAME: Schoen 1205 S-10H

Well # 1205 S-10H

DISTRICT/COUNTY/STATE: Grant / Harrison / WV

Submitted 
JOSH HINTON
HG ENERGY II APPALACHIA, LLC

DATE 5-10-2021

Approved 
~~Dominion Energy Transmission~~
EGTS

DATE 5/12/21

Approved 
EGTS
~~Dominion Energy Transmission~~

DATE 5/12/21 RECEIVED
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Comments:

HG Energy has submitted this Casing & Cementing diagram and Drilling Plan to Dominion Transmission for Review. This signed document acknowledges that Dominion has reviewed the proposed casing program and the well's location within the Fink/Kennedy/Lost Creek storage field. This acknowledgement also confirms the proposed casing program is accurate to the proper storage zone as provided by HG Energy II Appalachia, LLC

Cuttings Disposal/Site Water

Cuttings -Haul off Company:

Eap Industries, Inc. DOT # 0876278
1875 Smith Two State Rd. Atlasburg, PA 15004
1-888-284-5227

Waste Management
200 Rangos Lane
Washington, PA 15301
724-222-3272

Environmental Coordination Services & Recycling (ECS&R)
8287 US Highway 19
Cochranston, PA 16314
814-425-7778

Disposal Locations:

Apex Environmental, LLC Permit # 06-08488
11 County Road 78
Amsterdam, OH 43903
740-548-4889

Westmoreland Waste, LLC Permit # 100277
111 Conner Lane
Belle Vernon, PA 15012
724-929-7694

Sycamore Landfill Inc. Permit #R80-079001 05-2010
4301 Sycamore Ridge Road
Hurricane, WV 25526
304-562-2611

Max Environmental Technologies, Inc. Facility Permit # PAD004898146 / 901071
233 Max Lane
Yukon, PA 25968
724-722-3500

Max Environmental Technologies, Inc. Facility Permit # PAD05087072 / 301359
200 Max Drive
Bulger, PA 15019
724-796-1571

Waste Management Kelly Run Permit # 100663
1901 Park Side Drive
Elizabeth, PA 15037
412-884-7569

Waste Management South Hills (Arnoni) Permit # 100592
3100 Hill Road
Library, PA 15129
724-348-7013
412-884-7569

Waste Management Arden Permit # 100172
200 Rangos Lane
Washington, PA 15301
724-222-3272

Waste Management Meadowfill Permit # 1082
1488 Dawson Drive
Bridgeport, WV 26330

Brooke County Landfill Permit # SWR-108-87 / WV 0109029
Rd 2 Box 410
Colliers, WV 26035
304-748-0014

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Wetzel County Landfill Permit # SWF-1021-97 / WV 0109185
Rt 1, Box 156A
New Martinsville, WV 26035
804-455-3800

Energy Solutions, LLC Permit # UT 2300249
428 West 300 South
Suite 200
Salt Lake City, UT 84101

Energy Solutions Services, Inc. Permit # R-73006-124
1560 Bear Creek Road
Oak Ridge, TN 37830

Northern A-1 Environmental Services Permit ID MIP020906814
3947 US 131 North, PO Box 1030
Kalkaska, MI 49646
231-258-9961

Water Haul off Companies:

Dynamic Structures, Clear Creek DOT # 720488
3790 State Route 7
New Waterford, OH 44445
330-892-0164

Nabors Completion & Production Services Co.
PO Box 975682
Dallas, TX 75397-5682

Select Energy Services, LLC
PO Box 203997
Dallas, TX 75320-3997

Nuverra Environmental Solutions
11942 Veterans Memorial Highway
Masontown, WV 26542

Mustang Oilfield Services LLC
PO Box 739
St. Clairsville, OH 43950

Wilson's Outdoor Services, LLC
456 Cracraft Road
Washington, PA 15301

Disposal Locations:

Solidification
Waste Management, Arden Landfill Permit # 100172
200 Rangos Lane
Washington, PA 15301
724-225-1589

Solidification/Incineration
Soil Remediation, Inc. Permit # 02-20753
6065 Arrel-Smith Road
Lowellville, OH 44436
330-536-6825

Adams #1 (Buckeye Brine, LLC)
Permit # 34-031-2-7177
23986 Airport Road
Coshooton, OH 43812
740-575-4484
512-478-6545

CMS of Delaware Inc. DBA CMS Oilfield Serv
301 Commerce Drive
Moorestown, NJ 08057

Force, Inc.
1380 Rte. 286 Hwy. E, Suite 803
Indiana, PA 15701

Solo Construction
P.O. Box 544
St. Mary's, WV 26170

Equipment Transport
1 Tyler Court
Carlisle, PA 17015

Myers Well Service, -----
2001 Ballpark Court
Export, PA 15622

Burns Drilling & Excavating
618 Crabapple Road P.O. Box
Wind Ridge, PA 15880

Nichols 1-A (SWIW #13)
Permit # 3882
300 Charrington Pkwy, Suite 200
Coraopolis, PA 15108
412-829-7275

Grosella (SWIW #34)
Permit # 4096
Rt. 88
Garrettsville, OH
718-275-4816

Kamble 1-D Well
Permit # 8780
7675 East Pike
Norwich, Oh 43767
614-648-8898
740-786-6495

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Adams #2 (Buckeye Brine, LLC)
2205 Westover Road
Austin TX 78703
Permit # 34-031-2-7178
740-575-4484
512-478-6545

Adams #3 (Buckeye Brine, LLC)
Permit # 34-031-2-7241-00-00
2680 Exposition, Suite 117
Austin, TX 78703
512-478-6545

Mozena #1 Well (SWIW # 13)
Permit # 34-157-2-5511-00-00
8367 E. State Street
Newcomerstown, OH 43882
740-763-3966

Goff SWD #1 (SWIW # 27)
Permit # 34-119-2-8776-000
300 Cherrington Pkwy, Suite 200
Coraopolis, PA 15108
412-829-7276

SOS D#1 (SWIW #12)
Permit # 34-059-2-4202-00-00
Sillcor Oilfield Services, Inc.
2999 Hubbard Road
Youngstown, OH 44505

Dudley #1 UIC (SWIW #1)
Permit # 34-121-2-2458-00-00
Select Energy Services, LLC
7884 S. Pleasant Hwy
St. Marys, WV 26170
304-665-2652

OH UIC #1 Buckeye UIC Barnesville 1 & 2
CNX Gas Company, LLC
1000 Consol Energy Drive
Permit # 34-013-2-0609-00-00
Permit # 34-013-2-0614-00-00
304-823-6568

US Steele 11385
Permit # 47-001-00561
200 Evergreen Drive
Waynesburg, PA 15780
304-823-6568

Chapin #7 UIC (SWIW #7)
Permit # 34-083-2-4137-00-00
Elkhead Gas & Oil Company
12168 Marne Rd. NE
Newark, OH 43055
740-763-3966

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07/02/2021



HG ENERGY, II APPALACHIA, LLC
 5260 DuPont Road, Parkersburg, WV 26101
 12/28/2020

Proposed 1205 S-8H Proposed 1205 S-7H Proposed 1205 S-8H
 Proposed 1205 S-9H Proposed 1205 S-10H
 Grant District, Harrison County, W.Va. &
 Hacker's Creek District, Lewis County, W.Va.

SCHOEN 1205 SOUTH UNIT

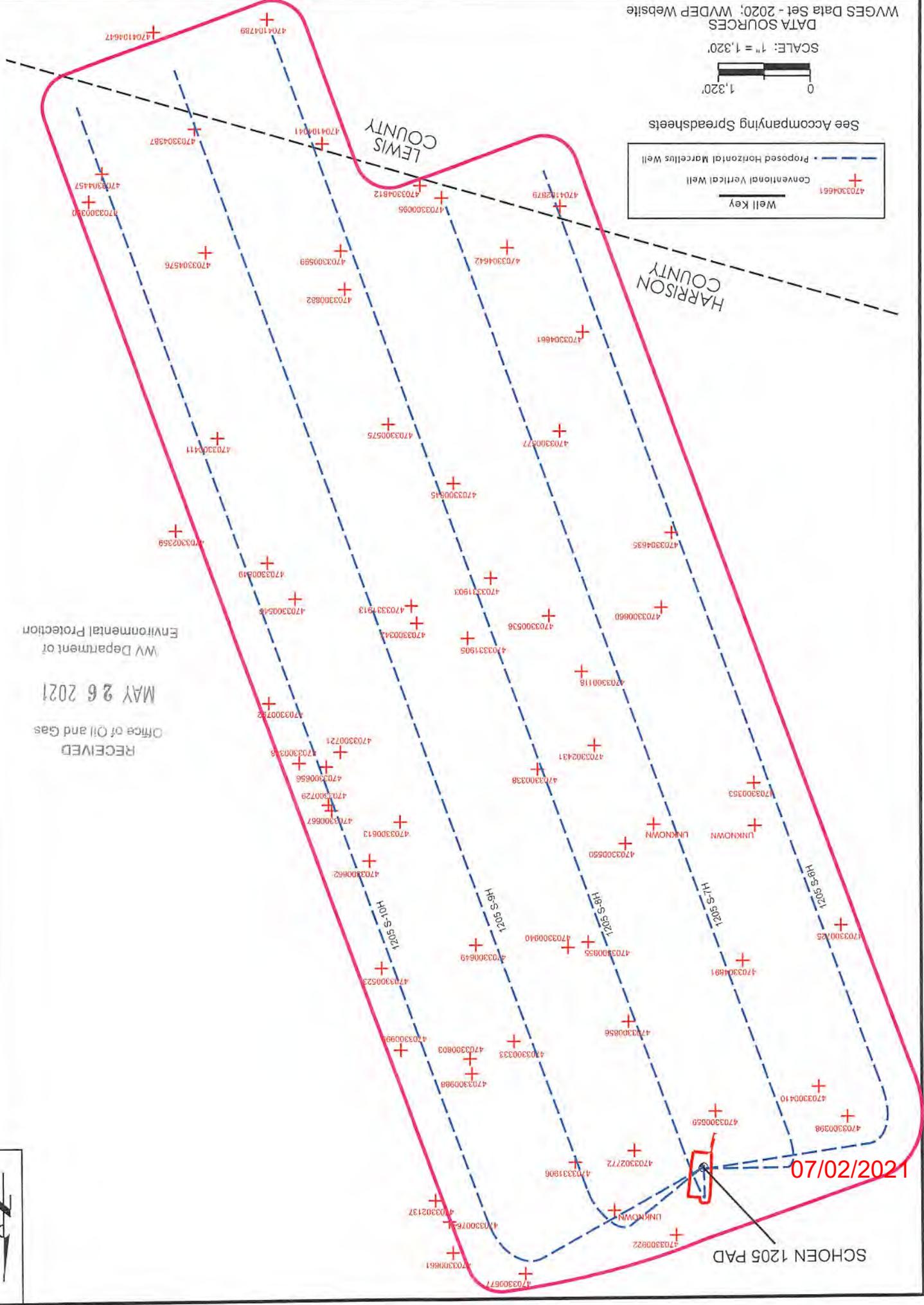
Area of Review for:

DATA SOURCES
 WVGES Data Set - 2020; WVDEP Website
 SCALE: 1" = 1,320'
 0 1,320'

See Accompanying Spreadsheets

Well Key

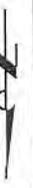
- 4703304661 + Conventional Vertical Well
- - - Proposed Horizontal Marcellus Well



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1202/0170

SCHOEN 1205 PAD



4703306010

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 West Virginia Department of Environmental Protection

**EXISTING WELLS LOCATED WITHIN THE AREA OF REVIEW FOR:
 SCHOEN 1205 SOUTH UNIT AND PROPOSED WELLS S-7H, S-8H, S-9H, S-10H & S-11H**

CT	API	COUNTY	FARM	OPERATOR NAME	FORMATION NAME	WELL TYPE	TVD	STATUS	LATITUDE	LONGITUDE
1	4703300095	Harrison	A B Jackson 1	Dominion Energy Transmission, Inc.	Fifth	Storage	2219	ACTIVE	39.113482	-80.340584
2	4703300118	Harrison	O F Allman 1	Dominion Energy Transmission, Inc.	Gantz	Storage	1679	ACTIVE	39.131942	-80.346144
3	4703300333	Harrison	James M Waggoner	UNKNOWN	Hampshire Grp	Gas	2165	PLUGGED	39.146495	-80.342517
4	4703300338	Harrison	F S Young	Dominion Energy Transmission, Inc.	Gantz	Storage	1700	ACTIVE	39.135769	-80.343869
5	4703300342	Harrison	Asa Boyce	UNKNOWN	Fifth	Gas	2269	PLUGGED	39.129986	-80.337801
6	4703300348	Harrison	Sarah F Vincent	UNKNOWN	Hampshire Grp	Gas	2054	PLUGGED	39.135437	-80.331733
7	4703300350	Harrison	Viola Mount	Dominion Energy Transmission, Inc.	Greenland Gap Fm	Gas	4370	PLUGGED	39.113273	-80.321297
8	4703300353	Harrison	G M Curry et al	Dominion Energy Transmission, Inc.	Gordon (undiff)	Storage	2047	ACTIVE	39.136407	-80.354852
9	4703300398	Harrison	J N Rector	UNKNOWN	Thirty-foot	Storage	2002	PLUGGED	39.149633	-80.359418
10	4703300410	Harrison	E A Waggoner	Dominion Energy Transmission, Inc.	Hampshire Grp	Storage	1964	ACTIVE	39.148438	-80.357974
11	4703300411	Harrison	W N Dawson CW513	Dominion Energy Transmission, Inc.	Hampshire Grp	Storage	1920	ACTIVE	39.122627	-80.327748
12	4703300523	Harrison	Lewis C Swisher	Dominion Energy Transmission, Inc.	Gantz	Storage	1723	ACTIVE	39.143557	-80.335826
13	4703300536	Harrison	M M F Randolph	Dominion Energy Transmission, Inc.	Benson	Gas	4410	ACTIVE	39.129739	-80.344514
14	4703300546	Harrison	M M F Randolph	Dominion Energy Transmission, Inc.	Benson	Gas	4260	ACTIVE	39.128982	-80.331615
15	4703300550	Harrison	Lloyd D Swisher	Dominion Energy Transmission, Inc.	Benson	Dry w/ Gas Show	4320	PLUGGED	39.138747	-80.348299
16	4703300575	Harrison	Sidney Haymond	Dominion Energy Transmission, Inc.	Benson	Gas	4350	ACTIVE	39.122265	-80.336369
17	4703300577	Harrison	Sidney Cookman	Dominion Energy Transmission, Inc.	Benson	Gas	4356	ACTIVE	39.122467	-80.345146
18	4703300599	Harrison	Amanda E Smith	Dominion Energy Transmission, Inc.	Bayard	Gas	2512	ACTIVE	39.115515	-80.334818
19	4703300613	Harrison	Lewis C Swisher	Dominion Energy Transmission, Inc.	Benson	Gas	4457	ACTIVE	39.137811	-80.336839
20	4703300649	Harrison	G W Swisher	Dominion Energy Transmission, Inc.	Greenland Gap Fm	Storage	2347	ACTIVE	39.142725	-80.340651
21	4703300656	Harrison	F S Young CW520	Dominion Energy Transmission, Inc.	Greenland Gap Fm	Storage	1894	PLUGGED	39.135593	-80.333125
22	4703300659	Harrison	S V Curry CW433	Dominion Energy Transmission, Inc.	Thirty-foot	Storage	1990	ACTIVE	39.149343	-80.352710
23	4703300661	Harrison	M S Davis CW538	Dominion Energy Transmission, Inc.	Fifty-foot	Storage	1885	ACTIVE	39.154774	-80.339266
24	4703300662	Harrison	L C Swisher CW527	Dominion Energy Transmission, Inc.	Fifty-foot	Storage	1759	ACTIVE	39.139321	-80.335262
25	4703300667	Harrison	G W Swisher CW525	Dominion Energy Transmission, Inc.	Hampshire Grp	Storage	1687	PLUGGED	39.137325	-80.333373
26	4703300677	Harrison	D L Nutter	Alliance Petroleum Co. LLC	Thirty-foot	Gas	1850	ABANDONED	39.155655	-80.342933
27	4703300721	Harrison	Harris Hrs CW521	Dominion Energy Transmission, Inc.	Fifty-foot	Storage	1948	PLUGGED	39.135023	-80.333850
28	4703300729	Harrison	F Wiant CW522	Dominion Energy Transmission, Inc.	Fifty-foot	Storage	1864	PLUGGED	39.137099	-80.333220
29	4703300764	Harrison	M S Davis CW533	Dominion Energy Transmission, Inc.	Thirty-foot	Storage	2028	PLUGGED	39.153552	-80.339108
30	4703300792	Harrison	L Snyder CW518	Dominion Energy Transmission, Inc.	Fifty-foot	Storage	1824	PLUGGED	39.133088	-80.330236
31	4703300803	Harrison	O Fallman CW430	Dominion Energy Transmission, Inc.	Thirty-foot	Storage	2125	PLUGGED	39.147150	-80.340268
32	4703300845	Harrison	S Haymond CW514	Dominion Energy Transmission, Inc.	Thirty-foot	Storage	2175	ACTIVE	39.124501	-80.339721
33	4703300849	Harrison	M M F Randolph CW573	Dominion Energy Transmission, Inc.	Thirty-foot	Storage	2000	ACTIVE	39.127556	-80.330228

HG Energy II Appalachia, LLC

Site Safety Plan

Schoen 1205 Well Pad

1279 Sutton Farm Rd

Lost Creek

Harrison County, WV 26385

August 2020: Version 1

**For Submission to
West Virginia Department of Environmental Protection,
Office of Oil and Gas**

HG Energy II Appalachia, LLC

5260 Dupont Road

Parkersburg, WV 26101

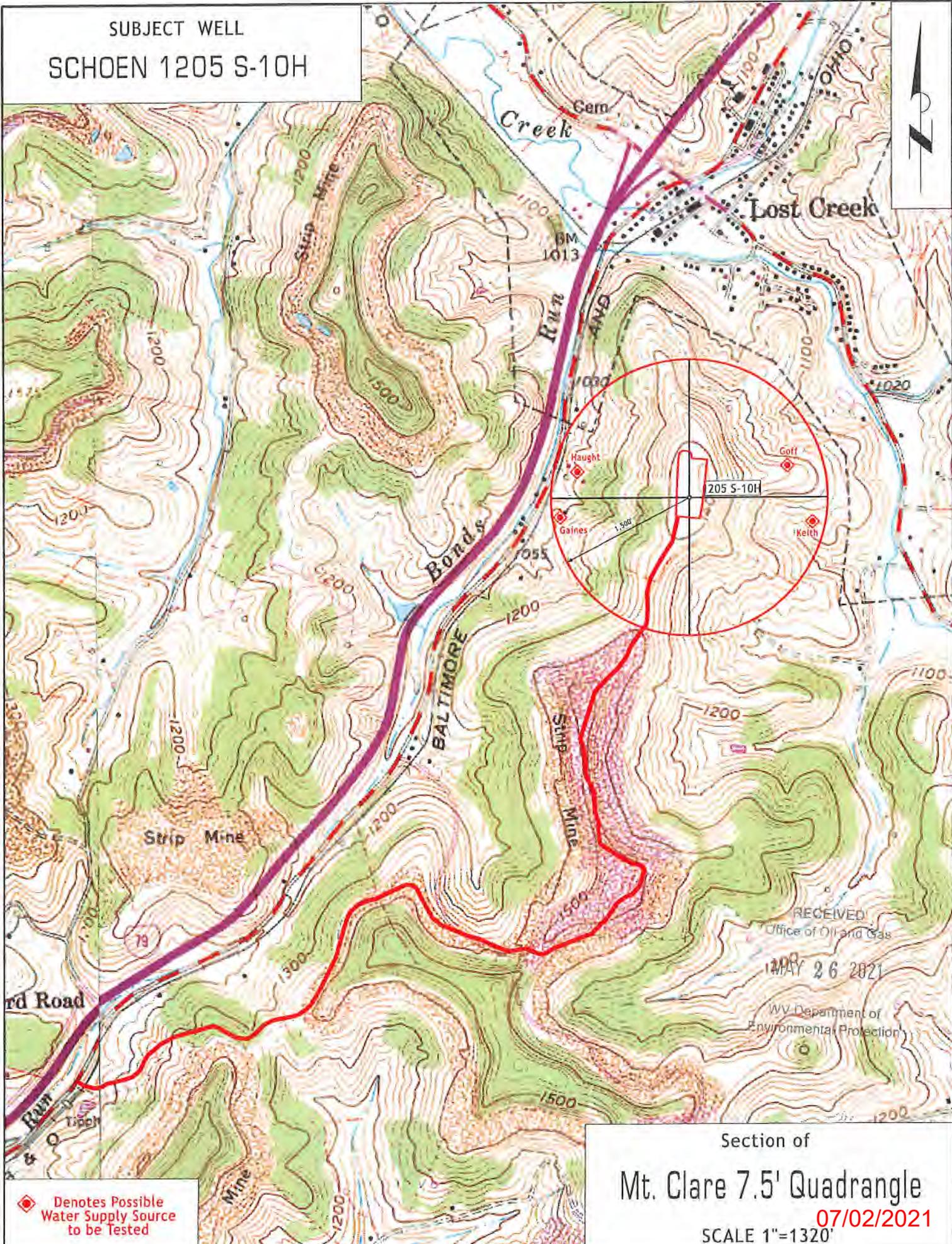
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*SDW
5/13/2021*

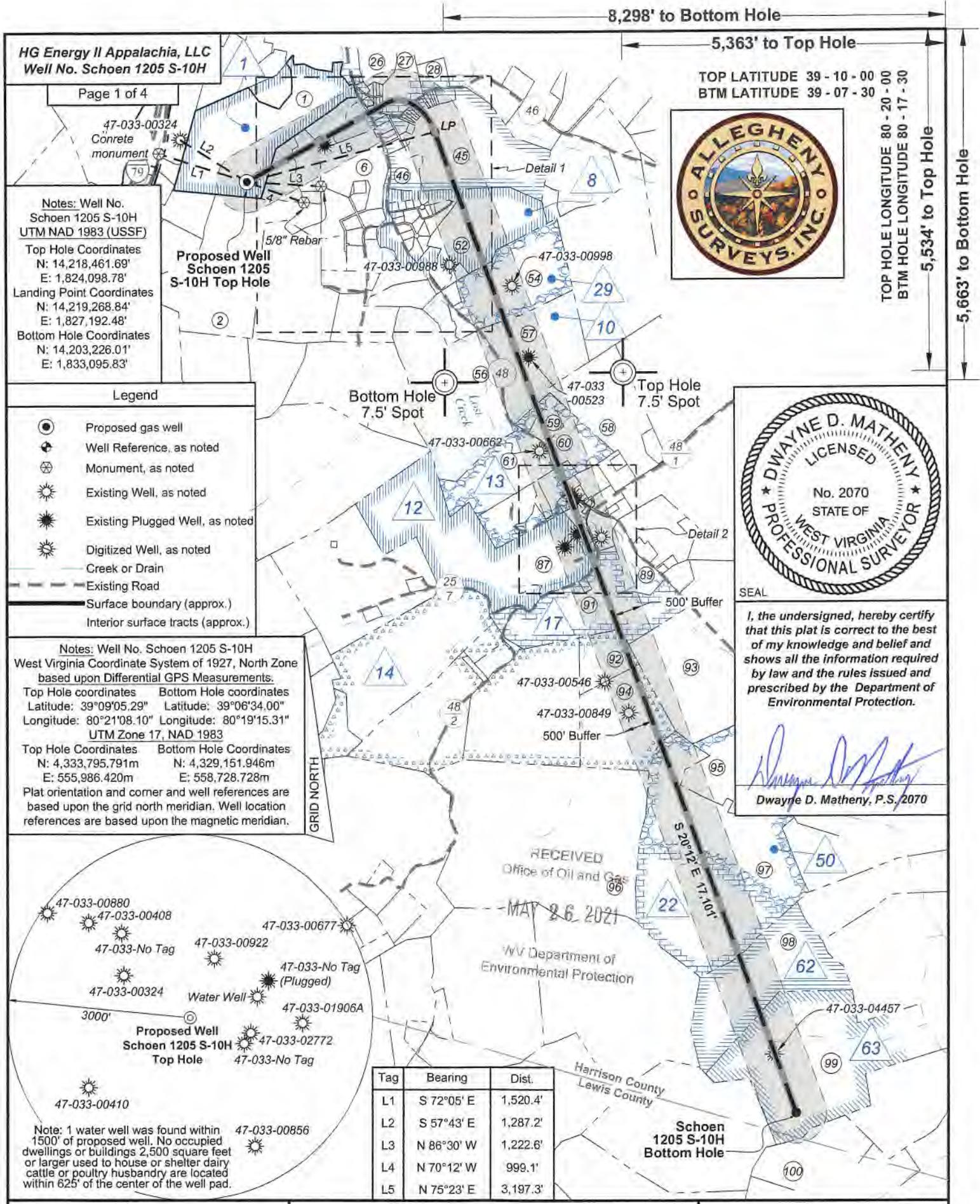
SUBJECT WELL
SCHOEN 1205 S-10H



◆ Denotes Possible Water Supply Source to be Tested

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Section of
Mt. Clare 7.5' Quadrangle
07/02/2021
SCALE 1"=1320'



HG Energy II Appalachia, LLC
Well No. Schoen 1205 S-10H

Page 1 of 4

Notes: Well No. Schoen 1205 S-10H
UTM NAD 1983 (USSF)
Top Hole Coordinates
N: 14,218,461.69'
E: 1,824,098.78'
Landing Point Coordinates
N: 14,219,268.84'
E: 1,827,192.48'
Bottom Hole Coordinates
N: 14,203,226.01'
E: 1,833,095.83'

Proposed Well
Schoen 1205
S-10H Top Hole



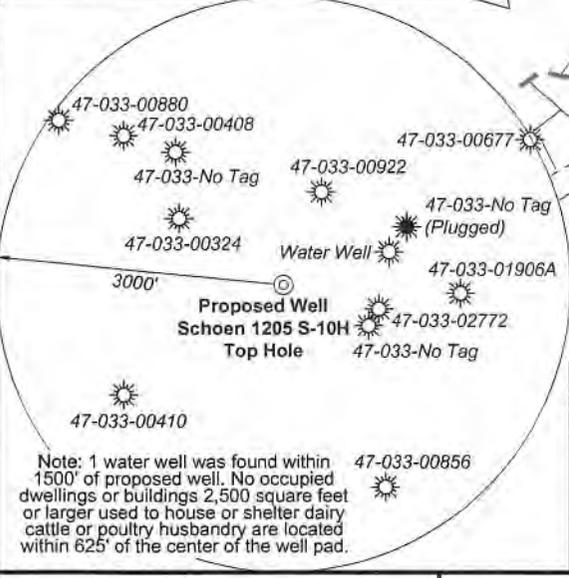
TOP LATITUDE 39 - 10 - 00
BTM LATITUDE 39 - 07 - 30

TOP HOLE LONGITUDE 80 - 20 - 00
BTM HOLE LONGITUDE 80 - 17 - 30

5,534' to Top Hole
5,663' to Bottom Hole

- Legend
- Proposed gas well
 - Well Reference, as noted
 - Monument, as noted
 - Existing Well, as noted
 - Existing Plugged Well, as noted
 - Digitized Well, as noted
 - Creek or Drain
 - Existing Road
 - Surface boundary (approx.)
 - Interior surface tracts (approx.)

Notes: Well No. Schoen 1205 S-10H
West Virginia Coordinate System of 1927, North Zone
based upon Differential GPS Measurements.
Top Hole coordinates Bottom Hole coordinates
Latitude: 39°09'05.29" Latitude: 39°06'34.00"
Longitude: 80°21'08.10" Longitude: 80°19'15.31"
UTM Zone 17, NAD 1983
Top Hole Coordinates Bottom Hole Coordinates
N: 4,333,795.791m N: 4,329,151.946m
E: 555,986.420m E: 558,728.728m
Plat orientation and corner and well references are
based upon the grid north meridian, Well location
references are based upon the magnetic meridian.



Tag	Bearing	Dist.
L1	S 72°05' E	1,520.4'
L2	S 57°43' E	1,287.2'
L3	N 86°30' W	1,222.6'
L4	N 70°12' W	999.1'
L5	N 75°23' E	3,197.3'



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 rules issued and prescribed by the Department of Environmental Protection.

Dwayne D. Matheny
Dwayne D. Matheny, P.S., 2070

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FILE NO: 32-36-G-19
DRAWING NO: Schoen 1205 S-10H Well Plat
SCALE: 1" = 2000'
MINIMUM DEGREE OF ACCURACY: Submeter
PROVEN SOURCE OF ELEVATION: CORS, Bridgeport, WV

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

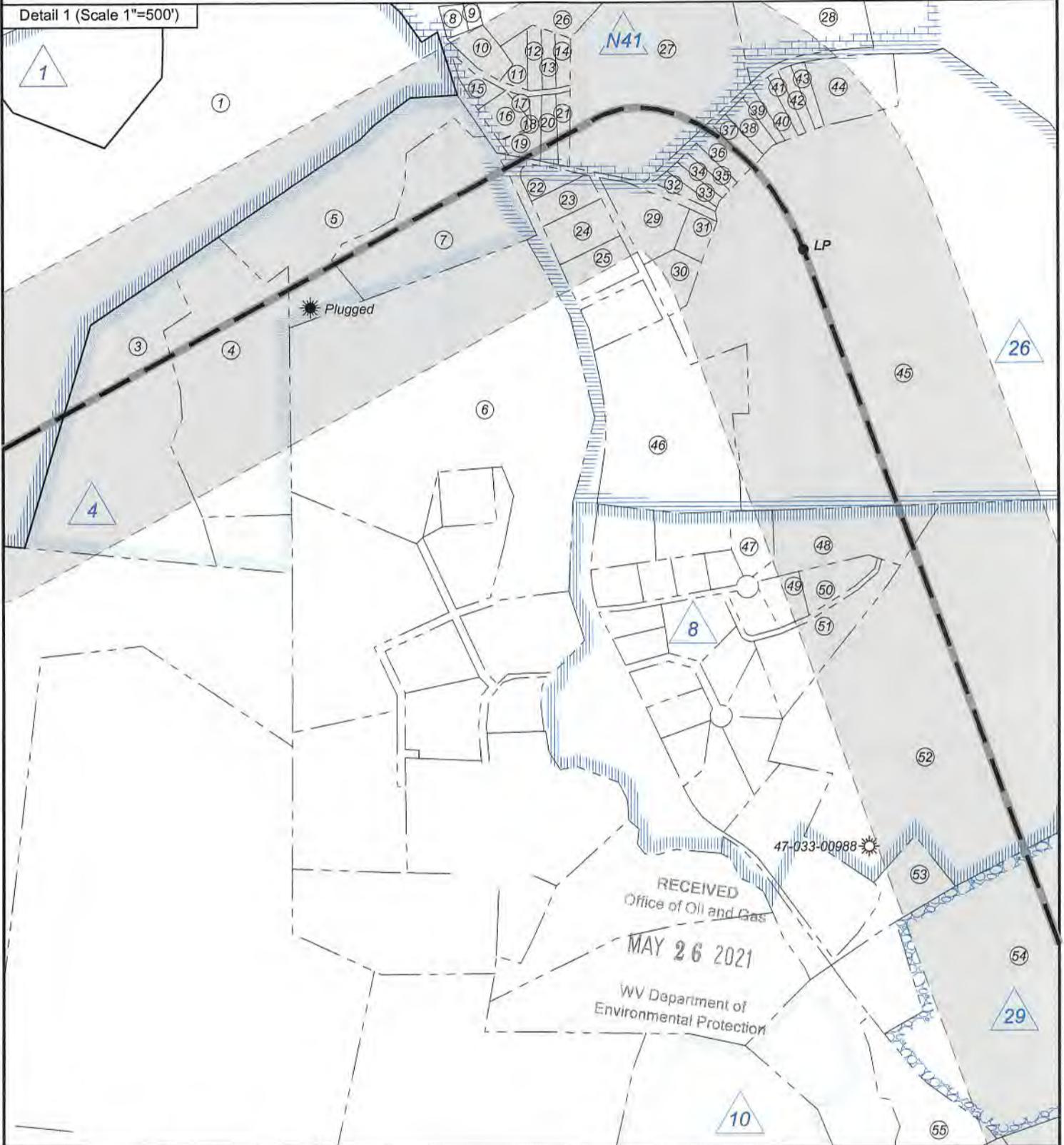
DATE: May 7 2021
OPERATOR'S WELL NO. Schoen 1205 S-10H
API WELL NO 46A
47 - 033 - 06010
STATE COUNTY PERMIT

WELL TYPE: OIL GAS LIQUID INJECTION WASTE DISPOSAL
(IF GAS) PRODUCTION: STORAGE DEEP SHALLOW
LOCATION: ELEVATION: 1,407.3' WATERSHED: Middle West Fork Creek
DISTRICT: Grant / Hackers Creek
SURFACE OWNER: George & Rosanne Schoen
ROYALTY OWNER: Willa Post Robey, et al LEASE NO: ACREAGE: 78.20
PROPOSED WORK: DRILL CONVERT DRILL DEEPER FRACTURE OR STIMULATE PLUG OFF OLD FORMATION
 PERFORATE NEW FORMATION OTHER PHYSICAL CHANGE IN WELL (SPECIFY) 7,240' TVD
 PLUG AND ABANDON CLEAN OUT AND REPLUG TARGET FORMATION: Marcellus Shale ESTIMATED DEPTH: 25,879' MD

WELL OPERATOR: HG Energy II Appalachia, LLC DESIGNATED AGENT: Diane C. White
ADDRESS: 5260 Dupont Road ADDRESS: 5260 Dupont Road
Parkersburg, WV 26101 Parkersburg, WV 26101



Detail 1 (Scale 1"=500')



FILE NO: 32-36-G-19
DRAWING NO: Schoen 1205 S-10H Well Plat
SCALE: 1" = 2000'
MINIMUM DEGREE OF ACCURACY:
Submeter
PROVEN SOURCE OF ELEVATION:
CORS, Bridgeport, WV

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

DATE: May 7 2021
OPERATOR'S WELL NO. Schoen 1205 S-10H
API WELL NO **HGA**
47 - 033 - **06010**
STATE COUNTY PERMIT

WELL TYPE: OIL GAS LIQUID INJECTION WASTE DISPOSAL
(IF GAS) PRODUCTION: STORAGE DEEP SHALLOW

LOCATION: ELEVATION: 1,407.3' WATERSHED: Middle West Fork Creek

DISTRICT: Grant / Hackers Creek

SURFACE OWNER: George & Rosanne Schoen

ROYALTY OWNER: Willa Post Robey, et al

LEASE NO: _____ ACREAGE: 78.20

PROPOSED WORK: DRILL CONVERT DRILL DEEPER FRACTURE OR STIMULATE PLUG OFF OLD FORMATION
 PERFORATE NEW FORMATION OTHER PHYSICAL CHANGE IN WELL (SPECIFY) _____ 7,240' TVD

PLUG AND ABANDON CLEAN OUT AND REPLUG TARGET FORMATION: Marcellus Shale ESTIMATED DEPTH: 25,879' MD

Top: Mount Clare
Btm: Berlin
QUADRANGLE: _____
COUNTY: Harborside
ACREAGE: 65.00

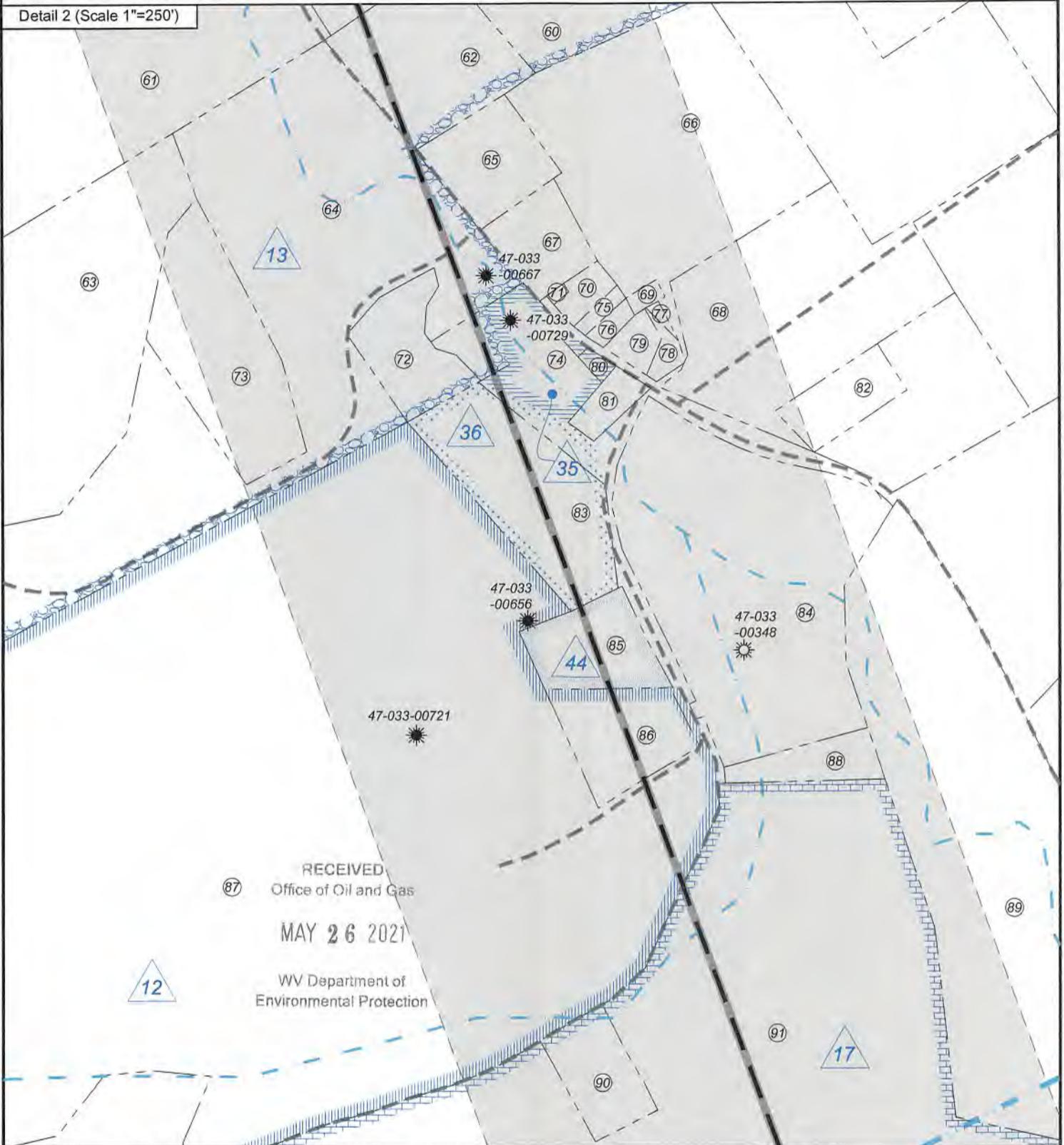
07/02/2021

WELL OPERATOR: HG Energy II Appalachia, LLC
ADDRESS: 5260 Dupont Road
Parkersburg, WV 26101

DESIGNATED AGENT: Diane C. White
ADDRESS: 5260 Dupont Road
Parkersburg, WV 26101



Detail 2 (Scale 1"=250')



FILE NO: 32-36-G-19
DRAWING NO: Schoen 1205 S-10H Well Plat
SCALE: 1" = 2000'
MINIMUM DEGREE OF ACCURACY:
Submeter
PROVEN SOURCE OF ELEVATION:
CORS, Bridgeport, WV

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

DATE: May 7 2021
OPERATOR'S WELL NO. Schoen 1205 S-10H
API WELL NO ~~HA~~
47 — 033 — ~~06010~~
STATE COUNTY PERMIT

WELL TYPE: OIL GAS LIQUID INJECTION WASTE DISPOSAL
(IF GAS) PRODUCTION: STORAGE DEEP SHALLOW

LOCATION: ELEVATION: 1,407.3' WATERSHED: Middle West Fork Creek

Top: Mount Clare
Btm: Berlin
QUADRANGLE: ~~0702/2~~
COUNTY: Harborside
ACREAGE: 65.00

DISTRICT: Grant / Hackers Creek
SURFACE OWNER: George & Rosanne Schoen

ROYALTY OWNER: Willa Post Robey, et al

LEASE NO: _____ ACREAGE: 78.20

PROPOSED WORK: DRILL CONVERT DRILL DEEPER FRACTURE OR STIMULATE PLUG OFF OLD FORMATION
 PERFORATE NEW FORMATION OTHER PHYSICAL CHANGE IN WELL (SPECIFY) _____ 7,240' TVD

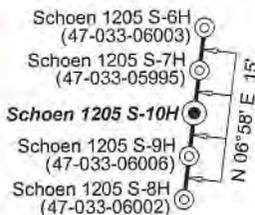
PLUG AND ABANDON CLEAN OUT AND REPLUG TARGET FORMATION: Marcellus Shale ESTIMATED DEPTH: 25,879' MD

WELL OPERATOR: HG Energy II Appalachia, LLC
ADDRESS: 5260 Dupont Road
Parkersburg, WV 26101

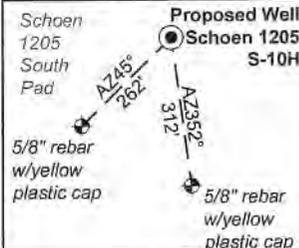
DESIGNATED AGENT: Diane C. White
ADDRESS: 5260 Dupont Road
Parkersburg, WV 26101



Wellhead Layout (NTS)



Well Location References
Not to Scale



Harrison County				
No.	TM / Par	Owner	Bk / Pg	Ac.
1	447 / 2	George & Rosanne Schoen	1148 / 1059	65.00
2	446 / 29	Thomas K. Young, et al	1121 / 25	75.00
3	447 / 3	George and Rosanne Schoen	1253 / 302	10.06
4	447 / 3.4	Stephen M & Kimberly Goff	1257/189	7.67
5	447 / 3.3	Charlotte C Gerlach	1070/1041	6.10
6	447 / 4.11	Joseph & Karen Bowers	1295/887	21.87
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8	2105 / 46	Eugene Smith, et al	F111/530	0.26
9	2105 / 46.1	Emilee Hall, et al	1437/1189	0.17
10	2105 / 47	Cecil Smith, et al	1394/681	0.56
11	2105 / 48	Walter Knight	1284/893	0.37
12	2105 / 50	Helen I. Eakle Estate	---/---	0.25
13	2105 / 53	Virgil Lamb	1577/1012	0.23
14	2105 / 54	Ronald Lake	1415/288	0.23
15	2105 / 116	Kitty Lowther	1580/152	0.42
16	2105 / 117	Kitty Lowther	1580/152	0.50
17	2105 / 49	Kitty Lowther	1580/152	Lot 8
18	2105 / 117.1	Kitty Lowther	1580/152	0.02
19	2105 / 51	Helen I. Eakle Estate	---/---	Lot 7
20	2105 / 52	Virgil Lamb	1577/1012	0.33
21	2105 / 55	Ronald Lake	1415/288	0.23
22	2105 / 118	Trustees Church of God	1097/818	Lot 22
23	2105 / 119	Trustees Church of God	1097/818	Lot 24
24	2105 / 120	Trustees Church of God	1097/818	Lot 24
25	2105 / 121	Jane L. Given	882/569	0.881
26	427 / 33	Isacc & Betty Maxwell III	1539/141	67.32
27	427 / 34	Worthy C. Hall	1577/626	27.00
28	427 / 8.1	Allen Scott Hall	1265/589	5.40
29	2105 / 56	Thomas & Terri Hawkins	1558/1255	0.76
30	2105 / 57	Thomas & Terri Hawkins	1558/1255	0.70
31	2105 / 58	Thomas & Terri Hawkins	1558/1255	0.76
32	2105 / 59	Mary Ann Bowyer, et al	F118/63	0.23
33	2105 / 60	Mary Ann Bowyer, et al	F118/63	0.23
34	2105 / 61	Lisa Hickman	1621/760	0.21
35	2105 / 62	Lisa Hickman	1621/760	0.21
36	2105 / 63	Lisa Hickman	1621/760	0.38
37	2105 / 64	David W. & Blanche K. Stutler	1480/433	0.28
38	2105 / 65	Jean Riffle Estate, et al	F100 / 64	0.42
39	2105 / 67	Jean Riffle Estate, et al	F100 / 64	0.21
40	2105 / 68	Jean Riffle Estate, et al	F100 / 64	0.25
41	2105 / 69	Jean Riffle Estate, et al	F100 / 64	0.26
42	2105 / 70	Kevin R. Kolenda	1257/800	0.26
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48	447 / 5.11	Daniel & Paulette Shaffer	1448/933	2.66
49	447 / 5.23	Ronald & Janet Barnosky	0.57	0.57
50	447 / 5.24	Ronald & Janet Barnosky	1401/271	0.73
51	447 / 5.8	Ronald & Janet Barnosky	1401/271	2.03
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53	447 / 26	Russell A. Snyder	1425/1332	0.66
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59	447 / 36.2	Jason & Taylor Workman	1593/15	4.55
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65	447 / 50	Judy M. Gillespie	1139/421	0.75
66	447 / 52	Trustees M P Church	501/142	4.20
67	447 / 49	Russell W. Stutler	FO 96/707	0.75
68	467 / 12	Stephen B. Riel	1229/916	3.06
69	447 / 54	Linda F. Marple	1325/1055	0.04
70	447 / 47	Leroy Stutler	1448/292	0.25

ID	Lease
N41	D.L. Nutter, et ux
1	A.B. Post, et al
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22	W. Haymond Dawson, et ux
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36	Jackson L. Smith
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50	W. Haymond Dawson, et ux
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63	C. Ross Lewis, et ux, et al

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MAY 26 2021

WV Department of
Environmental Protection

Harrison County				
No.	TM / Par	Owner	Bk / Pg	Ac.
71	447 / 48	Leroy Stutler	1448/292	0.01
72	447 / 44.2	Timothy Smith	1478/1262	0.95
73	447 / 44.5	Karri Trent	1404/418	1.78
74	467 / 8	Danny Joe & Greta Ann Butcher	1321/699	0.63
75	447 / 46	Leroy Stutler	1448/292	0.25
76	447 / 46.1	Leroy Stutler	1448/292	0.25
77	467 / 58	Trustees MP Parsonage	501/142	0.06
78	467 / 57	Trustees MP Parsonage	501/142	0.20
79	467 / 56	Linda F. Marple	1325/1055	0.25
80	467 / 9	Danny & Greta Bucher	1321/699	0.05
81	467 / 10	Carol S. Bennett	1450/590	0.22
82	467 / 13.1	Gordon C. Dawson	1330/356	0.57
83	467 / 6	Jackson L. Smith, et ux	1514/233	1.71
84	467 / 17	Steven C. & Dorothy J. Williams	1198/632	4.58
85	467 / 3	Jackson L. Smith	1412/25	0.75
86	467 / 2.1	Susan K. Dustin	1318/359	0.80
87	467 / 2	Jackson L. Smith	1378/976	95.16
88	467 / 19	Steven G. & Juila A. Randolph	1321/1151	---
89	467 / 21	Steven G. & Juila A. Randolph	1321/1151	10.30
90	467 / 20.1	Charles & Mitzie Reider	1358/1074	0.57
91	467 / 20	Steven G. & Juila A. Randolph	1321/1151	54.64
92	467 / 36	Gary W. & Kathy Hanby	1107/1041	15.35
93	467 / 26	Jane L. Given	1398/247	149.75
94	467 / 36.1	Gary W. & Kathy Hanby	1153/965	45.00
95	467 / 40	Edward G. Dawson	W 137/528	39.75
96	467 / 52	David L. & Lisle C. Hinkle	1282/389	175.50
97	467 / 53	George W & Dorothy K. Dawson	1418/331	158.55
98	487 / 6	Clayton W. Rice	1563/252	70.33
99	487 / 8	Wayne R. Lewis	1616/1241	134.68
Lewis County				
100	10C / 17	Norman Jackson	584/191	34.00

FILE NO: 32-36-G-19
DRAWING NO: Schoen 1205 S-10H Well Plat
SCALE: 1" = 2000'
MINIMUM DEGREE OF ACCURACY:
Submeter
PROVEN SOURCE OF ELEVATION:
CORS, Bridgeport, WV

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

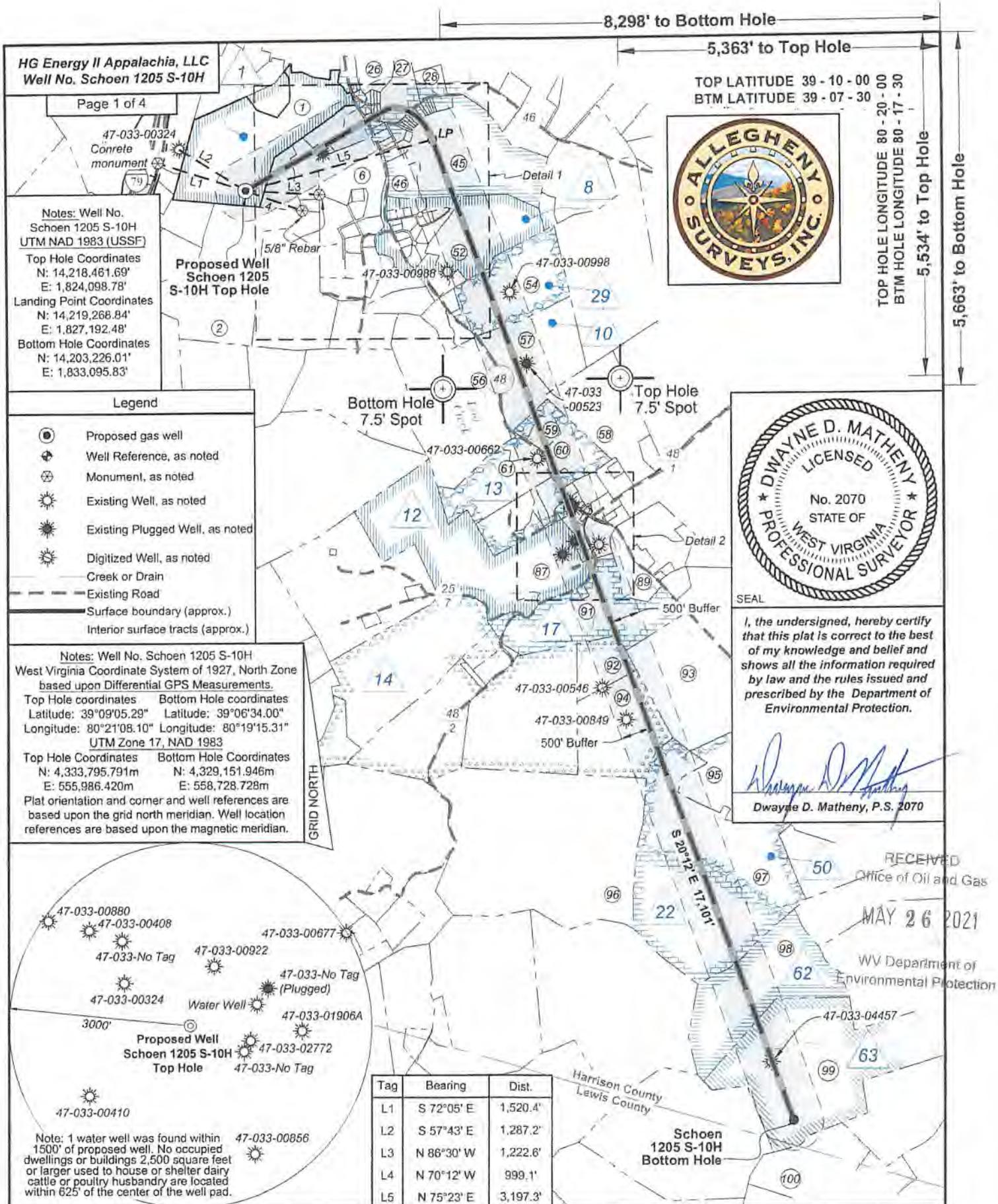
DATE: May 7 2021
OPERATOR'S WELL NO. Schoen 1205 S-10H
API WELL NO 46A
47 - 033 - 06010
STATE COUNTY PERMIT

WELL TYPE: OIL GAS LIQUID INJECTION WASTE DISPOSAL
(IF GAS) PRODUCTION: STORAGE DEEP SHALLOW

LOCATION: ELEVATION: 1,407.3' WATERSHED: Middle West Fork Creek
DISTRICT: Grant / Hackers Creek
SURFACE OWNER: George & Rosanne Schoen
ROYALTY OWNER: Willa Post Robey, et al LEASE NO: ACREAGE: 78.20

PROPOSED WORK: DRILL CONVERT DRILL DEEPER FRACTURE OR STIMULATE PLUG OFF OLD FORMATION
 PERFORATE NEW FORMATION OTHER PHYSICAL CHANGE IN WELL (SPECIFY) 7,240' TVD
 PLUG AND ABANDON CLEAN OUT AND REPLUG TARGET FORMATION: Marcellus Shale ESTIMATED DEPTH: 25,879' MD

WELL OPERATOR: HG Energy II Appalachia, LLC DESIGNATED AGENT: Diane C. White
ADDRESS: 5260 Dupont Road ADDRESS: 5260 Dupont Road
Parkersburg, WV 26101 Parkersburg, WV 26101



HG Energy II Appalachia, LLC
Well No. Schoen 1205 S-10H

Page 1 of 4

47-033-00324
Concrete monument

Notes: Well No. Schoen 1205 S-10H
UTM NAD 1983 (USSF)
Top Hole Coordinates
N: 14,218,461.69'
E: 1,824,098.78'
Landing Point Coordinates
N: 14,219,268.84'
E: 1,827,192.48'
Bottom Hole Coordinates
N: 14,203,226.01'
E: 1,833,095.83'

Proposed Well
Schoen 1205
S-10H Top Hole



TOP LATITUDE 39 - 10 - 00 00
BTM LATITUDE 39 - 07 - 30

TOP HOLE LONGITUDE 80 - 20 - 00
BTM HOLE LONGITUDE 80 - 17 - 30

5,534' to Top Hole

5,663' to Bottom Hole

Legend

- Proposed gas well
- Well Reference, as noted
- Monument, as noted
- Existing Well, as noted
- Existing Plugged Well, as noted
- Digitized Well, as noted
- Creek or Drain
- Existing Road
- Surface boundary (approx.)
- Interior surface tracts (approx.)

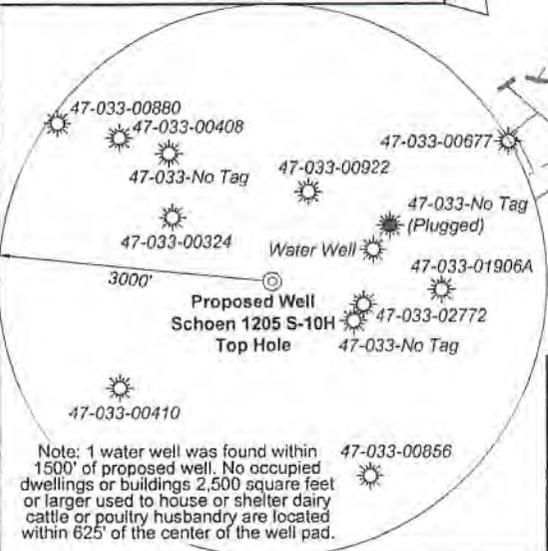
Notes: Well No. Schoen 1205 S-10H
West Virginia Coordinate System of 1927, North Zone
based upon Differential GPS Measurements.
Top Hole coordinates Bottom Hole coordinates
Latitude: 39°09'05.29" Latitude: 39°06'34.00"
Longitude: 80°21'08.10" Longitude: 80°19'15.31"
UTM Zone 17, NAD 1983
Top Hole Coordinates Bottom Hole Coordinates
N: 4,333,795.791m N: 4,329,151.946m
E: 555,986.420m E: 558,728.728m
Plat orientation and corner and well references are
based upon the grid north meridian. Well location
references are based upon the magnetic meridian.

GRID NORTH



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 rules issued and prescribed by the Department of Environmental Protection.

Dwayne D. Matheny
Dwayne D. Matheny, P.S. 2070



Tag	Bearing	Dist.
L1	S 72°05' E	1,520.4'
L2	S 57°43' E	1,287.2'
L3	N 86°30' W	1,222.6'
L4	N 70°12' W	999.1'
L5	N 75°23' E	3,197.3'

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MAY 26 2021
WV Department of Environmental Protection

FILE NO: 32-36-G-19
DRAWING NO: Schoen 1205 S-10H Well Plat
SCALE: 1" = 2000'
MINIMUM DEGREE OF ACCURACY: Submeter
PROVEN SOURCE OF ELEVATION: CORS, Bridgeport, WV

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

DATE: May 7 2021
OPERATOR'S WELL NO. Schoen 1205 S-10H
API WELL NO H64
47 - 033 - 06010
STATE COUNTY PERMIT

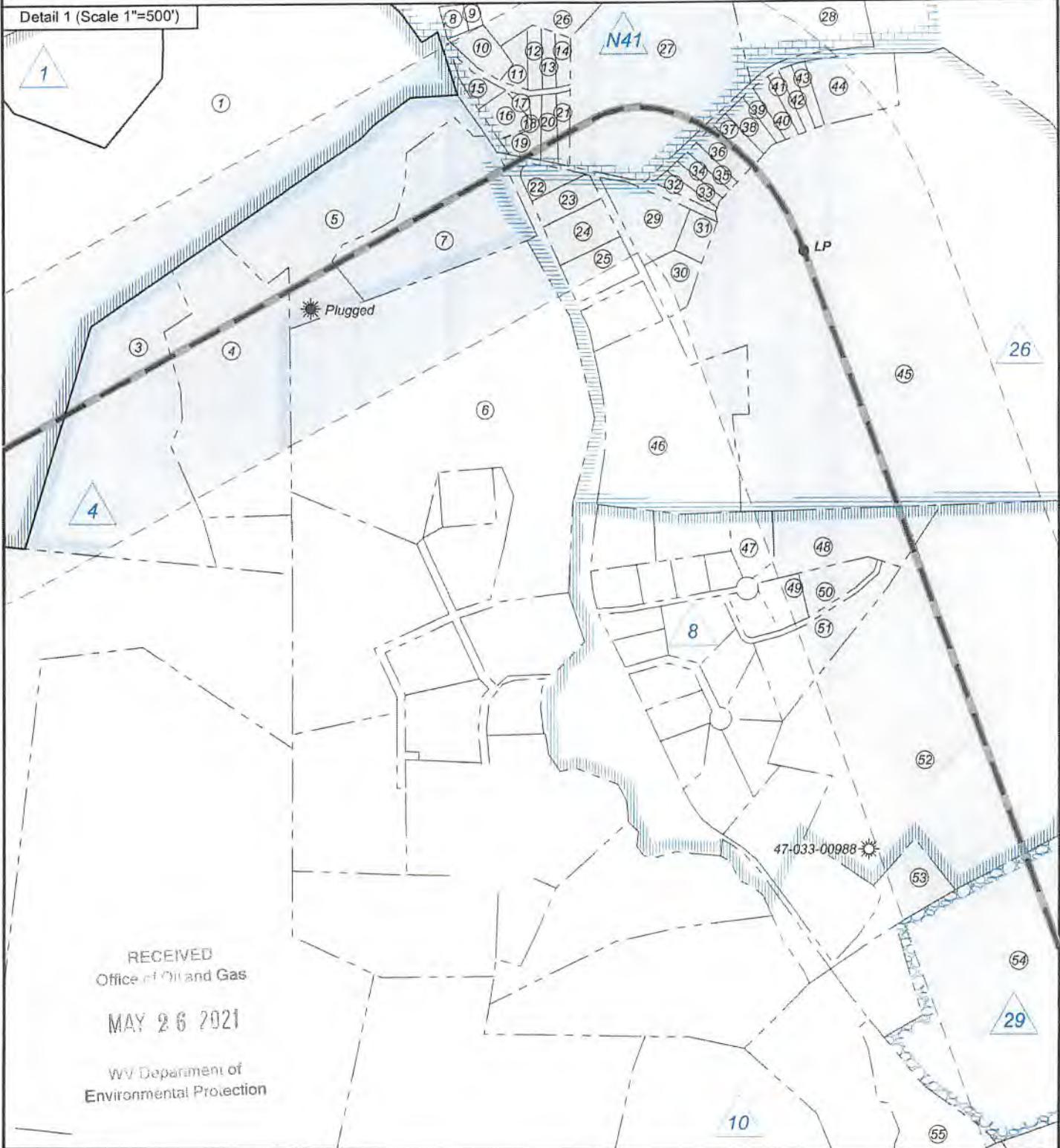
WELL TYPE: OIL GAS LIQUID INJECTION WASTE DISPOSAL
(IF GAS) PRODUCTION: STORAGE DEEP SHALLOW
LOCATION: ELEVATION: 1,407.3' WATERSHED: Middle West Fork Creek
DISTRICT: Grant / Hackers Creek
SURFACE OWNER: George & Rosanne Schoen
ROYALTY OWNER: Willa Post Robey, et al LEASE NO: ACREAGE: 78.20
PROPOSED WORK: DRILL CONVERT DRILL DEEPER FRACTURE OR STIMULATE PLUG OFF OLD FORMATION
 PERFORATE NEW FORMATION OTHER PHYSICAL CHANGE IN WELL (SPECIFY)
 PLUG AND ABANDON CLEAN OUT AND REPLUG TARGET FORMATION: Marcellus Shale ESTIMATED DEPTH: 25,879' MD

WELL OPERATOR: HG Energy II Appalachia, LLC ADDRESS: 5260 Dupont Road Parkersburg, WV 26101
DESIGNATED AGENT: Diane C. White ADDRESS: 5260 Dupont Road Parkersburg, WV 26101

07/02/2021



Detail 1 (Scale 1"=500')



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Office of Oil and Gas
MAY 26 2021
WV Department of
Environmental Protection

FILE NO: 32-36-G-19
DRAWING NO: Schoen 1205 S-10H Well Plat
SCALE: 1" = 2000'
MINIMUM DEGREE OF ACCURACY:
Submeter
PROVEN SOURCE OF ELEVATION:
CORS, Bridgeport, WV

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

DATE: May 7 2021
OPERATOR'S WELL NO. Schoen 1205 S-10H
API WELL NO. H64
47 - 033 - 0610
STATE COUNTY PERMIT

WELL TYPE: OIL GAS LIQUID INJECTION WASTE DISPOSAL
(IF GAS) PRODUCTION: STORAGE DEEP SHALLOW

LOCATION: ELEVATION: 1,407.3' WATERSHED: Middle West Fork Creek
DISTRICT: Grant / Hackers Creek

Top: Mount Clare
QUADRANGLE: Btm: Berlin
COUNTY: Harrison / Lewis

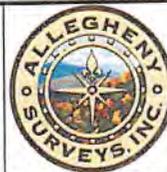
SURFACE OWNER: George & Rosanne Schoen
ROYALTY OWNER: Willa Post Robey, et al

ACREAGE: 65.00 **07/02/2021**

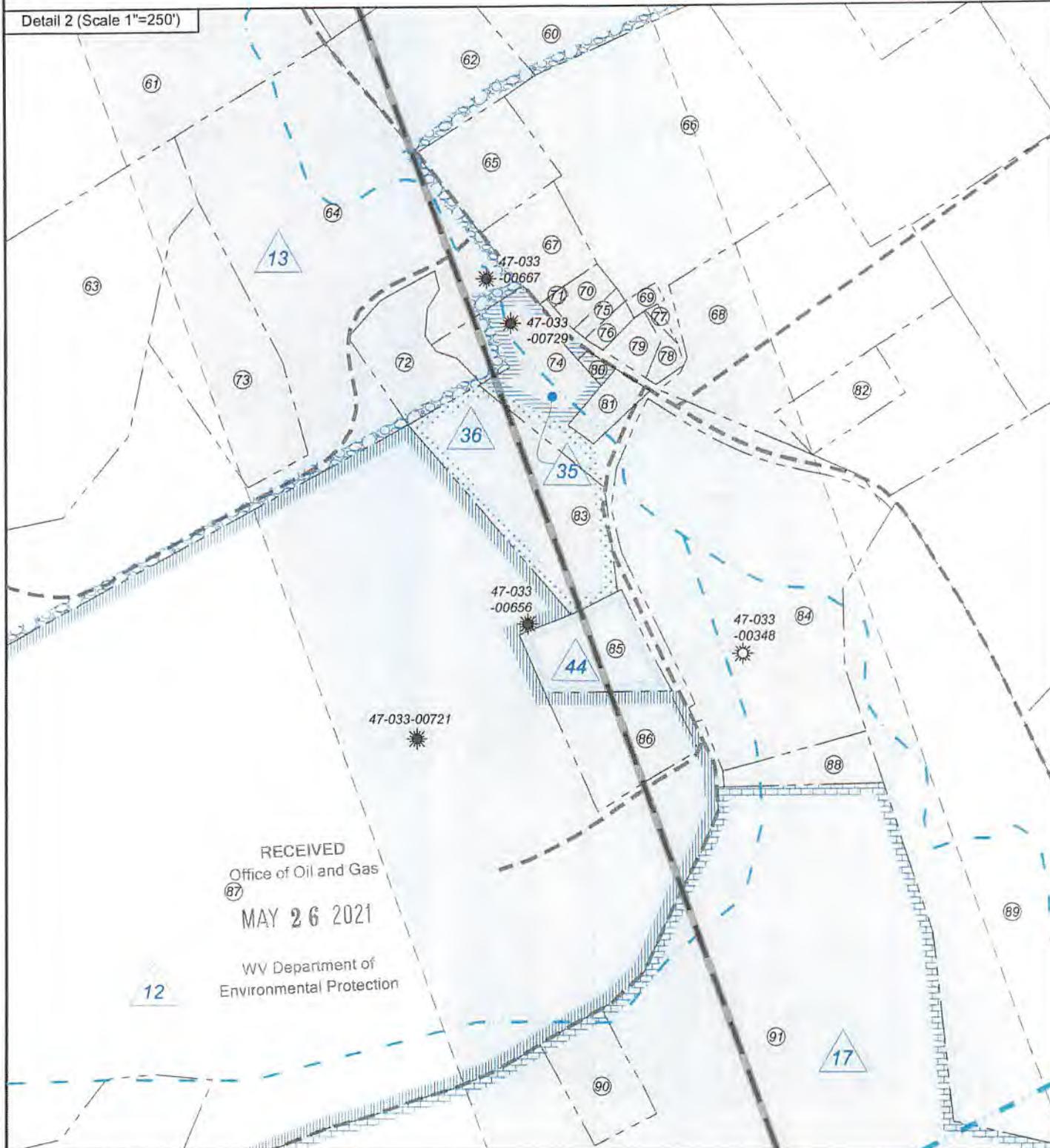
PROPOSED WORK: DRILL CONVERT DRILL DEEPER FRACTURE OR STIMULATE PLUG OFF OLD FORMATION
 PERFORATE NEW FORMATION OTHER PHYSICAL CHANGE IN WELL (SPECIFY) _____ 7,240' TVD
 PLUG AND ABANDON CLEAN OUT AND REPLUG TARGET FORMATION: Marcellus Shale ESTIMATED DEPTH: 25,879' MD

WELL OPERATOR: HG Energy II Appalachia, LLC
ADDRESS: 5260 Dupont Road
Parkersburg, WV 26101

DESIGNATED AGENT: Diane C. White
ADDRESS: 5260 Dupont Road
Parkersburg, WV 26101



Detail 2 (Scale 1"=250')



FILE NO: 32-36-G-19
DRAWING NO: Schoen 1205 S-10H Well Plat
SCALE: 1" = 2000'
MINIMUM DEGREE OF ACCURACY:
Submeter
PROVEN SOURCE OF ELEVATION:
CORS, Bridgeport, WV

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

DATE: May 7 2021
OPERATOR'S WELL NO. Schoen 1205 S-10H
API WELL NO H04
47 - 033 - 06010
STATE COUNTY PERMIT

WELL TYPE: OIL GAS LIQUID INJECTION WASTE DISPOSAL
(IF GAS) PRODUCTION: STORAGE DEEP SHALLOW

LOCATION: ELEVATION: 1,407.3' WATERSHED: Middle West Fork Creek

DISTRICT: Grant / Hackers Creek

SURFACE OWNER: George & Rosanne Schoen

ROYALTY OWNER: Willa Post Robey, et al

LEASE NO: _____

ACREAGE: 78.20

PROPOSED WORK: DRILL CONVERT DRILL DEEPER FRACTURE OR STIMULATE PLUG OFF OLD FORMATION
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PLUG AND ABANDON CLEAN OUT AND REPLUG TARGET FORMATION: Marcellus Shale ESTIMATED DEPTH: 25,879' MD 7,240' TVD

WELL OPERATOR: HG Energy II Appalachia, LLC
ADDRESS: 5260 Dupont Road
Parkersburg, WV 26101

DESIGNATED AGENT: Diane C. White
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Parkersburg, WV 26101

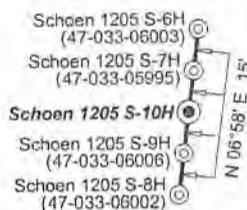
Top: Mount Clare
QUADRANGLE: Btm: Berlin
COUNTY: Harrison / Lewis

ACREAGE: 65.00

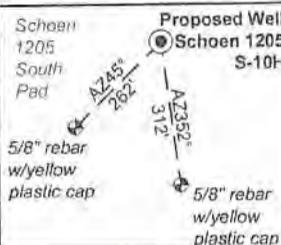
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71	447 / 48	Leroy Stutler	1448/292	0.01
72	447 / 44.2	Timothy Smith	1478/1262	0.95
73	447 / 44.5	Karri Trent	1404/418	1.78
74	467 / 8	Danny Joe & Greta Ann Butcher	1321/699	0.63
75	447 / 46	Leroy Stutler	1448/292	0.25
76	447 / 46.1	Leroy Stutler	1448/292	0.25
77	467 / 58	Trustees MP Parsonage	501/142	0.06
78	467 / 57	Trustees MP Parsonage	501/142	0.20
79	467 / 56	Linda F. Marple	1325/1055	0.25
80	467 / 9	Danny & Greta Bucher	1321/699	0.05
81	467 / 10	Carol S. Bennett	1450/590	0.22
82	467 / 13.1	Gordon C. Dawson	1330/358	0.57
83	467 / 6	Jackson L. Smith, et ux	1514/233	1.71
84	467 / 17	Steven C. & Dorothy J. Williams	1198/632	4.58
85	467 / 3	Jackson L. Smith	1412/25	0.75
86	467 / 2.1	Susan K. Dustin	1318/359	0.80
87	467 / 2	Jackson L. Smith	1378/976	95.16
88	467 / 19	Steven G. & Juila A. Randolph	1321/1151	---
89	467 / 21	Steven G. & Juila A. Randolph	1321/1151	10.30
90	467 / 20.1	Charles & Mitzie Reider	1358/1074	0.57
91	467 / 20	Steven G. & Juila A. Randolph	1321/1151	54.64
92	467 / 36	Gary W. & Kathy Hanby	1107/1041	15.35
93	467 / 26	Jane L. Given	1398/247	149.75
94	467 / 36.1	Gary W. & Kathy Hanby	1153/965	45.00
95	467 / 40	Edward G. Dawson	W 137/528	39.75
96	467 / 52	David L. & Lisle C. Hinkle	1282/389	175.50
97	467 / 53	George W & Dorothy K. Dawson	1418/331	158.55
98	487 / 6	Clayton W. Rice	1563/252	70.33
99	487 / 8	Wayne R. Lewis	1616/1241	134.68
		Lewis County		
100	10C / 17	Norman Jackson	584/191	34.00

FILE NO: 32-36-G-19
DRAWING NO: Schoen 1205 S-10H Well Plat
SCALE: 1" = 2000'
MINIMUM DEGREE OF ACCURACY:
Submeter
PROVEN SOURCE OF ELEVATION:
CORS, Bridgeport, WV

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

DATE: May 7 2021
OPERATOR'S WELL NO. Schoen 1205 S-10H
API WELL NO. H64
47 - 033 - 64010
STATE COUNTY PERMIT

WELL TYPE: OIL GAS LIQUID INJECTION WASTE DISPOSAL
(IF GAS) PRODUCTION: STORAGE DEEP SHALLOW

LOCATION: ELEVATION: 1,407.3' WATERSHED: Middle West Fork Creek

Top: Mount Clare
QUADRANGLE: Btm: Berlin
COUNTY: Harrison / Lewis

DISTRICT: Grant / Hackers Creek

ACREAGE: 65.00

SURFACE OWNER: George & Rosanne Schoen

ACREAGE: 78.20

ROYALTY OWNER: Willa Post Robey, et al

LEASE NO: _____

PROPOSED WORK: DRILL CONVERT DRILL DEEPER FRACTURE OR STIMULATE PLUG OFF OLD FORMATION
 PERFORATE NEW FORMATION OTHER PHYSICAL CHANGE IN WELL (SPECIFY) _____

PLUG AND ABANDON CLEAN OUT AND REPLUG TARGET FORMATION: Marcellus Shale ESTIMATED DEPTH: 7,240' TVD
25,879' MD

WELL OPERATOR: HG Energy II Appalachia, LLC
ADDRESS: 5260 Dupont Road
Parkersburg, WV 26101

DESIGNATED AGENT: Diane C. White
ADDRESS: 5260 Dupont Road
Parkersburg, WV 26101

07/02/2021

HG Energy II Appalachia, LLC
Well No. Schoen 1205 S-10H

8,298' to Bottom Hole

5,363' to Top Hole

TOP LATITUDE 39 - 10 - 00
BTM LATITUDE 39 - 07 - 30

TOP HOLE LONGITUDE 80 - 20 - 00
BTM HOLE LONGITUDE 80 - 17 - 30

5,534' to Top Hole

Page 1 of 4

47-033-00324
Concrete monument

Notes: Well No. Schoen 1205 S-10H
UTM NAD 1983 (USSF)
Top Hole Coordinates
N: 14,218,461.69'
E: 1,824,098.78'
Landing Point Coordinates
N: 14,219,268.84'
E: 1,827,192.48'
Bottom Hole Coordinates
N: 14,203,226.01'
E: 1,833,095.83'

Proposed Well Schoen 1205 S-10H Top Hole



- Legend
- Proposed gas well
 - Well Reference, as noted
 - Monument, as noted
 - Existing Well, as noted
 - Existing Plugged Well, as noted
 - Digitized Well, as noted
 - Creek or Drain
 - Existing Road
 - Surface boundary (approx.)
 - Interior surface tracts (approx.)

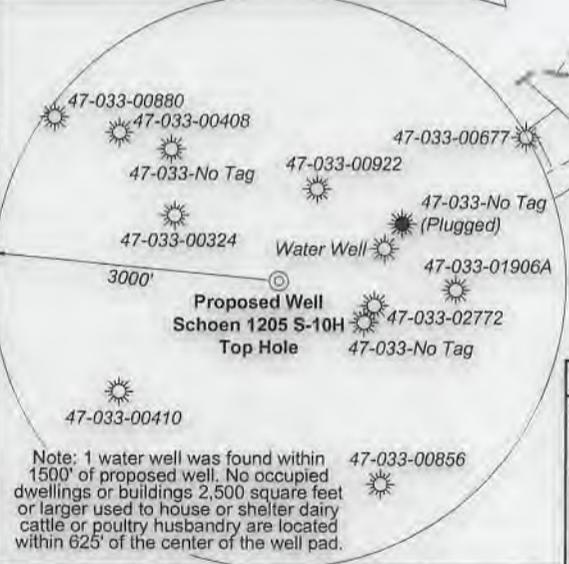
Notes: Well No. Schoen 1205 S-10H
West Virginia Coordinate System of 1927, North Zone based upon Differential GPS Measurements.
Top Hole coordinates Latitude: 39°09'05.29" Longitude: 80°21'08.10"
Bottom Hole coordinates Latitude: 39°06'34.00" Longitude: 80°19'15.31"
UTM Zone 17, NAD 1983
Top Hole Coordinates N: 4,333,795.791m E: 555,986.420m
Bottom Hole Coordinates N: 4,329,151.946m E: 558,728.728m
Plat orientation and corner and well references are based upon the grid north meridian. Well location references are based upon the magnetic meridian.

GRID NORTH



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 rules issued and prescribed by the Department of Environmental Protection.

Dwayne D. Matheny, P.S. 2070



Tag	Bearing	Dist.
L1	S 72°05' E	1,520.4'
L2	S 57°43' E	1,287.2'
L3	N 86°30' W	1,222.6'
L4	N 70°12' W	999.1'
L5	N 75°23' E	3,197.3'

FILE NO: 32-36-G-19
DRAWING NO: Schoen 1205 S-10H Well Plat
SCALE: 1" = 2000'
MINIMUM DEGREE OF ACCURACY: Submeter
PROVEN SOURCE OF ELEVATION: CORS, Bridgeport, WV

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

DATE: May 7 2021
OPERATOR'S WELL NO. Schoen 1205 S-10H
API WELL NO. H44
47 - 033 - 06010
STATE COUNTY PERMIT

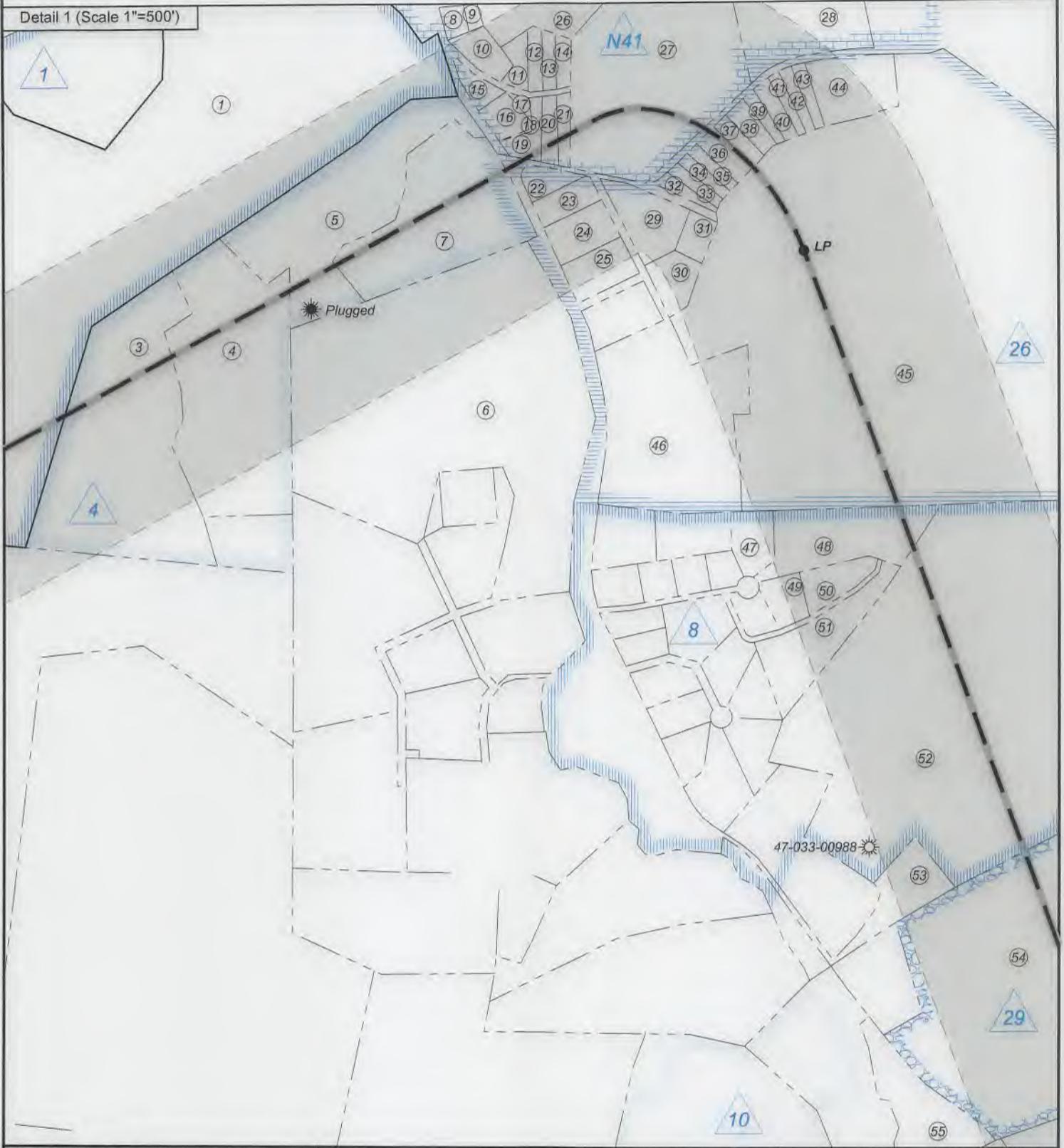
WELL TYPE: OIL GAS LIQUID INJECTION WASTE DISPOSAL
(IF GAS) PRODUCTION: STORAGE DEEP SHALLOW
LOCATION: ELEVATION: 1,407.3' WATERSHED: Middle West Fork Creek
DISTRICT: Grant / Hackers Creek
SURFACE OWNER: George & Rosanne Schoen
ROYALTY OWNER: Willa Post Robey, et al LEASE NO: ACREAGE: 78.20
PROPOSED WORK: DRILL CONVERT DRILL DEEPER FRACTURE OR STIMULATE PLUG OFF OLD FORMATION
 PERFORATE NEW FORMATION OTHER PHYSICAL CHANGE IN WELL (SPECIFY)
 PLUG AND ABANDON CLEAN OUT AND REPLUG TARGET FORMATION: Marcellus Shale ESTIMATED DEPTH: 7,240' TVD 25,879' MD

WELL OPERATOR: HG Energy II Appalachia, LLC ADDRESS: 5260 Dupont Road Parkersburg, WV 26101
DESIGNATED AGENT: Diane C. White ADDRESS: 5260 Dupont Road Parkersburg, WV 26101

07/02/2021



Detail 1 (Scale 1"=500')



FILE NO: 32-36-G-19
DRAWING NO: Schoen 1205 S-10H Well Plat
SCALE: 1" = 2000'
MINIMUM DEGREE OF ACCURACY:
Submeter
PROVEN SOURCE OF ELEVATION:
CORS, Bridgeport, WV

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

DATE: May 7 20 21
OPERATOR'S WELL NO. Schoen 1205 S-10H
API WELL NO. WVA
47 - 033 - 00988
STATE COUNTY PERMIT

WELL TYPE: OIL GAS LIQUID INJECTION WASTE DISPOSAL
(IF GAS) PRODUCTION: STORAGE DEEP SHALLOW

LOCATION: ELEVATION: 1,407.3' WATERSHED: Middle West Fork Creek

Top: Mount Clare
QUADRANGLE: Btm: Berlin
COUNTY: Harrison
ACREAGE: 65.00

DISTRICT: Grant / Hackers Creek
SURFACE OWNER: George & Rosanne Schoen

ROYALTY OWNER: Willa Post Robey, et al LEASE NO: ACREAGE: 78.20

PROPOSED WORK: DRILL CONVERT DRILL DEEPER FRACTURE OR STIMULATE PLUG OFF OLD FORMATION
 PERFORATE NEW FORMATION OTHER PHYSICAL CHANGE IN WELL (SPECIFY)

PLUG AND ABANDON CLEAN OUT AND REPLUG TARGET FORMATION: Marcellus Shale ESTIMATED DEPTH: 7,240' TVD
25,879' MD

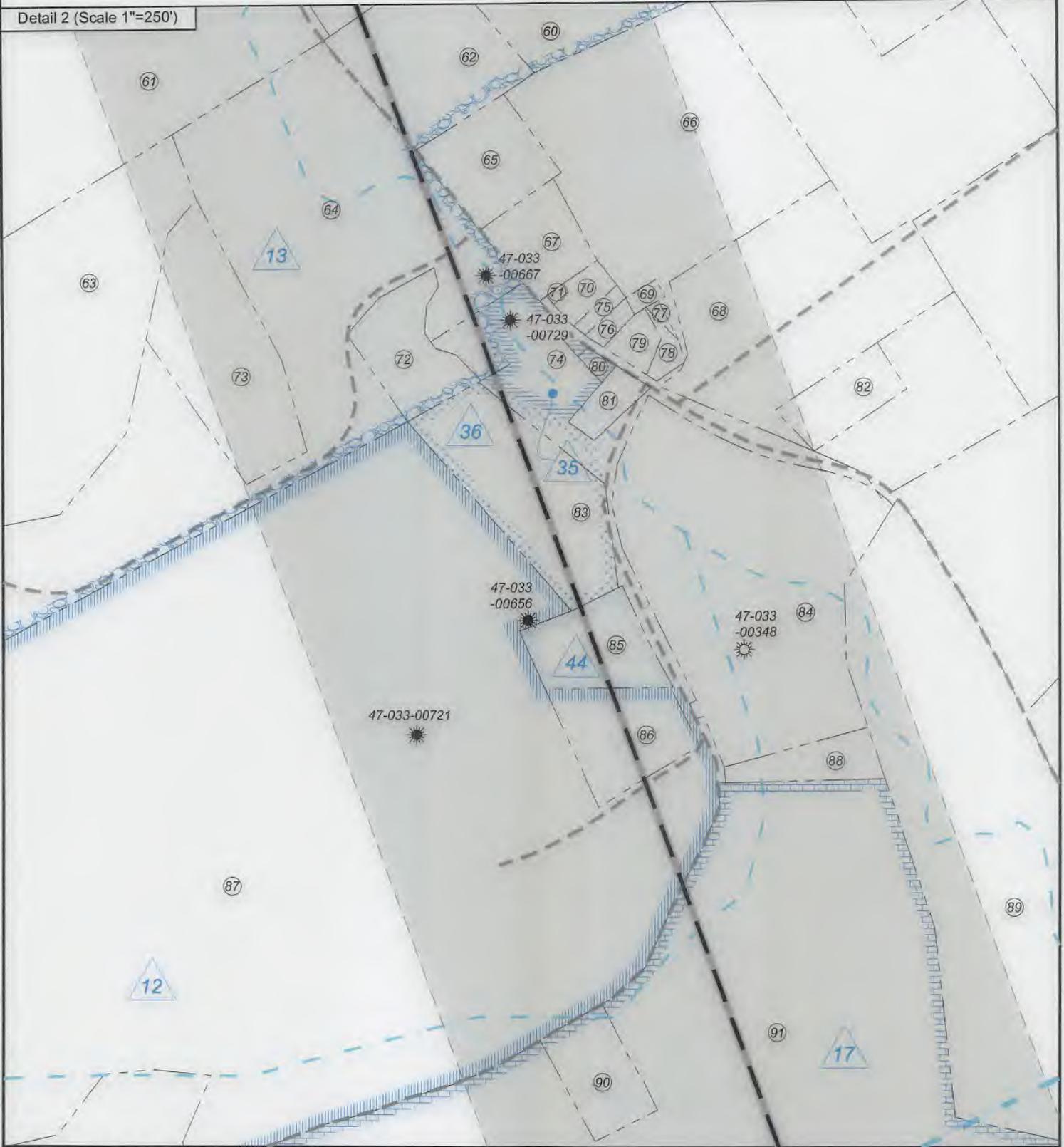
WELL OPERATOR: HG Energy II Appalachia, LLC
ADDRESS: 5260 Dupont Road
Parkersburg, WV 26101

DESIGNATED AGENT: Diane C. White
ADDRESS: 5260 Dupont Road
Parkersburg, WV 26101

07/02/2021



Detail 2 (Scale 1"=250')



FILE NO: 32-36-G-19
DRAWING NO: Schoen 1205 S-10H Well Plat
SCALE: 1" = 2000'
MINIMUM DEGREE OF ACCURACY:
Submeter
PROVEN SOURCE OF ELEVATION:
CORS, Bridgeport, WV

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

DATE: May 7 2021
OPERATOR'S WELL NO. Schoen 1205 S-10H
API WELL NO HGA
47 - 033 - 06010
STATE COUNTY PERMIT

WELL TYPE: OIL GAS LIQUID INJECTION WASTE DISPOSAL
(IF GAS) PRODUCTION: STORAGE DEEP SHALLOW

LOCATION: ELEVATION: 1,407.3' WATERSHED: Middle West Fork Creek

Top: Mount Clare
QUADRANGLE: Btm: Berlin
COUNTY: Harbison WV
ACREAGE: 65.00

DISTRICT: Grant / Hackers Creek
SURFACE OWNER: George & Rosanne Schoen

ROYALTY OWNER: Willa Post Robey, et al

LEASE NO: _____ ACREAGE: 78.20

PROPOSED WORK: DRILL CONVERT DRILL DEEPER FRACTURE OR STIMULATE PLUG OFF OLD FORMATION
 PERFORATE NEW FORMATION OTHER PHYSICAL CHANGE IN WELL (SPECIFY) _____

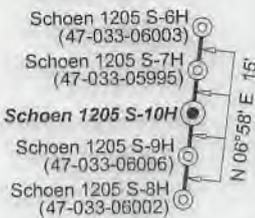
PLUG AND ABANDON CLEAN OUT AND REPLUG TARGET FORMATION: Marcellus Shale ESTIMATED DEPTH: 7,240' TVD 25,879' MD

WELL OPERATOR: HG Energy II Appalachia, LLC
ADDRESS: 5260 Dupont Road
Parkersburg, WV 26101

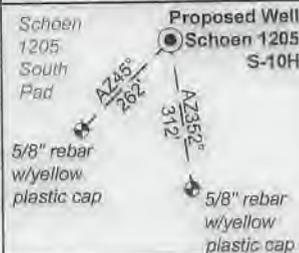
DESIGNATED AGENT: Diane C. White
ADDRESS: 5260 Dupont Road
Parkersburg, WV 26101



Wellhead Layout (NTS)



Well Location References
Not to Scale



Harrison County				
No.	TM / Par	Owner	Bk / Pg	Ac.
1	447 / 2	George & Rosanne Schoen	1148 / 1059	65.00
2	446 / 29	Thomas K. Young, et al	1121 / 25	75.00
3	447 / 3	George and Rosanne Schoen	1253 / 302	10.06
4	447 / 3.4	Stephen M & Kimberly Goff	1257/189	7.67
5	447 / 3.3	Charlotte C Gerlach	1070/1041	6.10
6	447 / 4.11	Joseph & Karen Bowers	1295/887	21.87
7	447 / 3.2	Michael Tillman & Mary Hencke	1257/193	5.86
8	2105 / 46	Eugene Smith, et al	F111/530	0.26
9	2105 / 46.1	Emilee Hall, et al	1437/1189	0.17
10	2105 / 47	Cecil Smith, et al	1394/681	0.56
11	2105 / 48	Walter Knight	1284/893	0.37
12	2105 / 50	Helen I. Eakle Estate	---/---	0.25
13	2105 / 53	Virgil Lamb	1577/1012	0.23
14	2105 / 54	Ronald Lake	1415/288	0.23
15	2105 / 116	Kitty Lowther	1580/152	0.42
16	2105 / 117	Kitty Lowther	1580/152	0.50
17	2105 / 49	Kitty Lowther	1580/152	Lot 8
18	2105 / 117.1	Kitty Lowther	1580/152	0.02
19	2105 / 51	Helen I. Eakle Estate	---/---	Lot 7
20	2105 / 52	Virgil Lamb	1577/1012	0.33
21	2105 / 55	Ronald Lake	1415/288	0.23
22	2105 / 118	Trustees Church of God	1097/818	Lot 22
23	2105 / 119	Trustees Church of God	1097/818	Lot 24
24	2105 / 120	Trustees Church of God	1097/818	Lot 24
25	2105 / 121	Jane L. Given	882/569	0.881
26	427 / 33	Isacc & Betty Maxwell III	1539/141	67.32
27	427 / 34	Worthy C. Hall	1577/626	27.00
28	427 / 8.1	Allen Scott Hall	1265/589	5.40
29	2105 / 56	Thomas & Terri Hawkins	1558/1255	0.76
30	2105 / 57	Thomas & Terri Hawkins	1558/1255	0.70
31	2105 / 58	Thomas & Terri Hawkins	1558/1255	0.76
32	2105 / 59	Mary Ann Bowyer, et al	F118/63	0.23
33	2105 / 60	Mary Ann Bowyer, et al	F118/63	0.23
34	2105 / 61	Lisa Hickman	1621/760	0.21
35	2105 / 62	Lisa Hickman	1621/760	0.21
36	2105 / 63	Lisa Hickman	1621/760	0.38
37	2105 / 64	David W. & Blanche K. Stutler	1480/433	0.28
38	2105 / 65	Jean Riffle Estate, et al	F100 / 64	0.42
39	2105 / 67	Jean Riffle Estate, et al	F100 / 64	0.21
40	2105 / 68	Jean Riffle Estate, et al	F100 / 64	0.25
41	2105 / 69	Jean Riffle Estate, et al	F100 / 64	0.26
42	2105 / 70	Kevin R. Kolenda	1257/800	0.26
43	2105 / 71	Kevin R. Kolenda	1257/800	0.26
44	2105 / 73	Paul W. Winters	W 148/702	1.53
45	447 / 6	Thomas E. & Terri E. Hawkins	1558/1255	84.25
46	447 / 6.1	Michael & Charlotte Moses	1364/7	7.20
47	447 / 5	Michele L. Bennett	1336/796	0.75
48	447 / 5.11	Daniel & Paulette Shaffer	1448/933	2.66
49	447 / 5.23	Ronald & Janet Barnosky	0.57	0.57
50	447 / 5.24	Ronald & Janet Barnosky	1401/271	0.73
51	447 / 5.8	Ronald & Janet Barnosky	1401/271	2.03
52	447 / 27	Lyle Randolph, et al	1308/74	63.11
53	447 / 26	Russell A. Snyder	1425/1332	0.66
54	447 / 28	Lyle Randolph, et al	1308/74	46.50
55	447 / 23.1	Shirley Wheeler	1585/111	2.33
56	447 / 36	Debra J. Bedell	1291/931	82.38
57	447 / 36.1	Debra J. Bedell	1244/881	65.58
58	447 / 37.2	Carol S. Bennett	991/227	43.60
59	447 / 36.2	Jason & Taylor Workman	1593/15	4.55
60	447 / 36.1	Debra J. Bedell	1244/881	65.58
61	447 / 44.1	Debra J. Bedell	1291/931	30.37
62	447 / 51	Joseph F. Coffman	1360/716	1.54
63	447 / 44.4	Michael W. & Tracy L. Ash	1359/139	4.79
64	447 / 44	Roddy & Tracy L. Ash	1332/493	15.21
65	447 / 50	Judy M. Gillespie	1139/421	0.75
66	447 / 52	Trustees M P Church	501/142	4.20
67	447 / 49	Russell W. Stutler	FO 96/707	0.75
68	467 / 12	Stephen B. Riel	1229/916	3.08
69	447 / 54	Linda F. Marple	1325/1055	0.04
70	447 / 47	Leroy Stutler	1448/292	0.25

ID	Lease
N41	D.L. Nutter, et ux
1	A.B. Post, et al
4	Charlotte C. Gerlach
8	L.B. & S.J. Davis
10	Lewis C. & Alma Swisher
12	French S. Young, et ux
13	Lewis C. & Alma Swisher
14	M.M.F. & S.F. Randolph
17	Mary Holbert Ellyson, et vir, et al
22	W. Haymond Dawson, et ux
26	Milton S. Davis, et al
29	Alan M. & Deborah K. Randolph
35	Danny J. & Greta A. Butcher, et al
36	Jackson L. Smith
44	Lawrence E. & Delphia V. Harts, et al
50	W. Haymond Dawson, et ux
62	Kate Stout
63	C. Ross Lewis, et ux, et al

Harrison County				
No.	TM / Par	Owner	Bk / Pg	Ac.
71	447 / 48	Leroy Stutler	1448/292	0.01
72	447 / 44.2	Timothy Smith	1478/1262	0.95
73	447 / 44.5	Karl Trent	1404/418	1.78
74	467 / 8	Danny Joe & Greta Ann Butcher	1321/699	0.63
75	447 / 46	Leroy Stutler	1448/292	0.25
76	447 / 46.1	Leroy Stutler	1448/292	0.25
77	467 / 58	Trustees MP Parsonage	501/142	0.06
78	467 / 57	Trustees MP Parsonage	501/142	0.20
79	467 / 56	Linda F. Marple	1325/1055	0.25
80	467 / 9	Danny & Greta Bucher	1321/699	0.05
81	467 / 10	Carol S. Bennett	1450/590	0.22
82	467 / 13.1	Gordon C. Dawson	1330/356	0.57
83	467 / 6	Jackson L. Smith, et ux	1514/233	1.71
84	467 / 17	Steven C. & Dorothy J. Williams	1198/632	4.58
85	467 / 3	Jackson L. Smith	1412/25	0.75
86	467 / 2.1	Susan K. Dustin	1318/359	0.80
87	467 / 2	Jackson L. Smith	1378/976	95.16
88	467 / 19	Steven G. & Juila A. Randolph	1321/1151	---
89	467 / 21	Steven G. & Juila A. Randolph	1321/1151	10.30
90	467 / 20.1	Charles & Mitzie Reider	1358/1074	0.57
91	467 / 20	Steven G. & Juila A. Randolph	1321/1151	54.64
92	467 / 36	Gary W. & Kathy Hanby	1107/1041	15.35
93	467 / 26	Jane L. Given	1398/247	149.75
94	467 / 36.1	Gary W. & Kathy Hanby	1153/965	45.00
95	467 / 40	Edward G. Dawson	W 137/528	39.75
96	467 / 52	David L. & Lisle C. Hinkle	1282/389	175.50
97	467 / 53	George W & Dorothy K. Dawson	1418/331	158.55
98	467 / 6	Clayton W. Rice	1563/252	70.33
99	467 / 8	Wayne R. Lewis	1616/1241	134.68
		Lewis County		
100	10C / 17	Norman Jackson	584/191	34.00

FILE NO: 32-36-G-19
DRAWING NO: Schoen 1205 S-10H Well Plat
SCALE: 1" = 2000'
MINIMUM DEGREE OF ACCURACY:
Submeter
PROVEN SOURCE OF ELEVATION:
CORS, Bridgeport, WV

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

DATE: May 7 2021
OPERATOR'S WELL NO. Schoen 1205 S-10H
API WELL NO H6A
47 - 033 - 56010
STATE COUNTY PERMIT

WELL TYPE: OIL GAS LIQUID INJECTION WASTE DISPOSAL
(IF GAS) PRODUCTION: STORAGE DEEP SHALLOW

LOCATION: ELEVATION: 1,407.3' WATERSHED: Middle West Fork Creek

Top: Mount Clare
QUADRANGLE: Btm: Berlin

DISTRICT: Grant / Hackers Creek

COUNTY: Harrison County

SURFACE OWNER: George & Rosanne Schoen

ACREAGE: 65.00

ROYALTY OWNER: Willa Post Robey, et al

LEASE NO: _____ ACREAGE: 78.20

PROPOSED WORK: DRILL CONVERT DRILL DEEPER FRACTURE OR STIMULATE PLUG OFF OLD FORMATION
 PERFORATE NEW FORMATION OTHER PHYSICAL CHANGE IN WELL (SPECIFY) _____

PLUG AND ABANDON CLEAN OUT AND REPLUG TARGET FORMATION: Marcellus Shale ESTIMATED DEPTH: 7,240' TVD 25,879' MD

WELL OPERATOR: HG Energy II Appalachia, LLC

DESIGNATED AGENT: Diane C. White

ADDRESS: 5260 Dupont Road
Parkersburg, WV 26101

ADDRESS: 5260 Dupont Road
Parkersburg, WV 26101

**INFORMATION SUPPLIED UNDER WEST VIRGINIA CODE
Chapter 22, Article 6A, Section 5(a)(5)
IN LIEU OF FILING LEASE(S) AND OTHER CONTINUING CONTRACT(S)**

Under the oath required to make the verification on page 1 of this Notice and Application, I depose and say that I am the person who signed the Notice and Application for the Applicant, and that –

- (1) the tract of land is the same tract described in this Application, partly or wholly depicted in the accompanying plat, and described in the Construction and Reclamation Plan;
- (2) the parties and recordation data (if recorded) for lease(s) or other continuing contract(s) by which the Applicant claims the right to extract, produce or market the oil or gas are as follows:

Lease Name or Number	Grantor, Lessor, etc.	Grantee, Lessee, etc.	Royalty	Book/Page
----------------------	-----------------------	-----------------------	---------	-----------

****See Attached Sheets****

**Acknowledgement of Possible Permitting/Approval
In Addition to the Office of Oil and Gas**

The permit applicant for the proposed well work addressed in this application hereby acknowledges the possibility of the need for permits and/or approvals from local, state, or federal entities in addition to the DEP, Office of Oil and Gas, including but not limited to the following:

- WV Division of Water and Waste Management
- WV Division of Natural Resources WV Division of Highways
- U.S. Army Corps of Engineers
- U.S. Fish and Wildlife Service
- County Floodplain Coordinator

RECEIVED
Office of Oil and Gas
MAY 26 2021
WV Department of
Environmental Protection

The applicant further acknowledges that any Office of Oil and Gas permit in no way overrides, replaces, or nullifies the need for other permits/approvals that may be necessary and further affirms that all needed permits/approvals should be acquired from the appropriate authority before the affected activity is initiated.

Well Operator: HG Energy II Appalachia, LLC
 By: Diane White *Diane White*
 Its: Accountant

26	LC043728	13-2105-0056-0000 13-2105-0057-0000 13-2105-0058-0000 13-2105-0060-0000 13-2105-0061-0000 13-2105-0063-0000 13-2105-0064-0000 13-2105-0065-0000 13-2105-0067-0000 13-2105-0069-0000 13-2105-0071-0000 13-2105-0073-0000, 13-2105-0118-0000 THRU 13-2105-0122-0000 p/o 12-0427-0028-0000	Q100789000	GRASELLI CHEMICAL COMPANY	HOPE NATURAL GAS COMPANY	ASSIGNMENT	381	163
				HOPE NATURAL GAS COMPANY	CONSOLIDATED GAS SUPPLY CORPORATION	CONFIRMATORY DEED	903	179
				CONSOLIDATED GAS SUPPLY CORPORATION	CONSOLIDATED GAS TRANSMISSION CORPORATION	ASSIGNMENT	1136	250
				CONSOLIDATED GAS TRANSMISSION CORPORATION	CNG TRANSMISSION CORPORATION	MERGER/NAME CHANGE	51	795
				CNG TRANSMISSION CORPORATION	DOMINION TRANSMISSION, INC.	MERGER/NAME CHANGE	58	362
				DOMINION TRANSMISSION, INC.	CNX GAS COMPANY LLC	MEMORANDUM FARMOUT AGREEMENT	1522	33
				DOMINION TRANSMISSION, INC.	CNX GAS COMPANY LLC	FIRST AMENDMENT TO MEMORANDUM OF FARMOUT AGREEMENT	1524	491
				CNX GAS COMPANY LLC	NOBLE ENERGY, INC.	LIMITED PARTIAL ASSIGNMENT (50%)	1543	1235
				DOMINION TRANSMISSION, INC.	CNX GAS COMPANY LLC AND NOBLE ENERGY, INC.	PARTIAL ASSIGNMENT (32%)	1576	125
				CNX GAS COMPANY LLC	NOBLE ENERGY, INC.	ASSIGNMENT	1584	942
				NOBLE ENERGY, INC.	HG ENERGY II APPALACHIA, LLC	ASSIGNMENT	1600	692
				DOMINION TRANSMISSION, INC.	DOMINION ENERGY TRANSMISSION, INC.	MERGER/NAME CHANGE	WVSOS	
				DOMINION ENERGY TRANSMISSION, INC.	HG ENERGY II APPALACHIA, LLC	SECOND AMENDMENT TO MEMORANDUM OF FARMOUT AGREEMENT	1601	581
				DOMINION ENERGY TRANSMISSION, INC.	HG ENERGY II APPALACHIA, LLC	THIRD AMENDMENT TO MEMORANDUM OF FARMOUT AGREEMENT	1621	1295
8	LC008512	13-0447-0005-0000 13-0447-0005-0001 13-0447-0005-0003 13-0447-0005-0004 13-0447-0005-0006 13-0447-0005-0007 13-0447-0005-0008 13-0447-0005-0009 13-0447-0005-0010 13-0447-0005-0011 13-0447-0005-0012 13-0447-0005-0013 13-0447-0005-0014 13-0447-0005-0015 13-0447-0005-0016 13-0447-0005-0017 13-0447-0005-0018 13-0447-0005-0019 13-0447-0005-0021 13-0447-0005-0022 13-0447-0005-0023 13-0447-0005-0024 13-0447-0005-0025 p/o 12-0447-0023-0031 p/o 12-0447-0027-0000	Q100305000	L. B. DAVIS AND S. J. DAVIS, HIS WIFE	SOUTH PENN OIL COMPANY	NOT LESS THAN 1/8	121	150
				SOUTH PENN OIL COMPANY	HOPE NATURAL GAS COMPANY	ASSIGNMENT	204	402
				HOPE NATURAL GAS COMPANY	CONSOLIDATED GAS SUPPLY CORPORATION	CONFIRMATORY DEED	903	179
				CONSOLIDATED GAS SUPPLY CORPORATION	CONSOLIDATED GAS TRANSMISSION CORPORATION	ASSIGNMENT	1136	250
				CONSOLIDATED GAS TRANSMISSION CORPORATION	CNG TRANSMISSION CORPORATION	MERGER/NAME CHANGE	51	795
				CNG TRANSMISSION CORPORATION	DOMINION TRANSMISSION, INC.	MERGER/NAME CHANGE	58	362
				DOMINION TRANSMISSION, INC.	CNX GAS COMPANY LLC	MEMORANDUM FARMOUT AGREEMENT	1522	33
				DOMINION TRANSMISSION, INC.	CNX GAS COMPANY LLC	FIRST AMENDMENT TO MEMORANDUM OF FARMOUT AGREEMENT	1524	491
				CNX GAS COMPANY LLC	NOBLE ENERGY, INC.	LIMITED PARTIAL ASSIGNMENT (50%)	1543	1235
				DOMINION TRANSMISSION, INC.	CNX GAS COMPANY LLC AND NOBLE ENERGY, INC.	PARTIAL ASSIGNMENT (32%)	1576	125
				CNX GAS COMPANY LLC	NOBLE ENERGY, INC.	ASSIGNMENT	1584	942
				NOBLE ENERGY, INC.	HG ENERGY II APPALACHIA, LLC	ASSIGNMENT	1600	692
				DOMINION TRANSMISSION, INC.	DOMINION ENERGY TRANSMISSION, INC.	MERGER/NAME CHANGE	WVSOS	
				DOMINION ENERGY TRANSMISSION, INC.	HG ENERGY II APPALACHIA, LLC	SECOND AMENDMENT TO MEMORANDUM OF FARMOUT AGREEMENT	1601	581
DOMINION ENERGY TRANSMISSION, INC.	HG ENERGY II APPALACHIA, LLC	THIRD AMENDMENT TO MEMORANDUM OF FARMOUT AGREEMENT	1621	1295				
29	N/A	12-0447-0028-0000	N/A	ALAN M. RANDOLPH AND DEBORAH K. RANDOLPH	HG ENERGY II APPALACHIA, LLC	NOT LESS THAN 1/8	1711	108
10	LC078281	12-0447-0036-0000 p/o 12-0447-0036-0001	Q100950000	LEWIS C. SWISHER AND ALMA SWISHER, HIS WIFE	CONSOLIDATED GAS SUPPLY CORPORATION	NOT LESS THAN 1/8	955	378
				CONSOLIDATED GAS SUPPLY CORPORATION	CONSOLIDATED GAS TRANSMISSION CORPORATION	ASSIGNMENT	1136	250
				CONSOLIDATED GAS TRANSMISSION CORPORATION	CNG TRANSMISSION CORPORATION	MERGER/NAME CHANGE	51	795
				CNG TRANSMISSION CORPORATION	DOMINION TRANSMISSION, INC.	MERGER/NAME CHANGE	58	362
				DOMINION TRANSMISSION, INC.	CNX GAS COMPANY LLC	MEMORANDUM FARMOUT AGREEMENT	1522	33
				CNX GAS COMPANY LLC	NOBLE ENERGY, INC.	LIMITED PARTIAL ASSIGNMENT (50%)	1543	1235
				DOMINION TRANSMISSION, INC.	CNX GAS COMPANY LLC AND NOBLE ENERGY, INC.	PARTIAL ASSIGNMENT (32%)	1576	125
				CNX GAS COMPANY LLC	NOBLE ENERGY, INC.	ASSIGNMENT	1584	942
				NOBLE ENERGY, INC.	HG ENERGY II APPALACHIA, LLC	ASSIGNMENT	1600	692
				DOMINION TRANSMISSION, INC.	DOMINION ENERGY TRANSMISSION, INC.	MERGER/NAME CHANGE	WVSOS	
				DOMINION ENERGY TRANSMISSION, INC.	HG ENERGY II APPALACHIA, LLC	SECOND AMENDMENT TO MEMORANDUM OF FARMOUT AGREEMENT	1601	581
				DOMINION ENERGY TRANSMISSION, INC.	HG ENERGY II APPALACHIA, LLC	THIRD AMENDMENT TO MEMORANDUM OF FARMOUT AGREEMENT	1621	1295
				DOMINION ENERGY TRANSMISSION, INC.	HG ENERGY II APPALACHIA, LLC	ASSIGNMENT 968%	1637	1081
				LEWIS C. SWISHER AND ALMA SWISHER, HIS WIFE	CONSOLIDATED GAS SUPPLY CORPORATION	NOT LESS THAN 1/8	955	382
CONSOLIDATED GAS SUPPLY CORPORATION	CONSOLIDATED GAS TRANSMISSION CORPORATION	ASSIGNMENT	1136	250				
CONSOLIDATED GAS TRANSMISSION CORPORATION	CNG TRANSMISSION CORPORATION	MERGER/NAME CHANGE	51	795				
CNG TRANSMISSION CORPORATION	DOMINION TRANSMISSION, INC.	MERGER/NAME CHANGE	58	362				
DOMINION TRANSMISSION, INC.	CNX GAS COMPANY LLC	MEMORANDUM FARMOUT AGREEMENT	1522	33				

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13	LC078282	12-0447-0044-0001 12-0447-0044-0002 12-0447-0044-0003 12-0447-0044-0004 12-0447-0044-000 12-0447-0051-0000 p/o 12-0447-0036-0001	Q100408000	DOMINION TRANSMISSION, INC.	CNX GAS COMPANY LLC	FIRST AMENDMENT TO MEMORANDUM OF FARMOUT AGREEMENT	1524	491				
				CNX GAS COMPANY LLC	NOBLE ENERGY, INC.	LIMITED PARTIAL ASSIGNMENT (50%)	1543	1235				
				DOMINION TRANSMISSION, INC.	CNX GAS COMPANY LLC AND NOBLE ENERGY, INC.	PARTIAL ASSIGNMENT (32%)	1576	125				
				CNX GAS COMPANY LLC	NOBLE ENERGY, INC.	ASSIGNMENT	1584	942				
				NOBLE ENERGY, INC.	HG ENERGY II APPALACHIA, LLC	ASSIGNMENT	1600	692				
				DOMINION TRANSMISSION, INC.	DOMINION ENERGY TRANSMISSION, INC.	MERGER/NAME CHANGE	WVSOS					
				DOMINION ENERGY TRANSMISSION, INC.	HG ENERGY II APPALACHIA, LLC	SECOND AMENDMENT TO MEMORANDUM OF FARMOUT AGREEMENT	1601	581				
				DOMINION ENERGY TRANSMISSION, INC.	HG ENERGY II APPALACHIA, LLC	THIRD AMENDMENT TO MEMORANDUM OF FARMOUT AGREEMENT	1621	1295				
				DOMINION ENERGY TRANSMISSION, INC.	HG ENERGY II APPALACHIA, LLC	ASSIGNMENT (68%)	LEWIS 736	220				
				36	FEE	12-0467-0006-0000	FEE	JACKSON L. SMITH	HG ENERGY II APPALACHIA, LLC	FEE	1708	858
44	LC084281	12-0467-0003-0000	Q100721000	LAWRENCE E. HARRIS AND DELPHIA V. HARRIS, HIS WIFE; CLARICE JENKINS, A MARRIED WOMAN; HARRY R. JENKINS, HUSBAND OF CLARICE JENKINS; GOLDIE M. GRAY AND CHARLES GRAY, HER HUSBAND; BETTY HARDMAN AND WILLIAM ARLEY HARDMAN, HER HUSBAND; DOROTHY BETONTE, A MARRIED WOMAN; LEWIS BETONTE, HUSBAND OF DOROTHY BETONTE; LINDA HALL AND GARRY HALL, HER HUSBAND	CONSOLIDATED GAS SUPPLY CORPORATION	NOT LESS THAN 1/8	1011	358				
				CONSOLIDATED GAS SUPPLY CORPORATION	CONSOLIDATED GAS TRANSMISSION CORPORATION	ASSIGNMENT	1136	250				
				CONSOLIDATED GAS TRANSMISSION CORPORATION	CNG TRANSMISSION CORPORATION	MERGER/NAME CHANGE	51	795				
				CNG TRANSMISSION CORPORATION	DOMINION TRANSMISSION, INC.	MERGER/NAME CHANGE	58	362				
				DOMINION TRANSMISSION, INC.	CNX GAS COMPANY LLC	MEMORANDUM FARMOUT AGREEMENT	1522	33				
				DOMINION TRANSMISSION, INC.	CNX GAS COMPANY LLC	FIRST AMENDMENT TO MEMORANDUM OF FARMOUT AGREEMENT	1524	491				
				CNX GAS COMPANY LLC	NOBLE ENERGY, INC.	LIMITED PARTIAL ASSIGNMENT (50%)	1543	1235				
				DOMINION TRANSMISSION, INC.	CNX GAS COMPANY LLC AND NOBLE ENERGY, INC.	PARTIAL ASSIGNMENT (32%)	1576	125				
				CNX GAS COMPANY LLC	NOBLE ENERGY, INC.	ASSIGNMENT	1584	942				
				NOBLE ENERGY, INC.	HG ENERGY II APPALACHIA, LLC	ASSIGNMENT	1600	692				
				DOMINION TRANSMISSION, INC.	DOMINION ENERGY TRANSMISSION, INC.	MERGER/NAME CHANGE	WVSOS					
				DOMINION ENERGY TRANSMISSION, INC.	HG ENERGY II APPALACHIA, LLC	SECOND AMENDMENT TO MEMORANDUM OF FARMOUT AGREEMENT	1601	581				
				DOMINION ENERGY TRANSMISSION, INC.	HG ENERGY II APPALACHIA, LLC	THIRD AMENDMENT TO MEMORANDUM OF FARMOUT AGREEMENT	1621	1295				
				DOMINION ENERGY TRANSMISSION, INC.	HG ENERGY II APPALACHIA, LLC	ASSIGNMENT (68%)	1637	1081				
				35	LC084284	p/o 12-0467-0008-0000 p/o 12-0467-0010-0000	Q100411000	FLORENCE WIANT, WIDOW	CONSOLIDATED GAS SUPPLY CORPORATION	NOT LESS THAN 1/8	1011	521
								CONSOLIDATED GAS SUPPLY CORPORATION	CONSOLIDATED GAS TRANSMISSION CORPORATION	ASSIGNMENT	1136	250
								CONSOLIDATED GAS TRANSMISSION CORPORATION	CNG TRANSMISSION CORPORATION	MERGER/NAME CHANGE	51	795
								CNG TRANSMISSION CORPORATION	DOMINION TRANSMISSION, INC.	MERGER/NAME CHANGE	58	362
DOMINION TRANSMISSION, INC.	CNX GAS COMPANY LLC	MEMORANDUM FARMOUT AGREEMENT	1522					33				
DOMINION TRANSMISSION, INC.	CNX GAS COMPANY LLC	FIRST AMENDMENT TO MEMORANDUM OF FARMOUT AGREEMENT	1524					491				
CNX GAS COMPANY LLC	NOBLE ENERGY, INC.	LIMITED PARTIAL ASSIGNMENT (50%)	1543					1235				
DOMINION TRANSMISSION, INC.	CNX GAS COMPANY LLC AND NOBLE ENERGY, INC.	PARTIAL ASSIGNMENT (32%)	1576					125				
CNX GAS COMPANY LLC	NOBLE ENERGY, INC.	ASSIGNMENT	1584					942				
NOBLE ENERGY, INC.	HG ENERGY II APPALACHIA, LLC	ASSIGNMENT	1600					692				
DOMINION TRANSMISSION, INC.	DOMINION ENERGY TRANSMISSION, INC.	MERGER/NAME CHANGE	WVSOS									
DOMINION ENERGY TRANSMISSION, INC.	HG ENERGY II APPALACHIA, LLC	SECOND AMENDMENT TO MEMORANDUM OF FARMOUT AGREEMENT	1601					581				
DOMINION ENERGY TRANSMISSION, INC.	HG ENERGY II APPALACHIA, LLC	THIRD AMENDMENT TO MEMORANDUM OF FARMOUT AGREEMENT	1621					1295				
DOMINION ENERGY TRANSMISSION, INC.	HG ENERGY II APPALACHIA, LLC	ASSIGNMENT (68%)	1637					1081				
								FRENCH S. YOUNG AND ANNA J. YOUNG, HUSBAND AND WIFE	HOPE NATURAL GAS COMPANY	NOT LESS THAN 1/8	808	416
								HOPE NATURAL GAS COMPANY	CONSOLIDATED GAS SUPPLY CORPORATION	CONFIRMATORY DEED	903	179
								CONSOLIDATED GAS SUPPLY CORPORATION	CONSOLIDATED GAS TRANSMISSION CORPORATION	ASSIGNMENT	1136	250
								CONSOLIDATED GAS TRANSMISSION CORPORATION	CNG TRANSMISSION CORPORATION	MERGER/NAME CHANGE	51	795
				CNG TRANSMISSION CORPORATION	DOMINION TRANSMISSION, INC.	MERGER/NAME CHANGE	58	362				
				DOMINION TRANSMISSION, INC.	CNX GAS COMPANY LLC	MEMORANDUM FARMOUT AGREEMENT	1522	33				

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12	LC068012	12-0467-0002-0000 12-0467-0002-0001 12-0467-0002-0002	Q100847000	DOMINION TRANSMISSION, INC.	CNX GAS COMPANY LLC	FIRST AMENDMENT TO MEMORANDUM OF FARMOUT AGREEMENT	1524	491				
				CNX GAS COMPANY LLC	NOBLE ENERGY, INC.	LIMITED PARTIAL ASSIGNMENT (50%)	1543	1235				
				DOMINION TRANSMISSION, INC.	CNX GAS COMPANY LLC AND NOBLE ENERGY, INC.	PARTIAL ASSIGNMENT (32%)	1576	125				
				CNX GAS COMPANY LLC	NOBLE ENERGY, INC.	ASSIGNMENT	1584	942				
				NOBLE ENERGY, INC.	HG ENERGY II APPALACHIA, LLC	ASSIGNMENT	1600	692				
				DOMINION TRANSMISSION, INC.	DOMINION ENERGY TRANSMISSION, INC.	MERGER/NAME CHANGE	WVSOS					
				DOMINION ENERGY TRANSMISSION, INC.	HG ENERGY II APPALACHIA, LLC	SECOND AMENDMENT TO MEMORANDUM OF FARMOUT AGREEMENT	1601	581				
				DOMINION ENERGY TRANSMISSION, INC.	HG ENERGY II APPALACHIA, LLC	THIRD AMENDMENT TO MEMORANDUM OF FARMOUT AGREEMENT	1621	1295				
				DOMINION ENERGY TRANSMISSION, INC.	HG ENERGY II APPALACHIA, LLC	ASSIGNMENT (68%)	1637	1081				
				17	LC075380	12-0467-0020-0000	Q100586000	MARY HOLBERT ELLYSON AND R. G. ELLYSON, HER HUSBAND; DELLA HOLBERT HARRIS AND STANLEY R. HARRIS, HER HUSBAND; HARRY E. HOLBERT AND MARY RUTH HOLBERT, HIS WIFE; EDWARD SNYDER AND VIOLET SNYDER, HIS WIFE; WILLIAM G. HOLBERT JR., A MARRIED MAN; SMITH F. HOLBERT AND GRACE HOLBERT, HIS WIFE; CLAUDIA L. HOLBERT, WIFE OF WILLIAM G. HOLBERT JR.; MARY ETHEL YOST, A MARRIED WOMAN; FRANK A. YOST, HUSBAND OF MARY ETHEL YOST; HELEN HAMILTON AND WILLIAM H. HAMILTON, HER HUSBAND; GEO. B. HOLBERT AND ELOISE V. HOLBERT, HIS WIFE; MARIE MCDUGAL AND RAY MCDUGAL, HER HUSBAND; EMMA JEANNE HOLT, DIVORCED; MARY K. NIXON AND RONALD E. NIXON, HER HUSBAND; RALPH S. SNYDER, WIDOWER; LOUISE NESSELROTTE AND HOMER NESSELROTTE, HER HUSBAND; CLYDE P. SNYDER, DIVORCED; CLARICE HOLBERT, WIDOW; DESSIE HOLBERT, WIDOW; A. W. HAMILTON, WIDOWER; A. L. LAYFIELD, WIDOWER; CATHERINE L. HOLBERT, WIDOW; C. R. HOLBERT, SR. AND ANNA M. HOLBERT, HIS WIFE; KATHRYN H. HENRY, WIDOW; CARL C. HOLBERT AND VIRGINIA L. HOLBERT, HIS WIFE; LOUISE A. EVANS AND T. J. EVANS, HER HUSBAND; JOHN L. HOLBERT AND LUCILLE E. HOLBERT, HIS WIFE; GLENNA FLOYD AND V. VERYL FLOYD, HER HUSBAND; BETTY L. LAYFIELD, SINGLE AND H. R. HOLBERT AND MARIE HOLBERT, HIS WIFE	CONSOLIDATED GAS SUPPLY CORPORATION	NOT LESS THAN 1/8	1023	569
CONSOLIDATED GAS SUPPLY CORPORATION	CONSOLIDATED GAS TRANSMISSION CORPORATION	ASSIGNMENT	1136					250				
CONSOLIDATED GAS TRANSMISSION CORPORATION	CNG TRANSMISSION CORPORATION	MERGER/NAME CHANGE	51					795				
CNG TRANSMISSION CORPORATION	DOMINION TRANSMISSION, INC.	MERGER/NAME CHANGE	58					362				
DOMINION TRANSMISSION, INC.	CNX GAS COMPANY LLC	MEMORANDUM FARMOUT AGREEMENT	1522					33				
DOMINION TRANSMISSION, INC.	CNX GAS COMPANY LLC	FIRST AMENDMENT TO MEMORANDUM OF FARMOUT AGREEMENT	1524					491				
CNX GAS COMPANY LLC	NOBLE ENERGY, INC.	LIMITED PARTIAL ASSIGNMENT (50%)	1543					1235				
DOMINION TRANSMISSION, INC.	CNX GAS COMPANY LLC AND NOBLE ENERGY, INC.	PARTIAL ASSIGNMENT (32%)	1576					125				
CNX GAS COMPANY LLC	NOBLE ENERGY, INC.	ASSIGNMENT	1584					942				
NOBLE ENERGY, INC.	HG ENERGY II APPALACHIA, LLC	ASSIGNMENT	1600					692				
DOMINION TRANSMISSION, INC.	DOMINION ENERGY TRANSMISSION, INC.	MERGER/NAME CHANGE	WVSOS									
DOMINION ENERGY TRANSMISSION, INC.	HG ENERGY II APPALACHIA, LLC	SECOND AMENDMENT TO MEMORANDUM OF FARMOUT AGREEMENT	1601					581				
DOMINION ENERGY TRANSMISSION, INC.	HG ENERGY II APPALACHIA, LLC	THIRD AMENDMENT TO MEMORANDUM OF FARMOUT AGREEMENT	1621					1295				
DOMINION ENERGY TRANSMISSION, INC.	HG ENERGY II APPALACHIA, LLC	ASSIGNMENT	LEWIS 736					220				
14	LC005043	12-0467-0030-0000 12-0467-0030-0001 p/o 12-0467-0032-0003 12-0467-033-0000 p/o 12-0467-0033-0001 12-0467-0034-0000	Q100542000					M.M.F. RANDOLPH AND S. F. RANDOLPH, HUSBAND AND WIFE	HOPE NATURAL GAS COMPANY	NOT LESS THAN 1/8	152	262
								HOPE NATURAL GAS COMPANY	CONSOLIDATED GAS SUPPLY CORPORATION	CONFIRMATORY DEED	903	179
								CONSOLIDATED GAS SUPPLY CORPORATION	CONSOLIDATED GAS TRANSMISSION CORPORATION	ASSIGNMENT	1136	250
								CONSOLIDATED GAS TRANSMISSION CORPORATION	CNG TRANSMISSION CORPORATION	MERGER/NAME CHANGE	51	795
								CNG TRANSMISSION CORPORATION	DOMINION TRANSMISSION, INC.	MERGER/NAME CHANGE	58	362
								DOMINION TRANSMISSION, INC.	CNX GAS COMPANY LLC	MEMORANDUM FARMOUT AGREEMENT	1522	33
				CNX GAS COMPANY LLC	NOBLE ENERGY, INC.	LIMITED PARTIAL ASSIGNMENT (50%)	1543	1235				
				DOMINION TRANSMISSION, INC.	CNX GAS COMPANY LLC AND NOBLE ENERGY, INC.	PARTIAL ASSIGNMENT (32%)	1576	125				

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		12-0467-0034-0000 12-0467-0035-0000 12-0467-0036-0000 12-0467-0036-0001 p/o 12-467-0032-0000		CNX GAS COMPANY LLC DOMINION TRANSMISSION, INC. NOBLE ENERGY, INC.	NOBLE ENERGY, INC. DOMINION ENERGY TRANSMISSION, INC. HG ENERGY II APPALACHIA, LLC	ASSIGNMENT MERGER/NAME CHANGE ASSIGNMENT	1584 WVSOS 1600	942
				DOMINION ENERGY TRANSMISSION, INC. DOMINION ENERGY TRANSMISSION, INC.	HG ENERGY II APPALACHIA, LLC HG ENERGY II APPALACHIA, LLC	SECOND AMENDMENT TO MEMORANDUM OF FARMOUT AGREEMENT THIRD AMENDMENT TO MEMORANDUM OF FARMOUT AGREEMENT	1601 1621	581 1295
50	LC066643	12-0467-0040-0000 p/o 12-0467-0053-0000	Q100828000	W. HAYMOND DAWSON AND RACHEL E. DAWSON, HUSBAND AND WIFE HOPE NATURAL GAS COMPANY CONSOLIDATED GAS SUPPLY CORPORATION CONSOLIDATED GAS TRANSMISSION CORPORATION CNG TRANSMISSION CORPORATION DOMINION TRANSMISSION, INC. CNX GAS COMPANY LLC DOMINION TRANSMISSION, INC. CNX GAS COMPANY LLC DOMINION TRANSMISSION, INC. NOBLE ENERGY, INC.	HOPE NATURAL GAS COMPANY CONSOLIDATED GAS SUPPLY CORPORATION CONSOLIDATED GAS TRANSMISSION CORPORATION CNG TRANSMISSION CORPORATION DOMINION TRANSMISSION, INC. CNX GAS COMPANY LLC NOBLE ENERGY, INC. CNX GAS COMPANY LLC AND NOBLE ENERGY, INC. NOBLE ENERGY, INC. DOMINION ENERGY TRANSMISSION, INC. HG ENERGY II APPALACHIA, LLC DOMINION ENERGY TRANSMISSION, INC. HG ENERGY II APPALACHIA, LLC HG ENERGY II APPALACHIA, LLC	NOT LESS THAN 1/8 CONFIRMATORY DEED ASSIGNMENT MERGER/NAME CHANGE MERGER/NAME CHANGE MEMORANDUM FARMOUT AGREEMENT LIMITED PARTIAL ASSIGNMENT (50%) PARTIAL ASSIGNMENT (32%) ASSIGNMENT MERGER/NAME CHANGE ASSIGNMENT SECOND AMENDMENT TO MEMORANDUM OF FARMOUT AGREEMENT THIRD AMENDMENT TO MEMORANDUM OF FARMOUT AGREEMENT ASSIGNMENT (68%)	776 903 1136 51 58 1522 1543 1576 1584 WVSOS 1600 1601 1621 1637	213 179 250 795 362 33 1235 125 942 692 581 1295 1081
49	LC015637	12-0467-0043-0000 p/o 12-0467-0026-0000	Q100547000	BENJAMIN STOUT AND M. E. STOUT, HIS WIFE HOPE NATURAL GAS COMPANY CONSOLIDATED GAS SUPPLY CORPORATION CONSOLIDATED GAS TRANSMISSION CORPORATION CNG TRANSMISSION CORPORATION DOMINION TRANSMISSION, INC. DOMINION TRANSMISSION, INC. CNX GAS COMPANY LLC DOMINION TRANSMISSION, INC. CNX GAS COMPANY LLC NOBLE ENERGY, INC. DOMINION TRANSMISSION, INC.	HOPE NATURAL GAS COMPANY CONSOLIDATED GAS SUPPLY CORPORATION CONSOLIDATED GAS TRANSMISSION CORPORATION CNG TRANSMISSION CORPORATION DOMINION TRANSMISSION, INC. CNX GAS COMPANY LLC NOBLE ENERGY, INC. CNX GAS COMPANY LLC AND NOBLE ENERGY, INC. NOBLE ENERGY, INC. HG ENERGY II APPALACHIA, LLC DOMINION ENERGY TRANSMISSION, INC. HG ENERGY II APPALACHIA, LLC HG ENERGY II APPALACHIA, LLC	NOT LESS THAN 1/8 CONFIRMATORY DEED ASSIGNMENT MERGER/NAME CHANGE MERGER/NAME CHANGE MEMORANDUM FARMOUT AGREEMENT FIRST AMENDMENT TO MEMORANDUM OF FARMOUT AGREEMENT LIMITED PARTIAL ASSIGNMENT (50%) PARTIAL ASSIGNMENT (32%) ASSIGNMENT ASSIGNMENT MERGER/NAME CHANGE SECOND AMENDMENT TO MEMORANDUM OF FARMOUT AGREEMENT THIRD AMENDMENT TO MEMORANDUM OF FARMOUT AGREEMENT ASSIGNMENT (68%)	184 903 1136 51 58 1522 1524 1543 1576 1584 1600 WVSOS 1601 1621 1637	77 179 250 795 362 33 491 1235 125 942 692 581 1295 1081
22	LC066644	12-0467-0063-0000	Q101094000	W. HAYMOND DAWSON AND RACHEL E. DAWSON, HUSBAND AND WIFE HOPE NATURAL GAS COMPANY CONSOLIDATED GAS SUPPLY CORPORATION CONSOLIDATED GAS TRANSMISSION CORPORATION CNG TRANSMISSION CORPORATION DOMINION TRANSMISSION, INC. CNX GAS COMPANY LLC DOMINION TRANSMISSION, INC. CNX GAS COMPANY LLC DOMINION TRANSMISSION, INC. NOBLE ENERGY, INC.	HOPE NATURAL GAS COMPANY CONSOLIDATED GAS SUPPLY CORPORATION CONSOLIDATED GAS TRANSMISSION CORPORATION CNG TRANSMISSION CORPORATION DOMINION TRANSMISSION, INC. CNX GAS COMPANY LLC NOBLE ENERGY, INC. CNX GAS COMPANY LLC AND NOBLE ENERGY, INC. NOBLE ENERGY, INC. DOMINION ENERGY TRANSMISSION, INC. HG ENERGY II APPALACHIA, LLC DOMINION ENERGY TRANSMISSION, INC. HG ENERGY II APPALACHIA, LLC HG ENERGY II APPALACHIA, LLC	NOT LESS THAN 1/8 CONFIRMATORY DEED ASSIGNMENT MERGER/NAME CHANGE MERGER/NAME CHANGE MEMORANDUM FARMOUT AGREEMENT LIMITED PARTIAL ASSIGNMENT (50%) PARTIAL ASSIGNMENT (32%) ASSIGNMENT ASSIGNMENT MERGER/NAME CHANGE SECOND AMENDMENT TO MEMORANDUM OF FARMOUT AGREEMENT THIRD AMENDMENT TO MEMORANDUM OF FARMOUT AGREEMENT ASSIGNMENT	776 903 1136 51 58 1522 1543 1576 1584 WVSOS 1600 1601 1621 1637	210 179 250 795 362 33 1235 125 942 692 581 1295 1081

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62	LC073275	12-0487-0006-0000	Q100713000	KATE STOUT, WIDOW	CONSOLIDATED GAS SUPPLY CORPORATION	NOT LESS THAN 1/8	1022	330
				CONSOLIDATED GAS SUPPLY CORPORATION	CONSOLIDATED GAS TRANSMISSION CORPORATION	ASSIGNMENT	1136	250
				CONSOLIDATED GAS TRANSMISSION CORPORATION	CNG TRANSMISSION CORPORATION	MERGER/NAME CHANGE	51	795
				CNG TRANSMISSION CORPORATION	DOMINION TRANSMISSION, INC.	MERGER/NAME CHANGE	58	362
				DOMINION TRANSMISSION, INC.	CNX GAS COMPANY LLC	MEMORANDUM FARMOUT AGREEMENT	1522	33
				CNX GAS COMPANY LLC	NOBLE ENERGY, INC.	LIMITED PARTIAL ASSIGNMENT (50%)	1543	1235
				DOMINION TRANSMISSION, INC.	CNX GAS COMPANY LLC AND NOBLE ENERGY, INC.	PARTIAL ASSIGNMENT (32%)	1576	125
				CNX GAS COMPANY LLC	NOBLE ENERGY, INC.	ASSIGNMENT	1584	942
				DOMINION TRANSMISSION, INC.	DOMINION ENERGY TRANSMISSION, INC.	MERGER/NAME CHANGE	WVSOS	
				NOBLE ENERGY, INC.	HG ENERGY II APPALACHIA, LLC	ASSIGNMENT	1600	692
				DOMINION ENERGY TRANSMISSION, INC.	HG ENERGY II APPALACHIA, LLC	SECOND AMENDMENT TO MEMORANDUM OF FARMOUT AGREEMENT	1601	581
				DOMINION ENERGY TRANSMISSION, INC.	HG ENERGY II APPALACHIA, LLC	THIRD AMENDMENT TO MEMORANDUM OF FARMOUT AGREEMENT	1621	1295
				DOMINION ENERGY TRANSMISSION, INC.	HG ENERGY II APPALACHIA, LLC	ASSIGNMENT (68%)	1637	1081
				63	LC066586	12-0487-0008-0000 12-0488-0024-0000	Q10109000	C. ROSS LEWIS AND OPAL LEWIS, HIS WIFE
HOPE NATURAL GAS COMPANY	CONSOLIDATED GAS SUPPLY CORPORATION	CONFIRMATORY DEED	903					179
CONSOLIDATED GAS SUPPLY CORPORATION	CONSOLIDATED GAS TRANSMISSION CORPORATION	ASSIGNMENT	1136					250
CONSOLIDATED GAS TRANSMISSION CORPORATION	CNG TRANSMISSION CORPORATION	MERGER/NAME CHANGE	51					795
CNG TRANSMISSION CORPORATION	DOMINION TRANSMISSION, INC.	MERGER/NAME CHANGE	58					362
DOMINION TRANSMISSION, INC.	CNX GAS COMPANY LLC	MEMORANDUM FARMOUT AGREEMENT	1522					33
CNX GAS COMPANY LLC	NOBLE ENERGY, INC.	LIMITED PARTIAL ASSIGNMENT (50%)	1543					1235
DOMINION TRANSMISSION, INC.	CNX GAS COMPANY LLC AND NOBLE ENERGY, INC.	PARTIAL ASSIGNMENT (32%)	1576					125
CNX GAS COMPANY LLC	NOBLE ENERGY, INC.	ASSIGNMENT	1584					942
DOMINION TRANSMISSION, INC.	DOMINION ENERGY TRANSMISSION, INC.	MERGER/NAME CHANGE	WVSOS					
NOBLE ENERGY, INC.	HG ENERGY II APPALACHIA, LLC	ASSIGNMENT	1600					692
DOMINION ENERGY TRANSMISSION, INC.	HG ENERGY II APPALACHIA, LLC	SECOND AMENDMENT TO MEMORANDUM OF FARMOUT AGREEMENT	1601					581
DOMINION ENERGY TRANSMISSION, INC.	HG ENERGY II APPALACHIA, LLC	THIRD AMENDMENT TO MEMORANDUM OF FARMOUT AGREEMENT	1621					1295
DOMINION ENERGY TRANSMISSION, INC.	HG ENERGY II APPALACHIA, LLC	ASSIGNMENT (68%)	1637					1081

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

May 7, 2021

Kelly Kees
WV DEP
Division of Oil & Gas
601 57th Street
Charleston, WV 25304

RE: Drilling Under Roads – Schoen 1205 S-10H
Grant District, Harrison County
West Virginia

Dear Ms. Kees -

HG Energy II Appalachia, LLC, is submitting the attached application for a new well work permit for the Schoen 1205 well pad. As an authorized representative, I certify HG Energy II Appalachia, LLC, has the right to drill, stimulate, extract, produce and market the oil, gas or condensate for all leases through which the Schoen 1205 laterals will drill through including any and all roads crossed under as identified on the attached survey plat.

Should you have any questions or desire further information, please contact me at dwhite@hgenergyllc.com or 304-420-1119.

Very truly yours,

Diane White

Diane C. White

Enclosures

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07/02/2021

**STATE OF WEST VIRGINIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS
NOTICE CERTIFICATION**

Date of Notice Certification: 02/15/2021

API No. 47- _____ - _____
Operator's Well No. Schoen 1205 S-10H
Well Pad Name: Schoen Well Pad

Notice has been given:

Pursuant to the provisions in West Virginia Code § 22-6A, the Operator has provided the required parties with the Notice Forms listed below for the tract of land as follows:

State:	<u>West Virginia</u>	UTM NAD 83	Easting:	<u>555986.4</u>
County:	<u>Harrison</u>		Northing:	<u>4333795.8</u>
District:	<u>Grant</u>	Public Road Access:	<u>McWhorter Road</u>	
Quadrangle:	<u>Mount Clare</u>	Generally used farm name:	<u>Schoen</u>	
Watershed:	<u>Middle West Fork Creek</u>			

Pursuant to West Virginia Code § 22-6A-7(b), every permit application filed under this section shall be on a form as may be prescribed by the secretary, shall be verified and shall contain the following information: (14) A certification from the operator that (i) it has provided the owners of the surface described in subdivisions (1), (2) and (4), subsection (b), section ten of this article, the information required by subsections (b) and (c), section sixteen of this article; (ii) that the requirement was deemed satisfied as a result of giving the surface owner notice of entry to survey pursuant to subsection (a), section ten of this article six-a; or (iii) the notice requirements of subsection (b), section sixteen of this article were waived in writing by the surface owner; and Pursuant to West Virginia Code § 22-6A-11(b), the applicant shall tender proof of and certify to the secretary that the notice requirements of section ten of this article have been completed by the applicant.

Pursuant to West Virginia Code § 22-6A, the Operator has attached proof to this Notice Certification that the Operator has properly served the required parties with the following: *PLEASE CHECK ALL THAT APPLY <input type="checkbox"/> 1. NOTICE OF SEISMIC ACTIVITY or <input checked="" type="checkbox"/> NOTICE NOT REQUIRED BECAUSE NO SEISMIC ACTIVITY WAS CONDUCTED <input type="checkbox"/> 2. NOTICE OF ENTRY FOR PLAT SURVEY or <input checked="" type="checkbox"/> NO PLAT SURVEY WAS CONDUCTED <input checked="" type="checkbox"/> 3. NOTICE OF INTENT TO DRILL or <input type="checkbox"/> NOTICE NOT REQUIRED BECAUSE NOTICE OF ENTRY FOR PLAT SURVEY WAS CONDUCTED or <input type="checkbox"/> WRITTEN WAIVER BY SURFACE OWNER (PLEASE ATTACH) <input checked="" type="checkbox"/> 4. NOTICE OF PLANNED OPERATION <input checked="" type="checkbox"/> 5. PUBLIC NOTICE <input checked="" type="checkbox"/> 6. NOTICE OF APPLICATION		<p>OOG OFFICE USE ONLY</p> <input type="checkbox"/> RECEIVED/ NOT REQUIRED <input type="checkbox"/> RECEIVED <input type="checkbox"/> RECEIVED/ NOT REQUIRED <input type="checkbox"/> RECEIVED <input type="checkbox"/> RECEIVED <input type="checkbox"/> RECEIVED
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Required Attachments:

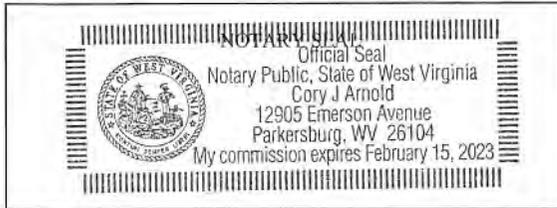
The Operator shall attach to this Notice Certification Form all Notice Forms and Certifications of Notice that have been provided to the required parties and/or any associated written waivers. For the Public Notice, the operator shall attach a copy of the Class II Legal Advertisement with publication date verification or the associated Affidavit of Publication. The attached Notice Forms and Certifications of Notice shall serve as proof that the required parties have been noticed as required under West Virginia Code § 22-6A. Pursuant to West Virginia Code § 22-6A-11(b), the Certification of Notice to the person may be made by affidavit of personal service, the return receipt card or other postal receipt for certified mailing.

Certification of Notice is hereby given:

THEREFORE, I Diane White, have read and understand the notice requirements within West Virginia Code § 22-6A. I certify that as required under West Virginia Code § 22-6A, I have served the attached copies of the Notice Forms, identified above, to the required parties through personal service, by registered mail or by any method of delivery that requires a receipt or signature confirmation. I certify under penalty of law that I have personally examined and am familiar with the information submitted in this Notice Certification and all attachments, 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 and imprisonment.

Well Operator: HG II Appalachia, LLC
By: Diane White *Diane White*
Its: Agent
Telephone: 304-420-1119

Address: 5260 Dupont Road
Parkersburg, WV 26101
Facsimile: 304-863-3172
Email: dwhite@hgenergyllc.com



Subscribed and sworn before me this 15th day of February, 2021.
Cory J. Arnold Notary Public
My Commission Expires 2-15-2023

Oil and Gas Privacy Notice:

The Office of Oil and Gas processes your personal information, such as name, address and telephone number, as 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 or your personal information, please contact DEP's Chief Privacy Officer at depprivacyofficer@wv.gov.

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WW-6A
(9-13)

API NO. 47- _____ - _____
OPERATOR WELL NO. Schoen 1205 N-1H to S-10H
Well Pad Name: Schoen 1205

STATE OF WEST VIRGINIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS
NOTICE OF APPLICATION

Notice Time Requirement: notice shall be provided no later than the **filing date of permit application.**

Date of Notice: 11.23.20 **Date Permit Application Filed:** 11/25/20

Notice of:

- PERMIT FOR ANY WELL WORK
- CERTIFICATE OF APPROVAL FOR THE CONSTRUCTION OF AN IMPOUNDMENT OR PIT

Delivery method pursuant to West Virginia Code § 22-6A-10(b)

- PERSONAL SERVICE
- REGISTERED MAIL
- METHOD OF DELIVERY THAT REQUIRES A RECEIPT OR SIGNATURE CONFIRMATION

Pursuant to W. Va. Code § 22-6A-10(b) no later than the filing date of the application, the applicant for a permit for any well work or for a certificate of approval for the construction of an impoundment or pit as required by this article shall deliver, by personal service or by registered mail or by any method of delivery that requires a receipt or signature confirmation, copies of the application, the erosion and sediment control plan required by section seven of this article, and the well plat to each of the following persons: (1) The owners of record of the surface of the tract on which the well is or is proposed to be located; (2) The owners of record of the surface tract or tracts overlying the oil and gas leasehold being developed by the proposed well work, if the surface tract is to be used for roads or other land disturbance as described in the erosion and sediment control plan submitted pursuant to subsection (c), section seven of this article; (3) The coal owner, operator or lessee, in the event the tract of land on which the well proposed to be drilled is located [sic] is known to be underlain by one or more coal seams; (4) The owners of record of the surface tract or tracts overlying the oil and gas leasehold being developed by the proposed well work, if the surface tract is to be used for the placement, construction, enlargement, alteration, repair, removal or abandonment of any impoundment or pit as described in section nine of this article; (5) Any surface owner or water purveyor who is known to the applicant to have a water well, spring or water supply source located within one thousand five hundred feet of the center of the well pad which is used to provide water for consumption by humans or domestic animals; and (6) The operator of any natural gas storage field within which the proposed well work activity is to take place. (c)(1) If more than three tenants in common or other co-owners of interests described in subsection (b) of this section hold interests in the lands, the applicant may serve the documents required upon the person described in the records of the sheriff required to be maintained pursuant to section eight, article one, chapter eleven-a of this code. (2) Notwithstanding any provision of this article to the contrary, notice to a lien holder is not notice to a landowner, unless the lien holder is the landowner. W. Va. Code R. § 35-8-5.7.a requires, in part, that the operator shall also provide the Well Site Safety Plan ("WSSP") to the surface owner and any water purveyor or surface owner subject to notice and water testing as provided in section 15 of this rule.

Application Notice WSSP Notice E&S Plan Notice Well Plat Notice is hereby provided to:

SURFACE OWNER(s)
Name: George & Rosanne Schoen
Address: PO Box 158
Lost Creek, WV 26385

Name: _____
Address: _____

SURFACE OWNER(s) (Road and/or Other Disturbance)
Name: Thomas Young
Address: 4856 SW 95th
Gainesville, FL 32608
Name: Joseph Queen
Address: P. O. Box 531
Lost Creek, WV 26385

SURFACE OWNER(s) (Impoundments or Pits)
Name: _____
Address: _____

COAL OWNER OR LESSEE
Name: _____
Address: _____

COAL OPERATOR
Name: _____
Address: _____

SURFACE OWNER OF WATER WELL AND/OR WATER PURVEYOR(s)
Name: Vera & Oral Haught
Address: 400 Justice Avenue
Logan, WV 25601

OPERATOR OF ANY NATURAL GAS STORAGE FIELD
Name: Dominion Energy Transmission - Attn: Ronald Waldren
Address: 925 White Oaks Blvd
Bridgeport, WV 26330

*Please attach additional forms if necessary

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Environmental Protection

Sept 1, 2020

Notice is hereby given:

Pursuant to West Virginia Code § 22-6A-10(b), notice is hereby given that the undersigned well operator has applied for a permit for well work or for a certificate of approval for the construction of an impoundment or pit.

This Notice Shall Include:

Pursuant to W. Va. Code § 22-6A-10(b), this notice shall include: (1) copies of the application; (2) the erosion and sediment control plan required by section seven of this article; and (3) the well plat.

Pursuant to W. Va. Code § 22-6A-10(f), this notice shall include: (1) a statement of the time limits for filing written comments; (2) who may file written comments; (3) the name and address of the secretary for the purpose of filing the comments and obtaining additional information; and (4) a statement that the persons may request, at the time of submitting written comments, notice of the permit decision and a list of persons qualified to test water.

Pursuant to W. Va. Code R. § 35-8-5.7.a, the operator shall provide the Well Site Safety Plan to the surface owner and any water purveyor or surface owner subject to notice and water testing as provided in section 15 of this rule.

Pursuant to W. Va. Code R. § 35-8-15.2.c, this notice shall: (1) contain a statement of the surface owner's and water purveyor's right to request sampling and analysis; (2) advise the surface owner and water purveyor of the rebuttable presumption for contamination or deprivation of a fresh water source or supply; advise the surface owner and water purveyor that refusal to allow the operator to conduct a pre-drilling water well test constitutes a method to rebut the presumption of liability; (3) advise the surface owner and water purveyor of his or her independent right to sample and analyze any water supply at his or her own expense; advise the surface owner and water purveyor whether or not the operator will utilize an independent laboratory to analyze any sample; and (4) advise the surface owner and or water purveyor that he or she can obtain from the Chief a list of water testing laboratories in the subject area capable of and qualified to test water supplies in accordance with standard acceptable methods.

Additional information related to horizontal drilling may be obtained from the Secretary, at the WV Department of Environmental Protection headquarters, located at 601 57th Street, SE, Charleston, WV 25304 (304-926-0450) or by visiting www.dep.wv.gov/oil-and-gas/pages/default.aspx.

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Well Location Restrictions

Pursuant to W. Va. Code § 22-6A-12, Wells may not be drilled within two hundred fifty feet measured horizontally from any existing water well or developed spring used for human or domestic animal consumption. The center of well pads may not be located within six hundred twenty-five feet of an occupied dwelling structure, or a building two thousand five hundred square feet or larger used to house or shelter dairy cattle or poultry husbandry. This limitation is applicable to those wells, developed springs, dwellings or agricultural buildings that existed on the date a notice to the surface owner of planned entry for surveying or staking as provided in section ten of this article or a notice of intent to drill a horizontal well as provided in subsection (b), section sixteen of this article was provided, whichever occurs first, and to any dwelling under construction prior to that date. This limitation may be waived by written consent of the surface owner transmitted to the department and recorded in the real property records maintained by the clerk of the county commission for the county in which such property is located. Furthermore, the well operator may be granted a variance by the secretary from these distance restrictions upon submission of a plan which identifies the sufficient measures, facilities or practices to be employed during well site construction, drilling and operations. The variance, if granted, shall include terms and conditions the department requires to ensure the safety and protection of affected persons and property. The terms and conditions may include insurance, bonding and indemnification, as well as technical requirements. (b) No well pad may be prepared or well drilled within one hundred feet measured horizontally from any perennial stream, natural or artificial lake, pond or reservoir, or a wetland, or within three hundred feet of a naturally reproducing trout stream. No well pad may be located within one thousand feet of a surface or ground water intake of a public water supply. The distance from the public water supply as identified by the department shall be measured as follows: (1) For a surface water intake on a lake or reservoir, the distance shall be measured from the boundary of the lake or reservoir. (2) For a surface water intake on a flowing stream, the distance shall be measured from a semicircular radius extending upstream of the surface water intake. (3) For a groundwater source, the distance shall be measured from the wellhead or spring. The department may, in its discretion, waive these distance restrictions upon submission of a plan identifying sufficient measures, facilities or practices to be employed during well site construction, drilling and operations to protect the waters of the state. A waiver, if granted, shall impose any permit conditions as the secretary considers necessary. (c) Notwithstanding the foregoing provisions of this section, nothing contained in this section prevents an operator from conducting the activities permitted or authorized by a Clean Water Act Section 404 permit or other approval from the United States Army Corps of Engineers within any waters of the state or within the restricted areas referenced in this section. (d) The well location restrictions set forth in this section shall not apply to any well on a multiple well pad if at least one of the wells was permitted prior to the effective date of this article. (e) The secretary shall, by December 31, 2012, report to the Legislature on the noise, light, dust and volatile organic compounds generated by the drilling of horizontal wells as they relate to the well location restrictions regarding occupied dwelling structures pursuant to this section. Upon a finding, if any, by the secretary that the well location restrictions regarding occupied dwelling structures are inadequate or otherwise require alteration to address the items

07/02/2021

WW-6A
(8-13)

API NO. 47- 033 - 06010
OPERATOR WELL NO. Schoen 1205 N-1H to S-10H
Well Pad Name: Schoen 1205

examined in the study required by this subsection, the secretary shall have the authority to propose for promulgation legislative rules establishing guidelines and procedures regarding reasonable levels of noise, light, dust and volatile organic compounds relating to drilling horizontal wells, including reasonable means of mitigating such factors, if necessary.

Water Well Testing:

Pursuant to West Virginia Code § 22-6A-10(d), notification shall be made, with respect to surface landowners identified in subsection (b) or water purveyors identified in subdivision (5), subsection (b) of this section, of the opportunity for testing their water well. The operator shall provide an analysis to such surface landowner or water purveyor at their request.

Water Testing Laboratories:

Pursuant to West Virginia Code § 22-6A-10(i), persons entitled to notice pursuant to subsection (b) of this section may contact the department to ascertain the names and locations of water testing laboratories in the subject area capable and qualified to test water supplies in accordance with standard accepted methods. In compiling that list of names the department shall consult with the state Bureau for Public Health and local health departments. A surface owner and water purveyor has an independent right to sample and analyze any water supply at his or her own expense. The laboratory utilized by the operator shall be approved by the agency as being certified and capable of performing sample analyses in accordance with this section.

Rebuttable Presumption for Contamination or Deprivation of a Fresh Water Source or Supply:

W. Va. Code § 22-6A-18 requires that (b) unless rebutted by one of the defenses established in subsection (c) of this section, in any action for contamination or deprivation of a fresh water source or supply within one thousand five hundred feet of the center of the well pad for horizontal well, there is a rebuttable presumption that the drilling and the oil or gas well or either was the proximate cause of the contamination or deprivation of the fresh water source or supply. (c) In order to rebut the presumption of liability established in subsection (b) of this section, the operator must prove by a preponderance of the evidence one of the following defenses: (1) The pollution existed prior to the drilling or alteration activity as determined by a predrilling or prealteration water well test. (2) The landowner or water purveyor refused to allow the operator access to the property to conduct a predrilling or prealteration water well test. (3) The water supply is not within one thousand five hundred feet of the well. (4) The pollution occurred more than six months after completion of drilling or alteration activities. (5) The pollution occurred as the result of some cause other than the drilling or alteration activity. (d) Any operator electing to preserve its defenses under subdivision (1), subsection (c) of this section shall retain the services of an independent certified laboratory to conduct the predrilling or prealteration water well test. A copy of the results of the test shall be submitted to the department and the surface owner or water purveyor in a manner prescribed by the secretary. (e) Any operator shall replace the water supply of an owner of interest in real property who obtains all or part of that owner's supply of water for domestic, agricultural, industrial or other legitimate use from an underground or surface source with a comparable water supply where the secretary determines that the water supply has been affected by contamination, diminution or interruption proximately caused by the oil or gas operation, unless waived in writing by that owner. (f) The secretary may order the operator conducting the oil or gas operation to: (1) Provide an emergency drinking water supply within twenty-four hours; (2) Provide temporary water supply within seventy-two hours; (3) Within thirty days begin activities to establish a permanent water supply or submit a proposal to the secretary outlining the measures and timetables to be used in establishing a permanent supply. The total time in providing a permanent water supply may not exceed two years. If the operator demonstrates that providing a permanent replacement water supply cannot be completed within two years, the secretary may extend the time frame on case-by-case basis; and (4) Pay all reasonable costs incurred by the real property owner in securing a water supply. (g) A person as described in subsection (b) of this section aggrieved under the provisions of subsections (b), (e) or (f) of this section may seek relief in court... (i) Notwithstanding the denial of the operator of responsibility for the damage to the real property owner's water supply or the status of any appeal on determination of liability for the damage to the real property owner's water supply, the operator may not discontinue providing the required water service until authorized to do so by the secretary or a court of competent jurisdiction.

Written Comment:

Pursuant to West Virginia Code § 22-6A-11(a), all persons described in subsection (b), section ten of this article may file written comments with the secretary as to the location or construction of the applicant's proposed well work within thirty days after the application is filed with the secretary. All persons described in West Virginia Code § 22-6A-10(b) may file written comments as to the location or construction of the applicant's proposed well work to the Secretary at:

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

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Such persons may request, at the time of submitting written comments, notice of the permit decision and a list of persons qualified to test water. **NOTE: YOU ARE NOT REQUIRED TO FILE ANY COMMENT.**

07/02/2021

Time Limits and Methods for Filing Comments.

The law requires these materials to be served on or before the date the operator files its Application. You have **THIRTY (30) 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.

Pursuant to West Virginia Code § 22-6A-11(c)(2), Any objections of the affected coal operators and coal seam owners and lessees shall be addressed through the processes and procedures that exist under sections fifteen, seventeen and forty, article six of this chapter, as applicable and as incorporated into this article by section five of this article. The written comments filed by the parties entitled to notice under subdivisions (1), (2), (4), (5) and (6), subsection (b), section ten of this article shall be considered by the secretary in the permit issuance process, but the parties are not entitled to participate in the processes and proceedings that exist under sections fifteen, seventeen or forty, article six of this chapter, as applicable and as incorporated into this article by section five of this article.

Comment Requirements

Your comments must be in writing and 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.

Disclaimer: All comments received will be placed on our web site <http://www.dep.wv.gov/oil-and-gas/Horizontal-Permits/Pages/default.aspx> and the applicant will automatically be forwarded an email notice that such comments have been submitted. The applicant will be expected to provide a response to comments submitted by any surface owner, water purveyor or natural gas storage operator noticed within the application.

Permit Denial or Condition

The Chief has the power to deny or condition a well work permit. Pursuant to West Virginia Code § 22-6A-8(d), the permit may not be issued or be conditioned, including conditions with respect to the location of the well and access roads prior to issuance if the director determines that:

- (1) The proposed well work will constitute a hazard to the safety of persons;
- (2) The plan for soil erosion and sediment control is not adequate or effective;
- (3) Damage would occur to publicly owned lands or resources; or
- (4) The proposed well work fails to protect fresh water sources or supplies.

A permit may also be denied under West Virginia Code § 22-6A-7(k), the secretary shall deny the issuance of a permit if the secretary determines that the applicant has committed a substantial violation of a previously issued permit for a horizontal well, including the applicable erosion and sediment control plan associated with the previously issued permit, or a substantial violation of one or more of the rules promulgated under this article, and in each instance has failed to abate or seek review of the violation within the time prescribed by the secretary pursuant to the provisions of subdivisions (1) and (2), subsection (a), section five of this article and the rules promulgated hereunder, which time may not be unreasonable.

Pursuant to West Virginia Code § 22-6A-10(g), any person entitled to submit written comments to the secretary pursuant to subsection (a), section eleven of this article, shall also be entitled to receive from the secretary a copy of the permit as issued or a copy of the order modifying or denying the permit if the person requests receipt of them as a part of the written comments submitted concerning the permit application. Such persons may request, at the time of submitting written comments, notice of the permit decision and a list of persons qualified to test water.

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API NO. 47- 033-06010
OPERATOR WELL NO. Schoen 1205 N-1H to S-10H
Well Pad Name: Schoen 1205

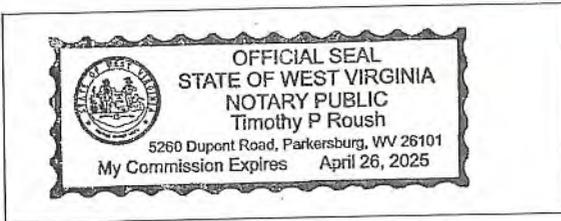
Notice is hereby given by:

Well Operator: HG Energy II Appalachia, LLC
Telephone: 304-420-1119
Email: dwhite@hgenergyllc.com

Address: 5260 Dupont Road
Parkersburg, WV 26101
Facsimile: 304-863-2172

Oil and Gas Privacy Notice:

The Office of Oil and Gas processes your personal information, such as name, address and telephone number, as 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 or your personal information, please contact DEP's Chief Privacy Officer at depprivacyofficer@wv.gov.



Subscribed and sworn before me this 1 st day of September, 2020.

[Handwritten Signature]

Notary Public

My Commission Expires 4/26/2025

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WW-6A
(8-13)
Page 1 Continued

Schoen 1205 S-7H

Surface Owner of Water Well and/or Water Purveyors to be Noticed:

Marilyn Gaines ✓
1191 McWhorter Road
Lost Creek, WV 26385

Keith & Diana Bramel ✓
124 Tree Frog Lane
Lost Creek, WV 26385

Stephen & Kimberly Goff ✓
412 Hill Top Drive
Lost Creek, WV 26385

Surface Owner (s) (Road and/or Other Disturbance)

Charles and Franklin Sutton ✓
801 Worthington Drive
Bridgeport, WV 26330

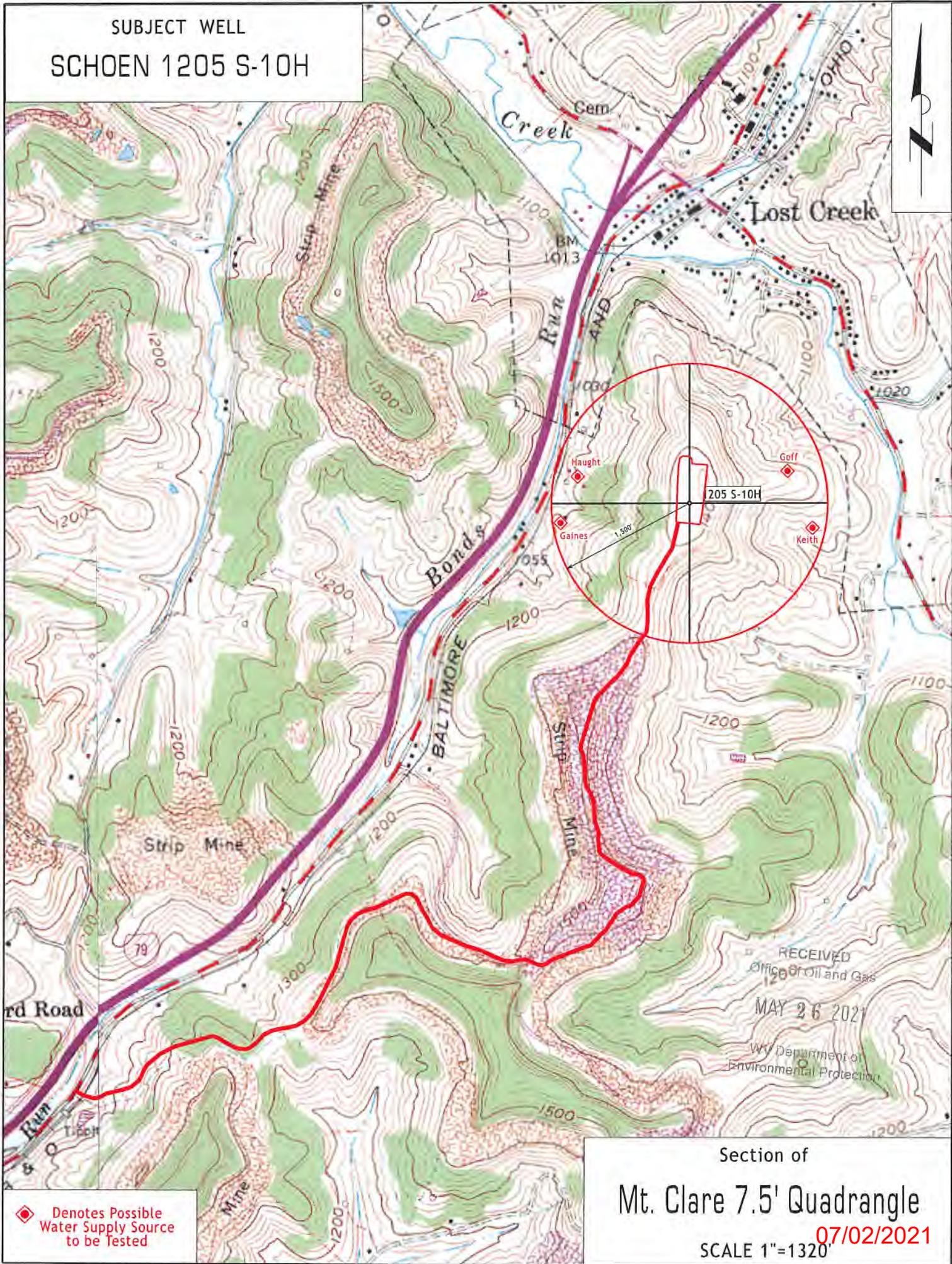
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SUBJECT WELL
SCHOEN 1205 S-10H



◆ Denotes Possible Water Supply Source to be Tested

Section of
Mt. Clare 7.5' Quadrangle
SCALE 1"=1320'
07/02/2021

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MAY 26 2021
OHIO Department of
Environmental Protection

Diane White

From: Vicki Hoops <vhoops@sturmenvironmental.com>
Sent: Wednesday, August 26, 2020 8:58 AM
To: Diane White
Subject: RE: Pre Drill Water Sampling/Analysis for the Schoen 1205 Water Owners - Possible

We will take care of this, thank you!

Vicki

From: Diane White [mailto:dwhite@hgenergyllc.com]
Sent: Wednesday, August 26, 2020 8:23 AM
To: vhoops@sturmenvironmental.com
Subject: Pre Drill Water Sampling/Analysis for the Schoen 1205 Water Owners - Possible

Vicki,
Please schedule pre drill water sampling and analysis for the sources identified below. As you'll see we don't have phone numbers for the people but I am attaching some mapping which will help you identify the sources. As per usual, please document any source where the surface owner does not want testing to occur. Thanks and have a great day,
Diane

From: Timothy Roush <troush@hgenergyllc.com>
Sent: Wednesday, March 4, 2020 1:45 PM
To: Diane White <dwhite@hgenergyllc.com>
Cc: Cory Arnold <carnold@hgenergyllc.com>
Subject: 1205 WSW Owners

Diane,
Below are the WSW owners for the 1205 Unit. Again, I could not find many of the phone numbers. Cory, if you can help again it would be much appreciated.

1. Vera E. Haight & Oral Haight, 400 Justice Ave., Logan, WV 25601 304-752-7179
2. Marilyn Gaines, 1191 McWhorter Road, Lost Creek, WV 26385
3. Keith & Diana Bramel, 124 Tree Frog Lane, Lost Creek, WV 26385
4. Stephen & Kimberly Goff, 412 Hill Top Drive, Lost Creek, WV 26385

Tim

Timothy P. Roush, PS
HG Energy, LLC
5260 Dupont Road
Parkersburg, WV 26101
troush@hgenergyllc.com

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(1/12)

STATE OF WEST VIRGINIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS
NOTICE OF INTENT TO DRILL

Pursuant to W. Va. Code § 22-6A-16(b), the Notice of Intent to Drill is only required if the notice requirements of W. Va. Code § 22-6A-10(a) have NOT been met or if the Notice of Intent to Drill requirement has NOT been waived in writing by the surface owner.

Notice Time Requirement: Notice shall be provided at least **TEN (10)** days prior to filing a permit application.
Date of Notice: 12/28/2020 **Date Permit Application Filed:** 01/11/2021

Delivery method pursuant to West Virginia Code § 22-6A-16(b)

HAND DELIVERY CERTIFIED MAIL RETURN RECEIPT REQUESTED

Pursuant to W. Va. Code § 22-6A-16(b), at least ten days prior to filing a permit application, an operator shall, by certified mail return receipt requested or hand delivery, give the surface owner notice of its intent to enter upon the surface owner's land for the purpose of drilling a horizontal well: *Provided*, That notice given pursuant to subsection (a), section ten of this article satisfies the requirements of this subsection as of the date the notice was provided to the surface owner: *Provided, however*, That the notice requirements of this subsection may be waived in writing by the surface owner. The notice, if required, shall include the name, address, telephone number, and if available, facsimile number and electronic mail address of the operator and the operator's authorized representative.

Notice is hereby provided to the SURFACE OWNER(s):

Name: George & Rosanne Schoen
Address: PO Box 158
Lost Creek, WV 26385

Name: _____
Address: _____

Notice is hereby given:

Pursuant to West Virginia Code § 22-6A-16(b), notice is hereby given that the undersigned well operator has an intent to enter upon the surface owner's land for the purpose of drilling a horizontal well on the tract of land as follows:

State:	<u>West Virginia</u>	UTM NAD 83	Easting:	<u>555986.976</u>
County:	<u>Harrison</u>		Northing:	<u>4333800.330</u>
District:	<u>Grant</u>	Public Road Access:	<u>McWhorter Road / SR19</u>	
Quadrangle:	<u>Mount Clare</u>	Generally used farm name:	<u>Schoen</u>	
Watershed:	<u>Middle West Fork Creek</u>			

This Notice Shall Include:

Pursuant to West Virginia Code § 22-6A-16(b), this notice shall include the name, address, telephone number, and if available, facsimile number and electronic mail address of the operator and the operator's authorized representative. Additional information related to horizontal drilling may be obtained from the Secretary, at the WV Department of Environmental Protection headquarters, located at 601 57th Street, SE, Charleston, WV 25304 (304-926-0450) or by visiting www.dep.wv.gov/oil-and-gas/pages/default.aspx.

Notice is hereby given by:

Well Operator: HG Energy II Appalachia, LLC
Address: 5260 Dupont Road
Parkersburg, WV 26101
Telephone: 304-420-1119
Email: dwhite@hgenergyllc.com
Facsimile: 304-863-3172

Authorized Representative: Diane White
Address: 5260 Dupont Road
Parkersburg, WV 26101
Telephone: 304-420-1119
Email: dwhite@hgenergyllc.com
Facsimile: 304-863-3172

RECEIVED
Office of Oil and Gas
MAY 26 2021
WV Department of
Environmental Protection

Oil and Gas Privacy Notice:

The Office of Oil and Gas processes your personal information, such as name, address and telephone number, as 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 or your personal information, please contact DEP's Chief Privacy Officer at depprivacyofficer@wv.gov.

07/02/2021

WW-6A5
(1/12)

STATE OF WEST VIRGINIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS
NOTICE OF PLANNED OPERATION

Notice Time Requirement: notice shall be provided no later than the **filing date of permit application.**
Date of Notice: 12/29/2020 **Date Permit Application Filed:** 01/11/2021

Delivery method pursuant to West Virginia Code § 22-6A-16(c)

- CERTIFIED MAIL HAND
- RETURN RECEIPT REQUESTED DELIVERY

Pursuant to W. Va. Code § 22-6A-16(c), no later than the date for filing the permit application, an operator shall, by certified mail return receipt requested or hand delivery, give the surface owner whose land will be used for the drilling of a horizontal well notice of the planned operation. The notice required by this subsection shall include: (1) A copy of this code section; (2) The information required to be provided by subsection (b), section ten of this article to a surface owner whose land will be used in conjunction with the drilling of a horizontal well; and (3) A proposed surface use and compensation agreement containing an offer of compensation for damages to the surface affected by oil and gas operations to the extent the damages are compensable under article six-b of this chapter. (d) The notices required by this section shall be given to the surface owner at the address listed in the records of the sheriff at the time of notice.

Notice is hereby provided to the SURFACE OWNER(s)
(at the address listed in the records of the sheriff at the time of notice):

Name: <u>George & Rosanne Schoen</u>	Name: _____
Address: <u>PO Box 158</u>	Address: _____
<u>Lost Creek, WV 26385</u>	

Notice is hereby given:

Pursuant to West Virginia Code § 22-6A-16(c), notice is hereby given that the undersigned well operator has developed a planned operation on the surface owner's land for the purpose of drilling a horizontal well on the tract of land as follows:

State: <u>West Virginia</u>	UTM NAD 83	Easting: <u>555986.976</u>
County: <u>Harrison</u>		Northing: <u>4333800.330</u>
District: <u>Grant</u>	Public Road Access: <u>McWhorter Road / SR 19</u>	
Quadrangle: <u>Mount Clare 7.5'</u>	Generally used farm name: <u>Schoen</u>	
Watershed: <u>Middle West Fork Creek</u>		

This Notice Shall Include:

Pursuant to West Virginia Code § 22-6A-16(c), this notice shall include: (1) A copy of this code section; (2) The information required to be provided by **W. Va. Code § 22-6A-10(b)** to a surface owner whose land will be used in conjunction with the drilling of a horizontal well; and (3) A proposed surface use and compensation agreement containing an offer of compensation for damages to the surface affected by oil and gas operations to the extent the damages are compensable under article six-b of this chapter. Additional information related to horizontal drilling may be obtained from the Secretary, at the WV Department of Environmental Protection headquarters, located at 601 57th Street, SE, Charleston, WV 25304 (304-926-0450) or by visiting www.dep.wv.gov/oil-and-gas/pages/default.aspx.

Well Operator: HG Energy II Appalachia, LLC

Telephone: 304-420-1119

Email: dwhite@hgenergyllc.com

Address: 5260 Dupont Road

Parkersburg, WV 26101

Facsimile: 304-863-3172

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MAY 26 2021
WV Department of
Environmental Protection

Oil and Gas Privacy Notice:

The Office of Oil and Gas processes your personal information, such as name, address and telephone number, as 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 or your personal information, please contact DEP's Chief Privacy Officer at depprivacyofficer@wv.gov.



WEST VIRGINIA DEPARTMENT OF TRANSPORTATION

Division of Highways

1900 Kanawha Boulevard East • Building Five • Room 110
Charleston, West Virginia 25305-0430 • (304) 558-3505

Byrd E. White, III
Secretary of Transportation/
Commissioner of Highways

September 3, 2020

Jimmy Wriston, P. E.
Deputy Secretary/
Deputy Commissioner

James A. Martin, Chief
Office of Oil and Gas
Department of Environmental Protection
601 57th Street, SE
Charleston, WV 25304

Subject: DOH Permit for the Schoen 1205 Pad, Harrison County
Schoen S-10H Well Site

Dear Mr. Martin,

This well site will be accessed from a DOH permit #04-2020-0615 which has been issued to HG Energy LLC for access to the State Road for a well site located off Harrison County Route 25 SLS.

This operator is in compliance with §22-6A-20 of the WV Code. Operator has signed a STATEWIDE OIL AND GAS ROAD MAINTENANCE BONDING AGREEMENT and provided the required Bond. This operator is currently in compliance with the DOH OIL AND GAS POLICY dated October 1, 2018.

Very Truly Yours,

Gary K. Clayton, P.E.
Regional Maintenance Engineer
Central Office O&G Coordinator

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Office of Oil and Gas

MAY 26 2021

WV Department of
Environmental Protection

Cc: Jerod Duellley
HG Energy LLC
CH, OM, D-4
File

4703306010

HG Energy II Appalachia, LLC
List of Frac Additives by Chemical Name and CAS #
Schoen 1205 Well Pad (N-1H to S-10H)

Chemical Name	CAS #	Multiple CAS #'s
Pro Shale Slik 405	Mixture	68551-12-2
		7647-14-5
		12125-02-9
		64742-47-8
Pro Hib II	Mixture	68412-54-4
		68607-28-3
		107-21-1
		111-76-2
		67-56-1
		107-19-7
Silica Sand and Ground Sand	Mixture	14808-60-7
		1344-28-1
		1309-37-1
		13463-67-7
Hydrochloric Acid 22 DEG BE	7647-01-0	
PROGEL - 4.5	64742-96-7	
BIO CLEAR 2000	Mixture	25322-68-3
		10222-01-2
SCALE CLEAR SI 112	107-21-1	
PROBREAK 4	Mixture	57-50-1
		107-21-1
Sulfamic Acid	5329-14-6	
PRO - Flow - 102-N	Mixture	67-63-0
		68439-45-2
		2687-96-9
PROGEL - 4	9000-30-0	

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MAY 26 2021

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Environmental Protection

07/02/2021

4703306010

HG Energy II Appalachia, LLC
List of Frac Additives by Chemical Name and CAS #
Schoen 1205 Well Pad (N-1H to S-10H)

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		1344-28-1
		1309-37-1
		13463-67-7
Hydrochloric Acid 22 DEG BE	7647-01-0	
PROGEL - 4.5	64742-96-7	
BIO CLEAR 2000	Mixture	25322-68-3
		10222-01-2
SCALE CLEAR SI 112	107-21-1	
PROBREAK 4	Mixture	57-50-1
		107-21-1
Sulfamic Acid	5329-14-6	
PRO - Flow - 102-N	Mixture	67-63-0
		68439-45-2
		2687-96-9
PROGEL - 4	9000-30-0	

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Office of Oil and Gas

MAY 26 2021

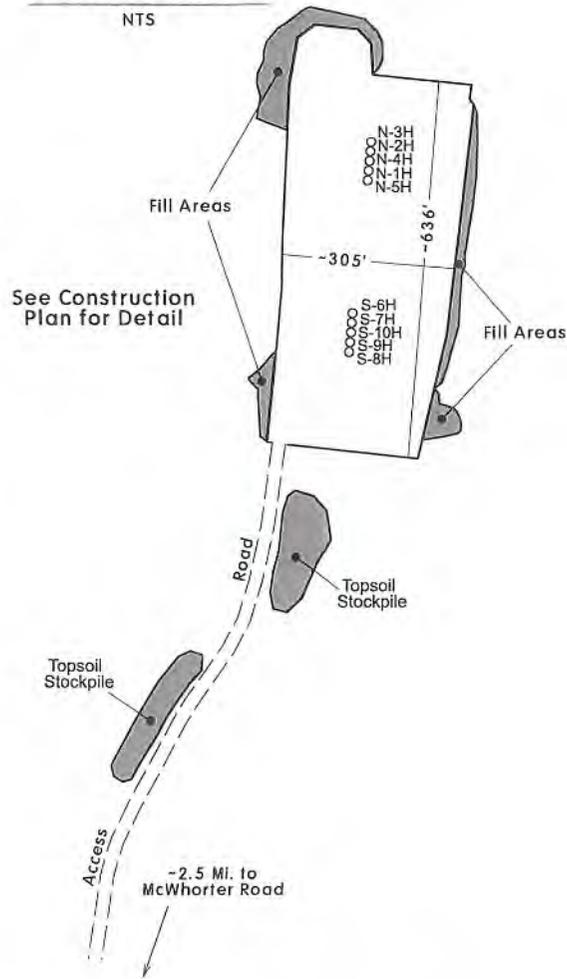
WV Department of
Environmental Protection

07/02/2021

Reclamation Plan For: SCHOEN 1205 PAD

PAD DETAIL

NTS



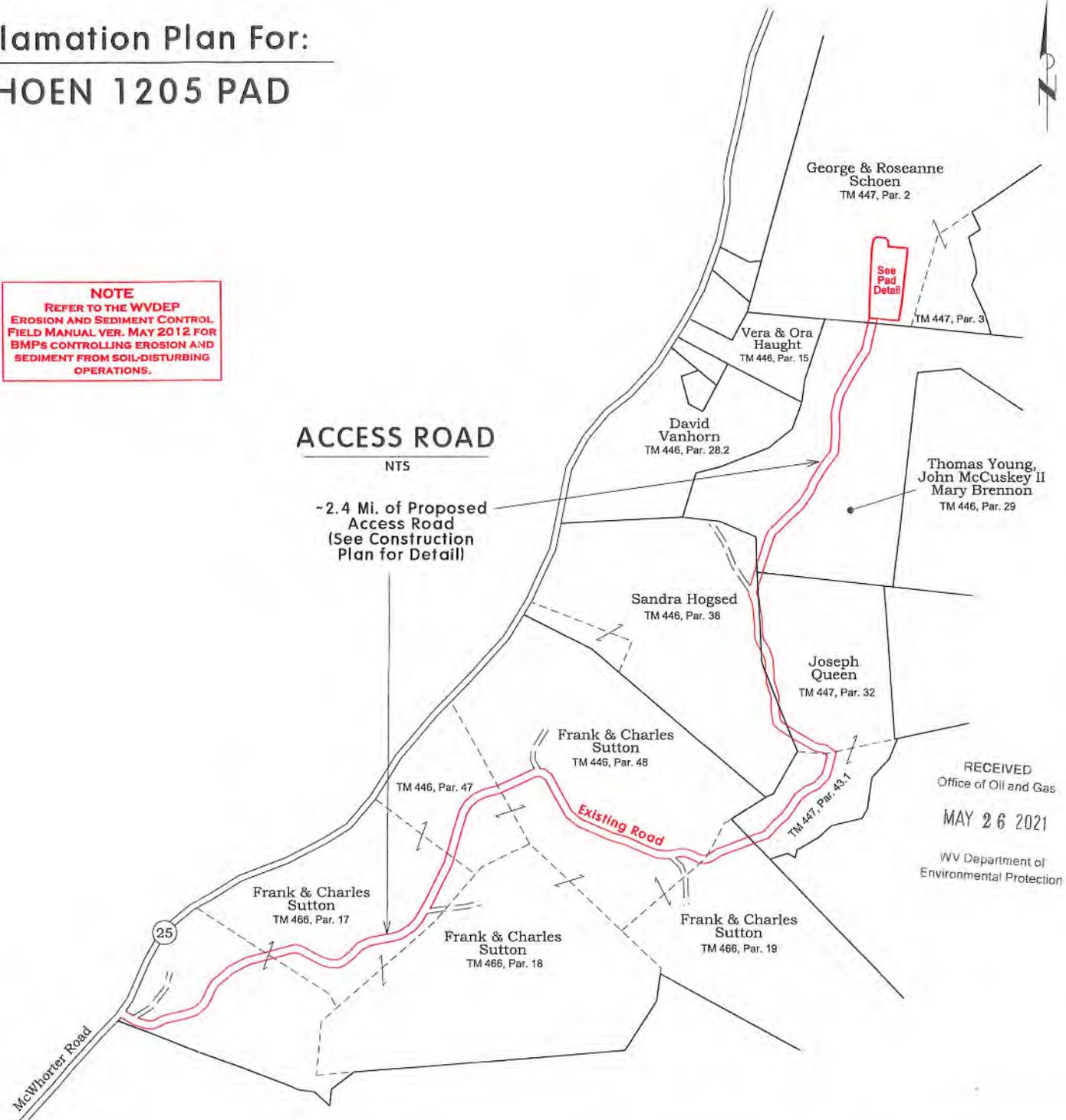
See Construction Plan for Detail

NOTE
REFER TO THE WVDEP
EROSION AND SEDIMENT CONTROL
FIELD MANUAL VER. MAY 2012 FOR
BMPs CONTROLLING EROSION AND
SEDIMENT FROM SOIL-DISTURBING
OPERATIONS.

ACCESS ROAD

NTS

~2.4 Mi. of Proposed
Access Road
(See Construction
Plan for Detail)



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Office of Oil and Gas
MAY 26 2021
WV Department of
Environmental Protection

Notes:

- REQUESTED PERMIT IS FOR DRILLING NEW HORIZONTAL WELLS.
- LOCATION AND ACCESS ROADS WILL BE CONSTRUCTED AS SHOWN ON THE ENGINEERED DRAWINGS WHICH ACCOMPANY THIS PERMIT APPLICATION. REFERENCE IS HEREBY MADE TO THOSE PLANS FOR MORE DETAIL ON E&S MEASURES TO BE TAKEN TO ENSURE COMPLIANCE WITH WVDEP RECLAMATION STANDARDS.
- ALL DISTURBED AREAS WILL BE RE-VEGETATED AS OUTLINED ON FORM WW-9.
- MAINTAIN SEDIMENT BARRIERS AND DRAINAGE STRUCTURES.
- NO DRILL PIT WILL BE CONSTRUCTED AND A CLOSED LOOP SYSTEM WILL BE UTILIZED TO HANDLE DRILL CUTTINGS.
- DRAWING NOT TO SCALE.

CONSTRUCTION IMPROVEMENT PLANS WITH EROSION AND SEDIMENT CONTROLS HG 1205 WELL PAD

SHT. NO.	SHEET TITLE
1	TITLE SHEET
2A-2K	SITE DEVELOPMENT PLANS
3	WELL PAD SECTIONS
4A-4D	ACCESS ROAD SECTIONS
5A-5F	CONSTRUCTION NOTES & DETAILS
6A-6J	RESTORATION PLAN
7A-7C	PROPERTY MAP

GRANT DISTRICT HARRISON COUNTY WEST VIRGINIA

CONSTRUCTION SEQUENCE

- Prior to commencement of any earth disturbance activity including clearing and grubbing, the registrant shall call West Virginia 811 by dialing 811 or 1-800-245-4848 to identify all utility lines. The registrant also must clearly delineate sensitive areas, riparian forest buffer boundaries, the limits of clearing, and trees that are to be conserved within the project site, and shall install appropriate barriers where equipment may not be parked, staged, operated or located for any purpose.
- Site access - This is the first land-disturbance activity to take place at the site and should provide BMPs to minimize accelerated erosion and sedimentation from the following areas: entrance to the site, construction routes, and areas designated for equipment or other use at the site including parking, stockpiles.
- Sediment Barriers - Install perimeter BMPs after the construction site is accessed, keeping associated clearing and grubbing limited to only that amount required for installing perimeter BMPs.
- Land Clearing and Grading - Implement clearing and grading only after all downslope E&S BMPs have been constructed and stabilized.
- Surface Stabilization - Apply temporary or permanent stabilization measures immediately to any disturbed areas where work has reached final grade, has been delayed or otherwise temporarily suspended.
- Construction of Buildings, Utilities, and Paving - During construction, install and maintain any additional erosion and sediment control BMPs, and implement any structural post construction stormwater BMPs that may be required.
- Upon completion of pad grading, compact the pad to grade and begin placement of pad soil cement.
- Final Stabilization, Topsoiling, Trees and Shrubs - After construction is completed, install stabilization BMPs including: permanent seeding, mulching and riprap, and complete implementation of stormwater BMPs in this last construction phase. Stabilize all open areas, including borrow and spoil areas, and remove all temporary BMPs and stabilize any disturbances associated with the removal of the BMP.



PREPARED FOR
HG ENERGY II APPALACHIA, LLC

5260 DUPONT ROAD
PARKERSBURG, WEST VIRGINIA 26101
(304) 420-1100

PREPARED BY
PENN ENVIRONMENTAL & REMEDIATION, INC.

111 RYAN COURT
PITTSBURGH, PA 15205
(412) 722-1222

Disturbance Area (Square Feet)	Disturbance Area (Acres)	Topsoil Volume (Cubic Yards)	Topsoil Volume (Cubic Feet)
1205 Well Pad	1.660	22,470	282
1205 Well Pad Access Road	12,710	13,250	174
1205 Well Pad Staging Area	240	250	3
TOTAL	14,610	36,000	459
Est. Silt Factor	(20%)	7200	92
Total Silt Load		1,500	19
Required Topsoil (Area of Disturbance)		14,610	188
Topsoil Factor	(20%)	2,922	37
Est. Topsoil Storage Volume (Cubic Yards)		1,500	19
Minimum Total Storage Capacity Required (Cubic Yards)		1,500	19

NOTE:
1. Material values for all good earthwork quantities (CY)
2. Values are based on 20% silt factor used
3. Values are based on 20% silt factor used
4. Values are based on 20% silt factor used

Disturbance Area (Square Feet)	Disturbance Area (Acres)	Topsoil Volume (Cubic Yards)	Topsoil Volume (Cubic Feet)
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WELL #	NAT. LAT.	LONG.
N-28	N 30.1534688	W 80.3518792
N-29	N 30.1524277	W 80.3518792
N-46	N 30.1512817	W 80.3518818
N-11	N 30.1524017	W 80.3518818
N-58	N 30.1522917	W 80.3518848
S-84	N 30.1516447	W 80.3520485
S-74	N 30.1516039	W 80.3520484
S-68	N 30.1515935	W 80.3520523
S-91	N 30.1515322	W 80.3520690
S-81	N 30.1514813	W 80.3520758

WELL ELEVATIONS: 1467.25
13MCS-17P

	LATITUDE	LONGITUDE
1205 WELL PAD ACCESS ROAD ENTRANCE	N 30.1540433°	W 80.3760696°

RECORD OWNER	RECORD LOT #	RECORD AREA (F LOT)	AREA WITH IN LOT
INTERSTATE 79 RIGHT OF WAY	N/A	N/A	0.704
FRANKLIN L. SUTTON	17-12-0466-0074-0022	36.4314	0.498
CHARLES R. SUTTON	17-12-0466-0075-0000	11.3448	0.532
FRANKLIN L. SUTTON	17-12-0466-0076-0000	22.1733	1.391
CHARLES R. SUTTON	17-12-0466-0077-0000	37.5168	3.008
FRANKLIN L. SUTTON	17-12-0446-0047-0000	25.9588	1.359
CHARLES R. SUTTON	17-12-0446-0048-0000	26.5040	2.008
CHARLES W. SUTTON	17-12-0466-0019-0000	62.7575	6.604
JOSEPH C. QUINN	17-12-0447-0043-0007	16.3326	0.443
JOSEPH C. QUINN	17-12-0447-0022-0006	35.5669	2.162
THOMAS K. YOUNG	17-12-0446-0028-0000	73.2754	6.570
GEORGE M. & ROSANNE SCHENK	17-12-0447-0002-0000	71.2561	7.792
TOTAL LIMIT OF DISTURBANCE			29.873 AC

APPROVED
WVDEP OOG
12/1/2020

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NO.	DATE	DESCRIPTION
1	06/17/2020	QUANTITY UPDATE AND CHANNEL MODIFICATIONS
2	08/27/2020	CLIENT REVISIONS
3	09/16/2020	REVISED PER WDEP COMMENTS
4	10/29/2020	REVISED PER CLIENT COMMENTS
5	11/17/2020	CLIENT WELL REDRAWING
6	11/20/2020	REVISED PER WDEP COMMENTS



TITLE SHEET
HG 1205 PAD
GRANT DISTRICT
HARRISON COUNTY, WEST VIRGINIA

PREPARED FOR
HG ENERGY II APPALACHIA, LLC
PARKERSBURG, WEST VIRGINIA

WEST VIRGINIA **CALL BEFORE YOU DIG!**
Dial 811 or 800.245.4848
West Virginia's One-Call Center

APPROVED: MFP 03/27/2020
CHECKED: CAC 03/28/2020
DRAWN: MPR 03/24/2020
PROJECT NO.: 4000-PAD07916
DRAWING NUMBER: PAD07916-001
SHEET 1

Penn E&R
Environmental & Remediation, Inc.
111 RYAN COURT, PITTSBURGH, PA 15205
412-722-1222

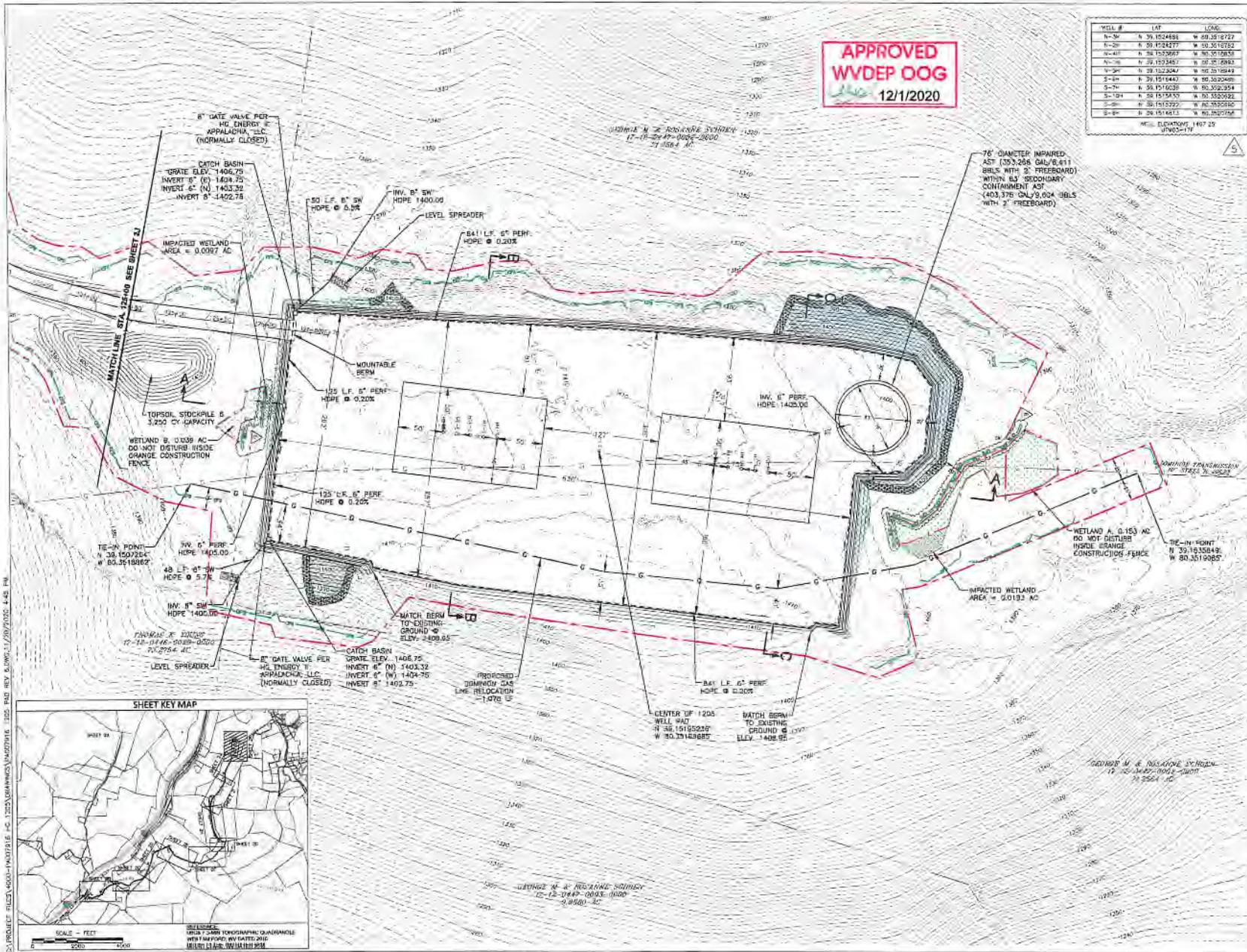
APPROVED
WV DEP OOG
12/1/2020

WELL #	LAT	LONG
N-34	N 30.1524486	W 80.3512727
N-28	N 30.1523277	W 80.3512523
N-41	N 30.1523067	W 80.3512500
N-76	N 30.1523467	W 80.3512693
N-24	N 30.1523244	W 80.3512643
S-11	N 30.1514463	W 80.3520485
S-74	N 30.1516038	W 80.3520354
S-101	N 30.1515950	W 80.3520462
S-8	N 30.1515223	W 80.3520267
S-84	N 30.1514613	W 80.3520156

WELL ELEVATIONS: 1407.25
1406.55-1417

LEGEND

- 1. PROPOSED 12" WATER MAIN
- 2. PROPOSED 6" WATER MAIN
- 3. PROPOSED ACCESS ROAD/PAVING DRIVEWAY
- 4. PROPOSED CONCRETE FLEX LOCK 48" DIAMETER UTILITY HOLES
- 5. PROPOSED 6" DIAMETER CONCRETE FLEX LOCK 48" DIAMETER UTILITY HOLES
- 6. PROPOSED 8" DIAMETER CONCRETE FLEX LOCK 48" DIAMETER UTILITY HOLES
- 7. PROPOSED 10" DIAMETER CONCRETE FLEX LOCK 48" DIAMETER UTILITY HOLES
- 8. PROPOSED 12" DIAMETER CONCRETE FLEX LOCK 48" DIAMETER UTILITY HOLES
- 9. PROPOSED 14" DIAMETER CONCRETE FLEX LOCK 48" DIAMETER UTILITY HOLES
- 10. PROPOSED 16" DIAMETER CONCRETE FLEX LOCK 48" DIAMETER UTILITY HOLES
- 11. PROPOSED 18" DIAMETER CONCRETE FLEX LOCK 48" DIAMETER UTILITY HOLES
- 12. PROPOSED 20" DIAMETER CONCRETE FLEX LOCK 48" DIAMETER UTILITY HOLES
- 13. PROPOSED 22" DIAMETER CONCRETE FLEX LOCK 48" DIAMETER UTILITY HOLES
- 14. PROPOSED 24" DIAMETER CONCRETE FLEX LOCK 48" DIAMETER UTILITY HOLES
- 15. PROPOSED 26" DIAMETER CONCRETE FLEX LOCK 48" DIAMETER UTILITY HOLES
- 16. PROPOSED 28" DIAMETER CONCRETE FLEX LOCK 48" DIAMETER UTILITY HOLES
- 17. PROPOSED 30" DIAMETER CONCRETE FLEX LOCK 48" DIAMETER UTILITY HOLES
- 18. PROPOSED 32" DIAMETER CONCRETE FLEX LOCK 48" DIAMETER UTILITY HOLES
- 19. PROPOSED 34" DIAMETER CONCRETE FLEX LOCK 48" DIAMETER UTILITY HOLES
- 20. PROPOSED 36" DIAMETER CONCRETE FLEX LOCK 48" DIAMETER UTILITY HOLES
- 21. PROPOSED 38" DIAMETER CONCRETE FLEX LOCK 48" DIAMETER UTILITY HOLES
- 22. PROPOSED 40" DIAMETER CONCRETE FLEX LOCK 48" DIAMETER UTILITY HOLES
- 23. PROPOSED 42" DIAMETER CONCRETE FLEX LOCK 48" DIAMETER UTILITY HOLES
- 24. PROPOSED 44" DIAMETER CONCRETE FLEX LOCK 48" DIAMETER UTILITY HOLES
- 25. PROPOSED 46" DIAMETER CONCRETE FLEX LOCK 48" DIAMETER UTILITY HOLES
- 26. PROPOSED 48" DIAMETER CONCRETE FLEX LOCK 48" DIAMETER UTILITY HOLES
- 27. PROPOSED 50" DIAMETER CONCRETE FLEX LOCK 48" DIAMETER UTILITY HOLES
- 28. PROPOSED 52" DIAMETER CONCRETE FLEX LOCK 48" DIAMETER UTILITY HOLES
- 29. PROPOSED 54" DIAMETER CONCRETE FLEX LOCK 48" DIAMETER UTILITY HOLES
- 30. PROPOSED 56" DIAMETER CONCRETE FLEX LOCK 48" DIAMETER UTILITY HOLES
- 31. PROPOSED 58" DIAMETER CONCRETE FLEX LOCK 48" DIAMETER UTILITY HOLES
- 32. PROPOSED 60" DIAMETER CONCRETE FLEX LOCK 48" DIAMETER UTILITY HOLES
- 33. PROPOSED 62" DIAMETER CONCRETE FLEX LOCK 48" DIAMETER UTILITY HOLES
- 34. PROPOSED 64" DIAMETER CONCRETE FLEX LOCK 48" DIAMETER UTILITY HOLES
- 35. PROPOSED 66" DIAMETER CONCRETE FLEX LOCK 48" DIAMETER UTILITY HOLES
- 36. PROPOSED 68" DIAMETER CONCRETE FLEX LOCK 48" DIAMETER UTILITY HOLES
- 37. PROPOSED 70" DIAMETER CONCRETE FLEX LOCK 48" DIAMETER UTILITY HOLES
- 38. PROPOSED 72" DIAMETER CONCRETE FLEX LOCK 48" DIAMETER UTILITY HOLES
- 39. PROPOSED 74" DIAMETER CONCRETE FLEX LOCK 48" DIAMETER UTILITY HOLES
- 40. PROPOSED 76" DIAMETER CONCRETE FLEX LOCK 48" DIAMETER UTILITY HOLES
- 41. PROPOSED 78" DIAMETER CONCRETE FLEX LOCK 48" DIAMETER UTILITY HOLES
- 42. PROPOSED 80" DIAMETER CONCRETE FLEX LOCK 48" DIAMETER UTILITY HOLES
- 43. PROPOSED 82" DIAMETER CONCRETE FLEX LOCK 48" DIAMETER UTILITY HOLES
- 44. PROPOSED 84" DIAMETER CONCRETE FLEX LOCK 48" DIAMETER UTILITY HOLES
- 45. PROPOSED 86" DIAMETER CONCRETE FLEX LOCK 48" DIAMETER UTILITY HOLES
- 46. PROPOSED 88" DIAMETER CONCRETE FLEX LOCK 48" DIAMETER UTILITY HOLES
- 47. PROPOSED 90" DIAMETER CONCRETE FLEX LOCK 48" DIAMETER UTILITY HOLES
- 48. PROPOSED 92" DIAMETER CONCRETE FLEX LOCK 48" DIAMETER UTILITY HOLES
- 49. PROPOSED 94" DIAMETER CONCRETE FLEX LOCK 48" DIAMETER UTILITY HOLES
- 50. PROPOSED 96" DIAMETER CONCRETE FLEX LOCK 48" DIAMETER UTILITY HOLES
- 51. PROPOSED 98" DIAMETER CONCRETE FLEX LOCK 48" DIAMETER UTILITY HOLES
- 52. PROPOSED 100" DIAMETER CONCRETE FLEX LOCK 48" DIAMETER UTILITY HOLES



- WV DEP REVIEW NOTES**
1. ALL PROPOSED CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE PROPOSED DEVELOPMENT PLAN.
 2. THE DEVELOPER SHALL MAINTAIN THE PROTECTION BARRIERS AT ALL TIMES.
 3. THE DEVELOPER SHALL MAINTAIN THE PROTECTION BARRIERS AT ALL TIMES.
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REVISIONS

NO.	DATE	DESCRIPTION
1	08/17/2020	QUANTITY UPDATE AND CHANGE NOTIFICATIONS
2	08/27/2020	CLIENT REVISIONS
3	08/18/2020	REVISIONS PER WRITER COMMENTS
4	10/29/2020	REVISIONS PER CLIENT COMMENTS
5	11/17/2020	CLIENT WALK REVISIONS
6	11/25/2020	REVISIONS PER WRITER COMMENTS

SCALE - FEET

0 50 100 150

SITE DEVELOPMENT PLAN WITH EROSION AND SEDIMENTATION CONTROLS
HG 1205 PAD
GRANT DISTRICT
HARRISON COUNTY, WEST VIRGINIA

PREPARED FOR:
HG ENERGY II APPALACHIA, LLC
PARKERSBURG, WEST VIRGINIA

APPROVED: DATE: 03/27/2020
CHECKED: DATE: 03/25/2020
DRAWN: DATE: 03/24/2020
PROJECT NO.: 400-2019-00178

Penn E&R
Environmental & Restoration, Inc.

DRAWING NUMBER: PA007916-001
SHEET: 24

111 PARK DRIVE, HARRISONBURG, VA 22801
414-722-1228



DATE PLOTTED: 03/27/2020 10:05:44 AM
SCALE: 1" = 100'
DRAWN BY: J. B. BROWN
CHECKED BY: J. B. BROWN
DATE: 03/25/2020
PROJECT NO.: 400-2019-00178

CONSTRUCTION IMPROVEMENT PLANS WITH EROSION AND SEDIMENT CONTROLS HG 1205 WELL PAD

SHT. NO.	SHEET TITLE
1	TITLE SHEET
2A-2K	SITE DEVELOPMENT PLANS
3	WELL PAD SECTIONS
4A-4D	ACCESS ROAD SECTIONS
5A-5F	CONSTRUCTION NOTES & DETAILS
6A-6J	RESTORATION PLAN
7A-7C	PROPERTY MAP

GRANT DISTRICT
HARRISON COUNTY
WEST VIRGINIA

RECEIVED
Office of Oil and Gas

MAY 26 2021

WV Department of
Environmental Protection

Estimate/Cross Material Balance (CY)	Excavate	Fill	Stockpile
Final Development - Gravel Option			
1205 Well Pad	11,826	10,719	260
1205 Well Pad Access Road	2,710	12,238	474
1205 Well Pad Staging Area	340	330	19
Totals	24,710	23,278	1,434
Est. Spoil Factor		266	
Total Spoil Balance		1,720	
Stripped Topsoil (Limits of Earthwork)		9,130	
Est. Spoil Factor		1,839	
Est. Topsoil Stockpile Volume (Loose CY)		11,011	
Minimum Total Stockpile Capacity Required (CY)		12,751	

Note:
1. Material balance for est. gross earthwork quantities only.
2. Topsoil est. volume based on 6 inches average depth.
3. Material balance and topsoil quantities based on estimates and may not be representative of actual quantities.
4. Estimates do not reflect contractor pay volumes.

Estimated Gravel Quantities	Est. 1/2" - 1/4" Gravel	Est. 3/8" - 1/2" Gravel	Est. 1/2" - 3/4" Gravel	TOTAL
Estimated Gravel Quantities	1,198	3,560	20,405	25,163
Estimated Pad Access Road # Filter Sock Length (LF)				2,814
Estimated Staging Area Pad # Filter Sock Length (LF)				8,510
Estimated Well Pad # Filter Sock Length (LF)				500
TOTAL Estimated # Composite Filter Sock Length (LF)				11,115
TOTAL Estimated # Triple Stacked Composite Filter Sock Length (LF)				8,375
Estimated Pad Access Road (Limit of Disturbance (Acres))				588
Estimated Staging Area Pad (Limit of Disturbance (Acres))				15,829
Estimated Well Pad (Limit of Disturbance (Acres))				1,091
Estimated 1205 Well Pad (Limit of Disturbance (Acres))				3,729
TOTAL Estimated Limit of Disturbance (Acres)				29,117
Well Pad Peak, Pre-Construction Elevation (Ft)				1415.00
Well Area Surface Elevation (Top of Soil Cement Subbase) (Ft)				1407.25
Well Area Surface Elevation (Ft)				1407.25

WELL #	LAT.	LONG.
N-3H	N 39.1524085	W 80.3518727
N-2H	N 39.1524277	W 80.3518782
N-4H	N 39.1523587	W 80.3518546
N-1H	N 39.1523457	W 80.3518993
N-5H	N 39.1523047	W 80.3518949
S-8H	N 39.1518447	W 80.3520465
S-7H	N 39.1516038	W 80.3520554
S-10H	N 39.1515630	W 80.3520622
S-9H	N 39.1515222	W 80.3520690
S-6H	N 39.1514813	W 80.3520758

WELL ELEVATIONS: 1407.25
UM83-17F

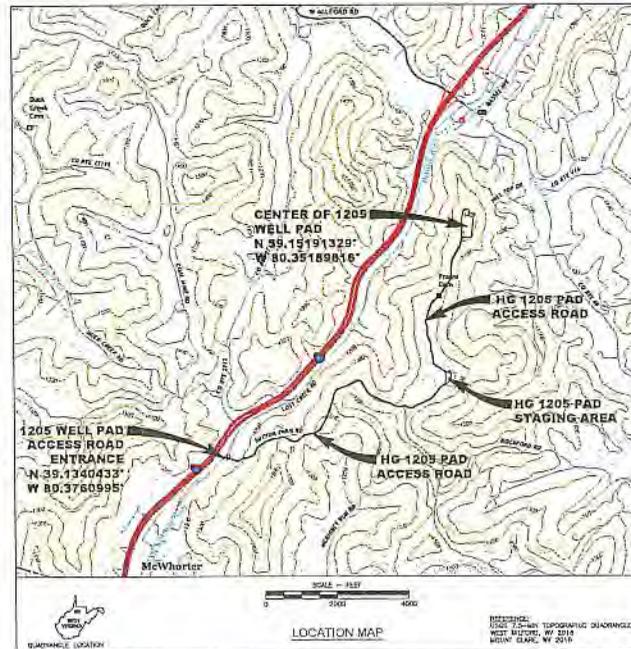
	LATITUDE	LONGITUDE
1205 WELL PAD ACCESS ROAD ENTRANCE	N 39.1340433°	W 80.3760985°

RECORD OWNER	RECORD LOT #	RECORD AREA OF LOT	AREA WITHIN LOD
INTERSTATE 79 RIGHT OF WAY	N/A	N/A	0.704
FRANKLIN L. SUTTON	17-12-0466-0014-0002	39.4314	0.498
CHARLES R. SUTTON	17-12-0466-0015-0000	11.3466	0.532
FRANKLIN L. SUTTON	17-12-0466-0016-0000	22.3733	1.391
CHARLES R. SUTTON	17-12-0466-0017-0000	37.5166	3.008
FRANKLIN L. SUTTON	17-12-0444-0047-0000	25.9586	1.389
CHARLES R. SUTTON	17-12-0444-0048-0000	86.5040	3.008
CHARLES R. SUTTON	17-12-0444-0019-0000	62.7579	0.604
JOSEPH C. QUEEN	17-12-0447-0043-0001	16.9338	0.445
JOSEPH C. QUEEN	17-12-0447-0032-0000	25.5669	2.182
THOMAS K. YOUNG	17-12-0446-0029-0000	73.2764	6.570
GEORGE M. & ROSANNE SCHOEN	17-12-0447-0002-0000	71.2584	7.792
TOTAL LIMIT OF DISTURBANCE			29.813 AC

SDW
5/13/2021

CONSTRUCTION SEQUENCE

- Prior to commencement of any earth disturbance activity including clearing and grubbing, the registrant shall call West Virginia 811 by dialing 811 or 1-800-245-4848 to identify all utility lines. The registrant also must clearly delineate sensitive areas, riparian forest buffer boundaries, the limits of clearing, and trees that are to be conserved within the project site, and shall install appropriate barriers where equipment may not be parked, staged, operated or located for any purpose.
- Site access - This is the first land-disturbance activity to take place at the site and should provide BMPs to minimize accelerated erosion and sedimentation from the following areas: entrance to the site, construction routes, and areas designated for equipment or other use at the site including parking, stockpiles.
- Sediment Barriers - Install perimeter BMPs after the construction site is accessed, keeping associated clearing and grubbing limited to only that amount required for installing perimeter BMPs.
- Land Clearing and Grading - Implement clearing and grading only after all downslope E&S BMPs have been constructed and stabilized.
- Surface Stabilization - Apply temporary or permanent stabilization measures immediately to any disturbed areas where work has reached final grade, has been delayed or otherwise temporarily suspended.
- Construction of Buildings, Utilities, and Paving - During construction, install and maintain any additional erosion and sediment control BMPs, and implement any structural post construction stormwater BMPs that may be required.
- Upon completion of pad grading, compact the pad to grade and begin placement of pad soil cement.
- Final Stabilization, Topsoiling, Trees and Shrubs - After construction is completed, install stabilization BMPs including: permanent seeding, mulching and riprap, and complete implementation of stormwater BMPs in this last construction phase. Stabilize all open areas, including borrow and spoil areas, and remove all temporary BMPs and stabilize any disturbances associated with the removal of the BMP.



PREPARED FOR
HG ENERGY II APPALACHIA, LLC
5260 DUPONT ROAD
PARKERSBURG, WEST VIRGINIA 26101
(304) 420-1100

PREPARED BY
PENN ENVIRONMENTAL & REMEDIATION, INC.
111 RYAN COURT
PITTSBURGH, PA 15205
(412) 722-1222

APPROVED
WVDEP OOG
12/1/2020



TITLE SHEET
HG 1205 PAD
GRANT DISTRICT
HARRISON COUNTY, WEST VIRGINIA
PREPARED FOR
HG ENERGY II APPALACHIA, LLC
PARKERSBURG, WEST VIRGINIA

WEST VIRGINIA

CALL BEFORE
YOU DIG!

Dial 811 or
800.245.4848
Plus ability of West Virginia

1. SERVICE UTILITY LINES ARE NOT SHOWN ON THE PLAN. THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING, MARKING, AND REPLACING AS NECESSARY TO ENSURE CONTINUAL SERVICE.

APPROVED: MEP 03/31/2022
CHECKED: CMC 03/30/2022
DRAWN: MFR 03/24/2022
PROJECT No.: 4000-PAD07916
DRAWING NUMBER:
PAD07916-001
SHEET 1

Penn E&R
Environmental & Remediation, Inc.
111 RYAN COURT, PITTSBURGH, PA 15205
412-722-1222

APPROVED WVDEP OOG
12/11/2020

WELL #	LAT.	LONG.
N-01	N 39.1524668	W 80.3511727
N-01	N 39.1524777	W 80.3511787
N-04	N 39.1528867	W 80.3519855
N-11	N 39.1523457	W 80.3519963
N-21	N 39.1533947	W 80.3518245
S-08	N 39.1510447	W 80.3528488
S-31	N 39.1515025	W 80.3520554
S-10B	N 39.1515030	W 80.3520502
S-31T	N 39.1515282	W 80.3520502
S-31	N 39.1514811	W 80.3520706

WELL ELEVATIONS 1497.25
1498.5-177

LEGEND

- PROPOSED ROCK CHECK DAM
- PROPOSED ROBERT FERRY
- UNPAVED ACCESS ROAD/PAV DAMAGED
- UNPAVED DRIVEWAY FUTURE SIDE OF UNPAVED DRIVEWAY (EXIST)
- PROPOSED STAIRWAY DOWN TO HIGH SOAK 5'
- STAIRWAY UNDER CONSTRUCTION FENCE
- APPROXIMATE LIMITS OF DISTURBANCE
- APPROXIMATE C2/PTL LINE
- APPROXIMATE LIMITS OF LIGHT IMPACT
- APPROXIMATE PROPERTY LINE
- EXISTING WALK (FOOTCUT)
- EXISTING INTERMEDIATE DRIVEWAY
- PROPOSED SURFACE ROADS CONTROL
- PROPOSED IMPROVED INTERMEDIATE DRIVEWAY
- EXISTING GRAVEL ROAD
- EXISTING WYOMING (SPUR) LANE
- EXISTING DIRT LANE
- PROPOSED ONE LANE (WYOMING)

SCALE (SEE SHEET 3)

EXISTING WETLAND

PROPOSED (SEE SHEET 3) (SEE FULL SHEET DATA)

(NO WETLAND/EROSION CONTROL BLANKET)

- WEST VIRGINIA CONSTRUCTION NOTES:**
- All proposed structures shown on plan sheets reflect proposed building footprints.
 - Reference this sheet with all construction notes and details.
 - CONTRACTOR SHALL CONTACT WEST VIRGINIA UTILITIES PROTECTION SERVICE (WVU) IN ADVANCE OF ANY WORK TO DETERMINE EXISTING UTILITIES TO BE DELETED AND LOCATED BY CONTRACTOR OR PROVIDED BY CONTRACTOR TO BE DELETED BY WORKING WORK.
 - Site shall be constructed in accordance with all existing floodplain regulations. CONTRACTOR RESPONSIBLE TO OBTAIN ALL OTHER NECESSARY PERMITS/AGREEMENTS REQUIRED TO CONDUCT THIS PROJECT AND TO OBTAIN ALL NECESSARY STATE AND LOCAL PERMITS.
 - NO CONSTRUCTION OR SOIL EXPOSURE SHALL BE PERMITTED FOR THIS SITE UNLESS A PERMITS OFFICER HAS REVIEWED THE PLAN SHEETS AND ISSUED A PERMITS OFFICER'S LETTER OF APPROVAL FOR SOIL EXPOSURE OR PARTIAL EXCAVATION.
 - Disturbance and sedimentation control shall be installed prior to any construction. CONTRACTOR SHALL FOLLOW WEST VIRGINIA CONSTRUCTION AND SEDIMENTATION CONTROL MANUAL, 2010, 10/1/2010.
 - CLAY AND OTHER SOILS SHALL BE PROTECTED AND STORED AWAY FROM THE SITE OF DISTURBANCE TO A LOCATION APPROVED BY THE ENGINEER IN APPROVAL.
 - NO EXCAVATED FILL SHALL BE PLACED ON FRESH WETLAND. FILL MATERIAL SHALL BE PLACED ON DRAINAGE LINES, TRENCH SOILS OR OTHER NONWETLAND MATERIALS.
 - EXCAVATED FILL SHALL BE CONFINED TO A MAXIMUM DEPTH OF 30 INCHES UNLESS NOTED OTHERWISE.
 - ALL MATERIAL SHALL BE PLACED IN LOTS ON LOTS OVER THE LENGTH OF THE FILL. TOP THEREOF OF THE FILL SHALL BE AS HIGH AS THE SURFACE WATERS EXISTING WETLAND. FILL SHALL BE PLACED IN LOTS. THE FILL SHALL NOT BE GROWN IN ANY MANNER THAN IN PILES. CONTRACTOR SHALL BE ADVISED BY CONSTRUCTION SUPERVISOR OF ANY FILLING OPERATIONS ON MATERIALS WITH CONTAMINATION. SUPERVISOR SHALL NOT EXCEED EXISTING WETLAND. EACH LOT SHALL BE CONFINED TO A MAXIMUM WIDTH OF 10 FEET. FILL SHALL BE PLACED AT A RATE OF 200 TONS PER DAY. NO FILLING SHALL BE PERFORMED AT A RATE OF 2 TONS PER DAY.
 - CONTRACTOR SHALL MAINTAIN ACCESS FROM AN ACCESS ROAD WITH DETAILS PROVIDED. ADDITIONAL ACCESS MATERIALS SHALL BE PROVIDED IN AREA BY EARTH TIER.
 - CONTRACTOR SHALL MAINTAIN MATERIAL HANDLING (EXCISE CUTTING) THROUGH EXISTING DRIVEWAY (EXISTING) WITH HIS EXISTING APPROPRIATE USE PRIOR TO ANY EXCAVATION. CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING EXISTING DRIVEWAY AND MAINTAINING ACCESS FROM THE SITE AND OFF SITE.
 - ALL EXISTING CONTROL MEASURES SHALL REMAIN IN PLACE UNTIL EROSION CONTROL MEASURES AND THE WETLANDS COVERED HAS ACHIEVED A UNIFORM VEGETATION. CONTRACTOR SHALL MAINTAIN A 10% VEGETATION COVER ON ALL EXPOSED AREAS UNTIL VEGETATION IS ACHIEVED.
 - WETLANDS CONSTRUCTION SHALL BE PROVIDED THROUGH SHALLOW TRENCHES. A LINE AND A DISTANCE WITH AREA SHALL BE INSTALLED PRIOR TO EXCAVATION AND WATER PROOF SECONDARY CONSTRUCTION SHALL BE INSTALLED PRIOR TO CONSTRUCTION WITH ANY STRUCTURE.

REVISIONS:

NO.	DATE	DESCRIPTION
1	12/17/2020	QUANTITY TAKEOFF AND CHANGE MODIFICATIONS
2	02/27/2021	CLIENT COMMENTS
3	03/15/2021	REVISED PER WYOMING COMMENTS
4	10/29/2020	REVISED PER CLIENT COMMENTS
5	11/11/2020	CLIENT WELL REVISIONS
6	11/20/2020	REVISED PER WVDEP COMMENTS

SCALE - FEET

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STATE OF WEST VIRGINIA
REGISTERED PROFESSIONAL ENGINEER
20458
DANIEL J. HARRIS
11/11/2010

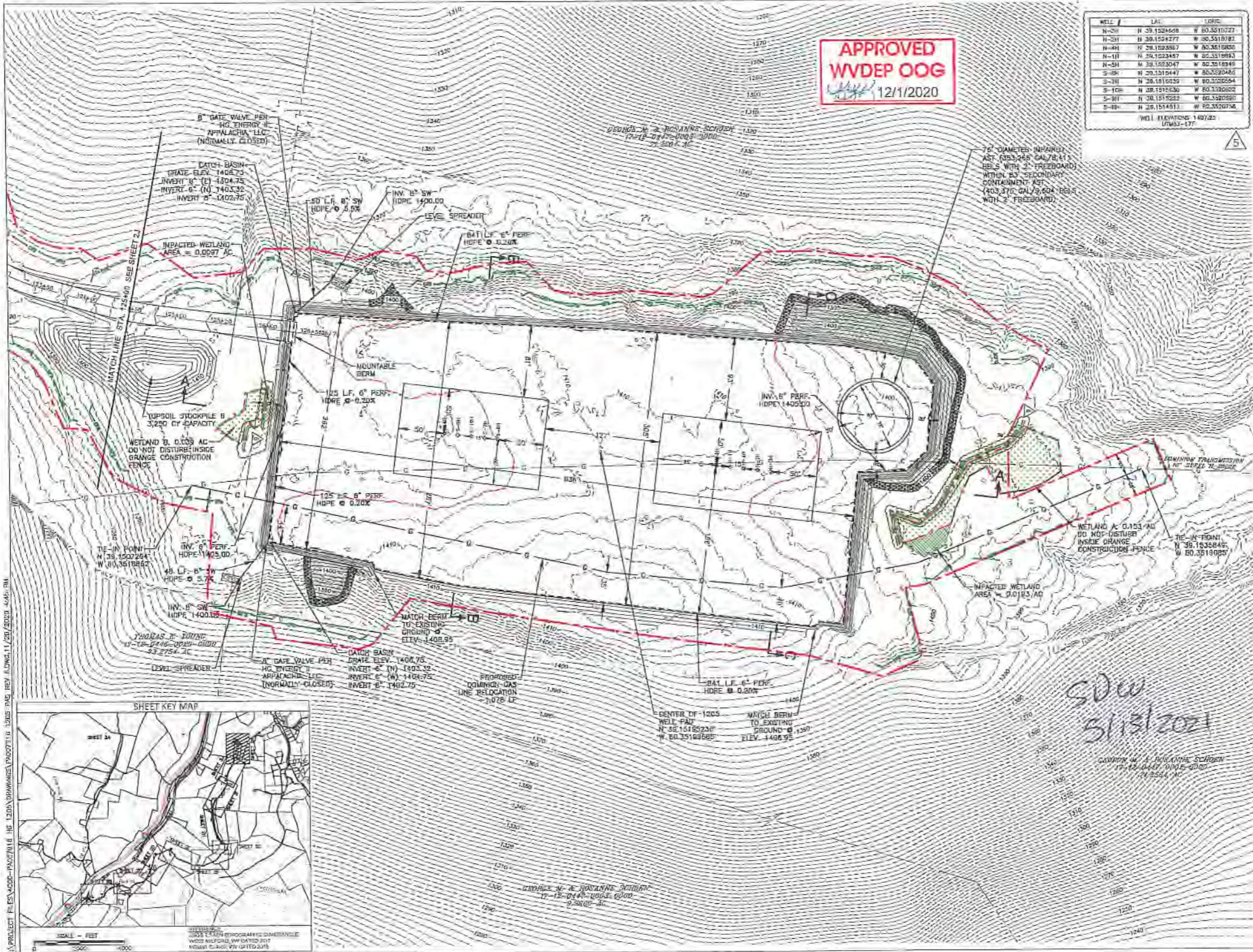
SITE DEVELOPMENT PLAN WITH EROSION AND SEDIMENTATION CONTROLS
HG 1205 PAD
GRANT DISTRICT
HARRISON COUNTY, WEST VIRGINIA

PREPARED FOR:
HG ENERGY II APPALACHIA, LLC
PARKERSBURG, WEST VIRGINIA

APPROVED SEP 03/31/2020
CHECKED CAD 03/30/2020
DRAWN MFR 02/24/2020
PROJECT NO. 1602-140201816

DRAWING NUMBER: PA007916-001
SHEET 2K

Penn E&R
Environmental & Remediation, Inc.
111 IRON COUNTY, BRISTOL, PA 15202
412-723-1322



PROJECT FILES: 1602-140201816 THE 1205 PAD DRAWINGS (PA007916-001) 1205 PAD REV. 05/11/2020 4:46:11 PM