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 west virginia department of environmental protection
 

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

Austin Caperton, Cabinet Secretary  
[www.dep.wv.gov](http://www.dep.wv.gov)

Friday, June 14, 2019  
 WELL WORK PERMIT  
 Horizontal 6A / New Drill

AMERICAN PETROLEUM PARTNERS OPERATING, LLC  
 4600 J. BARRY COURT SUITE 310

CANONSBURG, PA 15317

Re: Permit approval for RIVERRUN-10UH  
 47-051-02180-00-00

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: RIVERRUN-10UH  
 Farm Name: APP MINERALS  
 U.S. WELL NUMBER: 47-051-02180-00-00  
 Horizontal 6A New Drill  
 Date Issued: 6/14/2019

# 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

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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.

## 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](mailto:DEPOOGNotify@wv.gov).



west virginia department of environmental protection

Oil and Gas Conservation Commission  
601 57<sup>th</sup> Street SE, Charleston, WV 25304  
304-926-0499 Ext 1274

Barry K. Lay, Chairman  
dep.wv.gov

May 1, 2019

Department of Environmental Protection  
Office of Oil and Gas  
Charleston, WV 25304

RE: Application for Deep Well Permit – API #47-051-02180

COMPANY: American Petroleum Partners Operating, LLC

FARM: APP Minerals, LLC RiverRun-10UH

COUNTY: Marshall DISTRICT: Webster QUAD: Moundsville

The deep well review of the application for the above company is Approved to drill to the Point Pleasant formation for completion. Pooling Docket No. 275-267

The applicant has complied with the provision of Chapter 22C-9, of the Code of West Virginia, nineteen hundred and thirty-one (1931), as amended, Oil and Gas Conservation Commission as follows:

1. Comments to Notice of Deviation filed? yes
2. Provided a certified copy of duly acknowledged and recorded consent and easement form from all surface owners? Yes
3. Provided a tabulation of all deep wells within one mile of the proposed location, including the API number of all deep wells: 47-051-02090, 47-051-02091, 47-051-02137, 47-051-02136, 47-051-02178, 47-051-02179, 47-051-02134, 47-051-02106, 47-051-02118
4. Provided a plat showing that the proposed location is a distance of 400+ feet from the nearest lease line or unit boundary and showing the following wells drilled to or capable of producing from the objective formation within 3,000 feet of the proposed location.

Sincerely,

Susan Rose  
Administrator



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

1) Well Operator: American Petroleum Partners 494521257 Marshall Webster Moundsville  
Operator ID County District Quadrangle

2) Operator's Well Number: RiverRun-10 UH Well Pad Name: Dire Wolf-River Run

3) Farm Name/Surface Owner: App Minerals, LLC Public Road Access: McCreary's Ridge Road (CR 7)

4) Elevation, current ground: 1247.9' Elevation, proposed post-construction: 1249.00'

5) Well Type (a) Gas  Oil  Underground Storage   
Other   
(b) If Gas Shallow  Deep   
Horizontal

6) Existing Pad: Yes or No No

7) Proposed Target Formation(s), Depth(s), Anticipated Thickness and Expected Pressure(s):  
Point Pleasant Formation 11,395' / 130' thick 10,141 or .89 psi per foot / Utica Formation 11,042 150' thick / 10,000 psi or .89 psi per foot.

8) Proposed Total Vertical Depth: 11,395'

9) Formation at Total Vertical Depth: Point Pleasant

10) Proposed Total Measured Depth: 23,551'

11) Proposed Horizontal Leg Length: 11,632'

12) Approximate Fresh Water Strata Depths: 162', 845'

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

14) Approximate Saltwater Depths: Na

15) Approximate Coal Seam Depths: 455', 655'

16) Approximate Depth to Possible Void (coal mine, karst, other): None anticipated. drilling in pillar - Mine maps attached.

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

(a) If Yes, provide Mine Info: Name: The Ohio County Mine-Murray American Energy and Consolidation Coal Company  
Depth: 455', 655'  
Seam: Pittsburgh #8  
Owner: Murray American Energy & Consolidation Coal Company

WW-6B  
(04/15)

API NO. 47- 051 -  
OPERATOR WELL NO. River Run 10 UH  
Well Pad Name: Dire Wolf-River Run

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	81.3#	60'	60'	CTS
Fresh Water	20"	New	J-55	54.5#	905'	905'	18 0ppg to sur 521 ex w/30% OH excess
Coal	13 3/8"	New	J-55	54.5#	1941'	1941'	18 2ppg to sur 558 ex w/30% OH Excess
Intermediate	9 5/8"	New	HCP-110	40#	9542'	9542'	18 2ppg to sur 628 ex w/30% OH excess
Production	5 1/2"	New	HCP-110	23#	23,551'	23,551'	15.4 0ppg TOC =>207 above 9.625 show
Tubing	2 7/8"	New	J-55	6.5#			
Liners							

*JN 11/13/18*

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"	36"		300		Type 1	Lead yield 2.38 Tail 521 ex Yield 1.18
Fresh Water	20"	24"	.388	2,730	688	Class A	Lead yield 2.38 Tail 558 ex Yield 1.27
Coal	13 3/8"	17.5"	.380	2,730	688	Class A	Lead Yield 2.38 Tail 558 ex Yield 1.27
Intermediate	9 5/8"	12.375"-12.25"	.395	7,870	3,166	Class A	Lead Yield 1.28 Tail 638 ex Yield 1.28
Production	5 1/2"	8.75"	.361	14,360	11,000	Class H	Lead Yield 1.27 Tail 4714 ex Yield 1.27
Tubing	2 7/8"	5.14"	.217	10,570	8,000		
Liners							

**PACKERS**

Kind:				
Sizes:				
Depths Set:				

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WW-6B  
(10/14)

API NO. 47-051 - \_\_\_\_\_  
OPERATOR WELL NO. River Run 10 UH  
Well Pad Name: Dire Wolf-River Run

*JN 11/13/18*

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

Drill the vertical depth to the Point Pleasant at an estimated total vertical depth of approximately 11,395'. Drill the horizontal leg- stimulate and produce the Utica/Point Pleasant. Should we encounter a unanticipated void 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.

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

The stimulation will be in 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. Our maximum pressure is not to exceed 10,000 lbs.

21) Total Area to be disturbed, including roads, stockpile area, pits, etc., (acres): 14.7 acres

22) Area to be disturbed for well pad only, less access road (acres): 12.11 acres

23) Describe centralizer placement for each casing string:

Conductor- No centralizers used. Freshwater/Surface- Bow Spring centralizers every 3 joints to 100' from surface. 1st Intermediate - Bow Spring centralizers every 3 joints to 100' from surface. 2nd Intermediate - Bow Spring centralizers every 3 joints to 100' from surface. Production - Rigid bow springs every third joint from KOP to TOC. Rigid every joint to KOP.

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

Type 1 to Surface. Surface/Freshwater - 15.6 Class A +2% CaCl, 30% OH Excess Yield =1.18. 1st Intermediate - 15.6 ppg Class A +2% CaCl, 0.25 Lost Circ. 30% Yield =1.27. 2nd Intermediate- 2 Stage cement job with 15.4 ppg Class A lead + additives (antisetting, antifoam, fluid loss retarder, salt, viscosifier) & 15.4 Class A tail with additives (antisetting, antifoam, fluid loss retarder, salt, dispersant or 12.0 Class A lead + additives (+/-5% dispersant, 10% light weight additive, 75% fluid loss additive, and 1.15% fluid loss additive, Yield=1.28) 15.4 ppg Class A Tail + additives (+/- fluid loss additive, & .5% light weight additive, Yield 1.28), 0.125#/SK lost circ 30% excess to Surface. Production- 12.5ppg Class H Lead +additives and 14.8 ppg Class H Tail + additives (antifoam, antisealing extender,dispersant) 15%excess TOC>=200' above 9.625" shoe.

25) Proposed borehole conditioning procedures:

Conductor - The hole is drilled w/ air and casing is run on air. Apart from insuring hole is clean via air circulation, there are no other conditioning procedures. Freshwater/Surface- The hole is drilled w/air or Freshwater based mud and casing is run on air. Once casing is at setting depth, fill with KCl water circulate a minimum of one hole volume prior to pumping cement. First Intermediate- Drilled on Air. Once casing is at a setting depth, circulate a minimum of one hole volume prior to pumping cement. Second Intermediate - Drilled on air. Fill with salt saturated water once drilled to TD. Once casing is at setting depth, circulate a minimum of one hole volume prior to pumping cement. Production- drilled on +/- 14.8ppg SOBMM. Once at TD, circulate at max allowable pump rate for at least 6x bottoms up. Once on bottom with casing, circulate minimum of one hole volume prior to pumping cement.

\*Note: Attach additional sheets as needed.

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Allied Material Name CCAC (Class A Common)	Fresh Water Protection String:		Cement Additives		CAS #
	Additive (Material) Type	Base Cement	Additive (Material) Description	Grey powder	
CA-100	Accelerator		White, flake		65997-15-1 10043-52-4 7447-40-7 7732-18-5 7647-14-5

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**DRILLING WELL PLAN**  
RiverRun-10UH  
Utica Horizontal  
Marshall Co, WV

**Horizontal Well Plan with Cemented Long String Completion**

HOLE	RIG	CASING	GEOLOGY	Top TVD	MD	MUD	CEMENT	DIRECTIONAL	LOGS	BITS	COMMENTS		
36"	Conductor Rig	30" 81.3# LS	Conductor	60		AIR	To Surface	N/A	N/A		Stabilize surface fill/soil		
				305									
				505									
24"	Top-Hole	20" 94# J-55 BTC	Pittsburgh Coal	905	905	AIR	52' sx w/ 30% OH excess	20" Air Hammer Tolco at TD		Carbide hammer bit	Protect fresh groundwater		
				1525									
				1592									
17.5"	Top-Hole	13-3/8" 94.5# J-55 BTC	Greenbrier Group	1641	1641	AIR	556' sx w/ 30% OH excess	Center Rock Gyro above Coal, (Mine Approval) Tolco at TD		Hammer bit w/ diamond gage Test casing to 800psi			
				1941	1941								
				6216									
12.375" 12.25"	Horizontal Rig	9-5/8" 43.5# P-110IC BTC	Tully LS	6245									
			Hamilton	6354									
			Cherry Valley	6356									
			Marcellus Shale	6390									
			Onondaga LS	6619									
			Oriskany Sandstone	7203	AIR	15.4ppg to surface	12" Air Hammer Tolco every 400ft						
			Salina Group	7958		936' sx w/ 30% OH excess							
			Vernon Shale	8175									
			Lockport Dolomite	8890									
			Clinton Group	8962									
			Medina Group	9142									
			Queenston Shale	9542									
			Int. Casing	9542									
			Ulica Shale	11212									
			8.5" Curve/Lateral	Horizontal Rig	5-1/2" 23# P110ICY TSH Wedge 563	Point Pleasant Formation	11395			14.8ppg TOC >= 200' Above 9.625 shoe 452' sx w/ 15% OH excess	6.75" PDM & MWD 2.38" ADJ Bend (10" Build DLS)	MWD Surveys Mud Logger - 30 ft samples (Curve) 90 ft samples (Lateral)	PDC 5 - 25 WOB 100 - 120 RPM 450 - 500 GPM
Curve LP													
TARGET													
			Production Casing										

8.5 Hole - Cemented Long String 5-1/2" 23# P110ICY TSH Wedge 563

8.5" Pilot	H2T Rig	Isolation/ Sidetrack Cement Plugs	Trenton Limestone	11595		+/- 14.5 ppg SOB	17.5ppg Class H from TD to 200' above KOP (2) 800' balanced plugs w/ 2.375" luting	8" Air Hammer Tolco every 400ft	OH logs, as directed by APP Operations Dir. Surveys TD to shoe	Hammer bit w/ full face diamond	
Landing Point 11395 TVD 11919 MD			Pilot Hole TD	11632 ft Lateral Length				89.5 Inc 145 Az			Total Depth 11395 TVD 23551 TD

*Handwritten signature and initials*

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15-2-1

06/14/2019

51 02180

15-2-2

15-2-18

150'

15-2-17.4

15-2-15

15-2-17.3

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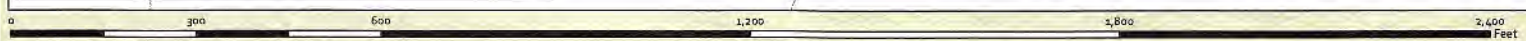
WV Department of  
Environmental Protection

15-2-17.1

**RiverRun10UH**  
**Surface Location Coordinates**

**10UH = -80.626552, 39.953763**

Credit:  
- Mine data courtesy of WV Department of Environmental Protection and Murray Energy Corporation



**RiverRun 10UH - Coal Areas**

Marshall County  
West Virginia

Coordinate System: NAD 1983 UTM Zone 17N  
Projection: Transverse Mercator  
Datum: North American 1983  
Linear Units: Meter

Map Scale Units: 1:3,600  
1 inch = 300 feet

Map Author: JKS  
Map Date: 11/20/2018

- Well SHL
- ➔ Approximate Well to Coal length
- ▨ Coal Pillars





06/14/2019

WW-9  
(4/16)

API Number 47 - 051 - \_\_\_\_\_  
Operator's Well No. River Run 10 UH

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

FLUIDS/ CUTTINGS DISPOSAL & RECLAMATION PLAN

Operator Name American Petroleum Partners Operating, LLC OP Code 494521257

Watershed (HUC 10) Upper Ohio South Quadrangle Moundsville

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: \_\_\_\_\_

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 See attached sheet )
- Reuse (at API Number at next anticipated well )
- Off Site Disposal (Supply form WW-9 for disposal location)
- Other (Explain \_\_\_\_\_)

Will closed loop system be used? If so, describe: Yes

Drilling medium anticipated for this well (vertical and horizontal)? Air, freshwater, oil based, etc. Air/water based mud through intermediate then SOB

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

Additives to be used in drilling medium? See attached sheet with list.

Drill cuttings disposal method? Leave in pit, landfill, removed offsite, etc. Landfill - See attached sheet

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

-Landfill or offsite name/permit number? See Attached Sheet

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 *Braulio Silva*  
Company Official (Typed Name) Braulio Silva  
Company Official Title Vice President - Drilling

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Subscribed and sworn before me this 12th day of November, 2018

WV Department of Environmental Protection

*Earline Bugay*  
My commission expires 1/23/2020

Notary Public  
COMMONWEALTH OF PENNSYLVANIA  
NOTARIAL SEAL  
Earline Bugay, Notary Public  
New Sewickley Twp., Beaver County  
My Commission Expires Jan. 23, 2020  
MEMBER, PENNSYLVANIA ASSOCIATION OF NOTARIES

06/14/2019

Form WW-9

Operator's Well No. River Run 10 UH

American Petroleum Partners Operating, LLC

Proposed Revegetation Treatment: Acres Disturbed 14.7 Prevegetation pH 6.0

Lime 2-3 Tons/acre or to correct to pH \_\_\_\_\_

Fertilizer type 10-20-20 or Equal

Fertilizer amount 500 lbs/acre

Mulch Hay or Straw at 2 Tons/acre

Seed Mixtures

Temporary		Permanent	
Seed Type	lbs/acre	Seed Type	lbs/acre
Annual Rye Grass	40	Crownvetch	10-15
Filed Bromegrass	40	Tall Fescue	30
Spring Oats	96	Perennial Ryegrass	20

\*Refer to attached Reclamation Plan for further detail.

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: *Jan Nicholas*

Comments: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

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Title: WV DEP Oil and Gas Inspector

Date: 11/13/18

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Field Reviewed?  Yes  No



## Additives for Drilling Medium

51 02180

CALCIUM CHLORIDE POWDER
CARBO TEC
CARBO-GEL 2
CARBO-TEC S
ECCO-BLOK
LIME
MIL-CARB TM
MIL-CLEAN
MIL-SEAL
NEXT BASE eC
NEXT DRILL
NEXT-HOLD
NEXT-MUL
OMNI-COTE
MIL-BAR
NEXT-MUL HT
SODA ASH
POTASSIUM CHLORIDE

## Closed Loop:

In our case, we will be running mud returns thru both, the barite recovery centrifuge or "Stripper" and the low gravity centrifuge or "Polisher" to be able to clean our mud and be put back into the mud tanks where it will be conditioned again and put back into the loop.

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# Cuttings Disposal/Site Water

51 02180

## Cuttings –Haul off Company:

Eap Industries, Inc. DOT # 0876278  
1575 Smith Two State Rd. Atlasburg, PA 15004  
1-888-294-5227

06/14/2019

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

Environmental Coordination Services & Recycling (ECS&R)  
3237 US Highway 19  
Cochran, PA 16314  
814-425-7773

## Disposal Locations:

Apex Environmental, LLC Permit # 06-08438  
11 County Road 78  
Amsterdam, OH 43903  
740-543-4389

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

Sycamore Landfill Inc. Permit #R30-079001 05-2010  
4301 Sycamore Ridge Road  
Hurricane, WV 25526  
304-562-2611

Max Environmental Technologies, Inc. Facility Permit # PAD004835146 / 301071  
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  
412-384-7569

Waste Management South Hills (Arnoni) Permit # 100592  
3100 Hill Road  
Library, PA 15129  
724-348-7013  
412-384-7569

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

Waste Management Meadowfill Permit # 1032  
1488 Dawson Drive  
Bridgeport, WV 26330

Brooke County Landfill Permit # SWF-103-97 / 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  
304-455-3800

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

Energy Solutions Services, Inc. Permit # R-73006-L24  
1560 Bear Creek Road  
Oak Ridge, TN 37830

Northern A-1 Environmental Services Permit ID MID020906814  
3947 US 131 North, PO Box 1030  
Kalkaska, MI 49646  
231-258-9961

**Water Haul off Companies:**

Dynamic Structures, Clear Creek DOT # 720485  
3790 State Route 7  
New Waterford, OH 44445  
330-892-0164

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

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

Force, Inc.  
1380 Rte. 286 Hwy. E, Suite 303  
Indiana, PA 15701

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

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

Nuverra Environmental Solutions  
11942 Veterans Memorial Highway  
Masontown, WV 26542

Equipment Transport  
1 Tyler Court  
Carlisle, PA 17015

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

Myers Well Service, Inc.  
2001 Ballpark Court  
Export, PA 15632

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

Burns Drilling & Excavating  
618 Crabapple Road P.O. Box 41  
Wind Ridge, PA 15380

**Disposal Locations:**

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

Nichlos 1-A (SWIW #13)  
Permit # 3862  
300 Cherrington Pkwy, Suite 200  
Coraopolis, PA 15108  
412-329-7275

JAN 31 2019

WV Department of  
Environmental Protection

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

Groselle (SWIW #34)  
Permit # 4096  
Rt. 88  
Garrettsville, OH  
713-275-4816

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

Kemble 1-D Well  
Permit # 8780  
7675 East Pike  
Norwich, Oh 43767  
614-648-8898  
740-796-6495

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  
2630 Exposition, Suite 117  
Austin, TX 78703  
512-478-6545

Mozena #1 Well (SWIW # 13)  
Permit # 34-157-2-5511-00-00  
5367 E. State Street  
Newcomerstown, OH 43832  
740-763-3966

Goff SWD #1 (SWIW # 27)  
Permit # 34-119-2-8776-000  
300 Cherrington Pkwy, Suite 200  
Coraopolis, PA 15108  
412-329-7275

SOS D#1 (SWIW #12)  
Permit # 34-059-2-4202-00-00  
Silcor Oilfield Services, Inc.  
2939 Hubbard Road  
Youngstown, PH 44505

Dudley #1 UIC (SWIW #1)  
Permit # 34-121-2-2459-00-00  
Select Energy Services, LLC  
7994 S. Pleasants Hwy  
St. Marys, WV 26170  
304-665-2652

51 02180

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  
304-323-6568

06/14/2019

US Steele 11385  
Permit # 47-001-00561  
200 Evergreen Drive  
Waynesburg, PA 15730  
304-323-6568

Chapin #7 UIC (SWIW #7)  
Permit # 34-083-2-4137-00-00  
Elkhead Gas& Oil Company  
12163 Marne Rd. NE  
Newark, OH 43055  
740-763-3966

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Environmental Protection



51 02180

## Hydraulic Fracturing Fluid Product Component Information Disclosure

### Hydraulic Fracturing Fluid Composition:

Trade Name	Supplier	Purpose	Ingredients	Chemical Abstract Service Number (CAS #)	Maximum Ingredient Concentration in Additive (% by mass)**
Water	Operator	Carrier/Base Fluid			
			Water	7732-18-5	100.00000
Terraprop Plus 30/50	Baker Hughes	Proppant			
			Aluminum Oxide	1344-28-1	100.00000
			Amorphous Silica	7631-86-9	20.00000
			Titanium Dioxide	13463-67-7	5.00000
			Iron Oxide	1309-37-1	5.00000
Sand (Proppant)	Stingray	Proppant			
			Silica Substrate	14808-60-7	87.00000
ProLite 40/70	Imerys	Proppant			
			Mullite	1302-93-8	70.00000
			Cristobalite	14464-46-1	30.00000
			Amorphous Silica	7631-86-9	15.00000
Hydrochloric Acid (HCl)	FTSI	Acid			
			Hydrogen Chloride	7647-01-0	15.00000
SI-117	WST	Scale Inhibitor			
			Copolymer of Maleic and Acrylic Acid	52255-49-9	70.00000
			Ethylene glycol	107-21-1	40.00000
			DETA phosphonate	15827-60-8	20.00000
			Hexamethylene Triamine Penta (Methylene Phosphonic Acid)	34690-00-1	20.00000
			Phosphino carboxylic acid polymer	71050-62-9	20.00000
K-BAC 1020 DBNPA	WST	Bactericide			
			Polyethylene glycol	25322-68-3	50.00000
			Water	7732-18-5	30.00000
			2,2-Dibromo-3-nitripropionamide	10222-01-2	21.00000
NEFE-180	Stingray	Acid Inhibitor/Iron Control			
			Acetic Acid	64-19-7	60.00000
			Methanol	67-56-1	30.00000
			2-Ethylhexanol	104-76-7	7.50000
			Cocunut Oil Acid diethanolamine	68603-42-9	3.00000
			Alcohols, C15-15, ethoxylated	68951-67-7	3.00000
			Olefin	64743-02-8	3.00000
			Fatty Acids, tall oil	61790-12-3	3.00000
			2-Propyn-1-ol	107-19-7	3.00000
FRA-409	Stingray	Friction Reducer			
			Copolymer of 2-propenamide	Proprietary	30.00000
			Distillates (petroleum), Hydrotreated Light	64742-47-8	20.00000
			Alcohols, C12-16, Ethoxylated	68551-12-2	2.00000
			Alkanolamide	93-83-4	2.00000
			Ammonium Chloride	12125-02-9	1.00000
CSL-30	Stingray	pH Control			
			Sodium Hydroxide	1310-73-2	30.00000

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JAN 31 2019  
WV Department of  
Environmental Protection

## Hydraulic Fracturing Fluid Product Component Information Disclosure

## Hydraulic Fracturing Fluid Composition:

Trade Name	Supplier	Purpose	Ingredients	Chemical Abstract Service Number (CAS #)	Maximum Ingredient Concentration in Additive (% by mass)**
Water	Operator	Carrier/Base Fluid			
			Water	7732-18-5	100.00000
Terraprop Plus 30/50	Baker Hughes	Proppant			
			Aluminum Oxide	1344-28-1	100.00000
			Amorphous Silica	7631-86-9	20.00000
			Titanium Dioxide	13463-67-7	5.00000
			Iron Oxide	1309-37-1	5.00000
Sand (Proppant)	Stingray	Proppant			
			Silica Substrate	14808-60-7	87.00000
ProLite 40/70	Imerys	Proppant			
			Mullite	1302-93-8	70.00000
			Cristobalite	14464-46-1	30.00000
			Amorphous Silica	7631-86-9	15.00000
Hydrochloric Acid (HCl)	FTSI	Acid			
			Hydrogen Chloride	7647-01-0	15.00000
SI-117	WST	Scale Inhibitor			
			Copolymer of Maleic and Acrylic Acid	52255-49-9	70.00000
			Ethylene glycol	107-21-1	40.00000
			DETA phosphonate	15827-60-8	20.00000
			Hexamethylene Triamine Penta (Methylene Phosphonic Acid)	34690-00-1	20.00000
			Phosphino carboxylic acid polymer	71050-62-9	20.00000
K-BAC 1020 DBNPA	WST	Bactericide			
			Polyethylene glycol	25322-68-3	50.00000
			Water	7732-18-5	30.00000
			2,2-Dibromo-3-nitriopropanamide	10222-01-2	21.00000
NEFE-180	Stingray	Acid Inhibitor/Iron Control			
			Acetic Acid	64-19-7	60.00000
			Methanol	67-56-1	30.00000
			2-Ethylhexanol	104-76-7	7.50000
			Cocunut Oil Acid diethanolamine	68603-42-9	3.00000
			Alcohols, C15-15, ethoxylated	68951-67-7	3.00000
			Olefin	64743-02-8	3.00000
			Fatty Acids, tall oil	61790-12-3	3.00000
			2-Propyn-1-ol	107-19-7	3.00000
FRA-409	Stingray	Friction Reducer			
			Copolymer of 2-propenamide	Proprietary	30.00000
			Distillates (petroleum), Hydrotreated Light	64742-47-8	20.00000
			Alcohols, C12-16, Ethoxylated	68551-12-2	2.00000
			Alkanolamide	93-83-4	2.00000
			Ammonium Chloride	12125-02-9	1.00000
CSL-30	Stingray	pH Control			
			Sodium Hydroxide	1310-73-2	30.00000
WG-36 GELLING AGENT	Halliburton	Gelling Agent			
			Guar gum	9000-30-0	100.00000
SP BREAKER	Halliburton	Breaker			
			Sodium persulfate	7775-27-1	100.00000
LOSURF-300D	Halliburton	Non-ionic Surfactant			
			Ethanol	64-17-5	60.00000
			Heavy aromatic petroleum	64742-94-5	30.00000
			Naphthalene	91-20-3	5.00000
			Poly(oxy-1,2-ethanediyl), alpha-	127087-87-0	5.00000
			1,2,4 Trimethylbenzene	95-63-6	1.00000

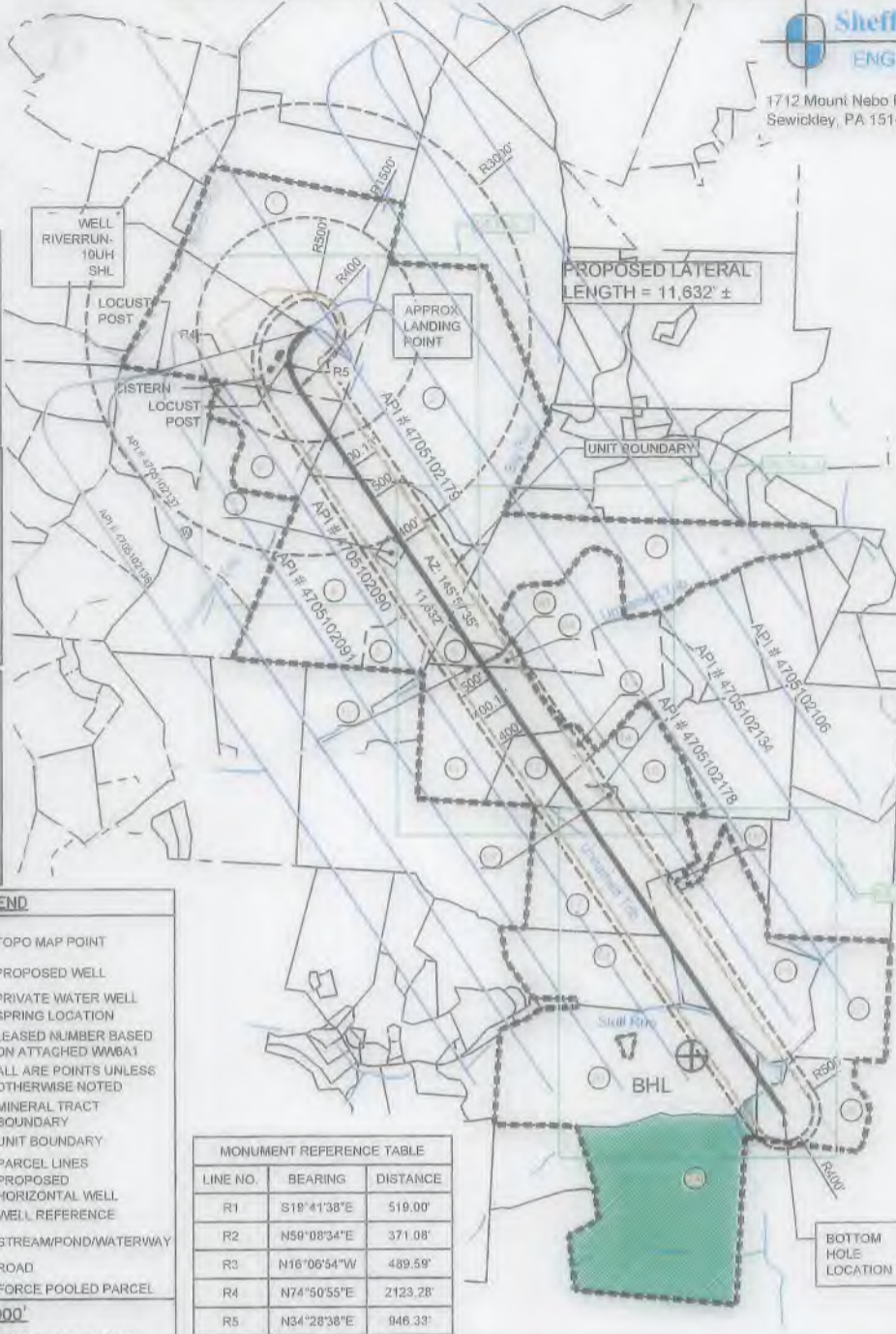
06/14/2019

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Office of Oil and Gas  
JAN 31 2019  
WV Department of Environmental Protection



SHL is located on topo map 1,665 feet south of Latitude: 39° 57' 30"  
 BHL is located on topo map 12,011 feet south of Latitude: 39° 57' 30"

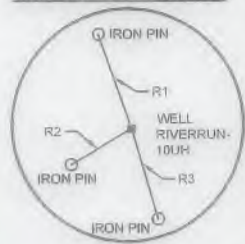
**Sheffler & Company, Inc.**  
 ENGINEERING • SURVEYING  
 1712 Mount Nebo Road Phone: 412-219-4509  
 Sewickley, PA 15143 Email: info@shefflerCo.com



TOTAL UNIT  
 259.3 ACRES

06/14/2019

REFERENCE DETAIL



NOTES

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

SHL is located on topo map 435  
 BHL is located on topo map 5604  
 feet west of Longitude: 80° 37' 30"  
 feet west of Longitude: 80° 35' 00"

**SURFACE HOLE LOCATION (SHL)**  
 UTM 17 - NAD83  
 N: 4422692.147(m)  
 E: 531898.889(m)  
 NAD27, WV NORTH  
 N: 531453.837(ft)  
 E: 1684126.003(ft)  
 LAT/LON - NAD83  
 LAT: N39.9537630  
 LON: W80.6265526

**APPROXIMATE LANDING POINT**  
 UTM 17 - NAD83  
 N: 4422451.894(m)  
 E: 531864.978(m)  
 NAD27, WV NORTH  
 N: 530667.302(ft)  
 E: 1684001.556(ft)  
 LAT/LON - NAD83  
 LAT: N39.9515997  
 LON: W80.6269613

**BOTTOM HOLE LOCATION (BHL)**  
 UTM 17 - NAD83  
 N: 4419548.533(m)  
 E: 533897.928(m)  
 NAD27, WV NORTH  
 N: 521028.180(ft)  
 E: 1690513.301(ft)  
 LAT/LON - NAD83  
 LAT: N39.9253623(d)  
 LON: W80.6033135(d)

**LEGEND**

- TOPO MAP POINT
- PROPOSED WELL
- PRIVATE WATER WELL
- SPRING LOCATION
- LEASED NUMBER BASED ON ATTACHED WVA6A1
- ALL ARE POINTS UNLESS OTHERWISE NOTED
- MINERAL TRACT BOUNDARY
- UNIT BOUNDARY
- PARCEL LINES
- PROPOSED HORIZONTAL WELL
- WELL REFERENCE
- STREAM/POND/WATERWAY
- ROAD
- FORCE POOLED PARCEL

**WELLS WITHIN 3000'**  
 EIGHT (8) DEEP WELLS WITHIN 3000'

**MONUMENT REFERENCE TABLE**

LINE NO.	BEARING	DISTANCE
R1	S19°41'38"E	519.00'
R2	N59°08'34"E	371.08'
R3	N16°08'54"W	489.59'
R4	N74°50'55"E	2123.28'
R5	N34°28'38"E	946.33'

FILE #: RIVERRUN-10UH  
 DRAWING #: RIVERRUN-10UH-R4.DWG  
 SCALE: 1"=2500'  
 MINIMUM DEGREE OF ACCURACY: 1/2500  
 PROVEN SOURCE OF ELEVATION: USGS MONUMENT JX0742: 1343.3'

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 REGULATIONS ISSUED AND PRESCRIBED BY THE DEPARTMENT OF ENVIRONMENTAL PROTECTION.

SIGNED: *Handwritten Signature*  
 R.P.E.: 21452 L.L.S.: P.S. NO.



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

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

WATERSHED: WHEELING CREEK - UPPER OHIO RIVER  
 COUNTY/DISTRICT: MARSHALL / WEBSTER  
 SURFACE OWNER: APP MINERALS LLC  
 OIL & GAS ROYALTY OWNER: APP MINERALS LLC

DATE: February 7, 2019 - REV - April 30, 2019  
 OPERATOR'S WELL #: RIVERRUN-10UH  
 API WELL # 47 051 02180  
 STATE COUNTY PERMIT  
 ACREAGE: 183.31

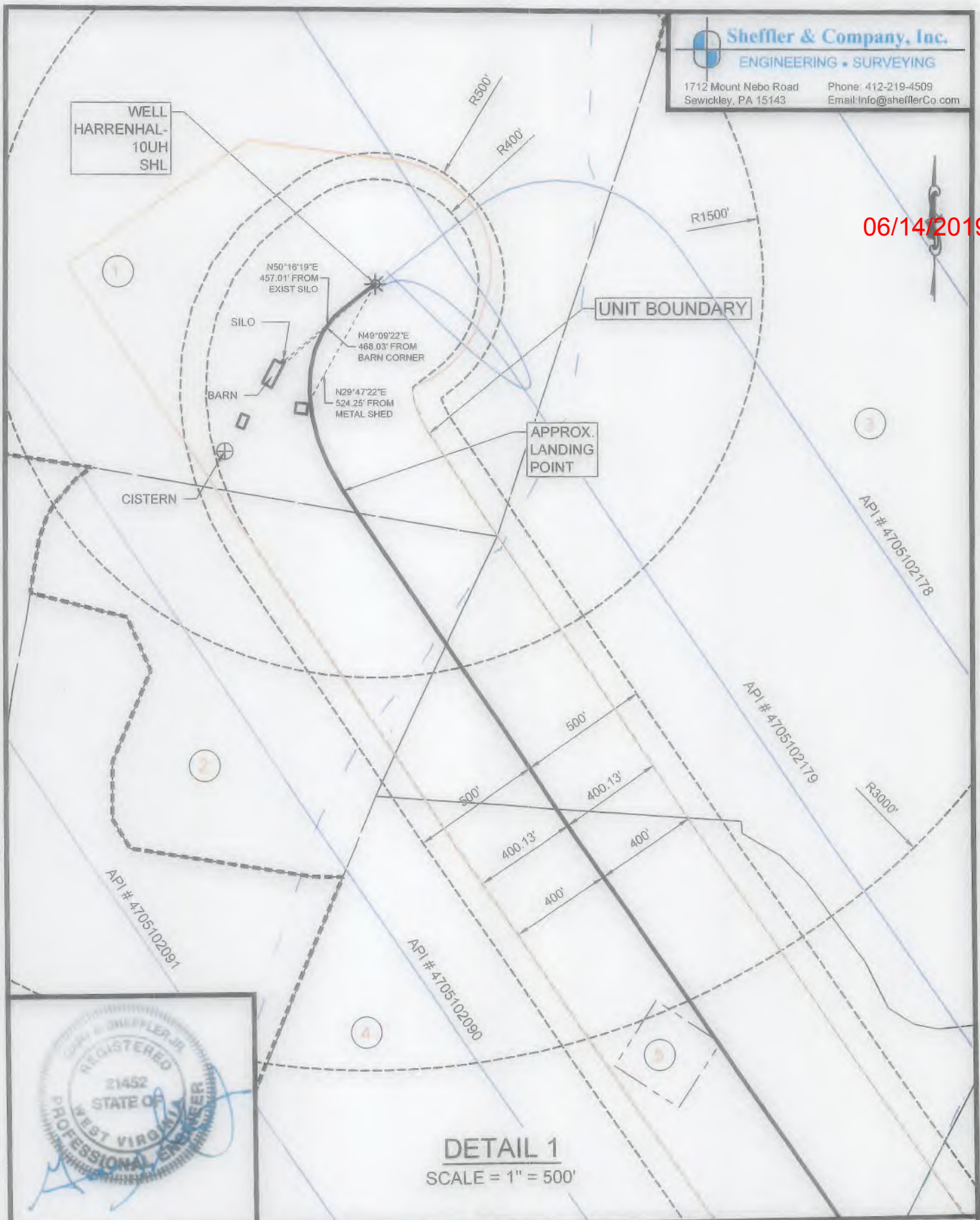
DRILL  CONVERT  DRILL DEEPER  REDRILL  FRACTURE OR STIMULATE   
 PLUG OFF OLD FORMATION PERFORATE NEW FORMATION PLUG AND ABANDON  
 CLEAN OUT & REPLUG  OTHER CHANGE  (SPECIFY)

TARGET FORMATION: POINT PLEASANT  
 WELL OPERATOR: AMERICAN PETROLEUM PARTNERS OPERATING, LLC  
 Address: 4600 J. BARRY COURT, SUITE 310  
 City: CANONSBURG State: PA Zip Code: 15317

ESTIMATED DEPTH: TVD: 11,395' ± TMD: 23,551' ±  
 DESIGNATED AGENT: STEVEN GREEN  
 Address: 300 SUMMERS ST, SUITE 1000  
 City: CHARLESTON State: WV Zip Code: 25301



06/14/2019



**DETAIL 1**  
 SCALE = 1" = 500'

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



DATE: February 7, 2019 - REV - April 30, 2019  
 OPERATOR'S WELL #: RIVERRUN-10UH  
 API WELL # 47 051 02180H6A  
 STATE COUNTY PERMIT

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

WATERSHED: WHEELING CREEK - UPPER OHIO RIVER ELEVATION: 1,264.94'  
 COUNTY/DISTRICT: MARSHALL / WEBSTER QUADRANGLE: MOUNDVILLE, WV  
 SURFACE OWNER: APP MINERALS LLC ACREAGE: 183.31  
 OIL & GAS ROYALTY OWNER: APP MINERALS LLC

ACREAGE: 183.31

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

TARGET FORMATION: POINT PLEASANT ESTIMATED DEPTH: TVD: 11,395' ± TMD: 23,551' ±  
 WELL OPERATOR: AMERICAN PETROLEUM PARTNERS OPERATING, LLC DESIGNATED AGENT: STEVEN GREEN  
 Address: 4600 J. BARRY COURT, SUITE 310 Address: 300 SUMMERS ST, SUITE 1000  
 City: CANONSBURG State: PA Zip Code: 15317 City: CHARLESTON State: WV Zip Code: 25301



06/14/2019



**DETAIL 2**  
SCALE = 1" = 500'

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



DATE: February 7, 2019 - REV - April 30, 2019

OPERATOR'S WELL #: RIVERRUN-10UH

API WELL # 47 051 02180H6A  
STATE COUNTY PERMIT

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

WATERSHED: WHEELING CREEK - UPPER OHIO RIVER ELEVATION: 1,264.94'

COUNTY/DISTRICT: MARSHALL / WEBSTER QUADRANGLE: MOUNDVILLE, WV

SURFACE OWNER: APP MINERALS LLC ACREAGE: 183.31

OIL & GAS ROYALTY OWNER: APP MINERALS LLC ACREAGE: 183.31

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

TARGET FORMATION: POINT PLEASANT ESTIMATED DEPTH: TVD: 11,395' ± TMD: 23,551' ±

WELL OPERATOR: AMERICAN PETROLEUM PARTNERS OPERATING, LLC DESIGNATED AGENT: STEVEN GREEN

Address: 4600 J. BARRY COURT, SUITE 310 Address: 300 SUMMERS ST, SUITE 1000

City CANONSBURG State PA Zip Code 15317 City CHARLESTON State WV Zip Code 25301



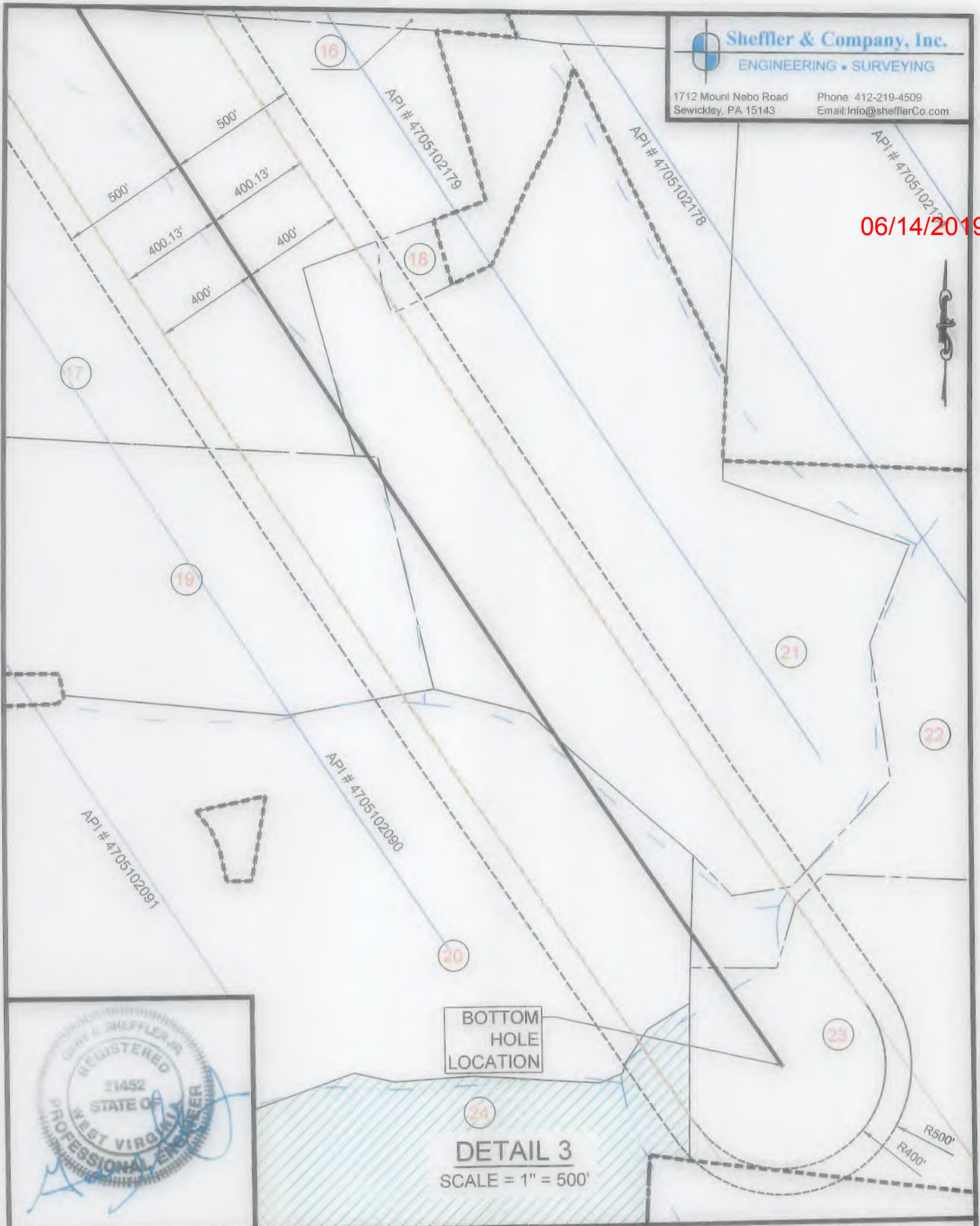


**Sheffler & Company, Inc.**  
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1712 Mount Nebo Road  
Sewickley, PA 15143

Phone: 412-219-4509  
Email: info@shefflerCo.com

06/14/2019



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



DATE: February 7, 2019 - REV - April 30, 2019  
OPERATOR'S WELL #: RIVERRUN-10UH  
API WELL # 47 051 02180666  
STATE COUNTY PERMIT

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

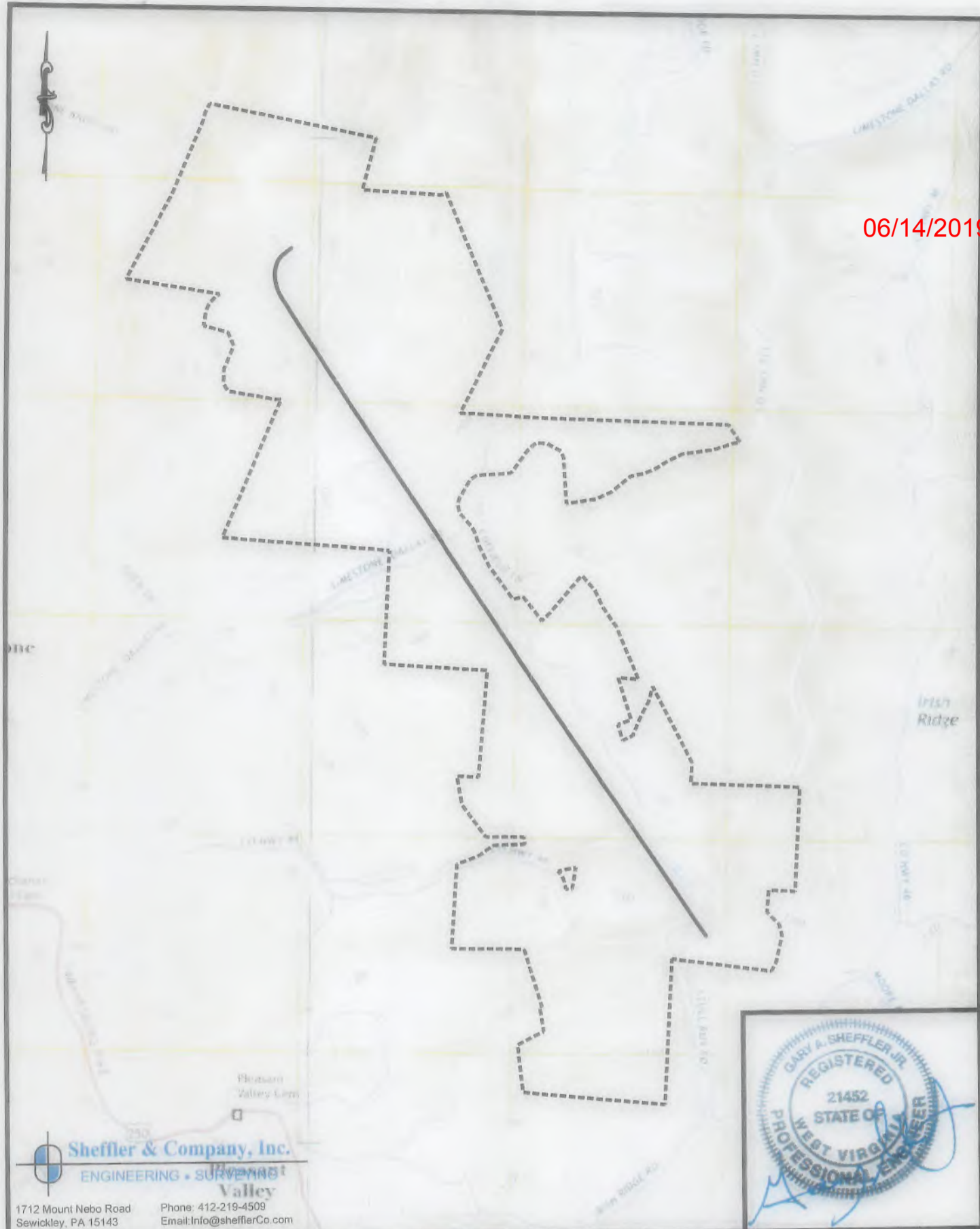
WATERSHED: WHEELING CREEK - UPPER OHIO RIVER ELEVATION: 1,264.94'  
COUNTY/DISTRICT: MARSHALL / WEBSTER QUADRANGLE: MOUNDSVILLE, WV  
SURFACE OWNER: APP MINERALS LLC ACREAGE: 183.31  
OIL & GAS ROYALTY OWNER: APP MINERALS LLC ACREAGE: 183.31

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

TARGET FORMATION: POINT PLEASANT ESTIMATED DEPTH: TVD: 11,395' ± TMD: 23,551' ±  
WELL OPERATOR: AMERICAN PETROLEUM PARTNERS OPERATING, LLC DESIGNATED AGENT: STEVEN GREEN  
Address: 4600 J. BARRY COURT, SUITE 310 Address: 300 SUMMERS ST, SUITE 1000  
City: CANONSBURG State: PA Zip Code: 15317 City: CHARLESTON State: WV Zip Code: 25301



06/14/2019



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 IRVING VALLEY

1712 Mount Nebo Road  
 Sewickley, PA 15143

Phone: 412-219-4509  
 Email: info@shefflerco.com



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



DATE: February 7, 2019 - REV - April 30, 2019

OPERATOR'S WELL #: RIVERRUN-10UH

API WELL # 47 051 02180H6A  
 STATE COUNTY PERMIT

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

WATERSHED: WHEELING CREEK - UPPER OHIO RIVER ELEVATION: 1,264.94'  
 COUNTY/DISTRICT: MARSHALL / WEBSTER QUADRANGLE: MOUNDSVILLE, WV  
 SURFACE OWNER: APP MINERALS LLC ACREAGE: 183.31  
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DRILL  CONVERT  DRILL DEEPER  REDRILL  FRACTURE OR STIMULATE   
 PLUG OFF OLD FORMATION PERFORATE NEW FORMATION PLUG AND ABANDON  
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TARGET FORMATION: POINT PLEASANT ESTIMATED DEPTH: TVD: 11,395' ± TMD: 23,551' ±  
 WELL OPERATOR: AMERICAN PETROLEUM PARTNERS OPERATING, LLC DESIGNATED AGENT: STEVEN GREEN  
 Address: 4600 J. BARRY COURT, SUITE 310 Address: 300 SUMMERS ST, SUITE 1000  
 City CANONSBURG State PA Zip Code 15317 City CHARLESTON State WV Zip Code 25301



06/14/2019

- |  |  |  |
|--|--|--|
| <p><input type="radio"/> TAX MAP NO.<br/>15-0002-0016-0000-0000<br/>ASSESSED ACREAGE: 183.31 ACRES</p> <p><u>SURFACE OWNERS:</u><br/>APP MINERAL, LLC</p> <p><u>MINERAL OWNERS:</u><br/>APP MINERAL, LLC</p>   | <p><input type="radio"/> TAX MAP NO.<br/>15-0002-0014-0002-0000<br/>ASSESSED ACREAGE: 2.00 ACRES</p> <p><u>SURFACE OWNERS:</u><br/>HESS, KAREN &amp; CHARLES P.</p> <p><u>MINERAL OWNERS:</u><br/>CRAIG A. &amp; NORA J. SNYDER; TROWBRIDGE</p>  | <p><input type="radio"/> TAX MAP NO.<br/>15-0002-0019-0000-0000<br/>ASSESSED ACREAGE: 1.73 ACRES</p> <p><u>SURFACE OWNERS:</u><br/>RIEDMAN, THOMAS MERLIN, ET UX.</p> <p><u>MINERAL OWNERS:</u><br/>GARY W. STROPE AND RICKEE J. STROPE,<br/>TRUSTEES OF THE STROPE FAMILY<br/>TRUST DATED MARCH 29, 2017.</p>     |
| <p><input type="radio"/> TAX MAP NO.<br/>15-0002-0017-0003-0000<br/>ASSESSED ACREAGE: 41.85 ACRES</p> <p><u>SURFACE OWNERS:</u><br/>DOVE, WILLIAM E., ET AL.</p> <p><u>MINERAL OWNERS:</u><br/>RESOURCE MINERALS HEADWATER I, LP</p>   | <p><input type="radio"/> TAX MAP NO.<br/>15-0002-0014-0001-0000<br/>ASSESSED ACREAGE: 11.48 ACRES</p> <p><u>SURFACE OWNERS:</u><br/>HESS, KAREN &amp; CHARLES P.</p> <p><u>MINERAL OWNERS:</u><br/>KAREN SNYDER &amp; CHARLES P. HESS</p>  | <p><input type="radio"/> TAX MAP NO.<br/>15-0002-0019-0000-0000<br/>ASSESSED ACREAGE: 0.27 ACRES</p> <p><u>SURFACE OWNERS:</u><br/>WEST VIRGINIA DEPARTMENT OF TRANSPORTATION,<br/>DIVISION OF HIGHWAYS</p> <p><u>MINERAL OWNERS:</u><br/>WEST VIRGINIA DEPARTMENT OF TRANSPORTATION,<br/>DIVISION OF HIGHWAYS</p> |
| <p><input type="radio"/> TAX MAP NO.<br/>15-0002-0015-0000-0000<br/>ASSESSED ACREAGE: 171.32 ACRES</p> <p><u>SURFACE OWNERS:</u><br/>HARRY B. SNYDER AND<br/>ELIZABETH JANE SNYDER,<br/>TRUSTEES OF THE SNYDER FAMILY TRUST,<br/>DATED DECEMBER 17, 2014</p> <p><u>MINERAL OWNERS:</u><br/>HARRY B. SNYDER AND<br/>ELIZABETH JANE SNYDER,<br/>TRUSTEES OF THE SNYDER FAMILY TRUST,<br/>DATED DECEMBER 17, 2014</p> | <p><input type="radio"/> TAX MAP NO.<br/>15-0002-0013-0000-0000<br/>ASSESSED ACREAGE: 94.04 ACRES</p> <p><u>SURFACE OWNERS:</u><br/>BOCK, JEFFERY T.</p> <p><u>MINERAL OWNERS:</u><br/>JEFFREY T. BOCK<br/>SALLY A. HUNTER-BOCK</p>  | <p><input type="radio"/> TAX MAP NO.<br/>15-0007-0021-0001-0000<br/>ASSESSED ACREAGE: 0.20 ACRES</p> <p><u>SURFACE OWNERS:</u><br/>PARSONS, NATASHA C.</p> <p><u>MINERAL OWNERS:</u><br/>GARY W. STROPE AND RICKEE J. STROPE,<br/>TRUSTEES OF THE STROPE FAMILY<br/>TRUST DATED MARCH 29, 2017.</p>                |
| <p><input type="radio"/> TAX MAP NO.<br/>15-0002-0014-0000-0000<br/>ASSESSED ACREAGE: 126.12 ACRES</p> <p><u>SURFACE OWNERS:</u><br/>HARRY B. SNYDER AND<br/>ELIZABETH JANE SNYDER,<br/>TRUSTEES OF THE SNYDER FAMILY TRUST,<br/>DATED DECEMBER 17, 2014</p> <p><u>MINERAL OWNERS:</u><br/>HARRY B. SNYDER AND<br/>ELIZABETH JANE SNYDER,<br/>TRUSTEES OF THE SNYDER FAMILY TRUST,<br/>DATED DECEMBER 17, 2014</p> | <p><input type="radio"/> TAX MAP NO.<br/>15-0002-0013-0002-0000<br/>ASSESSED ACREAGE: 6.76 ACRES</p> <p><u>SURFACE OWNERS:</u><br/>PARSONS, NATASHA C.</p> <p><u>MINERAL OWNERS:</u><br/>RESOURCE MINERALS HEADWATER I, LP,<br/>DONNA GASSAWAY IAMS,<br/>DONALD HEBERT PARSONS,<br/>KENNETH ROBERT PARSONS,<br/>TEDDY HOWARD PARSONS,<br/>RICHARD MCKIMMIE AND BERNICE MCKIMMIE,<br/>TRUSTEES OF THE MCKIMMIE FAMILY TRUST</p> | <p><input type="radio"/> TAX MAP NO.<br/>15-0007-0021-0000-0000<br/>ASSESSED ACREAGE: 59.80 ACRES</p> <p><u>SURFACE OWNERS:</u><br/>RIEDMAN, THOMAS MERLIN, ET UX.</p> <p><u>MINERAL OWNERS:</u><br/>GARY W. STROPE AND RICKEE J. STROPE,<br/>TRUSTEES OF THE STROPE FAMILY<br/>TRUST DATED MARCH 29, 2017.</p>    |
| <p><input type="radio"/> TAX MAP NO.<br/>15-0007-0022-0000-0000<br/>ASSESSED ACREAGE: 48.77</p> <p><u>SURFACE OWNERS:</u><br/>BOCK THOMAS A., ET UX.</p> <p><u>MINERAL OWNERS:</u><br/>BRENT E. CAIN<br/>DAVID S. CAIN<br/>HERMAN D. LANTZ<br/>THOMAS A. &amp; PAMELA L. BOCK<br/>THOMAS D. CAIN</p>   |  |  |

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



DATE: February 7, 2019 - REV - April 30, 2019

OPERATOR'S WELL #: RIVERRUN-10UH

API WELL #	47	051	02180H6A
	STATE	COUNTY	PERMIT

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

WATERSHED: WHEELING CREEK - UPPER OHIO RIVER      ELEVATION: 1,264.94'

COUNTY/DISTRICT: MARSHALL / WEBSTER      QUADRANGLE: MOUNDVILLE, WV

SURFACE OWNER: APP MINERALS LLC      ACREAGE: 183.31

OIL & GAS ROYALTY OWNER: APP MINERALS LLC      ACREAGE: 183.31

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

TARGET FORMATION: POINT PLEASANT      ESTIMATED DEPTH: TVD: 11,395' ±    TMD: 23,551' ±

WELL OPERATOR: AMERICAN PETROLEUM PARTNERS OPERATING, LLC      DESIGNATED AGENT: STEVEN GREEN

Address: 4600 J. BARRY COURT, SUITE 310      Address: 300 SUMMERS ST, SUITE 1000

City: CANONSBURG    State: PA    Zip Code: 15317      City: CHARLESTON    State: WV    Zip Code: 25301



TAX MAP NO.  
15-0007-0022-0001-0000  
ASSESSED ACREAGE: 3.00 ACRES

SURFACE OWNERS:  
BURKLE, GERALD E., ET AL.

MINERAL OWNERS:  
BRENT EUGENE CAIN  
DAVID SCOTT CAIN  
THOMAS DEAN CAIN

1712 Mount Nebo Road Phone: 412-219-4509  
Sewickley, PA 15143 Email: info@shefflerCo.com

06/14/2019

TAX MAP NO.  
15-0007-0023-0003-0000  
ASSESSED ACREAGE: 17.02 ACRES

SURFACE OWNERS:  
HASLAM, LORRAINE

MINERAL OWNERS:  
LORRAINE HASLAM

TAX MAP NO.  
15-0007-0023-0002-0000  
ASSESSED ACREAGE: 1.18 ACRES

SURFACE OWNERS:  
HASLAM, LORRAINE, ET AL.

MINERAL OWNERS:  
LORRAINE HASLAM,  
SRI HASLAM

TAX MAP NO.  
15-0007-0023-0000-0000  
ASSESSED ACREAGE: 19.61 ACRES

SURFACE OWNERS:  
HASLAM, LORRAINE, ET AL.,  
AS JOINT TENANTS WITH  
RIGHT OF SURVIVORSHIP

MINERAL OWNERS:  
LORRAINE & SRI HASLAM

TAX MAP NO.  
15-0007-0027-0000-0000  
ASSESSED ACREAGE: 76.34 ACRES

SURFACE OWNERS:  
COFFIELD, WILLIAM E., ET UX.,  
AS JOINT TENANTS WITH  
RIGHT OF SURVIVORSHIP

MINERAL OWNERS:  
WILLIAM E. & BRENDA K. COFFIELD

TAX MAP NO.  
15-0007-0026-0001-000  
ASSESSED ACREAGE: 1.58

SURFACE OWNERS:  
RICE, STEVEN T, ET UX.

MINERAL OWNERS:  
JENNIFER L. RICE

TAX MAP NO.  
15-0007-0028-0000-0000  
46.06 ACRES

SURFACE OWNERS:  
COFFIELD, WILLIAM E. & BRENDA K.

MINERAL OWNERS:  
WILLIAM E. & BRENDA K. COFFIELD

TAX MAP NO.  
15-0007-0029-0000-0000  
ASSESSED ACREAGE: 114.91 ACRES

SURFACE OWNERS:  
FRIED, GABRIEL B.

MINERAL OWNERS:  
GABRIEL B. FRIED

TAX MAP NO.  
15-0007-0026-0000-0000  
ASSESSED ACREAGE: 81.67 ACRES

SURFACE OWNERS:  
COFFIELD, BETTY GENEVA

MINERAL OWNERS:  
BETTY GENEVA COFFIELD  
DEBRA & PAUL HOLDREN  
JUDITH LAWHEAD  
KIMBER LEE LAWHEAD

TAX MAP NO.  
15-0007-0030-0000-0000  
ASSESSED ACREAGE: 40.00 ACRES

SURFACE OWNERS:  
SCHRACK, DAVID W.

MINERAL OWNERS:  
DAVID SCHRACK

TAX MAP NO.  
15-0009-0001-0000-0000  
ASSESSED ACREAGE: 36.26 ACRES

SURFACE OWNERS:  
SCHRACK, TROY D. & SHERRY L.

MINERAL OWNERS:  
GARNET RUBY BUSH AND KENNETH R. BUSH,  
CO-TRUSTEES OF THE GARNETT BUSH FAMILY  
TRUST, DATED APRIL 16, 2018,  
BRENT M. BUSH,  
LAWRENCE L. GILMORE,  
EILEEN GILMORE MERCADO AND ALBERT MERCADO

TAX MAP NO.  
15-0008-0032-0000-0000  
ASSESSED ACREAGE: 120.09 ACRES

SURFACE OWNER:  
SCHRACK, DAVID W.

MINERAL OWNERS:  
ANNE MCCOMBS WELLMAN  
AMANDA BLACKWELL  
CURTIS FITZSIMMONS  
UNKNOWN HEIRS OF EVELYN G. MCCOMBS  
DAVID SCHRACK  
ROBERT CURTIS FITZSIMMONS  
ROBIN NAGY  
MARILYN LYDICK  
CHRISTINE GILLIS  
ASHLEY HENDERSON  
BARBARA COOK  
CAROL COTA  
ALICE J BARNES  
ELIZABETH SHEPHERD  
BONNIE FITZSIMMONS WENDT

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



DATE February 7, 2019 - REV - April 30, 2019

OPERATOR'S WELL #: RIVERRUN-10UH

API WELL # 47 051 02180HG6A

STATE COUNTY PERMIT

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

WATERSHED: WHEELING CREEK - UPPER OHIO RIVER ELEVATION: 1,264.94'

COUNTY/DISTRICT: MARSHALL / WEBSTER QUADRANGLE: MOUNDSVILLE, WV

SURFACE OWNER: APP MINERALS LLC ACREAGE: 183.31

OIL & GAS ROYALTY OWNER: APP MINERALS LLC ACREAGE: 183.31

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

TARGET FORMATION: POINT PLEASANT ESTIMATED DEPTH: TVD: 11,395' ± TMD: 23,551' ±

WELL OPERATOR: AMERICAN PETROLEUM PARTNERS OPERATING, LLC DESIGNATED AGENT: STEVEN GREEN

Address: 4600 J. BARRY COURT, SUITE 310 Address: 300 SUMMERS ST, SUITE 1000

City: CANONSBURG State: PA Zip Code: 15317 City: CHARLESTON State: WV Zip Code: 25301

WW-6A1  
(5/13)

Operator's Well No. River Run 10 UH

**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
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See attached sheet

**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

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: American Petroleum Partners Operating, LLC  
 By: Braulio Silva   
 Its: Vice President-Drilling



## RiverRun-10UH - Wellbore Tracts

Map #	LEASE #	LESSOR	CURRENT LESSEE	ROYALTY	MOL RECORDING INFORMATION	TAX PARCEL
1	WV-MAR-1192	APP Minerals LLC	American Petroleum Partners Operating, LLC	Not Less than 1/8th	984-392	15-2-16
2	WV-MAR-0035	Resource Minerals Headwater I, LP	American Petroleum Partners Operating, LLC	Not Less than 1/8th	930-446	15-2-17.3
3	WV-MAR-0688	Harry B. Snyder & Elizabeth J. Snyder, Trustees of the Snyder Family Trust dated December 17, 2014	American Petroleum Partners Operating, LLC	Not Less than 1/8th	741-88	15-2-15
4	WV-MAR-0688	Harry B. Snyder and Elizabeth Jane Snyder, Trustees of the Snyder Family Trust dated December 17, 2014	American Petroleum Partners Operating, LLC	Not Less than 1/8th	741-88	15-2-14
5	WV-MAR-1248	Craig A. Snyder & Nora J. Trowbridge	American Petroleum Partners Operating, LLC	Not Less than 1/8th	871-394	15-2-14.2
7	WV-MAR-0094	Jeffrey T. Bock	American Petroleum Partners Operating, LLC	Not Less than 1/8th	978-559	15-2-13
7	WV-MAR-0094	Sally A. Hunter-Bock	American Petroleum Partners Operating, LLC	Not Less than 1/8th	978-559	15-2-13
8	WV-MAR-0032	Resource Minerals Headwater I, LP	American Petroleum Partners Operating, LLC	Not Less than 1/8th	822-200	15-2-13.2
8	WV-MAR-0116	Teddy Howard Parsons	American Petroleum Partners Operating, LLC	Not Less than 1/8th	832-620	15-2-13.2
8	WV-MAR-0117	Kenneth Robert Parsons	American Petroleum Partners Operating, LLC	Not Less than 1/8th	832-616	15-2-13.2
8	WV-MAR-0118	Richard McKimmie and Bernice McKimmie, Trustees of the McKimmie Family Trust, dated January 9, 2015	American Petroleum Partners Operating, LLC	Not Less than 1/8th	832-618	15-2-13.2
8	WV-MAR-0119	Donald Herbert Parsons	American Petroleum Partners Operating, LLC	Not Less than 1/8th	832-614	15-2-13.2
8	WV-MAR-0121	Donna Gassaway Iams	American Petroleum Partners Operating, LLC	Not Less than 1/8th	833-239	15-2-13.2
9A	WV-MAR-0687	Gary W. Strobe and Rickee J. Strobe, Trustees of the Strobe Family Trust dated March 29, 2017	American Petroleum Partners Operating, LLC	Not Less than 1/8th	848-323	P/O 15-2-19

06/14/2019

51-02180

## RiverRun-10UH - Wellbore Tracts

Map #	LEASE #	LESSOR	CURRENT LESSEE	ROYALTY	MOL RECORDING INFORMATION	TAX PARCEL
9B	WV-MAR-1674	West Virginia Department of Transportation, Division of Highways	American Petroleum Partners Operating, LLC	Not Less than 1/8th	1035-382	P/O 15-2-19
11	WV-MAR-0700	Gary W. Strope and Rickee J. Strope, Trustees of the Strope Family Trust dated March 29, 2017	American Petroleum Partners Operating, LLC	Not Less than 1/8th	989-71	15-7-21
12	WV-MAR-1245	David S. Cain	American Petroleum Partners Operating, LLC	Not Less than 1/8th	905-21	15-7-22
12	WV-MAR-1244	Brent E. Cain	American Petroleum Partners Operating, LLC	Not Less than 1/8th	905-19	15-7-22
12	WV-MAR-1582	Herman D. Lantz	American Petroleum Partners Operating, LLC	Not Less than 1/8th	962-509	15-7-22
12	WV-MAR-1142	Thomas A. Bock & Pamela L. Bock	American Petroleum Partners Operating, LLC	Not Less than 1/8th	905-25	15-7-22
12	WV-MAR-1246	Thomas D. Cain	American Petroleum Partners Operating, LLC	Not Less than 1/8th	905-23	15-7-22
14	WV-MAR-0340	Lorraine Haslam	American Petroleum Partners Operating, LLC	Not Less than 1/8th	827-494	15-7-23.3
17	WV-MAR-0728	William E. Coffield & Brenda K. Coffield	American Petroleum Partners Operating, LLC	Not Less than 1/8th	866-115	15-7-27
19	WV-MAR-1164	William E. Coffield & Brenda K. Coffield	American Petroleum Partners Operating, LLC	Not Less than 1/8th	866-104	15-7-28
20	WV-MAR-0042	Gabriel B. Fried	American Petroleum Partners Operating, LLC	Not Less than 1/8th	825-576	15-7-29
21	WV-MAR-1165	Betty Geneva Coffield	American Petroleum Partners Operating, LLC	Not Less than 1/8th	865-54	15-7-26
21	WV-MAR-1171	Judith Lawhead	American Petroleum Partners Operating, LLC	Not Less than 1/8th	865-31	15-7-26
21	Pending	Debra Holdren & Paul Holdren	American Petroleum Partners Operating, LLC	Not Less than 1/8th	916-16	15-7-26
21	WV-MAR-1171	Kimber Lee Lawhead	American Petroleum Partners Operating, LLC	Not Less than 1/8th	865-31	15-7-26

06/14/2019

51-02180

## RiverRun-10UH - Wellbore Tracts

Map #	LEASE #	LESSOR	CURRENT LESSEE	ROYALTY	MOL RECORDING INFORMATION	TAX PARCEL
23	WV-MAR-1583	Garnet Ruby Bush and Kenneth R. Bush, Co-Trustees of the Garnett Bush Family Trust, dated April 16, 2018	American Petroleum Partners Operating, LLC	Not Less than 1/8th	988-463	15-9-1
23	WV-MAR-1594	Lawrence L. Gilmore	American Petroleum Partners Operating, LLC	Not Less than 1/8th	1027-644	15-9-1
23	WV-MAR-1264	Brent M. Bush	American Petroleum Partners Operating, LLC	Not Less than 1/8th	1028-1	15-9-1
23	WV-MAR-1606	Eileen Gilmore	American Petroleum Partners Operating, LLC	Not Less than 1/8th	1028-371	15-9-1

Note: The ones that say pending belong to APP. Internally they were not assigned a lease number as of yet.





Office of Oil & Gas  
601 57<sup>th</sup> street, SE  
Charleston, WV 25304-2345

November 6, 2018

Re: Drilling Under Roads

To Whom It May Concern:

American Petroleum Partners Operating, LLC. has the right to drill, stimulate and produce wells that are drilled under the County and State Roads as designated on the plats.

Should you have any questions or desire additional information, please do not hesitate to contact me at [regulatory@app-lp.com](mailto:regulatory@app-lp.com).

Sincerely,

Braulio Silva  
VP- Drilling

BS/djs

RECEIVED  
Office of Oil and Gas  
JAN 31 2019  
WV Department of  
Environmental Protection

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

51 02180

Date of Notice Certification: \_\_\_\_\_

API No. 47- 051 - \_\_\_\_\_

Operator's Well No. River Run 10 UH \_\_\_\_\_

Well Pad Name: Dire Wolf-River Run \_\_\_\_\_

**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>531898.8880</u>
County: <u>Marshall</u>		Northing: <u>4422692.1470</u>
District: <u>Webster</u>	Public Road Access: <u>McCreary's Ridge Road (CR 7)</u>	
Quadrangle: <u>Moundsville</u>	Generally used farm name: <u>App Mineral, LLC</u>	
Watershed: <u>Upper Ohio South</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.

<p>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:</p> <p>*PLEASE CHECK ALL THAT APPLY</p> <p><input type="checkbox"/> 1. NOTICE OF SEISMIC ACTIVITY or <input checked="" type="checkbox"/> NOTICE NOT REQUIRED BECAUSE NO SEISMIC ACTIVITY WAS CONDUCTED</p> <p><input type="checkbox"/> 2. NOTICE OF ENTRY FOR PLAT SURVEY or <input checked="" type="checkbox"/> NO PLAT SURVEY WAS CONDUCTED</p> <p><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</p> <p><input checked="" type="checkbox"/> WRITTEN WAIVER BY SURFACE OWNER (PLEASE ATTACH)</p> <p><input checked="" type="checkbox"/> 4. NOTICE OF PLANNED OPERATION</p> <p><input checked="" type="checkbox"/> 5. PUBLIC NOTICE</p> <p><input checked="" type="checkbox"/> 6. NOTICE OF APPLICATION</p>	<p><b>OOG OFFICE USE ONLY</b></p> <p><input type="checkbox"/> RECEIVED/ NOT REQUIRED</p> <p><input type="checkbox"/> RECEIVED</p> <p><input type="checkbox"/> RECEIVED/ NOT REQUIRED</p> <p><input type="checkbox"/> RECEIVED</p> <p><input type="checkbox"/> RECEIVED</p> <p><input type="checkbox"/> RECEIVED</p>
--	---

**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.

RECEIVED  
Office of Oil and Gas

JAN 31 2019

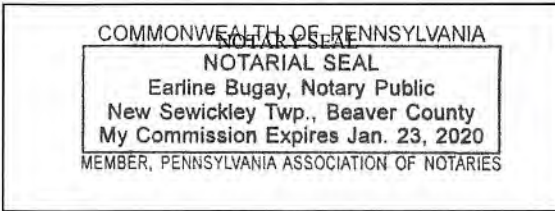
WV Department of  
Environmental Protection



**Certification of Notice is hereby given:**

THEREFORE, I Braulio Silva, 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:	<u>American Petroleum Partners Operating, LLC</u>	Address:	<u>4600 J. Barry Court Suite 310</u>
By:	<u>Braulio Silva</u>		<u>Canonsburg, PA 15317</u>
Its:	<u>Vice President-Drilling</u>	Facsimile:	<u>na</u>
Telephone:	<u>1-724-338-8629</u>	Email:	<u>Regulatory@app-lp.com</u>



Subscribed and sworn before me this 12<sup>th</sup> day of November 2018  
Earline Bugay Notary Public  
 My Commission Expires 1/23/2020

*Braulio Silva*

**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](mailto:depprivacyofficer@wv.gov).

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 JAN 31 2019  
 WV Department of  
 Environmental Protection

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: 1/25/19 Date Permit Application Filed: 1/25/19

Notice of:

- [X] 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)

- [X] PERSONAL SERVICE [ ] REGISTERED MAIL [X] 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.

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

[X] SURFACE OWNER(s)  
Name: APP Mins LLC  
Address: 4900 J. Barry Ct. Suite 310  
Canonsburg, PA 15317  
Name:  
Address:

[X] COAL OWNER OR LESSEE  
Name: Murray American Energy and Consolidation Coal Company  
Address: 46226 National Road  
St. Clairsville, OH 43950

[X] COAL OPERATOR  
Name: The Ohio County Mine-Murray American Energy and Consolidation Coal Company  
Address: 46226 National Road  
St. Clairsville, OH 43950

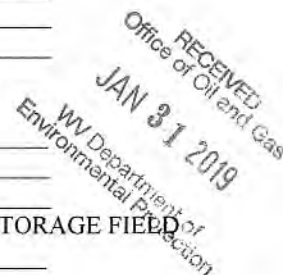
[X] SURFACE OWNER(s) (Road and/or Other Disturbance)  
Name: Mark Meberg, Et Ux & Mary P. Meberg  
Address: 325 McCreary's Ridge  
Moundsville, WV 26041  
Name: David Hunt  
Address: 6906 Conley Street  
Baltimore, MD 21224

[X] SURFACE OWNER OF WATER WELL AND/OR WATER PURVEYOR(s)  
Name: See Attached List  
Address:

[ ] SURFACE OWNER(s) (Impoundments or Pits)  
Name: None  
Address:

[ ] OPERATOR OF ANY NATURAL GAS STORAGE FIELD  
Name: None  
Address:

\*Please attach additional forms if necessary





06/14/2019

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

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**Date of Notice:** 1/25/19 **Date Permit Application Filed:** 1/25/19

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
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- METHOD OF DELIVERY THAT REQUIRES A RECEIPT OR SIGNATURE CONFIRMATION

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

SURFACE OWNER(s)  
Name: \_\_\_\_\_  
Address: \_\_\_\_\_  
\_\_\_\_\_  
Name: \_\_\_\_\_  
Address: \_\_\_\_\_

COAL OWNER OR LESSEE  
Name: \_\_\_\_\_  
Address: \_\_\_\_\_  
\_\_\_\_\_

COAL OPERATOR  
Name: \_\_\_\_\_  
Address: \_\_\_\_\_  
\_\_\_\_\_

SURFACE OWNER(s) (Road and/or Other Disturbance)  
Name: Gorakshya Seva & ENV EDU/Eco-Vrindaban Inc.  
Address: Rd 3 Box 278 B  
Wheeling, WV 26003  
Name: Lakshmi D. Dove et al. William E & Irene M. Dove, Et al  
Address: Rd 3 Box 278 B  
Wheeling, WV 26003

SURFACE OWNER OF WATER WELL AND/OR WATER PURVEYOR(s)  
Name: \_\_\_\_\_  
Address: \_\_\_\_\_  
\_\_\_\_\_

SURFACE OWNER(s) (Impoundments or Pits)  
Name: \_\_\_\_\_  
Address: \_\_\_\_\_  
\_\_\_\_\_

OPERATOR OF ANY NATURAL GAS STORAGE FIELD  
Name: \_\_\_\_\_  
Address: \_\_\_\_\_  
\_\_\_\_\_

\*Please attach additional forms if necessary

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

SURFACE OWNER(s)  
Name: \_\_\_\_\_  
Address: \_\_\_\_\_  
Name: \_\_\_\_\_  
Address: \_\_\_\_\_

COAL OWNER OR LESSEE  
Name: \_\_\_\_\_  
Address: \_\_\_\_\_  
 COAL OPERATOR  
Name: \_\_\_\_\_  
Address: \_\_\_\_\_

SURFACE OWNER(s) (Road and/or Other Disturbance)  
Name: Joy Chicione  
Address: 61 Waymans Ridge  
Moundsville, WV 26041  
Name: David & Lonna Hudson  
Address: 319 Oxen Drive  
Moundsville, WV 26041

SURFACE OWNER OF WATER WELL AND/OR WATER PURVEYOR(s)  
Name: \_\_\_\_\_  
Address: \_\_\_\_\_  
 OPERATOR OF ANY NATURAL GAS STORAGE FIELD  
Name: \_\_\_\_\_  
Address: \_\_\_\_\_

SURFACE OWNER(s) (Impoundments or Pits)  
Name: \_\_\_\_\_  
Address: \_\_\_\_\_

\*Please attach additional forms if necessary

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**STATE OF WEST VIRGINIA  
DEPARTMENT OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS  
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Application Notice  WSSP Notice  E&S Plan Notice  Well Plat Notice is hereby provided to:

SURFACE OWNER(s)

Name: \_\_\_\_\_  
Address: \_\_\_\_\_

Name: \_\_\_\_\_  
Address: \_\_\_\_\_

SURFACE OWNER(s) (Road and/or Other Disturbance)

Name: Marian E. Phillips  
Address: 247 Oxen Drive  
Moundsville, WV 26041

Name: Norma C. Payne & Eric G. Dailey  
Address: 8794 Pasture Gate Lane  
Baldwinsville, NY 13027

SURFACE OWNER(s) (Impoundments or Pits)

Name: None  
Address: \_\_\_\_\_

COAL OWNER OR LESSEE

Name: \_\_\_\_\_  
Address: \_\_\_\_\_

COAL OPERATOR

Name: \_\_\_\_\_  
Address: \_\_\_\_\_

SURFACE OWNER OF WATER WELL AND/OR WATER PURVEYOR(s)

Name: \_\_\_\_\_  
Address: \_\_\_\_\_

OPERATOR OF ANY NATURAL GAS STORAGE FIELD

Name: None  
Address: \_\_\_\_\_

\*Please attach additional forms if necessary

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JAN 31 2019  
WV Department of  
Environmental Protection

**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 57<sup>th</sup> Street, SE, Charleston, WV 25304 (304-926-0450) or by visiting [www.dep.wv.gov/office/land-and-gas/pages/default.aspx](http://www.dep.wv.gov/office/land-and-gas/pages/default.aspx).

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JAN 31 2019

**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



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 57<sup>th</sup> St. SE  
Charleston, WV 25304  
(304) 926-0450

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.**

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Office of Oil and Gas  
JAN 31 2019  
WV Department of  
Environmental Protection

**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.

RECEIVED  
Office of Oil and Gas  
JAN 31 2019  
WV Department of  
Environmental Protection



WW-6A  
(8-13)

51 07180  
API NO. 47-051  
OPERATOR WELL NO. River Run 10 UH  
Well Pad Name: Dire Wolf-River Run  
06/14/2019

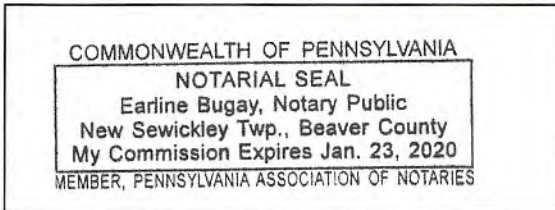
**Notice is hereby given by:**

Well Operator: American Petroleum Partners Operating, LLC  
Telephone: 1-724-338-8629  
Email: Regulatory@APP-LP.com

Address: 4600 J. Barry Court, Suite 310  
Canonsburg, PA 15317  
Facsimile: na

**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](mailto:depprivacyofficer@wv.gov).



Subscribed and sworn before me this 12<sup>th</sup> day of November 2018

Earline Bugay Notary Public

My Commission Expires 1/23/2020

RECEIVED  
Office of Oil and Gas  
JAN 31 2019  
WV Department of  
Environmental Protection

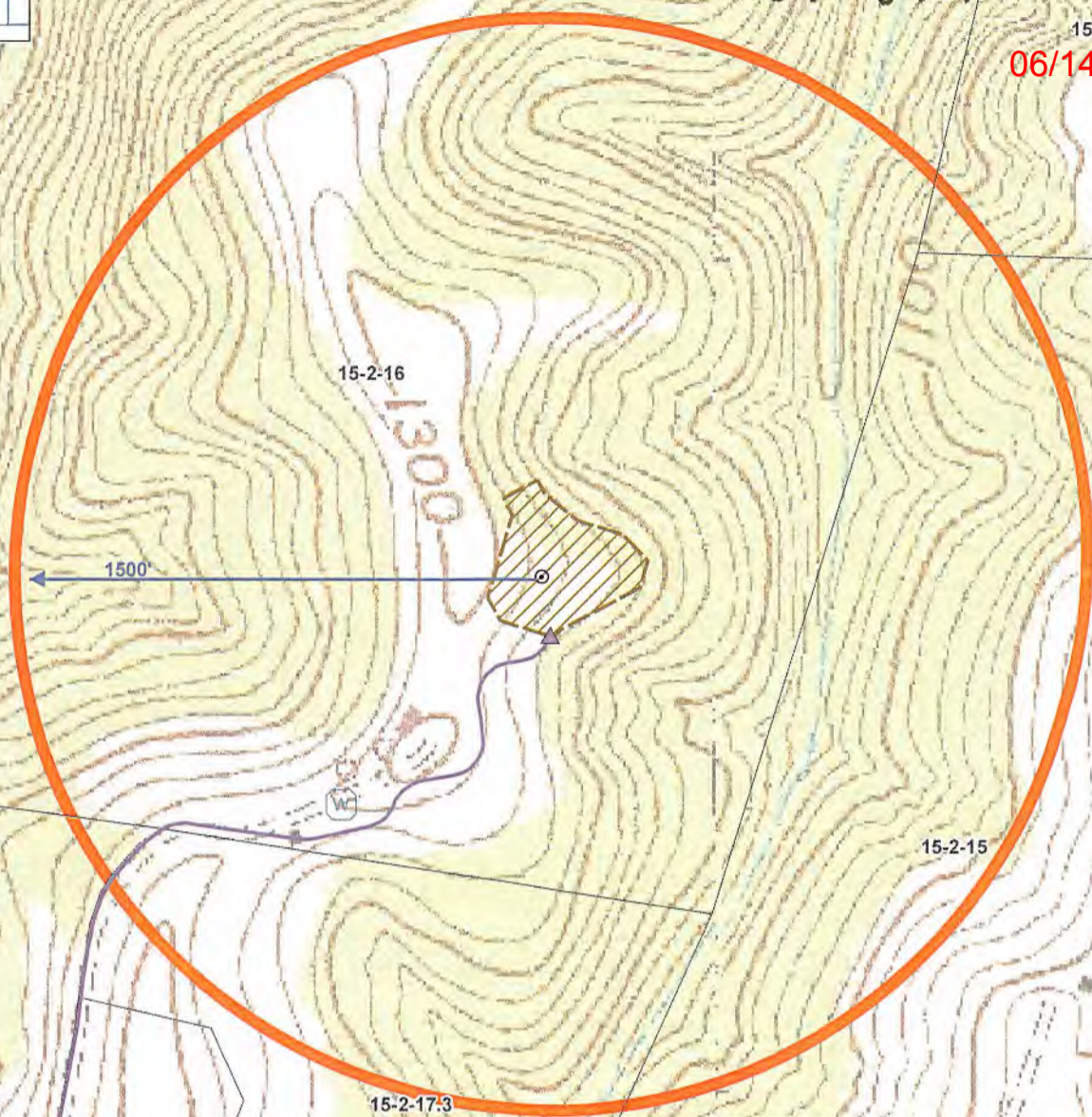


**1 WATER PURVEYOR WITHIN 1,500'**



51 07 180

15-2-2  
**06/14/2019**



**RiverRun10UH**  
**Surface Location Coordinates**  
**10UH = -80.626552, 39.953763**

**RiverRun 10UH - Water Source**

Marshall County  
West Virginia

Coordinate System: NAD 1983 UTM Zone 17N  
Projection: Transverse Mercator  
Datum: North American 1983  
Linear Units: Meter

Map Scale Units:  
1:5,000  
1 inch = 500 feet

Map Author: JKS  
Map Date: 11/20/2018

- Well SHL
- Well Pad
- Access Rd Intersection
- Access Road
- Parcels

- Water Well
- 1,500' Buffer





Affidavit of Personal Service

State Of Pennsylvania

County Of Washington

The undersigned, being first duly sworn, says that the undersigned served a true and complete copy of all sides of--

- (1) Notice on Form WW-2(A)\_\_\_/ WW-3(A)\_\_\_/ WW-4(A)\_\_\_/ WW-5(A)\_\_\_/ WW-6(A)\_\_\_
- (2) Application on Form WW-2(B)\_\_\_/ WW-3(B)\_\_\_/ WW-4(B)\_\_\_/ WW-5(B)\_\_\_/ WW-6(B)\_\_\_
- (3) Plat showing the well location on Form WW-6, and
- (4) Construction and Reclamation Plan on Form WW-9

--all with respect to operator's Well No. River Run located in Webster District, Marshall County, West Virginia, upon the person or organization named--

APP Minerals, LLC

--by delivering the same in Washington County, State of Pennsylvania on the 1st day of July, 20   in the manner specified below.

[COMPLETE THE APPROPRIATE SECTION]

For an individual:

[ ] Handing it to him\_\_\_/ her\_\_\_/ or, because he\_\_\_/ she\_\_\_/ refused to take it when offered it, by leaving it in his\_\_\_/ her\_\_\_/ presence.

[ ] Handing it to a member of his or her family above the age of 16 years named \_\_\_\_\_ who resides at the usual place of abode of the person to be served, and asking the family member to give it to the person to be served as soon as possible.

For a partnership:

[ ] Handing it to \_\_\_\_\_, a partner of the partnership or, because the partner refused to take it when I handed it over, by leaving it in the presence of the partner.

For a limited partnership:

[ ] Handing it to the general partner, named \_\_\_\_\_, or, because the general partner refused to take it when I tried to hand it over, by leaving it in the presence of the general partner.

For a corporation:

[ ] Handing it to the corporation's employee\_\_\_/ officer\_\_\_/ director\_\_\_/ attorney in fact\_\_\_/ named Braulio Silva

[Signature]  
(Signature of person executing service)

Taken, subscribed and sworn before me this 12th day of November 2018.  
My commission expires 1/23/2020

Earline Bugay  
Notary Public  
[Signature]

RECEIVED  
Office of Oil and Gas  
JAN 31 2019  
WV Department of  
Environmental Protection

(AFFIX SEAL IF NOTARIZED OUTSIDE THE STATE)

COMMONWEALTH OF PENNSYLVANIA  
NOTARIAL SEAL  
Earline Bugay, Notary Public  
New Sewickley Twp., Beaver County  
My Commission Expires Jan. 23, 2020  
MEMBER, PENNSYLVANIA ASSOCIATION OF NOTARIES



51 02180

STATE OF WEST VIRGINIA  
DEPARTMENT OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS  
NOTICE OF ENTRY FOR PLAT SURVEY

**Notice Time Requirement:** Notice shall be provided at least SEVEN (7) days but no more than FORTY-FIVE (45) days prior to entry

Date of Notice: 7/17/18 Date of Planned Entry: 7/25/18

**Delivery method pursuant to West Virginia Code § 22-6A-10a**

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

Pursuant to West Virginia Code § 22-6A-10(a), Prior to filing a permit application, the operator shall provide notice of planned entry on to the surface tract to conduct any plat surveys required pursuant to this article. Such notice shall be provided at least seven days but no more than forty-five days prior to such entry to: (1) The surface owner of such tract; (2) to any owner or lessee of coal seams beneath such tract that has filed a declaration pursuant to section thirty-six, article six, chapter twenty-two of this code; and (3) any owner of minerals underlying such tract in the county tax records. The notice shall include a statement that copies of the state Erosion and Sediment Control Manual and the statutes and rules related to oil and gas exploration and production may be obtained from the Secretary, which statement shall include contact information, including the address for a web page on the Secretary's web site, to enable the surface owner to obtain copies from the secretary.

**Notice is hereby provided to:**

SURFACE OWNER(s)

Name: APP Minerals LLC  
 Address: 4600 J. Barry Ct, Suite 310  
Canonsburg, PA 15317

Name: \_\_\_\_\_  
 Address: \_\_\_\_\_

Name: \_\_\_\_\_  
 Address: \_\_\_\_\_

COAL OWNER OR LESSEE

Name: Consol Mining Company LLC  
 Address: 1000 Consol Energy Drive  
Canonsburg, PA 15317

MINERAL OWNER(s)

Name: APP Minerals LLC  
 Address: 4600 J. Barry Ct, Suite 310  
Canonsburg, PA 15317

\*please attach additional forms if necessary

**Notice is hereby given:**

Pursuant to West Virginia Code § 22-6A-10(a), notice is hereby given that the undersigned well operator is planning entry to conduct a plat survey on the tract of land as follows:

State: <u>West Virginia</u>	Approx. Latitude & Longitude: <u>Latitude: 39.953868 &amp; Longitude: -80.626477</u>
County: <u>Marshall</u>	Public Road Access: <u>Oxen Dr.</u>
District: <u>Webster</u>	Watershed: <u>Upper Ohio South</u>
Quadrangle: <u>Moundsville</u>	Generally used farm name: <u>APP Minerals LLC</u>

Copies of the state Erosion and Sediment Control Manual and the statutes and rules related to oil and gas exploration and production may be obtained from the Secretary, at the WV Department of Environmental Protection headquarters, located at 601 57<sup>th</sup> Street, SE, Charleston, WV 25304 (304-926-0450). Copies of such documents or additional information related to horizontal drilling may be obtained from the Secretary by visiting [www.dep.wv.gov/oil-and-gas/pages/default.aspx](http://www.dep.wv.gov/oil-and-gas/pages/default.aspx).

**Notice is hereby given by:**

Well Operator: American Petroleum Partners Operating, LLC  
 Telephone: 844-835-5277  
 Email: regulatory@app-lp.com

Address: 4600 J. Barry Ct, Suite 310  
Canonsburg, PA 15317  
 Facsimile: \_\_\_\_\_

RECEIVED  
Office of Oil and Gas

JAN 31 2019

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](mailto:depprivacyofficer@wv.gov).



WW-6A5  
(1/12)

Operator Well No. River Run 10 UH **06/14/2019**

**51 09180**

**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:** 1/25/19 **Date Permit Application Filed:** 1/25/19

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

- CERTIFIED MAIL  
RETURN RECEIPT REQUESTED
- HAND  
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: APP Minerals, LLC  
Address: 4600 J. Barry Court, Suite 310  
Canonsburg, PA 15317

Name: \_\_\_\_\_  
Address: \_\_\_\_\_

**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>531898.8880</u>
County: <u>Marshall</u>		Northing: <u>4422892.1470</u>
District: <u>Webster</u>	Public Road Access: <u>McCreary's Ridge Road (CR 7)</u>	
Quadrangle: <u>Moundsville</u>	Generally used farm name: <u>App Mineral, LLC</u>	
Watershed: <u>Upper Ohio South</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 57<sup>th</sup> Street, SE, Charleston, WV 25304 (304-926-0450) or by visiting [www.dep.wv.gov/oil-and-gas/pages/default.aspx](http://www.dep.wv.gov/oil-and-gas/pages/default.aspx).

RECEIVED  
Office of Oil and Gas

Well Operator: American Petroleum Partners Operating, LLC  
Telephone: 1-724-338-8629  
Email: Regulatory@app-lp.com

Address: 4600 J. Barry Court Suite 310  
Canonsburg, PA 15317  
Facsimile: na

**JAN 31 2019**

WV Department of  
Environmental Protection

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51 02180

**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:** 1/25/19      **Date Permit Application Filed:** 1/25/19

**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: Joyce Chiclone  
Address: 61 Waymans Ridge  
Moundsville, WV 26041

Name: David and Lonna Hudson  
Address: 319 Oxen Drive  
Moundsville, WV 26041

**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>531898.8880</u>
County:	<u>Marshall</u>		Northing:	<u>4422692.1470</u>
District:	<u>Webster</u>	Public Road Access:	<u>McCreary's Ridge Road (CR 7)</u>	
Quadrangle:	<u>Moundsville</u>	Generally used farm name:	<u>App Minerals, LLC</u>	
Watershed:	<u>Upper Ohio South</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 57<sup>th</sup> Street, SE, Charleston, WV 25304 (304-926-0450) or by visiting [www.dep.wv.gov/oil-and-gas/pages/default.aspx](http://www.dep.wv.gov/oil-and-gas/pages/default.aspx).

Well Operator: American Petroleum Partners OPerationg, LLC  
Telephone: 724-338-8629  
Email: Regulatory@app-lp.com

Address: 4600 J. Barry Court, Suite 110  
Canonsburg, PA 15317  
Facsimile: NA

RECEIVED  
Office of Oil and Gas

**JAN 31 2019**

WV Department of  
Environmental Protection

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

51 02180

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

**Date of Notice:** 1/25/19 **Date Permit Application Filed:** 1/25/19

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

- CERTIFIED MAIL  
RETURN RECEIPT REQUESTED
- HAND  
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: Gorakshya-Serv & Env EDU /Eco-Vrindaban, Inc.  
Address: Rd 3 Box 278-B  
Wheeling, WV 26003

Name: William E and Irene M Dove, et al/ Lakshmi D Dove, et al  
Address: Rd 3 Box 278-B  
Wheeling, WV 26003

**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>531898.8880</u>
County: <u>Marshall</u>		Northing: <u>4422692.1470</u>
District: <u>Webster</u>	Public Road Access: <u>McCreary's Ridge Road (CR 7)</u>	
Quadrangle: <u>Moundsville</u>	Generally used farm name: <u>App Minerals, LLC</u>	
Watershed: <u>Upper Ohio South</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 57<sup>th</sup> Street, SE, Charleston, WV 25304 (304-926-0450) or by visiting [www.dep.wv.gov/oil-and-gas/pages/default.aspx](http://www.dep.wv.gov/oil-and-gas/pages/default.aspx).

Well Operator: American Petroleum Partners Operation, LLC  
Telephone: 724-338-8629  
Email: Regulatory@app-lp.com

Address: 4600 J. Barry Court, Suite 110  
Canonsburg, PA 15317  
Facsimile: NA

RECEIVED  
Office of Oil and Gas

JAN 31 2019

WV Department of  
Environmental Protection

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WW-6A5  
(1/12)

Operator Well No. River Run 10 UH 06/14/2019

51 02180

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:** 1/25/19 **Date Permit Application Filed:** 1/25/19

**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>David Hunt</u>	Name: _____
Address: <u>6906 Conley Street</u>	Address: _____
<u>Baltimore, MD 21224</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>531898.8880</u>
County: <u>Marshall</u>		Northing: <u>4422692.1470</u>
District: <u>Webster</u>	Public Road Access: <u>McCreary's Ridge Road (CR 7)</u>	
Quadrangle: <u>Moundsville</u>	Generally used farm name: <u>App Minerals, LLC</u>	
Watershed: <u>Upper Ohio South</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 57<sup>th</sup> Street, SE, Charleston, WV 25304 (304-926-0450) or by visiting [www.dep.wv.gov/oil-and-gas/pages/default.aspx](http://www.dep.wv.gov/oil-and-gas/pages/default.aspx).

Well Operator: American Petroleum Partners OPerationg, LLC

Telephone: 724-338-8629

Email: Regulatory@app-lp.com

Address: 4800 J. Barry Court, Suite 110

Canonsburg, PA 15317

Facsimile: NA

RECEIVED  
Office of Oil and Gas

JAN 31 2019

WV Department of  
Environmental Protection

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Affidavit of Personal Service

51 02180

State Of Pennsylvania

County Of Washington

The undersigned, being first duly sworn, says that the undersigned served a true and complete copy of all sides of--

- (1) Notice on Form WW-2(A)\_\_\_/ WW-3(A)\_\_\_/ WW-4(A)\_\_\_/ WW-5(A)\_\_\_/ WW-6(A)\_\_\_
- (2) Application on Form WW-2(B)\_\_\_/ WW-3(B)\_\_\_/ WW-4(B)\_\_\_/ WW-5(B)\_\_\_/ WW-6(B)\_\_\_
- (3) Plat showing the well location on Form WW-6, and
- (4) Construction and Reclamation Plan on Form WW-9

--all with respect to operator's Well No. River Run located in Webster District, Marshall County, West Virginia, upon the person or organization named--

APP Minerals, LLC

--by delivering the same in Washington County, State of Pennsylvania on the 1st day of July, 20    in the manner specified below.

[COMPLETE THE APPROPRIATE SECTION]

For an individual:

Handing it to him\_\_\_/ her\_\_\_/ or, because he\_\_\_/ she\_\_\_/ refused to take it when offered it, by leaving it in his\_\_\_/ her\_\_\_/ presence.

Handing it to a member of his or her family above the age of 16 years named \_\_\_\_\_ who resides at the usual place of abode of the person to be served, and asking the family member to give it to the person to be served as soon as possible.

For a partnership:


Handing it to \_\_\_\_\_, a partner of the partnership or, because the partner refused to take it when I handed it over, by leaving it in the presence of the partner.

For a limited partnership:

Handing it to the general partner, named \_\_\_\_\_, or, because the general partner refused to take it when I tried to hand it over, by leaving it in the presence of the general partner.

For a corporation:

Handing it to the corporation's employee\_\_\_/ officer\_\_\_/ director\_\_\_/ attorney in fact\_\_\_/ named Braulio Silva.

  
(Signature of person executing service)

Taken, subscribed and sworn before me this \_\_\_ day of \_\_\_\_\_ 20\_\_\_.  
My commission expires \_\_\_\_\_.

\_\_\_\_\_  
Notary Public

(AFFIX SEAL IF NOTARIZED OUTSIDE THE STATE)

RECEIVED  
Office of Oil and Gas  
JAN 31 2019  
WV Department of  
Environmental Protection





## WEST VIRGINIA DEPARTMENT OF TRANSPORTATION

## Division of Highways

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

Thomas J. Smith, P. E.  
 Secretary of Transportation/  
 Commissioner of Highways

November 28, 2018 ✓

Jill M. Newman  
 Deputy Commissioner

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

Subject: DOH Permit for the Riverrun Pad, Marshall County  
 Riverrun 10UH Well site ✓

Dear Mr. Martin,

This well site will be accessed from a DOH permit #06-2018-0543 which has been issued to American Petroleum Partners for access to the State Road for a well site located off of Marshall County Route 7 SLS.

The operator has signed a DISTRICT WIDE 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

Cc: Bill Dorsch  
 American Petroleum Partners  
 CH, OM, D-6  
 File

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## Hydraulic Fracturing Fluid Product Component Information Disclosure

### Hydraulic Fracturing Fluid Composition:

Trade Name	Supplier	Purpose	Ingredients	Chemical Abstract Service Number (CAS #)	Maximum Ingredient Concentration in Additive (% by mass)
Water	Operator	Carrier/Base Fluid	Water	7732-18-5	100.00000
Terraprop Plus 30/50	Baker Hughes	Proppant	Aluminum Oxide	1344-28-1	100.00000
			Amorphous Silica	7631-86-9	20.00000
			Titanium Dioxide	13463-67-7	5.00000
			Iron Oxide	1309-37-1	5.00000
Sand (Proppant)	Stingray	Proppant	Silica Substrate	14808-60-7	87.00000
ProLite 40/70	Imerys	Proppant	Mullite	1302-93-8	70.00000
			Cristobalite	14464-46-1	30.00000
			Amorphous Silica	7631-86-9	15.00000
Hydrochloric Acid (HCl)	FTSI	Acid	Hydrogen Chloride	7647-01-0	15.00000
SI-117	WST	Scale Inhibitor	Copolymer of Maleic and Acrylic Acid	52255-49-9	70.00000
			Ethylene glycol	107-21-1	40.00000
			DETA phosphonate	15827-60-8	20.00000
			Hexamethylene Triamine Penta (Methylene Phosphonic Acid)	34690-00-1	20.00000
			Phosphino carboxylic acid polymer	71050-62-9	20.00000
K-BAC 1020 DBNPA	WST	Bactericide	Polyethylene glycol	25322-68-3	50.00000
			Water	7732-18-5	30.00000
			2,2-Dibromo-3-nitriopropionamide	10222-01-2	21.00000
NEFE-180	Stingray	Acid Inhibitor/Iron Control	Acetic Acid	64-19-7	60.00000
			Methanol	67-56-1	30.00000
			2-Ethylhexanol	104-76-7	7.50000
			Cocunut Oil Acid diethanolamine	68603-42-9	3.00000
			Alcohols, C15-15, ethoxylated	68951-67-7	3.00000
			Olefin	64743-02-8	3.00000
			Fatty Acids, tall oil	61790-12-3	3.00000
			2-Propyn-1-ol	107-19-7	3.00000
FRA-409	Stingray	Friction Reducer	Copolymer of 2-propenamide	Proprietary	30.00000
			Distillates (petroleum), Hydrotreated Light	64742-47-8	20.00000
			Alcohols, C12-16, Ethoxylated	68551-12-2	2.00000
			Alkanolamide	93-83-4	2.00000
			Ammonium Chloride	12125-02-9	1.00000
CSL-30	Stingray	pH Control	Sodium Hydroxide	1310-73-2	30.00000
WG-36 GELLING AGENT	Halliburton	Gelling Agent	Guar gum	9000-30-0	100.00000
SP BREAKER	Halliburton	Breaker	Sodium persulfate	7775-27-1	100.00000
LOSURF-300D	Halliburton	Non-ionic Surfactant	Ethanol	64-17-5	60.00000
			Heavy aromatic petroleum	64742-94-5	30.00000
			Naphthalene	91-20-3	5.00000
			Poly(oxy-1,2-ethanedyl), alpha-	127087-87-0	5.00000
			1,2,4 Trimethylbenzene	95-63-6	1.00000

06/14/2019

 REV  
 Office of Oil and Gas

JAN 31 2019

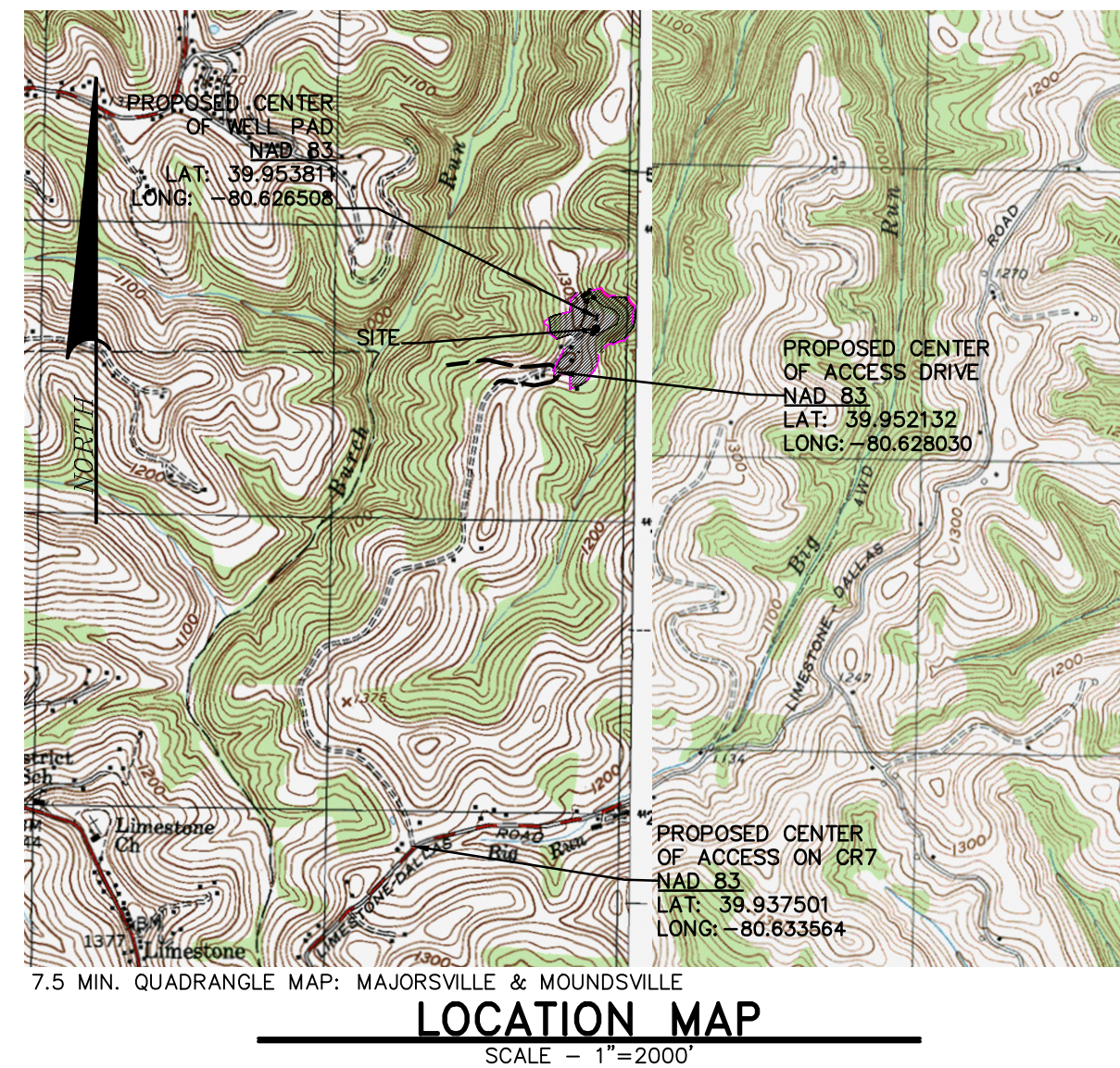
 WV Department of  
 Environmental Protection



# EROSION & SEDIMENT CONTROL PLAN FOR DIRE WOLF - RIVERRUN PAD WEBSTER TAX DISTRICT, MARSHALL COUNTY, WEST VIRGINIA

## GENERAL NOTES

1. THE BOUNDARY AND TOPOGRAPHIC SURVEY FOR THE PROJECT AREA WERE PROVIDED BY APP OPERATING, LLC IN APRIL 2018.
2. PROPERTY BOUNDARIES, LANDOWNER INFORMATION AND ROAD NETWORKS SHOWN ON THIS PLAN ARE BASED ON AVAILABLE COUNTY GIS DATA AND BOUNDARY SURVEY PROVIDED BY APP OPERATING LLC.
3. EXISTING STRUCTURES, TREE LINES AND ROADWAYS HAVE BEEN LOCATED PER AVAILABLE ONLINE AERIAL PHOTOGRAPHY AND SURVEY PROVIDED BY APP OPERATING LLC.
4. THE HORIZONTAL DATUM IS WEST VIRGINIA STATE PLANE, NORTH AMERICAN DATUM 1983 (WV83-NF), NORTH ZONE.
5. THE VERTICAL DATUM IS WEST VIRGINIA STATE PLANE, NORTH AMERICAN VERTICAL DATUM 1983 (WV83-NV) WHICH ORIGINATES FROM FIELD RUN TOPOGRAPHIC SURVEY.
6. A WETLANDS SURVEY WAS PERFORMED BY RETTEW ASSOCIATES ON APRIL AND MAY 2018.
7. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING, PRIOR TO CONSTRUCTION, ALL NECESSARY CONSTRUCTION PERMITS REQUIRED BY FEDERAL, STATE AND LOCAL GOVERNMENT AGENCIES.
8. THE CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE FEDERAL, STATE, AND LOCAL LAWS AND REGULATIONS, INCLUDING ALL SAFETY REQUIREMENTS.
9. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO PREVENT ANY DAMAGE TO PRIVATE PROPERTY, PROVIDE ACCESS TO ALL DRIVES DURING CONSTRUCTION, NOTIFY UTILITY COMPANIES AND VERIFY LOCATION OF ALL UTILITIES PRIOR TO THE START OF CONSTRUCTION, AND PROTECT ALL UTILITIES TO REMAIN IN SERVICE.
10. THE CONTRACTOR SHALL ABIDE BY ALL APPLICABLE FEDERAL, STATE, AND LOCAL REGULATIONS GOVERNING EXCAVATION. THE CONTRACTOR SHALL PROVIDE DETAILED PLANS AND SPECIFICATIONS FOR TRENCH SAFETY SYSTEMS THAT COMPLY WITH APPLICABLE LAWS GOVERNING EXCAVATION WHEN APPLICABLE TO THE PROJECT. THESE PLANS SHALL BE SEALED BY AN ENGINEER EXPERIENCED IN THE DESIGN OF TRENCH SAFETY SYSTEMS AND LICENSED BY THE STATE IN WHICH THE WORK IS OCCURRING. CONTRACTOR SHALL SUBMIT THE PLAN TO APP OPERATING, LLC PRIOR TO COMMENCING WORK. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL ASPECTS FOR WORK RELATED TO EXCAVATION.
11. ANY DAMAGES THAT MAY OCCUR TO PROPERTY OR EXISTING IMPROVEMENTS SHALL BE RESTORED BY THE CONTRACTOR TO AT LEAST THE SAME CONDITION THAT THE PROPERTY OR IMPROVEMENTS WERE IN PRIOR TO THE DAMAGES. IN THE EVENT OF SUCH DAMAGE, CONTRACTOR SHALL NOTIFY APP OPERATING, LLC IMMEDIATELY PRIOR TO THE RESTORATION. THIS RESTORATION SHALL BE SUBJECT TO THE OWNER'S APPROVAL; MOREOVER, THIS RESTORATION SHALL NOT BE A BASIS FOR ADDITIONAL COMPENSATION TO THE CONTRACTOR.
12. CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING THE CONSTRUCTION SITE CLEAR OF ALL TRASH AND DEBRIS.
13. PRIOR TO ANY EARTHWORK EXCAVATION OR TOPSOIL REMOVAL, ALL EROSION CONTROL MEASURES DETAILED ON THESE DRAWINGS SHALL BE PROPERLY INSTALLED. ADDITIONAL EROSION CONTROL MEASURES MAY BE REQUIRED BY APP OPERATING, LLC AT ANY TIME.
14. THE CONTRACTOR SHALL INSPECT STABILIZATION AND EROSION CONTROL MEASURES AT A MINIMUM OF ONCE EVERY 7 DAYS OR WITHIN 24 HOURS AFTER ANY STORM EVENT GREATER THAN 0.5 INCHES DURING CONSTRUCTION.
15. SILT FENCE AND SEDIMENT BARRIERS SHALL REMAIN IN PLACE UNTIL RE-VEGETATION HAS BEEN COMPLETELY ESTABLISHED IN ACCORDANCE WITH APPLICABLE REGULATIONS UNTIL PROJECT COMPLETION.
16. DISTURBED AREAS THAT ARE SEEDED OR SODDED SHALL BE CHECKED PERIODICALLY TO SEE THAT GRASS COVERAGE IS PROPERLY MAINTAINED UNTIL THE CONTRACTOR IS RELEASED FROM THE JOB SITE. DISTURBED AREAS SHALL BE WATERED, FERTILIZED, AND RESEEDED OR RE-SODDED, IF NECESSARY.
17. FOR DESIGN PURPOSES, THE PAD CROSS SECTION AND ROAD SECTION WAS ASSUMED TO BE 16". THIS IS DUE TO SETTLEMENT OF THE CRUSHER RUN INTO THE R-3 ZONE.
18. A GEOTECHNICAL INVESTIGATION HAS NOT BEEN PERFORMED. SEE SHEET 13 FOR TYPICAL BONDING (TOE BENCH DETAIL).
19. PRIOR TO FILL PLACEMENT, EXISTING SUBGRADE SHALL BE SCARIFIED TO A MINIMUM DEPTH OF 6". MOISTURE ADJUSTED TO OPTIMUM, AND RE-COMPACTED TO THE SAME DENSITY AND MOISTURE CONTENT AS THE PROPOSED FILL.
20. IMPORTED SELECT FILL IS DEFINED AS UNIFORMLY BLENDED SANDY CLAY TO CLAYEY SAND WITH A LIQUID LIMIT (LL) OF LESS THAN 35 PERCENT AND A PLASTICITY INDEX (PI) OF BETWEEN 6 AND 15. FILL MATERIAL SHALL BE PLACED IN LIFTS NOT EXCEEDING EIGHT (8) INCHES IN LOOSE THICKNESS. ROCK FILL LIFTS SHALL BE NO GREATER THAN 36". FILLS WILL BE FREE OF OBJECTIONABLE MATERIAL, NOTHING LARGER THAN 6". LIFT THICKNESSES WILL BE 12" MAXIMUM, NOTHING FROZEN OR WET.
21. FILL MATERIAL SHALL BE COMPACTED TO A MINIMUM OF 95 PERCENT MAXIMUM STANDARD PROCTOR DRY DENSITY (ASTM D 698), IN CONJUNCTION WITH THE COMPACTING OPERATION, FILL MATERIAL SHALL BE BROUGHT TO OPTIMUM MOISTURE CONTENT.



**AMERICAN  
PETROLEUM  
PARTNERS**

### OPERATOR

AMERICAN PETROLEUM PARTNERS OPERATING, LLC  
4600 J. BARRY COURT  
SUITE 310  
CANONSBURG, PA 15317

### LIMITS OF DISTURBANCE

PAD	12.41 ACRES
ROAD	2.59 ACRES
TOTAL	14.7 ACRES
PER LAND OWNER	ACRES
APP MINERALS, LLC	15.0



AT LEAST 48 HOURS, BUT NOT MORE THAN 10 WORKING DAYS (EXCLUDING WEEKENDS AND HOLIDAYS), PRIOR TO STARTING ANY EARTH DISTURBANCE ACTIVITIES, ALL CONTRACTORS INVOLVED IN THESE ACTIVITIES SHALL CONTACT MISS UTILITY OF WEST VIRGINIA AT 811 OR 1-800-245-4848.

DATE: 5-31-2018 TICKET #: 1615162355

06/14/2019

### SOILS CLASSIFICATION

QmD: CULLEOKA-DORMANT COMPLEX, 15 TO 25% SLOPES

DsE: DORMANT-CULLEOKA COMPLEX, 35 TO 70% SLOPES, VERY STONY

### CUT & FILL

	WELL PAD	ACCESS DRIVE	SITE
CUT (SOIL)	+ 99,245 CY	+ 1,214 CY	+100,459 CY
FILL	- 75,976 CY	- 5,501 CY	- 81,477 CY
NET	+ 23,269 CY	- 4,287 CY	= 18,982 CY
STONE	+ 5,557 CY	+ 754 CY	= 6,311 CY
TOPSOIL	- 5,303 CY	- 855 CY	= -6,158 CY
NET	+ 23,523 CY	- 4,388 CY	= 19,135 CY

### NOTES:

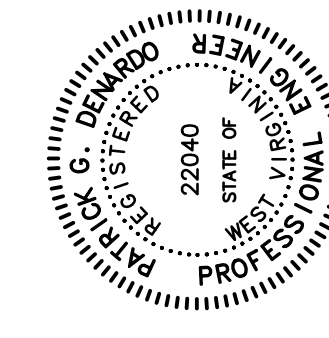
1. THE TOPSOIL DEPTH FOR THE ACCESS DRIVE IS APPROXIMATELY 6.0". THE TOPSOIL DEPTH FOR THE PAD IS ASSUMED 6.0".
2. THE CUT & FILL SUMMARY CALCULATIONS PRESENTED ON THIS PLAN ARE FOR INFORMATIONAL PURPOSES ONLY. IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO VERIFY EXISTING GRADES AND VERIFY EARTHWORK VOLUMES, METHODS AND PROCEDURES. ANY ISSUES ARE TO BE BROUGHT TO THE ENGINEER'S AND OWNER'S ATTENTION PRIOR TO COMMENCEMENT OF WORK.
3. THE EXCESS TOPSOIL AND SUBSOIL WILL BE STORED IN THE DESIGNATED FILL STOCKPILES AS SHOWN ON THE PLANS.

### LIST OF DRAWINGS

- 1 OF 16 . . . . . COVER SHEET & GENERAL NOTES
- 2 OF 16 . . . . . ENLARGED LAYOUT PLAN
- 3 OF 16 . . . . . EROSION & SEDIMENT CONTROL PLAN
- 4 OF 16 . . . . . WV DEP ERS PLAN
- 5 OF 16 . . . . . OXEN DRIVE PROFILE
- 6 OF 16 . . . . . OXEN DRIVE PROFILE
- 7 OF 16 . . . . . ACCESS DRIVE PROFILE
- 8 OF 16 . . . . . CROSS SECTIONS PLAN VIEW
- 9 OF 16 . . . . . CROSS SECTIONS - ACCESS DRIVE
- 10 OF 16 . . . . . CROSS SECTIONS - PAD
- 11 OF 16 . . . . . RECLAMATION PLAN
- 12 OF 16 . . . . . EVACUATION ROUTE PLAN
- 13 OF 16 . . . . . EVACUATION ROUTE PLAN - USGS
- 14 OF 16 . . . . . NOTES & DETAILS
- 15 OF 16 . . . . . DETAILS
- 16 OF 16 . . . . . DETAILS



FOR RETTEW ASSOCIATES BY: AREFS:



MANAGER: PATRICK DEMARDO, P.E.  
DESIGN BY: CHKO BY: MEI  
PDZ  
DRAWN BY: CHKO BY: MEI  
PDZ  
SURV. CHIEF: FIELDBOOK NO. DATA COLLECTOR

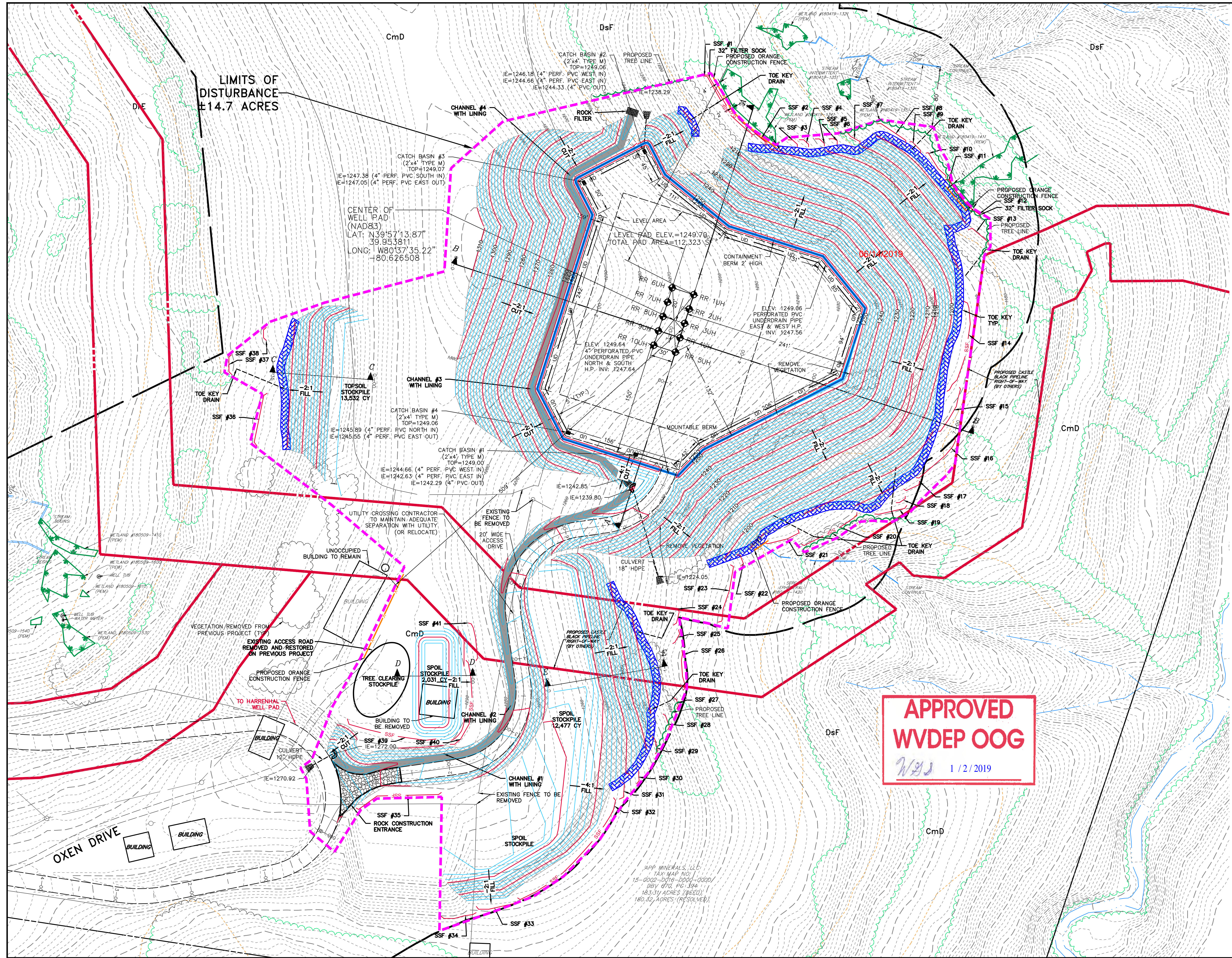
CLIENT: AMERICAN PETROLEUM PARTNERS OPERATING, LLC  
4600 J. BARRY COURT  
SUITE 310  
CANONSBURG, PA 15317

**RETTEW**  
RETTEW Associates, Inc.  
One Robison Plaza, Suite 200, Pittsburgh, PA 15205  
Tel: (412) 446-1725  
Fax: (412) 446-1725  
Email: [info@rettew.com](mailto:info@rettew.com)  
Website: [www.rettew.com](http://www.rettew.com)  
Engineers • Planners • Surveyors • Landscape Architects  
Environmental Consultants

COVER SHEET & GENERAL NOTES  
FOR  
DIRE WOLF - RIVERRUN PAD  
WEBSTER TAX DISTRICT MARSHALL COUNTY, WV

DATE: 06/05/2018  
SHEET NO. 1 OF 16  
DWG. NO. 109562001





LIMITS OF DISTURBANCE  
±14.7 ACRES

CATCH BASIN #2  
(2'x4' TYPE M)  
TOP=1249.06  
IE=1246.18 (4" PERF. PVC WEST IN)  
IE=1244.66 (4" PERF. PVC EAST IN)  
IE=1244.33 (4" PVC OUT)

CATCH BASIN #3  
(2'x4' TYPE M)  
TOP=1249.07  
IE=1247.38 (4" PERF. PVC SOUTH IN)  
IE=1247.05 (4" PERF. PVC EAST OUT)

CATCH BASIN #4  
(2'x4' TYPE M)  
TOP=1249.06  
IE=1245.89 (4" PERF. PVC NORTH IN)  
IE=1245.55 (4" PERF. PVC EAST OUT)

CATCH BASIN #1  
(2'x4' TYPE M)  
TOP=1249.00  
IE=1244.66 (4" PERF. PVC WEST IN)  
IE=1242.63 (4" PERF. PVC EAST IN)  
IE=1242.29 (4" PVC OUT)

LEVEL PAD  
ELEV.=1249.70  
TOTAL PAD AREA=112,323 SF

**APPROVED  
WVDEP OOG**  
*WJS* 1/2/2019

APP MINERALS, LLC  
TAXI MAP NO:  
15-0002-0016-0000-0000/  
DIV 070, PG 1394  
183.317 ACRES (1982)  
180.32 ACRES (RESOLVED)

**LEGEND**

EXISTING PAVEMENT	
PROPOSED TREE LINE	
LIMITS OF DISTURBANCE	
PROPOSED CONTAINMENT BERM	
ROCK CONSTRUCTION ENTRANCE	
EXISTING WETLAND	
EXISTING STREAM	
EXISTING UTILITY POLE	
EXISTING OVERHEAD ELECTRIC LINE	
EXISTING STRUCTURE	
WETLAND A01	

- NOTES:**
- CONTRACTOR SHALL FIELD LOCATE ALL PROPERTY LINES, AND SHALL NOT CROSS EXCEPT WHERE SHOWN.
  - REFER TO SHEETS 12 THROUGH 14 FOR EROSION CONTROLS.
  - CONTRACTOR SHALL PROTECT ALL TREES TO REMAIN.
  - ALL WORK SHALL STAY OUT OF BED AND BANKS OF ALL STREAMS UNLESS PREVIOUSLY AUTHORIZED.
  - REFER TO SHEET 15 FOR CHANNEL LININGS.

FOR RETTEW ASSOCIATES BY: AREFS:

MANAGER: PATRICK DEMARDO, P.E.  
DESIGN BY: PDZ  
DRAWN BY: PDZ  
SURV. CHIEF: PDZ

CHKD BY: MEI  
CHKD BY: MEI  
FIELDBOOK NO.: 22040  
DATA COLLECTOR: MEI

DATE: 2/1/2018  
REVISED: 1/9/2018  
PER WV DEP COMMENTS  
NO. DATE REVISION

CLIENT: AMERICAN PETROLEUM PARTNERS OPERATING, LLC  
4600 J. BARRY COURT  
CANONSBURG, PA 15317

SCALE: 1"=60'  
0 30' 60' 120' 180'

**RETTEW**  
Engineers • Planners • Surveyors • Landscape Architects  
Environmental Consultants  
RETTEW Associates, Inc.  
One Robinson Plaza, Suite 200, Pittsburgh, PA 15205  
Phone: (412) 446-1725  
Fax: (412) 446-1735  
Email: [info@rettew.com](mailto:info@rettew.com)  
Website: [www.rettew.com](http://www.rettew.com)

EROSION & SEDIMENT CONTROL PLAN  
FOR  
DIRE WOLF-RIVERRUN PAD  
WEBSTER TAX DISTRICT MARSHALL COUNTY, WV

DATE: 06/05/2018  
SHEET NO. 3 OF 16  
DWG. NO. 109562001

NOT FOR CONSTRUCTION/NOT FOR BIDDING