

west virginia department of environmental protection

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

Austin Caperton, Cabinet Secretary www.dep.wv.gov

Monday, January 28, 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 WINTERFELL-5UH

47-051-02118-00-00

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: WINTERFELL-5UH

Farm Name: HARRIS, BRENDA J., ET AL

U.S. WELL NUMBER: 47-051-02118-00-00

Horizontal 6A New Drill Date Issued: 1/28/2019

API Number: 051-02118

PERMIT CONDITIONS

West Virginia Code § 22-6A-8(d) allows the Office of Oil and Gas to place specific conditions upon this permit. Permit conditions have the same effect as law. Failure to adhere to the specified permit conditions may result in enforcement action.

CONDITIONS

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

API Number: <u>051-02118</u>

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, cessation of drilling, sending an email to DEPOOGNotify@wv.gov.



west virginia department of environmental protection

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

Barry K. Lay, Chairman dep.wv.gov

December 12, 2018

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

RE: Application for Deep Well Permit – API #47-051-02118

COMPANY: American Petroleum Partners Operating, LLC

FARM: Brenda J. Harris et al Winterfell-5UH

COUNTY: Marshall DISTRICT: Webster QUAD: Majorsville

The deep well review of the application for the above company is <u>Approved to drill to the Point Pleasant for completion. Pooling Docket No. 269-260</u>

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? None
- 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: *yes, Docket 269-260 Exception Location Hearing, Castle Black-5UH 47-051-02044; Winterfell-10UH 47-051-02106.
- 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,

Administrator

API NO. 47-051 - 6 2 1 1 8

OPERATOR WELL NO. Winterfell 5 UH

Well Pad Name: Dire Wolf-Winterfell

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

1) Well Operato	or: Americ	an Petroleur	n Partne	494521257	Marshall	Webster	Moundsville
•				Operator ID	County	District	Quadrangle
2) Operator's W	ell Number	r: Winterfell 5	UH	Well Pac	Name: Dire V	Volf-Winte	rfell
3) Farm Name/S	Surface Ow	ner: Brenda	J. Harris,	et al Public Roa	d Access: McC	reary's Ri	dge Road (CR 7)
4) Elevation, cu	rrent groun	d: <u>1145.44</u>	' Ele	evation, proposed	post-construction	on: 1130'	
5) Well Type	(a) Gas Other	X	Oil	Unde	erground Storag	ge	
	(b)If Gas	Shallow Horizontal	×	Deep	x		
6) Existing Pad	Yes or No						
•	7) Proposed Target Formation(s), Depth(s), Anticipated Thickness and Expected Pressure(s): Utica Formation 11,395 150' thick / 10,000 psi or .89 psi per foot.						
8) Proposed Tot	tal Vertical	Depth: 11,39	95'				
9) Formation at Total Vertical Depth: Utica							
10) Proposed Total Measured Depth: 21,523'							
11) Proposed H	orizontal Le	eg Length: 9	,637'	·			
12) Approximate Fresh Water Strata Depths: 162'							
13) Method to I	Determine F	resh Water D	epths: N	learest offset we	ll		
14) Approximat	te Saltwater	Depths: Na					
15) Approximat	te Coal Sear	m Depths: 45	55', 655'				
16) Approximat	te Depth to	Possible Void	(coal mi	ne, karst, other):	None anticipated.	drilling in pilla	r - Mine maps attached.
17) Does Propo directly overlying				ns Yes X	No		
(a) If Yes, pro	vide Mine l	Info: Name:	The O	hio County Mine-Murr	ay American Ener	gy and Cons	olidation Coal Company
•		Depth:	455',	655'			
		Seam:	Pittsb	ourgh #8			
		Owner	: Murra	ay American Ene	rgy & Consolid	ation Coal	Company

WW-6B (04/15)

API NO. 47- 051

OPERATOR WELL NO. Winterfell 5 UH

Well Pad Name: Dire Wolf-Winterfell

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#	100'	100'	CTS
Fresh Water	20"	New	J-55	94#	730'	730'	15.8ppg to sur 521 sx w/30% OH escess
Coal	13 3/8"	New	J-55	54.5#	1,941'	1,941'	15.2ppg to sur 556 ax W/30% OH Excess
Intermediate	9 5/8"	New	HCP-110	43.5#	9,542'	9,542'	15.4ppg to surf 938 sx w/30% OH excess
Production	5 1/2"	New	HCP-110	23#	21,523'	21,523'	14.8ppg TOC >=200' above 9.625 shoe
Tubing	2 7/8"	New	J-55	6.5#	11,400	11,400'	
Liners							

Ju8/23/18

ТҮРЕ	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 yleld 2.38 tail 521 ax Yleld 1.18
Fresh Water	20"	24"	.438	2,110	400	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 556 sx Yield 1.27
Intermediate	9 5/8"	12.375"-12.25"	.395	7,870	3,166	Class A	Load Yleki 1.28 Tail 936 ax Yleki 1.28
Production	5 1/2"	8.5"	.361	14,360	11,000	Class H	RECEIVED of Oil and Gas
Tubing	2 7/8"	5.14"	.217	10,570	8,000		
Liners						AU	29 2018

WV Department of Environmental Protection

PACKERS

Kind:		
Sizes:		
Depths Set:		

WW-6E	3
(10/14))

API NO. 47- 051

OPERATOR WELL NO. Winterfell 5 UH

Well Pad Name: Dire Wolf-Winterfell

X 8 23 18

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

Drill the vertical depth to the Utica at an estimated total vertical depth of 11,395'. Drill the horizontal legstimulate and produce the Utica formation. 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 engineerig 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): 36.2 acres
- 22) Area to be disturbed for well pad only, less access road (acres): 9.55 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 (antisettling, antifoam, fluid loss retarder, salt, viscosifer) & 15.4 Class A tail with additives (antisettling, 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, antisettling, 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 at TD, 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 KCI 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 SOBM. 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.

	Fresh Water Protetcion String:	Cement Additives	
Allied Material Name	Additive (Material) Type	Additive (Material) Description	CAS#
CCAC (Class A Common)	Base Cement	Grey powder	65997-15-1
			10043-52-4
CA-100	Accelerator	White flake	7447-40-7
			7732-18-5
			7647-14-5
		on	
		018	
		CEIVED (Oil and Control of the contr	ille ire
		REC Office of AUG WV De Environm	Environm



DRILLING WELL PLAN

Winterfell-5UH 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		PE		AIR	To Surface	N/A	N/A		Stabilize surface fill/soil
		7.19	20	Conductor	100	100						
	1			Sewickley Coal	455					CBL Log		
	24"	Top-Hole	20" 94# J-	Pittsburgh Coal	655		AID	15.6ppg	20" Air Hammer	Cased hole NPHI, GR at	Carbide hammer	Protect fresh groundwate
П	24	тор-поје	55 BTC				AIR	to surface 521sx w/ 30%	Totco at TD	Pilot TD in	bit	Protect fresh groundwater
П				Surf. Casing	730	730		OH excess		Pilot Well only		
				Big Lime	1525				Center Rock		Hammer bit w/	
	47.50	T (1-1-	13-3/8"	Greenbrier Group	Greenbrier Group 1592 15.2ppg	15" Air Hammer		diamond gage				
	17,5"	Top-Hole	54.5# J-55 BTC	Big Injun	1641		AIR		Gyro above Coal, (Mine Approval)		Test casing to 800psi	
				Int. Casing	1941	1941			Totco at TD		aoopsi	
				Tully LS	6216							
				Hamilton 6245								
				Cherry Valley	6354		AIR to st		ı,	MWD surveys Mud Logger - 90	Hammer bit w/ full face diamond	PU cleanout assembly,dress plug, displace to 12 0ppg
	41.		/ 1	Marcellus Shale	6356			15.4ppg to surface 12" Air Hammer 936sx w/ 30% OH excess				
				Onondaga Ls	6390							
	40.0751	(Indiana)	9-5/8" 43.5# P-110 BTC	Oriskany Sandstone	6619							
	12.375"	Horizontal Rig		Salina Group	7203				r ft samples	Test casing to	displace to 12.0ppg SOBM, PU Curve BHA,	
				Vermon Shale	7958				Totco every 400ft		1000psi	time drill / KO cement plug.
			1	Lockport Dolomite 8175		OH excess				Expect Seepage in curve		
1			Clinton Group 8890									
				Medina Group 8962								
			1	Queenston Shale	9142							
1				Int. Casing	9542	9542						
	100			Utica Shale	11042			24.2000		MWD Surveys	1	
	8.5"		5-1/2" 23#	Point Pleasant Formation	11395		.+/- 14.5	14.8ppg TOC >= 200'	6.75" PDM &	Mud Logger - 30		
	Curve/L	Horizontal Rig	HCP-110	Curve LP TARGET			ppg	Above 9.625	MWD 2.38° ADJ Bend	ft samples (Curve) 90 ft	5 - 25 WOB 100 - 120 RPM	Geosteering
	ateral	rug	BPN	TANGET			SOB	shoe 4100sx w/ 15%	(10° Build DLS)	samples	100 - 120 RPM 450 - 500 GPM	
				Production Casing				OH excess		(Lateral)		
				Production Casing								1

8.5 Hole - Cemented Long String 5-1/2" 23# HCP-110 BPN

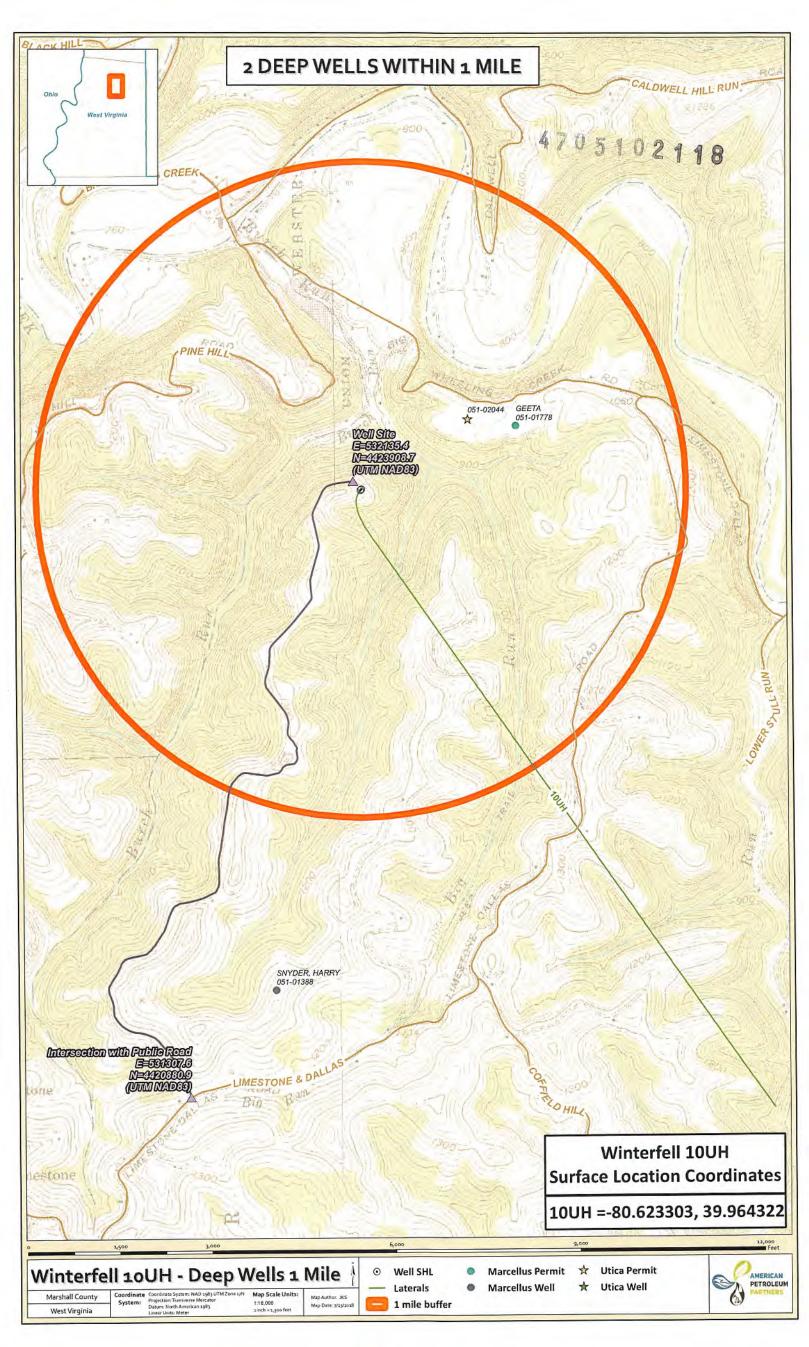
Lateral Targets Landing Point 11395 TVD 11886 MD

90.5 degrees

9637 ft Lateral Length

90.5 Inc 325 Az Total Depth 11395 TVD 21523 TD





Member, Pennsylvania Association of Notaries

WW-9 (4/16)

API Number 47 -	051	-
Operator's	Well No.	Winterfell 5 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 Majorsville
Do you anticipate using more than 5,000 bbls of water to complete the proposed well work? Yes No No No No Vill a pit be used? Yes No Vill a pit be used?
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. Ar/water based mud through intermediate then SOBM
-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 Gas penalties for submitting false information, including the possibility of fine or imprisonment.
Company Official Signature AUG 2 9 2018
Company Official (Typed Name) Braulio Silva WV Department of Environmental Protection
Company Official Title_ Vice President - Drilling
Subscribed and sworn before me this 24th day of August, 20_18
Teresa L. Lesko Notary Publicommonwealth of Pennsylvania - Notary
My commission expires 7-17-2000 Teresa L. Lesko, Notary Public Washington County My commission expires July 17, 202 Commission number 1205105

Operator's Well No. Winterfell 5 UH

Proposed Revegetation Treatmen	t: Acres Disturbed 8.3	Prevegetation pH	Prevegetation pH 6.0		
Lime 2-3	Tons/acre or to correct t	to pH			
Fertilizer type 10-20-2	0 or Equal	_			
Fertilizer amount 500		lbs/acre			
Mulch_ Hay or Straw	at 2T	ons/acre			
		Seed Mixtures			
Тетро	rary	Permane	nt		
Seed Type Annual Rye Grass	lbs/acre 40	Seed Type Crownvetch	lbs/acre 10-15		
Filed Bromegrass	40	Tall Fescue	30		
Spring Oats	96	Perennial Ryegrass	20		
Attach: Maps(s) of road, location, pit and rovided). If water from the pit w creage, of the land application as	proposed area for land a ill be land applied, inclu- rea.	r further detail. Application (unless engineered plans including de dimensions (L x W x D) of the pit, and di	g this info have been mensions (L x W), and are		
Attach: Maps(s) of road, location, pit and provided). If water from the pit water application and the creage, of the land application are thotocopied section of involved and the creage.	proposed area for land a ill be land applied, inclu- rea.	application (unless engineered plans including	g this info have been mensions (L x W), and are		
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*Refer to attached Reconstract: Attach: Maps(s) of road, location, pit and provided). If water from the pit water age, of the land application at the provided section of involved and the provided section of involved and the provided section of involved and the provided section of involved are comments:	proposed area for land a ill be land applied, inclu- rea.	application (unless engineered plans including	RECEIVED		
Attach: Maps(s) of road, location, pit and provided). If water from the pit water age, of the land application at the photocopied section of involved and application are the provided and application at the provided and application are the provided and application	proposed area for land a ill be land applied, inclu- rea.	application (unless engineered plans including	RECEIVED Office of Oil and		

Additives for Drilling Medium

CALCIUM CHLORIDE POWDER

CARBO TEC

CARBO-GEL 2

CARBO-TECS

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

RECEIVED Office of Oil and Gas

AUG 29 2018

WV Department of Environmental Protection

Cuttings Disposal/Site Water

Cuttings – Haul off Company:

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

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

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

Disposal Locations:

Apex Environnemental, 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 Environnemental Technologies, Inc. Facility Permit # PAD004835146 / 301071 233 Max Lane
Yukon, PA 25968
724-722-3500

Max Environnemental 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

RECEIVED
Office of Oil and Gas

AUG 29 2018

WV Department of Environmental Protection

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

Wetzel County Landfill Permit # SWF-1021-97 / WV 0109185 Rt 1 Box 156A New Martinsville, WV 26035 304-455-3800

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 Environnemental 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

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

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

Nuverra Environmental Solutions 11942 Veterans Memorial Highway Masontown, WV 26542

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

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

Disposal Locations:

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

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

Adams #1 (Buckeye Brine, LLC) Permit # 34-031-2-7177 23986 Airport Road Coshocton, OH 43812 740-575-4484 512-478-6545 CMS of Delaware Inc. DBA CMS Oilfield Serv 301 Commerce Drive Moorestown, NJ 08057

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

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

Equipment Transport 1 Tyler Court Carlisle, PA 17015

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

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

RECEIVED Office of Oil and Gas

AUG 29 2018

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

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

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

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

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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AUG 2 9 2018

WV Department of Environmental Protection



Site Safety Plan

American Petroleum Partners Operating, LLC
Dire Wolf- Winterfell Well Pad Winterfell 5UH
1500 Oxen Drive
Moundsville, WV 26041

June 2018: Version 1

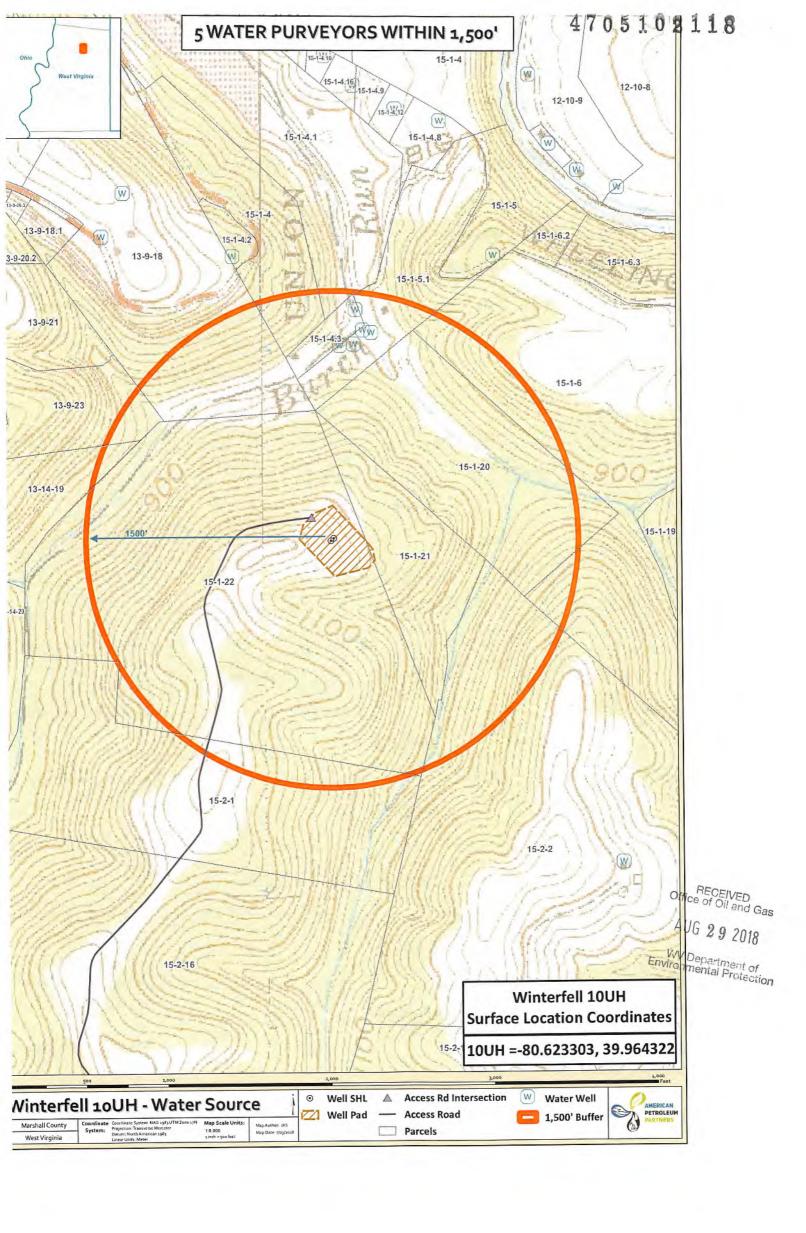
8 9 9 Office of Oil and Gas

AUG 29 2018

WV Department of Environmental Protection

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

American Petroleum Partners Operating, LLC
4600 J. Barry Ct
Suite 310
Canonsburg, PA 15317



WW-6A	1
(5/13)	

Operator's Well No.	Winterfell 5 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

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.

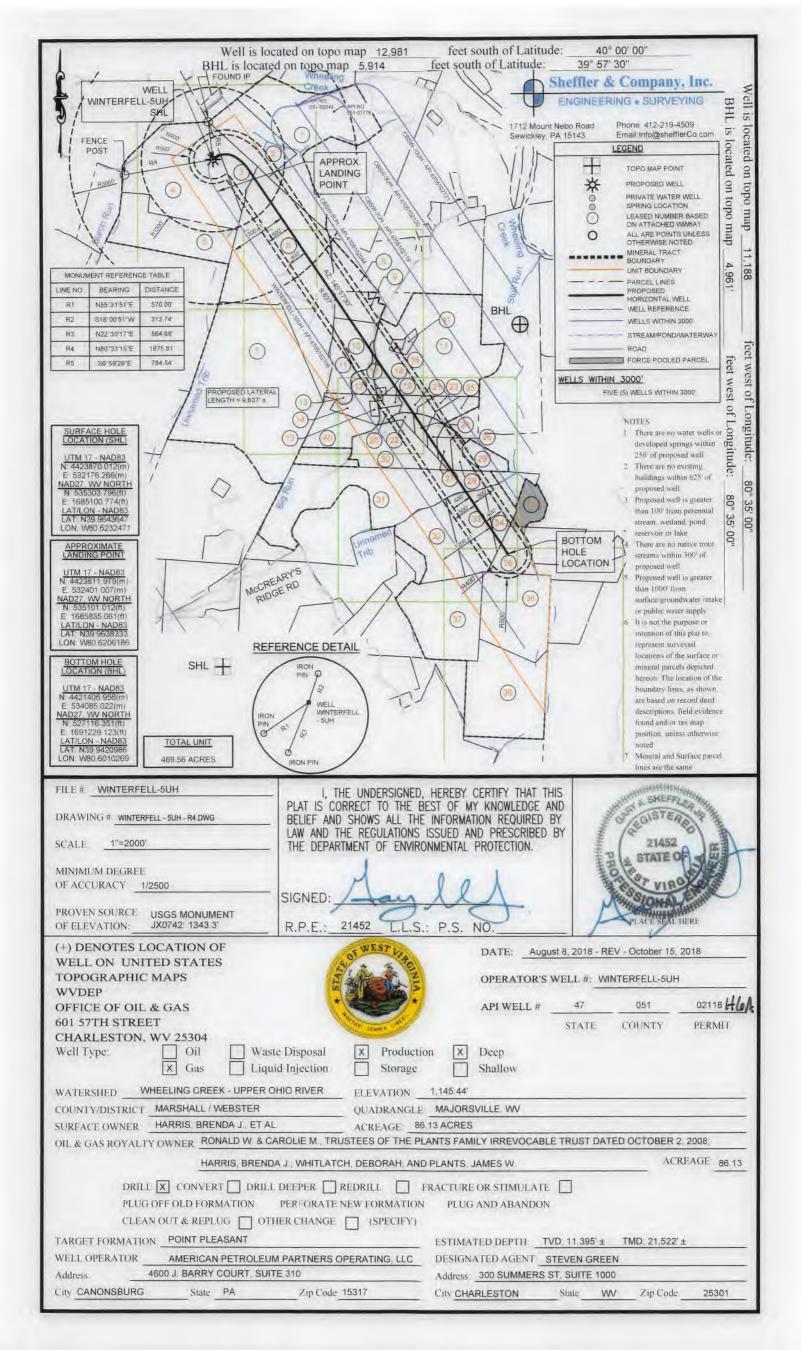
Well Operator:	American Petroleum Partners Operating, LLC
By:	Braulio Silva
Its:	Vice President-Drilling

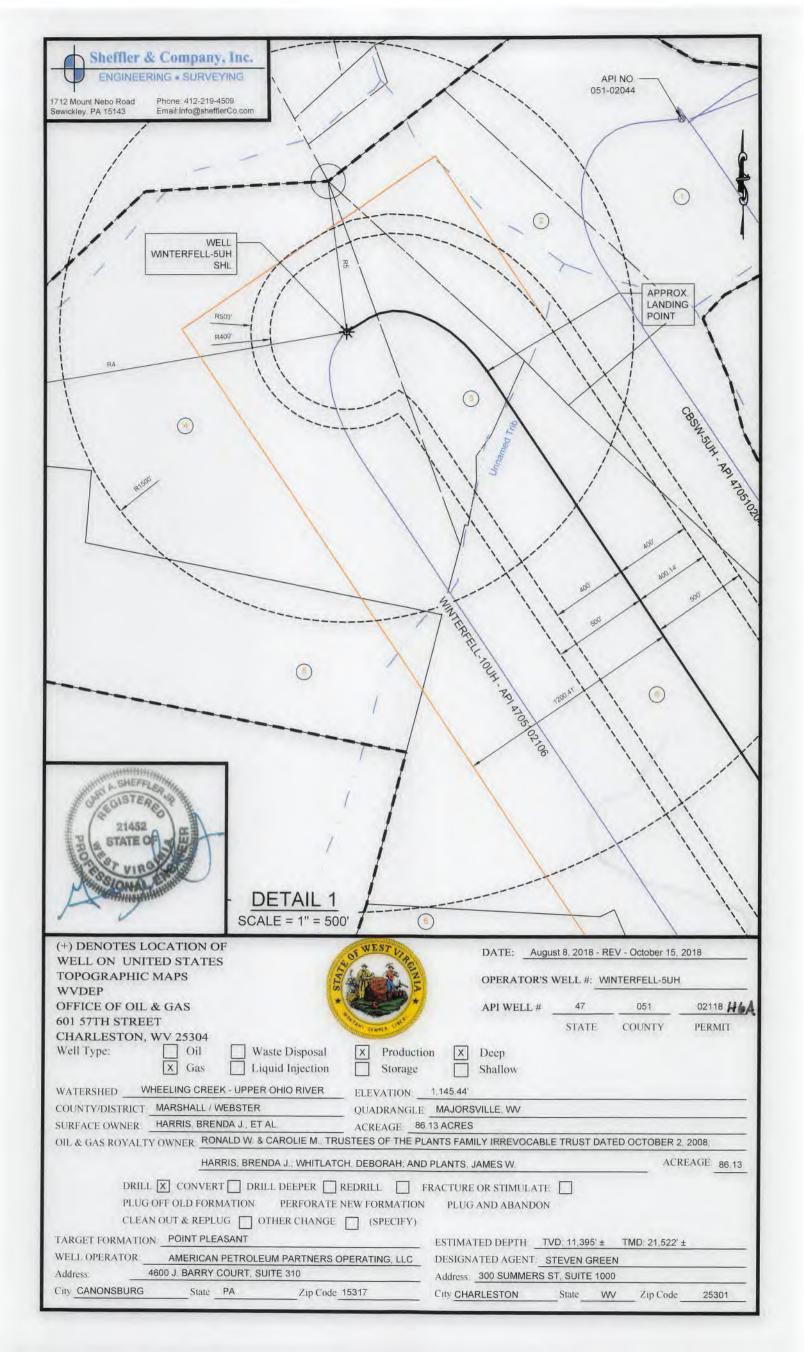
Winterfell South East 5UH Wellbore Tracts

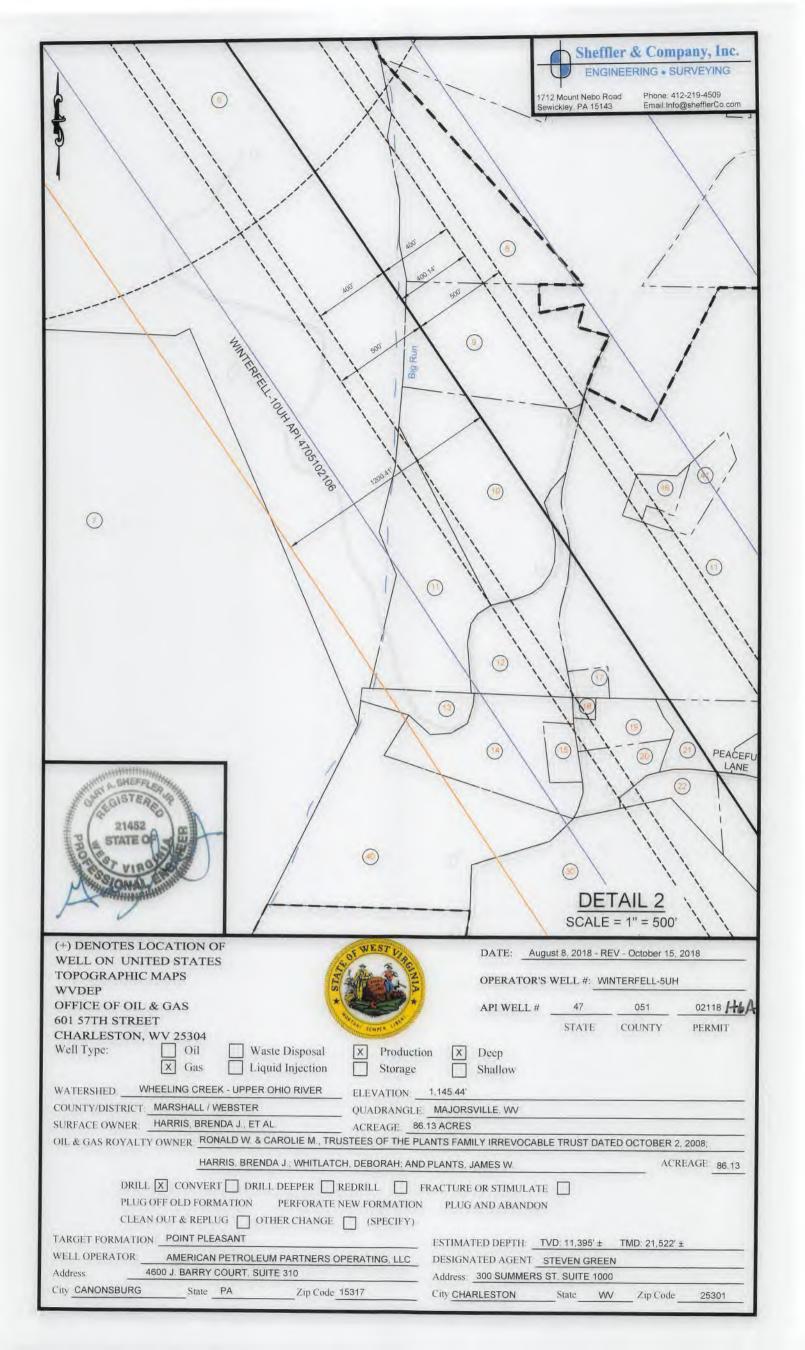
Map#	Lease#	Lessor	Current Lessee	Royalty	Recording Information	Parcel
3 🗸	WV-MAR-0659	Gerald Theodore Plants and Barbara Plants	American Petroleum Partners Operating, LLC	Not Less than 1/8th	684-347	15-1-21
3 /	WV-MAR-0696	James Walter Plants	American Petroleum Partners Operating, LLC	Not Less than 1/8th	684-569	15-1-21
3 √	WV-MAR-0660	Ronald W. Plants and Carolie M. Plants	American Petroleum Partners Operating, LLC	Not Less than 1/8th	684-562	15-1-21
4 \	WV-MAR-0659	Gerald Theodore Plants and Barbara Plants	American Petroleum Partners Operating, LLC	Not Less than 1/8th	684-347	15-1-22
4	WV-MAR-0696	James Walter Plants	American Petroleum Partners Operating, LLC	Not Less than 1/8th	684-569	15-1-22
4	WV-MAR-0660	Ronald W. Plants and Carolie M. Plants	American Petroleum Partners Operating, LLC	Not Less than 1/8th	684-562	15-1-22
6 1	WV-MAR-0107	Tatia Josephine Rose	American Petroleum Partners Operating, LLC	Not Less than 1/8th	831-280	15-2-2
6	WV-MAR-0109	Jonathan M. Cooke	American Petroleum Partners Operating, LLC	Not Less than 1/8th	831-278	15-2-2
6	WV-MAR-0015	AMP Fund III, LP	American Petroleum Partners Operating, LLC	Not Less than 1/8th	925-459	15-2-2

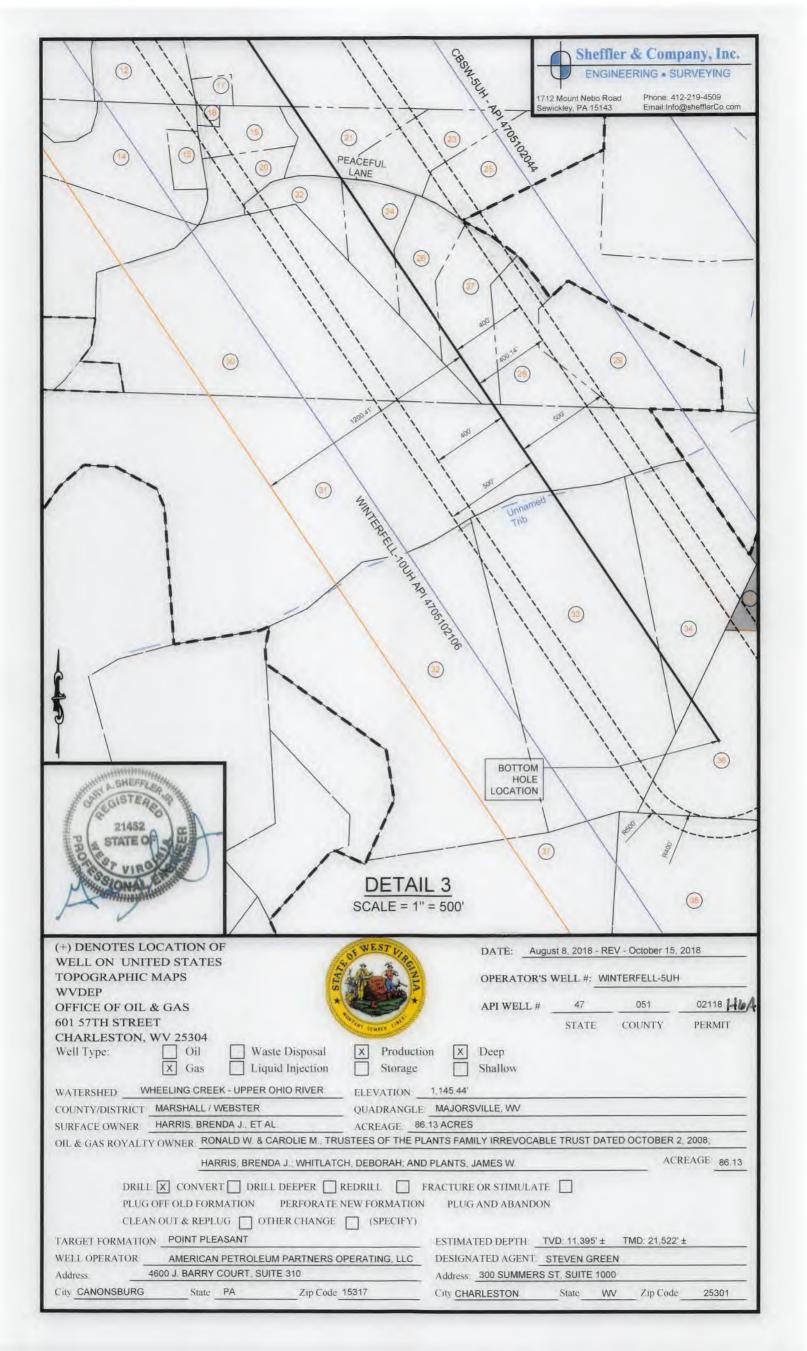
9	WV-MAR-0087	Carolos Ordonez	American Petroleum Partners Operating, LLC	Not Less than 1/8th	827-486	15-2-5.3
10	WV-MAR-0041	Giridhari D. Weber	American Petroleum Partners Operating, LLC	Not Less than 1/8th	825-584	15-2-5.5
11	WV-MAR-0080	ISKCON New Vrindaban, Inc.	American Petroleum Partners Operating, LLC	Not Less than 1/8th	827-480	15-2-5
12	WV-MAR-0080	ISKCON New Vrindaban, Inc.	American Petroleum Partners Operating, LLC	Not Less than 1/8th	827-480	15-2-5.4
21	WV-MAR-0108	Hema K. Mulchand	American Petroleum Partners Operating, LLC	Not Less than 1/8th	831-553	15-2-12.12
22	WV-MAR-0021	One World One Family Now Inc.	American Petroleum Partners Operating, LLC	Not Less than 1/8th	825-510	15-2-12.3
24	WV-MAR-0104	lwona Dudzinska	American Petroleum Partners Operating, LLC	Not Less than 1/8th	832-175	15-2-12.7
26	WV-MAR-0070	Thomas Clothier	American Petroleum Partners Operating, LLC	Not Less than 1/8th	825-562	15-2-12.10
27	WV-MAR-0619	Gintaras Lukosevicius	American Petroleum Partners Operating, LLC	Not Less than 1/8th	943-411	15-2-12.5
31	WV-MAR-0094	Jeffrey T. Bock	American Petroleum Partners Operating, LLC	Not Less than 1/8th	830-119	15-2-13
33	WV-MAR-0080	ISKCON New Vrindaban, Inc.	American Petroleum Partners Operating, LLC	Not Less than 1/8th	827-480	15-7-24

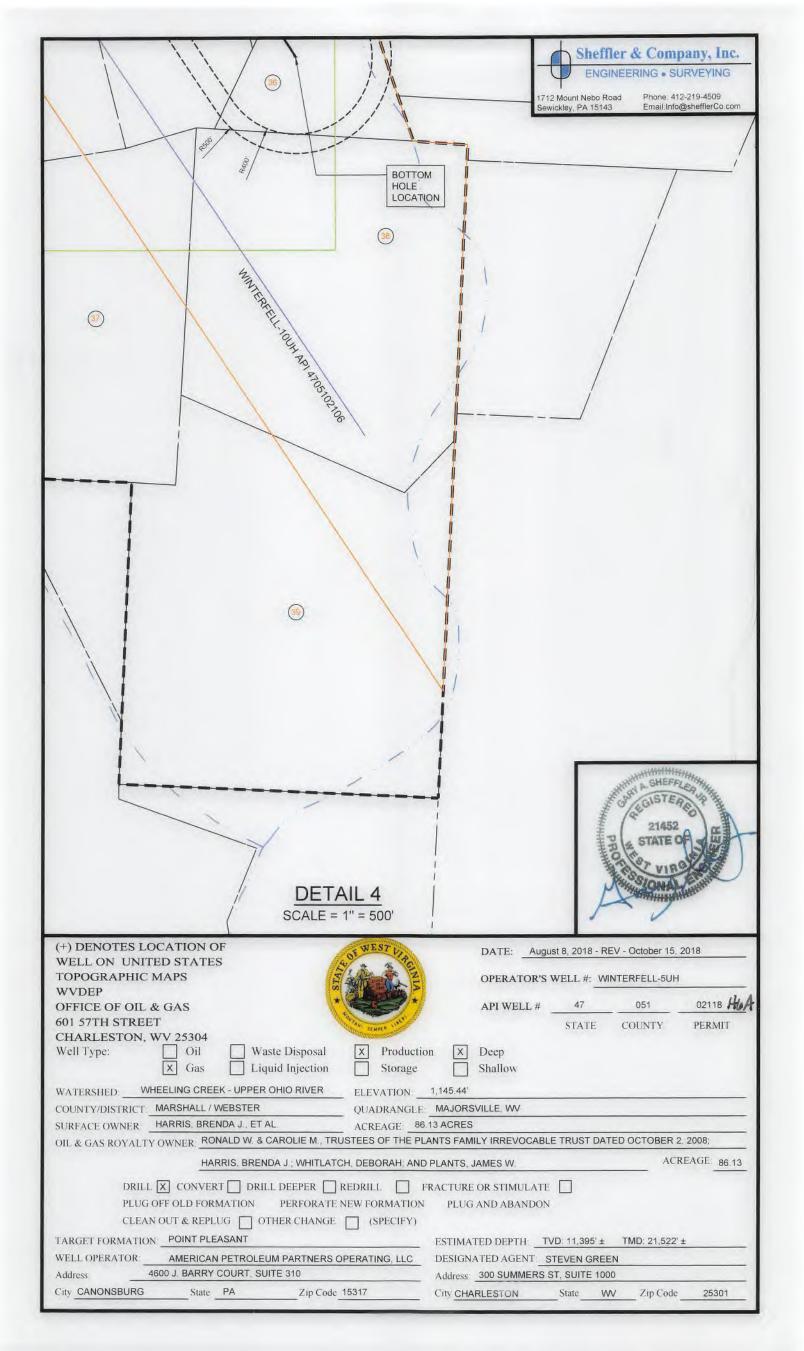
34	WV-MAR-0080	ISKCON New Vrindaban, Inc.	American Petroleum Partners Operating, LLC	Not Less than 1/8th	827-480	15-7-24.4
36	WV-MAR-0078	Aaron A. Kwiatkoski	American Petroleum Partners Operating, LLC	Not Less than 1/8th	826-84	15-6-10
36	WV-MAR-0076	Angelique A. Schweinebraten aka Angelique A. Kwiatkoski	American Petroleum Partners Operating, LLC	Not Less than 1/8th	828-145	15-6-10

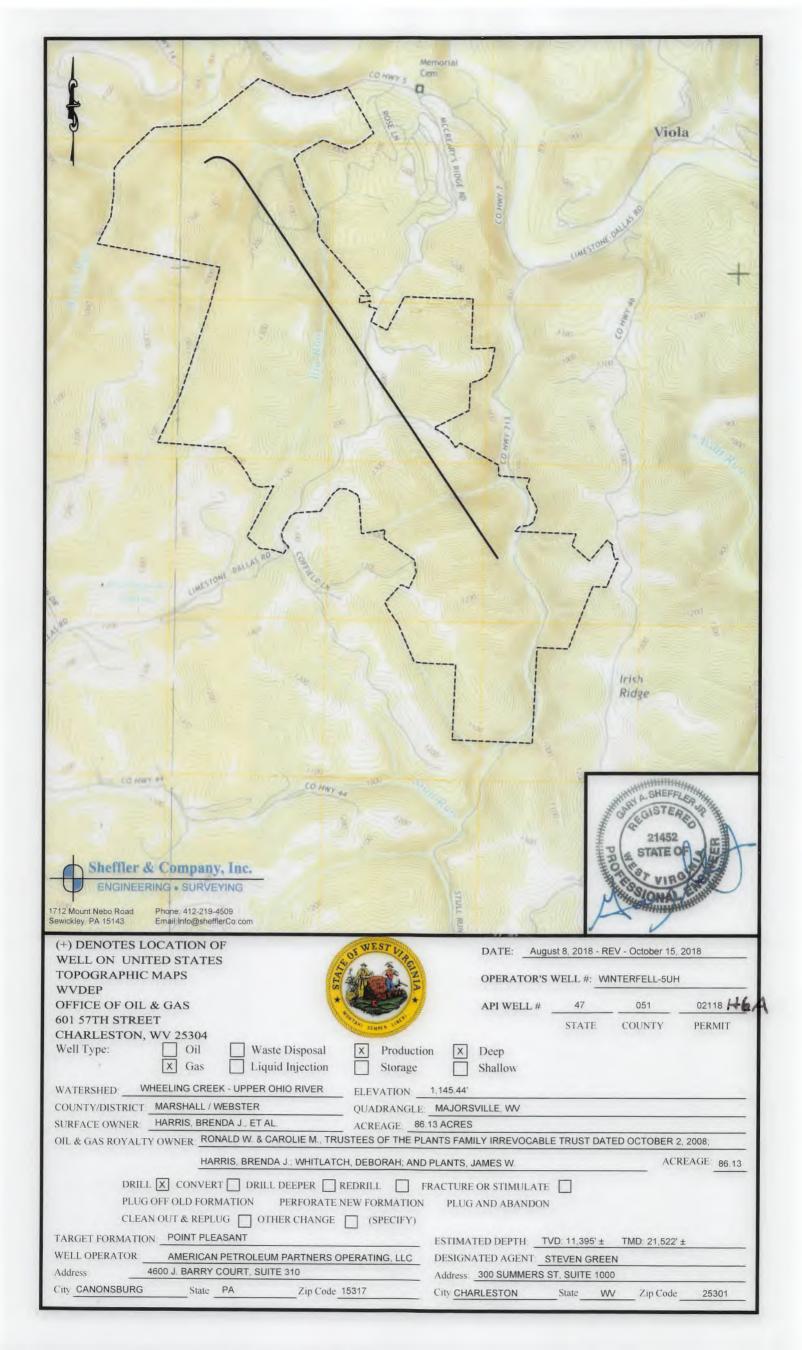












		Sheriter & Company, Inc.
TAX MAP NO. 15-0001-0006-0000-0000 ASSESSED ACREAGE: 89.01 ACRES	TAX MAP NO. 15-0002-0003-0000-0000 ASSESSED ACREAGE: 12.45 ACRES	TAX MAP NO. 15-0002-0008-0001-0000 ASSESSED ACREAGE: 1 12 ACRES ENGINEERING • SURVEYING 1712 Mount Nebo Road Sewickley. PA 15143
SURFACE OWNERS:	SURFACE OWNERS: ISKCON NEW MATHURA VRINDABAN, INC.	SURFACE OWNERS: CONNOR, USA M Phone: 412-219-4509 Email.Info@shefflerCo.com
MINERAL OWNERS: ECQ-VRINDABAN, INC.	MINERAL OWNERS: ISKCON NEW MATHURA VRINDABAN, INC.	MINERAL OWNERS: GIESER. LISA M.
TAX MAP NO. 15-0001-0020-0000-0000 ASSESSED ACREAGE 30.00 ACRES		42
SURFACE OWNERS: GEETA	TAX MAP NO. 15-0002-0005-0003-0000 ASSESSED ACREAGE: 14:19 ACRES	TAX MAP NO 15-0002-0005-0006-0000 ASSESSED ACREAGE: 1.25 ACRES
MINERAL OWNERS:	SURFACE OWNERS: ORDONEZ CARLOS	SURFACE OWNERS: L. ONE, LLC
CHESTNUT HOLDING INC.	MINERAL OWNERS: ORDONEZ, CARLOS	MINERAL OWNERS: L. ONE, LLC
TAX MAF NO. 15-0001-0021-0000-0000	TAX MAP NO.	TAX MAP NO. 15-0002-0005-0002-0000
ASSESSED ACREAGE: 13.00 ACRES SURFACE OWNERS:	15-0002-0005-0006 ASSESSED ACREAGE: 15.32 ACRES	ASSESSED ACREAGE: 0.67 ACRES SURFACE OWNERS
HARRIS, BRENDA J., ET AL. MINERAL OWNERS:	SURFACE OWNERS: WEBER, GIRIDHARI D.	SINGH, TARAN, ET AL. MINERAL OWNERS.
WHITLATCH, DEBORAH HARRIS, BRENDA J. PLANTS, JAMES W. RONALD W. & CAROLIE M., TRUSTEES OF THE PLANTS FAMILY IRREVOCABLE TRUST DATED OCTOBER 2, 2008	MINERAL OWNERS. WEBER, GIRIDHARI D.	RAMKAREE, SABITREE S. SINGH, TARAN
TAX MAP NO. 15-0001-0022-0000-0000		142
ASSESSED ACREAGE: 86,13 ACRES SURFACE OWNERS:	TAX MAP NO. 15-0002-0005-0000-0000 ASSESSED ACREAGE: 113.88 ACRES	TAX MAP NO. 15-0002-0012-0002-0000
HARRIS, BRENDA J., ET AL. MINERAL OWNERS:	SURFACE OWNERS: ISKCON NEW MATHURA VRINDABAN, INC.	ASSESSED ACREAGE: 0.21 ACRES SURFACE OWNERS;
HARRIS, BRENDA J. WHITLATCH, DEBORAH PLANTS, JAMES W.	MINERAL OWNERS: ISKCON NEW VRINDABAN, INC.	SINGH TARAN ET AL. MINERAL OWNERS
RONALD W. & CAROLIE M., TRUSTEES OF THE PLANTS FAMILY IRREVOCABLE TRUST DATED OCTOBER 2, 2008		RAMKAREE, SABITREE S. SINGH, TARAN
TAX MAP NO. 15-0002-0001-0000-0000	TAX MAP NO.	TAX MAP NO.
ASSESSED ACREAGE 56.10 ACRES SURFACE OWNERS:	15-0002-0005-0004-0000 ASSESSED ACREAGE: 6,63 ACRES	15-0002-0012-0000-0000 ASSESSED ACREAGE: 2.29 ACRES
APP MINERALS LLC MINERAL OWNERS	SURFACE OWNERS; SATSANGI, ADITYA, ET UX.	SURFACE OWNERS: SINGH, TARAN, ET AL.
APP MINERALS LLC	MINERAL OWNERS: ISKCON NEW VRINDABAN, INC.	MINERAL OWNERS. SINGH. TARAN RAMKAREE, SABITREE S.
TAX MAP NO. 15-0002-0000-0000	TAX MAP NO. 15-0002-0008-0003-0000	TAX MAP NO. 15-0002-0012-0001
ASSESSED ACREAGE: 132.77 ACRES SURFACE OWNERS:	ASSESSED ACREAGE: 2.00 ACRES SURFACE OWNERS:	ASSESSED ACREAGE: 2.57 ACRES SURFACE OWNERS.
ISKCON NEW MATHURA VRINDABAN MINERAL OWNERS.	CLAYTON, JILL, ET AL. MINERAL OWNERS:	THIBEAULT, PATRICIA MINERAL OWNERS:
AMP FUND III, LP	ONE WORLD ONE FAMILY NOW INC. (LIFE ESTATE) CLAYTON, GOVINDA G. (REMAINDERMAN) CLAYTON, JILL (REMAINDERMAN) CLAYTON, VASUDEVA G. (REMAINDERMAN)	THIBEAULT, PATRICIA
TAX MAP NO 15-0002-0015-0000-0000 ASSESSED ACREAGE: 171.32 ACRES	(14) TAX MAP NO.	TAX MAP NO. 15-0002-0012-0012-0000
SURFACE OWNERS: HARRY B. SNYDER AND ELIZABETH	15-0002-0008-0002-0000 ASSESSED ACREAGE; 8:00 ACRES	ASSESSED ACREAGE: 3 55 ACRES SURFACE OWNERS:
JANE SNYDER, TRUSTEES OF THE SNYDER FAMILY TRUST DATED DECEMBER 17, 2014	SURFACE OWNERS: CONNOR, LISA M	CARLSON, GREGORY D., ET AL. MINERAL OWNERS:
MINERAL OWNERS HARRY B. SNYDER AND ELIZABETH JANE SNYDER. TRUSTEES OF THE SNYDER FAMILY TRUST. DATED DECEMBER 17, 2014	MINERAL OWNERS GIESER, LISA M.	MULCHAND, HEMA K.
(+) DENOTES LOCATION OF WELL ON UNITED STATES	OF WEST VIRGO	DATE: August 8, 2018 - REV - October 15, 2018
TOPOGRAPHIC MAPS	E AND E	OPERATOR'S WELL #: WINTERFELL-5UH
WVDEP OFFICE OF OIL & GAS	*	API WELL# 47 051 02118
601 57TH STREET	Marian semper class	STATE COUNTY PERMIT
CHARLESTON, WV 25304 Well Type: Oil W	aste Disposal X Production	X Deep
	iquid Injection Storage	Shallow
WATERSHED: WHEELING CREEK - UPPE COUNTY/DISTRICT MARSHALL / WEBSTER		
SUBFACE OWNER HARRIS, BRENDA J., E	TAL ACREAGE 86.13	BACRES
		NTS FAMILY IRREVOCABLE TRUST DATED OCTOBER 2, 2008; ACREAGE 86.13
	ENDA J.; WHITLATCH, DEBORAH; AND PI	LANTO, JAIVIES W.
DRILL X CONVERT DE	PERFORATE NEW FORMATION	PLUG AND ABANDON
CLEAN OUT & REPLUG		
TARGET FORMATION: POINT PLEASANT		ESTIMATED DEPTH: TVD: 11,395' ± TMD: 21,522' ±
WELL OPERATOR: AMERICAN PETROL Address: 4600 J. BARRY COURT.		DESIGNATED AGENT STEVEN GREEN Address: 300 SUMMERS ST, SUITE 1000
City CANONSBURG State PA		City CHARLESTON State WV Zip Code 25301

TAX MAP NO 15-0002-0012-0003-0000	TAX MAP NO. 15-0002-0012-0004-0000	TAX MAP NO. 15-0006-0010-0000-0000
ASSESSED ACREAGE: 2.29 ACRES SURFACE OWNERS:	ASSESSED ACREAGE: 8.42 ACRES SURFACE OWNERS:	ASSESSED ACREAGE: 14.11 ACRES SURFACE OWNERS.
ONE WORLD ONE FAMILY NOW, INC. MINERAL OWNERS.	MOHAN, NAITHANI P., ET AL. MINERAL OWNERS:	KWIATKOSKI ANGELIQUE A., ET AL. MINERAL OWNERS.
ONE WORLD ONE FAMILY NOW, INC.	NATHANI PRAKASH MOHAN & RENATA BRUZA	KWIATKOSKI, AARON A. SCHWEINEBRATEN, ANGELIQUE A.
TAX MAP NO.	TAX MAP NO	
15-0002-0012-0013-0000 ASSESSED ACREAGE: 3,98 ACRES	15-0002-0011-0000-0000 ASSESSED ACREAGE: 29.65 ACRES	TAX MAP NO 15-0007-0024-0001-0000 ASSESSED ACREAGE: 66-78 ACRES
SURFACE OWNERS: HANSON, JESSE S., ET UX.	SURFACE OWNERS: SEWARD, RALPH J. ET AL.	SURFACE OWNERS: ECO-VRINDABAN, INC., D/B/A
MINERAL OWNERS. HANSON, JESSE S. ET UX	MINERAL OWNERS: SEWARD, RALPH J. ET AL	GORAKSHYA-SEVA AND ENVIRONMENTAL EDUCATION TRUST OF AMERICA, INC
	A.	MINERAL OWNERS: ECO-VRINDABAN, INC. D/B/A GEETA
TAX MAP NO. 15-0002-0012-0007-0000	TAX MAP NO. 15-0002-0013-0000-0000	(38) TAX MAP NO.
ASSESSED ACREAGE: 3.79 ACRES SURFACE OWNERS:	ASSESSED ACREAGE: 94.03 ACRES SURFACE OWNERS:	15-0006-0011-0000-0000 ASSESSED ACREAGE: 40.00 ACRES
DUDZINSKA, IWONA	BOCK, JEFFERY T. MINERAL OWNERS:	SURFACE OWNERS. MILLER, R. CRAIG, ET UX
MINERAL OWNERS: DUDZINSKA, IWONA	BOCK JEFFREYT. BOCK - HUNTER, SALLY A.	MINERAL OWNERS: MILLER: R. CRAIG ET UX:
TAX MAP NO.		RESOURCE MINERALS HEADWATER I. LP
15-0002-0012-0011-0000 ASSESSED ACREAGE: 6.17 ACRES	TAX MAP NO 15-0007-0024-0002-0000	TAX MAP NO 15-0006-0016-0000-0000
SURFACE OWNERS: CLOTHIER, VRINDA D., ET AL.	ASSESSED ACREAGE: 30.93 ACRES <u>SURFACE OWNERS</u>	ASSESSED ACREAGE: 77.40 ACRES SURFACE OWNERS:
MINERAL OWNERS. VRINDA D. CLOTHIER & CHRISTOPHER L. HARKNESS AS JOINT TENANTS WITH	ISKCON NEW MATHURA VRINDABAN, INC. MINERAL OWNERS:	COFFIELD, WILLIAM E., ET UX. MINERAL OWNERS
RIGHT OF SURVIVORSHIP, AND VRINDA CLOTHIER	ISKCON NEW MATHURA VRINDABAN, INC.	COFFIELD, WILLIAM E. ET UX. COFFIELD, BETTY GENEVA
4		
TAX MAP NO. 15-0002-0012-0010-0000	TAX MAP NO. P/O 15-0007-0024-0000-0000 ASSESSED ACREAGE: 57.64 ACRES	(4D) TAX MAP NO.
ASSESSED ACREAGE: 4.05 ACRES SURFACE OWNERS:	SURFACE OWNERS:	15-0002-0008-0000-0000 ASSESSED ACREAGE: 19.21 ACRES
CLOTHIER, THOMAS MINERAL OWNERS	ISKCON NEW MATHURA VRINDABAN, INC. MINERAL OWNERS	ONE WORLD ONE FAMILY NOW INC.
CLOTHIER. THOMAS	ISKCON NEW MATHURA VRINDABAN, INC.	MINERAL OWNERS: ONE WORLD ONE FAMILY NOW, INC.
	(34) TAY MARKING	
TAX MAP NO.	TAX MAP NO. 15-0007-0024-0004 ASSESSED ACREAGE: 15 42 ACRES	
15-0002-0012-0005-0000 ASSESSED ACREAGE: 5.78 ACRES	SURFACE OWNERS: MOREAU, DENIS J. ET AL.	(41) TAY MAD NO
SURFACE OWNERS. LUKOSEVICIUS, GINTARAS	MINERAL OWNERS. ISKCON NEW VRINDABAN, INC.	TAX MAP NO 15-0002-0005-0008-0000 ASSESSED ACREAGE. 2.23 ACRES
MINERAL OWNERS. LUKOSEVICIUS, GINTARAS	ISCULT NEW VINDADAN, INC.	SURFACE OWNERS: LANE, LEON
	15-000-0000-0000-0000 ASSESSED ACREAGE: 5 ACRES	MINERAL OWNERS: LEON LANE AND CELERINA R. LANE
TAX MAP NO.	SURFACE OWNERS:	
15-0002-0012-0008-0000 ASSESSED ACREAGE: 5.59 ACRES	GALL, EDNA S., ET AL., MINERAL OWNERS.	
SURFACE OWNERS: BAUER, SUSAN	MONTGOMERY, ANN B. MILLER, ELLEN G. ELLIOT, JANE B.	
MINERAL OWNERS: BAUER, SUSAN	MURRAY, JANET G. JOSEPH, KAREN UNDERDONK, LESLIE GALL	
PIWOWARCZYK, GRAZYNA & ANDRZEJ	HARCLERODE, LESLIE KAY JACKSON, LISA ANN LAUTAR, PAUL D	Sheffler & Company, Inc.
	SMITH, SUSAN GALL	ENGINEERING • SURVEYING
		1712 Mount Nebo Road Sewickley, PA 15143
		Phone. 412-219-4509 Email:Info@shefflerCo.com
(+) DENOTES LOCATION OF	WE ST	
WELL ON UNITED STATES	SOF TO THE SECOND	DATE: August 8, 2018 - REV - October 15, 2018
TOPOGRAPHIC MAPS WVDEP	ES AND	OPERATOR'S WELL #: WINTERFELL-5UH
OFFICE OF OIL & GAS	*	API WELL # 47 051 02118 # 4
601 57TH STREET CHARLESTON, WV 25304	DESCRIPTION OF THE PROPERTY OF	STATE COUNTY PERMIT
Well Type: Oil	Waste Disposal X Production	n X Deep
X Gas	Liquid Injection Storage	Shallow
241-2407-07-07-07-07	UPPER OHIO RIVER ELEVATION:	
COUNTY/DISTRICT MARSHALL / WEE SURFACE OWNER HARRIS, BRENDA		MAJORSVILLE, WV 13 ACRES
The state of the s		ANTS FAMILY IRREVOCABLE TRUST DATED OCTOBER 2, 2008;
HARRI	S, BRENDA J.; WHITLATCH, DEBORAH; AND	PLANTS, JAMES W. ACREAGE 86.13
		FRACTURE OR STIMULATE
PLUG OFF OLD FORMA		PLUG AND ABANDON
CLEAN OUT & REPLUG TARGET FORMATION POINT PLEAS.	The second seek was a few to be a second as a second seek as a second seco	ESTIMATED DEPTH: TVD: 11,395' ± TMD: 21,522' ±
The state of the s	TROLEUM PARTNERS OPERATING, LLC	DESIGNATED AGENT STEVEN GREEN
Address. 4600 J. BARRY CO		Address: 300 SUMMERS ST, SUITE 1000
City CANONSBURG State PA	4 Zip Code 15317	City CHARLESTON State WW Zip Code 25301



Office of Oil & Gas 601 57th street, SE Charleston, WV 25304-2345 August 21, 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.

Sincerely

Braulio Silva VP- Drilling

BS/djs

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

Date of Notic	ee Certification: 8124/18	A	PI No. 47	' - 051 -			
		O	perator's	Well No. Winte	erfell 5 UH		
		W	ell Pad N	ame: Dire Wo	lf-Winterfell		
Notice has b	een given:						
Pursuant to th	e provisions in West Virginia Code	§ 22-6A, the Operator has provid	ed the req	uired parties v	vith the Notice Forms listed		
	tract of land as follows:	-	•	-			
State:	West Virginia	UTM NAD 83	asting:	532176.266			
County:	Marshall	N	orthing:	4423870.012			
District:	Webster	Public Road Access	Public Road Access:		McCreary's Ridge Road (CR 7)		
Quadrangle:	Majorsville	Generally used farm	name:	Brenda J. Harris			
Watershed:	Upper Ohio South						
information re of giving the requirements Virginia Code	ed the owners of the surface descri- equired by subsections (b) and (c), so surface owner notice of entry to so of subsection (b), section sixteen of section (b), the applicant shall have been completed by the applicant	ection sixteen of this article; (ii) to urvey pursuant to subsection (a), of this article were waived in with tender proof of and certify to the	hat the rec section triting by	quirement was en of this arti- the surface ow	deemed satisfied as a result cle six-a; or (iii) the notice vner; and Pursuant to West		
that the Oper	West Virginia Code § 22-6A, the Operator has properly served the require CCK ALL THAT APPLY		Notice Co	ertification	OOG OFFICE USE ONLY		
☐ 1. NOT	TICE OF SEISMIC ACTIVITY or	■ NOTICE NOT REQUIRE SEISMIC ACTIVITY WAS			RECEIVED/		
■ 2. NOT	TICE OF ENTRY FOR PLAT SUR	VEY or □ NO PLAT SURVEY	WAS CO	ONDUCTED	RECEIVED		
☐ 3. NOT	TICE OF INTENT TO DRILL or	■ NOTICE NOT REQUIRED NOTICE OF ENTRY FOR PLEWAS CONDUCTED or			RECEIVED/ NOT REQUIRED		
		☐ WRITTEN WAIVER BY (PLEASE ATTACH)	SURFAC	CE OWNER			
■ 4. NO7	TICE OF PLANNED OPERATION				RECEIVED		
■ 5. PUB	BLIC NOTICE	O	RECEI fice of Oil	VED and Gas	RECEIVED		
■ 6. NOT	TICE OF APPLICATION	4	NUG 29	2018	RECEIVED		
			/ Depart	0.51			
			/ D _{epartm} nmental P	rotection			

Required Attachments:

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

Certification of Notice is hereby given:

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

1-724-338-8629

Telephone:

Address: 4600 J. Barry Court Suite 310

Canonsburg, PA 15317

Facsimile:

Email: Regulatory@app-lp.com

Commonwealth of Panaly Walnut - Notary Seal Teresa L. Lesko, Notary Public Washington County My commission expires July 17, 2022 Commission number 1205105

Member, Pennsylvania Association of Notaries

Subscribed and sworn before me this

Notary Public

My Commission Expires

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.

WV Department of Environmental Protection

WW-6A (9-13)

API NO. 47- ⁰⁵¹ -	-
OPERATOR WELL NO. Winterfell 5 UH	_
Well Pad Name: Dire Wolf-Winterfell	

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: 원이네용 Date Permit Application Filed: 임생	99/18			
PERMIT FOR ANY WELL WORK CONSTRUCTION OF	PROVAL FOR THE AN IMPOUNDMENT OR PIT			
Delivery method pursuant to West Virginia Code § 22-6A-10	O(b)			
	IOD OF DELIVERY THAT REQUIRES A IPT OR SIGNATURE CONFIRMATION			
sediment control plan required by section seven of this article, and the surface of the tract on which the well is or is proposed to be loc oil and gas leasehold being developed by the proposed well work, it described in the erosion and sediment control plan submitted pursus operator or lessee, in the event the tract of land on which the well p more coal seams; (4) The owners of record of the surface tract or trawell work, if the surface tract is to be used for the placement, constrimpoundment or pit as described in section nine of this article; (5) A have a water well, spring or water supply source located within one provide water for consumption by humans or domestic animals; and proposed well work activity is to take place. (c)(1) If more than three subsection (b) of this section hold interests in the lands, the applicative records of the sheriff required to be maintained pursuant to section provision of this article to the contrary, notice to a lien holder is not	or signature confirmation, copies of the application, the erosion and the well plat to each of the following persons: (1) The owners of record of ated; (2) The owners of record of the surface tract or tracts overlying the of the surface tract is to be used for roads or other land disturbance as ant to subsection (c), section seven of this article; (3) The coal owner, roposed to be drilled is located [sic] is known to be underlain by one or acts overlying the oil and gas leasehold being developed by the proposed ruction, enlargement, alteration, repair, removal or abandonment of any Any surface owner or water purveyor who is known to the applicant to thousand five hundred feet of the center of the well pad which is used to d (6) The operator of any natural gas storage field within which the see tenants in common or other co-owners of interests described in the may serve the documents required upon the person described in the eight, article one, chapter eleven-a of this code. (2) Notwithstanding any a notice to a landowner, unless the lien holder is the landowner. W. Va. provide the Well Site Safety Plan ("WSSP") to the surface owner and any			
☑ Application Notice ☑ WSSP Notice ☑ E&S Plan Notice ☑ SURFACE OWNER(s) Name: Brenda J. Harris, et al ✓ Address: 45316 State Route 800 Woodfield, OH 43793 Name: Address:	☐ COAL OWNER OR LESSEE Name: Murray American Energy and Consolidation Coal Company Address: 46226 National Road St. Clairsville, OH 43950 ☐ COAL OPERATOR ☐ COAL OPERATOR			
Address: SURFACE OWNER(s) (Road and/or Other Disturbance) Name: Mark K. Meberg Et Ux & Mary P. Meberg Address: 325 McCreary's Ridge Moundsville, WV 26041 Name: Marian E. Phillips Address: 247 Oxen Drive Moundsville, WV 26041 SURFACE OWNER(s) (Impoundments or Pits)	Name: The Ontic County Mine-Murray American Energy and Consolidation Coal Company Address: 46226 National Road St. Clairsville, OH 43950 SURFACE OWNER OF WATER WELL AND/OR WATER PURVEYOR(s) Name: Melinda Dawn Wiselka Address: 3305 Ward Street Pittsburgh, PA 15213 OPERATOR OF ANY NATURAL GAS STORAGE FIELD Name: None			
Name: None Address:	*Please attach additional forms if necessary			

WW-6A (9-13)

API NO. 47-051 5 1 0 2 1 1 8
OPERATOR WELL NO. Winterfell 5 UH
Well Pad Name: Dire Wolf-Winterfell

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: 8 24 8 Date Permit Application Filed: 8 29 18 Notice of: ☐ CERTIFICATE OF APPROVAL FOR THE PERMIT FOR ANY CONSTRUCTION OF AN IMPOUNDMENT OR PIT WELL WORK Delivery method pursuant to West Virginia Code § 22-6A-10(b) **PERSONAL** REGISTERED ✓ METHOD OF DELIVERY THAT REQUIRES A **SERVICE** MAIL RECEIPT OR SIGNATURE CONFIRMATION Pursuant to W. Va. Code § 22-6A-10(b) no later than the filing date of the application, the applicant for a permit for any well work or for a certificate of approval for the construction of an impoundment or pit as required by this article shall deliver, by personal service or by registered mail or by any method of delivery that requires a receipt or signature confirmation, copies of the application, the erosion and sediment control plan required by section seven of this article, and the well plat to each of the following persons: (1) The owners of record of the surface of the tract on which the well is or is proposed to be located; (2) The owners of record of the surface tract or tracts overlying the oil and gas leasehold being developed by the proposed well work, if the surface tract is to be used for roads or other land disturbance as described in the erosion and sediment control plan submitted pursuant to subsection (c), section seven of this article; (3) The coal owner, operator or lessee, in the event the tract of land on which the well proposed to be drilled is located [sic] is known to be underlain by one or more coal seams; (4) The owners of record of the surface tract or tracts overlying the oil and gas leasehold being developed by the proposed well work, if the surface tract is to be used for the placement, construction, enlargement, alteration, repair, removal or abandonment of any impoundment or pit as described in section nine of this article; (5) Any surface owner or water purveyor who is known to the applicant to have a water well, spring or water supply source located within one thousand five hundred feet of the center of the well pad which is used to provide water for consumption by humans or domestic animals; and (6) The operator of any natural gas storage field within which the proposed well work activity is to take place. (c)(1) If more than three tenants in common or other co-owners of interests described in subsection (b) of this section hold interests in the lands, the applicant may serve the documents required upon the person described in the records of the sheriff required to be maintained pursuant to section eight, article one, chapter eleven-a of this code. (2) Notwithstanding any provision of this article to the contrary, notice to a lien holder is not notice to a landowner, unless the lien holder is the landowner. W. Va. Code R. § 35-8-5.7.a requires, in part, that the operator shall also provide the Well Site Safety Plan ("WSSP") to the surface owner and any water purveyor or surface owner subject to notice and water testing as provided in section 15 of this rule. ☑ Application Notice ☑ WSSP Notice ☑ E&S Plan Notice ☑ Well Plat Notice is hereby provided to: ☐ SURFACE OWNER(s) ☐ COAL OWNER OR LESSEE Name: RECEIVED
Office of Oil and Gas Name: Address: Address: _______ AUG 29 2018 ☐ COAL OPERATOR Name: Address: Name: WV Department of Environmental Protection Address: ☑ SURFACE OWNER(s) (Road and/or Other Disturbance) Name: Lakshimi D. Dove, Et Al & William E & Irene Dove, Et AL ☑ SURFACE OWNER OF WATER WELL Address: Rd 3 Box 278 B AND/OR WATER PURVEYOR(s) Name: _State of West Virginia Conservation Commission Wheeling, WV 26003 Name: Gorakshya Seva & ENV EDU/ECO-VrinDaban, Inc. Address: 1900 Kanawaha BLVD. E. Address: Rd 3 Box 278 B Charleston, WV 25305 □ OPERATOR OF ANY NATURAL GAS STORAGE FIELD Wheeling, WV 26003 ☐ SURFACE OWNER(s) (Impoundments or Pits) Name: Address: Name: Address: *Please attach additional forms if necessary

WW-6A (9-13)

API NO 447 00 5 1 0 2 1 1 8 OPERATOR WELL NO. Winterfell 5 UH Well Pad Name: Dire Wolf-Winterfell

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: Date Permit Application Filed: 8 24/18 Notice of: PERMIT FOR ANY CERTIFICATE OF APPROVAL FOR THE WELL WORK CONSTRUCTION OF AN IMPOUNDMENT OR PIT Delivery method pursuant to West Virginia Code § 22-6A-10(b) PERSONAL ☐ REGISTERED ☑ METHOD OF DELIVERY THAT REQUIRES A **SERVICE** MAIL RECEIPT OR SIGNATURE CONFIRMATION Pursuant to W. Va. Code § 22-6A-10(b) no later than the filing date of the application, the applicant for a permit for any well work or for a certificate of approval for the construction of an impoundment or pit as required by this article shall deliver, by personal service or by registered mail or by any method of delivery that requires a receipt or signature confirmation, copies of the application, the erosion and sediment control plan required by section seven of this article, and the well plat to each of the following persons: (1) The owners of record of the surface of the tract on which the well is or is proposed to be located; (2) The owners of record of the surface tract or tracts overlying the oil and gas leasehold being developed by the proposed well work, if the surface tract is to be used for roads or other land disturbance as described in the erosion and sediment control plan submitted pursuant to subsection (c), section seven of this article; (3) The coal owner, operator or lessee, in the event the tract of land on which the well proposed to be drilled is located [sic] is known to be underlain by one or more coal seams; (4) The owners of record of the surface tract or tracts overlying the oil and gas leasehold being developed by the proposed well work, if the surface tract is to be used for the placement, construction, enlargement, alteration, repair, removal or abandonment of any impoundment or pit as described in section nine of this article; (5) Any surface owner or water purveyor who is known to the applicant to have a water well, spring or water supply source located within one thousand five hundred feet of the center of the well pad which is used to provide water for consumption by humans or domestic animals; and (6) The operator of any natural gas storage field within which the proposed well work activity is to take place. (c)(1) If more than three tenants in common or other co-owners of interests described in subsection (b) of this section hold interests in the lands, the applicant may serve the documents required upon the person described in the records of the sheriff required to be maintained pursuant to section eight, article one, chapter eleven-a of this code. (2) Notwithstanding any provision of this article to the contrary, notice to a lien holder is not notice to a landowner, unless the lien holder is the landowner. W. Va. Code R. § 35-8-5.7.a requires, in part, that the operator shall also provide the Well Site Safety Plan ("WSSP") to the surface owner and any water purveyor or surface owner subject to notice and water testing as provided in section 15 of this rule. ☑ Application Notice ☑ WSSP Notice ☑ E&S Plan Notice ☑ Well Plat Notice is hereby provided to: ☐ SURFACE OWNER(s) COAL OWNER OR LESSEE Name: Name: Address: Address: ______ COAL OPERATOR Name: Name: Address: AUG 29 2018 Address: ☑ SURFACE OWNER(s) (Road and/or Other Disturbance) WV Department of Name: Joyce Chiclone ☐ SURFACE OWNER OF WATER WELL Environmental Protection Address: 61 Waymans Ridge AND/OR WATER PURVEYOR(s) Moundsville, WV 26041 Name: Name: David A. & Lonna C. Hudson Address: Address: 319 Oxen Drive OPERATOR OF ANY NATURAL GAS STORAGE FIELD Moundsville, W. 2003 2604 ☐ SURFACE OWNER(s) (Impoundments or Pits) Name: _____ Name: Address: Address: *Please attach additional forms if necessary

API NO. 47- 051 OPERATOR WELL NO. Winterfell 5 UH
Well Pad Name: Dire Wolf-Winterfell

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 that	n the filing date of permit application.
Date of Notice: 8 Date Permit Application Filed: 2\3 Notice of:	9/18
✓ PERMIT FOR ANYWELL WORK☐ CERTIFICATE OF APPCONSTRUCTION OF A	ROVAL FOR THE AN IMPOUNDMENT OR PIT
Delivery method pursuant to West Virginia Code § 22-6A-10	(b)
	OD OF DELIVERY THAT REQUIRES A PT OR SIGNATURE CONFIRMATION
the surface of the tract on which the well is or is proposed to be local oil and gas leasehold being developed by the proposed well work, if described in the erosion and sediment control plan submitted pursual operator or lessee, in the event the tract of land on which the well proposed well work, if the surface tract is to be used for the placement, constraint impoundment or pit as described in section nine of this article; (5) A have a water well, spring or water supply source located within one provide water for consumption by humans or domestic animals; and proposed well work activity is to take place. (c)(1) If more than thresubsection (b) of this section hold interests in the lands, the applicar records of the sheriff required to be maintained pursuant to section of provision of this article to the contrary, notice to a lien holder is not	the well plat to each of the following persons: (1) The owners of record of sted; (2) The owners of record of the surface tract or tracts overlying the other than the surface tract is to be used for roads or other land disturbance as and to subsection (c), section seven of this article; (3) The coal owner, roposed to be drilled is located [sic] is known to be underlain by one or acts overlying the oil and gas leasehold being developed by the proposed function, enlargement, alteration, repair, removal or abandonment of any any surface owner or water purveyor who is known to the applicant to thousand five hundred feet of the center of the well pad which is used to (6) The operator of any natural gas storage field within which the elements in common or other co-owners of interests described in that may serve the documents required upon the person described in the sight, article one, chapter eleven-a of this code. (2) Notwithstanding any notice to a landowner, unless the lien holder is the landowner. W. Va. rovide the Well Site Safety Plan ("WSSP") to the surface owner and any
☐ Application Notice ☐ WSSP Notice ☐ E&S Plan Notice	
SURFACE OWNER(s)	COAL OWNER OR LESSEE
Name:Address:	Name:Address:
Name:Address:	COAL OPERATOR Name:
	Address:
SURFACE OWNER(s) (Road and/or Other Disturbance)	
Name: David Huntt	SURFACE OWNER OF WATER WELL
Address: 6906 Conley Street	AND/OR WATER PURVEYOR(s)
Baltimore, MD 21224	Name:
Name: APP Minerals, LLC /	Address:
Address: 4600 J. Barry Court, Suite 310	TODED ATOD OF ANY NATIDAL CAS STODAGE FIELD
Canonsburg, PA 15317	OPERATOR OF ANY NATURAL GAS STORAGE FIELD
SURFACE OWNER(s) (Impoundments or Pits)	Name:
Name:	Audicess.
Address:	*Please attach additional forms if necessary

Office of Oil and Gas

API NO. 47-051 - 0 2 1 1 (
OPERATOR WELL NO. Winterfell 5 UH

Well Pad Name: Dire Wolf-Winterfell

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 57th Street, SE, Charleston, WV 25304 (304-926-0450) or by visiting www.dep.wv.gov/oil-and-gas/pages/default.aspx.

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

OPERATOR WELL NO. Winterfell 5 UH Well Pad Name: Dire Wolf-Winterfell

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 was 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 st. AUG 29 2018 location or construction of the applicant's proposed well work to the Secretary at: W Department of Environmental Protection

Chief, Office of Oil and Gas Department of Environmental Protection 601 57th 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.

API NO. 47-051 5 1 0 2 1 1 8
OPERATOR WELL NO. Winterfell 5 UH
Well Pad Name: Dire Wolf-Winterfell

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.



4705102118

API NO. 47- 051

OPERATOR WELL NO. Winterfell 5 UH

Well Pad Name: Dire Wolf-Winterfell

Notice is hereby given by:

Well Operator: American Petroleum Partners Operat

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.

Minichwealth of Pennsylvania - Notary Sear Teresa L. Lesko, Notary Public Washington County My commission expires July 17, 2022 Commission number 1205105

Member, Fennsylvania Association of Notaries

Subscribed and sworn before me this

 $ust, \alpha v$

____ Notary Public

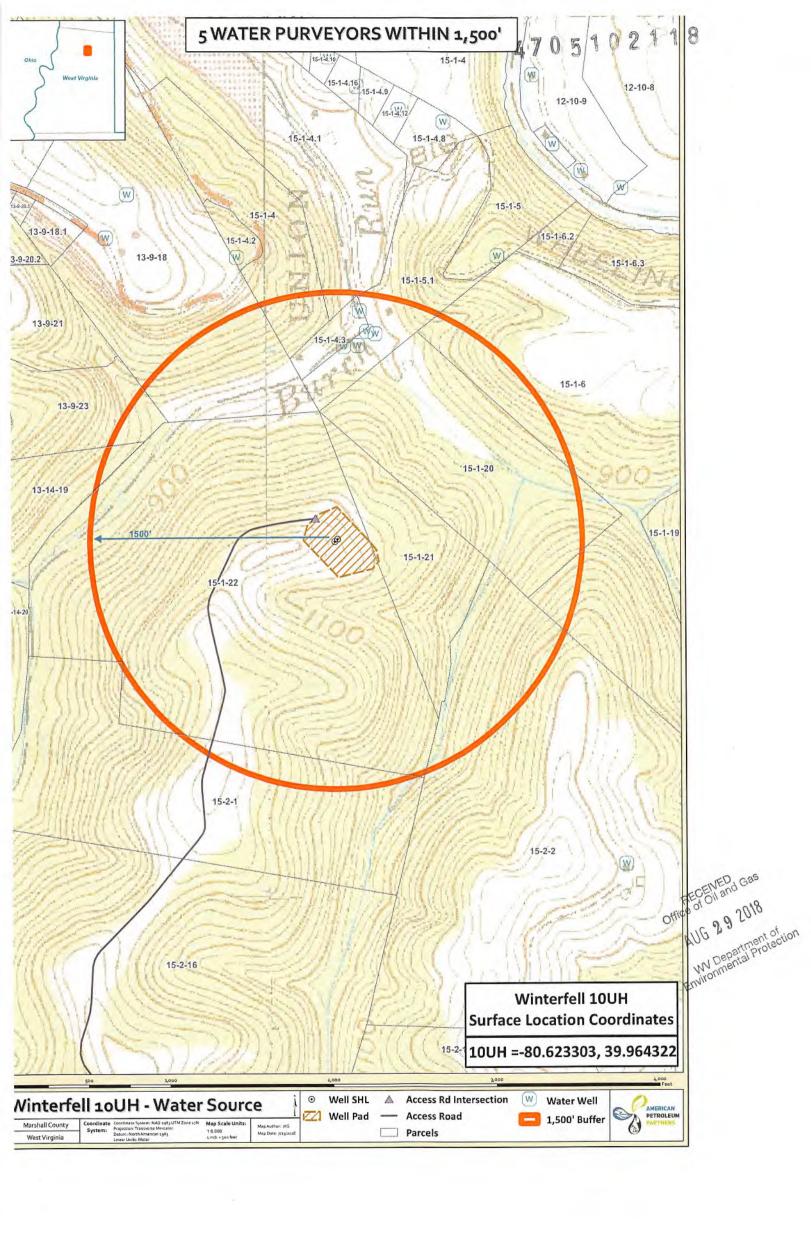
My Commission Expires

Office of Oil and Gas

Office of Oil and Gas

AUG 29 2018

WW Department of the Commental Protection



WW-70 Rev. 7/01	
	fidavit of Personal Service
State Of Pennsylvania	
County Of Washington	
	duly sworn, says that the undersigned served a true and
(1) Notice on Form WW-2(A) / (2) Application on Form WW-2(B) (3) Plat showing the well locati (4) Construction and Reclamation	WW-3(A)
all with respect to operator's W District, Mershall County,	ell No. Winterfell located in Webster West Virginia, upon the person or organization named-
APP Minerals, LLC	
by delivering the same in Westerdon on the tel day of July	County, State of Pennsylvania in the manner specified below.
[COMP]	LETE THE APPROPRIATE SECTION]
For an individual:	
	er / or, because he _ / she _ / refused to take it when _ / her _ / presence.
[] Handing it to a member of who residuered, and asking the family members.	of his or her family above the age of 16 years named des at the usual place of abode of the person to be er to give it to the person to be served as soon as
possible.	3 me herson to be served as soon ga
ne a nactonichtmi	
or a barchergurb.	
	, a partner of the partnership or,
[] Handing it to ecause the partner refused to take	, a partner of the partnership or, s it when I handed it over, by leaving it in the presence
[] Handing it to ecause the partner refused to take f the partner.	, a partner of the partnership or, s it when I handed it over, by leaving it in the presence
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commonwealth of Pennsylvania - Notary Seal Teresal Lesko, Notary Public Washington County My commission expires July 17, 2022	al partner, named , or, it to take it when I tried to hand it over, by leaving it the control of

WW-6A3 (1/12)

Operator Well No. Winterfell 5UH, BUH, 10UH

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

Notice Time Require entry Date of Notice: 7/17/18		rided at least SEVEN (7) days but no more that	n FORTY-FIVE	(45) days prior to
	suant to West Virginia C	ode § 22-6A-10a		
☐ PERSONAL SERVICE	☐ REGISTERED MAIL	METHOD OF DELIVERY THAT RE RECEIPT OR SIGNATURE CONFIR	MATION	
on to the surface tract but no more than forty beneath such tract tha owner of minerals und and Sediment Control Secretary, which state	to conduct any plat survey y-five days prior to such en t has filed a declaration pur derlying such tract in the co	Prior to filing a permit application, the operator is required pursuant to this article. Such notice stry to: (1) The surface owner of such tract; (2) resuant to section thirty-six, article six, chapter to purty tax records. The notice shall include a stand rules related to oil and gas exploration and prinformation, including the address for a web paths secretary.	to any owner or leading to the control of the contr	essee of coal seams s code; and (3) any les of the state Erosion e obtained from the
Notice is hereby pro	vided to:			
■ SURFACE OW!	NER(s)	COAL OWNER OR LE	ESSEE	
		Name: SEE ATTACHED		
		Address:		····
				RECEIVED Gas Office of Oil and Gas
Name:		- III ADJEDAL OUNED(c)		Office of Oil allo
		ATTACHED		3018
N1		Address:		AUG 20
Name:				W Department of W Department Protection
Audicss.		*please attach additional forms if no	ecessary	W Department of W Department Protection
Notice is hereby g Pursuant to West Vir a plat survey on the t State: West Vir	ginia Code § 22-6A-10(a), ract of land as follows:	notice is hereby given that the undersigned we Approx. Latitude & Longitude: Public Road Access:		nning entry to conduct & Longitude: -80.623344
County: Marshall				
District: Webster			Plants	
District: Webster Quadrangle: Majorsvi Copies of the state E may be obtained from	rosion and Sediment Control the Secretary, at the WV	Watershed:	Plants oil and gas explo	ration and production at 601 57 th Street, SE, ntal drilling may be
District: Webster Quadrangle: Majorsvi Copies of the state E may be obtained from Charleston, WV 253 obtained from the Se Notice is hereby g Well Operator: Ame	rosion and Sediment Contr n the Secretary, at the WV 04 (304-926-0450). Copie cretary by visiting <u>www.de</u>	Watershed: Generally used farm name: of Manual and the statutes and rules related to of Department of Environmental Protection headers of such documents or additional information op.wv.gov/oil-and-gas/pages/default.aspx. Address: 4600 J. Barry Ct, Suite	Plents oil and gas exploquarters, located related to horizo	ration and production at 601 57 th Street, SE, ntal drilling may be
District: Webster Quadrangle: Majorsvi Copies of the state E may be obtained from Charleston, WV 253 obtained from the Se Notice is hereby g Well Operator: Ame	rosion and Sediment Control on the Secretary, at the WV 104 (304-926-0450). Copie cretary by visiting www.de	Watershed: Generally used farm name: ol Manual and the statutes and rules related to of Department of Environmental Protection headers of such documents or additional information ep.wv.gov/oil-and-gas/pages/default.aspx.	Plents oil and gas exploquarters, located related to horizo	ration and production at 601 57 th Street, SE, ntal drilling may be

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. WW-6A3 (1/12) Operator Well No. Winterfell 5UH, 9UH, 10UH

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

SURFACE & MINERAL OWNER(S)

Name: Brenda J. Harris

Address: 30 Virginia Oaks Drive

Moundsville, WV 26041

RECEIVED Office of Oil and Gas

AUG 29 2018

Name: James W. Plants

Address:

2502 Hess Avenue

Wheeling, WV 26003

WV Department of Environmental Protection

Name: Ronald W. Plants and Carolie M. Plants, Trustees of the Plants Family Irrevocable Trust

dated October 2, 2008

Address:

2215 Pine Hill Rd

Wheeling WV 26003

Name: Deborah Whitlach

Address:

30 Virginia Oaks Drive

Moundsville, WV 26041

WW-6A3 (1/12)

COAL OWNER(S)

Operator Well No. Winterfell 5UH, 9UH, 10UH

Pittsburgh Coal and Mining Rights Owner:

Name: Consol Mining Company LLC

Address:

1000 Consol Energy Drive

Canonsburg, PA 15317

All Coal (LESS Surface/Creek Vein and Pittsburgh) Owner:

Name: Consol Mining Company LLC (71/72)

Address:

1000 Consol Energy Drive

Canonsburg, PA 15317

Name: Joseph E. Barnes, Unknown Heirs and Assigns (1/72)

Unknown Address

Address:

Unknown Address

Surface/Creek Vein Coal Owner:

Name: Brenda J. Harris

C

Address:

30 Virginia Oaks Dr.

Moundsville, WV 26041

RECEIVED Office of Oil and Gas

AUG 29 2018

Name: James W. Plants

Address:

2502 Hess Avenue

Wheeling, WV 26003

WW Department of Environmental Protection

Name: Ronald W. Plants and Carolie M. Plants, Trustees of the Plants Family Irrevocable Trust dated October 2, 2008

Address:

2215 Pine Hill Rd

Wheeling WV 26003

Name: Deborah Whitlach

Address:

30 Virginia Oaks Dr.

Moundsville, WV 26041

Operator Well No. Winterfell 5 UH

WW-6A5 (1/12)

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

Delivery met	hod pursuant to West Virginia Co	de § 22-6A-16(c)			
■ CERTI	FIED MAIL	■ HAND			
	RN RECEIPT REQUESTED	DELIVERY			
return receipt the planned of required to be drilling of a damages to tl (d) The notic of notice.	V. Va. Code § 22-6A-16(c), no late requested or hand delivery, give the peration. The notice required by a provided by subsection (b), section horizontal well; and (3) A proposed as surface affected by oil and gas oper required by this section shall be get by provided to the SURFACE ON	surface owner whose lands is subsection shall include the of this article to a surface use and competerations to the extent the civen to the surface owner.	nd will be used for ude: (1) A copy face owner whose isation agreement damages are com	or the drilling of a of this code secti se land will be use at containing an o upensable under art	horizontal well notice of ion; (2) The information d in conjunction with the ffer of compensation for icle six-b of this chapter.
					1
(at the address	s listed in the records of the sheriff a	· ····································			
Name: Brenda		Name	APP Minerals, LLC		
Name: Brenda . Address: 4531	I. Harris, et al 6 State Route 800	Name	APP Minerals, LLC SS: 4600 J. Barry Cou	urt, Suite 310	/
Name: Brenda . Address: 4531 Woodfield, OH 43 Notice is her Pursuant to V	l. Harris, et al 6 State Route 800 793 eby given: Vest Virginia Code § 22-6A-16(c), no	Name Addre Canoni otice is hereby given that	SS: 4600 J. Barry Cou burg, PA 15317 the undersigned	well operator has o	
Name: Brenda Address: 4531 Woodfield, OH 43 Notice is her Pursuant to Voperation on State: County: District:	l. Harris, et al 6 State Route 800 793 eby given:	Name Addre Addre Canoni otice is hereby given that cose of drilling a horizon UTM NAD Public Road	the undersigned all well on the tra Easting: Northing:	well operator has o	ws:
Name: Brenda Address: 4531 Woodfield, OH 43 Notice is her Pursuant to V	Harris, et al 6 State Route 800 793 eby given: Vest Virginia Code § 22-6A-16(c), not the surface owner's land for the pur West Virginia Marshall Webster	Name Addre Addre Canoni otice is hereby given that cose of drilling a horizon UTM NAD Public Road	the undersigned all well on the tra 83 Easting: Northing:	well operator has c act of land as follow 532176.266 4423870.012 McCreary's Ridge Roa	ws:
Name: Brenda Address: 4531 Woodfield, OH 43 Notice is her Pursuant to V operation on State: County: District: Quadrangle: Watershed: This Notice S Pursuant to V to be provide horizontal we surface affect information r	eby given: Vest Virginia Code § 22-6A-16(c), not the surface owner's land for the pur West Virginia Marshall Webster Majorsville Upper Ohio South Shall Include: Vest Virginia Code § 22-6A-16(c), the downward of the pur West Virginia Code § 22-6A-10(b) and (3) A proposed surface use a sed by oil and gas operations to the elated to horizontal drilling may be located at 601 57th Street, SE,	Name Addre Addre Canoni otice is hereby given that cose of drilling a horizon UTM NAD Public Road Generally u nis notice shall include: (to a surface owner who nd compensation agreem extent the damages are cobtained from the Secr	the undersigned all well on the tra 83 Easting: Northing: Access: sed farm name: 1)A copy of this se land will be usent containing are compensable understary, at the WV	well operator has cact of land as follow 532176.266 4423870.012 McCreary's Ridge Roa Brenda J. Harris code section; (2) Tused in conjunction offer of compension of the compe	The information required on with the drilling of a sation for damages to the this chapter. Additional invironmental Protection
Name: Brenda Address: 4531 Woodfield, OH 43 Woodfield, OH 43 Notice is her Pursuant to V operation on State: County: District: Quadrangle: Watershed: This Notice Sepursuant to V to be provide horizontal we surface affect information readquarters, gas/pages/def	eby given: Vest Virginia Code § 22-6A-16(c), not the surface owner's land for the pur West Virginia Marshall Webster Majorsville Upper Ohio South Shall Include: Vest Virginia Code § 22-6A-16(c), to the surface owner's land for the pur West Virginia Marshall Webster Majorsville Upper Ohio South Shall Include: Vest Virginia Code § 22-6A-16(c), to the surface use a get of the surface use a located at 601 57th Street, SE, the sault.aspx.	Name Addre Addre Canoni otice is hereby given that bose of drilling a horizon UTM NAD Public Road Generally u nis notice shall include: (to a surface owner who nd compensation agreem extent the damages are cobtained from the Secr Charleston, WV 25304	the undersigned all well on the transport to the undersite	well operator has cact of land as follow 532176,266 4423870.012 McCreary's Ridge Roa Brenda J. Harris code section; (2) The section of the conjunction of the conjunction of the compensator article six-b of the partment of E or by visiting well and the carticle six-b of the compensator of the comp	The information required on with the drilling of a sation for damages to the this chapter. Additional environmental Protection www.dep.wx.gov/oil-and-Office of Oil and Gas
Name: Brenda Address: 4531 Woodfield, OH 43 Notice is her Pursuant to V operation on State: County: District: Quadrangle: Watershed: This Notice S Pursuant to V to be provide horizontal we surface affect information r headquarters,	eby given: Vest Virginia Code § 22-6A-16(c), not the surface owner's land for the pur West Virginia Marshall Webster Majorsville Upper Ohio South Shall Include: Vest Virginia Code § 22-6A-16(c), to the surface owner's land for the pur West Virginia Marshall Webster Majorsville Upper Ohio South Shall Include: Vest Virginia Code § 22-6A-16(c), to the surface use a get of the surface use a located at 601 57th Street, SE, the sault.aspx.	Name Addre Addre Canoni otice is hereby given that bose of drilling a horizon UTM NAD Public Road Generally u nis notice shall include: (to a surface owner who nd compensation agreem extent the damages are cobtained from the Secr Charleston, WV 25304	the undersigned all well on the tra 83 Easting: Northing: Access: sed farm name:	well operator has of act of land as follow 532176.266 4423870.012 McCreary's Ridge Roa Brenda J. Harris code section; (2) To used in conjunction offer of compension of article six-b of Department of E or by visiting well suite 310	The information required on with the drilling of a sation for damages to the this chapter. Additional environmental Protection www.dep.wx.gov/oil-and-

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.

WW-6A5 (1/12)

Operator Well No. Winterfell 5 UH

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

Delivery method pursuant to West Virginia Code § 22-6A-16(c) CERTIFIED MAIL 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 return receipt requested or hand delivery, give the surface owner whose land will be used for the drilling of a horizontal well not 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 drilling of a horizontal well; and (3) A proposed surface use and compensation agreement containing an offer of compensation damages to the surface affected by oil and gas operations to the extent the damages are compensable under article six-b of this cha (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 of notice. Notice is hereby provided to the SURFACE OWNER(s) (at the address listed in the records of the sheriff at the of notice). Name: Markine E. Phillips Address: 235 McCremy's Bridge Address: 235 McCremy's Bridge Address: 235 McCremy's Bridge Address: 235 McCremy's Bridge Moundaville, WW 25041 Notice is hereby given: Public Road Access: 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: 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: West Virginia Code § 22-6A-16(c), instinctive shall include: (1)A copy of this code section; (2) The information required by W. Va. Code § 22-6A-16(c), this notice shall inclu	Notice Time I Date of Notic	Requirement: notice shall be provided r e: 실실식 [% Date Permit A	no later than the filing date of Application Filed:		application.	
Pursuant to W. Va. Code § 22-6A-16(c), no later than the date for filing the permit application, an operator shall, by certified return receipt requested or hand delivery, give the surface owner whose land will be used for the drilling of a horizontal well notice the planned operation. The notice required by this subsection shall include: (1) A copy of this code section; (2) The informe required to be provided by subsection (b), section ten of this article to a surface owner whose land will be used in conjunction with drilling of a horizontal well; and (3) A proposed surface use and compensation agreement containing an orfer of compensation (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 of notice. Notice is hereby provided to the SURFACE OWNER(s) (at the address listed in the records of the sheriff at the off notice): Name: Marks Meeting Et Us & Many P. Mobeing Address: 325 Oxen Drive Moundswille, WV 28041 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: Vieat 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: Vieat 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: Vieat Virginia Code § 22-6A-16(c), notice is hereby given that the undersigned well operator has developed a planned operation. The surface owner's land for the purpose of drilling a horizontal well on the tract of land as follows: State: Vieat Virginia Code § 22-6A-	Delivery met	hod pursuant to West Virginia Code §	22-6A-16(c)			
Pursuant to W. Va. Code § 22-6A-16(c), no later than the date for filing the permit application, an operator shall, by certified return receipt requested or hand delivery, give the surface owner whose land will be used for the drilling of a horizontal well notice the planned operation. The notice required by this subsection shall include: (1) A copy of this code section; (2) The informe required to be provided by subsection (b), section ten of this article to a surface owner whose land will be used in conjunction with drilling of a horizontal well; and (3) A proposed surface use and compensation agreement containing an orfer of compensation (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 of notice. Notice is hereby provided to the SURFACE OWNER(s) (at the address listed in the records of the sheriff at the off notice): Name: Marks Meeting Et Us & Many P. Mobeing Address: 325 Oxen Drive Moundswille, WV 28041 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: Vieat 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: Vieat 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: Vieat Virginia Code § 22-6A-16(c), notice is hereby given that the undersigned well operator has developed a planned operation. The surface owner's land for the purpose of drilling a horizontal well on the tract of land as follows: State: Vieat Virginia Code § 22-6A-	CERTIE	SIED MAII.	HAND			
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at the address listed in the records of the sheriff af the time of notice): Name: Mark K. Meberg Et U. & Mary P. Meberg Address: 247 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: West Virginia UTM NAD 83 Sasting: 523176.266 County: Marshall UTM NAD 83 Northing: 423870.012 District: Webster Public Road Access: McCreary's Ridge Road (CR 7) Quadrangle: Majorsville Generally used farm name: Brenda J. Harris, et all Watershed: Upper Onio South 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 by W. Va. Code § 22-6A-10(b) to a surface owner whose land will be used in conjunction with the drilling oberprovided by W. Va. Code § 22-6A-10(b) to a surface owner whose land will be used in conjunction with the drilling orizontal well; and (3) A proposed surface use and compensation agreement containing an offer of compensation for damages to surface affected by oil and gas operations to the extent the damages are compensable under article six-b of this chapter. Addition information related to horizontal drilling may be obtained from the Secretary, at the WV Department of Environmental Protectives/pages/default.aspx. Vell Operator: American Petroleum Partners OPerations, LLC Address: 4600 J. Barry Court, Suite 110 Canonsburg, PA 15317 AUG 20 Environmental Protection of Canonsburg, PA 15317 Aug 20 E	return receipt the planned of required to be drilling of a had amages to the d) The notice of notice.	requested or hand delivery, give the sur- peration. The notice required by this e provided by subsection (b), section ten- forizontal well; and (3) A proposed sur- e surface affected by oil and gas operations is required by this section shall be given	face owner whose land will be subsection shall include: (1) of this article to a surface own face use and compensation a const to the extent the damages to the surface owner at the account of the surface owner at the surface own	e used for A copy ner whose greement are comp	or the drilling of a of this code sect se land will be use at containing an opensable under ar	a horizontal well notice of tion; (2) The information ed in conjunction with the offer of compensation for ticle six-b of this chapter.
Name: Mark K. Meberg El Ux & Mary P. Meberg Address: 325 McCreary's Ridge 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: 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: West Virginia Code § 22-6A-16(c), this notice shall include: Quadrangle: Webster Public Road Access: McCreary's Ridge Road (CR 7) Public Road Access: McCreary's Ridge Road (CR 7) Public Road Access: McCreary's Ridge Road (CR 7) Brenda J. Harris, et al Provided by W. Va. Code § 22-6A-16(c), this notice shall include: (1)A copy of this code section; (2) The information requered by the provided by W. Va. Code § 22-6A-16(b) to a surface owner whose land will be used in conjunction with the drilling incrinated well; and (3) A proposed surface use and compensation agreement containing an offer of compensation for damages to urface affected by oil and gas operations to the extent the damages are compensable under article six-b of this chapter. Additinformation related to horizontal drilling may be obtained from the Secretary, at the WV Department of Environmental Protection as/pages/default.aspx. Vell Operator: American Petroleum Partners Operationg, LLC Composition of Partners of Canonsburg, PA 15317 Aug. 20 Address: A						
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: West Virginia County: Marshall West virginia Quadrangle: Webster Quadrangle: Watershed: Upper Ohio South Public Road Access: Generally used farm name: Pursuant to West Virginia Code § 22-6A-16(c), this notice shall include: (1)A copy of this code section; (2) The information requered by W. Va. Code § 22-6A-10(b) to a surface owner whose land will be used in conjunction with the drilling norizontal well; and (3) A proposed surface use and compensation agreement containing an offer of compensation for damages to surface affected by oil and gas operations to the extent the damages are compensable under article six-b of this chapter. Additinformation related to horizontal drilling may be obtained from the Secretary, at the WV Department of Environmental Protect leadquarters, located at 601 57th Street, SE, Charleston, WV 25304 (304-926-0450) or by visiting www.dep.wv.gov/oil-gas/pages/default.aspx. Well Operator: American Petroleum Partners OPerationg, LLC Address: Address				Phillips		
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: West Virginia UTM NAD 83 Easting: Northing: Watershall UTM NAD 83 Easting: Northing: Worthing: Webster Public Road Access: McCreary's Ridge Road (CR 7) Quadrangle: Majorsville Generally used farm name: McCreary's Ridge Road (CR 7) Brenda J. Harris, et al Watershed: Upper Ohio South 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 requested by W. Va. Code § 22-6A-10(b) to a surface owner whose land will be used in conjunction with the drilling norizontal well; and (3) A proposed surface use and compensation agreement containing an offer of compensation for damages to undrace affected by oil and gas operations to the extent the damages are compensable under article six-b of this chapter. Addit information related to horizontal drilling may be obtained from the Secretary, at the WV Department of Environmental Protect acadquarters, located at 601 57th Street, SE, Charleston, WV 25304 (304-926-0450) or by visiting www.dep.wv.gov/oil-tas/pages/default.aspx. Well Operator: American Petroleum Partners OPerationg, LLC Address: 4600 J. Barry Court, Suite 110 Canonsburg, PA 15317 AUG 20 Entire Regulatory@app-lp.com Facsimile: NA W Department of Environmental From Petroleum Partners OPerationg, LLC Canonsburg, PA 15317 AUG 20 Environmental From Petroleum Partners OPerationg, LLC Canonsburg, PA 15317 AUG 20 Environmental From Petroleum Partners OPerationg, LLC Canonsburg, PA 15317 AUG 20 Environmental From Petroleum Partners OPerationg, LLC Canonsburg, PA 15317 AUG 20 Environmental From Petroleum Partners OPerationg, LLC Environmental Protection Partners OPerationg, LLC Canonsburg, PA 15317 AUG 20 Environmental Protection Partner	Address: 325 M	lcCreary's Ridge	Address: 247 Ox	cen Drive		
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:	Moundsville, WV 2	6041	Moundsville, WV 26	6041		*
Watershed: Upper Ohio South 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 requested by W. Va. Code § 22-6A-10(b) to a surface owner whose land will be used in conjunction with the drilling norizontal well; and (3) A proposed surface use and compensation agreement containing an offer of compensation for damages to surface affected by oil and gas operations to the extent the damages are compensable under article six-b of this chapter. Addition information related to horizontal drilling may be obtained from the Secretary, at the WV Department of Environmental Protect acadquarters, located at 601 57th Street, SE, Charleston, WV 25304 (304-926-0450) or by visiting www.dep.wv.gov/oil-ras/pages/default.aspx . Well Operator: American Petroleum Partners OPerationg, LLC Address: American Petroleum Partners OPerationg, LLC Telephone: 724-338-8629 Regulatory@app-lp.com Regulatory@app-lp.com Facsimile: NA Address: American Petroleum Partners OPerationg, LLC Address: American Petroleum Partners OPerationg, LLC Address: American Petroleum Partners OPerationg, LLC Address: American Petroleum Partners OPerationg, LLC Address: American Petroleum Partners OPerationg, LLC Address: Address: Address: American Petroleum Partners OPerationg, LLC Address: American Petroleum Partners OPera	County: District:	Marshall Webster	Public Road Access:	orthing:	4423870.012 McCreary's Ridge Roa	
Chis 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 requires 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 orizontal well; and (3) A proposed surface use and compensation agreement containing an offer of compensation for damages to urface affected by oil and gas operations to the extent the damages are compensable under article six-b of this chapter. Addition information related to horizontal drilling may be obtained from the Secretary, at the WV Department of Environmental Protect eadquarters, located at 601 57th Street, SE, Charleston, WV 25304 (304-926-0450) or by visiting www.dep.wv.gov/oil-as/pages/default.aspx . Well Operator: American Petroleum Partners OPerationg, LLC Telephone: Telephone: Telephone: Regulatory@app-lp.com Regulatory@app-lp.com Regulatory@app-lp.com Regulatory@app-lp.com Regulatory@app-lp.com Regulatory Notice:			Generally used farm	name:	Brenda J. Harris, et al	
Vell Operator: American Petroleum Partners OPerationg, LLC Address: 4600 J. Barry Court, Suite 110 AUG 20 Canonsburg, PA 15317 Aug 20 Canonsburg, PA 15317 Aug 20 Canonsburg, PA 15317 Canonsburg, PA 15317 Aug 20 Canonsburg, PA 15317 Canonsburg, PA 15317 Aug 20 Canonsburg, PA 15317 Canonsburg, PA 15317 Canonsburg, PA 15317 Aug 20 Canonsburg, PA 15317 Canonsburg, PA 15317 Aug 20 Canonsburg, PA 15317 Canonsburg, PA 15317 Aug 20 Canonsburg, PA 15317 Canonsburg, PA 15317 Canonsburg, PA 15317 Aug 20 Canonsburg, PA 15317 Can	Pursuant to Wood be provided to be provided to provided to be prov	est Virginia Code § 22-6A-16(c), this ned by W. Va. Code § 22-6A-10(b) to a ll; and (3) A proposed surface use and ced by oil and gas operations to the extered to horizontal drilling may be obtollocated at 601 57th Street, SE, Characteristics.	surface owner whose land ompensation agreement contains the damages are compensatined from the Secretary, at	will be und aining an able und the WV	offer of compen er article six-b of Department of I	on with the drilling of a sation for damages to the f this chapter. Additional Environmental Protection
Email: Regulatory@app-lp.com Facsimile: NA						Office RECEIVER
Email: Regulatory@app-lp.com Facsimile: NA		American Petroleum Partners OPerationg, LLC	Address: 4600 J.	Barry Court,	Suite 110	oi Oil and
Environmental P		724-338-8629		ourg, PA 153	317	AUG 20 20
Environmental p Environmental p Che Office of Oil and Gas processes your personal information, such as name, address and telephone number, as part of our regular	Email:	Regulatory@app-lp.com	Facsimile: NA			- War-
he Office of Oil and Gas processes your personal information, such as name, address and telephone number, as part of our regula	Oil and Gas I	rivacy Notice:				Environmental Project
duties. Your personal information may be disclosed to other State agencies or third parties in the normal course of business of						, and barrens our resembles

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.

WW-6A5 (1/12)

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

Notice Time Date of Notic	Requirement: notice shall be provided note: 원 기 기 명 Date Permit A	o later than the filing pplication Filed:		application.	
Delivery met	hod pursuant to West Virginia Code § 2	22-6A-16(c)			
■ CERTI	FIED MAIL	HAND			
	RN RECEIPT REQUESTED	DELIVERY			
KLIO	AVRECEM I REQUESTED	DELIVERT			
return receipt the planned of required to be drilling of a damages to the (d) The notice of notice.	V. Va. Code § 22-6A-16(c), no later than requested or hand delivery, give the surfapperation. The notice required by this subsection (b), section ten o horizontal well; and (3) A proposed surface surface affected by oil and gas operation es required by this section shall be given to	ace owner whose land ubsection shall inclu- f this article to a surf- ace use and compens as to the extent the da to the surface owner a	I will be used for de: (1) A copy ace owner whose action agreement amages are comp	or the drilling of a of this code sec se land will be us at containing an opensable under a	a horizontal well notice of tion; (2) The information ed in conjunction with the offer of compensation for rticle six-b of this chapter.
	eby provided to the SURFACE OWNER				
	s listed in the records of the sheriff at the				
Name: David Hu Address: 6906		Name: Address			
Baltimore, MD 21		Address			
State: County: District:	the surface owner's land for the purpose of West Virginia Marshall Webster	UTM NAD 8	Easting: Northing:	532176.266 4423870.012 McCreary's Ridge Ro	
Quadrangle:	Majorsville	Generally use	ed farm name:	Brenda J. Harris, et a	l .
Watershed:	Upper Ohio South				
Pursuant to W to be provide horizontal we surface affect information r	Shall Include: Vest Virginia Code § 22-6A-16(c), this noted by W. Va. Code § 22-6A-10(b) to a sell; and (3) A proposed surface use and coded by oil and gas operations to the extended to horizontal drilling may be obtated to horizontal drilling may be obtated at 601 57th Street, SE, Charland Coult.	surface owner whose impensation agreement the damages are co- lined from the Secret	e land will be unt containing an ompensable und ary, at the WV	used in conjunction offer of compensions article six-b of Department of	ion with the drilling of a sation for damages to the of this chapter. Additional Environmental Protection www.dep.wv.gov/oil-and-
Well Operato	American Petroleum Partners OPerationg, LLC	Address:	4600 J. Barry Court,	Suite 110	Office of Oil and Gas AUG 29 2018
Telephone:	724-338-8629		Canonsburg, PA 153		Alla e
Email:	Regulatory@app-lp.com	Facsimile:	NA		29 2018
Oil and Gas	Privacy Notice: Oil and Gas processes your personal info	rmation, such as nam	e, address and t	elephone number	Environmental Protections, 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.

4705102118 Operator Well No. Winterfell 5 UH

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

Delivery me	thod pursuant to West Virginia Co	ode 8 2	2-6A-16(c)			
CERTI	FIED MAIL	Ш	HAND			
RETU	RN RECEIPT REQUESTED		DELIVERY			
return receip the planned required to b drilling of a damages to t	W. Va. Code § 22-6A-16(c), no late a requested or hand delivery, give the operation. The notice required by a provided by subsection (b), section horizontal well; and (3) A proposed as surface affected by oil and gas opes required by this section shall be g	e surface this sulface ten of d surface eration	ce owner whose land bsection shall inclu- this article to a surface use and compens to the extent the data	I will be used for de: (1) A copy ace owner whos sation agreemen umages are com	or the drilling of this code see land will be unter containing an pensable under	f a horizontal well notice of ection; (2) The information used in conjunction with the offer of compensation for article six-b of this chapter.
	eby provided to the SURFACE O					
	s listed in the records of the sheriff	at the ti		B. 14		1
					son	
200		- /		David and Lonna Hud		
Address: 61 V Moundsville, WV Notice is her Pursuant to V	/ayman's Ridge 26041		Address Moundsv	s: 319 Oxen Drive	well operator ha	
Address: 61 V Moundsville, WV Notice is her Pursuant to V operation on State: County:	/ayman's Ridge 26041 eby given: Vest Virginia Code § 22-6A-16(c), n the surface owner's land for the pur West Virginia Marshall		Address Moundsv s hereby given that the drilling a horizonta UTM NAD 8	s: 319 Oxen Drive sille, WV 26041 ne undersigned vil well on the tra Easting: Northing:	well operator hat of land as fo 532176.266 4423870.012	llows:
Address: 61 V Moundsville, WV Notice is her Pursuant to V operation on State: County: District:	/ayman's Ridge 26041 eby given: Vest Virginia Code § 22-6A-16(c), n the surface owner's land for the pur West Virginia Marshall Webster		Address Moundsv s hereby given that the drilling a horizonta UTM NAD 8 Public Road	s: 319 Oxen Drive ille, WV 26041 ne undersigned v. l well on the tra Easting: Northing: Access:	well operator hat of land as fo 532176.266 4423870.012 McCreary's Ridge	llows:
Notice is her Pursuant to V	/ayman's Ridge 26041 eby given: Vest Virginia Code § 22-6A-16(c), n the surface owner's land for the pur West Virginia Marshall		Address Moundsv s hereby given that the drilling a horizonta UTM NAD 8 Public Road	s: 319 Oxen Drive sille, WV 26041 ne undersigned vil well on the tra Easting: Northing:	well operator hat of land as fo 532176.266 4423870.012	llows:
Address: 61 V Moundsville, WV Notice is her Pursuant to V operation on State: County: District: Quadrangle: Watershed: This Notice Pursuant to V to be provid horizontal we surface affect information	West Virginia Code § 22-6A-16(c), n the surface owner's land for the pur West Virginia Marshall Webster Majorsville Upper Ohio South Shall Include: Vest Virginia Code § 22-6A-16(c), the dealer of the pur West Virginia Code § 22-6A-10(b) and (3) A proposed surface use a sted by oil and gas operations to the related to horizontal drilling may be located at 601 57th Street, SE,	this notito a suand cone extente obtain	Address Moundsv Shereby given that the drilling a horizonta UTM NAD 8 Public Road A Generally use ice shall include: (1) urface owner whose opensation agreement the damages are contended from the Secret	s: 319 Oxen Drive iille, WV 26041 ne undersigned ville well on the tra Easting: Northing: Access: ed farm name: OA copy of this e land will be undersigned will be undersigned arry, at the WV	well operator hat to of land as for the state	Road (CR 7) t al 2) The information required ction with the drilling of a ensation for damages to the of this chapter. Additional f Environmental Protection www.dep.wv.gov/oil-and-
Address: 61 v Moundsville, WV Motice is her Pursuant to V operation on State: County: District: Quadrangle: Watershed: This Notice Pursuant to V to be provide horizontal we surface affect information headquarters gas/pages/de	West Virginia Code § 22-6A-16(c), nothe surface owner's land for the pur West Virginia Marshall Webster Majorsville Upper Ohio South Shall Include: Vest Virginia Code § 22-6A-16(c), to ed by W. Va. Code § 22-6A-10(b) edl; and (3) A proposed surface use a sted by oil and gas operations to the related to horizontal drilling may be located at 601 57th Street, SE, fault.aspx.	this notito a su and con extent e obtain Charle	Address Moundsv Shereby given that the drilling a horizonta UTM NAD 8 Public Road A Generally use ice shall include: (1) urface owner whose opensation agreement the damages are contended from the Secret	s: 319 Oxen Drive iille, WV 26041 ne undersigned ville well on the tra Easting: Northing: Access: ed farm name: OA copy of this e land will be undersigned will be undersigned arry, at the WV	well operator had to of land as for 532176.266 4423870.012 McCreary's Ridge Brenda J. Harris, escode section; (2) ased in conjunction offer of compler article six-b Coppartment of or by visiting	Road (CR 7) t al 2) The information required ction with the drilling of a ensation for damages to the of this chapter. Additional f Environmental Protection www.dep.wv.gov/oil-and-
Address: 61 V Moundsville, WV Notice is her Pursuant to V operation on State: County: District: Quadrangle: Watershed: This Notice Pursuant to V to be provid horizontal we surface affect information headquarters	West Virginia Code § 22-6A-16(c), nothe surface owner's land for the pur West Virginia Marshall Webster Majorsville Upper Ohio South Shall Include: Vest Virginia Code § 22-6A-16(c), to ed by W. Va. Code § 22-6A-10(b) edl; and (3) A proposed surface use a sted by oil and gas operations to the related to horizontal drilling may be located at 601 57th Street, SE, fault.aspx.	this notito a su and con extent e obtain Charle	Address Moundsv Thereby given that the drilling a horizonta UTM NAD 8 Public Road A Generally use ice shall include: (1) urface owner whose in the damages are connected from the Secret eston, WV 25304	s: 319 Oxen Drive iile, WV 26041 the undersigned ville, WV 26041 The undersigned ville well on the transport of the season of the season of the containing and the undersy, at the WV (304-926-0450)	well operator hat to of land as for 532176,266 4423870,012 McCreary's Ridge Brenda J. Harris, e	Road (CR 7) tal 2) The information required ction with the drilling of a ensation for damages to the of this chapter. Additional f Environmental Protection

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.

470510211 8perator Well No. Winterfell 5 UH

WW-6A5 (1/12)

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

gas/pages/d			Address:			ww.dep.wv.gov/oil-and- Office of Oil and Gas
Pursuant to to be prov horizontal surface aff information headquarte	ided by W. Va. Code well; and (3) A propose ected by oil and gas op n related to horizontal ors, located at 601 57 th	§ 22-6A-10(b) to a side of the surface use and concernations to the external frilling may be obta	surface owner whose ompensation agreement the damages are contined from the Secretarian	e land will be not containing an ompensable und arry, at the WV	used in conjunction offer of compens der article six-b of Department of E	The information required on with the drilling of a ation for damages to the this chapter. Additional nvironmental Protection www.dep.wv.gov/oil-and-
Watershed	Upper Ohio South		_			
Quadrangle			Generally us	ed farm name:	Brenda J. Harris, et al	
District:	Webster		Public Road		McCreary's Ridge Road	d (CR 7)
County:	Marshall		— UTM NAD 8	Northing:	4423870.012	
Pursuant to	nereby given: b West Virginia Code § 2 on the surface owner's l		of drilling a horizonta	I well on the tra		
Wheeling, W	RD 3 Box 278-B / 26003			S: RD 3 Box 278-B , WV 26003		
(at the addi Name: Gora	nereby provided to the stress listed in the records likshya-Seva & Env EDU /ECO-Vri	of the sheriff at the	time of notice): Name:		. Dove Et. Al/Lakshmi D. D	ove Et. Al
damages to	the surface affected by	oil and gas operation	ns to the extent the da	mages are com	pensable under arti	fer of compensation for icle six-b of this chapter. of the sheriff at the time
return rece the planne required to	ipt requested or hand de d operation. The notice be provided by subsect	livery, give the surface required by this si ion (b), section ten o	ace owner whose land ubsection shall inclu of this article to a surf	I will be used for de: (1) A copy ace owner whose	or the drilling of a of this code sections se land will be used	r shall, by certified mail horizontal well notice of on; (2) The information d in conjunction with the
RET	URN RECEIPT REQUI	ESTED	DELIVERY			
■ CER	TIFIED MAIL		HAND			
	action pursuant to Tre	st virginia Code 8.	22-0A-10(C)			
Delivery n	nethod pursuant to We	et Vinginia Coda 8	22 64 16(0)			
	otice: 8/24/18		pplication Filed: 🔠	4110		

Oil and Gas Privacy Notice:

The Office of Oil and Gas processes your personal information, such as name, address and telephone number, as part of our regulatory duties. Your personal information may be disclosed to other State agencies or third parties in the normal course of business or as needed to comply with statutory or regulatory requirements, including Freedom of Information Act requests. Our office will appropriately secure your personal information. If you have any questions about our use or your personal information, please contact DEP's Chief Privacy Officer at depprivacyofficer@wv.gov.



WEST VIRGINIA DEPARTMENT OF TRANSPORTATION

Division of Highways

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

August 1, 2018

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

> Jill M. Newman **Deputy Commissioner**

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

Subject: DOH Permit for the Winterfell Pad, Marshall County Winterfell 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 January 3, 2012.

Very Truly Yours,

Gary K. Clayton, P.E.

Dary K. Clayton

Regional Maintenance Engineer

Regional Maintenance Engineer

RECEIVED

Central Office O&G Coordinat@fice of Oil and Gas

AUG 29 2018

WV Department of Environmental Protection

Braulio Silva Cc: American Petroleum Partners CH, OM, D-6 File

Hydraulic Fracturing Fluid Product Component Information Disclosure

Hydraulic Fracturing Fluid Composition:

Trade Name	ring Fluid Compo	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	YVacci	1702-10-0		
retroprop , rae	Danor Fragilia	1,1044-11	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	Office Outstands	4 4000 00 7	87.00000	
ProLite 40/70	Imanue	Propagat	Silica Substrate	14808-60-7	07.0000	
PIOLILE 40/10	Imerys	Proppant	Mullite	1302-93-8	70.00000	
			Cristobalite	14464-46-1	30.00000	
			Amorphous Silica	7631-86-9	15.00000	
Hydrochloric Acid (HCI)	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 Hexamethylene Triamine Penta	15827-60-8 34690-00-1	20.00000	
			(Methylene Phosphonic Acid)		2 0 2 2 2	
C CAG AGGS DONDA	LUCT	Destruction date	Phosphino carboxylic acid polymer	71050-62-9	20.00000	
K-BAC 1020 DBNPA	WST	Bacteriacide	Polyethylene glycol	25322-68-3	50,00000	
			Water	7732-18-5	30,00000	
			2,2-Dibromo-3- nitrilopropionamide	10222-01-2	21.00000	
NEFE-180	Stingray	Acid Inhibitor/Iron Control			Of	RECEIVED ffice of Oil and Gas
			Acetic Acid	64-19-7	60.00000	and Ga
			Methanol	67-56-1	30.00000	UG 9000
			2-Ethylhexanol	104-76-7	7.50000	UG 29 2018
			Cocunut Oil Acid diethanolamine Alcohols, C15-15, ethoxylated	68603-42-9	3.00000	Department of mental Protection
			Olefin	68951-67-7 64743-02-8	3,00000	mental pent of
			Fatty Acids, tall oil	61790-12-3	3.00000	Profection
			2-Propyn-1-ol	107-19-7	3.00000	
FRA-409	Stingray	Friction Reducer	7.7.7.7			
			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	
001.00	Officer	all Cartral	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	0	9000-30-0	100,00000	
SP BREAKER	Halliburton	Descript	Guar gum	9000-30-0	100.0000	
SP BREAKER	Hamburton	Breaker	Sodium persulfate	7775-27-1	100.00000	
LOSURF-300D	Halliburton	Non-ionic Surfactant	Sodium persunate	7713-21-1	100.0000	
LUGURF-300D	Planton	NOTPORC GUITACIAN	Ethanol	64-17-5	60.00000	
			Heavy aromatic petroleum	64742-94-5	30.00000	
			Naphthalene	91-20-3	5.00000	
			117721-00000			
			Poly(oxy-1,2-ethanediyl), alpha-	127087-87-0	5.00000	

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

- DARIENA, MODRIG LARGER THAN 6 DF) INFORMATION OF STANDARD TO BE STANDARD THAN 6 DF THEORY MAINLY STANDARD COURTY (AST O BESS) IN COUNTRICION WITH THE CONFACTING CREENING, FULL LES BINDUCKT TO DETAILS MOSTURE CONTENT.







LIMITS OF DISTURBANCE

CALL BEFORE Dial 811 or

800,245,4848 YOU DIG!

DATE: 6-12-2018 TICKET #: 1816368639

CHE: CULLECKA-DORNANT COMPLEX. 15 TO 25% SLOPES DE DOGMANT-CULLECKA COMPLEX, 25 TO 30% SLOPES

cut (SOL)	MELL PAD # 102.043 CT	ACCESS ORIVE +35,656 CY	S/TE +137,699 CY	
ELL	- 68,986 CY	-32,089 CY	-101,057 CY	
MET	+ 33,057 CY	+ 3,567 CY	= 36.624 CY	
STONE (16")	* 0,069 CT	+ 5.776 GT	- 11.344 CT	
TOPSOL NET	- 5.163 CY + 33.460 CY	- 6.139 CY + 3.206 CY	#-11.302 CY - 36,666 CY	

LIST OF DRAWINGS

2 09 34	OVERALL SIE PLAN DNIARCED LAYOUT PLAN
2 OF 34	DILARGED LAYOUT PLAN
4 OF 34	ENLARGED LAYOUT PLAN
5 OF 34	ENLARGED LAYOUT PLAN ENLARGED LAYOUT PLAN
4 DF 54	ENLARGED LAYOUT PLAN
7 OF 34	CROSON & SEDMENTATION CONTROL PLAN
E OF 34	, EROSION & SEDMENTATION CONTROL PLAN-
9 OF 34	CROSON & SEMAINTATION CONTROL PLAN
10 OF 34	ENDSON & SEDMENTATION CONTROL PLAN
	WY DEP EAS PLAN
15 OF 34	AV DEP EAS PLAN
14 07 34	. WY CEP EAS PLAN
15 OF 34	DXDN ORIVE PROFILE
16 0/ 34	DIREN THRVE PHOPILE
17 OF 24	ACCESS DRIVE PROFILE
18 OF 24	ACCESS DRIVE PROPILE
19 DF 34	ACCESS DAVE PROFILE
21 05 34	CROSS SECTIONS PLAN WEW CHOSS SECTIONS ADDESS DRIVE
22 OF 34	DROSS SECTIONS ADDESS DRIVE
23 09 34	CROSS SECTIONS - ADDESS DRIVE
24 OF 34	CROSS SECTIONS - WELL PAD
25 CF 34.	CHOSS SECTIONS - STOCKPILES
20 OF 34	RECLAMATION PLAN
27 OF 34	HECLAMATION PLAN
28 OF 34	RECLAMATION PLAN
28 OF 34	RECLAMATION PLAN
30 OF 34	CVADUATION PLAN
51 OF 34	EVACUATION PLAN - USGS
31 OF 34.	NOTES & DETAILS
35 OF 54	DETALS
34 OF 34	. OTTALS





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