



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

Wednesday, January 29, 2020
WELL WORK PERMIT
Horizontal 6A / New Drill

AMERICAN PETROLEUM PARTNERS OPERATING, LLC
4600 J. BARRY COURT

CANONSBURG, PA 15317

Re: Permit approval for KINGS LANDING - 7UH
47-051-02222-00-00

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: KINGS LANDING - 7UH
Farm Name: YOUNG, ROBERT L. ET. UX.
U.S. WELL NUMBER: 47-051-02222-00-00
Horizontal 6A New Drill
Date Issued: 1/29/2020

Promoting a healthy environment.

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.

PERMIT CONDITIONS

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



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

August 22, 2019

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

RE: Application for Deep Well Permit – API #47-051-02222

COMPANY: American Petroleum Partners Operating, LLC

FARM: Robert L. Young et ux Kings Landing-7UH

COUNTY: Marshall DISTRICT: Webster QUAD: Moundsville

The deep well review of the application for the above company is Approved to drill to the Trenton for Point Pleasant completion. Pooling Docket No. 283-278

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

1. Comments to Notice of Deviation filed? Yes
2. Provided a certified copy of duly acknowledged and recorded consent and easement form from all surface owners? Yes
3. Provided a tabulation of all deep wells within one mile of the proposed location, including the API number of all deep wells: 47-051-02090, 47-051-02091, 47-051-02137, 47-051-02136, 47-051-02178, 47-051-02179, 47-051-02180, 47-051-02135, 47-051-02073, 47-051-02072, 47-051-02071; 47-051-02212, 47-051-02221, 47-051-02223, 47-051-02224, and 47-051-02225
4. Provided a plat showing that the proposed location is a distance of 400+ feet from the nearest lease line or unit boundary except for the toe which is 150 feet from the nearest lease line or unit boundary and showing the following wells drilled to or capable of producing from the objective formation within 3,000 feet of the proposed location.

Sincerely,

Susan Rose
Administrator

WW-6B
(04/15)

API NO. 47-051 -
OPERATOR WELL NO. Kings Landing-7UH
Well Pad Name: Kings Landing

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

1) Well Operator: American Petroleum Partners

<u>494521257</u>	<u>Marshall</u>	<u>Webster</u>	<u>Moundsville</u>
------------------	-----------------	----------------	--------------------

Operator ID County District Quadrangle

2) Operator's Well Number: Kings Landing-7UH Well Pad Name: Kings Landing

3) Farm Name/Surface Owner: Robert L. Young Public Road Access: Stull Run Road C.R. 44

4) Elevation, current ground: 1,314.95' Elevation, proposed post-construction: 1,301.55'

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

(b) If Gas Shallow Deep
Horizontal

6) Existing Pad: Yes or No No

7) Proposed Target Formation(s), Depth(s), Anticipated Thickness and Expected Pressure(s):
Point Pleasant Formation 11,617' / 81' thick 10,144 or .89 psi per foot / Utica Formation 11,480 137' thick / 10,000 psi or .89 psi per foot.

8) Proposed Total Vertical Depth: 11,893' pilot hole into the Trenton-Plug back, land and TD in Point Pleasant.

9) Formation at Total Vertical Depth: Trenton

10) Proposed Total Measured Depth: 20,418'

11) Proposed Horizontal Leg Length: 8,525'

12) Approximate Fresh Water Strata Depths: 162', 1155'

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

14) Approximate Saltwater Depths: Na

15) Approximate Coal Seam Depths: 722', 808'

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

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

(a) If Yes, provide Mine Info: Name: The Ohio County Mine-Murray American Energy and Consolidation Coal Company
Depth: 722', 808'
Seam: Pittsburgh #8
Owner: Murray American Energy & Consolidation Coal Company

RECEIVED
Office of Oil and Gas

MAY 06 2019

4705102222

WW-6B
(04/15)

API NO. 47-051 -

OPERATOR WELL NO. Kings Landing-7UH

Well Pad Name: Kings Landing

18)

CASING AND TUBING PROGRAM

TYPE	Size (in)	New or Used	Grade	Weight per ft. (lb/ft)	FOOTAGE: For Drilling (ft)	INTERVALS: Left in Well (ft)	CEMENT: Fill-up (Cu. Ft.)/CTS
Conductor	30"	New	LS	81.3#	60'	60'	CTS
Fresh Water	20"	New	J-55	94#	1,216'	1,216'	CTS 15.6ppg to sur 521 ex w/30% OH ex
Coal	13 3/8"	New	J-55	54.5#	2,512'	2,512'	CTS 15.2ppg to sur 556 ex w/30% OH ex
Intermediate	9 5/8"	New	HCP-110	43.5#	10,189'	10,189'	CTS 15.4ppg to surf 936 ex w/30% OH ex
Production	5 1/2"	New	HCP-110	23#	20,418'	20,418'	14.8ppg TOC >=200' above 9,625 shoe
Tubing	2 7/8"	New	J-55	6.5#	11,698'	11,698'	CTS
Liners							

ju 4/10/19

TYPE	Size (in)	Wellbore Diameter (in)	Wall Thickness (in)	Burst Pressure (psi)	Anticipated Max. Internal Pressure (psi)	Cement Type	Cement Yield (cu. ft./k)
Conductor	30"	36"		300		Type 1	Lead yield 2.38 tail 521 ex Yield 1.18
Fresh Water	20"	24"	.438	2,110	400	Class A	Lead yield 2.38 Tail 556 ex Yield 1.27
Coal	13 3/8"	17.5"	.380	2,730	688	Class A	Lead Yield 2.38 Tail 556 ex Yield 1.27
Intermediate	9 5/8"	12.375"-12.25" ₊	.395	7,870	3,166	Class A	Lead Yield 1.28 Tail 936 ex Yield 1.28
Production	5 1/2"	8.5"	.361	14,360	11,000	Class H	Lead Yield 1.27 Tail 4714 ex Yield 1.27
Tubing	2 7/8"	5.14"	.217	10,570	8,000		
Liners							

PACKERS

Kind:				
Sizes:				
Depths Set:				

RECEIVED
Office of Oil and Gas

MAY 06 2019

WV Department of
Environmental Protection

WW-6B
(10/14)

API NO. 47- 051 -
OPERATOR WELL NO. Kings Landing-7UH
Well Pad Name: Kings Landing

4/10/19

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

Drill the vertical depth (Pilot Hole) into the Trenton at an estimated Total vertical depth of approximately 11,893', plug back above the Point Pleasant by placing two 800' cement plugs to KOP. Drill and land well in the Point Pleasant to drill horizontal leg and TD in the same Point Pleasant 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 engineering design. Slickwater fracturing technique will be utilized on each stage using sand, water, and chemicals. Our maximum pressure is not to exceed 10,000 lbs.

21) Total Area to be disturbed, including roads, stockpile area, pits, etc., (acres): 21.70

22) Area to be disturbed for well pad only, less access road (acres): 5.57

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 (antisetling, antifoam, fluid loss retarder, salt, viscosifer) & 15.4 Class A tail with additives (antisetling, 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, antisetling, 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 KCl water circulate a minimum of one hole volume prior to pumping cement. First Intermediate- Drilled on Air. Once casing is at a setting depth, circulate a minimum of one hole volume prior to pumping cement. Second Intermediate - Drilled on air. Fill with salt saturated water once drilled to TD. Once casing is at setting depth, circulate a minimum of one hole volume prior to pumping cement. Production- drilled on +/- 14.8ppg 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.

RECEIVED
Office of Oil and Gas

*Note: Attach additional sheets as needed.

MAY 06 2019

Page 3 of 3

470510222

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

RECEIVED
Office of Oil and Gas

MAY 06 2019

WV Department of
Environmental Protection



DRILLING WELL PLAN
Kings Landing-7UH
Utica Horizontal
Marshall Co, WV

Horizontal Well Plan with Cemented Long String Completion

HOLE	RIG	CASING	GEOLOGY	Top TVD	BTM TVD	MUD	CEMENT	DIRECTIONAL	LOGS	BITS	COMMENTS
36"	Conductor Rig	30" 81.3# LS	Elevation KB Elevation	1314 1336		AIR	To Surface	N/A	N/A		Stabilize surface fill/soil
24"	Top-Hole	20" 94# J-55 BTC	Conductor Sewickley Coal Pittsburgh Coal	60 722 808	60 730 816	AIR	15.6ppg to surface 521sx w/ 30% OH excess	20" Air Hammer Totco at TD	N/A	Carbide hammer bit	Protect fresh groundwater
17.5"	Top-Hole	13-3/8" 54.5# J-55 BTC	Surf. Casing Big Lime Big Injun Price	1216 1914 2022 2212	1216 2022 2212 2475	AIR	15.2ppg to surface 556sx w/ 30% OH excess	Center Rock 15" Air Hammer Gyro above Coal. (Mine Approval) Totco at TD	N/A	Hammer bit w/ diamond gage Test casing to 800psi	
12.375" 12.25"	Horizontal Rig	9-5/8" 43.5# P-1101C BTC	Int. Casing Tully LS Hamilton Marcellus Shale Onondaga Ls Oriskany Sandstone	2512 6712 6750 6828 6889 6895 7118	2512 6750 6828 6889 6895 7227	AIR	15.4ppg to surface 936sx w/ 30% OH excess	12.25" Tricone 6.75" PDM MWD 2.12" ADJ Bend	MWD surveys Mud Logger - 90 ft samples	Tricone Bit Test casing to 1100psi	PU cleanout assembly, dress plug, displace to 13.5ppg SOBM, PU Curve BHA, time drill / KO cement plug, Expect Seepage in curve
8.5" Curve/Lateral	Horizontal Rig	5-1/2" 23# P1101CY TSH Wedge 563	Int. Casing Utica Shale Point Pleasant Formation Curve LP TARGET Production Casing	10189 11480 11617 11698	10189 11480 11617 11698	AIR	14.8ppg TOC >= 200' Above 9.625 shoe 3871sx w/ 15% OH excess	RSS 6.75" PDM & MWD (10" Build DLS)	MWD Surveys Mud Logger - 30 ft samples (Curve) 90 ft samples (Lateral)	PDC 5 - 25 WOB 100 - 120 RPM 450 - 500 GPM	Geosteering

8.5 Hole - Cemented Long String 5-1/2" 23# P1101CY TSH Wedge 563

Isolation/Sidetrack Cement Plugs	HZT Rig	Lexington	11698	11736	17.5ppg Class-H from TD to 200' above 9.625" Csg shoe balanced plugs w/ 2.375" tubing	RSS 6.75" PDM & MWD	OH logs, as directed by APP Operations Dir. Surveys TD to shoe	PDC 5 - 25 WOB 100 - 120 RPM 500 - 550 GPM
8.5" Pilot		Trenton	11736		17.5ppg Class-H from TD to 200' above 9.625" Csg shoe balanced plugs w/ 2.375" tubing			
		Pilot Hole TD	11898	11898				

Lateral Targets	Landing Point	91.5 Inc	325 Az	8525 ft Lateral Length	91.5 Inc 325 Az	Total Depth 11698 TVD 20418 TD
-----------------	---------------	----------	--------	------------------------	-----------------	--------------------------------

RECEIVED
Office of Oil and Gas
MAY 06 2019
WV Department of
Environmental Protection

4705102222

Handwritten signature/initials

Additives for Drilling Medium

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

Closed Loop:

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

RECEIVED
Office of Oil and Gas

MAY 06 2019
WV Department of
Environmental Protection

4705102222

WW-9
(4/16)

API Number 47 - 051 -

Operator's Well No. Kings Landing-7UH

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) Huc-10 Wheeling Creek, Huc 12 Upper Wheeling Creek Quadrangle Moundsville

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

Will a pit be used? Yes No

If so, please describe anticipated pit waste:

Will a synthetic liner be used in the pit? Yes No If so, what ml.?

Proposed Disposal Method For Treated Pit Wastes:

- Land Application
- Underground Injection (UIC Permit Number See attached sheet)
- Reuse (at API Number at next anticipated well)
- Off Site Disposal (Supply form WW-9 for disposal location)
- Other (Explain

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

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

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

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

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

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

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

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

I certify that I understand and agree to the terms and conditions of the GENERAL WATER POLLUTION PERMIT issued on August 1, 2005, by the Office of Oil and Gas of the West Virginia Department of Environmental Protection. I understand that the provisions of the permit are enforceable by law. Violations of any term or condition of the general permit and/or other applicable law or regulation can lead to enforcement action.

I certify under penalty of law that I have personally examined and am familiar with the information submitted on this application form and all attachments thereto and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine or imprisonment.

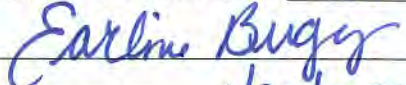
Company Official Signature 

Company Official (Typed Name) Braulio Silva

Company Official Title Vice President - Drilling

RECEIVED
Office of Oil and Gas
MAY 06 2019
WV Department of
Environmental Protection

Subscribed and sworn before me this 30th day of April, 2019


My commission expires 1/23/2020

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

American Petroleum Partners Operating, LLC

Proposed Revegetation Treatment: Acres Disturbed 21.70 Prevegetation pH 6.0

Lime 2-3 Tons/acre or to correct to pH _____

Fertilizer type 10-20-20 or Equal

Fertilizer amount 500 lbs/acre

Mulch Hay or Straw at 2 Tons/acre

Seed Mixtures

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

*Refer to attached Reclamation Plan for further detail.

Attach:

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

Photocopied section of involved 7.5' topographic sheet.

Plan Approved by: *Jim Nicholas*

Comments: _____

RECEIVED
Office of Oil and Gas
MAY 06 2019
WV Department of
Environmental Protection

Title: WV DEP Oil and Gas Inspector

Date: 4/10/19

Field Reviewed? () Yes () No

Form WW-9

Operator's Well No. Kings Landing -3UH

American Petroleum Partners Operating, LLC

Proposed Revegetation Treatment: Acres Disturbed 21.70 Prevegetation pH 6.0

Lime 2-3 Tons/acre or to correct to pH _____

Fertilizer type 10-20-20 or Equal

Fertilizer amount 500 lbs/acre

Mulch Hay or Straw at 2 Tons/acre

Seed Mixtures

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

*Refer to attached Reclamation Plan for further detail.

Attach:

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

Photocopied section of involved 7.5' topographic sheet.

Plan Approved by: Jim Anderson

Comments: I have a concern with the public road leading to the access road, Limestone Hill Lane. This is a dead-end road, with approx 10 residential dwellings located past the pad access. Ingress/egress for those landowners must be addressed.

Title: WV DEP Oil and Gas Inspector

Date: 4/10/19

Field Reviewed? Yes No

RECEIVED
Office of Oil and Gas
MAY 06 2019
WV Department of Environmental Protection

RECEIVED
Office of Oil and Gas
MAY 06 2019
WV Department of Environmental Protection

Cuttings Disposal/Site Water

4705102222

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

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

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

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

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

Waste Management Kelly Run Permit # 100663
1901 Park Side Drive
Elizabeth, PA 15037
412-384-7569

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

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

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

Brooke County Landfill Permit # SWF-103-97 / WV 0109029
Rd 2 Box 410
Colliers, WV 26035
304-748-0014

RECEIVED
Office of Oil and Gas
MAY 06 2019
WV Department of
Environmental Protection

4705102222

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

Water Haul off Companies:

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

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

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

RECEIVED
Office of Oil and Gas
MAY 06 2019
WV Department of
Environmental Protection

4705102222

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

RECEIVED
Office of Oil and Gas
MAY 06 2019
WV Department of
Environmental Protection

4705102222

Hydraulic Fracturing Fluid Product Component Information Disclosure

Hydraulic Fracturing Fluid Composition:

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



4705102222

**AMERICAN
PETROLEUM
PARTNERS**

Site Safety Plan

American Petroleum Partners Operating, LLC

Kings Landing Well Pad

473 Limestone Hill Lane

Moundsville, WV 26041

April 2019: Version 1

ju
4/10/19

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

American Petroleum Partners Operating, LLC

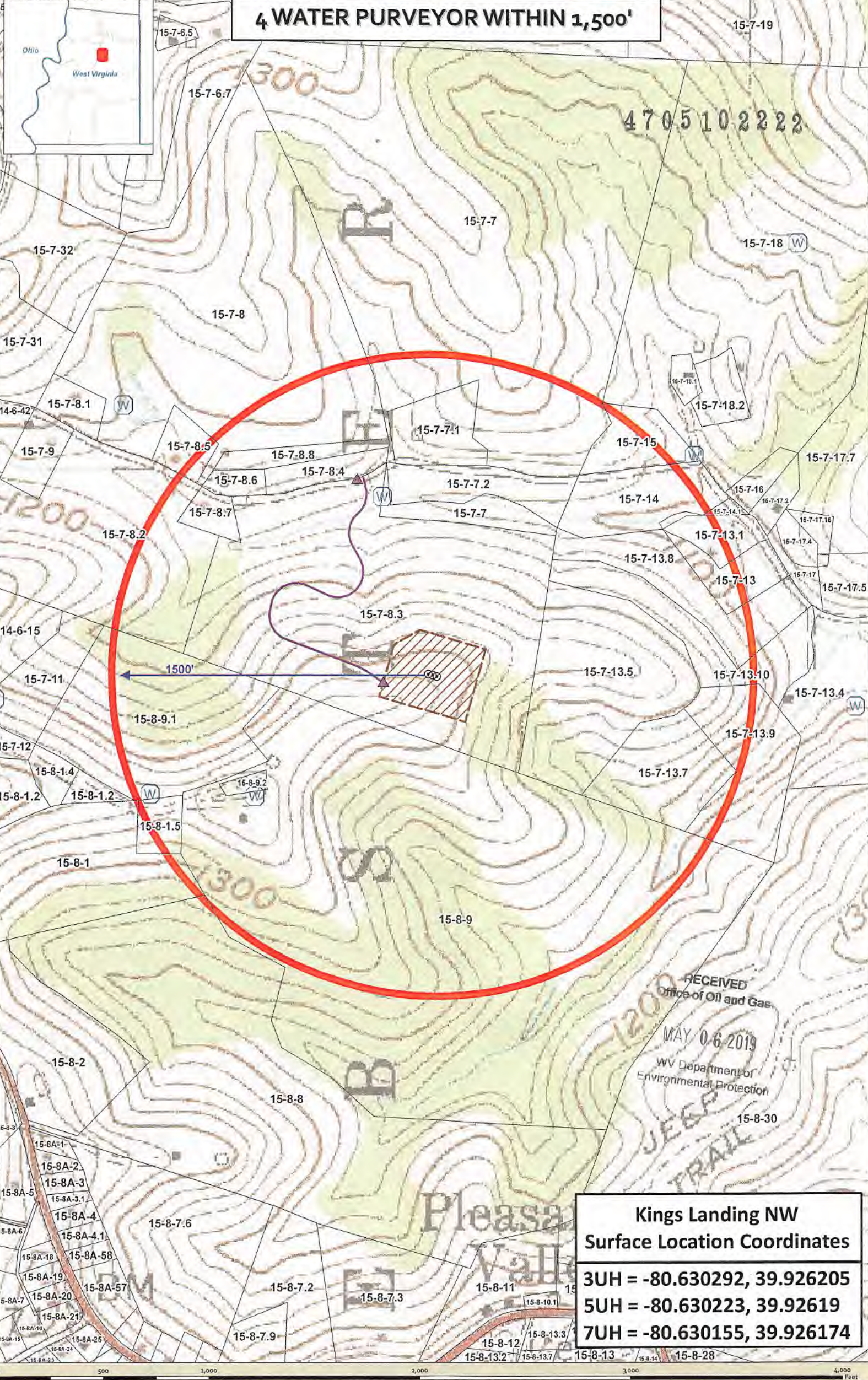
4600 J. Barry Ct

Suite 310

Canonsburg, PA 15317

RECEIVED
Office of Oil and Gas
MAY 06 2019
WV Department of
Environmental Protection

4 WATER PURVEYOR WITHIN 1,500'



**Kings Landing NW
Surface Location Coordinates**

3UH = -80.630292, 39.926205
 5UH = -80.630223, 39.92619
 7UH = -80.630155, 39.926174

Kings landing NW - Water Source		Well SHL	Access Rd Intersection	Water Well
Marshall County West Virginia	Coordinate System: Coordinate System: NAD 1983 UTM Zone 17N Projection: Transverse Mercator Datum: North American 1983	Map Scale Units: 1:6,000 1 inch = 600 feet	Map Author: DJA Map Date: 4/5/2019	1,500' Buffer
		Well Pad	Access Road	AMERICAN PETROLEUM PARTNERS
		Parcels		

470510222

Kings Landing-7UH Wellbore Tracts

Map #	Lease #	Lessor	Current Lessee	Royalty	Recording Information	Parcel
1	WV-MAR-1256	Robert L. & Kathy J. Young	American Petroleum Partners Operating, LLC Jamestown Resources, LLC	Not Less than 1/8th	685-415	15-7-8.3
2	WV-MAR-1253	Noble Marcellus, LP	American Petroleum Partners Operating, LLC Jamestown Resources, LLC	Not Less than 1/8th	682-63	15-8-9
2	WV-MAR-1260	Vemuri Home & Garden LLC	American Petroleum Partners Operating, LLC Jamestown Resources, LLC	Not Less than 1/8th	747-106	15-8-9
2	WV-MAR-1257	Christen R. & Joseph L. Blake	American Petroleum Partners Operating, LLC Jamestown Resources, LLC	Not Less than 1/8th	698-381	15-8-9
2	WV-MAR-1262	Donald & Pamela P. Colvin	American Petroleum Partners Operating, LLC Jamestown Resources, LLC	Not Less than 1/8th	752-12	15-8-9
2	WV-MAR-1259	Donna Lemons	American Petroleum Partners Operating, LLC Jamestown Resources, LLC	Not Less than 1/8th	747-101	15-8-9
2	WV-MAR-1628	Elizabeth Howell Gorby & Kenneth A. T. Gorby	American Petroleum Partners Operating, LLC	Not Less than 1/8th	Not Yet Recorded	15-8-9
2	WV-MAR-1261	Elizabeth Jean Howell	American Petroleum Partners Operating, LLC Jamestown Resources, LLC	Not Less than 1/8th	747-111	15-8-9
2	WV-MAR-1644	Lella Howell f/k/a Lella Howell Wright	American Petroleum Partners Operating, LLC	Not Less than 1/8th	1032-20	15-8-9
2	WV-MAR-1261	Lella V. Howell	American Petroleum Partners Operating, LLC Jamestown Resources, LLC	Not Less than 1/8th	747-111	15-8-9
2	WV-MAR-1258	Linda M. Ater	American Petroleum Partners Operating, LLC Jamestown Resources, LLC	Not Less than 1/8th	747-96	15-8-9
2	WV-MAR-1255	Nicole L. & Charles F. Reynolds	American Petroleum Partners Operating, LLC Jamestown Resources, LLC	Not Less than 1/8th	697-81	15-8-9
2	WV-MAR-1641	Robert L. Lemons & Christina M. Lemons	American Petroleum Partners Operating, LLC	Not Less than 1/8th	1031-629	15-8-9
2	WV-MAR-1632	Ronald L. Howell, Jr.	American Petroleum Partners Operating, LLC	Not Less than 1/8th	Not Yet Recorded	15-8-9
2	WV-MAR-1261	Ronald L. Howell, Jr.	American Petroleum Partners Operating, LLC Jamestown Resources, LLC	Not Less than 1/8th	747-111	15-8-9
2	WV-MAR-1259	Shayna M. Miller	American Petroleum Partners Operating, LLC Jamestown Resources, LLC	Not Less than 1/8th	747-101	15-8-9
2	WV-MAR-1629	Shayna M. Miller & Brandon Miller	American Petroleum Partners Operating, LLC	Not Less than 1/8th	1031-621	15-8-9
2	WV-MAR-1630	William R. Howell	American Petroleum Partners Operating, LLC	Not Less than 1/8th	Not Yet Recorded	15-8-9
2	WV-MAR-1261	William R. Howell	American Petroleum Partners Operating, LLC Jamestown Resources, LLC	Not Less than 1/8th	747-111	15-8-9
23	WV-MAR-1256	Robert L. & Kathy J. Young	American Petroleum Partners Operating, LLC Jamestown Resources, LLC	Not Less than 1/8th	685-415	15-7-8.7
24	WV-MAR-1432	Rebecca Ann Haley	American Petroleum Partners Operating, LLC Jamestown Resources, LLC	Not Less than 1/8th	740-157	15-7-8.5
24	WV-MAR-1431	Sandra Carol Koontz	American Petroleum Partners Operating, LLC Jamestown Resources, LLC	Not Less than 1/8th	740-152	15-7-8.5
24	WV-MAR-1281	Lawrence K. & Erica Bjork	American Petroleum Partners Operating, LLC Jamestown Resources, LLC	Not Less than 1/8th	749-306	15-7-8.5
24	WV-MAR-1280	Gregor J. & Carol Bjork	American Petroleum Partners Operating, LLC Jamestown Resources, LLC	Not Less than 1/8th	747-121	15-7-8.5
24	WV-MAR-1279	Kristine L. Truta	American Petroleum Partners Operating, LLC Jamestown Resources, LLC	Not Less than 1/8th	747-116	15-7-8.5
24	WV-MAR-1269	Joseph Leroy Kittle	American Petroleum Partners Operating, LLC Jamestown Resources, LLC	Not Less than 1/8th	741-569	15-7-8.5
24	WV-MAR-1268	Terry Wayne & Deborah S. Kittle	American Petroleum Partners Operating, LLC Jamestown Resources, LLC	Not Less than 1/8th	741-564	15-7-8.5
24	WV-MAR-1267	Harry B. & Elizabeth J., Trustees of the Snyder Family Trust dated December 17, 2014 Snyder	American Petroleum Partners Operating, LLC Jamestown Resources, LLC	Not Less than 1/8th	738-432	15-7-8.5
24	WV-MAR-1266	Brenda Kay Yoho	American Petroleum Partners Operating, LLC Jamestown Resources, LLC	Not Less than 1/8th	688-449	15-7-8.5
24	WV-MAR-1266	John Daniel Kittle	American Petroleum Partners Operating, LLC Jamestown Resources, LLC	Not Less than 1/8th	688-449	15-7-8.5
24	WV-MAR-1266	Kathy Jo Young	American Petroleum Partners Operating, LLC Jamestown Resources, LLC	Not Less than 1/8th	688-449	15-7-8.5
24	WV-MAR-1266	Stacy Ann Fox	American Petroleum Partners Operating, LLC Jamestown Resources, LLC	Not Less than 1/8th	688-449	15-7-8.5
25	WV-MAR-1265	Brian & Stacy Norman	American Petroleum Partners Operating, LLC Jamestown Resources, LLC	Not Less than 1/8th	688-429	15-7-8.6
29	WV-MAR-1252	Robert L. & Kathy J. Young	American Petroleum Partners Operating, LLC Jamestown Resources, LLC	Not Less than 1/8th	685-412	15-7-8
39	WV-MAR-1527	Wildes Mineral Interests, LLC	American Petroleum Partners Operating, LLC	Not Less than 1/8th	1020-43	14-5-79
39	WV-MAR-1466	McCrow Energy Partners II, LLC	American Petroleum Partners Operating, LLC	Not Less than 1/8th	1013-393	14-5-79
39	WV-MAR-1464	Appalachian Basin Minerals, LP	American Petroleum Partners Operating, LLC	Not Less than 1/8th	1013-372	14-5-79
39	WV-MAR-1463	PennMarc Resources II, LP	American Petroleum Partners Operating, LLC	Not Less than 1/8th	1014-123	14-5-79
41	WV-MAR-1320	Lloyd E. & Margaret A. Walker	American Petroleum Partners Operating, LLC Jamestown Resources, LLC	Not Less than 1/8th	661-639	15-7-32
95	WV-MAR-0124	Emil P., Jr. & Mary A. Sofsky; Campbell	American Petroleum Partners Operating, LLC	Not Less than 1/8th	969-458	15-7-1.1
96	WV-MAR-1371	Joanne K. Cappelletti	American Petroleum Partners Operating, LLC Pelican Energy, LLC	Not Less than 1/8th	807-349	15-7-1
99	WV-MAR-0080	ISKCON New Vrindaban, Inc.	American Petroleum Partners Operating, LLC	Not Less than 1/8th	827-480	15-7-1.2
101	WV-MAR-1348	Shirley Jean Moore	American Petroleum Partners Operating, LLC Pelican Energy, LLC	Not Less than 1/8th	660-516 748-278	14-5-77
101	WV-MAR-1347	Noble Marcellus LP	American Petroleum Partners Operating, LLC Pelican Energy, LLC	Not Less than 1/8th	659-140 748-123	14-5-77
101	WV-MAR-1305	Bounty Minerals III LLC	American Petroleum Partners Operating, LLC Pelican Energy, LLC	Not Less than 1/8th	695-31	14-5-77
103	WV-MAR-0022	Diana Lynn King	American Petroleum Partners Operating, LLC	Not Less than 1/8th	989-1	14-5-31.2
107	WV-MAR-0028	Kay F. & Beverly K. Hill	American Petroleum Partners Operating, LLC	Not Less than 1/8th	1019-154	14-5-30
110	WV-MAR-0027	Joshua Adam Hill	American Petroleum Partners Operating, LLC	Not Less than 1/8th	972-614	14-5-29.2
110	WV-MAR-0027	Matthew Bryon Hill	American Petroleum Partners Operating, LLC	Not Less than 1/8th	972-614	14-5-29.2
143	WV-MAR-0092	Daniel Edward Tatch, Trustee of the Daniel Edward Tatch Irrevocable Trust dated April 27, 2016	American Petroleum Partners Operating, LLC	Not Less than 1/8th	979-279	14-5-36
144	WV-MAR-0029	Kathleen T. Hill and Susan M. Ferris, Trustees of the K.T. Hill Family Trust, dated December 17, 2013	American Petroleum Partners Operating, LLC	Not Less than 1/8th	1025-453	14-5-28
144	WV-MAR-0028	Kay F. & Beverly K. Hill	American Petroleum Partners Operating, LLC	Not Less than 1/8th	1019-136 14-5-28	14-5-28
151	No Lease # Yet	West Virginia Department of Transportation, Division of Highways	American Petroleum Partners Operating, LLC	Not Less than 1/8th	Not Yet Recorded	KL-Road

MAY 06 2019

RECEIVED
Office of Oil and Gas
1019-136
14-5-28
WV Department of
Environmental Protection

4705102222

108 & 111	WV-MAR-0029	Kathleen T. Hill and Susan M. Ferris, Trustees of the K.T. Hill Family Trust, dated December 17, 2013	American Petroleum Partners Operating, LLC	Not Less than 1/8th	1025-453	14-5-29
108 & 111	WV-MAR-0028	Kay F. & Beverly K. Hill	American Petroleum Partners Operating, LLC	Not Less than 1/8th	1019-136	14-5-29

--	--	--	--	--	--	--

RECEIVED
Office of Oil and Gas

MAY 06 2019

WV Department of
Environmental Protection

51-02222

Kings Landing-7UH Wellbore Tracts

Map #	Lease #	Lessor	Current Lessee	Royalty	Recording Information	Parcel
1	WV-MAR-1256	Robert L. & Kathy J. Young	American Petroleum Partners Operating, LLC Jamestown Resources, LLC	Not Less than 1/8th	685-415	15-7-8.3
2	WV-MAR-1253	Noble Marcellus, LP	American Petroleum Partners Operating, LLC Jamestown Resources, LLC	Not Less than 1/8th	682-63	15-8-9
2	WV-MAR-1260	Vemuri Home & Garden LLC	American Petroleum Partners Operating, LLC Jamestown Resources, LLC	Not Less than 1/8th	747-106	15-8-9
2	WV-MAR-1257	Christen R. & Joseph L. Blake	American Petroleum Partners Operating, LLC Jamestown Resources, LLC	Not Less than 1/8th	698-381	15-8-9
2	WV-MAR-1262	Donald & Pamela P. Colvin	American Petroleum Partners Operating, LLC Jamestown Resources, LLC	Not Less than 1/8th	752-12	15-8-9
2	WV-MAR-1259	Donna Lemons	American Petroleum Partners Operating, LLC Jamestown Resources, LLC	Not Less than 1/8th	747-101	15-8-9
2	WV-MAR-1628	Elizabeth Howell Gorby & Kenneth A. T. Gorby	American Petroleum Partners Operating, LLC	Not Less than 1/8th	1032-434	15-8-9
2	WV-MAR-1261	Elizabeth Jean Howell	American Petroleum Partners Operating, LLC Jamestown Resources, LLC	Not Less than 1/8th	747-111	15-8-9
2	WV-MAR-1644	Lelia Howell f/k/a Lelia Howell Wright	American Petroleum Partners Operating, LLC	Not Less than 1/8th	1032-20	15-8-9
2	WV-MAR-1261	Lelia V. Howell	American Petroleum Partners Operating, LLC Jamestown Resources, LLC	Not Less than 1/8th	747-111	15-8-9
2	WV-MAR-1258	Linda M. Ater	American Petroleum Partners Operating, LLC Jamestown Resources, LLC	Not Less than 1/8th	747-96	15-8-9
2	WV-MAR-1255	Nicole L. & Charles F. Reynolds	American Petroleum Partners Operating, LLC Jamestown Resources, LLC	Not Less than 1/8th	697-81	15-8-9
2	WV-MAR-1641	Robert L. Lemons & Christina M. Lemons	American Petroleum Partners Operating, LLC	Not Less than 1/8th	1031-629	15-8-9
2	WV-MAR-1632	Ronald L. Howell, Jr.	American Petroleum Partners Operating, LLC	Not Less than 1/8th	1033-571	15-8-9
2	WV-MAR-1261	Ronald L. Howell, Jr.	American Petroleum Partners Operating, LLC Jamestown Resources, LLC	Not Less than 1/8th	747-111	15-8-9
2	WV-MAR-1259	Shayna M. Miller	American Petroleum Partners Operating, LLC Jamestown Resources, LLC	Not Less than 1/8th	747-101	15-8-9
2	WV-MAR-1629	Shayna M. Miller & Brandon Miller	American Petroleum Partners Operating, LLC	Not Less than 1/8th	1031-621	15-8-9
2	WV-MAR-1630	William R. Howell	American Petroleum Partners Operating, LLC	Not Less than 1/8th	1033-574	15-8-9
2	WV-MAR-1261	William R. Howell	American Petroleum Partners Operating, LLC Jamestown Resources, LLC	Not Less than 1/8th	747-111	15-8-9
23	WV-MAR-1256	Robert L. & Kathy J. Young	American Petroleum Partners Operating, LLC Jamestown Resources, LLC	Not Less than 1/8th	685-415	15-7-8.7

SI-02222

24	WV-MAR-1432	Rebecca Ann Haley	American Petroleum Partners Operating, LLC Jamestown Resources, LLC	Not Less than 1/8th	740-157	15-7-8.5
24	WV-MAR-1431	Sandra Carol Koonitz	American Petroleum Partners Operating, LLC Jamestown Resources, LLC	Not Less than 1/8th	740-152	15-7-8.5
24	WV-MAR-1281	Lawrence K. & Erica Bjork	American Petroleum Partners Operating, LLC Jamestown Resources, LLC	Not Less than 1/8th	749-306	15-7-8.5
24	WV-MAR-1280	Gregor J. & Carol Bjork	American Petroleum Partners Operating, LLC Jamestown Resources, LLC	Not Less than 1/8th	747-121	15-7-8.5
24	WV-MAR-1279	Kristine L. Truta	American Petroleum Partners Operating, LLC Jamestown Resources, LLC	Not Less than 1/8th	747-116	15-7-8.5
24	WV-MAR-1269	Joseph Leroy Kittle	American Petroleum Partners Operating, LLC Jamestown Resources, LLC	Not Less than 1/8th	741-569	15-7-8.5
24	WV-MAR-1268	Terry Wayne & Deborah S. Kittle	American Petroleum Partners Operating, LLC Jamestown Resources, LLC	Not Less than 1/8th	741-564	15-7-8.5
24	WV-MAR-1267	Harry B. & Elizabeth J., Trustees of the Snyder Family Trust dated December 17, 2014 Snyder	American Petroleum Partners Operating, LLC Jamestown Resources, LLC	Not Less than 1/8th	738-432	15-7-8.5
24	WV-MAR-1266	Brenda Kay Yoho	American Petroleum Partners Operating, LLC Jamestown Resources, LLC	Not Less than 1/8th	688-449	15-7-8.5
24	WV-MAR-1266	John Daniel Kittle	American Petroleum Partners Operating, LLC Jamestown Resources, LLC	Not Less than 1/8th	688-449	15-7-8.5
24	WV-MAR-1266	Kathy Jo Young	American Petroleum Partners Operating, LLC Jamestown Resources, LLC	Not Less than 1/8th	688-449	15-7-8.5
24	WV-MAR-1266	Stacy Ann Fox	American Petroleum Partners Operating, LLC Jamestown Resources, LLC	Not Less than 1/8th	688-449	15-7-8.5
25	WV-MAR-1265	Brian & Stacy Norman	American Petroleum Partners Operating, LLC Jamestown Resources, LLC	Not Less than 1/8th	688-429	15-7-8.6
29	WV-MAR-1252	Robert L. & Kathy J. Young	American Petroleum Partners Operating, LLC Jamestown Resources, LLC	Not Less than 1/8th	685-412	15-7-8
39	WV-MAR-1527	Wildes Mineral Interests, LLC	American Petroleum Partners Operating, LLC	Not Less than 1/8th	1020-43	14-5-79
39	WV-MAR-1466	McCrow Energy Partners II, LLC	American Petroleum Partners Operating, LLC	Not Less than 1/8th	1013-393	14-5-79
39	WV-MAR-1464	Appalachian Basin Minerals, LP	American Petroleum Partners Operating, LLC	Not Less than 1/8th	1013-372	14-5-79
39	WV-MAR-1463	PennMarc Resources II, LP	American Petroleum Partners Operating, LLC	Not Less than 1/8th	1014-123	14-5-79
41	WV-MAR-1320	Lloyd E. & Margaret A. Walker	American Petroleum Partners Operating, LLC Jamestown Resources, LLC	Not Less than 1/8th	661-639	15-7-32
95	WV-MAR-0124	Emil P., Jr. & Mary A. Sofsky; Campbell	American Petroleum Partners Operating, LLC	Not Less than 1/8th	969-458	15-7-1.1
96	WV-MAR-1371	Joanne K. Cappelletti	American Petroleum Partners Operating, LLC Pelican Energy, LLC	Not Less than 1/8th	807-349	15-7-1
99	WV-MAR-0080	ISKCON New Vrindaban, Inc.	American Petroleum Partners Operating, LLC	Not Less than 1/8th	827-480	15-7-1.2

51-02222

101	WV-MAR-1348	Shirley Jean Moore	American Petroleum Partners Operating, LLC	Not Less than 1/8th	660-516 748-278	14-5-77
101	WV-MAR-1347	Noble Marcellus LP	Pelican Energy, LLC American Petroleum Partners Operating, LLC	Not Less than 1/8th	659-140 748-123	14-5-77
101	WV-MAR-1305	Bounty Minerals III LLC	American Petroleum Partners Operating, LLC Pelican Energy, LLC	Not Less than 1/8th	695-31	14-5-77
103	WV-MAR-0022	Diana Lynn King	American Petroleum Partners Operating, LLC	Not Less than 1/8th	989-1	14-5-31.2
107	WV-MAR-0028	Kay F. & Beverly K. Hill	American Petroleum Partners Operating, LLC	Not Less than 1/8th	1019-154	14-5-30
110	WV-MAR-0027	Joshua Adam Hill	American Petroleum Partners Operating, LLC	Not Less than 1/8th	972-614	14-5-29.2
110	WV-MAR-0027	Matthew Bryon Hill	American Petroleum Partners Operating, LLC	Not Less than 1/8th	972-614	14-5-29.2
143	WV-MAR-0092	Daniel Edward Tatich, Trustee of the Daniel Edward Tatich Irrevocable Trust dated April 27, 2016	American Petroleum Partners Operating, LLC	Not Less than 1/8th	979-279	14-5-36
144	WV-MAR-0029	Kathleen T. Hill and Susan M. Ferris, Trustees of the K.T. Hill Family Trust, dated December 17, 2013	American Petroleum Partners Operating, LLC	Not Less than 1/8th	1025-453	14-5-28
144	WV-MAR-0028	Kay F. & Beverly K. Hill	American Petroleum Partners Operating, LLC	Not Less than 1/8th	1019-136	14-5-28
151	WV-MAR-1673	West Virginia Department of Transportation, Division of Highways	American Petroleum Partners Operating, LLC	Not Less than 1/8th	1035-403	KL-Road
108 & 111	WV-MAR-0029	Kathleen T. Hill and Susan M. Ferris, Trustees of the K.T. Hill Family Trust, dated December 17, 2013	American Petroleum Partners Operating, LLC	Not Less than 1/8th	1025-453	14-5-29
108 & 111	WV-MAR-0028	Kay F. & Beverly K. Hill	American Petroleum Partners Operating, LLC	Not Less than 1/8th	1019-136	14-5-29

--	--	--	--	--	--	--

Well is located on topo map 11,715 feet south of Latitude: 39° 57' 30"
 BHL is located on topo map 4,819 feet south of Latitude: 39° 57' 30"

Sheffler & Company, Inc.
 ENGINEERING + SURVEYING
 1712 Mount Nebo Road
 Sewickley, PA 15143
 Phone: 412-219-4508
 Email: Info@shefflerCo.com

Well is located on topo map 1,446 feet west of Longitude: 80° 37' 30"
 BHL is located on topo map 6,701 feet west of Longitude: 80° 37' 30"

- NOTES**
1. There are no water wells or developed springs within 250' of proposed well.
 2. There are no existing buildings within 625' of proposed well.
 3. Proposed well is greater than 100' from perennial stream, wetland, pond, reservoir or lake.
 4. There are no native streams within 300' of proposed well.
 5. Proposed well is greater than 1000' from surface/groundwater intake or public water supply.
 6. It is not the purpose or intention of this plat to represent surveyed locations of the surface or mineral parcels depicted hereon. The location of the boundary lines, as shown, are based on record deed descriptions, field evidence found and/or tax map position, unless otherwise noted.
 7. Mineral and Surface parcel lines are the same except #64A, #64B, #65A, & #65B.

LINE NO.	BEARING	DISTANCE
R1	S48°43'03"E	468.11'
R2	N76°08'17"E	522.71'
R3	S63°16'01"W	433.35'
R4	S55°00'29"E	1119.89'
R5	N40°00'16"W	591.05'

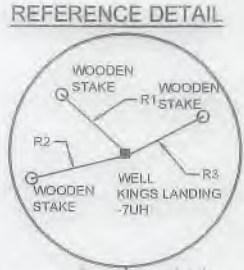
- LEGEND**
- TOPO MAP POINT
 - PROPOSED WELL
 - PRIVATE WATER WELL
 - SPRING LOCATION
 - LEASED NUMBER BASED ON ATTACHED WM6A1
 - ALL ARE POINTS UNLESS OTHERWISE NOTED
 - MINERAL TRACT BOUNDARY
 - UNIT BOUNDARY
 - SURFACE PARCEL LINES
 - MINERAL PARCEL LINES
 - PROPOSED HORIZONTAL WELL
 - WELL REFERENCE
 - STREAM/POND/WATERWAY
 - ROAD
 - FORCE POOLED PARCEL

TOTAL UNIT
528.22 ACRES

SURFACE HOLE LOCATION (SHL)
 UTM 17 - NAD83
 N: 4419628.818(m)
 E: 531603.868(m)
 NAD27, WW NORTH
 N: 521417.661(ft)
 E: 1682989.974(ft)
 LAT/LON - NAD83
 LAT: N39.9261744
 LON: W80.6301550

APPROXIMATE LANDING POINT
 UTM 17 - NAD83
 N: 4419595.986(m)
 E: 531483.470(m)
 NAD27, WW NORTH
 N: 521316.537(ft)
 E: 1682593.099(ft)
 LAT/LON - NAD83
 LAT: N39.9258831
 LON: W80.6315655

BOTTOM HOLE LOCATION (BHL)
 UTM 17 - NAD83
 N: 4421723.574(m)
 E: 529993.718(m)
 NAD27, WW NORTH
 N: 528380.096(ft)
 E: 1677821.252(ft)
 LAT/LON - NAD83
 LAT: N39.9451062
 LON: W80.6489011



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

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

PROPOSED LATERAL LENGTH = 8,525' ±



FILE # KINGS LANDING - 7UH
 DRAWING # KINGS LANDING - 7UH - R4.DWG
 SCALE 1"=2000'
 MINIMUM DEGREE OF ACCURACY: 1/2500
 PROVEN SOURCE OF ELEVATION: USGS MONUMENT JX044; 1372.23'

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

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

WATERSHED: WHEELING CREEK - UPPER OHIO RIVER ELEVATION: 1,314.95'
 COUNTY/DISTRICT: MARSHALL / WEBSTER QUADRANGLE: MOUNDVILLE, WV
 SURFACE OWNER(1): YOUNG, ROBERT L. ET. UX. ACREAGE(1) 39.17 SURFACE OWNER(2): _____ ACREAGE(2) _____
 OIL & GAS ROYALTY OWNERS(1): YOUNG, ROBERT L. ET. UX. ACREAGE(1) 39.17
 OIL & GAS ROYALTY OWNERS(2): _____ ACREAGE(2) _____

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

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

DATE: April 8, 2019 - Rev May 28, 2019
 OPERATOR'S WELL #: KINGS LANDING - 7UH
 API WELL # 47 051 02222 ^{Deep}
 STATE: PA COUNTY: WEBSTER PERMIT: 46A

ESTIMATED DEPTH: TVD: 11,698' ± TMD: 20,418' ±
 DESIGNATED AGENT: STEVEN GREEN
 Address: 300 SUMMERS ST, SUITE 1000
 City CHARLESTON State WV Zip Code 25301





DETAIL 1
SCALE = 1" = 500'

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



DATE: April 8, 2019 - Rev May 28, 2019

OPERATOR'S WELL #: KINGS LANDING - 7UH

API WELL # 47 051 02222 H6A
STATE COUNTY PERMIT

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

WATERSHED: WHEELING CREEK - UPPER OHIO RIVER ELEVATION: 1,314.95'

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

SURFACE OWNER(1): YOUNG, ROBERT L. ET. UX. ACREAGE(1) 39.17 SURFACE OWNER(2) _____ ACREAGE(2) _____

OIL & GAS ROYALTY OWNERS(1): YOUNG, ROBERT L. ET. UX. ACREAGE(1) 39.17

OIL & GAS ROYALTY OWNERS(2): _____ ACREAGE(2) _____

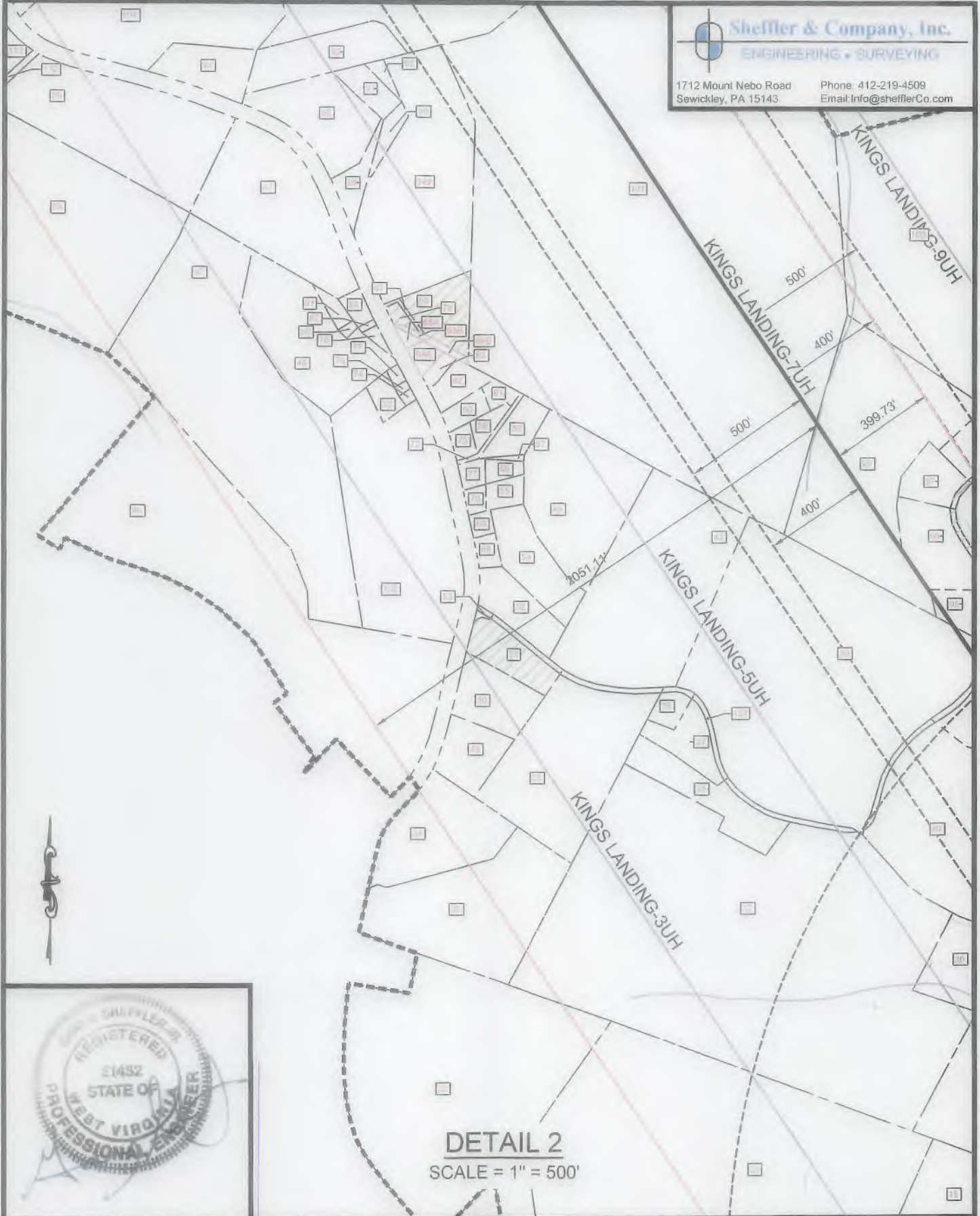
DRILL CONVERT DRILL DEEPER REDRILL FRACTURE OR STIMULATE
PLUG OFF OLD FORMATION PERFORATE NEW FORMATION PLUG AND ABANDON
CLEAN OUT & REPLUG OTHER CHANGE (SPECIFY)

TARGET FORMATION: POINT PLEASANT ESTIMATED DEPTH: TVD: 11,698' ± TMD: 20,418' ±

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

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

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



DETAIL 2
SCALE = 1" = 500'



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



DATE: April 8, 2019 - Rev May 28, 2019

OPERATOR'S WELL #: KINGS LANDING - 7UH

API WELL # 47 051 02222 *Deep*
STATE COUNTY PERMIT

H6A

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

WATERSHED: WHEELING CREEK - UPPER OHIO RIVER ELEVATION: 1,314.95'

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

SURFACE OWNER(1): YOUNG, ROBERT L. ET. UX. ACREAGE(1) 39.17 SURFACE OWNER(2) _____ ACREAGE(2) _____

OIL & GAS ROYALTY OWNERS(1) YOUNG, ROBERT L. ET. UX. ACREAGE(1) 39.17

OIL & GAS ROYALTY OWNERS(2) _____ ACREAGE(2) _____

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

TARGET FORMATION: POINT PLEASANT ESTIMATED DEPTH: TVD: 11,698' ± TMD: 20,418' ±

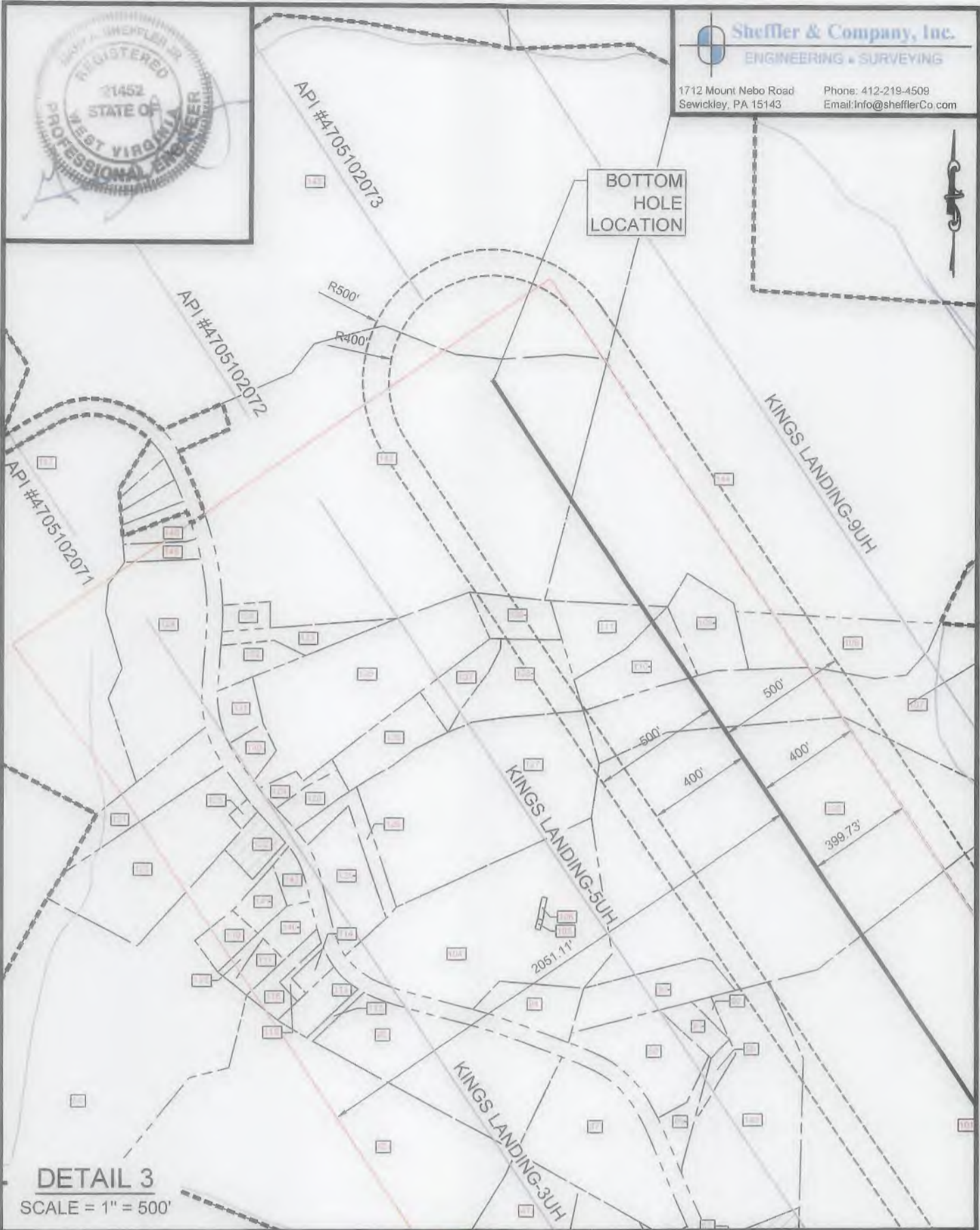
WELL OPERATOR: AMERICAN PETROLEUM PARTNERS OPERATING, LLC DESIGNATED AGENT: STEVEN GREEN

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

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



BOTTOM
HOLE
LOCATION



DETAIL 3
SCALE = 1" = 500'

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



DATE: April 8, 2019 - Rev May 28, 2019

OPERATOR'S WELL #: KINGS LANDING - 7UH

API WELL # 47 051 **02222 Deep H&A**
STATE COUNTY PERMIT

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

WATERSHED: WHEELING CREEK - UPPER OHIO RIVER ELEVATION: 1,314.95'

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

SURFACE OWNER(1): YOUNG, ROBERT L. ET. UX. ACREAGE(1) 39.17 SURFACE OWNER(2) ACREAGE(2)

OIL & GAS ROYALTY OWNERS(1): YOUNG, ROBERT L. ET. UX. ACREAGE(1) 39.17

OIL & GAS ROYALTY OWNERS(2) ACREAGE(2)

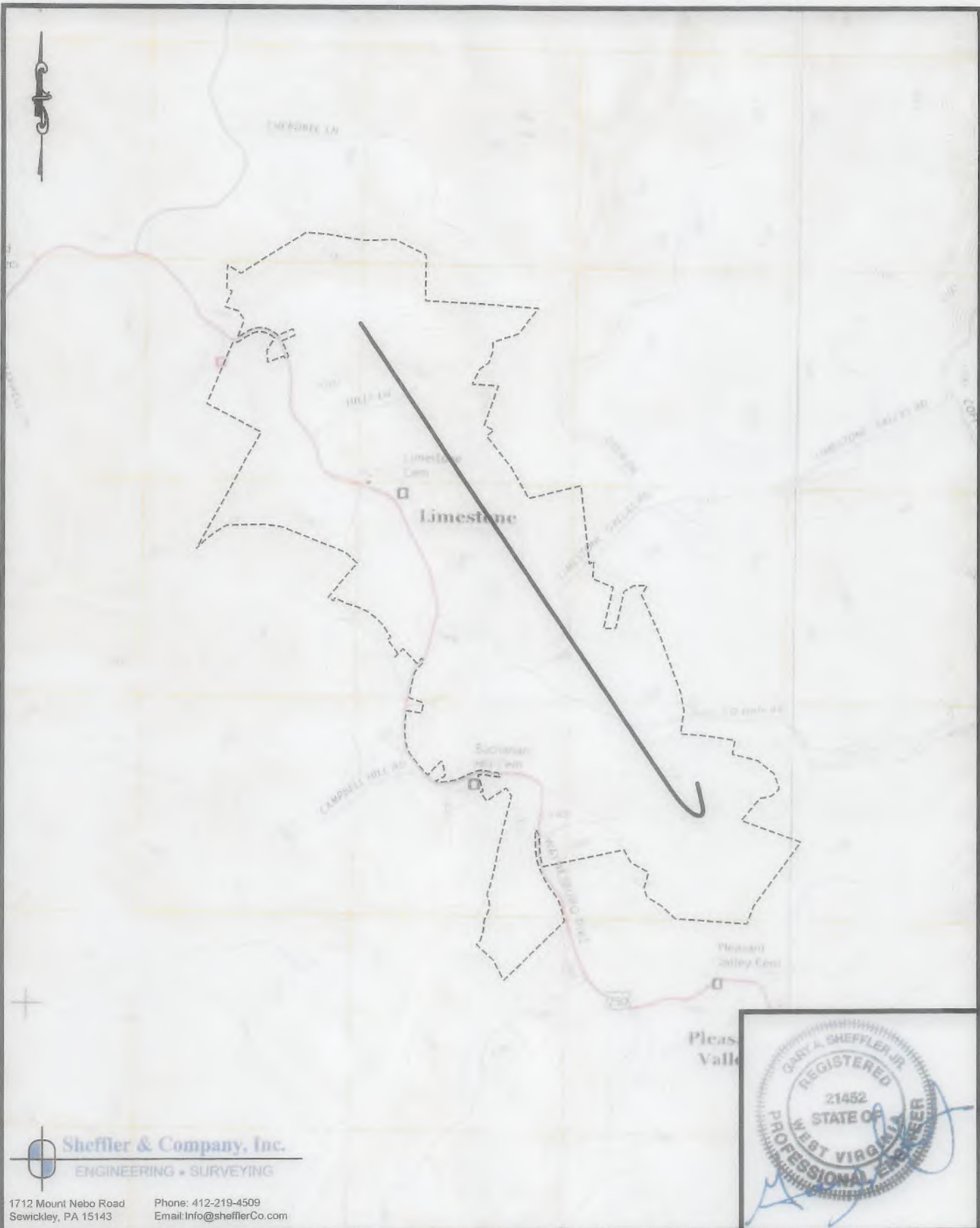
DRILL CONVERT DRILL DEEPER REDRILL FRACTURE OR STIMULATE
PLUG OFF OLD FORMATION PERFORATE NEW FORMATION PLUG AND ABANDON
CLEAN OUT & REPLUG OTHER CHANGE (SPECIFY)

TARGET FORMATION: POINT PLEASANT ESTIMATED DEPTH: TVD: 11,698' ± TMD: 20,418' ±

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

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

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



Sheffler & Company, Inc.
ENGINEERING • SURVEYING

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



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



DATE: April 8, 2019 - Rev May 28, 2019

OPERATOR'S WELL #: KINGS LANDING - 7UH

API WELL # 47 051 02222 *Deep HWA*
STATE COUNTY PERMIT

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

WATERSHED: WHEELING CREEK - UPPER OHIO RIVER ELEVATION: 1,314.95'

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

SURFACE OWNER(1): YOUNG, ROBERT L. ET. UX. ACREAGE(1): 39.17 SURFACE OWNER(2): _____ ACREAGE(2): _____

OIL & GAS ROYALTY OWNERS(1): YOUNG, ROBERT L. ET. UX. ACREAGE(1) 39.17

OIL & GAS ROYALTY OWNERS(2): _____ ACREAGE(2): _____

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

TARGET FORMATION: POINT PLEASANT ESTIMATED DEPTH: TVD: 11,698' ± TMD: 20,418' ±

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

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

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

- | | | | |
|--|---|--|---|
| <p><input type="checkbox"/> TAX MAP NO.
15-0007-0008-0003-0000
ASSESSED ACREAGE: 39.17 ACRES</p> <p>SURFACE OWNERS:
YOUNG, ROBERT L., ET UX</p> <p>MINERAL OWNERS:
ROBERT L. & KATHY J. YOUNG</p> | <p><input type="checkbox"/> P/O TAX MAP NO.
15-0008-0001-0002-0000
ASSESSED ACREAGE: 4.378 ACRES</p> <p>SURFACE OWNERS:
FRANCIS, BEVERLY JEAN</p> <p>MINERAL OWNERS:
BEVERLY JEAN FRANCIS</p> | <p><input type="checkbox"/> TAX MAP NO.
14-0006-0017-0001-0000
ASSESSED ACREAGE: 0.977 ACRES</p> <p>SURFACE OWNERS:
YOHO, PAUL D., ET UX</p> <p>MINERAL OWNERS:
PAUL & TINA YOHO</p> | <p><input type="checkbox"/> TAX MAP NO.
15-0007-0008-0008-0000
ASSESSED ACREAGE: 0.696 ACRES</p> <p>SURFACE OWNERS:
NORMAN, BRIAN, ET UX</p> <p>MINERAL OWNERS:
BRIAN & STACY NORMAN</p> |
| <p><input type="checkbox"/> TAX MAP NO.
15-0008-0009-0000-0000
ASSESSED ACREAGE: 80.212 ACRES</p> <p>SURFACE OWNERS:
MINER, FREDDIE B., ET UX</p> <p>MINERAL OWNERS:
LELIA HOWELL FKA LELIA HOWELL WRIGHT
ROBERT L. LEMONS & CHRISTINA M. LEMONS
RONALD L. HOWELL, JR
WILLIAM R. HOWELL
SHAYNA M. MILLER & BRANDON MILLER
ELIZABETH HOWELL GORBY & KENNETH A. T. GORBY
DONALD & PAMELA P. COLVIN
ELIZABETH JEAN HOWELL
RONALD L. HOWELL, JR
WILLIAM R. HOWELL
LELIA V. HOWELL
VEMURI HOME & GARDEN LLC
DONNA LEMONS
SHAYNA M. MILLER
LINDA M. ATER
CHRISTEN R. & JOSEPH L. BLAKE
NICOLE L. & CHARLES F. REYNOLDS
NOBLE MARCELLUS, LP</p> | <p><input type="checkbox"/> TAX MAP NO.
15-0008-0003-0000-0000
ASSESSED ACREAGE: 1.246 ACRES</p> <p>SURFACE OWNERS:
SNYDER, TRUDY LEE</p> <p>MINERAL OWNERS:
TRUDY L. SNYDER</p> <p><input type="checkbox"/> TAX MAP NO.
15-0008-0001-0004-0000
ASSESSED ACREAGE: 0.671 ACRES</p> <p>SURFACE OWNERS:
FRANCIS, DAVID E., ET UX</p> <p>MINERAL OWNERS:
BEVERLY JEAN LILLEY FRANCES</p> <p><input type="checkbox"/> P/O TAX MAP NO.
15-0008-0001-0002-0000
ASSESSED ACREAGE: 4.378 ACRES</p> <p>SURFACE OWNERS:
FRANCIS, BEVERLY JEAN</p> <p>MINERAL OWNERS:
BEVERLY JEAN FRANCIS</p> <p><input type="checkbox"/> TAX MAP NO.
15-0007-0013-0005-0000
ASSESSED ACREAGE: 12.26 ACRES</p> <p>SURFACE OWNERS:
BROWN, JOSHUA C.</p> <p>MINERAL OWNERS:
ISKCON NEW VRINDABAN, INC.</p> <p><input type="checkbox"/> TAX MAP NO.
15-0008-0001-0000-0000
ASSESSED ACREAGE: 11.840 ACRES</p> <p>SURFACE OWNERS:
FRANCIS, BEVERLY JEAN</p> <p>MINERAL OWNERS:
BEVERLY JEAN FRANCIS</p> <p><input type="checkbox"/> TAX MAP NO.
15-0008-0009-0001-0000
ASSESSED ACREAGE: 0.388 ACRES</p> <p>SURFACE OWNERS:
MINER, FREDDIE B., ET UX</p> <p>MINERAL OWNERS:
FREDDIE B. & MARY ANN MINER</p> <p><input type="checkbox"/> TAX MAP NO.
15-0008-0001-0005-0000
ASSESSED ACREAGE: 1.295 ACRES</p> <p>SURFACE OWNERS:
FRANCIS, MATTHEW D., ET UX</p> <p>MINERAL OWNERS:
MATTHEW D. & AMANDA D. FRANCIS</p> <p><input type="checkbox"/> TAX MAP NO.
15-0008-0001-0003-0000
ASSESSED ACREAGE: 0.854 ACRES</p> <p>SURFACE OWNERS:
ERNEST, CARL WILLIAM, JR.</p> <p>MINERAL OWNERS:
BEVERLY J. FRANCIS</p> <p><input type="checkbox"/> TAX MAP NO.
15-0008-0001-0001-0000
ASSESSED ACREAGE: 0.446 ACRES</p> <p>SURFACE OWNERS:
FRANCIS, BEVERLY JEAN</p> <p>MINERAL OWNERS:
BEVERLY JEAN FRANCIS</p> | <p><input type="checkbox"/> TAX MAP NO.
14-0006-0018-0004-0000
ASSESSED ACREAGE: 0.663 ACRES</p> <p>SURFACE OWNERS:
BIERCE, JOHN A., ET UX</p> <p>MINERAL OWNERS:
JOHN A. BIERCE, TRUSTEE OF THE J. BIERCE FAMILY TRUST DATED OCTOBER 30, 2018</p> <p><input type="checkbox"/> TAX MAP NO.
14-0006-0014-0000-0000
ASSESSED ACREAGE: 20.517 ACRES</p> <p>SURFACE OWNERS:
COFFIELD, BETTY GENEVA</p> <p>MINERAL OWNERS:
WILBERT & BETTY G. COFFIELD</p> <p><input type="checkbox"/> TAX MAP NO.
15-0007-0008-0002-0000
ASSESSED ACREAGE: 23.200 ACRES</p> <p>SURFACE OWNERS:
KITTLE, JOSEPH LEROY</p> <p>MINERAL OWNERS:
SANDRA C. (REMAINDERMAN) KOONTZ
TERRY WAYNE (REMAINDERMAN) & DEBORAH KITTLE
REBECCA ANN (REMAINDERMAN) HALEY
ELIZABETH JANE (REMAINDERMAN) SNYDER
JOSEPH LEROY KITTLE
HILDA MAE, (LIFE TENANT) APPEARING HEREIN BY AND THROUGH ELIZABETH JANE SNYDER, HER AGENT AND ATTORNEY IN FACT, BY POWER OF ATTORNEY DATED NOVEMBER 18, 2003 KITTLE</p> <p><input type="checkbox"/> TAX MAP NO.
15-0007-0008-0007-0000
ASSESSED ACREAGE: 1.030 ACRES</p> <p>SURFACE OWNERS:
YOUNG, BRIA LYNN</p> <p>MINERAL OWNERS:
ROBERT L. & KATHY J. YOUNG</p> <p><input type="checkbox"/> TAX MAP NO.
15-0007-0008-0005-0000
ASSESSED ACREAGE: 1.750 ACRES</p> <p>SURFACE OWNERS:
YOUNG, ROBERT L., ET UX</p> <p>MINERAL OWNERS:
REBECCA ANN HALEY
SANDRA CAROL KOONTZ
LAWRENCE K. & ERICA BJORK
GREGOR J. & CAROL BJORK
KRISTINE L. TRUTA
JOSEPH LEROY KITTLE
TERRY WAYNE & DEBORAH S. KITTLE
HARRY B. & ELIZABETH J., TRUSTEES OF THE SNYDER FAMILY TRUST DATED DECEMBER 17, 2014 SNYDER
BRENDA KAY YOHO
JOHN DANIEL KITTLE
KATHY JO YOUNG
STACY ANN FOX</p> | <p><input type="checkbox"/> TAX MAP NO.
15-0007-0008-0004-0000
ASSESSED ACREAGE: 1.400 ACRES</p> <p>SURFACE OWNERS:
YOHO, CLYDE, ET UX</p> <p>MINERAL OWNERS:
BRENDA KAY YOHO</p> <p><input type="checkbox"/> TAX MAP NO.
15-0007-0008-0008-0000
ASSESSED ACREAGE: 1.250 ACRES</p> <p>SURFACE OWNERS:
NORMAN, BRIAN K., ET UX</p> <p>MINERAL OWNERS:
ROBERT L. & KATHY J. YOUNG</p> <p><input type="checkbox"/> TAX MAP NO.
15-0007-0008-0001-0000
ASSESSED ACREAGE: 1.250 ACRES</p> <p>SURFACE OWNERS:
YOUNG, ROBERT L., ET UX</p> <p>MINERAL OWNERS:
SANDRA C. KOONTZ
JOSEPH LEROY KITTLE
REBECCA ANN & RUSSELL L., JR. HALEY
TERRY WAYNE KITTLE
LAWRENCE K. & ERICA BJORK
GREGOR J. & CAROL BJORK
KRISTINE L. TRUTA
STACY ANN FOX
BRENDA KAY YOHO
KATHY JO YOUNG
JOHN DANIEL KITTLE
HARRY B. & ELIZABETH J., TRUSTEES OF THE SNYDER FAMILY TRUST DATED DECEMBER 17, 2014 SNYDER</p> <p><input type="checkbox"/> TAX MAP NO.
15-0007-0008-0000-0000
ASSESSED ACREAGE: 28.732 ACRES</p> <p>SURFACE OWNERS:
YOUNG, ROBERT L., ET UX</p> <p>MINERAL OWNERS:
ROBERT L. & KATHY J. YOUNG</p> <p><input type="checkbox"/> TAX MAP NO.
14-0006-0042-0000-0000
ASSESSED ACREAGE: 2.004 ACRES</p> <p>SURFACE OWNERS:
WALKER, MICHAEL A.</p> <p>MINERAL OWNERS:
MICHAEL A. WALKER</p> <p><input type="checkbox"/> TAX MAP NO.
15-0007-0009-0000-0000
ASSESSED ACREAGE: 1.800 ACRES</p> <p>SURFACE OWNERS:
KITTLE, JOSEPH LEROY</p> <p>MINERAL OWNERS:
SANDRA C. KOONTZ
TERRY W. & DEBORAH KITTLE
REBECCA ANN HALEY
ELIZABETH JANE SNYDER
JOSEPH LEROY KITTLE
HILDA MAE KITTLE</p> <p><input type="checkbox"/> TAX MAP NO.
14-0006-0013-0003-0000
ASSESSED ACREAGE: 32.037 ACRES</p> <p>SURFACE OWNERS:
WALKER, MARK, ET UX</p> <p>MINERAL OWNERS:
MARK & ELIZABETH WALKER</p> |

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



DATE: April 8, 2019 - Rev May 28, 2019

OPERATOR'S WELL #: KINGS LANDING - 7UH

API WELL # 47 051 0222 ^{Deep} _{H2O A}

STATE COUNTY PERMIT

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

WATERSHED: WHEELING CREEK - UPPER OHIO RIVER ELEVATION: 1,314.95'

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

SURFACE OWNER(1): YOUNG, ROBERT L. ET. UX. ACREAGE(1): 39.17 SURFACE OWNER(2): ACREAGE(2):

OIL & GAS ROYALTY OWNERS(1): YOUNG, ROBERT L. ET. UX. ACREAGE(1): 39.17

OIL & GAS ROYALTY OWNERS(2): ACREAGE(2):

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

TARGET FORMATION: POINT PLEASANT ESTIMATED DEPTH: TVD: 11,698' ± TMD: 20,418' ±

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

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

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

TAX MAP NO. 14-0006-0008-0000-0000
ASSESSED ACREAGE: 5.875 ACRES
SURFACE OWNERS: GATTS, RICHARD L., ET AL
MINERAL OWNERS: RICHARD L. & RICHARD J. GATTS

TAX MAP NO. 14-0006-0009-0001-0000
ASSESSED ACREAGE: 3.898 ACRES
SURFACE OWNERS: SCHRACK, JAMES C., ET UX.
MINERAL OWNERS: JAMES C. & HEATHER K. SCHRACK

TAX MAP NO. 14-0006-0012-0000-0000
ASSESSED ACREAGE: 6.249 ACRES
SURFACE OWNERS: LILLEY, IVAN ORVAL, ET UX.
MINERAL OWNERS: IVAN ORVAL & NANCY VERLA JEAN LILLEY

TAX MAP NO. 14-0006-0013-0001-0000
ASSESSED ACREAGE: 0.368 ACRES
SURFACE OWNERS: YOUNG, ALLEN W., ET UX.
MINERAL OWNERS: CRAIG ALLEN YOUNG, CHAD ALLEN YOUNG, CARRIE MARIE YOUNG, BRYAN CHRISTOPHER YOUNG, MARGARET ANN & LLOYD E. WALKER

TAX MAP NO. 14-0006-0013-0002-0000
ASSESSED ACREAGE: 1.152 ACRES
SURFACE OWNERS: YOUNG, RITA
MINERAL OWNERS: RITA M. YOUNG

TAX MAP NO. 14-0006-0013-0000-0000
ASSESSED ACREAGE: 2.002 ACRES
SURFACE OWNERS: BLAKE, GERALD H., ET UX.
MINERAL OWNERS: CHRISTOPHER G., LILA D. WEST, MORROW

TAX MAP NO. 14-0005-0078-0000-0000
ASSESSED ACREAGE: 17.660 ACRES
SURFACE OWNERS: ASTON, WILLIAM
MINERAL OWNERS: WILDES MINERAL INTERESTS, LLC, MCCROW ENERGY PARTNERS II, LLP, APPALACHIAN BASIN MINERALS, LP, PENNMARC RESOURCES II, LP

TAX MAP NO. 15-0007-0031-0000-0000
ASSESSED ACREAGE: 8.440 ACRES
SURFACE OWNERS: WALKER, LLOYD E., ET UX.
MINERAL OWNERS: LLOYD & MARGARET WALKER

TAX MAP NO. 15-0007-0032-0000-0000
ASSESSED ACREAGE: 6.620 ACRES
SURFACE OWNERS: WALKER, LLOYD E., ET UX.
MINERAL OWNERS: LLOYD E. & MARGARET A. WALKER

TAX MAP NO. 15-0007-0008-0007-0000
ASSESSED ACREAGE: 4.718 ACRES
SURFACE OWNERS: STORCH, ROBERT A.
MINERAL OWNERS: ROBERT A. STORCH

TAX MAP NO. 13-0007-0006-0004-0000
ASSESSED ACREAGE: 13.864 ACRES
SURFACE OWNERS: SOFSKY, EMIL P., JR.
MINERAL OWNERS: EGG-VRINDABAN, INC. (EMIL P. SOFSKY, JR., SINGLE AND MARY A. CAMPBELL, SINGLE)

TAX MAP NO. 14-0005-0078-0000-0000
ASSESSED ACREAGE: 8.800 ACRES
SURFACE OWNERS: ASTON, THOMAS C.
MINERAL OWNERS: PENNMARC RESOURCES II, LP, APPALACHIAN BASIN MINERALS, LP, WILDES MINERAL INTERESTS, LLC, MCCROW ENERGY PARTNERS II, LLC

P/O TAX MAP NO. 14-0005-0075-0000-0000
ASSESSED ACREAGE: 6.350 ACRES
SURFACE OWNERS: RICHMOND, SALLY ANN, ET VIR
MINERAL OWNERS: SALLY ANN & CHARLES R. RICHMOND

TAX MAP NO. 14-0008-0005-0018-0000
ASSESSED ACREAGE: 17.182 ACRES
SURFACE OWNERS: HARTLEY, DONOVAN, ET UX.
MINERAL OWNERS: DELORES JEAN SHELTON

TAX MAP NO. 14-0005-0054-0000-0000
ASSESSED ACREAGE: 10.740 ACRES
SURFACE OWNERS: SAMPSON, BARBARA, ET AL
MINERAL OWNERS: DELORES JEAN SHELTON

TAX MAP NO. 14-0005-0060-0000-0000
ASSESSED ACREAGE: 4.139 ACRES
SURFACE OWNERS: MARSHAL COUNTY PUBLIC SERVICE DISTRICT NO. 3
MINERAL OWNERS: MARSHALL COUNTY PUBLIC SERVICE DISTRICT NO. 3

TAX MAP NO. 14-0006-0010-0000-0000
ASSESSED ACREAGE: 1.440 ACRES
SURFACE OWNERS: RICKMAN, DONALD V., JR., ET UX.
MINERAL OWNERS: DONALD V., JR. & JENNIFER D. RICKMAN

TAX MAP NO. 14-0006-0011-0001-0000
ASSESSED ACREAGE: 1.702 ACRES
SURFACE OWNERS: BECA, MICHAEL, ET UX.
MINERAL OWNERS: THOMAS C. ASTON

TAX MAP NO. 14-0006-0011-0002-0000
ASSESSED ACREAGE: 1.282 ACRES
SURFACE OWNERS: CLAYTON, JILL
MINERAL OWNERS: ISKCON - NEW VRINDABAN, INC.

TAX MAP NO. 14-0005-0074-0000-0000
ASSESSED ACREAGE: 1.620 ACRES
SURFACE OWNERS: ASTON, THOMAS C.
MINERAL OWNERS: PENNMARC RESOURCES II, LP, MCCROW ENERGY PARTNERS II, LLC, APPALACHIAN BASIN MINERALS, LP, WILDES MINERAL INTERESTS, LLC

TAX MAP NO. 14-0006-0011-0000-0000
ASSESSED ACREAGE: 0.144 ACRES
SURFACE OWNERS: ISKCON - NEW MATHURA VRINDABAN INC.
MINERAL OWNERS: ISKCON NEW VRINDABAN, INC.

TAX MAP NO. 14-0005-0088-0000-0000
ASSESSED ACREAGE: 1.721 ACRES
SURFACE OWNERS: GUMP, DAVID A., ET UX.
MINERAL OWNERS: DAVID A. & BETTY JEAN GUMP

TAX MAP NO. 14-0005-0087-0001-0000
ASSESSED ACREAGE: 0.359 ACRES
SURFACE OWNERS: GUMP, DAVID A., ET UX.
MINERAL OWNERS: DAVID A. & BETTY JEAN GUMP

TAX MAP NO. 14-0005-0088-0001-0000
ASSESSED ACREAGE: 0.240 ACRES
SURFACE OWNERS: GUMP, DAVID A., ET UX.
MINERAL OWNERS: DAVID A. & BETTY JEAN GUMP

TAX MAP NO. 14-0005-0085-0000-0000
ASSESSED ACREAGE: 0.050 ACRES
SURFACE OWNERS: GUMP, DAVID A., ET UX.
MINERAL OWNERS: DAVID A. & BETTY JEAN GUMP

TAX MAP NO. 14-0005-0075-0001-0000
ASSESSED ACREAGE: 0.711 ACRES
SURFACE OWNERS: GUMP, DAVID A., ET UX.
MINERAL OWNERS: SALLY ANN & CHARLES R. RICHMOND

TAX MAP NO. 14-0005-0084-0000-0000
ASSESSED ACREAGE: 0.235 ACRES
SURFACE OWNERS: GUMP, DAVID A., ET UX.
MINERAL OWNERS: DAVID A. & BETTY JEAN GUMP

TAX MAP NO. 14-0005-0081-0000-0000
ASSESSED ACREAGE: 0.414 ACRES
SURFACE OWNERS: SNODGRASS, GARY E., ET UX.
MINERAL OWNERS: GARY E. & LINDA K. SNODGRASS

TAX MAP NO. 14-0005-0082-0000-0000
ASSESSED ACREAGE: 0.232 ACRES
SURFACE OWNERS: SNODGRASS, GARY E., ET UX.
MINERAL OWNERS: GARY E. & LINDA K. SNODGRASS

TAX MAP NO. 14-0005-0080-0000-0000
ASSESSED ACREAGE: 0.587 ACRES
SURFACE OWNERS: MARRINER, LEROY A.
MINERAL OWNERS: LEROY A. MARRINER

TAX MAP NO. 14-0005-0071-0000-0000
ASSESSED ACREAGE: 0.400 ACRES
SURFACE OWNERS: PERSINGER, TAMMIE D.
MINERAL OWNERS: THOMAS GEHO

TAX MAP NO. 14-0005-0070-0000-0000
ASSESSED ACREAGE: 0.381 ACRES
SURFACE OWNERS: TULLIUS, JOSHUA W.
MINERAL OWNERS (A): CLARENCE TOLAND

TAX MAP NO. 14-0005-0070-0000-0000
ASSESSED ACREAGE: 0.331 ACRES
SURFACE OWNERS: TULLIUS, JOSHUA W.
MINERAL OWNERS (B): BARRY D. & JOYCE E. CROW, BARRY D. & JOYCE E. CROW BOUNTY MINERALS, LLC, CLARENCE TOLAND

TAX MAP NO. 14-0005-0069-0000-0000
ASSESSED ACREAGE: 0.1594 ACRES
SURFACE OWNERS: BOCK, JEFFERY T.
MINERAL OWNERS (A): JEFFREY T. BOCK

TAX MAP NO. 14-0005-0069-0000-0000
ASSESSED ACREAGE: 0.1594 ACRES
SURFACE OWNERS: BOCK, JEFFERY T.
MINERAL OWNERS (B): JEFFREY T. BOCK, BOUNTY MINERALS, LLC, BARRY D. & JOYCE E. CROW, BARRY D. & JOYCE E. CROW

TAX MAP NO. 14-0005-0068-0000-0000
ASSESSED ACREAGE: 1.200 ACRES
SURFACE OWNERS: FERRELL, CHARLES DAVID, ET UX.
MINERAL OWNERS: CHARLES D. & ERTHA J. FERRELL

TAX MAP NO. 14-0005-0067-0000-0000
ASSESSED ACREAGE: 0.063 ACRES
SURFACE OWNERS: FERRELL, CHARLES DAVID, ET UX.
MINERAL OWNERS: CHARLES D. & ERTHA J. FERRELL

TAX MAP NO. 14-0005-0073-0000-0000
ASSESSED ACREAGE: 0.400 ACRES
SURFACE OWNERS: ASTON, THOMAS C.
MINERAL OWNERS: MCCROW ENERGY PARTNERS II, LLC, APPALACHIAN BASIN MINERALS, LP, PENNMARC RESOURCES II, LP, WILDES MINERAL INTERESTS, LLC

TAX MAP NO. 14-0005-0072-0000-0000
ASSESSED ACREAGE: 0.250 ACRES
SURFACE OWNERS: ASTON, THOMAS C.
MINERAL OWNERS: APPALACHIAN BASIN MINERALS, LP, PENNMARC RESOURCES II, LP, WILDES MINERAL INTERESTS, LLC, MCCROW ENERGY PARTNERS II, LLC

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



DATE: April 8, 2019 - Rev May 28, 2019

OPERATOR'S WELL #: KINGS LANDING - 7UH

API WELL # 47 051 **02222 Deep**

STATE COUNTY PERMIT **H6A**

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

WATERSHED: WHEELING CREEK - UPPER OHIO RIVER ELEVATION: 1,314.95'

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

SURFACE OWNER(1): YOUNG, ROBERT L. ET. UX. ACREAGE(1): 39.17 SURFACE OWNER(2): ACREAGE(2):

OIL & GAS ROYALTY OWNERS(1): YOUNG, ROBERT L. ET. UX. ACREAGE(1): 39.17

OIL & GAS ROYALTY OWNERS(2): ACREAGE(2):

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

TARGET FORMATION: POINT PLEASANT ESTIMATED DEPTH: TVD: 11,698' ± TMD: 20,418' ±

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

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

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

TAX MAP NO. 14-0005-0087-0000-0000
ASSESSED ACREAGE: 0.211 ACRES

SURFACE OWNERS: KNIGHT, ELEANOR L.

MINERAL OWNERS: BONNIE WOOD, JOYCE ROBINSON, BARBARA SAMPSON, BRENDA ESTEL

TAX MAP NO. 14-0005-0086-0000-0000
ASSESSED ACREAGE: 0.153 ACRES

SURFACE OWNERS: KNIGHT, ELEANOR L.

MINERAL OWNERS: JOYCE ROBINSON, BARBARA SAMPSON, BRENDA ESTEL, BONNIE WOOD

P/O TAX MAP NO. 14-0005-0075-0000-0000
ASSESSED ACREAGE: 6.350 ACRES

SURFACE OWNERS: RICHMOND, SALLY ANN, ET VIR

MINERAL OWNERS: SALLY ANN & CHARLES R. RICHMOND

TAX MAP NO. 14-0005-0083-0000-0000
ASSESSED ACREAGE: 0.238 ACRES

SURFACE OWNERS: BURKLE, SHARON L.

MINERAL OWNERS: SHARON L. GRAY

TAX MAP NO. 14-0005-0055-0001-0000
ASSESSED ACREAGE: 0.046 ACRES

SURFACE OWNERS: PERSINGER, TAMMIE D.

MINERAL OWNERS: THOMAS GEHO

TAX MAP NO. 14-0005-0055-0002-0000
ASSESSED ACREAGE: 0.750 ACRES

SURFACE OWNERS: SCHER-CASH INC.

MINERAL OWNERS: BARBARA SAMPSON, JOYCE ROBINSON, BRENDA ESTEL, BONNIE WOOD

TAX MAP NO. 14-0005-0056-0000-0000
ASSESSED ACREAGE: 0.062 ACRES

SURFACE OWNERS: SCHER-CASH INC.

MINERAL OWNERS: SCHER-CASH INC.

TAX MAP NO. 14-0005-0057-0000-0000
ASSESSED ACREAGE: 0.128 ACRES

SURFACE OWNERS: SCHER-CASH INC.

MINERAL OWNERS: DELORES JEAN SHELTON

TAX MAP NO. 14-0005-0058-0000-0000
ASSESSED ACREAGE: 0.088 ACRES

SURFACE OWNERS: MARSHAL COUNTY PUBLIC SERVICE DISTRICT NO. 3

MINERAL OWNERS: MARSHAL COUNTY PUBLIC SERVICE DISTRICT NO. 3

TAX MAP NO. 14-0005-0068-0000-0000
ASSESSED ACREAGE: 0.150 ACRES

SURFACE OWNERS: FERRELL, CHARLES DAVID, ET UX.

MINERAL OWNERS: CHARLES D. & ERTHA J. FERRELL

TAX MAP NO. 14-0005-0060-0002-0000
ASSESSED ACREAGE: 0.375 ACRES

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

MINERAL OWNERS: MARGARET A. & LLOYD E. WALKER

TAX MAP NO. 14-0005-0060-0001-0000
ASSESSED ACREAGE: 0.375 ACRES

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

MINERAL OWNERS: MARGARET A. & LLOYD E. WALKER

TAX MAP NO. 14-0005-0059-0000-0000
ASSESSED ACREAGE: 0.152 ACRES

SURFACE OWNERS: MARSHAL COUNTY PUBLIC SERVICE DISTRICT NO. 3

MINERAL OWNERS: MARSHAL COUNTY PUBLIC SERVICE DISTRICT NO. 3

TAX MAP NO. 14-0005-0061-0000-0000
ASSESSED ACREAGE: 0.293 ACRES

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

MINERAL OWNERS: MARGARET A. & LLOYD E. JR. WALKER

TAX MAP NO. 14-0005-0052-0000-0000
ASSESSED ACREAGE: 22.890 ACRES

SURFACE OWNERS: HUDKINS, BASIL J., ET UX.

MINERAL OWNERS: BASIL J. & PATRICIA L. HUDKINS

TAX MAP NO. 14-0005-0052-0010-0000
ASSESSED ACREAGE: 19.417 ACRES

SURFACE OWNERS: COFFIELD, WILLIAM E., ET UX.

MINERAL OWNERS: WILLIAM E. & BRENDA K. COFFIELD

TAX MAP NO. 14-0005-0053-0000-0000
ASSESSED ACREAGE: 8.570 ACRES

SURFACE OWNERS: SINON, MARIE N.

MINERAL OWNERS: DONALD E., II & MARIE N., TRUSTEES OF THE MARIE SINON FAMILY TRUST DATED DECEMBER 21, 2015 SINON

TAX MAP NO. 14-0005-0061-0000-0000
ASSESSED ACREAGE: 5.707 ACRES

SURFACE OWNERS: WILSON, DONALD M., ET UX.

MINERAL OWNERS: DONALD M. & DANI WILSON

TAX MAP NO. 14-0005-0064-0000-0000
ASSESSED ACREAGE: 3.110 ACRES

SURFACE OWNERS: LIMESTONE PRESBYTERIAN CHURCH

MINERAL OWNERS: THE LIMESTONE PRESBYTERIAN CHURCH

TAX MAP NO. 14-0005-0063-0000-0000
ASSESSED ACREAGE: 0.478 ACRES

SURFACE OWNERS: LIMESTONE PRESBYTERIAN CHURCH

MINERAL OWNERS: THE LIMESTONE PRESBYTERIAN CHURCH

TAX MAP NO. 14-0005-0065-0001-0000
ASSESSED ACREAGE: 0.340 ACRES

SURFACE OWNERS: LIMESTONE PRESBYTERIAN CHURCH

MINERAL OWNERS: THE LIMESTONE PRESBYTERIAN CHURCH

TAX MAP NO. 14-0005-0065-0000-0000
ASSESSED ACREAGE: 0.550 ACRES

SURFACE OWNERS: LIMESTONE PRESBYTERIAN CHURCH

MINERAL OWNERS: THE LIMESTONE PRESBYTERIAN CHURCH

TAX MAP NO. 14-0005-0065-0002-0000
ASSESSED ACREAGE: 0.146 ACRES

SURFACE OWNERS: LIMESTONE PRESBYTERIAN CHURCH

MINERAL OWNERS: THE LIMESTONE PRESBYTERIAN CHURCH

TAX MAP NO. 14-0005-0031-0001-0000
ASSESSED ACREAGE: 2.110 ACRES

SURFACE OWNERS: LIMESTONE PRESBYTERIAN CHURCH

MINERAL OWNERS: THE LIMESTONE PRESBYTERIAN CHURCH

TAX MAP NO. 14-0005-0062-0000-0000
ASSESSED ACREAGE: 1.800 ACRES

SURFACE OWNERS: HILL, SETH

MINERAL OWNERS: THE BOARD OF EDUCATION OF THE COUNTY OF MARSHALL, STATE OF WEST VIRGINIA

TAX MAP NO. 15-0007-0001-0001-0000
ASSESSED ACREAGE: 0.567 ACRES

SURFACE OWNERS: SOFSKY, EMIL P., JR., ET AL.

MINERAL OWNERS: EMIL P., JR. & MARY A. SOFSKY, CAMPBELL

TAX MAP NO. 15-0007-0001-0000-0000
ASSESSED ACREAGE: 1.407 ACRES

SURFACE OWNERS: CAPPELLITTI, JOANNE K.

MINERAL OWNERS: JOANNE K. CAPPELLITTI

TAX MAP NO. 15-0007-0001-0005-0000
ASSESSED ACREAGE: 0.943 ACRES

SURFACE OWNERS: RICCARDI, ANTHONY, ET UX.

MINERAL OWNERS: ANTHONY & KELLEY RICCARDI

TAX MAP NO. 15-0007-0001-0004-0000
ASSESSED ACREAGE: 1.040 ACRES

SURFACE OWNERS: BHAT, SRILATA

MINERAL OWNERS: ISKCON NEW VRINDABAN, INC.

TAX MAP NO. 15-0007-0001-0002-0000
ASSESSED ACREAGE: 11.552 ACRES

SURFACE OWNERS: ISKCON - NEW MATHURA VRINDABAN INC.

MINERAL OWNERS: ISKCON NEW VRINDABAN, INC.

TAX MAP NO. 15-0007-0001-0003-0000
ASSESSED ACREAGE: 19.550 ACRES

SURFACE OWNERS: WESNER, GEORGE L., ET UX.

MINERAL OWNERS: BOUNTY MINERALS LLC, NOBLE MARCELLUS, LP, GEORGE L. & LYNN K. WESNER

TAX MAP NO. 14-0005-0077-0000-0000
ASSESSED ACREAGE: 67.721 ACRES

SURFACE OWNERS: WALTON, SHIRLEY JEAN

MINERAL OWNERS: SHIRLEY JEAN MOORE, NOBLE MARCELLUS LP, BOUNTY MINERALS III LLC

TAX MAP NO. 14-0005-0055-0000-0000
ASSESSED ACREAGE: 7.300 ACRES

SURFACE OWNERS: SAMPSON, BARBARA, ET AL.

MINERAL OWNERS: BARBARA SAMPSON, JOYCE ROBINSON, BRENDA ESTEL, BONNIE WOOD

TAX MAP NO. 14-0005-00031-0002-0000
ASSESSED ACREAGE: 28.925 ACRES

SURFACE OWNERS: DIANA LYNN PETTIT

MINERAL OWNERS: DIANA LYNN KING

TAX MAP NO. 14-0005-0031-0004-0000
ASSESSED ACREAGE: 9.870 ACRES

SURFACE OWNERS: HUDKINS, BASIL J., ET UX.

MINERAL OWNERS: APPALACHIAN BASIN MINERALS, LP, PENNMARC RESOURCES II, LP, WILDES MINERAL INTERESTS, LLC, MCCROW ENERGY PARTNERS II, LLC

TAX MAP NO. 14-0005-0031-0005-0000
ASSESSED ACREAGE: 0.018 ACRES

SURFACE OWNERS: HILL, SETH

MINERAL OWNERS: WILDES MINERAL INTERESTS, LLC, APPALACHIAN BASIN MINERALS, LP, MCCROW ENERGY PARTNERS II, LLC, PENNMARC RESOURCES II, LP

TAX MAP NO. 14-0005-0031-0006-0000
ASSESSED ACREAGE: 0.040 ACRES

SURFACE OWNERS: HILL, SETH

MINERAL OWNERS: APPALACHIAN BASIN MINERALS, LP, PENNMARC RESOURCES II, LP, WILDES MINERAL INTERESTS, LLC, MCCROW ENERGY PARTNERS II, LLC

TAX MAP NO. 14-0005-0030-0000-0000
ASSESSED ACREAGE: 11.270 ACRES

SURFACE OWNERS: HILL, KAY F., ET UX.

MINERAL OWNERS: KAY F. & BEVERLY K. HILL

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



DATE: April 8, 2019 - Rev May 28, 2019

OPERATOR'S WELL #: KINGS LANDING - 7UH

API WELL # 47 051 02222 Deep
STATE COUNTY PERMIT H6A

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

WATERSHED: WHEELING CREEK - UPPER OHIO RIVER ELEVATION: 1,314.95'
COUNTY/DISTRICT: MARSHALL / WEBSTER QUADRANGLE: MOUNDVILLE, WV
SURFACE OWNER(1): YOUNG, ROBERT L. ET UX. ACREAGE(1): 39.17 SURFACE OWNER(2): ACREAGE(2):
OIL & GAS ROYALTY OWNERS(1): YOUNG, ROBERT L. ET UX. ACREAGE(1): 39.17
OIL & GAS ROYALTY OWNERS(2): ACREAGE(2):

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

TARGET FORMATION: POINT PLEASANT ESTIMATED DEPTH: TVD: 11,698' ± TMD: 20,418' ±
WELL OPERATOR: AMERICAN PETROLEUM PARTNERS OPERATING, LLC DESIGNATED AGENT: STEVEN GREEN
Address: 4600 J. BARRY COURT, SUITE 310 Address: 300 SUMMERS ST, SUITE 1000
City: CANONSBURG State: PA Zip Code: 15317 City: CHARLESTON State: WV Zip Code: 25301



P/O TAX MAP NO. 14-0005-0029-0000-0000 ASSESSED ACREAGE: 5.028 ACRES SURFACE OWNERS: HILL, PAULA. MINERAL OWNERS: KATHLEEN T. HILL AND SUSAN M. FERRIS TRUSTEES OF THE K.T. HILL FAMILY TRUST, DATED DECEMBER 17, 2013 KAY F. & BEVERLY K. HILL.

TAX MAP NO. 14-0005-0052-0008-0000 ASSESSED ACREAGE: 0.672 ACRES SURFACE OWNERS: COFFIELD, WILLIAM E., ET UX. MINERAL OWNERS: WILLIAM E. & BRENDA K. COFFIELD

TAX MAP NO. 14-0005-0039-0000-0000 ASSESSED ACREAGE: 5.775 ACRES SURFACE OWNERS: 1712 Mount Nebo Road DERROW, SAMUEL R., ET UX. MINERAL OWNERS: SAMUEL R. & ANGELA R. DERROW

TAX MAP NO. 14-0005-0036-0001-0000 ASSESSED ACREAGE: 0.456 ACRES SURFACE OWNERS: KORNGIVER, TODD E. & JENNIFER MINERAL OWNERS: JORDAN M. & VICTORIA G. BENLINE SIMONS

TAX MAP NO. 14-0005-0029-0001-0000 ASSESSED ACREAGE: 1.695 ACRES SURFACE OWNERS: HILL, KAY F., ET UX. MINERAL OWNERS: KAY F. & BEVERLY K. HILL

TAX MAP NO. 14-0005-0052-0011-0000 ASSESSED ACREAGE: 0.430 ACRES SURFACE OWNERS: HUDKINS, BASIL J., ET UX. MINERAL OWNERS: BASIL J. & PATRICIA L. HUDKINS

TAX MAP NO. 14-0005-0032-0001-0000 ASSESSED ACREAGE: 2.140 ACRES SURFACE OWNERS: ASTON, CHAD E. MINERAL OWNERS: CHAD E. ASTON

TAX MAP NO. 14-0005-0033-0000-0000 ASSESSED ACREAGE: 6.955 ACRES SURFACE OWNERS: YOHO, DONALD WILLIAM, ET UX. MINERAL OWNERS: KIM MARLENE YOHO

TAX MAP NO. 14-0005-0029-0002-0000 ASSESSED ACREAGE: 1.886 ACRES SURFACE OWNERS: HILL, HOWARD B. MINERAL OWNERS: JOSHUA ADAM HILL MATTHEW BRYON HILL

TAX MAP NO. 14-0005-0052-0006-0000 ASSESSED ACREAGE: 0.241 ACRES SURFACE OWNERS: KUSMA, MICHAEL R. MINERAL OWNERS: MICHAEL R. KUZMA

TAX MAP NO. 14-0005-0032-0003-0000 ASSESSED ACREAGE: 0.866 ACRES SURFACE OWNERS: HILL, KAY F., ET UX. MINERAL OWNERS: KAY F. & BEVERLY K. HILL

TAX MAP NO. 14-0005-0032-0002-0000 ASSESSED ACREAGE: 1.569 ACRES SURFACE OWNERS: ULRICH, DOUGLAS R., ET UX. MINERAL OWNERS: DOUGLAS R. & PAMELA D. ULRICH

P/O TAX MAP NO. 14-0005-0029-0000-0000 ASSESSED ACREAGE: 5.028 ACRES SURFACE OWNERS: HILL, PAULA. MINERAL OWNERS: KATHLEEN T. HILL AND SUSAN M. FERRIS TRUSTEES OF THE K.T. HILL FAMILY TRUST, DATED DECEMBER 17, 2013 KAY F. & BEVERLY K. HILL

TAX MAP NO. 14-0005-0052-0005-0000 ASSESSED ACREAGE: 0.643 ACRES SURFACE OWNERS: KUSMA, MICHAEL R. MINERAL OWNERS: BASIL JAMES & PATRICIA L. HUDKINS EVELYN & RALPH F. MINTON

TAX MAP NO. 14-0005-0032-0004-0000 ASSESSED ACREAGE: 10.000 ACRES SURFACE OWNERS: HILL, KAY F., ET UX. MINERAL OWNERS: KAY F. & BEVERLY K. HILL

TAX MAP NO. 14-0005-0032-0000-0000 ASSESSED ACREAGE: 1.000 ACRES SURFACE OWNERS: SAMPSON, RUTH. MINERAL OWNERS: RUTH E. SMITH

TAX MAP NO. 14-0005-0053-0002-0000 ASSESSED ACREAGE: 0.161 ACRES SURFACE OWNERS: SINON, MARIE N. MINERAL OWNERS: DONALD E. II AND MARIE N., TRUSTEES OF THE MARIE SINON FAMILY TRUST DATED DECEMBER 21, 2015 SINON

TAX MAP NO. 14-0005-0052-0000-0000 ASSESSED ACREAGE: 0.241 ACRES SURFACE OWNERS: KUSMA, MICHAEL R. MINERAL OWNERS: BRENDAY KAY HUDKINS & WILLIAM E. COFFIELD WILLARD & TAMMY JO MCMILLAN BARBARA JEAN & LAWRENCE M. TOMASZCZYK GARY GAMBLE GARY & LORETTA E. GAMBLE

TAX MAP NO. 14-0005-0031-0003-0000 ASSESSED ACREAGE: 0.838 ACRES SURFACE OWNERS: WASSUM, LORI. MINERAL OWNERS: LORI A. KENNEDY

TAX MAP NO. 14-0005-0032-0005-0000 ASSESSED ACREAGE: 2.351 ACRES SURFACE OWNERS: LILLEY, ROGER W., ET UX. MINERAL OWNERS: CONNIE CLUTTER

TAX MAP NO. 14-0005-0053-0001-0000 ASSESSED ACREAGE: 0.839 ACRES SURFACE OWNERS: SINON, MARIE N. MINERAL OWNERS: DONALD E. II & MARIE N., TRUSTEES OF THE MARIE SINON FAMILY TRUST DATED DECEMBER 21, 2015 SINON

TAX MAP NO. 14-0005-0051-0000-0000 ASSESSED ACREAGE: 5.479 ACRES SURFACE OWNERS: AUTEN, RAYMOND N. MINERAL OWNERS: AMP FUND III, LP

TAX MAP NO. 14-0005-0031-0000-0000 ASSESSED ACREAGE: 0.398 ACRES SURFACE OWNERS: YOHO, DONALD W. MINERAL OWNERS:

TAX MAP NO. 14-0005-0032-0005-0000 ASSESSED ACREAGE: 1.052 ACRES SURFACE OWNERS: LILLEY, ROGER W., ET UX. MINERAL OWNERS: ROGER W. & TRICIA A. LILLEY

TAX MAP NO. 14-0005-0052-0001-0000 ASSESSED ACREAGE: 0.230 ACRES SURFACE OWNERS: COFFIELD, WILLIAM E., ET UX. MINERAL OWNERS: BASIL JAMES & PATRICIA L. HUDKINS GARY GAMBLE GARY GAMBLE & LORETTA E. GAMBLE BRENDA KAY HUDKINS & WILLIAM E. COFFIELD BARBARA JEAN & LAWRENCE M. TOMASZCZYK EVELYN & RALPH F. MINTON JOYCE ROBINSON BONNIE WOOD BRENDA ESTEL BARBARA SAMPSON WILLARD & TAMMY JO MCMILLAN

TAX MAP NO. 14-0005-0051-0001-0000 ASSESSED ACREAGE: 2.091 ACRES SURFACE OWNERS: HILL, MARTHA KAYE, ET AL. MINERAL OWNERS: HILLS CREEK CONSULTING, LLC DRY RIDGE RESOURCES, LLC

TAX MAP NO. 14-0005-0033-0001-0000 ASSESSED ACREAGE: 0.508 ACRES SURFACE OWNERS: YOHO, SHIRLEY M. MINERAL OWNERS: APPALACHIAN BASIN MINERALS, LP PENNMARC RESOURCES II, LP WILDES MINERAL INTERESTS, LLC MCCROW ENERGY PARTNERS II, LLC

TAX MAP NO. 14-0005-0052-0007-0000 ASSESSED ACREAGE: 0.671 ACRES SURFACE OWNERS: HUDKINS, BASIL J. MINERAL OWNERS: BASIL J. & PATRICIA L. HUDKINS

TAX MAP NO. 14-0005-0052-0000-0000 ASSESSED ACREAGE: 0.230 ACRES SURFACE OWNERS: COFFIELD, WILLIAM E., ET UX. MINERAL OWNERS: WILLIAM E. & BRENDA K. COFFIELD

TAX MAP NO. 14-0005-0052-0003-0000 ASSESSED ACREAGE: 0.820 ACRES SURFACE OWNERS: COFFIELD, WILLIAM E., ET UX. MINERAL OWNERS: EVELYN & RALPH F. MINTON BONNIE WOOD BARBARA SAMPSON BRENDA ESTEL JOYCE ROBINSON BRENDA KAY HUDKINS & WILLIAM E. COFFIELD WILLARD & TAMMY JO MCMILLAN BRENDA KAY HUDKINS & WILLIAM E. COFFIELD GARY GAMBLE GARY & LORETTA E. GAMBLE BASIL JAMES & PATRICIA L. HUDKINS

TAX MAP NO. 14-0005-0033-0002-0000 ASSESSED ACREAGE: 0.730 ACRES SURFACE OWNERS: SNYDER, ROBERT E., ET UX. MINERAL OWNERS: WILDES MINERAL INTERESTS, LLC MCCROW ENERGY PARTNERS II, LLC APPALACHIAN BASIN MINERALS, LP PENNMARC RESOURCES II, LP

TAX MAP NO. 14-0005-0052-0004-0000 ASSESSED ACREAGE: 0.596 ACRES SURFACE OWNERS: HUDKINS, BASIL J., ET UX. MINERAL OWNERS: BASIL JAMES & PATRICIA L. HUDKINS EVELYN & RALPH F. MINTON BONNIE WOOD JOYCE ROBINSON BARBARA SAMPSON BRENDA ESTEL BRENDA KAY HUDKINS & WILLIAM E. COFFIELD WILLARD & TAMMY JO MCMILLAN BARBARA JEAN & LAWRENCE M. TOMASZCZYK GARY GAMBLE GARY & LORETTA E. GAMBLE

TAX MAP NO. 14-0005-0052-0002-0000 ASSESSED ACREAGE: 0.230 ACRES SURFACE OWNERS: COFFIELD, WILLIAM E., ET UX. MINERAL OWNERS: WILLIAM E. & BRENDA K. COFFIELD

TAX MAP NO. 14-0005-0051-0002-0000 ASSESSED ACREAGE: 0.167 ACRES SURFACE OWNERS: VOGLER, THOMAS G. MINERAL OWNERS: THOMAS G. VOGLER

TAX MAP NO. 14-0005-0035-0000-0000 ASSESSED ACREAGE: 1.000 ACRES SURFACE OWNERS: WHIPKEY, ROGER, ET UX. MINERAL OWNERS: ROGER & DEBORAH DIANE WHIPKEY

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



DATE: April 8, 2019 - Rev May 28, 2019

OPERATOR'S WELL #: KINGS LANDING - 7UH

API WELL # 47 051 02222 Deep STATE COUNTY PERMIT H6A

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

WATERSHED WHEELING CREEK - UPPER OHIO RIVER ELEVATION: 1,314.95'

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

SURFACE OWNER(1) YOUNG, ROBERT L. ET. UX. ACREAGE(1) 39.17 SURFACE OWNER(2) ACREAGE(2)

OIL & GAS ROYALTY OWNERS(1) YOUNG, ROBERT L. ET. UX. ACREAGE(1) 39.17

OIL & GAS ROYALTY OWNERS(2) ACREAGE(2)

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

TARGET FORMATION: POINT PLEASANT ESTIMATED DEPTH: TVD: 11,698' ± TMD: 20,418' ±

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

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

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

TAX MAP NO.
 14-0005-0052-0009-0000
 ASSESSED ACREAGE: 0.482 ACRES
 SURFACE OWNERS:
 REYNOLDS, SCOTTY J., ET UX.
 MINERAL OWNERS:
 SCOTTY J. & MELINDA M. REYNOLDS

TAX MAP NO.
 DOH-1473
 ASSESSED ACREAGE: 46.812 ACRES
 SURFACE OWNERS:
 STATE OF WEST VIRGINIA
 MINERAL OWNERS:
 STATE OF WEST VIRGINIA

TAX MAP NO.
 14-0005-0036-0000-0000
 ASSESSED ACREAGE: 31.708 ACRES
 SURFACE OWNERS:
 DANIEL EDWARD TATCICH
 IRREVOCABLE TRUST
 MINERAL OWNERS:
 DANIEL EDWARD TATCICH, TRUSTEE OF THE
 DANIEL EDWARD TATCICH IRREVOCABLE TRUST
 DATED APRIL 27, 2016

TAX MAP NO.
 KL-ROAD
 ASSESSED ACREAGE: 3.077 ACRES
 SURFACE OWNERS:
 WEST VIRGINIA DEPARTMENT OF TRANSPORTATION,
 DIVISION OF HIGHWAYS
 MINERAL OWNERS:
 WEST VIRGINIA DEPARTMENT OF TRANSPORTATION,
 DIVISION OF HIGHWAYS

TAX MAP NO.
 14-0005-0028-0000-0000
 ASSESSED ACREAGE: 57.260 ACRES
 SURFACE OWNERS:
 HILL, KAY F., ET AL
 MINERAL OWNERS:
 KATHLEEN T. HILL AND SUSAN M. FERRIS,
 TRUSTEES OF THE K. T. HILL FAMILY TRUST, DATED
 DECEMBER 17, 2013
 KAY F. & BEVERLY K. HILL

TAX MAP NO.
 MCCREARYS RIDGE ROAD
 ASSESSED ACREAGE: 0.309
 SURFACE OWNERS:
 WEST VIRGINIA DEPARTMENT OF TRANSPORTATION,
 DIVISION OF HIGHWAYS
 MINERAL OWNERS:
 WEST VIRGINIA DEPARTMENT OF TRANSPORTATION,
 DIVISION OF HIGHWAYS

TAX MAP NO.
 14-0005-0038-0001-0000
 ASSESSED ACREAGE: 0.471 ACRES
 SURFACE OWNERS:
 BANE, MARTIN C. & SUSAN
 MINERAL OWNERS:
 MARTIN C. & SUSAN A. BANE

TAX MAP NO.
 14-0005-0036-0000-0000
 ASSESSED ACREAGE: 0.474 ACRES
 SURFACE OWNERS:
 BANE, MARTIN C. & SUSAN
 MINERAL OWNERS:
 MARTIN C. & SUSAN A. BANE

TAX MAP NO.
 14-0005-0039-0001-0000
 ASSESSED ACREAGE: 21.788 ACRES
 SURFACE OWNERS:
 BISHOP, PENNY S., ET VIR.
 MINERAL OWNERS:
 PENNY S. & RAYMOND D. BISHOP

TAX MAP NO.
 14-0005-0037-0000-0000
 ASSESSED ACREAGE: 72.630 ACRES
 SURFACE OWNERS:
 THE RICHARD H. FRANCIS TRUST
 MINERAL OWNERS:
 LISA JANE FRANCIS, TRUSTEE, OR ANY
 SUCCESSORS IN TRUST, UNDER THE
 RICHARD H. FRANCIS TRUST DATED JULY 01,
 2015 AND ANY AMENDMENTS THERETO

TAX MAP NO.
 14-0005-0076-0000-0000
 ASSESSED ACREAGE: 7.564 ACRES
 SURFACE OWNERS:
 FOSTER, KERRY G.
 MINERAL OWNERS:
 KERRY & CINDY FOSTER

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



DATE: April 8, 2019 - Rev May 28, 2019

OPERATOR'S WELL #: KINGS LANDING - 7UH

API WELL # 47 051 02222 Deep
 STATE COUNTY PERMIT
 H 6 A

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

WATERSHED: WHEELING CREEK - UPPER OHIO RIVER ELEVATION: 1,314.95'

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

SURFACE OWNER(1) YOUNG, ROBERT L. ET. UX. ACREAGE(1) 39.17 SURFACE OWNER(2) _____ ACREAGE(2) _____

OIL & GAS ROYALTY OWNERS(1) YOUNG, ROBERT L. ET. UX. ACREAGE(1) 39.17

OIL & GAS ROYALTY OWNERS(2) _____ ACREAGE(2) _____

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

TARGET FORMATION: POINT PLEASANT ESTIMATED DEPTH: TVD: 11,698' ± TMD: 20,418' ±

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

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

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

**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: Brulio Silva
 Its: Vice President

REG. DIV.
Office of Oil and Gas

MAY 06 2019
WV Department of
Environmental Protection



4705102222

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

April 7, 2019

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,

A handwritten signature in black ink, appearing to read "Brulio Silva".

Brulio Silva
VP- Drilling

BS/djs

RECEIVED
Office of Oil and Gas

MAY 06 2019
WV Department of
Environmental Protection

8838017073

UNITED STATES
DEPARTMENT OF JUSTICE
FEDERAL BUREAU OF INVESTIGATION
WASHINGTON, D. C. 20535
MAY 2 1967
COMMUNICATIONS SECTION
RECEIVED

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

Date of Notice Certification: _____

API No. 47- 051 - _____
Operator's Well No. Kings Landing-7UH
Well Pad Name: Kings Landing

Notice has been given:

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

State: <u>West Virginia</u>	UTM NAD 83	Easting: <u>531603.868</u>
County: <u>Marshall</u>		Northing: <u>4419628.818</u>
District: <u>Webster</u>	Public Road Access: <u>Stull Run Road C.R. 44</u>	
Quadrangle: <u>Moundsville</u>	Generally used farm name: <u>Robert Young</u>	
Watershed: <u>Huc-10 Wheeling Creek, Huc-12 Upper Wheeling Creek</u>		

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

<p>Pursuant to West Virginia Code § 22-6A, the Operator has attached proof to this Notice Certification that the Operator has properly served the required parties with the following:</p> <p>*PLEASE CHECK ALL THAT APPLY</p> <p><input type="checkbox"/> 1. NOTICE OF SEISMIC ACTIVITY or <input checked="" type="checkbox"/> NOTICE NOT REQUIRED BECAUSE NO SEISMIC ACTIVITY WAS CONDUCTED</p> <p><input type="checkbox"/> 2. NOTICE OF ENTRY FOR PLAT SURVEY or <input checked="" type="checkbox"/> NO PLAT SURVEY WAS CONDUCTED</p> <p><input checked="" type="checkbox"/> 3. NOTICE OF INTENT TO DRILL or <input type="checkbox"/> NOTICE NOT REQUIRED BECAUSE NOTICE OF ENTRY FOR PLAT SURVEY WAS CONDUCTED or</p> <p style="padding-left: 100px;"><input type="checkbox"/> WRITTEN WAIVER BY SURFACE OWNER (PLEASE ATTACH)</p> <p><input checked="" type="checkbox"/> 4. NOTICE OF PLANNED OPERATION</p> <p><input checked="" type="checkbox"/> 5. PUBLIC NOTICE</p> <p><input checked="" type="checkbox"/> 6. NOTICE OF APPLICATION</p>	<p>OOG OFFICE USE ONLY</p> <p><input type="checkbox"/> RECEIVED/ NOT REQUIRED</p> <p><input type="checkbox"/> RECEIVED</p> <p><input type="checkbox"/> RECEIVED/ NOT REQUIRED</p> <p><input type="checkbox"/> RECEIVED</p> <p><input type="checkbox"/> RECEIVED</p> <p><input type="checkbox"/> RECEIVED</p>
--	---

Required Attachments:

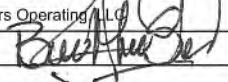
The Operator shall attach to this Notice Certification Form all Notice Forms and Certifications of Notice that have been provided to the required parties and/or any associated written waivers. For the Public Notice, the operator shall attach a copy of the Class II Legal Advertisement with publication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

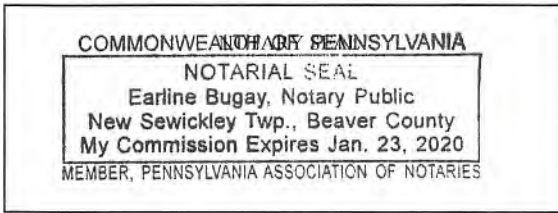
RECEIVED
Office of Oil and Gas
MAY 06 2019
WV Department of
Environmental Protection

4705102222

Certification of Notice is hereby given:

THEREFORE, I Braulio Silva, have read and understand the notice requirements within West Virginia Code § 22-6A. I certify that as required under West Virginia Code § 22-6A, I have served the attached copies of the Notice Forms, identified above, to the required parties through personal service, by registered mail or by any method of delivery that requires a receipt or signature confirmation. I certify under penalty of law that I have personally examined and am familiar with the information submitted in this Notice Certification and all attachments, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

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



Subscribed and sworn before me this 30th day of April 2019.

Earline Bugay Notary Public

My Commission Expires 1/23/2020

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 deprivacyofficer@wv.gov.

RECEIVED
Office of Oil and Gas

MAY 06 2019

WV Department of
Environmental Protection

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

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

Date of Notice: _____ **Date Permit Application Filed:** _____

Notice of:

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

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

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

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

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

SURFACE OWNER(s)
 Name: Robert L. and Kathy J. Young
 Address: 182 Limestone Hill Lane
 Moundsville, WV 26041
 Name: _____
 Address: _____

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

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

SURFACE OWNER(s) (Road and/or Other Disturbance)
 Name: None
 Address: _____
 Name: _____
 Address: _____

SURFACE OWNER OF WATER WELL AND/OR WATER PURVEYOR(s)
 Name: **See attached list
 Address: _____

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

OPERATOR OF ANY NATURAL GAS STORAGE FIELD
 Name: None
 Address: _____

RECEIVED
 *Please attach additional forms if necessary. Office of Oil and Gas

MAY 06 2019

WW-6A
(8-13)

API NO. 47- 051 -
OPERATOR WELL NO. Kings Landing-7UH
Well Pad Name: Kings Landing

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 and any other items that 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

WW-6A
(8-13)

API NO. 47-051-4705102222
OPERATOR WELL NO. Kings Landing-7UH
Well Pad Name: Kings Landing

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

Water Well Testing:

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

Water Testing Laboratories:

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

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

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

Written Comment:

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

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

RECEIVED
Office of Oil and Gas

MAY 06 2019
WV Department of
Environmental Protection

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.**

Time Limits and Methods for Filing Comments.

The law requires these materials to be served on or before the date the operator files its Application. You have **THIRTY (30) DAYS** after the filing date to file your comments. Comments must be filed in person or received in the mail by the Chief's office by the time stated above. You may call the Chief's office to be sure of the date. Check with your postmaster to ensure adequate delivery time or to arrange special expedited handling. If you have been contacted by the well operator and you have signed a "voluntary statement of no objection" to the planned work described in these materials, then the permit may be issued at any time.

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

Comment Requirements

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

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

Permit Denial or Condition

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

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

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

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

RECEIVED
Office of Oil and Gas

MAY 06 2019

WV Department of
Environmental Protection

WW-6A
(8-13)

API NO: 4705102222
OPERATOR WELL NO. Kings Landing-7UH
Well Pad Name: Kings Landing

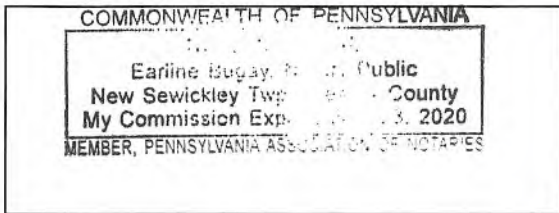
Notice is hereby given by:

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

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

Oil and Gas Privacy Notice:

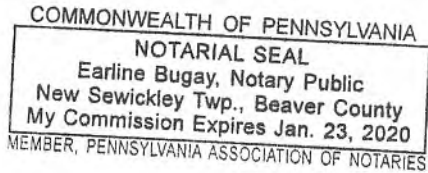
The Office of Oil and Gas processes your personal information, such as name, address and telephone number, as part of our regulatory duties. Your personal information may be disclosed to other State agencies or third parties in the normal course of business or as needed to comply with statutory or regulatory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



Subscribed and sworn before me this 30th day of April, 2019.

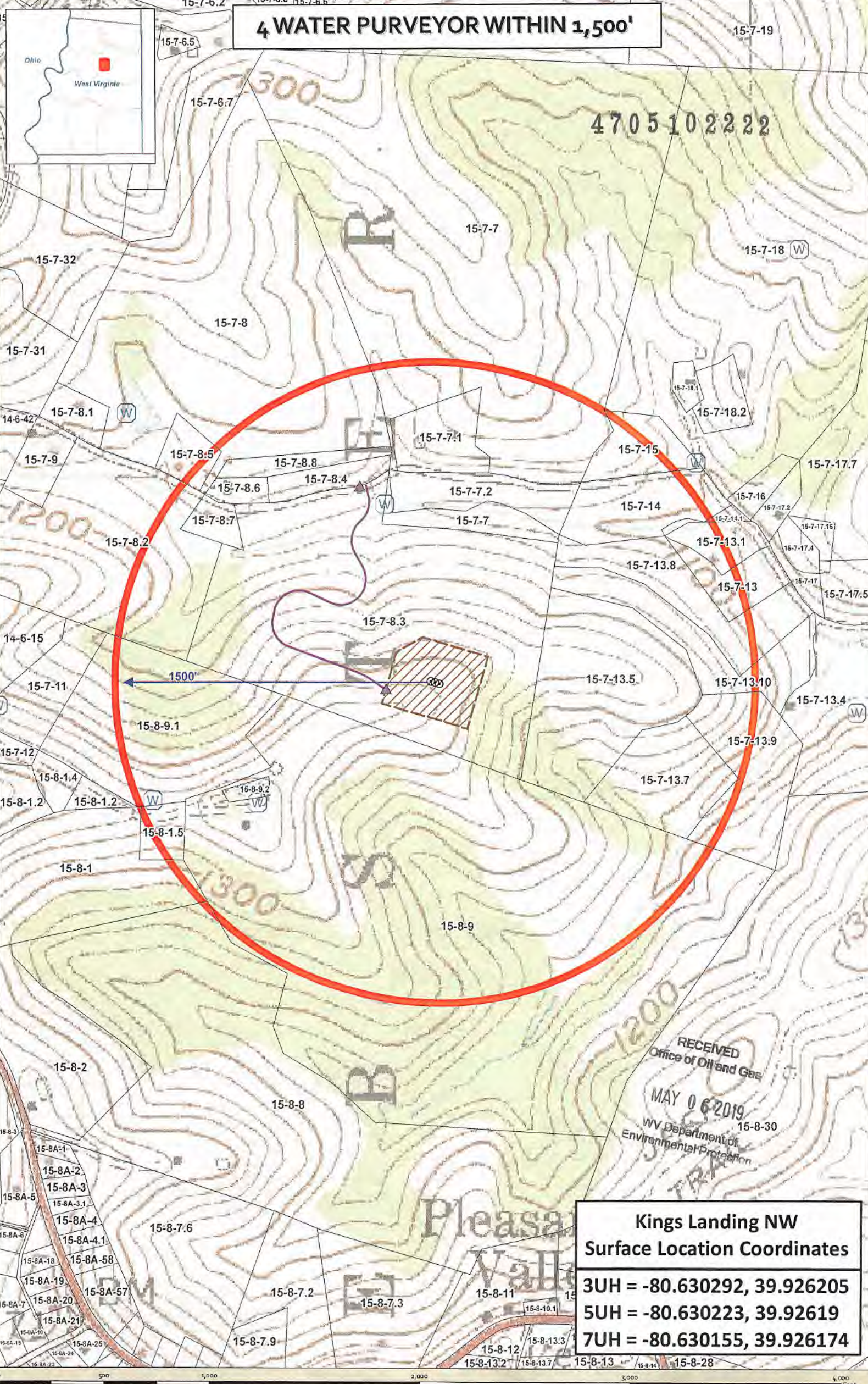
Earline Bugay Notary Public

My Commission Expires 1/23/2020



RECEIVED
Office of Oil and Gas
MAY 06 2019
WV Department of
Environmental Protection

4 WATER PURVEYOR WITHIN 1,500'



**Kings Landing NW
Surface Location Coordinates**
 3UH = -80.630292, 39.926205
 5UH = -80.630223, 39.92619
 7UH = -80.630155, 39.926174

4705102222

Water Purveyors within 1500' of Kings Landing:

- Robert L. and Katherine Young
182 Limestone Hill Lane
Moundsville, WV 26041
- Joseph Leroy Kittle
177 Limestone Hill Road
Moundsville, WV 26041
- Ivan R. Lilley
204 Miners Lane
Moundsville, WV 26041
- Freddie B. Miner, Et Ux
252 Miners Lane
Moundsville, WV 26041

RECEIVED
Office of Oil and Gas

MAY 06 2019

WV Department of
Environmental Protection

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

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

Notice Time Requirement: Notice shall be provided at least TEN (10) days prior to filing a permit application.
Date of Notice: _____ **Date Permit Application Filed:** _____

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

- HAND DELIVERY CERTIFIED MAIL RETURN RECEIPT REQUESTED

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

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

Name: Robert L. and Kathy J. Young
Address: 182 Limestone Hill Lane
Moundsville, WV 26041

Name: _____
Address: _____

Notice is hereby given:

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

State: West Virginia UTM NAD 83 Easting: 531603.868
County: Marshall Northing: 4419628.818
District: Webster Public Road Access: Stull Run Road C.R. 44
Quadrangle: Moundsville Generally used farm name: Robert Young
Watershed: Huc-10 Wheeling Creek, Huc 12 Upper Wheeling Creek

This Notice Shall Include:

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

Notice is hereby given by:

Well Operator: American Petroleum Partners Operating, LLC
Address: 4600 J. Barry Court Suite 310
Canonsburg, PA 15317
Telephone: 1-724-338-8629
Email: Regulatory@app-lp.com
Facsimile: na

Authorized Representative: _____
Address: _____
Telephone: _____
Email: _____
Facsimile: _____

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.

RECEIVED
Office of Oil and Gas

MAY 06 2019

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

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

Date of Notice: _____ **Date Permit Application Filed:** _____

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

- CERTIFIED MAIL HAND
RETURN RECEIPT REQUESTED DELIVERY

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

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

Name: Robert L. and Kathy J. Young
Address: 182 Limestone Hill Lane
Moundsville, WV 26041

Name: _____
Address: _____

Notice is hereby given:

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

State:	<u>West Virginia</u>	UTM NAD 83	Easting:	<u>531603.868</u>
County:	<u>Marshall</u>		Northing:	<u>4419628.818</u>
District:	<u>Webster</u>	Public Road Access:	<u>Stull Run Road C.R. 44</u>	
Quadrangle:	<u>Moundsville</u>	Generally used farm name:	<u>Robert Young</u>	
Watershed:	<u>Huc-10 Wheeling Creek, Huc 12 Upper Wheeling Creek</u>			

This Notice Shall Include:

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

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

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

Oil and Gas Privacy Notice:

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

RECEIVED
Office of Oil and Gas

MAY 06 2019

WV Department of
Environmental Protection



WEST VIRGINIA DEPARTMENT OF TRANSPORTATION

Division of Highways

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

May 22, 2019

Byrd E. White, III
Secretary of Transportation

Jimmy Wriston, P. E.
Deputy Secretary/
Acting 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 Kings Landing Pad, Marshall County
Kings Landing 7UH Well site

Dear Mr. Martin,

This well site will be accessed from a DOH permit #06-2019-0410 which has been issued to American Petroleum Partners for access to the State Road for a well site located off of Marshall County Route 44 SLS.

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

Very Truly Yours,

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

RECEIVED
Office of Oil and Gas

MAY 22 2019

Cc: Julia Sharma
American Petroleum Partners
CH, OM, D-6
File

WV Department of
Environmental Protection

Hydraulic Fracturing Fluid Product Component Information Disclosure

Hydraulic Fracturing Fluid Composition:

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

RECEIVED
Office of Oil and Gas

MAY 06 2019

WV Department of
Environmental Protection

KING'S LANDING WELL PAD EROSION AND SEDIMENT CONTROL PLANS

WEBSTER TAX DISTRICT, MARSHALL COUNTY, WEST VIRGINIA



PROPOSED START
ACCESS DRIVE
NAD83
LAT: 39.928734
LONG: -80.631420



WEST VIRGINIA 811
CALL BEFORE YOU DIG!
Dial 811 or 800.245.4048

AT LEAST 48 HOURS BUT NOT MORE THAN 10 WORKING DAYS BEFORE THE PROJECT STARTS, YOU MUST NOTIFY ANY LOCAL UTILITIES AGENCIES ALL UTILITIES IMPACTED BY THESE SERVICES SHALL CONTACT THE OFFICE OF WEST VIRGINIA 811 AT 1.800.245.4048.

PROPOSED WELL PAD
NAD83
LAT: 39.926237
LONG: -80.630295

OPERATOR
AMERICAN PETROLEUM PARTNERS OPERATING, LLC
4600 J. BARNETT COURT
SUITE 210
CANNONBURG, PA 15317

**APPROVED
WVDEP OOG**
11/5/2019

DIRECTIONS TO THE SITE

FROM MOONSHADE, WV, TRAVEL EAST ON SH 21 TOWARD JACKSON. PAS FIRM 0.5 MILES. TURN LEFT ONTO GRANT AVENUE FOR 0.5 MILES. TURN RIGHT ONTO 1ST STREET FOR 0.5 MILES. 1ST STREET RUNS LEFT AND BECOMES 05-200 S / WAINSWORTH PINE ROAD. CONTINUE ONTO US-200 S / WAINSWORTH PINE ROAD FOR 0.2 MILES. TURN LEFT ONTO WAINSWORTH PINE ROAD FOR 0.3 MILES SOUTH ONTO STILL RUN ROAD FOR 0.5 MILES. SITE WILL BE ON THE RIGHT.



GENERAL NOTES

1. THE PRE-CONSTRUCTION TOPOGRAPHIC INFORMATION SHOWN HEREIN IS BASED ON AERIAL PHOTOGRAPHY COMPILED BY RETIEW ASSOCIATES.
2. THE PROPERTY LINES SHOWN HEREIN DO NOT REPRESENT A BOUNDARY SURVEY OR ANY OF THE PARCELS SHOWN. THE PROPERTY LINES ARE BASED ON COUNTY REAL ESTATE TAX MAPS, GIS INFORMATION, DEEDS OF RECORD AND AMERICAN PETROLEUM PARTNERS PROVIDED INFORMATION.
3. UTILITIES AND THEIR LOCATIONS AS SHOWN HEREIN ARE BASED ON OBSERVABLE EVIDENCE OF THOSE UTILITY ABOVE-GROUND FACILITIES, FEATURES, AND MARKERS WHICH WERE FOUND ON THE SUBJECT PROPERTY AT THE TIME OF SURVEY PERFORMED BY RETIEW ASSOCIATES. RETIEW ASSOCIATES CANNOT GUARANTEE THE ACCURACY OF WHAT ALL UTILITIES ENDING WITHIN THE LIMITS OF THIS PLAN ARE SHOWN. ANY UTILITIES ENCOUNTERED SUBJECT TO PLAN APPROVAL, OR DURING CONSTRUCTION THAT ARE NOT SHOWN ON THE PLAN SHOULD BE REPORTED TO RETIEW ASSOCIATES AND AMERICAN PETROLEUM PARTNERS.
4. ALL EXISTING UTILITIES HAVE BEEN SHOWN IN ACCORDANCE WITH THE BEST AVAILABLE INFORMATION.
5. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL ABOVE AND BELOW GROUND UTILITIES AND STRUCTURES AND WILL BE RESPONSIBLE FOR THE PROTECTION OF THESE UTILITIES AND STRUCTURES AT ALL TIMES.
6. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PROTECT THE EXISTING UTILITIES AND MAINTAIN UNIMPEDED SERVICE AND ANY DAMAGE DUE TO THE CONTRACTORS NEGLIGENCE SHALL BE REPAIRED IMMEDIATELY AND COMPLETELY AT HIS EXPENSE.
7. CONTRACTOR SHALL BE RESPONSIBLE FOR THE REPLACEMENT OF DAMAGED OR DESTROYED LANDSCAPE AND LAWNS.
8. CONTRACTOR SHALL VERIFY ALL DIMENSIONS ON THE PROJECT SITE PRIOR TO THE START OF CONSTRUCTION.
9. CONTRACTOR TO RELOCATE UTILITIES AS REQUIRED.
10. SEED AND MULCH ALL DISTURBED AREAS PER DETAILS.
11. ALL CLEARED TREE CANOPIES SHOULD BE PLACED ON UPWIND SIDE OF FILTER FENCE AND/OR SILT FENCE AND NOT STOCKPILED ON-SITE.
12. CONTRACTOR SHALL STOP WORK IMMEDIATELY AND CONTACT AMERICAN PETROLEUM PARTNERS AND APPROPRIATE RESPONSIBLE AUTHORITIES SHOULD ANY HISTORICAL ARTIFACTS (I.E. BONES, POTTERY, ETC.) ARE ENCOUNTERED DURING CONSTRUCTION.

WETLAND IMPACT (SQUARE FEET)				
WETLAND AND IMPACT CAUSE	FILL (SF)	CONSTRUCTION DISTURBANCE TO LOO (SF)	TOTAL IMPACT (SF)	WITHIN LOG BUT NOT IMPACTED
WETLAND #190314-1100 (PERM) (ACCESS)	7,972	0	7,972	0
TOTAL	7,972	0	7,972	0

STREAM IMPACT (LINEAR FEET)					
STREAM AND IMPACT CAUSE	TYPE OF IMPACT	FILL (LF)	CONSTRUCTION DISTURBANCE TO LOO (LF)	TOTAL IMPACT (LF)	TOTAL IMPACT (AC)
STREAM #190314-1100 (PERENNIAL) (ACCESS)	PERMANENT	138	0	138	0.025
TOTAL		138	0	138	0.0250

WELLHEAD LOCATION NAD 83 (WV NORTH ZONE)				
WELL DESIGNATION	WELL NAME	NORTHING	EASTING	LONGITUDE
WELL A	KINGS LANDING 10A	5214742.707	1801497.027	-80.6303562
WELL B	KINGS LANDING 20A	5214533.145	1801503.493	-80.6303355
WELL C	KINGS LANDING 30A	5214486.526	1801516.189	-80.6302972
WELL D	KINGS LANDING 40A	5214872.292	1801522.824	-80.6302770
WELL E	KINGS LANDING 50A	5214602.602	1801538.317	-80.6302213
WELL F	KINGS LANDING 60A	5214813.440	1801541.756	-80.6302021
WELL G	KINGS LANDING 70A	5214548.258	1801554.422	-80.6301925
WELL H	KINGS LANDING 80A	5214742.878	1801559.887	-80.6301313
WELL I	KINGS LANDING 90A	5214448.706	1801573.558	-80.6300877
WELL J	KINGS LANDING 100A	5214689.743	1801578.993	-80.6300655

WELLHEAD LOCATION NAD 27 (WV NORTH ZONE)				
WELL DESIGNATION	WELL NAME	NORTHING	EASTING	LONGITUDE
WELL A	KINGS LANDING 10A	5214325.223	1802432.580	4418033.874
WELL B	KINGS LANDING 20A	5214526.260	1802239.015	4419540.316
WELL C	KINGS LANDING 30A	5214719.370	1802046.111	4419352.189
WELL D	KINGS LANDING 40A	5214520.408	1802258.146	4419328.630
WELL E	KINGS LANDING 50A	5214233.917	1802070.643	4419630.503
WELL F	KINGS LANDING 60A	5214444.808	1802277.277	4419238.845
WELL G	KINGS LANDING 70A	5214172.884	1802089.973	4419628.817
WELL H	KINGS LANDING 80A	5214287.702	1802196.408	4419535.259
WELL I	KINGS LANDING 90A	5214187.819	1802009.019	4419571.154
WELL J	KINGS LANDING 100A	5214321.857	1802205.013	4419333.576

PROPERTY OWNER INFORMATION - KING'S LANDING WELL PAD LIMITS OF DISTURBANCE

WEBSTER DISTRICT - MARSHALL COUNTY

OWNER	PARCEL ID	TOTAL ACRES	WELL PAD ACREAGE	STOCKPILE ACREAGE	ACCESS DRIVE ACREAGE	TOTAL ACREAGE	TREE CLEARING ACREAGE	LIMITS OF DISTURBANCE
ROBERT L. YOUNG	49A	38.22	5.57	1.50	4.35	11.52	2.37	21.70
	20-14-7-0008-0003							
	GRAND TOTAL		5.57	1.50	4.35	11.52	2.37	21.70

SOILS CLASSIFICATION

- ONE: CULLEOKA-BOWEN COMPLEX, 15 TO 25 PERCENT SLOPES
- TWO: BOWEN-CULLEOKA COMPLEX, 15 TO 25 PERCENT SLOPES
- THREE: BOWEN-CULLEOKA COMPLEX, 25 TO 35 PERCENT SLOPES, VERY STONY
- FOUR: STANBAUGH-SILT CLAY, 0 TO 2 PERCENT SLOPES, OCCASIONALLY FLOODED
- FIVE: STANBAUGH-SILT CLAY, 3 TO 8 PERCENT SLOPES, BARELY FLOODED

LIST OF DRAWINGS

- 1 OF 19 COVER SHEET
- 2 OF 19 EXISTING CONDITIONS PLAN
- 3 OF 19 LAYOUT PLAN
- 4 OF 19 GRADING AND EROSION CONTROL PLAN
- 5 OF 19 GRADING ANALYSIS PLAN
- 6 OF 19 CROSS SECTION PLAN
- 7 OF 19 ACCESS DRIVE AND WELL PAD PROFILES
- 8 OF 19 ACCESS DRIVE CROSS SECTIONS
- 9 OF 19 WELL PAD CROSS SECTIONS
- 10 OF 19 NOTES AND DETAIL SHEET
- 11 OF 19 NOTES AND DETAIL SHEET
- 12 OF 19 NOTES AND DETAIL SHEET
- 13 OF 19 NOTES AND DETAIL SHEET
- 14 OF 19 NOTES AND DETAIL SHEET
- 15 OF 19 RECLAMATION PLAN
- 16 OF 19 EVAPORATION HOIST PLAN - USDO
- 17 OF 19 EVAPORATION HOIST PLAN - USDO
- 18 OF 19 WELL PAD BUFFER PLAN

LOCATION COORDINATES

CENTER OF WELL PAD (NAD83)
LAT: 39.926237
LONG: -80.630295

ACCESS ENTRANCE (NAD83)
LAT: 39.928734
LONG: -80.631420

GENERAL DESCRIPTION

THE PROPOSED WELL PAD SITE IS CURRENTLY UNDEVELOPED LAND AND ACCESS ROAD CROSSES OVER ONE (1) WETLAND AND ONE (1) STREAM. THE PROPOSED CONSTRUCTION WILL INVOLVE CONSTRUCTING A WELL PAD AND ACCESS IN COMPLIANCE WITH WV DEP REQUIREMENTS.

ENTRANCE PERMIT

AMERICAN PETROLEUM PARTNERS WILL OBTAIN AN ENCROACHMENT PERMIT (FORM MM-109) FROM WVDOH PRIOR TO COMMENCEMENT OF CONSTRUCTION.

FLOODPLAIN NOTE

THE SITE IS NOT LOCATED INSIDE OF ANY FLOOD ZONES PER FEMA FLOOD MAP #4004/00082E WITH AN EFFECTIVE DATE 04/25/2009.

ENVIRONMENTAL NOTES

STREAM AND WETLAND DELINEATIONS WERE PERFORMED ON MARCH 15, 2019 BY RETIEW ASSOCIATES TO REVIEW THE SITE FOR WATERS AND WETLANDS THAT ARE MOST LIKELY WITHIN THE REGULATORY JURISDICTION OF THE U.S. ARMY CORPS OF ENGINEERS (USACE) AND/OR THE WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION (WV DEP).

WELL LOCATION RESTRICTIONS

- 1. WELL PAD IS TO COMPLY WITH WELL LOCATION RESTRICTIONS OF WV CODE 22-5A-12. THE PADS COMPLY WITH THE FOLLOWING:
 - a. 250' FROM AN EXISTING OR DEVELOPED SPRING USED FOR DOMESTIC CONSUMPTION OR DOMESTIC ANIMALS.
 - b. 500' FROM AN EXISTING DWELLING OR BARN GREATER THAN 2000 SF USED FOR POLYDRIER OR BARN MEASURED FROM THE CENTER OF THE PAD.
 - c. 200' FROM EDGE OF DISTURBANCE TO NATURALLY FORMING TROUGH STREAMS.
 - d. 1000' OF SURFACE OR GROUND WATER INTAKE TO A PUBLIC WATER SUPPLY.
- 2. THE SITE MEETS THE 100' RESTRICTION FROM EDGE OF DISTURBANCE TO PERENNIAL STREAMS, NATURAL OR ARTIFICIAL LAKE, POND OR RESERVOIR. A PROFILE WILL BE OBTAINED FROM THE LIMITED STATES ARMY CORPS OF ENGINEERS FOR AN IMPACT TO WETLANDS WITHIN THE 100' RESTRICTION ZONE.

NO.	DATE	REVISION
1	10/10/19	ISSUED WELL BUFFER PLAN
2	10/27/19	REVISED PER WEST COMMENTS
3	11/4/2019	REVISED PER WEST COMMENTS

FOR REVIEW ASSOCIATES BY	
MANAGER:	AS NOTED
OWNER:	
DATE:	

CLIENT	
AMERICAN PETROLEUM PARTNERS OPERATING, LLC	
4600 J. BARNETT COURT	
SUITE 210	
CANNONBURG, PA 15317	

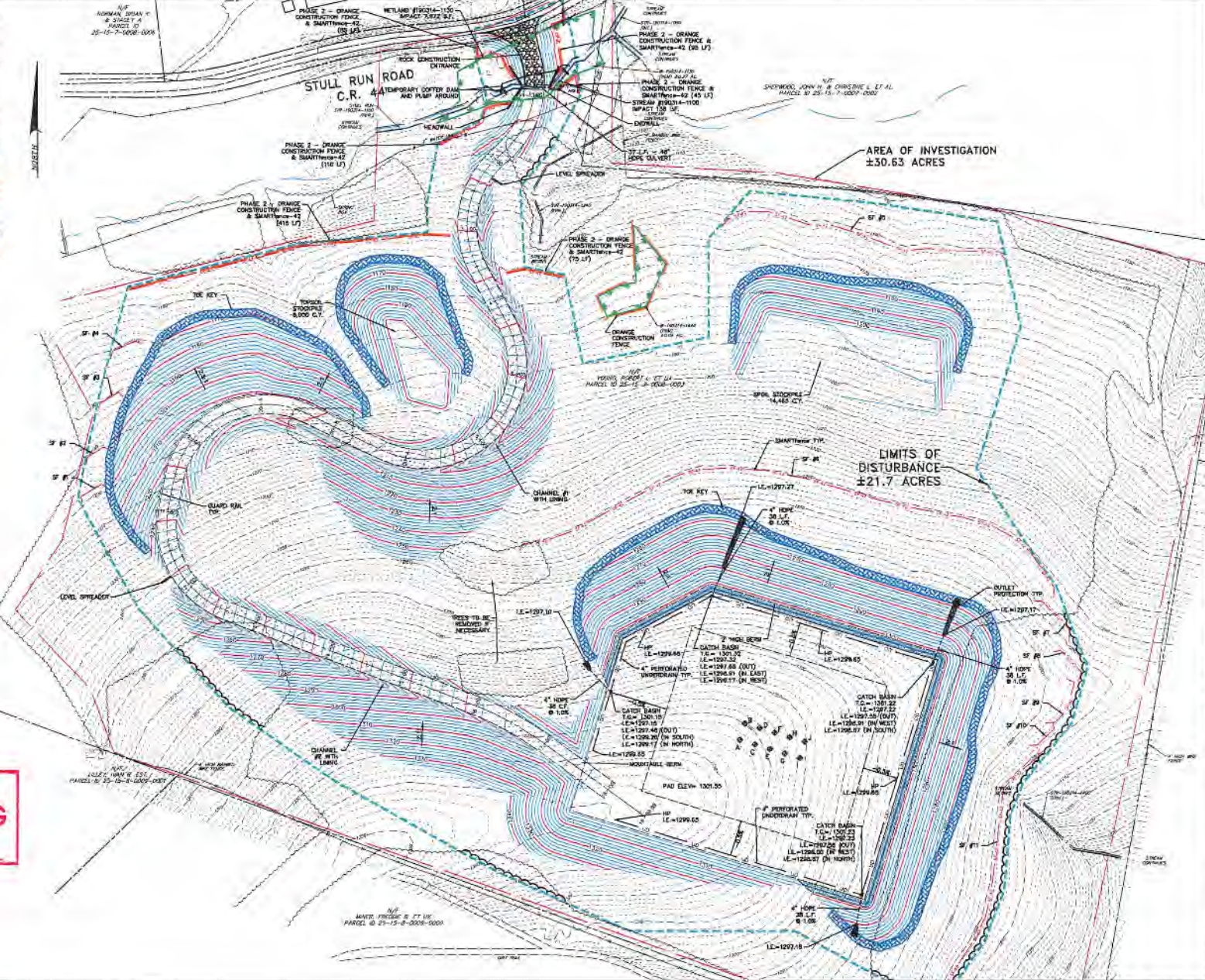
COVER SHEET	
DATE:	02/20/19
SHEET NO.	1 OF 19
DWG. NO.	1055E2007

FINAL PLANS	
KING'S LANDING WELL PAD	
MARSHALL COUNTY, WEST VIRGINIA	

NOT FOR CONSTRUCTION/NOT FOR BIDDING

LEGEND

EXISTING PROPERTY LINE	---
EXISTING FENCE	---
EXISTING EASEMENT LINE	---
EXISTING ADJACENT LOT LINE	---
EXISTING MOOR CONTOUR LINE	---
EXISTING UTILITY LINE	---
EXISTING CHANNEL EXISTING LINE	---
EXISTING SHADYBANK EROSION LINE	---
EXISTING GAS LINE	---
EXISTING SHADYBANK EROSION LINE	---
EXISTING STAKE LINE	---
EXISTING STREAM	---
EXISTING ROAD	---
COUNTY LINE	---
DISTRICT LINE	---
PROPOSED MAJOR CONDUIT LINE	---
PROPOSED MAJOR DRAINAGE LINE	---
PROPOSED TRENCH	---
PROPOSED DRIVE	---
PROPOSED STORM PIPE	---
LIMITS OF DISTURBANCE	---
PROPOSED DITCH	---
PROPOSED CONSTRUCTION THICK	---



APPROVED
WVDEP OOG
10/11/19 11/5/2019

SCALE: 1"=40'

0 50' 100'

FOR BETTER ASSOCIATES INC.

NO.	DATE	REVISION
1	10/17/19	ISSUED WELL BUFFER PLAN
2	10/27/19	REVISED PER WVDEP COMMENTS
3	11/14/19	REVISED PER WVDEP COMMENTS

MANAGER:	BJ BATTERSIN, P.E.
DESIGN BY:	JOHN
DATE:	11/5/2019
SCALE:	1"=40'

AMERICAN PETROLEUM PARTNERS
4800 J. FRANKLIN COOPER
CANTONSBURG, PA 15317

RETENW
RETENW ASSOCIATES, INC.
1000 W. MARKET STREET, SUITE 200
CANTONSBURG, PA 15317
Phone: (412) 444-2333
Fax: (412) 444-2334
www.retenw.com

GRADING & EROSION CONTROL PLAN
FINAL PLANS
FOR
KINGS LANDING WELL PAD
MARSHALL COUNTY, WEST VIRGINIA
WHEELING TAX DISTRICT

DATE:	03/20/19
SHEET NO.:	4 OF 16
DWG. NO.:	108562607

NOT FOR CONSTRUCTION/NOT FOR BIDDING