

**COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
OFFICE OF OIL & GAS MANAGEMENT**

PERMIT APPLICATION TO DRILL AND OPERATE AN UNCONVENTIONAL WELL

APPLICANT INFORMATION				
Applicant (Operator) Name RANGE RESOURCES APPALACHIA LLC	Legal Name RANGE RESOURCES - APPALACHIA, LLC	DEP Client ID# 141142	Phone 724-743-5260	FAX 724-743-6790
Mailing Address (Street or PO Box) 3000 TOWN CENTER BLVD	Address 2			
City CANONSBURG	State PA	Zip +4 15317		
Email Address lrusmisl@rangeresources.com	24/7 Emergency Contact Name / Number THOMAS STEWART 724-825-9772			

WELL INFORMATION			
(Well) Farm Name SASSO LEONARD UNIT			
Well # 12H	Serial #	Project # (from DEP)	
County WASHINGTON	Municipality SMITH TWP	911 Address of Well site (or nearest intersection) 822 JOFFRE CHERRY VALLEY RD BURGETTSTOWN PA 15021	
Is this an Unconventional well? Y	Is this a Coal well? N	Bond Agreement ID 6855 - BLANKET (\$850,000)	Well Deepest Point (TVD) 6240

WELLBORE INFORMATION			
Wellbore Number 1	Wellbore Name WELLBORE SURFACE HOLE LOCATION	Type of Wellbore GAS	Wellbore Configuration Horizontal Well

WELL PAD INFORMATION			
Well Pad Name SASSO LEONARD			
Is this well covered under an ESCGP? Y	ESCGP Number 955803	Will this well be built on a well pad? Y	Well Pad 145554-SASSO LEONARD

COORDINATION QUESTIONS	
Will the well be subject to the Oil and Gas Conservation Law?	N
Will either the edge of the disturbed area of any portion of the well site of the unconventional well be within 100 feet, or the vertical well bore be within 300 feet, from the edge of any solid blue lined stream, spring or body of water identified on the most current 7 1/2 topographic quadrangle map or wetland greater than one acre in size or in a wetland?	N
Will the well penetrate or be within 3,000 feet of an active gas storage reservoir boundary?	N
Is the proposed well location within the permitted perimeter of an active, abandoned or proposed landfill?	N
Will the vertical well bore of the unconventional well be drilled within 500 feet from any existing building or an existing water supply?"	N
Will the vertical well bore of the unconventional well be drilled within 1,000 feet from any existing water well, surface water intake, reservoir or other water supply extraction point used by the water purveyor?	N
Is this permit application for a well that will be drilled on an existing well site that has an active permitted well, or currently valid permit on this well site, for a well that was permitted on or before April 16, 2012?	N
Will the well be located where it may impact a public resource as outlined in the 'Coordination of a Well Location with Public Resources' form 5500 PM-OG0076?	N
Will any portion of the well site be located within a Special Protection watershed?	N
Is this well part of a development which disturbs more than 5 acres?	Y
Will the well or well site be located within a defined 100 year floodplain or where the floodplain is undefined, within 100 feet of the top of the bank of a perennial stream or within 50 feet of the top of the bank of an intermittent stream?	N
Is the well to be located within a 1-mile radius of a well drilled to or through the same formation where hydrogen sulfide (H2S) has been found while drilling?	N
Did you have a PNDI hit for the PA Department of Conservation and Natural Resources Bureaus of Forestry and Topographic and Geologic Survey?	N
Did you have a PNDI hit for the PA Fish and Boat Commission?	N
Did you have a PNDI hit for the PA Game Commission?	N
Did you have a PNDI hit for the U.S. Fish and Wildlife Service?	N

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WELLBORE SURFACE-HOLE LOCATION	
Surface elevation (in ft.)	1072
Latitude/Longitude	40 22 04.5100 -80 21 28.1200
Metadata Method	GPS - UNSPECIFIED
Accuracy (in ft.)	2
Datum	North American Datum of 1983
Reference Elevation	1072
USGS Map Name	MIDWAY
USGS Map Section #	1
Offset South (in feet)	2579
Offset West (in feet)	6819

WELLBORE LOCATION INFORMATION	
WELLBORE SURFACE HOLE LOCATION	
Type of Wellbore	GAS
Wellbore Configuration	Horizontal Well
Target Formation	MARCELLUS FORMATION(MARCF)
Producing Formation	MARCELLUS FORMATION(MARCF)
Oldest Formation Penetrated	MARCELLUS FORMATION(MARCF)
Wellbore Origin Point Lat/Long	40 22 04.5100 -80 21 28.1200
Wellbore Origin Point True Vertical Depth (TVD)	0
Wellbore Origin Point Total Measured Distance (TMD)	0
Wellbore Deepest Point Lat/Long	40 22 19.2300 -80 21 10.2100
Wellbore Deepest Point True Vertical Depth (TVD)	6240
Wellbore Deepest Point Total Measured Distance (TMD)	7735
Bottom Hole Lat/Long	40 23 39.9000 -80 22 14.5000
Bottom Hole True Vertical Depth (TVD)	6240
Bottom Hole Total Measured Distance (TMD)	17295

WELL PAD LOCATION INFORMATION		
Well Pad Corner 1 Lat/Long	40 22 07.0100	-80 21 27.1400
Well Pad Corner 2 Lat/Long	40 22 05.2200	-80 21 24.9400
Well Pad Corner 3 Lat/Long	40 22 01.8400	-80 21 29.3800
Well Pad Corner 4 Lat/Long	40 22 04.0700	-80 21 32.0800
Well Site GPS Location Lat/Long	40 22 04.1600	-80 21 28.5100
Well Site Access Road GPS Lat/Long	40 22 09.2600	-80 21 50.3600
Metadata Method GPS - UNSPECIFIED	Accuracy (in ft.) ±2	Datum North American Datum of 1983

SUBMISSION INFORMATION	
Pursuant to the Pennsylvania Electronic Transactions Act - Act 69, you are about to engage in an electronic transaction with the Commonwealth of Pennsylvania. You are submitting official information. Any false statement is subject to substantial civil and criminal penalties, including 18 P.S. section 4904 (relating to unsworn falsification to authorities).	
I hereby certify that, for all interested parties identified in this application for which written consent or an "Affidavit of Non-Delivery of Certified Mail" has not been uploaded, copies of the well plat have been sent via certified mail and I have received a return receipt verifying delivery.	
Submitted By	LAURA RUSMISEL
Document Generated	12/08/2017 02:44:44 PM

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INTERESTED PARTIES			
Interested Party ALFRED MATTIE ESTATE JOHN EDMOND	Address 122 RAYMOND STREET BURGETTSTOWN, PA 15021	Notifications WPU - Surface Landowners and Water Purveyors with water supplies less than 3000 ft	
Municipality	Notified MAIL	Certified Mail Sent Date 10/09/2017	Certified Mail Delivery Date 10/10/2017
Address Affidavit N	Written Consent N	Notification Acknowledgement Date	Uploaded Files
Water Source Locations 40 21 38.4000 -80 21 33.4100 Water Well - Private Supply			
Interested Party BIRCH RIDGE VILLAGE LP	Address 501 WASHINGTON AVE BRIDGEVILLE, PA 15017	Notifications WPU - Surface Landowners and Water Purveyors with water supplies less than 3000 ft	
Municipality	Notified MAIL	Certified Mail Sent Date 10/09/2017	Certified Mail Delivery Date 10/10/2017
Address Affidavit N	Written Consent N	Notification Acknowledgement Date	Uploaded Files
Water Source Locations 40 22 22.9600 -80 21 35.6700 Surface Water Body - Private Supply			
Interested Party BURGETTSTOWN BOROUGH	Address 1509 MAIN STREET BURGETTSTOWN, PA 15021	Notifications MU - Municipalities	
Municipality BURGETTSTOWN BOROUGH	Notified MAIL	Certified Mail Sent Date 10/09/2017	Certified Mail Delivery Date 10/10/2017
Address Affidavit N	Written Consent N	Notification Acknowledgement Date	Uploaded Files
Water Source Locations			
Interested Party CHERRY VALLEY COAL MINING CO	Address 16 PETRICCA DR BURGETTSTOWN, PA 15021	Notifications WPU - Surface Landowners and Water Purveyors with water supplies less than 3000 ft	
Municipality	Notified MAIL	Certified Mail Sent Date 10/09/2017	Certified Mail Delivery Date 10/10/2017
Address Affidavit N	Written Consent N	Notification Acknowledgement Date	Uploaded Files
Water Source Locations 40 21 41.0400 -80 21 44.8600 Surface Water Body - Private Supply 40 21 42.2400 -80 21 42.1600 Surface Water Body - Private Supply 40 21 54.5200 -80 21 44.2600 Surface Water Body - Private Supply			
Interested Party CROSS CREEK TOWNSHIP	Address 28 CLARK AVE AVELLA, PA 15312	Notifications MU - Municipalities	
Municipality CROSS CREEK TOWNSHIP	Notified MAIL	Certified Mail Sent Date 10/09/2017	Certified Mail Delivery Date 10/10/2017
Address Affidavit N	Written Consent N	Notification Acknowledgement Date	Uploaded Files
Water Source Locations			
Interested Party EDWARD J & CANDY LUKON	Address 28 LUKON LANE BURGETTSTOWN, PA 15021	Notifications WPU - Surface Landowners and Water Purveyors with water supplies less than 3000 ft	
Municipality	Notified MAIL	Certified Mail Sent Date 10/09/2017	Certified Mail Delivery Date 10/10/2017
Address Affidavit N	Written Consent N	Notification Acknowledgement Date	Uploaded Files
Water Source Locations 40 21 44.1700 -80 21 16.3600 Surface Water Body - Private Supply			
Interested Party G & D GENERAL CONTRACTING INC	Address 1537 MAIN STREET BURGETTSTOWN, PA 15021	Notifications WPU - Surface Landowners and Water Purveyors with water supplies less than 3000 ft	
Municipality	Notified MAIL	Certified Mail Sent Date 10/09/2017	Certified Mail Delivery Date 10/11/2017
Address Affidavit N	Written Consent N	Notification Acknowledgement Date	Uploaded Files
Water Source Locations 40 22 14.8100 -80 21 47.2700 Water Well - Private Supply			
Interested Party HANOVER TOWNSHIP	Address 11 MUNICIPAL DRIVE BURGETTSTOWN, PA 15021	Notifications MU - Municipalities	

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Municipality HANOVER TOWNSHIP	Notified MAIL	Certified Mail Sent Date 10/09/2017	Certified Mail Delivery Date 10/10/2017
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Water Source Locations			

Interested Party INDEPENDENCE MARSH FOUNDATION	Address 156 COWPATH RD ALIQUIPPA, PA 15001	Notifications WPU - Surface Landowners and Water Purveyors with water supplies less than 3000 ft	
Municipality	Notified MAIL	Certified Mail Sent Date 10/12/2017	Certified Mail Delivery Date 10/13/2017
Address Affidavit N	Written Consent N	Notification Acknowledgement Date	Uploaded Files
Water Source Locations 40 22 00.9100 -80 21 40.0200 Surface Water Body - Private Supply 40 22 02.8600 -80 21 38.9700 Surface Water Body - Private Supply			

Interested Party JAMES ALAN MCFARLAND	Address 4 SCHOOL DR BURGETTSTOWN, PA 15021	Notifications WPU - Surface Landowners and Water Purveyors with water supplies less than 3000 ft	
Municipality	Notified MAIL	Certified Mail Sent Date 10/09/2017	Certified Mail Delivery Date 10/10/2017
Address Affidavit N	Written Consent N	Notification Acknowledgement Date	Uploaded Files
Water Source Locations 40 22 16.4000 -80 21 46.0500 Water Well - Private Supply			

Interested Party JEFFERSON TOWNSHIP	Address 670 CEDAR GROVE RD BURGETTSTOWN, PA 15021	Notifications MU - Municipalities	
Municipality JEFFERSON TOWNSHIP	Notified MAIL	Certified Mail Sent Date 10/09/2017	Certified Mail Delivery Date 10/10/2017
Address Affidavit N	Written Consent N	Notification Acknowledgement Date	Uploaded Files
Water Source Locations			

Interested Party JOHN C & ROSEANN PHILLIS	Address 529 PHILLIS RD BURGETTSTOWN, PA 15021	Notifications WPU - Surface Landowners and Water Purveyors with water supplies less than 3000 ft	
Municipality	Notified MAIL	Certified Mail Sent Date 10/09/2017	Certified Mail Delivery Date 10/10/2017
Address Affidavit N	Written Consent N	Notification Acknowledgement Date	Uploaded Files
Water Source Locations 40 21 48.1300 -80 21 03.0700 Surface Water Body - Private Supply 40 21 51.2000 -80 20 54.4300 Surface Water Body - Private Supply 40 22 11.0500 -80 20 57.5100 Surface Water Body - Private Supply			

Interested Party JOSEPH E MYERS	Address 882 JOFFRE CHERRY VALLEY RD BURGETTSTOWN, PA 15021	Notifications WPU - Surface Landowners and Water Purveyors with water supplies less than 3000 ft	
Municipality	Notified MAIL	Certified Mail Sent Date 10/09/2017	Certified Mail Delivery Date 10/10/2017
Address Affidavit N	Written Consent N	Notification Acknowledgement Date	Uploaded Files
Water Source Locations 40 22 26.0200 -80 21 47.2600 Water Well - Private Supply			

Interested Party LPS INVESTMENT PARTNERSHIP	Address 492 STATEN AVE UNIT 501 OAKLAND, CA 94610	Notifications SL - Surface Landowner WPU - Surface Landowners and Water Purveyors with water supplies less than 3000 ft	
Municipality	Notified MAIL	Certified Mail Sent Date 10/09/2017	Certified Mail Delivery Date 10/16/2017
Address Affidavit N	Written Consent N	Notification Acknowledgement Date	Uploaded Files
Water Source Locations 40 22 00.2600 -80 21 48.1900 Surface Water Body - Private Supply 40 22 01.3300 -80 21 49.6800 Surface Water Body - Private Supply 40 22 01.4300 -80 21 51.4600 Surface Water Body - Private Supply			

Interested Party MARY Z BIANCHINI & LINDA BAVIELLO	Address 655 JOFFRE CHERRY VALLEY RD BURGETTSTOWN, PA 15021	Notifications WPU - Surface Landowners and Water Purveyors with water supplies less than 3000 ft	
Municipality	Notified MAIL	Certified Mail Sent Date 10/09/2017	Certified Mail Delivery Date 10/10/2017

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Address Affidavit N	Written Consent N	Notification Acknowledgement Date	Uploaded Files
Water Source Locations 40 21 36.8700 -80 21 27.2800 Water Well - Private Supply			
Interested Party MIDWAY BOROUGH	Address 304 NOBLESTOWN RD MIDWAY, PA 15060	Notifications MU - Municipalities	
Municipality MIDWAY BOROUGH	Notified MAIL	Certified Mail Sent Date 10/09/2017	Certified Mail Delivery Date 10/10/2017
Address Affidavit N	Written Consent N	Notification Acknowledgement Date	Uploaded Files
Water Source Locations			
Interested Party MT PLEASANT TOWNSHIP	Address 31 MCCARRELL RD HICKORY, PA 15340	Notifications MU - Municipalities	
Municipality MT PLEASANT TOWNSHIP	Notified MAIL	Certified Mail Sent Date 10/09/2017	Certified Mail Delivery Date 10/10/2017
Address Affidavit N	Written Consent N	Notification Acknowledgement Date	Uploaded Files
Water Source Locations			
Interested Party RICHARD B CIPRANIC	Address 900 JOFFRE CHERRY VALLEY RD BURGETTSTOWN, PA 15021	Notifications WPU - Surface Landowners and Water Purveyors with water supplies less than 3000 ft	
Municipality	Notified MAIL	Certified Mail Sent Date 10/09/2017	Certified Mail Delivery Date 10/10/2017
Address Affidavit N	Written Consent N	Notification Acknowledgement Date	Uploaded Files
Water Source Locations 40 22 27.9000 -80 21 44.5400 Water Well - Private Supply			
Interested Party RICHARD JR & DANA BONGIORNI	Address 7 LUKON LANE BURGETTSTOWN, PA 15021	Notifications WPU - Surface Landowners and Water Purveyors with water supplies less than 3000 ft	
Municipality	Notified MAIL	Certified Mail Sent Date 10/09/2017	Certified Mail Delivery Date 10/10/2017
Address Affidavit N	Written Consent N	Notification Acknowledgement Date	Uploaded Files
Water Source Locations 40 21 48.7600 -80 21 18.7200 Water Well - Private Supply			
Interested Party ROBERT C CASSIDY IV & ROBERT C IV & CATHY L CASSIDY	Address 7 CASSIDY DR BURGETTSTOWN, PA 15021	Notifications WPU - Surface Landowners and Water Purveyors with water supplies less than 3000 ft	
Municipality	Notified MAIL	Certified Mail Sent Date 10/09/2017	Certified Mail Delivery Date 10/10/2017
Address Affidavit N	Written Consent N	Notification Acknowledgement Date	Uploaded Files
Water Source Locations 40 22 15.6900 -80 21 57.6600 Water Well - Private Supply 40 22 17.8800 -80 21 57.4200 Water Well - Private Supply			
Interested Party ROBERT E & LOUISE MCFALL	Address 656 JOFFRE CHERRY VALLEY RD BURGETTSTOWN, PA 15021	Notifications WPU - Surface Landowners and Water Purveyors with water supplies less than 3000 ft	
Municipality	Notified MAIL	Certified Mail Sent Date 10/09/2017	Certified Mail Delivery Date 10/10/2017
Address Affidavit N	Written Consent N	Notification Acknowledgement Date	Uploaded Files
Water Source Locations 40 21 38.4800 -80 21 27.4600 Water Well - Private Supply			
Interested Party ROBINSON TOWNSHIP	Address 8400 NOBLESTOWN RD MCDONALD, PA 15057	Notifications MU - Municipalities	
Municipality ROBINSON TOWNSHIP	Notified MAIL	Certified Mail Sent Date 10/09/2017	Certified Mail Delivery Date 10/10/2017
Address Affidavit N	Written Consent N	Notification Acknowledgement Date	Uploaded Files
Water Source Locations			
Interested Party	Address	Notifications	

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SMITH TOWNSHIP	1848 SMITH TOWNSHIP STATE ROAD SLOVAN, PA 15078	MU - Municipalities	
Municipality SMITH TOWNSHIP	Notified MAIL	Certified Mail Sent Date 10/09/2017	Certified Mail Delivery Date 10/10/2017
Address Affidavit N	Written Consent N	Notification Acknowledgement Date	Uploaded Files
Water Source Locations			
Interested Party STEVE ZIBRITOSKY	Address 14 APPLE WAY JOFFRE, PA 15053	Notifications WPU - Surface Landowners and Water Purveyors with water supplies less than 3000 ft	
Municipality	Notified MAIL	Certified Mail Sent Date 10/09/2017	Certified Mail Delivery Date 10/10/2017
Address Affidavit N	Written Consent N	Notification Acknowledgement Date	Uploaded Files
Water Source Locations 40 22 29.3600 -80 21 49.0900 Water Well - Private Supply			

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UPLOADED FILES		
Attachment Justification for Non-Coal Well	File Name Sasso Leonard Unit 12H Non Coal Justification.pdf	File Upload Date 09/21/2017
Cryptographic Hash Value of File (SHA-512) 4F8D997315B284A337BB7054CE6441E81C3A2FF65704FB5302C8EFBA63EF8A5E58DB03F6931E8708F58D1C3D2D78D12AB09D541D6A737D3A5D65B3B344E9DAE4		
Attachment Location Plat	File Name Sasso Leonard Unit 12H Plat PG1.dwg	File Upload Date 10/16/2017
Cryptographic Hash Value of File (SHA-512) 3F8C1949F5F574F00609E420235AB5B96C4038B7A5BA7E9DB8893E557C93AFC2707247FC8FEDD7BA3E85F6E9F4EADB105FBE81DD1296F9CF898453C2F316E93B		
Attachment Pennsylvania Natural Diversity Inventory Form	File Name SASSO LEONARD 10108 PNDI - 8-9-2017 - CLEAR.pdf	File Upload Date 09/21/2017
Cryptographic Hash Value of File (SHA-512) D5885988EB6A11BD181BE46F07A6F6B074B92D5CC99A35A477496FDA8879EBA7A1A1B60269826FF5DA992ED387289CF29B18B98DC17CD70F6380BA5F02AB9F5		
Attachment Location Plat	File Name Sasso Leonard Unit 12H Plat PG2.dwg	File Upload Date 10/16/2017
Cryptographic Hash Value of File (SHA-512) 37EF30D70A6688A3E9C6993AD7A559570C856E3946213CEA2F07C2DBE12019C1B8CB079276BAB078FED2FD16D60ABA404F075377C6C0207F03010B4BEEA2E049		
Attachment Location Plat	File Name Sasso Leonard Unit 12H Plat PG3.dwg	File Upload Date 10/16/2017
Cryptographic Hash Value of File (SHA-512) 20F305BA910547392E871E4A28CA170D3C3D6D2139D3247A72391FDF3B16CD6E1B1981F9B057609D324D00475592AAA862A136B962C60B4FC4B3B7C3E3CEDD3E		
Attachment Operator Ownership and Control Information	File Name Ownership_Control Form 2016_05_05_14_22_19.pdf	File Upload Date 09/21/2017
Cryptographic Hash Value of File (SHA-512) D1F1A796E9FE98E3E7297C9B3679B71788F208C50D88E6D8E20C32BF72BD0CE132B3DF02D3F0065A77AA70A6B633D59BFD7462CC347817CB95FC796254C48A3B		
Attachment Well Cross-Section Diagram	File Name Sasso Leonard Unit 12H Cross Section PG4.pdf	File Upload Date 10/16/2017
Cryptographic Hash Value of File (SHA-512) 8F35845542D4E0B791E09D5A297D655B79EC11FFC50C357068CD8A360BB44B1E75F64FFDB63594156421C754C96A5345346D6B98D768A05B59B4F0966BBD2D03		