

**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 RICE DRILLING B LLC	Legal Name RICE DRILLING B LLC	DEP Client ID# 268470	Phone 724-271-7200	FAX 724-749-5581
Mailing Address (Street or PO Box) 2200 RICE DRIVE	Address 2			
City CANONSBURG	State PA	Zip +4 15317		
Email Address erin.spine@riceenergy.com	24/7 Emergency Contact Name / Number MIKE LAUDERBAUGH 724-809-9897			

WELL INFORMATION			
(Well) Farm Name DRAGON CHAN			
Well # 2	Serial #	Project # (from DEP)	
County GREENE	Municipality SPRINGHILL TWP	911 Address of Well site (or nearest intersection) 641 MORFORD ROAD ALEPPO PA 15310	
Is this an Unconventional well? Y	Is this a Coal well? Y	Bond Agreement ID 11936 - BLANKET (\$459,000)	Well Deepest Point (TVD) 7680

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 DRAGON CHAN			
Is this well covered under an ESCGP? Y	ESCGP Number 1162505	Will this well be built on a well pad? Y	Well Pad 154227-DRAGON CHAN

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

COAL MODULE	
Will the well penetrate a workable coal seam?	Y
Have any coal rights been severed from the surface estate?	Y



**pennsylvania**  
DEPARTMENT OF ENVIRONMENTAL PROTECTION

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

**PERMIT APPLICATION TO DRILL AND OPERATE AN UNCONVENTIONAL WELL**

If the coal rights been severed from the surface estate, have the owners of the workable and unworkable coal seams been notified?	Y
Is this a "non-conservation" gas well?	Y
If the well will penetrate a workable coal seam, and the well is a 'non-conservation' gas well, does the location comply with the distance requirements of Section 7 of the Coal and Gas Resource Coordination Act (at least 1,000 feet from all existing wells) and, if part of a well cluster, at least 2,000 feet from any other existing cluster, as measured from the center of the well bore of the nearest well?	Y
Will the well be part of a Well Cluster which is an area within a well pad intended to host multiple horizontal wells and which comprises an area no greater than 5,000 square feet?	Y
Will this well be part of a Well Cluster that already has an approved OG-57 waiver?	N
Will this well be drilled into solid coal or into an open underground void?	SC
Will the well be drilled through an operating coal mine, or within 1,000 feet of the boundary?	N
Has the surface landowner been notified and provided a copy of the Landowner Notification of Right to Participate in Alternative Dispute Resolution to Coal Bed Methane Wells (form 5500-FM-OG0053)?	N

PERMIT APPLICATION TO DRILL AND OPERATE AN UNCONVENTIONAL WELL

WELLBORE SURFACE-HOLE LOCATION	
Surface elevation (in ft.)	1485
Latitude/Longitude	39 47 14.0400 -80 30 35.0700
Metadata Method	GPS CARRIER PHASE KINEMATIC RELATIVE POSITION
Accuracy (in ft.)	3
Datum	North American Datum of 1983
Reference Elevation	1485
USGS Map Name	CAMERON WV
USGS Map Section #	9
Offset South (in feet)	1651
Offset West (in feet)	2786

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	39 47 14.0400 -80 30 35.0700
Wellbore Origin Point True Vertical Depth (TVD)	0
Wellbore Origin Point Total Measured Distance (TMD)	0
Wellbore Deepest Point Lat/Long	39 46 00.5000 -80 30 24.7000
Wellbore Deepest Point True Vertical Depth (TVD)	7680
Wellbore Deepest Point Total Measured Distance (TMD)	14957
Bottom Hole Lat/Long	39 46 00.5000 -80 30 24.7000
Bottom Hole True Vertical Depth (TVD)	7680
Bottom Hole Total Measured Distance (TMD)	14957

WELL PAD LOCATION INFORMATION		
Well Pad Corner 1 Lat/Long	39 47 15.5375 -80 30 31.0823	
Well Pad Corner 2 Lat/Long	39 47 17.0715 -80 30 32.8816	
Well Pad Corner 3 Lat/Long	39 47 12.5222 -80 30 38.5249	
Well Pad Corner 4 Lat/Long	39 47 11.5585 -80 30 34.2701	
Well Site GPS Location Lat/Long	39 47 33.3900 -80 30 09.2800	
Well Site Access Road GPS Lat/Long	39 47 43.3600 -80 29 08.5800	
Metadata Method GPS CARRIER PHASE KINEMATIC RELATIVE POSITION	Accuracy (in ft.) ±5	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	ERIN SPINE
Document Generated	07/11/2017 10:06:58 AM

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

**PERMIT APPLICATION TO DRILL AND OPERATE AN UNCONVENTIONAL WELL**

INTERESTED PARTIES			
Interested Party <b>ALEPPO TOWNSHIP</b>	Address 815 ALEPPO ROAD NEW FREEPORT, PA 15352	Notifications MU - Municipalities	
Municipality <b>ALEPPO TOWNSHIP</b>	Notified MAIL	Certified Mail Sent Date 01/30/2017	Certified Mail Delivery Date 02/09/2017
Address Affidavit N	Written Consent N	Notification Acknowledgement Date	Uploaded Files
Water Source Locations			
Interested Party <b>CONTURA COAL RESOURCES, LLC</b>	Address 158 PORTAL ROAD PO BOX 1020 WAYNESBURG, PA 15370	Notifications CO - Coal Owner	
Municipality	Notified MAIL	Certified Mail Sent Date 01/30/2017	Certified Mail Delivery Date 02/02/2017
Address Affidavit N	Written Consent N	Notification Acknowledgement Date	Uploaded Files
Water Source Locations			
Interested Party <b>DANIEL E. WEYRICK</b>	Address RD 3 BOX 161-D CAMERON, WV 26033	Notifications WPU - Surface Landowners and Water Purveyors with water supplies less than 3000 ft	
Municipality	Notified MAIL	Certified Mail Sent Date 01/30/2017	Certified Mail Delivery Date 02/02/2017
Address Affidavit N	Written Consent N	Notification Acknowledgement Date	Uploaded Files
Water Source Locations 39 47 09.0000 -80 31 10.9900 Water Well - Private Supply			
Interested Party <b>FREEPORT TOWNSHIP</b>	Address 773 GOLDEN OAKS ROAD NEW FREEPORT, PA 15352	Notifications MU - Municipalities	
Municipality <b>FREEPORT TOWNSHIP</b>	Notified MAIL	Certified Mail Sent Date 01/30/2017	Certified Mail Delivery Date 02/02/2017
Address Affidavit N	Written Consent N	Notification Acknowledgement Date	Uploaded Files
Water Source Locations			
Interested Party <b>GILMORE TOWNSHIP</b>	Address 181 HERO ROAD NEW FREEPORT, PA 15352	Notifications MU - Municipalities	
Municipality <b>GILMORE TOWNSHIP</b>	Notified MAIL	Certified Mail Sent Date 01/30/2017	Certified Mail Delivery Date 02/02/2017
Address Affidavit N	Written Consent N	Notification Acknowledgement Date	Uploaded Files
Water Source Locations			
Interested Party <b>GREG MEREDITH, ET UX</b>	Address 11 MILWEED PLACE PATASKALA, OH 43062	Notifications WPU - Surface Landowners and Water Purveyors with water supplies less than 3000 ft	
Municipality	Notified MAIL	Certified Mail Sent Date 01/30/2017	Certified Mail Delivery Date 02/03/2017
Address Affidavit N	Written Consent N	Notification Acknowledgement Date	Uploaded Files
Water Source Locations 39 47 02.5000 -80 30 13.8800 Water Well - Private Supply 39 47 03.8000 -80 30 11.0600 Water Well - Private Supply			
Interested Party <b>HELEN SIMMS</b>	Address 39325 FRENCH CREEK ROAD AVON, OH 44011	Notifications WPU - Surface Landowners and Water Purveyors with water supplies less than 3000 ft	
Municipality	Notified MAIL	Certified Mail Sent Date 01/30/2017	Certified Mail Delivery Date 02/03/2017
Address Affidavit N	Written Consent N	Notification Acknowledgement Date	Uploaded Files
Water Source Locations 39 47 44.7100 -80 30 36.7300 Surface Water Body - Private Supply			
Interested Party <b>JACK L. BEUTH JR., ET</b>	Address 1000 W INGOMAR ROAD	Notifications WPU - Surface Landowners and Water Purveyors with water supplies less than 3000 ft	

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

**PERMIT APPLICATION TO DRILL AND OPERATE AN UNCONVENTIONAL WELL**

UX	PITTSBURGH, PA 15237		
Municipality	Notified MAIL	Certified Mail Sent Date 01/30/2017	Certified Mail Delivery Date 02/04/2017
Address Affidavit N	Written Consent N	Notification Acknowledgement Date	Uploaded Files
Water Source Locations 39 47 35.5900 -80 30 42.5800 Water Well - Private Supply			
Interested Party JACKSON TOWNSHIP	Address 104 TUNNEL ROAD HOLBROOK, PA 15341	Notifications MU - Municipalities	
Municipality JACKSON TOWNSHIP	Notified MAIL	Certified Mail Sent Date 01/30/2017	Certified Mail Delivery Date 02/02/2017
Address Affidavit N	Written Consent N	Notification Acknowledgement Date	Uploaded Files
Water Source Locations			
Interested Party JERRY L. NEELY	Address 125 HARTS RUN ROAD ALEPPO, PA 15310	Notifications WPU - Surface Landowners and Water Purveyors with water supplies less than 3000 ft	
Municipality	Notified MAIL	Certified Mail Sent Date 01/30/2017	Certified Mail Delivery Date 02/03/2017
Address Affidavit N	Written Consent N	Notification Acknowledgement Date	Uploaded Files
Water Source Locations 39 47 24.5000 -80 31 01.1800 Surface Water Body - Private Supply 39 47 17.0400 -80 31 07.3600 Water Well - Private Supply 39 47 16.5900 -80 31 07.3200 Water Well - Private Supply 39 47 15.7300 -80 31 06.9500 Surface Water Body - Private Supply			
Interested Party PHILIP A. EVANS	Address 462 WAYNE BROWN ROAD BRUCETON MILLS, WV 26525	Notifications WPU - Surface Landowners and Water Purveyors with water supplies less than 3000 ft	
Municipality	Notified MAIL	Certified Mail Sent Date 01/30/2017	Certified Mail Delivery Date 02/02/2017
Address Affidavit N	Written Consent N	Notification Acknowledgement Date	Uploaded Files
Water Source Locations 39 46 43.1800 -80 30 38.7400 Water Well - Private Supply			
Interested Party ROBERT C. EVANS, JR. & PHILIP A. EVANS	Address 80 WILLOW DRIVE WASHINGTON, PA 15301	Notifications SL - Surface Landowner CO - Coal Owner WPWCU - Water Purveyor within 1000 ft	
Municipality	Notified MAIL	Certified Mail Sent Date 01/30/2017	Certified Mail Delivery Date 02/03/2017
Address Affidavit N	Written Consent N	Notification Acknowledgement Date	Uploaded Files
Water Source Locations 39 47 17.9900 -80 30 42.3900 Surface Water Body - Private Supply 39 47 20.2800 -80 30 42.6700 Water Well - Private Supply 39 46 51.6400 -80 31 01.4500 Water Well - Private Supply 39 46 47.8600 -80 30 51.9700 Water Well - Private Supply			
Interested Party SPRINGHILL TOWNSHIP	Address 268 WINDY GAP ROAD ALEPPO, PA 15310	Notifications MU - Municipalities	
Municipality SPRINGHILL TOWNSHIP	Notified MAIL	Certified Mail Sent Date 01/30/2017	Certified Mail Delivery Date 02/02/2017
Address Affidavit N	Written Consent N	Notification Acknowledgement Date	Uploaded Files
Water Source Locations			

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

**PERMIT APPLICATION TO DRILL AND OPERATE AN UNCONVENTIONAL WELL**

UPLOADED FILES		
Attachment Location Plat	File Name Dragon Chan 2_Final Sealed Dwg 7.10.2017.dwg	File Upload Date 07/10/2017
Cryptographic Hash Value of File (SHA-512) F1000AE5AACC93AC19734EF0FB10FD3D4A6CF64A4D0B948E4C4963DD6CD72FE1DCA061579D213F5B224F432B685E2394C22244EADA070A60C29B6B8A022EEDC8		
Attachment Pennsylvania Natural Diversity Inventory Form	File Name Dragon Chan PNDI 10.20.2016.pdf	File Upload Date 02/08/2017
Cryptographic Hash Value of File (SHA-512) B2948DFB0E970D6021DF53F463CD4E46CCE0A6F18DE3D56AA3ACADD221963D6F7AACC780C67F5D05B9B06D19913521F38B0F8417237379E5ED184A7B4F65E726		
Attachment Operator Ownership and Control Information	File Name SIGNED RDB Oil and Gas Operator Ownership and Control Information_8000-FM-OOGM0118.pdf	File Upload Date 02/10/2017
Cryptographic Hash Value of File (SHA-512) 7AA470855838797ACAA716F7AE61AD34A7C1B4C0CD6BD3833BA8B9B9AF94B533F6A0B201E5B9C885070BAFB40044D035BFFB1E1B65575A59565F4EFDAC2D8C95		
Attachment Well Cross-Section Diagram	File Name Dragon Chan 2_Cross-Section Diagram.pdf	File Upload Date 02/10/2017
Cryptographic Hash Value of File (SHA-512) 36F2E927BF807BD5EB438995D3E889DC7EA2FFE68D0158C90E127727D9CABEBC27686C917EE6ECA4BF8130E53738E8CBB056A990C3154DDD999CBA26BCCEA7		