




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

PERMIT APPLICATION TO DRILL AND OPERATE AN UNCONVENTIONAL WELL

Please read instructions before you begin filling in this form.

| WELL INFORMATION | | | | | | | | | | |
|---|---|--|------------------------------------|---|---|--|---|-------------------------------------|---|--|
| Well Operator Rice Drilling B LLC | | DEP ID# 268470 | Well API No. 37-059-27481-00-00 | | Well Farm Name Thunder 1 | | Well # 10 | | | |
| Address 2400 Ansys Drive, Suite 200 | | | LAT 39.826681 LONG - 80.279325 | | NAD 83 | Project Number | | Serial # 596194 | | |
| City Canonsburg | | State PA | Zip Code 15317 | Municipality Name/ City, Borough, Township Center / Township | | County Greene | | | | |
| Phone No. 724-271-7380 | | Fax No. 724-749-5581 | | Email espine@eqt.com | | USGS 7.5 min. quadrangle map Holbrook | | Section 6 | | |
| 24/7 Emergency Phone Contact No.: EQT Emergency Contact: 1-800-926-1759 | | | ESGP Permit No. ESX10-059-0080 | | | Well Pad (cluster) Name/Identification Hoover Access Road | | | | |
| 911 address of well site (if available) 466 Turkey Hollow Road, Waynesburg, PA 15370 | | | | | | | | | | |
| Surface Elev. 1410 | Deepest Formation to be Penetrated Marcellus | | Anticipated TVD 8026 | | PERMIT TYPE Check applicable. Application is to <input checked="" type="checkbox"/> Modify existing well/permit | | TYPE OF WELL Check applicable. <input checked="" type="checkbox"/> Gas <input type="checkbox"/> Comb. (gas & oil/condensate) Configuration <input type="checkbox"/> Vertical <input checked="" type="checkbox"/> Horizontal <input type="checkbox"/> Deviated <input type="checkbox"/> Multiple laterals | | APPLICATION FEE Check applicable. <input type="checkbox"/> Vertical <input checked="" type="checkbox"/> Non-vertical Total Application Fee \$ 5,250 | |
| Target Formation(s) Proposed for Production Marcellus | | Anticipated Target Top/Bottom TVD 7977 / 8074 | | Bond Agreement Id: RLB0014476 | | | | | | |
| Number of wellbore laterals proposed under this application 1. Total feet of wellbore to be drilled under this application 13566 Ft. | | | | | | | | | | |
| PNDI Attached: <input checked="" type="checkbox"/> Any threatened or endangered "hit" must include a demonstration of how the impact will be avoided or minimized and mitigated, or justification that section 78a.15(e) applies. | | | | | | | | | | |
| Application submitted as: <input checked="" type="checkbox"/> Coal well (Attach Coal Module) <input type="checkbox"/> Non coal well (Attach justification) | | | | | | | | | | |
| COORDINATION WITH REGULATIONS AND OTHER PERMITS | | | | | | | Yes | No | | |
| 1. Will the well be subject to the Oil and Gas Conservation Law? If "No," go to 2). | | | | | | | <input type="checkbox"/> | <input checked="" type="checkbox"/> | | |
| a. If "Yes" to #1, is the well at least 330 feet from outside lease or unit boundary? | | | | | | | <input type="checkbox"/> | <input type="checkbox"/> | | |
| b. Does the location fall within an area covered by a spacing order? | | | | | | | <input type="checkbox"/> | <input checked="" type="checkbox"/> | | |
| c. If the well will be multilateral, identify the wellbores on the sketch on page 3 of the plat that will be completed as conservation and non-conservation. | | | | | | | | | | |
| 2. Will the proposed limit of disturbance of the well site be within 100 feet measured horizontally from any watercourse or any high quality of exceptional value body of water or any wetland one acre or greater in size? | | | | | | | <input type="checkbox"/> | <input checked="" type="checkbox"/> | | |
| If yes, attach the following if applicable: a site-specific E&S control plan, a permit consistent with Chapter 102, applicable portions of the Pollution Prevention Control Plan, applicable portions of the Well Site Emergency Response Plan, applicable portions of the Site Containment Plan, the permit number of a Water Obstruction and Encroachment Permit issued pursuant to Chapter 105, or justification that section 78a.15(e) applies. | | | | | | | <input type="checkbox"/> | <input type="checkbox"/> | | |
| 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. | | | | | | | <input type="checkbox"/> | <input checked="" type="checkbox"/> | | |
| If yes, attach a plan that identifies the additional measure, facilities or practices to be employed during well site construction, drilling and operations to protect the waters of the Commonwealth | | | | | | | <input type="checkbox"/> | <input type="checkbox"/> | | |

| COORDINATION WITH REGULATIONS AND OTHER PERMITS (cont'd) | | Yes | No |
|---|--------------------------------------|--|-------------------------------------|
| 3. Will the vertical wellbore section penetrate or be within 3,000 feet of an active gas storage reservoir boundary? | | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| a. If Yes, print the names of: | Storage Field: _____ Operator: _____ | | |
| 4. Is the proposed well location within the permitted area of a landfill ? | | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 5. Will the vertical wellbore section of the unconventional well be drilled within 500 feet from any existing building or an existing water supply? | | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| a. If "Yes," is written consent from the owner attached? | | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| b. If written consent is not attached, is a variance request (form 8000-FM-OOGM0058) attached? | | <input type="checkbox"/> | <input type="checkbox"/> |
| 5.1. Will the vertical wellbore 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 a water purveyor? | | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| a. If "Yes," is written consent from the owner attached? | | <input type="checkbox"/> | <input type="checkbox"/> |
| b. If written consent is not attached, is a variance request (form 8000-FM-OOGM0058) attached? | | <input type="checkbox"/> | <input type="checkbox"/> |
| 6. Is this permit application for a well that will be drilled on a well site for which construction was completed prior to April 16, 2012? | | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| a. If "Yes," was there a permitted well at this well site prior to April 16, 2012? | | <input type="checkbox"/> | <input type="checkbox"/> |
| b. If the answer to question no. 6a is "Yes", provide the US Well Number (API No.) of the well permitted at this site prior to April 16, 2012. _____ | | <input type="checkbox"/> | <input type="checkbox"/> |
| 7. 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 8000-PM-OOGM0076? If yes, attach a completed copy of the form. | | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 8. Will any portion of the well site be in a Special Protection High Quality <input checked="" type="checkbox"/> (HQ) or Exceptional Value <input type="checkbox"/> (EV) watershed? Provide name of special protection watershed <u>Hargus Creek</u> . | | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 9. Is this well part of a development which requires an Earth Disturbance Permit for Oil and Gas Activities disturbing more than 5 acres? If yes, list the number of the ESCGP approval if the permit has been issued. ESX10-059-0080 If no, is this well part of a development that involves 1 to less than 5 acres of earth disturbance over the life of the project and is the answer to question no. 8 "Yes"? If yes, attach a site-specific E&S control plan. | | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 10. Is the well to be located within a H ₂ S area pursuant to §78a.77a? | | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 11. Attach a current Ownership & Control form 8000-FM-OOGM0118 with the first application submitted after the effective date of the final "Environmental Protection Performance Standards at Oil and Gas Well Sites" rulemaking, or if there have been any changes to parent and subsidiary business corporations. | | | |
| Signature of Applicant | | The person signing this form attests that they have the authority to submit this application on behalf of the applicant, and that the information, including all related submissions, is true and accurate to the best of their knowledge. | |
| Signature of Person Authorized to Submit Application  | (Print or Type) | Name of Signer: ERIN SPINE Title: Regional Land Supervisor | Date 6/6/2018 |
| Application Preparer/Contact: BSHRUM@EQT.COM | | | Phone: 724-271-7314 |



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DEPARTMENT OF ENVIRONMENTAL PROTECTION
OFFICE OF OIL AND GAS MANAGEMENT

**PERMIT APPLICATION TO DRILL AND OPERATE
AN UNCONVENTIONAL WELL
Record of Notification**

US Well No. (API No.)
37-059-27481-00-00

Signature of Applicant I hereby certify that, for all interested parties identified on the plat of 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.

| | | | |
|--|-------------------------------|---|------------------|
| Signature of Person Authorized to Submit Application | (Print or Type) Erin Spine | Name of Signer: ERIN SPINE Title: Regional Land Supervisor | Date 6/6/2018 |
|--|-------------------------------|---|------------------|

| List the following: surface landowner; surface landowners and water purveyors with water supplies within 3,000 feet; municipality where the well will be drilled; adjacent municipality; municipalities within 3,000 feet of the vertical well bore; gas storage operator if within 3,000 feet. Mark the boxes, "X," which show the parties' interests. Use additional forms if you need more space. You are required to notify each of these parties. Notification: Signature below name indicates the party's acknowledgement of receipt of the well location plat and serves as proof of notification | | | Surface Landowner | Gas Storage Operator | Surface Landowners & Water Purveyors with water supplies <3000' | Municipalities | Notification | | | |
|--|----------|---|-------------------|----------------------|---|----------------|----------------------------------|----------------|-------------------|-----------------|
| | | | | | | | Note the means and attach proof. | | Address Affidavit | Written Consent |
| | | | | | | | Certified Mail Dates | | | |
| | | | | | | | Sent | Return Receipt | | |
| Print Name: MARK & LISA MAIN Signature | Address: | Address: 297 IRON ROCK RD WAYNESBURG, PA 15370 | X | | X | | 5/18/2018 | 5/22/2018 | | |
| Print Name: ROBERT W REED ET UX Signature | Address: | Address: 113 IRON ROCK ROAD WAYNESBURG, PA 15370 | | | X | | 5/18/2018 | 5/21/2018 | | |
| Print Name: CARL S RABER ET UX Signature | Address: | Address: 366 IRON ROCK RD WAYNESBURG, PA 15370 | | | X | | 5/18/2018 | | X | |
| Print Name: ROBERT C HOOVER ET UX Signature | Address: | Address: 161 IRON ROCK ROAD WAYNESBURG, PA 15370 | | | X | | 5/18/2018 | 5/21/2018 | | |
| Print Name: CATHY S EDDY REVOCABLE TRUST Signature | Address: | Address: 285 IRON ROCK RD WAYNESBURG, PA 15370 | | | X | | 5/18/2018 | | X | |

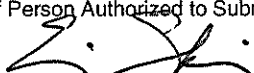
Record of Written Consent

Written Consent: Signature below indicates the party's approval of the well location, or indicates written consent and waives the 15-day objection period where applicable.

| | | | Check applicable box | | |
|----------------------|----------|------|--------------------------|----------------------------|--------------------------|
| | | | Surface Owner | Water Well within 500 feet | Building within 500 feet |
| Print and Sign Name: | Address: | Date | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
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US Well No. (API No.)
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| Signature of Person Authorized to Submit Application  | (Print or Type) Erin Spine | Name of Signer: ERIN SPINE Title: Regional Land Supervisor | Date 6/6/2018 |

| List the following: surface landowner; surface landowners and water purveyors with water supplies within 3,000 feet; municipality where the well will be drilled; adjacent municipality; municipalities within 3,000 feet of the vertical well bore; gas storage operator if within 3,000 feet. Mark the boxes, "X," which show the parties' interests. Use additional forms if you need more space. You are required to notify each of these parties. Notification: Signature below name indicates the party's acknowledgement of receipt of the well location plat and serves as proof of notification | | | | Surface Landowner | Gas Storage Operator | Surface Landowners & Water Purveyors with water supplies <3000' | Municipalities | Notification Note the means and attach proof. | | | |
|--|----------|---|--|-------------------|----------------------|---|----------------|--|----------------|-------------------|-----------------|
| | | | | | | | | Certified Mail Dates | | Address Affidavit | Written Consent |
| | | | | | | | | Sent | Return Receipt | | |
| Print Name: LUKE J KIGER ET UX Signature | Address: | Address: 295 IRON ROCK RD WAYNESBURG, PA 15370 | | | X | | 5/18/2018 | 5/30/2018 | | | |
| Print Name: WILLIAM JERDAN SIMMS Signature | Address: | Address: 198 IRON ROCK RD WAYNESBURG, PA 15370 | | | X | | 5/18/2018 | 5/21/2018 | | | |
| Print Name: JEFFREY N GRIMES ET UX Signature | Address: | Address: 292 IRON ROCK RD WAYNESBURG, PA 15370 | | | X | | 5/18/2018 | | X | | |
| Print Name: CENTER TOWNSHIP Signature | Address: | Address: 100 MUNICIPAL DRIVE PO BOX 435 ROGERSVILLE, PA 15359 | | | | X | 5/18/2018 | 5/21/2018 | | | |
| Print Name: FRANKLIN TOWNSHIP Signature | Address: | Address: 568 ROLLING MEADOWS ROAD WAYNESBURG, PA 15370 | | | | X | 5/18/2018 | 5/21/2018 | | | |


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| | | | | | | | | Certified Mail Dates | | Address Affidavit | Written Consent |
| | | | | | | | | Sent | Return Receipt | | |
| Print Name: JACKSON TOWNSHIP Signature | Address: | Address: 104 TUNNEL ROAD HOLBROOK, PA 15341 | | | | X | 5/18/2018 | 5/21/2018 | | | |
| Print Name: WAYNE TOWNSHIP Signature | Address: | Address: 132 SPRAGGS ROAD SPRAGGS, PA 15362 | | | | X | 5/18/2018 | 5/21/2018 | | | |
| Print Name: RICHHILL TOWNSHIP Signature | Address: | Address: 109 MUNICIPAL LANE WIND RIDGE, PA 15380 | | | | X | 5/18/2018 | 5/21/2018 | | | |
| Print Name: GRAY TOWNSHIP Signature | Address: | Address: 193 STRINGTOWN ROAD GRAYSVILLE, PA 15337 | | | | X | 5/18/2018 | 5/21/2018 | | | |
| Print Name: MORRIS TOWNSHIP Signature | Address: | Address: 1317 BROWNS CREEK ROAD SYCAMORE, PA 15364 | | | | X | 5/18/2018 | 5/21/2018 | | | |

Record of Written Consent

| | | | | | |
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| Check applicable box | | | | | |
| | | | Surface Owner | Water Well within 500 feet | Building within 500 feet |
| Print and Sign Name: | Address: | Date | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Print and Sign Name: | Address: | Date | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Print and Sign Name: | Address: | Date | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |