



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

Jim Justice , Governor
Austin Caperton , Cabinet Secretary
www.dep.wv.gov

Wednesday, March 15, 2017
WELL WORK PERMIT
Horizontal 6A / New Drill

EQT PRODUCTION COMPANY (A)
120 PROFESSIONAL PLACE
BUILDING II
BRIDGEPORT, WV 26330

Re: Permit approval for 516734
47-049-02427-00-00

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: 516734
Farm Name: PATRICK, WALTER & BEULAH
U.S. WELL NUMBER: 47-049-02427-00-00
Horizontal 6A / New Drill
Date Issued: 3/15/2017

Promoting a healthy environment.

03/17/2017

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.

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

1) Well Operator: EQT Production Company 306686 Marion Lincoln Grant Town
Operator ID County District Quadrangle

2) Operator's Well Number: 516734 Well Pad Name: GRT28

3) Farm Name/Surface Owner: Walter & Beulah Patrick Public Road Access: CR 91

4) Elevation, current ground: 1191 Elevation, proposed post-construction: 1207

5) Well Type (a) Gas Oil Underground Storage

Other _____

(b) If Gas Shallow Deep

Horizontal _____

*SDW
12/12/2016*

6) Existing Pad: Yes or No No

7) Proposed Target Formation(s), Depth(s), Anticipated Thickness and Expected Pressure(s):
Marcellus, 7612', 101', 2593 psi

8) Proposed Total Vertical Depth: 7612

9) Formation at Total Vertical Depth: Marcellus

10) Proposed Total Measured Depth: 11690

11) Proposed Horizontal Leg Length: 3016

12) Approximate Fresh Water Strata Depths: 700

13) Method to Determine Fresh Water Depths: By offset wells

14) Approximate Saltwater Depths: 1308, 1326, 1471

15) Approximate Coal Seam Depths: 29, 101, 155, 229, 394, 464, 486, 507, 545

16) Approximate Depth to Possible Void (coal mine, karst, other): 507

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: _____
Depth: _____
Seam: _____
Owner: _____

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WW-6B
(04/15)

API NO. 47-049 - 02427
 OPERATOR WELL NO. 516734
 Well Pad Name: GRT28

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 | 26 | New | A-500 | 85.6 | 80 | 80 | 98 ft ³ / CTS |
| Fresh Water | 18 5/8 | New | J-55 | 87.5 | 579 | 579 | 940 ft ³ / CTS |
| Coal | 13 3/8" | New | J-55 | 54.5 | 800 | 800 | 650 ft ³ / CTS |
| Intermediate | 9 5/8 | New | A-500 | 40 | 3239 | 3239 | 1273 ft ³ / CTS |
| Production | 5 1/2 | New | P-110 | 20 | 11690 | 11690 | 500' above top producing zone |
| Tubing | 2 3/8 | | J-55 | 4.7 | | May not be run if run set 40' above top perf or 80° inclination | |
| Liners | | | | | | | |

*SPW
12/12/2016*

| 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 | 26 | 30 | .312 | 884 | 707 | Class A | 1.18 |
| Fresh Water | 18 5/8 | 24 | .435 | 2250 | 1800 | See Variance | 1.19 |
| Coal | 13 3/8 | 17 1/2 | .38 | 2700 | 2160 | See Variance | 1.19 |
| Intermediate | 9 5/8 | 12 3/8 | .395 | 3950 | 3160 | See Variance | 1.19 |
| Production | 5 1/2 | 8 1/2 | .361 | 12640 | 10112 | Class A/H | 1.123/2.098 |
| Tubing | 2 3/8 | NA | .19 | 7700 | | | |
| Liners | | | | | | | |

PACKERS

| | | | | |
|-------------|--|--|--|--|
| Kind: | | | | |
| Sizes: | | | | |
| Depths Set: | | | | |

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

Drill and complete a new horizontal well in the Marcellus Formation. Drill the vertical to an approximate depth of 5069'. Kick off and drill curve. Drill the lateral in the Marcellus. Cement casing.

20) Describe fracturing/stimulating methods in detail, including anticipated max pressure and max rate:

Hydraulic fracturing is completed in accordance with state regulations using water recycled from previously fractured wells and obtained from freshwater sources. This water is mixed with sand and a small percentage (less than 0.3%) of chemicals (including 15% Hydrochloric acid, friction reducer, biocide, and scale inhibitor), referred to in the industry as a "slickwater" completion. Maximum anticipated internal casing pressure is expected to be approximately 10000 psi, maximum anticipated treating rates are expected to average approximately 100 bpm. Stage lengths vary from 150 to 300 feet. Average approximately 250,000 gallons of water per stage. Sand sizes vary from 100 mesh to 20/40 mesh. Average approximately 250,000 pounds of sand per stage.

21) Total Area to be disturbed, including roads, stockpile area, pits, etc.. (acres): 15.04

22) Area to be disturbed for well pad only, less access road (acres): 13.02

23) Describe centralizer placement for each casing string:

- Mine Protection: Bow spring centralizers – One centralizer at the shoe and one spaced every 500'.
- Surface: Bow spring centralizers – One centralizer at the shoe and one spaced every 500'.
- Intermediate: Bow spring centralizers– One centralizer at the shoe and one spaced every 500'.
- Production: One solid body centralizer spaced every joint from production casing shoe to KOP

24) Describe all cement additives associated with each cement type:

Conductor: Class A no additives
Mine Protection (Type 1 Cement): 0-3% Calcium Chloride. Used to speed the setting of cement slurries
Surface (Type 1 Cement): 0-3% Calcium Chloride. Used to speed the setting of cement slurries
Intermediate (Type 1 Cement): 0-3% Calcium Chloride. Used to speed the setting of cement slurries
Production
Lead (Class A Cement): 0.2% CD-20 (dispersant makes cement easier to mix); 15% SuperFL-300 (fluid loss lengthens thickening time); 15% SEC-10 (fluid loss); 50 50 POZ (extender)
Tail (Class H Cement): 0.2% Super CR-1 (Retarder). Lengthens thickening time; 3% Super FL-200 (fluid loss); 2% SEC-10 (Fluid loss); 2% SuperFL-350 (fluid loss). Reduces amount of water lost to formation; 60% Calcium Carbonate. Acid solubility.

25) Proposed borehole conditioning procedures:

Mine Protection: Circulate hole clean while rotating & reciprocating the drill string until cuttings diminish at surface.
Surface: Circulate hole clean while rotating & reciprocating the drill string until cuttings diminish at surface.
Intermediate: Circulate hole clean while rotating & reciprocating the drill string until cuttings diminish at surface.
Production: Pump marker sweep with nut plug to determine actual hole washout. Calculate a gauge holes bottoms up volume. Perform a cleanup cycle by pumping 3-5 bottoms up or until the shakers are clean. Check volume of cuttings coming across the shakers every 15 minutes.

*Note: Attach additional sheets as needed.

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Well 516734(GRT28H7)

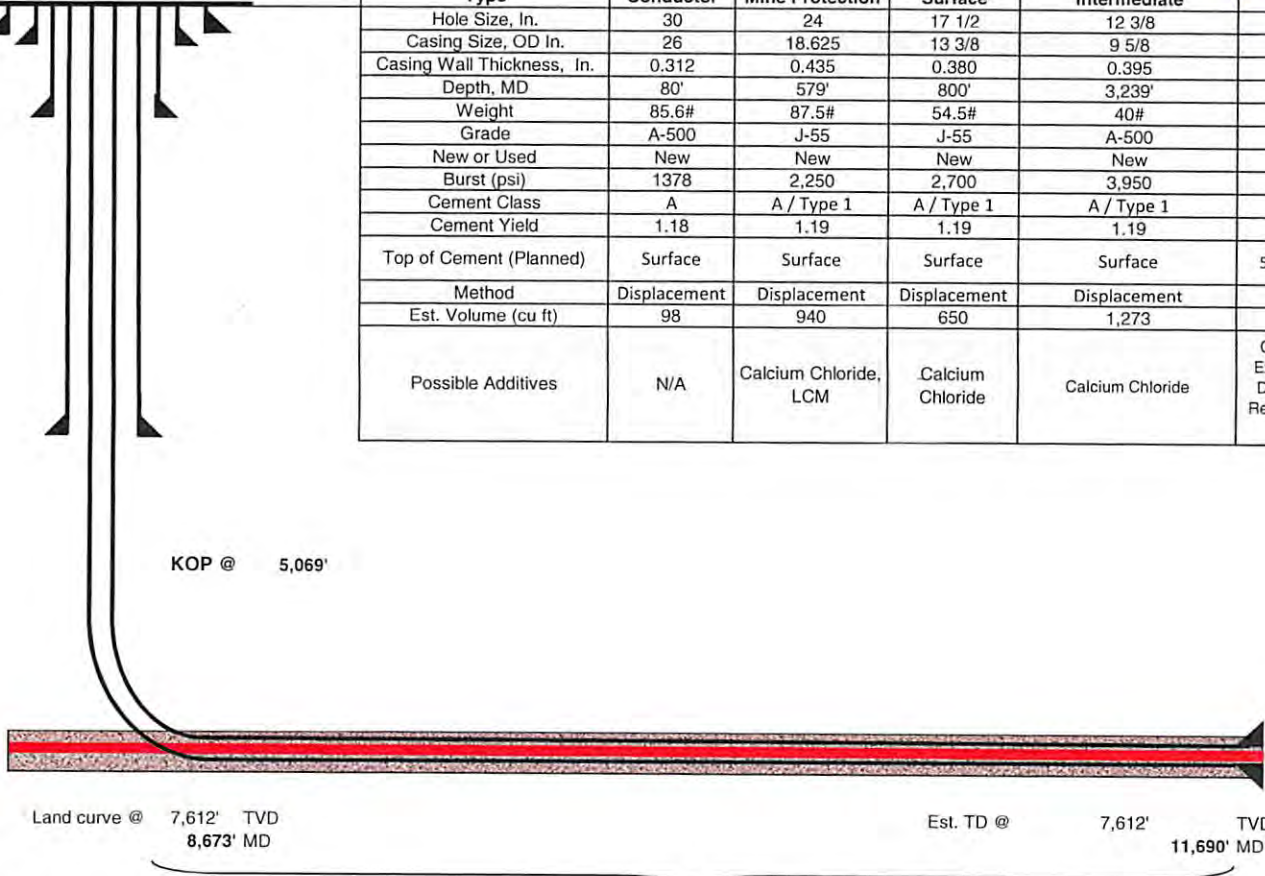
EQT Production
Grant Town Quad
Marion County, WV

Azimuth 335
Vertical Section 3239

Note: Diagram is not to scale

| Formations | Top TVD | Base TVD |
|----------------------|-------------|----------|
| Conductor | 80 | |
| Pittsburgh | 507 | 515 |
| Mine Protection | 579 | |
| Base Fresh Water | 700 | |
| Surface Casing | 800 | |
| Base Red Rock | 1328 | |
| Maxton | 1508 | 1607 |
| Big Lime | 1820 | 1940 |
| Big Injun | 1940 | 2049 |
| Weir | 2130 | 2247 |
| Gantz | 2434 | 2465 |
| | | |
| Fifty foot | 2478 | 2563 |
| Thirty foot | 2592 | 2638 |
| Gordon | 2667 | 2733 |
| Forth Sand | 2746 | 2831 |
| Bayard | 3121 | 3189 |
| Intermediate Casing | 3239 | |
| Warren | 3308 | 3343 |
| Speechley | 3444 | 3558 |
| Balltown A | 3576 | 3819 |
| Riley | 4177 | 4243 |
| Benson | 4832 | 5042 |
| Alexander | 5130 | 5326 |
| Sonyea | 6982 | 7177 |
| Middlesex | 7177 | 7238 |
| Genesee | 7238 | 7375 |
| Geneseo | 7375 | 7403 |
| Tully | 7403 | 7458 |
| Hamilton | 7458 | 7560 |
| Marcellus | 7560 | 7660 |
| Production Casing | 11690 | MD |
| Onondaga | 7660 | |

| Casing and Cementing | | | | Deepest Fresh Water: 700' | |
|----------------------------|--------------|-----------------------|------------------|---------------------------|--|
| Type | Conductor | Mine Protection | Surface | Intermediate | Production |
| Hole Size, In. | 30 | 24 | 17 1/2 | 12 3/8 | 8 1/2 |
| Casing Size, OD In. | 26 | 18.625 | 13 3/8 | 9 5/8 | 5 1/2 |
| Casing Wall Thickness, In. | 0.312 | 0.435 | 0.380 | 0.395 | 0.361 |
| Depth, MD | 80' | 579' | 800' | 3,239' | 11,690' |
| Weight | 85.6# | 87.5# | 54.5# | 40# | 20# |
| Grade | A-500 | J-55 | J-55 | A-500 | P-110 |
| New or Used | New | New | New | New | New |
| Burst (psi) | 1378 | 2,250 | 2,700 | 3,950 | 12,640 |
| Cement Class | A | A / Type 1 | A / Type 1 | A / Type 1 | H |
| Cement Yield | 1.18 | 1.19 | 1.19 | 1.19 | 1.07/1.86 |
| Top of Cement (Planned) | Surface | Surface | Surface | Surface | 500' above top Producing Zone |
| Method | Displacement | Displacement | Displacement | Displacement | Displacement |
| Est. Volume (cu ft) | 98 | 940 | 650 | 1,273 | 1,094 |
| Possible Additives | N/A | Calcium Chloride, LCM | Calcium Chloride | Calcium Chloride | Calcium Carbonate, Fluid Loss, Extender, Dispersent, Viscosifier, Defoamer, POZ, Bonding Agent, Retarder, Anti-Settling/Suspension Agent |



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Proposed Well Work:
 Drill and complete a new horizontal well in the Marcellus formation.
 Drill the vertical to an approximate depth of 5069'.
 Kick off and drill curve. Drill lateral in the Marcellus. Cement casing.

49-02427

4704902427

EQT Production
Hydraulic Fracturing Monitoring Plan
PAD ID: GRT28
Marion County, WV

8/26/16

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Purpose

The purpose of this pad-specific Hydraulic Fracturing Monitoring Plan is to identify and notify conventional well operators near EQT hydraulic fracturing in Marion County, WV prior to hydraulic fracturing at the following EQT wells on the GRT28 pad: 516734, 516735, 516736, 516737

Due to the apparent presence of unique geological conditions, the potential for communication between deep geologic zones exists in this area. This potential communication, via natural gas, water, or both, may occur between hydraulically fractured wells in the Marcellus formation (approximately 7,500' TVD) and existing conventional natural gas wells in the partially-depleted, relatively high permeability Alexander formation (approximately 5,200' TVD).

The plan is being implemented as an additional safety measure to be utilized in conjunction with existing best management practices and emergency action plans for the site. These additional measures include pre-notification of conventional well operators of the timing and location of the hydraulic fracturing, establishment of measures conventional well operators should implement, and assurance that the OOG is notified of the timeline, as well as any issues that may arise during fracturing.

1. Communications with Conventional Well Operators

EQT, using available data (WV Geological Survey, WVDEP website, and IHS data service), has identified all known conventional wells and well operators within 500 feet of this pad and the lateral sections. A map showing these wells along with a list of the wells and operators is included in **Attachment A**.

Upon approval of this plan, EQT will notify these operators, via letter, of the hydraulic fracturing schedule for these wells. A copy of this letter is included in **Attachment B**.

The letter provides recommendations to these conventional operators to 1) increase their monitoring of their wells during that time period, 2) ensure that their well head equipment is sound, and 3) provide immediate notification to EQT and the OOG in the event of any changes in their well conditions.

Specifically, the letter recommends that conventional well operators conduct the following activities during and after fracturing operations:

1. Inspect their surface equipment prior to fracturing to establish integrity and establish pre-frac well conditions
2. Observe wells closely during and after fracturing and monitor for abnormal increases in water, gas or pressure
3. Inspect or install master valves rated to 3,000 psi or other necessary equipment for wellhead integrity
4. Notify the OOG and EQT if any changes in water, gas production, pressure, or other anomalies are identified

2. Reporting

EQT will provide information relating to the hydraulic fracturing schedule, communication with conventional operators, and ongoing monitoring of the work upon request of OOG or immediately in the event of any noted abnormalities.

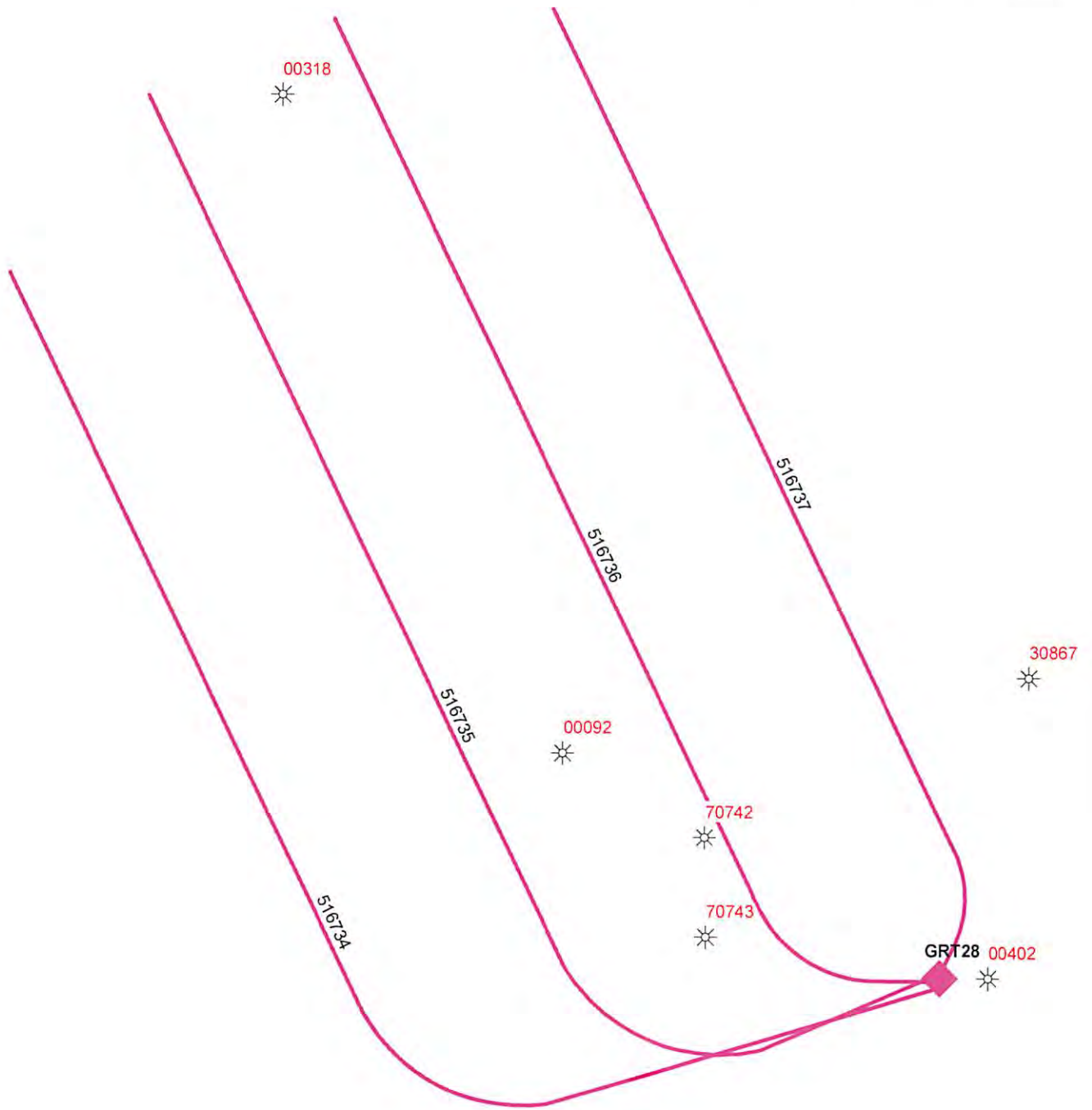
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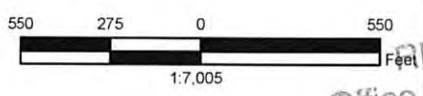


EQT EQT Corporation
 625 Liberty Avenue
 Pittsburgh, PA 15222

GRT28

Vertical Offsets and
 Foreign Laterals
 within 500'

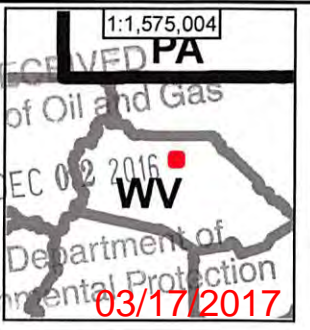
- Legend**
- GRT28 Vertical Offsets
 - Target Formation**
 - Utica
 - Genesee
 - Marcellus
 - Middlesex
 - Genesee Spud
 - Marcellus Spud
 - Middlesex Spud
 - Utica Spud



Disclaimer:

This map is confidential and is to be used only for the express informational purposes for which it was created. Unauthorized use, copying, or dissemination is strictly prohibited. EQT does not warrant the accuracy of the location of any items shown on this map, including, but not limited to, any structures, well or pipeline facilities, property boundaries, topography, roadways, or waterways. The items shown on the map may not have been placed on the map using survey lines or GPS coordinates. The specific location of any of the map items should be determined by a field survey performed by a licensed surveyor upon consultation with EQT.

1:1,575,004



4704902427

| API | Abandon Date | Comp Date | Operator | Datum Ele | Datum Type | Status | LATITUDE | LONGITUDE | OPER_NAME | SPUD_DATE | TD Form Name | Total Depth |
|----------------|--------------|------------|------------------------|-----------|------------|--------|----------|-----------|-------------------------------------|-----------|--------------------|-------------|
| 47049004020000 | | 11/15/1912 | ROSS & WHARTON | 1275 | GR | DG | 39.5614 | -80.2372 | CONSOLIDATED GAS SUPPLY CORPORATION | 9/23/1912 | FIFTH SAND | 2975 |
| 47049003180000 | | 4/20/1976 | EQT PRODUCTION COMPANY | 1388 | KB | DG | 39.5704 | -80.2465 | CONSOLIDATED GAS SUPPLY CORPORATION | 3/22/1976 | DEVONIAN /SD/ | 5363 |
| 47049000920000 | 3/23/1942 | 12/1/1941 | UNKNOWN | 1187 | GR | D | 39.5637 | -80.2428 | UNKNOWN | 11/1/1941 | FIFTH SAND | 2900 |
| 47049308670000 | 1/30/1960 | 8/14/1917 | UNKNOWN | 1429 | GR | DG | 39.5645 | -80.2366 | UNKNOWN | 7/23/1917 | ALLEGHENY /SERIES/ | 1321 |
| 47049707420000 | | 18010101 | UNKNOWN | | GR | U | 39.5629 | -80.2409 | UNKNOWN | | | |
| 47049707430000 | | 18010101 | UNKNOWN | | GR | U | 39.5619 | -80.2409 | UNKNOWN | | | |

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Attachment A(2)

4704902427

| UWI | Name | Depth Top | Base Depth |
|----------------|-------------------|-----------|------------|
| 47049003180000 | LITTLE LIME | 1900 | 1913 |
| 47049003180000 | BIG LIME | 1940 | |
| 47049003180000 | FIFTY FOOT SD | 2605 | 2715 |
| 47049003180000 | GORDON STRAY /SD/ | 2752 | |
| 47049003180000 | FOURTH SAND | 2922 | 2978 |
| 47049003180000 | FIFTY FOOT SD | 3074 | 3096 |
| 47049003180000 | BALLTOWN /SD/ | 3886 | 4090 |
| 47049003180000 | RILEY /SD/ | 4924 | 5009 |
| 47049003180000 | BENSON /SD/ | 5178 | 5188 |
| 47049003180000 | BIG INJUN /SD/ | | 2132 |
| 47049003180000 | GORDON /SD/ | | 2906 |

Perforated Formations

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Attachment A(3)



TEL: (412) 395-3305
FAX: (412) 395-2156

John Centofanti
Corporate Director,
Environmental Affairs

(date)

[Conventional Well Operator]
[address]
[state]

RE: Marion County Hydraulic Fracturing Notice

Dear Sir/Madam,

EQT has developed a Marcellus pad (Granttown 28 pad) located in Marion County, WV. As an owner or operator of conventional natural gas wells in this area, we are requesting your assistance in this matter.

Due to the apparent presence of unique geological conditions, the potential for communication between deep geologic zones exists in this area. This potential communication, via natural gas, water, or both, may occur between hydraulically fractured wells in the Marcellus formation (approximately 7,500' TVD) and existing conventional natural gas wells in the partially-depleted, relatively high permeability, Alexander formation (approximately 5,200' TVD).

EQT anticipates conducting hydraulic fracturing at the Granttown 28 pad during the [first,second, third,fourth] quarter of [year]. We have identified conventional natural gas wells operated by your company within 500' (lateral distance) of our new/planned laterals. Plats for each well on this pad are attached.

We recommend that conventional well operators conduct the following activities before, during, and after fracturing operations:

1. Inspect surface equipment, prior to fracturing, to establish integrity and establish well conditions.
2. Observe wells closely during and after fracturing and monitor for abnormal increases in water, gas, or pressure.
3. Inspect or install master valves rated to 3,000 psi or other necessary equipment for wellhead integrity.
4. Notify the OOG and EQT if any changes in water, gas production, pressure, or other anomalies are identified.

Please feel free to contact me at 412-395-3305 with any questions or comments. You may also contact the West Virginia Office of Oil and Gas at 304-926-0440.

Sincerely,
EQT Production

John Centofanti
Corporate Director, Environmental Affairs

cc: James Martin, WV Office of Oil and Gas

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Attachment B



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

Earl Ray Tomblin, Governor
Randy C. Huffman, Cabinet Secretary
dep.wv.gov

March 18, 2014

Nabors Completion & Production Services Company
1380 Route 286 Hwy E #121
Indiana PA 15701

Re: Cement Variance Request

Dear Sir or Madam,

This agency is approving a variance request for the cement blend listed below to be used on surface and coal protection strings for the drilling of oil and gas wells in the state of West Virginia. The variance cannot be used without requesting its use on a permit application and approval by this agency:

- Type 1 (2% Calcium Chloride-Accelerator, 0.25% Super Flake-Lost Circulation, 5.2% Water, 94% Type "1" Cement)

If you have any questions regarding this matter feel free to contact me at 304-926-0499, ext. 1653.

Sincerely,

James Peterson
Environmental Resources Specialist / Permitting

Promoting a healthy environment.

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Office of Oil and Gas
601 57th Street, SE
Charleston, WV 25304
(304) 926-0450
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Earl Ray Tomblin, Governor
Randy C. Huffman, Cabinet Secretary
dep.wv.gov

**BEFORE THE OFFICE OF OIL AND GAS
DEPARTMENT OF ENVIRONMENTAL PROTECTION
STATE OF WEST VIRGINIA**

IN THE MATTER OF A VARIANCE FROM) ORDER NO. 2014 - 17
REGULATION 35 CSR § 4-11.4/11.5/14.1)
AND 35 CSR § 8-9.2.h. 4/5/6/8 OF THE)
THE OPERATIONAL)
REGULATIONS OF CEMENTING OIL)
AND GAS WELLS)

REPORT OF THE OFFICE

Nabors Completion & Production Services Co. requests approval of a different cement blend for use in cementing surface and coal protection casing of oil and gas wells.

FINDINGS OF FACT

- 1.) Nabors Completion & Production Services Co. proposes the following cement blend:
- 2% Calcium Chloride (Accelerator)
 - 0.25 % Super Flake (Lost Circulation)
 - 94% Type “1” Cement
 - 5.20 % Water
- 2.) Laboratory testing results indicate that the blend listed in Fact No.1 will achieve a 500 psi compressive strength within 6 hours and a 2,435 psi compressive strength within 24 hours.

Promoting a healthy environment.

03/17/2017

CONCLUSIONS OF LAW

Pursuant to Articles 6 and 6A, Chapter 22 of the Code of West Virginia, the Office of Oil and Gas has jurisdiction over the subject matter embraced in said notice, and the persons interested therein, and jurisdiction to promulgate the hereinafter prescribed Order.

Pursuant to 35 CSR § 4-11.5 and 35 CSR § 8-9.2.h.8 the Chief of the Office of Oil and Gas may approve different cement blends upon the well operator providing satisfactory proof that different cement types are adequate.

ORDER

It is ordered that Nabors Completion & Production Services Co. may use the cement blend listed in Findings of Fact No.1 for the cementing of surface and coal protection casing of oil and gas wells in the State as may be requested by oil and gas operators. The waiting time on the cement blend shall be 8 hours. The cement blend shall be mixed in strict accordance with the specifications for each blend and weight measurements made on-site to assure the cement slurries meet the minimum weight specifications. A sample shall be collected and, if after 8 hours the cement is not set up, additional time will be required. Nabors Completion & Production Services Co. shall keep a record of cement blend jobs in which the cement blend approved under this order is to be used and made available to the Office of Oil and Gas upon request.

Dated this, the 18th day of March, 2014.

IN THE NAME OF THE STATE OF WEST VIRGINIA

OFFICE OF OIL AND GAS
DEPARTMENT OF ENVIRONMENTAL PROTECTION
OF THE STATE OF WEST VIRGINIA



James Martin, Chief
Office of Oil and Gas

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WV Department of
Environmental Protection
03/17/2017



July 14, 2016

Mr. Gene Smith
West Virginia Department of Environmental Protection
Office of Oil and Gas
601 57th Street SE
Charleston, WV 25304

Re: Casing on GRT28

Dear Mr. Smith,

EQT is requesting the 18 5/8" casing be set at 579' KB, 64' below the mined Pittsburgh coal seam and 30' below a workable coal seam. EQT is requesting the 13-3/8" casing be set at 800' KB, 100' below the deepest fresh water.

For the 9 5/8" casing string, EQT is requesting that the first well set the 9 5/8" casing at 3239' KB, 50' below the Bayard formation. Prior to cementing the 9 5/8" casing, a test will be performed to determine if the 9 5/8" casing string may be shortened. If the test is successful, the remaining wells on the pad will have 9 5/8" casing set at a shallower depth of 2297' KB, 50' below the Weir formation. If the test is unsuccessful, the remaining wells on the pad will have 9 5/8" casing set at the original set depth of 3239' KB. Upon completion of the test, the WV DEP inspector will be notified of the test results and the casing depth for the remaining wells on the pad will be discussed.

If you have any questions, please do not hesitate to contact me at (304) 848-0076.

Sincerely,

A handwritten signature in blue ink, appearing to read 'Vicki Roark'.

Vicki Roark
Permitting Supervisor - WV

Enc.

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WW-9
(4/16)

API Number 47 - 049 - _____
Operator's Well No. 516734

STATE OF WEST VIRGINIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
OFFICE OF OIL AND GAS

FLUIDS/ CUTTINGS DISPOSAL & RECLAMATION PLAN

Operator Name EQT Production Company OP Code 306686

Watershed (HUC 10) Bethel Run Quadrangle Grant Town

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 0014, 8462, 4037)
- Reuse (at API Number Various)
- Off Site Disposal (Supply form WW-9 for disposal location)
- Other (Explain _____)

Will closed loop system be used? If so, describe: Yes, The closed loop system will remove drill cuttings from the drilling fluid. The drill cuttings are then prepared for transportation to an off-site disposal facility.

Drilling medium anticipated for this well (vertical and horizontal)? Air, freshwater, oil based, etc. See Attached

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

Additives to be used in drilling medium? See Attached

Drill cuttings disposal method? Leave in pit, landfill, removed offsite, etc. Landfill

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

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

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 *Victoria J. Roark*
Company Official (Typed Name) Victoria J. Roark
Company Official Title Permitting Supervisor

Subscribed and sworn before me this 29 day of Nov, 20 16

My commission expires 8-24-22

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NOTARY PUBLIC
Pamela Sykes
EQT Production
PO Box 280
Bridgeport, WV 26330
My Commission Expires Aug. 24, 2022

Department of Environmental Protection
03/17/2017

NOTARY PUBLIC
STATE OF WEST VIRGINIA
OFFICIAL SEAL
Commission Expires Aug 24, 2022
Bridgford, WV 26730
PO Box 280
501 Production
Pawnee, WV 26052



03/17/2017

WW-9 Attachment

Drilling medium anticipated for this well (vertical and horizontal)? Air, freshwater, oil based, etc.

- Air is used to drill the top-hole sections of the wellbore (surface, intermediate, and pilot). Water based mud may be necessary depending on hole conditions to stabilize and drill the intermediate section. The pilot hole, curve, and lateral sections will be drilled with either air, water based mud, or oil based mud.

Additives to be used in drilling medium?

- Air - biodegradable oil lubricant, detergent, defoaming, water. Water based mud – Barite, viscosifer, alkalinity control, lime, filtration control, deflocculates, biodegradable oil lubricant, defoaming, walnut shell, salt, x-cide, carbonates. Oil based mud – synthetic base oil, emulsifier, salt, lime, viscosifer, alkalinity control, filtration control, deflocculates, biodegradable oil lubricant, defoaming, carbonates.

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EQT Production Company

Proposed Revegetation Treatment: Acres Disturbed 15.04 Prevegetation pH 5.8

Lime 3 Tons/acre or to correct to pH 6.5

Fertilizer type Granular 10-20-20

Fertilizer amount 1/3 lbs/acre

Mulch 2 Tons/acre

Seed Mixtures

| Temporary | | Permanent | |
|---------------|----------|---------------|----------|
| Seed Type | lbs/acre | Seed Type | lbs/acre |
| KY-31 | 40 | Orchard Grass | 15 |
| Alsike Clover | 5 | Alsike Clover | 5 |
| Annual Rye | 15 | | |

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: [Signature]

Comments: Pre-seed mulch as soon as reasonably possible per regulation. Upgrade E&S if needed per WV DEP E&S manual

Title COG Inspector

Date: 12/12/2016

Field Reviewed? (X) Yes () No

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EQT Production Water plan

Offsite disposals for Marcellus wells

CWS TRUCKING INC.

P.O. Box 391
Williamstown, WV 26187
740-516-3586
Noble County/Noble Township
Permit # 3390

BROAD STREET ENERGY LLC

37 West Broad Street
Suite 1100
Columbus, Ohio 43215
740-516-5381
Washington County/Belpre Twp.
Permit # 8462

LAD LIQUID ASSETS DISPOSAL INC.

226 Rankin Road
Washington, PA 15301
724-350-2760
724-222-6080
724-229-7034 fax
Ohio County/Wheeling
Permit # USEPA WV 0014

TRIAD ENERGY

P.O. Box 430
Reno, OH 45773
740-516-6021 Well
740-374-2940 Reno Office Jennifer
Nobel County/Jackson Township
Permit # 4037

TRI COUNTY WASTE WATER MANAGEMENT, INC.

1487 Toms Run Road
Holbrook, PA 15341
724-627-7178 Plant
724-499-5647 Office
Greene County/Waynesburg
Permit # TC-1009

KING EXCAVATING CO.

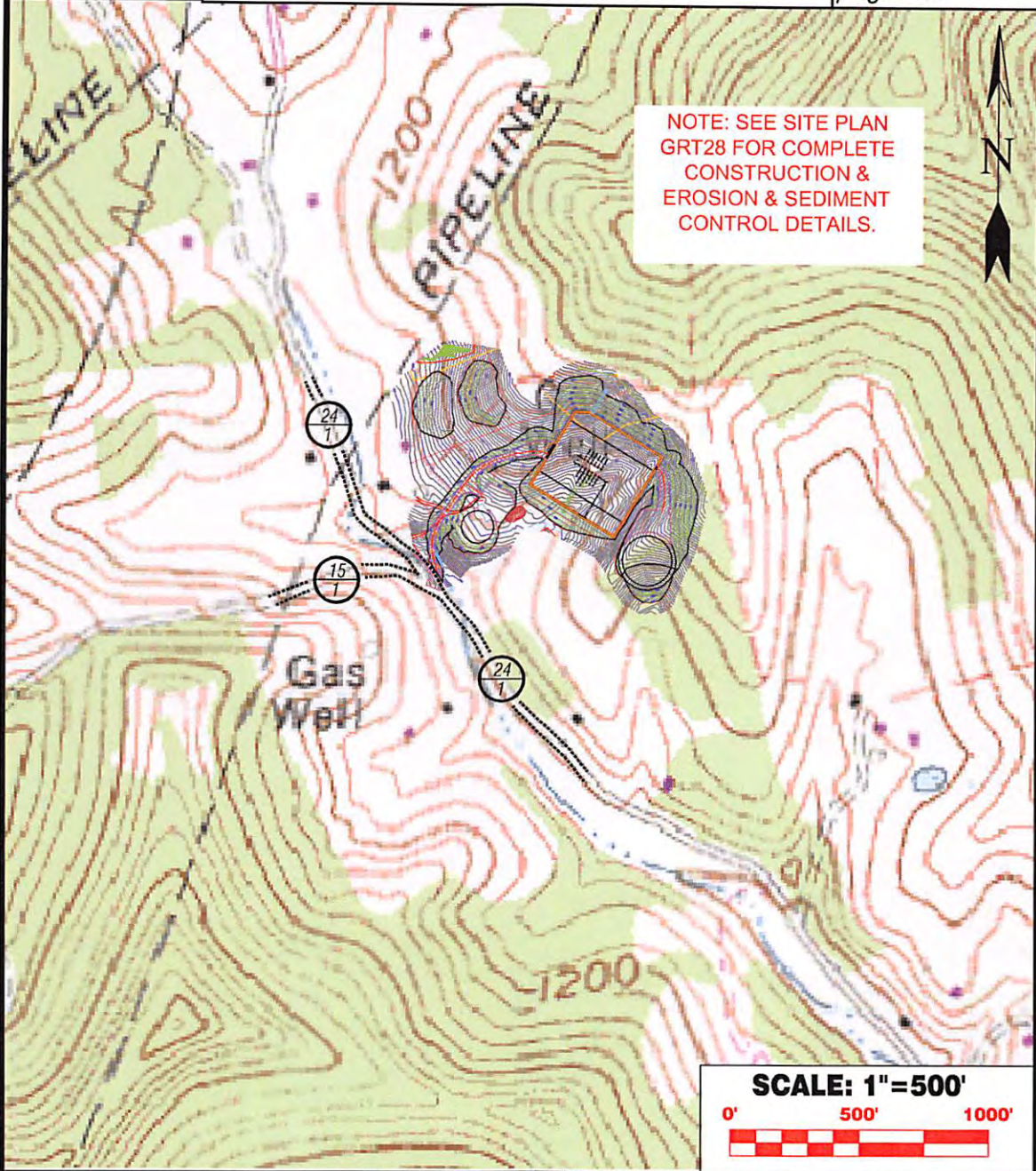
Advanced Waste Services
101 River Park Drive
New Castle, Pa. 16101
Facility Permit# PAR000029132

Waste Management - Meadowfill Landfill

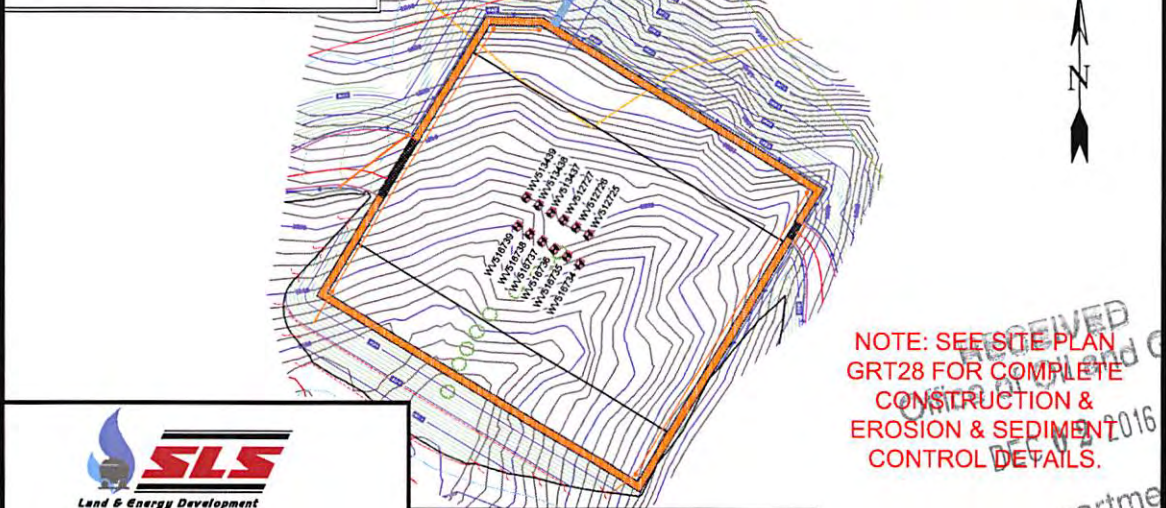
Rt. 2, Box 68 Dawson Drive
Bridgeport, WV 26330
304-326-6027
Permit #SWF-1032-98
Approval #100785WV

Waste Management - Northwestern Landfill

512 E. Dry Road
Parkersburg, WV 26104
304-428-0602
Permit #SWF-1025 WV-0109400
Approval #100833WV



Detail Sketch for Proposed GRT28 Wells



| | | | |
|---------------------|------------------|------------------|--------------------------------|
| DRAWN BY: K.D.W. | FILE NO. 8423 | DATE 08/22/16 | CADD FILE: 8423GRT28REC.dwg |
|---------------------|------------------|------------------|--------------------------------|

TOPO SECTIONS OF GRANT TOWN 7.5' TOPO QUADRANGLE

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WV Department of Environmental Protection
Not To Scale
03/17/2017



Where energy meets innovation.™

Site Specific Safety Plan

EQT GRT 28 Pad

Grant Town Quadrant

Marion County, WV

For Wells:

516734

Date Prepared:

August 18, 2016

EQT Production

SDW 12/12/2016
WV Oil and Gas Inspector

Title

Title

Date

12-5-16

Date

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Environmental Protection

03/17/2017

GRT28
WV 516734
EQT PRODUCTION COMPANY

NOTES ON SURVEY

1. NO WATER WELLS WERE FOUND WITHIN 250' OF PROPOSED GAS WELL. NO AGRICULTURAL BUILDINGS > 2500 SQ.FT. WERE FOUND WITHIN 625' OF THE CENTER OF PROPOSED WELL PAD.
2. SEE REFERENCE BOX FOR DISTANCES TO EXISTING DWELLINGS WITHIN 625' OF THE CENTER OF PROPOSED WELL PAD.
3. WELL SPOT CIRCLE & TOPO MARK SCALE IS 1"=2000'

BOTTOM HOLE LATITUDE 39°35'00" 28'



| | | |
|-------------|-----------------------------|----------------|
| L-TM-5-14 | ROBIN TENNANT ET AL | 25.28 ACRES± |
| L-TM-5-15 | JOSEPH LONGWELL ET AL | 22.76 ACRES± |
| L-TM-5-16 | RICHARD KINCELL ET AL | 7.88 ACRES± |
| L-TM-5-16.1 | ROGER PARKER | 7.88 ACRES± |
| L-TM-5-17 | JEAN CLARK | 9.26 ACRES± |
| L-TM-5-18 | JACK & MILDRED COOK | 9.24 ACRES± |
| L-TM-5-19 | AARON & MAGGIE DENHAM | 10.95 ACRES± |
| L-TM-5-20.2 | DONALD PRICE | 21.061 ACRES± |
| L-TM-5-22 | KEVIN JONES ET AL | 18.74 ACRES± |
| L-TM-5-23 | RONALD & MARILYN PETTY | 12.69 ACRES± |
| L-TM-5-24 | CARL & MARGARET McINTIRE | 11.86 ACRES± |
| L-TM-5-26 | TIMOTHY & JUDITH VANPELT | 11.646 ACRES± |
| L-TM-5-30 | RUSSELL & TERRI MORRIS | 11.820 ACRES± |
| L-TM-5-30.2 | BARBARA WISE ET AL | 21.55 ACRES± |
| L-TM-5-31 | SANDY CROWLEY | 20.72 ACRES± |
| L-TM-5-32 | RYAN & ANNA BESEDICH | 8.849 ACRES± |
| L-TM-5-32.1 | MICHAEL MARCOZZI ET AL | 1.42 ACRES± |
| L-TM-5-33 | THURMAN JR. & BELINDA BLAND | 22.75 ACRES± |
| L-TM-5-34 | LEONARD MYERS ET AL | 22.5 ACRES± |
| L-TM-5-35 | MARK CLEVINGER ET AL | 24.84 ACRES± |
| L-TM-5-35.1 | JIMMIE & VICKIE WELCH | 23.32 ACRES± |
| L-TM-5-35.2 | SHANNON CURREY | 0.94 ACRES± |
| L-TM-5-36 | HARRY & DEBRA BLAND | 202.145 ACRES± |
| L-TM-5-36.1 | HARRY & DEBRA BLAND | 0.935 ACRES± |
| L-TM-5-37 | WALTER & BEULAH PATRICK | 21.50 ACRES± |
| L-TM-5-37.1 | LUCIDA BROWN | 1.50 ACRES± |
| L-TM-5-37.2 | LARRY DENOON JR | 3 ACRES± |
| L-TM-5-37.3 | LUCINDA DENOON | 0.99 ACRES± |
| L-TM-5-37.4 | KEVIN & MARTHA TOOTHMAN | 1 ACRES± |
| L-TM-5-37.5 | TRAVIS & HEIDI TOOTHMAN | 0.75 ACRES± |
| L-TM-5-37.6 | LUCIDA BROWN | 20.50 ACRES± |
| L-TM-5-38 | ROBERT & NICOLE KINCELL | 5.170 ACRES± |
| L-TM-5-38.1 | JACK JR & ANGELINA FROST | 1.71 ACRES± |
| L-TM-5-38.2 | STEPHEN WOODY ET AL | 1.04 ACRES± |
| L-TM-5-38.5 | GREGORY & DEBORAH GARRISON | 0.70 ACRES± |
| L-TM-5-38.6 | DAVID & SHELLY BLAND | 0.95 ACRES± |
| L-TM-5-38.7 | GREGORY & DEBORAH GARRISON | 0.14 ACRES± |
| L-TM-5-38.8 | DAVID & SHELLY BLAND | 2.17 ACRES± |
| L-TM-5-39 | REBECCA CRANDALL | 3 ACRES± |
| L-TM-5-40 | D REYNOLDS INVESTMENTS LLC | 1.23 ACRES± |
| L-TM-5-41 | JOSEPH & JEANETTE MIJCYNIOZ | 85.75 ACRES± |
| L-TM-6-59 | I O O F ELECTIC LODGE #67 | 5.36 ACRES± |
| L-TM-6-60 | I O O F ELECTIC LODGE #67 | 53 ACRES± |
| L-TM-6-61 | REBECCA CRANDALL | 34.75 ACRES± |
| L-TM-6-62 | RUSSELL & TERRI MORRIS | 20 ACRES± |
| L-TM-6-63 | JOSEPH CRANDALL | 13.50 ACRES± |
| L-TM-6-64 | E.M. & NANCY KITTLE | 14.57 ACRES± |
| P-TM-10-69 | BASIL & WANDA RUCKLE | 89 ACRES± |

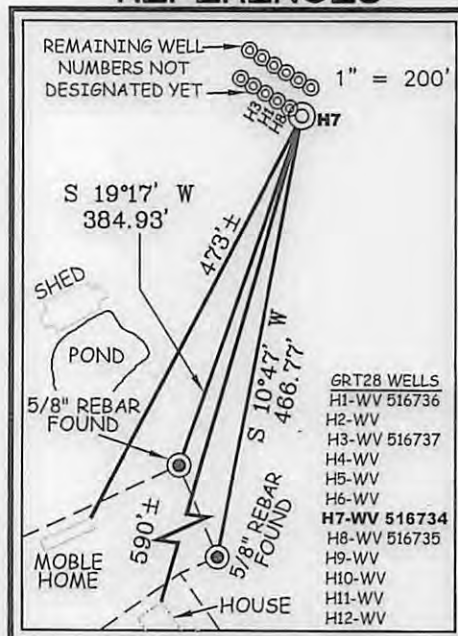
(S.P.C. NORTH ZONE) (UTM(M) ZONE 17 NORTH)

NAD'27 S.P.C.(FT) N. 387,400.42 E. 1,791,993.76
 NAD'27 GEO. LAT-(N) 39.561296 LONG-(W) 80.237780
 NAD'83 UTM (M) N. 4,379,353.84 E. 565,494.62

LANDING POINT
 NAD'27 S.P.C.(FT) N. 387,361.72 E. 1,789,817.47
 NAD'27 GEO. LAT-(N) 39.561140 LONG-(W) 80.245498
 NAD'83 UTM (M) N. 4,379,330.98 E. 564,831.75

BOTTOM HOLE
 NAD'27 S.P.C.(FT) N. 390,095.42 E. 1,788,542.73
 NAD'27 GEO. LAT-(N) 39.568616 LONG-(W) 80.250100
 NAD'83 UTM (M) N. 4,380,157.37 E. 564,429.50

REFERENCES



SLS
Land & Energy Development
 Solutions from the ground up.
 P.O. Box 150 • 12 Vanhorn Drive • Glenville, WV 26351 • (304) 462-5634
 www.slsurveys.com

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 DIVISION OF ENVIRONMENTAL PROTECTION.



P.S. *C. Victor Moyers*
 849

(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS.
 DATE AUGUST 25, 20 16
 REVISED OCTOBER 11, 20 16
 OPERATORS WELL NO. WV 516734
 API WELL NO. 47 - 049 - 02427H
 STATE COUNTY PERMIT

MINIMUM DEGREE OF ACCURACY 1 / 2500 FILE NO. 8423P516734R.dwg
 HORIZONTAL & VERTICAL CONTROL DETERMINED BY DGPS (SURVEY GRADE TIE TO CORS NETWORK) SCALE SEE NOTE 3

STATE OF WEST VIRGINIA
 DIVISION OF ENVIRONMENTAL PROTECTION
 OFFICE OF OIL AND GAS

WELL TYPE: OIL GAS LIQUID INJECTION WASTE DISPOSAL IF "GAS" PRODUCTION STORAGE DEEP SHALLOW

LOCATION: (GROUND) (PROPOSED)
 ELEVATION 1191' 1207' WATERSHED BETHEL RUN
 DISTRICT LINCOLN COUNTY MARION QUADRANGLE GRANT TOWN 7.5'
 SURFACE OWNER WALTER & BEULAH PATRICK ACREAGE 21.50±
 ROYALTY OWNER LARRY & JUDITH KUHN ET AL ACREAGE 231±
 PROPOSED WORK : LEASE NO. 300744
 DRILL CONVERT DRILL DEEPER REDRILL FRACTURE OR STIMULATE PLUG OFF OLD FORMATION PERFORATE NEW FORMATION PLUG AND ABANDON CLEAN OUT AND REPLUG OTHER
 PHYSICAL CHANGE IN WELL (SPECIFY) _____ TARGET FORMATION MARCELLUS
 ESTIMATED DEPTH 7612'

WELL OPERATOR EQT PRODUCTION COMPANY DESIGNATED AGENT REX C. RAY
 ADDRESS 115 PROFESSIONAL PLACE P.O. BOX 280 BRIDGEPORT, WV 26330 ADDRESS 115 PROFESSIONAL PLACE P.O. BOX 280 BRIDGEPORT, WV 26330

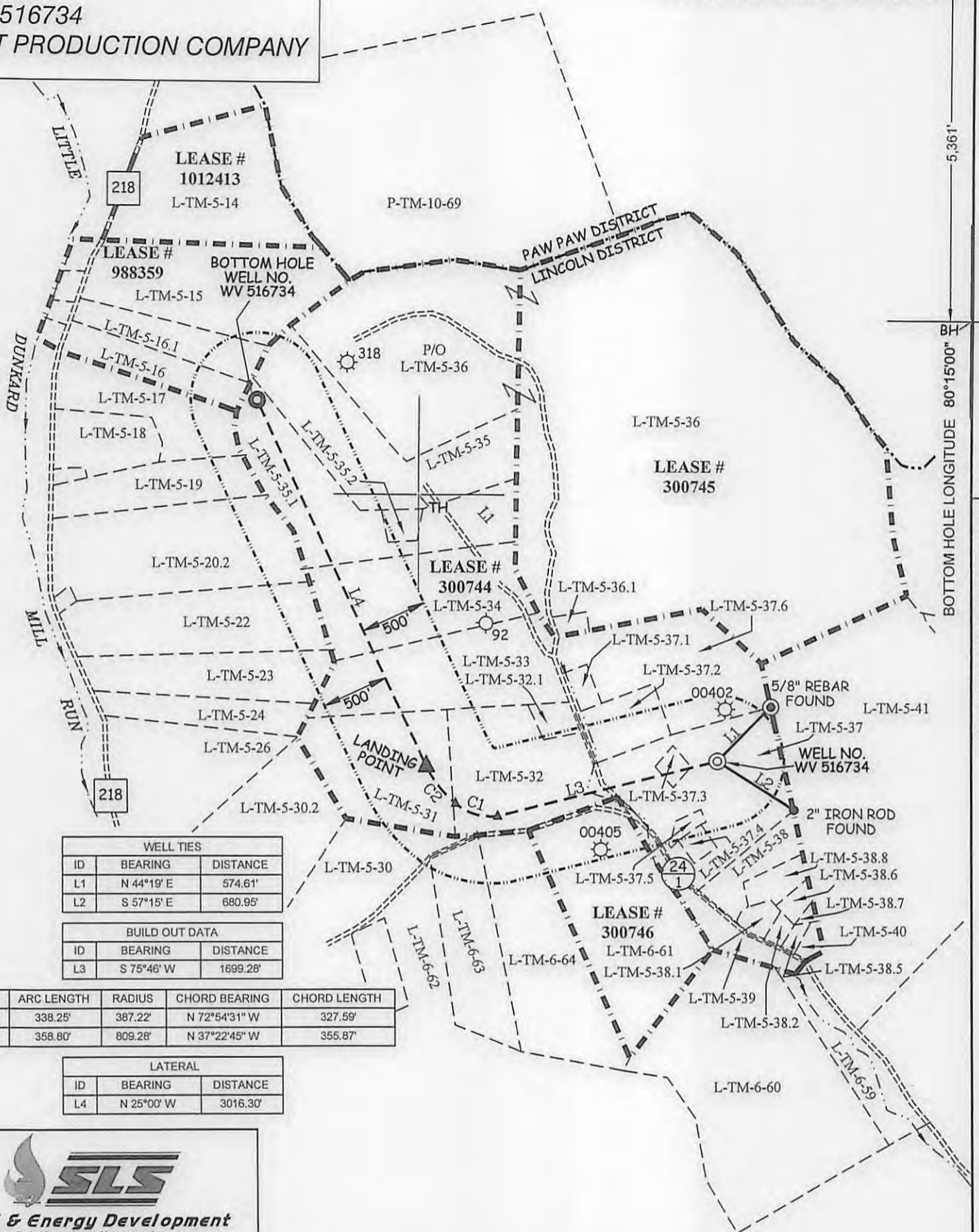
BOTTOM HOLE LONGITUDE 80°15'00" 28'
 TOP HOLE LONGITUDE 80°12'30"

COUNTY NAME
 PERMIT

03/17/2017

GRT28
WV 516734
EQT PRODUCTION COMPANY

NAD 27 GRID NORTH



5,361'

8,027'

BOTTOM HOLE LONGITUDE 80°15'00"

TOP HOLE LONGITUDE 80°12'30"

| WELL TIES | | |
|-----------|------------|----------|
| ID | BEARING | DISTANCE |
| L1 | N 44°19' E | 574.61' |
| L2 | S 57°15' E | 680.95' |

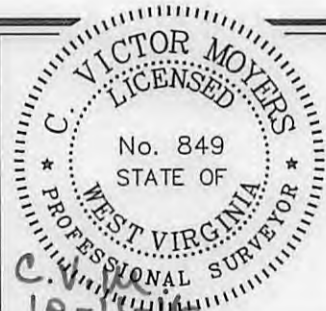
| BUILD OUT DATA | | |
|----------------|------------|----------|
| ID | BEARING | DISTANCE |
| L3 | S 75°46' W | 1699.28' |

| CURVE | ARC LENGTH | RADIUS | CHORD BEARING | CHORD LENGTH |
|-------|------------|---------|---------------|--------------|
| C1 | 338.25' | 387.22' | N 72°54'31" W | 327.59' |
| C2 | 358.80' | 809.28' | N 37°22'45" W | 355.87' |

| LATERAL | | |
|---------|------------|----------|
| ID | BEARING | DISTANCE |
| L4 | N 25°00' W | 3016.30' |

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 P.O. Box 150 • 12 Vanhorn Drive • Glenville, WV 26351 • (304) 482-5634
 www.slsurveys.com

| (S.P.C. NORTH ZONE) (UTM(M) ZONE 17 NORTH) | | |
|--|-------------------|--------------------|
| NAD'27 S.P.C.(FT) | N. 387,400.42 | E. 1,791,993.76 |
| NAD'27 GEO. | LAT-(N) 39.561296 | LONG-(W) 80.237780 |
| NAD'83 UTM (M) | N. 4,379,353.84 | E. 565,494.62 |
| LANDING POINT | | |
| NAD'27 S.P.C.(FT) | N. 387,361.72 | E. 1,789,817.47 |
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| BOTTOM HOLE | | |
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| NAD'27 GEO. | LAT-(N) 39.568616 | LONG-(W) 80.250100 |
| NAD'83 UTM (M) | N. 4,380,157.37 | E. 564,429.50 |



(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS.

| LEGEND | |
|---------------------------------|------------|
| LEASE LINE | ----- |
| SURFACE LINE | ----- |
| WELL LATERAL | ----- |
| OFFSET LINE | ----- |
| TIE LINE | ----- |
| CREEK | ----- |
| ROAD | ----- |
| COUNTY ROUTE | ----- |
| PROPOSED WELL | ⊙ |
| EXISTING WELL | ⊙ |
| PERMITTED WELL | ⊙ |
| LINCOLN DISTRICT TAX MAP-PARCEL | L-TM-00-00 |
| PAW PAW DISTRICT TAX MAP-PARCEL | P-TM-00-00 |

SCALE 1" = 1000' FILE NO. 8423P516734R

DATE AUGUST 25, 20 16

REVISED OCTOBER 11, 20 16

OPERATORS WELL NO. WV 516734

API WELL NO. 47 — 049 — 02427Hox

NO. STATE COUNTY PERMIT

STATE OF WEST VIRGINIA
 DIVISION OF ENVIRONMENTAL PROTECTION
 OFFICE OF OIL AND GAS

03/17/2017

COUNTY NAME

PERMIT

WELL OPERATOR EQT PRODUCTION COMPANY DESIGNATED AGENT REX C. RAY

ADDRESS 115 PROFESSIONAL PLACE P.O. BOX 280 BRIDGEPORT, WV 26330 ADDRESS 115 PROFESSIONAL PLACE P.O. BOX 280 BRIDGEPORT, WV 26330

**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

**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: EQT Production Company
 By: Victoria J Roark
 Its: Permitting Supervisor

Victoria J Roark
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 Office of Oil and Gas

DEC 02 2016
Page 1 of 2

WV Department of
Environmental Protection
03/17/2017

| Lease No. | Grantor, Lessor, etc. | Grantee, Lessee, etc. | Royalty | Book/Page |
|---------------|--|---|---------|------------|
| 300744 | <u>Larry & Judith Kuhn, et al (current royalty owner)</u> | | *** | |
| | D. D. Hawkins (original lessor) | W. Hunter Atha | | DB 111/219 |
| | W. Hunter Atha | E. H. Jennings & Bros | | DB 112/252 |
| | E. H. Jennings & Bros | Fairmont Gas and Light Company | | DB 112/286 |
| | Fairmont Gas and Light Company | Fairmont Gas Company | | DB 194/33 |
| | Fairmont Gas Company | Monongahela Valley Traction Company | | DB 207/314 |
| | Monongahela Valley Traction Company | Hope Natural Gas Company | | DB 497/163 |
| | Hope Natural Gas Company | Consolidated Gas Supply Corporation | | DB 680/35 |
| | Consolidated Gas Supply Corporation | Conolidated Gas Transmission Company | | DB 9/912 |
| | Conolidated Gas Transmission Company | CNG Transmission Corporation | | DB 46/654 |
| | CNG Transmission Corporation | Eastern States Oil and Gas, Inc. | | DB 16/993 |
| | Eastern States Oil and Gas, Inc. | Blazer Energy | | CB12/253 |
| | Blazer Energy | Eastern States Oil and Gas, Inc. | | CB 12/259 |
| | Eastern States Oil and Gas, Inc. | Equitable Production-Eastern States Oil & Gas | | CB 13/14 |
| | Equitable Production-Eastern States Oil & Gas | Equitable Production Company | | CB 13/14 |
| | Equitable Production Company | EQT Production Company | | CB 13/14 |

*** We will pay one-eighth of the total amount paid to or received by or allowed to the owner of the working interest at the wellhead for the oil or gas so extracted, produced, or marketed before deducting the amount to be paid to or set aside for the owner of the oil or gas in place, on all such oil or gas to be extracted, produced, or marketed from the well.

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Office of Oil and Gas
DEC 02 2016
WV Department of
Environmental Protection
03/17/2017



July 12, 2016

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

Re: GRT28 well pad, well number 516734
Lincoln District, Marion County

Dear Mr. Martin,

EQT Production Company is submitting an application for a new well work permit for the above well number. Upon information and belief, Operator's lease and/ or other real property rights permit it to conduct drilling operations for the subject well in the location shown on the plat, including under any public roads that the well lateral crosses.

Sincerely,

A handwritten signature in blue ink, appearing to read 'Vicki Roark'.

Vicki Roark
Permitting Supervisor-WV

RECEIVED
Office of Oil and Gas
DEC 02 2016
WV Department of
Environmental Protection

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

Date of Notice Certification: 11-30-16

API No. 47- 049 -
Operator's Well No. 516734
Well Pad Name: GRT28

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>WV</u> | UTM NAD 83 Easting: | <u>565494.624</u> |
| County: | <u>Marion</u> | Northing: | <u>4379353.842</u> |
| District: | <u>Lincoln</u> | Public Road Access: | <u>CR91</u> |
| Quadrangle: | <u>Grant Town</u> | Generally used farm name: | <u>Walter and Beulah Patrick</u> |
| Watershed: | <u>Bethel Run</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><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 align="center">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.

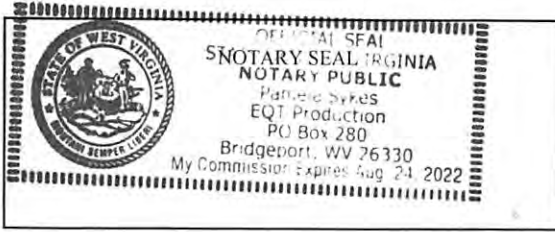
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WV Department of Environmental Protection
03/17/2017

Certification of Notice is hereby given:

THEREFORE, I *Victoria J Roark*, 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: EQT Production Company
By: Victoria J Roark
Its: Permitting Supervisor
Telephone: 304-848-0076

Address: 115 Professional Place PO Box 280
Bridgeport WV 26330
Facsimile: 304-848-0041
Email: vroark@eqt.com



Subscribed and sworn before me this 29 day of Nov 2016.
Patricia Sykes Notary Public
My Commission Expires 8-24-22

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.

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03/17/2017

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: 11-30-16 Date Permit Application Filed: 11-30-16

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: See Attached
Address: _____

Name: _____
Address: _____

SURFACE OWNER(s) (Road and/or Other Disturbance)

Name: See Attached
Address: _____

Name: _____
Address: _____

SURFACE OWNER(s) (Impoundments or Pits)

Name: See Attached
Address: _____

COAL OWNER OR LESSEE

Name: See Attached
Address: _____

COAL OPERATOR

Name: _____
Address: _____

SURFACE OWNER OF WATER WELL AND/OR WATER PURVEYOR(s)

Name: See Attached
Address: _____

OPERATOR OF ANY NATURAL GAS STORAGE FIELD

Name: _____
Address: _____

*Please attach additional forms if necessary

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Surface Owners:

Walter R. Patrick and Beulah J. Patrick
159 Horse Shoe Road
Farmington, WV 26571



7016 1970 0000 3938 1078

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OFFICIAL USE

| | |
|--|----|
| Certified Mail Fee | \$ |
| Extra Services & Fees (check box, add fee as appropriate) | |
| <input type="checkbox"/> Return Receipt (hardcopy) | \$ |
| <input type="checkbox"/> Return Receipt (electronic) | \$ |
| <input type="checkbox"/> Certified Mail Restricted Delivery | \$ |
| <input type="checkbox"/> Adult Signature Required | \$ |
| <input type="checkbox"/> Adult Signature Restricted Delivery | \$ |
| Postage | \$ |
| Total | \$ |

Postmark Here

BRIDGEFORD WV

NOV 2016

Walter R Patrick & Beulah J Patrick
159 Horse Shoe Road
Farmington WV 26571

City: Farmington GRT28 Permit Ap & Planned Op

PS Form 3800, April 2015 PSN 7530-02-000-9047 See Reverse for Instructions

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Surface Owners (road or other disturbance):

Walter R. Patrick and Beulah J. Patrick
159 Horse Shoe Road
Farmington, WV 26571

Lucida Darlene Denoon a/k/a Lucida Darlene Brown
100 Bland Hollow Road
Fairview, WV 26578

Larry E. Denoon Jr.
76 Bland Hollow Road
Fairview, WV 26578

7016 1970 0000 3938 1078

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\$ _____

Extra Services & Fees (check box, add fee as appropriate)

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|--|----------|
| <input type="checkbox"/> Return Receipt (hardcopy) | \$ _____ |
| <input type="checkbox"/> Return Receipt (electronic) | \$ _____ |
| <input type="checkbox"/> Certified Mail Restricted Delivery | \$ _____ |
| <input type="checkbox"/> Adult Signature Required | \$ _____ |
| <input type="checkbox"/> Adult Signature Restricted Delivery | \$ _____ |

Postage
\$ _____

Total
\$ _____

Sent To
\$ _____

Street and Apt
Walter R Patrick & Beulah J Patrick
159 Horse Shoe Road
Farmington WV 26571

City, State, ZIP
Farmington WV 26571

Postmark Here
NOV 3 2016

GRT28 Permit Ap & Planned Op

PS Form 3800, April 2015 PSN 7530-02-000-9047 See Reverse for Instructions

7016 1970 0000 3938 1092

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Extra Services & Fees (check box, add fee as appropriate)

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| <input type="checkbox"/> Return Receipt (electronic) | \$ _____ |
| <input type="checkbox"/> Certified Mail Restricted Delivery | \$ _____ |
| <input type="checkbox"/> Adult Signature Required | \$ _____ |
| <input type="checkbox"/> Adult Signature Restricted Delivery | \$ _____ |

Postage
\$ _____

Total Postage
\$ _____

Sent To
\$ _____

Street and Apt
Lucida Darlene Denoon
Aka Lucinda Darlene Brown
100 Bland Hollow Road
Fairview WV 26578

City, State, ZIP
Fairview WV 26578

Postmark Here
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GRT28 Permit Ap & Planned Op

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7016 1970 0000 3938 1108

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Certified Mail Fee
\$ _____

Extra Services & Fees (check box, add fee as appropriate)

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| <input type="checkbox"/> Return Receipt (hardcopy) | \$ _____ |
| <input type="checkbox"/> Return Receipt (electronic) | \$ _____ |
| <input type="checkbox"/> Certified Mail Restricted Delivery | \$ _____ |
| <input type="checkbox"/> Adult Signature Required | \$ _____ |
| <input type="checkbox"/> Adult Signature Restricted Delivery | \$ _____ |

Postage
\$ _____

Total
\$ _____

Sent To
\$ _____

Street
Larry E Denoon Jr
76 Bland Hollow Road
Fairview WV 26578

City, State, ZIP
Fairview WV 26578

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GRT28 Permit Ap & Planned Op

PS Form 3800, April 2015 PSN 7530-02-000-9047 See Reverse for Instructions

Surface Owners (Pits or impoundments):

Walter R. Patrick and Beulah J. Patrick
159 Horse Shoe Road
Farmington, WV 26571

70116 1970 0000 3938 1078

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OFFICIAL USE

Certified Mail Fee
\$ _____

Extra Services & Fees (check box, add fee as appropriate)

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|--|----------|
| <input type="checkbox"/> Return Receipt (hardcopy) | \$ _____ |
| <input type="checkbox"/> Return Receipt (electronic) | \$ _____ |
| <input type="checkbox"/> Certified Mail Restricted Delivery | \$ _____ |
| <input type="checkbox"/> Adult Signature Required | \$ _____ |
| <input type="checkbox"/> Adult Signature Restricted Delivery | \$ _____ |

Postage
\$ _____

\$ Total Walter R Patrick & Beulah J Patrick
\$ 159 Horse Shoe Road
\$ 159 Horse Shoe Road
\$ Farmington WV 26571

Street _____
City, _____

GRT28 Permit Ap & Planned Op _____

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BRIDGE MOUNTAIN WV
NOV 15 2016
Postmark Here

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Coal Owner

Consolidation Coal Company
Engineering Operations Support Dept. Coal
1000 Consol Energy Drive
Canonsburg PA 15317
Attn: Casey Saunders

Lucinda Darlene Brown
100 Bland Hollow Rd
Fairview, WV 26570

Consolidation Coal Company OH
c/o Murray American Energy, Inc.
46226 National Rd
St. Clairsville, OH 43950
Attn: Alex O'Neill



Consolidation Coal Company WV
c/o Murray American Energy, Inc.
1 Bridge St
Monongah, WV 26554
Attn: Troy Freels

CNX Gas Co., LLC
Engineering Operations Support Dept. Coal
1000 Consol Energy Dr.
Canonsburg, PA 15317-6506
Attn: Casey Saunders

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Owners of Water Wells

Harry "Wayne" Bland
148 Bland Hollow Rd.
Fairview WV 26570

7016 1970 0000 3938 1153

U.S. Postal Service™
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OFFICIAL USE

Certified Mail Fee
\$ _____

Extra Services & Fees (check box, add fee as appropriate)

| | |
|--|----------|
| <input type="checkbox"/> Return Receipt (hardcopy) | \$ _____ |
| <input type="checkbox"/> Return Receipt (electronic) | \$ _____ |
| <input type="checkbox"/> Certified Mail Restricted Delivery | \$ _____ |
| <input type="checkbox"/> Adult Signature Required | \$ _____ |
| <input type="checkbox"/> Adult Signature Restricted Delivery | \$ _____ |

Postage
\$ _____

Total Postage \$ _____

Sent To Harry "Wayne" Bland
148 Bland Hollow Rd
Fairview WV 26570

Street and, _____
City, State, _____

PS Form 3800, April 2015 PSN 7530-02-000-9047 See Reverse for Instructions

Postmark Here
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RIDGEBORO, WV 26330-0839
GRT28 Permitted

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03/17/2017

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 401 permit or other approval from the United States Army Corps of Engineers within any waters of the state or within the restricted areas referenced in this section. (d) The well location restrictions set forth in this section shall not apply to any well on a multiple well pad if at least one of the wells was permitted prior to the effective date of this article. (e) The secretary shall, by December 31, 2012, report to the Legislature on the noise, light, dust and volatile organic compounds generated by the drilling of horizontal wells as they relate to the well location restrictions regarding occupied dwelling structures pursuant to this section. Upon a finding, if any, by the secretary that the well location restrictions regarding occupied dwelling structures are inadequate or otherwise require alteration to address the same

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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

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.**

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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.

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WV Department of
Environmental Protection
03/17/2017

WW-6A
(8-13)

API NO. 47- 049 - _____
OPERATOR WELL NO. 516734 _____
Well Pad Name: GRT28 _____

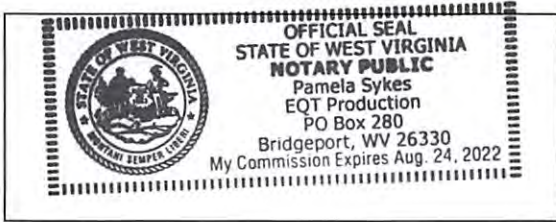
Notice is hereby given by:

Well Operator: EQT Production Company
Telephone: 304-848-0076
Email: vroark@eqt.com

Address: 115 Professional Place PO Box 280
Bridgeport WV 26330
Facsimile: 304-848-0041

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.



West of L

Subscribed and sworn before me this 29 day of Nov., 2016.

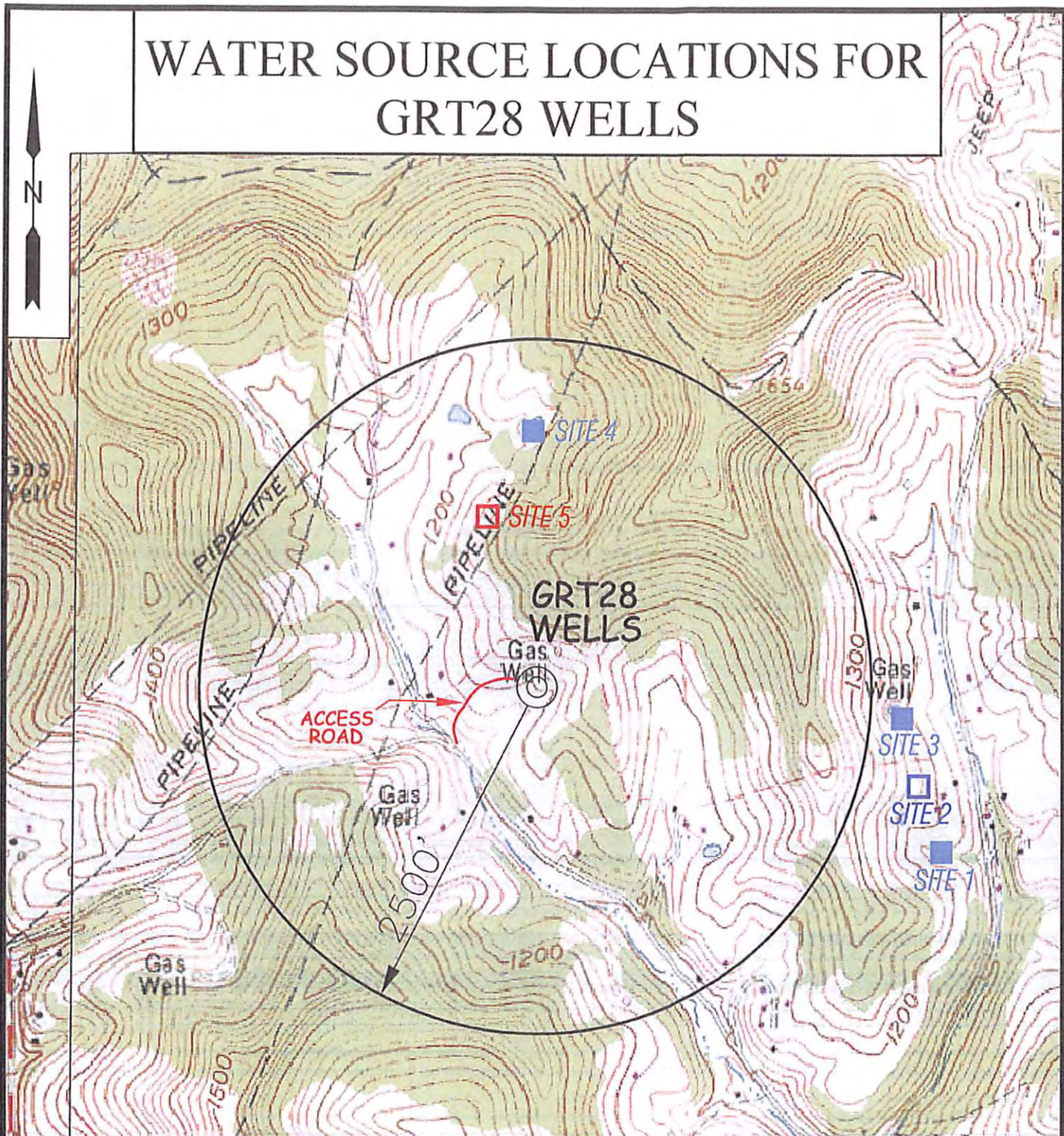
Pamela Sykes

Notary Public

My Commission Expires 8-24-22

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WV Department of
Environmental Protection
03/17/2017

WATER SOURCE LOCATIONS FOR GRT28 WELLS



LEGEND

- CISTERN
- SPRING



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Land & Energy Development
Solutions from the ground up.
P.O. Box 102 & 12, Charleston, WV 25303 • 304.402.9194
www.slsenergy.com

TOPO SECTION OF:
GRANT TOWN, WV 7.5' QUAD

| DISTRICT | COUNTY | TAX MAP-PARCEL NO. |
|----------|--------|--------------------|
| LINCOLN | MARION | 05-37 |

OPERATOR: **Office of Oil and Gas**
EQT PRODUCTION COMPANY
 115 PROFESSIONAL PLACE
 P.O. BOX 280
 BRIDGEPORT, WV 26630

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 OFFICE OF OIL AND GAS
 DEPARTMENT OF ENVIRONMENTAL PROTECTION
 03/17/2017

| | | | |
|---------------------|------------------|------------------|--------------------------------|
| DRAWN BY: K.D.W. | FILE NO. 8423 | DATE 06/28/16 | CADD FILE: 8423WATERMAP.dwg |
|---------------------|------------------|------------------|--------------------------------|

**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: 08/19/2016 **Date Permit Application Filed:** 08/29/2016

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: See attached.
Address: _____

Name: See attached.
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: <u>WV</u> | UTM NAD 83 Easting: <u>565494.624</u> |
| County: <u>Marion</u> | Northing: <u>4379353.842</u> |
| District: <u>Lincoln</u> | Public Road Access: <u>CR91</u> |
| Quadrangle: <u>Grant Town</u> | Generally used farm name: <u>Walter and Beulah Patrick</u> |
| Watershed: <u>Bethel Run</u> | |

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: EQT Production Company
Address: 115 Professional Place PO Box 280
Bridgeport WV 26330
Telephone: 304-848-0076
Email: vroark@eqt.com
Facsimile: 304-848-0041

Authorized Representative: Victoria Roark
Address: 115 Professional Place PO Box 280
Bridgeport WV 26330
Telephone: 304-848-0076
Email: vroark@eqt.com
Facsimile: 304-848-0041

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. The office will appropriately secure your personal information. If you have any questions about our use of your personal information, please contact DEP's Chief Privacy Officer at depprivacyofficer@wv.gov.

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WV Department of
Environmental Protection
03/17/2017

Surface Owners:

Walter R. Patrick and Beulah J. Patrick
159 Horse Shoe Road
Farmington, WV 26571

7016 0910 0000 4937 3880

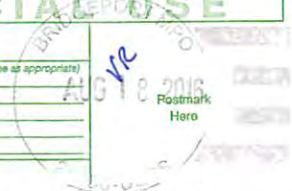
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| | |
|--|---|
| Certified Mail Fee | \$ |
| Extra Services & Fees (check box, add fee as appropriate) | |
| <input type="checkbox"/> Return Receipt (hardcopy) | \$ |
| <input type="checkbox"/> Return Receipt (electronic) | \$ |
| <input type="checkbox"/> Certified Mail Restricted Delivery | \$ |
| <input type="checkbox"/> Adult Signature Required | \$ |
| <input type="checkbox"/> Adult Signature Restricted Delivery | \$ |
| Postage | \$ |
| Total Postage | \$ |
| Sent To | Walter R. Patrick and Beulah J. Patrick |
| Street and | 159 Horse Shoe Road |
| City, State | Farmington, WV 26571 |
| City, State | GRT 28 |
| | Notice of Intent |

PS Form 3800, April 2015 PSN 7530-02-000-9047 See Reverse for Instructions



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WV Department of Environmental Protection
03/17/2017

Surface Owners (road or other disturbance):

Walter R. Patrick and Beulah J. Patrick
159 Horse Shoe Road
Farmington, WV 26571

Lucida Darlene Denoon a/k/a Lucida Darlene Brown
100 Bland Hollow Road
Fairview, WV 26578

Larry E. Denoon Jr.
76 Bland Hollow Road
Fairview, WV 26578

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 Return Receipt (hardcopy) \$
 Return Receipt (electronic) \$
 Certified Mail Restricted Delivery \$
 Adult Signature Required \$
 Adult Signature Restricted Delivery \$
Postage \$
Total Postage \$

Postmark Here

Sent To: Walter R. Patrick and Beulah J. Patrick
159 Horse Shoe Road
Farmington, WV 26571
City, State: GRT 28
Notice of Intent

PS Form 3800, April 2015 PSN 7530-02-000-9047 See Reverse for Instructions

7016 0910 0000 4937 3873

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Certified Mail Fee \$
Extra Services & Fees (check box, add fee as appropriate)
 Return Receipt (hardcopy) \$
 Return Receipt (electronic) \$
 Certified Mail Restricted Delivery \$
 Adult Signature Required \$
 Adult Signature Restricted Delivery \$
Postage \$
Total Postage \$

Postmark Here

Sent To: Lucida Darlene Denoon
100 Bland Hollow Road
Fairview, WV 26578
City, State: GRT 28
Notice of Intent

PS Form 3800, April 2015 PSN 7530-02-000-9047 See Reverse for Instructions

7016 0910 0000 4937 3859

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Extra Services & Fees (check box, add fee as appropriate)
 Return Receipt (hardcopy) \$
 Return Receipt (electronic) \$
 Certified Mail Restricted Delivery \$
 Adult Signature Required \$
 Adult Signature Restricted Delivery \$
Postage \$
Total Postage \$

Postmark Here

Sent To: Larry E. Denoon, Jr.
76 Bland Hollow Road
Fairview, WV 26578
City, State: GRT 28
Notice of Intent

PS Form 3800, April 2015 PSN 7530-02-000-9047 See Reverse for Instructions



Surface Owners (Pits or impoundments): (AST)

Walter R. Patrick and Beulah J. Patrick
159 Horse Shoe Road
Farmington, WV 26571

7016 0910 0000 4937 3880

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| | |
|--|----|
| Certified Mail Fee | \$ |
| Extra Services & Fees (check box, add fee as appropriate) | |
| <input type="checkbox"/> Return Receipt (hardcopy) | \$ |
| <input type="checkbox"/> Return Receipt (electronic) | \$ |
| <input type="checkbox"/> Certified Mail Restricted Delivery | \$ |
| <input type="checkbox"/> Adult Signature Required | \$ |
| <input type="checkbox"/> Adult Signature Restricted Delivery | \$ |
| Postage | \$ |
| Total Postage | \$ |

Sent To Walter R. Patrick and Beulah J. Patrick
159 Horse Shoe Road
Farmington, WV 26571

City, State: GRT 28
Notice of Intent

PS Form 3800, April 2015 PSN 7530-02-000-9047 See Reverse for Instructions

BRIDLEPOINTE
vr
AUG 18 2016
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✓

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: 11-30-16 **Date Permit Application Filed:** 11-30-16

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: <u>See Attached</u> | Name: <u>See Attached</u> |
| Address: _____ | 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>WV</u> | UTM NAD 83 Easting: <u>565494.624</u> |
| County: <u>Marion</u> | Northing: <u>4379353.842</u> |
| District: <u>Lincoln</u> | Public Road Access: <u>CR91</u> |
| Quadrangle: <u>Grant Town</u> | Generally used farm name: <u>Walter and Beulah Patrick</u> |
| Watershed: <u>Bethel Run</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: <u>EQT Production Company</u> | Address: <u>115 Professional Place PO Box 280</u> |
| Telephone: <u>304-848-0076</u> | <u>Bridgeport WV 26330</u> |
| Email: <u>vroark@eqt.com</u> | Facsimile: <u>304-848-0041</u> |

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.

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03/17/2017

Surface Owners:

Walter R. Patrick and Beulah J. Patrick
159 Horse Shoe Road
Farmington, WV 26571

7016 1970 0000 3938 1078

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Certified Mail Fee
\$ _____

Extra Services & Fees (check box, add fee as appropriate)

| | |
|--|----------|
| <input type="checkbox"/> Return Receipt (hardcopy) | \$ _____ |
| <input type="checkbox"/> Return Receipt (electronic) | \$ _____ |
| <input type="checkbox"/> Certified Mail Restricted Delivery | \$ _____ |
| <input type="checkbox"/> Adult Signature Required | \$ _____ |
| <input type="checkbox"/> Adult Signature Restricted Delivery | \$ _____ |

Postage
\$ _____

Total
\$ _____

Sender
Walter R Patrick & Beulah J Patrick
159 Horse Shoe Road
Farmington WV 26571

City
GRT28 Permit Ap & Planned Op

PS Form 3800, April 2015 PSN 7530-02-000-8047 See Reverse for Instructions

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WV Department of
Environmental Protection

03/17/2017

Surface Owners (road or other disturbance):

Walter R. Patrick and Beulah J. Patrick
159 Horse Shoe Road
Farmington, WV 26571

Lucida Darlene Denoon a/k/a Lucida Darlene Brown
100 Bland Hollow Road
Fairview, WV 26578

Larry E. Denoon Jr.
76 Bland Hollow Road
Fairview, WV 26578

7016 1970 0000 3938 1078

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Extra Services & Fees (check box, add fee as appropriate)

| | |
|--|----------|
| <input type="checkbox"/> Return Receipt (hardcopy) | \$ _____ |
| <input type="checkbox"/> Return Receipt (electronic) | \$ _____ |
| <input type="checkbox"/> Certified Mail Restricted Delivery | \$ _____ |
| <input type="checkbox"/> Adult Signature Required | \$ _____ |
| <input type="checkbox"/> Adult Signature Restricted Delivery | \$ _____ |

Postage
\$ _____

Total \$ _____

Sent To
\$ _____

Street and Apt
Walter R Patrick & Beulah J Patrick
159 Horse Shoe Road
Farmington WV 26571

City, State, ZIP
GRT28 Permit Ap & Planned Op

PS Form 3800, April 2015 PSN 7530-02-000-9047 See Reverse for Instructions

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| | |
|--|----------|
| <input type="checkbox"/> Return Receipt (hardcopy) | \$ _____ |
| <input type="checkbox"/> Return Receipt (electronic) | \$ _____ |
| <input type="checkbox"/> Certified Mail Restricted Delivery | \$ _____ |
| <input type="checkbox"/> Adult Signature Required | \$ _____ |
| <input type="checkbox"/> Adult Signature Restricted Delivery | \$ _____ |

Postage
\$ _____

Total Postage \$ _____

Sent To
\$ _____

Street and Apt
Lucida Darlene Denoon
Aka Lucinda Darlene Brown
100 Bland Hollow Road
Fairview WV 26578

City, State, ZIP
GRT28 Permit Ap & Planned Op

PS Form 3800, April 2015 PSN 7530-02-000-9047 See Reverse for Instructions

NOV 3 2016 BRIDGE MOUNTAIN WV

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Extra Services & Fees (check box, add fee as appropriate)

| | |
|--|----------|
| <input type="checkbox"/> Return Receipt (hardcopy) | \$ _____ |
| <input type="checkbox"/> Return Receipt (electronic) | \$ _____ |
| <input type="checkbox"/> Certified Mail Restricted Delivery | \$ _____ |
| <input type="checkbox"/> Adult Signature Required | \$ _____ |
| <input type="checkbox"/> Adult Signature Restricted Delivery | \$ _____ |

Postage
\$ _____

Total \$ _____

Sent To
\$ _____

Street and Apt
Larry E Denoon Jr
76 Bland Hollow Road
Fairview WV 26578

City, State, ZIP
GRT28 Permit Ap & Planned Op

PS Form 3800, April 2015 PSN 7530-02-000-9047 See Reverse for Instructions

NOV 3 2016 BRIDGE MOUNTAIN WV

Office of Oil and Gas
WV Department of Environmental Protection
03/17/2017

1194 114
201600007214

STATE OF WEST VIRGINIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS
WELL LOCATION RESTRICTION WAIVER

The well operator, EQT Production Company is applying for a permit from the State of West Virginia to conduct oil or gas well work. Please be advised that well work permits are valid for twenty-four (24) months.

Well Location Restrictions

Pursuant to West Virginia Code § 22-6A-12(a), 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.

WAIVER

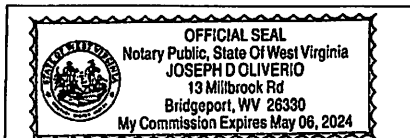
I, Kevin E. Toothman and Martha J. Toothman, hereby state that I have read the Instructions to Persons Named on Page WW-6A and the associated provisions listed above, and that I have received copies of a Notice of Application, an Application for a Well Work Permit on Form WW-6A and attachments consisting of pages one (1) through _____, including the erosion and sediment control plan, if required, and the well plat, all for proposed well work on the tract of land as follows:

State: West Virginia UTM NAD 83 Easting: 565494.624
County: Marion UTM NAD 83 Northing: 4379353.842
District: Lincoln Public Road Access: CR 24/1
Quadrangle: Fairmont West Generally used farm name: Toothman
Watershed: Dunkard Mill Run

I further state that I have no objection to the planned work described in these materials, and I have no objection to a permit being issued on those materials and I therefore waive all well site restrictions listed under West Virginia Code § 22-6A-12(a).

| | |
|---|--|
| WELL SITE RESTRICTIONS BEING WAIVED *Please check all that apply <input type="checkbox"/> EXISTING WATER WELLS <input type="checkbox"/> DEVELOPED SPRINGS <input checked="" type="checkbox"/> DWELLINGS <input type="checkbox"/> AGRICULTURAL BUILDINGS | FOR EXECUTION BY A NATURAL PERSON Signature: <u>Kevin E. Toothman and Martha J. Toothman</u> Print Name: <u>Kevin E. Toothman and Martha J. Toothman</u> Date: <u>April 13, 2016</u> FOR EXECUTION BY A CORPORATION, ETC. Company: _____ By: _____ Its: _____ Signature: <u>[Signature]</u> Date: _____ |
|---|--|

Well Operator: EQT Production Company Signature: [Signature]
By: John W. Damato Telephone: _____
Its: Attorney in Fact



Subscribed and sworn before me this 13 day of April, 2016
Joseph D. Oliverio Notary Public
My Commission Expires May 06, 2024

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 of your personal information, please contact DEP's Chief Privacy Officer at depprivacyofficer@wv.gov.

STATE OF WEST VIRGINIA, County of Marion,

To-Wit:

I, Janice Cosco, Clerk of the County Commission of said County, do hereby certify that the foregoing writing, with certificate thereto annexed, was this day produced to me in my office and duly admitted to record.

Witness my hand.

Janice Cosco Clerk

201600007214
Filed for Record in
MARION COUNTY, WV
JANICE COSCO, COUNTY CLERK
06-07-2016 At 02:50 pm.
WAIVER DEED 16.00
STATE TAX .00
COUNTY TAX .00
Book 1194 Page 114 - 114

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WV Department of
Environmental Protection

1194 102
201600007202

STATE OF WEST VIRGINIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS
WELL LOCATION RESTRICTION WAIVER

The well operator, EQT Production Company is applying for a permit from the State of West Virginia to conduct oil or gas well work. Please be advised that well work permits are valid for twenty-four (24) months.

Well Location Restrictions

Pursuant to West Virginia Code § 22-6A-12(a), 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.

WAIVER

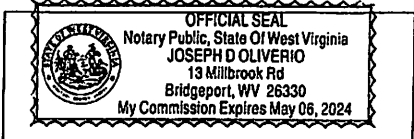
I, Travis E. Toothman and Heidi A. Toothman, hereby state that I have read the Instructions to Persons Named on Page WW-6A and the associated provisions listed above, and that I have received copies of a Notice of Application, an Application for a Well Work Permit on Form WW-6A and attachments consisting of pages one (1) through _____, including the erosion and sediment control plan, if required, and the well plat, all for proposed well work on the tract of land as follows:

State: West Virginia UTM NAD 83 Easting: 565494.624
County: Marion UTM NAD 83 Northing: 4379353.842
District: Lincoln Public Road Access: CR 241
Quadrangle: Fairmont West Generally used farm name: Toothman
Watershed: Dunkard Mill Run

I further state that I have no objection to the planned work described in these materials, and I have no objection to a permit being issued on those materials and I therefore waive all well site restrictions listed under West Virginia Code § 22-6A-12(a).

| | |
|---|---|
| <p>WELL SITE RESTRICTIONS BEING WAIVED *Please check all that apply</p> <p><input type="checkbox"/> EXISTING WATER WELLS</p> <p><input type="checkbox"/> DEVELOPED SPRINGS</p> <p><input checked="" type="checkbox"/> DWELLINGS</p> <p><input type="checkbox"/> AGRICULTURAL BUILDINGS</p> | <p>FOR EXECUTION BY A NATURAL PERSON Signature: <u>[Signature]</u> Print Name: <u>Travis E. Toothman and Heidi A. Toothman</u> Date: <u>April 26, 2016</u></p> <p>FOR EXECUTION BY A CORPORATION, ETC. Company: _____ By: _____ Its: _____ Signature: _____ Date: _____</p> |
|---|---|

Well Operator: EQT Production Company Signature: [Signature]
By: John W. Damato Telephone: [Signature]
Its: Attorney in Fact



Subscribed and sworn before me this 26 day of April, 2016
Joseph D. Oliverio Notary Public
My Commission Expires May 06, 2024

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 of your personal information, please contact DEP's Chief Privacy Officer at depprivacyofficer@wv.gov.

STATE OF WEST VIRGINIA, County of Marion,

To-Wit:

I, Janice Cosco, Clerk of the County Commission of said County, do hereby certify that the foregoing writing, with certificate thereto annexed, was this day produced to me in my office and duly admitted to record.

Witness my hand.

Janice Cosco Clerk

201600007202
Filed for Record in
MARION COUNTY, WV
JANICE COSCO, COUNTY CLERK
06-07-2016 At 02:50 pm.
WAIVER DEED 16.00
STATE TAX .00
COUNTY TAX .00
Book 1194 Page 102 - 102

RECEIVED
Office of Oil and Gas

DEC 02 2016

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

Earl Ray Tomblin
Governor

Paul A. Mattox, Jr., P. E.
Secretary of Transportation/
Commissioner of Highways

November 23, 2016

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 GRT 28 Pad Site, Marion County

- | | | |
|-------------------|-------------------|-------------------|
| 512725 GRT 28 H1 | 512726 GRT 28 H2 | 512727 GRT 28 H3 |
| 513437 GRT 28 H4 | 513438 GRT 28 H5 | 513439 GRT 28 H6 |
| 516734 GRT 28 H7 | 516735 GRT 28 H8 | 516736 GRT 28 H9 |
| 516737 GRT 28 H10 | 516738 GRT 28 H11 | 516739 GRT 28 H12 |

Dear Mr. Martin,

This well site will be accessed from Permit #04-2016-0588 applied for by EQT Production Company for access to the State Road. The well site is located off of Marion County Route 15/1 SLS. The approved DOH permit must be received before construction of or any use of this access to the roadway.

The operator has signed a STATEWIDE OIL AND GAS ROAD MAINTENANCE BONDING AGREEMENT and provided the required Bond. This operator is currently in compliance with the DOH OIL AND GAS POLICY dated January 3, 2012.

Very Truly Yours,

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

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Office of Oil and Gas
DEC 02 2016
WV Department of
Environmental Protection

Cc: Nick Bumgardner
EQT Production Company
CH, OM, D-4, File

03/17/2017

Anticipated Frac Additives
Chemical Names and CAS numbers

| <u>Material</u> | <u>Ingredient</u> | <u>CAS Number</u> |
|-----------------------|--|-------------------|
| Water | | |
| Sand | Hydrotreated light petroleum distillate | 14808-60-7 |
| Friction Reducer | Tributyl tetradecyl phosphonium chloride | 64742-47-8 |
| Biocide | Ammonium chloride | 81741-28-8 |
| Scale Inhibitor | Hydrochloric Acid | 12125-02-9 |
| 15% Hydrochloric Acid | Propargyl Alcohol | 7647-01-0 |
| Corrosion Inhibitor | Methanol | 107-19-7 |
| Corrosion Inhibitor | Guar Gum | 67-56-1 |
| Gelling Agent | Sodium Persulfate | 9000-30-0 |
| Oxidizing Breaker | Potassium Carbonate | 7775-27-1 |
| Buffering Agent | | 584-08-7 |

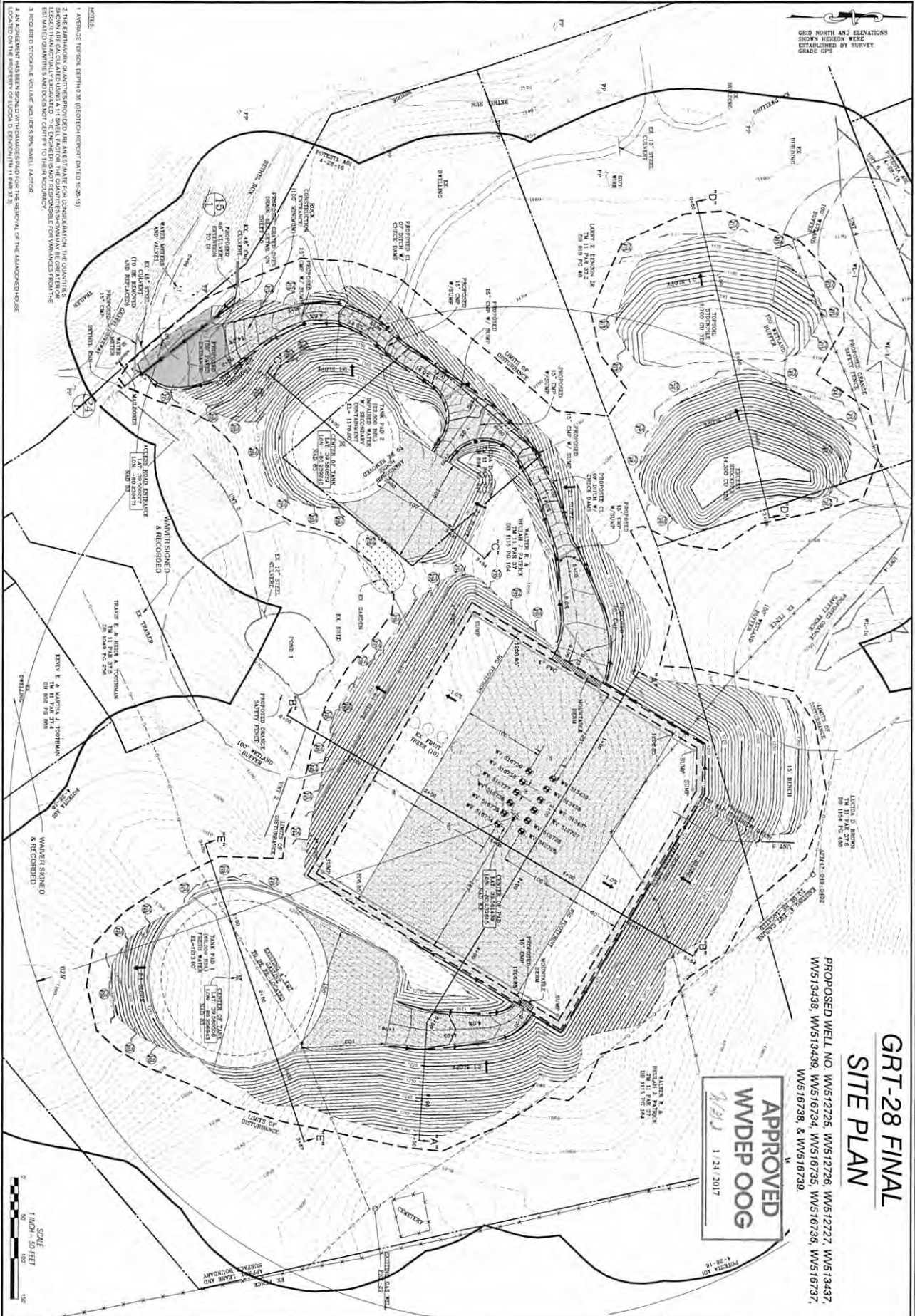
RECEIVED
Office of Oil and Gas

DEC 02 2016

WV Department of
Environmental Protection

03/17/2017

GRID NORTH AND ELEVATIONS SHOWN HEREON WERE ESTABLISHED BY SURVEY GRADE 0.00



- NOTES:
1. APPROVE TOPSOIL REPORTS & GEOTECH REPORT DATED 06-20-15
 2. THE EXISTING QUANTITIES PROVIDED ARE AN ESTIMATE FOR CONSTRUCTION. THE QUANTITIES SHOWN ARE CALCULATED FROM A 10' SHALL ACROSS THE QUANTITIES SHOWN MAY BE OBTAINED OR ESTIMATED QUANTITIES AND DOES NOT CARRY TO THEM ACCURACY.
 3. REQUIRED STROKE INCLUDE INCLUDES 50% SHALL FACTOR.
 4. AN AGREEMENT HAS BEEN SIGNED WITH QUANTITIES FOR THE REMOVAL OF THE ADJACENT HOUSE LOCATED ON THE PROPERTY OF LINDA B. BROWN (TA 11 PA 31 2).

**GRT-28 FINAL
SITE PLAN**

PROPOSED WELL NO. W1512725, W1512726, W1512727, W1513437, W1513438, W1513439, W1516734, W1516735, W1516736, W1516737, W1516738, & W1516739.

**APPROVED
WDEP OOG**
1/24/2017



| | | | |
|---|--|---|--|
| <p>EQT Where energy meets innovation</p> | <p>SLS Land & Energy Development Soilless from the ground up.</p> | <p>THIS DOCUMENT WAS PREPARED BY FOR THE PRODUCTION OF THE FOLLOWING:</p> | <p>GRT-28 FINAL SITE PLAN LINCOLN DISTRICT MARION COUNTY, WV</p> <p>DATE: 5-9-16 SCALE: 1" = 50' DESIGNED BY: BBS FILE NO: 0403 SHEET: 4 OF 12 REV: 1-01-17</p> |
|---|--|---|--|

03/17/2017

49-0247

PROJECT INFORMATION

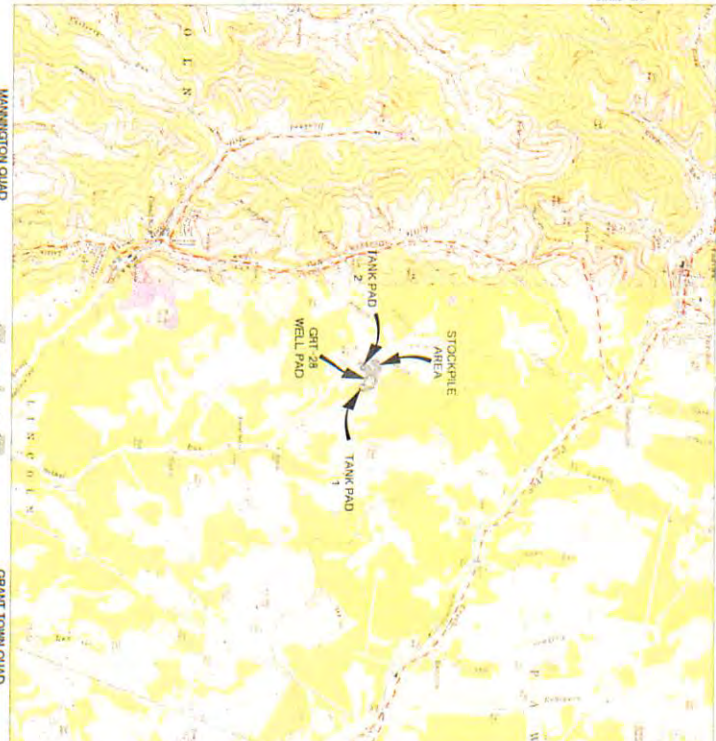
PROJECT NAME: GRT-28
 250 PAVEMENT
 LOCATION: MARION COUNTY, WEST VIRGINIA
 CLIENT: EQT PRODUCTION COMPANY
 PROJECT NO.: W513438, W513439, W516734, W516735, W516736, W516737, W516738, W516739
 DATE: 11/14/2016
 DRAWN BY: [Signature]
 CHECKED BY: [Signature]
 APPROVED BY: [Signature]

GRT-28 FINAL SITE PLAN

EQT PRODUCTION COMPANY

PROPOSED WELL NO. W512725, W512726, W512727, W513437, W513438, W513439, W516734, W516735, W516736, W516737, W516738, & W516739.

SITUATE ON THE WATERS OF BETHEL RUN IN
 LINCOLN DISTRICT, MARION COUNTY, WEST VIRGINIA.



MISS (Utah) of West Virginia
 Road - 380-265-4848
 (Seaham, Utah State Dept
 Requires that you call two
 business days before you die in
 the state of West Virginia.
 IT'S THE LAW!

LEGEND

| | |
|-------------------------|--------------------|
| 1 - CONSTRUCTION STAKE | CONSTRUCTION STAKE |
| 2 - CONSTRUCTION STAKE | CONSTRUCTION STAKE |
| 3 - CONSTRUCTION STAKE | CONSTRUCTION STAKE |
| 4 - CONSTRUCTION STAKE | CONSTRUCTION STAKE |
| 5 - CONSTRUCTION STAKE | CONSTRUCTION STAKE |
| 6 - CONSTRUCTION STAKE | CONSTRUCTION STAKE |
| 7 - CONSTRUCTION STAKE | CONSTRUCTION STAKE |
| 8 - CONSTRUCTION STAKE | CONSTRUCTION STAKE |
| 9 - CONSTRUCTION STAKE | CONSTRUCTION STAKE |
| 10 - CONSTRUCTION STAKE | CONSTRUCTION STAKE |
| 11 - CONSTRUCTION STAKE | CONSTRUCTION STAKE |
| 12 - CONSTRUCTION STAKE | CONSTRUCTION STAKE |

RESTRICTIONS/NOTES

1. THE OPERATOR SHALL MAINTAIN ACCESS TO ALL ADJACENT PROPERTIES AT ALL TIMES.
2. THE OPERATOR SHALL MAINTAIN ACCESS TO ALL ADJACENT PROPERTIES AT ALL TIMES.
3. THE OPERATOR SHALL MAINTAIN ACCESS TO ALL ADJACENT PROPERTIES AT ALL TIMES.
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6. THE OPERATOR SHALL MAINTAIN ACCESS TO ALL ADJACENT PROPERTIES AT ALL TIMES.
7. THE OPERATOR SHALL MAINTAIN ACCESS TO ALL ADJACENT PROPERTIES AT ALL TIMES.
8. THE OPERATOR SHALL MAINTAIN ACCESS TO ALL ADJACENT PROPERTIES AT ALL TIMES.

OPERATOR
 EQT PRODUCTION COMPANY
 115 PROFESSIONAL PLACE
 HERRINGTON, WV 26033
 PHONE: (304) 462-5634
 FAX: (304) 462-5634

ENGINEER/SUPERVISOR
 SLS
 115 PROFESSIONAL PLACE
 HERRINGTON, WV 26033
 PHONE: (304) 462-5634
 FAX: (304) 462-5634

S D W
 12/12/2016

COVER SHEET
GRT-28 FINAL SITE PLAN
 LINCOLN DISTRICT
 MARION COUNTY, WV

SCALE: 1" = 200'
 DRAWN BY: [Signature]
 CHECKED BY: [Signature]
 DATE: 11-16-16



03/17/2017