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

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

Wednesday, November 09, 2016
WELL WORK PERMIT
Horizontal 6A / Horizontal 6A Well - 1

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

Re: Permit approval for 513515
47-017-06753-00-00

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: 513515
Farm Name: HAYES, SHIRLEY J.
U.S. WELL NUMBER: 47-017-06753-00-00
Horizontal 6A / Horizontal 6A Well - 1
Date Issued: 11/9/2016

API Number: 17-06753

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. 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.

8. 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.

9. 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.

WW - 6B
(4/15)

API NO. 47 - 017 - 06753 0
OPERATOR WELL NO. 513515
Well Pad Name: CPT10

09/03

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

1) Well Operator: EQT Production Company

Operator ID	County	District	Quadrangle
306686	017	5	286

2) Operator's Well Number: 513515 Well Pad Name: CPT10

3) Farm Name/Surface Owner : Shirley James and Marjorie Hayes Public Road Access: Co. Rt. 4

4) Elevation, current ground: 977.0 Elevation, proposed post-construction: 970.0

5) Well Type: (a) Gas • Oil _____ Underground Storage _____

Other _____

(b) If Gas: Shallow • Deep _____

Horizontal •

Michael Doff
10-1-15

6) Existing Pad? Yes or No: no

7) Proposed Target Formation(s), Depth(s), Anticipated Thicknesses and Associated Pressure(s):

Target formation is Marcellus at a depth of 7020 with the anticipated thickness to be 50 feet and anticipated target pressure of 2951 PSI

Top of Marcellus 6998

8) Proposed Total Vertical Depth: 7020
9) Formation at Total Vertical Depth: Marcellus
10) Proposed Total Measured Depth: 10288
11) Proposed Horizontal Leg Length 2,718
12) Approximate Fresh Water Strata Depths: 48, 100
13) Method to Determine Fresh Water Depth: By offset wells
14) Approximate Saltwater Depths: 763, 1212, 1442
15) Approximate Coal Seam Depths: 163, 202, 302, 307, 406, 607, 663, 707, 725
16) Approximate Depth to Possible Void (coal mine, karst, other): None reported
17) Does proposed well location contain coal seams directly overlying or adjacent to an active mine? Yes _____ No x

(a) If Yes, provide Mine Info: Name: _____
Depth: _____
Seam: _____
Owner: _____

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WW - 6B
(4/15)

API NO. 47 - 017 - 06753
OPERATOR WELL NO. 513515
Well Pad Name: CPT10

CASING AND TUBING PROGRAM

18)

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.)
Conductor	20	New	MC-50	81	40	40	38 C.T.S.
Fresh Water	13 3/8	New	MC-50	54.5	358	358	333 C.T.S.
Coal	–	–	–	–	–	–	–
Intermediate	9 5/8	New	A-500	40	3,031	3,031	1,205 C.T.S.
Production	5 1/2	New	P-110	20	10,288	10,288	See Note 1
Tubing	2 3/8		J-55	4.6			May not be run, if run will be set 100' less than TD
Liners							

MAG
10-1-15

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	20	24	0.375	-	18	Construction	1.18
Fresh Water	13 3/8	17 1/2	0.38	2,730	2,184	* See Note 2	1.21
Coal							
Intermediate	9 5/8	12 3/8	0.395	3,950	3,160	* See Note 2	1.21
Production	5 1/2	8 1/2	0.361	12,640	10,112	-	1.27/1.86
Tubing							
Liners							

Packers

Kind:	N/A			
Sizes:	N/A			
Depths Set:	N/A			

Note 1: EQT plans to bring the TOC on the production casing cement job 1,000' above kick off point, which is at least 500' above the shallowest production zone, to avoid communication.
Note 2: Reference Variance 2014-17. (Attached)

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WW - 6B
(10/14)

4701706753

API NO. 47 - 017 - 0
OPERATOR WELL NO. 513515
Well Pad Name: CPT10

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. The vertical drill to go down to an approximiate depth of 5440'.

Then kick off the horizontal leg into the Marcellus using a slick water frac.

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, gelling agent, gel breaker, friction reducer, biocide, and scale inhibitor), referred to in the industry as a "slickwater" completion. Maximum anticipated internal casing pressure is expected to average approximately 8500 psi, maximum anticipated treating rates are expected to average approximately 100 bpm. Stage lengths vary from 150 to 300 feet. Average approximately 200,000 barrels of water per stage. Sand sizes vary from 100 mesh to 20/40 mesh. Average approximately 200,000 pounds of sand per stage.

21) Total area to be disturbed, including roads, stockpile area, pits, etc, (acres): 29.06

22) Area to be disturbed for well pad only, less access road (acres): 24016

23) Describe centralizer placement for each casing string.

- Surface: Bow spring centralizers – One at the shoe and one spaced every 500'.
- Intermediate: Bow spring centralizers– One cent at the shoe and one spaced every 500'.
- Production: One spaced every 1000' from KOP to Int csg shoe

24) Describe all cement additives associated with each cement type. **Surface (Type 1 Cement):** 0-3% Calcium Chloride Used to speed the setting of cement slurries.

0.4% flake. Loss Circulation Material (LCM) is used to combat the loss of the cement slurry to a thief zone.

Intermediate (Type 1 Cement): 0-3% Calcium Chloride. Salt is used in shallow, low temperature formations to speed the setting of cement slurries. 0.4% flake. Loss Circulation Material (LCM) is used to combat the loss of whole drilling fluid or cement slurry (not filtrate) to a thief zone.

Production:

Lead (Type 1 Cement): 0.2-0.7% Lignosulfonate (Retarder). Lengthens thickening time.

0.3% CFR (dispersant). Makes cement easier to mix.

Tail (Type H Cement): 0.25-0.40% Lignosulfonate (Retarder). Lengthens thickening time.

0.2-0.3% CFR (dispersant). This is to make the cement easier to mix.

60 % Calcuim Carbonate. Acid solubility.

0.4-0.6% Halad (fluid loss). Reduces amount of water lost to formation.

25) Proposed borehole conditioning procedures. **Surface:** Circulate hole clean (Approximately 30-45 minutes) rotating & reciprocating one full joint until cuttings diminish at surface. When cuttings returning to surface diminish, continue to circulate an additional 5 minutes. To ensure that there is no fill, short trip two stands with no circulation. If there is fill, bring compressors back on and circulate hole clean. A constant rate of higher than expected cuttings volume likely indicates washouts that will not clean up.

Intermediate: Circulate hole clean (Approximately 30-45 minutes) rotating & reciprocating one full joint until cuttings diminish at surface. When cuttings returning to surface diminish, continue to circulate an additional 5 minutes. If foam drilling, to enhance hole cleaning use a soap sweep or increase injection rate & foam concentration.

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.

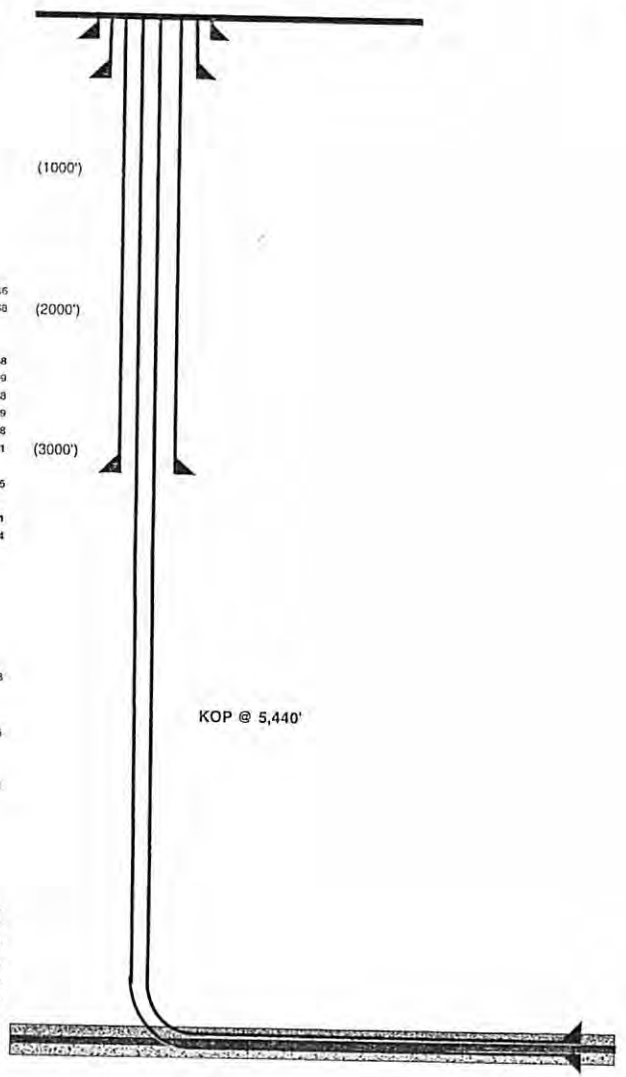
PPC
6/17/16

17-06053

Well 513515 (CPT10H3)
EQT Production
Center Point
Doddridge West Virgina

Azimuth 157
Vertical Section 4325

TVD Depth (feet)	Formation Tops (TVD)		
0'			
250'	Base Fresh Water	100	
500'			
750'			
1,000'			(1000')
1,250'			
1,500'			
1,750'			
2,000'	Maxton	1767 - 1946	
	Big Lime	2006 - 2168	(2000')
2,250'	Base Red Rock	2008	
2,500'	Weir	2428 - 2558	
	-Gantz	2626 - 1299	
2,750'	-Fifty foot	2687 - 2738	
	-Thirty foot	2787 - 2819	
3,000'	-Gordon	2840 - 2898	
	-Forth Sand	2945 - 2981	(3000')
3,250'	Int. csg pt	3031	
	-Bayard	3012 - 3065	
3,500'	-Warren	3503 - 3541	
	-Speechley	3747 - 3934	
3,750'			
4,000'			
4,250'			
4,500'			
4,750'	-Riley	4567 - 4893	
5,000'	-Benson	5019 - 5075	
5,250'			
5,500'	-Alexander	5339 - 5431	
5,750'			
6,000'			
6,250'	-Sonyea	6519 - 6725	
	-Middlesex	6725 - 6785	
6,500'	-Genesee	6785 - 6868	
	-Genesee	6868 - 6902	
6,750'	-Tully	6902 - 6933	
	-Hamilton	6933 - 6998	
7,000'	Marcellus top	6998	
	Target Inside Marcellus	**7020**	
7,250'	Marcellus Bottom	7048	
7,500'			
7,750'			



Hole Size (inches)	Casing Type	Casing Size (inches)	Wt (ppf)/Grade
24	Conductor	20	81#/MC-50
17 1/2	Surface	13 3/8	54.5#/J-55
12 3/8	Intermediate	9 5/8	40#/A-500
8 1/2	Production Casing	5 1/2	20#/P-110

Land curve @ 7,020' ft TVD
7,510' ft MD

Est. TD @ 7,020' ft TVD
10,228' ft MD

2,718' ft Lateral

Proposed Well Work:
Drill and complete a new horizontal well in the Marcellus formation.
The vertical drill to go down to an approximate depth of 5440'.
Then kick off the horizontal leg into the Marcellus using a slick water frac.

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Well Schematic
EQT Production

Well Name	513515 (CPT10H3)
County	Doddridge
State	West Virgina
Elevation KB:	983
Target	Marcellus
Prospect	
Azimuth	157
Vertical Section	4329

0'

100' Fresh Water Base

500'

1,000'

1,500'

1,767' Maxton

2,000'

2,006' Big Lime

2,008' Base Red Rock

2,500'

2,428' Weir

2,626' -Gantz

2,687' -Fifty foot

2,787' -Thirty foot

2,840' -Gordon

2,945' -Forth Sand

3,000'

3031 Int. csg pt

3,012' -Bayard

3,500'

3,503' -Warren

3,747' -Speechley

4,000'

4,500'

4,567' -Riley

5,000'

5,019' -Benson

5,339' -Alexander

5,500'

6,000'

6,519' -Sonyea

6,500'

6,725' -Middlesex

6,785' -Genesee

6,868' -Geneseo

6,902' -Tully

6,933' -Hamilton

7,000'

6,998' -Marcellus

7,048' Onondaga

7,500'

8,000'

0'

Hole Size 24" - 20" Conductor at 40'

Bit Size 17.5"

500'

TOC @ Surface

13 3/8", MC-50, 54.5# @ 358 ft MD

Bit Size 12.375"

1,000'

1,500'

2,000'

2,500'

3,000'

TOC @ Surface

9 5/8", MC-50, 40# @ 3,031 ft MD

Bit Size 8.5"

3,500'

4,000'

4,500'

5,000'

KOP = 5,440' ft MD

10 Deg DLS

5,500'

6,000'

6,500'

Land @ 7,510' ft MD

7,020' ft TVD

7,000'

5 1/2", P-110, 20# 10,228' ft MD

7,020' ft TVD

7,500'

8,000'

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EQT Production

Hydraulic Fracturing Monitoring Plan

Pad ID: CPT10

Doddridge County, WV

8/1/16

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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 Doddridge County, WV prior to hydraulic fracturing at the following EQT wells on the CPT10 pad: 513513, 513514, 513515, 513516

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 6,900' TVD) and existing conventional natural gas wells in the partially-depleted, relatively high permeability Alexander formation (approximately 5,300' 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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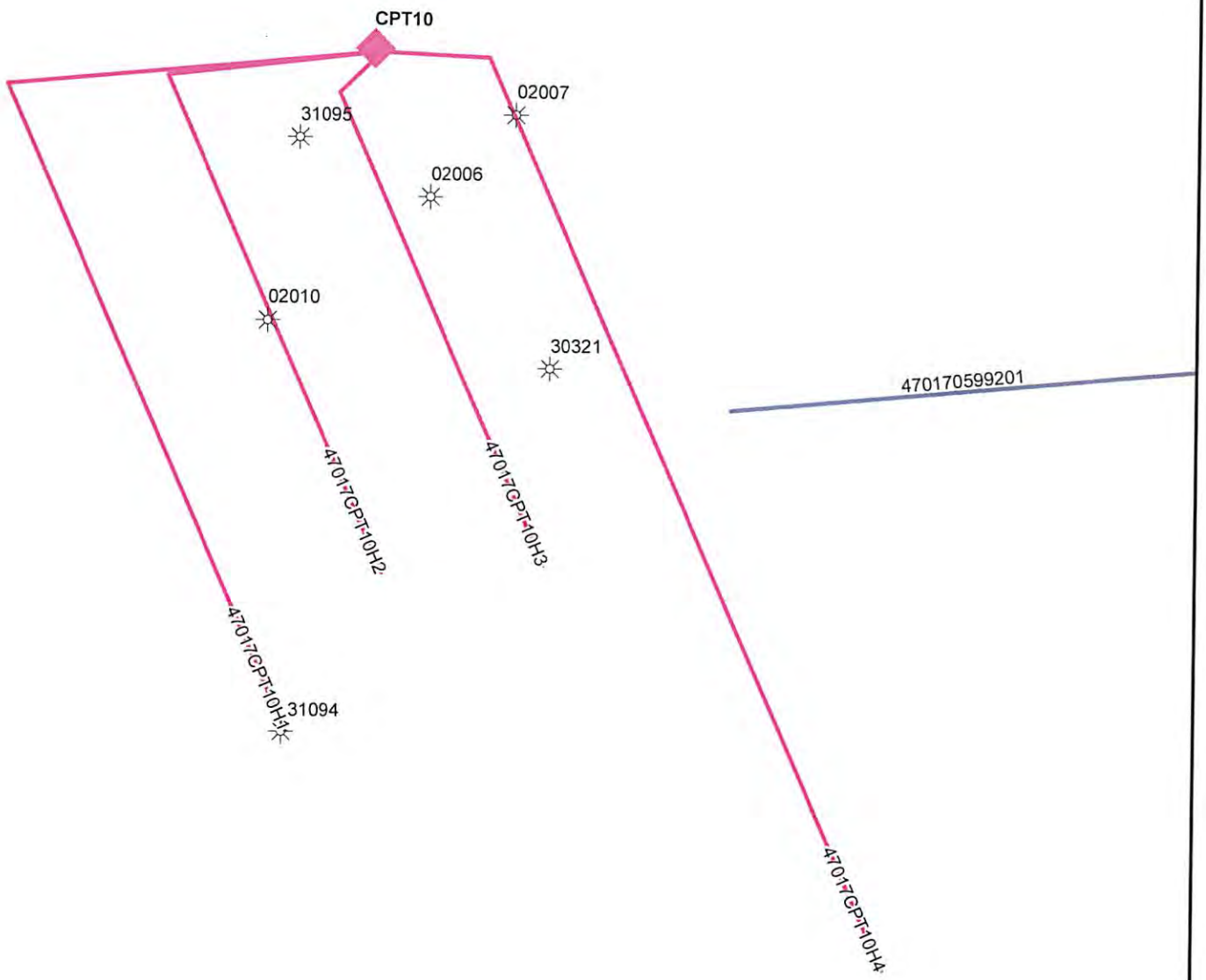


EQT

EQT Corporation
625 Liberty Avenue
Pittsburgh, PA 15222

CPT10 Offset Wells

Vertical Offsets and Foreign Laterals within 500'

Legend

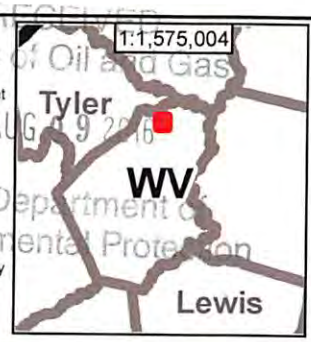
- CPT10 Offsets
- Genesee Spud
- Marcellus Spud
- Middlesex Spud
- Utica Spud
- GENESEO
- MARCELLUS
- MIDDLESEX
- POINT PLEASANT
- UTICA

850 425 0 850 Feet

1:10,696

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.



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4701706753

WellID	WellStatus	Comp Date	Permit	Operator	Longitude	Latitude	Datum Eleva	SS Depth	Total Depth
4701702006	O&G	5/10/1919	02006	EPC	-80.6598	39.4114	0.0000	-2667.0000	2667.0000
4701702007	OIL	7/16/1920	02007	EPC	-80.6582	39.4126	0.0000	-1993.0000	1993.0000
4701702010	O&G	10/6/1925	02010	EPC	-80.6628	39.4096	0.0000	-1979.0000	1979.0000
4701730321	GAS		30321	WILLIAM MOSES	-80.6575	39.4089	925.0000	-1890.0000	2815.0000
4701731094	OIL	3/21/1939	31094	CARNEGIE NAT GAS	-80.6625	39.4036	825.0000	-1216.0000	2041.0000
4701731095	OIL	6/25/1920	31095	CARNEGIE NAT GAS	-80.6622	39.4122	1133.0000	-1085.0000	2218.0000

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625 Liberty Ave, Suite 1700
Pittsburgh PA 15222
www.eqt.com

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

John Centofanti
Corporate Director,
Environmental Affairs

EQT

(date)

[Conventional Well Operator]
[address]
[state]

RE: Doddridge County Hydraulic Fracturing Notice

Dear Sir/Madam,

EQT has developed a Marcellus pad (Centerpoint 10 pad) located in Doddridge 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 6,900' TVD) and existing conventional natural gas wells in the partially-depleted, relatively high permeability, Alexander formation (approximately 5,300' TVD).

EQT anticipates conducting hydraulic fracturing at the Centerpoint 10 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

SAMPLE

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4701706753

WW-9
(2/15)

API No. 47 - 017 - 06753
Operator's Well No. 513515

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 (HUC10) Broad Run of McElroy Creek Quadrangle Center Point

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

Will a pit be used ? Yes: X No: ___

If so please describe anticipated pit waste: flowback water & residual solids

Will a synthetic liner be used in the pit? Yes X No ___ If so, what ml.? 60

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 ? 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.

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

– If oil based, what type? Synthetic, petroleum, etc Synthetic mud

Additives to be used in drilling medium? Air - biodegradable oil lubricant , detergent, defoaming, water. Water based mud – Bante, 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.

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, Line, 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.

PAC 6/17/16

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

RECEIVED
Office of Oil and Gas
JUN 20 2016
WV Department of Environmental Protection

Subscribed and sworn before me this 16 day of June 20 16

Notary Public

My commission expires 8-24-22

OFFICIAL SEAL
STATE OF WEST VIRGINIA
NOTARY PUBLIC
Pamela Sykes
EQT Production
PO Box 280
Bridgeport, WV 26330
My Commission Expires Aug. 24, 2022

17-06753

Form WW-9

Operator's Well No. 513515

Proposed Revegetation Treatment: Acres Disturbed 40.46 Prevegetation pH 6.2

Lime 3 Tons/acre or to correct to pH 6.5

Fertilize type Granular 10-20-20

Fertilizer Amount 1/3 lbs/acre (500 lbs minimum)

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:
Drawing(s) of road, location,pit and proposed area for land application.

Photocopied section of involved 7.5' topographic sheet.

Plan Approved by: Michael Raff

Comments: Preseed & Mulch any disturbed areas per WVDEP regulations. Maintain & upgrade E-&-S as necessary. May need to install sound control devices around pad during operations

Title: Oil & Gas Inspector Date: 10-1-15

Field Reviewed? (✓) Yes ( ) No

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Office of Oil and Gas
OCT 13 2015
WV Department of
Environmental Protection

4701706753

Form WW-9

Operator's Well No. 513515

Proposed Revegetation Treatment: Acres Disturbed 40.46 Prevegetation pH 6.2

Lime 3 Tons/acre or to correct to pH 6.5

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

Attach:
Drawing(s) of road, location,pit and proposed area for land application.

Photocopied section of involved 7.5' topographic sheet.

Plan Approved by: Daniel A. Fluke

Comments: Pressed and mulch any disturbed areas per WVDEP regs prior to rig being brought onto location. Maintain upgrade BMPs controls as necessary

Title: [illegible] Date: 6/17/16

Field Reviewed? ( ) Yes ( ) No

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Office of Oil and Gas
JUN 28 2016
WV Department of
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17-06753

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

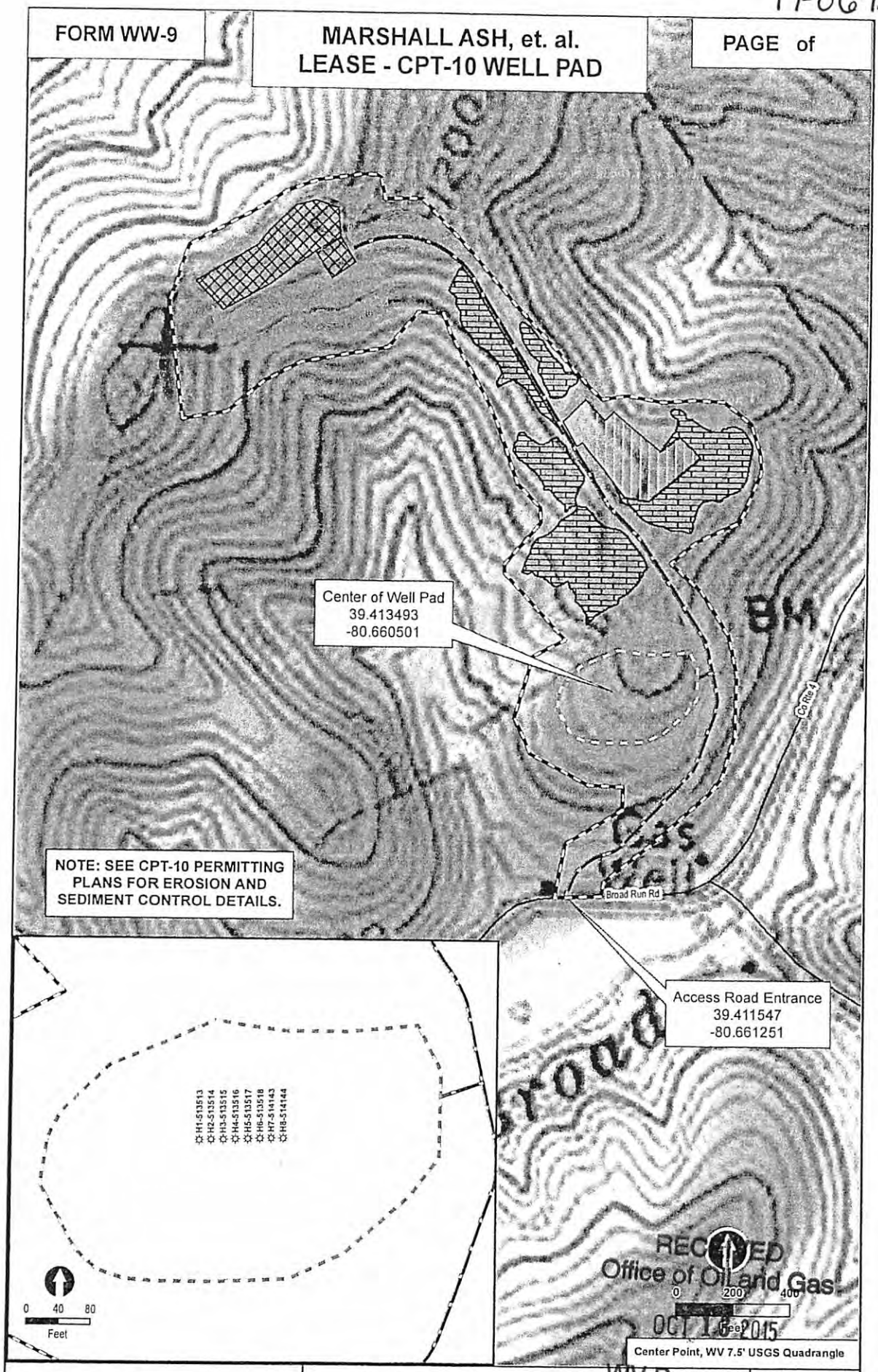
Received
Office of Oil & Gas
SEP 03 2015

17-06753

FORM WW-9

MARSHALL ASH, et. al.
LEASE - CPT-10 WELL PAD

PAGE of



NOTE: SEE CPT-10 PERMITTING PLANS FOR EROSION AND SEDIMENT CONTROL DETAILS.

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Office of Oil and Gas
OCT 15 2015
WV Department of Environmental Protection

EQT
Where energy meets innovation.

KLEINFELDER
Bright People. Right Solutions.

CPT-10 Well Pad
EQT Production Company
Doddridge County, WV

DRAWN BY: DRAWING DATE: FILE NAME: CPT10_FormWW9_v2.mxd

MAG
10-1-15

17-06753

EQT

Where energy meets innovation.™

Site Specific Safety Plan

EQT CPT 10 Pad

Center Point Quadrant

Doddridge County, WV

For Wells:

513515

Date Prepared: **August 11, 2015**

EQT Production

Permitting Supervisor

Title

8-27-15

Date

Michael Hoff

WV Oil and Gas Inspector

Title

10-

Date

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Office of Oil and Gas

OCT 13 2015

WV Department of
Environmental Protection

WV 513515
EQT Production Company
Shirley J. Hayes
350.65 Acres

10,035' LATITUDE: 39°25'00" TH

9,163' LATITUDE: 39°25'00" BH

3,844' LONGITUDE: 80°37'30" BH

1,143' LONGITUDE: 80°37'30" TH

LEGEND

- EXISTING OIL/GAS WELL
- WATER FEATURE
- WELL HEAD TOP HOLE
- WELL LANDING POINT
- WELL BOTTOM HOLE
- REBAR FOUND
- WELL LATERAL LINE
- LEASE BOUNDARY
- PROPERTY LINE
- STREAM
- 500' LATERAL COLLECTION
- BUFFER

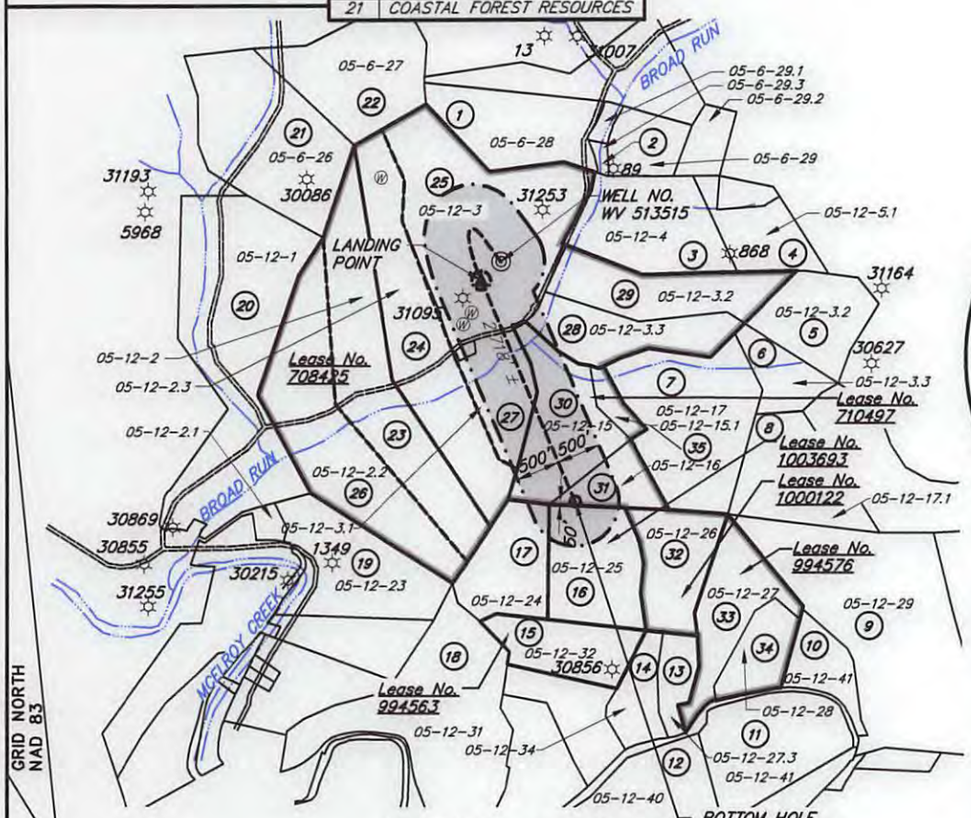
Lease No.	Acres	Owner
708425	350.65	Shirley J. Hayes
710497	46.31	Arthur Swiger et. al.

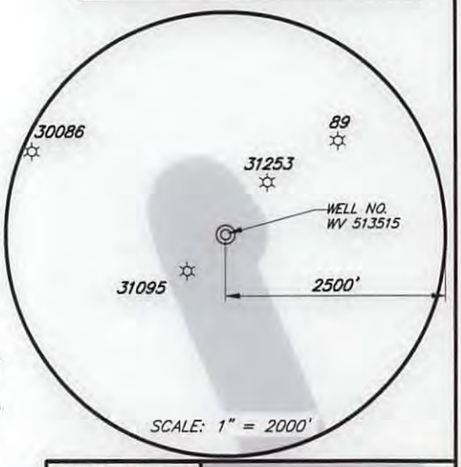
NO.	ADJACENT OWNER
1	WAYNE L & M CHRIST WOODS
2	HUTZELL RONALD G & HOLLY
3	KAREN L & JAMES L BOWERS
4	CYNTHIA LAURIE YEATER
5	BROOKS D YEATER
6	BOOK D. YEATER
7	PAUL A & KAREN HIGHBARGER
8	PAUL A & KAREN HIGHBARGER
9	HAROLD K FERNETT ET AL
10	JERRY E & LOIS J BRAUN
11	JERRY E & LOIS J BRAUN
12	MARY L GLASPELL
13	ARBY GLASPELL — BH
14	ARBY GLASPELL
15	WARD SWEENEY
16	MARY L GLASPELL
17	MARY L GLASPELL
18	JOHN MCCLASKEY
19	MARGARET MCINTR WILLIAMS
20	E F WADSWORTH EST
21	COASTAL FOREST RESOURCES

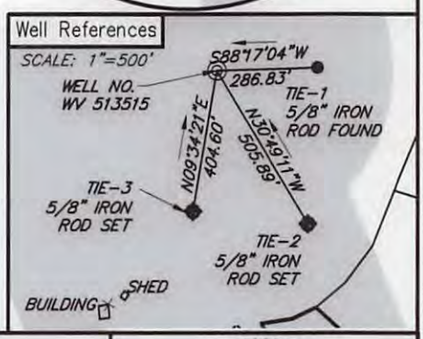
NO.	SURFACE OWNER
22	ROBERT C & EILEEN ROSS
23	SAMUEL G & HARUYO ASH
24	SHIRLEY & MARJORIE HAYES
25	BW & CAROLYN RUDDERFORTH
26	NANCY JUNE HAYES YEATER
27	JAMES FERREBEE
28	PAUL & KAREN HIGHBARGER
29	ARBY GLASPELL
30	MARY L. GLASPELL
31	JAMES K & ANNA RICHARDS
32	PAUL & KAREN HIGHBARGER
33	CONNIE L. HAYES ANDERSON

WV 513515 Well Point Coordinates

Top Hole Coordinates		
NAD 27 S.P.C. (Ft.)	N: 334,814.30	E: 1,672,068.29
NAD 27 GEO	LAT: 39.413447	LONG: 80.660697
NAD 83 UTM 17N (M)	N: 4,362,723.17	E: 529,224.43
NAD 83 S.P.C. (Ft.)	N: 334,850.57	E: 1,640,627.50
Landing Point Coordinates		
NAD 27 S.P.C. (Ft.)	N: 334,604.03	E: 1,671,844.73
NAD 27 GEO	LAT: 39.412862	LONG: 80.661479
NAD 83 UTM 17N (M)	N: 4,362,657.88	E: 529,157.38
NAD 83 S.P.C. (Ft.)	N: 334,640.29	E: 1,640,403.91
Bottom Hole Coordinates		
NAD 27 S.P.C. (Ft.)	N: 332,101.90	E: 1,672,906.81
NAD 27 GEO	LAT: 39.406030	LONG: 80.657606
NAD 83 UTM 17N (M)	N: 4,361,900.99	E: 529,493.68
NAD 83 S.P.C. (Ft.)	N: 332,138.16	E: 1,641,466.04







NOTES ON SURVEY

1. TIES TO WELLS, CORNERS, AND REFERENCES ARE BASED ON GRID NORTH FOR THE WV STATE PLANE COORDINATE SYSTEM NORTH ZONE NAD '83.
2. SURFACE OWNER AND ADJOINER INFORMATION TAKEN FROM THE ASSESSOR AND COUNTY CLERK RECORDS OF DODDRIDGE COUNTY IN OCTOBER, 2013.
3. WELL LAT./LONG. (NAD'27) ESTABLISHED BY GPS.
4. THE LOCATION OF BOUNDARY LINES SHOWN HEREIN ARE BASED ON RECORD DEED, PLATS, AND TAX MAPS BEST FIT TO FOUND FIELD EVIDENCE AND AERIAL PHOTOS, UNLESS OTHERWISE NOTED.
5. THIS PLAT DOES NOT REPRESENT AN ACTUAL BOUNDARY SURVEY OF THE INDIVIDUAL PARCELS.
6. THERE ARE NO EXISTING WATER WELLS OR DEVELOPED SPRINGS WITHIN 250' OF PROPOSED WELL.
7. CRITICAL POINTS (HARD LINES) WERE FIELD SURVEYED MAY 2014 AND APRIL 2015.

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 REGULATIONS ISSUED AND PRESCRIBED BY THE DEPARTMENT OF ENVIRONMENTAL PROTECTION.

encompass

WILLIAM J. WHITMAN, II — LICENSED — No. 2005 — STATE OF WEST VIRGINIA — PROFESSIONAL SURVEYOR

FILE NO.: EES-60681
DRAWING NO.: CPT10_Well Plat
SCALE: 1" = 2000'
MINIMUM DEGREE OF ACCURACY: ±3'
PROVEN SOURCE OF ELEVATION: GPS

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

DATE JULY 19, 2016
OPERATORS WELL NO. WV 513515
API WELL NO.
47 (STATE) 017 (COUNTY) 06753 (PERMIT)

WELL TYPE: ☐ OIL ☒ GAS ☐ LIQUID INJECTION ☐ WASTE DISPOSAL ☒ (IF GAS) PRODUCTION: ☐ STORAGE ☐ DEEP ☐ SHALLOW

LOCATION,
ELEVATION: 977' (Ground) 970' (Prop.) WATERSHED: Broad Run of McElroy Creek QUADRANGLE: CENTER POINT
DISTRICT: McCLELLAN COUNTY: DODDRIDGE
SURFACE OWNER: SHIRLEY J. HAYES ACREAGE: 177.0± AC/172.4± AC
ROYALTY OWNER: SHIRLEY J. HAYES LEASE NO.: 708425 ACREAGE: 350.7± AC
PROPOSED WORK: ☒ DRILL ☐ CONVERT ☐ DRILL DEEPER ☒ FRACTURE OR STIMULATE ☐ PLUG OFF OLD FORMATION
☐ PERFORATE NEW FORMATION ☐ OTHER PHYSICAL CHANGE IN WELL (SPECIFY)
☐ PLUG AND ABANDON ☐ CLEAN OUT AND REPLUG TARGET FORMATION: Marcellus ESTIMATED DEPTH: 6998'

WELL OPERATOR: EQT Production Company
ADDRESS: 115 Professional Pl. P.O. Box 280
Bridgeport, WV 26330

DESIGNATED AGENT: Rex. C. Ray
ADDRESS: 115 Professional Pl. P.O. Box 280
Bridgeport, WV 26330

017-06753

WW-6A1
(5/13)

Operator's Well No. 513515

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
			Min 1/8 pd	
708425	Shirley J. Hayes	Carnegie Natural Gas Company		LB41/433
	Carnegie Natural Gas Company	Carnegie Production Company		LB186/61
	Carnegie Production Company/USX	Equitable Resources Inc.		See attached
	Equitable Resources Inc.	Equitable Production Company		DB274/471
	Equitable Production Company	EQT Production Company		DB281/346
			Min 1/8 pd	
710497	Arthur Swiger	EQT Production Company		LB256/340
	Betty Joe Richardson	EQT Production Company		LB256/344
	Yvonne Skiles	EQT Production Company		LB256/348

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.

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:
Its: Permitting Supervisor

17-06753

PURCHASE AND SALE AGREEMENT

PURCHASE AND SALE AGREEMENT, dated as of May 27, 1999 (this "Agreement"), by and between USX CORPORATION, a Delaware corporation, ("USX") and EQUITABLE RESOURCES, INC., a Pennsylvania corporation (hereinafter referred to as "Buyer").

WHEREAS, USX owns directly or indirectly all of the outstanding capital stock or other evidence of an equity interest of the following companies (each a "Carnegie Company" and collectively the "Carnegie Companies"), which are involved in one or more of the production, gathering, transportation, treatment, distribution and sale of natural gas: (i) Carnegie Natural Gas Company, a Pennsylvania corporation, ("Carnegie"), (ii) Carnegie Interstate Pipeline Company, a Delaware corporation, ("CIPCO"), (iii) Carnegie Production Company, a Pennsylvania corporation, ("CPC"), (iv) Carnegie Natural Gas Sales, Inc., a Delaware corporation, ("CNGS") and (v) Carnegie Gas Storage, LLC, a Delaware limited liability company, ("CGS"); and

WHEREAS, USX desires to sell to Buyer and Buyer desires either for itself and/or one or more designated subsidiaries to purchase from USX one hundred percent (100%) of the capital stock and other evidence of equity interest in the Carnegie Companies;

NOW, THEREFORE, for and in consideration of the premises and the representations, warranties, covenants and agreements herein set forth and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the parties hereto, intending to be legally bound, agree as follows:

ARTICLE I
DEFINITIONS

Unless otherwise specifically stated in the text of this Agreement, the following terms shall have the following meanings:

Section 1.1 The "1935 Act" shall mean the Public Utility Holding Company Act of 1935, as amended.

Received
Office of Oil & Gas
SEP 03 2015

17-06753

Section 12.6 Names, Trademarks, Etc. USX and its Affiliates will discontinue use of the Carnegie and Apollo Names as promptly as practicable after the Closing.

IN WITNESS WHEREOF, the undersigned have cause this Agreement to be subscribed by their respective representatives duly authorized as of the date first above written.

USX CORPORATION

By: _____
Typed Name: V. G. Beghini
Title: Vice Chairman - Marathon Group

APPROVED AS TO FORM

EQUITABLE RESOURCES, INC.

By: _____
Typed Name: David L. Porges
Title: Senior Vice President and Chief Financial Officer

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Office of Oil & Gas
SEP 03 2015

WW-6AC
(1/12)

17-06753

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

Date of Notice Certification: _____

API No. 47 - 017 - 06753 0
Operator's Well No. 513515
Well Pad Name: CPT10

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:	WV	UTM NAD 83 Easting:	529,224.43
County:	Doddridge	UTM NAD 83 Northing:	4,362,723.08
District:	McClellan	Public Road Access:	Co. Rt. 4
Quadrangle:	Center Point	Generally used farm name:	Shirley James and Marjorie Hayes
Watershed:	Broad Run of McElroy Creek		

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.

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:	OOG OFFICE USE ONLY
*PLEASE CHECK ALL THAT APPLY	
☐ NOTICE OF SEISMIC ACTIVITY or ☑ NOTICE NOT REQUIRED BECAUSE NO SEISMIC ACTIVITY WAS CONDUCTED	☐ RECEIVED/NOT REQUIRED
☐ NOTICE OF ENTRY FOR PLAT SURVEY or ☑ NO PLAT SURVEY WAS CONDUCTED	☐ RECEIVED
☑ NOTICE OF INTENT TO DRILL or ☐ NOTICE NOT REQUIRED BECAUSE NOTICE OF ENTRY FOR PLAT SURVEY WAS CONDUCTED OR ☐ WRITTEN WAIVER BY SURFACE OWNER (PLEASE ATTACH)	☐ RECEIVED/NOT REQUIRED
☑ NOTICE OF PLANNED OPERATION	☐ RECEIVED
☑ PUBLIC NOTICE	☐ RECEIVED
☑ NOTICE OF APPLICATION	☐ RECEIVED

Received
Office of Oil & Gas
SEP 03 2015

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.

WW-6AC
(1/12)

17-06753

Certification of Notice is hereby given:

THEREFORE, I _____, 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	Address:	P.O. Box 280
By:	Victoria J. Roark		Bridgeport, WV 26330
Its:	Permitting Supervisor	Facsimile:	304-848-0040
Telephone:	304-848-0076	Email:	vroark@eqt.com

OFFICIAL SEAL
STATE OF WEST VIRGINIA
NOTARY PUBLIC
Nicholas L. Bumgardner
Rt. 1, Box 4
Liberty, WV 25124
My Commission Expires July 27, 2018

Subscribed and sworn before me this 1 day of SEPTEMBER, 2015

_____ Notary Public

My Commission Expires 7/27/2018

Oil and Gas Privacy Notice:

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

Received
Office of Oil & Gas
SEP 03

WW-6A
(9-13)

API NO. 47 - 017 - 06753
OPERATOR WELL NO. 513515
Well Pad Name: CPT10

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: 9/2/2015 Date Permit Application Filed: 9/2/2015

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 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 requires a receipt or signature confirmation, copies of the application, the erosion and sediment control plan required by section seven of 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; 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 disturbance as described in the erosion and sediment control plan submitted pursuant to subsection (c), section seven of this article; (3) The 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 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 construction, enlargement, alteration, repair, removal or abandonment of any impoundment or pit as described in section nine of this water purveyor who is known to the applicant to have a water well, spring or water supply source located within one thousand five which is used to provide water for consumption by humans or domestic animals; and (6) The operator of any natural gas storage field 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 in the lands, the applicant may serve the documents required upon the person described in the records of the sheriff required to be 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 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 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: Shirley James Hayes and Marjorie Hayes
Address: 881 Broad Run Rd.
Center Point, WV 26339

Name:
Address:

☑ SURFACE OWNERS(s) (Road and/or Other Disturbance)
Name: Shirley James Hayes and Marjorie Hayes
Address: 881 Broad Run Rd.
Center Point, WV 26339
0
Name: Samuel Glen Ash and Haruyo Ash
Address: 3616 Fox Glen PKWY
Las Vegas, NV 89108
0

☑ SURFACE OWNER(s) (Impoundments/Pits)
Name: Shirley James Hayes and Marjorie Hayes
Address: 881 Broad Run Rd.
Center Point, WV 26339
See attached for additional impoundment/pit owners

☑ COAL OWNER OR LESSEE
Name: The Winston Love Family Trust
Address: 801 Masonic Park Rd.
Marietta OH 45750

See attached for additional coal owners.

☐ COAL OPERATOR
Name:
Address:

☑ SURFACE OWNER OF WATER WELL AND/OR WATER PURVEYOR(s)
Name: Shirley James Hayes
Address: 881 Broad Run Road
Center Point WV 26339
See attached for additional Surface Owners with Water Wells

☐ OPERATOR OF ANY NATURAL GAS STORAGE FIELD
Name:
Address:

*Please attach additional forms if necessary

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WW6-A

017-06753

Additional Pit/ Impoundment Owners

Samuel Glen Ash and Haruyo Ash
3616 Fox Glen PKWY
Las Vegas, NV 89108

Coastal Forest Resources Company dba
Coastal Timberlands Company
1772 Brushy Fork Road
Buckhannon WV 26201

Additional Coal Owners

Marcella Ash
10854 Windham Parkman Road
Garretsville OH 44231

Brooks Yeater
442 Pennsylvania Ave
Colliers WV 26035

Samuel G. Ash
3616 Fox Glen Parkway
Las Vegas NV 89108

Betsy R. Faulkner
11919 Hickory Creek Dr.
Fredericksburg VA 22407

Mildred J, Worstell
127 Bartley Road
Burgettstown PA 15021-2255

Dawn Nelson, Heir of Martha Fife
121 Schwartz Street
Weirton WV 26062

Shirley James Hayes
881 Broad Run Road
Center Point WV 26339

Deetta E. Burris
256 Purdy Rd.
Burgettstown, PA 15021

Rosemary Underwood
2365 Courtland Blvd
Deltona, FL 32738-2539

Additional Surface Owners with Water Wells

Norman and Marilyn Ferrebee
152 Whipor Wheel Ln.
Center Point WV 26339

Samuel G. Ash et ux
3616 Fox Glen Parkway
Las Vegas NV 89108

June Hayes and Nancy Yeater
35 Ricks Dr.
Center Point WV 26339

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Additional Pit/ Impoundment Owners

Samuel Glen Ash and Haruyo Ash
3616 Fox Glen PKWY
Las Vegas, NV 89108

Coastal Forest Resources Company dba
Coastal Timberlands Company
1772 Brushy Fork Road
Buckhannon WV 26201

Additional Coal Owners

Marcella Ash
10854 Windham Parkman Road
Garretsville OH 44231

Brooks Yeater
442 Harmon Creek Road
Colliers WV 26035

Samuel G. Ash
3616 Fox Glen Parkway
Las Vegas NV 89108

Betsy R. Faulkner
11919 Hickory Creek Dr.
Fredericksburg VA 22407

Mildred J, Worstell
127 Bartley Road
Burgettstown PA 15021-2255

Dawn Nelson, Heir of Martha Fife
121 Schwartz Street
Weirton WV 26062

Shirley James Hayes
881 Broad Run Road
Center Point WV 26339

Lawrence Underwood Jr.
Address Unknown

Deeta E. Burris
Address Unknown

Rosemary Underwood
Address Unknown

See additional documents

Additional Water Purveyors

Norman and Marilyn Ferrebee
152 Whipor Wheel Ln.
Center Point WV 26339

Samuel G. Ash et ux
3616 Fox Glen Parkway
Las Vegas NV 89108

June Hayes and Nancy Yeater
35 Ricks Dr.
Center Point WV 26339

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WW-6A
(8-13)

API NO. 47 - 017 - 06753 0
OPERATOR WELL NO. 513515
Well Pad Name: CPT10

Notice is hereby given:

Pursuant to West Virginia Code § 22-6A-10(b), notice is hereby given that the undersigned well operator has applied for a permit for well work or for a certificate of approval for the construction of an impoundment or pit.

This Notice Shall Include:
Pursuant to W. Va. Code § 22-6A-10(b), this notice shall include: (1) copies of the application; (2) the erosion and sediment control plan required by section seven of this article; and (3) the well plat.

Pursuant to W. Va. Code § 22-6A-10(f), this notice shall include: (1) a statement of the time limits for filing written comments; (2) who may file written comments; (3) the name and address of the secretary for the purpose of filing the comments and obtaining additional information; and (4) a statement that the persons may request, at the time of submitting written comments, notice of the permit decision and a list of persons qualified to test water.

Pursuant to W. Va. Code R. § 35-8-5.7.a, the operator shall provide the Well Site Safety Plan to the surface owner and any water purveyor or surface owner subject to notice and water testing as provided in section 15 of this rule.

Pursuant to W. Va. Code R. § 35-8-15.2.c, this notice shall: (1) contain a statement of the surface owner's and water purveyor's right to request sampling and analysis; (2) advise the surface owner and water purveyor of the rebuttable presumption for contamination or deprivation of a fresh water source or supply; advise the surface owner and water purveyor that refusal to allow the operator to conduct a pre-drilling water well test constitutes a method to rebut the presumption of liability; (3) advise the surface owner and water purveyor of his or her independent right to sample and analyze any water supply at his or her own expense; advise the surface owner and water purveyor whether or not the operator will utilize an independent laboratory to analyze any sample; and (4) advise the surface owner and or water purveyor that he or she can obtain from the Chief a list of water testing laboratories in the subject area capable of and qualified to test water supplies in accordance with standard acceptable methods.

Additional information related to horizontal drilling may be obtained from the Secretary, at the WV Department of Environmental Protection headquarters, located at 601 57th Street, SE, Charleston, WV 25304 (304-926-0450) or by visiting www.dep.wv.gov/oil-and-gas/pages/default.aspx.

Well Location Restrictions

Pursuant to W. Va. Code § 22-6A-12, Wells may not be drilled within two hundred fifty feet measured horizontally from any existing water well or developed spring used for human or domestic animal consumption. The center of well pads may not be located within six hundred twenty-five feet of an occupied dwelling structure, or a building two thousand five hundred square feet or larger used to house or shelter dairy cattle or poultry husbandry. This limitation is applicable to those wells, developed springs, dwellings or agricultural buildings that existed on the date a notice to the surface owner of planned entry for surveying or staking as provided in section ten of this article or a notice of intent to drill a horizontal well as provided in subsection (b), section sixteen of this article was provided, whichever occurs first, and to any dwelling under construction prior to that date. This limitation may be waived by written consent of the surface owner transmitted to the department and recorded in the real property records maintained by the clerk of the county commission for the county in which such property is located. Furthermore, the well operator may be granted a variance by the secretary from these distance restrictions upon submission of a plan which identifies the sufficient measures, facilities or practices to be employed during well site construction, drilling and operations. The variance, if granted, shall include terms and conditions the department requires to ensure the safety and protection of affected persons and property. The terms and conditions may include insurance, bonding and indemnification, as well as technical requirements. (b) No well pad may be prepared or well drilled within one hundred feet measured horizontally from any perennial stream, natural or artificial lake, pond or reservoir, or a wetland, or within three hundred feet of a naturally reproducing trout stream. No well pad may be located within one thousand feet of a surface or ground water intake of a public water supply. The distance from the public water supply as identified by the department shall be measured as follows: (1) For a surface water intake on a lake or reservoir, the distance shall be measured from the boundary of the lake or reservoir. (2) For a surface water intake on a flowing stream, the distance shall be measured from a semicircular radius extending upstream of the surface water intake. (3) For a groundwater source, the distance shall be measured from the wellhead or spring. The department may, in its discretion, waive these distance restrictions upon submission of a plan identifying sufficient measures, facilities or practices to be employed during well site construction, drilling and operations to protect the waters of the state. A waiver, if granted, shall impose any permit conditions as the secretary considers necessary. (c) Notwithstanding the foregoing provisions of this section, nothing contained in this section prevents an operator from conducting the activities permitted or authorized by a Clean Water Act Section 404 permit or other approval from the United States Army Corps of Engineers within any waters of the state or within the restricted areas referenced in this section. (d) The well location restrictions set forth in this section shall not apply to any well on a multiple well pad if at least one of the wells was permitted prior to the effective date of this article. (e) The secretary shall, by December 31, 2012, report to the Legislature on the [illegible] 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 items

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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:

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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.

WW-6A
(8-13)

API NO. 47 - 017 - 06753
OPERATOR WELL NO. 513515
Well Pad Name: CPT10

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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17-06753

Notice is hereby given by:

Well Operator:	EQT Production Company	Address:	115 Professional Place P.O. Box 280
Telephone:	304-848-0082		Bridgeport, WV 26330
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. 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.

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, 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.

By: Victoria Roark

Its: Permitting Supervisor

Subscribed and sworn before n 1 day of SEPTEMBER, 2015

Notary Public

My Commission Expir 7/27/2018

OFFICIAL SEAL
STATE OF WEST VIRGINIA
NOTARY PUBLIC
Nicholas L. Bumgardner
Rt. 1, Box 4
Liberty, WV 25124
My Commission Expires July 27, 2018

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(1/12)

Operator Well No. 513515

M-06753

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: 8/12/2015 **Date Permit Application Filed:** 8/22/15

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: Shirley James Hayes and Marjorie Hayes
Address: 881 Broad Run Rd.
Center Point, WV 26339

Name: Samuel Glen Ash and Haruyo Ash
Address: 3616 Fox Glen PKWY
Las Vegas NV 89108

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:	WV	UTM NAD 83	Easting	529,224.43
County:	Doddridge		Northing	4,362,723.08
District:	McClellan		Public Road Access:	Co. Rt. 4
Quadrangle:	Center Point		Generally used farm name:	Shirley James and Marjorie Hayes
Watershed:	Broad Run of McElroy Creek			

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

Notice is hereby given by:

Well Operator:	EQT Production Company	Authorized Representative:	Victoria Roark
Address:	115 Professional Place, P.O Box 280	Address:	115 Professional Place, P.O Box 280
	Bridgeport, WV 26330		Bridgeport, WV 26330
Telephone:	304-848-0076	Telephone:	304-848-0076
Email:	vroark@eqt.com	Email:	vroark@eqt.com
Facsimile:	304-848-0041	Facsimile:	304-848-0041

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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.

WW-6A4
(1/12)

Operator Well No. 513515

17-06753

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: 8/12/2015 **Date Permit Application Filed:** 8/22/15

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: Coastal Forest Resources Company dba
Address: Coastal Timberlands Company
1772 Brushy Fork Road
Buckhannon WV 26201

Name:
Address:

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

State:	WV	UTM NAD 83	Easting	529,215.29
County:	Doddridge		Northing	4,362,722.93
District:	McClellan		Public Road Access:	Co. Rt. 4
Quadrangle:	Center Point		Generally used farm name:	Shirley James and Marjorie Hayes
Watershed:	Broad Run of McElroy Creek			

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

Notice is hereby given by:

Well Operator:	EQT Production Company	Authorized Representative:	Victoria Roark
Address:	115 Professional Place, P.O Box 280	Address:	115 Professional Place, P.O Box 280
	Bridgeport, WV 26330		Bridgeport, WV 26330
Telephone:	304-848-0076	Telephone:	304-848-0076
Email:	vroark@eqt.com	Email:	vroark@eqt.com
Facsimile:	304-848-0041	Facsimile:	304-848-0041

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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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WV Department of
Environmental Protection

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(1/12)

Operator Well No. 513515

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: SEP 02 2015 **Date Permit Application Filed:** SEP 02 2015

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

☑ CERTIFIED MAIL RETURN RECEIPT REQUESTED ☐ HAND 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:	Shirley James Hayes and Marjorie Hayes	Name:	Samuel Glenn and Haruyo Ash
Address:	881 Broad Run Rd.	Address:	3616 Fox Glen Pkwy.
	Center Point, WV 26339		Las Vegas NV 89108

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:	WV	UTM NAD 83	Easting:	529,224.430000
County:	Doddridge		Northing:	4,362,723.080000
District:	McClellan	Public Road Access:		Co. Rt. 4
Quadrangle:	Center Point	Generally used farm name:		Shirley James and Marjorie Hayes
Watershed:	Broad Run of McElroy Creek			

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:	EQT Production Company	Address:	115 Professional Place, P.O. Box 280
Telephone:	304-848-0082	Bridgeport, WV 26330	
Email:	vroark@eqt.com	Facsimile:	304-848-0040

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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Environmental Protection

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(1/12)

Operator Well No. 513515

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: SEP 02 2015 **Date Permit Application Filed:** SEP 02 2015

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

☑ CERTIFIED MAIL RETURN RECEIPT REQUESTED ☐ HAND 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: Coastal Forest Resources Company dba Coastal Timberlands Co.
Address: 1772 Brushy Fork Rd.
Buckhannon WV 26201

Name:
Address:

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

State:	WV	UTM NAD 83	Easting:	529,224.430000
County:	Doddridge		Northing:	4,362,723.080000
District:	McClellan	Public Road Access:		Co. Rt. 4
Quadrangle:	Center Point	Generally used farm name:		Shirley James and Marjorie Hayes
Watershed:	Broad Run of McElroy Creek			

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:	EQT Production Company	Address:	115 Professional Place, P.O. Box 280
Telephone:	304-848-0082	Bridgeport, WV 26330	
Email:	vroark@eqt.com	Facsimile:	304-848-0040

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.

17-06753

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

September 1, 2015

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 CPT10 Well Site, Doddridge County

513513 CPT10H1	513514 CPT10H2	513515 CPT10H3	513516 CPT10H4
513517 CPT10H5	513518 CPT10H6	514143 CPT10H7	514144 CPT10H8
514145 CPT10H9	514146 CPT10H10	516403 CPT10H11	516404 CPT10H12

Dear Mr. Martin,

This well site will be accessed from Permit # 04-2015-0842 applied for by EQT Production Company for access to the State Road for a well site located off of Doddridge County Route 4 SLS.

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

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

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

Received
Office of Oil & Gas
SEP 03 2015

17-06753

Anticipated Frac Additives
Chemical Names and CAS numbers

Material	Ingredient	CAS Number
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 & Gas
SEP 03 2015

4701706753

CPT-10 WELL PAD
SITE DESIGN & CONSTRUCTION PLAN, EROSION & SEDIMENT CONTROL PLANS
EQT PRODUCTION COMPANY

EQT
Where energy meets innovation.

PLAN REPRODUCTION WARNING
THE PLANS HAVE BEEN CREATED ON ANSI D (22" x 34") SHEETS. FOR REDUCTIONS, REFER TO GRAPHIC SCALE.

THE PLANS HAVE BEEN CREATED FOR FULL COLOR PLOTTING. ANY SET OF THE PLANS THAT IS NOT PLOTTED IN FULL COLOR SHALL NOT BE CONSIDERED ADEQUATE FOR CONSTRUCTION PURPOSES.

WARNING INFORMATION MAY BE LOST IN COPYING AND/OR GRAY SCALE PLOTTING.

KLEINFELDER
Bright People. Right Solutions.
230 Executive Drive, Suite 122
Cranberry Township, PA 16066
Phone 724.772.7072
www.kleinfelder.com

JOSHUA D. FREGOSI REGISTERED 20261 STATE OF WEST VIRGINIA PROFESSIONAL ENGINEER
SIGNED BY: JOSHUA D. FREGOSI, W.V. P.E. # 20261

PROJECT CONTACTS

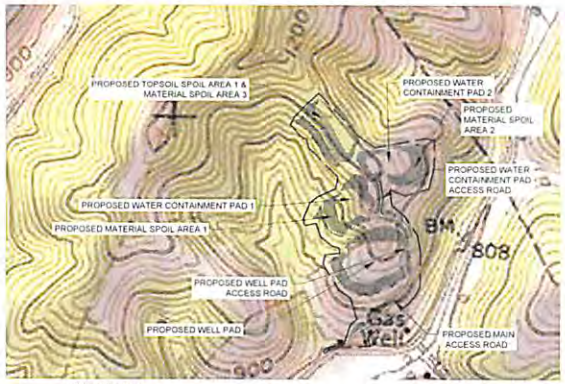
PROJECT OWNER
EQT PRODUCTION COMPANY
CONTACT: CHRIS METZGAR
115 PROFESSIONAL PLACE
BRIDGEPORT, WV 26330
304.848.0075 OFFICE

LOCATION SURVEYOR
ENCOMPASS ENERGY SERVICES, LLC
CONTACT: TYLER HASTINGS
1370 WASHINGTON PIKE, SUITE 308
BRIDGEVILLE, PA 15017
412.564.5215 OFFICE

ENGINEER OF RECORD
KLEINFELDER, INC.
CONTACT: JOSHUA D. FREGOSI, PE
WV PE #20261
230 EXECUTIVE DRIVE, SUITE 122
CRANBERRY TOWNSHIP, PA 16066
724.772.7072 OFFICE
724.772.7079 FAX

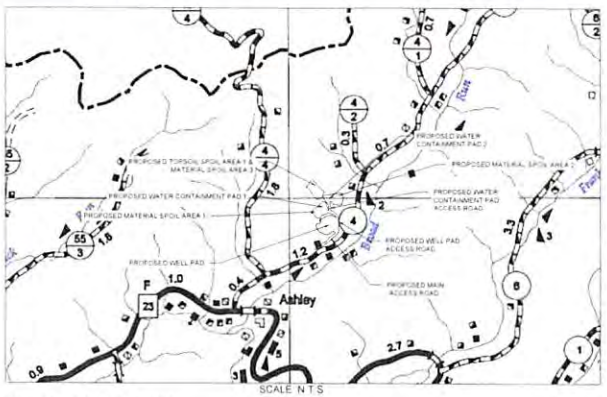
ENVIRONMENTAL/ DELINEATION BOUNDARY
KLEINFELDER, INC.
CONTACT: MATTHEW ALBRIGHT
230 EXECUTIVE DRIVE, SUITE 122
CRANBERRY TOWNSHIP, PA 16066
724.772.7072 OFFICE
724.772.7079 FAX

TOPO SURVEYOR
BLUE MOUNTAIN AERIAL MAPPING
CONTACT: CRAIG FRY
11023 MASON DIXON HIGHWAY
BURTON, WV 26562
304.662.2626 OFFICE
304.815.4690 CELL



NORTH MERIDIAN
REFERENCED TO NAD83
WEST VIRGINIA STATE
PLANE NORTH ZONE

CENTER POINT QUAD



WELL HEAD LAYOUT				
WELL HEAD	WV STATE PLANE NAD 83 (FT)		NAD 83 (DEGREES)	
	NORTHING	EASTING	LATITUDE (N)	LONGITUDE (W)
H1-513513	334850.57	1640597.50	39.413529°	80.660625°
H2-513514	334850.57	1640612.50	39.413530°	80.660572°
H3-513515	334850.57	1640627.50	39.413530°	80.660519°
H4-513516	334850.57	1640642.50	39.413531°	80.660466°
H5-513517	334850.57	1640657.50	39.413531°	80.660413°
H6-513518	334850.57	1640672.50	39.413532°	80.660359°
H7-514143	334850.57	1640687.50	39.413532°	80.660306°
H8-514144	334850.57	1640702.50	39.413533°	80.660253°

WELL HEAD LAYOUT				
WELL HEAD	WV STATE PLANE NAD 27 (FT)		UTM ZONE 17N NAD 83 (M)	
	NORTHING	EASTING	NORTHING	EASTING
H1-513513	334814.30	1672038.29	4362723.13	529215.29
H2-513514	334814.30	1672053.29	4362723.15	529219.85
H3-513515	334814.30	1672068.29	4362723.17	529224.43
H4-513516	334814.30	1672083.29	4362723.18	529229.00
H5-513517	334814.30	1672098.29	4362723.20	529233.57
H6-513518	334814.30	1672113.29	4362723.22	529238.14
H7-514143	334814.30	1672128.29	4362723.46	529242.71
H8-514144	334814.30	1672143.29	4362723.47	529247.28

SHEET INDEX	
PAGE NO.	DESCRIPTION
1	COVER PAGE & LOCATION MAP
2	SCHEDULE OF QUANTITIES
3	NOTES AND MASTER LEGEND
4	EXISTING CONDITIONS
5	TAX MAP
6 - 8	GEOTECH NOTES & DETAILS
9 - 10	SITE PLAN
11	WELL PAD CROSS SECTIONS & PROFILE
12	WATER CONTAINMENT PAD 1 CROSS SECTIONS & PROFILE
13	WATER CONTAINMENT PAD 2 CROSS SECTIONS & PROFILE
14 - 15	MAIN ACCESS ROAD CROSS SECTIONS AND PROFILE
16	TOPSOIL SPOIL AREA & MATERIAL SPOIL AREA CROSS SECTIONS & PROFILE
17	CULVERT PROFILES
18	CONSTRUCTION DETAILS
19	BERM DETAILS
20 - 21	STORMWATER DETAILS
22 - 23	EROSION AND SEDIMENT DETAILS
24 - 25	RECLAMATION PLAN

SITE LOCATION				
DESCRIPTION	NAD 83 (DEGREES)		UTM ZONE 17N NAD 83 (M)	
	LATITUDE (N)	LONGITUDE (W)	NORTHING	EASTING
CENTER OF WELL PAD	39.413548°	80.660677°	529210.80	4362725.00
CENTER OF WATER CONTAINMENT PAD 1	39.414844°	80.661147°	529169.80	4362868.68
CENTER OF WATER CONTAINMENT PAD 2	39.415742°	80.660074°	529261.79	4362968.69
MAIN ACCESS ROAD ENTRANCE	39.411553°	80.661248°	529162.48	4362503.41
WELL PAD ACCESS ROAD ENTRANCE	39.413704°	80.659463°	529315.24	4362742.71
WATER CONTAINMENT PAD ACCESS ROAD	39.414530°	80.660394°	529234.75	4362834.07

FLOOD CONDITIONS	
DO SITE CONSTRUCTION ACTIVITIES TAKE PLACE IN FLOODPLAIN	NO
PERMIT NEEDED FROM COUNTY FLOODPLAIN COORDINATOR	NO
HEC-RAS STUDY COMPLETED	N/A
FLOODPLAIN SHOWN ON DRAWINGS	NO
FIRM MAP NUMBER FOR SITE	54017C0045C
ACREAGE OF CONSTRUCTION IN FLOODPLAIN	N/A

ACCESS ROAD LENGTH (FEET)	
DESCRIPTION	FEET
MAIN ACCESS ROAD	1,553
WELL PAD ACCESS ROAD	104
WATER CONTAINMENT PAD ACCESS ROAD	361
TOTAL	2,018

LIMIT OF DISTURBANCE		
DESCRIPTION	AREA (ACRES)	AFFECTED TAX PARCELS
WELL PAD	7.94	HAYES SHIRLEY JAMES & MA PARCEL ID: 422909859
WATER CONTAINMENT PAD 1	2.38	
WATER CONTAINMENT PAD 2	2.42	
MAIN ACCESS ROAD	4.60	
WELL PAD ACCESS ROAD	0.30	
WATER CONTAINMENT PAD ACCESS ROAD	0.94	
MATERIAL SPOIL AREA 1	2.98	
MATERIAL SPOIL AREA 2	2.57	
MATERIAL SPOIL AREA 3	2.69	
TOPSOIL SPOIL AREA 1	2.24	
TOTAL	29.06	
TOTAL WOODED AREA	19.10	
TOTAL LINEAR FOOTAGE OF MAIN ACCESS ROAD	1553	
TOTAL LINEAR FOOTAGE OF WELL PAD ACCESS ROAD	104	
TOTAL LINEAR FOOTAGE OF WATER CONTAINMENT PAD ACCESS ROAD	361	

WEST VIRGINIA 811

DESIGN CERTIFICATION
THE DRAWINGS, CONSTRUCTION NOTES, AND REFERENCE DIAGRAMS ATTACHED HERETO HAVE BEEN PREPARED IN ACCORDANCE WITH THE WEST VIRGINIA CODE OF STATE RULES, DEPARTMENT OF ENVIROMENTAL PROTECTION, OFFICE OF OIL AND GAS §35-4-21 AND §35-8.

MM-109 PERMIT
EQT PRODUCTION COMPANY WILL OBTAIN AN ENCROACHMENT PERMIT (MM-109) FROM THE WEST VIRGINIA DEPARTMENT OF TRANSPORTATION, DIVISION OF HIGHWAYS, PRIOR TO THE COMMENCEMENT OF CONSTRUCTION ACTIVITIES.

WELL LOCATION RESTRICTIONS
WELL PAD IS TO COMPLY WITH WELL LOCATION RESTRICTIONS OF WV CODE 22-6A-12. THE PADS COMPLY WITH THE FOLLOWING RESTRICTIONS:
- 250' FROM AN EXISTING WELL OR DEVELOPED SPRING USED FOR HUMAN OR DOMESTIC ANIMALS TO WELL BEING DRILLED
- 625' FROM AN OCCUPIED DWELLING OR BARN GREATER THAN 2500 SF USED FOR POULTRY OR DAIRY MEASURED FROM THE CENTER OF THE PAD
- 100' FROM EDGE OF DISTURBANCE TO WETLANDS, PERENNIAL STREAMS, NATURAL OR ARTIFICIAL LAKE, POND OR RESERVOIR
- 300' FROM EDGE OF DISTURBANCE TO NATURALLY REPRODUCING TROUT STREAMS
- 1000' FROM EDGE OF DISTURBANCE TO ANY SURFACE OR GROUND WATER INTAKE TO A PUBLIC WATER SUPPLY

DPF 6/27/16

REVISIONS				
REV.	DESCRIPTION	DSN DWN	CHK APP	DATE

ISSUED FOR CONSTRUCTION

SCALE VERIFICATION
THIS BAR IS 1 INCH IN LENGTH ON ORIGINAL DRAWING
IF IT IS NOT 1 INCH ON THIS SHEET ADJUST YOUR SCALES ACCORDINGLY

0 500 1000 1500
SCALE 1" = 500' SCALE IN FEET
ORIGINAL DRAWING SIZE IS 22 x 34

COVER PAGE & LOCATION MAP

CPT-10 WELL PAD
DODDRIDGE COUNTY
WEST VIRGINIA

EQT
Where energy meets innovation.

CONSTRUCTION

PROJECT NO.	137351
ISSUE DATE	06-08-2016
CURRENT REVISION	0
DESIGNED BY	AEP
DRAWN BY	CRH
CHECKED BY	JDF
APPROVED BY	MJA

1

SHEET 1 of 25

CPT-10 WELL PAD
SITE DESIGN & CONSTRUCTION PLAN, EROSION & SEDIMENT CONTROL PLANS
EQT PRODUCTION COMPANY

APPROVED
WVDEP OOG
1/14/2016

EQT
Where energy meets innovation.

PLAN REPRODUCTION WARNING
THE PLANS HAVE BEEN CREATED ON ANSI D (22" x 34") SHEETS. FOR REDUCTIONS, REFER TO GRAPHIC SCALE.

THE PLANS HAVE BEEN CREATED FOR FULL COLOR PLOTTING. ANY SET OF THE PLANS THAT IS NOT PLOTTED IN FULL COLOR SHALL NOT BE CONSIDERED ADEQUATE FOR CONSTRUCTION PURPOSES.

WARNING: INFORMATION MAY BE LOST IN COPYING AND/OR GRAY SCALE PLOTTING

API# 1706751, 1706752, 1706753, 1706754

PROJECT CONTACTS

PROJECT OWNER
EQT PRODUCTION COMPANY
CONTACT: CHRIS METZGAR
115 PROFESSIONAL PLACE
BRIDGEPORT, WV 26330
304.848.0075 OFFICE

LOCATION SURVEYOR
ENCOMPASS ENERGY SERVICES, LLC
CONTACT: TYLER HASTINGS
1370 WASHINGTON PIKE, SUITE 308
BRIDGEVILLE, PA 15017
412.564.5215 OFFICE

ENGINEER OF RECORD
KLEINFELDER
CONTACT: JOSH FARLEY, PE
WV PE #020711
230 EXECUTIVE DRIVE, SUITE 122
CRANBERRY TOWNSHIP, PA 16066
724.772.7072 OFFICE
724.772.7079 FAX

ENVIRONMENTAL/ DELINEATION BOUNDARY
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BLUE MOUNTAIN AERIAL MAPPING
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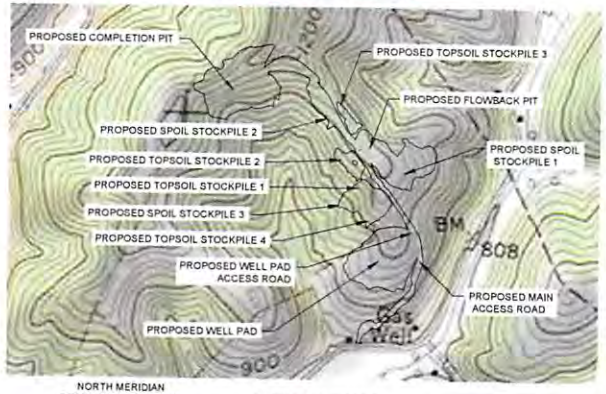
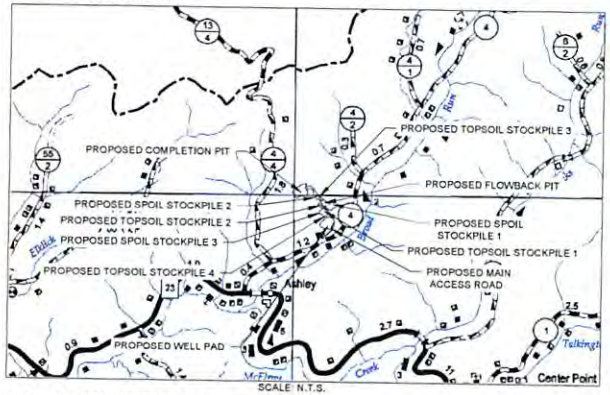
BURTON, WV 26562
304.662.2826 OFFICE
304.815.4890 CELL



NORTH MERIDIAN REFERENCED TO NAD83 WEST VIRGINIA STATE PLANE NORTH ZONE

AFFECTED TAX PARCELS: SEE SHEET 2

CENTER POINT QUAD



SCALE: N.T.S.

WELL HEAD LAYOUT				
WELL HEAD	WV STATE PLANE NAD 83 (FT)		NAD 83 (DEGREES)	
	NORTHING	EASTING	LATITUDE (N)	LONGITUDE (W)
H1-513513	334850.57	1640597.50	39.413529° N	80.660625° W
H2-513514	334850.57	1640612.50	39.413530° N	80.660572° W
H3-513515	334850.57	1640627.50	39.413530° N	80.660519° W
H4-513516	334850.57	1640642.50	39.413531° N	80.660466° W
H5-513517	334850.57	1640657.50	39.413531° N	80.660413° W
H6-513518	334850.57	1640672.50	39.413532° N	80.660359° W
H7-514143	334850.57	1640687.50	39.413532° N	80.660306° W
H8-514144	334850.57	1640702.50	39.413533° N	80.660253° W

WELL HEAD LAYOUT				
WELL HEAD	WV STATE PLANE NAD 27 (FT)		UTM ZONE 17N NAD 83 (M)	
	NORTHING	EASTING	NORTHING	EASTING
H1-513513	334814.30	1672038.29	4362723.13	529215.29
H2-513514	334814.30	1672053.29	4362723.15	529219.86
H3-513515	334814.30	1672068.29	4362723.17	529224.43
H4-513516	334814.30	1672083.29	4362723.18	529229.00
H5-513517	334814.30	1672098.29	4362723.20	529233.57
H6-513518	334814.30	1672113.29	4362723.22	529238.14
H7-514143	334814.30	1672128.29	4362723.46	529242.71
H8-514144	334814.30	1672143.29	4362723.47	529247.28

SITE LOCATION				
DESCRIPTION	NAD 83 (DEGREES)		UTM ZONE 17N NAD 83 (M)	
	LATITUDE (N)	LONGITUDE (W)	NORTHING	EASTING
CENTER OF WELL PAD	39.413493° N	80.660501° W	4362718.95	529225.97
CENTER OF COMPLETION PIT	39.417796° N	80.664784° W	4363195.12	528855.49
CENTER OF FLOWBACK PIT	39.415813° N	80.660713° W	4362976.36	529206.76
MAIN ACCESS ROAD ENTRANCE	39.411547° N	80.661251° W	4362502.75	529162.22
WELL PAD ACCESS ROAD ENTRANCE	39.413638° N	80.659453° W	4362735.39	529316.13

FLOOD CONDITIONS	
DO SITE CONSTRUCTION ACTIVITIES TAKE PLACE IN FLOODPLAIN	NO
PERMIT NEEDED FROM COUNTY FLOODPLAIN COORDINATOR	NO
HEC-RAS STUDY COMPLETED	N/A
FLOODPLAIN SHOWN ON DRAWINGS	NO
FIRM MAP NUMBER FOR SITE	54017C0045C
ACREAGE OF CONSTRUCTION IN FLOODPLAIN	N/A

ACCESS ROAD LENGTH (FEET)	
DESCRIPTION	FEET
MAIN ACCESS ROAD	3,100
PAD ACCESS ROAD	24
TOTAL	3,124

SHEET INDEX	
PAGE NO.	DESCRIPTION
1	COVER PAGE & LOCATION MAP
2	SCHEDULE OF QUANTITIES
3	NOTES
4	EXISTING CONDITIONS
5	OVERALL PLAN
6-8	SITE PLAN
9	WELL PAD CROSS SECTIONS AND PROFILE
10	FLOWBACK PIT CROSS SECTIONS AND PROFILE
11-12	COMPLETION PIT CROSS SECTIONS AND PROFILE
13-15A	MAIN ACCESS ROAD & STOCKPILE CROSS SECTIONS AND PROFILES
16	CULVERT PROFILES
17-22	DETAILS
23-25	RECLAMATION PLAN

811
Know what's below. Call before you dig.
THREE DAYS BEFORE YOU DIG
CALL PA ONE CALL SYSTEM TOLL FREE 811 OR 1-800-242-1776

DESIGN CERTIFICATION
THE DRAWINGS, CONSTRUCTION NOTES, AND REFERENCE DIAGRAMS ATTACHED HERETO HAVE BEEN PREPARED IN ACCORDANCE WITH THE WEST VIRGINIA CODE OF STATE RULES, DEPARTMENT OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS §35-4-21 AND §35-8.

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- 100' FROM EDGE OF DISTURBANCE TO WETLANDS, PERENNIAL STREAMS, NATURAL OR ARTIFICIAL LAKE, POND OR RESERVOIR
- 300' FROM EDGE OF DISTURBANCE TO NATURALLY REPRODUCING TROUT STREAMS
- 1000' FROM EDGE OF DISTURBANCE TO ANY SURFACE OR GROUND WATER INTAKE TO A PUBLIC WATER SUPPLY

KLEINFELDER
Bright People. Right Solutions.
230 Executive Drive, Suite 122
Cranberry Township, PA 16066
Phone: 724-772-7072
www.kleinfelder.com

JOSHUA M. FARLEY, PROFESSIONAL ENGINEER, 20711, STATE OF WEST VIRGINIA

Signed By: JOSHUA M. FARLEY, W.V. P.E. # 20711

REVISIONS				
REV	DESCRIPTION	DSN / DWN	CHK / APP	DATE
1	09-22-2015 WVDEP COMMENTS	SAM / SAM	JMF / JMF	09-30-15

ISSUED FOR PERMITTING
NOT RELEASED FOR CONSTRUCTION

SCALE VERIFICATION
1 INCH
ADJUST SCALE ACCORDINGLY IF DISTANCE PLOTS DIFFERENTLY

0 500 1000 1500
SCALE 1" = 500' SCALE IN FEET
ORIGINAL DRAWING SIZE IS 22 x 34

COVER PAGE & LOCATION MAP

CPT-10 WELL PAD
DODDRIDGE COUNTY
WEST VIRGINIA

EQT
Where energy meets innovation.

PERMITTING

PROJECT NO.	137355
ISSUE DATE	09/28/2015
CURRENT REVISION	-
DESIGNED BY	AER
DRAWN BY	AER
CHECKED BY	JMF
APPROVED BY	JMF

1

SHEET 1 of 25

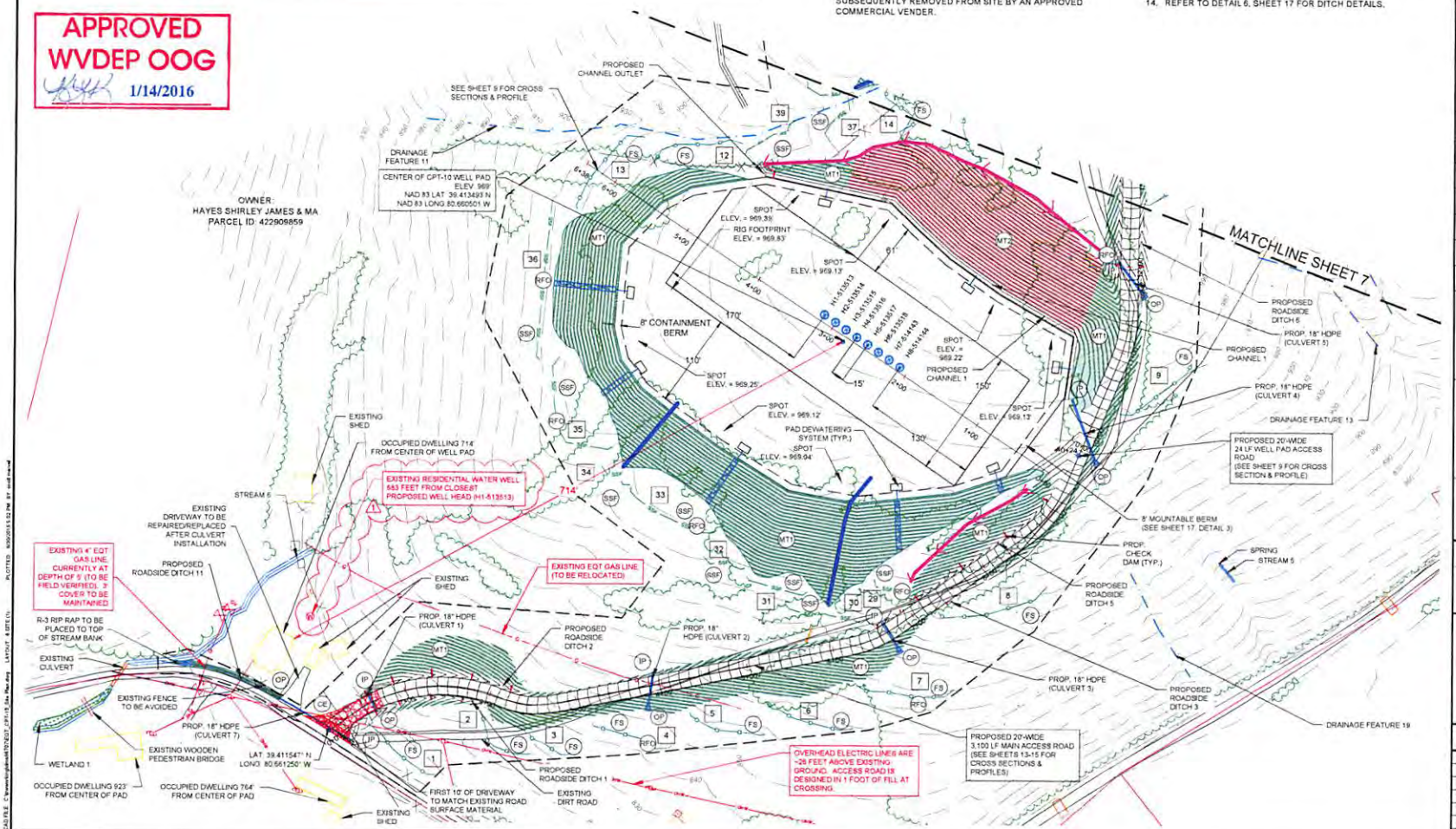
LEGEND

- EXISTING PROPERTY LINE
- EXISTING GAS LINE
- EXISTING OVERHEAD ELECTRIC SERVICE
- EXISTING UTILITY POLE
- EXISTING TREE LINE
- EXISTING STRUCTURE
- EXISTING WELL
- DELINEATED STREAM
- DELINEATED WETLAND
- DELINEATED DRAINAGE FEATURE
- EXISTING ROAD
- EXISTING FENCE
- FEMA FLOODPLAIN (N/A)
- EXISTING MAJOR CONTOUR (10')
- EXISTING MINOR CONTOUR (2')
- PROP. MAJOR CONTOUR (10')
- PROP. LIMITS OF DISTURBANCE
- PROP. PAD & ROAD EDGE
- SUPER SILT FENCE AND FILTER SOCK INDICATION (SEE SHEET 19 FOR SUPER SILT FENCE AND FILTER SOCK TABLE)
- PROP. FILTER SOCK
- PROP. SUPER SILT FENCE
- PROP. ROCK CONSTRUCTION ENTRANCE
- PROP. ROCK FILTER OUTLET
- PROP. OUTLET PROTECTION
- PROP. INLET PROTECTION
- PROP. PVC PIPE FOR SUMP SYSTEM
- PROP. CHECK DAM
- PROP. RIP RAP APRON
- PROP. RIP RAP OUTLETS
- FLARED END SECTION
- PROP. NAG C125BN EROSION CONTROL MATTING*
- PROP. NAG C350 EROSION CONTROL MATTING*
- PROP. CULVERT
- PROP. DITCH
- PROP. PAD PERIMETER SUMP
- PROP. WELL HEAD
- PROP. FRENCH DRAIN
- PROP. TOP OF SLOPE BERM

NOTES:

1. THE GRADE SHOWN REPRESENT FINISH GRADE ELEVATIONS.
2. PIPE MATERIALS SHALL BE AS NOTED ON THE PLAN AND IN THE STORM DRAINAGE COMPUTATION ON SHEET 16.
3. CUT AND FILL SLOPES SHALL BE AT 2H:1V UNLESS NOTED OTHERWISE.
4. FILL SHALL BE PLACED IN 12" LIFTS AND BE COMPACTED TO 95% STANDARD PROCTOR.
5. INTERMEDIATE TOE BENCHES SHALL BE INSTALLED ON FILL SLOPES AT INTERVALS OF 50' VERTICAL FEET OR LESS IF SOILS CONDITIONS WARRANT ADDITIONAL SLIP PRECAUTIONS.
6. ALL FILL SLOPES SHALL BE TOE KEYED PER THE DETAIL SHOWN ON SHEET 20.
7. POSITIVE FLOW FROM PAD TO SUMPS. SEDIMENT AND MATERIALS REMOVED FROM THE PAD SUMPS SHALL BE PUMPED TO ON-SITE HOLDING/STORAGE TANKS AND SUBSEQUENTLY REMOVED FROM SITE BY AN APPROVED COMMERCIAL VENDER.
8. ALL STORMWATER CONVEYANCES ON THE SITE HAVE BEEN DESIGNED TO ACCOMMODATE THE 10-YEAR STORM EVENT.
9. SEE DETAIL 9, SHEET 18 FOR RIP RAP OUTLET PROTECTION AND SIZING AND DESIGN.
10. CONTRACTOR TO INSTALL ROCK CHECK DAMS WITHIN ROADSIDE DITCHES. SEE DETAIL 17 ON PAGE 19 FOR SPACING REQUIREMENTS. ROCK CHECK DAMS WILL BE INSTALLED DURING CONSTRUCTION AS EROSION CONTROL MEASURES AND REMAIN IN PLACE AS PERMANENT CHECK DAMS AFTER CONSTRUCTION IS COMPLETE.
11. FILTER SOCK AND SUPER SILT FENCE SIZING TABLE IS SHOWN IN DETAIL 18, SHEET 19.
12. IN TOPSOIL PLACEMENT AREAS, CONTRACTOR TO INSTALL PROPER BMPS TO ENSURE NO OFFSITE EROSION & SEDIMENTATION RUNOFF.
13. INSTALL ROCK FILTER OUTLETS ALONG SEDIMENT BARRIERS AS SHOWN AND AT LOW POINTS AS IDENTIFIED IN THE FIELD.
14. REFER TO DETAIL 6, SHEET 17 FOR DITCH DETAILS.

APPROVED
WVDEP OOG
1/14/2016



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REGISTERED PROFESSIONAL ENGINEER 20711 STATE OF WEST VIRGINIA

Signed By: JOSHUA M. FARLEY, W.V. P.E. # 20711

REVISIONS

REV	DESCRIPTION	DSN / DWN	CHK / APP	DATE
1	09-22-2015 WVDEP COMMENTS	SAM / SAM	JMF / JMF	09-30-15

ISSUED FOR PERMITTING
NOT RELEASED FOR CONSTRUCTION

SCALE VERIFICATION
1 INCH
ADJUST SCALE ACCORDINGLY IF DISTANCE PLOTS DIFFERENTLY

0 60 120 180
SCALE 1" = 60' SCALE IN FEET

ORIGINAL DRAWING SIZE IS 22 x 34

SITE PLAN

CPT-10 WELL PAD
DODDRIDGE COUNTY
WEST VIRGINIA

EQT
Where energy meets innovation.

PERMITTING

PROJECT NO	137355
ISSUE DATE	09/28/2015
CURRENT REVISION	-
DESIGNED BY	AER
DRAWN BY	AER
CHECKED BY	JMF
APPROVED BY	JMF

SHEET 6 of 25

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