west virginia department of environmental protection

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

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

June 23, 2016

WELL WORK PERMIT

Horizontal 6A Well

This permit, API Well Number: 47-10303136, issued to EQT PRODUCTION COMPANY, 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 all 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 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.

In addition to the applicable requirements of this permit, and the statutes and rules governing oil and gas activity in WV, this permit may contain specific conditions which must be followed. Permit conditions are attached to this cover letter.

Per 35CSR-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) 926-0499 ext. 1654.

James Martin
Chief

Operator's Well No: 516341
Farm Name: COASTAL FOREST RESOURCES
API Well Number: 47-10303136
Permit Type: Horizontal 6A Well
Date Issued: 06/23/2016

API Number: 103-03136

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.

west virginia department of environmental protection

Oil and Gas Conservation Commission
601 57th Street, SE Charleston, WV 25304
(304)926-0499, Ext 1656

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

April 11, 2016

Department of Environmental Protection
Office of Oil and Gas
Charleston, WV 25304

RE: Application for Deep Well Permit – API #47-103-03136

COMPANY: EQT Production Company

FARM: Coastal Forest Resources #516341

COUNTY: Wetzel DISTRICT: Grant QUAD: Big Run

The deep well review of the application for the above company is **APPROVED TO TRENTON FOR POINT PLEASANT COMPLETION.**

The applicant has complied with the provision of Chapter 22C-9, of the Code of West Virginia, nineteen hundred and thirty-one (1931), as amended, Oil and Gas Conservation Commission as follows:

1. Comments to Notice of Deviation filed? YES- objector did not attend hearing

2. Provided a certified copy of duly acknowledged and recorded consent and easement form from all surface owners; yes

3. Provided a tabulation of all deep wells within one mile of the proposed location, including the API number of all deep wells, well name, and the name and address of the operator; none

4. Provided a plat showing that the proposed location is a distance of 400+ feet from the nearest lease line or unit boundary and showing the following wells drilled to or capable of producing from the objective formation within 3,000 feet of the proposed location.

Sincerely,

Cindy Raines

Cindy Raines
ERP Administrator

WW - 6B
(4/15)

API NO. 47 - 103 - 03136 8/24
OPERATOR WELL NO. 516341
Well Pad Name: BIG333

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

1) Well Operator: EQT Production Company | 306686 Operator ID | 103 County | 04 District | 254 Quadrangle

2) Operator's Well Number: 516341 Well Pad Name: BIG333

3) Farm Name/Surface Owner : Coastal Forest Resources Co. dba Coastal Timberlands Co Public Road Access: Co Rt. 20

4) Elevation, current ground: 1,452.0 Elevation, proposed post-construction: 1,452.0

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

Other _____

(b) If Gas: Shallow _____ Deep •

Horizontal •

6) Existing Pad? Yes or No: yes

DMH 8-24-15

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

Target formation is Point Pleasant at a depth of 13073 with the anticipated thickness to be 102 feet and anticipated target pressure of 10856 PSI

Top of Point Pleasant 13024

8) Proposed Total Vertical Depth: 13326

9) Formation at Total Vertical Depth: Trenton

10) Proposed Total Measured Depth: 16,313

11) Proposed Horizontal Leg Length 3,212

12) Approximate Fresh Water Strata Depths: 581, 753

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

14) Approximate Saltwater Depths: 2257, 2370, 2657

15) Approximate Coal Seam Depths: 743, 883, 919, 1011, 1240, 1333

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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(4/15)

API NO. 47 - 103 - 03136
OPERATOR WELL NO. 516341
Well Pad Name: BIG333

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	26	New	A-252	.375w	60	60	114 C.T.S.
Fresh Water	18 5/8	New	J-55 BTC	87.5	969	969	1,764 C.T.S.
Coal	-	-	-	-	-	-	-
Intermediate 1	13 3/8	New	J-55 BTC	68	3,100	3,100	2,679 C.T.S.
Intermediate 2	9 5/8	New	HC P-110 EIP BTC	47	11,950	11,950	4853 CTS
Production	5 1/2	New	P-110 CYHP	26	16,313	16,313	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							

DMH 8-24-15

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	26	32	0.438	880		Construction	
Fresh Water	18 5/8	24	0.48	2,250	610	* See Note 2	1.22
Coal							
Intermediate 1	13 3/8	17 1/2	0.472	3,450	1953	* See Note 2	1.26
Intermediate 2	9 5/8	12 3/8	0.476	11,000	10,158		1.22
Production	5 1/2	8 1/2	0.361	18,900	11,112	-	0.94
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)

API NO. 47 - 103 - 03136
OPERATOR WELL NO. 516341
Well Pad Name: BIG333

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

Drill a vertical well down to an approximate depth of 13,326 tagging the Trenton, run logs, then plug back vertical portion of wellbore with a solid cement plug, to approximately 12,020 then kick off the horizontal leg into the Point Pleasant 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 treating pressures are 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): No additional disturbance

22) Area to be disturbed for well pad only, less access road (acres): no additional disturbance

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.

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8-24-15

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.

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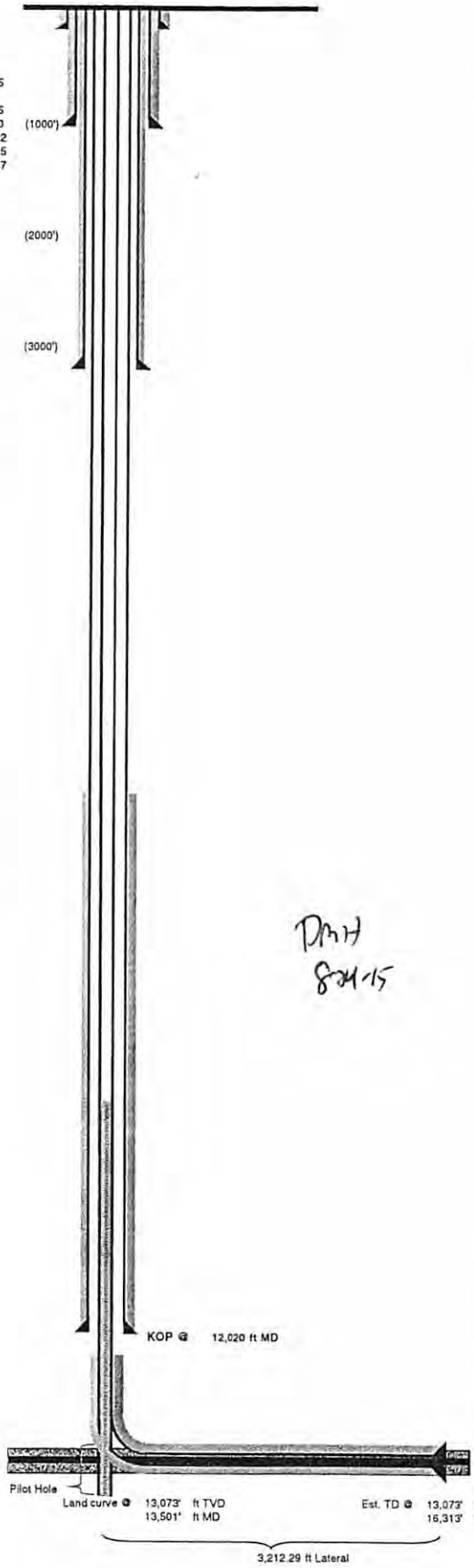
103-03136

Well 516341 BIG333H12 Azimuth 152
EQT Production Vertical Section 3288
Wetzel County West Virgina

TVD Depth (feet)	Formation Tops (TVD)	
0'		
250'		
500'		
750'	Washington	743 - 745
	Freshwater Zone (From MRC)	753
1,000'	Waynesburg	883 - 885
	Coal	919 - 920
1,250'	Uniontown	1,011 - 1012
	Pittsburgh	1,240 - 1245
1,500'	Coal	1,333 - 1337
1,750'		
2,000'		
2,250'		
2,500'	Maxton	2443
	Big Lime	2484
2,750'	Big Injun	2623
	Base Big Injun	2739
3,000'	Weir	2873
	Base Weir	2975
3,250'	Gantz	3082
	Fifty foot	3107
3,500'	Thirty foot	3194
	Gordon	3309
3,750'	Gordon Base	3341
	Forth Sand	3380
4,000'	Bayard	3469
	Bayard Base	3687
4,250'	Warren	3965
	Speechley	4115
4,500'		
4,750'		
5,000'	Riley	5007
5,250'		
5,500'		
5,750'	Benson	5637
6,000'	Alexander	5961
6,250'		
6,500'		
6,750'		
7,000'	Rhinestreet	7135
	Sonyea	7193
7,250'	Middlesex	7343
	Genesee	7392
7,500'	Geneseo	7478
	Tully	7505
7,750'	Hamilton	7526
	Marcellus	7613
8,000'	Onondaga/Huntersville	7664
	Oriskany	7891
8,250'	Helderberg	7987
8,500'	Salina	8421
8,750'		
9,000'		
9,250'		
9,500'	Lockport/Newburg	9657
9,750'		
10,000'	Rose Hill	10117
10,250'		
10,500'	Packer Shell	10482
	Clinton/Medina	10639
10,750'	Queenston/Juniata/Lorriane	10741
11,000'		
11,250'	Reedsville	11413
11,500'		
11,750'	Red/Grey Shale Transition	11850
12,000'		
12,250'		
12,500'		
12,750'	Utica	12914
13,000'	Point Pleasant	13024
	[redacted]	[redacted]
13,250'	Trenton	13125
	Black River	13339
13,500'		
13,750'		



Hole Size (inches)	Casing Type	Size (inches)	Wt (ppf)/Grade
32	Conductor	26	
24	Surface	18 5/8	87.5# J-55 BTC
17 1/2	Intermediate Casing 1	13 3/8	68# J-55 BTC
12 1/4	Intermediate Casing 2	9 5/8	47# HC P-110 EIP BTC
8 1/2	Production Casing	5 1/2	26# P-110 CYHP

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Proposed Well Work:
Drill a vertical well down to an approximate depth of 13,326'
Plug back vertical portion of wellbore with cement plug.
Then kick off the horizontal leg into the Point Pleasant.

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WW-9
(2/15)

Page 1 of 2
API No. 47 - 103 - 0 3136
Operator's Well No. 516341

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) Aunty Run of South Fork Fishing Creek Quadrangle Big Run

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.

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

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

- If left in pit and plan to solidify what medium will be used? (Cement, Lime, sawdust) n/a
- Landfill or offsite name/permit number? See Attached List

Permittee shall provide written notice to the Office of Oil and Gas of any load of drill cuttings or associated waste rejected at any West Virginia solid waste facility. The notice shall be provided within 24 hours of rejection and the permittee shall also disclose where it was properly disposed.

I certify that I understand and agree to the terms and conditions of the GENERAL WATER POLLUTION PERMIT issued on August 1, 2005, by the Office of Oil and Gas of the West Virginia Department of Environmental Protection. I understand that the provisions of the permit are enforceable by law. Violations of any term or condition of the general permit and/or other applicable law or regulation can lead to enforcement action.

I certify under penalty of law that I have personally examined and am familiar with the information submitted on this application form and all attachments thereto and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine or imprisonment.

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

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AUG 21 2015
WV Department of Environmental Protection

Subscribed and sworn before me this 18 day of Aug, 20 15

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

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

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

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

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

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

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

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

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103-03136

Form WW-9

Operator's Well No. 516341

Proposed Revegetation Treatment: Acres Disturbed no additional disturbance Prevegetation pH 6

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: [signature]

Comments:

Title: Oil & Gas Inspector Date: 8-24-15

Field Reviewed? (✓) Yes ( ) No

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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

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EQT

Where energy meets innovation.sm

Site Specific Safety Plan

EQT BIG 333 Pad

Pine Grove

Wetzel County, WV

For Wells:

516341

Date Prepared: **March 26, 2015**

EQT Production

Permitting Supervisor
Title

8-18-15
Date

WV Oil and Gas Inspector

Oil + Gas Inspector
Title

8-24-15
Date

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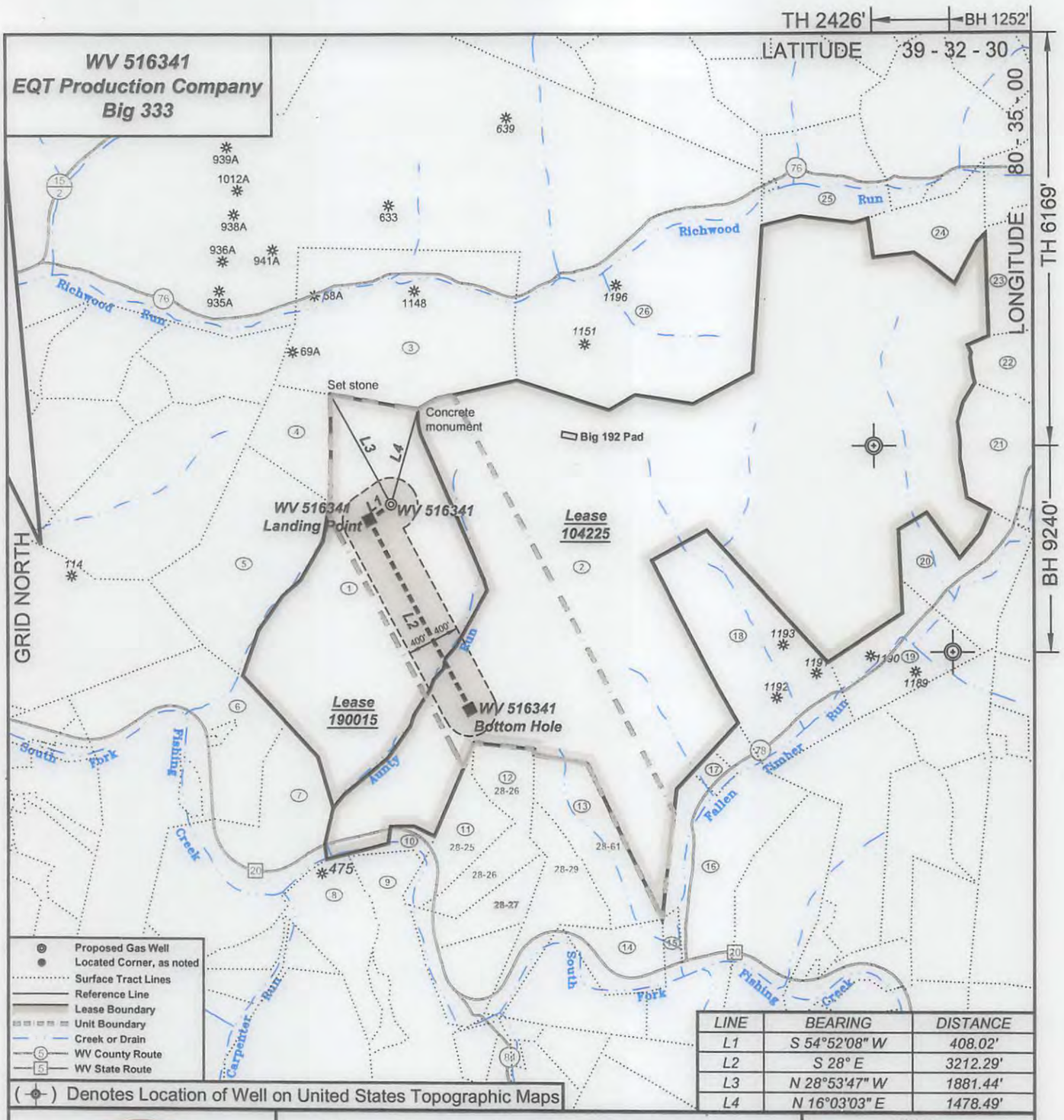


LINE	BEARING	DISTANCE
L1	S 54°52'08" W	408.02'
L2	S 28° E	3212.29'
L3	N 28°53'47" W	1881.44'
L4	N 16°03'03" E	1478.49'

ALLEGHENY SURVEYS, INC.

I, the undersigned, hereby certify that this plat is correct to the best of my knowledge and belief and shows all the information required by law and the regulations issued and prescribed by the Department of Environmental Protection.

Ben R. Singleton

P.S. 2092

Ben R. Singleton LICENSED NO. 2092 STATE OF WEST VIRGINIA PROFESSIONAL SURVEYOR

SEAL

FILE NO: 33-15
DRAWING NO: Utica 2 H12
SCALE: 1" = 2000'
MINIMUM DEGREE OF ACCURACY: 1:2500
PROVEN SOURCE OF ELEVATION: NGS CORS Station

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

DATE: April 5 20 16
OPERATOR'S WELL NO.: 516341
API WELL NO
47 - 103 - 03136 H6A
STATE COUNTY PERMIT

WELL TYPE: ☐ OIL ☒ GAS ☐ LIQUID INJECTION ☐ WASTE DISPOSAL
(IF GAS) PRODUCTION : ☐ STORAGE ☒ DEEP ☐ SHALLOW
LOCATION: ELEVATION: As-Built - 1452' WATERSHED Aunty Run of South Fork Fishing Creek QUADRANGLE: Big Run
DISTRICT: Grant COUNTY: Wetzel
SURFACE OWNER: Coastal Forest Resources Co., d/b/a Coastal Timberlands Co. ACREAGE: 283.6±
ROYALTY OWNER: Equitrans, Inc. LEASE NO: 190015 ACREAGE: 285±
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: Point Pleasant ESTIMATED DEPTH: 13,007'

WELL OPERATOR: EQT Production Company
ADDRESS: 115 Professional Place PO Box 280, Bridgeport, WV 26330
DESIGNATED AGENT: Rex C. Ray
ADDRESS: 115 Professional Place PO Box 280, Bridgeport, WV 26330

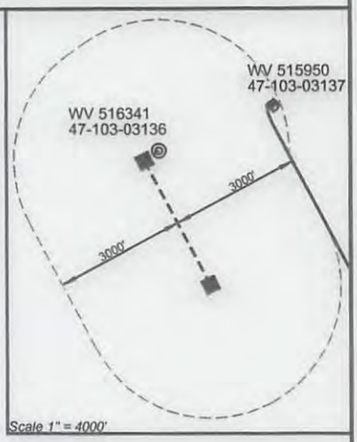
WV 516341
EQT Production Company
Big 333

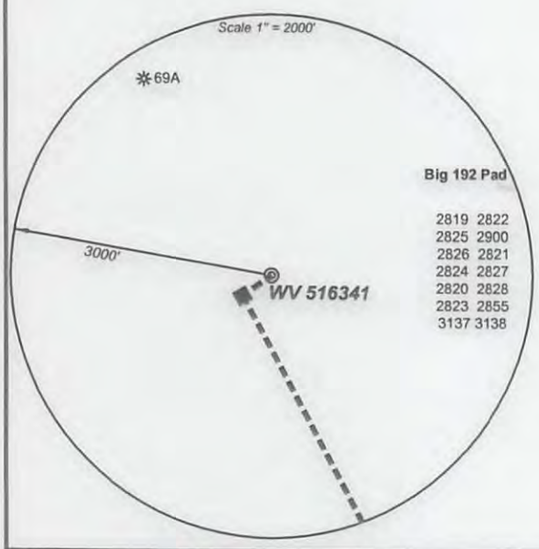
Lease No.	Royalty Owner	Acreage
104225	Ed Broom, Inc. et al.	1100

Tract I.D.	Tax Map No.	Parcel No.	District	Surface Tract Owner	Acres
1	23	13	Grant	Coastal Forest Resources Co.	283.60
2	23	14	Grant	Richard B. Dallison, et al.	879.30
3	23	5	Grant	Al Wyatt Heirs	174.68
4	23	9	Grant	Larry Larew, et al.	31.50
5	23	12	Grant	Larry Larew, et al.	104.80
6	28	6	Grant	Joseph W. Carlin	190.74
7	28	8	Grant	Joseph W. Carlin	112.90
8	28	20	Grant	Joseph W. Carlin	38.00
9	28	22	Grant	Laurie Jean Dallison	67.00
10	28	24	Grant	Phillip E. Lowe	2.00
11	28	25	Grant	Everett Lee Shreve	26.00
12	28	26	Grant	Everett Shreve, et al.	36.70
13	28	61	Grant	William J. & Paula J. Goodrich	50.14
14	28	46.1	Grant	William J. Goodrich	18.75
15	28	30.3	Grant	Richard B. & Jaynee Dallison	1.93
16	28	32	Grant	Coastal Forest Resources Co.	96.74
17	28	9	Grant	Edward E. Klein	3.90
18	23	16	Grant	Arthur J. Fach	112.00
19	24	40	Grant	Paul Ice	51.88
20	24	32	Grant	Eddie & Kim Dallison	45.27
21	24	24	Grant	Enzie L. Wyatt	42.00
22	24	15	Grant	Sheila Brown, et al.	35.60
23	24	5	Grant	Enzie L. & Thomas E. Wyatt	235.08
24	24	3	Grant	Eddie & Kim Dallison	40.00
25	24	1	Grant	Harry W. & Lavada B. Goodrich	54.50
26	17	14	Grant	Coastal Forest Resources Co.	1627.60

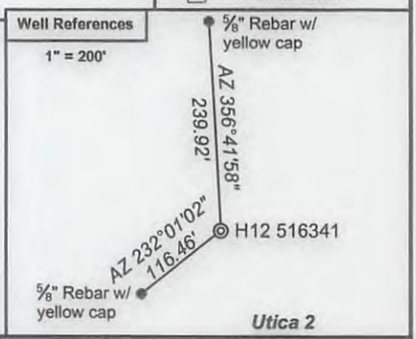
Notes:

WV 516341 coordinates:
NAD 27 N: 375,100.24 E: 1,691,987.52
NAD 27 Lat: 39.524731 Long: -80.591934
NAD 83 UTM N: 4,375,097.92 E: 535,088.46
WV 516341 Landing Point coordinates:
NAD 27 N: 374,865.45 E: 1,691,653.83
NAD 27 Lat: 39.524075 Long: -80.593107
NAD 83 UTM N: 4,375,024.69 E: 534,987.98
WV 516341 Bottom Hole coordinates:
NAD 27 N: 372,029.15 E: 1,693,161.89
NAD 27 Lat: 39.516339 Long: -80.587639
NAD 83 UTM N: 4,374,168.25 E: 535,461.82
West Virginia Coordinate system of 1927 (North Zone) based upon Differential GPS Measurements.
Plat orientation, corner and well ties are based upon the grid north meridian.
Well location references are based upon the grid north meridian.
UTM coordinates are NAD83, Zone 17, Meters.





Proposed Gas Well
Located Corner, as noted
Surface Tract Lines
Reference Line
Lease Boundary
Creek or Drain
WV County Route
WV State Route



ALLEGHENY SURVEYS, INC.

I, the undersigned, hereby certify that this plat is correct to the best of my knowledge and belief and shows all the information required by law and the regulations issued and prescribed by the Department of Environmental Protection.

Ben R. Singleton
P.S. 2092

Ben R. Singleton LICENSED NO. 2092 STATE OF WEST VIRGINIA PROFESSIONAL SURVEYOR

SEAL

FILE NO: 33-15
DRAWING NO: Utica 2 H12
SCALE: 1" = 2000'
MINIMUM DEGREE OF ACCURACY: 1:2500
PROVEN SOURCE OF ELEVATION: NGS CORS Station

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

DATE: April 5 20 16
OPERATOR'S WELL NO.: 516341
API WELL NO
47 - 103 - 03136 H6A
STATE COUNTY PERMIT

WELL TYPE: ☐ OIL ☒ GAS ☐ LIQUID INJECTION ☐ WASTE DISPOSAL
(IF GAS) PRODUCTION : ☐ STORAGE ☒ DEEP ☐ SHALLOW
LOCATION: ELEVATION: As-Built - 1452' WATERSHED Aunty Run of South Fork Fishing Creek QUADRANGLE: Big Run
DISTRICT: Grant COUNTY: Wetzel
SURFACE OWNER: Coastal Forest Resources Co., d/b/a Coastal Timberlands Co. ACREAGE: 283.6±
ROYALTY OWNER: Equitrans, Inc. LEASE NO: 190015 ACREAGE: 285±
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: Point Pleasant ESTIMATED DEPTH: 13,007'

WELL OPERATOR: EQT Production Company
ADDRESS: 115 Professional Place PO Box 280
Bridgeport, WV 26330

DESIGNATED AGENT: Rex C. Ray
ADDRESS: 115 Professional Place PO Box 280
Bridgeport, WV 26330

103-03136

WW-6A1
(5/13)

Operator's Well No. 516341

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
190015			Min 1/8 pd	
	Alex Hart, etal	The Philadelphia Company of West Virginia		93/392
	The Philadelphia Company of West Virginia	Pittsburgh & West Virginia Gas Company		146/98
	Pittsburgh & West Virginia Gas Company	Equitable Gas Company		187/321
	Equitable Gas Company	Equitrans Inc.		71A/453
	Equitrans Inc.	EQT Production Company		192/19 Doddridge
104225			Min 1/8 pd	
	L G Robinson, etal	H. L. Smith		111/452
	H. L. Smith	Philadelphiia Company of West Virginia		47A/287
	Philadelphia Company of West Virginia	Pittsburgh & W Va Gas Company		146/98
	Pittsburgh & West Virginia Gas Company	Equitable Gas Company		187/321
	Equitable Gas Company	Equitrans, Inc.		71A/453
	Equitrans, LLC	EQT Production Company		192/19 Doddridge

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

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(1/12)

103-03136

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

Date of Notice Certification: 8-18-15

API No. 47 - 103 - 0
Operator's Well No. 516341
Well Pad Name: BIG333

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:	535,088.46
County:	Wetzel	UTM NAD 83 Northing:	4,375,097.92
District:	Grant	Public Road Access:	Co Rt. 20
Quadrangle:	Big Run	Generally used farm name:	Coastal Forest Resources Co. dba Coastal Timberlands Co
Watershed:	Aunty Run of South Fork Fishing 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

Required Attachments:

The Operator shall attach to this Notice Certification Form all Notice Forms and Certifications of Notice that have been provided to the required parties and/or any associated written waivers. For the Public Notice, the operator shall attach a copy of the Class II Legal Advertisement with publication date verification or the associated Affidavit of Publication. The attached Notice Forms and Certifications of Notice shall serve as proof that the required parties have been noticed as required under West Virginia Code § 22-6A. Pursuant to West Virginia Code § 22-6A-11(b), the Certification of Notice to the person may be made by affidavit of personal service, the return receipt card or other postal receipt for certified mailing.

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(1/12)

103-03136

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

NOTARY SEAL

Subscribed and sworn before me this 18 day of Aug ,2015

_____ Notary Public

My Commission Expires 8-24-22

Oil and Gas Privacy Notice:

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

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WW-6A
(9-13)

API NO. 47 - 103 - 0 31360
OPERATOR WELL NO. 516341
Well Pad Name: BIG333

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: 8-18-15 Date Permit Application Filed: 9-18-15

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 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) 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: Coastal Forest Resources dba
Address: Coastal Timberlands Company
P.O. Box 709
Buckhannon, WV 26201

Name: 0
Address: 0
0
0

☑ SURFACE OWNERS(s) (Road and/or Other Disturbance)
Name: Coastal Forest Resources dba
Address: Coastal Timberlands Company
P.O. Box 709
Buckhannon, WV 26201
Name: Richard B. and Jaynee C Dallison
Address: 28855 Shortline Hwy.
Folsom, WV 26348-6021
0

☑ SURFACE OWNER(s) (Impoundments/Pits)
Name: Coastal Forest Resources dba
Address: Coastal Timberlands Company
P.O. Box 709
Buckhannon, WV 26201

☑ COAL OWNER OR LESSEE
Name: Murray American Energy Inc
Address: 1 Bridge St
Monongah WV 26554
0
See attached for additional coal owners.

☐ COAL OPERATOR
Name: 0
Address: 0
0
0

☐ SURFACE OWNER OF WATER WELL AND/OR WATER PURVEYOR(s)
Name: 0
Address: 0
0
0

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

*Please attach additional forms if necessary

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AUG 24 2015
WV Department of Environmental Protection

103-03136

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Surface Owners(road or other disturbance):

Thomas P. Dallison
452 Trader Fork Road
Folsom, WV 26348-6021

Trenton Dallison
2975 Barker Run Road
Pine Grove, WV 26419-8325

Richard and Roxanne Funk
4832 Fairport Road
Newton Falls, OH 44444

Larry Larew
12750 W. Middleton Rd.
Salem, OH 44460

Lydle M Martyn
P.O. Box 7
Jacksonburg, WV 26377

Additional Coal Owners:

Murray American Energy
46226 National Road
St. Clairsville OH 43950

CNX RCPC LLC
CNX Center
1000 Consol Energy Dr
Canonsburg PA 15317

Betty Jean Woods
7 Ross Street
New Martinsville WV 26155

Roxanna Yost Hafer
460 N Main St
New Martinsville WV 26155

Forrest O Miller
PO Box 1664
Lexington KY 40588

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WW-6A
(8-13)

API NO. 47 - 103 - 0336
OPERATOR WELL NO. 516341
Well Pad Name: BIG333

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 noise, light, dust and volatile organic compounds generated by the drilling of horizontal wells as they relate to the well location restrictions regarding occupied dwelling structures pursuant to this section. Upon a finding, if any, by the secretary that the well location restrictions regarding occupied dwelling structures are inadequate or otherwise require alteration to address the 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:

Chief, Office of Oil and Gas
Department of Environmental Protection
601 57th St. SE
Charleston, WV 25304
(304) 926-0450

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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 - 103 - 03136
OPERATOR WELL NO. 516341
Well Pad Name: BIG333

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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103-03136

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.

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

By: Victoria Roark
Its: Permitting Supervisor
Subscribed and sworn before n 18 day of Aug , 2015
Notary Public
My Commission Expi 8-24-22

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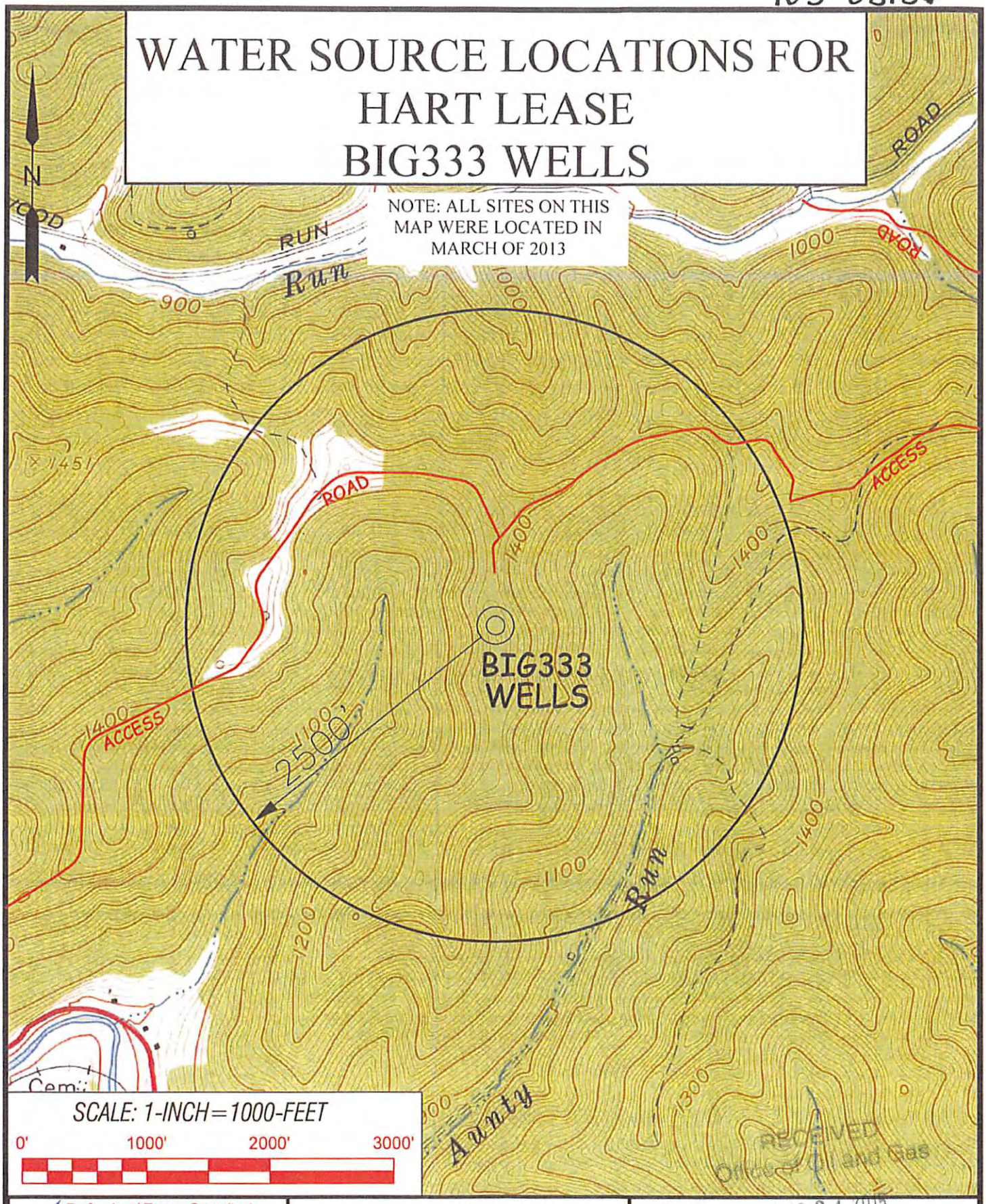
WATER SOURCE LOCATIONS FOR HART LEASE BIG333 WELLS



Professional Energy Consultants
A DIVISION OF SMITH LAND SURVEYING, INC
SLS SURVEYORS ENGINEERS ENVIRONMENTAL PROJECT MGMT.

DRAWN BY	FILE NO.	DATE	CADD FILE:
K.D.W.	7856	05/22/15	7856BIG333WS.dwg

TOPO SECTION OF:
BIG RUN, WV 7.5' QUAD

DISTRICT	COUNTY	TAX MAP-PARCEL NO.
GRANT	WETZEL	23-13

OPERATOR:
EQT PRODUCTION COMPANY
115 PROFESIONAL PLACE
P.O. BOX 280
BRIDGEPORT, WV 26330

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WW-6A4
(1/12)

Operator Well No. 516341

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: 4/28/2015 **Date Permit Application Filed:** 5/9/15

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 dba
Address: Coastal Timberlands Company
P.O. Box 709
Buckhannon WV 26201

Name: Richard B. and Jaynee C. Dallison
Address: 28855 Shortline Hwy.
Folsom WV 26348-6021

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
County: Wetzel
District: Grant
Quadrangle: Big Run
Watershed: Aunty Run of South Fork Fishing Creek

UTM NAD 83 Easting: 535,088.46
Northing: 4,375,097.92
Public Road Access: Co Rt. 20
Generally used farm name: Coastal Forest Resources Co. dba Coastal Timberlands Co

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

Notice is hereby given by:

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

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

Oil and Gas Privacy Notice:
The Office of Oil and Gas processes your personal information, such as name, address and telephone number, as part of our regulatory duties. Your personal information may be disclosed to other State agencies or third parties in the normal course of business or as needed to comply with statutory or regulatory requirements, including Freedom of Information Act requests. 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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WW-6A4
(1/12)

Operator Well No. 516340

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: 4/28/2015 **Date Permit Application Filed:** 5/9/15

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: Sharon Kay Irvin
Address: POA for Lydle M. Martin Widower
PO Box 7
Jacksonburg WV 26377

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	535,088.46
County:	Wetzel		Northing	4,375,097.92
District:	Grant		Public Road Access:	Co. Rt 20
Quadrangle:	Big Run		Generally used farm name:	Coastal Forest Resources Co. dba Coastal Timberlands Co
Watershed:	Aunty Run of South Fork Fishing 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 Bridgeport, WV 26330	Address:	115 Professional Place, P.O Box 280 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

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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WW-6A4
(1/12)

Operator Well No. 516341

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: 4/28/2015 **Date Permit Application Filed:** 5/9/15

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: Richard and Roxanne Funk
Address: 4832 Fairport Road
Newton Falls OH 44444

Name: Larry Larew
Address: 23860 W. Middleton Rd.
Salem OH 44460

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
County: Wetzel
District: Grant
Quadrangle: Big Run
Watershed: Aunty Run of South Fork Fishing Creek

UTM NAD 83 Easting: 535,088.46
Northing: 4,375,097.92
Public Road Access: Co. Rt 20
Generally used farm name: Coastal Forest Resources Co. dba Coastal Timberlands Co

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

Notice is hereby given by:

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

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

Oil and Gas Privacy Notice:
The Office of Oil and Gas processes your personal information, such as name, address and telephone number, as part of our regulatory duties. Your personal information may be disclosed to other State agencies or third parties in the normal course of business or as needed to comply with statutory or regulatory requirements, including Freedom of Information Act requests. 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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WW-6A4
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Operator Well No. 516341

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: 4/28/2015 **Date Permit Application Filed:** 5/9/15

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: Thomas P Dallison
Address: 452 Trader Fork Rd.
Folsom WV 26348

Name: Trenton Dallison
Address: 2975 Barker Run Rd.
Pine Grove WV 26419-8325

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
County: Wetzel
District: Grant
Quadrangle: Big Run
Watershed: Aunty Run of South Fork Fishing Creek

UTM NAD 83 Easting: 535,088.46
Northing: 4,375,097.92
Public Road Access: Co. Rt 20
Generally used farm name: Coastal Forest Resources Co. dba Coastal Timberlands Co

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

Notice is hereby given by:

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

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

Oil and Gas Privacy Notice:
The Office of Oil and Gas processes your personal information, such as name, address and telephone number, as part of our regulatory duties. Your personal information may be disclosed to other State agencies or third parties in the normal course of business or as needed to comply with statutory or regulatory requirements, including Freedom of Information Act requests. 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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WW-6A5
(1/12)

Operator Well No. 516341

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: 8-18-15 **Date Permit Application Filed:** 8-18-15

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: Richard B & Jaynee C Dallison
Address: 28855 Shortline Hwy
Folsom WV 26348

Name: Thomas P Dallison
Address: 452 Trader Fork Rd
Smithfield WV 26437

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:	535,088.460000
County:	Wetzel		Northing:	4,375,097.920000
District:	Grant	Public Road Access:		Co Rt. 20
Quadrangle:	Big Run	Generally used farm name:		Coastal Forest Resources Co. dba Coastal Timberlands Co
Watershed:	Aunty Run of South Fork Fishing 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:
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WW-6A5
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Operator Well No. 516341

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: 8-18-15 **Date Permit Application Filed:** 8-18-15

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: Trenton D Dallison
Address: 2975 Barker Run Rd
Pine Grove WV 26419

Name: Coastal Forest Resources
Address: DBA coastal Timberlands Co
PO Box 709
Buckhannon WV 26201

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:	535,088.460000
County:	Wetzel		Northing:	4,375,097.920000
District:	Grant	Public Road Access:		Co Rt. 20
Quadrangle:	Big Run	Generally used farm name:		Coastal Forest Resources Co. dba Coastal Timberlands Co
Watershed:	Aunty Run of South Fork Fishing 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.

103-03136

WW-6A5
(1/12)

Operator Well No. 516341

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: 8-18-15 **Date Permit Application Filed:** 8-18-15

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: Richard & Roxanne Funk
Address: 4832 Fairport Rd
Newton Falls OH 44444

Name: Larry Larew
Address: 12750 W Middleton Rd
Salem OH 44460

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:	535,088.460000
County:	Wetzel		Northing:	4,375,097.920000
District:	Grant	Public Road Access:		Co Rt. 20
Quadrangle:	Big Run	Generally used farm name:		Coastal Forest Resources Co. dba Coastal Timberlands Co
Watershed:	Aunty Run of South Fork Fishing 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.

RECEIVED
Office of Oil and Gas
AUG 24 2015
WV Department of
Environmental Protection

103-03136

WW-6A5
(1/12)

Operator Well No. 516341

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: 8-18-15 **Date Permit Application Filed:** 8-19-15

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

☑ CERTIFIED MAIL RETURN RECEIPT REQUESTED ☐ HAND DELIVERY

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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: Lydle M Martyn
Address: PO Box 7
Jacksonburg WV 26377

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:	535,088.460000
County:	Wetzel		Northing:	4,375,097.920000
District:	Grant	Public Road Access:		Co Rt. 20
Quadrangle:	Big Run	Generally used farm name:		Coastal Forest Resources Co. dba Coastal Timberlands Co
Watershed:	Aunty Run of South Fork Fishing 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

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Office of Oil and Gas
AUG 24 2015
WV Department of
Environmental Protection

103-03136

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

July 29, 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 BIG333 Pad Site, Wetzel County

#516335 BIG333H11 #516341 BIG333H12

Dear Mr. Martin,

This well site will be accessed from existing Permits # 06-12-0519 & 06-2014-0558 issued to EQT Production Company for access to the State Road for a well site located off of Wetzel County Route 76 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-6, File

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Office of Oil and Gas
AUG 24 2015
WV Department of
Environmental Protection

103-03136

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 and Gas
AUG 24 2015
WV Department of
Environmental Protection

BIG-333 AS-BUILT SITE PLAN
EQT PRODUCTION COMPANY

API NO. 47-103-02851, 47-103-02849, 47-103-02848, 47-103-02850, 47-103-02852, 47-103-02857, 47-103-02853, & 47-103-03025. PROPOSED WELLS WV 514416 & WV 514419.

SITUATE ON THE WATERS OF TRIBUTARIES OF SOUTH FORK, OF FISHING CREEK & AUNTY RUN IN GRANT DISTRICT, WETZEL COUNTY, WEST VIRGINIA.

APPROVED
WVDEP OOG
12-23-2014

PROJECT INFORMATION

PROJECT NAME: BIG-333 AS BUILT SITE PLAN

TAX PARCEL
GRANT DISTRICT
MAP 23-13

SURFACE OWNER.
COASTAL FOREST RESOURCES COMPANY d/b/a
COASTAL TIMBERLANDS COMPANY
GRANT DISTRICT
WETZEL COUNTY, WV
TOTAL PROPERTY AREA: 283.8± ACRES

ROYALTY OWNER
ALEX HART ET AL
GRANT DISTRICT
WETZEL COUNTY, WV
TOTAL PROPERTY AREA: 285.0± ACRES

SITE LOCATION.
THE BIG-333 SITE IS LOCATED ON A RIDGE SOUTH OF CO RT 76 AND NORTH OF WV RT 20. THE SITE IS APPROXIMATELY 7,825 FT NORTHWEST OF THE CO RT 78 AND WV RT 20 INTERSECTION. ACCESS TO THE BIG 333 SITE BEGINS AT COUNTY RT 76. THE BIG 192 AS-BUILT ACCESS ROAD IS INCLUDED IN THIS PLAN

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

LOCATION COORDINATES

BIG-333 COUNTY RT 76 ENTRANCE
LATITUDE: 39.534197 LONGITUDE: -80.583062 (NAD 83)

BIG-333 WELL PAD
LATITUDE: 39.524707 LONGITUDE: -80.586648 (NAD 83)

BIG-333 ASSOCIATED PIT
LATITUDE: 39.523667 LONGITUDE: -80.591636 (NAD 83)

SITE DISTURBANCE COMPUTATIONS

ACCESS ROAD AREA: 2.5± ACRES
PAD AREA: 3.9± ACRES
PIT & STOCKPILE AREA: 10.7± AREA
TOTAL AS-BUILT DISTURBANCE: 17.1± ACRES

GENERAL DESCRIPTION

THE WELL PAD AND ASSOCIATED PIT HAVE BEEN CONSTRUCTED TO AID IN THE DEVELOPMENT OF INDIVIDUAL MARCELLUS SHALE GAS WELLS

MISS Utility of West Virginia
1-800-245-4848
West Virginia State Law
(Section XIV: Chapter 24-C)
Requires that you call two business days before you dig in the state of West Virginia
IT'S THE LAW!!

LOCATION MAP

BIG RUN QUAD

0 2000 4000 6000
SCALE: 1"=2000'

DMH
12-17-14

LIST OF DRAWINGS

1 - COVER SHEET
2 - CONSTRUCTION NOTES
3 - INDEX SHEET
4 - BIG-333 SITE AS-BUILT (PAD AND PIT)
5 - BIG-333 STOCKPILE AS-BUILT
6 - BIG 192 ACCESS ROAD AS-BUILT
7 - BIG-192 ACCESS ROAD AS-BUILT
8 - BIG-192 SITE AS-BUILT (PAD AND PIT)
9 - BIG 192 ACCESS ROAD AS-BUILT
10 - BIG-192 ACCESS ROAD AS-BUILT
11 - BIG 192 ACCESS ROAD AS-BUILT
12 - BIG-192 ACCESS ROAD AS-BUILT
13 - BIG 192 ACCESS ROAD AS-BUILT
14 - CONSTRUCTION DETAILS

LEGEND

LIMITS OF DISTURBANCE
COMPOST FILTER SOCK
EX BOUNDARY LINE
EX ROAD EDGE OF GRAVEL/DIRT
EX ROAD EDGE OF PAVEMENT
EX ROAD CENTERLINE
EX DITCHLINE
EX CULVERT
EX FENCELINE
EX GATE
EX OVERHEAD UTILITY
EX OVERHEAD UTILITY R/W
EX POWER POLE
EX GUY WIRE
EX TELEPHONE LINE
EX GASLINE
EX GASLINE R/W
EX WATERLINE
EX MONITORING WELL
EX TREELINE
EX REFERENCE TREE
EX DELINEATED STREAM
EX DELINEATED WETLANDS
EX STRUCTURE
EX PIPELINE MARKER
FILL FOOTPRINT
EDGE OF GRAVEL PAD
EDGE OF BERM
EX SUPER SILT FENCE
EX REINFORCED SILT FENCE
BERM
GRAVEL
GRAVEL
ORIGINAL GROUND 2' CONTOURS
AS BUILT 2' CONTOURS
PHOTO NUMBER & LOCATION
AS-BUILT WELL LOCATIONS
PROPOSED WELL LOCATIONS
SPOT ELEVATIONS
MATCHLINE

KIP R. HALL REGISTERED 15178 STATE OF WEST VIRGINIA PROFESSIONAL ENGINEER

Kip R. Hall, PE

GREGORY A. SMITH LICENSED No. 877 STATE OF WEST VIRGINIA PROFESSIONAL SURVEYOR

Gregory A. Smith, PS

REVISION	DATE	DESCRIPTION

EQT Where energy meets innovation.

Professional Energy Consultants
A DIVISION OF SMITH LAND SURVEYING
SLS

THIS DOCUMENT WAS PREPARED BY: SMITH LAND SURVEYING, INC FOR: EQT

BIG-333 AS-BUILT SITE PLAN

THIS DOCUMENT WAS PREPARED BY SMITH LAND SURVEYING, INC. FOR EQT PRODUCTION COMPANY

DATE: 8-21-14
EQT
SCALE: 1"= 2000
DESIGNED BY: WAW
FILE NO. 7656
SHEET 1 OF 14

103-03136

BIG-333 PLAN MODIFICATION
EQT PRODUCTION COMPANY

EXISTING WELLS API NO's: API NO. 47-103-02851, 47-103-02849, 47-103-02848, 47-103-02850, 47-103-02852, 47-103-02857, 47-103-02853, 47-103-03025, WV 514416 & WV 514419

PROPOSED WELLS: WV 516335 & WV 516341.

SITUATE ON THE WATERS OF TRIBUTARIES OF SOUTH FORK, OF FISHING CREEK & AUNTY RUN IN GRANT DISTRICT, WETZEL COUNTY, WEST VIRGINIA.

PROJECT INFORMATION

PROJECT NAME: BIG-333 AS BUILT SITE PLAN

TAX PARCEL:
GRANT DISTRICT
MAP 23-6, 9, 11, 11.4, 13 & 14

SURFACE OWNER:

COASTAL FOREST RESOURCES COMPANY c/o/a
COASTAL TIMBERLANDS COMPANY
GRANT DISTRICT
WETZEL COUNTY, WV
TOTAL PROPERTY AREA 333.6± ACRES

ROYALTY OWNER:

ALEX HART, ET AL
GRANT DISTRICT
WETZEL COUNTY, WV
TOTAL PROPERTY AREA 235.0± ACRES

SITE LOCATION:

THE BIG-333 SITE IS LOCATED ON A RIDGE SOUTH OF CO. RT. 78, AND NORTH OF WV. RT. 20. THE SITE IS APPROXIMATELY 7,825 FT NORTHWEST OF THE CO. RT. 78 AND WV RT. 20 INTERSECTION. ACCESS TO THE BIG 333 SITE BEGINS AT COUNTY RT. 78. THE BIG 192 AS-BUILT ACCESS ROAD IS INCLUDED IN THIS PLAN

BIG 333 LOCATION COORDINATES

BIG-333 ACCESS ROAD ENTRANCE
LATITUDE 39.519798 LONGITUDE -80.500978 (NAD 83)
N 4374579.973 E 542993.354 (UTM NAD 83 ZONE 17)

BIG-333 WELL PAD (CENTER PAD)
LATITUDE 39.524727 LONGITUDE -80.501648 (NAD 83)
N 4375088.108 E 539087.326 (UTM NAD 83 ZONE 17)

BIG-333 ASSOCIATED PIT
LATITUDE 39.523637 LONGITUDE -80.501635 (NAD 83)
N 4374981.780 E 539096.671 (UTM NAD 83 ZONE 17)

BIG-192 SITE ENTRANCE
LATITUDE 39.534192 LONGITUDE -80.503105 (NAD 83)
N 4376161.015 E 538393.884 (UTM NAD 83 ZONE 17)

SITE DISTURBANCE COMPUTATIONS

ORIGINAL BIG 333 TOTAL LOD AREA 17.1± ACRES
ADDITIONAL BIG 192 ACCESS ROAD AREA 55.8± ACRES
PROPOSED BIG 333 ACCESS ROAD AREA 29.4± AREA

TOTAL PROPOSED LOD AREA FOR BIG 333 SITE 102.3± ACRES

GENERAL DESCRIPTION

THE WELL PAD AND ASSOCIATED PIT HAVE BEEN CONSTRUCTED TO AID IN THE DEVELOPMENT OF INDIVIDUAL MARCELLUS SHALE GAS WELLS

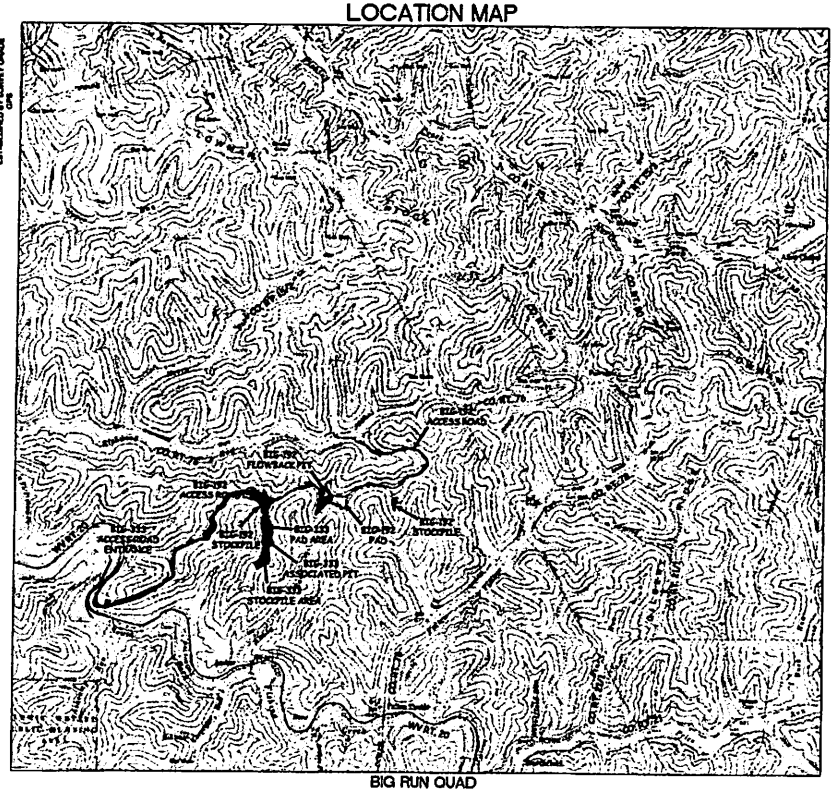
BIG 333 AS-BUILT DISTURBANCE

SURFACE OWNER	TAX MAP/PARCEL	AS-BUILT DISTURBANCE (AC.)	BIG-333 PROPOSED DISTURBANCE (AC.)
COASTAL LUMBER COMPANY COASTAL FOREST RESOURCES COMPANY	TM 23-13	28.67	0.46
THOMAS E. WYATT ET AL	TM 23-6	0.00	
RICHARD B. DALLISON ET AL	TM 23-14	31.83	
COASTAL LUMBER COMPANY COASTAL FOREST RESOURCES COMPANY	TM 17-14	12.68	
LARRY LAREW	TM 23-11.4		10.9
LARRY LAREW	TM 23-12		9.4
LARRY LAREW	TM 23-9		4.8
LYDLE MARTYN	TM 23-11		4.2

MISS Utility of West Virginia
1-800-245-4848
West Virginia State Law
(Section XIV: Chapter 24-C)
Requires that you call two business days before you dig in the state of West Virginia.
IT'S THE LAW!!

GRID NORTH AND ELEVATIONS ARE BASED ON WEST VIRGINIA STATE PLANE COORDINATE SYSTEM NAD 83 ESTABLISHED BY RTK GPS OBSERVATIONS

LOCATION MAP



BIG RUN QUAD

SCALE: 1"=2000'

SURVEY NOTES

THE BIG 333 ACCESS ROAD SHOWN IN THIS MODIFICATION WAS DESIGNED BY ALLEGHENY SURVEYS INC. THE DESIGN WAS PROVIDED TO SLS BY EQT

LIST OF DRAWINGS

1 - COVER SHEET
2 - CONSTRUCTION NOTES
3 - INDEX SHEET
4 - BIG-333 ACCESS ROAD AS-BUILT
5 - BIG-333 ACCESS ROAD AS-BUILT
6 - BIG-333 ACCESS ROAD AS-BUILT
7 - BIG-333 ACCESS ROAD AS-BUILT
8 - BIG-333 ACCESS ROAD / STOCKPILE AS-BUILT
9 - BIG-333 ACCESS ROAD AS-BUILT
10 - BIG-333 SITE AS-BUILT (PAD AND PIT)
11 - BIG-333 STOCKPILE AS-BUILT
12 - BIG-333 ACCESS ROAD AS-BUILT
13 - BIG-333 ACCESS ROAD (BIG-192 AS-BUILT (PAD AND PIT)
14 - BIG-333 ACCESS ROAD AS-BUILT
15 - BIG-333 ACCESS ROAD AS-BUILT
16 - BIG-333 ACCESS ROAD / STOCKPILE AS-BUILT
17 - BIG-333 ACCESS ROAD AS BUILT
18 - BIG-333 ACCESS ROAD AS-BUILT
19 - BIG-333 ACCESS ROAD AS-BUILT
20 - BIG-333 ACCESS ROAD AS-BUILT PROFILE
21 - BIG-333 ACCESS ROAD AS-BUILT PROFILE
22 - BIG-333 ACCESS ROAD AS-BUILT PROFILE
23 - CONSTRUCTION DETAILS
24 - CONSTRUCTION DETAILS
25 - CONSTRUCTION DETAILS
26 - RECLAMATION DETAILS

LEGEND

LIMITS OF DISTURBANCE
COMPOST FILTER SOCK
EX. BOUNDARY LINE
EX. ROAD EDGE OF GRAVEL/DIRT
EX. ROAD EDGE OF PAVEMENT
EX. ROAD CENTERLINE
EX. DITCHLINE
EX. CULVERT
EX. FENCELINE
EX. GATE
EX. OVERHEAD UTILITY
EX. OVERHEAD UTILITY R/W
EX. POWER POLE
EX. GUY WIRE
EX. TELEPHONE LINE
EX. GASLINE
EX. GASLINE R/W
EX. WATERLINE
EX. MONITORING WELL
EX. TREELINE
EX. REFERENCE TREE
EX. DELINEATED STREAM
EX. DELINEATED WETLAND
EX. STRUCTURE
EX. PIPELINE MARKER
BIG FOOTPRINT
EDGE OF GRAVEL PAD
EDGE OF BERM
EX. SUPER SILT FENCE
EX. REINFORCED SILT FENCE
BERM
GRAVEL
GRAVEL
ORIGINAL GROUND 2' CONTOURS
AS BUILT 2' CONTOURS
PHOTO NUMBER & LOCATION
AS-BUILT WELL LOCATIONS
PROPOSED WELL LOCATIONS
SPOT ELEVATIONS
MATCHLINE
ADDITIONAL LOD AREA

DMH 8-24-15

Received Office of Oil & Gas AUG 31 2015 WV Department of Environmental Protection

EQT Where energy meets progress.

Professional Energy Consultants
SLS Surveying Engineering Environmental Project Mgmt. www.slsdynamics.com

THIS DOCUMENT WAS PREPARED BY: SMITH LAND SURVEYING, INC. FOR EQT

BIG-333 SITE PLAN MODIFICATION

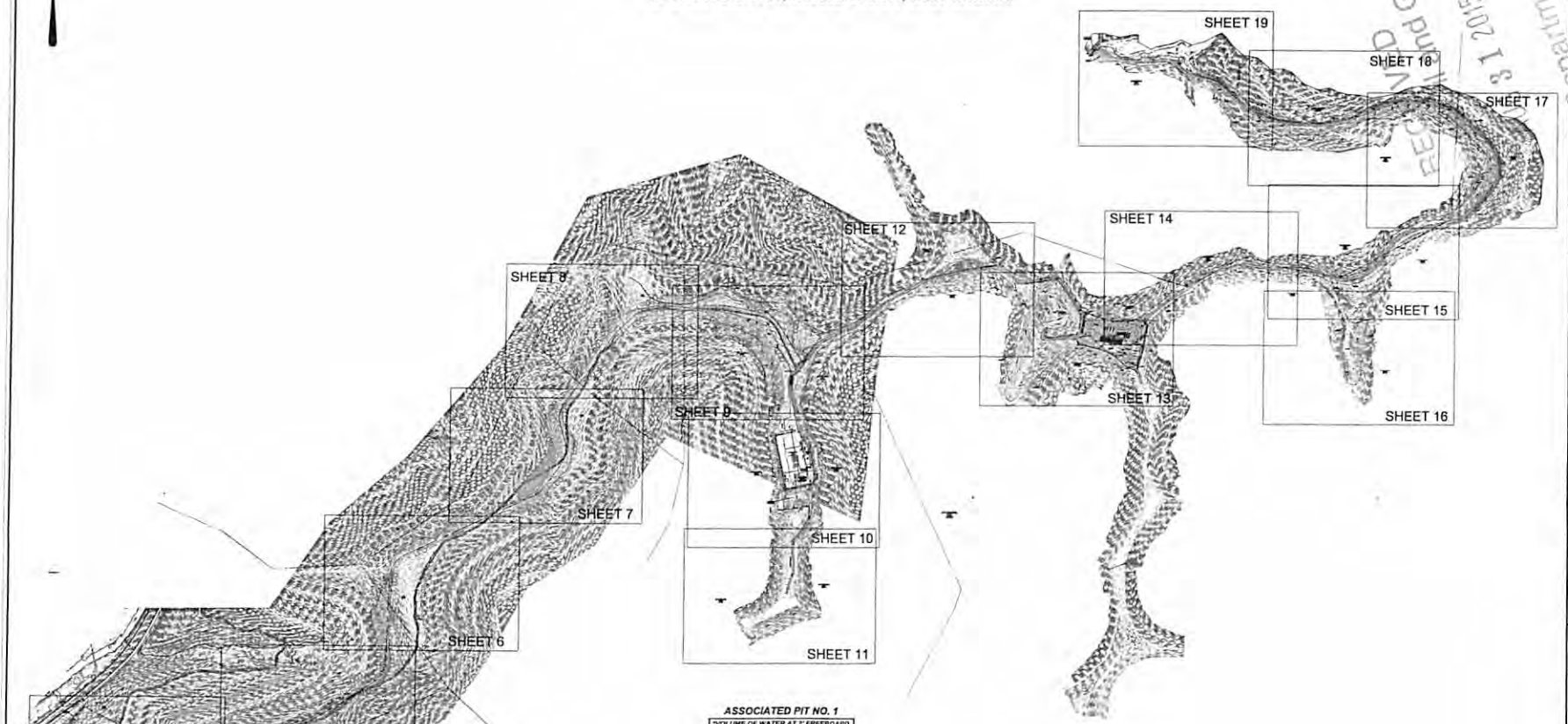
THIS SURVEY WAS PREPARED BY: SMITH LAND SURVEYING, INC. FOR: EQT PRODUCTION COMPANY

DATE 05/21/15
EQT
SCALE 1" = 2000'
DESIGNED BY K.E.S
FILE NO 7856
SHEET 1 OF 26
SEAL

BIG-333 AS-BUILT
SITE PLAN MODIFICATION

SITUATE ON THE WATERS OF TRIBUTARIES OF SOUTH FORK, OF FISHING CREEK & AUNTY RUN IN GRANT DISTRICT, WETZEL COUNTY, WEST VIRGINIA.

GRID NORTH AND ELEVATIONS SHOWN HEREON WERE ESTABLISHED BY DGPS SURVEY GRADE.



ASSOCIATED PIT NO. 1

*VOLUME OF WATER AT 2' FREEBOARD
1445.89' = 1,289,520.9 GALLONS
1445.89' = 30,702.9 BARRELS

BIG-333 ASSOCIATED PIT NO. 1 VOLUMES AT 1' INCREMENTS

Storage Volumes	Elevation	(C.Y.)	(Acre-ft)	(Gallons)	(Barrels)
0	1429.89	0.0	0.0	0.0	0.0
1	1430.89	0.4	0.000	72.3	1.8
2	1431.89	89.5	0.043	14037.9	334.2
3	1432.89	216.1	0.154	43848.4	1039.2
4	1433.89	412.4	0.258	83285.8	1983.2
5	1434.89	646.2	0.401	130521.9	3107.5
6	1435.89	920.5	0.571	185921.0	4426.8
7	1436.89	1237.8	0.767	250008.8	5952.5
8	1437.89	1599.8	0.992	322135.1	7669.8
9	1438.89	2006.1	1.245	405796.1	9661.8
10	1439.89	2468.1	1.530	498488.1	11868.8
11	1440.89	2978.8	1.848	601600.0	14323.8
12	1441.89	3542.3	2.196	715448.0	17034.8
13	1442.89	4161.4	2.578	840487.0	20011.8
14	1443.89	4839.7	3.000	977490.8	23273.8
15	1444.89	5580.1	3.459	1127028.5	26824.1
*16	1445.89	6384.6	3.957	1289520.8	30702.9
17	1446.89	7254.1	4.496	1465140.4	34884.2
18	1447.89	8190.9	5.077	1654353.1	39389.2

PMH
8-24-15

1" = 400'
SCALE
0' 400' 800' 1200'

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PROJECT MGMT.
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(304) 462-8894

THIS DOCUMENT WAS PREPARED BY: SMITH LAND SURVEYING, INC. FOR EQT

BIG-333 SITE PLAN MODIFICATION

THIS DOCUMENT WAS PREPARED BY SMITH LAND SURVEYING, INC. FOR EQT PRODUCTION COMPANY

REVISION	DATE	DESCRIPTION	BY

DATE: 05/21/15
EQT
SCALE: 1" = 400'
DESIGNED BY: R.E.S.
FILE NO.: 7856
SHEET: 1 OF 26

BIG-333 AS-BUILT
SITE PLAN MODIFICATION

SITUATE ON THE WATERS OF TRIBUTARIES OF SOUTH FORK, OF FISHING CREEK & AUNTY RUN
IN GRANT DISTRICT, WETZEL COUNTY, WEST VIRGINIA

GRID NORTH AND ELEVATIONS SHOWN HEREON WERE ESTABLISHED BY DGPS SURVEY GRADE.

SURVEY NOTES

THE BIG 133 ACCESS ROAD SHOWN IN THIS MODIFICATION WAS DESIGNED BY ALLEGHENY SURVEYS INC. THE DESIGN WAS PROVIDED TO SLS BY EQT.

MATCHLINE SHEET 9

MATCHLINE SHEET 11

COASTAL LUMBER COMPANY
COASTAL FOREST RESOURCES COMPANY
TM 23 PAR 13
283.6 ACRES±

LAT 39.524707
LON -80.591548

LAT 39.523857
LON -80.591635

SURVEY NOTES

1. AREA IS COMPUTED FROM THE AS-BUILT DIMENSIONS AS SHOWN FOR LIMITS OF DISTURBANCE BASED ON OUR INTERPRETATION AS SURVEYED ON 2-28-13, 3-1-13, 3-7-13, 3-11-13, 3-13-13, 4-8-13, 4-10-13, 4-11-13, 4-15-13, 4-16-13, 4-17-13, 4-18-13, 4-22-13, 4-23-13, 4-29-13, 5-1-13, 5-2-13, 5-4-13, 5-6-13, 5-13-13, 5-15-13, 5-17-13, 5-21-13, 5-22-13, 5-24-13, 5-25-13, 5-28-13, 5-30-13, 5-31-13, 6-3-13, 6-4-13, 6-6-13, 6-10-13, 6-11-13, 6-12-13, 6-14-13, 9-16-14, & 1-26-15.

2. THE CERTIFICATION OF THIS ACCESS ROAD APPLIES ONLY TO THE TOPOGRAPHY AND VOLUMES AS GENERATED FROM THE FIELD DATA OBTAINED AT THE TIME OF THE FIELD SURVEY ON 3-7-13, 3-11-13, 3-12-13, 4-10-13, 4-17-13, 4-18-13, 4-22-13, 4-23-13, 4-25-13, 5-1-13, 5-2-13, 5-13-13, 5-15-13, 5-17-13, 5-21-13, 5-22-13, 5-24-13, 5-25-13, 5-28-13, 5-30-13, 5-31-13, 6-3-13, 6-4-13, 6-6-13, 6-10-13, 6-11-13, 6-12-13, 6-14-13, 9-16-14, & 1-26-15.

1" = 50'
SCALE
0' 50' 100' 150'

DMH 8/24/15

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AUG 31 2015
Office of Oil and Gas
WV Department of Environmental Protection

NO.	REVISION / BASIS	DESCRIPTION	BY

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BIG-333 SITE PLAN MODIFICATION

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DATE: 05/21/15
EQT
SCALE: 1" = 50'
DESIGNED BY: K.E.S
FILE NO: 7856
SHEET 10 OF 26