



west virginia department of environmental protection

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

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

Friday, November 04, 2016
WELL WORK PERMIT
Vertical / Plugging - 2

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

Re: Permit approval for 7839
47-097-00110-00-00

This well work permit is evidence of permission granted to perform the specified well work at the location described on the attached pages and located on the attached plat, subject to the provisions of Chapter 22 of the West Virginia Code of 1931, as amended, and all rules and regulations promulgated thereunder, and to any additional specific conditions and provisions outlined in the pages attached hereto. Notification shall be given by the operator to the Oil and Gas Inspector at least 24 hours prior to the construction of roads, locations, and/or pits for any permitted work. In addition, the well operator shall notify the same inspector 24 hours before any actual well work is commenced and prior to running and cementing casing. Spills or emergency discharges must be promptly reported by the operator to 1-800-642-3074 and to the Oil and Gas Inspector.

Please be advised that form WR-35, Well Operators Report of Well Work is to be submitted to this office within 90 days of completion of permitted well work, as should form WR-34 Discharge Monitoring Report within 30 days of discharge of pits, if applicable. Failure to abide by all statutory and regulatory provisions governing all duties and operations hereunder may result in suspension or revocation of this permit and, in addition, may result in civil and/or criminal penalties being imposed upon the operators.

Per 35 CSR 4-5.2.g this permit will expire in two (2) years from the issue date unless permitted well work is commenced. If there are any questions, please feel free to contact me at (304) 926- 0450.



James A. Martin
Chief

Operator's Well Number: 7839
Farm Name: SUMMERS, G. W., ETUX
U.S. WELL NUMBER: 47-097-00110-00-00
Vertical / Plugging - 2
Date Issued: 11/4/2016

Promoting a healthy environment.

PERMIT CONDITIONS

West Virginia Code § 22-6-11 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. All pits must be lined with a minimum of 20 mil thickness synthetic liner.
2. In the event of an accident or explosion causing loss of life or serious personal injury in or about the well or while working on the well, the well operator or its contractor shall give notice, stating the particulars of the accident or explosion, to the oil and gas inspector and the Chief within twenty-four (24) hours.
3. Well work activities shall not constitute a hazard to the safety of persons.
4. This well is under a consent order and must be plugged within two years of the date of issuance of this permit.

9700110P

OK #2062 \$100.00

Form WW-4 (B)
Permit Copy
(Rev 2/01)

Date: July 12, 2016
Operator's Well _____
Well No. 607839 (G. W. Summers #7839)
API Well No.: 47 097 - 00110

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

APPLICATION FOR A PERMIT TO PLUG AND ABANDON

- 4) Well Type: Oil _____ Gas X Liquid Injection _____ Waste Disposal: _____
If Gas, Production _____ X Or Underground storage _____ Deep _____ Shallow X
- 5) Elevation: 1495 ft. Watershed: Saul's Run
Location: Buckhannon County: Upshur Quadrangle: Berlin
District: _____
- 6) Well Operator EQT Production Company 7) Designated Agent: Rex C. Ray
Address: 120 Professional Place Address: 120 Professional Place
Bridgeport, WV 26330 Bridgeport, WV 26330
- 8) Oil & Gas Bryan Harris 9) Plugging Contractor:
Name: P. O. Box 157 Name: HydroCarbon Well Service
Address: Volga, WV 26238 Address: PO BOX 995
Buckhannon, WV 26201

- 10) Work Order: The work order for the manner of plugging this well is as follows:
See Attachment for details and procedures.

OFFICE USE ONLY

Notification must be given to the district oil and gas inspector 24 hours before permitted work can commence.

Work order approved by inspector Bryan Harris Date 8-4-16

PLUGGING PROGNOSIS

Summers, G.W. #7839 (607839)
 Upshur Co. WV
 District, Buckhannon
 API # 47-097-00110

BY: Craig Duckworth
 DATE: 12/1/15

CURRENT STATUS:

10" csg @ 311'
 8 1/4" csg @ 1051'
 6 5/8" csg @ 2354'
 3" csg @ 4595' (packer @ 4378')
 Elevation @ 1496'

TD: 4595'

Fresh Water @ none reported Coal @ 152', 680', 985'
 Saltwater @ none reported
 Gas shows @ 4565'

1. Notify State Inspector, **Brian Harris @ 304-553-6087**, 48 hrs.prior to commencing operations.
2. Check TD w/wireline, Free point 3" csg, cut csg @ free point, TOO H w/csg.
3. TIH w/tbg to 4595', set 300' C1A cement plug from 4595' to 4295' . (Gas show @ 4565' & 3" @4595' & packer @ 4378')
4. Set 100' C1A cement plug 50' in/out of casing cut, perforate all freshwater, saltwater, coal, oil and gas shows below cut. Do not omit any plugs
5. TOO H w/tbg to 4295', gel hole 4295' to 3500'
6. TOO H w/tbg to 3500' set 200' C1A cement plug from 3500' to 3300', (safety plug).
7. TOO H w/tbg to 3300' gel hole 3300' to 2400',.
8. TOO H w/tbg, Free point 6 5/8" csg, cut csg @ free point, TOO H w/csg.
9. Set 100' C1A cement plug 50' in/out of casing cut, perforate all freshwater, saltwater, coal, oil and gas shows below cut. Do not omit any plugs.
10. TIH w/tbg to 2400', set 200' C1A cement plug 2400' to 2200'. (6 5/8" csg @ 2354').
11. TOO H w/tbg to 2200' gel hole from 2200' to 1500'.
12. TOO H w/tbg to 1500', set 100' C1A cement plug 1500 to 1400'. (elevation @ 1496').
13. TOO H w/tbg to 1400', gel hole 1400' to 1100'.
14. TOO H w/tbg, Free point 8 1/4" csg, cut csg at free point, TOO H w/csg
15. TOO H w/tbg to 1100', set 200' C1A cement plug 1100' to 900'. (8 1/4" csg seat @ 1051' & Coal @ 985').

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16. Set 100' C1A cement plug 50' in/out of casing cut, perforate all freshwater, saltwater, coal, oil and gas shows below cut. Do not omit any plugs.
17. TIH w/tubing to 900'. Gel hole from 900' to 730'.
18. TOOH w/tubing to 730'. Set 100' C1A cement plug from 730' to 630'. (coal @ 680')
19. TOOH w/tubing to 630'. Gel hole from 630' to 350'.
20. TOOH w/tubing to surface.
21. Try to pull 10" casing. If 10" is pulled, then TIH w/tubing and set C1A cement plug from 350' to surface. Proceed to Step 25.
22. If casing will not pull, then free point 10" casing, cut casing above free point and TOOH with casing.
23. If remaining 10" casing left in well covers the coal seam at 152' it must be perforated along with any other fresh water, salt water, oil and gas shows.
24. TIH w/tubing and set C1A cement plug from 350' to surface.
25. Erect monument with API #.
26. Reclaim location and road to WV- DEP specifications.

JMM
11/03/16

9700110P

WEST VIRGINIA DEPARTMENT OF MINES
OIL & GAS DIVISION
WELL RECORD

Permit No. Up-110
Weston S.E. Quad.
Company
Address
Farm
Location
Well No.
District
Surface & Mineral
Commenced
Completed
Shot
Flow
Volume
Rock Pressure

47-097-0010
607239

Gas Well

Pittsburgh & West Virginia Gas Co.,
Clarksburg, W. Va.
G. W. Summers et ux Acres 92
Weston s/e 3-4
7839 Elev. 1496 VA
Buckhannon - Upshur County
G. W. Summers et ux, Lorontz, W. Va.
July 28, 1941
Oct. 17, 1941
10-17-41 Depth 4563-4576 60 Qts
100/10ths Water in 1 1/2"
207,000 c.f.
1320 lbs. 19 hrs.

Casing & Tubing
10 311 311
8 1/2 1051 1051
6-5/8 2354 2354
3 4595 4595
Packer Comb. Hook Wall
Size 6-5/8" X 3"
Depth set 4378
Coal 152' 48"
680' 36"
385' 48"

Clay	rd	s	0	20
Slate	rd	s	20	55
Lime	wh	h	55	75
Red Rock	rd	s	75	80
Lime	gy	h	80	105
Slate	rd	s	105	110
Lime	rd	c	110	130
Slate	gy	s	130	152
Coal	bk	s	152	156
Lime	bk	s	156	186
Slate	rd	s	186	210
Lime	gy	c	210	295
Slate	dk	s	295	300
Red Slate	rd	s	300	305
Lime	wh	h	305	332
Red Rock	rd	s	332	337
Lime	wh	c	337	358
Slate	rd	s	358	447
Lime	wh	c	447	502
Slate	gy	s	502	587
Lime	wh	c	587	615
Red Rock	rd	s	615	630
Lime	gy	h	630	680
Coal	bk	s	680	683
Slate	dk	s	683	710
Slate&Shells	rd	s&h	710	721
Lime	wh	h	721	740
Slate	dk	s	740	758
Sand	wh	c	758	783
Slate&Lime	gy	c	783	874
Slate	dk	s	874	880
Lime	gy	h	880	900
Slate	gy	s	900	909
Lime	gy	h	909	930
Slate	dk	s	930	985
Coal	bk	w	985	989
Slate	bk	s	989	1000
Lime	gy	h	1000	1015
Slate	bk	s	1015	1020
Sand	wh	h	1020	1034
Slate	bk	s	1034	1049
Lime	wh	h	1049	1060
Sand	wh	h	1060	1114
Slate	bk	s	1114	1117
Sand	gy	c	1117	1134
Slate	bk	s	1134	1150
Sand	lt	c	1150	1180
Slate	wh	s	1180	1205
Lime	wh	h	1205	1235
Slate	bk	s	1235	1240
Sand	wh	c	1240	1265
Slate	bk	s	1265	1270
Lime	wh	h	1270	1281
Slate	wh	s	1281	1300
Lime	gy	c	1300	1332
Sand	wh	h	1332	1345

Slate	wh	s	1345	1350
Lime	gy	h	1350	1375
Salt Sand	wh	h	1375	1555 ^{W, 1497}
Slate	bk	s	1555	1564 ^{58 ft}
Sand	wh	c	1564	1584
Slate	bk	s	1584	1621
Lime	gy	c	1621	1630
Maxon Sand	wh	c	1630	1648
Red Rock	rd	s	1648	1653
Lime	gy	c	1653	1666
Red Shale	s		1666	1690
Lime	gy	c	1690	1715
Slate	wh	s	1715	1728
Shale	rd	s	1728	1774
Lime	bl	c	1774	1804
Shale	rd	s	1804	1825
Lime	gy	bk	1825	1839
Slate	bk	s	1839	1842
Little Lime	h		1842	1863
Slate	bk	s	1863	1890
Big Lime	h		1890	1977
Big Injun	gy	h	1977	2100
Squaw Sand	bk	h	2100	2181
Berea	wh	h	2181	2269
Slate	gy	s	2269	2280
Grutz Sand	gy	h	2280	2340
Slate	rd	s	2340	2342
Lime	dk	h	2342	2375
Red Rock	rd	s	2375	2378
Lime	gy	h	2378	2393
30 Foot	gy	c	2393	2440
Lime	rd	h	2440	2453
Gordon Stray	gy	c	2453	2509
Gordon Sand	rd	h	2509	2551
4th Sand	gy	h	2551	2584
Slate	rd	s	2584	2592
Slate&Shells	gy	s	2592	2644
5th Sand	gy	h	2644	2712
Slate	wh	s	2712	2850
Lime	gy	h	2850	3056
Slate&Shells	gy	h&s	3056	3180
Lime	gy	c	3180	3418
Slate&Shells	wh	c	3418	3520
Lime	gy	c	3520	3760
Slate&Shells	gy	s&h	3760	3900
Lime	dk	h	3900	3957
Slate	dk	s	3957	4067
Shale	bn	s	4067	4087
Slate&Shells	wh	h&s	4087	4378
Sand	dk	c	4378	4383
Slate	gy	s	4383	4400
Shale	bn	s	4400	4563
Benson Sand	bn	h	4563	4576 ^G
Gas			4563-74 1 1/2/100.1 1/2"	
Lime	gy	c	4576	4595
Total Depth				4595

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JUL 13 2016

9700110P

WW-4-A
Revised 6/07

1) Date: July 12, 2016
2) Operator's Well Number
607839 (G. W. Summers #7839)
3) API Well No.: 47 097 - 00110
State County Permit

STATE OF WEST VIRGINIA - BUREAU OF ENVIRONMENT
DIVISION OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL & GAS
NOTICE AND APPLICATION TO PLUG AND ABANDON WELL

4) Surface Owner(s) to be served:
(a) Name Thomas and Melinda Darnall
Address 595 Bargerhuff Lane
Buckhannon, WV 26201
(b) Name _____
Address _____
(c) Name _____
Address _____
6) Inspector Bryan Harris
Address P. O. Box 157
Volga, WV 26238
Telephone (304) 553-6087

5) (a) Coal Operator:
Name None
Address _____
(b) Coal Owner(s) with Declaration
Name Helen M. Elmer, et al.
c/o Mary Darnall
Address 61 Tennerton Drive
Buckhannon, WV 26201
Name _____
Address _____
(c) Coal Lessee with Declaration
Name None
Address _____

TO THE PERSONS NAMED ABOVE: You should have received this Form and the following documents:

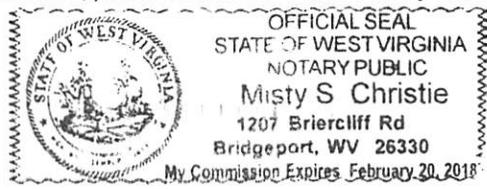
- (1) The application to Plug and Abandon a Well on Form WW-4B, which sets out the parties involved in the work and describes the well its and the plugging work order; and
 - (2) The plat (surveyor's map) showing the well location on Form WW-6.
- The reason you received these documents is that you have rights regarding the application which are summarized in the instructions on the reverses side. However, you are not required to take any action at all.

Take notice that under Chapter 22-6 of the West Virginia Code, the undersigned well operator proposes to file or has filed this Notice and Application and accompanying documents for a permit to plug and abandon a well with the Chief of the Office of Oil and Gas, West Virginia Division of Environmental Protection, with respect to the well at the location described on the attached Application and depicted on the attached Form WW-6. Copies of this Notice, the Application, and the plat have been mailed by registered or certified mail or delivered by hand to the person(s) named above (or by publication in certain circumstances) on or before the day of mailing or delivery to the Chief.

Well Operator: EQT Production Company
By: Victoria J. Roark
Its: Permitting Supervisor
Address: PO Box 280
Bridgeport, WV 26330
Telephone: (304) 848-0076

Subscribed and sworn before me this 12th day of July, 2016
Misty S. Christie Notary Public
My Commission Expires: 2/20/18

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



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JUL 13 2016

97001109

STATE OF WEST VIRGINIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
OFFICE OF OIL & GAS
FLUIDS / CUTTINGS DISPOSAL & RECLAMATION PLAN

Operator Name: EQT PRODUCTION COMPANY OP CODE: 306686

Watershed (HUC 10): Saul's Run Quadrangle: Berlin

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

Will a pit be used? Yes X No ___

If so, please describe anticipated pit waste: Formation Fluids

Will a synthetic liner be used in the pit? Yes X No ___ Is so, what ml.? 20 ml. -10 ml

Proposed Disposal Method for Treated Pit Wastes:

- Land Application (if selected provide a completed form WW-9-GPP)
- Underground Injection (UIC Permit Number _____)
- Reuse (at API Number -- Various)
- Off Site Disposal Permit (Supply form WW-9 for disposal location. See attachment)
- Other: (Explain _____)

Will closed loop system be used ? If so, describe: _____

Drilling medium anticipated for this well? (vertical and horizontal)? Air, freshwater, oil based, etc. _____
If oil based, what type? Synthetic, petroleum, etc. _____

Additives to be used in drilling medium? _____

Drill cuttings disposal method? Leave in pit, landfill, remove offsite, etc. _____

If left in pit and plan to solidify what medium will be used? (cement, Lime, sawdust) _____

Landfill or offsite name/permit number? _____

Permittee shall provide written notice to the Office of the 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 April 1, 2016, by the Office of Oil and Gas of the West Virginia Division of Environmental Protection. I understand that the provisions of the permit are enforceable by law. Violations of any term or condition of the general permit and/or other applicable law or regulation can lead to enforcement action.

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

Company Official Signature *Victoria J Roark*

Company Official (Typed Name) Victoria J Roark

Company Official Title Permitting Supervisor - WV

Subscribed and sworn before me this 10 day of August, 2016

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Office of Oil & Gas
AUG 19 2016

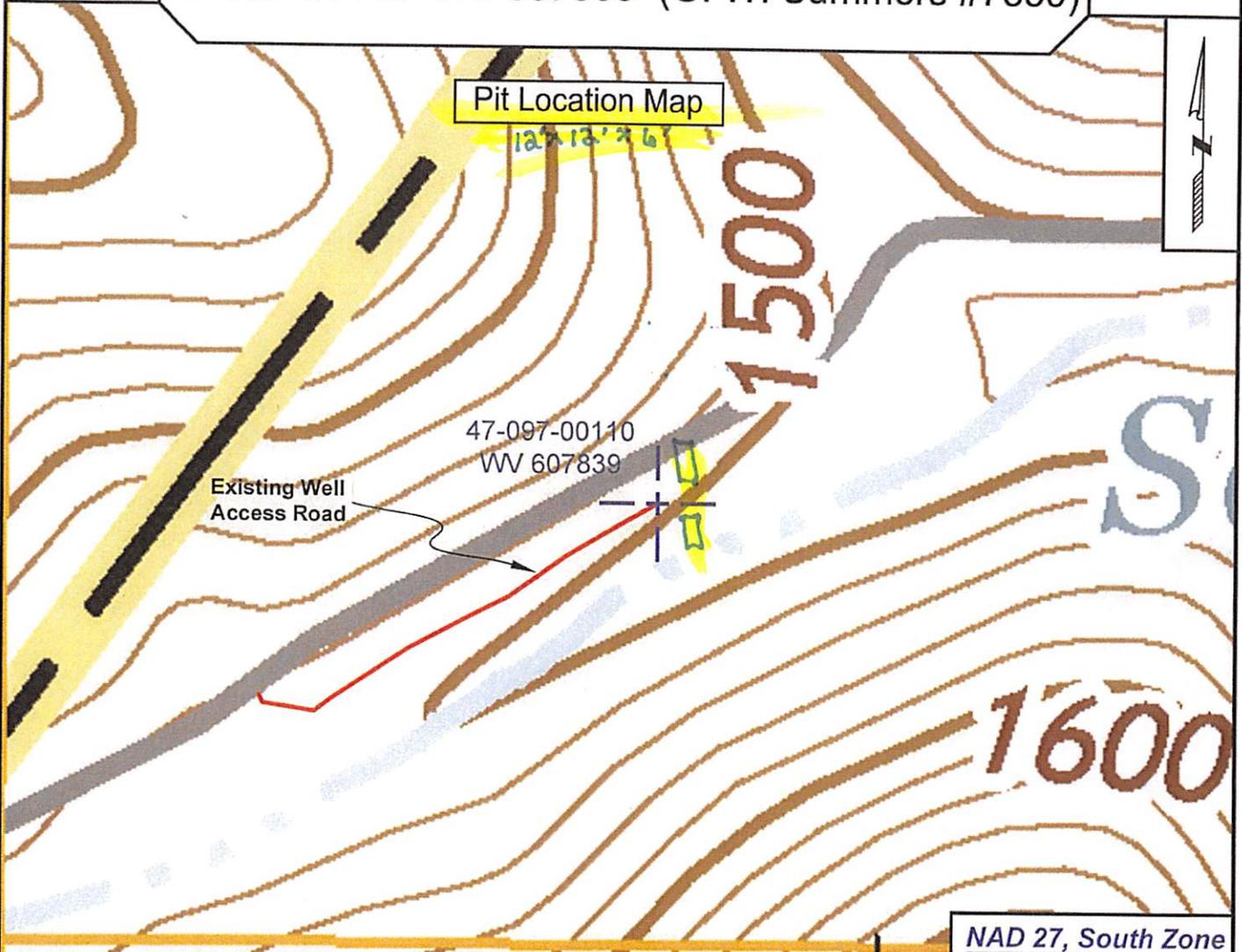


Rebecca G Wamstreet Notary Public
4-7-2020

9700110P

Topo Quad: Berlin 7.5'	Scale: 1" = 200'
County: Upshur	Date: August 12, 2016
District: Buckhannon	Project No: 39-09-00-09

47-097-00110 WV 607839 (G. W. Summers #7839)



LEGEND

- PIT-CUT WALLS 
- PIT-COMPACTED WALLS 
- AREA OF LAND APPLICATION OF PIT WASTE 

NAD 27, South Zone
 N:729538.58
 E:2191163.72

WGS 84
 LAT:39.001613
 LONG:-80.327202
 ELEV:1494.67



SURVEYING AND MAPPING SERVICES PERFORMED BY:
ALLEGHENY SURVEYS, INC.
 1-800-482-8606
 237 Birch River Road
 Birch River, WV 26610
 PH: (304) 649-8606
 FAX: (304) 649-8608

PREPARED FOR:
EQT Production Company
 P.O. Box 280
 Bridgeport, WV 26330

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EQT Production Water plan
Offsite disposals

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

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Office of Oil & Gas
AUG 19 2016

Topo Quad: Berlin 7.5'

Scale: 1" = 2000'

County: Upshur

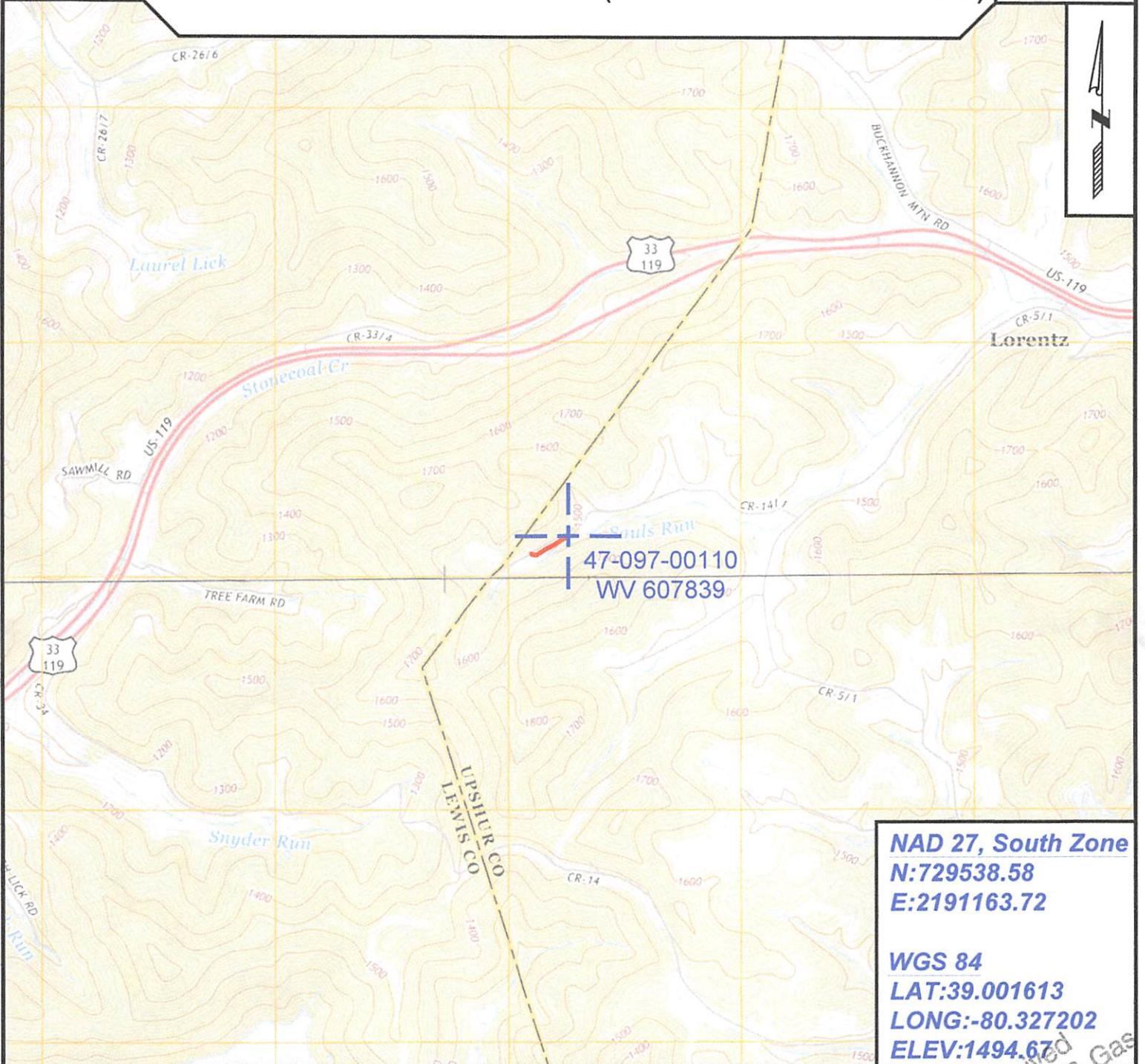
Date: June 20, 2016

District: Buckhannon

Project No: 39-09-00-09

47-097-00110 WV 607839 (G. W. Summers #7839)

Topo



NAD 27, South Zone
N:729538.58
E:2191163.72

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LAT:39.001613
LONG:-80.327202
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PREPARED FOR:
EQT Production Company
 P.O. Box 280
 Bridgeport, WV 26330

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Topo Quad: Berlin 7.5'

Scale: 1" = 2000'

County: Upshur

Date: June 20, 2016

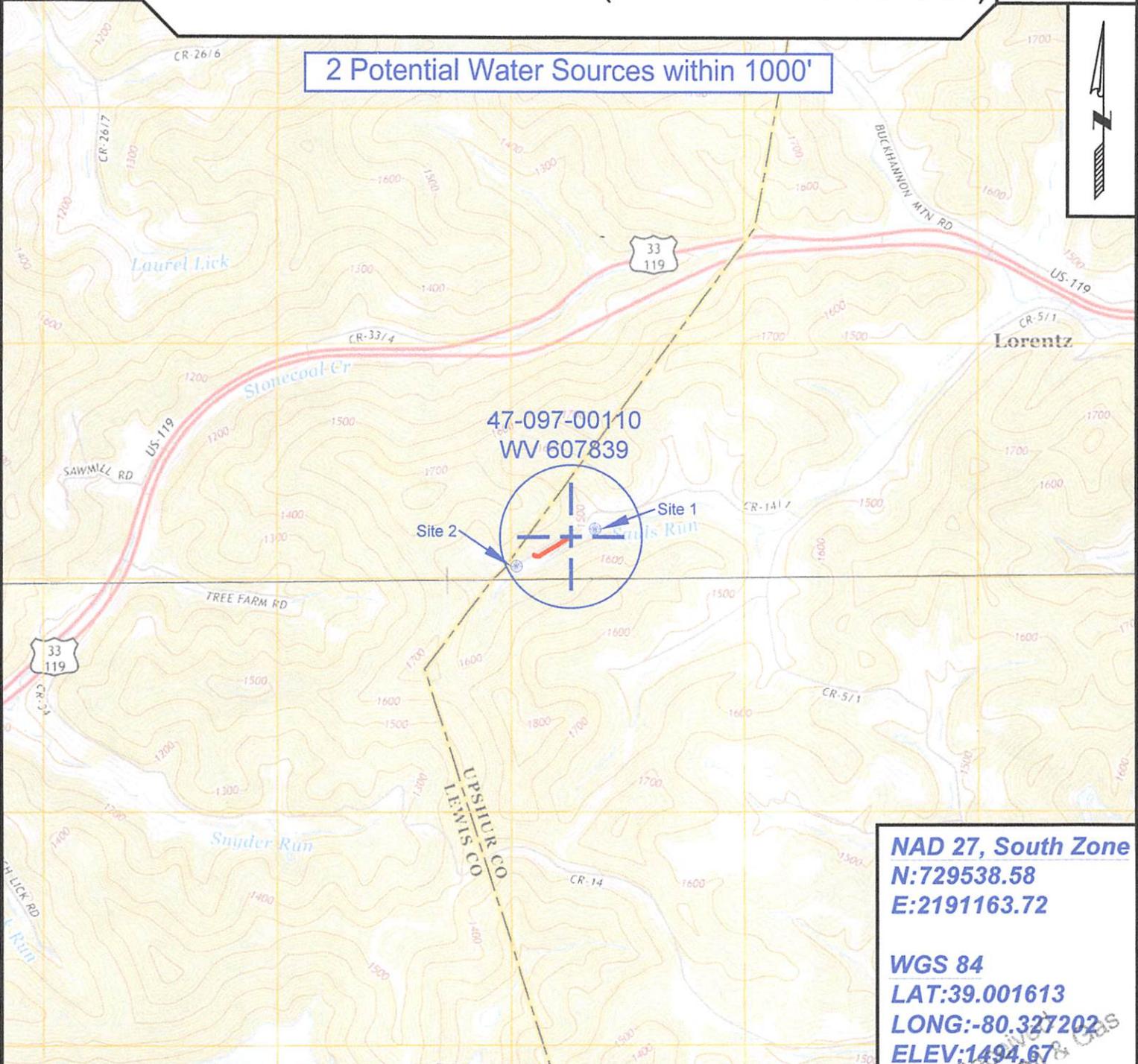
District: Buckhannon

Project No: 39-09-00-09

Water

47-097-00110 WV 607839 (G. W. Summers #7839)

2 Potential Water Sources within 1000'



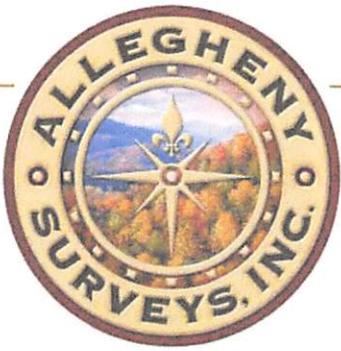
NAD 27, South Zone
N:729538.58
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WGS 84
LAT:39.001613
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ELEV:1494.67



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 PH: (304) 649-8606
 FAX: (304) 649-8608

PREPARED FOR:
EQT Production Company
 P.O. Box 280
 Bridgeport, WV 26330



POTENTIAL WATER SAMPLE DATA SHEET

CLIENT: EQT PRODUCTION COMPANY
LEASE NAME AND WELL No. G. W. Summers #7839 - WV 607839 - API No. 47-097-00110

POTENTIAL SAMPLE LOCATIONS

Site: 1 Spacing: 353 +/- Owner: Thomas S. & Melinda K. Darnell
Address: 599 Bargerhuff Lane, Buckhannon, WV 26201 Phone No. _____
Comments: _____

Site: 2 Spacing: 866 +/- Owner: Thomas S. & Melinda K. Darnell
Address: 599 Bargerhuff Lane, Buckhannon, WV 26201 Phone No. _____
Comments: _____

BIRCH RIVER OFFICE
237 Birch River Road
Birch River, WV 26610
phone: 304-649-8606
fax: 304-649-8608

BRIDGEPORT OFFICE
172 Thompson Drive
Bridgeport, WV 26330
phone: 304-848-5035
fax: 304-848-5037

ALUM CREEK OFFICE
P.O. Box 108 • 1413 Childress Rd
Alum Creek, WV 25003
phone: 304-756-2949
fax: 304-756-2948

MARTINSBURG OFFICE
25 Lights Addition Drive
Martinsburg, WV 25404
phone: 304-901-2162
fax: 304-901-2182

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