



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

July 01, 2013

WELL WORK PLUGGING PERMIT

Plugging

This permit, API Well Number: 47-2103186, 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.

Upon completion of the plugging well work, the above named operator will reclaim the site according to the provisions of WV Code 22-6-30. The above named operator will also file, as required in WV Code 22-6-23, an affidavit on form WR-38 by two experienced persons in the operator's employment and the Oil and Gas inspector that the work authorized under this permit was performed and a description given. Failure to abide by all statutory and regulatory provisions governing all duties and operations here under may result in suspensions or revocation of this permit and in addition may result in civil and/or criminal penalties being imposed upon the operator.

This permit will expire in two (2) years from date of issue. If there are any questions, please free to contact me at (304) 926-0499 ext. 1654.

James Martin
Chief

Operator's Well No: WV 607696 (SNODGRASS 7696)
Farm Name: LANTER, MACEL A. ., TRUST

API Well Number: 47-2103186

Permit Type: Plugging

Date Issued: 07/01/2013

Promoting a healthy environment.

OK# 15553
\$300.00

2103186P

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

Date: May 29, 2013
Operator's Well
Well No. 607696 Snodgrass 7696
API Well No.: 47 021 - 03186

**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: 1,002' Watershed: Laurel Fork of Right Fork of Steer Creek of Little Kanawha River
Location: Center 01 County: Gilmer 21 Quadrangle: Rosedale 7.5' 587
District:

6) Well Operator EQT Production Company
120 Professional Place
Address: Bridgeport, WV 26330

7) Designated Agent: Rex C. Ray
Address: 120 Professional Place
Bridgeport, WV 26330

8) Oil & Gas Joe McCourt
Name: P.O. Box 2657
Address: Buckhannon, WV 26201

9) Plugging Contractor:
Name: HydroCarbon Well Service
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 _____

Date Received

JUN 5 2013

PLUGGING PROGNOSIS

Snodgrass, C.N. 7696 (607696)

Gilmer, County, West Virginia

API # 47-021-03186

Dist: Center

BY: Craig Duckworth

DATE: 3/6/13

CURRENT STATUS:

8 1/4" csg @ 320'
 6 5/8" csg @ 1054'
 5 3/16" csg @ 1917'
 2" tbg @ 2086' Packer @2026'

TD @ 2610' hole filled back to 2111'

Fresh Water @ 145' & 1023'

Salt Water @ 1685'

Salt Sand @ 1635'

Coal @ none reported

Gas shows @ Maxton 1782' ; Big Lime 1984' ; Big Injun 2058' ; Squaw 2073'

Oil Shows @ Salt Sand 1681' ; Squaw 2074'

Stimulation: none reported

Elevation @

1. Notify State Inspector, **Joe McCourt 304-380-2467**, and 24 hrs prior to commencing operations.
2. Attempt to pull 2" @ 2018'. Free point 2" if unable to pull. Shoot off 2" at Packer 2026' and start plugging.
3. TOO H w/tbg and check conduction.
TIH w/ tbg @ 2026'; Set 100' C1A Cement Plug @ 2026' to 1926' (Gas Shows)
4. Set a 100' C1A Cement Plug 50' In/Out of cut. Perf all FW, Coal, Oil and Gas Shows below 2". Do not omit any plugs
5. Attempt to pull 5 3/16" @ 1917'. Free point 5 3/16" if unable to pull. Shoot off 5 3/16" and continue plugging.
6. Set a 100' C1A Cement Plug 50' In/Out of cut. Perf all FW, Coal, Oil and Gas Shows below 5 3/16". Do not omit any plugs.
7. TOO H w/ tbg @ 1926'; Set 100' C1A Cement Plug @ 1926' to 1826' (5 3/16")
8. TOO H w/ tbg @ 1826'; gel hole @ 1826' to 1782'
9. TOO H w/ tbg @ 1782'; Set 100' C1A Cement Plug @ 1782' to 1682' (Gas Show 1782')
10. TOO H w/ tbg @ 1682'; gel hole @ 1682' to 1635'
11. TOO H w/ tbg @ 1635'; Set 100' C1A Cement Plug @ 1635' to 1535' (Salt Sand @ 1635')
12. TOO H w/ tbg @ 1535'; gel hole @ 1535' to 1100'
13. TOO H w/tbg and Attempt to pull 6 5/8" @ 1024'. Free point 6 5/8" if unable to pull. Shoot off 6 5/8" at free point and continue plugging.
14. TIH w/ tbg @ 1100; Set 100' C1A Cement Plug @ 1100' to 1000
15. Set a 100' C1A Cement Plug 50' In/Out of cut. Perf all FW, Coal, Oil and Gas Shows below 6 5/8". Do not omit any plugs.
16. TOO H w/ tbg @ 1000'; gel hole @ 1000' to 320'
17. TOO H w/tbg and Attempt to pull 8 1/4" @ 320'. Free point 8 1/4" if unable to pull. Shoot off 8 1/4" at free point and continue plugging.
18. Set a 100' C1A Cement Plug 50' In/Out of cut. Perf all FW, Coal, Oil and Gas Shows below 8 1/4". Do not omit any plugs
19. TIH w/ tbg @ 320; Set 320' C1A Cement Plug @ 320' to Surface
20. Top off as needed

Received

JUN 5 2013

- 21. Set Monument to WV-DEP Specifications
- 22. Reclaim Location & Road to WV-DEP Specifications.

OK JWM

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JUN 5 2013
Office of Oil and Gas
WV Dept. of Environmental Protection

2103186P

Snodgrass 7696
607696 API 47-021-03186

Received

JUN 5 2013

Office of Oil and Gas
WV Dept. of Environmental Protection

WELL NO. 7696 LEASE NO. 248501		ACRES 81		ELEVATION		L. DIV. R. 2103186P						
FORMATION	TOP	BOTTOM	GAS AT	OIL AT	WATER AT	FORMATION	TOP	BOTTOM	GAS AT	OIL AT	WATER AT	CLASSIFICATION
WAYNESBURG COAL						15' SAND (SHEWAN)						CASING AND TUBING DATA
MARLETON "						15' SAND (SHEWAN)						DATE PUT IN DATE PULLED DATE
REDSTONE "						15' SAND (SHEWAN)						15' 16' 16' 16'
PITTSBURGH "						15' SAND (SHEWAN)						10' 10' 10' 10'
WARRIOR SAND	115				105	15' SAND (SHEWAN)						320' 127'
AMEX LIMESTONE						15' SAND (SHEWAN)						10' 10' 10' 10'
BAHENSICOWN COAL						15' SAND (SHEWAN)						10' 10' 10' 10'
B. CHARD SAND	710	790				15' SAND (SHEWAN)						10' 10' 10' 10'
USWAAYHANT SAND	800	885				15' SAND (SHEWAN)						10' 10' 10' 10'
UPPER FREEMONT COAL						15' SAND (SHEWAN)						10' 10' 10' 10'
HARBWOOD SAND	880	999				15' SAND (SHEWAN)						10' 10' 10' 10'
Coalbury Sand	1005	1027			1023	15' SAND (SHEWAN)						10' 10' 10' 10'
VALACITY LIME						15' SAND (SHEWAN)						10' 10' 10' 10'
CLARON COAL						15' SAND (SHEWAN)						10' 10' 10' 10'
SPROCKVILLE COAL						15' SAND (SHEWAN)						10' 10' 10' 10'
LET GAS SAND						15' SAND (SHEWAN)						10' 10' 10' 10'
MERCER COAL						15' SAND (SHEWAN)						10' 10' 10' 10'
LET SALT SAND						15' SAND (SHEWAN)						10' 10' 10' 10'
Ashtola Gas S.	1076	1091				15' SAND (SHEWAN)						10' 10' 10' 10'
Rosendale Salt S.	1085	1098			1085-1086	15' SAND (SHEWAN)						10' 10' 10' 10'
MARTON	1102	1111			1100-1101	15' SAND (SHEWAN)						10' 10' 10' 10'
LITTLE LIME	1111	1109				15' SAND (SHEWAN)						10' 10' 10' 10'
PENCIL CAVE	1156	1153				15' SAND (SHEWAN)						10' 10' 10' 10'
SHO LIME (SHEWAN)	1205	2000			1200-20	15' SAND (SHEWAN)						10' 10' 10' 10'
SHO LIME SAND	2000	2030				15' SAND (SHEWAN)						10' 10' 10' 10'
ESWAN					2073	15' SAND (SHEWAN)						10' 10' 10' 10'
NO GAS						15' SAND (SHEWAN)						10' 10' 10' 10'
4 SAND (SHEWAN)	2153	2110				15' SAND (SHEWAN)						10' 10' 10' 10'
TOTAL DEPTH	Ashtola filled to 2111				100 OK	TOTAL DEPTH						
TOTAL DEPTH	2610				1626 1/2 GDA	TOTAL DEPTH						

7697 OPEN FLOW VOLUME & PRESSURE DATA																	
DATE	READING	LIQUID	SIZE		MINUTES										IN 1000 DAY R.P.	VOLUME	PRODUCING SAND
			OPENING	TUBING	1	2	3	4	5	15	30	60					
6-22-12	10	Water	2"	2 1/2"												1510	200 1/2 gals
9-27																176 1/2	217 1/2

PIPE LINE DATA							
C/O NO.	DATE LAID	DATE RCL'D	SIZE	FEET LAID	FEET RCL'D	REMARKS	

REPAIR AND DRILLING DEEPER						SHOOTING RECORD							
W/O-M/O NO.	DATE	REASON	COMMENCED	COMPLETED	C/O OR O/D TO	VOLUME		ROCK PRESS.					
						BEFORE	AFTER	BEFORE	AFTER				
	5-24-11	Oil 12 1/2"	1-26-11	2111	20.1	96	170	220	2082	150	2077	72	165
	5-24-11	Oil 12 1/2"	1-26-11	2111	11.4	37	237	310					
	7-12-11	Oil 12 1/2"	7-12-11	2023	10	31.5	25/11	100/12					
	8-2-11	Oil 12 1/2"	8-2-11	2111	8.09	19.2	147.0	235/27					
	8-2-11	Oil 12 1/2"	8-2-11	2111	4.4	14.3							
	8-2-11	Oil 12 1/2"	8-2-11	2111	3.5	17.3		217/21					

VOLUME FACTOR DATA			
PREVIOUS	DATE	DEPTH	REMARKS
20057	12-5-11	20	11-1-11
6113	3"	20	12-11-11 Error in 411-11

1) Date: May 29, 2013
2) Operator's Well Number
607696 Snodgrass 7696
3) API Well No.: 47 021 - 03186
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

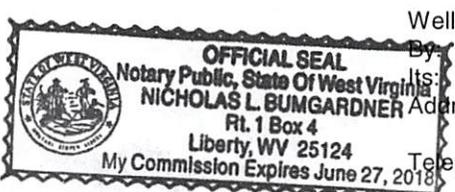
4) Surface Owner(s) to be served:
(a) Name Macel A. Lanter Trust ✓
Address 1244 E. Hayward Ave
Phoenix, AZ 85020
(b) Name Sherri L. King ✓
Address 1490 Laurel Run Rd.
Rosedale, WV 26636
(c) Name Sheila A. & Kenneth D. Norman ✓
Address 301 Huffman Run Rd.
Shock, WV 26631
6) Inspector Joe McCourt ✓
Address P.O. Box 2657
Buckhannon, WV 26201
Telephone 304-380-2467

5) (a) Coal Operator:
Name None
Address _____
(b) Coal Owner(s) with Declaration ✓
Name Macel A. Lanter Trust
Address 1244 E. Hayward Ave
Phoenix, AZ 85020
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 30 day of MAY, 2013

My Commission Expires: 6/27/2018 Notary Public

Received

**STATE OF WEST VIRGINIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL & GAS
CONSTRUCTION AND RECLAMATION PLAN AND SITE REGISTRATION APPLICATION FORM
GENERAL PERMIT FOR OIL AND GAS PIT WASTE DISCHARGE**

Operator Name: EQT PRODUCTION COMPANY OP ID: _____

Watershed: rel Fork of Right Fork of Steer Creek of Little Kanawha F Quadrangle: Rosedale 7.5'

Elevation: 1,002' County: Gilmer District: Center

Description of anticipated Pit Waste: Formation Fluids

Do you anticipate using more than 5,000 bbls of water to complete the proposed well work? Yes___ NoX

Will synthetic liner be used in the pit? Yes Is so, what ml.? 30 ml

Proposed Disposal Method for Treated Pit Wastes:

- Land Application
- Underground Injection - UIC Permit Number _____
- Reuse (at API Number) _____
- Offsite Disposal Permit #. _____
- Other: Explain _____

Drilling medium anticipated for this well? Air, freshwater, oil based, etc. _____

If oil based, what type? Synthetic, petroleum, etc. _____

Additives to be used? _____

Will closed loop system be used? _____

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? _____

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 Division of Environmental Protection. I understand that the provisions of the permit are enforceable by law. Violations of any terms 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 Roark*

Company Official (Typed or Printed) Victoria Roark

Company Official Title Permitting Supervisor-WV

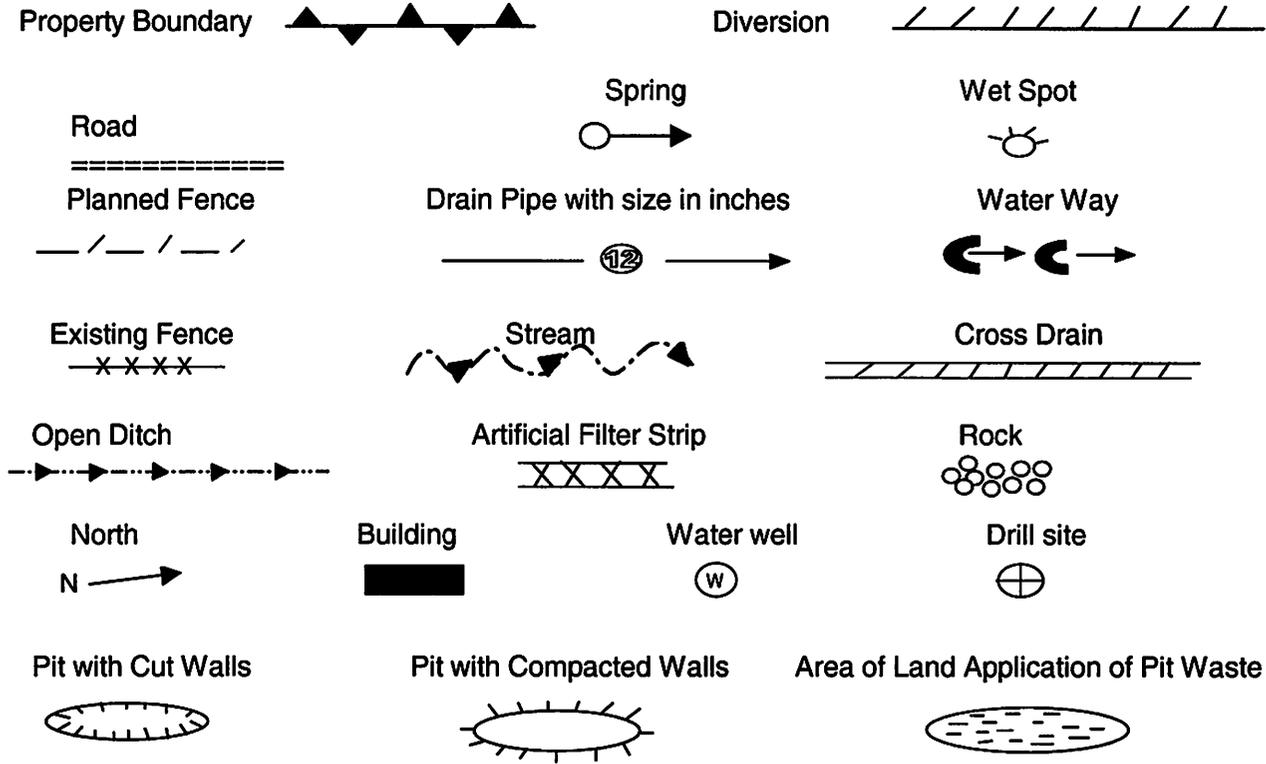
Subscribed and sworn before me this 30 day of MAY 2013

My Commission Expires 6/27/2018



OPERATOR'S WELL NO.:
607696 Snodgrass 7696

LEGEND



Proposed Revegetation Treatment: Acres Disturbed: 1± Prevegetation pH 5.8

Lime 3 Tons/acre or to correct to pH 6.5

Fertilizer (10-20-20) or equivalent 1/3 ton lbs/acre (500 lbs minimum)

Mulch 2 Tons/acre or hydroseed.

SEED MIXTURES

Area I		Area II	
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.
Photocopies section of involved 7.5' topographic sheet.

Plan approved by: _____

Received

Comments: _____

JUN 5 2013

Title: _____ Date: _____

Field Reviewed? Yes No

2103186P

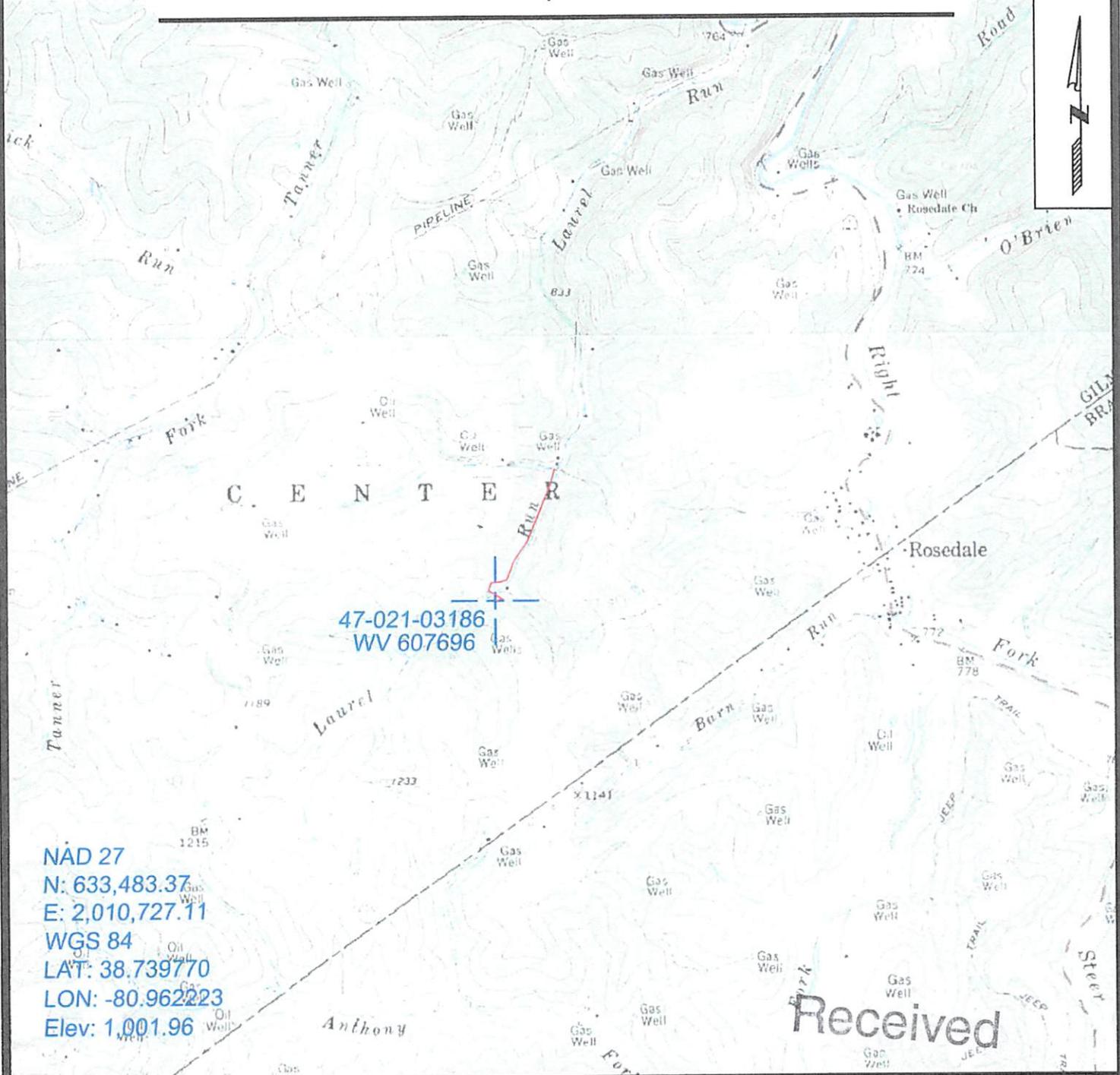
Topo Quad: Rosedale Scale: 1" = 2000'

County: Gilmer Date: May 17, 2013

District: Center Project No: 25-19-00-07

47-021-03186 (WV 607696)

Topo



47-021-03186
WV 607696

NAD 27
 N: 633,483.37
 E: 2,010,727.11
 WGS 84
 LAT: 38.739770
 LON: -80.962223
 Elev: 1,001.96

Received



SURVEYING AND MAPPING SERVICES PERFORMED BY:
ALLEGHENY SURVEYS, INC.
 1-800-482-8606
 P.O. BOX 438
 BIRCH RIVER, WV 26610
 PH: (304) 649-8606
 FAX: (304) 649-8608

PREPARED FOR: JUN 5 2013
EQT PRODUCTION COMPANY, INC.
 Office of Oil and Gas
 WV Dept. of Environmental Protection
 P.O. Box 280
 Bridgeport, WV 26330

WW-7
8-30-06



West Virginia Department of Environmental Protection
Office of Oil and Gas
WELL LOCATION FORM: GPS

API: 47-021-03186 WELL NO.: WV 607696 (Snodgrass 7696)

FARM NAME: Snodgrass

RESPONSIBLE PARTY NAME: EQT Production Company

COUNTY: Gilmer DISTRICT: Center

QUADRANGLE: Rosedale 7.5'

SURFACE OWNER: Macel A. Lanter Trust

ROYALTY OWNER: C.N. Snodgrass et al.

UTM GPS NORTHING: 4,287,900

UTM GPS EASTING: 503,283 GPS ELEVATION: 305m (1002 ft)

The Responsible Party named above has chosen to submit GPS coordinates in lieu of preparing a new well location plat for a plugging permit or assigned API number on the above well. The Office of Oil and Gas will not accept GPS coordinates that do not meet the following requirements:

1. Datum: NAD 1983, Zone: 17 North, Coordinate Units: meters, Altitude: height above mean sea level (MSL) – meters.
2. Accuracy to Datum – 3.05 meters
3. Data Collection Method:

Survey grade GPS : Post Processed Differential
Real-Time Differential

Mapping Grade GPS X: Post Processed Differential X
Real-Time Differential

4. **Letter size copy of the topography map showing the well location.**

I the undersigned, hereby certify this data 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 Office of Oil and Gas.

Ben Singleton
Signature

P.S. 2092
Title

5-17-13
Date

Received

JUN 5 2013



Land Surveyors, Mineral and
Construction Consultants

Surveying West Virginia
Since 1988

Marshall W. Robinson, PS
Licensed in WV, VA, OH, KY and PA
Dwayne D. Matheny, PS
David W. King, PS
Stacey O. Brown, PS
Kenneth J. Plum, PS

Ben R. Singleton, PS
Dwayne A. Hall, PS, SU
Damon L. Wilkewitz, PS
William Yetzer, PLS
Licensed in CO and UT

POTENTIAL WATER SAMPLE DATA SHEET

CLIENT: EQT PRODUCTION COMPANY INC.
LEASE NAME AND WELL No. Snodgrass 7696 – WV 607696 (47-021-03186)

The initial mapping review of the area surrounding the proposed well site revealed the below listed surface owner(s) that were potentially utilizing groundwater (potable) for Human Consumption or other purposes within 1000' of the existing well site. The following landowners will be notified of the opportunity to request a water sample.
*Please note that the following information is subject to change upon field inspection.

POTENTIAL SAMPLE LOCATIONS

Site: 1 Spacing: 250' +/- Owner: Macel Lanter Trust
Address: 1244 East Hayward Ave. Phoenix, Arizona 85020
Comments:

Phone no. _____

Received

25-07 WV 607696 Potential Water

JUN 5 2013

237 Birch River Road P.O. Box 438
Birch River, WV 26610
Ph: 1-800-482-8606 Fax: (304) 649-8608
E-mail: infobirch@alleghenysurveys.com

1413 Childress Road P.O. Box 108
Alum Creek, WV 25003
Ph: (304) 756-2949 Fax: (304) 756-2948
E-mail: infoalumcreek@alleghenysurveys.com

123 State Street
Bridgeport, WV 26330
Office of Oil and Gas
WV Dept. of Environmental Protection
Ph: (304) 848-5131 Fax: (304) 848-5037
E-mail: info@wvdeprotection.com

Topo Quad: Rosedale Scale: 1" = 2000'

County: Gilmer Date: May 17, 2013

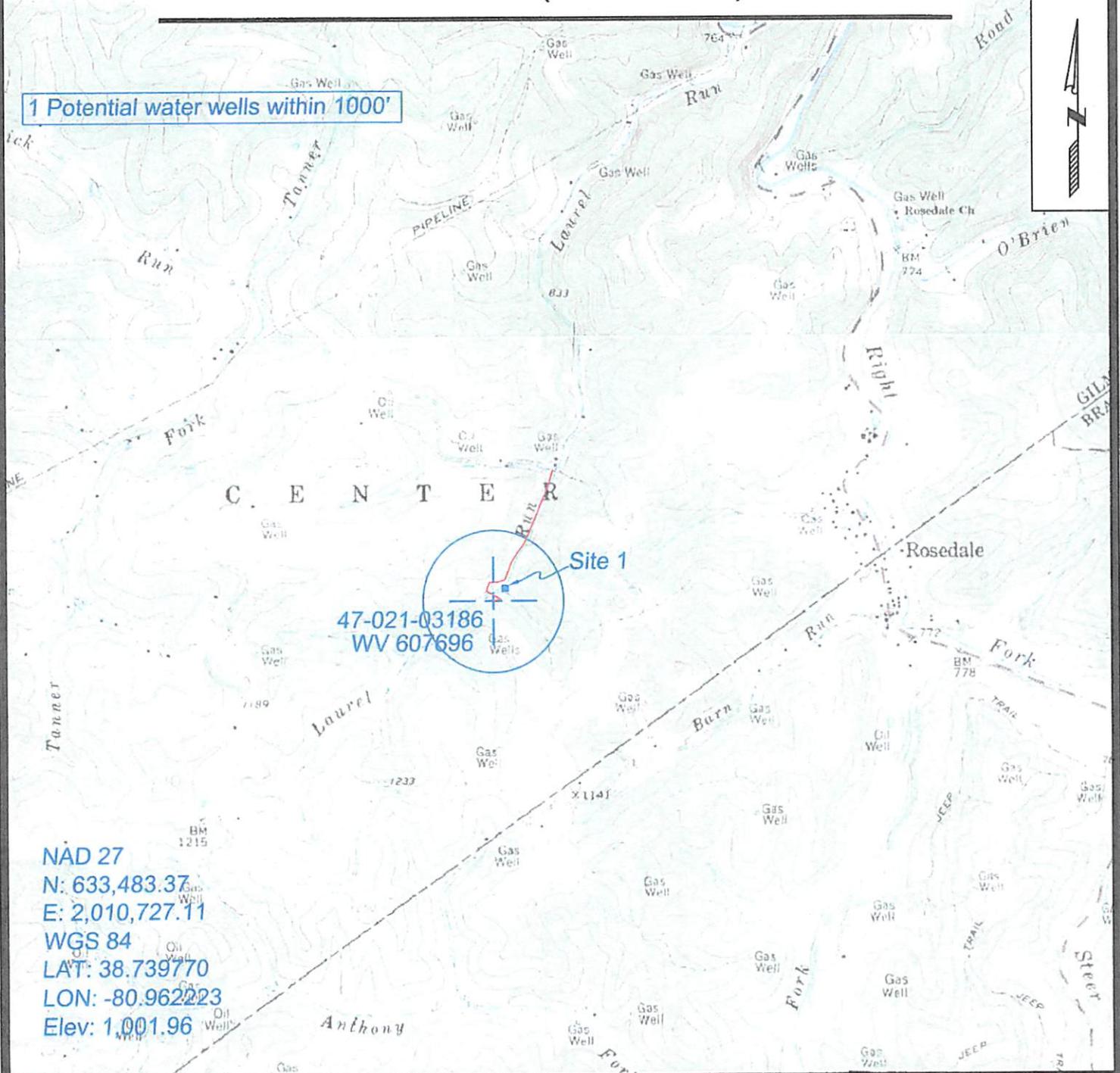
District: Center Project No: 25-19-00-07

Water

47-021-03186 (WV 607696)

Topo

1 Potential water wells within 1000'



NAD 27
 N: 633,483.37
 E: 2,010,727.11
 WGS 84
 LAT: 38.739770
 LON: -80.962223
 Elev: 1,001.96



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PREPARED FOR:

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