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**west virginia** department of environmental protection

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

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

February 22, 2016

**WELL WORK PLUGGING PERMIT**

**Plugging**

This permit, API Well Number: 47-8100750, 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: 131351 ROWLAND 13  
Farm Name: ROWLAND LAND CO.

**API Well Number: 47-8100750**

**Permit Type: Plugging**

Date Issued: 02/22/2016

**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

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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 under the terms of that agreement.

8100750P

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

Date: February 1, 2016  
Operator's Well  
Well No. 131351 Rowland B 13  
API Well No.: 47 081 - 00750

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

100<sup>00</sup>  
CK 2022A

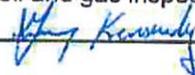
APPLICATION FOR A PERMIT TO PLUG AND ABANDON

- 4) Well Type: Oil \_\_\_\_\_ Gas X Liquid Injection \_\_\_\_\_ Waste Disposal: \_\_\_\_\_  
If Gas, Production \_\_\_\_\_ X Or Underground storage \_\_\_\_\_ Deep \_\_\_\_\_ Shallow X
- 5) Elevation: 1409 Watershed: Marsh Fork  
Location: Marsh Fork County: Raleigh Quadrangle: Pilot Knob  
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 Gary Kennedy 9) Plugging Contractor:  
Name: P.O. Box 268 Name: HydroCarbon Well Service  
Address: Nimitz WV 25978 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 2/10/16

PLUGGING PROGNOSIS

Rowland Land Co.'B" #13 (131351)

Raleigh County, West Virginia

API # 47-081-00750

District: Marsh Fork

BY: Craig Duckworth

DATE: 3/5/13

CURRENT STATUS:

9 5/8" csg @ 896' (365sks) cts

7" csg @ 2379' (175sks) cts

4 1/2" csg @ 5890' (260sks)

TD @ 5900'

Fresh Water @ 50'

Salt Water @ 500'

Salt Sand @ 1508'

Coal @ none reported

Gas shows @ none reported

Oil Shows @ none reported

Elevation @ 1414'

Stimulation: Devonian Shale ( Perfs 5862'-5226', 5070'-4462', 4415'-4175', 3457'-3453')  
Lower Weir ( Perfs 2982'-2957')

1. Notify State Inspector, Gary Kennedy 304-382-8402, and 24 hrs prior to commencing operations.
2. TIH w/ tbg @ 5890'; Set 714' C1A Cement Plug @ 5890' to 5176' (Devonian Shale Perfs @ 5862'-5226')
3. TOOH w/ tbg @ 5226'; Gel hole @ 5226' to 5120'
4. TOOH w/ tbg @ 5120'; Set 995' C1A Cement Plug @ 5120' to 4125' ( Devonian Shale Perfs @ 5070'-4462', 4415'-4175')
5. TOOH w/ tbg @ 4125'; Gel hole @ 4125' to 3507'
6. TOOH w/ tbg @ 3507'; Set 107' C1A Cement Plug @ 3507' to 3400' ( Devonian Shale Perfs @ 3457'-3453')
7. TOOH w/ tbg @ 3400'; gel hole @ 3400' to 3032'
8. TOOH w/ tbg @ 3032'; Set 100' C1A Cement Plug @ 3032' to 2907' (Lower Weir Perfs @ 2982'-2957')
9. TOOH w/ tbg @ 2907'; gel hole @ 2907' to 2429'
10. TOOH w/tbg Freepoint 4 1/2". Cut/shoot 4 1/2" at freepoint ( freepoint approx. 2379')
11. Set a 100' C1A Cement Plug 50' In/Out of cut. Perf all FW, Coal, Oil & Gas Shows below 4 1/2" cut. Do not omit any plugs.
12. TIH w/ tbg @ 2429'; Set 100' C1A Cement Plug @ 2429' to 2329' (4 1/2" cut & 7" @ 2379')
13. TOOH w/ tbg @ 2329'; gel hole @ 2329' to 1508'
14. TOOH w/ tbg @ 1508'; Set 100' C1A Cement Plug @ 1508' to 1408' (Salt Sand @ 1508')
15. TOOH w/ tbg @ 1408'; gel hole @ 1408' to 946'
16. TOOH w/ tbg @ 946'; Set 100' C1A Cement Plug @ 946' to 846' (9 5/8" @ 896')
17. Set a 100' C1A Cement Plug 50' In/Out of cut. Perf all FW, Coal, Oil & Gas Shows below 9 5/8".

Do not omit any plugs.

18. TOOH w/ tbg @ 846'; gel hole @ 846' to 550'

19 SET 100' C1A CEMENT PLUG FROM 550' TO 450' (SALT WATER)

20 GEL FROM 450' TO 200'.

21. SET C1A CEMENT PLUG FROM 200' TO SURFACE

22. SET MONUMENT TO WU - DEP SPECIFICATIONS

23. RECLAIM

← SHOULD NOT BE NEEDED  
NO CASING CUT.  
9 5/8" CTS

JAK

Rowland Land  
Co. #B-13

API# 47-081-00750

131351

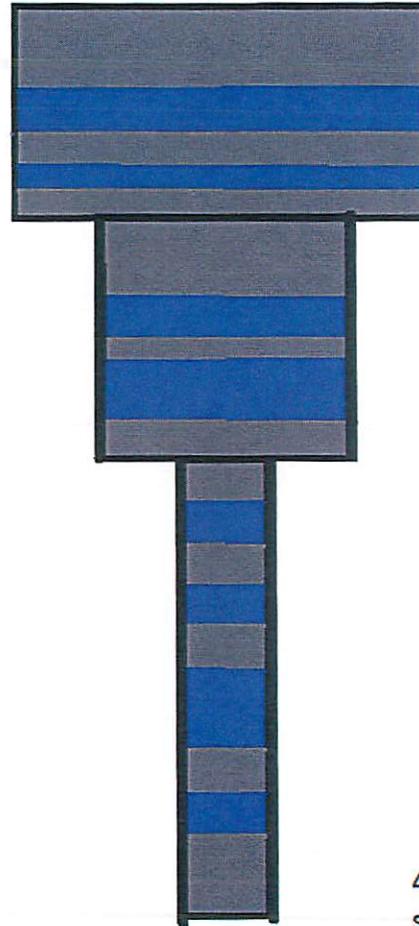
1/26/16

Cement 200' to surface.  
Gel 450' to 200'  
Cement 550' to 450'  
Gel 846' to 550'  
Cement 946 to 846'

Gel 1408' to 946'  
Cement 1508' to 1408'  
Gel 2329' to 1508'  
Cement 2429' to 2329'

Gel 2907' to 2429'  
Cement 3032' to 2907'  
Gel 3400' to 3032'  
Cement 3507' to 3400'  
Gel 4125' to 3507'

Cement 5120' to 4125'  
Gel 5176' to 5120'  
Cement 5890' to 5176'



Freshwater @ 50'  
Saltwater @ 500'  
9 5/8" csg @ 896' (CTS)

Elevation @ 1414'

Salt Sand @ 1508'

7" csg @ 2379' (CTS)

Weir perms @ 2957' to  
2982'

Devonian perms @ 3453' to  
5862'

4 1/2" csg @ 5890' (260  
sks)

TD @ 5900'

81007509



IV-35  
(Rev 8-81)

**RECEIVED**  
AUG 11 1987

State of West Virginia  
Department of Mines  
Oil and Gas Division

Date April 6 1987  
Operator's Well No. Rowland 13  
Farm Rowland Land Co  
API No. 47 - 081 - 0750

DIVISION OF OIL & GAS  
DEPARTMENT OF ENERGY

WELL OPERATOR'S REPORT  
OF

DRILLING, FRACTURING AND/OR STIMULATING, OR PHYSICAL CHANGE

WELL TYPE: Oil  / Gas  / Liquid Injection  / Waste Disposal   
(If "Gas," Production  / Underground Storage  / Deep  / Shallow  )

LOCATION: Elevation: 1414 Watershed Marsh Fork  
District: Marsh Fork County Raleigh Quadrangle Pilot Knob 7.5

COMPANY Allegheny & Western Energy Corp  
ADDRESS P.O. Box 2587, Charleston, W.Va., 25329  
DESIGNATED AGENT Dennis L. Mann  
ADDRESS P.O. Box 2587, Charleston, W.Va., 25329  
SURFACE OWNER Rowland Land Co.  
ADDRESS 1033 Quarrier ST, Charleston, W.Va  
MINERAL RIGHTS OWNER Same  
ADDRESS \_\_\_\_\_  
OIL AND GAS INSPECTOR FOR THIS WORK Rodney  
Dillon P.O. Box 1526  
ADDRESS Sophia, W.Va  
PERMIT ISSUED 12/4/86  
DRILLING COMMENCED 12/21/86  
DRILLING COMPLETED 1/7/87

Casing Tubing	Used in Drilling	Left in Well	Cement fill up Cu. ft.
Size 20-16 Cord.			
13-10"	64	64	150 sks
9 5/8	896	896	375 sks
8 5/8			
7	2379	2379	175 sks
5 1/2			
4 1/2	5890	5890	260 sks
3			
2			
Liners used			

IF APPLICABLE: PLUGGING OF DRY HOLE ON  
CONTINUOUS PROGRESSION FROM DRILLING OR  
REWORKING. VERBAL PERMISSION OBTAINED  
ON \_\_\_\_\_

GEOLOGICAL TARGET FORMATION Devonian Shale Depth 5300 feet  
Depth of completed well 5900 feet Rotary  / Cable Tools \_\_\_\_\_  
Water strata depth: Fresh 50 feet; Salt 500 feet  
Coal seam depths: N/A Is coal being mined in the area? no

OPEN FLOW DATA

Producing formation Lower Weir Pay zone depth 2957 feet  
Gas: Initial open flow \_\_\_\_\_ Mcf/d Oil: Initial open flow \_\_\_\_\_ Bbl/d  
Final open flow 201 Mcf/d Final open flow \_\_\_\_\_ Bbl/d  
Time of open flow between initial and final tests 24 hours  
Static rock pressure 800 psig (surface measurement) after 24 hours shut in  
(If applicable due to multiple completion--)

Second producing formation Devonian Shale Pay zone depth 3453 feet  
Gas: Initial open flow \_\_\_\_\_ Mcf/d Oil: Initial open flow \_\_\_\_\_ Bbl/d  
Final open flow 550 Mcf/d Oil: Final open flow \_\_\_\_\_ Bbl/d  
Time of open flow between initial and final tests 24 hours  
Static rock pressure 800 psig (surface measurement) after 24 hours shut in

(Continue on reverse side)

FORM IV-35  
(REVERSE)

DETAILS OF PERFORATED INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC.

2957-2982 perf w/ 21 holes frac w/ 45,000# 20/50 sd + 1,000 gal 15% acid + 635,000 scf n2  
 3453-3457 perf w/ 9 holes frac w/ 30,000# 20/50 sd + 500 gal 15% acid + 290,000 scf n2  
 4175-4415 perf w/ 15 holes frac w/ 45,000# 20/50 sd + 1,000 gal 15% acid + 1,015,000 scf n2  
 4462-5070 perf w/ 24 holes frac w/ 45,000# 20/50 sd + 1,000 gal 15% acid + 1,054,000 scf n2  
 5226-5862 perf w/ 19 holes frac w/ 45,000# 20/50 sd + 1,000 gal 15% acid + 1,200,000 scf n2

WELL LOG

FORMATION	COLOR	HARD OR SOFT	TOP FEET	BOTTOM FEET	REMARKS
					Including indication of all fresh and salt water, coal, oil and gas
shale & sand			0	1508	<div style="text-align: center;">  <p>AUG 11 1987</p> <p>DIVISION OF OIL &amp; GAS DEPARTMENT OF ENERGY</p> <p>TD 5900 KB</p> </div>
salt sand			1508	1632	
shale			1632	1689	
salt sand			1689	1852	
shale & sand			1852	2324	
little lime			2324	2384	
slate & lime			2384	2419	
big lime			2419	2772	
shale			2772	2845	
upper weir			2845	2897	
shale			2897	2927	
lower weir			2927	2990	
shale			2990	3238	
sunbury shale			3238	3252	
sandy siltstone & shale			3252	3454	
gordon			3454	3468	
grey & brown shale			3468	5900	

(Attach separate sheets as necessary)

Allegheny & Western Energy Corp  
 Well Operator  
 By: Don G. Mc... Vice President  
 Date: April 6, 1987

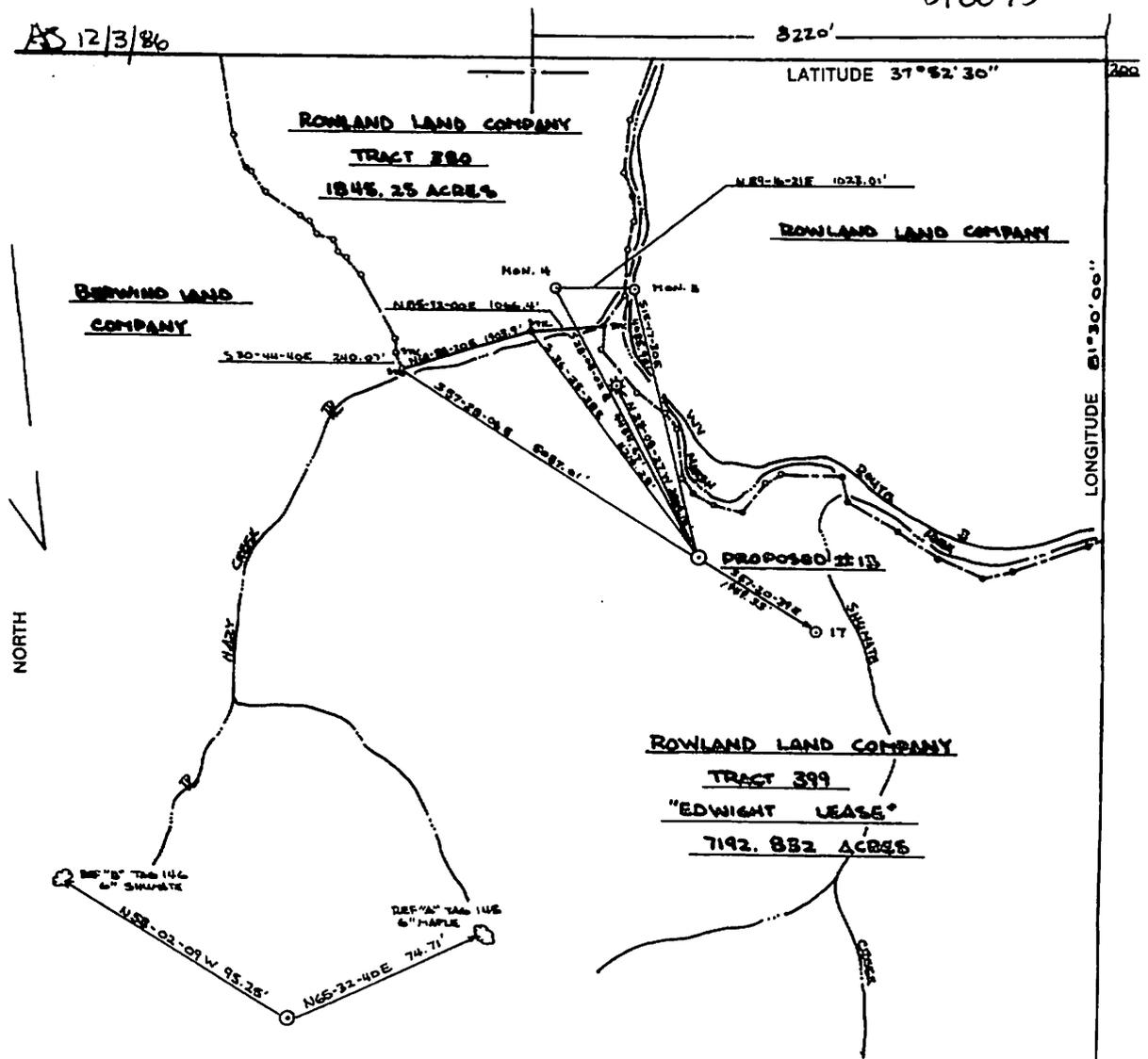
Note: Regulation 2.02(i) provides as follows:  
 "The term 'log' or 'well log' shall mean a systematic ... of all formations including

8100750 P

AS 12/3/86

8220'

LATITUDE 37°52'30"



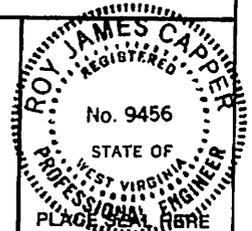
REFERENCES  
1" = 50'

PEARSON COAL COORDINATES:  
N: 588308.62  
E: 3218116.88

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

FILE NO. 86-081-016  
 DRAWING NO. 84061  
 SCALE 1" = 2000'  
 MINIMUM DEGREE OF ACCURACY 1 IN 5000  
 PROVEN SOURCE OF ELEVATION BM N-401 ON BRIDGE ART. IN EDWIGHT (ELEVATION) 985.687'

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 ENERGY.  
 (SIGNED) Roy James Capper  
 R.P.E. 9456 U.S.



STATE OF WEST VIRGINIA  
 DEPARTMENT OF ENERGY  
 OIL AND GAS DIVISION



DATE 29 OCTOBER, 19 86  
 OPERATOR'S WELL NO. ROWLAND #13  
 API WELL NO.

WELL TYPE: OIL  GAS  LIQUID INJECTION  WASTE DISPOSAL   
 (IF "GAS,") PRODUCTION  STORAGE  DEEP  SHALLOW   
 LOCATION: ELEVATION 144.3 WATER SHED MARSH FORK OF BIG COAL  
 DISTRICT MARSH FORK COUNTY RALEIGH  
 QUADRANGLE PILOT KNOB 7.5'  
 SURFACE OWNER ROWLAND LAND COMPANY ACREAGE 7192.832  
 OIL & GAS ROYALTY OWNER SAME LEASE ACREAGE 15000

PROPOSED WORK: DRILL  CONVERT  DRILL DEEPER  REDRILL  FRACTURE OR STIMULATE  PLUG OFF OLD FORMATION  PERFORATE NEW FORMATION  OTHER PHYSICAL CHANGE IN WELL (SPECIFY) \_\_\_\_\_  
 PLUG AND ABANDON  CLEAN OUT AND REPLUG   
 TARGET FORMATION MARCELLUS SHALE ESTIMATED DEPTH 5200'  
 WELL OPERATOR AUCHEMY + WESTERN DESIGNATED AGENT DENNIS L. MANN  
 ADDRESS P.O. Box 2587 ADDRESS P.O. Box 2587  
CHARLESTON, WEST VIRGINIA 25329 CHARLESTON, WEST VIRGINIA 25329

COUNTY NAME  
PERMIT

81 00750P

WW-4-A  
Revised 6/07

1) Date: February 1, 2016  
2) Operator's Well Number  
131351 Rowland B 13  
3) API Well No.: 47 081 - 00750  
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 Rowland Land Company LLC ✓  
Address 405 Capitol St  
Suite 609  
Charleston, WV 25301  
(b) Name \_\_\_\_\_  
Address \_\_\_\_\_  
(c) Name \_\_\_\_\_  
Address \_\_\_\_\_  
6) Inspector Gary Kennedy ✓  
Address P.O. Box 268  
Nimitz WV 25978  
Telephone 304.382.8402

5) (a) Coal Operator:  
Name None  
Address \_\_\_\_\_  
(b) Coal Owner(s) with Declaration  
Name Rowland Land Company LLC  
405 Capitol St ✓  
Suite 609  
Charleston, WV 25301  
Name \_\_\_\_\_  
Address \_\_\_\_\_  
(c) Coal Lessee with Declaration ✓  
Name Performance Coal Company  
Address Alpha Natural Resources  
300 Running Right Road  
Julian WV 25521

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

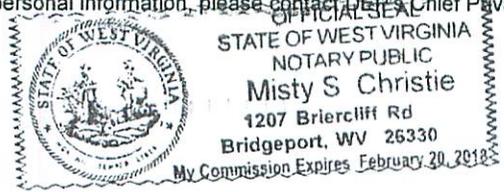
- (1) The application to Plug and Abandon a Well on Form WW-4B, which sets out the parties involved in the work and describes the well its and the plugging work order; and
  - (2) The plat (surveyor's map) showing the well location on Form WW-6.
- The reason you received these documents is that you have 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 2nd day of February, 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 DEPRCC Chief Privacy Officer at [depprivacyofficer@wv.gov](mailto:depprivacyofficer@wv.gov).



WW-9  
Revised 2/03

Page \_\_\_\_ of \_\_\_\_  
2) Operator's Well Number  
131351 Rowland B 13  
3) API Well No.: 47 081 - 00750

**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: Marsh Fork Quadrangle: Pilot Knob  
Elevation: 1409 County: Raleigh District: Marsh Fork

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 \_\_\_ No X  
Will synthetic liner be used in the pit? Yes Is so, what ml.? 10 ml

Proposed Disposal Method for Treated Pit Wastes: JK  
 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? \_\_\_\_\_

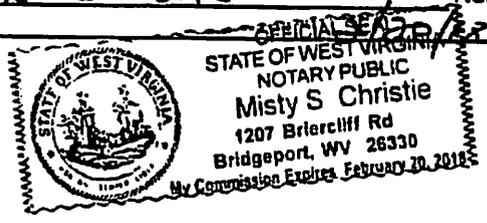
Will closed loop system be used? \_\_\_\_\_  
Drill Cuttings disposal method? Leave in pit, landfill, remove offsite, etc. \_\_\_\_\_  
If left in pit and plan to solidify what medium will be used? Cement, Lime, sawdust \_\_\_\_\_  
Landfill or offsite name/permit number? \_\_\_\_\_

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 [Signature]  
Company Official (Typed or Printed) Victoria Roark  
Company Official Title Permitting Supervisor-WV

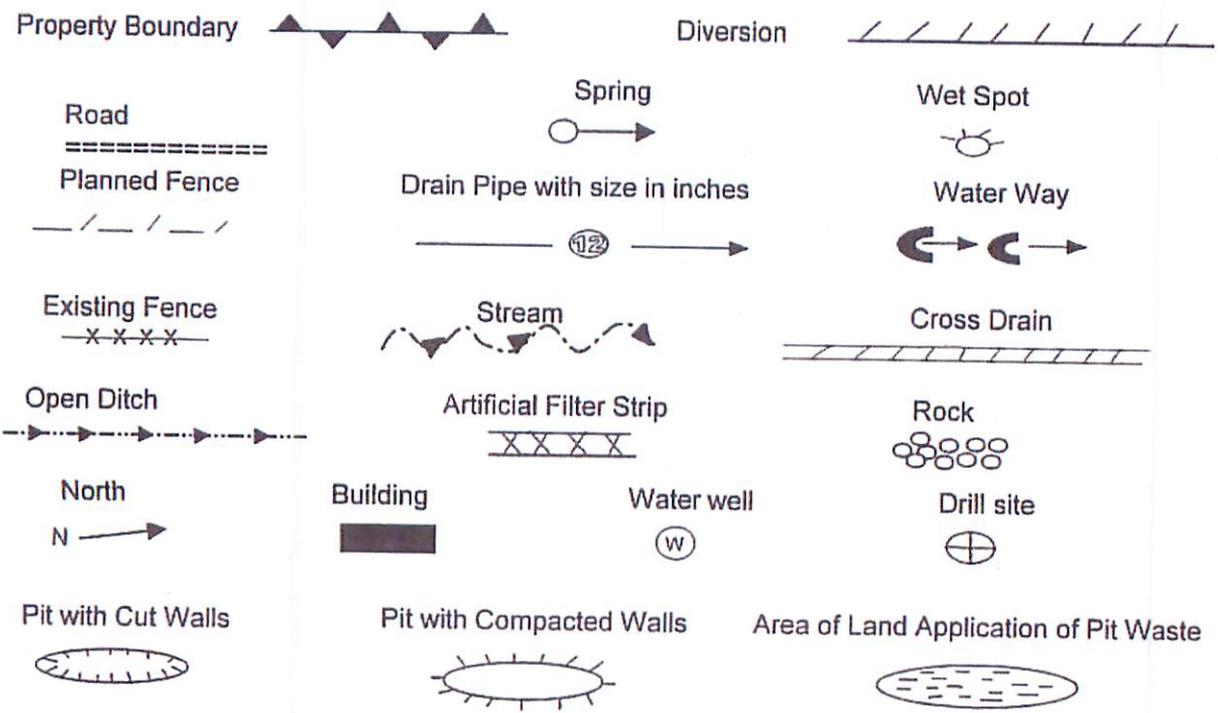
Subscribed and sworn before me this 2nd day of February, 2016

[Signature] Notary Public  
My Commission Expires \_\_\_\_\_



**OPERATOR'S WELL NO.:**  
131351 Rowland B 13

**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: *Mary Kennedy*

Comments: \_\_\_\_\_

Title: *Inspector* Date: *2/14/16*

Field Reviewed? Yes  No

Topo Quad: Pilot Knob 7.5'

Scale: 1" = 2000'

County: Raleigh

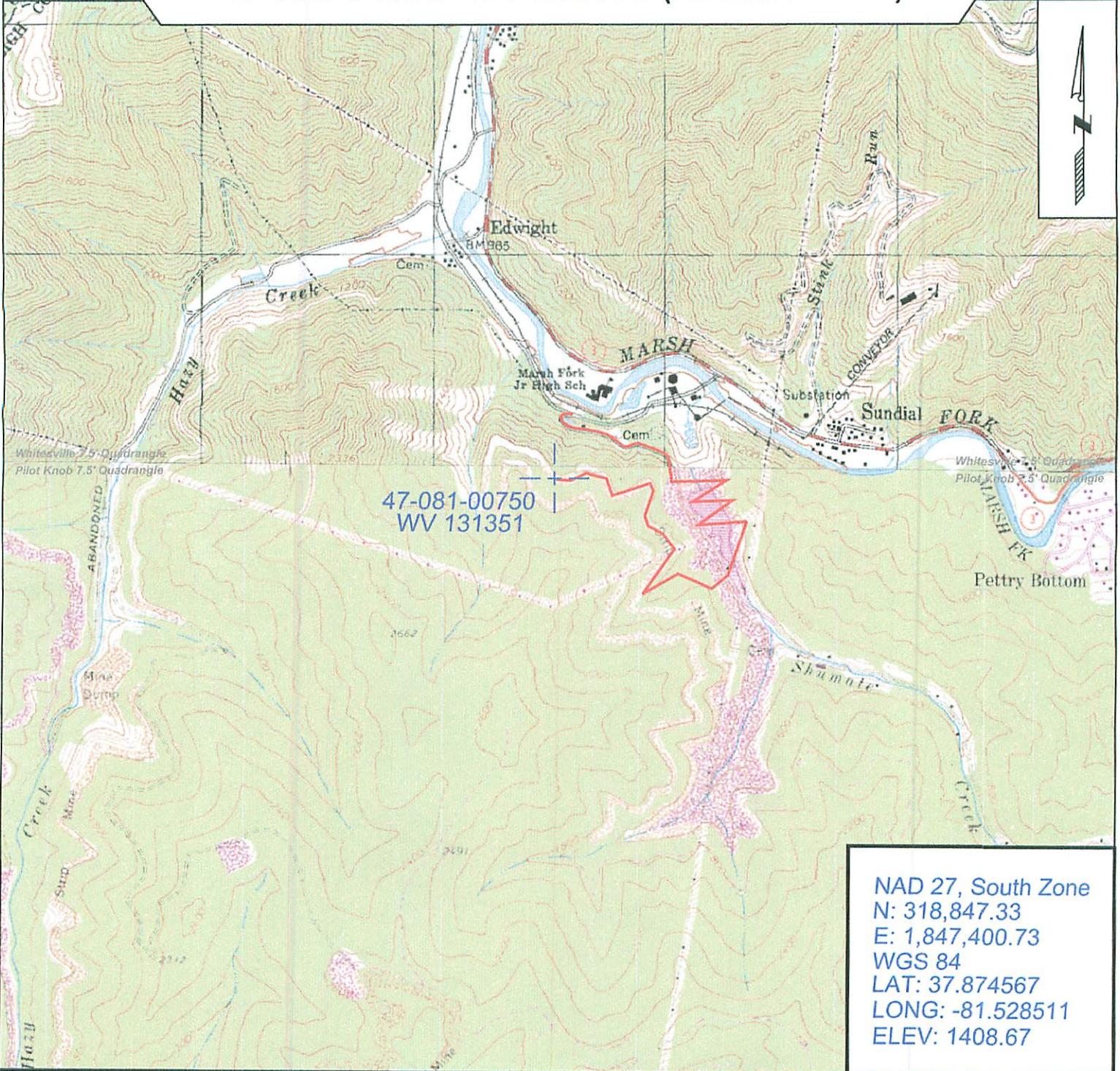
Date: January 27, 2016

District: Marsh Fork

Project No: 23-06-00-08

# 47-081-00750 WV 131351 (Rowland B 13)

Topo



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

WW-7  
8-30-06



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

API: 47-081-00750 WELL NO.: WV 131351 (Rowland B 13)

FARM NAME: Rowland Land Co.

RESPONSIBLE PARTY NAME: EQT Production Company

COUNTY: Raleigh DISTRICT: Marsh Fork

QUADRANGLE: Pilot Knob 7.5'

SURFACE OWNER: Rowland Land Company, LLC

ROYALTY OWNER: Rowland Land Company, LLC, et al.

UTM GPS NORTHING: 4192030

UTM GPS EASTING: 453519 GPS ELEVATION: 429m (1409 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 South, 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.

*Stacy O'Brien*  
Signature

PS# 2180  
Title

1/28/16  
Date



## POTENTIAL WATER SAMPLE DATA SHEET

CLIENT: EOT PRODUCTION COMPANY  
LEASE NAME AND WELL No. Rowland B 13 - WV 131351 - API No. 47-081-00750

### POTENTIAL SAMPLE LOCATIONS

There appears to be no known water samples within the required 1000' of the existing well WV 131351.

**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

86100750P

Topo Quad: Pilot Knob 7.5'

Scale: 1" = 2000'

County: Raleigh

Date: January 27, 2016

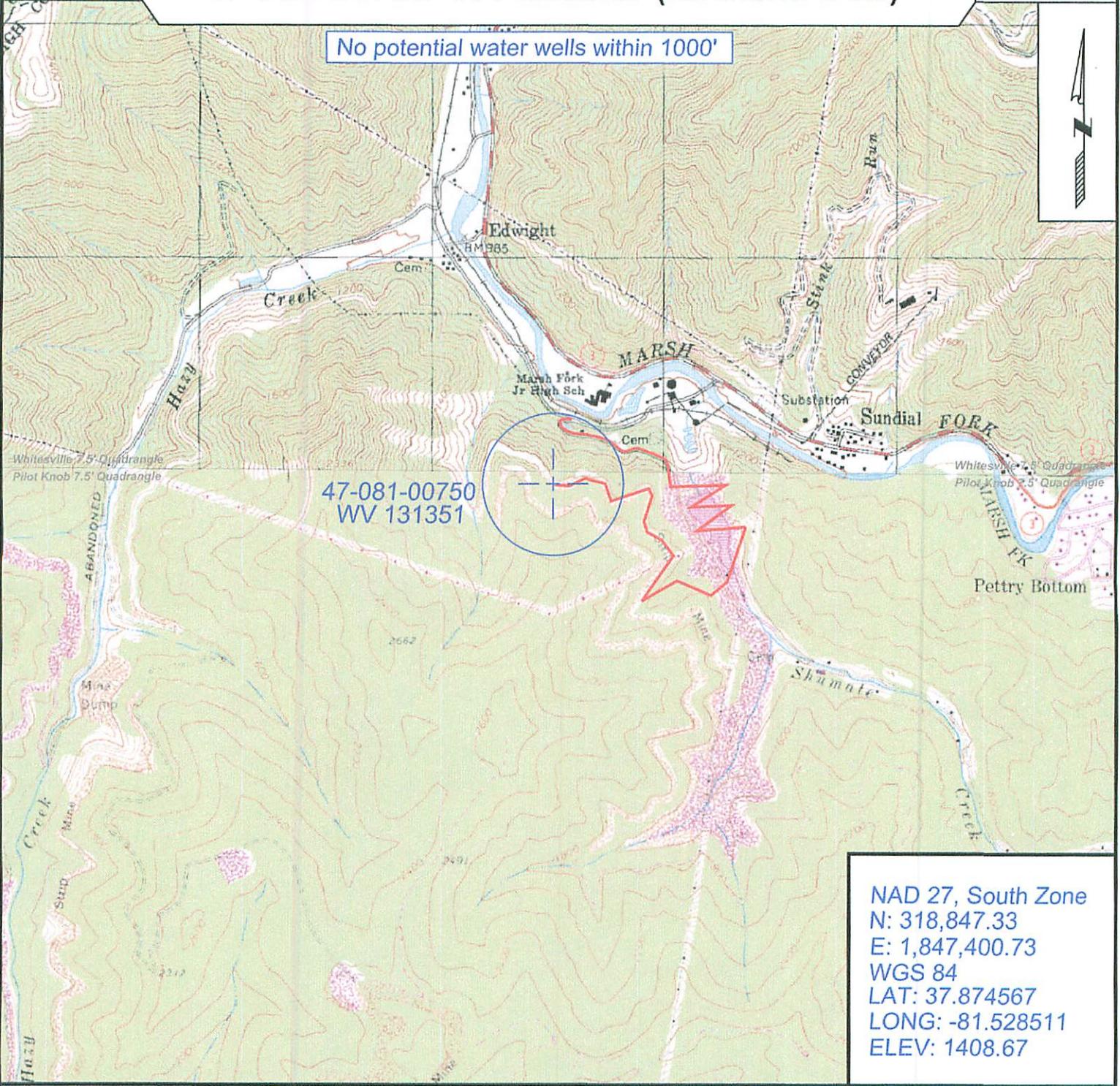
District: Marsh Fork

Project No: 23-06-00-08

Water

# 47-081-00750 WV 131351 (Rowland B 13)

No potential water wells within 1000'



NAD 27, South Zone  
 N: 318,847.33  
 E: 1,847,400.73  
 WGS 84  
 LAT: 37.874567  
 LONG: -81.528511  
 ELEV: 1408.67



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