



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

December 08, 2014


WELL WORK PLUGGING PERMIT

Plugging

This permit, API Well Number: 47-1502748, issued to RANGE RESOURCES - PINE MOUNTAIN, INC., 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: CBM 2
Farm Name: BARRINGER, PAUL B. II
API Well Number: 47-1502748
Permit Type: Plugging
Date Issued: 12/08/2014

Promoting a healthy environment.

12/12/14

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.

1) Date October 15, 2014
2) Operator's
Well No. CBM2
3) API Well No. 47-015 - 02748

STATE OF WEST VIRGINIA
DEPARTMENT 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 ___ or Underground storage ___) Deep ___ / Shallow X

5) Location: Elevation 901' Watershed Buffalo Creek
District Buffalo County Clay Quadrangle Swandale 7.5' 629

6) Well Operator Range Resource - Pine Mountain Inc. 7) Designated Agent Geary Legg
Address P.O. Box 2136 Address 158 Big Sandy Road
Abingdon, VA 24212 Newton, WV 25266

8) Oil and Gas Inspector to be notified Name Ed Gainer
Address P.O. Box 821
Spencer, WV 25276
9) Plugging Contractor Name To be determined upon permit approval
Address _____

10) Work Order: The work order for the manner of plugging this well is as follows:

- Casing: TD - 1104'
- 13 3/8" 22 (TD)
1100 Plug No. 1 ~~4000~~-820
- 7" 301 83 sks CTS Plug No. 2 740-250
- 4 1/2" 1068 100 sks CTS Plug No. 3 100-0
- 2 3/8" 1021
- 6% gel between cement plugs
- No pipe recovery - all casing cemented to surface

REMOVE 2 3/8" TUBING

Received
Office of Oil & Gas
OCT 31 2014

SET MONUMENT

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

Work order approved by inspector



Date

10/23/14

CK 600379
\$100.00

Received
Office of Oil & Gas
NOV 07 2014

1) Date: October 13, 2014
2) Operator's Well Number
CBM2
3) API Well No.: 47 - 015 - 02748

STATE OF WEST VIRGINIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS
NOTICE OF APPLICATION TO PLUG AND ABANDON A WELL

4) Surface Owner(s) to be served:	5) (a) Coal Operator
(a) Name <u>Allegheny Rural NMTC Forestlands, LLC</u>	Name _____
Address <u>3001 Emerson Avenue</u>	Address _____
<u>Parkersburg, WV 26104</u>	
(b) Name _____	(b) Coal Owner(s) with Declaration
Address _____	Name <u>CNX Land Resources</u>
	Address <u>1000 Consol Energy Drive</u>
	<u>Cannonsburg, PA 15317</u>
(c) Name _____	Name _____
Address _____	Address _____
6) Inspector <u>Ed Gainer</u>	(c) Coal Lessee with Declaration
Address <u>PO Box 821</u>	Name _____
<u>Spencer, WV 25276</u>	Address _____
Telephone _____	

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 Department 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 Range Resources - Pine Mountain, Inc.
 By: Ian Landon
 Its: Agent
 Address P.O. Box 2136
Abingdon, VA 24212
 Telephone (276) 628-9001

Subscribed and sworn before me this 28th day of OCTOBER 2014
Kimberley Allison Eller Notary Public
 My Commission Expires 31 May 2018 REG # 7040059

Oil and Gas Privacy Notice

The Office of Oil and Gas processes your personal information, such as name, address and phone number, as a 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.

15-02748 P

PINE MOUNTAIN OIL & GAS, INC.

PMOG CBM #2

CONDUCTOR:

30' of 9 5/8" 26 #/ft
Filled annulus
w/ cuttings 30'

FRESH WATER:

300' (GL) of 7" 17 #/ft
Cmt to surface

Coal

300'

PRODUCTION STRING:

1000' (GL) of 4 1/2" 9.5 #/ft
Cmt to surface

1000'

T.D.
1050

12 1/4" open hole

8 3/4" open hole

Coal

*Coal seams not being completed
will be protected by fresh water casing
and production casing

6 3/4" open hole

WR-35
Rev (5-01)

DATE: March 2, 2007
API # 047 - 015 - 02748C

State of West Virginia
Department of Environmental Protection
Office of Oil and Gas

FILE COPY

Well Operator's Report of Well Work

Farm Name: Paul B. Barringer II, et al Operator Well No. PMOG CBM 2

LOCATION: Elevation: 896' Quadrangle: Swandale

District: Buffalo County: Clay

Latitude: 14200 Feet South of 38 Deg. 30 Min. 00 Sec.

Longitude: 7325 Feet West of 80 Deg. 55 Min. 00 Sec.

Company: Pine Mountain Oil & Gas, Inc
Address: P.O. Box 2136
Abingdon, Virginia 24212
Agent: Tom Young
Inspector: Terry Urban
Date Permit Issued: 5/18/06
Date Well Work Commenced: 9/27/2006
Date Well Work Completed: 10/20/2006
Verbal Plugging: _____
Date Permission granted on: _____
Rotary Cable Rig _____
Total Depth (feet): 1104
Fresh Water Depth (ft.): 384
Salt Water Depth (ft.): _____
Is coal being mined in area (N/Y)? N
Coal Depths (ft.): See Log

Casing & Tubing	Used in drilling	Left in well	Cement fill up Cu. Ft.
<u>13 3/8</u>	<u>22</u>	<u>22</u>	
<u>7</u>	<u>301</u>	<u>301</u>	<u>83</u>
<u>4 1/2</u>	<u>1068</u>	<u>1068</u>	<u>100</u>
<u>2 3/8</u>		<u>1021</u>	

OPEN FLOW DATA

Producing Formation: Pennsylvanian Coals Pay zone depth 310-965 (ft)
Gas: Initial open flow: N.A MCF/d Oil: Initial open flow: _____ Bbl/d
Final open flow: _____ MCF/d Final open flow: _____ Bbl/d
Time of open flow between initial and final tests _____ Hours
Static Rock Pressure 150 Psig (surface pressure) after 72 Hours

Second Producing Formation: _____ Pay zone depth _____ (ft)
Gas: Initial open flow: _____ MCF/d Oil: Initial open flow: _____ Bbl/d
Final open flow: _____ MCF/d Final open flow: _____ Bbl/d
Time of open flow between initial and final tests _____ Hours
Static Rock Pressure _____ Psig (surface pressure) after _____ Hours

NOTE: ON THE BACK OF THIS FORM PUT THE FOLLOWING: 1) DETAILS OF PERFORATED INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC. 2) THE WELL LOG, WHICH IS A SYSTEMATIC DETAILED GEOLOGICAL RECORD OF ALL FORMATIONS, INCLUDING COAL ENCOUNTERED BY THE WELLBORE.

Signed: Christian D. Moore
By: CHRISTIAN D. MOORE
Date: 2 MAR 07

WR-35

047-015-02748C

Completion Data

	Stage 1	Stage 2	Stage 3	Stage 4	Stage 5
Date	10/20/2006	10/20/2006	10/20/2006	10/20/2006	10/20/2006
Frac Formation(s)	75Q N2 Foam Lower Sewell	75Q N2 Foam Mid Sewell X-Seam	75Q N2 Foam X-Seam	75Q N2 Foam Lower War Ck Eagle	75Q N2 Foam Little Eagle Eagle
Interval	961-965	869.5-891	605-694	531.5-536	310-438
# of Perf	12	32	16	14	33
BD Press	2800 psi	3752 psi	3300 psi	3672 psi	2079 psi
Avg Treating Press	3000 psi	2995 psi	2828 psi	2375 psi	1590 psi
Max Treating Press	4286 psi	3752 psi	3716 psi	3689 psi	2079 psi
Avg Rate (dh)	24.5 m	29.3 m	24.9 m	33 m	34.9 m
ISIP	psi	1859 psi	2860 psi	1177 psi	psi
5 min SIP	psi	1586 psi	1186 psi	879 psi	psi
Total Acid	50/15%HCl gal	250/15%HCl gal	500/15%HCl gal	250/15%HCl gal	250/15%HCl gal
Total N2	170,500 scf	413,000 scf	254,000 scf	246,000 scf	312 scf
Total H2O	82 bbl	175 bbl	133 bbl	129 bbl	200 bbl
Total Sand	83 sx	333 sx	120 sx	163 sx	268 sx

Geologic Data

Formation	Top (ft)	Bottom (ft)	Formation	Top (ft)	Bottom (ft)
Overburden	0	23	Sand and Shale	1020	1050
Sand and Shale	23	310	Sand	1050	1110
Coal	310	312			
Sand and Shale	312	395			
Coal	395	396.5			
Sand and Shale	396.5	412			
Coal	412	413			
Sand and Shale	413	438			
Coal	438	439.5			
Sand and Shale	439.5	532			
Coal	532	535			
Sand and Shale	535	604			
Coal	604	605			
Sand and Shale	605	666			
Coal	666	667			
Sand and Shale	667	694			
Coal	694	695			
Sand and Shale	695	870			
Coal	870	874			
Sand and Shale	874	888			
Coal	888	890.5			
Sand and Shale	890.5	962			
Coal	962	964			
Sand and Shale	964	990			
Sand	990	1020			

12/12/14

WW-4A
Revised 6-07

1) Date: October 13, 2014
2) Operator's Well Number
CBM 2

3) API Well No.: 47 - 015 - 02748

STATE OF WEST VIRGINIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS
NOTICE OF APPLICATION TO PLUG AND ABANDON A WELL

4) Surface Owner(s) to be served:	5) (a) Coal Operator
(a) Name <u>Allegheny Rural NMTC Forestlands, LLC</u>	Name _____
Address <u>3001 Emerson Avenue</u>	Address _____
<u>Parkersburg, WV 26104</u>	
(b) Name _____	(b) Coal Owner(s) with Declaration
Address _____	Name <u>CNX Land Resources</u>
	Address <u>1000 Consol Energy Drive</u>
	<u>Cannonsburg, PA 15317</u>
(c) Name _____	Name _____
Address _____	Address _____
6) Inspector <u>Ed Gainer</u>	(c) Coal Lessee with Declaration
Address <u>PO Box 821</u>	Name _____
<u>Spencer, WV 25276</u>	Address _____
Telephone _____	

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Well Operator	<u>Range Resources - Pine Mountain, Inc.</u>	Received Office of Oil & Gas OCT 31 2014
By:	<u>Ian Landon</u>	
Its:	<u>Agent</u>	
Address	<u>P.O. Box 2136</u>	
Telephone	<u>Abingdon, VA 24212</u> <u>(276) 628-9001</u>	

Subscribed and sworn before me this 28th day of OCTOBER 2014
Kimberley Allison Eller Notary Public
 My Commission Expires 31 May 2018 REG # 7040059

Oil and Gas Privacy Notice

The Office of Oil and Gas processes your personal information, such as name, address and phone number, as a 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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Total Postage & Fees	\$

Sent to: Allegheny Rural NMTC Forestlands, LLC
 Street, Apt. 1 or PO Box #: 3001 Emerson Avenue
 City, State, ZIP: Parkersburg, WV 26104

PS Form 38

ABINGDON, WV 26009
 OCT 29 2014
 Postmark Here

WV 2014

The following information was included in the certified mailing to Allegheny Rural NMTC Forestlands:

- Well Nos. ERC&L 8129
- ERC&L 7977
- ERC&L 8130
- ERC&L 7976
- PMOG 32
- PMOG 23A
- CBM 7
- CBM 2

Received
 Office of Oil & Gas
 OCT 31 2014

- Notice of Application to Plug and Abandon a Well (WW-4A)
- Application for a Permit to Plug and Abandon (WW-4B)
- Construction and Reclamation Plan and Site Registration Application Form General Permit for Oil and Gas Pit Waste Discharge (WW-9)
- Legend (WW-9)
- Surface Owner Waiver
- WVDEP Office of Oil and Gas Well Location Form: GPS (WW-7)
- Location Map

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Priorized Delivery Fee (Endorsement Required)	
Total Postage & Fees	\$

APR 22 2014
 OCT 29 2014
 VA 22210

Sent to:
 Street, Apt. or PO Box:
 City, State:
 PS Form 3841

CNX Land Resources
1000 Consol Energy Drive
Cannonsburg, PA 15317

WV 2014

The following information was included in the certified mailing to CNX Land Resources:

Well Nos. ERC&L 8129
 ERC&L 7977
 ERC&L 8130
 ERC&L 7976
 PMOG 32
 PMOG 23A
 CBM 7
 CBM 2

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 OCT 31 2014

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- Legend (WW-9)
- Coal Operators Owners and Lessee Waiver (WW-4B)
- WVDEP Office of Oil and Gas Well Location Form: GPS (WW-7)
- Location Map
- Well Record/Well Report

1502748P

WW-9
Rev. 5/08

Page _____ of _____
API Number 47 - 015 - 02748
Operator's Well No. CBM 2

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

CONSTRUCTION AND RECLAMATION PLAN AND SITE REGISTRATION APPLICATION FORM
GENERAL PERMIT FOR OIL AND GAS PIT WASTE DISCHARGE

Operator Name Range Resources - Pine Mountain, Inc. OP Code 307499

Watershed Buffalo Creek Quadrangle Swandale 7.5'

Elevation 901' County Clay District Buffalo

Description of anticipated Pit Waste: Fluids encountered while plugging subject well

Will a synthetic liner be used in the pit? Yes Zonal

Proposed Disposal Method For Treated Pit Wastes:

- Land Application
- Underground Injection (UIC Permit Number _____)
- Reuse (at API Number _____)
- Off Site Disposal (Supply form WW-9 for disposal location)
- Other (Explain _____)

Proposed Work For Which Pit Will Be Used:

- Drilling
- Workover
- Other (Explain _____)
- Swabbing
- Plugging

Received
Office of Oil & Gas
OCT 31 2014

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 *Ian Landon*

Company Official (Typed Name) Ian Landon

Company Official Title Agent

Subscribed and sworn before me this 28th day of OCTOBER, 2014

Kimberley Allison Eller

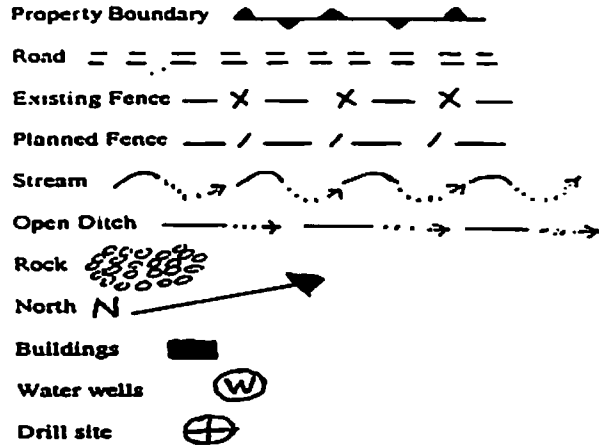
Notary Public
REG # 7040059

My commission expires 31 May 2018

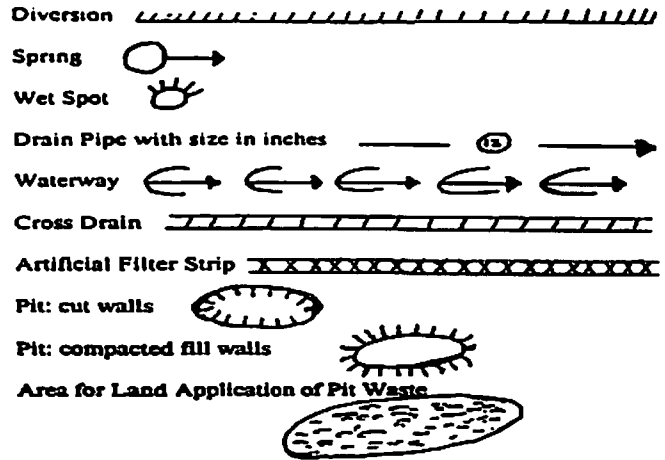


Form WW-9

Operator's Well No. CBM 2



LEGEND



Proposed Revegetation Treatment: Acres Disturbed .5 acres Prevegetation pH _____

Lime 2 Tons/acre or to correct to pH 6.5

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

Mulch Straw 2 Tons/acre

Seed Mixtures

Area I		Area II	
Seed Type	lbs/acre	Seed Type	lbs/acre
Tall Fescue	40	Tall Fescue	40
Ladino Clover	5	Ladino Clover	5

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

Photocopied section of involved 7.5' topographic sheet.

Received
Office of Oil & Gas

OCT 31 2014

Plan Approved by:

Comments: _____

Title: Inspector Date: 10/2/14

Field Reviewed? Yes No

Topo Quad: Swandale 7.5'

Scale: 1" = 2000'

County: Clay

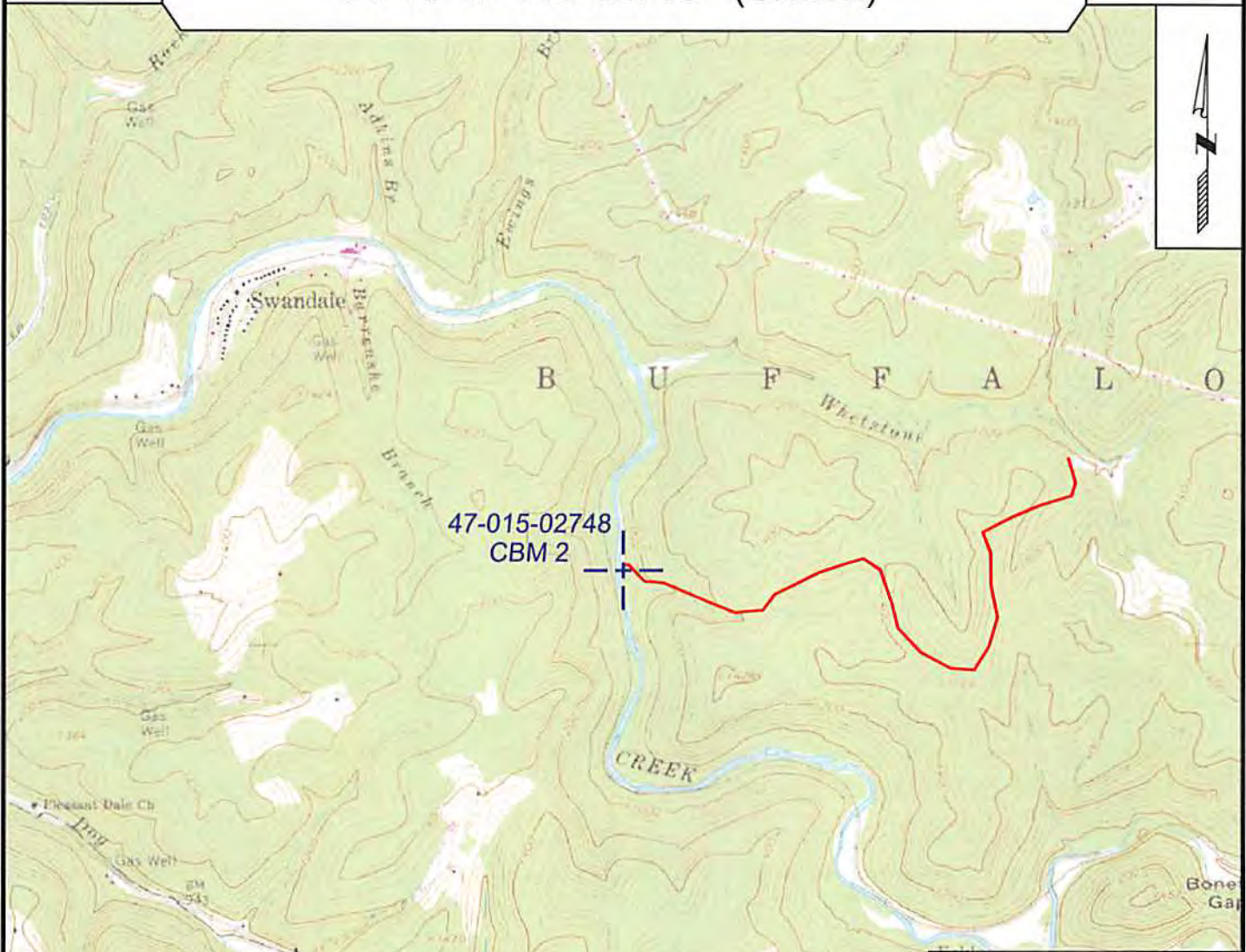
Date: June 26, 2014

District: Buffalo

Project No: 170-04-B-14

API # 47-015-02748 (CBM 2)

Topo



Received
Office of Oil & Gas
OCT 31 2014

NAD 27, WV South Zone

N: 531,973.75
E: 2,016,509.99
ELEV: 900.99

WGS 84
LAT: 38.461032
LONG: -80.942167



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:
Range Resources - Pine Mountain, Inc.

406 West Main Street
Abingdon, VA 24210

