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: 47-1500482, 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 penalities 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: 8130
Farm Name: ELK RIVER COAL
API Well Number: 47-1500482
Permit Type: Plugging
Date Issued: 12/08/2014

Promoting a healthy environment.

1500482P

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.

1500482P

WW-4B
Rev. 2/01

1) Date October 15, 2014
2) Operator's
Well No. ERC&L 8130
3) API Well No. 47- 015 - 00482

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 1070' Watershed Buffalo Creek
District Buffalo County Clay Quadrangle Swandale 7.5'

6) Well Operator Range Resource - Pine Mountain Inc.
Address P.O. Box 2136
Abingdon, VA 24212

7) Designated Agent Geary Legg
Address 158 Big Sandy Road
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 - 1524' ✓
13" 21
10" 173 50 sks, CTS
8 1/4" 1039
6 5/8" 1503
3 1/2" 1524

6% gel between cement plugs

RUN GEL TO BOTTOM. ENOUGH TO COVER 1ST PLUG.
Release packer & POH w/ 3" or free point & cut
(6 5/8") Release packer & POH w/ 5/8" or free point & cut
Plug No. 1 ~~1500-1400~~ 1500'-1400'
Plug No. 2 1300-~~1400~~ 1150'
Free point, cut & pull 8 1/4" casing, est 500
Plug No. 3 500-400
Plug No. 4 300-0

SET MONUMENT.

Received
Office of Oil & Gas
OCT 31 2014

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

1500482P

OG-10

STATE OF WEST VIRGINIA
DEPARTMENT OF MINES
OIL AND GAS DIVISION

WELL RECORD

Permit No. CLA-482 — Oil or Gas Well "GAS" (KIND)

Company Pittsburgh & West Va Gas Company.
Address Clarksburg, West Va.
Farm Elk River Coal & Lumber Co. Acres 77,198
Location (waters) Summersville N/W. 2-4
Well No. 8130 Elev. 1067' L
District Buffalo County Clay
The surface of tract is owned in fee by Elk River C.&.L.Co.
Dundon, Clay County. Address West Va.
Mineral rights are owned by Elk River Coal & L. Co.
Dundon, Clay County. Address West Va.
Drilling commenced October 4th, 1947
Drilling completed November 27th, 1947
Date Shot From To
With

Open Flow 11 /10ths Water in Inch
/10ths Merc. in 3" Inch
Volume 1,169,000 Cu. Ft.
Rock Pressure 737 lbs. 48 hrs.
Oil bbls., 1st 24 hrs.
Fresh water feet feet
Salt water feet feet

Casing and Tubing	Used in Drilling	Left in Well	Packers
Size			
16			Kind of Packer
13	21'	21'	Anchor
10	173'	173'	Size of 8-1/4" X
8¼	1039'	1039'	6-5/8"
6⅝	1503'	1503'	Depth set 1474'
5 3/16			1-6-5/8" Shoe.
3			Perf. top
2			Perf. bottom
Liners Used			Perf. top
			Perf. bottom

CASING CEMENTED 10 SIZE 173 No. Ft. 10-12-47 Date
50 Bags Cement - Cemented from 173' to surface.

COAL WAS ENCOUNTERED AT 60 FEET 60 INCHES
265 FEET 60 INCHES 457 FEET 36 INCHES
FEET INCHES FEET INCHES

Formation	Color	Hard or Soft	Top	Bottom	Oil, Gas or Water	Depth Found	Remarks
Gravel	Brown		0	18			
Slate	Dark	Soft	18	24			
Sand	White	Hard	24	60	Water	30'	Hole full.
Coal	Black	Soft	60	65			
Lime	Dark	Hard	65	70			
Sand	White	"	70	102			
Lime	Broken	Dark	102	135			
Slate	Dark	Soft	135	177			
Lime	"	Hard	177	246	Water	188'	6 Blr. Hr.
Sand	White	Hard	246	265			
Coal	Black	Soft	265	270			
Sand	White	Hard	270	285			
Slate	Dark	Soft	285	345			
Gritty Lime	White	Hard	345	382			
Sand	"	Hard	382	450			
Slate	Black	Soft	450	457			
Coal	Black	Soft	457	460			
Lime	White	Hard	460	565	Sh. Gas	535-542'	
Sand	"	Hard	565	600			
Lime	"	Hard	600	660			
Slate	Dark	Soft	660	705			
1st.Salt Sand	White	Hard	705	774			
Lime	Dark	Broken	774	890			
Gritty Lime	Black	Hard	890	915			
Slate&Shells	Dark	Hard&Soft	915	940			
Gritty Lime	"	Hard	940	954			
Rosedale Gas Sd.	White	"	954	1044			
Lime	Dark	Hard	1044	1129			
Gritty Lime	"	"	1129	1180			
Rosedale Salt Sd.	Wh.	"	1180	1286	Sh. Oil	1189'	
Red Rock	Red	Soft	1286	1290	Gas	1220'	10/10 W 1"
Lime	Dark	Broken	1290	1335	Gas & Oil	1228-1236'	
Sand	White	Hard	1335	1385	Water	1245'	Hole full.
Lime	Dark	Hard	1385	1393			
Red Rock	Red	Soft	1393	1394			
Lime	Light	Hard	1394	1406			
Maxon Sand	White	Hard	1406	1467			
Little Lime	Dark	Hard	1467	1492			
Slate	"	Soft	1492	1496			

(Over)

1500482P

Formation	Color	Hard or Soft	Top	Bottom	Oil, Gas or Water	Depth Found	Remarks
Blue Monday Sand	White	Hard	1496		Gas	1512-1524'	70/10 Mer. 3" Opng.
Total Depth.....				1524'			

December 10th, 1947

Date_____, 19____

APPROVED PITTSBURGH & WEST VA GAS COMPANY., Owner

By W. McMasters

(Title)

Elk River Coal & Lumber # 8130
API # 47-015-00482

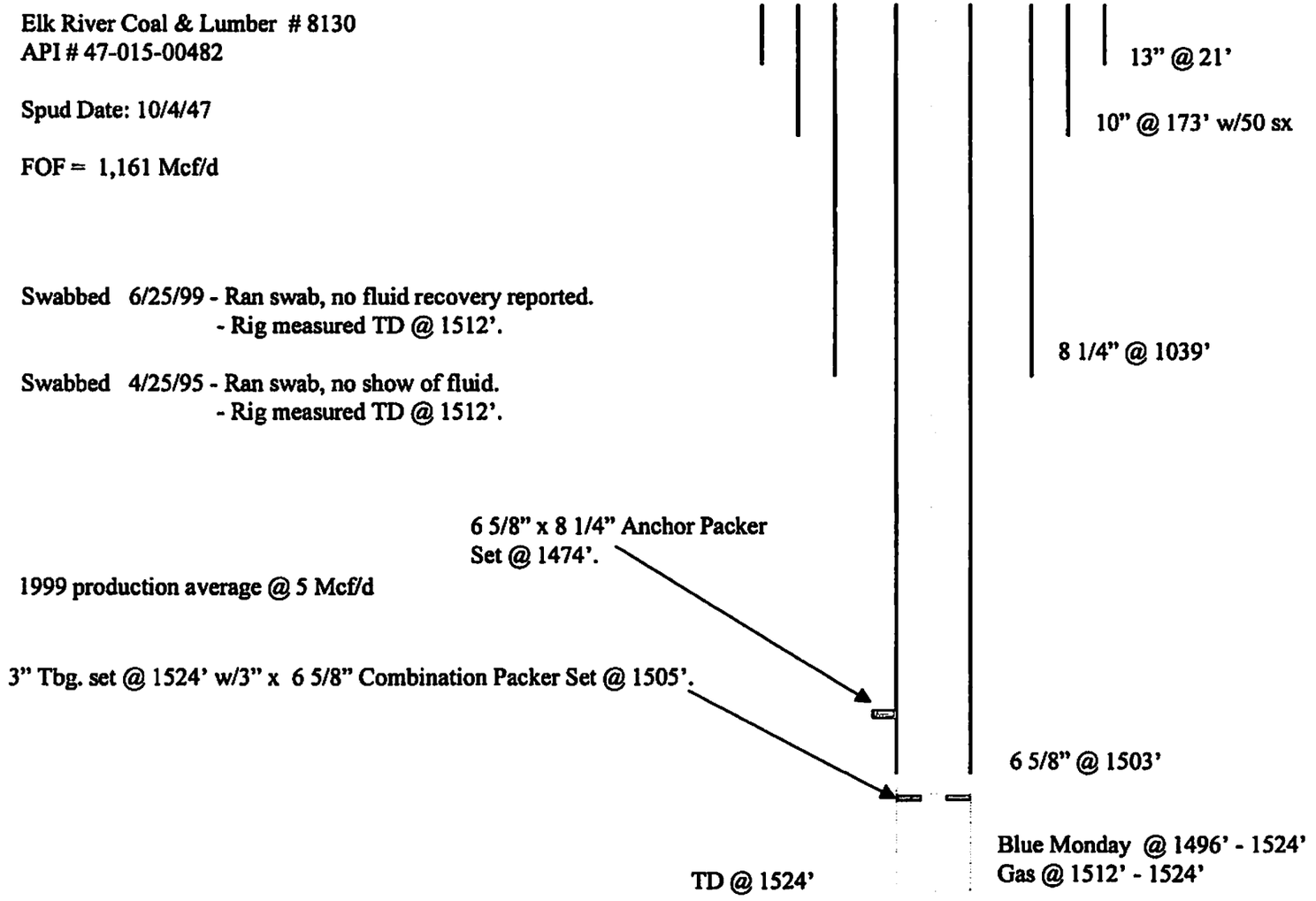
Spud Date: 10/4/47

FOF = 1,161 Mcf/d

Swabbed 6/25/99 - Ran swab, no fluid recovery reported.
- Rig measured TD @ 1512'.

Swabbed 4/25/95 - Ran swab, no show of fluid.
- Rig measured TD @ 1512'.

1999 production average @ 5 Mcf/d



RDL. - 7/18/00

1500482P

1500482P

WW-4A
Revised 6-07

Received
Office of Oil & Gas
NOV 07 2014

CK 600379 $100.00

1) Date: October 13, 2014
2) Operator's Well Number
ERC&L 8130
3) API Well No.: 47 - 015 - 00482

STATE OF WEST VIRGINIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS
NOTICE 0F APPLICATION TO PLUG AND ABANDON A WELL

4) Surface Owner(s) to be served:
(a) Name: Allegheny Rural NMTC Forestlands, LLC
Address: 3001 Emerson Avenue
Parkersburg, WV 26104
(b) Name:
Address:
(c) Name:
Address:

6) Inspector: Ed Gainer
Address: PO Box 821
Spencer, WV 25276
Telephone:

5) (a) Coal Operator
Name:
Address:

(b) Coal Owner(s) with Declaration
Name: CNX Land Resources
Address: 1000 Consol Energy Drive
Cannonsburg, PA 15317
Name:
Address:

(c) Coal Lessee with Declaration
Name:
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 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.

KIMBERLEY ALLISON ELLER
NOTARY PUBLIC
REG. #7040059
MY COMMISSION EXPIRES
31 MAY 2018
COMMONWEALTH OF VIRGINIA

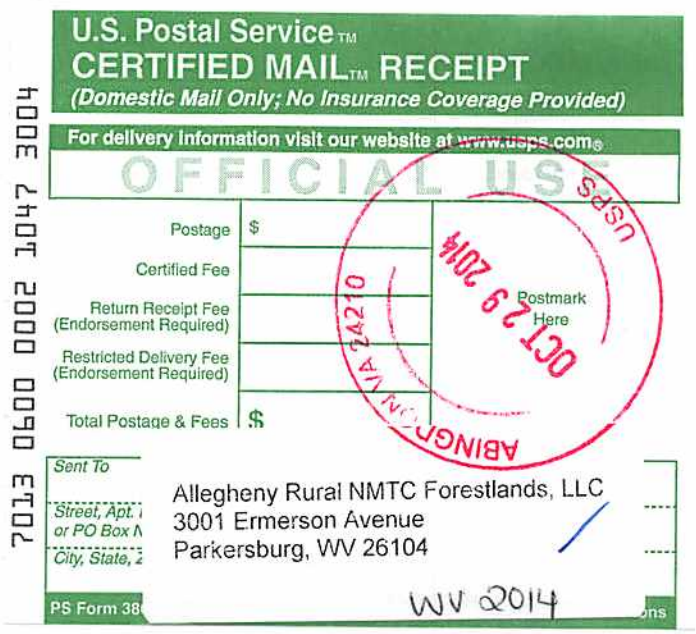
Well Operator: Range Resources - Pine Mountain, Inc.
By: Ian Landon
Its: Agent
Address: P.O. Box 2136
Abingdon, VA 24212
Telephone: (276) 628-9001

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

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 deprivacyoffier@wv.gov.

1500482P



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

1500482P

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

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)
-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

1500482P

WW-9
Rev. 5/08

Page _____ of _____
API Number 47 - 015 - 00482
Operator's Well No. ERC&L 8130

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 1070' 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 20 ML.

Proposed Disposal Method For Treated Pit Wastes:

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

Received
Office of Oil & Gas
OCT 31 2014

Proposed Work For Which Pit Will Be Used:

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

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 Notory Public

My commission expires 31 MAY 2018 REG # 7040059

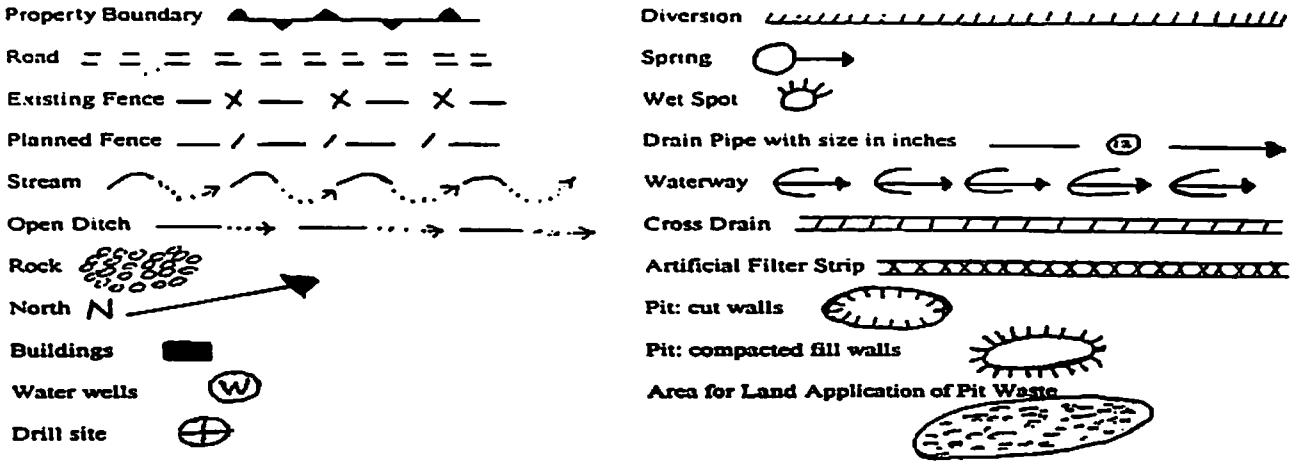
KIMBERLEY ALLISON ELLER
NOTARY PUBLIC
REG. #7040059
MY COMMISSION EXPIRES
31 MAY 2018
COMMONWEALTH OF VIRGINIA

1500482P

Form WW-9

Operator's Well No. ERC&L 8130

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

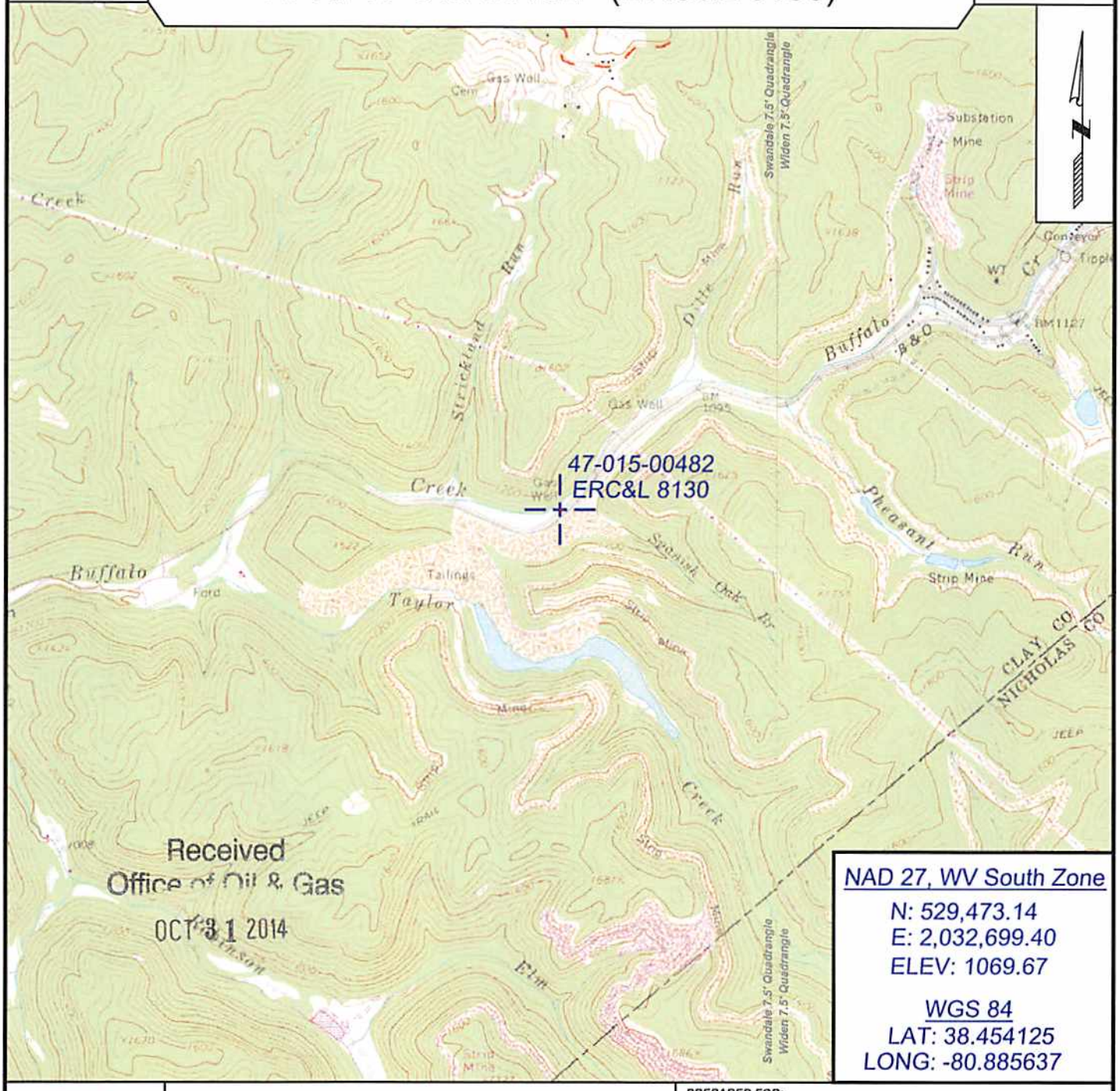
Field Reviewed? (_____) Yes (X) No

1500482P

Topo Quad:	Swandale 7.5'	Scale:	1 " = 2000'
County:	Clay	Date:	June 26, 2014
District:	Buffalo	Project No:	170-04-B-14

API # 47-015-00482 (ERC&L 8130)

Topo



NAD 27, WV South Zone
N: 529,473.14
E: 2,032,699.40
ELEV: 1069.67

WGS 84
LAT: 38.454125
LONG: -80.885637

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

1500482P

WW-7
8-30-06

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

API: 47-015-00482 **WELL NO.:** ERC&L 8130

FARM NAME: Elk River Coal

RESPONSIBLE PARTY NAME: Range Resources – Pine Mountain, Inc.

COUNTY: Clay **DISTRICT:** Buffalo

QUADRANGLE: Swandale 7.5' 629

SURFACE OWNER: Allegheny Rural NMTC Forestlands, LLC

ROYALTY OWNER: Range Resources-Pine Mountain, Inc.

UTM GPS NORTHING: 4256209

UTM GPS EASTING: 509979 **GPS ELEVATION:** 326 m (1070 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.

Received
Office of Oil & Gas
OCT 31 2014

Signature	Title	Date
	PS # 2180	7/16/14