

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: 47-1502753, 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: CBM 7

Farm Name: BARRINGER, PAUL B. II

API Well Number: 47-1502753

Permit Type: Plugging
Date Issued: 12/08/2014

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.

WW-4B Rev. 2/01

1) Date October 15	, 2014
2) Operator's Well No. CBM7	
3) API Well No.	47-015 - 07753

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

5)	Location: Ele	evation 912.05'	Watershed Whetstone Creek		
		strict Buffalo		Quadrangle Swandale7.5'	
6)	Well Operator	Range Resource - Pine Mountain Inc.	7) Designated Ag	gent Geary Legg	
		P.O. Box 2136	Addr	ress 158 Big Sandy Road	
		Abingdon, VA 24212		Newton, WV 25266	
8)	Oil and Gas In	nspector to be notified wer		ractor be determined upon permit approval	
	Address P.O	. Box 821	Address		
	Spe	ncer, WV 25276	_		
Cas 13 7" 3 4 1/	Work Order: !sing: TD - 1104' 3/8" 12 305 143 sks CTS 1/2" 1064 304 sks	CTS Plug No		this well is as follows:	
Cas 13 7" 3 4 1/ 2 3/ 6%	sing: TD - 1104' 3/8" 12 305 143 sks CTS 12" 1064 304 sks 18" 1021 gel between cempipe recovery - all	Plug No CTS Plug No Plug No	1 1000-900 0. 2 710-270 0. 3 100-0	TD -900 (1104') 73/8" TUBNG	
Cas 13 7" 3 4 1/ 2 3/ 6% No	sing: TD - 1104' 3/8" 12 305 143 sks CTS /2" 1064 304 sks /8" 1021 gel between cem	Plug No CTS Plug No Plug No Plug No ent plugs casing cemented to surface	1 1000-900 0. 2 710-270 0. 3 100-0	TD -900 (1164) -900 HOUR 278" TUBING F PLUG I FROM TD (110	
Cas 13 7" 3 4 1/ 2 3/ 6% No	sing: TD - 1104' 3/8" 12 305 143 sks CTS 2" 1064 304 sks 8" 1021 gel between cempipe recovery - all	Plug No CTS Plug No Plug No Plug No ent plugs casing cemented to surface	1 1000-900 0. 2 710-270 0. 3 100-0	TD -900 (1104') 73/8" TUBNG	
Cas 13 7" 3 4 1/ 2 3/ 6% No	sing: TD - 1104' 3/8" 12 305 143 sks CTS 2" 1064 304 sks 8" 1021 gel between cempipe recovery - all Received ffice of Oil & C	Plug No CTS Plug No Plug No Plug No ent plugs casing cemented to surface	1. 1 1000-900 0. 2 710-270 0. 3 100-0 Rev	TD -900 (1164) -900 HOUR 27/8" TUBING F PLUG I FROM TD (110	

WR-35 Rev (5-01)

FILE COPY

API # 047 - 015 - 02753C

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

	Well Operato	r's Report of	f Well Work			
Farm Name:	Paul B. Barringer II, et al		Operator Well No	PMOC	G CBM 7	_,
LOCATION: Elevation:	921'		Quadrangle:	Swand	ale	
District:	Buffalo		County:	Clay		_
			30 Min. 00			
Longitude:	6500 Feet West of 8	O Deg.	55 Min. 00	Sec.		
Company: Pine Mou	ntain Oil & Gas, Inc	Casing of Tubing		Left in well	Cement fill up Cu. Ft.	
Address: P.O. Box		13 3/4	12	12		
	, Virginia 24212	7	305	305	143	
Agent: Tom You		4 1/2	1064	1064	204	3
Inspector: Terry Url		2 3/4		1021		
Date Permit Issued:	5/26/2006					
Date Well Work Comm						
Date Well Work Comple						7
		-				
Verbal Plugging: Date Permission grantee	dawi	-				
			-		-	
Rotary X Cable		-		-		-
Total Depth (feet):	1104		_			-
Fresh Water Depth (ft.)	: 14,34	-				-
			-	-		-
Salt Water Depth (ft.):					-	-
		-				-
Is coal being mined in a				_		-
Coal Depths (ft.): S	EE LOG			1-		
OPEN FLOW DATA						
Producing Formati	ion: Pennsylvania	n Coals	Pay zone dep	th 319-981.5	(ft)	
Cont. 1000 Telephone			ial open flow:	Bbl/d	_ , , ,	
Gas: Initial open				— Bbl/d		
Final open			al open flow:			
Time of o	pen flow between initial:			ours		
Static Rock Pres	sure 155 Psig (sur	face pressu	re) after 72	Hours		
						Received
Second Producing	Formation:		Pay zone dep	th (f	t) ()1	ffice of Oil & Ga:
Gas: Initial open		Oil: Initi	ial open flow:	Bbl/d		noo or on a da
Final open			al open flow:	Bbl/d		OCT 3 1 2014
				ours		2 2011
	pen flow between initial					
Static Rock Pres	sure Psig (sur	face pressu	re) after	Hours		
PERFORATED ETC. 2) THE	THE BACK OF THIS FOR INTERVALS, FRACTURE WELL LOG, WHICH IS A LATIONS, INCLUDING COLUMN COLUM	RING OR SYSTEMA	STIMULATING, TIC DETAILED	PHYSICAL CI GEOLOGICAL R	HANGE, ECORD	
By:	CHRISTIAN D.	Moo	RE			
Date:	Z MAR C	77		-		
	- TOTAL			_		

047-015-02753C WR-35

Completion	Stage 1		Stage 2		Stage 3		Stage 4	
Date	10/3/2006		10/3/2006		10/3/2006		10/3/2006	.8 ≥ 3.
Frac	75Q N2 Foam		75Q N2 Foam		75Q N2 Foam		75Q N2 Foam #2 Gas	
Formation(s)	Lower Sewell		X Seam		Eagle Lower Eagle		#2 Gas	
1-4	077 5 004 5		407 E 660		389.5-434.0		319-323	
Interval # of Perf	977.5-981.5 11		497.5-668 11		369.5-434.0 11		313-323	
# Of Pett	11		••		• •			
BD Press	3865	psi	1163	psi	1041	psi	1560	psi
Avg Treating Press	2780	psi	2427	psi	1743	psi	2550	psi
	2700	hai	2421	Pai	1145	hai	2000	Po.
Max Treating Press	4000	psi	2592	psi	2533	psi	3045	psi
7,555	,,,,,	bp		bp		bр		bp
Avg Rate (dh)		m	8.8	m		m		m
ISIP	3610	psi	838	psi	920	psi	1083	psi
5 min SIP	3068	psi	673	psi	762	psi	812	psi
Total Acid	0	gal	500 FE	gal	500 FE	gal	0	gai

377,920 scf

204.5 bbl

238.1 sx

WELL LOG

Total N2

Total H2O

Total Sand

Formation	Top (ft)	Bottom (ft)
Overburden	0	15
Sand and Shale	15	320
Coal	320	322
Sand and Shale	322	393.5
Coal	393.5	395
Sand and Shale	395	409
Coal	409	409.5
Sand and Shale	409.5	434
Coal	434	435.5
Sand and Shale	435.5	500.5
Coal	500.5	501.5
Sand and Shale	501.5	520
Coal	520	522
Sand and Shale	522	610.5
Coal	610.5	611
Sand and Shale	611	668
Coal	668	668.5
Sand and Shale	668.5	900
Sand	900	930
Sand and Shale	930	981
Coal	981	983
Sand and Shale	983	990
Sand	980	1020
Sand and Shale	1020	1050
Sand	1050	1080
Sand and Shale	1080	1100

143,117 scf

123.77 bbl

28.4 sx

Received Office of Oil & Gas OCT 3 1 2014

185,000 scf

116 **bbi**

122 sx

272,000 scf

374 bbl

205 sx

WW-4A
Revised 6-07
CK 600379

Received 1) I Office of Oil & Gascburg

1) Date: October 13, 2014

2) Operator's Well Number

NOV 07 2014

3) API Well No.: 47 -

15 - 0275

STATE OF WEST VIRGINIA

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

El (a) Caal Onountan

(a) Name	ner(s) to be served: Allegheny Rural NMTC Forestlands, LLC	Name		
Address	3001 Emerson Avenue	Address	-	
	Parkersburg, WV 26104			
(b) Name		(b) Coal Ow	ner(s) with Declaration	A STATE OF THE STA
Address		Name	CNX Land Resources	
		Address	1000 Consol Energy Drive	/
			Cannonsburg, PA 15317	
(c) Name		Name		
Address		Address		-
6) Inspector	Ed Gamer	(e) Coal Les	see with Declaration	
Address	PO Box 821	Name		
	Spencer, WV 25276	Address		
Telephone				
mo mun pp	POONG NAMED ABOVE			THE VALUE OF THE STATE OF THE S
TO THE PE	RSONS NAMED ABOVI	L: You should have rece	ived this Form and the follow	ing documents:
			and the second second second second	
	application to Plug and Abandon a Wo its and the plugging work order; and	ell on Form WW-4B, which	sets out the parties involved in t	he work and describes 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 Mountáin, Inc.
By:	Ian Landon Tan Landon
Its:	Agent
Address	P.O. Box 2136
	Abingdon, VA 24212
Telephone	(276) 628-9001
(1)	0
this 28 da	ay of UCTOBER 2014 Notary Public
	By: Its: Address Telephone

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 depprivacyoffier@wv.gov.



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

Received Office of Oil & Gas

OCT 3 1 2014

- -Notice of Application to Plug and Abandon a Well (WW-4A)
- -Application for a Permit to Plug and Abandon (WW-4B)

CBM 2

- -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



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 3 1 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

WW-9 Rev. 5/08

Pa	ige	of	
API Number 47 - 01	5 .	02753	
Operator's Well No.	CBM 7		_

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

CONSTRUCTION AND RECLAMATION PLAN AND SITE REGISTRATION APPLICATION FORM

Operator Name , tongo ite	sources - Pine Mounta	in, Inc.	Code 307499	
Watershed Whetstone Cre	ek	Quadrangle Swan		
Elevation 912.05	County Clay		District Buffalo	_
Description of anticipated Pit		tered while plugging s		
Will a synthetic liner be used	in the pit? Yes 20 4			
Proposed Disposal Method Fo	or Treated Pit Wastes:			
	nd Application	1 14 2 Company		
Un	derground Injection (UIC P	ermit Number)
	use (at API Number	Dini A A . II)
	f Site Dispposal (Supply for: her (Explain	n WW-9 for disposal location	n)	
			Rec	eived
Proposed Work For Which Pi		5 1.72	Office	Cived
	illing	Swabbing	Office of	Oil & Gas
	orkover ner (Explain	X Plugging		1 2014
provisions of the permit are e aw or regulation can lead to e I certify under penal application form and all atta	ince of Oil and Gas of the West inforceable by law. Violation inforcement action. Ity of law that I have person inchments thereto and that.	st Virginia Department of En ns of any term or condition of nally examined and am fam pased on my inquiry of the	RAL WATER POLLUTION PER avironmental Protection. I underst of the general permit and/or othe miliar with the information submi- pose individuals immediately respondence. I am aware that there are	and that the r applicable tted on this
enalties for submitting false i company Official Signature	information, including the po	ssibility of fine or imprisonm	ient.	Significant
	lon Loudes			_
	me) ran Landon			
Company Official (Typed Na	gent			=
Company Official (Typed Na Company Official Title Subscribed and sworn before to	gent	COOBER	Notory Public 24 7040059	BERLEY ALLISON PUBLIC Y COMMISSION PUBLIC EXPIRES

L	ECEND	
Property Boundary	Diversion Linear	· · · · · · · · · · · · · · · · · · ·
Road = = = = = = = = = = = = = = = = = = =	Spring —	
Existing Fence — X — X — X —	Wet Spot	
Planned Fence / / /	Drain Pipe with size in inches	— ⑥ —→
Stream Stream	Waterway \longleftrightarrow	$\rightarrow \iff \iff$
Open Ditch	Cross Drain	
Rock ESSE	Artificial Filter Strip XXXXX	
North N	Pit: cut walls	
Buildings	Pit: compacted fill walls	
Water wells W	Area for Land Application of Pit	Waste
Drill site	<u> </u>	
Proposed Revegetation Treatment: Acres Disturbed 0.5 ACI Lime 2 Tons/acre or to correct to pH Fertilizer (10-20-20 or equivalent) 500 lbs/a Mulch Straw 2 Tons/acre	6.5 acre (500 lbs minimum)	
Seed	Mixtures	
Area I	Area I	1
Seed Type Ibs/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 appli	cation.	Received
		Office of Oil & Gas
Photocopied section of involved 7.5' topographic sheet.		OCT 3 1 2014
Plan Approved by: Comments:		
Title: Inspector	Date: 10/2/14	

Abingdon, VA 24210

Swandale 7.5' Topo Quad: Scale: 1 " = 2000' Clay County: Date: June 26, 2014 Buffalo Project No: 170-04-B-14 District: Торо API # 47-015-02753 (CBM 7) 47-015-02753 CBM 7 B NAD 27, WV South Zone Received Office of Oil & Gas N: 534,592.14 E: 2,017,315.36 OCT 3 1 2014 ELEV: 912.05 WGS 84 LAT: 38.468220 Eakle LONG: -80.939348 PREPARED FOR: SURVEYING AND MAPPING SERVICES PERFORMED BY: ALLEGHENY SURVEYS, INC. Range Resources - Pine Mountain, Inc. 1-800-482-8606 237 Birch River Road Birch River, WV 26610 PH: (304) 649-8606 FAX: (304) 649-8608 406 West Main Street

WW-7 8-30-06



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

API: 47-015-02753 WELL NO.: CBM 7	
FARM NAME: Paul B. Barringer II	
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: 4257769	
UTM GPS EASTING: 505291 . GPS ELEVATION: 278 m (912 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: Received height above mean sea level (MSL) – meters. 2. Accuracy to Datum – 3.05 meters	ac
3. Data Collection Method: OCT 3 1 2014 Survey grade GPS: Post Processed Differential	as
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.	
Stay O Bron P5 # 2/80 7/14/14 Signature Title Date	