

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

October 08, 2014

WELL WORK PLUGGING PERMIT

Plugging

This permit, API Well Number: 47-4301912, issued to CHESAPEAKE APPALACHIA, L.L.C., 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.

Chief

James Martin

Operator's Well No: 6089

Farm Name: JOHNSON, MARINE

API Well Number: 47-4301912

Permit Type: Plugging
Date Issued: 10/08/2014

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. <u>Failure to adhere to the specified permit conditions may result in enforcement action.</u>

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.
- 4. This well is under a consent order and must be plugged under the terms of that agreement.

4301912 P.

FORM WW-4 (B) Observe File Copy (Rev. 2/01) 1) Date: 8/28/2014
2) Operator's Well No. 806089 P&A
3) API Well No. 47-043-01912

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

APPLICATION FOR A PERMIT TO PLUG AND ABANDON Well Type: Oil Gas Liquid injection Waste disposal (Is Gas. Production X or Underground storage Shallow 5) Location: Elevation 763' Mud River District Carroll County Hager, WV 7.5' Lincoln Quadrangle Chesapeake Appalachia, L.L.C. 6) Well Operator Eric B. Gillespie 7) Designated Agent P.O. Box 18496 Address Address P.O. Box 6070 Oklahoma City, OK 73154-0496 Charleston, WV 25362 8) Oil and Gas Inspector to be notified 9) Plugging Contractor Ralph Triplett Name Chesapeake Appalachia, L.L.C. 5539 McClellan Highway P.O. Box 18496 Address Branchland, WV 25506 Oklahoma City, OK 73154-0496

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

See Attached Sheet

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

Work Order approved by Inspector

Raepa D. Triplate

Date 09/11/14

10/10/2014

V/V Department of Environmental Protection

806089 P&A Procedure

- 1) Prepare road and location, MIRU service rig
- 2) Attempt to pull 3 1/2" and packer
 - A) If successful
 - a) Run W.S. to 2050', load hole with gel
 - b) Spot 150' cement plug 2050'-1900', pull W.S.
 - c) Proceed to step #3
 - B) If unsuccessful
 - a) RIH with tools to check TD at approximately 2090'
 - b) RIH with W.S. to 2070', load hole with gel
 - c) Spot 100' cement plug 2070'-1970, pull W.S.
 - d) Cut 3 1/2" at free-point (approximately 1860') pull W.S.
 - e) Run W.S. to cut, load hole with gel
 - f) Spot 100' cement plug approximately 1860'-1760', pull W.S.
 - g) Proceed to step #3
- 3) Attempt to pull 5 1/2" and packer
 - A) If successful
 - a) Run W.S. to 1750', load hole with gel, pull W.S. to 1560'
 - b) Spot 100' cement plug 1560'-1460', pull W.S.
 - c) Proceed to step #4
 - B) If unsuccessful
 - a) Run W.S. to 1820' or top of cement if shallower
 - b) Spot 100' cement plug 1820'-1720', pull W.S.
 - c) Cut 5 1/2" at free-point (approximately 1580') and pull
 - d) Run W.S. to 5 1/2" cut, load hole with gel
 - e) Spot 100' cement plug approximately 1580'-1480', pull W.S.
 - f) Proceed to step #4

ROT

10/10/2014

806089 P&A Procedure

Page Two

- 4) Attempt to pull 6 5/8"
 - A) If successful
 - a) Run W.S. to 1325', load hole with gel
 - b) Spot 100' cement plug 1325'-1225'
 - c) Proceed to step #5
 - B) If unsuccessful
 - a) Run W.S. to 1375'
 - b) Spot 100' cement plug 1375'-1275', pull W.S.
 - c) Cut 6 5/8" at free-point (approximately 775') and pull
 - d) Proceed to step #5
- 5) Pull or run W.S. to 775', load hole with gel
- 6) Spot 125' cement plug 775'-650', pull W.S.
- 7) Attempt to pull 8 1/4" casing
 - A) If successful
 - a) Run W.S. to 370', load hole with gel
 - b) Spot 100 cement plug 370'-270'
 - c) Proceed to step #8
 - B) If unsuccessful
 - a) Run W.S. to 370'
 - b) Spot 100' cement plug 370'-270', pull W.S.
 - c) Cut 8 1/4" at free-point (approximately 135') and pull
 - d) Proceed to step #8
- 8) Pull or run W.S. to 135'
- 9) Spot 135' cement plug 135'-surface
- 10) Pull W.S. and top off with cement
- 11) Erect monument and reclaim as prescribed by law

10/10/2014

Offic

Gas

WV Department of Environmental Protection

ar to

Serial Well No24	<u> </u>	Lease N			Мар	Jopment & UUS 43 019124 Square 37 5/
RECORD O	F WELL No.	on the	Castin	G AND TU	BING	TEST BEFORE SHOT
Marine Johnson		Acres		Thed in	Laft in Well	of Water in
in	Carroll Lincoln W.	District County Va.	16 13 10		21	10ths 40 of Merc. in 2 10ths Volume TEST AFTER SHOT
Rig Commenced Rig Completed		102 192	0% 5 8-10		306 327 <i>174</i>]	10ths Volume 360,000 Cu
	eb. 19, 1922 er. 17, 1922	192 102	4%			Date Shet
Drilling to cost Contractor is:	per foot		8 2		2104 1396	Oll Flowed bbis. 1st 26
Address: Driller's Names Roy & McComas :)			NHIST IN Itale Tubing or Caudag Nise of Packer.			Wall simulated and Plumped 1

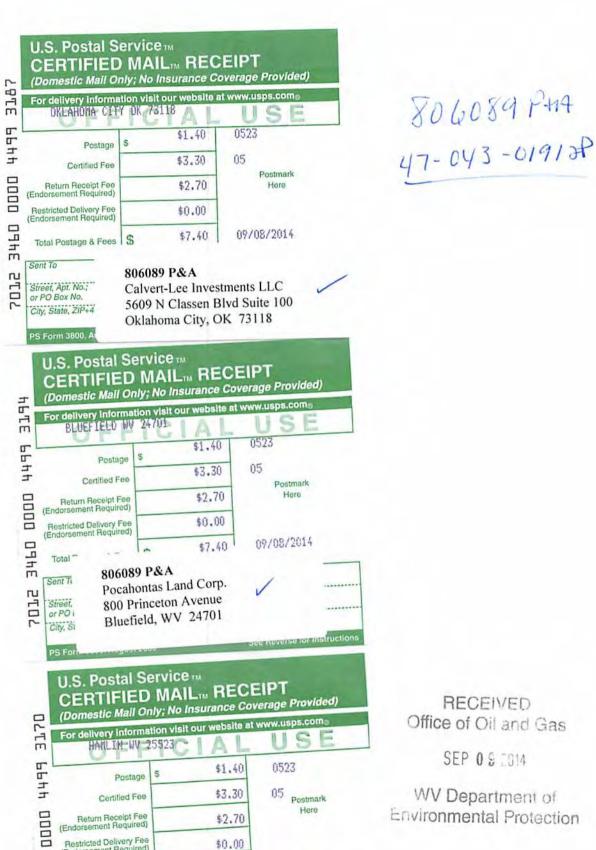
DRILLER'S RECORD

Formation	Тор	Hottom	Thickness	Romarks
Surface gravel Slate Sand Slate Sand Slate Sand Slate Slate Slate Slate Slate Sand Slate Slate Sand Slate Slate Sand Slate Slate Sand Slate Big dunkard sand Slate & shells Salt sand	21 40 90 100 140 200 240 350 390 430 510 550 750	21 40 90 100 140 200 240 350 390 430 510 550 750 870		Gas from Lime Top of pay 1390'; bottom of pay 1393' Cased at 1327' with 6-5/8" casing. Decond minute pressure taken on account of leak in tubing. Gauge after well was shut in 12 hrs. and left blow 1½ hrs. 87/10 M. thru 2". Office of Oil and Gar
Slate Sand Slate Sand	870 885 900	885 900 1000 1185		SEP 0 & 2014 WV Department of Environmental Protection
Slate Red rock Slate Sand	1185 1215 1220 1230	1215 1220 1230 1260		10/10/2014
Red rock Lime Slate Little lime Pencil cave Big lime Total Depth	1260 1265 1290 1300 1325 1325	1265 1290 1300 1320 1325	·	10/10/2014

WW4-A Revised 2/01 1) Date: 8/28/2014
2) Operator's Well No. 806089 P&A
3) API Well No. 47-043-01912

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

		NOTICE OF APPL	ICATION TO PL	UG AND ABANDON	NA WELL
4)	Surface Ow	ner(s) to be served:	/	5) Coal Operato	
	(a) Name Address	Calvert-Lee Investments LLC 5609 N Classen Blvd, Suite 100 Oklahoma City, OK 73118		(a) Name Address	None
			_	Carl Owner	a) with Declaration
	(b) Name	Richard Hamrick		(b) Name	s) with Declaration Pocahontas Land Corp.
	Address	P.O. Box 36	-1	Address	800 Princeton Avenue
	Addiess	Hamlin, WV 25523		Address	Bluefield, WV 24701
	(c) Name			Name	
	Address		7	Address	
			-	Coallagge	e with Declaration
3)	Inspector	Ralph Triplett		(c) Name	None
,	Address	5539 McClellan Highway	-	Address	Notice
	7 1441 000	Branchland, WV 25506		Nauross	
			_		
	Telephone	304-389-0350			
	The reason you instructions on Take notice the Notice and App Oil and Gas, Waltached Applic mailed by regis	urveyor's map) showing the well location ureceived these documents is that you the reverses side. However, you are not under Chapter 22-6 of the West Virginal Collection and accompanying documents lest Virginia Department of Environment attached Forestered or certified mail or delivered by help on or before the day of mailing or delivered.	have rights regard of required to take nia Code, the under for a permit to plu- ntal Protection, with rm WW-6. Copies and to the person(s	any action at all. ersigned well operator p g and abandon a well w respect to the well at t of the Notice, the Appli	proposes to file or has filed the with the Chief of the Office of the location described on the lication, and the plat have been
_		······			211
		Official Seal Notary Public	Well Operator:	Chesapeake Appala	
	S COUNTY	State of West Wysinia	By:	Mun	
	1日雄温月	Phyllis A. Copley 3	Its:		ns, Appalachia South
	3	146 Willard Circle Hurricans, WV 25525 7 My Commission Expires	Address:	P.O. Box 18496	70454 0400
	}	Beptamber 16, 2018	Telephone:	Oklahoma City, OK 405-935-4073	73134-0496
ubs	cribed and swor	nn before me this 28 day of	August	the year of	2014 otary Public
	ommission Expi WW-9	ires Septen	nber 16, 2018		



\$2.70

\$0.00

\$7.40

Return Receipt Fee (Endorsement Required)

Restricted Delivery Fee (Endorsement Required)

Total Postage & Fees

806089 P&A

P.O. Box 36

Richard Hamrick

Hamlin, WV 25523

194E

П

Sent To

Street, Apt.

or PO Box I

City, State,

RECEIVED Office of Oil and Gas

SEP 0 9 1014

WV Department of Environmental Protection Rev. 02/01

API Number 47-043-01912
Operator's Well No. 806089 P&A

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 _	Chesapeake	Appalachia, L.I	C.	OP Code 49	4477557	
Watershed	М	ud River		Quadrangle _	Hager,	WV 7.5'
Elevation763	3'	County _	Lincoln	Dis	strict	Carroll
Description of antic	ipated Pit Waste:	Plugging Ret	urns/Cement			
Will a synthetic line	r be used in the pit	? Yes				
Proposed Disposal	X Land Ap Undergr Reuse (oplication ound Injection (at API Number_ Disposal (Suppl		mber_ or disposal location)) on)	
Proposed Work For	Which Pit Will Be Drilling Workov Swabbir X Plugging Other (E	er ig)	
issued on December understand that the permit and/or other I certify under public application for obtaining the information of significant penalties. Company Official Significant Signif		ce of Oil and Gas of it are enforceable by ation can lead to en e personally examin nereto and that, bas the information is fromation, including	the West Virginia y law. Violations of forcement action. ed and am familia ed on my inquiry o ue, accurate, and the possibility of fi	Department of Enviror f any term or condition with the information so I those individuals improper complete. Lam aware	nmental Prote n of the gener submitted on mediately resp	cclion, I ral
Company Official (T		David Gocke			-	
Company Official Tit	lle	Manager - Op	erations, App	alachia South		
Subscribed and swo		day of da	August	pking-		tary Public.
, Semmodon Exp	ocpter	10, 2010			Pf	Official Seat Notary Public State of West Virginia 1y(lis A. Copley liard Circle Hurricane, Wv 25528 My Commission Expires 6eptember 16, 2018

10/10/2014 RECEIVED Office of Oil and Gas

SEP 1 6 2014

WV Department of Environmental Protection

Attachment #1

API #: 47-043-01912 Operator's Well No. 806089 P&A

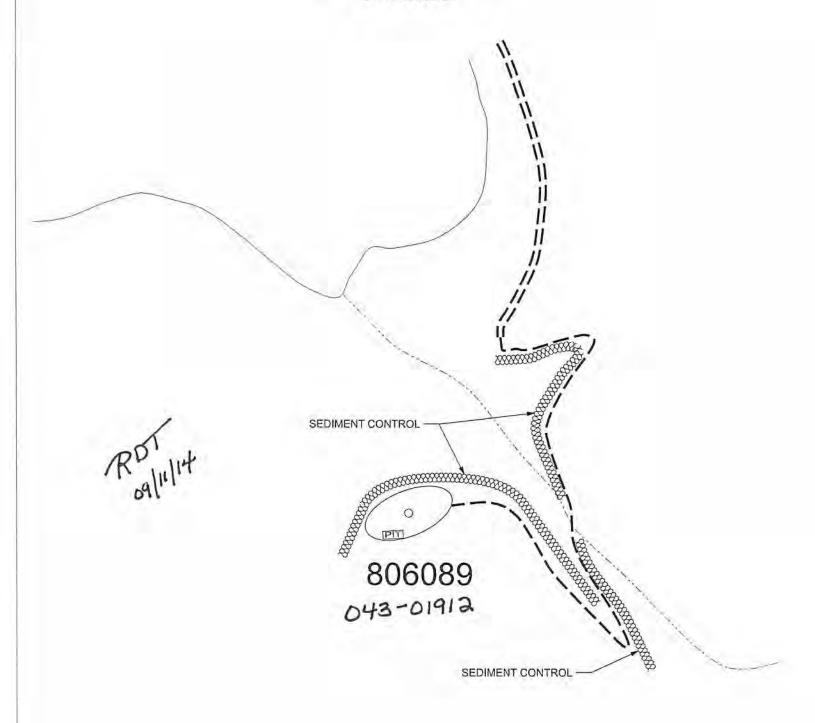
		LEGEND	
Property Boundary		Diversion Landing 111111111111111111111111111111111111	111111111
Rond = = = = = = = =	= ==	Spring O	
Existing Fence — X — X —	- × -	Wet Spot 1	
Planned Fence//	- /	Drain Pipe with size in inches Œ)
Stream	. 7 . 7	Waterway \iff	
Open Ditch		Cross Drain 7/1/1/1/1/1/1/1/1/1/1/1/1/1/1/1/1/1/1/1	
Rock of Section		Artificial Filter Strip	*****
North N		Pit: cut walls	
Buildings		Pit: compacted fill walls	
Water wells		Area for Land Application of Pit Waste	
Drill site			>
Proposed Revegetation Treatmen	nt: Acres Distur	ped 1.0 Prevegetation pH 6.1	
	Taller 1		
	Lime3	Tons/acre or to correct to pH6.5	
Fertilizer (10-20-20 or e	quivalent) 1/3 T	ON lbs/acre (500 lbs minimum)	
	Mulch Hay	Tons/acre	
		Seed Mixtures	
Area I		Area II	
Seed Type	lbs/acre		lbs/acre
Y-31	40	ORCHARD GRASS	
LSIKE CLOVER			15
	5	ALSIKE CLOVER	5
NNUAL RYE	15		
ttach:			
rawing(s) of road, location, pit ar	id proposed area	for land application.	
hotocopied section of involved 7.	5' topographic sh	eet.	
	00 11 1	Call	
lan Approved by: Rago	E. V. / Kypic		
itle: District Laso	acton)		
itle: <u>September</u> 11, 2	noul		
are. <u>Deplanuell II, a</u>	1017		
ield Reviewed? (/)	Yes	() No	

43019121

CHESAPEAKE APPALACHIA, L.L.C.

RECLAMATION DIAGRAM WELL LOCATION 806089

API 47-043-01912



GENERAL NOTES

This drawing is a schematic representation of the well site and access road. Proposed structures such as well site, drilling pit, roadways, culverts, sediment barriers, etc. are show in approximate pre-planning configurations.

All culvert pipes will be a minimum of 15 inches in diameter, all culvert pipes installed will be accomanied by an entrance sump with dimensions no less than 3 feet (width) x 3 feet (length) x 4 feet (deep). Culverts will be installed at an angle to ensure proper flow. The out fall of culverts will be protected from erosion and sedimentation using large roacks of other sediment controls deemed necessary in the prevention of erosion and sedimentation. Storm water from the ditches to the culverts will be directed to stable natural vegetative areas. Where culverts are not practical, operator will have other sediment control in place to minimize erosion sedimentation.

Cross drains, broad based dips, water bars, and diversion ditches, will be employed during the construction phase. These erosion and sediment control structures will be used to control erosion and sedimentation during the contruction phase, where applicable, and in areas that will allow. These structures will be considered permanent and used as such.

Permanent seeding: See Attachment #1.

RECEIVED
Office of Oil and Gas

5-2 1 6 2014

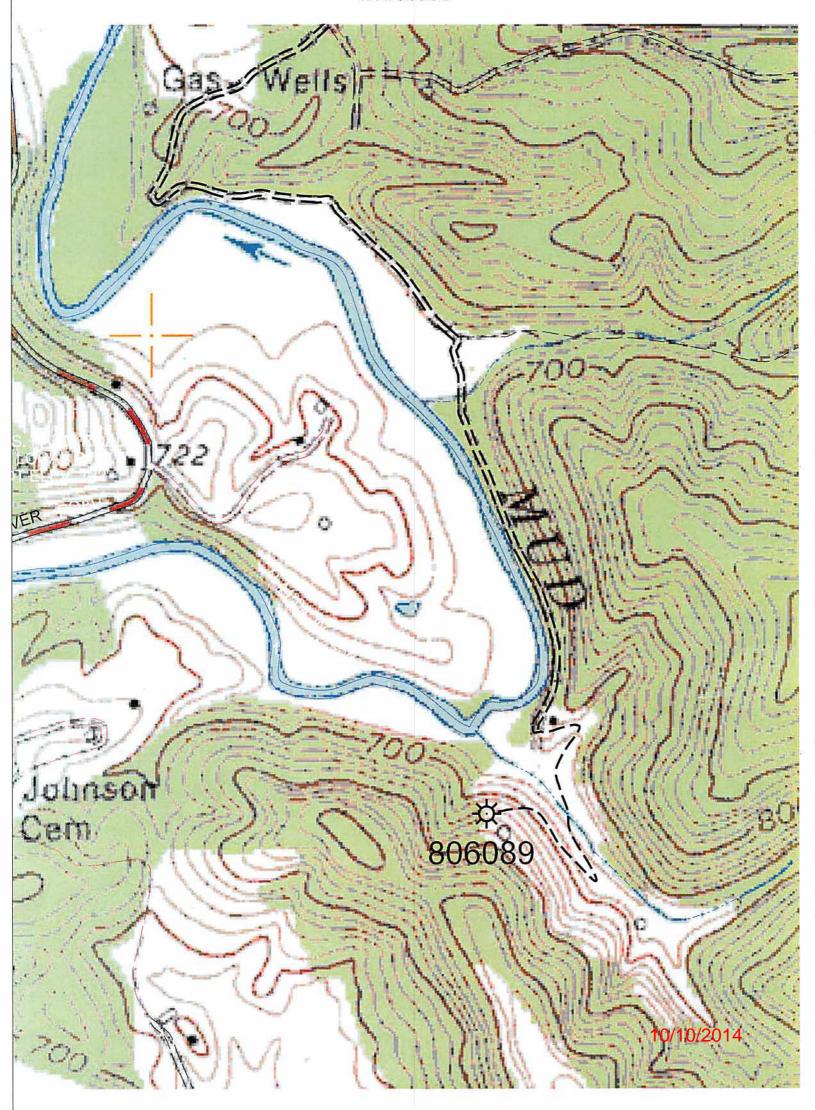
CHESAPEAKE ENERGY CORPORATION - EASTERN DIVISION
P.O. BOX 579 - 8165 COURT AVENUE - HAMLIN, WV 25523
304 824-5141 - FAX 304 824-2247

Environmental Protection

CHESAPEAKE APPALACHIA, L.L.C.

TOPOGRAPHICAL MAP OF ACCESS AND WELL LOCATION 806089

API 47-043-01912



CHESAPEAKE ENERGY CORPORATION - EASTERN DIVISION P.O. BOX 579 - 8165 COURT AVENUE - HAMLIN, WV 25523 304 824-5141 - FAX 304 824-2247

