

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

April 15, 2014

WELL WORK PLUGGING PERMIT

Plugging

This permit, API Well Number: 47-4301224, 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.

1

James Martin

Chief

Operator's Well No: 808846 (5844)

Farm Name: RUNYON, SANDENA

API Well Number: 47-4301224

Permit Type: Plugging Date Issued: 04/15/2014

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.

FORM WW-4 (B) Observe File Copy (Rev. 2/01)

1) Date:	4/2/2014
2) Operator's Well No.	808446 P&A
3) API Well No.	47-043-01224

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 (Is Gas, Production X or Underground storage) Deep Shallow X 5) Location: Elevation 810' Watershed Steer Fork of Fourteenmile Creek District Laurel Hill County Lincoln Quadrangle Ranger, WV 7.5'	4				STATE OF	WE	ST VIRG	INIA				
APPLICATION FOR A PERMIT TO PLUG AND ABANDON Well Type: Oil Gas X Liquid injection Waste disposal Shallow X Steer Fork of Fourteenmile Creek				DEPARTM					ECTION			
4) Well Type: Oil Gas X Liquid injection Material Materials (Is Gas, Production X or Underground storage) Deep					OFFICE O	FO	IL AND G	AS				
4) Well Type: Oil Gas X Liquid injection Material Materials (Is Gas, Production X or Underground storage) Deep				ADDI ICATIO	N EOD A DEI	DANI	T TO DI I	IC AND A	RANDON			
Clastion Steer Fork of Fourteenmile Creek Ste	4)	Well Type:								ste disp	iosal	
District Laurel Hill County C5 Well Operator Address P.O. Box 18496 Oklahoma City, OK 73154-0496 8) Oil and Gas Inspector to be notified Name Address Raph Triplett Address Panchland, WV 25506 8) Well Operator Address P.O. Box 18496 Oklahoma City, OK 73154-0496 8) Plugging Contractor Name Address P.O. Box 18496 Name Address P.O. Box 18496 Oklahoma City, OK 73154-0496 9) Plugging Contractor Name Chesapeake Appalachia, L.L.C. Address P.O. Box 18496 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. Notification must be given to the district oil and gas inspector 24 hours-before permitted work can commence.	,		the state of the s	or Undergroun		_)						
District Laurel Hill County C5 Well Operator Address P.O. Box 18496 Oklahoma City, OK 73154-0496 8) Oil and Gas Inspector to be notified Name Address Raph Triplett Address Panchland, WV 25506 8) Well Operator Address P.O. Box 18496 Oklahoma City, OK 73154-0496 8) Plugging Contractor Name Address P.O. Box 18496 Name Address P.O. Box 18496 Oklahoma City, OK 73154-0496 9) Plugging Contractor Name Chesapeake Appalachia, L.L.C. Address P.O. Box 18496 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. Notification must be given to the district oil and gas inspector 24 hours-before permitted work can commence.	E1	Lagations	Flounties	940'	Materahad			Cton- F	and of Cour		- Cl	
6) Well Operator Address Chesapeake Appalachia, L.L.C. Address Collahoma City, OK 73154-0496 8) Oil and Gas Inspector to be notified Name Ralph Triplett Address Sign McClellan Highway Branchland, WV 25506 9) Plugging Contractor Name Chesapeake Appalachia, L.L.C. Address P.O. Box 18496 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.	3)	Location:				-	Lincoln					7.5'
Address P.O. Box 18496 Oklahoma City, OK 73154-0496 Address P.O. Box 08496 Oklahoma City, OK 73154-0496 Address P.O. Box 08496 Oklahoma City, OK 73154-0496 P.O. Box 084070 Oklahoma City, OK 73154-0496 P.O. Box 18496 Oklahoma City, OK 73154-0496 Oklahoma City,				05	-		43					-
8) Oil and Gas Inspector to be notified Name Address 5539 McClellan Highway Branchland, WV 25506 8) Work Order: The work order for the manner of plugging this well is as follows: See Attached Sheet Oil and Gas Inspector to be notified Name Address 5539 McClellan Highway Branchland, WV 25506 P.O. Box 18496 Oklahoma City, OK 73154-0496					a, L.L.C.	7)		ed Agent				
8) Oil and Gas Inspector to be notified Name Address F39 McClellan Highway Branchland, WV 25506 10) Work Order: The work order for the manner of plugging this well is as follows: See Attached Sheet See Attached Sheet Received Gas Office of The Work of Case Notification must be given to the district oil and gas inspector 24 hours-before permitted work can commende.			A Committee of the Comm	Charles I V. Committee of the Committee	54-0496		Address				25362	
Name Address 5539 McClellan Highway Branchland, WV 25506 10) Work Order: The work order for the manner of plugging this well is as follows: See Attached Sheet See Attached Sheet Notification must be given to the district oil and gas inspector 24 hours-before permitted work can commence. When the commence of the property of the p			<u> </u>	oly, oli ioi					- Charlesto			
Address 5539 McClellan Highway Branchland, WV 25506 Address Oklahoma City, OK 73154-0496 10) Work Order: The work order for the manner of plugging this well is as follows: See Attached Sheet RECEIVED Cas Office of City of the Manner Case Office of Case	8)			notified		9)					. 1.2	
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 RECEIVED Office of O				lighway						chia, L.	L.C.	
Notification must be given to the district oil and gas inspector 24 hours before permitted work can commende.							Address			73154-0	0496	
See Attached Sheet RECEIVED Office of The Cas Notification must be given to the district oil and gas inspector 24 hours before permitted work can commence. Notification must be given to the district oil and gas inspector 24 hours before permitted work can commence.												
Notification must be given to the district oil and gas inspector 24 hours before permitted work can commence.				\$	See Attached S	Shee	t					
Notification must be given to the district oil and gas inspector 24 hours before permitted work can commence.												
Notification must be given to the district oil and gas inspector 24 hours before permitted work can commence.												
Notification must be given to the district oil and gas inspector 24 hours before permitted work can commence.												
Notification must be given to the district oil and gas inspector 24 hours before permitted work can commence.										C	Office of	107/4
Notification must be given to the district oil and gas inspector 24 hours before permitted work can commence. Work Order approved by Inspector **Rolph D. Trupletto** Date **Depth 9, 2014**												7.400
Work Order approved by Inspector Halph & Truplett Date April 9, 2014	Not	fication must	be given to the	district oil and	gas inspector 2	A ho	ours before	epermitted	work can co	mmeno	e.W	
				or Hal	al XI	up	LEAS		_		april	9,2014

Office of City of Constant Con

47-043-01224

808446 P&A Procedure

- 1) Prepare road and location, MIRU service rig
- 2) Attempt to pull 2 3/8" tubing and packer
 - A) If successful
 - a) RIH with tools to find top of fill at approximately 2100'
 - b) Run W.S. to top of fill, load hole with gel
 - c) Spot 100' cement plug on top of fill (approximately 2100'-2000'), pull W.S. to 1650'
 - d) Spot 100' cement plug 1650'-1550', pull W.S. to 1450'
 - e) Spot 100' cement plug 1450'-1350', pull W.S.
 - f) Proceed to step #3
 - B) If unsuccessful
 - a) Cut 2 3/8" at free-point (approximately 1410') and pull
 - b) Run W.S. to top of packer at 1440', load hole with gel
 - c) Spot 150' cement plug 1440'-1290', pull W.S.
 - d) Proceed to step #3
- 3) RIH to check top of plug (If TOC is below 1360', then reset plug)
- 4) Cut 7" at free-point (approximately 775') and pull
- 5) Run W.S. to 775', load hole with gel
- 6) Spot 150' cement plug 775'-625', pull W.S.
- 7) Attempt to pull 8 5/8" casing
 - A) If successful
 - a) Run W.S. to 215'
 - b) Spot 215' cement plug 215' surface
 - c) Proceed to step #8
 - B) If unsuccessful
 - a) Run W.S. to 250'
 - b) Spot 100' cement plug 250'-150', pull W.S.
 - c) Cut 8 5/8" at free-point (approximately 140') and pull
 - d) Run W.S. to 140', spot gel
 - e) Spot 140' cement plug 140' surface
 - f) Proceed to step #8
- 8) Pull W.S. and top off with cement
- 9) Erect monument and reclaim as prescribed by law

04/18/2014

Injun Sand

Big Shell

Brown Shale

Berea Sand

White Slate

Slate & Shells

Slate & Shells

Shells

Slate



STATE OF WEST VIRGINIA

DEPARTMENT OF MINES OIL AND GAS DIVISION 5

Quadrangle Midkiff WELL RECORD Permit No. LIN-1224 Oil or Gas Well Gas (KIND) Company United Fuel Gas Company Used in Drilling Left in Well Packers Address P. O. Box 1273; Charleston 25, W. Va. Farm United Fuel Gas Co. Min. Tr. #1 Acres 24, 293.44 Location (waters) Fourteen Mile Creek Size Elev_803.44 Kind of Packer_ Well No. 8446 16. District Laurel Hill Lincoln 10 3/4 201 Size of The surface of tract is owned in fee by 87 5/8 214 Address Mineral rights are owned by United Fuel Gas Co. 1398 Depth set_ Address Charleston, W. Va. 5 3/16_ July 20, 1956 Perf. top_ September 15, 1956 Drilling completed_ Perf. bottom. Date Shot 9-17-56 From 2202 To 3353 Liners Used Perf. top_ 7800# Gelatin Perf. bottom Open Flow 4 /10ths Water in_ Inch /10ths Merc. in_ CASING CEMENTED_ Inch SIZE No. Ft_ Date 84,000 Volume Cu. Ft. 72 Rock Pressure. COAL WAS ENCOUNTERED AT 103 FEET 60 INCHES Oil _bbls., 1st 24 hrs. Fresh water FEET INCHES FEET INCHES FEET INCHES. feet FEET INCHES Hard or Soft Oil, Gas or Water Depth Found Formation Color Top Bottom Remarks Clay 0 15 Show gas 14851 Slate 15 40 Sand Show oil 1600' 40 103 Coal 103 108 Gas 2222' 3/10 W 1" 18 M blew down to 1/10 W 1" 11 M Sand 108 212 Slate 212 225 Sand 225 300 Slate 300 400 Gas 3080' increased to 3/10 W 1" 18 M Sand 400 453 Slate Test before shot 2/10 W 1* 15 M Shot 9-17-56 with 7800# Gelatin from 453 480 Sand 480 563 Slate 2202-33531 563 585 Test 2 hours after shot 22/10 W 2" 198 M Test 16 hours after shot 4/10 W 2" 84 M Sand 585 610 Slate 610 645 Sand 645 745 Slate 745 752 Salt Sand FINAL OPEN FLOW - 84 M Br. Shale 72 Hr. R.P. 380#. 752 1120 Slate & Shells 1120 1190 Sand 1190 1314 Slate 1314 1330 Shut in 9-18-56 in 7" casing. Maxon Sand 1330 1347 Little Lime 1347 1381 Pencil Cave 1381 1386 Hig Lime 1386 1578 1578 Keener Sand 1595

(Over)

1595

1630

1640

1838

1978

21.64

2184

2197

2790

1630

1640

1838

1978

2164

2184

2197

2790

3062

OCT 1036

CEIVED

WEST VIRGINIA

DEAT. OF MINES

04/18/2014

Formation	Color	Hard or Soft	Top &	Bottom	Oil, Gas or Water	Depth Found	Remarks
Brown Shale White Slate Total Depth			3062 3335 3353	3335 3353			
					·		
							- 04/18/201 4

Date Cctober 15 , 19 56

APPROVED UNITED FUEL GAS COMPANY , Owner

By (Title)

Supt., Civil Engineering Department

UNITED FUEL GAS COMPANY COMPANY

Well 847494,3,91224P. API 47-043-01224 fagé 1 of 2

erial well no. 8146	LEASE NO	Ref. 246	89		MAP SQUARE 30-39
RECORD OF WELL NO. Blild on the		CASING AND	TUBING		TEST BEFORE SHOT
RECORD OF WELL NO. Blile on the 21,223 chil	SIZE	WEIGHT	USED IN DRILLING	LEFT IN	2 /10 of Water inincl
in Lourel Hill District	10-3/4"	1,0#	201	50 0	/10 of Merc. inincl
Lincoln County	8-5/80	24#	274	2141	Volume 14.90 MCF Cu. ft
State of: West Virginia	711	20#	34091	34091	TEST AFTER SHOT
Field: Central Division	7 7 7				4 /10 of Water in 20 incl
Rig Commenced July 11, 1956					/10 of Merc. inincl
Rig Completed July 19, 1956	11				Volume 814 MCF Cu. ft
Drilling Commenced July 20, 1956					. 16 Hours After Sho
					Rock Pressure 72 Hr. 380#
Drilling Completed September 15, 1956					Date Shot 9-17-56
Drilling to cost per foot					
Contractor is: R. H. Adkins					Size of Torpedo 7800# Gelatin
Address: Hemlin, W. Va.			SHUT IN		Oil Flowedbbls. 1st 24 hrs.
		Date_		Tubing or	Oil Pumpedbbls. 1st 24 hrs.
Driller's Name E. E. White		711_in.		Casing	
G. P. Pinkerton		Size of Packer 7"X8-5/8" Kind of Packer Bottom Hole			Well abandoned and
		Kind of Pa	cker Botto	n Hole	Plugged19
		1st. Perf. Se	etfro	om	
Elevation: 803-Lile		2nd Perf. Se	etfre	om	
- 2 " <u>f</u> o	DRILL	ER'S RECORD	167		3 V 3k
FORMATION TOP	воттом	THICKNESS			REMARKS
Clay	15	15			
Slate 15	L _i O	25			
Sand 110	2.03	53		-	
Goo2 203	108	5			n
Sand 108	212	10,			-cureD
Slate 212	225	23			RECEIVED Gas
Sand 225	300	75		Offi	-0 O
Slate 300	400	100			102110
Sand 1,00	453	53			- Imenia
Slate h53	480	27			MA Dehatlmeur op Michael blessenen
Sand 1,80	563	83		En	Allolimetre
Slate 563		22		E	
Sand 585		25			
Slate 610		35			
Sand 645		100			
Slate 745		7			
Call Canal Pro		960.			

368

752

1120

Salt Sand

WEIL SON 4760,473 0 1 2 2 4 P LEASE NO. ROL. 24689 API 47-043-01224 MAP SQUARE 30-39

Page 2 of 2

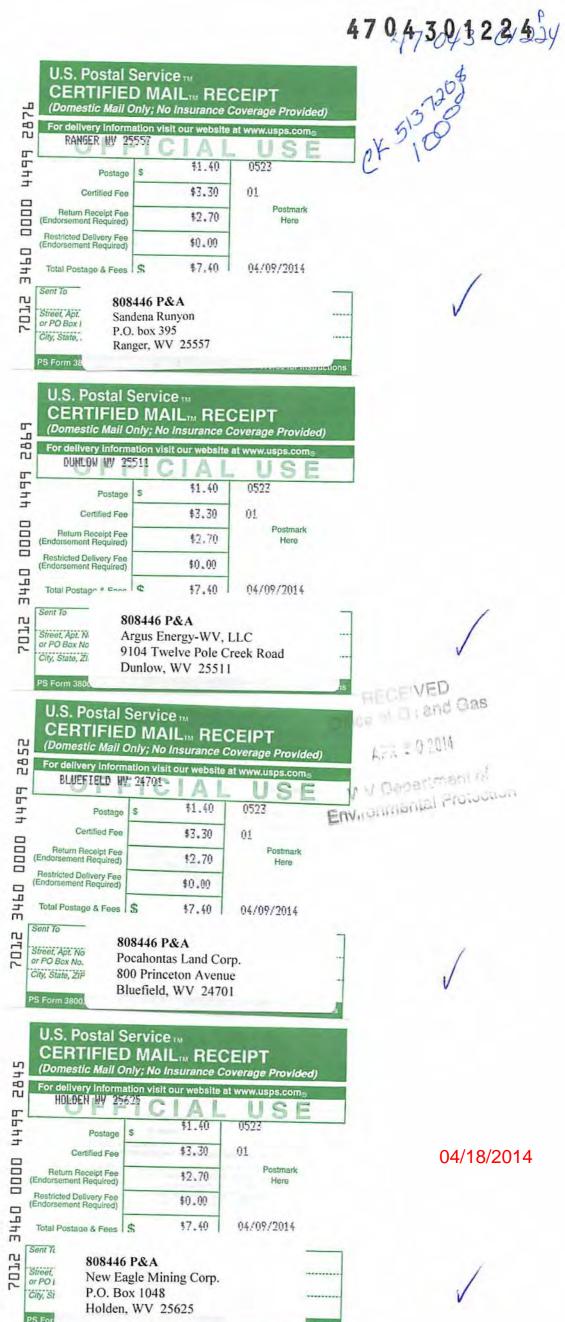
		DRILL	LER'S RECORD	
FORMATION	ТОР	воттом	THICKNESS	REMARKS
Slate & Shells	1120	1190	70	
Sand	3190	2324	124	- 10
Slate	2324	1330	26	x [†] E
Maxon Sand	2330	1347	27	40
Little Lime	1347	1381	34	
Pencil Cave	1381	1386	5	7" Casing set @ 1398"
Big Lime	2386	1578	192	Show of Gas @ 1185
Keener Sand	1578	1595	27	
Injun Sand	2595	2630	35	Show of 011 @ 1600*
Shells	1630	2640	10	
Slate & Shills	3.640	2838	198	
Big Shell	1838	1978	340	
Slate	1978	2164	286	
Brown Shale	22.64	SIG	20	
Berea Send	2184	21.97	13	
Slate & Shells	2197	2790	593	Gas @ 2222' - 3/10 W-1"
White State	2790	3062	272	Blew down to 1/10 W-1"
Brown Shile	3062	3335	273	Gas @ 3080* ~ 3/10 W-2"
White Slate	3335	3353	28	When Brilling Completed 2/10 W-1"
TOTAL DEPTH	33530			
				Cavings after shot = 260'
				N. Control of the con

WW4-A Revised 2/01

1) Date: 4/2/2014 2) Operator's Well No. 808846 P&A 3) API Well No. 47-043-01224

STATE OF WEST VIRGINIA - BUREAU OF ENVIRONMENT

			ENVIRONMENTAL PRO F APPLICATION TO PLI			
41	Surface Ou	ner(s) to be served:	AFFECATION TO FE	5) Coal Operate		/
4)	(a) Name	Sandena Runyon		(a) Name	Argus Energy WV, LLC	V
	Address	P.O. Box 395		Address	9104 Twelve Pole Creek Road	_
	Address	Ranger, WV 25557		Address	Dunlow, WV 25511	_
		Hanger, TV 20007			Daniow, WY 20011	
		-		Coal Owner(s) with Declaration	1
	(b) Name			(b) Name	Pocahontas Land Corporation	1
	Address			Address	800 Princeton Avenue	
					Bluefield, WV 24701	
		_				_
	(c) Name			Name		
	Address			Address		
				Castlassa	e with Declaration	-/
~	4.5555525					/
6)	Inspector	Ralph Triplett		(c) Name	New Eagle Mining Corp.	V_
	Address	5539 McClellan Highwa		Address	A CONTRACTOR OF THE CONTRACTOR	
		Branchland, WV 25506			Holden, WV 25625	_
	Telephone	304-389-0350			(Apr	-
	The reason yo instructions on Take notice the Notice and Ap	plication and accompanying d	is that you have rights regard you are not required to take West Virginia Code, the unde locuments for a permit to plu	ding the application what any action at all. ersigned well operator and abandon a well	proposes to file or has filed the with the Chief of the Office of the location described on the	
	attached Appli	cation and depicted on the at	tached Form WW-6. Copies	of the Notice, the App	olication, and the plat have been	
	mailed by regis	stered or certified mail or deliv	vered by hand to the person(s) named above (or by	y publication in certain	
	circumstances) on or before the day of mail	ing or delivery to the Chief.	A John Committee of the	/	
_	~~~		Well Operator:	Chesapeake Appal	achia I Mol 1	
	1 -	Official Sant Natory Public	By:	Onesayeare ripper	1 11.2001	_
	V State	State of West Virginia	} Its:	Manager Operation	ons, Appalachia South	
	(E)	Phyllis A. Copley	Address	P.O. Box 18496	or NED	
	160	144 Willard Circle Hurricane, WV 256 By Commission Expires	Mulicas	Oklahoma City, OK		200
	1	September 16, 2018	Telephone:	405-935-4073	Office Di Ch	_
	~~~	***************************************	<b>O</b>		2014 APR 2 (1970)	_
Sub	scribed and swo	orn before me this 3 kd	day of April	the year of		
		4	Jullis a. Cip	ly N	lotary Public	1
Му	Commission Exp	oires	September 16, 2018	0	M. M. WALLEST B. J.	
					Eusisauuieue su	



Form WW-9 Rev. 02/01

Page	of	
API Number	47-043-01224	_
Operator's Well No.	808446 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.L.C.	OP (	Code 49	4477557	
Watershed	Steer Fork of	f fourteenmile Creek	Qua	drangle _	Ranger	, WV 7.5'
Elevation81.0	0.1	CountyL	incoln	Dis	strict	Laurel Hill
Description of antici	ipated Pit Waste:	Plugging Returns	/Cement			
Will a synthetic line	r be used in the pi	t? Yes		20	O MIL.	
Proposed Disposal	X Land A Underg Reuse Off Site	ed Pit Wastes: pplication ground Injection ( UIC (at API Number e Disposal (Supply for Explain		osal locatio	) on)	
Proposed Work For	Which Pit Will Be Drilling Workov Swabb	ver				
	X Pluggir				)	
issued on Decemb understand that the permit and/or other I certify under this application for for obtaining the in	er 31, 1999, by the Or e provisions of the per r applicable law or reg penalty of law that I ha m and all attachments formation, I believe th s for submitting false	to the terms and condition ffice of Oil and Gas of the mit are enforceable by law ulation can lead to enforce ave personally examined a thereto and that, based o at the information including the information including the	West Virginia Departm	nent of Environment or condition or conditio	onmental Pro on of the gen on submitted or nmediately re	tection. I eral n sponsible
Company Official (1	Typed Name)	David Gocke				49 36
Company Official T	itle	Manager - Opera	tions, Appalachia	a South	-	OF THE WILL
Subscribed and swo	orn before me this	3 Kd day of _	April .	201	0	otary Public.
My Commission Ex	pires Sept	ember 16, 2018	. Cupem	1		Official Seni Notary Public State of West Virginia

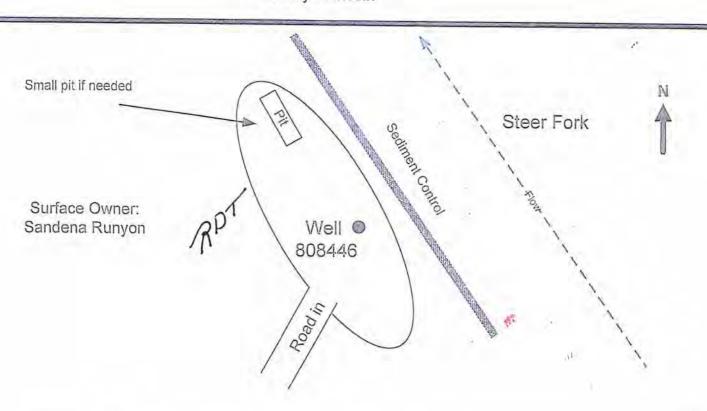
### Attachment #1

API #: 47-043-01224 Operator's Well No. 808446 P&A

	L	EGEND		
Property Boundary		Diversion Contraction		
Rond = = = = = = = =	= == ==	Spring -		
Existing Fence — X — X —	- × —	Wet Spot		
Planned Fence / /	/	Drain Pipe with size in inches	— @ <del></del>	
Stream	7 T	Waterway $\longleftrightarrow$	· <b>(</b>	
Open Ditch		Cross Drain		
Rock & See See	•	Artificial Filter Strip	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	
North N		Pit; cut walls		
Buildings		Pit: compacted fill walls	<u> </u>	
Water wells		Area for Land Application of Pit Was	Sic	
Drill site				
Proposed Revegetation Treatmen	t: Acres Disturbed	1.0 Prevegetation pH	6.1	
	Time 2	Tana/gara as to correct to all		
	Lime3	_ Tons/acre or to correct to pH _	6.5	
Fertilizer (10-20-20 or eq	uivalent) 1/3 TON	lbs/acre (500 lbs minimum)		
	Mulch Hay 2	Tons/acre		
	Much Hay 2	_ 10115/4016		
	S	eed Mixtures		
Area I	lhalaan		Area II	
Seed Type KY-31	<b>Ibs/acre</b> 40	Seed Type ORCHARD GRASS	lbs/acre 15	
ALSIKE CLOVER	5	ALSIKE CLOVER	5	
ANNUAL RYE	15		·	
Attach:				
Drawing(s) of road, location, pit and	d proposed area for	land application.		
Photocopied section of involved 7.5	5' topographic shee	t.	<u> </u>	
· · · · · · · · · · · · · · · · · · ·			- My COS	
Plan Approved by: Roled	() This Af	Ŷ	REC. Oil	
Ca a	N. Magreed	·	10 10 10 10 10 10 10 10 10 10 10 10 10 1	<i>(</i> )
Title: <u>Xustrut</u> Inspec	tow		On Vbb , help being	
Date: Opril 9 2013	3		Office APR 1 Days Color	
			Million	
Field Reviewed? ()	Yes	() No	E. W. C.	
			V	

# CHESAPEAKE APPALACHIA, L.L. C4704301224P

Diagram of Well 808446 API 47-043-01224 Field Office - Branchland County - Lincoln



### **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 shown in approximate pre-planning configurations.

All culvert pipes will be a minimum of 15 inches in diameter. All culvert pipes installed will be accompanied 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 rocks or 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 and 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 construction phase, where applicable and areas that will allow. These structures will be considered permanent and used as such.

Permanent seeding: See Attachment #1

## Site Plan

Prepared by: Kris Aldridge

Date: 4/9/2014

No Scale

04/18/2014

### CHESAPEAKE APPALACHIA, L.L.Q.7 0 4 3 0 1 2 2 4 P Topographical Map of Well 808446

graphical Map of Well 8 and Access Road API 47-043-01224 Field Office - Branchland County - Lincoln

