

#### 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 02, 2014

#### WELL WORK PLUGGING PERMIT

#### Plugging

This permit, API Well Number: 47-8101328, issued to ARP MOUNTAINEER PRODUCTION, LLC, 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.

Operator's Well No: SOUTHERN DICKINSON #4 (SD-4

Farm Name: SOUTHERN LAND COMPANY

API Well Number: 47-8101328 Permit Type: Plugging

Date Issued: 12/02/2014

81013286 P

## **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.

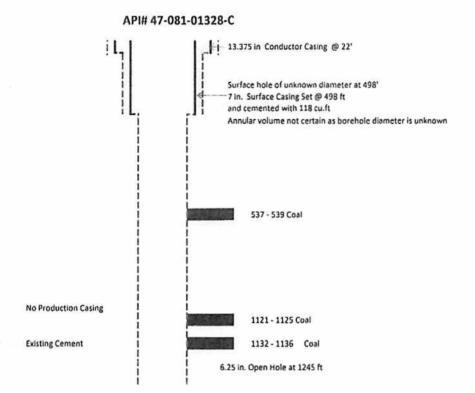
WW-4B Rev. 2/01

1) Date October 8	,	20 14
2) Operator's		1 4 24 24
Well No. SD-4		
3) API Well No.	47 - 081	- 1328-C

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

	APPLICATION FOR A PERM	IIT TO PLUG AND ABANDON
4)	Well Type: Oil/ Gas X _/ Liquid	injection / Waste disposal /
-,		derground storage) Deep/ Shallow X
5)	Location: Elevation 2303.63	Watershed Harper Branch Sandlick Creek
	District Clear Fork	County Raleigh Quadrangle Eccles
6)	Well Operator ARP Mountaineer Production, LLC	7) Designated Agent CT Corporation System
	Address Park Place Corporate Center One	Address 5400 D Big Tyler Road
	1000 Commerce Drive 4th Floor, Pittsburg, PA 15275	Charleston, West Virginia 25313
8)	Oil and Gas Inspector to be notified	9) Plugging Contractor
	Name Gary Kennedy	Name Universal Well Services
	Address P.O. Box 268	Address 5252 RT 1428
	Nimitz, WV 25978	Allen, KY 41601
1		
	An expanding cement will be used, consisting of 50/50 Class A PozMi	10.000 1000 1000 1000 1000 1000 1000 10
Pu LASS Noti	A permanent marker will be installed and the site reclaimed.  L 13% COMPUCTOR. FREEDING 7". CU  LUBING CEMENT MUST BE USED FA  SA CEMENT FROM 437 TO SURFACE  Lification must be given to the district of can commence.	The Remove Ha 7's Possible. Received  on TD To 437'. Received  OCT 24 2014  It and gas inspector 24 hours before dermitted  W Dept. of Environmented
	order approved by inspector	

SD-4 Plug and Abandon Schematic



Received

OCT 2 4 2014

Office of Oil and Gas
WV Dept. of Environmental Protection

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11m 3.6					
WR-35		19	DATE: March 1		
Rev (5-01)			DATE: MAICH I	1, 2003	
Sta	in of West Virg	(nis	API # :	47-081-013280	•
Department	of Unvironment	al Pentactina	1		
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Well Oners	ior's Report of	Watt titada		MAR	1 5
	or a responsing	WOU WOLK		1	100 & Gm. 1 & 2005
Parm name: Southern Lend Courseny	0.	perelor Well No	. cn .	my na.	
		Selector Mell Mo	50-4	G. U.L. L. A. A.	* PF .
LOCATION: Elevation: 2303.63	. 0	adenala. E	_1-		
AND THE RESERVE OF THE PARTY OF	4"	municipal D	celsa		
District: Clear Pork	Cour	nty: Raleleh			
Lotitude: 0 Pest South of 37 Longitude 0 Fact West of 31					
Longitude 0 Fact West of RI	Der 17	Min 05 1	acc.		
		03.1	4aec.		
Company: AMVEST OII and Gate luc.					
	Casing &	Used In	Lart to well	1	
	Tublag	drilling	want in Meti	Cement III	
Address: One Boar's Hend Pointe	13 3/8"	22'	22'	up Cu. Ft.	
Charlottesville, Virginia 22905	77	498'		N/A	_
Agent: Authoriy A. Witholt	1	1790	498'	118	
Inspectors Richard Compbell			-		<u></u>
Date Perselt Loued: June 10, 2094	-				
Date Well Work Commenced: 9/21/2004	-	-	-		=
Date Well Work Completed: 9/13/1004	-				
Verbal Plagaing:			-		판
Date Permission granfed on:			-		•
Rotary x Cable Rig Union #39	-				•
Total Depth (feat): 1245	-				•
Fresh Water Depth (ft.): N/A					-
					•
Salt Water Depth (ft.): N/A					<b>■</b> }
-					• 3
Is coal being mined in area (N/Y)? N					•
Coal Depths (R.): 523-524, 537-539, 1121-1125					ę
1152-1136					칠
OPEN FLOW DATA					
AND VALUE TO THE WORLD COMMENT OF THE STATE					
Producing formation Possbonias #2 and # Gas: Initial open flow N/A MCP/6 Oil					
Gas: Initial open flows 21/4 25 and 8	3 Seams	Pay zone d	lepth (ft) 1121.	1136	
Gas: Initial open flow N/A MCP/d Oil Final open flow 60 MCP/d Oil	Initial open f	low N/A BI	oVd.	*****	
Final open flow 60 MCF/d Final	l open flow	N/A Bbl	/d		
Time of open flow between initial and fit Statio rock Pressure 220	nal tosts N	VA Hou	rd .		
Static rock Pressure 220 psig (curl	soc pressure)	after 24 Hou	ITA		
Second producing formation	Pay zone	death (0)			
Gas: Initial open flow MCF/d Oil: In			1/7		
Final open flow MCF/d Fin Time of open flow between initial and fin	al ones flow	·	1/4		
Time of open flow between initial and fin	at open now_		/4		
Static rock Pressurepsig (surface)	m) (GRIS	Hours			
Park (antipace)	bresenta) attet	Hour	10		
NOTE: ON BACK OF THIS FORM PUT THE FO	T COMPAGE				
INTERVALS, FRACTURING OR STIMULATING, LOG WHICH IS A SYSTEMATIC DETAILED OF	PLOWING: 1).	DETAILS OF	PERFORATED		
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Signed: And I Co					HECOL
Dy: Teha F. Singley					Received
Date: 3/14/05					
					. 2014
					OCT 2 4 2014
					OCT 2 4 2014
					Office of Oil and Gas
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		Crele	0-6		Me environmental 1
		C.2020	770		MV Deleter
		**			W O.

Well: SD-4 0/3210 Permit Number: 47-081-645250 District: Clear Fork

District: Clear Fork County: Releigh

DETAILS OF PERFORATED INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC.

Date: 9/23/2004

Well encounterd a show of gas in the Pocahoniae #2 and #3 seams and has been completed open hole without attroubation.

ttorn

Planned

Actual

Treatment Remarks

Pormation	Top	Bottom	Romerko	
Clay	1	16		
Sand	18	183		
Sand and Shale	163	217		
8and	217	335		
Sand and Shalo		404		
Sand	404	475		"
Shalo	475	523		LEGS THAN 20"
Coal	623	624		1 FE53 THM ON
Shale	524	637		
Coal	637	639	(	
Shale	539	580		
Sand and Shale	580	622		
Satt Sand	522	720		
Shale	720	725		
Sand and Shale	725	985		**************************************
Shale	985	1038		
Salt Band	1038	1076		
Shalo	1078	1121		
Coal	1121	1125	show gas	
Shale	1126	1132		
Cosl	1132	1136	snow gas	
Sand and Shale	1136	1193		
lad Shale	1193			

Received

OCT 2 4 2014

Office of Oil and Gas

Dept. of Environmental Protection

Beckly

#### **GEOMET WELL PROFILE**

Well Number	ODD S	10-4	Date of Job	1-2	26-12			
Reason for Job	~	Completion Work Over		_ Check Pi Preventa				
Conditions Found (sand,	coal fines, s	cale, etc.)	Prays	stack	k fese	fler		
Rig number and operator	Lacso	Ris #	2 Jase	^	ton			
PRODUCTION CASING	4%	OD	Set @			P.	a 74	
PLUG DETAIL @		TUBING DETAIL	Subs	Size	27/8	_ Thread	Ernel	
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<u>@</u>	•	$\frac{g}{g}$	Barrel Seat Nipple	-65				
@	18	-6	Tail Joint	. 70				
@	•	43	Total	1183.	35	-7.6.		
@	<u></u>	000000	EOT					
@	6	1183.33						
<u>@</u>	85	PUMP DESCRIP			·			
@			-1 1/2" 1 25/32"		Insert		_Other	
PERFORATION DETAIL			_ 1 25/32		Split Ring		PAP	
	SPF	PUMP DESCRIP	TION (IN)					
	SPF		1 1/2"	1/	Insert		Other	
	SPF		1 25/32"		Split Ring		PAP	
@	SPF			~			-	
	SPF	Comments	Pago 77	CUG,	nv-c	285		
	SPF		5/		111	_ /	5/1/2V	14.
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	SPF	2277 AF	of hole	ed Pyach	W/ OPC	Jugk /	7 467.	
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	SPF	TD			SCALE D	ETAIL		
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		Bottom Perf		Ta <b>o</b> j	Thickness		" " "	rod
	SPF			2	# Rods	00	ecei\	100
	SPF	LACT CEDVICE I	NATE	7		11	100	
	SPF SPF	LAST SERVICE D	MIE		-			2014
@		SERVICE FREQU	IENCY				OCT 24	2014
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		Signature	ME	113	ko		Omos et Oli s	and Gas
	man salid	un gunnaranata	7				Olinca or - July	mental Protect

See

WW-4A	
Revised	6-07

1) Date:	October 8, 20	)14		
2) Operator's	Well Numb	er		
SD-	4			
3) API Well No	o.: 47 -	081	1328-C	

## STATE OF WEST VIRGINIA

	A CONTRACT OF THE PROPERTY OF	(a) Coal Operator	*
(a) Name	Southern Land Company, L.P.	Name	Black King Mine Development
Address	300 Capitol Street Suite 1401	Address	P.O. Box 271 300 Running Right Way
	Charleston, WV 25301		Julian WV 25529
(b) Name	Daniel McMillion	(b) Coal Ov	vner(s) with Declaration
Address	300 Arlington Road	Name	Southern Land Company, L.P.
	P.O. Box 214 Harper, WV 258510214	Address	300 Capitol Street Suite 1401
			Charleston, WV 25301
(c) Name	8	Name	
Address		Address	
) Inspector	Gary Kennedy	(c) Coal Les	ssee with Declaration
Address	P.O. Box 268 Nimitz, WV 25978	Name	Black King Mine Development
		- Address	P.O. Box 271 300 Running Right Way
Telephone	304-382-8402		Julian WV 25529
O THE PE	ERSONS NAMED ABOVE: Yo	ou should have rece	eived this Form and the following documents:
	application to Plug and Abandon a Well on l its and the plugging work order; and	Form WW-4B, which	sets out the parties involved in the work and describes the
(2) The	plat (surveyor's map) showing the well location	on on Form WW-6.	
200760	you received these documents is that you have ris	thts regarding the applic	ation which are summarized in the instructions on the reverses side

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

Well Operator ARP Mountaineer Production, LLC By: Its: Director of Environmental and Regulatory Affairs Address ARP Mountaineer Production, LLC Park Place Corporate Center One, 1000 Commerce Drive 4th Floor, Pittsburg, PA 15275

Telephone

certain circumstances) on or before the day of mailing or delivery to the Chief.

Oil and Gas Privacy Notice

The Office of Oil and Gas processes your personal information, such as name, address and phone number; as a pa regulatory duties. Your personal information may be disclosed to other State agencies or third partial information may be disclosed to other State agencies or third partial business or as needed to comply with statutory or regulatory requirements, including Freedom of Information agencies or third partial business or as needed to comply with statutory or regulatory requirements, including Freedom of Information agencies or third partial business or as needed to comply with statutory or regulatory requirements, including Freedom of Information agencies or third partial business or as needed to comply with statutory or regulatory requirements, including Freedom of Information agencies or third partial business or as needed to comply with statutory or regulatory requirements, including Freedom of Information agencies or as needed to comply with statutory or regulatory requirements, including Freedom of Information agencies or as needed to comply with statutory or regulatory requirements, including Freedom of Information agencies of the statutory of the partial business of the statutory of the stat information, please contact DEP's Chief Privacy Officer at depprivacyoffier wv.gov.



106 Ridgeview Way Clinton, TN 37716 Telephone: 865.457.6844 Facsimile: 865.457.6827

U.S. Postal Service

Certified Fee

Restricted Delivery Fee (Endorsement Required)

Total Postage & Fees

8484

0000

2000

CERTIFIED MAIL RECEIPT

(Domestic Mail Only; No Insurance Coverage Provided)

3.30

\$2.70

\$0.00

\$7.49

Memilion ,

October 15, 2014

Daniel McMillion 300 Arlington Road, P.O. Box 214, Harper, WV 25851

RE: Plug and Abandon SD-4 Well Raleigh County, West Virginia

Mr. McMillion:

In preparation for plugging the SD-4, a vertical coalbed methane well API # 47-081-01328C, you are receiving this notice because you have been identified as a land owner and/or coal owner/lessee/operator, within the notification radius of the above mentioned well. Details of the plugging plan may be found in the enclosed plugging permit application.

If you should have any questions or concerns regarding this matter, please feel free to contact me at (865) 457-6844, ext. 106, or by email at kwishoun@atlasenergy.com.

Sincerely,

Keith Wishoun Land Manager

Atlas Energy

encl.

Office of Oil and Gas

WV Department of Environmental Protection

AER Pipeline Construction, Inc. • AIC, LLC • Atlas America, LLC • Atlas Energy Indiana, LLC • Atlas Energy Michigan, LLC • Atlas Energy Ohio, LLC • Atlas Energy Operating Company, LLC • Atlas Energy Resources, LLC • Atlas Energy Tennessee, LLC • Atlas Gas & Oil Company, LLC • Atlas Noble, LLC • Atlas Resources, LLC • Crown Drilling of 2 10 4 4 REI-NY, LLC • Resource Energy, LLC • Resource Well Services, LLC • Viking Resources, LLC • Westside Pipeline Company, LLC



106 Ridgeview Way Clinton, TN 37716 Telephone: 865.457.6844 Facsimile: 865.457.6827

October 15, 2014

Black King Mine Development 300 Running Right Way, P.O. Box 271, Julian, WV 25529

RE: Plug and Abandon SD-4 Well Raleigh County, West Virginia

To whom it may concern:

In preparation for plugging the SD-4, a vertical coalbed methane well API # 47-081-01328C, you are receiving this notice because you have been identified as a land owner and/or coal owner/lessee/operator, within the notification radius of the above mentioned well. Details of the plugging plan may be found in the enclosed plugging permit application.

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Sincerely,

Keith Wishoun Land Manager

Atlas Energy

RECEIVED
Office of Oil and Gas

OCT 2 4 2014

WV Department of Environmental Protection

encl.

October 15, 2014

Eddie Workman Southern Land Company, L.P. 300 Capitol Street, Suite 1401 Charleston, WV 25301

RE: Plug and Abandon SD-4 Well Raleigh County, West Virginia

Mr. Workman:

In preparation for plugging the SD-4, a vertical coalbed methane well API # 47-081-01328C, you are receiving this notice because you have been identified as a land owner and/or coal owner/lessee/operator, within the notification radius of the above mentioned well. Details of the plugging plan may be found in the enclosed plugging permit application.

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Sincerely,

Keith Wishoun Land Manager

Atlas Energy

REGEIVED
Office of Oil and Gas

OCT 2 4 2014

WV Department of Environmental Protection

encl.

· WW-9 Rev. 5/08

F	age		of	
API Number 47 - 9	081	_	01328-C	
Operator's Well No	SD-4			

# 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

	D GAS PIT WASTE DISCHARGE
Operator Name ARP Mountaineer Production, LLC	OP Code
Watershed Harper Branch Sandlick Creek	Quadrangle Eccles
Elevation 2303.63 County Raleigh	
Description of anticipated Pit Waste: Fresh Water, Produc	ced Water, Bentonite, Cement
Will a synthetic liner be used in the pit? Open Top Tank	Also-
Off Site Dispposal (Supply form WW-	umber) 9 for disposal location)
Proposed Work For Which Pit Will Be Used:  Drilling Workover X	Swabbing Plugging
on August 1, 2005, by the Office of Oil and Gas of the West Virgin provisions of the permit are enforceable by law. Violations of an law or regulation can lead to enforcement action.  I certify under penalty of law that I have personally exapplication form and all attachments thereto and that, based of obtaining the information, I believe that the information is true, penalties for submitting false information, including the possibility Company Official Signature  Carla L. Suszkowski  Company Official Title  Director of Environmental and Regulatory Actions are considered to the company of the compan	amined and am familiar with the information submitted on this may inquiry of those individuals immediately responsible for accurate, and complete. I am aware that there are significant of time or imprisonment.  Affairs  Received
Subscribed and sworn before me this 10th day of 0	toper, 2014
Javen a Ja	Office of Oil and Gas  Office of Oil and Gas  WV Dept. of Environmental Protection  COMMONWEALTH OF PENNSYLVANIA
My commission expires October 2	Notarial Seal  Lauren A. Skiba, Notary Public Findlay Twp., Allegheny County My Commission Expires Oct. 2, 2017  MEMBER, PENNSYLVANIA ASSOCIATION OF NOTABLES

	LEGEND
Property Boundary	Diversion Levelle 111111111111111111111111111111111
Road = = = = = = = = = =	Spring
Existing Fence — X — X — X —	Wet Spot
Planned Fence / / /	Drain Pipe with size in inches (2
Stream	Waterway $\iff$ $\iff$ $\iff$
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 68588	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 Treatment: Acres Disturbed 0.5	Prevegetation pH 5-6.5
Lime 2 Tons/acre or to correct to pH	
	- <del></del>
1. 2015년 2014년 1120 - 1120 - 121 전 12 전 12 전 12 전 12 전 12 전 12 전 1	acre (500 lbs minimum)
Mulch Hay / Straw Tons/a	CTP
Tolls/a	
Seed	Mixtures
Area I	Area II
Seed Type lbs/acre	Seed Type lbs/acre
Tall Fescue or Orchard Grass 40	
Annual Ryegrass 5	
	9
Attach:	2 3
Drawing(s) of road, location,pit and proposed area for land appl	ication.
Photocopied section of involved 7.5' topographic sheet.	
	الم
	POINED
Plan Approved by: Huy Koundy	Bece.
Comments:	A110
paratus anno aliabet fatti.	Received  OCT 2 4-2014
	and Gas world
loc	Date: 10/24/14 Office of Oil and Gas  Office of Oil and Gas  Office of Oil and Gas  WV Dept. of Environmental Protection
Title: Inspector	Date: 10/24/14 One Environment WN Dept. of Environment
Field Reviewed? ( ) Yes (	) No

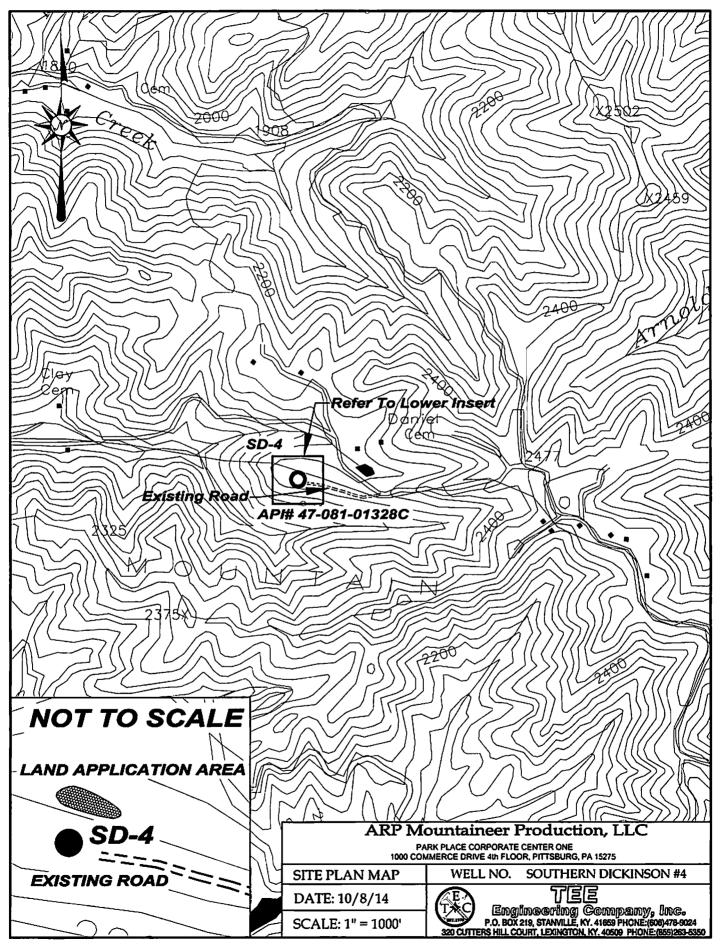


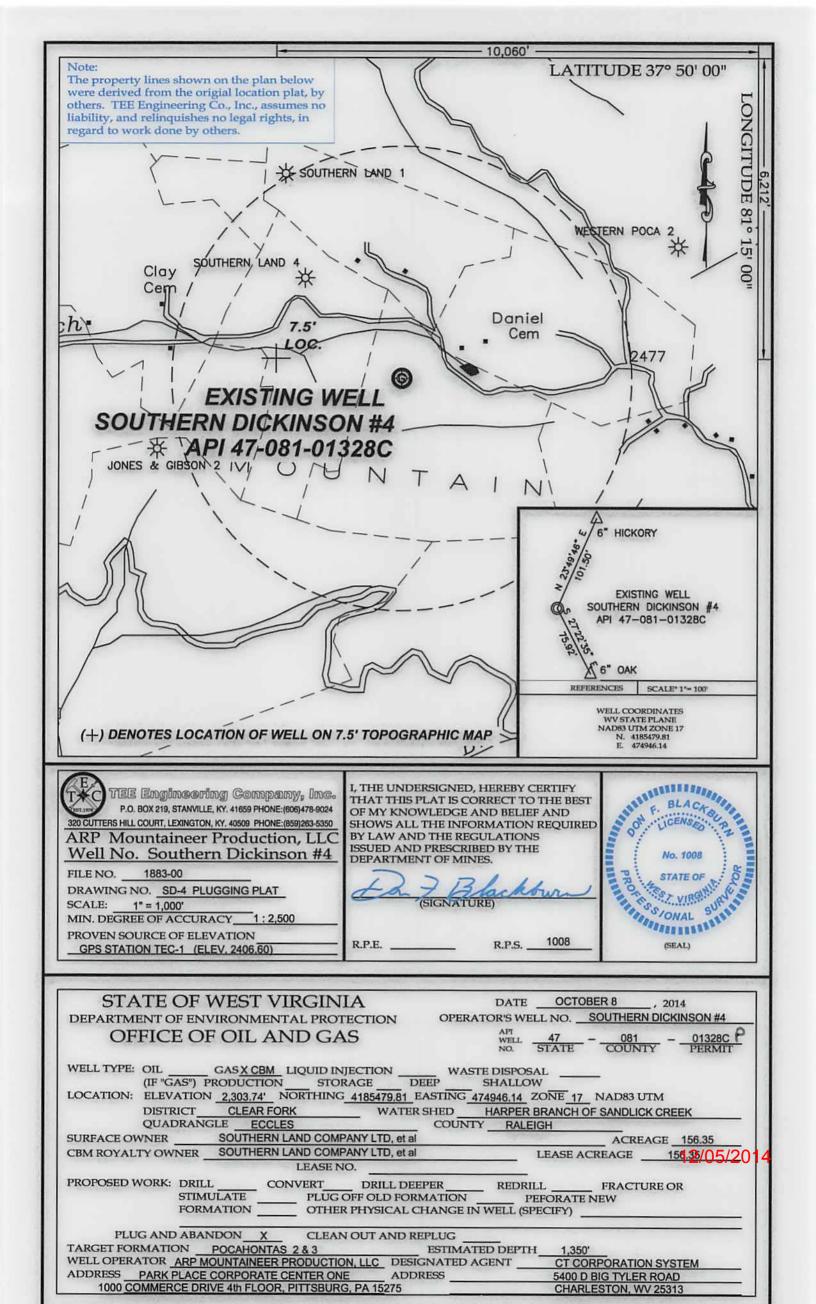
# Received

OCT 2 4 2014

Office of Oil and Gas

WV Dept. of City Imental Protection





### **TEE Engineering Company, Inc.**

320 Cutters Hill Court, Lexington, KY 40509 P.O. Box 219, Stanville, KY 41659

Phone: 859-263-5350 Fax: 859-263-5345 E-mail: teelex@windstream.net (Lexington)
Phone: 606-478-9024 Fax: 606-478-9019 E-mail: tblackbum@mikrotec.com (Stanville)

October 22, 2014

Mr. Gene Smith West Virginia Department of Environmental Protection Office of Oil and Gas 601 57<sup>th</sup> Street, SE Charleston, WV 25304-2345

Re: ARP Mountaineer Production, LLC - Application for Plugging Permit 47-081-01328C Well Name – SD #4

Dear Mr. Smith,

On behalf of ARP Mountaineer Production, LLC, please find attached for the above referenced plugging permit application the following:

- 1.) Original Plugging Permit Application
- 2.) Notification Mail Receipts.

Please note that the permit fee has been paid directly by ARP Mountaineer Production, LLC. Should there be any questions regarding this matter, please contact me at our Stanville office (606-478-9024 ext 450) or contact Rocky Stilwell (276-963-2976 ext 241).

Sincerely,

Tim W. Blackburn, V.P. TEE Engineering Co., Inc.

Office of Oil and Gas

OCT 2 4 2014

WV Department of Environmental Protection

