

west virginia department of environmental protection

Office of Oil and Gas 601 57th Street, S.E. Charleston, WV 25304 (304) 926-0450 fax: (304) 926-0452

Austin Caperton, Cabinet Secretary www.dep.wv.gov

Wednesday, November 14, 2018 WELL WORK PLUGGING PERMIT Vertical Plugging

ARSENAL RESOURCES LLC 6031 WALLACE ROAD EXTENSION SUITE 603 WEXFORD, PA 15090

Re: Permit approval for WALDMAN 4 47-001-03013-00-00

This well work permit 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 any additional specific 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. Please be advised that form WR-38, Affidavit of Plugging and Filling Well, is to be submitted to this office within 90 days of completion of permitted well work, as should form WR-34 Discharge Monitoring Report within 30 days of discharge of pits, if applicable. Failure to abide by all statutory and regulatory provisions governing all duties and operations hereunder may result in suspension or revocation of this permit and, in addition, may result in civil and/or criminal penalties being imposed upon the operators.

Per 35 CSR 4-5.2.g this permit will expire in two (2) years from the issue date unless permitted well work is commenced. If there are any questions, please feel free to contact me at (304) 926-0450.

James A. Martin

Chief

Operator's Well Number: WALDMAN 4

Farm Name: SMITH, JOANNE V.

Vertical Plugging

U.S. WELL NUMBER: 47-001-03013-00-00

Date Issued: 11/14/2018

Promoting a healthy environment.

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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.

WW-4B Rev. 2/01

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

	APPLICATION FOR A PERM	III TO PLUG AND ABANDON
4)	Well Type: Oil/ Gas X/ Liquid (If "Gas, Production or Und	linjection/ Waste disposal/ derground storage) Deep/ Shallow
5)	Location: Elevation 1370.67' District Pleasant	Watershed Bartlett Run County Barbour Quadrangle Brownton
6)	Well Operator Arsenal Resources Address 6031 WALLACE RD. EXT STE 300 WEXFORD, PA 15090	7) Designated Agent William Veigel Address 65 PROFESSIONAL PLACE STE 200 BRIDGEPORT, WV 26330
3)	Oil and Gas Inspector to be notified Name Kenneth Greynolds Address 613 Broad Run Road Jane Lew WV 26378	9) Plugging Contractor Name Patchwork Oil & Gas, LLC Address PO Box 168 Davisville, WV 26142
*	Work order attached.	
nadori de Milanon, el		Office of Oil and Gas OCT - 9 2018
Noti worl	ification must be given to the district of can commence.	Environment of it and gas inspector 24 hours before permitted Protection
Wor	c order approved by inspector	Skyde Date 10-3-18

Work Order Attachment

47-001-03013

Waldman #4H

Run Bond log when necessary to find cement top. Gel spacers in between all cement plugs.

- 1. Prepare plugging permit application.
- 2. Certify to surface and coal owners as necessary.
- 3. Certify and/or email to designated State inspector for signature.
- Once all signatures are obtained, copy for our records and certify at the state level for approval.
- 5. Receive plugging permit good for 2 years.
- 6. Notify the designated State inspector 24 hours prior to commencing operations.
- 7. Move rig and equipment to location.
- 8. Verify total depth of 7883'.
- 9. Attempt to clean out well bore, pull rods and tubing, if necessary.
- 10. Run gel
- 11. Run tubing to 50' below the bottom of the first set of perforations (7806'-7826' & 7720'-7740') and 50' above the second set of perforations. Set bottom plug with Class A cement with no more than 3% CaCl2 and no other additives from 7670' to TD'.
- 12. Pull tubing back, wait for cement to set.
- 13. Run in and tag plug, add additional cement if needed.
- 14. Run 6% Bentonite gel
- 15. Run bond log and shoot casing at free point.

16. Cut and place the second plug through the 5.5" (minimum 100') across the casing constructions of the orange of

17. Pull 5.5" to 50' below the bottom of the 8 5/8 set third plug with Class A cement with no more than 3% CaCl2 and no other additives covering the 8 5/8 casing shoe and elevation from of tection 1309' to 1422'.

BENSON HAD A GAS SHOW @ 4522'- 4568! SET A 100' CLASS A CEMENT PLUG FROM 4550- 4450'.

2 mins

CLASS A CEMENT PLUE FROM 2070' - 1970'.

- 18. Pull 5.5" back to 100 ' and place a surface plug with Class A cement with no more than 3% CaCl2 and no other additives covering the coal depth and fresh water zones and remove plugging string.
- 19. Set 3' high x 7" casing with concrete; add API for identification.
- 20. RDMO
- 21. Reclaim location.
- 22. Prepare WR-34 & WR-35 for permit release

Office of Oil and Gas

OCT - 9 2018

WV Department of Environmental Protection

WR-35 Rev (9-11)

State of West Virginia Department of Environmental Protection Office of Oil and Gas Well Operator's Report of Well Work

DATE: 10/16/2012 API #: 47-001-03013

Office Well Operator	of Oil and G 's Report of V		Aria	47-001-0301	3
Farm name: Smith, Joanne V.	Operator Wel	II No.: Waldman	14		
LOCATION: Elevation: 1370' GL / 1380' KB	Quadrangle:	Brownton 7.5			
District: Pleasant	County: Bar	bour			
Latitude: 6,580 Feet South of 39 Deg.	Min	. <u>00</u> _Se			
Longitude 1,240 Feet West of 80 Deg.	10 Min	i. <u>00</u> Ser	c.		
Company: Petroleum Development Corporation					
Address: 120 Genesis Boulevard	Casing & Tubing	Used in drilling	Left in well	Cement fill up Cu. Ft	1000
Bridgeport, WV 26330	11 3/4"	72'	72'	Sanded In	1
Agent: Bob Williamson	8 7/8"	1354'	1354'	448	1
Inspector: Bryan Harris	5 1/2"	7898'	7898'	297	1
Date Permit Issued: 01/30/2009					1 1
Date Well Work Commenced: 07/15/2009	2 3/8"	7709'	7709'		
Date Well Work Completed: 11/18/2009					1
Verbal Plugging:					
Date Permission granted on:					
Rotary Cable Rig					
Total Vertical Depth (ft): 7908'					
Total Measured Depth (ft): 7908					
Fresh Water Depth (ft.): 31', 111'					
Salt Water Depth (ft.): None Reported					
Is coal being mined in area (N/Y)? N					
Coal Depths (ft.): 142', 433', 519'					
Void(s) encountered (N/Y) Depth(s) N					
Gas: Initial open flow NA MCF/d Oil: Initial open flow Final open flow MCF/d Final open flow	one depth (ft)_ owBt	7720' ol/d	ita on separate sh	neet)	
Time of open flow between initial and final tests Static rock Pressure 2300 psig (surface pressure) aft	Hours		يربي سياسيا	בייות מייו	
psig (surface pressure) are	er <u>24 </u>	5		<u>.</u>	
	e depth (ft)			1 F 2017	
Gas: Initial open flow MCF/d Oil: Initial open flow MCF/d Final open flow MCF/d Final open flow			ושני	17 2012	
Time of open flow between initial and final tests	Hours	, u	.11.5-		:
Static rock Pressurepsig (surface pressure) after		R.			
I certify under penalty of law that I have personally examined a all the attachments and that, based on my inquiry of those individual that the information is true, accurate, and complete.	nd am familiar iduals immedia	with the inform tely responsible	nation submitted	on this document	and $\frac{Office}{Office}$ of Oil and Gas
Signature	—	10/16	5/2012 Date		WV Department of Environmental Protection

Were core samples taken? Yes	No_XX Were o	cuttings caught during drilling?	Yes_XX No	
Were Electrical, Mechanical or Geophy Monopole/Cross Dipole Semblance, Protechnics Spec	sical logs recorded on this well? If	yes, please list Mud Log, Weather	ford Triple Combo, Compact	•
NOTE: IN THE AREA BELOW FRACTURING OR STIMULATING DETAILED GEOLOGICAL RECO COAL ENCOUNTERED BY THE V	PUT THE FOLLOWING: 1 G, PHYSICAL CHANGE, ETC. 2 ORD OF THE TOPS AND BO). DETAILS OF PERFOR C). THE WELL LOG WHICH TTOMS OF ALL FORMA	HIS A SYSTEMATIC	•
Perforated Intervals, Fracturing, or Stim	ulating:			
B/21/2009: MIRU Hotwell & run GR/CC	L log from 7876' - 7240'. Perf from	7806-7826 (80 holes) & from	7720-7740 (80 holes).	
10/1/2009 60 bots of fluid was pumped at a rate of 1.5 b	pm and an ISP of 2389 was obtained. 5 minut	es later, the stimulation was continued with	h starting pressure at 2340 psi.	_
The pressure "rolled over" at 4829 psi at a rate of 35 open. The	rate was increased to 68 bpm with a treating pressur	e of 5082 pai. The pad was pumped as designa	ed. Introduction of sand began with	-
100 mosh at 0.5 pps. The rate was 69 bpm at a TP of 4910. Th) 100 mesh was continued as designed with increases to	o concembation as follows: 0.5, 0.75, 1, 1.25, 1.5,	2, 2.5. This soquence was performed	•
twice giving a total of 1021 sacts of 100 meah. Once the 1	10 mosh was completed, 40/70 mosh sand was utilit	ced. The 40/70 began to be pumped at a cate	of 70 bpm and a TP of 4715 psi.	-
The concentration was as follows: 1, 1.5, 2, 2.5, 3, 4.	The total 40/70 proppert pumped was 1980	sacks. The maximum pressure recorded	was 5329 psi near the flush.	_
Plug Back Details Including Plug Type	and Depth(s): The maximum rate was	71 bpm. The average treating press	sure was 4830 psi and the	_
average rate was 69 bpm. The ISIP after stimulation				
Formations Encountered: Surface:	Top Depth		Bottom Depth	
_ Lime	1554	1570		
3 Lime	1594	1782		-
Gantz	2066	2076	Show Gas	-
Fifty Foot	2134	2202		•
Gordon Stray	2270	2279		_
4th Sand	2454	2532		-
5th Sand	2572	2616		-
Benson	4522	4568	Show Gas	-
Sycamore	6878	6914		•
Tully	7545	7597		•
Marcellus	7750	7842	Show Gas	•
ioga Ash	7842	7848	······································	•
Onondaga LS	7848	7852		•
funtersville CH	7852	7,990	المستعدا المشتدان	
			C	RECEIVED Office of Oil and Gas
			テ 4 月 つれ・つ	- 9 201
			Enviro	Department of Protection



Select County	(001) Barbour	Sided datatypes.	(Check All)	
Einder Permit 2:	3013	th Location	Produtasi	# Exauting
and the		* Owner/Completion	✓ Strangraphy	√ Sample
Get Data	Reset	** Pay/Show/Water	e Logs	# Bam Hole Loc

Well: County = 1 Permit = 3013

Report Title: Friday Section ber 14, 2010 6 14:35 MM

Location Information: View Man.

API COUNTY PERMIT TAE DISTRICT QUAD 75 QUAD 15 LAT DD LON DD UTME UTMN 4700000011 Design Design

There is no Bottom Hole Location data for this well

Owner Information:

APP CMP OT SUPFIX STATUS SURFACE OWNER WELL HUN CO, HUM LEASE LEASE HUN MINERAL_CHIN

OPERATOR, AT COMPLETION PROP VD PROP TROT FM TFM_EST PRI

(2010)30313 11/15/2009 Organitus: Completed Justice V South

Walsham Petrolym Devisioner Corp.

7300 Marcela Fm

API	CMP DT	ACTIVITY	PRODUCT	SECTION	DEPTH TOP	FM TOP	DEPTH BOT	FM BOT	& DEF	G AFT	O BEF	O AFT	WATER O	MTY
4700103C13	11/15/2006	Water.	Frank Water	Visition!			31	Permaylvocum System	4					
4700103013	11/18/2009	Water.	Front Water	Virtigal.			117	Fremsylvanier System						
4700103913	HHBQ009	Show.	Gas	Vertical.	\$0tm	Garaz.		Guntz						
A700103013	11/18/2009	Show.	Gas	Vertical.	4522	Benson	4566	Elamapra.						
4700103013	F1/15/2009	Pay	Gen	Vertical.	7720	Hamitun Dep	7740	Hamilton Grp						
4700103613	H/15/2006	Pari	Gins	Vertical	7504	Marcielus Fre	782E	Marrobo Fin						
4700103013	TMISSOON	Show	Class	Vertical.	7751	Marciellas Fire	7642	Marapha Fre						

Production Gas Information: (Volumes in Mc/I)

AM	PRODUCING OPERATOR	PRD YEAR	ANN GAS	MAL	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DCM
4700103013	Petrolium Daveligenest Corp.	2003	12,348	.0	0	. 0	· · · · · · · ·	. 0	. 0	U	184	932	4,600	3,350	3.27
4700103013	Petrolisum Development Corp.	2010	25,279	3,019	7,751	2.093	1,960	1,611	1,995	7,206	2,231	1.975	1.76E	1,312	2.55
	Petrolsum Devoksment Corp.	2011	13,556	1,223	1,219	957	1,000	1.154	1.169	1.134	1,504	1.076	1,159	1,219	73
4700103013	POC Mourtainme, LLC	2012	9,438	931	802	959	583	585	714	7.17	977	H05	745	933	30
4700103013	PDC Mourronner, LLC	2013	7,271	563	590	653	819	624	510	810	673	567	160.0	547	70
4700103013	PDC Moortainest, LLC	2014	5,387	473	425	467	477	474	442	455	127	352	405	429	142
4700103013	Meantainger Kinystone, LLC	2015	3.956	460	304	356	397	410	373	256	353	361	873	276	
4700103013	Allania Petroleum Corporation	2015	5,123	27,00	755	567	791	700	JIA	390	583	580	700	393	- 40
4700103013	Arsenal Pleacaures LLC	2017	8,579	748	E85	860	908	1,001	1.345	496	829	306	321	436	- 44

Denduction Cil Information (Molumus in Rhi) ** norma countries may have recorded NCI under Cil

API	PRODUCING OPERATOR	PRO YEAR	ANII DE	JAN	FER	MAR	APR	MAY	JUN	JUL	AUG	SEP	DCT	NOV	DCM
4700103013	Petroisium Development Corp.	2500	n	0	. 0	9	- 0	. 0	0	.0	.0	.0	0	0	
4700103013	Petroleum Development Corp.	2013	n	0	. 0	- 3	0	11.	0	. 0	.0	- 0	10	- 0	- 5
1700103013	Petroleum Development Corp.	2011	9	0	. 0	- 0	9	- 12	. 0	- 5	.0	- 8	- 0	0	1.0
700103013	POC Mountaineer, LLC	2917	9	D	- 0	9	. 0	0	. 0	- 0	- 0	9	- 19	0	- 5
1760103613	PDG Mountaineer, LLG	2013	n	0	0	9	. 0	0	. 0	0	.0	9			- 0
1700103013	POC Mountaineer, LLC	2014	n	D	- 6	12	n	0	0		- 6	.0	G	12	
1700103013	Mississineer Keystone, N.C.	2015	- 0	- 0	0	5	- 5	0.	· ·		.n	.0	0	- 0	1.6
4700103013	Allance Petrolesim Corporation	2015	a												
4700 (03/01)	Amenal Rescriptes 11 C	2017	. 0	0											

Production NGL Information: (Volumes in Bhi). ** some operators may have reported NGL under Oil

API	PRODUCING OPERATOR	PRD YEAR	ARR NISL	JAN	FEB	MAR	APFI	MAY	JUN	JUL	AUG	SEP	DCT	NOV	DCM
4700103013	PDC Mountaineer, LLC	2913		. 0	D	.0	0	0	. 0	0	0	G		a	. 0
4700103013	PDC Mountainer, LLC	2014		- 0	- 0	- 0	.0	0	- 0	0	Ð	- 0	- 0	B	. 0
4700103013	Mountaineer Keystone, LLC	2015	. 0	- 6	- 0	- 0	- 6	0	n.	0	a	- 0	TI.	n	. 0
A700103011	Affiness Patrolaum Cornoration	2016	n n												

Production Water Information. (Volumes in Gallons)

AP PRODUCING OPERATOR PRO_YEAR ANH_WIR JAN FEB MAR APR MAY JUN JUL AUG SEP DCT NOV DCM

4/2010/513 Allange Periolami Geografiani 2015 0

Stratigraph	y Informati	on:							
API	SUFFIX	FM	FM DUALITY	DEPTH TOP	DEPTH QUALITY	THICKNESS	THICKNESS CUALI	TY ELEV	DATUM
47(0)103013	Original Los	1.85e Lime	WellRecord	1364	Reasonable	16	Heasanste	1371	Ground Level
4700103013	Original Los	Big Lime	Well Report	1534	Resumbling.	168	Redscription	1271	Ground Level
4700103013	Original Loc	Clarita	Wed Record	2036	Pensonsbiri	10	Reinspratte	1571	Ground Loved
4700103013	Original Loc	Filly-fool	Wed Record	2134	Peasonable	68	Findspriate-	1371	Ground Level
4700103013	Original Loc	Gorden Stray	Wnl Report	2270	Researable	10	Restonator	1371	Crosing Level
	Original too		Wed Record	2454	Peasonable	78	Researable	1571	Ground Level
4/00103013	Orgnal Loc	Fifter	Well Record	2572	Reasonable	3044	Reasonstria	13/1	Ground Level
4700103013	Original Los	Bernon	Well Record	4502	Reaschable	40	Remonale	1771	Ground Level
4700103013	Original Los	Sycamore	WellRecord	6876	Reunchable	.56	Reuniorusbóli	1371	Ground Level
4700103-013	Original Loc	Burket Sh Mbc	Electric Log. Fit35 Dyn Sh	7511	Reundnable	32	Reasonation	1380	Leiz Datum
1700103013	Original Loss	Tideta	Electric Log: PDS Dve Sh	7543	Responsible	70	Pleamonul &	1380	Leg Dalum
4720103013	Original Lee	Tuby La	Well Record		Rossonable	52	Resingmation	1071	Ground Level
4700103613	Orginaling	Hamilton Grp	Electric Log: Fit35 Dvn Sri		Reascruble	735	Reunionum	1380	Log Datum
4700103013	Original Loc	Malantanço Em	Electric Log. Rt35 Dvv 57	7613	Reasonable	131	Resignate	.1380	Log Oatum
4700103013	Original Los	Manuellis Fm	Electric Log: RIBS Dyn Sh	7744	Remonable	104	Responsible		Log Dah/m
4700103613	Digital Loc	upper Margetos A	Electric Log RISS Dvn Sh	7744	Reasonable	58	Resumble	1380	Less Dahimi
4700103013	Original Loc	Up Morrelus	Floding Log Fit35 Dvn Sh	7744	Renewable	7.0	Personniale	1386	Leg Datum
4700103013	Deignal Loc	Maruelus Fm	Well Record	7750	Reasonable	92	Remarkable	1271	Ground Level
4700103013	Original Loc	upper Marge Nail ()	Electric Log RISS Dvn Sh	7762	Reasonable	.00	Resumable	1360	Los Dabum
4700103013	Dignat Loc	lo Marriellus	Electric Log Philis Dyn Sh	7819	Rensonable	25	Reservation	.1384	Log Datum
4700103013	Oviginal Los	Marculas trans ione	Electric Log Rt35 Dvn-Sh	7841	Reasonable	7	(Course raph)	1380	Lot Datum
4700103013		Toga	Well Resord		Renserable		Researchite	1371	Criminat Linyof
4700103013	Drigimit Loc	Ополучевний Grp.	Electric Log. F135 Dyn Sh	7946	Remorable			1360	Leg Daham
4700103013	Oviginal Los	Onondage Liv	Well Record	7846	Fleanorskills	4	Gentle Pick	11371	Circuid Level
4700103013	Chemisal Lon	Hunterindle Chief	Wed Record	7852	Reservable			1371	Ground Leant

Witaline (E-Log) Information:

(API LOG_COP LOG_DOT DESPEST_FILE LOGG_AVAIL SCAN DISTRICTO BY TOP O_BOT D_TOP 0_BOT D_TOP 0_BOT 1_TOP 1_BOT 1_TOP 1_BOT 1_TOP 1_BOT 1_TOP 1_BOT 1_TOP 0_BOT NOT 0_TOP 0_TOP

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Then you can direct the file to a location of your choice, Please note these images vary in size and some may take several minutes to download, especially if using a 56k or slower dislup connection.

SCION.

Carck Reference Guide for Log File Names. For more into about WYGD's commod legit obtains greated by the types
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o ether) p. perforation depth control or perforatio

other kips may include, but one not dening to, such curves to suche, bit care, CCL—cusing color by per detector, guard. NCTU—Nuclear Coment Tan Landow, coloured trace; because

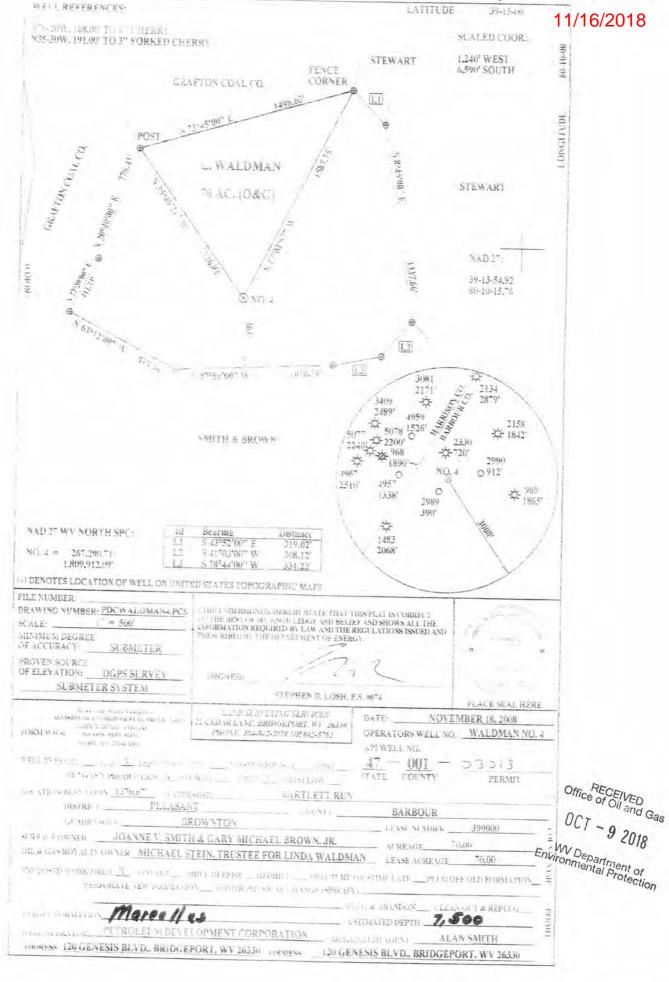
There is no Plugging data for this well

Sample Information:

API CUT1 100 CUT2 TOP CUT2 BOT CORES TOP CORES BOT FWS TOP FWS BOT CORES TOP CORES BOT FWS GOT FWS BOT SAMPL THIN SECT SCANS SLABS PERMS SLABS PERMS SLABS PERMS SLABS PERMS SAMPL THIN SECT SCANS SLABS PERMS SLABS PERMS SLABS PERMS SAMPL THIN SECT SCANS SLABS PERMS SLABS PERMS SAMPL THIN SECT SCANS SLABS PERMS SLABS PERMS SAMPL THIN SECT SCANS SAMPL THIN SECT SCANS SLABS PERMS SAMPL THIN SECT SCANS SLABS PERMS SAMPL THIN SECT SCANS SLABS PERMS SAMPL THIN SECT SCANS SAMPL THIN SECT SCANS SLABS PERMS SAMPL THIN SECT SCANS SAMPL THIN SAMPL S

Office of Oil and Gas OCT - 9 2018

WV Department of Environmental Protection



WW-4A Revised 6-07

4) Surface Owner(s) to be served:

1) Date: Septembe	r 21st, 2018			
 Operator's Well Numb Waldman #4 	oer			
3) API Well No.: 47 -	001	Į,	03013	

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

5) (a) Coal Operator

(a) Name	Joanne V. Smith		Name				
Address	2371 E Veterans M	emorial Hwy	Address				
	Flemington, WV 26	347					
(b) Name	Gary M. Brown Jr.	1	(b) Coal Ow	mer(s) with Decla	ration		
Address	2371 E. Veterans M	lemorial Hwy	Name	Consolidated Co	al Co.		
	Flemington, WV 26	347	Address	1800 Washingto	n Rd.		
				Pittsburgh, PA 1	5241		
(c) Name			Name	Coalquest Devel	opment LLC		
Address			Address	300 Corporation	Dr.		
			_	Scott Depot, WV			
3) Inspector	Kenneth Gre	zhlan	(c) Coal Les	see with Declarat			
Address	613 Broad R	3000	Name	Jood Will Double			
riduress	Jane Lew W			-			
Telephone	1-304-206-1						-7
retephone	1.304-200-0	2017	_				
(1) The apwell it (2) The pl	pplication to Plug and A is and the plugging work lat (surveyor's map) show you received these document	Abandon a Well on corder; and wing the well loca	n Form WW-4B, which	sets out the parties i			
(1) The appear well it (2) The pl The reason y However, yo Take notice accompanyir Protection, we the Applicat	pplication to Plug and A s and the plugging work lat (surveyor's map) sho	abandon a Well on corder; and wing the well local ats is that you have a ny action at all. the West Virginia Co to plug and abandon a te location described a mailed by registers	n Form WW-4B, which tion on Form WW-6. rights regarding the applic ode, the undersigned well a well with the Chief of th on the attached Applicati ed or certified mail or del	sets out the parties in sation which are summar operator proposes to file to Office of Oil and Gas, on and depicted on the air	ized in the instructio or has filed this Noti West Virginia Depart ttached Form WW-6.	ins on the reverses ice and Application tment of Environm Copies of this No	side. and ental otice.
(1) The name well it (2) The plant of the reason y However, you Take notice accompanying Protection, when Application is the Application of the Ap	pplication to Plug and A s and the plugging work lat (surveyor's map) show ou received these documer are not required to take are that under Chapter 22-6 of ag documents for a permit twith respect to the well at this ion, and the plat have been metances) on or before the commences.	Abandon a Well on to order; and wing the well local ats is that you have a my action at all. the West Virginia Co to plug and abandon a te location described in mailed by registers lay of mailing or deli	n Form WW-4B, which tion on Form WW-6. rights regarding the applicate, the undersigned well as well with the Chief of the on the attached Application of the cortified mail or delivery to the Chief.	sets out the parties is eation which are summar operator proposes to file e Office of Oil and Gas, on and depicted on the all livered by hand to the pro-	ized in the instructio or has filed this Noti West Virginia Depart ttached Form WW-6.	ins on the reverses ice and Application tment of Environm Copies of this No	side. and ental otice.
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Oil and Gas Privacy Notice

My Commission Expires

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.

Notary Public

WW-9 (5/16)

API Number 47 - 001 _03013 Operator's Well No. Waldman #4

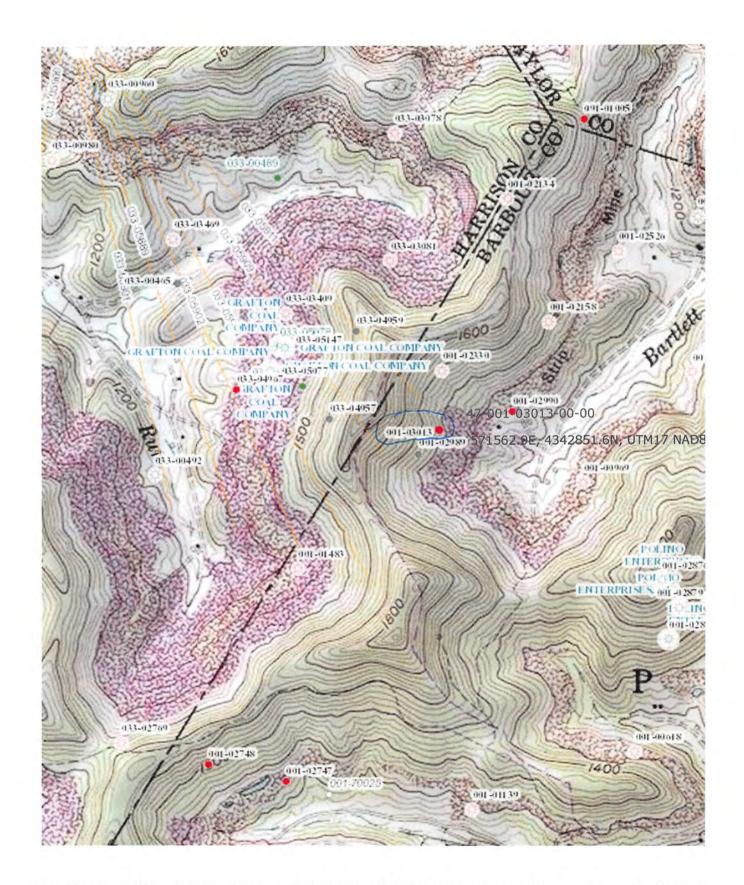
STATE OF WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION OFFICE OF OIL AND GAS

FLUIDS/ CUTTINGS DISPOSAL & RECLAMATION PLAN

Operator Name Arsenal Resources	OP Code 494519412
Watershed (HUC 10) Bartlett Run	Quadrangle Brownton
Do you anticipate using more than 5,000 bbls of water to comp	olete the proposed well work? Yes No
Will a pit be used? Yes No	
If so, please describe anticipated pit waste:	
Will a synthetic liner be used in the pit? Yes	No If so, what ml.?
Proposed Disposal Method For Treated Pit Wastes:	
Land Application (if selected provid	le a completed form WW-9-GPP)
Underground Injection (UIC Permit	
Reuse (at API NumberOff Site Disposal (Supply form WV	V - Q for disposal location)
Other (Explain Vac truck will be used	I for any fluids, no pit will be used. Fluids will be disposed of properly. 6FF-SITE.
Will closed loop systembe used? If so, describe: n/a	
Drilling medium anticipated for this well (vertical and horizont	al)? Air, freshwater, oil based, etc. n/a
-If oil based, what type? Synthetic, petroleum, etc. n/c	a
Additives to be used in drilling medium?n/a	
Drill cuttings disposal method? Leave in pit, landfill, removed	offsite, etc. n/a
-If left in pit and plan to solidify what medium will be	used? (cement, lime, sawdust) n/a
-Landfill or offsite name/permit number? П/а	
	Gas of any load of drill cuttings or associated waste rejected at any within 24 hours of rejection and the permittee shall also disclose
on April 1, 2016, by the Office of Oil and Gas of the West Virg provisions of the permit are enforceable by law. Violations of a or regulation can lead to enforcement action. I certify under penalty of law that I have personally application form and all attachments thereto and that, based on the information, I believe that the information is true, accurat submitting false information, including the possibility of fine or Company Official Signature	conditions of the GENERAL WATER POLLUTION PERMIT issued ginia Department of Environmental Protection. I understand that the any term or condition of the general permit and/or other applicable law examined and am familiar with the information submitted on this my inquiry of those individuals immediately responsible for o btaining te, and complete. I am aware that there are significant penaltics ECEIVED imprisonment. OCT - 9 2018
Company Official (Typed Name) William Veigel	Environment of
Company Official Title Designated Agent, Sr. Director	of Production WV Department of Environmental Protection
Subscribed and swom before me this 24 day of My commission expires August 726	Notary Public OFFICIAL SEAL NOTARY PUBLIC NO

Operator's Well No. Waldman #44

sed Revegetation Treatment: Acres Disturbed	ONE +/-	Preveg ctation pH	5.5
Lime One-Two Tons/acre or to con			
Fertilizer type Agland 5-10-10			
Fertilizer amount 500	lbs/acre		
Mulch Strawy	Tons/acre		
	Seed Mixtures		
Temporary		Permar	rent
Seed Type lbs/acre		Seed Type	lbs/acre
	Pas	ture mix	200
led). If water from the pit will be land applied,), and area in acres, of the land application are copied section of involved 7.5' topographic shall	provide water volume a.	, include dimensions (L,	ling this info have been W, D) of the pit, and dim
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 $http://deparcgis1/ooggis/index.html?x = 571562.9 \& y = 4342851.6 \& datum = NAD83 \& pntlab... \quad 10/11/2018 \\ + 10/11/2018 + 10/11/2018 \\ + 10$

WW-7 8-30-06

Signature



West Virginia Department of Environmental Protection Office of Oil and Gas

WELL LOCATION	FORM: GPS
API: 47-001-03013	WELL NO.: Waldman #4
FARM NAME: Smith, Joanne	
RESPONSIBLE PARTY NAME: Arsena	
	DISTRICT: Pleasant
QUADRANGLE: Brownton	
SURFACE OWNER: Joann V. Smith	& Gary M. Brown Jr.
ROYALTY OWNER: See list attack	ched.
UTM GPS NORTHING: 4342851.6	
UTM GPS EASTING: 571562.9	GPS ELEVATION: 1370.67'
The Responsible Party named above has chosen to preparing a new well location plat for a plugging pabove well. The Office of Oil and Gas will not accepte following requirements: 1. Datum: NAD 1983, Zone: 17 North, Concepte height above mean sea level (MSL) – north, and a concepte height above mean sea le	permit or assigned API number on the cept GPS coordinates that do not meet coordinate Units: meters, Altitude: neters.
Real-Time Differenti	
Mapping Grade GPS X: Post Processed Di	Uffice CEIVED
A. Letter size copy of the topography man the undersigned, hereby certify this data is corrected and shows all the information required by later prescribed by the Office of Oil and Gas.	ap showing the well location. It to the best of my knowledge and w and the regulations issued and
1/1/1/1/2 Designa	ated Agent a ou is

Title

Date