

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

Jim Justice, Governor Austin Caperton, Cabinet Secretary www.dep.wv.gov

Monday, October 02, 2017 WELL WORK PERMIT Horizontal 6A / New Drill

ARSENAL RESOURCES LLC 6031 WALLACE ROAD EXTENSION SUITE 300

WEXFORD, PA 15090

Re: Permit approval for VELTRI 4HM

47-091-01340-00-00

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.

Please be advised that form WR-35, Well Operators Report of Well Work 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: VELTRI 4HM Farm Name: VELTRI, ANTHONY J.

U.S. WELL NUMBER: 47-091-01340-00-00

Horizontal 6A / New Drill

Date Issued: 10/2/2017

Promoting a healthy environment.

API Number:	

PERMIT CONDITIONS

West Virginia Code § 22-6A-8(d) 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

- This proposed activity may require permit coverage from the United States Army Corps of Engineers (USACE). Through this permit, you are hereby being advised to consult with USACE regarding this proposed activity.
- 2. If the operator encounters an unanticipated void, or an anticipated void at an unanticipated depth, the operator shall notify the inspector within 24 hours. Modifications to the casing program may be necessary to comply with W. Va. Code § 22-6A-5a (12), which requires drilling to a minimum depth of thirty feet below the bottom of the void, and installing a minimum of twenty (20) feet of casing. Under no circumstance should the operator drill more than one hundred (100) feet below the bottom of the void or install less than twenty (20) feet of casing below the bottom of the void.
- 3. When compacting fills, each lift before compaction shall not be more than 12 inches in height, and the moisture content of the fill material shall be within limits as determined by the Standard Proctor Density test of the actual soils used in specific engineered fill, ASTM D698, Standard Test Method for Laboratory Compaction Characteristics of Soil Using Standard Effort, to achieve 95 % compaction of the optimum density. Each lift shall be tested for compaction, with a minimum of two tests per lift per acre of fill. All test results shall be maintained on site and available for review.
- 4. Operator shall install signage per § 22-6A-8g (6) (B) at all source water locations included in their approved water management plan within 24 hours of water management plan activation.
- 5. Oil and gas water supply wells will be registered with the Office of Oil and Gas and all such wells will be constructed and plugged in accordance with the standards of the Bureau for Public Health set forth in its Legislative rule entitled *Water Well Regulations*, 64 C.S.R. 19. Operator is to contact the Bureau of Public Health regarding permit requirements. In lieu of plugging, the operator may transfer the well to the surface owner upon agreement of the parties. All drinking water wells within fifteen hundred feet of the water supply well shall be flow tested by the operator upon request of the drinking well owner prior to operating the water supply well.
- 6. Pursuant to the requirements pertaining to the sampling of domestic water supply wells/springs the operator shall, no later than thirty (30) days after receipt of analytical data provide a written copy to the Chief and any of the users who may have requested such analyses.
- 7. 24 hours prior to the initiation of the completion process the operator shall notify the Chief or his designee.
- 8. During the completion process the operator shall monitor annular pressures and report any anomaly noticed to the chief or his designee immediately.
- 9. If any explosion or other accident causing loss of life or serious personal injury occurs in or about a well or well work on a well, the well operator or its contractor shall give notice, stating the particulars of the explosion or accident, to the oil and gas inspector and the Chief, within 24 hours of said accident.
- 10. During the casing and cementing process, in the event cement does not return to the surface, the oil and gas inspector shall be notified within 24 hours.

API Number:	

PERMIT CONDITIONS 9 9 1 1 3 4 0

11. The operator shall provide to the Office of Oil and Gas the dates of each of the following within 30 days of their occurrence: completion of construction of the well pad, commencement of drilling, cessation of drilling, completion of any other permitted well work, and completion of the well. Such notice shall be provided by sending an email to DEPOOGNotify@wv.gov.

4 7 API NO. 47	0	9	9	0	1	3	4	0
OPERATO	RW	/ELL	NC). <u>V</u>	eltri 4	НМ		
Well Pad	Nai	ne:	Velt	i				

STATE OF WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS WELL WORK PERMIT APPLICATION

1) Well Operator: Arsenal Res	sources	494519412	Taylor	Courthou Grafton	
		Operator ID	County	District Quadrang	gle
2) Operator's Well Number: Vel	ltri 4HM	Well Pad	Name: Veltri		
3) Farm Name/Surface Owner:	Anthony Veltri	Public Road	d Access: CR's	s 119/28, 119/27, 1	13/6
4) Elevation, current ground:	1474 El	evation, proposed j	ost-construction	on: 1474	
5) Well Type (a) Gas X Other	Oil	Unde	rground Storag	e	
(b)If Gas Shal	llow X izontal X	Deep			
6) Existing Pad: Yes or No Yes					
7) Proposed Target Formation(s) Marcellus Shalo, 7881 ft (Top)- 7968 ft (Bottom), 87 ft, 0.5 ps		ipated Thickness a	nd Expected Pr	essure(s):	
8) Proposed Total Vertical Depth	_{1:} 7954 ft				
9) Formation at Total Vertical De	epth: Marcellus	Shale			
10) Proposed Total Measured De	epth: 15459 ft				
11) Proposed Horizontal Leg Ler	ngth: 7083 ft				
12) Approximate Fresh Water St	rata Depths:	550 ft			
13) Method to Determine Fresh	Water Depths: C	Offsetting wells reported w	ater depths (091-00	825, 091-00826, 091-00967	', 091-00991)
14) Approximate Saltwater Dept	hs: 2010 ft.				
15) Approximate Coal Seam Dep	oths: Approximate Coal Seam Dept	ths: Harlom = 420, Bakerstown = 503', Brush Creek	- 598'. Upper Freeport - 673', Lower Fr	veport – 720', Upper Kittanning – 780', Middle Kittanning) – 818', Lower Kittanning – 8
16) Approximate Depth to Possil	ble Void (coal mi	ine, karst, other):	lone known		
17) Does Proposed well location directly overlying or adjacent to	contain coal sear			None known	
(a) If Yes, provide Mine Info:	Name:			RECEIVED	
	Depth:		<u>O</u>	ffice of Oil and G	as
	Seam:			JUN 0 1 2017 —	
	Owner:			1015	of
			[=n	NV Department or Fironmental Prote	ction
				HOITHCHEAT 1 1919	

WW-6B
(04/15)

API NO. 47	
OPERATOR WELL NO.	Veltri 4HM
Well Pad Name: Veltri	

18)

CASING AND TUBING PROGRAM

TYPE	Size (in)	New or Used	Grade	Weight per ft. (lb/ft)	FOOTAGE: For Drilling (ft)	INTERVALS: Left in Well (ft)	CEMENT: Fill-up (Cu. Ft.)/CTS
Conductor	24"	New	H-40	94#	80'	80'	CTS
Fresh Water	13.375"	New	J-55	54.5#	630'	630'	CTS
Coal							
Intermediate	9.625"	New	J-55	40#	2700'	2700'	CTS
Production	5.5"	New	P-110	20#	15,459'	15,459'	TOC @ 2,550'MD
Tubing							
Liners							

Limid L. Sagred 9-25-17

ТҮРЕ	Size (in)	Wellbore Diameter (in)	Wall Thickness (in)	Burst Pressure (psi)	Anticipated Max. Internal Pressure (psi)	Cement Type	Cement Yield (cu. ft./k)
Conductor	24"	36"			0	Class A, 3% Celchm	1.20
Fresh Water	13.375"	17.5"	0.38"	2730	0	Class A, 3% CaCl2	1.20
Coal					0		
Intermediate	9.625"	12.25"	0.395"	3950psi	0	Class A, 2% CaCl2	1.29
Production	5.5"	8.5-8.75	0.361"	12,640psi	9500	Class A	1.64/1.32
Tubing					5000		
Liners					N/A		

PACKERS

Kind:		
Sizes:		
Depths Set:		

WW-6E	3
(10/14))

RECEIVED				
See Miller	٠٠	and C		
		•		
	NO.	2017		

API NO. 47	
OPERATOR WELL NO.	Veltri 4HM
Well Pad Name: Veltri	

MV Departmen

19) Describe proposed well work, including the drilling and plugging back of any pilot hole:

The well will be started with a conductor rig drilling a 36" hole to Conductor programmed depth then running 24" casing and grout cement back to surface. The conductor rig will move out and the drilling rig will move in and rig up. The drilling rig will then spud a 17 ½" hole and drill to fresh water casing (Surface) to the programmed depth, Run 13- 3/8" casing and cement to surface. The rig will continue drilling a 12- ½" intermediate hole to the programmed depth, run 9- 5/8" casing and cement to surface. The rig with then continue to drill an 8- ¾" hole to a designed KOP. We will then start drilling the curve and lateral section to the programmed total measured depth, run 5 ½" casing and cement according to the program.

20) Describe fracturing/stimulating methods in detail, including anticipated max pressure and max rate:

The well will be completed using a plug and perforation method and stimulated with a slickwater and sand slurry. The anticipated maximum rate will be 90 bpm and the maximum pressure will be 9,500 psi.

- 21) Total Area to be disturbed, including roads, stockpile area, pits, etc., (acres): 14.4
- 22) Area to be disturbed for well pad only, less access road (acres): 3.36
- 23) Describe centralizer placement for each casing string:

20"- No centralizers 13 3/8" – one bow spring centralizer on every other joint 9 5/8" – one bow spring centralizer every third joint from TD to surface $5 \frac{1}{2}$ " – one semi rigid centralizer on every joint from TD of casing to end of curve. Then every other joint to KOP. Every third joint from KOP to 2,700'; there will be no centralizers from 2,700 to surface.

24) Describe all cement additives associated with each cement type:

24" will be grouted from surface. The 13-3/8" casing will be cemented to surface with Class A cement and no greater than 3% CaCl (calcium chloride). The 9-5/8" casing will be cemented to surface with Type 1 cement, & no greater than 3% calcium chloride. The 5-1/2" production string will be cemented back to 2,450' (+/- 150' above the casing shoe for the 9-5/8") with Type 1 or Class A cement retarder (to extend pumpability) cellophane flaked for fluid loss, Bentonite gel as an extender (increased pumpability and fluid loss), a defoaming agent to decrease cement foaming during mixing to insure the cement is of proper weight to placement and possibly a gypsum gas blocking additive to aid in blocking/gas migration (in combination with other additive mentioned here, helps cement achieve a "right-angle" set) during the plastic phase of the cement set-up.

25) Proposed borehole conditioning procedures:

Top holes will be drilled with fresh water to KOP. At KOP, the wellbore will be loaded with synthetic oil based mud, barite-weighted mud system with such properties as to build a filter-cake on the face to the bore-hole. This will provide lubricity as well as stabilizing the well bore. We will begin rotating the drill string and mud will be circulated upon reaching TD until no further cuttings are observed coming across the shaker screens. Once clean mud is circulated back to surface, we will pull three stands of drill pipe, load the hole, pull three stands and load the hole. The weight indicator on the rig will be monitored for any occurrences of drag and if any are notices, we will re-run the previous stand of pipe pulled across and circulate 2X bottoms up while watching the shakers for signs of cuttings. Once at the base of the curve, the string will be continuously rotated while pumping 2X bottoms up. We will pull three stands and fill the hole until we reach the vertical section of the well.

*Note: Attach additional sheets as needed.

			Arsenal Resource	es
ARSEN	AL		Veltri 4HM	
4 6 2 0 M H I	C E S		Casing Design Directional Plan # 5	
	N/A			County: Taylor
	TBD TBD			State: West Virginia AFE #: XX API #: XX
Total Depth:	15,459 MD (ft)			RKB: 27
Logs	7,954 TVD (ft) Significant	Depth (ft)	Depth (ft)	Ground Level: 1,474 Hole Casing and Mud Directional & Surveys
	Formations (TVD)	MD	TVD	Size Cement Drlg /Csg Point
None	Section 1	100	Drive Pipe	24" 94# H-40 STC Vertical
None				17 1/2" (PDC) Floc Water
	Section 2		Floc	Cement:Type 1 489 Sacks w/ 30% Excess TOC: Surface (top off if needed) All cement volumes are estimates
Possible CBL after cement job		600	600	13 3/8" 54.5# J-55 STC Vertical
			-	
None	Section 3		Floc	12 1/4" (PDC) Floc Water
				Cement:Type 1 389 Sacks w/ 50% Excess TOC: Surface (top off if needed) All cement volumes are estimates
Possible				
CBL after cement job		2,700	2,700	9 5/8" 40# J-55 LTC Vertical
	Section 4		Floc	Mud Data From To Floc Water 100 2700 Floc Water 2700 [7,375 11.5- 12.0 ppg SOBM 7,375 15,459
				Bit Data From To 17-1/2" & 12 1/4" PDC 100 2,700 8- 3/4" (PDC) 2,700 8,375 8- 1/2" (PDC) 8,375 15,459 Directional Data See Directional Plan
			ОВМ	
	Big Lime		1,550	709101340
	1st Elk Siltstone		4,937	1340
	Tully Lime		7,645	
	Purcell (Limestone)		7,933	Cement: Type 1
	Lower Marcellus		7,937	1.2 ft3/sack +10% Exs in OH = 2464 sacks TOC: 2,550 ft
I	15,459 MD 7954 TVD			All cement volumes are estimates 5 1/2" 20# P-110 VAR
Revision	1 ist Revised: 26-May-17	N	ote: Not drawn to sca	Cement Outside Casing Seal Assembly in Annulus
Date La	Jarrett Toms			

RECEIVED
Office of Oil and Gas

JUN 01 2017



4709101340

Purpose

The purpose of this pad-specific Hydraulic Fracturing Monitoring Plan is to identify and notify conventional well operators near Arsenal Resources hydraulic fracturing in Taylor County, WV prior to hydraulic fracturing at the following ARSENAL RESOURCES wells on the Veltri 4HM Pad.

Due to the apparent presence of unique geological conditions, the potential for communication between deep geologic zones exists in this area. This potential communication, via natural gas, water, or both, may occur between hydraulically fractured wells in the Marcellus formation (approximately 8,000'TVD) and existing conventional natural gas wells in the partially-depleted, relatively high permeability Benson formation (approximately 4,400' TVD).

The plan is being implemented as an additional safety measure to be utilized in conjunction with best management practices and emergency action plans for this site. These additional measures include pre-notification of conventional well operators of the timing and location of the hydraulic fracturing, establishment of measures conventional well operators should implement, and assurance that the Division of Oil and Gas is notified of the timeline, as well as any issues that may arise during fracturing.

1. Communications with Conventional Operators.

ARSENAL RESOURCES, using available data (WV Geological Survey, WVDEP Website, and IHS data service), has identified all known conventional wells and well operators within 500 feet of this pad and the lateral sections. A map showing these wells along with a list of the wells and operators is included in Attachment A. Upon approval of this plan, ARSENAL RESOURCES will notify these operators, via letter, of the hydraulic fracturing schedule for these wells. A copy of this letter is included in Attachment B.

The letter provides recommendations to these conventional operators to 1) increase their monitoring of their wells during that time period, 2) ensure that their well head equipment is sound, and 3) provide immediate notification to ARSENAL RESOURCES and the OOG in the event of any changes in their well conditions.

Specifically, the letter recommends that conventional well operators conduct the following activities during and after fracturing operations:

- 1. Inspect their surface equipment prior to fracturing to establish integrity and establish prefrac well conditions.
- 2. Observe wells closely during and after fracturing and monitor for abnormal increases in water, gas or pressure.
- 3. Inspect or install master valves rated to 3,000 psi or other necessary equipment for wellhead integrity.
- 4. Notify the OOG and ARSENAL RESOURCES if any changes in water, gas production, pressure or other anomalies are identified.



2. Reporting

ARSENAL RESOURCES will provide information relating to the hydraulic fracturing schedule, communication with conventional operators, and ongoing monitoring of the work upon request of OOG or immediately after any event of any noted abnormalities.

	_	_		_	_	_	_	_	_	_	_	_	_	_	_	_	_
		Producing Zones not Perforated	NA														
Pad, 4HM Lateral, Taylor County, WV	Bookson I Land	renorated rormation(s)	Big Lime, Big Injun, Benson														
Taylor	I oneitude Tetal Danch	inda pebri	4455														
Lateral,	Ionethinla	00 054470	-00.UST/29														
ad, 4HM	Latitude	20 35 4033	23.204333														
	WellType	Vartiral/Evieting	Simon round														
Area of Review Report - Veltri	Operator Name / Address	Alliance Petroleum Cornoration															
	API Number	091-00134													-		
	Well Name	Idon/Lois Findley 2															

API Number 47 -	
Operator's Well No.	Veltri 4HM

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

FLUIDS/ CUTTINGS DISPOSAL & REC	LAMATION PLAN
Operator Name Arsenal Resources	OP Code _494519412
Watershed (HUC 10) Long Run Quadrang	gle Grafton
Do you anticipate using more than 5,000 bbls of water to complete the propose Will a pit be used? Yes No	ed well work? Yes Vo 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 Underground Injection (UIC Permit Number Reuse (at API Number Off Site Disposal (Supply form WW-9 for disposal Other (Explain	l location)
Will closed loop system be used? If so, describe: Yes, The closed loop system will contain all	of the drilling medium and drill cuttings on location to than be taken to a landfill.
Drilling medium anticipated for this well (vertical and horizontal)? Air, fresh	
-If oil based, what type? Synthetic, petroleum, etc. Synthetic	
Additives to be used in drilling medium? Bentonite, Soap & Polymer sticks, Soda Ash, S	Sodium Bicarbonate, Defoamer, Base Oil, Emulsifiers, Lime, Barite
Drill cuttings disposal method? Leave in pit, landfill, removed offsite, etcL	andfill
-If left in pit and plan to solidify what medium will be used? (cemen	t, lime, sawdust)_N/A
-Landfill or offsite name/permit number? Advanced Disposal Services a	and Chestnut Valley Landfill
Permittee shall provide written notice to the Office of Oil and Gas of any load West Virginia solid waste facility. The notice shall be provided within 24 hour where it was properly disposed.	
I certify that I understand and agree to the terms and conditions of the on August 1, 2005, by the Office of Oil and Gas of the West Virginia Department provisions of the permit are enforceable by law. Violations of any term or claw or regulation can lead to enforcement action. I certify under penalty of law that I have personally examined an application form and all attachments thereto and that, based on my inquivalent obtaining the information, I believe that the information is true, accurate, penalties for submitting false information, including the possibility of fine or incompany Official Signature	d am familiar with the information submitted on this iry of those individuals immediately responsible for and complete. I am aware that there are significant imprisonment. Office of Oil and Gas
Company Official (Typed Name) William Veigel	JUN 01 2017
Company Official Title Designated Agent	WV Department of
	Environmental Protection
Subscribed and sworn before methis 30 TH day of MAY	, 20 17
Caveinde Jean	OFFICIAL SEAL NOTARY PUBLIC STATE OF WEST VIRGINIA CAROL INDA FLANAGAN

Form WW-9			Operator's Well N	o Veltri 4HM
Arsenal Resources			Operator's wen in	0
Proposed Revegetation Treat	tment: Acres Disturbed 14.	4	Prevegetation pH 6.8	3 Average
Lime 4	Tons/acre or to correct	to pH 6.0-7.5		
Fertilizer type 10-	20-20			
Fertilizer amount_5	00	lbs/acre		
Mulch 2		Γons/acre		
		Seed Mixtures	4) g s	· ···································
Te	mporary		Permanent	
Seed Type Annual Rye	lbs/acre 40	Swisher	Seed Type Meadow Mix	lbs/acre 100
Field Bromegrass	40	<u></u>		
Winter Rye	168			
Winter Wheat	180			
Attach: Maps(s) of road, location, pi provided). If water from the acreage, of the land applicati Photocopied section of invol	pit will be land applied, inclu on area.			
Plan Approved by:	must 1. keye	vel		
Comments: Pre-seed			oon as reasona	bly possible
	pgrade E&S whe			
necessary.				_
				RECEIVED Office of Oil and Gas
				JUN 0 1 2017
			Er	WV Department of vironmental Protection

Title: OIL+GDS INSPECTON Date: 5-25-17

(_____) Yes

Field Reviewed?



SITE SAFETY PLAN

VELTRI 4HM WELL PAD

911 Address:

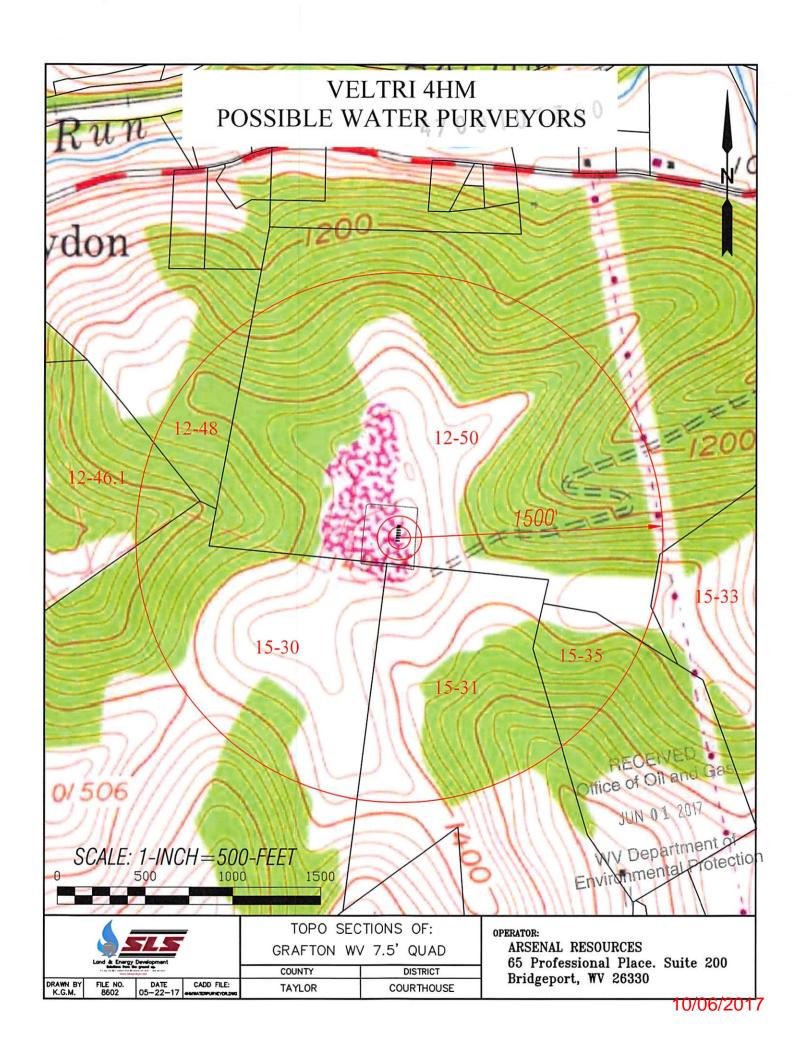
4728 Webster Pike

Grafton, WV 26354

Lement L. Shapeort 5-25-17

RECEIVED
Office of Oil and Gas

JUN 01 2017





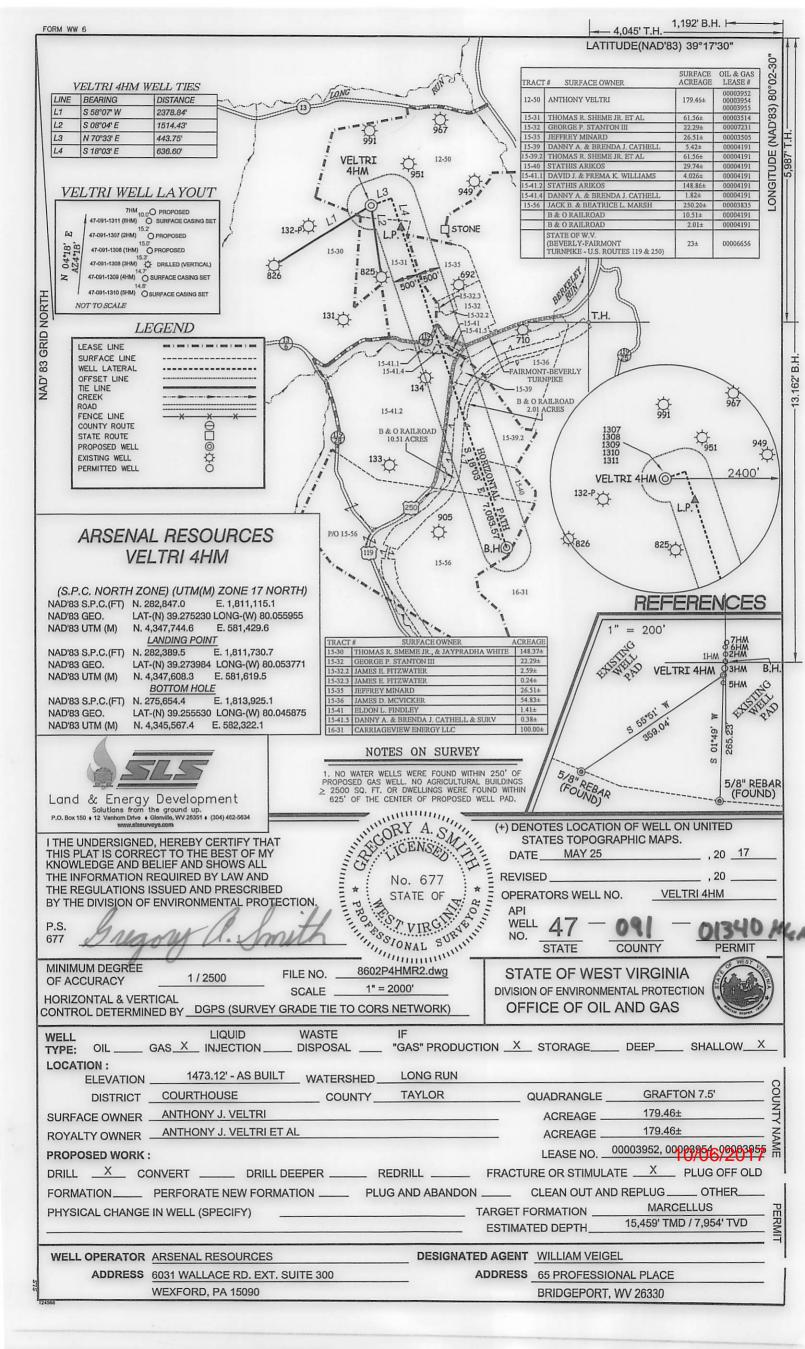
Possible Water Purveyors within 1,500 feet of Veltri Pad

MAP	PARCEL	OWNER	ADDRESS
12	46.1	SHEME THOMAS RICHARD JR	722 NUZUM RD , GRAFTON , WV 26354
12	48	48 NEAL MARK WAYNE & JUDY ELAINE P O BOX 144 , WALTON , WV 25286	
12	50	VELTRI ANTHONY J. RR 2 BOX 416, GRAFTON, WV 26354	
15	30	SHEME THOMAS R JR JAYPRADHA WHITE	722 NUZUM RD , GRAFTON , WV 26354
15	31	SHEME THOMAS R JR JAYPRADHA WHITE	722 NUZUM RD , GRAFTON , WV 26354
15	33	MCVICKER JAMES D	5661 WEBSTER PIKE , GRAFTON , WV 26354
15	35	MINARD JEFFREY	RR 2 BOX 426 , GRAFTON , WV 26354

4709101340

RECEIVED
Office of Oil and Gas

JUN 01 2017



INFORMATION SUPPLIED UNDER WEST VIRGINIA CODE Chapter 22, Article 6A, Section 5(a)(5) IN LIEU OF FILING LEASE(S) AND OTHER CONTINUING CONTRACT(S)

Under the oath required to make the verification on page 1 of this Notice and Application, I depose and say that I am the person who signed the Notice and Application for the Applicant, and that –

- (1) the tract of land is the same tract described in this Application, partly or wholly depicted in the accompanying plat, and described in the Construction and Reclamation Plan;
- (2) the parties and recordation data (if recorded) for lease(s) or other continuing contract(s) by which the Applicant claims the right to extract, produce or market the oil or gas are as follows:

Lease Name or Number

Grantor, Lessor, etc.

Grantee, Lessee, etc.

Royalty

Book/Page

See Attached

470910134

RECEIVED
Office of Oil and Gas

JUN 01 2017

WV Department of Environmental Protection

Acknowledgement of Possible Permitting/Approval In Addition to the Office of Oil and Gas

The permit applicant for the proposed well work addressed in this application hereby acknowledges the possibility of the need for permits and/or approvals from local, state, or federal entities in addition to the DEP, Office of Oil and Gas, including but not limited to the following:

- WV Division of Water and Waste Management
- WV Division of Natural Resources WV Division of Highways
- U.S. Army Corps of Engineers
- U.S. Fish and Wildlife Service
- County Floodplain Coordinator

The applicant further acknowledges that any Office of Oil and Gas permit in no way overrides, replaces, or nullifies the need for other permits/approvals that may be necessary and further affirms that all needed permits/approvals should be acquired from the appropriate authority before the affected activity is initiated.

Well Operator: Arsenal Resources

By: William Veigel

Its: Designated Agent

Attachment to WW-6A1, Veltri 4HM

Letter Designation/Number Designation on Plat	Grantor, Lessor, Assignor, etc.	Grantee, Lessee, Assignee, etc.	Royalty	Book/Page	Acreage
00003952	Dorsey C. Setler and Maude S. Setler, his wife	Petroleum Development Corporation	0.125	42/264 43/351 44/332 45/613 46/579 48/367	240
	Petroleum Development Corporation	PDC Mountaineer, LLC		30/698	
	PDC Mountaineer, LLC	River Ridge Energy, LLC			
00003954	Anthony J. and Geraldine M. Veltri	Petroleum Development Corporation	0.125	41/605 43/264 44/364 45/656 46/666 62/574 48/639	40.86
	Petroleum Development Corporation	PDC Mountaineer, LLC		30/698	
	PDC Mountaineer, LLC	River Ridge Energy, LLC			
00003955	Anthony J. and Geraldine M. Veltri	Petroleum Development Corporation	0.125	41/164 43/262 44/366 45/654 46/664 62/572 48/637 49/263	137
RECEIVED Office of Oil and Gas	Petroleum Development Corporation	PDC Mountaineer, LLC		30/698	
	PDC Mountaineer, LLC	River Ridge Energy, LLC			·

JUN 23 2017

00003514	Haymond J. Nuzum, single; Zona V. Nuzum, widow; Gloria D. Short, divorced	Consolidated Gas Supply Corporation	0.125	33/274	505.88
	Adolphus T. Leach and Leona C. Leach, his wife; Haymond J. Nuzum, single; Gloria D. Short, divorced	Petroleum Development Corporation; Consolidated Gas Supply Corporation		34/89	
	Petroleum Development Corporation	Adolphus T. Leach and Leona C. Leach, his wife; Haymond J. Nuzum, single; Gloria D. Short, divorced		34/98	
	Consolidated Gas Supply Corporation	Consolidated Gas Transmission Corporation		5/555	
	Consolidated Gas Transmission Corporation	CNG Development Company		6/443	
	CNG Development Company	CNG Producing			
	CNG Producing	Dominion Exploration and Production, Inc.			
	Dominion Exploration and Production, Inc.	Consol Gas Company		8/368	
	Consol Gas Company	CNX Gas Company LLC		8/368	
	CNX Gas Company LLC	Noble Energy, Inc.		32/54	
	CNX Gas Company LLC and Noble Energy, Inc.	PDC Mountaineer, LLC		33/198	
	PDC Mountaineer, LLC	River Ridge Energy, LLC			
00007231	OCMAHRR, LLC, by Richard F. Rager, its President	Mar Key, LLC	0.15	68/150	22.29

RECEIVED Office of Oil and Gas

JUN 2 3 2017

00003505	James V. Rinker and Margaret E. Rinker, his wife		0.125	40/709 42/110 43/197 44/338	26.51
	Petroleum Development Corporation	PDC Mountaineer, LLC		30/698	
	PDC Mountaineer, LLC	River Ridge Energy, LLC			
00004191	Eldon L. Findley and Lois J. Findley, each in his own right as husband and wife	Consolidated Gas Supply Corporation	0.125	31/62	256
	Consolidated Gas Supply Corporation	Consolidated Gas Transmission Corporation		5/555	
	Consolidated Gas Transmission Corporation	CNG Development Company		6/443	
	Petroleum Development Corporation	PDC Mountaineer, LLC		30/698	
	PDC Mountaineer, LLC	River Ridge Energy, LLC			
00003835	Jack B. Marsh and Beatrice L. Marsh, his wife	Petroleum Development Corporation	0.125	44/647 61/49	273
	Petroleum Development Corporation	PDC Mountaineer, LLC		30/698	
	PDC Mountaineer, LLC	River Ridge Energy, LLC			
00006656	00006656 West Virginia Department of Transportation, Division of Highways		0.2	67/659	23

RECEIVED Office of Oil and Gas

JUN 23 2017

West Virginia Secretary of State — Online Data Services

Business and Licensing

Online Data Services Help

Business Organization Detail

NOTICE: The West Virginia Secretary of State's Office makes every reasonable effort to ensure the accuracy of information. However, we make no representation or warranty as to the correctness or completeness of the information. If information is missing from this page, it is not in the The West Virginia Secretary of State's database.

DOMINION TRANSMISSION, INC.

Organization Information								
Org Type	Effective Date	Established Date	Filing Date	Charter	Class	Sec Type	Termination Date	Termination Reason
C Corporation	1/17/1984		1/17/1984	Foreign	Profit			

Business Purpose	4862 - Transportation and Warehousing - Pipeline Transportation - Pipeline Transportation of Natural Gas	Capital Stock	0.0000
Charter County		Control Number	0
Charter State	DE	Excess Acres	0
At Will Term		Member Managed	910-
At Will Term Years		Par Value	0.000000
Authorized Shares	0		

Addresses	
Туре	Address
Local Office Address	5400 D BIG TYLER ROAD CHARLESTON, WV, 25313
Mailing Address	445 WEST MAIN STREET CLARKSBURG, WV, 26301 USA
Notice of Process Address	CT CORPORATION SYSTEM 5400 D BIG TYLER ROAD CHARLESTON, WV, 25313
Principal Office Address	445 WEST MAIN STREET CLARKSBURG, WV, 26301 USA
Туре	Address

Officers	Officers				
Туре	Name/Address				
Director	DAVID A. CHRISTIAN 120 TREDEGAR STREET RICHMOND, VA, 23219				
President	DIANE LEOPOLD 120 TREDEGAR STREET RICHMOND, VA, 23219				
Secretary	CARTER M REID 100 TREDEGAR STREET 2ND FL. RICHMOND, VA, 23219				
Treasurer	JAMES R. CHAPMAN 120 TREDEGAR ST RICHMOND, VA, 23219				
Vice-President	ARNOLD J. JORDAN, JR. 100 TREDEGAR STREET RICHMOND, VA, 23219				
Туре	Name/Address				

Name	Changes	
Date		Old Name
	5/10/2000	CNG TRANSMISSION CORPORATION
Date		Old Name

Mergers				
Merger Date	Merged	Merged State	Survived	Survived State
1/16/2002	CNG POWER COMPANY	DE	DOMINION TRANSMISSION, INC.	DE
Merger Date	Merged	Merged State	Survived	Survived State

Date	Amendment
1/16/2002	MERGER: MERGING CNG POWER COMPANY, A QUALIFIED DE CORPORATION WITH AND INTO DOMINION TRANSMISSION, INC., A QUALIFIED DE CORPORATION, THE SURVIVOR
5/10/2000	NAME CHANGE: FROM CNG TRANSMISSION CORPORATION
12/2/1994	CHANGE TO AMEND STOCK IN ARTICLES OF CERTIFICATE OF AUTHORITY.
3/22/1993	CHANGE TO AMEND STOCK DESIGNATION IN ARTICLES OF CERTIFICATE OF AUTHORITY.
8/27/1991	AMENDMENT TO CERTIFICATE OF AUTHORITY.
12/19/1990	AMENDMENT TO CERTIFICATE OF AUTHORITY.
1/13/1988	CHANGE OF NAME FROM: CONSOLIDATED GAS TRANSMISSION CORPORATION.
Date	Amendment

Annual Reports	
Date filed	

5/26/2016	
6/15/2015	
6/13/2014	
6/14/2013	
5/31/2012	
5/27/2011	
6/9/2010	
6/22/2009	
8/14/2008	
11/1/2007	
12/11/2006	
9/29/2005	
4/25/2005	
5/14/2004	
4/29/2003	
11/5/2001	
12/1/2000	
	\equiv
	_
	_
	\equiv
Date filed	

For more information, please contact the Secretary of State's Office at 304-558-8000.

470

Monday, May 22, 2017 — 1:23 PM

© 2017 State of West Virginia

West Virginia Secretary of State — Online Data Services

Business and Licensing

Online Data Services Help

Business Organization Detail

NOTICE: The West Virginia Secretary of State's Office makes every reasonable effort to ensure the accuracy of information. However, we make no representation or warranty as to the correctness or completeness of the information. If information is missing from this page, it is not in the The West Virginia Secretary of State's database.

CONSOL GAS COMPANY

Organization Information								
Org Type	Effective Date	Established Date	Filing Date	Charter	Class	Sec Type	Termination Date	Termination Reason
C Corporation	3/26/1973		3/26/1973	Foreign	Profit		1/5/2011	Merger

Business Purpose	2111 - Mining, Quarrying, Oil & Gas Extraction - Oil and Gas Extraction - Crude Oil and Natural Gas Extraction	Capital Stock	0.0000
Charter County		Control Number	0
Charter State	DE	Excess Acres	0
At Will Term		Member Managed	
At Will Term Years		Par Value	0.000000
Authorized Shares	0		91013

Addresses		
Туре	Address	
Local Office Address	ONE DOMINION DRIVE JANE LEW, WV, 26378	
Mailing Address	1000 CONSOL ENERGY DR. CANONSBURG, PA, 15317 USA	
Notice of Process Address	CT CORPORATION SYSTEM 5400 D BIG TYLER ROAD CHARLESTON, WV, 25313 USA	
Principal Office Address	ONE DOMINION DRIVE JANE LEW, WV, 26378 USA	
Туре	Address	

Officers	
Туре	Name/Address
Director	N. J. DEIULIIS 1000 CONSOL ENERGY DRIVE CANONSBURG, PA, 15317 USA
President	J. BRETT HARVEY 1000 CONSOL ENERGY DRIVE CANONSBURG, PA, 15317 USA
Secretary	P. J. RICHEY 1000 CONSOL ENERGY DRIVE CANONSBURG, PA, 15317
Treasurer	J. M. REILLY 1000 CONSOL ENERGY DRIVE CANONSBURG, PA, 15317 USA
Vice-President	N. J. DEIULIIS 1000 CONSOL ENERGY DRIVE CANONSBURG, PA, 15317
Туре	Name/Address

Name Chai	nges		24-71-1-2-1-2-1-2-1-2-1-2-1-2-1-2-1-2-1-2-		
Date	Old Name				Gass
5/2	1/2010 DOMINION	EXPLORATION	& PRODUCTION, INC.	E	17 of Poting
5/1	0/2000 CNG PROD	UCING COMPA	NY.	43	JUN # 1 2017 Pepartment of ental Protection
Date	Old Name			E 75	V 0.
)#ice	1 2 2
Mergers				0	WV, Environn
Merger Date	Merged	Merged State	Survived	Survived State	, vi
7/7/2010	CONSOL GAS RESERVES	VA	CONSOL GAS COMPANY	DE	<i>W</i>

Mergers						
Merger Date	Merged	Merged State	Survived	Survived State		
7/7/2010	CONSOL GAS RESERVES INC.	VA	CONSOL GAS COMPANY	DE		
7/7/2010	CONSOL GAS COALBED METHANE, INC.	DE	CONSOL GAS COMPANY	DE		
11/19/2010	CONSOL ENERGY HOLDINGS LLC XVI	DE	CONSOL GAS COMPANY	DE 4 0		
Merger Date	Merged	Merged State	Survived	Survived State		

Subsidiaries		
Name	Address	
	CNG PIPELINE CO 1450 POYDRAS STREET NEW ORLEANS, LA, 70112 USA	
	CONSOLIDATED NATURAL GAS COMPANY 625 LIBERTY AVE. PITTSBURGH, PA, 15222 USA	
	DOMINION COALBED METHANE, INC ONE DOMINION DR JANE LEW, WV, 26378 USA	

Address

Date	Amendment
1/5/2011	MERGER: MERGING CONSOL GAS COMPANY, A QUALIFIED DE CORPORATION WITH AND INTO CNX GAS COMPANY LLC, A QUALIFIED VA LIMITED LIABILITY COMPANY, THE SURVIVOR
11/19/2010	MERGER: MERGING CONSOL ENERGY HOLDINGS LLC XVI, A NON- QUALIFIED DE ORGANIZATION WITH AND INTO CONSOL GAS COMPANY, A QUALIFIED DE CORPORATION, THE SURVIVOR
7/7/2010	MERGER: MERGING CONSOL GAS RESERVES INC., A QUALIFIED VA CORPORATION WITH AND INTO CONSOL GAS COMPANY, A QUALIFIED DE CORPORATION, THE SURVIVOR
7/7/2010	MERGER: MERGING CONSOL GAS COALBED METHANE, INC., A QUALIFIED DE CORPORATION WITH AND INTO CONSOL GAS COMPANY, A QUALIFIED DE CORPORATION, THE SURVIVOR
5/21/2010	NAME CHANGE: FROM DOMINION EXPLORATION & PRODUCTION, INC.
5/10/2000	NAME CHANGE: FROM CNG PRODUCING COMPANY
1/18/1985	AMENDMENT: FILED
7/23/1982	ARTICLES OF INCORPORATION
7/30/1980	CERTIFICATE OF INCORPORATION
6/23/1980	MERGER: HIDALGO-WILLACY OIL COMPANY, A TEXAS CORP. NOT QUAL. IN WV, WITH AND INTO CNG PRODUCING COMPANY, THE SURVIVOR
1/31/1975	CERTIFICATE OF INCORPORATION ROLL 91
7/16/1974	CERTIFICATE OF INCORPORATION ROLL 85
Date	Amendment

Annual Reports		
Date filed		
6/22/2010		. *
6/26/2009		
8/15/2008		
11/30/2007		
4/11/2007		
10/31/2005		
5/2/2005		
3/22/2004		
5/21/2003		
12/19/2001		
4/26/2001		
Date filed		

5/22/2017

Monday, May 22, 2017 — 1:11 PM

© 2017 State of West Virginia

Agreement to Drill, Complete and Operate Oil & Gas Wells

This Agreement to Drill, Complete and Operate Oil & Gas Wells (this "Agreement"), by and among Mountaineer Keystone LLC, a West Virginia limited liability company ("Mountaineer Keystone"), PDC Mountaineer, LLC, a Delaware limited liability company ("PDC"), and PDC Mountaineer Holdings, LLC, a Delaware limited liability company ("PDC Holdings"), is effective as of October 15, 2014. (the "Effective Date") and sets forth the terms pursuant to which Mountaineer Keystone will drill, complete and operate the Wells (as defined below) on behalf of PDC and PDC Holdings. Mountaineer Keystone, PDC, and PDC Holdings are each a "Party" and are collectively the "Parties". In consideration of the foregoing and the respective agreements hereinafter set forth and the mutual benefits to be derived therefrom, the Parties, intending to be legally bound, hereby agree as follows:

- 1. Term: This Agreement is effective from the Effective Date until terminated by Mountaineer Keystone on the one hand or PDC and PDC Holdings on the other hand with 30 days' written notice to the other Party or Parties, as applicable (the "Term").
- 2. Authorization to Operate: PDC and PDC Holdings authorize Mountaineer Keystone to undertake and perform, on PDC and PDC Holdings behalf, all operations, including without limitation permit applications, well pad preparation, drilling and completing wells, and marketing gas, oil and other hydrocarbons therefrom with respect to all oil and gas wells to be drilled on oil and gas leasehold acreage held by PDC or PDC Holdings. PDC, PDC Holdings and Mountaineer Keystone are affiliates with a common parent. Mountaineer Keystone was formed to operate oil and gas leasehold acreage held by PDC, PDC Holdings and certain other affiliates. Mountaineer Keystone agrees that it shall, in a good and workmanlike manner and in accordance with industry standards as they prevail in the area, drill, complete and operate oil and gas wells on leasehold acreage owned by PDC or PDC Holdings from time to time as directed by PDC or PDC Holdings (collectively, the "Wells").
- 3. No Third Party Beneficiary: This Agreement is for the benefit of the Parties and is not for the benefit of any third party.
- 4. Counterparts: This Agreement may be simultaneously executed in several counterparts and via facsimile or similar electronic transmittal, each of which shall be deemed to be an original and taken together shall constitute one and the same instrument.

[Signature Page Follows]

1

IN WITNESS WHEREOF, Mountaineer Keystone, PDC, and PDC Holdings have caused their duly authorized representatives to execute this Agreement as of the Effective Date.

MOUNTAINEER KEYSTONE LLC

Name:

Title: CEO

PDC MOUNTAINEER, LLC

Name!

Title: CEO

RECEIVED Office of Oil and Gas

JUN 01 2017

PDC MOUNTAINEER HOLDINGS, LLC

WV Department of **Environmental Protection**

Name: Rat

Title: Coo

Agreement to Drill, Complete and Operate Oil & Gas Wells

This Agreement to Drill, Complete and Operate Oil & Gas Wells (this "Agreement"), by and among Arsenal Resources LLC, a West Virginia limited liability company ("Arsenal"), River Ridge Energy, LLC, a Delaware limited liability company ("River Ridge"), and River Ridge Energy, Holdings, LLC, a Delaware limited liability company ("River Ridge Holdings"), is effective as of March 1, 2017. (the "Effective Date") and sets forth the terms pursuant to which Arsenal will drill, complete and operate the Wells (as defined below) on behalf of River Ridge and River Ridge Holdings. Arsenal, River Ridge, and River Ridge Holdings are each a "Party" and are collectively the "Parties". In consideration of the foregoing and the respective agreements hereinafter set forth and the mutual benefits to be derived therefrom, the Parties, intending to be legally bound, hereby agree as follows:

- 1. Term: This Agreement is effective from the Effective Date until terminated by Arsenal on the one hand or River Ridge and River Ridge Holdings on the other hand with 30 days' written notice to the other Party or Parties, as applicable (the "Term").
- 2. Authorization to Operate: River Ridge and River Holdings authorize Arsenal to undertake and perform, on River Ridge and River Ridge Holdings behalf, all operations, including without limitation permit applications, well pad preparation, drilling and completing wells, and marketing gas, oil and other hydrocarbons therefrom with respect to all oil and gas wells to be drilled on oil and gas leasehold acreage held by River Ridge or River Ridge Holdings. River Ridge, River Ridge Holdings and Arsenal are affiliates with a common parent. Arsenal was formed to operate oil and gas leasehold acreage held by River Ridge, River Ridge Holdings and certain other affiliates. Arsenal agrees that it shall, in a good and workmanlike manner and in accordance with industry standards as they prevail in the area, drill, complete and operate oil and gas wells on leasehold acreage owned by River Ridge or River Ridge Holdings from time to time as directed by River Ridge or River Ridge Holdings (collectively, the "Wells").
- 3. No Third Party Beneficiary: This Agreement is for the benefit of the Parties and is not for the benefit of any third party.
- 4. Counterparts: This Agreement may be simultaneously executed in several counterparts and via ED facsimile or similar electronic transmittal, each of which shall be deemed to be an original and Gas taken together shall constitute one and the same instrument.

 Office of Oil and Gas

[Signature Page Follows]

WV Department of Environmental Protection

JUN 01 2017

IN WITNESS WHEREOF, Arsenal, River Ridge, and River Ridge Holdings have caused their duly authorized representatives to execute this Agreement as of the Effective Date.

ARSENAL RESOURCES LLC

Name: Joel E. Symonds

Title: Vice President - Land

RIVER RIDGE ENERGY, LLC

Name: Joel E. Symonds

Title: Vice President - Land

RIVER RIDGE HOLDINGS, LLC

Name: Joel E. Symonds

Title: Vice President - Land

RECEIVED Office of Oil and Gas

JUN 01 2017



May 25, 2017

Mr. James Martin, Chief of Oil and Gas West Virginia Department of Environmental Protection 601 57th Street, SE Charleston, WV 25304

RE: Ownership of Roadways; Veltri Pad

WV Department of Environmental Protection

Dear Mr. Martin:

In preparation of filing a permit application for the above referenced well, the Title Department of Arsenal Resources conducted a thorough title examination to determine ownership of the oil and gas underlying all roadways crossed by the proposed wells. The findings of the title examination show that some of the roadways crossed by the proposed wells are owned in fee by the West Virginia Department of Transportation, Division of Highways and that some are right of ways only. If owned in fee by the West Virginia Department of Transportation, Division of Highways, a lease covering its interest in the roadway or roadways has been properly obtained and provided in the application materials. If a right of way only, the oil and gas underlying such roadway or roadways is owned by the adjoining landowners and is also covered by the leaseholds provided in the application materials.

If you have any questions, concerns or need further information, please do not hesitate to contact me at the address listed below.

Sincerely,

William T. Fahev III Senior Title Attorney

WT Fuly I

STATE OF WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS NOTICE CERTIFICATION

Date of Notic	ce Certification: 05/30/2017	A	API No. 47		
		O	Operator's Well No. Veltri 4HM		
		W	Vell Pad Na	nme: Veltri	
Notice has b					
	e provisions in West Virginia Code §	22-6A, the Operator has provid	led the requ	ired parties v	vith the Notice Forms listed
	tract of land as follows:	-		504 400 0	
State:	West Virginia			581,429.6	
County:	Taylor	Of the state of th	-	4,347,744.6	0/07 40/0
District:	Courthouse	Public Road Access		CR's 119/28, 119	9/27, 13/6
Quadrangle:	Grafton	Generally used farm	n name:	Veltri	
Watershed:	Long Run				
it has provide information re of giving the requirements Virginia Code	the secretary, shall be verified and sled the owners of the surface described equired by subsections (b) and (c), se surface owner notice of entry to su of subsection (b), section sixteen of each 22-6A-11(b), the applicant shall to have been completed by the applicant	ped in subdivisions (1), (2) and ction sixteen of this article; (ii) to try pursuant to subsection (a), of this article were waived in whender proof of and certify to the	d (4), subsethat the request, section territing by the	ction (b), sec uirement was n of this arti ne surface ov	ction ten of this article, the deemed satisfied as a result cle six-a; or (iii) the notice wner; and Pursuant to West
that the Ope	West Virginia Code § 22-6A, the Oprator has properly served the required ECK ALL THAT APPLY		s Notice Ce	rtification	OOG OFFICE USE ONLY
☐ 1. NO	TICE OF SEISMIC ACTIVITY or	■ NOTICE NOT REQUIRE SEISMIC ACTIVITY WAS C			RECEIVED/ NOT REQUIRED
☐ 2. NO	ΓΙCE OF ENTRY FOR PLAT SURV	EY or 🔳 NO PLAT SURVEY	WAS CO	NDUCTED	☐ RECEIVED
■ 3. NO	TICE OF INTENT TO DRILL or	☐ NOTICE NOT REQUIRE NOTICE OF ENTRY FOR PL WAS CONDUCTED or			☐ RECEIVED/ NOT REQUIRED
		WRITTEN WAIVER BY (PLEASE ATTACH)	Y SURFAC	E OWNER	
■ 4. NO	TICE OF PLANNED OPERATION	4700			☐ RECEIVED
■ 5. PUF	BLIC NOTICE	4709101	340		☐ RECEIVED
	TICE OF APPLICATION				☐ RECEIVED

Required Attachments:

The Operator shall attach to this Notice Certification Form all Notice Forms and Certifications of Notice that have been provided to the required parties and/or any associated written waivers. For the Public Notice, the operator shall attach a copy of the Class II Legal Advertisement with publication date verification or the associated Affidavit of Publication. The attached Notice Forms and Certifications of Notice shall serve as proof that the required parties have been noticed as required under West Virginia Code § 22-6A. Pursuant to West Virginia Code § 22-6A-11(b), the Certification of Notice to the person may be made by affidavit of personal service, the return receipt card or other postal receipt for certified mailing.

By:

Its:

Certification of Notice is hereby given:

THEREFORE, I William Veigel, have read and understand the notice requirements within West Virginia Code § 22-6A. I certify that as required under West Virginia Code § 22-6A, I have served the attached copies of the Notice Forms, identified above, to the required parties through personal service, by registered mail or by any method of delivery that requires a receipt or signature confirmation. I certify under penalty of law that I have personally examined and am familiar with the information submitted in this Notice Certification and all attachments, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

Well Operator: Arsenal Resources

William Veigel

Designated Agent

Telephone: 724-940-1204

Address: 6031 Wallace Road Ext., Suite 300

Wexford, PA 15090

Facsimile: 304-848-9134

Email: cflanagan@arsenalresources.com

NOTAR YNOTAR PUBLIC
STATE OF WEST VIRGINIA
CAROLINDA FLANAGAN
PO Box 603
Lumberport W7 26386
My Commission Expires September 15, 2021

Subscribed and sworn before me this 3157

day of MAY 2017

Notary Public

My Commission Expires 09/15/2021

Oil and Gas Privacy Notice:

The Office of Oil and Gas processes your personal information, such as name, address and telephone number, as 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 or your personal information, please contact DEP's Chief Privacy Officer at deprivacyofficer@wv.gov.

WW-6A (9-13)

API NO. 47	
OPERATOR WELL N	O. Veltri 4HM
Well Pad Name: Veltri	

STATE OF WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS NOTICE OF APPLICATION

Notice Time Requirement: notice shall be provided no later than the filing date of permit application.				
	e of Notice: 05/30/2017 ice of:	Date Permit Applicatio	n Filed: 05/31/2017	
7	PERMIT FOR ANY		ATE OF APPROVAL FOR THE CTION OF AN IMPOUNDMENT OR PIT	
Deli	very method pursua	ant to West Virginia Code	e § 22-6A-10(b)	
☐ PERSONAL ☐ REGISTERED ☑ METHOD OF DELIVERY TO		REGISTERED	✓ METHOD OF DELIVERY THAT REQUIRES A	
_	SERVICE	MAIL	RECEIPT OR SIGNATURE CONFIRMATION	
the soil addescription oper more well important provides the control of the contr	surface of the tract on and gas leasehold being ribed in the erosion at ator or lessee, in the elector consumption of this section (b) of this section of this article to e. R. § 35-8-5.7.a requirement of the traction of the section of the section of the section of this article to e. R. § 35-8-5.7.a requirement of the section of the section of the section of the section of this article to e. R. § 35-8-5.7.a requirement of the section of t	which the well is or is propoged developed by the proposed and sediment control plan subvent the tract of land on white owners of record of the surfact is to be used for the place cribed in section nine of this or water supply source located to be used for the place of the place of the place of the surfact is to be used for the place of the	article, and the well plat to each of the following persons: (1) The owners of record of sed to be located; (2) The owners of record of the surface tract or tracts overlying the well work, if the surface tract is to be used for roads or other land disturbance as mitted pursuant to subsection (c), section seven of this article; (3) The coal owner, ch the well proposed to be drilled is located [sic] is known to be underlain by one or ace tract or tracts overlying the oil and gas leasehold being developed by the proposed ement, construction, enlargement, alteration, repair, removal or abandonment of any sarticle; (5) Any surface owner or water purveyor who is known to the applicant to ad within one thousand five hundred feet of the center of the well pad which is used to animals; and (6) The operator of any natural gas storage field within which the nore than three tenants in common or other co-owners of interests described in s, the applicant may serve the documents required upon the person described in the not to section eight, article one, chapter eleven-a of this code. (2) Notwithstanding any holder is not notice to a landowner, unless the lien holder is the landowner. W. Va. or shall also provide the Well Site Safety Plan ("WSSP") to the surface owner and any water testing as provided in section 15 of this rule.	
Ø A	Application Notice	☑ WSSP Notice ☑ E&S	Plan Notice	
Ø S\	URFACE OWNER(s) /	☐ COAL OWNER OR LESSEE	
Nan	ne: Anthony Veltri		Name: CoalQuest Development LLC c/o Chuck Duckworth	
Add	ress: RR 2 Box 416		Address: 100 Tygart Drive	
Graft	on, WV 26354		Grafton, West Virginia 26354	
Nan	ne:		☐ COAL OPERATOR	
Add	ress:		Name:	
			Address:	
Ø SI	URFACE OWNER(s) (Road and/or Other Distu	rbance)	
	ne: Thomas Sheme	· ·	SURFACE OWNER OF WATER WELL	
Add	ress: 722 Nuzum Road		AND/OR WATER PURVEYOR(s)	
Grafte	on, WV 26354		Name: See Attached	
Nan	ne:		Address:	
Add	ress:			
			OPERATOR OF ANY NATURAL GAS STORAGE FIELD	
SI	URFACE OWNER(s) (Impoundments or Pits)	Name:	
			Address:	
Add	ress:			
			*Please attach additional forms if necessary	

WW-6A	
(8-13)	

API NO. 47	
OPERATOR WELL NO.	Veltri 4HM
Well Pad Name: Veltri	

Notice is hereby given:

Pursuant to West Virginia Code § 22-6A-10(b), notice is hereby given that the undersigned well operator has applied for a permit for well work or for a certificate of approval for the construction of an impoundment or pit.

This Notice Shall Include:

Pursuant to W. Va. Code § 22-6A-10(b), this notice shall include: (1) copies of the application; (2) the erosion and sediment control plan required by section seven of this article; and (3) the well plat.

Pursuant to W. Va. Code § 22-6A-10(f), this notice shall include: (1) a statement of the time limits for filing written comments; (2) who may file written comments; (3) the name and address of the secretary for the purpose of filing the comments and obtaining additional information; and (4) a statement that the persons may request, at the time of submitting written comments, notice of the permit decision and a list of persons qualified to test water.

Pursuant to W. Va. Code R. § 35-8-5.7.a, the operator shall provide the Well Site Safety Plan to the surface owner and any water purveyor or surface owner subject to notice and water testing as provided in section 15 of this rule.

Pursuant to W. Va. Code R. § 35-8-15.2.c, this notice shall: (1) contain a statement of the surface owner's and water purveyor's right to request sampling and analysis; (2) advise the surface owner and water purveyor of the rebuttable presumption for contamination or deprivation of a fresh water source or supply; advise the surface owner and water purveyor that refusal to allow the operator to conduct a pre-drilling water well test constitutes a method to rebut the presumption of liability; (3) advise the surface owner and water purveyor of his or her independent right to sample and analyze any water supply at his or her own expense; advise the surface owner and water purveyor whether or not the operator will utilize an independent laboratory to analyze any sample; and (4) advise the surface owner and or water purveyor that he or she can obtain from the Chief a list of water testing laboratories in the subject area capable of and qualified to test water supplies in accordance with standard acceptable methods.

Additional information related to horizontal drilling may be obtained from the Secretary, at the WV Department of Environmental Protection headquarters, located at 601 57th Street, SE, Charleston, WV 25304 (304-926-0450) or by visiting www.dep.wv.gov/oil-and-gas/pages/default.aspx.

Well Location Restrictions

Pursuant to W. Va. Code § 22-6A-12, Wells may not be drilled within two hundred fifty feet measured horizontally from any existing water well or developed spring used for human or domestic animal consumption. The center of well pads may not be located within six hundred twenty-five feet of an occupied dwelling structure, or a building two thousand five hundred square feet or larger used to house or shelter dairy cattle or poultry husbandry. This limitation is applicable to those wells, developed springs, dwellings or agricultural buildings that existed on the date a notice to the surface owner of planned entry for surveying or staking as provided in section ten of this article or a notice of intent to drill a horizontal well as provided in subsection (b), section sixteen of this article was provided, whichever occurs first, and to any dwelling under construction prior to that date. This limitation may be waived by written consent of the surface owner transmitted to the department and recorded in the real property records maintained by the clerk of the county commission for the county in which such property is located. Furthermore, the well operator may be granted a variance by the secretary from these distance restrictions upon submission of a plan which identifies the sufficient measures, facilities or practices to be employed during well site construction, drilling and operations. The variance, if granted, shall include terms and conditions the department requires to ensure the safety and protection of affected persons and property. The terms and conditions may include insurance, bonding and indemnification, as well as technical requirements. (b) No well pad may be prepared or well drilled within one hundred feet measured horizontally from any perennial stream, natural or artificial lake, pond or reservoir, or a wetland, or within three hundred feet of a naturally reproducing trout stream. No well pad may be located within one thousand feet of a surface or ground water intake of a public water supply. The distance from the public water supply as identified by the department shall be measured as follows: (1) For a surface water intake on a lake or reservoir, the distance shall be measured from the boundary of the lake or reservoir. (2) For a surface water intake on a flowing stream, the distance shall be measured from a semicircular radius extending upstream of the surface water intake. (3) For a groundwater source, the distance shall be measured from the wellhead or spring. The department may, in its discretion, waive these distance restrictions upon submission of a plan identifying sufficient measures, facilities or practices to be employed during well site construction, drilling and operations to protect the waters of the state. A waiver, if granted, shall impose any permit conditions as the secretary considers necessary. (c) Notwithstanding the foregoing provisions of this section, nothing contained in this section prevents an operator from conducting the activities permitted or authorized by a Clean Water Act Section 404 permit or other approval from the United States Army Corps of Engineers within any waters of the state or within the restricted areas referenced in this section. (d) The well location restrictions set forth in this section shall not apply to any well on a multiple well pad if at least one of the wells was permitted prior to the effective date of this article. (e) The secretary shall, by December 31, 2012, report to the Legislature on the noise, light, dust and volatile organic compounds generated by the drilling of horizontal wells as they relate to the well location restrictions regarding occupied dwelling structures pursuant to this section. Upon a finding, if any, by the secretary that the well location restrictions regarding occupied dwelling structures are inadequate or otherwise require alteration to address the items WW-6A (8-13) API NO. 47OPERATOR WELL NO. Veltri 4HM
Well Pad Name: Veltri

examined in the study required by this subsection, the secretary shall have the authority to propose for promulgation legislative rules establishing guidelines and procedures regarding reasonable levels of noise, light, dust and volatile organic compounds relating to drilling horizontal wells, including reasonable means of mitigating such factors, if necessary.

Water Well Testing:

Pursuant to West Virginia Code § 22-6A-10(d), notification shall be made, with respect to surface landowners identified in subsection (b) or water purveyors identified in subdivision (5), subsection (b) of this section, of the opportunity for testing their water well. The operator shall provide an analysis to such surface landowner or water purveyor at their request.

Water Testing Laboratories:

Pursuant to West Virginia Code § 22-6A-10(i), persons entitled to notice pursuant to subsection (b) of this section may contact the department to ascertain the names and locations of water testing laboratories in the subject area capable and qualified to test water supplies in accordance with standard accepted methods. In compiling that list of names the department shall consult with the state Bureau for Public Health and local health departments. A surface owner and water purveyor has an independent right to sample and analyze any water supply at his or her own expense. The laboratory utilized by the operator shall be approved by the agency as being certified and capable of performing sample analyses in accordance with this section.

Rebuttable Presumption for Contamination or Deprivation of a Fresh Water Source or Supply:

W. Va. Code § 22-6A-18 requires that (b) unless rebutted by one of the defenses established in subsection (c) of this section, in any action for contamination or deprivation of a fresh water source or supply within one thousand five hundred feet of the center of the well pad for horizontal well, there is a rebuttable presumption that the drilling and the oil or gas well or either was the proximate cause of the contamination or deprivation of the fresh water source or supply. (c) In order to rebut the presumption of liability established in subsection (b) of this section, the operator must prove by a preponderance of the evidence one of the following defenses: (1) The pollution existed prior to the drilling or alteration activity as determined by a predrilling or prealteration water well test. (2) The landowner or water purveyor refused to allow the operator access to the property to conduct a predrilling or prealteration water well test. (3) The water supply is not within one thousand five hundred feet of the well. (4) The pollution occurred more than six months after completion of drilling or alteration activities. (5) The pollution occurred as the result of some cause other than the drilling or alteration activity. (d) Any operator electing to preserve its defenses under subdivision (1), subsection (c) of this section shall retain the services of an independent certified laboratory to conduct the predrilling or prealteration water well test. A copy of the results of the test shall be submitted to the department and the surface owner or water purveyor in a manner prescribed by the secretary. (e) Any operator shall replace the water supply of an owner of interest in real property who obtains all or part of that owner's supply of water for domestic, agricultural, industrial or other legitimate use from an underground or surface source with a comparable water supply where the secretary determines that the water supply has been affected by contamination, diminution or interruption proximately caused by the oil or gas operation, unless waived in writing by that owner. (f) The secretary may order the operator conducting the oil or gas operation to: (1) Provide an emergency drinking water supply within twenty-four hours; (2) Provide temporary water supply within seventy-two hours; (3) Within thirty days begin activities to establish a permanent water supply or submit a proposal to the secretary outlining the measures and timetables to be used in establishing a permanent supply. The total time in providing a permanent water supply may not exceed two years. If the operator demonstrates that providing a permanent replacement water supply cannot be completed within two years, the secretary may extend the time frame on case-by-case basis; and (4) Pay all reasonable costs incurred by the real property owner in securing a water supply. (g) A person as described in subsection (b) of this section aggrieved under the provisions of subsections (b), (e) or (f) of this section may seek relief in court... (i) Notwithstanding the denial of the operator of responsibility for the damage to the real property owner's water supply or the status of any appeal on determination of liability for the damage to the real property owner's water supply, the operator may not discontinue providing the required water service until authorized to do so by the secretary or a court of competent jurisdiction.

Written Comment:

Pursuant to West Virginia Code § 22-6A-11(a), all persons described in subsection (b), section ten of this article may file written comments with the secretary as to the location or construction of the applicant's proposed well work within thirty days after the application is filed with the secretary. All persons described in West Virginia Code § 22-6A-10(b) may file written comments as to the location or construction of the applicant's proposed well work to the Secretary at:

Chief, Office of Oil and Gas Department of Environmental Protection 601 57th St. SE Charleston, WV 25304 (304) 926-0450

Such persons may request, at the time of submitting written comments, notice of the permit decision and a list of persons qualified to test water. NOTE: YOU ARE NOT REQUIRED TO FILE ANY COMMENT.

WW-6A (8-13)

API NO. 47	
OPERATOR WELL NO.	Veltri 4HM
Well Pad Name: Veltri	

9101340

Time Limits and Methods for Filing Comments.

The law requires these materials to be served on or before the date the operator files its Application. You have THIRTY (30) DAYS after the filing date to file your comments. Comments must be filed in person or received in the mail by the Chief's office by the time stated above. You may call the Chief's office to be sure of the date. Check with your postmaster to ensure adequate delivery time or to arrange special expedited handling. If you have been contacted by the well operator and you have signed a "voluntary statement of no objection" to the planned work described in these materials, then the permit may be issued at any time.

Pursuant to West Virginia Code § 22-6A-11(c)(2), Any objections of the affected coal operators and coal seam owners and lessees shall be addressed through the processes and procedures that exist under sections fifteen, seventeen and forty, article six of this chapter, as applicable and as incorporated into this article by section five of this article. The written comments filed by the parties entitled to notice under subdivisions (1), (2), (4), (5) and (6), subsection (b), section ten of this article shall be considered by the secretary in the permit issuance process, but the parties are not entitled to participate in the processes and proceedings that exist under sections fifteen, seventeen or forty, article six of this chapter, as applicable and as incorporated into this article by section five of this article.

Comment Requirements

Your comments must be in writing and include your name, address and telephone number, the well operator's name and well number and the approximate location of the proposed well site including district and county from the application. You may add other documents, such as sketches, maps or photographs to support your comments.

Disclaimer: All comments received will be placed on our web site http://www.dep.wv.gov/oil-and-gas/Horizontal-Permits/Pages/default.aspx and the applicant will automatically be forwarded an email notice that such comments have been submitted. The applicant will be expected to provide a response to comments submitted by any surface owner, water purveyor or natural gas storage operator noticed within the application.

Permit Denial or Condition

The Chief has the power to deny or condition a well work permit. Pursuant to West Virginia Code § 22-6A-8(d), the permit may not be issued or be conditioned, including conditions with respect to the location of the well and access roads prior to issuance if the director determines that:

- (1) The proposed well work will constitute a hazard to the safety of persons;
- (2) The plan for soil erosion and sediment control is not adequate or effective;
- (3) Damage would occur to publicly owned lands or resources; or
- (4) The proposed well work fails to protect fresh water sources or supplies.

A permit may also be denied under West Virginia Code § 22-6A-7(k), the secretary shall deny the issuance of a permit if the secretary determines that the applicant has committed a substantial violation of a previously issued permit for a horizontal well, including the applicable erosion and sediment control plan associated with the previously issued permit, or a substantial violation of one or more of the rules promulgated under this article, and in each instance has failed to abate or seek review of the violation within the time prescribed by the secretary pursuant to the provisions of subdivisions (1) and (2), subsection (a), section five of this article and the rules promulgated hereunder, which time may not be unreasonable.

Pursuant to West Virginia Code § 22-6A-10(g), any person entitled to submit written comments to the secretary pursuant to subsection (a), section eleven of this article, shall also be entitled to receive from the secretary a copy of the permit as issued or a copy of the order modifying or denying the permit if the person requests receipt of them as a part of the written comments submitted concerning the permit application. Such persons may request, at the time of submitting written comments, notice of the permit decision and a list of persons qualified to test water.

WW-6A (8-13)	1	
Notice is hereby given by: Well Operator: Arsenal Resources	Wunstl	Address: 6031 W
Telephone: 724-940-1224		Wexford, PA 1509
Email: cflanagan@arsenalresources con	n	Faccimile: 304

API NO. 47-___OPERATOR WELL NO. Veltri 4HM
Well Pad Name: Veltri

Address: 6031 Wallace Road Ext., Suite 300
Vexford, PA 15090

Facsimile: 304-848-9134

Oil and Gas Privacy Notice:

The Office of Oil and Gas processes your personal information, such as name, address and telephone number, as 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 or your personal information, please contact DEP's Chief Privacy Officer at deprivacyofficer@wv.gov.

A A A A A A A A A A	OFFICIAL SEAL	6
WESTV	NOTARY PUBLIC	5
14 A E	STATE OF WEST VIRGINIA	5
日本位立为公司	CAROLINDA FLANAGAN	9
*	PO Box 603	2
The state of the s	Lumberport WV 26386	2
THE PARTY NAME AND ADDRESS OF THE PA	My Commission Expires September 15, 2021	2
m	mmmm	~

Subscribed and sworn before me this 31 st day of MAY 2017

My Commission Expires 09/15/2021

4709101340



Possible Water Purveyors within 1,500 feet of Veltri Pad

MAP	PARCEL	CEL OWNER ADDRESS	
12	46.1	SHEME THOMAS RICHARD JR	722 NUZUM RD , GRAFTON , WV 26354
12	48	NEAL MARK WAYNE & JUDY ELAINE	P O BOX 144 , WALTON , WV 25286
12	50	VELTRI ANTHONY J.	RR 2 BOX 416, GRAFTON, WV 26354 🎤
15	30	SHEME THOMAS R JR JAYPRADHA WHITE	722 NUZUM RD , GRAFTON , WV 26354
15	31	SHEME THOMAS R JR JAYPRADHA WHITE	722 NUZUM RD , GRAFTON , WV 26354
15	33	MCVICKER JAMES D	5661 WEBSTER PIKE , GRAFTON , WV 26354
15	35	MINARD JEFFREY	RR 2 BOX 426 , GRAFTON , WV 26354

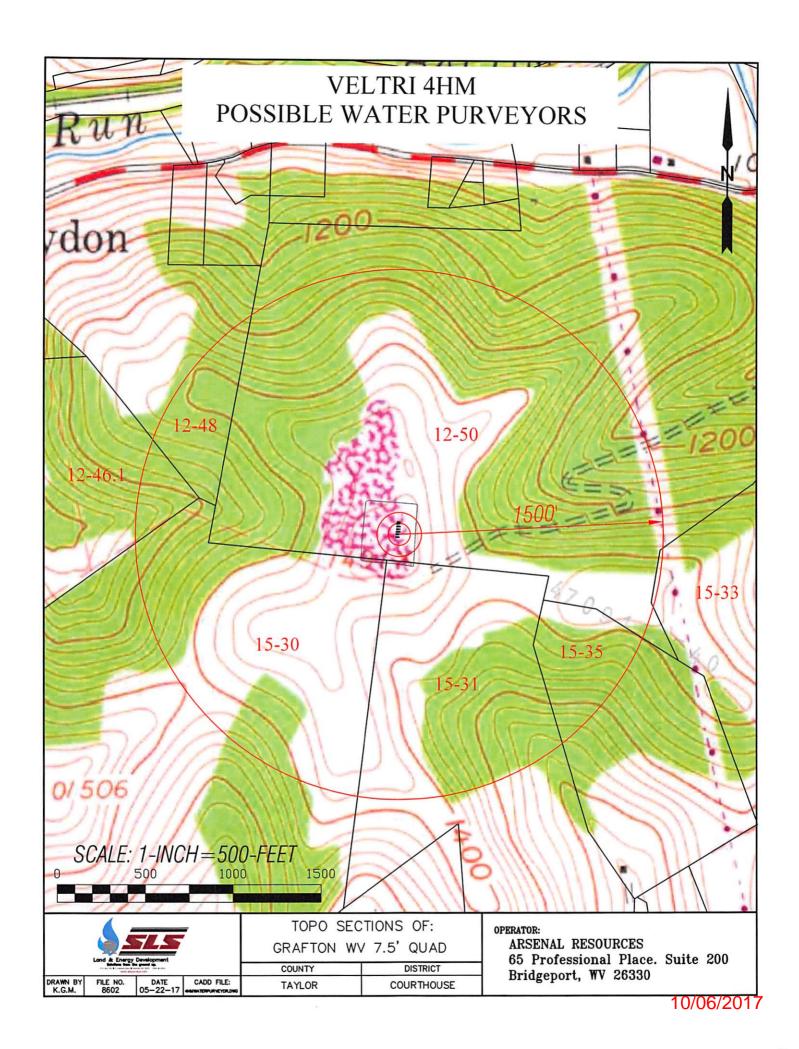
4709101340



Possible Water Purveyors within 1,500 feet of Veltri Pad

MAP	PARCEL	OWNER	ADDRESS
12	46.1	SHEME THOMAS RICHARD JR	722 NUZUM RD , GRAFTON , WV 26354
12	48	NEAL MARK WAYNE & JUDY ELAINE	P O BOX 144 , WALTON , WV 25286
12	50	VELTRI ANTHONY J.	RR 2 BOX 416, GRAFTON, WV 26354
15	30	SHEME THOMAS R JR JAYPRADHA WHITE	722 NUZUM RD , GRAFTON , WV 26354
15	31	SHEME THOMAS R JR JAYPRADHA WHITE	722 NUZUM RD , GRAFTON , WV 26354
15	33	MCVICKER JAMES D	5661 WEBSTER PIKE , GRAFTON , WV 26354
15	35	MINARD JEFFREY	RR 2 BOX 426 , GRAFTON , WV 26354

4709101340



STATE OF WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS NOTICE OF INTENT TO DRILL

Pursuant to W. Va. Code § 22-6A-16(b), the Notice of Intent to Drill is only required if the notice requirements of W. Va. Code § 22-6A-10(a) have NOT been met or if the Notice of Intent to Drill requirement has NOT been waived in writing by the surface owner.

Notice Time I Date of Notic	Requirement: Notice shall be provided at lease: Objective Objec	st TEN (10) days prior to filing a Application Filed: 05/31/2017	permit application.
Delivery met	hod pursuant to West Virginia Code § 22-62	A-16(b)	
☐ HAND	CERTIFIED MAIL		
DELIVE		STED	
receipt reques drilling a hori of this subsection ma	V. Va. Code § 22-6A-16(b), at least ten days proted or hand delivery, give the surface owner not zontal well: <i>Provided</i> , That notice given pursition as of the date the notice was provided to tay be waived in writing by the surface owner. Ite, facsimile number and electronic mail address.	otice of its intent to enter upon to suant to subsection (a), section to the surface owner: <i>Provided</i> , how The notice, if required, shall inc	he surface owner's land for the purpose of en of this article satisfies the requirements wever, That the notice requirements of this lude the name, address, telephone number,
	reby provided to the SURFACE OWNE	8.8	
Name: Anthony		Name:	
Address: RR 2 Grafton, WV 263		Address:	
the surface ov State:	Vest Virginia Code § 22-6A-16(b), notice is however's land for the purpose of drilling a horizon West Virginia	ereby given that the undersigned ntal well on the tract of land as for UTM NAD 83 Easting: Northing:	well operator has an intent to enter upon ollows: 581,429.6 4,347,744.6
County:	Taylor		CR's 119/28, 119/27, 13/6
District:	Courthouse	Public Road Access: Generally used farm name:	Veltri
Quadrangle: Watershed:	Grafton	Generally used farm flame.	Veitti
	Long Run	47091	01340
	Shall Include:		talankan and if available
facsimile nun related to hor	West Virginia Code § 22-6A-16(b), this notion of the operand electronic mail address of the operation of the operation of the section of the Section of the Section of Street, SE, Charleston, WV 25304 (304-25304).	ator and the operator's authorize cretary, at the WV Department of	red representative. Additional information of Environmental Protection headquarters,
Notice is he	reby given by:		
	r: Arsenal Resources	Authorized Representative	: William Veigel
Address:	6031 Wallace Road Ext., Suite 300	Address:	65 Professional Place, Suite 200
Wexford, PA 150	090	Bridgeport, WV 26330	
Telephone:	724-940-1204	Telephone:	724-940-1117
Email:	cflanagan@arsenalresources.com	Email:	wveigel@arsenalresources.com
Facsimile:	304-848-9134	Facsimile:	304-848-9134
		-	

Oil and Gas Privacy Notice:

The Office of Oil and Gas processes your personal information, such as name, address and telephone number, as 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 or your personal information, please contact DEP's Chief Privacy Officer at depprivacyofficer@wv.gov.

WW-6A5 (1/12)

Operator Well No. Veltri 4HM

STATE OF WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS **NOTICE OF PLANNED OPERATION**

Notice Time Date of Notic	Requirement: notice shall be provided no later tee: 05/30/2017 Date Permit Application			application.
Delivery met	hod pursuant to West Virginia Code § 22-6A	A-16(c)		
CERTII	FIED MAIL HAI	ND		
RETUR	RN RECEIPT REQUESTED DEI	LIVERY		
return receipt the planned of required to be drilling of a l damages to the	V. Va. Code § 22-6A-16(c), no later than the requested or hand delivery, give the surface of operation. The notice required by this subsect provided by subsection (b), section ten of this horizontal well; and (3) A proposed surface use surface affected by oil and gas operations to the required by this section shall be given to the	wner whose land tion shall include article to a surfa se and compens the extent the da	will be used for le: (1) A copy ace owner whos ation agreemen mages are comp	r the drilling of a horizontal well notice of of this code section; (2) The information e land will be used in conjunction with the t containing an offer of compensation for pensable under article six-b of this chapter.
	eby provided to the SURFACE OWNER(s)			
,	s listed in the records of the sheriff at the time of			
Name: Anthony				
Address: RR 2 Grafton, WV 263		Address	:	
operation on State: County: District:	the surface owner's land for the purpose of dril West Virginia Taylor Courthouse	lling a horizonta UTM NAD 8 Public Road	Easting: Northing:	ct of land as follows: 581,429.6 4,347,744.6 CR's 119/28, 119/27, 13/6
Quadrangle:	Grafton		ed farm name:	Veltri
Watershed:	Long Run	•		
Pursuant to V to be provide horizontal we surface affect information r	Shall Include: West Virginia Code § 22-6A-16(c), this notice set by W. Va. Code § 22-6A-10(b) to a surface ll; and (3) A proposed surface use and competed by oil and gas operations to the extent the related to horizontal drilling may be obtained located at 601 57th Street, SE, Charleston Sault.aspx.	ce owner whose nsation agreement damages are confrom the Secret	land will be unt containing arompensable und ary, at the WV	ased in conjunction with the drilling of a offer of compensation for damages to the er article six-b of this chapter. Additional Department of Environmental Protection
Well Operato	r: Arsenal Resources	Address:	6031 Wallace Road	Ext., Suite 300
Telephone:	724-940-1204	-((Wexford, PA 15090	970
Email:	cflanagan@arsenalresources.com	Facsimile:	304-848-9134	9 1
Oil and Gas The Office of	Privacy Notice: f Oil and Gas processes your personal informat	ion, such as nam	e, address and t	elephone number, as 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 or your personal information, please contact DEP's Chief Privacy Officer at depprivacyofficer@wv.gov.



WEST VIRGINIA DEPARTMENT OF TRANSPORTATION

Division of Highways

1900 Kanawha Boulevard East • Building Five • Room 110 Charleston, West Virginia 25305-0430 • (304) 558-3505

Earl Ray Tomblin Governor

Paul A. Mattox, Jr., P. E. Secretary of Transportation/ Commissioner of Highways

June 1, 2017

James A. Martin, Chief Office of Oil and Gas Department of Environmental Protection 601 57th Street, SE Charleston, WV 25304

Subject: DOH Permit for the Veltri Well Pad, Taylor County Veltri 4HM Well Site 47-091-01340

Dear Mr. Martin,

This well site will be accessed from a Permit #04-2013-0786 transferred to Arsenal Resources for access to the State Road for a well site located off of WV Route 119 F in Taylor County.

The operator has signed a DISTRICT WIDE OIL AND GAS ROAD MAINTENANCE BONDING AGREEMENT and provided the required Bond. This operator is currently in compliance with the DOH OIL AND GAS POLICY dated January 3, 2012.

Very Truly Yours,

Gary K. Clayton, P.E.

Regional Maintenance Engineer Central Office O&G Coordinator

Kelley Eddy Cc:

Arsenal Resources CH, OM, D-4

File

Veltri 4HM					
-	FRACTURING ADDITIVES				
	PURPOSE	TRADE NAME	CAS#		
Additive #1:	Friction Reducer	WFRA-405	Proprietary		
Additive #2:	Scale Inhibitor	SI-1000	7440-21-3		
Additive #3:	Biocide	BIOCLEAR 2000	25314-61-8		
Additive #4:	Gelling Agent	LGC-15	9000-30-0		
Additive #5:	Corrosion Inhibitor	Al-300	111-76-2		
Additive #6:	Gel Breaker	AP-One	7727-54-0		
Additive #7:	Acid	HCI - 7.5%	7647-01-0		

PROJECT NAME: VELTRI SURFACE OWNERS:

ANTHONY J. VELTRI TW 12 PAR 50

WVDEP OOG ACCEPTED AS-BUILT 7 / 14 / 2017

SITE LOCATION:
THE VELTRI WELL PAD IN LOCATED ON THE WESTERN SIDE U.S. FOUTES 119 & 200.
APPRODMATEZ 0.15 MILES SOUTHEAST OF THE INTERSECTION OF COUNTY ROUTE 13 AND
U.S. ROUTES 119 & 250.

PROPERTY DISTURBANCE COMPUTATIONS

LOCATION COORDINATES

CENTER OF WELL PAD LATTRUDE 39.275267 LONGITUDE -60.056155 (NAD 83)

ENTRANCE PERMIT

MISS UTILITY STATEMENT
IT IS UNDESTOOD THAT MISS UTILITY WAS NOTIFIED PROR TO CONSTRUCTION OF
THE VIRTH SITE AND ALL KNOWN UTILITIES WERE NOTED ON A SET OF DESIGN
FLANS PREPARED BY HORNER BROTHEDS ENGINEERING DATED 2-24-14. NO NEW
UTILITIES WERE NOTED DURING SLESS FIELD VISITS ON 10-24-16 & 10-26-16.

FLOODPLAIN NOTE
THE EXISTING ACCESS TO THE VELTRI PAD APPEARS TO CROSS A FLOODPLAIN THAT
IS DEPYCHED ON FIRM MAP SAGOICOLOOD AND IS ILLUSTRATED USING SHAPPFILES

ENVIRONMENTAL NOTE
A STILAND/STEAD REJECTION MAS PERFORMED BY CIVIL & ENVERONMENTAL COMMULIANTS, INC. (CEC) ON
A STILAND/STEAD REJECTION WAS ELIMISTRATED IN A REPORT DATED 4-20-13 ACCORDING TO THEIR REPORT
A STILAND STATE A 2-10-13 AND WAS ELIMISTRATED IN A REPORT DATED A 2-10-13 ACCORDING TO THEIR REPORT
A STILAND STATE A 2-10-13 ACCORDING THE PLANS AND PERMITS PERFARED AND ENHIBITION
CICCO SAG. ACCORDING TO HONSIER BROS. INCREMENTE STIL SAMP ENHITS PERFARED AND ENHIBITION
OF CICCA TO ACCORDING TO SAMPLE OF OPPLAT WAS TO COCCUR ON TREATURE 9 AND A TOTAL OF 0-04
ACRES OF PHACET WAS TO COCKIR ON WITHARDS SAF. ALL CIC DELINEATED STREAMS AND WITHARDS ARE
SHOWN ON THESE AS-DULT THEP PLANS.

GENERAL DESCRIPTION

AT THIS TIME, ONLY ONE OF SIX MARCELLUS GAS WELLS WERE DRILLED, WHICH IS THE SHM. THIS WELL HOWEVER IS NOT IN PRODUCTION

RESTRICTIONS NOTES:

1. ONE PERMITTED IMPACT OF WETLAND 6 OCCURRED WITHIN 100 FEET OF THE WELL PAD LOD

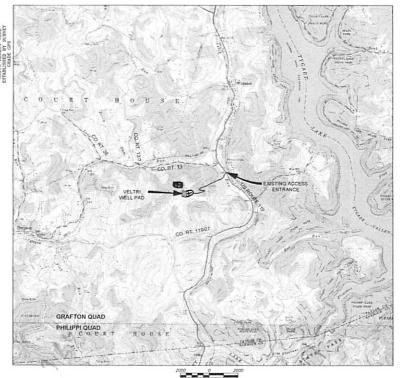
SURVEYOR NOTE

THE CERTIFICATION OF THIS BRAVING ONLY APPLIES TO THE TOPOGRAPHY AND DETAILS AS CENERATED FROM FIELD DATA OUTLANDED ON 10/24/16 & 10/25/16 SLS HAS NO RESPONSIBLE FOR ANY CHANGES AFTER THE DATES MENTIONED THAT COULD ALTER THE TOPOGRAPHY OR DETAILS.

VELTRI WELL PAD AS-BUILT AND FINAL AST SITE PLAN ARSENAL RESOURCES

PROPOSED WELLS: 1HM 47-091-01306, 2HM 47-091-01307, 3HM 47-91-01308. 4HM 47-91-01309, 5HM 47-91-01310, 6HM 47-91-01311, AND 7HM.

SITUATE ON THE WATERS OF LONG RUN AND BERKELEY RUN IN COURTHOUSE DISTRICT, TAYLOR COUNTY, WEST VIRGINIA.



MISS Utility of West Virginia 1-800-245-4848 West Virginia State Law (Section XIV: Chapter 24-C) Requires that you call two business days before you dig in the state of West Virginia. IT'S THE LAW!!

LIST OF DRAWINGS

1 - COVER SHEET

2 - OVERALL SHEET INDEX

3 - ACCESS ROAD

5 - WELL PAR AND ACCESS BOAR

7 - ACCESS ROAD PROFILE

9 - ACCESS BOAD SECTIONS

11 - ACCESS ROAD SECTIONS

13 - AST PAD

15 - AST PAD & ACCESS ROAD CROSS SECTIONS

17 - CONSTRUCTION NOTES 16 - CONSTRUCTION NOTES

19 - CONSTRUCTION NOTES

	LEG	END		
EXISTING		PROPOSED		
INTERMEDIATE CONTOUR	100	INDEX CONTOUR INTERMEDIATE CONTOUR		
BOUNDARY LINE ROAD EDGE OF GRAVEL/DIRT ROAD EDGE OF PAVEMENT		RECLAMATION 2' CONTOUR RECLAMATION 10' CONTOUR GRADING LIMITS	_	
ROAD CENTERLINE DITCHLINE		PERMITTED LIMITS OF DISTURBAL WELL PAD		
CULVERT GUARDRAIL	· ·	WELL HEAD 4" PVC DRAIN PIPE		
FENCELINE GATE OVERHEAD UTILITY	-	SUMP DRAIN CONTAINMENT BERM PIT/IMPOUNDMENT CL		
OVERHEAD UTILITY R/W POWER POLE		PERIMETER SAFETY FENCE ACCESS GATE WITH		
GUY WIRE TELEPHONE LINE GASLINE		EMERGENCY LIFELINE		
GASLINE R/W WATERLINE				
WATER WELL CAS WELL	ö	ROCK CONSTRUCTION ENTRANCE		
TREELINE REFERENCE TREE DELINEATED STREAM (PROVIDED '	0			
BY MOUNTAINEER KEYSTONE)		ROAD EDGE OF GRAVEL ROAD CENTERLINE		
DELINEATED WETLAND (PROVIDED BY MOUNTAINEER KEYSTONE) BUILDING	<	V-DITCH W/ CHECK DAMS DITCH RELIEF CULVERT (DRC)		
BRIDGE		RIP-RAP OUTLET PROTECTION	蠼	
100' WETLAND/STREAM BUFFER .		GUARDRAIL	UU	
CEC AREA OF INTEREST		18" COMPOST FILTER SOCK 18" COMPOST FILTER SOCK 24" COMPOST FILTER SOCK 18" TRIPLE STACK COMPOST FILTER SOCK		
		"A"	* "A"	
		WATCHLINE 6	•00 0	
		MAILLINE X-SECTION GRID INDEX X-SECTION GRID INTERMEDIATE X-SECTION FROPOSED GRADE X-SECTION FAISTING GRADE X-SECTION WATER SURFACE SPOT ELEVATION SUBGRADE SLEVATION SUBGRADE SLEVATION FINISH GRADE SLEVATION FINISH GRADE SLEVATION	1000 P 1000 P 10	

OPERATOR ENGINEER/SURVEYOR

SMITH LAND SURVEYING, INC. 12 VANHORN DRIVE P.D. BOX 150 GLENVILLE, WV 26351

4. Ш₃ () 。









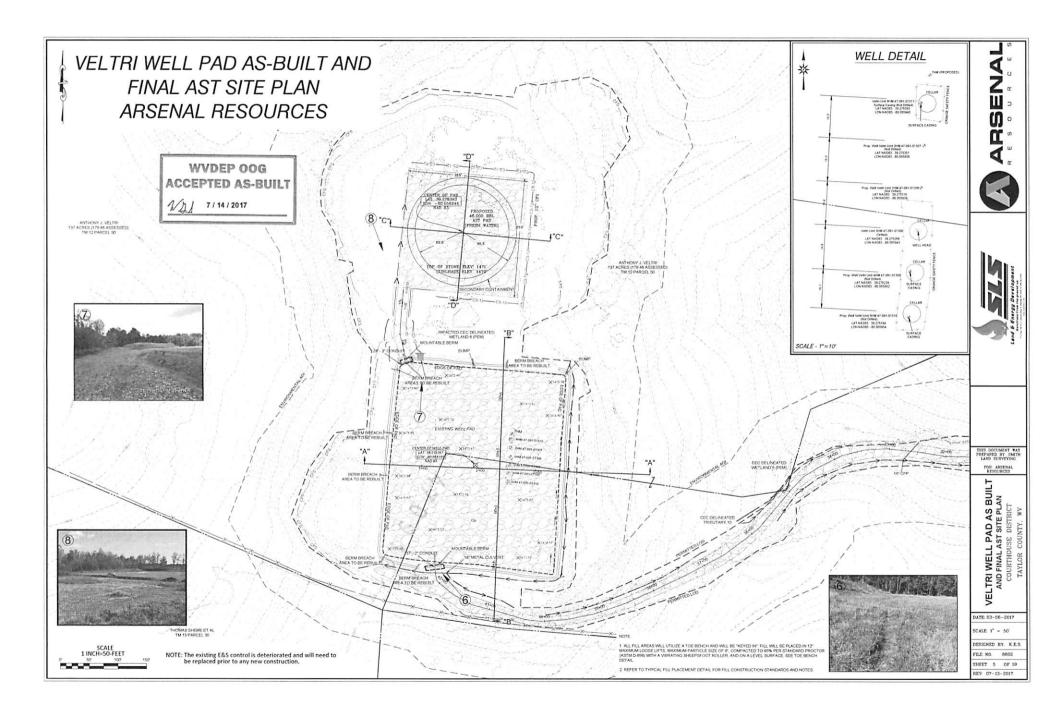
VELTRI WELL PAD AS BUILT
AND FINAL AST SITE PLAN
COURTHOUSE DISTRICT
TAYLOR COUNTY, WV

DATE: 03-06-2017

SCALE: 1" = 2000"

DESIGNED BY: K.E.S. FILE NO. 8602

SHEET 1 OF 19 REV: 07-13-2017



PROJECT INFORMATION

PROJECT NAME: VELTRI

SURFACE OWNERS:

ANTHONY J. VELTRI
TM 12 PAR 50
COUNTHOUSE DISTRICT
TAYLOR COUNTY, WV
TOTAL PROPERTY AREA: 179.46 ACRES

SITE LOCATION:

PROPERTY DISTURBANCE COMPUTATIONS

LOCATION COORDINATES

PAD STIE ENTRANCE LATITUDE: 39.279329 LONGITUDE: -80.045808 (NAD 83)

CENTER OF WELL PAD LATITUDE: 39.275267 LONGITUDE: -60.056155 (NAD 83)

CENTER OF TANK PAD LATITUDE: 39.276393 LONGITUDE: -80.056244 (NAD 83)

ENTRANCE PERMIT
AN ENCROACHDENT PERMIT (FORM MM-109) FROM THE WEST VIRGINIA DEPARTMENT
OF TRANSPORTATION DIVISION OF HIGHWAYS WAS OBTAINED UNDER PDC
MOUNTAINEER, LLC.

MISS UTILITY STATEMENT
IT IS UNDERSTOOD THAT MISS UTILITY WAS NOTIFIED PRIOR TO CONSTRUCTION OF
THE YELFIR SITE AND ALL KNOWN UTILITIES WERE NOTED ON A SET OF DESIGN
PLANS PREPARED BY HORNER BROTHERS ENDINEERING DATED 2-24-14. NO NEW
UTILITIES WERE NOTED DURING SLS'S FIELD VISITS ON 10-24-16 & 10-25-16

FLOODPLAIN NOTE
THE EGISTING ACCESS TO THE VELTRI PAD APPEARS TO CROSS A FLOODPLAIN THAT
IS DEPICTED ON FIRM MAP 54091C0120D AND IS ILLUSTRATED USING SHAPEFILES
FROM WOLES.

GEOTECHNICAL NOTE

AT THIS POINT NO GEOTECHNICAL EXPLORATION IS ANTICIPATED.

ENVIRONMENTAL NOTE

ENVIRONMENTAL NOTE

A WETLAND/STREAM DELINATION WAS PERFORMED BY CIVIL & ENVIRONMENTAL CONSULTANTS, INC. (CEC) ON

4-17-13 & 6-10-13 AND WAS ILLUSTRATED IN A REPORT DATED 6-28-13. ACCORDING TO THIS REPORT II

DIFFERENT STREAMS WERE IDESTIFIED TOTALING 1764.6 LINEAR FEET INSIDE CEC'S AREA OF INVESTIGATION

(ADI). ALSO, THERE APPEARS TO BE A TOTAL OF 9 WETLANDS IDENTIFIED TOTALING 0.194 ACRES WITHIN

CEC'S AOI. ACCORDING TO HORNING BROS. ENGINEERS' SITE PLANS AND PERMITS PREPARED AND SUBMITTED

BY CEC. A TOTAL OF 54 LINEAR FEET OF DEPLATE WAS TO OCCUR ON TRIBUTARY 8 AND A TOTAL OF 0.04

ACRES OF IMPACT WAS TO OCCUR ON WETLANDS 6 & 7. ALL CEC DELINEATED STREAMS AND WETLANDS ARE

SHOWN ON THIS AS-BUILT SITE PLAN.

GENERAL DESCRIPTION

AT THIS TIME, ONLY ONE OF SIX MARCELLUS GAS WELLS WERE DRILLED, WHICH IS THE 3HM. THIS WELL HOWEVER IS NOT IN PRODUCTION.

RESTRICTIONS NOTES:

1. ONE PERMITTED IMPACT OF WETLAND 6 OCCURRED WITHIN 100 FEET OF THE WELL PAD LOD.

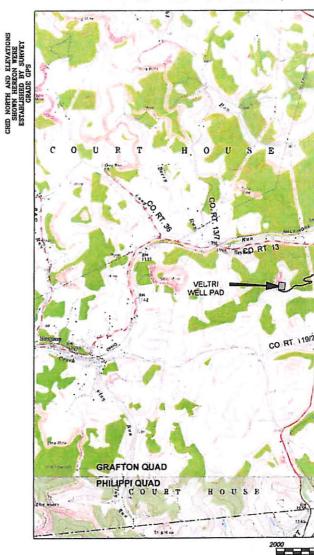
SURVEYOR NOTE

THE CERTIFICATION OF THIS DRAWING ONLY APPLIES TO THE TOPOGRAPHY AND DETAILS AS GENERATED FROM FIELD DATA OBTAINED ON 10/24/10 & 10/25/16. SLS HAS NO KNOWLEDGE AND IS NOT RESPONSIBLE FOR ANY CHANGES AFTER THE DATES MENTIONED THAT COULD ALTER THE TOPOGRAPHY OR DETAILS.

VELTRI WELL PAD FINAL AST SI ARSENAL RES

PROPOSED WELLS 1HM, 2HM, 3HM (4

SITUATE ON THE WATERS OF LO IN COURTHOUSE DISTRICT, TAY



MISS Utility of 1-800-2 West Virgini (Section XIV: (Requires that business days be the state of IT'S TH

AS-BUILT AND E PLAN OURCES

-091-1308), 4HM, 5HM, AND 6HM

IG RUN AND BERKELEY RUN

OR COUNTY, WEST VIRGINIA.

EXISTING ACCESS

JUN 1 4 2017

WV Department of Environmental Protection

LIST OF DRAWINGS

- 1 COVER SHEET
- 2 OVERALL SHEET INDEX
- 3 ACCESS ROAD
- 4 ACCESS ROADS
- 5 WELL PAD AND ACCESS ROAD
- 6 ACCESS ROAD PROFILE
- ACCESS ROAD PROFILE
- WELL PAD PROFILE
- ACCESS ROAD SECTIONS
- 0 ACCESS ROAD SECTIONS
- 11 ACCESS ROAD SECTIONS
- 2 ACCESS ROAD SECTIONS
- 13 AST PAI
- 14 CONSTRUCTION NOTES
- 15 AST PAD & ACCESS ROAD CROSS SECTIONS
- 18 AST PAD RECLAMATION
- 17 CONSTRUCTION NOTE:
- 8 CONSTRUCTION NOTES
- 19 CONSTRUCTION NOTE

LEC	END	
EXISTING)
700	INDEX CONTOUR INTERNEDIATE CONTOUR RECLAMATION 2' CONTOUR RECLAMATION 10' CONTOUR GRADING LIMITS PERMITTED LIMITS OF DISTURBA WELL PAD	NCE
	4" PYC DRAIN PIPE SUMP DRAIN CONTAINMENT BERM	•
	PIT/DIPOUNDMENT CL PERDMETER SAFETY FENCE ACCESS GATE WITH EMERGENCY LIFELINE	-
- å	ROCK CONSTRUCTION ENTRANCE	
	ROAD EDGE OF GRAVEL ROAD CENTERLINE V-DITCH W/ CHECK DAMS	→>
	DITCH RELIEF CULVERT (DRC) RIP-RAP OUTLET PROTECTION	-
	GUARDRAIL	0 0
	18" COMPOST FILTER SOCK 18" COMPOST FILTER SOCK 24" COMPOST FILTER SOCK 18" TRIPLE STACK COMPOST FILTER SOCK	-(11-(15))-
	"A	"A"
	MATCHLINE X-SECTION GRID INDEX X-SECTION GRID INTERMEDIATE X-SECTION PROPOSED GRADE	
		PROPOSEL INDEX CONTOUR INTERMEDIATE CONTOUR RECLAMATION IO' CONTOUR RECLAMATION IO' CONTOUR GRADING LIMITS PERMITTED LIMITS OP DISTURBA WELL PAD WELL PAD WELL PAD WELL PAD WELL PAD WELL PAD CONTARMENT BERM PIT/DAIPOUNDMENT CL PERMETER SAFETY FENCE ACCESS GATE WITH EMERGENCY LIFELINE ROAD EDGE OF GRAVEL ROAD CENTERLINE V-DITCH W/ CHECK DAMS DITCH RELIEF CULVERT (DRC) RIP-RAP OUTLET PROTECTION GUARDAIL 18" COMPOST FILTER SOCK 18" COMPOST FILTER SOCK 18" COMPOST FILTER SOCK 18" TEPPLE STACK COMPOST FILTER SOCK 18" ACCESSED TO THE STACK 18" TEPPLE STACK COMPOST FILTER SOCK 18" ACCESSED TO THE STACK 18" TEPPLE STACK COMPOST FILTER SOCK 18" ACCESSED TO THE STACK 18" TEPPLE STACK COMPOST FILTER SOCK 18" ACCESSED TO THE STACK 18" TEPPLE STACK COMPOST FILTER SOCK 18" ACCESSED TO THE STACK 18" TEPPLE STACK 18" ACCESSED TO THE STACK 18" TEPPLE STACK 18" ACCESSED TO THE STACK 18" TEPPLE STACK 18" ACCESSED TO THE STACK 18" ACCESSED TO TH

est Virginia

-4848
State Law
apter 24-C)
ou call two
re you dig in
st Virginia.
LAW!!

Junil 2. Synth 5-25-17

ARSENAL RESOURCES 65 PROFESSIONAL PLACE SUITE 200 BRIDGEPORT, WY 26330 PHONE: (304) 842-3597

OPERATOR

SMITH LAND SURVEYING, INC. 12 VANHORN DRIVE P.O. BOX 150 GLENVILLE, WV 28351 PHONE: (304) 462-5634

ENGINEER/SURVEYOR







THIS DOCUMENT WAS PREPARED BY: SMITH LAND SURVEYING FOR: ARSENAL

> VELTRI WELL PAD AS BUILT AND FINAL AST SITE PLAN COURTHOUSE DISTRICT TAYLOR COUNTY, WV

DATE: 03-06-2017 SCALE: 1" = 2000'

DESIGNED BY: K.E.S.
FILE NO. 8602
SHEET 1 OF 19