

### 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

Harold D. Ward, Cabinet Secretary www.dep.wv.gov

Monday, February 26, 2024 WELL WORK PERMIT Horizontal 6A / New Drill

ARSENAL RESOURCES LLC 6031 WALLACE RD EXT., SUITE 101

WEXFORD, PA 15090

Re-

Permit approval for Armstrong II 211

47-091-01377-00-00

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) 92

Operator's Well Number: Armstrong II 211

Farm Name: Robert L. and Julia A. Armstron

U.S. WELL NUMBER: 47-091-01377-00-00

Horizontal 6A New Drill

Date Issued: 2/26/2024

Promoting a healthy environment.

API Number:	47-091-01377
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### 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**

- 1. 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. 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. Also, 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.
- 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.

API NO. 47- 091	
OPERATOR WELL NO. 211	
Well Pad Name: Armstrong II	1

4709101377

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

1) Well Operate	or: Arsenal Re	esources /	494519412	Taylor	Courtho	Grafton
			Operator ID	County	District	Quadrangle
2) Operator's W	Vell Number: 2	11	Well P	ad Name: Arn	nstrong II	W4
3) Farm Name/	Surface Owner:	Robert & Julie Ar	mstrong Public Ro	oad Access: C	R 13, CR 36 (L	ong Run Rd), CR 36/3
4) Elevation, cu	irrent ground:	1294 ft I	Elevation, proposed	d post-construc	etion: 1294	ft
5) Well Type	(a) Gas X	Oil	Une	derground Stor	rage	
	Other					
	(b)If Gas Sh	allow X	Deep			
	Но	rizontal X		И.,	ng Kun	20/23
6) Existing Pad	Yes or No Ye	S		- Elon	Ty Du w	
	•	,	cipated Thickness Anticipated Thicknes		. ,	e - 0.5 psi/ft
8) Proposed Tot	al Vertical Dep	th: 7725 ft				
9) Formation at	Total Vertical I	Depth: Marcellu	s Shale	The second secon	977	
10) Proposed To	otal Measured D	epth: 20797 ft				
11) Proposed Ho	orizontal Leg Le	ength: 11986 ft				
12) Approximat	e Fresh Water S	Strata Depths:	30', 100', 150',	250', 850'		
13) Method to D	etermine Fresh	Water Depths:	Offset wells reporting water	(091-01116, 091-0091	12, 091-01122, 091-0	01123, 091-01228, 091-00803))
14) Approximate	e Saltwater Dep	ths: 2040'	(A)			
15) Approximate	e Coal Seam De	epths: (WVGES) Pillsburgh	18', Bakerslown 478', Brush Creek 523',	Upper Freeport 693', Lower Fr	reeport 748', U Kittanning 81	3', Middle Kiltanning 868', L Kiltanning 898'
16) Approximate	e Depth to Poss	ible Void (coal m	ine, karst, other):	None Known		
· ·		n contain coal sea an active mine?		N	None Kno	own
(a) If Yes, prov	vide Mine Info:	Name:				RECEIVED
		Depth:				of Oil and Gas
		Seam:			JA	N <b>2 6</b> 2024
		Owner:				Department of
						mental Protection

API NO. 47- 091 01377
OPERATOR WELL NO. 211
Well Pad Name: Armstrong II

### 18)

### CASING AND TUBING PROGRAM

ТҮРЕ	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	120	120 /	CTS
Fresh Water	13,375	New	J-55	54.5	950	950	CTS
Coal							
Intermediate	9.625	New	J-55	40	2500	2500 /	CTS
Production	5.5	New	P-110	20	20797	20797 /	TOC @ 2250
Tubing					-		
Liners							



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/L, 3% CaCl2	1.2
Fresh Water	13.375	17.5	0.38	2,730	900	Class A/L, 3% CaCl2	1.2
Coal							
Intermediate	9.625	12.25	0.395	3,950	1500	Class A/L, 3% CaCl2	1.29
Production	5.5	8.5-8.75	0.361	15,920	11,500	Class A/L, Poz	1.29/1.34
Tubing					5,000		
Liners			Common among pang-naganggangganggangganggangganggangga		N/A		

### **PACKERS**

Kind;		
Sizes:	4.	
Depths Set:		.,

WW-6B	
(10/14)	

API NO. 47- 091 - 01377

OPERATOR WELL NO. 211

Well Pad Name: Armstrong II

4709101377

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 circulate 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  $\frac{1}{2}$ " hole and drill to fresh water casing (Surface) to the programmed depth, Run 13-  $\frac{3}{8}$ " casing and cement to surface. The rig will continue drilling a 12-  $\frac{1}{4}$ " intermediate hole to the programmed depth, run 9-  $\frac{5}{8}$ " casing and cement to surface. The rig with then continue to drill an 8-  $\frac{3}{4}$ " hole to a designed KOP. We will then start drilling the curve and lateral section to the programmed total measured depth, run 5  $\frac{1}{2}$ " 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 11,500 psi.

- 21) Total Area to be disturbed, including roads, stockpile area, pits, etc., (acres): 7.43
- 22) Area to be disturbed for well pad only, less access road (acres): 4.96
- 23) Describe centralizer placement for each casing string:

24"- 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 circulated to surface. The 13 3/8" casing will be cemented to surface with Class A/L cement and no greater than 3% CaCl (calcium chloride). The 9 5/8" casing will be cemented to surface with Class A/L cement, & no greater than 3% calcium chloride, The 5 1/2" production string will be cemented back to 1,350' (+/- 150' above the casing shoe for the 9 5/8") with Class A/L Poz cement retarded (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 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 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 of 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 strands and load the hole. The weight indicator on the rig will be monitored for any occurrences of drag and if any are noticed, we will re-run the previous stand of pipe pulled across and circulate 2x bottoms up while watching shakers for signs of cuttings. Once at the base 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.

Office of Oil and Gas

JAN 26 2024

Page 3 of 3

### 4709101377

API Number 47 - 091 Operator's Well No. 211

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

### FLUIDS/ CUTTINGS DISPOSAL & RECLAMATION PLAN

Operator Name Arsenal Resources	DP Code 494519412
Watershed (HUC 10) Tygart Valley River Quadrangle Gra	afton
Do you anticipate using more than 5,000 bbls of water to complete the proposed well	work? Yes V No 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	œ.
Underground Injection (UIC Permit Number	
Reuse (at API Number Various Off Site Disposal (Supply form WW-9 for disposal location	on)
Other (Explain	,
Will closed loop system be used? If so, describe: Yes, the closed loop system will contain all of the drilling	g medium and drill cuttings on location and then be taken to a landfill
Drilling medium anticipated for this well (vertical and horizontal)? Air, freshwater, or	pil based, etc. Vertical: Freshwater, Horizontal: Oil based mud
-If oil based, what type? Synthetic, petroleum, etc. synthetic	
Additives to be used in drilling medium? Bentonite, soap & polymer sticks, soda ash, sodium bi	carbonate, defoamer, base oil, emulsifiers, lime, barite
Drill cuttings disposal method? Leave in pit, landfill, removed offsite, etclandfill	
-If left in pit and plan to solidify what medium will be used? (cement, lime,	sawdust)_n/a
-Landfill or offsite name/permit number? Meadowfill Landfill/Waste Managemer	nt, Westmoreland Sanitary Landfill, Apex Landfill
Permittee shall provide written notice to the Office of Oil and Gas of any load of drill West Virginia solid waste facility. The notice shall be provided within 24 hours of rej where it was properly disposed.	cuttings or associated waste rejected at any ection and the permittee shall also disclose
I certify that I understand and agree to the terms and conditions of the GEN on August 1, 2005, by the Office of Oil and Gas of the West Virginia Department of I provisions of the permit are enforceable by law. Violations of any term or conditional law or regulation can lead to enforcement action.  I certify under penalty of law that I have personally examined and am far application form and all attachments thereto and that, based on my inquiry of the obtaining the information, I believe that the information is true, accurate, and compensations for submitting false information, including the possibility of fine or imprison Company Official Signature	Environmental Protection. I understand that the on of the general permit and/or other applicable amiliar with the information submitted on this those individuals immediately responsible for mplete. I am aware that there are significant
Company Official (Typed Name) Dave Boye	745
Company Official Title Director of Geology & Development Planning	JAN 2 6 2024
Subscribed and sworn before me this 24th day of January	, 20 24 WV Department of Environmental Protection
Stranave O Conhor	Notary Public  Commonwealth of Pennsylvania - Notary Seal
My commission expires 3/17/2026	Annmarie O'Connor, Notary Public  Allegheny County
	My commission expires March 17, 2026  Commission number 1013 33/01/2024
	Member. Pennsylvania Association of Notaries

Field Reviewed?

Form WW-9	. 1	Operator	Operator's Well No. 211		
Arsenal Resources					
Proposed Revegetation Treatment	ment: Acres Disturbed 7.4	6 Prevegetation	<sub>1 pH</sub> 6.8 average		
Lime 2.67	Tons/acre or to correct	to pH 6.4			
Fertilizer type 10-2	20-20	Address of the Control of the Contro			
Fertilizer amount_10	000	lbs/acre			
Mulch 3-4		Fons/acre			
		Seed Mixtures			
Ter	nporary	Per	manent		
Seed Type	lbs/acre	Seed Type	lbs/acre		
Orchard Grass	129	Orchard Grass	129		
Rye	93	Rye	93		
Clover	24	Clover	24		
Timothy	45	Timothy	45		
provided). If water from the p acreage, of the land application Photocopied section of involv	it will be land applied, inclu n area.	application (unless engineered plans in ide dimensions (L x W x D) of the pit,			
		rbed areas as soon as re	easonably possible		
	grade erosion and	d sediment control measu	ures where needed		
per the West Virgi	nia Erosion and	Sediment Control Field	Manual.		
8 <u>19 2 77</u>					
	ta ingalah Kajard merenakan sebagai saran sengan saran s		тери дебере продостору обородня выполнення на населення на населення на населення предвору в населения на надрежения выполнения на надрежения на н		
Title: The partie		Date: [] (30 2-3)			



# SITE SAFETY PLAN

### **ARMSTRONG II WELL PAD #211**

911 Address:

40 Freewill Drive

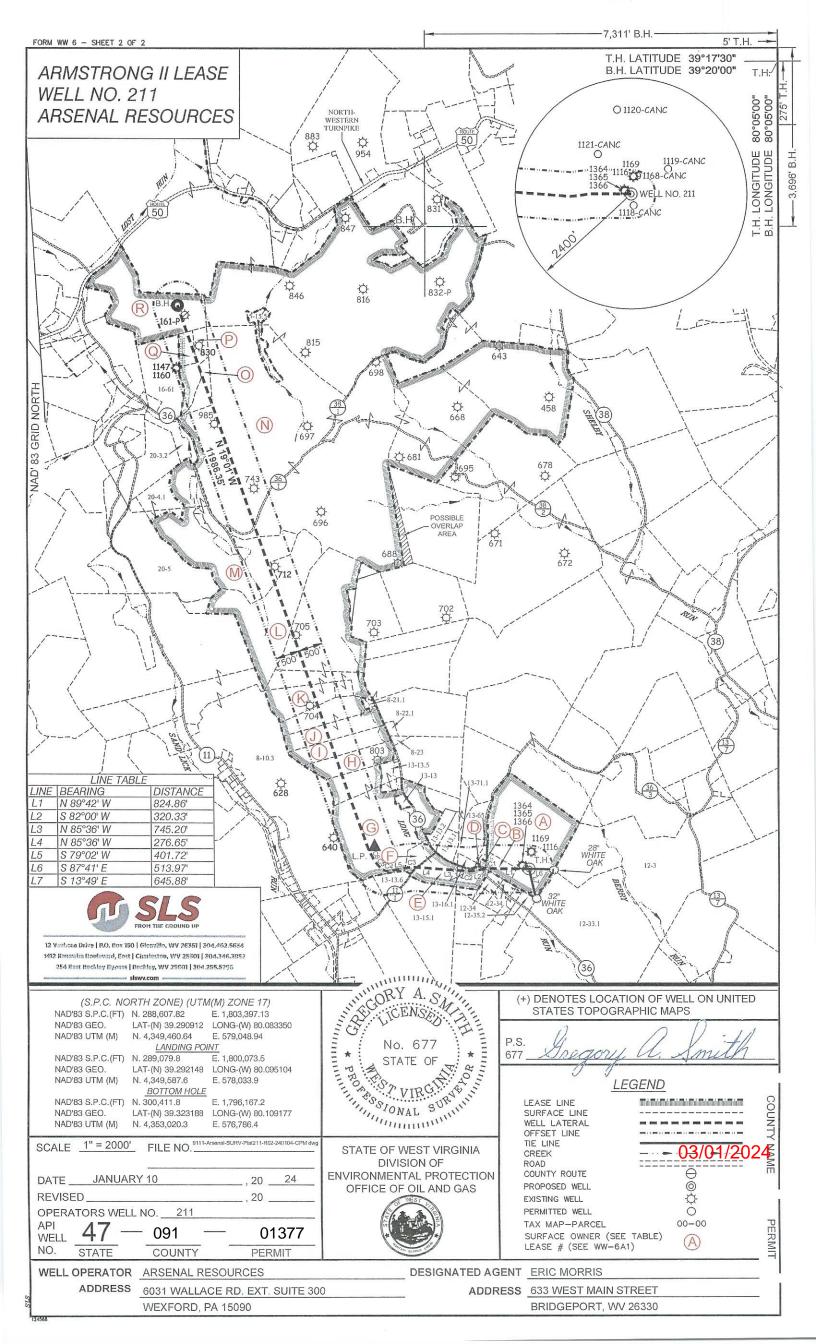
Flemington, WV 26347

Month of 2093

RECEIVED
Office of Oil and Gas

JAN 26 2024

WV Department of Environmental Protection



T.H. LATITUDE 39°17'30" B.H. LATITUDE 39°20'00'

E. 1,796,167.2

E. 576,786.4

LONG-(W) 80.109177

80°05'00" LONGITUDE

T.H. B.H.

T.H:

### ARMSTRONG II LEASE **WELL NO. 211** ARSENAL RESOURCES

TAG	SURFACE OWNER	PARCEL	ACRES
Α	ROBERT L. & JULIE A. ARMSTRONG	5-12-1	65,375
В	ROBERT L & JULIE A ARMSTRONG	5-12-90	5
C	LONG RUN FELLOWSHIP CHURCH	5-12-89	0.36
D	TRS OF LONG RUN FREE WILL BAPTIST CHURCH	5-13-16.2	6372.98 SQ FT
E	TINA L. FREEZE	5-13-15	14.98
F	JASON MATTHEW SINGLETON	5-13-13.7	4.99
G	JOSHUA AARON & BRITTANY ELAINE WININGER	5-13-13.8	63,60
Η.	MICHAEL EUGENE & BETH ANN WININGER	5-8-12	14.92
I	MICHAEL EUGENE & BETH ANN WININGER	5-8-13	16.74
J	ARK LAND LLC	5-8-21	66.95
K	ARK LAND LLC	5-8-15	106.82
L	RODNEY E. & LINDA S. MCQUAIN	5-8-30	62.54
M	RALPH & CRYSTAL L. MORRIS	3-20-4	79.65
N	STATE OF WEST VIRGINIA INDUSTRIAL SCHOOL FOR BOYS	5-5-15	913.69
0	BYRON D. & ELAINE D. GILBERT	3-16-61,1	6,55
P	NANCY B. BAKER (LF), ET AL	3-16-61.2	16.29
Q	DUSTIN L. DALTON & CALLIE MARISA MARIE GILBERT	3-16-61.3	5
R	ERNEST C. HAWKINBERRY (LIFE), ET AL	3-16-62	55.60

200.00	(S.P.C. NO	ORTH ZONE) (UTI	И(M) ZONE 17)
/B.H.	NAD'83 S.P.C.(FT)	N. 288,607.82	E. 1,803,397.13
i	NAD'83 GEO.	LAT-(N) 39.290912	LONG-(W) 80.083350
	NAD'83 UTM (M)	N. 4,349,460.64	E. 579,048.94
		LANDING PC	INT
	NAD'83 S.P.C.(FT)	N. 289,079.8	E. 1,800,073.5
	NAD'83 GEO.	LAT-(N) 39.292148	LONG-(W) 80.095104
	NAD'83 UTM (M)	N. 4,349,587.6	E. 578,033.9

N. 300,411,8

LAT-(N) 39,323188

N. 4,353,020.3

NAD'83 S.P.C.(FT)

NAD'83 UTM (M)

NAD'83 GEO.

	CUF C1
ACRES	C2 C3
26.91	C4
8.40	C5
11.97	- C6
6.62	[00
214.97	
1.05	
1.29	
1.1	
117.94	7.7
89.30	
4.825	
2.00	
1.57	
5.03	
5	
5.72	
5.77	
43,41	

CURVE	RADIUS	ARC LENGTH	CHORD LENGTH	CHORD BEARING
C1	1273.52	46.85'	46.85'	S 84°53'32" W
C2	584.22'	142.02'	141.67'	N 89°39'08" W
	530.41'	142.38'	141.96'	S 86°58'21" W
C4	146.78'	92.84'	91.30'	N 80°35'49" W
C4 C5	451.90'	198.96'	197.36'	N 49°08'31" W
C6	1312.52	428.04'	426.14'	N 27°49'28" W

BOTTOM HOLE

### REFERENCES

1000	neren	LIVE	,E3
	1116 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	1169	
	<u>/</u>	1" =	200'

PARCEL	ADJOINING SURFACE OWNER	ACRES
3-16-61	NANCY B BAKER	26.91
3-20-3,2	REBECCA J. BARTLETT	8.40
3-20-4.1	CHADWICK L & TOSHA N MORRIS	11.97
5-5-15.5	STATE OF WEST VIRGINIA (WV DEPT OF AGRICULTRE)	6.62
5-8-10.3	C & P RICOTTILLI ET AL	214.97
5-8-21.1	DIANNA I. LEONELLI	1.05
5-8-22.1	H. THOMAS ADKINS, JR.	1.29
5-8-23	TRINA RAGER	1.1
5-12-3	ROBERT L. JR. & PATRICIA LYNN CARPENTER	117.94
5-12-33.1	HARRY V. & PATRICIA J. JOHNSON	89.30
5-12-34.1	BOW SMITH	4.825
5-12-35.2	MARIE ELEANORE & KEITH QUEEN (LIFE), ET AL	2.00
5-13-13	MICHAEL EUGENE & BETH ANN WININGER	1.57
5-13-13.1	JERRY LEE JR. & MARSHA A. WELCH	5.03
5-13-13.2	LEROY G & ROBIN D STANLEY	5
5-13-13.5	TRINA RAGER	5.72
5-13-13.6	PETER J & TONYA J SHIPP	5.77
5-13-15.1	GARY LEE BOLYARD ET AL	43,41
5-13-65	LONG RUN FELLOWSHIP CHURCH	1.341
5-13-71.1	ALLISON SIMMONS	5.00
5-13-16.1	ALLISON SIMMONS	1.59

### NOTES ON SURVEY

1. NO WATER WELLS WERE FOUND WITHIN 250' OF PROPOSED GAS WELL. NO AGRICULTURAL BUILDINGS > 2500 SQ. FT. OR DWELLINGS WERE FOUND WITHIN 625' OF THE CENTER OF PROPOSED WELL PAD. 2. WELL SPOT CIRCLE & TOPO MARK SCALE ARE 1"=2000'

3. THERE IS ONE (1) HOUSE TRAILER AND ONE (1) HUNTING CABIN WITHIN WITHIN 625 FEET. NEITHER STRUCTURE APPEAR TO BE OCCUPIED AND THE HOUSE TRAILER APPEARS TO BE DILAPIDATED.

I THE UNDERSIGNED, HEREBY CERTIFY THAT THIS PLAT IS CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF AND SHOWS ALL THE INFORMATION REQUIRED BY LAW AND THE REGULATIONS ISSUED AND PRESCRIBED

vira Bouleyard, East | Charleston, WV 25301 | 304.346.3652 254 East Beckley Bypass | Beckley, WV 25661 | 304.255.5266

slswv.com

BY THE DIVISION OF ENVIRONMENTAL PROTECTION. P.S. 677

WELL OPERATOR ARSENAL RESOURCES

6031 WALLACE RD. EXT. SUITE 300

WEXFORD, PA 15090

ADDRESS

No. 677
STATE OF
VIRCE

STATE OF

ST

(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS DATE\_ JANUARY 10 , 20 \_\_\_\_24

REVISED\_ , 20

OPERATORS WELL NO. \_ 211

WELL 091 NO. STATE COUNTY

01377 PERMIT

MINIMUM DEGREE OF ACCURACY

1412 Kanas

1/2500

FILE NO. 9111-Arsenal-SURV-Plat211-R02-240104-CPM.dwg

1" = 2000' SCALE DGPS (SURVEY GRADE TIE TO CORS NETWORK)

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

ADDRESS 633 WEST MAIN STREET

BRIDGEPORT, WV 26330

DESIGNATED AGENT ERIC MORRIS



HORIZONTAL & VERTICAL SCALE 1" = 2000' CONTROL DETERMINED BY: DGPS (SURVEY GRADE TIE TO CORS NETWORK)	OFFICE OF OIL AND GAS			
WELL LIQUID WASTE IF TYPE: OIL GAS X INJECTION DISPOSAL "GAS" PRODUCTION	DN_X_ STORAGE	DEEP SHALLOW X	_	
			- o	
DISTRICT COURTHOUSE COUNTY TAYLOR	QUADRANGLE	GRAFTON	- 0	
DISTRICT COURTHOUSE COUNTY TAYLOR  SURFACE OWNER ROBERT L. & JULIE A. ARMSTRONG	ACREAGE	65.375±	- 7	
ROYALTY OWNERROBERT L. & JULIE A. ARMSTRONG ET AL	ACREAGE	65. <b>73/01/202</b> SEE WW-6A1	<u>2</u> 4€	
PROPOSED WORK:	LEASE NO.	SEE WW-6A1	_ 🗎	
DRILL X CONVERT DRILL DEEPER REDRILL	FRACTURE OR STIMU	LATE X PLUG OFF OLD	)	
FORMATION PERFORATE NEW FORMATION PLUG AND ABANDON_				
PHYSICAL CHANGE IN WELL (SPECIFY)	TARGET FORMATION	MARCELLUS	- PE	
PHYSICAL CHANGE IN WELL (SPECIFY)	ESTIMATED DEPTH	TMD 20,796.9 / TVD 7,725'	_ 8	

4709101377

### 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:

I	_ea	se	Name	or
	-	Νι	ımber	

Grantor, Lessor, etc.

Grantee, Lessee, etc.

Royalty

Book/Page

See attached

# 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:

RECEIVED Office of Oil and Gas

- 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

JAN 26 2024

WV Department of Environmental Protection

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:

By: Dave Boyer

Its: Director of Geology & Development Planning

Page 1 of \_\_\_\_\_

### Attachment to WW-6A1, Armstrong II 211

Letter Designation/Number Designation on Plat	ignation/Number Grantor, Lessor, Assignor, Grantee, Lessee,		Royalty	Book/Page	Acreage
A (00004370)	Robert L Armstrong and Julie Armstrong, husband and wife	Petroleum Development Corporation	12.5%	55/708	65.375
	Petroleum Development Corporation	PDC Mountaineer LLC		30/698	
	PDC Mountaineer LLC	River Ridge Energy LLC		8/541	
/ B (00005202)	Kim R Rogers	PDC Mountaineer LLC	15.0%	65/103	53.659
	PDC Mountaineer LLC	River Ridge Energy LLC		8/541	
B (00005203)	Richard A and Crystal A Vincent, his wife	PETROLEUM DEVELOPMENT CORPORATION	15.0%	65/115	53.659
	PDC Mountaineer LLC	River Ridge Energy LLC		8/541	
B (00005204)	Richard L Dodd	PDC Mountaineer LLC	15.0%	65/112	53.659
	PDC Mountaineer LLC	River Ridge Energy LLC		8/541	
/ C (00006672)	Taylor County Board of Education	Mar Key LLC	15.0%	67/606	0.36
/ D (00008895)	The Long Run Fellowship Church	Mar Key LLC	14.0%	70/258	1.341
/ E (00009015)	MARGARETT L ROGERS	Mar Key LLC	12.5%	71/228	16.57
E (00009027)	TINA L FREEZE	Mar Key LLC	12.5%	71/718	14.98
/ F (00009022)	JASON MATTHEW SINGLETON	Mar Key LLC	12.5%	71/259	4.99
/G (00009046)	RRHAMCO INC	Mar Key LLC	12.5%	72/226	77
/ H & I (00003750)	GLEN C LAREW ET UX ET AL	Petroleum Development Corporation	15.0%	46/567	34
	Petroleum Development Corporation	PDC Mountaineer LLC		30/698	
	PDC Mountaineer LLC	River Ridge Energy LLC		8/541	

### Attachment to WW-6A1, Armstrong II 211

Letter Designation/Number Designation on Plat	signation/Number Grantor, Lessor, Assignor,		Royalty	Book/Page	Acreage
/J (00008886)	I L MORRIS	MAR KEY LLC	15%	70/246	84.95
J (00008899)	ARK LAND LLC	Mar Key LLC	15%	70/283	84.95
J (00008907)	SONIA D GREEN- HERSHMAN	Mar Key LLC	20.0%	70/286	84.95
J (00008908	SHERRY A GREEN	Mar Key LLC	20.0%	70/292	84.95
J (00008909)	SHIRLENE R BOLYARD	Mar Key LLC	20.0%	70/288	84.95
J (00008910)	DEANNA ALESIA MCDOLE	Mar Key LLC	20.0%	70/290	84.95
J (00008924)	XTO ENERGY LLC	MAR KEY LLC	20.0%	70/323	84.95
K (00003964	Lou M Jenkins	Petroleum Development Corporation	12.5%	44/56	106
	Petroleum Development Corporation	PDC Mountaineer LLC		30/698	
	PDC Mountaineer LLC	River Ridge Energy LLC		8/541	
K (00003965)	Mary E Sorrells	Petroleum Development Corporation	12.5%	44/50	106
	Petroleum Development Corporation	PDC Mountaineer LLC		30/698	
	PDC Mountaineer LLC	River Ridge Energy LLC		8/541	
K (00003966)	Robert E Tracy and Catharine K Tracy, husband and wife	Petroleum Development Corporation	12.50%	45/52	106
	Petroleum Development Corporation	PDC Mountaineer LLC		30/698	
	PDC Mountaineer LLC	River Ridge Energy LLC		8/541	

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JAN 26 2024

### Attachment to WW-6A1, Armstrong II 211

Letter Designation/Number Designation on Plat	Grantor, Lessor, Assignor, etc.	Grantee, Lessee, Assignee, etc.	Royalty	Book/Page	Acreage
L & M (00007891)	STUART E MCQUAIN ET UX ET AL	Eastern American Energy Corporation	12.5%	44/230	206
	Eastern American Energy Corporation	Energy Corporation of America		314/429	
	Energy Corporation of America	Mar Key LLC		36/334	
On Plorence Kunst Hoback he (00008278)  Dr Florence Kunst Hoback he husband		Eastern American Energy Corporation		40/656	913.69
	Eastern American Energy Corporation	Energy Corporation of America		314/429	
	Energy Corporation of America	Greylock Production LLC		36/618	
	Greylock Production LLC	Mar Key LLC		37/8	
O, P, Q (00003972)	Harry E Baker & Nancy A Baker, his wife	Petroleum Development Corporation	12.5%	44/120	49.75
	Petroleum Development Corporation	PDC Mountaineer LLC		30/698	
	PDC Mountaineer LLC	River Ridge Energy LLC		8/541	
R (00009078)	Frank S. Law	Mar Key LLC	12.5%	73/105	35.025

### 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 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]

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Office of Oil and Gas

JAN 26 2024

Wy Department of Environmental Protection 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



People Powered. Asset Strong.

December 24, 2024

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; Armstrong II

Dear Mr. Martin:

In preparation of filing a permit application for the above referenced well, Arsenal Resources has conducted a thorough title examination in order to determine the ownership of the oil and gas underlying roadways crossed by the proposed well(s). 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,

Jon Sheldon

**Chief Operating Officer** 

Jon Sheldon

Office of Oil and Gas

JAN **26** 2024

WV Department of Environmental Protection

6031 Wallace Road Ext, Suite 300 Wexford, PA 15090 P: 724-940-1100 F: 800-428-0981 www.arsenalresources.com

WW-PN (11-18-2015)

## Horizontal Natural Gas Well Work Permit 47 0 9 1 0 1 3 7 7 **Application Notice By Publication**

Notice is hereby given:

Pursuant to West Virginia Code 22-6A-10(e) prior to filing an application for a permit for a horizontal well the applicant shall publish in the county in which the well is located or is proposed to be located a Class II legal advertisement.

Paper: The Mountain Statesman Public Notice Date: 11-22-2023 and 11-29-2023

The following applicant intends to apply for a horizontal natural well work permit which disturbs three acres or more of surface excluding pipelines, gathering lines and roads or utilizes more than two hundred ten thousand gallons of water in any thirty day period.

Well Number: Armstrong II 211, 212 Applicant: Arsenal Resources

Address: 6031 Wallace Road Extension, Suite 101

Wexford, PA 15090

Business Conducted: Natural gas production.

Location -

Taylor West Virginia County: State: Grafton Quadrangle: Courthouse District: 4,349,460.64, 4,349,462.20 UTM Coordinate NAD83 Northing: 579,048.94, 579,053.24 UTM coordinate NAD83 Easting: Watershed: Long Run Environmental Protection

### **Coordinate Conversion:**

To convert the coordinates above into longitude and latitude, visit: http://tagis.dep.wv.gov/convert/llutm\_conus.php

#### **Electronic notification:**

To receive an email when applications have been received or issued by the Office of Oil and Gas, visit http://www.dep.wv.gov/insidedep/Pages/DEPMailingLists.aspx to sign up.

**Reviewing Applications:** 

Copies of the proposed permit application may be reviewed at the WV Department of Environmental Protection headquarters, located at 601 57th Street, SE Charleston, WV 25304 (304-926-0450). Full copies or scans of the proposed permit application will cost \$15, whether mailed or obtained at DEP headquarters. Copies may be requested by calling the office or by sending an email to DEP.comments@wv.gov.

**Submitting Comments:** 

Comments may be submitted online at https://apps.dep.wv.gov/oog/comments/comments.cfm, or by letter to Permit Review, Office of Oil and Gas, 601 57th Street, SE Charleston, WV 25304. Please reference the county, well number, and operator when using this option.

Regardless of format for comment submissions, they must be received no later than thirty days after the permit application is received by the Office of Oil and Gas.

For information related to horizontal drilling visit: www.dep.wv.gov/oil-and-gas/pages/default.aspx

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

Date of Notice Certification: API No	. 4 /
Operato	or's Well No
Well Pa	or's Well Nod Name:
<b>Notice has been given</b> : Pursuant to the provisions in West Virginia Code § 22-6A, the Operator has provided the	
below for the tract of land as follows:  State: UTM NAD 83 Easting:  County: Northin	
District: Public Road Access:	
Quadrangle: Generally used farm name Watershed:	e:
Pursuant to West Virginia Code § 22-6A-7(b), every permit application filed under prescribed by the secretary, shall be verified and shall contain the following information: it has provided the owners of the surface described in subdivisions (1), (2) and (4), sinformation required by subsections (b) and (c), section sixteen of this article; (ii) that the of giving the surface owner notice of entry to survey pursuant to subsection (a), section requirements of subsection (b), section sixteen of this article were waived in writing Virginia Code § 22-6A-11(b), the applicant shall tender proof of and certify to the secret of this article have been completed by the applicant.	(14) A certification from the operator that (i) subsection (b), section ten of this article, the requirement was deemed satisfied as a result on ten of this article six-a; or (iii) the notice by the surface owner; and Pursuant to Wes
Pursuant to West Virginia Code § 22-6A, the Operator has attached proof to this Notice that the Operator has properly served the required parties with the following:	
*PLEASE CHECK ALL THAT APPLY	OOG OFFICE USE ONLY
☐ 1. NOTICE OF SEISMIC ACTIVITY or ☐ NOTICE NOT REQUIRED BEG SEISMIC ACTIVITY WAS COND	= RECEITED
$\square$ 2. NOTICE OF ENTRY FOR PLAT SURVEY or $\square$ NO PLAT SURVEY WAS	S CONDUCTED RECEIVED
☐ 3. NOTICE OF INTENT TO DRILL or ☐ NOTICE NOT REQUIRED BEOMOTICE OF ENTRY FOR PLAT SUWAS CONDUCTED or	in the cerve exp
☐ WRITTEN WAIVER BY SUR (PLEASE ATTACH)	FACE OWNER
☐ 4. NOTICE OF PLANNED OPERATION	☐ RECEIVED
☐ 5. PUBLIC NOTICE	☐ RECEIVED
☐ 6. NOTICE 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.

### Certification of Notice is hereby given:

THEREFORE, I Dave Boyer , 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

By: Dave Boyer

Its: Director of Geology and Development Planning

Telephone: 724-940-1100

Address: 6031 Wallace Road Extension, Suite 101

Wexford, PA 15090

Facsimile: 800-428-0981

Email: dboyer@arsenalresources.com

CommonwealtNGTPANKsYtAbia - Notary Seal Annmarie O'Connor, Notary Public

Allegheny County
My commission expires March 17, 2026
Commission number 1013834

Member. Pennsylvania Association of Notaries

Subscribed and sworn before me this

day of January 2024

Notary Public

My Commission Expires

7/2026

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.

Office of Oil and Gas

JAN 26 2024

WV Department of Environmental Protection

WW-6A (9-13)

Flemington WV 26347

API NO. 47-OPERATOR WELL NO. 211 Well Pad Name: Armstrong II

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

4709101377 Notice Time Requirement: notice shall be provided no later than the filing date of permit application. Date of Notice: 1/24/24 Date Permit Application Filed: 1/24/24 Notice of: PERMIT FOR ANY ☐ CERTIFICATE OF APPROVAL FOR THE WELL WORK CONSTRUCTION OF AN IMPOUNDMENT OR PIT Delivery method pursuant to West Virginia Code § 22-6A-10(b) ☐ PERSONAL REGISTERED ✓ METHOD OF DELIVERY THAT REQUIRES A **SERVICE** MAIL RECEIPT OR SIGNATURE CONFIRMATION Pursuant to W. Va. Code § 22-6A-10(b) no later than the filing date of the application, the applicant for a permit for any well work or for a certificate of approval for the construction of an impoundment or pit as required by this article shall deliver, by personal service or by registered mail or by any method of delivery that requires a receipt or signature confirmation, copies of the application, the erosion and sediment control plan required by section seven of this article, and the well plat to each of the following persons: (1) The owners of record of the surface of the tract on which the well is or is proposed to be located; (2) The owners of record of the surface tract or tracts overlying the oil and gas leasehold being developed by the proposed well work, if the surface tract is to be used for roads or other land disturbance as described in the erosion and sediment control plan submitted pursuant to subsection (c), section seven of this article; (3) The coal owner, operator or lessee, in the event the tract of land on which the well proposed to be drilled is located [sic] is known to be underlain by one or more coal seams; (4) The owners of record of the surface tract or tracts overlying the oil and gas leasehold being developed by the proposed well work, if the surface tract is to be used for the placement, construction, enlargement, alteration, repair, removal or abandonment of any impoundment or pit as described in section nine of this article; (5) Any surface owner or water purveyor who is known to the applicant to have a water well, spring or water supply source located within one thousand five hundred feet of the center of the well pad which is used to provide water for consumption by humans or domestic animals; and (6) The operator of any natural gas storage field within which the proposed well work activity is to take place. (c)(1) If more than three tenants in common or other co-owners of interests described in subsection (b) of this section hold interests in the lands, the applicant may serve the documents required upon the person described in the records of the sheriff required to be maintained pursuant to section eight, article one, chapter eleven-a of this code. (2) Notwithstanding any provision of this article to the contrary, notice to a lien holder is not notice to a landowner, unless the lien holder is the landowner. W. Va. Code R. § 35-8-5.7.a requires, in part, that the operator shall also provide the Well Site Safety Plan ("WSSP") 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. ☐ Application Notice ☐ WSSP Notice ☐ E&S Plan Notice ☐ Well Plat Notice is hereby provided to: ☑ SURFACE OWNER(s) COAL OWNER OR LESSEE Name: Robert and Julie Armstrong Name: See attached Address: 90 Freewill Drive Address: Flemington WV 26347 Name: COAL OPERATOR Address: Name: Address: ☑ SURFACE OWNER(s) (Road and/or Other Disturbance) Name: Robert and Julie Armstrong ☑ SURFACE OWNER OF WATER WELL Address: 90 Freewill Drive AND/OR WATER PURVEYOR(s) Flemington WV 26347 Name: See attached W Department of Name: Address: Address:

| Department of Operator Of Any Natural Gas Storage Field Citor Address: ☐ SURFACE OWNER(s) (Impoundments or Pits) Name: Name: Robert and Julie Armstrong (AST) Address: Address: 90 Freewill Drive

\*Please attach additional forms if necessary

WW-6A (8-13)

API NO. 47	
OPERATOR WELL NO. 211	
Well Pad Name: Armstrong II	

### 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 57<sup>th</sup> Street, SE, Charleston, WV 25304 (304-926-0450) or by visiting <a href="www.dep.wv.gov/oil-and-gas/pages/default.aspx">www.dep.wv.gov/oil-and-gas/pages/default.aspx</a>.

#### **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. 47-\_\_\_\_-OPERATOR WELL NO. 211

Well Pad Name: Armstrong II

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.

4709101377

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 57<sup>th</sup> St. SE
Charleston, WV 25304
(304) 926-0450

Office of Oil and Gas

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. 211

Well Pad Name: Armstrong II

### 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 <a href="http://www.dep.wv.gov/oil-and-gas/Horizontal-Permits/Pages/default.aspx">http://www.dep.wv.gov/oil-and-gas/Horizontal-Permits/Pages/default.aspx</a> 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)

API NO. 47-OPERATOR WELL NO. 211 Well Pad Name: Armstrong II

Address: 6031 Wallace Rd Ext Suite 101

Wexford PA 15090 Facsimile: 800-428-0981

Notice is hereby given by:

Well Operator: Arsenal Resources Telephone: 724-940-1100

Email: dboyer@arsenalresources.com

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.

Commonwealth of Pennsylvania - Notary Seal Annmarie O'Connor, Notary Public Allegheny County My commission expires March 17, 2026 Commission number 1013834

Member. Pennsylvania Association of Notaries

day of January Subscribed and sworn before me this

My Commission Expires

Office of Oil and Gas JAN 26 2024

# STATE OF WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS NOTICE OF ENTRY FOR PLAT SURVEY

	Requiremen	t: Notice shall be provid	ed at least SI	EVEN (7) day	ys but no more tha	n FORTY-FIVE (4	5) days prior to
entry  Date of Noti	ce: 6/11/2021	Date of Plann	ed Entry: 06	/21/2021	<del></del>		
Delivery me	thod pursuan	t to West Virginia Cod	le § 22-6A-10	)a			
☐ PERSO	NAL [	REGISTERED	■ METH	OD OF DEL	IVERY THAT RE	EQUIRES A	
SERVIO	Œ	MAIL	RECEI	PT OR SIGN	ATURE CONFIR	RMATION	
on to the surf but no more to beneath such owner of min and Sediment Secretary, whenable the sur-	face tract to co than forty-five tract that has terals underlyin t Control Mannich statement rface owner to	Code § 22-6A-10(a), Prinduct any plat surveys r days prior to such entry filed a declaration pursuing such tract in the coursual and the statutes and shall include contact in obtain copies from the	equired pursue to: (1) The sant to section ty tax record rules related formation, in-	uant to this ar surface owner thirty-six, ar s. The notice to oil and gas	ticle. Such notice to f such tract; (2) ticle six, chapter to shall include a state exploration and p	shall be provided at lead to any owner or lesson wenty-two of this contact that copies of the coduction may be ob-	least seven days ee of coal seams de; and (3) any of the state Erosion otained from the
-	eby provided CE OWNER(s			COAI	, OWNER OR LE	SSEE	Office of Oil
	and Julie Armstrong	,		Name: See			Office of Oil and Ga
Address: 90 F				Address:			" and Ga
Flemington, WV 20							JAN 26 2024
Name:				general			· 0 2024
Address:		***************************************		■ MINE	RAL OWNER(s)	.~	
	and the section of th			Name: See	Attached		Garnen
	annumerica, sp. restor's tendistron bifoliosteconicies described	tion to be because the proper processing the second		Address:		ronmental Proteogon	
Address:				*nlease attach	additional forms if ne		on , , ,
				prease areaer	additional tormo at the		
a plat survey State: County: District:	Vest Virginia Con the tract of West Virginia Taylor Court House	Code § 22-6A-10(a), not land as follows:	P V	approx. Latitu lublic Road A Vatershed:	ide & Longitude:	39.2528781, -80.169049 CR13, CR 36 (Long Run F Tygart Valley Armstrong II	
Quadrangle:	Grafton			renerally used	i iaili name.	Amstrong n	
may be obtain Charleston, W	ned from the S VV 25304 (30	and Sediment Control Mecretary, at the WV Depth 4-926-0450). Copies of by visiting <a href="https://www.dep.www.dep.www.dep.w">www.dep.w</a>	partment of E such docum	nvironmenta ents or additi	Protection headq onal information r	uarters, located at 60	1 57" Street, SE,
Notice is he	reby given b	y:					
Well Operator: Arsenal Resources			Address:	6031 Wallace Road Ext	ension, Suite 300		
Telephone:	724-940-1137				Wexford, PA 15090		
Email:	rschweitzer@a	rsenalresources.com		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 <a href="mailto:deprivacyofficer@wv.gov">deprivacyofficer@wv.gov</a>.

WW-6A5 (1/12)

Operator Well No.

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

	ovided no later than the filing date of permit application.  ermit Application Filed:
Delivery method pursuant to West Virginia	Code § 22-6A-16(c)
☐ CERTIFIED MAIL RETURN RECEIPT REQUESTED	☐ HAND DELIVERY
return receipt requested or hand delivery, give the planned operation. The notice required be required to be provided by subsection (b), section drilling of a horizontal well; and (3) A proposed damages to the surface affected by oil and gas of	ater than the date for filing the permit application, an operator shall, by certified mail the surface owner whose land will be used for the drilling of a horizontal well notice of by this subsection shall include: (1) A copy of this code section; (2) The information on ten of this article to a surface owner whose land will be used in conjunction with the sed surface use and compensation agreement containing an offer of compensation for operations to the extent the damages are compensable under article six-b of this chapter. The given to the surface owner at the address listed in the records of the sheriff at the time
Notice is hereby provided to the SURFACE (at the address listed in the records of the sherif Name:  Address:	ff at the time of notice): Name:
	Northing: Public Road Access:
to be provided by <b>W. Va. Code § 22-6A-10</b> (I horizontal well; and (3) A proposed surface us surface affected by oil and gas operations to t information related to horizontal drilling may	b), this notice shall include: (1)A copy of this code section; (2) The information required b) to a surface owner whose land will be used in conjunction with the drilling of a e and compensation agreement containing an offer of compensation for damages to the the extent the damages are compensable under article six-b of this chapter. Additional be obtained from the Secretary, at the WV Department of Environmental Protection Charleston, WV 25304 (304-926-0450) or by visiting <a href="https://www.dep.wv.gov/oil-and-damages-number-10">www.dep.wv.gov/oil-and-damages-number-10"&gt;www.dep.wv.gov/oil-and-damages-number-</a>
Well Operator:  Telephone:	Address:
Email:	Facsimile:

### 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 <a href="mailto:depprivacyofficer@wv.gov">depprivacyofficer@wv.gov</a>.

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	AI-300	111-76-2		
Additive #6:	Gel Breaker	AP-One	7727-54-0		
Additive #7:	Acid	HCI - 7.5%	7647-01-0		

RECEIVED
Office of Oil and Gas

JAN 26 2924

Environmenta errora. In



### WEST VIRGINIA DEPARTMENT OF TRANSPORTATION

## **Division of Highways**

Office of the District Engineer/Manager
District Four
Post Office Box 4220 · Clarksburg, West Virginia 26302 · (304) 842-1500

Alanna J. Keller, P.E. Deputy Secretary of Transportation Deputy Commissioner of Highways Jimmy Wriston, P. E.
Secretary of Transportation
Commissioner of Highways

December 12, 2023

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

Subject: DOH Permit for the Armstrong II Well Pad, Taylor County
Armstrong II Unit 211 Well Site

Dear Mr. Martin,

This well site will be accessed from a DOH permit 04-2021-0828 which has been issued to Arsenal Resources, LLC for access to the State Road for a well site located off Taylor County Route 36/3 SLS MP 0.035.

This operator is in compliance with §22-6A-20 of the WV Code. Operator has signed a STATEWIDE 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 March 6, 2023. This letter is valid for permitting purposes for one year from the date of this letter.

Very Truly Yours,

Stephen G. Johnson, P.E.

**Director of Operations** 

JAN 26 2024

RECEIVED
Office of Oil and Gas

Environmental Protection

Cc: Dave Boyer

Arsenal Resources, LLC

OM, D-4

File

## 4709101377

OPERATOR: Arsenal Resources	WELL NO: 211
PAD NAME:Armstrong II	- $0.172$
REVIEWED BY:	SIGNATURE:

### WELL RESTRICTIONS CHECKLIST

### **HORIZONTAL 6A WELL**

Well 1	Restri	ctions	
	$\checkmark$	At Least 100 Feet from Pad and LOD (including any E&S Control Feature) to any Perennial Stream, Lake, Pond, Reservoir or Wetland; OR	/
		DEP Waiver and Permit Conditions	
	$\checkmark$	At Least 300 Feet from Pad and LOD (including any E&S Control Feature) to any Naturally Producing Trout Stream; OR	/
		DEP Waiver and Permit Conditions	
	$\checkmark$	At Least 1000 Feet from Pad and LOD (including any E&S Control Feature) to as Groundwater Intake or Public Water Supply; OR	ny
		DEP Waiver and Permit Conditions	
	$\checkmark$	At Least 250 Feet from an Existing Water Well or Developed Spring to Well Bein Drilled; OR	ng
		Surface Owner Waiver and Recorded with County Clerk, OR	
		DEP Variance and Permit Conditions	
	$\checkmark$	At Least 625 Feet from an Occupied Dwelling Structure to Center of the Pad; OR	RECEIVED Office of Oil and Gas
		Surface Owner Waiver and Recorded with County Clerk, OR	JAN 26 2024
		DEP Variance and Permit Conditions	W December
	$\checkmark$	At Least 625 Feet from Agricultural Buildings Larger than 2500 Square Feet to the of the Pad; OR	vironmental Protection te Center
		Surface Owner Waiver and Recorded with County Clerk, OR	
		DEP Variance and Permit Conditions	