



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

Friday, November 14, 2025
WELL WORK PERMIT
Horizontal 6A / New Drill

ARSENAL RESOURCES LLC
6031 WALLACE RD. EXT. SUITE 200

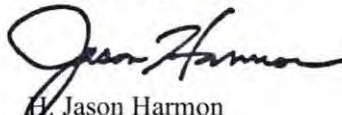
WEXFORD, PA 15090

Re: Permit approval for Lovejoy 203
47-091-01391-00-00

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.


H. Jason Harmon
Acting Chief

Operator's Well Number: Lovejoy 203
Farm Name: Rodney & Deborah A Anderson
U.S. WELL NUMBER: 47-091-01391-00-00
Horizontal 6A New Drill
Date Issued: 11/14/2025

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.

11/21/2025

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

- 1) Well Operator: Arsenal Resources 494519412 Taylor Courthouse Grafton
Operator ID County District Quadrangle
- 2) Operator's Well Number: Lovejoy 203 Well Pad Name: Halley's
- 3) Farm Name/Surface Owner: Anderson Public Road Access: CR-13/7 (Low Level Bridge Road)
- 4) Elevation, current ground: 1375' Elevation, proposed post-construction: 1377.44'
- 5) Well Type (a) Gas ☒ Oil ☐ Underground Storage ☐
Other ☐
(b) If Gas Shallow ☒ Deep ☐
Horizontal ☒
- 6) Existing Pad: Yes or No No
- 7) Proposed Target Formation(s), Depth(s), Anticipated Thickness and Expected Pressure(s):
Marcellus Shale, 7,815' (TVD Top) - 7,885' (TVD Bottom), 70', 0.5 psi/ft
- 8) Proposed Total Vertical Depth: 7,870'
- 9) Formation at Total Vertical Depth: Marcellus Shale
- 10) Proposed Total Measured Depth: 8,349'
- 11) Proposed Horizontal Leg Length: 0'
- 12) Approximate Fresh Water Strata Depths: 38', 47', 115', 155', 573'
- 13) Method to Determine Fresh Water Depths: Offsetting well water depths (091-01222, 091-01228, 091-00809)
- 14) Approximate Saltwater Depths: 870'
- 15) Approximate Coal Seam Depths: Harlem-414.44', Lower Freeport-724.44', Upper Killanning-784.44', Middle Killanning-834.44', Lower Killanning-864.44', Clarion-934.44'
- 16) Approximate Depth to Possible Void (coal mine, karst, other): None expected
- 17) Does Proposed well location contain coal seams directly overlying or adjacent to an active mine? Yes ☐ No ☒
- (a) If Yes, provide Mine Info: Name: _____
Depth: _____
Seam: _____
Owner: _____

MJK 10/1/2025

WW-6B
(04/15)

API NO. 47- 091 -

OPERATOR WELL NO. Lovejoy 203

Well Pad Name: Halley's

18)

CASING AND TUBING PROGRAM

TYPE	<u>Size (in)</u>	<u>New or Used</u>	<u>Grade</u>	<u>Weight per ft. (lb/ft)</u>	<u>FOOTAGE: For Drilling (ft)</u>	<u>INTERVALS: Left in Well (ft)</u>	<u>CEMENT: Fill-up (Cu. Ft.)/CTS</u>
Conductor	24	New	H-40	94	80	80	CTS
Fresh Water	13.375	New	J-55	54.5	650	650	CTS
Coal							
Intermediate	9.625	New	J-55	40	2,000	2,000	CTS
Production	5.5	New	P-110	23	8,349	8,349	TOC @ 1,850'
Tubing							
Liners							

BOK 10/1/2025

TYPE	<u>Size (in)</u>	<u>Wellbore Diameter (in)</u>	<u>Wall Thickness (in)</u>	<u>Burst Pressure (psi)</u>	<u>Anticipated Max. Internal Pressure (psi)</u>	<u>Cement Type</u>	<u>Cement Yield (cu. ft./k)</u>
Conductor	24	36			0	Class A/L, 3% CaCl ₂	1.2
Fresh Water	13.375	17.5	0.38	2,730	900	Class A/L, 3% CaCl ₂	1.2
Coal							
Intermediate	9.625	12.25	0.395	3,950	1,500	Class A/L, 3% CaCl ₂	1.29
Production	5.5	8.5-8.75	0.415	14,520	9,500	Class A/L, Poz	1.29/1.34
Tubing							
Liners							

PACKERS

Kind:				
Sizes:				
Depths Set:				

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 1/2" 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- 1/4" intermediate hole to the programmed depth, run 9- 5/8" casing and cement to surface. The rig will then continue to drill an 8- 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 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): 12.3

22) Area to be disturbed for well pad only, less access road (acres): 3.2

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 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 2,150'; there will be no centralizers from 2,150' 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% CaCl₂ (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 1,850' (+/- 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 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 of the bore-hole. This will provide lubricity as well as stabilizing the wellbore. 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, 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 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. Pull three stands and fill the hole until we reach the vertical section of the well.

*Note: Attach additional sheets as needed.

CEMENT ADDITIVES		
	Name	Purpose
Additive #1:	Bentonite	Helping fluid loss, reducing free water
Additive #2:	Calcium Chloride	Accelerator for low temp application
Additive #3:	Celloflake	Loss circulation additive
Additive #4:	Gypsum	Used for thixotropic properties
Additive #5:	Lignosulfonate	Low temp cement retarder
Additive #6:	Naphthalene Based Dispersant	Used to improve rheological properties of cement
Additive #7:	Cellulose	Help with fluid loss



west virginia department of environmental protection

Office of Oil and Gas
601 57th Street, SE
Charleston, WV 25304
Phone (304) 926-0450

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

**BEFORE THE OFFICE OF OIL AND GAS
DEPARTMENT OF ENVIRONMENTAL PROTECTION
STATE OF WEST VIRGINIA**

IN THE MATTER OF A VARIANCE FROM	)	
LEGISLATIVE RULE 35CSR4	)	ORDER NO. 2022-14
SECTION 11.5 AND LEGISLATIVE RULE	)	
35CSR8 SECTION 9.2.h.8.,	)	
RELATING TO THE CEMENTING	)	
OF OIL AND GAS WELLS	)	

REPORT OF THE OFFICE

In response to industry requests, the West Virginia Department of Environmental Protection, Office of Oil and Gas has reviewed the proposed use of American Petroleum Institute (API) Class L cement to be used in place of API Class A cement for well construction.

FINDINGS OF FACT

1. On July 14, 2022, Northeast Natural Energy (NNE) submitted a variance request from Legislative Rule 35CSR8 Section 9.2.h.8., for the use of API Class L cement in place of API Class A cement, relating to the construction of horizontal wells.
2. Laboratory analysis submitted by NNE on July 14, 2022, indicates API Class L cement is comparable to API Class A cement and thereby satisfies the requirements of the West Virginia Code.
3. Contemporaneously, the Chief of the Office of Oil and Gas also chose to consider a variance to Legislative Rule 35CSR4 Section 11.5., for the use of API Class L cement in place of API Class A cement, relating to the construction of vertical wells.

4. On August 18, 2022, the Office of Oil and Gas provided public notice of acceptance of public comments on the variance consideration. During the 20-day public comment period, no comments were received.

CONCLUSIONS OF LAW

Pursuant to Article 6 and Article 6A, Chapter 22 of the Code of West Virginia, the Office of Oil and Gas has jurisdiction over the subject matter, and the persons interested therein, and jurisdiction to promulgate the hereinafter prescribed Order.

Pursuant to Legislative Rule 35CSR4, Section 18 and Legislative Rule 35CSR8, Section 14, the Chief of the Office of Oil and Gas may grant a variance from any requirement of these rules.

ORDER

It is ordered that the Class L cement product approved and monogrammed by API is approved for use in place of API Class A cement for well construction subject to the provisions of Legislative Rule 35CSR4 and Legislative Rule 35CSR8.

Dated this, the 13th day of September, 2022.

IN THE NAME OF THE STATE OF WEST VIRGINIA

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



James Martin, Chief
Office of Oil and Gas

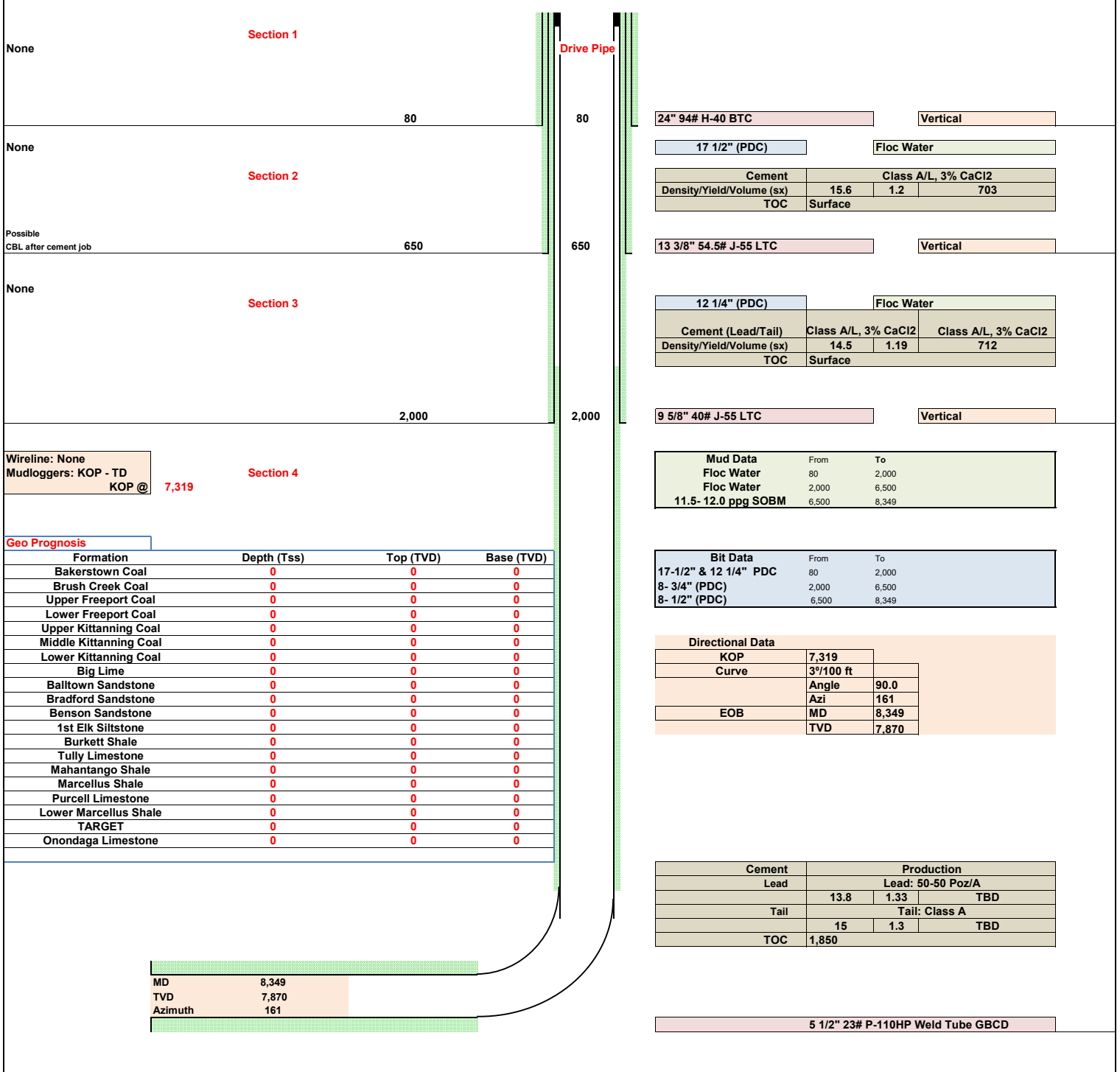
11/21/2025



Other Names:	N/A
Surface Location:	LAT 39.290783N x Long 80.069482W
Bottom Hole Location:	LAT 39.288617N x Long 80.072615W
Directional Plan Vs.	1,187'
Total Depth (MD)	8,349'

County:	Taylor		
State:	WV		
AFE #:	xxx	API #:	47-091-xxxxx
RKB:	27		
Ground Level:	1377.44'		

Logs	Significant Formations (TVD)	Depth (ft) MD	Depth (ft) TVD	Hole Size	Casing and Cement	Mud	Directional & Surveys Drig /Csg Point
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Area of Review Report - Halley's Pad, Lovejoy 203 Lateral, Taylor County, WV

Well Name	API Number	Operator Name / Address	Well Type	Latitude	Longitude	Total Depth	Perforated Formation(s)	Producing Zones not Perforated
Rodney J Anderson et ux 3HM	091-01214	PDC Mountaineer, LLC	Cancelled	39.291326	-80.067893	NA	NA	NA
Rodney J Anderson et ux 4HM	091-01222	Arsenal Resources LLC	Existing	39.291346	-80.067847	12,863	Marcellus	NA
Rodney J Anderson et ux 2HM	091-01223	Arsenal Resources LLC	Existing	39.291365	-80.0678	13,970	Marcellus	NA
Rodney J Anderson et ux 5HM	091-01228	Arsenal Resources LLC	Existing	39.291875	-80.067898	13,640	Marcellus	NA
Dale & M Hays B-420	091-00196	NA	Plugged	39.287844	-80.071326	5,400	Brallier	NA

WW-9
(4/16)

API Number 47 - 091

Operator's Well No. Lovejoy 203

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

FLUIDS/ CUTTINGS DISPOSAL & RECLAMATION PLAN

Operator Name Arsenal Resources OP Code 494519412Watershed (HUC 10) Long Run Quadrangle GraftonDo you anticipate using more than 5,000 bbls of water to complete the proposed well work? Yes ☒ No ☐Will a pit be used? Yes ☐ No ☒

If so, please describe anticipated pit waste: _____

Will a synthetic liner be used in the pit? Yes ☐ No ☐ If so, what ml.? _____

Proposed Disposal Method For Treated Pit Wastes:

- ____ Land Application
- ____ Underground Injection (UIC Permit Number _____)
- Reuse (at API Number Various)
- ____ Off Site Disposal (Supply form WW-9 for disposal location)
- ____ Other (Explain _____)

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 and then be taken to a landfillDrilling medium anticipated for this well (vertical and horizontal)? Air, freshwater, oil based, etc. Vertical: Freshwater, Horizontal: Oil based mud-If oil based, what type? Synthetic, petroleum, etc. syntheticAdditives to be used in drilling medium? Bentonite, soap & polymer sticks, soda ash, sodium bicarbonate, defoamer, base oil, emulsifiers, lime, bariteDrill cuttings disposal method? Leave in pit, landfill, removed offsite, etc. landfill-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 Management, Westmoreland Sanitary Landfill, Apex Landfill

Permittee shall provide written notice to the Office of Oil and Gas of any load of drill cuttings or associated waste rejected at any West Virginia solid waste facility. The notice shall be provided within 24 hours of rejection and the permittee shall also disclose where it was properly disposed.

I certify that I understand and agree to the terms and conditions of the GENERAL WATER POLLUTION PERMIT issued on August 1, 2005, by the Office of Oil and Gas of the West Virginia Department of Environmental Protection. I understand that the provisions of the permit are enforceable by law. Violations of any term or condition of the general permit and/or other applicable law or regulation can lead to enforcement action.

I certify under penalty of law that I have personally examined and am familiar with the information submitted on this application form and all attachments thereto 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 or imprisonment.

Company Official Signature Emily GlickCompany Official (Typed Name) Emily GlickCompany Official Title Geologist & Permitting SpecialistSubscribed and sworn before me this 7th day of October, 20 25

Jeraldine A. Marlowe Notary Public

My commission expires September 9 2026

Commonwealth of Pennsylvania - Notary Seal
Jeraldine A. Marlowe, Notary Public
Allegheny County
My commission expires September 9, 2026
Commission number 1182431
Member, Pennsylvania Association of Notaries

Form WW-9

Operator's Well No. Lovejoy 203**Arsenal Resources**Proposed Revegetation Treatment: Acres Disturbed 12.3 Prevegetation pH 6.8 averageLime 2.67 Tons/acre or to correct to pH 6.4Fertilizer type 10-20-20Fertilizer amount 1000 lbs/acreMulch 3-4 Tons/acre**Seed Mixtures****Temporary****Permanent**

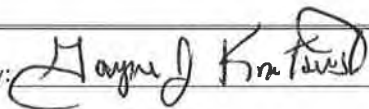
Seed Type	lbs/acre	Seed Type	lbs/acre
Orchard Grass	129	Orchard Grass	129
Rye	93	Rye	93
Clover	24	Clover	24
Timothy	45	Timothy	45

Attach:

Maps(s) of road, location, pit and proposed area for land application (unless engineered plans including this info have been provided). If water from the pit will be land applied, include dimensions (L x W x D) of the pit, and dimensions (L x W), and area in acreage, of the land application area.

Photocopied section of involved 7.5' topographic sheet.

Plan Approved by:



Comments:

Title:

Inspector

Date:

10/1/2025

Field Reviewed?

(☒) Yes(☐) No

11/21/2025



ARSENAL
R E S O U R C E S

SITE SAFETY PLAN

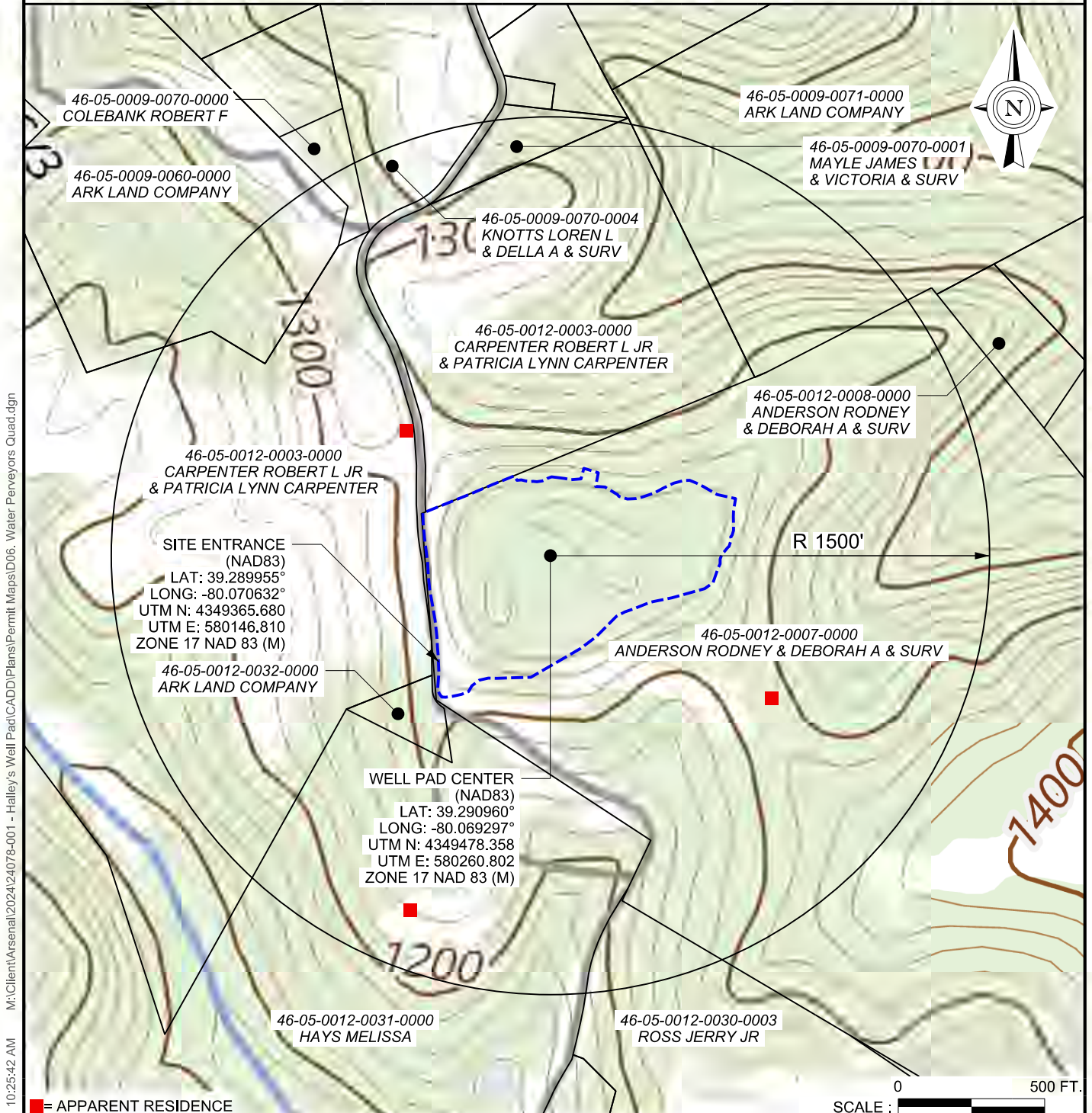
Halley's Well Pad

911 Address:

**828 Low Level Bridge Road
Grafton, WV 26354**

Maya J. Kuntz
10/1/2025

ARSENAL RESOURCES HALLEY'S WELL PAD POSSIBLE WATER PURVEYORS WITHIN 1500'



M:\Client\Arsenal\2024\24078-001 - Halley's Well Pad\CADD\Plans\Permit Maps\D06, Water Purveyors Quad.dgn

10:25:42 AM

10/7/2025

1:500



DIEFFENBAUCH & HRITZ, LLC
1095 Chapin Road, Suite 200
Morgantown, WV 26501
www.dandhengineers.com
P: 304.985.5555 F: 304.985.5557

TOPO SECTION:

GRAFTON 7.5'

COUNTY

DISTRICT

TAYLOR

COURT HOUSE

DRAWN BY

JOB NO.

W.E.D.

24078-001

OPERATOR:

PREPARED FOR:
ARSENAL RESOURCES
6031 WALLACE RD. EXT.
SUITE 200
WEXFORD, PA 15090

DATE

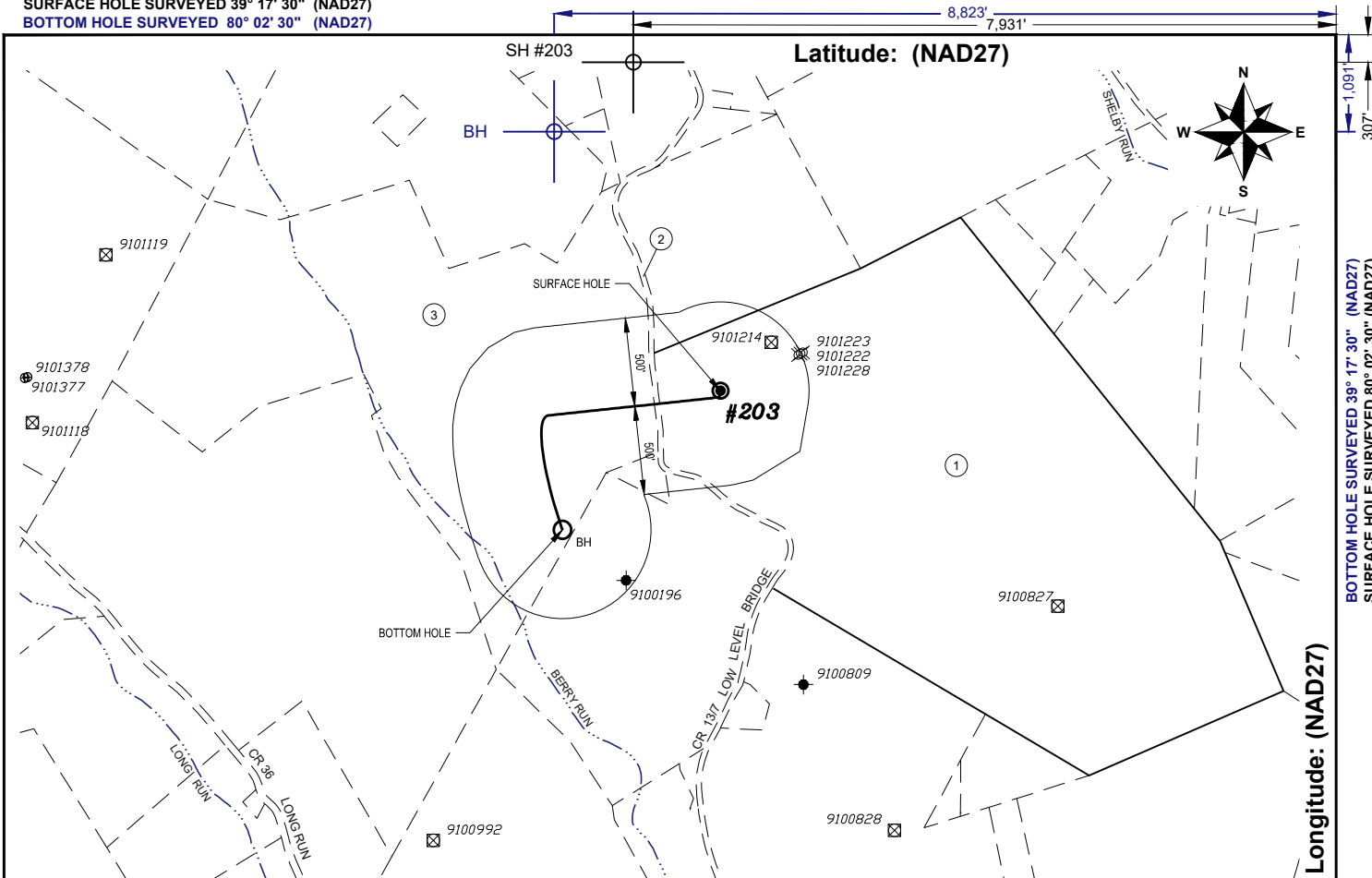
09/2025

SCALE

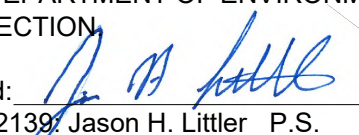
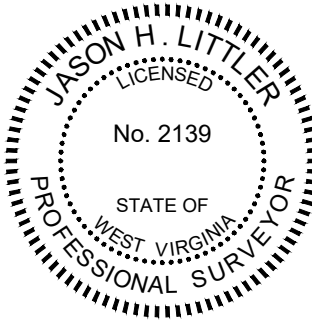
1" = 500'

**ARSENAL****11/21/2025**

SURFACE HOLE SURVEYED 39° 17' 30" (NAD27)
BOTTOM HOLE SURVEYED 80° 02' 30" (NAD27)

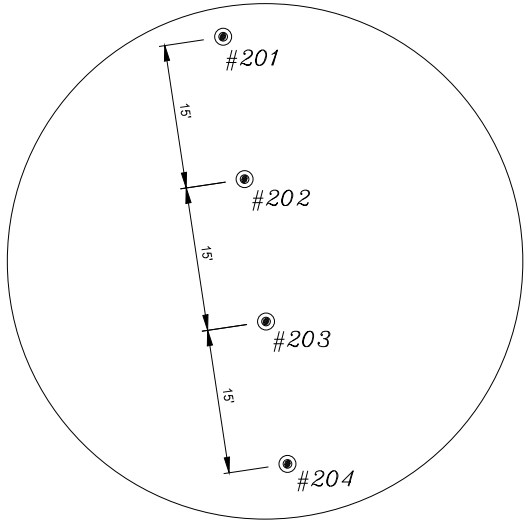
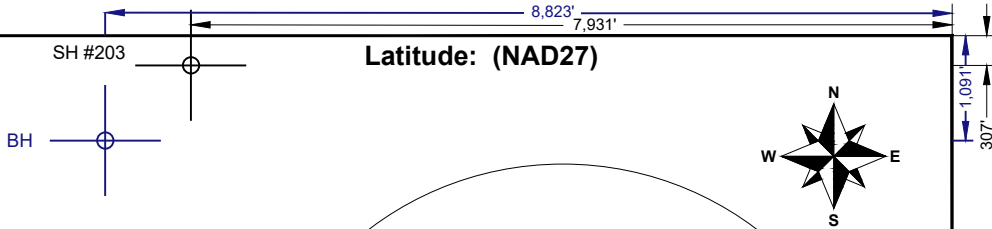


REFERENCE NOTES 1. Property lines as shown taken from deeds, tax maps, and field locations. A full boundary survey is not expressed or implied. All bearings are based on grid North. Ownership taken from public records Taylor County, West Virginia July 2025. 2. There are no railroads, dwellings, or agricultural buildings within 625 feet of center of pad. 3. No water wells found within 250' of the center of well pad.	(NAD83-WVN) US SURVEY FT. SURFACE HOLE N) 288535.83 E) 1807321.79 BOTTOM HOLE N) 287752.30 E) 1806430.11	(NAD83-LAT/LONG) DECIMAL SURFACE HOLE N) 39.290783 E) -80.069482 BOTTOM HOLE N) 39.288617 E) -80.072615	(UTM, NAD83 ZONE 17) METER SURFACE HOLE N) 4349458.59 E) 580245.05 BOTTOM HOLE N) 4349215.35 E) 579977.35																
	SURFACE PARCEL OWNER INFORMATION <table><thead><tr><th>ID#</th><th>DEP#</th><th>PARCEL NUMBER</th><th>OWNER NAME</th></tr></thead><tbody><tr><td>1</td><td>091</td><td>46-05-0012-0007-0000</td><td>ANDERSON RODNEY & DEBORAH A</td></tr><tr><td>2</td><td></td><td>RIGHT-OF-WAY</td><td>COUNTY ROUTE 13/7 LOW LEVEL BRIDGE ROAD</td></tr><tr><td>3</td><td>091</td><td>46-05-0012-0003-0000</td><td>CARPENTER PATRICIA L & CARPENTER ROBERT LOUIS, JR</td></tr></tbody></table>			ID#	DEP#	PARCEL NUMBER	OWNER NAME	1	091	46-05-0012-0007-0000	ANDERSON RODNEY & DEBORAH A	2		RIGHT-OF-WAY	COUNTY ROUTE 13/7 LOW LEVEL BRIDGE ROAD	3	091	46-05-0012-0003-0000	CARPENTER PATRICIA L & CARPENTER ROBERT LOUIS, JR
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2		RIGHT-OF-WAY	COUNTY ROUTE 13/7 LOW LEVEL BRIDGE ROAD																
3	091	46-05-0012-0003-0000	CARPENTER PATRICIA L & CARPENTER ROBERT LOUIS, JR																
LEGEND — PROPOSED WELL LATERAL - - - - - PROPOSED WELL TIE LINE — ··· — STREAM — EXISTING ROAD — BUFFER - - - - - PROPERTY LINE — SURVEYED SURFACE TRACT LINE — MINERAL TRACT BOUNDARY — COUNTY BOUNDARY LINE ····· PROPOSED WELL HEAD ○ LANDING POINT/BOTTOM HOLE ⊗ EXISTING WELL HEAD (Active) ⊙ EXISTING WELL HEAD (Plugged) ⊕ EXISTING WELL HEAD (Abandoned) ⊗ EXISTING WELL HEAD (Never Drilled) ⊕ EXISTING WELL HEAD (Permit Issued) # SURFACE OWNER																			
dh DIEFFENBAUCH & HRITZ, LLC 1095 Chaplin Road, Suite 200 Morgantown, WV 26501 www.dandhengineers.com P: 304.985.5555 F: 304.985.5557																			

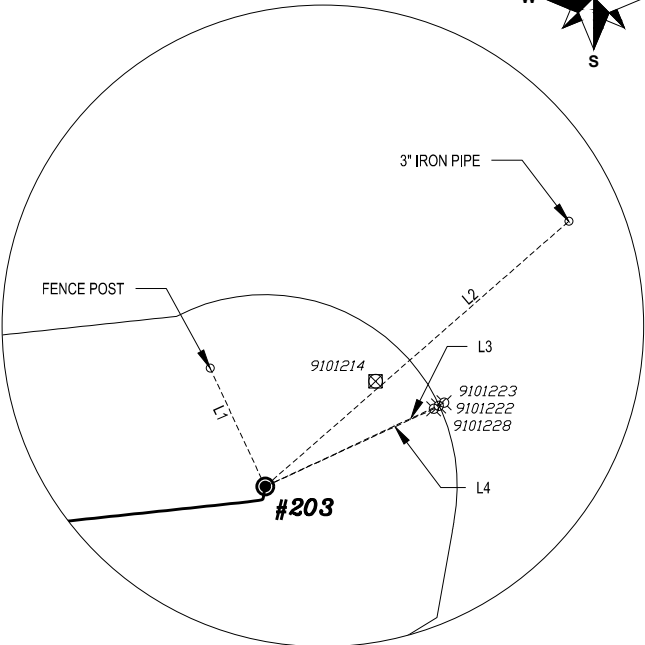
FILE#: 24078-001	I, THE UNDERSIGNED, HEREBY CERTIFY THAT THIS PLAT IS CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF AND SHOWS ALL THE INFORMATION REQUIRED BY LAW AND THE REGULATIONS ISSUED AND PRESCRIBED BY THE DEPARTMENT OF ENVIRONMENTAL PROTECTION. Signed:  10/2/25 P.S. #2139: Jason H. Littler P.S.	
SHEET#: 1 of 2		
SCALE: 1" = 1000'		
TICK SCALE: 1" = 2000'		
MINIMUM DEGREE OF ACCURACY: 1/2500		
PROVEN SOURCE OF ELEVATION: NGE OPUS (ONLINE POSITIONING USER SERVICE)		

(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS WVDEP OFFICE OF OIL & GAS 601 57TH STREET CHARLESTON, WV 25304		DATE: OCTOBER 2, 2025
Well Type: ☐ Oil ☐ Waste Disposal ☒ Production ☐ Deep ☒ Gas ☐ Liquid Injection ☐ Storage ☒ Shallow		HALLEY'S WELL PAD OPERATOR'S WELL #: LOVEJOY 203
WATERSHED: LONG RUN		API WELL #: 47 091 01391 STATE COUNTY PERMIT
COUNTY / DISTRICT: TAYLOR CO. / COURT HOUSE DISTRICT		ELEVATION: 1374.67' (GROUND) 1,377.44' (PROPOSED)
SURFACE OWNER: RODNEY & DEBORAH A ANDERSON		QUADRANGLE: GRAFTON, WV
OIL & GAS ROYALTY OWNER: RODNEY J. ANDERSON 50%, REGINA RAGER 50%		ACREAGE: 138 ± 11/21/2025 ACREAGE: 138 ±
☒ DRILL ☐ CONVERT ☐ DRILL DEEPER ☐ REDRILL ☒ FRACTURE OR STIMULATE ☐ PLUG OFF FORMATION ☐ PERFORATE NEW FORMATION ☐ PLUG & ABANDON ☐ CLEAN OUT & REPLUG ☐ OTHER CHANGE SPECIFY: _____		
TARGET FORMATION: MARCELLUS		ESTIMATED DEPTH: TVD: 7,870' TMD: 8,349'
WELL OPERATOR: ARSENAL RESOURCES ADDRESS: 6031 WALLACE ROAD EXT. SUITE # 200 CITY: WEXFORD STATE: PA ZIP: 15090		DESIGNATED AGENT: ERIC MORRIS ADDRESS: 633 WEST MAIN STREET CITY: BRIDGEPORT STATE: WV ZIP: 26330

SURFACE HOLE SURVEYED 39° 17' 30" (NAD27)
BOTTOM HOLE SURVEYED 80° 02' 30" (NAD27)



REFERENCES TO
PROPOSED HORIZONTAL
WELL SURFACE LOCATIONS
NTS



REFERENCES TIES
SCALE: 1" = 500'

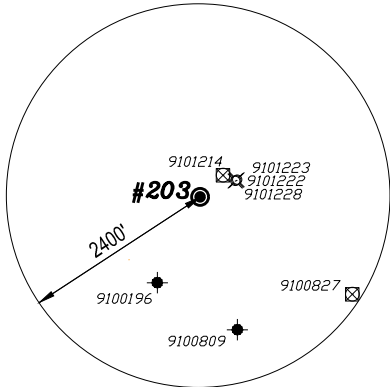
LINE	BEARING	DISTANCE
L1	S 24° 58' 20" E	339.50'
L2	S 48° 51' 03" W	1049.58'
L3	S 64° 54' 47" W	514.24'
L4	S 65° 14' 06" W	482.95'

REFERENCE NOTES

- Property lines as shown taken from deeds, tax maps, and field locations. A full boundary survey is not expressed or implied. All bearings are based on grid North. Ownership taken from public records Taylor County, West Virginia July 2025.
- There are no railroads, dwellings, or agricultural buildings within 625 feet of center of pad.
- No water wells found within 250' of the center of well pad.

LEGEND

- PROPOSED WELL LATERAL
- PROPOSED WELL TIE LINE
- STREAM
- EXISTING ROAD
- BUFFER
- PROPERTY LINE
- SURVEYED SURFACE TRACT LINE
- MINERAL TRACT BOUNDARY
- COUNTY BOUNDARY LINE
- PROPOSED WELL HEAD
- LANDING POINT/BOTTOM HOLE
- EXISTING WELL HEAD (Active)
- EXISTING WELL HEAD (Plugged)
- EXISTING WELL HEAD (Abandoned)
- EXISTING WELL HEAD (Never Drilled)
- EXISTING WELL HEAD (Permit Issued)
- SURFACE OWNER



DIEFFENBAUCH & HRITZ, LLC

1095 Chaplin Road, Suite 200
Morgantown, WV 26501
www.dandengineers.com
P: 304.985.5555 F: 304.985.5557

FILE#: 24078-001

SHEET#: 2 of 2

SCALE: 1" = 1000'

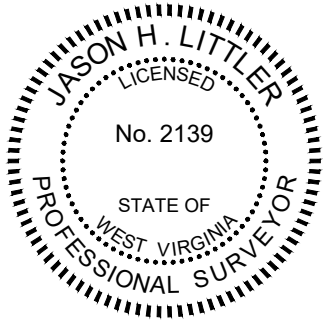
TICK SCALE: 1" = 2000'

MINIMUM DEGREE
OF ACCURACY: 1/2500

PROVEN SOURCE OF
ELEVATION: NGE OPUS (ONLINE
POSITIONING USER SERVICE)

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 BY
THE DEPARTMENT OF ENVIRONMENTAL
PROTECTION

Signed: Jason H. Littler 10/2/25
P.S. #2139: Jason H. Littler P.S.



(+) DENOTES LOCATION OF WELL ON
UNITED STATES TOPOGRAPHIC MAPS
WVDEP
OFFICE OF OIL & GAS
601 57TH STREET
CHARLESTON, WV 25304



DATE: OCTOBER 2, 2025

HALLEY'S WELL PAD
OPERATOR'S WELL #: LOVEJOY 203

API WELL #: 47 091 01391
STATE COUNTY PERMIT

Well Type: ☐ Oil ☐ Waste Disposal ☒ Production ☐ Deep
☒ Gas ☐ Liquid Injection ☐ Storage ☒ Shallow

WATERSHED: LONG RUN

COUNTY / DISTRICT: TAYLOR CO. / COURT HOUSE DISTRICT

SURFACE OWNER: RODNEY & DEBORAH A ANDERSON

OIL & GAS ROYALTY OWNER: RODNEY J. ANDERSON 50%, REGINA RAGER 50%

ELEVATION: 1374.67' (GROUND)
1,377.44' (PROPOSED)

QUADRANGLE: GRAFTON, WV

ACREAGE: 138 ± 11/21/2025

ACREAGE: 138 ±

- ☒ DRILL ☐ CONVERT ☐ DRILL DEEPER ☐ REDRILL ☒ FRACTURE OR STIMULATE
☐ PLUG OFF FORMATION ☐ PERFORATE NEW FORMATION ☐ PLUG & ABANDON
☐ CLEAN OUT & REPLUG ☐ OTHER CHANGE SPECIFY: _____

TARGET FORMATION: MARCELLUS

ESTIMATED DEPTH: TVD: 7,870' TMD: 8,349'

WELL OPERATOR: ARSENAL RESOURCES
ADDRESS: 6031 WALLACE ROAD EXT. SUITE # 200
CITY: WEXFORD STATE: PA ZIP: 15090

DESIGNATED AGENT: ERIC MORRIS
ADDRESS: 633 WEST MAIN STREET
CITY: BRIDGEPORT STATE: WV ZIP: 26330

WW-6A1
(5/13)Operator's Well No. Lovejoy 203

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				

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: Emily Glick
 Its: Geologist & Permitting Specialist

Attachment to WW-6A1, Lovejoy 203

ID # Lease #	PARCELS	Grantor, Lessor, Assignor, etc.	Grantee, Lessee, Assignee, etc.	Royalty	Book/Page	Acreage
1 - 00004736	47-091-46-5-12-7	Rodney J Anderson et ux	Falcon Partners	12.5+%	54/115	138.13
		Falcon Partners	River Ridge Energy LLC		31/318	
		Falcon Partners	PDC Mountaineer LLC		32/362	
		PDC Mountaineer LLC	River Ridge Energy LLC		8/541	
1 - 00004737	47-091-46-5-12-7	Regina Rager	Falcon Partners	12.5+%	54/320	138.13
		Falcon Partners	River Ridge Energy LLC		31/318	
		Falcon Partners	PDC Mountaineer LLC		32/362	
		PDC Mountaineer LLC	River Ridge Energy LLC		8/541	
2	ROAD	COUNTY ROUTE 13/7 LOW LEVEL BRIDGE ROAD				
3 - 00004457	47-091-46-5-12-3	Robert L Carpenter	Petroleum Development Corp	12.5+%	57/543	117.94
		Petroleum Development Corp	PDC Mountaineer LLC		30/698	
		PDC Mountaineer LLC	River Ridge Energy LLC		8/541	

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]

11/21/2025

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

By: Joel E. Symonds
Name: Joel E. Symonds
Title: Vice President - Land

RIVER RIDGE ENERGY, LLC

By: Joel E. Symonds
Name: Joel E. Symonds
Title: Vice President - Land

RIVER RIDGE HOLDINGS, LLC

By: Joel E. Symonds
Name: Joel E. Symonds
Title: Vice President - Land



47-091-01391

People Powered. Asset Strong.

October 7, 2025

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; Halley's Pad - Lovejoy Well 203

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,

A handwritten signature in black ink that reads 'Jon Sheldon'.

Jon Sheldon
Chief Operating Officer

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

11/21/2025

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

Date of Notice Certification: 10/07/2025

API No. 47- 091 -

Operator's Well No. Lovejoy 203

Well Pad Name: Halley's

Notice has been given:

Pursuant to the provisions in West Virginia Code § 22-6A, the Operator has provided the required parties with the Notice Forms listed below for the tract of land as follows:

State: West Virginia
County: Taylor
District: Courthouse
Quadrangle: Grafton
Watershed: Long Run

UTM NAD 83 Easting: 580260.802
Northing: 4349478.358
Public Road Access: CR-13/7/Low Level Bridge Road
Generally used farm name: Anderson

Pursuant to West Virginia Code § 22-6A-7(b), every permit application filed under this section shall be on a form as may be prescribed by the secretary, shall be verified and shall contain the following information: (14) A certification from the operator that (i) it has provided the owners of the surface described in subdivisions (1), (2) and (4), subsection (b), section ten of this article, the information required by subsections (b) and (c), section sixteen of this article; (ii) that the requirement was deemed satisfied as a result of giving the surface owner notice of entry to survey pursuant to subsection (a), section ten of this article six-a; or (iii) the notice requirements of subsection (b), section sixteen of this article were waived in writing by the surface owner; and Pursuant to West Virginia Code § 22-6A-11(b), the applicant shall tender proof of and certify to the secretary that the notice requirements of section ten of this article have been completed by the applicant.

Pursuant to West Virginia Code § 22-6A, the Operator has attached proof to this Notice Certification that the Operator has properly served the required parties with the following:

*PLEASE CHECK ALL THAT APPLY

- ☐ 1. NOTICE OF SEISMIC ACTIVITY or ☒ NOTICE NOT REQUIRED BECAUSE NO SEISMIC ACTIVITY WAS CONDUCTED
- ☒ 2. NOTICE OF ENTRY FOR PLAT SURVEY or ☐ NO PLAT SURVEY WAS CONDUCTED
- ☐ 3. NOTICE OF INTENT TO DRILL or ☒ NOTICE NOT REQUIRED BECAUSE NOTICE OF ENTRY FOR PLAT SURVEY WAS CONDUCTED or
- ☐ WRITTEN WAIVER BY SURFACE OWNER (PLEASE ATTACH)
- ☒ 4. NOTICE OF PLANNED OPERATION
- ☒ 5. PUBLIC NOTICE
- ☒ 6. NOTICE OF APPLICATION

**OOG OFFICE USE
ONLY**

- ☐ RECEIVED/
NOT REQUIRED
- ☐ RECEIVED
- ☐ RECEIVED/
NOT REQUIRED
- ☐ RECEIVED
- ☐ RECEIVED
- ☐ 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.

11/21/2025

Certification of Notice is hereby given:

THEREFORE, I Emily Glick, 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: Emily Glick *Emily Glick*
Its: Geologist & Permitting Specialist
Telephone: 724-940-1100

Address: 6031 Wallace Road Ext., Suite 200
Wexford, PA 15090
Facsimile: 800-428-0981
Email: eglick@arsenalresources.com

NOTARY SEAL
Commonwealth of Pennsylvania - Notary Seal
Jeraldine A. Marlowe, Notary Public
Allegheny County
My commission expires September 9, 2026
Commission number 1102431
Member, Pennsylvania Association of Notaries

Subscribed and sworn before me this 7th day of October 2025
Jeraldine A Marlowe Notary Public
My Commission Expires September 9 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.

11/21/2025

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.**

Date of Notice: 10/07/25 **Date Permit Application Filed:** _____

Notice of:

- ☒ PERMIT FOR ANY WELL WORK ☐ CERTIFICATE OF APPROVAL FOR THE CONSTRUCTION OF AN IMPOUNDMENT OR PIT

Delivery method pursuant to West Virginia Code § 22-6A-10(b)

- ☐ PERSONAL SERVICE ☐ REGISTERED MAIL ☒ METHOD OF DELIVERY THAT REQUIRES A 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)

Name: Rodney & Deborah A Anderson

Address: 580 Low Level Bridge Rd

Grafton, WV 26354-7672

Name: _____

Address: _____

☒ SURFACE OWNER(s) (Road and/or Other Disturbance)

Name: Rodney & Deborah A Anderson

Address: 580 Low Level Bridge Rd

Grafton, WV 26354-7672

Name: _____

Address: _____

☐ SURFACE OWNER(s) (Impoundments or Pits)

Name: _____

Address: _____

☒ COAL OWNER OR LESSEE

Name: See Attached

Address: _____

☐ COAL OPERATOR

Name: _____

Address: _____

☒ SURFACE OWNER OF WATER WELL
AND/OR WATER PURVEYOR(s)

Name: See Attached

Address: _____

☐ OPERATOR OF ANY NATURAL GAS STORAGE FIELD

Name: _____

Address: _____

*Please attach additional forms if necessary

11/21/2025

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

11/21/2025

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.**

11/21/2025

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)API NO. 47- 091 -
OPERATOR WELL NO. Lovejoy 203
Well Pad Name: Halley's**Notice is hereby given by:**Well Operator: Arsenal ResourcesTelephone: 724-940-1100Email: eglick@arsenalresources.comAddress: 6031 Wallace Road Ext, Suite 200Wexford, PA 15090

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 depprivacyofficer@wv.gov.

Commonwealth of Pennsylvania - Notary Seal
Jeraldine A. Marlowe, Notary Public
Allegheny County
My commission expires September 9, 2026
Commission number 1102431
Member, Pennsylvania Association of Notaries

Subscribed and sworn before me this 7th day of October 2025
Notary PublicMy Commission Expires September 9 2026

11/21/2025

Arsenal Resources

Halley's Well Pad (Anderson)

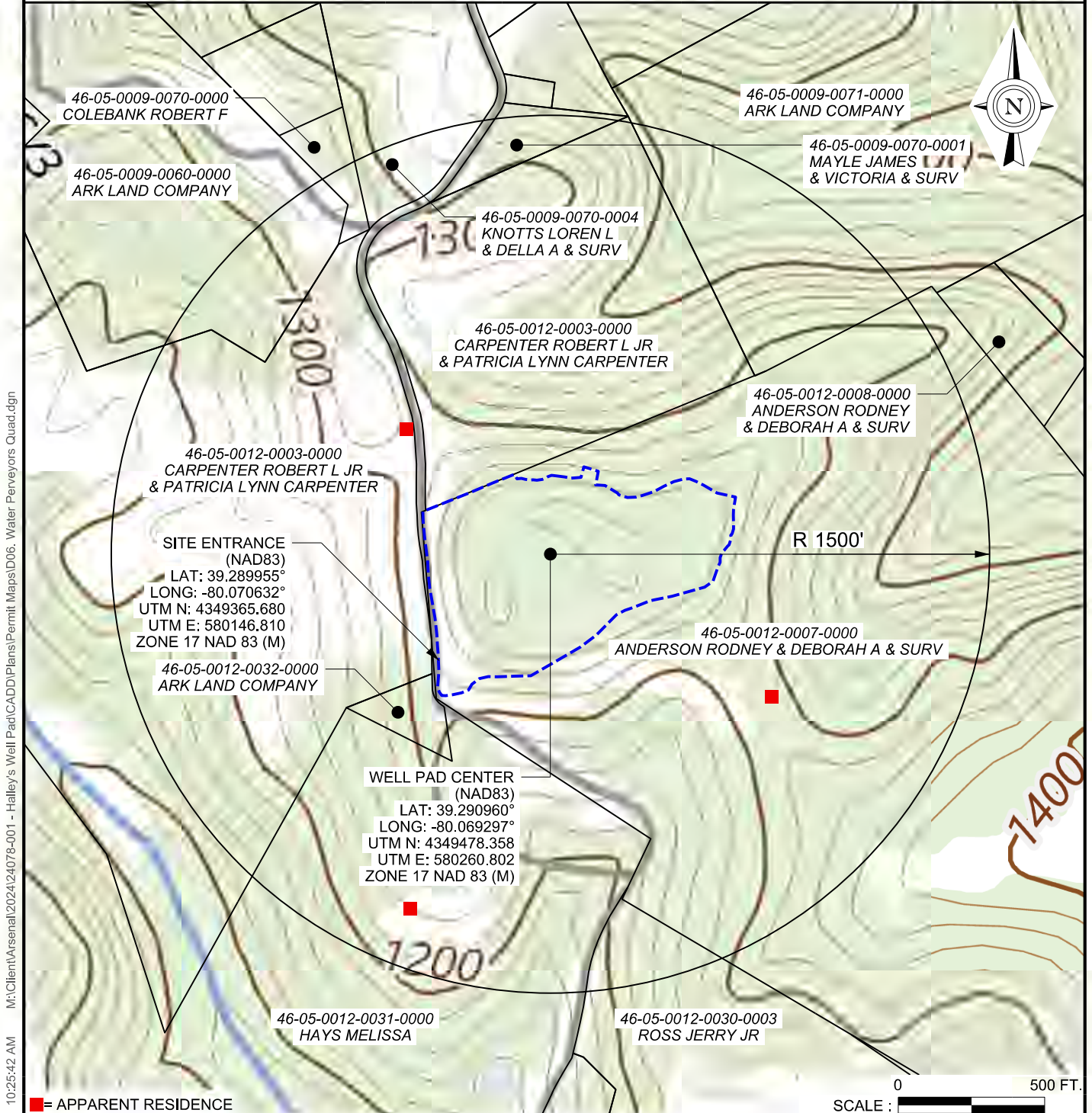
WW-6A - Notice of Application, Attachment

Coal Owner or Lessee:

Part of Pittsburgh Coal:
Starford Gas Coal Co
406 Indiana Theater Building
Indiana, PA 15701

Part of Pittsburgh Coal:
Rodney & Deborah A. Anderson
580 Low Level Bridge Rd
Grafton, WV 26354-7672

ARSENAL RESOURCES HALLEY'S WELL PAD POSSIBLE WATER PURVEYORS WITHIN 1500'



M:\Client\Arsenal\2024\24078-001 - Halley's Well Pad\CADD\Plans\Permit Maps\D06, Water Purveyors Quad.dgn

10:25:42 AM

10/7/2025

1:500



DIEFFENBAUCH & HRITZ, LLC
1095 Chapin Road, Suite 200
Morgantown, WV 26501
www.dandhengineers.com
P: 304.985.5555 F: 304.985.5557

TOPO SECTION:

GRAFTON 7.5'

COUNTY

DISTRICT

TAYLOR

COURT HOUSE

DRAWN BY

JOB NO.

W.E.D.

24078-001

OPERATOR:

PREPARED FOR:
ARSENAL RESOURCES
6031 WALLACE RD. EXT.
SUITE 200
WEXFORD, PA 15090

DATE

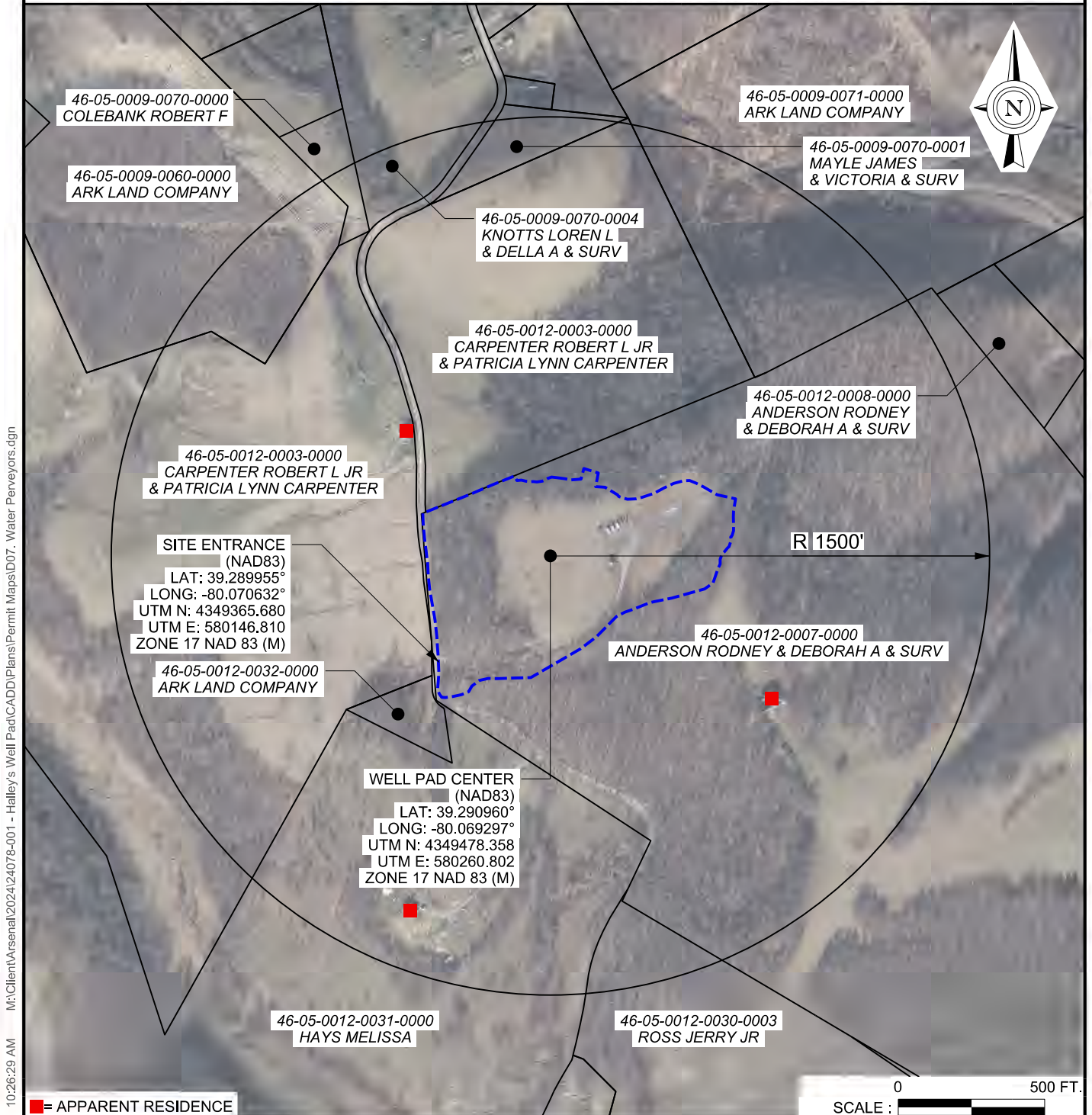
09/2025

SCALE

1" = 500'

**ARSENAL****11/21/2025**

ARSENAL RESOURCES HALLEY'S WELL PAD POSSIBLE WATER PURVEYORS WITHIN 1500'



M:\Client\Arsenal\2024\24078-001 - Halley's Well Pad\CADD\Plans\Permit Maps\D07. Water Purveyors.dgn
10/26/2025 10:26:29 AM

10/7/2025 1:500



DIEFFENBAUCH & HRITZ, LLC
1095 Chapin Road, Suite 200
Morgantown, WV 26501
www.dandhengineers.com
P: 304.985.5555 F: 304.985.5557

2024 AERIAL

OPERATOR:

COUNTY

DISTRICT

TAYLOR

COURT HOUSE

DRAWN BY

JOB NO.

DATE

SCALE

W.E.D.

24078-001

09/2025

1" = 500'

PREPARED FOR:
ARSENAL RESOURCES
6031 WALLACE RD. EXT.
SUITE 200
WEXFORD, PA 15090



11/21/2025

Possible Water Purveyors within 1,500 feet

Well Pad: Halley's Well Pad

District: Court House

County: Taylor

State: WV

46-05-0012-0007-0000 ANDERSON RODNEY & DEBORAH A & SURV Physical Address: 580 LOW LEVEL BRIDGE RD GRAFTON 26354 Tax Address: 24 OLD OAK DR N, PALM COAST, FL 32137	46-05-0012-0032-0000 ARK LAND COMPANY Physical Address: LOW LEVEL BRIDGE RD GRAFTON 26354 Tax Address: ONE CITY PLACE DR STE 300, SAINT LOUIS, MO 63141	46-05-0009-0070-0004 KNOTTS LOREN L & DELLA A & SURV Physical Address: 1219 LOW LEVEL BRIDGE RD GRAFTON 26354 Tax Address: 1219 LOW LEVEL BRIDGE RD, GRAFTON, WV 26354
46-05-0012-0008-0000 ANDERSON RODNEY J & DEBORAH A & SURV Physical Address: LOW LEVEL BRIDGE RD Tax Address: 580 LOW LEVEL BRIDGE RD, GRAFTON, WV 26354	46-05-0012-0003-0000 CARPENTER PATRICIA L Physical Address: LOWER LEVEL BRIDGE RD GRAFTON 26354 Tax Address: 1916 WHITEFACE CT, VIRGINIA BEACH, VA 23453	46-05-0009-0070-0001 MAYLE JAMES & VICTORIA & SURV Physical Address: SHELBY RUN Tax Address: 5180 FORD ST, LOUISVILLE, OH 44641
46-05-0012-0030-00003 ROSS JERRY JR Physical Address: LOW LEVEL BRIDGE RD GRAFTON 26354 Tax Address: 280 SHELBY RUN RD, GRAFTON, WV 26354	46-05-0009-0060-0000 ARK LAND LLC Physical Address: LOW LEVEL BRIDGE RD GRAFTON 26354 Tax Address: 1 CITY PLACE DR STE 300, SAINT LOUIS, MO 63141	46-05-0009-0071-0000 ARK LAND COMPANY Physical Address: 3140 SHELBY RUN RD GRAFTON 26354 Tax Address: ONE CITY PLACE DR STE 300, SAINT LOUIS, MO 63141
46-05-0012-0031-0000 HAYS MELISSA Physical Address: 473 LOW LEVEL BRIDGE RD GRAFTON 26354 Tax Address: 473 LOW LEVEL BRIDGE RD, GRAFTON, WV 26354	46-05-0009-0070-0000 COLEBANK ROBERT F Physical Address: LOW LEVEL BRIDGE RD GRAFTON 26354 Tax Address: 40 LONG RUN RD, FLEMINGTON, WV 26347	

47-091-01391

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

Notice Time Requirement: Notice shall be provided at least **SEVEN (7)** days but no more than **FORTY-FIVE (45)** days prior to entry

Date of Notice: 09/22/2025 **Date of Planned Entry:** 09/29/2025

Delivery method pursuant to West Virginia Code § 22-6A-10a

☐ PERSONAL SERVICE ☒ REGISTERED MAIL ☐ METHOD OF DELIVERY THAT REQUIRES A RECEIPT OR SIGNATURE CONFIRMATION

Pursuant to West Virginia Code § 22-6A-10(a), Prior to filing a permit application, the operator shall provide notice of planned entry on to the surface tract to conduct any plat surveys required pursuant to this article. Such notice shall be provided at least seven days but no more than forty-five days prior to such entry to: (1) The surface owner of such tract; (2) to any owner or lessee of coal seams beneath such tract that has filed a declaration pursuant to section thirty-six, article six, chapter twenty-two of this code; and (3) any owner of minerals underlying such tract in the county tax records. The notice shall include a statement that copies of the state Erosion and Sediment Control Manual and the statutes and rules related to oil and gas exploration and production may be obtained from the Secretary, which statement shall include contact information, including the address for a web page on the Secretary's web site, to enable the surface owner to obtain copies from the secretary.

Notice is hereby provided to:

☒ SURFACE OWNER(s)

Name: Rodney & Deborah A Anderson
Address: 580 Low Level Bridge Road
Grafton, WV 26354

Name: _____
Address: _____

Name: _____
Address: _____

☐ COAL OWNER OR LESSEE

Name: See Attached
Address: _____

☐ MINERAL OWNER(s)

Name: See Attached
Address: _____

*please attach additional forms if necessary

Notice is hereby given:

Pursuant to West Virginia Code § 22-6A-10(a), notice is hereby given that the undersigned well operator is planning entry to conduct a plat survey on the tract of land as follows:

State: West Virginia
County: Taylor
District: Courthouse
Quadrangle: Grafton

Approx. Latitude & Longitude: 39.290960, -80.069297
Public Road Access: CR-13/7/Low Level Bridge Road
Watershed: Long Run
Generally used farm name: Anderson

Copies of the state Erosion and Sediment Control Manual and the statutes and rules related to oil and gas exploration and production 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). Copies of such documents or additional information related to horizontal drilling may be obtained from the Secretary by visiting www.dep.wv.gov/oil-and-gas/pages/default.aspx.

Notice is hereby given by:

Well Operator: Arsenal Resources
Telephone: 724-940-1100
Email: eglick@arsenalresources.com

Address: 6031 Wallace Road Ext Suite 200
Wexford, PA 15090
Facsimile: 800-428-0981

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.

11/21/2025

Arsenal Resources

Halley's Well Pad (Anderson)

WW-6A3 - Notice of Entry for Plat Survey, Attachment

Surface Owner:

Rodney & Deborah A. Anderson
580 Low Level Bridge Rd
Grafton, WV 26354-7672

Mineral Owners:

Rodney & Deborah A. Anderson
580 Low Level Bridge Rd
Grafton, WV 26354-7672

Regina Rager
631 Long Run Rd
Flemington, WV 26347-6270

Coal Owner or Lessee:

Part of Pittsburgh Coal:
Starford Gas Coal Co
406 Indiana Theater Building
Indiana, PA 15701

Part of Pittsburgh Coal:
Rodney & Deborah A. Anderson
580 Low Level Bridge Rd
Grafton, WV 26354-7672

47-091-01391

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

Notice Time Requirement: notice shall be provided no later than the **filing date of permit application.**

Date of Notice: 10/07/2025 **Date Permit Application Filed:** 10/08/2025

Delivery method pursuant to West Virginia Code § 22-6A-16(c)

☒ CERTIFIED MAIL ☐ HAND
RETURN RECEIPT REQUESTED DELIVERY

Pursuant to W. Va. Code § 22-6A-16(c), no later than the date for filing the permit application, an operator shall, by certified mail return receipt requested or hand delivery, give the surface owner whose land will be used for the drilling of a horizontal well notice of the planned operation. The notice required by this subsection shall include: (1) A copy of this code section; (2) The information required to be provided by subsection (b), section ten of this article to a surface owner whose land will be used in conjunction with the drilling of a horizontal well; and (3) A proposed surface use and compensation agreement containing an offer of compensation for damages to the surface affected by oil and gas operations to the extent the damages are compensable under article six-b of this chapter. (d) The notices required by this section shall be given to the surface owner at the address listed in the records of the sheriff at the time of notice.

Notice is hereby provided to the SURFACE OWNER(s)

(at the address listed in the records of the sheriff at the time of notice):

Name: Rodney & Deborah A. Anderson
Address: 580 Low Level Bridge Rd
Grafton, WV 26354-7672

Name: _____
Address: _____

Notice is hereby given:

Pursuant to West Virginia Code § 22-6A-16(c), notice is hereby given that the undersigned well operator has developed a planned operation on the surface owner's land for the purpose of drilling a horizontal well on the tract of land as follows:

State:	<u>West Virginia</u>	UTM NAD 83	Easting:	<u>580260.802</u>
County:	<u>Taylor</u>		Northing:	<u>4349478.358</u>
District:	<u>Courthouse</u>	Public Road Access:	<u>CR-13/7/Low Level Bridge Road</u>	
Quadrangle:	<u>Grafton</u>	Generally used farm name:	<u>Anderson</u>	
Watershed:	<u>Long Run</u>			

This Notice Shall Include:

Pursuant to West Virginia Code § 22-6A-16(c), this notice shall include: (1) A copy of this code section; (2) The information required to be provided by **W. Va. Code § 22-6A-10(b)** to a surface owner whose land will be used in conjunction with the drilling of a horizontal well; and (3) A proposed surface use and compensation agreement containing an offer of compensation for damages to the surface affected by oil and gas operations to the extent the damages are compensable under article six-b of this chapter. 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 Operator: Arsenal Resources
Telephone: 724-940-1100
Email: eglick@arsenalresources.com

Address: 6031 Wallace Road Ext., Suite 200
Facsimile: 800-428-0981

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.

11/21/2025



47-091-01391

**WEST VIRGINIA
DEPARTMENT OF TRANSPORTATION**

1900 Kanawha Boulevard East • Building Five • Room 109
Charleston, West Virginia 25305-0440 • (304) 558-0444

Michael J. DeMers
Deputy Secretary of Transportation

Stephen T. Rumbaugh, P.E.
Secretary of Transportation
Commissioner of Highways

September 19, 2025

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 Halley's Well Pad, Taylor County
Lovejoy 201 Well Site Lovejoy 202 Well Site
Lovejoy 203 Well Site Lovejoy 204 Well Site

Dear Mr. Martin,

This well site will be accessed from a DOH permit #04-2025-5616 which has been issued to Arsenal Resources, LLC for access to the State Road for a well site located off Taylor County Route 13/7 SLS MP 0.77.

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,

Lacy D. Pratt
Central Office O&G Coordinator

Cc: Emily Glick
Arsenal Resources, LLC
OM, D-4
File

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	HCl - 7.5%	7647-01-0

OPERATOR: Arsenal Resources

WELL NO: Lovejoy 203

PAD NAME: Halley's

REVIEWED BY: Emily Glick

SIGNATURE: Emily Glick

WELL RESTRICTIONS CHECKLIST

HORIZONTAL 6A WELL

Well Restrictions

- ☒ 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
- ☒ 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
- ☒ At Least 1000 Feet from Pad and LOD (including any E&S Control Feature) to any Groundwater Intake or Public Water Supply; OR
- ☐ DEP Waiver and Permit Conditions
- ☒ At Least 250 Feet from an Existing Water Well or Developed Spring to Well Being Drilled; OR
- ☐ Surface Owner Waiver and Recorded with County Clerk, OR
- ☐ DEP Variance and Permit Conditions
- ☒ At Least 625 Feet from an Occupied Dwelling Structure to Center of the Pad; OR
- ☐ Surface Owner Waiver and Recorded with County Clerk, OR
- ☐ DEP Variance and Permit Conditions
- ☒ At Least 625 Feet from Agricultural Buildings Larger than 2500 Square Feet to the Center of the Pad; OR
- ☐ Surface Owner Waiver and Recorded with County Clerk, OR
- ☐ DEP Variance and Permit Conditions

11/21/2025

HALLEY'S WELL PAD SITE PLAN

PROPOSED WELL NO.'S 201, 202, 203, 204
TAYLOR COUNTY, WEST VIRGINIA
FOR



ENTRANCE PERMIT

ARSENAL RESOURCES HAS OBTAINED ENCROACHMENT PERMITS (FORM MM-109) FROM THE WEST VIRGINIA DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS, PRIOR TO COMMENCEMENT OF CONSTRUCTION ACTIVITIES. PERMIT #04-2025-5616

MISS UTILITY STATEMENT

MISS UTILITY OF WEST VIRGINIA WAS NOTIFIED FOR THE LOCATING OF UTILITIES PRIOR TO THIS PROJECT DESIGN. TICKET #2429748525
IN ADDITION, MISS UTILITY WILL BE CONTACTED PRIOR TO THE START OF THE PROJECT BY THE AWARDED CONTRACTOR(S)

ENVIRONMENTAL NOTE

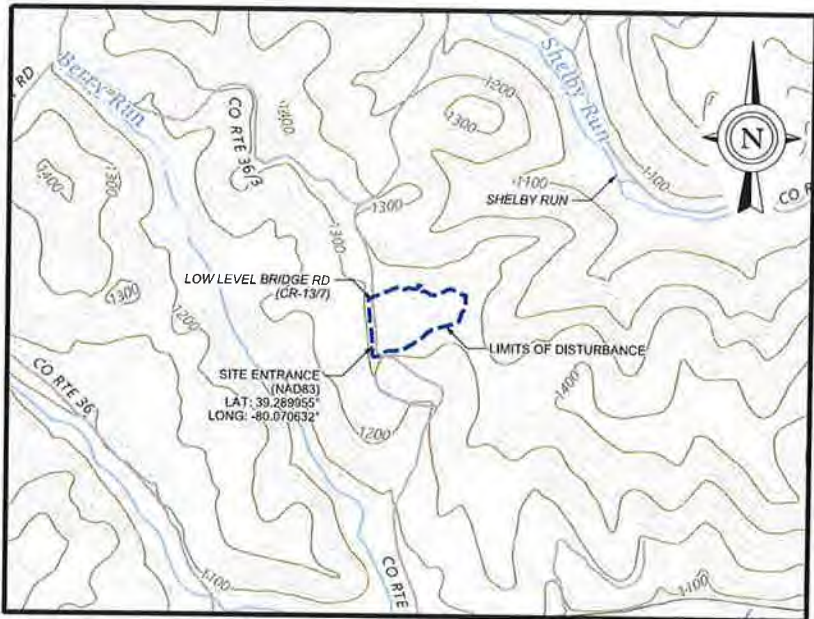
A WETLAND/STREAM DELINEATION WAS PERFORMED ON DECEMBER 2024 BY DIEFFENBAUCH & HRITZ, LLC TO REVIEW THE SITE FOR WATERS AND WETLANDS THAT ARE MOST LIKELY WITHIN THE REGULATORY PURVIEW OF THE U.S. ARMY CORPS OF ENGINEERS (USACE). THIS DELINEATION DOES NOT, IN ANY WAY, REPRESENT A JURISDICTIONAL DETERMINATION OF THE LANDWARD LIMITS OR WATERS AND WETLANDS WHICH MAY BE REGULATED BY THE USACE. THE OWNER/OPERATOR SHALL OBTAIN THE APPROPRIATE PERMITS FROM THE FEDERAL AND/OR STATE REGULATORY AGENCIES PRIOR TO ANY PROPOSED IMPACTS TO WATERS OF THE U.S. INCLUDING WETLAND FILLS AND STREAM CROSSINGS

NOTES:

1. TOPOGRAPHIC INFORMATION OBTAINED FROM DIEFFENBAUCH & HRITZ, LLC (DATUM NAD83 WVN)
2. PROPERTY LINE INFORMATION OBTAINED FROM DIEFFENBAUCH & HRITZ, LLC SURVEY AND TAX MAPPING AND SHOULD BE USED AS REFERENCE ONLY.
3. THE PROPERTIES AFFECTED BY THIS DEVELOPMENT ARE LOCATED ON FIRM MAP NUMBER 54091C0115D DATED 9/29/2009. THE LIMITS OF DISTURBANCE PROPOSED WITH THIS DEVELOPMENT ARE LOCATED IN ZONE (X) AS DEFINED BY THE FIRM.
4. RECEIVING STREAMS: UNNAMED TRIBUTARY TO SHELBY RUN
5. REFER TO GEOTECHNICAL INVESTIGATION REPORT PREPARED BY CTL, LLC (PROJ. NO. 24050044MOR) DATED JANUARY 31, 2025 AND REVISED FEBRUARY 17, 2025. ADJUSTMENTS TO PROPOSED CUT AND FILL SLOPES SHOULD NOT BE MADE UNLESS REVIEWED BY CTL, LLC
6. LIMITS OF DISTURBANCE: 12.3 ACRES
7. TREE CLEARING AREA: 5.0 ACRES

DISTURBANCE BREAKDOWN	
LANDOWNER	TOTAL DISTURBANCE (ACRES)
46-05-0012-0007-0000 ANDERSON RODNEY & DEBORAH A & SURV	12.3

WELL NUMBER	STATE PLANE (NAD83) N	STATE PLANE (NAD83) E	UTM (NAD83) METERS (N)	UTM (NAD83) METERS (E)	LATITUDE (NAD83)	LONGITUDE (NAD83)	PROPOSED ELEVATION
201	288667.8838	1807323.9684	4349504.928	580244.941	39.291201	80.069478	1376.29
202	288669.3767	1807333.6564	4349505.433	580247.946	39.291205	80.069443	1376.29
203	288690.6697	1807343.7443	4349505.938	580250.951	39.291209	80.069408	1376.29
204	288692.3626	1807353.6322	4349506.443	580253.958	39.291214	80.069373	1376.29



REFERENCES: UNITED STATES GEOLOGICAL SURVEY - GRAFTON QUADRANGLE, WV, 7.5 MINUTE SERIES



PROJECT NO. 24078-001

MARCH 2025



DIEFFENBAUCH & HRITZ



LOCATION COORDINATES

WELL PAD ACCESS ROAD
LATITUDE: 39.289955° LONGITUDE: -80.339901° (NAD83)

CENTER OF WELL PAD
LATITUDE: 39.290960° LONGITUDE: -80.069297° (NAD83)

CENTER OF AST
LATITUDE: 39.291106° LONGITUDE: -80.068100° (NAD83)

OPERATOR

ARSENAL RESOURCES
6031 WALLACE ROAD EXT.
SUITE 200
WEYFORD, PA 15090
PHONE: (724) 940-1100

ENGINEER/SURVEYOR

DIEFFENBAUCH & HRITZ, LLC
1095 CHAPLIN ROAD
SUITE 200
MORGANTOWN, WV 26501
PHONE: (304) 985-5555

LEGEND

EXISTING TREE LINE	EXISTING INDEX CONTOUR LINE (10')
EXISTING ROAD	EXISTING INTERMEDIATE CONTOUR LINE
EXISTING RIGHT-OF-WAY	PROPOSED INDEX CONTOUR LINE (10')
PROPOSED RIGHT-OF-WAY	PROPOSED INTERMEDIATE CONTOUR LINE
PROPERTY LINE	CHANNEL FLOW DIRECTION
MUNICIPAL BOUNDARY	STREAM
PROPOSED FENCE	DELINATED STREAM
EXISTING FENCE	DELINATED WETLAND BOUNDARY
EXISTING ELECTRIC LINE	FLOODWAY BOUNDARY
EXISTING GAS LINE	RIPARIAN BUFFER
PROPOSED GAS LINE	SMARTFENCE HD
PROPOSED WATER LINE	EXISTING SPOT ELEVATION
FILL LIMITS	PROPOSED SPOT ELEVATION
CUT LIMITS	EXISTING STRUCTURE
TOE KEY WITH DRAIN	MOUNTABLE BERM
ROADWAY CENTERLINE	
2' PERIMETER BERM	
LIMITS OF DISTURBANCE	
EXISTING UTILITY POLE	

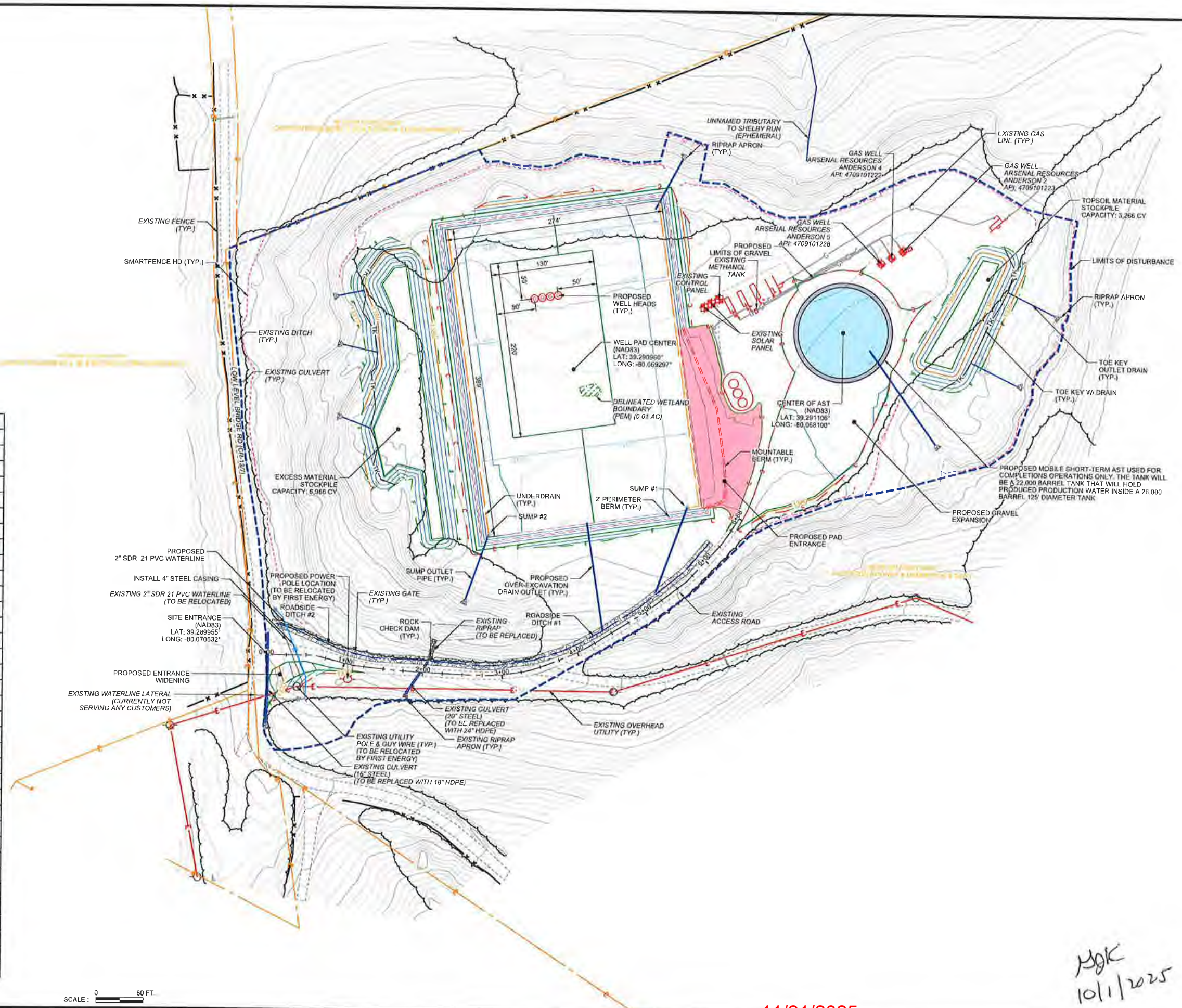
INDEX

DRAWING NO.	TITLE
1	TITLE SHEET
2	GENERAL NOTES
3	EXISTING SITE PLAN
4	SOILS PLAN
5	OVERALL SITE PLAN
6	WELL PAD
7	WELL PAD CROSS SECTIONS
8	TANK PAD CROSS SECTIONS
9	ACCESS ROAD
10	ACCESS ROAD PROFILE
11	TOPSOIL/EXCESS STOCKPILE CROSS SECTIONS
12	UTILITY RELOCATION PLAN
13 - 14	CULVERT REPLACEMENT PLAN
15 - 18	CONSTRUCTION DETAILS
19	GEOTECHNICAL DETAILS
20	REVEGETATION PLAN
21	RECLAMATION PLAN



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11/20

Halley's Well Pad - Earthwork Summary		
Description	Quantity	Units
Well Pad		
Topsoil (6" depth)	2,450	CY
Topsoil (6" depth) + 10%	2,695	CY
Cut	8,852	CY
Fill	4,779	CY
Net	4,072	CY
Pad Entrance		
Topsoil (6" depth)	262	CY
Topsoil (6" depth) + 10%	288	CY
Cut	19	CY
Fill	6	CY
Net	13	CY
Road Entrance Widening		
Topsoil (6" depth)	45	CY
Topsoil (6" depth) + 10%	49	CY
Cut	90	CY
Fill	9	CY
Net	81	CY
Tank Pad		
Topsoil (0" depth)	0	CY
Cut	1,354	CY
Fill	10	CY
Net	1,344	CY
Project Total		
Topsoil	2,756	CY
Total Topsoil + 10%	3,032	CY
Cut	10,315	CY
Fill	4,804	CY
Net	5,511	CY
Net + 10%	6,062	CY
Over-Excavation		
Well Pad Over-Excavation	39,613	CY
Tank Pad Over-Excavation	4,551	CY
Total Over-Excavation	44,164	CY



SCALE: 0 60 FT.

11/21/2025

MDK
10/1/2025

REVISION		DATE	BY
NO.	DESCRIPTION		
1	WED		
2	DRAWN		
3	MEP		
4	CHECKED		
5	ENS		
6	APPROVED		
7	MAR 2025		
8	DATE		
9	24078-001		
10	PROJECT NO.		
CLIENT			
DIFFENBAUGH & HRTZ LLC			
1095 Chaplin Road, Suite 200			
Morgantown, WV 26501			
P: 304.585.5555 F: 304.585.5557			
PROJECT			
HALLEY'S WELL PAD SITE			
TITLE			
OVERALL SITE PLAN			
DRAWING NO.			
5			