



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

Thursday, June 4, 2026
PERMIT MODIFICATION APPROVAL
Horizontal 6A / New Drill

ARSENAL RESOURCES LLC
6031 WALLACE RD. EXT. SUITE 200

WEXFORD, PA 15090

Re: Permit Modification Approval for FLANDERS 201
47-091-01383-00-00

Lateral Extension

ARSENAL RESOURCES LLC

The Office of Oil and Gas has reviewed the attached permit modification for the above referenced permit. The attached modification has been approved and well work may begin. Please be reminded that the oil and gas inspector is to be notified twenty-four (24) hours before permitted well work is commenced.

If there are any questions, please feel free to contact me at (304) 926- 0450.

H. Jason Harmon
Chief

Operator's Well Number: FLANDERS 201
Farm Name: VANDALIA LAND, LLC
U.S. WELL NUMBER: 47-091-01383-00-00
Horizontal 6A New Drill
Date Modification Issued: 06/04/2026

Promoting a healthy environment.

06/05/2026

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

1) Well Operator: Arsenal Resources 494519412 Taylor Courtho Grafton
Operator ID County District Quadrangle

2) Operator's Well Number: 201 Well Pad Name: Flanders

3) Farm Name/Surface Owner: Vandalia Land, LLC Public Road Access: CR-11/Wendel Road

4) Elevation, current ground: 1251.00' Elevation, proposed post-construction: 1250.00'

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, 7,642' (TVD Top) - 7,712' (TVD Bottom), 70 ft, 0.5 psi/ft

8) Proposed Total Vertical Depth: 7,702'

9) Formation at Total Vertical Depth: Marcellus Shale

10) Proposed Total Measured Depth: 37,000'

11) Proposed Horizontal Leg Length: 26,367'

12) Approximate Fresh Water Strata Depths: 55', 74', 140', 160', 500', 700', 945'

13) Method to Determine Fresh Water Depths: Offsetting well reported water depths (091-00630, 091-00912, 091-00623, 091-00619)

14) Approximate Saltwater Depths: None expected

15) Approximate Coal Seam Depths: Pittsburgh-57', Harlem-427', Lower Freeport-727', Upper Kittanning-792', Middle Kittanning-842', Clarion-837'

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: _____

CK# 205470
7500
2/5/2026

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JUN 01 2026
WV Department of
Environmental Protection

Digitally signed by
Gayne Knitowski
Date: 2026.05.22
10:10:46 -04'00'

Gayne
Knitowski

18)

CASING AND TUBING PROGRAM

TYPE	Size (in)	New or Used	Grade	Weight per ft. (lb/ft)	FOOTAGE: For Drilling (ft)	INTERVALS: Left in Well (ft)	CEMENT: Fill-up (Cu. Ft.)/CTS
Conductor	24	New	H-40	94	80	80	CTS
Fresh Water	13.375	New	J-55	54.5	1,000	1,000	CTS
Coal							
Intermediate	9.625	New	J-55	40	2,000	2,000	CTS
Production	5.5	New	P-110	20	37,000	37,000 ✓	TOC @ 1,850 ✓
Tubing	2.875	New	L-80	6.5		8,000 ✓	none
Liners							

Gayne Knitowski
 Digitally signed by Gayne Knitowski
 Date: 2026.05.22 10:11:08 -04'00'

TYPE	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	1,500	Class A/L, 3% CaCl2 ✓	1.29
Production	5.5	8.5-8.75	0.415	15,590	12,500	Class A/L, Poz	1.29/1.34
Tubing	2.875					none	
Liners							

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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.

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21) Total Area to be disturbed, including roads, stockpile area, pits, etc., (acres): 21.83

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22) Area to be disturbed for well pad only, less access road (acres): 8.32

WV Department of
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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 2,650'; there will be no centralizers from 2,650' 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 2,350' (+/- 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 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 borehole. This will provide lubricity as well as stabilize 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.



Project: Taylor Co., WV (NAD83 - WV N)
 Site: Flanders Pad
 Well: Flanders 201
 Wellbore: OH
 Design: Plan 3
 Lat: 39.286026
 Long: -80.099924
 GL: 1250.00
 RKB: GL +27' RKB @ 1277.00usft



Job #:

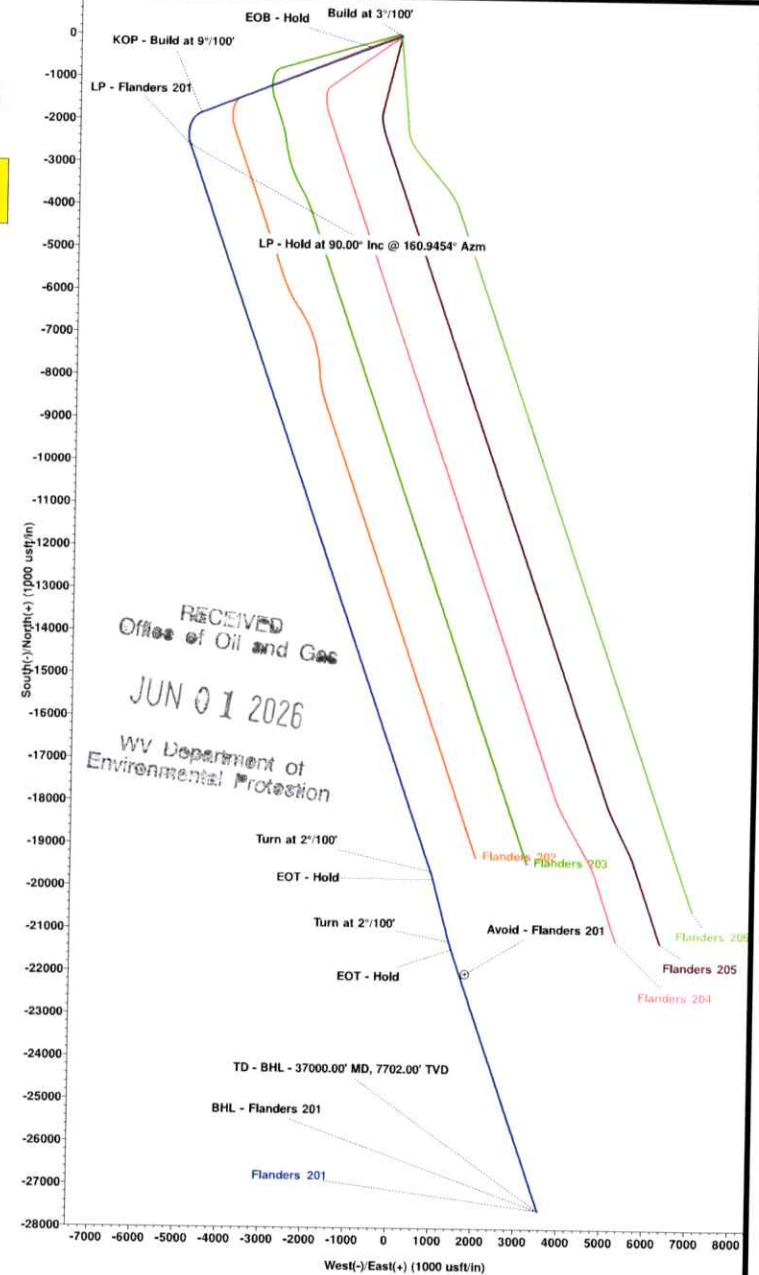
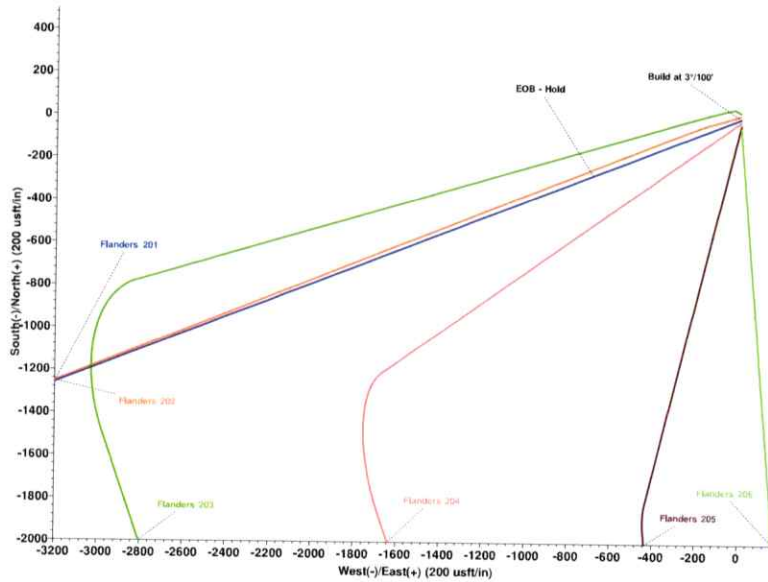
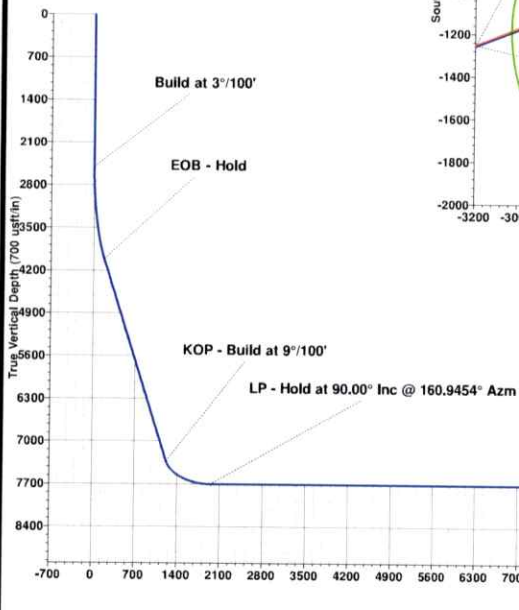
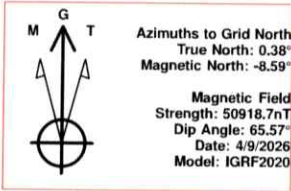
Plan 3

WELL DETAILS: Flanders 201

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
0.00	0.00	286859.18	1798694.47	39.286026	-80.099924	

SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	Vsect	Annotation
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
2	2500.00	0.00	0.00	2500.00	0.00	0.00	0.00	0.00	0.00	Build at 3°/100'
3	4241.08	52.23	248.52	4009.74	-271.06	-688.72	3.00	248.52	180.31	EOB - Hold
4	9653.99	52.23	248.52	7324.94	-1838.10	-4670.36	0.00	0.00	1222.68	KOP - Build at 9°/100'
5	10632.66	90.00	160.95	7702.00	-2598.24	-4922.23	9.00	-88.51	1944.15	LP - Hold at 90.00° Inc @ 160.9454° Azm
6	28632.66	90.00	160.95	7702.00	-19611.97	954.24	0.00	0.00	19571.98	Turn at 2°/100'
7	28835.40	90.00	165.00	7702.00	-19805.78	1013.59	2.00	90.00	19771.81	EOT - Hold
8	30335.40	90.00	165.00	7702.00	-21254.67	1401.82	0.00	0.00	21258.58	Turn at 2°/100'
9	30538.13	90.00	160.95	7702.00	-21448.47	1461.18	2.00	-90.00	21458.41	EOT - Hold
10	37000.00	90.00	160.95	7702.00	-27556.28	3570.79	0.00	0.00	27786.67	TD - BHL - 37000.00' MD, 7702.00' TVD



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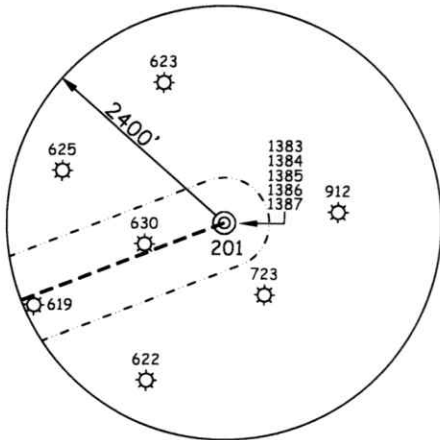
EOT - Hold
 Turn at 2°/100' EOT - Hold
 Turn at 2°/100' EOT - Hold
 TD - BHL - 37000.00' MD, 7702.00' TVD

Area of Review Report - Flanders Pad, 201 Lateral, Taylor County, WV

Well Name	API Number	Operator Name / Address	Well Type	Latitude	Longitude	Total Depth	Perforated Formation(s)	Producing Zones not Perforated
✓ Tygart East Co 7	091-00630	WV Mineral Group, LLC	Existing	39.285378	-80.10273	4,800	Benson	Riley, Gordon
✓ Tygart East Co 2	091-00619	WV Mineral Group, LLC	Existing	39.283348	-80.107208	4,853	Benson	Riley
✓ Robert Riffle 1	091-00689	WV Mineral Group, LLC	Existing	39.278563	-80.115603	4,701	Benson	Riley
✓ Hal Findley 1	091-00453	Ross & Wharton Gas Co., Inc.	Plugged	39.276085	-80.115991	2,885	Bayard	Fifth
✓ Live Plants 2	091-00252	Kelley Randall R. DBA Victory Construction	Existing	39.271312	-80.115413	4,654	Benson	Fifth, Fourth
✓ Live Plants 1	091-00244	Kelley Randall R. DBA Victory Construction	Existing	39.268122	-80.113173	4,550	Benson	Riley, Fourth, Big Injun
✓ Al Swiger 1	001-00675	WV Mineral Group, LLC	Existing	39.235364	-80.09934	4,562	Benson	Riley
✓ Clay & Doris Stout 1	001-00656-P	Diversified Production, LLC	Plugged	39.22764	-80.088854	4,544	Benson	None
✓ W B Cleavenger 4	001-02267	Diversified Production, LLC	Plugged	39.224831	-80.091783	4,967	Benson	Riley
✓ W D Cleavenger 3	001-00702-P	Alliance Petroleum Co., LLC	Plugged	39.220337	-80.090115	4,650	Benson	None
✓ Vera Boylen 1	001-01179	Diversified Production, LLC	Plugged	39.213285	-80.086293	5,553	Brallier	Benson, Alexander

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**ARSENAL RESOURCES
FLANDERS PAD
WELL 201**



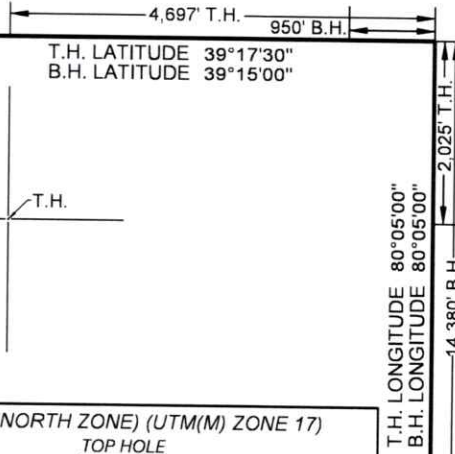
NOTES ON SURVEY

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'

CURVE	RADIUS	ARC LENGTH	CHORD LENGTH	CHORD BEARING
C1	442.24'	282.03'	277.28'	S 49°13' W
C2	618.93'	299.96'	297.03'	S 16°25' W
C3	802.03'	298.76'	297.03'	S 08°08' E
C4	355378.14'	1400.28'	1400.28'	S 15°03' E
C5	5838.19'	700.03'	699.61'	S 17°06' E



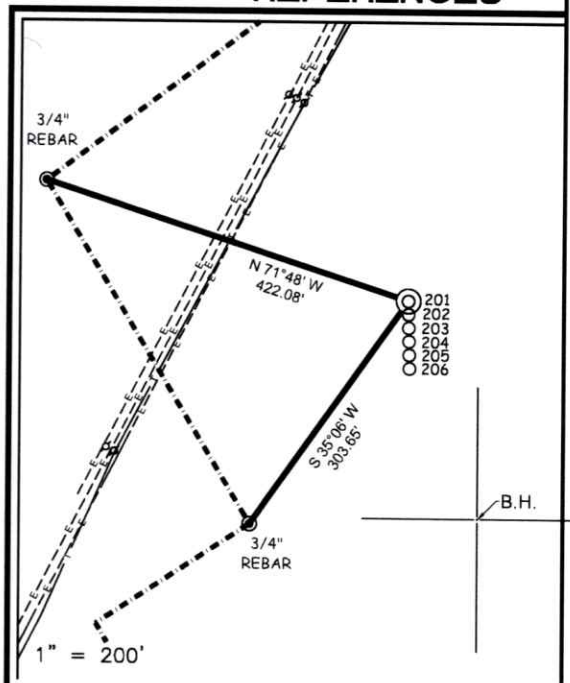
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(S.P.C. NORTH ZONE) (UTM(M) ZONE 17)

TOP HOLE		
NAD'83 S.P.C.(FT)	N. 286,889.05	E. 1,798,693.82
NAD'83 GEO.	LAT-(N) 39.286108	LONG-(W) 80.099927
NAD'83 UTM (M)	N. 4,348,913.16	E. 577,624.68
LANDING POINT		
NAD'83 S.P.C.(FT)	N. 284,291.7	E. 1,793,771.8
NAD'83 GEO.	LAT-(N) 39.278885	LONG-(W) 80.117253
NAD'83 UTM (M)	N. 4,348,096.9	E. 576,138.3
BOTTOM HOLE		
NAD'83 S.P.C.(FT)	N. 259,333.7	E. 1,802,261.3
NAD'83 GEO.	LAT-(N) 39.210520	LONG-(W) 80.086688
NAD'83 UTM (M)	N. 4,340,535.9	E. 578,851.1

REFERENCES



I THE UNDERSIGNED, HEREBY CERTIFY THAT THIS PLAN 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 DIVISION OF ENVIRONMENTAL PROTECTION.

P.S. 677 *Gregory A. Smith*



(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS.
 DATE MAY 20, 20 26

REVISED _____
 OPERATORS WELL NO. 201
 API WELL NO. 47 - 091 - 01383
 STATE COUNTY PERMIT

MINIMUM DEGREE OF ACCURACY 1 / 2500 FILE NO. 9554P201R-051226.dwg

HORIZONTAL & VERTICAL CONTROL DETERMINED BY DGPS (SURVEY GRADE TIE TO CORS NETWORK) SCALE 1" = 2000'

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



WELL TYPE: OIL _____ GAS X LIQUID INJECTION _____ WASTE DISPOSAL _____ IF "GAS" PRODUCTION X STORAGE _____ DEEP _____ SHALLOW X

LOCATION: ELEVATION 1,250.00' WATERSHED SANDLICK RUN
 DISTRICT COURTHOUSE COUNTY TAYLOR QUADRANGLE GRAFTON 7.5'

SURFACE OWNER VANDALIA LAND LLC ACREAGE 24.13±
 ROYALTY OWNER KIM R. ROGERS ET AL ACREAGE 6.04±

PROPOSED WORK: LEASE NO. SEE WW-6A1

DRILL X CONVERT _____ DRILL DEEPER _____ REDRILL _____ FRACTURE OR STIMULATE X 06/05/2026
 FORMATION _____ PERFORATE NEW FORMATION _____ PLUG AND ABANDON _____ CLEAN OUT AND REPLUG _____ OTHER _____

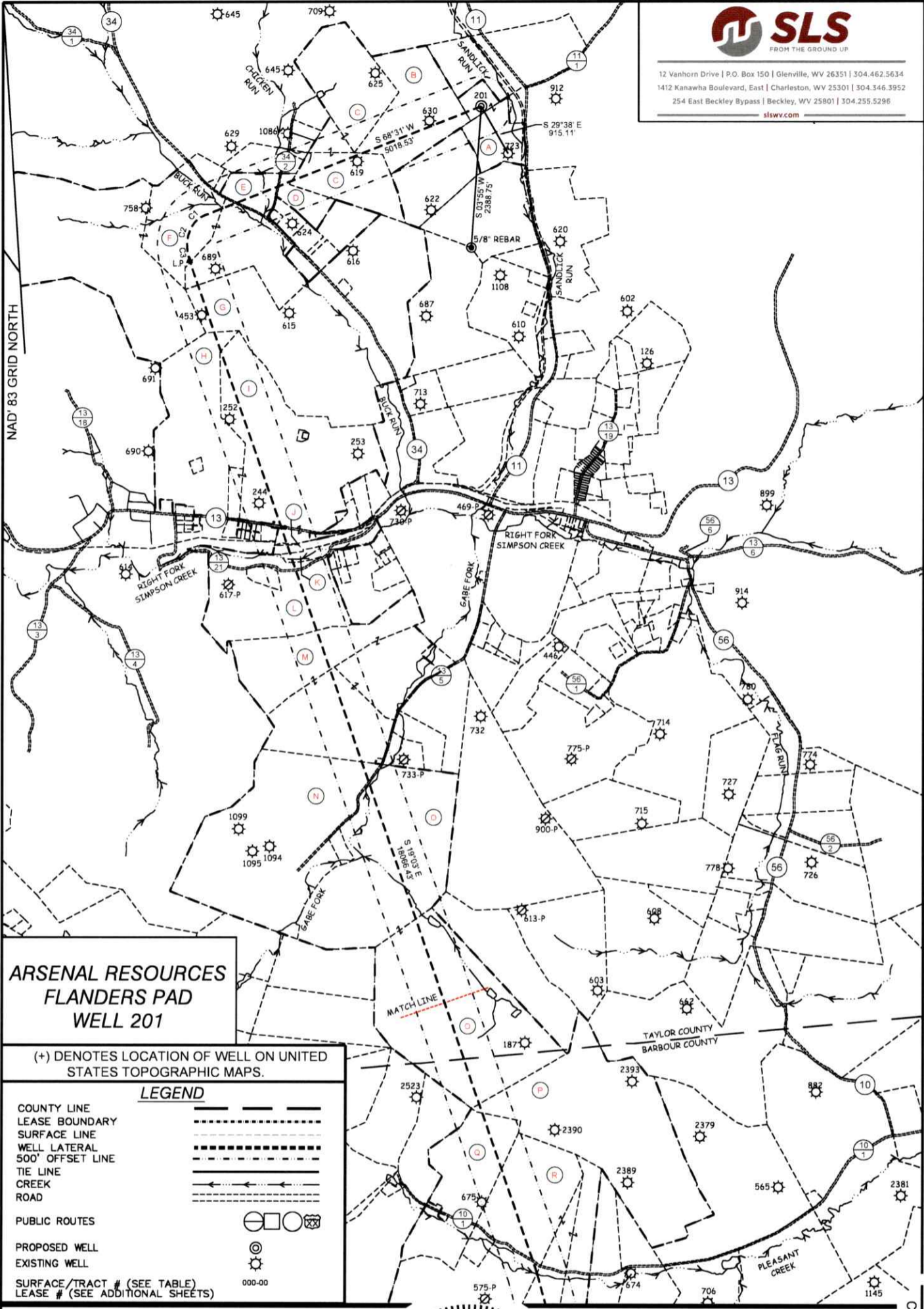
PHYSICAL CHANGE IN WELL (SPECIFY) _____ TARGET FORMATION MARCELLUS
 ESTIMATED DEPTH TVD: 7,702' / TMD: 37,000'

WELL OPERATOR ARSENAL RESOURCES LLC DESIGNATED AGENT ERIC MORRIS
 ADDRESS 6031 WALLACE RD. EXT. SUITE 200 ADDRESS 633 WEST MAIN STREET
WEXFORD, PA 15090 BRIDGEPORT, WV 26330

COUNTY NAME
 PERMIT



12 Vanhorn Drive | P.O. Box 150 | Glenville, WV 26351 | 304.462.5634
 1412 Kanawha Boulevard, East | Charleston, WV 25301 | 304.346.3952
 254 East Beckley Bypass | Beckley, WV 25801 | 304.255.5296
 slsvv.com



**ARSENAL RESOURCES
 FLANDERS PAD
 WELL 201**

(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS.

LEGEND

- COUNTY LINE: - - - - -
- LEASE BOUNDARY: - · - · -
- SURFACE LINE: ————
- WELL LATERAL: - - - - -
- 500' OFFSET LINE: - - - - -
- TIE LINE: ————
- CREEK: ~~~~~
- ROAD: ————
- PUBLIC ROUTES:
- PROPOSED WELL:
- EXISTING WELL:
- SURFACE/TRACT # (SEE TABLE): 000-00
- LEASE # (SEE ADDITIONAL SHEETS):

SCALE 1" = 2000' FILE NO. 9554P201R-051226.dwg

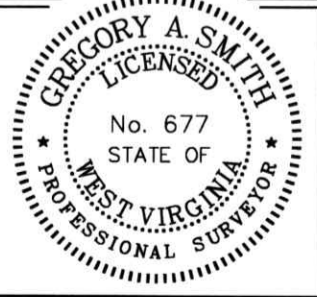
DATE MAY 20, 20 26

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OPERATORS WELL NO. 201

API WELL NO. 47 — 091 — 01383

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STATE OF WEST VIRGINIA
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 OFFICE OF OIL AND GAS

06/05/2026

P.S. 677 *Gregory A. Smith*

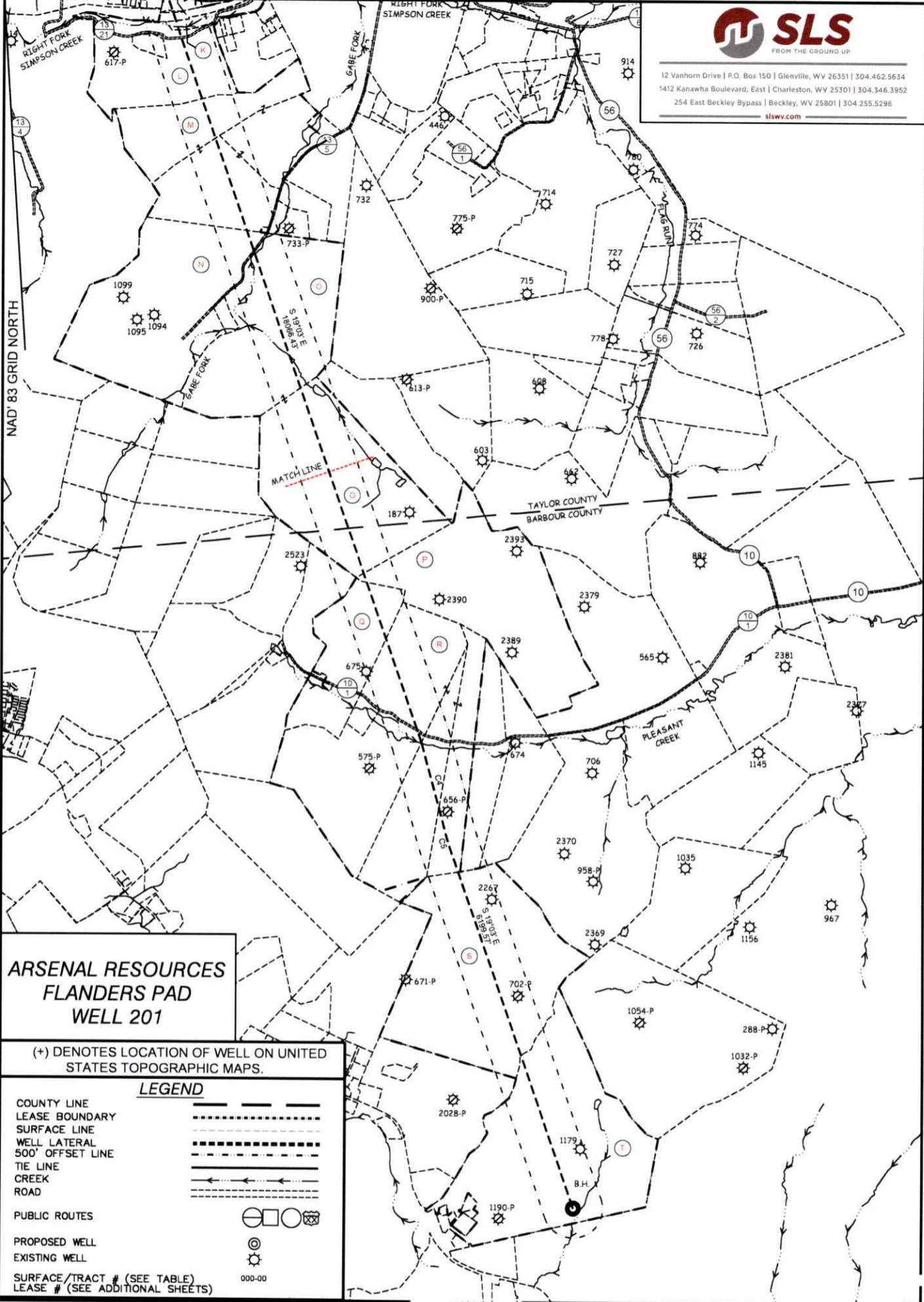
WELL OPERATOR ARSENAL RESOURCES LLC
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 FLANDERS PAD
 WELL 201**

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- COUNTY LINE
- LEASE BOUNDARY
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TAG	PARCEL	SURFACE OWNER	ACREAGE
A	5-13A-2	VANDALIA LAND LLC	24.13
B	5-13-37	COALQUEST DEVELOPMENT LLC	49.75
C	5-13-38	COALQUEST DEVELOPMENT LLC	83
D	5-13-70	VIRGIL L & SANDRA J BROWN	9.64
ROAD	N/A	TAYLOR CO. RT. 34/2	N/A
CREEK	N/A	CHICKEN RUN	N/A
E	5-13-72	BRAIN J GAIN	9.03
ROAD	N/A	TAYLOR CO. RT. 34	N/A
CREEK	N/A	BUCK RUN	N/A
F	4-4-3	JUANITA M RIFFLE (LF) & ROBERT G RIFFLE JR	249.18
G	4-4-4	JENNIE ANITA FINDLEY	178
H	4-9-3	CHRISTINE B BALL	78.17
I	4-9-9	VICTORY REAL ESTATE HOLDINGS LLC	106.31
J	N/A	CSX RAILROAD	N/A
ROAD	N/A	TAYLOR CO. RT. 13	N/A
K	4-9-44	JACKIE LEE CHARLTON (LF) & JACKIE LEE CHARLTON II	5.44
CREEK	N/A	RIGHT FORK OF SIMPSON CREEK	N/A
L	4-9-43	REPPERT FUELS, INC	78
ROAD	N/A	TAYLOR CO. RT. 13/21	N/A
M	5-14-45.2	BARBARA J SPENCER	146.65
N	5-20-4	JAMES F & ALICIA M KINSEY	129.75
CREEK	N/A	GABE FORK	N/A
O	5-14-67	MARK LEWIS STOUT	269
P	9-8-11	JEFFERY L MOSS ET AL	242
Q	9-8-9	MICHAEL A & KIMBERLY WILSON	59.5
R	9-8-10	MICHAEL A & KIMBERLY WILSON	234.38
ROAD	N/A	BARBOUR COUNTY ROUTE 10/1	N/A
CREEK	N/A	PLEASANT CREEK	N/A
S	9-13-32	MITCHELL CLEAVENGER	174
T	9-13-34.2	ROBERT R & MINDI J JACOBS	184.49

FILE NO. 9554P201R-051226.dwg

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 WEXFORD, PA 15090

DESIGNATED AGENT ERIC MORRIS
 ADDRESS 633 WEST MAIN STREET
 BRIDGEPORT, WV 26330

Attachment to WW-6A1, Flanders 201

Tag, Parcel, Lease #	Grantor, Lessor, Assignor, etc.	Grantee, Lessee, Assignee, etc.	Book/Page	Royalty	Acreage
A, B 47-091-5-13A-2 47-091-5-13-37 (00004300)	Elladean Railing and Ethel Railing	Petroleum Development Corporation	42/214	12.5+%	106.5475
	Petroleum Development Corporation	PDC Mountaineer LLC	30/698		
	PDC Mountaineer LLC	River Ridge Energy, LLC	59/1263		
C 47-091-5-13-38 (00003973)	Elladean Railing and Ethel Railing	Petroleum Development Corporation	42/171	12.5+%	82.4625
	Petroleum Development Corporation	PDC Mountaineer LLC	30/698		
	PDC Mountaineer LLC	River Ridge Energy, LLC	59/1263		
D, E, F 47-091-5-13-70 47-091-5-13-72 47-091-4-4-3 (00008300)	Laco B. Corder	Petro-Lewis Corporation	33/211	12.5+%	300
	Petro-Lewis Corporation	Partnership Properties Co	3/176		
	Partnership Properties Co	Eastern American Energy Corporation	4/381		
	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		
ROAD	TAYLOR COUNTY	ROUTE 34/2			
CREEK		CHICKEN RUN			
ROAD	TAYLOR COUNTY	ROUTE 34			
CREEK		BUCK RUN			
G 47-091-4-4-4 (00008263)	HAL S AND JENNIE A FINDLEY	Pittsburgh Plate Glass Company	27/4	12.5+%	173.43
	Pittsburgh Plate Glass Company	White Shield Oil and Gas Co	3/95		
	White Shield Oil and Gas Co	Partnership Properties Co	3/126		

Attachment to WW-6A1, Flanders 201

Tag, Parcel, Lease #	Grantor, Lessor, Assignor, etc.	Grantee, Lessee, Assignee, etc.	Book/Page	Royalty	Acreage
	Partnership Properties Co	Eastern American Energy Corporation	4/381		
	Eastern American Energy Corporation	Petroleum Development Corporation	10/718		
	Eastern American Energy Corporation	Energy Corporation of America	30/667		
	Energy Corporation of America	Greylock Production LLC	37/642		
	Greylock Production LLC	Mar Key LLC	37/8		
✓ H 47-091-4-9-3 (00010151)	RIGHT A BALL III	Mar Key LLC	SEE ATTACHED LEASE COPY	12.5+%	77.16
✓ I 47-091-4-9-9 (00009807)	VICTORY REAL ESATE HOLDINGS	Mar Key LLC	76/362	12.5+%	121.31
✓ J ROAD	CSX RAILROAD TAYLOR COUNTY	ROUTE 13			
✓ K 47-091-4-9-44 (00008053)	JACKIE LEE CHARLTON LIFE ESTATE	Mar Key LLC	69/49	12.5+%	5.44
✓ L 47-091-4-9-43 (00009846)	RIGHT FORK OF REPPERT FUELS INC	SIMPSON CREEK Mar Key LLC	76/350	12.5+%	78
✓ M 47-091-5-14-45.2 (00003535)	TAYLOR COUNTY ROBERT H BARTLETT ET AL	ROUTE 13/21 Petroleum Development Corporation	43/463	12.5+%	207.5
	Petroleum Development Corporation	PDC Mountaineer LLC	30/698		
M 47-091-5-14-45.2 (00009683)	PDC Mountaineer LLC JANICE MARIE RATCLIFF	River Ridge Energy, LLC Mar Key LLC	59/1263 76/260	12.5+%	53.75

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M 47-091-5-14-45.2 (00009684)	SHERRILL ANN THOMPSON	Mar Key LLC	76/248	12.5+%	53.75
M 47-091-5-14-45.2 (00009696)	RONDA LAVY	Mar Key LLC	76/224	12.5+%	53.75
M 47-091-5-14-45.2 (00009697)	RODNEY STALNAKER	Mar Key LLC	76/238	12.5+%	53.75
M 47-091-5-14-45.2 (00009710)	SCOTT M BURGESS	Mar Key LLC	76/216	12.5+%	53.75
M 47-091-5-14-45.2 (00009724)	WILLIAM D STALNAKER	Mar Key LLC	76/278	12.5+%	53.75
M 47-091-5-14-45.2 (00009748)	LESLIE RHYNARD	Mar Key LLC	76/311	12.5+%	53.75
N 47-091-5-20-4 (00008166)	JAMES F AND ALICIA M KINSEY	Mar Key LLC	69/182	12.5+%	130
CREEK		GABE FORK			
O 47-091-5-14-67 (00005165)	MARK LEWIS STOUT ET UX	PDC Mountaineer LLC	64/51	12.5+%	269
	PDC Mountaineer LLC	River Ridge Energy, LLC	59/1263		
P 47-091-9-8-11 (00003576)	FLOYD AND NORA JANE MOSS	CUMBERLAND AND ALLEGHENY GAS	46/36	12.5+%	245
	Cumberland and Allegheny Gas Union Drilling Inc Equitable Resources Exploration Equitable Resources Energy Enervest East LP	Union Drilling Inc Equitable Resources Exploration Equitable Resources Energy Enervest East LP The Houston Exploration Co	46/347 325/219 328/171 129/524 138/1		

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Tag, Parcel, Lease #	Grantor, Lessor, Assignor, etc.	Grantee, Lessee, Assignee, etc.	Book/Page	Royalty	Acreage
	Equitable Resources Energy Fuel Resources Production The Houston Exploration Company	Fuel Resources Production The Houston Exploration Co Seneca Upshur Petroleum Inc	116/81 383/187 404/381		
Q / 47-091-9-8-9 (00005960)	A I AND VALARIE A SWIGER	UNION DRILLING INC & ALLERTON MILLER	70/17	12.5+%	60.17
	Allerton Miller Union Drilling Inc Equitable Resources Exploration Equitable Resources Energy Equitable Resources Energy	Union Drilling Inc Equitable Resources Exploration Equitable Resources Energy Enervest East Limited Partnership	98/11 325/219 328/171 116/81 129/524		
	Fuel Resources Production Enervest East Limited Partnership	The Houston Exploration Co The Houston Exploration Co	136/162 138/1		
	The Houston Exploration Co Seneca-Upshur Petroleum LLC	Seneca-Upshur Petroleum LLC Seneca-Upshur Petroleum Corp	139/365 447/129		
R / 47-091-9-8-10 (00009665)	DORIS C STOUT IRREVOCABLE TRUST	Mar Key LLC	186/173	12.5+%	239.5
ROAD	BARBOUR COUNTY	ROUTE 10/1			
CREEK		PLEASANT CREEK			
S / 47-001-9-13-32 (00009653)	THOMAS CLEAVENGER	Mar Key LLC	186/81	12.5+%	241
S 47-001-9-13-32 (00009654)	MICHAEL LEE CLEAVENGER	Mar Key LLC	186/79	12.5+%	241
S 47-001-9-13-32 (00009655)	CHARLES E CLEAVENGER	Mar Key LLC	186/77	12.5+%	241

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Tag, Parcel, Lease #	Grantor, Lessor, Assignor, etc.	Grantee, Lessee, Assignee, etc.	Book/Page	Royalty	Acreage
✓ S 47-001-9-13-32 (00009657)	PATTY JEAN CLEAVENGER	Mar Key LLC	186/175	12.5+%	241
S 47-001-9-13-32 (00009658)	ROBERT ALLEN CLEAVENGER	Mar Key LLC	186/177	12.5+%	241
S 47-001-9-13-32 (00009674)	RICHARD L CLEAVENGER	Mar Key LLC	186/159	12.5+%	241
S 47-001-9-13-32 (00009715)	SHARON WELCH-DORMAN	Mar Key LLC	186/145	12.5+%	241
S 47-001-9-13-32 (00009716)	MITCHELL CLEAVENGER	Mar Key LLC	186/143	12.5+%	241
S 47-001-9-13-32 (00009717)	JOHN E CLEAVENGER	Mar Key LLC	186/141	12.5+%	241
✓ T 47-001-9-13-34.2 (D0000416)	WOLFE RUN MINING LLC	Mar Key LLC	580/543	12.5+%	187.51

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MEMORANDUM OF NO SURFACE USE OIL AND GAS LEASE

State of West Virginia

County Taylor

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Office of Oil and Gas

JUN 01 2026

Lessor: Right A. Ball III
Lessor's Address: 161 Ball Lane Flemington, WV 26347

Lessee: Mar Key, LLC.
Lessee's Address: 6031 Wallace Road Extension, Suite 200
Wexford, PA 15090

Date Executed: May 14, 2026

Effective Date: _____

As of the Effective Date stated above, Lessors, named above, executed and delivered to Lessee, name above, a No Surface Use-Oil and Gas Lease, (the "Agreement") in which Lessors granted, leased, and let to Lessee lands (the "Lands") located in the County and State named, described as follows:

All that certain tract of land in Flemington District, Taylor County, West Virginia, described in Deed Book(s) 271, at Page(s) 127, dated 10/20/2000 and recorded in the Recorder's Office of said County, containing 77.16 acres, more or less. Said Leased Premises, including but not limited to tract(s) being identified for tax purposes as parcel number(s) 47-091-4-9-3 and 47-091-4-9-3.2, as of the date of this Agreement. Notwithstanding said tax map designation, the Agreement shall be effective as to the tract(s) described in Deed Book 271, at Page 127 and actually owned by Lessor whether or not the tax map designation correctly identifies the location of the tract. It being the purpose and intent of Lessor to lease and Lessor does hereby lease all interests in the land above described now owned or hereafter acquired by Lessor. This Lease also covers and includes, in addition to that above described, all land, if any, contiguous or adjacent to or adjoining the lands above described and (a) owned or claimed by Lessor, by limitation, prescription, possession, reversion or unrecorded instrument or (b) as to which Lessor has a preference right of acquisition. Lessor agrees to execute any supplemental instrument requested by Lessee for a more complete or accurate description of said land.

The Agreement is for a primary term of Two (2) years from the Effective Date stated above and as long thereafter as oil, gas or other minerals are produced from the lands described above, or lands pooled therewith, according to and by the terms and provisions of the Agreement between Lessor and Lessee. The Agreement, with all of its terms, covenants and other provisions, is referred to and incorporated into this Memorandum for all purposes.

This Memorandum of No Surface Use-Oil and Gas Lease, is executed by Lessor and Lessee and placed of record in the County in which the Lands are located for the purpose of placing all persons on notice of the existence of the Agreement which Agreement is not, at the request of both parties, being placed of record.

WITNESS:

W.A.

LESSORS:

Right A. Ball III

By: Right A. Ball III

By: _____

LESSEE:
Mar Key, LLC

Jon Sheldon

By: Jon Sheldon
Its: SVP & COO

06/05/2026

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WV Department of
Environmental Protection

ACKNOWLEDGMENT

STATE OF West Virginia)
) SS:
COUNTY OF Taylor)

On this the 14th day of May, 2026, before me, the undersigned officer, appeared Right A. Ball III, satisfactorily proven to be the person(s) whose name(s) is/are subscribed to the within instrument, and acknowledged that he/she executed the same for the purposes therein contained.

IN WITNESS WHEREOF, I hereunto set my hand and official seal.

My Commission Expires: February 3rd 2031

Signature/Notary Public: [Handwritten Signature]

Name/Notary Public (print): William M Mohr



ACKNOWLEDGMENT

STATE OF _____)
) SS:
COUNTY OF _____)

On this the _____ day of _____, 2026, before me, the undersigned officer, appeared _____, satisfactorily proven to be the person(s) whose name(s) is/are subscribed to the within instrument, and acknowledged that he/she executed the same for the purposes therein contained.

IN WITNESS WHEREOF, I hereunto set my hand and official seal.

My Commission Expires: _____

Signature/Notary Public: _____

Name/Notary Public (print): _____

ACKNOWLEDGMENT

COMMONWEALTH OF PENNSYLVANIA)
) SS:
COUNTY OF ALLEGHENY)

On this the _____ day of _____, 2026, before me, the undersigned officer personally appeared **Jon Sheldon**, who acknowledged himself to be the **SVP & COO** of **Mar Key, LLC** and as such **SVP and COO**, being authorized to do so, executed the foregoing instrument for the purposes therein contained by signing his name as **SVP & COO**.

IN WITNESS WHEREOF, I hereunto set my hand and official seal.

My Commission Expires: _____

Signature/Notary Public: _____

Name/Notary Public (print): _____

PREPARED BY & RETURN TO:
MAR KEY, LLC
6031 WALLACE RD EXT, STE 200
WEXFORD, PA 15090

06/05/2026



People Powered. Asset Strong.

May 27, 2026

West Virginia Department of Environmental Protection
Office of Oil and Gas
ATTN: Taylor Brewer
601 57th Street SE
Charleston, WV 25304

RE: Flanders #201 and 202 (47-091-01383 and 47-091-01384) - Expedited Modifications Due to Well Extensions

Dear Mr. Brewer,

Enclosed please find the permit modifications for the Flanders #201 and 202 (47-091-01383 and 47-091-01384) laterals.

The wellhead locations remain the same as the current permits. The wells are being extended to the planned lateral lengths of 26,367' and 17,930', respectively.

Revised documents attached include the revised WW-6B, SSP, wellbore schematic with plan, plat, WW-6A1, and area of review. The modification review fees are also included.

Should you have any questions or need any additional information, please feel free to contact me by phone or email.

Sincerely,

A handwritten signature in blue ink that reads 'Emily Glick'.

Emily Glick
Geologist & Permitting Specialist
(c) 724-759-9612
(e) eglick@arsenalresources.com

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6031 Wallace Road Ext., Suite 200
Wexford, PA 15090
P - 724-940-1100
F - 800-428-0981

www.arsenalresources.com 06/05/2026