

LATITUDE(NAD'83) 39°20'00" TOP HOLE

10,434'

LATITUDE(NAD'83) 39°20'00" BOTTOM HOLE

2630'

DARWIN NORTH LAYOUT



DARWIN 212 LATERAL				
LINE	RADIUS	ARC LENGTH	CHORD BEARING	CHORD DISTANCE
G1	1902.20'	136.33'	N 22°01'48" W	135.31'
LINE BEARING DISTANCE				
L5	N 20°00' W	400.00'		
LINE	RADIUS	ARC LENGTH	CHORD BEARING	CHORD DISTANCE
G2	1908.73'	103.33'	N 26°03'00" W	102.58'
G3	1910.06'	230.62'	N 28°38'32" W	230.38'

PRESTON COUNTY			
DESIGNATOR	TM-PAR.	SURFACE OWNER	SURFACE ACREAGE
A	22-11	MARCHETTA HUFFMAN	47.50±
BARBOUR COUNTY			
DESIGNATOR	TM-PAR.	SURFACE OWNER	SURFACE ACREAGE
B	3-2	HARRIET M. TUCKER	5±
C	3-1	MARY K. LINDLEY	31.84±
PRESTON COUNTY			
DESIGNATOR	TM-PAR.	SURFACE OWNER	SURFACE ACREAGE
D	22-3	L. DARWIN & KAREN VOELFE	62.353±
E	22-7.1	ANDREW & EVAN HEPTUNE	.75±
F		STATE OF WV (OLD MORGANTOWN-BEVERLY TURNPIKE & WV RT 92)	14.42±
G	22-6	LAWSON L. SCHOCLEY	49.34±
H	22-5	TERRY D. & BETTY HAMILTON	57.18±
I	22-4	DAVID A. & CHRISTINA L. CLARISON ROBERT F. CLARISON (JRF)	167.035±
J	15-18	TERRY & BETTY HAMILTON	40.20±
K	15-17	ROBERTA A. KNOTTS	98.00±
L	15-9.1	DAVID L. RIVELY	93.75±

DARWIN 212 WELL TIES		
LINE	BEARING	DISTANCE
L1	N 58°17' W	642.09'
L2	S 83°25' W	1758.84'
L3	S 35°29' W	1193.77'
L4	N 24°00' W	636.61'

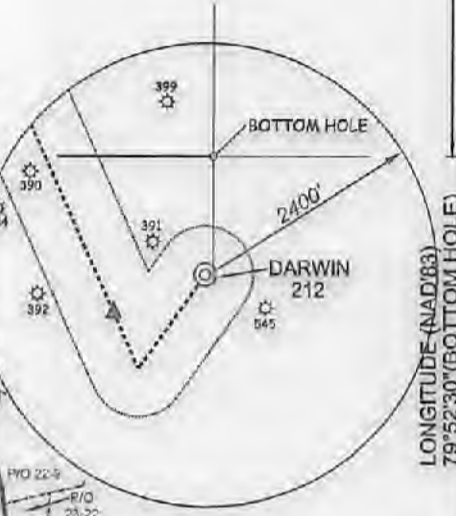
LINE	BEARING	DISTANCE
L6	N 24°03' W	8214.62'

TOTAL LATERAL DISTANCE = 73883.80'

NAD '83 GRID NORTH

LEGEND

- PROPOSED WELL
- EXISTING WELL
- PERMITTED WELL
- COUNTY ROUTE
- STATE ROUTE
- LEASE LINE
- SURFACE LINE
- WELL LATERAL
- OFFSET LINE
- TIC LINE
- CREEK
- ROAD
- FENCE LINE



ARSENAL RESOURCES DARWIN 212

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

NAD'83 S.P.C.(FT)	N. 289,962.29	E. 1,863,729.85
NAD'83 GEO.	LAT.-(N) 39.295510	LONG.-(W) 79.870202
NAD'83 UTM (M)	N. 4,350,178.82	E. 697,424.18
LANDING POINT		
NAD'83 S.P.C.(FT)	N. 289,571.50	E. 1,862,777.40
NAD'83 GEO.	LAT.-(N) 39.294426	LONG.-(W) 79.873562
NAD'83 UTM (M)	N. 4,350,054.93	E. 597,135.97
BOTTOM HOLE		
NAD'83 S.P.C.(FT)	N. 296,311.20	E. 1,859,768.60
NAD'83 GEO.	LAT.-(N) 39.312895	LONG.-(W) 79.884295
NAD'83 UTM (M)	N. 4,352,083.16	E. 596,185.12

REFERENCES



Notes on Survey

1. No water wells were found within 250' of proposed gas well. No agricultural buildings less than or equal to 2500 sq. ft. or dwellings were found within 625' of the center of proposed well pad.

SLS
Land & Energy Development
Solutions from the ground up.
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www.slsenergy.com

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 DIVISION OF ENVIRONMENTAL PROTECTION.

P.S. 849 *C. Victor Moyers*



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

DATE AUGUST 17, 20 17

REVISED _____, 20 _____

OPERATORS WELL NO. DARWIN 212

API WELL NO. 47 - 071 - 0040 H6A

STATE COUNTY PERMIT

MINIMUM DEGREE OF ACCURACY 1 / 2500 FILE NO. 8499P212R.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 LIQUID WASTE IF "GAS" PRODUCTION STORAGE _____ DEEP _____ SHALLOW

LOCATION: ELEVATION EXISTING: 1,440.4' / PROPOSED: 1,440.2' WATERSHED SANDY CREEK

DISTRICT RENO COUNTY PRESTON QUADRANGLE FELLOWSVILLE 7.5'

SURFACE OWNER MARCHETTA HUFFMAN ACREAGE 47.50±

ROYALTY OWNER MARCHETTA HUFFMAN ACREAGE 47.50± 01/12/2018

PROPOSED WORK: DRILL CONVERT _____ DRILL DEEPER _____ REDRILL _____ FRACTURE OR STIMULATE PLUG OFF OLD FORMATION _____ PERFORATE NEW FORMATION _____ PLUG AND ABANDON _____ CLEAN OUT AND REPLUG _____ OTHER _____

PHYSICAL CHANGE IN WELL (SPECIFY) _____ TARGET FORMATION MARCELLUS (LATERAL) ESTIMATED DEPTH 15,615' TMD / 7,692' TVD (LATERAL)

WELL OPERATOR ARSENAL RESOURCES DESIGNATED AGENT WILLIAM VEIGEL

ADDRESS 6031 WALLACE RD. EXT. SUITE 300 WEXFORD, PA 15090 ADDRESS 65 PROFESSIONAL PLACE BRIDGEPORT, WV 26330

LONGITUDE (NAD'83) 79°52'30" (BOTTOM HOLE) 7445' 13,777' LONGITUDE (NAD'83) 79°50'00" (TOP HOLE)

WV 849 P212R.dwg - SHEET 1 OF 2

**ARSENAL RESOURCES
DARWIN 212**



OWNERSHIP FOR SURFACE TRACTS AND ADJOINERS

Dist Name	Dist	Map	Parcel	SURFACE OWNER	Book	Page	Acage
BARBOUR COUNTY							
COVE	3	3	1	LINDLEY MARY K	347	121	31.84
COVE	3	3	1.1	WV DEPT OF HIGHWAYS	374	158	0.06
COVE	3	3	2	MATLICK HARRIETT HRS C/O RAMONA SCARTON	WB 4	554	5.00
COVE	3	3	4	SIGLEY RALPH D & GERDA J	315	8	103.00
COVE	3	4	36.1	REEDY JOSEPH B & CATHY W	421	132	2.96
COVE	3	4	36.2	PHILLIPS FOREST C & PEGGY S	360	37	3.40
COVE	3	4	36.3	PHILLIPS FOREST C & PEGGY S	298	260	3.84
COVE	3	4	36.4	PHILLIPS FOREST C & PEGGY S (H)	298	30	0.24
COVE	3	4	36.5	PHILLIPS DONALD & PATRICIA	449	257	2.11
COVE	3	4	38	HAMILTON TERRY	203	292	18.10
PRESTON COUNTY							
RENO	4	9	12	CLARKSON JOHN B & LORETTA J	474	339	122.75
RENO	4	9	12.1	RIDDLE KENNETH & DEBRA	636	685	16.00
RENO	4	9	13	CLARKSON JOHN B & LORETTA J	582	428	5.00
RENO	4	9	14.2	GRAGG WILLIAM W & MILDRED	404	251	120.00
RENO	4	9	16	HERSHMAN FAMILY IRREVOCABLE TRUST	753	523	110.84
RENO	4	15	1	CLARKSON ROBERT F	592	224	82.70
RENO	4	15	2	CLARKSON JOHN B & LORETTA J	572	169	41.56
RENO	4	15	3	WAGNER WAYNE R & GLORIA	595	127	64.06
RENO	4	15	5	WAGNER FAMILY IRREVOCABLE TRUST	W75	580	99.32
RENO	4	15	6	CLARKSON JOHN B & LORETTA J	W47	190	172.00
RENO	4	15	7	WAGNER WAYNE R & GLORIA F	571	211	42.34
RENO	4	15	8	CLUTTER GLENN W & CAROLYN S	759	118	145.59
RENO	4	15	9	HALL MARK A HEIRS	W55	558	5.00
RENO	4	15	9.1	RIVELY DAVID L CHOE-RIVELY ENSUG	625	1018	93.75
RENO	4	15	9.3	PHILLIPS RICHARD A & TAMMY L	583	699	1.15
RENO	4	15	9.4	HALL MARK A HEIRS	W55	558	13.14
RENO	4	15	9.5	HALL MARK A HEIRS	W55	558	3.46
RENO	4	15	10	DENNISON W H HRS ET AL	F26	227	0.25
RENO	4	15	11	KNOTTS ROBERTA A	744	32	9.87
RENO	4	15	12	AUSTIN ROBERTA	570	903	80.10
RENO	4	15	12.1	KNOTTS ROBERTA A	744	32	3.00
RENO	4	15	14	RUNNER HARRISON HRS	F22	16	13.75
RENO	4	15	16	RIVELY DAVID L CHOE-RIVELY ENSUG	625	1018	47.75
RENO	4	15	17	KNOTTS ROBERTA A	744	32	98.00
RENO	4	15	18	HAMILTON TERRY & BETTY	476	144	40.20
RENO	4	15	19	MYERS EDWARD C & DOROTHY J	530	580	1.50
RENO	4	15	20	CLARKSON JOHN B & LORETTA J	388	459	41.25
RENO	4	15	21	CLARKSON JOHN B & LORETTA J	595	770	71.50
RENO	4	15	22.1	CLARKSON JOHN B & LORETTA J	459	17	1.23
RENO	4	15	23	HAMILTON FAMILY TRUST	724	189	34.00
RENO	4	16	35	HAMILTON TERRY D & BETTY	559	543	32.24
RENO	4	22	1	RIVELY DAVID L CHOE-RIVELY ENSUG	625	1018	47
RENO	4	22	2	POLING FRID B & JUDITH A	702	617	90.19
RENO	4	22	2.1	POLING ROBERT L & HOLLE R	705	548	2.00
RENO	4	22	3	HAMILTON TERRY & BETTY	416	566	25.00
RENO	4	22	4	CLARKSON DAVID A & CHRISTINA L CLARKSON ROBERT F-LIFE	772	808	167.635
RENO	4	22	5	HAMILTON TERRY D & BETTY	371	544	57.43
RENO	4	22	6	SCHOOLEY LAWSON L	W38	237	51.04
RENO	4	22	7	WOLFE L DARWIN & KAREN	408	684	1.05
RENO	4	22	7.1	NEPTUNE ANDREW & EVAN NEPTUNE TERESA-LIFE	W74	919	0.75
RENO	4	22	8	WOLFE L DARWIN & KAREN	408	684	62.353
RENO	4	22	8.1	NEPTUNE ANDREW & EVAN NEPTUNE TERESA-LIFE	W74	919	2.00
RENO	4	22	8.2	WOLFE LORN A & SHANNON L S	730	172	5.237
RENO	4	22	9	BOLYARD STEVEN E & BECKY J	687	350	83.00
RENO	4	22	10	HUFFMAN MARCHEITA	424	617	130.75
RENO	4	22	11	HUFFMAN MARCHEITA	424	617	47.50
RENO	4	22	12	HAMILTON BRIAN M	650	465	5.765
RENO	4	22	13	HAMILTON FAMILY TRUST	724	189	24.75
RENO	4	23	1	HAMILTON TERRY D & BETTY	W68	644	95.066
RENO	4	23	1.2	HAMILTON KETH L & DEBORAH A	649	251	4.93
RENO	4	23	22	BOLYARD WILLARD H	W70	405	65.80
RENO	4	23	23	BOLYARD WILLARD H	W70	405	17.00
TAYLOR COUNTY							
FETTERMAN	6	24	22	RIDDLE KENNETH & DEBRA	282	90	35.85
KNOTTSVILLE	7	4	13	CLARKSON ROBERT F	282	260	59.225
KNOTTSVILLE	7	11	4.17	BOLYARD CARROLL L	279	344	23.15
KNOTTSVILLE	7	11	5.9	CELIK ISMAIL	279	347	18.65

FILE NO. 8499P212R.dwg
 DATE AUGUST 17, 20 17
 REVISED _____, 20 ____
 OPERATORS WELL NO. DARWIN 212 **146A**
 API WELL NO. **47** — **077** — **00640**
 STATE COUNTY PERMIT



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



01/12/2018

WELL OPERATOR ARSENAL RESOURCES
 ADDRESS 6031 WALLACE RD. EXT. SUITE 300
 WEXFORD, PA 15090

DESIGNATED AGENT WILLIAM VEIGEL
 ADDRESS 65 PROFESSIONAL PLACE
 BRIDGEPORT, WV 26330

COUNTY NAME PERMIT