

LATITUDE(NAD'83) 39°20'00" TOP HOLE

10,409'

BOTTOM HOLE

3642'

LATITUDE(NAD'83) 39°20'00"

FORM MW-5 - SHEET 1 OF 2

LONGITUDE (NAD'83) 79°52'30" (BOTTOM HOLE)

LONGITUDE (NAD'83) 79°50'00" (TOP HOLE)

COUNTY NAME PERMIT

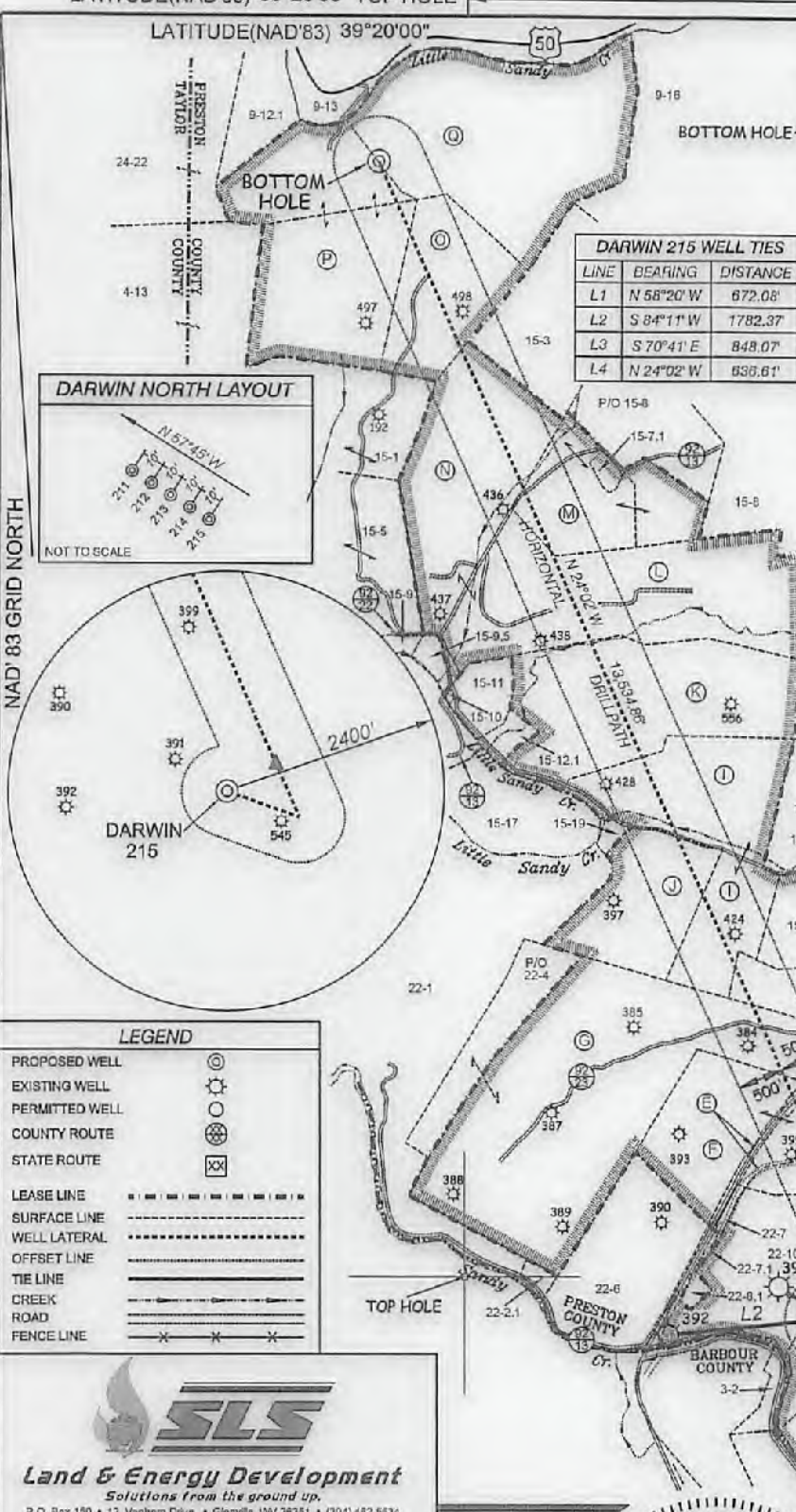
PRESTON COUNTY			
DESIGNATOR	TM-PAR.	SURFACE OWNER	SURFACE ACREAGE
A	22-11	MARCHETTA HUFFMAN	47.50±
B	22-22	WILLARD H. BOLYARD	65.80±
C	22-8	L. DARWIN & KAREN WOLFE	62.36±
D	22-8.2	LORN & SHANNON WOLFE	5.23±
E		STATE OF WV (OLD MORGANTOWN-BEVERLY TURNPIKE & W.V. ROUTE 92)	14.42±
F	22-5	TERRY & BETTY HAMILTON	57.18±
G	22-4	DAVID A & CHRISTINA L. CLARKSON ROBERT P. CLARKSON (LIFE)	167.83±
H	22-13	HAMILTON FAMILY TRUST	24.75±
I	15-21	JOHN B & LORETTA J CLARKSON	71.50±
J	15-18	TERRY & BETTY HAMILTON	40.20±
K	15-12	ROBERTA ALSTIN	80.10±
L	15-6	JOHN B & LORETTA J CLARKSON	172.00±
M	15-7	WAYNE WAGNER ET AL.	102.78±
N	15-6	JOHN B & LORETTA J CLARKSON	172.00±
O	15-2	JOHN B & LORETTA J CLARKSON	41.66±
P	9-12	JOHN B & LORETTA J CLARKSON	132.75±
Q	9-14.2	WILLIAM W. & MILDRED GRAGG	120±

DARWIN 215 WELL TIES		
LINE	BEARING	DISTANCE
L1	N 58°20' W	672.08'
L2	S 8°11' W	1782.37'
L3	S 70°41' E	848.07'
L4	N 24°02' W	838.61'

ARSENAL RESOURCES DARWIN 215			
(S.P.C. NORTH ZONE) (UTM(M) ZONE 17 NORTH)			
NAD'83 S.P.C.(FT)	N. 289,946.28	E. 1,863,755.23	
NAD'83 GEO.	LAT-(N) 39.295466	LONG-(W) 79.870112	
NAD'83 UTM (M)	N. 4,350,174.07	E. 597,432.01	
LANDING POINT			
NAD'83 S.P.C.(FT)	N. 290,247.10	E. 1,864,296.20	
NAD'83 GEO.	LAT-(N) 39.296298	LONG-(W) 79.868205	
NAD'83 UTM (M)	N. 4,350,268.48	E. 597,595.31	
BOTTOM HOLE			
NAD'83 S.P.C.(FT)	N. 302,607.90	E. 1,858,782.30	
NAD'83 GEO.	LAT-(N) 39.330171	LONG-(W) 79.887876	
NAD'83 UTM (M)	N. 4,354,006.70	E. 595,852.72	

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.



LEGEND

- PROPOSED WELL: (Symbol)
- EXISTING WELL: (Symbol)
- PERMITTED WELL: (Symbol)
- COUNTY ROUTE: (Symbol)
- STATE ROUTE: (Symbol)
- LEASE LINE: (Symbol)
- SURFACE LINE: (Symbol)
- WELL LATERAL: (Symbol)
- OFFSET LINE: (Symbol)
- TIE LINE: (Symbol)
- CREEK: (Symbol)
- ROAD: (Symbol)
- FENCE LINE: (Symbol)

SLS
Land & Energy Development
Solutions from the ground up.
P.O. Box 190 • 12 Vanhook Drive • Glenville, WV 26031 • (304) 482-8834
www.slsurveys.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 11, 20 17
REVISED _____, 20 ____
OPERATORS WELL NO. DARWIN 215
API WELL NO. 47 - 077 - 00639
STATE COUNTY PERMIT

MINIMUM DEGREE OF ACCURACY 1 / 2500 FILE NO. 8499P215.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 INJECTION ___ WASTE DISPOSAL ___ 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±

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 21,738' 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 PLAGE BRIDGEPORT, WV 26330

**ARSENAL RESOURCES
DARWIN 215**



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	0.05
COVE	3	3	2	MATLICK HARRIETT HRS CO RAMONA SCARTON	WB 4	554	5.00
COVE	3	3	4	SIGLEY RALPH D & GLENDA J	315	8	103.00
COVE	3	4	36.1	RIBBY JOSPEH 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	298	200	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	GRAGO WILLIAM W & MILDRED	404	251	120.00
RENO	4	9	16	HERSEMAN 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	41.66
RENO	4	15	3	WAGNER WAYNER & GLORIA	595	127	64.05
RENO	4	15	5	CLARKSON FAMILY IRREVOCABLE TRUST	W75	580	59.32
RENO	4	15	6	CLARKSON JOHN B & LORETTA J	W47	190	172.00
RENO	4	15	7	WAGNER WAYNER & GLORIA F	571	211	42.34
RENO	4	15	7.1	SUMMERS THOMAS B & STACI S	746	829	2.053
RENO	4	15	8	CLUTTER GLENN W & CAROLYN S	759	118	145.59
RENO	4	15	9	HALL MARK A HEIRS	W55	538	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	538	13.14
RENO	4	15	9.5	HALL MARK A HEIRS	W55	538	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	590	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	32.74
RENO	4	22	1	RIVELY DAVID L CHOE-RIVELY ENSUG	625	1018	47
RENO	4	22	2	POLING FRED E & JUDITH A	702	617	90.19
RENO	4	22	2.1	POLING ROBERT L & HOLLIE 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	WOLFEL 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	WOLFEL 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 MARCHETTA	424	617	130.75
RENO	4	22	11	HUFFMAN MARCHETTA	424	617	47.50
RENO	4	22	12	HAMILTON BRIAN M	660	465	5.265
RENO	4	22	13	HAMILTON FAMILY TRUST	724	189	24.25
RENO	4	23	1	HAMILTON TERRY D & BETTY	W68	644	95.066
RENO	4	23	1.2	HAMILTON KEITH 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							
PETTERMAN	6	24	22	RIDDLE KENNETH & DEBRA	282	90	35.85
KNOTTVILLE	7	4	13	CLARKSON ROBERT F	282	260	59.225
KNOTTVILLE	7	11	4.17	BOLYARD CARROLL L	279	344	73.15
KNOTTVILLE	7	11	5.9	CELIK ISMAIL	279	347	38.65

FILE NO. 8499P215.dwg
 DATE AUGUST 11, 20 17
 REVISED _____, 20 _____
 OPERATORS WELL NO. DARWIN 215
 API WELL NO. 47 — STATE 071 — COUNTY 00639 HVA
 NO. STATE COUNTY PERMIT



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

01/18/2018



COUNTY NAME
 PERMIT

WELL OPERATOR ARSENAL RESOURCES DESIGNATED AGENT WILLIAM VEIGEL
 ADDRESS 6031 WALLACE RD. EXT. SUITE 300 ADDRESS 65 PROFESSIONAL PLACE
 WEXFORD, PA 15090 BRIDGEPORT, WV 26330