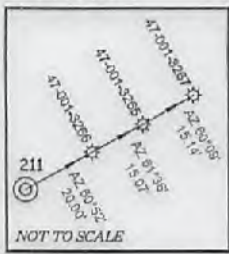


NOTES ON SURVEY

1. NO WATER WELLS WERE FOUND WITHIN 250' OF PROPOSED GAS WELL.
2. ONE DWELLING IS LOCATED WITHIN 625' OF THE CENTER OF WELL PAD.
3. WELL SPOT CIRCLE & TOPO MARK SCALE (SHELDON) 1"=2000'

MACKEY WOLFE PAD LAYOUT



**ARSENAL RESOURCES
MACKEY WOLFE 211**

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

NAD'83 S.P.C.(FT)	N. 275,369.0	E. 1,859,966.3
NAD'83 GEO.	LAT-(N) 39.255388	LONG-(W) 79.886741
NAD'83 UTM (M)	N. 4,345,706.5	E. 596,052.8

LANDING POINT

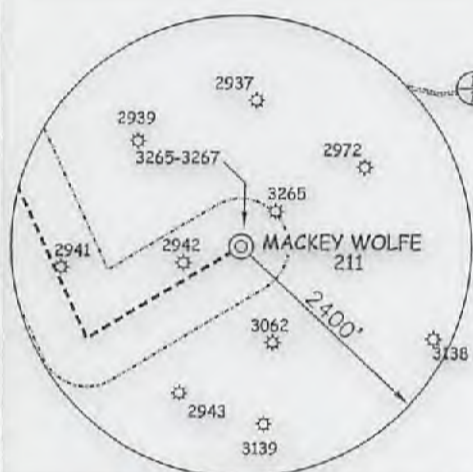
NAD'83 S.P.C.(FT)	N. 274,987.90	E. 1,857,110.4
NAD'83 GEO.	LAT-(N) 39.254320	LONG-(W) 79.893360
NAD'83 UTM (M)	N. 4,345,582.9	E. 595,483.1

BOTTOM HOLE

NAD'83 S.P.C.(FT)	N. 283,411.4	E. 1,853,288.8
NAD'83 GEO.	LAT-(N) 39.277400	LONG-(W) 79.906990
NAD'83 UTM (M)	N. 4,348,130.0	E. 594,276.1

NAD'83 GRID NORTH

TAG	SURFACE OWNER	TAX MAP / PCL.	ACREAGE
A	MARGARET WOLFE MACKEY (LIFE EST) & JOHN M. WOLFE	7-21	226.815±
B	CATHARINE WOLFE	7-21.3	2.32±
C	MARGARET WOLFE MACKEY (LIFE EST) & JOHN M. WOLFE	7-21.2	1.865±
D	STATE OF WV MORGANTOWN-BEVERLY TURNPIKE		
E	HAZEL N. WOLFE HEIRS	7-21.1	27.65±
F	JAMES PITZER	7-10	89.98±
G	SCOTT & DENISE HARSHBERGER	7-11.3	187.83±
H	CATHARINE WOLFE	7-13	65±
I	DAVID & MARY KEENER	7-4	64±
J	ZACKARY BERGDORF	7-3	65.15±
K	GREGORY & LISA LOOK	4-5.1	10±
L	RUSSELL KEENER	8-5	74.80±
M	ZACKARY BERGDORF ET AL.	4-6.2	41.53±
N	DELMAS PITZER ET AL.	4-4	99±

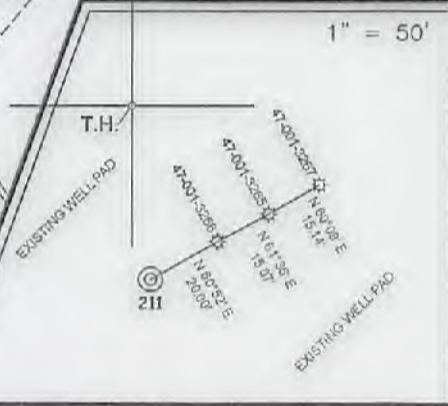


SLS
Land & Energy Development
Solutions from the ground up.
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www.slsurveys.com

LEGEND

- LEASE LINE
- SURFACE LINE
- WELL LATERAL
- 500' OFFSET LINE
- TIE LINE
- CREEK
- ROAD
- FENCE LINE
- COUNTY ROUTE
- STATE ROUTE
- PROPOSED WELL
- EXISTING WELL
- PERMITTED WELL
- LEASE TAG

REFERENCES



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.
677 Gregory A. Smith



(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS.
DATE MARCH 2, 20 18
REVISED _____
OPERATORS WELL NO. MACKEY WOLFE 211
API WELL NO. 47 - 001 - 03361
STATE COUNTY PERMIT

MINIMUM DEGREE OF ACCURACY 1 / 2500 FILE NO. 7968NP211.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 INJECTION _____ WASTE DISPOSAL _____ IF "GAS" PRODUCTION X STORAGE _____ DEEP _____ SHALLOW X

LOCATION:
ELEVATION 1,626' WATERSHED LITTLE COVE RUN
DISTRICT COVE COUNTY BARBOUR QUADRANGLE THORNTON 7.5'

SURFACE OWNER MARGARET WOLFE MACKEY (LIFE EST) & JOHN M. WOLFE ACREAGE 226.185±
ROYALTY OWNER MARGARET WOLFE MACKEY (LIFE EST) & JOHN M. WOLFE ET AL. ACREAGE 226.185±

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

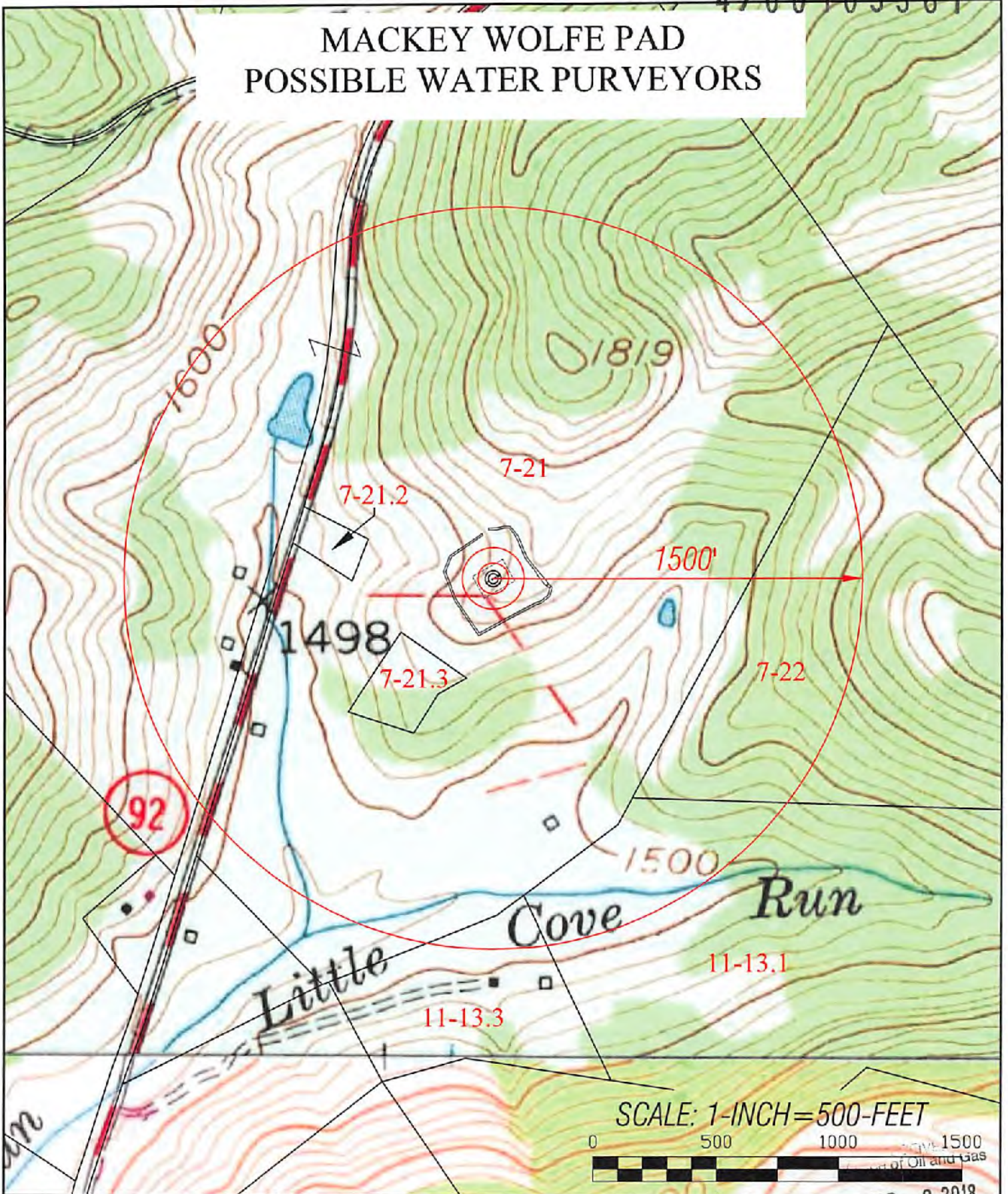
PHYSICAL CHANGE IN WELL (SPECIFY) _____ TARGET FORMATION MARCELLUS
ESTIMATED DEPTH 17,936.1' TMD / 7,885' TVD

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

B.H. LONGITUDE 79°52'30"
T.H. 13,214'

07/13/2018

MACKEY WOLFE PAD POSSIBLE WATER PURVEYORS



SCALE: 1-INCH=500-FEET



MAR 8 2018



TOPO SECTIONS OF:
THORNTON & NESTORVILLE
WV 7.5' QUADS

OPERATOR:

ARSENAL RESOURCES
65 Professional Place, Suite 200
Bridgeport, WV 26330

DRAWN BY: K.G.M.	FILE NO. 7968	DATE 02-28-18	CADD FILE: 7968WATERPURVEYORS.DWG
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COUNTY BARBOUR	DISTRICT COVE
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07/13/2018