

MONUMENT REFERENCE TABLE

| LINE NO | BEARING | DISTANCE |
|---------|-------------|----------|
| R1 | S26°42'45"W | 493.25' |
| R2 | N56°52'47"E | 436.25' |
| R3 | N09°44'58"W | 525.99' |
| R4 | N73°57'05"E | 2181.19' |
| R5 | N35°07'03"E | 1012.43' |

LEGEND

- TOPO MAP POINT
- PROPOSED WELL
- PRIVATE WATER WELL
- SPRING LOCATION
- LEASED NUMBER BASED ON ATTACHED WVA6A1
- ALL ARE POINTS UNLESS OTHERWISE NOTED
- MINERAL TRACT BOUNDARY
- UNIT BOUNDARY
- PARCEL LINES
- PROPOSED HORIZONTAL WELL
- WELL REFERENCE
- STREAM/POND/WATERWAY
- ROAD

WELLS WITHIN 3000'
TWO (2) DEEP WELLS WITHIN 3000'

| SURFACE HOLE LOCATION (SHL) | APPROXIMATE LANDING POINT | BOTTOM HOLE LOCATION (BHL) |
|--|--|--|
| UTM 17 - NAD83 N: 4422707.021(m) E: 531912.908(m) NAD27, WV NORTH N: 530501.877(ft) E: 1684172.822(ft) LAT/LON - NAD83 LAT: N39 9538965 LON: W80.6263877 | UTM 17 - NAD83 N: 4422651.720(m) E: 532048.681(m) NAD27, WV NORTH N: 531312.945(ft) E: 1684615.315(ft) LAT/LON - NAD83 LAT: N39 9533931 LON: W80.6248010 | UTM 17 - NAD83 N: 4423879.913(m) E: 531188.690(m) NAD27, WV NORTH N: 535390.540(ft) E: 1681860.676(ft) LAT/LON - NAD83 LAT: N39 9644909 LON: W80.6348100 |

- NOTES
- There are no water wells or developed springs within 250' of proposed well
 - There are no existing buildings within 625' of proposed well
 - Proposed well is greater than 100' from perennial stream, wetland, pond, reservoir or lake
 - There are no native trout streams within 300' of proposed well
 - Proposed well is greater than 1000' from surface/groundwater intake or public water supply
 - It is not the purpose or intention of this plat to represent surveyed locations of the surface or mineral parcels depicted hereon. The location of the boundary lines, as shown, are based on record deed descriptions, field evidence found and/or tax map position, unless otherwise noted.
 - Mineral and Surface parcel lines are the same

FILE # RIVERRUN-2UH (MH)
DRAWING # RIVERRUN-2MH-R1.DWG
SCALE: 1"=1500'
MINIMUM DEGREE OF ACCURACY: 1/2500
PROVEN SOURCE OF ELEVATION: USGS MONUMENT JX0742: 1343.3'

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: [Signature]
R.P.E.: 21452 L.L.S.: P.S. NO.



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

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

WATERSHED: WHEELING CREEK - UPPER OHIO RIVER ELEVATION: 1,264.94'
COUNTY/DISTRICT: MARSHALL / WEBSTER QUADRANGLE: MOUNDSVILLE, WV
SURFACE OWNER: APP MINERALS LLC ACREAGE: 183.31
OIL & GAS ROYALTY OWNER: APP MINERALS LLC

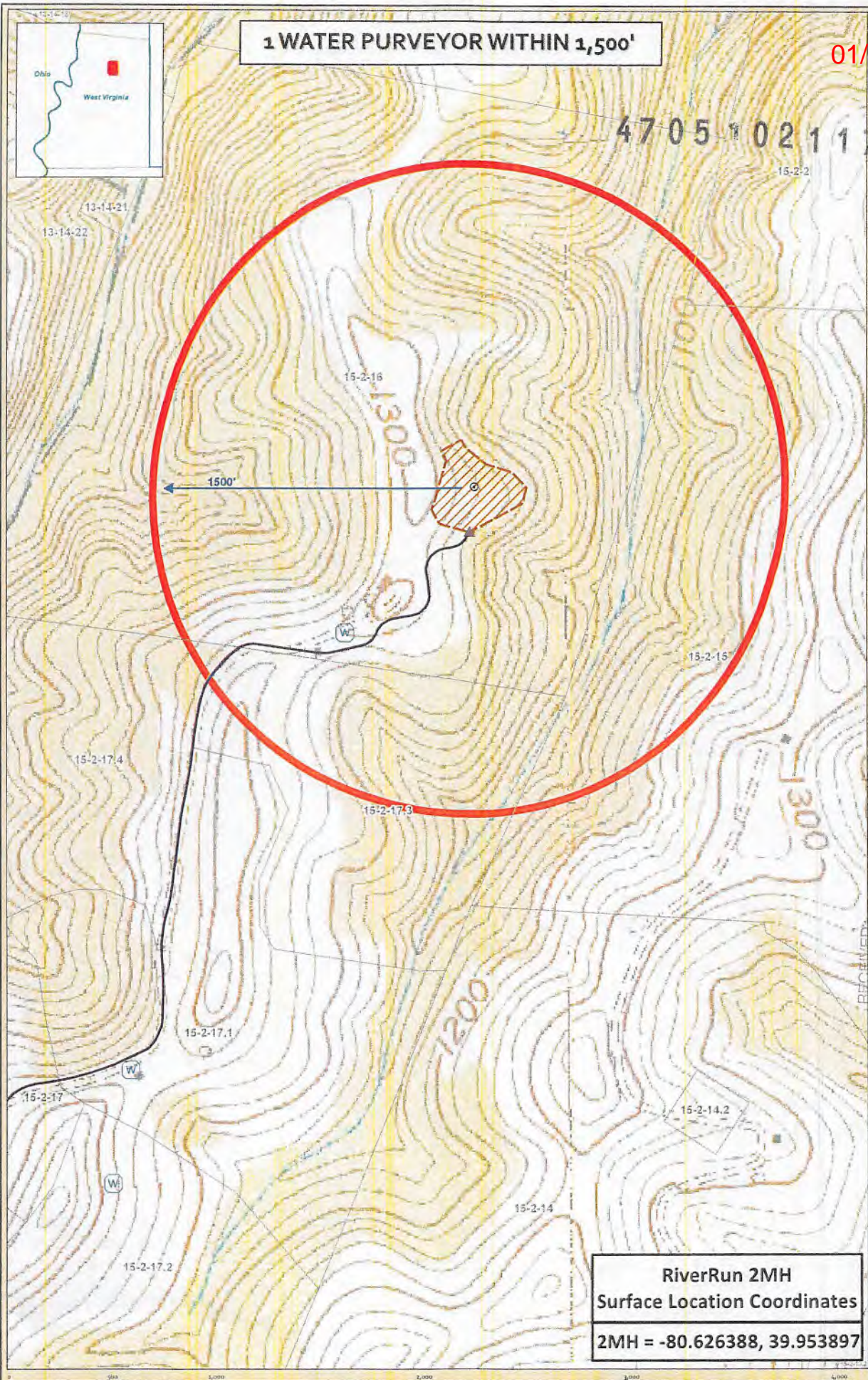
DATE: July 31, 2018 - REV - October 15, 2018
OPERATOR'S WELL #: RIVERRUN-2UH (MH)
API WELL # 47 051 02117H6A
STATE COUNTY PERMIT

DRILL CONVERT DRILL DEEPER REDRILL FRACTURE OR STIMULATE
PLUG OFF OLD FORMATION PERFORATE NEW FORMATION PLUG AND ABANDON
CLEAN OUT & REPLUG OTHER CHANGE (SPECIFY)

TARGET FORMATION: MARCELLUS ESTIMATED DEPTH: TVD: 6,720' ± TMD: 12,639' ±
WELL OPERATOR: AMERICAN PETROLEUM PARTNERS OPERATING, LLC DESIGNATED AGENT: STEVEN GREEN
Address: 4600 J. BARRY COURT, SUITE 310 Address: 300 SUMMERS ST, SUITE 1000
City CANONSBURG State PA Zip Code 15317 City CHARLESTON State WV Zip Code 25301

1 WATER PURVEYOR WITHIN 1,500'

01/18/2019



RiverRun 2MH
Surface Location Coordinates
2MH = -80.626388, 39.953897

RECEIVED
Office of Oil and Gas

AUG 9 2018

WV Department of
Environmental Protection

| | | | |
|------------------------------------|--|---|--------------------------------------|
| RiverRun 2MH - Water Source | | | |
| Marshall County West Virginia | Coordinate System: NAD 83 (GCS NAD 83) System: UTM Linear Units: Meter | Map Scale Units: 10,000 1 inch = 300 feet | Map Author: JCT Map Date: 01/2018 |
| Well SHL Well Pad | Access Rd Intersection Access Road Parcels | Water Well 1,500' Buffer | AMERICAN PETROLEUM PARTNERS |