



GOFF LEASE WELL NO. 19 HM

NOTES ON SURVEY

1. TIES TO WELLS, REFERENCES, AND CORNERS ARE BASED ON GRID NORTH FOR THE WV STATE PLANE COORDINATE SYSTEM NORTH ZONE NAD 27.
2. LEASE BOUNDARY SHOWN HEREON TAKEN FROM DEED BOOK 70 PAGE 152 AND ADJOINING DEEDS.
3. SURFACE OWNER AND ADJOINER INFORMATION TAKEN FROM THE ASSESSOR AND COUNTY CLERK RECORDS OF HARRISON COUNTY IN JULY, 2013.
4. WELL COORDINATES ESTABLISHED BY DGPS (SURVEY GRADE).
5. 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.

WELL NO. 19 HM TOP HOLE STATE PLANE COORDINATES (NORTH ZONE NAD 27) N. 284,455 E. 1,752,136 <hr/> TOP HOLE (NAD 27) LAT=(N) 39°16'39.6" LONG=(W) 80°22'32.1" <hr/> TOP HOLE (NAD 83) LAT=(N) 39°16'40.0" LONG=(W) 80°22'31.4" <hr/> TOP HOLE UTM (NAD 83) (N) 4,347,788 (E) 553,874
WELL NO. 19 HM LANDING POINT STATE PLANE COORDINATES (NORTH ZONE NAD 27) N. 284,626 E. 1,752,472 <hr/> LANDING POINT (NAD 27) LAT=(N) 39°16'41.4" LONG=(W) 80°22'27.8" <hr/> LANDING POINT (NAD 83) LAT=(N) 39°16'41.7" LONG=(W) 80°22'27.2" <hr/> LANDING POINT UTM (NAD 83) (N) 4,347,841 (E) 553,975
WELL NO. 19 HM BOTTOM HOLE STATE PLANE COORDINATES (NORTH ZONE NAD 27) N. 288,060 E. 1,751,262 <hr/> BOTTOM HOLE (NAD 27) LAT=(N) 39°17'15.2" LONG=(W) 80°22'43.7" <hr/> BOTTOM HOLE (NAD 83) LAT=(N) 39°17'15.5" LONG=(W) 80°22'43.0" <hr/> BOTTOM HOLE UTM (NAD 83) (N) 4,348,881 (E) 553,589

LEGEND

AS DRILLED	—
PROPOSED	---

NOTES ON SURVEY (CONT.)

6. PLAT UPDATED 05-05-17 TO SHOW AS DRILLED DATA PROVIDED BY ARSENAL RESOURCES.



LEGEND

LEASE LINE	
SURFACE LINE	
WELL LATERAL	
OFFSET LINE	
TIE LINE	
CREEK	
ROAD	
COUNTY ROUTE	
PROPOSED WELL	
EXISTING WELL	

AS DRILLED COORDINATES FOR WELL NO. 19HM

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

NAD27 S.P.C.(FT)	N. 284,458.0	E. 1,752,137.7
NAD27 GEO	LAT=(N) 39°16'39.7"	LONG=(W) 80°22'32.1"
NAD83 GEO	LAT=(N) 39°16'40.0"	LONG=(W) 80°22'31.4"
NAD83 UTM (M)	N. 4,347,789.0	E. 553,874.0

BOTTOM HOLE

NAD27 S.P.C.(FT)	N. 288,061.8	E. 1,751,073.9
NAD27 GEO	LAT=(N) 39°17'14.8"	LONG=(W) 80°22'46.1"
NAD83 GEO	LAT=(N) 39°17'14.9"	LONG=(W) 80°22'45.4"
NAD83 UTM (M)	N. 4,348,862.9	E. 553,531.7



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 APRIL 16, 20 14

REVISED 02/04/15 & 05/05/17

OPERATORS WELL NO. GOFF 19HM

API WELL NO. 47 - 033 - 5822

STATE COUNTY PERMIT

MINIMUM DEGREE OF ACCURACY 1 / 200 FILE NO. 8329P19(475-70)

PROVEN SOURCE OF ELEVATION DGPS (SUBMETER MAPPING GRADE) SCALE 1" = 2,000'

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 1122.80' WATERSHED WEST FORK RIVER

DISTRICT CLARK COUNTY HARRISON QUADRANGLE WOLF SUMMIT 7.5'

SURFACE OWNER H. DOTSON CATHER TRUSTEE ACREAGE 404.34±

ROYALTY OWNER H. DOTSON CATHER TRUSTEE ETAL ACREAGE 1087± & 20-1±

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

ESTIMATED DEPTH 7,089' TVD / TMD 11,284'

WELL OPERATOR PDC MOUNTAINEER, LLC DESIGNATED AGENT STEVEN P. JOHNSON

ADDRESS 120 GENESIS BOULEVARD ADDRESS 120 GENESIS BOULEVARD

BRIDGEPORT, WV 26330 BRIDGEPORT, WV 26330

LONGITUDE 80°22'30" 5,094'

COUNTY NAME

PERMIT

09/15/2014