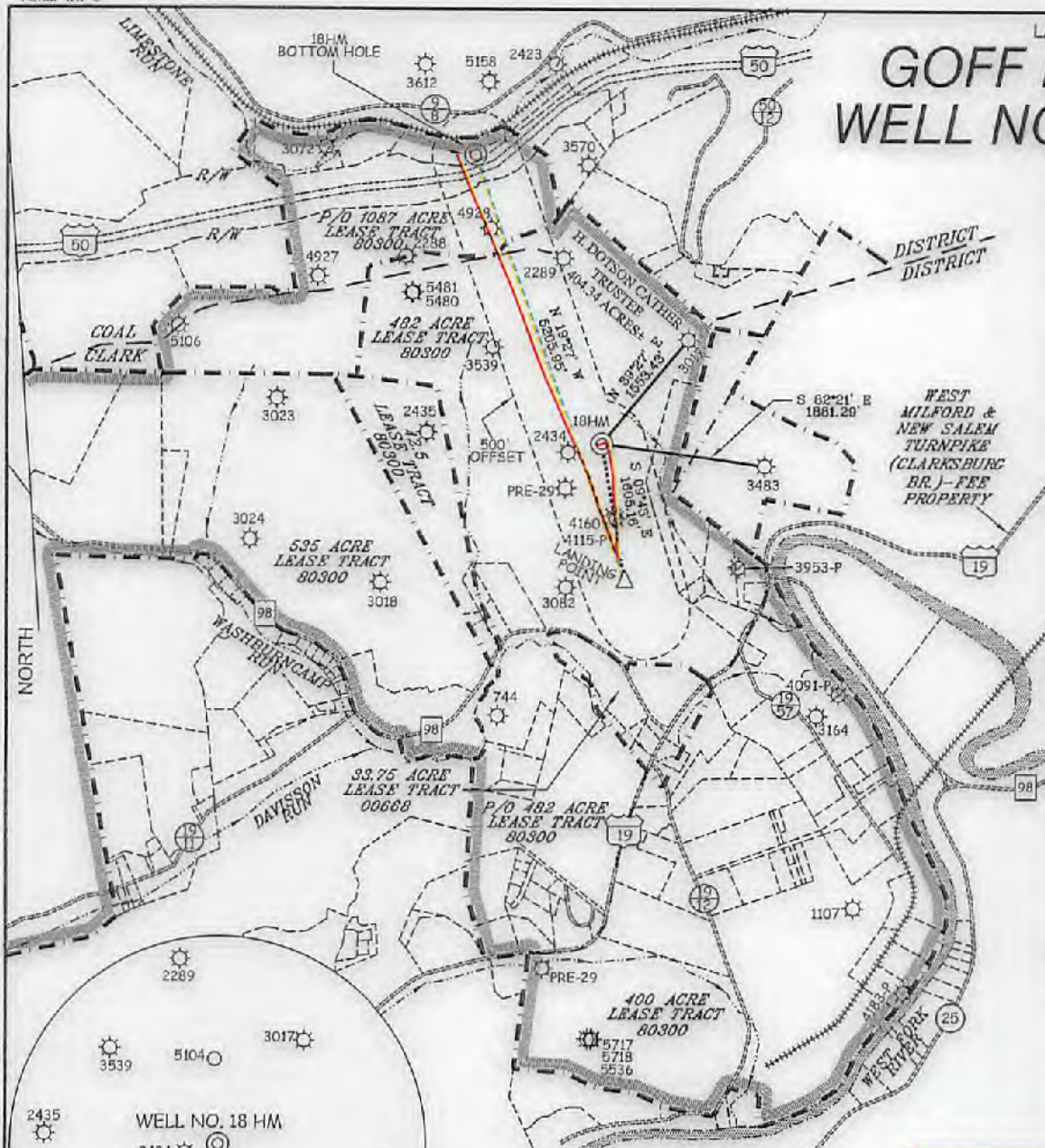


GOFF LEASE WELL NO. 18 HM

LATITUDE 39°17'30"

LONGITUDE 80°22'30"



WELL NO. 18 HM TOP HOLE STATE PLANE COORDINATES (NORTH ZONE NAD 27) N. 284,475 E. 1,752,114 TOP HOLE (NAD 27) LAT=(N) 39°16'39.8" LONG=(W) 80°22'32.4" TOP HOLE (NAD 83) LAT=(N) 39°16'40.2" LONG=(W) 80°22'31.7" TOP HOLE UTM (NAD 83) (N) 4,347,794 (E) 553,867
WELL NO. 18 HM LANDING POINT STATE PLANE COORDINATES (NORTH ZONE NAD 27) N. 282,893 E. 1,752,386 LANDING POINT (NAD 27) LAT=(N) 39°16'24.2" LONG=(W) 80°22'28.7" LANDING POINT (NAD 83) LAT=(N) 39°16'24.6" LONG=(W) 80°22'28.1" LANDING POINT UTM (NAD 83) (N) 4,347,313 (E) 553,967
WELL NO. 18 HM BOTTOM HOLE STATE PLANE COORDINATES (NORTH ZONE NAD 27) N. 287,802 E. 1,750,852 BOTTOM HOLE (NAD 27) LAT=(N) 39°17'12.6" LONG=(W) 80°22'51.4" BOTTOM HOLE (NAD 83) LAT=(N) 39°17'12.9" LONG=(W) 80°22'50.7" BOTTOM HOLE UTM (NAD 83) (N) 4,348,800 (E) 553,404

LEGEND

AS DRILLED ———

PROPOSED - - - - -

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

AS DRILLED COORDINATES FOR WELL NO. 18HM
(S.P.C. NORTH ZONE) (UTM(M) ZONE 17 NORTH)

NAD27 S.P.C.(FT)	N. 284,476.0	E. 1,752,115.1
NAD27 GEO.	LAT=(N) 39°16'39.9"	LONG=(W) 80°22'32.4"
NAD83 GEO.	LAT=(N) 39°16'40.2"	LONG=(W) 80°22'31.7"
NAD83 UTM (M)	N. 4,347,794	E. 553,867.0

BOTTOM HOLE

NAD27 S.P.C.(FT)	N. 287,802.8	E. 1,750,852.1
NAD27 GEO.	LAT=(N) 39°17'12.6"	LONG=(W) 80°22'51.4"
NAD83 GEO.	LAT=(N) 39°17'12.9"	LONG=(W) 80°22'50.7"
NAD83 UTM (M)	N. 4,348,801.3	E. 553,404.5



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 6, 20 13

UPDATED MAY 7, 20 17

OPERATORS WELL NO. GOFF 18HM

API WELL NO. 47 - 33 - 05820

STATE COUNTY PERMIT

MINIMUM DEGREE OF ACCURACY 1 / 200 FILE NO. 8099P18R2(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: GROUND PROPOSED

ELEVATION 1,129' 1,126' 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±

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 14,038'

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

ADDRESS 120 GENESIS BOULEVARD ADDRESS 120 GENESIS BOULEVARD

BRIDGEPORT, WV 26330 BRIDGEPORT, WV 26330

09/15/2017

COUNTY NAME PERMIT