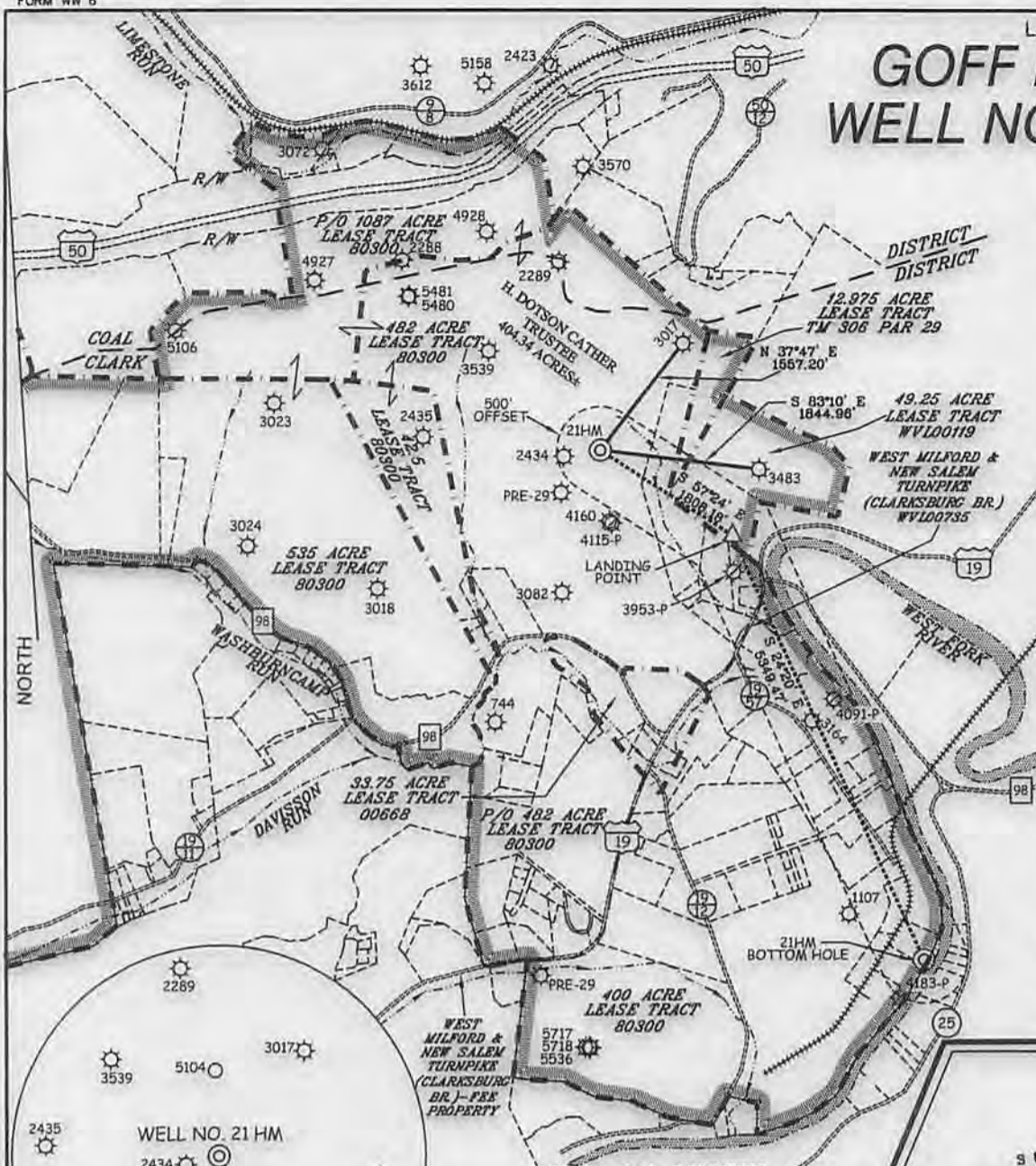


GOFF LEASE WELL NO. 21 HM

LATITUDE 39°17'30"

LONGITUDE 80°22'30"



WELL NO. 21 HM TOP HOLE STATE PLANE COORDINATES (NORTH ZONE NAD '27) N. 284,444 E. 1,752,147 TOP HOLE (NAD 27) LAT=(N) 39°16'39.5" LONG=(W) 80°22'32.0" TOP HOLE (NAD 83) LAT=(N) 39°16'39.9" LONG=(W) 80°22'31.3" TOP HOLE UTM (NAD 83) (N) 4,347,785 (E) 553,877
WELL NO. 21 HM LANDING POINT STATE PLANE COORDINATES (NORTH ZONE NAD '27) N. 283,470 E. 1,753,670 LANDING POINT (NAD 27) LAT=(N) 39°16'30.1" LONG=(W) 80°22'12.5" LANDING POINT (NAD 83) LAT=(N) 39°16'30.4" LONG=(W) 80°22'11.8" LANDING POINT UTM (NAD 83) (N) 4,347,495 (E) 553,346
WELL NO. 21 HM BOTTOM HOLE STATE PLANE COORDINATES (NORTH ZONE NAD '27) N. 278,596 E. 1,755,874 BOTTOM HOLE (NAD 27) LAT=(N) 39°15'42.1" LONG=(W) 80°21'43.8" BOTTOM HOLE (NAD 83) LAT=(N) 39°15'42.4" LONG=(W) 80°21'43.2" BOTTOM HOLE UTM (NAD 83) (N) 4,346,022 (E) 555,042

REFERENCES



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 OR DEVELOPED SPRINGS WITHIN 250'. NO APPLICABLE DWELLINGS OR BUILDINGS WITHIN 625'.



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. 2266 *[Signature]*

(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS.
 DATE MAY 21 20 14
 REVISED JUNE 5 20 14
 OPERATORS WELL NO. GOFF 21HM
 API WELL NO. 47 - 33 - 05823
 STATE COUNTY PERMIT

MINIMUM DEGREE OF ACCURACY 1 / 200 FILE NO. 8099P21R3(475-70)
 PROVEN SOURCE OF ELEVATION DGPS (SURVEY GRADE) SCALE 1" = 2,000'

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

WELL TYPE: OIL <input type="checkbox"/> GAS <input checked="" type="checkbox"/>	LIQUID INJECTION <input type="checkbox"/>	WASTE DISPOSAL <input type="checkbox"/>	IF "GAS" PRODUCTION <input checked="" type="checkbox"/>	STORAGE <input type="checkbox"/>	DEEP <input type="checkbox"/>	SHALLOW <input checked="" type="checkbox"/>
LOCATION: PRE ELEVATION <u>1,126.70'</u>	POST ELEVATION <u>1126.30'</u>	WATERSHED <u>WEST FORK RIVER</u>				
DISTRICT <u>CLARK</u>	COUNTY <u>HARRISON</u>	QUADRANGLE <u>WOLF SUMMIT 7.5'</u>				
SURFACE OWNER <u>H. DOTSON CATHER TRUSTEE</u>	ACREAGE <u>404.34±</u>					
ROYALTY OWNER <u>H. DOTSON CATHER TRUSTEE ETAL & STATE OF W.V.(TURNPIKE)</u>	ACREAGE <u>1087±, 12.975±, & 49.25±</u>					
PROPOSED WORK: DRILL <input checked="" type="checkbox"/>	CONVERT <input type="checkbox"/>	DRILL DEEPER <input type="checkbox"/>	REDRILL <input type="checkbox"/>	FRACTURE OR STIMULATE <input checked="" type="checkbox"/>	PLUG OFF OLD <input type="checkbox"/>	
FORMATION <input type="checkbox"/>	PERFORATE NEW FORMATION <input type="checkbox"/>	PLUG AND ABANDON <input type="checkbox"/>	CLEAN OUT AND REPLUG <input type="checkbox"/>	OTHER <input type="checkbox"/>		
PHYSICAL CHANGE IN WELL (SPECIFY)	TARGET FORMATION <u>MARCELLUS</u>					
	ESTIMATED DEPTH <u>7,089' TVD / TMD 13,897'</u>					

WELL OPERATOR PDC MOUNTAINEER, LLC DESIGNATED AGENT STEVEN P. JOHNSON
 ADDRESS 120 GENESIS BOULEVARD BRIDGEPORT, WV 26330 ADDRESS 120 GENESIS BOULEVARD BRIDGEPORT, WV 26330

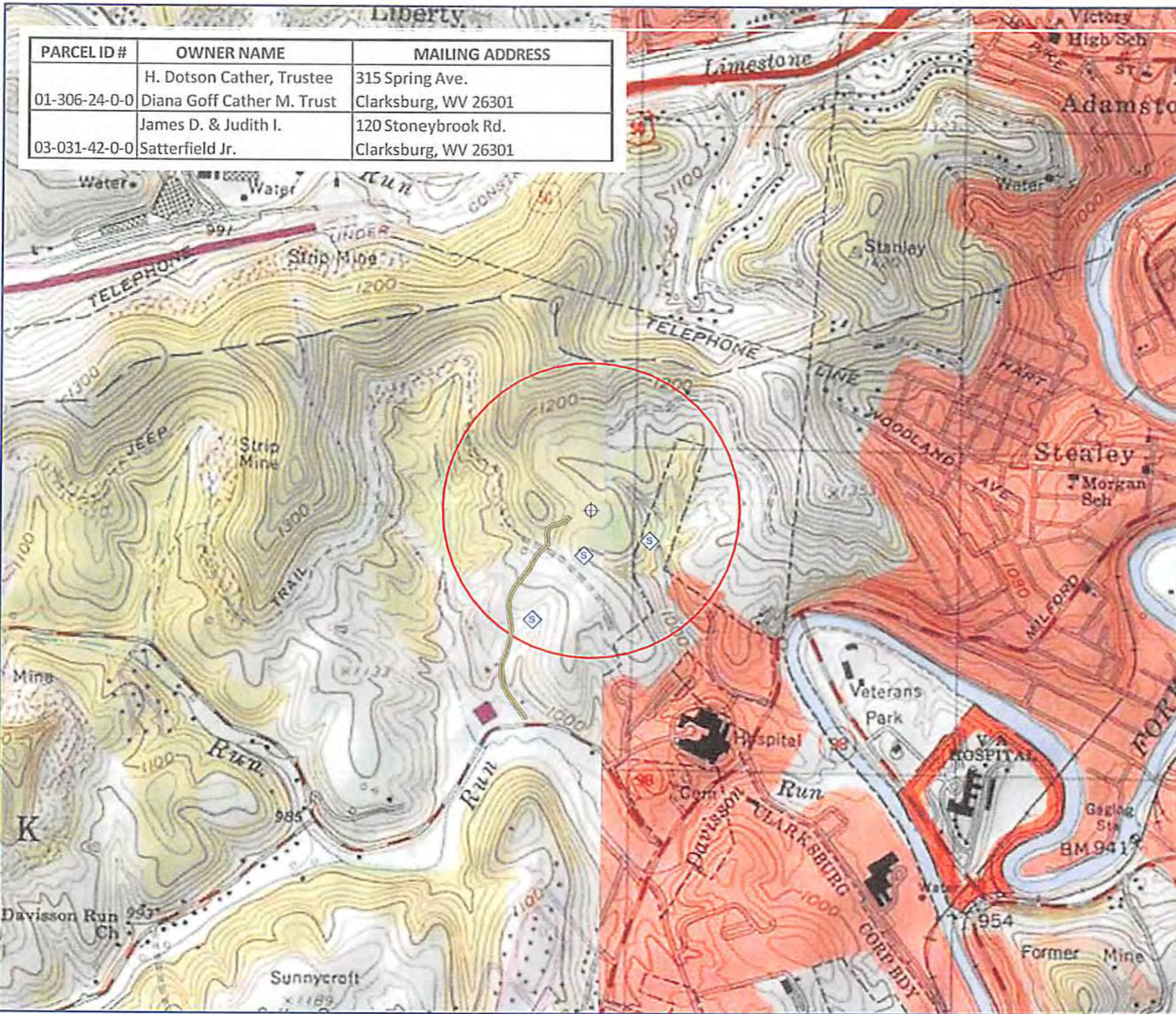
10/17/2014

COUNTY NAME PERMIT

4703305823

L:\Projects\PDC\GIS\SPDC_Goff_SM_PermitApp.mxd - Scale: 1:12,000 - 4/29/2014 2:11:17 PM - adrianad - MAD 1983 StatePlane West Virginia North FIPS 4701 Feet

PARCEL ID #	OWNER NAME	MAILING ADDRESS
01-306-24-0-0	H. Dotson Cather, Trustee	315 Spring Ave. Clarksburg, WV 26301
03-031-42-0-0	Diana Goff Cather M. Trust	Clarksburg, WV 26301
	James D. & Judith I.	120 Stoneybrook Rd. Clarksburg, WV 26301
	Satterfield Jr.	Clarksburg, WV 26301



Legend

- Spring
- Well
- Oil/Gas Well
- Access Road
- 1,500 ft Buffer

Notes:

DRAFTED BY:	SITE MAP		
DMC	GOFF 18HM, 19HM, 20HM AND 21HM		
CHECKED BY:	PDC MOUNTAINEER, LLC		
	GOFF 20HM		
REVIEWED BY:	HARRISON COUNTY, WV		
NORTH	Groundwater & Environmental Services, Inc.		
	827 FAIRMONT ROAD, SUITE 201, MORGANTOWN, WV 26501		
	SCALE IN FEET	DATE	FIGURE
		4-29-14	