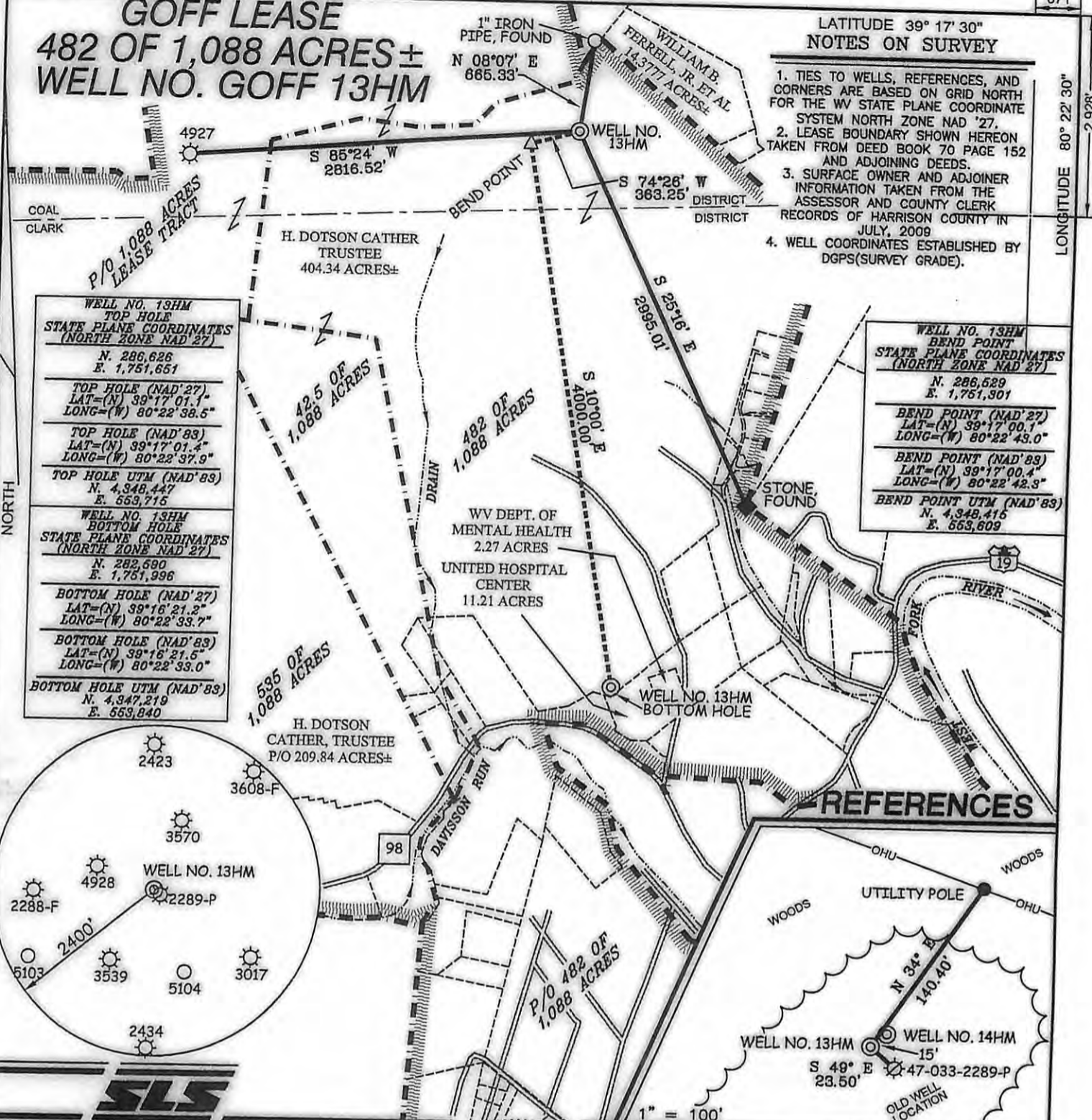


# GOFF LEASE 482 OF 1,088 ACRES ± WELL NO. GOFF 13HM

LATITUDE 39° 17' 30"  
NOTES ON SURVEY

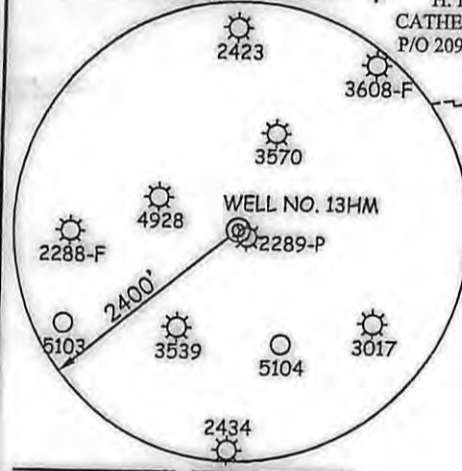
1. TIES TO WELLS, REFERENCES, AND CORNERS ARE BASED ON GRID NORTH FOR THE WV STATE PLANE COORDINATE SYSTEM NORTH ZONE NAD '27.
2. LEASE BOUNDARY SHOWN HEREON TAKEN FROM DEED BOOK 70 PAGE 152 AND ADJOINING DEEDS.
3. SURFACE OWNER AND ADJOINER INFORMATION TAKEN FROM THE ASSESSOR AND COUNTY CLERK RECORDS OF HARRISON COUNTY IN JULY, 2009
4. WELL COORDINATES ESTABLISHED BY DGPS (SURVEY GRADE).

LONGITUDE 80° 22' 30"  
2,928'



WELL NO. 13HM TOP HOLE STATE PLANE COORDINATES (NORTH ZONE NAD '27)	
N. 286,626	E. 1,751,651
TOP HOLE (NAD '27)	
LAT=(N) 39°17'01.1"	LONG=(W) 80°22'38.5"
TOP HOLE (NAD '83)	
LAT=(N) 39°17'01.4"	LONG=(W) 80°22'37.9"
TOP HOLE UTM (NAD '83)	
N. 4,348,447	E. 553,715
WELL NO. 13HM BOTTOM HOLE STATE PLANE COORDINATES (NORTH ZONE NAD '27)	
N. 282,690	E. 1,751,996
BOTTOM HOLE (NAD '27)	
LAT=(N) 39°16'21.2"	LONG=(W) 80°22'33.7"
BOTTOM HOLE (NAD '83)	
LAT=(N) 39°16'21.5"	LONG=(W) 80°22'33.0"
BOTTOM HOLE UTM (NAD '83)	
N. 4,347,219	E. 553,840

WELL NO. 13HM BEND POINT STATE PLANE COORDINATES (NORTH ZONE NAD '27)	
N. 286,529	E. 1,751,301
BEND POINT (NAD '27)	
LAT=(N) 39°17'00.1"	LONG=(W) 80°22'43.0"
BEND POINT (NAD '83)	
LAT=(N) 39°17'00.4"	LONG=(W) 80°22'42.3"
BEND POINT UTM (NAD '83)	
N. 4,348,416	E. 553,809



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 AUGUST 8, 20 10  
OPERATORS WELL NO. GOFF NO. 13HM  
API WELL NO. 47-033-05482H  
STATE COUNTY PERMIT

MINIMUM DEGREE OF ACCURACY 1/200 FILE NO. 7129P13HM (308-32)  
PROVEN SOURCE OF ELEVATION DGPS (SURVEY GRADE) SCALE 1" = 1000'

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 1,408' WATERSHED LIMESTONE RUN & DAVISSON RUN  
DISTRICT COAL COUNTY HARRISON QUADRANGLE WOLF SUMMIT 7.5'  
SURFACE OWNER H. DOTSON CATHER, TRUSTEE ACREAGE 404.34±  
ROYALTY OWNER H. DOTSON CATHER, TRUSTEE LEASE ACREAGE 1,088±  
PROPOSED WORK: LEASE NO. \_\_\_\_\_  
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 SHALE  
ESTIMATED DEPTH 7,275' TVD/ 11,700' MD

WELL OPERATOR PDC MOUNTAINEER, LLC DESIGNATED AGENT GARY W. FRIDLEY  
ADDRESS 120 GENESIS BOULEVARD BRIDGEPORT, WV 26330 ADDRESS 120 GENESIS BOULEVARD BRIDGEPORT, WV 26330

07/19/2013