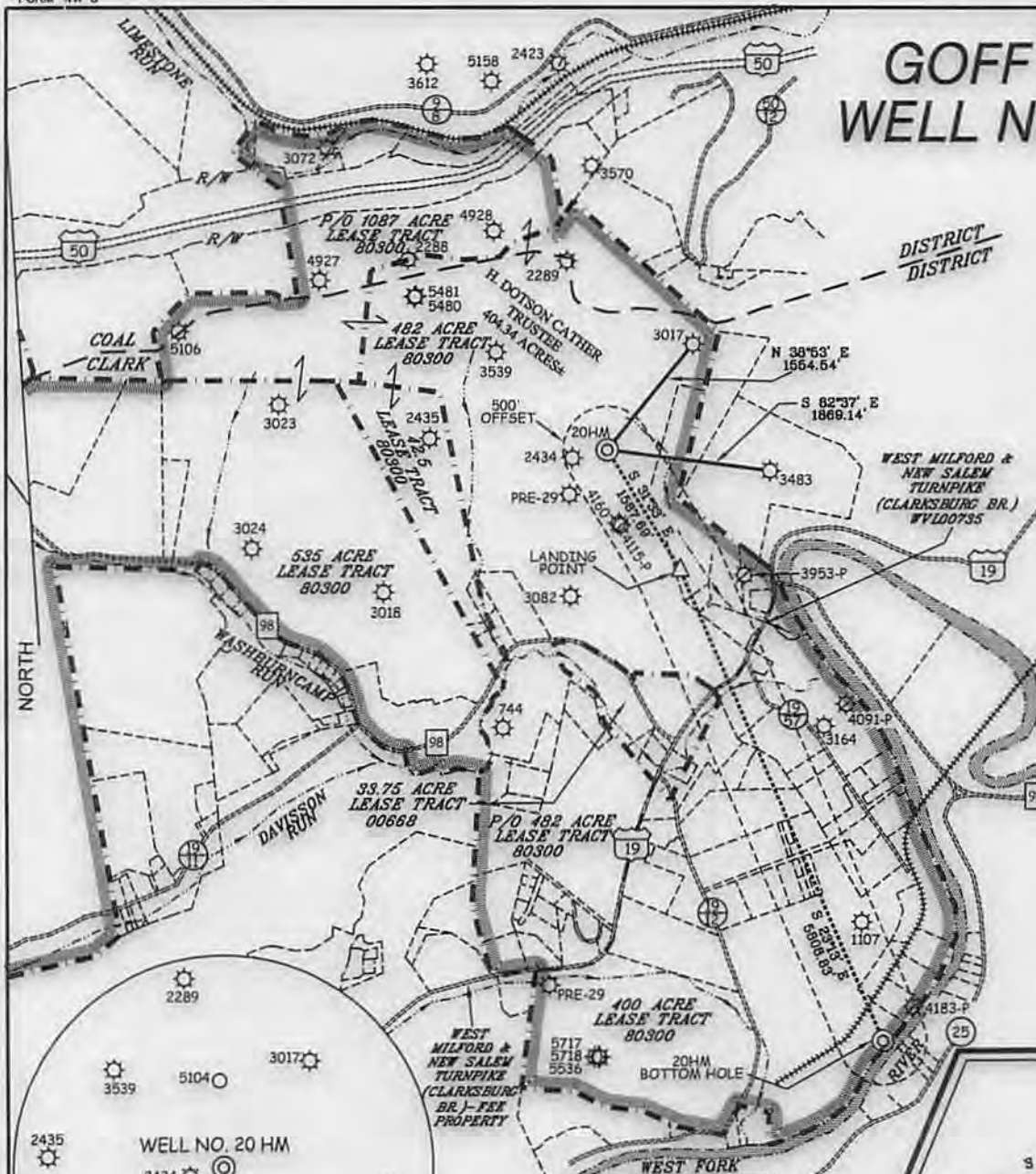


LATITUDE 39°17'30"

GOFF LEASE WELL NO. 20 HM

LONGITUDE 80°22'30"
5,084'



WELL NO. 20 HM TOP HOLE STATE PLANE COORDINATES (NORTH ZONE NAD '27) N. 284,465 E. 1,752,125 <hr/> TOP HOLE (NAD 27) LAT=(N) 39°16'39.8" LONG=(W) 80°22'32.2" <hr/> TOP HOLE (NAD 83) LAT=(N) 39°16'40.1" LONG=(W) 80°22'31.6" <hr/> TOP HOLE UTM (NAD 83) (N) 4,347,791 (E) 553,870
WELL NO. 20 HM LANDING POINT STATE PLANE COORDINATES (NORTH ZONE NAD '27) N. 283,112 E. 1,752,956 <hr/> LANDING POINT (NAD 27) LAT=(N) 39°16'28.4" LONG=(W) 80°22'21.5" <hr/> LANDING POINT (NAD 83) LAT=(N) 39°16'26.8" LONG=(W) 80°22'20.8" <hr/> LANDING POINT UTM (NAD 83) (N) 4,347,383 (E) 554,130
WELL NO. 20 HM BOTTOM HOLE STATE PLANE COORDINATES (NORTH ZONE NAD '27) N. 277,773 E. 1,755,246 <hr/> BOTTOM HOLE (NAD 27) LAT=(N) 39°15'33.9" LONG=(W) 80°21'51.7" <hr/> BOTTOM HOLE (NAD 83) LAT=(N) 39°15'34.2" LONG=(W) 80°21'51.1" <hr/> BOTTOM HOLE UTM (NAD 83) (N) 4,345,768 (E) 554,855

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

(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS.
 DATE MAY 21, 20 14
 REVISED JUNE 5, 20 14
 OPERATORS WELL NO. GOFF 20HM
 API WELL NO. 47 - 33 - 05821 ^{H6A}
 STATE COUNTY PERMIT

MINIMUM DEGREE OF ACCURACY 1/200 FILE NO. 8099P20R3(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 GAS LIQUID INJECTION WASTE DISPOSAL IF "GAS" PRODUCTION STORAGE DEEP SHALLOW

LOCATION: PRE ELEVATION 1,128.00' POST ELEVATION 1126.30' 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 & STATE OF W.V.(TURNPIKE) 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 14,024'

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

09/26/2014

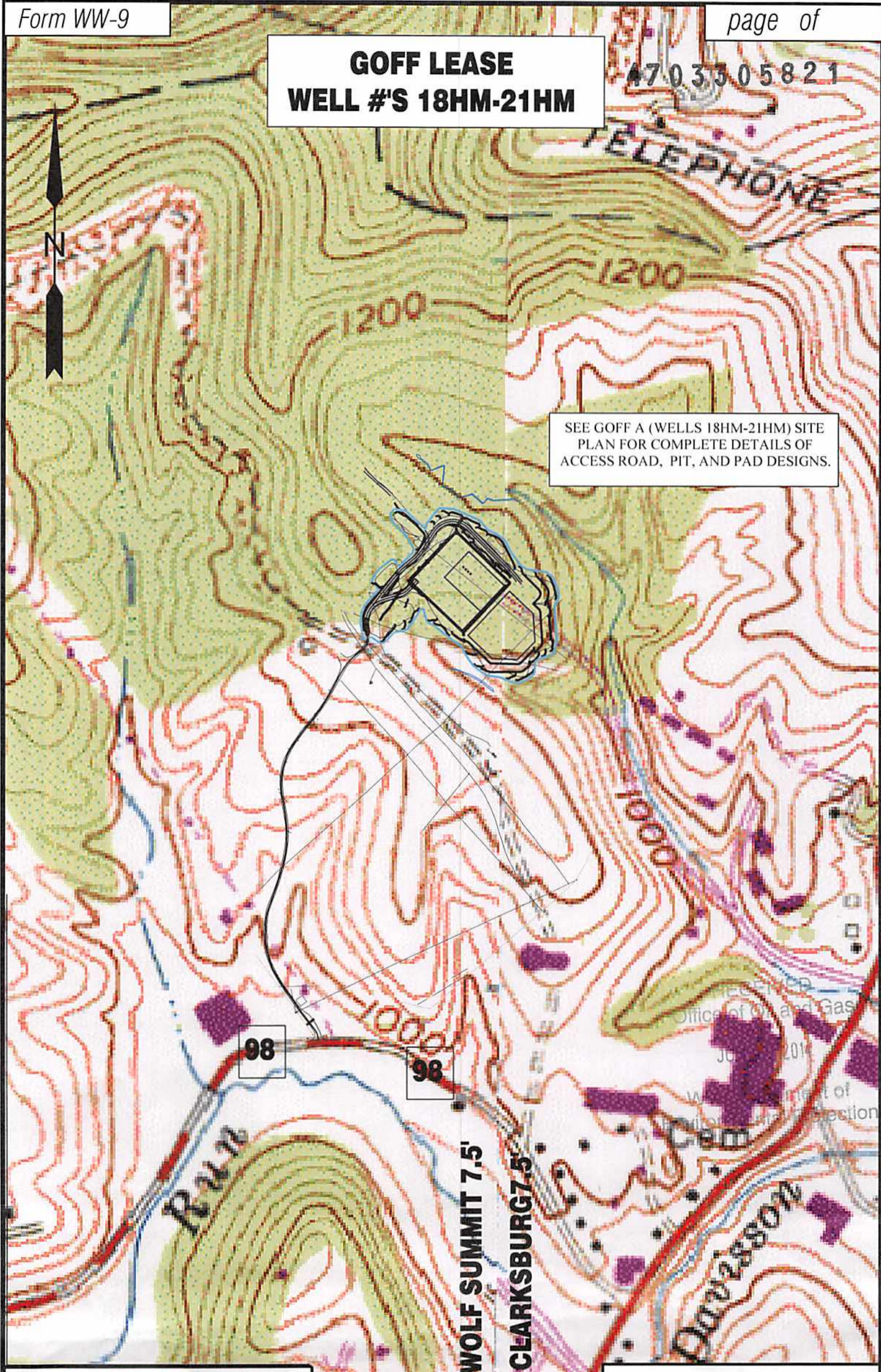
GOFF LEASE WELL #'S 18HM-21HM

4703305821

TELEPHONE



SEE GOFF A (WELLS 18HM-21HM) SITE PLAN FOR COMPLETE DETAILS OF ACCESS ROAD, PIT, AND PAD DESIGNS.



98

98

WOLF SUMMIT 7.5'

CLARKSBURG 7.5'

Professional Energy Consultants
A DIVISION OF SMITH LAND SURVEYING



SURVEYORS
PROJECT MGMT.



ENGINEERS
ENVIRONMENTAL

P.O. Box 150
Geneva, WV 26331
(204) 462-8634

HONESTY. INTEGRITY. QUALITY.

8606 Dimes Bottom Road
Shady Side, OH 42947
(740) 671-9911

TOPO SECTION OF USGS
WOLF SUMMIT & CLARKSBURG
7.5' QUADRANGLES

SCALE: 1"=500'



DRAWN BY C.P.M.	FILE NO. 8099	DATE 01-10-14	CADD FILE: 8099REC.DWG
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06/2014