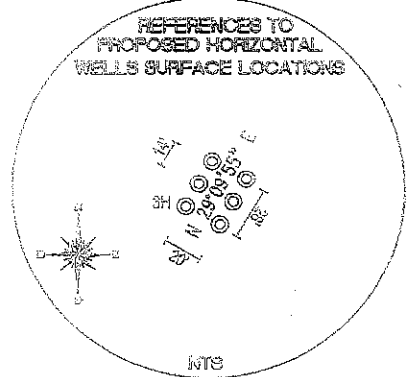


REFERENCES TO PROPOSED HORIZONTAL WELLS SURFACE LOCATIONS



RANDY L. OR VANESSA J. COLLINS
1.071 TOTAL ACRES
TAX MAP AND PARCEL
B43-49.1

GENE C. VALENTINE
53.21 TOTAL ACRES
TAX MAP AND PARCEL
B43-49.3
LEASE NUMBER
1-324548-000
DEED BOOK/PAGE
10/112

SAMUEL AND MELANIE DONINI
17.89 TOTAL ACRES
TAX MAP AND PARCEL
B43-57

SURFACE HOLE

WV ST OF DEPT OF COMME DIV. OF NAT.
178.5 TOTAL ACRES
TAX MAP AND PARCEL
B43-62
LEASE NUMBER
1-342833-000
DEED BOOK/PAGE
15/235

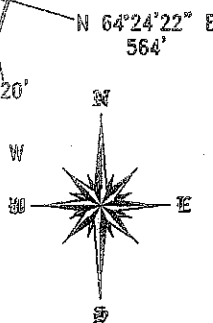
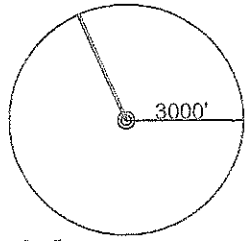
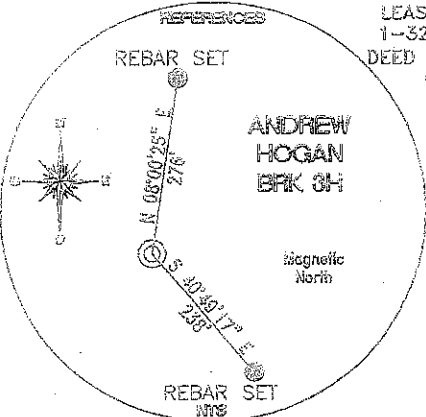
ANDREW P. HOGAN
85.57 TOTAL ACRES
TAX MAP AND PARCEL
B48-34
LEASE NUMBER
1-324081-000
DEED BOOK/PAGE
9/852

ANDREW P. HOGAN
41 TOTAL ACRES
TAX MAP AND PARCEL
B48-35
LEASE NUMBER
1-324079-000
DEED BOOK/PAGE
9/849

BETHANY COLLEGE
882.26 ACRES
PARCEL ID
B38-31
LEASE NUMBER
1-342632-001
DEED BOOK/PAGE
15/242

GENE C. VALENTINE
669.774 ACRES
PARCEL ID
B43-28
LEASE NUMBER
1-324546-000
DEED BOOK/PAGE
10/124

RANDY L. OR VANESSA J. COLLINS
0.594 TOTAL ACRES
TAX MAP AND PARCEL
B43-49.2



TOP HOLE (UTM 83)
N) 4448143.7
E) 539388.5
BOTTOM HOLE (UTM 83)
N) 4449774.0
E) 538629.6

TOP HOLE (NAD 83)
N) 614599.6
E) 1678666.4
LAT.) 40°10'57.9"
LONG.) 80°32'14.4"
DEC. LAT.) 40.182751
DEC. LONG.) 80.537324

TOP HOLE (NAD 27)
N) 614562.4
E) 1710100.6
LAT.) 40°10'57.6"
LONG.) 80°32'15.1"
DEC. LAT.) 40.182679
DEC. LONG.) 80.537531

BOTTOM HOLE (NAD 83)
N) 619991.3
E) 1676265.9
LAT.) 40°11'50.9"
LONG.) 80°32'46.1"
DEC. LAT.) 40.197474
DEC. LONG.) 80.546139

BOTTOM HOLE (NAD 27)
N) 619954.2
E) 1707700.2
LAT.) 40°11'50.6"
LONG.) 80°32'46.8"
DEC. LAT.) 40.197402
DEC. LONG.) 80.546346

REFERENCE NOTES
Boundaries as shown taken from deeds, tax maps and field locations. A full boundary survey is not expressed nor implied. All bearings are based on true north. Ownership taken from public records Brooke County, West Virginia JULY 2011
State Plane Coordinates & NAD 83 Lat/Long by differential submeter mapping grade GPS
Drafted by: E.A.M.

FILE #: CHE 064
DRAWING #: 1715
SCALE: 1"=2000'
MINIMUM DEGREE OF ACCURACY: 1/200
PROVEN SOURCE OF ELEVATION: SUBMETER MAPPING GRADE GPS

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 DEPARTMENT OF ENVIRONMENTAL PROTECTION.
Signed: _____
L.L.S. #2124 : Ernest J. Benchek III

(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS
WVDEP
OFFICE OF OIL & GAS
601 57TH STREET
CHARLESTON, WV 25304

DATE: NOVEMBER 28, 2011

OPERATOR'S WELL #: ANDREW HOGAN BRK 3H

API WELL #: 47 09 00117H
STATE COUNTY PERMIT

Well Type: Oil Waste Disposal Production Deep
 Gas Liquid Injection Storage Shallow

WATERSHED: UPPER OHIO SOUTH

COUNTY/DISTRICT: BROOKE/BUFFALO QUADRANGLE: BETHANY

SURFACE OWNER: ANDREW P. HOGAN ACREAGE: 41.00 +/-

OIL & GAS ROYALTY OWNER: ANDREW P. HOGAN ACREAGE: 429.56 +/-

LEASE NUMBERS: _____

DRILL CONVERT DRILL DEEPER REDRILL FRACTURE OR STIMULATE
PLUG OFF FORMATION PERFORATE NEW FORMATION PLUG & ABANDON
CLEAN OUT & REPLUG OTHER CHANGE (SPECIFY): _____

TARGET FORMATION: MARCELLUS ESTIMATED DEPTH: TVD: 6,000' TMD: 11,902'

WELL OPERATOR: CHESAPEAKE APPALACHIA, LLC. DESIGNATED AGENT: ERIC B. GILLESPIE

ADDRESS: PO BOX 18496 ADDRESS: Po Box 6070

CITY: OKLAHOMA CITY STATE: OK ZIP CODE: 73154-0496 CITY: CHARLESTON STATE: WV ZIP CODE: 25301

02/17/2012

WELL ANDREW HOGAN BRK 3H
QUAD. BETHANY

