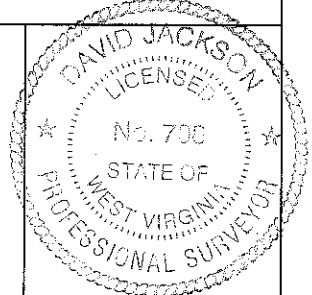


FILE NO. _____
 DRAWING NO. 1
 SCALE 1" = 2000'
 MINIMUM DEGREE OF ACCURACY 1 in 200
 PROVEN SOURCE OF ELEVATION GPS
submeter unit

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 ENERGY.

(SIGNED) David L Jackson
 R.P.E. _____ L.L.S. 708



STATE OF WEST VIRGINIA
 Division of Environmental Protection
 OFFICE OF OIL AND GAS

DATE November 11, 2011
 OPERATOR'S WELL NO. Vernon Johnson WTZ 6H
 API WELL NO. 47 - 103 - 027424 STATE COUNTY PERMIT

WELL TYPE: OIL GAS X LIQUID INJECTION WASTE DISPOSAL
 (IF "GAS") PRODUCTION X STORAGE DEEP SHALLOW X

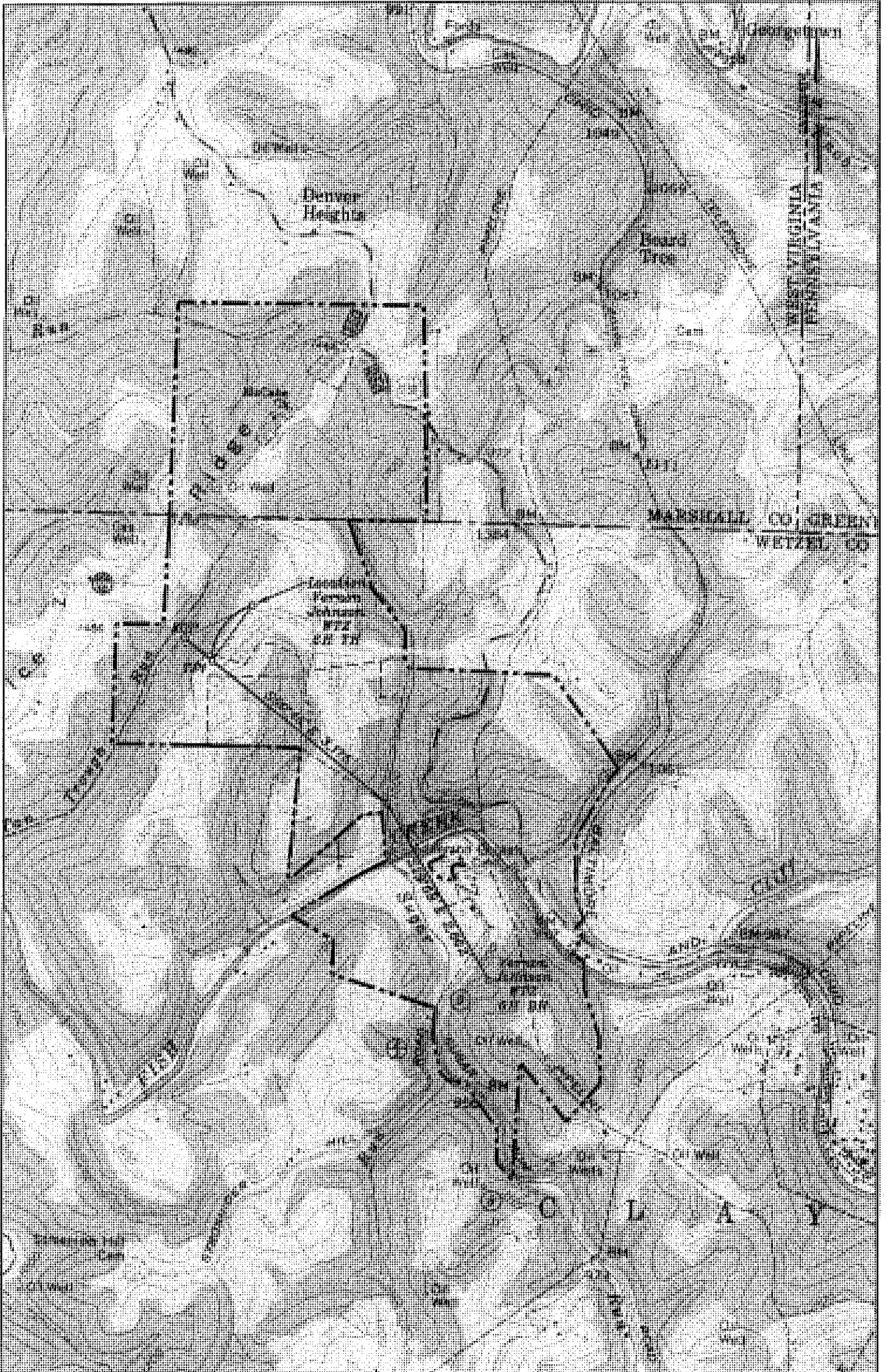
LOCATION: ELEVATION 1438' WATER SHED WV Fork of Fish Creek & Tan Trough Run
 DISTRICT Clay COUNTY Wetzel
 QUADRANGLE Littleton 7 1/2'

SURFACE OWNER Vernon S. Johnson ACREAGE 132 ac.
 OIL & GAS ROYALTY OWNER Vernon S. Johnson LEASE ACREAGE 528.75 ac
 LEASE NO. 1-253654-001 to 008 (TM 1-1), 1-243600-001 to 010 (TM 1-6 & 5), 1-272976-001 to 011 (TM 1-4), 1-272975-001 to 015 & 020 (TM 1-13), 1-242977-001 & 002 (TM 1-35), 1-289848-001 & 002 (TM 1-16), 1-292576-001 (TM 1-33), Third Party Assignment DB 86A/364 (TM 2-24)

PROPOSED WORK: DRILL X CONVERT DRILL DEEPER REDRILL FRACTURE OR STIMULATE PLUG OFF OLD FORMATION PERFORATE NEW FORMATION X OTHER PHYSICAL CHANGE IN WELL (SPECIFY) _____

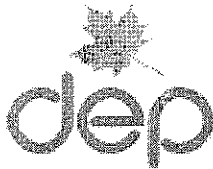
PLUG AND ABANDON CLEAN OUT AND REPLUG

TARGET FORMATION Marcellus ESTIMATED DEPTH 7675'+ Horizontal leg (TMD 14108')
 WELL OPERATOR Chesapeake Appalachia, L.L.C. DESIGNATED AGENT Eric B. Gillespie
 ADDRESS P.O. Box 18496 Oklahoma City, OK 73154-0496 ADDRESS P.O. Box 6070 Charleston, WV 25362



Well: Varman Johnson WTZ 6H
 Quad: Littleton 7 1/2"
 District: Clay
 County: Wetzel





west virginia department of environmental protection

Office of Oil and Gas
601 57th Street SE
Charleston, WV 25304
(304) 926-0450
(304) 926-0452 fax

Earl Ray Tomblin, Governor
Randy C. Huffman, Cabinet Secretary
www.dep.wv.gov

April 10, 2012

WELL WORK PERMIT

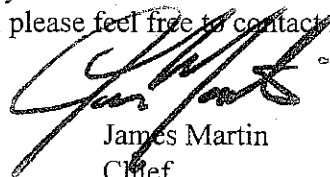
Horizontal Well

This permit, API Well Number: 47-10302742, issued to CHESAPEAKE APPALACHIA, L.L.C., is evidence of permission granted to perform the specified well work at the location described on the attached pages and located on the attached plat, subject to the provisions of Chapter 22 of the West Virginia Code of 1931, as amended, and all rules and regulations promulgated thereunder, and to all conditions and provisions outlined in the pages attached hereto. Notification shall be given by the operator to the Oil and Gas Inspector at least 24 hours prior to the construction of roads, locations, and/or pits for any permitted work. In addition, the well operator shall notify the same inspector 24 hours before any actual well work is commenced and prior to running and cementing casing. Spills or emergency discharges must be promptly reported by the operator to 1-800-642-3074 and to the Oil and Gas inspector.

Please be advised that form WR-35, well operators report of well work, is to be submitted to this office within 90 days of completion of drilling, as should form WR-34 Discharge Monitoring Report within 30 days of discharge of pits, if applicable. Failure to abide by all statutory and regulatory provisions governing all duties and operations hereunder may result in suspension or revocation of this permit and, in addition, may result in civil and/or criminal penalties being imposed upon the operators.

In addition to the applicable requirements of this permit, and the statutes and rules governing oil and gas activity in WV, this permit may contain specific conditions which must be followed. Permit conditions are attached to this cover letter.

Per 35CSR-4-5.2.g this permit will expire in two (2) years from the issue date unless permitted well work is commenced. If there are any questions, please feel free to contact me at (304) 926-0499 ext. 1654.



James Martin
Chief

Operator's Well No: VERNON JOHNSON 6H

Farm Name: JOHNSON, VERNON

API Well Number: 47-10302742

Permit Type: Horizontal Well

Date Issued: 04/10/2012

Promoting a healthy environment.

04/20/2012