

JKLM Energy, LLC – Judson Hollow 302 Pad
Wells Nos. 302-1HU, 2HU, 3HU, 4HM
Permit Application to Drill and Operate an Unconventional Well
Coal Justification

To evaluate the potential presence of coal within the drilling area, available historic data and geologic maps were reviewed to determine if there were know operating workable coal seams within 1,000 feet of the proposed well at the subject pad site and with the surrounding 3,000 feet radius area from the proposed wells. Information reviewed includes:

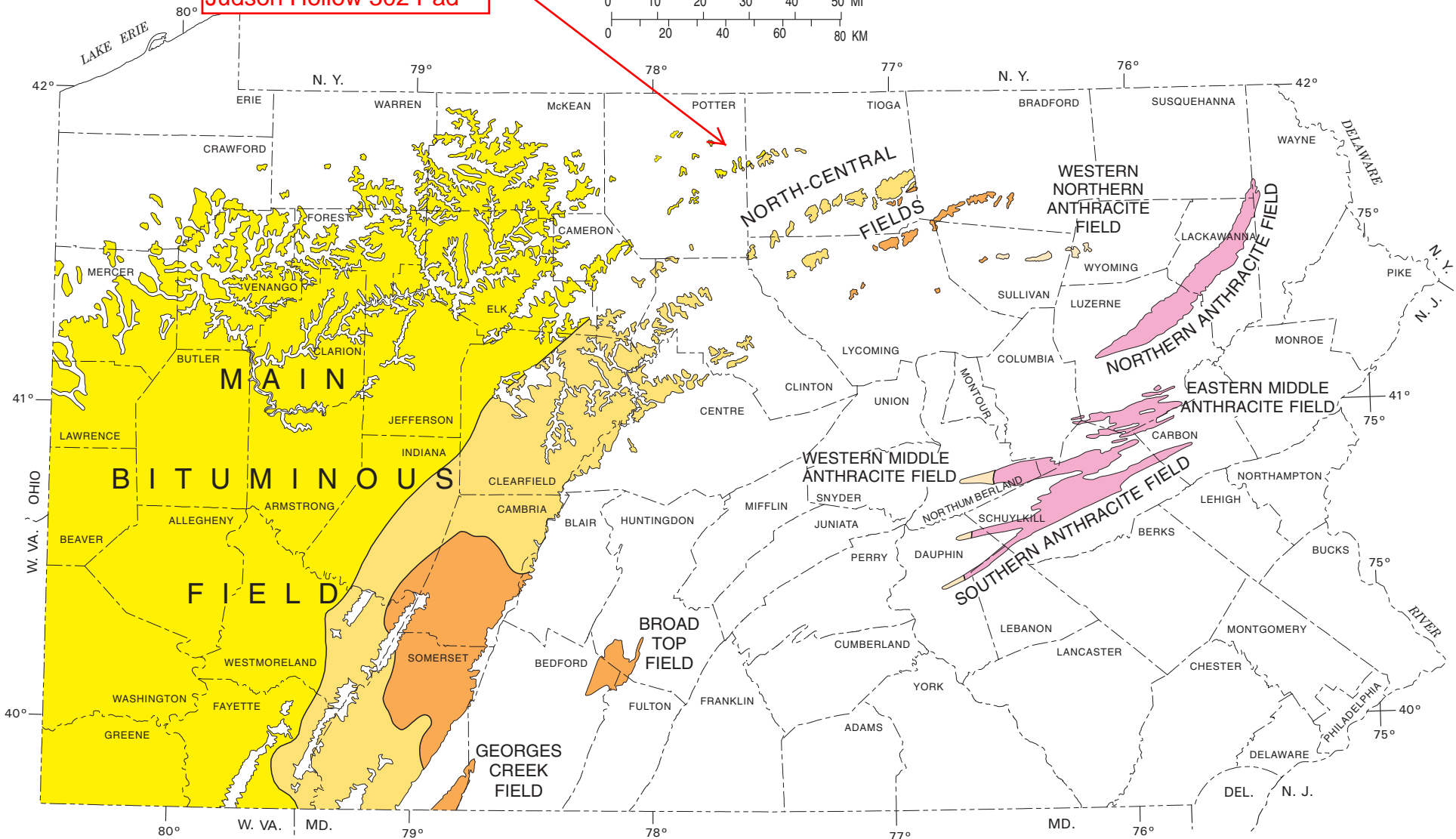
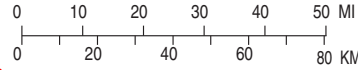
- Map 61, Atlas of Prelim. Geologic Quad. Maps of PA, Conrad 15' (NW), pg. 135;
- Open-File Report 96-49, Correlation Chart showing Suggested Revisions of Uppermost Devonian through Permian Stratigraphy, PA;
- GCG, 2nd Geological Survey of PA, Report of Progress in 1876-9, The Geology of Potter Co., Report on the Coal Fields;
- Geologic Map of Potter Co. (1876);
- Map 1, Geology Map of PA (1980);
- Distribution of Pennsylvania Coals, Map 11, from Commonwealth of Pennsylvania;
- Topographical and Geological Map of Coal Lands in Potter Co., PA owned by F.W. Knox, J.S. King, S.K. Billings, S.M. Alley and J.M. Finch, prepared April 25, 1876;
- Baltimore & Ohio R.R. Coal Ownership Map;
- EG-1, Engineering Characteristics of the Rocks of PA;
- Geologic Map of PA (1893);
- Surficial Geology and Geomorphology of Potter Co., PA, C.S. Denny;
- NRCS Soil Survey of Potter Co., PA (Ver. 5, May 8, 2008);
- PADEP Website:
- <http://www.dep.state.pa.us/dep/deputate/minres/BMR/annualreport/2010/index.html>;
- PA Coal Mining Production – 2010 Antracite & Bituminous Coal Mining Activities – Operators & Production Sites (Underground & Surface) Summary by County;
- PADEP eMapPA Website: <http://www.emappa.dep.state.pa.us/emappa/viewer.html>;
- eFACTS Website: http://www.ahs2.dep.state.pa.us/eFACTSWeb/criteria_Facility.aspx.

Based upon a review of the available information, no evidence of commercial (workable coal seams) was identified in the study area. Therefore, it has been concluded the study area is a non-coal area.

DISTRIBUTION OF PENNSYLVANIA COALS

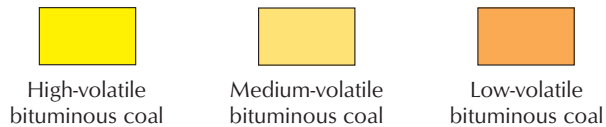
**JKLM Energy, LLC
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SCALE 1:2,000,000



EXPLANATION

BITUMINOUS FIELDS



ANTHRACITE FIELDS

