

Why **Mapping Accuracy** Matters to Land and Mineral Owners

West Virginia

TRUEMAPPING
GIS & MAPPING

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November 12th, 2026

West Virginia
LAND & MINERAL
Owners Association

Your Land. Your Resources. Your Questions.



Do I own the gas, coal, and timber rights?



What activity is happening on or near my property?



Where do my rights begin and end?

GIS IS

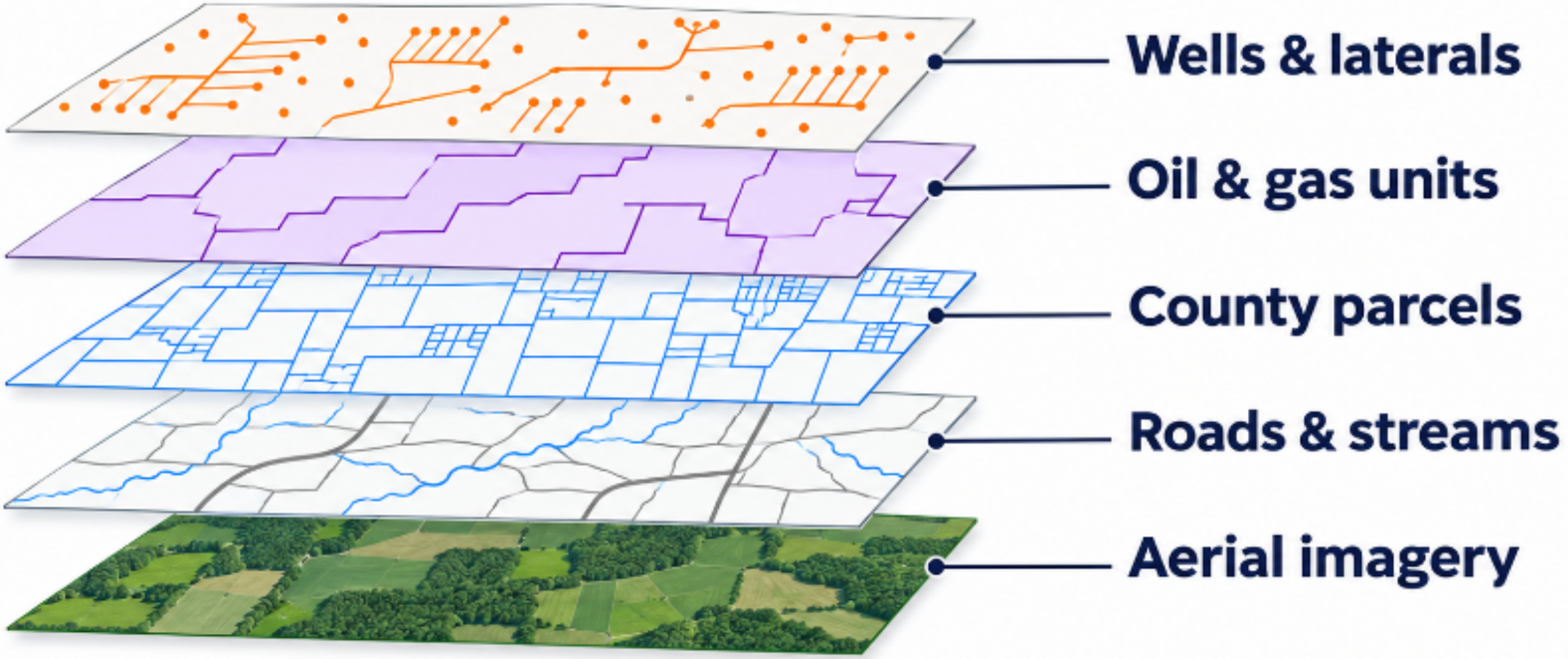
- A way to organize and compare location data
- A view of parcels, wells, laterals, mine data, timber assets, and more
- A tool to spot overlaps, gaps, and questions

GIS IS NOT

- A boundary survey or title opinion
- Proof of mineral ownership
- More accurate than its source data

GIS Layers: A Map Built Like Lasagna

Each layer adds a different kind of information.



Stacking layers adds context. Accuracy depends on each source and how the layers align.

True Mapping Inc.

Conceptual illustration

The difference in sources!

Vintage Map



Old Plat Book

Survey

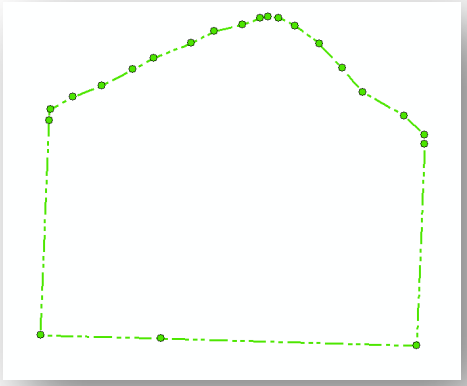
Sources Provided by Client

GIS Parcel

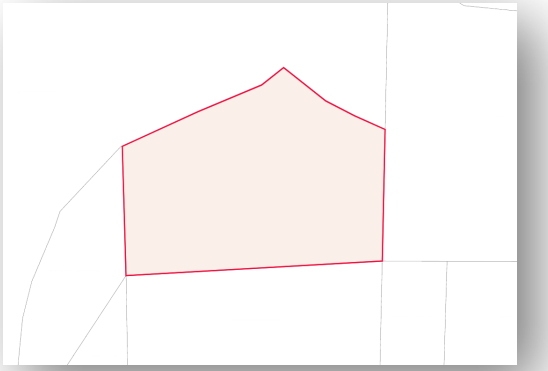
Deed

Location Plat

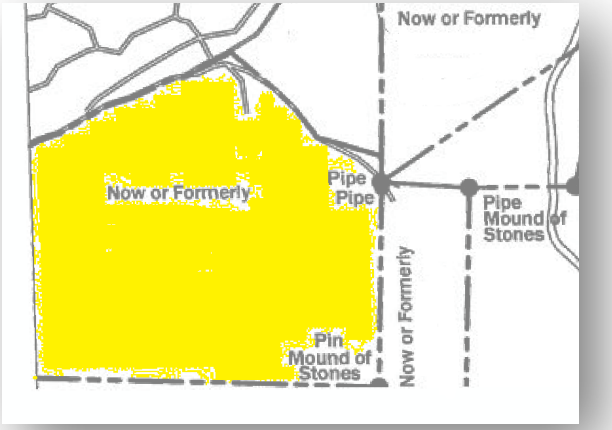
Landowner Survey



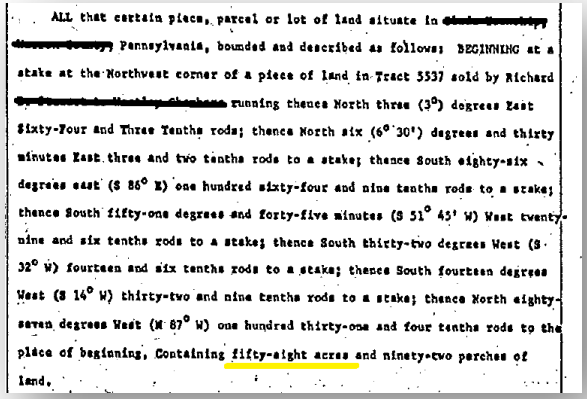
County GIS Department



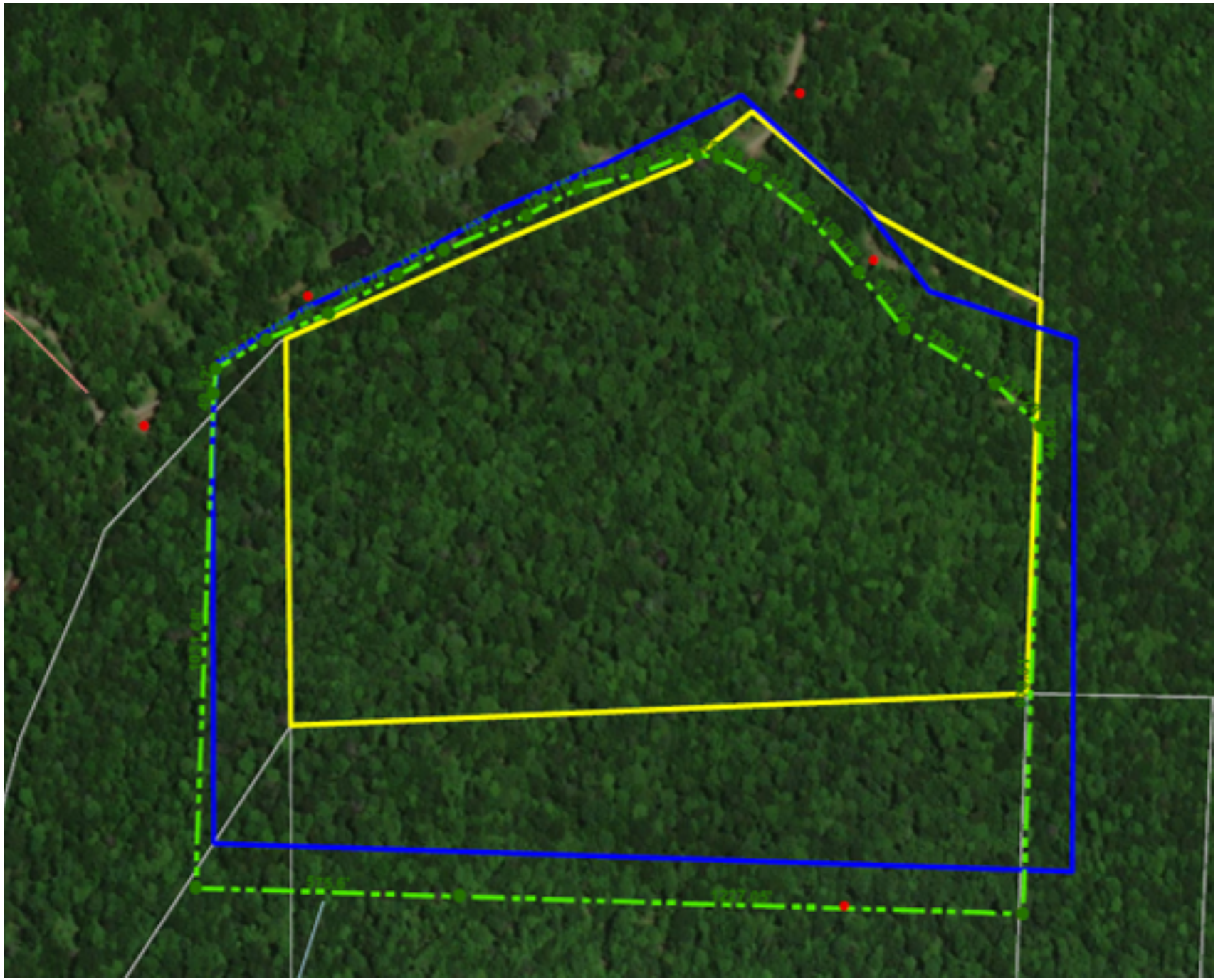
DCNR O&G Database



County Recorder of Deeds



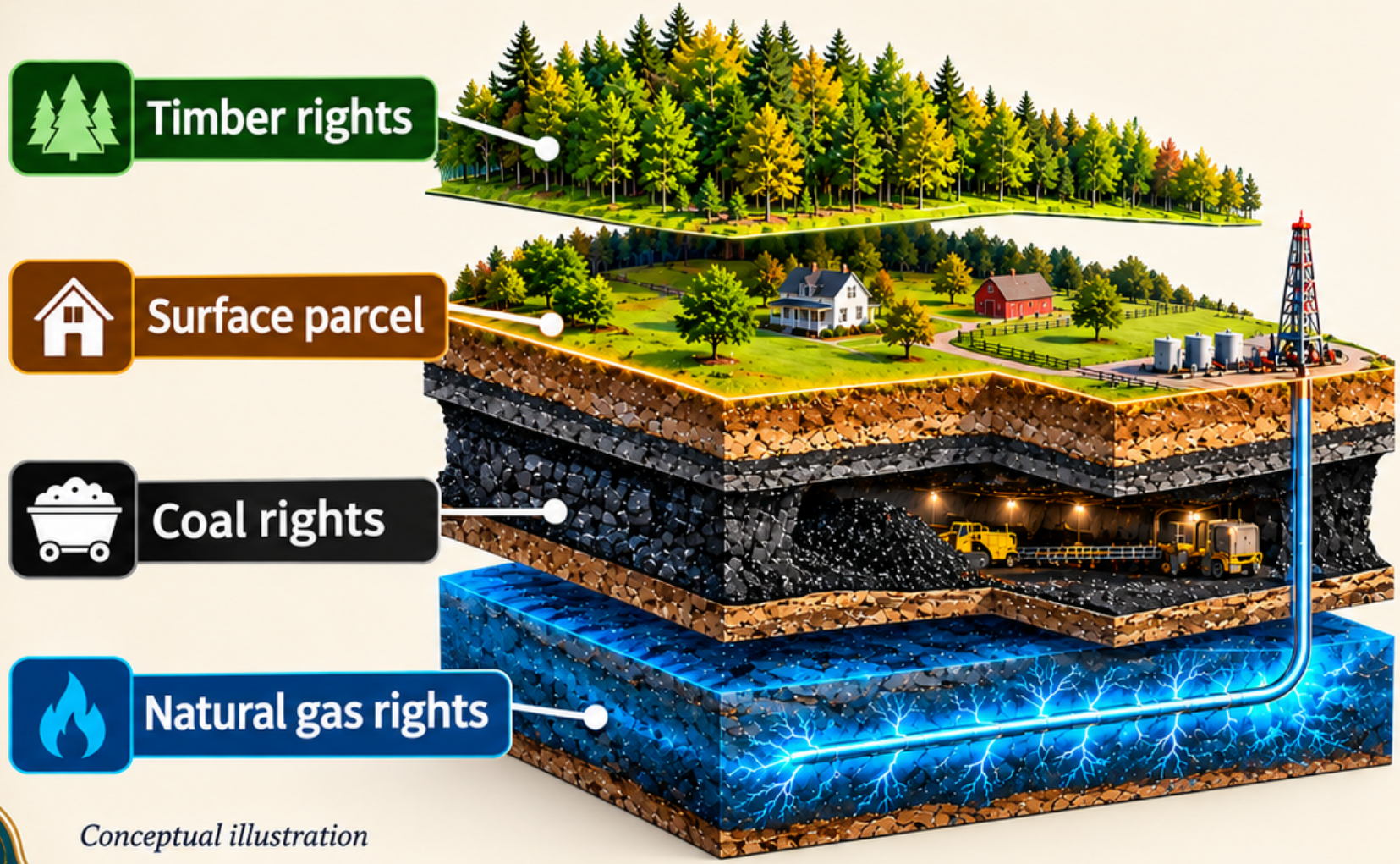
ALL that certain piece, parcel or lot of land situate in [redacted] Pennsylvania, bounded and described as follows: BEGINNING at a stake at the Northwest corner of a piece of land in Tract 3537 sold by Richard [redacted] running thence North three (3°) degrees East Sixty-Four and Three Tenths rods; thence North six (6° 30') degrees and thirty minutes East three and two tenths rods to a stake; thence South eighty-six degrees east (S 86° E) one hundred sixty-four and nine tenths rods to a stake; thence South fifty-one degrees and forty-five minutes (S 51° 45' W) West twenty-nine and six tenths rods to a stake; thence South thirty-two degrees West (S 32° W) fourteen and six tenths rods to a stake; thence South fourteen degrees West (S 14° W) thirty-two and nine tenths rods to a stake; thence North eighty-seven degrees West (N 87° W) one hundred thirty-one and four tenths rods to the place of beginning, Containing fifty-eight acres and ninety-two perches of land.



One Property Four Different Acreage Totals

- **58 Deeded Acres**
- **37 GIS Calculated Acres**
- **56 Digitized Acres**
- **54 Survey Acres**

One Property Can Have Different Rights



Conceptual illustration

Surface, timber, coal, and natural gas interests may differ.

Each interest needs its own supporting records.

A surface parcel alone does not tell the whole story.

Timber: The Right Boundary Matters.

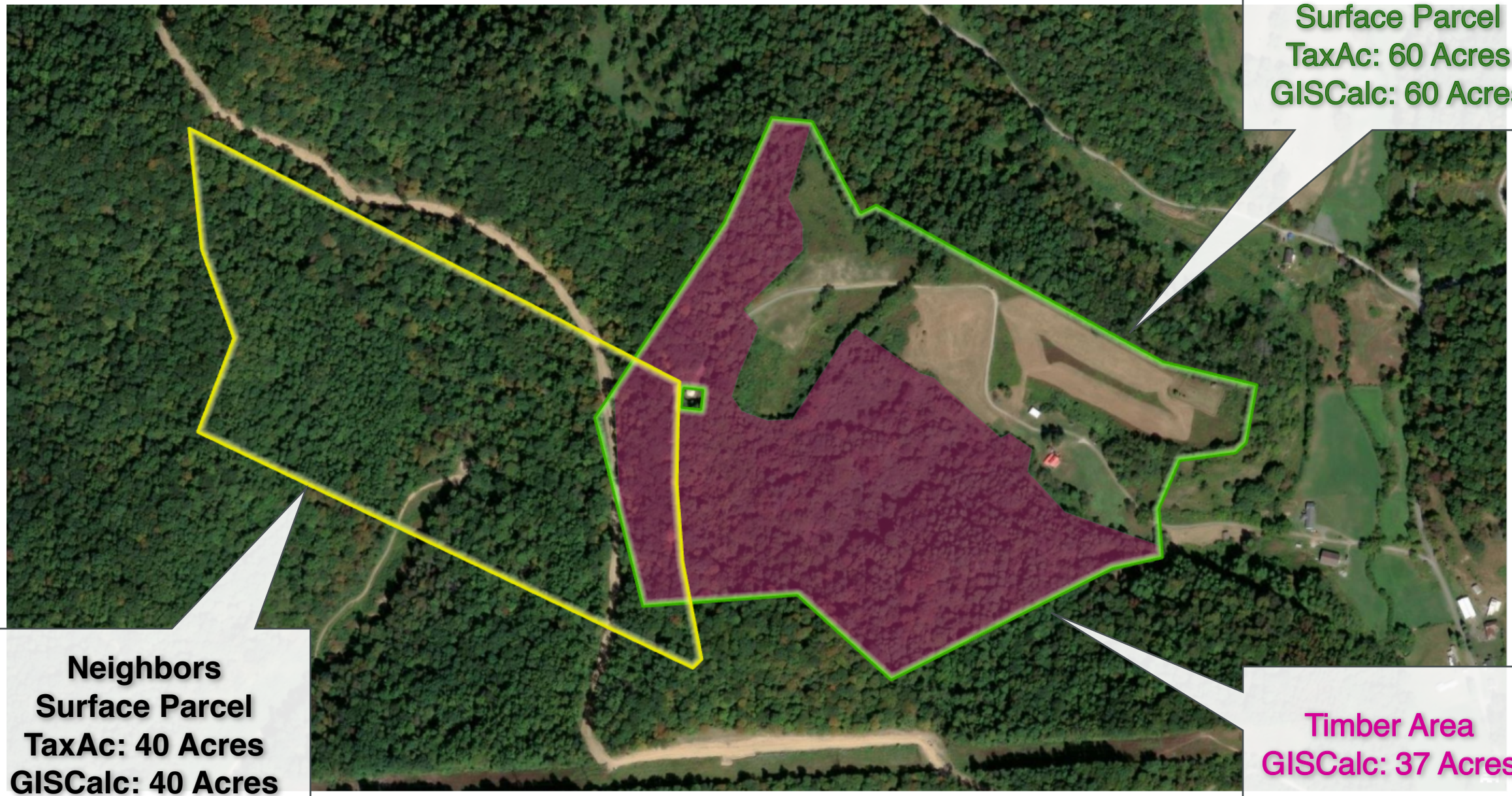
Compare the harvest area with supported property boundaries.

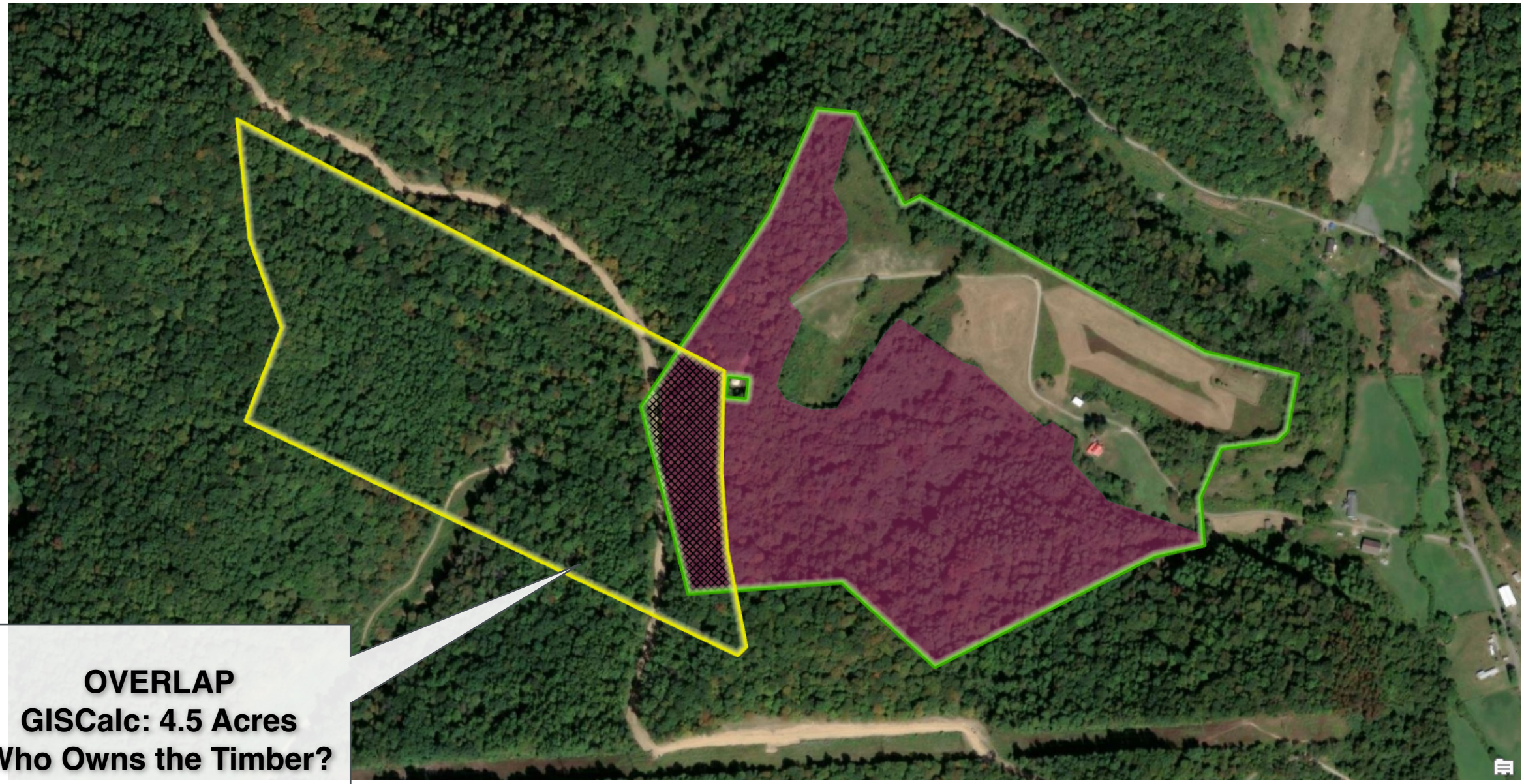
Review access roads and neighboring tracts.

Confirm uncertain lines before cutting..

Surface Parcel
TaxAc: 60Ac
GISCalc: 60Ac




Surface Parcel
TaxAc: 60 Acres
GISCalc: 60 Acres
Neighbors
Surface Parcel
TaxAc: 40 Acres
GISCalc: 40 Acres
Timber Area
GISCalc: 37 Acres

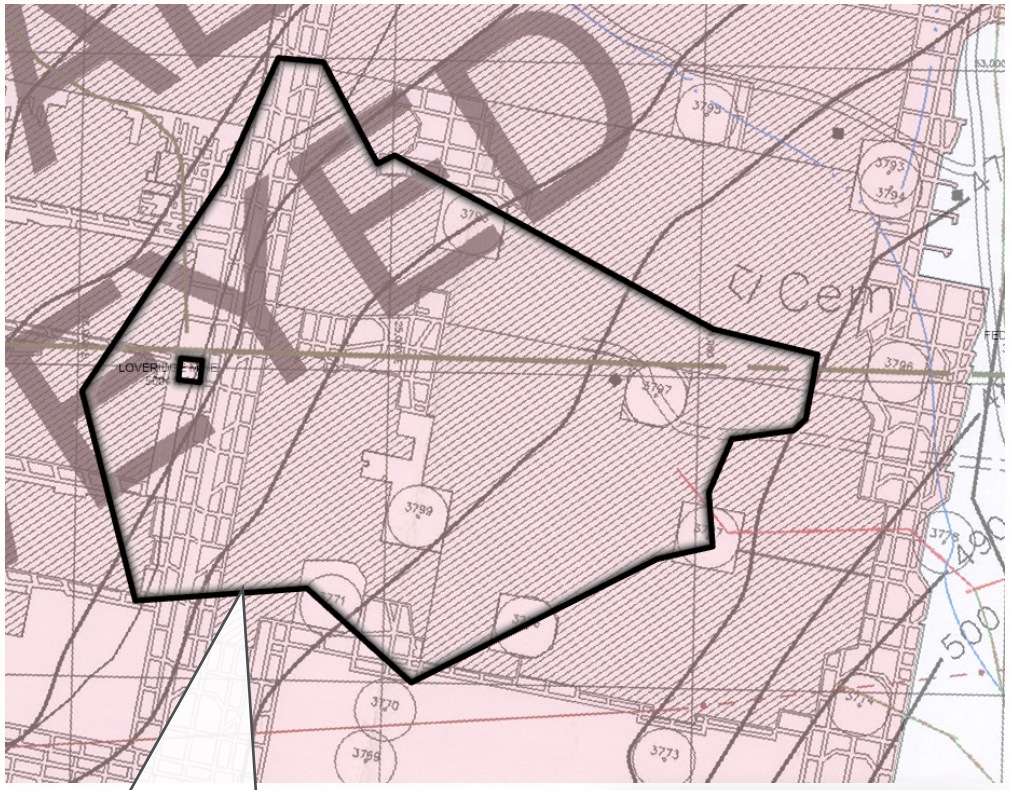

OVERLAP
GISCalc: 4.5 Acres
Who Owns the Timber?

Coal:
The Seam Matters Too.

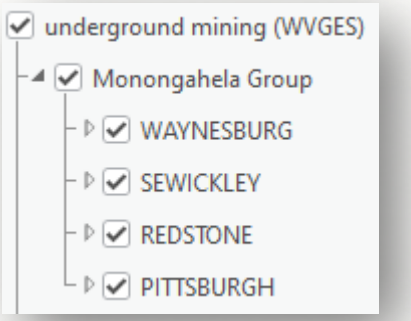
Identify the coal seam and rights described in the records.

Compare ownership with available mine maps.

Distinguish mapped workings from uncertain areas.



Underground Mining Operations
Pittsburgh Coal Seam



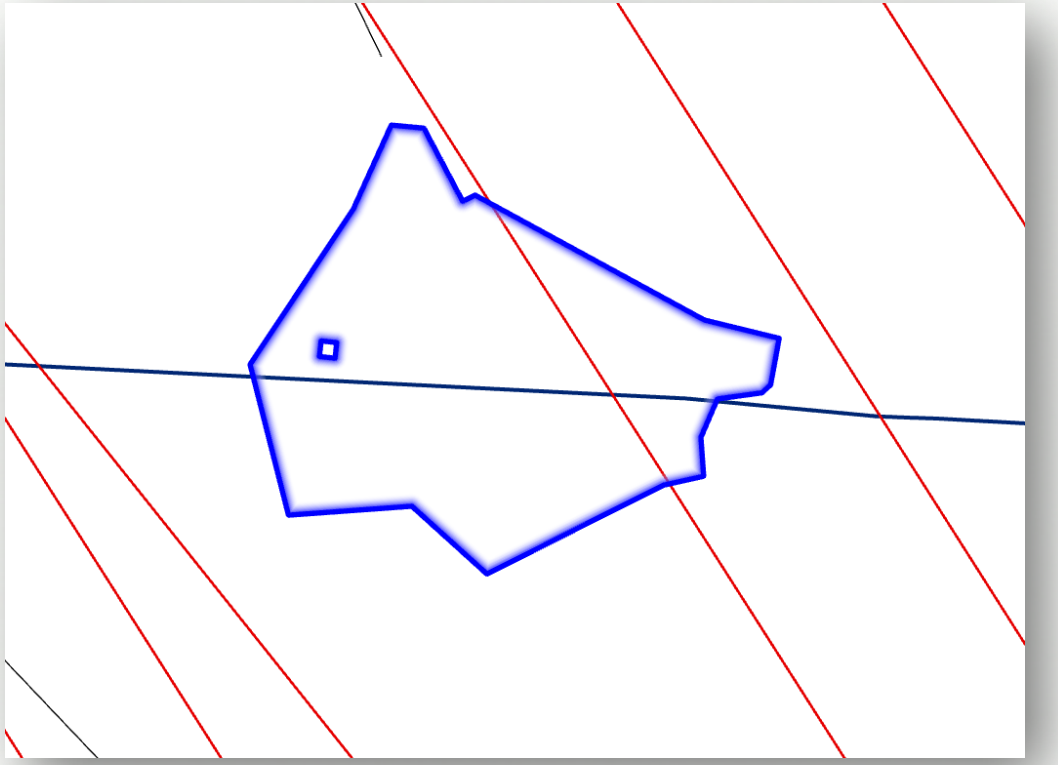
https://tagis.dep.wv.gov/mining/databrowser.html

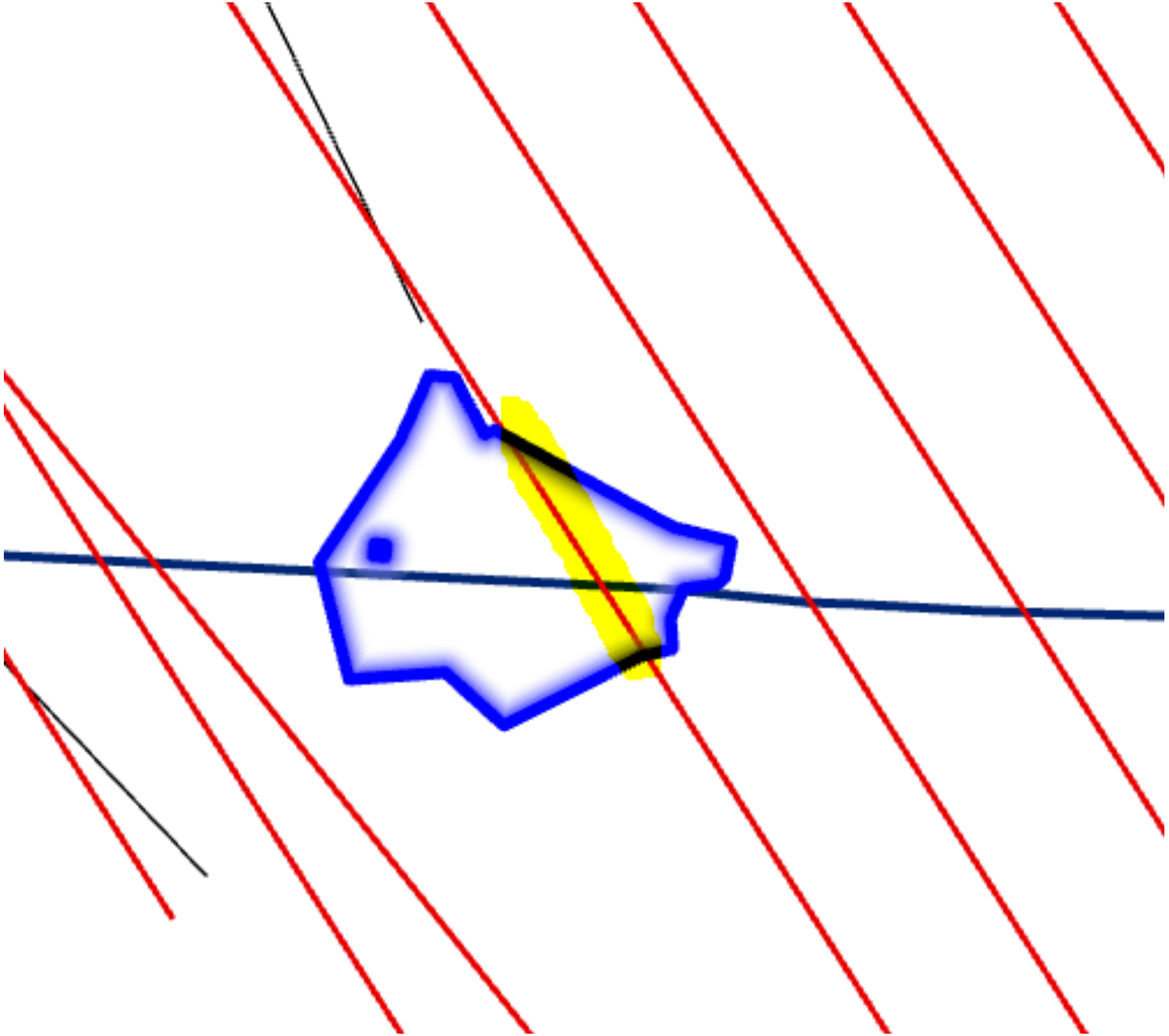
Natural Gas:
Proposed or Drilled?

Distinguish proposed laterals from documented drilled paths.

Compare the mineral tract with the well and unit.

Mapping supports review of acreage and royalty questions..





NEVER TRUST JUST ONE SOURCE OF DATA!

What is the source? Can we find additional information?

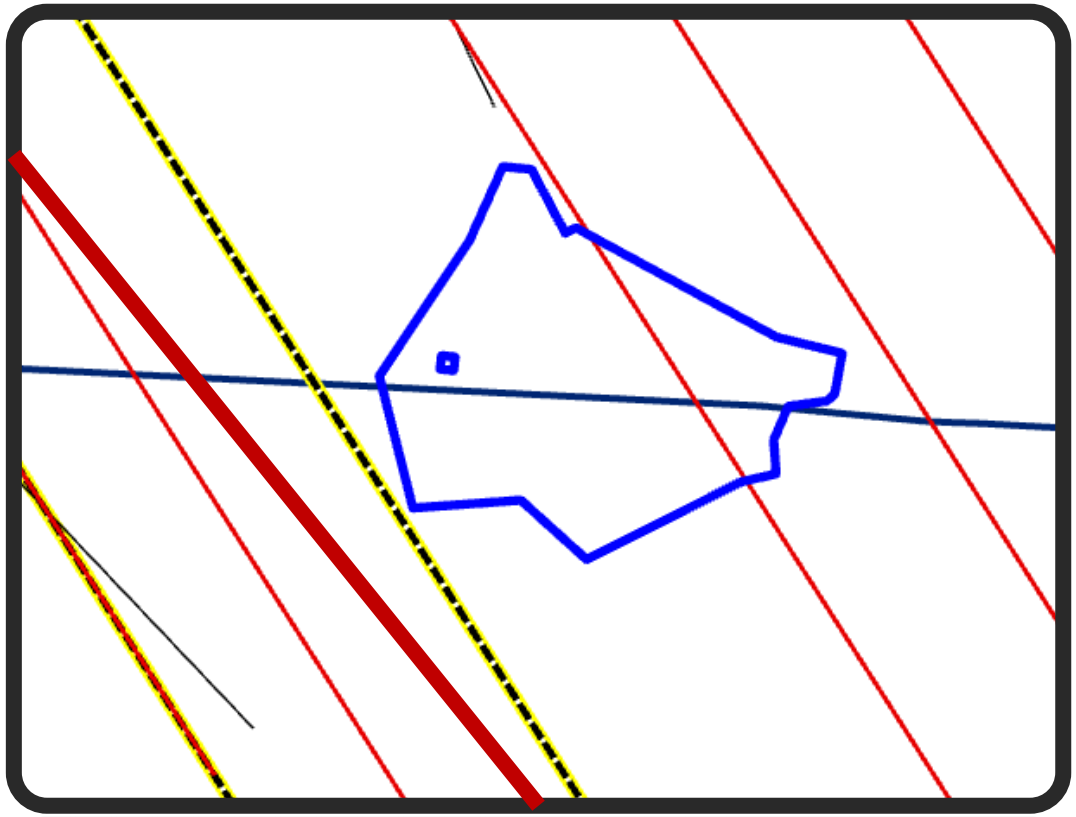
https://tagis.dep.wv.gov/oog/

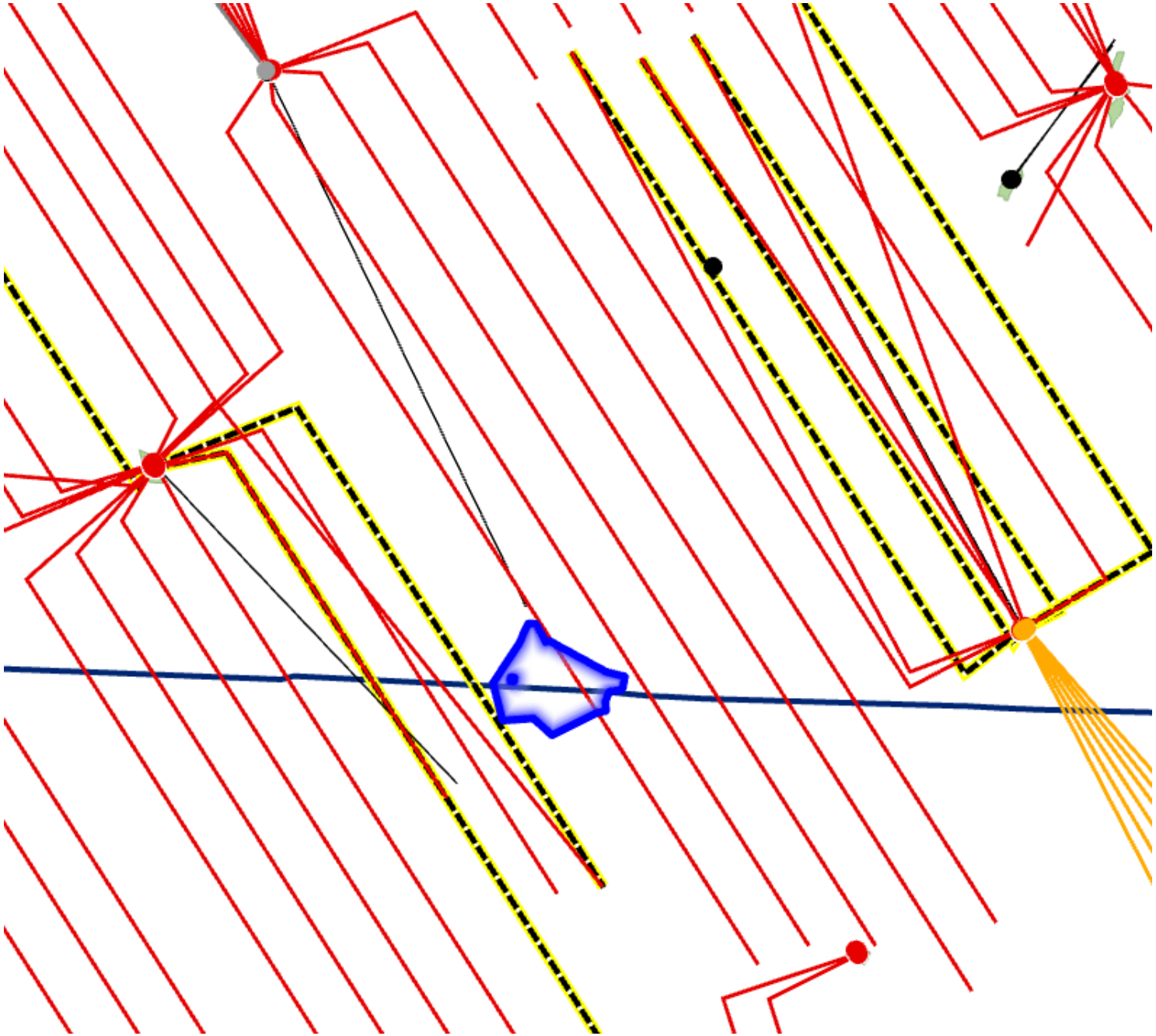
WVGES GEOLOGY UNDERLIES IT ALL
West Virginia
Geological & Economic Survey
"Geology underlies it all."

LP was not entered, data found on AS DRILLED plat

BHL changed from Permit location plat to As-Drilled plat. (5100')

Lateral changed from 400' from property to 40' from property.





By looking into the AS-DRILLED data, well laterals were corrected and now we can see this property is crossed by 2 laterals, from 2 different well pads.

UNIT data could not be found in this case to verify. No maps were provided by the operator in the Recorder of Deeds.

https://tagis.dep.wv.gov/oog/

Conclusions

Before You Act, Know What Your Map Is Telling You

- One map or website rarely tells the whole story.
- Ownership records and mapped boundaries may differ.
- Unanswered questions deserve a closer look before you commit time or money.
- When in doubt … seek professional advice.

Thank you for this Opportunity

Questions ??

TRUEMAPPING
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Sources: TAGIS Oil & Gas Viewer
https://tagis.dep.wv.gov/oog/

Sources: WVGES Underground & Surface Coal Mines & West Virginia Mine Info Database System https://www.wvgs.wvnet.edu/www/mids/document.php?mode=detail&doc_id=909291