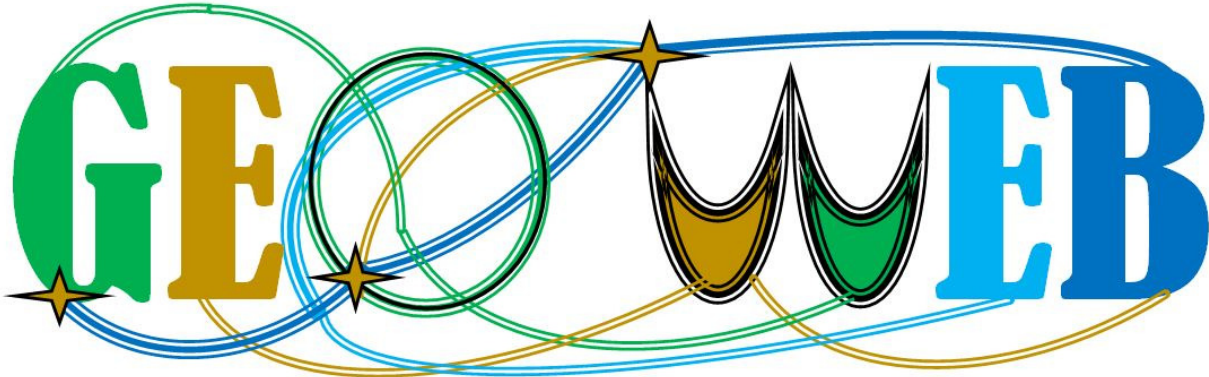




*Geoweb: Natural Resource Trading, Engineering,
Brokerage, Logistics, and Consultation Services.*

Mineral Valuation

TRACT 13

of

Bellwood Corporation, Inc. - Mineral Properties

In Fayette County, West Virginia

Valuation Date – February 6, 2026

By

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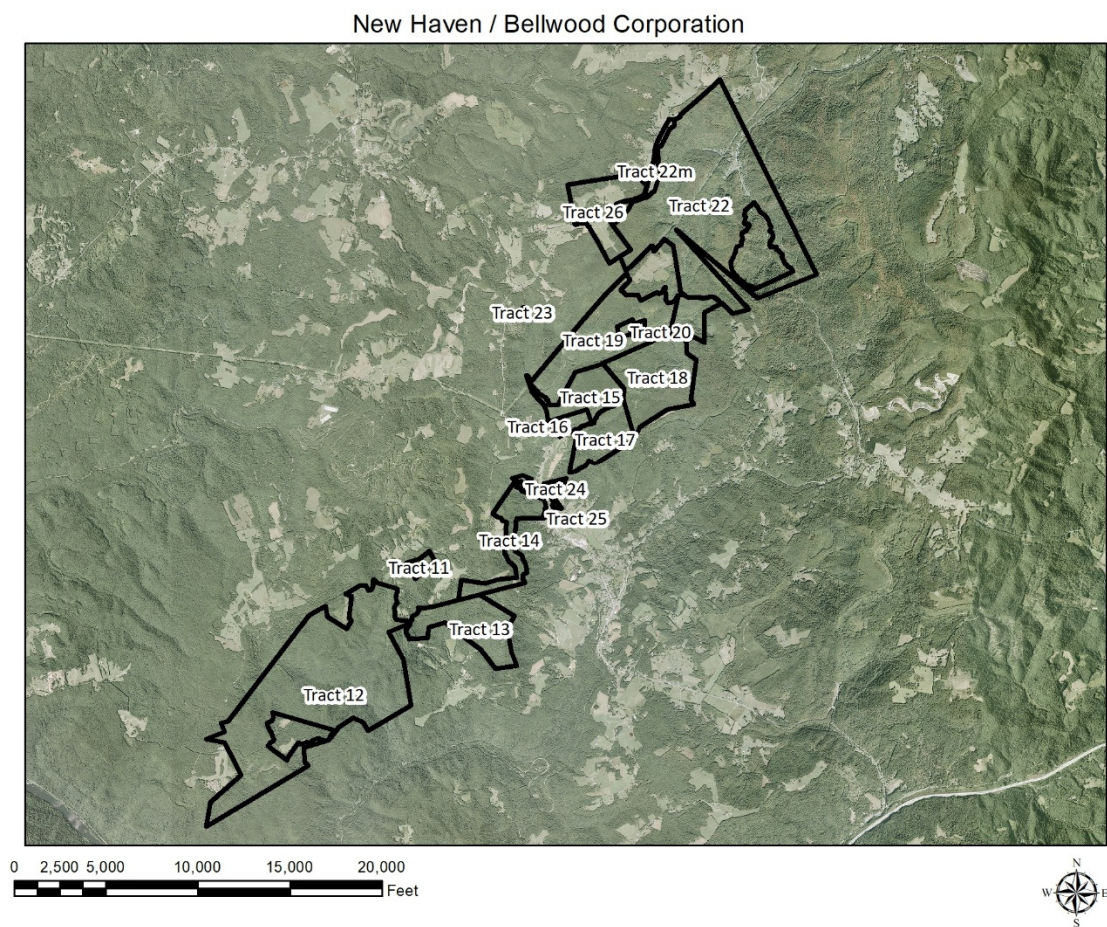
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1. Executive Summary
2. Property
3. Individual Tract - Tons in Place
4. Coal Quality
5. Summary of Mining History
6. Coal Reserve
7. Resume of Author

1 EXECUTIVE SUMMARY

This report contains an estimate of the in-place coal tons, a possible recovery percentage, the estimated recoverable coal, and comments to explain the tonnage estimate.

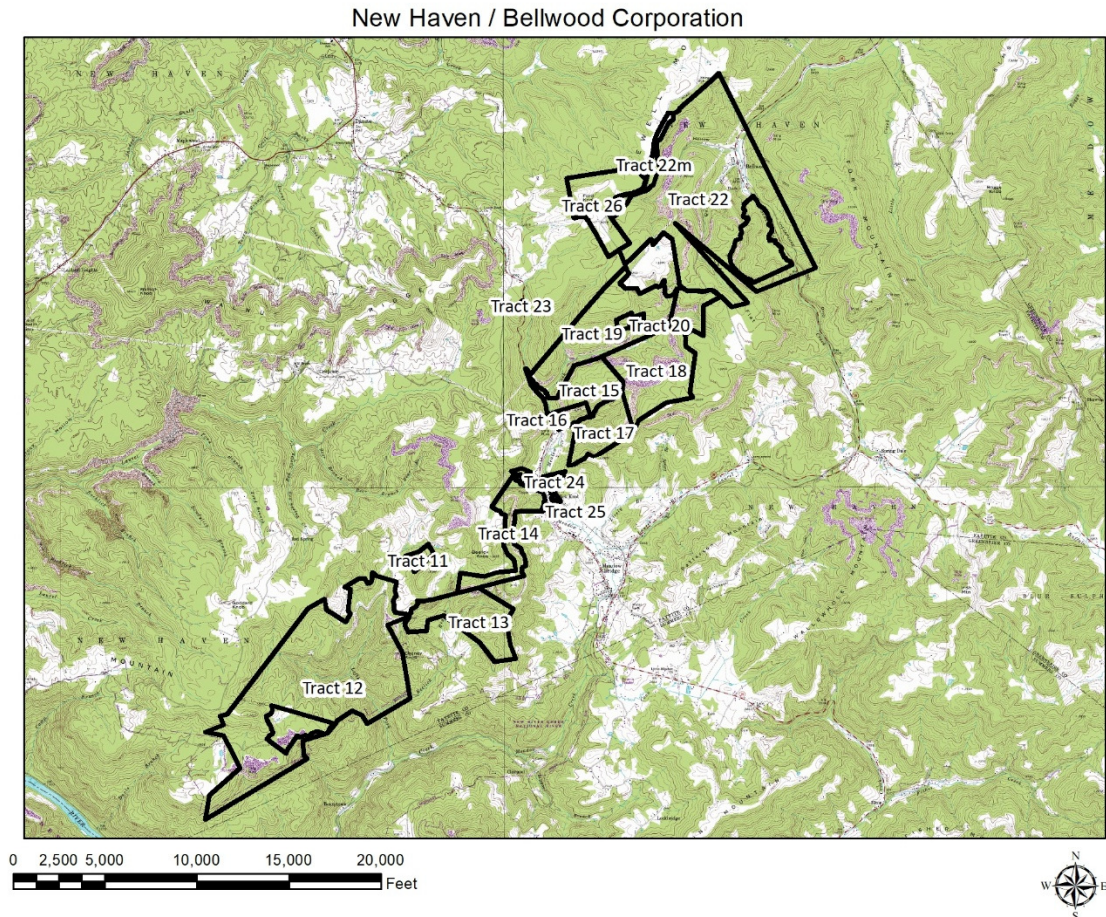
1. The client and other intended users – **Bellwood Corporation**
2. The effective date of the opinions and conclusions – **February 6, 2026**
3. The characteristics of the property (including location and property rights to be valued) – **Mineral ownership by BELLWOOD CORPORATION and JAMES C JUSTICE COMPANIES, INC.**



Aerial View of Property Mineral Tracts

2 PROPERTY

The minerals owned are principally the Pocahontas No. 6 and the Pocahontas No. 3 seams within the property boundaries shown below. The minerals are owned by Wilcox Industries.



Map of Bellwood Corporation Properties

The following table shows the estimated in-place coal tons, a possible recovery percentage, the estimated recoverable coal, and comments to explain the tonnage estimate.

New Haven/Bellwood Tracts 11-26

Recoverable Tons by Tract:

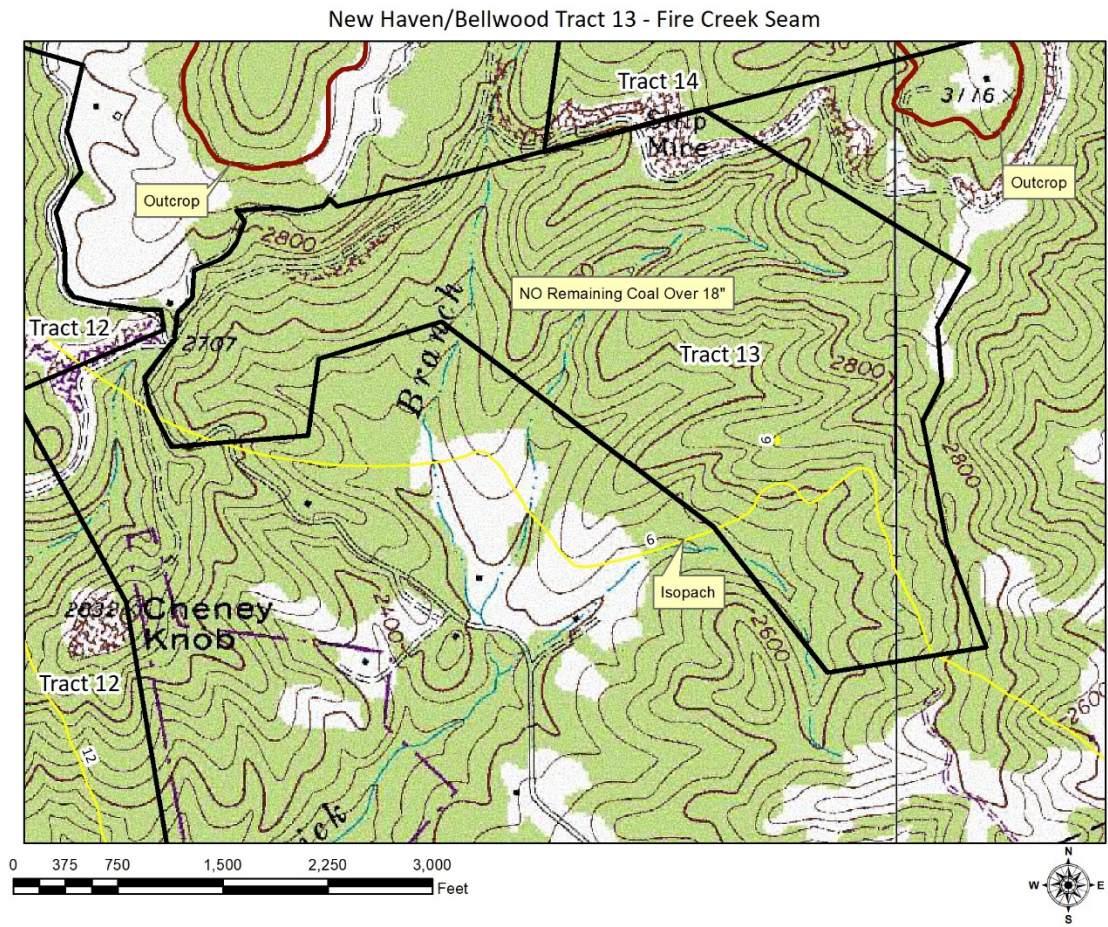
	New Haven/ Bellwood Minerals	Tons In Place	Percent Recoverable	Recoverable Tons	
Tract	11	208,053	15.675%	32,613	Very small tract with limited access. Behind old deep mine works.
Tract	12	8,175,743	25.781%	2,107,829	Large tract with excellent mining opportunities
Tract	13	509,889	10.000%	50,989	Limited options, mostly in lower PC3 seam.
Tract	14	280,634	14.794%	41,518	Former mining makes access difficult
Tract	15	1,329,640	23.745%	315,718	Tracts 15,16,17,18,19,20, 21 and 22 would make an excellent combined mining operation
Tract	16	55,729	15.719%	8,760	Tracts 15,16,17,18,19,20, 21 and 22 would make an excellent combined mining operation
Tract	17	346,549	11.100%	38,468	Tracts 15,16,17,18,19,20, 21 and 22 would make an excellent combined mining operation
Tract	18	1,989,353	10.317%	205,234	Tracts 15,16,17,18,19,20, 21 and 22 would make an excellent combined mining operation
Tract	19	3,021,009	19.643%	593,428	Tracts 15,16,17,18,19,20, 21 and 22 would make an excellent combined mining operation
Tract	20	140,185	20.139%	28,233	Tracts 15,16,17,18,19,20, 21 and 22 would make an excellent combined mining operation
Tract	21	56,539	11.359%	6,422	Tracts 15,16,17,18,19,20, 21 and 22 would make an excellent combined mining operation
Tract	22	6,487,355	25.791%	1,673,122	Large tract with excellent mining options, especially in the Fire Creek seam expansion.
Tract	22m	696,548	22.886%	159,414	Mineral tract is slightly larger than the surface tract
Tract	23	2,292	10.000%	229	Very, very small tract with very limited options for mining.
Tract	24	0	0.000%	0	No coal.
Tract	25	0	0.000%	0	No Coal.
Tract	26	2,453,091	23.528%	577,173	Good coal on a Mineral Only Tract adjoins Tract 22 and Tract 22m
	TONS IN PLACE	25,752,608	22.674%	5,839,150	
Recoverable	22.674%	5,839,150			

Recoverable Tons by Seam:

Seam Name	Tons In Place	Percent Recoverable	Recoverable Tons	
SEW	1,067,283	20.000%	213,457	Limited mining options. Quality is a question.
FCK	1,879,243	24.005%	451,111	Good coal to the north with excellent expansion opportunity to the west.
PC9	512,346	10.000%	51,235	Limited mining options. Quality is a question.
PC7	2,285,336	11.547%	263,882	Potential for good thin seam mining. Quality is a question.
PC6	9,246,616	36.545%	3,379,202	Best coal thickness around previous mining.
PC3	10,761,785	13.755%	1,480,263	Thin coal. Quality is a question.
TOTAL	25,752,608	22.674%	5,839,150	

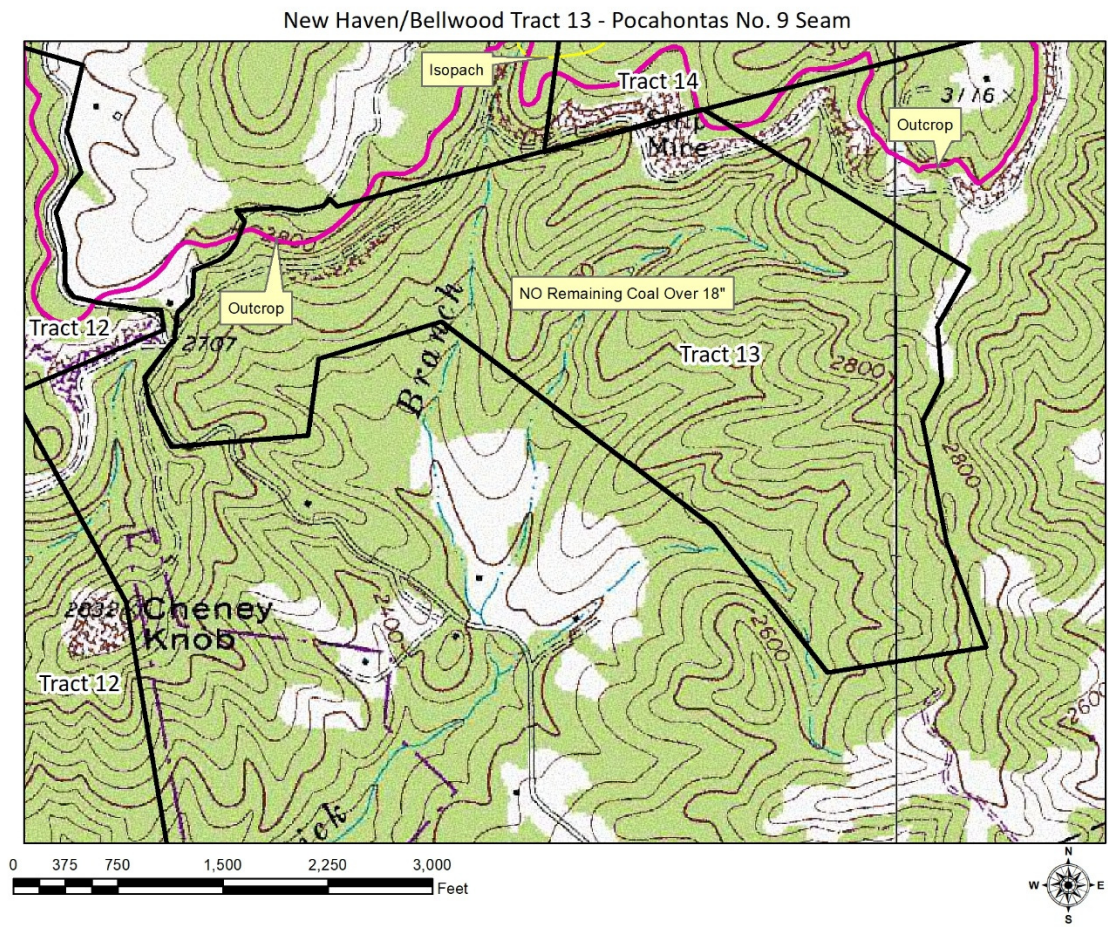
3 INDIVIDUAL TRACT – TONS IN PLACE

The New Haven/Bellwood tracts have the possibility of five (5) notable coal seams. The coal seam from highest to lowest are Fire Creek, Pocahontas No 9, Pocahontas No 7, Pocahontas No 6 and the lowest coal seam is the Pocahontas No 3. The Tract number being discussed is listed below the map.



Tract 13 – Fire Creek Seam – NO remaining coal.

Tract 13		
Sq Ft	Inches of Coal	Tons in Place
		0
	FCK	0
Percent Recoverable		0%
Clean Recoverable		0



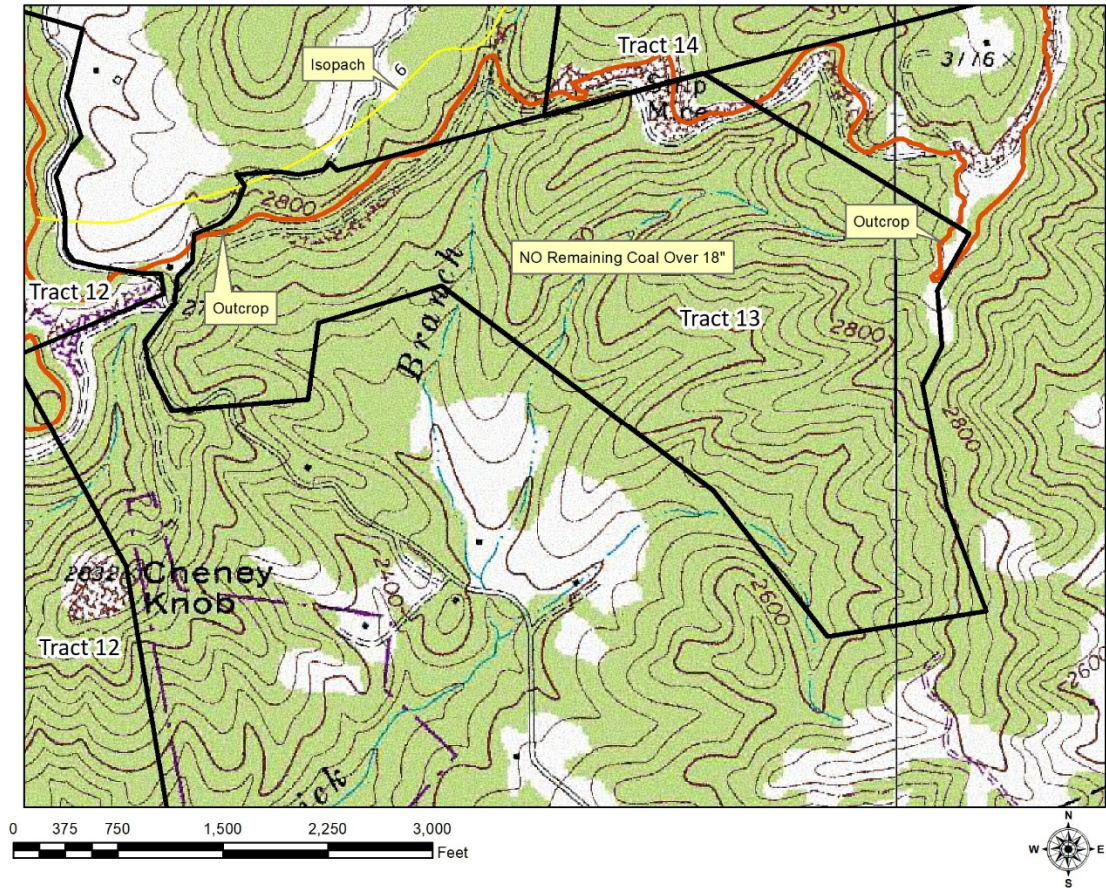
Tract 13 – Pocahontas No 9 Seam – NO remaining coal.

Tract 13		
Sq Ft	Inches of Coal	Tons in Place
		0
	PC9	0

Percent Recoverable 0%

Clean Recoverable 0

New Haven/Bellwood Tract 13 - Pocahontas No. 7 Seam

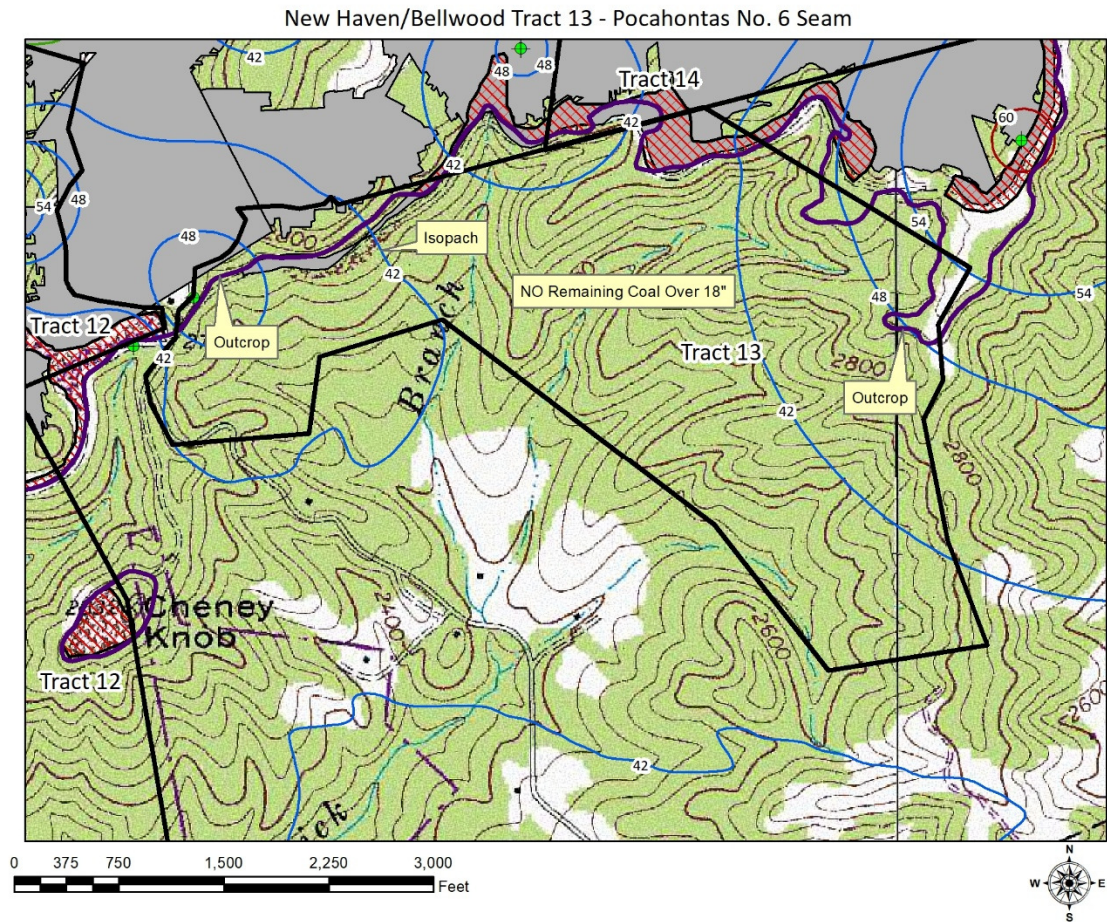


Tract 13 – Pocahontas No 7 Seam – NO remaining coal.

Tract 13		
Sq Ft	Inches of Coal	Tons in Place
		0
	PC7	0

Percent Recoverable 0%

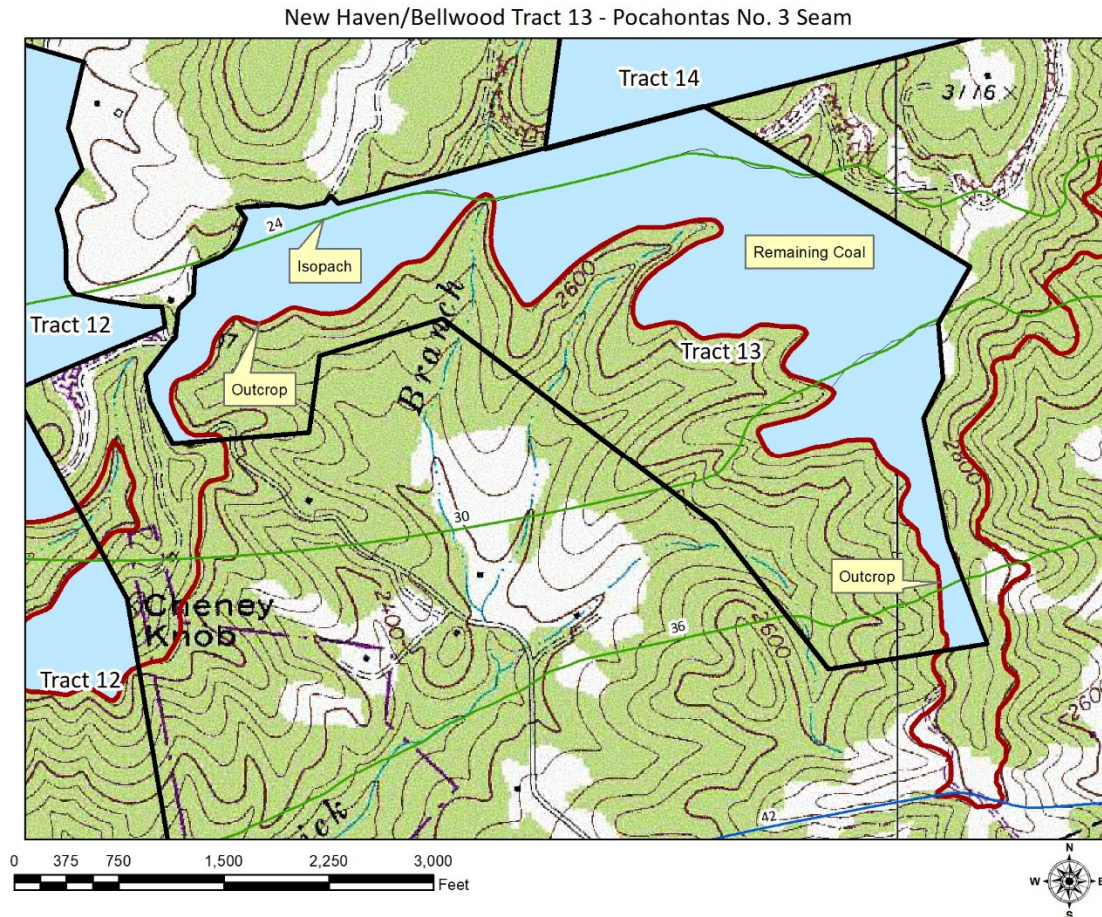
Clean Recoverable 0



Tract 13		
Sq Ft	Inches of Coal	Tons in Place
		0
	PC6	0

Percent Recoverable 0%

Clean Recoverable 0



Tract 13 – Pocahontas No 3 Seam available coal is a solid color. Mined areas are marked as such. Other feature such as coal thickness isopach, thickness control sample point to calculate the isopach, and seam outcrop are marked. A former coal tipple and railroad siding were located in Beelick Knob on Tract 14 property.

Tract 13		
Sq Ft	Inches of Coal	Tons in Place
6,118,665	25	509,889
		0
	PC3	509,889
Percent Recoverable		10%
Clean Recoverable		50,989

TOTAL RECOVERABLE COAL IS APPROXIMATELY 50,989 TONS.

The coal resources outlined in this report reflect the strong, well-established quality of the Pocahontas Seams in Fayette County, West Virginia—one of the region’s most historically reliable metallurgical coal horizons. Geoweb, LLC completed the resource evaluation using West Virginia Geological Survey data, providing a credible technical basis for defining the property’s in-place coal potential. My review of the supporting data indicates that the geology and coal quality characteristics are consistent with coal that could be economically mined under typical market conditions.

As with any resource position, additional drilling, sampling, and engineering data will continue to refine both confidence and valuation. Investors should incorporate independent due diligence into their assessment of the opportunity.



Harry D. McKenzie, PE, Real Estate Broker
Managing Member
Geoweb, LLC



4 COAL QUALITY REPORT

Coal quality information provided by the West Virginia Geological Survey shows an excellent low-volatile and mid-volatile metallurgical coal.

Below is a screen shot of the Fire Creek, Pocahontas No 6, and Pocahontas 3 seams quality from the West Virginia Geological Survey, Fayette County Report from 1919 on pages 639-640.

Table 1—Coal Analyses by West Virginia Geological Survey—(Concluded).

No. on Map II.	Mine.	Coal Bed.	Condition of Sample.	PROXIMATE				Common to Both		ULTIMATE				Calorimeter B. T. U. for 1 Lb. of Coal	Calculated B. T. U. for 1 Lb. of Coal	Carbon divided by Oxygen + ash.
				Moisture	Volatile Matter	Fixed Carbon	Phosphorus	Ash	Sulphur	Carbon	Hydrogen	Oxygen	Nitrogen			
184	A. W. Ashley	Sewell	A. R.	0.62	25.88	71.16	0.008	2.34	0.59	85.49	4.71	5.69	1.18	15,010	14,940	10.65
185	Meadow River Lumber Co.	Sewell	A. R.	0.56	26.84	69.31	0.008	3.29	0.58	84.78	4.84	5.46	1.05	14,840	14,930	9.69
186	Ben Sycamore	Sewell	A. R.	0.50	23.69	71.20	0.009	4.61	0.84	83.57	4.52	4.94	1.52	14,800	14,610	8.75
	Average	Sewell	A. D.	0.68	21.94	73.30	0.004	4.08	0.87	84.39	4.70	4.72	1.24	14,960	14,900	10.11
189	Rock Lick Coal Co. (Erskine)	Fire Creek	A. R.	0.87	21.35	74.31	0.007	3.68	0.82	83.68	4.74	5.17	1.24	15,066	14,759	9.41
191	N. R. & Poca. Cons. Coal Co.	Fire Creek	A. R.	0.61	19.72	75.37	0.006	4.30	0.60	85.56	4.03	4.54	1.26	15,327	14,970	10.04
192	Newlyn Coal Co.	Fire Creek	A. D.	1.15	19.09	75.27	0.006	3.98	0.81	85.56	4.03	4.54	1.26	14,970	14,627	10.04
193	Dunglen Coal Co. (McKell Estate) (Fire Creek)	Fire Creek	A. R.	1.33	19.57	75.12	0.006	3.98	0.61	85.41	4.07	4.67	1.26	14,943	14,614	9.87
193	Dunglen Coal Co. (McKell Estate) (Fire Creek)	Fire Creek	A. D.	0.60	18.00	78.63	0.019	2.72	0.63	86.67	4.54	4.11	1.33	15,470	15,119	12.69
538	Fire Creek C. & C. Co. (Fire Creek)	Fire Creek	A. R.	1.32	23.01	70.35	0.004	3.32	0.63	86.56	4.55	4.21	1.33	15,451	15,106	12.49
194	Beury Bros. C. & C. Co. (Echo)	Fire Creek	A. R.	0.82	20.55	74.11	0.024	4.52	0.55	85.49	4.71	5.69	1.18	15,098	14,878	12.36
196	Big Bend Coal Co. (Dimmock)	Fire Creek	A. R.	0.57	20.95	72.36	0.130	6.12	0.95	85.99	4.31	4.44	1.29	15,191	14,866	12.15
198	Stone Cliff C. & C. Co.	Fire Creek	A. R.	0.70	21.64	76.46	0.002	1.20	0.64	86.24	4.64	4.02	1.09	15,210	15,130	11.33
200	Beechwood C. & C. Co. (No. 1)	Fire Creek	A. R.	0.82	20.08	74.65	0.056	1.63	0.77	85.49	4.71	5.69	1.18	15,098	14,878	12.36
201	Alaska C. & C. Co. (Alaska)	Fire Creek	A. R.	0.38	20.71	72.21	0.020	6.70	0.48	85.49	4.71	5.69	1.18	15,098	14,878	12.36
203	Ephraims Creek C. & C. Co.	Fire Creek	A. R.	0.44	21.43	74.21	0.033	3.92	0.55	85.49	4.71	5.69	1.18	15,098	14,878	12.36
204	Phoenix Coal Co. (Slater)	Fire Creek	A. R.	0.59	17.88	78.57	0.010	2.96	0.52	85.49	4.71	5.69	1.18	15,098	14,878	12.36
207	Royal C. & C. Co. (Royal)	Fire Creek	A. R.	0.62	18.57	78.36	0.014	2.45	0.62	85.49	4.71	5.69	1.18	15,098	14,878	12.36
209	Export Coal Co.	Fire Creek	A. R.	0.75	19.16	75.63	0.008	4.46	0.93	85.49	4.71	5.69	1.18	15,098	14,878	12.36
210	Laurel Creek Coal Co. (Laurel Creek)	Fire Creek	A. R.	0.62	18.03	76.59	0.019	4.76	0.71	85.49	4.71	5.69	1.18	15,098	14,878	12.36
213	Quinnimont C. & C. Co. (Big "Q")	Fire Creek	A. R.	0.83	19.26	70.95	0.152	8.96	0.96	85.49	4.71	5.69	1.18	15,098	14,878	12.36
214	Greenwood Coal Co.	Fire Creek	A. R.	0.69	19.29	75.42	0.046	4.60	0.77	85.49	4.71	5.69	1.18	15,098	14,878	12.36
	Average	Fire Creek	A. D.	0.90	18.80	76.95	0.014	3.35	0.62	86.12	4.30	4.32	1.29	15,220	14,878	12.36
221	Wm. Sims	Little Fire Creek	A. R.	0.83	19.99	75.02	0.031	4.16	0.68	85.99	4.31	4.44	1.29	15,191	14,866	12.15
222	Meadow River Smokeless Coal Co.	No. 6 Pocahontas	A. R.	0.38	23.51	74.49	0.002	1.62	0.66	87.06	5.48	3.89	1.21	15,470	15,720	15.39
223	N. R. & Poca. Cons. Coal Co.	No. 6 Pocahontas	A. R.	0.32	21.60	74.61	0.012	3.47	0.54	86.24	4.64	4.02	1.09	15,210	15,130	11.33
224	Samuel Gwinn	No. 6 Pocahontas	A. R.	0.33	19.90	77.34	0.003	2.43	0.66	84.62	4.57	6.08	1.04	14,676	14,450	9.29
	Average	No. 6 Pocahontas	A. R.	1.09	21.16	75.39	0.005	2.36	0.43	85.16	4.51	6.34	1.00	14,676	14,450	9.29
225	Beury Bros	No. 3 Pocahontas	A. R.	0.58	20.89	75.78	0.007	2.75	0.54	85.34	4.58	6.75	1.04	14,850	14,377	10.12
	Average	No. 3 Pocahontas	A. R.	0.32	22.70	73.07	0.005	3.91	1.92	85.95	4.53	2.43	1.26	15,030	15,200	13.86

Table 3—Coal Analyses by U. S. Geological Survey and U. S. Bureau of Mines—(Continued).

No. on Map II.	Mine.	Coal Bed.	Laboratory Number	Condition of Sample.	Proximate			Common to Both		Ultimate				Calorimeter B. T. U. for 1 Lb. of Coal	Calculated B. T. U. for 1 Lb. of Coal	Carbon divided by Oxygen + ash.
					Moisture	Volatile Matter	Fixed Carbon	Ash	Sulphur	Carbon	Hydrogen	Oxygen	Nitrogen			
199	Beechwood C. & C. Co. (No. 2)	Fire Creek	8293	A. D.	0.78	16.82	77.69	4.71	0.55	85.00	4.79	3.47	1.48	14,917	14,917	10.30
200	Beechwood C. & C. Co. (No. 1)	Fire Creek	8060	A. R.	3.31	16.28	74.87	5.54	0.49	.....	.....	.....	.....	.....	.....	.....
200	Beechwood C. & C. Co. (No. 1)	Fire Creek	8063	A. R.	3.19	17.87	73.50	5.44	0.52	.....	.....	.....	.....	.....	.....	.....
200	Beechwood C. & C. Co. (No. 1)	Fire Creek	8062	A. R.	4.22	16.32	72.21	7.25	0.69	.....	.....	.....	.....	.....	.....	.....
200	Beechwood C. & C. Co. (No. 1)	Fire Creek	8115	A. R.	3.54	17.03	73.28	6.15	0.51	80.93	4.82	6.19	1.39	14,099	14,310	8.56
200	Beechwood C. & C. Co. (No. 1)	Fire Creek	8116	A. D.	0.66	17.54	75.47	6.33	0.53	83.35	4.64	3.72	1.43	14,521	.....	8.29
201	Alaska C. & C. Co. (Alaska)	Fire Creek	8189	A. R.	3.08	15.81	76.31	4.80	0.54	.....	.....	.....	.....	.....	.....	.....
201	Alaska C. & C. Co. (Alaska)	Fire Creek	8170	A. R.	3.14	16.75	75.22	4.89	0.54	.....	.....	.....	.....	.....	.....	.....
201	Alaska C. & C. Co. (Alaska)	Fire Creek	8294	A. R.	3.07	16.83	75.24	4.86	0.50	82.15	5.01	6.07	1.41	14,519	.....	7.52
201	Alaska C. & C. Co. (Alaska)	Fire Creek	8107	A. R.	4.85	15.96	70.94	8.25	0.87	.....	.....	.....	.....	.....	.....	.....
203	Ephraims Creek C. & C. Co.	Fire Creek	8174	A. R.	3.87	17.43	74.29	5.41	0.74	.....	.....	.....	.....	.....	.....	.....
203	Ephraims Creek C. & C. Co.	Fire Creek	8175	A. R.	3.17	15.41	76.35	5.06	0.54	.....	.....	.....	.....	.....	.....	.....
203	Ephraims Creek C. & C. Co.	Fire Creek	8199	A. R.	3.57	16.54	74.44	5.65	0.64	.....	.....	.....	.....	.....	.....	.....
203	Ephraims Creek C. & C. Co.	Fire Creek	8213	A. R.	3.57	17.96	72.34	6.13	0.75	.....	.....	.....	.....	.....	.....	.....
203	Ephraims Creek C. & C. Co.	Fire Creek	8290	A. R.	3.60	16.83	73.42	6.15	0.67	81.03	4.92	5.68	1.55	14,216	.....	6.77
203	Ephraims Creek C. & C. Co.	Fire Creek	10629	A. R.	3.17	18.46	70.86	7.51	1.07	79.07	4.84	5.95	1.56	13,905	.....	5.87
203	Ephraims Creek C. & C. Co.	Fire Creek	8353	A. R.	2.65	16.32	75.26	5.77	0.90	.....	.....	.....	.....	.....	.....	.....
205	Stonewall C. & C. Co. (Terry)	Fire Creek	8354	A. R.	3.03	16.01	73.55	7.11	0.49	.....	.....	.....	.....	.....	.....	.....
205	Stonewall C. & C. Co. (Terry)	Fire Creek	8355	A. R.	2.53	15.93	78.76	2.78	0.60	.....	.....	.....	.....	.....	.....	.....
205	Stonewall C. & C. Co. (Terry)	Fire Creek	8423	A. R.	2.75	15.99	76.01	5.25	0.64	82.56	4.84	5.28	1.43	14,508	14,627	7.84
205	Stonewall C. & C. Co. (Terry)	Fire Creek	8423	A. D.	0.97	16.28	77.40	5.35	0.65	84.07	4.72	3.75	1.45	14,774	.....	9.24
205	Stonewall C. & C. Co. (Terry)	Fire Creek	8891	A. R.	3.70	16.50	75.70	4.10	0.55	.....	.....	.....	.....	.....	.....	.....
209	Export Coal Co.	Fire Creek	8285	A. R.	3.00	15.30	78.70	2.30	0.45	.....	.....	.....	.....	.....	.....	.....
209	Export Coal Co.	Fire Creek	8284	A. R.	3.00	15.50	79.30	2.30	0.65	.....	.....	.....	.....	.....	.....	.....
209	Export Coal Co.	Fire Creek	8286	A. R.	2.80	15.00	77.60	4.70	0.65	.....	.....	.....	.....	.....	.....	.....
209	Export Coal Co.	Fire Creek	8315	A. R.	2.80	16.50	78.21	2.49	0.59	85.24	5.10	5.15	1.43	14,970	.....	11.16
209	Export Coal Co.	Fire Creek	8073	A. R.	2.39	14.50	78.93	4.18	0.87	.....	.....	.....	.....	.....	.....	.....
210	Laurel Creek Coal Co. (Laurel Creek)	Fire Creek	8074	A. R.	2.74	14.16	77.85	5.25	0.65	.....	.....	.....	.....	.....	.....	.....
210	Laurel Creek Coal Co. (Laurel Creek)	Fire Creek	8075	A. R.	2.85	14.44	78.02	4.69	0.55	.....	.....	.....	.....	.....	.....	.....
210	Laurel Creek Coal Co. (Laurel Creek)	Fire Creek	8392	A. R.	3.70	16.00	75.50	4.80	0.50	.....	.....	.....	.....	.....	.....	.....
210	Laurel Creek Coal Co. (Laurel Creek)	Fire Creek	8119	A. R.	2.69	15.48	76.91	4.02	0.59	83.55	4.84	4.69	1.41	14,501	14,812	8.69
210	Laurel Creek Coal Co. (Laurel Creek)	Fire Creek	8119	A. D.	0.70	15.80	78.48	5.02	0.60	85.25	4.71	2.98	1.44	14,790	.....	10.66
210	Laurel Creek Coal Co. (Laurel Creek)	Fire Creek	8300	A. R.	2.93	14.89	75.61	6.79	1.04	.....	.....	.....	.....	.....	.....	.....
211	Glendale Colliery Co.	Fire Creek	8176	A. R.	3.54	14.38	74.79	6.57	0.80	.....	.....	.....	.....	.....	.....	.....
211	Glendale Colliery Co.	Fire Creek	8410	A. R.	3.30	15.58	74.46	6.66	0.94	80.66	4.83	5.45	1.46	14,150	.....	6.66
211	Glendale Colliery Co.	Fire Creek	8197	A. R.	4.09	14.52	73.09	7.40	0.79	.....	.....	.....	.....	.....	.....	.....
213	Quinnimont C. & C. Co. (Big "O")	Fire Creek	8214	A. R.	3.58	15.39	72.46	8.57	0.85	.....	.....	.....	.....	.....	.....	.....
213	Quinnimont C. & C. Co. (Big "O")	Fire Creek	8215	A. R.	3.31	14.70	73.50	8.49	0.85	.....	.....	.....	.....	.....	.....	.....
213	Quinnimont C. & C. Co. (Big "O")	Fire Creek	8299	A. R.	3.41	14.06	73.75	8.20	0.78	79.05	4.83	5.74	1.40	13,846	14,708	5.67

These mines are near the New Haven/Bellwood Corporation Property, but none are on the property. The volatile matter and sulfur increase to the north. The typical quality will probably be more like the following:

Volatile Matter 14 to 26%

Ash 4 to 8%

Sulfur 0.50 to 2.45%

Actual quality will vary. Additional due diligence on quality is highly recommended.

5 SUMMARY OF MINING HISTORY

Bellwood, West Virginia was once a small but active coal-mining community in Fayette County, tied to the larger New River and Greenbrier coalfields. Its mines—run by companies like Alaska Coal Co. and Dorkent Coal Co.—worked major regional seams such as Fire Creek and Pocahontas No. 3. Extension mining by Peabody Coal in the Pocahontas No 6 seam in the northern block of tracts.

Mining History Near Bellwood, WV

- **Location & Coalfield Context**

- Bellwood sat within **Fayette County**, an area that spans parts of the **New River, Kanawha, and Greenbrier coalfields**. These coalfields were among the most productive in southern West Virginia.

Coal Companies & Operations

- **Alaska Coal Co.** operated mines in Bellwood, specifically working the **Fire Creek and Pocahontas No 6 seams**, well-known metallurgical coal seams in the region.
- Another historical account attributes **Bellwood No. 1, 2, and 3** to the **Dorkent Coal Co.**, which mined the **Pocahontas No. 3 vein**, one of the highest-quality seams in Appalachia.

What Remains Today

- Only remnants of the former coal camp survive—foundations, scattered structures, and traces of the old tipple sites. These remains are typical of many abandoned coal towns in Fayette County, where communities often disappeared after mine closures.

Broader Historical Context

- Fayette County's coal towns were usually built in narrow hollows with direct access to seams. Coal was transported downhill to rail lines, making the region a major contributor to West Virginia's coal boom from the late 1800s through the mid-20th century.

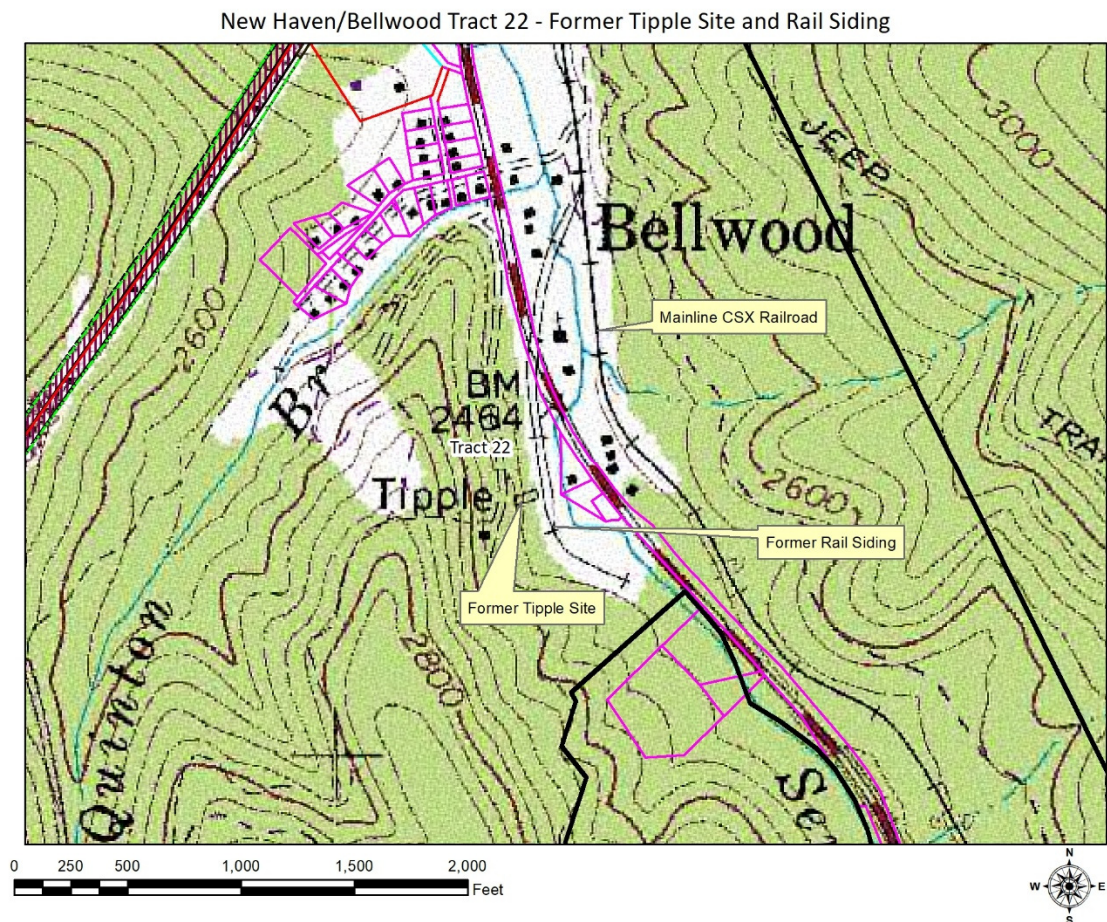
The mining history of the **Pocahontas No. 6** seam near Bellwood, West Virginia, is primarily centered on the early-to-mid 20th-century operations of the **Beelick Knob Coal Company**.

Key historical details include:

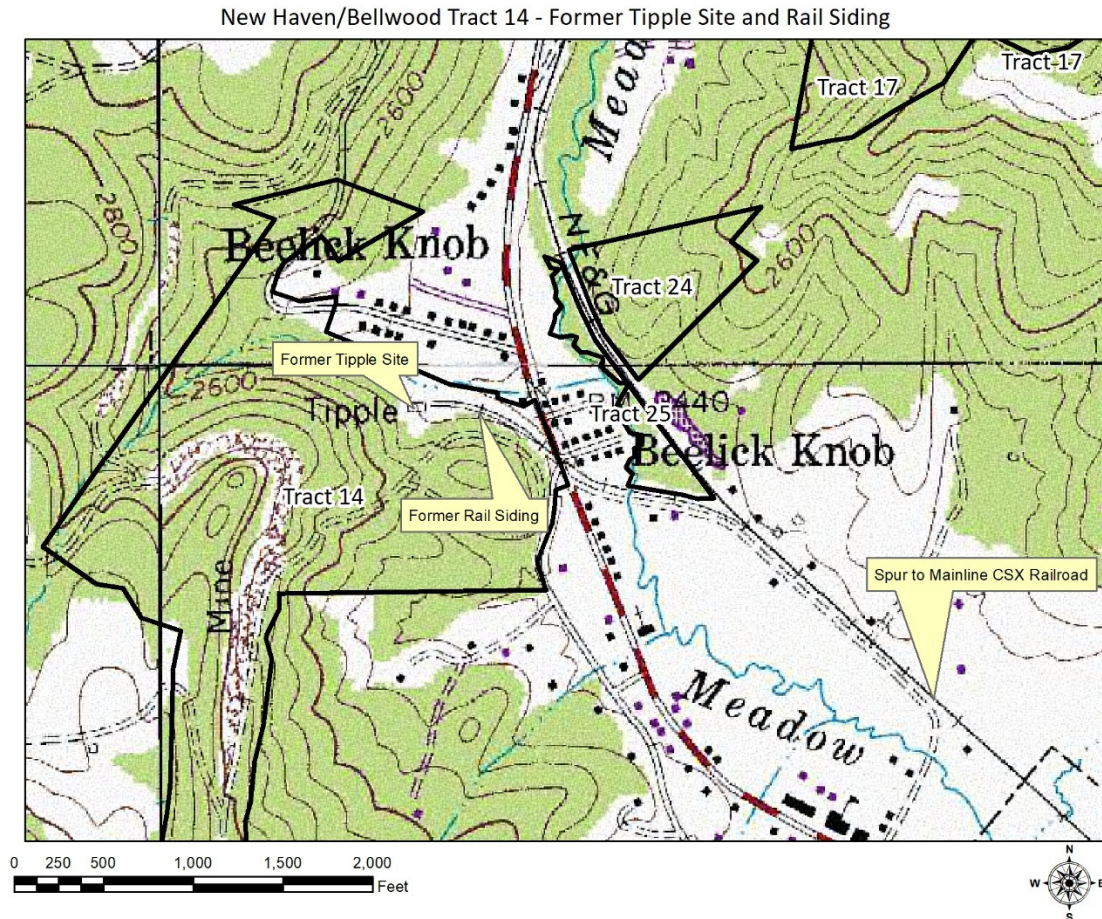
- **Establishment:** The Beelick Knob Coal Company opened operations in the Pocahontas No. 6 seam in **1920**.
- **Workforce:** By **1923**, the mine employed approximately 74 men.
- **Ownership Changes:** In 1939, the operation was acquired by the **Standard Fire Creek Coal Company**, which continued mining the seam until **1953**.
- **Operational Shifts:** After active mining ceased at this specific site, the facility served as a loading point; coal from other nearby mines was trucked to Beelick Knob to be loaded onto trains.
- **Coal Quality:** The Pocahontas No. 6 seam is part of the broader Pocahontas Coalfield, renowned for producing high-quality, "smokeless" semi-bituminous coal with a high BTU rating (approximately 15,000 Btu/lb).

Bellwood itself is recognized as a historic coal camp within the Greenbrier Coalfield region of Fayette County.

Bellwood was the location of a former tipple and rail siding as seen in the map below.



The site of the former tipple and rail siding is on Tract 22 of the New Haven / Bellwood property at Bellwood. Having a tipple and siding option for the project that is on the mainline CSX railroad could be very important. Other options are nearby coal preparation plants such as Coranado Coal, Lady H, or Southeast Coal.

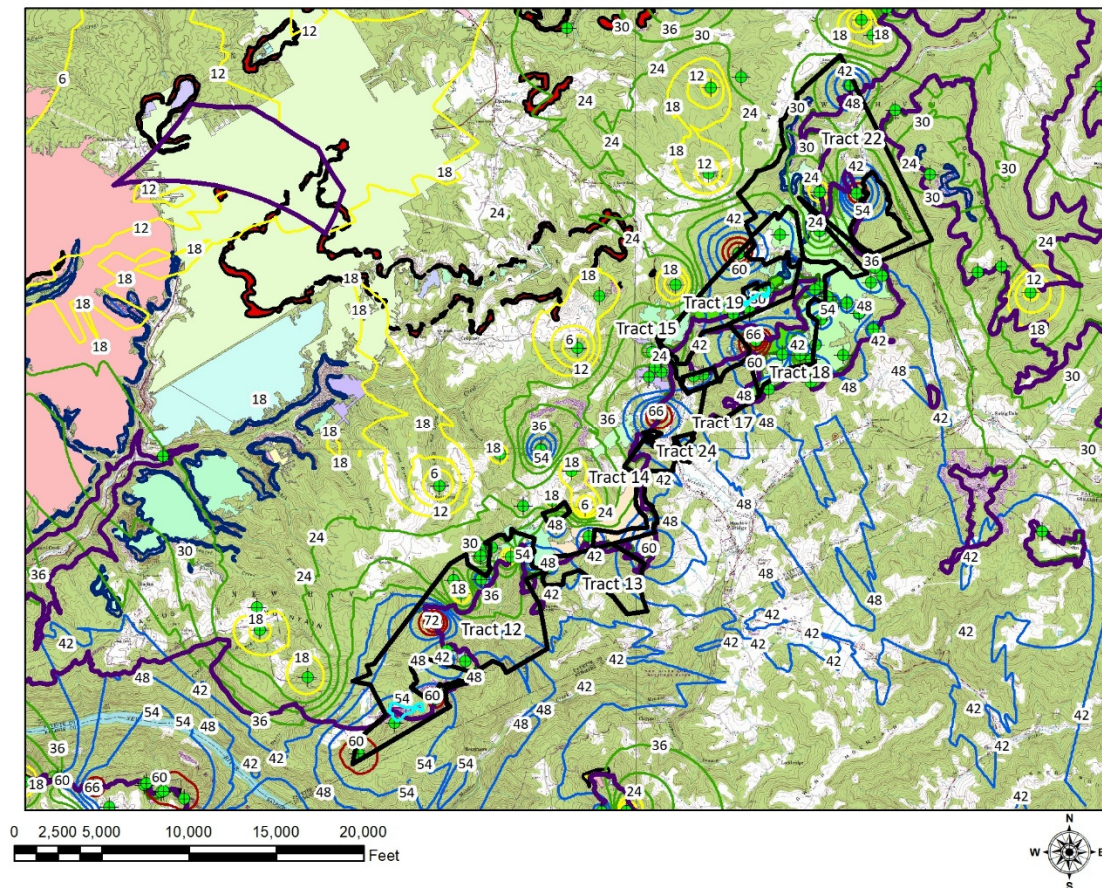


The site of the former tipple and rail siding is on Tract 14 of the New Haven / Bellwood property at Beelick Knob. Having a tipple and siding option for the project that is just off the mainline CSX railroad could be very important. Other options are nearby coal preparation plants such as Coranado Coal, Lady H, or Southeast Coal.

6 COAL RESERVE

The coal tons in place were calculated based on the isopach maps from the West Virginia Geological Survey. All coal seams in West Virginia have various mapping products. Each seam has an isopach map available along with a previous mining map. This is the basis for West Virginia Mineral Property taxes.

New Haven / Bellwood Corporation - Previous Underground and Surface Mining in the Area



The above Map shows the Isopach of the Total Coal Bed Thickness of the Pocahontas No 6 Seam

What is an isopach

A coal seam isopach map is a specialized geological map that shows the *true stratigraphic thickness* of a coal seam across a region, using contour lines to connect points of equal thickness.

What It Represents

- **Isopach definition:** An *isopach* is a line on a map connecting points of equal thickness within a geological layer.
- **Coal seam focus:** In coal geology, an isopach map illustrates how thick a coal seam is at different locations, based on drillhole data, core samples, or geophysical surveys.
- **True stratigraphic thickness (TST):** Unlike an *isochore map* (which shows vertical thickness), an isopach map measures thickness *perpendicular to bedding planes*. This distinction matters when strata are tilted or folded.

How It's Constructed

1. **Data collection:** Mining Engineers record the elevation of the *top* and *bottom* of a coal seam from drillholes or outcrops.
2. **Thickness calculation:** The difference between these surfaces gives the seam thickness at each point.
3. **Contour mapping:** Thickness values are contoured into lines (isopachs), producing a map that highlights areas of thicker or thinner coal.

Why It's Useful

- **Resource estimation:** Helps calculate coal reserves by showing where seams are thickest.
- **Mine planning:** Guides engineers in targeting areas with economically viable thickness.
- **Environmental permitting:** Supports regulatory filings (e.g., in West Virginia, maps are often required in mining permits).
- **Geological interpretation:** Reveals depositional patterns, basin architecture, and structural influences on seam distribution.

The number of acres of coal is calculated from the remaining coal boundary. The coal density used in the calculation is the industry standard 80 pounds per cubic foot. Next the mining recovery is estimated based on previous mining recovery. Lastly, the beneficiation of clean coal in the preparation plant is determined as a percent saleable of the raw coal feed.

Therefore, the calculation is:

AREA(in square feet) X THICKNESS(in feet) X DENSITY(pounds per cubic foot) / 2000(pounds per ton) = TONS IN PLACE

For example:

43,560 sq ft (One Acre) X 36 inches (Three Feet) = 5,227 Tons of Coal In Place

7 RESUME OF AUTHOR

RESUME OF HARRY DOUGLAS MCKENZIE, PE, REAL ESTATE BROKER

COLLEGE: University of Kentucky

Bachelor of Science in Civil Engineering with
Mining Engineering - 1977

REGISTRATION: Registered Professional Mining Engineer. Achieved the highest score ever recorded on the nationally standardized test for Professional Mining Engineers. Registered in Kentucky, West Virginia, Tennessee, North Carolina, Maryland, Alabama, Virginia, and Florida

LICENSE: West Virginia Real Estate Broker.
FAA Remote Pilot in Command (Commercial Drone Pilot).

CERTIFICATION: General Mine Foreman, Construction Supervisor, Underground Shot Fireman, Underground Miner, Surface Miner, National USPAP (Uniform Standards of Professional Appraisal Practice).

WORK EXPERIENCE:

1991 to Present Managing Member

Geoweb, LLC

Summersville, West Virginia

Manager of all operations for Geoweb business development. Including digital property map conversion, digital tax map conversion and GIS software development. Land Agent for over 100,000 acres of coal and gas properties. Professional Engineer in Charge of all Valuation Services. Authored translation software for the Computer Aided Mass Appraisal (CAMA) system for all real estate in West Virginia. Development and programming of DigitalCourthouse.com website to provide appraisal, mapping and other information on every parcel of land in West Virginia as a subscription-based service on the Internet. Real estate specialty in the sale of large parcels of land, both surface and sub-surface (coal, oil and gas, timber). Address conversion and system design and programming of 911 Mapping software and databases. Audit and review Alpha Natural Resources and Walter Energy coal and mineral properties for US Bankruptcy Court. Chief Pilot and Manager of drone mapping services. Responsible for property and mine surveying and layout.

1987 to 1991 Manager of Surface Operations

Professional Engineer in Charge

Marrowbone Development Company – Royal Dutch Shell Naugatuck,
West Virginia

Manager of all surface operations for the 50,000 acre Marrowbone Complex including Mountaintop Mining, Contour and Highwall Mining and outside areas of Deep Mines. Responsible for all gas wells and pipelines, drilling of new gas wells and safety of mining in vicinity of wells. Development and maintenance of all roads, water, sewer, electric, telephone and buildings. Interface with all State and Federal inspectors, both mining and environmental. Responsible for managing and certification of all construction and mine development. Manager of Shell Mining Appalachian Property Acquisitions and Sales team. Responsible for all surface and underground mine surveying including all infrastructure development and surveying for a new surface mining complex called The Dragon Mine. Manager of Appalachian property acquisitions, valuations, and property sales.

1985 to 1987 President and Owner

McKenzie Engineering Corporation

Summersville, West Virginia

GIS design and implementation with Autodesk, Bentley, Intergraph and ESRI system tools. Consulting engineering services provided for mine planning, development, valuation, and acquisition of coal property. Management consulting for existing coal companies interested in reducing mining costs and development of new mine complexes. Design custom GIS software for the mining and civil engineering communities. Primarily used for property geostatistical modeling from a customized database, with 2-D Topo and 3-D mapping with integration to CAD software. Property surveying as a licensed Professional Surveyor in West Virginia (#1028).

1983 to 1985 Chief Engineer

Professional Engineer in Charge

Banner Coal and Land Company

Beckley, West Virginia

In charge of all engineering services and surveying for the coal mines in West Virginia. Responsible for business development of new mines, and property acquisitions and valuations. Identify, acquire, and develop new mines.

1980 to 1983 Chief Engineer / Land Manager

Professional Engineer in Charge

Walhonde Coal and Construction, Inc.

Charleston, West Virginia

In charge of all engineering services and surveying for the coal and construction operations, union and non-union, in Kentucky and West Virginia. Responsible for business development of new mines, property acquisitions, valuations, and coal sales contracts. Identify, acquire, and develop a new mine complex in Betsy Layne, Kentucky called Somerset Coal Company. Superintendent and backup section foreman for the Indian Creek contract mine.

1979 to 1980 Division Mining Engineering

Badger Coal Company - Pittston Coal Group

Widen, West Virginia

In charge of all mining engineering services and surveying, surface and deep, for the 93,000 acre Widen Property. Responsible for selection and management of contract mines. Supervision of a detailed reserve study of the coal quality and quantity; supervision of a very detailed, workable twenty-year mining plan and a complete financial analysis of the plan using the computer program I developed.

1977 to 1979 Mining Engineer

Sewell Coal Company - Pittston Coal Group

Nettie, West Virginia

In charge of all mining engineering services for the Sewell Criton No. 4 Complex (seven miner sections, 14 miles of conveyor and track, and a 400 TPH preparation plant) including mine projections and surveying, mine maps, ventilation analysis, production analysis, section foreman, dewatering systems, preparation plant modifications, financial analysis of any changes in equipment or systems, and preparation of annual capital budget. Environmental Engineer for all five company operations. Developed and programmed first mining cost and modeling system on a computer. Responsible for all surface and underground surveying regarding Criton No. 4 Complex.