

Additional Information

The history of coal mining in the Grass Creek area is complicated, as mines changed hands and names often. The written record is incomplete, imprecise, and sometimes contradictory. Further, it is seldom clear which site in the field is the one referred to in the literature.

A. Historical Background

Coal was discovered in the Grass Creek area in 1860 by John Muir and Samuel Fletcher, who happened upon the outcrop of a ten foot seam while hunting. A mine was opened there by Daniel H. Wells, Bryant Stringham, and Stephen Taylor which became known as the Church Mine.[2] An 1871 business directory [7] lists a "Grass Cañon Coal Co." among businesses in Coalville. In 1873, the Williams Mine opened and operated intermittently on a small scale for a number of years. Around either 1876 or 1887 a mine was opened by the Algood brothers. A year later it was acquired by Matthew Cullen and Henry Spriggs. Located near the head of Grass Creek it was known as the Cullen Mine.[9] An 1878 map shows coal mines located in the south half of Section 24 (T3N, R5E) with a rail connection.[5]

In the summer of 1880 the Union Pacific Railroad sent a crew of men under David G. Thomas to develop the coal on its properties. The mine began producing in 1881 under superintendent James Tisdale, who also directed the construction of a small company town. Gomer Thomas, and later his brother Tom (neither kin to David G. Thomas), succeeded Tisdale as superintendent. The Union Pacific ran two mines in Sections 23 and 24 (T3N, R5E). However, plagued by water in the mines and heaving clay floors, the railroad abandoned them in 1887 and salvaged buildings and machinery. The No. 2 Mine continued to be operated under lease to Gomer Thomas.[10]

The Union Pacific mine workings were extensive. The mine had seven lift entries extending 2000 feet in one direction and 1400 feet in the other. The mine produced 271,960 tons in its seven year life (Table 1), most of which was sold to the railroad, but some went to other markets. The coal was of good quality, but the water and heaving floors in the mine drove up production costs and made it uneconomical. In its last five years the mine was losing \$0.405 on every ton produced, a large fraction of the \$1.847 to \$2.93 cost per ton of coal on the railroad car.[10]

Around 1892-93 Cullen and Spriggs sold the Cullen Mine to the Grass Creek Coal Company, which was also operating the Williams and Church Mines. Rail connection to the Grass Creek mines was made in 1895 by the Grass Creek Terminal Railway. The following year the Cullen (Grass Creek Coal Co.?) was working two openings, the Old Church and the Lower Church. Coal from the former was hauled by wagon to the Cullen for loading into cars. In 1896 the Thomas Mine, run by Gomer Thomas and sons, had been practically idle for several years. (It is not clear if this is one of the mines already mentioned or another mine south of Coalville.) By 1897 the Union Pacific Coal Company mines were being worked by the Grass Creek Coal Company. That year there were four openings being worked near the Cullen: the Old Church, Barber, Stallings, and the New Tunnel. The New Tunnel was located 1500 feet north of

the Old Church. It was driven by Gomer Thomas and sons until October 1, 1897, when Gomer Thomas was appointed State Mine Inspector, and completed by Lehi T. and Gomer Thomas, Jr. They struck coal 610 feet in on November 26, 1897. The New Tunnel had a rail connection to its mouth. It appears, then, that by 1897 the Grass Creek Coal Company operated most or all of the coal mines in the Grass Creek area, although most still went by their old names.[9]

In contrast to the Union Pacific mines in the 1880's, the Grass Creek mines in the 1890's were relatively small operations. The Cullen was the largest, employing twelve men in 1897. The Church and Thomas mines employed fewer than six men. The Cullen had a capacity of 50 tons/day, while the Old Church could produce over 30 tons/day, and the Lower Church, Stallings, and Barber openings had 20 tons/day capacities. 1896 production for the Cullen was 10,925 tons. In 1897 the Cullen and Church combined production was 8,200 tons.[9] Based on a reported \$736 royalty at \$0.75/ton, Gomer Thomas produced 981 tons in 1891 from the mine he leased from the Union Pacific Railroad.[10] Ventilation in the mines was natural.

Starting around 1898 the Grass Creek Coal Company made major capital improvements to the mines. Active ventilation in the form of a fan and a 6-inch pipe was installed in 1898, and an airway was driven to the Old Church. In 1899 the mine added a set of shaking screens and ten mining cars as well as adding three miner's cottages, a lodging house, and schoolhouse to the company town. In the following years additional fans and boilers were put in place. Production at the mine increased accordingly, jumping from 9,138 tons in 1898 to 37,573 tons in 1904 (Table 1). From 1899 to 1906 the company employed 20 to 78 men, generally around 50, and around ten horses. Mine superintendents during this period of expansion were W.L. Hansen (1899-1903), Andrew Adamson (1904), and John E. Pettit (1904-1906).[9]

Corporate officers of the Grass Creek Coal Company were: Joseph F. Smith, president; W.N. Cluff, vice president; and Arthur Winters, secretary and treasurer. The company was based in Salt Lake City.[9]

In 1907 the Grass Creek Coal Company sold the mine to the Union Fuel Company of Ogden, Utah. Backers of the Union Fuel Company included David Eccles, Judge Rholapp, and M.S. Browning. The new owners intended to increase production to 600 tons/day and market much of the coal to sugar factories. P.C. Kettle became the mine manager. In 1907-08 the Union Fuel Company spent \$20,000 on a new tibble, shaker screens, boilers, engine, and equipment, but only reached half of the 600 tons/day output targeted. Kettle continued as manager, and William S. Wilde, who had been foreman for a number of years before, became superintendent. Later superintendents were Frank Irwin (1909), Gibson (1910), and D.R. Roberts (1915).[9]

The Union Fuel Company apparently had two mines in 1910. The No. 2 Mine was opened by a 1400-foot-long slope on the 26° dip of the coal seam, with entries running east and west. Ventilation was provided by a 2x6x12 Crawford fan powered by five boilers yielding 480 horsepower. Steam driven pumps removed water from the mine.[9]

First mention of the Rees Mine is in the 1907 State Mine Inspector's Report. The mine was operated by the Rees-Grass Creek Coal Company (M.W. Taylor, president; M.C. Taylor, secretary; Thomas Rees/Reese in charge) on land in Section 24 (T3N, R5E) leased from the Union Pacific Coal Company. Lack of track delayed the shipping of coal and kept production a low 275 tons in 1907. That year the mine employed six men, two horses, and had one boiler. The following year the mine employed five men, producing 100 tons/day. The coal was sold to markets in Logan and Park City. The State Mine Inspector reports that considerable development work was done in 1909, and by 1910 the mine employment had jumped to 52 men. The mine worked an eight foot coal seam dipping 28°. A slope ran on the dip with entries running east and west. Two boilers were used to power hoists and pumps, but ventilation was natural.[6,9]

The Rees Mine was idle part of 1915. In a report the State Mine Inspector was critical of the poor condition of the mine and stated that he might advise it to close if conditions were not improved. It was working six men at the time (though a table in the same report lists 32 men working).[9]

The Union Fuel and Rees-Grass Creek mines ranked ninth and tenth in the state in production in 1909, producing 1.9% and 0.7%, respectively, of the state's 2,322,209 ton output.[6]

Sometime between 1916 and 1919 the Grass Creek Fuel Company started operating, presumably taking over the Union Fuel Mine. The company had its office in the town of Grass Creek and marketed coal under the trade name of "Grass Creek." Frank Pingree was president of the company and J.H. Roberts was vice president and superintendent. Mine operations were run by electricity by 1925. The mine worked a coal seam 5-11 feet high that dipped about 20°. Widespread faulting in the area led to a 1924 assessment that the mine would probably not expand beyond its current size.[8]

When the Union Pacific Railroad came to Grass Creek in 1880 to develop its coal resource, it constructed a small town for its workers. James Tisdale oversaw the construction of the town of Grass Creek, which consisted of about forty houses and a schoolhouse.[10] The Grass Creek Coal Company made improvements to the company town in 1899, adding three more houses for miners, a large boardinghouse, and another schoolhouse.[9] Other buildings present included a company store, horse barns, and corrals. The schoolhouse doubled as a church and social hall.[1,10] Current landowner Grant Ercanbrack has identified one remaining foundation as being the general mercantile and post office.[4] Most sources and the current USGS topographic map [12] place the Grass Creek townsite at the head of Grass Valley Canyon (T3N, R6E, Section 18). It is worth noting, however, that the oldest USGS map [11] and a map by Wegemann [13] put the town at the mouth of the canyon (T3N, R5E, Section 32) and also show several buildings in Grass Valley Canyon at Bear Hollow (T3N, R5E, Section 26).

The population of Grass Creek has been put at several hundred.[1] In their heyday from 1890 to 1920 the mines employed 50-125 miners (Table 1), and adding families and supporting services makes this a reasonable estimate. Most of the residents were Scotch, English, or Welsh. There were several Chinese working for the Union Pacific in the early 1880's, but these all left in the wake of racial tensions following the Chinese Riot in Rock Springs, Wyoming, in 1885. There was one organized religious group, an LDS church that met in the schoolhouse.[10]

When the mines were abandoned is not clear from the literature. Carr [1] states that the last Grass Creek mine shut down in 1932, but a 1937 date on a concrete slab at the Grass Creek Fuel Company site (92 Sm 13) belies this. A source published in 1940 states that a small amount of coal was still being produced from two openings at that time.[10] These probably closed in the early 1940's. A 1944 listing of Utah coal mines shows only one Summit County coal mine, the Weber Mine (92 Sm 6), a mine not located in Grass Creek that was also run by the Grass Creek Fuel Company. No Grass Creek area mines are on a similar 1946 list.[8].

Known deaths of miners in accidents at Grass Creek mines are as follows: Thomas Birch (November 6, 1902), Elijah Turner (February 6, 1905), James R. Robinson (December 22, 1906), Samuel E. Diston (December 17, 1915), James Casaril (January 7, 1925), and Irvin Staley (January 19, 1925).[8,9]

B. Reconciliation of Site Names, Mine Names, and Locations

Pinning down the actual locations of the mines discussed above is problematic. Precise locational descriptions are lacking in most literature sources, and what locations are given sometimes do not correspond to locations of features in the field. Contemporary descriptions and maps provided by Wegemann [13] give the best locations, but do not include all sites. Selection of sites for field work and assignment of names for this project were based on location information in Doelling [3] and the Utah Geological and Mineral Survey's computerized CRIB data base, which are based largely on Wegemann's work. Subsequent research indicates that some of the assigned names are incorrect. In the following discussion, "site" refers to assigned names and "mine" refers to the actual names of the mines.

It seems fairly safe to say that the Church site (92 Sm 11) is the Church Mine, as it corresponds exactly to the Old Church Mine on Wegemann's map and fits his description of one quarter mile southeast of the Union Fuel mine. This site may also contain any of a number of mines associated with the Church (Lower Church, Cullen, Barber, Stallings, Robinson, Williams). The New Tunnel (1,500 feet north of the Old Church) is probably on the Union Fuel site.

The Union Fuel site (92 Sm 12) is probably reliably located in the SW/4 Section 18 (T3N, R6E). Wegemann places the Union Fuel Co. mine there both on a map and in his written description. Also, the site is the only one with physical remains consistent with a mine of its size. It should be pointed out that the site probably contains an assemblage of older, smaller mines (Cullen, etc.) that were incorporated into the Grass Creek Coal Company, as well as the Grass Creek Fuel Company, which followed the Union Fuel. Some of the Union Pacific workings may be on this site, as Union Pacific mines were later worked by the Grass Creek Coal Company and the Union Pacific mine has been described as being at the head of Grass Creek. However, Union Pacific mines were generally described as being in Sections 23 and 24 (T3N, R5E).

No published source consulted mentions any mining at the Grass Creek Fuel site (92 Sm 13) in Section 19 (T3N, R6E). The main mine operation was probably at the Union Fuel site. This site seems to be a pair of isolated portals developed late in the life of the mine. The identification is based on the "GCFCo 1937" inscription on a concrete slab there. These newer workings may have incorporated some small older mines.

The Tuttle site (92 Sm 8) is probably part of the Rees-Grass Creek Mine, which was previously part of the Union Pacific mines. In his text Wegemann places the Rees-Grass Creek Mine in the SW/4 NW/4 Section 12 (T3N, R5E). This is undoubtedly a misprint, as he maps the site in Section 24 and lists it in a table as being in Section 24. The location of the Tuttle site matches Wegemann's map location and section quarter-quarter description nearly exactly, and the site fits his description of the mine's geology. The 1880 date in F6 is consistent with the start of the Union Pacific mines.

Doelling lists the Rees-Grass Creek mine as being in the SW/4 NE/4 Section 24 and maps the mine at the mine symbol in the center of the NE/4 Section 24 on the current USGS map. Wegemann has a "coal prospect/abandoned mine" symbol on his map at this location. This is the approximate location of the Rees-Grass Creek site (92 Sm 10). This site may be part of the Rees-Grass Creek Mine (though the Tuttle site is more persuasive for the reasons given above) or part of the Union Pacific mines.

Wegemann mentions "some abandoned mines formerly worked by the Union Pacific Co." in Section 14 three quarters of a mile southeast of the Rees-Grass Creek Mine. (This is also apparently a misprint. From his map and his text he undoubtedly means Section 26.) Assuming Section 26 is correct, this would be in the vicinity of Bear Hollow. Doelling lists the Union Pacific mines as being in the SW/4 Section 23 (which is adjacent to Section 26) but notes that the exact location is unknown. These two sections have not been thoroughly investigated in the field.

No source consulted shows any nearby mine to which the Section 27 Coal Piles (92 Sm 9) could be attributed, though Wegemann's map shows a prospect in the vicinity on the north side of the canyon. The site is more likely associated with the shipping of the coal on the rail line than with its production.

Table 1. Coal production and labor force figures for selected years at mines in the Grass Creek district.[8,9,10]

Year	Production (tons)	Avg. No. Employed	Mine
1881	40,608		Union Pacific Mine
1882	63,895		Union Pacific Mine
1883	47,219		Union Pacific Mine
1884	35,548		Union Pacific Mine
1885	50,613		Union Pacific Mine
1886	29,131		Union Pacific Mine
1887	4,946		Union Pacific Mine
1891	981		Union Pacific #2 (Gomer Thomas lease)
1896	10,925	6+	Cullen/Grass Creek Coal Co.
1897	8,200	12	Cullen, Church/Grass Creek Coal Co.
1898	9,138	10-25	Grass Creek Coal Co.
1899	20,400	40	Grass Creek Coal Co.
1900	32,360	20-46	Grass Creek Coal Co.
1901	28,488	55	Grass Creek Coal Co.
1902		50	Grass Creek Coal Co.
1903	35,250	44-78	Grass Creek Coal Co.
1904	37,573	54	Grass Creek Coal Co.
1905	40,561	52	Grass Creek Coal Co.
1906	28,564	45	Grass Creek Coal Co.
1907	32,025	70	Grass Creek Coal Co.
	275	6	Rees-Grass Creek
1908	46,255	75	Union Fuel Co.
	8,308	5	Rees-Grass Creek
1909	44,727	70	Union Fuel Co.
	17,171	24	Rees-Grass Creek
1910	58,900	75	Union Fuel Co.
	26,351	52	Rees-Grass Creek
1915	32,557	45	Union Fuel Co.
	17,440	32	Rees-Grass Creek
1916	44,390	32	Union Fuel Co.
1919	32,146	29	Grass Creek Fuel Co.
1920	23,892	30	Grass Creek Fuel Co.
1921	27,314	38	Grass Creek Fuel Co.
1922	32,675	28	Grass Creek Fuel Co.
1923	20,983		Grass Creek Fuel Co.
1924-25	19,000	28	Grass Creek Fuel Co. (July - June)
1925-26	18,519	28	Grass Creek Fuel Co. (July - June)

References Cited:

1. Carr, Stephen L. 1972. The Historical Guide to Utah Ghost Towns. Western Epics: Salt Lake City 166 pp.
2. Coalville Literary Club. 1959. Coalville, Utah: Centennial Souvenir, 1859-1959. 40 pp.
3. Doelling, H.H. 1972. Eastern and Northern Utah Coal Fields. UGMS Monograph Series No. 2
4. Ercanbrack, Grant. pers. comm. April 23, 1986
5. Froiseth, B.A.M. 1878. Froiseth's New Sectional and Mineral Map of Utah. Published by B.A.M. Froiseth, Salt Lake City, scale: 1 inch = 8 miles (reproduction)
6. Harrington, D. 1910. Utah as a coal producing state. Salt Lake Mining Review 11(23):19-23 (March 15)
7. Langley, Henry G. 1871. Pacific Coast Business Directory for 1871-73. Henry G. Langley: San Francisco (photocopy at Utah State Historical Society Library)
8. State of Utah, Industrial Commission. Annual and Biennial Reports: 1921, 1922-24, 1925, 1928-1930, 1942-44, 1944-46
9. State of Utah, State Mine Inspector. Annual Reports: 1896, 1897, 1898, 1899, 1900, 1909, 1910, 1915, 1916
10. Union Pacific Coal Company. 1940. History of the Union Pacific Coal Mines 1868-1940. Colonial Press: Omaha 265 pp.
11. U.S. Geological Survey. 1903. Coalville, Utah-Wyo. Quadrangle topographic map, scale 1:125,000 (reprinted 1944)
12. U.S. Geological Survey. 1967. Turner Hollow, Utah Quadrangle topographic map, scale 1:24,000
13. Wegemann, C.H. 1915. The Coalville Coal Field, Utah. USGS Bulletin 581-E

Additional Information:

A history of the Union Pacific coal mines states that the mine in Grass Creek was developed on a railroad section by a crew under David G. Thomas, who was sent there by the Coal Department of the Union Pacific Railroad in 1880. The company abandoned the mine in 1887, although it continued to operate its No. 2 Mine under lease. The mine was abandoned due to excessive water, heaving clay floors, and high costs. Coal production was as follows:

1881	40,608 tons
1882	63,895
1883	47,219
1884	35,548
1885	50,613
1886	29,131
1887	<u>4,946</u>
Total	271,960

The company built a camp of about forty houses for its workers and their families. Buildings and machinery were removed when the mine was abandoned.

A map of the underground mine workings shows that the main entry and slope were in T3N, R5E, Section 26 SE/4 SW/4 SE/4, about 1,000 feet northeast of feature F1, where there is a prominent sandstone ledge formed by the caprock. This portal is now caved and completely hidden by large boulders fallen from the ledge. The map shows seven mains running northeast and southwest from the slope. The F1 portal is labelled "Old Opening." The map shows no workings where features F2 and F3 would be. These features are very near a fault that limited the westward extent of the mine.

Doelling lists the "Union Pacific mines (Bishops)" in a table as "Exact location unknown, 1870-1880."

Wegemann states that an isolated outcrop in the center of Section 26 "was formerly worked and yielded considerable coal."

References:

Doelling, H.H. 1972. Eastern and Northern Utah Coal Fields. UGMS Monograph Series No. 2

Union Pacific Coal Company. 1940. History of the Union Pacific Coal Mines 1868-1940. Colonial Press: Omaha 265 pp.

Wegemann, C.H. 1915. The Coalville Coal Field, Utah. USGS Bulletin 581-E

Mine Map: "Plan of Grass Creek No. 1 Mine" no drafter, no date, scale= 1:720, annotated "Abandoned in 1887" Available on microfiche at Utah Geologic and Mineralogic Survey.

Addendum to
Additional Information

Since the IMACS Site Forms for sites 92 Sm 8-13 were completed, I have come across microfiche copies of several maps of mine workings of Grass Creek coal mines. The maps are on file at the Utah Geologic and Mineralogical Survey. Examination of the maps has greatly clarified the proper names and locations of the sites. The maps are:

1. The Union Fuel Co., Map Showing Workings at Grass Creek Mine; date and scale illegible
2. Map, Grass Creek Fuel Co.'s Property, Grass Creek, Utah, Section 18, T.3 N., R.6 E.; Jan. 1, 1921, scale 1 in. = 100 ft.
3. Map Showing Operations of Lessees, Sec. 23 and 24 - T.3 N., R.5 E., SLM, Grass Creek, Summit Co., Utah; Nov. 23, 1910, scale 1 in. = 100 ft.
4. No. 2 Mine and Gomer Thomas Opening, Grass Creek, Utah, Summit County on Section 24, T.3 N., R.5 E., SLM; date illegible, scale 1 in. = 100 ft.
5. Plan of Grass Creek No. 1 Mine, Abandoned in 1887, no date, scale 1 in. = 60 ft.

The Tuttle Site (92 Sm 8) is apparently actually the Union Pacific No. 2 Mine, which was leased to others after the Union Pacific pulled out of Grass Creek in 1887. The F1 mine portal is identified on Map 3 as the "Thomas Slope," presumably the opening worked by Gomer Thomas. The F5 mine portal is identified on the same map as the "Wild [sic] Slope," presumably named after William S. Wilde. The F6 mine portal is identified on Map 4 as the "Old No. 2 Slope." There was a dump or tipple structure on the surface leading from F5. Aligned with the dump was an engine house on the opposite bank of Grass Creek (F10?). The railroad line split into four tracks where it passed under the dump.

The Union Pacific No. 1 Mine was located in the southeast quarter of section 23 and the adjacent northeast quarter of section 26, T3N, R5E (Map 5). [See site number 92 Sm 22, Union Pacific Mine]

Map 2 shows the "Old Williams Mine" straddling the section line about 1300 feet west of the Church Mine site (92 Sm 11) portal (F1). The Williams Mine was small, consisting of nine rooms on either side of a single slope. The total extent of the underground workings was an area less than 225 feet square. A search in the field did not yield any sign of the mine.

The Union Fuel Co. Mine incorporated the earlier Church Mine workings. In turn, the Grass Creek Fuel Co. Mine assimilated the Union Fuel and Church workings. The Church Mine workings, north and east of the area identified on the IMACS Site Form as the Church Mine site (92 Sm 11), are shown on Map 1 as "Old Abandoned Workings" and on Map 2 as the "Old Church Mine." The Church Mine site (92 Sm 11) portal (F1) was really an exhaust fan portal. The actual entry was about 600 feet southeast of F1. A search in the field did not produce any sign of this portal. Workings at the Church Mine later became the Union Fuel and Grass Creek Fuel No. 1 Mine. Workings extending underground northwest of the Union Fuel Mine site (92 Sm 12) were the Union Fuel and Grass Creek Fuel No. 2 Mine.

The "New Tunnel" entry was located on the Union Fuel Mine site (92 Sm 12) where the large landslide south of F13 is now. The landslide has covered and obliterated the opening. The "New Tunnel" is labelled "Opening to Old Mine" and "Tunnel Mine No. 1" on Map 1 and marked as going through rock on Map 2. The "New Tunnel" was a rock tunnel that connected with the Church Mine workings, and gave surface access to the No. 1 Mine from the level of the surface plant and railroad line in the valley bottom.

Maps 1 and 2 show the location of a number of surface structures, including houses, railroad lines, the hoist, tibble, and stables.

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