Table 2.24 Average Coal Quality at Utah Mines, 2023

Company	Mine	Coal Field	Bed(s)	Heat content	% Sulfur	% Ash	% Moisture
				Btu/lb			
Bronco	Emery	Emery	I	11,960	0.5%	10.9%	6.0%
Gentry Mtn. Mining	Gentry	Wasatch	Hiawatha	11,805	0.7%	11.0%	8.6%
Canyon Fuel, LLC	Skyline #3	Wasatch	Lower O'Connor 'B'	11,795	0.3%	9.2%	8.3%
Canyon Fuel, LLC	SUFCO	Wasatch	Upper/Lower Hiawatha	10,666	1.1%	14.7%	8.7%
Emery Co. Coal Resources	Lila Canyon	Book Cliffs	Sunnyside	11,132	0.9%	15.6%	7.6%
Alton Coal Development	Coal Hollow	Alton	Smirl	10,060	1.0%	8.7%	16.9%

Table 2.24 Average Coal Quality at Utah Mines, 2022

Company	Mine	Coal Field	Bed(s)	Heat content	% Sulfur	% Ash	% Moisture
				Btu/lb			
Bronco	Emery	Emery	I	11,700	0.5%	11.1%	7.6%
Gentry Mtn. Mining	Gentry	Wasatch	Bear/Blind/Hiawatha	11,700	0.8%	13.0%	7.1%
Canyon Fuel, LLC	Skyline #3	Wasatch	Lower O'Connor 'B'	11,508	0.4%	10.7%	9.0%
Canyon Fuel, LLC	SUFCO	Wasatch	Upper Hiawatha	11,431	0.6%	9.5%	10.4%
Emery Co. Coal Resources	Lila Canyon	Book Cliffs	Sunnyside	12,329	0.9%	8.5%	7.9%
Alton Coal Development	Coal Hollow	Alton	Smirl	10,126	0.9%	8.6%	16.3%

Source: Utah coal operators

Table 2.24 Average Coal Quality at Utah Mines, 2021

Company	Mine	Coal Field	Bed(s)	Heat content	% Sulfur	% Ash	% Moisture
				Btu/lb			
Bronco	Emery	Emery	I	11,700	0.5%	11.1%	7.6%
Gentry Mtn. Mining	Gentry	Wasatch	Bear/Blind/Hiawatha	11,805	0.6%	12.2%	7.7%
Canyon Fuel, LLC	Skyline #3	Wasatch	Lower O'Connor 'B'	11,508	0.4%	10.7%	9.0%
Canyon Fuel, LLC	SUFCO	Wasatch	Upper Hiawatha	10,842	0.4%	12.1%	10.3%
Emery Co. Coal Resources	Lila Canyon	Book Cliffs	Sunnyside	12,369	0.9%	8.3%	7.7%
Alton Coal Development	Coal Hollow	Alton	Smirl	10,215	0.9%	8.7%	15.7%

Source: Utah coal operators

Table 2.24 Average Coal Quality at Utah Mines, 2020

Company	Mine	Coal Field	Bed(s)	Heat content	% Sulfur	% Ash	% Moisture
				Btu/lb			
Bronco	Emery	Emery	I	11,700	0.5%	10.8%	8.2%
Gentry Mtn. Mining	Gentry	Wasatch	Bear/Blind	11,672	0.7%	12.0%	8.0%
Canyon Fuel, LLC	Skyline #3	Wasatch	Lower O'Connor 'B'/Flat Canyon	11,650	0.4%	10.0%	8.4%
Canyon Fuel, LLC	SUFCO	Wasatch	Upper Hiawatha	10,803	0.4%	13.2%	9.2%
Emery Co. Coal Resources	Lila Canyon	Book Cliffs	Sunnyside	11,672	0.7%	12.0%	8.0%
Alton Coal Development	Coal Hollow	Alton	Smirl	10,117	1.0%	9.0%	16.2%

Source: Utah coal operators

Table 2.24 Average Coal Quality at Utah Mines, 2019

Company	Mine	Coal Field	Bed(s)	Heat content	% Sulfur	% Ash	% Moisture
				Btu/lb			
Canyon Fuel, LLC	Dugout Canyon	Book Cliffs	Rock Canyon	11,874	1.1%	12.1%	6.5%
Bronco	Emery	Emery	I	11,850	0.5%	10.6%	7.1%
Rhino Resources	Castle Valley #3 & #4	Wasatch	Bear/Tank	11,850	0.7%	12.5%	8.6%
Canyon Fuel, LLC	Skyline #3	Wasatch	Lower O'Connor 'B'	10,943	0.4%	14.3%	8.6%
Canyon Fuel, LLC	SUFCO	Wasatch	Upper Hiawatha	10,933	0.3%	11.4%	9.7%
UtahAmerican Energy, Inc.	Lila Canyon	Book Cliffs	Sunnyside	12,260	0.9%	9.0%	7.7%
Alton Coal Development	Coal Hollow	Alton	Smirl	na	na	na	na

Table 2.24 Average Coal Quality at Utah Mines, 2018

Company	Mine	Coal Field	Bed(s)	Heat content	% Sulfur	% Ash	% Moisture
				Btu/lb			
Canyon Fuel, LLC	Dugout Canyon	Book Cliffs	Rock Canyon	11,874	1.1%	12.1%	6.5%
Bronco	Emery	Emery	I	11,900	0.5%	7.5%	4.0%
Rhino Resources	Castle Valley #3 & #4	Wasatch	Bear/Tank	11,900	0.7%	12.3%	8.0%
Canyon Fuel, LLC	Skyline #3	Wasatch	Lower O'Connor 'A'	11,410	0.5%	11.1%	9.0%
Canyon Fuel, LLC	SUFCO	Wasatch	Upper Hiawatha	10,955	0.4%	11.4%	9.5%
UtahAmerican Energy, Inc.	Lila Canyon	Book Cliffs	Sunnyside	12,088	1.0%	9.8%	7.5%
Alton Coal Development	Coal Hollow	Alton	Smirl	na	na	na	na

Table 2.24 Average Coal Quality at Utah Mines, 2017

Company	Mine	Coal Field	Bed(s)	Heat content	% Sulfur	% Ash	% Moisture
				Btu/lb			
Canyon Fuel, LLC	Dugout Canyon	Book Cliffs	Rock Canyon	11,911	1.4%	na	na
Bronco	Emery	Emery	I	11,900	0.5%	7.5%	4.0%
Rhino Resources	Castle Valley #3 & #4	Wasatch	Bear/Tank	11,805	0.6%	12.5%	6.7%
Canyon Fuel, LLC	Skyline #3	Wasatch	Lower O'Connor 'A'	11,450	0.5%	10.8%	8.8%
Canyon Fuel, LLC	SUFCO	Wasatch	Upper Hiawatha	10,940	0.4%	11.5%	9.7%
UtahAmerican Energy, Inc.	Lila Canyon	Book Cliffs	Sunnyside	11,427	1.0%	13.3%	8.2%
Alton Coal Development	Coal Hollow	Alton	Smirl	10,000	1.0%	8.0%	18.0%

Source: Utah coal operators

Table 2.24 Average Coal Quality at Utah Mines, 2016

Company	Mine	Coal Field	Bed(s)	Heat content	% Sulfur	% Ash	% Moisture
				Btu/lb			
Canyon Fuel, LLC	Dugout Canyon	Book Cliffs	Rock Canyon	11,966	0.9%	na	na
Bronco	Emery	Emery	I	na	na	na	na
Rhino Resources	Castle Valley #3 & #4	Wasatch	Bear/Tank	11,850	0.6%	12.3%	7.0%
Canyon Fuel, LLC	Skyline #3	Wasatch	Lower O'Connor 'A'	na	na	na	na
Canyon Fuel, LLC	SUFCO	Wasatch	Upper Hiawatha	10,359	0.4%	14.5%	9.9%
UtahAmerican Energy, Inc.	Lila Canyon	Book Cliffs	Sunnyside	na	na	na	na
Alton Coal Development	Coal Hollow	Alton	Smirl	10,000	1.0%	8.0%	18.0%

Source: Utah coal operators

 Table 2.24
 Average Coal Quality at Utah Mines, 2015

Company	Mine	Coal Field	Bed(s)	Heat content	% Sulfur	% Ash	% Moisture
				Btu/lb			
Canyon Fuel, LLC	Dugout Canyon	Book Cliffs	Rock Canyon	11,757	0.9%	na	na
WEST RIDGE Resources, Inc.	West Ridge	Book Cliffs	Lower Sunnyside	na	na	na	na
Rhino Resources	Castle Valley #3 & #4	Wasatch	Bear/Tank	11,953	0.7%	12.0%	7.3%
Canyon Fuel, LLC	Skyline #3	Wasatch	Lower O'Connor 'A'	na	na	na	na
Canyon Fuel, LLC	SUFCO	Wasatch	Upper Hiawatha	10,781	0.4%	12.2%	9.5%
UtahAmerican Energy, Inc.	Lila Canyon	Book Cliffs	Sunnyside	na	na	na	na
Alton Coal Development	Coal Hollow	Alton	Smirl	10,000	1.0%	8.0%	18.0%

Source: Utah coal operators

Table 2.24 Average Coal Quality at Utah Mines, 2014

Company	Mine	Coal Field	Bed(s)	Heat content	% Sulfur	% Ash	% Moisture
				Btu/lb			
Canyon Fuel, LLC	Dugout Canyon	Book Cliffs	Rock Canyon	12,012	0.7%	na	na
WEST RIDGE Resources, Inc.	West Ridge	Book Cliffs	Lower Sunnyside	na	na	na	na
Rhino Resources	Castle Valley #4	Wasatch	Tank	12,043	0.7%	11.5%	6.7%
Canyon Fuel, LLC	Skyline #3	Wasatch	Lower O'Connor 'A'	na	na	na	na
Canyon Fuel, LLC	SUFCO	Wasatch	Upper Hiawatha	10,780	0.3%	12.1%	9.6%
Energy West Mining Co.	Deer Creek	Wasatch	Hiawatha	11,850	0.5%	10.8%	8.3%
UtahAmerican Energy, Inc.	Lila Canyon	Book Cliffs	Sunnyside	na	na	na	na
Alton Coal Development	Coal Hollow	Alton	Smirl	10,000	1.0%	8.0%	18.0%

Table 2.24 Average Coal Quality at Utah Mines, 2013

Company	Mine	Coal Field	Bed(s)	Heat content	% Sulfur	% Ash	% Moisture
				Btu/lb			
Canyon Fuel, LLC	Dugout Canyon	Book Cliffs	Rock Canyon	12,049	0.7%	na	na
WEST RIDGE Resources, Inc.	West Ridge	Book Cliffs	Lower Sunnyside	12,365	1.0%	8.6%	7.5%
Rhino Resources	Castle Valley #4	Wasatch	Tank	12,043	0.7%	11.5%	6.7%
Canyon Fuel, LLC	Skyline #3	Wasatch	Lower O'Connor 'A'	11,500	0.5%	10.1%	8.7%
Canyon Fuel, LLC	SUFCO	Wasatch	Upper Hiawatha	10,911	0.3%	11.9%	9.4%
Energy West Mining Co.	Deer Creek	Wasatch	Hiawatha/Blind Canyon	11,414	0.7%	13.9%	8.2%
UtahAmerican Energy, Inc.	Lila Canyon	Book Cliffs	Sunnyside	11,736	1.3%	12.3%	7.0%
Alton Coal Development	Coal Hollow	Alton	Smirl	10,000	1.0%	8.0%	17.0%

Table 2.24 Average Coal Quality at Utah Mines, 2012

Company	Mine	Coal Field	Bed(s)	Heat content	% Sulfur	% Ash	% Moisture
				Btu/lb			
Canyon Fuel, LLC	Dugout Canyon	Book Cliffs	Gilson	11,795	0.6%	na	na
WEST RIDGE Resources, Inc.	West Ridge	Book Cliffs	Lower Sunnyside	11,800	1.2%	15.3%	5.5%
Rhino Resources	Castle Valley #4	Wasatch	Tank	12,043	0.7%	11.5%	6.7%
Canyon Fuel, LLC	Skyline #3	Wasatch	Lower O'Connor 'A'	11,500	0.4%	10.6%	8.4%
Canyon Fuel, LLC	SUFCO	Wasatch	Upper Hiawatha	10,926	0.3%	11.5%	9.7%
Energy West Mining Co.	Deer Creek	Wasatch	Hiawatha/Blind Canyon	11,376	0.7%	14.3%	8.1%
Hidden Splendor Resources, Inc.	Horizon	Wasatch	Hiawatha	11,500	0.5%	8.0%	10.0%
UtahAmerican Energy, Inc.	Lila Canyon	Book Cliffs	Sunnyside	11,620	1.2%	12.5%	7.5%
Alton Coal Development	Coal Hollow	Alton	Smirl	10,000	1.0%	8.5%	17.0%

Source: Utah coal operators

Table 2.24 Average Coal Quality at Utah Mines, 2011

Company	Mine	Coal Field	Bed(s)	Heat content	% Sulfur	% Ash	% Moisture
				Btu/lb			
Canyon Fuel, LLC	Dugout Canyon	Book Cliffs	Gilson	11,692	0.7%	na	na
WEST RIDGE Resources, Inc.	West Ridge	Book Cliffs	Lower Sunnyside	12,383	1.1%	11.0%	6.2%
Rhino Resources	Castle Valley #4	Wasatch	Tank	12,043	0.6%	12.1%	7.0%
Canyon Fuel, LLC	Skyline #3	Wasatch	Lower O'Connor 'A'	11,500	0.4%	10.3%	8.4%
Canyon Fuel, LLC	SUFCO	Wasatch	Upper Hiawatha	11,119	0.4%	10.1%	9.9%
Energy West Mining Co.	Deer Creek	Wasatch	Hiawatha/Blind Canyon	11,421	0.6%	13.4%	8.7%
Hidden Splendor Resources, Inc.	Horizon	Wasatch	Hiawatha	11,500	0.5%	8.0%	10.0%
UtahAmerican Energy, Inc.	Lila Canyon	Book Cliffs	Sunnyside	11,842	0.8%	11.1%	7.2%
Alton Coal Development	Coal Hollow	Alton	Smirl	na	na	na	na

Source: Utah coal operators

Table 2.24 Average Coal Quality at Utah Mines, 2010

Company	Mine	Coal Field	Bed(s)	Heat content	% Sulfur	% Ash	% Moisture
				Btu/lb			
Canyon Fuel, LLC	Dugout Canyon	Book Cliffs	Gilson	11,739	0.7%	na	na
WEST RIDGE Resources, Inc.	West Ridge	Book Cliffs	Lower Sunnyside	11,881	1.2%	14.6%	6.1%
CONSOL Energy	Emery	Emery	I	12,260	na	na	na
Canyon Fuel, LLC	Skyline #3	Wasatch	Lower O'Connor 'A'	11,600	0.7%	9.5%	8.6%
Canyon Fuel, LLC	SUFCO	Wasatch	Upper Hiawatha	10,988	0.4%	10.8%	10.2%
Energy West Mining Co.	Deer Creek	Wasatch	Hiawatha/Blind Canyon	11,366	0.5%	13.3%	9.1%
Hidden Splendor Resources, Inc.	Horizon	Wasatch	Hiawatha	11,500	0.5%	8.0%	10.0%
UtahAmerican Energy, Inc.	Lila Canyon	Book Cliffs	Sunnyside	12,107	1.2%	8.9%	9.2%

Table 2.24 Average Coal Quality at Utah Mines, 2009

Company	Mine	Coal Field	Bed(s)	Heat content	% Sulfur	% Ash	% Moisture
				Btu/lb			
Canyon Fuel, LLC	Dugout Canyon	Book Cliffs	Gilson	12,076	1.0%	na	na
WEST RIDGE Resources, Inc.	West Ridge	Book Cliffs	Lower Sunnyside	11,994	1.2%	12.8%	6.3%
CONSOL Energy	Emery	Emery	I	12,260	na	na	na
Canyon Fuel, LLC	Skyline #3	Wasatch	Lower O'Connor 'A'	11,600	0.4%	9.6%	8.3%
Canyon Fuel, LLC	SUFCO	Wasatch	Upper Hiawatha	10,942	0.4%	11.2%	9.9%
C.W. (Co-op) Mining Co.	Bear Canyon #4	Wasatch	Tank	10,737	0.7%	18.3%	7.7%
Energy West Mining Co.	Deer Creek	Wasatch	Hiawatha/Blind Canyon	12,062	0.5%	9.0%	5.0%
Hidden Splendor Resources, Inc.	Horizon	Wasatch	Hiawatha	11,700	1.2%	12.8%	6.3%

Table 2.24 Average Coal Quality at Utah Mines, 2008

Company	Mine	Coal Field	Bed(s)	Heat content	% Sulfur	% Ash	% Moisture
				Btu/lb			
UtahAmerican Energy, Inc.	Aberdeen	Book Cliffs	Aberdeen	12,200	0.5%	8.5%	6.5%
Canyon Fuel, LLC	Dugout Canyon	Book Cliffs	Gilson	12,126	0.8%	na	na
WEST RIDGE Resources, Inc.	West Ridge	Book Cliffs	Lower Sunnyside	11,889	1.0%	13.0%	6.0%
CONSOL Energy	Emery	Emery	I	12,260	na	na	na
Canyon Fuel, LLC	Skyline #3	Wasatch	Lower O'Connor 'A'	11,400	0.3%	11.0%	8.6%
Canyon Fuel, LLC	SUFCO	Wasatch	Upper Hiawatha	11,028	0.4%	10.4%	10.3%
C.W. (Co-op) Mining Co.	Bear Canyon #4	Wasatch	Tank	11,800	0.5%	11.1%	8.5%
Energy West Mining Co.	Deer Creek	Wasatch	Hiawatha/Blind Canyon	11,700	1.0%	10.0%	5.0%
Hidden Splendor Resources, Inc.	Horizon	Wasatch	Hiawatha	11,700	1.0%	10.0%	5.0%

Source: Utah coal operators

Table 2.24 Average Coal Quality at Utah Mines, 2007

Company	Mine	Coal Field	Bed(s)	Heat content	% Sulfur	% Ash	% Moisture
				Btu/lb			
UtahAmerican Energy, Inc.	Aberdeen	Book Cliffs	Aberdeen	12,200	0.5%	8.5%	6.5%
Canyon Fuel, LLC	Dugout Canyon	Book Cliffs	Gilson	11,600	0.5%	10.3%	8.5%
WEST RIDGE Resources, Inc.	West Ridge	Book Cliffs	Lower Sunnyside	11,889	1.0%	13.0%	6.0%
CONSOL Energy	Emery	Emery	I	12,000	1.0%	10.0%	8.0%
Canyon Fuel, LLC	Skyline #3	Wasatch	Lower O'Connor 'A'	11,600	0.4%	11.3%	10.0%
Canyon Fuel, LLC	SUFCO	Wasatch	Upper Hiawatha	10,994	0.4%	11.3%	10.0%
C.W. (Co-op) Mining Co.	Bear Canyon #4	Wasatch	Tank	11,700	0.7%	12.0%	8.5%
Energy West Mining Co.	Deer Creek	Wasatch	Hiawatha/Blind Canyon	10,900	0.7%	16.6%	9.0%
GENWAL Resources, Inc.	Crandall Canyon	Wasatch	Hiawatha	12,014	0.4%	9.0%	5.0%
Hidden Splendor Resources, Inc.	Horizon	Wasatch	Hiawatha	11,700	0.6%	10.0%	5.0%

Source: Utah coal operators

Table 2.24 Average Coal Quality at Utah Mines, 2006

Company	Mine	Coal Field	Bed(s)	Heat content	% Sulfur	% Ash	% Moisture
				Btu/lb			
UtahAmerican Energy, Inc.	Aberdeen/Pinnacle	Book Cliffs	Aberdeen/Centennial	12,200	0.5%	8.5%	6.5%
Canyon Fuel, LLC	Dugout Canyon	Book Cliffs	Gilson	12,028	0.6%	11.1%	6.5%
WEST RIDGE Resources, Inc.	West Ridge	Book Cliffs	Lower Sunnyside	12,460	1.4%	9.9%	6.4%
CONSOL Energy	Emery	Emery	I	12,000	1.0%	11.0%	8.0%
Canyon Fuel, LLC	Skyline #3	Wasatch	Lower O'Connor 'A'	11,550	0.4%	9.6%	9.0%
Canyon Fuel, LLC	SUFCO	Wasatch	Upper Hiawatha	11,162	0.4%	9.5%	10.6%
C.W. (Co-op) Mining Co.	Bear Canyon #3 & #4	Wasatch	Tank/Blind Canyon	11,700	0.7%	12.0%	7.5%
Energy West Mining Co.	Deer Creek	Wasatch	Hiawatha/Blind Canyon	11,500	0.8%	13.0%	9.0%
GENWAL Resources, Inc.	Crandall Canyon and South C.C.	Wasatch	Hiawatha/Blind Canyon	11,655	0.6%	11.7%	8.8%
Hidden Splendor Resources, Inc.	Horizon	Wasatch	Hiawatha	11,700	0.6%	10.0%	5.0%

Table 2.24 Average Coal Quality at Utah Mines, 2005

Company	Mine	Coal Field	Bed(s)	Heat content	% Sulfur	% Ash	% Moisture
				Btu/lb			
Andalex Resources Inc.	Aberdeen/Pinnacle	Book Cliffs	Aberdeen/Centennial	12,200	0.5%	8.5%	6.5%
Canyon Fuel, LLC	Dugout Canyon	Book Cliffs	Gilson	12,058	0.5%	10.4%	6.6%
WEST RIDGE Resources, Inc.	West Ridge	Book Cliffs	Lower Sunnyside	13,052	1.4%	9.6%	6.1%
CONSOL Energy	Emery	Emery	I	12,000	1.0%	10.0%	7.0%
Canyon Fuel, LLC	Skyline #3	Wasatch	Lower O'Connor 'A'	11,680	0.5%	9.0%	8.7%
Canyon Fuel, LLC	SUFCO	Wasatch	Upper Hiawatha	11,243	0.4%	9.2%	10.3%
C.W. (Co-op) Mining Co.	Bear Canyon #3 & #4	Wasatch	Tank/Blind Canyon	11,900	0.7%	12.0%	7.0%
Energy West Mining Co.	Deer Creek	Wasatch	Hiawatha/Blind Canyon	11,500	0.6%	12.0%	8.0%
GENWAL Resources, Inc.	Crandall Canyon and South C.C.	Wasatch	Hiawatha/Blind Canyon	11,305	0.6%	14.2%	8.6%
Hidden Splendor Resources, Inc.	Horizon	Wasatch	Hiawatha	11,700	0.6%	10.0%	5.0%

Table 2.24 Average Coal Quality at Utah Mines, 2004

Company	Mine	Coal Field	Bed(s)	Heat content	% Sulfur	% Ash	% Moisture
				Btu/lb			
Andalex Resources Inc.	Aberdeen/Pinnacle	Book Cliffs	Aberdeen/Gilson	12,200	0.5%	8.5%	7.0%
Canyon Fuel, LLC	Dugout Canyon	Book Cliffs	Gilson	11,950	0.6%	10.0%	7.3%
WEST RIDGE Resources, Inc.	West Ridge	Book Cliffs	Lower Sunnyside	12,550	1.2%	8.5%	7.5%
CONSOL Energy	Emery	Emery	I	11,800	0.7%	na	7.0%
Canyon Fuel, LLC	Skyline #3	Wasatch	Lower O'Connor 'A'	11,800	0.5%	9.0%	9.0%
Canyon Fuel, LLC	SUFCO	Wasatch	Upper Hiawatha	11,300	0.4%	9.0%	9.4%
C.W. (Co-op) Mining Co.	Bear Canyon #3 & #4	Wasatch	Hiawatha/Blind Canyon	12,400	0.5%	9.0%	7.0%
Energy West Mining Co.	Deer Creek	Wasatch	Hiawatha/Blind Canyon	12,550	0.4%	10.0%	9.0%
GENWAL Resources, Inc.	Crandall Canyon and South C.C.	Wasatch	Hiawatha	12,300	0.6%	9.0%	7.5%
Hidden Splendor Resources, Inc.	Horizon	Wasatch	Hiawatha	11,950	0.5%	11.0%	7.8%