

CORPORATE WELFARE FOR COAL

The biggest coal mining companies depend on subsidized federal coal, even as they attack federal climate and clean air policies

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Corporate Welfare for Coal

The biggest coal mining companies depend on subsidized federal coal, even as they attack federal climate and clean air policies

For decades, the federal coal program has given coal mining companies access to publicly owned coal at subsidized rates, with minimal consideration of the impacts to communities and the environment when that coal is mined, transported, and burned. Access to subsidized federal coal led to expanded coal mining in Western States, and also encouraged the use of coal generally. Indeed, when Interior Secretary Sally Jewell announced a moratorium on new federal coal leasing and a comprehensive review of the federal coal program, she acknowledged that in the past, “our practice was really about getting as much coal as possible.”¹

Whatever logic may have held in the past, a federal program that has flooded the market with subsidized coal is clearly inconsistent with federal policy priorities to address climate change. In that regard, the moratorium and review of the federal coal program provide an important opportunity to align the management of federal coal with US commitments to reduce carbon pollution and accelerate the transition toward clean energy.

As the federal government and communities impacted by the coal industry reconsider how to manage federal coal, it will also be important to recognize the role of the companies that mine federal coal. To a significant extent, the federal government has allowed the coal mining industry itself to manage the development of federal coal, including key decisions about how much coal to lease and mine. In order to address the many problems with the federal coal program, policy makers must contend with the impacts of the current corporate control of publicly owned coal.

Access to subsidized federal coal helped some coal mining companies dramatically expand their coal production, particularly in the Powder River Basin in Wyoming and Montana. While several coal mining companies mine federal coal, three companies in particular dominate federal coal production: Peabody Energy, Arch Coal, and Cloud Peak Energy. In part because of their access to subsidized federal coal, these companies have grown to become the three largest coal producers, accounting for about 40% of all the coal mined in the US.²

However, because the federal government does not publish details showing the quantity of federal coal produced from each coal mine, or by company, the extent to which these companies depend on federal coal has been less clear. This report reveals federal coal production data obtained through a Freedom of Information Act request, and shows that each of these three coal mining companies depend on federal coal for the vast majority of the coal they mine in the US. Federal coal accounted for 88% of Cloud Peak Energy’s total coal production, 83% of Arch Coal’s, and 68% of Peabody Energy’s total 2014 US coal production. Together, federal coal accounted for 77% of these three companies’ combined 2014 US coal production.

In effect, these coal mining companies are the beneficiaries of a major corporate welfare program. Yet even while they’ve grown from their access to subsidized federal coal, these same companies have attempted to position themselves as victims of the federal government, and continue to try and block or delay federal policies aimed at addressing climate change and reducing air and water pollution. As the largest US coal mining companies, Peabody Energy, Arch Coal, and Cloud Peak Energy have played a major role in this effort against what some in the industry call a “war on coal.”

Peabody Energy in particular has pursued an aggressive strategy, including legal challenges against the Clean Power Plan, lobbying, campaign contributions, and misleading public relations efforts. By providing subsidized access to federal coal to these companies, the federal government has ultimately helped fuel the coal industry's attacks on federal climate policy.

The moratorium on new coal leases and comprehensive review of the federal coal program provide an important opportunity for policymakers and communities impacted by the coal industry to consider new approaches. Instead of continuing to give the biggest coal mining companies subsidized access to billions of tons of publicly-owned coal, the federal government should assert its right – and responsibility – as owner of one of the largest coal reserves in the world, and manage federal coal in ways that support US efforts to address climate change, consult with communities impacted by coal mining and transport, and help ensure a just transition from coal to clean energy.

Most of the coal mined by the three biggest coal companies in the US belongs to the American public

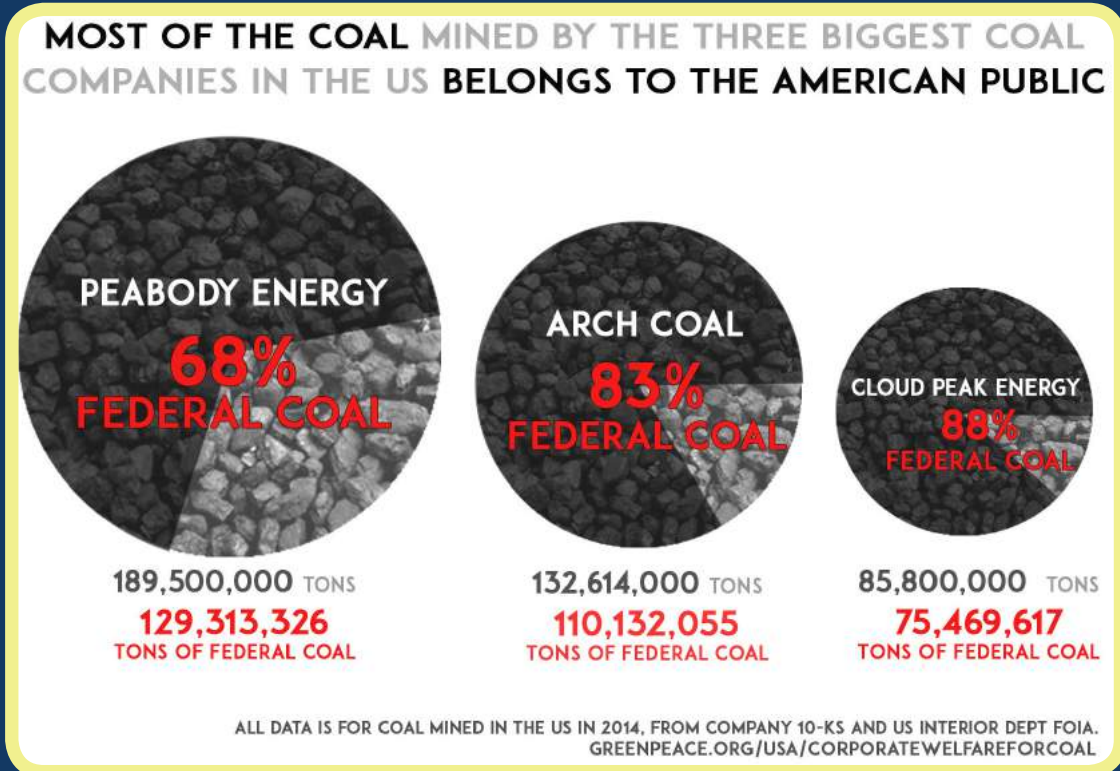
The US coal mining industry has fought federal policies aimed at addressing climate change and reducing air and water pollution, sometimes using rhetoric characterizing these health and environmental protections as a “war on coal.” Yet what has often been left out of the public debate around federal policies affecting the coal industry is that the biggest coal mining companies in the US actually depend on federal coal for the vast majority of the coal they mine. In fact, federal coal accounted for more than three-fourths of the coal mined by the top three coal mining companies in the US, Peabody Energy, Arch Coal, and Cloud Peak Energy. While this coal belongs to the American public and is managed by the Interior Department, mining companies have leased billions of tons at subsidized rates through a process that they have largely controlled.

While the Interior Department's Office of Natural Resources Revenue (ONRR) tracks the quantity of federal coal mined by each company in order to assess royalties, that information has not been made publicly available. This report shows the results of a Freedom of Information Act (FOIA) request for the quantities of federal coal produced by each coal mining company and subsidiary in 2014. We compiled the data from that FOIA request for each company's subsidiaries, in order to calculate the total amount of federal coal mined by Peabody Energy, Arch Coal, and Cloud Peak Energy in 2014. Then we compared those results to the total 2014 coal production from each mine operated by those companies and their subsidiaries, as reported by the Mine Safety and Health Administration (MSHA), as well as to each company's total 2014 US coal production as reported in company 10-K filings with the Securities and Exchange Commission (SEC). This provides the first detailed assessment of the extent to which major US coal mining companies depend on federal coal.

Peabody Energy, the largest US coal mining company, mined a total of 189,500,000 tons of coal in the US in 2014, according to the company's 10-K filing with the SEC. FOIA results show that Peabody Energy and its subsidiaries mined 129,313,326 tons of federal coal in 2014, 68% of the company's total US coal production.

Arch Coal, the second largest US coal mining company, mined a total of 132,614,000 tons of coal in the US in 2014, according to the company's 10-K filing with the SEC. FOIA results show that Arch Coal and its subsidiaries mined 110,132,055 tons of federal coal in 2014, 83% of the company's total.

Cloud Peak Energy, the third largest US coal mining company, mined a total of 85,800,000 tons of coal in the US in 2014, according to the company's 10-K filing with the SEC. FOIA results show that Cloud Peak Energy and its subsidiaries mined 75,469,617 tons of federal coal in 2014, 88% of the company's total.



The combined total US coal production in 2014 from these three companies, Peabody Energy, Arch Coal, and Cloud Peak Energy, was 407,914,000 tons, which represents over 40% of all the coal mined in the US in 2014, 1,000,049,000 tons.³ FOIA results show that these three companies mined 314,914,998 tons of federal coal in 2014, 77% of their combined total US coal production. FOIA results for the three largest companies, organized by subsidiary and parent company, are available in Appendix 1.

The FOIA results also include federal coal production data for several other smaller coal mining companies, which along with the three largest companies show 407,039,077 tons of federal coal mined in 2014. Peabody Energy's 129,313,326 tons of federal coal production in 2014 represents 31.8% of that total, while Arch Coal's 110,132,055 tons was 27%, and Cloud Peak Energy's 75,469,617 tons was 18.5% of the total. Combined, Peabody Energy, Arch Coal, and Cloud Peak Energy accounted for 77.3% of the total federal coal production from all companies and subsidiaries that were reported in the FOIA results. The full FOIA results, including federal coal production data for companies and subsidiaries besides the top three companies that are the focus of this report, are available in Appendix 4.

The federal coal mined by the top three coal mining companies in 2014 will cause \$18.8 billion in damages when burned, using the federal government's mid-range social cost of carbon figures

In his January 2016 State of the Union address, President Obama said:

“Rather than subsidize the past, we should invest in the future -- especially in communities that rely on fossil fuels. We do them no favor when we don't show them where the trends are going. That's why I'm going to push to change the way we manage our oil and coal resources, so that they better reflect the costs they impose on taxpayers and our planet.”⁴

Several federal government agencies use the Interagency Working Group's Social Cost of Carbon figures in order to measure the economic damages that will result from one ton of carbon pollution in a given year.⁵ Social cost of carbon figures could be used by the Interior Department to estimate the costs of federal coal to “taxpayers and our planet.”

Our 2014 report, *Leasing Coal, Fueling Climate Change*, showed that the Interior Department has leased 2.2 billion tons of federal coal to the mining industry since the beginning of the Obama administration, and calculated the carbon pollution and damages to society that will be caused when that coal is burned, using the federal government's social cost of carbon figures.⁶ The FOIA results allow similar calculations of the carbon pollution and damages to society from each company's 2014 federal coal production, again using the federal government's social cost of carbon figures.

The vast majority, 97%, of these three companies' combined 2014 federal coal production was from reserves of sub-bituminous coal in the Powder River Basin of Wyoming and Montana, so we use an emission factor of 1.659 metric tons carbon dioxide per short ton of coal, the same figure used by the Interior Department in its environmental review of a Powder River Basin coal lease.⁷ We use the US Environmental Protection Agency's Greenhouse Gas Equivalencies Calculator to estimate the equivalent annual emissions from passenger vehicles.⁸

Peabody Energy's 2014 federal coal production of 129,313,326 tons resulted in 214,530,808 metric tons of carbon dioxide, or the equivalent of the annual emissions from over 45 million passenger vehicles.

Arch Coal's 2014 federal coal production of 110,132,055 tons resulted in 182,709,079 metric tons of carbon dioxide, or the equivalent of the annual emissions from over 38 million passenger vehicles.

Cloud Peak Energy's 2014 federal coal production of 75,469,617 tons resulted in 125,204,095 metric tons of carbon dioxide, or the equivalent of the annual emissions from over 26 million passenger vehicles.

Combined, these top three US coal mining companies' 2014 federal coal production of 314,914,998 tons resulted in 522,443,982 metric tons of carbon dioxide, or the equivalent of the annual emissions from over 109 million passenger vehicles.

Note that these carbon pollution figures account only for these companies' federal coal production, not the rest of their coal production, and do not include the carbon and methane pollution associated with the mining, processing, and transporting of the coal.

With these carbon pollution figures for each company's 2014 federal coal production, we can then calculate a monetary value for some of the damages to society using the federal government's social cost of carbon figures. The mid-range (3% discount rate) social cost of carbon for a metric ton of carbon pollution emitted in 2015 is \$36.

The 214,530,808 metric tons of carbon dioxide from Peabody Energy's 2014 federal coal production would amount to \$7,723,109,088 (\$7.7 billion) in damages to society, using the federal government's mid-range social cost of carbon figures.

The 182,709,079 metric tons of carbon dioxide from Arch Coal's 2014 federal coal production would amount to \$6,577,526,844 (\$6.5 billion) in damages to society, using the federal government's mid-range social cost of carbon figures.

The 125,204,095 metric tons of carbon dioxide from Cloud Peak Energy's 2014 federal coal production would amount to \$4,507,347,420 (\$4.5 billion) in damages to society, using the federal government's mid-range social cost of carbon figures.

Combined, the 522,443,982 metric tons of carbon dioxide from these top three US coal mining companies' 2014 federal coal production would amount to \$18,807,983,352 (\$18.8 billion) in damages to society, using the federal government's mid-range social cost of carbon figures.

The federal government's social cost of carbon figures also include other cost estimates using different discount rates. In addition to the "mid-range" estimate of \$36 per ton of carbon dioxide emitted in 2015 using a 3% discount rate, estimates include \$11 per ton of carbon dioxide (using a 5% discount rate), \$56 per ton (using a 2.5% discount rate), and \$105 per ton (using a 3% discount rate, 95th percentile). Table 1 shows all of the social cost of carbon estimates for each company's 2014 federal coal production, as well as for the combined total federal coal production for all three companies and the total federal coal production from all companies reported in the FOIA data.

Table 1: Social Cost of Carbon Damages from Federal Coal Mined in 2014

	Federal Coal Production (Short Tons)	CO2 Emissions from Federal Coal (Metric Tons)	Damages to Society, 5% Discount Rate (\$11/ton CO2)	Damages to Society, 3% Discount Rate (\$36/ton CO2)	Damages to Society, 2.5% Discount Rate (\$56/ton CO2)	Damages to Society, 95th Percentile (\$105/ton CO2)
Peabody Energy	129,313,326	214,530,808	\$2,359,838,886	\$7,723,109,082	\$12,013,725,239	\$22,525,734,823
Arch Coal	110,132,055	182,709,079	\$2,009,799,872	\$6,577,526,853	\$10,231,708,438	\$19,184,453,321
Cloud Peak Energy	75,469,617	125,204,095	\$1,377,245,041	\$4,507,347,406	\$7,011,429,298	\$13,146,429,933
Top 3 Companies Combined	314,914,998	522,443,982	\$5,746,883,799	\$18,807,983,341	\$29,256,862,974	\$54,856,618,077
All Companies Reported in FOIA	407,039,007	675,277,713	\$7,428,054,839	\$24,309,997,654	\$37,815,551,906	\$70,904,159,824

Even these billion dollar figures represent only a portion of the damages to society from the mining and burning of this publicly-owned coal. First, these figures account only for the federal coal mined in a single year, 2014. Moreover, the federal government's social cost of carbon figures are considered to be too low by many experts.⁹ These figures also only account for carbon dioxide emissions

when the coal is burned, not the air and water pollution impacts to communities and the environment from mercury and other toxins. Even before it is burned, mining and transporting coal disrupts communities and damages agricultural and public lands. Finally, after it is burned, coal ash pollution threatens the drinking water and safety of communities around the country.

Of course, these damages are borne by communities and the environment, not the companies that mine federal coal. As corporations seeking to minimize costs, that is not surprising. But this coal belongs to the American public and is managed by the Interior Department, so a thorough consideration of these costs should inform federal coal management decisions. Instead, as the next sections summarize, many of the key decisions about the way this publicly owned coal is managed have been made by the coal industry, not the federal government.

Federal coal management decisions have been dominated by the coal industry itself

Even while supplying these top three coal mining companies with the majority of the coal they mine, the federal government has provided very little direction or oversight of the way this publicly owned coal is managed. The following sections describe a variety of factors that have allowed the federal coal program to be largely run by the coal industry itself, including loopholes within key federal rules, coal industry influence on state governments where federal coal is mined, lax management by state Bureau of Land Management offices, and a lack of meaningful oversight from Department of Interior officials in Washington DC. This is intended as a partial list and summary of some of the many problems with federal coal management, and additional details are available in several other reports cited below, as well as in the “Further Reading” section at the end of this report.

Decertification of the Powder River Basin as a coal producing region shifted management of federal coal to the industry-led “lease by application” process

One key loophole that has allowed the coal industry to dominate federal coal management decisions is that the Powder River Basin is no longer considered a “coal producing region,” despite being the source of about 40% of US coal production. Since the Powder River Basin was decertified as a coal producing region, federal coal has primarily been leased to coal mining companies using the “lease by application” process, which gives the industry primary responsibility for decisions about how much, where, and when federal coal should be leased and mined. More details about the history and impacts of the decertification decision are available in the Institute for Energy Economics and Financial Analysis report, “The Great Giveaway: An analysis of The United States’ Long-Term Trend of Selling Federally Owned Coal for Less Than Fair Market Value.”¹⁰

Under the “lease by application” process, coal mining companies operating in the Powder River Basin typically select coal leases that neighbor their existing mining operations, which are cheaper to exploit than would be the case for other coal mining companies. That has contributed to a general lack of competition for coal leases, and the Government Accountability Office (GAO) report assessing elements of the federal coal program found that about 90% of the coal leases since 1990 involved a single bidder (96 of 107 coal lease sales.)¹¹ The 2.2 billion tons of federal coal that have been sold since the beginning of the Obama administration under the “lease by application” process have averaged \$1.03 per ton,¹² and in a March 2015 speech, Interior Secretary Sally Jewell acknowledged that “most Americans would be surprised to know that coal companies can make a winning bid for about a dollar a ton to mine taxpayer-owned coal.”¹³

Coal leases for particularly polluting lignite are sold for less than one cent per ton

In fact, many coal leases have been sold for much lower amounts, even for less than one cent per ton, because state BLM officials have sometimes simply used the minimum price per acre as the “fair market value” for minimum bids. The GAO report found that “in North Dakota all successful bonus bids were \$100 per acre in nominal dollars, the minimum bid BLM can accept for a lease tract.” Even though the Interior Department has clear authority to increase minimum bids, the \$100 per acre minimum has not even been adjusted for inflation since it was established in 1982.¹⁴ Federal coal lease sales in North Dakota are for lignite, also known as brown coal, so the end result is that particularly polluting coal is leased for a fraction of a cent per ton. The most recent federal lignite coal lease in North Dakota, in 2010, was sold for \$0.005/ton, and the coal lease before that in 2007 was sold for \$0.003/ton.¹⁵

Royalty rate reductions further subsidize federal coal production

In addition to coal lease sales, which are primarily managed by the Bureau of Land Management, coal mining companies pay royalties, which are managed by the Office of Natural Resources Revenue (ONRR). Under the Mineral Leasing Act, royalty rates for surface mined coal are supposed to be a minimum of 12.5%. But in practice, effective royalty rates are much lower because coal mining companies are often offered royalty rate reductions. A report by Headwaters Economics found an effective royalty rate of just 4.9% for federal coal mined between 2008 and 2012, amounting to an average of \$1.70 per ton.¹⁶ Royalty rate reductions are sometimes approved because of a mining company’s “financial hardship,” and the Interior Department’s Inspector General report noted that the responsible BLM officials “generally do not have the expertise to evaluate a company’s financial statements.”^{17h}

BLM has even proposed royalty rate reduction that would apply retroactively, after the coal has already been mined. In December 2015, BLM proposed a royalty reduction for 13 million tons of coal from a Colorado mine that had already been closed, which would effectively subsidize the mining company by lowering royalties from 8% to 5% for coal that had already been mined and sold.¹⁸ After it was publicized, the Interior Department rejected the proposed royalty rate reduction.¹⁹

The coal industry expands access to federal coal with less oversight using lease modifications

While the “lease by application” process has allowed the coal industry to largely control the management of federal coal, mining companies are also able to expand existing coal mines with even less oversight and public participation by using “lease modifications.” While the “lease by applications” process has been largely uncompetitive, lease modifications allow mining companies to expand existing mines without any possibility of competition from other mining companies, minimal review, and even lower prices.

Lease modifications have become more important to the coal mining industry since the 2005 Energy Policy Act, which significantly expanded the maximum acreage for lease modifications from 160 acres to 960 acres. The 2005 Energy Policy Act was influenced by former Vice President Dick Cheney’s “Energy Task Force” meetings with energy industry interests, including Peabody Energy²⁰ and the National Mining Association.²¹ Before its inclusion in the 2005 Energy Policy Act, the measure increasing the maximum acreage for lease modifications was introduced by Wyoming’s Senators²² and Representative²³ as part of the “Coal Leasing Amendments Act of 2005.”

The Inspector General report raised concerns about lease modifications, and noted that among the lease modifications it analyzed, “more than half of the FMVs [fair market value calculations] were for \$100 per acre (the lowest price allowed by regulation) without adequate supporting documentation for this minimal price.”²⁴ The Interior Department does not publish complete records of coal lease modifications, and neither did the Inspector General report identifying problems with these undervalued lease modifications. However, the Inspector General did provide those details in response to a request from Senator Ron Wyden (D-OR), then-chairman of the Senate Energy and Natural Resources Committee. Those details for the 45 lease modifications reviewed by the Inspector General, including acreage, tonnage, sales price, date, and lessee, are provided in Table 2 below, along with calculations showing the price per ton for each coal lease modification, totals, and averages. The original table from the Inspector General’s letter to Senator Wyden is available in Appendix 2.

These records show that coal mining companies obtained over 192 million tons of federal coal through these 45 coal lease modifications, at an average price of \$0.16 per ton of coal. Table 2 also shows how coal mining companies moved to take advantage of the increased maximum acreage limits, beginning with Arch Coal’s 487 acre tract containing 2.3 million tons of coal in 2007. (Arch Coal lobbied on the Coal Lease Amendments Act, according to the Center for Responsive Politics).²⁵ After this, most coal lease modifications were for tracts of land well over the earlier 160 acre limit, with 19 of the 25 coal lease modifications (76%) greater than the earlier acreage limit. The average acreage for these coal lease modifications increased from 84 to 422 acres, and allowed coal mining companies to obtain significantly more federal coal using coal lease modifications and thereby minimize oversight, environmental reviews, and competition. Beginning with that first Arch Coal lease modification until the end of the Inspector General review period in 2012, mining companies obtained over 170 million tons of federal coal using coal lease modifications, eight times more than the 21 million tons of coal obtained from 2001 until 2007.

Table 2: Coal Lease Modifications Reviewed by Interior Inspector General
A. Coal Lease Modifications Before Maximum Acreage was Increased

Lessee	Mine	Date Modified	Acres Added	Price Per Acre	Size of Tract (Tons)	Sales Price	\$/Ton
Mountain Coal	West Elk, CO	10/11/2001	160	\$100.00	3,100,000	\$16,000	\$0.005
N/A	NA	10/11/2001	149.48	\$100.00	N/A	\$15,000	N/A
Pacificorp	Deer Creek, UT	12/14/2001	65.7	\$327.25	800,226	\$21,500	\$0.027
Black Butte	Black Butte, WY	4/26/2002	80	\$1,056.25	1,740,000	\$84,500	\$0.049
COP Coal Devel. Co	COP - Bear Canyon, UT	6/19/2002	40	\$3,125.00	500,000	\$125,000	\$0.250
COP Coal Devel. Co	COP - Bear Canyon, UT	6/19/2002	160	\$6,250.00	4,000,000	\$1,000,000	\$0.250
Peabody	N. Rochelle, WY	1/10/2003	10.19	\$490.68	65,000	\$5,000	\$0.077
Oxbow Mining	Elk Creek, CO	2/13/2003	159.99	\$100.00	766,000	\$16,000	\$0.021
Cyprus	Bowie No. 2, CO	1/1/2004	50	\$100.00	152,000	\$5,000	\$0.033
Western Fuels	Deserado, CO	2/1/2004	160	\$100.00	1,600,000	\$16,000	\$0.010
Westmoreland	Rosebud, MT	3/2/2004	30	\$375.00	250,000	\$11,250	\$0.045
Andale Resources	Crandall, UT	2/28/2005	120	N/A	900,000	N/A	N/A
Cyprus	Bowie No. 2, CO	9/7/2005	83.13	\$100.00	68,000	\$8,400	\$0.124
Colowyo Coal	Colowyo, CO	9/28/2005	60	\$100.00	472,000	\$6,000	\$0.013
San Juan	San Juan UG, NM	5/12/2006	160.6	\$100.00	1,250,000	\$16,060	\$0.013
Mountain Coal	West Elk, CO	5/18/2006	40	\$356.96	171,000	\$14,278	\$0.083
Cloud Peak	Decker, MT	6/19/2006	49.6	\$4,600.00	2,480,000	\$228,160	\$0.092
Cloud Peak	Decker, MT	6/19/2006	50.8	\$4,491.34	2,480,000	\$228,160	\$0.092
Arch	Black Thunder, WY	6/19/2006	40.36	\$12.39	8,000	\$500	\$0.063
Western Fuels	Desperado, CO	1/5/2007	120	\$100.00	1,150,000	\$12,000	\$0.010

Totals for 18 coal lease modifications before increased max acreage	1,520		21,052,226	\$1,813,808	
Averages for 18 coal lease modifications before increased max acreage	84	\$1,193	1,169,568	\$100,767	\$0.09

B. Coal Lease Modifications After Maximum Acreage was Increased

Lessee	Mine	Date Modified	Acres Added	Price Per Acre	Size of Tract (Tons)	Sales Price	\$/Ton
Arch	Dugout, UT	3/12/2007	487.57	\$943.45	2,300,000	\$460,000	\$0.200
Oxbow Mining	Elk Creek, CO	5/1/2007	190.67	\$860.68	2,026,000	\$164,106	\$0.081
Cyprus	Foidel Creek	7/27/2007	221.86	\$5,746.87	5,100,000	\$1,275,000	\$0.250
Western Fuels	Deserado, CO	9/1/2007	840	\$100.00	8,480,000	\$84,000	\$0.010
P&K Co.	Pollyana #8, OK	9/27/2007	170	\$100.00	600,000	\$17,000	\$0.028
Hudson-Blake	Shady Point/Cavanal OK	2/12/2008	20	\$100.00	10,000	\$2,000	\$0.200
Peabody	N. Rochelle, WY	4/23/2008	315.18	\$6,107.62	34,600,000	\$1,925,000	\$0.056
Cyprus	Bowie No. 2, CO	10/1/2008	560	\$402.11	2,780,000	\$225,180	\$0.081
Oxbow Mining	Elk Creek, CO	1/1/2009	148	\$317.98	581,000	\$47,061	\$0.081
White Oak Horizon	Horizon, UT	3/10/2009	936	\$1,073.08	10,800,000	\$1,004,400	\$0.093
UtahAmerican Energy	West Ridge, UT	4/6/2009	602	\$1,627.91	2,800,000	\$980,000	\$0.350
Western Fuels	Deserado, CO	7/1/2009	400	\$100.00	4,470,000	\$40,000	\$0.009
Arch	Dugout, UT	10/25/2009	367.44	\$4,517.74	8,300,000	\$1,660,000	\$0.200
Canyon Fuel	Sufco, UT	11/23/2009	880	\$4,371.97	9,600,000	\$3,847,333	\$0.401
Canyon Fuel	Sufco, UT	11/23/2009	795.68	\$4,703.31	9,300,000	\$3,742,333	\$0.402
Canyon Fuel	Succor, UT	11/23/2009	640	\$3,003.65	4,100,000	\$1,922,333	\$0.469
Westmoreland	Beulah, MT	12/2/2009	240	\$100.00	N/A	\$24,000	N/A
Spring Creek	Spring Creek, MT	6/16/2010	498.11	\$7,809.52	38,900,000	\$3,890,000	\$0.100
Arch	Dugout, UT	7/21/2010	50	\$490.00	70,000	\$24,500	\$0.350
Bridger Coal	Bridger, WY	10/5/2010	560	\$682.14	5,900,000	\$382,000	\$0.065
Cyprus	Bowie No. 2, CO	1/28/2011	160	\$250.00	400,000	\$40,000	\$0.100
UtahAmerican Energy	West Ridge, UT	6/9/2011	351	\$5,270.66	5,000,000	\$1,850,000	\$0.370
UtahAmerican Energy	Lila Canyon, UT	6/10/2011	5	\$3,700.00	50,000	\$18,500	\$0.370
Arch	Skyline, UT	4/2/2012	770	\$7,168.83	13,800,000	\$5,520,000	\$0.400
Oxbow Mining	Elk Creek, CO	5/1/2012	158.79	\$100.00	235,000	\$15,900	\$0.068

Totals for 24 coal lease modifications after increased max acreage	10,127		170,202,000	\$29,136,646	
Averages for 24 coal lease modifications after increased max acreage	422	\$2,877	7,091,750	\$1,214,027	\$0.17

Totals for 42 coal lease modifications with complete records	11,648		191,254,226	\$30,950,454	
Averages for 42 coal lease modifications with complete records	289	\$2,657	4,575,101	\$737,844	\$0.16
Totals for all 45 coal lease modifications	12,157		192,154,226	\$30,989,454	

Totals, Averages, and "\$/Ton" show calculations made for this report, all other columns show data and information from the Interior Department Inspector General, reordered to a chronological order to show the impacts of the increased maximum acreage. Average price per ton calculations are based on the 42 coal lease modifications with both sales price and total coal tonnage, excluding the three with incomplete information, which are marked in red text. A copy of the original table is available in Appendix 2.

Coal companies receive further subsidies from state governments, including avoiding requirements to post bonds for their mine reclamation obligations

While the Interior Department is responsible for managing federal coal, the state in which federal coal is mined receives half of the royalties. Federal coal mining occurs mostly in Western States, with the vast majority of federal coal production in the Powder River Basin region of Wyoming and Montana, as well as significant amounts in Colorado, Utah, New Mexico, and North Dakota, and small-

er amounts in other states. While the Interior Department has allowed the coal mining industry to largely run the federal coal mining process, state governments have sometimes gone beyond even this lax approach. For example, states like Utah ²⁶ and Wyoming ²⁷ have sought to use state funds to subsidize coal export proposals in Washington, Oregon, and California that would ship federal coal to Asia.

Another major way that the state of Wyoming has subsidized federal coal mining is by allowing coal mining companies to avoid posting bonds to pay for mine reclamation as required by the Surface Mining Control and Reclamation Act. Instead, Wyoming's Department of Environmental Quality (DEQ) has allowed coal mining companies to "self-bond," using their supposed financial strength, or even that of a subsidiary, as an indication of the company's ability to reclaim its mines. One report, "Assessing Thermal Coal Production Subsidies," estimated that self-bonding in the Powder River Basin amounted to a subsidy of \$0.78 for each ton of coal. ²⁸

This practice of self-bonding has come under increased scrutiny as coal mining companies like Arch Coal and Alpha Natural Resources have filed for bankruptcy, raising concerns that taxpayers could end up footing the bill for mine reclamation - exactly what the Surface Mining Control and Reclamation Act sought to avoid. Secretary Jewell highlighted those concerns in testimony to the House Natural Resources Committee: "With the increased financial fragility of many coal mining companies, if they are self-bonded that does potentially leave the states and the taxpayers at risk." ²⁹ After acknowledging that Alpha no longer qualified for self-bonding, Wyoming regulators ordered the company to post bonds for the \$411 million it owes to reclaim its Wyoming mines. But Wyo-



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Arch Coal's bankruptcy has raised concerns about the company's ability to pay for its reclamation obligations at its Black Thunder mine in Wyoming, one of the largest strip mines in the world

ming's Governor undermined that effort, and instead announced a deal that would require just \$61 million for the company's mine reclamation, less than 15% of the company's obligation.³⁰ However, federal regulators at the Office of Surface Mining and Reclamation Enforcement (OSMRE) did not sanction the deal, and notified Wyoming that its deal with Alpha, as well as its failure to require Arch Coal to post a sufficient bond for its mine reclamation, may violate the law.³¹ In its response to OSMRE, Wyoming regulators acknowledged "systemic problems with self-bonding," yet also rejected OSMRE concerns that the deal with Alpha may violate the law.³² Following its letters to Wyoming, OSMRE also notified state regulators in Wyoming, Colorado, and New Mexico that Peabody Energy may no longer qualify for self-bonding.³³

While Wyoming regulators have now acknowledged "systemic problems" with its self-bonding program, the state has not suggested how it will address those problems in order to protect taxpayers and the environment, even though organizations representing landowners in the region such as the Western Organization of Resource Councils have warned the state about these problems for several years. In light of the efforts by Wyoming's Governor and regulators to prioritize the interests of the coal industry ahead of other concerns, federal regulators will likely need to increase their involvement and intervene to enforce the requirements of the Surface Mining Control and Reclamation Act.

More information about coal mine reclamation and problems with self-bonding is available in "Undermined Promise II," a report by the Western Organization of Resource Councils, National Wildlife Federation, and Natural Resources Defense Council.³⁴

Coal companies provide data to the Interior Department about federal coal leases, and have significantly underestimated the quantity of coal in some leases

Another example of the extent to which the coal industry has dominated federal coal management is that coal companies supply the data to the government about the quantity and quality of federal coal within lease tracts they hope to mine. And data revealed by the Interior Department's Inspector General show that coal mining companies have significantly underestimated the amounts of coal in several cases. For example, as shown in Table 3 below, a coal lease to expand a Peabody Energy subsidiary's mine in Colorado was estimated to contain 1.4 million tons of coal and was sold for \$350,000, or \$0.25 per ton. But Peabody's subsidiary actually ended up mining more than 2.5 million tons of federal coal from that lease, so the lease sale price amounted to just \$0.13 per ton.

The Inspector General's report explained the overall concern:

"Before a lease sale takes place, a mining company explores the site for the existence and extent of coal seams, including the energy content and quality of the coal. The mining company is required to furnish the information to BLM, which helps form the basis of BLM's FMV determination. BLM, however, does not independently verify the data, relying instead on test results supplied by the mining company."³⁵

The Inspector General's report also noted that "a company could provide incorrect data to BLM, resulting in BLM's undervaluing the FMV and unknowingly accepting a low bid." Although the Inspector General did not include the data in its report, it did respond to Senator Wyden's letter with a table showing "Coal Leases that May Have Underestimated Reserves at Time of Sale." The data from that table is reproduced below in Table 3, along with additional columns to show the difference (in tons) between the amount of coal estimated at the time of the lease sale and the amount of coal actually

mined, as well as to show the impact of these underestimates in terms of the price per ton. Totals and averages are also calculated, showing that coal mining companies mined nearly 70 million more tons of coal from these 15 coal lease sales than what the companies estimated was contained in them. The original table from the Inspector General's letter to Senator Wyden is available in Appendix 3.

Table 3: Coal Leases that May Have Underestimated Reserves at Time of Sale

Sale Date	Bonus Bid	Successful Bidder	Associated Mine Name	Acres	Estimate of Reserves at Time of Sale	Total Coal Production for Life of Lease (Through Sept. 2013) Reported by ONRR	Percentage Difference Between Sold and Produced Tons	Tonnage Difference Between Sold and Produced Tons	\$/Ton, Based on Estimate of Reserves at Time of Sale	\$/Ton, Based on Total Coal Production for Life of Lease reported by ONRR
1/14/2009	\$350,000	Twentymile Coal Co.	Foidel Creek	500	1,400,000	2,583,208	84.5%	1,183,208	\$0.25	\$0.14
4/27/1990	\$101,560	National King Coal	King	193	1,000,000	1,841,496	84.1%	841,496	\$0.10	\$0.06
6/28/1990	\$6,103,479	Beaver Creek Coal	Trail Mountain	2,630	12,200,000	21,952,246	79.9%	9,752,246	\$0.50	\$0.28
5/31/2000	\$8,723,661	Oxbow Mining Inc.	Elk Creek	4,443	20,920,000	37,620,116	79.8%	16,700,116	\$0.42	\$0.23
10/7/1993	\$57,225	Cyprus Western	Foidel Creek	544	3,600,000	5,357,024	48.8%	1,757,024	\$0.02	\$0.01
3/26/1997	\$15,900	Falkirk Mining Co.	Freedom	159	1,750,000	2,397,014	37.0%	647,014	\$0.01	\$0.01
9/26/1991	\$20,110,457	Kerr McGee	Jacobs Ranch	1,709	102,600,000	134,495,136	31.1%	31,895,136	\$0.20	\$0.15
3/30/1998	\$19,752	National King Coal	King	195	624,000	812,855	30.3%	188,855	\$0.03	\$0.02
11/14/1994	\$164,544	Farrell-Cooper Mining Co.	Shady Point, Cavanal	400	369,400	476,142	28.9%	106,742	\$0.45	\$0.35
8/31/1993	\$19,005	Leeco	Number 60	181	500,000	615,631	23.1%	115,631	\$0.04	\$0.03
7/30/1992	\$1,025,998	Somerset Mining	Elk Creek	1,340	10,300,000	11,993,166	16.4%	1,693,166	\$0.10	\$0.09
2/12/2002	\$50,280	Coteau Properties Co.	Freedom	502	7,000,000	8,076,155	15.4%	1,076,155	\$0.01	\$0.01
6/28/1990	\$1,654,776	AMCA Coal Leasing	Aberdeen	933	8,800,000	10,027,595	13.9%	1,227,595	\$0.19	\$0.17
1/25/1996	\$4,057,900	Twentymile Coal Co.	Foidel Creek	2,600	23,870,000	26,454,590	10.8%	2,584,590	\$0.17	\$0.15
3/26/1997	\$8,000	Coteau Properties Co.	Coteau	80	510,000	517,346	1.4%	7,346	\$0.02	\$0.02
Totals	\$42,462,537			16,409	195,443,400	265,219,720		69,776,320		
Averages							35.7%		\$0.22	\$0.16

Totals, Averages, "Percentage difference between sold and produced tons," "Tonnage difference between sold and produced tons," "\$/ton, based on Estimate of Reserves at Time of Sale," and "\$/Ton, based on Total Coal Production for life of Lease reported by ONRR" show calculations made for this report. All other columns show data and information from the Interior Department Inspector General. A copy of the original table is available in Appendix 3.

Instead of subsidizing increased coal mining and the coal industry's political attacks, federal coal management should support US efforts to address climate change

While Peabody Energy, Arch Coal, and Cloud Peak Energy have grown in part because of their access to subsidized federal coal, as well as significant control over how federal coal is managed, these companies have nevertheless sought to portray themselves as the victims of federal regulations. And these companies have led the coal industry's efforts to block federal climate and clean air policies. Peabody Energy and Arch Coal spent more on lobbying than any other coal mining company, according to the Center for Responsive Politics.³⁶

As the largest coal mining company, Peabody Energy in particular has played a central role in the coal industry's attacks, including challenging the Clean Power Plan in court.³⁷ Peabody also continues to rely on climate change denial³⁸ and other misleading public relations efforts,³⁹ and was recently investigated by the New York Attorney General for misleading investors and regulators about the risks of climate change policies to its business.⁴⁰ The coal industry's efforts to block federal climate and clean air policies may not be surprising, but it is noteworthy that these coal industry attacks have been partially financed by these companies' access to subsidized federal coal.

Instead of continuing to subsidize increased coal production and the coal industry's political attacks, the Interior Department should realign the management of federal coal by consulting with communities impacted by coal mining and transport, helping ensure a just transition from coal to clean energy, and supporting US commitments to address climate change. A former Interior Department Deputy Secretary and a former economic adviser to President Obama have suggested a "carbon adder" to incorporate the federal government's social cost of carbon figures into federal coal management decisions and royalty rates.⁴¹ Issues surrounding this approach have been studied by the Institute for Policy Integrity,⁴² Vulcan Philanthropy,⁴³ and others.

Ultimately, federal coal management must be reconciled with the reality that the vast majority of US coal reserves cannot be mined and burned. The US holds the largest coal reserves in the world, and a study published in *Nature*⁴⁴ showed that in order to avoid an increase in global warming above 2 degrees Celsius, over 90% of US coal reserves must remain in the ground.⁴⁵ The President and Interior Department have clear authority to end new federal coal leasing, which is detailed in a report by the Center for Biological Diversity.⁴⁶ That authority has also been acknowledged by Cloud Peak Energy, the company most dependent on federal coal, which warned investors in its 10-K filing with the SEC: "There is no requirement that the federal government must lease its coal."⁴⁷

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Appendix 1 FOIA results for top three companies, organized by subsidiary and company

Peabody Energy

Peabody Energy Subsidiary: Powder River Coal LLC		
Mine: North Antelope Rochelle (Wyoming)		
Name	Production Tons	Sales Date
POWDER RIVER COAL LLC	8,786,955	1/31/2014
POWDER RIVER COAL LLC	8,638,928	2/28/2014
POWDER RIVER COAL LLC	9,424,294	3/31/2014
POWDER RIVER COAL LLC	7,930,601	4/30/2014
POWDER RIVER COAL LLC	8,664,099	5/31/2014
POWDER RIVER COAL LLC	8,284,223	6/30/2014
POWDER RIVER COAL LLC	7,998,743	7/31/2014
POWDER RIVER COAL LLC	8,530,574	8/31/2014
POWDER RIVER COAL LLC	8,176,371	9/30/2014
POWDER RIVER COAL LLC	8,366,824	10/31/2014
POWDER RIVER COAL LLC	9,550,672	11/30/2014
POWDER RIVER COAL LLC	8,193,629	12/31/2014
Total 2014 Federal Coal Production:	102,545,913	
Total 2014 North Antelope Production, (MSHA):	117,965,515	
Federal Coal as Percentage of Total Production:	86.93%	

Peabody Energy Subsidiary: Caballo Coal Company		
Mines: Caballo and Rawhide (Wyoming)		
Name	Production Tons	Sales Date
CABALLO COAL COMPANY	2,062,397	1/31/2014
CABALLO COAL COMPANY	1,669,483	2/28/2014
CABALLO COAL COMPANY	1,806,420	3/31/2014
CABALLO COAL COMPANY	1,755,850	4/30/2014
CABALLO COAL COMPANY	1,866,297	5/31/2014
CABALLO COAL COMPANY	1,821,967	6/30/2014
CABALLO COAL COMPANY	2,070,408	7/31/2014
CABALLO COAL COMPANY	2,104,255	8/31/2014
CABALLO COAL COMPANY	2,108,721	9/30/2014
CABALLO COAL COMPANY	2,031,662	10/31/2014
CABALLO COAL COMPANY	2,015,034	11/30/2014
CABALLO COAL COMPANY	1,899,476	12/31/2014
Total 2014 Federal Coal Production:	23,211,970	
Total Caballo 2014 Coal Production (MSHA):	7,990,986	
Total Rawhide 2014 Coal Production (MSHA):	15,473,474	
Total 2014 Coal Production, Both (MSHA):	23,464,460	
Federal Coal as Percentage of Total Production:	98.92%	

Peabody Energy Subsidiary: Twentymile Coal Company		
Mine: Twentymile Mine (Colorado)		
Name	Production Tons	Sales Date
TWENTYMILE COAL COMPANY	34,944	3/31/2014
TWENTYMILE COAL COMPANY	65,494	4/30/2014
TWENTYMILE COAL COMPANY	221,329	5/31/2014
TWENTYMILE COAL COMPANY	484,813	6/30/2014
TWENTYMILE COAL COMPANY	429,571	7/31/2014
TWENTYMILE COAL COMPANY	451,395	8/31/2014
TWENTYMILE COAL COMPANY	721	10/31/2014
TWENTYMILE COAL COMPANY	528,706	11/30/2014
TWENTYMILE COAL COMPANY	441,574	12/31/2014
Total 2014 Federal Coal Production:	2,658,547	
Total Twentymile 2014 Coal Production (MSHA):	6,659,492	
Federal Coal as Percentage of Total Production:	39.92%	
Note: FOIA results did not include data for three months		

Peabody Energy Subsidiary: Peabody Natural Resources		
Mine: El Segundo (New Mexico)		
Name	Production Tons	Sales Date
PEABODY NATURAL RESOURCES CO	73,795	7/31/2014
PEABODY NATURAL RESOURCES CO	298,847	8/31/2014
PEABODY NATURAL RESOURCES CO	23,992	9/30/2014
PEABODY NATURAL RESOURCES CO	236,400	10/31/2014
PEABODY NATURAL RESOURCES CO	39,498	11/30/2014
PEABODY NATURAL RESOURCES CO	224,364	12/31/2014
Total 2014 Federal Coal Production:	896,896	
Total El Segundo 2014 Coal Production (MSHA):	8,440,886	
Federal Coal as Percentage of Total Production:	10.63%	
Note: FOIA results did not include data for six months		

Peabody Subsidiaries Federal Coal Production as Percentage of Peabody Energy Total 2014 US Coal Production in 2014	
Federal Coal Production by Peabody Subsidiaries in 2014	
Powder River Coal LLC	102,545,913
Caballo Coal Company	23,211,970
Twentymile Coal Company	2,658,547
Peabody Natural Resources	896,896
Peabody Energy Total 2014 Federal Coal Production	129,313,326
Peabody Energy 2014 US Coal Production (10-K)	189,500,000
Federal Coal as Percentage of Total US Production:	68.24%

Arch Coal

Arch Coal Subsidiary: Thunder Basin Coal Company, LLC		
Mines: Black Thunder and Coal Creek (Wyoming)		
Name	Production Tons	Sales Date
THUNDER BASIN COAL COMPANY LLC	9,285,134	1/31/2014
THUNDER BASIN COAL COMPANY LLC	7,603,459	2/28/2014
THUNDER BASIN COAL COMPANY LLC	8,580,685	3/31/2014
THUNDER BASIN COAL COMPANY LLC	8,638,120	4/30/2014
THUNDER BASIN COAL COMPANY LLC	9,423,807	5/31/2014
THUNDER BASIN COAL COMPANY LLC	8,426,293	6/30/2014
THUNDER BASIN COAL COMPANY LLC	9,464,203	7/31/2014
THUNDER BASIN COAL COMPANY LLC	8,629,309	8/31/2014
THUNDER BASIN COAL COMPANY LLC	8,171,538	9/30/2014
THUNDER BASIN COAL COMPANY LLC	9,014,077	10/31/2014
THUNDER BASIN COAL COMPANY LLC	7,553,888	11/30/2014
THUNDER BASIN COAL COMPANY LLC	9,239,307	12/31/2014
Total 2014 Federal Coal Production:	104,029,820	
Total Black Thunder 2014 Coal Production (MSHA):	101,016,860	
Total Coal Creek 2014 Coal Production (MSHA):	9,414,483	
Total 2014 Coal Production, Both (MSHA):	110,431,343	
Federal Coal as Percentage of Total Production:	94.20%	

Arch Coal Subsidiary: Mountain Coal Company, LLC		
Mine: West Elk (Colorado)		
Name	Production Tons	Sales Date
MOUNTAIN COAL COMPANY, LLC	273,468	1/31/2014
MOUNTAIN COAL COMPANY, LLC	447,003	2/28/2014
MOUNTAIN COAL COMPANY, LLC	562,399	3/31/2014
MOUNTAIN COAL COMPANY, LLC	409,305	4/30/2014
MOUNTAIN COAL COMPANY, LLC	442,346	5/31/2014
MOUNTAIN COAL COMPANY, LLC	532,025	6/30/2014
MOUNTAIN COAL COMPANY, LLC	531,369	7/31/2014
MOUNTAIN COAL COMPANY, LLC	669,003	8/31/2014
MOUNTAIN COAL COMPANY, LLC	635,923	9/30/2014
MOUNTAIN COAL COMPANY, LLC	619,732	10/31/2014
MOUNTAIN COAL COMPANY, LLC	506,531	11/30/2014
MOUNTAIN COAL COMPANY, LLC	473,131	12/31/2014
Total 2014 Federal Coal Production:	6,102,235	
Total West Elk 2014 Coal Production (MSHA):	6,192,656	
Federal Coal as Percentage of Total Production:	98.54%	

Arch Subsidiaries Federal Coal Production as Percentage of Arch Coal Total Coal Production in 2014	
Federal Coal Production by Arch Subsidiaries in 2014	
Thunder Basin Coal Company, LLC	104,029,820
Mountain Coal Company LLC	6,102,235
Arch Coal Total 2014 Federal Coal Production	110,132,055
Arch Coal 2014 US Coal Production (10-K)	132,614,000
Federal Coal as Percentage of Total US Production:	83.05%

Cloud Peak Energy

Cloud Peak Energy Subsidiary: Antelope Coal, LLC		
Mine: Antelope Mine (Wyoming)		
Name	Production Tons	Sales Date
ANTELOPE COAL, LLC.	2,394,969	1/31/2014
ANTELOPE COAL, LLC.	2,390,169	2/28/2014
ANTELOPE COAL, LLC.	2,973,552	3/31/2014
ANTELOPE COAL, LLC.	2,705,526	4/30/2014
ANTELOPE COAL, LLC.	2,728,827	5/31/2014
ANTELOPE COAL, LLC.	2,603,732	6/30/2014
ANTELOPE COAL, LLC.	2,545,833	7/31/2014
ANTELOPE COAL, LLC.	2,935,940	8/31/2014
ANTELOPE COAL, LLC.	2,690,198	9/30/2014
ANTELOPE COAL, LLC.	2,928,458	10/31/2014
ANTELOPE COAL, LLC.	2,893,869	11/30/2014
ANTELOPE COAL, LLC.	3,212,640	12/31/2014
Total 2014 Federal Coal Production:	33,003,713	
Total Antelope Mine 2014 Coal Production (MSHA):	33,646,960	
Federal Coal as Percentage of Total Production:	98.09%	

Cloud Peak Energy Subsidiary: Cordero Mining, LLC		
Mine: Cordero Rojo (Wyoming)		
Name	Production Tons	Sales Date
CORDERO MINING, LLC.	2,935,594	1/31/2014
CORDERO MINING, LLC.	1,554,950	2/28/2014
CORDERO MINING, LLC.	2,658,157	3/31/2014
CORDERO MINING, LLC.	2,746,379	4/30/2014
CORDERO MINING, LLC.	2,262,893	5/31/2014
CORDERO MINING, LLC.	2,229,432	6/30/2014
CORDERO MINING, LLC.	2,876,455	7/31/2014
CORDERO MINING, LLC.	2,294,252	8/31/2014
CORDERO MINING, LLC.	2,030,780	9/30/2014
CORDERO MINING, LLC.	3,028,228	10/31/2014
CORDERO MINING, LLC.	2,958,318	11/30/2014
CORDERO MINING, LLC.	1,929,728	12/31/2014
Total 2014 Federal Coal Production:	29,505,166	
Total Cordero Rojo Mine 2014 Coal Production (MSHA):	34,809,101	
Federal Coal as Percentage of Total Production:	84.76%	

Cloud Peak Energy Subsidiary: Spring Creek Coal, LLC		
Mine: Spring Creek (Montana)		
Name	Production Tons	Sales Date
SPRING CREEK COAL LLC	991,151	1/31/2014
SPRING CREEK COAL LLC	287,468	2/28/2014
SPRING CREEK COAL LLC	937,708	3/31/2014
SPRING CREEK COAL LLC	793,907	4/30/2014
SPRING CREEK COAL LLC	1,010,995	5/31/2014
SPRING CREEK COAL LLC	884,293	6/30/2014
SPRING CREEK COAL LLC	1,395,151	7/31/2014
SPRING CREEK COAL LLC	1,391,433	8/31/2014
SPRING CREEK COAL LLC	1,554,973	9/30/2014
SPRING CREEK COAL LLC	1,403,035	10/31/2014
SPRING CREEK COAL LLC	1,067,380	11/30/2014
SPRING CREEK COAL LLC	1,243,244	12/31/2014
Total 2014 Federal Coal Production:	12,960,738	
Total Spring Creek Mine 2014 Coal Production (MSHA):	17,338,424	
Federal Coal as Percentage of Total Production:	74.75%	

Cloud Peak Subsidiaries' Federal Coal Production, as Percentage of Cloud Peak Energy's Total Coal Production in 2014	
Federal Coal Production by Cloud Peak Subsidiaries in 2014	
Antelope Coal, LLC	33,003,713
Cordero Mining, LLC	29,505,166
Spring Creek Coal, LLC	12,960,738
Cloud Peak Energy Total 2014 Federal Coal Production	75,469,617
Cloud Peak Energy 2014 US Coal Production (10-K)	85,800,000
Federal Coal as Percentage of Total US Production:	87.96%

Federal coal production data for each company's subsidiaries are from the results of a Greenpeace FOIA request to the US Interior Department, the full results of which are published in Appendix 4. Total US coal production figures for Peabody Energy, Arch Coal, and Cloud Peak Energy come from company 10-K filings with the SEC for the year ending December 31, 2014:

Page 34 of Peabody Energy's 10-K reports a total 2014 coal production of 227.2 million tons, of which 37.7 million tons was from mines in Australia, for a total US coal production of 189.5 million tons. <https://www.sec.gov/Archives/edgar/data/1064728/000106472815000021/btu-20141231x10k.htm>

Page 61 of Arch Coal's 10-K reports a total 2014 coal production of 132,614,000 million tons. <https://www.sec.gov/Archives/edgar/data/1037676/000104746915001419/a2223254z10-k.htm>

Page 4 of Cloud Peak Energy's 10-K reports that the company sold 87.1 million tons of coal in 2014, of which 0.2 million was resold coal mined by other companies. 1.1 million tons was from the Decker Mine, which is not included in the company's total for this report because Cloud Peak held a 50% interest in the mine, which it sold in September 2014. Excluding those 1.3 million tons, Cloud Peak Energy mined a total of 85.8 million tons of coal in 2014. https://www.sec.gov/Archives/edgar/data/1441849/000110465915011392/a15-1789_110k.htm

Appendix 2

Data Source for Table 2: Coal Lease Modifications Reviewed by Interior Inspector General, from Interior Department Inspector General Letter to Senator Wyden, November 15, 2013

	Lessee	Mine	Lease Number	Date Modified	Acres Added	Price Per Acre	Size of Tract (Tons)	Sales Price
1	Mountain Coal	West Elk, CO	COC 001362	10/11/2001	160	\$100.00	3,100,000	\$16,000
2	Western Fuels	Deserado, CO	COC 00842401	01/05/2007	120	\$100.00	1,150,000	\$12,000
3	Western Fuels	Deserado, CO	COC 00842401	09/01/2007	840	\$100.00	8,480,000	\$84,000
4	Western Fuels	Deserado, CO	COC 00842501	02/01/2004	160	\$100.00	1,600,000	\$16,000
5	Western Fuels	Deserado, CO	COC 00842501	07/01/2009	400	\$100.00	4,470,000	\$40,000

11	Oxbow Mining	Elk Creek, CO	COC 061357	02/13/2003	159.99	\$100.00	766,000	\$16,000
12	Oxbow Mining	Elk Creek, CO	COC 061357	05/01/2007	190.67	\$860.68	2,026,000	\$164,106
13	Oxbow Mining	Elk Creek, CO	COC 061357	01/01/2009	148	\$317.98	581,000	\$47,061
14	Oxbow Mining	Elk Creek, CO	COC 061357	05/01/2012	158.79	\$100.00	235,000	\$15,900
15	Colowyo Coal	Colowyo, CO	COD 0034365	09/28/2005	60	\$100.00	472,000	\$6,000
16	Cyprus	Bowie No. 2, CO	COD 0036955	01/28/2011	160	\$250.00	400,000	\$40,000
17	Mountain Coal	West Elk, CO	COD 0044569	05/18/2006	40	\$356.96	171,000	\$14,278
18	Cloud Peak	Decker, MT	MTM 037604	06/19/2006	49.6	\$4,600.00	2,480,000	\$228,160
19	Westmoreland	Rosebud, MT	MTM 080697	03/02/2004	30	\$375.00	250,000	\$11,250
20	Spring Creek	Spring Creek, MT	MTM 0069782	06/16/2010	498.11	\$7,809.52	38,900,000	\$3,890,000
21	Cloud Peak	Decker, MT	MTM 057934	06/19/2006	50.8	\$4,491.34	2,480,000	\$228,160
22	Westmoreland	Beulah, MT	NDM 0041765	12/02/2009	240	\$100.00	N/A	\$24,000
23	San Juan	San Juan UG, NM	NMNM 028093	05/12/2006	160.6	\$100.00	1,250,000	\$16,060
24	P&K Co.	Pollyanna #8, OK	OKNM 091190	09/27/2007	170	\$100.00	600,000	\$17,000
25	Hudson -Blake	Shady Point / Cavanal, OK	OKNM 091590	02/12/2008	20	\$100.00	10,000	\$2,000
26	Canyon Fuel	Sufco, UT	UTSL 0062583	11/23/2009	880	\$4,371.97	9,600,000	\$3,847,333
27	UtahAmerican Energy	Lila Canyon, UT	UTSL 0066490	06/10/2011	5	\$3,700.00	50,000	\$18,500
28	COP Coal Devel. Co	COP - Bear Canyon, UT	UTU 038727	06/19/2002	40	\$3,125.00	500,000	\$125,000
29	Canyon Fuel	Sufco, UT	UTU 047080	11/23/2009	795.68	\$4,703.31	9,300,000	\$3,742,333
30	COP Coal Devel. Co.	COP - Bear Canyon, UT	UTU 061049	06/19/2002	160	\$6,250.00	4,000,000	\$1,000,000
31	Canyon Fuel	Sufco, UT	UTU 063214	11/23/2009	640	\$3,003.65	4,100,000	\$1,922,333
32	Arch	Skvline, UT	UTU	04/02/2012	770	\$7,168.83	13,800,000	\$5,520,000
33	Andalex Resources	Crandall, UT	UTU 068082	02/28/2005	120	N/A	900,000	N/A
34	White Oak Horizon	Horizon, UT	UTU 074804	03/10/2009	936	\$1,073.08	10,800,000	\$1,004,400
35	UtahAmerican Energy	West Ridge, UT	UTU 078562	04/06/2009	602	\$1,627.91	2,800,000	\$980,000
36	UtahAmerican Energy	West Ridge, UT	UTU 078562	06/09/2011	351	\$5,270.66	5,000,000	\$1,850,000
37	PacifiCorp	Deer Creek, UT	UTU 0006039	12/14/2001	65.7	\$327.25	800,226	\$21,500
38	Arch	Dugout, UT	UTU 0007064	03/12/2007	487.57	\$943.45	2,300,000	\$460,000
39	Arch	Dugout, UT	UTU 0007064	0/25/2009	367.44	\$4,517.74	8,300,000	\$1,660,000
40	Arch	Dugout, UT	UTU 0007064	07/21/2010	50	\$490.00	70,000	\$24,500
41	Bridger Coal	Bridger, WY	WYW 002727	10/05/2010	560	\$682.14	5,900,000	\$382,000
42	Black Butte	Black Butte, WY	WYW 006266	04/26/2002	80	\$1,056.25	1,740,000	\$84,500
43	Peabody	N. Rochelle, WY	WYW 071692	01/10/2003	10.19	\$490.68	65,000	\$5,000
44	Peabody	Rawhide, WY	WYW 083395	04/23/2008	315.18	\$6,107.62	34,600,000	\$1,925,000
45	Arch	Black Thunder, WY	WYW 146744	06/19/2006	40.36	\$12.39	8,000	\$500
Total					12,157		192,154,226	\$30,989,454

Appendix 3

Data Source for Table 3: Coal Leases that May Have Underestimated Reserves at Time of Sale, from Interior Department Inspector General Letter to Senator Wyden, November 15, 2013

Lease Serial Number	Sale Date	Bonus Bid	Successful Bidder	Associated Mine Name	Acres	Estimate of Reserves at Time of Sale	Total Coal Production for life of Lease (through Sept. 2013) reported by ONRR	Percentage difference between sold and produced tons
COC 072980	14-Jan-09	\$350,000	Twentymile Coal Co.	Foidel Creek	500	1,400,000	2,583,208	84.5%
COC 049465	27-Apr-90	\$101,560	National King Coal	King	193	1,000,000	1,841,496	84.1%
UTU 064375	28-Jun-90	\$6,103,479	Beaver Creek Coal	Trail Mountain	2,630	12,200,000	21,952,246.00	79.9%
COC 061357	31-May-00	\$8,723,661	Oxbow Mining Inc.	Elk Creek	4,443	20,920,000	37,620,116.00	79.8%
COC 053560	7-Oct-93	\$57,225	Cyprus Western	Foidel Creek	544	3,600,000	5,357,024	48.8%
NDM 085516	26-Mar-97	\$15,900	Falkirk Mining Co.	Freedom	159	1,750,000	2,397,014	37.0%
WYW 117924	26-Sep-91	\$20,110,457	Kerr McGee	Jacobs Ranch	1709	102,600,000	134,495,136	31.1%
COC 060941	30-Mar-98	\$19,752	National King Coal	King	195	624,000	812,855	30.3%
OKNM 91590	14-Nov-94	\$165,544	Farrell-Cooper Mining Co.	Shady Point, Cavanal	400	369,400	476,142	28.9%
KYES 045088	31-Aug-93	\$19,005	Leeco	Number 60	181	500,000	615,631	23.1%
COC 053510	30-Jul-92	\$1,025,998	Somerset Mining	Elk Creek	1340	10,300,000	11,993,166	16.4%
NDM 90783	12-Feb-02	\$50,280	Coteau Properties Co.	Freedom	502	7,000,000	8,076,155	15.4%
UTU 066060	28-Jun-90	\$1,654,776	AMCA Coal Leasing	Aberdeen	933	8,800,000	10,027,595	13.9%
COC 054608	25-Jan-96	\$4,057,900	Twentymile Coal Co.	Foidel Creek	2600	23,870,000	26,454,590	10.8%
NDM 085537	26-Mar-97	\$8,000	Coteau Properties Co.	Coteau	80	510,000	517,346	1.4%

Source: Interior Department data, staff research

Appendix 4 Full FOIA Results

Cust ID	Name	Production Tons	Sales Date
MA027	ALPHA WYOMING LAND COMPANY, LLC.	1837799	2/28/2014
MA027	ALPHA WYOMING LAND COMPANY, LLC.	1587386	4/30/2014
MA027	ALPHA WYOMING LAND COMPANY, LLC.	1582893	6/30/2014
MA027	ALPHA WYOMING LAND COMPANY, LLC.	1552837	11/30/2014
MA027	ALPHA WYOMING LAND COMPANY, LLC.	1653979	9/30/2014
MA027	ALPHA WYOMING LAND COMPANY, LLC.	1811679	8/31/2014
MA027	ALPHA WYOMING LAND COMPANY, LLC.	1932780	12/31/2014
MA027	ALPHA WYOMING LAND COMPANY, LLC.	1864654	1/31/2014
MA027	ALPHA WYOMING LAND COMPANY, LLC.	1679835	7/31/2014
MA027	ALPHA WYOMING LAND COMPANY, LLC.	1896670	3/31/2014
MA027	ALPHA WYOMING LAND COMPANY, LLC.	1565301	5/31/2014
MA027	ALPHA WYOMING LAND COMPANY, LLC.	1724425	10/31/2014
MA039	ANTELOPE COAL, LLC.	2390169	2/28/2014
MA039	ANTELOPE COAL, LLC.	2705526	4/30/2014
MA039	ANTELOPE COAL, LLC.	2603732	6/30/2014
MA039	ANTELOPE COAL, LLC.	2893869	11/30/2014
MA039	ANTELOPE COAL, LLC.	2690198	9/30/2014
MA039	ANTELOPE COAL, LLC.	2935940	8/31/2014
MA039	ANTELOPE COAL, LLC.	3212640	12/31/2014
MA039	ANTELOPE COAL, LLC.	2394969	1/31/2014
MA039	ANTELOPE COAL, LLC.	2545833	7/31/2014
MA039	ANTELOPE COAL, LLC.	2973552	3/31/2014
MA039	ANTELOPE COAL, LLC.	2728827	5/31/2014
MA039	ANTELOPE COAL, LLC.	2928458	10/31/2014
MA077	BNI COAL, LTD.	121229	2/28/2014
MA077	BNI COAL, LTD.	65865	4/30/2014
MA077	BNI COAL, LTD.	13645	6/30/2014
MA077	BNI COAL, LTD.	79612	11/30/2014
MA077	BNI COAL, LTD.	129889	9/30/2014
MA077	BNI COAL, LTD.	173935	12/31/2014
MA077	BNI COAL, LTD.	30016	1/31/2014
MA077	BNI COAL, LTD.	77897	7/31/2014
MA077	BNI COAL, LTD.	115067	3/31/2014
MA077	BNI COAL, LTD.	41031	5/31/2014
MA077	BNI COAL, LTD.	84033	10/31/2014

MA086	BLEDSONE COAL LEASING COMPANY	10187	11/30/2014
MA086	BLEDSONE COAL LEASING COMPANY	2770	9/30/2014
MA086	BLEDSONE COAL LEASING COMPANY	3796	8/31/2014
MA086	BLEDSONE COAL LEASING COMPANY	5548	12/31/2014
MA086	BLEDSONE COAL LEASING COMPANY	9894	7/31/2014
MA086	BLEDSONE COAL LEASING COMPANY	14045	10/31/2014
MA100	BLACK BUTTE COAL COMPANY	22008	2/28/2014
MA100	BLACK BUTTE COAL COMPANY	23150	4/30/2014
MA100	BLACK BUTTE COAL COMPANY	55410	6/30/2014
MA100	BLACK BUTTE COAL COMPANY	38231	11/30/2014
MA100	BLACK BUTTE COAL COMPANY	27979	9/30/2014
MA100	BLACK BUTTE COAL COMPANY	119580	8/31/2014
MA100	BLACK BUTTE COAL COMPANY	91063	12/31/2014
MA100	BLACK BUTTE COAL COMPANY	236453	1/31/2014
MA100	BLACK BUTTE COAL COMPANY	50128	7/31/2014
MA100	BLACK BUTTE COAL COMPANY	104775	3/31/2014
MA100	BLACK BUTTE COAL COMPANY	28971	5/31/2014
MA100	BLACK BUTTE COAL COMPANY	5470	10/31/2014
MA109	KIEWIT MINING GROUP	1125290	2/28/2014
MA109	KIEWIT MINING GROUP	1229861	4/30/2014
MA109	KIEWIT MINING GROUP	1268127	6/30/2014
MA109	KIEWIT MINING GROUP	1190156	11/30/2014
MA109	KIEWIT MINING GROUP	1117745	9/30/2014
MA109	KIEWIT MINING GROUP	1369582	8/31/2014
MA109	KIEWIT MINING GROUP	1306026	12/31/2014
MA109	KIEWIT MINING GROUP	1367695	1/31/2014
MA109	KIEWIT MINING GROUP	1297967	7/31/2014
MA109	KIEWIT MINING GROUP	1342274	3/31/2014
MA109	KIEWIT MINING GROUP	1220058	5/31/2014
MA109	KIEWIT MINING GROUP	1498031	10/31/2014
MA110	BOWIE RESOURCES LLC	256619	2/28/2014
MA110	BOWIE RESOURCES LLC	267972	4/30/2014
MA110	BOWIE RESOURCES LLC	209660	6/30/2014
MA110	BOWIE RESOURCES LLC	137762	11/30/2014
MA110	BOWIE RESOURCES LLC	166732	9/30/2014
MA110	BOWIE RESOURCES LLC	322027	8/31/2014
MA110	BOWIE RESOURCES LLC	185065	12/31/2014
MA110	BOWIE RESOURCES LLC	186027	1/31/2014
MA110	BOWIE RESOURCES LLC	98218	7/31/2014

MA110	BOWIE RESOURCES LLC	148999	3/31/2014
MA110	BOWIE RESOURCES LLC	312273	5/31/2014
MA110	BOWIE RESOURCES LLC	125280	10/31/2014
MA163	COLOWYO COAL COMPANY	219496	2/28/2014
MA163	COLOWYO COAL COMPANY	244807	4/30/2014
MA163	COLOWYO COAL COMPANY	128366	6/30/2014
MA163	COLOWYO COAL COMPANY	195476	11/30/2014
MA163	COLOWYO COAL COMPANY	89472	9/30/2014
MA163	COLOWYO COAL COMPANY	288102	8/31/2014
MA163	COLOWYO COAL COMPANY	303769	12/31/2014
MA163	COLOWYO COAL COMPANY	158969	1/31/2014
MA163	COLOWYO COAL COMPANY	68850	7/31/2014
MA163	COLOWYO COAL COMPANY	158219	3/31/2014
MA163	COLOWYO COAL COMPANY	119572	5/31/2014
MA163	COLOWYO COAL COMPANY	72270	10/31/2014
MA180	COTEAU PROPERTIES	248411	2/28/2014
MA180	COTEAU PROPERTIES	163149	4/30/2014
MA180	COTEAU PROPERTIES	177860	6/30/2014
MA180	COTEAU PROPERTIES	236378	11/30/2014
MA180	COTEAU PROPERTIES	110245	9/30/2014
MA180	COTEAU PROPERTIES	155992	8/31/2014
MA180	COTEAU PROPERTIES	158403	7/31/2014
MA180	COTEAU PROPERTIES	8434	3/31/2014
MA180	COTEAU PROPERTIES	120658	5/31/2014
MA188	CORDERO MINING, LLC.	1554950	2/28/2014
MA188	CORDERO MINING, LLC.	2746379	4/30/2014
MA188	CORDERO MINING, LLC.	2229432	6/30/2014
MA188	CORDERO MINING, LLC.	2958318	11/30/2014
MA188	CORDERO MINING, LLC.	2030780	9/30/2014
MA188	CORDERO MINING, LLC.	2294252	8/31/2014
MA188	CORDERO MINING, LLC.	1929728	12/31/2014
MA188	CORDERO MINING, LLC.	2935594	1/31/2014
MA188	CORDERO MINING, LLC.	2876455	7/31/2014
MA188	CORDERO MINING, LLC.	2658157	3/31/2014
MA188	CORDERO MINING, LLC.	2262893	5/31/2014
MA188	CORDERO MINING, LLC.	3028228	10/31/2014
MA202	CASTLE VALLEY MINING, LLC.	65257	2/28/2014
MA202	CASTLE VALLEY MINING, LLC.	45092	4/30/2014
MA202	CASTLE VALLEY MINING, LLC.	23976	6/30/2014

MA202	CASTLE VALLEY MINING, LLC.	95052	11/30/2014
MA202	CASTLE VALLEY MINING, LLC.	65259	9/30/2014
MA202	CASTLE VALLEY MINING, LLC.	64478	8/31/2014
MA202	CASTLE VALLEY MINING, LLC.	83552	12/31/2014
MA202	CASTLE VALLEY MINING, LLC.	35149	1/31/2014
MA202	CASTLE VALLEY MINING, LLC.	30437	7/31/2014
MA202	CASTLE VALLEY MINING, LLC.	71763	3/31/2014
MA202	CASTLE VALLEY MINING, LLC.	20033	5/31/2014
MA202	CASTLE VALLEY MINING, LLC.	110033	10/31/2014
MA232	TWENTYMILE COAL COMPANY	65494	4/30/2014
MA232	TWENTYMILE COAL COMPANY	484813	6/30/2014
MA232	TWENTYMILE COAL COMPANY	528706	11/30/2014
MA232	TWENTYMILE COAL COMPANY	451395	8/31/2014
MA232	TWENTYMILE COAL COMPANY	441574	12/31/2014
MA232	TWENTYMILE COAL COMPANY	429571	7/31/2014
MA232	TWENTYMILE COAL COMPANY	34944	3/31/2014
MA232	TWENTYMILE COAL COMPANY	221329	5/31/2014
MA232	TWENTYMILE COAL COMPANY	721	10/31/2014
MA236	DAKOTA WESTMORELAND CORP.	253872	2/28/2014
MA236	DAKOTA WESTMORELAND CORP.	229727	4/30/2014
MA236	DAKOTA WESTMORELAND CORP.	190677	6/30/2014
MA236	DAKOTA WESTMORELAND CORP.	255742	11/30/2014
MA236	DAKOTA WESTMORELAND CORP.	168531	9/30/2014
MA236	DAKOTA WESTMORELAND CORP.	239872	8/31/2014
MA236	DAKOTA WESTMORELAND CORP.	156711	12/31/2014
MA236	DAKOTA WESTMORELAND CORP.	295122	1/31/2014
MA236	DAKOTA WESTMORELAND CORP.	208609	7/31/2014
MA236	DAKOTA WESTMORELAND CORP.	256089	3/31/2014
MA236	DAKOTA WESTMORELAND CORP.	226428	5/31/2014
MA236	DAKOTA WESTMORELAND CORP.	258582	10/31/2014
MA238	DECKER COAL COMPANY	178003	2/28/2014
MA238	DECKER COAL COMPANY	170890	4/30/2014
MA238	DECKER COAL COMPANY	231603	6/30/2014
MA238	DECKER COAL COMPANY	292149	11/30/2014
MA238	DECKER COAL COMPANY	253725	9/30/2014
MA238	DECKER COAL COMPANY	296239	8/31/2014
MA238	DECKER COAL COMPANY	415522	12/31/2014
MA238	DECKER COAL COMPANY	84146	1/31/2014
MA238	DECKER COAL COMPANY	289248	7/31/2014

MA238	DECKER COAL COMPANY	36498	3/31/2014
MA238	DECKER COAL COMPANY	219113	5/31/2014
MA238	DECKER COAL COMPANY	275907	10/31/2014
MA251	DRUMMOND CO INC	10092	2/28/2014
MA251	DRUMMOND CO INC	7260	4/30/2014
MA251	DRUMMOND CO INC	17605	6/30/2014
MA251	DRUMMOND CO INC	15061	3/31/2014
MA303	FARRELL-COOPER MINING COMPANY	7596	2/28/2014
MA303	FARRELL-COOPER MINING COMPANY	15888	6/30/2014
MA303	FARRELL-COOPER MINING COMPANY	12139	11/30/2014
MA303	FARRELL-COOPER MINING COMPANY	14664	9/30/2014
MA303	FARRELL-COOPER MINING COMPANY	19230	8/31/2014
MA303	FARRELL-COOPER MINING COMPANY	12060	12/31/2014
MA303	FARRELL-COOPER MINING COMPANY	11619	1/31/2014
MA303	FARRELL-COOPER MINING COMPANY	12368	7/31/2014
MA303	FARRELL-COOPER MINING COMPANY	12879	3/31/2014
MA303	FARRELL-COOPER MINING COMPANY	13080	5/31/2014
MA303	FARRELL-COOPER MINING COMPANY	17009	10/31/2014
MA480	LEONARDITE PRODUCTS LLC	1198	4/30/2014
MA480	LEONARDITE PRODUCTS LLC	1019	6/30/2014
MA480	LEONARDITE PRODUCTS LLC	727	11/30/2014
MA480	LEONARDITE PRODUCTS LLC	606	9/30/2014
MA480	LEONARDITE PRODUCTS LLC	583	8/31/2014
MA480	LEONARDITE PRODUCTS LLC	824	12/31/2014
MA480	LEONARDITE PRODUCTS LLC	212	7/31/2014
MA480	LEONARDITE PRODUCTS LLC	597	5/31/2014
MA480	LEONARDITE PRODUCTS LLC	680	10/31/2014
MA555	GCC ENERGY LLC	84633	2/28/2014
MA555	GCC ENERGY LLC	69595	4/30/2014
MA555	GCC ENERGY LLC	69034	6/30/2014
MA555	GCC ENERGY LLC	95470	11/30/2014
MA555	GCC ENERGY LLC	76585	9/30/2014
MA555	GCC ENERGY LLC	78778	8/31/2014
MA555	GCC ENERGY LLC	78413	12/31/2014
MA555	GCC ENERGY LLC	80298	1/31/2014
MA555	GCC ENERGY LLC	85842	7/31/2014
MA555	GCC ENERGY LLC	68341	3/31/2014
MA555	GCC ENERGY LLC	95147	5/31/2014
MA555	GCC ENERGY LLC	88654	10/31/2014

MA618	GEORGES COLLIERS, INC.	36684	2/28/2014
MA618	GEORGES COLLIERS, INC.	40424	4/30/2014
MA618	GEORGES COLLIERS, INC.	33067	6/30/2014
MA618	GEORGES COLLIERS, INC.	27330	11/30/2014
MA618	GEORGES COLLIERS, INC.	27134	9/30/2014
MA618	GEORGES COLLIERS, INC.	39461	8/31/2014
MA618	GEORGES COLLIERS, INC.	32820	12/31/2014
MA618	GEORGES COLLIERS, INC.	39137	1/31/2014
MA618	GEORGES COLLIERS, INC.	38771	7/31/2014
MA618	GEORGES COLLIERS, INC.	36942	3/31/2014
MA618	GEORGES COLLIERS, INC.	35336	5/31/2014
MA618	GEORGES COLLIERS, INC.	33173	10/31/2014
MA654	POWDER RIVER COAL LLC	8638928	2/28/2014
MA654	POWDER RIVER COAL LLC	7930601	4/30/2014
MA654	POWDER RIVER COAL LLC	8284223	6/30/2014
MA654	POWDER RIVER COAL LLC	9550672	11/30/2014
MA654	POWDER RIVER COAL LLC	8176371	9/30/2014
MA654	POWDER RIVER COAL LLC	8530574	8/31/2014
MA654	POWDER RIVER COAL LLC	8193629	12/31/2014
MA654	POWDER RIVER COAL LLC	8786955	1/31/2014
MA654	POWDER RIVER COAL LLC	7998743	7/31/2014
MA654	POWDER RIVER COAL LLC	9424294	3/31/2014
MA654	POWDER RIVER COAL LLC	8664099	5/31/2014
MA654	POWDER RIVER COAL LLC	8366824	10/31/2014
MA673	PEABODY NATURAL RESOURCES CO	39498	11/30/2014
MA673	PEABODY NATURAL RESOURCES CO	23992	9/30/2014
MA673	PEABODY NATURAL RESOURCES CO	298847	8/31/2014
MA673	PEABODY NATURAL RESOURCES CO	224364	12/31/2014
MA673	PEABODY NATURAL RESOURCES CO	73795	7/31/2014
MA673	PEABODY NATURAL RESOURCES CO	236400	10/31/2014
MA729	SIGNAL PEAK ENERGY LLC	13273	6/30/2014
MA729	SIGNAL PEAK ENERGY LLC	11690	11/30/2014
MA729	SIGNAL PEAK ENERGY LLC	6468	8/31/2014
MA729	SIGNAL PEAK ENERGY LLC	16641	12/31/2014
MA729	SIGNAL PEAK ENERGY LLC	3298	5/31/2014
MA738	BHP SAN JUAN COAL	731592	2/28/2014
MA738	BHP SAN JUAN COAL	664050	4/30/2014
MA738	BHP SAN JUAN COAL	1198772	6/30/2014
MA738	BHP SAN JUAN COAL	690512	11/30/2014

MA738	BHP SAN JUAN COAL	701928	9/30/2014
MA738	BHP SAN JUAN COAL	832936	8/31/2014
MA738	BHP SAN JUAN COAL	152072	12/31/2014
MA738	BHP SAN JUAN COAL	715928	1/31/2014
MA738	BHP SAN JUAN COAL	818791	7/31/2014
MA738	BHP SAN JUAN COAL	689020	3/31/2014
MA738	BHP SAN JUAN COAL	948728	5/31/2014
MA738	BHP SAN JUAN COAL	658344	10/31/2014
MA741	PACIFICORP ENERGY	223879	2/28/2014
MA741	PACIFICORP ENERGY	294492	4/30/2014
MA741	PACIFICORP ENERGY	186943	6/30/2014
MA741	PACIFICORP ENERGY	283519	11/30/2014
MA741	PACIFICORP ENERGY	8984	9/30/2014
MA741	PACIFICORP ENERGY	170841	8/31/2014
MA741	PACIFICORP ENERGY	329115	12/31/2014
MA741	PACIFICORP ENERGY	110852	1/31/2014
MA741	PACIFICORP ENERGY	338035	7/31/2014
MA741	PACIFICORP ENERGY	387067	3/31/2014
MA741	PACIFICORP ENERGY	300868	5/31/2014
MA741	PACIFICORP ENERGY	173437	10/31/2014
MA793	CANYON FUEL CO, LLC-SUFCA MINE	73471	2/28/2014
MA793	CANYON FUEL CO, LLC-SUFCA MINE	578393	4/30/2014
MA793	CANYON FUEL CO, LLC-SUFCA MINE	230167	6/30/2014
MA793	CANYON FUEL CO, LLC-SUFCA MINE	539523	11/30/2014
MA793	CANYON FUEL CO, LLC-SUFCA MINE	520548	9/30/2014
MA793	CANYON FUEL CO, LLC-SUFCA MINE	569661	8/31/2014
MA793	CANYON FUEL CO, LLC-SUFCA MINE	489194	12/31/2014
MA793	CANYON FUEL CO, LLC-SUFCA MINE	588794	1/31/2014
MA793	CANYON FUEL CO, LLC-SUFCA MINE	394100	7/31/2014
MA793	CANYON FUEL CO, LLC-SUFCA MINE	615703	3/31/2014
MA793	CANYON FUEL CO, LLC-SUFCA MINE	231644	5/31/2014
MA793	CANYON FUEL CO, LLC-SUFCA MINE	552703	10/31/2014
MA827	SPRING CREEK COAL LLC	287468	2/28/2014
MA827	SPRING CREEK COAL LLC	793907	4/30/2014
MA827	SPRING CREEK COAL LLC	884293	6/30/2014
MA827	SPRING CREEK COAL LLC	1067380	11/30/2014
MA827	SPRING CREEK COAL LLC	1554973	9/30/2014
MA827	SPRING CREEK COAL LLC	1391433	8/31/2014
MA827	SPRING CREEK COAL LLC	1243244	12/31/2014

MA827	SPRING CREEK COAL LLC	991151	1/31/2014
MA827	SPRING CREEK COAL LLC	1395151	7/31/2014
MA827	SPRING CREEK COAL LLC	937708	3/31/2014
MA827	SPRING CREEK COAL LLC	1010995	5/31/2014
MA827	SPRING CREEK COAL LLC	1403035	10/31/2014
MA863	THUNDER BASIN COAL COMPANY LLC	7603459	2/28/2014
MA863	THUNDER BASIN COAL COMPANY LLC	8638120	4/30/2014
MA863	THUNDER BASIN COAL COMPANY LLC	8426293	6/30/2014
MA863	THUNDER BASIN COAL COMPANY LLC	7553888	11/30/2014
MA863	THUNDER BASIN COAL COMPANY LLC	8171538	9/30/2014
MA863	THUNDER BASIN COAL COMPANY LLC	8629309	8/31/2014
MA863	THUNDER BASIN COAL COMPANY LLC	9239307	12/31/2014
MA863	THUNDER BASIN COAL COMPANY LLC	9285134	1/31/2014
MA863	THUNDER BASIN COAL COMPANY LLC	9464203	7/31/2014
MA863	THUNDER BASIN COAL COMPANY LLC	8580685	3/31/2014
MA863	THUNDER BASIN COAL COMPANY LLC	9423807	5/31/2014
MA863	THUNDER BASIN COAL COMPANY LLC	9014077	10/31/2014
MA870	TRAPPER MINING INC.	111962	2/28/2014
MA870	TRAPPER MINING INC.	172543	4/30/2014
MA870	TRAPPER MINING INC.	198260	6/30/2014
MA870	TRAPPER MINING INC.	205531	11/30/2014
MA870	TRAPPER MINING INC.	153802	9/30/2014
MA870	TRAPPER MINING INC.	156442	8/31/2014
MA870	TRAPPER MINING INC.	130665	12/31/2014
MA870	TRAPPER MINING INC.	153841	1/31/2014
MA870	TRAPPER MINING INC.	183787	7/31/2014
MA870	TRAPPER MINING INC.	152998	3/31/2014
MA870	TRAPPER MINING INC.	136494	5/31/2014
MA870	TRAPPER MINING INC.	187392	10/31/2014
MA895	CANYON FUEL CO LLC-SKYLINE MNS	46451	2/28/2014
MA895	CANYON FUEL CO LLC-SKYLINE MNS	175965	4/30/2014
MA895	CANYON FUEL CO LLC-SKYLINE MNS	435825	6/30/2014
MA895	CANYON FUEL CO LLC-SKYLINE MNS	188147	11/30/2014
MA895	CANYON FUEL CO LLC-SKYLINE MNS	82992	9/30/2014
MA895	CANYON FUEL CO LLC-SKYLINE MNS	358560	8/31/2014
MA895	CANYON FUEL CO LLC-SKYLINE MNS	575213	12/31/2014
MA895	CANYON FUEL CO LLC-SKYLINE MNS	206839	1/31/2014
MA895	CANYON FUEL CO LLC-SKYLINE MNS	406697	7/31/2014
MA895	CANYON FUEL CO LLC-SKYLINE MNS	48308	3/31/2014

MA895	CANYON FUEL CO LLC-SKYLINE MNS	434579	5/31/2014
MA895	CANYON FUEL CO LLC-SKYLINE MNS	19716	10/31/2014
MA906	PACIFICORP ENERGY	252383	2/28/2014
MA906	PACIFICORP ENERGY	187805	4/30/2014
MA906	PACIFICORP ENERGY	198745	6/30/2014
MA906	PACIFICORP ENERGY	112117	11/30/2014
MA906	PACIFICORP ENERGY	166704	9/30/2014
MA906	PACIFICORP ENERGY	91764	8/31/2014
MA906	PACIFICORP ENERGY	98972	12/31/2014
MA906	PACIFICORP ENERGY	165212	1/31/2014
MA906	PACIFICORP ENERGY	238200	7/31/2014
MA906	PACIFICORP ENERGY	117358	3/31/2014
MA906	PACIFICORP ENERGY	161222	5/31/2014
MA906	PACIFICORP ENERGY	292170	10/31/2014
MA909	CABALLO COAL COMPANY	1669483	2/28/2014
MA909	CABALLO COAL COMPANY	1755850	4/30/2014
MA909	CABALLO COAL COMPANY	1821967	6/30/2014
MA909	CABALLO COAL COMPANY	2015034	11/30/2014
MA909	CABALLO COAL COMPANY	2108721	9/30/2014
MA909	CABALLO COAL COMPANY	2104255	8/31/2014
MA909	CABALLO COAL COMPANY	1899476	12/31/2014
MA909	CABALLO COAL COMPANY	2062397	1/31/2014
MA909	CABALLO COAL COMPANY	2070408	7/31/2014
MA909	CABALLO COAL COMPANY	1806420	3/31/2014
MA909	CABALLO COAL COMPANY	1866297	5/31/2014
MA909	CABALLO COAL COMPANY	2031662	10/31/2014
MA926	WESTMORELAND SAVAGE CORP.	11877	2/28/2014
MA926	WESTMORELAND SAVAGE CORP.	7557	4/30/2014
MA926	WESTMORELAND SAVAGE CORP.	2795	1/31/2014
MA926	WESTMORELAND SAVAGE CORP.	2752	3/31/2014
MA926	WESTMORELAND SAVAGE CORP.	23147	5/31/2014
MA933	MOUNTAIN COAL COMPANY, LLC	447003	2/28/2014
MA933	MOUNTAIN COAL COMPANY, LLC	409305	4/30/2014
MA933	MOUNTAIN COAL COMPANY, LLC	532025	6/30/2014
MA933	MOUNTAIN COAL COMPANY, LLC	506531	11/30/2014
MA933	MOUNTAIN COAL COMPANY, LLC	635923	9/30/2014
MA933	MOUNTAIN COAL COMPANY, LLC	669003	8/31/2014
MA933	MOUNTAIN COAL COMPANY, LLC	473131	12/31/2014
MA933	MOUNTAIN COAL COMPANY, LLC	273468	1/31/2014

MA933	MOUNTAIN COAL COMPANY, LLC	531369	7/31/2014
MA933	MOUNTAIN COAL COMPANY, LLC	562399	3/31/2014
MA933	MOUNTAIN COAL COMPANY, LLC	442346	5/31/2014
MA933	MOUNTAIN COAL COMPANY, LLC	619732	10/31/2014
MA934	WESTMORELAND KEMMERER INC	54759	2/28/2014
MA934	WESTMORELAND KEMMERER INC	84824	4/30/2014
MA934	WESTMORELAND KEMMERER INC	82466	6/30/2014
MA934	WESTMORELAND KEMMERER INC	16091	11/30/2014
MA934	WESTMORELAND KEMMERER INC	20733	9/30/2014
MA934	WESTMORELAND KEMMERER INC	49647	8/31/2014
MA934	WESTMORELAND KEMMERER INC	28520	12/31/2014
MA934	WESTMORELAND KEMMERER INC	55153	1/31/2014
MA934	WESTMORELAND KEMMERER INC	61803	7/31/2014
MA934	WESTMORELAND KEMMERER INC	97018	3/31/2014
MA934	WESTMORELAND KEMMERER INC	60457	5/31/2014
MA934	WESTMORELAND KEMMERER INC	39222	10/31/2014
MA940	WESTERN ENERGY	450584	2/28/2014
MA940	WESTERN ENERGY	474245	4/30/2014
MA940	WESTERN ENERGY	405355	6/30/2014
MA940	WESTERN ENERGY	468185	11/30/2014
MA940	WESTERN ENERGY	645949	9/30/2014
MA940	WESTERN ENERGY	517937	8/31/2014
MA940	WESTERN ENERGY	455646	12/31/2014
MA940	WESTERN ENERGY	646215	1/31/2014
MA940	WESTERN ENERGY	316524	7/31/2014
MA940	WESTERN ENERGY	288322	3/31/2014
MA940	WESTERN ENERGY	397476	5/31/2014
MA940	WESTERN ENERGY	860847	10/31/2014
MA942	WESTERN FUELS-WYOMING INC	203056	2/28/2014
MA942	WESTERN FUELS-WYOMING INC	372166	4/30/2014
MA942	WESTERN FUELS-WYOMING INC	399831	6/30/2014
MA942	WESTERN FUELS-WYOMING INC	181113	11/30/2014
MA942	WESTERN FUELS-WYOMING INC	376698	9/30/2014
MA942	WESTERN FUELS-WYOMING INC	463170	8/31/2014
MA942	WESTERN FUELS-WYOMING INC	140794	12/31/2014
MA942	WESTERN FUELS-WYOMING INC	489158	1/31/2014
MA942	WESTERN FUELS-WYOMING INC	441863	7/31/2014
MA942	WESTERN FUELS-WYOMING INC	286954	3/31/2014
MA942	WESTERN FUELS-WYOMING INC	299891	5/31/2014
MA942	WESTERN FUELS-WYOMING INC	146702	10/31/2014

MA948	BLUE MOUNTAIN ENERGY, INC.	28761	2/28/2014
MA948	BLUE MOUNTAIN ENERGY, INC.	187739	4/30/2014
MA948	BLUE MOUNTAIN ENERGY, INC.	154900	6/30/2014
MA948	BLUE MOUNTAIN ENERGY, INC.	152127	11/30/2014
MA948	BLUE MOUNTAIN ENERGY, INC.	193182	9/30/2014
MA948	BLUE MOUNTAIN ENERGY, INC.	142098	8/31/2014
MA948	BLUE MOUNTAIN ENERGY, INC.	219584	12/31/2014
MA948	BLUE MOUNTAIN ENERGY, INC.	61655	1/31/2014
MA948	BLUE MOUNTAIN ENERGY, INC.	183323	7/31/2014
MA948	BLUE MOUNTAIN ENERGY, INC.	162169	3/31/2014
MA948	BLUE MOUNTAIN ENERGY, INC.	174532	5/31/2014
MA948	BLUE MOUNTAIN ENERGY, INC.	230368	10/31/2014
MA968	WYODAK RESOURCES DEV. CORP.	332014	2/28/2014
MA968	WYODAK RESOURCES DEV. CORP.	347886	4/30/2014
MA968	WYODAK RESOURCES DEV. CORP.	348689	6/30/2014
MA968	WYODAK RESOURCES DEV. CORP.	333493	11/30/2014
MA968	WYODAK RESOURCES DEV. CORP.	369375	9/30/2014
MA968	WYODAK RESOURCES DEV. CORP.	350617	8/31/2014
MA968	WYODAK RESOURCES DEV. CORP.	392137	12/31/2014
MA968	WYODAK RESOURCES DEV. CORP.	367219	1/31/2014
MA968	WYODAK RESOURCES DEV. CORP.	362861	7/31/2014
MA968	WYODAK RESOURCES DEV. CORP.	387758	3/31/2014
MA968	WYODAK RESOURCES DEV. CORP.	365944	5/31/2014
MA968	WYODAK RESOURCES DEV. CORP.	359029	10/31/2014



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