UNITED STATES SECURITIES AND EXCHANGE COMMISSION WASHINGTON, DC 20549

FORM 8-K

CURRENT REPORT Pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934

Date of report (Date of earliest event reported): April 28, 2011 (April 28, 2011)

Arch Coal, Inc.

(Exact name of registrant as specified in its charter)

Delaware (State or other jurisdiction of incorporation) 1-13105 (Commission File Number) 43-0921172 (I.R.S. Employer Identification No.)

CityPlace One One CityPlace Drive, Suite 300 St. Louis, Missouri 63141 (Address, including zip code, of principal executive offices)

Registrant's telephone number, including area code: (314) 994-2700

Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation of the registrant under any of the following provisions:

o Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)

o Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)

o Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))

o Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))

Item 7.01 Regulation FD Disclosure.

On April 28, 2011, Steven F. Leer, Chairman and Chief Executive Officer of Arch Coal, Inc. (the "Company"), will deliver a presentation at the Company's 2011 annual stockholders' meeting. The slides from the presentation are attached as Exhibit 99.1 hereto and are hereby incorporated by reference.

Item 9.01 Financial Statements and Exhibits.

(d) Exhibits

The following exhibits are attached hereto and filed herewith.

Exhibit No.	Description
99.1	Slides from the presentation at the 2011 annual stockholders' meeting.
	1

Signatures

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned hereunto duly authorized.

Dated: April 28, 2011

Arch Coal, Inc.

By: /s/ Robert G. Jones Robert G. Jones Senior Vice President — Law, General Counsel and Secretary Exhibit No.

Description

99.1 Slides from the presentation at the 2011 annual stockholders' meeting.



Annual Shareholder Meeting

STEVEN F. LEER Chairman and CEO Arch Coal, Inc.

St. Louis | April 28, 2011



Forward-Looking Information

This presentation contains "forward-looking statements" – that is, statements related to future, not past, events. In this context, forward-looking statements often address our expected future business and financial performance, and often contain words such as "expects," "anticipates," "intends," "plans," "believes," "seeks," or "will." Forward-looking statements by their nature address matters that are, to different degrees, uncertain. For us, particular uncertainties arise from changes in the demand for our coal by the domestic electric generation industry; from legislation and regulations relating to the Clean Air Act and other environmental initiatives; from operational, geological, permit, labor and weather-related factors; from fluctuations in the amount of cash we generate from operations; from future integration of acquired businesses; and from numerous other matters of national, regional and global scale, including those of a political, economic, business, competitive or regulatory nature. These uncertainties may cause our actual future results to be materially different than those expressed in our forward-looking statements. We do not undertake to update our forward-looking statements, whether as a result of new information, future events or otherwise, except as may be required by law. For a description of some of the risks and uncertainties that may affect our future results, you should see the risk factors described from time to time in the reports we file with the Securities and Exchange Commission.

This presentation includes certain non-GAAP financial measures, including Adjusted EBITDA and Adjusted Earnings Per Share. These non-GAAP financial measures are not measures of financial performance in accordance with generally accepted accounting principles and may exclude items that are significant in understanding and assessing our financial results. Therefore, these measures should not be considered in isolation or as an alternative to net income from operations, cash flows from operations, earnings per fully-diluted share or other measures of profitability, liquidity or performance under generally accepted accounting principles. You should be aware that our presentation of these measures may not be comparable to similarly-titled measures used by other companies. A reconciliation of these financial measures to the most comparable measures presented in accordance with generally accepted accounting principles has been included at the end of this presentation.



In 2010, we set new records and made further progress toward our company vision

- · Best safety rates for lost-time and total incidents
 - Five operations completed 2010 without a lost-time incident
 - Earned nine national and state awards for safety excellence
- · Strong financial performance in key metrics
 - ACI achieved record revenues in 2010
 - ACI achieved record cash flow from operations in 2010
 - ACI reported second highest EBITDA and operating income in 2010
- Best environmental compliance
 - Improved SMCRA compliance by 45% over 2009
 - 11 subsidiary mines and facilities achieved zero SMCRA violations
 - Coal-Mac earned U.S. Dept. of Interior National Award for Excellence



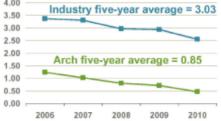
Arch is a steadfast industry leader in workplace safety and environmental compliance Record safety lost-time and total incident 4.00 rates in 2010 3.50 3.00 Earned nine national and state awards 2.50 for safety excellence 2.00 1.50 1.00 Record environmental compliance rate 0.50 in 2010 0.00 2006 2007 2008 Earned seven national or state awards for excellence in environmental practices Last year, two mining complexes 20 achieved A Perfect Zero - zero 15 reportable injuries and zero 10 environmental violations



THE POWER WITHIN

Lost-Time Safety Incident Rate

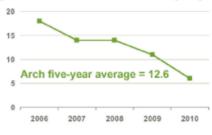
(per 200,000 employee-hours worked)



Arch Coal, Inc.

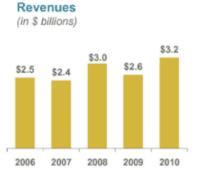
Environmental Compliance

(SMCRA violations based on state reports)

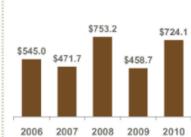


Sources: ACI, MSHA, State environmental agencies

Arch achieved solid results in 2010 in a recovering coal market







EBITDA*

(in \$ millions)



* Adjusted non-GAAP measure, see reconciliation at end of presentation

Arch Coal, Inc.

ACI stock has outperformed the broader market

Arch Coal, Inc.



Arch Coal, Inc.

Today's dividend increase underscores our board's confidence in Arch's future prospects

ACI Quarterly Dividend

(common stock dividend per share on June payable date)



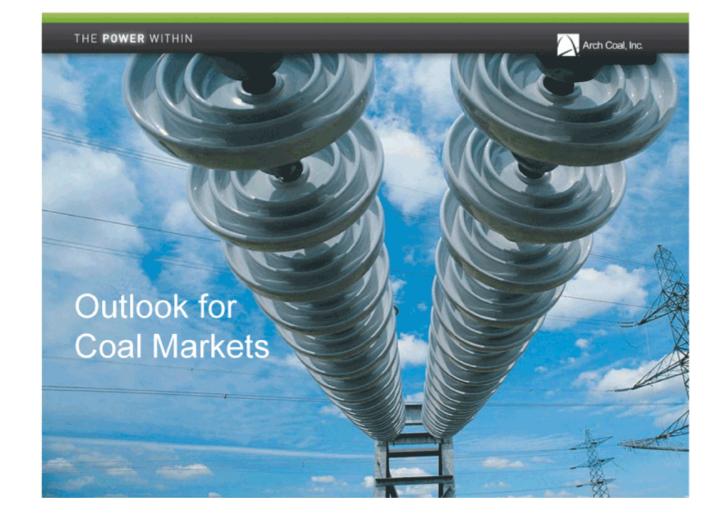
- Today's announcement reflects a 10% increase
- Regular increases in quarterly dividend convey board's continued confidence in Arch's future earnings potential
- 2011 marks Arch's sixth dividend increase in eight years

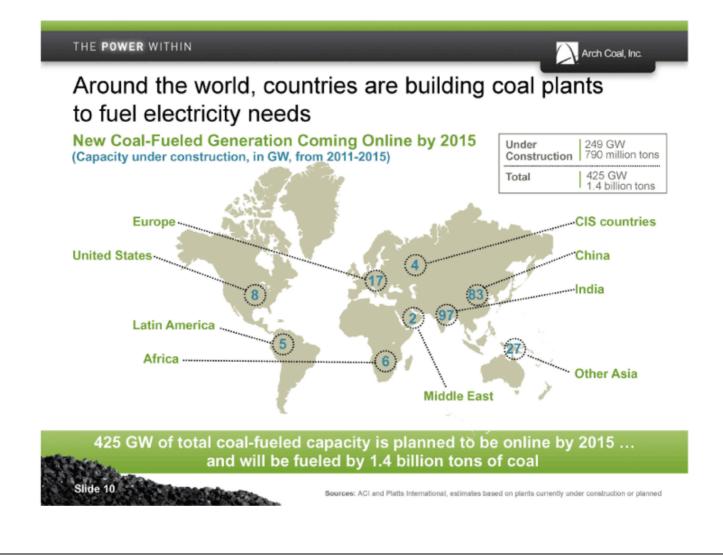


- **Meaningful expansion** in revenues, earnings per share and adjusted EBITDA over prior-year period
 - Earnings per share increased substantially
 - EBITDA increased 46%
 - Revenues increased 23%



* Adjusted non-GAAP measure, see reconciliation at end of presentation





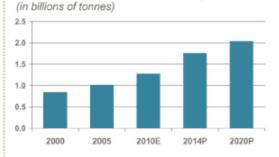


Metallurgical coal demand remains strong

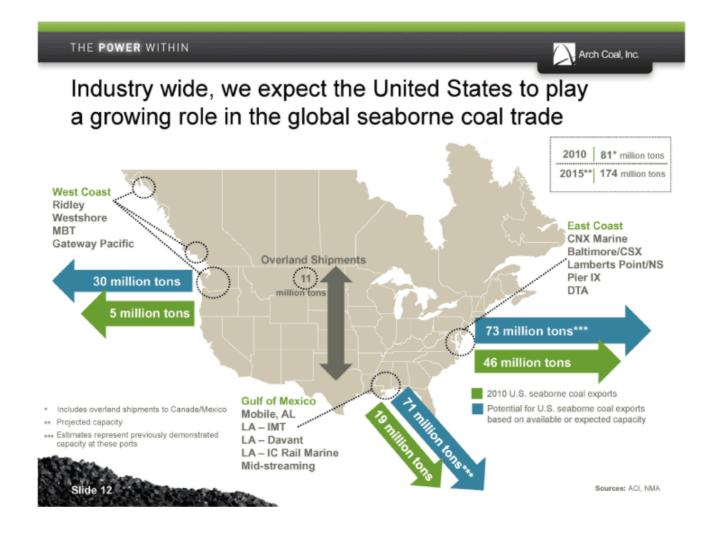
- Strong met coal fundamentals supported by global economic recovery and Asian steel demand
 - China has become a net importer of steam and met coal
 - Asia is expected to drive met coal demand growth going forward
- Production and transportation infrastructure issues as well as a lack of accessible, quality met coal deposits will continue to constrain met coal supply – a key input for steel



Growth in World Steel Consumption



Source: World Steel Association

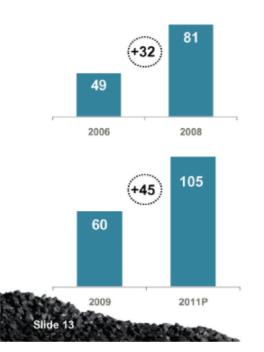




Even modest increases in export activity can have significant market implications

Increase in U.S. Coal Exports

(2006 to 2008 versus 2009 to 2011P, in million tons)



- Arguably the most significant driver in the 2008 market run-up was a 32-million-ton increase in U.S. exports from 2006 to 2008
- U.S. exports appear to be in the midst of an even greater expansion at present
- The market implications of such an increase could prove dramatic

Sources: NMA and ACI

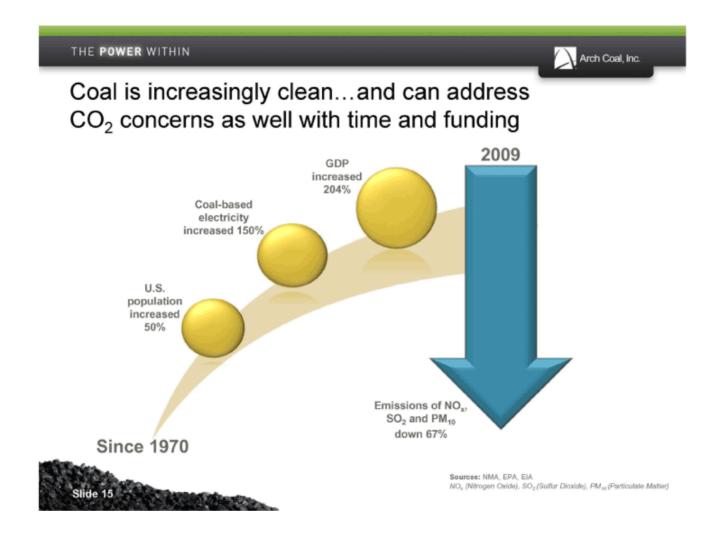


Though somewhat mixed, key market drivers should lead to further coal stockpile reductions in 2011



- Significant increases in U.S. exports – along with declining imports – should benefit domestic coal markets
- Stronger economic growth likely to be offset by more normal (milder) weather and higher contributions from other fuels – including hydro and natural gas
- In aggregate, key drivers point to a strengthening domestic market as the year proceeds

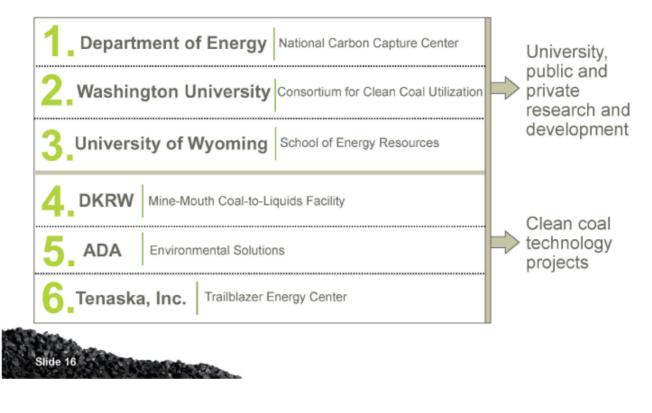
Sources: EIA, EVA and ACI





Arch Coal, Inc.

Arch has dedicated \$50+ million to date to advance U.S. clean coal technologies



With oil prices above \$100 and gasoline around \$4/gallon, the prospects for CTL continue to strengthen

- Arch owns an equity interest in DKRW Advanced Fuels
- Proposed 21,000 bpd facility will primarily provide gasoline to western markets
- In addition, Medicine Bow will capture CO₂ for enhanced oil recovery
- CTL can have a positive impact on the U.S. economy, security and environment







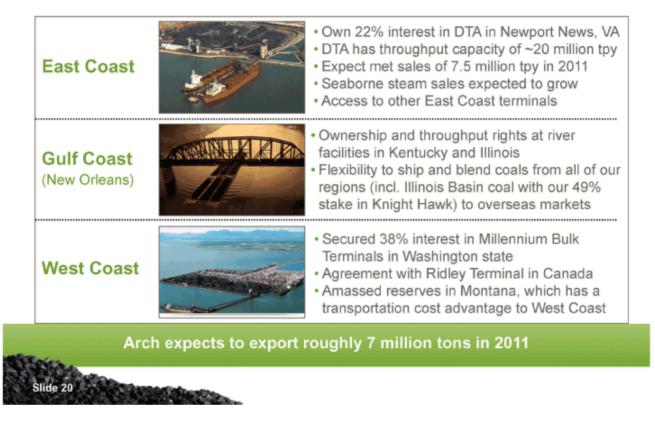
Source: DKRW / Artist's rendering of future Medicine Bow plant







Arch has growing access to seaborne coal markets



Arch Coal, Inc.

We've positioned Arch well to capitalize on this market cycle

#2 Producer in Powder River Basin

Unpriced volumes provide leverage to rising market

Jacobs Ranch acquisition further strengthened world-class assets

Unused capacity at Black Thunder could be brought back with limited capital



#1 Producer in Western Bit Region

Roll off of legacy contracts provides margin opportunity

Cost structure increasing, but large longwall mines mitigate pressure

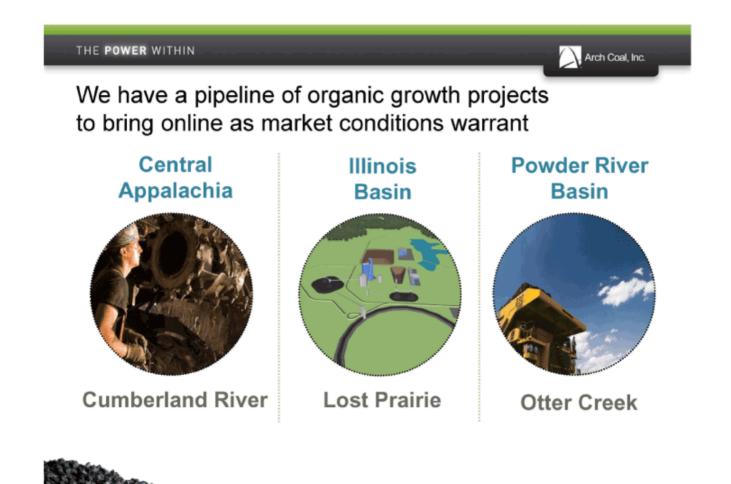
Supply in region is challenged to grow due to difficult geology and reserve depletion

#3 Producer in Central Appalachia

Met coal production is significant and underappreciated

Low-cost position provides flexibility to move in/out of steam market as needed

Productive capacity of up to 15 million tons remains intact





Arch maintains one of the strongest and cleanest balance sheets in the U.S. coal industry

Debt Maturity Profile (1)



- · Financing initiatives over the past two years have enhanced liquidity and extended debt maturities
- Available liquidity exceeds \$1.0 billion (2) ٠



Legacy Liabilities of Largest U.S. Coal Companies (at 12/31/10 pro forma, in \$ millions) \$4,451 \$1,951 \$1,792 \$1,657 \$475 Peer 1 Peer 2 Peer 3 Peer 4 ACI

- Workers' Comp E Post-Retirement Medical Pension Reclamation
- Low level of legacy liabilities versus largest U.S. coal companies
- More than 70% of Arch's legacy liabilities . are comprised of reclamation liabilities

Sources: ACI and SEC filings

Values for senior notes represent contractual maturities
Represents cash on hand as well as unused available borrowing capacity under ACI's revolving credit facility, accounts receivable securitization program and commercial paper placement program



Arch expects to generate record earnings in 2011



- In 2011, we expect to generate stronger earnings per share and EBITDA thanks to further improvement in coal markets
- We will continue to execute a marketdriven approach
- We will maintain rigorous capital and cost control
- First quarter results suggest that we're on track
 - Revenues grew nearly 23 percent in 1Q11 versus 1Q10
 - EBITDA increased 46 percent

* Adjusted non-GAAP measure, see reconciliation at end of presentation

Arch's leadership position in the coal industry will drive future value creation

- · One of the world's largest and most efficient coal producers
 - Represent 15 percent of the U.S. coal supply
 - National, diverse reserve base, skewed heavily towards growth regions
 - #1 in safety and environmental performance among peer group
 - Ship coal to domestic/international steel manufacturers and international power producers
- · Arch's value proposition is anchored by ...
 - Leading position in three major low-sulfur coal basins
 - Significant exposure to metallurgical markets
 - Targeting long-term growth in the international markets
 - Advancing greenfield projects in Illinois and Montana
 - Disciplined financial management, capital allocation





Annual Shareholder Meeting

STEVEN F. LEER Chairman and CEO Arch Coal, Inc.

St. Louis | April 28, 2011



Non-GAAP Measures Reconciliation Chart

Included in the accompanying presentation, we have presented adjusted earnings per share, which is considered a non-GAAP measure as defined by Regulation G. The following reconciles adjusted earnings per share to the nearest GAAP measurement.

Adjusted net income and adjusted diluted earnings per common share are adjusted for the after-tax impact of acquisition and financing related costs and are not measures of financial performance in accordance with generally accepted accounting principles. We believe that adjusted net income and adjusted diluted earnings per common share better reflect the trend of our future results by excluding items relating to significant transactions. The adjustments made to arrive at these measures are significant in understanding and assessing our financial condition. Therefore, adjusted net income and adjusted diluted earnings per share should not be considered in isolation, nor as an alternative to net income or diluted earnings per common share under generally accepted accounting principles. The table below shows how we calculate Adjusted earnings per share.

Adjusted net income and adjusted diluted earnings per common share

	Three Months							Tear Ended C	ACOTE		_	
		Children of				2009		2010		2011	Amor	
	2010		2011							Low		High
Net income (loss) attributable to Arch Coal	\$ (1,796	5	55,601	Net income attributable to Arch Coal	\$	42,169	\$	158.857	\$	331,000	\$	412,000
Amortization of acquired sales contracts, net Tax impact of adjustments	10,753		5,944 (2,170)	Amortization of acquired sales contracts, net Loss on early extinguishment of debt		19,623		35.606 6,776		19,000		21,000
The implementation and and an internal	prime a	-	Q4, 1700	Costs related to acquisition of Jacobs Ranch		13,726		-		-		-
Adjusted net income attributable to Arch Coal	\$ 5,032	5	59,375	Tax impact of adjustments		(12,172)	_	(15.469)	_	(6.935)	_	(7.665)
Diluted weighted average shares outstanding	162,372	: _	163,773	Adjusted net income attributable to Arch Coal	\$	63.346	5	185.770	\$	343.065	\$	425.335
				Diluted weighted average shares cutstanding		151,272	_	163,210	_	163,450	_	163,450
Diluted earnings per share	\$ (0.01	5	0.34				-				_	
Amortization of acquired sales contracts, net	\$ 0.06	\$	0.03	Diluted earrings per share	\$	0.28	\$	0.97	\$	2.03	\$	2.52
Tax impact of adjustments	\$ (0.02	5	(0.01)	Amortization of acquired sales contracts, net		0.13		0.22		0.11		0.13
Adjusted diluted earnings per share	\$ 0.03	5	0.36	Costs related to acquisition of Jacobs Ranch		0.09						
		_		Loss on early extinguishment of debt Tax impact of adjustments		-		0.04				
				Tax impact of adjustments	_	(0.08)	_	(0.09)	_	(0.04)		(0.05)
				Adjusted diluted earnings per share	\$	0.42	\$	1.14	\$	2.10	\$	2.60
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Non-GAAP Measures Reconciliation Chart

Included in the accompanying presentation, we have presented Adjusted EBITDA, which is considered a non-GAAP measure as defined by Regulation G. The following reconciles Adjusted EBITDA to the nearest GAAP measurement

Adjusted EBITDA is defined as net income attributable to the Company before the effect of net interest expense, income taxes, depreciation, depletion and amortization and the amortization of acquired sales contracts. Adjusted EBITDA may also be adjusted for items that may not reflect the trend of future results.

Adjusted EBITDA is not a measure of financial performance in accordance with generally accepted accounting principles, and items excluded to calculate Adjusted EBITDA are significant in understanding and assessing our financial condition. Therefore, Adjusted EBITDA should not be considered in isolation nor as an alternative to net income from operations, cash flows from operations or as a measure of our profitability, liquidity or performance under generally accepted accounting principles. We believe that Adjusted EBITDA presents a useful measure of our ability to service and incur debt based on ongoing operations. Furthermore, analogous measures are used by industry analysts to evaluate operating performance. In addition, acquisition and financing related expenses are excluded to make results more comparal between periods. Investors should be aware that cur presentation of Adjusted EBITDA may not be comparable to similarly titled measures used by other companies. The table below shows how we calculate Adjusted EBITDA.

Adjusted EBITDA

	_					T Gar	01000	December 31						
		2006		2007		2008		2009	2010	2011 Range				
							_				Low		High	
Net income	\$	262,358	\$	175,943	\$	355,211	\$	42,179	\$ 159,394	\$	331,000	\$	412,000	
Net income attributable to noncontrolling interest		(1,427)		(1,014)		(881)		(10)	(537)				-	
Income tax expense (benefit)		7,650		(19,850)		41,774		(16,775)	17,714		68,000		97,000	
Interest expense, net		60,639		72,265		64,285		98,310	140,100		136,000		134,000	
Depreciation, depletion and amortization		219,096		243,695		293,553		301,608	365,066		376,000		386,000	
Amortization of acquired sales contracts, net		(10,742)		(1,633)		(705)		19,623	35,606		19,000		21,000	
Costs related to acquisition of Jacobs Ranch						-		13,726	-		-		-	
Other non-operating expense	_	7,447		2,273			_	-	6,776					
Adjusted EBITDA	\$	545,021	\$	471,679	\$	753,237	\$	458,001	\$ 724,119	\$	930,000	\$ 1	,050,000	

- 31



Non-GAAP Measures Reconciliation Chart

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Adjusted EBITDA

τ.	hree Months E	nded I	March 31,
	2010	_	2011
\$	(1,770)	\$	55,874
	(775)		12,530
	34,745		33,834
	88,519		83,537
	10,753		5,944
_	(25)	_	(273)
\$	131,445	\$	191,446
	-	2010 \$ (1,770) (775) 34,745 88,519 10,753 (26)	\$ (1,770) \$ (775) 34,745 88,519 10,753 (25)

