

# Wyoming State RC&D Conference

April 18, 2011 Wheatland, Wyoming



### **CHK Overview**



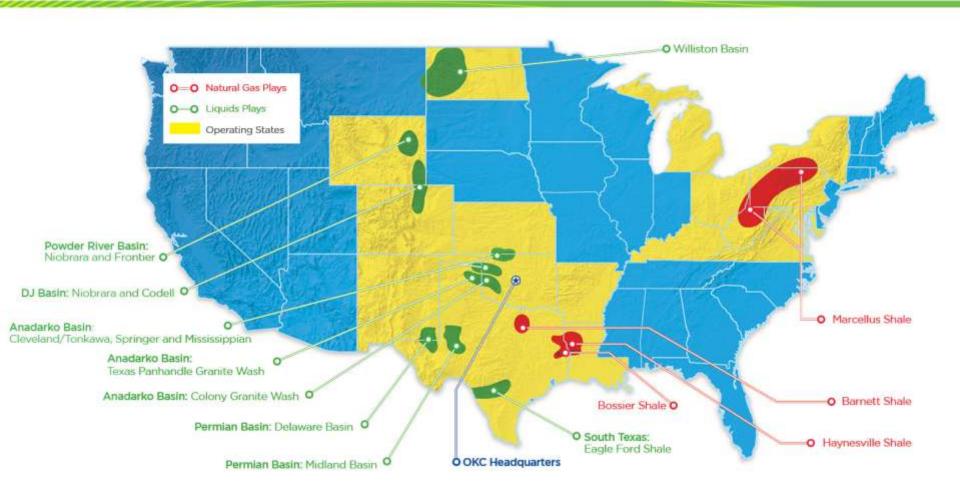
- Second-largest producer of U.S. natural gas
  - 4Q'10 natural gas production of ~2.6 bcf/d, total company production of ~2.9 bcfe/d
  - 4Q'10 liquids production of ~60,000 bbls/d, projecting 250,000 bbls/d in 2015
- Most active driller in U.S.
  - ▶ 160 operated rigs currently, collector of ~20% of all daily drilling information generated in the U.S. (~25% in our areas of interest)
    - -~50% of 2011 drilling capital in liquids plays
- Consistent production growth 21 consecutive years of sequential production growth
  - 2010 average daily production growth was 14%
  - Projecting two-year (2011-12) growth rate of 25% (net of asset sales)
    - From 2010-12, projecting liquids production to increase ~190% and natural gas production to grow ~6%
- Best assets in the industry
  - ▶ 15.2 tcfe of proved reserves at 12/31/10<sup>(1)(2)</sup>
  - ~100 tcfe of risked unproved resource potential (~250 tcfe of unrisked unproved resource potential)
  - PXP, BP, STO, TOT and CEP JVs validate asset quality and value
- Unparalleled inventory of U.S. onshore leasehold and 3D seismic
  - 13.3 mm net acres of U.S. onshore leasehold and 27.9 mm acres of 3D seismic data<sup>(2)</sup>

CHK's Outlook dated 2/22/11

<sup>1)</sup> Based on 10-year average NYMEX prices; 14.7 tcfe based on trailing 12-month average price required by SEC rules 2) Pro forma for announced Favetteville Shale asset sale

# **CHK's Operating Areas**





# **Top 20 U.S. Natural Gas Producers**



	Daily U.S. Natura	l Gas						2010 Reported		Proved U.S.	U.S.	U.S.	U.S. Gas Rigs
	Production (1)(2)					4Q'10	40'10	U.S. Net		Natural Gas	Gas Rigs	Gas Rigs	% Drilling
						vs. 3Q'10	vs. 4Q'09	Proved Natural	RP	Reserves	Drilling on	Drilling on	Change Since
	Company <sup>(3)</sup>	Ticker	40'10	3Q'10	4Q'09	% Change	% Change	Gas Reserves	Ratio <sup>(4)</sup>	Ranking	3/11/11 <sup>(5)</sup>	1/1/10 <sup>(5)</sup>	1/1/2010
1	ExxonMobil	хом	3,869	3,726	3,665	3.8%	5.6%	26,111	18	1	58	52	12%
2	Chesapeake	СНК	2,558	2,748	2,440	(6.9%)	4.8%	15,455	17	2	88	110	(20%)
3	Anadarko	APC	2,141	2,234	2,076	(4.2%)	3.1%	8,117	10	6	34	24	42%
4	ВР	BP	2,085	2,190	2,313	(4.8%)	(9.9%)	13,743	18	3	13	12	8%
5	Devon	DVN	1,963	1,942	1,894	1.1%	3.7%	9,065	13	5	49	34	44%
6	EnCana	ECA	1,835	1,731	1,616	6.0%	13.6%	7,477	11	7	33	40	(18%)
7	ConocoPhillips	COP	1,669	1,820	1,831	(8.3%)	(8.8%)	10,479	17	4	13	10	30%
8	Chevron	CVX	1,307	1,255	1,402	4.1%	(6.8%)	2,472	5	19	3	1	200%
9	EOG	EOG	1,241	1,175	1,075	5.6%	15.4%	6,491	14	8	26	31	<b>(16%)</b>
10	Southwestern	SWN	1,209	1,138	966	6.2%	25.1%	4,930	11	9	16	16	0%
11	Shell	RDS	1,199	1,151	1,064	4.2%	12.7%	2,671	6	16	15	14	7%
12	Williams	WMB	1,180	1,135	1,177	4.0%	0.3%	4,272	10	10	16	14	14%
13	Apache	APA	838	737	689	13.8%	21.7%	2,937	10	15	12	8	50%
14	Petrohawk	HK	708	654	575	8.3%	23.1%	3,110	12	13	27	19	42%
15	Occidental	OXY	699	656	645	6.6%	8.4%	3,034	12	14	3	1	200%
16	El Paso	EP	648	618	618	4.9%	4.9%	2,396	10	20	7	8	(13%)
17	Ultra	UPL	600	580	496	3.4%	21.0%	4,200	19	11	9	11	(18%)
18	QEP Resources	QEP	593	598	488	(0.8%)	21.7%	2,613	12	17	17	15	13%
19	Newfield	NFX	560	547	500	2.4%	12.0%	2,492	12	18	6	14	(57%)
20	Range Resources	RRC	410	389	374	5.4%	9.5%	3,567	24	12	15	13	15%
	Totals / Average		27,312	27,024	25,904	1.1%	5.4%	135,632			460	447	3%
	Other Producers										455	357	27%
	Total										915	804	14%

<sup>1)</sup> Based on 4Q'10 company reports

<sup>2)</sup> In mmcf/day

<sup>3)</sup> Independents in blue, majors in black, pipelines in green

Based on annualized production

<sup>5)</sup> Source: Smith Bits, a Schlumberger Company; CHK is internal count pro forma for Fayetteville sale

# **Top 20 U.S. Liquids Producers**



	Daily U.S. Liqui					4Q'10 vs. 3Q'10	4Q'10 vs. 4Q'09	2010 Reported U.S. Net Proved Liquids	RP	Proved U.S. Liquids Reserves	U.S. Liquids Rigs Drilling on		U.S. Liquids Rigs % Drilling Change Since
	Company <sup>(3)</sup>	Ticker	4Q'10	3Q' <b>1</b> 0	4Q'09	% Change	% Change	Reserves	Ratio <sup>(4)</sup>	Ranking	3/11/11 <sup>(5)</sup>	1/1/10 <sup>(5)</sup>	1/1/2010
1	ВР	ВР	567	564	687	0.5%	(17.5%)	3,073	15	1	3	5	(40%)
2	Chevron	cvx	481	482	518	(0.2%)	(7.1%)	1,275	7	5	4	5	(20%)
3	ExxonMobil	хом	455	430	472	5.8%	(3.6%)	2,303	14	2	11	4	175%
4	ConocoPhillips	COP	398	375	417	6.1%	(4.6%)	1,934	13	3	16	6	167%
5	Occidental	OXY	272	270	271	0.7%	0.4%	1,697	17	4	26	11	136%
6	Shell	RDS	230	237	269	(3.0%)	(14.5%)	843	10	6	0	4	(100%)
7	Anadarko	APC	179	190	180	(5.8%)	(0.6%)	805	12	7	12	5	140%
8	Apache	APA	130	114	100	13.4%	29.6%	759	16	8	24	2	1100%
9	Devon	DVN	121	118	118	2.3%	2.5%	597	14	9	16	7	129%
10	EOG	EOG	110	98	75	12.7%	46.2%	506	13	11	41	13	215%
11	Hess	HES	90	93	88	(3.2%)	2.3%	304	9	13	9	4	125%
12	ВНР	BHP	87	91	122	(4.1%)	(28.1%)	289	9	14	0	0	0%
13	Marathon	MRO	86	80	62	7.5%	38.7%	173	6	19	9	5	80%
14	Denbury	DNR	65	64	37	1.1%	74.0%	338	14	12	3	1	200%
15	Chesapeake	CHK	60	49	30	22.6%	103.0%	273	12	15	61	15	307%
16	Whiting	WLL	55	54	44	1.8%	23.1%	254	13	16	21	7	200%
	Noble	NBL	52	54	46	(3.7%)	13.0%	225	12	17	1	1	0%
18	ENI <sup>(6)(7)</sup>	E	51	49	84	4.4%	(38.8%)	110	6	20	1	0	100%
	Pioneer	PXD	51	49	44	2.8%	16.3%	545	30	10	28	8	250%
20	Plains	PXP	47	46	47	0.5%	(0.4%)	223	13	18	5	0	500%
	Totals / Average	е	3,586	3,508	3,710	2.2%	(3.3%)	16,527			291	103	183%
	Other Producers	3									493	272	81%
	Total										784	375	109%

<sup>1)</sup> Based on 4Q'10 company reports

<sup>2)</sup> In mbbls/day

<sup>3)</sup> Independents in blue, majors in black, pipelines in green

<sup>4)</sup> Based on annualized production

<sup>5)</sup> Source: Smith Bits, a Schlumberger Company; CHK is internal count

<sup>6)</sup> Proved reserves as of 2009

<sup>7)</sup> Applied yearly percentage regional split to quarterly production numbers

## **CHK's Commitment to Safety**





- Proactive risk identification and resolution
  - Pre-Job planning and frequent site inspections
  - Contractor selection and service quality reviews
  - Third party review of well designs
  - Performance auditing
- Rigorous reporting and response
  - Tracking of all injuries and incidents
  - Root cause investigations and reviews with senior management
- Emergency response training
  - Internal process design
  - Close interaction with local emergency responders
- Development and disciplined use of Best Management Practices (BMPs)
  - Site construction, well/facility designs and safety systems
- Behavior Based Safety training
  - Transitioning from a compliance culture to a belief culture
  - Personal accountability "you see it, you own it"

# CHK's Commitment to the Environment



- Spill Prevention, Control and Countermeasure (SPCC) plans
  - Secondary containment for chemicals, oils and produced fluids
  - CHK utilizes a site management system to generate SPCC plans
- Water management practices
  - Improved sourcing methods
  - Recycling/reuse
- Waste management
  - Regional waste plans and audits

- Air Quality
  - Robust compliance system
  - Technical support team to implement regional solutions
- Promoting the use of natural gas in America
  - ▶ NGV's
  - Natural Gas powered rigs



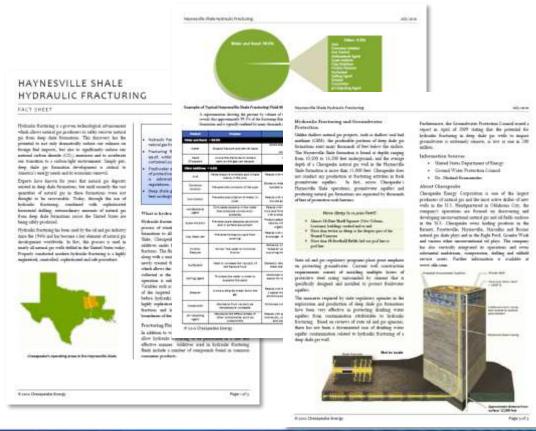
## **Public Outreach and Collaboration**



### **Operations and EH&S work together to develop educational resources:**

- Coordinate and provide town hall meetings and rig tours
- Educational videos that describe the drilling and completion process

- Proactive disclosure and education
  - Hydraulicfracturing.com
  - Naturalgasairemissions.com
  - Naturalgaswaterusage.com
  - Fracfocus.com



# Promoting Safe and Responsible Exploration and Production



- Chesapeake is actively participating in the national web-based registry developed by the Ground Water Protection Council (GWPC) and the Interstate Oil and Gas Compact Commission (IOGCC), with support of the U.S. Department of Energy, to report the additives used in the hydraulic fracturing process on a well-by-well basis
  - To date, information has been uploaded to the registry covering 94 wells in Arkansas, Louisiana, Oklahoma, Pennsylvania, Texas and Wyoming
  - Chesapeake has included fracking information for three wells in Wyoming. Two of the wells are in Converse County and one in Goshen County.
  - www.fracfocus.org



# Operating at the Highest Standard



Chesapeake has furthered its commitment to progressive operational, environmental and safety standards by adopting a set of principles for operations throughout the country

**Business Philosophy-** Committed to protecting our country's natural resources, caring for the environment and complying with all applicable local, state and federal laws and regulations as part of our daily operations

**Operational Excellence-** Strive for excellence and accept nothing less. Move quickly to rectify any environmental problem associated with our operations and address any issues that might arise

**Commitment of Resources-** Provide human, physical and financial resources to achieve our environmental protection objectives and expect our employees, contractors, suppliers and vendors to do likewise

**Continuous Improvement-** Continue to evaluate evolving environmental protection measures with the goal of improving our operating practices and further reducing our environmental footprint using the latest technologies and operational procedures

**Support of Industry Regulation-** Support evolving science-based regulation at the appropriate level of government that ensures natural gas and oil wells are drilled, completed and produced safely and responsibly

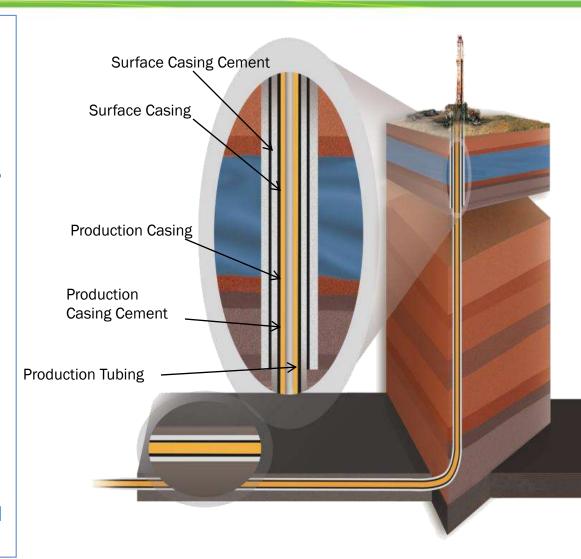
**Community Focus-** Strive to be charitable, engaged and responsible members of, and partners in, the communities in which we work

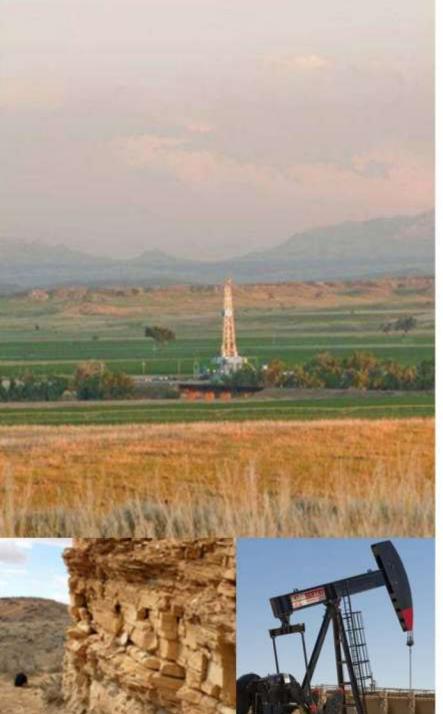
# **Drilling the Well - Horizontal Wells**



### Computer-driven, state-ofthe-art technology allows for horizontal drilling

- Horizontal drilling allows for access to a greater volume of the deep shale gas reservoir
- Results in approximately 90% less overall surface disturbance
- Of Chesapeake's 160 operated rigs, 65 are drilling wells primarily focused on liquids-rich plays.
- All of the rigs operating in the Niobrara Play are drilling horizontal wells.



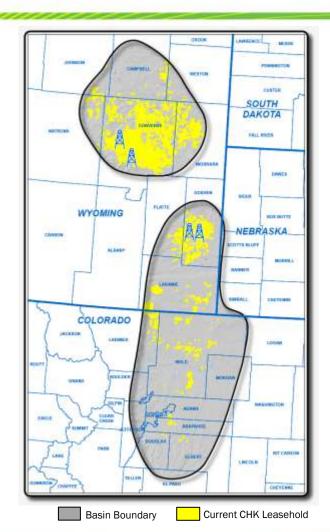




# **Chesapeake's Initial Efforts in Wyoming**

### Rockies - Overview





- CHK has recently entered the Niobrara and Codell plays in the DJ Basin (DJB) of northern Colorado and southern Wyoming with ~400,000 net acres and in the Powder River Basin (PRB) of Wyoming with ~400,000 net acres
- CHK has 4 rigs currently operating in Wyoming: 3 in Converse County and 1 in Goshen County
- In 2011 and 2012, the company plans to increase its Niobrara and Frontier operated rig count to an average of 10 and 20 rigs because of the Cooperative Venture announced with CNOOC
- Early success by CHK and others with IPs ranging from 500 boe/d to 1,700 boe/d
- Average Estimated Ultimate Recovery (EUR) per well is >500 mboe

Note: Well results above are peak 24-hour rate

## **Cooperative Venture Overview**





- On January 30, 2011, Chesapeake Energy Corporation and CNOOC Ltd. entered into an agreement whereby Chesapeake will sell to CNOOC Ltd. a minority, nonoperating interest in Chesapeake's oil and natural gas leaseholds in the Niobrara Formation and Frontier and Codell Sands area in the Denver-Julesburg (DJ) Basin and the Powder River Basin of Colorado and Wyoming for approximately \$570 million, plus an additional \$697 million of carried drilling and completion costs.
- The transaction involves a purely economic investment in leasehold assets for the purpose of conducting preliminary exploration.
  - Chesapeake will conduct all leasing, drilling, completion, operations and marketing and will be in exclusive control of the assets.
  - CNOOC Ltd. will have no employees within Chesapeake and will receive no training/information sharing rights as part of the transaction.

## **Disposition of Resources**



The Cooperative Venture will allow Chesapeake to develop the field faster and create more American jobs by producing more oil and gas domestically.



- The production from this project will be marketed solely in the United States by Chesapeake – CNOOC Ltd. will not be marketing its production or attempting to export it.
- The production from this project should reduce dependence on foreign oil imports on a barrel-perbarrel basis and will increase U.S. natural gas and oil production for the benefit of U.S. industrial, utility and residential consumers.

### **Shared Benefits**



### • Who shares in the revenue

- Workers: wages and benefits
- Businesses: subcontractors and services
- Mineral owners: bonus and royalties
- Surface owners: drill sites and easements
- Counties, cities, schools, hospitals, taxing
   districts: ad valorem taxes
- Shareholders: 401(k), IRA,retirement/pensions
- Non-profit organizations:
   donations and in-kind contributions



## **Community Involvement**

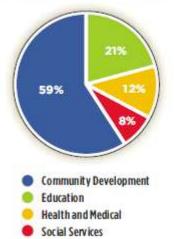






- In 2010, Chesapeake gave more than \$25 million to charitable organizations and projects across our operating area
  - Receiving organizations included those in community development, education, health and mental and social services.
- More than \$1.3 million of the company's educational contributions helped fund higher education tuition for nearly 400 students.
- In addition to the more than \$25 million in charitable donations, we also made numerous in-kind donations of computers, reconditioned Chesapeake fleet vehicles and subsidized office space.
- In Wyoming, Chesapeake has donated to the Rocky Mountain Elk Foundation, Eastern Wyoming College Foundation, Converse County 4H, SPE scholarship fund, PRCA Steer Roping Finals, Chugwater Chili Cookoff, WY High School Finals Rodeo, and more





### Conclusion



- Chesapeake is the most active driller in the United States and the second-largest natural gas
  driller in the United States
- CHK has developed the industry's leading position in the horizontal Niobrara and Frontier plays in the Powder River Basin (PRB) and the DJ Basin (DJB) of northern Colorado and southern Wyoming with ~800,000 net acres
- The Niobrara Play cooperative venture transaction is simply a non-controlling, minority investment in limited-duration leasehold interests for the purpose of enabling the further exploration and development of assets, which will return \$1.2 billion of foreign capital to the United States.
  - The cooperative venture will enable CHK to develop the field more quickly and create ~4,000 jobs in the area.
- Chesapeake is a responsible partner in natural gas and oil development and committed to local communities with involvement at all levels.
  - Chesapeake works with local governments, nonprofits, schools, and community organizations to ensure every community in which we operate is thriving.

### **Contact Us**



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