

Overview of PA Marcellus Production July 1, 2009 to June 30, 2011 (Part 2)

This column is presented weekly by the Public Education sub-committee of the Clinton County Natural Gas Task Force in an effort to provide accurate, up-to-date information on activities surrounding the Marcellus Shale formation and the natural gas exploration industry. For more information on Task Force activities, visit the Task Force page on the Clinton County government website at www.clintoncountypa.com.

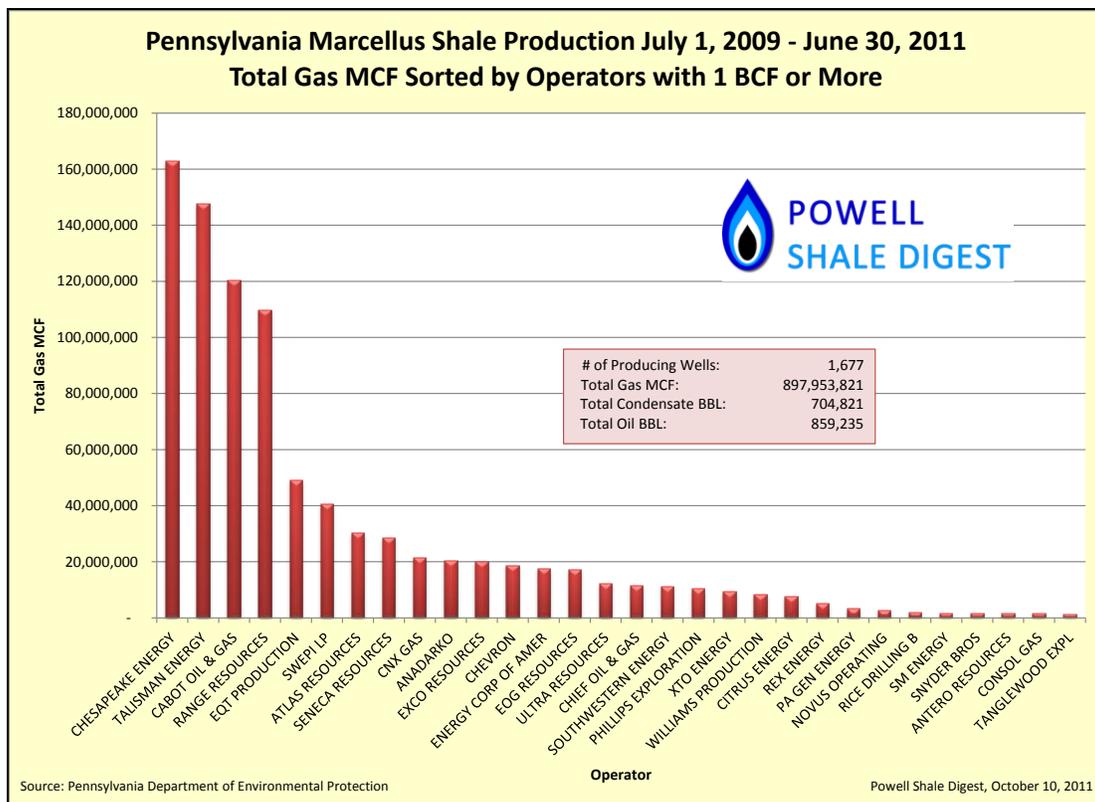
This week's column, the second of a two-part series, is reprinted with permission from a recent *Powell Shale Digest* newsletter, a Fort Worth, Texas-based news and research publication that provides current information on the technology and events in major U.S. shale plays. The following analysis of natural gas production in the Marcellus Shale in Pennsylvania was compiled by Will Brackett, managing editor, and John Evans, P.E., contributing editor.

Last week we brought you the first part of our overview of the Marcellus Shale production information released by the Pennsylvania Department of Environmental Protection (DEP) as of September 23, 2011, which combines the data from the three reporting periods, July 1, 2009 through June 30, 2010, July 1, 2010 through December 31, 2010, and January 1 through June 30, 2011.

As stated in last week's issue, we had problems with this data and it required some work to remove duplicate entries, particularly where two companies with interests in a well mistakenly both reported production data for it. Calls to the operators involved straightened out which firm should be the only one reporting the data.

As noted, we arrived at total natural gas production in the Marcellus Shale in Pennsylvania during the 2-year period of 897,953,720 MCF (one-thousand cubic feet), (or almost 900 BCF – billion cubic feet) from a total of 1,677 wells. Total condensate production during the period was 704,821 barrels and oil production amounted to 859,235 barrels.

After presenting a county-by-county breakdown last week, this week we present the breakdown by operator. Note that the operator listed is the current operator as of June 30, 2011.



As shown in the chart above and the table below, four operators are head and shoulders above the rest in terms of gas and liquids production. Chesapeake, Talisman, Cabot, and Range account for 675 out of 1,677 of

the producing wells, or 40.3%, and almost 541 BCF out of about 898 BCF of total gas production, or 60.2%. Range is the king of the liquids, with the company accounting for 45.3% of the condensate production and 86.4% of the oil production.

Pennsylvania Marcellus Shale Production July 1, 2009 - June 30, 2011 Operators Sorted by Total Gas MCF				
Operator	# Producing Wells	Total Gas MCF	Total Condensate BBL	Total Oil BBL
CHESAPEAKE APPALACHIA LLC	114	162,971,890	-	-
TALISMAN ENERGY USA INC	186	147,783,631	-	-
CABOT OIL & GAS CORP	122	120,445,695	-	-
RANGE RESOURCES APPALACHIA LLC	253	109,562,831	319,089	741,950
EQT PRODUCTION COMPANY	51	48,918,016	-	171
SWEPI LP	72	40,398,211	-	-
ATLAS RESOURCES LLC	225	30,164,456	37,335	100,697
SENECA RESOURCES CORP	43	28,554,724	-	-
CNX GAS CO LLC	49	21,415,752	-	-
ANADARKO E&P CO LP	47	20,459,645	-	32
EXCO RESOURCES PA LLC	44	19,911,243	-	-
CHEVRON APPALACHIA LLC	41	18,712,361	5,509	15,810
ENERGY CORP OF AMER	43	17,506,882	-	-
EOG RESOURCES INC	44	17,029,788	-	-
ULTRA RESOURCES INC	35	12,067,289	-	-
CHIEF OIL & GAS LLC	14	11,393,303	-	-
SOUTHWESTERN ENERGY PROD CO	18	11,070,241	-	-
PHILLIPS EXPLORATION INC	32	10,331,439	-	575
XTO ENERGY INC	28	9,141,546	-	-
WILLIAMS PRODUCTION APPALACHIA LLC	21	8,257,359	-	-
CITRUS ENERGY CORP	6	7,634,442	-	-
REX ENERGY OPERATING CORPORATION	23	5,213,252	1,999	-
PA GEN ENERGY CO LLC	22	3,181,099	194	-
NOVUS OPERATING LLC	8	2,663,350	-	-
RICE DRILLING B LLC	5	1,749,965	-	-
SM ENERGY CO	3	1,549,117	-	-
SNYDER BROS INC	40	1,461,872	-	-
ANTERO RESOURCES APPALACHIAN CORP	2	1,461,770	1,046	-
CONSOL GAS CO	16	1,422,618	-	-
TANGLEWOOD EXPL LLC	3	1,299,644	-	-
EAST RESOURCES MGMT LLC	5	698,157	-	-
SAMSON RES CO	2	562,521	-	-
J W OPERATING CO	5	560,593	-	-
DOMINION TRANS INC	7	449,121	-	-
BLX INC	12	370,116	1,258	-
ALPHA SHALE RES LP	2	363,501	-	-
MDS ENERGY LTD	8	321,983	-	-
VISTA OPR INC	2	218,704	338,391	-
FLATIRONS DEVELOPMENT LLC	1	208,427	-	-
BURNETT OIL CO INC	1	91,575	-	-

GREAT OAK ENERGY INC	1	68,550	-	-
THE PRODUCTION CO	1	54,922	-	-
AMER OIL & GAS LLC	1	47,248	-	-
GUARDIAN EXPLORATION LLC	3	46,385	-	-
MTN V OIL & GAS INC	1	38,938	-	-
TEXAS KEYSTONE INC	3	23,104	-	-
WILLIAM MCINTIRE COAL OIL & GAS	2	22,832	-	-
PDC MOUNTAINEER LLC	1	20,808	-	-
DL RESOURCES INC	1	15,368	-	-
M & M ROYALTY LTD	2	13,080	-	-
MIEKA LLC	1	12,330	-	-
TRUE OIL LLC	2	6,655	-	-
MARATHON OIL CO	2	4,171	-	-
ENERVEST OPR LLC	1	1,200	-	-
Totals	1,677	897,953,720	704,821	859,235
Source: Pennsylvania Department of Environmental Protection				
Powell Shale Digest, October 10, 2011				

As for the top-producing individual wells, the following tables show the top 25 gas producers and top 25 liquids producers, respectively. The top gas producer in the reporting period is Chesapeake's White 5H in Susquehanna County, with almost 4.6 BCF in 574 production days. Susquehanna County accounts for the top three wells, eight of the top ten, and 19 of the top 25.

For the liquids producers, two Vista Operating wells continue to be the leaders in the reporting period. Of note is the fact that the two wells in Butler County are the only two wells reported for Vista during the period. The J. Hudson #2 has produced almost exactly 200,000 BBL of oil and condensate, while the P. Lonchena #1 has produced 138,381 BBL of oil and condensate during the period.

With the exception of the two Vista wells in Butler County, the rest of the top 25 liquids producers are located in Washington County. Atlas Resources has three of those and all of the rest belong to Range.

Pennsylvania Marcellus Shale Production July 1, 2009 - June 30, 2011 Top 25 Producers Total Gas MCF

Total Gas MCF	Total Condensate + Oil	Total Production Days	Well Permit #	Operator	Well Name	Well #	County
4,570,517	-	574	115-20105	CHESAPEAKE APPALACHIA LLC	WHITE	5h	SUSQUEHANNA
4,516,476	-	634	115-20073	CHESAPEAKE APPALACHIA LLC	CLAPPER	2H	SUSQUEHANNA
4,320,256	-	574	115-20102	CHESAPEAKE APPALACHIA LLC	WHITE	2h	SUSQUEHANNA
4,096,743	-	496	015-20385	CHESAPEAKE APPALACHIA LLC	JAMES BARRETT	2H	BRADFORD
4,074,502	-	379	115-20189	CABOT OIL & GAS CORP	W CHUDLEIGH	3H-NW	SUSQUEHANNA
3,960,250	-	493	115-20076	CABOT OIL & GAS CORP	R SMITH	3H	SUSQUEHANNA
3,765,588	-	555	015-20123	CHESAPEAKE APPALACHIA LLC	MOWRY	1H	BRADFORD
3,538,539	-	303	115-20223	CABOT OIL & GAS CORP	GREENWOOD 6	6	SUSQUEHANNA
3,460,838	-	419	115-20170	CABOT OIL & GAS CORP	G SHIELDS	5H-NW	SUSQUEHANNA
3,307,038	-	303	115-20284	CABOT OIL & GAS CORP	GREENWOOD 8	8	SUSQUEHANNA
3,246,216	-	679	115-20047	CABOT OIL & GAS CORP	RATZEL	1H	SUSQUEHANNA
3,184,918	-	450	115-20120	CABOT OIL & GAS CORP	A HUNSINGER	1H	SUSQUEHANNA
3,137,803	-	349	115-20221	CABOT OIL & GAS CORP	A & M HIBBARD 3	3	SUSQUEHANNA
3,112,922	-	470	115-20176	CABOT OIL & GAS CORP	W BROOKS 4H	4H-SE	SUSQUEHANNA
3,071,893	-	650	115-20108	CHESAPEAKE APPALACHIA LLC	CLAPPER	4H	SUSQUEHANNA
3,028,567	-	383	115-20136	CHESAPEAKE APPALACHIA LLC	PRZYBYSZEWSKI	4H	SUSQUEHANNA
3,014,631	-	349	115-20150	CABOT OIL & GAS CORP	A & M HIBBARD 1H	1H	SUSQUEHANNA
2,990,214	-	209	059-25304	EQT PRODUCTION CO	COOPER 590387-A	590387	GREENE
2,947,159	-	529	115-20068	CHESAPEAKE APPALACHIA LLC	BENSCOTER	3H	SUSQUEHANNA
2,928,339	-	502	015-20333	CHESAPEAKE APPALACHIA LLC	JAMES BARRETT	1H	BRADFORD
2,851,761	-	378	115-20220	CABOT OIL & GAS CORP	C LARUE	6	SUSQUEHANNA
2,850,897	-	712	015-20085	CHESAPEAKE APPALACHIA LLC	CHANCELLOR	1	BRADFORD
2,750,424	-	363	115-20215	CHESAPEAKE APPALACHIA LLC	JAYNE	6H	SUSQUEHANNA
2,727,054	-	730	115-20045	CABOT OIL & GAS CORP	TEEL	8H	SUSQUEHANNA
2,717,977	-	303	059-25219	EQT PRODUCTION CO	COOPER 590384	590384	GREENE

Source: Pennsylvania Department of Environmental Protection

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Pennsylvania Marcellus Shale Production July 1, 2009 - June 30, 2011 Top 25 Liquids Producers Total Condensate + Oil BBL

Total Condensate + Oil BBL	Total Gas MCF	Total Production Days	Well Permit #	Operator	Well Name	Well #	County
200,010	125,717	546	019-21572	VISTA OPR INC	J HUDSON	2	BUTLER
138,381	92,987	546	019-21568	VISTA OPR INC	P LONCHENA	1	BUTLER
37,062	491,946	588	125-23390	ATLAS RESOURCES LLC	COWDEN	6	WASHINGTON
35,264	513,674	726	125-23393	ATLAS RESOURCES LLC	COWDEN	12	WASHINGTON
33,358	512,405	452	125-23392	ATLAS RESOURCES LLC	COWDEN	10	WASHINGTON
28,960	560,834	537	125-23174	RANGE RESOURCES APPALACHIA LLC	BROWNLEE	2H	WASHINGTON
27,467	805,897	239	125-23804	RANGE RESOURCES APPALACHIA LLC	COSTANZO	2H	WASHINGTON
26,422	672,811	239	125-23803	RANGE RESOURCES APPALACHIA LLC	COSTANZO	1H	WASHINGTON
22,166	463,435	538	125-22990	RANGE RESOURCES APPALACHIA LLC	GOETTEL	4H	WASHINGTON
21,721	584,629	242	125-22861	RANGE RESOURCES APPALACHIA LLC	CROSS CREEK COUNTY PARK	7H	WASHINGTON
21,243	423,673	246	125-22668	RANGE RESOURCES APPALACHIA LLC	CROSS CREEK COUNTY PARK	9A	WASHINGTON
20,815	526,429	533	125-23165	RANGE RESOURCES APPALACHIA LLC	CROSS CREEK COUNTY PARK	14h	WASHINGTON
20,445	311,427	239	125-23859	RANGE RESOURCES APPALACHIA LLC	CROSS CREEK COUNTY PARK	25H	WASHINGTON
20,141	425,237	168	125-23875	RANGE RESOURCES APPALACHIA LLC	GOETTEL UNIT 11H	11H	WASHINGTON
19,666	665,571	502	125-23169	RANGE RESOURCES APPALACHIA LLC	WILLIAM LOWRY	3H	WASHINGTON
19,657	596,894	533	125-23300	RANGE RESOURCES APPALACHIA LLC	CROSS CREEK COUNTY PARK	16H	WASHINGTON
19,307	387,876	517	125-22793	RANGE RESOURCES APPALACHIA LLC	CROSS CREEK COUNTY PARK	8	WASHINGTON
19,077	916,548	541	125-23048	RANGE RESOURCES APPALACHIA LLC	CONSTANCE ZAPPI	2H	WASHINGTON
19,068	396,583	385	125-23642	RANGE RESOURCES APPALACHIA LLC	KEARNS	6H	WASHINGTON
18,554	759,931	387	125-23644	RANGE RESOURCES APPALACHIA LLC	KEARNS	4H	WASHINGTON
18,361	303,966	516	125-22830	RANGE RESOURCES APPALACHIA LLC	CROSS CREEK COUNTY PARK	6H	WASHINGTON
18,151	501,020	532	125-23182	RANGE RESOURCES APPALACHIA LLC	CROSS CREEK COUNTY PARK	15H	WASHINGTON
17,663	375,470	171	125-23872	RANGE RESOURCES APPALACHIA LLC	GOETTEL UNIT 9H	9H	WASHINGTON
16,974	1,593,647	397	125-23196	RANGE RESOURCES APPALACHIA LLC	RICHARD FOSTER	1H	WASHINGTON
16,922	386,251	174	125-23870	RANGE RESOURCES APPALACHIA LLC	GOETTEL UNIT 7H	7H	WASHINGTON

Source: Pennsylvania Department of Environmental Protection

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