

RANGE RESOURCES CORPORATION
FINDING AND DEVELOPMENT COST CALCULATIONS

During the past three years, Range has increased proved reserves by 83% at an average finding and development cost of \$0.30 per mcf: (before future development costs). Finding and development cost ratio is derived directly from the Costs Incurred schedule, excluding non-cash costs and costs incurred for gathering facilities, (see Note 18: Supplemental Information on Natural Gas and Oil Exploration, Development and Production Activities) and reconciliation of beginning and ending proved reserves. The following table details the calculation of "all-in" finding and development costs which is typically done by financial analysts and a calculation of finding and development described in SEC Oil and Gas Alert 05-1:

	<u>2018</u>	<u>2017</u>	<u>2016</u>	<u>Combined Three years</u>
Costs incurred:				
Acquisitions:				
Acreage purchases	\$ 62,390	\$ 62,075	\$ 33,142	\$ 157,607
Unproved leasehold acquired	-	-	2,001,196	\$ 2,001,196
Proved oil and gas properties	1,683	18,269	1,097,585	1,117,537
Asset retirement obligations	-	-	21,899	21,899
Development expenditures	835,932	1,179,556	535,475	2,550,963
Exploration expenditures	32,196	50,920	30,027	113,143
Exploration expenditures -- non-cash	1,921	2,742	2,298	6,961
Asset retirement obligations changes	28,826	20,245	(24,064)	25,007
Gas gathering facilities:				
Acquisitions	-	-	-	-
Development	10,218	15,097	3,595	28,910
Total costs incurred per 10-K	<u>\$ 973,166</u>	<u>\$ 1,348,904</u>	<u>\$ 3,701,153</u>	<u>\$ 6,023,223</u>
Changes in future development costs	<u>\$ 557,518</u>	<u>\$ 497,400</u>	<u>\$ 314,864</u>	<u>\$ 1,369,782</u>
Reserve adds (Mmcf):				
Extension, discoveries, and additions	3,143,898	3,487,519	1,394,134	8,025,551
Revisions - PUD removal	(378,824)	(668,267)	(268,689)	(1,315,780)
- improved recovery	154,054	597,004	393,182	1,144,240
- performance	945,527	531,884	154,425	1,631,836
- price	10,978	46,297	(23,124)	34,151
Total reserve adds excluding purchases	<u>3,875,633</u>	<u>3,994,437</u>	<u>1,649,928</u>	<u>9,519,998</u>
Purchases	-	10,116	1,259,806	1,269,922
Total reserve adds	<u>3,875,633</u>	<u>4,004,553</u>	<u>2,909,734</u>	<u>10,789,920</u>
Finding and development costs as described in SEC Oil & Gas Alert 05-1				
Total costs incurred	\$ 973,166	\$ 1,348,904	\$ 3,701,153	\$ 6,023,223
Changes in future development costs	557,518	497,400	314,864	1,369,782
	<u>\$1,530,684</u>	<u>\$1,846,304</u>	<u>\$4,016,017</u>	<u>\$ 7,393,005</u>
Total overall finding & development costs	<u>\$0.39</u>	<u>\$0.46</u>	<u>\$1.38</u>	<u>\$0.69</u>

Finding and development costs as typically calculated by analysts- (excl. purchases)				
Total costs incurred	\$ 973,166	\$1,348,904	\$3,701,153	\$ 6,023,223
Less -				
Gas gathering facilities	(10,218)	(15,097)	(3,595)	(28,910)
Unproved leasehold acquired	-	-	(2,001,196)	(2,001,196)
Proved oil and gas properties acquired	(1,683)	(18,269)	(1,097,585)	(1,117,537)
Asset retirement obligations	(28,826)	(20,245)	2,165	(46,906)
Non-cash Exploration expenses	(1,921)	(2,742)	(2,298)	(6,961)
Total costs used	<u>\$ 930,518</u>	<u>\$1,292,551</u>	<u>\$598,644</u>	<u>\$2,821,713</u>
Total overall finding & development costs	<u>\$0.24</u>	<u>\$0.32</u>	<u>\$0.36</u>	<u>\$0.30</u>

Note: "Drill-bit" finding cost is defined as *Total costs used* (as reconciled above) less 'Acreage purchases' divided by *Total reserve adds excluding purchases* (as reconciled above).