



**Andrews, David**

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**From:** Andrews, David  
**Sent:** Tuesday, March 20, 2012 8:21 AM  
**To:** 'Cindy Keister'  
**Cc:** Neidel, Kris; Reno Roncco  
**Subject:** RE: Pirtlaw Partners Ltd 14-03 API 107-06241-00

Cindy,

The revised economic analysis is acceptable. I am copying the spreadsheet and this email to COGCC's well file as an addendum to Sundry Notice, Document No. 2055404, which provided the original approval for this flaring request on 2/9/2012.

Thanks,

**David D. Andrews, P.E., P.G.**  
Engineering Supervisor - Western Colorado

**State of Colorado**  
**Oil and Gas Conservation Commission**  
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**From:** Cindy Keister [<mailto:ckeister@qrinc.com>]  
**Sent:** Wednesday, March 07, 2012 9:45 AM  
**To:** Andrews, David  
**Cc:** Neidel, Kris; Reno Roncco  
**Subject:** FW: Pirtlaw Partners Ltd 14-03 API 107-06241-00

David,

Please see Reno's response to your attached email concerning the flare permit on the referenced well. Contact Reno or me if you have any questions or need further information and let me know if this answers Kris' question.

Thanks

Cindy Keister  
Director Regulatory Affairs  
Quicksilver Resources  
801 Cherry Street  
Suite 3700, Unit 19  
Fort Worth, Texas 76102

Direct Line: 817/665-5572  
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**From:** Reno Roncco  
**Sent:** Wednesday, March 07, 2012 10:01 AM  
**To:** Cindy Keister  
**Cc:** Scott Latka; Stan Page  
**Subject:** Pirtlaw 14-03

Cindy

Attached is a new economic evaluation for selling the gas currently flared at the Pirtlaw 14-03, based on the following criteria:

Initial production = 182 Mcfd (5 day average flare volume 03-02 thru 03-06)  
Capital cost = \$826,500  
Gas price = \$2.50/Mcf  
Severance tax = 0%  
Operating cost = \$0

The project will not payout during the life of the well based on a 25 year analysis and the undiscounted loss on the investment is \$-107,740 after 25 years.

Tie-in location is the Robert L. Bayless Producer LLC Eilts-Bradley 1-14 in NE-NE-14-6N-87W. Estimated minimum pipeline length is 11,020 feet.

Initial production used in the economic evaluation is gas to flare. Treater usage and pumping unit engine usage, which are not currently measured, are estimated to be 4.8 Mcfd and 5.8 Mcfd respectively.

Thank you.

Reno

**QUICKSILVER RESOURCES, INC.**  
**Pirtlaw 14-03**  
**Routt County, Colorado**

Reserves and Economics (Gas)								
Year	Gross Gas Mcf	Net Gas Mcf	Price \$/Mcf	Net Sales Annual, \$	Op Cost, \$	Cap Cost, \$	UNDISC, \$	Cum UNDISC, \$
2012	61,388	42,434	2.50	106,086	0	826,500	-720,414	-720,414
2013	49,365	34,124	2.50	85,309	0		85,309	-635,105
2014	39,697	27,441	2.50	68,601	0		68,601	-566,504
2015	31,922	22,066	2.50	55,165	0		55,165	-511,339
2016	27,163	18,776	2.50	46,941	0		46,941	-464,397
2017	24,312	16,806	2.50	42,014	0		42,014	-422,383
2018	21,759	15,041	2.50	37,602	0		37,602	-384,781
2019	19,475	13,462	2.50	33,655	0		33,655	-351,126
2020	17,431	12,049	2.50	30,123	0		30,123	-321,003
2021	15,601	10,784	2.50	26,960	0		26,960	-294,042
2022	13,963	9,652	2.50	24,130	0		24,130	-269,913
2023	12,497	8,639	2.50	21,596	0		21,596	-248,316
2024	11,185	7,732	2.50	19,329	0		19,329	-228,987
2025	10,011	6,920	2.50	17,300	0		17,300	-211,687
2026	8,960	6,194	2.50	15,484	0		15,484	-196,203
2027	8,019	5,543	2.50	13,858	0		13,858	-182,345
2028	7,177	4,961	2.50	12,403	0		12,403	-169,942
2029	6,424	4,441	2.50	11,101	0		11,101	-158,841
2030	5,750	3,975	2.50	9,937	0		9,937	-148,904
2031	5,146	3,557	2.50	8,893	0		8,893	-140,011
2032	4,606	3,184	2.50	7,960	0		7,960	-132,051
2033	4,122	2,849	2.50	7,123	0		7,123	-124,928
2034	3,689	2,550	2.50	6,375	0		6,375	-118,553
2035	3,302	2,283	2.50	5,706	0		5,706	-112,847
2036	2,955	2,043	2.50	5,107	0		5,107	-107,740
<b>Total</b>	<b>415,919</b>	<b>287,504</b>		<b>718,760</b>				

W.I. 1.000000  
N.R.I. 0.691250  
Tax 0.000000  
Gross Cost \$826,500